

AGENDA

Board of Directors Metro Valley Study Session

August 11, 2022

*****Start Time: 9:30 AM*****

Location

San Bernardino County Transportation Authority
First Floor Lobby Board Room
1170 W. 3rd Street, San Bernardino, CA 92410

Board of Directors

Valley Representatives

Study Session Chair

Dawn Rowe, Supervisor
Third District

Study Session Vice-Chair

John Valdivia, Mayor
City of San Bernardino

Eunice Ulloa, Mayor
City of Chino

Ray Marquez, Mayor
City of Chino Hills

Frank Navarro, Mayor
City of Colton

Acquanetta Warren, Mayor
City of Fontana

Darcy McNaboe, Mayor
City of Grand Terrace

Larry McCallon, Mayor
City of Highland

Rhodes "Dusty" Rigsby, Council Member
City of Loma Linda

John Dutrey, Mayor
City of Montclair

Alan Wapner, Mayor Pro Tem
City of Ontario

L. Dennis Michael, Mayor
City of Rancho Cucamonga

Paul Barich, Mayor
City of Redlands

Deborah Robertson, Mayor
City of Rialto

Carlos A. Garcia, Council Member
City of Upland

David Avila, Mayor
City of Yucaipa

Mountain/Desert Representatives

Daniel Ramos, Mayor Pro Tem
City of Adelanto

Art Bishop, Mayor Pro Tem
Town of Apple Valley

Paul Courtney, Mayor
City of Barstow

Rick Herrick, Mayor
City of Big Bear Lake

Rebekah Swanson, Council Member
City of Hesperia

Edward Paget, Vice Mayor
City of Needles

Joel Klink, Council Member
City of Twentynine Palms

Debra Jones, Mayor
City of Victorville

Rick Denison, Mayor Pro Tem
Town of Yucca Valley

County Board of Supervisors

Paul Cook, First District

Janice Rutherford, Second District

Curt Hagman, Fourth District

Joe Baca, Jr., Fifth District

Interim Ex-Officio Member – Diane Morales, Caltrans

Ray Wolfe, Executive Director

Julianna Tillquist, General Counsel

**San Bernardino County Transportation Authority
San Bernardino Council of Governments**

AGENDA

Board of Directors Metro Valley Study Session

**August 11, 2022
9:30 AM**

**Location
First Floor Lobby Board Room
1170 W. 3rd Street, San Bernardino, CA 92410**

Items listed on the agenda are intended to give notice to members of the public of a general description of matters to be discussed or acted upon. The posting of the recommended actions does not indicate what action will be taken. The Board may take any action that it deems to be appropriate on the agenda item and is not limited in any way by the notice of the recommended action.

To obtain additional information on any items, please contact the staff person listed under each item. You are encouraged to obtain any clarifying information prior to the meeting to allow the Board to move expeditiously in its deliberations. Additional ***“Meeting Procedures”*** and agenda explanations are attached to the end of this agenda.

CALL TO ORDER

(Meeting Chaired by Dawn Rowe)

- i. Pledge of Allegiance
- ii. Attendance
- iii. Announcements
- iv. Agenda Notices/Modifications – Ana Arellano

Possible Conflict of Interest Issues

Note agenda item contractors, subcontractors and agents which may require member abstentions due to conflict of interest and financial interests. Board Member abstentions shall be stated under this item for recordation on the appropriate item.

1. Information Relative to Possible Conflict of Interest

Note agenda items and contractors/subcontractors, which may require member abstentions due to possible conflicts of interest.

This item is prepared for review by Board of Directors and Committee Members.

Pg. 11

CONSENT CALENDAR

Items listed on the Consent Calendar are expected to be routine and non-controversial. The Consent Calendar will be acted upon as a single motion. Items on the Consent Calendar may be removed for discussion by Board Members.

Consent - Project Delivery

2. Construction Contract Change Orders to On-Going Construction Contracts

Pg. 16

Receive and file Change Order Report.

Presenter: Henry Stultz

This item is not scheduled for review by any other policy committee or technical advisory committee.

DISCUSSION ITEMS

Discussion - Project Delivery

3. Major Projects Status Report through June 2022

Pg. 29

Receive the Major Projects Status Report for the period through June 2022.

Presenter: Sal Chavez

This item is not scheduled for review by any other policy committee or technical advisory committee.

4. Dry Run Resolutions of Necessity for the Interstate 215 University Parkway Project

Pg. 32

That the following be reviewed and recommended for final approval by the Board of Directors, acting as the San Bernardino County Transportation Authority, at a regularly scheduled Board meeting:

A. Conduct a public hearing to consider condemnation of real property required for the Interstate 215 University Parkway Interchange Project in the City of San Bernardino.

B. Upon completion of a public hearing, that the Board of Directors adopt Resolution of Necessity No. 22-166, authorizing and directing General Counsel, or her designee, to prepare, commence, and prosecute proceedings in eminent domain for the purpose of acquiring interests in real property from: Junghwan Choi and Elaine D. Choi (Assessor's Parcel Number [APN] 0266-072-32). The resolution must be approved by at least a two-thirds majority; and

C. Upon completion of a public hearing, that the Board of Directors adopt Resolution of Necessity No. 22-167 authorizing and directing General Counsel, or her designee, to prepare, commence, and prosecute proceedings in eminent domain for the purpose of acquiring interests in real property from: Jimmy Fikri Kaymaz (APN 0266-072-33). The resolution must be approved by at least a two-thirds majority.

Presenter: Sal Chavez

Agenda Item 4 Cont.

This item is not scheduled for review by any other policy committee or technical advisory committee. This item was taken to the June 9, 2022 Metro Valley Study Session meeting and unanimously recommended for approval with a condition by the City of San Bernardino (Mayor Valdivia) that staff investigate the possibility of a shared parking agreement between Walmart and the Kaymaz and Choi properties. Staff is bringing this item back with the results of that inquiry. SBCTA General Counsel has reviewed this item and the draft resolutions.

5. Design Services Contract Award for the Interstate 10 Slover Mountain Underpass Project Pg. 42

That the following be reviewed and recommended for final approval by the Board of Directors, acting as the San Bernardino County Transportation Authority (SBCTA), at a regularly scheduled Board meeting:

A. Award Contract No. 22-1002762 to TranSystems Corporation for a total not-to-exceed amount of \$2,840,879.51, to be funded with Measure I 2010-2040 Freeway Program funds, for Plans, Specifications and Estimates Design Services for the Interstate 10 Slover Mountain Underpass Project.

B. Approve a contingency for Contract No. 22-1002762 in a not-to-exceed amount of \$284,087.95, to be funded with Measure I 2010-2040 Freeway Program funds, to be released in accordance with SBCTA Procurement and Special Risk Assessment Policy No. 11000, as necessary.

Presenter: Sal Chavez

This item is not scheduled for review by any other policy committee or technical advisory committee. SBCTA General Counsel, Procurement Manager and Risk Manager have reviewed this item and the draft contract.

6. Award Design Services Contract No. 22-1002727 for State Route 210 at Waterman Avenue Interchange Project Pg. 103

That the following be reviewed and recommended for final approval by the Board of Directors, acting as the San Bernardino County Transportation Authority, at a regularly scheduled Board meeting:

A. Award Contract No. 22-1002727 to EXP U.S. Services, Inc., for \$644,666.32, for Project Approval, and Plans, Specifications and Estimates Design Services for the State Route 210 at Waterman Avenue Interchange Project (Project).

B. Approve a contingency budget of \$64,466.63 for Contract No. 22-1002727, which would be released by the Department Director by contract amendment for scope of work within the original contract for elements that may arise during Project execution.

Presenter: Sal Chavez

This item is not scheduled for review by any other policy committee or technical advisory committee. SBCTA General Counsel, Procurement Manager and Risk Manager have reviewed this item and the draft contract.

7. Award Construction Management Services Contract No. 22-1002757 for Interstate 15 Corridor Freight and Express Lanes Project - Contract 1 Pg. 191

That the following be reviewed and recommended for final approval by the Board of Directors, acting as the San Bernardino County Transportation Authority (SBCTA), at a regularly scheduled Board meeting:

A. Award Contract No. 22-1002757 to TRC Engineers, Inc., for a not-to-exceed amount of \$29,538,703.11 for Construction Management Services for the Interstate 15 Corridor Freight and Express Lanes Project - Contract 1.

B. Approve contingency in a not-to-exceed amount of \$2,953,870.31 for Contract No. 22-1002757, to be released in accordance with SBCTA Procurement and Special Risk Assessment Policy No. 11000.

Presenter: Khalid Bazmi

This item is not scheduled for review by any other policy committee or technical advisory committee. SBCTA General Counsel, Procurement Manager and Risk Manager have reviewed this item and the draft contract.

Discussion - Regional/Subregional Planning

8. Regional Early Action Planning 2.0 Grant Applications Pg. 267

That the following be reviewed and recommended for final approval by the Board of Directors, acting as the San Bernardino County Transportation Authority (SBCTA) and San Bernardino Associated Governments (SBCOG), at a regularly scheduled Board meeting:

A. Authorize SBCTA/SBCOG staff to submit the following applications to the Southern California Association of Governments (SCAG) for the Regional Early Action Planning (REAP) 2.0 grants:

1. Senate Bill 743 Vehicle Miles Traveled Mitigation Crediting Program under the County Transportation Commission (CTC) Partnership Program.
2. First/Last Mile transit service enhancements at selected Metrolink stations under the CTC Partnership Program.
3. San Bernardino County Housing Trust Program under the Housing Supportive Infrastructure Program.
4. Tunnel to Ontario International Airport / West Valley Connector / Cucamonga Station Land Use Strategy under the CTC Partnership Program.
5. Other Supplemental Planning Work Left from REAP 1.0 under the Sub-regional Partnership Program 2.0.

B. Authorize the Executive Director, or his designee, to approve the scope of work and sign the applications that would eventually become part of the regional application being submitted by SCAG to the California Department of Housing and Community Development by the end of December 2022.

C. Authorize the Executive Director, or his designee, to negotiate and execute future Restricted REAP 2.0 Grant Agreements between SBCTA/SBCOG and SCAG to receive reimbursement grant funding, subject to approval as to form by General Counsel.

Presenter: Josh Lee

Agenda Item 8 Cont.

This item is scheduled for review by the Mountain/Desert Policy Committee on August 12, 2022 and was reviewed by the Planning and Development Technical Forum on July 27, 2022, the Transportation Technical Advisory Committee on August 1, 2022 and the City/County Managers Technical Advisory Committee on August 4, 2022.

9. Draft 2022 South Coast Air Quality Management Plan

Pg. 289

Receive information on the Draft 2022 South Coast Air Quality Management Plan.

Presenter: Steve Smith

This item is not scheduled for review by any other policy committee or technical advisory committee.

Public Comment

Brief Comments from the General Public

Comments from Board Members

Brief Comments from Board Members

ADJOURNMENT

Additional Information

Attendance

Pg. 312

Acronym List

Pg. 314

Mission Statement

Pg. 316

The next Metro Valley Study Session is scheduled for September 15, 2022.

Meeting Procedures and Rules of Conduct

Meeting Procedures - The Ralph M. Brown Act is the state law which guarantees the public's right to attend and participate in meetings of local legislative bodies. These rules have been adopted by the Board of Directors in accordance with the Brown Act, Government Code 54950 et seq., and shall apply at all meetings of the Board of Directors and Policy Committees.

Accessibility - The meeting facility is accessible to persons with disabilities. If assistive listening devices or other auxiliary aids or services are needed in order to participate in the public meeting, requests should be made through the Clerk of the Board at least three (3) business days prior to the Board meeting. The Clerk can be reached by phone at (909) 884-8276 or via email at clerkoftheboard@gosbcta.com and office is located at 1170 W. 3rd Street, 2nd Floor, San Bernardino, CA.

Agendas – All agendas are posted at www.gosbcta.com/board/meetings-agendas/ at least 72 hours in advance of the meeting. Staff reports related to agenda items may be reviewed online at that web address. Agendas are also posted at 1170 W. 3rd Street, 1st Floor, San Bernardino at least 72 hours in advance of the meeting.

Agenda Actions – Items listed on both the “Consent Calendar” and “Discussion” contain recommended actions. The Board of Directors will generally consider items in the order listed on the agenda. However, items may be considered in any order. New agenda items can be added and action taken by two-thirds vote of the Board of Directors or unanimous vote of members present as provided in the Ralph M. Brown Act Government Code Sec. 54954.2(b).

Closed Session Agenda Items – Consideration of closed session items excludes members of the public. These items include issues related to personnel, pending litigation, labor negotiations and real estate negotiations. Prior to each closed session, the Chair will announce the subject matter of the closed session. If action is taken in closed session, the Chair may report the action to the public at the conclusion of the closed session.

Public Testimony on an Item – Members of the public are afforded an opportunity to speak on any listed item. Individuals wishing to address the Board of Directors or Policy Committee Members should complete a “Request to Speak” form, provided at the rear of the meeting room, and present it to the Clerk prior to the Board's consideration of the item. A "Request to Speak" form must be completed for each item an individual wishes to speak on. When recognized by the Chair, speakers should be prepared to step forward and announce their name and address for the record. In the interest of facilitating the business of the Board, speakers are limited to three (3) minutes on each item. Additionally, a twelve (12) minute limitation is established for the total amount of time any one individual may address the Board at any one meeting. The Chair or a majority of the Board may establish a different time limit as appropriate, and parties to agenda items shall not be subject to the time limitations. Members of the public requesting information be distributed to the Board of Directors must provide 40 copies of such information in advance of the meeting, except for noticed public hearings. Information provided as public testimony is not read into the record by the Clerk.

The Consent Calendar is considered a single item, thus the three (3) minute rule applies. Consent Calendar items can be pulled at Board member request and will be brought up individually at the specified time in the agenda allowing further public comment on those items.

Agenda Times – The Board is concerned that discussion take place in a timely and efficient manner. Agendas may be prepared with estimated times for categorical areas and certain topics to be discussed. These times may vary according to the length of presentation and amount of resulting discussion on agenda items.

Public Comment – At the end of the agenda, an opportunity is also provided for members of the public to speak on any subject within the Board’s authority. Matters raised under “Public Comment” may not be acted upon at that meeting. “Public Testimony on any Item” still applies.

Disruptive or Prohibited Conduct – If any meeting of the Board is willfully disrupted by a person or by a group of persons so as to render the orderly conduct of the meeting impossible, the Chair may recess the meeting or order the person, group or groups of person willfully disrupting the meeting to leave the meeting or to be removed from the meeting. Disruptive or prohibited conduct includes without limitation addressing the Board without first being recognized, not addressing the subject before the Board, repetitiously addressing the same subject, failing to relinquish the podium when requested to do so, bringing into the meeting any type of object that could be used as a weapon, including without limitation sticks affixed to signs, or otherwise preventing the Board from conducting its meeting in an orderly manner. Your cooperation is appreciated!

General Practices for Conducting Meetings of Board of Directors and Policy Committees

Attendance.

- The Chair of the Board or a Policy Committee (Chair) has the option of taking attendance by Roll Call or Self-Introductions. If attendance is taken by Roll Call, the Clerk of the Board will call out by jurisdiction or supervisorial district. The Member or Alternate will respond by stating his/her name. If attendance is by Self-Introduction, the Member or Alternate will state his/her name and jurisdiction or supervisorial district.
- A Member/Alternate, who arrives after attendance is taken, shall announce his/her name prior to voting on any item.
- A Member/Alternate, who wishes to leave the meeting after attendance is taken but before remaining items are voted on, shall announce his/her name and that he/she is leaving the meeting.

Basic Agenda Item Discussion.

- The Chair announces the agenda item number and states the subject.
- The Chair calls upon the appropriate staff member or Board Member to report on the item.
- The Chair asks members of the Board/Committee if they have any questions or comments on the item. General discussion ensues.
- The Chair calls for public comment based on “Request to Speak” forms which may be submitted.
- Following public comment, the Chair announces that public comment is closed and asks if there is any further discussion by members of the Board/Committee.
- The Chair calls for a motion from members of the Board/Committee.
- Upon a motion, the Chair announces the name of the member who makes the motion. Motions require a second by a member of the Board/Committee. Upon a second, the Chair announces the name of the Member who made the second, and the vote is taken.
- The “aye” votes in favor of the motion shall be made collectively. Any Member who wishes to oppose or abstain from voting on the motion, shall individually and orally state the Member’s “nay” vote or abstention. Members present who do not individually and orally state their “nay” vote or abstention shall be deemed, and reported to the public, to have voted “aye” on the motion.

The Vote as specified in the SANBAG Bylaws.

- Each Member of the Board of Directors shall have one vote. In the absence of the official representative, the alternate shall be entitled to vote. (Board of Directors only.)
- Voting may be either by voice or roll call vote. A roll call vote shall be conducted upon the demand of five official representatives present, or at the discretion of the presiding officer.

Amendment or Substitute Motion.

- Occasionally a Board Member offers a substitute motion before the vote on a previous motion. In instances where there is a motion and a second, the maker of the original motion is asked if he or she would like to amend his or her motion to include the substitution or withdraw the motion on the floor. If the maker of the original motion does not want to amend or withdraw, the substitute motion is voted upon first, and if it fails, then the original motion is considered.
- Occasionally, a motion dies for lack of a second.

Call for the Question.

- At times, a Member of the Board/Committee may “Call for the Question.”
- Upon a “Call for the Question,” the Chair may order that the debate stop or may allow for limited further comment to provide clarity on the proceedings.
- Alternatively and at the Chair’s discretion, the Chair may call for a vote of the Board/Committee to determine whether or not debate is stopped.
- The Chair re-states the motion before the Board/Committee and calls for the vote on the item.

The Chair.

- At all times, meetings are conducted in accordance with the Chair’s direction.
- These general practices provide guidelines for orderly conduct.
- From time-to-time circumstances require deviation from general practice.
- Deviation from general practice is at the discretion of the Chair.

Courtesy and Decorum.

- These general practices provide for business of the Board/Committee to be conducted efficiently, fairly and with full participation.
- It is the responsibility of the Chair and Members to maintain common courtesy and decorum.

Adopted By SANBAG Board of Directors January 2008

Revised March 2014

Revised May 4, 2016

Minute Action

AGENDA ITEM: 1

Date: August 11, 2022

Subject:

Information Relative to Possible Conflict of Interest

Recommendation:

Note agenda items and contractors/subcontractors, which may require member abstentions due to possible conflicts of interest.

Background:

In accordance with California Government Code 84308, members of the SBCTA Board may not participate in any action concerning a contract where they have received a campaign contribution of more than \$250 in the prior twelve months from an entity or individual, except for the initial award of a competitively bid public works contract. This agenda contains recommendations for action relative to the following contractors:

Consent/Discussion Calendar Items

Item No.	Contract No.	Principals & Agents	Subcontractors
2	19-1002078	Guy F. Atkinson Construction, LLC (dba Guy F. Atkinson) <i>Timothy Stroud</i>	All American Asphalt Cal Stripe, Inc. Case Pacific Company Commercial Metals Company Cooper Engineering, Inc. Coral Construction Company DeesBurke Engineering Contractors, LLC Diverscape, Inc. Dywidag Systems International USA, Inc. Ferreira Construction Company, Inc. Foundation Pile, Inc. Harber Companies, Inc. L. Johnson Construction, Inc. Maneri Traffic Control, Inc. Penhall Company Treesmith Enterprises, Inc. Universal Construction
	17-1001599	Lane-Security Paving Joint Venture <i>Giuseppe Quarta</i> <i>Joseph Ferndino</i>	Aegis Project Controls Corp. A.M. Concrete Antigo Construction Apex Logistics Arellano Associates, LLC BC Traffic Rentals Boral Resources, LLC Bridge Deck Solutions

Entity: San Bernardino Council of Governments, San Bernardino County Transportation Authority

Board of Directors Metro Valley Study Session Agenda Item

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2 Cont.			<p> C Below CalPortland Company Cal-Stripe Cemex CGO Construction CH2M Hill Engineers, Inc. CMC Commercial Metals Conco Pumping Con-Fab California CTI Milling CW Allied, Inc. Diversified Landscape Dywidag Systems EBS General Engineering, Inc. ECS Euclid Chemical Company Ferreira Construction Fitzgerald Formliners Fleming & Sons Concrete Forefront Deep Foundations Foundation Pile FPL and Associates, Inc. Fryman Management, Inc. 2G3 Quality, Inc. G&F Concrete Cutting Global Road Sealing Golden State Boring & Pipe Hanes Geo Components Harber Companies Highlight Electric Irvine Pipe Company ISCO Industries JC Supply & Manufacturing JT Construction Products, LLC L Johnson Construction L.B. Foster Construction Malcolm Drilling Company Michael Baker International, Inc. Miranda Logistics Murphy Industrial Coatings Pacific Corrugated Pipe Co. Peri Formworks Pipe Jacking Trenchless, Inc. Pro-Cast Products, Inc. PQM, Inc. </p>
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Board of Directors Metro Valley Study Session Agenda Item

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2 Cont.			The R. J. Noble Company Rupert Construction Supply Sierra Landscape Development Skyline Steel Spartan Mat, LLC Statewide Traffic Safety and Signs, Inc. Strength Transportation Management Titan Constructor Engineering V&A, Inc. Vulcan Materials
	18-1001966	Traylor-Granite Joint Venture <i>C. John Meagher</i> <i>Bob Lofling</i>	COWI North America, Inc. CPM Logistics LLC Dan Brown & Associates Foothills Bridge Co. Granite Construction Company Hernandez, Kroone & Associates PPM Group, Inc. Terracon Consulting Engineers & Scientist Traylor Bros., Inc.
	20-1002290	SEMA Construction, Inc. <i>Joshua Clyne</i>	Alcorn Fence Company Amber Steel Co. Cal Stripe, Inc. Ferreira Construction Co, Inc. Hardy & Harper, Inc. Malcolm Drilling Company, Inc. Marina Landscape, Inc. Statewide Traffic Safety & Signs, Inc.
	21-1002620	Ortiz Enterprises, Inc. <i>Patrick A. Ortiz, President</i> <i>John D. Schaar, VP/Secretary</i>	JFL Electric Inc DC Hubbs Construction Griffith Co EBS General Engineering Inc. Chrisp Co. Advantage Ferreira Matich Corp Camblin Steel

Board of Directors Metro Valley Study Session Agenda Item

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Item No. 4 – Dry Run Resolutions of Necessity for the Interstate 215 University Parkway Project

APN#	Principals & Agents
APN 0266-072-32	Junghwan Choi and Elaine D. Choi
APN 0266-072-33	Jimmy Fikri Kaymaz

5	22-1002762	TranSystems Corporation <i>Ayman Salama, Principal/Senior Vice President</i>	Advanced Civil Technologies Group Delta Consultants, Inc. ICF Jones & Stokes Psomas RailPros, Inc. Tatsumi and Partners, Inc.
6	22-1002727	EXP U.S. Services, Inc. <i>Khalil Saba, Principal-In-Charge</i>	ICF Jones & Stokes, Inc. Converse Consultant CL Surveying and Mapping Epic Land Solutions Inc. ECORP Inc. David Evans and Associates Inc.
7	22-1002757	TRC Engineers, Inc. <i>Charlene Palmer, Vice President</i>	AIX Consulting, Inc. CalWORKs LLC CMTS LLC CRM Tech Dynamic Engineering Services, Inc. FCG Consultants, Inc. G3 Quality, Inc. Gannett Fleming, Inc. Guida Surveying, Inc. Hill International, Inc. IQON Engineers, Inc. Kleinfelder Construction Services LSA Associates, Inc. Materials Culture Consulting, Inc. SYRUSA Engineering, Inc. Twing, Inc. V&A Inc. WSP USA, Inc. ZT Consulting Group, Inc.

Financial Impact:

This item has no direct impact on the budget.

Board of Directors Metro Valley Study Session Agenda Item

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Reviewed By:

This item is prepared for review by Board of Directors and Committee Members.

Responsible Staff:

Henry Stultz, Director of Project Delivery

Minute Action

AGENDA ITEM: 2

Date: August 11, 2022

Subject:

Construction Contract Change Orders to On-Going Construction Contracts

Recommendation:

Receive and file Change Order Report.

Background:

San Bernardino County Transportation Authority has thirteen (13) on-going construction contracts, of which five (5) have had Construction Change Orders (CCOs) approved since the last reporting to the Board of Directors Metro Valley Study Session on June 9, 2022. The CCOs are listed below.

A. Contract No. 19-1002078 with Guy F. Atkinson Construction, LLC, for the State Route 210 Lane Addition, Base Line Interchange and Pavement Rehabilitation Project: CCO No. 60 (\$8,252.67 decrease for hydro-seed restoration modifications).

B. Contract No. 17-1001599 with Lane-Security Paving Joint Venture, for the Interstate 10 (I-10) Corridor Contract 1 Design Build Contract: CCO No. 66 (\$10,250 increase for additional work on Mountain Avenue, eastbound on-ramp right-of-way fencing).

C. Contract No. 18-1001966 with Traylor-Granite Joint Venture for the Mount Vernon Viaduct Project: CCO No. 20 (\$141,592 increase for north abutment embankment removal).

D. Contract No. 20-1002290 with SEMA Construction, Inc., for the I-10 University Street Improvement Project: CCO No. 2, Supplemental No. 1 (\$15,000 increase for additional funds for payment to maintain roadway and traffic control); CCO No. 6 (\$393,852.01 increase to replace pavement structural section), and CCO No. 6, Supplemental No. 1 (\$20,000 increase to replace pavement structural section).

E. Contract No. 21-1002620 with Ortiz Enterprises, Inc., for the I-10 Alabama Street Improvement Project: CCO No. 4 (\$20,362.87 decrease for stage 1A Value Engineering Change Proposal (VECP) credit).

Financial Impact:

This item imposes no financial impact, as all CCOs are within previously approved contingency amounts under: Task No. 0830 Interchange Projects and Task No. 0820 Freeway Projects, Sub-Task No. 0887 SR 210 Lane Addition, Sub-Task No. 0823 I-10 Corridor Contract 1, Sub-Task No. 0899 I-10 University Street Interchange, Sub-Task No. 0895 I-10/Alabama Street Interchange, and Sub-Task No. 0827 Mount Vernon Avenue Viaduct.

Reviewed By:

This item is not scheduled for review by any other policy committee or technical advisory committee.

Responsible Staff:

Henry Stultz, Director of Project Delivery

Entity: San Bernardino County Transportation Authority

Board of Directors Metro Valley Study Session Agenda Item
August 11, 2022
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Approved
Board of Directors Metro Valley Study Session
Date: August 11, 2022
Witnessed By:

San Bernardino County Transportation Authority

Board of Directors Metro Valley Study Session
Construction Change Orders Log

Archibald Avenue Improvements Project at SR 60 – Executed Change Orders		
Number	Description	Amount
3	Maintain Traffic	\$25,000.00
4	Maintain Existing Electrical Systems	\$15,000.00
5	Staging Changes	(\$267.57)
6	Partnering	\$20,000.00
7	SWPPP Maintenance	\$25,000.00
10	Removal of Man-Made-Buried-Object	\$8,500.00
11	Revised Retaining Wall Details	\$0.00
12	Modify Irrigation Removal Plan and Irrigation Details	\$77,416.59
13	Water Line Revisions	\$55,889.00
14	Conflicting Palm Trees Removal	\$10,000.00
15	Combine Stages 2 and 3 for Retaining Wall 16	\$0.00
16	Drainage Systems Modifications	\$33,942.75
18	Revised Closure Hours and Irrigation Crossover	\$9,000.00
19	Install Temporary Overhead Power Poles	\$6,000.00
20	Furnish Two Fire Hydrants	\$15,553.94
21	Provide Power to Existing Caltrans TMS Sign	\$72,750.69
22	Pavement Revisions	\$72,994.62
23	Pavement Revisions	(\$31,247.42)
24	Irrigation Valve Repair	\$5,000.00
26	Removal of Conflicting Trees	\$6,720.00
27	Abandon Conflicting Weigh In Motion System	\$36,028.10
28	Modify Existing Drainage Pipe and Structures	\$34,628.10
29	Modify Drainage Systems 10 and 11	(\$14,608.45)
31	Modify Conflicted Portion of Drainage System 17	\$35,000.00
32	Modify Drainage Systems 4 and 8	\$30,000.00
33	Install Video Detection Signal System at Archibald and Oak Hill Intersection	\$57,432.28
34	Relocation of the Double Close Detector Assembly at the Kuzina Property	\$18,000.00
36	Revise Stage Construction and Replace Pavement Types	\$98,911.97
37	Modify Existing Non-Standard Median Bull Nose	\$6,500.00
38	Dispute Resolution – Profile Grinding Pavement	\$20,000.00
39	Extend Midwest Guardrail System 25' to Meet Safety Requirement	\$15,000.00
40	Install Minor Concrete under Bridge Center Median	\$9,566.00
41	Furnish and Install Handrail along ADA Curb	\$15,200.00
42	Test Low Point to Assure Water Flow for On and Off Ramp	\$2,456.00
44	Remove and Replace Faulty Master Valve and Pressure Regulator	\$5,000.00
CCO TOTAL		\$ 796,366.60
TOTAL CONTINGENCY AND SUPPLEMENTAL		\$2,122,333.00

Attachment: CCO Log (8721 : Construction Contract Change Orders MVSS2208)

Bolded - Construction Change Orders approved since the last reporting to the Metro Valley Study Session
Amounts shown in parentheses represent a credit to the Agency

SR 210 Lane Addition, Base Line I/C and Pavement Rehabilitation – Executed Change Orders		
Number	Description	Amount
1	Maintain Traffic SR 210 Lane Addition	\$300,000.00
2	Maintain Traffic SR 210 Base Line Interchange	\$50,000.00
3	Maintain Traffic SR 210 Pavement Rehabilitation	\$150,000.00
4	Partnering	\$100,000.00
5	Dispute Resolution Board	\$50,000.00
5 S-1	Revised Dispute Resolution Board Specifications	\$0.00
6	Federal Training Program	\$50,000.00
7	Storm Water Best Management Practice Maintenance	\$100,000.00
8	Existing Roadway Repair	\$80,000.00
8 S-1	Cold Mill and Overlay Shoulders	\$160,000.00
8 S-2	Roadway Repair	\$100,000.00
9	Bird Exclusionary Devices	\$50,000.00
10	Added Environmental Requirements	\$85,491.00
12	K-rail Relocation Due to A Public Incident	\$15,000.00
13	Revised Ramp Closure Charts	\$0.00
14	Revised Pile Layout for Retaining Wall 1021	\$24,312.00
15	Revisions to Santa Ana River Bridge Abutment 7-Right	\$4,035.00
16	Removal of Buried Man-Made Objects	\$75,000.00
16 S-1	Removal Buried Man-Made Objects Additional Funds	\$30,000.00
17	Repair of Existing Irrigation Crossovers	\$20,000.00
18	Agency Provided Street Name Signs	(\$4,832.59)
19	Removal of Asbestos Shims at Sterling Ave Bridge	\$12,017.12
20	Approach Slab and Abutment Drainage Modifications	\$25,000.00
21	Deck Drain Grates	\$7,000.00
22	Remove Concrete Slab and Bollards at Gas Station	\$8,000.00
23	Added Temporary Fence	\$10,000.00
24	Maint Existing Electrical Systems	\$30,000.00
27	CIDH Foundation and Pile Quantity Adjustment	\$26,218.00
28	Revised Shop Drawings Submittal Requirements	\$0.00
29	Oil Price Fluctuation Adjustment	\$250,000.00
30	Just in Time (JIT) Training	\$5,000.00
31	Extend Irrigation Crossovers	\$127,323.00
32	Change in Treated Wood Waste Management	\$122,450.00
33	Additional Fiber Optic Pullboxes	\$127,658.33
34	Roadway Profile Correction at Victoria Avenue	\$207,906.00
35	CIDH Pile Quantity Increase	\$11,266.00
36	Deletion of RW 1033	(\$254,924.32)
36 S-1	Additional Dowel Rebar for Concrete Barrier	\$5,000.00
37	Median Edge Drain Revisions	\$89,634.57
39	Add Pile Anchors	\$35,676.22
40	Value Engineering Change Proposal – RW 1092 Deletion	(\$228,102.82)
41	Drainage System Modification	\$23,627.00
42	Removal of Thickened Asphalt Concrete	\$40,000.00
43	Base Line Driveway Changes	\$15,000.00
44	Resolve Dispute – Differing Site Condition at Retaining Wall #1036	\$435,396.70
48	Sound wall 981 Tree Removal	\$5,995.00
49	Regrade Median Gutter	\$10,000.00
50	Differing Site Condition-Potential Claims 1, 2 and 3 Resolution	\$27,500.00

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Attachment: CCO Log (8721 : Construction Contract Change Orders MVSS2208)

51	Settlement of Potential Claim No. 6 DSC at Plunge Creek	\$75,884.46
52	Grind Existing HMA Pavement win Median to Match Elevation at CRCP Joint	\$122,000.00
53	Landscape Irrigation Antenna Removal	\$5,000.00
54	Barrier Light Pole Support Modification	\$21,000.00
55	Additional Widening N. Side of Baseline Between Buckeye & SR210	\$69,000.47
57	Joint Seal Assembly Quantity Increase	\$19,197.00
59	Median Crossover Modifications	\$89,044.23
60	Hydro-seed Restoration Modifications	(\$8,252.67)
61	Additional Concrete Test Panel	\$1,541.00
61 S-1	Revised Concrete Stamp	\$3,600.00
62	NOPC No. 9 Resolution Damaged MBGR	\$50,000.00
63	Temporary K-Rail for Crossover	\$280,878.00
64	Irrigation, Trench Rock and Debris Removal	\$22,500.00
65	Revision to Sound Wall 1050 Block Face	\$48,710.82
CCO TOTAL		\$3,413,749.52
TOTAL CONTINGENCY AND SUPPLEMENTAL		\$34,927,690.07

Central Avenue Improvements Project at SR 60 – Executed Change Orders		
Number	Description	Amount
1	Establish and Maintain construction Field Office	\$150,000.00
2	Revise Plans – Shoulder Pavement Section	(\$21,291.00)
4	Temporary Striping	\$11,000.00
5	Maintain Traffic per Supplemental funds Provided	\$40,000.00
6	Establish Partnering per Specifications	\$20,000.00
7	Remove and Dispose of Illegal Dumping	\$20,000.00
8	Establish Dispute Review Board	\$15,000.00
10	Additional Move In for State 1 Clear and Grub	\$2,530.00
11	Maintain Electrical per Supplemental Funds Provided	\$15,000.00
12	Asbestos Abatement	\$41,185.00
13	Revise Irrigation Plans	\$0.00
14	Storm Water Protection per Supplemental Funds	\$40,000.00
15	Traffic Handling Plan Revision	\$20,000.00
17	Tree Removal	\$40,000.00
19	Soil Nail Wall Design Change	\$25,000.00
CCO TOTAL		\$418,424.00
TOTAL CONTINGENCY AND SUPPLEMENTAL		\$2,912,039.00

I-10 Tippecanoe Avenue Landscaping EEP – Executed Change Orders		
Number	Description	Amount
1	Replace Frost Damaged Plant Material	\$796.00
2	Replace Caltrans Phase I Irrigation Controller	\$7,777.09
3	Additional Tree Replacement	\$859.86
3 S-1	Weather Damaged Plants Replacement	\$2,428.00
4	Mulch Replenishment	\$99,999.99
5	Contract Extension and Water Reimbursement	\$17,443.28
CCO TOTAL		\$129,304.22
TOTAL CONTRACT AMENDMENTS, CONTINGENCY AND SUPPLEMENTAL		\$130,590.00

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SR 210 Pepper Avenue Interchange EEP – Executed Change Orders		
Number	Description	Amount
1	Repairs to Existing Site Irrigation	\$10,000.00
CCO TOTAL		\$10,000.00
TOTAL CONTINGENCY AND SUPPLEMENTAL		\$31,244.80

I-215 Segment 1 & 3 Landscape Replacement Project – Executed Change Orders		
Number	Description	Amount
1	Maintain Public Traffic	\$25,000.00
2	Storm Water Shared Costs	\$25,000.00
3	Establish Dispute Resolution Advisor	\$5,000.00
4	Remove and Dispose of Rock Cobble	\$10,000.00
4 S-1	Additional Funds	\$15,000.00
4 S-2	Additional Funds	\$4,854.82
5	Cleaning of Drainage Systems	\$25,000.00
6	Removal of Dead Trees	\$10,000.00
7	Change from 15 Gallon to 5 Gallon Plant Size	(\$43,663.00)
7 S-1	Additional Funds	\$2,221.02
8	Repairs to Existing Facilities	\$3,000.00
8 S-1	Additional Funds	\$2,000.00
8 S-2	Additional Funds	\$4,500.00
8 S-3	Additional Funds	\$15,250.00
8 S-4	Additional Funds	\$3,930.65
9	Lane Closure Chart Revisions	\$0.00
9 S-1	Lane Closure Chart Revisions	\$0.00
10	PVC Ball Valve	\$0.00
11	Repair Fiber Optic Cable	\$4,070.87
12	Irrigation Water Payment	\$32,384.52
12 S-1	Additional Funds	\$8,487.04
12 S-2	Additional Funds	\$1,656.78
12 S-3	Additional Funds	\$1,634.70
12 S-4	Additional Funds	\$1,603.65
12 S-5	Additional Funds	\$5,007.79
12 S-6	Additional Funds	\$5,739.61
12 S-7	Additional Funds	\$6,753.56
12 S-8	Additional Funds	\$8,666.48
12 S-9	Additional Funds	\$4,744.77
12 S-10	Additional Funds	\$5,482.89
12 S-11	Additional Funds	\$2,874.37
12 S-12	Additional Funds	\$466.51
12 S-13	Additional Funds	\$493.89
12 S-14	Irrigation Water Payment	\$719.97
13	Increase in Gravel Mulch Costs	\$158,215.90
14	Repair Damage by Others	\$6,000.00
15	Additional Electrical Work	\$976.73
16	Additional Plant Establishment Work	\$5,000.00
16 S-1	Additional Funds	\$50,000.00

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17	Remove Burned Palm Tree	\$4,000.00
CCO TOTAL		\$422,073.52
TOTAL CONTINGENCY AND SUPPLEMENTAL		\$812,748.38

I-215 Segment 2 Landscape Replacement Project – Executed Change Orders		
Number	Description	Amount
1	Maintain Public Traffic	\$2,000.00
2	Storm Water Shared Costs	\$10,000.00
3	Establish Dispute Resolution Advisor	\$5,000.00
4	Remove and Dispose of Rock Cobble	\$10,000.00
4 S-1	Additional Funds to Remove BNSF Ballast	\$40,000.00
4 S-2	Additional Funds to Remove and Dispose of Rock Cobble	\$20,000.00
4 S-3	Additional Funds to Remove and Dispose of Rock Cobble	\$3,000.00
4 S-4	Remove Unsuitable Material	\$2,646.91
5	Cleaning of Drainage Systems	\$25,000.00
6	Removal of Dead Trees	\$10,000.00
7	Revised Special Provisions for the Cost of Water	\$0.00
7 S-1	Water Cost Adjustment	\$5,000.00
8	Irrigation Revisions	\$656.30
9	Relocate Trees and Irrigation outside of Clear Recovery Zone	\$10,000.00
9 S-1	Additional Funds	\$1,206.16
10	Service Connection for Irrigation	\$5,000.00
10 S-1	Additional Funds	\$15,000.00
11	Revised Ball Valves Specifications	\$0.00
12	Modify Plants Group/Type	(\$6,968.44)
13	Delete Work at 16 th	(\$54,250.70)
13 S-1	Salvage Irrigation Equipment	\$1,676.15
14	Revised Gravel Mulch Specifications	\$0.00
15	Added Irrigation Booster Pump	\$48,457.80
16	Added Closure Charts	\$0.00
17	Gravel Mulch Adjustment	\$187,717.00
18	Additional Gravel Mulch Quantities	\$21,508.05
CCO TOTAL		\$362,649.23
TOTAL CONTINGENCY AND SUPPLEMENTAL		\$502,203.56

I-10 Corridor Contract 1		
Design Build – Executed Change Orders		
Number	Description	Amount
1	Establish Dispute Review Board	\$75,000.00
2	Partnering	\$90,000.00
3	100 Day Extension for Utility Information Submittal	\$0.00
4	Addition of Executed Utility Agreements to Technical Provisions	\$0.00
4 S-1	Executed / Revised Utility Agreements	\$0.00
4 S-2	Executed / Revised Utility Agreements	\$0.00
4 S-3	Executed / Revised Utility Agreements	\$0.00
4 S-4	Executed Utility Agreements	\$0.00
4 S-5	Executed Utility Agreements	\$0.00

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4 S-6	Executed Utility Agreements	\$0.00
5	Overhead Sign Location Change	\$0.00
6	Modifications to Insurance and Subcontractor Requirements	\$0.00
7	Provide for CHP & Maintenance Observation/Enforcement Area	\$0.00
11	Revised Pavement Delineation Detail	\$0.00
12	Mass Concrete Specification Revision	\$0.00
13	Temporary ITS Traffic Monitoring Stations	\$0.00
14	Concurrent Closure of 6th Street and Campus Avenue Bridges	\$0.00
15	Modify Utility Relocation Work Packages	\$0.00
16	Revised Requirements for Shop Drawings Submittals	\$0.00
17	Revised Ramp Lane Closure Requirements	\$0.00
18	Revised Tech Provision 14.3.5 "Design Submittals" Requirements	\$0.00
19	Modifications to the Project Aesthetics and Landscape Master Plan	\$0.00
20	Added Pool Removal and (2) Electrical Panel Replacements	\$42,790.00
21	Revised SHOPP Pavement Rehabilitation Work Limits	\$657,200.00
22	Revised East End Ultimate Paving Limits	\$257,050.00
23	4th Street Striping	\$14,000.00
24	GAD and ROW Revisions	(\$470,125.00)
25	Deletion of Sound Wall 1190	(\$322,150.00)
26	Euclid Eastbound Exit Ramp Ground Anchor Wall Limits	\$155,400.00
27	Reduced Speed Limit Requirements	\$260,000.00
28	Additional Toll Rate Dynamic Message Signs	\$290,900.00
29	Revised Maintenance Requirements for Specific Auxiliary Lanes	\$0.00
30	Right of Way and Utility Design Revisions	\$719,277.00
30 S-1	Utility Revisions near Monte Vista Avenue	\$617,905.00
31	Additional Design Revisions for Right-of-Way Changes	\$25,767.00
32	Clearing of the TCE and Pool Mitigation Work	\$30,380.00
33	Rock Curb Extension at Euclid Avenue	\$77,892.00
34	7th Street and 2nd Avenue Sidewalk Improvements	\$79,732.00
Jan 2021	BOD approves revised funding plan with contingency reduction	(21,400,000)
35	Revised TCS CCTV Camera System	\$76,517.00
37	Partnering Facilitator Payment	\$50,000.00
38	Emergency Property Fence Fix	\$1,631.00
39	I-10/I-15 North to West Connector – 55-hour Closure	\$0.00
40	55-Hour Closure, Storm And Deck Drains	\$730,000.00
41	Recessed Pavement Markers	\$6,384.00
42	Telecommunication Conduits/ROW Support	\$111,843.48
43	Extra Maintenance for CHP Directed Closure	\$12,652.00
44	Extra Maintenance for Hazardous Materials Clean Up	\$1,111.00
45	Additional Industrial Driveway on Sultana Avenue at Edison Elementary	\$10,000.00
46	Additional 55-Hour Closures on Segment 4	\$0.00
47	All Compensation for Design, Construction and all Ancillary Items to Complete Additional Work	\$900,000.00
48	DB CN 0130 and CN 1135 Additional SOW for AT&T	\$117,500.00
49	Removal of Abandoned Pipes along Monte Vista Avenue	\$85,000.00
50	Credit for the Design, Construction and all Ancillary Items to Complete Additional Work	(\$750,000.00)
51	Change Concrete Barrier Type from 736 to 836	\$3,600,000.00
52	Property Commitment at 1325 Fresno Street – Criner Property	\$41,000.00
53	Reflective Traffic Signal Backplates	\$120,000.00

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54	Relocation of Ramp Meter System RMS at Vineyard WB On-Ramp DL-139	\$182,000.00
55	9222 Vernon Avenue Maki Private Property Drainage Improvement	\$16,000.00
56	Additional Work at WB I-10, East of I-10/Vineyard IC	\$345,000.00
57	Removal of Abandoned Pipelines CN 0565 & CN 0566 at Monte Vista/I-10 UC Structure	\$90,000.00
58	Holt Blvd. Off-Ramp UC LT Closure Wall Aesthetic Finish	\$35,000.00
59	Monte Vista WB On-Ramp Shoulder Pavement DL-121	\$217,500.00
60	Directive – Add “International” to Ontario Airport Signs	\$50,000.00
61	Furnish Ramp Meter Cabinets	\$210,000.00
62	Additional SHOPP Paving Archibald Ramp Pavement Rehab	\$98,500.00
63	Additional Work for MWD Encasement Extension	\$752,000.00
64	Additional SHOPP Rehab Work - Slab Repair Near I-10/Etiwanda Ave IC	\$92,500.00
66	Additional Work Mountain Ave EB On-Ramp Right-of-Way Fencing	\$10,250.00
CCO TOTAL		\$9,813,315.48
TOTAL CONTINGENCY AND SUPPLEMENTAL		\$51,369,000.00

Toll Service Provider – Executed Change Orders		
Number	Description	Amount
1	Establish Dispute Review Board	\$75,000.00
2	Partnering	\$0.00
3	Right of Way (ROW) Revisions	\$0.00
4	Revised NTP 2 Start Date	\$0.00
6	Revised Enforcement Beacon Specifications	(\$1,952.00)
7	Added TRDMS to Two On-Ramps	\$193,850.00
CCO TOTAL		\$266,898.00
TOTAL CONTINGENCY AND SUPPLEMENTAL		\$1,855,000.00

US 395 Phase 1 Widening Project – Executed Change Orders		
Number	Description	Amount
1	Maintain Public Traffic	\$100,000.00
2	Storm Water Shared Costs	\$25,000.00
3	Partnering	\$20,000.00
4	Establish Dispute Resolution Advisor	\$20,000.00
5	Cleaning of Drainage Systems	\$30,000.00
6	Buried Man-Made Objects	\$15,000.00
7	Maintain Existing Temporary Electrical Systems	\$15,000.00
7 S-1	Additional Funds	\$85,000.00
8	Maintain Temporary Tortoise Fence	\$15,000.00
9	Revised Temporary HMA Requirements	(\$11,000.00)
10	Revised Temporary HMA Specifications	(\$3,180.00)
11	Additional Earthwork	\$35,905.00
12	Protect Existing Drainage Systems	\$70,000.00
13	Added Saw Cut to coordinate with Kinder Morgan work	\$24,304.00
14	Provide Access to A Local Business	\$11,800.00
15	Quantity Increases; Bid Items 21, 26 & 83	\$78,780.00

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15 S-1	Revised Bid Item Quantities	\$356,374.49
15 S-2	Revised Bid Item Quantities	\$34,801.30
16	Drainage System 14 Modifications	\$10,270.00
17	Removal of 31 Concrete Headwalls and Wingwalls	\$52,583.75
18	Drainage System 7 Modifications	\$31,356.00
19	Adjust Manholes to Grade	\$10,000.00
19 S-1	Additional Funds	\$5,000.00
20	Additional HMA Paving for Revised Staging	\$127,670.90
21	Modified Drainage System Opening on Retaining Wall 794	\$4,103.35
22	Revisions at North of Mojave Drive Intersection	\$150,000.00
22 S-1	Revisions at North of Mojave Drive Intersection	\$150,000.00
23	Revised Pile Cap Concrete Requirement for Sound Wall 875	\$217,665.25
25	Added curb on the Southeast Corner of Air Base Road	\$2,040.00
26	Electrical Design Changes at the Air Base Road Intersection	\$43,363.00
27	Added Hydroseed	\$35,324.00
28	Added MGS per Safety Commission	\$50,000.00
29	Additional Pavement Markings and Striping	\$50,000.00
29 S-1	Additional Funds	\$7,000.00
30	Revised Joshua Wash Bridge Wingwalls	\$50,000.00
31	Payment Adjustment for Gravel Bag Quantities	\$40,138.32
32	Additional Safety Commission Revisions	\$45,000.00
33	Installation and Testing of Additional Electronic Ball Markers	\$8,569.95
34	Stage 4 Temporary Striping	\$73,706.00
35	Seneca Interchange Revisions	\$108,331.64
CCO TOTAL		\$2,194,906.95
TOTAL CONTINGENCY AND SUPPLEMENTAL		\$8,741,611.75

Monte Vista Grade Separation – Executed Change Orders		
Number	Description	Amount
1	Establish Dispute Resolution Board	\$15,000.00
1 S-1	Revise Special Provision Language	\$0.00
1 S-2	Additional Funds	\$10,000.00
2	Partnering Workshop	\$15,000.00
3	Traffic Control	\$10,000.00
3 S-1	Additional Funds	\$10,000.00
4	Federal Training Program	\$12,000.00
5	Post-Tensioning Duct Size Change	\$0.00
7	Storm Water Shared Costs	\$50,000.00
8	Relocate 8" Water Line	\$8,000.00
8 S-1	Additional Funds	\$10,386.03
9	Drainage System for Adjacent Property	\$14,925.00
10	Masonry Block Change	\$0.00
11	Sewer Lateral Piping Size Change	\$6,013.00
12	Future Electrical Conduits for Montclair	\$39,385.00
13	Change in Phasing of Work	\$0.00
14	Precast Girder Reinforcement Change	\$0.00
15	Change in Phasing of Work	\$0.00

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16	Water Line Modifications	\$8,790.00
16 S-1	TRO Payment for Delays Related to CCO No. 16	\$124,800.00
16 S-2	Additional Funds	\$54,689.60
17	Modify Overhead Signs and Install Pedestrian Barricades	\$6,765.97
21	Additional Sewer Service Lateral Connections	\$10,850.00
22	Girder Reinforcement Splicing Option	\$0.00
23	Deleting Sidewalk	(\$12,540.00)
25	HMA Along Private Access Road	\$16,000.00
26	Temporary Embankment for SCE	\$15,000.00
27	Temporary Shoring for SCE	\$60,000.00
28	Modify Water Line in Conflict with SCE	\$10,000.00
29	Storm Drain Lateral Realignment	\$14,110.00
31	Driveway for Future Development	\$3,187.80
32	Potholing/Locating AT&T & Level 3 Utilities	\$60,000.00
33	Deduction for Rejected Piles	(\$10,000.00)
34	Modified Quantities Due to the Field Conditions	\$29,257.95
34 S-1	Modified Quantities Due to the Field Conditions	\$105,453.57
34 S-2	Modified Quantities Due to the Field Conditions	\$9,450.00
35	Conduit for SCE Service Connection for Traffic Signal System	\$8,000.00
36	Additional MSE Wall Drainage	\$8,000.00
37	Water Supply Modifications	\$15,000.00
38	Seal Coat Specification Change	(\$2,000.00)
39	Removal of UPRR Sign Foundations	\$5,000.00
41	Resolution of NOPC No. 3	(\$59,986.00)
42	Revised Canopy at Taxi Yard	\$0.00
43	Landscaping Revisions	\$11,286.00
44	Added Headwall and Retaining Curb	\$10,000.00
45	Drainage Inlet Repair Damaged by Public	\$7,500.00
45 S-1	Additional Funds	\$381.43
46	Project Substantial Completion	\$0.00
47	Wire Mesh Substitution	\$15,000.00
48	Fence and Gate Revisions	\$52,336.60
49	Monument Modifications	\$6,500.00
49 S-1	Additional Monument Modifications	\$46,000.00
52	Additional work required by UPRR	\$10,577.00
53	Additional Erosion Control	\$16,000.00
54	Fence Repairs Damaged by Public	\$13,184.00
CCO TOTAL		\$869,302.95
TOTAL CONTINGENCY AND SUPPLEMENTAL		\$2,498,958.60

Mount Vernon Avenue Viaduct Design-Build Project – Executed Change Orders		
Number	Description	Amount
1	Added Perimeter Fence, K-rail and Signage	\$21,500.00
1 S-1	Install/Maintain Temporary Fence	\$28,670.86
2	Partnering	\$100,000.00

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3	Temporary Crossing	\$700,000.00
3 S-1	Additional Funds	\$225,000.00
3 S-2	Construct Railroad Temporary Construction Crossing	\$13,889.15
3 S-3	Temporary Railroad Crossing	\$27,744.36
5	Asbestos Removal	\$100,000.00
5 S-1	Additional Funds	\$954,863.00
5 S-2	Asbestos Coating Abatement	\$429,723.86
5 S-3	Bridge Demolition Engineer – Increase Time	\$67,977.25
5 S-4	Asbestos Coating Abatement	\$159,481.26
7	Add Fire Hydrants	\$112,200.00
8	Test Unforeseen Buried Man-made object	\$1,341.55
9	Decommission/Abandon Water and Sewer Lines	\$203,852.65
10	Added Utilities Work at Kingman Street	\$377,389.28
12	Increase Contractor Overhead – Increase Time	\$208,232.35
15	Design for Additional Street Lights on Alley and Cabrera	\$15,400.00
16	Design for Bike Lanes E 2 nd	\$14,190.00
17	BNSF Fence Removal	\$12,332.14
20	North Abutment Embankment Removal	\$141,592.00
CCO TOTAL		\$3,915,379.71
TOTAL CONTINGENCY AND SUPPLEMENTAL		\$17,230,000.00

I-10 University Street Improvement Project – Executed Change Orders		
Number	Description	Amount
1	Time Extension (Delay Start)	\$0.00
2	Maintain Traffic	\$10,000.00
2 S-1	Maintain Roadway and Traffic	\$15,000.00
3	Time Extension	\$20,000.00
4	Tree Removals	\$17,096.27
5	Dispute Resolution Advisor DRA	\$10,000.00
6	Replace Pavement Structural Section	\$393,852.01
6 S-1	Replace Pavement Structural Section	\$20,000.00
7	WB On-Ramp Modification	\$229,391.13
9	Relocate Signal Push Button Pole	\$13,372.65
10	Install of Signal Conduit to Avoid Conflict	\$15,129.64
11	Differing Site Condition	\$28,061.09
12	Disposal of Fiber Optic Vault	\$4,940.41
13	Revised Elevations for Curb and Gutter	\$2,862.64
15	Payment Adjustment per Price Index due to Crude Oil Prices	\$38,500.00
16	Water Meter Revisions	\$61,564.00
17	Install Joint Sealant	\$9,433.79
CCO TOTAL		\$889,203.63
TOTAL CONTINGENCY AND SUPPLEMENTAL		\$1,500,590.00

I-10 Alabama Street Improvement Project – Executed Change Orders		
Number	Description	Amount
1	SWPPP Maintenance	\$20,000.00
2	Traffic Control Devices	\$30,000.00
3	Electrical Works Utility Modifications	\$25,000.00

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4	Stage 1A Value Engineering Change Proposal (VECP) Credit	(\$20,362.87)
	CCO TOTAL	\$54,637.13
	TOTAL CONTINGENCY AND SUPPLEMENTAL	\$1,338,886.33

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Minute Action

AGENDA ITEM: 3

Date: August 11, 2022

Subject:

Major Projects Status Report through June 2022

Recommendation:

Receive the Major Projects Status Report for the period through June 2022.

Background:

The Major Projects Status Report for the period through June 2022, is a high-level summary of relevant project information. This information is presented to provide schedules, cost, funding, and work descriptions for current active projects being managed by the Project Delivery group. San Bernardino County Transportation Authority (SBCTA) staff also would like to highlight the following activities for this period:

1. Interstate 15 Corridor Freight and Express Lanes Project - Contract 1:

The Interstate 15 (I-15) Corridor Freight and Express Lanes Project - Contract 1 will add auxiliary lanes to improve freight corridor movement and an addition of two (2) express lanes in each direction on the I-15 from south of State Route (SR) 60 to north of Foothill Boulevard. The Environmental Document (ED) for the I-15 Corridor Project was approved in December 2018. The Project will be delivered in multiple construction packages. The first construction package, known as the I-15 Corridor Freight and Express Lanes Project - Contract 1, will construct one (1) to two (2) express lanes in each direction from south of SR 60 to north of Foothill Boulevard and add auxiliary lanes at select locations in order to improve freight movement and reduce traffic congestion. The 65% Plans, Specifications, and Estimates (PS&E) milestone was achieved in April 2022. The 95% PS&E milestone was submitted in July 2022. The Construction Management services firm has been selected and is currently scheduled for Board of Directors (Board) approval in September 2022. Coordination with Riverside County Transportation Commission and the California Department of Transportation (Caltrans) is ongoing regarding the interface between the Riverside and San Bernardino County portions of work.

2. Interstate 10 Cedar Avenue Interchange Improvement Project:

The Interstate 10 (I-10) Cedar Avenue Interchange Improvement Project (Project), in the County of San Bernardino, is the highest priority project in the Measure I 2010-2040 Freeway Interchange Program. Cedar Avenue is a north – south arterial in the unincorporated community of Bloomington and forms a tight diamond interchange with the I-10. This location has been experiencing high levels of traffic congestion resulting in low levels of service. The Project will reconstruct and widen Cedar Avenue and replace the bridge over I-10 and the Union Pacific Railroad. The Project's PS&E were prepared by Caltrans and approved on April 25, 2022. The Union Pacific Railroad Construction and Maintenance Agreement was approved on May 16, 2022 and the Right-of-Way Certification approved by Caltrans on June 21, 2022. An Invitation for Bids (IFB) was released on June 30, 2022. Bid Opening is scheduled for August 10, 2022 with an anticipated award of the construction contract at the September 7, 2022

Entity: San Bernardino County Transportation Authority

Board meeting. Construction is anticipated to start in October 2022 and is anticipated to take approximately two and one-half (2 ½) years to complete. A Public Outreach program is in place and will be maintained during the construction period.

3. Interstate 10 Corridor Freight and Express Lane Project - Contract 2:

Project Delivery staff have been working with the SBCTA Board on defining upcoming projects on the I-10 Corridor. Construction work is ongoing to add two (2) express lanes in each direction between the Los Angeles County line and I-15. Cost estimates and traffic and revenue studies completed over the last several years confirmed the need to further phase the balance of the corridor. The Board provided direction at its October 2021 meeting to explore a strategy for a single lane express lane in each direction over the next 11-miles of the corridor, which would be consistent with potential State funding grant opportunities. This section has been identified as Contract 2. Staff has selected a design consultant for final design services for this 11-mile segment, which the Board approved on July 6, 2022. Design services are now underway and in order to expedite project delivery, the I-10 Corridor Freight and Express Lane Project – Contract 2 will be delivered in two (2) segments: Segment 2A: I-15 to Sierra Avenue and Segment 2B: Sierra Avenue to Pepper Avenue. It is anticipated that the design work will take about two and one-half (2 ½) years to complete, resulting in a final design package to advertise for construction in early 2024 for Segment 2A and late 2024 for Segment 2B.

Financial Impact:

This item is consistent with the Fiscal Year 2022/2023 Budget.

Reviewed By:

This item is not scheduled for review by any other policy committee or technical advisory committee.

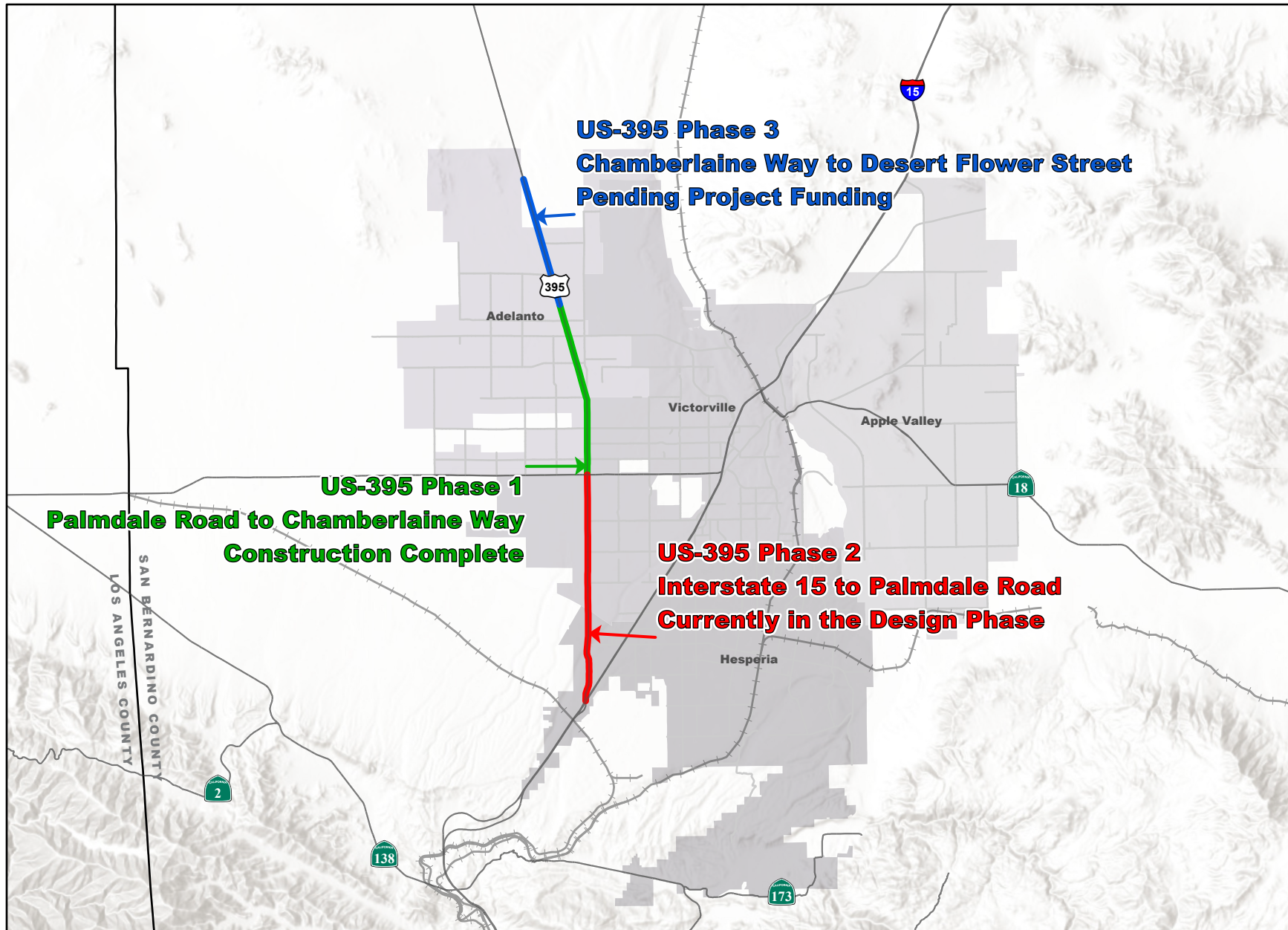
Responsible Staff:

Sal Chavez, Project Delivery Manager

Approved
Board of Directors Metro Valley Study Session
Date: August 11, 2022

Witnessed By:

US-395 Improvement Phases



Minute Action

AGENDA ITEM: 4

Date: August 11, 2022

Subject:

Dry Run Resolutions of Necessity for the Interstate 215 University Parkway Project

Recommendation:

That the following be reviewed and recommended for final approval by the Board of Directors, acting as the San Bernardino County Transportation Authority, at a regularly scheduled Board meeting:

- A. Conduct a public hearing to consider condemnation of real property required for the Interstate 215 University Parkway Interchange Project in the City of San Bernardino.
- B. Upon completion of a public hearing, that the Board of Directors adopt Resolution of Necessity No. 22-166, authorizing and directing General Counsel, or her designee, to prepare, commence, and prosecute proceedings in eminent domain for the purpose of acquiring interests in real property from: Junghwan Choi and Elaine D. Choi (Assessor's Parcel Number [APN] 0266-072-32). The resolution must be approved by at least a two-thirds majority; and
- C. Upon completion of a public hearing, that the Board of Directors adopt Resolution of Necessity No. 22-167 authorizing and directing General Counsel, or her designee, to prepare, commence, and prosecute proceedings in eminent domain for the purpose of acquiring interests in real property from: Jimmy Fikri Kaymaz (APN 0266-072-33). The resolution must be approved by at least a two-thirds majority.

Background:

In November 2015, San Bernardino County Transportation Authority (SBCTA) and the City of San Bernardino (City) approved Cooperative Agreement No. 16-1001335 for the delivery of the Interstate 215 (I-215) University Parkway Interchange Project (Project) from the Project Initiation Document (PID) phase through completion of construction. This agreement was assumed and replaced by Cooperative Agreement No. 19-1002205, which was approved in July 2019. Under the cooperative agreement, SBCTA is to lead the acquisition of Right-of-Way (ROW) needed to construct and operate the Project. Through the environmental and the preliminary engineering process, and in consultation with the California Department of Transportation (Caltrans), SBCTA and the City identified the ROW requirements for the Project while employing extensive efforts to minimize impacts to property owners. While most of the Project will be constructed within existing public ROW, rights were needed from five (5) property owners ranging from extension of freeway access control, Temporary Construction Easements (TCE), and a permanent access easement. In March 2020, the Board of Directors (Board) authorized staff to proceed with voluntary acquisition of property necessary for the Project, from identified property owners. The Board also authorized the Director of Project Delivery, or his designee, to add or remove parcels from the list of properties as the Director determines, from time to time, are necessary for the Project, provided they are environmentally cleared. The initial offers for some properties were made in mid-2021. The properties listed in the Resolution of Necessity are the last two property acquisitions anticipated for this Project.

In an effort to keep the Project schedule intact and deliver the Project consistent with Federal funding timelines, it is necessary to comply with the statutorily-prescribed process for eminent

Entity: San Bernardino County Transportation Authority

domain and conduct hearings for a Resolution of Necessity for each property while negotiations continue. Therefore, the purpose of this agenda item is to present information regarding the public interest and necessity for the Project and the properties that are needed. Although the adoption of Resolutions of Necessity is recommended for the subject properties in order to maintain the Project schedule and avoid delay costs, SBCTA's acquisition agents will continue to negotiate with the property owners in an effort to acquire the properties through a voluntary purchase and avoid litigation in the eminent domain process.

The owners of the subject properties are:

- Junghwan Choi and Elaine D. Choi
- Jimmy Fikri Kaymaz

Support for the Resolutions of Necessity

SBCTA is authorized to acquire property by eminent domain pursuant to the California Public Utilities Code Sections 130220.5 and 130809(b)(4). Eminent domain will allow SBCTA to obtain legal rights to the properties needed for the Project if a negotiated sale cannot be reached. A Resolution of Necessity is the first step in the eminent domain process. Since the process takes several months, it is necessary to start this process now to ensure that possession of the properties is obtained in time to meet the scheduled delivery dates and to avoid costly ROW delays.

In order to adopt the Resolutions of Necessity, SBCTA must make the four (4) findings discussed below for each of the properties. The issue of the amount of just compensation for these properties is not addressed by these Resolutions of Necessity and is not to be considered at the hearings. The four (4) necessary findings are:

1. The public interest and necessity require the Project.

The purpose of the Project is to address congestion, improve traffic operations, and accommodate projected regional population growth in the City of San Bernardino and the region. The interchange serves the area and also serves the California State University at San Bernardino campus located roughly a mile to the north. The Project area currently experiences severe congestion resulting in delays for travelers. This traffic congestion is forecasted to deteriorate to Level of Service (LOS) F, or congestive traffic breakdown conditions, at the Project design horizon of 2042 if improvements are not made. The Project will reconstruct the existing tight diamond interchange into a Diverging Diamond Interchange (DDI) configuration and will improve freeway access for the area. DDIs are known to improve traffic safety by reducing the amount of vehicular conflict points at an interchange and having a minimal footprint reducing the amount of acquisition needed to construct the interchange.

The Project limits along University Parkway extend from Hallmark Parkway south of the interchange to Varsity Avenue/State Street to the north.

2. The Project is planned and located in the manner that will be most compatible with the greatest public good and least private injury.

During the environmental and preliminary design phase, several alternatives were developed and considered to address the need to alleviate current and forecasted congestion in the area. The DDI was selected to be the design alternative having the least amount of acquisition needed to construct and operate the Project. The other alternative would have resulted in full displacement of several businesses and acquisition of a significant amount of the parking area for Walmart. Additionally, staff explored and used design and geometric refinements to avoid and minimize impacts to adjacent businesses.

SBCTA staff and ROW agents have had numerous communications with the impacted property owners and considered their feedback during design refinements in order to proceed with the Project in a manner that causes the least private injury while accomplishing the greatest public good.

3. Each property sought to be acquired is necessary for the Project.

While portions of the Project are being constructed within existing ROW, the Project requires acquisition of the property interests listed below:

- **Junghwan Choi and Elaine D. Choi:** One (1) access control extension and one (1) Temporary Construction Easement are needed for construction and operation of the Project.
- **Jimmy Fikri Kaymaz:** One (1) access control extension, one (1) access easement, and two (2) Temporary Construction Easements are needed for construction and operation of the Project.

4. Offers required by Section 7267.2 of the Government Code have been made to the owner or owners of record.

- The offer for the Junghwan Choi and Elaine D. Choi property was sent on 04/21/2022
- The offer for the Jimmy Fikri Kaymaz property was sent on 04/21/2022

Upon completion of the Project, or as prescribed in agreements, SBCTA will transfer the properties acquired for the Project, or portions thereof, to the City and to Caltrans, respectively.

Financial Impact:

This item is consistent with the Fiscal Year 2022/2023 Budget under Task No. 830, Sub-Task No. 0853.

Reviewed By:

This item is not scheduled for review by any other policy committee or technical advisory committee. This item was taken to the June 9, 2022 Metro Valley Study Session meeting and unanimously recommended for approval with a condition by the City of San Bernardino (Mayor Valdivia) that staff investigate the possibility of a shared parking agreement between Walmart and the Kaymaz and Choi properties. Staff is bringing this item back with the results of that inquiry. SBCTA General Counsel has reviewed this item and the draft resolutions.

San Bernardino County Transportation Authority

Board of Directors Metro Valley Study Session Agenda Item
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Responsible Staff:

Sal Chavez, Project Delivery Manager

San Bernardino County Transportation Authority

Approved
Board of Directors Metro Valley Study Session
Date: August 11, 2022
Witnessed By:

I-215 University Parkway Interchange Project

RESOLUTION OF NECESSITY FOR PROJECT RIGHT-OF-WAY

Presenter: Paul Melocoton
SBCTA Project Manager



cta

San Bernardino County
Transportation Authority

Board of Directors Metro Valley
Study Session
August 11, 2022

SBCTA IS REQUESTED TO MAKE THE FOLLOWING FINDINGS:

1. The public interest and necessity require the proposed project
2. The project is planned or located in a manner that will be most compatible with the greatest public good and the least private injury
3. The real property to be acquired is necessary for the project
4. The offer of just compensation has been made to the property owner



SBCTA Request

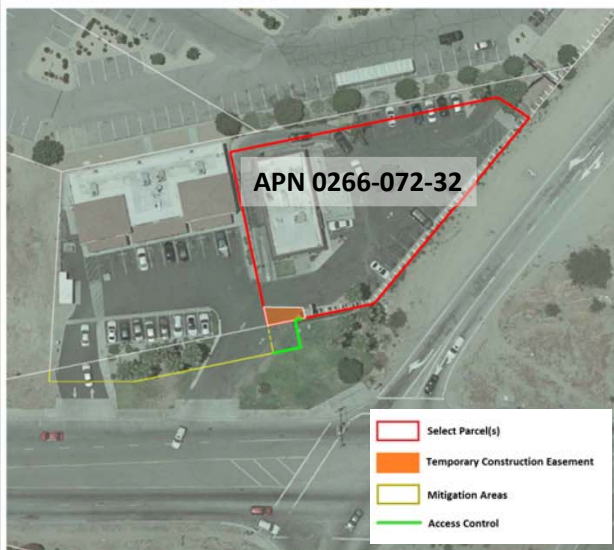


- Project will reconstruct the existing tight diamond interchange into a Diverging Diamond Interchange (DDI) configuration in order to address congestion, improve traffic operations, and accommodate projected regional population growth.
- The project will improve pedestrian and bicyclist access across the interchange.



I-215 University Parkway Interchange Project

OWNER: JUNGHWAN & ELAINE CHOI



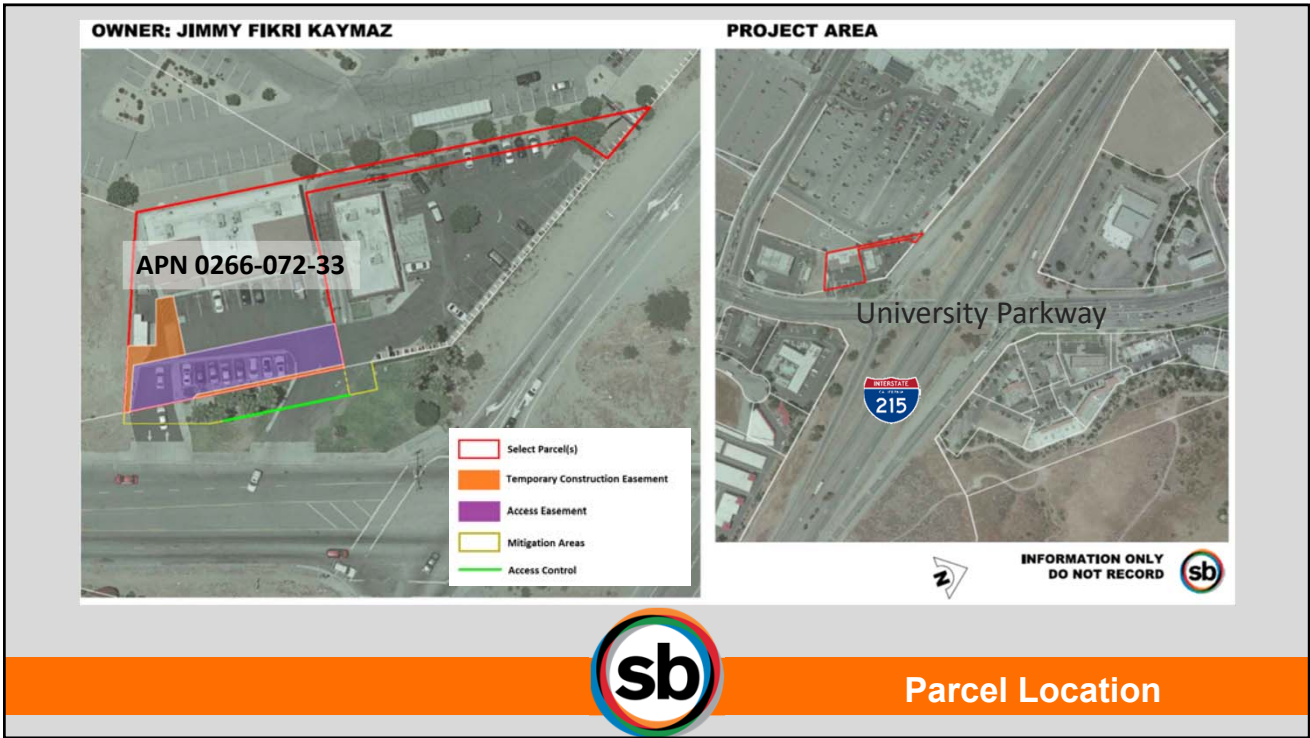
PROJECT AREA

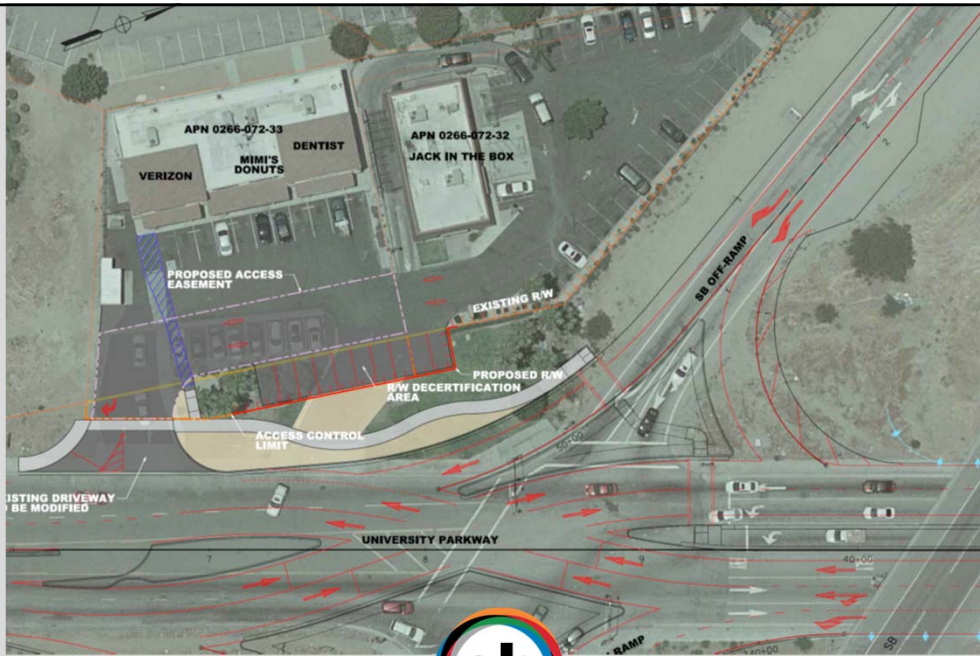


INFORMATION ONLY
DO NOT RECORD



Parcel Location





Parcel Location

No.	Ownership	Date of First Contact	Mailings	In Person Meetings	Phone Contacts	E-Mails	Attorney Contacts	Unsuccessful Contacts *	Total
B.	Junghwan Choi and Elaine D. Choi	11/11/2020	2	3	20	2	13		40
C.	Jimmy Fikri Kaymaz	11/11/2020	2	3	4	1	9		19
* Property visit, phone call and/or email with no response									
Communications as of August 3, 2022									

Communication Summary

Item	Ownership	Offer Date
B.	Junghwan Choi and Elaine D. Choi	4/21/2022
C.	Jimmy Fikri Kaymaz	4/21/2022



Offer of Just Compensation

**SBCTA ADOPT A RESOLUTION OF NECESSITY
BASED ON THE FOLLOWING FINDINGS:**

1. The public interest and necessity require the proposed project
2. The project is planned or located in a manner that will be most compatible with the greatest public good and the least private injury
3. The real property to be acquired is necessary for the project
4. The offer of just compensation has been made to the property owner



Staff Recommendation

THANK YOU



Minute Action

AGENDA ITEM: 5

Date: August 11, 2022

Subject:

Design Services Contract Award for the Interstate 10 Slover Mountain Underpass Project

Recommendation:

That the following be reviewed and recommended for final approval by the Board of Directors, acting as the San Bernardino County Transportation Authority (SBCTA), at a regularly scheduled Board meeting:

A. Award Contract No. 22-1002762 to TranSystems Corporation for a total not-to-exceed amount of \$2,840,879.51, to be funded with Measure I 2010-2040 Freeway Program funds, for Plans, Specifications and Estimates Design Services for the Interstate 10 Slover Mountain Underpass Project.

B. Approve a contingency for Contract No. 22-1002762 in a not-to-exceed amount of \$284,087.95, to be funded with Measure I 2010-2040 Freeway Program funds, to be released in accordance with SBCTA Procurement and Special Risk Assessment Policy No. 11000, as necessary.

Background:

To minimize concurrent public impacts and to prepare the Interstate 10 (I-10) Corridor for potential funding opportunities in the near-term, it was determined to advance several components of the I-10 Corridor Project. This agenda item is to replace the I-10 at Slover Mountain underpass to accommodate the upcoming I-10 Corridor Project.

The Project proposes to replace the existing Union Pacific Railroad Slover Mountain underpass to accommodate up to two (2) new express lanes in the median in each direction through this corridor segment. This will allow for future construction of the ultimate facility at this location. The Geometric Approved Drawings will provide the initial basis for this final design; however, the track alignment will be finalized by the selected consultant.

On April 14, 2022, Request for Proposals (RFP) No. 22-1002762 was released and posted on PlanetBids and the San Bernardino County Transportation Authority (SBCTA) website to solicit firms to assist SBCTA in providing Plans, Specifications and Estimates (PS&E) Design Services for the I-10 Slover Mountain Underpass Project. The solicitation was issued in accordance with SBCTA's Policy No. 11000. The solicitation was sent electronically to approximately 343 firms and consultants registered on PlanetBids. Of the 343 firms notified, 61 firms downloaded the RFP.

On April 20, 2022, a Pre-Proposal Conference was held and the sign-in sheets were uploaded to PlanetBids on April 21, 2022. On April 29, 2022, all responses to questions were released via PlanetBids. On May 3, 2022, Addendum No. 1 was released to extend the proposal due date and to revise the insurance limits.

On May 18, 2022, SBCTA received three (3) proposals by the date and time specified in the RFP from T.Y. Lin International, TranSystems Corporation, and TRC Engineers. A responsiveness

Entity: San Bernardino County Transportation Authority

Board of Directors Metro Valley Study Session Agenda Item

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review was conducted by the Procurement Manager and found all three (3) proposals to be in compliance with the requirements and specifications outlined in the RFP. The Evaluation Committee was comprised of staff from SBCTA, and the California Department of Transportation (Caltrans) District 8.

The Evaluation Committee concluded their individual review of the proposals and convened to review, discuss, and score the proposals. The Evaluation Committee members met on June 1, 2022, and discussed each proposal according to the evaluation criteria, including the proposal's strengths and weaknesses. At the completion of discussions, the Evaluation Committee individually scored the proposals based on the following evaluation criteria; Qualifications of the Firm - 30%, Proposed Staffing and Project Organization - 30%, and Work Plan - 40%. The firms were ranked in order of technical merit, and a short-list was developed. All three (3) firms were short-listed and invited to interview.

On June 15, 2022, three (3) firms were interviewed. The Evaluation Committee considered all three (3) qualified to perform the work specified in the RFP. The highest ranked firm, TranSystems Corporation is being selected due to their knowledge of the Project, experience, and staff.

As a result of the scoring, the committee recommends that the contract to perform the scope of work as outlined in RFP No. 22-1002762, be awarded to TranSystems Corporation. The firm clearly demonstrated a thorough understanding of the scope of work, proposed a qualified team, had a clear and concise work plan, and had an innovative approach to the project showing the ability to perform the work necessary to complete the project on schedule and within budget. Evaluation forms and reference checks are located in the Contract Audit File. The negotiated cost proposal is higher than the independent cost estimate; however, staff concurs with the higher cost estimate due to the additional extensive coordination with the Union Pacific Railroad, railroad track realignment, aesthetic treatment of the structure, and environmental re-validation.

Contract No. 22-1002762 is to provide Final Design Support Services, which will include preparation of a Supplemental Project Report, Environmental Revalidation, Right-of-Way Engineering, PS&E, and Construction Support Services. Caltrans will provide oversight for compliance with state design standards and requirements. In addition, Union Pacific Railroad will review and approve the track alignment and structures plan.

Staff recommends approval of Contract No. 22-1002762 with TranSystems Corporation for a total not-to-exceed amount of \$2,840,879.51 and a contract duration of five (5) years to cover design support during construction. It is anticipated that construction would start near the middle of 2024, and be complete within two (2) years.

Staff is also recommending a 10% contingency budget in a not-to-exceed amount of \$284,087.95, and would be released in accordance with SBCTA Procurement and Special Risk Assessment Policy No. 11000.

Although the I-10 Slover Mountain Underpass Project was not included in the 2021 Update to the 10-Year Delivery Plan, staff has determined that award of this contract will not impact the delivery of other projects in the Freeway Program.

San Bernardino County Transportation Authority

Board of Directors Metro Valley Study Session Agenda Item

August 11, 2022

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Financial Impact:

This item is consistent with the Fiscal Year 2022/2023 Budget for Task No. 0820 Freeway Projects, Sub-Task No. 0847.

Reviewed By:

This item is not scheduled for review by any other policy committee or technical advisory committee. SBCTA General Counsel, Procurement Manager and Risk Manager have reviewed this item and the draft contract.

Responsible Staff:

Sal Chavez, Project Delivery Manager

Approved
Board of Directors Metro Valley Study Session
Date: August 11, 2022

Witnessed By:

San Bernardino County Transportation Authority

Contract Summary Sheet

General Contract Information

Contract No: 22-1002762 Amendment No.: _____

Contract Class: Payable Department: Project Delivery

Vendor No.: 01817 Vendor Name: TRANSYSTEMS CORPORATION

Description: I-10 SLOVER MOUNTAIN UNDERPASS DESIGN SERVICES

List Any Related Contract Nos.: _____

Dollar Amount							
Original Contract		\$	2,840,879.51	Original Contingency		\$	284,087.9
Prior Amendments		\$	-	Prior Amendments		\$	-
Prior Contingency Released		\$	-	Prior Contingency Released (-)		\$	-
Current Amendment		\$	-	Current Amendment		\$	-
Total/Revised Contract Value		\$	2,840,879.51	Total Contingency Value		\$	284,087.9
	Total Dollar Authority (Contract Value and Contingency)					\$	3,124,967.4

Contract Authorization

Board of Directors _____ Date: 9/7/2022 _____ Committee _____ Item # _____

Contract Management (Internal Purposes Only)

Other Contracts _____ Sole Source? No _____ No Budget Adjustment _____

Local _____ Design _____ N/A _____

Accounts Payable

Estimated Start Date: 9/7/2022 Expiration Date: 8/30/2027 Revised Expiration Date: _____

NHS: Yes QMP/QAP: Yes Prevailing Wage: Yes

							Total Contract Funding:		Total Contingency:	
Sub-										
Fund	Prog	Task	Task	Object	Revenue	PA Level	Revenue Code Name	\$		\$
GL	4110	40	0820	0847	52001	41100000	620	MSI Fwy	2,840,879.51	284,087.95
GL								2,840,879.51		284,087.95
GL								-		-
GL								-		-
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Juan Lizarde

Project Manager (Print Name)

Henry Stultz

Task Manager (Print Name)

Additional Notes:

CONTRACT No. 22-1002762

BY AND BETWEEN

SAN BERNARDINO COUNTY TRANSPORTATION AUTHORITY

AND

TranSystems Corporation

FOR

I-10 SLOVER MOUNTAIN UNDERPASS PLANS SPECIFICATIONS & ESTIMATES

SERVICES

This contract ("Contract") is made and entered into by and between the San Bernardino County Transportation Authority, ("SBCTA"), whose address is 1170 W. 3rd Street, 2nd Floor, San Bernardino, California 92410-1715; and TranSystems Corporation ("CONSULTANT"), whose address is: 3281 E. Guasti Road. Suite 460, Ontario, CA 91761. SBCTA and CONSULTANT are each a "Party" and collectively the "Parties".

RECITALS:

WHEREAS, SBCTA requires Work as described in Exhibit A of this Contract; and

WHEREAS, CONSULTANT has confirmed that CONSULTANT has the requisite professional qualifications, personnel and experience and is fully capable and qualified to perform the services identified herein; and

WHEREAS, CONSULTANT desires to perform all Work identified herein and to do so for the compensation and in accordance with the terms and conditions set forth herein.

NOW, THEREFORE, the Parties agree as follows:

ARTICLE 1. INTRODUCTION

- 1.1 The work to be performed under this Contract is described in Exhibit A, entitled “Scope of Work”, and the CONSULTANT’s Approved Cost Proposal dated July 5, 2022 (Exhibit B). If there is any conflict between the Approved Cost Proposal and the Contract Articles, the Contract Articles take precedence.
- 1.2 CONSULTANT agrees to indemnify and hold harmless SBCTA, its officers, agents and employees from any and all claims, demands, costs, or liability arising from or connected with the services provided hereunder due to negligent acts, errors, or omissions of the CONSULTANT. CONSULTANT will reimburse SBCTA for any expenditure, including reasonable attorney fees, incurred by SBCTA in defending against claims ultimately determined to be due to negligent acts, errors, or omissions of the CONSULTANT.
- 1.3 CONSULTANT and the agents and employees of CONSULTANT, in the performance of this Contract, shall act in an independent capacity and not as officers or employees or agents of SBCTA.
- 1.4 Without the written consent of SBCTA, this Contract is not assignable by CONSULTANT, either in whole or in part.
- 1.5 No alteration or variations of the terms of this Contract shall be valid unless made in writing and signed by the Parties hereto; and no oral understanding or agreement not incorporated herein shall be binding on any of the Parties hereto.
- 1.6 The consideration to be paid to CONSULTANT as provided herein shall be in compensation for all of CONSULTANT’s expenses incurred in the performance hereof, including travel and per diem, unless otherwise expressly so provided.
- 1.7 The Project Manager for this Contract is Sal Chavez, or such other designee as shall be designated in written notice to CONSULTANT from time to time by the Department Director of SBCTA or his or her designee. The Project Manager shall have authority to act on behalf of SBCTA in administering this Contract, including giving notices (including without limitation, notices of default and/or termination), technical directions and approvals, demanding performance and accepting work performed, but is not authorized to receive or issue payments or execute amendments to the Contract itself.

ARTICLE 2. PROJECT DESCRIPTION/SCOPE OF WORK

CONSULTANT agrees to perform the work and services set forth in Exhibit A “Scope of Work”, (“Work”), in accordance with all applicable professional architectural, engineering, construction management, land surveying and/or materials testing standards which are generally accepted in the State of California, in accordance with the terms and conditions expressed herein and in the sequence, time, and manner defined herein. The word “Work”, as used herein, includes without limitation the performance, fulfillment and discharge by CONSULTANT of all obligations, duties, tasks, and Work imposed upon or assumed by CONSULTANT hereunder; and the Work performed hereunder shall be completed to the satisfaction of SBCTA, with their satisfaction being based on prevailing applicable professional standards.

ARTICLE 3. CONSULTANT's REPORTS OR MEETINGS

- 3.1 CONSULTANT shall submit progress reports at least once a month. The report should be sufficiently detailed for SBCTA to determine if CONSULTANT is performing to expectations and is on schedule, to provide communication of interim findings, and to sufficiently address any difficulties or special problems encountered, so remedies can be developed.
- 3.2 CONSULTANT's Project Manager shall meet with SBCTA, as needed, to discuss progress on the Contract.

ARTICLE 4. PERFORMANCE PERIOD

- 4.1 Contingent upon approval by SBCTA's Awarding Authority in accordance with Article 54, below, CONSULTANT shall commence work after written notification to proceed by SBCTA's Procurement Manager. The Contract shall end on August 30, 2027, unless extended by written amendment.
- 4.2 CONSULTANT is advised that any recommendation for contract award is not binding on SBCTA until the Contract is fully executed and approved by SBCTA's Awarding Authority.

ARTICLE 5. ALLOWABLE COSTS AND PAYMENTS

- 5.1 The method of payment for this Contract will be based on actual cost plus fixed fee. SBCTA will reimburse CONSULTANT for actual costs (including labor costs, employee benefits, travel, equipment rental costs, overhead and other direct costs) incurred by CONSULTANT in performance of the Work. CONSULTANT will not be reimbursed for actual costs that exceed the estimated wage rates, employee benefits, travel, equipment rental, overhead, and other estimated costs set forth in the approved CONSULTANT's cost proposal, unless additional reimbursement is provide for by contract amendment. In no event, will CONSULTANT be reimbursed for overhead costs at a rate that exceeds SBCTA's approved overhead rate set forth in the Cost Proposal. In the event, that SBCTA determines that a change to the Work from that specified in the Cost Proposal and Contract is required, the Contract time or actual costs reimbursable by SBCTA shall be adjusted by contract amendment to accommodate the changed work. The maximum total cost as specified herein shall not be exceeded, unless authorized by written amendment.
- 5.2 In addition to the allowable incurred costs, SBCTA will pay CONSULTANT a fixed fee of \$118,449.32. The fixed fee is nonadjustable for the term of the Contract, except in the event of a significant change in the Scope of Work and such adjustment is made by contract amendment.
- 5.3 Reimbursement for transportation and subsistence costs shall not exceed the rates specified in the approved Cost Proposal.
- 5.4 When milestone cost estimates are included in the approved Cost Proposal, CONSULTANT shall obtain prior written approval for a revised milestone cost estimate from SBCTA before exceeding such cost estimate.
- 5.5 Progress payments will be made monthly in arrears based on Services provided and allowable incurred costs. A pro rata portion of CONSULTANT's fixed fee will be included in the monthly progress payments. If CONSULTANT fails to submit the required deliverable items according to the schedule set forth in the Scope of Work, SBCTA shall have the right to delay

payment or terminate this Contract in accordance with the Termination provisions herein.

- 5.6 No payment will be made prior to approval of any Work, nor any Work performed prior to approval of this Contract.
- 5.7 CONSULTANT will be reimbursed as promptly as fiscal procedures will permit upon receipt by SBCTA of itemized invoices in triplicate. Invoices shall be submitted no later than 45 calendar days after the performance of Work for which CONSULTANT is billing except for the month of June, which will require the invoice to be submitted by July 10th. Invoices shall detail the Work performed on each milestone and each project as applicable. Invoices shall follow the format stipulated for the approved Cost Proposal and shall reference this contract number. Final invoice must contain the final cost and all credits due SBCTA including any equipment purchased under the provisions of this Contract. The final invoice should be submitted within 60 calendar days after completion of CONSULTANT's Work. Invoices should be e-mailed to SBCTA at the following address:
ap@gosbcta.com
 For large files over 30 megabytes, invoices can be submitted using this link:
<https://sanbag-lfweb.sanbag.ca.gov/Forms/Invoice-submission>
- 5.8 CONSULTANT shall include a statement and release with each invoice, satisfactory to SBCTA, that CONSULTANT has fully performed the Work invoiced pursuant to this Contract for the period covered, that all information included with the invoice is true and correct, and that all payments to and claims of CONSULTANT and its subconsultants for Work during the period will be satisfied upon the making of such payment. SBCTA shall not be obligated to make payments to CONSULTANT until CONSULTANT furnishes such statement and release.
- 5.9 The total amount payable by SBCTA to CONSULTANT including the fixed fee shall not exceed \$2,840,879.51.
- 5.10 Salary increases will be reimbursable if the new salary is within the salary range identified in the approved Cost Proposal and is approved by SBCTA. For personnel subject to prevailing wage rates as described in the California Labor Code, all salary increases, which are the direct result of changes in the prevailing wage rates are reimbursable.
- 5.11 All subcontracts in excess of \$25,000 shall contain the above provisions.

ARTICLE 6. TERMINATION

- 6.1 Termination for Convenience – SBCTA's Executive Director shall have the right at any time, with or without cause, to terminate further performance of Work by giving thirty (30) calendar days written notice to CONSULTANT specifying the date of termination. On the date of such termination stated in said notice, CONSULTANT shall promptly discontinue performance of Work and shall preserve Work in progress and completed Work, pending SBCTA's instruction, and shall turn over such Work in accordance with SBCTA's instructions.
- 6.1.1 CONSULTANT shall deliver to SBCTA all deliverables prepared by CONSULTANT or its subconsultants or furnished to CONSULTANT by SBCTA. Upon such delivery, CONSULTANT may then invoice SBCTA for payment in accordance with the terms herein.

- 6.1.2 If CONSULTANT has fully and completely performed all obligations under this Contract up to the date of termination, CONSULTANT shall be entitled to receive from SBCTA as complete and full settlement for such termination a pro rata share of the Contract cost based upon the percentage of all contracted Work satisfactorily executed to the date of termination.
- 6.1.3 CONSULTANT shall be entitled to receive the actual costs incurred by CONSULTANT to return CONSULTANT's tools and equipment, if any, to it or its suppliers' premises, or to turn over Work in progress in accordance with SBCTA's instructions plus the actual cost necessarily incurred in effecting the termination.
- 6.2 Termination for Cause
- 6.2.1 In the event CONSULTANT shall file a petition in bankruptcy court, or shall make a general assignment for the benefit of its creditors, or if a petition in bankruptcy shall be filed against CONSULTANT or a receiver shall be appointed on account of its insolvency, or if CONSULTANT shall default in the performance of any express obligation to be performed by it under this Contract and shall fail to immediately correct (or if immediate correction is not possible, shall fail to commence and diligently continue action to correct) such default within ten (10) calendar days following written notice, SBCTA may, without prejudice to any other rights or remedies SBCTA may have, and in compliance with applicable Bankruptcy Laws: (a) hold in abeyance further payments to CONSULTANT; (b) stop any Work of CONSULTANT or its subconsultants related to such failure until such failure is remedied; and/or (c) terminate this Contract by written notice to CONSULTANT specifying the date of termination. In the event of such termination by SBCTA, SBCTA may take possession of the products and finished Work by whatever method SBCTA may deem expedient. A waiver by SBCTA of one default of CONSULTANT shall not be considered to be a waiver of any subsequent default of CONSULTANT of the same or any other provision, nor be deemed to waive, amend, or modify this Contract.
- 6.2.2 CONSULTANT shall deliver to SBCTA all finished and unfinished deliverables under this Contract prepared by CONSULTANT or its subconsultants or furnished to CONSULTANT by SBCTA within ten (10) working days of said notice.
- 6.3 All claims for compensation or reimbursement of costs under any of the foregoing provisions shall be supported by documentation submitted to SBCTA, satisfactory in form and content to SBCTA and verified by SBCTA. In no event shall CONSULTANT be entitled to any payment for prospective profits or any damages because of such termination.
- 6.3.1 All subcontracts in excess of \$25,000 shall contain the above provisions.

ARTICLE 7. FUNDING REQUIREMENTS

- 7.1 It is mutually understood between the Parties that this Contract may have been written before ascertaining the availability of funds or appropriation of funds for the mutual benefit of both Parties, in order to avoid program or fiscal delays that would occur if the Contract were executed after that determination was made.

- 7.2 This Contract is valid and enforceable only if sufficient funds are made available to SBCTA for the purpose of this Contract. In addition, this Contract is subject to any additional restrictions, limitations, conditions, or any statute enacted by Congress, State Legislature, or SBCTA governing board that may affect the provisions, terms, or funding of this Contract in any manner.
- 7.3 It is mutually agreed that if sufficient funds are not appropriated, this Contract may be amended to reflect any reduction in funds.
- 7.4 SBCTA has the option to void the Contract under the 30-day cancellation clause, or by mutual agreement to amend the Contract to reflect any reduction of funds.

ARTICLE 8. CHANGE IN TERMS

- 8.1 This Contract may be amended or modified only by mutual written agreement of the Parties.
- 8.2 CONSULTANT shall only commence Work covered by an amendment after the amendment is executed and the NTP has been provided by SBCTA's Procurement Analyst.
- 8.3 There shall be no change in CONSULTANT's Project Manager or members of the project team, as listed in the approved cost proposal, which is part of this Contract without prior written approval of SBCTA.

ARTICLE 9. DISADVANTAGED BUSINESS ENTERPRISE

Intentionally Omitted

ARTICLE 10. COST PRINCIPLES AND ADMINISTRATIVE REQUIREMENTS

- 10.1 CONSULTANT agrees that the Contract Cost Principles and Procedures, 48 CFR Federal Acquisition Regulations System, Chapter 1, Part 31.000 et seq. shall be used to determine the cost allowability of individual items.
- 10.2 CONSULTANT also agrees to comply with federal procedures in accordance with 49 CFR, Part 18, Uniform Administrative Requirements for Grants and Cooperative Agreements to State and Local Governments.
- 10.3 Any costs for which payment has been made to CONSULTANT that are determined by subsequent audit to be unallowable under 49 CFR, Part 18 and 48 CFR Federal Acquisition Regulations System, Chapter 1, Part 31.000 et seq., are subject to repayment by CONSULTANT to SBCTA.
- 10.4 All subcontracts in excess of \$25,000 shall contain the above provision.

ARTICLE 11. CONTINGENT FEE

CONSULTANT warrants by execution of this Contract that no person or selling agency has been employed or retained to solicit or secure this Contract upon an agreement or understanding for a commission, percentage, brokerage, or contingent fee, excepting bona fide employees or bona fide established commercial or selling agencies maintained by CONSULTANT for the purpose of securing business. For breach or violation of this warranty, SBCTA has the right to annul this Contract without liability; pay only for the value of the Work actually performed, or in its discretion, to deduct

from the Contract price or consideration, or otherwise recover, the full amount of such commission, percentage, brokerage, or contingent fee.

ARTICLE 12. RETENTION OF RECORDS/AUDIT

- 12.1 For the purpose of determining compliance with Public Contract Code section 10115, et seq. and Title 21, California Code of Regulations, Chapter 21, Section 2500 et seq., when applicable and other matters connected with the performance of the Contract pursuant to Government Code section 8546.7; CONSULTANT, and subconsultants shall maintain and make available for inspection all books, documents, papers, accounting records, and other evidence pertaining to the performance of the Contract, including but not to, the costs of administering the Contract. All Parties shall make such materials available at their respective offices at all reasonable times during the Contract period and for three years from the date of final payment under the Contract. The state, State Auditor, SBCTA, Federal Highway Administration, or any other duly authorized representative of the SBCTA shall have access to any books, records, and documents of CONSULTANT that are pertinent to the Contract for audit, examinations, excerpts, and transactions, and copies thereof shall be furnished if requested.
- 12.2 Subcontracts in excess of \$25,000 shall contain this provision.

ARTICLE 13. DISPUTES

- 13.1 Any dispute, other than audit, concerning a question of fact arising under this Contract that is not disposed of by agreement shall be decided by a committee consisting of SBCTA's Executive Director, who may consider written or verbal information submitted by CONSULTANT.
- 13.2 Not later than 30 days after completion of all deliverables necessary to complete the plans, specifications and estimate, CONSULTANT may request review by SBCTA's Executive Director, of unresolved claims, disputes, other than audit. The request for review will be submitted in writing.
- 13.3 Neither the pendency of a dispute nor its consideration by SBCTA's Executive Director, will excuse CONSULTANT from full and timely performance in accordance with the terms of this Contract.

ARTICLE 14. AUDIT REVIEW PROCEDURES

- 14.1 Any dispute concerning a question of fact arising under an interim or post audit of this Contract that is not disposed of by agreement shall be reviewed by SBCTA's Chief Financial Officer.
- 14.2 Not later than 30 days after issuance of final audit report, CONSULTANT may request a review by SBCTA's Chief Financial Officer of unresolved audit issues. The request for review must be submitted in writing.
- 14.3 Neither the pendency of a dispute nor its consideration by SBCTA will excuse CONSULTANT from full and timely performance in accordance with the terms of this Contract.

ARTICLE 15. SUBCONTRACTING

- 15.1 Nothing contained in this Contract or otherwise shall create any contractual relation between SBCTA and any subconsultant(s), and no subcontract shall relieve CONSULTANT of its responsibilities and obligations hereunder. CONSULTANT agrees to be fully responsible to SBCTA for the acts and omissions of its subconsultant(s) and of persons directly employed by CONSULTANT. CONSULTANT's obligation to pay its subconsultant(s) is independent of SBCTA's obligation to make payments to the CONSULTANT.
- 15.2 CONSULTANT shall perform the Work contemplated with resources available within its own organization, and no portion of the Work pertinent to this Contract shall be subcontracted without prior written authorization by SBCTA, except that which is expressly identified in the approved Cost Proposal.
- 15.3 CONSULTANT shall pay its subconsultant(s) within ten (10) calendar days from receipt of each payment made to CONSULTANT by SBCTA.
- 15.4 Any subcontract in excess of \$25,000 entered into as a result of this Contract shall contain all the provisions stipulated in this Contract to be applicable to subconsultants.
- 15.5 Any substitution of subconsultants must be approved in writing by SBCTA prior to the start of Work by the subconsultant.

ARTICLE 16. EQUIPMENT PURCHASE

- 16.1. Prior authorization in writing by SBCTA shall be required before CONSULTANT enters into any unbudgeted purchase order or subcontract exceeding \$5,000 for supplies, equipment, or CONSULTANT services. CONSULTANT shall provide an evaluation of the necessity or desirability of incurring such costs.
- 16.2. When seeking SBCTA's prior written authorization for purchase of any item, service or consulting work not covered in CONSULTANT's Cost Proposal and exceeding \$5,000, CONSULTANT must submit three competitive quotations with the request, or the absence of bidding must be adequately justified.
- 16.3. Any equipment purchased as a result of this Contract is subject to the following: "CONSULTANT shall maintain an inventory of all nonexpendable property. Nonexpendable property is defined as having a useful life of at least two years and an acquisition cost of \$5,000 or more. If the purchased equipment needs replacement and is sold or traded in, SBCTA shall receive a proper refund or credit at the conclusion of the Contract, or if the Contract is terminated, CONSULTANT may either keep the equipment and credit SBCTA in an amount equal to its fair market value, or sell such equipment at the best price obtainable at a public or private sale, in accordance with established SBCTA procedures, and credit SBCTA in an amount equal to the sales price. If CONSULTANT elects to keep the equipment, fair market value shall be determined at CONSULTANT's expense, on the basis of a competent independent appraisal of such equipment. Appraisals shall be obtained from an appraiser mutually agreeable to SBCTA and CONSULTANT. If it is determined to sell the equipment, the terms and conditions of such sale must be approved in advance by SBCTA."
- 16.4 All subcontracts in excess \$25,000 shall contain the above provisions.

ARTICLE 17. INSPECTION OF WORK

CONSULTANT and any subconsultant shall permit SBCTA and the State, to review and inspect the project activities and files at all reasonable times during the performance period of this Contract including review and inspection on a daily basis.

ARTICLE 18. SAFETY

- 18.1 CONSULTANT shall comply with OSHA regulations applicable to CONSULTANT regarding necessary safety equipment or procedures. CONSULTANT shall comply with safety instructions issued by SBCTA or other SBCTA representative. CONSULTANT personnel shall wear hard hats and safety vests at all times while working on the construction project site.
- 18.2 Pursuant to the authority contained in Section 591 of the Vehicle Code, SBCTA has determined that such areas are within the limits of the Project and are open to public traffic. CONSULTANT shall comply with all of the requirements set forth in Divisions 11, 12, 13, 14, and 15 of the Vehicle Code. CONSULTANT shall take all reasonably necessary precautions for safe operation of its vehicles and the protection of the traveling public from injury and damage from such vehicles.
- 18.3 Any subcontract entered into as a result of this Contract shall contain all of the provisions of this Article.
- 18.4 CONSULTANT must have a Division of Occupational Safety and Health (CAL-OSHA) permit(s), as outlined in California Labor Code Sections 6500 and 6705, prior to the initiation of any practices, work, method, operation, or process related to the construction or excavation of trenches which are five feet or deeper.

ARTICLE 19. INSURANCE

- 19.1 Prior to commencing the Work, and at all times during the performance of the Work and for such additional periods as required herein, CONSULTANT shall, at CONSULTANT's sole expense, procure and maintain insurance coverage with the following minimum requirements, and shall require all subconsultants of every tier performing any of the Work to procure and maintain such insurance specified below:

CONSULTANT shall furnish SBCTA with original Certificates of Insurance, including all required amendatory endorsements (or copies of the applicable policy language effecting coverage required by this clause) and a copy of the Declarations and Endorsement Page(s) of the CGL policy listing all policy endorsements, before work begins.

SBCTA reserves the right to require full-certified copies of all Insurance coverages and endorsements. Prior to commencing the Work, at all times during the performance of the Work, and for such additional periods as required herein.

19.1.1 Professional Liability. The policies must include the following:

- \$3,000,000 per claim limits
- \$9,000,000 in the aggregate for all claims.
- If Coverage is on a claims made basis:

- Policy shall contain a retroactive date for coverage of prior acts, which date will be prior to the date the CONSULTANT begins to perform Work under this Contract.
- CONSULTANT shall secure and maintain “tail” coverage for a minimum of Five (5) years after Contract completion.

19.1.2 Worker’s Compensation/Employer’s Liability. The policies must include the following:

- Coverage A. Statutory Benefits
- Coverage B. Employer’s Liability
- Bodily Injury by accident - \$1,000,000 per accident
- Bodily Injury by disease - \$1,000,000 policy limit/\$1,000,000 each employee

Such policies shall contain a waiver of subrogation in favor of the parties named as Indemnitees below. Such insurance shall be in strict accordance with the applicable workers’ compensation laws in effect during performance of the Work by CONSULTANT or any subconsultant of any tier. All subconsultants of any tier performing any portion of the Work for CONSULTANT shall also obtain and maintain the same insurance coverage as specified in this subparagraph, with a waiver of subrogation in favor of CONSULTANT and all parties named as Indemnitees below. SBCTA and CONSULTANT must be certificate holders and must be provided at least 30 days advance notice of cancellation, unless the cancellation is for non-payment, then at least 10 days advance notice of cancellation shall be provided. Where coverage is provided through the California State Compensation Insurance Fund, the requirement for a minimum A.M. Best rating does not apply.

19.1.3 Commercial General Liability. The policy must include the following:

- \$7,000,000 per occurrence limit/\$10,000,000 in the aggregate for property damage or bodily injury
- \$1,000,000 per occurrence limit/\$2,000,000 in the aggregate for personal injury and advertising injury
- An endorsement stating that any aggregate limits apply on a “per project” and on a “per location” basis.
- The project name must be indicated under “Description of Operations/Locations.”
- The policy shall be endorsed to provide: “This insurance will be primary and noncontributory with any other insurance of the additional insureds.”
- All commercial general liability insurance policies shall be written on an occurrence form that shall provide coverage at least as broad as the coverage provided by ISO form CG 00 01.
- The policy shall also include premises-operations (including explosion, collapse and underground coverage) and products-completed operations coverage; severability of interests (full separation of insureds); contractual liability coverage (including coverage to the maximum extent possible for the indemnifications contained in this Contract); including completed operations; and a duty to defend in addition to (without reducing) the limits of the policy(ies).

- All sub-consultants of any tier performing any portion of the Work for CONSULTANT shall also obtain and maintain the commercial general liability insurance coverage with limits not less than:

Each occurrence limit:	\$2,000,000
General aggregate limit:	\$2,000,000
Personal injury and advertising limit	\$1,000,000
Products-completed operations aggregate limit	\$2,000,000

19.1.4 Umbrella/Excess CGL Insurance:

If the CONSULTANT elects to include an umbrella or excess policy to cover any of the total limits required beyond the primary commercial general liability policy limits and/or the primary commercial automobile liability policy limits, then the policy must include the following:

- The umbrella or excess policy shall follow form over the CONTRACTOR'S primary general liability coverage and shall provide a separate aggregate limit for products and completed operations coverage.
- The umbrella or excess policy shall not contain any restrictions or exclusions beyond what is contained in the primary policy.
- The umbrella or excess policy shall contain a clause stating that it takes effect (drops down) in the event the primary limits are impaired or exhausted.
- The umbrella or excess policy must also extend coverage over the automobile policy if it is to be used in combination with the primary automobile policy to meet the total insurance requirement limits.
- There shall be no statement limiting the coverage provided to the parties listed as additionally insureds or as indemnitees below.

19.1.5 Commercial Auto. The policy must include the following:

- A total limit of liability of not less than \$5,000,000 each accident.
- This total limit of liability may be met by combining the limits of the primary auto policy with an umbrella or excess policy in accordance with subparagraph 4 (Umbrella/Excess CGL).
- Such insurance shall cover liability arising out of any vehicle, including owned, hired, leased, borrowed and non-owned vehicles assigned to or used in performance of the CONSULTANT services.
- Combined Bodily Injury and Property Damage Liability insurance.
- The commercial automobile liability insurance shall be written on the most recent edition of ISO Form CA 00 01 or equivalent acceptable to SBCTA.

19.1.6 Cyber Liability Errors and Omissions Insurance - appropriate to the Consultant's profession and work hereunder, with limits not less than \$2,000,000 per occurrence. Coverage shall be sufficiently broad to respond to the duties and obligations as is undertaken by the Consultant in this agreement and shall include, but not be limited to, claims involving infringement of intellectual property, copyright, trademark, invasion of privacy violations, information theft, release of private information,

extortion and network security. The policy shall provide coverage for breach response costs as well as regulatory fines and penalties as well as credit monitoring expenses with limits sufficient to respond to these obligations.

The Policy shall include, or be endorsed to include, property damage liability coverage for damage to, alteration of, loss of, or destruction of electronic data and/or information "property" of SBCTA in the care, custody, or control of the CONSULTANT. If not covered under the CONSULTANT's liability policy, such "property" coverage of SBCTA maybe endorsed onto the CONSULTANT's Cyber Liability Policy as covered property as follows: Cyber Liability coverage in an amount sufficient to cover the full replacement value of damage to, alteration of, loss of, or destruction of electronic data and/or information "property" of SBCTA that will be in the care, custody, or control of CONSULTANT.

19.1.7 Railroad Protective Liability Insurance: This coverage will be required if CONSULTANT performs activities under this agreement in close proximity to a railroad and/or the owner or operator require this coverage.

- Insurance Services Office Form Railroad Protective Liability, AAR-AASHTO (ISO/RIMA), in the name of the railroad owners and operators with respect to the operations they or any of their subconsultants perform on the Property. Minimum Limits: \$3 million per occurrence combined single limit, for coverage and for losses arising out of injury to or death of all persons and for physical loss or damage to or destruction of Property, including the loss of use thereof. A \$6 million annual aggregate shall apply.

If providing coverage on the London claims- made form, the following provisions shall apply:

- The limits of liability shall be not less than \$3 million per occurrence, combined single limit. A \$9 million aggregate may apply, or limits required by Rail Road Operator/Owner.
- Declarations item 6, extended claims made date, shall allow an extended claims made period no shorter than the length of the original policy period plus one year.
- If equivalent or better, wording is not contained in the policy form, the following endorsement must be included:

It is agreed that "physical damage to Property" means direct and accidental loss of or damage to rolling stock and their contents, mechanical construction equipment or motive power equipment, railroad tracks, roadbed, catenaries, signals, bridges or buildings.

In cases of low hazard activity and insignificant risk to rail facilities, and if the exposure to the track is physically separated by a building, floor or a continuous fence (no thoroughfares) and the employees of the Consultant are explicitly notified, trained, and supervised such that they are not permitted to have any contact with the track or its related improvements, the Railroad Protective Liability Insurance requirement may be waived by SBCTA, or its designated representative, in SBCTA's sole and absolute discretion, where SBCTA's agreements and obligations with rail operators allow it.

19.1.8 Pollution Liability. Intentionally Omitted

19.2 General Provisions

- 19.2.1 Qualifications of Insurance Carriers. If policies are written by insurance carriers authorized and admitted to do business in the state of California, then the insurance carriers must have a current A.M. Best rating of A-VIII or better and if policies are written by insurance carriers that are non- admitted but authorized to conduct business in the state of California, then they must meet the current A.M. Best rating of A-X or better, unless otherwise approved in writing by SBCTA's Risk Manager.
- 19.2.2 Additional Insured Coverage. All policies, except those for Workers' Compensation and Professional Liability insurance, shall name San Bernardino County Transportation Authority, California Department of Transportation (CALTRANS), City of Colton, County of San Bernardino and Union Pacific Rail Road (UPRR) and their respective officers, directors, members, employees, and agents as additional insureds ("Additional Insureds"). The Indemnified Parties shall be named, by specific endorsement, as additional insureds using ISO form CG 20 10 10 01 and ISO form CG 20 37 10 01, or their respective equivalent forms, to include completed operations coverage. With respect to general liability arising out of or connected with work or operations performed by or on behalf of the CONSULTANT under this Contract, coverage for such Additional Insureds shall not extend to liability to the extent prohibited by section 11580.04 of the Insurance Code. The additional insured endorsements shall not limit the scope of coverage for SBCTA to vicarious liability, but shall allow coverage for SBCTA to the full extent provided by the policy.
- 19.2.3 Proof of Coverage. Evidence of insurance in a form acceptable to SBCTA's Risk Manager, including certificates of insurance and the required additional insured endorsements, shall be provided to SBCTA's Procurement Analyst prior to issuance of the NTP or prior to commencing any Work, as SBCTA specifies. Certificate(s) of insurance, as evidence of the required insurance shall: be executed by a duly authorized representative of each insurer; show compliance with the insurance requirements set forth in this Article; set forth deductible amounts applicable to each policy; list all exclusions which are added by endorsement to each policy; and also include the Contract Number and the SBCTA Project Manager's name on the face of the certificate. If requested in writing by SBCTA, CONSULTANT shall submit complete copies of all required insurance policies within ten (10) business days of a written request by SBCTA.
- 19.2.4 Deductibles and Self-Insured. Retention. Regardless of the allowance of exclusions or deductibles by SBCTA, CONSULTANT shall be responsible for any deductible or self- insured retention (SIR) amount and shall warrant that the coverage provided to SBCTA is consistent with the requirements of this Article. CONSULTANT will pay, and shall require its sub- CONSULTANTS to pay, all deductibles, co-pay obligations, premiums and any other sums due under the insurance required in this Article. Any deductibles or self-insured retentions must be declared to and approved in writing by SBCTA's Risk Manager. Without SBCTA's Risk Manager's expressed written approval no deductibles or SIR will be allowed. At the option of SBCTA, if the deductible or SIR is approved and it is greater than \$10,000 or one (1) percent of the

amount of coverage required under this Contract, whichever is less, the CONSULTANT shall guarantee that either: (1) the insurer shall reduce or eliminate such deductibles or self-insured retentions as respects to SBCTA, its directors, officials, officers, employees and agents; or, (2) the CONSULTANT shall procure a bond guaranteeing the amount of the deductible or self-insured retention. SBCTA shall have the right to review any and all financial records that SBCTA, at its sole discretion deems necessary to approve any deductible or SIR. SBCTA will have the right, but not the obligation, to pay any deductible or SIR due under any insurance policy. If SBCTA pays any sums due under any insurance required above, SBCTA may withhold said sums from any amounts due to CONSULTANT. The Contractor's policies will neither obligate nor prohibit SBCTA or any other Additional Insured, from paying any portion of any Consultant's deductible or SIR.

- 19.2.5 CONSULTANT's and Subconsultants' Insurance Primary. All policies required to be maintained by the CONSULTANT or subconsultant of any tier with the exception of Professional Liability and Worker's Compensation shall be endorsed to be primary coverage, and any coverage carried by any of the Additional Insureds named herein shall be excess and non-contributory. Further, none of CONSULTANT's or subconsultants' pollution, automobile, general liability or other liability policies (primary or excess) will contain any exclusion barring coverage for claims by an additional insured against a named insured.
- 19.2.6 Waiver of Subrogation Rights. To the fullest extent permitted by law, CONSULTANT hereby waives all rights of recovery under subrogation against the Additional Insureds named herein, and any other consultant, subconsultant or sub-subconsultant performing work or rendering services on behalf of SBCTA, in connection with the planning, development and construction of the Project. To the fullest extent permitted by law, CONSULTANT shall require similar written express waivers and insurance clauses from each of its subconsultants of every tier. CONSULTANT shall require all of the policies and coverages required in this Article to waive all rights of subrogation against the Additional Insureds. Such insurance and coverages provided shall not prohibit CONSULTANT from waiving the right of subrogation prior to a loss or claim.
- 19.2.7 Cancellation. If any insurance company elects to cancel or non-renew coverage for any reason, CONSULTANT will provide SBCTA thirty (30) days prior written notice of such cancellation or nonrenewal. If the policy is cancelled for nonpayment of premium, CONSULTANT will provide SBCTA ten (10) days prior written notice. In any event, CONSULTANT will provide SBCTA with a copy of any notice of termination or notice of any other change to any insurance coverage required herein which CONSULTANT receives within one business day after CONSULTANT receives it by submitting it to SBCTA at insurance@gosbcta.com to the attention of SBCTA's Procurement Analyst, and by depositing a copy of the notice in the U.S. Mail in accordance with the notice provisions of this Contract.
- 19.2.8 Non-Limitation of Insurance Requirements. The insurance coverage provided and limits required under this Contract are minimum requirements and are not intended to limit the CONSULTANT's indemnification obligations under the Contract, nor do the indemnity obligations limit the rights of the Indemnified Parties to the coverage

afforded by their insured status. To the extent required by Law in connection with Work to be performed, the CONSULTANT shall obtain and maintain, or cause to be obtained and maintained, in addition to the insurance coverage expressly required under this Contract, such other insurance policies for such amounts, for such periods of time and subject to such terms, as required by Law and any other agreements with which the CONSULTANT is required to comply, including any Third-Party Agreements. Liability insurance coverage will not be limited to the specific location designated as the Site, except that if the CONSULTANT arranges project-specific general liability, excess liability, or workers' compensation coverage, limitations of coverage to the Site will be permitted subject to SBCTA approval and use of the broadest available site-specific endorsements. No liability policy will contain any provision or definition that would serve to eliminate so-called "third-party-over action" claims, including any exclusion for bodily injury to an employee of the insured or of any Sub-consultant. The CONSULTANT acknowledges and will at all times comply with the provisions of Labor Code Section 3700 which require every employer in the State to be insured against liability for workers' compensation, or to undertake self-insurance in accordance with the provisions of that code.

- 19.2.9 Enforcement. SBCTA may take any steps as are necessary to assure CONSULTANT's compliance with its insurance obligations as identified within this Article. Failure to continuously maintain insurance coverage as provided herein is a material breach of contract. In the event the CONSULTANT fails to obtain or maintain any insurance coverage required, SBCTA may, but is not required to, maintain this coverage and charge the expense to the CONSULTANT or withhold such expense from amounts owed CONSULTANT, or terminate this Contract. The insurance required or provided shall in no way limit or relieve CONSULTANT of its duties and responsibility under the Contract, including but not limited to obligation to indemnify, defend and hold harmless the Indemnitees named below. Insurance coverage in the minimum amounts set forth herein shall not be construed to relieve CONSULTANT for liability in excess of such coverage, nor shall it preclude SBCTA from taking other actions as available to it under any other provision of the Contract or law. Nothing contained herein shall relieve CONSULTANT, or any subconsultant of any tier of their obligations to exercise due care in the performance of their duties in connection with the Work, and to complete the Work in strict compliance with the Contract.
- 19.2.10 No Waiver. Failure of SBCTA to enforce in a timely manner any of the provisions of this Article shall not act as a waiver to enforcement of any of these provisions at a later date.
- 19.2.11 Project Specific Insurance. All insurance coverage required to be provided by CONSULTANT, with the exception of automobile liability and worker's compensation, shall apply specifically and exclusively for the Project and extend to all aspects of the Work, with coverage limits dedicated solely to the Project. Use of other insurance programs is acceptable, provided that coverage under such programs provides dedicated Project-specific limits and identified premiums and meets all requirements described in contract.
- 19.2.12 No Representations or Warranties. SBCTA makes no representation or warranty that the coverage, limits of liability, or other terms specified for the insurance policies

required under this contract are adequate to protect the CONSULTANT against its undertakings under this Contract or its liability to any third party, nor will they preclude SBCTA from taking any actions as are available to it under this Contract or otherwise at law.

19.2.13 Review of Coverage. SBCTA may at any time review the coverage, form, and amount of insurance required under this contract, and may require the CONSULTANT to make changes in such insurance reasonably sufficient in coverage, form, and amount to provide adequate protection against the kind and extent of risk that exists at that time. SBCTA may change the insurance coverages and limits required under this contract by notice to the CONSULTANT, whereupon the CONSULTANT will, upon receipt of such notice date, procure the additional and/or modified insurance coverages. Upon such change any additional cost (at actual cost) from such change will be paid by SBCTA and any reduction in cost will reduce the amounts owed to Consultant.

19.2.14 Subconsultant Insurance. Insurance required of the CONSULTANT shall be also provided by subconsultants or by CONSULTANT on behalf of all subconsultants to cover their services performed under this Contract. CONSULTANT may reduce the amounts of insurance limits provided by sub-consultants to be proportionate to the amount of the sub-consultant's contract and the level of liability exposure for the specific type of work performed by the sub-consultant. CONSULTANT shall be held responsible for all modifications, deviations, or omissions in these insurance requirements as they apply to subconsultant.

19.2.15 Higher limits. If CONSULTANT maintains higher limits than the minimums shown above, SBCTA shall be entitled to coverage for the higher limits maintained by CONSULTANT. Any available insurance proceeds in excess of the specified minimum limits of insurance and coverage shall be available to SBCTA.

ARTICLE 20. INDEMNITY

20.1 To the extent, but only to the extent, that CONSULTANT's Work falls within the scope of Civil Code Section 2782.8, the following indemnification is applicable:

CONSULTANT shall indemnify and defend (with legal counsel reasonably approved by SBCTA) SBCTA, California Department of Transportation (CALTRANS), City of Colton, County of San Bernardino and Union Pacific Rail Road (UPRR) and their respective officers, employees, agents and volunteers from any and all losses, damages, liability, actions, and/or costs for claims that arise out of, pertain to, or are related to the negligence, recklessness, or willful misconduct of the design professional to the maximum extent permitted by Civil Code Section 2872.8.

20.2 For all other Work and obligations under this Contract, CONSULTANT agrees to indemnify, defend (with legal counsel reasonably approved by SBCTA) and hold harmless SBCTA, California Department of Transportation (CALTRANS), City of Colton, County of San Bernardino and Union Pacific Rail Road (UPRR) and their respective officers, employees, agents and volunteers ("Indemnitees") from any and all claims, actions, losses, damages and/or liability (Claims) arising out of or related to any act or omission of CONSULTANT or any of its

officers, employees, agents, sub-consultants or volunteers, and for any costs or expenses incurred by SBCTA on account of any such Claims except where such indemnification is prohibited by law. This indemnification provision shall apply regardless of the existence or degree of fault of indemnitees. CONSULTANT's indemnification obligation applies to SBCTA's "active" as well as "passive" negligence, but does not apply to SBCTA's "sole negligence" or "willful misconduct" within the meaning of Civil Code Section 2782.

ARTICLE 21. OWNERSHIP OF DATA

- 21.1 Upon completion of all Work under this Contract, ownership and title to all reports, documents, plans, specifications, and estimates produced as part of this Contract will automatically be vested in SBCTA, and no further agreement will be necessary to transfer ownership to SBCTA. CONSULTANT shall furnish SBCTA all necessary copies as needed to complete the review and approval process.
- 21.2 It is understood and agreed that all calculations, drawings and specifications, whether in hard copy or machine-readable form, are intended for one-time use in the construction of the project for which this Contract has been entered into.
- 21.3 CONSULTANT is not liable for claims, liabilities, or losses arising out of or connected with the modification or misuse by SBCTA of the machine-readable information and data provided by CONSULTANT under this Contract; further, CONSULTANT is not liable for claims, liabilities, or losses arising out of or connected with any use by SBCTA of the project documentation for other projects or additions to this project, or for the completion of this project by others, except only such use as may be authorized in writing by CONSULTANT.
- 21.4 Applicable patent rights provisions regarding rights to inventions shall be included in the Contract as appropriate (48 CFR 27, subpart 27.3).
- 21.5 SBCTA may permit copyrighting reports or other agreement products. If copyrights are permitted, the Contract shall provide that the FHWA shall have the royalty-free nonexclusive and irrevocable right to reproduce, publish, or otherwise use, and to authorize others to use, the work for government purposes.
- 21.6 Any subcontract in excess of \$25,000 entered into as a result of this Contract, shall contain all of the provisions of this Article.

ARTICLE 22. CLAIMS FILED BY SBCTA's CONSTRUCTION CONTRACTOR

- 22.1 If claims are filed by SBCTA's construction contractor relating to Work performed by CONSULTANT's personnel, and additional information or assistance from CONSULTANT's personnel is required in order to evaluate or defend against such claims, CONSULTANT agrees to make its personnel available for consultation with SBCTA and legal staff, and for testimony, if necessary, at depositions, administrative proceedings, trial or arbitration proceedings.
- 22.2 CONSULTANT's personnel that SBCTA considers essential to assist in defending against construction contractor claims will be made available on reasonable notice from SBCTA. Consultation or testimony will be reimbursed at the same rates, including travel costs, that are being paid for the CONSULTANT's personnel services under this Contract.

- 22.3 Services of the CONSULTANT's personnel in connection with SBCTA's construction contractor claims will be performed pursuant to a written contract amendment, if necessary, extending the termination date of this Contract in order to resolve the construction claims.
- 22.4 Any subcontract in excess of \$25,000 entered into as a result of this Contract, shall contain all of the provisions of this Article.

ARTICLE 23. CONFIDENTIALITY OF DATA

- 23.1 All financial, statistical, personal, technical, or other data and information relative to SBCTA's operations which are designated confidential by SBCTA and made available to CONSULTANT in order to carry out this Contract, shall be protected by CONSULTANT from unauthorized use and disclosure.
- 23.2 Neither permission to disclose information on one occasion, nor public hearing held by SBCTA relating to the Contract shall authorize CONSULTANT to further disclose such information or disseminate the same on any other occasion.
- 23.3 CONSULTANT shall not comment publicly to the press or any other media, including social media, regarding the Contract or SBCTA's actions on the same, except to SBCTA's staff, CONSULTANT's own personnel involved in the performance of this Contract, at public hearings, or in response to questions from a SBCTA Board Committee or other public meeting approved by SBCTA.
- 23.4 CONSULTANT shall not issue any news release or public relations item of any nature whatsoever regarding Work performed or to be performed under this Contract without first obtaining SBCTA's review and written permission.
- 23.5 Any SBCTA communications or materials to which CONSULTANT or its subconsultants or agents have access and materials prepared by CONSULTANT under the terms of this Contract shall be held in confidence by CONSULTANT, who shall exercise reasonable precautions to prevent the disclosure of confidential information to anyone except as expressly authorized by SBCTA. Any communications with or work product of SBCTA's legal counsel to which CONSULTANT or its subconsultants or agents have access in performing work under this Contract shall be subject to the attorney-client privilege and attorney work product doctrine, and shall be confidential. CONSULTANT shall not release any reports, information or promotional material or allow for the use of any photos related to this Contract for any purpose without prior written approval of SBCTA.
- 23.6 Any subcontract entered into as a result of this Contract shall contain all of the provisions of this Article.
- 23.7 CONSULTANT, its employees, agents and subconsultants shall be required to comply with SBCTA's Confidentiality Policy; anyone who may have access to Personally Identifiable Information ("PII") and/or Sensitive Security Information ("SSI") will be required to execute a Confidentiality Agreement.
- 23.8 All information related to the construction estimate is confidential, and shall not be disclosed by CONSULTANT to any entity other than SBCTA.

ARTICLE 24. NATIONAL LABOR RELATIONS BOARD CERTIFICATION

In accordance with Public Contract Code Section 10296, CONSULTANT hereby states under penalty of perjury that no more than one final unappealable finding of contempt of court by a federal court has been issued against CONSULTANT within the immediately preceding two-year period, because of CONSULTANT's failure to comply with an order of a federal court that orders CONSULTANT to comply with an order of the National Labor Relations Board.

ARTICLE 25. EVALUATION OF CONSULTANT

CONSULTANT's performance may be evaluated by SBCTA. A copy of the evaluation will be sent to CONSULTANT for comments. The evaluation and any comments submitted shall be retained as part of the Contract file. This information may be used when evaluating the firm on future proposal submittals.

ARTICLE 26. RETENTION OF FUNDS

- 26.1 Any subcontract entered into as a result of this Contract shall contain all of the provisions of this Article.
- 26.2 No retainage will be withheld by SBCTA from progress payments due the CONSULTANT. Retainage by the CONSULTANT or subconsultants is prohibited, and no retainage will be held by CONSULTANT from progress payments due subconsultants. This requirement shall not be construed to limit or impair any contractual, administrative, or judicial remedies, otherwise available to the CONSULTANT or subconsultant in the event of a dispute involving late payment or nonpayment by the CONSULTANT or deficient subconsultant performance, or noncompliance by a subconsultant. This provision applies to both DBE and non-DBE CONSULTANTS and subconsultants.

ARTICLE 27. RESPONSIBILITY OF CONSULTANT

- 27.1 CONSULTANT shall be responsible for the professional quality, technical accuracy, and the assurance of compliance with all applicable federal, State, and local laws and regulations, and other Work furnished by the CONSULTANT under the Contract. The Contract includes reference to the appropriate standards for design or other standards for Work performance stipulated in the Contract.
- 27.2 In addition to any other requirements of this Contract or duties and obligations imposed on CONSULTANT by law, CONSULTANT shall, as an integral part of its Work, employ quality control procedures that identify potential risks and uncertainties related to scope, schedule, cost, quality and safety of the Project and the Work performed by CONSULTANT within the areas of CONSULTANT's expertise. Risks that may be encountered include, but are not limited to, soil conditions, constructability, factors of safety, impact on adjacent properties, public safety, and environmental considerations. At any time during performance of the Scope of Work, should CONSULTANT observe, encounter, or identify any unusual circumstances or uncertainties, which could pose potential risk to SBCTA or the Project. CONSULTANT shall immediately document such matters and notify SBCTA in writing. CONSULTANT shall also similarly notify SBCTA as to the possibility of any natural catastrophe, potential failure, or any situation that exceeds environmental, design, and/or construction assumptions and could precipitate a failure of any structure or other part of the Project. Notifications under

this paragraph shall be specific, clear and timely, and in a form which enables SBCTA to understand and evaluate the magnitude and effect of the risk and/or uncertainties involved.

- 27.3 When a modification to a construction contract is required because of an error or deficiency in the design Work provided under this Contract, CONSULTANT shall be responsible for any and all additional costs associated with the construction contract or the construction of the Project.
- 27.4 SBCTA shall advise CONSULTANT of their responsibility and collect the amount due, including but not limited to, withholding of payments, if the recoverable cost will exceed the administrative cost involved or is otherwise in SBCTA's best interest. SBCTA shall include in the Contract Audit File a written statement of the reasons for the decision to recover or not recover the costs from CONSULTANT.
- 27.5 CONSULTANT shall document the results of the Work to the satisfaction of SBCTA, and if applicable, Caltrans and FHWA. This may include preparation of progress and final reports, plans, specifications and estimates, or similar evidence of attainment of SBCTA's objectives.
- 27.6 As applicable, the responsible consultant/engineer shall sign all plans, specifications, estimates (PS&E) and engineering data furnished by him/her, certify as-built drawings, and where appropriate, indicate his/her California registration or license number.

ARTICLE 28. TECHNICAL DIRECTION

- 28.1 Performance of Work under this Contract shall be subject to the technical direction of SBCTA's Project Manager, who will be identified in writing to CONSULTANT upon issuance of the NTP and/or subsequently by written notice during the Contract. The term "Technical Direction" is defined to include, without limitation:
 - 28.1.1 Directions to CONSULTANT which redirect the Contract effort, shift work emphasis between work areas or tasks, require pursuit of certain lines of inquiry, fill in details or otherwise serve to accomplish the contractual Scope of Work.
 - 28.1.2 Provision of written information to CONSULTANT which assists in the interpretation of drawings, reports, or technical portions of the Scope of Work described herein.
 - 28.1.3 Review and, where required by the Contract, approval of technical reports, drawings, specifications and technical information to be delivered by CONSULTANT to SBCTA under the Contract.
 - 28.1.4 SBCTA may modify this Contract for certain administrative modifications without issuing a written amendment. Administrative modifications as defined herein are limited to: substitutions of personnel identified in this Contract, including Key Personnel and project personnel and subconsultants; modifications to hourly rates, classifications, and names of personnel in Exhibit B; and modifications of the address of the CONSULTANT. All administrative modifications shall be documented in writing between the Parties.
- 28.2 Technical Direction must be within the Scope of Work under this Contract. SBCTA's Project Manager does not have the authority to, and may not, issue any Technical Direction which:

- 28.2.1 Increases or decreases the Scope of Work;
 - 28.2.2 Directs CONSULTANT to perform Work outside the original intent of the Scope of Work;
 - 28.2.3 In any manner causes an increase or decrease in the Contract price as identified in this Contract, or the time required for Contract performance unless expressly authorized by SBCTA policy;
 - 28.2.4 Changes any of the expressed terms, conditions or specifications of the Contract, unless identified herein;
 - 28.2.5 Interferes with the CONSULTANT's right to perform the terms and conditions of the Contract; or
 - 28.2.6 Approves any demand or claim for additional payment.
- 28.3 Failure of CONSULTANT and SBCTA's Project Manager to agree that the Technical Direction is within the scope of the Contract, or a failure to agree upon the Contract action to be taken, shall be subject to the provisions of the "DISPUTES" Article herein.
- 28.4 All Technical Direction shall be issued in writing by SBCTA's Project Manager.
- 28.5 CONSULTANT shall proceed promptly with the performance of Technical Direction issued by SBCTA's Project Manager, in the manner prescribed by this Article and within their authority under the provisions of this Article. If, in the opinion of CONSULTANT, any instruction or direction by SBCTA's Project Manager falls within one of the categories defined in 27.2.1 through 27.2.6, CONSULTANT shall not proceed but shall notify SBCTA in writing within five (5) working days after receipt of any such instruction or direction and shall request SBCTA to modify the Contract accordingly. Upon receiving the notification from the CONSULTANT, SBCTA shall:
- 28.5.1 Advise CONSULTANT in writing within thirty (30) calendar days after receipt of the CONSULTANT's letter that the Technical Direction is or is not within the scope of this Contract.
 - 28.5.2 Advise CONSULTANT within a reasonable time whether SBCTA will or will not issue a written amendment.

ARTICLE 29. KEY PERSONNEL

The personnel specified below are considered to be essential to the Work being performed under this Contract. Prior to diverting any of the specified individuals to other projects or reallocating any tasks or hours of Work that are the responsibility of key personnel to other personnel, CONSULTANT shall notify SBCTA in writing in advance and shall submit justifications (including proposed substitutions, resumes and payroll information to support any changes to the labor rate) in sufficient detail to permit evaluation of the impact on the Project. Diversion or reallocation of key personnel shall not be made without prior written consent of SBCTA. CONSULTANT shall not substitute any key personnel without the prior written consent of SBCTA. In the event that the Parties cannot agree as to the substitution of key personnel, SBCTA may terminate the Contract. Key Personnel are:

Name	Job Classification/Function
Ayman Salama, PhD, PE	Project Manager
Sarwar Naveed, PE, SE5	Structures
Marion Rule, PE, PgMP	Rail
Jay Hyland	Structures/Retaining Walls
Nathan Ortega, PE5	Track Design
Kevin Hicks	UP Coordination
Joe Sawtelle	I-10 Express Lanes Coordination
Andy Kwan, PE	Roadway

ARTICLE 30. REPRESENTATIONS

All Work supplied by CONSULTANT under this Contract shall be supplied by personnel who are qualified, careful, skilled, experienced and competent in their respective trades or professions. CONSULTANT agrees that they are supplying professional services, findings, and/or recommendations in the performance of this Contract and agrees with SBCTA that the same shall conform to professional and engineering and environmental principles and standards that are generally accepted in the profession in the State of California.

ARTICLE 31. TAXES, DUTIES AND FEES

Except to the extent expressly provided elsewhere in this Contract, CONSULTANT shall pay when due, and the compensation set forth herein shall be inclusive of, all: a) local, municipal, State, and federal sales and use taxes; b) excise taxes; c) taxes on personal property owned by CONSULTANT; and d) other governmental fees and taxes or charges of whatever nature applicable to CONSULTANT to enable it to conduct business.

ARTICLE 32. PERMITS AND LICENSES

CONSULTANT shall, without additional compensation, keep current all governmental permits, certificates and licenses (including professional licenses) and required registrations necessary for CONSULTANT to perform Work identified herein.

ARTICLE 33. STATEMENT OF COMPLIANCE

- 33.1 CONSULTANT's signature affixed herein, and dated, shall constitute a certification under penalty of perjury under the laws of the State of California that CONSULTANT has, unless exempt, complied with, the nondiscrimination program requirements of Government Code Section 12990 and 2 California Code of Regulations Section 8103.
- 33.2 During the performance of this Contract, CONSULTANT and its subconsultants shall not unlawfully discriminate, harass, or allow harassment against any employee or applicant for employment because of race, religious creed, color, national origin, ancestry, physical disability, mental disability, medical condition, genetic information, marital status, sex, gender, gender identity, gender expression, age (over 40), sexual orientation or military or veteran status. CONSULTANT and subconsultants shall insure that the evaluation and treatment of their employees and applicants for employment are free from such discrimination and harassment. CONSULTANT and subconsultants shall comply with the provisions of the Fair Employment and Housing Act (Gov. Code § 12900 et seq.) and the applicable regulations

promulgated there under (2 California Code of Regulations §§ 7286.0 et seq.). CONSULTANT and subconsultants shall give written notice of their obligations under this clause to labor organizations with which they have a collective bargaining or other agreement.^{33.3} The contractor and all subcontractors shall comply with all provisions of Title VI of the Civil Rights Act of 1964, as amended, which prohibits discrimination on the basis of race, color, and national origin. In addition, the contractor and all subcontractors will ensure their services are consistent with and comply with obligations and procedures outlined in SBCTA's current Board-adopted Title VI Program, including the Public Participation Plan and the Language Assistance Plan.

ARTICLE 34. STATE PREVAILING WAGE RATES

- 34.1 CONSULTANT shall comply with the State of California's General Prevailing Wage Rate requirements in accordance with California Labor Code Section 1770, and all Federal, State, and local laws and ordinances applicable to the Work.
- 34.2 Any subcontract entered into as a result of this Contract if for more than \$25,000 for public works construction or more than \$15,000 for the alteration, demolition, repair, or maintenance of public works, shall contain all of the provisions of this Article.
- 34.3 When prevailing wages apply to services described in the Scope of Work, transportation and subsistence costs shall be reimbursed at the minimum rates set by the Department of Industrial Relations (DIR) as outlined in the applicable Prevailing Wage Determination. See <http://www.dir.ca.gov>.

ARTICLE 35. CONFLICT OF INTEREST

- 35.1 CONSULTANT shall disclose any financial, business, or other relationship with SBCTA that may have an impact upon the outcome of this Contract, or any ensuing SBCTA construction project. CONSULTANT shall also list current clients who may have a financial interest in the outcome of this Contract, or any ensuing SBCTA construction project, which will follow.
- 35.2 CONSULTANT hereby certifies that it does not now have, nor shall it acquire, any financial or business interest that would conflict with the performance of services under this Contract. CONSULTANT agrees that it presently has no interest, financial or otherwise, and shall not acquire any interest, direct or indirect, which would conflict in any manner or degree with the performance of Work required under this Contract or be contrary to the interests of SBCTA as to the Project. CONSULTANT further agrees that in the performance of this Contract no person having any such interest shall be employed. CONSULTANT is obligated to fully disclose to SBCTA, in writing, any conflict of interest issues as soon as they are known to CONSULTANT. CONSULTANT agrees that CONSULTANT's staff designated by SBCTA's Executive Director as "Consultants" under the Political Reform Act shall timely file Statements of Economic Interest with the SBCTA Clerk of the Board.
- 35.3 Any subcontract in excess of \$25,000 entered into as a result of this Contract shall contain all of the provisions of this Article.
- 35.4 CONSULTANT hereby certifies that neither CONSULTANT, nor any firm affiliated with CONSULTANT will bid on any construction contract, or any contract to provide construction

inspection for any construction project resulting from this Contract. An affiliated firm is one subject to the control of the same persons through joint ownership or otherwise.

- 35.5 Except for subconsultants whose services are limited to providing surveying or materials testing information, no subconsultant who has provided design services in connection with this Contract shall be eligible to bid on any construction contract, or any contract to provide construction inspection for any construction project resulting from this Contract.

ARTICLE 36. REBATES, KICKBACKS OR OTHER UNLAWFUL CONSIDERATION

CONSULTANT warrants that this Contract was not obtained or secured through rebates, kickbacks or other unlawful consideration, either promised or paid to any SBCTA employee. For breach or violation of this warranty, SBCTA shall have the right in its discretion; to terminate the Contract without liability; to pay only for the value of the Work actually performed; or to deduct from the Contract price or otherwise recover the full amount of such rebate, kickback or other unlawful consideration.

ARTICLE 37. NOTIFICATION

All notices hereunder and communications regarding the interpretation of the terms of this Contract and changes thereto, shall be effected by the mailing thereof by registered or certified mail, return receipt requested, postage prepaid, and addressed as follows:

To TranSystems Corporation	To SBCTA
3281 E. Guasti Road Ste.400	1170 W. 3rd Street, 2nd Floor
Ontario, Ca 91761	San Bernardino, CA 92410-1715
Attn: Ayman Salama, PE	Attn: Sal Chavez
	cc: Shaneka Morris, Procurement Manager
Phone: (949)798-9385	Phone: (909) 884-8276

ARTICLE 38. STOP WORK ORDER

Upon failure of CONSULTANT or its subconsultants to comply with any of the requirements of this Contract, SBCTA shall have the right to stop any or all Work affected by such failure until such failure is remedied or to terminate this Contract in accordance with "TERMINATION" provision herein.

ARTICLE 39. CLAIMS

SBCTA shall not be bound to any adjustments in the Contract amount or schedule unless expressly agreed to by SBCTA in writing. SBCTA shall not be liable to CONSULTANT for any claim asserted by CONSULTANT after final payment has been made under this Contract.

ARTICLE 40. ERRORS AND OMISSIONS

CONSULTANT shall be responsible for the professional quality, technical accuracy, and coordination of all Work required under this Contract. CONSULTANT shall be liable for SBCTA costs resulting from errors or deficiencies in Work furnished under this Contract, including but not limited to any fines, penalties, damages, and costs associated with a modification to a construction contract required because of an error or deficiency in the Work provided by CONSULTANT under this Contract.

ARTICLE 41. WARRANTY

CONSULTANT warrants that all Work performed shall be in accordance with the Contract, and all applicable professional standards. In the event of a breach of this provision, CONSULTANT shall take the necessary actions to correct the breach at CONSULTANT's sole expense. If CONSULTANT does not take the necessary action to correct the breach, SBCTA, without waiving any other rights or remedies it may have, may take the necessary steps to correct the breach, and CONSULTANT shall promptly reimburse SBCTA for all expenses and costs incurred.

ARTICLE 42. INDEPENDENT CONTRACTOR

CONSULTANT is and shall be at all times an independent contractor. Accordingly, all Work provided by CONSULTANT shall be done and performed by CONSULTANT under the sole supervision, direction and control of CONSULTANT. SBCTA shall rely on CONSULTANT for results only, and shall have no right at any time to direct or supervise CONSULTANT or CONSULTANT's employees in the performance of Work or as to the manner, means and methods by which Work is performed. All personnel furnished by CONSULTANT under this Contract, and all representatives of CONSULTANT, shall be and remain the employees or agents of CONSULTANT or of CONSULTANT's subconsultant(s) at all times, and shall not at any time or for any purpose whatsoever be considered employees or agents of SBCTA.

ARTICLE 43. ATTORNEY'S FEES

If any legal action is instituted to enforce or declare any Party's rights under the Contract, each Party, including the prevailing Party, must bear its own costs and attorneys' fees. This Article shall not apply to those costs and attorneys' fees directly arising from any third party legal action against a Party hereto and payable under the "Indemnity" provision of the Contract.

ARTICLE 44. GOVERNING LAW AND VENUE

This Contract shall be subject to the law and jurisdiction of the State of California. The Parties acknowledge and agree that this Contract was entered into and intended to be performed in whole or substantial part in San Bernardino County, California. The Parties agree that the venue for any action or claim brought by any Party to this Contract will be the Superior Court of California, San Bernardino County. Each Party hereby waives any law or rule of court, which would allow them to request or demand a change of venue. If any action or claim concerning this Contract is brought by any third party, the Parties hereto agree to use their best efforts to obtain a change of venue to the Superior Court of California, San Bernardino County.

ARTICLE 45. FEDERAL, STATE AND LOCAL LAWS

CONSULTANT warrants that in the performance of this Contract, it shall comply with all applicable federal, State and local laws, ordinances, rules and regulations.

ARTICLE 46. PRECEDENCE

46.1 The Contract consists of the Contract Articles, Exhibit A "Scope of Work", and Exhibit B "Approved Cost Proposal", SBCTA's Request For Proposal and CONSULTANT's proposal, all of which are incorporated into this Contract by this reference.

- 46.2 The following order of precedence shall apply: first, the Contract Articles; second, Exhibits A and B; third, SBCTA's Request For Proposal; and last, CONSULTANT's Proposal. In the event of a conflict between the Contract Articles and the Scope of Work, the Contract Articles will prevail.
- 46.3 In the event of an express conflict between the documents listed in this Article, or between any other documents, which are a part of the Contract, CONSULTANT shall notify SBCTA in writing within three (3) business days of its discovery of the conflict and shall comply with SBCTA's resolution of the conflict.

ARTICLE 47. GRATUITIES

CONSULTANT, its employees, agents, or representatives shall not offer or give to any officer, official, agent or employee of SBCTA, any gift, entertainment, payment, loan, or other gratuity.

ARTICLE 48. REVIEW AND ACCEPTANCE

All Work performed by CONSULTANT shall be subject to periodic review and approval by SBCTA at any and all places where such performance may be carried on. Failure of SBCTA to make such review or to discover defective work shall not prejudice the rights of SBCTA at the time of final acceptance. All Work performed by CONSULTANT shall be subject to periodic and final review and acceptance by SBCTA upon completion of all Work.

ARTICLE 49. DRUG FREE WORKPLACE

CONSULTANT agrees to comply with the Drug Free Workplace Act of 1990 per Government Code Section 8350 et seq.

ARTICLE 50. FORCE MAJEURE

CONSULTANT shall not be in default under this Contract in the event that the Work performed by CONSULTANT is temporarily interrupted or discontinued for any of the following reasons: riots, wars, sabotage, acts of terrorism, civil disturbances, insurrection, explosion, pandemics, quarantines, acts of God, acts of government or governmental restraint, and natural disasters such as floods, earthquakes, landslides, and fires, or other catastrophic events which are beyond the reasonable control of CONSULTANT and which CONSULTANT could not reasonably be expected to have prevented or controlled. "Other catastrophic events" does not include the financial inability of CONSULTANT to perform or failure of CONSULTANT to obtain either any necessary permits or licenses from other governmental agencies or the right to use the facilities of any public utility where such failure is due solely to the acts or omissions of CONSULTANT.

ARTICLE 51. COMPLIANCE WITH THE AMERICANS WITH DISABILITIES ACT

CONSULTANT shall comply with all applicable provisions of the Americans With Disabilities Act in performing Work under this Contract.

ARTICLE 52. ENTIRE DOCUMENT

- 52.1 This Contract constitutes the sole and only agreement governing the Work and supersedes any prior or contemporaneous understandings, written or oral, between the Parties respecting the Project. All previous proposals, offers, and other communications, written or oral, relative to

this Contract, are superseded except to the extent that they have been expressly incorporated into this Contract.

- 52.2 No agent, official, employee or representative of SBCTA has any authority to bind SBCTA to any affirmation, representation or warranty outside of, or in conflict with, the stated terms of this Contract, and CONSULTANT hereby stipulates that it has not relied, and will not rely, on same.
- 52.3 Both Parties have been represented or had the full opportunity to be represented by legal counsel of their own choosing in the negotiation and preparation of this Contract. Therefore, the language in all parts of this Contract will be construed, in all cases, according to its fair meaning, and not for or against either Party.

ARTICLE 53. CONTRACT

This Contract constitutes the entire agreement which is made and concluded in duplicate between the two Parties. Each Party, for and in consideration of the payments to be made, conditions mentioned, and work to be performed, agrees to diligently perform in accordance with the terms and conditions of this Contract as evidenced by the signatures below.

ARTICLE 54. EFFECTIVE DATE

The date that this Contract is executed by SBCTA shall be the Effective Date of the Contract.

-----SIGNATURES ARE ON THE FOLLOWING PAGE-----

IN WITNESS WHEREOF, the Parties hereto have executed this Contract on the day and year written below.

TranSystems Corporation, a Missouri Corporation

**SAN BERNARDINO COUNTY
TRANSPORTATION AUTHORITY**

By: _____
Ayman Salama
Principal/Senior Vice President

By: _____
Art Bishop
President, Board of Directors

Date: _____

Date: _____

APPROVED AS TO FORM

By: _____
Juanda L. Daniel
Assistant General Counsel

Date: _____

CONCURRENCE

By: _____
Shaneka Morris
Procurement Manager

Date: _____

22-1002762

EXHIBIT A

SCOPE OF WORK

EXHIBIT A - SCOPE OF WORK

RFP No. 22-1002762

The San Bernardino County Transportation Authority (“SBCTA”) is seeking professional services for the preparation of Plans, Specifications and Estimate (PS&E) for the Interstate 10 (I-10) Corridor Freight and Express Lane Project – Slover Mountain Underpass (Bridge Number 54-0835) (“Project”) which would replace the existing underpass at I-10 in San Bernardino County. SBCTA Sales Tax Measure I funds will be used to cover the cost of the preparation of the final design phase. Constructing funding for the next phases are currently not finalized, but state and/or federal funds could be utilized. As such, the final plans and specifications should comply with applicable state and federal requirements.

The project proposes to replace the existing underpass to allow for two express lanes in the median in each direction through this corridor segment.

The environmental document and project report for an extended corridor were approved in May, 2017. The geometrics approved in those documents will provide the initial basis for this final design, but the track alignment will be finalized by the selected consultant.

Union Pacific Track realignment and bridge replacement shall be within existing State or Union Pacific right-of way.

Final design services will include preparation of a Supplemental Project Report and Environmental Revalidation to document that this work is part of a separate construction package as part of the longer corridor approved in the original Project Report and Environmental Document.

Caltrans will provide oversight for compliance with State design standards and requirements. In addition, Union Pacific Rail will review and approve the track alignment and structures plan.

Project services include assistance with the preparation of the construction bid advertisement package, support during right of way, responses to Requests for Information (RFI), and review of construction Contract Change Orders (CCO) during the construction phase is required. Coordination with the designer of the Project Approval and Environmental Document Phase (PA/ED) may be required to obtain project files and latest project design information.

I. APPLICABLE STANDARDS

All documents shall be prepared in accordance with current SBCTA, Union Pacific Railroad, and Caltrans regulations, policies, procedures, manuals, and standards where applicable. CONSULTANT shall obtain, at its expense, all applicable Manuals and Standard Plans.

II. GENERAL DESCRIPTION OF REQUIRED SERVICES

- A. Required services listed below do not supersede the requirements established in the Contract.
- B. CONSULTANT Services include the studies, reports, drawings, plans, specifications, estimates, and special provisions necessary to complete the plans, specifications, and estimates for the underpass structure and track realignment and compatibility with the I-10 corridor.
- C. The deliverables list for the PS&E phase will be refined during the initial planning and scoping Project Development Team (PDT) meeting. Not all deliverables listed in this attachment may be required.
- D. CONSULTANT shall develop and maintain a Project schedule. The Project schedule may be presented monthly to the PDT meeting. A deliverables matrix will accompany the schedule. The deliverables matrix will highlight the status of the documents in the review process.
- E. CONSULTANT shall employ appropriate quality control and quality assurance procedures for every deliverable.
- F. CONSULTANT shall identify potential risks and uncertainties related to the delivery and construction of the Project. Risks that may be encountered include, but are not limited to, soil conditions, constructability, factors of safety, impacts to adjacent properties, public safety, and environmental considerations. If at any time during the performance of this Scope of Services, CONSULTANT observes, encounters, or identifies any circumstance that could pose potential risk, CONSULTANT shall notify SBCTA immediately.
- G. The design will be prepared in English units.
- H. Prime contract terms and conditions will be incorporated into the subcontract agreements.
- I. The Task and WBS Structure used for pricing, cost reporting and schedule preparation shall be consistent with the Caltrans Workplan Standards Guide for Delivery of Capital Projects. Project Management activities will be performed in accordance to the Caltrans' Workplan Standards Guide for Delivery of Capital Projects.
- J. CONSULTANT shall prepare and submit monthly invoices and project controls reports. Invoices shall follow SBCTA templates and shall contain all required information including project percent complete and earned value. CONSULTANT shall manage the contract budget and shall provide a monthly report including Earned Value and Estimate at Completion.
- K. Project plans and specifications must comply with the federal Americans with Disabilities Act (ADA) requirements 28 CFR, Part 35, and the *California and Local Building Codes* within the project limits. In accordance with 28 CFR Sec. 35.151, curbs and ramps must meet current ADA standards if the project includes streets that are to be newly constructed or altered (includes

repaving). For ADA requirements, see Chapter 11 “Design Standards,” and Section 12.7 of this chapter. Complete the Caltrans Certification of Compliance with Americans with Disabilities Act (ADA) Form.

- L. The final engineering technical reports must bear the signature, stamp or seal, registration number, and registration certificate expiration date of the registered civil engineer most directly in responsible charge or other registered or certified professional working on the report as specified in Section 9 of the Project Development Procedures Manual.
- M. Final design shall be coordinated with project stakeholders including SBCTA, Caltrans, Union Pacific Railroad, and FHWA.

III. ASSUMPTIONS

- A. There may be up to eight meetings per month (including conference calls) during the duration of this contract, including one mandatory monthly PDT meeting.
- B. CONSULTANT will coordinate with SBCTA, Toll Service Provider (TSP) and Caltrans prior to distribution of all deliverables to determine the points of contact, number of hardcopies and format of electronic files.
- C. Assume one SBCTA and TSP peer review and two Caltrans reviews for each major deliverable and a workshop for comment resolution, if required.
- D. Assume there may be two or more contract bid packages, final estimates and final reports. SBCTA may choose to package this work in multiple packages, such as early bridge work, or split out the civil and toll systems work.

IV. SCOPE OF SERVICES

Following the selection of a consultant, the selected firm shall prepare and submit a Cost Proposal and Project Schedule. The selected firm shall use the latest SBCTA Work Breakdown Structure (WBS), which follows the Caltrans Workplan Standards Guide for Delivery of Capital Projects, and cost and schedule templates for the preparation of the cost proposal and schedule.

TASK 3.100.15 - PROJECT MANAGEMENT

3.100.15 Project Management

CONSULTANT shall furnish a Project Manager to coordinate all CONSULTANT operations with SBCTA, including but not limited to, tracking progress of the work and administering subcontracts. CONSULTANT Project Manager shall provide overall project management, coordination, and supervision of project staff to facilitate the performance of the work in accordance with standards and requirements of the SBCTA and other applicable standards and requirements. CONSULTANT Project Manager shall prepare and submit monthly project progress reports to SBCTA Project Manager.

Deliverables:

- *Monthly Progress Reports*

3.100.15-1 Coordination and Meetings

CONSULTANT Project Manager shall conduct regular meetings with SBCTA, and shall conduct meetings and coordination with other stakeholders, including Caltrans and other agencies in monthly PDT meetings or technical workshops and focused meetings as necessary. CONSULTANT Project Manager will be responsible for preparation of agendas and meeting minutes, communication and distribution of project records and information, and responses to all internal requests for information about the project.

Deliverables:

- *PDT meeting notices, agendas, handouts/exhibits, deliverable matrix, and minutes.*

3.100.15-2 Administration

CONSULTANT Project Manager shall prepare and update the Project schedule on a monthly basis or as needed. Project schedule shall be logical, complete, and shall consider SBCTA peer reviews. CONSULTANT Project Manager shall provide regular reporting on the project status, including, but not limited to, schedule, contract budget, general progress on project tasks, and project issues and concerns. CONSULTANT Project Manager shall maintain project files using the Caltrans Uniform System in hard copies and electronic format.

CONSULTANT Project Manager shall prepare and implement a Project Specific Quality Control/Quality Assurance (QA/QC) Plan in conformance with Section V and a Risk Management Plan following SBCTA format and content requirements; CONSULTANT Project Manager will be responsible for adherence to all applicable SBCTA administrative policies and procedures.

Deliverables:

- *Project Schedules*
- *Project Master Files*
- *QA/QC Plan and Risk Management Plan*

TASK 3.180 – PREPARE ENVIRONMENTAL REVALIDATION AND SUPPLEMENTAL PROJECT REPORT

CONSULTANT shall develop a design for the Slover Mountain Underpass that is compatible with a two express lane as approved during PA/ED, avoiding impact to ROW to the extent practical. CONSULTANT shall develop eastern logical termini for the project in the vicinity of Pepper Avenue. Based on these geometrics, an environmental revalidation and supplemental project report shall be prepared to document the construction sequencing proposed for this project.

Deliverables:

- *Track Alignment Approval*
- *Environmental Revalidation*
- *Supplemental Project Report*

TASK 3.185 – PREPARE BASE MAPS AND PLAN SHEETS**Task 3.185.05 Updated Project Information**

CONSULTANT shall request, collect, assemble, and review all pertinent project information, including, but not limited to, prior project related reports and Engineering Technical Reports, Environmental Documents and Environmental Technical Reports, CAD files and drawings, and relevant correspondence. CONSULTANT shall incorporate the collected materials and information into the Project Master File.

Deliverables:

- *Project Records Files*

Task 3.185.10 Engineering and Photogrammetric Surveys

Mapping and Surveys and preparation of Base Maps were performed during the PA/ED phase. CONSULTANT shall review Project Mapping and Project Survey Control prepared to ensure completeness and accuracy. CONSULTANT shall inform SBCTA's Project Manager if there are incomplete or missing data in the Design Base Maps.

TASK 3.205 – PERMITS & AGREEMENTS**Task 3.205.05 Determine Required Permits & Task 3.205.10 Obtain Permits**

CONSULTANT shall perform work to identify all necessary permits to construct the project and obtain all necessary permits and agreements needed to construct the project. Work as part of this task may include discussions with permitting agencies, preparation of the permit and attachments such as maps and other exhibits identifying funds necessary for the permit application, and submitting the permit. Discussions and negotiations with permitting agencies shall only be performed in consultation with the SBCTA Project Manager or designee.

Deliverables:

- *Various Permits*

TASK 3.220-PERFORM RIGHT OF WAY ENGINEERING**Task 3.220.05 and 220.10 Existing Land Net and Preparation of Land Net Map**

CONSULTANT shall collect all record data and field evidence required to begin development of the Right of Way Base Map. Perform research to locate all relevant survey and land ownership records to complete existing land-net survey, boundary analysis, determination and delineation. CONSULTANT shall prepare land net survey as

required for easements, and monumentations for perpetuation of record of survey.

Deliverables:

- *Land Net Map*

Task 3.220.15 and 220.20 Right of Way Maps and Acquisition Documents

CONSULTANT shall prepare right of way appraisal maps and other maps and exhibits as needed to support right of way acquisition including deeds, legal descriptions, resolution of necessity legal descriptions, and other documents and exhibits as needed to support the acquisition of required property interests from property owners, utilities, railroads, and other agencies as required.

Deliverables:

- *Right of way requirement maps*
- *Right of way appraisal maps*
- *Deeds*
- *Legal Descriptions*
- *Resolution of Necessity Exhibits as required*
- *Exhibits for utility relocations, railroad agreements, right of way acquisition, as required.*

TASK 3.230 – PREPARE HIGHWAY DRAFT PLANS, SPECIFICATIONS & ESTIMATES

Task 3.230.05 Draft Highway/Track Plans

CONSULTANT shall prepare the Highway Roadway and Railroad Track Plans, Specifications, and Estimates (PS&E) plans set for the project following the Caltrans Highway Design Manual, Standard Plans, Standard Specifications, Special Provisions, and Union Pacific Railroad standard, as appropriate. Preparation of the Highway and Railroad Track PS&E plans set shall include, but not be limited to, the preparation of the following roadway engineering sheets:

- | | |
|------------------------------------------|-------------------------------------|
| - Title Sheet | - Typical Cross Sections |
| - Geometric Layouts | - Profile and Superelevation Sheets |
| - Construction Details | - Contour Grading Plans |
| - Summary of Quantities | - Stage Construction Plans |
| - Traffic Handling Plans | - Highway Planting Plans |
| - Utility & Utility Relocation Plans | - Drainage Plans |
| - Signing and Pavement Delineation Plans | - Electrical Plans |
| - Transportation System Management | |

- Preparation of the roadway plans shall be consistent with Caltrans and Union Pacific Railroad design standards to the greatest extent feasible. CONSULTANT shall coordinate toll infrastructure design with SBCTA TSP. TSP shall provide initial infrastructure design requirements for its toll collection system.

CONSULTANT shall perform internal QA/QC plans check and review and shall submit copies to SBCTA for peer review prior to submittal to Caltrans. CONSULTANT shall notify SBCTA's Project Manager if the CONSULTANT is seeking any exceptions to any applicable design standards.

Deliverables:

- *65% Plans*
- *95% Plans*

Task 3.230.20 Transportation Management Plan

CONSULTANT will prepare the Draft and Final Transportation Management Plan (TMP) in accordance with current Caltrans procedures and guidelines. The TMP will identify specific measures that can be taken during construction to reduce impacts due to construction on the traveling public and to provide travel through and around the work area.

Deliverables:

- *Transportation Management Plan*

Task 3.230.35 Draft Highway and Railroad Track Specifications

CONSULTANT shall prepare the Highway Specifications and Special Provisions for the project following the Caltrans Standard Specifications and Union Pacific Railroad provisions. CONSULTANT shall notify SBCTA's Project Manager if the CONSULTANT is seeking any exceptions to this requirement.

Deliverables:

- *Draft Standard Special Provisions (65% and 95% PS&E)*

Task 3.230.40 Draft Highway Quantities and Estimates

CONSULTANT shall prepare the Highway Quantities and Estimates for the project following the Caltrans Standard Specifications including periodic cost updates, as well as cost estimates to support the analysis of project alternatives developed during design. CONSULTANT shall notify SBCTA's Project Manager if the CONSULTANT is seeking any exceptions to this requirement.

Deliverables:

- *Draft Quantities and Estimates*

Task 3.230.60 Storm Water Data Report

CONSULTANT will prepare a Storm Water Data Report (SWDR) in accordance with current Caltrans procedures and guidelines. The SWDR will identify specific measures that can be taken to handle storm water flows around the work area.

Deliverables:

- *Storm Water Data Report-PS&E*

Task 3.230.70 Hydraulics Report

CONSULTANT will prepare a Hydraulics Report in accordance with current Caltrans procedures and guidelines. The updated Hydraulics Report will evaluate existing drainage systems and will be used to support the drainage plans.

Deliverables:

- *Hydraulics Report*

Task 3.230.80 Geotechnical Design Report

CONSULTANT will prepare a Geotechnical Design Report in accordance with current Caltrans procedures and guidelines. The Geotechnical Design Report will be used for recommendations to complete the plans and specifications.

Deliverables:

- *Geotechnical Design Report*

Task 3.230.80 Materials Report

If required, CONSULTANT will prepare an updated Materials Report in accordance with current Caltrans procedures and guidelines.

Deliverables:

- *Materials Report*

TASK 3.240 – PREPARE STRUCTURAL DRAFT PLANS, SPECIFICATIONS & ESTIMATESTask 3.240.65 Preliminary Foundation Report

CONSULTANT will prepare the Preliminary Foundation Report to be utilized as part of the Structures Type Selection. The Preliminary Foundation Report shall document existing foundation conditions, make preliminary foundation recommendations, and identify the need for investigations, subsurface exploration, and studies.

Deliverables:

- *Preliminary Foundation Report*

Task 3.240.70 Subsurface Exploration and other Field Studies

CONSULTANT will perform work required to perform subsurface exploration to support the Foundation Report. This task includes all activities needed such as procurement of permits and rights to enter to perform any needed subsurface explorations. Results of the

study shall be summarized in a report. Subsurface exploration work shall include proposed bridge widening and retaining or soundwalls required for the project.

CONSULTANT will perform an infiltration test to determine the percolation rates for the proposed storm water treatment facilities.

Deliverables:

- *Log of Test Borings*
- *Infiltration Test Report*

Task 3.240.75 Draft Structural Plans

CONSULTANT shall prepare the Structural Plans, Specifications and Estimates (PS&E) plans set for the project following the Caltrans Highway Design Manual and Caltrans Standard Plans as appropriate. Preparation of the Structural PS&E plans set shall include, but not be limited to the preparation of the following roadway engineering sheets:

- | | |
|----------------------------|---------------------------------|
| - Title Sheet | - Typical Cross Sections |
| - Foundation Plans | - Bridge General Plans |
| - Soundwall Plans | - Retaining Wall Plans |
| - Stage Construction Plans | - Structural Special Provisions |
| - Structural Quantities | |

CONSULTANT shall perform an internal QA/QC plans check and review and shall submit copies to SBCTA for peer review prior to submittal to Caltrans. CONSULTANT shall notify SBCTA's Project Manager if the CONSULTANT is seeking any exceptions to any applicable design standards.

Deliverables:

- *Type Selection Report*
- *65% Plans*
- *95% Plans*

Task 3.240.80 Foundation Report

CONSULTANT shall prepare the Foundation Report incorporating subsurface explorations through report and Log of Test Borings. The Foundation Report is to provide the required geologic and geotechnical recommendations needed to prepare the structural plans sheets.

Deliverables:

- *Foundation Report*

TASK 3.255 – PREPARE FINAL PS&E PACKAGE

Task 3.255.20 Final District PS&E Package

This task includes the distribution of the draft final combined highway and structural PS&E package for final review by Caltrans, SBCTA, and other stakeholders.

CONSULTANT shall address comments received and incorporate changes as appropriate in the final combined PS&E package. Under this task, CONSULTANT shall perform an internal QA/QC plans check and review and shall submit the final combined PS&E package to an independent reviewer, which shall be provided by the CONSULTANT. The independent reviewer shall be a registered Professional Engineer in the State of California and shall certify the quality of the package and that the plans are constructible. The independent reviewer shall submit a stamped report to the SBCTA summarizing its review and certifying the constructability of the plans and that the final combined PS&E package is biddable. CONSULTANT will be responsible for completion of the draft final combined PS&E package in a manner where there is sufficient time to address comments during the independent review and finalize the PS&E package within the project schedule. CONSULTANT will be responsible for the constructability of the project.

Deliverables:

- *Final Combined PS&E Package*
- *Independent Constructability and Ready-to-Bid Certification*

Task 3.255.40 Resident Engineer File and Supplemental Materials

CONSULTANT shall be responsible for preparing the pending Resident Engineer File and other supplemental PS&E materials, which would include the following:

- | | |
|--------------------------------------------|-------------------------------------|
| - Geotechnical Information Handout | - Materials Information Handout |
| - Construction Staking Package and Control | - Project Controls for Construction |
| - Grid Grades | - Construction Permits |
| - Quantity Work Book | - Representative Cross Sections |

Deliverables:

- *Pending Resident Engineer File*
- *Supplemental PS&E Materials*

TASK 3.260 – CONTRACT BID DOCUMENTS READY TO LIST

Task 3.260-1 Draft Contract

CONSULTANT shall assist SBCTA in the preparation of the Construction Contract Bid Documents. Under this task, the CONSULTANT shall develop a draft contract, which shall be consistent with Caltrans standards. Draft contract shall include the plans, specifications, special provisions, applicable Federal, state and local laws, regulations, and requirements and item codes. All contract pay items shall utilize the Basic Engineering Estimate System (BEES) coding.

Deliverables:

- *Draft Construction Contract Package*

TASK 5.270 – CONSTRUCTION ENGINEERING – TECHNICAL SUPPORT

Provide Technical Support to the construction engineering staff including design, traffic, hydraulics, materials, structures design, geotechnical services, environmental, landscape and other specialty staff. Functional support may include attendance at pre-work conferences, on-site construction support including contractor request for information (RFI) and RE pending file review.

TASK 6.295 – ACCEPT CONTRACT/PREPARE FINAL CONSTRUCTION ESTIMATE AND FINAL REPORT

Work involved in the acceptance and final documentation of a construction contract.

Work involved includes coordination with the construction manager and/or Resident Engineer to develop as-built plans in accordance with Caltrans and the City Standards. Work includes the transfer of the red-line As-Built plan mark-ups to the original full size reproducible plan sheets (and CADD file) and forwarding a reproducible set of plans with the transferred As-Built changes to SBCTA, Caltrans and the Cities. CONSULTANT shall complete this task within 30 calendar days of receipt of red-line mark-ups.

Deliverables:

- *Red line construction package*
- *As-Built construction package*
- *Electronic and hardcopy submittal for Caltrans and City records*

V. PROJECT SPECIFIC QUALITY ASSURANCE AND QUALITY CONTROL PLAN REQUIREMENTS

Quality Assurance (QA) encompasses all of the planned and systematic activities implemented within the quality system that can be demonstrated to provide confidence that a product or service will fulfill requirements for quality. Quality Control (QC) consists of operational techniques and activities used to fulfill requirements for quality. For environmental review process, preliminary engineering and final design, QC includes technical checking, review and design verification activities, while the QA activities includes the monitoring, surveillances, auditing and other means of oversight of the QC activities and documentation, to ensure completeness and adherence to the QC procedures.

A project specific quality management plan (herein referred to as a Project QA/QC Plan) shall be developed by the Consultant and submitted to SBCTA for review and approval. The Project QA/QC Plan shall describe how QA and QC will be executed and express by the Consultant and its subconsultants. In lieu of a Project QA/QC Plan, for small projects at the discretion of the SBCTA Director of Project Delivery, a copy of the Consultant's standard QA and QC procedures that are to be followed by the Consultant team (including subconsultants) for the project, will be submitted to SBCTA for review and approval. The standard QA and QC procedures document and any appended project-specific

processes, should address the same requirements listed below for the Project QA/QC Plan.

The following is a list of the minimum content and scope of what the Project QA/QC Plan shall contain. When submitted to SBCTA for review, the Project QA/QC Plan will be reviewed and assessed to ensure that these topic areas are covered and adequately addressed by the plan.

Project Introduction and Scope:

- Project description
- Scope of work
- Quality objectives
- List of deliverable documents for each milestone submittal

Project Team Qualifications, Organization, Staff, Roles and Responsibilities:

- A description of the minimum resource requirements for staff competence, skills, experience, and credentials.
- Organization chart showing project staff and lines of QA and QC authority and communications.
- List of project staff members, roles and responsibilities, including verification, QC review and technical checking, Project Management, Project QA Management and Technical Lead duties.

Quality Training:

- Quality training, including a training syllabus, schedule, and methods of tracking the staff that have been trained.

Scheduling of Quality Activities:

- Detailed QA and QC schedule that provides the timing, durations, and dependencies for all QC technical checking, interdisciplinary reviews, internal design verification against project criteria, and internal QA audits.

SBCTA, TSP and Caltrans Reviews:

- Formal external (SBCTA, TSP and Caltrans) review schedules (Peer Reviews and Constructability Reviews).
- Processes for SBCTA and TSP Peer Review and Caltrans review comments tracking, response, resolution, checking of comment incorporation, and closure process.

Internal Reviews:

- Quality procedures related to interdisciplinary design review (IDR) process.
- Technical review of environmental reports.

Management of Requirements:

- The requirements for the development of a Basis of Design report that includes a list of governing project criteria, source documents for the governing criteria, including those from Caltrans, SBCTA and local municipalities.
- Requirements management processes used to track design variation requests, and procedures for changes to the requirements as a result of approved design variances.

Quality Procedures for Project Controls:

- Project QA and QC procedures related to approved project scope changes and associated revisions to estimates and schedule.
- Project QA and QC procedures for configuration management against the baseline design.

Quality Control (QC) Procedures:

- Detailed QC procedures, including descriptions of process steps and documentation of processes for technical checking, QC reviews, and design verification. The procedures for technical checking will include:
 - QC testing and validation of computer software used for the calculations
 - Checking of calculations and data (hand calculations and computer calculations input and output)
 - Checking of drawings and exhibits
 - Checking of specifications and contract documents
 - Checking of quantities and cost estimates
 - Review of studies or report-type documents
 - QC of CADD-produced documents
- Checklists to be used to verify: design criteria / technical compliance; submittal contents; CADD compliance; specifications compliance; calculations compliance; and milestone specific level of completion.

Quality Assurance (QA) Procedures:

- The processes for QA monitoring, surveillances, and audits of the QC activities, including when QA audits are to be conducted prior to submittals, and the QC activities and QC documentation to be audited.
- Processes for the management of the implementation of Corrective Action to internal and external QA audit non-conformances and findings.

Quality Documentation:

- Quality Records list or definition.

Document Control procedures, including electronic files and project folders, submittal procedures, control of hardcopies, uploading of scanned hardcopy PDF files, document retention requirements, and the treatment of quality documents. This part of the Project QA/QC Plan may reference sections of a project management plan and/or a separate project or firm document control plan.

EXHIBIT B—“APPROVED COST PROPOSAL”

For Cost Plus Fixed Fee Contracts – use SBCTA Form 348-10H

Cost/Price Form for Cost Plus Fixed Fee RFP
I-10 Express Lanes Contract 2 Plans, Specifications, and Estimates

Consultant TranSystemsContract No. 22-1002762Date 07/05/2022

Direct Labor Classification/Title	Key Personnel	Hours	Labor Rate Range		Average Hourly Rate	Total Direct Labor
			Low	High		
Project Manager	Ayman Salama	336	179.58	179.58	\$179.58	\$60,338.88
Rail Lead	Marian Rule	60	149.14	149.14	\$149.14	\$8,948.40
Roadway Lead	Andy Kwan	497	88.18	88.18	\$88.18	\$43,825.46
UP Coordination	Kevin Hicks	40	150.26	150.26	\$150.26	\$6,010.40
I-10 Express Lanes Coord	Joe Sawtelle	40	129.42	129.42	\$129.42	\$5,176.80
Structures/Retaining Walls	Jay Hyland	80	83.04	83.04	\$83.04	\$6,643.20
Administrative II		50	27.00	37.00	\$32.00	\$1,600.00
Civil Engineer I		1,936	34.00	48.00	\$41.00	\$79,376.00
Civil Engineer II		1,745	53.00	56.00	\$54.50	\$95,102.50
Civil Engineer III		1,005	62.00	117.00	\$89.50	\$89,947.50
Civil Engineer IV		120	88.00	162.00	\$125.00	\$15,000.00
Civil Engineer V		60	104.00	180.00	\$142.00	\$8,520.00
Structural Engineer II		240	43.00	47.00	\$45.00	\$10,800.00
Structural Engineer III		298	64.00	82.00	\$73.00	\$21,754.00
Structural Engineer IV		48	88.00	162.00	\$125.00	\$6,000.00
Structural Engineer V		30	104.00	180.00	\$142.00	\$4,260.00
Technician I		1,600	20.00	24.00	\$22.00	\$35,200.00
Technician II		764	29.00	39.00	\$34.00	\$25,976.00
Technician IV		240	52.00	86.00	\$69.00	\$16,560.00

9,189

Labor Costs

- a) Subtotal Direct Labor Costs \$ \$541,039.14
b) Anticipated Salary Increases (see page 2 for sample) \$ 15,975.07
c) **TOTAL DIRECT LABOR COSTS [(a)+(b)]** \$ 557,014.21

Fringe Benefits

- d) Fringe Benefits (Rate 52.093% %) e) **Total Fringe Benefits [(c)x(d)]** \$ 290,165.41

Indirect Costs

- f) Overhead (Rate 98.084% %) g) Overhead [(c)x (f)] \$ 546,341.82
h) General and Administrative (Rate 0.000% %) i) Gen & Admin [(c) x (h)] \$ -
j) **Total Indirect Costs [(g)+(i)]** \$ 546,341.82

Fixed Fee (Profit)

- n) (Rate 8.50% %) k) **Fixed fee [(c) + (e) + (j)] x (n)** \$ 118,449.32

Total Loaded Labor Costs1,511,970.76**Other Direct Costs (ODC)**

- l) Travel/ Mileage Costs (supported by consultant actual costs) \$ \$1,875.00
m) Equipment Rental and Supplies (itemize) \$ \$0.00
n) Permit Fees (itemize), Plan sheets (each), Test Holes (each, Etc.) \$ \$36,100.00
o) Subconsultant Costs (attach detailed cost proposal) \$ 1,290,933.75
Advanced Civil Technology \$ 131,128.72
GroupDelta \$ 171,329.40
ICF Jones and Stokes \$ 125,081.23
Psomas \$ 198,623.92
RailPros \$ 599,939.86
Tatsumi and Partners \$ 64,830.62

- p) **Total Other Direct Costs [(l) + (m) + (n) + (o)]** \$ \$1,328,908.75
Total cost [(c) + (e) + (j) + (k) + (p)] \$ 2,840,879.51

Notes:

- Employees subject to prevailing wage requirements to be marked with an *.

Attachment: Exhibit B_22-1002762 (8588 : I-10 Slover Mountain Underpass Project)

Form 348-10-H Cost Proposal
Actual Cost- Plus-Fixed Fee or Lump Sum (Firm Fixed Price) Contracts

Consultant TranSystemsContract No. 22-1002762Date 07/05/2022**1. Calculate average hourly rate for 1st year of contract (Direct Labor Subtotal divided by total hours)**

Direct Labor Subtotal Per Cost Proposal	Total Hours cost Proposal	Avg Hourly Rate	5year Contract Duration
\$ 541,039.14 /	9189 =	\$ 58.88	Year 1 avg Hourly rate

2. Calculate hourly rate for all years (increase the Average Hourly rate for a year by proposed escalation%)

	Average hourly rate	Proposed Escalation			
Year 1	\$ 58.88 +	4%	=	\$ 61.24	Year 2 Avg Hourly Rate
Year 2	\$ 61.24 +	4%	=	\$ 63.69	Year 3 Avg Hourly Rate
Year 3	\$ 63.69 +	4%	=	\$ 66.24	Year 4 Avg Hourly Rate
Year 4	\$ 66.24 +	4%	=	\$ 68.89	Year 5 Avg Hourly Rate

3. Calculate estimated hour per year (multiply estimate % each year by total hours)

	Estimated % Completed Each year	Total Hours Per Cost Proposal	Total Hours per Year	
Year 1	40.0% *	9189 =	3675.6	Estimated Hours Year 1
Year 2	50.0% *	9189 =	4594.5	Estimated Hours Year 2
Year 3	7.0% *	9189 =	643.2	Estimated Hours Year 3
Year 4	3.0% *	9189 =	275.7	Estimated Hours Year 4
Year 5	0.0% *	9189 =	0.0	Estimated Hours Year 5
Total	100.0%	Total =	9189	

4. Calculate Total Costs including Escalation (multiply average hourly rate by the number of hours)

	Avg Hourly Rate (Calculated above)	Estimated hours (Calculated above)	Cost Per Year	
Year 1	\$ 58.88 *	3675.6 =	\$ 216,419.33	Estimated Hours Year 1
Year 2	\$ 61.24 *	4594.5 =	\$ 281,367.18	Estimated Hours Year 2
Year 3	\$ 63.69 *	643.2 =	\$ 40,967.32	Estimated Hours Year 3
Year 4	\$ 66.24 *	275.7 =	\$ 18,260.38	Estimated Hours Year 4
Year 5	\$ 68.89 *	0.0 =	\$ -	Estimated Hours Year 5
Total Direct Labor Cost with Escalation =			\$ 557,014.21	
Direct Labor Subtotal before Escalation =			\$ 541,039.14	
Estimated Total of Direct Labor Salary Increase =			\$ 15,975.07	Transferred to page 1

Notes:

- This assumes that one year will be worked at the rate on the cost proposal before salary increases are granted.
- This escalation calculation is for determining the total contract amount only.
- Estimated yearly percent completed from resource loaded schedule

Attachment: Exhibit B_22-1002762 (8588 : I-10 Slover Mountain Underpass Project)

Cost/Price Form for Cost Plus Fixed Fee RFP
I-10 Express Lanes Contract 2 Plans, Specifications, and Estimates

Consultant Advanced Civil Technologies, Inc.Contract No. 22-1002762Date 07/05/2022

Direct Labor Classification/Title	Key Personnel	Hours	Labor Rate Range		Average Hourly Rate	Total Direct Labor
			Low	High		
Principal/Project Manager		32	171.31	171.31	\$171.31	\$5,481.92
Senior Engineer		54	121.49	121.49	\$121.49	\$6,560.46
Senior Electrical Engineer		50	95.07	95.07	\$95.07	\$4,753.50
Design Engineer III		92	82.87	82.87	\$82.87	\$7,624.04
Staff Engineer		516	39.76	48.71	\$44.24	\$22,827.84
		0			\$0.00	\$0.00
		0			\$0.00	\$0.00
		0			\$0.00	\$0.00
		0			\$0.00	\$0.00

744

Labor Costs

a) Subtotal Direct Labor Costs \$ \$47,24
b) Anticipated Salary Increases (see page 2 for sample) \$ 2,56
c) **TOTAL DIRECT LABOR COSTS [(a)+(b)]** \$ 49,80

Fringe Benefits

d) Fringe Benefits (Rate 59.590% %) e) **Total Fringe Benefits [(c)x(d)]** \$ 29,680.93

Indirect Costs

f) Overhead (Rate 81.850% %) g) Overhead [(c)x (f)] \$ 40,768.31
h) General and Administrative (Rate 0.000% %) i) Gen & Admin [(c) x (h)] \$ -
j) **Total Indirect Costs [(g)+(i)]** \$ 40,768.31

Fixed Fee (Profit)

n) (Rate 8.50% %) k) **Fixed fee [(c) + (e) + (j)] x (n)** \$ 10,221.91

Total Loaded Labor Costs130,479.72**Other Direct Costs (ODC)**

l) Travel/ Mileage Costs (supported by consultant actual costs) \$ \$649.00
m) Equipment Rental and Supplies (itemize) \$ \$0.00
n) Permit Fees (itemize), Plan sheets (each), Test Holes (each, Etc.) \$ \$0.00
o) Subconsultant Costs (attach detailed cost proposal in same format as prime consultant estimate for each subconsultant) \$

p) **Total Other Direct Costs [(l) + (m) + (n) + (o)]** \$ 649.00
Total cost [(c) + (e) + (j) + (k) + (p)] \$ 131,128.72

Notes:

- Employees subject to prevailing wage requirements to be marked with an *.

Attachment: Exhibit B_22-1002762 (8588 : I-10 Slover Mountain Underpass Project)

Form 348-10-H Cost Proposal
Actual Cost- Plus-Fixed Fee or Lump Sum (Firm Fixed Price) Contracts

Consultant Advanced Civil Technologies, Inc. Contract No. 22-1002762

Date 07/05/2022

1. Calculate average hourly rate for 1st year of contract (Direct Labor Subtotal divided by total hours)

Direct Labor Subtotal Per Cost Proposal	Total Hours cost Proposal	Avg Hourly Rate	5year Contract Duration
\$ 47,247.76 /	744	= \$ 63.51	Year 1 avg Hourly rate

2. Calculate hourly rate for all years (increase the Average Hourly rate for a year by proposed escalation%)

	Average hourly rate		Proposed Escalation			
Year 1	\$ 63.51	+	4%	=	\$ 66.05	Year 2 Avg Hourly Rate
Year 2	\$ 66.05	+	4%	=	\$ 68.69	Year 3 Avg Hourly Rate
Year 3	\$ 68.69	+	4%	=	\$ 71.44	Year 4 Avg Hourly Rate
Year 4	\$ 71.44	+	4%	=	\$ 74.30	Year 5 Avg Hourly Rate

3. Calculate estimated hour per year (multiply estimate % each year by total hours)

	Estimated % Completed Each year		Total Hours Per Cost Proposal		Total Hours per Year	
Year 1	28.0%	*	744	=	208.3	Estimated Hours Year 1
Year 2	30.0%	*	744	=	223.2	Estimated Hours Year 2
Year 3	28.0%	*	744	=	208.3	Estimated Hours Year 3
Year 4	10.0%	*	744	=	74.4	Estimated Hours Year 4
Year 5	4.0%	*	744	=	29.8	Estimated Hours Year 5
Total	100.0%		Total	=	744	

4. Calculate Total Costs including Escalation (multiply average hourly rate by the number of hours)

	Avg Hourly Rate (Calculated above)		Estimated hours (Calculated above)		Cost Per Year	
Year 1	\$ 63.51	*	208.3	=	\$ 13,230.40	Estimated Hours Year 1
Year 2	\$ 66.05	*	223.2	=	\$ 14,742.36	Estimated Hours Year 2
Year 3	\$ 68.69	*	208.3	=	\$ 14,309.50	Estimated Hours Year 3
Year 4	\$ 71.44	*	74.4	=	\$ 5,315.14	Estimated Hours Year 4
Year 5	\$ 74.30	*	29.8	=	\$ 2,211.17	Estimated Hours Year 5
Total Direct Labor Cost with Escalation =					\$ 49,808.57	
Direct Labor Subtotal before Escalation =					\$ 47,247.76	
Estimated Total of Direct Labor Salary Increase =					\$ 2,560.81	Transferred to page 1

Notes:

- This assumes that one year will be worked at the rate on the cost proposal before salary increases are granted.
- This escalation calculation is for determining the total contract amount only.
- Estimated yearly percent completed from resource loaded schedule

Attachment: Exhibit B_22-1002762 (8588 : I-10 Slover Mountain Underpass Project)

Form 348-10-H Cost Proposal
Actual Cost- Plus-Fixed Fee or Lump Sum (Firm Fixed Price) Contracts

Consultant Group Delta Consultants, Inc. Contract No. 22-1002762

Date 07/05/2022

1. Calculate average hourly rate for 1st year of contract (Direct Labor Subtotal divided by total hours)

Direct Labor Subtotal Per Cost Proposal	Total Hours cost Proposal	Avg Hourly Rate	5year Contract Duration
\$ 41,235.63 /	932 =	\$ 44.24	Year 1 avg Hourly rate

2. Calculate hourly rate for all years (increase the Average Hourly rate for a year by proposed escalation%)

	Average hourly rate	Proposed Escalation			
Year 1	\$ 44.24 +	4%	=	\$ 46.01	Year 2 Avg Hourly Rate
Year 2	\$ 46.01 +	4%	=	\$ 47.85	Year 3 Avg Hourly Rate
Year 3	\$ 47.85 +	4%	=	\$ 49.76	Year 4 Avg Hourly Rate
Year 4	\$ 49.76 +	4%	=	\$ 51.75	Year 5 Avg Hourly Rate

3. Calculate estimated hour per year (multiply estimate % each year by total hours)

	Estimated % Completed Each year	Total Hours Per Cost Proposal	Total Hours per Year	
Year 1	40.0% *	932 =	372.8	Estimated Hours Year 1
Year 2	50.0% *	932 =	466.0	Estimated Hours Year 2
Year 3	7.0% *	932 =	65.2	Estimated Hours Year 3
Year 4	3.0% *	932 =	28.0	Estimated Hours Year 4
Year 5		932 =	0.0	Estimated Hours Year 5
Total	100.0%	Total =	932	

4. Calculate Total Costs including Escalation (multiply average hourly rate by the number of hours)

	Avg Hourly Rate (Calculated above)	Estimated hours (Calculated above)	Cost Per Year	
Year 1	\$ 44.24 *	372.8 =	\$ 16,492.67	Estimated Hours Year 1
Year 2	\$ 46.01 *	466.0 =	\$ 21,440.66	Estimated Hours Year 2
Year 3	\$ 47.85 *	65.2 =	\$ 3,121.73	Estimated Hours Year 3
Year 4	\$ 49.76 *	28.0 =	\$ 1,391.29	Estimated Hours Year 4
Year 5	\$ 51.75 *	0.0 =	\$ -	Estimated Hours Year 5
Total Direct Labor Cost with Escalation =			\$ 42,446.36	
Direct Labor Subtotal before Escalation =			\$ 41,235.63	
Estimated Total of Direct Labor Salary Increase =			\$ 1,210.73	Transferred to page 1

Notes:

- This assumes that one year will be worked at the rate on the cost proposal before salary increases are granted.
- This escalation calculation is for determining the total contract amount only.
- Estimated yearly percent completed from resource loaded schedule

Attachment: Exhibit B_22-1002762 (8588 : I-10 Slover Mountain Underpass Project)

Cost/Price Form for Cost Plus Fixed Fee RFP
I-10 Express Lanes Contract 2 Plans, Specifications, and Estimates

Consultant ICF Jones & Stokes, Inc.Contract No. 22-1002762Date 07/05/2022

Direct Labor Classification/Title	Key Personnel	Hours	Labor Rate Range		Average Hourly Rate	Total Direct Labor
			Low	High		
Proj Dir	Calvert, Brian	118	90.22	110.94	\$100.58	\$11,868.44
Sr Consult III	Corpuz, Monica	340	54.31	60.95	\$57.63	\$19,594.20
Mng Consult	Hoisington, Gregory	32	64.90	68.28	\$66.59	\$2,130.88
Sr Consult III	Flores, Marisa	16	54.31	60.95	\$57.63	\$922.08
Sr Tech Analyst	Hardie, Jon	5	73.50	80.30	\$76.90	\$384.50
Tech Dir	Lay, Keith	6	79.21	90.51	\$84.86	\$509.16
Assoc Consult III	Barrera, Mario	3	42.42	48.73	\$45.58	\$136.74
Sr Tech Analyst	Jameson, Megan	6	73.50	80.30	\$76.90	\$461.40
Sr Consult III	Ban, Jennifer	12	54.31	60.95	\$57.63	\$691.56
Sr Tech Analyst	Trisal, Shilpa	6	73.50	80.30	\$76.90	\$461.40
Mng Consult	Twaddell, Hannah	11	64.90	68.28	\$66.59	\$732.49
Sr Consult I	Garcia, Johnnie	14	46.85	49.12	\$47.99	\$671.86
Sr Consult II	Irvin, Elizabeth	8	50.52	57.71	\$54.12	\$432.96
Admin Tech	Shook, Jill	8	31.95	39.48	\$35.72	\$285.76
Sr Tech Analyst	Crawford, Karen	5	73.50	80.30	\$76.90	\$384.50
Sr Consult I	Chmiel, Karolina	22	46.85	49.12	\$47.99	\$1,055.78
Asst Consult	Roderick, Margaret	4	32.13	39.61	\$35.87	\$143.48
Sr Consult III	Feldman, Jessica	5	54.31	60.95	\$57.63	\$288.15
Assoc Consult II	Klinefelter, Kristen	19	40.20	42.19	\$41.20	\$782.80

640

Labor Costs

a) Subtotal Direct Labor Costs	\$ <u>41.9</u>
b) Anticipated Salary Increases (see page 2 for sample)	\$ <u>1.3</u>
c) TOTAL DIRECT LABOR COSTS [(a)+(b)]	\$ <u>43.2</u>

Fringe Benefits

d) Fringe Benefits (Rate <u>40.170%</u> %)	e) Total Fringe Benefits [(c)x(d)]	\$ <u>17,390.08</u>
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Indirect Costs

f) Overhead (Rate <u>121.720%</u> %)	g) Overhead [(c)x (f)]	\$ <u>52,694.05</u>
h) General and Administrative (Rate <u>0.000%</u> %)	i) Gen & Admin [(c) x (h)]	\$ <u>-</u>
	j) Total Indirect Costs [(g)+(i)]	\$ <u>52,694.05</u>

Fixed Fee (Profit)

n) (Rate <u>8.50%</u> %)	k) Fixed fee [(c) + (e) + (j)] x (n)	\$ <u>9,636.90</u>
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Total Loaded Labor Costs123,012.23**Other Direct Costs (ODC)**

l) Travel/ Mileage Costs (supported by consultant actual costs)	\$ <u>\$819.00</u>
m) Equipment Rental and Supplies (itemize)	\$ <u>\$0.00</u>
n) Surveys and Reports	\$ <u>\$1,250.00</u>
o) Subconsultant Costs (attach detailed cost proposal in same format as prime consultant estimate for each subconsultant)	\$ <u></u>

p) Total Other Direct Costs [(l) + (m) + (n) + (o)]	\$ <u>2,069.00</u>
Total cost [(c) + (e) + (j) + (k) + (p)]	\$ <u>125,081.23</u>

Notes:

- Employees subject to prevailing wage requirements to be marked with an *.

Attachment: Exhibit B_22-1002762 (8588 : I-10 Slover Mountain Underpass Project)

Form 348-10-H Cost Proposal
Actual Cost- Plus-Fixed Fee or Lump Sum (Firm Fixed Price) Contracts

Consultant ICF Jones & Stokes, Inc. Contract No. 22-1002762

Date 07/05/2022

1. Calculate average hourly rate for 1st year of contract (Direct Labor Subtotal divided by total hours)

Direct Labor Subtotal Per Cost Proposal	Total Hours cost Proposal	Avg Hourly Rate	5year Contract Duration
\$ 41,938.14 /	640 =	\$ 65.53	Year 1 avg Hourly rate

2. Calculate hourly rate for all years (increase the Average Hourly rate for a year by proposed escalation%)

	Average hourly rate	Proposed Escalation			
Year 1	\$ 65.53 +	4%	=	\$ 68.15	Year 2 Avg Hourly Rate
Year 2	\$ 68.15 +	4%	=	\$ 70.88	Year 3 Avg Hourly Rate
Year 3	\$ 70.88 +	4%	=	\$ 73.72	Year 4 Avg Hourly Rate
Year 4	\$ 73.72 +	4%	=	\$ 76.67	Year 5 Avg Hourly Rate

3. Calculate estimated hour per year (multiply estimate % each year by total hours)

	Estimated % Completed Each year	Total Hours Per Cost Proposal	Total Hours per Year	
2022	35.0% *	640	=	224.0
2023	50.0% *	640	=	320.0
2024	15.0% *	640	=	96.0
2025	0.0% *	640	=	0.0
2026	0.0% *	640	=	0.0
Total	100.0%	Total	=	640

4. Calculate Total Costs including Escalation (multiply average hourly rate by the number of hours)

	Avg Hourly Rate (Calculated above)	Estimated hours (Calculated above)	Cost Per Year	
Year 1	\$ 65.53 *	224.0	=	\$ 14,678.72
Year 2	\$ 68.15 *	320.0	=	\$ 21,808.00
Year 3	\$ 70.88 *	96.0	=	\$ 6,804.48
Year 4	\$ 73.72 *	0.0	=	\$ -
Year 5	\$ 76.67 *	0.0	=	\$ -
Total Direct Labor Cost with Escalation =			\$	43,291.20
Direct Labor Subtotal before Escalation =			\$	41,938.14
Estimated Total of Direct Labor Salary Increase =			\$	1,353.06

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Notes:

- This assumes that one year will be worked at the rate on the cost proposal before salary increases are granted.
- This escalation calculation is for determining the total contract amount only.
- Estimated yearly percent completed from resource loaded schedule

Attachment: Exhibit B 22-1002762 (8588 : I-10 Slover Mountain Underpass Project)

Cost/Price Form for Cost Plus Fixed Fee RFP
I-10 Express Lanes Contract 2 Plans, Specifications, and Estimates

Consultant PsomasContract No. 22-1002762Date 07/05/2022

Direct Labor Classification/Title	Key Personnel	Hours	Labor Rate Range		Average Hourly Rate	Total Direct Labor
			Low	High		
Calif. L.S. Party Chief*		208	59.01	59.01	\$59.01	\$12,274.08
Chairman*		208	51.28	51.28	\$51.28	\$10,666.24
Certified Party Chief*		23	57.31	57.31	\$57.31	\$1,318.13
Sr. Project Surveyor II		24	57.29	57.29	\$57.29	\$1,374.96
Sr. Project Surveyor I		234	52.00	52.00	\$52.00	\$12,168.00
Project Surveyor II		24	45.00	45.00	\$45.00	\$1,080.00
CAD Technician		256	40.00	40.00	\$40.00	\$10,240.00
Photo Compiler III		168	51.00	51.00	\$51.00	\$8,568.00
Project Administrator		20	32.70	32.70	\$32.70	\$654.00
Sr. Project Surveyor III		38	61.00	61.00	\$61.00	\$2,318.00
Sr. Project Manager		30	82.39	82.39	\$82.39	\$2,471.70
Technical Manager		28	96.91	96.91	\$96.91	\$2,713.48

1,261

Labor Costs

a) Subtotal Direct Labor Costs

\$ \$65.8

b) Anticipated Salary Increases (see page 2 for sample)

\$ 5c) **TOTAL DIRECT LABOR COSTS** [(a)+(b)]\$ 66.3**Fringe Benefits**d) Fringe Benefits (Rate 61.110% %)e) **Total Fringe Benefits** [(c)x(d)]\$ 40,562.69**Indirect Costs**f) Overhead (Rate 110.520% %)

g) Overhead [(c)x (f)]

\$ 73,359.33h) General and Administrative (Rate 0.000% %)

i) Gen & Admin [(c) x (h)]

\$ -j) **Total Indirect Costs** [(g)+(i)]\$ 73,359.33**Fixed Fee (Profit)**n) (Rate 8.50% %)k) **Fixed fee** [(c) + (e) + (j)] x (n)\$ 15,325.38**Total Loaded Labor Costs**195,623.92**Other Direct Costs (ODC)**

l) Travel/ Mileage Costs (supported by consultant actual costs)

\$ \$0.00

m) Equipment Rental and Supplies (itemize)

\$ \$0.00

n) Permit Fees (itemize), Plan sheets (each), Test Holes (each, Etc.)

\$ \$3,000.00

o) Subconsultant Costs (attach detailed cost proposal in same format as prime consultant estimate for each subconsultant)

\$ p) **Total Other Direct Costs** [(l) + (m) + (n) + (o)]\$ 3,000.00**Total cost** [(c) + (e) + (j) + (k) + (p)]\$ 198,623.92**Notes:**

- Employees subject to prevailing wage requirements to be marked with an *.

Attachment: Exhibit B_22-1002762 (8588 : I-10 Slover Mountain Underpass Project)

Form 348-10-H Cost Proposal
Actual Cost- Plus-Fixed Fee or Lump Sum (Firm Fixed Price)
Contracts

Consultant PsomasContract No. 22-1002762Date 07/05/2022**1. Calculate average hourly rate for 1st year of contract (Direct Labor Subtotal divided by total hours)**

Direct Labor Subtotal Per Cost Proposal	Total Hours cost Proposal	Avg Hourly Rate	5year Contract Duration
\$ 65,846.59 /	1261 =	\$ 52.22	Year 1 avg Hourly rate

2. Calculate hourly rate for all years (increase the Average Hourly rate for a year by proposed escalation%)

	Average hourly rate	Proposed Escalation			
Year 1	\$ 52.22 +	4%	=	\$ 54.31	Year 2 Avg Hourly Rate
Year 2	\$ 54.31 +	4%	=	\$ 56.48	Year 3 Avg Hourly Rate
Year 3	\$ 56.48 +	4%	=	\$ 58.74	Year 4 Avg Hourly Rate
Year 4	\$ 58.74 +	4%	=	\$ 61.09	Year 5 Avg Hourly Rate

3. Calculate estimated hour per year (multiply estimate % each year by total hours)

	Estimated % Completed Each year	Total Hours Per Cost Proposal	Total Hours per Year	
Year 1	80.0% *	1261	1008.8	Estimated Hours Year 1
Year 2	20.0% *	1261	252.2	Estimated Hours Year 2
Year 3	0.0% *	1261	0.0	Estimated Hours Year 3
Year 4	0.0% *	1261	0.0	Estimated Hours Year 4
Year 5	0.0% *	1261	0.0	Estimated Hours Year 5
Total	100.0%	Total	1261	

4. Calculate Total Costs including Escalation (multiply average hourly rate by the number of hours)

	Avg Hourly Rate (Calculated above)	Estimated hours (Calculated above)	Cost Per Year	
Year 1	\$ 52.22 *	1008.8	\$ 52,679.54	Estimated Hours Year 1
Year 2	\$ 54.31 *	252.2	\$ 13,696.98	Estimated Hours Year 2
Year 3	\$ 56.48 *	0.0	\$ -	Estimated Hours Year 3
Year 4	\$ 58.74 *	0.0	\$ -	Estimated Hours Year 4
Year 5	\$ 61.09 *	0.0	\$ -	Estimated Hours Year 5
Total Direct Labor Cost with Escalation =			\$ 66,376.52	
Direct Labor Subtotal before Escalation =			\$ 65,846.59	
Estimated Total of Direct Labor Salary Increase =			\$ 529.93	Transferred to page 1

Notes:

- This assumes that one year will be worked at the rate on the cost proposal before salary increases are granted.
- This escalation calculation is for determining the total contract amount only.
- Estimated yearly percent completed from resource loaded schedule

Attachment: Exhibit B_22-1002762 (8588 : I-10 Slover Mountain Underpass Project)

Cost/Price Form for Cost Plus Fixed Fee RFP
I-10 Express Lanes Contract 2 Plans, Specifications, and Estimates

Consultant RailProsContract No. 22-1002762Date 07/05/2022

Direct Labor Classification/Title	Key Personnel	Hours	Labor Rate Range		Average Hourly Rate	Total Direct Labor
			Low	High		
Rail Principal	Nathan Ortega	37	112.67	118.30	\$115.49	\$4,273.13
Rail Manager		80	56.74	79.15	\$67.95	\$5,436.00
Rail Designer		204	41.00	56.74	\$48.87	\$9,969.48
Rail Drafter		253	32.86	41.00	\$36.93	\$9,343.29
Quality Checker		9	126.00	138.60	\$132.30	\$1,190.70
Structures Manager	Sarwar Naveed	317	94.30	109.00	\$101.65	\$32,223.05
Structural Engineer		745	59.28	68.50	\$63.89	\$47,598.05
Professional Engineer (Structures)		0	55.29	67.58	\$61.43	\$0.00
Engineering Designer (Structures)		748	36.86	40.75	\$38.81	\$29,029.88
CADD Designer		1,306	43.62	52.25	\$47.93	\$62,596.58

3,699

Labor Costs

- a) Subtotal Direct Labor Costs \$ \$201,660.16
b) Anticipated Salary Increases (see page 2 for sample) \$ 8,139.72
c) **TOTAL DIRECT LABOR COSTS** [(a)+(b)] \$ 209,799.88

Fringe Benefits

- d) Fringe Benefits (Rate 53.470% %) e) **Total Fringe Benefits** [(c)x(d)] \$ 112,180.00

Indirect Costs

- f) Overhead (Rate 73.870% %) g) Overhead [(c)x (f)] \$ 154,979.17
h) General and Administrative (Rate 36.150% %) i) Gen & Admin [(c) x (h)] \$ 75,842.66
j) **Total Indirect Costs** [(g)+(i)] \$ 230,821.83

Fixed Fee (Profit)

- n) (Rate 8.50% %) k) **Fixed fee** [(c) + (e) + (j)] x (n) \$ 46,988.15

Total Loaded Labor Costs599,789.86**Other Direct Costs (ODC)**

- l) Travel/ Mileage Costs (supported by consultant actual costs) \$ \$150.00
m) Equipment Rental and Supplies (itemize) \$ \$0.00
n) Permit Fees (itemize), Plan sheets (each), Test Holes (each, Etc.) \$ \$0.00
o) Subconsultant Costs (attach detailed cost proposal in same format as prime consultant estimate for each subconsultant) \$

- p) **Total Other Direct Costs** [(l) + (m) + (n) + (o)] \$ 150.00
Total cost [(c) + (e) + (j) + (k) + (p)] \$ 599,939.86

Notes:

- Employees subject to prevailing wage requirements to be marked with an *.

Attachment: Exhibit B_22-1002762 (8588 : I-10 Slover Mountain Underpass Project)

Form 348-10-H Cost Proposal
Actual Cost- Plus-Fixed Fee or Lump Sum (Firm Fixed Price) Contracts

Consultant RailProsContract No. 22-1002762Date 07/05/2022**1. Calculate average hourly rate for 1st year of contract (Direct Labor Subtotal divided by total hours)**

Direct Labor Subtotal Per Cost Proposal	Total Hours cost Proposal	Avg Hourly Rate	5year Contract Duration
\$ 201,660.16 /	3699 =	\$ 54.52	Year 1 avg Hourly rate

2. Calculate hourly rate for all years (increase the Average Hourly rate for a year by proposed escalation%)

	Average hourly rate	Proposed Escalation				
Year 1	\$ 54.52 +	4%	=	\$ 56.70	Year 2 Avg Hourly Rate	
Year 2	\$ 56.70 +	4%	=	\$ 58.97	Year 3 Avg Hourly Rate	
Year 3	\$ 58.97 +	4%	=	\$ 61.33	Year 4 Avg Hourly Rate	
Year 4	\$ 61.33 +	4%	=	\$ 63.78	Year 5 Avg Hourly Rate	

3. Calculate estimated hour per year (multiply estimate % each year by total hours)

	Estimated % Completed Each year	Total Hours Per Cost Proposal	Total Hours per Year	
Year 1	20.0% *	3699	=	739.8
Year 2	60.0% *	3699	=	2219.4
Year 3	20.0% *	3699	=	739.8
Year 4	0.0% *	3699	=	0.0
Year 5	0.0% *	3699	=	0.0
Total	100.0%	Total	=	3699

4. Calculate Total Costs including Escalation (multiply average hourly rate by the number of hours)

	Avg Hourly Rate (Calculated above)	Estimated hours (Calculated above)	Cost Per Year	
Year 1	\$ 54.52 *	739.8	=	\$ 40,333.90
Year 2	\$ 56.70 *	2219.4	=	\$ 125,839.98
Year 3	\$ 58.97 *	739.8	=	\$ 43,626.01
Year 4	\$ 61.33 *	0.0	=	\$ -
Year 5	\$ 63.78 *	0.0	=	\$ -
Total Direct Labor Cost with Escalation =			\$	209,799.88
Direct Labor Subtotal before Escalation =			\$	201,660.16
Estimated Total of Direct Labor Salary Increase =			\$	8,139.72

Notes:

- This assumes that one year will be worked at the rate on the cost proposal before salary increases are granted.
- This escalation calculation is for determining the total contract amount only.
- Estimated yearly percent completed from resource loaded schedule

Attachment: Exhibit B_22-1002762 (8588 : I-10 Slover Mountain Underpass Project)

Cost/Price Form for Cost Plus Fixed Fee RFP
I-10 Express Lanes Contract 2 Plans, Specifications, and Estimates

Consultant Tatsumi and Partners, Inc.Contract No. 22-1002762Date 07/05/2022

Direct Labor Classification/Title	Key Personnel	Hours	Labor Rate Range		Average Hourly Rate	Total Direct Labor
			Low	High		
Senior Principal		11	95.00	95.00	\$95.00	\$1,045.00
Senior Associate		70	58.60	58.60	\$58.60	\$4,102.00
Senior Technical Staff		48	43.75	43.75	\$43.75	\$2,100.00
Senior Designer		70	43.75	43.75	\$43.75	\$3,062.50
Technical Staff III		128	37.25	38.75	\$38.00	\$4,864.00
Technical Staff I		190	30.50	30.50	\$30.50	\$5,795.00
		0			\$0.00	\$0.00
		0			\$0.00	\$0.00
		0			\$0.00	\$0.00

517

Labor Costs

a) Subtotal Direct Labor Costs

\$ 20,

b) Anticipated Salary Increases (see page 2 for sample)

\$ 1,c) **TOTAL DIRECT LABOR COSTS** [(a)+(b)]\$ 21,**Fringe Benefits**d) Fringe Benefits (Rate %)e) **Total Fringe Benefits** [(c)x(d)]\$ **Indirect Costs**f) Overhead (Rate 176.000% %)

g) Overhead [(c)x (f)]

\$ 37,992.35h) General and Administrative (Rate 0.000% %)

i) Gen & Admin [(c) x (h)]

\$ -j) **Total Indirect Costs** [(g)+(i)]\$ 37,992.35**Fixed Fee (Profit)**n) (Rate 8.50% %)k) **Fixed fee** [(c) + (e) + (j)] x (n)\$ 5,064.21**Total Loaded Labor Costs**64,643.12**Other Direct Costs (ODC)**

l) Travel/ Mileage Costs (supported by consultant actual costs)

\$ \$187.50

m) Equipment Rental and Supplies (itemize)

\$ \$0.00

n) Permit Fees (itemize), Plan sheets (each), Test Holes (each, Etc.)

\$ \$0.00

o) Subconsultant Costs (attach detailed cost proposal in same format as prime consultant estimate for each subconsultant)

\$ p) **Total Other Direct Costs** [(l) + (m) + (n) + (o)]\$ 187.50**Total cost** [(c) + (e) + (j) + (k) + (p)]\$ 64,830.62**Notes:**

- Employees subject to prevailing wage requirements to be marked with an *.

Attachment: Exhibit B_22-1002762 (8588 : I-10 Slover Mountain Underpass Project)

Consultant Tatsumi and Partners, Inc.

Contract No. 22-

Date 07/05/2022

1. Calculate average hourly rate for 1st year of contract (Direct Labor Subtotal divided by total hours)

Direct Labor Subtotal Per Cost Proposal	Total Hours cost Proposal	Avg Hourly Rate	5year Contract Duration
\$ 20,968.50 /	517 =	\$ 40.56	Year 1 avg Hourly rate

2. Calculate hourly rate for all years (increase the Average Hourly rate for a year by proposed escalation%)

	Average hourly rate	Proposed Escalation			
Year 1	\$ 40.56 +	4%	=	\$ 42.18	Year 2 Avg Hourly Rate
Year 2	\$ 42.18 +	4%	=	\$ 43.87	Year 3 Avg Hourly Rate
Year 3	\$ 43.87 +	4%	=	\$ 45.62	Year 4 Avg Hourly Rate
Year 4	\$ 45.62 +	4%	=	\$ 47.44	Year 5 Avg Hourly Rate

3. Calculate estimated hour per year (multiply estimate % each year by total hours)

	Estimated % Completed Each year	Total Hours Per Cost Proposal	Total Hours per Year	
Year 1	40.0% *	517	= 206.8	Estimated Hours Year 1
Year 2	50.0% *	517	= 258.5	Estimated Hours Year 2
Year 3	7.0% *	517	= 36.2	Estimated Hours Year 3
Year 4	3.0% *	517	= 15.5	Estimated Hours Year 4
Year 5	0.0% *	517	= 0.0	Estimated Hours Year 5
Total	100.0%	Total	= 517	

4. Calculate Total Costs including Escalation (multiply average hourly rate by the number of hours)

	Avg Hourly Rate (Calculated above)	Estimated hours (Calculated above)	Cost Per Year	
Year 1	\$ 40.56 *	206.8	= \$ 8,387.81	Estimated Hours Year 1
Year 2	\$ 42.18 *	258.5	= \$ 10,903.53	Estimated Hours Year 2
Year 3	\$ 43.87 *	36.2	= \$ 1,587.66	Estimated Hours Year 3
Year 4	\$ 45.62 *	15.5	= \$ 707.57	Estimated Hours Year 4
Year 5	\$ 47.44 *	0.0	= \$ -	Estimated Hours Year 5
Total Direct Labor Cost with Escalation			= \$ 21,586.56	
Direct Labor Subtotal before Escalation			= \$ 20,968.50	
Estimated Total of Direct Labor Salary Increase			= \$ 618.06	Transferred to page 1

Notes:

- This assumes that one year will be worked at the rate on the cost proposal before salary increases are granted.
- This escalation calculation is for determining the total contract amount only.
- Estimated yearly percent completed from resource loaded schedule

Attachment: Exhibit B_22-1002762 (8588 : I-10 Slover Mountain Underpass Project)

Minute Action

AGENDA ITEM: 6

Date: August 11, 2022

Subject:

Award Design Services Contract No. 22-1002727 for State Route 210 at Waterman Avenue Interchange Project

Recommendation:

That the following be reviewed and recommended for final approval by the Board of Directors, acting as the San Bernardino County Transportation Authority, at a regularly scheduled Board meeting:

A. Award Contract No. 22-1002727 to EXP U.S. Services, Inc., for \$644,666.32, for Project Approval, and Plans, Specifications and Estimates Design Services for the State Route 210 at Waterman Avenue Interchange Project (Project).

B. Approve a contingency budget of \$64,466.63 for Contract No. 22-1002727, which would be released by the Department Director by contract amendment for scope of work within the original contract for elements that may arise during Project execution.

Background:

The State Route 210 (SR 210) at Waterman Avenue Interchange Project (Project) holds position No. 17 on the Measure I Valley Freeway Interchange Program priority list.

The Project will improve traffic operations and local circulation at the SR 210/Waterman Avenue intersection with East 30th Street and the eastbound SR 210 entrance ramp. The eastbound on-ramp will be widened to two lanes and the one southbound and northbound through lane will be converted into left-turn lanes.

In January 2022, San Bernardino County Transportation Authority (SBCTA) entered into an agreement with the City of San Bernardino (City) to initiate the Project and define roles and responsibilities. On March 2, 2022, the Board approved the release of Request for Proposals (RFP) No. 22-1002727 for the Project.

On March 8, 2022, RFP No. 22-1002727 was released and posted on PlanetBids and the SBCTA website to solicit firms to assist SBCTA in providing Plans, Specifications and Estimates (PS&E) Design Services for the Project. The solicitation was issued in accordance with Procurement and Special Risk Assessment Policy No. 11000. The solicitation was sent electronically to approximately 1,172 firms and consultants registered on PlanetBids. Of the 1,172 firms notified, 72 firms downloaded the RFP.

On March 24, 2022, Addendum No. 1 was released to provide a Pre-Proposal Attendees List. On April 4, 2022, Addendum No. 2 was released to provide SBCTA's responses to questions submitted as detailed in the RFP. Addendum No. 3 was issued on April 21, 2022, extending the proposal due date and revising insurance requirements.

Entity: San Bernardino County Transportation Authority

Board of Directors Metro Valley Study Session Agenda Item

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On April 28, 2022, SBCTA received two (2) proposals by the date and time specified in the RFP from EXP U.S. Services Inc. and Kleinfelder Construction Services. A responsiveness review was conducted by the Procurement Analyst and found all proposals were in compliance with the requirements and specifications outlined in the RFP. The Evaluation Committee was comprised of staff from SBCTA and the City of San Bernardino Engineering Department.

The Evaluation Committee concluded their individual review of the proposals and convened to review, discuss, and score the proposals. The Evaluation Committee members met on May 5, 2022, and discussed each proposal according to the evaluation criteria, including the proposal's strengths and weaknesses. At the completion of discussions, the Evaluation Committee individually scored the proposals based on the following evaluation criteria: Qualifications of the Firm – 40 points, Proposed Staffing and Project Organization – 40 points, and Work Plan – 20 points. The firms were ranked in order of technical merit, and a short-list was developed.

As a result of the scoring, the committee recommends that the contract to perform the scope of work as outlined in RFP No. 22-1002727, be awarded to EXP U.S. Services, Inc. The firm clearly demonstrated a thorough understanding of the scope of work, proposed a qualified team, had a clear and concise work plan, and had an innovative approach to the Project showing the ability to perform the work necessary to complete the Project on schedule and within budget. Evaluation forms and reference checks are located in the Contract Audit File.

Contract No. 22-1002727 is to provide the final design for widening the eastbound entrance ramp and re-striping of Waterman Avenue from the eastbound ramps to 30th Street. Design services will include the Design Engineering Evaluation Report (DEER)/Environmental Document (ED), Plans, Specifications and Estimate (PS&E), Right-of-Way (ROW) and Construction Support Services for the Project. The result of this work will be a PS&E package that would be ready to advertise for construction.

Staff is recommending approval of Contract No. 22-1002727 with EXP U.S. Services, Inc. for \$644,666.32. The contract duration will be three (3) years to provide design support during construction. It is anticipated that construction would start near the end of 2023, and be complete in about one (1) year.

Staff is also recommending approval of a contingency budget of \$64,466.63 for the design contract. This budget would be utilized, if needed, for work identified in the original contract and would be released as contract amendments per Procurement and Special Risk Assessment Policy No. 11000 by the Department Director. Release of contingency will be reported to the Board on a regular basis.

Financial Impact:

This item is consistent with the Fiscal Year 2022/2023 Budget under Task No. 0830 Interchange Projects, Sub-Task No. 0814 SR-210 Waterman Avenue Interchange.

Reviewed By:

This item is not scheduled for review by any other policy committee or technical advisory committee. SBCTA General Counsel, Procurement Manager and Risk Manager have reviewed this item and the draft contract.

San Bernardino County Transportation Authority

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Responsible Staff:

Sal Chavez, Project Delivery Manager

Approved
Board of Directors Metro Valley Study Session
Date: August 11, 2022

Witnessed By:

San Bernardino County Transportation Authority

Contract Summary Sheet

6.a

General Contract Information

Contract No: 22-1002727 Amendment No.: _____

Contract Class: Payable Department: Project Delivery

Vendor No.: 03441 Vendor Name: EXP U.S. SERVICE, INC.

Description: SR 210 Waterman Design Contract

List Any Related Contract Nos.: 22-1002720

Dollar Amount							
Original Contract		\$	644,666.32	Original Contingency		\$	64,466.6
Prior Amendments		\$	-	Prior Amendments		\$	-
Prior Contingency Released		\$	-	Prior Contingency Released (-)		\$	-
Current Amendment		\$	-	Current Amendment		\$	-
Total/Revised Contract Value		\$	644,666.32	Total Contingency Value		\$	64,466.6
	Total Dollar Authority (Contract Value and Contingency)					\$	709,132.9

Contract Authorization

Board of Directors _____ Date: 9/7/2022 _____ Committee _____ Item # _____

Contract Management (Internal Purposes Only)

Other Contracts _____ Sole Source? No _____ Administrative Budget Adjustment _____

Local _____ Design _____ N/A _____

Accounts Payable

Estimated Start Date: 10/5/2022 Expiration Date: 7/31/2025 Revised Expiration Date: _____

NHS: Yes QMP/QAP: Yes Prevailing Wage: Yes

							Total Contract Funding:		Total Contingency:	
	Fund	Prog	Task	Sub-Task	Object	Revenue	PA Level	Revenue Code Name	\$	\$
GL:	4120	40	0830	0814	52001	41100000	620	MSI Interchange	527,337.05	52,733.70
GL:	6010	40	0830	0814	52001	42421013	620	City of San Bernardino	117,329.27	11,732.93
GL:									-	-
GL:									-	-
GL:									-	-
GL:									-	-
GL:									-	-
GL:									-	-
GL:									-	-
GL:									-	-
GL:									-	-

Juan Lizarde

Henry Stultz

Juan Lizarde, Project Manager

Henry Stultz, Project Delivery Director

Additional Notes:

Attachment: 22-1002727_CSS [Revision 1] (8562 : Award Design Services Contract No. 22-1002727 for State Route 210 at Waterman Avenue

CONTRACT No. 22-1002727**BY AND BETWEEN****SAN BERNARDINO COUNTY TRANSPORTATION AUTHORITY****AND****EXP U.S. SERVICES INC.****FOR**

**STATE ROUTE 210/WATERMAN AVENUE INTERCHANGE DESIGN
ENGINEERING EVALUATION REPORT (DEER)/ ENVIRONMENTAL
DOCUMENT (ED), PLANS, SPECIFICATIONS AND ESTIMATE (PS&E),
RIGHT-OF-WAY (ROW) AND CONSTRUCTION SUPPORT PROFESSIONAL
SERVICES**

This contract (“Contract”) is made and entered into by and between the San Bernardino County Transportation Authority, (“SBCTA”), whose address is 1170 W. 3rd Street, 2nd Floor, San Bernardino, California 92410-1715; and EXP U.S. Services Inc. (“CONSULTANT”), whose address is: 451 East Vanderbuilt Way, Suite 375, San Bernardino, CA 92408. SBCTA and CONSULTANT are each a “Party” and collectively the “Parties”.

RECITALS:

WHEREAS, SBCTA requires Work as described in Exhibit A of this Contract; and

WHEREAS, CONSULTANT has confirmed that CONSULTANT has the requisite professional qualifications, personnel and experience and is fully capable and qualified to perform the services identified herein; and

WHEREAS, CONSULTANT desires to perform all Work identified herein and to do so for the compensation and in accordance with the terms and conditions set forth herein.

NOW, THEREFORE, the Parties agree as follows:

ARTICLE 1. INTRODUCTION

- 1.1 The work to be performed under this Contract is described in Exhibit A, entitled “Scope of Work”, and the CONSULTANT’s Approved Cost Proposal dated 05/20/2022 (Exhibit B). If there is any conflict between the Approved Cost Proposal and the Contract Articles, the Contract Articles take precedence.
- 1.2 CONSULTANT agrees to indemnify and hold harmless SBCTA, its officers, agents and employees from any and all claims, demands, costs, or liability arising from or connected with the services provided hereunder due to negligent acts, errors, or omissions of the CONSULTANT. CONSULTANT will reimburse SBCTA for any expenditure, including reasonable attorney fees, incurred by SBCTA in defending against claims ultimately determined to be due to negligent acts, errors, or omissions of the CONSULTANT.
- 1.3 CONSULTANT and the agents and employees of CONSULTANT, in the performance of this Contract, shall act in an independent capacity and not as officers or employees or agents of SBCTA.
- 1.4 Without the written consent of SBCTA, this Contract is not assignable by CONSULTANT, either in whole or in part.
- 1.5 No alteration or variations of the terms of this Contract shall be valid unless made in writing and signed by the Parties hereto; and no oral understanding or agreement not incorporated herein shall be binding on any of the Parties hereto.
- 1.6 The consideration to be paid to CONSULTANT as provided herein shall be in compensation for all of CONSULTANT’s expenses incurred in the performance hereof, including travel and per diem, unless otherwise expressly so provided.
- 1.7 The Project Manager for this Contract is Juan Lizarde, or such other designee as shall be designated in written notice to CONSULTANT from time to time by the Department Director of SBCTA or his or her designee. The Project Manager shall have authority to act on behalf of SBCTA in administering this Contract, including giving notices (including without limitation, notices of default and/or termination), technical directions and approvals, demanding performance and accepting work performed, but is not authorized to receive or issue payments or execute amendments to the Contract itself.

ARTICLE 2. PROJECT DESCRIPTION/SCOPE OF WORK

CONSULTANT agrees to perform the work and services set forth in Exhibit A “Scope of Work”, (“Work”), in accordance with all applicable professional architectural, engineering, construction management, land surveying and/or materials testing standards which are generally accepted in the State of California, in accordance with the terms and conditions expressed herein and in the sequence, time, and manner defined herein. The word “Work”, as used herein, includes without limitation the performance, fulfillment and discharge by CONSULTANT of all obligations, duties, tasks, and Work imposed upon or assumed by

CONSULTANT hereunder; and the Work performed hereunder shall be completed to the satisfaction of SBCTA, with their satisfaction being based on prevailing applicable professional standards.

ARTICLE 3. CONSULTANT's REPORTS OR MEETINGS

- 3.1 CONSULTANT shall submit progress reports at least once a month. The report should be sufficiently detailed for SBCTA to determine if CONSULTANT is performing to expectations and is on schedule, to provide communication of interim findings, and to sufficiently address any difficulties or special problems encountered, so remedies can be developed.
- 3.2 CONSULTANT's Project Manager shall meet with SBCTA, as needed, to discuss progress on the Contract.

ARTICLE 4. PERFORMANCE PERIOD

- 4.1 Contingent upon approval by SBCTA's Awarding Authority in accordance with Article 54, below, CONSULTANT shall commence work after written notification to proceed by SBCTA's Procurement Analyst. The Contract shall end on July 31, 2025, unless extended by written amendment.
- 4.2 CONSULTANT is advised that any recommendation for contract award is not binding on SBCTA until the Contract is fully executed and approved by SBCTA's Awarding Authority.
- 4.3 SBCTA at its sole discretion may extend the original term of the Contract for two one-year option terms. The maximum term of this Contract, including all option term(s) if exercised, will not exceed July 31, 2027.

ARTICLE 5. ALLOWABLE COSTS AND PAYMENTS

- 5.1 The method of payment for this Contract will be based on actual cost plus fixed fee. SBCTA will reimburse CONSULTANT for actual costs (including labor costs, employee benefits, travel, equipment rental costs, overhead and other direct costs) incurred by CONSULTANT in performance of the Work. CONSULTANT will not be reimbursed for actual costs that exceed the estimated wage rates, employee benefits, travel, equipment rental, overhead, and other estimated costs set forth in the approved CONSULTANT's cost proposal, unless additional reimbursement is provided for by contract amendment. In no event, will CONSULTANT be reimbursed for overhead costs at a rate that exceeds SBCTA's approved overhead rate set forth in the Cost Proposal. In the event, that SBCTA determines that a change to the Work from that specified in the Cost Proposal and Contract is required, the Contract time or actual costs reimbursable by SBCTA shall be adjusted by contract amendment to accommodate the changed work. The maximum total cost as specified herein shall not be exceeded, unless authorized by written amendment.
- 5.2 In addition to the allowable incurred costs, SBCTA will pay CONSULTANT a fixed fee of \$27,598.70. The fixed fee is nonadjustable for the term of the Contract, except

in the event of a significant change in the Scope of Work and such adjustment is made by contract amendment.

- 5.3 Reimbursement for transportation and subsistence costs shall not exceed the rates specified in the approved Cost Proposal.
- 5.4 When milestone cost estimates are included in the approved Cost Proposal, CONSULTANT shall obtain prior written approval for a revised milestone cost estimate from SBCTA before exceeding such cost estimate.
- 5.5 Progress payments will be made monthly in arrears based on Services provided and allowable incurred costs. A pro rata portion of CONSULTANT's fixed fee will be included in the monthly progress payments. If CONSULTANT fails to submit the required deliverable items according to the schedule set forth in the Scope of Work, SBCTA shall have the right to delay payment or terminate this Contract in accordance with the Termination provisions herein.
- 5.6 No payment will be made prior to approval of any Work, nor any Work performed prior to approval of this Contract.
- 5.7 CONSULTANT will be reimbursed as promptly as fiscal procedures will permit upon receipt by SBCTA of itemized invoices in triplicate. Invoices shall be submitted no later than 45 calendar days after the performance of Work for which CONSULTANT is billing except for the month of June, which will require the invoice to be submitted by July 10th. Invoices shall detail the Work performed on each milestone and each project as applicable. Invoices shall follow the format stipulated for the approved Cost Proposal and shall reference this contract number. Final invoice must contain the final cost and all credits due SBCTA including any equipment purchased under the provisions of this Contract. The final invoice should be submitted within 60 calendar days after completion of CONSULTANT's Work. Invoices should be e-mailed to SBCTA at the following address:
ap@gosbcta.com
 For large files over 30 megabytes, invoices can be submitted using this link: <https://sanbag-lfweb.sanbag.ca.gov/Forms/Invoice-submission>
- 5.8 CONSULTANT shall include a statement and release with each invoice, satisfactory to SBCTA, that CONSULTANT has fully performed the Work invoiced pursuant to this Contract for the period covered, that all information included with the invoice is true and correct, and that all payments to and claims of CONSULTANT and its subconsultants for Work during the period will be satisfied upon the making of such payment. SBCTA shall not be obligated to make payments to CONSULTANT until CONSULTANT furnishes such statement and release.
- 5.9 The total amount payable by SBCTA to CONSULTANT including the fixed fee shall not exceed \$644,666.32.
- 5.10 Salary increases will be reimbursable if the new salary is within the salary range identified in the approved Cost Proposal and is approved by SBCTA. For personnel

subject to prevailing wage rates as described in the California Labor Code, all salary increases, which are the direct result of changes in the prevailing wage rates are reimbursable.

- 5.11 All subcontracts in excess of \$25,000 shall contain the above provisions.

ARTICLE 6. TERMINATION

- 6.1 Termination for Convenience – SBCTA’s Executive Director shall have the right at any time, with or without cause, to terminate further performance of Work by giving thirty (30) calendar days written notice to CONSULTANT specifying the date of termination. On the date of such termination stated in said notice, CONSULTANT shall promptly discontinue performance of Work and shall preserve Work in progress and completed Work, pending SBCTA's instruction, and shall turn over such Work in accordance with SBCTA’s instructions.
- 6.1.1 CONSULTANT shall deliver to SBCTA all deliverables prepared by CONSULTANT or its subconsultants or furnished to CONSULTANT by SBCTA. Upon such delivery, CONSULTANT may then invoice SBCTA for payment in accordance with the terms herein.
- 6.1.2 If CONSULTANT has fully and completely performed all obligations under this Contract up to the date of termination, CONSULTANT shall be entitled to receive from SBCTA as complete and full settlement for such termination a pro rata share of the Contract cost based upon the percentage of all contracted Work satisfactorily executed to the date of termination.
- 6.1.3 CONSULTANT shall be entitled to receive the actual costs incurred by CONSULTANT to return CONSULTANT's tools and equipment, if any, to it or its suppliers' premises, or to turn over Work in progress in accordance with SBCTA's instructions plus the actual cost necessarily incurred in effecting the termination.
- 6.2 Termination for Cause
- 6.2.1 In the event CONSULTANT shall file a petition in bankruptcy court, or shall make a general assignment for the benefit of its creditors, or if a petition in bankruptcy shall be filed against CONSULTANT or a receiver shall be appointed on account of its insolvency, or if CONSULTANT shall default in the performance of any express obligation to be performed by it under this Contract and shall fail to immediately correct (or if immediate correction is not possible, shall fail to commence and diligently continue action to correct) such default within ten (10) calendar days following written notice, SBCTA may, without prejudice to any other rights or remedies SBCTA may have, and in compliance with applicable Bankruptcy Laws: (a) hold in abeyance further payments to CONSULTANT; (b) stop any Work of CONSULTANT or its subconsultants related to such failure until such failure is remedied; and/or (c) terminate this Contract by written notice to CONSULTANT specifying the date of termination. In the event of such termination by SBCTA, SBCTA may

take possession of the products and finished Work by whatever method SBCTA may deem expedient. A waiver by SBCTA of one default of CONSULTANT shall not be considered to be a waiver of any subsequent default of CONSULTANT of the same or any other provision, nor be deemed to waive, amend, or modify this Contract.

6.2.2 CONSULTANT shall deliver to SBCTA all finished and unfinished deliverables under this Contract prepared by CONSULTANT or its sub-consultants or furnished to CONSULTANT by SBCTA within ten (10) working days of said notice.

6.3 All claims for compensation or reimbursement of costs under any of the foregoing provisions shall be supported by documentation submitted to SBCTA, satisfactory in form and content to SBCTA and verified by SBCTA. In no event shall CONSULTANT be entitled to any payment for prospective profits or any damages because of such termination.

6.3.1 All subcontracts in excess of \$25,000 shall contain the above provisions.

ARTICLE 7. FUNDING REQUIREMENTS

7.1 It is mutually understood between the Parties that this Contract may have been written before ascertaining the availability of funds or appropriation of funds for the mutual benefit of both Parties, in order to avoid program or fiscal delays that would occur if the Contract were executed after that determination was made.

7.2 This Contract is valid and enforceable only if sufficient funds are made available to SBCTA for the purpose of this Contract. In addition, this Contract is subject to any additional restrictions, limitations, conditions, or any statute enacted by Congress, State Legislature, or SBCTA governing board that may affect the provisions, terms, or funding of this Contract in any manner.

7.3 It is mutually agreed that if sufficient funds are not appropriated, this Contract may be amended to reflect any reduction in funds.

7.4 SBCTA has the option to void the Contract under the 30-day cancellation clause, or by mutual agreement to amend the Contract to reflect any reduction of funds.

ARTICLE 8. CHANGE IN TERMS

8.1 This Contract may be amended or modified only by mutual written agreement of the Parties.

8.2 CONSULTANT shall only commence Work covered by an amendment after the amendment is executed and the NTP has been provided by SBCTA's Procurement Analyst.

8.3 There shall be no change in CONSULTANT's Project Manager or members of the project team, as listed in the approved cost proposal, which is part of this Contract without prior written approval of SBCTA.

ARTICLE 9. DISADVANTAGED BUSINESS ENTERPRISE

Intentionally Omitted

ARTICLE 10. COST PRINCIPLES AND ADMINISTRATIVE REQUIREMENTS

- 10.1 CONSULTANT agrees that the Contract Cost Principles and Procedures, 48 CFR Federal Acquisition Regulations System, Chapter 1, Part 31.000 et seq. shall be used to determine the cost allowability of individual items.
- 10.2 CONSULTANT also agrees to comply with federal procedures in accordance with 49 CFR, Part 18, Uniform Administrative Requirements for Grants and Cooperative Agreements to State and Local Governments.
- 10.3 Any costs for which payment has been made to CONSULTANT that are determined by subsequent audit to be unallowable under 49 CFR, Part 18 and 48 CFR Federal Acquisition Regulations System, Chapter 1, Part 31.000 et seq., are subject to repayment by CONSULTANT to SBCTA.
- 10.4 All subcontracts in excess of \$25,000 shall contain the above provision.

ARTICLE 11. CONTINGENT FEE

CONSULTANT warrants by execution of this Contract that no person or selling agency has been employed or retained to solicit or secure this Contract upon an agreement or understanding for a commission, percentage, brokerage, or contingent fee, excepting bona fide employees or bona fide established commercial or selling agencies maintained by CONSULTANT for the purpose of securing business. For breach or violation of this warranty, SBCTA has the right to annul this Contract without liability; pay only for the value of the Work actually performed, or in its discretion, to deduct from the Contract price or consideration, or otherwise recover, the full amount of such commission, percentage, brokerage, or contingent fee.

ARTICLE 12. RETENTION OF RECORDS/AUDIT

- 12.1 For the purpose of determining compliance with Public Contract Code section 10115, et seq. and Title 21, California Code of Regulations, Chapter 21, Section 2500 et seq., when applicable and other matters connected with the performance of the Contract pursuant to Government Code section 8546.7; CONSULTANT, and sub-consultants shall maintain and make available for inspection all books, documents, papers, accounting records, and other evidence pertaining to the performance of the Contract, including but not to, the costs of administering the Contract. All Parties shall make such materials available at their respective offices at all reasonable times during the Contract period and for three years from the date of final payment under the Contract. The state, State Auditor, SBCTA, Federal Highway Administration, or any other duly authorized representative of the SBCTA shall have access to any books, records, and documents of CONSULTANT that are pertinent to the Contract for audit, examinations, excerpts, and transactions, and copies thereof shall be furnished if requested.

12.2 Subcontracts in excess of \$25,000 shall contain this provision.

ARTICLE 13. DISPUTES

- 13.1 Any dispute, other than audit, concerning a question of fact arising under this Contract that is not disposed of by agreement shall be decided by a committee consisting of SBCTA's Procurement Manager and SBCTA's Executive Director, who may consider written or verbal information submitted by CONSULTANT.
- 13.2 Not later than 30 days after completion of all deliverables necessary to complete the plans, specifications and estimate, CONSULTANT may request review by SBCTA's Executive Director, of unresolved claims, disputes, other than audit. The request for review will be submitted in writing.
- 13.3 Neither the pendency of a dispute nor its consideration by SBCTA's Executive Director, will excuse CONSULTANT from full and timely performance in accordance with the terms of this Contract.

ARTICLE 14. AUDIT REVIEW PROCEDURES

- 14.1 Any dispute concerning a question of fact arising under an interim or post audit of this Contract that is not disposed of by agreement shall be reviewed by SBCTA's Chief Financial Officer.
- 14.2 Not later than 30 days after issuance of final audit report, CONSULTANT may request a review by SBCTA's Chief Financial Officer of unresolved audit issues. The request for review must be submitted in writing.
- 14.3 Neither the pendency of a dispute nor its consideration by SBCTA will excuse CONSULTANT from full and timely performance in accordance with the terms of this Contract.

ARTICLE 15. SUBCONTRACTING

- 15.1 Nothing contained in this Contract or otherwise shall create any contractual relation between SBCTA and any sub-consultant(s), and no subcontract shall relieve CONSULTANT of its responsibilities and obligations hereunder. CONSULTANT agrees to be fully responsible to SBCTA for the acts and omissions of its sub-consultant(s) and of persons directly employed by CONSULTANT. CONSULTANT's obligation to pay its sub-consultant(s) is independent of SBCTA's obligation to make payments to the CONSULTANT.
- 15.2 CONSULTANT shall perform the Work contemplated with resources available within its own organization, and no portion of the Work pertinent to this Contract shall be subcontracted without prior written authorization by SBCTA, except that which is expressly identified in the approved Cost Proposal.
- 15.3 CONSULTANT shall pay its sub-consultant(s) within ten (10) calendar days from receipt of each payment made to CONSULTANT by SBCTA.

- 15.4 Any subcontract in excess of \$25,000 entered into as a result of this Contract shall contain all the provisions stipulated in this Contract to be applicable to sub-consultants.
- 15.5 Any substitution of sub-consultants must be approved in writing by SBCTA prior to the start of Work by the sub-consultant.

ARTICLE 16. EQUIPMENT PURCHASE

- 16.1 Prior authorization in writing by SBCTA shall be required before CONSULTANT enters into any unbudgeted purchase order or subcontract exceeding \$5,000 for supplies, equipment, or CONSULTANT services. CONSULTANT shall provide an evaluation of the necessity or desirability of incurring such costs.
- 16.2 When seeking SBCTA's prior written authorization for purchase of any item, service or consulting work not covered in CONSULTANT's Cost Proposal and exceeding \$5,000, CONSULTANT must submit three competitive quotations with the request, or the absence of bidding must be adequately justified.
- 16.3 Any equipment purchased as a result of this Contract is subject to the following: "CONSULTANT shall maintain an inventory of all nonexpendable property. Nonexpendable property is defined as having a useful life of at least two years and an acquisition cost of \$5,000 or more. If the purchased equipment needs replacement and is sold or traded in, SBCTA shall receive a proper refund or credit at the conclusion of the Contract, or if the Contract is terminated, CONSULTANT may either keep the equipment and credit SBCTA in an amount equal to its fair market value, or sell such equipment at the best price obtainable at a public or private sale, in accordance with established SBCTA procedures, and credit SBCTA in an amount equal to the sales price. If CONSULTANT elects to keep the equipment, fair market value shall be determined at CONSULTANT's expense, on the basis of a competent independent appraisal of such equipment. Appraisals shall be obtained from an appraiser mutually agreeable to SBCTA and CONSULTANT. If it is determined to sell the equipment, the terms and conditions of such sale must be approved in advance by SBCTA."
- 16.4 All subcontracts in excess \$25,000 shall contain the above provisions.

ARTICLE 17. INSPECTION OF WORK

CONSULTANT and any sub-consultant shall permit SBCTA and the State, to review and inspect the project activities and files at all reasonable times during the performance period of this Contract including review and inspection on a daily basis.

ARTICLE 18. SAFETY

- 18.1 CONSULTANT shall comply with OSHA regulations applicable to CONSULTANT regarding necessary safety equipment or procedures. CONSULTANT shall comply with safety instructions issued by SBCTA or other SBCTA representative. CONSULTANT personnel shall wear hard hats and safety vests at all times while working on the construction project site.

- 18.2 Pursuant to the authority contained in Section 591 of the Vehicle Code, SBCTA has determined that such areas are within the limits of the Project and are open to public traffic. CONSULTANT shall comply with all of the requirements set forth in Divisions 11, 12, 13, 14, and 15 of the Vehicle Code. CONSULTANT shall take all reasonably necessary precautions for safe operation of its vehicles and the protection of the traveling public from injury and damage from such vehicles.
- 18.3 Any subcontract entered into as a result of this Contract shall contain all of the provisions of this Article.
- 18.4 CONSULTANT must have a Division of Occupational Safety and Health (CAL-OSHA) permit(s), as outlined in California Labor Code Sections 6500 and 6705, prior to the initiation of any practices, work, method, operation, or process related to the construction or excavation of trenches which are five feet or deeper.

ARTICLE 19. INSURANCE

- 19.1 Prior to commencing the Work, subject to the provisions of Article 19.2 “General Provisions”, and at all times during the performance of the Work and for such additional periods as required herein, CONSULTANT and all sub-consultants of every tier performing any Work under this contract shall, at CONSULTANT’s and sub-consultant’s sole expense, procure and maintain broad form insurance coverage at least as broad as the following minimum requirements specified below:

19.1.1 Professional Liability. The policies must include the following:

- A limit of liability not less than \$3,000,000 per claim
- An annual aggregate limit of not less than \$9,000,000
- Coverage shall be appropriate for the CONSULTANT’S profession and provided services to include coverage for errors and omissions arising out of the CONSULTANT’S professional services, or services of any person employed by the CONSULTANT, or any person for whose acts, errors, mistakes or omissions the CONSULTANT may be legally liable.
- If Coverage is on a claims made basis:
 - Policy shall contain a retroactive date for coverage of prior acts, which date will be prior to the date the CONSULTANT begins to perform Work under this Contract.
 - CONSULTANT shall secure and maintain “tail” coverage for a minimum of FIVE (5) years after Contract completion.

19.1.2 Worker's Compensation/Employer's Liability. The policies must include the following:

- Coverage A. Statutory Benefits
- Coverage B. Employer's Liability
- Bodily Injury by accident - \$1,000,000 per accident
- Bodily Injury by disease - \$1,000,000 policy limit/\$1,000,000 each employee

Such policies shall contain a waiver of subrogation in favor of the parties named as Indemnitees below. Such insurance shall be in strict accordance with the applicable workers' compensation laws in effect during performance of the Work by CONSULTANT or any sub-consultant of any tier. All sub-consultants of any tier performing any portion of the Work for CONSULTANT shall also obtain and maintain the same insurance coverage as specified in this subparagraph, with a waiver of subrogation in favor of CONSULTANT and all parties named as Indemnitees below. Where coverage is provided through the California State Compensation Insurance Fund, the requirement for a minimum A.M. Best rating does not apply.

19.1.3 Commercial General Liability. The policy must include the following:

- Consultant shall maintain commercial general liability (CGL) insurance (Insurance Services Office (ISO) Form CG 00 01), and if necessary excess/umbrella commercial liability insurance, with a combined limit of liability of not less than **\$7,000,000 each occurrence**.
- The policy shall, at a minimum, include coverage for any and all of the following: bodily injury, property damage, personal injury, broad form contractual liability (including coverage to the maximum extent possible for the indemnifications in this Contract), premises-operations (including explosion, collapse and underground coverage), duty to defend in addition to (without reducing) the limits of the policy(ies), and products and completed operations.
 - \$2,000,000 per occurrence limit for property damage or bodily injury
 - \$1,000,000 per occurrence limit for personal injury and advertising injury
 - \$2,000,000 per occurrence limits for products/completed operations coverage (ISO Form 20 37 10 01) if SBCTA's Risk Manager determines it is in SBCTA's best interests to require such coverage

- If a general aggregate applies, it shall apply separately to this project/location. The project name must be indicated under “Description of Operations/Locations” (ISO Form CG 25 03 or CG 2504).
- Coverage is to be on an “occurrence” form. “Claims made” and “modified occurrence” forms are not acceptable.
- A copy of the declaration page or endorsement page listing all policy endorsements for the CGL policy must be included.

All sub-consultants of any tier performing any portion of the Work for CONSULTANT shall also obtain and maintain the CGL insurance coverage with limits not less than:

- Each occurrence limit: \$2,000,000
- General aggregate limit: \$2,000,000
- Personal injury and advertising limit \$1,000,000
- Products-completed operations aggregate limit \$2,000,000

All sub-consultants’ and sub-consultants’ deductibles or self-insured retentions must be acceptable to SBCTA’s Risk Manager.

19.1.4 Umbrella/Excess CGL. The policy must include the following:

- If the CONSULTANT elects to include an umbrella or excess policy to cover any of the total limits required beyond the primary commercial general liability policy limits and/or the primary commercial automobile liability policy limits, then the policy must include the following:
 - The umbrella or excess policy shall follow form over the CONSULTANT’s primary general liability coverage and shall provide a separate aggregate limit for products and completed operations coverage.
 - The umbrella or excess policy shall not contain any restrictions or exclusions beyond what is contained in the primary policy.
 - The umbrella or excess policy shall contain a clause stating that it takes effect (drops down) in the event the primary limits are impaired or exhausted.
 - The umbrella or excess policy must also extend coverage over the automobile policy if it is to be used in combination with the primary automobile policy to meet the total insurance requirement limits.

There shall be no statement limiting the coverage provided to the parties listed as additionally insureds or as indemnitees below.

19.1.5 Commercial Auto. The policy must include the following:

- A total limit of liability of not less than **\$5,000,000** each accident. This total limits of liability may be met by combining the limits of the primary auto policy with an umbrella or excess policy in accordance with subparagraph 4 (Umbrella/Excess CGL).
- Such insurance shall cover liability arising out of any vehicle, including owned, hired, leased, borrowed and non-owned vehicles assigned to or used in performance of the CONSULTANT services.
- Combined Bodily Injury and Property Damage Liability insurance

The commercial automobile liability insurance shall be written on the most recent edition of ISO Form CA 00 01 or equivalent acceptable to SBCTA.

19.1.6 Pollution Liability The policy must include the following if it is determined by SBCTA's Risk Manager to be in SBCTA's best interests to require such policy:

- \$3,000,000 per claim or occurrence limits/\$6,000,000 in the aggregate

19.1.7 Technology Liability - Cyber Insurance - appropriate to the Consultant's profession and work hereunder, with limits not less than \$1,000,000 per occurrence.

- Coverage shall be sufficiently broad to respond to the duties and obligations as is undertaken by the Consultant in this agreement and shall include, but not be limited to, claims involving infringement of intellectual property, copyright, trademark, invasion of privacy violations, information theft, release of private information, extortion and network security.
- The policy shall provide coverage for breach response costs as well as regulatory fines and penalties as well as credit monitoring expenses with limits sufficient to respond to these obligations.
- The Policy shall include, or be endorsed to include, property damage liability coverage for damage to, alteration of, loss of, or destruction of electronic data and/or information "property" of SBCTA in the care, custody, or control of the CONSULTANT. If not covered under the CONSULTANT's liability policy, such "property" coverage of SBCTA may be endorsed onto the CONSULTANT's Cyber Liability Policy as covered property as follows:

- Cyber Liability coverage in an amount sufficient to cover the full replacement value of damage to, alteration of, loss of, or destruction of electronic data and/or information “property” of SBCTA that will be in the care, custody, or control of CONSULTANT.

19.1.8 Railroad Protective Liability The policy must include the following:

- Should the CONSULTANT need to perform activities in a railroad right-of-way, SBCTA’s Risk Manager and/or a railroad operator may require CONSULTANT to provide Railroad Protective Liability.
- In such a case, the policy shall be in amounts and coverages and from issuers, acceptable to SBCTA’s Risk Manager in his/her sole discretion.
- Depending on facts and circumstances, and the terms and conditions of the policy involved, SBCTA’s Risk Manager may choose to find that the CONSULTANT satisfactorily meets this requirement by obtaining one of the following: a) an acceptable Railroad Protective Liability specific policy; b) a waiver of any railroad liability exclusion from the CONSULTANT’s existing general liability policy; or c) acceptable general liability insurance without a railroad exclusion.

19.2 General Provisions

19.2.1 Qualifications of Insurance Carriers - If policies are written by insurance carriers authorized and admitted to do business in the state of California, then the insurance carriers must have a current A.M. Best rating of A-VIII or better and if policies are written by insurance carriers that are non- admitted but authorized to conduct business in the state of California, then they must meet the current A.M. Best rating of A-X or better, unless otherwise approved in writing by SBCTA’s Risk Manager.

19.2.2 No Representations or Warranties - SBCTA makes no representation or warranty that the coverage, limits of liability, or other terms specified for the insurance policies required under this contract are adequate to protect the CONSULTANT against its undertakings under this Contract or its liability to any third party, nor will they preclude SBCTA from taking any actions as are available to it under this Contract or otherwise at law.

19.2.3 Additional Insured Coverage. All policies, except those for Workers’ Compensation and Professional Liability insurance, shall be endorsed by ISO Form CG 20 10 11 85, or if not available, then ISO Form CG 20 38, to name San Bernardino County Transportation Authority (SBCTA), California Department of Transportation (Caltrans), City of San Bernardino, and their officers, directors, members, employees and agents, as additional insureds (“Additional Insureds”). With respect to general liability arising out of or connected with work or operations performed by or on behalf of the

CONSULTANT under this Contract, coverage for such Additional Insureds shall not extend to liability to the extent prohibited by section 11580.04 of the Insurance Code. The additional insured endorsements shall not limit the scope of coverage for SBCTA, Caltrans and City of San Bernardino to vicarious liability but shall allow coverage for SBCTA, Caltrans and City of San Bernardino to the full extent provided by the policy.

19.2.4 Proof of Coverage. Evidence of insurance in a form acceptable to SBCTA's Risk Manager, including declarations pages of each policy, certificates of insurance and the required additional insured endorsements, shall be provided to SBCTA's Procurement Analyst prior to issuance of the NTP or prior to commencing any Work, as SBCTA specifies. Certificate(s) of insurance, as evidence of the required insurance shall: be executed by a duly authorized representative of each insurer; show compliance with the insurance requirements set forth in this Article; set forth deductible amounts applicable to each policy; list all exclusions which are added by endorsement to each policy; and also include the Contract Number and the SBCTA Project Manager's name on the face of the certificate. If requested in writing by SBCTA, CONSULTANT shall submit complete copies of all required insurance policies within ten (10) business days of a written request by SBCTA.

19.2.5 Deductibles and Self-Insured Retention. Regardless of the allowance of exclusions or deductibles by SBCTA, CONSULTANT shall be responsible for any deductible or self-insured retention (SIR) amount and shall warrant that the coverage provided to SBCTA is consistent with the requirements of this Article. CONSULTANT will pay, and shall require its sub-contractor to pay, all deductibles, co-pay obligations, premiums and any other sums due under the insurance required in this Article. Any deductibles or self-insured retentions must be declared to and approved in writing by SBCTA's Risk Manager. Without SBCTA's Risk Manager's expressed written approval no deductibles or SIR will be allowed. At the option of SBCTA, if the deductible or SIR is approved and it is greater than \$10,000 or one (1) percent of the amount of coverage required under this Contract, whichever is less, the CONSULTANT shall guarantee that either: (1) the insurer shall reduce or eliminate such deductibles or self-insured retentions as respects to SBCTA, its directors, officials, officers, employees and agents; or, (2) the CONSULTANT shall procure a bond guaranteeing the amount of the deductible or self-insured retention. SBCTA shall have the right to review any and all financial records that SBCTA, at its sole discretion deems necessary to approve any deductible or SIR. SBCTA will have the right, but not the obligation, to pay any deductible or SIR due under any insurance policy. If SBCTA pays any sums due under any insurance required above, SBCTA may withhold said sums from any amounts due to CONSULTANT. The CONSULTANT's policies will neither obligate nor prohibit SBCTA or any other Additional Insured, from paying any portion of any CONSULTANT's deductible or SIR.

- 19.2.6 CONSULTANT's and Sub-consultants' Insurance will be Primary. All policies required to be maintained by the CONSULTANT or any sub-consultant with the exception of Professional Liability and Worker's Compensation shall be endorsed, with a form at least as broad as ISO Form CG 20 01 04 13), to be primary coverage, and any coverage carried by any of the Additional Insureds shall be excess and non-contributory. Further, none of CONSULTANT's or sub-consultants' pollution, automobile, general liability or other liability policies (primary or excess) will contain any cross-liability exclusion barring coverage for claims by an additional insured against a named insured.
- 19.2.7 Waiver of Subrogation Rights. To the fullest extent permitted by law, CONSULTANT hereby waives all rights of recovery under subrogation against the Additional Insureds named herein, and any other consultant, sub-consultant or sub- sub-consultant performing work or rendering services on behalf of SBCTA, in connection with the planning, development and construction of the Project. To the fullest extent permitted by law, CONSULTANT shall require similar written express waivers and insurance clauses from each of its sub-consultants of every tier. CONSULTANT shall require all of the policies and coverages required in this Article to waive all rights of subrogation against the Additional Insureds (ISO Form CG 24 04 05 09). Such insurance and coverages provided shall not prohibit CONSULTANT from waiving the right of subrogation prior to a loss or claim.
- 19.2.8 Cancellation. If any insurance company elects to cancel or non-renew coverage for any reason, CONSULTANT will provide SBCTA thirty (30) days prior written notice of such cancellation or nonrenewal. If the policy is cancelled for nonpayment of premium, CONSULTANT will provide SBCTA ten (10) days prior written notice. In any event, CONSULTANT will provide SBCTA with a copy of any notice of termination or notice of any other change to any insurance coverage required herein which CONSULTANT receives within one business day after CONSULTANT receives it by submitting it to SBCTA at procurement@gosbcta.com to the attention of SBCTA's Procurement Analyst, and by depositing a copy of the notice in the U.S. Mail in accordance with the notice provisions of this Contract.
- 19.2.9 Enforcement. SBCTA may take any steps as are necessary to assure CONSULTANT's compliance with its insurance obligations as identified within this Article. Failure to continuously maintain insurance coverage as provided herein is a material breach of contract. In the event the CONSULTANT fails to obtain or maintain any insurance coverage required, SBCTA may, but is not required to, maintain this coverage and charge the expense to the CONSULTANT or withhold such expense from amounts owed CONSULTANT, or terminate this Contract. The insurance required or provided shall in no way limit or relieve CONSULTANT of its duties and

responsibility under the Contract, including but not limited to obligation to indemnify, defend and hold harmless the Indemnitees named below. Insurance coverage in the minimum amounts set forth herein shall not be construed to relieve CONSULTANT for liability in excess of such coverage, nor shall it preclude SBCTA from taking other actions as available to it under any other provision of the Contract or law. Nothing contained herein shall relieve CONSULTANT, or any sub-consultant of any tier of their obligations to exercise due care in the performance of their duties in connection with the Work, and to complete the Work in strict compliance with the Contract.

19.2.10 No Waiver. Failure of SBCTA to enforce in a timely manner any of the provisions of this Article shall not act as a waiver to enforcement of any of these provisions at a later date.

19.2.11 Non-Limitation of Insurance Requirements. The insurance coverage provided and limits required under this Contract are minimum requirements and are not intended to limit the CONSULTANT's indemnification obligations under the Contract, nor do the indemnity obligations limit the rights of the Indemnified Parties to the coverage afforded by their insured status. To the extent required by Law in connection with Work to be performed, the CONSULTANT shall obtain and maintain, or cause to be obtained and maintained, in addition to the insurance coverage expressly required under this Contract, such other insurance policies for such amounts, for such periods of time and subject to such terms, as required by Law and any other agreements with which the CONSULTANT is required to comply, including any Third-Party Agreements. Liability insurance coverage will not be limited to the specific location designated as the Site, except that if the CONSULTANT arranges project-specific general liability, excess liability, or workers' compensation coverage, limitations of coverage to the Site will be permitted subject to SBCTA approval and use of the broadest available site-specific endorsements. No liability policy will contain any provision or definition that would serve to eliminate so-called "third-party-over action" claims, including any exclusion for bodily injury to an employee of the insured or of any Sub-contractor. The CONSULTANT acknowledges and will at all times comply with the provisions of Labor Code Section 3700 which require every employer in the State to be insured against liability for workers' compensation, or to undertake self-insurance in accordance with the provisions of that code.

19.2.12 Review of Coverage. SBCTA may at any time review the coverage, form, and amount of insurance required under this contract, and may require the CONSULTANT to make changes in such insurance reasonably sufficient in coverage, form, and amount to provide adequate protection against the kind and extent of risk that exists at that time. SBCTA may change the insurance coverages and limits required under this contract by notice to the

CONSULTANT, whereupon the CONSULTANT will, within sixty (60) days of such notice date, procure the additional and/or modified insurance coverages. Upon such change any additional cost (at actual cost) from such change will be paid by SBCTA and any reduction in cost will reduce the Contract Price pursuant to a Change Order.

19.2.13 Sub-consultant Insurance. Insurance required of the CONSULTANT shall be also provided by sub-consultants or by CONSULTANT on behalf of all sub-consultants to cover their services performed under this Contract. CONSULTANT may reduce types and the amounts of insurance limits provided by sub-consultants to be proportionate to the amount of the sub-consultant's contract and the level of liability exposure for the specific type of work performed by the sub-consultant. CONSULTANT shall be held responsible for all modifications, deviations, or omissions in these insurance requirements as they apply to sub-consultant.

19.2.14 Higher limits. If CONSULTANT maintains higher limits than the minimums shown above, SBCTA shall be entitled to coverage for the higher limits maintained by CONSULTANT. Any available insurance proceeds in excess of the specified minimum limits of insurance and coverage shall be available to SBCTA.

19.2.15 Special Risks or Circumstances. SBCTA reserves the right to modify any or all of the above insurance requirements, including limits, based on the nature of the risk, prior experience, insurer, coverage, or other special circumstances.

19.2.16 Project Specific Insurance. All insurance coverage required to be provided by CONSULTANT, with the exception of automobile liability and worker's compensation, shall apply specifically and exclusively for the Project and extend to all aspects of the Work, with coverage limits dedicated solely to the Project. Use of other insurance programs is acceptable, provided that coverage under such programs provides dedicated Project-specific limits and identified premiums and meets all requirements described in contract.

ARTICLE 20. INDEMNITY

20.1 To the extent, but only to the extent, that CONSULTANT's Work falls within the scope of Civil Code Section 2782.8, the following indemnification is applicable: CONSULTANT shall indemnify and defend (with legal counsel reasonably approved by SBCTA), SBCTA, Caltrans and City of San Bernardino and their officers, employees, agents and volunteers from any and all losses, damages, liability, actions, and/or costs for claims that arise out of, pertain to, or are related to the negligence, recklessness, or willful misconduct of the design professional to the maximum extent permitted by Civil Code Section 2872.8..

20.2 For all other Work and obligations under this Contract, CONSULTANT agrees to indemnify, defend (with legal counsel reasonably approved by SBCTA) and hold

harmless SBCTA, and its officers, employees, agents and volunteers (“Indemnitees”) from any and all claims, actions, losses, damages and/or liability (Claims) arising out of or related to any act or omission of CONSULTANT or any of its officers, employees, agents, sub-consultants or volunteers, and for any costs or expenses incurred by SBCTA on account of any such Claims except where such indemnification is prohibited by law. This indemnification provision shall apply regardless of the existence or degree of fault of indemnitees. CONSULTANT’s indemnification obligation applies to SBCTA’s “active” as well as “passive” negligence, but does not apply to SBCTA’s “sole negligence” or “willful misconduct” within the meaning of Civil Code Section 2782.

ARTICLE 21. OWNERSHIP OF DATA

- 21.1 Upon completion of all Work under this Contract, ownership and title to all reports, documents, plans, specifications, and estimates produced as part of this Contract will automatically be vested in SBCTA, and no further agreement will be necessary to transfer ownership to SBCTA. CONSULTANT shall furnish SBCTA all necessary copies as needed to complete the review and approval process.
- 21.2 It is understood and agreed that all calculations, drawings and specifications, whether in hard copy or machine-readable form, are intended for one-time use in the construction of the project for which this Contract has been entered into.
- 21.3 CONSULTANT is not liable for claims, liabilities, or losses arising out of or connected with the modification or misuse by SBCTA of the machine-readable information and data provided by CONSULTANT under this Contract; further, CONSULTANT is not liable for claims, liabilities, or losses arising out of or connected with any use by SBCTA of the project documentation for other projects or additions to this project, or for the completion of this project by others, except only such use as may be authorized in writing by CONSULTANT.
- 21.4 Applicable patent rights provisions regarding rights to inventions shall be included in the Contract as appropriate (48 CFR 27, subpart 27.3).
- 21.5 SBCTA may permit copyrighting reports or other agreement products. If copyrights are permitted, the Contract shall provide that the FHWA shall have the royalty-free nonexclusive and irrevocable right to reproduce, publish, or otherwise use, and to authorize others to use, the work for government purposes.
- 21.6 Any subcontract in excess of \$25,000 entered into as a result of this Contract, shall contain all of the provisions of this Article.

ARTICLE 22. CLAIMS FILED BY SBCTA's CONSTRUCTION CONTRACTOR

- 22.1 If claims are filed by SBCTA's construction contractor relating to Work performed by CONSULTANT's personnel, and additional information or assistance from CONSULTANT's personnel is required in order to evaluate or defend against such claims, CONSULTANT agrees to make its personnel available for consultation with SBCTA and legal staff, and for testimony, if necessary, at depositions, administrative proceedings, trial or arbitration proceedings.
- 22.2 CONSULTANT's personnel that SBCTA considers essential to assist in defending against construction contractor claims will be made available on reasonable notice from SBCTA. Consultation or testimony will be reimbursed at the same rates, including travel costs, that are being paid for the CONSULTANT's personnel services under this Contract.
- 22.3 Services of the CONSULTANT's personnel in connection with SBCTA's construction contractor claims will be performed pursuant to a written contract amendment, if necessary, extending the termination date of this Contract in order to resolve the construction claims.
- 22.4 Any subcontract in excess of \$25,000 entered into as a result of this Contract, shall contain all of the provisions of this Article.

ARTICLE 23. CONFIDENTIALITY OF DATA

- 23.1 All financial, statistical, personal, technical, or other data and information relative to SBCTA's operations which are designated confidential by SBCTA and made available to CONSULTANT in order to carry out this Contract, shall be protected by CONSULTANT from unauthorized use and disclosure.
- 23.2 Neither permission to disclose information on one occasion, nor public hearing held by SBCTA relating to the Contract shall authorize CONSULTANT to further disclose such information or disseminate the same on any other occasion.
- 23.3 CONSULTANT shall not comment publicly to the press or any other media, including social media, regarding the Contract or SBCTA's actions on the same, except to SBCTA's staff, CONSULTANT's own personnel involved in the performance of this Contract, at public hearings, or in response to questions from a SBCTA Board Committee or other public meeting approved by SBCTA.
- 23.4 CONSULTANT shall not issue any news release or public relations item of any nature whatsoever regarding Work performed or to be performed under this Contract without first obtaining SBCTA's review and written permission.
- 23.5 Any SBCTA communications or materials to which CONSULTANT or its sub-consultants or agents have access and materials prepared by CONSULTANT under the terms of this Contract shall be held in confidence by CONSULTANT, who shall exercise reasonable precautions to prevent the disclosure of confidential information

to anyone except as expressly authorized by SBCTA. Any communications with or work product of SBCTA's legal counsel to which CONSULTANT or its sub-consultants or agents have access in performing work under this Contract shall be subject to the attorney-client privilege and attorney work product doctrine, and shall be confidential. CONSULTANT shall not release any reports, information or promotional material or allow for the use of any photos related to this Contract for any purpose without prior written approval of SBCTA.

- 23.6 Any subcontract entered into as a result of this Contract shall contain all of the provisions of this Article.
- 23.7 CONSULTANT, its employees, agents and sub-consultants shall be required to comply with SBCTA's Confidentiality Policy; anyone who may have access to Personally Identifiable Information ("PII") and/or Sensitive Security Information ("SSI") will be required to execute a Confidentiality Agreement.
- 23.8 All information related to the construction estimate is confidential, and shall not be disclosed by CONSULTANT to any entity other than SBCTA.

ARTICLE 24. NATIONAL LABOR RELATIONS BOARD CERTIFICATION

In accordance with Public Contract Code Section 10296, CONSULTANT hereby states under penalty of perjury that no more than one final unappealable finding of contempt of court by a federal court has been issued against CONSULTANT within the immediately preceding two-year period, because of CONSULTANT's failure to comply with an order of a federal court that orders CONSULTANT to comply with an order of the National Labor Relations Board.

ARTICLE 25. EVALUATION OF CONSULTANT

CONSULTANT's performance may be evaluated by SBCTA. A copy of the evaluation will be sent to CONSULTANT for comments. The evaluation and any comments submitted shall be retained as part of the Contract file. This information may be used when evaluating the firm on future proposal submittals.

ARTICLE 26. RETENTION OF FUNDS

- 26.1 Any subcontract entered into as a result of this Contract shall contain all of the provisions of this Article.
- 26.2 No retainage will be withheld by SBCTA from progress payments due the CONSULTANT. Retainage by the CONSULTANT or sub-consultants is prohibited, and no retainage will be held by CONSULTANT from progress payments due sub-consultants. This requirement shall not be construed to limit or impair any contractual, administrative, or judicial remedies, otherwise available to the CONSULTANT or sub-consultant in the event of a dispute involving late payment or nonpayment by the CONSULTANT or deficient sub-consultant performance, or noncompliance by a sub-consultant. This provision applies to both DBE and non-DBE CONSULTANTS and sub-consultants.

ARTICLE 27. RESPONSIBILITY OF CONSULTANT

- 27.1 CONSULTANT shall be responsible for the professional quality, technical accuracy, and the assurance of compliance with all applicable federal, State, and local laws and regulations, and other Work furnished by the CONSULTANT under the Contract. The Contract includes reference to the appropriate standards for design or other standards for Work performance stipulated in the Contract.
- 27.2 In addition to any other requirements of this Contract or duties and obligations imposed on CONSULTANT by law, CONSULTANT shall, as an integral part of its Work, employ quality control procedures that identify potential risks and uncertainties related to scope, schedule, cost, quality and safety of the Project and the Work performed by CONSULTANT within the areas of CONSULTANT's expertise. Risks that may be encountered include, but are not limited to, soil conditions, constructability, factors of safety, impact on adjacent properties, public safety, and environmental considerations. At any time during performance of the Scope of Work, should CONSULTANT observe, encounter, or identify any unusual circumstances or uncertainties, which could pose potential risk to SBCTA or the Project. CONSULTANT shall immediately document such matters and notify SBCTA in writing. CONSULTANT shall also similarly notify SBCTA as to the possibility of any natural catastrophe, potential failure, or any situation that exceeds environmental, design, and/or construction assumptions and could precipitate a failure of any structure or other part of the Project. Notifications under this paragraph shall be specific, clear and timely, and in a form which enables SBCTA to understand and evaluate the magnitude and effect of the risk and/or uncertainties involved.
- 27.3 When a modification to a construction contract is required because of an error or deficiency in the design Work provided under this Contract, CONSULTANT shall be responsible for any and all additional costs associated with the construction contract or the construction of the Project.
- 27.4 SBCTA shall advise CONSULTANT of their responsibility and collect the amount due, including but not limited to, withholding of payments, if the recoverable cost will exceed the administrative cost involved or is otherwise in SBCTA's best interest. SBCTA shall include in the Contract Audit File a written statement of the reasons for the decision to recover or not recover the costs from CONSULTANT.
- 27.5 CONSULTANT shall document the results of the Work to the satisfaction of SBCTA, and if applicable, Caltrans and FHWA. This may include preparation of progress and final reports, plans, specifications and estimates, or similar evidence of attainment of SBCTA's objectives.
- 27.6 As applicable, the responsible consultant/engineer shall sign all plans, specifications, estimates (PS&E) and engineering data furnished by him/her, certify as-built drawings, and where appropriate, indicate his/her California registration or license number.

ARTICLE 28. TECHNICAL DIRECTION

- 28.1 Performance of Work under this Contract shall be subject to the technical direction of SBCTA's Project Manager, who will be identified in writing to CONSULTANT upon issuance of the NTP and/or subsequently by written notice during the Contract. The term "Technical Direction" is defined to include, without limitation:
- 28.1.1 Directions to CONSULTANT which redirect the Contract effort, shift work emphasis between work areas or tasks, require pursuit of certain lines of inquiry, fill in details or otherwise serve to accomplish the contractual Scope of Work.
 - 28.1.2 Provision of written information to CONSULTANT which assists in the interpretation of drawings, reports, or technical portions of the Scope of Work described herein.
 - 28.1.3 Review and, where required by the Contract, approval of technical reports, drawings, specifications and technical information to be delivered by CONSULTANT to SBCTA under the Contract.
 - 28.1.4 SBCTA may modify this Contract for certain administrative modifications without issuing a written amendment. Administrative modifications as defined herein are limited to: substitutions of personnel identified in this Contract, including Key Personnel and project personnel and sub-consultants; modifications to hourly rates, classifications, and names of personnel in Exhibit B; and modifications of the address of the CONSULTANT. All administrative modifications shall be documented in writing between the Parties.
- 28.2 Technical Direction must be within the Scope of Work under this Contract. SBCTA's Project Manager does not have the authority to, and may not, issue any Technical Direction which:
- 28.2.1 Increases or decreases the Scope of Work;
 - 28.2.2 Directs CONSULTANT to perform Work outside the original intent of the Scope of Work;
 - 28.2.3 In any manner causes an increase or decrease in the Contract price as identified in this Contract, or the time required for Contract performance unless expressly authorized by SBCTA policy;
 - 28.2.4 Changes any of the expressed terms, conditions or specifications of the Contract, unless identified herein;
 - 28.2.5 Interferes with the CONSULTANT's right to perform the terms and conditions of the Contract; or
 - 28.2.6 Approves any demand or claim for additional payment.

- 28.3 Failure of CONSULTANT and SBCTA's Project Manager to agree that the Technical Direction is within the scope of the Contract, or a failure to agree upon the Contract action to be taken, shall be subject to the provisions of the "DISPUTES" Article herein.
- 28.4 All Technical Direction shall be issued in writing by SBCTA's Project Manager.
- 28.5 CONSULTANT shall proceed promptly with the performance of Technical Direction issued by SBCTA's Project Manager, in the manner prescribed by this Article and within their authority under the provisions of this Article. If, in the opinion of CONSULTANT, any instruction or direction by SBCTA's Project Manager falls within one of the categories defined in 27.2.1 through 27.2.6, CONSULTANT shall not proceed but shall notify SBCTA in writing within five (5) working days after receipt of any such instruction or direction and shall request SBCTA to modify the Contract accordingly. Upon receiving the notification from the CONSULTANT, SBCTA shall:
- 28.5.1 Advise CONSULTANT in writing within thirty (30) calendar days after receipt of the CONSULTANT's letter that the Technical Direction is or is not within the scope of this Contract.
- 28.5.2 Advise CONSULTANT within a reasonable time whether SBCTA will or will not issue a written amendment.

ARTICLE 29. KEY PERSONNEL

The personnel specified below are considered to be essential to the Work being performed under this Contract. Prior to diverting any of the specified individuals to other projects or reallocating any tasks or hours of Work that are the responsibility of key personnel to other personnel, CONSULTANT shall notify SBCTA in writing in advance and shall submit justifications (including proposed substitutions, resumes and payroll information to support any changes to the labor rate) in sufficient detail to permit evaluation of the impact on the Project. Diversion or reallocation of key personnel shall not be made without prior written consent of SBCTA. CONSULTANT shall not substitute any key personnel without the prior written consent of SBCTA. In the event that the Parties cannot agree as to the substitution of key personnel, SBCTA may terminate the Contract. Key Personnel are:

Na	Job Classification/Function
Syed Raza, PE	Project Manager
Christine Brown, PE	Roadway Design
Mitsuru Tanaka, PTOE	Traffic Analysis & Design

ARTICLE 30. REPRESENTATIONS

All Work supplied by CONSULTANT under this Contract shall be supplied by personnel who are qualified, careful, skilled, experienced and competent in their respective trades or professions. CONSULTANT agrees that they are supplying professional services, findings, and/or recommendations in the performance of this Contract and agrees with SBCTA that the same shall conform to professional and engineering and environmental principles and standards that are generally accepted in the profession in the State of California.

ARTICLE 31. TAXES, DUTIES AND FEES

Except to the extent expressly provided elsewhere in this Contract, CONSULTANT shall pay when due, and the compensation set forth herein shall be inclusive of, all: a) local, municipal, State, and federal sales and use taxes; b) excise taxes; c) taxes on personal property owned by CONSULTANT; and d) other governmental fees and taxes or charges of whatever nature applicable to CONSULTANT to enable it to conduct business.

ARTICLE 32. PERMITS AND LICENSES

CONSULTANT shall, without additional compensation, keep current all governmental permits, certificates and licenses (including professional licenses) and required registrations necessary for CONSULTANT to perform Work identified herein.

ARTICLE 33. STATEMENT OF COMPLIANCE

- 33.1 CONSULTANT's signature affixed herein, and dated, shall constitute a certification under penalty of perjury under the laws of the State of California that CONSULTANT has, unless exempt, complied with, the nondiscrimination program requirements of Government Code Section 12990 and 2 California Code of Regulations Section 8103.
- 33.2 During the performance of this Contract, CONSULTANT and its sub-consultants shall not unlawfully discriminate, harass, or allow harassment against any employee or applicant for employment because of race, religious creed, color, national origin, ancestry, physical disability, mental disability, medical condition, genetic information, marital status, sex, gender, gender identity, gender expression, age (over 40), sexual orientation or military or veteran status. CONSULTANT and sub-consultants shall insure that the evaluation and treatment of their employees and applicants for employment are free from such discrimination and harassment. CONSULTANT and sub-consultants shall comply with the provisions of the Fair Employment and Housing Act (Gov. Code § 12900 et seq.) and the applicable regulations promulgated there under (2 California Code of Regulations §§ 7286.0 et seq.). CONSULTANT and sub-consultants shall give written notice of their obligations under this clause to labor organizations with which they have a collective bargaining or other agreement.
- 33.3 The contractor and all subcontractors shall comply with all provisions of Title VI of the Civil Rights Act of 1964, as amended, which prohibits discrimination on the basis of race, color, and national origin. In addition, the contractor and all subcontractors will ensure their services are consistent with and comply with obligations and procedures outlined in SBCTA's current Board-adopted Title VI Program, including the Public Participation Plan and the Language Assistance Plan.

ARTICLE 34. STATE PREVAILING WAGE RATES

- 34.1 CONSULTANT shall comply with the State of California's General Prevailing Wage Rate requirements in accordance with California Labor Code Section 1770, and all Federal, State, and local laws and ordinances applicable to the Work.
- 34.2 Any subcontract entered into as a result of this Contract if for more than \$25,000 for public works construction or more than \$15,000 for the alteration, demolition, repair, or maintenance of public works, shall contain all of the provisions of this Article.
- 34.3 When prevailing wages apply to services described in the Scope of Work, transportation and subsistence costs shall be reimbursed at the minimum rates set by the Department of Industrial Relations (DIR) as outlined in the applicable Prevailing Wage Determination. See <http://www.dir.ca.gov>.

ARTICLE 35. CONFLICT OF INTEREST

- 35.1 CONSULTANT shall disclose any financial, business, or other relationship with SBCTA that may have an impact upon the outcome of this Contract, or any ensuing SBCTA construction project. CONSULTANT shall also list current clients who may have a financial interest in the outcome of this Contract, or any ensuing SBCTA construction project, which will follow.

CONSULTANT hereby certifies that it does not now have, nor shall it acquire, any financial or business interest that would conflict with the performance of services under this Contract. CONSULTANT agrees that it presently has no interest, financial or otherwise, and shall not acquire any interest, direct or indirect, which would conflict in any manner or degree with the performance of Work required under this Contract or be contrary to the interests of SBCTA as to the Project. CONSULTANT further agrees that in the performance of this Contract no person having any such interest shall be employed. CONSULTANT is obligated to fully disclose to SBCTA, in writing, any conflict of interest issues as soon as they are known to CONSULTANT. CONSULTANT agrees that CONSULTANT's staff designated by SBCTA's Executive Director as "Consultants" under the Political Reform Act shall timely file Statements of Economic Interest with the SBCTA Clerk of the Board.

- 35.2 Any subcontract in excess of \$25,000 entered into as a result of this Contract shall contain all of the provisions of this Article.
- 35.3 CONSULTANT hereby certifies that neither CONSULTANT, nor any firm affiliated with CONSULTANT will bid on any construction contract, or any contract to provide construction inspection for any construction project resulting from this Contract. An affiliated firm is one subject to the control of the same persons through joint ownership or otherwise.

- 35.4 Except for sub-consultants whose services are limited to providing surveying or materials testing information, no sub-consultant who has provided design services in connection with this Contract shall be eligible to bid on any construction contract, or any contract to provide construction inspection for any construction project resulting from this Contract.

ARTICLE 36. REBATES, KICKBACKS OR OTHER UNLAWFUL CONSIDERATION

CONSULTANT warrants that this Contract was not obtained or secured through rebates, kickbacks or other unlawful consideration, either promised or paid to any SBCTA employee. For breach or violation of this warranty, SBCTA shall have the right in its discretion; to terminate the Contract without liability; to pay only for the value of the Work actually performed; or to deduct from the Contract price or otherwise recover the full amount of such rebate, kickback or other unlawful consideration.

ARTICLE 37. NOTIFICATION

All notices hereunder and communications regarding the interpretation of the terms of this Contract and changes thereto, shall be effected by the mailing thereof by registered or certified mail, return receipt requested, postage prepaid, and addressed as follows:

To EXP U.S. SERVICES INC	To SBCTA
451 Vanderbuilt Way, Suite 375	1170 W. 3rd Street, 2nd Floor
San Bernardino, CA 92408	San Bernardino, CA 92410-1715
Attn: Syed Raza, PE	Attn: Henry Stultz
	cc: Procurement Manager
Phone: (909) 217-5779	Phone: (909) 884-8276

ARTICLE 38. STOP WORK ORDER

Upon failure of CONSULTANT or its sub-consultants to comply with any of the requirements of this Contract, SBCTA shall have the right to stop any or all Work affected by such failure until such failure is remedied or to terminate this Contract in accordance with "TERMINATION" provision herein.

ARTICLE 39. CLAIMS

SBCTA shall not be bound to any adjustments in the Contract amount or schedule unless expressly agreed to by SBCTA in writing. SBCTA shall not be liable to CONSULTANT for any claim asserted by CONSULTANT after final payment has been made under this Contract.

ARTICLE 40. ERRORS AND OMISSIONS

CONSULTANT shall be responsible for the professional quality, technical accuracy, and coordination of all Work required under this Contract. CONSULTANT shall be liable for SBCTA costs resulting from errors or deficiencies in Work furnished under this Contract, including but not limited to any fines, penalties, damages, and costs associated with a modification to a construction contract required because of an error or deficiency in the Work provided by CONSULTANT under this Contract.

ARTICLE 41. WARRANTY

CONSULTANT warrants that all Work performed shall be in accordance with the Contract, and all applicable professional standards. In the event of a breach of this provision, CONSULTANT shall take the necessary actions to correct the breach at CONSULTANT's sole expense. If CONSULTANT does not take the necessary action to correct the breach, SBCTA, without waiving any other rights or remedies it may have, may take the necessary steps to correct the breach, and CONSULTANT shall promptly reimburse SBCTA for all expenses and costs incurred.

ARTICLE 42. INDEPENDENT CONTRACTOR

CONSULTANT is and shall be at all times an independent contractor. Accordingly, all Work provided by CONSULTANT shall be done and performed by CONSULTANT under the sole supervision, direction and control of CONSULTANT. SBCTA shall rely on CONSULTANT for results only, and shall have no right at any time to direct or supervise CONSULTANT or CONSULTANT's employees in the performance of Work or as to the manner, means and methods by which Work is performed. All personnel furnished by CONSULTANT under this Contract, and all representatives of CONSULTANT, shall be and remain the employees or agents of CONSULTANT or of CONSULTANT's sub-consultant(s) at all times, and shall not at any time or for any purpose whatsoever be considered employees or agents of SBCTA.

ARTICLE 43. ATTORNEY'S FEES

If any legal action is instituted to enforce or declare any Party's rights under the Contract, each Party, including the prevailing Party, must bear its own costs and attorneys' fees. This Article shall not apply to those costs and attorneys' fees directly arising from any third party legal action against a Party hereto and payable under the "Indemnity" provision of the Contract.

ARTICLE 44. GOVERNING LAW AND VENUE

This Contract shall be subject to the law and jurisdiction of the State of California. The Parties acknowledge and agree that this Contract was entered into and intended to be performed in whole or substantial part in San Bernardino County, California. The Parties agree that the venue for any action or claim brought by any Party to this Contract will be the Superior Court of California, San Bernardino County. Each Party hereby waives any law or rule of court, which would allow them to request or demand a change of venue. If any action or claim concerning this Contract is brought by any third party, the Parties hereto agree to use their best efforts to obtain a change of venue to the Superior Court of California, San Bernardino County.

ARTICLE 45. FEDERAL, STATE AND LOCAL LAWS

CONSULTANT warrants that in the performance of this Contract, it shall comply with all applicable federal, State and local laws, ordinances, rules and regulations.

ARTICLE 46. PRECEDENCE

- 46.1 The Contract consists of the Contract Articles, Exhibit A “Scope of Work”, and Exhibit B “Approved Cost Proposal”, SBCTA’s Request For Proposal and CONSULTANT’s proposal, all of which are incorporated into this Contract by this reference.
- 46.2 The following order of precedence shall apply: first, the Contract Articles; second, Exhibits A and B; third, SBCTA’s Request For Proposal; and last, CONSULTANT’s Proposal. In the event of a conflict between the Contract Articles and the Scope of Work, the Contract Articles will prevail.

In the event of an express conflict between the documents listed in this Article, or between any other documents, which are a part of the Contract, CONSULTANT shall notify SBCTA in writing within three (3) business days of its discovery of the conflict and shall comply with SBCTA's resolution of the conflict.

ARTICLE 47. GRATUITIES

CONSULTANT, its employees, agents, or representatives shall not offer or give to any officer, official, agent or employee of SBCTA, any gift, entertainment, payment, loan, or other gratuity.

ARTICLE 48. REVIEW AND ACCEPTANCE

All Work performed by CONSULTANT shall be subject to periodic review and approval by SBCTA at any and all places where such performance may be carried on. Failure of SBCTA to make such review or to discover defective work shall not prejudice the rights of SBCTA at the time of final acceptance. All Work performed by CONSULTANT shall be subject to periodic and final review and acceptance by SBCTA upon completion of all Work.

ARTICLE 49. DRUG FREE WORKPLACE

CONSULTANT agrees to comply with the Drug Free Workplace Act of 1990 per Government Code Section 8350 et seq.

ARTICLE 50. FORCE MAJEURE

CONSULTANT shall not be in default under this Contract in the event that the Work performed by CONSULTANT is temporarily interrupted or discontinued for any of the following reasons: riots, wars, sabotage, acts of terrorism, civil disturbances, insurrection, explosion, pandemics, quarantines, acts of God, acts of government or governmental restraint, and natural disasters such as floods, earthquakes, landslides, and fires, or other catastrophic events which are beyond the reasonable control of CONSULTANT and which CONSULTANT could not reasonably be expected to have prevented or controlled. “Other catastrophic events” does not include the financial inability of CONSULTANT to perform or failure of CONSULTANT to obtain either any necessary permits or licenses from other governmental agencies or the right to use the

facilities of any public utility where such failure is due solely to the acts or omissions of CONSULTANT.

ARTICLE 51. COMPLIANCE WITH THE AMERICANS WITH DISABILITIES ACT

CONSULTANT shall comply with all applicable provisions of the Americans With Disabilities Act in performing Work under this Contract.

ARTICLE 52. ENTIRE DOCUMENT

52.1 This Contract constitutes the sole and only agreement governing the Work and supersedes any prior or contemporaneous understandings, written or oral, between the Parties respecting the Project. All previous proposals, offers, and other communications, written or oral, relative to this Contract, are superseded except to the extent that they have been expressly incorporated into this Contract.

52.2 No agent, official, employee or representative of SBCTA has any authority to bind SBCTA to any affirmation, representation or warranty outside of, or in conflict with, the stated terms of this Contract, and CONSULTANT hereby stipulates that it has not relied, and will not rely, on same.

52.3 Both Parties have been represented or had the full opportunity to be represented by legal counsel of their own choosing in the negotiation and preparation of this Contract. Therefore, the language in all parts of this Contract will be construed, in all cases, according to its fair meaning, and not for or against either Party.

ARTICLE 53. CONTRACT

This Contract constitutes the entire agreement which is made and concluded in duplicate between the two Parties. Each Party, for and in consideration of the payments to be made, conditions mentioned, and work to be performed, agrees to diligently perform in accordance with the terms and conditions of this Contract as evidenced by the signatures below.

ARTICLE 54. EFFECTIVE DATE

The date that this Contract is executed by SBCTA shall be the Effective Date of the Contract.

-----SIGNATURES ARE ON THE FOLLOWING PAGE-----

IN WITNESS WHEREOF, the Parties hereto have executed this Contract on the day and year written below.

EXP U.S. SERVICES INC.

**SAN BERNARDINO COUNTY
TRANSPORTATION AUTHORITY**

By: _____
Khalil Saba
Vice President

Date: _____

By: _____
Art Bishop
President, Board of Directors

Date: _____

APPROVED AS TO FORM

By: _____
Juanda L. Daniel
Assistant General Counsel

Date: _____

CONCURRENCE

By: _____
Shaneka Morris
Procurement Manager

Date: _____

EXHIBIT A – “SCOPE OF WORK”

EXHIBIT A - SCOPE OF WORK

No. 22-10027274

San Bernardino County Transportation Authority (“SBCTA”) is seeking professional services for the Design Engineering Evaluation Report (DEER)/Environmental Document (ED), Plans, Specifications and Estimate (PS&E), Right-of-Way (ROW), and Construction Support for the State Route (SR) 210/Waterman Avenue (SR 18) Interchange Project (“Project”) in the City of San Bernardino. SBCTA Sales Tax Measure I Funds, and City Funds may be used to cover the cost of the preparation of the DEER/ED, PS&E, ROW, and Construction phase.

The Project is located along SR 210 at Postmile 24.22, approximately 2.3 miles east of the SR 210/Interstate 215 Interchange. This Project will improve traffic operations and local circulation at the SR 210/Waterman Avenue intersection with East 30th Street and the eastbound SR 210 entrance ramp. The eastbound on-ramp will be widened to two lanes and the one southbound and northbound through lane will be converted into left-turn lanes. The proposed Project is consistent with the Circulation Element of the City of San Bernardino General Plan and would accommodate projected traffic volume through 2050. This will be a phased Project where the California Department of Transportation (Caltrans) will be providing improvements to the westbound off-ramp in a separate project.

Preliminary Engineering Services as part of the preparation of the DEER are anticipated to include preliminary engineering, preparation the Geometric Approval Drawings (GAD), and preparation of various engineering reports. The project will be delivered through the California Department of Transportation (Caltrans) Encroachment Project Processed Enhancements memorandum dated June 12, 2020.

Caltrans will be the lead agency for the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA).

Prior to initiation of the environmental studies, scoping and early analysis of build alternatives and refinement of the purpose and need of the project will be required.

This will be a phased Project where Caltrans will be providing improvements to the westbound off-ramp in a separate project.

Environmental and the PS&E phase will be prepared concurrently. PS&E services include ROW and construction management support.

I. APPLICABLE STANDARDS

All documents shall be prepared in accordance with current SBCTA, Caltrans, and City of San Bernardino (City) regulations, policies, procedures, manuals, and standards where applicable. CONSULTANT shall obtain, at its expense, all applicable Manuals and Standard Plans.

II. GENERAL DESCRIPTION OF REQUIRED SERVICES

- A. Required services listed below do not supersede the requirements established in the Contract.
- B. CONSULTANT Services include the studies, reports, drawings, plans, specifications, estimates, and special provisions necessary to complete the DEER, ED, ROW, and PS&E.
- C. The deliverables list for the DEER, ED and PS&E will be refined during the initial planning and scoping Project Development Team (PDT) meeting. Not all deliverables may be required.
- D. CONSULTANT shall develop and maintain a Project schedule. The Project schedule may be presented monthly to the PDT meeting. A deliverables matrix will accompany the schedule. The deliverables matrix will highlight the status of the documents in the review process.
- E. CONSULTANT shall employ appropriate quality control and quality assurance procedures for every deliverable.
- F. CONSULTANT shall identify potential risks and uncertainties related to the delivery and construction of the Project. Risks that may be encountered include, but are not limited to, soil conditions, constructability, factors of safety, impacts to adjacent properties, public safety, and environmental considerations. If at any time during the performance of this Scope of Services, CONSULTANT observes, encounters, or identifies any circumstance that could pose potential risk, CONSULTANT shall notify SBCTA immediately.
- G. The design will be prepared in English units.
- H. Prime contract terms and conditions will be incorporated into the subcontract agreements.
- I. The Task and WBS Structure used for pricing, cost reporting and schedule preparation shall be consistent with the Caltrans Workplan Standards Guide for Delivery of Capital Projects. Project Management activities will be performed in accordance to the Caltrans' Workplan Standards Guide for Delivery of Capital Projects.
- J. CONSULTANT shall prepare and submit monthly invoices and project controls reports. Invoices shall follow SBCTA templates and shall contain all required information.
- K. Project plans and specifications must comply with the Federal Americans with Disabilities Act (ADA) requirements 28 CFR, Part 35 or Part 36, and the *California and Local Building Codes* within the project limits. In accordance with 28 CFR Sec. 35.151, curbs and ramps must meet current ADA standards if the project includes streets that are to be newly constructed or altered (includes repaving). For ADA requirements, see Chapter 11 "Design Standards," and Section 12.7 of this chapter. Complete the Caltrans Certification of Compliance with Americans with Disabilities Act (ADA) Form TR-040.

- L. The final engineering technical reports must bear the signature, stamp or seal, registration number, and registration certificate expiration date of the registered civil engineer most directly in responsible charge or other registered or certified professional working on the report as specified in Section 9 of the Project Development Procedures Manual.
- M. CONSULTANT will coordinate with SBCTA and Caltrans prior to distribution of all deliverables to determine the points of contact, number of hardcopies and format of electronic files. For preliminary and draft reports, electronic copies will be submitted to SBCTA for review. Hardcopies of final reports will be provided to Caltrans and SBCTA.

III. GENERAL ASSUMPTIONS

- A. One build and one no-build alternative to be carried forward and evaluated in the DEER and ED to address the operational deficiencies of the Project. Proposed alternative variations to be evaluated during the initial planning and project scoping.
- B. Preparation of the DEER, ED, and PS&E assumes that the alternative selected for the project is consistent with the alternative included in the RFP and the PSR, which maintains the general configuration. This Project will improve traffic operations and local circulation at the SR 210/Waterman Avenue intersection with East 30th Street and the eastbound SR 210 entrance ramp. The eastbound on-ramp will be widened to two lanes and the one southbound and northbound through lane will be converted into left-turn lanes.
- C. Non-capacity increasing project.
- D. A Categorical Exclusion (CE) for the NEPA Environmental Document; and a Categorical Exemption (CE) for the CEQA Environmental Document.
- E. Caltrans to be the lead agency under NEPA and CEQA.
- F. NEPA/404 integration, Habitat Mitigation and Monitoring Plan are not expected.
- G. Three meetings per month during the duration of this contract, including one monthly PDT meeting.
- H. Three DEER reviews and two Caltrans reviews for each major deliverable.
- I. SBCTA will perform all Right of Way acquisition effort for the project. Consultant will prepare Right of Way engineering mappings to support acquisition.
- J. CONSULTANT will perform the Utility Coordination activities. All fees for new service meters and relocated service meters will be paid for by SBCTA.

IV. SUMMARY OF TASKS

Task 100 Project Management

TASK 2.100.10 - PROJECT MANAGEMENT

Task 2.100.10 Project Management

CONSULTANT shall furnish a Project Manager to coordinate all CONSULTANT operations with SBCTA, including but not limited to, tracking progress of the work and administering subcontracts. CONSULTANT Project Manager shall provide overall project management, coordination, and supervision of project staff to facilitate the performance of the work in accordance with standards and requirements of the SBCTA and other applicable standards and requirements. CONSULTANT Project Manager shall prepare and submit monthly project progress reports to SBCTA Project Manager.

Deliverables:

- *Monthly Progress Reports*

Task 2.100.10-1 Coordination and Meetings

CONSULTANT Project Manager shall conduct regular meetings with SBCTA, and shall conduct meetings and coordination with other stakeholders, including Caltrans, City, and other agencies, in PDT meetings or technical workshops and focused meetings as necessary. CONSULTANT Project Manager will be responsible for preparation of agendas and meeting minutes, Communication and distribution of project records and information, and responses to all internal requests for information about the project.

Deliverables:

- *PDT meeting notices, agendas, handouts/exhibits, deliverable matrix, and minutes.*

Task 2.100.10-2 Administration

CONSULTANT Project Manager shall prepare and update the Project schedule monthly or as needed. Project schedule shall be logical, complete, and shall consider SBCTA peer reviews. CONSULTANT Project Manager shall provide regular reporting on the project status, including, but not limited to, schedule, contract budget, general progress on project tasks, and project issues and concerns. CONSULTANT Project Manager shall maintain project files using the Caltrans Uniform System in hard copies and electronic format.

CONSULTANT Project Manager shall prepare and implement a Quality Control/Quality Assurance (QA/QC) Plan and a Risk Management Plan following SBCTA format and content requirements; CONSULTANT Project Manager will be responsible for adherence to all applicable SBCTA administrative policies and procedures.

Deliverables:

- *Project Schedules*
- *Project Master Files*
- *QA/QC Plan and Risk Management Plan*

TASK 2.160 – PRELIMINARY ENGINEERING STUDIES & PROJECT REPORT

Task 2.160.05 Review Updated Project Information

CONSULTANT shall request, collect, assemble, and review pertinent project information, including, but are not limited to, prior Project Study Reports, Project Reports and Engineering Technical Reports, Environmental Documents and Environmental Technical Reports, CAD files and drawings, and relevant correspondence. CONSULTANT shall incorporate the collected materials and

information into the Project Master File.

Deliverables:

- *Project Records Files*

Task 2.160.10 Engineering Studies

CONSULTANT shall perform necessary Engineering Studies and preliminary design work required for the preparation of a Project Report, development and refinement of viable Project Build Alternatives, selection of the preferred alternative, and initiation of final design efforts. All engineering studies performed and reports prepared shall meet Caltrans requirements according to the Highway Design Manual, Project Development Procedures Manual, and other pertinent Caltrans guidance. CONSULTANT will be responsible for obtaining right of entry permits required for field work from Caltrans and private properties willing to grant entry, SBCTA will assist in obtaining ROW entry permits when necessary.

Task 2.160.10-05 Refine Project Alternative

CONSULTANT shall evaluate project alternatives and variations and develop refinements to improve conformance to standards, minimize impacts to Right of Way, and improve constructability.

Task 2.160.10.10 Traffic Studies

Caltrans prepared and approved a Traffic Analysis Report dated April 2021. The Traffic Analysis Report developed opening year (2025) and horizon year (2045) traffic volumes and level of services (LOS) for the intersections. CONSULTANT shall review and update the Traffic Analysis. If necessary, Consultant shall collect and analyze relevant travel-demand and travel forecast data to generate traffic forecasts to be used in the traffic operational analysis. If appropriate, CONSULTANT shall perform supplemental traffic forecasting and modeling. Future traffic projections should include data for intersections, highway mainline, and interchange ramps. Utilizing traffic forecasts, CONSULTANT shall update and perform a traffic capacity/operational analysis for each alternative. The traffic operational analysis criteria to be used shall include, but not be limited to, levels of service, vehicle miles travelled, vehicle hours travelled, average speeds, and delay. The traffic operational analysis shall consider traffic control measures such as ramp metering and intelligent transportation systems. CONSULTANT shall prepare a Supplemental Traffic Impact Analysis report that includes traffic information and analysis for current year, opening year, and a design horizon year.

Deliverables:

- *Supplemental Traffic Impact Analysis*
 - *Draft / Final Traffic Forecasting and Analysis Assumptions and Methodologies Memorandum, if required*
 - *Draft / Final Traffic Volumes Report, if required*
 - *Draft / Final Traffic Operations Analysis Report*

Task 2.160.10.15 Geometric Plans for Project Alternative

CONSULTANT, if necessary, shall prepare Geometric Approval Drawings for the Project Build Alternative. This includes horizontal and vertical alignments, and typical cross sections.

Deliverables:

- *Geometric Approval Drawings, if required, for Project Build Alternative.*

Task 2.160.10.25 Hydraulics/Hydrology Studies

CONSULTANT shall perform Hydraulics/Hydrology studies to analyze on-site and off-site storm water flows for each of the project build alternatives. CONSULTANT shall identify requirements for hydraulic and storm water treatment design features as part of this task. Results of this study shall be considered and utilized in the project preliminary design.

Deliverables:

- *Hydrology Report*

Task 2.160.10.30 Landscape Concept Plan

CONSULTANT shall prepare Landscape Concept Plans and Structure Aesthetics Treatment Graphics. Includes mitigation planting and replacement planting. One concept plan will be developed. The Landscape Concept Plan shall be consistent with SBCTA's Landscape Policy No. 34502.

Deliverables:

- *Landscape Concepts Plans*
- *Structure Aesthetics Treatment Plans*

Task 2.160.40 Right of Way Data Sheets

CONSULTANT shall assess project ROW requirements by obtaining ROW information and preparing ROW data sheets for each build alternative. This task shall include preliminary utility location work which includes, but not limited to, review of utility as-build plans and performing utility record searches. Results of this assessment will be used as basis for estimating ROW costs.

Deliverables:

- *ROW Data Sheets*

Task 2.160.10.45 – Utility Locations Determined for Preliminary Engineering

CONSULTANT shall perform all activities needed for Utility Locations Determined for Preliminary Engineering per Caltrans ROW manual and other requirements.

Deliverables:

- *Utility Relocation Estimate*
- *Utility correspondence*

160.10.55 Multi-Modal Study

CONSULTANT shall prepare Complete Streets Decision Document (CSDD). The CSDD shall comply with Caltrans current standard.

Deliverables:

- *Draft / Final Complete Streets Decision Document*

Task 2.160.10.80 Geotechnical Studies Preliminary Materials Report

CONSULTANT shall prepare a Geotechnical Design Report (PGDR), Geotechnical Design Report (GDR) and Materials Report (MR). Materials Report which shall provide recommendations for pavement structure recommendations, pavement type, proposed pavement design life and corrosion studies if culverts are proposed. Results of this assessment will be used as basis for estimating project construction costs.

Deliverables:

- *Draft / Final Geotechnical Design Report, including Caltrans Encroachment Permit and Environmental to perform necessary work.*
- *Draft / Final Materials Report, including Caltrans Permit and Environmental Clearance to perform necessary drilling/sampling work.*

Task 2.160.10.95 – Transportation Management Plan (TMP) or Template

CONSULTANT shall prepare the TMP or Template per the latest Caltrans guidelines and requirements.

Deliverables:

- *Draft and Final TMP or Template*

Task 2.160.15 Draft Design Engineering Evaluation Report

CONSULTANT shall prepare a Design Engineering Evaluation Report (DEER) following the Caltrans format. The DEER shall be prepared by or under the supervision of a registered Civil Engineer in the State of California. The consideration of non-standard features will be closely coordinated with the SBCTA Project Manager and designee to confirm acceptability by the SBCTA.

Deliverables:

- *Draft Design Engineering Evaluation Report*

Task 2.160.15.10 – Design Standard Decision Document for Exceptions to Design Standards

CONSULTANT shall prepare Design Standard Decision Document (DSDD) for both mandatory and advisory standards. The DSDD will be prepared per the latest Caltrans guidelines and requirements. It is assumed that there is only one build alternative, so the DSDD can be drafted once the geometrics are defined.

Deliverables:

- *Draft and Final Design Standard Decision Document (DSDD) (Mandatory and Advisory)*

Task 2.160.15.99 – Stage Construction Concept

CONSULTANT shall prepare stage construction concept to be included in the Project Report; it is assumed that the project could be built in three stages since the existing bridge could remain in place during construction.

Deliverables:

- *Draft and Final Stage Construction Exhibit*

Task 2.160.45 Base Maps and Plan Sheets

CONSULTANT shall request, collect, assemble, and review all pertinent project information, including, but not limited to, prior project related reports and Engineering Technical Reports, Environmental Documents and Environmental Technical Reports, CAD files and drawings, and relevant correspondence. CONSULTANT shall incorporate the collected materials and information into the Project Master File.

Deliverables:

- *Project Records Files*

TASK 2.165 – ENVIRONMENTAL STUDIES & ENVIRONMENTAL DOCUMENT

Task 2.165.10 General Environmental Studies

CONSULTANT shall perform general environmental studies to support the evaluation of the Project Build Alternatives and, if necessary, to support the environmental determination made under the California Environmental Quality Act (CEQA), the National Environmental Policy Act (NEPA) and other applicable environmental laws and regulations. Caltrans will act as the Lead Agency under CEQA and NEPA; the preparation of each environmental technical report shall be performed in consultation with the SBCTA Project Manager or designee. CONSULTANT will be responsible for obtaining any right of entry permits required for field work.

Preparation of all technical analyses and reports will follow local, state, and federal environmental guidelines, primarily consisting of the Caltrans Standard Environmental Reference (SER) website, Caltrans Project Development Procedures Manual, local and state CEQA Guidelines, and FHWA Technical Advisory 6640.81 Guidance on Preparing and Processing Environmental and Section 4(f) Documents. The formats to be used for the technical studies will follow the guidance available on the Caltrans SER website as of the date that those studies are initiated.

For this scope of work, the technical studies for which a specific scope of work has been included have been assumed based on a review of existing project information and a preliminary review of the project site. If additional studies are identified during the environmental phase of the project a scope of work and cost price proposal will be submitted for approval prior to their initiation.

Deliverables:

- *Draft / Revised Draft / Final Technical Studies*

Task 2.165.10-2 Visual Impact Analysis

CONSULTANT, if necessary, shall perform a visual impact analysis and prepare a visual impact analysis report or Memorandum which will be referenced in the environmental document. Discussions and negotiations with external parties as part of this task shall only be performed in consultation with the SBCTA Project Manager or designee.

In accordance with FHWA and the U.S. Department of the Interior guidelines, the visual analysis will be prepared under the direction of a licensed Landscape Architect and based on FHWA's Visual Impact Assessment for Highway Projects. Based on the Visual Impact Assessment (VIA) Questionnaire it is assumed that a Visual Impact Assessment Memorandum (VIAM) would be appropriate. A short VIAM will be prepared following the Caltrans VIAM outline, therefore, simulations would not be required.

Deliverables:

- *Draft / Final Visual Impact Analysis Report or Memorandum*

Task 2.165.10-3 Noise Study

CONSULTANT shall prepare a Noise Study Report evaluating the noise impacts and potential noise abatement/mitigation measures, if any, associated with the proposed project. Because federal and Caltrans oversight is involved, the report will be prepared in accordance with procedures specified by FHWA in Title 23, Section 772 of the Code of Federal Regulations (CFR) (23 CFR 772) and the Caltrans Traffic Noise Analysis Protocol (Protocol).

Based on a preliminary review of the alignment, noise impacts are not predicted, therefore, a Noise Abatement Decision Report (NADR) will not be required.

Deliverables:

- *Draft / Final Noise Study Report*

Task 2.165.10-4 Air Quality Study

CONSULTANT, if necessary, shall prepare an Air Quality Study Report or Memorandum. The report will provide the following discussion and analyses:

- Regulatory Setting and Existing Conditions.
- Evaluation of Construction Emissions.
- Evaluation of Operations-Period Mass Emissions.
- Localized Carbon Monoxide Hot Spot Analysis.
- Localized PM2.5/PM10 Hot Spot Analysis.
- Mobile Source Air Toxics.
- Climate Change/Greenhouse Gas Emissions.
- Mitigation Measures.
- Air Quality Conformity Analysis Report and Checklist.

Deliverables:

- *Air Quality Study Report or Memorandum*

Task 2.165.10.35 – Storm Water Data Report (SWDR)

CONSULTANT shall prepare the SWDR according to the latest Caltrans guidelines and procedures. It is assumed that the long form will be required and that the SWDR will be provided in .doc format to be used as the basis for this task.

Deliverables:

- *Draft and Final SWDR – PS&E level*

Task 2.165.10-45 Water Quality Studies

A Scoping Questionnaire for Water Quality Issues (SQWQI) will be prepared for the proposed project using the current SQWQI template available on the Caltrans SER. As required, this will address

existing conditions, project description and impacts, and construction (temporary) impacts. It is assumed that the SQWQI will be sufficient and a full Water Quality Assessment will not be required.
Deliverables:

- *Scoping Questionnaire for Water Quality Issues (SQWQI)*

Task 2.165.10-5 Paleontology Study

CONSULTANT shall perform a paleontology study or Memorandum to identify and evaluate potential impacts to paleontological resources in the project area.

The following tasks shall be performed to evaluate paleontological resources:

- Document review
- Records search
- Paleontological resource assessment
- Field survey
- Preparation of technical report(s)

Based on preliminary review, a Paleontological Mitigation Plan (PMP) will be required for the proposed project. The PMP will be prepared under the supervision of a qualified Principal Paleontologist and will follow the PMP format as defined on the Caltrans SER.

Deliverables:

- *Combined Paleontological Identification Report (PIR) and Paleontological Evaluation Report (PER) or Memorandum*
- *Paleontological Mitigation Plan (PMP), if necessary.*

Task 2.160.10.80 Hazardous Waste Initial Site Assessment

CONSULTANT shall perform a hazardous waste assessment to identify and evaluate the potential for Recognized Environmental Conditions (REC) that occur in the project area. This task shall include a literature search and review of historic information, interagency coordination with the appropriate agencies, field studies, and preparation of an Initial Site Assessment (ISA) Checklist or report.

The ISA shall be prepared in general accordance with the Caltrans Initial Site Assessment Guidance Document, dated September 2006. Project specific scoping considerations include evaluations of right-of-way acquisition parcels and construction easements, proper management of any identified waste materials, and construction worker and public exposure to any identified onsite contaminants.

Review of local, state and federal regulatory databases and files in performance of the ISA. Based on these findings, additional information may be obtained from direct contact with regulatory agencies including the City of San Bernardino and County, California Regional Water Quality Control Board,

California Department of Toxic Substances Control, Caltrans and the United States Environmental Protection Agency.

Deliverables:

- *Initial Site Assessment Checklist or Report*

Task 2.160.10.99 Hazardous Waste Preliminary Site Investigations

CONSULTANT shall perform an Aerially Deposited Lead (ADL) Survey. A report shall be prepared to transmit the field observations, laboratory data, data evaluation and statistics, and conclusions. The report will include diagrams of sample locations and laboratory results presented in tabular format. CONSULTANT will input the analytical data into a Caltrans format MS Access database and provide an electronic copy to the Client. A professional geologist (PG) will review/sign the investigation report. Hard copies and or an electronic (.pdf file) of the final report will be submitted after the Client provides written draft report review comments.

Task 2.165.15 Biological Studies

CONSULTANT shall perform biological studies to assess potential impacts to biological resources in the project area. Biological studies performed shall support the environmental determination made in the Environmental Document and shall be used to demonstrate with all applicable biological related laws, regulations, and requirements, including but not limited to, the Federal Endangered Species Act, California Endangered Species Act, Clean Water Act, and the Department of Fish and Game Code. All biological studies performed and reports prepared shall meet Caltrans requirements according to the SER and other pertinent Caltrans guidance. CONSULTANT will be responsible for obtaining any right of entry permits required for field work.

Task 2.165.15-1 Natural Environment Study

CONSULTANT shall perform a general biological study to identify biological resources that could be affected by the project. CONSULTANT may conduct informal consultation with appropriate regulatory agencies. Discussions and negotiations with external agencies as part of this task shall only be performed in consultation with the SBCTA Project Manager or designee.

CONSULTANT shall conduct a literature search, perform field surveys, and prepare a Natural Environment Study/Minimal Impacts (NES/MI) report analyzing potential impacts to biological resources. The report will be prepared in accordance with Caltrans SER guidance and will conform to the Caltrans NES/MI annotated outline that is available at the time that the NES/MI is initiated. A full NES is not assumed or included. The following tasks will be performed during the preparation of the reports:

- Review of Project Information and Applicable Literature
- Field Evaluation for Biological Resource Constraints

It is therefore assumed that no impacts to state or federally listed species or conducting any protocol surveys is required.

Deliverables:

- *Draft / Final Natural Environment Study Report/Minimal Impacts*

Task 2.165.20 Cultural Resources Studies

CONSULTANT shall perform cultural resources studies to assess potential impacts to archaeological and historic resources in the project area. Cultural studies performed shall support the environmental determination made in the Environmental Document. CONSULTANT will be responsible for obtaining any right of entry permits required for field work.

It is assumed that a CEQA CE will be appropriate and Assembly Bill 52 consultation will not be required.

This scope of work assumes that no archaeological sites will be identified in the APE and that no testing and/or evaluation will be required. It is anticipated that an Archaeological Survey Report (Finding of No Archaeological Resources Present) will be prepared and no additional documentation will be required.

Based on a review of the anticipated APE, it is assumed that a Historical Resources Evaluation Report (HRER) will not be needed and no built environment resources will need to be evaluated. If any resources are identified as part of the record search then a scope and fee will be provided for approval prior to conducting this effort.

Following completion and approval of the APE, research, survey, outreach and reporting, a summary document (the HPSR) with attached Archaeological Survey Report (ASR) shall be generated. It is anticipated that the proposed project shall result in an HPSR with a finding that no properties eligible for listing on the NRHP or CRHR are present within the project's APE.

Deliverables:

- *Historic Resources Compliance Report*
- *APE Map, if required*

Task 2.165.25 Environmental Document

Task 2.165.25.15 Categorical Exemption/Categorical Exclusion

The Caltrans CE/CE Form will be prepared and provided to Caltrans for review and approval. It is assumed that a brief project description and one to two sentence summary of the findings of each technical study will be included. In addition, an Environmental Commitments Record (ECR) will be prepared and appended to the CE/CE form. No other environmental documentation related to the CE/CE is assumed.

Deliverables:

- *Draft CE/CE Form (electronically to SBCTA and Caltrans)*
- *Final CE/CE Form for signature (electronically to SBCTA and Caltrans)*
- *Final signed CE/CE form (electronically to SBCTA and Caltrans)*

TASK 2.170 – PERMITS & AGREEMENTS

Task 2.170.05 Determine Required Permits & Task 2.170.10 Obtain Permits

CONSULTANT shall perform work to identify and obtain necessary permits and agreements needed for project construction. Work as part of this task may include discussions with permitting agencies, preparation of the permit and attachments such as maps and other exhibits identify funds necessary for the permit application, and submitting the permit. CONSULTANT is responsible for identifying and obtaining the permits that are required to complete the project construction. Discussions and negotiations with permitting agencies shall only be performed in consultation with the SBCTA Project Manager or designee.

The project alignment may include aquatic resources that will be impacted, and as a result, Clean Water Act (CWA) Section 401 and Section 404, and California Fish and Game Code (CFGF) 1602 (et seq.) permits may be required.

Implementation of permit conditions and permit application/processing application fees are not included in this scope of work and associated cost proposal.

CONSULTANT will coordinate with the regulatory agencies throughout the permit processing period. This task includes one collective site visit with regulatory agency staff and the project team, if requested by the agencies.

Compensatory mitigation is typically required for project imposed impacts on aquatic features regulated by the USACE, RWQCB, and CDFW. CONSULTANT will research and identify potential mitigation options and coordination with the agency.

Deliverables:

- *Various Construction Permits*
- *Update of the Environmental Commitment Record (ECR)*

Task 2.170.15 Freeway Agreements

If the Freeway Agreement needs to be updated, CONSULTANT should assist with the local agency reviews, coordination with Caltrans, and revision to the map.

Deliverables:

- *Executed Copies of the Freeway Agreement and Map Sent*

TASK 2.180 – DESIGN ENGINEERING EVALUATION REPORT & FINAL ENVIRONMENTAL DOCUMENT

Task 2.180.05 Final Project Report

CONSULTANT shall perform work to incorporate comments received, update the information, and complete the Design Engineering Evaluation Report for final Caltrans approval.

Deliverables:

- *Final Design Engineering Evaluation Report*

3.180.15-10 Notice of Exemption

A CEQA Notice of Exemption (NOE) will be prepared and filed with the State Clearinghouse. It is assumed that no fees will be required associated with the NOE.

Deliverables:

- *Draft / Final Notice of Exemption (all transmittals assumed to be electronic)*

TASK 3.185 – PREPARE BASE MAPS AND PLAN SHEETS

Task 3.185-1 Mapping and Surveys

CONSULTANT shall perform survey control work and engineering surveys necessary to produce the mapping for final design. CONSULTANT shall perform the necessary work to establish the project design file and CADD base maps. CONSULTANT will be responsible for obtaining as-built maps, record of surveys, topographic data, aerial mapping, and maps and plans of major utilities and proposed utilities within the project area. CONSULTANT will be responsible for obtaining any right of entry permits required for field survey work.

Deliverables:

- *Design Base Maps*
- *Design Surveys*

Task 3.185-2 Right Of Way Requirements

CONSULTANT shall perform the work necessary to determine the right of way needs and prepare maps for use in the Right Of Way (ROW) process. Work would include identifying the need for new ROW, permanent easements, and temporary construction easements. This task includes determination of potential utility conflicts and consultation with affected agencies.

Deliverables:

- *ROW Requirements Map*
- *Utility Conflicts Map*

Task 3.185-2-05 Utility Locations Determined for Design.

CONSULTANT shall collect existing As-Built plans and record drawings, prepare, distribute and collect responses for utility verification letters and utilities on structures information, and update Existing Utilities on Base maps.

Deliverables:

- *Identify Potential Utility Conflicts*
- *Create Base Maps with Existing Utilities (from research)*

Task 4.200-2 Utility Identification and Verification

CONSULTANT, if necessary, shall assign Parcel Numbers for potholes, prepare, distribute and coordinate Letters to owner requesting positive identification, obtain the utility companies, the States,

and local encroachment permits for potholing; Perform ground penetration radar utility identification instead of potholing where appropriate.

Deliverables:

- *Letters to Owner Requesting Positive Identification*
- *Reports of Investigation (ROIs)/Potholing information*
- *Develop Utility Pothole Plan (Conflicts and High and Low Risk Protocol)*
- *Survey Utility Potholes*
- *Plot Pothole Data on Base Maps and Adjust Linework*
- *Certification of “No Conflicts” on Utility Relocation Designs/Plans*
- *Caltrans Utility Exception Letters*
- *Potholes, if required, shall include permit fees, traffic management, one mobilization cost and required equipment.*

TASK 3.230 – PREPARE DRAFT PLANS, SPECIFICATIONS & ESTIMATE (PS&E)

Task 3.230-1 Draft Plans

CONSULTANT shall prepare the Roadway Plans, Specifications, and Estimates (PS&E) plans set for the project following the Caltrans Highway Design Manual and Caltrans Standard Plans as appropriate.

Preparation of the roadway plans shall be consistent with Caltrans design standards to the greatest extent feasible. CONSULTANT shall perform an internal QA/QC plans check and review and shall submit copies to SBCTA for peer review prior to submittal to Caltrans. CONSULTANT shall notify the SBCTA Project Manager if the CONSULTANT is seeking any exceptions to any applicable design standards. Preparation of the Draft Plans set shall include, but not be limited to, the preparation of the following engineering sheets:

- | | |
|-----------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|
| - Title Sheet | - Typical Cross Sections |
| - Roadway/Geometric Layouts | - Profile and Superelevation Sheets |
| - Construction Details | - Contour Grading Plans, if needed |
| - Summary of Quantities | - Stage Construction Plans |
| - Traffic Handling Plans | - Highway Planting Plans |
| - Irrigation Plans | - Utility & Utility Relocation Plans |
| - Drainage Plans | - Pavement Delineation Plans |
| - Sign Plans | - Retaining Walls |
| - Electrical Plans including Traffic Signal Modification and Lighting, Ramp Metering, and Traffic Management System Modifications | |

Deliverables:

- *95% Plans (First Encroachment Permit Submittal to Caltrans)*

Task 3.230-2 Draft Specifications and Quantities and Estimates

CONSULTANT shall prepare the Specifications and Special Provisions and PS&E Quantities and Estimates for the project following the Caltrans Standard Specifications. CONSULTANT shall

notify the SBCTA's Project Manager if the CONSULTANT is seeking any exceptions to this requirement.

Deliverables:

- *Draft Standard Special Provisions*

Task 3.230.05.70 – Overall Constructability Review

This includes an overall review of the PS&E package to identify any constructability issues.

Deliverables:

- *Constructability review comments matrix*

TASK 3.255 – PREPARE FINAL PS&E PACKAGE

Task 3.225-1 Final PS&E Package

This task includes the distribution of the draft final combined PS&E package for final review by the Caltrans, the SBCTA, and other stakeholders. CONSULTANT shall address comments received and incorporate changes as appropriate in the final combined PS&E package. Under this task, CONSULTANT shall perform an internal QA/QC plans check and review and shall submit the final combined PS&E package to an independent reviewer, which shall be provided by the CONSULTANT. The independent reviewer shall be a registered Professional Engineer in the State of California and shall certify the quality of the package and that the plans are constructible. The independent reviewer shall submit a stamped report to the SBCTA summarizing its review and certifying the constructability of the plans and that the final combined PS&E package is biddable. CONSULTANT will be responsible for completion of the draft final combined PS&E package in a manner where there is sufficient time to address comments during the independent review and finalize the PS&E package within the project schedule. CONSULTANT will be responsible for the constructability of the project.

Deliverables:

- *Final Combined PS&E Package*
- *Independent Constructability and Ready-to-Bid Certification*

Task 3.225-2 Resident Engineer File and Supplemental Materials

CONSULTANT shall be responsible for preparing the pending Resident Engineer File and other supplemental PS&E materials, which would include the following:

- | | |
|--------------------------------------------|-------------------------------------|
| - Geotechnical Information Handout | - Materials Information Handout |
| - Construction Staking Package and Control | - Project Controls for Construction |
| - Grid Grades | - Construction Permits |
| - Quantity Work Book | - Representative Cross Sections |

Deliverables:

- *Pending Resident Engineer File*
- *Supplemental PS&E Materials*

TASK 3.260 – PREPARE CONTRACT BID DOCUMENTS

Task 3.260-1 Draft Contract

CONSULTANT shall assist the SBCTA in the preparation of the Construction Contract Bid Documents. Under this task, the CONSULTANT shall develop a draft contract, which shall be consistent with Caltrans standards. Draft contract shall include the plans, specifications, special provisions, applicable Federal, state and local laws, regulations, and requirements and item codes. All contract pay items shall utilize the Basic Engineering Estimate System (BEES) coding.

Deliverables:

- *Draft Construction Contract Package*

TASK 3.270 – DESIGN SERVICES CONSTRUCTION SUPPORT

CONSULTANT shall provide as-needed Design Services Construction Support during construction. Task will include providing response to Request for Information (RFI), and design support with Construction Change Orders (CCO). Design services will include construction support to roadway design, traffic, hydraulics, materials, structures design, geotechnical services, environmental, landscape and other specialty staff. Functional support may include attendance at pre-work conferences, on-site construction support and RE pending file review.

Deliverables:

- *RFI Response.*

TASK 3.295 – ACCEPT CONTRACT/PREPARE FINAL CONSTRUCTION ESTIMATE AND FINAL REPORT

CONSULTANT shall coordinate with the construction manager and/or Resident Engineer to develop as-built plans in accordance with Caltrans and the City Standards. Work includes the transfer of the red-line As-Built plan mark-ups to the original full size reproducible plan sheets (and CADD file) and forwarding a reproducible set of plans with the transferred As-Built changes to SBCTA, Caltrans and the City of San Bernardino.

Deliverables:

- *Red-line construction package*
- *As-Built construction package*
- *Electronic and hardcopy submittal for Caltrans and City of San Bernardino records*

TASK 4.200 - Utility Coordination

CONSULTANT shall coordinate with the affected utility companies on work involved in the protection, removal and relocation of utility facilities necessary to clear and certify utilities. Includes coordination with utility companies, review of utility plans, and establishing liability. In addition the CONSULTANT shall facilitate the service connections between designers and utility companies.

Deliverables:

- *“No Conflicts” Letter to Owner*
- *Notice to Owner to Relocate, if required*

- *Utility Agreements , if required*
- *Utility Coordination Progress Matrix, if required*
- *Right of Way File Diary, if required*

TASK - 4.220 ROW Engineering

This task identifies ROW support services. Services include ROW Engineering work in advance of Appraisal and Acquisition activities.

TASK 4.220 – 1 Land Net Survey, Maps and Documents

CONSULTANT will search, recover, describe, and tie-in existing controlling land survey monuments, followed by observation adjustment and calculating coordinates. The Land-Net Map depicts the condition of existing property ownership boundaries, lines, and monuments (Land Net). Effort entails completion of work activities required to analyze, determine, and delineate a single Land Net that encompasses the whole project.

Deliverables:

- *Land Net Survey, Maps and Documents*

TASK 4.220 – 3 Appraisal Maps

CONSULTANT will prepare calculation and delineations of all new parcels and sub-parcels, using the Land Net Map.

Deliverables:

- *Appraisal Maps, if required*

TASK 4.220 – 4 Field Located ROW

CONSULTANT will flag ROW: Provide temporary and approximate marking of the right of way. Used for the purpose of appraisal, acquisition, disposal of land, or utility relocation planning and estimating. CONSULTANT will stake ROW: Provide a permanent and accurate marking of the right of way. Used to provide a durable visible location of a ROW feature and its angle points.

Deliverables:

- *Field Located ROW, if required*
- *Flagged ROW, if required*
- *Staked ROW, if required*

TASK 4.220 – 4 ROW Certification

CONSULTANT will secure deeds, prepare legal descriptions and plats, and support the Resolutions of Necessity.

Deliverables:

- *Order Title Reports, if required*
- *Plats and Legals, if required*

TASK 4.220 –5 Post-ROW Certification

CONSULTANT will support SBCTA Post-ROW certification efforts in delivering exhibits for condemnation work, if required, for Right of Way project closeout.

Deliverables:

- *Trial Exhibits, if required*
- *Review Condemnation Appraisal, if required*

TASK 4.220 –6 Final Right of Way Engineering

CONSULTANT will support SBCTA Post-ROW certification efforts and update the ROW map after completion of construction. CONSULTANT will provide the monumentation of the right of way, relinquishments and vacations, preparation of right of way record maps, and preparation of deed packages for excess land transactions.

Deliverables:

- *Filed Monumentation Record of Survey, if required*
- *Court Exhibits, if required*
- *Relinquishment and Vacation Maps and Documents, if required*
- *Excess Lands Documents, if required*
- *Right of Way Record Maps, if required*

V. PROJECT SPECIFIC QUALITY ASSURANCE AND QUALITY CONTROL PLAN REQUIREMENTS

Quality Assurance (QA) encompasses all of the planned and systematic activities implemented within the quality system that can be demonstrated to provide confidence that a product or service will fulfill requirements for quality. Quality Control (QC) consists of operational techniques and activities used to fulfill requirements for quality. For environmental review process, preliminary engineering and final design, QC includes technical checking, review and design verification activities, while the QA activities includes the monitoring, surveillances, auditing and other means of oversight of the QC activities and documentation, to ensure completeness and adherence to the QC procedures.

A project specific quality management plan (herein referred to as a Project QA/QC Plan) shall be developed by the Consultant and submitted to SBCTA for review and approval. The Project QA/QC Plan shall describe how QA and QC will be executed and managed by the Consultant and its subconsultants. In lieu of a Project QA/QC Plan, for small projects at the discretion of the SBCTA Director of Project Delivery, a copy of the Consultant's standard QA and QC procedures that are to be followed by the Consultant team (including subconsultants) for the project, will be submitted to SBCTA for review and approval. The standard QA and QC procedures document and any appended project-specific processes, should address the same requirements listed below for the Project QA/QC Plan.

The following is a list of the minimum content and scope of what the Project QA/QC Plan shall contain. When submitted to SBCTA for review, the Project QA/QC Plan will be reviewed and assessed to ensure that these topic areas are covered and adequately addressed by the plan.

Project Introduction and Scope:

1. Project description
2. Scope of work
3. Quality objectives
4. List of deliverable documents for each milestone submittal

Project Team Qualifications, Organization, Staff, Roles and Responsibilities:

1. A description of the minimum resource requirements for staff competence, skills, experience, and credentials.
2. Organization chart showing project staff and lines of QA and QC authority and communications.
3. List of project staff members, roles and responsibilities, including verification, QC review and technical checking, Project Management, Project QA Management and Technical Lead duties.

Quality Training:

1. Quality training, including a training syllabus, schedule, and methods of tracking the staff that have been trained.

Scheduling of Quality Activities:

1. Detailed QA and QC schedule that provides the timing, durations, and dependencies for all QC technical checking, interdisciplinary reviews, internal design verification against project criteria, and internal QA audits.

SBCTA, Caltrans Reviews:

1. Formal external (SBCTA and Caltrans) review schedules (Peer Reviews and Constructability Reviews).
2. Processes for SBCTA Peer Review and Caltrans review comments tracking, response, resolution, checking of comment incorporation, and closure process.

Internal Reviews:

1. Quality procedures related to interdisciplinary design review (IDR) process.
2. Technical review of environmental reports.

Management of Requirements:

1. The requirements for the development of a Basis of Design report that includes a list of governing project criteria, source documents for the governing criteria, including those from Caltrans, SBCTA and local municipalities.
2. Requirements management processes used to track design variation requests, and procedures for changes to the requirements as a result of approved design variances.

Quality Procedures for Project Controls:

1. Project QA and QC procedures related to approved project scope changes and associated revisions to estimates and schedule.
2. Project QA and QC procedures for configuration management against the baseline design.

Quality Control (QC) Procedures:

1. Detailed QC procedures, including descriptions of process steps and documentation of processes for technical checking, QC reviews, and design verification. The procedures for technical checking will include:
 - QC testing and validation of computer software used for the calculations
 - Checking of calculations and data (hand calculations and computer calculations input and output)
 - Checking of drawings and exhibits
 - Checking of specifications and contract documents
 - Checking of quantities and cost estimates
 - Review of studies or report-type documents
 - QC of CADD-produced documents
2. Checklists to be used to verify: design criteria / technical compliance; submittal contents; CADD compliance; specifications compliance; calculations compliance; and milestone specific level of completion.

Quality Assurance (QA) Procedures:

1. The processes for QA monitoring, surveillances, and audits of the QC activities, including when QA audits are to be conducted prior to submittals, and the QC activities and QC documentation to be audited.
2. Processes for the management of the implementation of Corrective Action to internal and external QA audit non-conformances and findings.

Quality Documentation:

1. Quality Records list or definition.
2. Document Control procedures, including electronic files and project folders, submittal procedures, control of hardcopies, uploading of scanned hardcopy PDF files, document retention requirements, and the treatment of quality documents. This part of the Project QA/QC Plan may reference sections of a project management plan and/or a separate project or firm document control plan.

Cost/Price Form for Cost Plus Fixed Fee

Consultant EXP U.S. Services, Inc.Contract No. 22-1002727Date 5/20/2022

Direct Labor Classification/Title	Key Personal	Hours	Labor Rate Range		Actual Hourly Rate	Total Direct Labor
			Low	High		
Project Manager	Syed Raza	180	114.30	121.30	\$117.80	\$21,204.00
QC Reviewer	Emilio Rodriguez	20	108.55	114.80	\$111.68	\$2,233.60
Highway Engineering Lead	Christine Brown	294	47.25	53.90	\$50.58	\$14,870.52
Drainage Engineering Lead	Portia Gonzalez	16	111.78	118.70	\$115.24	\$1,843.84
Traffic Engineer	Mitsuru Tanaka	436	66.40	73.00	\$69.70	\$30,389.20
Engineer/Designer	Jose Carrillo	582	46.30	51.30	\$48.80	\$28,401.60
Engineer/Designer	Ricky Carrillo	180	46.30	51.30	\$48.80	\$8,784.00
Engineer/Designer	Ben Hashemloo	236	51.10	58.20	\$54.65	\$12,897.40
Engineer/Designer	Parakh Jaiswal	188	37.10	44.00	\$40.55	\$7,623.40

Labor Costs

a) Subtotal Direct Labor Costs	\$	128,247.56
b) Anticipated Salary Increases (see page 2 for sample)	\$	8.72
c) TOTAL DIRECT LABOR COSTS [(a)+(b)]	\$	128,256.28

Fringe Benefits

d) Fringe Benefits (Rate <u>62.050%</u> %)	e) Total Fringe Benefits [(c)x(d)]	\$	79,583.02
--------------------------------------------	-------------------------------------------	----	-----------

Indirect Costs

f) Overhead (Rate	106.640%	g) Overhead [(c)x (f)]	\$	136,772.50
h) General and Administrative (Rate	0.290%	i) Gen & Admin [(c) x (h)]	\$	371.94
j) Total Indirect Costs [(g)+(i)]			\$	137,144.44

Fixed Fee (Profit)

n) (Rate <u>8.00%</u> %)	k) Fixed fee [(c) + (e) + (j)] x (n)	\$	27,598.70
--------------------------	-----------------------------------------------	----	-----------

Total Loaded Labor Costs

372,582.44

Other Direct Costs (ODC)

l) Travel/ Mileage Costs (supported by consultant actual costs)	\$	500.00
m) Equipment Rental and Supplies (itemize)	\$	
n) Printing/Repro/Delivery Costs	\$	
o) Subconsultant Costs (attach detailed cost proposal in same format as prime consultant estimate for each subconsultant)	\$	
p) Total Other Direct Costs [(l) + (m) + (n) + (o)]	\$	500.00

Outside Services

Company	Labor	Fee	ODC's	Total
David Evans and Associates, Inc. (DEA)	\$24,026.60	\$1,922.13	\$500.00	\$26,448.73
ICF	\$91,161.92	\$7,292.95	\$1,800.00	\$100,254.87
Converse	\$39,522.79	\$3,161.82	\$30,103.00	\$72,787.61
Epic Land Solutions, Inc.	\$22,554.12	\$1,804.33	\$800.00	\$25,158.45
CL Surveying	\$29,568.72	\$2,365.50	\$8,000.00	\$39,934.22
ECORP	\$6,196.99	\$495.76	\$307.25	\$7,000.00

q) **Total Outside Services** \$ 271,583.88**Total cost** [(c) + (e) + (j) + (k) + (p)+(q)] \$ 644,666.32**Notes:**

- Employees subject to prevailing wage requirements to be marked with an *.

22-1002727
Form 348-10-H Cost Proposal
Actual Cost- Plus-Fixed Fee or Lump Sum (Firm Fixed Price) Contracts

Consultant EXP U.S. Services, Inc. Contract No. 22-1002727 Date 5/20/2022

1. Calculate average hourly rate for 1st year of contract (Direct Labor Subtotal divided by total hours)

Direct Labor Subtotal Per Cost Proposal	Total Hours cost Proposal	Avg Hourly Rate	5year Contract Duration
\$ 113,349.72 /	2132	= \$ 53.17	Year 1 avg Hourly rate

2. Calculate hourly rate for all years (increase the Average Hourly rate for a year by proposed escalation%)

Average hourly rate	Proposed Escalation				
Year 1 \$ 53.17 +	0%	=	\$ 53.17	Year 2 Avg Hourly Rate	
Year 2 \$ 53.17 +	3%	=	\$ 54.77	Year 3 Avg Hourly Rate	
Year 3 \$ 54.77 +	3%	=	\$ 56.41	Year 4 Avg Hourly Rate	
Year 4 \$ 56.41 +	3%	=	\$ 58.10	Year 5 Avg Hourly Rate	

3. Calculate estimated hour per year (multiply estimate % each year by total hours)

Estimated % Completed Each year	Total Hours Per Cost Proposal	Total Hours per Year	
Year 1 90.0% *	2132	= 1918.8	Estimated Hours Year 1
Year 2 10.0% *	2132	= 213.2	Estimated Hours Year 2
Year 3 0.0% *	2132	= 0.0	Estimated Hours Year 3
Year 4 0.0% *	2132	= 0.0	Estimated Hours Year 4
Year 5 0.0% *	2132	= 0.0	Estimated Hours Year 5
Total 100.0%	Total	= 2132	

4. Calculate Total Costs including Escalation (multiply average hourly rate by the number hours)

Avg Hourly Rate (Calculated above)	Estimated hours (Calculated above)	Cost Per Year	
Year 1 \$ 53.17 *	1918.8	= \$ 102,022.60	Estimated Hours Year 1
Year 2 \$ 53.17 *	213.2	= \$ 11,335.84	Estimated Hours Year 2
Year 3 \$ 54.77 *	0.0	= \$ -	Estimated Hours Year 3
Year 4 \$ 56.41 *	0.0	= \$ -	Estimated Hours Year 4
Year 5 \$ 58.10 *	0.0	= \$ -	Estimated Hours Year 5
Total Direct Labor Cost with Escalation =		\$ 113,358.44	
Direct Labor Subtotal before Escalation =		\$ 113,349.72	
Estimated Total of Direct Labor Salary Increase =		\$ 8.72	Transferred to page 1

Notes:

- This assumes that one year will be worked at the rate on the cost proposal before salary increases are granted.
- This escalation calculation is for determining the total contract amount only. The actual allowable escalation is per Contract Section ????
- Estimated yearly percent completed from resource loaded schedule

Contract:22-1002727

Date:5/20/2022

Detail Sheet												
Task Description			Consultant									
			EXP U.S. Services, Inc.									
A	B	C	D	E	G	H	I	J	K	L	M	AI
Row	WBS Number	Drawing or Item of Work - Titles	Project Manager	QC Reviewer	Highway Engineering Lead	Drainage Engineering Lead	Traffic Engineer	Engineer/Designer	Engineer/Designer	Engineer/Designer	Engineer/Designer	Total Hours
1	100	PROJECT MANAGEMENT										0.0
2	100.10	Project Management	100.0									100.0
3	100.10-1	Coordination and Meetings	32.0		8.0			4.0	4.0			48.0
4	100.10-2	Administration	16.0									16.0
5												0.0
6	160	PRELIMINARY ENGINEERING/BASE MAPPING			4.0		4.0	4.0		4.0	4.0	20.0
7	160.05	Review Updated Project Information			4.0							4.0
8	160.05.10.1	Material Report (MR)										0.0
9	160.05.10.2	Geotechnical Design Report (GDR)										0.0
10	160.05.10.3	Retaining Wall Foundation Report (FR)										0.0
11	160.10.10	Traffic Methodology Memo			2.0					16.0		18.0
12	160.10.10.1	Traffic Volume Report			4.0					80.0		84.0
13	160.10.10.2	Traffic Operations Analysis Report (TOAR)			4.0					120.0		124.0
14	160.10.25	Storm Water Data Report			4.0						40.0	44.0
15	160.10.25.1	Drainage Report			4.0						40.0	44.0
16	160.10.30	Highway Planting Design Concepts (inlcuding Design Charrette)										0.0
17	160.10.95	Preliminary Transportation Management Plan						4.0				4.0
18	160.45	Base Maps and Plan Sheets			4.0			160.0				164.0
19	185.10.05.1	Control and Design Survey			4.0							4.0
20	185.10.05.2	Pothole Survey			4.0							4.0
21	185.10.05.3	LandNet Survey			4.0							4.0
22	185.10.05.4	Right-of-Way Staking			4.0							4.0
23	185.10.05.5	Legal Descriptions and Exhibits (Estimated 2)			4.0							4.0
24	185.10.05.6	Monumentation and Record of Survey			4.0							4.0
25												0.0
26	165	ENVIRONMENTAL STUDIES AND ENVIRONMENTAL DOCUMENT										0.0
27	165.10.2	Visual Impact Assessment			4.0							4.0
28	165.10.25	Noise Quality Documentation Review			4.0							4.0
29	165.10.30	Air Quality Conformity Checklist			4.0							4.0
30	165.10.45	Water Quality Studies			4.0							4.0
31	165.10.65	Paleontology			4.0							4.0
32	165.10.80	Initial Site Assessment Checklist			4.0							4.0
33	165.10.80.1	ADL Survey			4.0							4.0
34	165.10.80.2	Phase II ESA			4.0							4.0
35	165.15.1	Natural Environment Study			4.0							4.0
36	165.20.1	Cultural Resources Studies			4.0							4.0
37	165.25.15	Categorical Exemption/Categorical Exclusion										0.0

Contract:22-1002727

Date:5/20/2022

Detail Sheet												
Task Description			Consultant									
			EXP U.S. Services, Inc.									
A	B	C	D	E	G	H	I	J	K	L	M	AI
Row	WBS Number	Drawing or Item of Work - Titles	Project Manager	QC Reviewer	Highway Engineering Lead	Drainage Engineering Lead	Traffic Engineer	Engineer/Designer	Engineer/Designer	Engineer/Designer	Engineer/Designer	Total Hours
38	180.15.1	Notice of Exemption										0.0
39												0.0
40	200	UTILTIY COORDINATION										0.0
41	200.10.1	Obtain Utilities As Built Plans			4.0			16.0				20.0
42	200.10.2	Identify Utility Conflicts			4.0			16.0				20.0
43	200.10.3	Utility Coordination			4.0			16.0				20.0
44												0.0
45	230	PREPARE DRAFT PLANS, SPECIFICATIONS, & ESTIMATE (PS&E - 65% and 95%))										0.0
46	230.05	Draft Roadway Plans			16.0			160.0				176.0
47	230.10	Draft Highway Planting Plans										0.0
48	230.15.15	Electrical Plans			8.0		240.0					248.0
49	230.20	Transportation Management Plan			8.0							8.0
50	230.35	Draft Specifications			8.0	4.0	8.0	16.0	8.0		8.0	52.0
51	230.40	Draft Quantities and Estimates			8.0	4.0	8.0	16.0			8.0	44.0
52	230.5	Design Engineering Evaluation Report (DEER)	8.0		40.0							48.0
53												0.0
54	255	PREPARE FINAL DISTRICT PS&E PACKAGE										0.0
55	255.2	Final District PS&E Package						40.0				40.0
56	255.4	Resident Engineer's Pending File						20.0				20.0
57												0.0
58	260	PREPARE CONTRACT BID DOCUMENTS										0.0
59	260.8	Draft Contract Ready			8.0		8.0	24.0				40.0
60												0.0
61	270	CONSTRUCTION ENGINEERING										0.0
62	270.2	Construction Technical Support	8.0		8.0		8.0	16.0	8.0		8.0	56.0
63												0.0
64		Add the following tasks										0.0
65	100.10-3	PMP	8.0									8.0
66	100.10-4	QMP	8.0									8.0
	100.10-5	QA/QC		20.0								
67	160.10.10	Collect traffic data								8.0		8.0
68	160.10.10.1	Obtain SCAG forecast traffic data								8.0		8.0
		Prepare drainage plans, details and quantities			4.0	8.0					80.0	
69	230.15	Prepare construction staging/traffic handling plans			4.0		80.0					84.0
70	230.2	Prepare utility plans			4.0			60.0				64.0
71	230.25	Prepare signing, striping plans			4.0		80.0					84.0
	230.3	Prepare retaining wall plans						10.0	160.0			

Attachment: Exhibit B 22-1002727_EXP Final Cost Proposal [Revision 1] (8562 : Award Design Services Contract No. 22-1002727 for State

Contract:22-1002727

Date:5/20/2022

Detail Sheet												
Task Description			Consultant									
			EXP U.S. Services, Inc.									
A	B	C	D	E	G	H	I	J	K	L	M	AI
Row	WBS Number	Drawing or Item of Work - Titles	Project Manager	QC Reviewer	Highway Engineering Lead	Drainage Engineering Lead	Traffic Engineer	Engineer/Designer	Engineer/Designer	Engineer/Designer	Engineer/Designer	Total Hours
72	230.35	Prepare DSDD			24.0							24.0
73	230.4	Prepare Exception to Ramp Metering Design Manual Policy			24.0							24.0
74	255.1	Right of Way Certification			4.0							4.0
75	255.3	Environmental Certification			4.0							4.0
76	255.35	TMP Certification			4.0							4.0
77												0.0
			180.0	20.0	294.0	16.0	436.0	582.0	180.0	236.0	188.0	
		Total Hours										2,132.0

Contract: 22-1002727			Date: 5/20/2022			Detail Sheet										
Task Description			Consultant													
0			EXP U.S. Services, Inc.													
A	B	C	D1	E1	G1	H1	I1	J1	K1	L1	M1	AI1	AJ	AK	AL	AM
			\$ 117.80	\$ 111.68	\$ 50.58	\$ 115.24	\$ 69.70	\$ 48.80	\$ 48.80	\$ 54.65	\$ 40.55		168.98%	8.00%		
Row	WBS Number	Drawing or Item of Work - Titles	Project Manager	QC Reviewer	Highway Engineering Lead	Drainage Engineering Lead	Traffic Engineer	Engineer/Designer	Engineer/Designer	Engineer/Designer	Engineer/Designer	Direct Labor Total	Overhead Cost	Fee	Total Labor Costs	Escalated Total Labor Cost
1	100	PROJECT MANAGEMENT	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2	100.10	Project Management	\$ 11,780.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 11,780.00	\$ 19,905.84	\$ 2,534.87	\$ 34,220.71	\$ 38,721.0
3	100.10-1	Coordination and Meetings	\$ 3,769.60	\$ -	\$ 404.64	\$ -	\$ -	\$ 195.20	\$ 195.20	\$ -	\$ -	\$ 4,564.64	\$ 7,713.33	\$ 982.24	\$ 13,260.21	\$ 15,004.0
4	100.10-2	Administration	\$ 1,884.80	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,884.80	\$ 3,184.94	\$ 405.58	\$ 5,475.31	\$ 6,195.3
5			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
6	160	PRELIMINARY ENGINEERING/BASE MAPPING	\$ -	\$ -	\$ 202.32	\$ -	\$ 278.80	\$ 195.20	\$ -	\$ 218.60	\$ 162.20	\$ 1,057.12	\$ 1,786.32	\$ 227.48	\$ 3,070.92	\$ 3,474.7
7	160.05	Review Updated Project Information	\$ -	\$ -	\$ 202.32	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 202.32	\$ 341.88	\$ 43.54	\$ 587.74	\$ 665.0
8	160.05.10.1	Material Report (MR)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
9	160.05.10.2	Geotechnical Design Report (GDR)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
10	160.05.10.3	Retaining Wall Foundation Report (FR)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
11	160.10.10	Traffic Methodology Memo	\$ -	\$ -	\$ 101.16	\$ -	\$ -	\$ -	\$ -	\$ 874.40	\$ -	\$ 975.56	\$ 1,648.50	\$ 209.92	\$ 2,833.99	\$ 3,206.6
12	160.10.10.1	Traffic Volume Report	\$ -	\$ -	\$ 202.32	\$ -	\$ -	\$ -	\$ -	\$ 4,372.00	\$ -	\$ 4,574.32	\$ 7,729.69	\$ 984.32	\$ 13,288.33	\$ 15,035.8
13	160.10.10.2	Traffic Operations Analysis Report (TOAR)	\$ -	\$ -	\$ 202.32	\$ -	\$ -	\$ -	\$ -	\$ 6,558.00	\$ -	\$ 6,760.32	\$ 11,423.59	\$ 1,454.71	\$ 19,638.62	\$ 22,221.2
14	160.10.25	Storm Water Data Report	\$ -	\$ -	\$ 202.32	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,622.00	\$ 1,824.32	\$ 3,082.74	\$ 392.56	\$ 5,299.62	\$ 5,996.5
15	160.10.25.1	Drainage Report	\$ -	\$ -	\$ 202.32	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,622.00	\$ 1,824.32	\$ 3,082.74	\$ 392.56	\$ 5,299.62	\$ 5,996.5
16	160.10.30	Highway Planting Design Concepts (inlcuding Design Charrette)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
17	160.10.95	Preliminary Transportation Management Plan	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 195.20	\$ -	\$ -	\$ -	\$ 195.20	\$ 329.85	\$ 42.00	\$ 567.05	\$ 641.6
18	160.45	Base Maps and Plan Sheets	\$ -	\$ -	\$ 202.32	\$ -	\$ -	\$ 7,808.00	\$ -	\$ -	\$ -	\$ 8,010.32	\$ 13,535.84	\$ 1,723.69	\$ 23,269.85	\$ 26,330.0
19	185.10.05.1	Control and Design Survey	\$ -	\$ -	\$ 202.32	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 202.32	\$ 341.88	\$ 43.54	\$ 587.74	\$ 665.0
20	185.10.05.2	Pothole Survey	\$ -	\$ -	\$ 202.32	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 202.32	\$ 341.88	\$ 43.54	\$ 587.74	\$ 665.0
21	185.10.05.3	LandNet Survey	\$ -	\$ -	\$ 202.32	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 202.32	\$ 341.88	\$ 43.54	\$ 587.74	\$ 665.0
22	185.10.05.4	Right-of-Way Staking	\$ -	\$ -	\$ 202.32	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 202.32	\$ 341.88	\$ 43.54	\$ 587.74	\$ 665.0
23	185.10.05.5	Legal Descriptions and Exhibits (Estimated 2)	\$ -	\$ -	\$ 202.32	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 202.32	\$ 341.88	\$ 43.54	\$ 587.74	\$ 665.0
24	185.10.05.6	Monumentation and Record of Survey	\$ -	\$ -	\$ 202.32	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 202.32	\$ 341.88	\$ 43.54	\$ 587.74	\$ 665.0
25			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
26	165	ENVIRONMENTAL STUDIES AND ENVIRONMENTAL DOCUMENT	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
27	165.10.2	Visual Impact Assessment	\$ -	\$ -	\$ 202.32	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 202.32	\$ 341.88	\$ 43.54	\$ 587.74	\$ 665.0
28	165.10.25	Noise Quality Documentation Review	\$ -	\$ -	\$ 202.32	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 202.32	\$ 341.88	\$ 43.54	\$ 587.74	\$ 665.0
29	165.10.30	Air Quality Conformity Checklist	\$ -	\$ -	\$ 202.32	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 202.32	\$ 341.88	\$ 43.54	\$ 587.74	\$ 665.0
30	165.10.45	Water Quality Studies	\$ -	\$ -	\$ 202.32	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 202.32	\$ 341.88	\$ 43.54	\$ 587.74	\$ 665.0
31	165.10.65	Paleontology	\$ -	\$ -	\$ 202.32	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 202.32	\$ 341.88	\$ 43.54	\$ 587.74	\$ 665.0
32	165.10.80	Initial Site Assessment Checklist	\$ -	\$ -	\$ 202.32	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 202.32	\$ 341.88	\$ 43.54	\$ 587.74	\$ 665.0
33	165.10.80.1	ADL Survey	\$ -	\$ -	\$ 202.32	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 202.32	\$ 341.88	\$ 43.54	\$ 587.74	\$ 665.0
34	165.10.80.2	Phase II ESA	\$ -	\$ -	\$ 202.32	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 202.32	\$ 341.88	\$ 43.54	\$ 587.74	\$ 665.0
35	165.15.1	Natural Environment Study	\$ -	\$ -	\$ 202.32	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 202.32	\$ 341.88	\$ 43.54	\$ 587.74	\$ 665.0
36	165.20.1	Cultural Resources Studies	\$ -	\$ -	\$ 202.32	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 202.32	\$ 341.88	\$ 43.54	\$ 587.74	\$ 665.0
37	165.25.15	Categorical Exemption/Categorical Exclusion	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
38	180.15.1	Notice of Exemption	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
39			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
40	200	UTILITIY COORDINATION	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
41	200.10.1	Obtain Utilities As Built Plans	\$ -	\$ -	\$ 202.32	\$ -	\$ -	\$ 780.80	\$ -	\$ -	\$ -	\$ 983.12	\$ 1,661.28	\$ 211.55	\$ 2,855.95	\$ 3,231.5
42	200.10.2	Identify Utility Conflicts	\$ -	\$ -	\$ 202.32	\$ -	\$ -	\$ 780.80	\$ -	\$ -	\$ -	\$ 983.12	\$ 1,661.28	\$ 211.55	\$ 2,855.95	\$ 3,231.5
43	200.10.3	Utility Coordination	\$ -	\$ -	\$ 202.32	\$ -	\$ -	\$ 780.80	\$ -	\$ -	\$ -	\$ 983.12	\$ 1,661.28	\$ 211.55	\$ 2,855.95	\$ 3,231.5
44			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
45	230	PREPARE DRAFT PLANS, SPECIFICATIONS, & ESTIMATE (PS&E - 65% and 95%))	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
46	230.05	Draft Roadway Plans	\$ -	\$ -	\$ 809.28	\$ -	\$ -	\$ 7,808.00	\$ -	\$ -	\$ -	\$ 8,617.28	\$ 14,561.48	\$ 1,854.30	\$ 25,033.06	\$ 28,325.1
47	230.10	Draft Highway Planting Plans	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
48	230.15.15	Electrical Plans	\$ -	\$ -	\$ 404.64	\$ -	\$ 16,728.00	\$ -	\$ -	\$ -	\$ -	\$ 17,132.64	\$ 28,950.74	\$ 3,686.67	\$ 49,770.05	\$ 56,315.2
49	230.20	Transportation Management Plan	\$ -	\$ -	\$ 404.64	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 404.64	\$ 683.76	\$ 87.07	\$ 1,175.47	\$ 1,330.0
50	230.35	Draft Specifications	\$ -	\$ -	\$ 404.64	\$ 460.96	\$ 557.60	\$ 780.80	\$ 390.40	\$ -	\$ 324.40	\$ 2,918.80	\$ 4,932.19	\$ 628.08	\$ 8,479.07	\$ 9,594.1
51	230.4	Draft Quantities and Estimates	\$ -	\$ -	\$ 404.64	\$ 460.96	\$ 557.60	\$ 780.80	\$ -	\$ -	\$ 324.40	\$ 2,528.40	\$ 4,272.49	\$ 544.07	\$ 7,344.96	\$ 8,310.8
52	230.5	Design Engineering Evaluation Report (DEER)	\$ 942.40	\$ -	\$ 2,023.20	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,965.60	\$ 5,011.27	\$ 638.15	\$ 8,615.02	\$ 9,747.9
53			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
54	255	PREPARE FINAL DISTRICT PS&E PACKAGE	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
55	255.2	Final District PS&E Package	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,952.00	\$ -	\$ -	\$ -	\$ 1,952.00	\$ 3,298.49	\$ 420.04	\$ 5,670.53	\$ 6,416.2
56	255.4	Resident Engineer's Pending File	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 976.00	\$ -	\$ -	\$ -	\$ 976.00	\$ 1,649.24	\$ 210.02	\$ 2,835.26	\$ 3,208.13

Contract: 22-1002727			Date: 5/20/2022															
Detail Sheet																		
Task Description					Consultant													
0					EXP U.S. Services, Inc.													
A	B	C			D1	E1	G1	H1	I1	J1	K1	L1	M1	AI1	AJ	AK	AL	AM
					\$ 117.80	\$ 111.68	\$ 50.58	\$ 115.24	\$ 69.70	\$ 48.80	\$ 48.80	\$ 54.65	\$ 40.55					
Row	WBS Number	Drawing or Item of Work - Titles			Project Manager	QC Reviewer	Highway Engineering Lead	Drainage Engineering Lead	Traffic Engineer	Engineer/Designer	Engineer/Designer	Engineer/Designer	Engineer/Designer	Direct Labor Total	Overhead Cost	Fee	Total Labor Costs	Escalated Total Labor Cost
57					\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
58	260	PREPARE CONTRACT BID DOCUMENTS			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
59	260.8	Draft Contract Ready			\$ -	\$ -	\$ 404.64	\$ -	\$ 557.60	\$ 1,171.20	\$ -	\$ -	\$ -	\$ 2,133.44	\$ 3,605.09	\$ 459.08	\$ 6,197.61	\$ 7,012.61
60					\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
61	270	CONSTRUCTION ENGINEERING			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
62	270.2	Construction Technical Support			\$ 942.40	\$ -	\$ 404.64	\$ -	\$ 557.60	\$ 780.80	\$ 390.40	\$ -	\$ 324.40	\$ 3,400.24	\$ 5,745.73	\$ 731.68	\$ 9,877.64	\$ 11,176.64
200					\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
					\$ 21,204.00	\$ -	\$ 14,668.20	\$ 921.92	\$ 30,389.20	\$ 27,913.60	\$ 976.00	\$ 12,897.40	\$ 4,379.40					
		Total Hours												\$ 113,349.72	\$ 191,538.36	\$ 24,391.05	\$ 329,279.12	\$ 372,582.41

22-1002727

Cost/Price Form for Cost Plus Fixed Fee RFP

Consultant David Evans and Associates, Inc. (Landscape Architecture)Contract No. 22-1002727Date 5/20/2022

Direct Labor Classification/Title	Key Personal	Hours	Labor Rate Range		Average Hourly Rate	Total Direct Labor
			Low	High		
Senior Landscape Architect	Kim S. Rhodes	10	79.00	86.00	\$82.12	\$821.20
Landscape Arch. and QA/QC	Todd Holmes	9	57.00	65.00	\$60.00	\$540.00
Senior Landscape Designer	Danny Wang	34	45.00	52.00	\$46.84	\$1,592.56
Landscape Designer	Rachel Wells	36	33.00	40.00	\$34.50	\$1,242.00
Senior Irrigation Designer	Jon-sen Oen	56	45.00	51.00	\$46.46	\$2,601.76
Irrigation Designer		40	33.00	39.00	\$36.00	\$1,440.00
Landscape Cadd		4	31.00	37.00	\$34.00	\$136.00
Administration		0	34.00	42.00	\$37.00	\$0.00
Accounting		6	33.00	40.00	\$36.00	\$216.00
		0			\$0.00	\$0.00
		0			\$0.00	\$0.00

Labor Costs

a) Subtotal Direct Labor Costs	\$ 8,589.52
b) Anticipated Salary Increases (see page 2 for sample)	\$ 64.97
c) TOTAL DIRECT LABOR COSTS [(a)+(b)]	\$ 8,654.49

Fringe Benefits

d) Fringe Benefits (Rate <u>61.740%</u> %)	e) Total Fringe Benefits [(c)x(d)]	\$ 5,343.28
--------------------------------------------	-------------------------------------------	-------------

Indirect Costs

f) Overhead (Rate <u>115.480%</u> %)	g) Overhead [(c)x (f)]	\$ 9,994.21
h) General and Administrative (Rate <u>0.400%</u> %)	i) Gen & Admin [(c) x (h)]	\$ 34.62
j) Total Indirect Costs [(g)+(i)]		\$ 10,028.83

Fixed Fee (Profit)

n) (Rate <u>8.00%</u> %)	k) Fixed fee [(c) + (e) + (j)] x (n)	\$ 1,922.13
--------------------------	-----------------------------------------------	-------------

Total Loaded Labor Costs

\$ 25,948.73

Other Direct Costs (ODC)

l) Travel/ Mileage Costs (supported by consultant actual costs)	\$ 300.00
m) Equipment Rental and Supplies (itemize)	\$
n) Printing /Repro/Delivery Costs	\$ 200.00
o) Subconsultant Costs (attach detailed cost proposal in same format as prime - artist consultant estimate for each subconsultant)	\$
p) Total Other Direct Costs [(l) + (m) + (n) + (o)]	\$ 500.00

Outside Services

Company	Labor	Fee	ODC's	Total
				\$0.00
				\$0.00
				\$0.00
				\$0.00
				\$0.00
				\$0.00

q) **Total Outside Services** \$ -**Total cost** [(c) + (e) + (j) + (k) + (p)+(q)] \$ 26,448.73**Notes:**

- Employees subject to prevailing wage requirements to be marked with an *.

22-1002727
Form 348-10-H Cost Proposal
Actual Cost- Plus-Fixed Fee or Lump Sum (Firm Fixed Price) Contracts

Consultant David Evans and Associates, Inc. Contract No. 22-1002727 Date 5/20/2022

1. Calculate average hourly rate for 1st year of contract (Direct Labor Subtotal divided by total hours)

Direct Labor Subtotal Per Cost Proposal	Total Hours cost Proposal	Avg Hourly Rate	5year Contract Duration
\$ 8,589.52 /	195	= \$ 44.05	Year 1 avg Hourly rate

2. Calculate hourly rate for all years (increase the Average Hourly rate for a year by proposed escalation%)

Average hourly rate	Proposed Escalation			
Year 1 \$ 44.05 +	0%	=	\$ 44.05	Year 2 Avg Hourly Rate
Year 2 \$ 44.05 +	3%	=	\$ 45.37	Year 3 Avg Hourly Rate
Year 3 \$ 45.37 +	3%	=	\$ 46.73	Year 4 Avg Hourly Rate
Year 4 \$ 46.73 +	3%	=	\$ 48.13	Year 5 Avg Hourly Rate

3. Calculate estimated hour per year (multiply estimate % each year by total hours)

Estimated % Completed Each year	Total Hours Per Cost Proposal	Total Hours per Year	
Year 1 55.0% *	195	= 107.3	Estimated Hours Year 1
Year 2 25.0% *	195	= 48.8	Estimated Hours Year 2
Year 3 15.0% *	195	= 29.3	Estimated Hours Year 3
Year 4 5.0% *	195	= 9.8	Estimated Hours Year 4
Year 5	195	= 0.0	Estimated Hours Year 5
Total 100.0%	Total	= 195	

4. Calculate Total Costs including Escalation (multiply average hourly rate by the number hours)

Avg Hourly Rate (Calculated above)	Estimated hours (Calculated above)	Cost Per Year	
Year 1 \$ 44.05 *	107.3	= \$ 4,724.36	Estimated Hours Year 1
Year 2 \$ 44.05 *	48.8	= \$ 2,147.44	Estimated Hours Year 2
Year 3 \$ 45.37 *	29.3	= \$ 1,327.07	Estimated Hours Year 3
Year 4 \$ 46.73 *	9.8	= \$ 455.62	Estimated Hours Year 4
Year 5 \$ 48.13 *	0.0	= \$ -	Estimated Hours Year 5
Total Direct Labor Cost with Escalation =		\$ 8,654.49	
Direct Labor Subtotal before Escalation =		\$ 8,589.52	
Estimated Total of Direct Labor Salary Increase =		\$ 64.97	Transferred to page 1

Notes:

- This assumes that one year will be worked at the rate on the cost proposal before salary increases are granted.
- This escalation calculation is for determining the total contract amount only. The actual allowable escalation is per Contract Section ????
- Estimated yearly percent completed from resource loaded schedule

Contract: 22-1002727

Date: 5/20/2022

Detail Sheet													
Task Description			Consultant										
			David Evans and Associates, Inc. (Landscape Architecture)										
A	B	C	D	E	F	G	H	I	J	K	L	M	AI
Row	WBS Number	Drawing or Item of Work - Titles	Senior Landscape Architect	Landscape Arch. and QA/QC	Senior Landscape Designer	Landscape Designer	Senior Irrigation Designer	Irrigation Designer	Landscape Cadd	Administration	Accounting	0	Total Hours
1	2.100.10	COORDINATION AND MEETINGS	2		6		4				2		14
2													0
3	2.160.10.30	LANDSCAPE CONCEPT PLANS											0
4													0
5	2.165.10-2	VISUAL IMPACT ASSESSMENT - Omitted											0
6													0
7	3.230-1	DRAFT PLANS, SPECIFICATIONS AND ESTIMATE (PS&E)											0
8		Planting Plans	2	2	8	32							44
9		Irrigation Plan	2	2			24	40					68
10		Agency Review (Submittal & Plan Check)	1	1	8		16		4				30
11		Wall Aesthetics (Final Plans)											0
12													0
13	3.230-2	DRAFT SPECIFICATIONS AND QUANTITIES AND ESTIMATES	1	2	4		4						11
14													0
15	3.225-1	FINAL PS&E PACKAGE	2	2	8	4	8				2		26
16													0
17	3.27	CONSTRUCTION SUPPORT									2		2
Total Hours			10	9	34	36	56	40	4	0	6	0	195

Attachment: Exhibit B 22-1002727_EXP Final Cost Proposal [Revision 1] (8562 : Award Design Services Contract No. 22-1002727 for State

Contract: 22-1002727			Date: 5/20/2022														
Task Description			Consultant														
0			David Evans and Associates, Inc. (Landscape Architecture)														
A	B	C	D1	E1	F1	G1	H1	I1	J1	K1	L1	M1	AI1	AJ	AK	AL	AM
Row	WBS Number	Drawing or Item of Work - Titles	\$ 82.12	\$ 60.00	\$ 46.84	\$ 34.50	\$ 46.46	\$ 36.00	\$ 34.00	\$ 37.00	\$ 36.00	\$ -					
			Senior Landscape Architect	Landscape Arch. and QA/QC	Senior Landscape Designer	Landscape Designer	Senior Irrigation Designer	Irrigation Designer	Landscape Cadd	Administration	Accounting	0	Direct Labor Total	Overhead Cost	Fee	Total Labor Costs	Escalated Total Labor Cost
1	2.100.10	COORDINATION AND MEETINGS	\$ 164.24	\$ -	\$ 281.04	\$ -	\$ 185.84	\$ -	\$ -	\$ -	\$ 72.00	\$ -	\$ 703.12	\$ 1,248.88	\$ 156.16	\$ 2,108.16	\$ 2,124.17
2			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
3	2.160.10.30	LANDSCAPE CONCEPT PLANS	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
4			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
5	2.165.10-2	VISUAL IMPACT ASSESSMENT - Omitted	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
6			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
7	3.230-1	DRAFT PLANS, SPECIFICATIONS AND ESTIMATE (PS&E)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
8		Planting Plans	\$ 164.24	\$ 120.00	\$ 374.72	\$ 1,104.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,762.96	\$ 3,131.37	\$ 391.55	\$ 5,285.88	\$ 5,325.88
9		Irrigation Plan	\$ 164.24	\$ 120.00	\$ -	\$ -	\$ 1,115.04	\$ 1,440.00	\$ -	\$ -	\$ -	\$ -	\$ 2,839.28	\$ 5,043.13	\$ 630.59	\$ 8,513.00	\$ 8,577.40
10		Agency Review (Submittal & Plan Check)	\$ 82.12	\$ 60.00	\$ 374.72	\$ -	\$ 743.36	\$ -	\$ 136.00	\$ -	\$ -	\$ -	\$ 1,396.20	\$ 2,479.93	\$ 310.09	\$ 4,186.22	\$ 4,217.88
11		Wall Aesthetics (Final Plans)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
12			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
13	3.230-2	DRAFT SPECIFICATIONS AND QUANTITIES AND ESTIMATES	\$ 82.12	\$ 120.00	\$ 187.36	\$ -	\$ 185.84	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 575.32	\$ 1,021.88	\$ 127.78	\$ 1,724.98	\$ 1,738.00
14			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
15	3.225-1	FINAL PS&E PACKAGE	\$ 164.24	\$ 120.00	\$ 374.72	\$ 138.00	\$ 371.68	\$ -	\$ -	\$ -	\$ 72.00	\$ -	\$ 1,240.64	\$ 2,203.62	\$ 275.54	\$ 3,719.81	\$ 3,747.94
16			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
17	3.27	CONSTRUCTION SUPPORT	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 72.00	\$ -	\$ 72.00	\$ 127.89	\$ 15.99	\$ 215.88	\$ 217.55
Total Hours			\$ 821.20	\$ 540.00	\$ 1,592.56	\$ 1,242.00	\$ 2,601.76	\$ 1,440.00	\$ 136.00	\$ -	\$ 216.00	\$ -	\$ 8,589.52	\$ 15,256.71	\$ 1,907.70	\$ 25,753.92	\$ 25,948.72

tion 1] (8562 : Award Design Services Contract No. 22-1002727 for State

22-1002727
SR-210 Waterman Ave IC
Cost/Price Form for Cost Plus Fixed Fee

Consultant **ICF Jones & Stokes, Inc.**Contract No. **22-1002727**Date **5/20/2022**

Direct Labor Classification/Title	Key Personal	Hours	Labor Rate Range		Actual Hourly Rate	Total Direct Labor
			Low	High		
Proj Dir	Calvert, Brian	8	74.15	101.67	\$100.58	\$804.64
Proj Dir	Morgan, Harcourt	63	74.15	101.67	\$86.29	\$5,436.27
Sr Consult I	Garcia, Johnnie	16	47.12	49.12	\$47.98	\$767.68
Sr Consult II	Irvin, Elizabeth	20	49.50	54.09	\$54.09	\$1,081.80
Sr Consult III	Ban, Jennifer	0	56.66	60.95	\$57.92	\$0.00
Sr Tech Analyst	Hardie, Jon	2	74.63	76.98	\$76.92	\$153.84
Sr Tech Analyst	Higginson, Jonathan	0	74.63	76.98	\$76.92	\$0.00
Assoc Consult II	Rzeszutko, Jakob	0	35.83	41.23	\$37.69	\$0.00
Assoc Consult III	Barrera, Mario	2	41.15	46.00	\$45.58	\$91.16
Tech Dir	Lay, Keith	48	77.98	90.51	\$84.86	\$4,073.28
Asst Consult	Abeywickrema, Dinu	88	32.41	43.50	\$33.65	\$2,961.20
Assoc Consult II	Sukola, Katrina	2	35.83	41.23	\$37.50	\$75.00
Mng Consult	Hoisington, Gregory	6	62.92	68.28	\$66.55	\$399.30
Sr Consult II	Richards, Phillip	8	49.50	54.09	\$50.52	\$404.16
Sr Consult I	Buscombe, Brittany	10	47.12	49.12	\$49.12	\$491.20
Assoc Consult III	Martin, Colleen	55	41.15	46.00	\$41.15	\$2,263.25
Proj Dir	Crawford, Karen	26	74.15	101.67	\$75.08	\$1,952.08
Sr Consult III	Vargas, Benjamin	122	56.66	60.95	\$60.50	\$7,381.00
Asst Consult	Pham, Peter	60	32.41	43.50	\$32.41	\$1,944.60
Assoc Consult II	Downs, Lauren	24	35.83	41.23	\$40.89	\$981.36
Asst Consult	Roderick, Margaret	40	32.41	43.50	\$35.32	\$1,412.80
Admin Assistant	Finance Project Administrator	10	23.90	39.48	\$30.00	\$300.00

Labor Costs

a) Subtotal Direct Labor Costs	\$	\$32,974.62
b) Anticipated Salary Increases (see page 2 for sample)	\$	696.77
c) TOTAL DIRECT LABOR COSTS [(a)+(b)]	\$	33,671.39

Fringe Benefits

d) Fringe Benefits (Rate 34.63% %)	e) Total Fringe Benefits [(c)x(d)]	\$	11,660.40
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Indirect Costs

f) Overhead (Rate 130.11% %)	g) Overhead [(c)x (f)]	\$	43,809.85
h) General and Administrative (Rate 6.00% %)	i) Gen & Admin [(c) x (h)]	\$	2,020.28
j) Total Indirect Costs [(g)+(i)]		\$	45,830.13

Fixed Fee (Profit)

n) (Rate 8.00% %)	k) Fixed fee [(c) + (e) + (j)] x (n)	\$	7,292.95
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Total Loaded Labor Costs**98,454.87****Other Direct Costs (ODC)**

l) Travel/ Mileage Costs (supported by consultant actual costs)	\$	250.00
m) Equipment Rental and Supplies (itemize)	\$	-
n) Printing/Repro/Postage/Delivery Costs	\$	250.00
o) Records Search / Project Supplies	\$	1,300.00
consultant estimate for each subconsultant		

p) Total Other Direct Costs [(l) + (m) + (n) + (o)]	\$	1,800.00
------------------------------------------------------------	----	----------

Outside Services

Company	Labor	Fee	ODC's	Total
			.	\$0.00
				\$0.00
				\$0.00

q) Total Outside Services	\$	-
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Total cost [(c) + (e) + (j) + (k) + (p)+(q)]	\$	100,254.87
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Notes:

- Employees subject to prevailing wage requirements to be marked with an *.

22-1002727
Form 348-10-H Cost Proposal
Actual Cost- Plus-Fixed Fee or Lump Sum (Firm Fixed Price) Contracts

Consultant ICF Jones & Stokes, Inc. Contract No. 22-1002727 Date 5/20/2022

1. Calculate average hourly rate for 1st year of contract (Direct Labor Subtotal divided by total hours)

Direct Labor Subtotal Per Cost Proposal	Total Hours cost Proposal	Avg Hourly Rate	5year Contract Duration
\$ 32,974.62 /	610	= \$ 54.06	Year 1 avg Hourly rate

2. Calculate hourly rate for all years (increase the Average Hourly rate for a year by proposed escalation%)

Average hourly rate	Proposed Escalation				
Year 1 \$ 54.06 +	3%	=	\$ 55.68	Year 2 Avg Hourly Rate	
Year 2 \$ 55.68 +	3%	=	\$ 57.35	Year 3 Avg Hourly Rate	
Year 3 \$ 57.35 +	3%	=	\$ 59.07	Year 4 Avg Hourly Rate	
Year 4 \$ 59.07 +	3%	=	\$ 60.84	Year 5 Avg Hourly Rate	

3. Calculate estimated hour per year (multiply estimate % each year by total hours)

Estimated % Completed Each year	Total Hours Per Cost Proposal	Total Hours per Year	
Year 1 40.0% *	610	= 244.0	Estimated Hours Year 1
Year 2 50.0% *	610	= 305.0	Estimated Hours Year 2
Year 3 10.0% *	610	= 61.0	Estimated Hours Year 3
Year 4 0.0% *	610	= 0.0	Estimated Hours Year 4
Year 5 0.0% *	610	= 0.0	Estimated Hours Year 5
Total 100.0%	Total	= 610	

4. Calculate Total Costs including Escalation (multiply average hourly rate by the number hours)

Avg Hourly Rate (Calculated above)	Estimated hours (Calculated above)	Cost Per Year	
Year 1 \$ 54.06 *	244.0	= \$ 13,190.64	Estimated Hours Year 1
Year 2 \$ 55.68 *	305.0	= \$ 16,982.40	Estimated Hours Year 2
Year 3 \$ 57.35 *	61.0	= \$ 3,498.35	Estimated Hours Year 3
Year 4 \$ 59.07 *	0.0	= \$ -	Estimated Hours Year 4
Year 5 \$ 60.84 *	0.0	= \$ -	Estimated Hours Year 5
Total Direct Labor Cost with Escalation =		\$ 33,671.39	
Direct Labor Subtotal before Escalation =		\$ 32,974.62	
Estimated Total of Direct Labor Salary Increase =		\$ 696.77	Transferred to page 1

Notes:

- This assumes that one year will be worked at the rate on the cost proposal before salary increases are granted.
- This escalation calculation is for determining the total contract amount only. The actual allowable escalation is per Contract Section ????
- Estimated yearly percent completed from resource loaded schedule

Contract:			22-1002727		Date:		5/20/2022																
Detail Sheet																							
Task Description				Consultant																			
				ICF Jones & Stokes, Inc.																			
A	B	C		D	E	F	G	I	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	AI
Row	WBS Number	Drawing or Item of Work - Titles		Calvert, Brian	Morgan, Harcourt	Garcia, Johnnie	Irvin, Elizabeth	Hardie, Jon	Barrera, Mario	Lay, Keith	Abeywickrema, Dinu	Sukola, Katrina	Holsington, Gregory	Richards, Phillip	Buscombe, Brittany	Martin, Colleen	Crawford, Karen	Vargas, Benjamin	Pham, Peter	Downs, Lauren	Roderick, Margaret	Finance Project Administrator	Total Hour
1		Task 2.100.10-1 -- Coordination and Meetings		8.0	40.0																	10.0	58.0
2		Task 2.160.10.80 -- Geotechnical Studies Preliminary Materials Report			10.0	4.0	2.0	2.0	2.0	2.0		2.0	2.0				2.0						28.0
3		Task 2.165.10 -- General Environmental Studies																					0.0
4		Task 2.165.10-2 -- Visual Impact Analysis																					0.0
5		Task 2.165.10-3 -- Noise Study																					0.0
6		Task 2.165.10-4 -- Air Quality Study			1.0		2.0			46.0	88.0												137.0
7		Task 2.165.10-45 -- Water Quality Studies																					0.0
8		Task 2.165.15-1 -- Natural Environment Study			1.0		6.0						4.0	8.0	10.0	55.0							84.0
9		Task 2.165.20 -- Cultural Resources Studies			1.0	12.0	8.0										24.0	122.0	60.0	24.0	40.0		297.0
10		Task 2.165.25.15 -- Categorical Exemption/Categorical Exclusion			8.0		2.0																10.0
11		Task 3.180.15-10 -- Notice of Exemption			2.0																		2.0
12																							0.0
201																							0.0
		Total Hours		8.0	63.0	16.0	20.0	2.0	2.0	48.0	88.0	2.0	6.0	8.0	10.0	55.0	26.0	122.0	60.0	24.0	40.0	10.0	610.0

62 : Award Design Services Contract No. 22-1002727 for State

Contract: 22-1002727			Date: 5/20/2022													
Detail Sheet																
Task Description			Consultant													
0			ICF Jones & Stokes, Inc.													
A	B	C	D1	E1	G1	H1	I1	J1	K1	L1	M1	AI1	AJ	AK	AL	AM
			\$ 100.58	\$ 86.29	\$ 54.09	\$ 57.92	\$ 76.92	\$ 76.92	\$ 37.69	\$ 45.58	\$ 84.86		170.74%	8.00%		
Row	WBS Number	Drawing or Item of Work - Titles	Proj Dir	Proj Dir	Sr Consult II	Sr Consult III	Sr Tech Analyst	Sr Tech Analyst	Assoc Consult II	Assoc Consult III	Tech Dir	Direct Labor Total	Overhead Cost	Fee	Total Labor Costs	Escalated Total Labor Cost
1		Task 2.100.10-1 -- Coordination and Meetings	\$ 804.64	\$ 3,451.60	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,556.24	\$ 7,779.32	\$ 986.85	\$ 13,322.41	\$ 13,603.92
2		Task 160.10.80 -- Geotechnical Studies Preliminary Materials Report	\$ -	\$ 862.90	\$ 108.18	\$ -	\$ 153.84	\$ -	\$ -	\$ 91.16	\$ 169.72	\$ 1,935.98	\$ 3,305.49	\$ 419.32	\$ 5,660.79	\$ 5,780.40
3		Task 2.165.10 -- General Environmental Studies	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
4		Task 2.165.10-2 -- Visual Impact Analysis	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
5		Task 2.165.10-3 -- Noise Study	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
6		Task 2.165.10-4 -- Air Quality Study	\$ -	\$ 86.29	\$ 108.18	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,903.56	\$ 7,059.23	\$ 12,052.93	\$ 1,528.97	\$ 20,641.13	\$ 21,077.29
7		Task 2.165.10-45 -- Water Quality Studies	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
8		Task 2.165.15-1 -- Natural Environment Study	\$ -	\$ 86.29	\$ 324.54	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,835.64	\$ 6,548.97	\$ 830.77	\$ 11,215.38	\$ 11,452.37
9		Task 2.165.20 -- Cultural Resources Studies	\$ -	\$ 86.29	\$ 432.72	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 14,616.45	\$ 24,956.13	\$ 3,165.81	\$ 42,738.38	\$ 43,641.46
10		Task 2.165.25.15 -- Categorical Exemption/Categorical Exclusion	\$ -	\$ 690.32	\$ 108.18	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 798.50	\$ 1,363.36	\$ 172.95	\$ 2,334.81	\$ 2,384.14
11		Task 3.180.15-10 -- Notice of Exemption	\$ -	\$ 172.58	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 172.58	\$ 294.66	\$ 37.38	\$ 504.62	\$ 515.29
12			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
201			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Hours			\$ 804.64	\$ 5,436.27	\$ 1,081.80	\$ -	\$ 153.84	\$ -	\$ -	\$ 91.16	\$ 4,073.28	\$ 32,974.62	\$ 56,300.87	\$ 7,142.04	\$ 96,417.53	\$ 98,454.86

22-1002727

Cost/Price Form for Cost Plus Fixed Fee

1 Preliminary Materials Report & Geotechnical Design Report, 1 Final Materials Report & Geotechnical Design Report & Environmental

Consultant **Converse Consultants**Contract No. **22-1002727**Date **5/20/2022**

Direct Labor Classification/Title	Key Personal	Hours	Labor Rate Range		Actual Hourly Rate	Total Direct Labor
			Low	High		
Managing Officer	Norman Eke	4	95.00	100.00	\$97.50	\$390.00
Principal Professional	Laura Tanaka	6	65.00	65.00	\$65.00	\$390.00
Senior Professional	Michael Van Fleet	32	40.00	50.00	\$45.00	\$1,440.00
Senior Professional	John Ziegler	0	40.00	50.00	\$45.00	\$0.00
Sr. Staff Scientist	Spencer Wagner	20	30.00	40.00	\$35.00	\$700.00
Staff Scientist	Kaspar Witingner	30	20.00	30.00	\$25.00	\$750.00
Staff Scientist	Katherine Thomas	2	20.00	30.00	\$25.00	\$50.00
Clerical	Ann Marie Maldonado	0	15.00	25.00	\$20.00	\$0.00
Word Processor	Jennifer Loeppky	0	15.00	25.00	\$20.00	\$0.00
Principal Engineer/Project Director	Hashmi Quazi	10	133.82	133.82	\$133.82	\$1,338.20
Lead Engineer	Ram Ariram	30	57.70	57.70	\$57.70	\$1,731.00
QA/QC Engineer	Gamini Weeratunga	16	100.00	100.00	\$100.00	\$1,600.00
Senior Engineer	Zafar Ahmed	0	75.00	75.00	\$75.00	\$0.00
Lead Geologist	Robert Gregorek	16	65.00	65.00	\$65.00	\$1,040.00
Laboratory Supervisor	Antonio Maciel	0	35.00	40.00	\$37.50	\$0.00
Office/Field Engineer	Mahmoud Suliman	140	33.00	35.00	\$34.00	\$4,760.00
Office/Field Geologist	Catherine Nelson	16	32.80	32.80	\$32.80	\$524.80
Word Processor	Kathy Von Glahn	0	25.00	25.00	\$25.00	\$0.00
Billing	Danielle Ertl	0	31.50	31.50	\$31.50	\$0.00
Drafting	Yadira Guevara Carmona	20	24.00	25.00	\$24.50	\$490.00

Labor Costs

a) Subtotal Direct Labor Costs	\$	\$15,204.00
b) Anticipated Salary Increases (see page 2 for sample)	\$	-
c) TOTAL DIRECT LABOR COSTS [(a)+(b)]	\$	\$15,204.00

Fringe Benefits

d) Fringe Benefits (Rate 33.560% %)	e) Total Fringe Benefits [(c)x(d)]	\$	5,102.46
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Indirect Costs

f) Overhead (Rate 103.620% %)	g) Overhead [(c)x (f)]	\$	15,754.38
h) General and Administrative (Rate 22.770% %)	i) Gen & Admin [(c) x (h)]	\$	3,461.95
j) Total Indirect Costs [(g)+(i)]		\$	19,216.33

Fixed Fee (Profit)

n) (Rate 8.00% %)	k) Fixed fee [(c) + (e) + (j)] x (n)	\$	3,161.82
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Total Loaded Labor Costs

42,684.61

Other Direct Costs (ODC)

l) Travel/ Mileage Costs (supported by consultant actual costs) (env)	\$	300.00
m) Equipment Rental and Supplies (itemize) (env)	\$	200.00
n) Laboratory Testing (Geo)	\$	6,810.00
o) Subconsultant Costs (attach detailed cost proposal in same format as prime consultant estimate for each subconsultant)	\$	
p) Total Other Direct Costs [(l) + (m) + (n) + (o)]	\$	7,310.00

Outside Services

Company	Labor	Fee	ODC's	Total
EDR		\$2,100.00	.	\$2,100.00
Interphase Environmental				\$0.00
Jones Environmental		\$2,265.00		\$2,265.00
Roadway Construction Services		\$500.00		\$500.00
2R Drilling		\$13,728.00		\$13,728.00
City & Caltrans Permit Fees		\$0.00		\$0.00
Utilocator		\$2,000.00		\$2,000.00
Traffic Control		\$2,200.00		\$2,200.00

q) **Total Outside Services** \$ 22,793.00**Total cost [(c) + (e) + (j) + (k) + (p)+(q)]** \$ 72,787.61

Notes:

- Employees subject to prevailing wage requirements to be marked with an *.

22-1002727
Form 348-10-H Cost Proposal
Actual Cost- Plus-Fixed Fee or Lump Sum (Firm Fixed Price) Contracts

Consultant Converse Consultants Contract No. 22-1002727 Date 5/20/2022

1. Calculate average hourly rate for 1st year of contract (Direct Labor Subtotal divided by total hours)

Direct Labor Subtotal Per Cost Proposal	Total Hours cost Proposal	Avg Hourly Rate	5year Contract Duration
\$ 10,280.00 /	342 =	\$ 30.06	Year 1 avg Hourly rate

2. Calculate hourly rate for all years (increase the Average Hourly rate for a year by proposed escalation%)

Average hourly rate	Proposed Escalation				
Year 1 \$ 30.06 +	0%	=	\$ 30.06	Year 2 Avg Hourly Rate	
Year 2 \$ 30.06 +	3%	=	\$ 30.96	Year 3 Avg Hourly Rate	
Year 3 \$ 30.96 +	3%	=	\$ 31.89	Year 4 Avg Hourly Rate	
Year 4 \$ 31.89 +	3%	=	\$ 32.85	Year 5 Avg Hourly Rate	

3. Calculate estimated hour per year (multiply estimate % each year by total hours)

Estimated % Completed Each year	Total Hours Per Cost Proposal	Total Hours per Year	
Year 1 90.0%	342 =	308.0	Estimated Hours Year 1
Year 2 10.0%	342 =	34.0	Estimated Hours Year 2
Year 3 0.0%	342 =	0.0	Estimated Hours Year 3
Year 4 0.0%	342 =	0.0	Estimated Hours Year 4
Year 5 0.0%	342 =	0.0	Estimated Hours Year 5
Total 100.0%	Total =	342.0	

4. Calculate Total Costs including Escalation (multiply average hourly rate by the number hours)

Avg Hourly Rate (Calculated above)	Estimated hours (Calculated above)	Cost Per Year	
Year 1 \$ 30.06 *	308.0 =	\$ 9,258.00	Estimated Hours Year 1
Year 2 \$ 30.06 *	34.0 =	\$ 1,022.00	Estimated Hours Year 2
Year 3 \$ 30.96 *	0.0 =	\$ -	Estimated Hours Year 3
Year 4 \$ 31.89 *	0.0 =	\$ -	Estimated Hours Year 4
Year 5 \$ 32.85 *	0.0 =	\$ -	Estimated Hours Year 5
Total Direct Labor Cost with Escalation =		\$ 10,280.00	
Direct Labor Subtotal before Escalation =		\$ 10,280.00	
Estimated Total of Direct Labor Salary Increase =		\$ -	Transferred to page 1

Notes:

- This assumes that one year will be worked at the rate on the cost proposal before salary increases are granted.
- This escalation calculation is for determining the total contract amount only. The actual allowable escalation is per Contract Section ????
- Estimated yearly percent completed from resource loaded schedule

Contract:		22-1002727		Date:		5/20/2022		Detail Sheet																
Task Description			Consultant																					
			Converse Consultants																					
A	B	C	D	E	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X		
Row	WBS Number	Drawing or Item of Work - Titles	Managing Officer	Principal Professional	Seniorr Professional	Seniorr Professional	Sr. Staff Scientist	Staff Scientist	Staff Scientist	Clerical	Word Processor	Principal EngineerProject Director	Lead Engineer	QA/QC Engineer	Senior Engineer	Lead Geologist	Laboratory Supervisor	Office/Field Engineer	Office/Field Geologist	Word Processor	Billing	Drafting	Total Hour	
1		Initial Site Assessment	2.0	6.0	4.0		0.0	22.0	2.0	0.0	0.0												36	
2		ADL Survey	2.0	0.0	28.0		20.0			0.0	0.0												50	
4		Traffic Control						8.0															8	
5		Preliminary Material Report & Geotechnical Design Report										5.0	15.0	8.0		8.0		70.0	8.0			10.0	124	
6		Final Material Report & Geotechnical Design Report										5.0	15.0	8.0		8.0		70.0	8.0			10.0	124	
7																							0	
8																							0	
9																							0	
10																							0	
11																							0	
12																							0	
13																							0	
200																							0	
			4.0	6.0	32.0	0.0	20.0	30.0	2.0	0.0	0.0	10.0	30.0	16.0	0.0	16.0	0.0	140.0	16.0	0.0	0.0	20.0		
		Total Hours																					344	

Contract: 22-1002727			Date: 5/20/2022			Detail Sheet																												
Task Description					Consultant																													
0					Converse Consultants																													
A	B	C			D1	E1	G1	H1	I1	J1	K1	L1	M1	N1	O1	P1	Q1	R1	S1	T1	U1	V1	W1	X1	AI	AI1	AJ	AK	AL	AM				
Row	WBS Number	Drawing or Item of Work - Titles			\$ 97.50	\$ 65.00	\$ 45.00	\$ 45.00	\$ 35.00	\$ 25.00	\$ 25.00	\$ 20.00	\$ 20.00	\$ 133.82	\$ 57.70	\$ 100.00	\$ 75.00	\$ 65.00	\$ 37.50	\$ 34.00	\$ 32.80	\$ 25.00	\$ 31.50	\$ 24.50	Hours Total	Direct Labor Total	Overhead Cost	Fee	Total Labor Costs	Escalated Total Labor Cost				
					Managing Officer	Principal Professional	Senior Professional	Senior Professional	Sr. Staff Scientist	Staff Scientist	Staff Scientist	Clerical	Word Processor	Principal Engineer/Project Director	Lead Engineer	QA/QC Engineer	Senior Engineer	Lead Geologist	Laboratory Supervisor	Office/Field Engineer	Office/Field Geologist	Word Processor	Billing	Drafting										
1		Initial Site Assessment			\$ 195.00	\$ 390.00	\$ 180.00	\$ -	\$ -	\$ 550.00	\$ 50.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	36.0	\$ 1,365.00	\$ 2,183.32	\$ 283.87	\$ 3,832.18	\$ 3,832.18				
2		ADL Survey			\$ 195.00	\$ -	\$ 1,260.00	\$ -	\$ 700.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	50.0	\$ 2,155.00	\$ 3,446.92	\$ 448.15	\$ 6,050.08	\$ 6,050.08				
4		Traffic Control			\$ -	\$ -	\$ -	\$ -	\$ -	\$ 200.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	8.0	\$ 200.00	\$ 319.90	\$ 41.59	\$ 561.49	\$ 561.49				
5		Preliminary Material Report & Geotechnical Design Report			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 669.10	\$ 865.50	\$ 800.00	\$ -	\$ 520.00	\$ -	\$ 2,380.00	\$ 262.40	\$ -	\$ -	\$ 245.00	124.0	\$ 5,742.00	\$ 9,184.33	\$ 1,194.11	\$ 16,120.44	\$ 16,120.44				
6		Final Material Report & Geotechnical Design Report			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 669.10	\$ 865.50	\$ 800.00	\$ -	\$ 520.00	\$ -	\$ 2,380.00	\$ 262.40	\$ -	\$ -	\$ 245.00	124.0	\$ 5,742.00	\$ 9,184.33	\$ 1,194.11	\$ 16,120.44	\$ 16,120.44					
7					\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0.0	\$ -	\$ -	\$ -	\$ -	\$ -				
8					\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0.0	\$ -	\$ -	\$ -	\$ -	\$ -				
9					\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0.0	\$ -	\$ -	\$ -	\$ -	\$ -				
10					\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0.0	\$ -	\$ -	\$ -	\$ -	\$ -				
11					\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0.0	\$ -	\$ -	\$ -	\$ -	\$ -				
12					\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0.0	\$ -	\$ -	\$ -	\$ -	\$ -				
13					\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0.0	\$ -	\$ -	\$ -	\$ -	\$ -				
14					\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0.0	\$ -	\$ -	\$ -	\$ -	\$ -				
15					\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0.0	\$ -	\$ -	\$ -	\$ -	\$ -				
200					\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0.0	\$ -	\$ -	\$ -	\$ -	\$ -				
Total Hours					\$ 390.00	\$ 390.00	\$ 1,440.00	\$ -	\$ 700.00	\$ 750.00	\$ 50.00	\$ -	\$ -	\$ 1,338.20	\$ 1,731.00	\$ 1,600.00	\$ -	\$ 1,040.00	\$ -	\$ 4,760.00	\$ 524.80	\$ -	\$ -	\$ 490.00	342.0	\$ 15,204.00	\$ 24,318.80	\$ 3,161.82	\$ 42,684.62	\$ 42,684.62				

22-1002727
Cost/Price Form for Cost Plus Fixed Fee

Consultant Epic Land Solutions, Inc.Contract No. 22-1002727Date 5/20/2022

Direct Labor Classification/Title	Key Personal	Hours	Labor Rate Range		Actual Hourly Rate	Total Direct Labor
			Low	High		
Senior Regional Manager	Kari Anvick	16	72.12	72.12	\$72.12	\$1,153.92
Right of Way Agent	Yasmeen Flores	5	30.77	30.77	\$30.77	\$153.85
Senior GIS Analyst	Kelsey Kaszas	10	55.00	55.00	\$55.00	\$550.00
Utility Coordination Lead	Michael Mays	40	55.29	55.29	\$55.29	\$2,211.60
Utility Coordinator	Bernadette Salto	120	33.65	33.65	\$33.65	\$4,038.00
Budget & Financial Controls	Abigail Lopez	6	47.60	47.60	\$47.60	\$285.60
		0			\$0.00	\$0.00
		0			\$0.00	\$0.00
		0			\$0.00	\$0.00
		0			\$0.00	\$0.00

Labor Costs

a) Subtotal Direct Labor Costs	\$ 8,392.97
b) Anticipated Salary Increases (see page 2 for sample)	\$ 120.27
c) TOTAL DIRECT LABOR COSTS [(a)+(b)]	\$ 8,513.24

Fringe Benefits

d) Fringe Benefits (Rate <u>48.250%</u> %)	e) Total Fringe Benefits [(c)x(d)]	\$ 4,107.64
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Indirect Costs

f) Overhead (Rate <u>73.070%</u> %)	g) Overhead [(c)x (f)]	\$ 6,220.62
h) General and Administrative (Rate <u>43.610%</u> %)	i) Gen & Admin [(c) x (h)]	\$ 3,712.62
j) Total Indirect Costs [(g)+(i)]		\$ 9,933.24

Fixed Fee (Profit)

n) (Rate <u>8.00%</u> %)	k) Fixed fee [(c) + (e) + (j)] x (n)	\$ 1,804.33
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Total Loaded Labor Costs

24,358.45

Other Direct Costs (ODC)

l) Travel/ Mileage Costs (supported by consultant actual costs)	\$ 200.00
m) Property Ownership and Real Estate Data consultant estimate for each subconsultant	\$ 600.00

p) Total Other Direct Costs [(l) + (m) + (n) + (o)]	\$ 800.00
--------------------------------------------------------------	-----------

Outside Services

Company	Labor	Fee	ODC's	Total
				\$0.00
				\$0.00
				\$0.00
				\$0.00
				\$0.00
				\$0.00
				\$0.00

q) Total Outside Services	\$ -
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Total cost [(c) + (e) + (j) + (k) + (p)+(q)]	\$ 25,158.45
-----------------------------------------------------	--------------

Notes:

- Employees subject to prevailing wage requirements to be marked with an *.

22-1002727
Form 348-10-H Cost Proposal
Actual Cost- Plus-Fixed Fee or Lump Sum (Firm Fixed Price) Contracts

SR-210 Waterman Avenue
Interchange DEER, ED, PS&E, ROW.

Consultant Epic Land Solutions, Inc. Contract No. 22-1002727 Date 5/20/2022

1. Calculate average hourly rate for 1st year of contract (Direct Labor Subtotal divided by total hours)

Direct Labor Subtotal Per Cost Proposal	Total Hours cost Proposal	Avg Hourly Rate	5year Contract Duration
\$ 8,392.97 /	197 =	\$ 42.60	Year 1 avg Hourly rate

2. Calculate hourly rate for all years (increase the Average Hourly rate for a year by proposed escalation%)

Average hourly rate	Proposed Escalation			
Year 1 \$ 42.60 +	3%	=	\$ 43.88	Year 2 Avg Hourly Rate
Year 2 \$ 43.88 +	3%	=	\$ 45.20	Year 3 Avg Hourly Rate
Year 3 \$ 45.20 +	3%	=	\$ 46.56	Year 4 Avg Hourly Rate
Year 4 \$ 46.56 +	3%	=	\$ 47.96	Year 5 Avg Hourly Rate

3. Calculate estimated hour per year (multiply estimate % each year by total hours)

Estimated % Completed Each year	Total Hours Per Cost Proposal	Total Hours per Year	
Year 1 52.0% *	197 =	102.4	Estimated Hours Year 1
Year 2 48.0% *	197 =	94.6	Estimated Hours Year 2
Year 3 0.0% *	197 =	0.0	Estimated Hours Year 3
Year 4 0.0% *	197 =	0.0	Estimated Hours Year 4
Year 5 0.0% *	197 =	0.0	Estimated Hours Year 5
Total 100.0%	Total =	197	

4. Calculate Total Costs including Escalation (multiply average hourly rate by the number hours)

Avg Hourly Rate (Calculated above)	Estimated hours (Calculated above)	Cost Per Year	
Year 1 \$ 42.60 *	102.4 =	\$ 4,363.94	Estimated Hours Year 1
Year 2 \$ 43.88 *	94.6 =	\$ 4,149.29	Estimated Hours Year 2
Year 3 \$ 45.20 *	0.0 =	\$ -	Estimated Hours Year 3
Year 4 \$ 46.56 *	0.0 =	\$ -	Estimated Hours Year 4
Year 5 \$ 47.96 *	0.0 =	\$ -	Estimated Hours Year 5
Total Direct Labor Cost with Escalation =		\$ 8,513.24	
Direct Labor Subtotal before Escalation =		\$ 8,392.97	
Estimated Total of Direct Labor Salary Increase =		\$ 120.27	Transferred to page 1

Notes:

- This assumes that one year will be worked at the rate on the cost proposal before salary increases are granted.
- This escalation calculation is for determining the total contract amount only. The actual allowable escalation is per Contract Section ????
- Estimated yearly percent completed from resource loaded schedule

Contract:22-1002727

Date:5/20/2022

Detail Sheet													
Task Description			Consultant										
			Epic Land Solutions, Inc.										
A	B	C	D	E	F	G	H	I	J	K	L	M	AI
Row	WBS Number	Drawing or Item of Work - Titles	Senior Regional Manager	Right of Way Agent	Senior GIS Analyst	Utility Coordination Lead	Utility Coordinator	Budget & Financial Controls					Total Hours
1		Task 2.100.10 - Project Management (Meetings, File maintenance, Status reports, etc.)				16.0		6.0	0	0	0	0	22
2		Task 2.160.40 - Prepare Cost Estimates/ROW Data Sheets	10.0	5.0	10.0								25
3		Task 2.160.40 - Address Comments and Update ROW Data Sheet	6.0										6
4		Task 3.185-2-05 - Utility Coordination (35% PS&E)				8.0	56.0						64
5		Task 4.200 - Utility Coordination (65% & 100% PS&E & Caltrans Utility Cert)				16.0	64.0						80
6													0
200													0
Total Hours			16.0	5.0	10.0	40.0	120.0	6.0	0.0	0.0	0.0	0.0	197

Contract: 22-1002727			Date: 5/20/2022														
			Detail Sheet														
Task Description			Consultant														
0			Epic Land Solutions, Inc.														
A	B	C	D1	E1	G1	H1	I1	J1	K1	L1	M1	AI1	AJ	AK	AL	AM	
Row	WBS Number	Drawing or Item of Work - Titles	\$ 72.12	\$ 30.77	\$ 55.29	\$ 33.65	\$ 47.60	\$ -	\$ -	\$ -	\$ -						
			Senior Regional Manager	Right of Way Agent	Utility Coordination Lead	Utility Coordinator	Budget & Financial Controls										
			Direct Labor Total	Overhead Cost	Fee	Total Labor Costs	Escalated Total Labor Cost										
1		Task 2.100.10 - Project Management (Meetings, File maintenance, Status reports, etc.)	\$ -	\$ -	\$ 884.64	\$ -	\$ 285.60	\$ -	\$ -	\$ -	\$ -	\$ 1,170.24	\$ 1,930.08	\$ 248.03	\$ 3,348.34	\$ 3,396.32	
2		Task 2.160.40 - Prepare Cost Estimates/ROW Data Sheets	\$ 721.20	\$ 153.85	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,425.05	\$ 2,350.33	\$ 302.03	\$ 4,077.42	\$ 4,135.84	
3		Task 2.160.40 - Address Comments and Update ROW Data Sheet	\$ 432.72	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 432.72	\$ 713.69	\$ 91.71	\$ 1,238.12	\$ 1,255.86	
4		Task 3.185-2-05 - Utility Coordination (35% PS&E)	\$ -	\$ -	\$ 442.32	\$ 1,884.40	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,326.72	\$ 3,837.46	\$ 493.13	\$ 6,657.31	\$ 6,752.71	
5		Task 4.200 - Utility Coordination (65% & 100% PS&E & Caltrans Utility Cert)	\$ -	\$ -	\$ 884.64	\$ 2,153.60	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,038.24	\$ 5,010.97	\$ 643.94	\$ 8,693.15	\$ 8,817.71	
6			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
7			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
200			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
		Total Hours	\$ 1,153.92	\$ 153.85	\$ 2,211.60	\$ 4,038.00	\$ 285.60	\$ -	\$ -	\$ -	\$ -	\$ 8,392.97	\$ 13,842.53	\$ 1,778.84	\$ 24,014.34	\$ 24,358.44	

22-1002727
Cost/Price Form for Cost Plus Fixed Fee

Consultant CL Surveying and Mapping, Inc.Contract No. 22-1002727Date 5/20/2022

Direct Labor Classification/Title	Key Personal	Hours	Labor Rate Range		Actual Hourly Rate	Total Direct Labor
			Low	High		
QA/QC Oversight	Daniel Calvillo	6	75.00	75.00	\$75.00	\$450.00
Project Manager	Lam Le	14	75.00	75.00	\$75.00	\$1,050.00
Project Surveyor	Joe Deal	86	78.25	78.25	\$78.25	\$6,729.50
Party Chief*	TBD	36	55.26	55.26	\$55.26	\$1,989.36
Chainman*	TBD	36	51.28	51.28	\$51.28	\$1,846.08
		0			\$0.00	\$0.00
		0			\$0.00	\$0.00
		0			\$0.00	\$0.00
		0			\$0.00	\$0.00

Labor Costs

a) Subtotal Direct Labor Costs	\$	\$12,064.94
b) Anticipated Salary Increases (see page 2 for sample)	\$	36.03
c) TOTAL DIRECT LABOR COSTS [(a)+(b)]	\$	12,100.97

Fringe Benefits

d) Fringe Benefits (Rate <u>80.010%</u> %)	e) Total Fringe Benefits [(c)x(d)]	\$	9,681.99
--------------------------------------------	-------------------------------------------	----	----------

Indirect Costs

f) Overhead (Rate	<u>32.170%</u> %)	g) Overhead [(c)x (f)]	\$	<u>3,892.88</u>
h) General and Administrative (Rate	<u>32.170%</u> %)	i) Gen & Admin [(c) x (h)]	\$	<u>3,892.88</u>
j) Total Indirect Costs [(g)+(i)]			\$	7,785.76

Fixed Fee (Profit)

n) (Rate <u>8.00%</u> %)	k) Fixed fee [(c) + (e) + (j)] x (n)	\$	2,365.50
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Total Loaded Labor Costs

31,934.22

Other Direct Costs (ODC)

l) Travel/ Mileage Costs (supported by consultant actual costs)	\$	-
m) Equipment Rental and Supplies (itemize)	\$	-
n) Printing/Repro/Delivery Costs	\$	-
o) Subconsultant Costs (attach detailed cost proposal in same format as prime consultant estimate for each subconsultant)	\$	-

p) Total Other Direct Costs [(l) + (m) + (n) + (o)]	\$	-
--------------------------------------------------------------	----	---

Outside Services

Company	Labor	Fee	ODC's	Total
Inland Aerial Surveys, Inc.			\$8,000.00	\$8,000.00
				\$0.00
				\$0.00
				\$0.00
				\$0.00
				\$0.00
				\$0.00

q) Total Outside Services	\$	8,000.00
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Total cost [(c) + (e) + (j) + (k) + (p)+(q)]	\$	39,934.22
-----------------------------------------------------	----	-----------

Notes:

- Employees subject to prevailing wage requirements to be marked with an *.

22-1002727
Form 348-10-H Cost Proposal
Actual Cost- Plus-Fixed Fee or Lump Sum (Firm Fixed Price)
Contracts

Consultant CL Surveying and Mapping, Inc. Contract No. 22-1002727 Date 5/20/2022

1. Calculate average hourly rate for 1st year of contract (Direct Labor Subtotal divided by total hours)

Direct Labor Subtotal Per Cost Proposal	Total Hours cost Proposal	Avg Hourly Rate	5year Contract Duration
\$ 12,064.94 /	178	= \$ 67.78	Year 1 avg Hourly rate

2. Calculate hourly rate for all years (increase the Average Hourly rate for a year by proposed escalation%)

Average hourly rate	Proposed Escalation				
Year 1 \$ 67.78 +	0%	=	\$ 67.78	Year 2 Avg Hourly Rate	
Year 2 \$ 67.78 +	3%	=	\$ 69.81	Year 3 Avg Hourly Rate	
Year 3 \$ 69.81 +	3%	=	\$ 71.90	Year 4 Avg Hourly Rate	
Year 4 \$ 71.90 +	3%	=	\$ 74.06	Year 5 Avg Hourly Rate	

3. Calculate estimated hour per year (multiply estimate % each year by total hours)

Estimated % Completed Each year	Total Hours Per Cost Proposal	Total Hours per Year	
Year 1 80.0% *	178	= 142.4	Estimated Hours Year 1
Year 2 10.0% *	178	= 17.8	Estimated Hours Year 2
Year 3 10.0% *	178	= 17.8	Estimated Hours Year 3
Year 4 0.0% *	178	= 0.0	Estimated Hours Year 4
Year 5 0.0% *	178	= 0.0	Estimated Hours Year 5
Total 100.0%	Total	= 178	

4. Calculate Total Costs including Escalation (multiply average hourly rate by the number hours)

Avg Hourly Rate (Calculated above)	Estimated hours (Calculated above)	Cost Per Year	
Year 1 \$ 67.78 *	142.4	= \$ 9,651.87	Estimated Hours Year 1
Year 2 \$ 67.78 *	17.8	= \$ 1,206.48	Estimated Hours Year 2
Year 3 \$ 69.81 *	17.8	= \$ 1,242.62	Estimated Hours Year 3
Year 4 \$ 71.90 *	0.0	= \$ -	Estimated Hours Year 4
Year 5 \$ 74.06 *	0.0	= \$ -	Estimated Hours Year 5
Total Direct Labor Cost with Escalation =		\$ 12,100.97	
Direct Labor Subtotal before Escalation =		\$ 12,064.94	
Estimated Total of Direct Labor Salary Increase =		\$ 36.03	Transferred to page 1

Notes:

- This assumes that one year will be worked at the rate on the cost proposal before salary increases are granted.
- This escalation calculation is for determining the total contract amount only. The actual allowable escalation is per Contract Section ????
- Estimated yearly percent completed from resource loaded schedule

Contract: 22-1002727			Date: 5/20/2022									
Detail Sheet												
Task Description			Consultant									
Land Surveying Services			CL Surveying and Mapping, Inc.									
A	B	C	D	E	G	H	I	J	K	L	M	AI
Row	WBS Number	Drawing or Item of Work - Titles	QA/QC Oversight	Project Manager	Project Surveyor	Party Chief*	Chainman*	0	0	0	0	Total Hours
1	3.185-1	Aerial Topography - CL Survey Cost	1.0	1.0	2.0	12.0	12.0					28.0
2	3.185-1	Ground Conventional Topography	1.0	1.0	12.0	16.0	16.0					46.0
3	4.220-3	LandNet Survey	2.0	6.0	32.0	8.0	8.0					56.0
4	4.200-6	Monumentation and Record of Survey	2.0	6.0	40.0							48.0
5												0.0
66												0.0
67												0.0
68												0.0
69												0.0
200												0.0
			6.0	14.0	86.0	36.0	36.0	0.0	0.0	0.0	0.0	
		Total Hours										178.0

Contract: 22-1002727			Date: 5/20/2022														
Detail Sheet																	
Task Description			Consultant														
Land Surveying Services			CL Surveying and Mapping, Inc.														
A	B	C	D1	E1	G1	H1	I1	J1	K1	L1	M1	AI1	AJ	AK	AL	AM	
Row	WBS Number	Drawing or Item of Work - Titles	\$ 75.00	\$ 75.00	\$ 78.25	\$ 55.26	\$ 51.28	\$ -	\$ -	\$ -	\$ -		144.35%	8.00%			
			QA/QC Oversight	Project Manager	Project Manager	Project Surveyor	Party Chief*	Chainman*									
1	3.185-1	Aerial Topography - CL Survey Cost	\$ 75.00	\$ 75.00	\$ 156.50	\$ 663.12	\$ 615.36	\$ -	\$ -	\$ -	\$ -	\$ 1,584.98	\$ 2,287.92	\$ 309.83	\$ 4,182.73	\$ 4,195.22	
2	3.185-1	Ground Conventional Topography	\$ 75.00	\$ 75.00	\$ 939.00	\$ 884.16	\$ 820.48	\$ -	\$ -	\$ -	\$ -	\$ 2,793.64	\$ 4,032.62	\$ 546.10	\$ 7,372.36	\$ 7,394.38	
3	4.220-3	LandNet Survey	\$ 150.00	\$ 450.00	\$ 2,504.00	\$ 442.08	\$ 410.24	\$ -	\$ -	\$ -	\$ -	\$ 3,956.32	\$ 5,710.95	\$ 773.38	\$ 10,440.65	\$ 10,471.83	
4	4.200-6	Monumentation and Record of Survey	\$ 150.00	\$ 450.00	\$ 3,130.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,730.00	\$ 5,384.26	\$ 729.14	\$ 9,843.40	\$ 9,872.79	
5			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
200			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Total Hours			\$ 450.00	\$ 1,050.00	\$ 6,729.50	\$ 1,989.36	\$ 1,846.08	\$ -	\$ -	\$ -	\$ -	\$ 12,064.94	\$ 17,415.74	\$ 2,358.45	\$ 31,839.14	\$ 31,934.22	

22-1002727
Cost/Price Form for Cost Plus Fixed Fee

Consultant ECORP Consulting Inc.Contract No. 22-1002727Date 5/20/2022

Direct Labor Classification/Title	Key Personal	Hours	Labor Rate Range		Actual Hourly Rate	Total Direct Labor
			Low	High		
Principal Paleontologist		30	40.00	60.00	\$50.00	\$1,500.00
GIS		4	34.52	54.52	\$44.52	\$178.08
QA/QC		4	86.17	106.17	\$96.17	\$384.68
Production		2	21.00	41.00	\$31.00	\$62.00
		0			\$0.00	\$0.00
		0			\$0.00	\$0.00
		0			\$0.00	\$0.00
		0			\$0.00	\$0.00
		0			\$0.00	\$0.00
		0			\$0.00	\$0.00

40

Labor Costs

a) Subtotal Direct Labor Costs	\$ 2,124.76
b) Anticipated Salary Increases (see page 2 for sample)	\$ 6.40
c) TOTAL DIRECT LABOR COSTS [(a)+(b)]	\$ 2,131.16

Fringe Benefits

d) Fringe Benefits (Rate <u>69.34%</u> %)	e) Total Fringe Benefits [(c)x(d)]	\$ 1,477.75
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Indirect Costs

f) Overhead (Rate <u>35.83%</u> %)	g) Overhead [(c)x (f)]	\$ 763.59
h) General and Administrative (Rate <u>85.61%</u> %)	i) Gen & Admin [(c) x (h)]	\$ 1,824.49
j) Total Indirect Costs [(g)+(i)]		\$ 2,588.08

Fixed Fee (Profit)

n) (Rate <u>8.00%</u> %)	k) Fixed fee [(c) + (e) + (j)] x (n)	\$ 495.76
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Total Loaded Labor Costs6,692.75**Other Direct Costs (ODC)**

l) Travel/ Mileage Costs (supported by consultant actual costs)	\$ 57.25
m) Archival Records Search (actual)	\$ 250.00
n) Printing/Repro/Delivery Costs	\$
o) Subconsultant Costs (attach detailed cost proposal in same format as prime consultant estimate for each subconsultant)	\$
p) Total Other Direct Costs [(l) + (m) + (n) + (o)]	\$ 307.25

Outside Services

Company	Labor	Fee	ODC's	Total
			.	\$0.00
				\$0.00
				\$0.00
				\$0.00
				\$0.00
				\$0.00
				\$0.00

q) **Total Outside Services** \$ -**Total cost** [(c) + (e) + (j) + (k) + (p)+(q)] \$ 7,000.00**Notes:**

- Employees subject to prevailing wage requirements to be marked with an *.

22-1002727
Form 348-10-H Cost Proposal
Actual Cost- Plus-Fixed Fee or Lump Sum (Firm Fixed Price) Contracts

Consultant ECORP Consulting Inc. Contract No. 22-1002727 Date 5/20/2022

1. Calculate average hourly rate for 1st year of contract (Direct Labor Subtotal divided by total hours)

Direct Labor Subtotal Per Cost Proposal	Total Hours cost Proposal	Avg Hourly Rate	5year Contract Duration
\$ 2,124.76 /	40	= \$ 53.12	Year 1 avg Hourly rate

2. Calculate hourly rate for all years (increase the Average Hourly rate for a year by proposed escalation%)

Average hourly rate	Proposed Escalation			
Year 1 \$ 53.12 +	0%	=	\$ 53.12	Year 2 Avg Hourly Rate
Year 2 \$ 53.12 +	3%	=	\$ 54.71	Year 3 Avg Hourly Rate
Year 3 \$ 54.71 +	3%	=	\$ 56.35	Year 4 Avg Hourly Rate
Year 4 \$ 56.35 +	3%	=	\$ 58.04	Year 5 Avg Hourly Rate

3. Calculate estimated hour per year (multiply estimate % each year by total hours)

Estimated % Completed Each year	Total Hours Per Cost Proposal	Total Hours per Year	
Year 1 90.0% *	40	= 36.0	Estimated Hours Year 1
Year 2 10.0% *	40	= 4.0	Estimated Hours Year 2
Year 3 0.0% *	40	= 0.0	Estimated Hours Year 3
Year 4 0.0% *	40	= 0.0	Estimated Hours Year 4
Year 5 0.0% *	40	= 0.0	Estimated Hours Year 5
Total 100.0%	Total	= 40	

4. Calculate Total Costs including Escalation (multiply average hourly rate by the number hours)

Avg Hourly Rate (Calculated above)	Estimated hours (Calculated above)	Cost Per Year	
Year 1 \$ 53.12 *	36.0	= \$ 1,912.32	Estimated Hours Year 1
Year 2 \$ 54.71 *	4.0	= \$ 218.84	Estimated Hours Year 2
Year 3 \$ 56.35 *	0.0	= \$ -	Estimated Hours Year 3
Year 4 \$ 58.04 *	0.0	= \$ -	Estimated Hours Year 4
Year 5 \$ 58.04 *	0.0	= \$ -	Estimated Hours Year 5
Total Direct Labor Cost with Escalation =		\$ 2,131.16	
Direct Labor Subtotal before Escalation =		\$ 2,124.76	
Estimated Total of Direct Labor Salary Increase =		\$ 6.40	Transferred to page 1

Notes:

- This assumes that one year will be worked at the rate on the cost proposal before salary increases are granted.
- This escalation calculation is for determining the total contract amount only. The actual allowable escalation is per Contract Section ????
- Estimated yearly percent completed from resource loaded schedule

Contract:		22-1002727		Date:		5/20/2022							
Detail Sheet													
Task Description				Consultant									
				ECORP Consulting Inc.									
A	B	C		D	E	G	H	I	J	K	L	M	AI
Row	WBS Number	Drawing or Item of Work - Titles		Principal Paleontologist	GIS	QA/QC	Production						Total Hours
1		Paleontological Resources Records Search, Survey, and Report		49.0	5.0	4.0	2.0	0	0	0	0	0	60.
2													0.
3													0.
200													0.
				49.0	5.0	4.0	2.0	0.0	0.0	0.0	0.0	0.0	60.
		Total Hours											

Contract: 22-1002727			Date: 5/20/2022													
Detail Sheet																
Task Description			Consultant													
0			ECORP Consulting Inc.													
A	B	C	D1	E1	G1	H1	I1	J1	K1	L1	M1	AI1	AJ	AK	AL	AM
Row	WBS Number	Drawing or Item of Work - Titles	\$ 50.00	\$ 44.52	\$ 96.17	\$ 31.00	\$ -	\$ -	\$ -	\$ -	\$ -					
			Principal Paleontologist	GIS	QA/QC	Production	0	0	0	0	0	Direct Labor Total	Overhead Cost	Fee	Total Labor Costs	Escalated Total Labor Cost
1		Paleontological Resources Records Search, Survey, and Report	\$ 2,450.00	\$ 222.60	\$ 384.68	\$ 62.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,119.28	\$ 5,950.96	\$ 725.62	\$ 9,795.86	\$ 6,692.7
2			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
3			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
4			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
200			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Hours			\$ 2,450.00	\$ 222.60	\$ 384.68	\$ 62.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,119.28	\$ 5,950.96	\$ 725.62	\$ 9,795.86	\$ 6,692.7

Minute Action

AGENDA ITEM: 7

Date: August 11, 2022

Subject:

Award Construction Management Services Contract No. 22-1002757 for Interstate 15 Corridor Freight and Express Lanes Project - Contract 1

Recommendation:

That the following be reviewed and recommended for final approval by the Board of Directors, acting as the San Bernardino County Transportation Authority (SBCTA), at a regularly scheduled Board meeting:

A. Award Contract No. 22-1002757 to TRC Engineers, Inc., for a not-to-exceed amount of \$29,538,703.11 for Construction Management Services for the Interstate 15 Corridor Freight and Express Lanes Project - Contract 1.

B. Approve contingency in a not-to-exceed amount of \$2,953,870.31 for Contract No. 22-1002757, to be released in accordance with SBCTA Procurement and Special Risk Assessment Policy No. 11000.

Background:

The Interstate 15 (I-15) Corridor Freight and Express Lanes Project - Contract 1 (Project) will add auxiliary lanes to improve freight corridor movement and an addition of two (2) express lanes in each direction on the I-15 from south of State Route (SR) 60 to north of Foothill Boulevard. The Environmental Document (ED) for the I-15 Corridor Project was approved in December 2018. The Project will be delivered in multiple construction packages. The first construction package, known as the I-15 Corridor Freight and Express Lanes Project – Contract 1, will construct one (1) to two (2) express lanes in each direction from south of SR 60 to north of Foothill Boulevard and add auxiliary lanes at select locations in order to improve freight movement and reduce traffic congestion. Construction packages for portions north of Foothill Boulevard to Duncan Canyon Road will be developed in the future based on funding considerations. Final design work for the Project is ongoing with current activities consisting of traffic analysis, geometric studies, structure design, and developing Plans, Specifications, and Estimates. Coordination with Riverside County Transportation Commission and the California Department of Transportation (Caltrans) is ongoing regarding the interface between the Riverside and San Bernardino County portions of work.

On March 2, 2022, the Board of Directors (Board) authorized the release of Request for Proposals (RFP) No. 22-1002757 for Construction Management (CM) Services. RFP No. 22-1002757 was released to solicit firms to assist San Bernardino County Transportation Authority (SBCTA) in providing CM services for the Project. The solicitation was issued in accordance with SBCTA Procurement and Special Risk Assessment Policy No. 11000. On March 3, 2022, RFP No. 22-1002757 was released and posted on PlanetBids and the SBCTA website. The notice was electronically sent to over 969 entities and was downloaded by 92 firms. On March 16, 2022, a pre-proposal meeting was held virtually and was attended by over 33 individuals representing various firms including prime and sub-consulting firms. There were a total of four (4) addendums issued, Addendum No. 1 provided the list of attendees of the pre-

Entity: San Bernardino County Transportation Authority

Board of Directors Metro Valley Study Session Agenda Item

August 11, 2022

Page 2

proposal meeting, Addendum No. 2 responded to questions received from various firms, and Addendum No. 3 extended the proposal due date to May 5, 2022.

On May 5, 2022, four (4) proposals were received from the following firms (in alphabetical order) by the date and time specified in the RFP. Staff reviewed each submittal and deemed each proposal responsive to the requirements outlined in the RFP.

- AECOM Technical Services, Inc.
- HNTB Corporation
- Jacobs
- TRC Engineers, Inc.

The Evaluation Committee comprised of four (4) SBCTA staff members and two (2) Caltrans staff members. Each committee member thoroughly reviewed each proposal and independently scored each firm based on the following evaluation criteria; Qualifications of the Firm - 25%, Proposed Staffing and Project Organization - 25%, and Work Plan - 50%. The Evaluation Committee members met on May 19, 2022, and ranked the firms based on total score. At the completion of discussions, all four (4) firms were invited to interview.

On June 16, 2022 the four (4) firms were interviewed. After careful consideration, TRC Engineers, Inc., is being recommended to be awarded CM Services Contract No. 22-1002757. TRC Engineers, Inc., is being selected as they are considered the best-qualified firm for the Project. They were able to successfully demonstrate a thorough understanding of the scope of work and proposed a qualified team, clear concise work plan, and innovative approach, showing the ability to perform all work and/or services necessary to complete the Project.

Staff recommends awarding Contract No. 22-1002757 to TRC Engineers, Inc., for a not-to-exceed amount of \$29,538,703.11 and a contract duration of five (5) years. It is anticipated that construction will start in late 2023, and be completed in about three (3) years. The contract funding is consistent with the 2021 Update to the 10-Year Delivery Plan.

Staff is also recommending a 10% contingency budget in a not-to-exceed amount of \$2,953,870.31, which would be utilized and released in accordance with SBCTA Procurement and Special Risk Assessment Policy No. 11000.

Financial Impact:

This item is consistent with the Fiscal Year 2022/2023 Budget

Reviewed By:

This item is not scheduled for review by any other policy committee or technical advisory committee. SBCTA General Counsel, Procurement Manager and Risk Manager have reviewed this item and the draft contract.

Responsible Staff:

Khalid Bazmi, Construction Manager

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General Contract Information

Contract No: 22-1002757 Amendment No.: _____

Contract Class: Payable Department: Project Delivery

Vendor No.: 03378 Vendor Name: TRC Engineers Inc

Description: CM services for I-15 Corridor Freight and Express Lanes Project (Contract 1)

List Any Related Contract Nos.: _____

Dollar Amount							
Original Contract		\$	29,538,703.11	Original Contingency		\$	2,953,870.3
Prior Amendments		\$	-	Prior Amendments		\$	-
Prior Contingency Released		\$	-	Prior Contingency Released (-)		\$	-
Current Amendment		\$	-	Current Amendment		\$	-
Total/Revised Contract Value		\$	29,538,703.11	Total Contingency Value		\$	2,953,870.3
	Total Dollar Authority (Contract Value and Contingency)					\$	32,492,573.4

Contract Authorization

Board of Directors Date: 9/7/2022 Committee _____ Item # _____

Contract Management (Internal Purposes Only)

Other Contracts _____ Sole Source? No No Budget Adjustment _____

Local _____ Construction Management _____ Monthly _____

Accounts Payable

Estimated Start Date: 9/15/2022 Expiration Date: 9/14/2027 Revised Expiration Date: _____

NHS: Yes QMP/QAP: N/A Prevailing Wage: Yes

							Total Contract Funding:		Total Contingency:	
							\$	29,538,703.11	\$	2,953,870.31
GL	4110	40	0820	0831	53702	41100000		29,538,703.11		2,953,870.31
GL								-		-
GL								-		-
GL								-		-
GL								-		-
GL								-		-
GL								-		-
GL								-		-
GL								-		-
GL								-		-
GL								-		-

Mohammad Saleem

Project Manager (Print Name)

Henry Stultz

Task Manager (Print Name)

Additional Notes:

Attachment: CSS - Revised - 06-22-2022 9.30am [Revision 1] (8762 : Award CM Services Contract for I-15 Corridor Freight and Express Lanes

CONTRACT No. 22-1002757

BY AND BETWEEN

SAN BERNARDINO COUNTY TRANSPORTATION AUTHORITY

AND

TRC ENGINEERS, INC.

FOR

I-15 EXPRESS LANES CONTRACT 1 CONSTRUCTION MANAGEMENT SERVICES

This contract ("Contract") is made and entered into by and between the San Bernardino County Transportation Authority, ("SBCTA"), whose address is 1170 W. 3rd Street, 2nd Floor, San Bernardino, CA 92410-1715; and TRC Engineers, Inc., ("CONSULTANT"), whose address is: 1935 Chicago Ave., Ste. A, Riverside, CA 92507. SBCTA and CONSULTANT are each a "Party" and collectively the "Parties".

RECITALS:

WHEREAS, SBCTA requires Work as described in Exhibit A of this Contract; and

WHEREAS, CONSULTANT has confirmed that CONSULTANT has the requisite professional qualifications, personnel and experience and is fully capable and qualified to perform the services identified herein; and

WHEREAS, CONSULTANT desires to perform all Work identified herein and to do so for the compensation and in accordance with the terms and conditions set forth herein.

NOW, THEREFORE, the Parties agree as follows:

ARTICLE 1. INTRODUCTION

- 1.1 The work to be performed under this Contract is described in Exhibit A, entitled “Scope of Work”, and the CONSULTANT’s Approved Cost Proposal dated July 1, 2022 (Exhibit B). If there is any conflict between the Approved Cost Proposal and the Contract Articles, the Contract Articles take precedence.
- 1.2 CONSULTANT agrees to indemnify and hold harmless SBCTA, its officers, agents and employees from any and all claims, demands, costs, or liability arising from or connected with the services provided hereunder due to negligent acts, errors, or omissions of the CONSULTANT. CONSULTANT will reimburse SBCTA for any expenditure, including reasonable attorney fees, incurred by SBCTA in defending against claims ultimately determined to be due to negligent acts, errors, or omissions of the CONSULTANT.
- 1.3 CONSULTANT and the agents and employees of CONSULTANT, in the performance of this Contract, shall act in an independent capacity and not as officers or employees or agents of SBCTA.
- 1.4 Without the written consent of SBCTA, this Contract is not assignable by CONSULTANT, either in whole or in part.
- 1.5 No alteration or variations of the terms of this Contract shall be valid unless made in writing and signed by the Parties hereto; and no oral understanding or agreement not incorporated herein shall be binding on any of the Parties hereto.
- 1.6 The consideration to be paid to CONSULTANT as provided herein shall be in compensation for all of CONSULTANT’s expenses incurred in the performance hereof, including travel and per diem, unless otherwise expressly so provided.
- 1.7 The Project Manager for this Contract is Khalid Bazmi, or such other designee as shall be designated in written notice to CONSULTANT from time to time by the Department Director of SBCTA or his or her designee. The Project Manager shall have authority to act on behalf of SBCTA in administering this Contract, including giving notices (including without limitation, notices of default and/or termination), technical directions and approvals, demanding performance and accepting work performed, but is not authorized to receive or issue payments or execute amendments to the Contract itself.

ARTICLE 2. PROJECT DESCRIPTION/SCOPE OF WORK

CONSULTANT agrees to perform the work and services set forth in Exhibit A “Scope of Work”, (“Work”), in accordance with all applicable professional architectural, engineering, construction management, land surveying and/or materials testing standards which are generally accepted in the State of California, in accordance with the terms and conditions expressed herein and in the sequence, time, and manner defined herein. The word “Work”, as used herein, includes without limitation the performance, fulfillment and discharge by CONSULTANT of all obligations, duties, tasks, and Work imposed upon or assumed by CONSULTANT hereunder; and the Work performed hereunder shall be completed to the satisfaction of SBCTA, with their satisfaction being based on prevailing applicable professional standards.

ARTICLE 3. CONSULTANT's REPORTS OR MEETINGS

- 3.1 CONSULTANT shall submit progress reports at least once a month. The report should be sufficiently detailed for SBCTA to determine if CONSULTANT is performing to expectations and is on schedule, to provide communication of interim findings, and to sufficiently address any difficulties or special problems encountered, so remedies can be developed.
- 3.2 CONSULTANT's Project Manager shall meet with SBCTA, as needed, to discuss progress on the Contract.

ARTICLE 4. PERFORMANCE PERIOD

- 4.1 Contingent upon approval by SBCTA's Awarding Authority in accordance with Article 54, below, CONSULTANT shall commence work after written notification to proceed by SBCTA's Procurement Manager. The Contract shall end on December 31, 2026, unless extended by written amendment.
- 4.2 CONSULTANT is advised that any recommendation for contract award is not binding on SBCTA until the Contract is fully executed and approved by SBCTA's Awarding Authority.

ARTICLE 5. ALLOWABLE COSTS AND PAYMENTS

- 5.1 The method of payment for this Contract will be based on actual cost plus fixed fee. SBCTA will reimburse CONSULTANT for actual costs (including labor costs, employee benefits, travel, equipment rental costs, overhead and other direct costs) incurred by CONSULTANT in performance of the Work. CONSULTANT will not be reimbursed for actual costs that exceed the estimated wage rates, employee benefits, travel, equipment rental, overhead, and other estimated costs set forth in the approved CONSULTANT's cost proposal, unless additional reimbursement is provide for by contract amendment. In no event, will CONSULTANT be reimbursed for overhead costs at a rate that exceeds SBCTA's approved overhead rate set forth in the Cost Proposal. In the event, that SBCTA determines that a change to the Work from that specified in the Cost Proposal and Contract is required, the Contract time or actual costs reimbursable by SBCTA shall be adjusted by contract amendment to accommodate the changed work. The maximum total cost as specified herein shall not be exceeded, unless authorized by written amendment.
- 5.2 In addition to the allowable incurred costs, SBCTA will pay CONSULTANT a fixed fee of \$2,044,787.55. The fixed fee is nonadjustable for the term of the Contract, except in the event of a significant change in the Scope of Work and such adjustment is made by contract amendment.
- 5.3 Reimbursement for transportation and subsistence costs shall not exceed the rates specified in the approved Cost Proposal.
- 5.4 When milestone cost estimates are included in the approved Cost Proposal, CONSULTANT shall obtain prior written approval for a revised milestone cost estimate from SBCTA before exceeding such cost estimate.
- 5.5 Progress payments will be made monthly in arrears based on Services provided and allowable incurred costs. A pro rata portion of CONSULTANT's fixed fee will be included in the monthly

progress payments. If CONSULTANT fails to submit the required deliverable items according to the schedule set forth in the Scope of Work, SBCTA shall have the right to delay payment or terminate this Contract in accordance with the Termination provisions herein.

- 5.6 No payment will be made prior to approval of any Work, nor any Work performed prior to approval of this Contract.
- 5.7 CONSULTANT will be reimbursed as promptly as fiscal procedures will permit upon receipt by SBCTA of itemized invoices in triplicate. Invoices shall be submitted no later than 45 calendar days after the performance of Work for which CONSULTANT is billing except for the month of June, which will require the invoice to be submitted by July 10th. Invoices shall detail the Work performed on each milestone and each project as applicable. Invoices shall follow the format stipulated for the approved Cost Proposal and shall reference this contract number. Final invoice must contain the final cost and all credits due SBCTA including any equipment purchased under the provisions of this Contract. The final invoice should be submitted within 60 calendar days after completion of CONSULTANT's Work. Invoices should be e-mailed to SBCTA at the following address:

ap@gosbcta.com

For large files over 30 megabytes, invoices can be submitted using this link:

<https://sanbag-lfweb.sanbag.ca.gov/Forms/Invoice-submission>

- 5.8 CONSULTANT shall include a statement and release with each invoice, satisfactory to SBCTA, that CONSULTANT has fully performed the Work invoiced pursuant to this Contract for the period covered, that all information included with the invoice is true and correct, and that all payments to and claims of CONSULTANT and its subconsultants for Work during the period will be satisfied upon the making of such payment. SBCTA shall not be obligated to make payments to CONSULTANT until CONSULTANT furnishes such statement and release.
- 5.9 The total amount payable by SBCTA to CONSULTANT including the fixed fee shall not exceed \$29,538,703.11.
- 5.10 Salary increases will be reimbursable if the new salary is within the salary range identified in the approved Cost Proposal and is approved by SBCTA. For personnel subject to prevailing wage rates as described in the California Labor Code, all salary increases, which are the direct result of changes in the prevailing wage rates are reimbursable.
- 5.11 All subcontracts in excess of \$25,000 shall contain the above provisions.

ARTICLE 6. TERMINATION

- 6.1 Termination for Convenience – SBCTA's Executive Director shall have the right at any time, with or without cause, to terminate further performance of Work by giving thirty (30) calendar days written notice to CONSULTANT specifying the date of termination. On the date of such termination stated in said notice, CONSULTANT shall promptly discontinue performance of Work and shall preserve Work in progress and completed Work, pending SBCTA's instruction, and shall turn over such Work in accordance with SBCTA's instructions.

- 6.1.1 CONSULTANT shall deliver to SBCTA all deliverables prepared by CONSULTANT or its subconsultants or furnished to CONSULTANT by SBCTA. Upon such delivery, CONSULTANT may then invoice SBCTA for payment in accordance with the terms herein.
- 6.1.2 If CONSULTANT has fully and completely performed all obligations under this Contract up to the date of termination, CONSULTANT shall be entitled to receive from SBCTA as complete and full settlement for such termination a pro rata share of the Contract cost based upon the percentage of all contracted Work satisfactorily executed to the date of termination.
- 6.1.3 CONSULTANT shall be entitled to receive the actual costs incurred by CONSULTANT to return CONSULTANT's tools and equipment, if any, to it or its suppliers' premises, or to turn over Work in progress in accordance with SBCTA's instructions plus the actual cost necessarily incurred in effecting the termination.
- 6.2 Termination for Cause
- 6.2.1 In the event CONSULTANT shall file a petition in bankruptcy court, or shall make a general assignment for the benefit of its creditors, or if a petition in bankruptcy shall be filed against CONSULTANT or a receiver shall be appointed on account of its insolvency, or if CONSULTANT shall default in the performance of any express obligation to be performed by it under this Contract and shall fail to immediately correct (or if immediate correction is not possible, shall fail to commence and diligently continue action to correct) such default within ten (10) calendar days following written notice, SBCTA may, without prejudice to any other rights or remedies SBCTA may have, and in compliance with applicable Bankruptcy Laws: (a) hold in abeyance further payments to CONSULTANT; (b) stop any Work of CONSULTANT or its subconsultants related to such failure until such failure is remedied; and/or (c) terminate this Contract by written notice to CONSULTANT specifying the date of termination. In the event of such termination by SBCTA, SBCTA may take possession of the products and finished Work by whatever method SBCTA may deem expedient. A waiver by SBCTA of one default of CONSULTANT shall not be considered to be a waiver of any subsequent default of CONSULTANT of the same or any other provision, nor be deemed to waive, amend, or modify this Contract.
- 6.2.2 CONSULTANT shall deliver to SBCTA all finished and unfinished deliverables under this Contract prepared by CONSULTANT or its subconsultants or furnished to CONSULTANT by SBCTA within ten (10) working days of said notice.
- 6.3 All claims for compensation or reimbursement of costs under any of the foregoing provisions shall be supported by documentation submitted to SBCTA, satisfactory in form and content to SBCTA and verified by SBCTA. In no event shall CONSULTANT be entitled to any payment for prospective profits or any damages because of such termination.
- 6.3.1 All subcontracts in excess of \$25,000 shall contain the above provisions.

ARTICLE 7. FUNDING REQUIREMENTS

- 7.1 It is mutually understood between the Parties that this Contract may have been written before ascertaining the availability of funds or appropriation of funds for the mutual benefit of both Parties, in order to avoid program or fiscal delays that would occur if the Contract were executed after that determination was made.
- 7.2 This Contract is valid and enforceable only if sufficient funds are made available to SBCTA for the purpose of this Contract. In addition, this Contract is subject to any additional restrictions, limitations, conditions, or any statute enacted by Congress, State Legislature, or SBCTA governing board that may affect the provisions, terms, or funding of this Contract in any manner.
- 7.3 It is mutually agreed that if sufficient funds are not appropriated, this Contract may be amended to reflect any reduction in funds.
- 7.4 SBCTA has the option to void the Contract under the 30-day cancellation clause, or by mutual agreement to amend the Contract to reflect any reduction of funds.

ARTICLE 8. CHANGE IN TERMS

- 8.1 This Contract may be amended or modified only by mutual written agreement of the Parties.
- 8.2 CONSULTANT shall only commence Work covered by an amendment after the amendment is executed and the NTP has been provided by SBCTA's Procurement Analyst.
- 8.3 There shall be no change in CONSULTANT's Project Manager or members of the project team, as listed in the approved cost proposal, which is part of this Contract without prior written approval of SBCTA.

ARTICLE 9. DISADVANTAGED BUSINESS ENTERPRISE

Intentionally Omitted

ARTICLE 10. COST PRINCIPLES AND ADMINISTRATIVE REQUIREMENTS

- 10.1 CONSULTANT agrees that the Contract Cost Principles and Procedures, 48 CFR Federal Acquisition Regulations System, Chapter 1, Part 31.000 et seq. shall be used to determine the cost allowability of individual items.
- 10.2 CONSULTANT also agrees to comply with federal procedures in accordance with 49 CFR, Part 18, Uniform Administrative Requirements for Grants and Cooperative Agreements to State and Local Governments.
- 10.3 Any costs for which payment has been made to CONSULTANT that are determined by subsequent audit to be unallowable under 49 CFR, Part 18 and 48 CFR Federal Acquisition Regulations System, Chapter 1, Part 31.000 et seq., are subject to repayment by CONSULTANT to SBCTA.
- 10.4 All subcontracts in excess of \$25,000 shall contain the above provision.

ARTICLE 11. CONTINGENT FEE

CONSULTANT warrants by execution of this Contract that no person or selling agency has been employed or retained to solicit or secure this Contract upon an agreement or understanding for a commission, percentage, brokerage, or contingent fee, excepting bona fide employees or bona fide established commercial or selling agencies maintained by CONSULTANT for the purpose of securing business. For breach or violation of this warranty, SBCTA has the right to annul this Contract without liability; pay only for the value of the Work actually performed, or in its discretion, to deduct from the Contract price or consideration, or otherwise recover, the full amount of such commission, percentage, brokerage, or contingent fee.

ARTICLE 12. RETENTION OF RECORDS/AUDIT

12.1 For the purpose of determining compliance with Public Contract Code section 10115, et seq. and Title 21, California Code of Regulations, Chapter 21, Section 2500 et seq., when applicable and other matters connected with the performance of the Contract pursuant to Government Code section 8546.7; CONSULTANT, and subconsultants shall maintain and make available for inspection all books, documents, papers, accounting records, and other evidence pertaining to the performance of the Contract, including but not to, the costs of administering the Contract. All Parties shall make such materials available at their respective offices at all reasonable times during the Contract period and for three years from the date of final payment under the Contract. The state, State Auditor, SBCTA, Federal Highway Administration, or any other duly authorized representative of the SBCTA shall have access to any books, records, and documents of CONSULTANT that are pertinent to the Contract for audit, examinations, excerpts, and transactions, and copies thereof shall be furnished if requested.

12.2 Subcontracts in excess of \$25,000 shall contain this provision.

ARTICLE 13. DISPUTES

13.1 Any dispute, other than audit, concerning a question of fact arising under this Contract that is not disposed of by agreement shall be decided by a committee consisting of SBCTA's Executive Director, who may consider written or verbal information submitted by CONSULTANT.

13.2 Not later than 30 days after completion of all deliverables necessary to complete the plans, specifications and estimate, CONSULTANT may request review by SBCTA's Executive Director, of unresolved claims, disputes, other than audit. The request for review will be submitted in writing.

13.3 Neither the pendency of a dispute nor its consideration by SBCTA's Executive Director, will excuse CONSULTANT from full and timely performance in accordance with the terms of this Contract.

ARTICLE 14. AUDIT REVIEW PROCEDURES

14.1 Any dispute concerning a question of fact arising under an interim or post audit of this Contract that is not disposed of by agreement shall be reviewed by SBCTA's Chief Financial Officer.

- 14.2 Not later than 30 days after issuance of final audit report, CONSULTANT may request a review by SBCTA's Chief Financial Officer of unresolved audit issues. The request for review must be submitted in writing.
- 14.3 Neither the pendency of a dispute nor its consideration by SBCTA will excuse CONSULTANT from full and timely performance in accordance with the terms of this Contract.

ARTICLE 15. SUBCONTRACTING

- 15.1 Nothing contained in this Contract or otherwise shall create any contractual relation between SBCTA and any subconsultant(s), and no subcontract shall relieve CONSULTANT of its responsibilities and obligations hereunder. CONSULTANT agrees to be fully responsible to SBCTA for the acts and omissions of its subconsultant(s) and of persons directly employed by CONSULTANT. CONSULTANT's obligation to pay its subconsultant(s) is independent of SBCTA's obligation to make payments to the CONSULTANT.
- 15.2 CONSULTANT shall perform the Work contemplated with resources available within its own organization, and no portion of the Work pertinent to this Contract shall be subcontracted without prior written authorization by SBCTA, except that which is expressly identified in the approved Cost Proposal.
- 15.3 CONSULTANT shall pay its subconsultant(s) within ten (10) calendar days from receipt of each payment made to CONSULTANT by SBCTA.
- 15.4 Any subcontract in excess of \$25,000 entered into as a result of this Contract shall contain all the provisions stipulated in this Contract to be applicable to subconsultants.
- 15.5 Any substitution of subconsultants must be approved in writing by SBCTA prior to the start of Work by the subconsultant.

ARTICLE 16. EQUIPMENT PURCHASE

- 16.1. Prior authorization in writing by SBCTA shall be required before CONSULTANT enters into any unbudgeted purchase order or subcontract exceeding \$5,000 for supplies, equipment, or CONSULTANT services. CONSULTANT shall provide an evaluation of the necessity or desirability of incurring such costs.
- 16.2. When seeking SBCTA's prior written authorization for purchase of any item, service or consulting work not covered in CONSULTANT's Cost Proposal and exceeding \$5,000, CONSULTANT must submit three competitive quotations with the request, or the absence of bidding must be adequately justified.
- 16.3. Any equipment purchased as a result of this Contract is subject to the following: "CONSULTANT shall maintain an inventory of all nonexpendable property. Nonexpendable property is defined as having a useful life of at least two years and an acquisition cost of \$5,000 or more. If the purchased equipment needs replacement and is sold or traded in, SBCTA shall receive a proper refund or credit at the conclusion of the Contract, or if the Contract is terminated, CONSULTANT may either keep the equipment and credit SBCTA in an amount equal to its fair market value, or sell such equipment at the best price obtainable at a public or private sale, in accordance with established SBCTA procedures, and credit SBCTA in an

amount equal to the sales price. If CONSULTANT elects to keep the equipment, fair market value shall be determined at CONSULTANT's expense, on the basis of a competent independent appraisal of such equipment. Appraisals shall be obtained from an appraiser mutually agreeable to SBCTA and CONSULTANT. If it is determined to sell the equipment, the terms and conditions of such sale must be approved in advance by SBCTA."

16.4 All subcontracts in excess \$25,000 shall contain the above provisions.

ARTICLE 17. INSPECTION OF WORK

CONSULTANT and any subconsultant shall permit SBCTA and the State, to review and inspect the project activities and files at all reasonable times during the performance period of this Contract including review and inspection on a daily basis.

ARTICLE 18. SAFETY

- 18.1 CONSULTANT shall comply with OSHA regulations applicable to CONSULTANT regarding necessary safety equipment or procedures. CONSULTANT shall comply with safety instructions issued by SBCTA or other SBCTA representative. CONSULTANT personnel shall wear hard hats and safety vests at all times while working on the construction project site.
- 18.2 Pursuant to the authority contained in Section 591 of the Vehicle Code, SBCTA has determined that such areas are within the limits of the Project and are open to public traffic. CONSULTANT shall comply with all of the requirements set forth in Divisions 11, 12, 13, 14, and 15 of the Vehicle Code. CONSULTANT shall take all reasonably necessary precautions for safe operation of its vehicles and the protection of the traveling public from injury and damage from such vehicles.
- 18.3 Any subcontract entered into as a result of this Contract shall contain all of the provisions of this Article.
- 18.4 CONSULTANT must have a Division of Occupational Safety and Health (CAL-OSHA) permit(s), as outlined in California Labor Code Sections 6500 and 6705, prior to the initiation of any practices, work, method, operation, or process related to the construction or excavation of trenches which are five feet or deeper.

ARTICLE 19. INSURANCE

19.1 Prior to commencing the Work, subject to the provisions of Article 19.2 "General Provisions", and at all times during the performance of the Work and for such additional periods as required herein, CONSULTANT and all sub-consultants of every tier performing any Work under this contract shall, at CONSULTANT's and sub-consultant's sole expense, procure and maintain broad form insurance coverage at least as broad as the following minimum requirements specified below:

19.1.1 Professional Liability. The policies must include the following:

- A limit of liability not less than \$10,000,000 per claim
- An annual aggregate limit of not less than \$10,000,000

- Coverage shall be appropriate for the CONSULTANT'S profession and provided services to include coverage for errors and omissions arising out of the CONSULTANT'S professional services, or services of any person employed by the CONSULTANT, or any person for whose acts, errors, mistakes or omissions the CONSULTANT may be legally liable.
- If Coverage is on a claims made basis:
 - Policy shall contain a retroactive date for coverage of prior acts, which date will be prior to the date the CONSULTANT begins to perform Work under this Contract.
 - CONSULTANT shall secure and maintain "tail" coverage for a minimum of Five (5) years after Contract completion.

19.1.2 Worker's Compensation/Employer's Liability. The policies must include the following:

- Coverage A. Statutory Benefits
- Coverage B. Employer's Liability
- Bodily Injury by accident - \$1,000,000 per accident
- Bodily Injury by disease - \$1,000,000 policy limit/\$1,000,000 each employee

Such policies shall contain a waiver of subrogation in favor of the parties named as Indemnitees below. Such insurance shall be in strict accordance with the applicable workers' compensation laws in effect during performance of the Work by CONSULTANT or any subconsultant of any tier. All subconsultants of any tier performing any portion of the Work for CONSULTANT shall also obtain and maintain the same insurance coverage as specified in this subparagraph, with a waiver of subrogation in favor of CONSULTANT and all parties named as Indemnitees below. Where coverage is provided through the California State Compensation Insurance Fund, the requirement for a minimum A.M. Best rating does not apply.

19.1.3 Commercial General Liability. The policy must include the following:

- Consultant shall maintain commercial general liability (CGL) insurance (Insurance Services Office (ISO) Form CG 00 01), and if necessary excess/umbrella commercial liability insurance, with a combined limit of liability of not less than \$10,000,000 each occurrence.
- The policy shall, at a minimum, include coverage for any and all of the following: bodily injury, property damage, personal injury, broad form contractual liability (including coverage to the maximum extent possible for the indemnifications in this Contract), premises-operations (including explosion, collapse and underground coverage), duty to defend in addition to (without reducing) the limits of the policy(ies), and products and completed operations.

- \$10,000,000 per occurrence limit for property damage or bodily injury
- \$2,000,000 per occurrence limit for personal injury and advertising injury
- \$2,000,000 per occurrence limits for products/completed operations coverage (ISO Form 20 37 12 19) if SBCTA's Risk Manager determines it is in SBCTA's best interests to require such coverage.
- If a general aggregate applies, it shall apply separately to this project/location. The project name must be indicated under "Description of Operations/Locations" (ISO Form CG 25 03 or CG 2504).
- Coverage is to be on an "occurrence" form. "Claims made" and "modified occurrence" forms are not acceptable.
- A copy of the declaration page or endorsement page listing all policy endorsements for the CGL policy must be included.

All subconsultants of any tier performing any portion of the Work for CONSULTANT shall also obtain and maintain the CGL insurance coverage with limits not less than:

- Each occurrence limit: \$1,000,000
- General aggregate limit: \$2,000,000
- Personal injury and advertising limit \$1,000,000
- Products-completed operations aggregate limit \$2,000,000

All subconsultants' and sub-subconsultants' deductibles or self-insured retentions must be acceptable to SBCTA's Risk Manager.

19.1.4 Umbrella/Excess CGL. The policy must include the following:

- If the CONSULTANT elects to include an umbrella or excess policy to cover any of the total limits required beyond the primary commercial general liability policy limits and/or the primary commercial automobile liability policy limits, then the policy must include the following:
 - The umbrella or excess policy shall follow form over the CONSULTANT's primary general liability coverage and shall provide a separate aggregate limit for products and completed operations coverage.
 - The umbrella or excess policy shall not contain any restrictions or exclusions beyond what is contained in the primary policy.
 - The umbrella or excess policy shall contain a clause stating that it takes effect (drops down) in the event the primary limits are impaired or exhausted.

- The umbrella or excess policy must also extend coverage over the automobile policy if it is to be used in combination with the primary automobile policy to meet the total insurance requirement limits.

There shall be no statement limiting the coverage provided to the parties listed as additionally insureds or as indemnitees below.

19.1.5 Commercial Auto. The policy must include the following:

- A total limit of liability of not less than **\$10,000,000** each accident. This total limits of liability may be met by combining the limits of the primary auto policy with an umbrella or excess policy in accordance with subparagraph 4 (Umbrella/Excess CGL) of this Article.
- Such insurance shall cover liability arising out of any vehicle, including owned, hired, leased, borrowed and non-owned vehicles assigned to or used in performance of the CONSULTANT services.
- Combined Bodily Injury and Property Damage Liability insurance. The commercial automobile liability insurance shall be written on the most recent edition of ISO Form CA 00 01 or equivalent acceptable to SBCTA.

19.1.6 Pollution Liability. Intentionally Omitted

19.1.7 Cyber Liability Insurance appropriate to the Consultant's profession and work hereunder, with limits not less than \$1,000,000 per occurrence. Coverage shall be sufficiently broad to respond to the duties and obligations as is undertaken by the Consultant in this agreement and shall include, but not be limited to, claims involving infringement of intellectual property, copyright, trademark, invasion of privacy violations, information theft, release of private information, extortion and network security. The policy shall provide coverage for breach response costs as well as regulatory fines and penalties as well as credit monitoring expenses with limits sufficient to respond to these obligations.

The Policy shall include, or be endorsed to include, property damage liability coverage for damage to, alteration of, loss of, or destruction of electronic data and/or information "property" of SBCTA in the care, custody, or control of the CONSULTANT. If not covered under the CONSULTANT's liability policy, such "property" coverage of SBCTA may be endorsed onto the CONSULTANT's Cyber Liability Policy as covered property as follows:

Cyber Liability coverage with limits of \$1,000,000 per claim and annual aggregate to cover the full replacement value of damage to, alteration of, loss of, or destruction of electronic data and/or information "property" of SBCTA that will be in the care, custody, or control of CONSULTANT.

19.2 General Provisions

19.2.1 Qualifications of Insurance Carriers. If policies are written by insurance carriers authorized and admitted to do business in the state of California, then the insurance

carriers must have a current A.M. Best rating of A-VIII or better and if policies are written by insurance carriers that are non-admitted but authorized to conduct business in the state of California, then they must meet the current A.M. Best rating of A-X or better, unless otherwise approved in writing by SBCTA's Risk Manager.

- 19.2.2 No Representations or Warranties. SBCTA makes no representation or warranty that the coverage, limits of liability, or other terms specified for the insurance policies required under this contract are adequate to protect the CONSULTANT against its undertakings under this Contract or its liability to any third party, nor will they preclude SBCTA from taking any actions as are available to it under this Contract or otherwise at law.
- 19.2.3 Additional Insured Coverage. All policies, except those for Workers' Compensation, Employers Liability and Professional Liability insurance, shall be endorsed by ISO Form CG 20 37 12 19, or if not available, then ISO Form CG 20 38, to name San Bernardino County Transportation Authority, the Riverside County Transportation Commission, and the California Department of Transportation and their officers, directors, members, employees, agents and volunteers, as additional insureds ("Additional Insureds"). With respect to general liability arising out of or connected with work or operations performed by or on behalf of the CONSULTANT under this Contract, coverage for such Additional Insureds shall not extend to liability to the extent prohibited by section 11580.04 of the Insurance Code. The additional insured endorsements shall not limit the scope of coverage for SBCTA to vicarious liability but shall allow coverage for SBCTA to the full extent provided by the policy.
- 19.2.4 Proof of Coverage. Evidence of insurance in a form acceptable to SBCTA's Risk Manager, including declarations pages of each policy, certificates of insurance and the required additional insured endorsements, shall be provided to SBCTA's Procurement Analyst prior to issuance of the NTP or prior to commencing any Work, as SBCTA specifies. Certificate(s) of insurance, as evidence of the required insurance shall: be executed by a duly authorized representative of each insurer; show compliance with the insurance requirements set forth in this Article; set forth deductible amounts applicable to each policy; list all exclusions which are added by endorsement to each policy; and also include the Contract Number and the SBCTA Project Manager's name on the face of the certificate. If requested in writing by SBCTA, CONSULTANT shall submit complete copies of all required insurance policies within ten (10) business days of a written request by SBCTA.
- 19.2.5 Deductibles and Self-Insured Retention. Regardless of the allowance of exclusions or deductibles by SBCTA, CONSULTANT shall be responsible for any deductible or self-insured retention (SIR) amount and shall warrant that the coverage provided to SBCTA is consistent with the requirements of this Article. CONSULTANT will pay, and shall require its sub-CONSULTANTS to pay, all deductibles, co-pay obligations, premiums and any other sums due under the insurance required in this Article. Any deductibles or self-insured retentions must be declared to and approved in writing by SBCTA's Risk Manager. Without SBCTA's Risk Manager's expressed written approval no deductibles or SIR will be allowed. At the option of SBCTA, if

the deductible or SIR is approved and it is greater than \$10,000 or one (1) percent of the amount of coverage required under this Contract, whichever is less, the CONSULTANT shall guarantee that either: (1) the insurer shall reduce or eliminate such deductibles or self-insured retentions as respects to SBCTA, its directors, officials, officers, employees and agents; or, (2) the CONSULTANT shall procure a bond guaranteeing the amount of the deductible or self-insured retention. SBCTA shall have the right to review any and all financial records that SBCTA, at its sole discretion deems necessary to approve any deductible or SIR. SBCTA will have the right, but not the obligation, to pay any deductible or SIR due under any insurance policy. If SBCTA pays any sums due under any insurance required above, SBCTA may withhold said sums from any amounts due to CONSULTANT. The CONSULTANT's policies will neither obligate nor prohibit SBCTA or any other Additional Insured, from paying any portion of any CONSULTANT's deductible or SIR.

- 19.2.6 CONSULTANT's and Subconsultants' Insurance will be Primary. All policies required to be maintained by the CONSULTANT or any subconsultant with the exception of Professional Liability and Worker's Compensation shall be endorsed, with a form at least as broad as ISO Form CG 20 01 04 13), to be primary coverage, and any coverage carried by any of the Additional Insureds shall be excess and non-contributory. Further, none of CONSULTANT's or subconsultants' pollution, automobile, general liability or other liability policies (primary or excess) will contain any cross-liability exclusion barring coverage for claims by an additional insured against a named insured.
- 19.2.7 Waiver of Subrogation Rights. To the fullest extent permitted by law, CONSULTANT hereby waives all rights of recovery under subrogation against the Additional Insureds named herein, and any other consultant, subconsultant or sub-subconsultant performing work or rendering services on behalf of SBCTA, in connection with the planning, development and construction of the Project. To the fullest extent permitted by law, CONSULTANT shall require similar written express waivers and insurance clauses from each of its subconsultants of every tier. CONSULTANT shall require all of the policies and coverages required in this Article to waive all rights of subrogation against the Additional Insureds (ISO Form CG 24 04 05 09). Such insurance and coverages provided shall not prohibit CONSULTANT from waiving the right of subrogation prior to a loss or claim.
- 19.2.8 Cancellation. If any insurance company elects to cancel or non-renew coverage for any reason, CONSULTANT will provide SBCTA thirty (30) days prior written notice of such cancellation or nonrenewal. If the policy is cancelled for nonpayment of premium, CONSULTANT will provide SBCTA ten (10) days prior written notice. In any event, CONSULTANT will provide SBCTA with a copy of any notice of termination or notice of any other change to any insurance coverage required herein which CONSULTANT receives within one business day after CONSULTANT receives it by submitting it to SBCTA at procurement@gosbcta.com to the attention of SBCTA's Procurement Analyst, and by depositing a copy of the notice in the U.S. Mail in accordance with the notice provisions of this Contract.

- 19.2.9 Enforcement. SBCTA may take any steps as are necessary to assure CONSULTANT's compliance with its insurance obligations as identified within this Article. Failure to continuously maintain insurance coverage as provided herein is a material breach of contract. In the event the CONSULTANT fails to obtain or maintain any insurance coverage required, SBCTA may, but is not required to, maintain this coverage and charge the expense to the CONSULTANT or withhold such expense from amounts owed CONSULTANT, or terminate this Contract. The insurance required or provided shall in no way limit or relieve CONSULTANT of its duties and responsibility under the Contract, including but not limited to obligation to indemnify, defend and hold harmless the Indemnitees named below. Insurance coverage in the minimum amounts set forth herein shall not be construed to relieve CONSULTANT for liability in excess of such coverage, nor shall it preclude SBCTA from taking other actions as available to it under any other provision of the Contract or law. Nothing contained herein shall relieve CONSULTANT, or any subconsultant of any tier of their obligations to exercise due care in the performance of their duties in connection with the Work, and to complete the Work in strict compliance with the Contract.
- 19.2.10 No Waiver. Failure of SBCTA to enforce in a timely manner any of the provisions of this Article shall not act as a waiver to enforcement of any of these provisions at a later date.
- 19.2.11 Non-Limitation of Insurance Requirements - The insurance coverage provided and limits required under this Contract are minimum requirements and are not intended to limit the CONSULTANT's indemnification obligations under the Contract, nor do the indemnity obligations limit the rights of the Indemnified Parties to the coverage afforded by their insured status. To the extent required by Law in connection with Work to be performed, the CONSULTANT shall obtain and maintain, or cause to be obtained and maintained, in addition to the insurance coverage expressly required under this Contract, such other insurance policies for such amounts, for such periods of time and subject to such terms, as required by Law and any other agreements with which the CONSULTANT is required to comply, including any Third-Party Agreements. Liability insurance coverage will not be limited to the specific location designated as the Site, except that if the CONSULTANT arranges project-specific general liability, excess liability, or workers' compensation coverage, limitations of coverage to the Site will be permitted subject to SBCTA approval and use of the broadest available site-specific endorsements. No liability policy will contain any provision or definition that would serve to eliminate so-called "third-party-over action" claims, including any exclusion for bodily injury to an employee of the insured or of any Sub-CONSULTANT. The CONSULTANT acknowledges and will at all times comply with the provisions of Labor Code Section 3700 which require every employer in the State to be insured against liability for workers' compensation, or to undertake self-insurance in accordance with the provisions of that code.
- 19.2.12 Review of Coverage – SBCTA may at any time review the coverage, form, and amount of insurance required under this contract, and may require the CONSULTANT to make changes in such insurance reasonably sufficient in

coverage, form, and amount to provide adequate protection against the kind and extent of risk that exists at that time. SBCTA may change the insurance coverages and limits required under this contract by notice to the CONSULTANT, whereupon the CONSULTANT will, within sixty (60) days of such notice date, procure the additional and/or modified insurance coverages. Upon such change any additional cost (at actual cost) from such change will be paid by SBCTA and any reduction in cost will reduce the Contract Price pursuant to a Change Order.

19.2.13 Subconsultant Insurance. Insurance required of the CONSULTANT shall be also provided by subconsultants or by CONSULTANT on behalf of all subconsultants to cover their services performed under this Contract. CONSULTANT may reduce types and the amounts of insurance limits provided by subconsultants to be proportionate to the amount of the subconsultant's contract and the level of liability exposure for the specific type of work performed by the subconsultant. CONSULTANT shall be held responsible for all modifications, deviations, or omissions in these insurance requirements as they apply to subconsultant.

19.2.14 Higher limits. If CONSULTANT maintains higher limits than the minimums shown above, SBCTA shall be entitled to coverage for the higher limits maintained by CONSULTANT. Any available insurance proceeds in excess of the specified minimum limits of insurance and coverage shall be available to SBCTA.

19.2.15 Special Risks or Circumstances. SBCTA reserves the right to modify any or all of the above insurance requirements, including limits, based on the nature of the risk, prior experience, insurer, coverage, or other special circumstances.

19.2.16 Project Specific Insurance - All insurance coverage required to be provided by CONSULTANT, with the exception of automobile liability and worker's compensation, shall apply specifically and exclusively for the Project and extend to all aspects of the Work, with coverage limits dedicated solely to the Project. Use of other insurance programs is acceptable, provided that coverage under such programs provides dedicated Project-specific limits and identified premiums and meets all requirements described in contract.

ARTICLE 20. INDEMNITY

20.1 To the extent, but only to the extent, that CONSULTANT's Work falls within the scope of Civil Code Section 2782.8, the following indemnification is applicable: CONSULTANT shall indemnify and defend (with legal counsel reasonably approved by SBCTA) SBCTA and its officers, employees, agents and volunteers from any and all losses, damages, liability, actions, and/or costs for claims that arise out of, pertain to, or are related to, and to the extent caused by, the negligence, recklessness, or willful misconduct of the design professional to the maximum extent permitted by Civil Code Section 2872.8.

20.2 For all other Work, CONSULTANT agrees to indemnify, defend (with legal counsel reasonably approved by SBCTA) and hold harmless SBCTA, the Riverside County Transportation Commission, and the California Department of Transportation and their officers, employees, agents and volunteers ("Indemnitees") from any and all claims, actions, losses, damages and/or liability (Claims) arising out of or related to any act or omission of CONSULTANT or any of its

officers, employees, agents, subconsultants or volunteers, and for any costs or expenses incurred by SBCTA on account of any such Claims except where such indemnification is prohibited by law. This indemnification provision shall apply regardless of the existence or degree of fault of indemnitees. CONSULTANT's indemnification obligation applies to SBCTA's "active" as well as "passive" negligence, but does not apply to SBCTA's "sole negligence" or "willful misconduct" within the meaning of Civil Code Section 2782.

ARTICLE 21. OWNERSHIP OF DATA

- 21.1 Upon completion of all Work under this Contract, ownership and title to all reports, documents, plans, specifications, and estimates produced as part of this Contract will automatically be vested in SBCTA, and no further agreement will be necessary to transfer ownership to SBCTA. CONSULTANT shall furnish SBCTA all necessary copies as needed to complete the review and approval process.
- 21.2 It is understood and agreed that all calculations, drawings and specifications, whether in hard copy or machine-readable form, are intended for one-time use in the construction of the project for which this Contract has been entered into.
- 21.3 CONSULTANT is not liable for claims, liabilities, or losses arising out of or connected with the modification or misuse by SBCTA of the machine-readable information and data provided by CONSULTANT under this Contract; further, CONSULTANT is not liable for claims, liabilities, or losses arising out of or connected with any use by SBCTA of the project documentation for other projects or additions to this project, or for the completion of this project by others, except only such use as may be authorized in writing by CONSULTANT.
- 21.4 Applicable patent rights provisions regarding rights to inventions shall be included in the Contract as appropriate (48 CFR 27, subpart 27.3).
- 21.5 SBCTA may permit copyrighting reports or other agreement products. If copyrights are permitted, the Contract shall provide that the FHWA shall have the royalty-free nonexclusive and irrevocable right to reproduce, publish, or otherwise use, and to authorize others to use, the work for government purposes.
- 21.6 Any subcontract in excess of \$25,000 entered into as a result of this Contract, shall contain all of the provisions of this Article.

ARTICLE 22. CLAIMS FILED BY SBCTA's CONSTRUCTION CONTRACTOR

- 22.1 If claims are filed by SBCTA's construction contractor relating to Work performed by CONSULTANT's personnel, and additional information or assistance from CONSULTANT's personnel is required in order to evaluate or defend against such claims, CONSULTANT agrees to make its personnel available for consultation with SBCTA and legal staff, and for testimony, if necessary, at depositions, administrative proceedings, trial or arbitration proceedings.
- 22.2 CONSULTANT's personnel that SBCTA considers essential to assist in defending against construction contractor claims will be made available on reasonable notice from SBCTA. Consultation or testimony will be reimbursed at the same rates, including travel costs, that are being paid for the CONSULTANT's personnel services under this Contract.

- 22.3 Services of the CONSULTANT's personnel in connection with SBCTA's construction contractor claims will be performed pursuant to a written contract amendment, if necessary, extending the termination date of this Contract in order to resolve the construction claims.
- 22.4 Any subcontract in excess of \$25,000 entered into as a result of this Contract, shall contain all of the provisions of this Article.

ARTICLE 23. CONFIDENTIALITY OF DATA

- 23.1 All financial, statistical, personal, technical, or other data and information relative to SBCTA's operations which are designated confidential by SBCTA and made available to CONSULTANT in order to carry out this Contract, shall be protected by CONSULTANT from unauthorized use and disclosure.
- 23.2 Neither permission to disclose information on one occasion, nor public hearing held by SBCTA relating to the Contract shall authorize CONSULTANT to further disclose such information or disseminate the same on any other occasion.
- 23.3 CONSULTANT shall not comment publicly to the press or any other media, including social media, regarding the Contract or SBCTA's actions on the same, except to SBCTA's staff, CONSULTANT's own personnel involved in the performance of this Contract, at public hearings, or in response to questions from a SBCTA Board Committee or other public meeting approved by SBCTA.
- 23.4 CONSULTANT shall not issue any news release or public relations item of any nature whatsoever regarding Work performed or to be performed under this Contract without first obtaining SBCTA's review and written permission.
- 23.5 Any SBCTA communications or materials to which CONSULTANT or its subconsultants or agents have access and materials prepared by CONSULTANT under the terms of this Contract shall be held in confidence by CONSULTANT, who shall exercise reasonable precautions to prevent the disclosure of confidential information to anyone except as expressly authorized by SBCTA. Any communications with or work product of SBCTA's legal counsel to which CONSULTANT or its subconsultants or agents have access in performing work under this Contract shall be subject to the attorney-client privilege and attorney work product doctrine, and shall be confidential. CONSULTANT shall not release any reports, information or promotional material or allow for the use of any photos related to this Contract for any purpose without prior written approval of SBCTA.
- 23.6 Any subcontract entered into as a result of this Contract shall contain all of the provisions of this Article.
- 23.7 CONSULTANT, its employees, agents and subconsultants shall be required to comply with SBCTA's Confidentiality Policy; anyone who may have access to Personally Identifiable Information ("PII") and/or Sensitive Security Information ("SSI") will be required to execute a Confidentiality Agreement.
- 23.8 All information related to the construction estimate is confidential, and shall not be disclosed by CONSULTANT to any entity other than SBCTA.

ARTICLE 24. NATIONAL LABOR RELATIONS BOARD CERTIFICATION

In accordance with Public Contract Code Section 10296, CONSULTANT hereby states under penalty of perjury that no more than one final unappealable finding of contempt of court by a federal court has been issued against CONSULTANT within the immediately preceding two-year period, because of CONSULTANT's failure to comply with an order of a federal court that orders CONSULTANT to comply with an order of the National Labor Relations Board.

ARTICLE 25. EVALUATION OF CONSULTANT

CONSULTANT's performance may be evaluated by SBCTA. A copy of the evaluation will be sent to CONSULTANT for comments. The evaluation and any comments submitted shall be retained as part of the Contract file. This information may be used when evaluating the firm on future proposal submittals.

ARTICLE 26. RETENTION OF FUNDS

- 26.1 Any subcontract entered into as a result of this Contract shall contain all of the provisions of this Article.
- 26.2 No retainage will be withheld by SBCTA from progress payments due the CONSULTANT. Retainage by the CONSULTANT or subconsultants is prohibited, and no retainage will be held by CONSULTANT from progress payments due subconsultants. This requirement shall not be construed to limit or impair any contractual, administrative, or judicial remedies, otherwise available to the CONSULTANT or subconsultant in the event of a dispute involving late payment or nonpayment by the CONSULTANT or deficient subconsultant performance, or noncompliance by a subconsultant. This provision applies to both DBE and non-DBE CONSULTANTS and subconsultants.

ARTICLE 27. RESPONSIBILITY OF CONSULTANT

- 27.1 CONSULTANT shall be responsible for the professional quality, technical accuracy, and the assurance of compliance with all applicable federal, State, and local laws and regulations, and other Work furnished by the CONSULTANT under the Contract. The Contract includes reference to the appropriate standards for design or other standards for Work performance stipulated in the Contract.
- 27.2 In addition to any other requirements of this Contract or duties and obligations imposed on CONSULTANT by law, CONSULTANT shall, as an integral part of its Work, employ quality control procedures that identify potential risks and uncertainties related to scope, schedule, cost, quality and safety of the Project and the Work performed by CONSULTANT within the areas of CONSULTANT's expertise. Risks that may be encountered include, but are not limited to, soil conditions, constructability, factors of safety, impact on adjacent properties, public safety, and environmental considerations. At any time during performance of the Scope of Work, should CONSULTANT observe, encounter, or identify any unusual circumstances or uncertainties, which could pose potential risk to SBCTA or the Project. CONSULTANT shall immediately document such matters and notify SBCTA in writing. CONSULTANT shall also similarly notify SBCTA as to the possibility of any natural catastrophe, potential failure, or any situation that exceeds environmental, design, and/or construction assumptions and could precipitate a failure of any structure or other part of the Project. Notifications under this paragraph shall be specific,

clear and timely, and in a form which enables SBCTA to understand and evaluate the magnitude and effect of the risk and/or uncertainties involved.

27.3 *Intentionally Omitted*

- 27.4 Shall advise CONSULTANT of their responsibility and collect the amount due, including but not limited to, withholding of payments, if the recoverable cost will exceed the administrative cost involved or is otherwise in SBCTA's best interest. SBCTA shall include in the Contract Audit File a written statement of the reasons for the decision to recover or not recover the costs from CONSULTANT.
- 27.5 CONSULTANT shall document the results of the Work to the satisfaction of SBCTA, and if applicable, Caltrans and FHWA. This may include preparation of progress and final reports, plans, specifications and estimates, or similar evidence of attainment of SBCTA's objectives.
- 27.6 As applicable, the responsible consultant/engineer shall sign all plans, specifications, estimates (PS&E) and engineering data furnished by him/her, certify as-built drawings, and where appropriate, indicate his/her California registration or license number.

ARTICLE 28. TECHNICAL DIRECTION

- 28.1 Performance of Work under this Contract shall be subject to the technical direction of SBCTA's Project Manager, who will be identified in writing to CONSULTANT upon issuance of the NTP and/or subsequently by written notice during the Contract. The term "Technical Direction" is defined to include, without limitation:
- 28.1.1 Directions to CONSULTANT which redirect the Contract effort, shift work emphasis between work areas or tasks, require pursuit of certain lines of inquiry, fill in details or otherwise serve to accomplish the contractual Scope of Work.
 - 28.1.2 Provision of written information to CONSULTANT which assists in the interpretation of drawings, reports, or technical portions of the Scope of Work described herein.
 - 28.1.3 Review and, where required by the Contract, approval of technical reports, drawings, specifications and technical information to be delivered by CONSULTANT to SBCTA under the Contract.
 - 28.1.4 SBCTA may modify this Contract for certain administrative modifications without issuing a written amendment. Administrative modifications as defined herein are limited to: substitutions of personnel identified in this Contract, including Key Personnel and project personnel and subconsultants; modifications to hourly rates, classifications, and names of personnel in Exhibit B; and modifications of the address of the CONSULTANT. All administrative modifications shall be documented in writing between the Parties.
- 28.2 Technical Direction must be within the Scope of Work under this Contract. SBCTA's Project Manager does not have the authority to, and may not, issue any Technical Direction which:
- 28.2.1 Increases or decreases the Scope of Work;

- 28.2.2 Directs CONSULTANT to perform Work outside the original intent of the Scope of Work;
 - 28.2.3 In any manner causes an increase or decrease in the Contract price as identified in this Contract, or the time required for Contract performance unless expressly authorized by SBCTA policy;
 - 28.2.4 Changes any of the expressed terms, conditions or specifications of the Contract, unless identified herein;
 - 28.2.5 Interferes with the CONSULTANT's right to perform the terms and conditions of the Contract; or
 - 28.2.6 Approves any demand or claim for additional payment.
- 28.3 Failure of CONSULTANT and SBCTA's Project Manager to agree that the Technical Direction is within the scope of the Contract, or a failure to agree upon the Contract action to be taken, shall be subject to the provisions of the "DISPUTES" Article herein.
- 28.4 All Technical Direction shall be issued in writing by SBCTA's Project Manager.
- 28.5 CONSULTANT shall proceed promptly with the performance of Technical Direction issued by SBCTA's Project Manager, in the manner prescribed by this Article and within their authority under the provisions of this Article. If, in the opinion of CONSULTANT, any instruction or direction by SBCTA's Project Manager falls within one of the categories defined in 27.2.1 through 27.2.6, CONSULTANT shall not proceed but shall notify SBCTA in writing within five (5) working days after receipt of any such instruction or direction and shall request SBCTA to modify the Contract accordingly. Upon receiving the notification from the CONSULTANT, SBCTA shall:
- 28.5.1 Advise CONSULTANT in writing within thirty (30) calendar days after receipt of the CONSULTANT's letter that the Technical Direction is or is not within the scope of this Contract.
 - 28.5.2 Advise CONSULTANT within a reasonable time whether SBCTA will or will not issue a written amendment.

ARTICLE 29. KEY PERSONNEL

The personnel specified below are considered to be essential to the Work being performed under this Contract. Prior to diverting any of the specified individuals to other projects or reallocating any tasks or hours of Work that are the responsibility of key personnel to other personnel, CONSULTANT shall notify SBCTA in writing in advance and shall submit justifications (including proposed substitutions, resumes and payroll information to support any changes to the labor rate) in sufficient detail to permit evaluation of the impact on the Project. Diversion or reallocation of key personnel shall not be made without prior written consent of SBCTA. CONSULTANT shall not substitute any key personnel without the prior written consent of SBCTA, which consent shall not be unreasonably withheld. In the event that the Parties cannot agree as to the substitution of key personnel, SBCTA may terminate the Contract. Key Personnel are:

Name	Job Classification/Function
Ghassan Dagher, PE, QSD/P	Project Manager
Jagdish Patel, PE	Resident Engineer
Ravin Maru, PE, QSD	Assistant Resident Engineer
Ben Rhode, PE, QSD	Assistant Resident Engineer
Dragon Buha, PE, QSD/P	Lead Structural Representative
Jonathon Sipe, PE, QSD	Structural Representative
Lisa Woodward	Toll Integration Manager

ARTICLE 30. REPRESENTATIONS

All Work supplied by CONSULTANT under this Contract shall be supplied by personnel who are qualified, careful, skilled, experienced and competent in their respective trades or professions. CONSULTANT agrees that they are supplying professional services, findings, and/or recommendations in the performance of this Contract and agrees with SBCTA that the same shall conform to professional and engineering and environmental principles and standards that are generally accepted in the profession in the State of California.

ARTICLE 31. TAXES, DUTIES AND FEES

Except to the extent expressly provided elsewhere in this Contract, CONSULTANT shall pay when due, and the compensation set forth herein shall be inclusive of, all: a) local, municipal, State, and federal sales and use taxes; b) excise taxes; c) taxes on personal property owned by CONSULTANT; and d) other governmental fees and taxes or charges of whatever nature applicable to CONSULTANT to enable it to conduct business.

ARTICLE 32. PERMITS AND LICENSES

CONSULTANT shall, without additional compensation, keep current all governmental permits, certificates and licenses (including professional licenses) and required registrations necessary for CONSULTANT to perform Work identified herein.

ARTICLE 33. STATEMENT OF COMPLIANCE

33.1 CONSULTANT's signature affixed herein, and dated, shall constitute a certification under penalty of perjury under the laws of the State of California that CONSULTANT has, unless exempt, complied with, the nondiscrimination program requirements of Government Code Section 12990 and 2 California Code of Regulations Section 8103.

33.2 During the performance of this Contract, CONSULTANT and its subconsultants shall not unlawfully discriminate, harass, or allow harassment against any employee or applicant for employment because of race, religious creed, color, national origin, ancestry, physical disability, mental disability, medical condition, genetic information, marital status, sex, gender, gender identity, gender expression, age (over 40), sexual orientation or military or veteran status. CONSULTANT and subconsultants shall insure that the evaluation and treatment of their employees and applicants for employment are free from such discrimination and harassment. CONSULTANT and subconsultants shall comply with the provisions of the Fair Employment and Housing Act (Gov. Code §12900 et seq.) and the applicable regulations promulgated there under (2 California Code of Regulations §§ 7286.0 et seq.). CONSULTANT

and subconsultants shall give written notice of their obligations under this clause to labor organizations with which they have a collective bargaining or other agreement.

- 33.3 The contractor and all subcontractors shall comply with all provisions of Title VI of the Civil Rights Act of 1964, as amended, which prohibits discrimination on the basis of race, color, and national origin. In addition, the contractor and all subcontractors will ensure their services are consistent with and comply with obligations and procedures outlined in SBCTA's current Board-adopted Title VI Program, including the Public Participation Plan and the Language Assistance Plan.

ARTICLE 34. STATE PREVAILING WAGE RATES

- 34.1 CONSULTANT shall comply with the State of California's General Prevailing Wage Rate requirements in accordance with California Labor Code Section 1770, and all Federal, State, and local laws and ordinances applicable to the Work.
- 34.2 Any subcontract entered into as a result of this Contract if for more than \$25,000 for public works construction or more than \$15,000 for the alteration, demolition, repair, or maintenance of public works, shall contain all of the provisions of this Article.
- 34.3 When prevailing wages apply to services described in the Scope of Work, transportation and subsistence costs shall be reimbursed at the minimum rates set by the Department of Industrial Relations (DIR) as outlined in the applicable Prevailing Wage Determination. See <http://www.dir.ca.gov>.

ARTICLE 35. CONFLICT OF INTEREST

- 35.1 CONSULTANT shall disclose any financial, business, or other relationship with SBCTA that may have an impact upon the outcome of this Contract, or any ensuing SBCTA construction project. CONSULTANT shall also list current clients who may have a financial interest in the outcome of this Contract, or any ensuing SBCTA construction project, which will follow.
- 35.2 CONSULTANT hereby certifies that it does not now have, nor shall it acquire, any financial or business interest that would conflict with the performance of services under this Contract. CONSULTANT agrees that it presently has no interest, financial or otherwise, and shall not acquire any interest, direct or indirect, which would conflict in any manner or degree with the performance of Work required under this Contract or be contrary to the interests of SBCTA as to the Project. CONSULTANT further agrees that in the performance of this Contract no person having any such interest shall be employed. CONSULTANT is obligated to fully disclose to SBCTA, in writing, any conflict of interest issues as soon as they are known to CONSULTANT. CONSULTANT agrees that CONSULTANT's staff designated by SBCTA's Executive Director as "Consultants" under the Political Reform Act shall timely file Statements of Economic Interest with the SBCTA Clerk of the Board.
- 35.3 Any subcontract in excess of \$25,000 entered into as a result of this Contract shall contain all of the provisions of this Article.
- 35.4 CONSULTANT hereby certifies that neither CONSULTANT, nor any firm affiliated with CONSULTANT will bid on any construction contract, or any contract to provide construction

inspection for any construction project resulting from this Contract. An affiliated firm is one subject to the control of the same persons through joint ownership or otherwise.

- 35.5 CONSULTANT further certifies that neither CONSULTANT nor any firm affiliated with CONSULTANT will bid on any construction subcontracts included within the construction contract. Additionally, CONSULTANT certifies that no person working under this Contract is also employed by the construction contractor for any project included within this Contract.
- 35.6 Except for subconsultants whose services are limited to providing surveying or materials testing information, no subconsultant who has provided design services in connection with this Contract shall be eligible to bid on any construction contract, or any contract to provide construction inspection for any construction project resulting from this Contract.

ARTICLE 36. REBATES, KICKBACKS OR OTHER UNLAWFUL CONSIDERATION

CONSULTANT warrants that this Contract was not obtained or secured through rebates, kickbacks or other unlawful consideration, either promised or paid to any SBCTA employee. For breach or violation of this warranty, SBCTA shall have the right in its discretion; to terminate the Contract without liability; to pay only for the value of the Work actually performed; or to deduct from the Contract price or otherwise recover the full amount of such rebate, kickback or other unlawful consideration.

ARTICLE 37. NOTIFICATION

All notices hereunder and communications regarding the interpretation of the terms of this Contract and changes thereto, shall be effected by the mailing thereof by registered or certified mail, return receipt requested, postage prepaid, and addressed as follows:

To TRC Engineers, Inc.	To SBCTA
1935 Chicago Ave. #A	1170 W. 3rd Street, 2nd Floor
Riverside, CA 92507	San Bernardino, CA 92410-1715
Attn: Ghassan Dagher	Attn: Khalid Bazmi
	cc: Shaneka Morris, Procurement Manager
Phone: (951)788-6078	Phone: (909) 884-8276

ARTICLE 38. STOP WORK ORDER

Upon failure of CONSULTANT or its subconsultants to comply with any of the requirements of this Contract, SBCTA shall have the right to stop any or all Work affected by such failure until such failure is remedied or to terminate this Contract in accordance with "TERMINATION" provision herein.

ARTICLE 39. CLAIMS

SBCTA shall not be bound to any adjustments in the Contract amount or schedule unless expressly agreed to by SBCTA in writing. SBCTA shall not be liable to CONSULTANT for any claim asserted by CONSULTANT after final payment has been made under this Contract.

ARTICLE 40. ERRORS AND OMISSIONS

CONSULTANT shall be responsible for the professional quality, technical accuracy, and coordination of all Work required under this Contract. CONSULTANT shall be liable for SBCTA costs resulting from errors or deficiencies in Work furnished under this Contract, including but not limited to any fines, penalties, damages, and costs associated with a modification to a construction contract required because of an error or deficiency in the Work provided by CONSULTANT under this Contract.

ARTICLE 41. WARRANTY

CONSULTANT represents that all Work performed shall be in accordance with the Contract, and all applicable professional standards. In the event of a breach of this provision, CONSULTANT shall take the necessary actions to correct the breach at CONSULTANT's sole expense. If CONSULTANT does not take the necessary action to correct the breach, SBCTA, without waiving any other rights or remedies it may have, may take the necessary steps to correct the breach, and CONSULTANT shall promptly reimburse SBCTA for all expenses and costs incurred.

ARTICLE 42. INDEPENDENT CONTRACTOR

CONSULTANT is and shall be at all times an independent contractor. Accordingly, all Work provided by CONSULTANT shall be done and performed by CONSULTANT under the sole supervision, direction and control of CONSULTANT. SBCTA shall rely on CONSULTANT for results only, and shall have no right at any time to direct or supervise CONSULTANT or CONSULTANT's employees in the performance of Work or as to the manner, means and methods by which Work is performed. All personnel furnished by CONSULTANT under this Contract, and all representatives of CONSULTANT, shall be and remain the employees or agents of CONSULTANT or of CONSULTANT's subconsultant(s) at all times, and shall not at any time or for any purpose whatsoever be considered employees or agents of SBCTA.

ARTICLE 43. ATTORNEY'S FEES

If any legal action is instituted to enforce or declare any Party's rights under the Contract, each Party, including the prevailing Party, must bear its own costs and attorneys' fees. This Article shall not apply to those costs and attorneys' fees directly arising from any third party legal action against a Party hereto and payable under the "Indemnity" provision of the Contract.

ARTICLE 44. GOVERNING LAW AND VENUE

This Contract shall be subject to the law and jurisdiction of the State of California. The Parties acknowledge and agree that this Contract was entered into and intended to be performed in whole or substantial part in San Bernardino County, California. The Parties agree that the venue for any action or claim brought by any Party to this Contract will be the Superior Court of California, San Bernardino County. Each Party hereby waives any law or rule of court, which would allow them to request or demand a change of venue. If any action or claim concerning this Contract is brought by any third party, the Parties hereto agree to use their best efforts to obtain a change of venue to the Superior Court of California, San Bernardino County.

ARTICLE 45. FEDERAL, STATE AND LOCAL LAWS

CONSULTANT warrants that in the performance of this Contract, it shall comply with all applicable federal, State and local laws, ordinances, rules and regulations.

ARTICLE 46. PRECEDENCE

- 46.1 The Contract consists of the Contract Articles, Exhibit A “Scope of Work”, and Exhibit B “Approved Cost Proposal”, SBCTA’s Request For Proposal and CONSULTANT’s proposal, all of which are incorporated into this Contract by this reference.
- 46.2 The following order of precedence shall apply: first, the Contract Articles; second, Exhibits A and B; third, SBCTA’s Request For Proposal; and last, CONSULTANT’s Proposal. In the event of a conflict between the Contract Articles and the Scope of Work, the Contract Articles will prevail.
- 46.3 In the event of an express conflict between the documents listed in this Article, or between any other documents, which are a part of the Contract, CONSULTANT shall notify SBCTA in writing within three (3) business days of its discovery of the conflict and shall comply with SBCTA’s resolution of the conflict.

ARTICLE 47. GRATUITIES

CONSULTANT, its employees, agents, or representatives shall not offer or give to any officer, official, agent or employee of SBCTA, any gift, entertainment, payment, loan, or other gratuity.

ARTICLE 48. REVIEW AND ACCEPTANCE

All Work performed by CONSULTANT shall be subject to periodic review and approval by SBCTA at any and all places where such performance may be carried on. Failure of SBCTA to make such review or to discover defective work shall not prejudice the rights of SBCTA at the time of final acceptance. All Work performed by CONSULTANT shall be subject to periodic and final review and acceptance by SBCTA upon completion of all Work.

ARTICLE 49. DRUG FREE WORKPLACE

CONSULTANT agrees to comply with the Drug Free Workplace Act of 1990 per Government Code Section 8350 et seq.

ARTICLE 50. FORCE MAJEURE

CONSULTANT shall not be in default under this Contract in the event that the Work performed by CONSULTANT is temporarily interrupted or discontinued for any of the following reasons: riots, wars, sabotage, acts of terrorism, civil disturbances, insurrection, explosion, pandemics, quarantines, acts of God, acts of government or governmental restraint, and natural disasters such as floods, earthquakes, landslides, and fires, or other catastrophic events which are beyond the reasonable control of CONSULTANT and which CONSULTANT could not reasonably be expected to have prevented or controlled. “Other catastrophic events” does not include the financial inability of CONSULTANT to perform or failure of CONSULTANT to obtain either any necessary permits or licenses from other governmental agencies or the right to use the facilities of any public utility where such failure is due solely to the acts or omissions of CONSULTANT.

ARTICLE 51. COMPLIANCE WITH THE AMERICANS WITH DISABILITIES ACT

CONSULTANT shall comply with all applicable provisions of the Americans With Disabilities Act in performing Work under this Contract.

ARTICLE 52. ENTIRE DOCUMENT

- 52.1 This Contract constitutes the sole and only agreement governing the Work and supersedes any prior or contemporaneous understandings, written or oral, between the Parties respecting the Project. All previous proposals, offers, and other communications, written or oral, relative to this Contract, are superseded except to the extent that they have been expressly incorporated into this Contract.
- 52.2 No agent, official, employee or representative of SBCTA has any authority to bind SBCTA to any affirmation, representation or warranty outside of, or in conflict with, the stated terms of this Contract, and CONSULTANT hereby stipulates that it has not relied, and will not rely, on same.
- 52.3 Both Parties have been represented or had the full opportunity to be represented by legal counsel of their own choosing in the negotiation and preparation of this Contract. Therefore, the language in all parts of this Contract will be construed, in all cases, according to its fair meaning, and not for or against either Party.

ARTICLE 53. CONTRACT

This Contract constitutes the entire agreement which is made and concluded in duplicate between the two Parties. Each Party, for and in consideration of the payments to be made, conditions mentioned, and work to be performed, agrees to diligently perform in accordance with the terms and conditions of this Contract as evidenced by the signatures below.

ARTICLE 54. EFFECTIVE DATE

The date that this Contract is executed by SBCTA shall be the Effective Date of the Contract.

-----SIGNATURES ARE ON THE FOLLOWING PAGE-----

IN WITNESS WHEREOF, the Parties hereto have executed this Contract on the day and year written below.

TRC Engineers, Inc., A California Corporation

**SAN BERNARDINO COUNTY
TRANSPORTATION AUTHORITY**

By: _____
Charlene Palmer
Vice President

By: _____
Art Bishop
President, Board of Directors

Date: _____

Date: _____

APPROVED AS TO FORM

By: _____
Juanda L. Daniel
Assistant General Counsel

Date: _____

CONCURRENCE

By: _____
Shaneka Morris
Procurement Manager

Date: _____

EXHIBIT A

SCOPE OF WORK

INDEX

- A. DESCRIPTION OF SERVICES
- B. PERFORMANCE REQUIREMENTS
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 - 3. Project Administration
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A. DESCRIPTION OF SERVICES

The San Bernardino County Transportation Authority (SBCTA) will utilize the services of CONSULTANT to support the construction activities for the Project. The CONSULTANT will provide construction management, materials testing, construction surveying and source inspection, landscape inspection and assist in public outreach for the Project. A description of the Project is given below. Reference Project Environmental Reports on the SBCTA website for more detail information:

<https://www.gosbcta.com/project/i-15-corridor/>

Project General Description:

The San Bernardino County Transportation Authority (“SBCTA”) is seeking professional services for the construction management for the Interstate 15 (I-15) Express Lanes (“Project”) which would extend from Cantu Galleano Ranch Road in Riverside County to Foothill Boulevard in San Bernardino County. SBCTA Sales Tax Measure I funds will be used to cover the cost of this work.

The Project proposes to add express lanes in the median in each direction through this corridor segment. South of State Route (SR) 60, one express lane may be added in each direction, augmenting the existing express lane in each direction currently being constructed by Riverside County Transportation Commission (RCTC). From SR 60 going north, there will be one to two lanes in each direction until transitioning back to the existing general purpose lanes near Foothill Boulevard. In addition, auxiliary lanes and other operational improvements are planned through this corridor. The environmental document and Project report for an extended corridor were approved in December 2018. The geometrics approved in those documents will provide the initial basis for the final design, but the final lane configuration and location of ingress and egress locations shall be based on operational analysis conducted under the design contract as well as coordination with RCTC at the Express Lanes connection within Riverside County. This Project will include both the roadway work as well as toll collection system layout and infrastructure. The toll collection system design requirements will be prepared by the SBCTA toll system provider (TSP); however, extensive coordination will be required with the TSP, and the toll collection system design will be incorporated into the final design plans developed under the design contract.

Services

Services are anticipated to generally include, but are not limited to the following: participation in the evaluation of scheduling of the proposed Project; constructability review; construction Project advertising, bid analysis, and award; construction inspection; construction surveying, materials testing, landscape inspection, contractor interface and contract administration; office engineering; and other assorted duties as appropriate in managing construction of a Caltrans and city roadway improvement project.

It is expected that the Consultant will assign a full-time Resident Engineer to coordinate all contract and personnel activities for all phases of construction. Other Resident Engineer(s) and inspection personnel may be assigned to direct and coordinate all Project specific field

activities and responsibilities as needed for satisfactory performance on the Project.

The Resident Engineer assigned for this Project shall be licensed as a Professional Civil Engineer in the State of California at the time of proposal submittal through the duration of the contract. The Consultant is expected to provide a Structures Representative, Survey Project Manager, Materials Testing/Source Inspection Project Manager, and Landscape Architect to administer the construction support services requested herein and to assign qualified field personnel to perform the requested services. Furthermore, the Resident Engineer shall act as the public outreach liaison to assist the Authority's Public Information Office in implementing the Public Outreach Program established for this project.

Insofar as the Consultant's approach described in the Proposal, the scope of responsibility and the total number of personnel assigned to each phase is left to the discretion of the Consultant. The Proposal shall include a staffing plan, an organization chart and a resource loaded schedule that establish the firm's ability to adequately and appropriately staff and manage the Project.

CONSULTANT shall provide qualified construction management and inspection, materials testing, construction surveying and public relations personnel to perform a wide variety of construction management, support and contract administration duties as outlined in this Scope of Services for the Project.

The SBCTA Director of Project Delivery has designated a Project Manager to coordinate all construction activities.

Mr. Khalid Bazmi, Construction Manager

The CONSULTANT shall report to and receive direction from SBCTA through the Project Manager, or his designees. The SBCTA Project Manager is responsible for coordination of all SBCTA construction activities and for coordinating the efforts of the total construction team. The SBCTA Project Manager will be the main contact and primary source of information between SBCTA, cities, outside agencies, supporting consultants and the public for the construction Projects.

B. PERFORMANCE REQUIREMENTS

Construction Management: CONSULTANT shall furnish a Project Manager to coordinate CONSULTANT operations with SBCTA. The Project Manager shall be responsible for all matters related to CONSULTANT personnel and operations. The Project Manager may also serve as the Resident Engineer.

CONSULTANT shall also furnish a Resident Engineer. The Resident Engineer shall be assigned to direct and coordinate construction activities under this contract. Other Assistant Resident Engineers may be assigned to each specific Project responsibilities as needed. The Resident Engineer shall be a Civil Engineer registered in the State of California and shall be in responsible charge of construction management and construction activity within the Project.

The number of CONSULTANT personnel assigned to the Project will vary throughout the

duration of the contract. CONSULTANT personnel will be assigned, in varying levels of responsibility, as needed by the CONSULTANT to meet the Project schedule, Project requirements, and construction activities.

Resumes of personnel must be submitted to SBCTA for review and approval prior to assignment to the Project. SBCTA and CONSULTANT will jointly determine the quality and quantity of services that are required by CONSULTANT personnel. Personnel selected for assignment by CONSULTANT shall be made available for personal interviews prior to acceptance by SBCTA. If, in the opinion of SBCTA, an individual lacks adequate experience, the individual may be rejected or may be accepted on a trial basis until such time the individual's ability to perform the required services has been demonstrated. If, at any time, the performance of CONSULTANT personnel is unsatisfactory to SBCTA, SBCTA may release him/her by written notice and may request another qualified person be assigned.

If CONSULTANT personnel are on leave of absence, the Project Manager shall provide equally qualified replacement personnel until the assigned personnel returns to the Project approved by SBCTA.

The typical workday includes all hours worked by the construction Contractor. If necessary, overtime for CONSULTANT personnel may be required. The construction Contractor's operations may be restricted to specific hours during the week, which shall become the normal workday for CONSULTANT personnel. The Project Manager, with prior concurrence from SBCTA, shall have the authority to increase, decrease, or eliminate CONSULTANT personnel work hours dependent on the schedule and requirements of the construction Contractor. All overtime required by CONSULTANT personnel shall be approved and authorized by SBCTA prior to each occurrence.

CONSULTANT personnel shall be knowledgeable of and comply with all applicable local, state, and federal regulations. CONSULTANT personnel shall cooperate and consult with SBCTA, State, and City officials during the course of the Project. CONSULTANT personnel shall perform duties as may be required to assure that construction is being performed in accordance with the Project plans and specifications. CONSULTANT personnel shall keep accurate and timely records and document all work performed by the Contractor and CONSULTANT.

CONSULTANT shall monitor for Contractor's compliance with the labor standards provisions of the Projects and the related wage determination decisions of the Secretary of Labor.

CONSULTANT personnel shall assist SBCTA and local agencies in obtaining compliance with the safety and accident prevention provisions of the Project. Local agencies will retain jurisdictional control for traffic control.

All services required herein shall be performed in accordance with California Department of Transportation guidelines, regulations, policies, procedures, manuals, and standards, except as noted in the special provisions.

Materials Testing & Source Inspection: The number of field testing and source inspection

personnel assigned to the Project will vary throughout the duration of the construction contract. CONSULTANT certified materials testing and source inspection personnel will be assigned as needed by the Resident Engineer to meet the required numbers and frequencies of testing based on schedule of the construction contractor.

Materials Testing /Source Inspection Services will be provided on an on-call basis. The duration of assignments could vary from a minimum of a few hours to the full term of the Project. CONSULTANT personnel will be available within one (1) day of written notification by SBCTA.

It is the intent of SBCTA to maintain a consistency of material testing/source inspection quality throughout each phase of each project. CONSULTANT is therefore encouraged to provide, where ever and whenever possible, the same personnel for the duration of construction of each project.

On days when work is not performed by the construction contractor, such as rainy or unsuitable weather days, CONSULTANT will not provide services unless authorized by the SBCTA Project Manager.

Consultant shall be responsible for finalizing a Source Inspection Quality Management Plan (SIQMP) to match the Project requirements, assist SBCTA in gaining Caltrans approval, and manage the SIQMP. The SIQMP shall meet SBCTA and Caltrans requirements. Consultant shall provide Structural Materials Representative (SMR), Steel inspectors, Non-destructive Steel Inspectors, Coating Inspectors, Precast Concrete Inspectors and other source inspectors as needed.

All CONSULTANT personnel will be knowledgeable of, and comply with, all applicable local, state, and federal regulations. All personnel shall cooperate and consult with SBCTA during the course of the contract; and perform other duties as may be required to assure that the construction is being performed in accordance with the Project plans and specifications. CONSULTANT's personnel will keep records and document the work as directed by the Resident Engineer.

All services required herein will be performed in accordance with Caltrans regulations, policies, procedures, manuals, and standards.

Construction Surveying: CONSULTANT will furnish surveying crew(s) to perform construction surveys for the Project. The number of survey crew(s) assigned to the Project may vary throughout the duration of the construction contract to meet the Project needs. CONSULTANT personnel will be assigned as needed by the Resident Engineer to meet the schedule of the construction contractor.

Construction surveying services will be provided on an on-call basis. It is the intent of SBCTA to maintain a consistency of construction survey quality throughout each phase of each project. Therefore, CONSULTANT is encouraged to provide the same field personnel for the duration of construction. It is important that the Field Party Chief(s) assigned to a project be completely familiar with the survey requirements and the assignments for the Project.

Construction surveying will not be performed when conditions such as weather, traffic, and other factors prevent safe and efficient operation.

CONSULTANT personnel will:

- Be knowledgeable of, and comply with all, applicable local, Caltrans, state, and federal regulations.
- Cooperate and consult with SBCTA officials during the course of the contract.
- Perform duties as may be required to assure construction is performed in accordance with the Project plans and specifications.
- Keep records and document work as directed by SBCTA Project Manager.

All services required herein will be performed in accordance with Caltrans regulations, policies, procedures, manuals, and standards.

C. DUTIES AND RESPONSIBILITIES

1. Pre-construction Services

a. Schedule

CONSULTANT shall review the proposed Project schedule, compare it to the Project plans and specifications, and provide recommendations to SBCTA, as appropriate, to ensure efficiency of Contractor and CONSULTANT operations and safe and expeditious completion of the Project.

b. Budget

CONSULTANT shall review the Project estimate, quantities and provide recommendations to SBCTA, as appropriate, to ensure efficient utilization of funds and control of Project costs.

c. Constructability Review

CONSULTANT shall review Project plans and special provisions for possible errors and deficiencies and report such findings to SBCTA in a format provide by SBCTA.

2. Bid Process

a. Bid Documents

CONSULTANT shall assist SBCTA, as requested, with the following tasks:

- 1) Review of bid documents
- 2) Preparation of bid tabulations

b. Pre-construction Meetings

CONSULTANT shall assist SBCTA in conducting one, or more, pre-construction meetings with all involved parties on the Project. Parties may include, but are not limited to, the Contractor, design engineer, Caltrans, County and City staff, utility companies, and developers.

c. Contract Award

CONSULTANT shall assist SBCTA, as requested, with the following tasks:

- 1) Review of bid for completeness and responsiveness
- 2) Perform bid analysis
- 3) Development of contractor payment schedules, and other procedural items.
- 4) Checking Contractor references, licenses, insurance, and sureties.
- 5) Coordination with prospective Contractor for award of construction contract(s).

All processes will be consistent with procedures outlined by the California Department of Transportation for Special Funded Programs and Local Assistance Procedure Manuals.

3. Project Administration

- a. CONSULTANT shall administer Project construction contracts using Caltrans Construction Manual as a guideline.
- b. CONSULTANT shall conduct regular Project coordination meetings with Contractor, SBCTA, local agencies, and design engineer, as appropriate.
- c. CONSULTANT shall prepare Contractor progress payments and maintain payment records and supporting documentation. All progress payments shall be reviewed by SBCTA for approval.
- d. CONSULTANT shall provide reports as needed to comply with specific funding requirements.
- e. CONSULTANT shall establish and maintain Project records in accordance with the Caltrans Construction Manual. Project record keeping shall include, but are not limited to, correspondence, memoranda, contract documents, change orders, claims, SBCTA and engineer directives, meeting minutes, shop drawings, supplementary drawings, and requests for payment. CONSULTANT shall maintain a record of the names, addresses, and telephone

and fax numbers of the Contractors, subcontractors, and principal material suppliers.

- f. CONSULTANT shall establish and maintain a filing system in hard copies files and in electronic forms for each Project using the Caltrans Construction Manual as a guideline. Electronic data documentation will be required to be uploaded weekly to the SBCTA Major Projects Portal
- g. CONSULTANT shall monitor Contractors' construction schedules on an ongoing basis and alert SBCTA to conditions that may lead to delays in completion of the Project.
- h. CONSULTANT shall prepare and submit a monthly Activity Summary Report for the Project in a format approved by SBCTA. The activity report shall include among other items status of SWPPP issues, RFIs, contract change orders, and notice of potential claims; construction activities completed, ongoing, and upcoming; status of Project budget and schedule, and other highlights and critical issues.
- i. CONSULTANT shall review and ensure compliance with environmental requirements.
- j. CONSULTANT shall participate in partnering sessions with the Contractor, SBCTA, and Local Agencies, as required.
- k. CONSULTANT shall ensure that the Project meets all provisions of the SBCTA Construction Materials Quality Assurance Program and Caltrans Quality Assurance Program Manual.
- l. CONSULTANT shall review Contractors' certified payroll records and ensure compliance with the requirements of the construction contract.
- m. CONSULTANT shall ensure that the Project meets all provisions of the Storm Water Pollution Prevention Plan (SWPPP).
- n. CONSULTANT shall assure that the Project meets all applicable regulations of the Air Quality Management District (AQMD) and State Water Resource Control Board (SWRCB).
- o. CONSULTANT shall maintain redlined as-built plans on an ongoing basis throughout the duration of the Project. Redlined plans shall show all changes made to the original contract plans, each change identified with the name of the approver, date of change approval, and CCO number, if applicable

4. Construction Coordination

- a. CONSULTANT shall provide a minimum of one qualified Resident Engineer to effectively manage the Project.

- b. CONSULTANT Resident Engineer shall act as a prime point of contact between Contractor, SBCTA, CONSULTANT's construction surveyor, CONSULTANT's materials inspector, and utility companies. CONSULTANT may, when requested by SBCTA, act as point of contact between design engineers, cities, and the public. CONSULTANT shall ensure coordination with property owners adjacent to Project right-of-way to ensure timely communication regarding property-condition survey and construction activities and scheduling.
- c. CONSULTANT shall maintain regular contact with SBCTA's Project Manager.
- d. CONSULTANT shall coordinate utility relocations with utility companies and their designees, as well as the utility inspector.
- e. CONSULTANT shall proactively review Project plans and special provisions for possible errors and deficiencies prior to construction of any specific element and report such findings to SBCTA. Should SBCTA determine that changes are necessary, CONSULTANT shall assist in implementation and processing of change orders in accordance with contract documents.
- f. CONSULTANT shall proactively review Project plans and special provisions; monitor, coordinate, and track construction progress schedule and RFIs; and communicate with various agencies prior to construction of any specific elements to ensure the Project proceeds on schedule and according to the order of work in the plans and special provisions. CONSULTANT shall expedite work, as required, to maintain schedule in conjunction with the overall construction staging program.
- g. CONSULTANT shall coordinate review of shop drawings and Requests for Information (RFI) with the SBCTA Project Manager. CONSULTANT shall log and track all submittals and requests.
- h. CONSULTANT shall provide a qualified SWPPP Coordinator who along with the Resident Engineer shall review and certify contractor prepared Storm Water Pollution Prevention Plans (SWPPP) and coordinate approval with SBCTA and the State Water Resource Control Board. The SWPPP Coordinator shall be at a minimum a Qualified Storm Water Pollution Prevention Plan (SWPPP) Developer (QSD) and a Qualified SWPPP Practitioner (QSP). CONSULTANT shall provide at a minimum weekly SWPPP monitoring and shall cooperate with all monitoring agency inspections and field reviews.
- i. CONSULTANT shall coordinate the implementation of any changes with the SBCTA Project Manager and the design engineer.

- j. CONSULTANT shall review and approve falsework and shoring plans.
- k. CONSULTANT shall review and approve Traffic Control Plans and forward to SBCTA for Caltrans/City/County approvals, as necessary.
- l. CONSULTANT shall coordinate all Project construction activities with other on-going projects within and adjacent to the Project limits.

5. Construction Inspection

- a. CONSULTANT shall coordinate all required inspections necessary for the Project. CONSULTANT shall ensure that appropriate City and local agencies are notified and present as required throughout the Project. CONSULTANT shall notify SBCTA immediately regarding any directives, recommendations, notices, etc. received from agencies other than SBCTA.
- b. CONSULTANT shall perform daily on-site observations of the progress and quality of construction to determine if the work being performed is in general conformance with the contract documents, all applicable laws, codes, and ordinances.
- c. CONSULTANT shall exercise reasonable care and diligence to discover and promptly report to SBCTA any and all defects or deficiencies in the materials or workmanship used in the Project.
- d. CONSULTANT personnel assigned to the Project shall be thoroughly familiar with Caltrans Standard Specifications, Caltrans Standard Plans, Caltrans Erosion Control and Highway Planting requirements, safety standards and State Water Resources Control Board requirements. CONSULTANT personnel shall have the ability to read and interpret construction plans and specifications. CONSULTANT personnel shall also have knowledge of State of California Construction Safety Orders (CalOSHA) and traffic control practices as specified in the Work Area Traffic Control Handbook (WATCH). In addition, CONSULTANT personnel shall be thoroughly familiar with the construction requirements of Caltrans' Storm Water Pollution Prevention Program.
- e. Assignments to be performed by CONSULTANT personnel shall include, but are not limited to, the following:
 - 1) Paving and subgrade inspection, sub-surface & finish surface drainage inspection, structures and foundation inspection, electrical inspection for traffic, ramp meter and irrigation control equipment, signing and striping inspection, quantity calculations, checking grade and alignment, construction traffic control, soil amendments and plant material identification & quality control, hardscape inspection, trenching & irrigation inspection and duties that may be required to determine that construction of the Project is being performed in

accordance with the contract documents.

- 2) Identifying actual and potential problems associated with the Project and recommending sound engineering solutions.
- 3) Identifying common plant diseases and/or pests together with their respective eradication techniques, directing of plant adaptability requirements along with proper planting & pruning techniques, and avoiding potential problems associated with the Project by recommending sound engineering solutions.
- 4) Perform basic sampling of construction materials in the field per California Test Method 105 and 125 by both the prime and subconsultant personnel.
- 5) Maintaining awareness of safety and health requirements. Monitoring Contractors' compliance with applicable regulations and construction contract provisions for the protection of the public and Project personnel.
- 6) Preparing complete and accurate daily reports, calculations, Project records, payment quantity documents, reports, and correspondence related to Project activities.
- 7) Preparing construction sketches, drawings, and cross-sections, as necessary.
- 8) Assisting in the preparation of as-built plans.
- 9) Providing inspections for environmental compliance.
- 10) Maintaining awareness of water discharge requirements. Monitoring Contractors' compliance with applicable regulations and construction contract provisions.
- 11) Monitoring Contractors' compliance with applicable regulations required by AQMD.
- 12) Other duties as may be required or reasonably requested.

6. Project Support

a. Construction Surveys

CONSULTANT shall perform construction surveying services, field calculations, and home office calculations to support construction of the Project. CONSULTANT may be requested to review available survey data,

construction plans, and right-of-way plans to confirm compatibility and to identify discrepancies prior to and during construction of proposed projects. The Resident Engineer will assign survey work to the CONSULTANT as needed by issuing a "Request for Survey Services". Requests may include, but not be limited to, the following types of surveys and related services:

1) Construction Surveys

CONSULTANT shall perform construction staking and calculations as needed.

- a) Survey calculations and adjustments shall be performed with established and computed coordinates based on the California Coordinate System.
- b) Cross-section data collection shall be performed by conventional and terrain line interpolation survey methods.
- c) Survey data will include topography, cross-section, and other survey data in computer formats compatible with the Caltrans computer survey and design systems.
- d) Prepare and maintain survey documents. Survey documents include survey field notes, maps, drawings, and other survey documents.
- e) Perform construction staking as directed by Resident Engineer, including but not limited to:
 - i. Utility relocations
 - ii. Clearing limits
 - iii. Slope staking
 - iv. Storm drain, sanitary sewer, and irrigation systems
 - v. Drainage structures
 - vi. Curbs, gutters, and sidewalk
 - vii. Horizontal and vertical control for structures and portions of structures (bents, abutments, wingwalls, etc.)
 - viii. Rough grade
 - ix. Finish grade
- f) Monitor for settlement, if required.
- g) Global Positioning Satellite (GPS) equipment shall be made available if required by SBCTA
- h)

2) Grid Grades

Grid grade data shall provide pavement elevations at the station line, the left edge of pavement, the right edge of pavement, and the right edge of travel way at 25 foot intervals for travel lanes.

3) Open Ended Traverses and Profile Data Sheets

Separate open-ended traverse calculations and point maps shall depict plan data for station lines, utility lines, wall layout lines, and abutment/bent alignment. Specific information to be shown will be part numbers, coordinates, bearings, and curve data.

Profile data sheets are required for all profiles shown on the plans identifying vertical design elements such as grade, point of intersection (PI) location, beginning of vertical curve (BVC) location, end of vertical curve (EVC) location, and curve length.

4) Three Line Profiles

Separate profile plots are required for the left edge of pavement, the right edge of pavement, and the edge of shoulder for all travel lanes.

5) Right of Way Lines

Existing right of way and easements will be established from Local Agency's record information and existing monumentation.

- a) Right of way monumentation shall be renewed and restored in accordance with Section 10.4 of the Caltrans "Survey Manual" and the State of California Land Surveyor's Act.
- b) Corner records and records of surveys shall be prepared and filed in accordance with the applicable standards and the State of California Land Surveyor's Act and the California Subdivision Map Act.
- c) Perpetuate existing monumentation, which includes restoring, renewing, referencing, and resetting existing boundary related monumentation. In addition, stake areas where construction disturbs the existing right of way, preparing and filing required maps and records.

New right of way and easements will be established from plans, right of way maps, utility drawings, and Local Agency record information, and existing monumentation.

- a) Right of Way Surveys, which includes research and preparation filing of required maps and records. In addition, locate and set monuments for right of way and easement lines, staking for right of way and easement fences.
- b) Final monumentation, which includes setting of centerline points of control upon completion of construction.

6) Special Design – Data Surveys

Includes drainage, utility, and surveys required for special field studies.

7) Control Survey

Includes Project control surveys, aerial mapping control surveys, horizontal and vertical control surveys. In addition control surveys will include restoration, renewal, reference, relocation, and resetting of existing control monumentation. The CONSULTANT will be required to provide horizontal and vertical control at the end of each bridge.

8) Topographic Surveys

Topographic surveys will normally be compiled by ground survey methods only.

CONSULTANT will provide all necessary Project related surveys and construction staking, including horizontal and vertical control, right of way, and easements. CONSULTANT shall coordinate all staking and verify accuracy. CONSULTANT shall ensure timely coordination of all staking requests from the Contractor.

b. Materials Testing, Source Inspection and Geotechnical Services

- 1) CONSULTANT will provide experienced personnel, equipment, and facilities to perform various construction materials sampling and testing. Laboratory and field materials testing will be used to ensure that structure and roadway construction work conforms to California State Department of Transportation (Caltrans) standards, specifications, and special provisions for material quality and workmanship.
- 2) All field and laboratory testing is to be performed in accordance with California Test Methods.
- 3) CONSULTANT will be responsible for the accuracy and completeness of all test data compilation and results.

c. Public Outreach

General Public Outreach Plan will be provided and administered by SBCTA.

- a) SBCTA's primary goal is to assure the public that SBCTA is a public agency that delivers quality transportation projects and trustworthy, accurate and timely public information.
- b) SBCTA will provide the primary outreach effort with supplemental support as requested from CONSULTANT. This will be a targeted approach with incremental outreach based on construction schedule and staging. The primary target audiences identified for this Project include, but are not limited to:
 - i. LOCAL AGENCY
 - ii. SBCTA Board
 - iii. LOCAL AGENCY and area Emergency Service Providers
 - iv. School Transportation Coordinator(s)
 - v. Local Business Community
 - i) Specific businesses with expanding priority based on proximity to work zone and detours
 - ii) Chamber of Commerce
 - vi. Commuters
 - vii. Recreational Travelers
 - viii. Trucking Industry
 - ix. Local media
 - i) Print
 - ii) Radio
 - iii) Television
- c) In the weeks prior to the selection of a construction contractor, SBCTA may coordinate an Emergency Responders Project Briefing to highlight the Project details and possible access challenges for consideration by the Project team.
- d) Following the emergency responders briefing, SBCTA may coordinate a Chamber of Commerce Project Briefing to highlight the Project benefits, possible construction schedule and traffic management plan.
- e) Just prior to the start of field construction activities, SBCTA and CONSULTANT (includes all PR subs) may coordinate a groundbreaking media event with the LOCAL AGENCY to ceremoniously open the Project. CONSULTANT will be called up on to develop (with input from SBCTA) and maintain a task list of deliverables for this event. CONSULTANT will acquire

the necessary items authorized for the event. CONSULTANT will be responsible for set up and breakdown of the event site.

- f) Prior to construction beginning, SBCTA and CONSULTANT may coordinate a community meeting to share Project information, construction scheduling, detour information and expected challenges with the general public. CONSULTANT will be called up on to develop (with input from SBCTA) and maintain a task list of deliverables for this event. CONSULTANT will acquire the necessary items authorized for the event. CONSULTANT will be responsible for set up and breakdown of the event site. Staffing this event will be determined based on availability.
- g) Near the completion of the construction Project, SBCTA and CONSULTANT will coordinate a ribbon-cutting media event. CONSULTANT will be called upon in a similar fashion to the groundbreaking event.
- h) At various stages throughout the Project, SBCTA will request support from CONSULTANT for the following items:
 - i. Establish and maintain stakeholder and/or 'interested parties' list(s) – used for sharing Project updates during Project construction. May need to be filtered to specific audiences (i.e. emergency responders, city government, etc.)
 - ii. Development of a Project fact sheet (include Project description, Project budget, Project schedule, SBCTA contact information, LOCAL AGENCY contact information, photos, logos, etc.)
 - iii. Weekly media advisories (use SBCTA template). CONSULTANT (or sub) will make weekly contact with Project team to establish what road or lane closures (and associated detours if applicable) will be taking place, develop the advisory, send to SBCTA Public Information Office for approval, submit to webmaster for posting, distribute to appropriate media and stakeholder list.
 - iv. Emergency notices – when needed.
 - v. Develop web content for Project tab on SBCTA website. This page should include same elements of fact sheet with expanded detail when possible. If the information is dynamic, please provide updates to

SBCTA Public Information Office for approval prior to submitting to webmaster.

- 2) All requests for speaking to government councils, boards, chambers of commerce or similar business or social groups shall be directed to the SBCTA Public Information Office before agreeing to appear.
- 3) All media inquiries shall be directed to the SBCTA Public Information Office.

d. Permits

CONSULTANT shall review the Project for permit compliance and coordinate with SBCTA and the design engineer to ensure that necessary permits are obtained. CONSULTANT shall assist SBCTA in the coordination, timely processing and verification of approval for all permits. CONSULTANT shall maintain permits and permit documentation on site.

7. Cost and Schedule

a. CONSULTANT shall monitor and track the following:

- 1) Contract pay item quantities and payments
- 2) Contract change orders
- 3) Supplemental work items
- 4) Agency furnished materials
- 5) Contingency balance
- 6) Project budget

b. CONSULTANT shall review and monitor Contractor's schedule by keeping its own updated schedule to "shadow" that of the contractor and inform SBCTA of any significant changes or deviations in the schedule.

c. CONSULTANT shall provide and maintain a Project staffing plan of field office personnel based on the Contractor submitted baseline schedule update. In cooperation with SBCTA, the staffing plan shall be periodically updated to reflect Project progress and needs.

8. Change Orders and Claims

a. CONSULTANT shall receive and evaluate requests for changes and/or substitutions by the Contractor. Contract Change Orders submitted to SBCTA shall be accompanied by CONSULTANT recommendations. Where applicable, CONSULTANT shall convey proposed changes to design engineer, or other Project consultants. If the requested changes are accepted, CONSULTANT shall negotiate and prepare appropriate Contract Change Orders.

- b. CONSULTANT shall attempt to avoid unnecessary Contract Change Orders. When a Contract Change Order is necessary, CONSULTANT shall consult with SBCTA prior to its preparation. Unless directed otherwise by SBCTA, the preferred method of payment for Contract Change Orders should be as follows

- 1) Agreed Price
- 2) Adjustment in compensation to a bid item
- 3) Time and materials or Force Account

CONSULTANT shall perform force account analysis to validate cost submitted by the Contractor for contract change orders with agreed unit price, lump sum price, and adjustment in components. Analysis shall be based on realistic production and resource needs to complete the work.

- c. CONSULTANT shall attempt to identify all potential claims, track and monitor unresolved claims. The CONSULTANT shall implement appropriate claims avoidance processes where in the best interests of SBCTA as determined by SBCTA's Project Manager.
- d. CONSULTANT shall assist SBCTA, as requested, in the identification, resolution, and final disposition of claims filed by the Contractor or third parties against SBCTA or the Project.

9. Safety

In addition to the requirements specified elsewhere in this contract, the following shall also apply:

- a. CONSULTANT shall implement and conduct a comprehensive safety program including regular tail-gate safety meetings for CONSULTANT personnel. CONSULTANT shall provide SBCTA with monthly status of safety reports.
- b. CONSULTANT shall comply with State of California Construction Safety Orders and provisions of the Caltrans Construction Manual.
- c. CONSULTANT shall provide appropriate safety training for all CONSULTANT field personnel.
- d. CONSULTANT shall provide all necessary safety equipment as required for CONSULTANT personnel.

10. Toll System Construction Oversight

- Monitor the overall construction of tolling systems construction activities to identify critical milestones and priorities
- Coordinate and conduct pre-construction and pre-activity meetings with the Contractor and Toll System Provider(TSP)

- Provide engineering assessment of plans for adequacy of design, particularly with respect to suitability to actual field conditions
- Ensure compliance with the plans, specifications shop drawings, and material data submittals by the Contractor and TSP; recommend, modify, interpret, and edit special provisions and prepare modification estimates; and keep necessary records pertaining to construction progress, and budget performance;
- Monitor the CONTRACTOR and TSP construction QC programs, including the adequacy of capability of QC resources. Oversee and provide, as necessary, notification to the Contractor and TSP of rejected work when their work or materials do not conform to the requirements of the contract documents;
- Monitor compliance of CONTRACTOR and TSP safety plans and note concerns or deficiencies immediately to CONTRACTOR or TSP for their implementation of corrective measures;
- Provide construction oversight of the delivery of the toll system infrastructure by the CONTRACTOR. Validate/confirm the CONTRACTOR work, in coordination with the TSP, is correct per the design and technical requirements. This includes validating and testing power and communications conduit duct banks, gantries, CMS and camera pole installation, toll utility buildings, and emergency backup generators;
- Oversee the installation of TSP work, including roadside tolling equipment, communications and power, express lane cameras, CMS signage, traffic operations, and data center build out, document compliance with the contract requirements, and obtain signoff and acceptance by the Riverside County Transportation Commission and other stakeholder agencies, as required;
- Perform oversight and review of laboratory, shop, and mill test reports of materials and equipment, as needed;
- Monitor test and inspection records and noncompliance reports for satisfactory resolution of noncompliant work.
- Coordinate Operations and Maintenance implementation activities with TSP

11. Project Close Out

- a. CONSULTANT shall prepare a list of items to be completed and/or corrected by the Contractor for final completion of the Project.
- b. CONSULTANT shall collect and furnish as-built information to the design engineer for preparation of as-built drawings including pre-stress drawings and pile logs, as applicable.
- c. CONSULTANT shall review and verify completeness of as-built drawings.
- d. CONSULTANT shall conduct a final walk-through with SBCTA, Local Agencies, Contractors, and design engineers.
- e. CONSULTANT shall prepare final construction reports including the Project Completion Report.

- f. CONSULTANT shall prepare and deliver to SBCTA all Project files.
- g. CONSULTANT shall assist SBCTA and Contractor in obtaining final release of all Project permits.
- h. Project closeout services will be completed within two months of Project acceptance.

D. DELIVERABLES

- 1. Inspector daily reports, extra work diaries and Resident Engineers' daily diaries.
- 2. Monthly Project Summary Reports and SIQMP Monthly Reports.
- 3. Weekly update of all files to SBCTA Portal.
- 4. Monthly Contractor progress payments, back-up documentation, and Contractor payment records.
- 5. Contractor final payment documents, delivered to SBCTA no later than ten (10) working days after Acceptance by SBCTA of the completed construction Project.
- 6. Project Completion Report documents per Local Assistance Procedure Manual and Caltrans Construction Manual.
- 7. All Project files, Project reports, Record As-builts, correspondence, memoranda, shop drawings, Project logs, schedule updates, change order data, claims and claim reports, and Contractor payment records per Caltrans Construction Manual.
- 8. Certified payrolls and fringe benefit statements for all employees, CONSULTANT and Contractor, who are subject to the State and/or Federal prevailing wage rates.
- 9. American For Disabilities Act certification of Project per Caltrans Standards.
- 10. All material test results will be provided in accordance with the applicable Standard Specifications and Special Provisions, and test methods. Failing tests will be immediately reported to the Resident Engineer or Structures Representative. All test results will be recorded on the appropriate forms. The test documents will be legible and show the identity of the tester where appropriate. A notebook containing all test results and reports will be maintained by CONSULTANT throughout the duration of the Project and delivered to SBCTA with the Project files.
- 11. Record of Survey and Right of Way Monumentations and recording with County.
- 12. Unless otherwise specified in the survey request, the deliverables shall conform to the following:

- a. Survey points, lines, and monuments shall be established, marked, identified, and referenced as required by survey request and requirements herein.
- b. Survey notes, drawings, calculations, and other survey documents and information shall be completed as required by the survey request and the requirements herein.
- c. All original survey documents resulting from this contract, including original field notes, adjustment calculations, final results, and appropriate intermediate documents, shall be delivered to the Resident Engineer and shall become the property of SBCTA. A copy of all survey documents furnished by SBCTA shall be retained by CONSULTANT for future reference.

When the survey is performed with a total station survey system, the original field notes shall be a hard copy in a readable format of the data (observations) as originally collected and submitted by the survey party. The hard copy shall be signed by the Party Chief. If the Party Chief is not licensed, the person in “responsible charge” will be required to sign.

- d. Deliverables to the Resident Engineer shall follow the format specified below:
 - 1) Horizontal Control
 - 2) Alpha numeric hard copy point listing with adjusted California Coordinate System northing and easting and the appropriate descriptions.
 - 3) Vertical Control
 - 4) Alpha numeric hard copy benchmark listing with adjusted elevations compatible with the design datum.
 - 5) Topography
 - 6) Alpha numeric hard copy listing, hard copy drawing, and computer aided drawing and design (CADD) digital drawing. The CADD drawing shall be compatible with the systems utilized by Caltrans.
- e. Data collection method used to collect cross-section data and the coding (feature description) of terrain data for cross-sections shall conform to the survey request requirements. Deliverables shall depend on the data collection method as follows:
 - 1) Conventional Cross – Sections (each cross – section):
For each cross - section and alpha numeric listing, a hard copy drawing, and a computer formatted file compatible with the systems utilized by Caltrans.
 - 2) Terrain Line Interpolation Cross – Section Data (each terrain line interpolation survey):
Terrain line interpolation cross – sections shall include an alpha numeric listing, a hard copy plan view drawing of the terrain lines, and a computer input file. The computer input file shall be provided in a format compatible with the systems utilized by Caltrans.

- 3) Data Collector Data
If specified in the survey request, the raw data from the data collector shall be provided in a format conforming to the survey request requirements.
- 4) Other—As specified in the survey request.

F. RISK REGISTER

- 1) Obtain and review all available risk assessment information, including the risk register already developed by SBCTA and Caltrans that identifies risks, probability and severity of risk occurrence, proposed mitigation strategies, responsible parties, and mitigation timing.
- 2) Perform ongoing Project risk identification and management activities by working with the various Project work groups.
- 3) Provide quarterly updates of the risk register showing resolution and mitigation of defined Project risks, identification of new risks, and required mitigation measures; and
- 4) Provide all necessary reports and actions requested by SBCTA to support requests of Caltrans, or others in documenting adherence to all risk management requirements and practices.
- 5) Provide a Sequential list of activities during Preconstruction, Construction, Post Construction and Close out showing person responsible for each activity.
- 6) Provide a “monthly expenditure plan through completion” showing all CM personnel and subconsultants estimated billable hours and ODC’s. This document should also show planned vs actual charges from contract start date to current month expenditures.

E. EQUIPMENT AND MATERIALS TO BE PROVIDED BY CONSULTANT

1. CONSULTANT shall provide all necessary equipment including software, materials, supplies, miscellaneous tools, phones, vehicles, and safety equipment required for its personnel to perform the services accurately, efficiently, and safely. The above noted items are not to be included in Attachment B of Consultants Cost Proposal and are part of the consultants overhead. Only those items authorized by SBCTA in Attachment B, CONSULTANT Cost Proposal, shall be reimbursed by SBCTA.
2. CONSULTANT personnel shall be provided with vehicles suitable for the location and nature of the work involved. Vehicles shall be equipped with flashing yellow lights, either permanently or temporarily affixed.

3. CONSULTANT personnel shall be provided with a mobile radio, cellular phone, or other means to assure full-time communication. If a radio system is to be used, CONSULTANT shall provide a base station at the field office.
4. CONSULTANT personnel shall be provided with all applicable standard plans, specifications, and other standards as appropriate (see item G below).
5. For Materials Testing, CONSULTANT and its staff will be fully equipped at all times to perform the services required, including but not limited to the following:
 - a. An on-site mobile laboratory or laboratory in close proximity to the Project will be required. The type and location of the lab should be such that it can meet the needs of the Project in an efficient, time effective manner. The laboratory is to be fully staffed, equipped, and supplied to conduct all required soils, materials, and concrete breaking tests in a timely manner.
 - b. Field personnel will be provided with all necessary safety equipment to permit work to be performed safely and efficiently within operating highway and construction zone environments.
 - c. All equipment to be calibrated as per Section 3-10 and 3-11 of Caltrans' Quality Assurance Program Manual.
6. For construction surveying, CONSULTANT and staff shall have adequate equipment and supplies to complete the required survey work. Equipment and supplies shall, include, but not be limited to:
 - a. Survey vehicles:
Survey vehicles will be suitable to perform the required work in varying terrain and conditions encountered on the Project. Vehicles shall be fully equipped with all necessary tools, instruments, supplies, and safety equipment required to perform the work accurately, efficiently, and safely. Vehicles shall be equipped with a flashing yellow beacon light.
 - b. Data Processing Systems:

Data processing systems shall include hardware and software to:
 - 1) Performing survey and staking calculations from the design plans and specifications;
 - 2) Reduce survey data collected with conventional and total station survey systems;
 - 3) Perform network adjustments for horizontal and vertical control surveys;
 - 4) Format survey data to be compatible with the Caltrans computer survey and data system.
 - c. Drafting equipment and supplies.

- d. Digital calculators.
- e. Hand tools as appropriate for the requested survey work.
- f. Traffic cones (minimum 25). Traffic cones shall be 28 inches in height (minimum).
- g. Traffic control devices as required to perform the requested survey work. Traffic control devices include signs, sign bases, flags, and hand held signs.
- h. Leveling instruments and equipment:
 - 1) Self-leveling level. Precision: Standard deviations in one mile of double run leveling 0.005 feet or less.
 - 2) Suitable level rods for the work to be performed.
- i. Distance measuring instruments and equipment:
 - 1) Electronic distance measurer (EDM). Precision: standard deviation 3 mm plus 3 PPM, or less; Range: Minimum one mile under average atmospheric conditions.
 - 2) Prisms, sufficient to perform the required work.
 - 3) Tapes; steel, cloth.
- j. Angle measuring instruments and equipment:
 - 1) Theodolite for non-control surveys; Precision: direct circle reading to three seconds, or equivalent, horizontal and vertical.
 - 2) Targets as required to perform the work.
- k. When required for efficient survey operations, total station survey systems consisting of an electronic angle measuring instrument, EDM, and electronic data collector shall be provided. The angle measuring instruments and EDM shall conform to the requirements for the equipment previously listed.
- l. Radio or cellular communications equipment for communication between field office and field crews.
- m. Caltrans manuals, standards, forms, and other policies and procedures to be followed to perform the required work.

F. MATERIALS TO BE FURNISHED BY SBCTA

- 1. SBCTA will provide three (3) copies of all Project construction documents including plans, and special provisions, and one (1) copy of all other reports, designer prepared resident engineer files, and contracts. In addition, SBCTA will provide one (1) full size (24" x 36") sets of plans for use in the construction field office as record documents.
- 2. SBCTA will provide copies of all previously secured permits and Project authorizations.

3. SBCTA Construction Management Forms including SBCTA Construction Materials Quality Assurance Program, sample SIQMP and appropriate forms for recording test data in accordance with Caltrans practices and procedures outlined in the “Manual of Test”.

G. STANDARDS

All construction inspection, surveys, materials sampling and testing, and contract administration shall be in accordance with the Project bid documents, special provisions, plans, and current Caltrans Manuals including:

1. Construction Manual and its revisions
2. Bridge Construction Records and Procedures Manual
3. Quality Assurance Program Manual
4. Manual of Traffic Controls for Construction and Maintenance Work Zones
5. Caltrans Standard Specifications and Standard Plans
6. Caltrans Storm Water Pollution Prevention Plan (SWPPP) and Water Pollution Control Program (WPCP) Preparation Manual
7. Manual of Test (3 volumes)
8. Survey Manual
9. District 8 Standard Staking Procedures Manual

Work not covered by the manuals shall be performed in accordance with accepted professional standards.

Surveys performed by CONSULTANT shall conform to the requirements of the Land Surveyor’s Act. In accordance with the Land Surveyor’s Act, “responsible charge” for the work shall reside with the Licensed Land Surveyor or a pre-January 1, 1982, Registered Professional Civil Engineer in the State of California.

Unless otherwise specified in the survey request, control surveys shall conform to second order (modified) accuracy standards as specified in the Caltrans “Survey Manual”.

Additional standards for specific survey work may be included in the applicable request for survey. Such standards supplement the standards specified herein. If additional standards conflict with the standards specified herein, the “Survey Request’s” standard shall govern.

The Resident Engineer and SBCTA will decide all questions, which may arise as to the quality or acceptability of deliverables furnished and work performed for this contract. Any CONSULTANT employee who does not perform adequately will be replaced if directed by the SBCTA Project Manager.

H. AVAILABILITY AND WORK HOURS

The typical workday includes all hours worked by SBCTA’s construction Contractor including nights and weekends. The construction Contractor’s operations may be restricted to specific hours during the week, which will become the normal workday for

CONSULTANT's personnel. On days when work is not performed by the construction contractor, such as rainy or unsuitable weather days, CONSULTANT services will not be provided unless authorized by the SBCTA Project Manager.

Unless otherwise directed by SBCTA, the normal work week will consist of 40 hours. From time to time, overtime may be required. However, overtime will be worked only when approved in writing by SBCTA.

I. LIMITATIONS TO AUTHORITY

CONSULTANT does not have the authority to:

1. Authorize deviations from the contract documents.
2. Approve substitute materials or equipment; except as authorized in writing by SBCTA.
3. Conduct or participate in tests or third party inspections; except as authorized in writing by SBCTA.
4. Assume any of the responsibilities of the Contractors, Contractors' Superintendent, or subcontractors.
5. Exercise control over or be responsible for construction means, methods, techniques, sequences, procedures, or safety precautions.
6. Communicate directly with subcontractors or material suppliers without the prior consent of the Contractor.
7. Verbally authorize or approve change orders or extra work for the Project.
8. Offer or receive incentives, inducements, or other forms of enumeration to or from the Contractor to perform services or work outside the terms of any executed contracts for this Project.

J. THIRD PARTY RELATIONSHIPS

This Contract is intended to provide unique services for a specific project. In the development of the Project, SBCTA has worked closely with various professional consultants, agencies, and others in the preparation of the construction documents and other Project related materials. SBCTA, however, is solely responsible for and will be the sole point of contact for all contractual matters related to the Project. CONSULTANT shall take direction **only** from SBCTA and shall regularly inform **only** SBCTA of Project progress, outstanding issues, and all Project related matters.

During the course of the Project, CONSULTANT may find occasion to meet with Caltrans, City or County representatives, the design engineer, Project consultants, or other third parties who have assisted with the Project. These entities may, from time to time, offer suggestions and/or recommendations regarding the Project or elements of the Project. While SBCTA enjoys a close relationship with and has considerable confidence in the capabilities of these other parties, CONSULTANT shall not act on any suggestions, solicited or unsolicited, without obtaining specific direction from SBCTA. All oral and written communication with outside agencies or consultants related to the Project shall be directed only to SBCTA. Distribution of Project related communication and information shall be at the sole discretion of SBCTA representatives.

K. CONSTRUCTION SITE SAFETY

In addition to the requirements specified elsewhere in this contract, the following also will apply.

1. CONSULTANT will conform to the safety provisions of the Caltrans Construction Manual.
2. CONSULTANT's field personnel will wear white hard hats with proper suspension, orange vests with reflective tape, sleeved shirt, long pants, and leather boots with ankle support and rubber soled shoes at all times while working in the field.
3. CONSULTANT will provide appropriate safety training for all CONSULTANT's personnel, including work on and near highways.
4. All safety equipment will be provided by CONSULTANT.

L. BASIS FOR SURVEY AND MONUMENT STAKING

SBCTA will designate the existing horizontal and vertical control monuments that are the basis of CONSULTANT performed surveys. SBCTA will provide the California Coordinate System values and/or elevation values for these monuments. CONSULTANT shall adjust CONSULTANT performed surveys to be the designated control monuments and the values.

Monuments established by CONSULTANT shall be marked by CONSULTANT with furnished disks, plugs, tags. In addition, CONSULTANT shall identify CONSULTANT established monuments by tagging or stamping the monuments with the license or registration number of CONSULTANT'S surveyor who is in "responsible charge" of the work.

M. PERSONNEL QUALIFICATIONS AND RESPONSIBILITIES

The quantity and qualifications of field personnel to be assigned will be determined by the scope of the Project and the degree of difficulty of required tasks to be performed. Again, all personnel and personnel assignments are subject to approval by SBCTA. While some areas of responsibility may overlap, as a guideline, CONSULTANT personnel assigned to the Project should have the following qualifications:

1. Project Manager
 - a. A minimum of six (6) years' project management experience on similar construction projects is desired.
 - b. Accessible to SBCTA at all times during normal working hours.
 - c. A thorough understanding of Caltrans construction practices and procedures.
 - d. A thorough understanding of Cal-OSHA practices and procedures.

- e. The Project Manager will assume the following functional responsibilities:
 - 1) Review, monitor, train, and provide general direction for CONSULTANT personnel.
 - 2) Assign personnel to projects on an as-needed basis.
 - 3) Administer personal leave.
 - 4) Prepare monthly reports for delivery to SBCTA.

2. Resident Engineer

- a. A minimum of eight (8) years' resident engineer experience on similar construction projects is desired.
- b. Licensed Professional Civil Engineer in the State of California.
- c. Ability to work independently, make effective decisions concerning construction work in progress, and solve field problems.
- d. Accessible to SBCTA at all times including weekends and holidays.
- e. Certified as a Qualified SWPPP Developer or Practitioner is desired.
- f. A thorough understanding of Cal-OSHA practices and procedures.
- g. A thorough understanding of American with Disability Act (ADA) and Caltrans ADA requirements. Completion of Caltrans Temporary Pedestrian Facilities training within last 6 months.
- h. A thorough understanding of Caltrans field methods, practices, and construction office procedures. The Resident Engineer will assume the following functional responsibilities:
 - 1) Monitor and provide daily direction to CONSULTANT Resident Engineers and inspection personnel.
 - 2) Assign field personnel to specific project tasks.
 - 3) Monitor and track Contractor progress.
 - 4) Prepare daily, weekly and monthly reports as required.
 - 5) Coordinate utility relocations with appropriate agencies and the utility inspector.
 - 6) Act as prime field contact between various project Contractors and SBCTA's Project Manager.

3. Assistant Resident Engineer

- a. A minimum of four (4) years' experience on similar construction projects is desired.
- b. Licensed Professional Civil Engineer in the State of California.
- c. Ability to work independently, make effective decisions concerning construction work in progress, and solve field problems.
- d. Accessible to SBCTA at all times including weekends and holidays.
- e. Certified as a Qualified SWPPP Developer or Practitioner is desired.
- f. A thorough understanding of Cal-OSHA practices and procedures.
- g. A thorough understanding of American with Disability Act (ADA) and Caltrans ADA requirements. Completion of Caltrans Temporary Pedestrian Facilities training within last 6 months.
- h. Thorough understanding of Caltrans field methods, practices, and construction office procedures. The Assistant Resident Engineer shall act under the direction of the Resident Engineer and will assume the following functional responsibilities:
 - 1) Monitor and provide daily direction to CONSULTANT inspection personnel.
 - 2) Assign field personnel to specific project tasks.
 - 3) Monitor and track Contractor progress.
 - 4) Prepare daily, weekly and monthly reports as required.
 - 5) Coordinate utility relocations with appropriate agencies.

4. Lead Field Inspector

- a. A minimum of six (6) years' construction inspection experience in public works or similar projects or a four-year degree in the field of civil engineering, transportation and four years of similar construction experience is desired.
- b. A thorough understanding of Cal-OSHA practices and procedures.
- c. Knowledge of Caltrans construction practices, physical characteristics and properties of highway construction materials, and approved methods and equipment used in making physical tests of construction materials.
- d. Ability to work independently, make effective decisions concerning construction work in progress, and solve field problems.
- e. Ability to direct the efforts of subordinate inspectors.
- f. Ability to use an automatic level and transit for the purpose of verifying line

and grade.

- g. Certified as a Qualified SWPPP Developer or Practitioner is desired.
- h. A thorough understanding of American with Disability Act (ADA) and Caltrans ADA requirements. Completion of Caltrans Temporary Pedestrian Facilities training within last 6 months.
- i. Understanding of Caltrans field and construction office procedures. The Lead Field Inspector will assume the following functional responsibilities:
 - 1) Assist in inspections to assure compliance with contract plans, specifications, and special provisions on all phases of construction.
 - 2) Assist in the preparation of contract change orders, contract estimates, progress pay estimates, and other documents or reports required for the Project.
 - 3) Coordinate field testing of materials to monitor compliance with Project specifications and Caltrans Quality Assurance Program.
 - 4) Maintain accurate and timely Project records. Perform quantity calculations for progress pay estimates.
 - 5) Perform analytical calculations such as basic earthwork, grading, profiles, and special staking procedures.
 - 6) Provide input for the redesign of facilities to fit existing field conditions.
 - 7) Monitor and track Contractor progress. Prepare daily, weekly, and monthly reports as required.

5. Field Inspector

- a. Two (2) years' construction inspection experience in public works or similar projects or a four-year degree in the field of civil transportation engineering is desired.
- b. A thorough understanding of Cal-OSHA practices and procedures.
- c. Knowledge of construction practices, physical characteristics and properties of construction materials, and approved methods and equipment used in making physical tests of construction materials.
- d. Ability to work independently. Ability to make minor decisions concerning construction work in progress and to solve field and office problems.
- e. Ability to use an automatic level and transit for the purpose of verifying line and grade.
- f. Certified as a Qualified SWPPP Developer or Practitioner is desired.

- g. A thorough understanding of Americans with Disability Act (ADA) and Caltrans ADA requirements. Completion of Caltrans Temporary Pedestrian Facilities training within last 6 months.
- h. Understanding of Caltrans construction methods and practices. The Field Inspector will assume the following functional responsibilities:
 - 1) Assist in inspections to assure compliance with contract plans, specifications, and special provisions on all phases of project construction.
 - 2) Assist in preparation of contract change orders, contract estimates, progress pay estimates, and other documents or reports required for the Project.
 - 3) Coordinate field testing of materials to monitor compliance with Project specifications and Caltrans Quality Assurance Program.
 - 4) Perform quantity calculations for progress pay estimates and maintain Project records.
 - 5) Perform analytical calculations such as basic earthwork, grading, profiles, and special staking procedures.
 - 6) Provide input for the redesign of facilities to fit existing field conditions.
 - 7) Perform construction materials sampling.
 - 8) Perform labor compliance interviews of the Contractors' personnel.

6. Structural Representative

- a. A minimum of six (6) years' of bridge or structural construction inspection as related to major public works projects and a four-year degree in civil engineering is desired.
- b. A minimum of four (4) years as a Structural Representative on major public works projects.
- c. Licensed Professional Civil Engineer in the State of California.
- d. Knowledge of stress analysis, structural mechanics, and strength of materials.
- e. A thorough understanding of Cal-OSHA practices and procedures.
- f. Knowledge of Caltrans and Greenbook construction practices and the physical characteristics and properties of various bridge construction materials including concrete.
- g. Experience in the following areas: foundations, pile driving, concrete prestressing, bridge deck construction, cast-in-place wall construction, falsework, and shoring.
- h. Ability to work independently. Ability to perform duties in the construction

field office and effectively make decisions concerning construction work in progress and solving field problems.

- i. Ability to direct the efforts of subordinate inspectors.
- j. Ability to use an automatic level and transit for the purpose of verifying line and grade.
- k. Thorough understanding of Caltrans field methods, practices, and construction office procedures. The Structural Representative shall assume the following functional responsibilities:
 - 1) Assist in inspections to assure compliance with contract plans, specifications, and special provisions on all phases of structural construction such as bridges, foundations, walls, falsework, shoring, and drainage structures.
 - 2) Make grade, alignment, quantity, falsework, and shoring calculations.
 - 3) Assist in the preparation of contract change orders, contract estimates, progress pay estimates, and other documents or reports required for the Project. Coordinate the sampling and testing of construction materials to monitor compliance with contract specifications.
 - 4) Monitor and track Contractor progress. Prepare daily, weekly, and monthly reports as required.
 - 5) Coordinate with Resident Engineer, as well as the Construction Staking and Material Testing consultants.
 - 6) Direct the daily activities of subordinate inspectors.

7. Structural Inspector

- a. A minimum of four (4) years' of bridge design or structural construction inspection as related to Caltrans or major public works projects and a four-year degree in civil or structural engineering is desired.
- b. Knowledge of stress analysis, structural mechanics, and strength of materials.
- c. A thorough understanding of Cal-OSHA practices and procedures.
- d. Knowledge of construction practices and the physical characteristics and properties of various highway bridge construction materials including concrete.
- e. Experience in one or more of the following areas: pile driving, concrete prestressing, bridge deck construction, retaining wall construction, falsework, and shoring.
- f. Ability to work independently and make minor decisions concerning construction work in progress and to solve field and office problems.

- g. Ability to use an automatic level and transit for the purpose of verifying line and grade.
- h. Understanding of Caltrans construction methods and practices. The Structural Inspector will assume the following functional responsibilities:
 - 1) Assist in inspections to assure compliance with contract plans, specifications, and special provisions on all phases of structural construction such as bridges, foundation, walls, falsework, shoring, and drainage structures.
 - 2) Make grade, alignment, quantity, falsework, and shoring calculations.
 - 3) Assist in the preparation of contract change orders, contract estimates, progress pay estimates, and other documents or reports required for the Project.
 - 4) Sampling and testing of construction materials to monitor compliance with contract specifications and Caltrans Quality Assurance Program.

8. Office Engineer

- a. A minimum of two (2) years' experience as an office engineer on similar construction projects is desired.
- b. Knowledge of Caltrans Office of Highway Construction forms used to administer construction projects.
- c. Knowledge of Caltrans system of document organization.
- d. Knowledge of construction records and accounting procedures.
- e. Knowledge of documentation, procedures, and reporting for federally funded projects.
- f. Knowledge of laws and regulations governing the payment of prevailing wages.
- g. The Office Engineer will assume the following functional responsibilities:
 - 1) Process monthly progress pay estimates, monthly status reports, extra work reports, and weekly statements of working days.
 - 2) Prepare and process contract change orders.
 - 3) Monitor construction budget and schedule.
 - 4) Prepare, maintain, and/or file project documents including labor and equipment records, correspondence, memoranda, meeting minutes, claims, personnel records, labor compliance reports, and daily, weekly, and monthly reports.

- 5) Perform routine calculations and checking of quantities.
- 6) Coordinate all office activities and functions with SBCTA representatives.

9. Materials Testing/Source Inspection Project Manager

- a. A minimum four (4) years' project management experience on a similar highway/bridge construction project is desired.
- b. Licensed Civil Engineer in the State of California.
- c. Ability to use typical computer programs including word processing and spreadsheets.
- d. The Materials Testing/Source Inspection Project Manager will assume the following functional responsibilities:
 - 1) Review, monitor, train, and provide general direction for CONSULTANT's laboratory, field and source inspection personnel.
 - 2) Assign personnel to projects on an as-needed basis in coordination with the Resident Engineer.
 - 3) Administer personal leave, subject to approval of the Resident Engineer.
 - 4) Prepare monthly reports for delivery to the Resident Engineer.
 - 5) Provide direction, administration, and responsibility for Materials Certification per Caltrans Construction Manual, Section 8-01.
 - 6) Assist SBCTA and Resident Engineer in preparing the project specific Source Inspection Quality Management Plan (SIQMP) for Caltrans review and approval. (Reference Caltrans "Source Inspection Quality Management Plan (SIQMP Outline dated 04/17/12).
 - 7) Provide direction, administration, and responsibility for implementation of the approved SIQMP per Caltrans Construction Procedures Directive (CPD) 08-5 and FHWA Title 23 requirements.

Material testing/source inspection personnel will be certified by a California Registered Civil Engineer as being experienced and competent in the test procedures required for the work involved (and possess a current certificate of proficiency (Form MR-0111) in accordance with Quality Assurance Program Manual (Section 3-5). Independent certification of Caltrans test procedures may be performed at the discretion of the SBCTA Project Manager.

10. Materials Technicians

CONSULTANT personnel provided under this contract will have a variety of skills and experience appropriate for the level of tasks to be assigned. Field personnel shall be certified by Caltrans and should have a minimum of two (2) years' experience in conducting material sampling and testing of the type required for the projects involved and possess the following additional capabilities:

- a. Have the ability to establish specific locations for appropriate tests when construction contract administration personnel are not available.
- b. Be familiar with construction practices and be fully aware of construction activities at the Project site.
- c. Have knowledge of and comply with safety and health regulations and requirements applicable to the Project.
- d. Specific qualifications for technicians are as follows:

1) CONSTRUCTION TECHNICIAN I

- a) Performs a variety of semi-skilled activities. Examples of duties assigned to this classification are:
 - i. Conducting quality control tests such as soil densities, sieve analysis tests, operation scales and inspecting spread operations.
 - ii. Sampling and transporting produced construction materials from point of application or production to testing laboratory.
- b) Knowledge and Skills Required
 - i. Knowledge of tools, equipment and vehicles utilized in construction.
 - ii. Knowledge of standard equipment and materials used for the sampling and testing of construction material.
 - iii. Knowledge of basic mathematics used in the computation of a variety of construction items.
 - iv. Knowledge of record keeping, preparing of documents and reports.

2) CONSTRUCTION TECHNICIAN II

- a) Performs a variety of skilled activities. Examples of duties assigned to this classification are:
 - i. Inspecting minor construction items, sampling and inspection of steel reinforcement, sampling and inspection of concrete placing operation.
 - ii. Collect and analyze soil samples of construction materials to determine compaction and moisture content.
 - iii. Inspection and sampling of all phases of asphalt

concrete and PCC paving operation, including plant inspection.

- iv. Confers with construction engineers and contractors regarding construction in progress and is conformance to specifications and construction plans.
- v. Answers questions and resolves problems.
- vi. Inspects construction in progress to ensure conformance with specification, agreements, and established requirements.
- vii. Keeps daily diary of work progress.
- viii. Prepares reports on all field inspections and submits project quantities on a daily basis.
- ix. Keeps accurate documentation for force accounts and possible claims.

b) Knowledge and Skills Required

- i. All knowledge and skills required of lower classification.
- ii. Knowledge of currently accepted methods, procedures and techniques used in highway construction inspection, survey, materials testing, and quality control equipment.
- iii. Skill in interpersonal relations as applied to contact with contractors, representatives of other governmental jurisdictions, and other SBCTA/Caltrans staff.

3) CONSTRUCTION TECHNICIAN III

a) Exercises considerable independent judgment within general Caltrans standards and guidelines. Examples of duties assigned to this classification are:

- i. Inspect Project construction on an ongoing basis to assure compliance with contract and in accordance with State and local standards.
- ii. Perform a variety of structural material tests and inspections.
- iii. Reviews construction plans and verified that these are in accordance with designated specifications and other requirements.
- iv. Participates in the preparation of completed work estimates, to calculate compensation due contractor.
- v. Examines and verifies numeric data and material specifications on project cost source documents, utilizing geometry and trigonometry calculations.
- vi. Supervises all work activities involved in construction

- projects, laboratory, and quality control work.
- vii. Recommends approval of proposed Project changes.

b) Knowledge and Skills Required

- i. All knowledge and skills required of lower classifications.
- ii. Knowledge of the principles and practices of Civil Engineering as applied to the construction of state highways.
- iii. Skill in analyzing and evaluating a wide variety of highly technical engineering data, including construction plans, field survey and quality control documents.
- iv. Skill in interpreting and implementing Caltrans standards, policies, procedures and regulations.
- v. Skill in interpersonal relations, as applied to contacts with contractors, representatives of other governmental jurisdictions, and other SBCTA/Caltrans staff.

11. Construction Surveying Project Manager

- a. A minimum four (4) years' project management experience on similar construction projects is desired.
- b. Licensed Surveyor or pre-January 1, 1982 Registered Professional Engineer in the State of California.
- c. Accessible to the Resident Engineer and SBCTA at all times during normal working hours as specified in this Scope of Services.
- d. Under the direction of the Resident Engineer, the Survey Project Manager will be responsible for:
 - 1) Review, monitor, train, and provide general direction for CONSULTANT survey personnel.
 - 2) Assign personnel to projects on an as-needed basis.
 - 3) Administer personal leave, subject to approval of the Resident Engineer.
 - 4) Prepare monthly reports for delivery to the Resident Engineer.

12. Field Party Chief(s)

- a. The person(s) holding the position of Party Chief shall meet at least one of the following licensing requirements:
 - 1) A licensed Land Surveyor in the State of California.

- 2) A pre-January 1, 1982, Registered Professional Civil Engineer in the State of California.
 - 3) An experienced surveyor who serves as chief under the direction or supervision of a person who is a licensed Land Surveyor or pre-January 1, 1982 Registered Professional Civil Engineer in the State of California. The direction or supervision shall place the supervisor in “responsible charge” of the work. “Responsible Charge” is defined in Chapter 15 of the Business and Professions Code (the Land Surveyor’s Act) and Title 16, Chapter 5, of the California Administrative Code (regulations adopted by the Board of Registration for Professional Engineers and Land Surveyors).
- b. The Party Chief(s) should have a minimum two (2) years’ survey experience on similar construction projects and possess the following additional capabilities:
- 1) Thorough knowledge of construction survey practices and the ability to read and interpret plans and specifications.
 - 2) Ability to make effective decisions concerning field problems and work in progress.
 - 3) Familiarity with typical coordinate geometry computer programs.
 - 4) Familiarity with safety requirements for surveying near traffic.
- c. The Party Chief(s) will assume the following responsibilities:
- 1) Perform construction staking services for Project construction.
 - 2) Administer day to day activities for the survey party.
 - 3) Perform analytical survey calculations for items such as grading, horizontal and vertical control, right of way, and minor in-field design.
 - 4) Maintain continuous communication with the Resident Engineer, field personnel, and construction administration staff.

13. Survey Crews

- a. Qualifications for survey crew members should include the following:
- 1) A minimum of one (1) year of survey experience on similar construction projects is desired.
 - 2) Fundamental knowledge of construction survey practices and the ability to read and interpret plans and specifications.
 - 3) Ability to assist Party Chiefs and office personnel in all required surveying work.
 - 4) One survey crew member must have the ability to assume temporary leadership of the survey party in the absence of the Party Chief.
- b. Under the direction of the Resident Engineer and the Party Chief, the survey crew members will assume the following responsibilities:

- 1) Perform basic calculations to support construction staking.
- 2) Maintain continuous communication with Party Chiefs and office personnel.

END OF SCOPE OF WORK

EXHIBIT B

Specific Rate of Compensation

EXHIBIT B

7.e

Specific Rate of Compensation (use for on call or As- Needed contracts)
(Construction Engineering and Inspection Contracts)

CONTRACT NO. 22-1002757 "I-15 EXPRESS LANES CONTRACT 1 CONSTRUCTION MANAGEMENT SERVICES"

Contract Totals			
PRIME	TRC Engineers, Inc.	Hours	Cost
	Labor Costs	66958	\$ 14,622,978.14
	Other Direct Costs		\$ 432,300.00
Sub total		66958	\$ 15,055,278.14
Safety Coordination	AIX		
	Labor Costs	1080	\$ 239,091.65
	Other Direct Costs		\$ 4,687.50
Sub total		1080	\$ 243,779.15
Project Controls	CALIWORKS		
	Labor Costs	1170	\$ 266,561.81
	Other Direct Costs		\$ 4,536.00
Sub total		1170	\$ 271,097.81
Utility Inspector	CMTS		
	Labor Costs	500	\$ 108,535.28
	Other Direct Costs		\$ 3,600.00
Sub total		500	\$ 112,135.28
Electrical	DESI		
	Labor Costs	2744	\$ 581,993.76
	Other Direct Costs		\$ 16,468.75
Sub total		2744	\$ 598,462.51
Cultural Resources	CRM		
	Labor Costs	720	\$ 118,484.07
	Other Direct Costs		\$ 4,375.00
Sub total		720	\$ 122,859.07
Office Engineer/Scheduling	FCG		
	Labor Costs	3300	\$ 348,727.76
	Other Direct Costs		\$ 3,125.00
Sub total		3300	\$ 351,852.76
Quality	G3		
	Labor Costs	3840	\$ 583,706.73

Form 351 - Specific Rate of Compensation Cost Proposal

EXHIBIT B

7.e

Specific Rate of Compensation (use for on call or As- Needed contracts)
(Construction Engineering and Inspection Contracts)

	Other Direct Costs		\$	392,144.70
Sub total		3840	\$	975,851.43
Toll Integration	Gannett Fleming			
	Labor Costs	810	\$	162,701.74
	Other Direct Costs		\$	11,472.00
Sub total		810	\$	174,173.74
Surveys	Guida Surveying, Inc.			
	Labor Costs	5642	\$	1,184,343.93
	Other Direct Costs		\$	20,304.68
Sub total		5642	\$	1,204,648.62
Roadway/Structure/Toll	Hill International			
	Labor Costs	4800	\$	961,645.19
	Other Direct Costs		\$	93,600.00
Sub total		4800	\$	1,055,245.19
Roadway	IQON			
	Labor Costs	1200	\$	283,770.20
	Other Direct Costs		\$	12,500.00
Sub total		1200	\$	296,270.20
Roadway/Structure	Kleinfelder			
	Labor Costs	5780	\$	1,083,305.25
	Other Direct Costs		\$	45,540.00
Sub total		5780	\$	1,128,845.25
Biological Monitoring	LSA			
	Labor Costs	1240	\$	240,302.97
	Other Direct Costs		\$	20,500.00
Sub total		1240	\$	260,802.97
Paleontology	Material Culture Consulting			
	Labor Costs	970	\$	95,421.11
	Other Direct Costs		\$	312.50
Sub total		970	\$	95,733.61
Strucuture	Syrusa			
	Labor Costs	12540	\$	2,849,018.70
	Other Direct Costs		\$	84,375.00
Sub total		12540	\$	2,933,393.70
Material Testing & Inspection	Twining			

Attachment: 22-1002757 Exhibit B (8762 : Award CM Services Contract for I-15 Corridor Freight and Express Lanes Project - Contract 1)

EXHIBIT B

7.e

Specific Rate of Compensation (use for on call or As- Needed contracts)
(Construction Engineering and Inspection Contracts)

	Labor Costs	2570	\$	370,398.19
	Other Direct Costs		\$	154,580.00
Sub total		2570	\$	524,978.19
	VA			
MOT Inspection	Labor Costs	1200	\$	317,614.98
	Other Direct Costs		\$	12,375.00
Sub total		1200	\$	329,989.98
	WSP			
Strcutre/Toll	Labor Costs	10402	\$	2,693,837.87
	Other Direct Costs		\$	247,200.00
Sub total		10402	\$	2,941,037.87
	ZT			
Source Inspection	Labor Costs	3530	\$	492,192.64
	Other Direct Costs		\$	370,075.00
Sub total		3530	\$	862,267.64
Contract Grand Total Amount		130996	\$	29,538,703.11

Attachment: 22-1002757 Exhibit B (8762 : Award CM Services Contract for I-15 Corridor Freight and Express Lanes Project - Contract 1)

Minute Action

AGENDA ITEM: 8

Date: August 11, 2022

Subject:

Regional Early Action Planning 2.0 Grant Applications

Recommendation:

That the following be reviewed and recommended for final approval by the Board of Directors, acting as the San Bernardino County Transportation Authority (SBCTA) and San Bernardino Associated Governments (SBCOG), at a regularly scheduled Board meeting:

A. Authorize SBCTA/SBCOG staff to submit the following applications to the Southern California Association of Governments (SCAG) for the Regional Early Action Planning (REAP) 2.0 grants:

1. Senate Bill 743 Vehicle Miles Traveled Mitigation Crediting Program under the County Transportation Commission (CTC) Partnership Program.
2. First/Last Mile transit service enhancements at selected Metrolink stations under the CTC Partnership Program.
3. San Bernardino County Housing Trust Program under the Housing Supportive Infrastructure Program.
4. Tunnel to Ontario International Airport / West Valley Connector / Cucamonga Station Land Use Strategy under the CTC Partnership Program.
5. Other Supplemental Planning Work Left from REAP 1.0 under the Sub-regional Partnership Program 2.0.

B. Authorize the Executive Director, or his designee, to approve the scope of work and sign the applications that would eventually become part of the regional application being submitted by SCAG to the California Department of Housing and Community Development by the end of December 2022.

C. Authorize the Executive Director, or his designee, to negotiate and execute future Restricted REAP 2.0 Grant Agreements between SBCTA/SBCOG and SCAG to receive reimbursement grant funding, subject to approval as to form by General Counsel.

Background:

On July 7, 2022, the Southern California Association of Governments (SCAG) Regional Council (RC) adopted the Regional Early Action Planning Grant Program for 2021 (REAP 2021 or REAP 2.0) Program Development Framework. The REAP 2.0 was established by the state of California in the Fiscal Year 2021/2022 Budget to support transformative and innovative projects that implement a region's Sustainable Communities Strategy (SCS) and help achieve goals of more housing and transportation options that reduce reliance on cars. Approximately \$600 million is available statewide to support transformative and innovative projects, and the SCAG region's formula share is expected to be around \$246 million. Approximately 80 percent of these funds are from the Coronavirus State and Local Fiscal Recovery Funds (SLFRF), established as a part of the American Rescue Plan Act (ARPA), and the balance are State General Funds. These new funds will be provided as grants to regional entities, primarily metropolitan planning organizations (MPO) such as SCAG. All REAP 2.0 funds are to be

Entity: San Bernardino Council of Governments, San Bernardino County Transportation Authority

obligated by June 2024 and expended by June 2026, with a final closeout report due June 2026. The California Housing and Community Development Department (HCD) is the lead for the program and is working collaboratively with the Strategic Growth Council (SGC), Governor's Office of Planning and Research (OPR), and California Air Resources Board (CARB), to develop detailed guidelines for implementation.

SCAG staff is currently proposing three (3) main programmatic areas to distribute the \$246 million of REAP 2.0 funding. The program areas have been developed to closely resemble the draft HCD REAP guidelines. The three program areas include: 1) Early Program Initiatives – Connect SoCal Implementation Strategy that includes a Sub-Regional Partnership (SRP) Program, 2) County Transportation Commission (CTC) Partnership Program, and 3) Housing Supportive Infrastructure Program.

The proposed three (3) SCAG programmatic areas are aligned with the REAP 2.0 priorities. There are three (3) core objectives that every proposed project needs to address and meet:

1. Accelerating infill housing development, and
2. Reduce Vehicle Miles Traveled, and
3. Affirmatively Further Fair Housing.

1. Early Program Initiatives: SCAG will expand certain existing programs in the Connect SoCal Implementation Strategy to offer additional support to cities in implementing Connect SoCal.

- a. Sustainable Communities Program (SCP): The Call-for-Projects provides resources to local jurisdictions to conduct Greenhouse Gas / Vehicle Miles Traveled (GHG/VMT) reducing planning activities and demonstration projects with a nexus to housing production in the SCAG region.
- b. Go Human: SCAG is seeking to expand local resources and toolkits to help cities, counties and community-based organizations promote safe walking and biking.
- c. Regional Data Platform (RDP): SCAG seeks to partner with sub-regional agencies and other partners to expand support and training for local jurisdictions to use the RDP as well as provide additional features and functions to help further align local efforts with regional goals through performance dashboard features.
- d. *Sub-regional Partnership Program 2.0 (SRP2.0): SCAG will work with the sub-regional Council of Governments (COG) to develop a SRP Program similar to the SRP Program developed under REAP 1.0 but based on REAP 2.0 goals and objectives. SCAG staff has shared a set of draft guidelines with the sub-regional COGs with a funding level that was similar to REAP 1.0. (Approximately \$23 million). There will be a formula share of 12 percent allocated to San Bernardino COG (SBCOG) (\$2.76 million).*

2. CTC Partnership Program: SCAG will develop a new partnership program with the region's six CTCs, to fund the development of plans, programs, pilot projects, and certain signature GHG/VMT reducing capital projects with a strong nexus to housing, consistent with the goals and objectives of REAP 2.0. *SCAG staff has shared a set of draft guidelines with the CTCs with a funding level of around 40 percent of the total REAP allocated to*

SCAG. (Approximately \$100 million). There will be geographic “guidance” built into the program funding distribution, but not a formula share of the funding like the SRP.

- 3. Housing Supportive Infrastructure Program** - The Housing Supportive Infrastructure program builds on the concepts put forward in the Key Connections in Connect SoCal 2020, as well as current work funded through the REAP 1.0 program. This program will have 4 main priority areas:
- a. Utilities to support housing development: Identify transformative programs to invest in the utilities (sewer, storm water, electric, broadband) needed to environmentally clear, entitle and ultimately build the housing needed to meet the region’s 6th cycle Regional Housing Needs Assessment (RHNA) goals.
 - b. ***Housing Trust Funds: Support establishment of and investing in catalyst housing funds, regional or sub-regional housing trust funds, and revolving loan funds to leverage efforts to deliver affordable housing.***
 - c. Preservation of expiring covenants and naturally occurring affordable housing: Target existing affordable housing with expiring covenants and develop programs to extend covenants and preserve these units as affordable.
 - d. ***Technical Assistance: Through the outreach process, SCAG will identify additional technical assistance needs for cities, counties and other partners.*** Technical Assistance may include programs to:
 - i. ***Help public agencies use their surplus land for affordable housing development,***
 - ii. Continue land use planning efforts that implement 6th cycle Housing Elements,
 - iii. Ensure the region can secure grant funding for affordable housing development.

In response to the REAP 2.0 program framework and draft guidelines shared from SCAG, San Bernardino County Transportation Authority (SBCTA)/SBCOG staff currently has several projects that would fit and compete well within these three (3) program areas. On November 3, 2021, staff provided an update on the progress of the REAP 1.0 housing element technical assistance funding program. In that agenda item, staff shared a brief summary of each proposal currently included in this item. Staff noted that additional details on each of the concepts would be provided to the SBCTA Board of Directors (Board) as the REAP 2.0 guidelines are completed and SCAG program direction becomes clearer. Based on the current schedule of the REAP 2.0 shared with SBCTA/SBCOG, staff is bringing these proposals forward to be authorized by the Board to submit under the SCAG REAP 2.0 grant program.

It is important to note that more detail will be added for purposes of the actual applications to SCAG. A variation of these concepts may emerge as we get closer to the application deadline. Details of the applications will be developed and reviewed by staff familiar with the subject matter, under the oversight of the Executive Director. Specific funding requests are expected to total in the vicinity of \$45 million for all proposals combined; however, the final allocation of requests will be discussed with the Executive Director. The proposals below should not be considered a final set, as additional ideas may come to light over the next two (2) months. However, substantial outreach has occurred with local jurisdictions particularly with the VMT

Mitigation Bank and the Housing Trust proposals, so that the core concepts will likely not vary significantly from what is seen here.

1. SB 743 VEHICLE MILES TRAVELED (VMT) MITIGATION CREDITING PILOT PROGRAM – Proposal under the CTC Partnership Program

Overview

With the passage of Senate Bill (SB) 743 and adoption of VMT as the preferred California Environmental Quality Act (CEQA) transportation impact metric, project applicants (transportation and land use) that have identified significant VMT impacts are required to mitigate to the fullest extent feasible. SBCTA completed an initial countywide study on the implementation of SB 743 in 2020. This ‘Phase 1’ of implementation included resources for all jurisdictions in San Bernardino County (County) related to threshold options, a web-based screening tool, sample implementation documentation, and mitigation options. Subsequently, at the request of the member jurisdictions, SBCTA, in partnership with SCAG, have also completed a ‘Phase 2’ study to examine the potential of establishing a regional CEQA mitigation program for VMT impacts in the County.

A mitigation bank attempts to create a monetary value for VMT reduction on a per mile basis, such that a developer or an agency building a VMT-generating land use or transportation project could purchase VMT reduction credits already verified through an established program. The money exchanged for credits could be applied to individual, local, regional, or state VMT reduction programs or projects, such as housing specific projects included in a regional housing trust program. The SBCTA VMT mitigation pilot project uses a VMT reduction framework based on VMT-reducing mode choices individuals make for their commute trips (HBW or Home-Based Work trips), as measured against a verified individual baseline.

Project Need

Currently, as there are no regional-level mitigation programs that are operational in the state, all VMT mitigation must be attempted at the project level as on-site mitigations. To better understand how on-site mitigation costs may vary and how they compare to the mitigation costs of a regional program, SBCTA evaluated various on-site mitigation options in Phase 2. SBCTA then analyzed sample projects with potentially significant impacts to see what the mitigation cost would be using the potential mitigation costs per VMT. Based on the calculations and sample projects studied, potential cost of mitigation varies substantially by project location and type (active transportation infrastructure, vanpool program, transit pass subsidy, and telework program). However, based on the sample projects that were reviewed, on-site mitigations were generally far more expensive than the average cost of paying into a regional mitigation program. On-site mitigations are also much less likely to result in a significant VMT reduction. It was quite natural then for the SBCTA member jurisdictions to look toward having a regional mitigation option established for the county in addition to the onsite mitigation options for VMT increasing projects. A VMT Mitigation Bank provides the most cost-effective and feasible approach to reducing VMT since it deals with only the actual verified credits (i.e. VMT saved) rather than hypothetical future VMT reduction credits using modelling.

Here are several of the on-site and regional VMT reduction mitigation measures evaluated in Phase 2:

1. VMT Reducing Transit Pass Programs
2. Vanpool Programs
3. Deployment of active transportation facilities
4. Telework Programs
5. Carpool and school pool programs and subsidies
6. Ridematch Programs or Shuttle Service Programs

Estimates were made as to the potential cost of mitigating the VMT increase from a hypothetical residential development in the High Desert to below the threshold of significance for CEQA purposes. The results showed that the cost per unit could vary widely depending on the type of mitigation applied. The range was from a low of approximately \$2,500 per unit to a high of \$47,000 per unit for the least efficient method tested. In other words, the cost of mitigation can be substantial. The most efficient methods identified were in the range of \$.05 to \$.08 per VMT and assuming that mitigation would occur over a period of 20 years, which is typical of CEQA analyses. Bicycle infrastructure was among the least efficient mitigation methods. Telework was generally the most efficient. It is unfortunate that, in a period of excessive housing costs, additional costs would be added. However, this has become California's policy since SB 743 was enacted in 2013. SBCTA/SBCOG have never endorsed this policy, nonetheless in seeking to streamline new development and transportation improvements, it becomes necessary to devise a least-cost burdensome mechanism for doing so.

Project Scope for REAP 2.0 Application

Subject to Board approval, SBCTA would develop a regional VMT mitigation bank using a mode-choice based framework, in which commuters would be paid for reducing their VMT, with telework as the initial regional mitigation measure. Initially, the program would focus on incentivizing individuals to earn VMT reduction credits by making choices to reduce their travel. After establishing a verified HBW trip "baseline," individuals who volunteer for the program can generate credits whenever they choose to telework for a particular day. The volunteers would need to live or work in the County. The verified VMT reduction credit would then be assigned an economic value and the volunteers would be paid a share of that value as an incentive for reducing their VMT. The purchased credit would be banked by SBCTA then sold to development projects or transportation projects that would need to reduce VMT impacts under CEQA. While telework would be the only program included in the bank initially, additional projects and programs already established under the Inland Empire (IE) Commuter Rideshare Program could be added in the future (e.g. choices to ride transit or vanpool/carpool).

Consistency with REAP Requirements

Three of the requirements for REAP 2.0 proposals to be consistent with the guidelines include:

- The proposal should be innovative, impactful, and transformative
- Should help to achieve housing goals through VMT reduction
- Should spur economic development in disadvantaged communities

The VMT Mitigation Bank pilot program is consistent with the REAP 2.0 guidelines in the following ways:

- **Innovative, Impactful and Transformative:** The proposed VMT Mitigation Bank is innovative/transformative in that it would incentivize the “trip-makers” to make modal choices that personally reduce their VMT. They will be paid as they accumulate credits relative to a baseline, and this pool of earned and verified credits can be sold in the VMT marketplace, with prices set based on supply/demand relationships. Under REAP Guidelines: *Transformative means “housing, planning, infrastructure investments supporting infill housing, and other actions that enable meeting housing goals that also result in per capita vehicle miles traveled reductions, including accelerating infill development, supporting residents through realizing **multimodal communities**, shifting travel behavior through **reducing driving**, and increasing transit ridership.”* From a transportation perspective, the proposed project would result in exactly the changes envisioned in the guidelines.
- **Achieving Housing Goals with VMT Reduction:** One of the consequences of SB 743 is that it adds another challenge for the County in increasing housing production. The 6th Cycle RHNA allocated 138,110 new units to be planned in the County from 2021 – 2029. This is a monumental task, and SBCTA, in cooperation with local partners, are meeting this challenge to produce more housing while advancing the implementation of the VMT-reducing elements of the SCS head-on. This program aligns directly with the REAP objectives of reducing VMT: *“Increase travel options to homes, jobs, and services that support multimodal communities and reduce the number and/or length of vehicle trips.”* Since the majority of the credit purchase will come from the housing sector, much of the proceeds will be slated to go back into the housing sector through the proposed San Bernardino County Housing Trust.
- **Spurs economic development in a disadvantaged community:** San Bernardino County has some of the most disadvantaged communities in the state. While the County has a growing employment base, it has traditionally operated as an outlying community that provided affordable housing for workers commuting to Los Angeles and Orange Counties. During COVID-19, some cities within the County saw an increase in their business activity as people who were able to telework stayed home. We expect to see similar benefits to local disadvantaged communities with implementation of the program, especially with our small business community.

2. **FIRST/LAST MILE TRANSIT SERVICE ENHANCEMENTS AT SAN BERNARDINO COUNTY METROLINK STATIONS** (Including Redlands Passenger Rail stations and Ontario-East Station) – Proposal under the CTC Partnership Program

Overview

In San Bernardino County, there are seven Metrolink stations on the San Bernardino Line (SBL) – Montclair, Upland, Rancho Cucamonga, Fontana, Rialto, San Bernardino Depot, and Downtown San Bernardino – and one station (Ontario) on the Riverside Line southeast of Ontario International Airport (ONT). There are four (4) more extended station areas through the soon to be operational SBCTA Redlands Passenger Rail Project (branded “Arrow Service”).

San Bernardino Council of Governments

San Bernardino County Transportation Authority

The SBL is currently served by 30 trains per day (38 trains per day pre-pandemic) and the Riverside Line is served by seven (7) trains per day. The *Customer-Based Ridesharing and Transit Connectivity Study* (2018) examined several options for first/last mile connections between Metrolink stations and major nearby destinations. It also analyzed a possible shuttle connection from the Downtown San Bernardino Metrolink station (Transit Center) to downtown employers in the area.

Need

In Spring 2022, the SBCTA Board approved funding for two (2) shuttle services to provide first/last mile services in two locations: 1) from the Transit Center near downtown San Bernardino to buildings in downtown San Bernardino representing major workplaces and centers of government services, and 2) from the Cucamonga Metrolink station to Ontario International Airport (ONT). The selection of these locations was based on a working paper that examined primary destinations in proximity to Metrolink stations (but too far to walk) within each of the cities served by the SBL.

For example, the Transit Center accommodates a Metrolink station, Omnitrans bus routes, and routes from four (4) other operators. In addition, the Arrow Service will begin service in Fall 2022, with its west terminus at the Transit Center. Part of the ridership is projected to include downtown San Bernardino employment centers and services, the largest of which include the County, California Department of Transportation (Caltrans) District 8, and the Superior Court. The main County office is a 0.8 mile walk from the Transit Center and Caltrans and the courts are just slightly less; other County offices are slightly more. In the case of ONT, the SBL Cucamonga Station is the closest to the airport, but is four miles from the ONT terminals. This service will be provided by two (2) shuttle buses, timed to meet trains arriving and departing from Cucamonga Station. Both services will be using Compressed Natural Gas (CNG) buses.

A third primary candidate for first/last mile services is the Fontana Metrolink station. Major destinations in the vicinity of the station include a major regional hospital (Kaiser Medical Center), Fontana Civic Center, and multiple apartment complexes clustered along Sierra Avenue. While several transit routes serve activities along Sierra Avenue, none provide route continuity both north and south of the station. Route 61, with 20-minute peak headways provides connectivity between Metrolink and Kaiser Medical Center.

Scope

The purpose of the Fontana Metrolink First/Last Mile proposal is to provide timely connectivity to arriving and departing trains via a new zero-emission shuttle service. The route would connect the affordable housing communities near the rail station to other locations along Sierra Avenue that provide for medical needs, shopping, and government services. This would become part of a comprehensive system of first mile/last mile strategies to increase transit ridership around the Metrolink station areas, with the opportunity to replicate similar pilot programs in partnership with local jurisdictions and Omnitrans.

A pilot study approach for the shuttle would allow for a minimum 2-3-year period of shuttle operation. Funding participation from the employers would be sought as well, with SBCTA staff serving as initial interface with the employers. The use of a zero-emission vehicles will be pursued, leveraging REAP funds to access other vehicle purchase incentive programs. To increase ridership, it is also important to look at the land use/housing strategies around the station areas. The City of Fontana is in the process of updating its housing element. SBCTA will partner with them to create synergy between various transportation options and land uses for station area improvements as identified in the housing elements.

Consistency with REAP Principles

- **Provides efficient, zero-emission Transit Center access to/from the Metrolink transit system:** Metrolink is a regional rail system of over 500 miles, with 63 stations throughout the region with an additional nine miles and four stations under construction in San Bernardino County.
- **Affirmatively Furthers Fair Housing:** The San Bernardino County Metrolink stations are a hub for multiple public transportation systems and the City of Fontana is making excellent progress with Transit Oriented Development (TOD) near its rail station. In partnership with SBCTA, Omnitrans, and the local jurisdictions, locations for future land development to increase housing production in many of the station areas have been identified through the local jurisdiction housing elements that are consistent with the goals of the affirmatively furthering fair housing (AFFH).
- **Improves Place-Based Strategies to Encourage Revitalization:** As CalEnviroScreen indicates, for the most part, the SBL station areas are located in some of the most disadvantaged census tracts in the state. The Fontana station is no exception, and the program will dedicate funding in these disadvantaged/historically underserved communities to spur economic development in the community around the station areas.
- **Innovative, Impactful and Transformative:** The concept of “first mile/last mile” is certainly not new to the transportation planning sector. However, implementation of the program will bring visible changes with measureable outcomes in ridership.
- **Consistency and Timeliness in Spending:** The program proposal for the REAP 2.0 funding has been in development since 2018. The concept has been vetted through multiple stakeholders including Omnitrans who will operate the service and the jurisdictions who will implement a variety of non-transportation strategies.
- **Replicability:** As previously mentioned, the goal of the pilot programs here are to implement the programs and replicate it around other Metrolink station areas.

3. SAN BERNARDINO COUNTY REGIONAL HOUSING TRUST PROGRAM –

Proposal under the Housing Supportive Infrastructure Program

Overview

In response to an increasing need for access to affordable housing across the County, the lack of sufficient funding to produce needed affordable housing, due in part to the dissolution of redevelopment, and an increased interest in solutions to comprehensively address regional housing needs, SBCTA/SBCOG is developing pathways for increased funding to support housing-related programs. One such pathway is the establishment of a regional housing trust fund, which would serve as an additional funding mechanism to support housing programs.

San Bernardino Council of Governments

San Bernardino County Transportation Authority

Housing trust funds offer a great opportunity to increase housing supply in the County, California's once affordable residential outpost, now on the rise as an economic hub, but with shrinking housing opportunities. There are a variety of administrative structures for housing trusts, but the most impactful is the regional model. Given the limited capacity of local jurisdictions to devote resources to trust administration, and SBCOG's well-established role in the region, SBCOG is both qualified to and capable of administering a regional housing trust that would address regional housing needs while minimizing duplication of resources across the County.

In 2021, in response to increasing concern around the region's housing shortage, SBCTA's City/County Manager's Technical Advisory Committee (CCMTAC) expressed interest in exploring the feasibility of implementing a housing trust fund for the region. In response to the request of the CCMTAC, in January 2022, SBCOG released a Draft San Bernardino Regional Housing Trust White Paper that details the potential benefits, structures, and an assortment of relevant case studies regarding the formation of a Regional Housing Trust Fund. At the same time, SBCOG saw a funding opportunity being developed for the formation of a regional housing trust under the REAP 2.0 Program from HCD and SCAG. These events have created an opportunity to include an option for establishing a specific housing trust in the region and utilize existing staff resources and expertise related to the pursuit of regional grant funds to better connect housing with regional transportation efforts.

Staff is currently in the process of developing a report that provides a detailed overview and analysis of background information needed to formally establish the Housing Trust if the member jurisdictions would like to establish one in the County. The report will include a summary of all outreach and engagement conducted for the Housing Trust to-date, an assessment on housing needs within the County, an analysis of funding opportunities for funding programs of the Housing Trust, and inventory of existing, internal SBCTA/SBCOG mechanisms to manage a new Joint Powers Authority (JPA), and pipeline affordable housing developments in the County. The analyses will provide the foundation for the Administrative Plan of the Housing Trust, which will detail the purpose and structure, participating jurisdictions, administrative responsibilities, and program objectives of the Housing Trust. Ultimately, the Administrative Plan will be the main policy document that will need to be approved by a new JPA Board.

Scope

The Housing Trust can be established to tackle a variety of housing related issues in the region. With a regional trust fund structure, it can be used for the development and implementation of regional housing strategies to assist jurisdictions in implementing their 6th cycle Housing Elements; to assist in the rehabilitation, preservation, and production of affordable housing; and to implement solutions for assisting those experiencing homelessness in the region.

Housing trust activities are those implementation actions which the housing trust fulfills through the expenditure of funds. Activities can include, but are not limited to, new construction of affordable housing, predevelopment activities for affordable housing development, down payment assistance for first-time homebuyers, gap financing for affordable housing developers, preservation or rehabilitation of existing affordable housing, land acquisition for development of

affordable housing, and establishment of housing or services for those experiencing homelessness. Further, housing activities that a housing trust undertakes can serve a variety of housing needs. Those primary housing needs that have been identified for the Housing Trust include housing for middle-income earners or workforce housing, housing for lower-income households, housing for first-time homebuyers, and housing for those experiencing homelessness. Priority activities of the Housing Trust have been identified through outreach conducted for this effort and are detailed in this section.

Following is a summary of initial feedback received from the SBCOG member jurisdictions on the programs and strategies that can be established under the Housing Trust.

- Housing for those Experiencing Homelessness (High Priority)
- Housing Preservation and Rehabilitation (High Priority)
- Land Banking (High Priority)
- Gap Financing for Affordable Housing Developments (High Priority)
- Funds to Support Local Programs (High Priority)
- Provide Technical Assistance (High Priority)
- Workforce and Missing Middle Housing (Medium Priority)
- Community Land Trusts (Medium Priority)
- Coordination with Other Agencies and Organizations (Medium Priority)

Housing trusts use different forms of revenue to raise funds such as grants, loans, donations, taxes, and fees. Some housing trusts will receive a majority of their funding from one funding source, such as fees, but many seek out a variety of funding sources. Ensuring a variety of funding sources is advantageous for trusts, as it can increase flexibility in how funds may be expended and can help to better leverage funds for additional revenues. Currently, there are some state funding that the region is not receiving due to not having an established housing trust. For the REAP 2.0 grant funding, SBCOG staff will request funding for both administrative cost involved in establishing a Housing Trust, and program funding that will implement some of the identified priority projects to begin operation immediately following the establishment.

Need

In the County, housing is a substantial expense, reflecting the largest single monthly expenditure for many individuals and families. Quality housing is not affordable for everyone, and those with lower incomes are most likely to live in unhealthy, overcrowded, or unsafe housing conditions. Housing supply has not kept pace with population growth throughout the region. Instead, growth is being accommodated through increases in persons per household, resulting in household overcrowding. With a much higher demand (or need) for housing units than there is supply, both home and rental prices have increased to stymie the influx of interest. Significant portions of the County pay more than 30 percent of their gross income towards housing payments, and higher housing costs put lower income households at risk of living in substandard housing or of experiencing homelessness. Without a concerted effort to expand the affordable housing supply, increasing numbers of households will become unable to afford housing in the County as rents and housing prices continue to rise.

4. **ALIGNING HOUSING PROJECTS ALONG ONTARIO INTERNATIONAL AIRPORT (ONT) LOOP/WEST VALLEY CONNECTOR/RANCHO CUCAMONGA STATION LAND USE STRATEGY** – Proposal under the CTC Partnership Program

Overview & Scope

SBCTA is currently in the environmental stage with the construction of a new four-mile transit tunnel from the Cucamonga Station on the SBL to Terminals 2 and 4 at the ONT. The tunnel will have three (3) surface stations (the Cucamonga Station, and one adjacent to each ONT terminal). Passengers, employees, and visitors to ONT will be transported in rubber tire, zero-emission vehicles on an “on-demand” basis. The service will be initiated with human drivers; however, it will transition to an autonomous service once the technology becomes available. The tunnel will be built as a closed system to minimize trip times and maximize safety and efficiency. The expected travel time between the Cucamonga station and the ONT Terminals is approximately 7-8 minutes vs. 30 minutes using surface transit.

In addition, San Bernardino County’s second Bus Rapid Transit (BRT) system, The West Valley Connector (WVC) is projected to start service in 2024. The 100% Zero-emission Bus Initiative project is 19 miles long. There will be 21 stations in Phase 1 that will provide a much-improved transit connection to Ontario International Airport (ONT) and help build transit connectivity by linking ONT, two Metrolink lines (San Bernardino and Riverside) and multiple major activity centers along the route including Ontario Mills and Victoria Gardens. Headways will be 10 minutes in the peak commute period and 15 minutes off-peak, providing a high level of service to the community.

Furthermore, the Cucamonga Station is developing into a major transit hub. Capacity of the SBL is anticipated to nearly double as infrastructure improvements are completed as part of the Southern California Optimized Rail Expansion (SCORE) Program, along with the planned Brightline West privately-funded electrified high-speed rail between Las Vegas and Cucamonga Station.

These new features around the Cucamonga Station have presented a number of housing opportunities near the station. SBCTA is currently discussing how to maximize REAP 2.0 funding related to the project with the City of Rancho Cucamonga. Potentially, the REAP 2.0 funds could be applied to specific future Transit Oriented Development (TOD) projects near the station, including a possible infill project.

Improves Regional Mobility

- **Provides efficient, zero-emission airport access to/from the regional Metrolink transit system.** Rancho Cucamonga is becoming a thriving multimodal center, likely serving as the southern terminus of the Brightline West high-speed rail service to Las Vegas in the near future.
- **Fastest-growing commercial airport in the U.S. since transfer to local control in 2016.** ONT is back on a growth track post-pandemic. An efficient connection to the regional transit network will increase convenience of access for many ONT passengers and employees from San Bernardino and Los Angeles Counties.

- **Supports CAPTI principles.** The ONT Tunnel and the Rancho Cucamonga Station area improvements support increased network connectivity across transit modes - commuter rail, high-speed rail, BRT, and local bus - multiplying the sustainability and accessibility benefits and increasing the potential for infill and TOD.

5. **OTHER SUPPLEMENTAL PLANNING WORK LEFT FROM REAP 1.0** – Proposal under the Early Program Initiative: SRP Program (Formula Funding)

Overview

Through funding from REAP 1.0, SBCOG was able to contract with consultants to assist cities within the County with housing element updates. During this process, SBCOG identified additional projects to better support jurisdictions with affordable housing-related outcomes as they move forward with implementation of the housing elements. Working with the member jurisdictions, SBCOG has developed the initial scope of work under the REAP 1.0 continuation program. However, since the program funding is distributed on a formula basis, the program will build in flexibility to account for new needs as jurisdictions implement programs identified in their respective housing elements.

List of Possible Program Areas

1. Assist in development of construction-level design plans for accessory dwelling units (ADU)
2. Provide ADU customizable design guidelines for jurisdictions
3. Assist jurisdictions with adoption of ADU ordinances
4. Create Engagement Team outreach required for housing elements for local jurisdictions, especially around issues surrounding AFFH
5. Collect data from housing non-profits to assist with future housing element updates
6. Develop Annual Progress Report (APR) submittal tracking form, land use implementation and updating RHNA site selection data base (Coordinate with SCAG Regional Data Platform)
7. Continue to provide staffing assistance on housing element implementation
8. Provide site analysis and develop procedural manual on implementing Surplus Land Act

Details - ADU Assistance:

REAP 2.0 funding will enable SBCOG to develop additional ADU construction plans to accommodate specific city needs. No two cities are alike, and housing construction needs differ, which requires different plan options to be developed. Design guidelines that can be customizable for each city will enable jurisdictions to pick and choose from a pallet of ready-to-go designs which will bring consistency and streamline to the review and permitting process. Additionally, many cities require assistance with the adoption of the ADU ordinances. Skilled consultants can provide much needed assistance to cities that do not have in-house capabilities to stay up-to-date on ordinances and the process of adoption as required by the state.

Community Engagement Assistance:

Within the requirements for housing elements, cities are now being asked to conduct community outreach to connect residents to resources for fair and affordable housing. Cities do not have the resources, budget or staff to conduct the required outreach multiple times per year. SBCTA will provide a core team of staff to provide outreach support to cities on a scheduled basis.

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The process by which the team conducts outreach, develops progress reports and creates forms for the housing element will be replicated for each city. Many of the SBCOG member jurisdictions have asked for assistance with community engagement during the 6th cycle Housing Element, especially in regards to outreach involving AFFH.

Data Collection:

SBCOG is required to provide housing data to include displacement and equity issues affecting cities. SBCTA will fund future data collection and reporting documents for AFFH in support of our jurisdictions as it will be a requirement every eight years based on the current Housing Element requirements.

Graphic Information System (GIS) Planning:

SBCOG will provide GIS and Database planning services as needed by jurisdictions.

Financial Impact:

This item has no financial impact on the Fiscal Year 2022/2023 Budget.

Reviewed By:

This item is scheduled for review by the Mountain/Desert Policy Committee on August 12, 2022 and was reviewed by the Planning and Development Technical Forum on July 27, 2022, the Transportation Technical Advisory Committee on August 1, 2022 and the City/County Managers Technical Advisory Committee on August 4, 2022.

Responsible Staff:

Josh Lee, Deputy Director of Planning

Approved
Board of Directors Metro Valley Study Session
Date: August 11, 2022

Witnessed By:

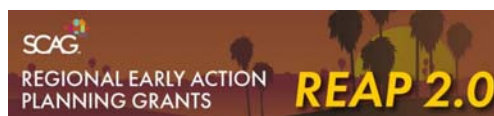
San Bernardino Council of Governments
San Bernardino County Transportation Authority

SBCTA/SBCOG REAP 2.0 Grant Application Proposals

Regional Early Action Planning Grants of 2021 (REAP 2.0)

Final Guidelines for Metropolitan Planning Organizations

State of California
Governor Gavin Newsom



San Bernardino County Transportation Authority/Council of Governments

SCAG REAP 2.0 Guidelines: Overview

REAP 2.0 - Overview

Regional Early Action Planning (REAP) 2021 Grant

\$246 million = SCAG region's formula share

Obligated by June 2024

Expended by June 2026

"Transformative Planning and Implementation Activities"

Accelerating infill housing development AND

Coronavirus Economic Recovery AND

Reduce Vehicle Miles Travelled AND

Affirmatively Further Fair Housing

Early Action
Initiatives

- Sustainable Communities Program (SCP)
- Local Information Services / Regional Data Platform
- Subregional Partnership Program 2.0 (Housing Element Support)
- Go Human

CTC
Partnership
Program

- Transit and other multi-modal services that will be critical in supporting VMT reduction
- Fund the development of plans, programs, and pilot projects

Housing
Supportive
Infrastructure
Program

- Infrastructure and utilities to support housing development
- Preservation
- Housing Trust Funds
- Technical Assistance



SBCTA/SBCOG

SCAG REAP 2.0 Guidelines: Schedule (Sample)



SBCTA/SBCOG

SCAG REAP 2.0 Guidelines:

1. Early Program Initiatives

SCAG will expand certain existing programs in the Connect SoCal Implementation Strategy to offer additional support to cities in implementing Connect SoCal.

1. Sustainable Communities Program (SCP):
2. Go Human:
3. Regional Data Platform (RDP):
4. ***Sub-regional Partnership Program 2.0 (SRP2.0): SCAG staff has shared a set of draft guidelines with the subregional COGs with a funding level similar to REAP 1.0. (Approx. 23M) There will be a formula share of about 10 percent allocated to SBCOG (\$2.3M).***



SBCTA/SBCOG

SCAG REAP 2.0 Guidelines:

2. County Transportation Commission (CTC) Partnership Program

SCAG will develop a new partnership program with the region's County Transportation Commissions to fund programs and pilot projects with a strong nexus to housing

SCAG staff has shared a set of draft guidelines with the County Transportation Commissions (CTCs) with a funding level of around 40% of the total REAP allocated to SCAG. (Approx. \$100M of competitive funding)



SBCTA/SBCOG

SCAG REAP 2.0 Guidelines:

3. Housing Supportive Infrastructure Program

This program will have 4 main priority areas:

1. Utilities to support housing development: (sewer, storm water, electric, broadband)
2. ***Housing Trust Funds: Support establishment of a regional housing trust funds, and revolving loan funds to deliver affordable housing.***
3. Preservation of expiring covenants and naturally occurring affordable housing:
4. ***Technical Assistance:***
 - ***Help public agencies use their surplus land for affordable housing development,***
 - Continue land use planning efforts that implement 6th cycle Housing Elements,
 - Ensure the region can secure grant funding for affordable housing development.

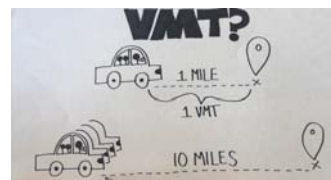


SBCTA/SBCOG

SCAG REAP 2.0: SBCTA/SBCOG Proposals

Pilot SBC VMT Mitigation Bank: Background

- SB 743 – VMT as the preferred CEQA transportation impact metric
- SBCTA – completed countywide study on the implementation of SB 743 in 2020
- ‘Phase 1’ – provided threshold options, screening tools, implementation documents, and **mitigation options**
- July 1, 2020 Board action: *“Authorize staff to develop options for establishing a mitigation crediting system that would allow for quantification of the trip-reduction benefits of telework and other TDM options and the voluntary application of those credits to facilitate environmental mitigation of projects in San Bernardino County...”*
- ‘Phase 2’ - examine establishment of a regional CEQA mitigation program for VMT impacts in San Bernardino County.



SBCTA/SBCOG

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VIDEO WILL BE SHOWN DURING
COMMITTEE MEETING

SCAG REAP 2.0: SBCTA/SBCOG Proposals

Pilot SBC VMT Mitigation Bank: Conceptual Process

Mitigation bank attempts to create a monetary value for VMT reduction on a per mile basis (Land Use and Transportation Projects)

Supply Side:

- Individuals and companies would volunteer to participate
- Establish a baseline (HBW trips)
- Custom smartphone app logs travel and compare "new travel pattern"
- Cash incentives paid to participants who reduce commute VMT
- Participants who do not reduce commute VMT not eligible to receive incentives
- Reduced VMT credits are banked

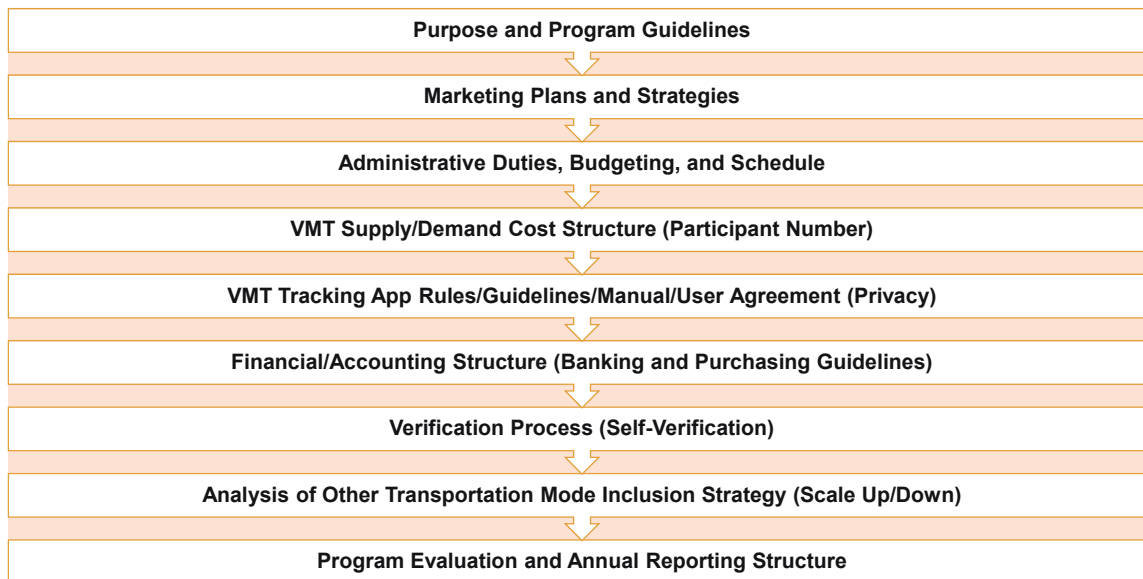
Demand Side:

- CEQA Lead Agencies determine VMT project level mitigation quantity
- Project proponents mitigate VMT through on-site strategies
- Project proponents look for offsite mitigation options
- SBC VMT credits sold to projects in need
- Proceeds are used for more housing projects through the SBC Housing Trust



SBCTA/SBCOG

VMT Mitigation Bank - Administrative Plan Components



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SCAG REAP 2.0: SBCTA/SBCOG Proposals

First/Last Mile Transit Service Enhancements at SBC Metrolink Stations (Incl. RPRP and Ontario-East Station)

- San Bernardino County - 11 Metrolink Stations
- Customer-Based Ridesharing and Transit Connectivity Study (2018)
- SBCTA/Omnitrans/Local Jurisdiction Partnerships – San Bernardino Transit Center & Rancho Cucamonga Station
- Pilot shuttle service candidate: Fontana Station
- Feasibility and pilot program implementation at other Metrolink Stations with Omnitrans
- Look at Land Use/Housing Strategies around the Metrolink Station areas with Local Jurisdictions



SBCTA/SBCOG

SCAG REAP 2.0: SBCTA/SBCOG Proposals

Ontario International Airport (ONT) Loop/Rancho Cucamonga Station Land Use Strategy

- SBCTA is currently in the environmental stage with the construction of a new four-mile transit tunnel from the Cucamonga Station to the Ontario International Airport (ONT)
- Connects airport passengers and employees to the 538-mile regional rail system and local transit service
- Cucamonga Station as a major transit hub
- ONT Loop, SBL Metrolink service improvements (SCORE) Program, Brightline West, West Valley Connector Bus Rapid Transit (BRT), and 6th Street Cycle Track
- Housing opportunities at the station – Future TOD/Infill Developments
- SBCTA/Rancho Cucamonga City partnership



SBCTA/SBCOG

SCAG REAP 2.0: SBCTA/SBCOG Proposals

San Bernardino County Regional Housing Trust

Overview

Need Exist – 1. Limited access to affordable housing, 2. Lack of sufficient funding to produce needed affordable housing, 3. Dissolution of redevelopment, 4. Increased interest in regional solutions by the member jurisdictions, 5. Growing issues of overcrowding, and 6. impacts lower income households harder

One of the Solution: Regional Housing Trust (provides additional funding for the region)

Right Timing:

1. Need and opportunity to increase housing supply exist
2. SBCOG can be used as the regional vehicle to administer the programs under the new JPA
3. Unique funding opportunity with REAP 2.0 from HCD and SCAG
4. Provides a unique linkage between SBCTA and SBCOG as pressure grows to integrate housing into transportation
5. SBCOG staff used REAP 1.0 funding to lay the ground work (SBC Regional Housing Trust Whitepaper, Jurisdictional Outreach, Other Housing Trust Outreach, and Started the draft Administrative Plan)



SBCTA/SBCOG

SCAG REAP 2.0: SBCTA/SBCOG Proposals

San Bernardino County Regional Housing Trust

Activities

Following are initial feedback received from the SBCOG member jurisdictions on the programs and strategies that can be established under the Housing Trust.

- Housing for those Experiencing Homelessness (High Priority)
- Housing Preservation and Rehabilitation (High Priority)
- Land Banking (High Priority)
- Gap Financing for Affordable Housing Developments (High Priority)
- Funds to Support Local Programs (High Priority)
- Provide Technical Assistance (High Priority)
- Workforce and Missing Middle Housing (Medium Priority)
- Community Land Trusts (CLTs) (Medium Priority)
- Coordination with Other Agencies and Organizations (Medium Priority)



SBCTA/SBCOG

SBC Regional Housing Trust - Administrative Plan Component



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SCAG REAP 2.0: SBCTA/SBCOG Proposals

Other Supplemental Planning Activities Left from REAP 1.0

List of Possible Program Areas

1. Assist in development of construction-level design plans for Accessory Dwelling Units (ADUs)
2. Provide ADU customizable design guidelines for jurisdictions
3. Assist jurisdictions with adoption of ADU ordinances
4. Create Engagement Team outreach required for housing elements for local jurisdictions, especially around issues surrounding Affirmatively Furthering Fair Housing (AFFH)
5. Collect data from housing non-profits to assist with future housing element updates
6. Develop APR submittal tracking form, land use implementation and updating RHNA site selection data base (Coordinate with SCAG Regional Data Platform)
7. Continue to provide staffing assistance on housing element implementation
8. Provide site analysis and develop procedural manual on implementing Surplus Land Act



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San Bernardino County
Transportation Authority

Minute Action

AGENDA ITEM: 9

Date: August 11, 2022

Subject:

Draft 2022 South Coast Air Quality Management Plan

Recommendation:

Receive information on the Draft 2022 South Coast Air Quality Management Plan.

Background:

The federal Clean Air Act (CAA or Act) requires areas that do not meet the health-based National Ambient Air Quality Standards (NAAQS or federal standards) to develop and implement an emission reduction strategy to attain healthy levels of air quality in a timely manner. The state of California also requires areas that do not meet the California ambient air quality standards (CAAQS or state standards) to take all feasible measures towards achieving the CAAQS at the earliest practicable date.

Air Quality Management Plans (AQMP or Plan) provide the strategy and the underlying technical analysis for how the region will meet federal standards by the required dates and continue progress to achieve the state standards. The South Coast Air Quality Management District (SCAQMD), with contributions from and collaborations with the California Air Resources Board (CARB) and Southern California Association of Governments (SCAG), has developed six (6) comprehensive AQMPs since the late 1990s to address updates to air quality standards and attainment deadlines.

The primary purpose of the 2022 AQMP is to identify, develop, and implement strategies and control measures to meet the 2015 8-hour ozone NAAQS - 70 parts per billion (ppb) as expeditiously as practicable, but no later than the statutory attainment deadline of August 3, 2038 for the South Coast Air Basin (Basin) and Coachella Valley. The Basin covers large portions of Los Angeles, Orange, Riverside, and San Bernardino Counties. The San Bernardino Valley plus the San Bernardino Mountain subregion fall within the jurisdiction of the SCAQMD and their AQMPs.

The Draft 2022 AQMP builds upon measures already in place from previous AQMPs. It also includes a variety of additional strategies such as regulation, accelerated deployment of available cleaner technologies (e.g., zero emission technologies, when cost-effective and feasible, and low Nitrogen Oxide (NOx) technologies in other applications), best management practices, co-benefits from existing programs (e.g., climate and energy efficiency), incentives, and other CAA measures to achieve the 2015 8-hour ozone standard. A set of summary points from the AQMP is provided below, and the Executive Summary is attached to this agenda item. The full report may be accessed on the SCAQMD website at: [South Coast AQMD Air Quality Management Plan](#). While a round of comments on the draft documents was concluded in early July, SCAQMD indicates that there will be further opportunity for comment.

Entity: San Bernardino County Transportation Authority

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Summary Points (excerpts from the Draft AQMP Executive Summary):

1. Despite great strides in cleaning the air over the past several decades, the Los Angeles area still has the highest levels of ozone (smog) in the nation.
2. Meeting the 2015 federal ozone standard requires reducing emissions of NO_x – the key pollutant that creates ozone – by 71 percent more than is required by adopted rules and regulations in 2037.
3. The only way to achieve the required NO_x reductions is through extensive use of zero-emission technologies across all stationary and mobile sources.
4. South Coast Air Quality Management District's (South Coast AQMD) primary authority is over stationary sources which account for less than 20 percent of NO_x emissions.
5. The overwhelming majority of NO_x emissions are from heavy-duty trucks, ships and other state and federally regulated mobile sources that are mostly beyond the South Coast AQMD's control.
6. The region will not meet the standard absent significant federal action.
7. In addition to federal action, the 2022 Air Quality Management Plan (AQMP) requires substantial reliance on future deployment of advanced technologies to meet the standard.
8. The required transition to zero and low-emission technologies to meet the standard will be more expensive than traditional control strategies developed for previous federal standards. Ensuring the transition is equitable and affordable will be key to the success of the AQMP.

Financial Impact:

This item has no financial impact on the Fiscal Year 2022/2023 Budget.

Reviewed By:

This item is not scheduled for review by any other policy committee or technical advisory committee.

Responsible Staff:

Steve Smith, Director of Planning

Approved
Board of Directors Metro Valley Study Session
Date: August 11, 2022

Witnessed By:



Executive Summary

- Despite great strides in cleaning the air over the past several decades, the Los Angeles area still has the highest levels of ozone (smog) in the nation.
- Meeting the 2015 federal ozone standard requires reducing emissions of nitrogen oxides (NOx) – the key pollutant that creates ozone – by 71 percent more than is required by adopted rules and regulations in 2037.
- The only way to achieve the required NOx reductions is through extensive use of zero emission technologies across all stationary and mobile sources.
- South Coast Air Quality Management District's (South Coast AQMD) primary authority is over stationary sources which account for less than 20 percent of NOx emissions.
- The overwhelming majority of NOx emissions are from heavy-duty trucks, ships and other State and federally regulated mobile sources that are mostly beyond the South Coast AQMD's control.
- The region will not meet the standard absent significant federal action.
- In addition to federal action, the 2022 Air Quality Management Plan (AQMP) requires substantial reliance on future deployment of advanced technologies to meet the standard.
- The required transition to zero and low emission technologies to meet the standard will be more expensive than traditional control strategies developed for previous federal standards. Ensuring the transition is equitable and affordable will be key to the success of the AQMP.

In This Chapter

- **Overview** **ES-1**
Purpose of the 2022 AQMP
- **Health Effects and Air Quality Trends** **ES-3**
Air quality and health impacts
- **Emissions in the Basin and Reductions Needed for Attainment** **ES-4**
Emissions and reductions needed
- **Control Strategy** **ES-5**
Strategy to reduce emissions
- **Control Measures** **ES-7**
Control approaches and measures
- **Attainment Demonstration** **ES-9**
Future air quality projections
- **Collaboration, Public Process, and Outreach** **ES-10**
Integration and coordination with other agencies

Overview

The 17 million residents of the greater Los Angeles area have historically suffered from some of the worst air quality in the nation. While air pollution has reduced greatly, more needs to be done. The region has the worst levels of ground-level ozone (smog) and among the highest levels of fine particulate matter (PM_{2.5}). The air pollution levels in the region exceed both National and California Ambient Air Quality Standards for both these air pollutants. The health impacts associated with the high levels of air pollution cause respiratory and cardiovascular disease, exacerbate asthma, and can lead to premature death. We also know that our Environmental Justice (EJ) communities experience the brunt of the health effects from air pollution. In this document, EJ communities are defined as census tracts in the top 25 percent in the California Office of Environmental Health Hazard Assessment's California Communities Environmental Health Screening Tool (CalEnviroScreen).¹ Approximately 37 percent of the South Coast Air Basin (Basin) residents and 8 percent of Coachella Valley residents live in EJ communities.

The U.S. Environmental Protection Agency (U.S. EPA) requires areas that do not meet a National Ambient Air Quality Standard (NAAQS or standard) to develop and submit a State Implementation Plan (SIP) for approval. SIPs are used to show how the region will meet the standard. Regions must attain NAAQS by specific dates or face the possibility of sanctions by the federal government and other consequences under the Clean Air Act (CAA). This can result in increased permitting fees, stricter restrictions for permitting new projects, and the loss of federal highway funds.

The South Coast AQMD SIPs are developed within the agencies Air Quality Management Plans (AQMP). The most recent AQMP was developed in 2016 and addressed the 1997 8-hour and 2008 8-hour ozone standards, as well as PM_{2.5} standards. This document is the Draft 2022 AQMP and is focused on attaining the 2015 8-hour ozone standard of 70 parts per billion (ppb).

In August 2018, the U.S. EPA designated the Basin as "extreme" nonattainment and the Coachella Valley as "severe-15" nonattainment for the 2015 8-hour ozone standard. The South Coast Air Basin includes large areas of Los Angeles, Orange, Riverside, and San Bernardino counties. The Coachella Valley is the desert portion of Riverside County in the Salton Sea Air Basin. "Extreme" nonattainment areas must attain this standard by August 2038 and "severe" nonattainment areas must attain by August 2033 (Table ES-1).

¹ Full details of the CalEnviroScreen methodology and data sources can be found in the CalEnviroScreen 4.0 report released in October 2021. Available online at: <https://oehha.ca.gov/calenviroscreen/report/calenviroscreen-40>.

TABLE ES-1
NONATTAINMENT STATUS OF 2015 8-HOUR OZONE NAAQS

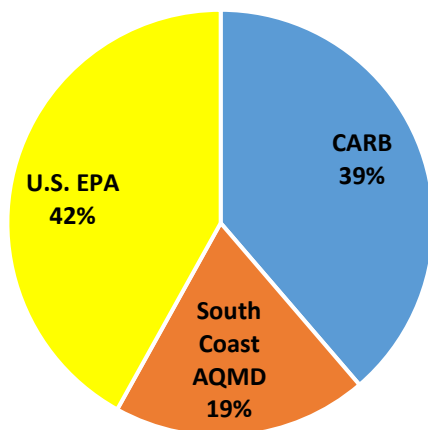
Standard	Nonattainment Area	Classification	Attainment Year
2015 8-Hour Ozone	South Coast Air Basin	Extreme	2037 ²
	Coachella Valley	Severe-15	2032 ³

The Draft 2022 AQMP builds upon measures already in place from previous AQMPs. It also includes a variety of additional strategies such as regulation, accelerated deployment of available cleaner technologies (e.g., zero emission technologies, when cost-effective and feasible, and low NO_x technologies in other applications), best management practices, co-benefits from existing programs (e.g., climate and energy efficiency), incentives, and other CAA measures to achieve the 2015 8-hour ozone standard.

The 2015 8-hour ozone standard is the most stringent standard to date. Because current ozone levels in the Basin are so high, meeting the standard will require substantial emission reductions above and beyond current programs. We project that emissions of NO_x – the key pollutant controlling formation of ozone – must be reduced by 71 percent beyond what we would achieve through current programs by 2037 to meet the standard. The magnitude of such an emission reduction means that all sources of emissions must be controlled as stringently as possible. This also means that we will have to rely on flexibilities provided by the Section 182(e)(5) of the CAA, known as “black box” measures, to show that we are able to meet the standard. These “black box” measures can include the development and deployment of future technologies to reduce emissions as well as the reduction of NO_x from sources regulated by the federal government. As depicted in Figure ES-1, 42 percent of NO_x emissions in 2037 will come from federal sources, while 39 percent will come from State regulated sources, and only 19 percent will come from the South Coast AQMD regulated sources.

² Attainment date is August 3, 2038, which is 20 years from the designation as “extreme” nonattainment areas. The U.S. EPA requires that all control measures in the attainment demonstration must be implemented no later than the beginning of the attainment year ozone season. The U.S. EPA also defines the attainment year ozone season is the ozone season immediately preceding a nonattainment area’s maximum attainment date, which is August 3, 2038, therefore, 2037 is the attainment year for the basin.

³ Attainment date is August 3, 2033, which is 15 years from the designation as “severe” nonattainment area. The attainment year is the ozone season preceding August 3, 2033, which leads to 2032 as attainment year.



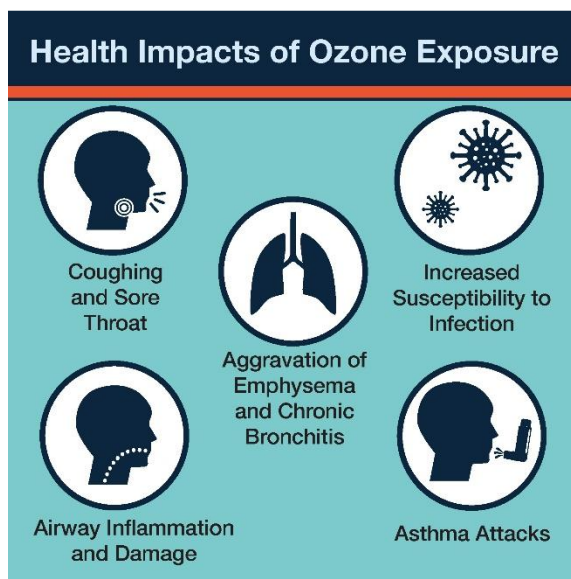
NOx Emissions: 220 Tons per Day

FIGURE ES-1
2037 EMISSIONS INVENTORY BY AGENCY RESPONSIBILITY

Health Effects and Air Quality Trends

Breathing high levels of ozone can cause a variety of negative health impacts such as asthma, chronic bronchitis and emphysema; and increased susceptibility to lung infection. Individuals working outdoors, children, older adults, people with preexisting lung disease, and individuals with certain nutritional deficiencies are the most susceptible to these effects. Exposure to high levels of ozone levels can increase school absences, hospital visits, disease and death.

Improvements in cleaner technology and strict regulations have reduced ozone levels since its peak in the mid-twentieth century. However, ozone levels have remained unacceptably high over the past decade despite significant reductions. This trend is due to the changes in climate and other weather conditions such as the increase in hot, stagnant days that can lead to the formation of ozone that we have experienced in recent years. While this AQMP predominantly addresses ozone, the trends and attainment status of all criteria air pollutants are presented in Chapter 2 and Appendix 2. The Basin meets federal standards for particulate matter less than 10 microns in diameter (PM10), nitrogen dioxide (NO₂), carbon monoxide (CO), sulfur dioxide (SO₂) and



lead, but does not meet federal ozone and PM_{2.5} standards. The Coachella Valley does not meet federal ozone and PM₁₀ standards, but attains federal PM_{2.5}, NO₂, and CO standards.⁴

Emissions in the Basin and Reductions Needed for Attainment

Unlike most other air pollutants, ozone is not directly emitted, but instead is formed in the atmosphere. Ozone is formed when NO_x and volatile organic compounds (VOCs) react in the presence of sunlight.⁵ While both NO_x and VOCs contribute to ozone, the key to attaining the ozone standard is to reduce NO_x.

In the Basin, mobile sources – heavy-duty trucks, ships, airplanes, locomotives and construction equipment – account for more than 80 percent of NO_x emissions. Meanwhile, stationary sources – such as power plants, refineries, and factories – will be responsible for the remaining 19 percent in 2037. This is an important point as the majority of the South Coast AQMD’s regulatory authority is for stationary sources with only limited authority to control mobile sources.

In 2037, we project that 220 tons per day of NO_x will be emitted. This is known as the “baseline” and includes the implementation of existing regulations and programs, but does not include the actions proposed in this AQMP. This level is 36 percent lower than NO_x emissions in 2018. In order to meet the ozone standard, the amount of NO_x that can be emitted into the atmosphere is 63 tons per day and is known as the “carrying capacity.” This means that NO_x needs to be reduced about 71 percent beyond the current 2037 baseline and about 82 percent below current levels (Figure ES-2).

⁴ Lead and SO₂ concentrations were not measured in the Coachella Valley. In 2020, however, historic analyses have shown concentrations to be less than the federal standards and no major sources of these pollutants are located in the Coachella Valley.

⁵ Ozone formation is complex and is described in greater detail in Chapter 2.

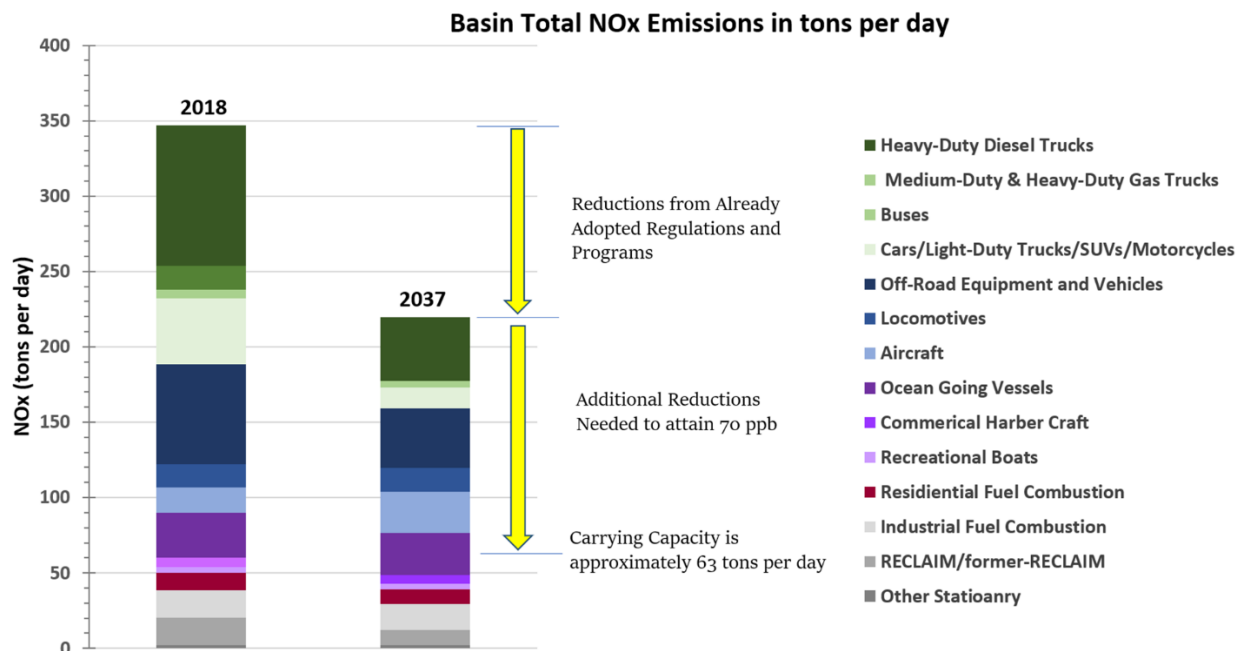


FIGURE ES-2

BASELINE NOX EMISSIONS INVENTORIES AND ADDITIONAL REDUCTIONS REQUIRED TO ATTAIN THE 2015 OZONE STANDARD

Control Strategy

Reducing significant amounts of NOx emissions poses a serious challenge. Previous AQMPs have relied on increasingly stringent regulations targeting tailpipe and exhaust stack emissions, new engine technologies, or fuel mix improvements. However, these approaches rely on additional reductions from already strictly regulated sources, and cannot achieve an additional 71 percent reduction beyond the 2037 baseline. Therefore, there is no viable pathway to achieve the needed reductions without widespread adoption of zero emission (ZE) technologies across all mobile sectors and stationary sources large and small.

An overview of the control strategy by category is shown in Figure ES-3. Low NOx technologies will also need to play a significant role for some areas where ZE technology is not ready or commercially available. These lower emission technologies will also assist with attainment of other air quality standards with earlier deadlines.

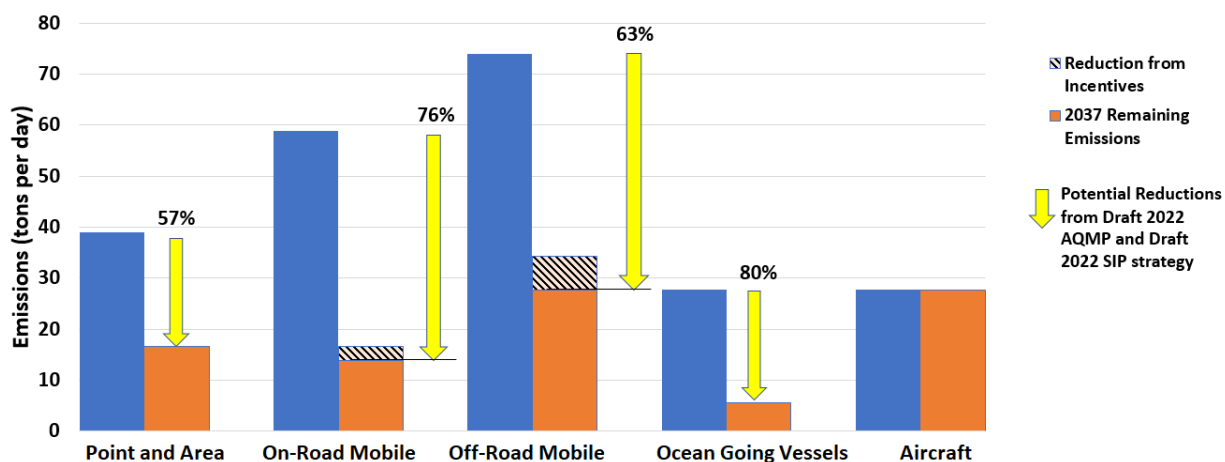


FIGURE ES-3
SUMMARY OF APPROACH TO REDUCING NO_x EMISSIONS BY MAJOR SOURCE CATEGORY

The control strategy for the 2022 AQMP includes aggressive new regulations and the development of incentive programs to support early deployment of advanced technologies. The two key areas for incentive programs are (1) promoting widespread deployment of available ZE and low NO_x technologies and (2) developing new ZE and ultra-low NO_x technologies for use in cases where the technology is not currently available. The South Coast AQMD will prioritize distribution of incentive funding in EJ areas and seek opportunities to focus benefits on the most disadvantaged communities. Cost-effectiveness and affordability will be further considered during the rulemaking or incentive program development process.

Given the bulk of the Basin's NO_x emissions in 2037 will be coming from federally regulated sources, the South Coast AQMD and the California Air Resources Board (CARB) cannot sufficiently reduce emissions to meet the standard without federal action. It is therefore imperative that the federal government act decisively to reduce emissions from federally regulated sources of air pollution, including interstate heavy-duty trucks, ships, locomotives, aircraft, and certain categories of off-road equipment.

Emissions from federal and international sources are estimated to be 92 tons per day in 2037 (see Figure ES-4). Even if all sources regulated by CARB and the South Coast AQMD were zero emissions, federal sources alone would emit substantially more than the 63 tons per day NO_x limit, thwarting any other actions to meet the standard.

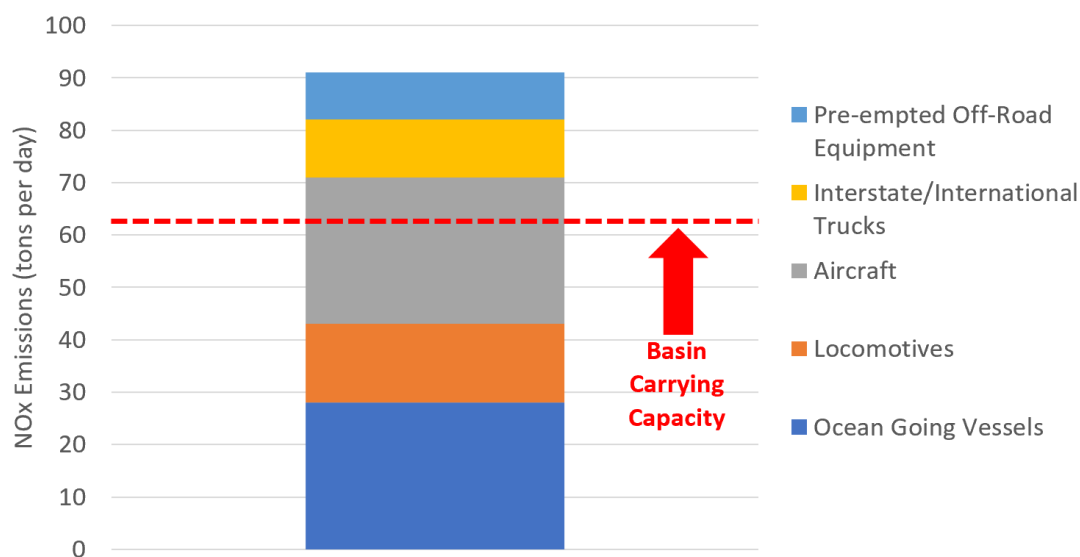


FIGURE ES-4
NOx EMISSIONS IN 2037 FROM SOURCES UNDER FEDERAL JURISDICTION IN RELATION TO THE CARRYING CAPACITY FOR THE 2015 8-HOUR OZONE NAAQS

Control Measures

The South Coast AQMD proposes a total of 48 control measures for the 2022 AQMP. Thirty control measures targeting stationary sources are categorized into four groups (Figure ES-5). The NOx measures are further grouped by residential combustion, commercial equipment and large equipment. The first two groups mostly target non-permitted sources and have a 70 percent reduction goal by 2037. Large combustion sources have a goal of 37 percent reductions by 2037 and predominantly address permitted equipment. Many control measures focus on widespread deployment of ZE and low NOx technologies through a combination of regulatory approaches and incentives and will require technology assessments to better understand where and when ZE and low NOx technologies can be implemented. New funding and programs are needed for research, development, demonstration, and deployment of advanced technologies.

The residential and commercial measures are frequently referred to as “building measures,” which are in line with California’s aggressive climate goals to reduce greenhouse gases (GHG) emissions across various sectors. State climate actions such as Title 24 energy code requirements and building electrification (e.g., Assembly Bill 3232) can also help reduce NOx emissions. In addition, as part of the 2022 State SIP Strategy, CARB has proposed a statewide zero GHG emission standard for residential and commercial buildings appliances, which would have criteria pollutant co-benefits. The South Coast AQMD has also developed multiple building-related control measures to address emissions from residential and commercial combustion equipment for space heating, water heating, cooking, and others.

In addition to the NOx measures, this AQMP relies on co-benefits from climate and energy efficiency programs for further reductions, limited strategic measures for VOCs reductions and other actions.

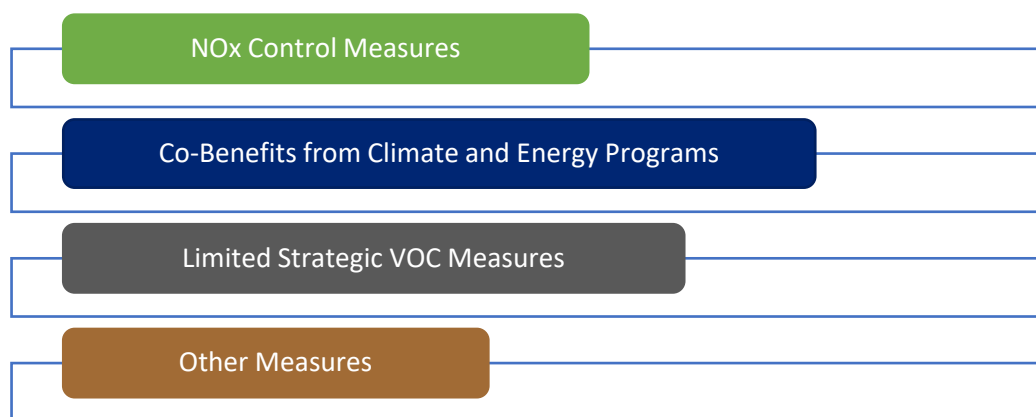


FIGURE ES-5
SOUTH COAST AQMD STATIONARY AND AREA SOURCE CONTROL STRATEGY

The remaining 18 control measures target mobile sources. They are facility-based mobile source measures, emission reductions from incentive programs, and partnerships with local, State, federal, and international entities (Figure ES-6).

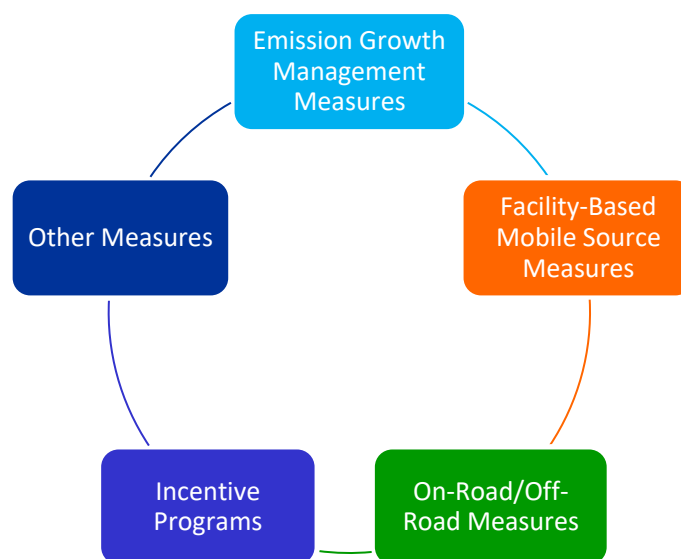


FIGURE ES-6
SOUTH COAST AQMD MOBILE SOURCE CONTROL STRATEGY

Further deployment of cleaner technologies will be necessary to attain the ozone standard. These are the CAA section 182(e)(5) "black box" measures that point to deployment of developing advanced technologies. Given that the zero and low NOx emission technologies needed for attainment of the ozone standard are still being developed, reliance on section 182(e)(5) measures provides flexibility and time for the development of new technology and improvement of existing technologies. South Coast AQMD measures include modest black box NOx reductions of 3 tons per day for stationary sources and 10 tons per day for mobile source incentives. However, a much larger black box is needed to accommodate

emission reductions from sources regulated by the U.S. EPA, namely aircraft, ships, and interstate trucks. The black box is needed because the U.S. EPA has not adopted aggressive controls targeting these sources. The black box includes a 70 percent emission reduction for aircraft, which is approximately 19 tons per day, and NO_x reductions of 35 tons per day from other sources subject to U.S. EPA authority. Collectively, black box measures comprise 67 tons per day, or 43 percent of the emission reductions needed to reach attainment. A summary of the emission reductions is shown in Figure ES-7.

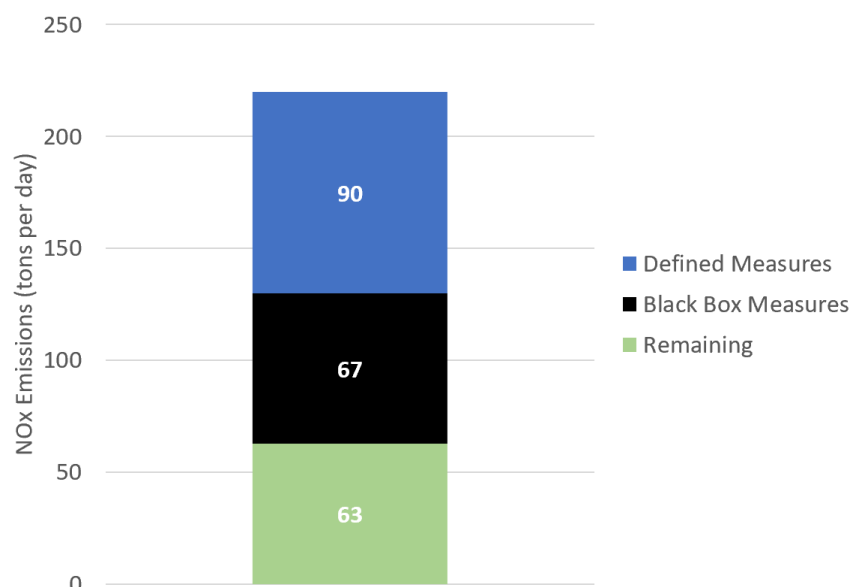


FIGURE ES-7
CONTRIBUTION OF CONTROL MEASURES TO EMISSION REDUCTIONS⁶

Attainment Demonstration

Air quality modeling is used to demonstrate future attainment of the ozone standard and is an integral part of the planning process. Modeling allows us to demonstrate the connection between emission reductions and a path to attainment. It reflects updated emissions estimates, new technical information, enhanced air quality modeling techniques, updated attainment demonstration methodology, and the control strategy.

Under baseline conditions, NO_x emissions are expected to decline by nearly 36 percent from 2018 to 2037, yet air quality modeling shows that the standard would not be met. However, modeling shows that we would be expected to meet the ozone standard in 2037 with a 71 percent reduction from baseline emissions based on the controls proposed in this AQMP.

⁶ Mobile source measures reflect CARB's commitment from the 2016 and 2022 State SIP Strategies. Available online at: https://ww2.arb.ca.gov/sites/default/files/2022-01/Draft_2022_State_SIP_Strategy.pdf and <https://ww3.arb.ca.gov/planning/sip/2016sip/rev2016statesip.pdf>.

Air quality modeling indicates that the Coachella Valley will not meet the 70 ppb standard by its 2032 deadline. Therefore, the South Coast AQMD is requesting the redesignation of the Coachella Valley as an “extreme” nonattainment area, giving it a new attainment deadline of August 2038. Modeling demonstrates attainment in Coachella Valley in 2037.

Collaboration, Public Process, and Outreach

The development of the 2022 AQMP has been a regional, multi-agency effort that includes the South Coast AQMD, CARB, the Southern California Associate of Governments, and the U.S. EPA. The 2022 AQMP also incorporates collaborative efforts by a wide range of stakeholders such as businesses, environmental and health organizations, community groups, and academia. As shown in Figure ES-8, numerous meetings were conducted to promote the collaborative process and public participation. Agendas and presentations for each meeting are available at the South Coast AQMD’s website.⁷

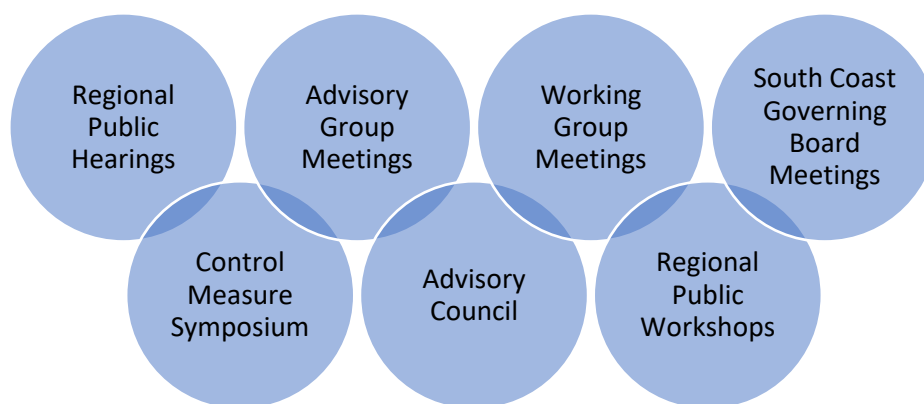


FIGURE ES-8

VENUES ACCOMMODATING STAKEHOLDER PARTICIPATION

⁷ www.aqmd.gov/2022aqmp.



2022 DRAFT AIR QUALITY MANAGEMENT PLAN

San Bernardino County
Transportation Authority
Metro Valley Study Session Update


August 11, 2022

South Coast Air Quality
Management District



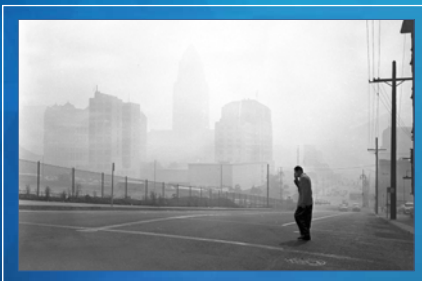
2022 Air Quality Management Plan (AQMP)

- AQMP is a blueprint to improve air quality and achieve federal air quality standards in the South Coast Air Basin and Coachella Valley
- In 2015, the U.S. EPA tightened the ozone air quality standard to 70 parts per billion (ppb), triggering the need to develop an AQMP
- The 2022 AQMP addresses control strategy to meet the ozone standard by 2037
- The 2022 Draft AQMP and all supporting documents are available online at:
<http://www.aqmd.gov/2022aqmp>



2

Our Challenge



Los Angeles c. 1950

Our region has historically suffered from some of the worst air quality in the United States



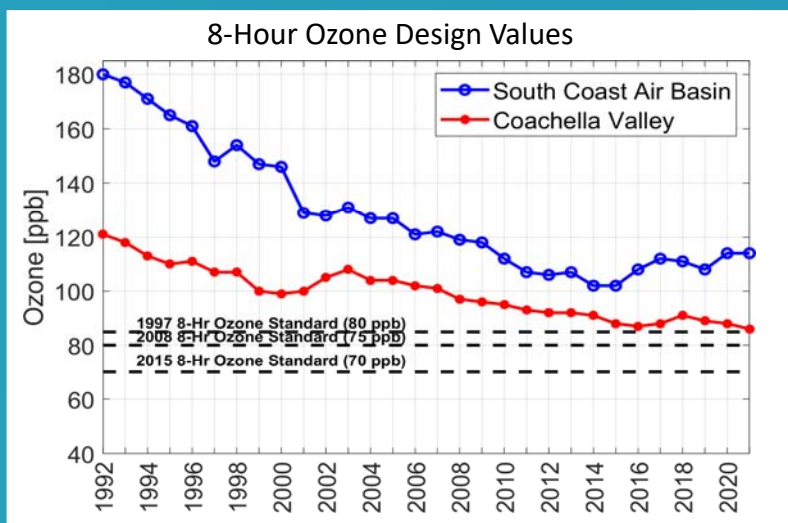
Los Angeles Recent Condition (2018)

We have made significant progress, but still suffer from poor air quality

- Worst ozone (smog) in the nation
- Among the worst fine particulate matter (PM_{2.5})

3

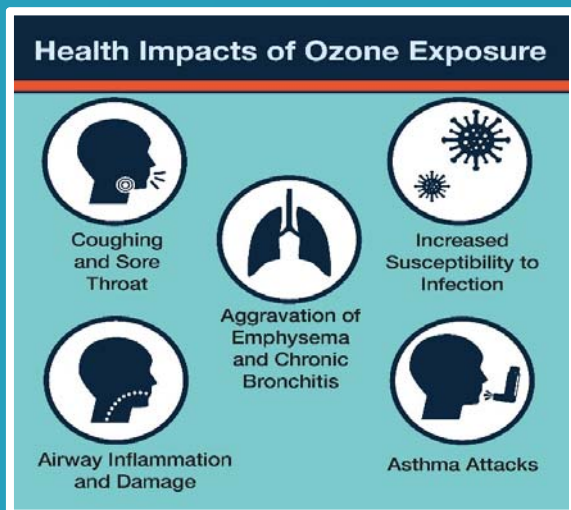
Ozone Trends in the South Coast Air Basin



- Overall air quality has dramatically improved
- High ozone in recent years were due to adverse meteorology. Continued emission reductions will improve ozone

4

Health Impacts of Ozone

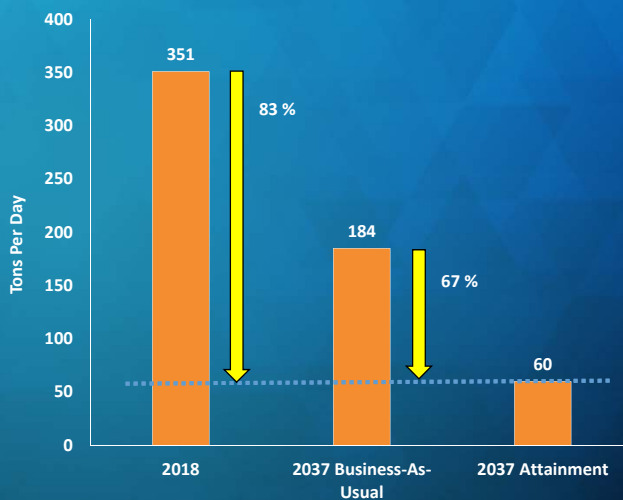


- Ozone precursor pollutants also increase fine particulate (PM_{2.5}) pollution
- PM_{2.5} can cause **premature death** in addition to other serious health effects

5

Need to Reduce NO_x Emissions

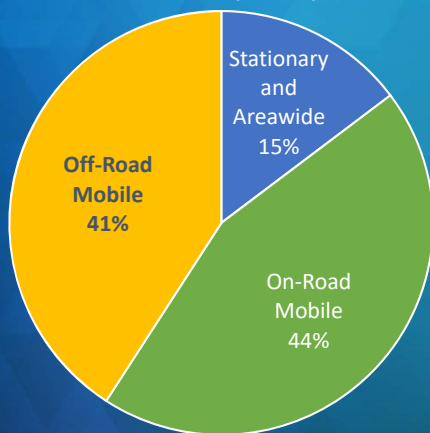
- The primary pollutant that must be controlled to reduce ozone in our region is nitrogen oxides (NO_x)
- NO_x is formed during processes that burn fuels
- NO_x must be reduced to 60 tons per day to meet the ozone standard
 - 83% below current conditions
 - 67% below Business-As-Usual conditions in 2037



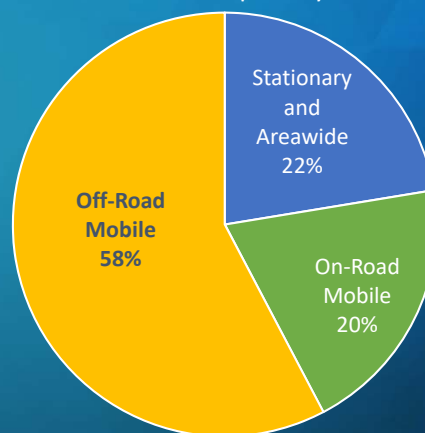
6

NOx Emission from Different Source Category

2018 NOx Emission
351 tons per day



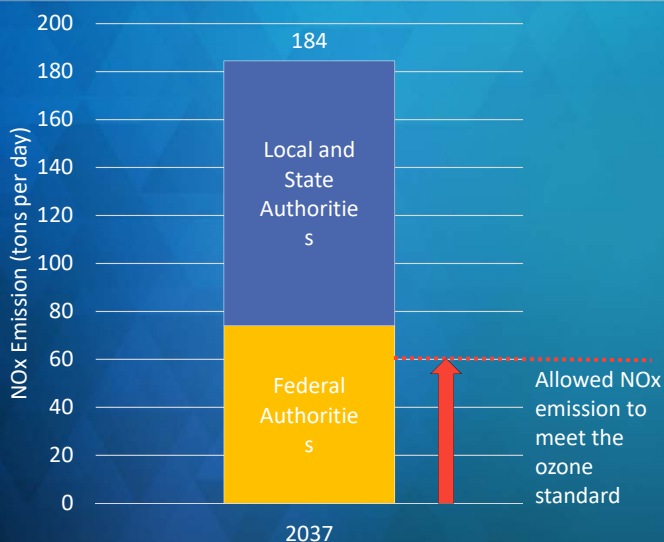
2037 NOx Emission
184 tons per day



Over 80% of the NOx Emission in 2018 is from mobile sources

7

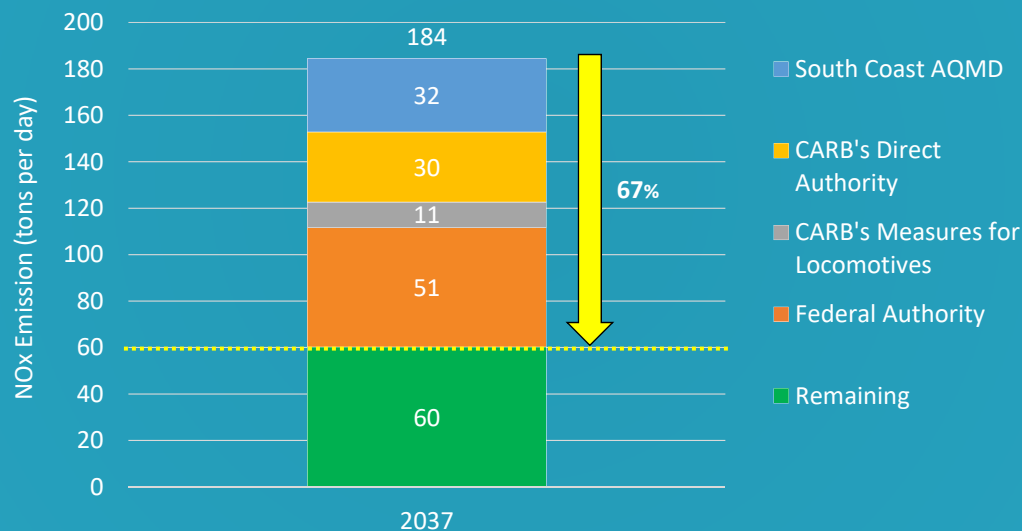
Shared Responsibility for Emission Reductions



- More than 1/3 of the 2037 baseline emissions inventory is regulated primarily under federal and international jurisdiction, with limited authority for CARB/South Coast AQMD
 - Ships, aircraft, locomotives, etc
- Cannot assign responsibility to federal government to reduce emissions, even from federal sources
- Attainment is not possible without significant reductions from these sources

8

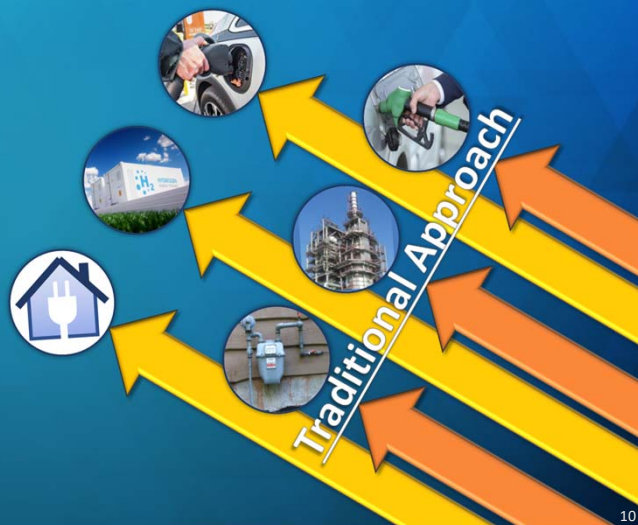
NOx Reductions Needed for Attainment



9

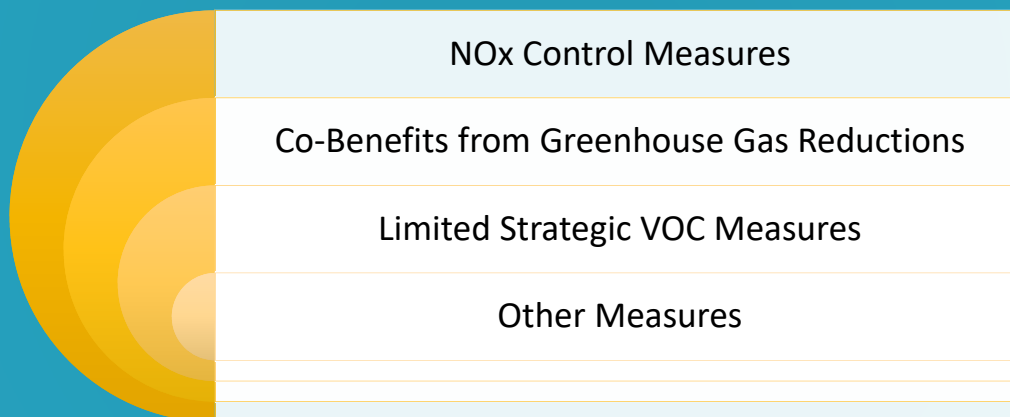
Innovative Approaches Needed

- Traditional approach relies on additional tailpipe/exhaust stack controls, new engines technology, or fuel improvements tailored to individual use cases
- These traditional approaches will not reduce emissions by the amount needed
- We must turn to zero emission and advanced technologies wherever possible



10

Overview of Draft South Coast AQMD Stationary and Area Source Control Strategy



11

Draft Stationary and Area Sources NOx Control Measures



Residential Combustion
Water/Space/Heating/
Cooking/Others



Commercial Combustion
Water/Space/Heating/
Cooking/Others



Industrial Combustion
Boilers/Process Heaters/
Refineries/EGUs/Etc.

12

Overview of Draft South Coast AQMD Mobile Source Control Strategy



13

Public Input and Outreach

'Standard' Comprehensive

AQMP
Advisory
Group

Working
Group
Meetings

Individual
Stakeholder
Meetings

Written
Comments

Public
Workshops

State Agencies
CARB
Energy Comm.
Public Util. Comm.
GoBIZ
etc.

**Additional
Critical**

Federal Agencies
EPA
Dept. of Energy
Dept. of Transp.
Council Env. Qual.
etc.



14

Development Process

- Release of the Draft 2022 AQMP: May 6, 2022
- Public comments were received during May 6 – July 22, 2022
- Revised 2022 AQMP to be released in late Summer
- Upcoming public meetings and schedule:

Timeline	Milestone
August 5, 2022	Status update on Draft 2022 AQMP development to South Coast AQMD Governing Board
August 10, 2022	Advisory Council Meeting on Health Effects Appendix
Late August, 2022	Release Revised Draft 2022 AQMP
October 7, 2022	Status update on Draft 2022 AQMP development to South Coast AQMD Governing Board and Set Hearing
Mid October, 2022	Regional Public Hearings
December 2, 2022	South Coast AQMD Board Consideration of Draft Final AQMP

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**2022 AQMP
Interested Parties**



For comments or questions,
please email:
AQMPteam@aqmd.gov

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Additional Information

BOARD OF DIRECTORS METRO VALLEY STUDY SESSION ATTENDANCE - 2022
VALLEY BOARD MEMBER ATTENDANCE

Name	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec
Eunice Ulloa City of Chino		X	X			X						
Ray Marquez City of Chino Hills		X	X	X		X						
Frank Navarro City of Colton		X	X	X	X	X						
Aquanetta Warren City of Fontana		X	X			X						
Darcy McNaboe City of Grand Terrace		X	X	X	X	X						
Larry McCallon City of Highland		X	X	X	X	X						
Rhodes 'Dusty' Rigsby City of Loma Linda		X	X			X						
John Dutrey City of Montclair		X	X	X	X	X						
Alan Wapner City of Ontario		X	X	X	X							
L. Dennis Michael City of Rancho Cucamonga		X		X		X						
Paul Barich City of Redlands			X									
Deborah Robertson City of Rialto		X										
John Valdivia City of San Bernardino			X	X	X	X						
Carlos Garcia City of Upland												
David Avila City of Yucaipa		X	X	X	X	X						
Curt Hagman Board of Supervisors				X		X						

X = member attended meeting. * = alternate member attended meeting. Empty box = Did not attend meeting Crossed out box = not a Board Member at the time.
 Shaded box = No meeting

Communication: Attendance (Additional Information)

BOARD OF DIRECTORS METRO VALLEY STUDY SESSION ATTENDANCE – 2022

VALLEY BOARD MEMBER ATTENDANCE (Cont.)

Name	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec
Dawn Rowe Board of Supervisors		X	X	X	X	X						
Janice Rutherford Board of Supervisors		X		X		X						
Joe Baca, Jr. Board of Supervisors		X	X	X	X	X						

MOUNTAIN/DESERT BOARD MEMBER ATTENDANCE

Daniel Ramos City of Adelanto												
Art Bishop Town of Apple Valley		X		X	X	X						
Paul Courtney City of Barstow												
Rick Herrick City of Big Bear Lake												
Rebekah Swanson City of Hesperia												
Edward Paget City of Needles												
Joel Klink City of Twentynine Palms												
Debra Jones City of Victorville						X						
Rick Denison Town of Yucca Valley		X	X	X	X	X						
Paul Cook Board of Supervisors		X	X	X	X	X						

X = member attended meeting. * = alternate member attended meeting. Empty box = Did not attend meeting. Crossed out box = not a Board Member at the time.

MVSSatt22

Shaded box = No meeting

Communication: Attendance (Additional Information)

Acronym List

This list provides information on acronyms commonly used by transportation planning professionals. This information is provided in an effort to assist Board Members and partners as they participate in deliberations at Board meetings. While a complete list of all acronyms which may arise at any given time is not possible, this list attempts to provide the most commonly-used terms. Staff makes every effort to minimize use of acronyms to ensure good communication and understanding of complex transportation processes.

AB	Assembly Bill
ACE	Alameda Corridor East
ACT	Association for Commuter Transportation
ADA	Americans with Disabilities Act
ADT	Average Daily Traffic
APTA	American Public Transportation Association
AQMP	Air Quality Management Plan
ARRA	American Recovery and Reinvestment Act
ATMIS	Advanced Transportation Management Information Systems
BAT	Barstow Area Transit
CALACT	California Association for Coordination Transportation
CALCOG	California Association of Councils of Governments
CALSAFE	California Committee for Service Authorities for Freeway Emergencies
CARB	California Air Resources Board
CEQA	California Environmental Quality Act
CMAQ	Congestion Mitigation and Air Quality
CMIA	Corridor Mobility Improvement Account
CMP	Congestion Management Program
CNG	Compressed Natural Gas
COG	Council of Governments
CPUC	California Public Utilities Commission
CSAC	California State Association of Counties
CTA	California Transit Association
CTC	California Transportation Commission
CTC	County Transportation Commission
CTP	Comprehensive Transportation Plan
DBE	Disadvantaged Business Enterprise
DEMO	Federal Demonstration Funds
DOT	Department of Transportation
EA	Environmental Assessment
E&D	Elderly and Disabled
E&H	Elderly and Handicapped
EIR	Environmental Impact Report (California)
EIS	Environmental Impact Statement (Federal)
EPA	Environmental Protection Agency
FHWA	Federal Highway Administration
FSP	Freeway Service Patrol
FRA	Federal Railroad Administration
FTA	Federal Transit Administration
FTIP	Federal Transportation Improvement Program
GFOA	Government Finance Officers Association
GIS	Geographic Information Systems
HOV	High-Occupancy Vehicle
ICTC	Interstate Clean Transportation Corridor
IEEP	Inland Empire Economic Partnership
ISTEA	Intermodal Surface Transportation Efficiency Act of 1991
IIP/ITIP	Interregional Transportation Improvement Program
ITS	Intelligent Transportation Systems
IVDA	Inland Valley Development Agency
JARC	Job Access Reverse Commute
LACMTA	Los Angeles County Metropolitan Transportation Authority
LNG	Liquefied Natural Gas
LTF	Local Transportation Funds

Acronym List

MAGLEV	Magnetic Levitation
MARTA	Mountain Area Regional Transportation Authority
MBTA	Morongo Basin Transit Authority
MDAB	Mojave Desert Air Basin
MDAQMD	Mojave Desert Air Quality Management District
MOU	Memorandum of Understanding
MPO	Metropolitan Planning Organization
MSRC	Mobile Source Air Pollution Reduction Review Committee
NAT	Needles Area Transit
NEPA	National Environmental Policy Act
OA	Obligation Authority
OCTA	Orange County Transportation Authority
PA&ED	Project Approval and Environmental Document
PASTACC	Public and Specialized Transportation Advisory and Coordinating Council
PDT	Project Development Team
PNRS	Projects of National and Regional Significance
PPM	Planning, Programming and Monitoring Funds
PSE	Plans, Specifications and Estimates
PSR	Project Study Report
PTA	Public Transportation Account
PTC	Positive Train Control
PTMISEA	Public Transportation Modernization, Improvement and Service Enhancement Account
RCTC	Riverside County Transportation Commission
RDA	Redevelopment Agency
RFP	Request for Proposal
RIP	Regional Improvement Program
RSTIS	Regionally Significant Transportation Investment Study
RTIP	Regional Transportation Improvement Program
RTP	Regional Transportation Plan
RTPA	Regional Transportation Planning Agencies
SB	Senate Bill
SAFE	Service Authority for Freeway Emergencies
SAFETEA-LU	Safe Accountable Flexible Efficient Transportation Equity Act – A Legacy for Users
SCAB	South Coast Air Basin
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCRRA	Southern California Regional Rail Authority
SHA	State Highway Account
SHOPP	State Highway Operations and Protection Program
SOV	Single-Occupant Vehicle
SRTP	Short Range Transit Plan
STAF	State Transit Assistance Funds
STIP	State Transportation Improvement Program
STP	Surface Transportation Program
TAC	Technical Advisory Committee
TCIF	Trade Corridor Improvement Fund
TCM	Transportation Control Measure
TCRP	Traffic Congestion Relief Program
TDA	Transportation Development Act
TEA	Transportation Enhancement Activities
TEA-21	Transportation Equity Act for the 21 st Century
TMC	Transportation Management Center
TMEE	Traffic Management and Environmental Enhancement
TSM	Transportation Systems Management
TSSDRA	Transit System Safety, Security and Disaster Response Account
USFWS	United States Fish and Wildlife Service
VCTC	Ventura County Transportation Commission
VVTA	Victor Valley Transit Authority
WRCOG	Western Riverside Council of Governments



MISSION STATEMENT

Our mission is to improve the quality of life and mobility in San Bernardino County. Safety is the cornerstone of all we do.

We achieve this by:

- Making all transportation modes as efficient, economical, and environmentally responsible as possible.
- Envisioning the future, embracing emerging technology, and innovating to ensure our transportation options are successful and sustainable.
- Promoting collaboration among all levels of government.
- Optimizing our impact in regional, state, and federal policy and funding decisions.
- Using all revenue sources in the most responsible and transparent way.

Approved December 4, 2019