

## **ITEM 12D**

**Coachella Valley Association of Governments  
Joint Meeting of the Executive  
& Transportation Committees  
December 4, 2023**



### **STAFF REPORT**

**Subject:** CV Sync Phase III and additional Environmental and Engineering Services along Varner Road

**Contact:** Eric V. Cowle, Transportation Program Manager ([ecowle@cvag.org](mailto:ecowle@cvag.org))

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**Recommendation:** Authorize the Executive Director to:

1. Execute an engineering services contract with Dokken Engineering for a total not-to-exceed amount of \$5,148,209, including contingency, for work along Varner Road to include CV Sync Phase III design and engineering and a feasibility study of an Interstate 10 bypass;
2. Negotiate and execute reimbursement agreements with the local jurisdictions for costs related to the I-10 bypass

**Background:** CVAG is currently working with its member jurisdictions on a regional signal synchronization program known as CV Sync. Phase I of CV Sync addressed the top three prioritized corridors from the project's Master Plan, which were Highway 111, Ramon Road and Washington Street. Phase I construction was completed at the end of June 2023.

In April 2018, the CVAG Executive Committee expanded CV Sync for Phase II, which focused on the next 18 top-ranked corridors:

Monterey Avenue	Gene Autry Trail	Country Club Drive*
Cook Street	Date Palm Drive	Monroe Street
Palm Drive	Indio Boulevard	Avenue 48
Bob Hope Drive*	Jefferson Street	Sunrise Way
Fred Waring Drive*	Palm Canyon Drive	Indian Canyon Drive
Dinah Shore Drive*	Vista Chino*	Jackson Street

While these corridors cross every jurisdiction in the Coachella Valley, some streets are noted with an asterisk because this regional project does not include work in the City of Rancho Mirage.

At the time that final plans progressed on Phase I and preliminary design began on Phase II, staff from CVAG's member jurisdictions were reviewing the project as part of the Technical Transportation Advisory Sub-Committee (TTAS). The TTAS members made the case that four additional corridors should be added to Phase II. Development of intelligent transportation system (ITS) technology on these four additional corridors – Portola Avenue, Avenue 50, Avenue 44 and Varner Road/Avenue 42 – would largely complete the regional network that the individual jurisdictions currently manage. At its February 22, 2021 meeting, the Executive Committee authorized environmental studies and engineering design for Portola Avenue, Avenue 50 and

Avenue 44. Avenue 50 was authorized for construction in Phase II of CV Sync by the Executive Committee at its April 24, 2023 meeting, bringing the total corridors under construction to 19 corridors

Staff is now recommending that CVAG launch Phase III of CV Sync by working on Varner Road's engineering and design. In addition to CV Sync related improvements, staff is recommending a feasibility study be completed to effectively design Varner Road as a bypass to Interstate 10.

Varner Road is primarily a two-lane roadway with its own history of flooding and logistical problems. And it proved to be a critical route after Tropical Storm Hilary struck the Coachella Valley with an unprecedented destructive force in August 2023. Several member jurisdictions declared a state of emergency, dozens of roads were closed across the region, and Interstate 10 was shut down in both directions at several locations. Thousands of cars and trucks were detoured from the highway and onto a bypass route that extended from Washington Street to Palm Drive in Desert Hot Springs by utilizing Varner Road. The importance of having routes like this was also highlighted by Shailen Bhatt, the Federal Highway (FHWA) Administrator, during the keynote address at the Intelligent Transportation Society of California's Annual Conference on October 17, 2023 in Anaheim. The presentation highlighted the need for safe and efficient bypasses to the Interstate Highway System, particularly when incidents and natural disasters occur.

CVAG staff advertised a Request for Proposals (RFP) on September 19, 2023 for Professional Engineering and Intelligent Transportation Systems Engineering for Varner Road improvements. RFP proposals were due by October 31, 2023. Four engineering firms submitted proposals: Albert A. Webb Associates, Dokken Engineering, Kimley Horn Associates Inc. and Michael Baker International.

A Selection Committee was assembled to review the proposals. The Committee included CVAG, Riverside County, Caltrans District 8 and the cities of Cathedral City and Palm Desert. The Committee scored the proposals and selected the top two consultant teams to be interviewed. The Committee interviewed Dokken Engineering and Michael Baker International on Wednesday, November 15, with Dokken Engineering being the consensus choice for contract negotiations. Discussion over the scope and cost proposal were completed on Friday, November 17.

Staff is now recommending the Executive Director be authorized to execute a contract with Dokken. Staff is also recommending the Executive Director be authorized to negotiate and execute reimbursement agreements with local jurisdictions, including the County of Riverside and the Cities of Indio and Cathedral City, for work related to the I-10 bypass and feasibility study. The recommended action would also authorize the Executive Director and/or Legal Counsel to make clarifying revisions before execution.

CV SYNC Phase III Improvements will extend along a 22-mile stretch of Varner Road and will be fully designed with final Plans, Specifications and Cost Estimate (PSE) Package(s) as well as construction and implementation support provided. Final PSE is scheduled to be completed in March 2025.

The Varner Road improvements, which extend from Palm Drive to Avenue 42, will be evaluated from a traffic safety and capacity perspective with development of design alternatives to present solutions to the existing drainage issues. The proposed improvements needed to allow Varner Road to serve as the de-facto bypass to I-10 during emergency/incident management events will be carefully evaluated with potential projects, impacts, and costs to be summarized in a Varner Road Improvements Feasibility Study. A partnership with Caltrans in developing an Integrated

Corridor Management Plan will be a key component of the overall strategy to bypass Interstate 10. In addition, the Dokken team will work closely with on-going design work by CVAG and its Flooding and Blowsand project as well as design work underway in Cathedral City along Varner Road. The feasibility study is scheduled to be completed in May 2025.

**Fiscal Analysis:** Dokken Engineering's proposed cost to prepare final PSE and support through construction for CV Sync Phase II, combined with a Feasibility Study for enhancing the safety and efficiency of Varner Road as a de facto bypass to I-10, is \$4,680,190. This was significantly lower than the bid from the second-ranked firm.

A substantial amount of this cost is related to the civil engineering required for a I-10 bypass concept. The feasibility study will require significant hydrology and preliminary engineering. CVAG staff is in discussions with local jurisdictions, including the County of Riverside and the Cities of Indio and Cathedral City, to address the local cost share.

Staff is recommending a 10% contingency of \$468,019, bringing the total contract cost would be \$5,148,209. Regional transportation funding is available for this project.

**Attachments:**

1. Dokken Engineering Proposal: <https://cvag.org/pdf/cvsync/Dokken.pdf>
2. Engineering Services Contract
3. Location Map

## PROFESSIONAL SERVICES CONTRACT

between

COACHELLA VALLEY ASSOCIATION OF GOVERNMENTS (CVAG)

and

DOKKEN ENGINEERING

THIS AGREEMENT is made and effective as of December 4, 2023 between the Coachella Valley Association of Governments ("CVAG") and Dokken Engineering ("Consultant"). In consideration of the mutual covenants and conditions set forth herein, the parties agree as follows:

### 1. TERM

This Agreement shall commence on **December 4, 2023** and shall remain and continue in effect until tasks described herein are completed, but in no event later than **May 31, 2025**, unless sooner terminated or extended pursuant to the provisions of this Agreement.

### 2. SERVICES

Consultant shall perform **PROFESSIONAL ENGINEERING, TRAFFIC ENGINEERING, AND ITS SYSTEMS ENGINEERING SERVICES** consistent with the provisions of the Request for Proposals for the proposed **CV SYNC PHASE III AND VARNER ROAD IMPROVEMENT (VARNRR/AVENUE 42) PROJECT**, released on September 19, 2023, (the "RFP,") and any modification thereto adopted in writing by the parties and identified herein as an exhibit to this Agreement, upon issuance by CVAG of written authority to proceed (a "Notice to Proceed") as to either (a) a portion of the work if separate and independent tasks are contemplated or (b) all work if it constitutes a single project.

Except as amended by the exhibits hereto, Consultant is bound by the contents of the RFP and Consultant's response thereto. In the event of conflict, the requirements of this Agreement, including any exhibits, then the Request for Proposals, shall take precedence over those contained in Consultant's response.

The following exhibit(s) are attached and incorporated herein by reference:

Exhibit A: Scope of Work

Exhibit B: Price Formula (Consultants Proposal)

### 3. PRICE FORMULA

CVAG agrees to pay Consultant at the rates set forth in Exhibit B, the Price Formula, and by reference incorporated herein. In no event shall the total amount paid for services rendered by Consultant under this Agreement exceed the sum of **\$5,148,209** without a written amendment.

#### 4. PERFORMANCE

Consultant shall at all times faithfully, competently and to the best of its ability, experience, and talent, perform all tasks required hereunder. Consultant shall employ, at a minimum, generally accepted standards and practices utilized by persons engaged in providing similar services as are required of Consultant hereunder in meeting its obligations under this Agreement.

Consultant shall submit informal progress reports to CVAG's Project Manager by telephone, e-mail or in person, on a weekly basis, in a form acceptable to CVAG, describing the state of work performed. The purpose of the reports is to allow CVAG to determine if the contract objectives and activities are being completed in accordance with the agreed upon schedule, and to afford occasions for airing difficulties or special problems encountered.

The Consultant's Project Manager shall meet with the CVAG Project Manager as needed.

#### 5. PAYMENT

(a) If independent and separate Work Orders are contemplated, CVAG shall pay Consultant upon satisfactory completion of each Work Order; and, unless Consultant provides a performance bond, progress payments will not be made on individual or a collection of Work Orders. If all the work constitutes a single project, Consultant shall submit invoices for work completed on a periodic basis, no more frequently than monthly.

(b) Consultant shall not be compensated for any services rendered in connection with its performance of this Agreement which are in addition to those set forth in a duly issued Work Order.

(c) Consultant shall submit invoices for services performed in accordance with the payment rates and terms set forth in Exhibit B. The invoice shall be in a form approved by CVAG.

(d) A formal report of tasks performed and tasks in process, in a form acceptable to CVAG, shall be attached to each invoice.

(e) All invoices shall be consistent with current progress reports as well as the budget and work schedule set out in the RFP and, if modified or supplemented thereby, the exhibits to this Agreement.

(f) Upon approval by CVAG's Project Manager, payment shall be made within thirty (30) days of receipt of each invoice as to all non-disputed fees. If CVAG disputes any of Consultant's invoiced fees it shall give written notice to Consultant within thirty (30) days of receipt of the invoice.

## 6. INSPECTION OF WORK

Consultant shall permit CVAG the opportunity to review and inspect the project activities at all reasonable times during the performance period of this Agreement including review and inspection on a daily basis.

## 7. SCOPE OF WORK CHANGES

The scope of work shall be subject to change by additions, deletions or revisions by CVAG. Consultant shall be advised of any such changes by written notice. Consultant shall promptly perform and strictly comply with each such notice. If Consultant believes that performance of any change would justify modification of the Agreement price or time for performance, Consultant shall comply with the provisions for dispute resolution set out hereinbelow.

## 8. SUSPENSION OR TERMINATION OF AGREEMENT WITHOUT CAUSE

(a) CVAG may at any time, for any reason, with or without cause, suspend or terminate this Agreement, or any portion hereof, by serving upon Consultant seven (7) days prior written notice. Upon tender of said notice, Consultant shall immediately cease all work under this Agreement, unless further work is authorized by CVAG. If CVAG suspends or terminates a portion of this Agreement, such suspension or termination shall not make void or invalidate the remainder of this Agreement.

(b) In the event this Agreement is terminated pursuant to this Section, CVAG shall pay Consultant only for work that has been accepted by CVAG. Work in process will not be paid unless CVAG agrees in writing to accept the partial work, in which case, prorated fees may be authorized. Upon termination of the Agreement pursuant to this Section, Consultant will submit a final invoice to CVAG. Payment of the final invoice shall be subject to approval by the CVAG Project Manager as set out above.

## 9. DEFAULT OF CONSULTANT

(a) Consultant's failure to comply with the provisions of this Agreement shall constitute a default. In the event that Consultant is in default for cause under the terms of this Agreement, CVAG shall have no obligation or duty to continue compensating Consultant for any work performed after the date of default and can terminate this Agreement immediately by written notice to Consultant. Provided, however, if such failure by Consultant to make progress in the performance of work hereunder arises out of causes beyond Consultant's control, and without fault or negligence of Consultant, it shall not be considered a default.

(b) As an alternative to notice of immediate termination, the CVAG Executive Director or his/her delegate may cause to be served upon Consultant a written notice of the default. Consultant shall then have ten (10) days after service upon it of said notice in which to cure the default by rendering a satisfactory performance. In the event that Consultant fails to cure its default within such period of time, CVAG shall have the right, notwithstanding any other provision of this Agreement, to terminate this Agreement without further notice and without prejudice to any other remedy to which it may be entitled at law, in equity or under this Agreement.

## 10. OWNERSHIP OF DOCUMENTS

(a) Consultant shall maintain complete and accurate records with respect to work performed, costs, expenses, receipts, and other such information that relates to the performance of services under this

Agreement. Consultant shall maintain adequate records of services provided in sufficient detail to permit an evaluation of services. All such records shall be maintained in accordance with generally accepted accounting principles and shall be clearly identified and readily accessible. Consultant shall provide free access to the representatives of CVAG or its designees at reasonable times to such books and records; shall give CVAG the right to examine and audit said books and records; shall permit CVAG to make transcripts therefrom as necessary; and shall allow inspection of all work, data, documents, proceedings, and activities related to this Agreement. Such records, together with supporting documents, shall be maintained for a period of three (3) years after receipt of final payment.

(b) Unless the RFP or exhibits hereto expressly provide otherwise, upon completion of, or in the event of termination or suspension of this Agreement, all original documents, designs, drawings, maps, models, computer files, surveys, notes, and other documents prepared in the course of providing the services to be performed pursuant to this Agreement shall become the sole property of CVAG and may be used, reused, or otherwise disposed of by CVAG without the permission of Consultant. With respect to computer files, Consultant shall make available to CVAG, at Consultant's office and upon reasonable written request by CVAG, the necessary computer software and hardware for purposes of accessing, compiling, transferring, and printing computer files.

#### 11. INDEMNIFICATION FOR PROFESSIONAL LIABILITY

To the fullest extent permitted by law, Consultant shall indemnify, protect, defend and hold harmless CVAG, its members and any and all of their officials, employees and agents from and against any and all losses, liabilities, damages, costs and expenses, including attorney's fees and costs, which arise out of, pertain to, or relate to Consultant's alleged act(s) or failure(s) to act.

#### 12. INSURANCE

(a) Throughout the term of this Agreement, Consultant shall procure and maintain the following: (1) Commercial General Liability insurance in an amount not less than \$2,000,000 per occurrence, \$4,000,000 general aggregate for bodily injury, personal injury and property damage; (2) Professional Liability/Errors and Omissions insurance in an amount not less than \$1,000,000.00 per claim and in the aggregate; (3) Automobile Liability Insurance for bodily injury and property damage including coverage for owned, non-owned and hired vehicles, in an amount not less than \$1,000,000 per accident combined single limit, at least as broad as Insurance Services Office Form Number CA 00 01 covering automobile liability, Code 1 (any auto); (4) Workers' compensation in compliance with applicable statutory requirements and Employer's Liability Coverage in an amount not less than \$1,000,000 per accident or disease, Consultant shall submit to Agency, along with the certificate of insurance, a Waiver of Subrogation endorsement in favor of Agency, its officers, agents, employees and volunteers.

(b) Consultant shall include CVAG, its member agencies and any other interested and related party designated by CVAG, as additional insureds on the commercial general liability policy and the automobile liability policy for liabilities caused by Consultant in its performance of services under this Agreement and shall provide CVAG with a certificate and endorsement verifying such coverage. In the event said insurance coverage expires at any time or times during the term of this Agreement, Consultant agrees to provide at least five (5) days notice prior to said expiration date and, prior to said expiration date, a new certificate of insurance and endorsements evidencing insurance coverage as required herein for no less than the remainder of the term of the Agreement, or for a total period of not less than one (1) year. New certificates of insurance are subject to the approval of CVAG. In the event

Consultant fails to keep in effect at all times insurance coverage as required herein, CVAG may, in addition to any other remedies it may have, terminate this Agreement.

(c) Consultant's insurance coverage shall be primary insurance as respects CVAG, its member agencies, and any other interested and related party designated by CVAG as additional insureds. Any insurance or self-insurance maintained by said additional insureds shall be in excess of Consultant's insurance and shall not contribute with it and, to the extent obtainable, such coverage shall be payable notwithstanding any act of negligence of CVAG, its members, or any other additional insured, that might otherwise result in forfeiture of coverage. Any failure to comply with reporting or other provisions of the policies, including breach of warranties, shall not affect coverage provided to said additional insureds. Consultant's insurance shall apply separately to each insured against whom claim is made or suit is brought. Each insurance policy required by this clause shall be endorsed to state that coverage shall not be suspended, voided, canceled by any party, reduced in coverage or in limits except after thirty (30) days prior written notice by certified mail, return receipt requested, has been given to CVAG.

(d) Said insurance policy or policies shall be issued by a responsible insurance company with a minimum A. M. Best Rating of "A-" Financial Category "X", and authorized and admitted to do business in, and regulated by, the State of California.

(e) Evidence of all insurance coverage shall be provided to CVAG prior to issuance of the Notice to Proceed. Consultant acknowledges and agrees that such insurance is in addition to Consultant's obligation to fully indemnify and hold CVAG, its members and any other additional insureds free and harmless from and against any and all claims arising out of an injury or damage to property or persons caused by the acts or omissions of Consultant.

### 13. INDEPENDENT CONTRACTOR

(a) Consultant is and shall at all times remain as to CVAG a wholly independent contractor. The personnel performing the services under this Agreement on behalf of Consultant shall at all times be under Consultant's exclusive direction and control. Neither CVAG, its members, nor any of their officers, employees, or agents shall have control over the conduct of Consultant or any of Consultant's officers, employees, or agents, except as set forth in this Agreement. Consultant shall not at any time or in any manner represent that it or any of its officers, employees, or agents are in any manner officers, employees, or agents of CVAG or its members. Consultant shall not incur or have the power to incur any debt, obligation, or liability whatever against CVAG or its members, or bind CVAG or its members in any manner except as expressly authorized by CVAG.

(b) No employee benefits shall be available to Consultant in connection with the performance of this Agreement. Except for the fees paid to Consultant as provided in the Agreement, CVAG shall not pay salaries, wages, or other compensation to Consultant for performing services hereunder. CVAG shall not be liable for compensation or indemnification to Consultant for injury or sickness arising out of performing services hereunder.

### 14. LEGAL RESPONSIBILITIES

Consultant shall keep itself informed of State, Federal and local laws and regulations which in any manner affect those employed by it or in any way affect the performance of its services pursuant to this Agreement. Consultant shall at all times observe and comply with all such laws and regulations. CVAG, its



members, and their officers and employees, shall not be liable at law or in equity for any liability occasioned by failure of Consultant to comply with this Section.

Consultant shall not discriminate against any employee or applicant for employment because of race, religion, color, sex, age, national origin, or any other unlawful basis.

15. UNDUE INFLUENCE

Consultant declares and warrants that no undue influence or pressure was or will be used against or in concert with any officer or employee of CVAG in connection with the award, terms or implementation of this Agreement, including any method of coercion, confidential financial arrangement, or financial inducement. No officer or employee of CVAG will receive compensation, directly or indirectly, from Consultant, or from any officer, employee or agent of Consultant, in connection with the award of this Agreement or any work to be conducted as a result of this Agreement. Violation of this Section shall be a material breach of this Agreement entitling CVAG to any and all remedies at law or in equity.

16. NO BENEFIT TO ARISE TO LOCAL EMPLOYEES

No member, officer, or employee of CVAG, nor its designees or agents, and no public official who exercises authority over or responsibilities with respect to the subject of this Agreement during his/her tenure or for one year thereafter, shall have any interest, direct or indirect, in any agreement or sub-agreement, or the proceeds thereof, for work to be performed in connection with the services performed under this Agreement.

17. RELEASE OF INFORMATION/CONFLICTS OF INTEREST

(a) All information gained by Consultant in performance of this Agreement shall be considered confidential and shall not be released by Consultant without CVAG's prior written authorization. Consultant, its officers, employees, agents, or sub-consultants, shall not without written authorization from the CVAG Task Manager or unless requested by the CVAG Attorney, voluntarily provide declarations, letters of support, testimony at depositions, response to interrogatories, or other information concerning the work performed under this Agreement or relating to any project or property of CVAG. Response to a subpoena or court order shall not be considered "voluntary" provided Consultant gives CVAG notice of such court order or subpoena.

(b) Consultant shall promptly notify CVAG should Consultant, its officers, employees, agents, or sub-consultants be served with any summons, complaint, subpoena, notice of deposition, request for documents, interrogatories, request for admissions, or other discovery request, court order, or subpoena from any person or party regarding this Agreement and the work performed thereunder or with respect to any project or property of CVAG or its members. CVAG retains the right, but has no obligation, to represent Consultant and/or be present at any deposition, hearing, or similar proceeding. Consultant agrees to cooperate fully with CVAG and to provide the opportunity to review any response to discovery requests provided by Consultant. However, CVAG's right to review any such response does not imply or mean the right by CVAG to control, direct, or rewrite said response.

(c) Consultant covenants that neither it nor any officer or principal of Consultant's firm has any interest in, or shall acquire any interest, directly or indirectly, which will conflict in any manner or degree with the performance of services hereunder. Consultant further covenants that in the performance of this Agreement, no person having such interest shall be employed by Consultant as an officer, employee, agent, or subcontractor.

## 18. NOTICES

Any notices which either party may desire to give to the other party under this Agreement must be in writing and may be given either by (i) personal service, (ii) delivery by a reputable document delivery service, such as but not limited to, Federal Express, which provides a receipt showing date and time of delivery, or (iii) mailing in the United States Mail, certified mail, postage prepaid, return receipt requested, addressed to the address of the party as set forth below or at any other address as that party may later designate by notice:

To CVAG: Executive Director  
Coachella Valley Association of Governments  
74-199 El Paseo, Suite 100  
Palm Desert, CA 92260

To Consultant: Michael Greer, Project Manager  
Dokken Engineering  
1450 Frazee Road, Suite 100  
San Diego, CA 92108

19. ASSIGNMENT/PERSONNEL

Consultant shall not assign the performance of this Agreement, nor any part thereof, nor any monies due hereunder, without prior written consent of CVAG.

Because of the personal nature of the services to be rendered pursuant to this Agreement, there shall be no change in Consultant's Project Manager or members of the project team without prior written approval by CVAG.

## 20. MANAGEMENT

CVAG's Executive Director shall represent CVAG in all matters pertaining to the administration of this Agreement, review and approval of all services submitted by Consultant.

During the term of this Agreement, Consultant shall provide sufficient executive and administrative personnel as shall be necessary and required to perform its duties and obligations under the terms hereof.

## 21. SUBCONTRACTS

Unless expressly permitted in the RFP or the exhibits hereto, Consultant shall obtain the prior written approval of CVAG before subcontracting any services related to this Agreement. CVAG reserves the right to contract directly with any necessary subcontractors in the unlikely event it becomes necessary.

## 22. LICENSES

At all times during the term of this Agreement, Consultant shall have in full force and effect all licenses required of it by law for the performance of the services described in this Agreement.

## 23. GOVERNING LAW

CVAG and Consultant understand and agree that the laws of the State of California shall govern the rights, obligations, duties, and liabilities of the parties to this Agreement and also govern the interpretation of this Agreement. Any litigation concerning this Agreement shall take place in the Riverside County Superior Court, Desert Branch.

Any dispute arising under this Agreement shall first be decided by the CVAG Executive Director or designee. Consultant shall give CVAG written notice within seven (7) days after any event which Consultant believes may give rise to a claim for an increase in compensation or a change in the performance schedule. Within fourteen (14) days thereafter, Consultant shall supply CVAG with a statement supporting the claim. CVAG shall not be liable for and Consultant hereby waives any claim or potential claim which Consultant knew or should have known about and which was not reported in accordance with the provisions of this paragraph. Consultant agrees to continue performance of the services during the time any claim is pending. No claim shall be allowed if asserted after final payment.

24. FINAL PAYMENT CERTIFICATION AND RELEASE

CVAG shall not be obligated to make final payment to Consultant until Consultant has fully performed under this Agreement and has provided CVAG written assurances that Consultant has paid in full all outstanding obligations incurred as a result of Consultant's performance hereunder. All obligations owing by CVAG to Consultant shall be deemed satisfied upon Consultant's acceptance of the final payment. Thereafter, no property of CVAG shall be subject to any unsatisfied lien or claim arising out of this Agreement.

25. ENTIRE AGREEMENT

This Agreement contains the entire understanding between the parties relating to the obligations of the parties described in this Agreement. All prior or contemporaneous agreements, understandings, representations, and statements, oral or written, are merged into this Agreement and shall be of no further force or effect. Each party is entering into this Agreement based solely upon the representations set forth herein and upon each party's own independent investigation of any and all facts such party deems material.

26. FORCE MAJEURE

Neither party hereto shall be liable to the other for its failure to perform under this Agreement when such failure is caused by strikes, accidents, acts of God, fire, war, flood, governmental restrictions, or any other cause beyond the control of the party charged with performance; provided that the party so unable to perform shall promptly advise the other party of the extent of its inability to perform. Any suspension of performance by reason of this paragraph shall be limited to the period during which such cause of failure exists.

27. AUTHORITY TO EXECUTE THIS AGREEMENT

The person or persons executing this Agreement on behalf of Consultant warrants and represents that he/she has the authority to execute this Agreement on behalf of Consultant and has the authority to bind Consultant to the performance of its obligations hereunder.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed the day and year first above written.

COACHELLA VALLEY ASSOCIATION OF GOVERNMENTS

By: \_\_\_\_\_  
Tom Kirk, Executive Director

Dokken Engineering

By: \_\_\_\_\_  
John Klemunes, President

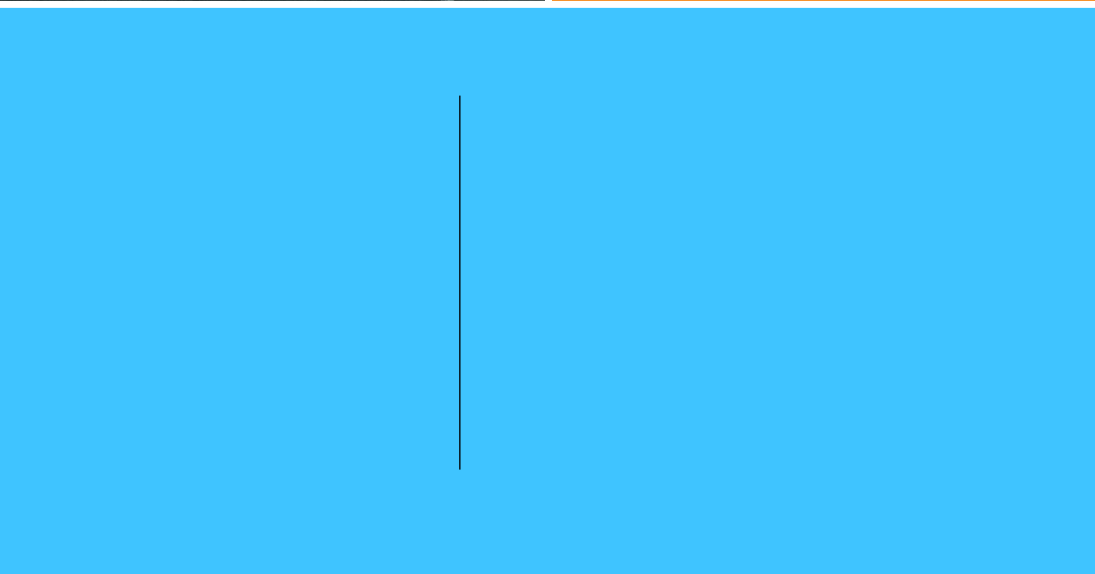
**EXHIBIT “A”**  
**SCOPE OF WORK**



# CVAG



## 5. WORK PLAN





## 5. WORK PLAN

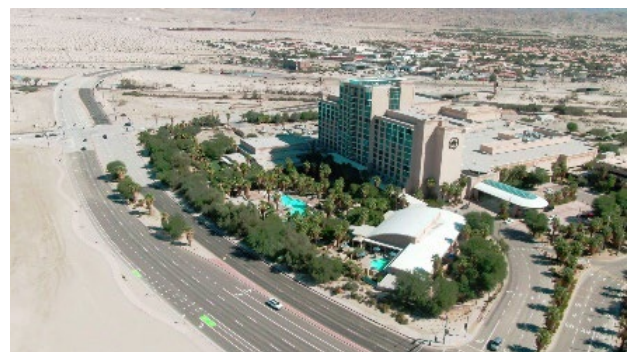
### PROJECT UNDERSTANDING

Our Dokken Engineering Team has thoroughly evaluated CVAG's RFP for Professional Engineering, Traffic Engineering, and ITS Systems Engineering Services for CV SYNC Phase III and Varner Road Improvements Feasibility Study. We attended the pre-proposal meeting and have thoroughly read through the Addendum, dated October 17, 2023, to understand the project needs and goals. We understand that the CV SYNC Phase III Improvements, with 22-mile limits as described in the next section, shall be fully designed with final PS&E Package(s) as well as construction and implementation support provided. We also understand that the Varner Road Improvements, along the 18-mile corridor from Palm Drive to Avenue 42, are to be evaluated from a traffic safety and capacity perspective with development of design alternatives to present solutions to the existing drainage issues. The proposed improvements needed to allow Varner Road to serve as the de-facto bypass to I-10 during emergency/incident management events will be carefully evaluated with potential projects, impacts, and costs to be summarized in a Varner Road Improvements Feasibility Study.

### PROJECT UNDERSTANDING – CV SYNC PHASE III IMPROVEMENTS AND ICM EVALUATION

Dokken Engineering has teamed with ADVANTEC, who has been working with CVAG and their stakeholders since 2016 to provide planning, design, signal timing/synchronization, construction support, and post-construction support as part of the CV SYNC Phase I and Phase II Projects. In addition, ADVANTEC provided preliminary analysis on the Phase III – Varner Road/Avenue 42 Corridor during the planning phase of the program. They are currently working with CVAG preparing the System Operations, System Maintenance, and System Management Manuals to support the CV Sync Program.

**CV Sync Phase III Project** – The CV Sync Phase III proposed improvements are along Varner Road from Palm Drive to Avenue 42, and Avenue 42 from Varner Road to Golf Center Parkway. The total corridor length is approximately 22 miles with a total of 23 traffic signals. Segments of the corridor are owned and maintained by the City of Cathedral City, County of Riverside, Caltrans, and the City of Indio. It is anticipated that the CV SYNC Phase III Project will follow the same planning, design, implementation, and operations as the Phase I and Phase II Projects that were delivered by ADVANTEC, with the exception that this Phase III Project will be managed by Dokken Engineering. The ITS field technologies including QFree advanced traffic controllers (ATC), Bosch Closed Circuit Television (CCTV) System, Daktronics Changeable Message Signs (CMS), Iteris Video Detection System (VDS), C-V2X Yunex Roadway Side Units (RSUs), Acyclica Wi Fi/Bluetooth Arterial Management System (AMS) will be incorporated as part of the CV SYNC Phase III Project. In addition, a fiber optic/wireless secured communication system will be designed and will be integrated to the Phase I and Phase II communication network via proposed and existing communication hubs that will be connected to the Regional Traffic Management Center (RTMC), Cities Traffic Operations Center, (TOCs), County of Riverside TOC, and Caltrans District 8 TMC using the CV Sync workstation. Consistent with the approach to Phase I and Phase II of CV SYNC Projects, the planning and design phases will assume the use of wireless communications through tribal nation lands to avoid ground disturbance. These field elements will be connected to QFree Kinetic Mobility, Genetec Video Management System, and Eximus Asset Management Software. We will include other facilities to be part of the CV SYNC Phase to support management of Special Events at the Acrisure Hockey Arena; connectivity to City of Rancho Mirage Public Works Yard; and connectivity to the California Highway Patrol facility. In order to provide a reliable wireless communication network, our team recommends providing backhaul communication radios at the roof of the Agua Caliente Casino in the City of Rancho Mirage and Fantasy Springs Casino in the City of Indio and connect it to the proposed wireless communication system along Varner Road and Avenue 42 to the CV SYNC RTMC. Our proposed approach will also allow the Agua Caliente and Cabazon Band of Mission Indians Tribal Nations to be major stakeholders of the CV SYNC Program. We will

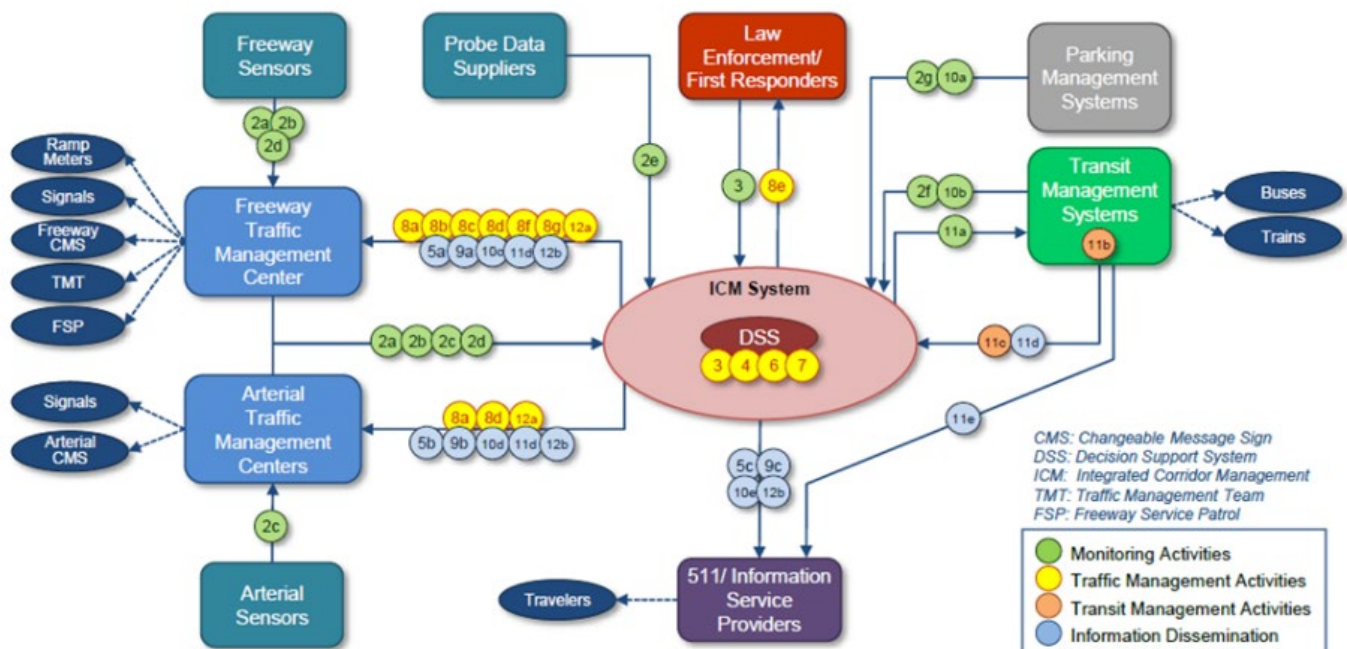


provide all the necessary planning, design, and project implementation support as described in our Work Plan. Our team anticipates the proposed communication system for CV SYNC Phase III improvements as shown in the table below.

**CV SYNC PHASE III PROPOSED CORRIDOR COMMUNICATIONS SUMMARY TABLE**

Additional Corridors	Corridor Limits	Proposed Communication Improvements
<b>Varner Road</b>	From Palm Drive to Ramon Road	Wireless Communications
<b>Varner Road</b>	From Ramon Road to Avenue 42	Fiber Optic Communications
<b>Avenue 42</b>	From Varner Road to Golf Center Drive	Fiber Optic Communications
<b>Golf Center Drive</b>	From Avenue 42 to I-10 Freeway	<i>Potentially Not-a-Part of the Phase III Project</i>

**INTEGRATED CORRIDOR MANAGEMENT (ICM) FIGURE**



**Integrated Corridor Management (ICM)** – CVAG wants to evaluate a potential ICM System in the Coachella Valley that will provide connectivity to Caltrans District 8 that will allow real-time coordination and management of major non-recurring events (e.g., accidents, weather events, etc.) along the I-10 freeway and provide travel time messages and detour routes to motorists to properly exit the I-10 freeway and take the Varner Road/ Avenue 42 Corridor or other CV Sync Corridors; and allow motorist to get back safely to the I-10 freeway after the incident area. The ICM component will be evaluated along Varner Road from Palm Drive to Avenue 42, and Avenue 42 from Varner Road to Golf Center Parkway. **At this time, we are anticipating that the segment along Golf Center Drive from Avenue 42 to the I-10 interchange is not included; but it is recommended for the planning, design, and integration of an Integrated Corridor Management (ICM) with Caltrans District 8.** The Golf Center Drive Corridor was not a Phase I or Phase II Corridor, but it was ranked No. 25 as a Priority Corridor in the Coachella Valley (based on the approved ITS Master Plan Priority Corridors Chapter). Other connectivity points from Varner Road/Avenue 42 to the I-10 freeway (e.g., Monterey Avenue, Cook Street, Jefferson Street, etc.) are not part of the CV Sync





# CVAG

CV SYNC - ICM Concept of Operations (ConOps)				
Purpose of Document and Summary	Project Scope	Reference Documents	Corridor Overview	Existing Transportation Management Assets
Current Operational Analysis	Justification for Changes	Proposed System Concept	Corridor Stakeholders	User Needs
System Overview	Operational Environment	Support Environment	Operational Scenarios	Summary of Impacts

### CV SYNC PHASE III and PROPOSED ICM STUDY SEGMENTS FIGURE



## PROJECT UNDERSTANDING – VARNER ROAD IMPROVEMENTS FEASIBILITY STUDY

Our team has identified three key project challenges including drainage system modification design considerations, planned roadway widening (Palm Drive to Bob Hope Drive) design considerations, and stakeholder communication and coordination considerations while analyzing the Varner Road, from Palm Drive to Avenue 42, Improvements Feasibility Study Project. These challenges, along with an overview our team's unique solutions, have been outlined below and further elaborated on pages that follow to highlight the benefit our Dokken Engineering Team brings to you.

CVAG/PROJECT CHALLENGE	DOKKEN TEAM SOLUTIONS	BENEFIT(S) TO CVAG
<b>Drainage System Modification Design Considerations</b>		
The flooding along I-10 and Varner Road was recently evidenced during Storm Hilary. There are several cross-culverts and low-water crossing upgrades needed to alleviate this issue. Specifically, cross-culverts within Caltrans' ROW and low-water crossings along Varner Road, with FEMA's floodplain north of I-10, will need to be evaluated to determine preliminary design options.	We believe the first steps to analyzing this issue are to develop a comprehensive and agreed upon Hydrology Map of the Whitewater Watershed in this vicinity of the Coachella Valley. The hydrology and contour mapping will need to account for all existing above and below ground drainage patterns as well as aeolian windblown blow sand migration patterns. We will coordinate with CVWD on the floodplain and locations of flooding as related to drainage system flow rates and sediment transport in the system.	Our team has provided engineering solutions in the Coachella Valley for years. We worked with CVAG, Palm Springs, and Riverside County to construct a modified interchange at Indian Canyon Drive. Our lead drainage engineer was one of the hydrologic and hydraulic modelers for the Whitewater River Levee project and is very familiar with the floodplain and challenges specific to this immediate project area.
<b>Planned Roadway Widening (Palm to Bob Hope) Design Considerations</b>		
A portion of the recent traffic backup along Varner Road experienced during Storm Hilary was related to insufficient roadway capacity along certain roadway segments and at signalized intersections. The segments along Varner Road, from Palm Drive to Bob Hope Drive, are currently listed in the SCAG FTIP to have capacity-increasing improvements. Alternative analysis on the optimal roadway alignment and widening options will be completed for this project.	Dokken has extensive experience preparing feasibility studies for large and small projects. Corridor upgrade projects, such as this one, require a big picture perspective to ensure proposed improvement at any one location, roadway segment, or intersection do not create potential additional issues at another. Our team at Dokken is skilled at working with our clients and sub consultants to find solutions that work best for all. Evaluation of intersection alternatives that meet the goals of adjacent property owners while minimizing property impacts, increasing capacity, and improving safety for all users is something we take great pride in.	Our team has prepared several feasibility study and project report type documents for our clients. With in-house environmental, structural, and right-of-way engineers that have been delivering projects together for years CVAG can be assured that our team will be efficient, thorough, and accurate with our assessment of design options and alternatives. We are also currently coordinating with ADVANTEC to provide construction support for a Bridge Widening Project over UPRR in Palm Springs.
<b>Stakeholder Communication and Coordination</b>		
This project has invested interest from Cities and other nearby stakeholders including businesses, residents, schools, and tribal nations. The proposed corridor improvements will directly impact accessibility and emergency response for all, so garnering their input will be critical to successful delivery of the project.	We have extensive expertise providing project updates to executive committees, City staff, residents, business owners, and other community stakeholders. Our team is familiar with this corridor and will ensure that proposed improvements minimize property and utility impacts by maintaining existing infrastructure. We know that clear <b>communication keeps everyone informed of the project status</b> and schedule.	Our <b>proactive approach to communication</b> with stakeholders using available technology and exhibits that are easy to read and comprehend will enable our team to resolve questions or concerns in a timely manner and <b>minimize any miscommunication</b> regarding project goals, improvements, and potential impacts or utility conflicts.

This section elaborates a bit more on each of the afore-mentioned design challenges that are anticipated on this project. We have also included Project Overview Exhibits within **Appendix 6.5** to help distinguish between the limits of each and identify areas of drainage analysis concern and potential widening along the corridor.





### **DRAINAGE SYSTEM MODIFICATION DESIGN CONSIDERATIONS**

Existing terrain along the corridor is generally sloping from north to south, with varying grades between the slopes and high elevation points at Palm Drive and Date Palm Drive. There are several existing low water crossings along the corridor that our team will evaluate options for upgrades such as reinforced concrete pipes or box culverts as needed for this project. When

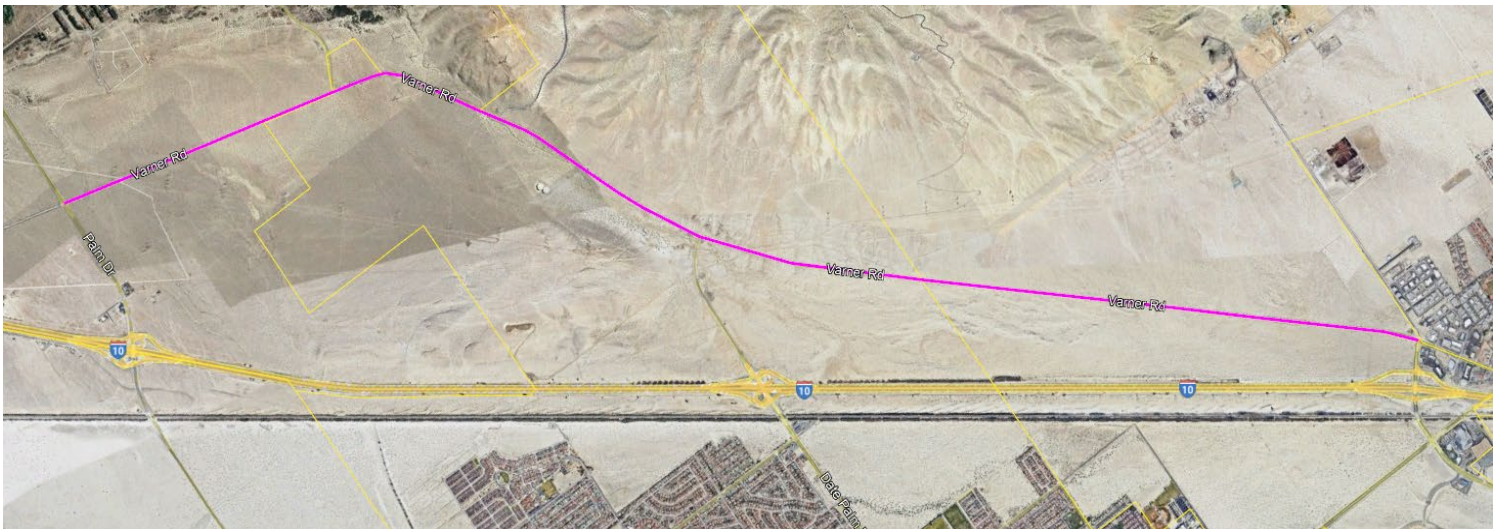


minor modifications are proposed we have in-house structural designers that can provide structural designs and calculations that document proposed modifications. As part of this project's hydraulics and hydrology analysis, a review of the current hydromodification requirements as related to these proposed improvements will be conducted to ensure water quality treatment features, that minimize utility conflicts, are proposed where needed. Thus, proper analysis of existing hydrology and flow patterns paired with an in-depth understanding of the drainage patterns, existing drainage facilities, and water quality treatment options will allow our team as well as CVAG and the CVWD to meet the project's goals

while adhering to current drainage and water quality treatment standards.

### **PLANNED ROADWAY WIDENING (PALM TO BOB HOPE) DESIGN CONSIDERATIONS**

For the Varner Road widening feasibility study, we would also look to project partners such as CVWD to develop complementary facilities such as a raised roadway section that acts as a levee to prevent flooding of I-10. The northside toe of the roadway prism could be excavated into a longitudinal basin which would provide fill for the roadway prism but also capture and infiltrate flood flows. As the entire north side of I-10 is FEMA designated floodplain, it will be critical to account for the floodplain hydrology and hydraulics to understand drainage paths and design facilities that are able to prevent the roadway from flooding in the future. This may include joint use facilities such as flood control basins that can capture flood flows and then infiltrate off-peak, off-site diversions, and other larger-scale facilities that are capable of collecting and conveying flood waters away from Varner Road. This section along Varner Road as highlighted below, between Palm Drive and Bob Hope Drive is currently listed for widening from a two-lane to a four-lane roadway in SCAG's FTIP, thus not subject to VMT Traffic Analysis as other roadway widening segments would be. Additional improvements along the corridor will be evaluated to understand the traffic mobility needs of each intersection and specific turning movements and pocket lengths.



### **STAKEHOLDER COMMUNICATION AND COORDINATION**

Proper coordination to understand the needs and preferences of the community will ensure stakeholders are heard and their input incorporated into project improvements. With in-house Right of Way Agents our team can coordinate with homeowners on CVAG's behalf to expedite processes and alleviate the CVAG of this burden if needed once proposed improvements and easement needs are confirmed. There are a few areas along the project, specifically along steep slopes, that may benefit from the addition of retaining walls to help minimize impacts to adjacent properties. The type of retaining walls to be designed and constructed will depend on many factors including the height of the wall, available width and right of way to build the wall, geotechnical design parameters, and the aesthetic appeal of the wall considering local input.



## **SCOPE OF WORK – CV SYNC PHASE III IMPROVEMENTS**

### **TASK 1 – PROJECT INITIATION, MANAGEMENT, AND COORDINATION**

#### **Subtask 1.1 Meetings and Coordination**

- Integrated Corridor Management (ICM) Caltrans and Stakeholders Coordination
- Kickoff Meeting (1)
- Project Meetings (14)
- ICM Meetings (12), and
- TSMO Meetings (12)

#### **Subtask 1.2 Project Administration**

***Task 1 Deliverables:** Project Management; Project Coordination with CVAG, Cities, Caltrans, and County; ICM Planning/Coordination with Caltrans and Stakeholders; Project Meetings; ICM Meetings; TSMO Meetings; Meeting Notices, Agendas, Minutes, and Presentation Materials; Technical Memos; Staff Reports and Attachments; Monthly Progress Report; Project Schedule; Stakeholder List; Team Coordination and Budget Monitoring*

### **TASK 2 – DATA COLLECTION AND FIELD REVIEW**

#### **Subtask 2.1 Data Collection and Field Review**

***Task 2 Deliverables:** Data Collection Inventory Matrix; Field Review and Notes; Photo Logs*

### **TASK 3 – CONCEPTUAL ENGINEERING AND ANALYSIS**

***Task 3 Deliverables:** ICM Concept-of-Operations Report; Incident Scenarios; Exhibits; ICM Architecture*

### **TASK 4 – PRELIMINARY ENGINEERING**

***Task 4 Deliverables:** Preliminary Engineering and Cost Estimates (70 Sheets)*

### **TASK 5 – ENVIRONMENTAL STUDIES AND ENVIRONMENTAL CLEARANCE**

***Task 5 Deliverables:** Project Management; Project Coordination; Preparation of Documents/Details/Exhibits; Project Coordination Meetings*

### **TASK 6 – FINAL DESIGN**

#### **Subtask 6.1 Fiber Optic/Wireless Communications, RTMC, RTOC, and ITS Field Elements Plans and Details**

#### **Subtask 6.2 Technical Specifications, Special Provisions, and Hardware and Software Procurement List**

#### **Subtask 6.3 Construction Quantities and Engineer's Estimates**

***Task 6 Deliverables:** Fiber Optic/Wireless Communications, Secured Communication Network, RTMC, TOCs, and ITS Field Elements Plans and Details (189 Sheets); GIS Mapping of Final Approved Plans; Technical Specifications; Special Provisions; and Hardware and Software Procurement List; Construction Quantities and Engineer's Estimates*

### **TASK 7 – GRANT FUNDING APPLICATION SUPPORT**

***Task 7 Deliverables:** ITS, Smart Mobility and Smart Cities Grant Funding Application Support*

### **TASK 8 – UTILITY COORDINATION**

***Task 8 Deliverables:** Varner Road/Avenue 42 Corridor and Twenty-three (23) Signalized Intersections Utility Notification and Coordination; SCE and IID Electrical Service Points Coordination for Proposed CMS*

### **TASK 9 – RIGHT-OF-WAY AND EASEMENT ACQUISITION**

***Task 9 Deliverables:** N/A*

### **TASK 10 – CONSTRUCTION SUPPORT, COORDINATION, AND MEETING ATTENDANCE**

***Task 10 Deliverables:** Construction Support, Coordination, and Meetings Attendance*



## **TASK 11 – PROJECT IMPLEMENTATION SUPPORT**

### **Subtask 11.1 Conduct Traffic Signal Counts, Field Observations, Measurements, and Data Gathering**

- Corridor “Before” Study (Varner Road/Avenue 42 Corridor)

**Subtask 11.1 Deliverables:** 7-day ADT counts (13 locations); ITM counts during AM, Midday, PM, and Saturday Midday (23 locations); Report summarizing data collection and field review efforts; Excel Files of updated timing parameters; “Before” Study Memorandum; Tru-traffic files with trip logs; In-vehicle video recording of each travel run

### **Subtask 11.2 Prepare, Implement and Adjust Traffic Signal Timing and Coordination Based on Field Observations and Observations from the Regional Traffic Management Center Signal Timing Optimization and Implementation**

- Proposed Network Modeling
- Concept of Operations
- Develop Optimized Traffic Signal Timing
- Signal Timing Implementation
- Optimize Signal Timing (Fine-Tuning)
- Corridor “After” Study (Varner Road/Avenue 42 Corridor)
- Before/After Synchronized Video

**Subtask 11.2 Deliverables:** Concept of Operations Report including Scenarios; Proposed Synchro and Tru-traffic with optimized timing parameters; Draft and Final Network Modeling Technical Memorandum documenting the signal timing optimization; Implementation-ready timing sheets for each agency; Final optimized Synchro and Tru-traffic files; After Study Report; Tru-traffic files with “Before” and “After” trip logs; Synchronized videos showing Before and After runs for AM, Midday, PM, and Saturday peak periods

### **Subtask 11.3 Traffic Control and Detour Plans**

- Project Coordination and Meeting Attendance
- Field Investigation

**Subtask 11.3 Deliverables:** Traffic Control, Details, and Detour Plans (170 Sheets); Project Coordination, Meeting Attendance, Meeting Notes, and Action Items; Field Investigation, Notes, Video, and Photos of Existing Conditions During Construction

### **Subtask 11.4 System Operations and Maintenance Support Services**

**Subtask 11.4 Deliverables:** System Operations and Maintenance Support Services

### **Subtask 11.5 Record Drawings**

**Subtask 11.5 Deliverables:** Record Drawings (189 Sheets)

### **Subtask 11.6 Updates to the CV Sync Operations and Maintenance Manuals**

**Subtask 11.6 Deliverables:** Updates to the CV Sync Operations, Management, and Maintenance Manuals

### **Subtask 11.7 Updates to CVAG ITS Master Plan**

**Subtask 11.7 Deliverables:** Update to CVAG ITS Master Plan

### **Subtask 11.8 Project Closeout Support Services**

- Environmental Documents
- Closeout Documents
- Executive Level Support Documents

**Subtask 11.8 Deliverables:** Project Closeout Support Services

**\*A DETAILED SCOPE OF WORK, WITH DESCRIPTIONS OF EACH TASK AND SUBTASK, CAN BE PROVIDED UPON REQUEST**



## SCOPE OF WORK – VARNER ROAD IMPROVEMENTS FEASIBILITY STUDY

### TASK 1 – PROJECT INITIATION, MANAGEMENT, AND COORDINATION

#### Subtask 1.1 Meetings and Coordination

- Coordination with CVAG, Cities, Caltrans, and Stakeholders
- Kickoff Meeting (1)
- Bi-Weekly Project Meetings (24)
- Transportation Committee Meetings (4), and
- Executive Committee Meetings (4)

#### Subtask 1.2 Project Administration

***Task 1 Deliverables:** Project Management; Project Coordination with CVAG, Cities, Caltrans, and Stakeholders; Project Meetings; TC Meetings; EC Meetings; Meeting Notices, Agendas, Minutes, and Presentation Materials; Technical Memos; Staff Reports and Attachments; Monthly Progress Report; Project Schedule; Stakeholder List; Team Coordination and Budget Monitoring*

### TASK 2 – DATA COLLECTION AND FIELD REVIEW

#### Subtask 2.1 Data Collection and Field Review

#### Subtask 2.2 Utility Base Mapping from As-Builts and Site Visits

#### Subtask 2.3 Aerial Topographic Mapping and Imagery

***Task 2 Deliverables:** Data Collection Inventory Matrix; Field Review and Notes; Photo Logs*

### TASK 3 – CONCEPTUAL ENGINEERING AND ANALYSIS

#### Subtask 3.1 Traffic Data Collection and Modeling

#### Subtask 3.2 Roadway and Intersection Safety and Capacity Analysis

#### Subtask 3.3 Future Volume Forecasting, Operations Analysis, and Traffic Report

#### Subtask 3.4 Draft Varner Road Improvements Feasibility Study

- |   |  |
|---|--|
| • Executive Summary   | • Schedule to Deliver Project  |
| • Introduction  | • Approvals and Recommendation   |
| • Project Background, including Community Interaction                   | • Project Personnel  |
| • Purpose and Need, including Regional and System Planning              | • Potential Right of Way Impacts, including Access Control                     |
| • Existing Facilities, including Utilities                              | • Basis of Design Worksheet Identifying Non-Standard Design Features           |
| • Environmental Compliance Considerations                               | • Storm Water Requirements/Construction General Permit Risk Level Assessment   |
| • Traffic, Maintenance, and Operations Impacts                          | • Preliminary Cost Estimate (using square footage cost factors for quantities) |
| • Drainage and Stormwater Treatment                                     | • 11x17, Scaled Exhibits of Each of the Three (3) Alternatives                 |
| • Alternatives Considered   | • Grant Funding Opportunities  |
| • Other Considerations, including Permits, Agreements, Complete Streets |  |
| • Alternatives Rejected   |  |
| • Funding, Programming, and Estimate                                    |  |

#### Subtask 3.5 Final Varner Road Improvements Feasibility Study

***Task 3 Deliverables:** Traffic Count Data; Traffic Modeling; Roadway Segment Safety and Capacity Analysis; Intersection Turning Movement and Traffic Control Safety and Capacity Analysis; Draft/Final Varner Road Improvements Feasibility Study; Draft/Final Drainage Report (Optional)*

### TASK 4 – PRELIMINARY ENGINEERING

Our team's understanding is that Preliminary Engineering task for the Varner Road Improvements Feasibility Study portion of this project has been removed from the scope of work per Addendum No. 1, dated October 17, 2023. Please see Task 12 for optional Surveying/Right-of-Way Assessments and Geotechnical Investigations tasks related to Preliminary Engineering.



#### **TASK 5 – ENVIRONMENTAL STUDIES AND ENVIRONMENTAL CLEARANCE**

Our team's understanding is that Environmental Studies and Environmental Clearance task for the Varner Road Improvements Feasibility Study portion of this project has been removed from the scope of work per Addendum No. 1, dated October 17, 2023. Please see Task 12 for optional Preliminary Environmental Assessment as well as Biological, Cultural, and Hazardous Waste Assessment Memorandum Tasks related to Environmental Studies and Clearance.

#### **TASK 6 – FINAL DESIGN**

Our team's understanding is that this Final Design task for the Varner Road Improvements Feasibility Study portion of this project has been removed from the scope of work per Addendum No. 1, dated October 17, 2023.

*Task 6 Deliverables: N/A*

#### **TASK 7 – GRANT FUNDING APPLICATION SUPPORT**

*Task 7 Deliverables: ATP, Complete Streets, and Vision Zero Grant Funding Application Support*

#### **TASK 8 – UTILITY COORDINATION**

Our team's understanding is that this Utility Coordination task for the Varner Road Improvements Feasibility Study portion of this project has been removed from the scope of work per Addendum No. 1, dated October 17, 2023.

*Task 8 Deliverables: N/A*

#### **TASK 9 – RIGHT-OF-WAY AND EASEMENT ACQUISITION**

Our team's understanding is that this Right-of-Way and Easement Acquisition task for the Varner Road Improvements Feasibility Study portion of this project has been removed from the scope per Addendum No. 1, dated October 17, 2023.

*Task 9 Deliverables: N/A*

#### **TASK 10 – CONSTRUCTION SUPPORT, COORDINATION, AND MEETING ATTENDANCE**

This task will no longer be required without the preparation of final construction documents for this portion of the project.

*Task 10 Deliverables: N/A*

#### **TASK 11 – PROJECT IMPLEMENTATION SUPPORT**

This task will only be required for the CV SYNC Phase III portion of the project.

*Task 11 Deliverables: N/A*

#### **TASK 12 – OPTIONAL FEASIBILITY STUDY DESIGN SUPPORT TASKS**

**Subtask 12.1 Draft/Final Drainage Report**

**Subtask 12.2 Field Surveying/Mapping and Right-of-Way Needs Assessment**

**Subtask 12.3 Preliminary Geotechnical Investigations**

**Subtask 12.4 Preliminary Environmental Assessment**

**Subtask 12.5 Cultural Survey/Assessment Memorandum**

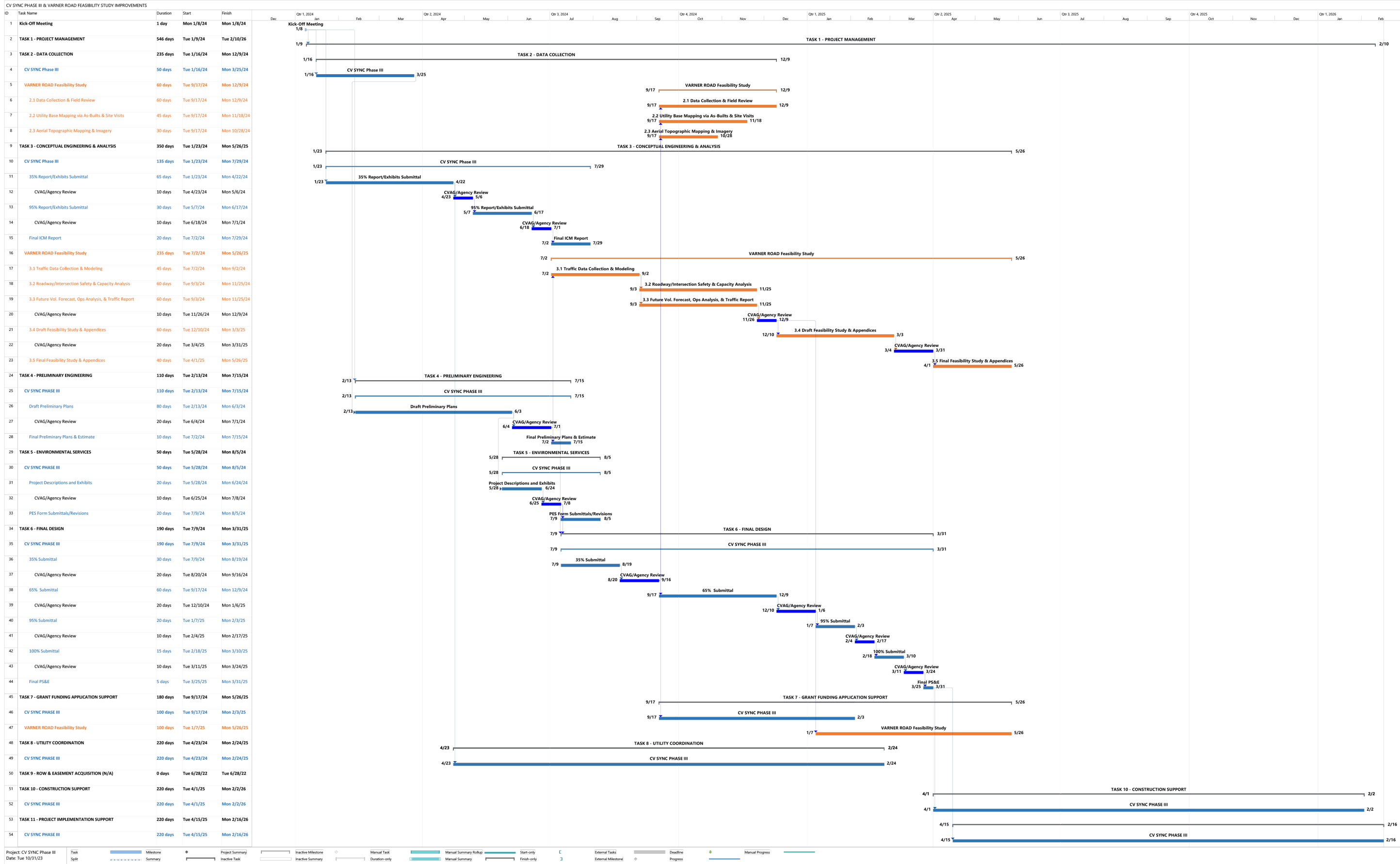
**Subtask 12.6 Biological Survey/Assessment Memorandum**

**Subtask 12.7 Hazardous Waste Survey/Assessment Memorandum**

*Task 12 Optional Deliverables: Draft/Final Drainage Report; Field Surveying/Mapping Needs Assessment Matrix; Right-of-Way Mapping/Acquisition Needs Assessment Matrix; Preliminary Geotechnical Investigations Report; Preliminary Environmental Assessment; Cultural Survey/Assessment Memorandum; Biological Survey/Assessment Memorandum; Hazardous Waste Survey/Assessment Memorandum*

**\*A DETAILED SCOPE OF WORK, WITH DESCRIPTIONS OF EACH TASK AND SUBTASK, CAN BE PROVIDED UPON REQUEST**

Request for Proposal for  
Professional Engineering, Traffic Engineering, and ITS Systems Engineering Services for  
CV SYNC PHASE III AND VARNER ROAD IMPROVEMENTS





**EXHIBIT “B”**  
**PRICE FORMULA**



COST PROPOSAL - HOURS BREAKDOWN BY TASK  
CV-SYNC PHASE 3 PORTION OF PROJECT  
October 31, 2023

TASK DESCRIPTION	DOKKEN ENGINEERING																ADVANTEC										GRAND TOTAL HOURS	OTHER DIRECT COSTS	GRAND TOTAL COSTS					
	Mark Tarrall, PE Principal in Charge	Michael Greer, PE, TE* Project Manager	Charles Tornaci, PE* Structures Lead	Ashley Orsaba-Finders, PE* Drainage Lead	Justin Thorner, PE* Project Engineer	Senior Engineer 2	Senior Engineer 1	Associate Engineer 2	Associate Engineer 1	Assistant Engineer 2	Assistant Engineer 1	Zach Liptak* Environmental Lead	Senior Environmental Planner/Archaeologist	Associate Environmental Planner/Biologist	Environmental Planner/Biologist	TOTAL HOURS	OTHER DIRECT COST	TOTAL COST	Carlos Ortiz Task Leader Traffic, ITS, and Signal Ops	John Dorado Task Leader PS&E and ITS Master Plan	Task Leader ICM	Task Leader Signal Timing and Operations	Task Leader Systems Engineer	Key Support PS&E and ITS Master Plan	Key Support Signal Timing	Associate Engineer				Assistant Engineer	TOTAL HOURS	OTHER DIRECT COST	TOTAL COST	
	BILLING RATES*	\$320	\$265	\$235	\$225	\$185	\$265	\$225	\$185	\$165	\$145	\$125	\$165	\$165	\$135				\$105	\$350	\$290	\$310	\$250	\$195	\$175	\$155				\$140				\$120
TASK 1 – PROJECT MANAGEMENT	8	120	20	20	100			100				40					408		\$87,160	214	96	74		48	154				586	\$10,700	\$172,690	994	\$10,700	\$259,850
1.1 Meetings and Coordination	4	80	20	20	80			80				40					324		\$67,880	134	56	74		48	114				426	\$8,400	\$123,790	750	\$8,400	\$191,670
1.2 Project Administration	4	40			20			20									84		\$19,280	80	40				40				160	\$2,300	\$48,900	244	\$2,300	\$68,180
TASK 2 – DATA COLLECTION		4	2	2	8			8				8	8		8		48		\$8,340	6	8			64	164		82	82	406	\$4,200	\$71,120	454	\$4,200	\$79,460
2.1 Data Collection and Field Review		4	2	2	8			8				8	8		8		48		\$8,340	6	8			64	164		82	82	406	\$4,200	\$71,120	454	\$4,200	\$79,460
TASK 3 – CONCEPTUAL ENGINEERING AND ANALYSIS		4				4	8										16		\$3,920	42	16	160		54	32			32	336	\$1,000	\$89,910	352	\$1,000	\$93,830
- ICM Concept Of Operations Report (ConOps) -		4				4	8										16		\$3,920	42	16	160		54	32			32	336	\$1,000	\$89,910	352	\$1,000	\$93,830
TASK 4 – PRELIMINARY ENGINEERING	2	8	4	4	8	16				32							74		\$15,600	14	28			62	400		164	164	832	\$2,000	\$139,750	906	\$2,000	\$155,350
- Preliminary Network, Layout Plans, and Estimates -	2	8	4	4	8	16				32							74		\$15,600	14	28			62	400		164	164	832	\$2,000	\$139,750	906	\$2,000	\$155,350
TASK 5 – ENVIRONMENTAL STUDIES AND ENVIRONMENTAL CLEARANCE		2				4						32	64	64	32	198		29110	12	24				20			12	12	80	1000	18780	278	\$1,000	\$47,890
- Project Description, Exhibits, and PES Form(s) -		2				4						32	64	64	32	198		\$29,110	12	24				20			12	12	80	\$1,000	\$18,780	278	\$1,000	\$47,890
TASK 6 - FINAL DESIGN	4	24	8	8	44	70	16	32	128			64				398		\$76,650	148	321			616	1360	676	158		3279	\$12,500	\$642,410	3677	\$12,500	\$719,060	
6.1 Plans for FO/Wireless Comms, RTMC, RTOC, & ITS Elements with Details	4	16	8	8	32	64	16	32	128			64				372		\$70,720	108	263			510	1296	676	126		2,979	\$11,500	\$574,240	3,351	\$11,500	\$644,960	
6.2 Technical Specifications and Hardware and Software Procurement List		4				8	4									16		\$3,600	32	42			82					156	\$500	\$39,870	172	\$500	\$43,470	
6.3 Construction Quantities and Engineer's Estimates		4				4	2									10		\$2,330	8	16			24	64		32		144	\$500	\$28,300	154	\$500	\$30,630	
TASK 7 – GRANT FUNDING APPLICATION SUPPORT	2	4				8	4									18		\$4,240	16	24				126			40	206	\$500	\$39,910	224	\$500	\$44,150	
- ITS, Smart Mobility and Smart Cities Grant Funding Application Support -	2	4				8	4									18		\$4,240	16	24				126			40	206	\$500	\$39,910	224	\$500	\$44,150	
TASK 8 – UTILITY COORDINATION		2				4		8			16					30		\$5,390		8				64		32		104	\$500	\$18,500	134	\$500	\$23,890	
- Utility Notification and Coordination with SCE and IID Service Points -		2				4		8			16					30		\$5,390		8				64		32		104	\$500	\$18,500	134	\$500	\$23,890	
TASK 9 – RIGHT-OF-WAY AND EASEMENT ACQUISITION (N/A)																																		
TASK 10 – CONSTRUCTION SUPPORT	4	16	4	4	16	8	8	32		32		16			32	172		\$30,800	240	40			500	340				1120	\$12,000	\$264,600	1292	\$12,000	\$295,400	
- Bidding and Construction Support Services -	4	16	4	4	16	8	8	32		32		16			32	172		\$30,800	240	40			500	340				1,120	\$12,000	\$264,600	1,292	\$12,000	\$295,400	
TASK 11 – PROJECT IMPLEMENTATION AND SUPPORT	6	36	2	2	40	10	28	36	64			64				288		\$53,950	204	226		322	240	826	614	856	665	3953	\$47,400	\$751,000	4241	\$47,400	\$804,950	
11.1 Signal Count Coordination, Observations, Measurements, and Data		4						4								8		\$1,960	4			24			124			152	\$32,000	\$58,620	160	\$32,000	\$60,580	
11.2 Prepare, Implement, and Adjust Traffic Signal Timing		8						8								16		\$3,920	16			298			490			804	\$3,400	\$159,450	820	\$3,400	\$163,370	
11.3 Traffic Control and Detour Plans	4	16			32	8	16	32	64			64				236		\$41,640	40	110				400		540	465	1,555	\$6,000	\$253,300	1,791	\$6,000	\$294,940	
11.4 System Operations and Maintenance Support Services																			54					122				176	\$1,500	\$41,750	176	\$1,500	\$41,750	
11.5 Record Drawings		4	2	2	4	2			4							18		\$3,990	4	8				32		200	200	444	\$1,000	\$62,320	462	\$1,000	\$66,310	
11.6 Updates to the CV Sync Operations and Maintenance Manuals																			48	32			120	148				348	\$1,000	\$76,380	348	\$1,000	\$76,380	
11.7 Updates to CVAG ITS Master Plan																			32	64			120	100		68		384	\$1,000	\$81,180	384	\$1,000	\$81,180	
11.8 Project Closeout Support Services	2	4				4										10		\$2,440	6	12				24		48		90	\$1,500	\$18,000	100	\$1,500	\$20,440	
TOTAL HOURS	26	220	40	40	236	116	60	208	224	48	136	96	64	72	64	1,650			\$315,160	\$313,600	\$229,390	\$72,540	\$80,500	\$308,880	\$610,050	\$199,950	\$182,560	\$119,400		\$91,800	\$2,208,670		\$91,800	\$2,523,830
TOTAL COST	\$8,320	\$58,300	\$9,400	\$9,000	\$43,660	\$30,740	\$13,500	\$38,480	\$36,960	\$6,960	\$17,000	\$15,840	\$10,560	\$9,720	\$6,720			\$315,160	\$313,600	\$229,390	\$72,540	\$80,500	\$308,880	\$610,050	\$199,950	\$182,560	\$119,400		\$91,800	\$2,208,670		\$91,800	\$2,523,830	

\*Billing Rates will be adjusted in January of each Calendar year by 5%, rounded to the nearest multiple of \$5.



COST PROPOSAL - HOURS BREAKDOWN BY TASK

CV-SYNC PHASE 3 WITH VARNER ROAD FEASIBILITY STUDY AND PS&E

October 31, 2023

TASK DESCRIPTION	DOKKEN ENGINEERING																						
	Mark Tarrall, PE Principal in Charge	Michael Greer, PE, TE* Project Manager	Charles Tormaci, PE* Structures Lead	Ashley Orsaba-Finders, PE* Drainage Lead	Justin Thornber, PE* Project Engineer	Senior Engineer 2	Senior Engineer 1	Associate Engineer 2	Associate Engineer 1	Assistant Engineer 2	Assistant Engineer 1	CAD / Engineering Technician 2	Zach Liptak* Enviromental Lead	Environmental Manager	Senior Environmental Planner/Archaeologist	Associate Environmental Planner/Biologist	Environmental Planner/Biologist	Right of Way Manager	Senior Right of Way Agent	Right of Way Appraiser	TOTAL HOURS	OTHER DIRECT COST	TOTAL COST
BILLING RATES*	\$320	\$265	\$235	\$225	\$185	\$265	\$225	\$185	\$165	\$145	\$125	\$145	\$165	\$245	\$165	\$135	\$105	\$210	\$170	\$110			
TASK 1 – PROJECT MANAGEMENT	12	144	24	72	144	24			48	48		24	24								564		\$119,160
1.1 Meetings and Coordination	8	96	24	48	96	24			48	48		24	24								440		\$90,880
1.2 Project Administration	4	48		24	48																124		\$28,280
TASK 2 – DATA COLLECTION	2	16	6	6	28	6	8	32		48	48	16	4	8	8	8	16				260	\$49,500	\$93,610
2.1 Data Collection and Field Review		4	2	2	8	2		8		16	16		4	8	8	8	16				102		\$16,490
2.2 Utility Base Mapping from As-Built's and Site Visits	1	8	4	4	16	4	8	16		32	32	8									133	\$1,500	\$24,360
2.3 Aerial Topographic Mapping and Imagery	1	4			4			8				8									25	\$48,000	\$52,760
TASK 3 – CONCEPTUAL ENGINEERING AND ANALYSIS	5	110	24	48	208	118	48	192	384	772	384	192	24	12	24	24	48	12	42	62	2733		\$450,020
3.1 Traffic Data Collection and Modeling		4			4	2															10		\$2,330
3.2 Roadway and Intersection Safety and Capacity Analysis	2	8			8	16															34		\$8,480
3.3 Future Volume Forecasting, Operations Analysis, and Traffic Report		2			4	4															10		\$2,330
3.4 Draft Feasibility Study with Plans, Estimates, and Other Appendices	2	64	16	32	128	64	32	128	256	516	256	128	16	8	16	16	32	10	40	60	1,820		\$295,960
3.5 Final Feasibility Study with Plans, Estimates, and Other Appendices	1	32	8	16	64	32	16	64	128	256	128	64	8	4	8	8	16	2	2	2	859		\$140,920
TASK 4 – PRELIMINARY ENGINEERING (N/A)																							
TASK 5 – ENVIRONMENTAL STUDIES AND ENVIRONMENTAL CLEARANCE (N/A)																							
TASK 6 - FINAL DESIGN (N/A)																							
TASK 7 – GRANT FUNDING APPLICATION SUPPORT	2	8		8	32	16			64		128	32									290		\$45,920
- ATP, Complete Streets, and Other Grant Funding Application Support -	2	8		8	32	16			64		128	32									290		\$45,920
TASK 8 – UTILITY COORDINATION (N/A)																							
TASK 9 – RIGHT-OF-WAY EASEMENT AND ACQUISITION SUPPORT (N/A)																							
TASK 10 – CONSTRUCTION SUPPORT (N/A)																							
TASK 11 – PROJECT IMPLEMENTATION AND SUPPORT (N/A)																							
TASK 12 – OPTIONAL FEASIBILITY STUDY DESIGN SUPPORT TASKS	3	24	14	38	32		8	80		144		36	32	16	32	64	128	2	4		657	\$76,000	\$181,440
12.1 Draft/Final Drainage Report	2	8	8	32	16		8	64		128		32									298		\$51,640
12.2 Field Surveying/Mapping and Right-of-Way Needs Assessment		4	2	2	8			8		16		4						2	4		50		\$8,940
12.3 Geotechnical Investigations	1	2	4	4	8			8													27	\$54,000	\$59,650
12.4 Preliminary Environmental Assessment		4											16	8	16	32	64				140		\$19,340
12.5 Cultural Survey/Assessment Memorandum		2											8	4	8	16	32				70		\$9,670
12.6 Biological Survey/Assessment Memorandum		2											4	2	4	8	16				36		\$5,100
12.7 Hazardous Waste Survey/Assessment Memorandum		2											4	2	4	8	16				36	\$22,000	\$27,100
TOTAL HOURS WITHOUT OPTIONAL TASKS	21	278	54	134	412	164	56	224	496	868	560	264	52	20	32	32	64	12	42	62	3,847		
TOTAL COST WITHOUT OPTIONAL TASKS	\$6,720	\$73,670	\$12,690	\$30,150	\$76,220	\$43,460	\$12,600	\$41,440	\$81,840	\$125,860	\$70,000	\$38,280	\$8,580	\$4,900	\$5,280	\$4,320	\$6,720	\$2,520	\$7,140	\$6,820		\$49,500	\$708,710
TOTAL HOURS WITH OPTIONAL TASKS	24	302	68	172	444	164	64	304	496	1,012	560	300	84	36	64	96	192	14	46	62	4,504		
TOTAL COST WITH OPTIONAL TASKS	\$7,680	\$80,030	\$15,980	\$38,700	\$82,140	\$43,460	\$14,400	\$56,240	\$81,840	\$146,740	\$70,000	\$43,500	\$13,860	\$8,820	\$10,560	\$12,960	\$20,160	\$2,940	\$7,820	\$6,820		\$125,500	\$890,150

\*Billing Rates will be adjusted in January of each Calendar year by 5%, rounded to the nearest multiple of \$5.



COST PROPOSAL - HOURS BREAKDOWN BY TASK  
CV-SYNC PHASE 3 WITH VARNER ROAD FEASIBILITY STUDY AND PS&E  
October 31, 2023

TASK DESCRIPTION	ADVANTEC									FEHR & PEERS									GRAND TOTAL HOURS	OTHER DIRECT COSTS	GRAND TOTAL COSTS	
	Carlos Ortiz Task Leader Traffic, ITS, and Signal Ops	John Dorado Task Leader PS&E and ITS Master Plan	Task Leader Systems Engineer	Key Support PS&E and ITS Master Plan	Associate Engineer	Assistant Engineer	TOTAL HOURS	OTHER DIRECT COST	TOTAL COST	Project Manager	Project QA/QC	Task Lead	Traffic Forecasting	Traffic Engineer	Graphics/Visual Comm	Admin Support	TOTAL HOURS	OTHER DIRECT COST				TOTAL COST
BILLING RATES*	\$350	\$290	\$195	\$175	\$140	\$120				\$335	\$265	\$210	\$175	\$160	\$185	\$150						
TASK 1 – PROJECT MANAGEMENT										24	10	24		10		16	84		\$19,730	648		\$138,890
1.1 Meetings and Coordination										24	10	24		10		8	76		\$18,530	516		\$109,410
1.2 Project Administration																8	8		\$1,200	132		\$29,480
TASK 2 – DATA COLLECTION																				260	\$49,500	\$93,610
2.1 Data Collection and Field Review																				102		\$16,490
2.2 Utility Base Mapping from As-Built and Site Visits																				133	\$1,500	\$24,360
2.3 Aerial Topographic Mapping and Imagery																				25	\$48,000	\$52,760
TASK 3 – CONCEPTUAL ENGINEERING AND ANALYSIS	52	116	24	228	556	460	1436		\$229,460	38	28	146	60	290	36		598	\$12,500	\$126,870	4,767	\$12,500	\$806,350
3.1 Traffic Data Collection and Modeling										2		6		10			18	\$12,500	\$16,030	28	\$12,500	\$18,360
3.2 Roadway and Intersection Safety and Capacity Analysis										16	18	90		250	16		390		\$71,990	424		\$80,470
3.3 Future Volume Forecasting, Operations Analysis, and Traffic Report										20	10	50	60	30	20		190		\$38,850	200		\$41,180
3.4 Draft Feasibility Study with Plans, Estimates, and Other Appendices	40	100	20	200	500	400	1,260		\$199,900											3,080		\$495,860
3.5 Final Feasibility Study with Plans, Estimates, and Other Appendices	12	16	4	28	56	60	176		\$29,560											1,035		\$170,480
TASK 4 – PRELIMINARY ENGINEERING (N/A)																						
TASK 5 – ENVIRONMENTAL STUDIES AND ENVIRONMENTAL CLEARANCE (N/A)																						
TASK 6 - FINAL DESIGN (N/A)																						
TASK 7 – GRANT FUNDING APPLICATION SUPPORT																				290		\$45,920
- ATP, Complete Streets, and Other Grant Funding Application Support -																				290		\$45,920
TASK 8 – UTILITY COORDINATION (N/A)																						
TASK 9 – RIGHT-OF-WAY EASEMENT AND ACQUISITION SUPPORT (N/A)																						
TASK 10 – CONSTRUCTION SUPPORT (N/A)																						
TASK 11 – PROJECT IMPLEMENTATION AND SUPPORT (N/A)																						
TASK 12 – OPTIONAL FEASIBILITY STUDY DESIGN SUPPORT TASKS																				657	\$76,000	\$181,440
12.1 Draft/Final Drainage Report																				298		\$51,640
12.2 Field Surveying/Mapping and Right-of-Way Needs Assessment																				50		\$8,940
12.3 Geotechnical Investigations																				27	\$54,000	\$59,650
12.4 Preliminary Environmental Assessment																				140		\$19,340
12.5 Cultural Survey/Assessment Memorandum																				70		\$9,670
12.6 Biological Survey/Assessment Memorandum																				36		\$5,100
12.7 Hazardous Waste Survey/Assessment Memorandum																				36	\$22,000	\$27,100
TOTAL HOURS WITHOUT OPTIONAL TASKS	52	116	24	228	556	460	1,436			62	38	170	60	300	36	16	682			5,965		
TOTAL COST WITHOUT OPTIONAL TASKS	\$18,200	\$33,640	\$4,680	\$39,900	\$77,840	\$55,200			\$229,460	\$20,770	\$10,070	\$35,700	\$10,500	\$48,000	\$6,660	\$2,400		\$12,500	\$146,600		\$62,000	\$1,084,770
TOTAL HOURS WITH OPTIONAL TASKS	52	116	24	228	556	460	1,436			62	38	170	60	300	36	16	682			6,622		
TOTAL COST WITH OPTIONAL TASKS	\$18,200	\$33,640	\$4,680	\$39,900	\$77,840	\$55,200			\$229,460	\$20,770	\$10,070	\$35,700	\$10,500	\$48,000	\$6,660	\$2,400		\$12,500	\$146,600		\$138,000	\$1,266,210

\*Billing Rates will be adjusted in January of each Calendar year by 5%, rounded to the nearest multipl



**Phase III Location Map**

