September 17, 2025
NVTA Agenda Item 10.10
Continued From: New
Action Requested: APPROVE

NAPA VALLEY TRANSPORTATION AUTHORITY

Board Agenda Memo

TO: NVTA Board of Directors

FROM: Danielle Schmitz, Executive Director

REPORT BY: Grant Bailey, Program Manager – Engineer
(707) 259-5951 / Email: gbailey@nvta.ca.gov

SUBJECT: Contract Award for State Route 29 (SR29)/State Route 12 (SR12)/Airport Boulevard Alternative Analysis

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RECOMMENDATION

That the Napa Valley Transportation Authority Board authorize the Executive Director, or designee, to execute and allow for minor modifications to Work Order No. E-02 (Attachment 1) to NVTA Agreement No. 23-OCE08 with Kimley Horn and Associates for professional engineering services associated with the alternatives analysis and environmental clearance on the SR29/SR12/Airport Boulevard Interchange Project in an amount not to exceed $2,720,000.

COMMITTEE RECOMMENDATION

None

EXECUTIVE SUMMARY

The State Routes 29/12/Airport Boulevard Interchange Project will address severe congestion and safety issues that have worsened since completion of the Soscol Junction project. NVTA, in partnership with Caltrans District 4, will conduct a performance-based alternatives analysis and environmental review to evaluate up to three interchange options and revalidate the 2008 CEQA document. Following a competitive procurement, Kimley-Horn and Associates was selected as the most qualified consultant team. Staff recommends Board approval of a $2,720,000 contract with Kimley-Horn, including the base scope, pre-obligated contingency for optional tasks, and an unobligated contingency.

FISCAL IMPACT

Yes, Regional Measure 3 capital funds were previously programmed by the Board for this project. See the table below for the expenditure plan and financing plan.

Expenditure Plan	
Engineering Services	$2,158,998
Optional Services	$460,204
Contingency	$100,798
Total Expenditures	**$2,720,000**
Funding Plan	
Regional Measure 3	$2,720,000

This contract commits NVTA to a base contract value of $2,158,998. The Board is also authorizing an additional $561,002 for optional and contingent services, which may only be expended with prior authorization from the NVTA executive director.

CEQA REQUIREMENTS

ENVIRONMENTAL DETERMINATION*:* An Initial Study/Mitigated Negative Declaration (IS/MND) for the State Routes 29/12 Interchange Project was adopted by Caltrans in January 2008 in compliance with the California Environmental Quality Act (CEQA). The IS/MND evaluated potential impacts of constructing either a single point interchange or tight diamond interchange at SR 29/SR 12/Airport Boulevard and identified mitigation measures to reduce impacts to less-than-significant levels. The current action is consistent with the 2008 IS/MND and does not involve substantial changes to the project, changes in circumstances, or new information that would trigger additional CEQA review under Guidelines Sections 15162 and 15164; the 2008 IS/MND remains the appropriate CEQA document, and any future changes that could result in new or more severe impacts will undergo the appropriate level of CEQA analysis.

BACKGROUND

The State Routes 29/12/Airport Boulevard Interchange Project addresses longstanding operational deficiencies and safety concerns at the at-grade intersections of SR 29/SR 12/Airport Boulevard and SR 12/North Kelly Road. These locations experience collision rates above the statewide average for similar intersections, heavy congestion, and complex turning movements. Conditions have worsened since the completion of the Soscol Junction project to the north, which shifted traffic bottlenecks to this segment of the corridor.

A Caltrans-approved environmental document and project report from 2008 advanced a single point or tight diamond interchange, but the project was paused due to lack of funding. In 2020, NVTA completed the State Route 29 Comprehensive Multimodal Corridor Plan (CMCP), which identified a grade-separated dual roundabout ("dogbone") interchange as a potential alternative. This concept has not yet been validated for operations, safety, community context, or cost-effectiveness.

NVTA, in partnership with Caltrans District 4, will now conduct a performance-based alternatives analysis and environmental review to confirm the most effective interchange configuration. Up to three viable alternatives will be evaluated, with emphasis on options consistent with the environmental impacts analyzed in the 2008 IS/MND. This approach enables clearance through the CEQA revalidation process rather than requiring a more resource-intensive addendum or supplemental IS/MND. A robust community engagement process will be undertaken to ensure the selected alternative reflects the needs of residents, businesses, and agency partners.

This phase requires extensive preliminary engineering and public engagement to secure project approval and environmental clearance. NVTA released a request for proposals for PA&ED services on May 19, 2025. Five proposals were received by June 27, and the three most qualified teams were interviewed on July 23rd. Consultant were evaluated based on the following criteria:

1. Completeness of Response
2. Past Performance
3. Staffing and Organization
4. Organization and Approach
5. Scope of Services to be Provided

The evaluation committee – including NVTA, City and County of Napa, and Caltrans representatives – ultimately recommended Kimley-Horn and Associates (KHA) as the most qualified based on technical expertise, relevant experience, and understanding of the work. The table below summarizes consultant firms that submitted proposals.

Interviewed	**Consultant**
Yes	Kimley Horn & Associates
Yes	TYLin
Yes	AECOM
No	GHD
No	GFT

All firms were well qualified, and the selection reflects the committee's assessment of which team is best positioned to deliver this specific project successfully.

Following selection, staff negotiated with KHA to refine scope and fee. Adjustments included reducing overall project management time, consolidating prime and subconsultant efforts, and shifting certain tasks to optional services. These changes reduced the initial fee by approximately 8% and moved most environmental technical studies into an optional category.

Since a cooperative agreement with Caltrans is not yet in place, study requirements have not been confirmed. Deferring the technical studies as optional tasks allows NVTA to authorize only those that Caltrans requires, protecting NVTA from unnecessary costs. This approach, however, means a portion of contract contingency is "pre-obligated" for optional tasks identified in the scope.

Staff is therefore requesting Board approval of the following structure, for a total contract value of $2,720,000:

Task Description	Cost
Base Contract	$2,158,998
Optional Tasks (pre-obligated contingency)	$460,204
Unobligated Contingency	$100,798
Total	**$2,720,000**

ALTERNATIVES

1. The Board could choose to forego this contract; however, doing so would delay critical safety and congestion relief improvements at the SR 29/12/Airport Boulevard and SR 12/Kelly Road intersections, as well as postpone realizing the full benefits of the recently completed Soscol Junction project.

2. The Board could direct staff to reissue the solicitation or defer award until Caltrans provides further guidance on required environmental studies. This approach would extend the schedule, risk higher costs in a future procurement, and delay progress toward environmental clearance and project approval.

COUNTYWIDE PLAN GOALS MET BY THIS PROPOSAL

By authorizing this contract, NVTA advances the following agency goals:

- **Goal 2 – Improve system safety to support all modes and serve all users**
  The selected build alternative will reduce collision risk and congestion, improving operational efficiency and safety for motorists, pedestrians, bicyclists, and transit riders.

- **Goal 4 – Support Napa County economic vitality & Goal 5 – Minimize energy and resource use in moving people and goods**
  The project will ultimately shorten travel times and improve reliability along the SR 29 corridor, benefiting residents, commuters, and freight movement while reducing wasted fuel and emissions associated with delay.

ATTACHMENT(S)

1) Project Work Order No. E-01

PROJECT WORK ORDER NO. E-02
ON-CALL A/E & PROJECT DELIVERY SERVICES

PROJECT NAME: **SR29/SR12/Airport Blvd Interchange Alt. Analysis & Enviro Clearance**

PROJECT MANAGER: Grant Bailey, PE, Program Manager – Engineer
E gbailey@nvta.ca.gov | T 707.259.5951

CONSULTANT DESIGNATED TEAM MEMBERS:

- Kimley-Horn and Associates, Inc. Proposal and List of Subcontractors – see EXHIBIT B.

Consultant will independently and at its own discretion and liability enter into agreement with sub-consultant(s) listed in their proposal for any services required to complete the project as described in the scope of work.

SCOPE OF SERVICE: Provide professional engineering services to complete the SR29/SR12/Airport Blvd Interchange Alternative Analysis and Environmental Clearance project as described in the scope of services hereto as EXHIBIT A.

START DATE: SEPTEMBER 29*, 2025* **COMPLETION DATE:** *DECEMBER 31, 2027*

NOT-TO-EXCEED AMOUNT FOR THIS PROJECT: $2,158,998.30

CHARGE NUMBER FOR PAYMENT: RM3

TERMS AND CONDITIONS: This Project Work Order is issued and entered into as of the last date written below in accordance with the terms and conditions set forth in the Master Agreement with CONTRACTOR, which terms are hereby incorporated and made part of this Project Work Order.

NVTA

By:_____
DANIELLE SCHMITZ, Executive Director

Contractor
Kimley-Horn and Associates, Inc.

By:_____
PARAG MEHTA, P.E.
Vice President

Approved as to Form
By: _____
NVTA General Counsel
Date: _____

EXHIBIT A

SCOPE OF WORK

(Attached)

August 27, 2025

Grant Bailey, Project Manager
Napa Valley Transportation Authority
625 Burnell Street
Napa, CA 94559

4637 Chabot Drive #300,
Pleasanton, CA 94588
TEL 925.398.4840

RE: SR 29/SR 12/Airport Boulevard Alternative Analysis and Environmental Clearance Project

Dear Grant Bailey

Thank you for the notice of intent to award Kimley-Horn the opportunity to support NVTA in delivering the Alternatives Analysis, Project Approval, and Environmental Clearance for the SR 29/SR 12/Airport Boulevard Project. As requested, our scope and fee are provided on the following pages for your review.

We are excited for the opportunity to continue partnering with NVTA and appreciate your consideration. Should you have questions or require any additional information, please contact project manager, **Prasanna Muthireddy, PE**, at Prasanna.Muthireddy@kimley-horn.com , or 925-398-4855.

Sincerely,
KIMLEY-HORN AND ASSOCIATES, INC.

Prasanna Muthireddy, PE
Project Manager

Scope of Services

This scope of services is specifically based on providing planning, design, and environmental services to the Napa Valley Transportation Authority (NVTA) for completing the Alternative Analysis and Project Approval/Environmental Document (PA/ED) for the SR 29/SR 12/Airport Boulevard Interchange Alternative Analysis and Environmental Clearance Project. (Project).

Phase 0: Project Management

The Consultant, under this Agreement, Consultant will provide project management for each task for the entire duration of this project. Management activities include:

Phase 0.1: Coordination and Meetings

Consultant will coordinate with NVTA, Caltrans, Napa County, and other agencies/stakeholders/other project representatives. The Consultant will schedule, prepare an agenda, prepare meeting minutes, prepare presentation materials, and provide action item logs with the minimum level of support for:

- One (1) project kick-off meeting
- Bimonthly, 30-minute-calls with NVTA for the duration of the project, assuming 24-month project schedule, forty-eight (48).
- Twelve (12) Monthly Project Development Team (PDT) meetings with Caltrans and other stakeholder agencies
- Up to fifteen (15) focus meetings to resolve specific issues with Caltrans and other stakeholders
- Weekly team meetings with key team members, assuming 24-month project schedule

Meeting minutes will be prepared and distributed for review within approximately 10 business days of the meeting held.

Deliverables:

- Meeting Agendas, Materials, and Meeting Minutes
- Action item log

Phase 0.2: Project Administration

Consultant will prepare and submit monthly invoices along with progress reports, in general conformance with NVTA requirements, each month based on current billing and total billed amount to date. Monthly invoices will be organized by task and will include charges per staff member at the agreed hourly rates, expense charges, and subcontractor charges. Support documentation for contractor's and subcontractor's direct expenses and other charges will be attached. If NVTA requests additional design services during project development, Consultant will prepare a scope and fee for additional services as part of this task and will proceed after receiving written authorization from NVTA.

Deliverables:

- Monthly Invoices and Progress Reports

Phase 0.3: Project Management and Controls

The Consultant will supervise, coordinate, and monitor activities as well as the development of project deliverables for conformance with Caltrans, NVTA, and other applicable standards and policies. Project deliverables will be in accordance with the latest codes and standards and as approved by NVTA. Project files will be maintained in accordance with Caltrans' Uniform Filing System. The Consultant will hold internal team meetings to share project information with key team members, address and coordinate design issues, and verify that the quality process is being adhered to. Internal team action logs will be maintained.

Consultant will prepare a Critical Path Method schedule at the onset of the project based on this agreed upon scope and will get consensus from project team members and NVTA. After Phase 1 of the project, the schedule will be presented to Caltrans for their consensus. The Consultant will update the schedule on a monthly basis and inform NVTA's project manager of the changes, critical path items, and proactively manage the schedule to avoid delays and surprises.

Consultant will work with the QC/QA manager to develop a project-specific Quality Management Plan (QMP) that incorporates the contract requirements. The QMP will identify the deliverables that will go through the quality review process and when these reviews will take place during the project schedule. Prior to any design milestone submittals to NVTA, the Consultant will perform the necessary discipline, interdisciplinary, and if needed, independent reviews, in accordance with the approved QMP.

Deliverables:

- Detailed Microsoft Project Critical Path Schedule (Updated Monthly)
- Submittal Register
- Quality Management Plan

Phase 1: Alternative Analysis and Evaluation

Phase 1.1: Data Collection and Review

Consultant will obtain, either from NVTA or other readily available online documents, any of the pertinent prior documents, including the 2008 Project Report (PR), 2020 Comprehensive Multimodal Corridor Plan (CMCP), and other relevant plans and data, such as NVTA's Travel Behavior Study. Consultant will also conduct new traffic counts and supplement with readily available recent data where feasible, such as traffic count data from NVTA's American Canyon SR 29 Corridor Improvement project.

Consultant will also obtain relevant information about existing utilities and other existing facilities that may be affected by proposed project improvements within and nearby the project study area from NVTA, County, City, Caltrans, utility owners, open sources, and other agencies and organizations.

UNICO Engineering, Inc. will provide optional survey services as dictated by NVTA. Our approach for topographic surveys include evaluating the possibility of using any available topographic mapping from the approved 2008 PR. If the existing 2008 data is determined to not be salvageable, then the Consultant will coordinate with NVTA to obtain authorization to develop photogrammetric aerial map and orthophotography of the project area in accordance with Caltrans aerial photogrammetric standards.

UNICO will work closely with NVTA, Caltrans and City to identify the approved project control. It is assumed that Caltrans will provide the preferred horizontal and vertical control for utilization of surveys and mapping. It is assumed that horizontal control will be based on North American Datum (NAD83), California State Plane Coordinate System Zone 2 and North American Vertical Datum (NAVD88). Control research will be conducted to tie the survey and mapping services for this project into the desired control. Field surveys, GPS measurements and level loops will be conducted to process and adjust main control points to be used for the project. A project control report will be prepared which will include the primary horizontal and vertical control. Control report will include northings, eastings, elevations, basis of bearing, datum and utilized benchmarks.

UNICO will facilitate the delivery of an overall photogrammetric aerial map and orthophotography of the project area. UNICO will set all necessary aerial control panels at locations and frequency adequate to meet Caltrans and National Mapping Accuracy Standards of 1” = 50’ scale mapping with 1’ contour intervals based on the approved mapping limits. The aerial photogrammetric mapping will be in accordance with Caltrans aerial photogrammetric standards and will be approved and processed in 3 stages, A, B and C (A B C Process). The limits are centered at the intersection of SR29 and SR12 and will extend approximately 5000 feet northerly along SR12, 2300 feet easterly along SR12, 2000 feet southerly along SR29 and 2300 feet westerly along Airport Boulevard, including additional mapping along portions of South Kelly Road, North Kelly Road and Devlin Road at a sufficient width as directed by design team. Aerial based topographic mapping will show all visible surface features, improvements, 1’ contours, DTM ground surface and spot elevations within the mapping limits. Color photo background imagery will be provided. The imagery will be adjusted using ortho-correction within the mapping limits, and simple rectification within the ground control limits.

UNICO will perform detailed (non-aerial) supplemental topographic surveying and base mapping derived from the established horizontal and vertical control at the discretion of design team to locate utilities, trees, constraints and other key features not visible by aerial photogrammetric surveys. All supplemental ground topography will be mapped and combined into the photogrammetric aerial base survey.

UNICO will request from Caltrans current Right of Way Maps and Monument Maps along the project corridor. UNICO will attain additional mapping and documentation from County to aid in the mapping of the right of way along the project alignment. As part of alternative analysis, the right of way mapping will be limited to strictly the right of way along the project alignment. Individual properties will not be resolved and mapped at this stage. The resolution of individual properties along the project limits will require full surveying and mapping during future phases of the project. To aid in the right of way mapping, UNICO will purchase a total of eight (8) title

reports to better understand right of way, dedications and easement constraints as needed. A right of way base map will be prepared to assist with searching for monuments and right of way boundaries. GPS and conventional surveys will be performed to locate right of way monuments, pins and other boundary markers necessary to resolve and map the right of way. An overall right of way base map in AutoCAD will be prepared as the basis of the right of way limits.

Deliverables:

- Data Collection Summary Matrix
- Control Report
- Aerial Based Photogrammetric Topo Base File in AutoCAD Civil 3D, DTM File, 3D Surface File, Ortho Image Files, Points Files
- Right of Way Base Map, Recorded Maps, Deeds, Title Reports (8)

Phase 1.2: Establish Evaluation Criteria

Consultant will identify existing deficiencies and refine the Purpose and Need (P&N) statement from the 2008 PR. After data collection, assessment, and development of the P&N statement, the Consultant, in collaboration with NVTA, will develop a distinct quantifiable screening criteria intended to evaluate project alternatives based on performance, including but not limited to performance measures for traffic operations, safety, cost, constructability, stage construction considerations, right-of-way, multimodal compatibility, VMT, and context sensitivity. A screening matrix will be created to help navigate multiple complex factors in assessing alternatives with an objective approach to best serve NVTA, project stakeholders, and the local communities. The screening and evaluation criteria will promote a performance-based decision-making process for NVTA, which will be clearly documented.

Deliverables:

- Revised Purpose and Need Statement
- Screening Criteria Matrix

Phase 1.3: Development and Screening of Intersection Alternatives

Consultant will develop an inventory of preliminary geometric alternatives using available mapping which will address the project P&N, improve operations, avoid or minimize environmental, utility, and right-of-way impacts. The alternatives will also be based on Caltrans ISOAP and nationally accepted design guidance. The alternatives will also include multimodal access improvements, truck freight access, align geometric design with roadway context, and include both conventional and innovative configurations. Consultant will hold a workshop, where concepts will be presented to identify potential fatal flaws and alternatives to not consider with opportunity for NVTA to provide additional alternative design ideas for consideration.

This session will serve two primary purposes:

- Determine a range of possible alternatives to consider
- Establish alternatives that meet the project P&N and are aligned with the selection criteria developed in the previous task

The concepts will consider improvements for mobility in the corridor for both vehicular and non-vehicular modes of travel as defined in our existing deficiencies in the previous task. The workshop is intended to establish potential solutions, but not to minimize the range of concepts to be developed. After the workshop, Consultant will screen out alternatives for clear fatal flaws related to constructability, safety, environmental impact, or P&N, in collaboration and with input from our experienced team members. The alternatives will be developed as high-level concepts and will consider the current and future land uses in and around the project study area, including the traffic operations, trips, and proposed developments along SR 29 and the SR 12/North Kelly Road intersection and south of the intersection along South Kelly Road. The concepts will include enough information to establish advantages and disadvantages for each alternative considered. The Consultant will address one (1) round of comments from NVTA on the concept exhibits.

Deliverables:

- Workshop Concept Exhibits with advantages/disadvantages

Phase 1.4: Alternatives Refinement, Conceptual Engineering, and Cost Estimates

Consultant will refine up to six (6) build alternatives resulting from Phase 1.3, including preliminary concept layouts, construction staging considerations, and planning-level capital and right-of-way cost estimates. The concept alternatives will be prepared on available topographic mapping and aerial mapping at an appropriate scale to show proposed features and identify details such as non-standard features. The concept layout will also include typical sections at key locations for existing and proposed lane configuration and show multimodal facilities, as appropriate. The Consultant will address up to one (1) round of comments from NVTA on the six (6) preliminary concept layouts, planning-level capital cost estimate, and right-of-way cost estimate.

Deliverables:

- Concept Exhibits for up to six (6) alternatives
- Planning-level Capital and Right-of-Way Cost Estimates

Phase 1.5: Performance-Based Evaluation

Consultant will evaluate the refined six (6) build alternatives with the evaluation criteria developed from Phase 1.4, with input from NVTA. Each build alternative will be evaluated with a rating system, including both qualitative and quantitative metrics with rationale for each score. A comprehensive matrix to support the decision-making process will be developed, as well as a simplified clear matrix for easy comparison to allow for alternative selection to proceed to the next phase.

This will include input from the traffic lead to review the proposed build alternatives with preliminary peak hour and VMT screening analysis using Synchro/SimTraffic and SIDRA softwares, depending on the build alternative. The traffic analysis will include impacts to the Airport Road/Devlin Road intersection, SR 12/Kelly Road, and limits extending both north and south along SR 29 as needed in coordination with NVTA. These preliminary performance results, level of service (LOS), delay, and queue length will be compared against no build and

other build alternatives to add to the narrative for the appropriate three (3) build alternatives to move forward.

Additionally, Consultant will provide review of right-of-way requirements in terms of assessing constructability, safety, environmental impacts of each of the identified alternatives that are at-grade, grade separated, and structures such as connector ramps. The review of proposed structures will consider the constructability considerations into building a retaining wall through more complex systems like mechanically stabilized earth (MSE) walls and tieback walls. As part of our review of proposed structures, the TRC CM team will provide feedback on the impacts of these structures in terms of proximity to environmentally sensitive areas, if any, which will require seasonal restrictions to construction schedule and operations.

Consultant will develop comparative alternative evaluation matrices for up to six (6) alternatives. Consultant will address up to one (1) round of comments from NVTA on the six (6) evaluation matrices.

Deliverables:

- Comparative Alternative Evaluation Matrix for up to six (6) alternatives

Phase 1.6: Shortlisting of Alternatives

Consultant will collaborate with NVTA, with the help of the alternative evaluation matrix results, and recommend up to three (3) build alternatives that meet the agreed upon performance metrics. Consultant will prepare a short technical summary memorandum for the three (3) build alternatives and an evaluation matrix summarizing conclusions.

Deliverables:

- Summary memorandum identifying top three (3) build alternatives for Caltrans review

Phase 2: Caltrans Screening and Feasibility Input

Phase 2.1: Updated Project Description

Consultant will prepare detailed narratives that describe each of the three (3) build alternatives to help Caltrans gain an understanding of the pros and cons of the alternatives. The narratives will include, but not limited to, information related to proposed configuration, right-of-way impacts, multimodal components, expected operational improvements, impact to the intersections of Airport Boulevard/Devlin Road and SR 12/North Kelley Road, utility impacts, design features, and any non-standard features. Consultant will provide up to two (2) rounds of review with NVTA.

Deliverables:

- Updated Project Description for up to three (3) build alternatives

Phase 2.2: Updated Project Footprint

Consultant will refine the geometry of each of the three (3) build alternatives, review high level profile geometry based on available surface data, and develop plan-view exhibits that show the footprint for each of three (3) build alternatives. The footprint at this level will identify preliminary cut/fill limits, right-of-way needs, constructability needs, utility impacts, nonstandard features, and environmental impact areas. The exhibits will be developed in accordance with Caltrans Highway Design Manual, CADD User's Manual and other applicable Caltrans processes.

Deliverables:

- Refine Alternatives and Develop up to three (3) build alternative exhibits

Phase 2.3: Vehicle Miles Traveled (VMT) Screening

Based on Senet Bill (SB) 743, Consultant will follow the Transportation Analysis Framework (TAF) and Transportation Analysis Under CEQA (TAC) closed on November 22, 2024. Consultant will follow the TAF and TAC documents in identifying the VMT impacts. Consultant will conduct a CEQA VMT screening consistent with Caltrans Transportation Analysis under CEQA (TAC) and Transportation Analysis Framework (TAF) guidance for each of the top three (3) build alternatives.

Deliverables:

- VMT Screening Memorandum for up to three (3) build alternatives

Phase 2.4: Caltrans Coordination

Consultant will facilitate up to three (3) meetings with Caltrans to present findings of the alternative analysis and provide details for Caltrans to review three (3) of the proposed alternatives. Consultant will prepare agendas and distribute meeting minutes with action items for each of the coordination meetings. The Consultant will help deduce the appropriate path to gain project approval and environmental clearance for each of the three (3) build alternatives, including scope of required technical studies, with the intent to prepare addendum and revalidate the CEQA and NEPA from 2008. The results of this coordination with Caltrans will be used as part of community and stakeholder engagement as well as in the process of selection of the project build alternatives in Phase 4.

Deliverables:

- Meeting Agenda, Summary, and Action Items from Caltrans Coordination Meetings

Phase 3: Community and Stakeholder Engagement

Phase 3.1: Stakeholder Engagement Plan

Consultant will develop a comprehensive stakeholder engagement plan to guide public outreach and engagement throughout the project. This plan will:

- Define outreach goals aligned with the project's purpose and need

- Identify key audiences, including local agencies, transit agencies, advocacy groups, community-based organizations (CBOs), business leaders and groups, and underserved communities
- Outline strategies for equitable, inclusive engagement, including multilingual outreach and targeted efforts for disadvantaged communities
- Provide a calendar of engagement activities, communications milestones, and coordination with project phases, including Caltrans' environmental clearance process

Deliverables:

- Stakeholder Engagement Plan (including CBO strategy, timeline, and equity approach)

Phase 3.2: Public Input Events

Consultant will organize and facilitate up to two (2) public meetings or workshops with either in-person or virtual components. The first event is suggested to occur after Phase 1, post initial coordination with Caltrans and will:

- Educate the public on project background, share the three (3) build alternatives being evaluated, associated impacts, and alternative evaluation considerations.
- Gain public input on the three alternatives and summarize the meeting outcomes
- Use clear, accessible materials including fact sheets, boards, handouts, and presentations
- Leverage interactive tools (e.g., comment cards, online polling) to collect meaningful input
- Be promoted via social media, stakeholder emails, flyers, and community partnerships
- The second event is suggested to occur during Phase 4, after the preferred build alternative selection and around the ED circulation time frame. This event will also be similar to the first event but provide an update for the community and create opportunities for them to provide valuable input on the details of the preferred build alternative.

Deliverables:

- Public meeting coordination (logistics, agenda, facilitation)
- Outreach materials (fact sheets, digital graphics, handouts)
- Meeting summary and attendance documentation
- Comprehensive comment log and coding of input

Phase 3.3: Stakeholder Briefings

Consultant will conduct a series of up to six (6) stakeholder meetings and/or charrettes with local agencies and key stakeholders on the project. These briefings will:

- Provide tailored project updates and gather input on three (3) build alternatives
- Be coordinated in partnership with NVTA and as needed, Caltrans

Consultant will prepare all fact sheets, materials, agenda, meeting minutes, and follow up on any action items associated with all stakeholder meetings. Stakeholders may include City of Napa,

American Canyon, County of Napa, airport representatives, business groups, advocacy organizations, and potentially affected communities.

Deliverables:

- Presentation materials and fact sheets for briefings
- Summary of public comments received for both meetings
- Summary notes from each stakeholder engagement session

Phase 3.4: Public Input Summary

Consultant will document and analyze all feedback collected through meetings, workshops, stakeholder briefings, and online tools. A public input summary memorandum will be developed to:

- Synthesize comments and concerns
- Identify common themes and areas of support or conflict
- Outline how community input informs the selection of a preferred alternative
- Provide demographic insights where available to assess outreach effectiveness

Deliverables:

- Appendices of raw public and stakeholder feedback
- Memorandum summarizing public input and its implications for decision-making from the first public meeting with an addendum for the second public meeting

Phase 4: Final Deliverables and Clearance

Phase 4.1: Value Analysis (VA) Study

Value Management Strategies, Inc. and the Consultant will facilitate a formal VA study consistent with Caltrans and FHWA requirements for federally funded projects exceeding $50 million ($40 million for bridge projects). Consultant proposes to conduct VA study for up to three (3) build alternatives. The VA study results, together with the results from Phases 1 through 3, will inform the selection of the build alternative. The VA study will include:

- An independent Certified Value Specialist (CVS) team leader to lead a VA study in accordance with Caltrans value methodology
- VA study documentation in accordance with the Caltrans VA report guide and this task order
- Applicable data and correspondence and any other relevant information necessary for the VA study is collected, developed, and distributed
- Facilitate VA team meetings

Deliverables:

- Final Value Analysis Report

Phase 4.2: Selection of Preferred Alternative

Consultant, in collaboration with NVTA, Caltrans, and the project stakeholders, will recommend a preferred alternative based on the performance evaluation, public feedback, and Caltrans input collected as part of phases 1 through 3. The build alternative consensus will be part of a PDT meeting, and the minutes will document the consensus. Consultant will prepare a memorandum to document the preferred alternative decision from the PDT meeting. Consultant will address up to one (1) round of comments on the memorandum from NVTA and Caltrans.

Deliverables:

- Preferred alternative decision memorandum

Phase 4.3: Updated Environmental Document & Associated Studies

Consultant will prepare an addendum to the 2008 IS/EA or revalidation documents after a preferred build alternative is selected for the project.

Consultant will use the updated environmental technical studies to prepare an addendum/revalidation to the 2008 IS/EA and EA/FONSI for CEQA and NEPA compliance. This task is based on the assumption that the project build alternative will be limited to one preferred alternative as identified in this scope and the build alternative will not result in any new significant impacts or more severe adverse effects than were previously evaluated in the 2008 IS/EA which would necessitate the preparation of a new CEQA and NEPA documentation. Consultant will address two (2) rounds of comments with NVTA and Caltrans for the draft Environmental Document.

Deliverables:

- Draft Environmental Document

Phase 4.3.1: Project Description, Initial Coordination, and Potential Effect Map

Consultant will refine the purpose and need statement prepared in Phase 1 and a project description that describes the proposed preferred build alternative and the no build alternative to be analyzed in the PA&ED phase. Consultant will address up to two (2) rounds of comments on the revised purpose and need and project description from NVTA and Caltrans.

Consultant will also prepare an Area of Potential Effects (APE) map for review by NVTA and Caltrans. Consultant will address up to two (2) rounds of comments from NVTA and Caltrans.

Deliverables:

- Revised Purpose and Need
- Revised Project Description
- Area of Potential Effects Map

Phase 4.3.2: Environmental Technical Studies:

The following technical studies were prepared for the 2008 IS/EA and will need to be updated for the project. This task includes coordinating with Caltrans to determine the scope of the following environmental technical studies that are anticipated to be required for the project:

- 4.3.2.1 Cultural Resources
- 4.3.2.2 Natural Environmental Study
- 4.3.2.3 Community Impact Assessment Memo
- 4.3.2.4 Air Quality Report
- 4.3.2.5 Noise Study Report
- 4.3.2.6 Energy Analysis
- 4.3.2.7 Water Quality
- 4.3.2.8 Phase I Initial Site Assessment
- 4.3.2.9 Visual Impact Assessment

Phase 4.4: Supplemental Project Report (SPR)

Consultant will provide the necessary supplemental technical studies required for approval of the SPR by Caltrans. All technical studies will include at least two (2) round of review with NVTA and Caltrans separately, unless otherwise noted.

Phase 4.4.1: Traffic Analysis

Consultant will work with NVTA and Caltrans to identify the project/traffic study limits, which based on the previous 2008 study established limits to east of Gateway Drive/Sena Street on west and west of Kirkland Ranch Road on east, Soscol Derry Road Interchange (Interchange not included) on north, Tower Road on South. Project study limits may vary as compared to traffic study limits.

Phase 4.4.1.1: Methodology Memorandum and Traffic Data and Software Selection

To capture the existing operating conditions, Consultant will collect weekday and weekend data of key intersections and 7-day, 24-hour counts. Based on the existing conditions and future growth, a VISSIM simulation for multiple hours of analysis will be modeled to capture the intersection operations, queuing and upstream/downstream impacts. For feasibility study and signal time optimization for the study intersections, Synchro software will be used as well as preliminary roundabout analysis, SIDRA software, as needed. The peak period analysis will be performed using VISSIM microsimulation software as well. Consultant will prepare a traffic methodology memorandum for concurrence on traffic analysis approach from Caltrans for operations and forecasting.

Deliverables:

- Traffic Methodology Memorandum

Phase 4.4.1.2: Existing Conditions Calibration

Consultant will develop the VISSIM network within the traffic study limits in collaboration and approved by NVTA and Caltrans. The adjusted existing peak period data and current signal timing information will be entered into the model. The model calibration will be completed by adjusting necessary parameters in simulation software. After calibrating the model, the output results of demand vs served volume, travel time and queueing information at study intersections. Results meet the criteria, and the memorandum will be prepared and submitted to NVTA and Caltrans for review and approval.

Deliverables:

- Existing Conditions Memorandum

Phase 4.4.2.3: Travel Demand Forecasting

Consultant will use the recently calibrated sub-area validated SNABM model for SR 29 to develop the future forecast. Land use around the project study area will be reviewed/checked and necessary adjustments will be made, if needed. Future forecast data will be adjusted based on existing calibration and adjusted volumes will be used for project opening and design years.

Phase 4.4.2.4: Traffic Operational Analysis

Future traffic operational analysis will be performed based on approved forecast data. Proposed build alternative results will be compared against no build conditions as well as other alternatives to identify the best performed alternative. Based on input from NVTA and Caltrans preferred alternative will be selected.

Phase 4.4.2.5: Intersection Safety Operational Assessment Process (ISOAP)

Consultant will prepare per Caltrans documentation the Intersection Safety Operational Assessment Process (ISOAP). Intersection geometry and traffic control will be determined through a performance-based analysis that considers all users and supports the principles of the safe system approach. The selected build alternative will go through ISOAP process for selecting appropriate intersection lane geometry.

Deliverables:

- Intersection Safety Operational Assessment Process Memorandum

Phase 4.4.2.6: Traffic Operational Analysis Report (TOAR)

Consultant will prepare a draft and final TOAR summarizing existing conditions, forecasting analysis, opening and design year operational analysis results, improvements required to maintain acceptable operations and safety conditions once future traffic operational analyses are completed. The report will summarize the project findings and recommendations.

Deliverables:

- Draft and Final Traffic Operational Analysis Report

Phase 4.4.2: Other Technical Documents

Kimley-Horn will prepare the following necessary attachments to the supplemental PR and technical studies. All attachments and technical studies will include at least two (2) rounds of review with NVTA and Caltrans separately.

Phase 4.4.2.1: Safety Analysis and Design Standard Decision Document (DSDD)

- Safety Analysis:
  Consultant will prepare a memorandum to document which project improvements elements are feasible to be evaluated with the Highway Safety Manual (HSM). There

may be some elements of the alternative that are not feasible for evaluation with the HSM Crash Prediction Models (CPM). This memorandum will be reviewed and approved prior to starting the Safety Analysis Report.

Based on the approved HSM Safety Analysis Methodology Memorandum, Consultant will prepare a Safety Analysis Report in accordance with Caltrans' Application of the Highway Safety Manual Methodology for Project Development, dated March 30, 2023, for performance-based decision-making, and the Highway Safety Manual (HSM) to assess safety impacts to support project design decisions. Consultant will refer to other reference sources including the FHWA Crash Modification Factors (CMF) Clearinghouse, Safety Performance Function Clearinghouse, and Highway Design Manual.

It is anticipated that two (2) rounds of comments from Caltrans will be received prior to approval of the Safety Analysis.

- DSDD:
  Consultant will prepare DSDD for non-standard design features for up to one (1) build alternative. The draft DSDD will be submitted to Caltrans for review and comment. This work includes meetings (up to four meetings) with Caltrans and other functional units for the review of the proposed geometrics design. It is anticipated that two (2) rounds of comments from Caltrans will be received prior to approval.

Deliverables:

- Draft and Final Safety Analysis
- Draft and Final DSDD

Phase 4.4.2.2: Complete Streets Decision Document (CSDD)

Consultant will prepare a Complete Streets Decision Document (CSDD) from Caltrans Project Development Procedures Manual Appendix FF. The CSDD will document the steps taken to determine bicycle, pedestrian, or transit needs, identify preferred complete streets facilities, identify complete streets facilities selected for the project, and rationale supporting those decisions in development of the preferred alternative for the Project limits within Caltrans right-of-way only.

Deliverables:

- Complete Streets Decision Document

Phase 4.4.2.3: Geometric Engineering Drawings (GeDs)

Consultant will prepare Geometric Engineering Drawings (GeDs) to obtain agency consensus on the preferred build alternative that will be discussed in the Project Report and recommended for final design during the PS&E phase.

Deliverables:

- GeDs

Phase 4.4.2.4: Preliminary Geotechnical Design Report (PGDR)

A Preliminary Geotechnical Design Report (PGDR) will be prepared to provide preliminary recommendations to the design team and NVTA as a supporting document to develop the PA&ED. The PGDR will be prepared according to Caltrans Geotechnical Design Reports guidelines (February 2021).

Consultant will review the published geologic maps and other agency records if any. The overall geotechnical/geologic evaluations will be discussed on a broad basis, including geology, topsoil/soil survey, surface/subsurface conditions, and groundwater. The seismic hazards, such as liquefaction and lateral spreading will be evaluated based on the proposed boring and CPTs according to the current standard design practice.

The preliminary acceleration response spectrum and the peak ground acceleration (PGA) will be developed based on the Caltrans ARS Online website.

Deliverables:

- Preliminary Geotechnical Design Report

Phase 4.4.2.5: Preliminary Pavement Design Memorandum (PDM)

For the preliminary pavement design of the roadway, no fieldwork or laboratory testing is proposed in this preliminary engineering phase. A Preliminary Pavement Design Memorandum will be prepared using assumed R-values and Traffic Index (TI) provided by others. The pavement design will be based on the Caltrans standard empirical design method per Highway Design Manual guidelines to support the Life Cycle Cost Analysis (LCCA). For this preliminary engineering phase, Mechanistic-Empirical (ME) method by using the CalME software is not included in this scope.

Deliverables:

- Preliminary Pavement Design Memorandum

Phase 4.4.2.6: Storm Water Data Report (Long Form)

Consultant will prepare a PA&ED-level SWDR (Long Form) in accordance with Caltrans requirements.

Deliverables:

- Storm Water Data Report (Long Form)

Phase 4.4.2.7: Preliminary Drainage Report

Consultant will prepare a drainage report analyzing the existing drainage facilities and drainage patterns in the area and develop proposed facilities needed to effectively manage roadway runoff and accommodate the proposed improvements. Drainage shed areas will be developed from topography, field reviews, and the proposed roadway improvements in the project area. Tributary areas will be defined, and flow rates calculated for inlets and pipes. Required detention facilities

to mitigate the increased runoff due to project improvements will be assessed. Reports will be submitted to NVTA and Caltrans for review and approval.

Deliverables:

- Preliminary Drainage Report

Phase 4.4.2.8: Capital Outlay Project Estimate

Consultant will prepare an order-of-magnitude capital outlay project estimate consistent with Caltrans requirements for PA&ED. The preliminary capital outlay project estimate will be presented in the Caltrans 11-page format and will provide a detailed breakdown of capital construction costs. It will also include support costs needed for the PS&E and construction phases of the project.

Deliverables:

- Capital Outlay Project Estimate

Phase 4.4.2.9: Right of Way Data Sheet

Consultant will evaluate the potential right of way requirements, affected parcels and associated capital costs for build alternative, and deliver a Right of Way Data Sheet prepared by a qualified real estate professional.

Deliverables:

- Right of Way Data Sheet

Phase 4.4.3: Draft Supplemental Project Report (SPR)

Consultant will prepare an administrative draft SPR for the project limits within Caltrans right-of-way for NVTA review. Consultant will update the administrative draft per NVTA's comments and develop a draft version of the SPR for two (2) rounds of Caltrans review and comments, in accordance with Caltrans guidance documented in the Caltrans Project Development Procedures Manual (PDPM).

Deliverables:

- Administration Draft Supplemental Project Report
- Draft Supplemental Project Report

Phase 4.5: Final Submittals

Phase 4.5.1: Final Environmental Document

Consultant will update all relevant draft documents and NEPA/CEQA reports for final distribution and reviews. Consultant will work closely to resolve comments from stakeholders regarding the final conclusion of the final ED revalidation. It is assumed two (2) rounds of review for Caltrans approval of the environmental document.

Deliverables:

- Final Environmental Document

Phase 4.5.2: Final Supplemental Project Report (SPR)

Consultant will update the draft SPR and all necessary technical studies and attachments to the SPR for final circulation and approval with Caltrans. It is assumed two (2) rounds of review for Caltrans approval of the final supplemental project report.

Deliverables:

- Final Supplemental Project Report

Optional Tasks

The tasks identified in this section are considered Optional Tasks. Kimley Horn acknowledges that these tasks are not part of the base scope of services and will only be performed upon written authorization from NVTA.

Optional 1: Structures Preliminary Geotechnical Report (SPGR)

For the anticipated structures, Consultant will prepare two (2) SPGRs to support Advanced Planning Studies during this PA&ED phase study per Caltrans guidelines ("Foundation Reports for Bridges", July 2024), one for the grade separation structure and one for all retaining walls. Consultant will review the published geologic maps and other Agency records, if any, in the project vicinity. Consultant will comply with local permit requirements. It is assumed that the geotechnical explorations will be performed within Caltrans' right-of-way (ROW) and the encroachment permits will be provided by the team and/or NVTA at no cost. A drilling permit from Napa County will be obtained.

Consultant will locate the explorations in the field and contact Underground Service Alert (USA) for utility clearance. A private utility locator is not included in the scope since the borings are expected to be within the public right-of-way.

One (1) boring to 100 feet and four (4) CPTs to 100 feet or refusal, including two (2) SCPTs with shear wave velocity measurements, are included in the scope. Based on the site condition, it is expected that the exploration can be performed without lane closure or traffic control. Therefore, traffic control is not expected and is not included in the current scope. The explorations will be backfilled with neat cement when completed. Please note that the actual boring and CPT locations will depend upon the available access, utility conflicts, and the selected alternative.

Laboratory tests will be performed on representative soil samples, such as moisture contents, densities, particle size analyses, plasticity index (basic soil characteristics), corrosion tests (pH, sulfate, chloride, and resistivity), and strength tests as deemed necessary. Two R-value tests are planned.

Consultant will perform preliminary engineering analyses focusing on the seismic hazards, i.e., liquefaction potential, based on the boring and CPT data according to the current standard design

practice. The preliminary acceleration response spectrum and the peak ground acceleration (PGA) will be developed based on the Caltrans ARS Online website.

In addition, preliminary axial capacity for deep foundations will be developed based on the available boring and CPT data. Pavement design will be performed. The traditional empirical method will be used during this preliminary design phase.

Two SPGRs will be prepared, one for the grade separation structure and one for all retaining walls. The reports will discuss the potential geotechnical and geologic impacts and mitigations on a broad basis, including, but not limited to, geology, subsurface conditions, groundwater, as-built data, seismic hazards, erosion, etc., for the proposed structures. The SPGR will discuss the appropriateness of different foundation types and th anticipated scope and types of fieldwork and testing that may be required to complete the geotechnical investigation based on the proposed alternative and preliminary plans provided by the designer. It is assumed there will be two (2) rounds of review with NVTA and Caltrans for approval.

Deliverables:

- Structural Preliminary Geotechnical Report
- Foundation Report

Optional 2: Structure Advance Planning Study

An Advance Planning Study (APS) will be required to be prepared if a bridge or nonstandard retaining wall structure is part of the preferred alternative. The APS will follow the guidelines of Caltrans Memo to Designers (MTD), Section 1-8 “Planning Studies”, and Caltrans Office of Special Funded Projects (OSFP) Information and Procedures Guide, Section 3-2 “Advance Planning Studies”.

The purpose of an APS is to identify feasible type of structures for the project alternative and location. The APS will include cost, project risks, and potential impacts to surrounding environment and existing utilities. It will investigate the use of Accelerated Bridge Construction (ABC) techniques and their potential benefits to both cost and schedule.

Deliverables:

One APS will be prepared as part of this task will include the following:

- General Plan of the proposed structure, which will include a Plan View, Elevation View and Typical Section of the structure
- Preliminary Foundation Report
- APS Checklist
- Design Memo discussing the structure and its benefits and challenges
- Itemized Cost Estimate

Optional 3: Additional VIA Simulations

If the preferred build alternative includes a major structure such as a bridge or connector ramp, then this optional task will include the additional scope for (1) visual simulation from identified

key viewpoints which will demonstrate the before and after-effects of the proposed project with the proposed structure.

Optional 4: VMT

This project's environmental document was previously cleared and may be except from VMT assessment. However, Consultant will work with Caltrans District 4/Headquarters to resolve this item. If Caltrans requests to perform the VMT, Consultant will follow the recently updated (2024) TAF and TAC documents to identify there are any VMT impacts, if any.

Deliverables:

- VMT Document

All technical studies will include at least two (2) rounds of review with NVTA and Caltrans separately, unless otherwise noted. For all of the environmental technical study tasks, Consultant will submit a work plan for review and consensus by NVTA and Caltrans prior to preparing the revalidation of any documents. The following tasks are assumed based on readily available information, but they are subject to change with further coordination with Caltrans.

Optional 5: Cultural Resources (Archaeological Survey Report (ASR), Historic Property Survey Report (HPSR))

The proposed project has a signed EIR from 2008, which this scope seeks to revalidate. However, since the cultural resources studies for the project are 18 years old, the project requires updated cultural resources documents. Federal funds are being used for the complete streets improvements, requiring NHPA Section 106 review by Caltrans District 4 Local Assistance.

- Record Search

A record search for previous studies and recorded cultural resources will be requested from the Northwest Information Center (CHRIS), Sonoma State University, Rohnert Park, to include the project area and a ½-mile radius around it. A/HC will also request a Sacred Lands File search and tribal contact list for Napa County from the California Native American Heritage Commission in Sacramento.

- Native American Consultation

A/HC will prepare and circulate letters to Native American tribes informing them of the proposed project and inviting them to consult. We assume that two consultation meetings will be required.

- Archaeological Survey Report

A qualified archaeologist will complete a pedestrian field survey, background research, and geoarchaeological assessment of the project corridor. These data will be used to complete an Archaeological Survey Report that conforms to the guidance in the Caltrans Standard Environmental Reference (SER) Volume 2.

- Historic Properties Survey Report

The HPSR is a summary report that includes the final draft of the APE map, discusses documentation efforts, presents the findings of the ASR, and summarizes the National Register eligibility conclusions for cultural resources. The document also provides evidence of coordination with Native American groups, local government, and other interested persons and organizations, and requests the concurrence of the State Office of Historic Preservation (if necessary).

This scope does not include archaeological testing or evaluation of built environment resources.

Deliverables:

- Archaeological Survey Report
- Historic Property Survey Report

Optional 6: Natural Environment Study, Biological Assessment, and Aquatic Resources Delineation Report

Consultant will prepare a Natural Environment Study (NES) and Biological Assessment (BA) to document the various biological and/or physical elements that could be potentially impacted by the project. The BA will also support consultation with the United State Fish & Wildlife Service (USFWS). Consultant will complete an Aquatic Resources Delineation Report that will include mapping of all potential waters of the US/State and locations of ordinary high-water mark, as applicable, to assess potential impacts to aquatic resources within agency jurisdictions.

It is assumed that aquatic resources delineation survey does not include agency coordination or a site visit for USACE verification under this project phase.

Deliverables:

- Natural Environment Study
- Biological Assessment
- Aquatic Resources Delineation Report

Optional 7: Community Impact Assessment Memorandum

Consultant will prepare a Community Impact Assessment (CIA) memorandum that briefly documents appropriate or relevant topics based on the current Caltrans Annotated Outline. These are anticipated to include land use, growth, community character, traffic/transportation, bicycle and pedestrian facilities, equity, and public involvement.

Deliverables:

- Community Impact Assessment Memorandum

Optional 8: Air Quality Report

Consultant will prepare an air quality technical report using the Caltrans format and address the FHWA/Caltrans requirements and well as local CEQA criteria. The technical report will provide the following for one build alternative:

- Setting: Base line conditions that describe meteorology/climate of the project area, existing air quality conditions, federal, state and local air quality rules and regulations, and approved air quality plans. Air pollutants and their effect on human health will also be included.
- Regional Air Quality Impacts: Identify SIP conformity requirements for the project and develop conformity language suitable for the air quality analysis. This will include participation in consultation with NVTA and Caltrans regarding project inclusion in the latest transportation plans and programs. CO Hot Spot Analysis. Hot Spot CO analysis based on the CO protocol developed by UC Davis. Locations will include receptors nearest the highway and selected intersections.
- Assess Project GHG Emissions: Project and no project emissions will be computed and evaluated based on current State and local guidance. The effect of transportation control measures in reducing project emissions will also be included.
- Mobile Source Air Toxics: Consultant will use the FHWA guidance and UC Davis procedures to assess and calculate MSAT emissions from the project.
- PM2.5 Analysis: PM2.5 will be analyzed based on the latest FHWA Guidance. This project is not anticipated to generate a significant volume or change in volumes when compared to the No Build. As such, it is assumed that this project will not be considered a project of air quality concern (POAQC) for PM2.5. Consultant will support consultation efforts with the Bay Area Air Quality Conformity Task Force on the project's potential to increase PM2.5 levels as required by the FHWA conformity process.
- Construction Air Quality Impacts: Construction air quality impacts will be quantified with the current version of the Roadway Construction Emissions Model. The appropriate control measures to reduce particulate matter and fugitive dust generation will be identified.

Coordinating Methodology with the VMT Analysis, such that the emissions from VMT are consistent with those discussed under AQ/GHG.

It is assumed that the project would not be a Project of Air Quality Concern (POAQC). Consultant will prepare an Air Quality Conformity Analysis for a non-POAQC.

Deliverables:

- Air Quality Report

Optional 9: Noise Study Report

Consultant will conduct a traffic noise study in accordance with the Traffic Noise Analysis Protocol developed by Caltrans. Per the Caltrans' Traffic Noise Analysis Protocol dated April 2020, the addition of new travel lanes will require an evaluation of noise impacts along the entire project limits and reasonable and feasible noise abatement under FHWA and Caltrans requirements. The protocol requires identification of noise impacts at different types of activity areas affected by the project. The noise study will address both the State and Federal noise abatement criteria and evaluate noise impacts in accordance with CEQA pursuant to policies set forth in the local General Plans. The following tasks will be conducted to prepare the noise study for one (1) build alternative:

- Identify Potential Sensitive Receptors:

Based on aerial images and a field visit, potentially sensitive receptors for noise impacts will be identified and mapped.

- Measure Existing Noise Levels:

Existing noise levels will be monitored at representative receiver locations along the study area to quantify existing worst-hour noise levels and provide data for model calibration purposes.

- Model Future Noise Levels:

Modeling will be required to calculate noise levels throughout the project corridor using FHWA's Traffic Noise Model (TNM) to calculate existing noise levels and predict future noise levels with and without the project. The model will be calibrated to measure noise and traffic conditions and predict existing and future noise levels. Traffic noise modeling will be conducted in accordance with the Caltrans recommended procedures.

- Noise Barrier Feasibility and Reasonableness:

If noise impacts are identified, noise abatement will be considered for feasibility (to substantially reduce noise levels at sensitive receptors) and reasonableness (based on the opinion of probable cost to provide this reduction). This information will be used to assist in the preparation of the Noise Analysis Decision Report (NADR).

- Construction Noise:

Construction noise will be predicted using methods outlined in the Protocol that utilize the Roadway Construction Noise Model.

Deliverables:

- Noise Study Report

Optional 10: Energy Analysis

The energy study will include an evaluation of traffic volumes and/or vehicle miles traveled with comparisons between the No Build and Build Alternative. Based on energy consumption factors

for construction, Consultant will prepare a brief evaluation of construction energy in an energy analysis memorandum.

Deliverables:

- Energy Analysis Memorandum

Optional 11: Water Quality

Consultant will prepare a technical memorandum documenting the proposed construction BMPs for the project.

Deliverables:

- Water Quality Technical Memorandum

Optional 12: Phase I Initial Site Assessment (ISA)

Consultant will prepare a Phase I Initial Site Assessment (ISA) report for the proposed project.

Generally, the ASTM recommends a one-mile radius range for the data search. The objective of the ISA will be to determine the presence or likely presence of any hazardous substances or petroleum products within the project limits. The tasks consist of data collection and document research, including historical land use based on aerial photographs, topographic maps, and other relevant documents, and a site reconnaissance. Data will be ordered from Environmental Data Research, Inc. (EDR Inc.). No field exploration involving soil or material disturbance, or testing is included in this phase of the work.

Deliverables:

- Phase I Initial Site Assessment

Optional 13: Visual Impact Assessment

CONSULTANT will develop a work plan memorandum explaining the assumptions and methodology for the Visual Impact Assessment to Caltrans for review and approval prior to beginning the development of the VIA. Work Plan will outline the level of VIA recommended for the project along with a preliminary outline, number of visual simulations and key viewpoints recommended. CONSULTANT assumes one (1) round of revisions based on consolidated Client comments.

CONSULTANT assumes that a Standard VIA Report, which analyzes the changes to the visual setting and aesthetics associated with construction and implementation of the project, will be prepared. The analysis will be performed using methods and protocol developed by the Federal Highway Administration (FHWA) and adopted by the Caltrans and will utilize Caltrans' Standard VIA Report template. The principal components of the visual setting will be inventoried and will include, but not be limited to, views, viewsheds, viewer groups, visual resources and the quality and character of the project corridor. The CONSULTANT will consider and identify potential

visual aesthetic treatments for the project including, walls and other roadway minor structures, which will enhance the project will also be identified and considered. This scope does not include any major structures such as bridges or connector ramps. An optional task is provided to supplement this task if the preferred alternative includes a major structure element. A context sensitive solution approach will be utilized and implemented in the preparation of the VIA. This task will include a maximum of one (1) visual simulations from identified key viewpoints which will demonstrate the before and aftereffects of the proposed project.

Deliverables:

- Visual Impact Assessment Methodology Memorandum
- Visual Impact Assessment

○ EXHIBIT B

PROPOSAL AND LIST OF SUBCONTRACTORS

(Attached)

		Kimley-Horn and Associates, Inc.																								
194.54%	Overhead%	Name	Prasanna Muthireddy	Chris Brecheisen	Parag Mehta	Sherina Lam	Sr. Professional II	Sr. Professional I	Professional (A)	Professional (B)	Analyst (A)	Analyst (B)	Project Support	Kimley-Horn Total Hours	Kimley-Horn TOTAL COST	AHC COST	AIM COST	DJP COST	ETG COST	MONUMENT COST	PARIKH COST	SEQUOIA ECO COST	TRC COMPANIES	UNICO ENG COST	VMS COST	TOTAL PROJECT COST
194.38%	Overhead% w/o FCCM	Category/Title	Project Manager	Deputy Project Manager	Principal-in-Charge	QC/QA																				
10%	Fee%	Direct Rate	$105.85	$77.95	$134.55	$89.46	$124.70	$91.27	$81.22	$67.31	$53.32	$45.59	$47.53													
		Billing Rate	$342.93	$252.54	$435.91	$289.83	$404.00	$295.69	$263.13	$218.07	$172.75	$147.70	$153.99													
Task 0	**Project Management**		**282**	**246**	**36**	**40**	**0**	**0**	**48**	**0**	**98**	**0**	**96**	**846**	**$ 230,459.81**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 230,459.81**
0.1	Coordination and Meetings		162	150	16				48		98			474	$ 129,970.00											$ 129,970.00
0.2	Project Administration		48	48	4								96	196	$ 45,109.01											$ 45,109.01
0.3	Project Management and Controls		72	48	16	40								176	$ 55,380.80											$ 55,380.80
Task/Phase 1	**Alternatives Analysis and Evaluation**		**108**	**186**	**0**	**16**	**56**	**128**	**72**	**40**	**590**	**60**	**0**	**1256**	**$ 287,569.55**	**$ -**	**$ -**	**$ 15,473.59**	**$ -**	**$ 7,902.71**	**$ -**	**$ -**	**$ 19,627.42**	**$ 70,290.68**	**$ -**	**$ 400,863.95**
1.1	Data Collection and Review		8	16							50			74	$ 15,421.35			$ 9,845.24						$ 70,290.68		$ 95,557.27
1.2	Establish Evaluation Criteria		12	24							40			76	$ 17,085.95											$ 17,085.95
1.3	Development and Screening of Intersection Alternatives		12	24					24		60			120	$ 26,856.09			$ 5,628.35								$ 32,484.44
1.4	Alternatives Refinement, Conceptual Engineering, and Cost Estimates		40	72		8	48	120	40	40	320	60		748	$ 172,482.91					$ 7,902.71			$ 19,627.42			$ 200,013.04
1.5	Performance-Based Evaluation		24	30		8	8	8	8		72			158	$ 38,265.50				$ -							$ 38,265.50
1.6	Shortlisting of Alternatives		12	20							48			80	$ 17,457.75											$ 17,457.75
Task/Phase 2	**Caltrans Screening & Feasibility Input**		**46**	**90**	**0**	**0**	**20**	**28**	**66**	**0**	**208**	**52**	**0**	**510**	**$ 115,841.31**	**$ -**	**$ -**	**$ 28,242.57**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 144,083.88**
2.1	Updated Project Description		6	8							12			26	$ 6,150.85			$ 8,552.08								$ 14,702.93
2.2	Updated Project Footprint		24	60					60		120	40		304	$ 65,808.36											$ 65,808.36
2.3	Vehicle Miles Traveled (VMT) Screening		4	4			20	28			40			96	$ 25,651.15				$ -							$ 25,651.15
2.4	Caltrans Coordination		12	18					6		36	12		84	$ 18,230.95			$ 19,690.49								$ 37,921.44
Task/Phase 3	**Community and Stakeholder Engagement**		**48**	**104**	**0**	**0**	**8**	**8**	**8**	**8**	**80**	**72**	**0**	**336**	**$ 76,626.24**	**$ -**	**$ 46,646.79**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 123,273.03**
3.1	Stakeholder Engagement Plan		4	16							8			28	$ 6,794.34		$ 7,022.43									$ 13,816.77
3.2	Public Input Events		16	36			8	8	8	8	32	72		188	$ 40,187.92		$ 20,375.89						$ -			$ 60,563.80
3.3	Stakeholder Briefings		24	36							24			84	$ 21,467.69		$ 11,789.91									$ 33,257.60
3.4	Public Input Summary		4	16							16			36	$ 8,176.30		$ 7,458.55						$ -			$ 15,634.85
Task/Phase 4	**Final Deliverables and Clearance**		**173**	**661**	**8**	**0**	**242**	**704**	**20**	**8**	**1572**	**228**	**0**	**3616**	**$ 847,919.50**	**$ 9,404.96**	**$ -**	**$ 47,722.84**	**$ 79,087.23**	**$ 4,843.03**	**$ 31,816.69**	**$ 7,564.32**	**$ 29,911.17**	**$ -**	**$ 56,361.40**	**$ 1,114,631.13**
4.1	Value Analysis Study		30	30	8		16		16		30			130	$ 37,207.97								$ 13,942.12		$ 56,361.40	$ 107,511.49
4.2	Selection of Preferred Alternative		8	8							8			24	$ 6,145.73								$ 11,593.58			$ 17,739.31
4.3	Updated Environmental Document & Associated Studies		13	25	0	0	0	22	4	8	56	8	0	136	$ 30,929.34	$ 9,404.96		$ 24,187.52								$ 81,689.41
4.3.1	Project Description, Initial Coordination and Potential Effect Map		4	16							40	8		68	$ 13,503.79											$ 13,503.79
4.3.2	Environmental Technical Studies - Move all in options		9	9	0	0	0	22	4	8	16	0	0	68	$ 17,425.55											$ 34,593.14
4.3.2.1	*Cultural Resources*		1	1										2	$ 595.47			$ 885.10								$ 1,480.58
4.3.2.2	*Natural Environmental Study*		1	1										2	$ 595.47			$ 2,129.12				$ 7,564.32				$ 10,288.91
4.3.2.3	*Community Impact Assessment Memo*		1	1										2	$ 595.47			$ 2,751.51								$ 3,346.98
4.3.2.4	*Air Quality Report*		1	1				4						6	$ 1,778.25			$ 540.00								$ 2,318.25
4.3.2.5	*Noise Study Report*		1	1				4			4			10	$ 2,469.23			$ 540.00								$ 3,009.23
4.3.2.6	*Energy Analysis*		1	1				4			4			10	$ 2,469.23			$ 269.49								$ 2,738.72
4.3.2.7	*Water Quality*		1	1					4		4			10	$ 2,338.99											$ 2,338.99
4.3.2.8	*Phase I Initial Site Assessment*		1	1										2	$ 595.47			$ 517.48			$ 1,478.64					$ 2,591.59
4.3.2.9	*Visual Impact Assessment*		1	1				10		8	4			24	$ 5,987.96			$ 491.94								$ 6,479.90
4.4	Supplementary Project Report (SPR)		102	520	0	0	226	682	0	0	1390	172	0	3092	$ 724,788.42											$ 843,432.19
4.4.1	Traffic Analysis		18	40	0	0	160	352	0	0	664	0	0	1234	$ 299,701.75											$ 378,788.97
4.4.1.1	*Traffic Forecast and Operations Methodology Memo and Traffic Data Review*		2	4			12	28			40			86	$ 21,733.29											$ 21,733.29
4.4.1.2	*Existing Conditons Calibration*		2	4			24	60			100			190	$ 46,408.23											$ 46,408.23
4.4.1.3	*Travel Demand Forecasting*		2	4			12	24			60			102	$ 24,005.41				$ 79,087.23							$ 103,092.63
4.4.1.4	*Traffic Operational Analysis*		4	8			48	120			260			440	$ 103,181.16											$ 103,181.16
4.4.1.5	*Intersections Safety and Operational Assessment Process*		4	12			24	60			120			220	$ 52,569.32											$ 52,569.32
4.4.1.6	*Traffic Operational Analysis Report (TOAR)*		4	8			40	60			84			196	$ 51,804.34											$ 51,804.34
4.4.2	Other Technical Documents		84	480	0	0	66	330	0	0	726	172	0	1858	$ 425,086.67											$ 464,643.22
4.4.2.1	*Safety Analysis and Design Standard Decision Document (DSDD)*		24	180			26	150			150	40		570	$ 140,365.74											$ 140,365.74
4.4.2.2	*Complete Streets Decision Document (CSDD)*		2	8							40	8		58	$ 10,797.60											$ 10,797.60
4.4.2.3	*Geometric Engineering Drawings (GeDs)*		16	40							40	20		116	$ 25,452.36											$ 25,452.36
4.4.2.4	*Preliminary Geotechnical Design Report (PDGR)*		4	8							8			20	$ 4,774.01						$ 17,230.07					$ 22,004.08
4.4.2.5	*Preliminary Pavement Design Memorandum (PDM)*		4	8							8			20	$ 4,774.01						$ 13,107.98					$ 17,881.99
4.4.2.6	*Storm Water Data Report (Long Form)*		4	8			16	80			116			224	$ 53,550.06											$ 53,550.06
4.4.2.7	*Preliminary Drainage and Hydromodification Report*		4	8			24	100			140			276	$ 66,841.85											$ 66,841.85
4.4.2.8	*Capital Outlay Project Estimate*		8	16							40	40		104	$ 19,601.96											$ 19,601.96
4.4.2.9	*Right of Way Data Sheet*		2	4							4	4		14	$ 2,977.81					$ 4,843.03						$ 7,820.84
4.4.3	Draft Supplemental Project Report		16	200							180	60		456	$ 95,951.27								$ 4,375.47			$ 100,326.73
4.5	Final Submittals		20	78	0	0	0	0	0	0	88	48	0	234	$ 48,848.04								$ -			$ 64,258.72
4.5.1	Final Environmental Documents Addendum/Revalidation		4	8							8	8		28	$ 5,955.62			$ 15,410.68								$ 21,366.30
4.5.2	Final Supplemental Project Report		16	70							80	40		206	$ 42,892.42											$ 42,892.42
		TOTAL HOURS	**657**	**1287**	**44**	**56**	**326**	**868**	**214**	**56**	**2548**	**412**	**96**	**6564**												
		Subtotal Labor:	**$225,305.48**	**$325,020.08**	**$19,180.15**	**$16,230.52**	**$131,704.18**	**$256,663.02**	**$56,310.88**	**$12,211.90**	**$440,154.44**	**$60,853.05**	**$14,782.73**		**$ 1,558,416.41**	**$ 9,404.96**	**$ 46,646.79**	**$ 91,439.00**	**$ 79,087.23**	**$ 12,745.74**	**$ 31,816.69**	**$ 7,564.32**	**$ 49,538.59**	**$ 70,290.68**	**$ 56,361.40**	**$ 2,013,311.80**
	Other Direct Costs														**$ 88,421.06**	**$ 1,188.10**	**$ 3,883.08**	**$ 300.00**	**$ 1,977.18**	**$ 254.91**	**$ 20,184.62**	**$ 2,047.08**	**$ 2,507.89**	**$ 18,850.00**	**$ 6,072.57**	**$ 145,686.50**
	Escalation												Original Esc. $ 68,386.98		$ 62,921.06	$ 188.10	$583.08		$1,977.18	$ 254.91	$ 1,684.62	$1,891.08	$ 2,507.89		$ 2,818.07	$ 74,826.00
	Airfare																								$ 600.00	$ 600.00
	Airport Shuttle																								$ 150.00	$ 150.00
	Rental Car														$ 1,000.00										$ 600.00	$ 1,600.00
	Lodging																								$ 1,414.50	$ 1,414.50
	Meals														$ 1,000.00										$ 340.00	$ 1,340.00
	VA Study Supplies																								$ 150.00	$ 150.00
	Aerial Mapping																							$ 12,850.00		$ 12,850.00
	Title Reports (8 at $750 each)																							$ 6,000.00		$ 6,000.00
	NWIC Record Search															$ 850.00										$ 850.00
	Mileage and Tolls														$ 1,500.00	$ 150.00	$ 600.00	$ 200.00				$ 156.00				$ 2,606.00
	Printing														$ 2,000.00		$ 1,800.00	$ 100.00								$ 3,900.00
	Notifications																$ 900.00									$ 900.00
	EDR																				$ 500.00					$ 500.00
	CPT - Mob/Demob																				$ 2,000.00					$ 2,000.00
	CPT - Cost per Shift																				$ 13,000.00					$ 13,000.00
	CPT - Per Diem																				$ 1,000.00					$ 1,000.00
	Outside Laboratory Testing (Corr.)																				$ 500.00					$ 500.00
	Outside Laboratory Testing (R-Value)																				$ 500.00					$ 500.00
	Traffic Counts														$ 20,000.00						$ 1,000.00					$ 21,000.00
	TOTAL COST:														**$ 1,646,837.47**	**$ 10,593.06**	**$ 50,529.88**	**$ 91,739.00**	**$ 81,064.41**	**$ 13,000.66**	**$ 52,001.31**	**$ 9,611.40**	**$ 52,046.48**	**$ 89,140.68**	**$ 62,433.97**	**$ 2,158,998.30**

Optional Tasks																										
Task O	**Optional Tasks**																									
O.1	Structures Preliminary Geotechnical Report (SPGR)		2	8							4	4		18	$ 3,987.97						$ 67,134.08					$ 71,122.05
O.2	Structures Advance Planning Study (APS)						20		140		70			230	$ 57,011.06											$ 57,011.06
O.3	Additional VIA Simulations		2	4				20		20	40	20		106	$ 21,835.15											$ 21,835.15
O.4	Vehicle Miles Traveled (VMT)		4	8			40	20			80			152	$ 39,285.57											$ 39,285.57
O.5	Cultural Resources		1	7										8	$ 2,110.72			$ 7,965.94								$ 10,076.65
O.6	Natural Environmental Study		1	3										4	$ 1,100.55			$ 8,516.48				$ 68,078.88				$ 77,695.92
O.7	Community Impact Assessment Memo		1	3										4	$ 1,100.55			$ 11,006.02								$ 12,106.58
O.8	Air Quality Report		1	3				10				76		90	$ 15,282.82			$ 4,859.97								$ 20,142.79
O.9	Noise Study Report		1	3				20			46	20		90	$ 17,914.75			$ 4,859.97								$ 22,774.72
O.10	Energy Analysis		1	3				12			46			62	$ 12,595.16			$ 2,425.45								$ 15,020.61
O.11	Water Quality		1	7					12		36	24		80	$ 15,032.00											$ 15,032.00
O.12	Phase I Initial Site Assessment		1	3										4	$ 1,100.55			$ 4,657.32			$ 13,307.73					$ 19,065.61
O.13	Visual Impact Assessment		3	7		12		60		62	96	60	40	340	$ 69,141.64			$ 4,427.46								$ 73,569.09
	Other Direct Costs																									
	Labor Escalation														$ 5,465.92											$ 5,465.92
		OPTIONAL TASKS TOTAL HOURS	**19**	**59**	**0**	**12**	**60**	**142**	**152**	**82**	**418**	**204**	**40**	**1188**												
		Optional Tasks Subtotal Labor:	**$ 6,515.68**	**$ 14,899.91**	**$ -**	**$ 3,477.97**	**$ 24,240.03**	**$ 41,988.65**	**$ 39,996.51**	**$ 17,881.71**	**$ 72,207.44**	**$ 30,131.12**	**$ 6,159.47**		**$ 262,964.41**	**$ -**	**$ -**	**$ 48,718.60**	**$ -**	**$ -**	**$ 80,441.81**	**$ 68,078.88**	**$ -**	**$ -**	**$ -**	**$ 460,203.70**

NOTICE: By siginging this form, the Prime Contractor or Consultant shall attest to contracting the areas of work to the subcontractors and/or the subconsultants listed below based on the percentages and amounts listed. Prime Contractor or Consultant also attests that the subcontractors/subconsultants listed below, whereas required, are currently licensed to do the work in accordance with CA State laws or registered with System for Award Management (SAM) if competing for a Federal requirement, are currently registered with the DIR for public works projects, and if applicable are a certified DBE. Refer to the terms and conditions of the contract agreement for all other subcontracting requirements.

Signature of Prime Contractor/Consultant: _____ (Must be signed by person authorized to sign of behalf of Company)

Printed Name: Parag G. Mehta, PE, Vice President – Kimley-Horn and Associates, Inc.

Date: 6/27/2025

NO.	SUBCONTRACTOR/SUBCONSULTANT NAME & FULL ADDRESS	SUBSTITUTED Y/N (Refer to Federal/State rqmts when substituting a DBE)	DBE UNIQUE I.D.	AREA OF WORK	% OF WORK	AMOUNT	ICR RATE	LICENSE (IF REQ)	DIR # (IF REQ)	SAM REGISTRATION # (Federal Rqmts)	CONTACT NAME & PHONE#
1	Archaeological Historical Consultants 609 Aileen Street, Oakland, CA 94609-1609	N	N/A	Cultural Resource	0.40%	$10,593.06	118	N/A	1000826077	N/A	Daniel Shoup 510.224.4076
2	TRC Engineers, Inc. 1850 Gateway Blvd., Suite 1075, Concord, CA 94520	N	N/A	Constructability	1.97%	$52,046.48	168.14	Professional Engineer	1000019493	MJSJBC3LYVQ5	Pavitra Rammohan 949.379.0304
3	Elite Transportation Group, Inc. 1488 Falcon Ct ,Sunnyvale, CA 94087	N	45726	Forecast/Modeling	3.06%	$81,064.41	122.29	N/A	1000061688	075512328	Lawrence Liao 510.320.0680
4	UNICO Engineering 80 Blue Ravine Road, Suite 250, Folsom, CA 95630	N	41342	Surveying	3.37%	$89,140.68	149.95	Professional Land Surveyor	1000020978	C38JXLQQ1WL7	Cesar Montes de Oca 916.900.6623
5	AIM Consulting 2600 Capitol Ave Suite 440, Sacramento, CA 95816	N	35954	Public Outreach	1.91%	$50,529.88	164.88	N/A	N/A	N/A	Katie DeMaio 916.442.1169
6	David J. Powers & Associates, Inc. 1736 Franklin Street, Ste. 400 Oakland, CA 94612	N	38205	Environmental	5.30%	$140,457.60	205.51	American Institute of Certified Planners	PW-LR-1000 993073	ZSS5J6W996 Y1	Will Burns 510.902.5851
7	Monument Right-of-Way, Inc. 200 spectrum Center, Suite 300, Irvine CA 92618	N	46456	Right-of-Way Support	0.49%	$13,000.66	103.26	Real Estate Salesman	PW-LR-1000418551	XJ58XXD7M5P6	Amber Costello 949.703.9799
8	PARIKH Consultants, Inc. 1497 N Milpitas Blvd., Milpitas, CA 95035	N	20259	Geotechnical / Initial Site Assessment	3.10%	$81,959.04	177.25	Professional Engineer	1000016488	DCUJEZM5BNJ5	David Wang 408.452.9000
9	Value Management Strategies, Inc. 350 W. Fifth Ave., Suite 330, Escondido, CA 92025	N	N/A	Value Analysis	2.36%	$62,433.97	1568763	Certified Value Specialist	1000061216	MS28RKSQ8QN9	Jessica Combs 210.992.0946
10	Sequoia Ecological Consulting, Inc. 1342 Creekside Drive, Walnut Creek, CA 94596	N	40492	Biological Resources	2.93%	$77,690.28	275.56	N/A	1000022497	G83GLBLUL926	Tashi MacMillen 925.855.5500