

**AMENDMENT NO. 1  
TO PROFESSIONAL SERVICES AGREEMENT  
BETWEEN COUNTY OF MONTEREY AND  
KIMLEY-HORN AND ASSOCIATES, INC.**

**THIS AMENDMENT NO. 1** to the Professional Services Agreement between the County of Monterey, a political subdivision of the State of California (hereinafter, "County") and Kimley-Horn and Associates, Inc. (hereinafter, "CONTRACTOR") is hereby entered into between the County and the CONTRACTOR (collectively, the County and CONTRACTOR are referred to as the "Parties").

**WHEREAS**, CONTRACTOR entered into a Professional Services Agreement with County on January 10, 2012 (hereinafter, "Agreement"); and

**WHEREAS**, engineering services associated with the Countywide Fee Program Nexus Study; Agriculture and Winery Corridor Plan Impact Fee based on the recent adoption of the General Plan Update; Carmel Valley Transportation Improvement Program (CVTIP) Traffic Analysis and Fee Calculation; and California Environmental Quality Act (CEQA) Environmental Review for the CVTIP, have not been completed; and

**WHEREAS**, additional time and funding are necessary to allow CONTRACTOR to include an additional task to analyze corridor improvements on Carmel Valley Road based on requests by residents of Carmel Valley and as desired by the County; and

**WHEREAS**, the Parties wish to amend the Agreement to extend the term to December 31, 2013 and to increase the amount by \$97,090.00 to continue to provide services identified in the Agreement and as amended by this Amendment No. 1.

**NOW, THEREFORE**, the Parties agree to amend the Agreement as follows:

1. Amend Paragraph 1, "Services to be Provided", to read as follows:

The County hereby engages CONTRACTOR to perform, and CONTRACTOR hereby agrees to perform, the services described in **Exhibits A and A-1** in conformity with the terms of this Agreement. The services are generally described as follows: **Provide** engineering services associated with: 1) Countywide Fee Program Nexus Study; 2) Agriculture and Winery Corridor Plan Impact Fee based on the recent adoption of the General Plan Update; 3) Carmel Valley Transportation Improvement Program (CVTIP) Traffic Analysis and Fee Calculation; 4) California Environmental Quality Act (CEQA) Environmental Review for the CVTIP; and 5) Carmel Valley Road Corridor Study.

Amendment No. 1 to Professional Services Agreement  
Kimley-Horn and Associates, Inc.  
Traffic Impact Fee Programs  
RMA – Department of Public Works  
Term: December 13, 2011 – December 31, 2013  
Not to Exceed: \$352,253

2. Amend Paragraph 2, "Payments by County", to read as follows:

County shall pay the CONTRACTOR in accordance with the payment provisions set forth in Exhibits A and A-1, subject to the limitations set forth in this Agreement. The total amount payable by County to CONTRACTOR under this Agreement shall not exceed the sum of \$352,253.00.

3. Amend the first sentence of Paragraph 3, "Term of Agreement", to read as follows:

The term of this Agreement is from December 13, 2011 to December 31, 2013, unless sooner terminated pursuant to the terms of this Agreement.

4. Amend Paragraph 4, "Additional Provisions/Exhibits", by adding "Exhibit A-1, Scope of Services/Payment Provisions".

5. All other terms and conditions of the Agreement remain unchanged and in full force.

6. This Amendment No. 1 shall be attached to the Agreement and incorporated therein as if fully set forth in the Agreement.

Amendment No. 1 to Professional Services Agreement  
Kimley-Horn and Associates, Inc.  
Traffic Impact Fee Programs  
RMA – Department of Public Works  
Term: December 13, 2011 – December 31, 2013  
Not to Exceed: \$352,253

IN WITNESS WHEREOF, the Parties hereto have executed this Amendment No. 1 to the Professional Services Agreement as of the day and year written below:

COUNTY OF MONTEREY

CONTRACTOR\*

By: \_\_\_\_\_  
Contracts/Purchasing Officer

Kimley-Horn and Associates, Inc.  
Contractor's Business Name

Date: \_\_\_\_\_

By: \_\_\_\_\_  
(Signature of Chair, President or Vice President)

JAMES F. WES.

Its: VICE PRESIDENT  
(Print Name and Title)

Date: 11-19-2012

Approved as to Form and Legality  
Office of the County Counsel

By: \_\_\_\_\_  
(Signature of Secretary, Asst. Secretary, CFO,  
Treasurer or Asst. Treasurer)

Asst. Secretary

By: \_\_\_\_\_  
Deputy County Counsel

Its: James M. Daisa  
(Print Name and Title)

Date: 11-26<sup>cor</sup>-12

Date: 11/19/2012

Approved as to Fiscal Provisions

By: \_\_\_\_\_  
Auditor/Controller

Date: 11-20-12

Approved as to Indemnity and Insurance Provisions

By: \_\_\_\_\_  
Risk Management

Date: \_\_\_\_\_

\*INSTRUCTIONS: IF CONTRACTOR is a corporation, including limited liability and non-profit corporations, the full legal name of the corporation shall be set forth above together with the signatures of two specified officers. If CONTRACTOR is a partnership, the name of the partnership shall be set forth above together with the signature of a partner who has authority to execute this Agreement on behalf of the partnership. IF CONTRACTOR is contracting in an individual capacity, the individual shall set forth the name of the business, if any, and shall personally sign the Agreement.

Amendment No. 1 to Professional Services Agreement  
Kimley-Horn and Associates, Inc.  
Traffic Impact Fee Programs  
RMA - Department of Public Works  
Term: December 13, 2011 - December 31, 2013  
Not to Exceed: \$352,253

## EXHIBIT A-1 – SCOPE OF SERVICES/PAYMENT PROVISIONS



Kimley-Horn  
and Associates, Inc.

### Task 5: Carmel Valley Road Corridor Study

Amend Kimley-Horn and Associates (KHA) contract for Countywide Nexus Fee Study/Carmel Valley Transportation Improvement Program (CVTIP)/Agriculture and Winery Corridor Plan (AWCP) Fee Study, to add an additional task, Task 5, to analyze corridor improvements on Carmel Valley Road.

#### **Project Understanding:**

Based on requests by Carmel Valley residents, the County of Monterey wishes to analyze roadway operations along Carmel Valley Road. The analysis will consider the most constrained portion of the roadway, extending from Rancho San Carlos Road to Laureles Grade. An operations analysis of the existing roadway will be performed to identify opportunities for operational improvements. This operations analysis will consider roadway capacity, roadway volumes, accident history, truck flows, and multi-modal activity. Potential improvements along the study area will be identified. Improvements to be considered may include roundabouts, turn lanes, passing lanes and shoulder improvements. Conceptual horizontal layouts and opinions of probable cost will be prepared.

#### **Tasks to be Completed:**

##### Task 5.1: Data Collection

###### Task 5.1.1: Perform Traffic Counts

Intersection turning movement counts will be performed at up to seven (7) intersections on a single weekday between the hours of 7 and 9 a.m. and 2 and 6 p.m. Pedestrian and bicycle counts will be collected during these times as well.

Directional roadway segment counts will be performed at up to one (1) roadway segment for a seven-day period.

Deliverable: Raw count data – pdf format only.

###### Task 5.1.2: Obtain Accident History

The County of Monterey will provide collision data for the study area for a recent 5-year period. The collision data will include the type of incident, extent of resulting injury, date, time of day, and the location.

###### Task 5.1.3: Observations of Corridor Operations

KHA will perform one site visit to the corridor to observe various corridor operations, including public transit service, truck traffic frequency and effects on circulation, and bicycle and pedestrian activity.

###### Task 5.1.4: Review of Available Data

County staff will provide, and KHA will review, previous studies and planned projects within the study corridor. This review will include both CIP projects and private developer projects.

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## EXHIBIT A-1 – SCOPE OF SERVICES/PAYMENT PROVISIONS



Kimley-Horn  
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KHA, with the support of County staff where needed, will coordinate with Monterey-Salinas Transit to obtain transit ridership estimates for the study area.

*Total Cost for Task 5.1: \$7,795*

### Optional Task 5.1.A: Additional Traffic Count Data

Roadway traffic count data indicating vehicle type would be collected at various points along the corridor. This would allow calculation of truck percentages at various locations, providing further calibration of analysis models and understanding of truck flows. Should this information be deemed necessary, seven-day (7) directional vehicle classification counts be collected at each of the four roadway study segments.

*Total Cost of Optional Task 5.1.A: \$1,850*

*Total Cost for Task 5.1, Including Optional Task: \$9,645*

### Task 5.2: Existing Conditions Analysis

Two options are presented for the completion of this task. One option is to use traditional analysis tools including Synchro and HCS. The second option is to develop a micro-simulation model using the VISSIM software package. Option one may provide relatively less sensitivity when evaluating the effects of operational improvements. KHA will perform either Task 5.2A or 5.2B, as to be determined by the County.

#### Task 5.2A: Existing Conditions Analysis Using Synchro/HCS

##### Task 5.2A.1: Intersection Analysis

Using the Synchro software package, the following seven (7) study area intersections will be analyzed under existing AM and PM peak hour traffic conditions:

1. Carmel Valley Rd./Canada Way
2. Carmel Valley Rd./Brookdale Drive
3. Carmel Valley Rd./Valley Greens Drive/Canada De La Segunda
4. Carmel Valley Rd./Tierra Grande Drive
5. Carmel Valley Rd./Dorris Drive
6. Carmel Valley Rd./Robinson Canyon Road (westbound to southbound movement)
7. Carmel Valley Rd./Laureles Grade Road

As the Carmel Valley Rd./Robinson Canyon Rd. intersection only has one conflicting movement, the remainder of movements will need to be analyzed using a merge analysis. The HCS software package will be used to perform a merge analysis for the northbound to westbound movement and the northbound to eastbound movement.

##### Task 5.2A.2: Roadway Segment Analysis

Using the Highway Capacity Manual (HCM) two-lane highway methodology and the HCS software package, roadway segment analysis will be performed on the following four (4) roadway segments:

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**EXHIBIT A-1 – SCOPE OF SERVICES/PAYMENT PROVISIONS**



Kimley-Horn  
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1. Carmel Valley Rd. between Rancho San Carlos Road and Valley Greens Drive
2. Carmel Valley Rd. between Valley Greens Drive and Tierra Grande Drive
3. Carmel Valley Rd. between Tierra Grande Drive and Robinson Canyon Road
4. Carmel Valley Rd. between Robinson Canyon Road and Laureles Grade Road

The analysis methodology and inputs will be agreed to with County staff prior to the start of any analysis. Any subsequent modifications to the methodology or inputs will be considered an additional service.

**Task 5.2A.3: Accident History Analysis**

KHA will summarize the County-provided accident data in a table and figure, depicting frequency of accident severity and location.

**Task 5.2A.4: Existing Conditions Report**

KHA will prepare an existing conditions report, including results of the intersection and roadway segment analysis, and the accident history analysis. KHA will also include a summary of corridor observations completed in Task 5.1.3. Corridor deficiencies will be identified.

**Deliverables:** Draft Existing Conditions Report. Four hard copies and one PDF copy to be provided for County review.

Final Existing Conditions Report. Four hard copies and one PDF copy to be provided for County use.

*Total Cost for Task 5.2A: \$6,400*

**Task 5.2B: Existing Conditions Analysis Using VISSIM**

**Task 5.2B.1: Additional Data Collection**

In order to develop a more comprehensive and representative model of the corridor, intersection turning movement counts (with the same time period and data as identified in Task 5.1.1) will be collected at up to five (5) additional intersections. These additional intersections include:

8. Carmel Valley Rd./Rancho San Carlos Rd.
9. Carmel Valley Rd./Schulte Rd.
10. Carmel Valley Rd./Carmel Valley Manor Rd.
11. Carmel Valley Rd./Berwick Dr.
12. Carmel Valley Rd./Rancho Fiesta Rd.

The locations are noted in Attachment.

In addition, up to four travel time runs in each direction, in each peak hour, will be performed on a typical weekday. The travel time runs will be utilized to calibrate average speeds in the VISSIM model.

**Deliverable:** Raw count data – pdf format only.

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## EXHIBIT A-1 – SCOPE OF SERVICES/PAYMENT PROVISIONS



Kimley-Horn  
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### Task 5.2B.2: Model Development

A VISSIM model will be developed for the study area for each of the a.m. and p.m. peak hours. Only those study intersections identified in Task 5.2A.1, and the additional intersections identified in Task 5.2B.1 will be included in the model. "Dummy" driveway nodes will be included in the model to balance vehicle volumes between study intersections. Bicycle and pedestrian volumes will be incorporated into the model at the study intersections. Truck traffic percentages will be incorporated into the model as well, based on visual observations, or Task 5.1.A if authorized. Existing transit service will be integrated, if appropriate.

The VISSIM model will be calibrated strictly from intersection turning movement volumes collected in Task 5.2A.1 and Task 5.2B.1, the travel time runs performed in Task 5.2B.1 and visual observations of the corridor performed in Task 5.1.3.

At a project meeting, the model will be shown to the County for review and comment. Up to five (5) hours of revisions to the model following this meeting are assumed in this scope.

**Deliverable:** Visual presentation of the draft VISSIM model.

### Task 5.2B.3: Model Analysis

The VISSIM model will be run to obtain existing operations metrics. The model will be run five (5) times for each peak hour, and the metrics will be obtained by averaging the results of the five runs. These metrics include intersection delay and queuing at the study intersections (identified in Task 5.2A.1), travel time through the study area, and average vehicle speed at the four study segments (identified in Task 5.2A.2).

Based on the VISSIM delay outputs and HCM level of service tables, intersection level of service will be calculated for each of the study intersections. If a Class II designation is utilized for Carmel Valley Road, roadway level of service cannot be calculated from VISSIM. However, metrics such as travel speed, delay and travel time will be provided.

### Task 5.2B.4: Accident History Analysis

KHA will summarize the County-provided accident data in a table and figure, depicting frequency of accident severity and location.

### Task 5.2B.5: Existing Conditions Report

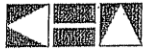
KHA will prepare an existing conditions report, including results of the intersection and roadway segment analysis in VISSIM, and the accident history analysis. KHA will also include a summary of corridor observations completed in Task 5.1.3. Corridor deficiencies will be identified.

**Deliverables:** Draft Existing Conditions Report. Four hard copies and one PDF copy to be provided for County review.

**Final Existing Conditions Report.** Four hard copies and one PDF copy to be provided for County use.

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## EXHIBIT A-1 – SCOPE OF SERVICES/PAYMENT PROVISIONS



Kimley-Horn  
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### Task 5.2B.6: Creation of Corridor Simulation Videos

The VISSIM model prepared in Task 5.2B.2 will be used to create simulation videos of corridor operations. Based on input by County staff, KHA will establish camera views and create one .avi format video of each the a.m. and p.m. peak hours. This will be provided to County staff for use in internal or public meetings.

**Deliverable:** Two .avi videos created from VISSIM. One round of revisions to the videos, including video length and camera angles is assumed.

*Total Cost for Task 5.2B: \$13,380*

### Task 5.3: Development of Improvement Concepts

#### Task 5.3.1: Identification of Potential Improvements

Using the data collected in Task 5.1 and the analysis performed in Task 5.2, KHA will develop a preliminary list of potential corridor improvements. Up to fifteen (15) improvement alternatives will be developed. An improvement alternative is defined as a set of improvements at a single intersection or along a single roadway segment. Multiple improvement alternatives may be developed for each study intersection or roadway segment, with the total of improvement alternatives not to exceed 15.

County staff to provide geo-referenced right-of-way data in GIS or CAD. County to provide topographic data (if available) in GIS or CAD. County to provide high-quality geo-referenced aerial imagery.

**Deliverable:** KHA to provide a matrix listing up to fifteen (15) improvement alternatives for County review. The matrix will include qualitative descriptions of the improvements, and identify anticipated improvement benefits and potential site constraints determined from field observations.

#### Task 5.3.2: Layout of Potential Improvements

Upon County review of the improvement list compiled in Task 5.3.1, KHA will prepare conceptual layouts for up to ten (10) improvement concepts. The conceptual layouts will be prepared in AutoCAD and presented as 11x17-sized graphic exhibits. The layouts will be developed based on right-of-way and topographic (if any available) data provided by the County. They will not be based on any evaluation of underground utilities, and will be conceptual in nature only.

For any proposed roundabout improvements, AutoTurn analysis to examine truck turning paths will be performed for up to two (2) different truck types and one fire response vehicle.

The layouts and AutoTurn exhibits will be provided to the County for review and comment. One round of revisions to the layouts is assumed.

**Deliverable:** KHA to provide up to ten (10) draft conceptual layouts for intersection or roadway improvements. KHA will make one round of revisions and provide up to ten (10) revised conceptual layouts.

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## EXHIBIT A-1 – SCOPE OF SERVICES/PAYMENT PROVISIONS



Kimley-Horn  
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### Task 5.3.3: Opinions of Probable Cost

Upon completion of Task 5.3.2, KHA to prepare Opinions of Probable Construction Cost (OPCC) for up to ten (10) improvement alternatives. The OPCC will be based on unit costs developed in conjunction with County staff. It is assumed that the unit costs will match those recently utilized for the Countywide Traffic Impact Nexus Study, unless alternative unit costs are provided by County staff. The OPCC will include quantities, unit costs, right-of-way acquisition and contingency.

The OPCC will be provided to the County for review and comment. One round of revisions to the OPCC is assumed.

*Total Cost for Task 5.3: \$22,220*

### Task 5.4: Analysis of Improved Scenario

Upon completion of Task 5.3.1, the up to fifteen (15) proposed improvements will be analyzed to determine their effect on the existing roadway environment. It is assumed that Task 5.4 may proceed simultaneous with, or prior to, Task 5.3.2 in order to assist with identification of the preferred concepts to be further considered.

Similar to Task 5.2, Task 5.4 can be completed using two different analysis approaches, presented as Tasks 5.4A and 5.4B. This scope assumes the same methodology will be selected for both the analysis of existing conditions and the analysis of the improved scenario (i.e. Task 5.4A would only follow Task 5.2A and Task 5.4B would only follow Task 5.2B).

#### Task 5.4A: Analysis of Improved Scenario Using Synchro/HCS/SIDRA

##### Task 5.4A.1: Intersection Analysis

Using the Synchro software package, the seven (7) study area intersections identified in Task 5.2A.1 will be analyzed under existing plus improvements traffic conditions for the AM and PM peak hours. Merge movements noted in Task 5.2A.1, if maintained in the improved scenario, will be analyzed using the HCS software package. Any intersection improvements that include roundabouts will be analyzed using the SIDRA software package. Each improvement alternative will be analyzed in isolation.

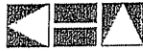
##### Task 5.4A.2: Roadway Segment Analysis

Where an improvement alternative would modify the findings of the roadway segment analysis (such as roadway widening, mid-segment two-way left-turn lane modifications, or volume changes), the existing improved roadway segment level of service will be calculated using the HCM two-lane highway methodology and the HCS software package.

*Total Cost for Task 5.4A: \$6,000*

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## EXHIBIT A-1 – SCOPE OF SERVICES/PAYMENT PROVISIONS



Kimley-Horn  
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### Task 5.4B: Analysis of Improved Scenario Using VISSIM

Up to two improved VISSIM models will be prepared incorporating various combinations of improvements. County staff will indicate what combinations of improvements should be analyzed in each model.

#### Task 5.4B.1: Model Development

The proposed improvements, identified in Task 5.3.1, will be incorporated into the VISSIM model. This includes any potential roundabout improvements.

At a project meeting, the improved model will be shown to the County for review and comment. Up to five (5) hours of revisions to the model following this meeting are assumed in this scope.

**Deliverable:** Visual presentation of the draft VISSIM model.

#### Task 5.4B.2: Model Analysis

The VISSIM model will be run to obtain improvement scenario operations metrics. The model will be run five (5) times for each peak hour, and the metrics will be obtained by averaging the results of the five runs. These metrics include intersection delay and queuing at the study intersections (identified in Task 5.2A.1), travel time through the study area, and average vehicle speed at the four study segments (identified in Task 5.2A.2).

Based on the VISSIM delay outputs and HCM level of service tables, intersection level of service will be calculated for each of the study intersections. Depending on the methodology, as noted in Task 5.2B.3, roadway segment level of service will be calculated.

#### Task 5.4A.3: Creation of Corridor Simulation Videos

The VISSIM model prepared in Task 5.4B.1 will be used to create simulation videos of corridor operations. The same camera views as established in Task 5.2B.6 will be used to create one .avi format video of each the a.m. and p.m. peak hours. This will be provided to County staff for use in internal or public meetings.

**Deliverable:** Two .avi videos created from VISSIM.

*Total Cost for Task 5.4B: \$7,540*

### Task 5.5: Final Report

#### Task 5.5.1: Final Corridor Study Report

KHA will prepare final corridor study report. The report will include the existing conditions analysis, the proposed improvement measures, and projected roadway conditions with implementation of the proposed improvement measures. It will also include conceptual layouts, as 11x17 graphics, and OPCC.

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**EXHIBIT A-1 – SCOPE OF SERVICES/PAYMENT PROVISIONS**



Kimley-Horn  
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Justifications for the proposed improvement measures, including on multi-modal corridor operations, will be included.

**Deliverables:** Draft Corridor Study Report. Four hard copies and one PDF copy to be provided for County review.

Final Corridor Study Report. Four hard copies and one PDF copy to be provided for County use.

*Total Cost for Task 5.5: \$6,285*

Task 5.6: Meetings

Up to five (5) internal project meetings are assumed as part of this scope. Additional meetings, or meetings with stakeholders or committees, are not included in this task.

*Total Cost for Task 5.6: \$6,650*

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## EXHIBIT A-1 – SCOPE OF SERVICES/PAYMENT PROVISIONS



Kimley-Horn  
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### ***Additional Optional Tasks:***

Estimates for the following tasks were requested by County staff. These elements, if selected, will serve to enhance the corridor study, or to update the CVTIP to ensure consistency.

#### Task 5.A: Year 2030 Analysis – using Synchro/HCS/SIDRA

##### Task 5.A.1: Obtain Year 2030 Volumes

Using the travel demand forecast models previously developed as part of Countywide Fee Program Nexus Study project and the Carmel Valley Master Plan Traffic Improvement Program model developed in 2007, Year 2030 forecast volumes will be prepared for each study intersection and study roadway segment (as identified in Tasks 5.2A.1 and 5.2A.2). The methodology will be identical to that used to develop forecast year 2030 Carmel Valley Transportation Improvement Program (CVTIP) volumes as part of Task 3: CVTIP Traffic Analysis and Fee Calculation. Note that should Task 5.D be authorized prior to start of work on Task 5.A, the resulting model run would replace the Countywide Fee Program Nexus Study model as a source model for this task.

##### Task 5.A.2: Perform Year 2030 Baseline Analysis

Using the same process identified in Tasks 5.2A.1 and 5.2A.2, intersection and roadway analyses will be performed for a 2030 horizon year without improvements, based on volumes obtained in Task 5.A.1.

##### Task 5.A.3: Perform Year 2030 with Improvement Analysis

Using the same process identified in Tasks 5.4A.1 and 5.4A.2, intersection and roadway analyses will be performed for a 2030 horizon year with improvements, based on volumes obtained in Task 5.A.1.

##### Task 5.A.4: Incorporate into Final Corridor Report

The 2030 analysis performed under this task will be incorporated into the draft and final Corridor Study Report.

*Total Cost for Task 5.A: \$6,280*

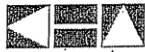
#### Task 5.B: Year 2030 Analysis – using VISSIM

##### Task 5.B.1: Obtain Year 2030 Volumes

Using the travel demand forecast models previously developed as part of Countywide Fee Program Nexus Study project and the Carmel Valley Master Plan Traffic Improvement Program model developed in 2007, Year 2030 forecast volumes will be prepared for each study intersection and study roadway segment (as identified in Tasks 5.2A.1 and 5.2A.2), as well as the additional intersections identified in Task 5.2B.1. The methodology will be identical to that used to develop forecast year 2030 Carmel Valley Transportation Improvement Program (CVTIP) volumes as part of Task 3: CVTIP Traffic Analysis and Fee Calculation.

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## EXHIBIT A-1 – SCOPE OF SERVICES/PAYMENT PROVISIONS



Kimley-Horn  
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Note that should Task 5.D be authorized prior to start of work on Task 5.B, the resulting model run would replace the Countywide Fee Program Nexus Study model as a source model for this task.

### Task 5.B.2: Perform Year 2030 Baseline Analysis

The VISSIM model prepared in Task 5.2B.2 will be modified to incorporate Year 2030 projected traffic volumes. Performance metrics, as identified in Task 5.2B.3, will be obtained from the model.

### Task 5.B.3: Perform Year 2030 with Improvement Analysis

The VISSIM model prepared in Task 5.4B.1 will be modified to incorporate Year 2030 background traffic volumes determined in Task 5.B.1. Performance metrics, as identified in Task 5.4B.2, will be obtained from the model.

### Task 5.B.4: Provide VISSIM Videos

Videos from the VISSIM model will be prepared and provided for County review and use of Year 2030 background and with improvements conditions.

Deliverable: Up to four .avi videos created from VISSIM.

### Task 5.B.5: Incorporate into Final Corridor Report

The 2030 analysis performed under this task will be incorporated into the draft and final Corridor Study Report.

*Total Cost for Task 5.B: \$9,260*

## Task 5.C: Update CVTIP Roadway Segment Analysis based on new Methodology or Volumes

### Task 5.C.1: Update CVTIP Existing Conditions Roadway Segment Analysis

The CVTIP analysis performed by KHA as part of the CVTIP study authorized in December 2011 will be updated to incorporate 2012 Carmel Valley Road counts performed by the County. This task does not assume KHA will be responsible for any traffic data collection – all information to be provided by County. The existing conditions analysis may also reflect a different analysis methodology than that utilized in the performance of the prior CVTIP scope. The methodology will be agreed to with County staff prior to the initiation of this task. This scope assumes that only one methodology will be utilized for analysis.

### Task 5.C.2: Update CVTIP Horizon Year 2030 Conditions Roadway Segment Analysis

The CVTIP analysis performed by KHA as part of the CVTIP study authorized in December 2011 will be updated to reflect one of, or both of the following conditions:

- Revised analysis methodology
- Modified land use forecast or otherwise modified forecast year volumes

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## EXHIBIT A-1 – SCOPE OF SERVICES/PAYMENT PROVISIONS



Kimley-Horn  
and Associates, Inc.

The methodology utilized in Task 5.C.1 will be also utilized for this task.

*Total Cost for Task 5.C: \$3,200*

### Task 5.D: Modifications to Travel Demand Forecast Model

#### Task 5.D.1: Understand Land Use Modifications

Meet with County staff to understand any changes to land use required to be incorporated into the travel demand forecast model. It is assumed that the Monterey County General Plan model (as modified by the Countywide Fee Program Nexus Study) will be the base model used for this project. KHA will update the land use inputs in the model and provide resulting land use tables by TAZ for confirmation by County staff.

**Deliverable:** Land use tables by TAZ for updated model.

#### Task 5.D.2: Run Updated Travel Demand Forecast Model

KHA will run the updated model to obtain trip generation, trip assignments, and resulting roadway volumes. KHA will use the model outputs to prepare revised Year 2030 forecast volumes for CVTIP study intersections and roadway segments. The forecast volumes will be calibrated based on Year 2012 roadway segment count data to be provided by the County.

*Total Cost for Task 5.D: \$8,910*

### Task 5.E: Additional Meetings or Presentations of Carmel Valley Road Corridor Study

Meetings to discuss or present the Carmel Valley Road Corridor Study, exclusive of those identified in Task 5.6, will be performed on a time and materials basis, according to the hourly rates identified in Hours and Cost Breakdown by Task. The cost to attend these meetings cannot be estimated at this time, although it is proposed that up to \$10,000 be allocated for this task. This task will not be utilized unless specifically authorized by County staff. KHA will inform County staff if the proposed budget for this task is nearing depletion.

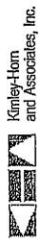
*Total Cost for Task 5.E: \$10,000*

*Total Cost for All Tasks, with Task 5.2A, Task 5.4A, and Task 5.A Selected (Synchro/HCS/SIDRA track): \$85,590*

*Total Cost for All Tasks, with Task 5.2B, Task 5.4B, and Task 5.B Selected (VISSIM track): \$97,090*

11/14/2012

EXHIBIT A-1 - SCOPE OF SERVICES/PAYMENT PROVISIONS



Monterey County TIF/CVTIP/AWCP Additional Effort - Hours and Cost Breakdown by Task

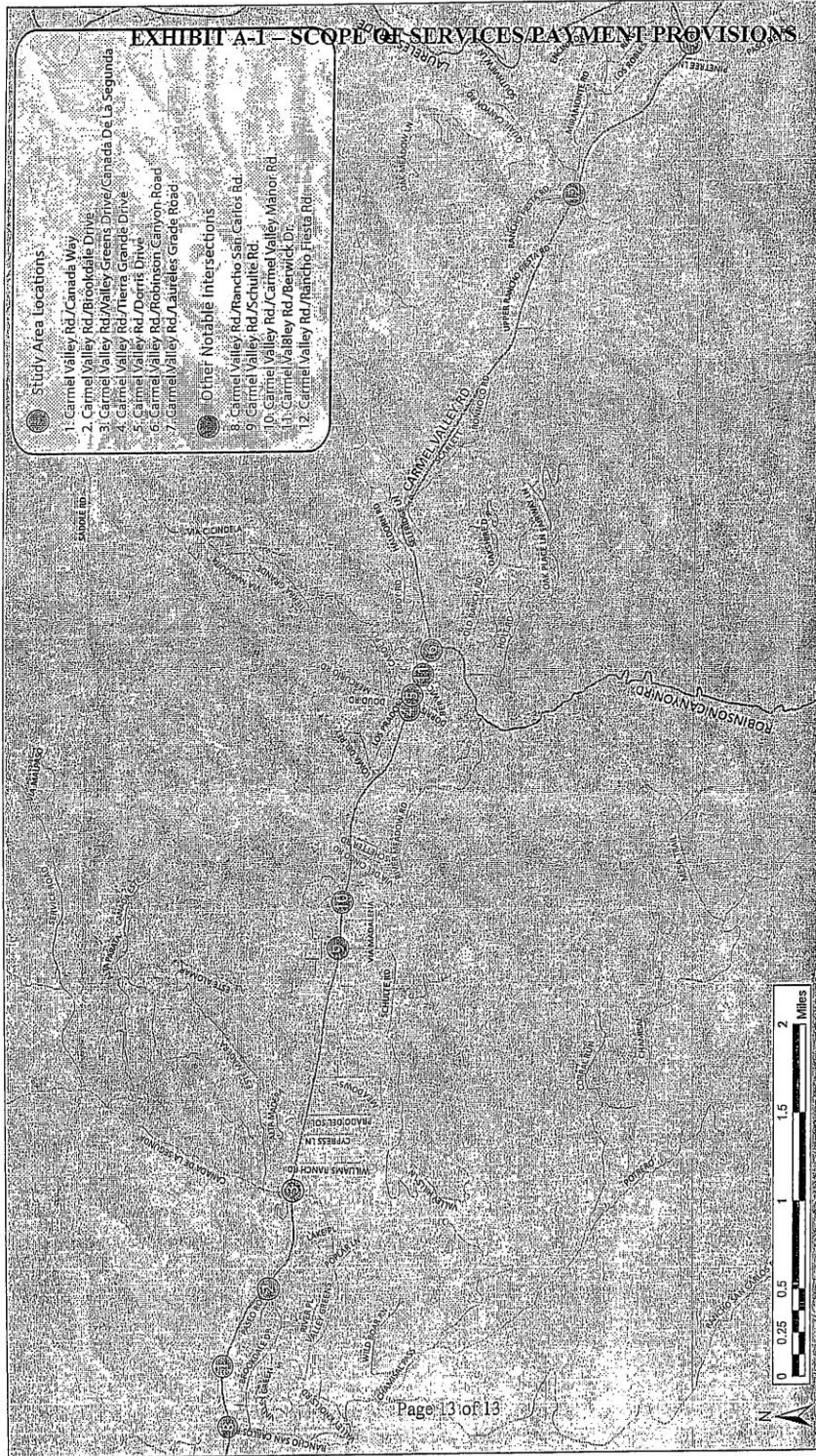
Classification	Role	P8 Principal \$240.00	P6 Engineer \$180.00	P5 Project Manager/ Engineer \$150.00	D8 Designer \$140.00	P4 Analyst/ Modelling	P3 Analyst \$110.00	P2 Analyst \$100.00	Accounting \$100.00	Admin/ Support \$65.00	Total Hours	Labor Cost	Expenses	Total Cost
5.1 Data Collection				12		12		5	3		32	\$4,040	\$3,255	\$7,295
5.1A Optional - Additional Traffic Count Data				2		2					4	\$540	\$1,310	\$1,850
5.2 Analysis of Existing Conditions - Synchro/HCS				10								\$6,100	\$300	\$6,400
5.2A Analysis of Existing Conditions - Synchro/HCS				10								\$6,100	\$300	\$6,400
5.2B Analysis of Existing Conditions - VISSIM				10								\$6,100	\$300	\$6,400
5.3 Development of Improvement Concepts		8	25	20	50	10	30		2		145	\$21,120	\$1,100	\$22,220
5.3A Analysis of Improved Scenario - Synchro/HCS				10							32	\$5,700	\$300	\$6,000
5.3B Analysis of Improved Scenario - VISSIM				10							32	\$5,700	\$300	\$6,000
5.4 Analysis of Improved Scenario - Synchro/HCS				10							32	\$5,700	\$300	\$6,000
5.4A Analysis of Improved Scenario - Synchro/HCS				10							32	\$5,700	\$300	\$6,000
5.4B Analysis of Improved Scenario - VISSIM				10							32	\$5,700	\$300	\$6,000
5.5 Final Report		4		10		20		6	2	5	47	\$5,985	\$300	\$6,285
5.5A Final Report		4		10		20		6	2	5	47	\$5,985	\$300	\$6,285
5.5B Meetings				15		10					25	\$3,525	\$1,000	\$4,525
5.5C Meetings				15		10					25	\$3,525	\$1,000	\$4,525
5.5D Meetings				15		10					25	\$3,525	\$1,000	\$4,525
5.5E Meetings				15		10					25	\$3,525	\$1,000	\$4,525
5.5F Meetings				15		10					25	\$3,525	\$1,000	\$4,525
5.5G Meetings				15		10					25	\$3,525	\$1,000	\$4,525
5.5H Meetings				15		10					25	\$3,525	\$1,000	\$4,525
5.5I Meetings				15		10					25	\$3,525	\$1,000	\$4,525
5.5J Meetings				15		10					25	\$3,525	\$1,000	\$4,525
5.5K Meetings				15		10					25	\$3,525	\$1,000	\$4,525
5.5L Meetings				15		10					25	\$3,525	\$1,000	\$4,525
5.5M Meetings				15		10					25	\$3,525	\$1,000	\$4,525
5.5N Meetings				15		10					25	\$3,525	\$1,000	\$4,525
5.5O Meetings				15		10					25	\$3,525	\$1,000	\$4,525
5.5P Meetings				15		10					25	\$3,525	\$1,000	\$4,525
5.5Q Meetings				15		10					25	\$3,525	\$1,000	\$4,525
5.5R Meetings				15		10					25	\$3,525	\$1,000	\$4,525
5.5S Meetings				15		10					25	\$3,525	\$1,000	\$4,525
5.5T Meetings				15		10					25	\$3,525	\$1,000	\$4,525
5.5U Meetings				15		10					25	\$3,525	\$1,000	\$4,525
5.5V Meetings				15		10					25	\$3,525	\$1,000	\$4,525
5.5W Meetings				15		10					25	\$3,525	\$1,000	\$4,525
5.5X Meetings				15		10					25	\$3,525	\$1,000	\$4,525
5.5Y Meetings				15		10					25	\$3,525	\$1,000	\$4,525
5.5Z Meetings				15		10					25	\$3,525	\$1,000	\$4,525
5.C Update CVTIP Analysis Methodology				4		20					24	\$3,000	\$200	\$3,200
5.E Additional Meetings		16		28		5					49	\$8,640	\$1,360	\$10,000
Total - Synchro/HCS/SIDRA Track		44	34	146	50	183	30	27	13	5	532	\$75,165	\$10,425	\$85,590
Total - VISSIM Track		44	34	154	50	243	30	35	13	5	608	\$84,365	\$12,725	\$97,090

Optional services described in Exhibit A-1 - Scope of Services/Payment Provisions of the Agreement shall not be provided unless authorized in writing by the County's Project Manager prior to optional services being provided.

In addition, prior to performing services where there is an option of either using traditional analysis tools including Synchro and HCS or utilizing the development of a micro-simulation model using the VISSIM software package, Kimley-Horn and Associates, Inc. will seek written approval by the County's Project Manager to determine which of the options are appropriate.

11/14/2012

*WJD* 11-17-2012  
(Contractor's Initials) (Date)



**Carmel Valley Road Corridor Study  
Study Locations**

**Attachment**

