FORM APPROVED COUNTY COUNSEL
BY: MARSHA L. VICTOR DATE 12/23/09

SUBMITTAL TO THE BOARD OF SUPERVISORS
COUNTY OF RIVERSIDE, STATE OF CALIFORNIA

529 A

FROM: TLMA - Transportation Department

SUBMITTAL DATE: December 3, 2009

SUBJECT: Amendment No. 2 to the Engineering Services Agreement with Kimley Horn and Associates for the Van Buren Boulevard / Interstate 215 Interchange Project

RECOMMENDED MOTION: That the Board of Supervisors:

1. Approve Amendment No. 2 to the Engineering Services Agreement between the County of Riverside and Kimley-Horn and Associates, Inc., and;

2. Authorize the Chairman to execute the same.

BACKGROUND: On July 1, 2008, the Board of Supervisors approved an agreement with Kimley-Horn and Associates, Inc. to prepare 30% design plans and studies for improvements to the Van Buren Boulevard/I-215 Interchange Project. On July 21, 2009, the Board of

Juan C. Perez
Director of Transportation

BEC
(Continued on next page)

FINANCIAL DATA				
	Current F.Y. Total Cost:	$ 1,403,289	In Current Year Budget:	Yes
	Current F.Y. Net County Cost:	$ 0	Budget Adjustment:	No
	Annual Net County Cost:	$ 0	For Fiscal Year:	2009/2010

SOURCE OF FUNDS: RCTC - Measure A (100%)

Positions To Be Deleted Per A-30	☐
Requires 4/5 Vote	☐

C.E.O. RECOMMENDATION:

APPROVE
BY: Tina Grande

County Executive Office Signature

Departmental Concurrence

☒ Policy ☒ Policy
☐ Consent ☐ Consent
Dep't Recomm.: Per Exec. Ofc.:

Prev. Agn. Ref. 07/01/08 (3.97)
07/21/09 (3.84)

District: 1 & 5

Agenda Number: 3.32

Form 11 (Rev 07/2007)

ATTACHMENTS FILED
WITH THE CLERK OF THE BOARD

Supervisors approved Amendment No. 1 to the original agreement with Kimley-Horn and Associates, Inc. to prepare 65% design plans and studies for improvements to the Van Buren Boulevard/I-215 Interchange Project. Amendment No. 2 is now required in order to complete the remaining tasks to get the project ready for construction.

The Van Buren/I-215 Interchange Expansion Project will upgrade the interchange for one of the County's major arterials in order to improve current operations, provide for future traffic growth, and allow for the expansion of the Meridian Business Park and other uses at the March JPA, which is expected to be one of the primary job centers in the County.

On July 1, 2008 the Board approved the Project Baseline Agreement with the California Transportation Commission (CTC) for the Van Buren/I-215 Interchange Expansion Project. This Project Baseline agreement provided eligibility for $10 million in Transportation Corridor Improvement Funds (TCIF) from the State's Prop 1B Bonds Goods Movement Program. As part of this agreement, the CTC and its Project Delivery Council monitors the progress of the Van Buren/I-215 Interchange Expansion Project. The total cost of this improvement project is now estimated to be in the $60 - $70 million range given the current bid market.

The significant improvements to the Van Buren/I-215 Interchange will consist of replacing, realigning, and widening the existing bridges from two to five lanes over I-215 and from four to seven lanes over the BNSF railroad line. All of the on/off ramps will be reconstructed and widened with one additional lane. The southbound on/off ramps and northbound off ramp will be widened from two to three lanes. The northbound on ramp will be widened from one to two lanes. In addition, a three lane northbound loop on ramp will be added with the project. Two signals are proposed, one at the southbound on/off ramps and the other at the northbound on/off ramps. The project will introduce auxiliary lanes from Van Buren to Cactus Boulevard in both the north and southbound directions, and will realign the southbound I-215 lanes to accommodate the proposed on/off ramps by widening the freeway to the outside.

The RCTC-Measure A funding is sufficient to fund the associated costs for the engineering consultant and staff costs to complete the 100% plans and to provide engineering support during the bidding and construction phases of the project. March JPA and the Transportation Department are actively seeking additional funding through regional programs and other means to secure complete construction funding.

Project No. B40527

AMENDMENT 2

AMENDMENT TO AGREEMENT BETWEEN

THE COUNTY OF RIVERSIDE AND KIMLEY-HORN AND ASSOCIATES, INC. FOR ENGINEERING SERVICES ON THE VAN BUREN BOULEVARD / INTERSTATE 215 INTERCHANGE PROJECT

THIS AMENDMENT 2 (hereinafter the "Amendment") to an agreement is made and entered into as of this _____ day of _____, 2009, by and between the County of Riverside, a political subdivision of the State of California (hereinafter the "COUNTY"), and Kimley-Horn and Associates, Inc. (hereinafter "ENGINEER").

RECITALS

A. COUNTY and ENGINEER have entered in an agreement entitled " Engineering Services Agreement for the Van Buren Boulevard / Interstate 215 Interchange between the County of Riverside • Transportation Department and Kimley-Horn and Associates, Inc.," that is dated July 1, 2008 (hereinafter the "Agreement"). The Agreement provides the terms and conditions, scope of work, schedule and budget for the performance of professional and technical services necessary to prepare project reports, plans, specifications and estimates.

B. The parties desire to supplement the current Agreement to modify the scope of services to be provided by the ENGINEER and increase the contract budget.

AGREEMENT

NOW, THEREFORE, in consideration of the mutual covenants hereinafter contained, the parties agree as follows:

1. The current contract budget of $3,018,623.00 (including budgets for Amendment Nos. 1) shall be increased by $1,403,289.08 to $4,421,918.08 as provided below:

   Increase the Phase II budget by the amount of $1,189,171.93, increase Phase III budget by the amount of $69,552.42, and increase the Phase IV budget by the amount of $144,564.73 for engineering services necessary to complete from 65% to 100% design. Detailed descriptions of the extra work and summaries of the requested and recommended budget adjustments are provided in Attachment "1" of this Amendment.

2. Except to the extent specifically modified or amended hereunder, all of the terms, covenants and conditions of the Agreement as approved on dated July 1, 2008 shall remain in full force and effect between the parties hereto.

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

ARTICLE VIII • APPROVALS

COUNTY Approvals

RECOMMENDED FOR APPROVAL:

_____ Dated: 12/15/09

JUAN C. PEREZ

Director of Transportation

APPROVED AS TO FORM:

_____ Dated: 12/23/09

Marsha L. Victor, Deputy

PAMELA J. WALLS

County Counsel

APPROVAL BY THE BOARD OF SUPERVISORS

_____ Dated: _____

_____

PRINTED NAME

Chairman, Riverside County Board of Supervisors

ATTEST:

_____ Dated: _____

KECIA HARPER-IHEM

Clerk to the Board

ENGINEER Approvals

ENGINEER:

_____ Dated: 10/12/09

Dennis Landaal, PE

PRINTED NAME

Vice President

TITLE

ENGINEER:

_____ Dated: 10/12/09

Jason Valencia

PRINTED NAME

Assistant Secretary

TITLE

ATTACHMENT 1

CONTRACT 100% PS&E

ARTICLE AII • PROJECT ADMINISTRATION

A. PROJECT MANAGEMENT

This task includes the day-to-day management of the PROJECT. Project Development Team (PDT) meetings with the COUNTY PROJECT MANAGER, the California Department of Transportation (CALTRANS) staff and other representatives from affected agencies will be held once a month. The subconsultants will attend PDT meetings as appropriate. The ENGINEER shall coordinate PDT meetings, prepare meeting notes for each meeting and have these available for review at least one week prior to each succeeding meeting. Action items are to be tracked and reviewed at PDT meetings.

The ENGINEER's Project Management Plan will include a communication and risk plan. The communication plan will consist of a roster of staff involved in the PROJECT and multiple forms of contact for each team member (address, telephone number, e-mail, etc.). The communication plan will also identify lines of communication with levels of responsibility/authority for development of the PROJECT.

A risk management plan is to be developed and maintained in order to address the major project risks to scope, cost and schedule.

Assumptions:

- Effort and deliverables associated with the PDT meetings will be part of Article AIII Task B Project Development Team Meeting of this Agreement.
- First draft of the Communication Plan and Risk Management Plan will be delivered within 30 days of NTP and updated monthly, if required. The Communication and Risk Management Plan will be distributed at the PDT meetings.
- Affected agencies include: March Air Reserve Base (ARB), March JPA, RCTC, Railroad, COUNTY and CALTRANS.

B. BUDGETING

The ENGINEER will prepare budgets for each task and milestone for the PROJECT. Such budgets will be entered in to the ENGINEER's Management Information System along with actual costs incurred and used as a basis for cost monitoring and control.

Assumptions:

- The ENGINEER will set up and monitor the project on a schedule, task and overall budget basis.

C. COST ACCOUNTING

The ENGINEER will prepare monthly reports of expenditures for the PROJECT by task and milestone. Expenditures include direct labor costs, other direct costs and subconsultant costs. These reports will be prepared per COUNTY's guidelines and will be included as supporting data for invoices presented to the COUNTY every month.

Assumptions:

- Prior to sending out monthly reports, the ENGINEER Project Accounting staff will meet with Riverside COUNTY once to review the COUNTY guidelines. ENGINEER to obtain example of an acceptable invoice format from the COUNTY website. ENGINEER to follow COUNTY accounting processes documented on COUNTY website.

D. SCHEDULING

Within one month from the Notice to Proceed (NTP), the ENGINEER will provide a detailed project schedule, which indicates milestones, major activities and deliverables, to the COUNTY for review and comments. This schedule will reflect assumed review times necessary by all of the agencies involved. Review of the schedule will occur at subsequent trend meetings. Adjustments will be made, if necessary, due to changing circumstances.

Assumptions:

- The schedule will be prepared using Primavera Project Planner/Suretrak and/or Microsoft Project.
- The schedule will be updated monthly as necessary.

E. PROGRESS REPORTING

Progress reports shall be prepared in accordance with COUNTY guidelines. Reports will be required monthly and shall be accompanied by an invoice.

Assumptions:

- ENGINEER to obtain example of an acceptable Progress Report from the COUNTY website. ENGINEER to follow COUNTY accounting processes documented on COUNTY website.

F. CONTRACT ADMINISTRATION

The ENGINEERING PROJECT MANAGER shall maintain ongoing liaison with the COUNTY PROJECT MANAGER, CALTRANS Project Manager, AGENCY contacts and utility companies to promote effective coordination during the course of project development. Progress meetings with ENGINEER's staff, subconsultants and the COUNTY PROJECT MANAGER shall be held regularly. Engineer is to provide project scope, schedule, budget, photos, and various project details to the COUNTY web master for posting on the COUNTY website.

Assumptions:

- Phone calls and unscheduled meetings are to be part of project management activities.
- Meetings will be held with each of the following utility companies: Southern California Gas for the HP gas line, Southern California Edison for the OH electrical and Western Municipal Water, and any other utility company, as required.
- PS&E close out will be part of this task. Activities associated with the close out include verification that all contract requirements have been completed, identify lesson learned (memorandum), update and archive project hardcopy and electronic files and close the project.

ARTICLE AIV • STRUCTURES

G. INTERMEDIATE STRUCTURE PS&E (90% CHECKED PLANS)

The (90%) structure PS&E will be compiled and submitted for review to the COUNTY and CALTRANS DOS.

H. DRAFT FINAL STRUCTURE PS&E (95%)

The draft (95%) structure PS&E shall be compiled and submitted for review to the COUNTY and CALTRANS DOS. This will include for each bridge:

One set of *reproducible* and seven sets of "blueline" plans, two copies of design calculations and design check calculations, three sets of quantity calculations and Marginal Estimates and three sets of edited Structure Special Provisions. (One copy of each will be returned with comments). The package will be accompanied by a Structures PS&E checklist.

I. FINAL STRUCTURE PS&E

The final structure PS&E will incorporate review comments from the COUNTY, CALTRANS DOS and other affected agencies. The ENGINEER will provide all necessary documents in a bid-ready form. It is assumed that the COUNTY will advertise, award and administer the construction contract for this PROJECT.

The ENGINEER shall deliver the following documents to COUNTY and CALTRANS:

- 1 set of original tracings of final design plans
- 1 set of vellums of final design plans
- 1 set of "blue-lines" of final design plans
- 1 set of final Structure Special Provisions
- 1 copy of final quantity calculations and estimate
- 1 copy of final design calculations
- 1 copy of design check calculations (upon request)
- 1 vellum and 2 "blue-lines" of bridge full-scale plans in accordance with Memo to Designers 2-2.
- 2 Resident Engineer's Files (structures information)
- 2 copies of Environmental Constraint Areas (if required by Environmental Document)

ARTICLE AV • ROADWAY

The title sheet for specifications and reports, and each sheet of plans, shall bear the professional seal, certificate number, registration classification, expiration date of the certificate and signature of the Professional Engineer responsible for their preparation. All roadway plans shall also use single sheet files.

The following is a summary listing of drawing types that shall be prepared as part of the roadway PS&E:

A. BASIC ROADWAY PLANS

- Title Sheet
- Typical Cross Sections
- Key Map and Line Index
- Layouts
- Profile and Superelevation Diagrams
- Construction and Intersection Details
- Erosion Control Plan
- Erosion Control Details and Quantities

Assumptions:

❖ The roadway design plans shall be based upon the Draft Project Report – Alternative 2E

B. CALCULATIONS

The following calculations will be provided:

- Grid Grades
- Slope Staking Notes
- Earthwork Quantities
- Other Quantities

Assumptions:

- ❖ Cross sections and slope stake notes will be every 50 feet and will include key stations in between. The cross-sections and slope stake notes will be prepared per CALTRANS standards.

C. DRAINAGE PLANS

ENGINEER shall perform hydrology and hydraulic studies to obtain and provide design solutions, which will remove surface runoff from the area of the improvements and provide the appropriate water quality mitigation facilities. Cross culverts that convey runoff flows across the freeway and through the interchange will be extended to the extent necessary required by the proposed improvements. Studies and designs shall be performed in accordance with Chapter 800 of the current Highway Design Manual, District 8 Project Development Policy Memos and the current CALTRANS Standard Plans.

The following list of drawing types shall include:

- Drainage Layouts
- Drainage Profiles
- Drainage Details
- Drainage Quantities

o *Assumptions:*

❖ The following drainage facilities are assumed:

- o Extending or replacing existing 15 culvert locations (size varies from 24" to 36"; length varies from 15 feet to 70 feet)
- o Adding an additional 5 culverts at:
  - Approximate station 1821+74 – 18 inch at 100 feet long
  - Approximate station 1817+75 – 18 inch at 50 feet long
  - Approximate station 1801 to 1803 – 4 foot by 2 foot RCB at 170 feet long
  - Approximate station 1802+75 – 24 inch at 580 feet long
  - Approximate station 1794+50 – 36 inch at 200 feet

- Pavement Delineation
- Roadside Sign Plan
- Highway Lighting and Sign Illumination
- Signal and Lighting
- Temporary Signals and Lighting
- Ramp Metering System
- Power supply for electrical systems are to be designed and coordinated by the ENGINEER

Assumptions:

- ❖ Detour Plans- Two types of detour plans are required for this project. One type that provides detours for the traffic shift on the northbound ramp in the northeast corner of the interchange. This detour is required to shift traffic due to a gap between existing and proposed as a temporary detour. The second type of detour is an area wide detour map that provides detours to other interchanges during construction. Detour Plans include I-215 mainline shift construction staging, traffic handling, and detours.
- ❖ Sign Plans- An inventory of existing signs will be performed and included in the sign plans along with the proposed new signs. Additionally, it is assumed two overhead sign structures will be required. This task assumes the following sheets:
  - o Sign Plan Sheets
  - o Overhead Sign Details Sheets
  - o Appropriate structural sheets for the sign structures
- ❖ Signal - There are two traffic signals proposed for the interchange.
- ❖ Staged Construction Plans – Stage construction plans are assumed to be consistent with the concept developed during the Project Report phase of the project: there will be six primary stages of construction.
- ❖ Traffic Handling- Traffic Handling sheets will be prepared for each stage of construction.
- ❖ Pavement delineation- Final pavement delineation sheets will be prepared for each layout sheet.

- ❖ Highway Lighting and Sign Illumination- It is assumed that highway lighting will be provided throughout the limits of the project.
- ❖ Ramp Metering System- The project has two ramp meters proposed for the entrance ramps to the freeway.
- ❖ Video Detection System – Signal design to incorporate video detection elements as require.
- ❖ Bicycle Detection System – Latest design standards for bicycle detection and operation are to be incorporated
- ❖ Quantities Plan Sheets - The following sheets will also be prepared for the following sets of plans:
    - o Construction Area Sign Quantities
    - o Detour Quantities
    - o Sign Plan Quantities
    - o Traffic Handling Quantities
    - o Pavement Delineation Quantities
- ❖ Communication Layout Plans and Communication Details- Although not requested in the detail list of plan sheets, CALTRANS will require communications between the ramp meters and traffic signals back to the traffic management center. Current communication system is through wireless network. Plans will reflect connections to existing network.
- ❖ Irrigation Controller Electrical- It is assumed that two separate plan sheets will be required for the electrical service conduit to the irrigation controllers.

E. MISCELLANEOUS PLANS

ENGINEER shall also be responsible to prepare PS&E for the Airbase thematic streetscape/landscape and aesthetic treatments for the structures. The details of the conceptual design are provided in the Draft Project Report.

- Utility Plan

- Summary of Quantities
- Retaining Wall Plan and Elevation
- Retaining Wall Details and Quantities
- Streetscaping/Landscaping/Irrigation

Assumptions:

- ❖ Utility plan sheets identifying existing, abandoned, relocated, etc utilities will be prepared.
- ❖ All of the proposed retaining walls will be CALTRANS standard walls – Type 1. Each sheet will have a layout, elevation showing footing and top of wall elevations and typical section. The following are the walls that will be included in the PS&E:
  - Van Buren/northbound ramps – retaining wall along the east side of Van Buren. Approximately 350 feet long.
  - Southbound entrance ramp – retaining wall along the west side – approximately 550 feet long. Retaining wall along the east side – approximately 150 feet long.
  - Southbound exit ramp – retaining wall along the west side – approximately 250 feet long. Retaining wall along the east side 600 feet long.
  - Northbound Entrance Ramp (diamond) – retaining wall along the east side – approximately 400 feet long.
  - Van Buren west of the interchange – retaining wall along the south side – approximately 450 feet long. Retaining wall along the north side – approximately 450 feet long.
- ❖ ENGINEER will prepare construction documents (in English units) and cost projections for the highway planting and irrigation system identified for the project. The construction documents will follow CALTRANS Highway Planting Policy and will include plans for 3 years of plant establishment. The planting plan will be based on the approved Project Report planting plan.
- ❖ Aesthetics Coordination. ENGINEER to incorporate the aesthetics specified in the PA/ED phase into the construction documents for the project walls, structures and other

features. Color, texture, finish, etc consistent with the approved landscape concept plan and environmental documents prepared previously.

F. INTERMEDIATE REVIEWS

Roadway, drainage, traffic and miscellaneous plans shall be submitted for review to the COUNTY/CALTRANS and other affected agencies/stakeholders at the 95% and 100% complete stage. The ENGINEER will submit up to 40 sets of plans reduced to 11" x 17" size and up to 5 full size sets of all plans as required. Roadway cross sections, grid grades and slope staking notes will be submitted only at the 100% complete submittal stage. Also, the ENGINEER should submit electronic samples of all plan sheet groups on a compact disc to CALTRANS at intermediate reviews.

G. SPECIFICATIONS AND ESTIMATE

Specifications and Special Provisions will be prepared for items not covered by the CALTRANS Standard Specifications or Standard Special Provisions.

The Roadway Construction Cost Estimate will be prepared using the latest available CALTRANS cost data, COUNTY cost data and readily available actual recent construction costs in the PROJECT area. Cost estimates are to be provided with the appropriate submittals and updated on a quarterly basis.

Assumptions:

- It is assumed that the construction contract will be administered by the COUNTY. As such, the front end "boilerplate" will be per COUNTY standards and will be provided by the COUNTY. ENGINEER is to coordinate with the COUNTY contract unit to ensure that the COUNTY contract elements are implemented in the project contract documents.
- Technical specifications will be prepared per CALTRANS' standards and format.
- CALTRANS requires that the latest version of their SSPs be utilized. As such, technical specifications will be updated as necessary, prior to the 95% and 100% submittal.

H. QUALITY CONTROL

The Plans, Specifications and Estimate (PS&E) will be subject to quality control reviews before submittal. These reviews will be in conformance with CALTRANS and COUNTY standards and criteria as well as minimizing typographical omissions.

I. DRAFT PS&E (95% COMPLETE)

The roadway plans, revised to incorporate Quality Control review comments, will be submitted to the COUNTY, CALTRANS and other affected agencies/stakeholders for review and comments. These will include:

- Roadway Plans
- Special Provisions
- Design Calculations
- Roadway Quantities and Cost Estimate

One safety/constructability review meeting will be held at the 95% PS&E stage.

Assumptions:

- ❖ Includes one review process. Focused meetings with specific functional units are to be held to discuss review comments, as required.
- ❖ Comments to 95% submittal to be incorporated to the 100 % submittal.

J. FINAL PS&E (100% COMPLETE)

The final PS&E will incorporate applicable comments from the draft PS&E received from the COUNTY, CALTRANS and other affected agencies/stakeholders. The ENGINEER will provide the necessary final PS&E documents in a bid-ready form. PROJECT files and the Project Engineer's/Resident Engineer's file will also be submitted with the final PS&E. The entire PROJECT, which will be prepared in MicroStation format, will be submitted upon final approval of the PS&E.

Assumptions:

- Focused meetings with specific functional units are to be held to discuss review comments, as required. *(The number of review cycles is related to the quality of the submittal – there should be no reference to number of review cycles especially for the 100%. You will need to go through the oversight process and the OE review as well.)*
- It is assumed that the COUNTY will be the lead agency for Advertising, Awarding, and Administering the contract.

ARTICLE AVI • CONSTRUCTION BIDDING PHASE

Bidding procedures will be the responsibility of the COUNTY. Coordination with CALTRANS District Office Engineer (OE) can be expected and to be included in the scope of services. Although, the project will be administered by the COUNTY, electronic plan submittals meeting CALTRANS electronic bid requirements will be required for CALTRANS records. While the PROJECT is being advertised for bids, all questions concerning the intent shall be referred to COUNTY for resolution. In the event that the items requiring interpretation in the drawings or specifications are discovered during the bidding period, said items shall be analyzed by the ENGINEER for decision by COUNTY as to the proper procedure required. Corrective action taken will either be in the form of a memo prepared by the ENGINEER and issued by COUNTY or by covering change order after the award of the construction contract. ENGINEER to prepare ADDENDA as required.

ENGINEER shall attend pre-bid meeting(s) and will present the project in sufficient detail to the contractors so that they can prepare comprehensive bid packages.

ARTICLE AVII • CONSTRUCTION SUPPORT PHASE

A. ENGINEER shall attend the pre-construction meeting with the successful construction contractor upon notification by the COUNTY.

B. Upon award of the construction contract, ENGINEER will proceed with the Construction Support Phase services required by this contract.

C During construction, the ENGINEER shall furnish necessary additional drawings for correcting and change orders required by errors and omissions of ENGINEER. Such drawings will be requested in writing from the ENGINEER by COUNTY and shall be at no additional cost to the COUNTY. The original tracing(s) of the drawings and contract wording for change orders shall be submitted to the COUNTY for duplication and distribution.

D. ENGINEER shall review shop drawings and RFIs submitted by the construction contractor (falsework review is not included) as requested by the COUNTY as determined necessary by the ENGINEER. ENGINEER shall complete shop plan reviews within two weeks of receipt. Contract change order and RFI reviews shall be completed between two working days and two working weeks of receipt, depending on the complexity of the issue.

E. Drawings and change orders required due to actions of the COUNTY,CALTRANS, or Contractor which are beyond the scope of the ENGINEER's responsibilities, shall be considered extra services.

F. ENGINEER shall be available to visit to the jobsite for on-site review of construction and other visits to the jobsite as requested by the COUNTY or CALTRANS to resolve any discrepancies in the contract documents. ENGINEER shall bring to the attention of the COUNTY/CALTRANS Resident Engineer defects or deficiencies in the work by the construction contractor, which the ENGINEER may observe. ENGINEER shall have no authority to issue instructions on behalf of the COUNTY or to deputize another to do so. All agreements shall be between the COUNTY and its construction contractor. These provisions shall not be construed as making the ENGINEER responsible for failure of the construction contractor to carry out the work in accordance with the contract documents nor the construction means or methods or techniques, sequences, procedures or safety programs in connection with the work.

G. ENGINEER shall prepare and deliver to the COUNTY and CALTRANS the "As-Built" plans within two months of completion of project construction.

ARTICLE AVIII • COMPUTER FACILITIES

A. CALCULATIONS

All roadway calculations will be performed using COGO PC and InRoads or Road Calc. The structural analyses and design will be performed by using STAADIII, GTSTRUDL, SEISAB, PCBRIDGE, PCYIELD, PCFOOT, PCBENT and PCABUT programs meeting COUNTY/CALTRANS standards. The data files and the results will be submitted electronically on compact discs along with a hard copy.

B. COMPUTER AIDED DRAFTING AND DESIGN (CADD)

All plans will be prepared using MicroStation format in conformance with the latest CALTRANS CADD Users Manual and the CALTRANS Drafting Manual to assure complete compatibility.

ARTICLE AIX • VALUE ENGINEERING

A value engineering review has been completed, and a copy will be provided to the successful ENGINEER. The results of the VE Study are to be incorporated into the design where practical and feasible.

ARTICLE AX • QUALITY CONTROL PLAN

A Quality Control Plan will be established for this PROJECT in accordance with the provisions of Article IV, Section H of the Agreement. It will be provided to the COUNTY within two (2) weeks after NTP for review and approval.

END OF SCOPE

Van Buren / I-215 Interchange Project		PS&E PHASE II	Bidding PHASE III	Construct. PHASE IV	TOTALS
Kimley-Horn and Associates, Inc.		$879,405.20	$50,580.92	$101,969.24	$1,031,955.35
Aguirre & Associates	DBE				
Geocon Consultants, Inc.					
Helix Environmental Planning, Inc.			$3,458.29	$4,679.21	$8,137.50
Butsco (Utility)					
Simon Wong Engineering	DBE	$201,660.19	$9,190.26	$24,774.04	$235,624.50
Overland, Pacific and Cutler, Inc. (ROW)					
Contingency (10%)		$108,106.54	$6,322.95	$13,142.25	$127,571.73
TOTALS		$1,189,171.93	$69,552.42	$144,564.73	$1,403,289.08

Phase I: N/A
Phase II: Final Plans, Specs & Estimate
Phase III: Bid / Award Support
Phase IV: Construction Support
Phase V: <not used>

COMPANY:	SCOPE OF WORK	DATE:	REV:
Kimley-Horn and Associates, Inc.	Project Summary	6/24/2009	1
PROJECT:		**MILESTONE/PHASE/PROJ SUMMARY:**	
Van Buren Boulevard Interchange on I-215 Reconstruction Project		All Phases	

DIRECT LABOR

PERSONNEL	FUNCTION	HOURS		RATE	AMOUNT
Dennis Landaal, PE	Project Manager	220	@	$67.00	$14,719.90
Alan Tubosnick	Senior Engineer	394	@	$50.00	$19,685.00
Mike Ross, PE	QC/ Senior Engineer	51	@	$58.00	$2,958.00
Darren Adrian	QC/ Senior Engineer	133	@	$52.00	$6,916.00
Sam McWhorter, PE	Senior Drainage Engineer	54	@	$45.00	$2,430.00
Jon Collins, PE	Senior Traffic Engineer	181	@	$46.00	$8,326.00
Jason Valencia, PE	Project Engineer	1115	@	$45.00	$50,157.00
	Engineer	1038	@	$36.00	$37,368.00
	Assistant Engineer	1844	@	$32.00	$59,008.00
	CADD Designer	2769	@	$38.00	$105,222.00
	Admin Support	260	@	$23.00	$5,980.00

TOTAL HOURS 8058 — TOTAL DIRECT LABOR $312,769.90

MULTIPLIERS

ESCALATION @		(Rate)	
OVERHEAD @	196.76%	(of Total Direct Labor + Escalation)	$615,406.06
PAYROLL ADDITIVES @		(of Total Direct Labor + Escalation)	

TOTAL MULTIPLIERS $615,406.06

OTHER DIRECT EXPENSES ••• Billed at Actual Cost •••

ITEM	QUANTITY	UNIT	UNIT COST	AMOUNT
Reproduction				$2,000.00
Travel/Per Diem				
Mileage	18200	miles		
Deliveries				$2,500.00
Misc				$3,000.00
Office				$913.80

TOTAL OTHER DIRECT EXPENSES $8,413.80

OUTSIDE SERVICES (w/o fee)

COMPANY		LABOR	MULTIPLIER	EXPENSES	TOTAL
Aguirre & Associates	DBE				
Geocon Consultants, Inc.					
Helix Environmental Planning, Inc.		$2,323.00	$4,529.27	$600.00	$7,452.27
Butsco (Utility)					
Simon Wong Engineering	DBE	$87,656.68	$125,638.32	$1,000.00	$214,295.00
Overland, Pacific and Cutler, Inc. (ROW)					

TOTAL OUTSIDE SERVICES $221,747.27

FEES

OUTSIDE SERVICES ADMIN FEE @		(of Total Outside Services & Outside Services Fees	
KIMLEY-HORN AND ASSOCIATES,	010.00%	(of Total Direct Labor + Total Multipliers)	$92,817.60
OUTSIDE SERVICES @	010.00%	(of Total Labor + Total Multiplier for Outside Servic	$22,014.73

TOTAL FEES $114,832.32

TOTAL COST $1,273,169.35

COMPANY:	SCOPE OF WORK	DATE:	REV:
Kimley-Horn and Associates, Inc.	Final Plans, Specs & Estimate	6/24/2009	1
PROJECT:		**MILESTONE/PHASE/PROJ SUMMARY:**	
Van Buren Boulevard Interchange on I-215 Reconstruction Project		Phase II	

DIRECT LABOR

PERSONNEL	FUNCTION	HOURS		RATE	AMOUNT
Dennis Landaal, PE	Project Manager	184	@	$67.00	$12,307.90
Alan Tubosnick	Senior Engineer	308	@	$50.00	$15,385.00
Mike Ross, PE	QC/ Senior Engineer	51	@	$58.00	$2,958.00
Darren Adrian	QC/ Senior Engineer	133	@	$52.00	$6,916.00
Sam McWhorter, PE	Senior Drainage Engineer	54	@	$45.00	$2,430.00
Jon Collins, PE	Senior Traffic Engineer	181	@	$46.00	$8,326.00
Jason Valencia, PE	Project Engineer	801	@	$45.00	$36,027.00
	Engineer	1038	@	$36.00	$37,368.00
	Assistant Engineer	1544	@	$32.00	$49,408.00
	CADD Designer	2465	@	$38.00	$93,670.00
	Admin Support	200	@	$23.00	$4,600.00

TOTAL HOURS 6958 — TOTAL DIRECT LABOR $269,395.90

MULTIPLIERS

ESCALATION @	(Rate)		
OVERHEAD @	196.76% (of Total Direct Labor + Escalation)	$530,063.37	
PAYROLL ADDITIVES @	(of Total Direct Labor + Escalation)		
		TOTAL MULTIPLIERS	$530,063.37

OTHER DIRECT EXPENSES ••• Billed at Actual Cost •••

ITEM	QUANTITY	UNIT	UNIT COST	AMOUNT
Reproduction				
Drainage Report (2 submittals plus Final)	25	Report		
TMP	25	Report		
SWDR	25	Report		
~~Type Selection~~		Report		
Specifications (300 pages)	50	SSP		
Quality Control Plan	25	Report		
~~30% PSE&E Plans (150 sheets)~~		Set		
60% PS&E (280 sheets -11"x17")	50	Set		
95% PS&E (354 sheets - 11"x 17")	50	Set		
Final PS&E (354 Sheets - 11"x17")	50	Set		
Final PS&E (354 Sheets - mylar full size)	1	Set		
Misc. Reproduction	1	LS		
Mileage	13000	mile		
Deliveries	1	LS		
Travel/Per Diem				
Airfare	8	Round trip		
Hotel	8	Night		
Meals	8	Day		
Car Rental	8	Day		
Office Expense	1	LS		

TOTAL OTHER DIRECT EXPENSES

OUTSIDE SERVICES (w/o fee)

COMPANY		LABOR	MULTIPLIER	EXPENSES	TOTAL
Aguirre & Associates	DBE				
Geocon Consultants, Inc.					
Helix Environmental Planning, Inc.					
Butsco (Utility)					
Simon Wong Engineering	DBE	$75,341.08	$107,986.37		$183,327.45
Overland, Pacific and Cutler, Inc. (R(					

TOTAL OUTSIDE SERVICES $183,327.45

FEES

OUTSIDE SERVICES ADMIN FEE @	(of Total Outside Services & Outside Services Fees		
KIMLEY-HORN AND ASSOCIATES,	10.00% (of Total Direct Labor + Total Multipliers)	$79,945.93	
OUTSIDE SERVICES @	10.00% (of Total Labor + Total Multiplier for Outside Servic	$18,332.74	
		TOTAL FEES	$98,278.67

TOTAL COST $1,081,065.40

COMPANY:	SCOPE OF WORK	DATE:	REV:
Kimley-Horn and Associates, Inc.	Bid / Award Support	6/24/2009	1
PROJECT:		MILESTONE/PHASE/PROJECT SUMMAR	
Van Buren Boulevard Interchange on I-215 Reconstruction Project		Phase III	

DIRECT LABOR

PERSONNEL	FUNCTION	HOURS		RATE	AMOUNT
Dennis Landaal, PE	Project Manager	10	@	$67.00	$670.00
Alan Tubosnick	Senior Engineer	36	@	$50.00	$1,800.00
Mike Ross, PE	QC/ Senior Engineer				
Darren Adrian	QC/ Senior Engineer				
Sam McWhorter, PE	Senior Drainage Engineer				
Jon Collins, PE	Senior Traffic Engineer				
Jason Valencia, PE	Project Engineer	118	@	$45.00	$5,310.00
	Engineer			$36.00	
	Assistant Engineer	140	@	$32.00	$4,480.00
	CADD Designer	44	@	$38.00	$1,672.00
	Admin Support	36	@	$23.00	$828.00

TOTAL HOURS 384 TOTAL DIRECT LABOR $14,760.00

MULTIPLIERS

ESCALATION @		(Rate)	
OVERHEAD @	196.76%	(of Total Direct Labor + Escalation)	$29,041.78
PAYROLL ADDITIVES @		(of Total Direct Labor + Escalation)	

TOTAL MULTIPLIERS $29,041.78

OTHER DIRECT EXPENSES ••• Billed at Actual Cost •••

ITEM	QUANTITY	UNIT		UNIT COST	AMOUNT
Mileage	1200	Mile	@	$0.49	$588.00
Deliveries	1	LS	@	$500.00	$500.00
Misc	1	LS	@	$1,000.00	$1,000.00
Office	1	LS	@	$310.96	$310.96

TOTAL OTHER DIRECT EXPENSES $2,398.96

OUTSIDE SERVICES (w/o fee)

COMPANY		LABOR	MULTIPLIER	EXPENSES	TOTAL
Aguirre & Associates	DBE				
Geocon Consultants, Inc.					
Helix Environmental Planning, Inc.		$1,035.00	$2,017.99	$100.00	$3,152.99
Butsco (Utility)					
Simon Wong Engineering	DBE	$3,358.80	$4,814.17	$200.00	$8,372.97
Overland, Pacific and Cutler, Inc. (R(					

TOTAL OUTSIDE SERVICES $11,525.96

FEES

OUTSIDE SERVICES ADMIN FEE @		(of Total Outside Services & Outside Services Fees	
KIMLEY-HORN AND ASSOCIATES,	10.00%	(of Total Direct Labor + Total Multipliers)	$4,380.18
OUTSIDE SERVICES @	10.00%	(of Total Labor + Total Multiplier for Outside Servic	$1,122.60

TOTAL FEES $5,502.77

TOTAL COST $63,229.47

COMPANY:	SCOPE OF WORK	DATE:	REV:
Kimley-Horn and Associates, Inc.	Construction Support	6/24/2009	1
PROJECT:		MILESTONE/PHASE/PROJ SUMMARY:	
Van Buren Boulevard Interchange on I-215 Reconstruction Project		Phase IV	

DIRECT LABOR

PERSONNEL	FUNCTION	HOURS		RATE	AMOUNT
Dennis Landaal, PE	Project Manager	26	@	$67.00	$1,742.00
Alan Tubosnick	Senior Engineer	50	@	$50.00	$2,500.00
Mike Ross, PE	QC/ Senior Engineer				
Darren Adrian	QC/ Senior Engineer				
Sam McWhorter, PE	Senior Drainage Engineer				
Jon Collins, PE	Senior Traffic Engineer				
Jason Valencia, PE	Project Engineer	196	@	$45.00	$8,820.00
	Engineer			$36.00	
	Assistant Engineer	160	@	$32.00	$5,120.00
	CADD Designer	260	@	$38.00	$9,880.00
	Admin Support	24	@	$23.00	$552.00

TOTAL HOURS 716 — TOTAL DIRECT LABOR $28,614.00

MULTIPLIERS

ESCALATION @		(Rate)	
OVERHEAD @	196.76%	(of Total Direct Labor + Escalation)	$56,300.91
PAYROLL ADDITIVES @		(of Total Direct Labor + Escalation)	

TOTAL MULTIPLIERS $56,300.91

OTHER DIRECT EXPENSES ••• Billed at Actual Cost •••

ITEM	QUANTITY	UNIT		UNIT COST	AMOUNT
Reproduction	1	LS	@	$2,000.00	$2,000.00
Mileage	4000	Mile	@	$0.49	$1,960.00
Deliveries	1	LS	@	$2,000.00	$2,000.00
Misc	1	LS	@	$2,000.00	$2,000.00
Office	1	LS	@	$602.84	$602.84

TOTAL OTHER DIRECT EXPENSES $8,562.84

OUTSIDE SERVICES (w/o fee)

COMPANY		LABOR	MULTIPLIER	EXPENSES	TOTAL
Aguirre & Associates	DBE				
Geocon Consultants, Inc.					
Helix Environmental Planning, Inc.		$1,288.00	$2,511.28	$500.00	$4,299.28
Butsco (Utility)					
Simon Wong Engineering	DBE	$8,956.80	$12,837.78	$800.00	$22,594.58
Overland, Pacific and Cutler, Inc. (RC					

TOTAL OUTSIDE SERVICES $26,893.86

FEES

OUTSIDE SERVICES ADMIN FEE @		(of Total Outside Services & Outside Services Fees	
KIMLEY-HORN AND ASSOCIATES,	10.00%	(of Total Direct Labor + Total Multipliers)	$8,491.49
OUTSIDE SERVICES @	10.00%	(of Total Labor + Total Multiplier for Outside Service	$2,559.39

TOTAL FEES $11,050.88

TOTAL COST $131,422.48

COMPANY:	SCOPE OF WORK	DATE:	REV:
Simon Wong Engineering	Bridge Engineering Services	6/24/2009	1
PROJECT:		**MILESTONE/PHASE/PROJ SUMMARY:**	
Van Buren Boulevard Interchange on I-215 Reconstruction Project		All Phases	

DIRECT LABOR

PERSONNEL	FUNCTION	HOURS		RATE	AMOUNT
Mark Creveling	Project Manager	94	@	$88.30	$8,300.20
Andrew Sanford	Senior Bridge Engineer	740	@	$55.98	$41,425.20
James Frost	Senior Bridge Engineer	24	@	$66.10	$1,586.40
Craig Shannon	Associate Bridge Engineer	297	@	$43.04	$12,782.88
Ty Brittan	Senior Tech	450	@	$52.36	$23,562.00

TOTAL HOURS 1605 TOTAL DIRECT LABOR $87,656.68

MULTIPLIERS

ESCALATION @	(Rate)		
OVERHEAD @	102.17% (of Total Direct Labor + Escalation)	$89,558.83	
PAYROLL ADDITIVES @	41.16% (of Total Direct Labor + Escalation)	$36,079.49	
		TOTAL MULTIPLIERS	$125,638.32

OTHER DIRECT EXPENSES ••• Billed at Actual Cost •••

ITEM	QUANTITY	UNIT		UNIT COST	AMOUNT
Reproduction Costs	1	LS	@	$17,000.00	$17,000.00
Milage Costs	1	LS	@	$1,500.00	$1,500.00

TOTAL OTHER DIRECT EXPENSES $18,500.00

OUTSIDE SERVICES (w/o fee)

COMPANY	LABOR	MULTIPLIER	EXPENSES	TOTAL

TOTAL OUTSIDE SERVICES

FEES

OUTSIDE SERVICES ADMIN FEE @	(of Total Outside Services & Outside Services Fee		
SIMON WONG ENGINEERING	10.00% (of Total Direct Labor + Total Multipliers)	$21,329.50	
OUTSIDE SERVICES @	(of Total Labor + Total Multiplier for Outside Servic		
		TOTAL FEES	$21,329.50

TOTAL COST **$253,124.50**

COMPANY:	SCOPE OF WORK	DATE:	REVISION:
Kimley-Horn and Associates, Inc.		6/24/2009	1
PROJECT:		MILESTONE/PHASE/PROJECT SUMMARY:	
Van Buren Boulevard Interchange on I-215 Reconstruction Project		Project Summary	

Kimley-Horn and Associates, Inc. Summary

TASK		Project Manager	Senior Engineer	QC/ Senior Engineer	QC/ Senior Engineer	Senior Drainage Engineer	Senior Traffic Engineer	Project Engineer	Engineer	Assistant Engineer	CADD Designer	Admin Support								TOTAL
		$67.00	$60.00	$58.00	$52.00	$45.00	$46.00	$45.00	$36.00	$32.00	$38.00	$23.00								
Phase 1 Subtotal																				
Phase 2 Subtotal		184	308	51	133	54	181	801	1,038	1,544	2,465	200								6,958
Phase 3 Subtotal		10	36					118		140	44	36								384
Phase 4 Subtotal		26	50					196		160	260	24								716
Phase 5 Subtotal																				
Totals		220	394	51	133	54	181	1,115	1,038	1,844	2,769	260								8,058

Aguirre & Associates Summary

																				TOTAL

Geocon Consultants, Inc. Summary

																				TOTAL

Helix Environmental Planning, Inc. Summary

	CADD / GIS	Landscape Designer	Landscape Architect					Sr Landscape Architect	QA-QC											TOTAL
	$30.00	$20.00	$23.00					$48.00	$57.68											

Butsco (Utility) Summary

	Project Manager	Designer	Project Support																	TOTAL
	$40.97	$35.38	$30.74																	

Simon Wong Engineering Summary

	Project Manager	Senior Bridge Engineer	Senior Bridge Engineer					Associate Bridge Engineer	Senior Tech											TOTAL
	$88.30	$55.98	$66.10					$43.04	$52.36											
	94	740	24					297	450											1,605

Overland, Pacific, and Cutler (ROW) Summary

	Principal	Sr. Project Manager	Sr. Project Manager					Sr. Project Manager	R/W Project Manager	R/W Consultant	R/W Consultant	Project Support								TOTAL
	$63.94	$46.90	$42.45					$42.00	$40.68	$26.55	$16.83	$16.87								

COMPANY:	SCOPE OF WORK	DATE:	REVISION:
Kimley-Horn and Associates, Inc.	Final Plans, Specs & Estimate	6/24/2009	1
PROJECT:		**MILESTONE/PHASE/PROJECT SUMMARY:**	
Van Buren Boulevard Interchange on I-215 Reconstruction Project		Phase 2	

TASK	Project Manager	Senior Engineer	QC/ Senior Engineer	QC/ Senior Engineer	Senior Drainage Engineer	Senior Traffic Engineer	Project Engineer	Engineer	Assistant Engineer	CADD Designer	Admin Support					TOTAL
Total Manhours	184	308	51	133	54	181	801	1,038	1,544	2,465	200					**6,958**
ARTICLE AII - PROJECT ADMINISTRATION																
A. Project Management																
Project Management Services	9	9									12					30
B. Budgeting																
Project Budgeting	2	2									2					6
C. Cost Accounting																
Project Cost Accounting	11	11									28					49
D. Scheduling																
Project Scheduling	2	2					13				5					21
E. Progress Reporting																
Progress Reporting	4	4					27				5					40
F. Contract Administration																
Contract Administration Services	36	36					17				7					96
PS&E Component Close Out	2	2					7				7					19
I. Draft PS&E (95% Complete)																
Respond to Agency Review Comments	2	4	6		2	2	24		40		4					84
Title Sheet								1		8						9

COMPANY:	SCOPE OF WORK	DATE:	REVISION:
Kimley-Horn and Associates, Inc.	Final Plans, Specs & Estimate	6/24/2009	1
PROJECT:		**MILESTONE/PHASE/PROJECT SUMMARY:**	
Van Buren Boulevard Interchange on I-215 Reconstruction Project		Phase 2	

TASK	Project Manager	Senior Engineer	QC/ Senior Engineer	QC/ Senior Engineer	Senior Drainage Engineer	Senior Traffic Engineer	Project Engineer	Engineer	Assistant Engineer	CADD Designer	Admin Support					TOTAL
Index of Sheets							1	2		12						15
Typical Cross Sections			4				6	12	15	30						67
Key Map & Line Index								1		8						9
Layout	2	4		4	2		17	24	30	40						123
Profile and Superelevation Diagram	1	2		2			17	23	40	40						125
Construction Details	4	8			4	4	20	40	60	80						220
Temp Water Pollution Control Plan	1	1			3		11	18	30	60						124
Temp Water Pollution Control Details					1		2	4	8	20						35
Temp Water Pollution Control Quantities							2	8	12	24						46
Countour Grading	4	8	16				11	20	30	40						129
Drainage Plan	4	8			14		16	20	33	22						117
Drainage Profiles					10		12	6	28	55						111
Drainage Details		2					8	10	20	60						100
Drainage Quantities							6	18	24	12						60
Transportation Management Plan						4	6		10	20						40
Stage Construction and Traffic Handling Plan	10	16				24	30	30	60	135						305
Construction Area Signs		8				4	20		32	64						128
Pavement Delineation Plan		8				8	11	12	17	55						111
Pavement Delineation Quantities							2	6	8	4						20
Summary of Quantities	2	4		4			10	30	30	20						100
Sign Plans		8		8			18	18	30	56						138

COMPANY:		SCOPE OF WORK	DATE:	REVISION:
Kimley-Horn and Associates, Inc.		Final Plans, Specs & Estimate	6/24/2009	1
PROJECT:			MILESTONE/PHASE/PROJECT SUMMARY:	
Van Buren Boulevard Interchange on I-215 Reconstruction Project			Phase 2	

TASK	Project Manager	Senior Engineer	QC/ Senior Engineer	QC/ Senior Engineer	Senior Drainage Engineer	Senior Traffic Engineer	Project Engineer	Engineer	Assistant Engineer	CADD Designer	Admin Support					TOTAL
Sign Details							2	2	4	12						20
Sign Quantities							1	3	4	2						10
Overhead Sign Details		8		8			10	20	14	40						100
Overhead Sign Quantities							2	6	8	4						20
Retaining Wall Plans	8	16		22			38	50	77	173						384
Retaining Wall Details		3					10	13	26	77						129
Retaining Wall Quantites							6	19	26	13						64
Plant List							4	8		4						16
Planting Plans							4	16		8						28
Irrigation Plan							4	16		8						28
Sprinkler Schedule and Details							4	8		4						16
Irrigation Quantities								8		4						12
Signal and Lighting	2	2				8	2	8	8	12						42
Lighting and Sign Illumination	4	12				14	6	22	22	33						113
Structure Lighting Plan	2	2				4	1	4	4	6						23
Ramp Metering System	2	4				10	2	8	8	12						46
Communication Conduit		2				2	2	8	6	20						40
Electrical Service (Irrigation)		2				2	1	4	4	7						20
Electrical Details		2				4	2	8	8	16						40
Updated Technical Reports	2	2		8			16	24	40	24	24					140
Updated Specifications	4	8		20			16	16			20					84

COMPANY:	SCOPE OF WORK	DATE:	REVISION:
Kimley-Horn and Associates, Inc.	Final Plans, Specs & Estimate	6/24/2009	1
PROJECT:		**MILESTONE/PHASE/PROJECT SUMMARY:**	
Van Buren Boulevard Interchange on I-215 Reconstruction Project		Phase 2	

TASK	Project Manager	Senior Engineer	QC/ Senior Engineer	QC/ Senior Engineer	Senior Drainage Engineer	Senior Traffic Engineer	Project Engineer	Engineer	Assistant Engineer	CADD Designer	Admin Support					TOTAL
Updated Construction Cost	4	8					24	40	40	24						140
Constructability Review / Coordination	15	15	10	20			24			4	4					92
Drafting Standard and CADD Compliance							5			40						45
J. Final PS&E (Final Documents for RTL)																
Respond to Agency Review Comments	2	4	6		2	2	24		40		8					88
Title Sheet								1		4						5
Index of Sheets							1	2		8						11
Typical Cross Sections	2						5	10	12	20						49
Key Map & Line Index								1		4						5
Layout	2	2	2	2			13	18	22	30						91
Profile and Superelevation Diagram	1	1	1	2			14	18	32	30						99
Construction Details	2	4	2	4	2	2	16	24	40	64						160
Temp Water Pollution Control Plan	2	3					9	9	22	44						89
Temp Water Pollution Control Details							2	2	5	20						29
Temp Water Pollution Control Quantities							2	5	6	3						16
Countour Grading	2	4	4	6			9	13	22	26						86
Drainage Plan	2	4			9		13	16	26	18						88
Drainage Profiles		4			5		9	4	22	50						94
Drainage Details		2					6	8	16	50						82
Drainage Quantities							5	14	19	10						48
Transportation Management Plan		3					5		8	16						32

COMPANY:	SCOPE OF WORK	DATE:	REVISION:
Kimley-Horn and Associates, Inc.	Final Plans, Specs & Estimate	6/24/2009	1
PROJECT:		**MILESTONE/PHASE/PROJECT SUMMARY:**	
Van Buren Boulevard Interchange on I-215 Reconstruction Project		Phase 2	

TASK	Project Manager	Senior Engineer	QC/ Senior Engineer	QC/ Senior Engineer	Senior Drainage Engineer	Senior Traffic Engineer	Project Engineer	Engineer	Assistant Engineer	CADD Designer	Admin Support					TOTAL
Stage Construction and Traffic Handling Plan	8	16				18	24	24	60	108						258
Construction Area Signs		2				1	5		8	16						32
Pavement Delineation Plan		4		1		8	9	9	13	44						88
Pavement Delineation Quantities							2	5	6	3						16
Summary of Quantities	2	4		2			8	24	24	16						80
Sign Plans		4		1		8	9	9	13	44						88
Sign Details							1	2	3	10						16
Sign Quantities							1	2	3	2						8
Overhead Sign Details		4				8	8	16	12	32						80
Overhead Sign Quantities							2	5	6	3						16
Retaining Wall Plans	2			10			10	12	19	43						96
Retaining Wall Details				1			3	3	6	19						32
Retaining Wall Quantites							2	5	6	3						16
Plant List							1	2		6						9
Planting Plans							9	18		62						89
Irrigation Plan							9	18		62						89
Sprinkler Schedule and Details							1	2		6						9
Irrigation Quantities							2	3		11						16
Signal and Lighting	2					6	2	6	6	10						32
Lighting and Sign Illumination	5					18	4	18	18	26						89
Structure Lighting Plan	1					3	1	3	3	5						16

COMPANY:	SCOPE OF WORK	DATE:	REVISION:
Kimley-Horn and Associates, Inc.	Final Plans, Specs & Estimate	6/24/2009	1
PROJECT:		**MILESTONE/PHASE/PROJECT SUMMARY:**	
Van Buren Boulevard Interchange on I-215 Reconstruction Project		Phase 2	

TASK	Project Manager	Senior Engineer	QC/ Senior Engineer	QC/ Senior Engineer	Senior Drainage Engineer	Senior Traffic Engineer	Project Engineer	Engineer	Assistant Engineer	CADD Designer	Admin Support					TOTAL
Ramp Metering System	4					6	2	6	6	10						34
Communication Conduit						3	2	6	5	16						32
Electrical Service (Irrigation)						3	1	3	3	6						16
Electrical Details						3	2	6	6	13						30
Updated Specifications		2		4		2	8				24					40
Updated Construction Cost				4			8	20	40	8						80
Construction Staking Package		4					16	40	90	24	8					182
Resident Engineer's Pending File		4					8		16	8	40					76
Contract Documents Ready to Advertise	6						8	12	24	40	2					92

COMPANY:	SCOPE OF WORK	DATE:	REVISION:
Kimley-Horn and Associates, Inc.	Construction Support	6/24/2009	1
PROJECT:		**MILESTONE/PHASE/PROJECT SUMMARY:**	
Van Buren Boulevard Interchange on I-215 Reconstruction Project		Phase 4	

TASK		Project Manager	Senior Engineer	Project Engineer	Engineer	Assistant Engineer	CADD Designer	Admin Support										TOTAL
Total Manhours		26	50	196		160	260	24										716
ARTICLE AVII - CONSTRUCTION SUPPORT PHASE																		
Pre-Construction Meeting		6	6															12
Respond to Contractor RFIs		4	40	80		120	120	4										368
Shop Drawing Review			4	24		40												68
Job Site Visits (12)				48				4										52
As-Built Plans		8		24			120											152
Construction Component Close Out		8		20			20	16										64

COMPANY:	SCOPE OF WORK	DATE:	REVISION:
Kimley-Horn and Associates, Inc.	<not used>	6/24/2009	1
PROJECT:		MILESTONE/PHASE/PROJECT SUMMARY:	
Van Buren Boulevard Interchange on I-215 Reconstruction Project		Phase 5	

TASK		Project Manager	Senior Engineer	Project Engineer	Engineer	Assistant Engineer	CADD Designer	Admin Support										TOTAL
Total Manhours																		

COMPANY:		SCOPE OF WORK	DATE:	REVISION:
Simon Wong Engineering		Bridge Engineering Services	6/24/2009	1
PROJECT:			MILESTONE/PHASE/PROJECT SUMMARY:	
Van Buren Boulevard Interchange on I-215 Reconstruction Project			All Phases	

TASK	Project Manager	Senior Bridge Engineer	Senior Bridge Engineer	Associate Bridge Engineer	Senior Tech													TOTAL
Total Manhours	94	740	24	297	450													1,605
ARTICLE AIV - STRUCTURES																		
A. Not Used																		
C. Structural Design and Calculations																		
Complete Structural Design																		
D. Independent Check and Quality Control																		
Perform Structures Independent Check and QC																		
E. Structures Specifications & Estimate																		
Develop Preliminary Specs and Estimate																		
F. Initial Structure PS&E (65% Unchecked Plans)																		
Prepare 65% Unchecked PS&E																		
G. Intermediate Structure PS&E (90% Checked Plans)																		
Prepare 90% Checked PS&E	40	240	8	155	220													663
H. Draft Final Structure PS&E (95%)																		
Prepare 95% PS&E	30	140	8	82	110													370
I. Final Structure PS&E																		
Prepare Final PS&E	24	140	8	60	120													352
ARTICLE AVI - CONSTRUCTION BIDDING PHASE																		
Respond to Contractor RFIs (20 RFIs)		60																60
ARTICLE AVII - CONSTRUCTION SUPPORT PHASE																		
Respond to Contractor RFIs		80																80
Shop Drawing Review		80																80