# ORIGINAL

#### HDR Engineering, Inc.

# Design Engineering and Project Delivery Support Services for the Green Valley Road at Weber Creek Bridge Replacement Project

#### AGREEMENT FOR SERVICES # AGMT 07-1591

THIS AGREEMENT, made and entered into by and between the County of El Dorado, a political subdivision of the State of California (hereinafter referred to as "County"), and HDR Engineering, Inc., a Nebraska corporation duly qualified to conduct business in the State of California, whose principal place of business is 8404 Indian Hills Drive, Omaha, Nebraska 68114 and whose local office address is 2365 Iron Point Road, Suite 300, Folsom, California 95630, (hereinafter referred to as "Consultant");

#### RECITALS

WHEREAS, County has determined that it is necessary to obtain a consultant to assist its Department of Transportation with design engineering and project delivery support services for the Green Valley Road at Weber Creek Bridge Replacement Project; and

**WHEREAS**, Consultant has represented to County that it is specially trained, experienced, expert, and competent to perform the special services required hereunder, and County has determined to rely upon such representations; and

**WHEREAS**, it is the intent of the parties hereto that such services be in conformity with all applicable federal, state and local laws and ordinances applicable to the work, including compliance with prevailing wage rates and their payment in accordance with California Labor Code, Section 1775; and

WHEREAS, County has determined that the provision of such services provided by Consultant are in the public's best interest, and authorized by El Dorado County Charter, Section 210(b)(6) and/or Government Code Section 31000;

NOW, THEREFORE, County and Consultant mutually agree as follows:

# ARTICLE I Scope of Services:

- A. Consultant's services are to be provided specifically in support of the Green Valley Road at Weber Creek Bridge Replacement Project (hereinafter referred to as "Project").
- B. Consultant shall perform all professional and technical services, work, and tasks required to accomplish the objectives set forth herein, and shall provide and make available Consultant's own personnel, subconsultants, materials, equipment and

services necessary to provide design engineering services, hydrology and hydraulic engineering services, geotechnical engineering services, project coordination services, and other project delivery support services including, but not limited to, those tasks identified in Exhibit A, marked "Base Scope of Work," incorporated herein and made by reference a part hereof. Deliverables for the specific items of work to be provided under the Base Scope of Work shall be as specified therein, shall be prepared using the software described in Section D of this Article and shall be submitted in accordance with the timeframes specified in Exhibit A. Adjustments to the completion times specified in Exhibit A may only be made in accordance with the prior written approval of County's Contract Administrator. The Contract Administrator shall issue Consultant a separate written Notice to Proceed for Items of Work A, B, C, D, E, F, G and H as identified in the Base Scope of Work, and Consultant shall not commence work on any Item of Work until receiving the Notice to Proceed. No payment will be made for any work performed prior to the date specified in each written Notice to Proceed.

C. In addition to the specific services identified in Exhibit A, "Base Scope of Work," this Agreement may also include Optional Tasks. Such Optional Tasks may supplement, expand or otherwise modify the Base Scope of Work or may include, but not be limited to, tasks that are deemed critical by the Contract Administrator to the furtherance of the Project, including items of work necessary to support the construction activities for the Project.

Before proceeding with any work concerning Optional Tasks under this Agreement, the parties will identify the specific services to be provided for each assignment in individual Task Orders to be issued in accordance with this Agreement. The specific services for each Optional Task assignment shall be determined at a meeting or telephone conference between Consultant and County's Contract Administrator, or designee, to discuss the needs, applicable design standards, required deliverables, specific Consultant staff, subconsultants (if required), and any task-related mileage budget, if applicable, on a task-by-task basis. Following the meeting, Consultant shall provide the Contract Administrator with a written scope of work for the Optional Task, a schedule including a list of tasks with completion dates and a target completion date for the overall scope of work, and a not-to-exceed cost to complete the work (resulting in a Task Order), which shall require written approval, authorization, and written notification to proceed from County's Contract Administrator, prior to commencement of the work. No payment will be made for any Optional Task work performed prior to approval and full execution of the Task Order, and no payment will be made for amounts in excess of the not-to-exceed amount of the Task Order.

Funding from various local, state and federal sources may be utilized to fund certain Optional Task assignments to be performed under this Agreement and as a consequence, the requirements (other than those incorporated herein below) of the funding agencies related to those grants will be incorporated into the provisions of the specific Task Orders issued for those Optional Task assignments.

Consultant shall provide the Contract Administrator with the names and titles of Consultant's representatives that are authorized to bind Consultant by signing Task Orders and Task Order Amendments on Consultant's behalf. Consultant's notification of individuals authorized to execute Task Orders and Task Order Amendments on Consultant's behalf shall be communicated to County in accordance with the provisions of Article XIX, Notice to Parties of this Agreement.

The period of performance for Task Orders shall be in accordance with dates specified in each Task Order. No payment will be made for any work performed before or after the period of performance in the Task Order, unless County's Contract Administrator and Consultant amend the Task Order. No Task Order will be written which extends beyond the expiration date of this Agreement, nor the cumulative total of the not-to-exceed Contract amount.

D. If a submittal is required to be an electronic file, Consultant shall produce the file using Microsoft Office 2003 applications (specifically, MS Word, MS Project and MS Excel). Signed reports shall be submitted in Adobe portable document format (PDF). Electronic AutoCAD 2008 or AutoCAD Civil 3D 2008 format shall be used for submittal of plans for review. Newer versions of software may be used and other engineering software used for analytical purposes may be authorized if approved by County's Contract Administrator. Consultant shall submit all deliverables to County's Contract Administrator in accordance with completion time schedules identified in Exhibit A hereto. Failure to submit the required deliverables in the format required shall be grounds for termination of the Agreement, as provided in Article XVIII, Default, Termination, and Cancellation herein.

All of the services included in this Article are the responsibility of Consultant, unless specifically described as a task or item of work to be provided by County. Consultant shall be responsible for the supervision, administration and work performed by any subconsultant for services rendered under this Agreement.

#### ARTICLE II

**Term:** This Agreement shall become effective when fully executed by both parties hereto and shall expire upon the later of County's recordation of the Notice of Completion for the Green Valley Road at Weber Creek Bridge Replacement Project or resolution of all construction claims, if any, associated with that Project.

#### **ARTICLE III**

Compensation for Services: For services provided herein including all deliverables described in the Base Scope of Work or in any individual Task Orders issued for Optional Tasks in accordance with Article I, Scope of Services, and including the progress reports required in Article VI, Progress Reports below, County agrees to pay Consultant monthly in arrears. Payment shall be made within thirty (30) days following County receipt and approval of itemized invoices detailing services rendered.

For the purposes hereof, the billing rates shall be in accordance with Exhibit B, marked "Hourly Billing Rates," incorporated herein and made by reference a part hereof. The base

hourly rates indicated in Exhibit B are effective through December 31, 2008 and may be adjusted annually beginning on January 1, 2009. On or before January 1<sup>st</sup> of each calendar year, Consultant may submit a new proposed rate schedule, which shall require written approval and acceptance by County's Contract Administrator, prior to the new rates becoming effective. In no instance shall the base hourly rates be increased more than five percent (5%) per year.

Reimbursement for mileage expenses, if applicable, shall not exceed the lesser of (1) the rates to be paid to County employees under the current Board of Supervisors Travel Policy at the time the mileage expenses are incurred; or (2) the rates authorized to be paid to rank and file state employees under the then current State Department of Personnel Administration (DPA) rules. References to the DPA rates and Consultant's responsibilities for cost differences and any overpayments are more fully described in Article XXX, Cost Principles herein. Mileage reimbursement rates apply to Consultant and to any subconsultants authorized under this Agreement. Any reimbursements for mileage expenses for Optional Tasks will only be made if such expenses are included in the budget of an approved and fully executed Task Order issued pursuant to this Agreement.

Travel costs (i.e., overnight lodging, meals, parking, airfare, bridge tolls, etc.) will not be reimbursed for any services performed under this Agreement. Notwithstanding this section, reimbursement for rental car expenses only may be authorized by the Contract Administrator if use of a rental car provides the most economical and practical means of travel. Any reimbursements for rental car expenses for Optional Tasks will only be made if such expenses are included in the budget of an approved and fully executed Task Order issued pursuant to this Agreement.

For the purposes of budgeting the items of work indentified in Exhibit A, Base Scope of Work, the maximum allowable billing amounts for each item of work are described in Exhibit C, marked "Cost Proposal," incorporated herein and made by reference a part hereof. The amounts indicated in Exhibit C, represent the composition of the total not-to-exceed budget for the various items of work. In the performance of the scope of services to be provided under this Agreement, Consultant may request to reallocate the expenses listed in Exhibit C among Consultant's own personnel (not including subconsultants) and among the various tasks identified therein, subject to the Contract Administrator's written approval. In no event shall the "not-to-exceed" amount of the Base Scope of Work be exceeded, nor shall the amounts identified for subconsultants or optional tasks be exceeded, nor shall the total not-to-exceed amount of the Contract be exceeded.

The total amount for services to be provided under the Base Scope of Work in accordance with Exhibit A hereto shall not exceed \$573,000 inclusive of all expenses.

The total amount payable by County for an individual Task Order issued under the Optional Tasks provision of Article I above, if any, shall not exceed the amount agreed to in the Task Order, unless County's Contract Administrator and Consultant amend the Task Order.

The total amount for all Optional Tasks which may be assigned in accordance with this Agreement shall not exceed \$227,000, inclusive of all Task Orders and expenses. The

not-to-exceed amount of each individual Task Order so assigned shall not exceed the amount specified in each Task Order.

The total amount of this Agreement, including all of the services detailed in Exhibit A and including any Optional Tasks which may be assigned, and inclusive of all work of subconsultants, costs, expenses and Task Orders shall not exceed \$800,000.

Itemized invoices shall follow the format specified by County and shall reference this Agreement number and, for Optional Tasks, the County-provided Task Order number both on their faces and on any enclosures or backup documentation. For the items of work identified in the Base Scope of Work in Exhibit A, Consultant shall bill County for only one item of work per invoice. For Optional Tasks, Consultant shall bill County for only one Task Order per invoice. Consultant shall attach a copy of each notification to proceed required under the provisions of Article I, Scope of Services, and copies of any progress reports required under the provisions of Article VI, Progress Reports, that relate to the services being billed, as backup documentation to any invoices submitted for payment under the terms of this Agreement. Copies of documentation attached to invoices shall reflect Consultant's charges for the specific services billed on those invoices. Invoices shall be mailed to County at the following address:

County of El Dorado
Department of Transportation
2850 Fairlane Court
Placerville, California 95667
Attn: Administration Division-Accounts Payable

or to such other location as County directs.

In the event that Consultant fails to deliver, in the format specified, the deliverables and progress reports required by this Agreement, County at its sole option may delay the monthly payment for the period of time of the delay, cease all payments until such time as the required progress reports and deliverables are received, or proceed as set forth herein below in Article XVIII, Default, Termination, and Cancellation.

#### **ARTICLE IV**

Standards for Work: Services rendered under this Agreement shall be performed in accordance with current County, Caltrans and federal design criteria, regulations, policies, procedures, manuals, and standards, including the guidelines set forth in the AASHTO Green Book - A Policy on Geometric Design of Highways and Streets, the Caltrans Highway Design Manual, the Caltrans Bridge Design Manuals, the Caltrans Local Assistance Procedures Manual, the El Dorado County Design and Improvements Standards Manual, the El Dorado County Drainage Manual and all other applicable Caltrans, Federal Highway Administration (FHWA), federal, state and local laws, County guidelines and accepted industry standards, and shall be performed in a safe, professional, skillful and workmanlike manner in accordance with good engineering practices.

All of Consultant's services and deliverables must adhere to current County, Caltrans and federal requirements for project development and shall be made available to County and

Caltrans for review and approval at stages specified in the individual Task Orders issued pursuant to the Agreement and upon request by the Contract Administrator.

Plans, specifications and estimates shall be prepared in conformance with the standards, design criteria, regulations, policies, procedures, manuals and guidelines stated herein above. As part of the work involved in the preparation of the plans, specifications and estimates, Consultant may be required to prepare and furnish special provisions for items of work included in the plans which are not covered by the Caltrans Standard Specifications and Caltrans' approved standard special provisions.

Consultant has full responsibility for the accuracy and completeness of the plans and related designs, specifications, estimates, reports and such other documents that may be required for the projects assigned. Assistance, cooperation and oversight by County, Caltrans, FHWA or other regulatory agencies will not relieve Consultant of this professional responsibility.

All work must be performed and work products prepared in a format and manner customarily anticipated by the appropriate approving agencies.

#### **ARTICLE V**

**Quality Control:** Consultant shall have a quality control plan in effect during the entire time work is being performed under this Agreement. Consultant shall provide County with a general overview of Consultant's quality control plan in the form of a written outline. Consultant shall also identify critical quality control reviews for the major deliverables within each Task Order schedule. The plan shall take into account the following:

- A. The plan shall establish a process whereby calculations and plans are independently checked, corrected and back-checked, all draft and final reports are reviewed for accuracy, completeness, and readability before submittal, and all jobrelated correspondence and memoranda are routed and received by affected persons and then filed in the appropriate Task Order file.
- B. Consultant is responsible for the accuracy and completeness of all data, plans, specifications and estimates prepared by Consultant under this Agreement and shall check all such material accordingly.
- C. Consultant is responsible for a detailed review of design components and related details, and the accuracy with which such designs are depicted on the plans and the details.
- D. Plans, designs, estimates, calculations, reports and other documents furnished under each Task Order shall be of a quality acceptable to the County's Contract Administrator.
- E. A design, estimate, calculation, report or other document furnished under each Task Order is of acceptable quality when it is neat in appearance, well-organized, technically and grammatically correct, and checked.

- F. The minimum standard of appearance, organization and content of the drawings and reports shall be that of similar types by County. County will provide examples to Consultant upon request.
- G. The page identifying the preparer of engineering reports, the title sheet for specifications, and each sheet of plans shall bear the professional seal, certificate number, registration classification, expiration date of the certificate, and the signature of the professional engineer(s) responsible for their preparation.
- H. Consultant shall maintain a complete project file for each Task Order performed under this Agreement. This file shall be made available to the County's Contract Administrator, or designee, during normal County working hours and shall be transferred to County upon completion of work under the Task Order.

County's Contract Administrator shall decide all questions pertaining to the quality or acceptability of deliverables furnished and work performed under this Agreement.

#### **ARTICLE VI**

**Progress Reports:** Consultant shall submit progress reports to the Contract Administrator at intervals that are commensurate with the requirements of the tasks and the items of work being performed and based upon a mutually agreeable schedule. At a minimum, Consultant shall submit progress reports once per month. The reports shall be sufficiently detailed for the Contract Administrator to determine if Consultant is performing to expectations and is on schedule, to provide communication of interim findings, and to afford occasions for airing difficulties or special circumstances encountered so that remedies can be developed. County's review of these reports will ensure that Consultant's work meets a level of acceptability as determined by the Contract Administrator, and Consultant shall be required to modify its work as necessary to meet that level of acceptability as defined by the Contract Administrator. Separate detail shall be provided for each ongoing item of work. Progress reports shall include the total number of hours worked by Consultant and any authorized subconsultants and shall include descriptions of the tasks and work performed, including a description of any deliverables submitted during the reporting period and the anticipated tasks, work and deliverables proposed for the subsequent reporting period. Any invoices submitted by Consultant for payment under the terms of this Agreement shall include copies of the progress reports that relate to the services being billed on those invoices.

#### **ARTICLE VII**

**Licenses:** Consultant represents that it and any and all subconsultants employed under this Agreement are duly licensed in good standing by the State of California to perform the services required under this Agreement, and that Consultant and all subconsultants shall maintain said licenses in good standing throughout the term of this Agreement.

#### **ARTICLE VIII**

**Business License:** The County Business License Ordinance provides that it is unlawful for any person to furnish supplies or services, or transact any kind of business in the unincorporated territory of El Dorado County without possessing a County business license

unless exempt under County Ordinance Code Section 5.08.070. Consultant warrants and represents that it shall comply with all of the requirements of the County Business License Ordinance prior to beginning work under this Agreement and at all times during the term of this Agreement.

#### **ARTICLE IX**

Ownership of Data: Upon completion or earlier termination of all services under this Agreement, ownership and title to all reports, documents, plans, maps, specifications, estimates, compilations and any and all other materials or data produced as part of this Agreement will automatically be vested in County and no further agreement will be necessary to transfer ownership to County. Consultant shall furnish County all necessary copies of data, including data stored in electronic format, needed to complete the review and approval process of the project.

#### **ARTICLE X**

Consultant's Project Manager: Consultant designates Dennis Pecchia, P.E. as its Project Manager for this Agreement. Consultant's Project Manager, or County-approved designee, shall be accessible to County's Contract Administrator, or designee, during normal County working hours and shall respond within twenty-four (24) hours to County inquiries or requests. Consultant's Project Manager shall be responsible for all matters related to Consultant's personnel, operations and any subconsultants authorized under this Agreement including, but not limited to (1) assigning qualified personnel to perform the work and to prepare the deliverables required by the Agreement; and (2) reviewing, monitoring, training and directing Consultant's personnel and any subconsultants authorized herein.

#### **ARTICLE XI**

Changes to Agreement: This Agreement may be amended by mutual consent of the parties hereto. Amendments may be made to permit mutually acceptable changes in the scope, character or complexity of the work if such changes become desirable or necessary as the work progresses. Appropriate extensions of time in case of unavoidable delays and for consideration of warranted adjustments in payment may also be accomplished by amendments to the Agreement. Said amendments shall become effective only when in writing and fully executed by duly authorized officers of the parties hereto. There shall be no change in Consultant's Project Manager or subconsultants without prior written approval by County's Contract Administrator.

#### **ARTICLE XII**

Consultant to County: It is understood that the services provided under this Agreement shall be prepared in and with cooperation from County and its staff. It is further agreed that in all matters pertaining to this Agreement, Consultant shall act as Consultant only to County and shall not act as Consultant to any other individual or entity affected by this Agreement nor provide information in any manner to any party outside of this Agreement that would conflict with Consultant's responsibilities to County during the term hereof.

#### **ARTICLE XIII**

#### Confidentiality:

- A. Consultant shall maintain the confidentiality and privileged nature of all records, including billing records, all financial, statistical, personal, technical, or other data and information relative to County's operations together with any knowledge therein acquired, in accordance with all applicable state and federal laws and regulations, as they may now exist or may hereafter be amended or changed. Consultant, and all Consultant's staff, employees, and representatives, including any subconsultants authorized herein, shall not use or disclose, directly or indirectly at any time, any said confidential information, other than to County's Department of Transportation for the purpose of, and in the performance of, this Agreement.
- B. Permission to disclose information on one occasion shall not authorize Consultant to further disclose such information, or disseminate the same on any other occasion.
- C. Consultant shall not comment publicly to the press or any other media regarding this Agreement or County's actions on the same, except to County's staff, Consultant's own personnel or authorized subconsultants involved in the performance of this Agreement, at public hearings or in response to questions from a Legislative committee.
- D. Consultant shall not issue any news release or public relations item of any nature, whatsoever, regarding work performed or to be performed under this Agreement without prior review of the contents thereof by County, and receipt of the Contract Administrator's written permission.
- E. All information related to any construction estimates prepared or otherwise obtained in the performance of this Agreement is confidential, and shall not be disclosed by Consultant to any entity other than to County.

#### **ARTICLE XIV**

Assignment and Delegation: Consultant is engaged by County for its unique qualifications and skills as well as those of its personnel. Consultant shall not subcontract, delegate, or assign services to be provided, in whole or in part, to any other person or entity without prior written consent of County. Notwithstanding this Article, Consultant is authorized to utilize the specific subconsultant identified in Exhibit A hereto, and the subconsultants, if any, that may be authorized in individual Task Orders for Optional Tasks issued pursuant to this Agreement. Consultant shall require each subconsultant, to the extent of the work to be performed by the subconsultant, to be bound to Consultant by the terms of this Agreement and to assume toward Consultant all of the obligations and responsibilities that Consultant, by this Agreement, assumes toward County.

Any subcontract entered into as a result of this Agreement shall contain all of the provisions stipulated in this Agreement to be applicable to subconsultants.

Notwithstanding any provision to the contrary, at no time shall County be obligated to pay separately for subconsultant services.

#### ARTICLE XV

Independent Contractor/Liability: Consultant is, and shall be at all times, deemed independent and shall be wholly responsible for the manner in which it performs services required by the terms of this Agreement. Consultant exclusively assumes responsibility for acts of its employees, associates, and subconsultants, if any are authorized herein, as they relate to services to be provided under this Agreement during the course and scope of their employment.

Consultant shall be responsible for performing the work under this Agreement in a safe, professional, skillful and workmanlike manner, in accordance with good engineering practices, and shall be liable for its own negligence and negligent acts of its employees and subconsultants. County shall have no right of control over the manner in which work is to be done and shall, therefore, not be charged with responsibility of preventing risk to Consultant or its employees or subconsultants.

#### **ARTICLE XVI**

Prevailing Wage: County requires Consultant's services on public works project(s) involving local, state and/or federal funds to which prevailing wage requirements may apply. As a consequence, Consultant and any subconsultants authorized pursuant to this Agreement shall comply with all applicable state and federal prevailing wage rates, statutes, rules and regulations then in effect. In the event of conflict between applicable federal and state provisions, the higher prevailing wage rate will apply. Consultant shall use the general prevailing wage rates determined by the Director of Industrial Relations for the county in which the work is to be done, which are available at the offices of the District Director of Transportation for the district in which the work is situated. Changes, if any, to the general prevailing wage rates will be available at the same location. The federal minimum wage rates are determined by the United States Secretary of Labor and may be examined at the office described above. Future effective general prevailing wage rates which have been predetermined and are on file with the California Department of Industrial Relations are referenced but not printed in the general prevailing wage rates.

Consultant and any authorized subconsultants shall comply with all applicable wage requirements, as set forth in Labor Code Sections 1770 et seq., 1773.2, 1775, 1776, 1810, and 1813. In accordance with the provisions of Labor Code Section 1810, eight (8) hours of labor shall constitute a legal day's work upon all work done hereunder, and Consultant and any subconsultant authorized under this Contract shall also conform to and be bound by the provisions of Labor Code Sections 1810 through 1815.

#### **ARTICLE XVII**

**Fiscal Considerations:** The parties to this Agreement recognize and acknowledge that County is a political subdivision of the State of California. As such, County is subject to the provisions of Article XVI, Section 18 of the California Constitution and other similar fiscal and procurement laws and regulations and may not expend funds for products, equipment, or services not budgeted in a given year. It is further understood that in the normal course of County business, County will adopt a proposed budget prior to a given fiscal year, but that the final adoption of a budget does not occur until after the beginning of the fiscal year.

Notwithstanding any other provision of this Agreement to the contrary, County shall give notice of cancellation of this Agreement in the event of adoption of a proposed budget that does not provide for funds for the services, products, or equipment subject herein. Such notice shall become effective upon the adoption of a final budget, which does not provide funding for this Agreement. Upon the effective date of such notice, this Agreement shall be automatically terminated and County released from any further liability hereunder.

In addition to the above, should the Board of Supervisors during the course of a given year for financial reasons reduce or order a reduction in the budget for any County department for which services were contracted to be performed, pursuant to this paragraph in the sole discretion of County, this Agreement may be deemed to be canceled in its entirety subject to payment for services performed prior to cancellation.

#### **ARTICLE XVIII**

#### **Default, Termination, and Cancellation:**

A. Default: Upon the occurrence of any default of the provisions of this Agreement, a party shall give written notice of said default to the party in default (notice). If the party in default does not cure the default within ten (10) days of the date of notice (Time to Cure), then such party shall be in default. The Time to Cure may be extended at the discretion of the party giving notice. Any extension of Time to Cure must be in writing, prepared by the party in default for signature by the party giving notice, and must specify the reason(s) for the extension and the date in which the extension of Time to Cure expires.

Notice given under this section shall specify the alleged default and the applicable Agreement provision and shall demand that the party in default perform the provisions of this Agreement within the applicable period of time. No such notice shall be deemed a termination of this Agreement unless the party giving notice so elects in this notice, or the party giving notice so elects in a subsequent written notice after the Time to Cure has expired.

- B. Bankruptcy: This Agreement, at the option of County, shall be terminable in the case of bankruptcy, voluntary or involuntary, or insolvency of Consultant.
- C. Ceasing Performance: County may terminate this Agreement in the event Consultant ceases to operate as a business, or otherwise becomes unable to substantially perform any term or condition of this Agreement.
- D. Termination or Cancellation without Cause: County may terminate this Agreement in whole or in part upon seven (7) calendar days' written notice by County for any reason. If such prior termination is effected, County will pay for satisfactory services rendered prior to the effective dates, as set forth in the Notice of Termination provided to Consultant, and for such other services which County may agree to in writing as necessary for contract resolution. In no event, however, shall County be obligated to pay more than the total amount of the contract. Upon receipt of a Notice of Termination, Consultant shall promptly discontinue all services affected, as of the effective date of termination set forth in such Notice of Termination, unless

the Notice directs otherwise. In the event of termination for default, County reserves the right to take over and complete the work by contract or by any other means.

#### ARTICLE XIX

**Notice to Parties:** All notices to be given by the parties hereto shall be in writing and served by depositing same in the United States Post Office, postage prepaid and return receipt requested. Notices to County shall be in duplicate and addressed as follows:

To County:

County of El Dorado
Department Of Transportation
2850 Fairlane Court
Placerville, California 95667

Attn.: Matthew D. Smeltzer, Deputy Director

West Slope Engineering Division

or to such other location as County directs.

With a copy to:

County of El Dorado Department Of Transportation 2850 Fairlane Court Placerville, California 95667

Attn: Tim C. Prudhel,

Contract Services Officer

Notices to Consultant shall be addressed as follows:

HDR Engineering, Inc. 2365 Iron Point Road Suite 300 Folsom, California 95630

Attn.: Timothy R. Fleming, P.E., Senior Vice President

or to such other location as Consultant directs.

#### **ARTICLE XX**

Indemnity: To the fullest extent allowed by law, Consultant shall defend, indemnify, and hold harmless the County and its officers, agents, employees and representatives from and against any and all claims, actions, losses, injuries, damages or expenses of every name, kind, and description, including litigation costs and reasonable attorney's fees incurred, brought for or on account of, injury to or death of any person, including but not limited to workers, County employees and the public, or damage to property, which arise out of, pertain to, or relate to the negligence, recklessness, or willful misconduct of Consultant, its officers, agents, employees, volunteers, representatives, contractors and subcontractors. This duty of Consultant includes the duty of defense, inclusive of that set forth in California Civil Code Section 2778. Each party shall notify the other party immediately in writing of any claim or damage related to activities performed under this Agreement. The parties shall cooperate with each other in the investigation and disposition of any claim arising out of the activities under this Agreement.

#### **ARTICLE XXI**

**Insurance:** Consultant shall provide proof of a policy of insurance satisfactory to County's Risk Management Division and documentation evidencing that Consultant maintains insurance that meets the following requirements:

- A. Full Workers' Compensation and Employers' Liability Insurance covering all employees of Consultant as required by law in the State of California.
- B. Commercial General Liability Insurance of not less than \$1,000,000 combined single limit per occurrence for bodily injury and property damage.
- C. Automobile Liability Insurance of not less than \$1,000,000 is required in the event motor vehicles are used by Consultant in performance of the Agreement.
- D. In the event Consultant is a licensed professional and is performing professional services under this Agreement, Professional Liability Insurance is required with a limit of liability of not less than \$1,000,000.
- E. Consultant shall furnish a certificate of insurance satisfactory to County's Risk Management Division as evidence that the insurance required above is being maintained.
- F. The insurance will be issued by an insurance company acceptable to County's Risk Management Division, or be provided through partial or total self-insurance likewise acceptable to the Risk Management Division.
- G. Consultant agrees that the insurance required herein shall be in effect at all times during the term of this agreement. In the event said insurance coverage expires at any time or times during the term of this contract, Consultant shall immediately provide a new certificate of insurance as evidence of the required insurance coverage. In the event Consultant fails to keep in effect at all times insurance coverage as herein provided, County may, in addition to any other remedies it may have, terminate this contract upon the occurrence of such event. New certificates of insurance are subject to the approval of County's Risk Management Division, and Consultant agrees that no work or services shall be performed prior to the giving of such approval.
- H. The certificate of insurance must include the following provisions stating that:
  - 1. The insurer will not cancel the insured's coverage without 30-day prior written notice to County; and
  - The County of El Dorado, its officers, officials, employees, and volunteers are included as additional insured, but only insofar as the operations under this Agreement are concerned. This provision shall apply to all general and excess liability insurance policies.

- I. Consultant's insurance coverage shall be primary insurance as respects the County, its officers, officials, employees, and volunteers. Any insurance or self-insurance maintained by County, its officers, officials, employees, or volunteers shall be in excess of Consultant's insurance and shall not contribute with it.
- J. Any deductibles or self-insured retentions must be declared to, and approved, by County. At the option of County, either: The insurer shall reduce or eliminate such deductibles or self-insured retentions as respects County, its officers, officials, employees, and volunteers; or Consultant shall procure a bond guaranteeing payment of losses and related investigations, claim administration, and defense expenses.
- K. Any failure to comply with the reporting provisions of the policies shall not affect coverage provided to the County, its officers, officials, employees, or volunteers.
- L. The insurance companies shall have no recourse against the County of El Dorado, its officers and employees or any of them for payment of any premiums or assessments under any policy issued by any insurance company.
- M. Consultant's obligations shall not be limited by the foregoing insurance requirements and shall survive the expiration of this Agreement.
- N. In the event Consultant cannot provide an occurrence policy, Consultant shall provide insurance covering claims made as a result of performance of this Agreement for not less than three (3) years following completion of performance of this Agreement.
- O. The certificate of insurance shall meet such additional standards as may be determined by the contracting County department, either independently or in consultation with County's Risk Management Division as essential for protection of County.

In addition, Consultant shall ensure that all subconsultants authorized pursuant to this Agreement shall maintain workers' compensation, general liability, auto liability and professional liability insurance as specified above and shall provide County with proof of same.

#### **ARTICLE XXII**

Interest of Public Official: No official or employee of County who exercises any functions or responsibilities in review or approval of services to be provided by Consultant under this Agreement shall participate in or attempt to influence any decision relating to this Agreement which affects personal interest or the interest of any corporation, partnership, or association in which he/she is directly or indirectly interested; nor shall any such official or employee of County have any interest, direct or indirect, in this Agreement or the proceeds thereof.

#### **ARTICLE XXIII**

Interest of Consultant: Consultant covenants that Consultant presently has no personal interest or financial interest, and shall not acquire the same in any manner or degree, in either: 1) any other contract connected with or directly affected by the services to be performed by this Agreement; or, 2) any other entities connected with or directly affected by the services to be performed by this Agreement. Consultant further covenants that in the performance of this Agreement no person having any such interest shall be employed by Consultant. Consultant hereby certifies that neither Consultant, nor any firm affiliated with Consultant will bid on any construction contract for any construction project resulting from this Agreement. An affiliated firm is one, which is subject to the control of the same persons through joint-ownership, or otherwise.

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

Consultant further certifies that neither Consultant, nor any firm affiliated with Consultant, will bid on any construction subcontracts included within the construction contract. Additionally, Consultant certifies that no person working under this contract is also employed by the construction contractor for any project included within this Agreement.

Any subcontract in excess of \$25,000 entered into as a result of this contract shall contain all of the provisions of this Article.

#### **ARTICLE XXIV**

California Residency (Form 590): All independent Consultants providing services to County must file a State of California Form 590, certifying their California residency or, in the case of a corporation, certifying that they have a permanent place of business in California. Consultant will be required to submit a Form 590 prior to execution of this Agreement, or County shall withhold seven (7) percent of each payment made to Consultant during the term of this Agreement. This requirement applies to any agreement/contract exceeding \$1,500.

#### **ARTICLE XXV**

**Taxpayer Identification Number (Form W-9):** All independent contractors or corporations providing services to County must file a Department of the Treasury Internal Revenue Service Form W-9, certifying their Taxpayer Identification Number.

#### **ARTICLE XXVI**

California Forum and Law: Any dispute resolution action arising out of this Agreement, including, but not limited to, litigation, mediation, or arbitration, shall be brought in El Dorado County, California, and shall be resolved in accordance with the laws of the State of California.

#### **ARTICLE XXVII**

Year 2000 Compliance: Consultant agrees that all hardware and software developed, distributed, installed, programmed, or employed as a result of this order will comply with

ISO 9000 date format to correctly manipulate and present date-sensitive data.

Upon delivery of product and thereafter, the date and date logic component shall effectively and efficiently operate using a four-digit year.

Upon written notification by County of any hardware or software failure to comply with ISO 9000 date format, Consultant will replace or correct the failing component with compliant hardware or software immediately, at no cost to County.

#### **ARTICLE XXVIII**

Compliance with Federal, State and Local Agency Requirements: County may rely on federal assistance or grants, state funds and on local agency or other grant funds for all or a portion of the funding for the services to be provided herein. As a requirement of County's use of federal, state and local agency grant funds, County is required to comply with certain contracting requirements and to extend those requirements to all third party contracts. Consultant shall comply with all applicable provisions of federal, state and local agency regulations, including those required by Federal Highway Administration (FHWA) grant funding requirements, regulations, and related executive orders regarding the use, expenditure, control, reporting, allowable costs and management of such funds. Failure of Consultant to comply with any federal, state or local agency provision may be the basis for withholding payments for charges made by Consultant and for such other remedies as may be appropriate including termination of this Agreement. Consultant shall further comply with any flow-down or third-party contracting provisions which may be required under the federal, state or local agency regulations and which may apply to Consultant's subcontracts, if any, associated with this Agreement.

#### **ARTICLE XXIX**

**Working Office:** Consultant shall establish a working office at a place acceptable to County. The parties hereto acknowledge and agree that Consultant's offices located at 2365 Iron Point Road, Suite 300, Folsom, California 95630 are acceptable to County.

#### **ARTICLE XXX**

**Cost Principles:** The Federal Acquisition Regulations in Title 48, CFR, Part 31 et seq. are the governing factors regarding allowable elements of cost for all services to be performed under this Agreement.

- A. Consultant shall comply with federal administrative procedures pursuant to 49 CFR, Part 18, Uniform Administrative Requirements for Grants and Cooperative Agreements to State and Local Governments, and 49 CFR, Chapter 1, Parts 31 et seq., Federal Acquisition Regulations System, insofar as those regulations may apply to Consultant. This provision shall apply to every sub-recipient receiving funds as a Consultant or subconsultant under this Agreement.
- B. Any expenditures for costs for which Consultant has received payment or credit that are determined by subsequent audit to be unallowable under 48 CFR, Parts 31 et seq. or 49 CFR, Part 18 are subject to repayment by Consultant to County.

- C. Travel and subsistence (per diem) reimbursements, if applicable, and third-party contract reimbursements to subconsultants will be allowable as project costs only after those costs are incurred and paid for by Consultant.
- D. Notwithstanding any other provision of this Agreement to the contrary, payments to Consultant for travel and subsistence (per diem) and mileage expenses, if applicable, for Consultant's staff or for subconsultants claimed for reimbursement shall not exceed the lesser of (1) the rates to be paid to County employees under the current Board of Supervisors Travel Policy in effect at the time the expenses are incurred; or (2) the rates authorized to be paid to rank and file state employees under the then current State Department of Personnel Administration (DPA) rules. If the rates invoiced are in excess of these authorized rates, then Consultant is responsible for the cost difference and any overpayments shall be reimbursed to County upon demand. For the purposes of this Agreement, only mileage expenses and rental car expenses shall be eligible for reimbursement in accordance with Article III, Compensation for Services above. No reimbursements for travel and subsistence (per diem) expenses shall be allowed.
- E. Consultant and its subconsultants shall establish and maintain accounting systems and records that properly accumulate and segregate funds received under this Agreement by line item. The accounting systems of Consultant and all subconsultants shall conform to Generally Accepted Accounting Principles (GAAP), shall enable the determination of incurred costs at interim points of completion, and shall provide support for reimbursement of payment vouchers or invoices.

#### **ARTICLE XXXI**

**Post-Award Audit:** This Agreement may be subject to a post-award audit in accordance with Caltrans guidelines. After any post-award audit recommendations are received, rates on Exhibit B hereto may require adjustment by Consultant to conform to the audit recommendations and any such adjustments shall be subject to approval by County. Other contract provisions that may require modification as a result of the post-award audit recommendations may also require revisions. Consultant agrees that individual items of cost may be incorporated into the Agreement upon mutual agreement between Consultant and County through the contract amendment process and that other modifications required as a result of the post-award audit recommendations may also be incorporated into the Agreement by the contract amendment process.

#### ARTICLE XXXII

Audit and Inspection of Records: Consultant shall maintain and make available to the FHWA, State, the California State Auditor, and County or to any duly authorized representative of the United States Department of Transportation, the State, or County all books, papers, job cost records, detailed cost estimates, claims, and accounts, including payment, property, payroll, personnel, subconsultant records, and financial records related to or which arise out of the work or under terms of this Agreement. Consultant shall maintain such books, records, data and documents in accordance with generally accepted accounting principles and in accordance with the provisions of Article XXVIII, Compliance with Federal, State and Local Agency Requirements and Article XXX, Cost Principles above. These books, papers, records, claims and accounts shall be made available for

examination during normal business hours and shall be readily available and accessible at Consultant's principal place of business in California, for audit during normal business hours at such place of business. Consultant shall provide office space, photocopies and other assistance to enable audit or inspection representatives to conduct such audits or inspections. This right to audit books and records directly related to this Agreement shall also extend to all subconsultants authorized under this Agreement. Consultant shall incorporate this provision in any subcontract entered into as a result of this Agreement and shall require its subconsultants to agree to cooperate with the listed agencies by making all appropriate and relevant project records available to those agencies for audit and copying.

#### **ARTICLE XXXIII**

**Record Retention:** All of Consultant's books, papers, job cost records, detailed cost estimates, claims, and accounts, including payment, property, payroll, personnel, subconsultant records, and financial records related to or which arise out of the work or under terms of this Agreement shall be retained for access, inspection and/or audit by the FHWA, the State, the California State Auditor and County or their duly authorized representatives for at least three (3) years after County's final payment to Consultant under this Agreement. Consultant shall incorporate this provision in any subcontract entered into as a result of this Agreement.

#### **ARTICLE XXXIV**

Covenant Against Contingent Fees: By executing this Agreement, Consultant warrants that it has not employed or retained any company or person, other than a bona fide employee working for Consultant, to solicit or secure this Agreement, and that it has not paid or agreed to pay any company or person, other than a bona fide employee, any fee, commission, percentage, brokerage fee, gift, or any other consideration, contingent upon or resulting from the award or formation of this Agreement. For breach or violation of this warranty, County shall have the right to annul this Agreement without liability or at its discretion to deduct from the Agreement price or consideration, or otherwise recover, the full amount of such fee, commission, percentage, brokerage fee, gift or contingent fee. The parties hereto have acknowledged this covenant against contingent fees and Consultant has duly executed Exhibit E, marked "Certification of Consultant," and County has duly executed Exhibit F, marked "Certification of Local Agency," both of which exhibits are incorporated herein and made by reference a part hereof.

#### **ARTICLE XXXV**

**Design Standards:** Consultant shall perform all services under this Agreement in conformance with applicable federal, state and local design standards or other standards for work performance stipulated in Article IV, Standards for Work above or in the individual Task Orders issued for any Optional Tasks pursuant to this Agreement.

#### **ARTICLE XXXVI**

**Documentation:** Consultant shall document the results of its work to the satisfaction of County and if applicable, the State and the FHWA. This may include preparation of progress and final reports, plans, specifications and estimates, or similar evidence of attainment of the Agreement objectives.

#### **ARTICLE XXXVII**

**Patent Rights:** Applicable patent rights provisions described in 41 CFR 1-9.1 regarding rights to inventions are hereby included in this Agreement as applicable. Consultant shall incorporate this provision in its subcontracts, if any, in excess of \$25,000.

#### ARTICLE XXXVIII

**Copyrights:** County may permit copyrighting reports or other Agreement products. If copyrights are permitted, the FHWA and State shall have the royalty-free non-exclusive and irrevocable right to reproduce, publish, or otherwise use, and to authorize others to use, the work for government purposes. Consultant shall incorporate this provision in its subcontracts, if any, in excess of \$25,000.

#### **ARTICLE XXXIX**

Consultant's Endorsement on PS&E/Other Data: If applicable, the responsible Consultant/Engineer shall sign all plans, specifications, estimates (PS&E) and all engineering data furnished by it and where appropriate, indicate its registration number.

#### **ARTICLE XL**

**Disadvantaged Business Enterprise (DBE) Considerations:** Consultant must give consideration to DBE firms as specified in 23 CFR 172.5(b) and in Appendix A to Part 26 of 49 CFR, and in Exhibit G marked, "Notice to Bidders/Proposers Disadvantaged Business Enterprise Information," incorporated herein and made by reference a part hereof. Consultant shall ensure that certified DBE firms have the opportunity to participate in the performance of this Contract and Consultant shall take all necessary and reasonable steps for such assurance.

### **ARTICLE XLI**

## **DBE Participation:**

- A. This Agreement is subject to 49 CFR, Part 26 entitled "Participation by Disadvantaged Business Enterprises in Department of Transportation Financial Assistance Programs." It is the policy of County that certified DBE firms shall have the maximum opportunity to participate in the performance of Contracts financed in whole or in part with federal funds. Consultant shall ensure that certified DBE firms, as defined in the Code of Federal Regulations, have the maximum opportunity to participate in the performance of this Contract and shall take all necessary and reasonable steps, as set forth in said Part 26, for such assurance. Consultant, if it obtains DBE participation on this Contract, will assist Caltrans in meeting its federally mandated statewide overall DBE goal.
- B. DBE and other small businesses, as defined in 49 CFR, Part 26 are encouraged to participate in the performance of agreements financed in whole or in part with federal funds. Consultant, subrecipient or subconsultant shall not discriminate on the basis of race, color, national origin, or sex in the performance of this Agreement. Consultant shall carry out applicable requirements of 49 CFR, Part 26 in the award and administration of US DOT-assisted agreements. Failure by Consultant to carry out these requirements is a material breach of this Agreement, which may result in the termination of this Agreement or such other remedy as County deems appropriate.

- C. Any subcontract entered into as a result of this Agreement shall contain all of the provisions of this Article.
- D. A sample agreement is attached hereto as Exhibit H, marked "Standard Agreement for Subcontractor/DBE Participation," and is incorporated herein and made by reference a part hereof.

## ARTICLE XLII Nondiscrimination:

- In connection with its performance under this Agreement, Consultant shall comply Α. with all applicable nondiscrimination statutes and regulations during the performance of this Agreement including, but not limited to the following: Consultant, its employees, subconsultants and representatives shall not unlawfully discriminate against any employee or applicant for employment because of race, religion, color, national origin, ancestry, physical handicap, medical condition, marital status, age, or sex; Consultant shall, unless exempt, comply with the applicable provisions of the Fair Employment and Housing Act (Government Code, Sections 12900 et seq.) and applicable regulations promulgated thereunder (California Code of Regulations, Title 2, Sections 7285.0 et seq.); the applicable regulations of the Fair Employment and Housing Commission implementing Government Code, Section 12990, set forth in Chapter 5 of Division 4 of Title 2 of the California Code of Regulations incorporated into this Agreement by reference and made a part hereof as if set forth in full; and Title VI of the Civil Rights Act of 1964, as amended. Consultant, its employees, subconsultants and representatives shall give written notice of their obligations under this clause as required by law.
- B. Where applicable, Consultant shall include the nondiscrimination and compliance provisions in any of its agreements that affect or are related to the services performed herein.
- C. The Congress of the United States, the Legislature of the State of California and the Governor of the State of California, each within their respective jurisdictions, have prescribed certain nondiscrimination requirements with respect to contract and other work financed with public funds. Consultant agrees to comply with the requirements of Exhibit I, marked "Fair Employment Practices Addendum" and the requirements of Exhibit J, marked "Nondiscrimination Assurances," including Appendices A through D to Exhibit J, both of which exhibits and the four Appendices to Exhibit J are incorporated herein and made by reference a part hereof. Consultant further agrees that any agreement entered into by Consultant with a third party for the performance of project-related work shall incorporate Exhibits I and J and Appendices A through D to Exhibit J as essential parts of such agreement to be enforced by that third party as verified by County.
- D. Consultant's signature executing this Agreement shall provide any certifications necessary under the federal laws and the laws of the State of California, including but not limited to Government Code Section 12990 and Title 2, California Code of Regulations, Section 8103.

#### **ARTICLE XLIII**

Compliance with Disability Acts: Consultant shall comply with: (a) Section 504 of the Rehabilitation Act of 1973 which prohibits discrimination on the basis of disability in federally assisted programs; (b) the Americans with Disabilities Act (ADA) of 1990 which prohibits discrimination on the basis of disability irrespective of funding; and (c) all applicable regulations and guidelines issued pursuant to both the Rehabilitation Act and the ADA.

#### **ARTICLE XLIV**

#### **Debarment and Suspension Certification:**

- A. Consultant's signature affixed herein, shall constitute a certification under penalty of perjury under the laws of the State of California, that Consultant has complied with Title 49, Code of Federal Regulations, Part 29, Debarment and Suspension Certificate, which certifies that it or any person associated therewith in the capacity of the owner, partner, director, officer or manager, is not currently under suspension, debarment, voluntary exclusion or determination of ineligibility by any federal agency; has not been suspended, debarred, voluntarily excluded or determined ineligible by any federal agency within the past three (3) years; does not have a proposed debarment pending; and has not been indicted, convicted or had a civil judgment rendered against it by a court of competent jurisdiction in any manner involving fraud or official misconduct within the past three (3) years. Any exceptions to this certification must be disclosed to County.
- B. Exceptions will not necessarily result in denial of recommendation for award, but will be considered in determining Consultant responsibility. Disclosures must indicate to whom exceptions apply, initiating agency and dates of action.

#### ARTICLE XLV

## Prohibition of Expending County, State or Federal Funds for Lobbying:

- A. Consultant, by its signature herein, certifies to the best of its knowledge and belief that:
  - 1. No state, federal or County appropriated funds have been paid, or will be paid by-or-on behalf of Consultant to any person for influencing or attempting to influence an officer or employee of any state or federal agency; a Member of the State Legislature or United States Congress; an officer or employee of the Legislature or Congress; or any employee of a Member of the Legislature or Congress, in connection with the awarding of any state or federal contract; the making of any state or federal grant; the making of any state or federal loan; the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any state or federal contract, grant, loan, or cooperative agreement.
  - If any funds other than federal appropriated funds have been paid, or will be paid to any person for influencing or attempting to influence an officer or employee of any federal agency; a Member of Congress; an officer or

employee of Congress, or an employee of a Member of Congress; in connection with this federal contract, grant, loan, or cooperative agreement; the Consultant shall complete and submit "Standard Form-LLL, Disclosure Form to Report Lobbying," in accordance with its instructions, which form and instructions are attached hereto as Exhibit K and are incorporated herein and made by reference a part hereof.

- B. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by Section 1352, Title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.
- C. Consultant also agrees by signing this document that it shall require that the language of this certification be included in all lower-tier subcontracts, which exceed \$100,000, and that all such subrecipients shall certify and disclose accordingly.

# ARTICLE XLVI Disputes:

- A. Any dispute, other than audit, concerning a question of fact arising under this Contract that is not disposed of by agreement shall be decided by a committee consisting of the County's Contract Administrator and the Director of Transportation, or designee, which may consider written or verbal information submitted by Consultant.
- B. Not later than thirty (30) days after completion of all work under the Contract, Consultant may request review by the Director of Transportation of unresolved claims or disputes, other than audit. The request for review will be submitted in writing.
- C. Neither the pendency of a dispute, nor its consideration by the committee will excuse Consultant from full and timely performance in accordance with the terms of this Contract.
- D. Consultant's failure to follow this dispute resolution procedure shall constitute a waiver of such claims and a bar to further proceedings.

#### **ARTICLE XLVII**

**Inspection of Work:** Consultant and any subconsultants authorized herein shall permit County, the state and the FHWA if federal participating funds are used in this contract to review and inspect the project activities and files at all reasonable times during the performance period of this Contract, including review and inspection on a daily basis.

# ARTICLE XLVIII Safety:

- A. Consultant shall comply with OSHA regulations applicable to Consultant regarding necessary safety equipment or procedures. Consultant shall comply with safety instructions issued by County's Safety Officer and other County representatives. Consultant's personnel and any subconsultants authorized herein shall wear hard hats and safety vests at all times while working on construction project sites.
- B. Pursuant to the authority contained in Section 591 of the Vehicle Code, County has determined that there are areas that may be within the limits of certain projects that are open to public traffic. Consultant shall comply with all of the requirements set forth in Divisions 11, 12, 13, 14 and 15 of the Vehicle Code. Consultant shall take all reasonably necessary precautions for safe operation of its vehicles and the protection of the traveling public from injury and damage from such vehicles.
- C. Consultant must have a Division of Occupational Safety and Health (CAL-OSHA) permit(s), as outlined in California Labor Code Sections 6500 and 6705, prior to the initiation of any practices, work, method, operation, or process related to the construction or excavation of trenches which are five (5) feet or deeper.
- D. Any subcontract entered into as a result of this Agreement, shall contain all of the provisions of this Article.

# ARTICLE XLIX Claims Filed by County's Construction Contractors:

- A. If claims are filed by County's construction contractors relating to work performed by Consultant's personnel or subconsultants, and additional information or assistance from Consultant's personnel or subconsultants is required in order to evaluate or defend against such claims, Consultant agrees to make its personnel and/or subconsultants available for consultation with County's construction contract administration and legal staff and for testimony, if necessary, at depositions and at trial or arbitration proceedings.
- B. Consultant's personnel and subconsultants that County considers essential to assist in defending against construction contractor claims will be made available on reasonable notice from County. Consultation or testimony will be reimbursed at the same rates that are being paid for Consultant's personnel services under this Agreement.
- C. Services of Consultant's personnel or subconsultants in connection with County's construction contractor claims will be performed pursuant to a written contract amendment, if necessary, extending the termination date of this agreement in order to finally resolve the claims.
- D. Any subcontract in excess of \$25,000 entered into as a result of this contract shall contain all of the provisions of this Article.

#### ARTICLE L

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

#### **ARTICLE LI**

**Evaluation of Consultant:** Consultant's performance will be evaluated by County. A copy of the evaluation will be sent to Consultant for comments. The evaluation together with the comments shall be retained as part of the contract record.

#### ARTICLE LII

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

#### **ARTICLE LIII**

**Contract Administrator:** The County Officer or employee with responsibility for administering this Agreement is Matthew D. Smeltzer, Deputy Director, West Slope Engineering Division, Department of Transportation, or successor.

#### **ARTICLE LIV**

**Authorized Signatures:** The parties to this Agreement represent that the undersigned individuals executing this Agreement on their respective behalf are fully authorized to do so by law or other appropriate instrument and to bind upon said parties the obligations set forth herein.

#### **ARTICLE LV**

**Partial Invalidity:** If any provision of the Agreement is held by a court of competent jurisdiction to be invalid, void, or unenforceable, the remaining provisions will continue in full force and effect without being impaired or invalidated in any way.

#### **ARTICLE LVI**

**Entire Agreement:** This document and the documents referred to herein or exhibits hereto are the entire Agreement between the parties, and they incorporate or supersede all prior written or oral agreements or understandings.

By: _	Matthew D. Smeltzer, Deputy Director West Slope Engineering Division Department of Transportation	Dated: 7/81/80	_
Req	uesting Department Concurrence:		
By: _	Richard W. Shepard, P.E. Director of Transportation	Dated:	_

**Contract Administrator Concurrence:** 

**IN WITNESS WHEREOF**, the parties have executed this Agreement on the dates indicated below, the latest of which shall be deemed to be the effective date of this Agreement.

## -- COUNTY OF EL DORADO--

Зу:	Dated:
Board of Supervisors "County"	
Attest: Cindy Keck Clerk of the Board of Supervisors	
By: Deputy Clerk	Dated:
HDR ENG	INEERING, INC
By: Timothy R. Fleming, P.E. Senior Vice President "Consultant"	Dated:
By: Corporate Secretary	Dated:

#### HDR Engineering, Inc.

#### Exhibit A

#### **Base Scope of Work**

### Base Scope of Work Table of Contents

Item of Work A.	Bridge and Retaining Walls Preliminary Engineering (30% Design)	1
Item of Work B.	Preparation of 65% PS&E and Related Documents Concerning Bridge and Retaining Walls	3
Item of Work C.	Preparation of 95% PS&E and Related Documents Concerning Bridge and Retaining Walls	4
Item of Work D.	Preparation of Final PS&E and Related Documents Concerning Bridge and Retaining Walls	5
Item of Work E.	Hydrology, Hydraulics, Scour Investigation and Erosion Protection	6
Item of Work F.	Geotechnical Engineering Services	9
Item of Work G.	Project Coordination1	2
Item of Work H.	Bidding Assistance And Pre-Construction Meeting1	3
NOTE:	Services Not Provided By HDR — County Responsibilities1	4

#### **DELIVERABLES:**

HDR Engineering, Inc. (HDR) shall submit all deliverables to County's Contract Administrator in accordance with completion time schedules herein. All unsigned deliverables, whether hard copy or electronic versions, shall be provided using Microsoft Office 2003 applications (specifically, MS Word, MS Project and MS Excel). Signed reports will be submitted in Adobe portable document format (PDF). Electronic AutoCAD 2008 or AutoCAD Civil 3D 2008 format shall be used for submittal of plans for review.

# Item of Work A. Bridge and Retaining Walls Preliminary Engineering (30% Design)

Plans shall be prepared by or under direction of a licensed Civil Engineer registered in the State of California. HDR will be responsible for design and preparing 30% plans, cost estimate and supporting details related to the proposed bridge and retaining walls including advanced planning study and bridge general plans. Plans shall include the design of barriers and/or rails and/or fences along the limits of the bridge span, bridge abutments and retaining walls. The design shall be in accordance with the

documents specified in this Agreement. HDR will submit plans and CAD files in accordance with this Agreement and County's CADD manual.

HDR will prepare a sample plan sheet and submit it to County for review and approval prior to development of the project plans. This sheet will show sample drawing title block, scales, line weights, lettering sizes and symbols to be utilized in the plan production process. The County-approved sample plan sheet shall be used as a basis for developing the project plans.

Note that this Item of Work includes studies for one bridge and one retaining wall type/configuration for each of the five retaining walls. Project configuration and limits are generally depicted in Exhibit D, marked "Preliminary Project Layout," incorporated herein and made by reference a part hereof. References to bridge and retaining wall locations shall reference Exhibit D. Each of the five retaining walls may be a separate type of wall with its own distinct type or design. The bridge will be expected to accommodate a 10" or 12" waterline. Wall #3 is expected to be lengthened to approximately 300 ft. long (extended north near the driveway). Wall #3 is also expected to accommodate a storm drainage culvert. Wall #4 is expected to be lengthened to approximately 200 ft. long (extended east just along Old Green Valley Road). Wall #4 is also expected to accommodate a storm drainage culvert.

The portion of the Engineer's Cost Estimate prepared by HDR shall include all materials and labor shown on the plans prepared by HDR and shall also include the cost regarding demolition of the existing bridge. Estimates and plans for construction prepared by HDR will not illustrate or contain excavation limits near the existing bridge or armoring of the creek bed.

During each submittal review, County will prepare a written list of comments and notations on the corresponding documents. HDR will respond in writing to each comment. The written responses shall accompany each submittal. HDR will incorporate all comments, changes and/or corrections obtained from County's review. If a comment cannot be incorporated, HDR will address why the comment was not incorporated, to County's satisfaction. County may request a resubmittal if, in County's opinion, the PS&E is not constructible in accordance with generally accepted construction practice, or if comments prepared by County have not been addressed from the previous review, or if the submittal does not meet the minimum requirements for the percentage of work to be completed. HDR will prepare an Advanced Planning Study (APS) for the proposed bridge and retaining walls (example: one bridge and each of the five retaining walls) in accordance with Caltrans Highway Design Manual requirements.

#### Deliverables:

- One (1) hard copy sample plan sheet (requires approval from County)
- Two (2) hard copies of Advanced Planning Study
- One (1) electronic copy of Advanced Planning Study in PDF format on CD
- Two (2) hard copy sets of 22" by 34" 30% plans
- Two (2) hard copy sets of 11" by 17" 30% half size plans
- One (1) electronic copy of plans on CD in AutoCAD 2008 or AutoCAD Civil 3D 2008 format
- Two (2) hard copy sets of Engineer's 30% Estimate on 8.5" by 11" paper
- One (1) electronic copy of Engineer's 30% Estimate in MS Excel format on CD

#### **Completion Time:**

All deliverables for this Item of Work shall be submitted within seventy (70) working days after County issues the Notice to Proceed regarding Item of Work A - Bridge and Retaining Walls Preliminary Engineering (30% design).

# Item of Work B. Preparation of 65% PS&E and Related Documents Concerning Bridge and Retaining Walls

HDR will be responsible for design and preparation of 65% plans, cost estimates, specifications, calculations, supporting details and documents related to the design of the selected bridge and retaining walls. The 65% PS&E shall be sufficiently developed so that an independent bridge design check can be completed.

HDR will prepare instructions and special provisions related to the demolition of the existing bridge including proposed slopes and excavation limits. Limits shall reference and be complimentary with HDR's recommendations for armoring (see Item of Work E. "Hydrology, Hydraulics, Scour Investigation and Erosion Protection" Section in this scope). Estimates and plans for construction prepared by HDR should not illustrate or contain excavation limits near the existing bridge or armoring of the creek bed. The portion of the Engineer's Cost Estimate prepared by HDR shall include all materials and labor shown on the plans prepared by HDR and will also include the cost regarding demolition of the existing bridge.

The submittal review process for the 65% submittal will be similar to the process stated above for 30% submittal. During each submittal review, County will prepare a written list of comments and notations on the corresponding documents. HDR will respond in writing to each comment. The written responses shall accompany each submittal. HDR will incorporate all comments, changes and/or corrections obtained from County's review. If a comment cannot be incorporated, HDR will address why the comment was not incorporated, to County's satisfaction. County may request a resubmittal if, in County's opinion, the PS&E is not constructible in accordance with generally accepted construction practice, or if comments prepared by County have not been addressed from the previous review, or if the submittal does not meet the minimum requirements for the percentage of work to be completed.

#### **Deliverables:**

- 1. Two (2) sets of wet signed and stamped 8.5" by 11" instructions regarding bridge demolition, excavation slopes, excavation limits and armoring.
- 2. One (1) electronic copy of instructions regarding bridge demolition, excavation slopes, excavation limits and armoring in Microsoft (MS) Word format on CD

#### **Completion Time:**

Deliverables 1 and 2 shall be submitted within thirty (30) working days after County issues the Notice to Proceed regarding Item of Work B - Preparation of 65% PS&E and Related Documents Concerning Bridge and Retaining Walls.

- 3. Three (3) hard copy sets of 22" by 34" 65% plans
- 4. Three (3) hard copy sets of half size 11" by 17" 65% plans
- 5. One (1) electronic copy of 65% plans on CD in AutoCAD 2008 or AutoCAD Civil 3D 2008 format
- 6. Three (3) hard copy sets of 8.5" by 11" 65% Special Provisions concerning bridge and retaining walls.
- 7. Two (2) hard copies of the engineer's 65% estimate for construction
- 8. One (1) electronic copy of engineer's 65% estimate concerning bridge and retaining walls on CD in MS Excel format
- 9. Two (2) hard copy sets of Bridge Design Notes and Calculations

- 10. Two (2) hard copies of Retaining Walls Design Notes and Calculations
- 11. Two (2) hard copies of how the issues from the 30% review comments (concerning the bridge and retaining walls portion) have been addressed by HDR

#### **Completion Time:**

Deliverables 3 through 11 shall be submitted within seventy (70) working days after County issues the Notice to Proceed regarding Item of Work B - Preparation of 65% PS&E and Related Documents Concerning Bridge and Retaining Walls.

# Item of Work C. Preparation of 95% PS&E and Related Documents Concerning Bridge and Retaining Walls

HDR will have the 65% PS&E reviewed independently by an experienced bridge engineer registered in California and not involved with the original design. The reviewer will re-analyze the bridge, verify member capacities, review the special provisions and prepare independent quantity calculations for the bridge. Issues raised by the reviewer will be discussed with and resolved by HDR. The 95% design will reflect agreement between HDR and the reviewer.

The submittal review process for the 95% submittal will be similar to the process stated above for the 30% submittal. During each submittal review, County will prepare a written list of comments and notations on the corresponding documents. HDR will respond in writing to each comment. The written responses shall accompany each submittal. HDR will incorporate all comments, changes and/or corrections obtained from County's review. If a comment cannot be incorporated, HDR will address why the comment was not incorporated, to County's satisfaction. County may request a resubmittal if, in County's opinion, the PS&E is not constructible in accordance with generally accepted construction practice, or if comments prepared by County have not been addressed from the previous review, or if the submittal does not meet the minimum requirements for the percentage of work to be completed.

#### Deliverables:

- Three (3) hard copy sets of 22" by 34" 95% plans
- Three (3) hard copy sets of half size 11" by 17" 95% plans
- One (1) Electronic copy of 95% plans on CD in AutoCAD 2008 or AutoCAD Civil 3D 2008 format
- Three (3) hard copy sets of 8.5" by 11" 95% Special Provisions
- One (1) electronic copy of 95% Special Provisions concerning bridge and retaining walls on CD in MS Word format
- Two (2) hard copies of the engineer's 95% estimate for construction
- Two (2) hard copy sets of Bridge Design Notes and Calculations
- Two (2) hard copies of Retaining Walls Design Notes and Calculations
- Two (2) hard copy sets of Independent Bridge Design Check Calculations
- One (1) hard copy set of review comments made by the independent reviewer and response to those comments made by HDR
- Two (2) hard copies of how the issues from the 65% review comments (concerning the bridge and retaining walls portion) have been addressed by HDR

#### **Completion Time:**

All deliverables for this Item of Work shall be submitted within eighty (80) working days after County issues the Notice to Proceed regarding Item of Work C - Preparation of 95% PS&E and Related Documents Concerning Bridge and Retaining Walls.

# Item of Work D. Preparation of Final PS&E and Related Documents Concerning Bridge and Retaining Walls

The final PS&E will reflect agreement between the HDR designer, the independent reviewer and County. The final PS&E shall include all items necessary so that County can immediately proceed with the advertisement of bids, award and construction of the project. After receipt of final approval from County, an original set of stamped and signed plans, copies of the portion of bidding documents associated with the bridge and retaining walls and the portion of engineer's estimate associated with bridge and retaining walls shall be submitted to County for its use in advertising and soliciting construction bids. HDR shall provide estimate and quantity calculations to County for use in administering the contract.

#### Deliverables:

- One (1) set wet signed and stamped final plans and Log of Test Boring Sheets on 22" by 34"
   Mylar
- One (1) hard copy set of plotted, signed and stamped 11" by 17" half-size plans
- One (1) electronic copy, on CD, of the final plans regarding the bridge and retaining walls for County records and construction staking in AutoCAD 2008 or AutoCAD Civil 3D 2008 format.
   The file shall include a model with accuracy for construction staking information
- One (1) hard copy set of wet signed and stamped Special Provisions concerning the bridge and retaining walls
- One (1) electronic copy of Special Provisions concerning the bridge and retaining walls on CD in MS Word format
- Two (2) hard copy wet signed and stamped sets of Bridge Design Calculations for County records
- Two (2) hard copy sets of Independent Bridge Design Check Calculations
- One (1) hard copy wet signed and stamped set of Retaining Walls Calculations
- One (1) hard copy of Engineer's Estimate and an electronic copy on CD in MS Excel format
- Two (2) hard copy sets of quantity calculations regarding the bridge and retaining walls
- Two (2) hard copies of how the issues from the 95% review comments (concerning the bridge and retaining walls portion) have been addressed by HDR

#### **Completion Time:**

All deliverables for this Item of Work shall be submitted within seventy (70) working days after County issues the Notice to Proceed regarding Item of Work D – Preparation of Final PS&E and Related Documents Concerning Bridge and Retaining Walls.

# Item of Work E. Hydrology, Hydraulics, Scour Investigation and Erosion Protection

The following Item of Work descriptions provide the recommended hydrologic and hydraulic analysis to evaluate the proposed Green Valley Road at Weber Creek Bridge Replacement Project.

All memos, analysis, review summaries and reports will be prepared by or under the direction of a licensed Civil Engineer registered in the State of California.

Discharges for Weber Creek have been recently modeled for the U.S. Highway 50 Missouri Flat Road Project. HDR assumes a copy of this report will be available for this project after review and approval by County. HDR will review the study limits in the Highway 50 report. HDR will provide all necessary additional studies for the Green Valley Rd. / Weber Creek Study.

The effective FEMA FIRM (Panel No. 060040 0750B) currently shows no floodplain delineation near the proposed project site. The nearest FEMA floodplain delineation is approximately 2-miles downstream from the project site. HDR will meet with County staff to review available hydrologic information and determine the limits of the necessary hydraulic modeling. Once determined, HDR will develop a hydraulic (HEC-RAS) model using peak discharges calculated by HDR. One bridge is anticipated to be considered for the 30% submittal. Preliminary assessment of the creek bed and stream bank impacts will be provided with the submittal.

Once a final design alternative is selected, HDR will provide a scour assessment and recommend the required erosion protection measures for the creek bed and stream bank design.

The following Items of Work describe the recommended hydrologic and hydraulic evaluation.

HDR will conduct a data and literature search to obtain information pertinent to the hydrologic and hydraulic analysis. This includes obtaining relevant documents from County, such as the Final Hydrology Report concerning the U.S. Highway 50 Missouri Flat Road Interchange project.

HDR will also review the existing survey of the creek channel geometry and determine what additional information is necessary to complete a hydraulic analysis. County will provide an electronic copy of the existing survey control, topography with contours and a digital terrain model in AutoCAD 2007 format. HDR will prepare a technical memo describing all additional survey needed to complete the hydraulic analysis.

HDR will collect necessary soils information from HDR's geotechnical sub-consultant, Youngdahl Consulting Group, Inc. (Youngdahl), to complete the scour and erosion analysis.

HDR will prepare a Preliminary Hydrology / Hydraulic analysis with review summary for the Advanced Planning Study and Environmental Studies.

Peak discharges for Weber Creek have been modeled and approved for the U.S. Highway 50 Missouri Flat Road Project. HDR will review the available hydrologic data information and confirm that the model study limits are included and acceptable for this project. If necessary, HDR will modify available modeling information as needed to encompass the proposed project within the extents of the Weber Creek watershed.

HDR will conduct a hydraulic analysis of Weber Creek. A HEC-RAS model will be developed for approximately 1,000 feet upstream and downstream of the proposed bridge location. HDR anticipates one bridge alternative will be modeled for the 30% submittal. No floodway analysis will be performed for this project.

The starting water surface elevations for study streams will be determined using FEMA's criteria described in the document: "Guidance for Riverine Flooding Analysis and Mapping." It is also assumed

that the study reach is not impacted by backwater effects from the South Fork American River and therefore, normal depth with be used as the downstream boundary condition.

Manning's "n-values" will be estimated using the report titled "Guide for Selecting Manning's Roughness Coefficients for Natural Channels and Floodplains," USGS Water Supply Paper 2339. The report information will be supplemented by the field reconnaissance photographic documentation provided by County.

Channel and floodplain cross-sectional information will be obtained from the existing elevation data and supplemented with survey information provided by County. The 2- percent-annual-chance storm events (50-Year), 1- percent-annual-chance storm events (100-Year) and overtopping event will be modeled using HEC-RAS. A series of water surface elevations utilizing various storm frequencies will be evaluated to determine the optimum worst-case pier scour and erosion condition for design. The HEC-RAS model will consist of actual surveyed cross-sections. HDR assumes that no certifiable levees exist within the study reach.

Initially, an existing conditions model will be developed. Basic bridge design alternatives will then be analyzed for possible hydraulic impacts. Possible impacts could include increased water surface elevations, changes in velocities and re-directing of flows. This scope assumes that only one basic bridge design option that improves hydraulic conditions will be analyzed.

Multiple runs will be made reflecting the various percent-annual-chance-events. The feasibility of the model results will be assessed by comparing them with available flood information.

Water surface profiles for the specified percent-annual-chance-events, stage-discharge curve, stage-frequency curve and flow velocities will be developed and provided to County.

HDR will submit the hydraulic analysis to its internal QA team members for review and comment. All review comments will be summarized in HDR's Hydraulic Analysis QA/QC Form.

As part of the hydrology/hydraulics analyses, the existing and future floodplains must be identified and compared. Currently, there is no FEMA floodplain developed for this portion of Weber Creek.

HDR will prepare a digital base map delineating cross section locations and the one (1)-percent-annual chance floodplain boundaries (100-Year), base flood elevations and insurance risk zone boundaries.

HDR will submit the digital work maps to its internal QA team members for review and comment.

Once an alternative has been selected by County, bridge scour potential will be assessed to meet all Caltrans guidelines. HDR will perform an HEC-RAS analysis along with calculations based on guidelines provided in the FHWA's Hydraulic Engineering Circulars (HEC) 18 and 20 to determine the extent of potential scour at the bridge piles. Grain-size distribution data will be used from Youngdahl's geotechnical research.

An allowance will be made for estimated long-term degradation and localized scour. Localized scour components may include bridge structure scour (such as abutment scour or pier scour), bend scour, bedform scour, thalweg migration and contraction scour.

Recommendations on scour protection and erosion protection for the creek will be presented in the Preliminary Hydrologic / Hydraulic Report. The scour analysis will summarize scour potential relative to geotechnical data for making recommendations for bridge foundation depths and/or channel invert and slope protection design.

Once an alternative has been selected by County, HDR will recommend erosion protection measures for armoring the creek bed and stream banks. All recommendations will meet Caltrans guidelines.

HDR will prepare and submit a Preliminary Hydrologic / Hydraulic Report analysis with review summary for the Advanced Planning Study and Environmental Studies.

HDR will prepare and submit a Draft Hydrologic / Hydraulic Report for the bridge/creek portion of the proposed project. The Draft Report shall be prepared in accordance with the guidelines contained in the Caltrans Local Assistance Procedures Manual, the El Dorado County Drainage Manual and all other applicable standards specified in this Agreement. The Draft Hydrologic / Hydraulic Report shall include an introduction, background information and a narrative describing the existing conditions, specific goals and project objectives for the site. The Draft Report shall also contain recommendations for armoring the creek bed and stream banks from erosion.

HDR will prepare and submit an unsigned Final Hydrologic / Hydraulic Report for the selected alternative. The final HEC-RAS model run and scour potential shall be included in the Final Hydrology / Hydraulic Report. The report will include sections to summarize results of the analysis presented in the previous versions. Back-up calculations will also be provided as appendices to the report.

During each submittal review for the Preliminary Hydrologic / Hydraulic Report, the Draft Hydrologic / Hydraulic Report and the unsigned Final Hydrologic / Hydraulic Report, County will prepare a written list of comments and notations on the corresponding documents. HDR will respond in writing to each comment. The written responses shall accompany each submittal. HDR will incorporate all comments, changes and/or corrections obtained from County's review. If a comment cannot be incorporated, HDR will address why the comment was not incorporated, to County's satisfaction. County may request a resubmittal if, in County's opinion, the reports are not acceptable in accordance with generally accepted engineering and construction practices, or if comments prepared by County have not been addressed from the previous review, or if the submittal does not meet the minimum requirements for the percentage of work to be completed.

Once HDR receives review comments from County on the unsigned Final Hydrologic / Hydraulic Report, HDR will provide written responses to each comment. Appropriate changes will be made and the Final Hydrologic / Hydraulic Report will be resubmitted with a wet signature and the stamp of a licensed Civil Engineer registered in the State of California.

#### Deliverables:

- 1. Two (2) hard copies of the Preliminary Hydrologic / Hydraulic Report with review summary
- One (1) electronic copy on CD of the Preliminary Hydrologic / Hydraulic Report in PDF format

#### **Completion Time:**

Deliverables 1 and 2 shall be submitted within thirty (30) working days after County issues the Notice to Proceed regarding Item of Work E- Hydrology, Hydraulics, Scour Investigation and Erosion Protection.

3. Two (2) hard copies of the Draft Hydrologic / Hydraulic Report

#### **Completion Time:**

The Notice to Proceed for this Item of Work E - Hydrology, Hydraulics, Scour Investigation and Erosion Protection, will specify that the completion time for deliverable 3 will be on or prior to the completion date for the Bridge and Retaining Walls Preliminary Engineering (30% design).

4. Two (2) hard copies of the unsigned Final Hydrologic / Hydraulic Report

#### **Completion Time:**

The Notice to Proceed for this Item of Work E - Hydrology, Hydraulics, Scour Investigation and Erosion Protection, will specify that deliverable 4 shall be submitted within thirty (30) working days after the Notice to Proceed regarding Item of Work B - Preparation of 65% PS&E and Related Documents Concerning Bridge and Retaining Walls is issued.

- 5. Two (2) hard copies of the wet signed and stamped Final Hydrologic / Hydraulic Report
- 6. Any additional hard copies of the Final Hydrologic / Hydraulic Report required by Caltrans
- 7. One (1) electronic copy on CD of the Final Hydrologic / Hydraulic Report in PDF format

#### **Completion Time:**

The Notice to Proceed for this Item of Work E - Hydrology, Hydraulics, Scour Investigation and Erosion Protection, will specify that deliverables 5, 6 and 7 shall be submitted concurrently with deliverables 3 thorough 11 required under Item of Work B - Preparation of 65% PS&E and Related Documents Concerning Bridge and Retaining Walls.

## Item of Work F. Geotechnical Engineering Services

Subconsultant Youngdahl will provide geotechnical services for the project. Due to the steep nature of the site and narrow roadway, some adjustments to the proposed boring locations will be required. This scope of work includes positioning the borings on the existing roadway which are located approximately 50 feet laterally from the planned bridge abutment foundation locations. These borings will not be at the exact bridge and retaining wall foundation locations.

HDR shall prepare and submit a Preliminary Geotechnical Report, an unsigned Final Geotechnical Report and a signed Final Geotechnical Report. During each submittal review, County will prepare a written list of comments and notations on the corresponding documents. HDR will respond in writing to each comment. The written responses shall accompany each submittal. HDR will incorporate all comments, changes and/or corrections obtained from County's review. If a comment cannot be incorporated, HDR will address why the comment was not incorporated, to County's satisfaction. County may request a resubmittal if, in County's opinion, the geotechnical reports are not acceptable in accordance with generally accepted engineering and construction practices, or if comments prepared by County have not been addressed from the previous review, or if the submittal does not meet the minimum requirements for the percentage of work to be completed.

Once HDR receives review comments from County on the unsigned Final Geotechnical Report, HDR will provide written responses to each comment, the appropriate changes will be made and the Final Geotechnical Report will be resubmitted with a wet signature and the stamp of a licensed Civil Engineer registered in the State of California.

In the event that County determines that the above geotechnical information is insufficient, County's Contract Administrator may authorize an "Optional Task" in accordance with the procedures identified in this Agreement for additional geotechnical work such as field borings in the creek. This Optional Task may include drilling two (2) additional borings at the exact foundation locations by using an all-terrain skid mounted drill rig to access either side of Weber Creek.

Initially, Youngdahl will review various sources of geotechnical information concerning the project site. Such sources will include geologic maps, seismologic literature and other published documents. Any available soil logs and information obtained from any previous utility trenching along the proposed

roadway improvements will be reviewed. Youngdahl's project engineer will perform a reconnaissance of the site to become familiar with the job site conditions. The conditions observed will be noted for later use in situating boring locations.

Following this literature review, Youngdahl will map the geologic conditions along the proposed alignments. Existing roadway excavation and bedrock conditions exposed along the creek alignment will be mapped. The mapping will further facilitate the positioning of the exploratory borings. Additionally, Youngdahl's reconnaissance and mapping will include an evaluation of the slope performance of the existing cut and fill slopes in order to provide information regarding the optimal slope configurations for future slopes.

Once the above items have been completed, preferable boring locations will be identified, based on the information obtained and the locations will be marked in the field. Youngdahl will request the local utility locating service (USA) to mark any underground utilities at each exploration location. Encroachment permits will also be obtained from County and traffic control will be in place during the subsurface investigations. Youngdahl will perform all necessary traffic control for field investigations.

Following USA clearance, gathering utility information and obtaining permits, Youngdahl will perform the geotechnical investigation, in accordance with the Caltrans Local Assistance Procedures Manual. Youngdahl will explore subsurface conditions by advancing four (4) borings. One boring will be positioned at each end of the proposed bridge and one at each road approach. Youngdahl will increase the depth of the four (4) borings to obtain additional information regarding the foundation conditions below the planned approaches and bridge foundations. Exploration depths on the order of 30 to 40 feet below existing grades are anticipated to be adequate to characterize subsurface conditions.

Given the shallow bedrock conditions at the site, rock coring is expected to be required. Rock Quality Designation (RQD) will be used to assess the integrity of the bedrock mass and will be performed on core samples recovered during the field exploration. An experienced geologist or engineer from Youngdahl will continuously observe the borings, log the subsurface conditions, collect representative soil samples and transport all samples to the laboratory for further visual examination and testing. Youngdahl will exercise due care while working at the site, but some surface disturbance is unavoidable and complete restoration of any disturbed areas is not included in this scope of work. Auger holes will be backfilled with a cement/bentonite slurry.

Youngdahl will conduct a series of geotechnical laboratory tests on selected samples obtained from the field explorations in order to evaluate the engineering and index properties of the site subsurface materials. As deemed appropriate, these tests may include maximum dry density and optimum moisture determinations, in-situ moisture content and dry density determinations, grain size analyses, unconfined compressive strength tests, direct-shear tests, resistance value (R-value) tests, sulfate and chloride content as well as pH and resistivity. Samples will be stored for thirty (30) days after submittal of the Preliminary Geotechnical Report and then discarded, unless prior arrangements are made for longer term storage.

In order to assess the potential for Naturally Occurring Asbestos (NOA) at the project site, a sample collection and laboratory analysis will be performed. The El Dorado County Air Quality Management District requires a work plan to be submitted prior to sampling. The costs for this work plan have been included in the budget for this scope of work. Sample collection will be performed by a California Professional Geologist. Youngdahl will collect up to four (4) discrete samples (one (1) from each boring location at the project site) and will test the samples for NOA using ARB Test Method 435. An archive duplicate of the analyzed samples will be retained for future additional analysis. A report of the findings, which includes the analytical results, will be included in the unsigned Final Geotechnical Report.

Upon completion of the field and laboratory work, Youngdahl will analyze all field exploration data, laboratory testing data and research findings in order to develop conclusions and recommendations

concerning the geotechnical aspects of the project. After analyzing the site conditions, a Preliminary Geotechnical Report for the project will be prepared. The report will include the following specific items:

- Site plan showing approximate exploration locations on a base map supplied by County
- Descriptive logs of subsurface explorations in accordance with Caltrans requirements
- Description of surface, soil, bedrock, groundwater and seismic conditions
- Conclusions regarding the reuse of on-site soils and bedrock for structural fill
- Recommendations regarding temporary slopes and fills
- Conclusions regarding on-site liquefaction potential
- Conclusions regarding slope stability
- Recommended seismic design parameters
- Recommendations for site preparation
- Recommendations concerning excavations, including temporary slope angles
- Design criteria for shallow and deep bridge foundations, including allowable bearing pressures
- Estimated total and differential settlements
- Design criteria for retaining walls
- Recommendations concerning temporary and permanent drainage systems
- Recommended asphalt concrete pavement sections
- Recommendations concerning permanent slopes, including maximum inclinations
- Recommendations concerning structural fill
- Recommendations for construction monitoring
- Explanation of report limitations
- Recommendations for further geotechnical study, if necessary

Additionally, a Phase I Environmental Site Assessment (ESA) for hazardous materials will be conducted in accordance with the American Society for Testing and Materials (ASTM) Designation E 1527-05 "Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment (ESA) Process". The ASTM E1527-05 standard is consistent with the requirement of the All Appropriate Inquiry (AAI) rule in Title 40 of the Code of Federal Regulations (40 C.F.R. § 312). A Phase I ESA Questionnaire will be provided by HDR/Youngdahl to facilitate the collection of information. The questionnaire will be completed by a person with good knowledge of the property. A reasonable attempt shall be made HDR to interview a reasonable number of occupants. Prior to HDR's site visit, the property owner shall be asked to provide any of the following helpful documents, if reasonably ascertainable: environmental site assessment report, environmental site audit reports, environmental permits (i.e. solid waste disposal, hazardous waste disposal, wastewater), registrations for underground and aboveground storage tanks, material safety data sheets, community right-to-know plan, safety plans (i.e. spill prevention, countermeasure, control plans), reports regarding hydrogeologic conditions on the property or surrounding area, notices or other correspondence from any government agency relating to past or current violations of environmental laws with respect to the property or relating to environmental liens encumbering the property, archeological studies, hazardous waste generator notices or report and geotechnical studies. The goal of the Phase I ESA is to identify recognized environmental conditions which may affect the property. Recognized environmental conditions for the Phase 1 ESA do not include the presence of asbestos, lead paint, radon or radioactive soils, methane, electromagnetic fields,

or wetlands and this item of work does not include inquiries with respect to those issues. This item of work includes searches for liens and deed restrictions for up to ten (10) parcels. A Phase I ESA Report will be prepared and submitted to County.

#### Deliverables:

- 1. Two (2) hard copies of the Preliminary Geotechnical Report and the Phase I ESA Report
- 2. One (1) electronic copy on CD of the Preliminary Geotechnical Report and the Phase I ESA Report in PDF format

#### **Completion Time:**

Deliverables 1 and 2 shall be submitted within thirty (30) working days after County issues a Notice to Proceed regarding Item of Work F - Geotechnical Engineering Services.

- 3. Two (2) hard copies of the unsigned Final Geotechnical Report
- 4. Two (2) hard copies of the draft Log of Test Borings Sheets

#### **Completion Time:**

The Notice to Proceed for this Item of Work F - Geotechnical Engineering Services, will specify that deliverables 3 and 4 shall be submitted within thirty (30) working days after the Notice to Proceed regarding Item of Work B - Preparation of 65% PS&E and Related Documents Concerning Bridge and Retaining Walls is issued.

- 5. Four (4) hard copies of wet signed and stamped Final Geotechnical Report
- 6. Additional hard copies of the wet signed and stamped Final Geotechnical Report as required by Caltrans
- 7. Four (4) hard copies of the Log of Test Borings Sheets
- 8. Additional hard copies of the Log of Test Borings Sheets as required by Caltrans

#### **Completion Time:**

The Notice to Proceed for this Item of Work F - Geotechnical Engineering Services, will specify that deliverables 5 through 8 shall be submitted concurrently with deliverables 3 thorough 11 required under Item of Work B - Preparation of 65% PS&E and Related Documents Concerning Bridge and Retaining Walls.

## Item of Work G. Project Coordination

HDR will provide professional and technical services during the design of the project. As directed by the Contract Administrator, HDR will perform the following duties and tasks associated with its engineering services for the bridge and retaining walls:

- Attend and participate at fifteen (15) project team coordination and status meetings. Meeting notes will be prepared by County and not by HDR
- Prepare and submit written memos regarding recommendations associated with environmental issues involving the bridge and retaining walls

- Prepare and submit written memos with recommendations regarding construction staging sequences and techniques involving the bridge and retaining walls
- Assist County in preparing supporting documents and technical reports required by Caltrans and/ or environmental reviews related to the bridge, retaining walls, hydrology/hydraulics or geotechnical features of the project

The Project Coordination effort for Team Leader, Dennis Pecchia, will be capped at 160 hours under this Item of Work. This is due to not being able to predict the number and nature of the technical memoranda and supporting documents that will be required for the project at this time.

#### Deliverables:

- Attend and participate at up to fifteen (15) project team coordination and status meetings
- Prepare and submit hard copy memos within twelve (12) working days of receiving request from the Contract Administrator

## Item of Work H. Bidding Assistance and Pre-Construction Meeting

Bidding Assistance from HDR will be related to the bridge and retaining walls. HDR shall provide clarification and information about the PS&E package, Geotechnical Engineering Services and Hydrology and Hydraulic Analysis during the construction advertising and bidding process. HDR will assist County in responding to bidder's inquires, preparing addenda, and in providing clarification during the advertisement period. Additionally, HDR will be responsible for resolving any errors in the design, which are identified during construction at no additional cost to County and in a timely manner to ensure that construction delays are avoided or minimized.

If directed by the Contractor Administrator, HDR shall attend and participate in the project pre-bid meeting. Questions concerning the intent of the construction plans and specifications may be referred to HDR for resolution. In the event that any items requiring interpretation in the drawings, plans or specifications are discovered during the advertising period, those items referred to HDR will be analyzed by HDR and recommendations will be provided to County for its consideration. Corrective action taken may be in the form of Addenda to the bid documents, or in the form of Contract Change Orders issued after the award of the construction contract. If Addenda or Contract Change Orders are required, HDR will prepare all necessary documents, to perform any required revisions to the plans and specifications and shall submit the documents to County.

If directed by the Contractor Administrator, HDR will attend and participate in the pre-construction meeting held between the Resident Engineer and the Contractor prior to the start of actual construction activities.

#### **Deliverables:**

- If directed by the Contractor Administrator, attend and participate in the pre-bid meeting
- If directed by the Contractor Administrator, attend and participate in the pre-construction meeting
- Prepare and submit analyses and written recommendations regarding concerns from the meetings within three (3) working days of each meeting
- Provide consultation, clarifications and revisions of documents such as Addenda or Contract Change Orders related to HDR's Scope of Work during advertising and construction of the project.

## Note: Services Not Provided by HDR — County Responsibilities

- Overall project management.
- Environmental work (except for the Phase I Environmental Site Assessment described in Item of Work F herein), public outreach and environmental permitting.
- Surveying and base mapping, including utility mapping
- Roadway layout and alignment and all associated design and plans. Roadway drainage design, roadway erosion control and SWPPP
- Overall preparation of PS&E with the exception of HDR's responsibility for the bridge and retaining walls PS&E as described herein
- Integration and combining of the roadway and structures plans, specifications and estimates
- · Right of way, including document and acquisition services and utility relocations
- Construction management and full time inspection.

#### HDR Engineering, Inc.

#### **Exhibit B**

#### **Hourly Billing Rates**

Billing rates for labor under this Agreement shall be based on the base hourly salary rates below times a factor of 2.81 (overhead, fringe benefits and 10% fee). Base Hourly Rates are valid through December 31, 2008 and are subject to a five percent (5%) increase effective January 1, 2009 and an additional five percent (5%) increase on January 1<sup>st</sup> of each successive year. On or before January 1<sup>st</sup> of each calendar year, Consultant may submit a new proposed rate schedule, which shall require written approval and acceptance by County's Contract Administrator, prior to the new rates becoming effective. In no instance shall the base hourly rates be increased more than five percent (5%) per year.

For employee classifications subject to Prevailing Wage rates, compensation shall be based on the current General Prevailing Wage Schedule set forth by the California Department of Industrial Relations.

		2008
	2008	Hourly Billing
	Base	Rates
	Hourly	(2.81
Classification	Rates	Factor)
Principal-In-Charge	83.50	234.64
Team Leader	64.80	182.09
Senior Bridge Engineer	57.75	162.28
Bridge Engineer I	29.00	81.49
Bridge CAD Technician	42.65	119.85
Retaining Wall CAD Technician	36.58	102.79
Senior Hydraulics Engineer	57.75	162.28
Hydraulic Engineer II	38.00	106.78
Roadway Specialist	55.50	155.96
Right of Way Specialist	54.00	151.74
Funding Specialist	67.50	189.68
Environmental Specialist	63.50	178.44
Project Controller	27.00	75.87
Administrative Support	18.10	50.86

#### A. OUTSIDE EXPENSES

Outside expenses incurred by Consultant under this Agreement shall be compensated at actual cost. These expenses may include, but shall not be limited to, costs for photographic or reproduction services; filings, applications; postage and freight.

#### **B. IN-HOUSE EXPENSES**

In-house expenses incurred by Consultant under this Agreement shall be compensated as listed below:

EXPENSE TYPE	RATE	
Office Computer & Software	Included in Overhead	
Phone/Fax	Included in Overhead	
Copies (in office convenience)	Included in Overhead	
Auto Mileage	*See Below	
Miscellaneous Other Expenses	Actual Cost	

\*Reimbursement for mileage expenses, if applicable, shall not exceed the lesser of (1) the rates to be paid to County employees under the current Board of Supervisors Travel Policy at the time the mileage expenses are incurred; or (2) the rates authorized to be paid to rank and file state employees under the then current State Department of Personnel Administration (DPA) rules. Mileage reimbursement rates apply to Consultant and to any subconsultants authorized under this Agreement. Any reimbursements for mileage expenses for Optional Tasks will only be made if such expenses are included in the budget of an approved and fully executed Task Order issued pursuant to this Agreement.

#### HDR Engineering, Inc.

#### **Exhibit C**

#### Cost Proposal\*

### Base Scope of Work

#### HDR Engineering, Inc.

Item of Work A - Bridge and Retaining Wall Preliminary Engineering (30% Design)	\$34,161
Item of Work B - Preparation of 65% PS&E and Related Documents Concerning Bridge and Retaining Walls	71,314
Item of Work C - Preparation of 95% PS&E and Related Documents Concerning Bridge and Retaining Walls	20,297
Item of Work D - Preparation of Final PS&E and Related Documents Concerning	
Bridge and Retaining Walls	8,173
Item of Work E - Hydrology, Hydraulics, Scour Investigation & Erosion Protection	19,829
Item of Work F - Geotechnical Engineering Services	664
Item of Work G - Project Coordination	12,840
Item of Work H - Bidding Assistance and Pre-Construction Meeting	4,652
Labor Subtotal	\$171,930
Overhead and Fees	336,984
Other Direct Costs	24,741
Total Prime Costs	\$533,655

#### **Subconsultant:**

#### Youngdahl Consulting Group, Inc.

Task F - Geotechnical Engineering Services	\$39,345

Total Proposed Base Scope Cost Estimate \$573,000

## **Optional Tasks**

Optional Tasks \$227,000

Total Proposed Budget Cost Estimate \$800,000

<sup>\*</sup>All expenses and their distribution among tasks are estimates only. This exhibit represents the composition of the total not-to-exceed budget for this Agreement. In the performance of the scope of services to be provided in accordance with this budget, Consultant may request to reallocate the expenses listed herein among Consultant's personnel (not including subconsultants) and among the various tasks identified herein, subject to the Contract Administrator's written approval. In no event shall the total amount of the Prime Costs (\$533,655) be exceeded, nor shall the total not-to-exceed amount of the Base Scope (\$573,000) nor the total not-to-exceed amount of the Contract be exceeded.