

**FOURTH AMENDMENT TO AGREEMENT  
FOR CONSULTANT SERVICES  
BETWEEN  
THE CITY OF SAN JOSE  
AND  
WINZLER & KELLY**

This FOURTH AMENDMENT TO AGREEMENT is entered into this \_\_\_\_ day of \_\_\_\_\_, 2009, by the **CITY OF SAN JOSE** ("CITY"), a municipal corporation, and **WINZLER & KELLY**, a California corporation ("CONSULTANT").

**RECITALS**

A. **WHEREAS**, on June 26, 2007, CITY and CONSULTANT entered into an agreement entitled "AGREEMENT FOR CONSULTANT SERVICES BETWEEN THE CITY OF SAN JOSE AND WINZLER & KELLY CONSULTING ENGINEERS" ("Agreement") for CONSULTANT to provide engineering services to determine engineering solutions to repair Upper Penitencia Creek stream damage in Alum Rock Park; and

B. **WHEREAS**, on March 27, 2008, CITY and CONSULTANT entered into a First Amendment to the Agreement to modify the schedule of performance and extend the term of the Agreement ("First Amendment"); and

C. **WHEREAS**, on August 19, 2008, CITY and CONSULTANT entered into a Second Amendment to the Agreement to change the CEQA required scope of work from a Categorical Exemption to an Initial Study/Mitigated Negative Declaration with corresponding modification of the schedule of performance and compensation ("Second Amendment"); and

D. **WHEREAS**, on June 3, 2009, CITY and CONSULTANT entered into a Third Amendment to the Agreement to extend the term of the Agreement ("Third Amendment") for six months to allow additional time to determine the additional scope of work necessary to address comments from State and Federal permitting agencies; and

E. **WHEREAS**, consultation with permitting State and Federal agencies has resulted in the need to develop the project's conceptual drawings to sixty-five percent (65%) construction level documents; and

F. **WHEREAS**, CITY and CONSULTANT desire to further amend the amended Agreement to modify the scope of services and schedule of performance, increase the amount of total compensation and extend the term of the Agreement through June 30, 2011;

NOW, THEREFORE, the parties agree to further amend the amended Agreement as follows:

**SECTION 1.** SECTION 1, "SCOPE OF SERVICES" is amended to read as follows:  
"CONSULTANT shall perform those services specified in detail in the SECOND REVISED EXHIBIT B, entitled "SCOPE OF SERVICES", which is attached hereto and incorporated herein."

**SECTION 2.** SECTION 2, "TERM OF AGREEMENT" is amended to read as follows:  
"The term of this AGREEMENT shall be from July 1, 2007 and shall extend through June 30, 2011 inclusive, subject to the provisions of SECTION 11 of this AGREEMENT."

**SECTION 3.** SECTION 3, "SCHEDULE OF PERFORMANCE" is amended to read as follows:  
"The services of CONSULTANT are to be completed according to the schedule set out in the FOURTH REVISED EXHIBIT C, entitled "SCHEDULE OF PERFORMANCE", which is attached hereto and incorporated herein. Time is of the essence in this AGREEMENT."

**SECTION 4.** SECTION 4, "COMPENSATION" is amended to read as follows:

"The compensation to be paid to CONSULTANT for professional services shall not exceed FIVE HUNDRED THIRTY-SEVEN THOUSAND DOLLARS (\$537,000). The rate and schedule of payment is set out in the SECOND REVISED EXHIBIT D, entitled "COMPENSATION", which is attached hereto and incorporated herein."

**SECTION 5,** REVISED EXHIBIT B, "SCOPE OF SERVICES" is amended and replaced in its entirety to read as shown in the SECOND REVISED EXHIBIT B, attached and incorporated herein.

**SECTION 6.** THIRD REVISED EXHIBIT C, "SCHEDULE OF PERFORMANCE" is amended and replaced in its entirety to read as shown in the FOURTH REVISED EXHIBIT C, attached and incorporated herein.

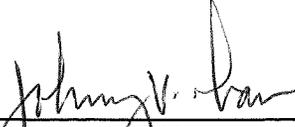
**SECTION 7.** REVISED EXHIBIT D, "COMPENSATION" is amended and replaced in its entirety to read as shown in the SECOND REVISED EXHIBIT D, attached and incorporated herein.

**SECTION 8.** All of the terms and conditions of the Agreement, First Amendment, Second Amendment, and Third Amendment not modified by this Fourth Amendment shall remain in full force and effect.

**WITNESS THE EXECUTION HEREOF** on the day and year first written above.

APPROVED AS TO FORM:

CITY OF SAN JOSE, a municipal corporation



JOHNNY V. PHAN  
Deputy City Attorney

DEANNA SANTANA  
Deputy City Manager

CONSULTANT

WINZLER & KELLY, a California corporation



Signature

YOUSRA TILDEN

Print Name

Managing Principal

Title

417 Montgomery Street, Suite 700  
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## **SECOND REVISED EXHIBIT B**

### **SCOPE OF SERVICES**

Construction Documents for Protection of Two Bridge Abutments and Sixty-Five Percent Design Drawings for Nine Other Bank Repair/Stream Restoration Projects Along Upper Penitencia Creek in Alum Rock Park, San Jose, CA

#### **INTRODUCTION**

CONSULTANT shall provide the CITY with the following engineering services:

- (A) Field work to map riparian corridor, wetlands boundary delineation, and ordinary high water mark;
- (B) Complete CEQA and environmental permitting for nine (9) bank repair/stream restoration projects and two bridge abutment repair projects;
- (C) Sixty-five percent (65%) design drawings for nine (9) stream bank repair/floodplain expansion projects; and
- (D) Complete construction documents for two (2) erosion-damaged bridge abutments.

#### **SCOPE OF SERVICES**

##### **A. Field Work Task**

This task includes a wetlands boundary delineation, Ordinary High Water Mark (OHWM), mapping of riparian corridor along segments of the Upper Penitencia Creek at eleven (11) project sites (two (2) bridge abutment repair and nine (9) stream bank repair/floodplain expansion projects), and collection of additional field data to be performed by CONSULTANT. Results of portions of the field investigation will be recorded using survey grade equipment. A map visually presenting results of the field work effort will be produced for use in the delineation report and existing permit documentation and other project documents. The Field Work Task is based on the following assumptions:

- Access to the project site will be provided and ensured by the CITY.
- CITY will provide clearing services to open areas within the study area if any are blocked to entry by fallen trees.
- This scope does not include survey for biological assessment for threatened, endangered or sensitive species.
- CITY staff will review the documents after completion.
- CITY will provide one (1) set of consistent, written review comments.
- Land use practices and regulations can change thereby affecting site conditions and delineation results; therefore, delineation is given a 5-year expiration period.

- Verification of the delineation by jurisdictional agencies is necessary prior to the use of report for development purposes. An agency stamped delineation map and jurisdictional approval letter is required to signify confirmation of delineation results.
- CITY is responsible to maintain delineation flagging placed at the site by CONSULTANT for ease of jurisdictional agency(s) site review. CONSULTANT will place semi-permanent markers and/or point labels to avoid loss of data points prior to jurisdictional approval(s).

**Task No. 1: Field Data Collection** – CONSULTANT shall conduct a wetland delineation at project sites within the study area, as defined below. The Ordinary High Water Mark (OHWM) of the creek and riparian corridor will be documented for use in defining the limits of agency jurisdiction(s).

The study area will encompass up to eleven (11) project sites defined below in Sections C and D. The study area is defined as the area along the Upper Penitencia Creek within 100 feet of of each project site. For the upstream cluster (Projects 1, 11, 3, 10, and 4), the study area to be evaluated includes 100 feet above the Creekside Bridge to 100 feet below Bridge K, on both sides of the creek (approximately 1,400 linear feet of creek). In the central portion of the site (Projects 6, 2, 5, and 9), the study area is defined as 100 feet above Site 6 to 100 feet below Site 9, Bridge H (approximately 450 linear feet of creek). In the downstream extent of the site, approximately 100 linear feet on both sides of the creek will be evaluated in the area of Site 8, and approximately 100 linear feet on the south bank in the area of Site 7.

- a. Wetland Delineation - The wetlands delineation will follow the United States Army Corps of Engineers (USACE) criteria (three parameter approach) for areas that have suspect wetland conditions, per the Corps of Engineers Wetlands Delineation Manual (USACE, 1987) and Draft Interim Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys and Coast Region (Army Engineer Research and Development Center, USACE, April 2008). A determination of wetland boundary, if any, will be made based on soil, hydrology (if present), and vegetative parameters (three parameter approach). Once wetland and upland characteristics are determined, flags will be placed to delineate the limits of the wetland boundary/upland boundary. Plot numbers will be written on each flag that correspond to data sheets.
- b. Ordinary High Water Mark (OHWM) - A delineation of the ordinary high water mark (OHWM) for the Creek will be conducted using standard field observation techniques and photographs to determine the break between vegetation and bare soil along the banks of the channel. The field work will be focused on areas expected to be disturbed during implementation of the project at the various identified project sites, as defined as the study area. The OHWM will be evaluated on one or both sides of the creek depending on specific details of each project, and will not map resources along the entire ½ mile (+/-) reach of the creek throughout the Alum Rock Park (Park). The OHWM line will be mapped using survey level GPS equipment, if possible, as described below.
- c. Riparian Mapping - A mapping of the extent of the riparian corridor will be conducted using standard field observation techniques. In areas that are not easily discernible,

the understory will be evaluated and presence of predominant upland understory species could be used to support an upland determination. In areas where over-story as well as understory species consist of riparian and/or wetland species, the area will be mapped as riparian based on the drip line of the over-story. In cases where leaning trees are observed, the average drop line will be relied upon. Department of Fish and Game will request riparian mapping for the permit approval process. The riparian boarder will be flagged and data points collected via topographic survey as described in Task 2 below.

- d. Manual Data Collection - CONSULTANT will identify and manually record construction staging areas onto project basemaps and describe the types of vegetation present in these areas. General plant community types will be documented for use in prescribing revegetation plans post construction.
- e. CONSULTANT will collect approximate drip line data for trees using a hand held tape measure and manually record measurements onto basemaps. CONSULTANT will also identify and manually record truck access routes and traffic control plans, and dewatering and bypass pumping schemes. These data will be transferred into AutoCAD and included in the design drawings for the two (2) bridge abutment projects and incorporated into design drawings to be developed for the nine (9) streambank bank repair/floodplain expansion projects.

**Task No. 2: Survey and Map Production** – CONSULTANT shall perform a topographic survey to collect the horizontal location of data points identified and marked in Tasks 1a, 1b, and 1c above using a total-station survey. The vertical elevation of the OHWM will also be recorded. CONSULTANT will upload survey data and produce a map of the wetlands boundary, OHWM line, and extent of riparian vegetation on topographic base map (using AutoCAD). The map will be prepared according to USACE mapping requirements.

**Task No. 3: Wetland Delineation Report** – CONSULTANT shall prepare a Draft Wetlands Delineation Report (2 copies), including field data sheets from the *Interim Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region* (April 2008) and the wetlands boundary map prepared in accordance with the USACE requirements for delineation reports, data sheets, and mapping. The report will classify the delineated wetlands based on "*Classification of Wetlands and Deepwater Habitat of the United States*". The title of the report is "Wetland Delineation Report" per USACE requirements, and will present and include a discussion of results of the OHWM and riparian corridor mapping. The final report will incorporate comments from a single review of the report by the City, who will provide comments to CONSULTANT on a single rectified copy of the draft report. The final reports will be delivered directly to the USACE for request for concurrence/jurisdictional determination on the boundary delineation.

**Deliverables:** Draft Wetlands Delineation Report, Final Wetlands Delineation Report (one hard copy and digital version in Microsoft Word)

## **B. CEQA Documentation and Permit Applications**

**Task No. 1: Initial Study/Mitigated Negative Declaration** – CONSULTANT shall prepare a Draft Administrative Initial Study/Proposed Mitigated Negative Declaration (IS/MND) and a Final Administrative IS/MND for the nine (9) stream bank repair and floodplain expansion projects described below in Section C, the two (2) bridge abutment protection projects described below in Section D, and the one (1) fish passage grade control weir project immediately downstream of the Youth Sciences Institute bridge being designed under separate contract with non-profit CEMAR. CONSULTANT shall prepare responses to CITY and public comments on IS/MND and incorporate the same as directed by CITY into the Final Admin IS/MND.

- a. CONSULTANT shall utilize Appendix G of the CEQA Guidelines, address all questions in each Impact Category, and utilize a CITY-supplied format. All impact categories will be fully analyzed and the following are specifics on certain impact categories. For the purpose of this Scope of Services, it is assumed that no significant impact items will remain after mitigation, thus, preparation of a Mitigated Declaration is proposed. If significant impact items remain after mitigation then this Scope of Services must be revisited. The IS/MND shall include a discussion of applicable Plans and Policies, with an emphasis on the CITY's General Plan Goals and Policies and Riparian Corridor Policy Study.
- b. The aesthetics section will discuss the proposed projects' impacts on the viewshed, particularly with regard to historic resources. The scope does not include computer visual simulations.
- c. The air quality section will utilize Urban Emission Model (URBEMIS) or equal to analyze air quality impacts focusing on construction vehicles. The project effects on global warming will be discussed, briefly, and qualitatively. A brief quantitative Greenhouse Gas Emissions Analysis (for stationary source equipment based on the URBEMIS2007 model or other similar equivalent) will also be discussed. Use of BAAQMD CEQA guidelines modeling should not be required.
- d. The biology section will utilize the Park Riparian Management Plan for special-status animal species and will assume presence of Red-legged frogs and Steelhead in the project area. It is anticipated that no special-status plant species will be impacted. Impacts to Penitencia Creek wetlands and Riparian resources will be addressed. Introduction of invasive plant species will be addressed.
- e. Sonoma State University will be utilized to address archeological resources. CONSULTANT shall utilize the final Alum Rock Park Historic Resources report prepared by LSA Associates, Inc. and approved by CITY's Historic Preservation Officer.
- f. The geology and soils section will use existing available data, including the Geotechnical Design Memorandum to be completed under Section C, Task No. 3, and Section D, Task No. 3 below in this Second Revised Exhibit B.

- g. The hydrology and water quality section will discuss hydrology and hydraulic impacts as prepared under Section D, Task No. 4 below in this Second Revised Exhibit B.
- h. A traffic study is not anticipated to be necessary and is not part of the scope of services for this Agreement, but a brief discussion and qualitative analysis will be included in the IS/MND.
- i. CEQA questions with regard to Mandatory Findings of Significance and Habitat Conservation Plan will be addressed.
- j. CONSULTANT shall identify cumulative effects of the proposed projects and other past, present, and reasonably foreseeable future projects on wetlands, sensitive habitats and open space. The analysis will include the effects on water quality, biological communities, and cultural resources. CONSULTANT shall identify appropriate mitigation measures and monitoring programs, if any effects are found to exist. CONSULTANT shall submit a Draft Admin Mitigation & Monitoring Program (MMP) to CITY per CITY format and incorporate changes into the Final MMP.
- k. In addition, CONSULTANT shall address all issues associated with agricultural resources, land use planning, energy, climate change, mineral resources, noise, public services, recreation, and all other resources impact categories.
- l. CITY will complete the mailing list, notices, any necessary findings/resolution, and the Notice of Determination (NOD). CITY will also run CEQA-required meetings and pay all necessary NOD fees. CONSULTANT will respond to written public comments and one (1) revision after CITY comments.

Deliverables:

CEQA

- One (1) Administrative Draft IS/MND (CITY will require up to seven (7) hard copies, and six (6) digital CD copies in Microsoft Word or ADIS).
- One (1) revised ADIS incorporating CITY comments.
- One (1) digital Final Administrative IS/MND.
- Up to forty-five (45) copies of IS/MND (per State Clearinghouse and CITY formatting requirements).
- Distribution of up to forty-five (45) copies of IS/MND.
- One (1) Admin Draft Mitigation, Monitoring and Reporting Program (MMRP).
- One (1) Mitigation, Monitoring and Reporting Program.
- One (1) Response to Agency/Public Comment on IS/MND in electronic Microsoft Word document.
- One (1) electronic CD with IS/MND & MMRP formatted per CITY requirements.
- Attendance of Project Manager and Scientists at two (2) CEQA-related CITY Meetings.

(A formal public hearing on the Draft MND is not anticipated).

**Task No. 2: Permitting** – CONSULTANT shall prepare and submit the following permit applications on behalf of the CITY -- applications for Army Corps of Engineers (Corps), California Department of Fish and Game (CDFG), U.S. Fish and Wildlife Service, and Regional Water Quality Control Board (RWQCB) permits for the two (2) bridge abutment, nine (9) bank repair and floodplain expansion projects, and the fish passage grade control weir project immediately downstream of the Youth Sciences Institute bridge being designed under separate contract with non-profit CEMAR.

CONSULTANT will package these projects into one consolidated permit application package. To satisfy the requirements of the Corps permit, CONSULTANT shall complete a Biological Assessment. CONSULTANT shall provide up to sixteen (16) hours of consultation per permit application for meetings, telephone calls, email correspondence, tracking progress of applications, and similar tasks. This task also includes attendance of CONSULTANT's environmental planner at the initial project site meeting and two (2) site meetings with regulatory staff at the project site. CITY will pay all necessary permit fees including the NOD and Fish and Game Fees.

Deliverables:

- Draft Corps, RWQCB, and CDFG Permit Applications (1 copy).
- Final Corps, RWQCB and CDFG permit Applications (2 copies, one to be submitted by CITY to agencies).
- Draft Biological Assessment (5 copies).
- Final Biological Assessment (3 copies, CITY to submit to agencies).

**C. 65% Design of Nine Projects**

CITY has identified several areas through the Park where creek banks have been damaged and/or eroded and are in need of repair. In addition, the CITY'S Riparian Management Plan identified several management priority locations for the CITY to consider providing floodplain expansion consistent with geomorphic principles, habitat enhancement, and stream stability. To address these maintenance and stream management priorities, CONSULTANT shall provide CITY with 65 percent construction level designs for seven (7) streambank repair projects and two (2) floodplain expansion projects at various locations along the creek through the Park, as described in the numbered list below.

City will use these designs to build support for detailed final design and construction of these projects, regulatory outreach and permit acquisition, and/or grant funding applications to pay for additional design and construction services necessary to implement these projects.

Refer to Task No. 4 for a description of the design approach.

The seven (7) streambank repair projects are as follows:

Project 3 – Prepare 65% designs of the repair of rock wall and expansion of floodplain on east bank immediately downstream of historic foot bridge "L".

Project 4 – Prepare 65% designs of the repair of undercut section of rock wall on east bank immediately downstream of historic foot bridge “K”.

Project 5 – Prepare 65% designs of the repair of the eroded rill at end of north bank vertical rock wall directly adjacent to grade control structure.

Project 6 – Prepare 65% designs of the repair of failed bank protection project adjacent to Visitors Center. This project was originally constructed as part of the Phase II capital projects in 2001 (RMP, “Site #18”).

Project 7 – Prepare 65% designs of the repair/protection of failing south bank along trail downstream of Quail Hollow.

Project 8 – Prepare 65% designs of the repair of failing north bank sack concrete wall at sharp bend in road.

Project 9 – Prepare 65% designs of the repair of the abutments/footings, repair of the rock railing, and bank repair at the Visitors Center Bridge, Historic Foot Bridge H.

The two (2) floodplain expansion projects are as follows:

Project 10 – Prepare 65% designs of the expansion of floodplain immediately downstream of Historic Foot Bridge L.

Project 11 – Prepare 65% designs of the expansion of floodplain immediately downstream of Historic Foot Bridge M.

**Task No. 1: Site Meeting** – CONSULTANT and its geotechnical engineer and surveyor will meet at the project site with CITY staff to kickoff the project. At this meeting, CONSULTANT will confirm the project objectives and schedule with the CITY, and walk each of the project sites to verify the limits of work and site characteristics as they pertain to the scope of services. CONSULTANT will provide the CITY with any meeting handouts at the meeting and will prepare and distribute meeting minutes to attendees. Follow up meetings with the CITY are anticipated to discuss project elements and make decisions as the project progresses.

Deliverable: Meeting handouts and Meeting minutes (*complete*).

**Task No. 2: Surveying** – CONSULTANT shall perform a topographic survey of the immediate vicinity of the nine (9) bank repair/floodplain expansion sites necessary to provide the basic dimensions of site features necessary for conceptual design. The survey data will be referenced to assumed horizontal and vertical datums. This survey will show, if any, pertinent hardscapes, utilities, fences, trees, structures, and improvements at the site. The area will be surveyed with spot elevations in a roughly 15- to 25-foot pattern throughout the area. All significant grade breaks within the survey boundary will be surveyed. Contours will be plotted from the survey data at an interval of two (2) feet. All units shall be in US feet. No property boundary or easement information is included in this scope.

**Task No. 3: Geotechnical Analysis** – CONSULTANT shall perform the following geotechnical analysis tasks that are critical and necessary for the design team to provide the CITY with 65 percent (65%) construction level designs of the stream bank repair and floodplain expansion projects:

1. Review existing geologic and geotechnical information pertinent to the sites including the geologic report prepared by Nolan Associates.
2. Perform engineering reconnaissance of the nine (9) stream bank sites including observation of existing wall and bank conditions.
3. Develop repair concepts and consult with the design team to identify the most appropriate repair concept for each site. Consultation will be limited to four (4) hours which may be used for consultation or meeting attendance. If additional consultation or meeting attendance is requested, it will be provided as an additional service to the scope and fee presented herein.
4. Present the results of the assessment in a Geotechnical Design Memorandum.

CONSULTANT shall conduct follow-up work required for engineering design which includes a supplemental geotechnical investigation of Sites 5, 6, and 8. Additionally, geotechnical consultation/plan review will be conducted.

Deliverable: Geotechnical Design Memorandum, Draft Updated Geotechnical Design Memorandum, Final Updated Geotechnical Design Memorandum.

#### **Task No. 4: 65% Design Drawings**

CONSULTANT shall develop conceptual designs for the seven (7) bank repair and two (2) floodplain expansion projects listed above. For this purpose, where this information is needed CONSULTANT shall assume channel velocities based on the HEC-RAS model created by Swanson & Associates as part of the CITY's 2001 RMP and a typical scour depth for the bank protection designs, where applicable. Conceptual design solutions for floodplain expansion shall include an assessment of bankfull width and elevation, overall channel geomorphology, habitat considerations, and vegetation impacts and revegetation efforts necessary to help provide a stable geomorphic channel and floodplain. For each of the nine (9) projects, CONSULTANT shall develop a project description, plan view and cross section drawings, design fee estimate for construction documents, opinion of probable construction cost, and follow-up monitoring recommendations. Each project description shall include a discussion of impacts to existing riparian vegetation, anticipated improvements to fisheries habitat, and channel stability and flooding impacts, where applicable. All of this information shall be compiled into one combined Conceptual Design Report for all nine (9) projects. A draft version of this document shall be submitted to the CITY for review and comment. CONSULTANT shall meet with CITY staff to discuss the document and associated objectives and issues of concern for the CITY.

CONSULTANT shall build on concept designs to develop 65 percent (65%) design drawings and an updated estimate of probable construction cost for the seven (7) bank repair and two (2) floodplain projects. CONSULTANT shall incorporate recommendations made in the Updated Geotechnical Design Memorandum generated in Task C.3 above. CITY comments

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10/27/2009

on the Draft Concept Design Report and data generated in the Field Work Task performed in Section A above will be incorporated into the design package.

CONSULTANT will create one plan set for the nine (9) sites. The following sheets will be developed and may be combined as appropriate during the design process: Cover, General Notes, Legend Abbreviation, Existing Conditions, Survey Control Benchmarks, Site Access/Traffic Control/Staging, Demolition, Grading/Bank Stabilization, Plantings Plan, and Details.

Deliverables: Draft Conceptual Design Report, Final Conceptual Design Report, 65% Design Drawings and Estimate of Probable Construction Cost

#### **D. Two Bridge Abutment Repair Construction Documents**

The Youth Sciences Institute, Creek Side (Project 1), and Visitor Center bridges over Upper Penitencia Creek (Project 2) were identified in the CITY 2001 Alum Rock Riparian Management Plan (RMP) as being at risk of severe damage by erosion during high flow conditions. Damage to the abutments and footings of these bridges from stream flows has continued since 2001, and engineering solutions are needed to prevent these historic bridges from collapsing.

CONSULTANT shall provide CITY with final construction documents for improvements that will repair the damage that has already occurred, and provide long-term protection of the abutments, footings, and immediately adjacent stream banks from further flood damage.

**Task No. 1: Site Meeting** – CONSULTANT and its geotechnical engineer and surveyor shall meet at the project site with CITY staff to kick off the project. At this meeting, CONSULTANT shall (a) confirm the project objectives and schedule with the CITY, and (b) walk each of the project sites to verify the limits of work and site characteristics as they pertain to the scope of work. CONSULTANT shall provide CITY any meeting handouts at the meeting, and prepare and distribute meeting minutes to attendees.

Deliverable: Meeting handouts, Meeting minutes.

**Task No. 2: Surveying** – CONSULTANT shall conduct topographic surveys of each bridge using assumed horizontal and vertical datums. The survey shall include existing riparian vegetation and other surface features necessary to develop the design. No property boundary or easement information is included in this scope. A geomorphic field assessment shall be conducted by CONSULTANT at each site as it relates to the proposed improvements. CONSULTANT shall develop a topographic base map in AutoCAD based on the survey data for use in design and analysis.

**Task No. 3: Geotechnical Analysis** – CONSULTANT shall perform the following geotechnical analysis tasks that are critical and necessary for CONSULTANT to design the bridge abutment/footing and stream bank improvements:

- a. Review existing geologic and geotechnical information provided by CITY that is pertinent to the site including the geologic report prepared by Nolan Associates in 2001 for CITY's RMP.
- b. Perform engineering reconnaissance of the two bridge sites (Bridges I and M ) as designated in the RMP including observation of existing abutment and foundation conditions.
- c. Explore foundation and subsurface conditions at selected locations at the site by a combination of drilling test borings and hand excavating small test pits at selected locations to be agreed upon in advance by CITY and CONSULTANT. The exploration shall be limited to eight (8) hours of on-site drilling using portable drilling equipment and four (4) hours of on-site test pit hand excavation.
- d. Performing laboratory tests to evaluate pertinent engineering properties of soil and rock encountered during exploration, including a particle size analysis of stream bed materials in the upper 18" of the bed at each bridge location.
- e. Consult with the design team, CITY staff, and Federal and State permitting agencies to identify the most appropriate repair alternative. Consultation shall be limited to four (4) hours which may be used for consultation or meeting attendance. If additional consultation or meeting attendance is requested, it shall be provided as Additional Services to the scope and fee presented herein.
- f. Provide geotechnical recommendations and geotechnical design parameters for the repair alternative.
- g. Present the results of the assessment in a concise design memorandum.

Deliverable: Geotechnical Design Memorandum.

**Task No. 4: Hydraulics and Scour Analysis** – CONSULTANT shall utilize the hydrology and hydraulics information provided by CITY that was prepared by Swanson and Associates for the CITY's 2001 RMP, and perform additional hydraulics and scour analyses in the immediate vicinity of the bridges to assess the depth of stream scour in order to determine design requirements for abutment and footing protection and stream bank stabilization.

**Task No. 5: Construction Documents**

Based on the results and analyses performed in the previous tasks, CONSULTANT shall develop the design drawings, specifications, and opinion of probable construction cost necessary for the CITY to bid the bridge abutment/footing improvements for construction for each of the bridges. In developing the design for these projects, CONSULTANT shall consider a variety of methods of abutment repair including piles, cutoff walls, grout injection, and expansion and extension of abutments and footings. CONSULTANT's design shall include stream bank repair and long-term stabilization in the approach section of the channel just upstream of each bridge to repair and prevent further erosion of the banks and piping of flows into and around the abutments. CONSULTANT's construction documents shall use standard CITY plans and specifications where applicable. Drawings, specifications, and cost estimates shall be provided to the CITY at 65% and 90% completion for review and comment. The 90% drawings, specifications and cost estimates will incorporate CITY comments from the prior version plus data collected under the Field Work Task.

Deliverables: 65%, 90%, and Final Construction Documents.

### **E. Deliverables**

Unless otherwise noted, CONSULTANT shall provide five (5) hardcopies and an electronic PDF copy of all deliverables noted above.

### **F. Additional Services**

Items of work not specifically described in the above scope of services are outside of the scope of this Agreement. Any out of scope items will be provided on a time and materials basis according to CONSULTANT's current rate schedule, attached hereto. Commencement of any such services would occur only upon prior notification and approval by the CITY.

The construction documents for the bridge abutment and footing design addresses the erosion to the bridge caused by stream flows. The CITY has not requested, and therefore this scope does not include, analysis and design, including of loads and structural integrity, of the bridge superstructure itself.

The CEQA and environmental permitting included in this Agreement is limited to an Initial Study/Mitigated Negative Declaration and Biological Assessment. In the event that the permitting agencies require further environmental documentation beyond an Initial Study/Mitigated Negative Declaration and Biological Assessment, CITY may request a proposal for the additional work from the CONSULTANT. Commencement of any such additional services shall occur only upon prior written authorization by CITY.

**FOURTH REVISED EXHIBIT C**  
**SCHEDULE OF PERFORMANCE**

Work is scheduled to commence on or soon after July 1, 2007. The estimated time for completion is June 30, 2011 with the following time lines:

**Summary Schedule for Activities and Deliverables**

<b>ACTIVITY/DELIVERABLE</b>	<b>COMPLETION DATE</b>
Site Meeting With CITY Staff	July 2007
Surveying, Geotechnical, Hydraulics and Scour Analyses	August 2007
Final Geotechnical Design Memorandum	January 2008
<b>A. Field Work Task</b>	
1. CONSULTANT Performs Data Collection	February 2010
2. CONSULTANT Performs Survey and Map Production	February 2010
3. CONSULTANT Submits Report	March 2010
<b>B. CEQA Documentation and Permit Application</b>	
1. CONSULTANT Submits Draft Permit Applications and Draft BA to CITY	July 9, 2010
2. CITY Submits Comments on Draft Permit Applications and Draft BA to CONSULTANT	July 23 2010
3. CONSULTANT Submits Permit Applications and BA to Agencies	August 6, 2010
4. CONSULTANT Submits Admin Draft IS/MND to CITY	August 20, 2010
5. CITY Submits Comments on Admin Draft MND	September 20, 2010
6. CONSULTANT Submits Draft Admin IS/MND to CITY for Circulation	October 4, 2010
7. CONSULTANT Submits Response to Public Comment on IS/MND	November 4, 2010
8. Provide Final Responses to Permitting Agencies	May 4, 2011
<b>C. 65% Design of Nine Projects</b>	
1. Draft conceptual design report for bank repair/floodplain expansion projects, Biological Assessment, and Permit Applications to CITY	September 2008
2. Updated Geotechnical Design Memorandum	March 5, 2010
3. CONSULTANT Submits 65% Design Drawings	July 2, 2010
4. CONSULTANT Submits Estimate of Probable Construction Cost	August 2, 2010

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<b>D. Two Bridge Abutment Repair Construction Documents</b>	
1. 65% construction documents to CITY	February 2008
2. CITY comments on 65% construction documents to CONSULTANT	June 2009
3. CONSULTANT Submits 90% Construction Documents for Two Bridges	March 5, 2010
4. CITY Submits Response to Comments on 90% Construction Documents for Two Bridges to CONSULTANT	May 5, 2010
5. CONSULTANT Submits Final Construction Documents to CITY	July 2, 2010

**SECOND REVISED EXHIBIT D**

**COMPENSATION**

CITY agrees to compensate CONSULTANT on a monthly basis for services rendered during the previous month for professional services performed in accordance with the terms and conditions of this AGREEMENT. The estimated costs provided below include all costs associated per task with the scope of services, including labor, subconsultant fees, and indirect and direct expenses. The actual costs for individual tasks may vary above or below the estimates shown, however the total for all tasks shall be less than or equal to the not to exceed amount of FIVE HUNDRED THIRTY SEVENTY THOUSAND DOLLARS (\$537,000).

<b>Task</b>	<b>Estimated Fee</b>
<b>Completed Tasks</b>	
Site Meeting	\$5,142
Surveying	\$53,629
Geotechnical Analysis	\$20,306
Hydraulics and Scour Analysis	\$5,890
Conceptual Plan of Nine Riparian Repair Projects	80,154
65% Construction Documents for Two Bridge Projects	\$32,474
CEQA and Permitting	\$114,405
Archeological Resources Study	10,000
<b>Subtotal Completed Tasks</b>	<b>\$322,000</b>
<b>A. Field Work Task</b>	
Task A1 – Field Data Collection	\$15,000
Task A2 – Survey & Map Production	\$5,000
Task A3 – Wetland Delineation Report	\$5,000
<b>Subtotal A</b>	<b>\$25,000</b>
<b>B. CEQA Documentation and Permit Applications</b>	
Task B1 – Initial Study/Mitigated Negative Declaration	\$34,900
Task B2 – Permitting	\$20,600
<b>Subtotal B</b>	<b>\$55,500</b>
<b>C. 65% Design of Nine Projects</b>	
Geotechnical Investigation	\$16,500
Structural Engineering	\$20,000
Botany/Landscaping	\$12,000
Civil Engineering	\$51,500
<b>Subtotal C</b>	<b>\$100,000</b>

<b>D. Two Bridge Abutment Repair Construction Documents</b>	
Drawings	\$8,000
Specifications	\$5,000
Estimate of Probable Construction Cost	\$2,000
<b>Subtotal D</b>	<b>\$15,000</b>
<b>Contingency</b>	<b>\$19,500</b>
<b>Project Total</b>	<b>\$537,000</b>

The maximum amount of compensation to be paid to CONSULTANT for the tasks identified in the scope of services under this AGREEMENT for professional services shall not exceed FIVE HUNDRED SEVENTEEN THOUSAND FIVE HUNDRED DOLLARS AND NO/100 (\$517,500.00). A contingency of NINETEEN THOUSAND FIVE HUNDRED AND NO/100 DOLLARS (\$19,500.00) may be used solely by written direction and at the discretion of CITY if Additional Services are required. Any hours worked for which payment would result in a total exceeding the maximum amount of compensation set forth herein shall be at no cost to CITY.

CONSULTANT shall bill the CITY for actual services rendered during the previous month based on CONSULTANT's then-current rate schedule. Additional Services shall be billed at the following hourly rates, unless a different method of payment has been negotiated by the CITY and CONSULTANT, in accordance with the provisions of SECOND REVISED EXHIBIT B:

- ♦ Principal \$180-250
- ♦ Senior Project Engineer \$130-250
- ♦ Project Engineer \$100-170
- ♦ Staff Engineer \$90-145
- ♦ Senior Project Scientist \$120-190
- ♦ Project Scientist \$95-135
- ♦ Staff Scientist \$70-105
- ♦ Senior Planner \$120-190
- ♦ Staff Planner \$90-120
- ♦ 3-Person Survey Crew \$255-390
- ♦ 2-Person Survey Crew \$170-270
- ♦ 1-Person Survey Crew \$85-175
- ♦ Construction Manager \$120-180
- ♦ Construction Inspector \$85-115

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♦ Technician	\$75-145
♦ Designer	\$100-150
♦ CADD	\$80-135
♦ Project Administrator	\$70-150
♦ Word Processor & Clerical Support	\$45-100

These rates are effective as of February 2009 and are subject to change on a semi-annual basis. For other than professional employees, time spent over eight (8) hours per day, time spent on swing shifts, and time spent on Saturdays will be charged at 1.5 times the hourly billing rate. Work on Sundays will be charged at 2.0 times the hourly billing rate and holiday work will be charged at 2.5 times the hourly billing rate. All field personnel charges are portal to portal. Professional employees will not be charged out at premium charge rates for overtime work.

Payments shall be processed upon receipt of invoice on a monthly basis for services rendered during the previous month. There are no reimbursable expenses.