

**FIFTH AMENDMENT TO AGREEMENT BETWEEN
CITY OF TEMECULA AND
CALIFORNIA WATERSHED ENGINEERING CORPORATION d/b/a CWE
FLOOD CONTROL CHANNEL RECONSTRUCTION AND REPAIR, PW11-10
(CONTRACT #14-017)**

THIS FIFTH AMENDMENT is made and entered into as of **February 12, 2019** by and between the City of Temecula, a municipal corporation (hereinafter referred to as "City"), and **California Watershed Engineering d/b/a CWE**, a **Corporation** (hereinafter referred to as "Consultant"). In consideration of the mutual covenants and conditions set forth herein, the parties agree as follows:

1. This Amendment is made with the respect to the following facts and purposes:
 - a. On February 11, 2014, the City and Consultant entered into that certain Agreement entitled "**Agreement for Consultant Services**" in the amount of **\$94,816.00** plus contingency of \$21,460.00, for a total Agreement amount of **\$116,276.00**.
 - b. On **August 26, 2014**, the City and Consultant entered into the **First Amendment** to that certain agreement entitled "**Agreement for Consultant Services**" to add scope of work and increase the payment in the amount of **\$47,715.00**.
 - c. On **April 14, 2015**, the City and the Consultant entered into the **Second Amendment** to that certain Agreement entitled "**Agreement for Consultant Services**" to amend the Prevailing Wage section of the Agreement, add scope of work, and increase the payment in the amount of **\$119,802.00**.
 - d. On **June 21, 2016**, the City and the Consultant entered into the **Third Amendment** to that certain Agreement entitled "**Agreement for Consultant Services**" to extend the term of the agreement to December 31, 2017.
 - e. On **November 28, 2017**, the City and the Consultant entered into the **Fourth Amendment** to that certain Agreement entitled "**Agreement for Consultant Services**", to extend the term of the agreement to **December 31, 2019**.
 - f. The parties now desire to add scope of work and increase payment in the amount of **\$89,132.00**, and amend the agreement as set forth in this Amendment
2. Section 5 of the Agreement entitled "**Payment**" at paragraph "a" is hereby amended to read as follows:

"The City agrees to pay Consultant monthly, in accordance with the payment rates and schedules and terms set forth in Exhibit B, Payment Rates and Schedule, attached hereto and incorporated herein by this reference as though set forth in full, based upon actual time spent on the above tasks. Any terms in Exhibit B, other than the payment rates and schedule of payment, are null and void. The **Fifth Amendment** amount shall not exceed **Eighty Nine Thousand One Hundred Thirty Two Dollars (\$89,132.00)** for additional environmental studies and permitting, for a total contract amount of **Three Hundred Seventy Two Thousand Nine Hundred Twenty Five Dollars (\$372,925.00)**."

3. Exhibits "A" and "B" to the Agreement are hereby amended by adding thereto the items set forth on Attachment "A" to this Amendment, which is attached hereto and incorporated herein is through set forth in full.

4. Except for the changes specifically set forth herein, all other terms and conditions of the Agreement shall remain in full force and effect.

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

CITY OF TEMECULA

California Watershed Engineering Corporation
d/b/a CWE

(Two Signatures of corporate officers required unless corporate documents authorize only one person to sign the agreement on behalf of the corporation.)

By: _____
Michael S. Naggar, Mayor

By: _____
Vik Bapna, Chief Executive Officer

ATTEST:

By: _____
Randi Johl, City Clerk

By: _____
Jason Pereira, Secretary

APPROVED AS TO FORM:

By: _____
Peter M. Thorson, City Attorney

CONSULTANT

California Watershed Engineering Corporation
d/b/a CWE

Attn: Jason Pereira

1561 E Orangethorpe Avenue, Suite 240

Fullerton, CA 92831-5202

714-526-7004

jpereira@cwecorp.com

PM Initials:

Date:

Attachment “A”

Attached hereto and incorporated herein is the additional scope of work and associated cost as provided by the Consultant.

**CWE**

1561 E. ORANGETHORPE AVENUE
SUITE 240
FULLERTON, CA 92831-5202
(714) 526-7500 PHONE
(714) 526-7004 FAX
www.cwecorp.com

January 15, 2019

EMAIL

Mr. Nino Abad
Associate Civil Engineer
City of Temecula
41000 Main Street
Temecula, California 92590

**Pala Park Channel Restoration – Spur System Project
Joint Project Review Support**

Dear Mr. Abad,

CWE is please to submit this cost proposal to support the Joint Project Review (JPR) for the City of Temecula (City), to implement the Pala Park Channel Restoration – Spur System Project. CWE has supported the preparation of the preliminary application, and will develop the habitat assessment report addendum for the project construction, and revise the regulatory applications based on the biological report addendum and the JPR decision. The following sections provide CWE's proposed scope of work to support the JPR process.

Scope of Work

CWE will conduct the following scopes as identified below and detailed in Exhibit A:

1. JPR application, support, and meeting
2. Habitat assessment report
3. Revisions to the Mitigated Negative Declaration and regulatory permit applications
4. Special status plant surveys
5. Burrowing owl surveys
6. Pre-construction burrowing owl survey
7. Vernal pool branchiopod surveys
8. Least bell's vireo surveys
9. Pre-construction nesting bird/raptor survey

10. Update construction cost estimate

Fee

CWE will provide the identified scope of work as noted in the fee matrix below. The proposed fee is valid for 90 days from the date of the letter. If additional coordination or site meetings are required, CWE staff can attend on a time and materials basis per the enclosed CWE fee schedule.

Item	Scope	Fee
1	JPR application, support, and meeting	\$2,756
2	Habitat assessment report	\$23,927
3	Revisions to the Mitigated Negative Declaration and regulatory permit applications	\$2,356
4	Special status plant surveys	\$6,848
5	Burrowing owl surveys	\$7,574
6	Pre-construction burrowing owl survey	\$3,064
7	Vernal pool branchiopod surveys	\$25,476
8	Least bell's vireo surveys	\$9,917
9	Pre-construction nesting bird/raptor survey	\$4,708
10	Update construction cost estimate	\$2,506
TOTAL		\$89,132

If you have any questions or require additional information, please contact Mr. Vik Bapna at (714) 526-7500 Ext. 212 or vbapna@cwecorp.com.

Respectfully submitted,
CWE



Jason Pereira, PE, CPSWQ, QSD
Principal

Enc.

Exhibit A

Scope of Work

Task 1 JPR application, support, and meeting

CWE has prepared a JPR application and met with the City and JPR to discuss comments.

Task 2 Habitat assessment report

CWE will prepare the habitat assessment report with the following subtasks.

Task 2.1 Updated literature review

An updated literature review will be conducted to determine which species have been identified as special status by state, federal, and local resources agencies and organizations and have a potential to occur within the project site or immediate vicinity. Sources to be reviewed include: (1) special status species lists from the California Department of Fish and Wildlife (CDFW), U.S. Fish and Wildlife Service (USFWS), and California Native Plant Society (CNPS); (2) database searches of the California Natural Diversity Database (CNDDB) and the Electronic Inventory of the CNPS; (3) the most recent Federal Register listing package and critical habitat determination for each federally listed Endangered or Threatened species potentially occurring on the project site; (4) the Regional Conservation Authority (RCA) Multiple Species Habitat Conservation Plan (MSHCP) Information Tool; and (5) other readily available biological studies conducted in the vicinity of the project site.

Task 2.2 Habitat assessment and vegetation mapping

A habitat assessment consistent with guidelines set forth in the Western Riverside County MSHCP will be prepared for the project site. The project site will be assessed for the potential presence of riparian/riverine resources, vernal pool habitat, urban/wildlands interface issues, and U.S. Army Corps of Engineers (USACE) and CDFW jurisdictional resources. According to the RCA MSHCP Information Tool, the project site is located within an MSHCP Criteria Area and an assessment of burrowing owl habitat will also be conducted. The habitat assessment will include a one-day field visit performed by a Botanist and Wildlife Biologist to map the vegetation and describe the current conditions on the project site. Any notable biological resources observed will be mapped on an aerial photograph.

Concurrent with the habitat assessment described above, CWE will perform a jurisdictional delineation to determine the limits of jurisdictional “waters of the U.S.,” including wetlands (if present), “waters of the State”, and/or CDFW jurisdictional waters located within the boundaries of the project’s proposed impact area. The project’s proposed impact area is defined as the ultimate limits of project disturbance including grading and any other construction-related activity that involves temporary and/or permanent ground disturbance that can be characterized as dredge or fill within “waters of the U.S.,” including wetlands, “waters of the State”, and/or CDFW jurisdictional waters. The City or the Project Engineer will provide digital files (in CAD or GIS) of the project’s permanent and temporary disturbance areas to CWE to be used for impact analysis. The City or its Project Engineer will also provide CWE with digital files showing existing topographic contour data (at 2-foot intervals if available).

Following the field survey, a Consistency Analysis Report will be developed based on the comments received from the City of Temecula on the Habitat Assessment Report for the Geotechnical Explorations portion of the project, previous documentation, literature review updates, and field verification surveys.

Exhibit A

Scope of Work

The report will include the following: (1) introduction; (2) description of the proposed project; (3) the methodology used to conduct the survey; (4) a general description of the existing vegetation types and associated wildlife resources on the project site; (5) jurisdictional delineation results; and (6) recommendations based on MSHCP guidelines. In addition, the report will include a Determination of Biologically Equivalent or Superior Preservation (DBESP) section to address potential impacts on Riparian/Riverine resources, least Bell's vireo, and/or burrowing owl (if present). This section will include the following: (1) summary of biological studies and resource mapping of the project site; (2) demonstration of the infeasibility of avoidance; (3) quantification of unavoidable impacts; (4) mitigation/conservation measures; and (5) biologically equivalent or superior alternative conclusion and determination.

This Scope of Work assumes one draft version of the report will be submitted in .pdf format to the Client and a final report, which incorporates required modifications will be submitted in .pdf format. Additional revisions to the report will be billed on a time and materials basis using the budget from Task 3 below. Any special status species observed will be reported to the CNDDB.

The report will make recommendations for focused surveys that may be required by the MSHCP. If the habitat assessment identifies species associated with riparian resources and vernal pools (e.g., least Bell's vireo, southwestern willow flycatcher, and/or fairy shrimp) or suitable habitat for burrowing owl, recommendations for additional studies will be included in the report.

Please Note: This Scope of Work does not include the preparation and processing of regulatory permits or the development of a habitat mitigation concept or habitat mitigation and monitoring program. If these services are required, a budget augment will be requested.

Task 2.3 Project management and meetings

CWE will spend up to eight hours revising reports and performing project management and coordination tasks. Any time beyond this effort will be billed on a time and materials basis after prior approval or will require a budget augment. In addition, CWE will attend two meetings with the City of Temecula. The first will be a project initiation meeting via teleconference to discuss the response to comments on the previous Habitat Assessment Report for Geotechnical Explorations and to discuss the project and to obtain available information on project design and project features. The second in-person meeting will be with the City of Temecula and the RCA. Additional time beyond this effort will be billed on a time and materials basis after prior approval or will require a budget augment.

Task 3 Revisions to the Mitigated Negative Declaration and regulatory permit applications

Based on the revisions proposed in the JPR and the RCA process, CWE will make the necessary revisions and incorporate the changes into the Mitigated Negative Declaration (MND) and the regulatory permit applications.

Exhibit A

Scope of Work

Optional Tasks

Task 4 Special status plant surveys

If suitable habitat is determined to be present after the field survey, a survey for special status plant species will be conducted on the project site. These surveys will focus on species not covered by the MSHCP. These surveys will be conducted during the blooming periods for each of the plants, which vary depending on rainfall and temperature. Therefore, reference populations will be monitored to determine the appropriate survey time (generally between March and July). Since blooming periods for special status species typically overlap, one early spring and one late spring survey can be conducted to cover all of the target species. The focused surveys will be conducted to systematically cover all suitable habitat on the project site. Field notes will be taken during the survey. If any special status plant species are found, the location of each population will be mapped, and voucher specimens will be collected and deposited in an appropriate herbarium to ensure the accuracy of the identification. A collecting permit is required for the collection of any state-listed Endangered species and the team of surveying botanists will have the appropriate permits. This scope of work assumes that the entire project site would provide habitat for special status plant species.

Upon completion of the survey effort, a Letter Report that documents survey findings will be prepared. The letter will include a methods and results section with locations and descriptions of all special status plant species found. This Scope of Work assumes one draft version of the report will be submitted in .pdf format to the Client and a final report, which incorporates required modifications will be submitted in .pdf format. Any special status species observed will be reported to the CDFW's CNDDDB.

Task 5 Burrowing owl surveys

If suitable habitat is determined to be present after the field survey, a focused survey, including a 500-foot buffer (if accessible) will be conducted following the Burrowing Owl Survey Instructions for the Western Riverside Multiple Species Habitat Conservation Plan (MSHCP) Area (March 2006). The survey for the burrowing owl will be conducted by a qualified Biologist. A total of four surveys will be conducted during the burrowing owl breeding season (March 1 through August 31) and will cover all suitable habitats (e.g., grassland, disturbed areas, channels, road edges, or other open vegetation types) in the project survey area. The surveys will be conducted during appropriate weather conditions from either two hours before sunset to one hour after, or from one hour before sunrise to two hours after. All potential habitat within the project will be surveyed by walking the survey area in transects, which will allow 100 percent visual coverage of the area. Any active burrows and burrowing owl sightings will be mapped on an aerial photograph and recorded with a Global Positioning System (GPS) unit. The number of burrowing owls will be noted on each visit and data will be collected on general habitat characteristics for each burrowing owl observed. Any pertinent behavior will also be recorded. A total of one field day would be required to cover the project survey area during each survey visit; therefore, this scope of work assumes a total of four Biologists field days to complete the work throughout the project survey area.

Upon completion of the survey effort, a Letter Report that documents survey findings will be prepared. The Letter will include a methods and results section with locations and descriptions of any burrowing owls observed. This Scope of Work assumes one draft version of the report will be submitted in .pdf

Exhibit A

Scope of Work

format to the Client and a final report, which incorporates required modifications will be submitted in .pdf format. Any special status species observed will be reported to the CDFW's CNDDDB.

Task 6 Pre-construction burrowing owl survey

Pursuant to the MSHCP Objective 6 of the Species Account for the burrowing owl, a pre-construction burrowing owl survey is required prior to the issuance of a grading permit. The purpose of this survey is to verify the presence or absence of the burrowing owl on the project site. The survey will be conducted by a qualified Biologist no more than 30 days prior to construction. The locations of any burrowing owls observed on the project site will be mapped on an aerial photograph. Any pertinent behavior will also be recorded.

Upon completion of the survey effort, a Letter Report that documents survey findings will be prepared. The Letter will include a description of survey methods, results section with locations and descriptions of any burrowing owls observed, and any limits to construction due to burrowing owl presence on or adjacent to the project site. This Scope of Work assumes one draft version of the report will be submitted in .pdf format to the Client and a final report, which incorporates required modifications will be submitted in .pdf format. Any special status species observed will be reported to the CDFW's CNDDDB.

Task 7 Vernal pool branchiopod (fairy shrimp) surveys

The purpose of these surveys is to determine the presence or absence of federally listed vernal pool branchiopod species on the project site. If suitable habitat is determined to be present after the field survey, focused surveys will be conducted according to the USFWS' Survey Guidelines for the Listed Large Branchiopods (USFWS 2015). Pursuant to the MSHCP take agreement, one dry season and one wet season survey is required where suitable habitat (including stock ponds, ephemeral ponds, or other human-modified depressions) is present and cannot be avoided. Surveys will be performed by Biologists with the appropriate USFWS permits. The USFWS requires a 15-day notification prior to the anticipated start date of the surveys.

Task 7A Dry season survey

In accordance with USFWS dry season survey guidelines, soil will first be collected when it is dry to avoid damaging or destroying fairy shrimp cysts, which are more fragile when wet. The amount of soil collected will be proportional to the size of the ponding feature, ranging from 10 samples collected from smaller features up to 100 samples collected from larger features. Soil will be collected from the top 1 to 3 centimeters of sediment. The soil samples will be processed, and cyst density will be determined by a biologist who holds a permit with the appropriate terms and conditions specifically for conducting processing, isolating, and identifying listed large branchiopod eggs. If cysts are present in the samples, cysts will be cultured and reared to adulthood for identification by the permitted Biologist.

Upon completion of the survey effort, a Letter Report that documents soil collection activities and processing/rearing of cysts will be prepared. The report will be submitted to the USFWS, the CDFW, and the City of Temecula within 90 days of completion of the soil and cyst analysis, as required by the surveying Biologist's 10(a)(1)(A) permit requirements. This scope assumes a draft and final version of the

Exhibit A

Scope of Work

Letter Report will be submitted in .pdf format. Voucher specimens of all listed vernal pool branchiopod species will be collected and deposited to either the California Academy of Sciences or the Natural History Museum of Los Angeles County. Any special status species observed will be reported to the CNDDDB.

Task 7B Wet season survey

A survey will begin after initial storm events to determine when pools/swales have been sufficiently inundated to begin the survey (i.e., greater than 3 centimeters of standing water 24 hours after a rain event). Following rainfall events, the hydrology of the pools on the project site will be monitored. This fee estimate includes up to 3 monitoring visits before surveys are initiated.

The frequency and termination of surveys differ for three geographic subdivisions of the California Floristic Province. The project site is located within Survey Zone C. In accordance with Survey Zone C requirements, once the pools are sufficiently inundated, surveys will begin no later than 7 days following the initial inundation and continue once every week until pools are no longer inundated or until they have experienced 120 days of continuous inundation. This scope assumes that the ponds will be continuously inundated and includes 17 survey visits. If the pools dry and pond a second time during the season, additional surveys may be required, and a budget augment may be necessary.

If a listed species is observed during a wet season survey, the USFWS will be notified within 10 working days and subsequent surveys may not be required. Upon completion of the survey effort, a Letter Report that documents survey findings will be prepared. The report will be submitted to the USFWS, the CDFW, and the City of Temecula within 90 days of completion of surveys, as required by the surveying Biologist's 10(a)(1)(A) permit requirements. This scope assumes a draft and final version of the Letter Report will be submitted in .pdf format. Voucher specimens of all listed vernal pool branchiopod species will be collected and deposited to either the California Academy of Sciences or the Natural History Museum of Los Angeles County. Any special status species observed will be reported to the CNDDDB.

NOTE: A single wet season survey may be considered unreliable if moderate to extreme drought conditions persist through the wet season or if a subsequent dry season survey detects branchiopod resting eggs. Additional surveys in subsequent wet seasons with sufficient rainfall may be required by the USFWS and a budget augment may be necessary.

Task 8 Least bell's vireo surveys

If suitable habitat is determined to be present after the field survey, a focused survey for the least Bell's vireo will follow the USFWS protocol (USFWS 2001). Surveys for the least Bell's vireo will be conducted by a qualified Biologist. Focused surveys for the least Bell's vireo will be conducted within all suitable habitat (i.e., riparian vegetation) in the project survey area. The least Bell's vireo protocol requires that a total of eight surveys be conducted at approximately ten-day intervals starting after April 10 and ending by July 31. Recordings will not be used for the least Bell's vireo as they are not required by the protocol. All surveys will be conducted during appropriate weather conditions, generally between dawn and 11:00 A.M. The locations where vireo are first observed will be mapped on an aerial photograph and recorded with a GPS unit. The number of birds (individuals or pairs) will be noted on each subsequent visit and data will be collected on general habitat characteristics for any least Bell's vireo observed. Any pertinent behavior will also be recorded. A total of one field day would be required to cover the project survey area

Exhibit A

Scope of Work

during each survey visit; therefore, this scope of work assumes a total of eight Biologists field days to complete the work throughout the project survey area.

Upon completion of the survey effort, a Letter Report that documents survey findings will be prepared. The report will include a methods and results section with locations and descriptions of any least Bell's vireo observed, and the least Bell's vireo survey and detection form. This Scope of Work assumes one draft version of the report will be submitted in .pdf format to the Client and a final report, which incorporates required modifications will be submitted in .pdf format. Any special status species observed will be reported to the CDFW's CNDDDB.

Task 9 Pre-construction nesting bird/raptor survey

This task would be required if construction would occur during the migratory bird or raptor nesting season (i.e., generally between March 1 and June 30 for migratory birds and February 1 to June 30 for raptors). This task would not be required if construction occurs between July 1 and January 31.

Pre-construction surveys for nesting birds and raptors will be conducted by a qualified Biologist ending no more than three days prior to construction within a 300-foot buffer around the project impact area (within 500 feet for raptors). If nesting birds/raptors are found, locations will be mapped, and a determination will be made on the nesting stage of the bird. In addition, if nesting bird/raptors are found, excavation activities within 300 feet of nesting habitat (within 500 feet of raptor nests) would be delayed until the nest is vacated, juveniles have fledged, and there is no evidence of a second nesting attempt.

Limits of avoidance will be flagged or staked with construction fencing. This scope assumes two survey visits will be conducted to (1) locate active nests and (2) monitor nesting stage; additional surveys to monitor active nests will require a contract augment.

Upon completion of the survey effort, a Letter Report will be prepared on the survey findings. The report will include a methods and results section with locations and descriptions of nesting birds found and recommendations for appropriate further actions. This scope assumes a draft and final version of the Letter Report will be submitted in .pdf format. Any special status species observed will be reported to the CDFS's CNDDDB.

Task 10 Update construction cost estimate

CWE will revise the current cost estimates for the project to reflect expected prices in 2020 when the project is put out for bid. Recent trends in construction bids are higher than current engineering estimates at the City of Temecula. CWE will evaluate recent aerial photography flown by the City against the topographic data collected during the original evaluation of the park in 2014. This will allow comparison of bank locations to see if more fill is required in the system design. Costs submitted recently by construction companies on other similar projects will be evaluated to determine the current costs of construction materials and labor and to see if these values are currently trending upwards. Costs for 2020 will be estimated considering inflation and the rising trends.

Exhibit A

Scope of Work

Assumptions and Exclusions

- The Client will provide right-of-entry permits.
- The Client will provide site maps in electronic format and GIS shape files of sufficient detail to determine site boundaries in the field.
- Field surveys for biological resources, other than those explicitly detailed in this Scope of Work, that may be requested or required by the resource agencies are not included in this proposal.
- Surveys for biological resources cannot be performed in inclement weather. Inclement weather may affect project schedule.
- The above costs are estimates, and each task will be performed on a time and materials basis. Each cost has been estimated based on CWE's current knowledge of the proposed project. Agency or client requests that entail additional out of scope work efforts not explicitly described above will require an additional Scope of Work and Fee Estimate.
- Changes to the project description, project design, grading, or other changes that occur after the initiation of field surveys or after the draft report has been prepared will result in additional costs.
- CWE will respond to one set of written consensus comments that incorporate comments from the Client to the draft deliverables described above and will provide a final product based on those comments. Response to additional comments will be on a time and materials basis.
- Other services not expressly described are excluded.