SUBMITTAL TO THE FLOOD CONTROL AND WATER CONSERVATION DISTRICT BOARD OF SUPERVISORS COUNTY OF RIVERSIDE, STATE OF CALIFORNIA



ITEM: 11.4 (ID # 13120)

MEETING DATE:

Tuesday, August 04, 2020

FROM: FLOOD CONTROL DISTRICT:

SUBJECT: FLOOD CONTROL DISTRICT: Approval of the Consulting Services Agreement Between the Riverside County Flood Control and Water Conservation District and Dudek for Mockingbird Canyon Stabilization, Project No. 2-8-00180-03, Fiscal Years 2020/2021-2022/2023, District 1. [Total Cost \$1,230,267 - District Funds 100%]

RECOMMENDED MOTION: That the Board of Supervisors:

- 1. Approve the Consulting Services Agreement ("Agreement") between the Riverside County Flood Control and Water Conservation District ("District") and Dudek ("Consultant") for Fiscal Years 2020/2021-2021/2022;
- 2. Authorize the Chairwoman of the Board to execute the same on behalf of the District;
- 3. Authorize the General Manager-Chief Engineer to extend time for performance for an additional year (Fiscal Year 2022/2023), if necessary;
- 4. Authorize the District's General Manager-Chief Engineer to terminate the Agreement in accordance with the terms and conditions in the Agreement; and
- 5. Direct the Clerk of the Board to return two (2) executed Agreements to the District.

ACTION: Policy

aspn Unley, GENERAL MGR-CHF FLD CNTRL ENG

7/23/2020

MINUTES OF THE BOARD OF SUPERVISORS

On motion of Supervisor Jeffries, seconded by Supervisor Spiegel and duly carried by unanimous vote, IT WAS ORDERED that the above matter is approved as recommended.

Ayes:

Jeffries, Spiegel, Washington, Perez and Hewitt

Nays:

None

Absent:

None

Date:

August 4, 2020

XC:

Flood

Deputy

Kecia R. Harper

Clerk of the Board

SUBMITTAL TO THE FLOOD CONTROL AND WATER CONSERVATION DISTRICT BOARD OF SUPERVISORS COUNTY OF RIVERSIDE. STATE OF CALIFORNIA

FINANCIAL DATA	Current Fiscal Year:	Next Fiscal Year:	Total Cost:	Ongoing Cost				
COST	\$738,160	\$492,107	\$1,230,267	\$0				
NET COUNTY COST	\$0	\$0	\$0	\$0				
SOURCE OF FUNDS	Budget Adjus	Budget Adjustment: No						
25120 - 947420 - 5254	onal For Fiscal Ye	For Fiscal Year: 20/21-22/23						
Services								

C.E.O. RECOMMENDATION: Approve

BACKGROUND:

Summary

The Agreement sets the terms and conditions by which the Consultant will provide professional engineering services for the final design of the District's Mockingbird Canyon Stabilization project ("Stabilization Project") to provide streambank protection along Mockingbird Canyon Wash ("Wash").

Over the last 40 years, the Wash has experienced significant erosion, deposition and flooding problems. Erosion and flooding have repeatedly caused significant damage to Mockingbird Canyon Road, the District's existing levee and existing public utilities in the area. Additionally, Mockingbird Canyon Road, which is the primary access for residents in the area, becomes impassable during significant storm events.

On January 14, 2014 (Minute Order No. 11-2), the Board of Supervisors approved the consulting services agreement between the District and JE Fuller/Hydrology & Geomorphology, Inc. ("JE Fuller") for the Mockingbird Canyon Wash Geomorphology Study. The District and JE Fuller have analyzed the existing Wash and have prepared preliminary design plans for the Stabilization Project. The Consultant will perform the final design of the Stabilization Project.

County Counsel has approved the Agreement as to legal form. The Consultant has executed the Agreement.

Prev. Agn. Ref.: 11-2 of 01/14/2014

Impact on Residents and Businesses

The future Stabilization Project will provide flood protection to existing homes, Mockingbird Canyon Road and utilities in the road. Costs incurred under this Agreement will be funded by ad valorem property tax revenue and entail no new fees, taxes or bonded indebtedness.

Additional Fiscal Information

SUBMITTAL TO THE FLOOD CONTROL AND WATER CONSERVATION DISTRICT BOARD OF SUPERVISORS COUNTY OF RIVERSIDE, STATE OF CALIFORNIA

Sufficient funding is available in the District's Zone 2 budget for Fiscal Year 2020-2021 and will be included in the District's recommended budget(s) for future fiscal years, as appropriate and necessary.

Contract History and Price Reasonableness

The District released the Request for Proposals/Qualifications ("RFP") for the Mockingbird Canyon Stabilization in accordance with the purchasing guidelines. A public notice of the RFP was published in The Press-Enterprise and The Desert Sun. The RFP was also posted on the District's website. Eight (8) firms responded, and a selection committee comprised of District employees reviewed each firm's qualifications. Dudek was selected based on relevant experience, key personnel, project understanding and scope, schedule/work hours estimate and overall impression.

ATTACHMENTS:

1. Consulting Services Agreement

RKM:blm P8/232380

√ason Farin Principal Management Analyst

7/29/2020

Gregory V. Prianos, Director County Counsel

7/23/2020

CONSULTING SERVICES AGREEMENT

Mockingbird Canyon Stabilization Project No. 2-8-00180-03

- SCOPE OF SERVICES DISTRICT hereby retains CONSULTANT, as an independent contractor, to perform all technical and professional services including but not limited to expertise, labor, materials, equipment, transportation, supervision and other incidental services to fully and adequately perform and complete in a skillful and professional manner those engineering services set forth and described in the "Scope of Work", attached hereto as Attachment "A" and made a part hereof.
 - CONSULTANT shall not perform any additional work, including any optional tasks, except as directed by DISTRICT in writing.
- 2. <u>TIME FOR PERFORMANCE</u> The term of this Agreement shall become effective on the date the Agreement is executed by DISTRICT's Board of Supervisors and shall terminate on June 30, 2022. Prior to the termination of this Agreement, by mutual written agreement of DISTRICT and CONSULTANT, this Agreement may be extended for one (1) additional one-year term through June 30, 2023.
 - CONSULTANT shall not commence performance of any work or services, for any reason whatsoever, until DISTRICT has provided CONSULTANT with a written Notice to Proceed authorizing CONSULTANT to initiate work pursuant to this Agreement. No payment will be made for any work or services performed prior to the issuance of said Notice to Proceed.
- 3. <u>COMPENSATION</u> The total amount of compensation paid to CONSULTANT under the

terms of this Agreement shall not exceed the sum of One Million Two Hundred Thirty Thousand Two Hundred Sixty-Seven Dollars (\$1,230,267). DISTRICT shall pay CONSULTANT for actual services satisfactorily performed in accordance with CONSULTANT's "Scope of Work" (Attachment "A") and "Fee Schedule", attached hereto as Attachment "B" and made a part hereof. CONSULTANT shall invoice DISTRICT for completion of "Tasks" as shown in Attachment "B" based on a lump sum not to exceed for each deliverable upon delivery or performance of said tasks.

4. PAYMENT – CONSULTANT shall submit invoice(s) to DISTRICT (Attention: Business Office – Accounts Payable) in arrears, no later than sixty (60) calendar days after completion of each deliverable. The DISTRICT reserves the right to withhold payment for work that is not invoiced in a timely manner. All invoices shall itemize charges to conform to the deliverables as set forth in Attachment "B". All invoices shall contain, at a minimum, the following information: invoice number, invoice date, invoice total amount, remittance address, DISTRICT's purchase order number, quantities, item descriptions, unit price, extensions and sales/use tax if applicable. Incomplete invoices will be returned to CONSULTANT for correction.

Upon satisfactory performance of CONSULTANT's services pursuant to DISTRICT approved scope of services, DISTRICT shall pay CONSULTANT within forty-five (45) days after DISTRICT's receipt of appropriate invoice(s) from CONSULTANT. Progress payments, if permitted in DISTRICT approved scope of services, shall be processed no more than once per month. DISTRICT shall not pay interest or finance charges on any outstanding balance(s).

Except as specifically provided for and stated in this Agreement or Attachment "B", DISTRICT shall not be responsible for payment of any of CONSULTANT's expenses related to this Agreement.

- 5. <u>SUBCONTRACTING</u> CONSULTANT may, at CONSULTANT's own expense, employ special consultants to accomplish the work covered by this Agreement; however, except as specifically provided in Attachment "A" or as expressly identified in this Agreement, no portion of the services pertinent to this Agreement shall be subcontracted without prior written approval and authorization by DISTRICT.
- 6. <u>LICENSES</u> At all times, while performing services under this Agreement, CONSULTANT, its employees, agents, contractors and subcontractors shall possess and maintain all necessary professional licenses, registrations, certificates, permits and other authorizations as required by the applicable federal, state and local laws, regulations, rules and ordinances.
- 7. STANDARD OF CARE While performing the services, CONSULTANT shall exercise the reasonable professional care and skill customarily exercised by reputable members of CONSULTANT's profession practicing in the State of California, and shall use reasonable diligence and best judgment while exercising CONSULTANT's professional skill and expertise. By executing this Agreement, CONSULTANT represents and maintains that CONSULTANT has the necessary experience and expertise to skillfully perform all services, duties, and obligations required by this Agreement.

If, pursuant to this Agreement, CONSULTANT is engaged as a "Professional Engineer" pursuant to Section 6701 of the Professional Engineers Act (Chapter 7 of Division 3 of the Business and Professions Code), then CONSULTANT assumes responsible charge of the work pursuant to Section 6703 of the Professional Engineers Act; and shall be wholly responsible for the completeness and accuracy of all data, technical studies, reports, plans, specifications, and estimates prepared pursuant to this Agreement, and shall check all of its work product accordingly.

8. <u>ERRORS AND OMISSIONS</u> – In the event CONSULTANT's data, technical studies,

reports, plans, specifications, estimates or any work products contain any errors or omissions that cause DISTRICT to incur additional expense beyond what would have otherwise resulted if there were no errors or omissions in CONSULTANT's data, technical studies, reports, plans, specifications, estimates or any work products, such additional expense shall be borne solely by CONSULTANT.

9. PREVAILING WAGE

- A. In the event that a portion of the work performed by CONSULTANT are by crafts affected by state labor laws, the following terms and conditions shall apply.
 - CONSULTANT shall comply with all applicable provisions of the California
 State Labor Code regarding prevailing wages, Department of Industrial
 Relations Division of Apprenticeship Standards Labor and Labor Codes.
 - ii. All workers shall be paid not less than the general prevailing rate of wages and benefits for work of a similar character in the locality in which the work is performed, as provided in Labor Code Sections 1770 et seq.
 - iii. When prevailing wages apply to the services described in the scope of work, transportation and subsistence costs shall be reimbursed at the minimum rates set by the Department of Industrial Relations (DIR) as outlined in the applicable Prevailing Wage Determination. See http://www.dir.ca.gov.
- B. When all of the work performed by CONSULTANT is performed by crafts not affected by state labor laws or are not contemplated for use, the following terms and conditions shall apply.
 - The State of California's General Prevailing Wage Rates are not applicable to this Agreement.
- 10. <u>NOTICES</u> Any and all notices sent or required to be sent to the Parties of this Agreement will be mailed by first class mail, postage prepaid, to the following addresses:

To DISTRICT:

RIVERSIDE COUNTY FLOOD CONTROL AND

WATER CONSERVATION DISTRICT

1995 Market Street Riverside, CA 92501

Attn: Design II

To CONSULTANT:

DUDEK

605 Third Street Encinitas, CA 92024 Attn: Jonis Smith

11. <u>INSURANCE</u> – Without limiting or diminishing CONSULTANT's obligation to indemnify or hold DISTRICT harmless, CONSULTANT shall procure and maintain or cause to be maintained, at its sole cost and expense, the following insurance coverage's during the term of this Agreement.

As respects to the insurance section only, DISTRICT herein refers to the Riverside County Flood Control and Water Conservation District and the County of Riverside, its Agencies, Districts, Special Districts and Departments, their respective directors, officers, Board of Supervisors, employees, elected or appointed officials, agents or representatives as Additional Insureds.

- A. Workers' Compensation: If CONSULTANT has employees as defined by the State of California, CONSULTANT shall maintain statutory Workers' Compensation Insurance (Coverage A) as prescribed by the laws of the State of California. Policy shall include Employers' Liability (Coverage B) including Occupational Disease with limits not less than \$1,000,000 per person per accident. The policy shall be endorsed to waive subrogation in favor of the Riverside County Flood Control and Water Conservation District and the County of Riverside.
- B. <u>Commercial General Liability</u>: Commercial General Liability insurance coverage, including but not limited to premises liability, unmodified contractual liability, products and completed operations liability, personal and advertising injury, and cross

liability coverage, covering claims which may arise from or out of CONSULTANT's performance of its obligations hereunder. Policy shall name DISTRICT as Additional Insured. Policy's limit of liability shall not be less than \$2,000,000 per occurrence combined single limit. If such insurance contains a general aggregate limit, it shall apply separately to this Agreement or be no less than two (2) times the occurrence limit.

- C. Vehicle Liability: If vehicles or mobile equipment are used in the performance of the obligations under this Agreement, then CONSULTANT shall maintain liability insurance for all owned, non-owned or hired vehicles so used in an amount not less than \$1,000,000 per occurrence combined single limit. If such insurance contains a general aggregate limit, it shall apply separately to this Agreement or be no less than two (2) times the occurrence limit. Policy shall name DISTRICT as Additional Insured.
- D. Professional Liability: CONSULTANT shall maintain Professional Liability Insurance providing coverage for CONSULTANT's performance of work included within this Agreement, with a limit of liability of not less than \$2,000,000 per occurrence and \$4,000,000 annual aggregate. If CONSULTANT's Professional Liability Insurance is written on a claims made basis rather than an occurrence basis, such insurance shall continue through the term of this Agreement and CONSULTANT shall purchase, at his sole expense, either 1) an Extended Reporting Endorsement (also, known as Tail Coverage); or 2) Prior Dates Coverage from new insurer with a retroactive date back to the date of or prior to the inception of this Agreement; or 3) demonstrate through Certificates of Insurance that CONSULTANT has maintained continuous coverage with the same or original insurer. Coverage provided under items 1), 2), or 3) will continue as long as the law allows.

E. General Insurance Provisions – All Lines:

i. Any insurance carrier providing insurance coverage hereunder shall be

admitted to the State of California and have an A.M. BEST rating of not less than A:VIII (A:8) unless such requirements are waived, in writing, by the DISTRICT Risk Manager. If DISTRICT's Risk Manager waives a requirement for a particular insurer, such waiver is only valid for that specific insurer and only for one policy term.

- ii. CONSULTANT must declare its insurance self-insured retention for each coverage required herein. If any such self-insured retention exceed \$500,000 per occurrence each such retention shall have the prior written consent of DISTRICT Risk Manager before the commencement of operations under this Agreement. Upon notification of self-insured retention unacceptable to DISTRICT and at the election of DISTRICT's Risk Manager, CONSULTANT's carriers shall either 1) reduce or eliminate such self-insured retention as respects this Agreement with DISTRICT; or 2) procure a bond which guarantees payment of losses and related investigations, claims administration, and defense costs and expenses.
- iii. CONSULTANT shall cause CONSULTANT's insurance carrier(s) to furnish DISTRICT with either: 1) a properly executed original Certificate(s) of Insurance and certified original copies of endorsements effecting coverage as required herein; and 2) if requested to do so orally or in writing by the DISTRICT Risk Manager, provide original certified copies of policies, including all endorsements and all attachments thereto, showing such insurance is in full force and effect. Further, said Certificate(s) and policies of insurance shall contain the covenant of the insurance carrier(s) that a minimum of thirty (30) days written notice shall be given to DISTRICT prior to any material modification, cancellation, expiration or reduction in coverage of such

insurance. If CONSULTANT's insurance carrier(s) policies do not meet the minimum notice requirement found herein, CONSULTANT shall cause CONSULTANT's insurance carrier(s) to furnish a 30 day Notice of Cancellation endorsement.

- iv. In the event of a material modification, cancellation, expiration or reduction in coverage, this Agreement shall terminate forthwith, unless the County of Riverside receives, prior to such effective date, another properly executed original Certificate of Insurance and original copies of endorsements or certified original policies, including all endorsements and attachments thereto, evidencing coverage's set forth herein and the insurance required herein is in full force and effect. CONSULTANT shall not commence operations until DISTRICT has been furnished original Certificate(s) of Insurance and certified original copies of endorsements and, if requested, certified original policies of insurance, including all endorsements and any and all other attachments as required in this section. An individual authorized by the insurance carrier to do so on its behalf shall sign the original endorsements for each policy and the Certificate of Insurance.
- v. It is understood and agreed to by the Parties hereto that CONSULTANT's insurance shall be construed as primary insurance, and DISTRICT's insurance and/or deductibles and/or self-insured retentions or self-insured programs shall not be construed as contributory.
- vi. If, during the term of this Agreement or any extension thereof, there is a material change in the scope of services, or there is a material change in the equipment to be used in the performance of the scope of work, or the term of this Agreement, including any extensions thereof, exceeds five (5) years,

COUNTY reserves the right to adjust the types of insurance and the monetary limits of liability required under this Agreement if, in DISTRICT Risk Management's reasonable judgment, the amount or type of insurance carried by CONSULTANT has become inadequate.

- vii. CONSULTANT shall pass down the insurance obligations contained herein to all tiers of subconsultants working under this Agreement.
- viii. The insurance requirements contained in this Agreement may be met with a program(s) of self-insurance acceptable to DISTRICT.
- ix. CONSULTANT agrees to notify DISTRICT of any claim by a third party or any incident or event that may give rise to a claim arising from the performance of this Agreement.

12. INDEMNITY AND HOLD HARMLESS

A. Basic Indemnity

i.

To the fullest extent permitted by applicable law, CONSULTANT agrees to defend (through legal counsel reasonably acceptable to DISTRICT), indemnify, and hold harmless the Riverside County Flood Control and Water Conservation District and the County of Riverside, its Agencies, Districts, Departments and Special Districts, Board of Supervisors, elected and appointed officials, and each of their respective directors, members officers, employees, agents, volunteers and representatives ("Indemnitees") and each of them from any and all Losses that arise out of or relate to any act or omission constituting ordinary and not professional negligence (including, without limitation, negligent breach of contract), recklessness, or willful misconduct on the part of CONSULTANT or its subconsultants or their respective employees, agents, representatives, or independent contractors.

- ii. "Losses" shall mean any and all economic and non-economic losses, costs, liabilities, claims, damages, actions, judgements, settlements and expenses, including, without limitation, full and actual attorney's fees (including, without limitation, attorney's fees for trial and on appeal), expert and non-expert witness fees, arbitrator and arbitration fees and mediator and mediation fees.
- Indemnitees from all liability arising from suits, claims, demands, actions, or proceedings made by agents, employees or subcontractors of CONSULTANT for salary, wages, compensation, health benefits, insurance, retirement or any other benefit not explicitly set forth in this contract and arising out of work performed for DISTRICT pursuant to this contract. The Indemnitees shall be entitled to the defense and indemnification provided for hereunder regardless of whether the Loss is in part caused or contributed to by the acts or omissions of an Indemnitee or any other person or entity; provided however, that nothing contained herein shall be construed as obligating CONSULTANT to indemnify and hold harmless any Indemnitee to the extent not required under the provisions of Paragraph B. below.

B. Indemnity for Design Professionals

i. To the fullest extent permitted by Applicable Law, CONSULTANT agrees to defend (through legal counsel reasonably acceptable to DISTRICT), indemnify and hold harmless the Indemnitees, and each of them, against any and all Losses that arise out of, pertain to, or relate to, any negligence, recklessness or willful misconduct constituting professional negligence on the part of CONSULTANT or its Subconsultants, or their respective employees, agents, representatives, or independent contractors. The Indemnitees shall be entitled

to the defense, and indemnification provided for hereunder regardless of whether the Loss is, in part, caused or contributed to by the acts or omissions of an Indemnitee or any other person or entity; provided, however, that nothing contained herein shall be construed as obligating CONSULTANT to indemnify and hold harmless any Indemnitee to the extent not required under the provisions of this section. CONSULTANT shall defend and pay, all costs and fees, including but not limited to attorney fees, cost of investigation, and defense, in any loss, suits, claims, demands, actions, or proceedings to the extent and in proportion to the percentage, such costs and fees arise out of, pertain to, or relate to the negligence, recklessness or willful misconduct of CONSULTANT arising out of or from the performance of professional design services under this Agreement. The duty to defend applies to any alleged or actual negligence, recklessness, willful misconduct of CONSULTANT. The cost for defense shall apply whether or not CONSULTANT is a party to the lawsuit and shall apply whether or not CONSULTANT is directly liable to the plaintiffs in the lawsuit. The duty to defend applies even if Indemnitees are alleged or found to be actively negligent, but only in proportion to the percentage of fault or negligence of CONSULTANT.

ii. Without affecting the rights of DISTRICT under any other provision of this Agreement, CONSULTANT shall not be required to indemnify or hold harmless or provide defense or defense costs to an Indemnitee for a loss due to that Indemnitee's negligence, recklessness or willful misconduct; provided, however, that such negligence, recklessness or willful misconduct has been determined by agreement of CONSULTANT and Indemnitee or has been adjudged by the findings of a court of competent jurisdiction.

- iii. CONSULTANT agrees to obtain or cause to be obtained executed defense and indemnity agreements with provisions identical to those set forth in this section from each and every Subconsultant, of every Tier.
- iv. CONSULTANT's indemnification obligations under this Agreement shall not be limited by the amount or type of damages, compensation or benefits payable under any policy of insurance, workers' compensation acts, disability benefit acts or other employee benefit acts.
- v. The Indemnitees shall be entitled to recover their attorneys' fees, costs and expert and consultant costs in pursuing or enforcing their right to defense and/or indemnification under this Agreement.
- 13. RECORD RETENTION/AUDIT CONSULTANT shall retain complete and accurate records relating to all reports, documents and related records documents including, but not limited to, records related to the nature and extent of CONSULTANT's costs incurred while providing services authorized under this Agreement for at least three (3) years from the date of final payment under this Agreement. These records shall, upon request, be made available for inspection by DISTRICT.

DISTRICT, the County of Riverside, the State of California or any of their duly authorized representatives shall have the right to review and to copy any records and supporting documentation pertaining to the performance of this Agreement. CONSULTANT agrees to allow the auditor(s) access to such records during normal business hours and to allow interviews of any employees who might reasonably have information related to such records.

14. WORK PRODUCT – CONSULTANT shall provide DISTRICT with all applicable data, calculations, technical studies, plans, specifications, computer files, field notes, estimates, drawings, logs, maps, exhibits, analyses, documents, materials, policies and report(s) as set forth in Attachment "A". All work products or deliverables furnished under this Agreement

shall be and remain the sole property of DISTRICT. CONSULTANT shall not publish or transfer any material produced or resulting from activities supported by this Agreement without the written consent of the General Manager-Chief Engineer. If any such material is subject to copyright and/or trademark, the parties agree that the right to any and all copyright and/or trademark in and to the material is expressly reserved to DISTRICT. If any such material is copyrighted, the parties hereto understand and agree that DISTRICT reserves a royalty-free, non-exclusive and irrevocable license to reproduce, publish, and use such material, in whole or in part and to authorize others to do so provided written credit is given the author.

- 15. <u>CONFIDENTIALITY OF DATA</u> All financial, statistical, personal, technical or other data and information made available to CONSULTANT shall not be disclosed (in whole or in part) by CONSULTANT to any third parties and shall be protected by CONSULTANT from unauthorized use and disclosure. CONSULTANT shall refer all requests for information to DISTRICT. CONSULTANT shall observe all federal, state and county regulations concerning confidentiality of records.
- 16. <u>ALTERATION</u> No alteration or variation of the terms of this Agreement shall be valid unless made in writing and signed by the parties hereto, and no oral understanding or agreement not incorporated herein shall be binding on any of the parties hereto.
 There shall be no change in CONSULTANT's Key Personnel as listed in Attachment "A" without prior written approval by DISTRICT.
- 17. <u>TERMINATION</u> At any time during the term of this Agreement, DISTRICT may:
 - A. Terminate this Agreement without cause upon providing CONSULTANT thirty (30) calendar days written notice stating the extent and effective date of termination; or
 - B. Upon five (5) days written notice, terminate this Agreement for CONSULTANT default, if CONSULTANT refuses or fails to comply with the provisions of this

Agreement or fails to make progress so as to endanger performance and does not cure such failure within a reasonable period of time. In the event of such termination, DISTRICT may proceed with the work in a manner deemed proper to DISTRICT.

In the event DISTRICT issues a Notice of Termination, CONSULTANT shall (i) stop all work under this Agreement on the date specified in the Notice of Termination; and (ii) transfer to DISTRICT and deliver in the manner and to the extent, if any, as directed by DISTRICT, any equipment, data or reports and any other documents which, if the Agreement had been completed, would have been required to be furnished to DISTRICT.

In the event DISTRICT terminates this Agreement, DISTRICT shall make payment for all services satisfactorily performed in accordance with this Agreement to the date of termination and at the rates as set forth in Attachment "B". Notwithstanding any of the other provisions of this Agreement, CONSULTANT's rights under this Agreement shall terminate (except for fees accrued prior to the date of termination) upon dishonesty or a willful or material breach of this Agreement by CONSULTANT; or in the event of CONSULTANT's unwillingness or inability for any reason whatsoever to perform the duties hereunder; or if the Agreement is terminated pursuant to Section 26 (NON-DISCRIMINATION). In such event, CONSULTANT shall not be entitled to any further compensation under this Agreement. The rights and remedies of DISTRICT provided in this section shall not be exclusive and are in addition to any other rights and remedies provided by law or under this Agreement.

18. DISPUTES

A. In the event CONSULTANT considers any work demanded of CONSULTANT to be outside the requirements of this Agreement, or if CONSULTANT considers any order, instruction or decision of DISTRICT to be unfair, CONSULTANT shall promptly, upon receipt of such order, instruction or decision, ask for a written

confirmation of the same whereupon CONSULTANT shall proceed without delay to perform the work or to conform to the order, instruction, or decision. However, if CONSULTANT finds such order, instruction or decision unsatisfactory, CONSULTANT shall, within twenty-one (21) calendar days after receipt of same, file a written protest with DISTRICT stating clearly and in detail its objections and reasons therefor. Except for such protests or objections as are made of record in the manner specified and within the time stated herein, and except for such instances where the basis of a protest could not reasonably have been foreseen by CONSULTANT within the time limit specified for protest, CONSULTANT hereby waives all grounds for protests or objections to orders, instruction, or decisions of DISTRICT and hereby agrees that, as to all matters not included in such protests, the orders, instructions and decisions of DISTRICT will be limited to matters properly falling within DISTRICT's authority.

- B. Any controversy or claim arising out of or relating to this Agreement which cannot be resolved by mutual agreement may be settled by arbitration, provided that the parties hereto mutually agree to submit to arbitration.
- C. Neither the pendency of a dispute nor its consideration by arbitration shall excuse CONSULTANT from full and timely performance in accordance with the terms of this Agreement.
- ASSIGNMENT Neither this Agreement nor any part thereof shall be assigned by CONSULTANT without the prior written consent of DISTRICT.

20. CONFLICT OF INTEREST

A. CONSULTANT shall disclose any financial, business, or other relationship with DISTRICT that may have an impact upon the outcome of this Agreement, or any ensuing DISTRICT construction project. CONSULTANT shall also list current clients

- who may have a financial interest in the outcome of this Agreement, or any ensuing DISTRICT construction project, which will follow.
- B. CONSULTANT hereby certifies that it does not now have, nor shall it acquire any financial or business interest that would conflict with the performance of services under this Agreement.
- C. CONSULTANT hereby certifies that neither CONSULTANT, nor any firm affiliated with CONSULTANT will bid on any construction contract, or on any contract to provide construction inspection 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.
- D. 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 Agreement shall be eligible to bid on any construction contract, or on any contract to provide construction inspection for any construction project resulting from this Agreement.
- 21. INDEPENDENT CONTRACTOR CONSULTANT and the agents and employees of CONSULTANT shall act at all times in an independent capacity during the term of this Agreement and in the performance of the services to be rendered hereunder and shall not act as, shall not be and shall not in any manner be considered employees or agents of DISTRICT or the County of Riverside.
- 22. <u>FORCE MAJEURE</u> If either of the Parties cannot comply with any provision of this Agreement due to causes beyond its reasonable control, and which could not have been reasonably anticipated, such as acts of God, acts of war, civil disorders or other similar acts, such party shall not be held liable for such failure to comply.
- 23. <u>EDD REPORTING REQUIREMENTS</u> In order to comply with child support enforcement

requirements of the State of California, DISTRICT may be required to submit a Report of Independent Contractor(s) form DE 542 to the Employment Development Department ("EDD"). CONSULTANT agrees to furnish the required data and certifications to DISTRICT within 10 days of notification of award of Agreement when required by EDD. This data will be transmitted to governmental agencies charged with the establishment and enforcement of child support orders. Failure of CONSULTANT to timely submit the data and/or certificates required may result in the contract being awarded to another contractor. In the event a contract has been issued, failure of CONSULTANT to comply with all federal and state reporting requirements for child support enforcement or to comply with all lawfully served Wage and Earnings Assignments Orders and Notices of Assignment shall constitute a material breach of Agreement. If CONSULTANT has any questions concerning this reporting requirement, please call 916.657.0529. CONSULTANT should also contact its local Employment Tax Customer Service Office listed in the telephone directory in the State Government section under "Employment Development Department" or access their Internet site at www.edd.ca.gov.

- 24. <u>JURISDICTION/LAW/SEVERABILITY</u> This Agreement is to be construed in accordance with the laws of the State of California. If any provision of this Agreement is held by a court of competent jurisdiction to be invalid, void or unenforceable, the remaining provisions shall be declared severable and shall be given full force and effect to the extent possible.
 - Any legal action, in law or equity related to the performance or interpretation of this Agreement shall be filed only in the Superior Court of the State of California located in the County of Riverside, California and the parties waive any provision of law providing for a change of venue to another location. Prior to the filing of any legal action, the parties shall be obligated to attend a mediation session with a neutral mediator to try to resolve the dispute.
- 25. <u>WAIVER</u> Any waiver by DISTRICT of any breach of any one or more of the terms of this

Agreement shall not be construed to be a waiver of any subsequent or other breach of the same or any other term thereof. Failure on the part of DISTRICT to require exact, full and complete compliance with any terms of this Agreement shall not be construed as in any manner changing the terms hereof, or estopping DISTRICT from enforcement hereof.

- 26. NON-DISCRIMINATION CONSULTANT represents that it is an equal opportunity employer and it shall not discriminate against any employee or applicant for employment because of race, religion, color, national origin, ancestry, sex, disability, physical condition, marital status or age, and to the extent they shall be found to be applicable hereto, shall comply with the provisions of the California Fair Employment and Housing Act (California Government Code Section 12900 et seq.), the Federal Civil Rights Act of 1964 (P.L. 88-352), the American with Disabilities Act of 1990 (42 U.S.C. Section 12101 et seq.), the Age Discrimination in Employment Act of 1967, the Age Discrimination Act of 1975, the Civil Rights Stabilization Act of 1987, Executive Orders 12898 and 13166, and all other applicable related laws, regulations and Executive Orders. Such nondiscrimination shall include, but not be limited to, all activities related to initial employment, upgrading, demotion, transfer, recruitment or recruitment advertising, layoff or termination.
- 27. NON-APPROPRIATION OF FUNDS It is mutually agreed and understood that the obligations of DISTRICT are limited by and contingent upon the availability of DISTRICT funds for the reimbursement of CONSULTANT's fees. In the event that such funds are not forthcoming for any reason, DISTRICT shall immediately notify CONSULTANT in writing. This Agreement shall be deemed terminated and have no further force and effect immediately on receipt of DISTRICT's notification by CONSULTANT. In the event of such termination, CONSULTANT shall be entitled to payment for work already performed in accordance with Section 3 (COMPENSATION) and Section 4 (PAYMENT).
- 28. <u>ENTIRE AGREEMENT</u> This Agreement constitutes the entire agreement between the

parties hereto with respect to the subject matter hereof. Any modifications to the terms of this Agreement must be in writing and signed by the parties herein.

29. <u>DISCREPANCIES</u> – In the event of any conflict between the terms of this Agreement and the terms in any of the Attachments, the terms of this Agreement shall govern.

//

//

IN WITNESS WHEREOF, the Parties hereto have executed this Agreement on to be filled in by Clerk of the Board)

RECOMMENDED FOR APPROVAL:

RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT

By_

JASON E. UHLEY

General Manager-Chief Engineer

rarer J.

KAREN SPIEGEL, Chairwoman

Riverside County Flood Control and Water Conservation District Board of Supervisors

APPROVED AS TO FORM:

GREGORY P. PRIAMOS

County Counsel

ATTEST:

KECIA HARPER

Clerk of the Board

By _

SYNTHIA M. GUNZEL

Chief Deputy County Counsel

Denut

Consulting Services Agreement Mockingbird Canyon Stabilization Project No. 2-0-00180 07/20/2020 RKM:blm **DUDEK**

Christne moore

CHRISTINE MOORE
Chief Financial Officer

Consulting Services Agreement Mockingbird Canyon Stabilization Project No. 2-0-00180 07/20/2020 RKM:blm

ATTACHMENT "A" SCOPE OF WORK

ARTICLE I – INTRODUCTION

- Project Description DISTRICT's Mockingbird Canyon Stabilization project (Project No. 2-8-00180-003), hereinafter called "PROJECT", a streambank protection along Mockingbird Canyon Wash.
- 2. Location PROJECT is located in the unincorporated community of Woodcrest in Riverside County, within Sections 21, 27, 28 and 34, Township 3 South, Range 5 West, San Bernardino County Baseline and Meridian.

PROJECT Location



3. Key Personnel – CONSULTANT has represented to DISTRICT that certain key personnel will perform the services and if one or more of such personnel should become unavailable, CONSULTANT may substitute other personnel of at least equal competence only after prior written approval by DISTRICT has been secured. The key personnel for performance of this PROJECT are:

Assignment

Key Personnel

Principal Engineer

D. Michael Metts, PE

Project Manager

Jonis Smith, PE

The Project Manager shall be a registered civil engineer in the State of California. All documents and deliverables submitted that represent engineering work shall be signed and stamped (including registration number) by an engineer/land surveyor with an appropriate license/registration for the work performed.

4. Standards – All work shall be performed in accordance with DISTRICT standards and any special criteria established by DISTRICT for PROJECT. All deliverables prepared by CONSULTANT pursuant to this Agreement shall be prepared in accordance with current DISTRICT practices, regulations, policies, procedures, manuals and standards.

- Where applicable, those portions of the work dealing with the redesign and relocation of utilities shall conform to the utility owner's standards. All deliverables shall be subject to review and approval by DISTRICT and the utility owner(s), as applicable.
- 5. Quality Control CONSULTANT shall implement and maintain quality control procedures throughout all phases of PROJECT plan preparation. CONSULTANT shall demonstrate appropriate quality control procedures during the entire time services are being performed under this Agreement. All PROJECT plans, calculations and documentation shall be independently checked; corrected and back-checked, and all pertinent job related correspondence and memoranda shall be bound in appropriate job files. Evidence that the quality control plan is functional shall be provided to DISTRICT. All plans, calculations, documents and other items submitted to DISTRICT for review shall be initialed by CONSULTANT's Project Manager, or his designee, as being fully checked and that the preparation of the material followed the quality control plan established for the work.

The responsibility for accuracy and completeness of such items remains solely that of CONSULTANT. Neither DISTRICT's review or approval shall give rise to any liability or responsibility on the part of DISTRICT, or waive any of DISTRICT's rights, or relieve CONSULTANT of its professional responsibilities or obligations under this Agreement.

The plans, designs, estimates, calculations, reports and other documents furnished in accordance with the Scope of Services shall meet the criteria for acceptance and be a product of neat appearance, well organized, technically and grammatically correct, checked and having the preparer and checker identified. The minimum standard of appearance, organization and contents shall be of similar types produced by DISTRICT. If any work product submitted is not complete and ready for use by DISTRICT, it shall be marked "Draft" or similar designation to indicate it is not ready for use by DISTRICT. DISTRICT expects that all work product not so designated is ready for and can be used on PROJECT.

The page identifying preparers 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 signature of the professional engineer(s) responsible for their preparation.

- 6. DISTRICT Responsibilities The following includes tasks to be completed by DISTRICT:
 - A. Control Surveys and Topographic Mapping
 - Unless otherwise specified herein, DISTRICT shall provide primary survey control monuments including both horizontal (California Coordinate System) and vertical control positions and shall perform all right of way surveys and right of way engineering necessary to construct PROJECT.
 - DISTRICT shall provide CONSULTANT with its existing topographic mapping for PROJECT in the form of a digital terrain model (DTM).
 - DISTRICT shall provide CONSULTANT with field survey services as requested to complete PROJECT.
 - B. Identification/Location of Utilities
 - DISTRICT shall contact known utility providers, request information on the
 existence of utilities in the vicinity of PROJECT and provide CONSULTANT
 with any available preliminary information it may obtain concerning the
 existence of existing above and below ground utilities that may affect
 PROJECT'S design and construction.
 - C. Utility Relocations
 - DISTRICT shall be responsible for accomplishing all utility relocations.
 - D. Design Discharges

- Unless otherwise specified herein, DISTRICT shall provide CONSULTANT with PROJECT design discharges for the main line portions of PROJECT.
- E. Rights of Way
 - Unless otherwise specified herein, DISTRICT shall prepare and file all
 property surveys and record maps and accomplish all right of way
 negotiations and acquisitions.
- F. Reproduction
 - DISTRICT shall be responsible for all document reproduction necessary to advertise PROJECT for bids and administer PROJECT construction.
- G. Studies, Documents, Models, and As-builts
 - DISTRICT shall provide CONSULTANT with boiler plate specifications.
 - DISTRICT shall provide CONSULTANT with all previous Planning studies including the Geomorphology Report by JE Fuller in PDF format.
 - DISTRICT shall provide CONSULTANT As-Built drawings for the existing facility.
 - DISTRICT shall provide CONSULTANT existing HEC-RAS model of Mockingbird Canyon Wash.

H. Environmental

- DISTRICT shall be responsible for all environmental documentation and permits necessary for the construction of PROJECT.
- DISTRICT shall provide CONSULTANT with environmental information package template.

ARTICLE II – SERVICES TO BE PROVIDED

- Deliverables CONSULTANT shall perform professional engineering services for PROJECT
 as further described in the "Scope of Services", which is attached hereto and incorporated herein
 by reference, in accordance with applicable federal, state, and local laws and regulations.
 DISTRICT reserves the right to perform any portion of the Scope of Services with DISTRICT
 personnel.
- 2. Scope of Services Continued on the next page.

Scope of Services

The following scope of services are the minimum engineering services that will be necessary for the District to construct the proposed improvements to restore Mockingbird Canyon Wash.

Task-1 Full Service Project Management:

Consultant will provide proactive management and coordination of project elements to ensure completion on time. This includes active coordination with various District staff, other consultants, other Government Agencies, and Cities as necessary to seek and obtain timely information to keep the project on schedule. Monthly meetings to provide detailed project status updates, project schedule and to address any questions/concerns. Meeting preparation includes scheduling, preparing the agenda and providing meeting minutes. Bi-weekly conference calls to provide quick project status updates.

Task-2 Memorandum of Understanding and Schedule:

Consultant will provide a design memorandum of understanding including an outline of identifiable project constraints, a detailed review of the preliminary design and recommendations for revisions, identifications of any site investigations that are recommended and a detailed project schedule showing advertise targeted date February 2022. The project schedule will include sufficient time for District review of submittals, as well as time to address comments from the District identified in the schedule.

Task-3 Update Preliminary Design:

The Consultant will determine maintenance access requirements with District Operations and Maintenance staff and incorporate maintenance access into design. The Consultant will perform an alternative analysis regarding access to the site from Pennington Place. The existing District-owned bridge is rated for 30,000 lbs which is insufficient for District maintenance vehicles. The alternative analysis will assess whether the bridge can be retrofitted to meet current bridge design standards, or if extending access from Canyon View Drive southerly to Lindina Drive is a more feasible and cost-effective alternative. Consultant will present the analysis and recommendations to the District. The Consultant will evaluate opportunities to protect existing trees or vegetation and identify trees and habitat that can be protected in-place. Consultant will also identify new areas that are incorporated into the plan that can serve onsite environmental benefits and/or mitigation. Consultant will coordinate with District Environmental Regulatory Services (ERS) staff who are performing the project EIR/CEQA/Permits. The Consultant will evaluate opportunities to integrate a continuous trail system along the wash and prepare a conceptual layout and confirm impacts on project design, considering pedestrian safety and access. Consultant will participate with District and other public agencies in meetings to gauge interest in incorporating the trail into the final design assume two (2) meetings. The proposed preliminary design update will evaluate site drainage needs and identify local storm drain discharge locations in the wash. Consultant will update wash design consistent with the design approach as recommendations as described. This includes preparing updated preliminary plan and profile exhibits, HEC-RAS hydraulic models and FLO-2D confirmation models to meet project design objectives and to reflect recommend design changes resulting from the above studies. Consultant will also perform a detailed scour calculations to determine the appropriate toe-down/cut-off depth/burial depth for proposed improvements/structures and utilities crossing the wash. The scour calculation will include the following scour parameters: (live bed contraction scour, dune/anti-dune scour (Simons & Li /Kennedy), general scour (regime equations -Blench/Lacey, and low-flow incisement).

Consultant will prepare the following Deliverables for this Task:

- Technical memorandum documenting the proposed project preliminary design revisions, analysis
 outcomes and decisions/recommendations made, and how they will impact or be integrated into the final
 design/permitting.
- Supporting Exhibits
 - o Preliminary Trail Map
 - o Preliminary Tree and Vegetation Preservation Map
 - o Potential Mitigation Site Map
 - Preliminary District Access Location Plan/Map
 - o Preliminary Pennington Place Bridge Retrofit Plan/Exhibit
 - o Property Acquisition Map
 - Preliminary Mockingbird Canyon Wash Improvement project Map/Plan
 - o Preliminary Mockingbird Canyon Wash Improvement project Floodplain Map

Task-3.1 Public Outreach and Preliminary Design Update Coordination

The Consultant will attend and participate in standing Municipal Advisory Council (MAC) community meetings to present the Mockingbird Canyon Wash Restoration Project to the community and/or participate in public outreach meetings either online or in-person to present the project. The Consultant will represent the District at said meetings and provide technical input and guidance on discussion topics as needed. The Consultant will prepare a presentation and exhibits as needed to facilitate the meeting(s) and convey the required information to the community effectively. Consultant has assumed two (2) community / public outreach meetings.

Task-4 Mockingbird Canyon Wash - 30% Complete Improvement Plans

Consultant will prepare a first draft set of improvement plans for the project reach of Mockingbird Canyon Wash to a minimum 30% level of completion. The 30% design plans will including all of the proposed major civil improvements in both plan view and profile view. Cross section views of the proposed improvements will be provided on a 100-ft interval along the entire reach of the project. The 30% plan set will integrate the design elements identified in updated preliminary design exhibits and will include all proposed Mockingbird Canyon Wash improvements in plan and profile view including structures within the main wash such as bridges, culverts, grade control structures, transitions, riprap, soil cement etc. The Temporary Traffic Control and Staging Plan and Maintenance Plan will not be prepared until the final 90% plan review submittal. The plans will conform to the content and presentation requirements shown in the latest edition of the District's Drafting Manual. It is anticipated that the 30% plan set will include the following sheets:

Table 2. 30% Plan Set Sheet Count

Sheet Name/Type	Sheet Count
Title Sheet	1
Notes Sheet	2
Existing Conditions and Horizontal Control Sheets	14
Mockingbird Canyon Wash Plan and Profile Sheets	14
Van Buren Blvd Improvements Sheets	1
Van Buren Blvd Culvert Structural Sheets	1
Mockingbird Canyon Road Culvert Structural Sheets	4
Soil Cement Bank Lining Construction Sheet	2
Steel Pile Grade Control Structure Construction Sheets	24

Sheet Name/Type	Sheet Count						
Steel Pile Cap Structural Detail Sheet	2						
Mockingbird Canyon Drive Driveway Improvement Sheet	1						
Mockingbird Canyon Drive Culvert Abandonment Sheet	1						
Signage and Striping Sheets*	2						
Trail Pedestrian Traffic Plan*	5						
Local Drainage Improvements Plan Sheets	6						
Construction Detail Sheets	8						
Traffic Control and Construction Staging Sheets*	6						
Maintenance Plan*	4						
Mockingbird Canyon Wash Residential Secondary Access Road Improvement Plan	5						
Mockingbird Canyon Wash Residential Secondary Access Road Signage, Striping and Access Control Plan	3						
Oakley Drive Roadway Extension Improvement Plan	1						
Oakley Drive Roadway Extension Signage and Striping	1						
Mockingbird Canyon Wash Residential Secondary Access Road Driveway Connections Improvement Plans	1						
Mockingbird Cyn Wash Residential Secondary Access Road - Greenview Drive Intersection Improvement Plan	1						
Mockingbird Cyn Wash Residential Secondary Access Road - Greenview Drive Signage, Striping, and Access Control Plan	1						
Canyon View Drive Roadway Extension Improvement Plan	1						
Canyon View Drive Roadway Extension Signage and Striping	1						
TOTAL	113						

Consultant will prepare the following Deliverables for this Task:

Two (2) full size 24x36 hard copies and one PDF copy of the 30% plan set

Task-5 Land Acquisition Coordination:

Consultant will coordinate with District Real Estate Services (RES) staff, who will lead in acquiring any necessary property rights. Consultant will develop exhibits and information necessary to support District RES staff in their real estate acquisition efforts. Anticipated exhibits include Right-of-Way maps, Parcel Boundary Maps, Required Land Acquisition Maps. Anticipated information to be provided by Consultant includes mapping measurement of permanent and temporary land acquisition area, and supporting parcel mapping data. Consultant will coordinate with RES staff as needed during the acquisition process for questions/clarifications. Consultant will also work with RES staff in preparing Right of Entry exhibits as needed to perform geotechnical investigation.

Consultant will prepare the following Deliverables for this Task:

- Exhibits for each APN identifying and dimensioning the specific limits of land acquisition necessary for the
 project, considering both temporary construction needs as well as permanent needs for operation and
 maintenance of the project for 41 APNs
- Review and confirmation of District-prepared legal descriptions and plats to confirm they meet project needs.

^{*}Note Signage and Striping, Trail Traffic, Temporary Traffic Control Plans, and Maintenance Plans will not be included in the 30% Plan submittal package

Prepare Right of Entry exhibits for RES staff prior to performing geotechnical investigation.

Task-6 Environmental Coordination:

Pursuant to the District's direction in the RFP, the District will be responsible for all environmental documentation and permits necessary for the construction of the project, including CEQA and regulatory permits. Consultant will provide environmental compliance-related tasks included in this scope of as follows:

- Consultant Environmental Planner will assist in preparing an Environmental Information Package (EIP) (20 hours are assumed to complete this tasks); and
- A Consultant Environmental Planner will attend meetings and participate in conference calls to ensure that
 the design and CEQA/permitting efforts are coordinated (pursuant to the RFP, 20 hours are assumed for
 this task)

Consultant will prepare the following Deliverables for this Task:

Submit an Environmental Information Package (EIP) in PDF format, following the provided template.

Task-7 Geotechnical Investigation:

The Consultant will prepare a geotechnical investigation of the site. This investigation will be performed prior to the 30% design plans.

The project site is located within the Mockingbird Canyon Wash located in the unincorporated community of Woodcrest in Riverside County. Regional mapping (Morton and Cox, 1996) indicated that the site is largely underlain by Holocene and late Pleistocene young alluvial fan deposits consisting of unconsolidated sand and pebble to gravel-sand deposits derived from lithely diverse sedimentary units. Arkosic sand derived from varied metamorphic and granitic lithologies of Peninsular Ranges. The site may be underlain at depth by Cretaceous-aged bedrock which consists of fine to coarse-grained massive granite and biotite monzogranite. Most is equigranular and consists of quartz and alkali feldspars. The geotechnical investigation will begin with a Literature Review. Consultant will review the following available documents:

- · Regional and local geology literatures and maps
- Existing reports pertaining to the project
- · Flood hazards maps
- · Faulting and seismicity, and any other documents that pertain to the site or the vicinity
- · Groundwater data.

After the Literature Review, Consultant will then perform a field reconnaissance/project set-up including the following tasks:

- Conduct a site reconnaissance to verify the existing surface conditions within the project limits including drainage courses, exposed material and any possible fill. Also mark the boring locations
- Notify Underground Service Alert (USA) at least 48 hours prior to drilling to clear the boring locations of any conflict with existing underground utilities
- Retain a drilling company registered in the State of California

Consultant will then perform a subsurface investigation including drilling exploratory borings. The purpose of the borings will be to:

Obtain subsurface information adjacent to the booster station site

· Collect undisturbed and bulk samples of the various soil types for laboratory testing

The original Consultant planned field exploration is presented in the table below. (This has been revised see Task 7A shown below)

Table 3. Field Exploration

Project Area	Number of Borings / Depth of Borings (ft.)							
Grade Control Structures	2/50'; 12/35' (each)							
RCB Culvert at Mockingbird Canyon Road	3/20' (each)							
RCB Culvert under Van Buren Blvd.	1/20'							
Two Secondary Access Roads	8/10' (each)							
Bridge over Pennington Place	2/70' (each) 28/820'							
TOTAL								

Soil samples obtained during exploratory drilling will be tested in Consultant's laboratory to evaluate their physical characteristics and engineering properties. Laboratory testing will include, but will not necessarily be limited to, the following:

- · In-place moisture-density
- Collapse
- Sand Equivalent
- Expansion Index
- R-value
- Soils corrosivity
- Sieve analysis
- Consolidation
- · Laboratory maximum density
- Direct shear

Data obtained from the existing documents report, field reconnaissance, exploratory borings and laboratory testing program will be evaluated to prepare two reports. One report will be prepared for the overall Mockingbird Canyon Wash Restoration project and the other for the Pennington Place Bridge. The content of the reports will include the following:

Mockingbird Canyon Wash Restoration Report

- Overall feasibility of the project as proposed
- Site description
- Project description
- A description of the field procedures used in the investigation
- A description of subsurface conditions and controlling engineering properties of the subsurface materials encountered, including a documentation of the boring and sampling locations, and groundwater level
- Depth to groundwater and the necessity for dewatering during construction
- Existing pavement and base material thickness (if encountered). Discussion on the laboratory test results including soils corrosivity

- · Geologic setting/seismicity condition of the area
- Seismic coefficients based on 2019 California Building Code
- · Evaluation of liquefaction potential and other secondary effects of earthquakes
- · Excavation characteristics, and presence of rock within the proposed excavations
- · Suitability of onsite materials for use as backfill and any limitations
- · Temporary and permanent slope stability evaluation
- Recommendations for unusual soil conditions or groundwater conditions during construction, if encountered
- · Site preparation including compaction requirements and compaction characteristics of native soils
- · Recommendations for any anticipated shrinkage and/or subsidence
- · Corrosion protection requirements
- Trenching and shoring design criteria as applicable
- The stability of access along Lindina Drive and Pennington Place Bridge, including abutments

Specific soil analyses/parameters as needed for the design of the project, but not limited to the following

- Allowable soils bearing pressure
- Active/passive lateral earth pressure coefficients
- · Coefficients of internal friction and cohesion of in-situ undisturbed soils
- In-situ moisture and density
- Collapse/expansion potential of the soils
- · Corrosion potential of the site soils
- · Minimum footing embedment
- Total and differential settlement of foundation
- Flexible pavement design based on R-value and design traffic index
- · Street subgrade preparation recommendation
- · Discussion of laboratory test results including corrosivity
- · Steel pile design and construction recommendations

Pennington Place Bridge Report

Based on the data from the field investigation and laboratory testing results will be used to prepare a report which will include the following:

- Introduction
 - o Purpose and Scope of Study
 - o Project Description
- Field Investigation and Laboratory Testing
 - Available Subsurface Information
 - o Field Investigation
 - Laboratory Testing
- Geology and Seismicity
 - Topography and Drainage
 - o Faulting
 - Seismicity

- o Geologic Hazard
- Subsurface Condition
 - o Soil Conditions
 - Groundwater Conditions
- Conclusions and Recommendations
 - o Seismic Design Criteria
 - o Liquefaction and Seismic Settlement
 - Soil Corrosivity
 - o Bridge Foundation Design
 - o Axial Pile Capacity
 - Lateral Pipe Capacity
 - o Passive Resistance on Pile Cap
- · Approach Embankments
 - o Settlement and Settlement Period
 - o Slope Stability
- Bridge Abutment Wall
 - o Lateral Earth Pressures for Abutment and Wing Walls
 - o Passive Resistance of Abutment Backfill
- Pavement
 - o Asphalt concrete pavement section
 - o Pavement subgrade preparation
- Construction Recommendations (if applicable)
 - o Earthwork
 - o Temporary Slopes/Shoring
 - o Groundwater Control
 - o Back drain and Backfill Requirements
 - Pile Construction
 - o Review of Construction Plans and Specifications
 - o Geotechnical Observation and Testing
- Limitations
- References.

The Bridge Report does NOT need to follow Caltrans guidelines and it will NOT be reviewed by Caltrans.

Consultant will prepare the following Deliverables for this Task:

- A draft report will be provided for District review in PDF format
- A final report signed and stamped by a registered geotechnical engineer will be provided in PDF format and two (2) bound hard copies.

Task-8 Utility Location Coordination:

The Consultant will perform potholing (including any traffic control, and County permits) or other investigations as necessary for the entire project. The Consultant will coordinate with the District to determine the locations where potholing is required. The purpose of potholing is to identify the horizontal and vertical positioning of existing utilities along the channel alignment for each pothole. Consultant will coordinate the potholing work between with District's Utility Coordinator. The District's Utility Coordinator will schedule the District's Survey Crew to survey the horizontal and vertical control points of all potholes performed by the subcontractor. The Consultant will coordinate with the District to have a District Engineer onsite during the potholing process. Consultant will prepare a pothole location diagram which will be used to identify the required pothole locations in the field.

Consultant will prepare the following Deliverables for this Task:

 Provide final pothole report which includes location, description, photos and exhibits and diagrams in hard copy and digital PDF format.

Task-9 Utility Relocation Coordination

The District will take the lead in coordinating with utility companies for the relocation of their facilities. Where possible, utilities will be ordered relocated by the County, and in such cases, Consultant will review the utility company's relocation plans as needed to ensure that they will be clear of the work necessary for the project. If necessary, the District may request Consultant prepare utility relocation or protection exhibits.

Consultant will prepare the following Deliverables for this Task:

- Redline comments and comment letter on utility company prepared relocation plans as needed
- Utility relocation coordination exhibit(s)

Task 10 Mockingbird Canyon Wash - 60% Complete Improvement Plans

Consultant will prepare 60% completion level of improvement plans for the project reach of Mockingbird Canyon Wash. The 60% design plans will including all of the proposed project improvements in both plan view, profile view and section views. The 60% design plans will incorporate all comments received on the 30% design review and advance the design to a greater level of completion such that all of the project construction elements are adequately depicted to evaluate the geometric design of the proposed improvements, as well as the project footprint including necessary land acquisition. All of the project plan sheets will be included in the 60% design as listed in the 30% plan set.

Consultant will prepare the following Deliverables for this Task:

. Two (2) full size 24x36 hard copies and one PDF copy of the 60% plan set

Task-11 Basis of Design Report:

Consultant will prepare a comprehensive report incorporating the local drainage hydrology and all project hydraulic calculations. The mainline hydrology provided by the District will be included in an appendix. This report will be a complete self-contained package and will include a narrative, assumptions, boundary conditions, all mapping/exhibits, calculations, hydraulic output files and reference drawings and materials. Information will be

organized and labeled such that the District can easily find the backup for a portion of the project in which they are interested. It is anticipated that the Basis of Design Report will include the following Sections:

Table of Contents

- Introduction and Technical Background
- Previous Studies and Design Criteria
- Existing Drainage Facilities
- Watershed Hydrology
- Mockingbird Canyon Wash Floodplain Hydraulics
 - o Existing Condition
 - Proposed Condition
- Bed Scour Calculations
- Local Drainage Improvements Hydraulics
 - Proposed Condition
- Estimated Construction Costs
- Summary
- References

Consultant will prepare the following Deliverables for this Task:

- A draft report will be provided for District review and comments (PDF format).
- · A final report signed and stamped by registered professional engineer will be provided (PDF format)
- · Computer files of all hydrologic/hydraulic analyses.

Task-12 Bid Schedule and Construction Cost Estimate:

Consultant will prepare a bid schedule in standard District format ensuring that each item to be constructed has a bid item in the schedule and is identified in the construction notes and details on the plans. Develop quantities consistent with District standard payment methods. Research appropriate unit costs, such as by using information from the District's Planning Unit Cost Sheets or from recent District projects bid results.

Consultant will prepare the following Deliverables for this Task:

· Provide preliminary construction cost estimate hard copy and PDF format

Task-13 Mockingbird Canyon Wash - 90% Complete Improvement Plans

Consultant will prepare 90% completion level of improvement plans for the project reach of Mockingbird Canyon Wash. The 90% design plans will including all of the proposed project improvements in both plan view, profile view and section views. The 90% design plans will incorporate all comments received on the 60% design review and advance the design to a greater level of completion such that all of the proposed improvements are clearly depicted in the plans sufficient to develop reliable construction cost estimates and a draft specification package. All of the project plan sheets will be included in the 90% design.

Consultant will prepare the following Deliverables for this Task:

. Two (2) full size 24x36 hard copies and one PDF copy of the 90% plan set

Task-14 Structural Design Report:

Consultant will prepare a project-specific structural design report. This report will be a complete record of structural analysis for all custom designed elements in the project. The report will contain narrative explaining assumptions, load cases, code references and reference source input data (geotechnical investigation report, etc.). Information will be organized and labeled such that the District can easily find the backup to a portion of the project for which they are interested. All structures that requires structural analysis (non-standard structures) will be designed in accordance with the appropriate codes for the materials, design loads, stability and stresses. Where possible, other structures will be designed to County/District Standards where available and similarly will not require custom structural design. For such 'standard' structures, the structural design report will simply confirm the applicability of the standard to the design scenario. The proposed RCB structures under Van Buren Blvd and Mockingbird Canyon Road is likely to consist of a multi-cell culvert with relatively tall, narrow cells which is likely to incorporate a grade drop at the upstream entrance to the structure. Based on past similar project experience in Riverside County, the replacement of the existing RCB structure will require review and approval from the Riverside County Transportation Department (RCTD). Prior to initiating final structural design, RCTD is likely to require that a "Structure Type Selection" study be conducted and a Type Selection Report be submitted to RCTD for review and approval. The proposed grade-control structures are likely to consist of interlocking steel sheet piling aligned across the width of the existing wash at intermittent locations within the project limits. RCG will study two (2) types of sheet pile structures and determine the most cost-effective and suitable for each structure location. Where possible miscellaneous structures (retaining walls, culverts, headwalls, etc.) located throughout the project will be designed using references to applicable standard drawings published by Riverside County (Standard Drawings), APWA (SPPWC), and/or Caltrans (Standard Plans).

Consultant will prepare the following Deliverables for this Task:

- Complete draft of the structural design report (PDF format) for District review and comment.
- · Final structural design report signed and stamped by registered professional engineer (PDF format)

Task-15 Stormwater Pollution Prevention Plan:

Consultant will determine the requirements of the construction general permit (CGP) that are applicable to the project. If coverage under the CGP is required, Consultant will prepare a Stormwater Pollution Prevention Plan (SWPPP) following the template provided by the District.

Consultant will prepare the following Deliverables for this Task:

· SWPPP (hard copy and digital format).

Task-16 Draft Specifications:

Utilizing the Master Specifications provide by District, Consultant will review the special provisions and edit/modify any provisions as needed for the project. Consultant will ensure the specifications include contract items that cover ALL items that the plans require. Also, make sure the construction items used on the plans are adjusted if necessary to match the contract bid items and terms used in the specifications.

Consultant will prepare the following Deliverables for this Task:

· Provide a set of draft specifications (hard copy and digital format)

Task-17 Mockingbird Canyon Wash -Field Check, Final Plans, Specifications & Estimates

The Consultant will perform, with District staff, a final field check of the project plans. The plans will then be finalized based on comments from final field check with District personnel, as well as any other changes provided by the District. This milestone task documents the point in time that the District has confirmed that any/all necessary revisions have been completed and the plans are considered approved and ready to print to mylar. Consultant will prepare 100% completion level "final plans" for the project reach of Mockingbird Canyon Wash. The final plans will including all of the proposed project improvement designs 100% completed and ready for bid.

Final Construction Cost Estimate: Consultant will finalize the construction cost estimate based on the approved Final Plans and any comments received from the District from the 90% submittal. Consultant will coordinate with District personnel to ensure bid items match the design specifications exactly and are reflected on the plans.

Final Specifications: Consultant will finalize specifications by incorporating comments received on the previously submitted draft specifications.

Consultant will prepare the following Deliverables for this Task:

- Final signed and stamped design plans in PDF format, following District procedures for digital signatures and plan creation
- Provide final bid items list including quantities, units, unit cost and final total cost estimate.
- Provide final project specifications (digital format).

Task-18 Mockingbird Canyon Wash CLOMR Application Preparation

Consultant will prepare an initial FEMA submittal package for a CLOMR based upon proposed Mockingbird Canyon Road improvements. The initial submittal package will include accumulated technical background information developed during the final design of Mockingbird Canyon Wash Restoration project and data related to the mapping of the revised floodplain boundary. The submittal package will include all of the relevant and required FEMA application forms and appropriate data outlined in the Application/Certification Forms and Instructions for CLOMRs., A formal cover letter will be developed describing the initial submittal package and the extent of the map revision. In addition, a supplementary technical report will be prepared which describes and provides supporting documentation for (1) the existing effective floodplain boundaries; (2) detailed description and extent of the proposed map revision indicating conversion of the effective Zone-A floodplain to Zone-AE (no floodway); (3) proposed improvements associated with the project related to the floodplain modification; (4) description of the hydrology utilized in the floodplain analysis; and (5) description of the hydraulic analysis used in analyzing the existing and proposed floodplain. A detailed "work-map" will be prepared which provides the HEC-RAS crosssectional information along with the extent of the existing or "effective" floodplain limits and the proposed 1-percent annual chance floodplain limits. No FEMA Regulatory Floodway will be established for Mockingbird Canyon Wash as a part of this CLOMR application. The CLOMR application also requires submittal of confirmation of project compliance with the ESA per FEMA regulations section 60.3(a)(2). The submittal package will submitted to the Local Floodplain Manager (District) for review and concurrence indicating their agreement with the proposed floodplain map modifications and supporting technical analyses.

ESA Compliance Confirmation

Consultant has extensive experience in working with federal agencies (The U.S. Department of Interior's Fish and Wildlife Service (FWS) and the U.S. Department of Commerce's National Marine Fisheries Service (NMFS)) who are tasked with enforcing the ESA. Compliance with the ESA must document that: (1) No potential for "Take" exists (meaning that the project has no potential to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect,

or to attempt to engage in any such conduct) to threatened and endangered species. The requester will be responsible for the potential for take determination and the determination is not required to come from, or be concurred by, the Services. (2) If the requester determines a "Take" will or has a potential to occur, they can consider contacting the Services to discuss potential project revisions to eliminate the "Take." (3) If neither (1) or (2) are possible and the project has the potential to "Take" listed species, an Incidental Take Permit may be submitted showing that the project is the subject, or is covered by the subject, of the permit. Consultant has reviewed the Registry of Endangered Species and maps of their occurrence. This project will fall under option (1)- No potential for take. Consultant will provide documentation and exhibit(s) to support this opinion and include it in the CLOMR application. If needed, qualified biologists are available for consultation regarding Endangered Species Act compliance.

Prepare Annotated FIRM

Consultant will prepare an annotated FIRM showing the proposed revisions to the effective FIRM panel containing the project site and Mockingbird Canyon Wash floodplain limits in the vicinity of the project, indicating the extent of the revision. The annotated FIRM will be prepared in the format required by FEMA and at a scale required by FEMA. It is anticipated that the annotated map(s) will provided in either a GIS or CAD format. Consultant will coordinate with FEMA staff to obtain agreement and address any comments on mapped floodplain boundaries, zone designations, and mapping revisions.

Prepare Floodplain Workmap

Consultant will prepare floodplain workmap exhibits depicting the mapped floodplain limits for the existing and proposed conditions. The maps will be prepared to assist in illustrating the results of the floodplain hydraulic modeling. The maps will provide a plan view of the floodplain depicting the existing site topography, proposed grading, proposed improvements, hydraulic data tables, and the existing and proposed floodplain limits.

The District will provide all CLOMR processing and coordination efforts to obtain approval of the CLOMR. Consultant will support the District in the effort to process the CLOMR application through FEMA by preparing necessary exhibits, participating in conference calls, and providing response to coordination emails with FEMA representatives and addressing FEMA's comments related to supporting CLOMR documents. Consultant will prepare the application and supporting documents and deliver them to the District to handle processing with FEMA.

Task-19 Stream Stability Assessment

Consultant will utilize the watershed hydrologic analysis results and flowrate data in addition to watershed sediment yield calculation results provided in the reports titled: Mockingbird Canyon Geomorphology Study – Existing Condition Hydraulic and Sediment Transport Modeling Report; dated June 2015, Mockingbird Canyon Geomorphology Study – Initial Assessment Report; dated July 23, 2014, and Mockingbird Canyon Geomorphology Study – Proposed Improvements Report; dated April 21, 2016 to support a fluvial system model of the proposed improvements in the project reach of Mockingbird Canyon Wash.

Watershed Sediment Yield Analysis

Consultant will prepare an event based watershed sediment yield analysis to estimate the offsite tributary watershed sediment yield at the upstream project boundary(s). Consultant will evaluate the offsite tributary watershed landuse, vegetative cover, topography, and soil cover conditions to assess the potential to yield sediment to Mockingbird Canyon Wash. The potential sediment yield of the watershed will be estimated through the application of a USDA - Revised Uniform Soil Loss Equation (RUSLE) analysis of the watershed. The offsite watershed will be subdivided into subareas and the **sk** (6) parameters for the RUSLE analysis will be estimated for each subarea. Soil data parameters will be estimated from USDA and NRCS GIS database, field review, and data from previous watershed studies. Sensitivity analysis will be applied to the various input watershed parameters to determine the range of effect on the sediment yield calculation to bracket the range of variation. Watershed grain size distribution of the existing soil will be used to estimate the coarse and fine material fraction of the total watershed yield based on the SCS soils data. The coarse sediment yield will be used to compare with historic dredge records for Mockingbird Canyon Reservoir to determine an expected annual sediment yield from the watershed to the reservoir.

Stream Stability Analysis

Consultant will develop a quantitative assessment for the stream stability using a steady state sediment continuity analysis. The long term equilibrium channel slope will be estimated based upon the channel hydraulics, bed sediment characteristics, empirical data, and flood discharge rates. The sediment continuity procedure was adopted as a method to quantify the magnitude of potential change along various reaches of the natural stream to be preserved. The results will be used to assess stream aggradation and degradation trends to assist in evaluating the effectiveness of the proposed grade stabilization and channelization system utilizing the US Army Corps of Engineers (USACOE) SAM Hydraulic Design Package for channels. SAM is an integrated system of programs developed through the Flood Damage Reduction and Stream Restoration Research Program to aid engineers in stream restoration projects. SAM combines the hydraulic characteristics information and bed material gradation data to compute sediment transport "capacity" for a given cross section at a given discharge at a point in time using multiple sediment transport functions simultaneously. The program assumes that the sediment transport rate from the subject reach is equal to the bed material transport capacity and the sediment inflow rate is the sum of the bed material transport capacity of the upstream channel and any input of bed material from lateral sources. SAM then calculates a transport capacity for each given discharge to develop a sediment discharge rating table. SAM results provide a reliable simplified sediment transport rate to verify the accuracy of a more detailed model. The SAM model results will be verified against the sediment transport results provided in the Mockingbird Canyon Geomorphology Study - Proposed Improvements Report; dated April 21, 2016 for consistency.

Stream Stability Exhibits

Consultant will prepare Stream Stability Exhibits to assist in the review of the sediment continuity analysis which will include profile of the maximum streambed variation, cross section location map with summary information, representative cross section plots, and a streambed profile comparison between the proposed improvements and the profile calculated in the *Mockingbird Canyon Geomorphology Study – Proposed Improvements Report*; dated April 21, 2016.

Stream Stability Technical Memorandum

Consultant will prepare a Technical Memorandum which documents the engineering analysis and presents the results of the stream stability assessment of the proposed Mockingbird Canyon Wash improvements. The memo will summarize the assumptions associated with the analyses and the background for the study.

Task-20 Extra Directed Work

The task item Extra Directed Work shall consist of necessary work that is not included in other task items. All extra directed work shall be performed only as directed by the District. Items for this work may include, but is not limited to; utility relocation design, and bridge design.

ATTACHMENT "B" FEE SCHEDULE

Mockingbird Canyon Wash Restoration Project Riverside County Flood Control and Water Conservation District Dudek Fee Proposal July 11, 2020

alestina.	1955 Pall 1986 中华 的复数经验的 建氯化物 医甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基	Labor Hours and Rates								2455830	BANK TO SEE	TENSOR REPORT	HARMAN BOLIS		OF REAL PROPERTY.				1	5000	\$5500 FE	VAT 1	STEED SHIP		
	Project Team Role:	Principal	Proj Mgr	Principal Engineer	Sr. Proj. Engineer	Proj Engineer	CADD /GIS Specialist	Senior Specialist	Technical Editor / Technical Assistant	TOTAL HOURS	DUDEK LABOR FEE		Converse Consultants	sultants Group			ısı	RBI Traffic		OTHER DIRECT COSTS (ODC's)			TOTAL FEE		
	Team Mamber:	Metta	Smith	Greely	Muli / Magana \$230	O'Brien / Cato / Relger	Nikid	Ramsey \$200		Hours								Foo.		COSTS (COC N)					
	Billable Rate :	\$290	\$250	\$260		\$185	\$165		\$145				Fee												
Tasks		The Care	A STATE OF THE PARTY OF THE PAR	90.0	A STATE OF	通过多																			
1	Project Management		280						104	384	\$	85,080								\$	4.150	\$	89,230		
2	Memo of Understanding and Schedule	2	4		8	16			2	32	5	6,670									1	\$	6,670		
3	Prelim Design Update		40		72	164			4	280	5	57,480										\$	57,480		
3.1	Public Outreach and Prelim Design Update Coord		24		24	16		24	8	96	\$	20,440						ALCOHOL THE CONTROL		\$	1.500	\$	21.940		
4	30% Improvement Plans		40		40	226	57			363	5	70,333		1				5	7.085			\$	77.417		
5	Land Acquisition Coordination				82		164		16	262	\$	48,240								-	-	\$	48,240		
6	Environmental Coordination							40		40	\$	8.000										\$	8,000		
7	Geotechnical Investigation		12		8	16				36	5	7,800	\$ 100,644			100						\$	108.444		
8	Utility Coordination		8		24	80	T			112	5	22.320				\$	22.661	5	2.875	\$	2.200	\$	50.056		
9	Utility Relocation Coordination		1			20				20	\$	3,700										\$	3,700		
10	60% Improvement Plans		60		100	283	57			499	\$	99,585										\$	99.585		
11	Basis of Design Report		12		40	100			4	156	\$	31,280										\$	31,286		
12	Bid Schedule and Construction Cost Estimate		24	-		80				104	\$	20.800										\$	20,800		
13	90% Improvement Plans	-	60		80	339	85			564	5	110,099						\$	7,500	\$	2,200	\$	119,799		
14	Structural Design Report			-		12	7			12	\$	2.220		5	109.889							\$	112.10		
15	SWPPP		4		16	60	1			80	\$	15,780										\$	15,78		
16	Draft Specs				40	100	1			140	5	27,700										5	27.700		
17	Field Check, Final Plans, Specs & Estimates		44		60	201	61		8	374	\$	73,128						\$	1.725	\$	2.200	5	77,053		
18	Mockingbird Cyn Wash GLOMR Application Prep		12	1		80	40		8	140	\$	25,560									1	\$	25,560		
19	Fluvial System Modeling		14		8	36			4	62	\$	12.580								\$	200	\$	12,780		
20	Extra Directed Work		24		24	216	31		3	298	\$	57,030		\$	142,150					\$	800	5	199.980		
	Subtotal	2	662		626	2.045	493	64	161	4,053		805,824	\$ 100,644	\$ 2	252,039	\$	22,661	\$ 15	9,185	\$	13,250	\$ 1	1,213,602		
Project #	Management	THE PARTY OF THE P	Herath Creek	EXPERIENCE.		MAD HISTORY	DAC USWESS		SHIP OF THE	Money Car		250 Harris Brit	CHARLES TO A				HE CAN				NO SERVE				
	OA/QC	16		46	1	-	The same of the sa			62	\$	16,665										\$	16,665		
-	Subtotal Project Mgmt	16		46		1				62		16,665	\$.	\$						\$			16,665		
GEW.	Total Non-Optional Hours and Fee	THE RESERVE OF THE PERSON NAMED IN	662	A SHAREST PARTY OF THE PARTY OF	626	2,045	493	64	161	4,115	3	822,489	\$ 100,644		252,039	•	22,661	\$ 1	9,185	1	13,250	\$	1,230,267		