BOARD AGENDA FACT SHEET

CLERK USE ONLY
BOS ACTION
#_____

Planning & Development Services Dept.
Department /Agency

March 23, 2021
Requested Board Date

1. Request:

Board Approval	X	**Information Only/Presentation**	
Other (specify) _____		**Schedule Hearing Time:** _____	

2. Requested Action: *Type requested action below*

The Imperial County Planning & Development Services Department respectfully requests the Board of Supervisors to:

1. Consider and Award contract to HDR, Inc. to prepare an Environmental Impact Report for the VEGA SES 2, 3 & 5 Solar Energy and Storage Project (CUP #20-0021, #20-0022 & #20-0023); and,
2. Authorize the Chairman to sign the agreement between HDR and the County of Imperial in the amount of **$139,530.00**

3. Cost $** **$ 139,530.00 **Source:** **7565000**

4. If approval of Contract, reviewed/approved by County Counsel on: **03/03/21**

By: ***Faye Winkler*** **Action Request #** **20-1201**
Assigned by County Counsel's Office

5. If approval of position allocation change, approved by Human Resources on: **N/A**

By: **N/A**

6. Electronic copy submittal date: **03/05/21** **By:** ***Rosa A. Soto, Office Supervisor II***

Department Head/Agency Representative

INSTRUCTIONS: ***Back-up must be submitted 11 BUSINESS days prior to requested date. Back-up submitted must contain an Original and 6 copies. Copies must be submitted double sided and three (3) hole punched. Back-up must be submitted in a PDF format to cobstaff@co.imperial.ca.us.***

CEO/CLERK USE ONLY:

DATE STAMP

BOARD DATE: _____

Action _____ **Filing** _____

Consent _____ **Presentation** _____

Hearing _____ **CEO Approval** _____

Other (specify) _____

_____ CEO _____ Date

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Imperial County Planning & Development Services
Planning / Building

Jim Minnick
DIRECTOR

TO: Board of Supervisors

March 5, 2021

FROM: Jim Minnick, Director of Planning & Development Services

M/O_____

SUBJECT: CONSIDER AND AWARD CONTRACT TO HDR INC., TO PREPARE AN ENVIRONMENTAL IMPACT REPORT FOR THE VEGA SES 2, 3 & 5 SOLAR ENERGY AND STORAGE PROJECT (CUP #20-0021, #20-0022 & #20-0023)

Dear Board Members:

REQUESTED ACTION:

The Imperial County Planning & Development Services Department respectfully requests the Board of Supervisors to:

1) Consider and Award contract to HDR, Inc. to prepare an Environmental Impact Report for the VEGA SES 2, 3 & 5 Solar Energy and Storage Project (CUP #20-0021, #20-0022 & #20-0023; and,

2) Authorize the Chairman to sign the agreement between HDR, Inc. and the County of Imperial in the amount of **$139,530.00**

BACKGROUND:

On October 19, 2010, Apex Energy Solutions, LLC submitted the VEGA SES 2, 3 & 5 Solar Energy and Storage Project ("Project"), which includes the construction and operation of a solar energy and storage facility on a project area that totals approximately 1961.70 acres. The project is being distributed among four (4) parcels, three (3) of which are zoned S-2-RE (Open Space/Preservation-Renewable Energy Overlay), and one (1) parcel has multiple zones: A-2-RE (General Agriculture-Renewable Energy), A-3-RE (Heavy Agriculture-Renewable Energy), and S-2-RE (Open Space/Preservation-Renewable Energy Overlay). This is how each CUP is being proposed:

1. One (1) Conditional Use Permit (CUP#20-0021 VEGA SES 2) to allow for the construction and operation of a 240-megawatt (MW) alternating current (AC) solar photovoltaic (PV) energy generation and 240MW/960 megawatt hour (MWh) battery storage project. The Project is to be located on approximately 1,472 acres;
2. One (1) Conditional Use Permit (CUP#20-0022 VEGA SES 3) to allow for the construction and operation of a 60-megawatt (MW) alternating current (AC) solar photovoltaic (PV) energy generation and 60 MW/240 megawatt hour (MWh) battery storage project. The Project is to be located on approximately 240 acres; and
3. One (1) Conditional Use Permit (CUP#20-0023 VEGA SES 5) to allow for the construction and operation of a 50-megawatt (MW) alternating current (AC) solar photovoltaic (PV) energy generation and 50MW/200 megawatt hour (MWh) battery storage project. The Project is to be located on approximately 249.70 acres.

A Request for Proposal (RFP) was sent out on October 26 2020, by the Planning and Development Services Department to 36 specialized consulting firms, with a deadline to submit their proposals by November 18, 2020. A total of eleven (11) proposals were received. Staff reviewed the responses and prepared a matrix comparing the all eleven (11) proposals. Staff discussed the proposals, the matrix and the Department's findings with the applicant. The applicant was given copies of the proposals for review. The Department received an email on January 3, 2021 stating their concurrence with the HDR Inc., selection.

Attached, please find copies of all eleven (11) proposals, along with the matrix used to rate the submitted proposals. The consultant selected for this project is HDR, Inc.

The selection of HDR, Inc. was based on the following:

- HDR, Inc.'s qualifications showed more experience with projects similar to the proposed project;
- HDR, Inc.'s qualifications also showed more experience with local projects and projects with County of Imperial

FISCAL IMPACT:

There will be no Fiscal Impact to the County's "General Fund". All costs for the environmental consultant will be borne by the Applicant.

SUMMARY:

The Planning staff is available to answer any questions you may have. Thank you.

Attachment:

A. Contract for HDR, Inc. to prepare an Environmental Impact Report (EIR)
B. Selection Letter from Applicant to have HDR, Inc. prepare the EIR
C. Matrix
D. Eleven (11) RFP Proposals received
E. RFP for VEGA SES 2, 3 & 5 Solar Energy and Storage Project for an Environmental Impact Report (EIR)

cc: Tony Rouhotas, County Executive Officer
Adam Crook, County Counsel
Jim Minnick, Director, Planning & Development Services
Michael Abraham, AICP, Asst. Planning & Dev. Services Director
Patricia Valenzuela, Planner IV
File 10.101, 10.102, 10.105, and 10.110 & 10.104

DR\rsS:\AllUsers\APN\025\260\011\CUP20-0021\BOARD\CUP20-00021 Board Letter.docx

ATTACHMENT A

Contract for HDR, Inc. to Prepare an Environmental Impact Report (EIR)

AGREEMENT FOR SERVICES

HDR ENGINEERING, INC.

THIS AGREEMENT FOR SERVICES ("Agreement"), made and entered into effective the _____ day of _____, 2021, by and between the **County of Imperial**, a political subdivision of the State of California, by and through its Planning and Development Services Department ("COUNTY") and **HDR ENGINEERING, INC.**, a Nebraska corporation licensed to do business within the state of California ("CONSULTANT") (individually, "Party;" collectively, "Parties") shall be as follows:

RECITALS

WHEREAS, COUNTY desires to retain a qualified individual, firm or business entity to provide professional services for preparation of an Environmental Impact Report for the VEGA SES 2 Solar Energy Project, VEGA SES 3 Solar Energy Project; and VEGA SES 5 Solar Energy Project ("Project"); and

WHEREAS, CONSULTANT represents that it is qualified and experienced to perform the Project services; and

WHEREAS, COUNTY desires to engage CONSULTANT to provide services by reason of its qualifications and experience for performing such services, and CONSULTANT has offered to provide the services required for the Project.

NOW, THEREFORE, in consideration of their mutual covenants, COUNTY and CONSULTANT have and hereby agree to the following:

1. INCORPORATION OF RECITALS.

Parties hereby certify that to the best of their knowledge, the above recitals are true and correct. The above recitals are hereby adopted and incorporated within this Agreement.

2. DEFINITIONS.

2.1. "Request for Proposal" or "RFP" shall mean that document that describes the Project and project requirements to prospective bidders entitled, "Request for Proposal – Environmental Impact Report (EIR) for a Solar Energy Project (VEGA SES 2, 3 & 5 Solar Project)" dated October 26, 2020. The Request for Proposal is attached hereto as **Exhibit "A"** and incorporated herein by this reference.

2.2. "Proposal" shall mean CONSULTANT's document entitled, "Proposal for an

Environmental Impact Report for the VEGA SES 2, 3, & 5 Solar Energy Project," dated November 18, 2020, and submitted to COUNTY's Department of Planning and Development Services. The Proposal is attached hereto as **Exhibit "B"** and incorporated herein by reference.

3. CONTRACT COORDINATION.

3.1. The Director of Planning and Development Services, or his/her designee, shall be the representative of COUNTY for all purposes under this Agreement. The Director of Planning and Development Services, or his/her designee, is hereby designated as the Contract Manager for COUNTY. He/she shall supervise the progress and execution of this Agreement.

3.2. CONSULTANT shall assign a single Contract Manager to have overall responsibility for the progress and execution of this Agreement. Should circumstances or conditions subsequent to the execution of this Agreement require a substitute Contract Manager for any reason, the Contract Manager designee shall be subject to the prior written acceptance and approval of COUNTY's Contract Manager.

4. DESCRIPTION OF WORK.

CONSULTANT shall provide all materials and labor to perform this Agreement consistent with the RFP and Proposal, as set forth in **Exhibits "A" and "B."** In the event of a conflict amongst this Agreement, the RFP and the Proposal, the RFP shall take precedence over the Proposal, and the Agreement shall take precedence over both.

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5. WORK TO BE PERFORMED BY CONSULTANT.

5.1. CONSULTANT shall comply with all terms, conditions, and requirements of the RFP, the Proposal, and this Agreement.

5.2. CONSULTANT shall perform such other tasks as necessary and proper for the full performance of the obligations assumed by CONSULTANT hereunder.

5.3. CONSULTANT shall:

5.3.1. Procure all permits and licenses, pay all charges and fees, and give all notices that

may be necessary and incidental to the due and lawful prosecution of the services to be performed by CONSULTANT under this agreement;

5.3.2. Keep itself fully informed of all existing and proposed federal, state and local laws, ordinances, regulations, orders and decrees which may affect those engaged or employed under this Agreement;

5.3.3. At all times observe and comply with, and cause all of its employees to observe and comply with all of said laws, ordinances, regulations, orders and decrees mentioned above; and

5.3.4. Immediately report to COUNTY's Contract Manager in writing any discrepancy or inconsistency it discovers in said laws, ordinances, regulations, orders and decrees mentioned above in relation to any plans, drawings, specifications or provisions of this Agreement.

6. <u>REPRESENTATIONS BY CONSULTANT</u>.

6.1. CONSULTANT understands and agrees that COUNTY has limited knowledge in the multiple areas specified in the Proposal. CONSULTANT has represented itself to be an expert in these fields and understands that COUNTY is relying upon such representation.

6.2. CONSULTANT represents and warrants that it is a lawful entity possessing all required licenses and authorities to do business in the State of California and perform all aspects of this Agreement.

6.3. CONSULTANT shall not commence any work under this Agreement or provide any other services, or materials, in connection therewith until CONSULTANT has received written authorization from COUNTY's Contract Manager to do so.

6.4. CONSULTANT represents and warrants that the people executing this Agreement on behalf of CONSULTANT have the authority of CONSULTANT to sign this Agreement and bind CONSULTANT to the performance of all duties and obligations assumed by CONSULTANT herein.

6.5. CONSULTANT represents and warrants that any employee, subcontractor, and/or agent who will be performing any of the duties and obligations of CONSULTANT herein possess

all required licenses and authorities, as well as the experience and training, to perform such tasks.

6.6. CONSULTANT represents and warrants that the allegations contained in the Proposal are true and correct.

6.7. CONSULTANT understands that COUNTY considers the representations made herein to be material and would not enter into this Agreement with CONSULTANT if such representations were not made.

6.8. CONSULTANT understands and agrees not to discuss this Agreement or work performed pursuant to this Agreement with anyone not a party to this Agreement without the prior permission of COUNTY. CONSULTANT further agrees to immediately advise COUNTY of any contacts or inquiries made by anyone not a party to this Agreement with respect to work performed pursuant to this Agreement.

6.9. Prior to accepting any work under this Agreement, CONSULTANT shall perform a due diligence review of its files and advise COUNTY of any conflict or potential conflict CONSULTANT may have with respect to the work requested.

6.10. CONSULTANT understands and agrees that in the course of performance of this Agreement, CONSULTANT may be provided with information or data considered by the owner or the COUNTY to be confidential. COUNTY shall clearly identify such information and/or data as confidential. CONSULTANT shall take all necessary steps necessary to maintain such confidentiality including but not limited to restricting the dissemination of all material received to those required to have such data in order for CONSULTANT to perform under this Agreement.

6.11. CONSULTANT represents that the personnel dedicated to this project, as identified in CONSULTANT's Proposal, will be the people to perform the tasks identified therein. CONSULTANT will not substitute other personnel or engage any contractors to work on any tasks identified herein without prior written notice to COUNTY.

7. <u>TERM OF AGREEMENT</u>.

This Agreement shall commence on the date first written above and shall remain in effect until

the services provided as outlined in Section 4, ("DESCRIPTION OF WORK"), have been completed, unless otherwise modified or terminated as provided for in this Agreement.

8. COMPENSATION.

8.1. The total compensation payable under this Agreement shall not exceed **one hundred thirty-nine thousand five hundred thirty dollars ($139,530.00)**, unless otherwise previously agreed to in writing by COUNTY.

8.2. The fee for any additional services required by COUNTY will be computed either on a negotiated lump sum basis or upon actual hours and expenses incurred by CONSULTANT and based on CONSULTANT's current standard rates as set forth in the Proposal. Additional services or costs will not be paid without a prior written agreement between the Parties.

8.3. Except as provided under Paragraphs 8.1 and 8.2, COUNTY shall not be responsible to pay CONSULTANT any compensation, out of pocket expenses, fees, reimbursement of expenses or other remuneration.

9. PAYMENT.

9.1. CONSULTANT shall bill COUNTY on a time and material basis as set forth in **Exhibit "B."** COUNTY shall pay CONSULTANT for completed and approved services upon presentation of its itemized billing.

9.2. COUNTY shall have the right to retain five percent (5%) of the total of amount of each invoice, not to exceed five percent (5%) of the total compensation amount of the completed project. "Completion of the Project" is when the work to be performed has been completed in accordance with this Agreement, as determined by COUNTY, and all subcontractors, if any, have been paid in full by CONSULTANT. Upon completion of the Project, CONSULTANT shall bill COUNTY the retention for payment by COUNTY.

10. METHOD OF PAYMENT.

CONSULTANT shall at any time prior to the fifteenth (15th) day of any month, submit to COUNTY a written claim for compensation for services performed. The claim shall be in a format approved by COUNTY. No payment shall be made by COUNTY prior to the claims being approved in writing by

COUNTY's Contract Manager or his/her designee. CONSULTANT may expect to receive payment within a reasonable time thereafter and in any event in the normal course of business within thirty (30) days after the claim is submitted.

11. TIME FOR COMPLETION OF THE WORK.

The Parties agree that time is of the essence in the performance of this Agreement. Program scheduling shall be as described in the Exhibits unless revisions are approved by both COUNTY's Contract Manager and CONSULTANT's Contract Manager. Time extensions may be allowed for delays caused by COUNTY, other governmental agencies or factors not directly brought about by the negligence or lack of due care on the part of CONSULTANT.

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12. MAINTENANCE AND ACCESS OF BOOKS AND RECORDS.

CONSULTANT shall maintain books, records, documents, reports and other materials developed under this Agreement as follows:

12.1. CONSULTANT shall maintain books, records, documents, reports and other materials developed under this Agreement as follows:

12.2. CONSULTANT shall maintain all ledgers, books of accounts, invoices, vouchers, canceled checks, and other records relating to CONSULTANT's charges for services or expenditures and disbursements charged to COUNTY for a minimum period of three (3) years, or for any longer period required by law, from the date of final payment to CONSULTANT pursuant to this Agreement.

12.3. CONSULTANT shall maintain all reports, documents, and records, which demonstrate performance under this Agreement for a minimum period of five (5) years, or for any longer period required by law, from the date of termination or completion of this Agreement.

12.4. Any records or documents required to be maintained by CONSULTANT pursuant to this Agreement shall be made available to COUNTY for inspection or audit at any time during CONSULTANT's regular business hours provided that COUNTY provides CONSULTANT with seven (7) days advanced written or e-mail notice. Copies of such

documents shall, at no cost to COUNTY, be provided to COUNTY for inspection at CONSULTANT's address indicated for receipt of notices under this Agreement.

13. SUSPENSION OF AGREEMENT.

COUNTY's Contract Manager shall have the authority to suspend this Agreement, in whole or in part, for such period as deemed necessary due to unfavorable conditions or to the failure on the part of CONSULTANT to perform any provision of this Agreement. CONSULTANT will be paid the compensation due and payable to the date of suspension.

14. TERMINATION.

COUNTY retains the right to terminate this Agreement for any reason by notifying CONSULTANT in writing twenty (20) days prior to termination and by paying the compensation due and payable to the date of termination; provided, however, if this Agreement is terminated for fault of CONSULTANT, COUNTY shall be obligated to compensate CONSULTANT only for that portion of CONSULTANT's services which are of benefit to COUNTY. Said compensation is to be arrived at by mutual agreement between COUNTY and CONSULTANT; should the Parties fail to agree on said compensation, an independent arbitrator shall be appointed and the decision of the arbitrator shall be binding upon the Parties.

15. INSPECTION.

CONSULTANT shall furnish COUNTY with every reasonable opportunity for COUNTY to ascertain that the services of CONSULTANT are being performed in accordance with the requirements and intentions of this Agreement. All work done and materials furnished, if any, shall be subject to COUNTY's Contract Manager's inspection and approval. The inspection of such work shall not relieve CONSULTANT of any of its obligations to fulfill its Agreement as prescribed.

16. OWNERSHIP OF MATERIALS.

All original drawings, videotapes, studies, sketches, computations, reports, information, data and other materials given to or prepared or assembled by or in the possession of CONSULTANT pursuant to this Agreement shall become the permanent property of COUNTY and shall be delivered to COUNTY upon demand, whether or not completed, and shall not be made available to any individual or organization without the prior written approval of COUNTY.

17. INTEREST OF CONSULTANT.

17.1. CONSULTANT covenants that it presently has no interest, and shall not acquire any interest, direct or indirect, financial or otherwise, which would conflict in any manner or degree with the performance of the services hereunder.

17.2. CONSULTANT covenants that, in the performance of this Agreement, no sub-contractor or person having such an interest shall be employed.

17.3. CONSULTANT certifies that no one who has or will have any financial interest under this Agreement is an officer or employee of COUNTY.

18. INDEMNIFICATION.

CONSULTANT hereby agrees to indemnify, defend and hold harmless COUNTY, and its officers, officials, employees and volunteers from and against any and all losses, liabilities, damages, expenses, claims and costs (including attorneys' fees and costs of litigation) caused by, arising from, or related to any breach or alleged breach of the representations, warranties or agreements made by CONSUTLANT in this Agreement by CONSULTANT, its employees, agents and/or contractors, including any and all claims, demands or actions arising out of or based upon property damage, or bodily injuries, including death, resulting from the negligence, gross negligence or willful misconduct of CONSUTLANT, while CONSULTANT is engaged in the performance of the work pursuant to this Agreement.

19. INDEPENDENT CONTRACTOR.

In all situations and circumstances arising out of the terms and conditions of this Agreement, CONSULTANT is an independent contractor, and as an independent contractor, the following shall apply:

19.1. CONSULTANT is not an employee or agent of COUNTY and is only responsible for the requirements and results specified by this Agreement or any other agreement.

19.2. CONSULTANT shall be responsible to COUNTY only for the requirements and results specified by this Agreement and except as specifically provided in this Agreement, shall not be subject to COUNTY's control with respect to the physical actions or activities of CONSULTANT in fulfillment of the requirements of this Agreement.

19.3. CONSULTANT is not, and shall not be, entitled to receive from, or through, COUNTY, and COUNTY shall not provide, or be obligated to provide, CONSULTANT with Workers' Compensation coverage or any other type of employment or worker insurance or benefit coverage required or provided by any Federal, State or local law or regulation for, or normally afforded to, an employee of COUNTY.

19.4. CONSULTANT shall not be entitled to have COUNTY withhold or pay, and COUNTY shall not withhold or pay, on behalf of CONSULTANT, any tax or money relating to the Social Security Old Age Pension Program, Social Security Disability Program, or any other type of pension, annuity, or disability program required or provided by any Federal, State or local law or regulation.

19.5. CONSULTANT shall not be entitled to participate in, nor receive any benefit from, or make any claim against any COUNTY fringe program, including, but not limited to, COUNTY's pension plan, medical and health care plan, dental plan, life insurance plan, or any other type of benefit program, plan, or coverage designated for, provided to, or offered to COUNTY's employees.

19.6. COUNTY shall not withhold or pay, on behalf of CONSULTANT, any Federal, State, or local tax, including, but not limited to, any personal income tax, owed by CONSULTANT.

19.7. CONSULTANT is, and at all times during the term of this Agreement, shall represent and conduct itself as an independent contractor, not as an employee of COUNTY.

19.8. CONSULTANT shall not have the authority, express or implied, to act on behalf of, bind or obligate COUNTY in any way without the written consent of COUNTY.

20. **INSURANCE**.

20.1. CONSULTANT hereby agrees, at its sole cost and expense, to obtain and maintain in full force during the entire Term of this Agreement (or extended term thereof) the following types of insurance as detailed below:

20.1.1. Commercial General Liability. Coverage in a minimum amount of one million dollars ($1,000,000) combined single limit to any one person, and two million

dollars ($2,000,000) aggregate for any one accident, including personal injury, death, and property damage.

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20.1.2. Professional Liability. Errors and Omissions coverage in a minimum amount of two million dollars ($2,000,000) per person, per occurrence.

20.1.3. Automobile Liability. Coverage in a minimum amount of one million dollars ($1,000,000), including owned, non-owned, and hired vehicles.

20.1.4. Workers' Compensation.

(a) Coverage, if applicable, in full compliance with California statutory requirements, for all employees of CONSULTANT.

(b) Prior to the commencement of work, CONSULTANT shall sign and file with COUNTY the following certification: "I am aware of the provisions of California Labor Code §§3700 et seq. which require every employer to be insured against liability for workers' compensation or to undertake self-insurance in accordance with the provisions of that code, and I will comply with such provisions before commencing the performance of the work of this contract."

(c) This certification is included in this Agreement and signature of the Agreement shall constitute signing and filing of the certificate.

(d) CONSULTANT understands and agrees that any and all employees, regardless of hire date, shall be covered by Workers' Compensation pursuant to statutory requirements prior to beginning work on the Project.

(e) Workers' Compensation coverage shall not be required if CONSULTANT does not, at any time, have any employees during the term of this Agreement, and any extension thereof.

(i) If CONSULTANT does not have any employees, initial here_____.

(ii) Should this status change, CONSULTANT shall immediately

notify COUNTY in writing and comply with the insurance requirements above.

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20.1.5. Employers Liability.

(a) Coverage, if applicable, in the minimum amount of one million dollars ($1,000,000) per accident for bodily injury and disease.

(b) Employer's Liability coverage shall not be required if CONSULTANT does not, at any time, have any employees during the term of this Agreement, and any extension thereof.

(i) If CONSULTANT does not have any employees, initial here_____.

(ii) Should this status change, CONSULTANT shall immediately notify COUNTY in writing and comply with the insurance requirements above.

20.2. Special Insurance Requirements. All insurance required shall:

20.2.1. Be procured from California admitted insurers (licensed to do business in California) with a current rating by Best's Key Rating Guide, acceptable to COUNTY. A rating of at least A-VII shall be acceptable to COUNTY; lesser ratings must be approved in writing by COUNTY.

20.2.2. Be primary coverage as respects COUNTY and any insurance or self-insurance maintained by COUNTY shall be in excess of CONSULTANT's insurance coverage and shall not contribute to it.

20.2.3. Name the County of Imperial and its officers, employees, and volunteers as additional insured on all policies, except Workers' Compensation insurance and Errors & Omissions insurance, and provide that COUNTY may recover for any loss suffered by COUNTY due to CONSULTANT's negligence.

20.2.4. State that it is primary insurance and regards COUNTY as an additional insured and contains a cross-liability or severability of interest clause.

20.2.5. Not be canceled, non-renewed or reduced in scope of coverage until after thirty (30) days written notice has been given to COUNTY. CONSULTANT may not terminate such coverage until it provides COUNTY with proof that equal or better insurance has been secured and is in place. Cancellation or change without prior written consent of COUNTY shall, at the option of COUNTY, be grounds for termination of this Agreement.

20.2.6. If this Agreement remains in effect more than one (1) year from the date of its original execution, COUNTY may, at its sole discretion, require an increase to liability insurance to the level then customary in similar COUNTY Agreements by giving sixty (60) days notice to CONSULTANT.

20.3. Additional Insurance Requirements.

20.3.1. COUNTY is to be notified immediately of all insurance claims. COUNTY is also to be notified if any aggregate insurance limit is exceeded.

20.3.2. The comprehensive or commercial general liability shall contain a provision of endorsements stating that such insurance:

(a) Includes contractual liability;

(b) Does not contain any exclusions as to loss or damage to property caused by explosion or resulting from collapse of buildings or structures or damage to property underground, commonly referred to by insurers as the "XCU Hazards;"

(c) Does not contain a "pro rata" provision which looks to limit the insurer's liability to the total proportion that its policy limits bear to the total coverage available to the insured;

(d) Does not contain an "excess only" clause which require the exhaustion of other insurance prior to providing coverage;

(e) Does not contain an "escape clause" which extinguishes the insurer's liability if the loss is covered by other insurance;

(f) Includes COUNTY as an additional insured; and

(g) States that it is primary insurance and regards COUNTY as an additional insured and contains a cross-liability or severability of interest clause.

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20.4. Deposit of Insurance Policy. Promptly on issuance, reissuance, or renewal of any insurance policy required by this Agreement, CONSULTANT shall, if requested by COUNTY, provide COUNTY satisfactory evidence that insurance policy premiums have been paid together with a duplicate copy of the policy or a certificate evidencing the policy and executed by the insurance company issuing the policy or its authorized agent.

20.5. Certificates of Insurance.

20.5.1. CONSULTANT agrees to provide COUNTY with the following insurance documents on or before the effective date of this Agreement:

(a) Complete copies of certificates of insurance for all required coverages including additional insured endorsements shall be attached hereto as **Exhibit "C"** and incorporated herein.

(b) The documents enumerated in this Paragraph shall be sent to the following:

County of Imperial
Risk Management Department
940 Main Street, Suite 101
El Centro, CA 92243

County of Imperial
Department of Planning and Development Services
801 Main Street
El Centro, CA 92243

20.6. Additional Insurance. Nothing in this, or any other provision of this Agreement, shall be construed to preclude CONSULTANT from obtaining and maintaining any additional insurance policies in addition to those required pursuant to this Agreement.

21. PREVAILING WAGE.

21.1. CONSULTANT acknowledges that any work that qualifies as a "public work" within the

meaning of California Labor Code section 1720 shall cause CONSULTANT, and its sub-consultants, to comply with the provisions of California Labor Code sections 1775 et seq.

21.2. When applicable, copies of the prevailing rate of per diem wages shall be on file at COUNTY's Department of Public Works and available to CONSULTANT and any other interested party upon request. CONSULTANT shall post copies of the prevailing wage rate of per diem wages at the Project site.

21.3. CONSULTANT hereby acknowledges and stipulates to the following:

21.3.1. CONSULTANT has reviewed and agrees to comply, when applicable, with the provisions of Labor Code section 1776 regarding retention and inspection of payroll records and noncompliance penalties; and

21.3.2. CONSULTANT has reviewed and agrees to comply, when applicable, with the provisions of Labor Code section 1777.5 regarding employment of registered apprentices; and

21.3.3. CONSULTANT has reviewed and agrees to comply, when applicable, with the provisions of Labor Code section 1810 regarding the legal day's work; and

21.3.4. CONSULTANT has reviewed and agrees to comply, when applicable, with the provisions of Labor Code section 1813 regarding forfeiture for violations of the maximum hours per day and per week provisions contained in the same chapter.

21.3.5. CONSULTANT has reviewed and agrees to comply, when applicable, with any applicable provisions for those Projects subject to Department of Industrial Relations (DIR) Monitoring and Enforcement of prevailing wages. COUNTY hereby notifies CONSULTANT that CONSULTANT is responsible for complying with the requirements of Senate Bill 854 (SB854) regarding certified payroll record reporting. Further information concerning the requirements of SB854 is available on the DIR website located at: http://www.dir.ca.gov/Public-Works/PublicWorksEnforcement.html.

22. **<u>ASSIGNMENT</u>.**

Neither this Agreement nor any duties or obligations hereunder shall be assignable by

CONSULTANT without the prior written consent of COUNTY. CONSULTANT may employ other specialists to perform services as required with prior approval by COUNTY.

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23. NON-DISCRIMINATION.

23.1. During the performance of this Agreement, CONSULTANT and its subcontractors shall not unlawfully discriminate, harass or allow harassment against any employee or applicant for employment because of sex, race, color, ancestry, religious creed, national origin, physical disability (including HIV and AIDS), mental disability, medical condition (cancer), age (over forty (40)), marital status and denial of family care leave.

23.2. CONSULTANT and its subcontractors shall insure that the evaluation and treatment of their employees and applicants for employment are free from such discrimination and harassment.

23.3. CONSULTANT and its subcontractors shall comply with the provisions of the Fair Employment and Housing Act (Gov. Code §12990 (a-f) et seq.) and the applicable regulations promulgated thereunder (California Code of Regulations, Title 2, §7285 et seq.).

23.4. The applicable regulations of the Fair Employment and Housing Commission implementing Government Code §12990 (a-f), set forth in Chapter 5 of Division 4 of Title 2 of the California Code of Regulations, are incorporated into this Agreement by reference and made a part hereof as if set forth in full.

23.5. The applicable regulations of §504 of the Rehabilitation Act of 1973 (29 U.S.C. §794 (a)) are incorporated into this Agreement by reference and made a part hereof as if set forth in full.

23.6. CONSULTANT and its subconsultants shall give written notice of their obligations under this clause to labor organizations with which they have a collective bargaining or other agreement.

23.7. CONSULTANT shall include the nondiscrimination and compliance provisions of this clause in all subcontracts to perform work under this Agreement.

24. NOTICES AND REPORTS.

24.1. Any notice and reports under this Agreement shall be in writing and may be given by personal delivery or by mailing by certified mail, addressed as follows:

COUNTY	**CONSULTANT**
Planning and Development Services 801 Main Street El Centro, CA 92243	HDR ENGINEERING, INC. 8690 Balboa Avenue, Suite 200 San Diego, CA 92123

County of Imperial
Clerk of the Board of Supervisors
940 W. Main Street, Suite 209
El Centro, CA 92243

24.2. Notice shall be deemed to have been delivered only upon receipt by the Party, seventy-two (72) hours after deposit in the United States mail or twenty-four (24) hours after deposit with an overnight carrier.

24.3. The addressees and addresses for purposes of this Section may be changed to any other addressee and address by giving written notice of such change. Unless and until written notice of change of addressee and/or address is delivered in the manner provided in this Section, the addressee and address set forth in this Agreement shall continue in effect for all purposes hereunder.

25. ENTIRE AGREEMENT.

This Agreement contains the entire Agreement between COUNTY and CONSULTANT relating to the transactions contemplated hereby and supersedes all prior or contemporaneous agreements, understandings, provisions, negotiations, representations, or statements, either written or oral.

26. MODIFICATION.

No modification, waiver, amendment, discharge, or change of this Agreement shall be valid unless the same is in writing and signed by both Parties.

27. CAPTIONS.

Captions in this Agreement are inserted for convenience of reference only and do not define, describe or limit the scope or the intent of this Agreement or any of the terms thereof.

///

28. PARTIAL INVALIDITY.

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

29. GENDER AND INTERPRETATION OF TERMS AND PROVISIONS.

29.1. As used in this Agreement and whenever required by the context thereof, each number, both singular and plural, shall include all numbers, and each gender shall include a gender.

29.2. CONSULTANT as used in this Agreement or in any other document referred to in or made a part of this Agreement shall likewise include the singular and the plural, a corporation, a partnership, individual, firm or person acting in any fiduciary capacity as executor, administrator, trustee or in any other representative capacity or any other entity.

29.3. All covenants herein contained on the part of CONSULTANT shall be joint and several if more than one person, firm or entity executes the Agreement.

30. WAIVER.

No waiver of any breach or of any of the covenants or conditions of this Agreement shall be construed to be a waiver of any other breach or to be a consent to any further or succeeding breach of the same or any other covenant or condition.

31. CHOICE OF LAW.

This Agreement shall be governed by the laws of the State of California. This Agreement is made and entered into in Imperial County, California. Any action brought by either party with respect to this agreement shall be brought in a court of competent jurisdiction within said County.

32. AUTHORITY.

32.1. Each individual executing this Agreement on behalf of CONSULTANT represents and warrants that:

32.1.1. He/She is duly authorized to execute and deliver this Agreement on behalf of CONSULTANT;

32.1.2. Such execution and delivery is in accordance with the terms of the Articles of Incorporation or Partnership, any by-laws or Resolutions of CONSULTANT and;

32.1.3. This Agreement is binding upon CONSULTANT accordance with its terms.

32.2. CONSULTANT shall deliver to COUNTY evidence acceptable to COUNTY of the foregoing within thirty (30) days of execution of this Agreement.

33. COUNTERPARTS.

This Agreement (as well as any amendments hereto) may be executed in any number of counterparts, each of which when executed shall be an original, and all of which together shall constitute one and the same Agreement. No counterparts shall be effective until all Parties have executed a counterpart hereof.

34. REVIEW OF AGREEMENT TERMS.

34.1. Each Party has had the opportunity to receive independent legal advice from its attorneys with respect to the advisability of making the representations, warranties, covenants and agreements provided for herein, and with respect to the advisability of executing this Agreement.

34.2. Each Party represents and warrants to and covenants with the other Party that:

34.2.1. This Agreement in its reduction to final written form is a result of extensive good faith negotiations between the Parties and/or their respective legal counsel; and

34.2.2. The Parties and their legal counsel have had the opportunity to carefully review and examine this Agreement for execution by said Parties.

34.3. Any statute or rule of construction that ambiguities are to be resolved against the drafting party shall not be employed in the interpretation of this Agreement.

35. NON-APPROPRIATION.

This Agreement is based upon the availability of public funding. In the event that public funds are unavailable and not appropriated for the performance of the services set forth in this Agreement, the Agreement shall be terminated without penalty after written notice to CONSULTANT of the unavailability and/or non-appropriation of funds.

[Signatures on Following Page]

IN WITNESS WHEREOF, the Parties have executed this Agreement on the day and year first above written.

COUNTY OF IMPERIAL

By:_____
Michael W. Kelley, Chairman
Imperial County Board of Supervisors

ATTEST:

By:_____
Blanca Acosta, Clerk of the Board,
County of Imperial, State of California

APPROVED AS TO FORM:

Adam G. Crook,
County Counsel

By:_____
Faye Winkler,
Deputy County Counsel

HDR ENGINEERING, INC.

By:_____
~~Tim Gnibus~~
KIP D FIELD
SR VICE PRESIDENT

ATTACHMENT B

Selection letter from Applicant to have HDR, Inc. Prepare the Environmental Impact Report (EIR

Diana Robinson

From: jurgheuberger@gmail.com
Sent: January 7, 2021 9:31 AM
To: Diana Robinson
Cc: Patricia Valenzuela
Subject: RE: VEGA 4 Consultant

CAUTION: This email originated outside our organization; please use caution.

Ladies

Ok, we agree with the SELECTION of HDR for the VEGA 4 project as well as the VEGA 2,3 5,,,,

Thanks

Jurg

From: Diana Robinson <DianaRobinson@co.imperial.ca.us>
Sent: Thursday, January 7, 2021 7:50 AM
To: jurgheuberger@gmail.com
Cc: Michael Abraham <MichaelAbraham@co.imperial.ca.us>; Patricia Valenzuela <PatriciaValenzuela@co.imperial.ca.us>
Subject: VEGA 4 Consultant

Hello Jurg,

Could you please send an email selecting the desired consultant for the VEGA 4 project?

Thank you,
Diana Robinson, Planner III
Imperial County Planning & Development Services
801 Main Street, El Centro, CA 92243
Phone (442) 265-1736 x1751
Fax (442) 265-1735 / icpds.com

ATTACHMENT C

Matrix

VEGA SES 2, 3 & 5 Solar EIR Project

RFP COMPONENTS	THE ALTUM GROUP	EGI	ULTRASYSTEMS	CATALYST	SANTEC	RECON	CHAMBERS	AZTEC	HDR	MCINTYRE	CASC
Rating	6	7	11	1	5	9	8	2	3	4	10
Project Unders. & Scope of Work	YES	YES*	YES	YES	YES	YES	YES	YES	YES	YES	YES
Milestones (Tasks)	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Subs' time & cost breakdown	YES	YES	YES	YES	YES	NOT INCLUDED	YES	YES	YES	YES	YES
Not to Exceed Cost	YES	YES	NO	YES	NO STATEMENT	NO STATEMENT	NO STATEMENT	NO STATEMENT	YES	YES	YES
Findings of Cons w/RE Element	NO	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Elec Version of docs prepared	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Cost Est. for Deliverables (copies)	INCLUDED	INCLUDED	INCLUDED	INCLUDED	INCLUDED	INCLUDED	INCLUDED	INCLUDED	INCLUDED	YES	INCLUDED
Statement of Cost Overruns	NO	YES	YES	YES	NO STATEMENT	YES	YES	NO STATEMENT	YES	YES	NO STATEMENT
Time Table for FEIR (Schedule)	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Studies to be provided by Consultant											
Agriculture/Forest Resources	YES	YES	YES	YES	LISTED BUT NOT CLEAR. THERE IS NO CEQA SECTION NOR DESCRIPTION.	PEER REV LESA	YES	YES	YES	YES	YES
Energy	YES	YES	YES	YES		YES	YES	YES	YES	YES	YES
Geotechnical/Geology and Soils	YES BUT NOT GEOTECHNICAL	YES BUT NOT GEOTECHNICAL	YES BUT NOT GEOTECHNICAL	YES		NOT INCLUDED	INCLUDED AS OPTIONAL	YES	NO (ASSUMED TO BE APPLICANT)	NOT INCLUDED*	YES
Hazards/Hazardous Materials	YES	YES	NO	YES		NOT INCLUDED	YES	YES	YES	YES	YES
Hydrology and Water Quality	YES	YES	NO	YES		NOT INCLUDED	YES	YES	NO (ASSUMED TO BE	NOT INCLUDED*	YES
Land Use and Planning	YES	YES	YES	YES	LISTED BUT NOT CLEAR. THERE IS NO CEQA SECTION NOR DESCRIPTION (SEE PAGE 7 FOR REFERENCE)	YES	YES	YES	YES	YES	YES
Mineral Resources	YES	NOT INCLUDED	YES	YES		YES	YES	YES	YES	YES	YES
Population and Housing	YES	YES	YES	YES		YES	YES	YES	YES	YES	YES
Public Heath and Safety	NOT INCLUDED	NOT INCLUDED	NOT INCLUDED	YES		YES	NOT INCLUDED	NOT INCLUDED	NOT INCLUDED	NOT INCLUDED	YES
Public Services	YES	YES	YES	YES		YES	YES	YES	YES	YES	YES
Recreation	YES	NOT INCLUDED	YES	YES		YES	YES	YES	YES	YES	YES
Tribal Cultural Resources	YES	YES	YES	NO (BY APPLICANT)		THROUGH AB52	ASSUMED UNDER CULTURAL	YES	NOT INCLUDED	INCLUDES PALEO REPORT	YES
Utilities/Service Systems	YES	YES	YES	YES		YES	YES	YES	YES	YES	YES
Wildfire	YES	NOT INCLUDED	YES	YES		YES	YES	YES	YES	YES	YES
Water Supply Assessment	YES	YES (ONLY ON TABLE)	NOT INCLUDED	YES	NOT INCLUDED	NOT INCLUDED	YES	YES	AS OPTIONAL	YES	WATER DEMANT ESTIMATE?
Phase 1 Environmental Site Assessment	NOT INCLUDED	NOT INCLUDED	NOT INCLUDED	YES	NOT INCLUDED	NOT INCLUDED	YES	YES	NO (ASSUMED TO BE APPLICANT)	NOT INCLUDED*	YES
Studies to be provided by Applicant (for peer-review)											
Aesthetics	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Air Quality	YES	YES	YES	YES	YES	YES	YES	YES	YES	ASSUMES INCLUDES HEALTH RISK ASSESSMENT	YES
Greenhouse Gas Emissions	YES	YES	YES	YES	YES	YES	YES	YES	YES		YES
Biological Resources	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Cultural Resources	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Noise	YES	YES	NO	YES	YES	YES	YES	YES	YES	YES	YES
Land Evaluation & Site	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Transportation/Traffic	YES	YES	NO	YES	YES	YES	YES	YES	YES (ASSUMES W/HAUL STUDY)	YES	YES
Scope of Work											
Project Initiation	YES	YES	YES	YES	YES	YES	YES (CONF CALL)	YES	YES	YES	YES
Admin Draft EIR (CEQA, revisions, mtgs)	YES (ELEC, 5 HC & 50 CDS), NO MTGS	YES (ELEC ONLY), NO MTGS. COPIES MISSING	YES (5 HC, NO MTGS)**	YES (ELEC, 5 HC) NO CDS & NO MTGS	YES (10 HC & 20 CDS)**	YES (ELEC, 10 HC & VIRTUAL MTG)	YES (ELEC, 5 HC & 50 CDS)	YES (5 HC & 1 CD)	YES (ELEC & 5 HC) FOR EA (1ST AND 2ND ADEIR)	YES (ELEC & 5 HC), 5 HC OF 2ND ADEIR	YES (ELEC, 5 HC & 5 CDS). NO MTGS
Draft EIR (Prep, Notices, Scoping Mtg & Public Review)	YES (ELEC, 5 HC & 50 CDS) SCOPING MTG	YES (10 HC) & 50 CDS SCOPING MTG	YES (ELEC, 5 HC & 50 CDS) SCOPING MTG	YES (ELEC, 5 HC & 50 CDS) ONLINE SCOP & ADD MTG	YES (ELEC)	YES (10 HC & 50 CDS)	YES (ELEC, 5 HC & 50 CDS), NOTICES YES	YES (ELEC, 5 HC & 20 CD)	YES (ELEC, 5 HC & 50 CD)	YES (ELEC & 5 HC)	YES (ELEC, 5 HC & 5 CDS). SCOPING MTG
Final EIR (Prep, Resp Comm, Notices, Mtgs, Hearings)	YES (ELEC, 5 HC & 50 CDS) W/AFEIR. MTGS YES.	YES (10 HC) & 50 CDS. AFEIR. MTGS YES.	YES (ELEC, 5 HC & 50 CDS) W/ 5 HC OF AFEIR. MTGS YES	YES (ELEC, 5 HC & 50 CDS) W/ AFEIR (ELEC). MTGS YES	YES (10 HC & 20 CDS OF AFEIR; SAME FOR FEIR).	YES (10 HC & 50 CDS)	YES (ELEC, 5 HC & 50 CDS) MTGS YES. 1 TELECONF MTG	YES (ELEC, 5 HC & 20 CD)	YES (ELEC, 5 HC & 50 CD) FOR EA (SCREEN & FEIR)	YES (ELEC 1ST & 2ND AFEIR. FEIR SHC & 50 CDS)	YES (ELEC, 5 HC & 5 CDS). MTGS YES
MMRP	YES	YES (ELEC ONLY)	YES (ELEC ONLY)	YES (ELEC ONLY)	YES (HC & PDF)	YES	YES	YES	YES (DRAFT & FINAL SHC)	YES (ELEC DRAFT & FINAL)	YES
CEQA Findings & NOD	YES	YES (ELEC ONLY)	YES	YES	YES	YES	YES	YES	YES	YES	YES
Assumptions	YES	YES	YES	YES*	YES	YES	YES	YES	YES	YES	YES
SB18/AB52	YES	ONLY AB ON TABLE	NOT INCLUDED IN SCOPE	ONLY AB 52	NOT INCLUDED	AB52 ONLY	AB 52 ONLY	YES	AB 52	NO LTRS (MTG & MEMO)	NO
Alternative analysis	YES (3 TOTAL)	YES (6) ONLY ON TABLE	YES (3 TOTAL)	YES (1 W/NO ALT)	YES (3 TOTAL)	YES (3)	YES	YES (3)	YES (3)	YES (2)	YES (3)
Meetings (number)	7 (KICKOFF, SITE VISIT, SCOPING, UP TO 2 ADD MTGS, PC & BS)	5 (KICKOFF, SITE VISIT, SCOPING, PC & BS)	7 (1 KICK OFF, 3 ADD MTGS, 1 SCOPING, PC & BS)	7 (1 KICK OFF, 3 ADD MTGS, 1 SCOPING, PC & BS)	7 (UP TO 3 INTERNAL, SCOPING, EEC, PC & BS)	VIRTUAL SCOPING & EEC, AND ATTEND PC & BS	3 (VIRTUAL, PC & BS IN PERSON)	4 (KICK OFF, SCOPING, PC& BS) ADDITIONAL VIRTUAL	7 (KICK OFF, SCOPING, EEC, PC& BS) PLUS ADDITIONAL	9 (KICK OFF, SCOPING VIRTUAL, UP TO 5 ADD, PC &	4 (KICK OFF, SCOPING, PC & BS) UPTO 40 HRS OF MTGS
Proposed Schedule (weeks)	36 (9 MONTHS)	27 (7 MONTHS)	52 (12 MONTHS)	40 (10 MONTHS)	54 (14 MONTHS)	34 (9 MONTHS)	40 (10 MONTHS)	52 (12 MONTHS)	40 (10 MONTHS)	52 (12 MONTHS)	42 (11 MONTHS)
Qualifications	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Experience	SOLAR YES, BATT. NO	YES	YES	YES	YES	YES	YES	YES	YES	SOLAR YES, BATT. NO	YES
Conflicts	DOESN'T SAY	DOESN'T SAY	DOESN'T SAY	NO CONFLICTS	OTHER PROJECTS	DOESN'T SAY	DOESN'T SAY	NO CONFLICTS	NO CONFLICTS	NO CONFLICTS	NO CONFLICTS
TOTAL COST	$ 131,529.00	$ 150,165.00	$ 180,970.00	$ 272,110.00	$ 256,505.00	$ 129,878.00	$ 284,509.50	$ 327,389.37	$ 139,530.00	$ 152,982.35	$ 192,426.00
NOTES:	WSA HAD BEEN EXCLUDED FROM COST. COST W/OUT WSA IS $114,955	DID NOT INCLDE CEQA SECTION DESCRIPTIONS	LIST OF STUDIES TO PEER-REVIEW WAS INCOMPLETE.	MOST COMPLETE APPLICATION.	INCLUDED FISCAL IMPACT ANALYSIS & OFF-SITE CONSEQUENCES ANALYSIS	NOT CLEAR WHETHER THEY'LL PREPARE IS	OFFERS 10% DISCOUNT IF SELECTED FOR BOTH CUPS	VERY THOROUGH AND COMPLETE APPLICATION	MOST EXPERIENCE IN COUNTY SOLAR PROJECTS	EDITING ERRORS	NO DIRECT LOCAL EXPERIENCE BUT SUBS HAVE WORKED IN IMPERIAL COUNTY
5 HC WERE REQUIRED. MIGHT NEED TO REDUCE # OF CDS.										"DOES NOT SPECIFY IF PER RFP OR ASSUMED	
EEC HEARING WAS NOT LISTED ON RFP.	DOES NOT INCLUDE PREPARATION OF IS	ACREAGES FOR VEGA 3 & 5 WERE INCORRECT	THEY ARE EXPECTING NOP	"ASK FOR CLARIFICATION OF ITEM #4, PAGE 27)	NUMBER OF COPIES WAS NOT AS REQUESTED ON RFP	CONFLICTING LANGUAGE. MISUNDERSTANDNG OF STUDIES TO PROVIDE	DOES NOT INCLUDE PREPARATION OF IS	INCLUDED CUP CONSISTENCY FINDINGS	VERY THORHOUGH AND DETAILED	MOST MTGS INCLUDED	
		HAD DREW SOLAR REFERENCE			COST INCLUDES CONTINGENCY, WSA AND PHASE 1 ESA	AMOUNT OF COPIES NOT PER RFP.	SAYS THEY UPDATED THE GEOTHERMAL/ALT ENERGY ELEMENT?		COST INCLUDES WSA & OPTIONAL GEO REPORT		
		COST W/OUT HYDROLOGY STUDY IS $117,045							FORMAT AS PROVIDED IN RFP? PAGE 7		
									SEE PAGE 12 EXPLAINING PEER REVIEW STUDIES		

**DOESN'T SPECIFY WHETHER IT WILL BE SENT ELECTRONICALLY

ATTACHMENT D

Eleven (11) RFP Proposals Received

Proposal to Prepare

VEGA SES 2, 3 & 5 Solar Project Environmental Impact Report

November 18, 2020

The Altum Group

Prepared by:
The Altum Group
73-710 Fred Waring Drive
Suite 219
Palm Desert, CA 92260

Prepared for:
Imperial County
Planning & Development
Services Department
801 Main Street
El Centro, CA 92243

PLANNING | ENGINEERING | SURVEY | ENVIRONMENTAL

The Altum Group
73-710 Fred Waring Dr., Ste. 219
Palm Desert, CA 92260
760.346.4750 Tel
760.340.0089 Fax

November 18, 2020

Mr. Jim Minnick, Director
Imperial County
Planning & Development Services Department
801 Main Street
El Centro, CA 92243

Subject: Proposal to Prepare VEGA SES 2, 3 & 5 Solar Project Environmental Impact Report

Dear Mr. Minnick;

The Altum Group (Altum) is pleased to submit this proposal to Imperial County Planning and Development Services Department (County) to prepare the California Environmental Quality Act (CEQA) documentation for the VEGA SES 2, 3 & 5 Solar Project (proposed project). For the proposed project, the County is requiring an Environmental Impact Report (EIR) examining the development of three separate solar installations of varying size. Altum has prepared CEQA documentation examining solar and wind developments across Southern California including projects requiring peer review of applicant provided studies. We will work diligently to ensure that a high level of service is provided to the County for this project. Please consider the following that the Altum team offers:

- Extensive experience in preparing CEQA and NEPA documents and other technical reports for renewable energy projects throughout Southern California. We can initiate work immediately, bringing a well-grounded understanding of the project issues and challenges of the existing environment in the project area.
- A solid project management and internal technical team that has extensive knowledge of the CEQA process and peer review techniques and is able to provide the County with the appropriate level of technical support needed for this project.
- A competitive fee, and ability to meet an aggressive schedule.

We are excited about this opportunity and look forward to working in partnership with the County for this project. For this project, our Project Team includes Chris Moore, who will serve as Project Manager for this contract, and Thomas Strand, who will serve as Deputy Project Manager. If you have any questions about our proposal, please contact us via telephone 858-414-7363 or email at chris.moore@thealtumgroup.com.

Best Regards,

Thomas Strand, MS
Senior Environmental Planner

Chris D. Moore, AICP, ENV SP
Director of Urban and Environmental Management

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Appendix

- Resumes
- Schedule of Hourly Fees

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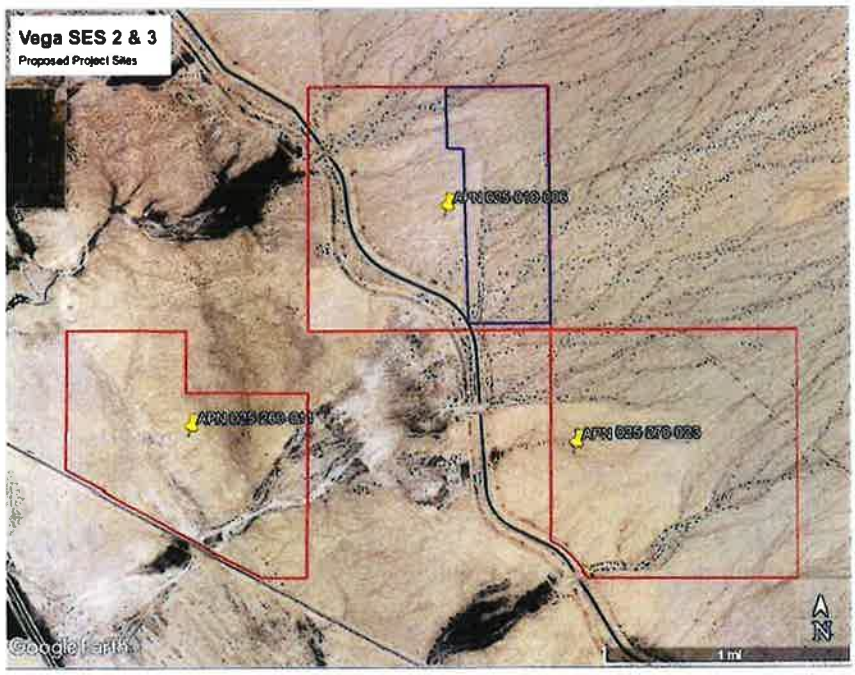
1. PROJECT UNDERSTANDING

Altum understands that Apex Energy Solutions LLC (Apex) (Applicant) is proposing to develop the Vega SES 2, 3 & 5 Solar Energy Storage project (Project), which consists of three distinct conditional use permit (CUP) applications. Implementation of the proposed project would include the following:

- VEGA SES 2: allow for the construction and operation of a 240-megawatt (MW) alternating current (AC) solar photovoltaic (PV) energy generation and 240 MW/960 megawatt hour (MWh) battery storage located on approximately 1,472 acres and includes Assessor's Parcel Number 025-260-011, 025-010-006, and 025-270-023. This site is zoned for Recreation (S-2-RE).
- VEGA SES 3: allow for the construction and operation of a 60 MW alternating current solar PV energy generation and 60 MW/240 MWh battery storage located on approximately 240 acres and includes Assessor's Parcel Number 025-010-006. This site is zoned for Recreation (S-2-RE).
- VEGA SES 5: allow for the construction and operation of a 50 MW alternating current solar PV energy generation and 50 MW/200 MWh battery storage located on approximately 250 acres and includes Assessor's Parcel Numbers 025-260-019 and 025-260-022. This site is zoned for Recreation (S-2-RE, A-2-RE, A-3-RE).

The electrical energy produced by VEGA SES 2 would be delivered to the Imperial Irrigation District (IID) via the 230 kV "KN/KS" Line. The electrical energy produced by VEGA SES 3 would be connected to the existing utility approved point of interconnection at the northern boundary of the VEGA SES 3 site to the IID 161kV "L" Line. The electrical energy produced by VEGA SES 5 would be conducted through a proposed 92kV generator intertie (gen-tie) line and delivered to IID through a short interconnection with the IID 92kV "Midway" Substation or the proposed switching station. Additionally, preliminary research identifies the project area as adjacent to areas identified by the Bureau of Land Management (BLM) as Development Focus Areas for either solar or geothermal resources. Additionally, all project parcels are located within the Renewable Energy Zone. The exhibit below identifies the extent of the project area as proposed.



The project would require the following permits and approvals from the specified agencies, although some may not be applicable: 1) Conditional Use Permit (Imperial County P&DSD); 2) Grading Permit (Imperial County P&DSD); Building Permit (Imperial County P&DSD); Dust Control Permit (Imperial County Air Pollution Control District); Rule 310 Exemption (Imperial County Air Pollution Control District), Encroachment Permit (Imperial County Public Works Dept.), Encroachment Permit (Imperial Irrigation District); General Construction Storm Water Permit Notice of Intent/Storm Water Pollution Prevention Plan (California State Water Resources Control Board), Consultation for Sensitive Species (California Dept. of Fish & Wildlife), and Consultation for Bird and Bat Conservation Strategy (U.S. Fish & Wildlife Service).

Altum understands that the Applicant proposes to utilize either thin film or crystalline solar PV technology modules mounted either on fixed frames or horizontal single-axis tracker (HSAT) systems for the project. The fixed frame PV module arrays would be mounted on racks that would be mounted on racks that would be supported by driven piles.

Development of the proposed project would include various project facilities, including an electrical power system, interconnection facilities, transmission lines, security, and a battery system. Construction activities would primarily involve demolition and grubbing; grading of the Project area to establish access roads and pads for electrical equipment (inverters and step-up transformers); trenching for underground electrical collection lines; and the installation of solar equipment and security fencing. The number of on-site construction workers for the solar project facilities is not expected to exceed 150 workers at any one time and the number of on-site construction workers for the battery storage facility and the substation is not expected to exceed 100 workers at any one time. Onesite parking would be provided for all construction workers.

It is Altum's understanding that the cost estimate for the EIR, including the hourly rate and total estimated hours, will be for the preparation of the following analysis within the EIR document:

- Aesthetics
- Agriculture and Forestry Resources
- Land Use and Planning
- Mineral Resources

- Air Quality
- Biological Resources
- Cultural Resources
- Energy
- Geology/Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Noise
- Population and Housing
- Public Services
- Recreation
- Transportation
- Tribal Cultural Resources
- Utilities and Services
- Wildfire

Altum also understands that the cost estimate for the EIR will include the cost for the peer-review of technical studies prepared by the applicant and/or their consultant(s). The list of technical studies to be peer-reviewed are as follows:

- Aesthetics/Visual Impacts
- Air Quality and Greenhouse Gas
- Biological Resources
- Cultural Resources Study (includes historical, Tribal Cultural, and archaeology)
- Land Evaluation and Site Assessment
- Noise
- Transportation/Traffic

2. Project Team

2.1 Firm Profile

The Altum Group
Strive Higher

The Altum Group is a multi-discipline consulting firm offering expertise in environmental planning, physical/policy planning, geographical information systems (GIS), civil engineering, surveying, and project management. The Altum Group began with a core group of experienced professionals each with decades of experience in providing consulting services to public and private clients. The firm now employs over 30 professionals and supporting staff with diverse levels of expertise that allows us the ability to provide a wide array of services.

Altum's planning and environmental team has successfully completed numerous environmental documents together for both private and public clients as required by CEQA and NEPA. Our staff have a strong understanding of these requirements and have prepared environmental documents for more than 130 individual projects to date. This includes preparing Initial Study and Mitigated Negative Declarations (IS/MNDs) and Environmental Impact Reports (EIRs) for solar and wind developments; residential, commercial, and mixed-use developments; large master plans and specific plans; general plan amendments; rezoning projects; and parks and recreation projects. Our environmental studies are prepared to fully comply with government guidelines and regulations. These studies address potentially significant environmental impacts of a proposed project and outline creative mitigation measures to reduce those impacts. Our team is fully capable of addressing all of the issue areas of impact analysis contained in the Appendix G checklist of the CEQA guidelines and will provide the County with sound technical environmental analysis.

Specific to this project with the County, Altum has been involved with a number of solar and wind energy projects from initial planning stages through full build. This includes both solar projects and wind farms set in the Southern California desert. In addition, our team has experience providing peer review services for CEQA and NEPA documents and overseeing consultant teams performing various technical studies. The following projects highlight our experience that is relevant to this contract with Imperial County.

- Glamis Specific Plan and Related Environmental Technical Studies, County of Imperial, Glamis, CA
- North Palm Springs Solar IV Project IS/MND, Palm Springs, CA
- Palm Springs RePower Wind Energy Center IS/MND, Palm Springs, CA
- WKN Wagner Wind Farm IS/MND, Riverside County, CA
- Truckhaven Geothermal Exploration Well Project, County of Imperial, CA – (*Deputy PM prior experience*)
- Desert Quartzite Solar Generating Project EIS/EIR, Blythe, CA (*PM prior experience*)
- Imperial Valley to Dixieland 230-kV Transmission Line and Substation Project NEPA/CEQA, Imperial Irrigation District (IID), Imperial County, CA (*PM prior experience*)
- Heber 1 Geothermal Project, County of Imperial, CA (*Deputy PM prior experience*)
- Willey Reservoir Embankment Stabilization Project, Irrigation District (IID), Imperial County, CA (Deputy *PM prior experience*)
- San Onofre Nuclear Generation Station Decommissioning Environmental Compliance, Review and Preparation of key CEQA/NEPA document, San Diego County, CA (Deputy PM prior experience)
- Seeley Market and Gas Station Façade Improvement Project, Conditional Use Permit Application and Visual Impact Assessment Memo, Seeley, Imperial County, CA (*PM experience*)
- Desert Springs Resort Specific Plan EIR, County of Imperial, CA (*PM prior experience*)
- Ocotillo Wells State Vehicular Recreation Area (SVRA) General Plan Update and EIR, Imperial and San Diego Counties, CA (*PM prior experience*)
- Silver State South Solar Power Plant Project, Primm, NV (*PM prior experience*)
- Solar Project Application for Certification, San Bernardino County, Beacon, CA (*PM prior experience*)
- Blythe Solar-Thermal Energy Power Plant Application for Certification, Solar Millennium, Riverside County, CA (*PM prior experience*)
- Palen Solar-Thermal Energy Power Plant Application for Certification, Solar Millennium, Riverside County, CA (*PM prior experience*)
- Ridgecrest Solar-Thermal Energy Power Plant Application for Certification, Solar Millennium, San Bernardino County, CA (*PM prior experience*)
- Mojave Solar Power Plant Project Application for Certification, Abengoa, San Bernardino County, CA (*PM prior experience*)
- KN/KS 230-kV Transmission Line Tubular Pole Replacement Project NEPA/CEQA, Imperial Irrigation District (IID), Imperial County, CA (*PM prior experience*)
- Engineering Services Contract Transmission Upgrades, Imperial Irrigation District (IID), Riverside and Imperial Counties, CA (*PM prior experience*)
- SMARA Imperial County Mine Inspections, Imperial County, CA
- On-Call CEQA Peer Review Services, City of Rancho Cucamonga, CA:
    - Speedway Commerce Development Project EIR
    - Christ's Church of the Valley IS/MND
    - Hellman Avenue Commercial IS/MND
    - Scheu Distribution Center IS/MND
    - Residential Development Site IS/MND
- Coachella Music Festival EIR Peer Review, Indio, CA

2.3 Key Personnel

For this contract with Imperial County we have included a robust project team that is adequately staffed and trained to successfully complete the project. We are confident that we have the right team to achieve excellent results for the County. The table below outlines our team and their education and credentials; our organization chart is found on the following page. Resumes are included in the appendix.

Staff	Role in Contract	Education and Credentials
Chris Moore, AICP, ENV SP The Altum Group	Project Manager	M.S., Community and Regional Planning, University of Texas, Austin B.A., Environmental Biology and Environmental Conservation, University of Colorado at Boulder American Institute of Certified Planners (AICP), cert. #017711 Envision Sustainability Professional (ENV SP), #13492
Mike Peroni The Altum Group	QA/QC and Technical Advisor	B.S., Urban Planning, California State Polytechnic University, Pomona
Thomas Strand, MS The Altum Group	Deputy Project Manager	M.S., Geography, Watershed Science – San Diego State University B.S., Geography – San Diego State University
Maribel Covarrubias The Altum Group	Assistant Environmental Planner	B.S., City and Regional Planning; California Polytechnic State University, San Luis Obispo
Yaneli Hernandez, MURP The Altum Group	Assistant Environmental Planner	Masters of Urban and Regional Planning (MURP), California Polytechnic State University, Pomona B.A., Landscape Architecture, California Polytechnic State University, Pomona
Kyle Mezrahi The Altum Group	Assistant Environmental Planner	B.A., Environmental Studies, Lewis and Clark College, Portland
Katie Davis The Altum Group	Production Manager and Technical Editor	B.A., English, University of California, Los Angeles
Tyler Carnevale The Altum Group	GIS Technician	FAA Part 107 Licensed Drone Pilot #4206288 Adobe Certified Associate in Adobe Illustrator

3. SCOPE OF WORK

Based on our understanding of the project and information presented by the County, we will prepare an EIR and conduct peer review of several technical documents, pursuant to CEQA as follows.

Task A - Project Initiation

Kickoff Meeting and Project Site Visit

Once the project is awarded, Altum's Project Manager and Deputy Project Manager will schedule a kick-off meeting of up to two (2) hours with County staff to discuss the proposed project, project history, specific project issues, background data, project alternatives, and review the scope of work and schedule for preparation of the EIR. Also, Altum's Project Manager and Deputy Project Manager will attend one (1) project site visit, which will occur around the same time as the project kick-off meeting (potentially on the same day). During the site visit, Altum will walk the project site, making general environmental/planning observations, and will take photographs of the project site. During the site visit, Altum will meet with County and/or applicant staff (if present), to discuss the project. Altum assumes the project site visit will last no more than two (2) hours. We will discuss communication protocols and procedures for review for all project tasks. Altum will provide a Data Needs List to the County. The provided Data Needs List will request all of the information pertinent to preparing a CEQA project description.

Project Description

Based upon the CUP Application and other project information provided by the County, Altum will prepare a Draft CEQA project description and submit one (1) electronic copy of the document to the County for one (1) round of comments and revisions. Following receipt of County comments (if any) and subsequent revisions (if necessary), Altum will submit one (1) electronic of the Final CEQA Project Description to the County.

Notice of Preparation

Altum will also prepare a Notice of Preparation (NOP) for the project and submit a Draft NOP to the County for one (1) round of review and comments. Following County review, Altum will revise accordingly and prepare the NOP for County distribution to the State Clearinghouse for a 30-day circulation period. For the purpose of the NOP, Altum assumes that a CEQA Initial Study will not be prepared and circulated with the NOP. Should the County require an Initial Study to be prepared and circulated with the NOP, then Altum could provide this additional service for an additional scope and fee authorization.

Scoping Meeting

Altum's team will attend a public scoping meeting of up to two (2) hours during the 30-day circulation of the NOP. The scoping meeting will allow the public to provide input regarding the scope of issues to be analyzed in the EIR.

Technical Study Peer Reviews

Altum will peer review all applicant-provided technical reports to determine adequacy of each report relevant to CEQA for each corresponding resource section of the EIR. During peer review, Altum will focus on factors such as use of substantial evidence to support impact determinations, current thresholds of significance and adherence of updated regulatory requirements. Altum will review the methodology, approaches, and assumptions, and identify any suggested additions, errors, or omissions, and review each report for the adequacy to support the EIR. The Altum team will review each report to make sure the reports have been prepared in accordance with the CEQA Guidelines and other environmental regulatory requirements. Altum will

provide a peer review comment memorandum for each document. Altum will submit the memoranda for review to the County, who will then submit the memoranda to the Applicant and the Applicant's CEQA Consultant. We will then review the revised tech reports to determine if all comments have been addressed. If found to be adequate during review, Altum will utilize the reports to prepare the analysis for the corresponding EIR sections.

The following studies will be peer reviewed as part of this project:

- Aesthetics/Visual Impacts
- Air Quality and Greenhouse Gas
- Biological Resources
- Cultural Resources Study
- Land Evaluation and Site Assessment
- Noise
- Transportation/Traffic

Tribal Cultural Resources Consultation

California Assembly Bill (AB) 52 requires the lead CEQA agency (County) to consult with interested Native American Tribes prior to the release of a draft environmental document. As identified in the RFP, and to ensure that consultation efforts do not delay the environmental review process, Altum will assist with AB 52 consultation. Altum will draft and/or review notification letters and provide guidance to agency personnel on the procedures associated with AB 52. In addition, Altum is prepared to offer the County assistance with regard to California Senate Bill (SB) 18. In certain circumstances AB 52 and SB 18 efforts may be combined for efficiency. It is assumed that Altum will not be required to attend any AB 52 or SB 18 consultation meetings.

Task A Deliverables and Meetings:

- *Electronic copy of Data Needs List (MS Word and/or PDF)*
- *Electronic copies of Draft and Final CEQA Project Description (MS Word and PDF)*
- *Electronic copies of the Draft and Final NOP (MS Word and PDF)*
- *Electronic copies of each Tech Report Peer Review Memorandum (MS Word and PDF)*
- *Attendance at Kickoff Meeting (Project Manager and Deputy Project Manager)*
- *Attendance at Project Site Visit Meeting (Project Manager and Deputy Project Manager)*
- *Attendance at Scoping Meeting (Project Manager and Deputy Project Manager)*

Task B - Administrative Draft EIR

Altum will prepare an Administrative Draft EIR that will include the following components:

Executive Summary – Summary of the Draft EIR, providing a synopsis of the project description, project impacts, mitigation measures, and alternatives analysis.

Introduction to the Draft EIR – Provides information on the purpose of and authority for the preparation of the EIR, identify the project applicant, identify the lead agency and responsible/trustee agencies, and provide a list of places where the Draft EIR is available for review and how to provide comments to the lead agency within the 45-day public review period.

Comprehensive Project Description - Describes the project location and environmental setting, project characteristics including the size of the site and the area to be affected, other agencies who have oversight of the project and any other pertinent information.

Environmental Impact Analysis – This section of the EIR will begin with an introduction describing its content and structure and present an overview of the methodological approaches used during the impact

assessment process. Based on our review of the County's RFP and our understanding of the project, we anticipate preparing analysis and/or peer reviewing technical studies for the following issue areas:

- Aesthetics
- Agriculture and Forestry Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Energy
- Geology/Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Noise
- Population and Housing
- Public Services
- Transportation
- Tribal Cultural Resources
- Utilities and Services

Issue areas that are not identified will be examined in the Other Issue Areas section of the EIR. These include Mineral Resources, Recreation, and Wildfire. Detailed description of the analysis is found in the *Issue Area Technical Approach* section.

As applicable, the analysis of the impacts will address the project's short-term, long-term, direct, indirect, and cumulative effects. Each section will be presented as follows:

- Introduction and Data Sources
- Existing Conditions
- Issues Identified During Scoping and/or NOP Circulation
- Thresholds of Significance
- Impact Analysis
- Cumulative Impacts
- Findings of Impact Significance (prior to mitigation)
- Project Compliance Measures and/or Design Features
- Mitigation Measures
- Level of Impact Significance after Mitigation

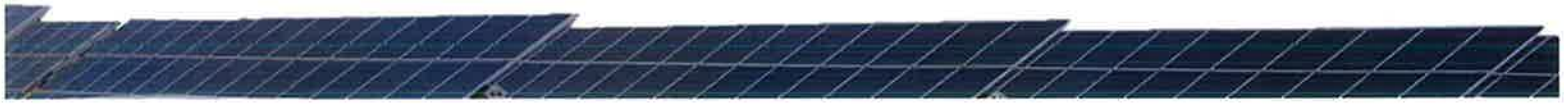
Alternatives Analysis – Up to three (3) alternatives to include 1) the proposed project, 2) the no-project alternative, and 3) an alternative to the proposed project at the same project site. The three (3) alternatives will be developed in consultation with County staff. The section will conclude with a discussion of the environmentally superior alternative.

Other CEQA Sections - Required analysis includes:

- Growth Inducing Impacts
- Unavoidable Adverse Effects
- Irreversible Commitment of Resources
- Short-term vs Long-term Impacts
- Impacts Found to be Less Than Significant

References, Organizations and Persons Consulted, Report Preparers – Includes all references, organizations, persons consulted, and report preparers.

Technical Appendices – Includes the NOP, public/agency comments on the NOP and technical studies that were used to prepare the EIR.



Upon completion of the Administrative Draft EIR, we will provide copies to County staff for review. We anticipate one (1) round of review from the County and that comments will be relatively minor.

Task B Deliverables and Meetings:

- *Electronic copy of the Administrative Draft EIR in MS Word and PDF formats*
- *Five (5) hard copies of the Administrative Draft EIR*
- *Fifty (50) CDs of the Administrative Draft EIR (as determined by the County)*

Issue Area Technical Approach

The Altum Team will be conducting technical analysis and preparing technical studies as outlined in the RFP. The following describes our approach to each identified issue.

Aesthetics

Analysis to determine the existing and future visual interfaces between development of the project site and surrounding land uses. The EIR will build on the discussion in the applicant-provided Aesthetics/Visual Impacts study and will identify any potentially significant adverse impacts and develop mitigation measure requirements, as necessary.

Agriculture and Forestry Resources

Analysis to determine the level of significance the project will have regarding removal of lands valued as an agricultural resource under the Williamson Act. Because the proposed project would convert agricultural/farmland to non-agricultural uses, the EIR will utilize the applicant provided Land Evaluation & Site Assessment (LESA) study to determine potential impacts resulting from this conversion. Provide mitigation, if needed, in order to reduce the project level of significance regarding agricultural farmland resources.

Air Quality

Analysis of Air Quality related issues based on the technical report prepared by the applicant's consultant. Altum will also review air quality information provided in the County's General Plan and associated EIR, the SCAQMD CEQA Air Quality Handbook, and any applicable construction-related ordinances to determine the project's air quality impacts and recommend mitigation measures as necessary.

Biological Resources

Analysis of biological resources based on information provided in the Biological Resources Report prepared by the applicant's consultant, as well as information in the County's General Plan and associated EIR, and the Imperial Irrigation District's Habitat Conservation Plan. The discussion of biological resources will determine any potentially significant impacts and will recommend mitigation measures as may be necessary.

Cultural Resources

Analysis of cultural resources impacts in the project area and if they would have an adverse impact to historical, archaeological, and/or paleontological features/areas. The discussion of cultural resources will determine any potentially significant impacts and will recommend mitigation measures as necessary. Applicant provided Cultural Resources reports will be utilized in the analysis.

Energy

Analysis of the project' energy use to determine if the project may result in significant environmental effects due to wasteful, inefficient, or unnecessary consumption of energy, or wasteful use of energy resources. This

analysis will include the project's energy use for all project phases and components, including transportation-related energy, during construction and operation. Given that the project is by nature a renewable energy project, we anticipate that energy impacts would be less than significant.

Geology/Soils

Analysis of Geology and Soils based upon a desktop study prepared by Altum. This section will include a discussion of these requirements as they pertain to water erosion. This section will also analyze potential impacts from faults, seismic activity, landslides, liquefaction, and expansive soils.

Greenhouse Gas Emissions

Analysis to determine whether the greenhouse gas (GHG) emissions would have a significant impact and if there are any policies available to reduce impacts. This section will discuss the regulatory frame-work relating to GHG emissions in California. The discussion of GHG emissions will determine any potentially significant impacts and will recommend mitigation measures as necessary.

Hazards and Hazardous Materials

Analysis to determine whether routine transport, use, or disposal of hazardous materials for the project would create a significant hazard to the public. Analysis to determine if reasonably foreseeable upset and accident conditions involving the release of hazardous materials would result in a significant public hazard. All proximate schools will be identified to determine if the project would emit hazardous emissions or acutely hazardous materials with a quarter-mile of any school. Hazards related to identified hazardous materials sites, safety and noise impacts on public airport land use plans, emergency plans and wildfires would be determined. Analysis will be based upon the Phase I Environmental Site Assessment and will be supplemented with desktop research conducted by Altum.

Hydrology and Water Quality

Analysis to determine if the project would violate any water quality standards or waste discharge requirements relative to degradation of surface or groundwater quality. Analysis regarding impact to existing groundwater supply and potential impacts to sustainable management of the basin. Analysis to determine if the project would substantially alter the existing drainage pattern with regard to altering a stream, erosion and/or siltation, change in surface runoff, stormwater drainage capacity, and flood flows. Finally, analysis regarding conflict with implementation of the water quality control plan or sustainable groundwater management plan.

Land Use and Planning

Review of the proposed Conditional Use Permit (CUP) application and project description to make findings of consistency with the Imperial County General Plan, General Plan Renewable and Transmission Element, and County's Zoning Ordinance. Analysis to determine if the project would physically divide an established community. Analysis to determine if the project would result in a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for environmental mitigation.

Noise

Analysis to determine if the project would have noise levels in excess of standards established in the County's General Plan. Review of short-term (construction) and long-term (operation) noise impacts. Applicable Noise Control Ordinances and applicable construction-related ordinances will be analyzed and used in determining any potentially significant impacts.

Population and Housing

Analysis to determine if the project would induce significant population growth, either directly or indirectly, in the area. Analysis to determine if the project would displace substantial numbers of existing people or housing, requiring construction of housing elsewhere.

Public Services

Analysis to determine if the project would result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new facilities, construction of such facilities, with regard to maintaining acceptable service ratios, response times, and other performance objectives for the following public services: Fire, Police, Schools, Parks, and other public facilities.

Transportation

Analysis of potential conflicts with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, including a rise in traffic patterns or levels. The traffic discussion will determine any potentially significant impacts and will recommend mitigation measures as may be necessary. Applicant provided transportation/traffic studies will be utilized in the analysis. VMT will be the basis of the analysis based on current CEQA regulations.

Tribal Cultural Resources

Address the existing setting and impacts to Tribal Cultural Resources and document the County's Tribal Consultation efforts pursuant to AB-52 consultation, including avoidance and mitigation measures that have been identified and agreed to by the County and Tribal governments. The discussion of tribal cultural resources will determine any potentially significant impacts and will recommend mitigation measures as may be necessary.

Utilities and Services

Analysis to determine if the project would require or result in the relocation or reconstruction of new or expanded utility facilities regarding water, wastewater, stormwater drainage, electric power, natural gas or telecommunication and if such construction would cause significant environmental effects. Analysis to determine if the project has sufficient water supplies, wastewater, and solid waste treatment capabilities. Analysis to determine if project would comply with federal, State, and local management and reduction statutes/regulations related to solid waste.

OPTIONAL – Water Supply Assessment

If required for the project, Altum will determine the project's impacts on water resources by preparing a Water Supply Assessment (WSA) per the requirements of SB 610 and SB 221. Coordination with the applicable water purveyor(s) (assumed to be the Imperial Irrigation District) will be required to determine if a water supply assessment will be written by the purveyor(s) or by The Altum Group. Budget has been included as an option for The Altum Group to complete a WSA that is fully compliant with the requirements of SB 610 and SB 221. This budget includes coordination with the water purveyor(s) to gather all necessary information, obtain approval for the draft report from the purveyor, and obtain approval for the report from the Board(s) of the water purveyor(s). If required, the WSA will then be integrated into the EIR (included as an appendix to the EIR).

If it is determined that the water purveyor(s) will complete the WSA, the approved report will be integrated into the EIR, with any additional information coordinated with the water purveyor(s). The base budget provided includes the integration of the report into the EIR and coordination with the water purveyor(s).

Task C - Public Review Draft EIR

Under this task, Altum will submit one (1) "screen-check" copy (PDF format) of the Draft EIR to the County for final review prior to public circulation. Final the County's approval, Altum will produce five (5) hard copies of the Draft EIR with fifty (50) CD's of the Draft EIR (including Appendices), for distribution. Altum will also prepare an electronic copy of the Notice of Completion (NOC) to accompany the State Clearinghouse package. Concurrent with the NOC, Altum will also prepare an electronic copy of the Notice of Availability (NOA) (MS Word and PDF format) to submit to the County for distribution. Altum assumes that the County will be responsible for publication of the NOA in at least one (1) local newspaper, and for posting of the NOA, including direct mailing to the owners and occupants of property contiguous to the parcels on which the project is located.

Task C Deliverables and Meetings:

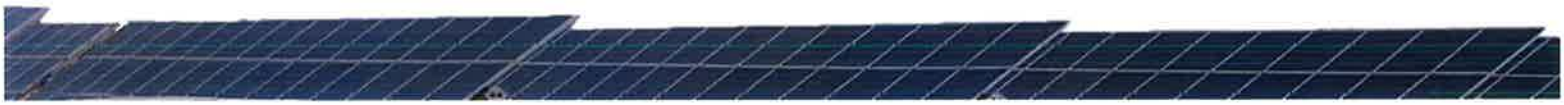
- *Five (5) hard copies of the Draft EIR*
- *Fifty (50) copies of the compiled document (Draft EIR and Appendices) will be burned to CD for distribution (including fifteen [15] to the State Clearinghouse)*
- *Electronic copy of the Notice of Completion (NOC) and Notice of Availability (NOA)*

Task D - Final EIR

Upon completion of the public review period, Altum will attend one (1) meeting of up to two (2) hours to discuss comments received during public review and the approach for responses. Altum staff will review comment letters and provide a summary of comments and strategy for preparing responses. We anticipate that we will be providing responses for up to twenty (20) comment letters from agencies/individuals and/or a total of no more than one hundred fifty (150) unique comments requiring responses other than "comment noted." Should the County require Altum to prepare comment responses to additional comments beyond the 150 unique comments we have included in our scope of work, then Altum can prepare comment responses for the additional comments for an additional scope and fee.

Altum's Project Manager will attend both the Planning Commission and Board of Supervisors hearing (for up to two (2) hours each) to assist with County staff with technical questions of the findings and results of the EIR. Task D includes the following steps:

- Compile comments on the Draft EIR and annotate comment letters.
- Review comments with County staff and formulate responses for review.
- County staff review of responses to comments (assume one round with second review as part of the compiled Final EIR).
- Prepare errata and revise Draft EIR (if necessary, anticipate only minor editorial revisions).
- Compile Final EIR for County staff review and approval prior to the Board hearing.



Task D Deliverables and Meetings:

- *Two (2) printed copies and one (1) electronic copy in MS Word and PDF formats of the Administrative Final EIR for County review*
- *Five (5) printed copies of the Final EIR, one (1) electronic copy in MS Word and PDF formats*
- *Fifty (50) copies of the compiled document (Responses to Comments, MMRP, Revised Draft EIR and Technical Appendices) will be burned to CD for distribution as determined by County staff*
- *Notice of Determination (NOD) to be filed by County staff upon certification of the Final EIR*
- *Attendance at one (1) Planning Commission Hearing Meeting (Project Manager)*
- *Attendance at one (1) Board of Supervisors Hearing Meeting (Project Manager)*

Task E Mitigation Monitoring and Reporting Program

Altum will prepare Mitigation Monitoring Program (MMRP) which identifies all requisite mitigation measures, the timing for their implementation, and the entity responsible for implementation (County, other agency, etc.).

Upon approval of the project and certification of the EIR, a Final EIR document will be assembled. The Final EIR document will include the Draft EIR (as revised) public comments and responses, MMRP, and other relevant data such as the CEQA findings and resolutions.

Task E Deliverables and Meetings:

- *Electronic copy of the MMRP in MS Word and PDF formats*

Task F - CEQA Findings and Notice of Determination

Altum will prepare Findings of Facts and Statement of Overriding Consideration if there are any impacts that cannot be mitigated to less than significant levels. Altum will prepare draft Findings of Fact for each environmental issue and a Statement of Overriding Consideration for no more than two (2) rounds of County review. Altum will coordinate with the County to finalize the Findings. Also, Altum will prepare a Notice of Determination to submit to the County for submittal to the County Clerk. Altum assumes the County will pay the filing fees.

Task F Deliverables and Meetings:

- *One (1) electronic copy of the CEQA Findings in MS Word and PDF formats*
- *One (1) electronic copy of the NOD to the County in PDF format*

Task G - Meetings

Altum's Project Manager and Deputy Project Manager will attend up to two (2) meetings of up to one (1) hour each throughout the duration of the project.

Task H - Project Management

Under this task, Altum's Project Manager and Deputy Project Manager will manage the scope, schedule, budget, QA/QC, contract, project progress reports (provided monthly), and invoicing during project. Altum's Project Manager and Deputy Project Manager will coordinate with the County and other members of the project team.

Specific coordination tasks include communicating information needs and communicating important and time-sensitive information to the project team. Communication will be via e-mail and telephone calls. Altum assumes project management of the project for up to nine (9) months. If additional project management time is requested (beyond a 9-month project schedule), Altum can provide an additional scope and fee to cover additional months of project management.

Assumptions

The following list of assumptions is not intended to be all-inclusive. If there are items that are deemed incorrect or are necessary for the successful completion of the project, please notify us so that we may amend the scope of services and associated fee.

1. Altum may amend the scope of services and fee herein based upon County comments, agency review, or public comments prior to agency approval;
2. Submittal fees, application/permit fees are not included in the budget;
3. Reimbursables are included in the budget;
4. No Initial Study will be prepared for the project;
5. All Meetings will be held virtually to accommodate COVID-19 guidelines and regulations;
6. The number of technical studies to be peer reviewed will not total more than seven (7) individual reports. If additional reports require peer review, a contract amendment will be prepared by Altum;
7. Access to the project site is clear, or the property owner will give authorization for personnel to access the project site;
8. This scope assumes that the project description will remain unchanged throughout the life span of the Project, and if any changes to the project description after Altum has started work, will require a contract amendment to adequately amend all deliverables to changes in the project description; and
9. All project services not specifically described herein will require a separate proposal and executed contract/amendment, prior to performing said additional services.

4. PROPOSED SCHEDULE

Based on our understanding of the environmental issues for the project, we believe that this EIR can be completed within nine (9) months from the time of project kickoff and receipt of a project description. The table below outlines the tasks and the timeline for each task (in working days). A detailed MS project schedule will be provided to the County at the time of project kick-off.

#	Task	Preceding Event	Time for Completion
A	Project Initiation	Contract Award	
	Kickoff Meeting/Site Visit	Contract Award	2 Days
	Notice of Preparation	Kickoff Meeting and Project Description	5 Days
	Public Circulation (Calendar Days)		30 Days
	Scoping Meeting	NOP Circulation	1 Day
B	Administrative Draft EIR (includes preparation of technical studies)	Project Initiation	80 Days
	County Review		20 Days
C	Draft EIR	Administrative Draft EIR	10 Days
	Public Circulation (Calendar Days)		45 Days
D/E	Final EIR Preparation and MMRP	End of Public Circulation Period	15 Days
	County Review		10 Days
D	Public Meetings (approx. 30 days apart)	Final EIR and MMRP	1 Day each
F	CEQA Findings and Notice	Final EIR	3 Days
F	Notice of Determination	Statement of Overriding Considerations	2 Days

5. COST ESTIMATE/MILESTONES

Altum will provide the Scope of Work detailed above on a Time and Materials (T&M) basis for a not-to-exceed fee of **$114,955**. For a more detailed breakdown of the fee, see the table on the following page.

Reimbursable costs for mileage and driving time to and from each respective meeting/hearing, and production costs are included in the not-to-exceed fee total. Costs for additional hard copies of each report will be $50 and each CD will be $5.

An Hourly Rate Schedule for The Altum Group is included in the appendix. These rates will be utilized for additional work outside the scope of the contract. This proposal is valid for a period of 90 days from the date received.

The Altum Group

VEGA SES 2, 3 & 5 Solar Project EIR

Imperial County Planning & Development Services

		Mike Peroni	Chris Moore	Thomas Strand	Maribel Covarrubias	Yaneli Hernandez	Kyle Mezrahi	Katie Davis	Tyler Carnevale	Total Hours	Total Labor	Direct Costs[1]	Total Costs
		$184	$163	$142	$90	$90	$90	$116	$79				
VEGA SES 4 Solar Project EIR													
A	**Project Initiation**									0	$ -		$ -
	Kickoff Meeting		14	14	2	2	2			34	$ 4,810	$ 200	$ 5,010
	Project Description	1	4	8	3	5	3	2	10	36	$ 3,984		$ 3,984
	Notice of Preparation			1	2	3				6	$ 592	$ 50	$ 642
	Scoping Meeting		6	10						16	$ 2,398	$ 300	$ 2,698
	Technical Study Peer Reviews		8	32						40	$ 5,848		$ 5,848
	AB52 Consultation	1	2	8		2	4	2	1	20	$ 2,497		$ 2,497
B	**Administrative Draft EIR**									0	$ -		$ -
	Executive Summary		1	4			8			13	$ 1,451	$ 500	$ 1,951
	Introduction	1	1	3			5			10	$ 1,223		$ 1,223
	Environmental Impact Analysis							12		12	$ 1,392		$ 1,392
	Aesthetics	1	1	3	16				1	22	$ 2,292		$ 2,292
	Agriculture and Forestry Resources		1	3			14		1	19	$ 1,928		$ 1,928
	Air Quality		1	3		16			1	21	$ 2,108		$ 2,108
	Biological Resources	1	1	3	16				1	22	$ 2,292		$ 2,292
	Cultural Resources	1	1	3			12		1	18	$ 1,932		$ 1,932
	Energy	1	1	3		15			1	21	$ 2,202		$ 2,202
	Geology/Soils		1	3			16		1	21	$ 2,108		$ 2,108
	Greenhouse Gas Emissions	1	1	3		14			1	20	$ 2,112		$ 2,112
	Hazards and Hazardous Materials		1	3			16		1	21	$ 2,108		$ 2,108
	Hydrology and Water Quality		1	3			18		1	23	$ 2,288		$ 2,288
	Land Use and Planning	1	1	3	18				1	24	$ 2,472		$ 2,472
	Noise		1	3	16				1	21	$ 2,108		$ 2,108
	Population and Housing		1	3			10		1	15	$ 1,568		$ 1,568
	Public Services		1	3			10		1	15	$ 1,568		$ 1,568
	Transportation		1	3		20			1	25	$ 2,468		$ 2,468
	Tribal Cultural Resources		1	3			14		1	19	$ 1,928		$ 1,928
	Utilities and Services	1	1	3		18			1	24	$ 2,472		$ 2,472
	Alternatives		2	12			26		2	42	$ 4,528		$ 4,528
	Other CEQA Sections		1	3	10					14	$ 1,489		$ 1,489
	References/Report Preparers		1	1			8			10	$ 1,025		$ 1,025
C	**Public Review Draft EIR**	2	10	24	24	24	24	4	6	118	$ 12,824	$ 600	$ 13,424
D	**Final EIR**	2	22	39	18	18	18	2	6	125	$ 15,058	$ 650	$ 15,708
E	**Mitigation Monitoring and Reporting Program**		1	2			6	1		10	$ 1,103		$ 1,103
F	**CEQA Findings and Notice of Determination**		3	8			22	1		34	$ 3,721		$ 3,721
G	**Meetings**		10	12						22	$ 3,334	$ 400	$ 3,734
H	**Project Management**	2	20	38						60	$ 9,024		$ 9,024
	Totals	16	123	270	125	137	236	24	42	973	$ 112,255	$ 2,700	$ 114,955

Notes:

1. Direct Costs include Vehicle Use, Equipment, Printing and Mailing Supplies, and Outreach Materials.

Optional Tasks													
	Water Supply Assessment	2	20	44	8	8	48	4	6	140	$ 16,574		$ 16,574

Appendix – Resumes

The Altum Group
Strive Higher

Michael A. Peroni
President

Education:

Bachelor of Science with Honors, Urban Planning, California State Polytechnic University, Pomona, California, 1972.

Associate of Science with Great Distinction, Architecture, Sacramento City College, Sacramento, California, 1969.

Registrations:

Associations:

Charter Member of American Planning Association

Member of the Association of Environmental Planners

Member of Urban Land Institute

Qualifications:

Mr. Peroni has over 40 years of experience in municipal planning, environmental planning, and urban design. He had his own consulting practice (Smith, Peroni & Fox, Planning Consultants, Inc.) for 12 years and has served as a principal with other firms prior to establishing The Altum Group. Since becoming a consultant in 1979, he has served as office manager/principal as well as project manager on a variety of projects throughout the Inland Empire, representing a mixture of large- and small-scale land developments including resort, industrial, residential, recreational, commercial, wind energy, and public projects. He has served as a project planner for the revision of the Palm Springs, Rancho Mirage, and Desert Hot Springs General Plans, and a principal-in-charge for the revisions of the Redlands and Coachella General Plans. His work has also included the preparation of Environmental Impact Reports and Statements. Examples include an Environmental Impact Statement for the Bureau of Indian Affairs evaluating an 18,000-acre new town south of Tucson, Arizona and Environmental Impact Reports for the Shadowrock, Palm Springs Classic, Canyon Park Resort and Spa developments in Palm Springs, The Classic Club, the Palm Springs General Plan Update and the 46-square-mile North Sphere Annexation in Palm Springs, and the Section Four (Willows Golf Resort) North Sphere Project in Palm Desert.

Prior to becoming a consultant, Mr. Peroni was employed by the City of Palm Springs for 7 years in mid-management supervisory positions. While with the City, he was project planner for the General Plan and related elements, environmental review, land use studies, zoning administration, park and open space management, growth management analysis, capital improvement programs, bikeway network and park design. Mr. Peroni has also mastered project evaluation, grantsmanship, and ordinance preparation. As senior planner with the City, he gained experience in budget preparation and served as staff advisor to the Architectural Advisory Committee. He has served as a board member on the Downtown Business Improvement District, and also on the Board of Parks, Open Space and Trails (POST) in the City of Palm Springs. His community service includes terms as president of the Palm Springs Lions Club, Palm Springs Jaycees and Palm Springs Band Boosters. He is currently a Board Member of the Coachella Valley Lincoln Club.

Project Experience:

Mark Technology WECS 71
Banning Pass, Riverside County, CA
Preparation and processing of permit entitlement and associated environmental documentation to facilitate approval of a 209 WECS on 640 hillside acres. Effort included processing materials through the County of Riverside and the Bureau of Interior.

Indian Palms Redevelopment Draft/Final Environmental Impact Report
Indio, CA
Mr. Peroni helped prepare an Environmental Impact Report for a highly controversial redevelopment project to revitalize an outdated golf clubhouse and hotel. At the center of the controversy was an adobe structure that was alleged to have hosted several famous celebrities. The report included extensive evaluation of the visual and historical impacts to the site.

Dillon Wind WECS Draft/Final Environmental Impact Report
Riverside County, CA
Mr. Peroni helped prepare portions of an EIR for a proposed 45-megawatt Wind Energy Conversion System for 45 separate one-megawatt turbines located along the northern border of Palm Springs. Forty WECS were sited in Riverside County and five WECS were located in the City. The County was the lead agency and the City of Palm Springs was a responsible agency.

Eagle Mountain Landfill Specific Plan
Eagle Mountain, CA
Specific Plan for 2,272-acre landfill and material recycling facility at Eagle Mountain, CA.

Eagle Mountain Townsite Specific Plan
Eagle Mountain, CA
Specific Plan for this mixed-use community adjacent to proposed landfill site at Eagle Mountain, CA.

Eagle Mountain Landfill/Townsite EIS/EIR
Eagle Mountain, CA
Preparation of land use impact analysis portion of EIS/EIR for 2,272-acre landfill and townsite Specific Plan at Eagle Mountain, CA.

Seawest Mountain View Windfarm (WECS 103) EIR
Riverside County, CA
EIR for windfarm project consisting of two alternatives ranging between 35 and 53 turbines in Riverside County, CA.

Coachella Valley Association of Governments
Coachella Valley, CA
Master environmental assessment and project growth scenarios for the Coachella Valley (1,500 square miles). Contract involved Riverside County and all of the Coachella Valley cities.

Thousand Palms 113
Riverside County, CA
Prepared an Environmental Impact Report for a 454-unit single-family residential subdivision on 113 acres in Thousand Palms, CA.

The Altum Group
Strive Higher

Chris Moore, AICP, ENV SP

Director of Urban and Environmental Management

Education:

M.S., Community and Regional Planning, Univ. of Texas, 1998

B.A., Environmental Biology and Environmental Conservation (double major), University of Colorado at Boulder, 1994

Registrations:

American Institute of Certified Planners (AICP), cert. #017711, since 2002.

Envision Sustainability Professional (ENV SP), Institute for Sustainable Infrastructure, cert. #13492, since 2015.

Associations:

American Planning Association

Association of Environmental Professionals

City of Del Mar – Design Review Board – Ex-Officio Board Member

Carmel Valley Community Planning Board, 2011 to 2016

Qualifications:

Chris Moore has 20 years of experience in the environmental and urban planning fields. Mr. Moore manages both the Planning and Environmental Planning groups for The Altum Group. He has managed or contributed to a wide variety of projects, primarily within the western U.S., related to CEQA, NEPA, Endangered Species Act, Section 404 of the Clean Water Act, and Section 106 of the National Historic Preservation Act, among other regulations. He has been involved in hundreds of development projects of many types, from early due diligence, through planning/permitting, construction-phase compliance, and post-construction restoration. In recent years, he has also worked as a contract planner, providing development review and CEQA review services to various Southern California municipal planning agencies. Other areas of expertise include urban planning, land use, socioeconomics, Environmental Justice, community impact assessment, and public outreach/collaborative planning. Mr. Moore has broad-based experience managing all phases of development projects involving transportation, water, oil/gas, and electrical transmission line infrastructure, solar and wind energy power plants, residential, commercial, and mixed-use development on both private and public lands. Mr. Moore has managed many projects involving corridor studies, bicycle/pedestrian facility planning, access management plans, trail and open space planning, general plans, specific plans, community plans, and neighborhood plans. Currently, Mr. Moore serves on the City of Del Mar's Design Review Board as an Ex-Officio Board Member. In recent years Mr. Moore served on the Carmel Valley Community Planning Board.

Imperial Valley to Dixieland 230-kV Transmission Line and Substation Project NEPA/CEQA Document and Tech Studies, Imperial Irrigation District (IID), Imperial County, CA

Prior to joining Altum, our proposed project manager, Chris Moore, served as project manager for environmental assessment/mitigated negative declaration (EA/MND), biological assessment, Class III cultural resources report, and related environmental documentation for a 230-kV transmission line project within approximately 7.4 miles of new right-of-way southwest of El Centro, and extending from the existing Imperial Valley substation northward to the proposed Liebert substation. The NEPA/CEQA document evaluated three project alignments that cross BLM open desert areas and agricultural land. Extensive cumulative impact analysis was conducted. Close coordination with the BLM El Centro field offices was very important for the project.

Blythe Solar-Thermal Energy Power Plant Application for Certification (AFC), Solar Millennium, Riverside County, CA

Prior to joining Altum, our proposed project manager, Chris Moore, supported project management staff with coordination related to biological technical reports, desert tortoise surveys, wetland surveys and delineations, and CDFW streambed alteration agreements. Provided project management support in developing document deliverable schedules and related to project work plans.

Mojave Solar Power Plant Project Application for Certification (AFC), Abengoa, San Bernardino County, CA
Prior to joining Altum, our proposed project manager, Chris Moore, served as deputy project manager and QA/QC reviewer for an AFC and a variety of environmental technical studies for the Abengoa Mojave Solar Power Plant project. The proposed project is a nominal 250-MW solar electric generating facility to be located on a 1,765-acre site near Harper Dry Lake in an unincorporated area of San Bernardino County. Key issues for the AFC and related environmental technical studies included jurisdictional waters, Mojave Desert tortoise, other protected plants and animals, and archaeological sites.

Seeley Market and Gas Station Façade Improvement Project, Conditional Use Permit Application and Visual Impact Assessment Memo, Seeley, Imperial County, CA
Prior to joining Altum, our proposed project manager, Chris Moore, assisted the Seeley Market and Gas Station for a Conditional Use Permit (CUP) permit application with the County of Imperial. Mr. Moore served as principal author of a Visual Impact Assessment (VIA) memo for a proposed façade improvement project involving additional signage to the Seeley Market and Gas Station in Seeley. The proposed project involved adding signage on existing building facades of the existing market building, beyond that allowed by the County's sign ordinance, and pursuant to the County of Imperial's zoning requirements for the property. The additional signage required a CUP application, with the VIA memo as a supporting document. The County of Imperial used the VIA memo in support of their preparation of a CEQA Initial Study checklist for the project. Mr. Moore represented the applicant at the County of Imperial – Environmental Evaluation Committee meeting and at a Planning Commission meeting, answering technical environmental/planning questions from board members at each meeting, and securing CUP approval from the Planning Commission.

Desert Springs Resort Specific Plan EIR, County of Imperial, CA
Prior to joining Altum, our proposed project manager, Chris Moore, served as project manager for the final EIR addressing the Specific Plan for a proposed 1,105-acre master-planned outdoor desert recreational resort community proposed within undeveloped private land approximately 10 miles to the northwest of El Centro. The proposed development consisted of 1,475 resort/vacation units, a series of lakes and canal-ways, golf course, and other resort facilities. Key issues included biological resources, cultural resources, land use/planning consistency, and consistency with military operations and planning documentation related to the Naval Air Facility El Centro (NAFEC). The project involved thorough research of NAFEC's land use requirements, which was key to resolving comments on the EIR.

Ocotillo Wells State Vehicular Recreation Area (SVRA) General Plan Update and EIR, California Department of Parks and Recreation Off-Highway Motor Vehicle Recreation (OHMVR) Division, Imperial and San Diego Counties, CA

Prior to joining Altum, our proposed project manager, Chris Moore, served as the project manager for planning, environmental, and public outreach services. The Ocotillo Wells SVRA covers over 80,000 acres in Imperial and San Diego Counties. Managed a variety of environmental technical studies, a comprehensive public outreach program, alternatives analysis, development of the general plan, and the EIR.

KN/KS 230-kV Transmission Line Tubular Pole Replacement Project NEPA/CEQA Document and Tech Studies, Imperial Irrigation District (IID), Imperial County, CA
Prior to joining Altum, our proposed project manager, Chris Moore, served as Project Manager for an EA/MND, biological assessment, and cultural resources report for a 230-kV transmission line upgrade project. This project involved steel pole replacement and/or upgrades at 41 locations along the approximate 55-mile existing transmission line extending from the Midway substation near Niland to the Coachella Valley substation in Coachella. Close coordination with the BLM El Centro field offices was very important for the project.

The Altum Group
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Thomas Strand, MS

Senior Environmental Planner

Education:

M.S., Geography, Watershed Science,

B.A., Geography, Methods of Geographical Analysis

Associations:

Association of Environmental Professionals

Qualifications:

Thomas Strand has over six years of experience in the environmental planning field managing and/or preparing multiple CEQA and NEPA documents. He is also knowledgeable of other various environmental regulations including the Clean Water Act, Clean Air Act, and Endangered Species acts. Mr. Strand has experience preparing Initial Studies, Notice of Exemptions, Negative Declarations, Mitigated Negative Declarations, Environmental Impact Reports, and various technical report sections. He is well versed in researching, writing, and editing planning and environmental documents and permit applications, preparing them for publication/submission, and processing them through government agency review and approval processes. His project experience is concentrated in the southern California region, focusing on industrial projects, renewable energy projects, K-12 education projects, housing projects, programmatic level environmental documents (i.e. EIRs for general plans, community plans, specific plans, etc.), and commercial and mixed-use development projects.

Truckhaven Geothermal Exploration Well Project, County of Imperial, CA
Managed the preparation of the MND and EA and associated technical studies for the project. Project included coordination with state and federal agencies, and involved the drilling of eighteen exploratory wells in the Truckhaven Geothermal Lease Area within Imperial County.

Heber 1 Geothermal Project, County of Imperial, CA
Managed the preparation of the MND and associated technical studies for the project. Project included coordination with state and federal agencies and involved the expansion of the Heber 1 geothermal plant.

Willey Reservoir Embankment Stabilization Project, Imperial Irrigation District, Imperial County, CA
Managed the preparation of the Initial Study and Mitigated Negative Declaration and associated technical studies for the project. The project involves the stabilization of 525 linear feet of the embankment separating the New River from Willey Reservoir. The project also included development and submittal of 401 and 404 permit applications, and 1602 notification letter.

San Onofre Nuclear Generation Station Environmental Management and Compliance during Decommissioning, San Onofre, San Diego County, CA
Assisted with the development and review of key CEQA and NEPA related documents, which includes development of the mitigation plans and compliance strategies, submittals, and representation with the Community Engagement Panel.

Big Horn Sheep Mitigation Project, SDG&E, San Diego County, CA
Prepared the Environmental Assessment (EA) for the invasive species vegetation management in portions of Myer Creek and Devils Canyon Creek to satisfy the Peninsular bighorn sheep mitigation requirements for the Sunrise Powerlin k (SRPL) Project. The development of the EA includes incorporation of technical studies including a Biological Technical Report, an Archaeological Survey Report, and a Historical Resources Compliance Report into the NEPA document.

Otay Lakes Campground Project, County of San Diego, San Diego, CA
Managed the preparation of the IS and MND and associated technical studies for the project. Project involves the development of a campground and various site improvements including a zip-line, high ropes course, archery, restrooms and showers, and a flag plaza and meeting area. Project also involved consultation with CDFW and redesign of the project due to the presence of QCB.

Skookumchuck Wind Project, RES America Development Inc., Lewis and Thurston Counties, WA
Assisted in the design and development of all NEPA/SEPA documentation, which includes a Habitat Conservation Plan, Critical Area Reports, Substantial Shoreline Development Permit, a Joint Area Review Permit, and a Conditional Use Permit for both Thurston and Lewis County.

Skookumchuck Wind Project, RES America Development Inc., Lewis and Thurston Counties, WA
Assisted in the design and development of all NEPA/SEPA documentation, which includes a Habitat Conservation Plan, Critical Area Reports, Substantial Shoreline Development Permit, a Joint Area Review Permit, and a Conditional Use Permit for both Thurston and Lewis County. This project produced the first Habitat Conservation Plan for the marbled murrelet and the bald and golden eagle and led to the permitting of the first wind project in western Washington.

TheAltumGroup
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Maribel Covarrubias

Assistant Planner

Education:

Bachelor of Science: City and Regional Planning; California Polytechnic State University, San Luis Obispo, 2017

Various CEQA Workshops, 2018

Associations:

American Planning Association Member

Qualifications:

Maribel Covarrubias is an Assistant Planner with The Altum Group working to provide entitlement support, code development, administrative duties, technical support, and regional planning documents. She is also well-versed in the California Environmental Quality Act (CEQA) and assists with technical analysis for a variety of issue areas. She understands the relationship between the built and natural environments and is able to identify potential impacts and create the appropriate level of mitigation.

Ms. Covarrubias is very skilled in in Architectural Technology including techniques for drafting and the associated software AutoCad, SketchUp and GIS. She utilizes these programs to create models and photosimulations of potential developments to present to the Clients and the public. Ms. Covarrubias is also a key part of Altum's community outreach team providing Spanish translations and attending charettes and public meetings for projects.

Glamis Specific Plan, Glamis, CA

Ms. Covarrubias assisted in the preparation of the Glamis Specific Plan in which extensive review of existing County General Plan/associated EIR, available reports, plans, and studies that would provide an important data base for site and policy planning. As a Planner, Ms. Covarrubias assisted in the development of the Specific Plan that would ensure a sustainable future for the project site while considering the environmental constraints such as the Flood Plain, Bureau of Land Management (BLM) land, Wetlands, and Visual Resources.

Dutch Bros. Coffee, Indio, CA

Ms. Covarrubias assisted in the preparation of a draft IS/MND for the Dutch Bros. Coffee shop located in the City of Indio. Her responsibility was to analyze all data provided by the City's General Plan, the prepared technical studies, and other publicly available resources, and incorporate these findings into the draft IS/MND. Ms. Covarrubias also ensured the proposed project was in compliance with the CEQA Guidelines and Statute based on good research and findings.

Amortization of Westside Specific Plan Project, National City, CA

Ms. Covarrubias assisted with the City of National City to implement the amortization of nonconforming land uses in the Westside Specific Plan based upon the standards established by the United States Environmental Protection Agency (EPA) as part of the National City Partnership for Sustainable Communities Brownfield Pilot Project. The project requires review of 125 parcels for neighborhood impacts and business operations as they relate to the Westside Specific Plan area. Ms. Covarrubias conducted field surveys to review all properties to be considered for amortization and coordinated with the City to provide to Council a finalized ranking of properties for their consideration for Amortization.

Bloomington Commercial Center Initial Study, Bloomington, San Bernardino County, CA
Ms. Covarrubias assisted in preparing a California Environmental Quality Act (CEQA) document that examined a proposed commercial development in the unincorporated community of Bloomington, San Bernardino County, California. The project involved the construction of a gas station, a car wash, truck stop, and several restaurants on an 8.9 acre undeveloped parcel of land. Ms. Covarrubias applied her knowledge of CEQA and her understanding of the issues that are applicable to this type of development in order to provide an appropriate analysis required for a completed CEQA document.

Church at the Red Door, Indio, CA
Maribel Covarrubias assisted in the preparation of an Administrative Draft Initial Study for the development of a new worship center and campus. The Administrative Draft Initial Study for the project would be in compliance with the CEQA Guidelines using an environmental checklist approved by City Staff. Ms. Covarrubias compiled essential data provided by the City's General plan, and other publicly available and relevant resources in order to address all topical issues identified in the checklist.

7-Eleven Gas Station Project, Escondido, CA
Ms. Covarrubias assisted in preparing a California Environmental Quality Act (CEQA) document that examined a proposed commercial development in Escondido, California. The project involved the construction of a 7-Eleven convenience store and fueling station on a developed 1.14-acre site. Ms. Covarrubias applied her knowledge of CEQA and her understanding of the issues that are applicable to this type of development in order to provide an appropriate analysis required for a completed CEQA document.

Project Coordination, Various Projects, CA
As Project Coordinator for the Environmental Planning and Planning Groups of The Altum Group, Ms. Covarrubias coordinates all aspects of the life of all projects within the department varying in size and complexity. She assists the Project Manager by directing, organizing and facilitating all project activities including meetings, scheduling, project budgets, project status, Client communication, subconsultant coordination, project submittals, and invoicing.

- DHS 109 Off-Site Sewer Project and Environmental & Engineering Project, Desert Hot Springs, CA
- 29 Palms Gas Station, Twenty-Nine Palms, CA
- Indio Highway Safety Improvement Program Project Preliminary Environmental Studies, Indio, CA
- Glamis Specific Plan, Glamis, CA
- NB Coachella Project IS/MND, Coachella, CA
- Moreno Beach Commercial Center, Moreno Valley, CA
- Torres Martinez strategic Plan, Mecca, CA
- 1000 Palms 278, Thousand Palms, CA
- Warehouse and Fleet Maintenance Building, Rancho Cucamonga, CA
- Two Bunch Palms Specific Plan, Desert Hot Springs, CA
- Bel Air Greens Resort and Residences, Palm Springs, CA
- Amortization of the Westside Specific Plan, National City, CA
- Escondido 7-Eleven, Escondido, CA
- Vernola Family Park Expansion Initial Study and Mitigated Negative Declaration, Jurupa Valley, CA
- Fee-To-Trust Land Acquisition and Gas Station/Convenience Store Environmental Assessment, Twenty-Nine Palms, CA
- Christ's Church of the Valley Campus Expansion Initial Study and Mitigated Negative Declaration Peer Review, Rancho Cucamonga, CA
- Hellman Avenue IS/MND Peer Review, Rancho Cucamonga, CA
- CVAG Valley-wide ITS Improvements Preliminary Environmental Study, Coachella Valley, Riverside County, CA

TheAltumGroup
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Yaneli Hernandez, MURP

Assistant Planner

Education:

Masters of Urban and Regional Planning, California Polytechnic State University, Pomona, 2019

B.A., Landscape Architecture, California Polytechnic State University, Pomona, 2010

Qualifications:

Ms. Hernandez is an experienced planner with a background in landscape architecture and municipal planning. Her professional knowledge stems from assignments in the public sector at the City of Rancho Cucamonga where she managed development projects, assisted with permit applications, and provided general counter services. She interpreted and applied applicable state, county and local codes, ordinances and regulations and helped initiate actions necessary to correct deficiencies or violations of regulations. Ms. Hernandez also reviewed plans for zoning conditions and compliance with development standards.

Ms. Hernandez also worked in the Planning Department for the Agua Caliente Band of Cahuilla Indians where she assisted in compiling and analyzed qualitative and quantitative data for the Tribe; processed applications for Temporary Use Permits (TUP) and Conditional Use Permits (CUP); prepared Staff Reports, Agendas, Memorandums, and Standard Operation Procedures; and interpreted Tribal Land Use Ordinance, Specific Plans, and General Plans. She worked in collaboration with regional Cities regarding project proposals and present projects in front of the Indian Planning Commission. She has a strong understanding of projects in the Inland Empire and helps facilitate analysis and submittal of permit applications and CEQA/NEPA documents. Ms. Hernandez has experience interpreting and applying applicable state, county and local codes, ordinances and regulations to submitted projects and initiating actions necessary to correct deficiencies or violations.

Project Experience:

Dutch Bros Coffee Initial Study and Mitigation Negative Declaration, Indio, CA

Prepared sections of an Initial Study and Mitigated Negative Declaration for an 887 square foot building consisting of a drive-through, patio area, and required parking. Ms. Hernandez analyzed the Phase I Environmental Assessment document pertaining to the Proposed Project site that was prepared by a sub consultant. She analyzed the document in order to prepare and write the Hazards and Hazardous Materials section of the Initial Study as well as other sections of the document.

Initial Study and Mitigated Negative Declaration (Confidential), County of San Bernardino (unincorporated community), CA

Assisted in the preparation of an Initial Study and Mitigated Negative Declaration for a Confidential Client to evaluate the development of an approximately 9 acre site comprised of a fulling station and other service amenities. Ms. Hernandez analyzed the Phase 1 Environmental Site Assessment document related to the project site to write the Hazards and Hazardous Materials section of the Initial Study and Mitigated Negative Declaration. She analyzed various documents pertaining to the project site that would be utilized to write other sections of the Initial Study. The proposed project is adjacent to residential and commercial projects located within an unincorporated community of San Bernardino County.

7-Eleven Gas Station Initial Study and Mitigated Negative Declaration, Escondido, CA
Participated in the preparation of an Initial Study and Mitigated Negative Declaration for the evaluation of a proposed convenience store (7-Eleven) on a 1.13 acre lot. The project consisted of a 4,088 square foot convenience store with a 4,284 square foot gas station canopy that included four fuel pumps and two underground storage tanks. She analyzed a Cultural Resource Survey Report from sub consultants to write the Cultural Resource section as well as analyzing other City documents to write additional sections of the Initial Study.

DHS 109 Industrial Park Initial Study and Mitigated Negative Declaration, Desert Hot Springs, CA
Prepared sections of an Initial Study and Mitigated Negative Declaration for the development of an industrial park consisting of 57 condo lots for industrial development, 4 retention basins, and a private on-site power plant. The proposed project would be constructed in four phases that would total 109 acres a full project built-out. Ms. Hernandez evaluated City documents such as the General Plan and the City's Municipal Code to write the aesthetics section of the Initial Study.

Church at the Red Door Initial Study and Mitigated Negative Declaration, Indio, CA
Assisted in the preparation of an Initial Study and Mitigated Negative Declaration to evaluate the development of a worship center on a 13.07 acre lot. The proposed project would be built in two phases with phase one consisting of 36,650 square foot church building and 26,704 square foot traversing covered outdoor walkway. Phase two consisted of a 24,000 square foot two-story expansion along the eastern face of the church building. Ms. Hernandez analyzed City documents to write section of the Initial Study.

Specific Plan (Confidential), Imperial County, CA
Prepared sections of a Specific Plan for a Project located within Imperial County. The project site consists of approximately 140 acres. Ms. Hernandez assisted in writing sections of the Specific Plan which would identify new proposed land uses for the project site, which would be built-out in several phases.

Two Bunch Palms Specific Plan Amendment, Desert Hot Springs, CA
Prepared contents and sections for a Specific Plan Amendment relating to the Two Bunch Palms Specific Plan. The Specific Plan Amendment would amend an approximate 9.2-acre portion of the Two Bunch Palms Specific Plan consisting of two parcel lots. The Specific Plan Amendment would modified the current Specific Plan designation to permit a Recreational Vehicle (RV) Park. The amendment would also consist of amending the development standards for zoning, landscaping, and architectural guidelines relevant to the RV Park.

Torres Martinez Hotel and Recreational Vehicle (RV) Park (On-Going Project), Thermal, CA
Ms. Hernandez assisted in the development of a preliminary land use plan for a portion of a 640-acre site located on the east side of Highway 86. The preliminary land plan consists of a 50-unit hotel and a 50-space recreational vehicle park. Efforts also included GIS work, AutoCAD design, and communication efforts with Caltrans District 11.

Site Development Review, Rancho Cucamonga, CA
Performed plan checks on site plans submitted for Site Development Review to the City of Rancho Cucamonga. These applications consisted of residential additions or Accessory Dwelling Units that were equal to or greater than fifty percent 50% of the existing square footage of the home. She evaluated architectural changes, color and materials, bulk, scale, and changes in the line of sight. She assured that projects where in compliance with development standards listed in the Municipal Code and any associated specific plans.

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Kyle Mezrahi

Assistant Environmental Planner

Education:

B.A., Environmental Studies, Lewis and Clark College, Portland; 2020

Qualifications:

Kyle Mezrahi is currently an Assistant Environmental Planner with The Altum Group following a successful internship in the Planning department. His responsibilities include analysis for both CEQA and NEPA documents, conducting field visits for projects, and coordinating with technical subconsultants. Mr. Mezrahi is also skilled with GIS and utilizes the platform to create detailed data sets and associated maps and graphics.

Desert AIDS Campus Expansion Project IS/MND, Palm Springs, CA

Mr. Mezrahi assisted with preparation of an IS/MND examining an expansion to the Desert AIDS medical offices/facilities in the City of Palm Springs. The project includes construction of an 18,500 square foot Pavilion, site and landscaping improvements to the existing campus, and the construction of 61 special needs affordable housing units on a 13.2-acre site. The project included peer review of a number of applicant provided technical studies prior to inclusion in the IS/MND.

DHS 109 Industrial Park IS/MND, Desert Hot Springs, CA

Mr. Mezrahi assisted with sections of an Initial Study and Mitigated Negative Declaration for the development of an industrial park consisting of 57 condo lots for industrial development, 4 retention basins, and a private on-site power plant. The proposed project would be constructed in four phases that would total 109 acres a full project built-out.

Lake and Mountain Commercial Center EIR, Lake Elsinore, CA

Assisting with preparation of an EIR for a proposed commercial center located on 5.6 acres at the northwest corner of Mountain Street and Lake Street in Lake Elsinore. The project proposes development of approximately 32,695 square feet of commercial retail including a convenience store with an attached quick-serve restaurant, gas fueling canopy, express car wash, two retail buildings, a drive-through restaurant with an attached retail building. The EIR examines a number of issue areas including aesthetics, traffic and circulation, noise, biological and cultural resources, and air quality.

Two Bunch Palms Specific Plan EIR Addendum, Desert Hot Springs, CA

Mr. Mezrahi assisted with preparation of an EIR Addendum relating to the Two Bunch Palms Specific Plan - a proposed RV Park on a 9-acre parcel (2 lots) in Desert Hot Springs. Altum Planning staff are preparing the Specific Plan Amendment (SPA) to amend the development standards for zoning, landscaping, and architectural guidelines, relevant to the RV Park. As pursuant to CEQA, an EIR Addendum with technical studies (i.e., Traffic, Air Quality, Greenhouse Gases, Biological, and Noise), is required in order to analyze all potential impacts associated with the SPA.

Church at the Red Door IS/MND, Indio, CA

Mr. Mezrahi assisted with the preparation of an Initial Study and Mitigated Negative Declaration to evaluate the development of a 14-acre site to a new worship center and campus. Analyzed technical reports from sub consultants to

write various sections within the Initial Study including geology, air quality, and biological resources. The proposed project is located at the southeast corner of Jefferson Street and Avenue 49 in the City of Indio, California.

Appendix – Schedule of Hourly Fees

TheAltumGroup
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73710 Fred Waring Drive, Suite 219
Palm Desert, CA 92260
(760) 346-4750 Tel
(760) 340-0089 Fax

2020 SCHEDULE OF HOURLY RATES

Staff Member	Hourly Rate
Principal	$184.00
Director	$163.00
Senior Project Manager	$158.00
Project Manager	$152.00
Assistant Project Manager	$142.00
Senior Associate	$131.00
Associate	$116.00
Assistant	$90.00
Project Coord/Technician	$79.00
Administrative Assistant/Clerical	$58.00
Intern	$37.00

Utility Location, GIS and Drone Services:

Mobilization - 1st Hour	$150.00
1-Man Crew - Non Prevailing	$90.00
2-Man Crew - Non Prevailing	$169.00
1-Man Crew - Prevailing	$125.00
2-Man Crew - Prevailing	$250.00

Survey Services:

Survey Crew - Non Prevailing	$225.00
Survey Crew - Prevailing	$275.00

Survey Crew Rates:

Hourly rates include standard 2-man crew, 1-man robotic crew and 1-man GPS crew.

Reimbursables Expenses:

Mileage is billed at IRS business rate plus 15%
Printing, reproduction, etc. are billed at direct cost plus 15%

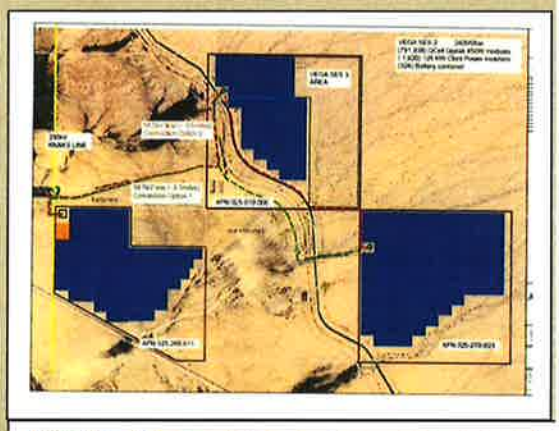
Altum's Schedule of Hourly Rates is subject to change based on an annual review of the cost of living and employee wage increases. In the event Altum's Schedule of Hourly Rates changes, a corresponding percentage increase shall be applied to all remaining Agreement budgets and such Schedule of Hourly Rates shall apply to subsequent Extra Work.

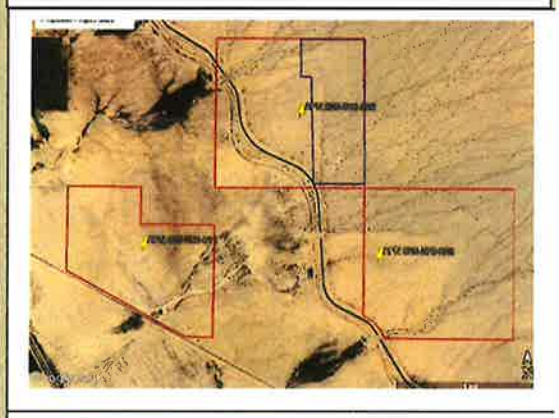
REQUEST FOR PROPOSAL
VEGA SES 2, 3 & 5 SOLAR PROJECT
ENVIRONMENTAL IMPACT REPORT

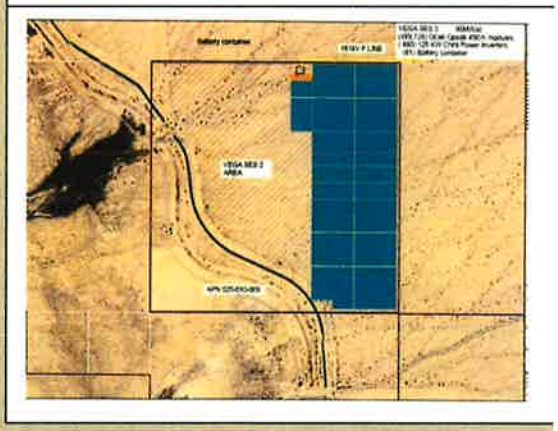
Submitted to:

Submitted by:

November 18, 2020







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315 South Coast Highway 101
Suite U277
Encinitas, CA 92024

Direct: 858-353-7073
Main: 888-316-4813
Fax: 760-501-0219

November 18, 2020

Imperial County Planning & Development Services Department
Attn: Jim Minnick, Director
801 Main Street
El Centro, CA 92243

RE: Request for Proposal for VEGA SES 2, 3 & 5 Solar Project Environmental Impact Report (EIR)

Dear Mr. Minnick,

Ericsson-Grant, Inc. (EGI) is pleased to submit our scope/cost to prepare the EIR for the VEGA SES 2, 3 & 5 Solar Energy Project. EGI is best qualified to prepare the EIR based on our prior experience preparing EIRs for multiple solar projects throughout Imperial County.

EGI successfully completed environmental documents for several large-scale solar projects including the Campo Verde Solar Project, Wistaria Ranch Solar Energy Center Ranch, the Campo Verde Battery Storage System Supplemental EIR, Seville Solar Farm Complex EIR and Seville 4 Solar Project EIR. We have provided third-party compliance monitoring for numerous solar developments in the Imperial Valley, throughout the state of California and beyond. Our experience with oversight during construction provides EGI with a unique perspective on mitigation measures that is readily translated to formulating effective feasible and effective methods of reducing and minimizing impacts.

Our staff involved with management and preparation of the EIR includes Kevin L. Grant as Principal in Charge/Project Director, Melanie J. Halajian, AICP as Project Manager and Bert Verrips as Assistant Project Manager. EGI's commitment to providing the highest level of service to the County will continue with preparation of the VEGA SES 2, 3 & 5 Solar Project EIR. We appreciate the opportunity to work with the County on this Project.

If you have any questions, please contact me directly at 858-353-7073.

Sincerely,

Kevin L. Grant
Managing Principal

Enclosures: Four (4) Hard Copies of Proposal with Resumés Attached

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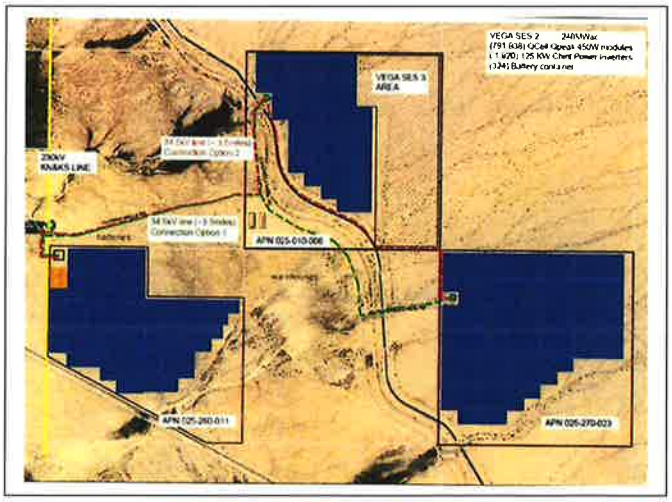
PROJECT UNDERSTANDING

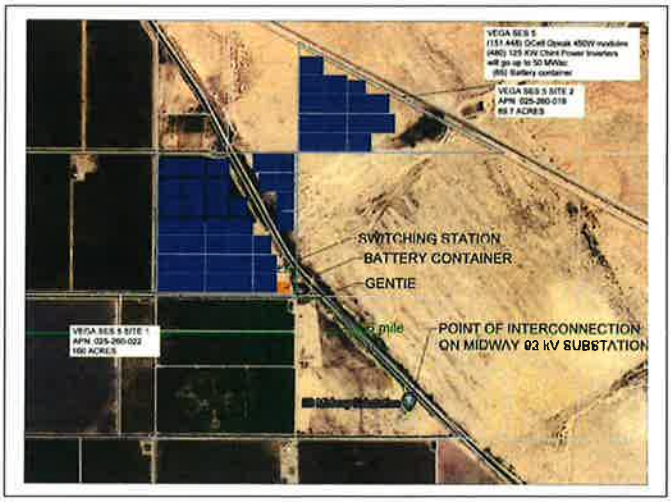
EGI has prepared the following scope and cost to prepare the EIR for the VEGA SES 2, 3 & 5 Solar Project based on the Request for Proposal (RFP) dated October 26, 2020 and the Conditional Use Permit (CUP).

The VEGA 2 SES Project would include a 240-megawatt (MW) alternating current (AC) solar photovoltaic (PV) energy generation and 240 MW/960 MW hour battery storage project. The Project occupies three parcels encompassing 1,483 acres located east of Niland in unincorporated Imperial County. The parcels are designated Agriculture on the Imperial County General Plan and zoned S-2-RE (Open Space/Preservation with a Renewable Energy Overlay). Renewable energy projects are conditionally allowed in the S-2-RE zoning designation. Electricity produced by VEGA 2 SES would be delivered to the Imperial Irrigation District (IID) through an interconnection switching station delivering to the IID 230-kV "KN/KS" Line.



The VEGA 3 SES Project would include a 60-megawatt (MW) alternating current (AC) solar photovoltaic (PV) energy generation and 60 MW/240 MW hour battery storage project. The Project occupies one parcel encompassing 590 acres located east of Niland in unincorporated Imperial County. The parcels are designated Agriculture on the Imperial County General Plan and zoned S-2-RE (Open Space/Preservation with a Renewable Energy Overlay). Renewable energy projects are conditionally allowed in the S-2-RE zoning designation. Electricity produced by VEGA 3 SES would be connected to the existing utility approved point of interconnect at the northern boundary of the project parcel to the IID 161 kV "L" Line.

The VEGA 5 SES Project would include a 50-megawatt (MW) alternating current (AC) solar photovoltaic (PV) energy generation and 50 MW/200 MW hour battery storage project. The Project occupies one parcel encompassing 590 acres located east of Niland in unincorporated Imperial County. The parcels are designated Agriculture on the Imperial County General Plan and zoned S-2-RE (Open Space/Preservation with a Renewable Energy Overlay); A-2-RE (General Agriculture with Renewable



Overlay); and A-3-RE (Heavy Agricultural with Renewable Energy Overlay). Renewable energy projects are conditionally allowed in all three zoning designations. Electricity produced by VEGA 5 SES would be conducted through a proposed 92 kV generator intertie line and delivered to the IID through a short interconnection with the IID 92 kV "Midway" Substation or the proposed Project switching station.

Battery energy storage systems (BESS) are proposed adjacent to each solar facility. The BESS would consist of either lithium ion or flow batteries. Each Project would be controlled remotely, and no Operation and Maintenance buildings are proposed.

Construction of each project would include a maximum of 150 workers on the solar project and 100 workers for the battery storage and substation.

PROJECT TEAM

Kevin L. Grant, REA I - Principal-in-Charge/Project Manager

Mr. Grant is the Principal and founder of Ericsson-Grant, Inc. Mr. Grant earned a BS in Natural Resources Management from California Polytechnic State University, San Luis Obispo, and an MBA from the University of California, San Diego. Mr. Grant oversees the Company's environmental services throughout California. Mr. Grant has over 25 years of experience preparing and managing environmental reviews for complex projects under CEQA and NEPA. Having worked extensively in the region, he has substantial understanding of the issues the County is facing. As Principal-in-Charge/Project Manager for the VEGA 4 SES Solar Project EIR, Mr. Grant will be responsible for all activities and services provided by the EGI Project team and will ensure that the stipulations of the contract and milestones of the schedule are being met as prescribed. Mr. Grant will also provide senior quality control review of all EGI work products and attend public hearings.

Melanie J. Halajian, AICP - Lead Senior Environmental Planner

Ms. Halajian is a Senior Environmental Planner and Project Manager. She earned her MCRP and MBA from California Polytechnic State University, San Luis Obispo. She is also a Member of the American Institute of Certified Planners. She has over 25 years of experience as an environmental planner preparing a variety of environmental documents for infrastructure and development Projects throughout California. She is well versed in the California Environmental Quality Act and understands the importance of early consultation and clear communication with all Project constituents. Ms. Halajian works closely with clients, sub-consultants and various regulatory agencies to ensure all aspects of a Project are adequately addressed. She provides responsiveness and attention to detail in serving clients. Ms. Halajian brings her experience and client-focused approach in serving as the lead senior environmental planner on the VEGA 4 SES Solar Project EIR. She will serve as the day-to-day point

person responsible for regular communication with the Project team and the County as well as management and production of the document.

Bert Verrips, AICP - Assistant Project Manager

Mr. Verrips has over 30 years of experience in successfully managing and preparing environmental documents on a diverse array of projects. He graduated with honors from the School of Planning in the Faculty of Environment at the University of Waterloo, Ontario, which has been regarded as a top environmental planning school in Canada for 50 years. Mr. Verrips' experience includes public infrastructure projects and public planning documents and programs, as well as private development projects. In conjunction with environmental documents, Bert has coordinated and prepared supporting materials for regulatory permits and authorizations from responsible and trustee agencies at the federal, state, and regional levels. Bert has also prepared a number of feasibility studies and is often called upon to provide pre-project advice to clients on the physical, environmental, and regulatory aspects of their projects. Mr. Verrips will author sections of the EIR and be involved as Assistant Project Manager for the VEGA 4 SES Solar Project EIR.

Miles Leandro, PE - Project Manager

Mr. Leandro earned a Bachelor of Science in Civil Engineering from San Diego State University. Mr. Leandro offers his design experience and expertise on precise grading design, hydrology analysis, and stormwater quality assurance developed from over 10 years of experience. He is currently providing service for SDG&E on the Cleveland National Forest Wood to Steel Pole Replacement project, to an independent power producer on Phase 1 of the Wistaria Ranch Solar project - a 1,000-acre, 100MW power plant in Imperial County, and has begun design on a 1,000 acre modern greenhouse development in San Bernardino County. Mr. Leandro will serve as Project Manager in preparing the Water Supply Assessment and Hydrology Study for the VEGA 4 SES Solar Project.

Konstantin Okun - Senior Engineer

Mr. Okun earned a Bachelor of Science in Civil Engineering from Belarusian National Technical University, Minsk, Belarus. Mr. Okun is currently working on renewable energy and utility projects across California, including several renewable energy projects ISEC West, Campo Verde and SolarGen 2 in the Imperial Valley. He has also provided service to SDG&E on multiple projects: Miguel Substation Complex, Talega Substation, and the Ocean Ranch Substation. He has also been a key team member assisting with design of guard shelter installation at multiple substations for SDG&E. Mr. Okun will provide support with preparation of the Hydrology Study for the VEGA 4 SES Solar Project.

Ian Adam, MESM, CPSWQ, QSD – Principal, Stormwater Manager

Mr. Adam is a firm Principal and Fuscoe's Stormwater Management team leader. His specialty is water resources, with an emphasis in water quality regulations and Resource Agency interaction. He has extensive research and assessment skills garnered from his studies at the Donald Bren School of Environmental Science and Management at UC Santa Barbara. Ian's research included watershed modeling for TMDLs within the Santa Ana River Watershed. Mr. Adam's technical background in water quality combined with his engineering and regulatory experience provides clients with a uniquely trained individual to work with stakeholders, regulatory agencies and other consultants. Mr. Adam has also provided services for over 50 EIRs, General Plans and Specific Plans, and he has become highly proficient in producing CEQA technical reports covering hydrology, water quality, infrastructure and sea level rise.

Alex Bennett, CPSWQ, QSD - Stormwater Specialist III

Mr. Bennett specializes in the intersection of science and water policy, and effectively communicates complex scientific results to a variety of audiences. As a Stormwater Specialist II for Fuscoe Engineering's water quality team, Mr. Bennett serves as a primary author of EIR technical reports, WQMPs, SWPPPs and other stormwater compliance plans required by agencies throughout the State. He has worked on EIR technical reports for General and Specific Plan updates in the cities of Santa Ana, Fountain Valley, Montclair and Bellflower, in addition to smaller scale projects throughout Los Angeles and Orange counties.

ORGANIZATION CHART

The Organizational structure of the team is represented below. EGI will work under the direction of the County of Imperial as the Lead Agency and direct our subconsultant, Fuscoe, for the Hydrology and Water Supply effort.

LEAD AGENCY

Kevin Grant, Principal-in-Charge

Melanie Halajian, AICP
Lead Senior Environmental Planner

Bert Verrips, AICP
Assistant Project Manager

Fuscoe
Miles Leandro, PE Project Manager
Konstantin Okun - Senior Engineer
Ian Adam, Principal, Stormwater Manager
Alex Bennett, Stormwater Specialist III

SCOPE OF WORK

EGI will prepare the EIR as efficiently and cost-effectively as possible by using prior studies and technical reports prepared by the Applicant.

Our Scope of Work assumes the following:

- A project-level EIR will be prepared that analyzes the CUP for each aspect of the Project: Construction; Operation; and Decommissioning. Quantitative and qualitative information based on experience with similar projects will be used to address the decommissioning aspect of the project.
- The format of the EIR will differentiate impacts and mitigation measures applicable to the CUP during Construction, Operation and Decommissioning, as appropriate.
- In cases where an existing study, survey, technical report or model has been prepared by the Applicant, these documents will be peer reviewed by EGI.
- Any changes, modifications or deficiencies required to deem the study, survey, technical report or model adequate will be noted by EGI and will be the responsibility of the Applicant.
- EGI will submit a memorandum documenting the findings of the peer review to the County to provide to the Applicant.
- If the Applicant chooses to have EGI make changes to an existing study, technical report or model, or perform additional surveys and report preparation or modeling, these costs will be borne by the Applicant under a separate scope and cost.
- EGI will provide follow-up review of any revised study, survey, technical report or model and provide written documentation of its adequacy prior to using the documents for preparation of the EIR.

As specified in the RFP, this Scope of Work assumes that the following studies will be prepared by the Applicant and submitted to EGI for peer review: Transportation/Traffic; Biological Resources; Cultural/Historical/Tribal Cultural/Archaeological; Aesthetics/Visual Impacts; Air Quality and Greenhouse Gas; Land Evaluation and Site Assessment (LESA); and Noise.

TASK 1 - PROJECT INITIATION

Project initiation includes EGI attendance at a kick-off meeting, a site visit, initial data collection, and scoping meeting preparation. The Project kick-off meeting will involve County staff, and the entirety of the environmental team. This meeting is assumed to occur via conference call or other distance platform (e.g., Zoom, Microsoft Teams). The following items are also included as part of this task.

Data Collection/Site Visit: EGI will request maps and any existing technical studies that have been prepared for the Project. EGI will also conduct a site visit to photograph the Project parcels and surrounding area. Digital photos will be taken of the project area which will be included in the environmental document as appropriate to portray existing conditions and surrounding uses.

Project Description: Under this sub-task, EGI will prepare a draft Project Description to ensure that both the County and EGI have a complete understanding of all aspects of the Project prior to commencing with a detailed analysis. The draft Project Description will be provided to the County and Applicant for review and comment. EGI will make revisions based on one round of comments (i.e., there will be one review cycle for the Project Description). The Project Description will be provided electronically for mark-up in track-changes.

Notice of Preparation/Notice of Intent: EGI will prepare the Notice of Preparation (NOP) for the EIR and provide a reproducible copy to the County. To facilitate greater expediency and efficiency, printing and/or electronic distribution of the Initial Study and NOP to the State Clearinghouse, local agencies, and individuals as identified on the NOP distribution list will be the responsibility of the County.

I would expand the directive a bit more stating that it makes more sense from a timing perspective for County to send/post docs etc.

Scoping Meeting Presentation: EGI will assist the County in conducting one public scoping meeting for the EIR. This task will involve preparation for the scoping meeting, including coordination with the County and creating meeting materials (sign-in sheet, PowerPoint presentation, and handouts).

Deliverables: *One (1) electronic file of the Project Description for review/comment and one (1) electronic file of the NOP/NOI provided electronically via EGI's ShareFile system.*

TASK 2 - ADMINISTRATIVE DRAFT EIR

An Administrative Draft Environmental Impact Report (ADEIR) will be prepared in conformance with the CEQA Guidelines and County of Imperial CEQA Procedures. The ADEIR will be delivered to County staff electronically for internal review and comment in track-changes prior to public release of the Draft EIR (under Task 3, below). The major sections and areas of concern to be addressed are outlined below.

Introductory Sections: Executive Summary, Introduction and Project Description

Environmental Setting and Analysis: The Environmental Setting and Analysis comprises the main chapter of the EIR and includes separate sections for each environmental topic area identified as having a "potentially significant" or "significant" impact. The text of each section will be formatted so that the impact statements and corresponding mitigation measures stand out from the text discussion for clarity and ease of reference (i.e. impact statement headings and numbers and mitigation measure numbers will appear in bold text). The level of significance of each impact after mitigation will also be provided. Each section will include:

- A full description of the environmental setting specific to each topic area;
- A description of the regulatory setting, including all applicable local, state and federal laws and policies;
- A description of the methodology used for conducting the analysis of each topic area;
- Identification of the applicable standards of significance from CEQA Appendix G and elsewhere, as applicable;

- Identification and discussion of impacts including analysis and conclusion regarding level of significance;
- A consistency analysis with applicable Imperial County General Plan goals, policies and objectives; and
- Mitigation Measures to address potentially significant and significant impacts, including timing and enforcement responsibility, as applicable.

The analysis of each issue will be based on the environmental conditions existing at the time the NOP is issued.

EIR Sections: The EIR is anticipated to include the following sections.

- Agricultural Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Geology and Soils
- Greenhouse Gas Emissions
- Energy
- Hazards and Hazardous Materials
- Noise
- Public Services and Utilities
- Transportation
- Tribal Cultural Resources
- Utilities and Service Systems
- Wildfire

TASK 3 - PREPARATION AND DISTRIBUTION OF DRAFT EIR

The public Draft EIR will be prepared based on consolidated comments received from the County on the Administrative Draft EIR. Requested changes will be incorporated into the Draft EIR as appropriate. The 50-day public and agency review period per the County CEQA guidelines will commence once the Draft EIR is submitted to the State Clearinghouse and made available for public review. It is anticipated that the County will submit the Draft EIR to the State Clearinghouse and distribute the Draft EIR to local agencies and interested parties.

Deliverables: *Ten (10) hardcopies (five [5] hardcopies to include appendices) and fifty (50) CDs of the Draft EIR. Any additional copies will be prepared by EGI at cost to the County.*

TASK 4 – PREPARATION OF FINAL EIR

At the conclusion of the 50-day review period, EGI will review the comment letters received on the Draft EIR and coordinate with County staff to discuss the responses. Assuming a maximum of 20 comment letters from individuals and agencies and/or 150 comments that require answers other than "comment noted," EGI will prepare draft responses to comments, along with an errata section containing any EIR text revisions.

Deliverables: *Electronic copy of the Administrative Final EIR will be provided to the County via EGI's ShareFile. EGI will revise the Final EIR based on comments received from the County. Following completion of all revisions, ten (10) hardcopies (five [5] hardcopies to include appendices) and fifty (50) CDs of the Final EIR will be prepared. Any additional copies will be prepared by EGI at cost plus 20% to the County.*

- Land Use and Planning

TASK 5 – MITIGATION MONITORING AND REPORTING PROGRAM

Upon completion, an electronic copy of the Administrative Final EIR and the Mitigation Monitoring and Reporting Program (MMRP) will be made available to the County for download from EGI's ShareFile. Based on the comments received from County staff, final revisions to the document.

Deliverables: *Electronic copy of the Mitigation Monitoring and Reporting Program (MMRP) will be provided to the County via EGI's ShareFile.*

TASK 6 – CEQA FINDINGS AND NOTICE OF DETERMINATION

EGI will prepare the CEQA Findings of Fact and Statement of Overriding Considerations for certification of the Final EIR. Findings are prepared to address any significant impacts and/or significant and unavoidable impacts.

EGI will also assist the County with preparation of the Notice of Determination. EGI will work with County staff to develop and publish press releases and website postings to provide information to the public regarding the EIR process. To facilitate greater expediency and efficiency, the County will be responsible for submission of the necessary notices to the County Clerk, California Department of Fish and Wildlife, the State Clearinghouse (if applicable) and for printing and posting notices at appropriate locations in the community (e.g. the County Library Branches).

Deliverables: *Draft and final versions of CEQA-required notices and press releases will be delivered to the County electronically via EGI's ShareFile for internal review prior to distribution by EGI. Electronic copies of the draft and final versions of CEQA Findings and Statements will be delivered to the County for internal review and ultimate distribution.*

TASK 7 – MEETINGS

EGI anticipates participation at up to three public meetings (one for the public scoping meeting, one with the Planning Commission, one with the Board of Supervisors). EGI's Principal and Senior Project Manager will attend meetings with the Project team to initiate the Project, review screencheck document comments, and resolve issues as they arise through the process. In light of the current COVID crisis, Team meetings are assumed to be carried out virtually.

Deliverables: *Electronic copies of the draft and final versions of CEQA Findings and Statements will be delivered to the County for internal review and ultimate distribution.*

ASSUMPTIONS

It is assumed that the proposed Project will not change significantly once the Project Description has been reviewed/approved and preparation of the EIR has begun. Although some minor modifications to the Project are expected, any Project modification that would result in the need for re-analysis or revised technical studies may require additional budget.

- Should additional technical reports be required because of unknown existing conditions or inability to secure technical reports from the applicant, additional budget may be required.
- One screen check of revisions is assumed for the draft document. Should additional rounds of review be requested, additional budget may be required. The budget assumes that any discrepancies between comments will be resolved by the County.

- Attendance by the Project manager at three in-person meetings with County staff and two public hearings is included. Historically, EGI attends any and all meetings without any cost to the applicant or County. Our goal is to ensure all relevant and current information is part of the analysis. **EGI does not charge for travel time or mileage.**

PROPOSED SCHEDULE

The following table is a summary of the proposed schedule for the Drew Road Solar Project EIR. The schedule provides a timeline for completion of the EIR, accounting for County staff review time, public review, and current EGI staff workloads. An expedited schedule has been prepared as summarized below.

PROJECT COMPLETION SCHEDULE FOR
VEGA SES 2, 3 & 5 SOLAR PROJECT EIR

	Project Task	Weeks
1)	Project Initiation, Initial Study, NOP/NOI	2
2)	Administrative Draft EIR	11
	EIR County Review	1
3)	Draft EIR Preparation/NOC	2
	Public Review Period	6.5
4)	Administrative Final EIR	1
	County Review	.5
5&6)	Final EIR Findings/MMRP/nod	.5
	County Review	.5
7)	Public Hearings	2
	CEQA -Required Notices (NOD)	Through Draft EIR and Final EIR process
7)	Staff Meetings	Through Draft EIR and Final EIR process
	Project Management	Through Draft EIR and Final EIR process
	Total	**27 weeks**

COST ESTIMATE

It is estimated that the total budget required by EGI to complete the proposed scope of work will be **$117,045** (see next page). While this budget is expected to be sufficient for the proposed scope of

work (which is further defined by the assumptions listed below), any currently unforeseen expansion of required efforts beyond the expected scope of work may necessitate corresponding changes to the budget.

Note that we have included as an Optional Task Flo-2D modeling to support the Hydrology Analysis if requested by the County. Flo-2D Modeling uses calculations for offsite flow to determine flow contribution and time of concentration/time lag at various points of inflow into the project. Hydrology calculations are used as input into the Flo-2D model.

The budget estimate is given as a "not to exceed" amount, subject to the notes and assumptions listed below. Any additional work required beyond the parameters described in the scope of work and/or the following budget notes may require additional budget.

Prior to any cost overruns, EGI shall seek written approval from the Imperial County Planning & Development Services Director.

MILESTONES

Consistent with our current Invoicing set-up with the County on other Projects, EGI would propose the following milestone payment schedule. Each task would be billed monthly based on a percentage complete.

Milestone 1 - Project Initiation
Milestone 2 - Draft EIR
Milestone 3 - Final EIR
Milestone 4 - MMRP
Milestone 5 - CEQA Findings of Fact
Milestone 6 – NOD
Milestone 7 - Meetings and Hearings

This proposal constitutes a formal offer by EGI to provide professional environmental consulting services to the County of Imperial in accordance with the scope of work, schedule and cost described above and the terms and conditions to be agreed upon in Imperial County Standard Agreement. This offer is valid for a period of 90 days.

TASK	ACTIVITY	Project Director		Project Manager		Assistant PM		GIS Graphics		Peer Review	Sub-Consultants	Outside Direct Costs	TOTALS	
		hours	$125	hours	$105	hours	$95	hours	$85				hours	Fee
1	Project Initiation													
	Data Collection/Site Visit/Kick-off Meeting	4	$500	8	$840	6	$570	0	$0	$0		$850	18	$2,760
	Project Description Scoping/Refinement	2	$250	8	$840	6	$570	2	$170	$0		$250	18	$2,080
	Initial Study/NOP	2	$250	20	$2,100	8	$760	0	$0	$0		$250	30	$3,360
	Subtotal Task 1	8	$1,000	36	$3,780	20	$1,900	2	$170	0		$1,350	66	$8,200
2	Preparation of ADEIR													
	Introduction and Executive Summary	1	$125	8	$840	2	$190	0	$0	$0		$0	11	$1,155
	Aesthetics	1	$125	14	$1,470	4	$380	4	$340	$380		$0	23	$2,695
	Agriculture	2	$250	14	$1,470	10	$950	3	$255	$380		$0	29	$3,305
	Air Quality including Peer Review	2	$250	14	$1,470	10	$950	0	$0	$380		$0	26	$3,050
	Biological Resources	2	$250	14	$1,470	8	$760	0	$0	$570		$0	24	$3,050
	Cultural Resources	2	$250	12	$1,260	8	$760	0	$0	$630		$0	22	$2,900
	AB 52 Consultation	2	$250	10	$1,050	2	$190	0	$0	$0		$0	14	$1,490
	Geology and Soils / Geotechnical Report	2	$250	14	$1,470	4	$380	2	$170	$630		$0	22	$2,900
	Hazards & Hazardous Materials / Phase 1	2	$250	14	$1,470	4	$380	0	$0	$525		$0	20	$2,625
	Hydrology & Water Quality	2	$250	14	$1,470	8	$760	0	$0	$0	$20,240	$0	24	$22,720
	Water Supply Assessment	0	$0	6	$630	0	$0	0	$0	$0	$16,100	$0	6	$16,730
	Land Use	6	$750	14	$1,470	4	$380	2	$170	$0		$0	26	$2,770
	Noise	4	$500	10	$1,050	2	$190	0	$0	$380		$0	16	$2,120
	Public Services	4	$500	10	$1,050	6	$570	0	$0	$0		$0	20	$2,120
	Transportation	4	$500	16	$1,680	4	$380	0	$0	$630		$0	24	$3,190
	Utilities/Services	4	$500	20	$2,100	4	$380	0	$0	$570		$0	28	$3,550
	Greenhouse Gases	4	$500	10	$1,050	6	$570	0	$0	$380		$0	20	$2,500
	Energy Analysis	1	$125	6	$630	2	$190	0	$0	$0		$0	9	$945
	Cumulative, Growth, Other CEQA Sections	6	$750	10	$1,050	6	$570	0	$0	$0		$0	22	$2,370
	Alternatives	6	$750	16	$1,680	2	$190	3	$255	$0		$0	27	$2,875
	Document Production	1	$125	12	$1,260	0	$0	0	$0	$0		$0	13	$1,385
	Subtotal Task 2	58	$7,250	258	$27,090	96	$9,120	14	$1,190	$5,455	$36,340	$0	426	$86,445
3	Revise ADEIR/Preparation of DEIR													
	Preparation of DEIR	4	$500	12	$1,260	6	$570	0	$0	$0		$4,000	22	$6,330
	Project Management and Quality Control	12	$1,500	6	$630	0	$0	0	$0	$0		$0	18	$2,130
	Subtotal Task 3	16	$2,000	18	$1,890	6	$570	0	$0	$0		$4,000	40	$8,460

TASK	ACTIVITY	Project Director		Project Manager		Assistant PM		GIS Graphics		Peer Review	Sub-Consultants	Outside Direct Costs	TOTALS	
		hours	$125	hours	hours	hours	$95	hours	$85				hours	Fee
4	Preparation of FEIR								$0					
	Preparation of FEIR	8	$1,000	10	$1,050	4	$380	0	$0	$0		$800	22	$3,230
	Subtotal Task 4	8	$1,000	10	$1,050	4	$380	0	$0	$0		$800	22	$3,230
5	Mitigation Monitoring and Reporting Program								$0					
	Preparation of MMRP	2	$250	2	$210	0	$0	0	$0	$0		$450	4	$910
	Subtotal Task 5	***2***	***$250***	***2***	***$210***	***0***	***$0***	***0***	***$0***	***$0***		***$450***	***4***	***$910***
6	CEQA Findings and NOD								$0					
	Preparation of Findings	5	$625	10	$1,050	0	$0	0	$0	$0		$200	15	$1,875
	Preparation of NOD	1	$125	2	$210	0	$0	0	$0	$0		$0	3	$335
	Subtotal Task 6	***6***	***$750***	***12***	***$1,260***	***0***	***$0***	***0***	***$0***	***$0***		***$200***	***18***	***$2,210***
7	Meetings and Public Hearings	12	$1,500	10	$1,050	0	$0	0	$0	$0		$0	22	$2,550
	Subtotal Task 7	***12***	***$1,500***	***10***	***$1,050***	***0***	***$0***	***0***	***$0***	***$0***		***$0***	***22***	***$2,550***
	EIR Project Management													
	Project Coordination	30	$3,750	8	$840	0	$0	0	$0	$0		$450	38	$5,040
	Subtotal Project Management	***30***	***$3,750***	***8***	***$840***	***0***	***$0***	***0***	***$0***	***$0***		***$450***	***38***	***$5,040***
	Project Totals													
	Project Hours	**140**		**354**		**126**		**16**					**636**	
	Project Cost		**$17,500**		**$37,170**		**$11,970**		**$1,360**	**$5,455**	**$36,340**	**$7,250**		**$117,045**
	Optional Task - Flo-2D Study													
	Offsite Hydrology Fee										$10,580			
	Flo-2D Study Fee										$19,320			
	GIS Services Fee										$3,220			
	Subtotal Optional Task										$33,120			
	Project Cost with Optional Task		***$20,625***		***$41,160***		***$13,110***		***$1,360***	***$5,455***	***$54,050***	***$7,100***		***$150,165***

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RESUMÉS

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KEVIN L. GRANT, PRINCIPAL

EDUCATION

Master of Business Administration, University of California, San Diego, California

Bachelor of Science in Natural Resources Management, California Polytechnic State University, San Luis Obispo, California

Areas of Expertise

- Team Lead – Provided leadership on a variety of projects throughout California
- Staff Management – Effectively manages staff and coordinates staff in various locations.
- CEQA/NEPA – Extensive experience working on complex projects with multiple agency involvement.
- Client Relations – Highly responsive to meeting client needs and providing superior service.
- Project Management – Proven history of managing projects on-time and on-budget.
- Land Use Planning
- Project Visioning

ENVIRONMENTAL PLANNING MANAGEMENT

Process-based and detail-driven business and environmental planning development specialist. Management professional who creates project successes and assists clients in project resolution to ensure timely, accurate completion. A valued visionary with comprehensive land use planning and construction phase capability. Demonstrated oversight and command of environmental planning. Articulate team lead who brings together cross-departmental teams and aligns efforts with client and employer objectives. Innovative director who expands company client base, regional penetration, and drives corporate success through client satisfaction.

Renewable Energy Projects

Drew Solar Project EIR. Project Director for the preparation of a project-level EIR for the Drew Solar Project. The project is a 100 mega-watt facility that includes six Conditional Use Permits, a General Plan Amendment, Zone Change, Variance, Five lot tie agreements and a Parcel Map. The project is located on 855 acres in southern Imperial County. Responsibilities included managing budget, attending public meetings and overall quality control.

Seville 4 Solar Project EIR. Project Director for the preparation of a project-level EIR for the Seville 4 Project located 5 miles west of the junction of State Routes 86 and 78 in unincorporated west-central Imperial County. The project is located within the Seville Solar Farm Complex and is approximately 174 acres. The project and would generate approximately 20 megawatts of electricity. Provided QA/QC and overall direction on all aspects of the Project.

Campo Verde Battery Energy Storage System Supplemental EIR. Project Director for the preparation of a Supplemental EIR for the amendment to a CUP to allow construction of a Battery Energy Storage System within the boundaries of Campo Verde Solar Project. The project was to be constructed in two phases with capacity for up to 105 MW of storage upon completion. The project proposes traditional lithium ion batteries enclosed in structures with a comprehensive fire safety system. Provided QA/QC and attended Planning Commission and Board of Supervisor's Hearings.

County of Imperial, Centinela Solar Energy Project EIR/EIS. Project Director overseeing preparation of a combined CEQA/NEPA document for the 2,067-acre Centinela Solar Project. Main point of contact for County and Applicant. Responsible for coordinating all aspects of document preparation and agency co-ordination. Participated in meetings with County and Bureau of Land Management staff and attended Airport Land Use Commission Meetings.

Canergy Rockwood Project EIR. Project Director responsible for the Canergy Rockwood Project in Imperial County. The Project includes an ethanol and lignin processing facility, a rail spur, and cultivation of energy cane as feedstock. The Project is approximately 83 acres in size and includes construction of an electrical substation for the Imperial Irrigation District. When operational, the facility will produce up to 36 million gallons per year of fuel-grade ethanol; up to 485,000 tons of lignin; and up to 132,000 tons of CO2.

Wistaria Ranch Solar Energy Center EIR. Project Director for the preparation of the EIR for the Wistaria Ranch Solar Energy Center. The Project is a multi-phase solar energy facility located on approximately 2,660 acres of agricultural land capable of producing approximately 250-megawatt upon build-out. The Project includes 16 Conditional Use Permits (CUPs) over multiple parcels that could be built in phases to respond to energy market conditions. Provided QA/QC on Project-level EIR that examined each individual CUP as well as build-out of all 16 CUPs.

Seville Solar Farm Complex EIR. Project Director for the preparation of a project-level EIR for the Seville Solar Farm Complex located 5 miles west of the junction of State Routes 86 and 78 in unincorporated west-central Imperial County. The solar farm complex is located on approximately 1,238 acres and would generate approximately 135 megawatts of electricity at full build-out. Provided QA/QC and overall direction on all aspects of the Project.

County of Imperial, Pacific Ethanol EIR. Project Director overseeing preparation of an EIR for a proposed 60-million gallon/day ethanol production facility, including coordination with responsible agencies and peer review of technical reports. Issues included rail circulation, truck traffic, air emissions, public services impacts, agricultural conversion, SB 610 Water Supply Assessment, and land use consistency. The production of ethanol would use biomass to convert starch to sugar and sugar to ethanol.

County of Imperial, Campo Verde Solar Project EIR. Project Director for preparation of a **project-level EIR for the 1,990 acre 140-mega-watt Campo Verde Solar Project. Provided oversight of entire EIR preparation process, meetings with County and Applicant and presentation before Board of Supervisors.**

County of Imperial, Ocotillo Wind Energy EIR/EIS. Provided technical review of Ocotillo Wind Energy combined EIR/EIS as contract staff to the County. The project consists of a 474-megawatt wind energy project located on approximately 12,436 acres of undeveloped range land under the jurisdiction of the Bureau of Land Management within the County of Imperial. Performed thorough regulatory review to ensure the document adequately addressed all issues to fulfill the requirements of the California Environmental Quality Act, the County of Imperial, the U.S. Bureau of Land Management and the National Environmental Policy Act.

County of Imperial, Liberty XX Renewable Energy Power Plant EIR. Served as Project Director overseeing preparation of an EIR for a biofuel/renewable energy production facility that would contribute 15 MW of power to the grid. Proposed fuel sources include biosolids (sludge), manure, and biomass transported by truck from Los Angeles sewer facilities and local farmers. Issues included conversion of agricultural land, land use compatibility with adjacent active food crop agricultural lands, hazards potential relating to sludge storage and transport and project operations, water quality and sensitive species concerns, air quality and hazardous emission concerns, project location in a military over flight zone, SB 610 Water Supply Assessment, environmental justice, and strong community opposition.

County of Kern, Famoso Ethanol Plant Project EIR. Served as Project Director overseeing preparation of an EIR for a proposed 55-million gallon/year ethanol production facility. Responsibilities included coordination with subconsultants, peer review of technical studies, and coordination with County planning staff and various responsible agencies such as the South Coast Air Quality Management District (SCAQMD), Caltrans, and California Public Utilities Commission (CPUC). Issues included truck traffic, air quality pollutants and hazard risk, Groundwater Supply Assessment, emergency services, and public services.

KEVIN L. GRANT, PRINCIPAL

East Brawley Geothermal Project EIR. Project Manager for preparation of an EIR involving construction a new 49.9 net megawatt binary power plant. The project included six Ormat Energy Converters, an expanded geothermal well field beyond the six exploration wells, and pipelines to carry the geothermal brine to the power plant. The project also included pipelines to carry cooled brine to injection wells, pipelines to distribute non-condensible gas from production wells to the power plant area and injection wells, an electrical transmission line to interconnect to the substation at the North Brawley 1 Geothermal Power Plant, and water pipelines to bring water from the City of Brawley's treatment plant upgrade, with supplemental water supplied by IID to the power plant for cooling water. The geothermal plant is located on a 32.81-acre site in unincorporated Imperial County, 1.5 miles north of the City of Brawley. Additionally, 3,713 acres of land within the project area will contain geothermal pipelines that will deliver geothermal fluid to the plant.

California Ethanol & Power (CE&P), Imperial Valley I CE&P Imperial Valley 1 EIR. Project Director for the Sugarcane and Sweet Sorghum-to-Ethanol Electricity and Bio-Methane Facility EIR. Also provided oversight on the associated Specific Plan Amendment.

Affiliations

American Planning Association – SDAPA Board Member (Previous)

Municipal Management Association of Southern California Member

National Association of Environmental Professionals

Registered Environmental Assessor I (REA I # 07600)

ISA Certified Arborist (WE-4192)

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MELANIE J. HALAJIAN, AICP

Education

Master of City and Regional Planning, California Polytechnic State University, San Luis Obispo

Master of Business Administration, California Polytechnic State University, San Luis Obispo

B.A., Systems Analysis, Fresno Pacific College, Fresno

Experience Overview

- Twenty-five years of experience in environmental impact assessment and CEQA/NEPA compliance.
- Works effectively with agencies, jurisdictions, clients, sub-consultants, and staff.
- Participated in the preparation of numerous environmental studies and impact reports on a variety of projects throughout the state including renewable energy projects, infrastructure projects (storm drainage, water and wastewater treatment plants) urban structures, subdivisions, and golf courses.

Renewable Energy Projects

Drew Solar Project EIR. Project Manager for the preparation of a project-level EIR for the Drew Solar Project. The project is a 100 mega-watt facility that includes six Conditional Use Permits, a General Plan Amendment, Zone Change, Variance, Five lot tie agreements and a Parcel Map. The project is located on 855 acres in southern Imperial County. Responsibilities included managing sub-consultants, authoring sections, interfacing with the County and Applicant, and production of the document.

Seville 4 Solar Project EIR. Project Manager for the preparation of a project-level EIR for the Seville 4 Project located 5 miles west of the junction of State Routes 86 and 78 in unincorporated west-central Imperial County. The project is located within the Seville Solar Farm Complex and is approximately 174 acres. Served as Project Manager responsible for writing, coordinating sub-consultants and interfacing with the County and Applicant.

Seville Solar Farm Complex EIR. Project Manager for the preparation of a project-level EIR for the Seville Solar Farm Complex located 5 miles west of the junction of State Routes 86 and 78 in unincorporated west-central Imperial County. The solar farm complex is located on approximately 1,238 acres and would generate approximately 135 megawatts of electricity at full build-out. Managed all sub-consultants and worked closely with the County in preparing the EIR.

Wistaria Ranch Solar Energy Center EIR. Project Manager for the preparation of the EIR for the Wistaria Ranch Solar Energy Center. The Project is a multi-phase solar energy facility located on approximately 2,660 acres of agricultural land capable of producing approximately 250 mega-watt upon build-out. The Project includes 16 Conditional Use Permits (CUPs) over multiple parcels that could be built in phases to respond to energy market conditions. Managed prepared a Project-level EIR that examined each individual CUP as well as build-out of all 16 CUPs.

Centinela Solar Energy Project EIR/EIS. Project Manager for the preparation of a combined CEQA/NEPA document for the 2,067-acre Centinela Solar Project in Imperial County. Responsible for overseeing all aspects of document preparation and sub-consultant co-ordination. Authored multiple sections and worked closely with County staff, BLM staff and the client to ensure all regulatory requirements were fulfilled.

Campo Verde Battery Energy Storage System Supplemental EIR. Project Manager for the preparation of a Supplemental EIR for the amendment to a CUP to allow construction of a Battery Energy Storage System within the boundaries of Campo Verde Solar Project. The project was to be constructed in two phases with capacity for up to 105 MW of storage upon completion. The project proposes traditional lithium ion batteries enclosed in structures with a comprehensive fire safety system. Managed and authored key section of the EIR.

Canergy Rockwood Project EIR. Project Manager responsible for overseeing preparation of a project-level EIR for the Canergy Rockwood Project in Imperial County. The Project includes an ethanol and lignin processing facility, a rail spur, and cultivation of energy cane as feedstock. The Project is approximately 83 acres in size and includes construction of an electrical substation for the Imperial Irrigation District. When operational, the facility will produce up to 36 million gallons per year of fuel-grade ethanol; up to 485,000 tons of lignin; and up to 132,000 tons of CO2.

California Ethanol & Power (CE&P), Imperial Valley I CE&P Imperial Valley 1 EIR. Project Manager responsible for overseeing preparation of a project-level EIR for the Sugarcane and Sweet Sorghum-to-Ethanol Electricity and Bio-Methane Facility proposed by CE&P on an approximately 160-acre parcel in Imperial County. Managed multiple sub-consultants, reviewed technical studies and conducted weekly team conference calls.

Campo Verde Solar Project EIR. Project Manager for the preparation of a project-level EIR for the 1,990-acre Campo Verde Solar Project in Imperial County. Duties included oversight of all aspects of document preparation, authoring sections, working closely with sub-consultants and regularly communicating with County staff. Reviewed technical studies, authored multiple sections, and coordinated document production and QA/QC.

Ocotillo Wind Energy EIR. Served as contract staff to County of Imperial for review of Ocotillo Wind Energy combined EIR/EIS. Provided regulatory review to ensure the document adequately addressed all issues to fulfill the requirements of the CEQA, the County of Imperial, U.S. Bureau of Land Management and the National Environmental Policy Act (NEPA).

Affiliations

Member, American Planning Association, California Chapter

Member, American Institute of Certified Planners

Member, Association of Environmental Professionals

BERT VERRIPS, AICP

EDUCATION

University of Waterloo (Canada) – Faculty of Environment, School of Planning (Dean's List)

SUMMARY OF EXPERIENCE

Since 1992, Bert Verrips, AICP has prepared over 70 environmental documents on a variety of projects. These have included public infrastructure projects and public planning documents and programs, as well as private development projects, as described in detail in the following pages. In conjunction with environmental documents, Bert has coordinated and prepared supporting materials for regulatory permits and authorizations from responsible and trustee agencies at the federal, state, and regional levels. Bert has also prepared a number of feasibility studies and is often called upon to provide pre-project advice to clients on the physical, environmental, and regulatory aspects of their projects.

REPRESENTATIVE SOLAR PROJECT EXPERIENCE SUMMARY

Westside Solar Project (22 MW) IS/MND, County of Kings

Aquamarine Solar Project (250 MW) and Gen-Tie Line IS/MND, County of Kings

Westlands Transmission Gen-Tie (15 miles) IS/MND, County of Fresno

Solar Blue Generating Facility (250 MW) IS/MND, County of Kings

Chestnut Solar Project (150 MW) IS/MND, County of Kings

Westlands Cluster 9 Solar Projects (500 MW) IS/MNDs, County of Kings

EXAMPLE PROJECT

Westlands Solar Park Master Plan and Gen-Tie Corridors Program EIR, Westlands Water District

Certified in January 2018, this Program EIR covers a master planned solar park on 21,000 acres in central Kings County, along with its associated 15 miles of offsite transmission line. Since the site's farmland is physically impaired by high salt and selenium concentrations, as well as chronic perched groundwater conditions, these lands were purchased by Westlands Water District and retired from irrigated agriculture. The planned reuse of this degraded land for solar generating facilities is actively supported as a preferred location for renewable energy development by all of the major environmental organizations and the California Farm Bureau Federation. The main issues addressed in the PEIR include biological and cultural resources, aesthetics, and construction impacts.

Professional Certification and Affiliations

- American Institute of Certified Planners (AICP)
- American Planning Association (APA)
- Association of Environmental Professionals (AEP)

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EDUCATION

- BS, Civil Engineering
  San Diego State University

REGISTRATIONS/CERTIFICATIONS

- PE, 2015 - CA #84291
- PE, 2020 - NV #27468

AFFILIATIONS

- BIA yGen
- Solar Energy Industries Association (SEIA)

FEI TEAM MEMBER SINCE 2016

MILES LEANDRO, PE

TITLE Project Manager | OFFICE San Diego, CA

Miles joined Fuscoe in 2016 and has quickly become a valuable member of Fuscoe's Renewable Energy and Utilities team. Miles offers his design experience and expertise on precise grading design, hydrology analysis and stormwater quality assurance, developed from over 10 years of experience. Miles is currently leading the Renewable Energy Utilities team.

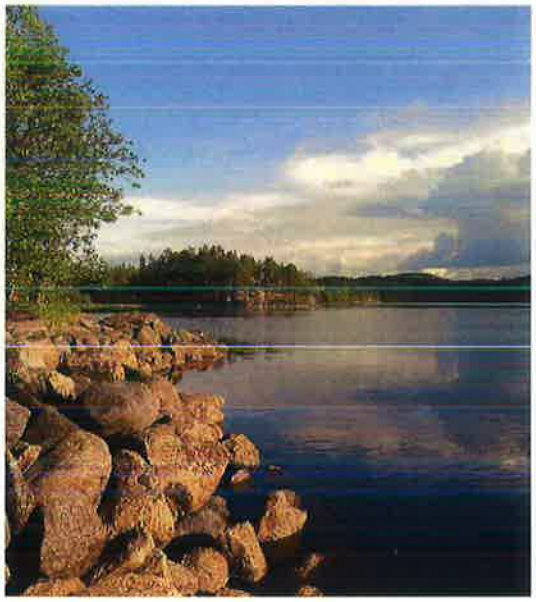
Miles is currently providing design and management services for multiple solar projects throughout California, totaling 300 MW in Kings County, 375 MW in Riverside County, 110 MW in Kern County and 70 MW in Fresno County. Miles has also provided services for several of Fuscoe's solar energy projects in Japan. Miles is leading efforts on various SDG&E projects, including many of SDG&E substation sites in San Diego County.

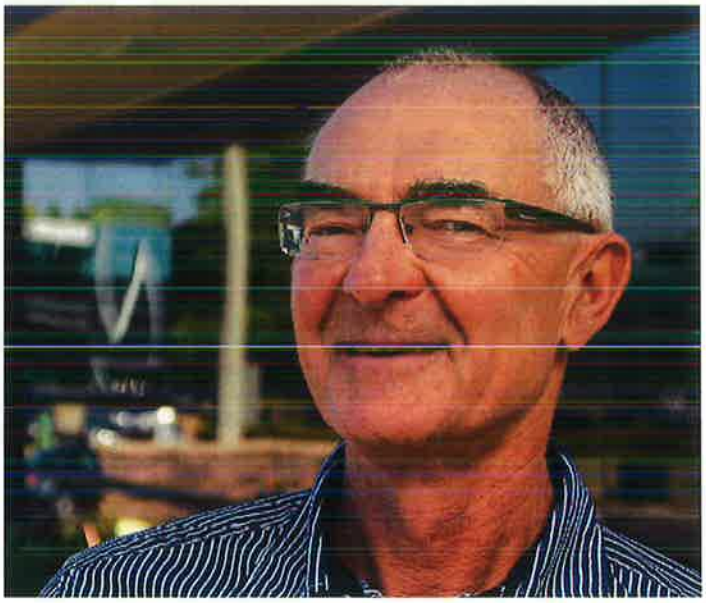
Prior to joining Fuscoe, Miles provided engineering design for a variety of projects throughout San Diego County, including Mesa Nueva, a graduate student housing project at UC San Diego; the Glen Retirement Community in Scripps Ranch; and the Atmosphere Affordable Housing project in downtown San Diego.

Miles is providing engineering services for the following energy projects:

- Valentine Solar (110 MW)
- Mustang II (150 MW)
- Wisteria Ranch (110 MW)
- American Kings (150 MW)
- Little Bear (70 MW)
- Maverick (225 MW)
- Desert Harvest (150 MW)
- Miguel Substation
- Ocean Ranch Substation
- Kearny Mesa Substation
- Avocado Substation

Miles is a member of BIA y | GEN, a group providing educational, mentorship and networking opportunities to young professionals in the building industry.





KONSTANTIN OKUN

Sr. Engineer | San Diego, CA

Konstantin joined Fuscoe in 2012 and has been an intricate part of Fuscoe's Renewable Energy and Utilities team. Konstantin is working on renewable energy and utility projects across California and has even done grading design work on multiple projects in Japan.

Under the supervision of Sr. Project Manager, Paul Haaland, and Project Manager, Miles Leandro Konstantin has contributed to the firms' total experience of providing preliminary and/or final design on solar energy projects totalling over 2GW in capacity.

Konstantin has provided service on several renewable energy projects in the Imperial Valley including ISEC West, Campo Verde, SolarGen 2 and a confidential project on 2,800 acres. He has also provided service to SDG&E on multiple projects: Miguel Substation Complex, Talega Substation, and the Ocean Ranch Substation. Konstantin has also been a key team member assisting with design of guard shelter installation at multiple substations for SDG&E.

EDUCATION

- BS, Civil Engineering
  Civil Engineering
  Belarusian National Technical University, Minsk, Belarus
- Certificate of Computer Information Science
  Coleman College, La Mesa, CA

AFFILIATIONS

- Building Industry Association of San Diego

EMPLOYMENT HISTORY

- 1977-1981: Belmestpromproect Engineering – Structural Engineer
- 1981-1990: Metrostroi Construction – Civil Engineer
- 1990-1994: Minsk Tractor Works – Civil Engineer
- 1994-1995: Applied Consultants – Civil Designer/Analyst
- 2000 -2002: nStor Technologies – Software Engineer
- 2003 - 2011: Burkett & Wong Engineers – Civil Designer
- 2012: Science Applications International – Civil Engineer
- 2012 - Present: Fuscoe Engineering Engineer

FEI TEAM MEMBER SINCE 2012

IAN ADAM, MESM, CPSWQ, QSD

Principal/Stormwater Manager | Irvine, CA

Ian is a firm Principal and Fuscoe's Stormwater Management team leader. His specialty is water resources, with an emphasis in water quality regulations and Resource Agency interaction. He has extensive research and assessment skills garnered from his studies at the Donald Bren School of Environmental Science and Management at UC Santa Barbara. Ian's research included watershed modeling for TMDLs within the Santa Ana River Watershed. Since joining Fuscoe in 2001, Ian has also worked extensively with the University of California, Santa Barbara (UCSB) on various development projects involving compliance with water quality treatment requirements.

Ian's extensive knowledge of stormwater regulations and water quality BMP design has made him a valuable resource for cities, private developers and public entities. Ian is currently working as the stormwater consultant to several cities in Orange County for the development, implementation and training of numerous stormwater programs. He is also serving as the lead water quality design consultant for Del Mar Fairgrounds and regularly interacts with the RWQCB and County of Orange on water quality permitting issues, grant opportunities and LID solutions. Ian has also worked on several individual permits in San Diego, Orange and LA County coordinating directly with the various Regional Water Quality Control Boards (RWQCB) staff on TMDL implementation, receiving water limitations, high flood flow exemptions and monitoring protocols. Ian also serves as a technical water quality resource for animal operations that include confined animal facilities.

Ian's technical background in water quality combined with his engineering and regulatory experience at FEI provides clients with a uniquely trained individual to work with stakeholders, regulatory agencies and other consultants. Ian has also provided services for over 50 EIRs, General Plans and Specific Plans, and he has become highly proficient in producing CEQA technical reports covering hydrology, water quality, infrastructure and sea level rise.

EDUCATION

- MESM, Master of Environmental Science and Management
  Donald Bren School of Environmental Science and Management
  University of California, Santa Barbara
- BS, Science - Ecology and Systematic Biology
  University of California, Santa Barbara

REGISTRATIONS/CERTIFICATIONS

- Certified Professional in Stormwater Quality (CPSWQ)
- QSD / QSP Certified

AFFILIATIONS

- BIA/Orange County
- National Association of Environmental Professionals
- Urban land Institute
- U.S. Green Building Council

FEI TEAM MEMBER SINCE 2001

FEI PRINCIPAL SINCE 2011

EDUCATION

- MESM, Water Resources Management
  Bren School at UC Santa Barbara
- BS, Environmental Studies, University of Oregon

REGISTRATIONS/CERTIFICATIONS

- Certified Professional in Stormwater Quality (CPSWQ)
- Qualified SWPPP Developer/Practitioner (QSD/QSP)
- Qualified Industrial Stormwater Practitioner (QISP)

FEI TEAM MEMBER SINCE 2018

ALEX BENNETT, CPSWQ, QSD/P, QISP

TITLE Stormwater Specialist II | OFFICE Irvine, CA

Alex specializes in the intersection of science and water policy, and effectively communicates complex scientific results to a variety of audiences. As a Stormwater Specialist II for Fuscoe Engineering's water quality team, Alex serves as a primary author of EIR technical reports, WQMPs, SWPPPs and other stormwater compliance plans required by agencies throughout the State. He has worked on EIR technical reports for General and Specific Plan updates in the cities of Santa Ana, Fountain Valley, Montclair and Bellflower, in addition to smaller scale projects throughout Los Angeles and Orange counties.

In conjunction with his work on technical stormwater reports, Alex provides his expertise and guidance to Phase I and Phase II MS4 Permittees as part of Fuscoe's stormwater consulting services. Alex works closely with the cities of Anaheim, Brea and Tustin, as well as Del Mar Fairgrounds.

Alex received his Master's in Environmental Science and Management from the Bren School at UC Santa Barbara. He pursued a specialization in Water Resources Management, focusing his coursework on the fate and transport of pollutants through freshwater and groundwater systems. Prior to his career at Fuscoe, Alex worked as an Environmental Policy Analyst for a water quality-focused non-profit organization in Santa Barbara, California.

PROPOSAL TO PREPARE AN ENVIRONMENTAL IMPACT REPORT (EIR) FOR A SOLAR ENERGY PROJECT (VEGA SES 2, 3 & 5 SOLAR PROJECT) PROJECT APPLICANT: APEX ENERGY SOLUTIONS, LLC

- **CUP20-0021 - VEGA 2**
- **CUP20-0022 - VEGA 3**
- **CUP20-0023 - VEGA 5**
- **INITIAL STUDY (IS20-0030)**

Presented to:

Mr. Jim Minnick, Director
County Planning & Development Services Department
801 Main Street
El Centro, California 92243

Prepared by:

UltraSystems Environmental Inc.
16431 Scientific Way
Irvine, CA 92618
UEI No. 201101

November 2020

UltraSystems
environmental•management•planning

November 17, 2020

Mr. Jim Minnick, Director
Imperial County Planning & Development Services Department
801 Main Street
El Centro, CA 92243

Subject: Proposal to Prepare an Environmental Impact Report for the Proposed VEGA SES 2, 3, and 5 Solar Project (CUP20-0021, 0022, and 0023)

Dear Mr. Minnick:

UltraSystems Environmental Inc. (UltraSystems) is pleased to submit our proposal to prepare an environmental impact report addressing the proposed VEGA SES 2, 3, and 5 Solar Project. The content of our proposal is a direct response to the County's October 26, 2020 Request for Proposal. UltraSystems will serve as the Prime Contractor for this contract, manage the project from our corporate headquarters in Irvine, California and complete all facets of the proposed Scope of Services utilizing in-house personnel. Unlike many other firms, UltraSystems is structured to strictly focus on providing environmental services to our public and private sector clients.

The preparation, processing and review of CEQA compliance documents has been a core service since the company founding in 1994. UltraSystems has provided consulting services to public agency clients throughout Southern California, having prepared in excess of **7,000** environmental reports, engineering studies and other technical studies either for them or on their behalf. Many of these assignments were associated with a variety of alternative-fueled energy production facilities including wind, solar, and biomass.

For this assignment, our Project Team will be directly managed by the undersigned and a Deputy Project Manager, Ms. Margaret Partridge, ENV SP, LEED GREEN, AICP, who is also a Senior Project Manager with the firm. Our technical disciplines are all lead by highly qualified and experienced scientific, engineering and planning professionals. Our team members have long-standing working relationships, and have developed a seamless collaborative approach to successfully completing each project assignment afforded to our company. The entire team would remain committed to successfully completing the subject assignment from inception through certification of the subject EIR. We are excited about this opportunity to be of service.

As the President and CEO of UltraSystems, I am a duly authorized officer of the firm with the legal authority to bind and contractually commit the firm. Should you need any additional information, you can reach me via email at blindsay@ultrasystems.com or via telephone at (949) 788-4900 ext. 227.

Sincerely,

ULTRASYSTEMS ENVIRONMENTAL INC.

Betsy A Lindsay

President, CEO

Corporate Office – Orange County
16431 Scientific Way
Irvine, CA 92618-4355

Telephone: 949.788.4900
Facsimile: 949.788.4901
Website: www.ultrasystems.com

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TABLES

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Technical Appendices

Appendix A - Resumes

1.0 PROJECT UNDERSTANDING

The Imperial County Planning & Development Services Department (ICPDS) has received applications from Apex Energy Solutions LLC to develop the VEGA SES 2, 3 and 5 Solar Project. In essence, these three components of the overall VEGA Solar Project each generate, store and deliver to the Imperial Irrigation District energy derived from the sun via photovoltaic (PV) technology. Collectively, VEGA SES 2, 3 and 5 will be constructed on approximately 1,960 acres located approximately 9 miles east of the Salton Sea and about four miles southeast of Niland. Public roadways providing access to the project area include Noffsinger Road and Weist Road.

A summary of the CUP Case Nos., generating capacity (in MW), battery storage capacity (in Megawatts/Megawatt Hours) and land area associated with each project component follows:

PROJECT COMPONENT	CUP APPLICATION CASE NO.	GENERATING CAPACITY	BATTERY STORAGE CAPACITY	LAND AREA
VEGA SES 2	CUP#20-0021 VEGA SES 2	240 MW	240MW/960 MWh	1,472AC
VEGA SES 3	CUP#20-0022 VEGA SES 3	60 MW	60MW/240 MWh	240AC
VEGA SES 5	CUP#20-0023 VEGA SES 5	50 MW	50MW/200 MWh	249.7AC

A project substation will be constructed for each component along with required interconnection switching technology. For low voltage outputs the substations will up their voltage to a transmissible 60kV. Higher voltage output will be stepped up to 230kV. Each of the substations will be tasked with stepping up the 34.5kV generated by the solar arrays and step it up to 92kV. Each component is located within the County's Renewable Energy Overlay Zone. As such, approval of a Conditional Use Permit by the Imperial County Board of Supervisors is required before realization of the project components can occur. As such, in its capacity of "Lead Agency", the County's Planning & Development Services Department (ICPDS) is soliciting proposals for the preparation of a comprehensive Environmental Impact Report (EIR) pursuant to the California Environmental Quality Act (CEQA). The formal County solicitation in this regard is dated October 26, 2020. This proposal is UltraSystems' response to the County's RFP.

2.0 PROJECT TEAM

UltraSystems has carefully evaluated the County's RFP and its work program requirements. The County is seeking a consultant who is both independent but also capable of working as an extension of staff in every facet of the environmental review process from scoping, to noticing, to ensuring transparency, to providing public hearing support. Given this we are prepared to commit a Project Team who is both technically qualified to perform the work as well as managed by a seasoned Principal-in-Charge/Project Manager and Deputy Project Manager. More than that all of the capabilities necessary to successfully complete the upcoming assignment are available in-house. This will ultimately serve to promote efficiency, enhance communication, and facilitate early problem identification and resolution. Members of our Project Team, their respective roles on the upcoming assignment, and the years of experience they have are identified in the Table which follows.

Table 2.0-1
PROJECT TEAM MEMBERS - ROLES ON THE PROJECT

NAME	ROLE ON THE PROJECT	YEARS EXP.
Betsy A. Lindsay, MURP, ENV SP **Principal-in-Charge/Senior Project Manager**	***Primary Point of Contact, Project Manager****, Project Description, Alternatives, Contract Management and Administration, Resource Allocation, Corporate Deliverable QA/QC, Mandatory CEQA Sections*	35+
Margaret Partridge, MURP, ENV SP, AICP **Senior Project Manager**	***Alternate Point of Contact, Deputy Project Manager, Peer Review:*** *Photo Simulations/Solar Glare Study; Scoping, Findings of Fact/Statement of Overriding Considerations (if required), Work Product QA/QC, CEQA Noticing, Cumulative Effects, Growth-Inducing Impacts*	15
Robert J. Verlaan, MA, MSW **Principal Planner**	*CEQA Compliance, Work Product QA/QC, CEQA Compliance,* ***Peer Review:*** *LESA Model; Transportation and Traffic*	40+
Steven O'Neil, MS, RPA **Cultural Resources Manager**	***Peer Review:*** *Archaeological Resources, Historical Resources, Tribal Cultural Resources, Paleontological Resources, SB18/AB52 Compliance*	41
Michelle Tollett, BS **Biological Group Manager**	***Peer Review:*** *Biological Resources, Jurisdictional Delineation, BOW Survey*	19
Dr. Michael Rogozen, D.Env. **Senior Principal Engineer**	***Peer Review:*** *Air Quality, Greenhouse Gas Emissions, Noise, Energy*	44
Dan Herlihy, MS, CEG, PG, CHG **Senior Engineer**	***Peer Review: Preliminary Geotechnical Study,*** *Phase I Environmental Site Assessment; Geology and Soils, Hydrology & Water Quality, Hazards/Hazardous Materials*	40+
Billye Breckenridge, BA **Senior Planner**	*Agriculture and Forestry Resources, Utilities and Service Systems, Public Services, Population and Housing, Recreation, Wildfires, Mineral Resources*	18
Omar Sarsour, P.E., (LSIT) **Transportation Engineer**	***Peer Review:*** *Traffic Impact Study*	7

The Principal-in-Charge and Project Manager for the upcoming assignment will be Ms. **Betsy Lindsay, MURP, ENV SP.** She will administer the contract and ensure that corporate resources are appropriately allocated to the needs of the work program. As our Project Manager, she will also serve as our ***Primary Point of Contact*** with the County on this assignment. Ms. **Margaret Partridge, MURP, ENV SP, AICP**, a Senior Project Manager with the firm, will serve as the Deputy Project Manager and ***Alternate Point of Contact*** with the County on this assignment. Both of these individuals have proven successful experience preparing, managing, processing and representing CEQA compliance documents for a large number of projects in the Southern CA region.

Brief descriptions summarizing the qualifications of our Principal-in-Charge/Project Manager and Deputy Project Manager are provided below.

BETSY LINDSAY, MURP, ENV SP | Principal-in-Charge/Project Manager | Primary Point of Contact

As UltraSystems' Principal-in-Charge, Ms. Lindsay will ensure client satisfaction of all services provided by the UltraSystems project team under this contract to the County. In this role, Ms. Lindsay, will ensure that adequate technical staff are available for field monitoring and compliance. Ms. Lindsay will also help oversee the quality assurance program and be the **Point of Contact** for all matters relating to the contract, and contract execution.

Ms. Lindsay has over **35 years** of experience, has successfully managed over **20** large-scale, on-call/as-needed contracts that have encompassed **1,000's** of task orders relating to

public-agency projects. She has also worked on numerous utility-grade solar projects, utility corridor, substation, and other numerous projects that have involved desert plants and animals, including BUOWs and FTHLs.

Ms. Lindsay knows how to: communicate with the client, facilitate teams, manage personnel, work collaboratively with agencies, run meetings for clients, provide strategic thinking, and most importantly, get projects built for clients. Ms. Lindsay will work closely with our designated Deputy Project Manager and key technical leads on this important project.

RELEVANT EXPERIENCE | PROVEN TRACK-RECORD

1. Ms. Lindsay has been involved with numerous projects in Imperial Valley since the early 1990s. Her firm has worked on technical studies and environmental documents covering approximately 7,000 acres within the Valley.
2. Ms. Lindsay has worked on renewable projects since the mid-1980s, and has been involved with wind, solar and combined-cycle power projects since that period.
3. Ms. Lindsay was the designated Project Director for Tenaska's Imperial Solar Energy Facility South and West.
4. Ms. Lindsay has managed the preparation of more than 200 environmental documents and has provided entitlement services for large-scale public and private infrastructure projects. In these roles, she has managed EIRs/EISs, and has developed conditional use permits, project findings and statements of overriding considerations.
5. In her career, Ms. Lindsay has successfully managed eight on-call, task order-based contracts for public agencies, with an internal revenue contracting value of over $30M to UltraSystems. Project Value: $15B.
6. Ms. Lindsay is familiar with all of the key agency regulatory staff (e.g., BLM, CDFW, USFWS, and DTSC) that would directly monitor the resources within this project's jurisdiction.

EDUCATION

- MURP., Urban and Regional Planning, California State Polytechnic University, Pomona, CA
- B.S., Geography, California State University, Long Beach, CA

PROFESSIONAL REGISTRATIONS, LICENSES AND AFFILIATIONS

- Institute of Sustainable Infrastructure, Envision Sustainability Professional

MARGARET PARTRIDGE, MURP, ENV SP, AICP | Deputy Project Manager | Alternate Point of Contact

Ms. Partridge is a planner with **15 years** of experience in community and environmental planning. Margaret has experience in both the public and private sectors as a city planner and as an environmental planner for residential, commercial, industrial, mixed-use, specific plan, and solar projects. She is certified as a LEED Green Associate and is a member of the American Institute of Certified Planners (AICP).

Ms. Partridge is trained in environmental analysis for a variety of project types and has experience conducting current planning and permit work for many jurisdictions, including cities and counties. As the Project Manager, Ms. Partridge will: (1) manage and supervise the UltraSystems Team, including sub-consultants; (2) serve as the primary point of contact with County staff regarding the day-to-day execution of the work program; (3) lead consultation and coordination among local, regional and state agencies and participate in presentations to the County and other stakeholders as warranted; (4) ensure that the environmental document for the project meets the requirements of CEQA, State CEQA Guidelines and the County's CEQA procedures; and (5) monitor, review, and report on the project's status to the County at regular intervals and thoroughly review all major documents prior to submittal to the County.

EDUCATION

- M.A., Urban and Regional Planning, University of California, Irvine
- B.A., Environmental Analysis and Design, University of California, Irvine

PROFESSIONAL REGISTRATIONS, LICENSES AND AFFILIATIONS

- American Institute of Certified Planners
- LEED – Green Associate
- Institute of Sustainable Infrastructure, Envision Sustainability Professional

3.0 SCOPE OF WORK

3.1 Introduction

UltraSystems has tailored its scope of work (SOW) to ensure that the Imperial County Planning & Development Services Department (County), as Lead Agency, will successfully meet its environmental review obligations for the proposed project in a manner that is technically comprehensive and complies fully with all applicable provisions of the California Environmental Quality Act of 1970 (CEQA), its implementing State CEQA Guidelines, and the County's Local CEQA Implementation Guidelines, all as amended. The environmental review will address the potential environmental impacts associated with the construction and operation of the proposed VEGA SES 2, 3, and 5 Solar Photovoltaic Energy Generation and Integrated Battery Storage Project (proposed project). Since the proposed project is a construction project, the environmental review will be conducted at a construction level of detail. The environmental analysis addressing the proposed project will include direct, indirect, short-term (construction), long-term (operational), and potential cumulative effects.

Per the County's RFP, the environmental review for the proposed project will be undertaken in an environmental impact report. Therefore, our SOW includes the preparation, noticing and circulation of a project level Environmental Impact Report (EIR). It also contains the conduct of peer reviews of applicant prepared technical reports, preparing several technical reports/studies, posting public notices, and a host of other related activities. The SOW also encompasses our attendance at kick-off and progress meetings with the project team, County Planning staff; scoping meetings with the public and other agencies, as may be warranted; and public hearings.

The SOW also encompasses preparation of CEQA documents incidental to the environmental review and entitlement processes. These include: (1) a Mitigation Monitoring and Reporting Program; (2) Findings of Fact (§ 15091); and, if necessary (3), a Statement of Overriding Considerations (§ 15093). Our Scope also includes all document production and other direct expenses required to execute the work program successfully. UltraSystems will also be responsible for preparing, posting and filing all requisite CEQA notices associated with the proposed project.

3.2 Scope of Work

MAJOR TASK 1.0: PROJECT INITIATION

Task 1.1: Project Management Plan. Upon notification of contract award and receipt of a Notice to Proceed, UltraSystems will develop and ultimately employ a user-friendly and transparent overall Project Management Plan (PMP). The PMP will provide the details for completing each task required to successfully complete the EIR. The PMP will describe the management, coordination, and controls that will be implemented to ensure the timely completion of both the Draft EIR and Final EIR. The PMP will include for each phase:

- An overall work flow chart identifying critical path work items for each component,

- A detailed description of each task,
- A detailed schedule for each work task,
- A detailed breakdown of the costs for each task, and a detailed staffing plan for each task.

The PMP will be the basis against which project status and progress will be measured and reported. UltraSystems is committed to developing and maintaining effective communication with the Project Team and County staff throughout the term of this work assignment. These efforts are intended to finalize any outstanding issues concerning this work effort, facilitate ongoing support of County Planning staff concerning various aspects of this project, and provide opportunities for the consultant's participation at public meetings and associated activities.

Deliverable: *Project Management Plan in PDF format.*

Task 1.2: Tracking System/ Project Status Report. UltraSystems' Project Manager will set up a detailed tracking and reporting system for the project with the County's Project Manager. The tracking system will provide an ongoing status report that details the progress of the project and provides the means to keep the project on schedule. The main component of the tracking and reporting system will be an overall project status report. The project status report will identify any potential cost overruns and provide the best means to maintain the project's budget. The project status report will include:

- A discussion of the progress of the work completed and the work remaining by task,
- A discussion of unforeseen issues,
- An updated project schedule,
- An action plan to put the project back on schedule, should it slip,
- An accounting of costs for each task,
- An action plan to get the project back on budget, and
- Staffing revisions, if applicable.

Deliverables*: Monthly Status Reports.*

Task 1.3: Project Kick-off Meeting. UltraSystems' Project Manager and Deputy Project Manager will attend **one (1) kick-off meeting** with the County Project Manager and any other staff deemed appropriate. UltraSystems will be responsible for taking and distributing the minutes of the meeting. The purpose of the meeting is to:

- Introduce the key Project Team members and County staff,
- Review and verify the project schedule with all parties,
- Obtain the list of all public individuals and groups and responsible agencies who are to receive announcement of the NOP and comments received on the NOP,
- Be provided with all technical studies prepared on behalf of, and submitted by, the Project Applicant
- Discuss the scoping meeting with the County and its format and dates and times for the meeting,
- Discuss related reports (utilizing the County's format, if available) for all relevant information, and
- Discuss the Initial Study.

Deliverable: *Kick-off Meeting Minutes.*

Task 1.4: Project Status/ Update Meetings. To maximize interactions between the environmental consultant and County Planning staff, enhance opportunities for conveying information, and provide a mechanism to address and resolve outstanding issues as they arise, **three (3) additional meetings** (two hours per meeting) between UltraSystems' Project Manager, Deputy Project Manager and County staff have been budgeted. To the extent feasible,

meeting schedules will correspond to draft deliverables or related milestones and will be preceded by the delivery of draft documents to the County for review.

Additional meetings beyond the number indicated above would be compensated in accordance with the terms and conditions contained in UltraSystems' Standard Rate Schedule.

Task 1.5: Scoping Meeting and Public Hearings. UltraSystems' Project Manager and Deputy Project Manager shall attend **one (1) scoping meeting** during the Notice of Preparation (NOP) circulation period. It is assumed that this meeting will require publication of the agenda on the County's website. UltraSystems will assist in the preparation of the agenda for County staff, along with the PowerPoint presentation.

UltraSystems has included in our SOW attendance at and participation in up to **two (2) public hearings** by our Project Manager, one each before the Planning Commission and the Board of Supervisors. Our Project Manager will be the designated spokesperson for the presentation and "defense" of the EIR. Ms. Lindsay is a principal level planner and CEQA Project Manager with extensive experience representing CEQA compliance documents before decision-making bodies.

Additional meetings beyond the number indicated above would be compensated in accordance with the terms and conditions contained in UltraSystems' Standard Rate Schedule.

UltraSystems, in cooperation with County staff, will prepare and present any materials that would be required and will participate at such meetings to the extent determined appropriate by the County. If environmental questions arise at those meetings requiring additional investigation(s) beyond the scope of this proposal, UltraSystems will provide the County with specific recommendations concerning an appropriate response(s) and, following the County's authorization to proceed, will undertake additional studies that may be required.

Deliverable: *Assist County staff with the Scoping Meeting Agenda and Scoping Meeting presentation. A Scoping Meeting Report will be prepared following the Scoping Meeting. The Report will include information related to this meeting, including; agenda, list of attendees, and comments received during the meeting.*

Task 1.6: Ongoing Consultation. UltraSystems will be available throughout the contract performance period work effort to respond to County staff requests for input concerning various aspects during the CEQA process. UltraSystems will advise the project team and the County regarding relevant environmental issues, oversee environmental compliance activities related to the Draft EIR, and ensure that work is performed in accordance with applicable CEQA requirements.

Task 1.7: Prepare Project Description. Based on information provided by the Project Applicant, its consultants, and the County UltraSystems will prepare a Project Description in full compliance with the content provisions set forth in § 15124 of the State CEQA Guidelines, as amended. The Project Description will graphically and textually identify the location and boundaries of the proposed project on both an area-wide and local basis. The Project Description will then identify the objectives of the proposed project and follow that with a discussion of the project's technical, and environmental characteristics including engineering and supporting service facilities. The entitlements requiring approval in order for the proposed project to be implemented will be identified and characterized. UltraSystems will submit a draft Project Description to the County for review and comment. Pursuant to any comments or edits made by the County, UltraSystems would then modify the Project Description accordingly and ready the Project Description for inclusion into the Notice of Preparation which would be circulated in the not too distant future.

Deliverable: *An electronic file of the draft Project Description for review and comment; a final version of the Project Description will be provided upon approval of the revisions to the draft document.*

Task 1.8: Prepare Initial Study. UltraSystems will prepare the Initial Study for the proposed project. The Initial Study will include all requisite information as required by *State CEQA Guidelines* § 15063(d), and based on CEQA's latest Environmental Checklist Form. UltraSystems will submit the draft Initial Study to the project team and County Planning staff via email for their technical review and comment, and then revise the Initial Study per the County's comments. The Initial Study will identify those topical issues found to potentially yield significant effects and thus warrant additional study in an EIR and those remaining topical issues which would not be subject to significant effects and would thus not be analyzed further. These conclusions will be supported by substantial evidence.

Technical analyses will be conducted for different environmental resource areas, as needed and well supported responses for all questions listed in CEQA Appendix G will be provided. Environmental issues to be considered include the following topical areas along with the required Mandatory Finding of Significance.

Topical Areas to be Discussed		
Aesthetics	Greenhouse Gas Emissions	Population/ Housing
Agricultural & Forestry Resources	Hazardous Materials	Public Services
Air Quality	Hydrology and Water Quality	Recreation
Biological Resources	Land Use/ Planning	Transportation/ Traffic
Cultural Resources	Mineral Resources	Utilities and Service Systems
Energy	Noise	Tribal Cultural Resources
Geology & Soils	Mandatory Findings of Significance	Wildfire

Deliverable: *Draft and Final version of the Initial Study in PDF format.*

Task 1.9: Prepare Notice of Preparation (NOP). UltraSystems will prepare a draft Notice of Preparation (NOP) for the County's review and approval. The NOP comply with the NOP content provisions set forth in *State CEQA Guidelines* § 15082. After describing the proposed project, the NOP will provide a list of the probable environmental effects to be evaluated in the upcoming EIR. UltraSystems will work with the County to prepare a list of persons and agencies to be notified of the EIR documents and related public hearings.

Deliverable: *Electronic file of the NOP in English/Spanish. UltraSystems will provide the final NOP formatting, prepare exhibits and maps, and distribute the NOP to the State Clearinghouse, agencies, and interested parties. It will also be published in one newspaper of general circulation.*

Task 1.10: Publish NOP. UltraSystems will finalize the NOP packet employing the County's preferred format and ready it for distribution to the list developed under Task 1.9 above. All copies of the NOP shall be distributed to all recipients via certified mail. It is also assumed that the NOP will be published in a local area publication and posted on the County's website.

Deliverable: *Publish NOP.*

Task 1.11: Review Comments Received on the NOP. UltraSystems will review the comments received on the NOP during the public review period and ensure that all pertinent areas of concern are considered in the Draft EIR. Copies of all correspondence received by the County throughout the NOP process will be incorporated in a technical appendix to the Draft EIR.

Task 1.12: Peer Review Technical Studies. Pursuant to the County's RFP and the Applicant's Project Description materials for VEGA SES 2,3 and 5, the following technical reports and/or studies shall be furnished by the Applicant and then subjected to Peer Review by UltraSystems. They are as follows: Aesthetics (Visual Simulations); Aesthetics

(Solar Glare Analysis); Agriculture & Forestry Resources (Land Evaluation Site Assessment) LESA Model; Air Quality (CalEEMod); Air Quality (Greenhouse Gas Emissions), Biological Resources (Biological Resources Survey), Biological Resources (Jurisdictional Delineation); Biological Resources (Focused BUOW Breeding Season Survey); Cultural Resources (Baseline Cultural Resources Survey); Geology & Soils (Preliminary Geotechnical Survey Report); Hazards/Hazardous Materials (Phase I Environmental Site Assessment); Hydrology and Water Quality (Preliminary Drainage Study); Hydrology and Water Quality (Storm Water Pollution Prevention Plan – SWPPP); Utilities and Service Systems (Water Supply Assessment); Project Description (Preliminary Grading Plan); Project Description (Project Site Restoration Plan).

UltraSystems Project Team will perform a CEQA adequacy peer review of all Applicant-prepared technical studies listed above except for those that are germane to the Project Description. In addition, since the Applicant indicates that a Water Supply Agreement with IID will be required, it appears reasonable to us that the Applicant will furnish us a Water Supply Assessment as requested by the County. The purpose of performing a CEQA adequacy peer review is to determine if a technical study contains the necessary content to support the environmental analysis that is germane to the technical study topic. For each of these technical studies UltraSystems: 1) will look for variables such as a consistent structure of the information presented, use of abbreviations and acronyms, bibliography, and other variables; 2) determine if the analysis presented in the technical study has a logical nexus to the Project Description; and, 3) determine if each technical study provides its results in the context of the thresholds of significance contained in Appendix G of the State CEQA Guidelines and any local thresholds of significance typically applied by the County pursuant to its own adopted *Local Guidelines for Implementing the California Environmental Quality Act.*

Deliverable: *A peer review results memorandum will be prepared for County staff. For each peer reviewed study, the memorandum will indicate that it is either adequate or contains CEQA-related deficiencies. In the latter case, such deficiencies will be identified and remedial measures will be suggested.*

Task 1.13: Prepare Project Imperial County General Plan Renewable and Transmission Element Consistency Evaluation. Based on the technical reports to be provided by the Applicant, it is our belief that while additional technical analyses would be required to address certain issues to be assessed in either the Initial Study or EIR, they do not rise to the level of stand-alone technical reports. As a consequence, we are not proposing to prepare any stand-alone reports beyond those to be furnished by the Applicant. However, pursuant to the County's RFP this task facilitates the effort required to make a finding regarding the proposed project's consistency with the Renewable and Transmission Element of the Imperial County General Plan. It is anticipated that this discussion will appear in the Land Use and Planning section of the upcoming EIR.

Deliverable: *A Draft Consistency Evaluation in electronic format (PDF or in MS Word) for review by County Staff. The final evaluation will be incorporated into the Land Use and Planning discussion of the Draft EIR*

MAJOR TASK 2.0: PREPARE ADMINISTRATIVE DRAFT EIR (ADEIR)

This major task encompasses all work efforts required to prepare an Administrative Draft EIR. The Draft EIR will be developed for the purpose of satisfying County environmental disclosure obligations and will include those mandatory elements identified in CEQA and its implementing guidelines. The tasks described below comprise the activities of the scientific and management professionals assigned to the project. This Major Task assumes all efforts related to the preparation of an Administrative Draft EIR for County review. Revising the Administrative Draft EIR pursuant to the County's comments, and all efforts up to and including circulation of the Public Review Draft EIR (DEIR) are described under Major Task 3.0 later in this SOW. Primary components of the Administrative Draft EIR are provided below:

Task 2.1: Table of Contents. This section of the Draft EIR will list the contents of the EIR, include text discussions and list tables and figures. The table of contents will also include the list of technical appendices to the Draft EIR.

Task 2.2: Executive Summary. The executive summary of the EIR is required by CEQA and is typically prepared after all the other sections of the EIR are completed. This section will include a summary of the EIR purpose, background, and major assumptions; a description of the project and alternatives; major conclusions of the alternative analysis (including the environmentally superior alternative); the project approval process; and an overview of all mitigation measures. This section will present in table format the overview of the project's significant impacts, mitigation measures and alternatives.

Task 2.3: Introduction. The introductory section will contain (1) a discussion of the purpose for producing the Draft EIR; (2) an identification of the statutory authority for this Draft EIR; (3) a list of the documents incorporated by reference, including a discussion of their relevance to the proposed action (pursuant to § 15150 of the California Code of Regulations [CCR]); and (4) a matrix of project approvals, identifying those actions which will be involved in the approval of the project. The introduction will further describe scoping activities (i.e., consultation and coordination) undertaken by the County and UltraSystems to identify environmental issues and mitigation measures included in the environmental review record.

Task 2.4: Summary of Impacts, Mitigation Measures and Alternatives. A summary, prepared pursuant to § 15123 of the California Code of Regulations (CCR), will include a matrix outlining all identified impacts, mitigation measures, and conditions of approval recommended to reduce or avoid those effects; and will present a conclusion indicating the post-project level of significance after implementation of those measures. The summary will identify (1) each significant effect with proposed mitigation measures and alternatives that would reduce or avoid the effect; (2) areas of controversy known to the County acting in its capacity as the Lead Agency, including issues raised by the public and commenting agencies during the public scoping meeting and public review periods; and (3) issues to be resolved, including the choice among alternatives and how to mitigate the project's significant environmental effects.

UltraSystems, in consultation with County staff, will prepare mitigation measures that are based on final technical studies and significance determinations. UltraSystems will use the County-supplied spreadsheet that will include a bulleted outline analysis of each chapter, impacts under of each section of the Draft EIR, organization of issues for each impact, draft mitigation measures, and potential significance determinations before and after mitigation.

Task 2.5: Basis for Cumulative Analysis. When evaluating the potential environmental effects of a proposed activity, § 15130 of the CCR requires that the Lead Agency also examine potential cumulative impacts when they are significant. As further indicated, the discussion of cumulative impacts should be guided by the standards of practicality and reasonableness. When assessing cumulative effects, CEQA affords agencies the opportunity to conduct the analyses in accordance with either of the following methodologies: (1) a list of past, present, and reasonably anticipated future projects producing related or cumulative impacts; or (2) a summary of projections contained in an adopted planning document designed to evaluate regional or area-wide conditions. UltraSystems will work cooperatively with County staff to formulate an appropriate strategy in response to this CEQA obligation and to identify related projects, if warranted. At this time, it is our considered opinion that the cumulative impact discussion will be based on the first of the two aforementioned methodological approaches.

Task 2.6: Environmental Setting. As defined under § 15358(b) of the CCR, effects analyzed under CEQA must be related to a physical change in the environment. As a result, the effects, which are to be examined in the Draft EIR, relate to the change between the existing conditions and the future conditions resulting from project implementation and development. This section shall contain a brief description of the natural and built environment on and in the vicinity of the project site, as it exists prior to project implementation from both a local and regional perspective. Special emphasis will be placed on any environmental resources that are considered rare or unique.

Task 2.7: Discussion of Environmental Impacts and Mitigation Measures. Each of the topical issues identified in Appendix G of the State CEQA Guidelines as supplied by the County in the Request for Proposal will be individually

addressed in the Draft EIR. UltraSystems anticipates that some topical issues will be "screened out" during the preparation of the Initial Study. The County will provide the final determination of which topical issues are "screened out." Presented below are the potentially significant environmental issues we currently believe will be addressed in the upcoming Draft EIR. Each environmental issue discussed will comprise the same format: Environmental Setting, Regulatory Setting, Thresholds of Impact Significance, Environmental Impacts, Mitigation Measures, and Level of Impact Significance after Mitigation. Following is an example of how a particular environmental topic will be structured:

Example – EIR Section Structure

1.0 Environmental Topic
1.1 Environmental setting
1.2 Regulatory Setting
1.3 Thresholds of Impact Significance
1.4 Environmental Impacts
1.5 Cumulative Impacts
1.6 Mitigation Measures
1.7 Level of Impact Significance after Mitigation

Prospective Environmental Issues to be addressed in the upcoming EIR:

- Aesthetics
- Air Quality
- Cultural Resources
- Greenhouse Gas Emissions
- Hydrology/Water Quality
- Noise
- Hazards/Hazardous Materials
- Recreation
- Energy Assessment
- Biological Resources
- Geology and Soils
- Land Use/Planning
- Public Health and Safety (Including Wildfire)
- Utilities and Service Systems
- Transportation/Traffic

Task 2.8: Significant Environmental Effects. UltraSystems will list and summarize environmental effects determined to be significant based on the environmental evaluation. This list will be organized by topical issue.

Task 2.9: Unavoidable Significant Environmental Effects. Based on the environmental evaluation, UltraSystems will summarize and discuss any significant environmental effects that were unable to be avoided. A Draft EIR must disclose the significant unavoidable impacts that would result from implementing a proposed project. Moreover, CEQA Guidelines § 15126(b) states that a Draft EIR should explain the implications of such impacts and the reasons why the project is being proposed, notwithstanding such impacts.

Task 2.10: Significant Irreversible Environmental Changes. A Draft EIR must disclose the long-term commitment to natural resources and the energy implications associated with implementing the project. It is anticipated that the applicant will furnish an energy balance as part of the Project Description or through the Air Quality/GHG Emissions Analyses.

Task 2.11: Growth-Inducing Impacts. The assessment of growth-inducing impacts within the Draft EIR will consider whether the overall project once implemented: (1) produces a potential for in-migration to fill employment opportunities associated with the project's construction and operation; (2) results in an increased localized demand for goods and services; (3) results in the removal of economic, physical or political constraints; and (4) facilitates peripheral development through the expansion of services and/or utilities. Issues of population, demographics, job formation, housing, infrastructure improvements, and economic growth will be considered.

Task 2.12: Alternatives to the Proposed Action. The Draft EIR must include a discussion of a reasonable range of alternatives to the proposed action. It will include the evaluation of up to **three** (3) feasible alternatives, including the No Project Alternative. UltraSystems, working in cooperation with County staff, will identify additional alternatives, which could attain the stated objectives of the project, evaluate the environmental impacts associated with each alternative, and provide a summary analysis of anticipated impacts under each of the topical issues examined in the Draft EIR. A matrix presenting a comparative analysis of the corresponding impacts associated with the project and each of the alternatives identified in the Draft EIR will be developed. An Environmentally Superior Alternative shall be also be identified.

Task 2.13: References/List of Preparers. This section will be prepared in accordance with the provisions of CEQA and its implementing guidelines. It will identify County staff, UltraSystems personnel, and any relevant other individuals who participated in preparing the Draft EIR. Also to be included in this section will be a list of organizations and persons consulted and references employed to prepare the Draft EIR.

MAJOR TASK 3.0: PREPARE PUBLIC REVIEW DRAFT EIR (DEIR)

This major task encompasses all activities required to finalize and disseminate the Public Review Draft EIR.

Task 3.1: Revise Administrative Draft EIR. Upon receipt of the County comments on the Administrative Draft EIR, UltraSystems will; (1) organize the comments, perform necessary reevaluation, and revise the document where appropriate, and (2) submit a revised Administrative Draft EIR (incorporating subsequent revisions) to County staff for their final review. Two cycles of County review have been assumed in the budget and overall schedule of performance. The first County review cycle assumes a 45 day period. The second County review cycle assumes a 30 day period.

Should new technical issues arise from that review that have not been previously identified or considered in this proposal, or should further investigative analysis be required beyond the specific limits of this SOW, UltraSystems reserves the right to enter into further negotiations to amend the scope of services as may be required to complete those additional tasks and responsibilities. Following acceptance of the revised Draft EIR by the County, that document shall be disseminated in that manner as described herein.

Task 3.2: Distribute Draft EIR. Upon concurrence of a document distribution list, UltraSystems will print the Draft EIR, which will be disseminated to those agencies, organizations, and individuals required to receive notice. All mailing will be done via certified mail (return receipt requested). The proof of deliveries will be assembled by UltraSystems to document distribution compliance.

Task 3.3: Noticing. UltraSystems will prepare a **Notice of Availability** (NOA) in order to give sufficient notice to the public, responsible agencies, trustee agencies, and the County Clerk that the Draft EIR is available for review and comment. Consistent with CEQA Guidelines § 15087(c), the notice will contain a brief project description and its location; the starting and ending dates for the review period during which the County will accept comments; the date, time and place of any scheduled public meeting or hearing; the address where copies of the Draft EIR are available for review; and if applicable, the presence on the site of any hazardous wastes per Government Code § 65962.5. UltraSystems will ensure posting of the NOA at the Imperial County Clerk, and mail the NOA to up to **25 recipients**. UltraSystems will prepare the **Notice of Completion** (NOC) and then file that notice with the County Clerk and the State Clearinghouse.

MAJOR TASK 4.0: FINAL EIR

This major task includes those activities associated with the preparation of the Final EIR. The content and format of the Final EIR shall follow the procedures set forth in CEQA and its implementing guidelines.

Task 4.1: Prepare Administrative Draft Response to Comments. This task encompasses the preparation of written administrative draft responses to comments received on the Draft EIR. All substantive and relevant comments shall be addressed and organized in a manner to facilitate easy reference.

The Administrative Draft Response to Comments volume will include a written response to all comments, as well as a copy of each written comment in its original form. The Administrative Draft Response to Comments volume shall include an introduction describing the document's contents, statutory authority, and relationship to the Draft EIR. Each comment will be identified and characterized by topic and source (e.g., federal, State, county, and local agencies; private organizations; and interested individuals).

The number and substance of comments may vary greatly. As a result, UltraSystems has allocated a specific number of labor hours to this task assignment based on information provided in the County's RFP. Therein it is stated that excessive comments are anything **more than 20 commenting agencies/individuals and/or up to 150 comments requiring substantive responses**. As a consequence, we have provided a budget which facilitates addressing up to 150 comments requiring substantive responses (answers more than merely "comment noted"). Should the number or substance of comments exceed this budget allocation, a revised not-to-exceed budget shall be developed and submitted to the County. All subsequent efforts in this regard will be compensated on a time-and-materials basis, in an amount to be negotiated with the County upon receipt of all public and government agency comments.

Deliverable: *Administrative Draft Responses to Comments in PDF format for County Review.*

Task 4.2: Prepare Revisions to the Administrative Draft Response to Comments. Upon receipt of County comments on the Administrative Draft Response to Comments volume, UltraSystems shall make the appropriate revisions and resubmit a Final Draft Response to Comments document to the County for its review and consideration. **Two** (30-day) County review cycles have been assumed in our budget and in performance schedule.

Deliverable: *Final Responses to Comments in PDF format for County Review.*

Task 4.3: Prepare Mitigation Monitoring and Reporting Program. UltraSystems will prepare a draft Mitigation Reporting and Monitoring Program, pursuant to § 21081.6 of the Public Resources Code. The monitoring program shall specify: (1) the responsibility for implementation; (2) the timing for implementation; (3) the mechanisms of monitoring activities, including the frequency, contact, and format for reporting requirements; and (4) the content, requirements, and ultimate disposition of a Final Mitigation Monitoring and Reporting Program Report. UltraSystems shall assist the County in soliciting and incorporating the views of Responsible Agencies regarding the scope and the appropriate aspects of the monitoring and reporting program.

Deliverable: *Draft and Final MMRP in PDF format for County Review.*

Task 4.4: Administrative Draft Final EIR. UltraSystems will prepare an Administrative Draft Final EIR incorporating the Draft EIR, Response to Comments, and the Mitigation Monitoring and Monitoring Program submit it for County review and comment.

Task 4.5: Revise Administrative Draft Final EIR. Following the County's review, UltraSystems will make any appropriate revisions and then compile a Final EIR incorporating the Draft EIR, Response to Comments, and the Mitigation Monitoring and Reporting Program.

Task 4.6: Notices. UltraSystems will file the following notices: Notice of Availability, Notice of Completion, and Notice of Determination (NOD). In addition, UltraSystems will support County staff, if necessary, in preparing and sending notices associated with AB 52 and SB 18. We will also provide posting of all notices at the County Clerk's office.

Task 4.7: Prepare Findings of Fact/Statement of Overriding Considerations (if warranted). UltraSystems will prepare Findings of Fact (§ 15091, CCR) and under the direction of County staff and County Counsel. Based on County comments, a final set of findings shall be provided for adoption concurrently with the certification of the Final EIR. In the event the Final EIR identifies the continuing existence of significant adverse impacts after mitigation, UltraSystems will draft a Statement of Overriding Considerations for review by the County staff.

Deliverables: *Draft and Final FOF and SOC in PDF format for County Review.*

Task 4.8: Administrative Record. UltraSystems will prepare, catalog, and deliver the administrative record. UltraSystems understands the County will provide directions on preparing the administrative record.

Task 4.9: Document Reproduction. UltraSystems shall print the following copies of the deliverables, to include the following:

Five printed copies of the Administrative DEIR
Five printed copies of the Proof Check DEIR
Five printed copies of the Public Draft EIR with Appendices and 50 CD's
Five printed copies of the Administrative Final EIR
Five printed copies of the Final EIR with Appendices and 50 CD's

Task 4.10: Other Direct Expenses. This task facilitates the Project Team's expenditures for incidental expenses related to the execution of the foregoing scope of work. Included are such items as; film, mileage, document procurement, subsistence, computer usage for modeling runs, etc.

4.0 PROPOSED SCHEDULE

UltraSystems has developed what we believe to be a realistic performance schedule from project initiation through EIR Certification and Filing of the NOD. Assuming two County review cycles for each major deliverable (ADEIR, DEIR, and FEIR) and a reasonable number of comments received on the DEIR certification of the DEIR could occur sometime during 12th month of the Work Program. The Table which follows identifies all work program tasks, their durations, and the cumulative work program duration.

Table 4.0-1
PROJECT SCHEDULE

		Task Duration (In weeks)	Cumulative Duration (In weeks)	Key Milestones
MT 1.0	**PROJECT INITIATION**			
T1.1	Project Management Plan	2	2	
T1.2	Tracking System/Project Status Reports	2	Periodic	
T1.3	Project Kick-off Meeting	1	2	◆
T1.4	Project Status/Update Meetings	1	Periodic	
T1.5	Scoping Meeting and Public Hearings	1	Periodic	
T1.6	Ongoing Consultation	Continuous	Continuous	
T1.7	Prepare Project Description	3	5	◆
T1.8	Prepare Initial Study	4	8	
T1.9	Prepare Notice of Preparation (NOP)	1	9	
T1.10	Publish NOP	1	9	◆
T1.11	Review Comments Received on the NOP	1	14	
T1.12	Peer Review Technical Studies	3	14	
T1.13	Prepare Project Imperial County General Plan Renewable and Transmission Element Consistency Evaluation	1	14	
MT 2.0	**PREPARE ADMINISTRATIVE DRAFT EIR**			
T2.1	Table of Contents	1	16	
T2.2	Executive Summary	1	16	
T2.3	Introduction	1	17	
T2.4	Summary of Impacts, Mitigation Measures and Alternatives	2	19	
T2.5	Basis for Cumulative Analysis	2	21	
T2.6	Environmental Setting	1	21	
T2.7	Discussion of Environmental Impacts and Mitigation Measures	6	26	
T2.8	Significant Environmental Effects	1	26	
T2.9	Unavoidable Significant Environmental Effects	1	26	

		Task Duration (In weeks)	Cumulative Duration (In weeks)	Key Milestones
T2.10	Significant Irreversible Environmental Changes	1	26	
T2.11	Growth-Inducing Impacts	1	26	
T2.12	Alternatives to the Proposed Action	2	28	
T2.13	References/List of Preparers	1	28	◆
MT 3.0	**PREPARE PUBLIC REVIEW DRAFT EIR**			
T3.1	Revise Administrative Draft EIR	2	30	
T3.2	Distribute Draft EIR	2	32	◆
T3.3	Noticing	1	32	
MT 4.0	**FINAL EIR**			
T4.1	Revise Administrative Draft RTC	2	45	
T4.2	Prepare Revisions to the Admin. Draft RTC	2	47	
T4.3	Prepare Mitigation Monitoring and Reporting Program	1	47	
T4.4	Administrative Draft Final EIR	2	47	
T4.5	Revise Administrative Draft Final EIR	2	48	◆
T4.6	Notices	1	48	
T4.7	Prepare Findings of Fact/Statement of Overriding Considerations (if warranted)	1	48	◆
T4.8	Administrative Record	1	48	
T4.9	Document Reproduction	Periodic	Periodic	
T4.10	Other Direct Expenses	Periodic	Periodic	
	Public Hearings	4	48-52	◆
	TOTAL WORK PROGRAM		**48-52**	

Assumptions:

1. The start date is assumed to be the week UltraSystems is authorized to begin work.
2. Technical studies will begin after the Project Description has been accepted by the County.
3. UltraSystems-prepared technical studies will begin after the Project Description has been accepted by the County and are included within the preparation of the Administrative Draft EIR (ADEIR)
4. UltraSystems assumes a two-week review cycle by the County.
5. The 30-day public review period is mandatory.
6. The 45-day public review period is mandatory. UltraSystems is not responsible for schedule delays beyond its control.
7. Certain tasks will be performed concurrently.
8. Planning Commission and Board of Supervisors hearing dates listed in the schedule will ultimately be determined by the County staff.

5.0 COST ESTIMATE/MILESTONES

The costs to implement the work scope outlined in **Section 3.0** are provided below in **Table 5.0-1** below, and in the attached Excel Spreadsheet, which defines all task by labor allocation. UltraSystems' Standard Rate Sheet is also provided in **Table 5.0-2**.

Table 5.0-1
PROJECT COST SUMMARY

Task Nos.	Major Task Activities	Cost ($)
1.0	Project Initiation, Project Management, and Meetings	$64,880
2.0	Prepare Administrative Draft EIR (ADEIR)	$44,680
3.0	Prepare Public Review Draft EIR (DEIR)	$15,390
4.0	Final EIR	$56,020
	TOTAL FEE	**$180,970**

Table 5.0-2
ULTRASYSTEMS STANDARD RATE SCHEDULE | Effective January 2020

Professional Staff		Hourly Rates
Principal		$185
Director		$175
Senior Project Manager		$165
Project Manager		$160
Senior Principal Engineer		$175
Senior Scientist/Engineer		$165
Scientist/Engineer		$150
Staff Scientist/Engineer		$140
Senior Planner		$125
Associate Planner		$120
Planner/Environmental Analyst		$110
Senior Biologist II		$130
Senior Biologist I		$125
Staff Biologist II		$120
Staff Biologist I		$85
Associate Biologist		$100
Cultural Specialist		$135
Archaeologist		$120
Cultural Monitor		$85
Senior GIS Analyst		$110
GIS Technician		$100
Word Processor		$75
Reports		**Fixed**
Up to 100 pages		No charge
101 to 500 pages		$75
Building Services		
Field Management		$145
ACM Air Monitor/Lead Inspector/Sampling		$88
Note: ACM/LBP Removal quoted on per job basis		
Field Equipment	**Daily**	**Weekly**
Excavation Screen	$5	$20
Field Supplies (shovels, health and safety, flagging, binoculars, etc.)	$15	$60
Garmin GPS (non-Trimble)	$5	$20
iPad Data Tablet	$25	$100
Kestrel Anemometer (or equivalent)	$5	$20
Photoionization detector (PID) or equivalent	$100	$400
Quest SoundPro SP-DL-1–1/3 Sound Level Meter (or equivalent)	$110	$440
RKI GX-2003 Multi-Gas Meter (or equivalent)	$65	$260
Trimble Geo7X GPS Unit (or equivalent)	$120	$560
XRF Analyzer	$95	$380

Table 5.0-3
LABOR COSTS BY PERSONNEL

UltraSystems

TASK BY TASK COST BREAKDOWN FOR PREPARATION OF AN EIR - VEGA SES 2, 3 and 6

	Labor Categories >>>>	Project Director	Senior Project Manager	Senior Principal Engineer	Scientist/ Engineer	Senior Planner	Associate Planner	Planner/ Environ. Analyst	Senior Biologist II	Senior Biologist I	Cultural Specialist	Archaeologist	Sr. GIS Analyst	Graphic Illustrator	Word Processor	Total Labor	Total Hours	Travel		Direct Expense	TOTAL (rounded)
	Hourly Rate >>>	$185	$165	$175	$150	$125	$120	$110	$130	$125	$135	$120	$110	$78	$75			Miles	$0.580		
		Labor Hours																			
1.0	Project Initiation, Project Management, and Meetings																				
1.1	Project Management Plan	2	4	0	0	0	0	0	0	0	0	0	0	0	2	$1,180.00	8	0	$0.00	$0.00	$1,180
1.2	Tracking System/Project Status Rpts.	0	12	0	0	0	0	0	0	0	0	0	0	0	0	$1,980.00	12	0	$0.00	$0.00	$1,980
1.3	Project Kick-Off Meeting	6	6	0	0	0	0	0	0	0	0	0	0	0	2	$2,250.00	14	500	$290.00	$0.00	$2,540
1.4	Project Status/Update Meetings	4	16	0	4	4	0	0	0	0	0	0	0	0	0	$4,480.00	28	0	$0.00	$0.00	$4,480
1.5	Scoping Meeting and Public Hearings	12	12	0	0	24	12	4	0	0	0	0	0	0	4	$9,380.00	68	500	$290.00	$0.00	$9,670
1.6	Ongoing Consultation	4	20	0	0	0	0	0	0	0	0	0	0	0	0	$4,040.00	24	0	$0.00	$0.00	$4,040
1.7	Prepare Project Description	2	2	0	0	12	12	0	0	0	0	0	0	6	4	$4,408.00	38	0	$0.00	$0.00	$4,410
1.8	Prepare Initial Study	2	16	4	6	16	24	12	4	4	4	4	4	4	8	$14,202.00	112	0	$0.00	$0.00	$14,200
1.9	Prepare Notice of Preparation	0	1	0	0	0	4	0	0	0	0	0	0	1	2	$873.00	8	0	$0.00	$0.00	$870
1.1	Publish NOP	0	1	0	0	2	0	0	0	0	0	0	0	0	2	$565.00	5	0	$0.00	$0.00	$570
1.11	Review Comments Received on the NOP	1	4	2	0	2	4	0	0	0	0	0	0	0	0	$1,925.00	13	0	$0.00	$0.00	$1,930
1.12	Peer Review Technical Studies	0	24	12	4	16	12	12	12	8	8	4	0	0	2	$15,690.00	114	0	$0.00	$0.00	$15,690
1.13	Prepare GP Renewable Element Consistency Evaluation	0	2	12	0	4	2	0	0	0	0	0	0	0	2	$3,320.00	22	0	$0.00	$0.00	$3,320
	Subtotal	33	120	30	14	80	70	28	16	12	12	8	4	11	28	$54,293.00	460	1000	$580.00	$0.00	$54,880
2.0	Prepare Administrative Draft EIR (ADEIR)																				
2.1	Table of Contents	0	0	0	0	0	0	0	0	0	0	0	0	0	4	$300.00	4	0	$0.00	$0.00	$300
2.2	Executive Summary	0	4	0	0	4	4	0	0	0	0	0	0	0	2	$1,790.00	14	0	$0.00	$0.00	$1,790
2.3	Introduction	0	2	0	0	6	6	2	0	0	0	0	0	0	2	$2,170.00	18	0	$0.00	$0.00	$2,170
2.4	Summary of Impacts, Mitigation Measures and Alternatives	1	4	4	0	4	4	2	0	0	0	0	0	0	4	$3,045.00	23	0	$0.00	$0.00	$3,050
2.5	Basis For Cumulative Analysis	1	4	0	0	6	0	0	2	0	2	0	0	0	2	$2,275.00	17	0	$0.00	$0.00	$2,280
2.6	Environmental Setting	0	1	0	0	4	4	0	0	0	0	0	0	0	2	$1,295.00	11	0	$0.00	$0.00	$1,300
2.7	Discussion of Environmental Impacts and Mitigation Measures	4	16	16	8	16	8	4	8	8	8	8	4	0	4	$15,600.00	112	0	$0.00	$0.00	$15,600
2.8	Significant Environmental Effects	0	1	0	0	3	2	0	0	0	0	0	0	0	2	$930.00	8	0	$0.00	$0.00	$930
2.9	Unavoidable Significant Effects	0	4	1	0	2	0	0	0	0	0	0	0	0	2	$1,235.00	9	0	$0.00	$0.00	$1,240
2.10	Significant Irreversible Environmental Changes	0	4	1	0	2	0	0	0	0	0	0	0	0	2	$1,235.00	9	0	$0.00	$0.00	$1,240
2.11	Growth-Inducing Impacts	0	2	0	0	4	0	0	0	0	0	0	0	0	2	$980.00	8	0	$0.00	$0.00	$980
2.12	Alternatives to the Proposed Project	0	24	4	8	24	26	0	0	0	0	0	4	0	4	$12,720.00	94	0	$0.00	$0.00	$12,720
2.13	References/List of Preparers	0	1	0	0	0	4	2	0	0	1	0	0	0	1	$1,075.00	9	0	$0.00	$0.00	$1,080
	Subtotal	6	67	26	16	76	68	10	10	8	11	8	8	0	33	$44,660.00	336	0	$0.00	$0.00	$44,660

3.0	Prepare Public Review Draft EIR (DEIR)																				
3.1	Revise Administrative Draft EIR	1	16	2	2	24	16	2	4	2	4	2	0	0	8	$10,785.00	83	0	$0.00	$500.00	$11,270
3.2	Distribute Draft EIR	0	2	0	0	4	4	0	0	0	0	0	0	0	4	$1,610.00	14	0	$0.00	$750.00	$2,360
3.3	Noticing	0	1	0	0	0	2	0	0	0	0	0	0	0	2	$555.00	5	0	$0.00	$1,200.00	$1,760
	Subtotal	1	19	2	2	28	22	2	4	2	4	2	0	0	14	$12,930.00	102	0	$0.00	$2,450.00	$15,390
4.0	Final EIR																				
4.1	Prepare Administrative Draft Response to Comments (RTC)	2	24	16	4	32	32	4	4	4	4	4	0	0	16	$19,250.00	146	0	$0.00	$1,000.00	$20,250
4.2	Prepare Revisions to Admin. Draft RTC	0	12	2	0	4	16	2	2	2	2	2	0	0	4	$6,290.00	48	0	$0.00	$0.00	$6,290
4.3	Prepare Mitigation Monitoring and Reporting Program	0	2	0	0	2	8	0	0	0	0	0	0	0	2	$1,690.00	14	0	$0.00	$0.00	$1,690
4.4	Administrative Draft Final EIR	0	4	0	0	12	12	0	0	0	0	0	0	0	4	$3,900.00	32	0	$0.00	$1,000.00	$4,900
4.5	Revise Administrative Draft Final EIR	0	2	0	0	8	8	0	0	0	0	0	0	0	2	$2,440.00	20	0	$0.00	$0.00	$2,440
4.6	Noticing	0	1	0	0	2	2	0	0	0	0	0	0	0	1	$730.00	6	500	$290.00	$3,500.00	$4,520
4.7	Prepare Findings of Fact and Statement of Overriding Considerations	4	16	0	0	16	12	0	0	0	0	0	0	0	4	$7,120.00	52	0	$0.00	$0.00	$7,120
4.8	Administrative Record	0	8	0	0	12	12	0	0	0	0	0	0	0	4	$4,580.00	36	0	$0.00	$500.00	$5,080
4.9	Document Reproduction	0	0	0	0	0	0	0	0	0	0	0	4	0	4	$740.00	8	15	$8.70	$1,500.00	$2,250
4.10	Other Direct Expenses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0.00	0	0	$0.00	$1,500.00	$1,500
	Subtotal	6	69	18	4	88	102	6	6	6	6	6	4	0	41	$46,720.00	362	515	$298.70	$9,000.00	$55,020
	Total (Hours)	46	275	76	36	271	252	46	36	28	33	24	16	11	116						
	TOTAL	$8,510.00	$45,375.00	$13,300.00	$6,400.00	$33,875.00	$30,240.00	$8,060.00	$4,680.00	$3,500.00	$4,455.00	$2,880.00	$1,760.00	$858.00	$8,700.00	$166,693.00	1266	1615	$878.70	$11,450.00	$180,970

APPENDIX A

KEY STAFF RESUMES

Betsy A. Lindsay, MURP, ENV SP

Principal-in-Charge

UltraSystems
environmental • management • planning

Years of Experience

35+

Years with Firm

26.5

Education

- M.U.R.P., Master of Urban and Regional Planning, California State Polytechnic University, Pomona, CA, 1989
- B.A., Geography, California State University, Long Beach, CA, 1978
- Graduate Program, Public Policy and Administration, California State University, Long Beach, CA, 1992
- Graduate Program, Business Administration, Pepperdine University, Irvine, CA, 1991

Professional Affiliations

- American Planning Association
- Urban Land Institute
- Association of Environmental Professionals
- National Association of Women Business Owners
- National Association for Female Executives

Areas of Expertise

- CEQA
- NEPA
- Entitlement
- Energy
- Federal
- Institutional
- Infrastructure

PROFESSIONAL SUMMARY

Ms. Lindsay is the founder and chief executive of UltraSystems Environmental. A building industry veteran, she has over 35 years of experience in environmental planning and permitting, preparing more than 400 environmental documents. Her background includes managing over 20 on-call professional service contracts for public agencies, which have included hundreds of projects. At UltraSystems, her day-to-day responsibilities include business and project management, contract administration, resource allocation, and quality control. She is responsible for overall project management, the preparation and processing of CEQA/NEPA documents, and associated entitlement obligations for large-scale public and private infrastructure projects.

SELECT PROJECT EXPERIENCE

Environmental Compliance, Imperial Solar Energy Center South, Imperial County, CA

Ms. Lindsay served as UltraSystems' Principal-in-Charge for this Imperial Solar Energy Center South (ISECS) project. The project is now in an Operational and Maintenance phase. The project was constructed on over 1,000 acres, and included a new substation, switchyard and a 1.6-mile-long transmission line on BLM Land. Ms. Lindsay primary duties included employee resource allocation, technical reporting, interagency coordination and contract administration. Ms. Lindsay was also involved in numerous required technical studies plans. There were over 20 employee's working on the ISEC South project, during its construction phase. UltraSystems was also involved with post-closure maintenance activities. All environmental compliance activities focused on the project's CUP, MMRP, BLM's POD, and regulatory permits.

Tehachapi Wind Farm Transmission Line Project, Los Angeles County, CA

As the Principal-in-Charge, Ms. Lindsay provided technical QA/QC of technical documents and field reports. UltraSystems prepared environmental documents and applications to the Bureau of Land Management for approval of a proposed 25-mile transmission line corridor. The purpose of the transmission line was to provide a connection between a transmission line operated by the Los Angeles Department of Water and Power and a proposed wind farm generating facility. The permitting effort included the preparation of applications, preparation of a supporting Environmental Assessment and Biological Assessment. Major issues involved potential impacts to cultural and biological resources, impacts to Off-Highway Vehicles (OHV)-use areas and visual impacts. The analysis also included land use implications associated with the designation of a new BLM utility corridor.

Coso Geothermal – Hay Ranch Water Extraction and Delivery System Project Environmental Assessment, Inyo County, CA

Ms. Lindsay served as the Principal-in-Charge and Contractual Administrator for the project. She assisted Gene Anderson, the designated Project Manager, with technical QA/QC review and the coordination of the project team and schedule. The proposed Hay Ranch Water Extraction and Delivery System Project is proposed to be located approximately 15 miles northeast

of Ridgecrest, California, in an unincorporated area of Inyo County. Approximately two-thirds of the project is to be on private land, largely in Rose Valley, and approximately one-third of the project is to be within public lands on the China Lake Naval Weapons Center. The purpose of the proposed Project is to develop an injection system to maintain the Coso Geothermal Project's electric production by minimizing the geothermal reservoir decline through the replacement of lost geothermal fluids. In order to accomplish this, ground water will be extracted from two existing wells and piped to one injection well and the existing injection distribution system. The project alignment encompasses an approximately 10-mile-long corridor with a 50 (fifty) foot right of way. The area directly affected would total approximately 60 acres. As the project is located in the sensitive California Desert area, the U.S. Department of the Interior Bureau of Land Management was the Lead Agency for the environmental document, with the U.S. Department of Defense, Department of the Navy, as a Responsible Agency. Detailed technical studies for biological and cultural resources were conducted as part of the environmental documentation. Based on these studies, the final alignment was planned to avoid sensitive biological and cultural resources. Hydrological studies were conducted to verify that the wells would produce sufficient fluids over the expected life of the project, and to demonstrate that the waters were from the same hydrologic basin.

Environmental Impact Report (EIR) and Environmental Impact Study (EIS), Telephone Flat Geothermal Development Project, Siskiyou County, CA

Ms. Lindsay served as Principal-in-Charge for this project involving a 48-megawatt geothermal power plant and wellfield project within the Glass Mountain Known Geothermal Resource Area (KGRA). The site is near the eastern boundary of Siskiyou County, CA, almost entirely within the Modoc National Forest.

Environmental Assessment (EA), Upgrade of Electrical Power Generation and Distribution System, Onizuka Air Force Base, CA

Ms. Lindsay served as Principal-in-Charge for this project. An EA and FONSI were prepared and submitted for a project that would provide uninterruptible power supply systems to Onizuka Air Force Base, part of the Air Force Satellite Control Facility spacecraft command and control.

Environmental Impact Report (EIR), BP Carson Crude Terminal Facility, Carson, CA

Ms. Lindsay served as Principal-in-Charge for this project, overseeing preparation of an EIR. Crude oil is received via pipeline, primarily from the Port of Long Beach, then stored and refined at the BP Carson Crude Terminal. BP West Coast Products, LLC proposed the construction and operation of two 260-foot-diameter domed external floating roof tanks to store crude oil at the BP Carson Crude Terminal. These tanks, crude oil storage tanks, would be typical storage tanks equipped with roofs that float on the surface of the stored liquid with seal systems for control of air emissions. As an added measure for the control of emissions, each tank will be constructed with a geodesic dome. The storage tanks were needed to provide additional storage capacity to offload crude oil cargos from Very Large Crude Carrier (VLCC) vessels.

Environmental Impact Report (EIR), for Exercise of Option to Renew a Lease of State Lands for the Chevron Marine Terminal, El Segundo, CA

Ms. Lindsay was Principal-in-Charge for this project involving preparation of an EIR. The UltraSystems team reviewed regulations pertaining to Marine Terminal operations from the California Department of Fish and Game, the Office of Oil Spill Prevention and Response (OSPR), the State Lands Commission, the U.S. Coast Guard, and the U.S. Environmental Protection Agency (EPA). Although Chevron's Marine Terminal has been in operation at this location since 1912, the renewal of the lease was determined to be a discretionary action subject to CEQA. She evaluated the environmental impacts of maintaining existing terminal facilities, modifying terminal facilities, and closing terminal facilities and transporting petroleum products via other modes.

Margaret Partridge, MURP, ENV SP, AICP

Sr. Project Manager

UltraSystems
environmental • engineering • planning

Years of Experience

15

Years with Firm

2.5

Education

- M.A., Urban and Regional Planning, University of California, Irvine (UCI), 2005
- B.A., Environmental Analysis and Design, University of California, Irvine (UCI), 2002

Professional Certificates

- American Institute of Certified Planners
- LEED Green Associate

Professional Affiliations

- American Institute of Certified Planners (AICP)
- American Planning Association (APA)
- Association of Environmental Professionals (AEP)
- U.S. Green Building Council (USGBC)

Areas of Expertise

- CEQA
- EIRs
- Initial Studies
- Mixed-Use
- MNDs
- Land Use
- Research
- Aesthetics
- Permits

PROFESSIONAL SUMMARY

Ms. Partridge is a planner with 15 years of experience in community and environmental planning. Ms. Partridge has experience in both the public and private sectors as a city planner and as an environmental planner for residential, commercial, industrial, mixed-use, and specific plan projects. Ms. Partridge's areas of expertise include CEQA, EIRs, Initial Studies, MNDs, and land use research. She is certified as a LEED Green Associate and is a member of the American Institute of Certified Planners (AICP). Ms. Partridge is trained in environmental analysis for a variety of project types and has experience conducting current planning and permit work for local cities.

SELECT PROJECT EXPERIENCE

Sol Orchard Solar Project, IS/MND, El Centro, Imperial County, CA

Ms. Partridge co-authored an Initial Study/Mitigated Negative Declaration (IS/MND) for a confidential client. This proposed solar facility project would be several hundred acres in size and is located in central California. As an Environmental Analyst for this project, Ms. Partridge conducted site-specific research and wrote portions of the IS/MND.

Watson Industrial Park, EIR, Chino, CA

Ms. Partridge assisted in the preparation of EIR sections for this proposed General Plan Amendment, Specific Plan Amendment, and Master Site Plan application for an approximately 190-acre industrial warehouse development project. This project proposed the development of eight industrial warehouse buildings, totaling approximately 3,700,000 square feet. The Final EIR for the project was certified in January 2016 by the City of Chino City Council.

Oak Flat Towers Project, IS/MND, Orange County, CA

Ms. Partridge co-authored an IS/MND for the development of a new radio transmitting tower facility in the Santa Ana Mountains for radio station KBRT AM 740. The new tower facility would replace the existing transmitting facility located in Los Angeles County. As an Assistant Project Manager for this project, Ms. Partridge coordinated with County staff and the Client regarding the project and assisted in research. The project was unanimously approved by the County of Orange Planning Commission in October 2011.

Wardlow and Lamb Residential Projects, Mitigated Negative Declarations (MNDs), Huntington Beach, CA

Ms. Partridge co-authored the Mitigated Negative Declarations for these detached single-family residential developments, proposed on former elementary school sites. The Wardlow project proposed the development of 49 homes and the Lamb Residential Project proposed 81 homes. Ms. Partridge attended the public scoping meetings for both projects and coordinated with subconsultants and City staff members regarding the projects. These projects were approved by the City of Huntington Beach City Council in November 2012.

Alderwood and Vista Verde Residential Projects, Environmental Impact Reports (EIRs), Irvine, CA
Ms. Partridge co-authored the EIRs for these detached single-family residential developments, proposed on former elementary school sites. The Alderwood Residential Project, located in the Village of Woodbridge in Irvine, proposed the development of 48 homes. The Vista Verde Residential Project, located in the Village of University Park in Irvine, proposed the development of up to 66 homes. Ms. Partridge prepared a variety of the EIR sections for these projects. She assisted in preparation of the public scoping meeting materials for both projects. Ms. Partridge also coordinated with subconsultants and City staff members regarding environmental impacts. The Alderwood Project was approved by the City of Irvine City Council in September 2011 and the Vista Verde Project was approved by the City Council in April 2012.

Serrano Woods Apartment Complex Initial Study/Mitigated Negative Declaration (IS/MND), Orange, CA
Ms. Partridge co-authored an IS/MND for the Serrano Woods affordable housing apartment complex. The project involved development of a 65-unit affordable housing development in the City of Orange. The project required a general plan amendment, zone change, tentative parcel map, and major site plan review by the City Design Review Committee. As Environmental Analyst/Assistant Project Manager for this project, Ms. Partridge conducted a site visit and photographed the project site. Additionally, she conducted all the background research and performed the environmental analysis. The City of Orange Planning Commission recommended approval in February of 2011 and the project was approved by the City Council in March of 2011.

La Habra Civic Center Infill Housing Project, EIR, La Habra, CA
As Environmental Analyst for this project, Ms. Partridge drafted sections of the DEIR for the La Habra Civic Center Infill Housing Project. Two options were considered for development of new single family and/or townhomes in the La Habra Civic Center area. Option 1 would entail development of approximately 110 new single-family homes and/or townhomes, on 5.5 acres already developed with the City of La Habra City Hall and Art Gallery, a Post Office, and the Crossroads Community Church property. The existing site improvements in these areas would be demolished and the City Hall and Post Office would be relocated to a nearby office property, through renovations of existing office buildings and an adjacent surface parking lot. Option 2 would entail development of approximately 47 new townhomes at the site of the same office buildings involved in Option 1. This project and its EIR were approved by the City of La Habra in May 2015.

150 Newport Center, MND, IS and EIR, Newport Beach, CA
Ms. Partridge assisted with the preparation of the MND, and subsequently the Initial Study and EIR sections for the 150 Newport Center project in the City of Newport Beach. Additionally, Ms. Partridge conducted a site visit and photographed surrounding land uses. The project would involve the demolition of a car wash, convenience market, and gas station to accommodate the development of a 7-story 49 unit residential condominium building with three levels of subterranean parking. The Project Applicant withdrew the application to the City in September 2016.

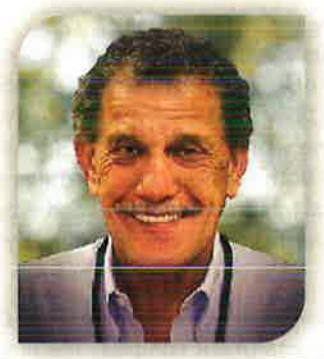
Liberty Groves Area Plan/Specific Plan, Administrative Draft PEIR, Madera, CA
Ms. Partridge authored sections of the Administrative Draft PEIR for this project, located in Madera County. The Liberty Groves Specific Plan provides for implementation of the Liberty Groves Area Plan and will function as the zoning document for the Liberty Groves project by providing land use regulations and development standards for new development. The Liberty Groves project is a proposed 1,320-acre master-planned, mixed-use community.

Oak Flat Towers Project, IS/MND, Orange County, CA
Ms. Partridge co-authored an IS/MND for the development of a new radio transmitting tower facility in the Santa Ana Mountains for radio station KBRT AM 740. The new tower facility would replace the existing transmitting facility located in Los Angeles County. As an Assistant Project Manager for this project, Ms. Partridge coordinated with County staff and the Client regarding the project and assisted in research. The project was unanimously approved by the County of Orange Planning Commission in October 2011.

Robert J. Verlaan, MA, MSW

Principal Planner

UltraSystems



Years of Experience
40

Years with Firm
4

Education

- Master of Arts, Environmental Planning, University of California, Santa Barbara (Ventura Learning Center), Ventura, CA, 1983
- M.S.W., Master of Social Work, California State University, San Francisco, San Francisco, CA, 1977
- B.A. Experimental Psychology, Westmont College, Montecito, CA, 1976

Professional Certificates

- Designated Expert Witness as a CEQA Practitioner by CA Superior Court, 1989

Professional Affiliations

- Association of Environmental Professionals

PROFESSIONAL SUMMARY

Mr. Verlaan is a highly experienced and versatile urban and environmental planning consulting professional with a verifiable track record of successfully achieving the goals and objectives of each assignment while employing methods reflecting the highest standards of professional care. He holds two advanced degrees from accredited major CA universities, one in the humanities and the second in Environmental Planning. Mr. Verlaan was accorded the status of qualified expert witness as a CEQA Practitioner by the Superior Court of the State of California in 1988. This has given him opportunities to develop extensive independent third-party review consultation and peer-review experience in association with various public agencies, private sector development interests, citizen stakeholders, and the legal community. Mr. Verlaan can point to the successful hands-on management, preparation and processing of CEQA, NEPA and TEPA (Tribal) compliance documents for more than 500 projects varying greatly in type, scale, complexity, public sensitivity, environmental setting and geographic location. This broad experience has encompassed his preparation of CEQA compliance documents for more than 40 jurisdictions and districts within the State of California and NEPA compliance documents for numerous federal agencies.

SELECT PROJECT EXPERIENCE

Diocese of Orange Catholic Church/School Complex Final Environmental Assessment
Project Manager. Initial Study/Mitigated Negative Declaration (IS/MND) addressing the future construction and operations of a new church and school facility in rural southeast Yorba Linda.

Claremont Graduate School Master Campus Development Plan FEIR
Project Manager. Program EIR addressing proposed development of the 35,000-square foot Peter F. Drucker Learning Center, surface parking, adaptive reuse of 12 structures, and renovation activities in an essentially residential area. City of Claremont, CA.

Yorba Linda Middle School Ball-field/Gymnasium Complex Final Environmental Assessment
Project Manager. Initial Study/Mitigated Negative Declaration (IS/MND) addressing the addition of two lighted multi-purpose ball-fields, jogging track, gymnasium, and the renovation of existing lighting facilities on vacant land occurring on the grounds of the Yorba Linda Middle School. City of Yorba Linda, CA.

Wintersburg Continuing Education High School Environmental Assessment
Project Manager. Initial Study/Mitigated Negative Declaration (IS/MND) and full CEQA processing for a 160-student educational facility at the existing Fountain Valley High School campus. Huntington Beach Union High School District; Fountain Valley, CA.

University Research Park Final Tiered Initial Study/Mitigated Negative Declaration (IS/MND Project Manager. Environmental assessment addressing a proposed 1.2 million square foot complex of research & development and related commercial uses in furtherance of the UCI Long Range Development Plan. University of California, Irvine, CA.

South Highland Avenue Extension and Roadway Improvement Project Environmental Assessment
Project Manager. Initial Study/Mitigated Negative Declaration (IS/MND) addressing a 2.2-mile roadway extension parallel to the future planned SR-30 freeway improvement project in northern Fontana.

Jack Bulik Park Expansion Environmental Assessment
Project Manager. Initial Study/Mitigated Negative Declaration (IS/MND) addressing a proposed expansion of an existing 12.78-acre park to 27.14-acres. The proposed expansion included a four-field softball complex, a Senior League baseball field, two additional basketball courts, and a 27,000 square foot skate park.

Hyundai Motor America Headquarters, Phase I and Phase II Facility Expansion, Environmental Assessment
Project Manager. Initial Study/Mitigated Negative Declaration (IS/MND) addressing the addition and redistribution of administrative and technical training uses comprising a net increase of 184,574 square feet to existing facilities.

South Park - A Planned Business Community FEIR
Project Manager. Program EIR for a 140-acre, 2.2 million square foot commercial office and retail project to be developed in a P.C. Zone.

Fiesta de Vida Specific Plan, Project Master Plan and Annexation Final Environmental Assessment.
Project Manager. The project comprised a proposed revision to Specific Plan No. 231 (Adams 34 Ranch) originally approved by the County of Riverside in 1992. As revised, the project included 1,495 dwelling units, of which 258 would be age-restricted, 656 would be senior-oriented, and the balance, non-age restricted. The project revision also included a 27-hole golf course, attendant clubhouse, a 7.29-acre community park and appurtenant infrastructure. Full CEQA processing. Document also served as the environmental review for annexation processing through Riverside County LAFCO.

Terra Lago East Final Environmental Assessment
Project Manager. Initial Study/Mitigated Negative Declaration (IS/MND) addressing a Project Master Plan and associated tentative tract maps encompassing 613-acres and approximately 849 dwelling units proximal to and within the existing Landmark Golf Club. Assignment also included full CEQA processing.

Addendum No. 4 to the Orange County Great Park Final Program EIR - Orange County Great Park (OCGP) Master Plan 00434337-PMP
Project Manager. Comparative environmental assessment conducted for the Orange County Great Park Master Plan component of the overall OCGP in relation to the findings of the 2003 Tier 1 Program EIR. Addendum No.4 addresses the environmental consequences of the next major metropolitan park planned for development in the Western Hemisphere. Comprising more than 1,100AC, the park will feature a broad array of physical improvements, including created, re-established and/or enhanced natural habitats, passive and active recreational facilities, cultural/civic/institutional buildings, interpretive exhibits, and in excess of 5,000 permanent parking spaces, among others.

La Cienega Hotel/Commercial Center FEIR No. 286-84-ZC
Project Manager. Project EIR for 300-room convention hotel and 70,000 square foot commercial center requiring a Zone Change.

Ramada Inn - Airport Boulevard FEIR
Project Manager. Project EIR addressing a 10-story, 440-room expansion of an existing hotel near LAX.

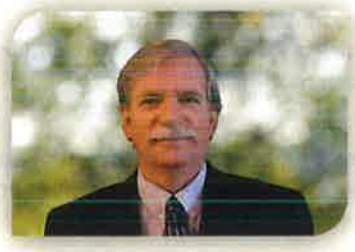
Toyota/Ontario Business Park Specific Plan FEIR
Project Manager. Program EIR addressing up to 2.2 million square feet of warehouse/distribution and office/R&D uses on approximately 94 acres adjacent to I-15.

Ontario Convention Center Final Environmental Assessment
Project Manager. Initial Study/Mitigated Negative Declaration (IS/MND) addressing a 220,000+/- square foot convention facility proximal to Ontario International Airport.

Stephen O'Neil, MA, RPA

Cultural Resources Manager - Archaeology

UltraSystems
environmental • management • planning



Years of Experience

41

Years with Firm

9

Education

- M.A., Anthropology, California State University, Fullerton, CA, 2002
- B.A., Anthropology, California State University, Long Beach, CA, 1979

Professional Registrations

- Register of Professional Archaeologists (No. 16104)
- Riverside County, CA, Cultural Resource Consultant (No. 259)
- Cultural Resource Field Director, BLM, Permit (CA-15-10) CA, 2015
- Contractor Safety Orientation, Burlington Northern and Santa Fe Railroad 2014, BNSF-US-CA-0814-02153

Professional Affiliations

- Orange County Natural History Museum; Board Member
- Pacific Coast Archaeological Society; Past President
- Society of CA Archaeology

Areas of Expertise

- CEQA
- NEPA
- Phase I/II
- Federal

PROFESSIONAL SUMMARY

Mr. O'Neil has over 41 years of experience as a cultural resource specialist in California. He has researched and written on archaeology, ethnography, and history throughout California. Mr. O'Neil has archaeological experience in excavation, survey, monitoring, and lab work. Most of this has been on Native American prehistoric sites, but also includes Spanish, Mexican, and American period adobe sites. His project management experience includes private, municipal, county, state and federal survey, excavation and monitoring projects. He has range of expertise in Phase I & II Cultural Resource Inventories, and archaeological, historical and paleontological survey assessments, and cultural background studies for various EIR projects. Mr. O'Neil has worked for cultural resource management firms as well as government agencies and Native American entities. He has prepared technical reports as well as published journal articles.

SELECT PROJECT EXPERIENCE

Cultural Resources Research and Evaluation, Imperial Solar Energy Center - West Project, Community of Seeley, Imperial County, CA

Mr. O'Neil was the cultural resources manager on the 1,130-acre solar generating facility project near the community of Seeley in the Imperial Valley. Prior to the start of construction, he oversaw the paleontological survey and subsequent technical report preparation, and paleontological monitoring of soil test borings. In anticipation of the construction, he prepared the Archaeological and Paleontological Monitoring Programs, the Long Term Management Plan, and the Tribal Participation Plan – all submitted to and approved by the Bureau of Land Management. During construction he coordinated archaeological, tribal and paleontological monitoring in private and BLM-managed lands for the development of the solar fields and construction of a 5.6 mile transmission line, also preparing weekly and monthly monitoring logs, and oversaw the final cultural resource monitoring reports

Archaeological Monitoring of Transmission Line Towers Removal for SDG&E, ISEWC West Project, – consultation with Native Americans on regarding human remains surface finds; El Centro, Imperial County, CA: 2014

Mr. O'Neil was the Cultural Resources Manager for this project located in Imperial County, with U.S. Bureau of Land Management oversight. 1.1 miles of electrical transmission lines were dismantled on BLM land traversing a scattered prehistoric site along the southwest shoreline of the ancient Lake Cahuilla. During cultural resource monitoring of the dismantling work human remains (a fragment of cremated remains) were observed. Mr. O'Neil consulted with the BLM and the Native American Cocopah tribe to halt construction in the immediate area of the remains, bring in a qualified osteologist to confirm the identification, and prepare and implement procedures to protect the remains.

NAVFAC NAF El Centro Cultural Resources Inventory Survey, Imperial County, CA: 2014-2016

Mr. O'Neil is co-cultural resources manager on the 15,073 acre field survey project on the Target Range 101 and Superstition Hills portions of Naval Air Facility El Centro, in the Salton Basin portion of the Colorado Desert, Imperial County. The UltraSystems effort re-surveyed portions of lands inadequately surveyed by previous workers and complete the previously surveyed portions.

This information will provide cultural resource information needed by the base to comply with Section 110 requirements. Mr. O'Neil co-authored the Work Plan, is the Field Director for the field survey effort, and is co-author of the final inventory report. Client: Naval Facilities Engineering Command – Southwest, San Diego, California.

Alton Parkway Extension Project, Cities of Irvine and Lake Forest, Orange County, CA

Mr. O'Neil directed and conducted archaeological and paleontological monitoring, archaeological excavation, cultural resource records search, Native American contacts and report writing for the Orange County Department of Public Works. Alton Parkway was extended 2.1 miles between the cities of Irvine and Lake Forest. For the portion within the City of Irvine, UltraSystems conducted monitoring and excavation services. One prehistoric site was excavated and reported on; a series of hearth features were discovered and also reported. The final monitoring report described the paleontological and archaeological findings. A separate technical report on the archaeological excavations was also prepared. Mr. O'Neil directed research into historic and prehistoric background, and prepared the final assessment of potential impacts.

Cultural Resource Monitoring, Owens Lake Dust Mitigation Phase VII, Inyo County, CA: 2009

Mr. O'Neil directed and conducted archaeological field monitoring for Phase 7 of the Owens Lake Dust Abatement Project. He served as Principal Cultural Monitor at the Owens Valley construction site during 2009. The Los Angeles Department of Water and Power was conducting a long-term program to mitigate the effects of dust pollution blowing across the Owens Lake bed and the surrounding region. UltraSystems' archaeological monitoring included:

- Being present on Owens Lake in support of grading and trenching construction work to ensure compliance with government regulations;
- Conducting surveys of areas prior to ground-disturbing activities;
- Recording historic and prehistoric artifacts prior to construction activities;
- Providing Native American monitors overseeing cultural regulatory compliance.

NEPA/CEQA Documentation, Los Angeles Regional Interoperable Communications System/Long Term Evolution, Los Angeles County, CA

UltraSystems' team prepared technical studies and NEPA and CEQA documentation toward the construction of LA-RICS/LTE, an $800-million emergency communications system that will provide a highly coordinated emergency communications system to all first-responders throughout Los Angeles County. Mr. O'Neil was the cultural and historical resources studies team leader, directing 13 archaeologists, architectural historians, paleontologists and technical writers. These studies include coordination of field visits to more than 260 locations for archaeologists and architectural historians with agency escorts to observe and record any on-site prehistoric and historic features, performing records and literature searches at information centers and local archives, contacting local agencies for historically listed structures and districts, coordinate public notices of the project throughout Los Angeles County, consultation with the Native American Heritage Commission and local tribal organizations, and direct consultation with the California State Historic Preservation Officer (SHPO). This information was compiled by Mr. O'Neil and used to prepare FCC 620/621 historical resource forms which were submitted to the SHPO for review.

Safe Routes to School Project (Federal Project Number ATPL-5307(024)), City of Fontana, San Bernardino County, CA

UltraSystems provided environmental services support for their sidewalk and bicycle infrastructure upgrade project. This consists of work on Arrow Boulevard and Fontana Avenue installing 2.2 miles of sidewalk and bicycle infrastructure including sidewalks bicycle lanes curb and gutter, ADA compliant driveways, ramps, signage and pavement restriping. The City of Fontana prepared a Preliminary Environmental Study (PES). UltraSystems prepared for the City an Environmental Assessment of the impacts in accordance with the National Historic Preservation Act of 1966, Section 106 (Protection of Cultural Resources & Historic Properties), Caltrans Local Assistance Procedures Manual, Standard Environmental Reference, and Section 106 Programmatic Agreement: 1. Area of Potential Effect (APE) Map approved by Caltrans District 8 prior to commencing the following studies. 2. Historical Properties Survey Report (HPSR) and Historical Resources Evaluation Report (HRER) - approved from the Caltrans District 8 DLAE and SEP, a HSPR, ASR [Archaeological Survey Report] and HRER.

Michelle Tollett, BS, ISA

Biological Resources Group Manager, Senior Biologist

UltraSystems

Years of Experience
19

Years with Firm
9

Education

- B.A., Botany and Environmental Science, University of Montana, Missoula, MT, 2000

Professional Affiliations

- CRAM Vernal Pools (2017).
- CRAM Instructor-in-Training (2017).
- Certified *Caulerpa taxifolia* Surveyor, NMFS (2013/2014).
- Southwestern Willow Flycatcher (2013).
- Western Pond Turtle Workshop, Elkhorn Slough Coastal Training (2012).
- Sea and Sage Audubon Society, Advanced Bird Identification Courses (2012).
- CDFW Flat-tailed Horned Lizard Training (2012).
- California Rapid Assessment Method (CRAM) (2012, 2017).
- CDFW Scientific Collection Permit, SCP#8526.
- Wetland Regional Field Training, Wetland Training Institute, Certificate (2011).
- The Desert Tortoise Council, Workshop (2011).
- Basic Wetland Delineation, Wetland Training Ins. (2005)
- 24-hour HazComm Hazardous Materials Training (2004).

PROFESSIONAL SUMMARY

Ms. Tollett has 19 years of experience as a field and consulting biologist working with private companies and public agencies throughout California and the Rocky Mountains. She is the Lead Senior Biologist and Group Manager at UltraSystems Environmental in Irvine, California. Her responsibilities include managing the Biological Resources Team; supervising and mentoring staff biologists; delegating work assignments; managing budgets and project schedules; reviewing document preparation; interacting with client and resource agency representatives; developing mitigation site design with landscape contractors; preparing and conducting environmental awareness training.

Ms. Tollett is familiar with the regulatory framework to prepare defensible biological resources technical reports and environmental documents including biological constraints surveys, reconnaissance-level field surveys, wetland delineations, CRAM assessments, focused special-status species surveys, and habitat mitigation and monitoring plans.

SELECT PROJECT EXPERIENCE

Southern California Edison, Various Transmission Pole Replacement and Wetlands Projects, Southern California

Ms. Tollett serves as an approved ISNET wetlands monitor for SCE throughout southern California on transmission pole repair, installation, and replacement projects. Ms. Tollett provides preconstruction survey, construction monitoring, vegetation monitoring, and mitigation strategy services to SCE.

Dogwood Road Bridge Improvement Project, Imperial County, CA

Ms. Tollett supervised and participated in several surveys for this bridge replacement project located over the Central Main Canal near the intersection of Dogwood Road and Willoughby Road in Imperial County, California. The project included a biological resources survey, jurisdictional delineation of Waters of the United States (WOTUS) and Waters of the State (WOS), Habitat Mitigation and Monitoring Program (HMMP), and focused burrowing owl (BUOW) surveys.

Los Angeles County Sheriff's Department Emergency Vehicle Operation Center (EVOC) and Role-Play Training Facility, Pitchess Detention Center, Castaic, Los Angeles County, CA

Ms. Tollett supervised field studies for preparation of several technical reports including a biological resources evaluation, jurisdictional delineation, focused burrowing owl surveys, a mitigation plan and owl relocation plan, due to presence of BUOW onsite.

Devers to Palo Verde 500Kv Transmission Line Project (DPV2), Riverside County, CA

Ms. Tollett prepared reconnaissance biological reports, mitigation and monitoring plans, noxious weed management plans, special-status plant transplanting plan, sensitive habitats definition memo, habitat restoration and compensation plan, and provided data management services for the 153-mile Devers to Palo Verde (DPV2) Transmission Line Project for Southern California Edison (SCE) from eastern to western Riverside County. The DPV2 Project began in summer 2011.

Burrowing Owl Relocation and Mitigation Planning, Imperial Solar Energy Center South, El Centro, CA
Ms. Tollett served as alternate Biological Resources Manager for this 200 MW PV solar project in Imperial Valley. The project includes the coordination all biological mitigation, monitoring, and compliance. The project tasks included scheduling and staffing preconstruction surveys, construction monitoring, and implementation of special-status species mitigation measures for the solar fields and transmission through 31 months of construction. Mitigation plans were developed for burrowing owl relocation and flat-tailed horned lizard in the BLM management area.

Evergreen Solar, Pre-construction Surveys for the Burrowing Owl, San Bernardino County, CA
Ms. Tollett supervised and performed pre-construction surveys for burrowing owls. Surveys included walking 20 meter belt transects along the project footprint and buffer area. All burrowing owls and burrowing owl sign (whitewash, pellets, and burrows) were recorded and mapped.

5968 - Imperial Center Subdivision Project (Tract 954), Imperial County, CA
Ms. Tollett directed the burrowing owl preconstruction surveys and construction monitoring for this 15-acre subdivision project.

Carodean Substation Expansion, Southern California Edison, Twentynine Palms, CA
Ms. Tollett served as Lead Biologist for this 115KV to 12KV substation expansion project for Southern California Edison, in Twentynine Palms, California. This project included the pre-construction surveys for desert tortoise, in accordance with the 2010 Desert Tortoise Pre-project Survey Protocol and routine nesting bird surveys in accordance with the Migratory Bird Treaty Act and California Fish and Game Code. Active nests of the black throated sparrow (*Amphispiza bilineata*) were mapped and monitored through to successful fledging.

Imperial Solar Energy Center West, Imperial County, CA
Ms. Tollett was the Lead In-house Biologist for the Imperial Solar Energy Center West project, a 1,130 acre solar development project located on private and public lands in Imperial County, California. Her primary tasks include review of suggested field methodologies, field data sheets, coordination with the natural resource agencies, and coordination with the resource agencies. Ms. Tollett provides review for compliance with permit conditions, and mitigation and survey design for the Burrowing Owl (*Athene cunicularia*) and Flat-tailed Horned Lizard (*Phyrnosoma mcalli*).

High Desert Corridor Project, Desert Tortoise (Gopherus agassizii) Presence/Absence Surveys, Mojave Desert, San Bernardino County, CA
Ms. Tollett performed presence/absence surveys for the Desert Tortoise across 100+ miles of creosote bush scrub in the Mojave Desert, in accordance with the 2010 Desert Tortoise Pre-project Survey Protocol. Survey included walking miles of transects along the project footprint, as well as the required buffers, formerly referred to as the Zone of Influence. Incidental burrowing owl locations were also mapped as part of this effort.

Hwy 395 Widening Project, Desert Tortoise Surveys, Kramer Junction, San Bernardino County, CA
Ms. Tollett performed presence/absence surveys for the Desert Tortoise across 30+ miles of creosote bush scrub and burrobush scrub in the Mojave Desert, in accordance with the 2010 Desert Tortoise Pre-project Survey Protocol. Survey included walking miles of transects along the project footprint, as well as the required buffers, formerly referred to as the Zone of Influence. Incidental burrowing owl locations were also mapped as part of this effort.

Protocol Level San Joaquin Kit Fox Surveys, Whitley Gardens Housing Project, Paso Robles, CA
Ms. Tollett was one of four field biologists surveying for the San Joaquin Kit Fox at the proposed Whitley Gardens housing project. Protocol level surveys were completed at night with 1-million candle watt bulbs. Camera stations and dust tracking were also used. Presence of the kit fox was identified and mitigation measures were coordinated. Ms. Tollett completed the required 30-hour experience training under Senior Biologist supervision and holds an introductory level training for future San Joaquin kit fox surveys. The project senior biologist prepared the survey report and submitted to the client.

Research Assistant, Western Spadefoot Toad capture and tagging, Crystal Cove, CA
Ms. Tollett has approximately 30 hours capturing and radio tagging the western spadefoot toad (*Spea hammondii*), under guidance from USGS permitted biologist, Kathy Baumberger.

Michael B. Rogozen, D.Env.

Senior Principal Engineer

UltraSystems

Years of Experience

44

Years with Firm

13

Education

- D.Env., Environmental Science and Engineering, University of California, Los Angeles, CA, 1978
- M.S., Systems Engineering, University of California, Los Angeles, CA, 1968
- B.S., Engineering, University of California, Los Angeles, CA, 1966

Areas of Expertise

- CEQA
- NEPA
- EIR/EIS
- IS/MND
- EA
- QA/QC
- Air Permitting
- Dispersion Modeling
- Cost-Benefit Analysis
- Transit
- SCAQMD
- Economic Analysis
- Survey Design
- HRA
- Noise Analysis
- CAAP
- GHG
- Soundwalls
- Sensitive Receptors
- Mitigation
- Compliance
- Toxic Emissions
- Database Design
- Health & Safety Plan
- Technical Editing
- Noise Control Plan
- Air Quality
- Technical Studies

PROFESSIONAL SUMMARY

Dr. Rogozen, who heads UltraSystems' air and noise practice, has 44 years of experience in project management, health risk assessment, air and industrial wastewater permitting, carbon footprint studies, ambient monitoring, dispersion modeling, pollution control technology assessment, economic analysis of air pollution control alternatives, air toxics emission inventory development, offsite consequence analysis, environmental database design, survey design and management, source test design and analysis, railroad noise investigations, regulatory analysis, water resources studies, and technical writing and editing.

Dr. Rogozen is responsible for consulting, technical project management, and business development. He has assisted industrial and governmental clients in complying with federal and local air quality regulations. His work has included managing air compliance audits, preparing applications for permits to construct and operate (including Title V permits), annual emissions reports, and responses to notices to comply and notices of violation. He has also conducted many health risk assessments under AB2588, Proposition 65, and SCAQMD Rule 1401. Dr. Rogozen serves as lead quality assurance officer for UltraSystems' submittals.

SELECT PROJECT EXPERIENCE

Construction Environmental Compliance, Imperial Solar Energy Center South, Imperial County, CA

CSolar South LLC recently completed construction of a 947-acre, 200-megawatt photovoltaic electric power plant west of Calexico, California. UltraSystems was responsible for managing and monitoring implementation of more than 1,000 regulatory requirements and mitigation measures. As part of the management team for this project, Dr. Rogozen prepared the Fire Protection and Prevention Plan and performed peer review of the Hazardous Materials Management Plan, the Waste Management Plan, and the Health and Safety Plan. He also translated training documents into Spanish. Dr. Rogozen designed a Microsoft Access data base to track compliance with all pertinent regulations and mitigation measures, and to archive related plans, photographs, maps, certifications, and other documents that demonstrated compliance. Once construction was underway, Dr. Rogozen was task manager for a series of tests to determine whether the soil in newly created retention basins and underlying newly constructed solar arrays met the Imperial County Air Pollution Control District's (ICAPCD's) criteria for stability against wind erosion. He developed a sampling protocol based upon ICAPCD Rule 800, designed a sampling form, advised field test crews on sampling issues, and co-authored the test report.

Peer Review of Review of White Paper: Comparative Life Cycle Greenhouse Gas Emissions Analysis of Alternative Scenarios for Treatment and/or Disposal of 1,000 Tons per Day of Post-Recycled Residuals from a Mixed-Waste Materials Recovery Facility

For the Los Angeles County Department of Public Works (through a subcontract with ARI), Dr. Rogozen peer-reviewed a draft analysis of the change in greenhouse gas emissions from using waste conversion technologies instead of landfilling. The peer review focused on the process description, the waste conversion technologies, and emission calculations. Dr. Rogozen identified discrepancies and

data gaps that prevented the study from obtaining defensible conclusions about the relevant merits of waste conversion and landfilling. He recommended several ways to improve the analysis.

Greenhouse Gas Emission Inventory, Hollywood Target Store, Los Angeles, CA

As support to an environmental impact assessment prepared by another consultant, Dr. Rogozen constructed a comprehensive inventory of greenhouse gas (GHG) emissions from a proposed commercial center consisting of a Target store, restaurant and other commercial uses. The inventory included both direct and indirect emissions. Projected GHG emissions were compared with emissions as of the Notice of Preparation and emissions under a "business as usual" (BAU) scenario in which none of the GHG reduction measures under AB 32 and other California regulations and programs would be implemented. Dr. Rogozen and his staff evaluated a large number of emission reduction measures proposed by Target to estimate the emission savings versus BAU.

Miscellaneous Air Quality and Noise Impact Analyses under CEQA and NEPA, Various Clients, CA

At any given time, Dr. Rogozen is responsible for preparing air quality and noise impact analyses, either as stand-alone technical documents or as sections of initial studies, preliminary environmental studies, environmental impact reports, and environmental impact studies. His work includes supervising Air and Noise Group staff on these projects, reviewing regulatory requirements, writing report sections and, on occasion, air dispersion modeling, health risk assessment and modeling of train and helicopter noise.

Environmental Impact Report Addendum, Monrovia Nursery Project, Azusa, CA

After construction on this mixed-use project began, it was discovered that excavated soil would exceed on-site requirements, and that soil transport via city streets would be necessary. Dr. Rogozen estimated on-road air pollutant emissions for three alternative truck routes. He designed and managed an ambient noise sampling program during a pilot soil-hauling exercise, and performed statistical analyses to determine the contribution of soil-hauling trucks to total exposures along haul routes. Dr. Rogozen prepared supplemental sections to the EIR on air and noise impacts, and prepared testimony for a hearing before the City Council.

Environmental Compliance for Gerald Desmond Bridge Replacement Project, Port of Long Beach, CA

Dr. Rogozen was Deputy Environmental Compliance Manager under UltraSystems' subcontract with the project's design-builder, SFI. He managed preparation of plans for implementing the FEIR/EA's mitigation measures, Port of Long Beach contract requirements, and federal, state, and local environmental regulations. As part of this project, Dr. Rogozen prepared a quantitative cost-benefit analysis for a design modification, using a net present value approach. Following Caltrans' guidelines, the analysis considered construction costs, vehicle miles traveled, and other factors which would change with the alternative design concept

Construction Noise Mitigation for I-405 Sepulveda Pass Widening Project, West Los Angeles, CA

This project added a 10-mile high-occupancy vehicle (HOV) lane on the northbound I-405 freeway between the I-10 and US-101 freeways and improved supporting infrastructure, such as ramps, bridges, and sound-walls. Dr. Rogozen developed construction noise control and monitoring plans for the project and audited implementation of the plans by the construction contractor. He helped train construction field managers on the fundamentals of noise exposure and mitigation. Finally, Dr. Rogozen managed a special study of noise exposures and mitigation at a hotel near the project.

Dan Herlihy, MS, CEG, PG, CHG

Senior Engineer

UltraSystems
environmental•management•planning

Years of Experience
35

Years with Firm
14

Education
- Hydrogeologic Studies under National Science Foundation Traineeship, Spears and Belford Fellowships, University of Wyoming, 1977
- M.S., Geology, University of New Hampshire, 1975
- B.S., Geology (Cum Laude), Long Island University-Southampton College, 1973

Professional Registrations
- Professional Geologist (PG #4388), CA
- Certified Engineering Geologist (CEG #1378), CA
- Certified Hydrogeologist (CHG #107), CA
- Qualified SWPPP Practitioner/Developer (QSP/QSD #No. 23577)
- OSHA HAZWOPER 40-Hour Training (29 CFR 1910.120)

Areas of Expertise
- CEQA
- NEPA
- CERCLA
- RCRA
- ISA
- Phase I&II
- PEA
- Geohazards

PROFESSIONAL SUMMARY

Mr. Herlihy has more than 35 years of experience with senior-level qualifications to manage comprehensive environmental projects in accordance with the California Environmental Quality Act (CEQA), National Environmental Policy Act (NEPA), Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), Resource Conservation and Recovery Act (RCRA) and applicable regulations for development, modernization, brownfield, and railway, freeway and bridge right-of-way projects. He has prepared numerous CEQA/NEPA documents, Initial Site Assessments (ISA), Preliminary Endangerment Assessments (PEA), Phase I Environmental Site Assessments (ESA), Phase II ESAs, and Remedial Actions (Phase III) required by the federal Environmental Protection Agency (EPA), California Department of Transportation (Caltrans), California Regional Water Quality Control Boards (RWQCB), California Department of Toxic Substances Control (DTSC), and other regulatory agencies. Mr. Herlihy completed Geohazard Analyses for facilities within Alquist-Priolo Earthquake Fault Zones; provided oversight for asbestos containing material (ACM), lead-based paint (LBP) and polychlorinated biphenyl (PCB) pre-demolition surveys; and acted as regulatory affairs liaison for numerous corporations. He has been selected as a Subject Matter Expert (SME) by the California Board of Registration for Geologists and Geophysicists to develop qualifications for the practice of hydrogeology in California.

SELECT PROJECT EXPERIENCE

Metropolitan Water District (MWD), Hazardous Materials Corridor Study, MWD Second Lower Feeder Pipeline Rehabilitation, Los Angeles and Orange Counties, CA.

Mr. Herlihy completed an environmental review to identify significant hazardous material issues that could affect the construction, feasibility, and cost of proposed rehabilitation of an underground Prestressed Concrete Cylinder Pipeline (PCCP) along 29.7 miles of the Second Lower Feeder from the Metropolitan Water District (MWD) Robert Diemer Water Treatment Plant (Yorba Linda) in Orange County to the Palos Verdes Reservoir (Rolling Hills Estates) in Los Angeles County, California. Mr. Herlihy researched and reviewed federal and California regulatory agency database information regarding (1) past owners, occupants and activities up to ¼ mile on each side of the alignment, (2) National Priority List (Superfund) sites within one mile of the alignment, and (3) aerial photographs to assess known or suspected past activities that could adversely affect proposed rehabilitation along the pipeline alignment. Following the review, Mr. Herlihy (1) completed site visits to specific areas of environmental concern to identify and resolve access issues for future environmental field sampling, and (2) prepared a detailed workplan and costs to install exploratory borings and groundwater monitoring wells as near as feasible to proposed excavations to collect representative samples for potential contaminants that may be encountered. The report and workplan were accepted by the Metropolitan Water District (MWD).

Phase I Environmental Site Assessment, 1514-1516 Orange Street & 1513-1515 Chestnut Streets (APN# 5343-002-012, 13, 17, 18) Alhambra, CA 91803

Hr. Herlihy conducted a Phase I Environmental Site Assessment (ESA) on behalf of the Alhambra Unified School District (AUSD) for an approximately 0.7-acre industrial parcel in Alhambra, CA in conformance with industry-accepted practices, American Society of Testing Materials (ASTM) Designation E1527-05, and the EPA All Appropriate Inquiry (AAI) Rule (40 CFR 312). The subject property is within the western portion of the 170 square-mile San Gabriel Valley (SGV), and was used to store used cars, granite, other rock and tile slabs. Several industrial properties northwest (upgradient) of and adjoining the subject property had reported releases of volatile organic compounds (VOCs) that potentially impact groundwater. Groundwater impacted with VOCs beneath these industrial facilities potentially migrates beneath the subject property. No releases of hazardous materials or waste were reported within the subject property. Recognized environmental conditions within the subject property included older fluorescent fixtures that may contain polychlorinated biphenyl (PCB), two small structures that may contain asbestos containing materials (ACMs) and lead based paint (LBP). ACM and LBP surveys were recommended.

Phase I Environmental Site Assessment, Portola Springs Elementary School

Mr. Herlihy completed a Phase I Environmental Site Assessment (ESA), on behalf of the Irvine Unified School District (District), for the 14.96- acre proposed Portola Springs Elementary in conformance with American Society of Testing Materials (ASTM) Designation E1527-13; California Education Code (CEC) § 17210, 17210.1 and 17213.1; Title 22 California Code of Regulations (CCR) Chapter 51.5 § 69100 et seq., and Department of Toxic Substances Control (DTSC) guidance. This Phase I ESA included the following scope of work:1) researched and reviewed available information regarding past owners and occupants of the Subject Property to assess the potential for contamination resulting from prior activities, 2) researched available information regarding nearby and adjacent properties for evidence of environmental conditions that could adversely impact the Subject Property, 3) contacted available persons familiar with current and former activities at the Subject Property for relevant information regarding potential areas of environmental concern, 4) reviewed federal and state regulatory agency database information for the Subject Property and nearby properties to identify potential concerns that could adversely affect the environmental condition of the Subject Property, and 5) performed a visit of the Subject Property to identify areas of environmental concern. No evidence for the release or presence of hazardous materials from agricultural use, mines, surface drainage pathways, fill material, debris, illegal drug manufacturing, and naturally occurring hazardous materials was observed within the Subject Property. Based on these findings, the Subject Property conformed to environmental requirements specified in CEC § 17210, 17210.1 & 17213.1, and 22 CCR Chapter 51.5 § 69100 et seq., and would be suitable as a school site.

Hazard Materials Assessment, City of Los Angeles, CA

Mr. Herlihy analyzed potential impacts to human health and the environment from the transportation, use, storage, recycling and disposal of hazardous wastes that may be generated during implementation of the City of Los Angeles Solid Waste Integrated Resources Plan (SWIRP). The assessment included a review of: (1) applicable federal and state laws, (2) federal, state and local enforcement agencies, (3) current and anticipated levels of hazardous waste generation, (4) a project- and cumulative-level impact analyses, and (5) applicable mitigation measures. There were five classes of waste that are considered hazardous or potentially hazardous in City waste: (1) hazardous waste, (2) universal waste, (3) special waste, (4) recyclable materials, and (5) major appliances (i.e. bulky items). The levels of significance according to California Environmental Quality Act (CEQA) criteria were assessed and the appropriate mitigation measures were recommended.

Billye Breckenridge, BA

Senior Planner

UltraSystems
environmental•management•planning

Years of Experience

18

Years with Firm

1.5

Education

- Bachelor of Arts Environmental Studies/Biology Minor
- University of Nevada, Las Vegas 1998

Professional Affiliations

- American Planning Association
- Association of Environmental Professionals
- Women of Wind Energy (WRISE)
- Air and Waste Management Association
- OC Bar Association, Real Estate Law Sections
- Building Industry Association

Areas of Expertise

- CEQA
- NEPA
- Wetlands
- Biological Resources
- Project Management
- Agency Coordination
- Federal
- Institutional
- Mitigation
- Outreach

PROFESSIONAL SUMMARY

Ms. Breckenridge is a Senior Environmental Professional with 18 years of comprehensive and diverse experience in environmental consulting. She specializes in regulatory permitting and compliance, CEQA/NEPA document management, preparation, and process, project management, public involvement, jurisdictional and biological resources, and business development. She has managed large NEPA and CEQA projects, 404 permitting projects, and multi-disciplinary teams of technical staff and subconsultants. She is proficient at identifying project permitting needs and negotiating and working with federal, state, and local resource agencies to obtain permits and approvals. She has coordinated and led large biological field surveys and analysis for federal and state protected species, and jurisdictional determinations/ wetlands delineations. She has directed and prepared numerous environmental analysis reports and permitting packages required pursuant CEQA, NEPA, Clean Water Act, Threatened and Endangered Species Act, MSHCPs, and others. She has planned, participated in, and conducted public scoping and other public meetings required under NEPA and CEQA, 404 permitting, and transmission line routing. Her extensive project experience consists of public and private projects including residential/commercial development, transportation, renewable energy/power plants, flood control, gas pipeline, transmission lines, mining, large utility/water lines, wastewater treatment, schools, and ports. She has managed groups of up to ten environmental and planning professionals. As a project manager and group manager, her responsibilities included staff hiring, training, and mentoring; business development and client relations; contract negotiations and project acquisition; project planning, scheduling, and budgeting; supervision of staff and work production; and financial management to ensure backlog and profitability.

SELECT PROJECT EXPERIENCE

Confidential Solar Project, Antelope Valley, CA

Regulatory Permitting Specialist. Conducted due diligence research and prepared a Permitting Plan for a confidential solar project proposed to be constructed in Antelope Valley, within Los Angeles County, California. The Permit Plan included a preliminary list of key environmental permits and approvals for the site, information about the project site regarding land use and zoning ordinances and policies, previously permitted solar projects in the vicinity of the project site, a permitting approach and recommendations, and reference material used to prepare the Permitting Plan. The Plan was prepared on a fast track to enable the client to make crucial decisions for the project quickly. (2016-2017)

Joshua Tree Solar Farm Initial Study/Mitigated Negative Declaration, Joshua Tree, CA

Planner. Prepared CEQA documents and forms for submittal to the OPR State Clearinghouse, compiled and organized public comments on Draft IS/MND, prepared responses to comments. Joshua Tree Solar Farm, LLC (JTSF or applicant) proposed to construct, own, and operate a 20 megawatt (MW) alternating current (AC) solar photovoltaic (PV) generating facility located on approximately 11.5 acres of land previously a deactivated, privately owned Hi Desert (or Roy Williams) Airport, 3.5 miles east of the unincorporated community of Joshua Tree. (2016)

Southern California Edison (SCE) Downs Substation Expansion Project, Kern and San Bernardino Counties, CA

Assistant Project Manager/Biological Support Services. Provided coordination, review, budget and schedule tracking, and project implementation support for the upgrade and expansion of the existing Downs 33/12-kilovolt (kV) Substation located in Ridgecrest. The project also included upgrades at Inyokern, McGen and Searles Substations and installation of subtransmission lines plus 58 miles of fiber optic telecommunication cable. (9/2014 - 12/2014)

EDF Renewable Energy Longboat Solar Project, San Bernardino, CA

Task Leader/Assistant Project Manager. Coordinated with subconsultants and client. Prepared several task proposals to obtain purchase orders for technical studies and subconsultant agreements, and provided senior QA/QC review of technical reports. Project tasks entailed technical and biological services in support of the California Public Utilities Commission (CPUC) application, CEQA process, and permitting for this 20-megawatt (MW) solar photovoltaic (PV) project located north of the city of Barstow. (9/2014 - 12/2014)

EDF Renewable Energy Catalina Solar 2, Kern County, CA

Assistant Project Manager. Provided project management support for preconstruction environmental services. Provided coordination, and technical senior QA/QC review for a 40-MW portion of the previously approved 150-MW component of the Catalina Renewable Energy Project located in unincorporated Kem County. (9/2014 -12/2014)

Imperial County Geothermal/Alternative Energy and Transmission Element Update, Imperial County, CA

Task Leader/Technical Writer. Coordinated the preparation of the Draft Baseline Environmental Inventory Report for Imperial County. It included the baseline inventory of existing environmental resources and an analysis of potential alternative energy generation suitability areas. The information in the baseline report will be used to update the Geothermal/ Alternative Energy and Transmission Element of the Imperial County General Plan and then the entire plan as well. It will be used as a guide for alternative energy development throughout Imperial County, CA. (2013 - 2014)

Imperial Valley Solar Company 2 EIR, Imperial County, CA

Senior Biologist. Conducted a peer review of the biological survey report prepared for the project and biological resources sections of the EIR. The EIR was prepared for the development of a nominal 30-megawatt alternating current (MWAc) solar photovoltaic (PV) energy generation project on 158.8 acres of land in Imperial County, CA. (9/2012 - 11/2013)

Agile Energy, Inc. Silverleaf Photovoltaic Solar Project, Imperial County, CA

Senior Biologist/Permitting Specialist. Assisted with preparation of the Jurisdictional Delineation Report for a proposed 160-megawatt (MW) PV solar facility, substation, and transmission lines to be located southeast of the City of El Centro, CA. The facility and substation would be installed on privately owned agricultural land, and the transmission lines would be located on BLM land and connect to the existing San Diego Gas & Electric Imperial Valley Substation. The purpose of the jurisdictional delineation was to determine jurisdiction of the USACE, Regional Water Quality Control Board, and the California Department of Fish and Wildlife (CDFW). Provided QA/QC review for the report and jurisdictional permitting expertise. (4/2012- 7/2012)

Omar Sarsour, PE, LSIT

Transportation Engineer

UltraSystems
environmental • management • planning

Years of Experience
7

Years with Firm
<1

Education

- University of California, Berkeley, B.S., Civil and Environmental Engineering, 2012

Professional Affiliations

- Institute of Transportation Engineers
- Associated Society of Civil Engineers
- Arab American Association for Engineers and Architects

Areas of Expertise

- Civil / Transportation Design
- CEQA/NEPA Traffic Analysis
- LOS Analysis
- VMT Analysis
- Public Improvement Projects
- Private Developer Projects

PROFESSIONAL SUMMARY

As a licensed civil engineer seeking to obtain dual licensure in surveying as well, Mr. Sarsour has worked on a wide range of projects that have proven his versatility. Mr. Sarsour's experience includes work on all stages of a typical public improvement project and has given him a unique perspective and understanding of all the various phases that bring a project from its conceptual and environmental phase through to its construction. Mr. Sarsour has worked in the field as a surveyor and inspector as well as in the office as a design engineer and consultant. His experience includes serving clients in both government agencies as well as private developers.

SELECT PROJECT EXPERIENCE

Sycamore-Peñasquitos 230 kV Transmission Line Traffic Analysis Review (San Diego, CA)

The Sycamore – Peñasquitos transmission line included three alternative designs for electrical transmissions line improvements in San Diego County. The alternatives spanned over 40 miles in total including overhead lines and underground lines in public right-of-way. Mr. Sarsour provided traffic analysis as part of the EIR to mitigate any construction traffic impacts. This meant coordinating with and obtaining standards from all affected jurisdictions including City of San Diego, City of Poway, County of San Diego, and Caltrans.

Mr. Sarsour's work included identifying public transit routes, bike routes, and emergency routes that would be impacted during construction of the transmission line. Over 50 public rights-of-way were analyzed to determine potential construction impacts. Mitigation was incorporated for those deemed to have significant impacts. As the project moved into the construction phase, Mr. Sarsour reviewed the TMP and TCP for compliance with Caltrans, County, City and the CA-MUTCD guidelines.

City of Highland, On-Call Traffic Engineering Consultant

As part of an on-call traffic engineering contract with the City of Highland, Mr. Sarsour has worked on various peer reviews of traffic impact analyses on behalf of the City and offered comments back for resubmittals. Mr. Sarsour has also assisted the City in applying for various grant funds pertaining to street improvement projects and has helped the City secure these funds.

Additionally, Mr. Sarsour worked closely with City staff on a pavement rehabilitation analysis procedure for new developments. The goal of the analysis is to account for project fair share mitigation from developers on truck-heavy projects, such as warehouses. These projects often introduce higher loads and increase the traffic index value of a road from what it was originally designed to handle.

Pioneer High-School Whittier Aquatic Facility Mitigated Negative Declaration (MND) (County of Los Angeles)

Mr. Sarsour prepared the traffic analysis for the Initial Study and Mitigated Negative Declaration (IS/MND) related to the development of a new sports aquatic facility in Whittier, CA. The new facility was located directly east of the I-605 freeway and analysis required Caltrans coordination. The facility was intended for use by both the community and for competitive sporting events between high schools. Although the project was located in the unincorporated County of Los Angeles, Mr. Sarsour also coordinated with the Cities of Pico Rivera and Whittier to identify cumulative project trips as well as additional future roadway masterplans. Analysis included over 10 intersections. The proposed

development was to replace a parking lot for Pioneer High School. This removal of parking spaces led to the preparation of an amendment to the conditional joint use agreement for the school's high school stadium as the amount of parking spaces was out of code. Mr. Sarsour coordinated with other schools, churches, and site owners to amend the joint use agreement. Mr. Sarsour performed traffic impact analysis per County of Los Angeles standards for each study intersection to identify and mitigate any impacts, including those that occurred during construction.

Bloomington Truck Study (County of San Bernardino)

As a solo-practitioner, Mr. Sarsour prepared a traffic impact analysis for a truck stop development located at the intersection of Cedar and Santa Ana Avenue in Bloomington, CA. The proposed site included one gas station with a convenience store, two fast food restaurants, one dine-in restaurant, a car wash, and a truck wash. Due to the site's usage type, trip generations had to converted to passenger car equivalents based on the Fontana Truck Study. Mr. Sarsour directly coordinated with County of San Bernardino and Caltrans staff on study parameters as well as successfully demonstrating that vehicle miles traveled (VMT) analysis was not required due to the site's trucking usage.

The analysis spanned 18 total intersections using Synchro 11 for a LOS Analysis for the existing scenario, opening year, and future year scenarios. Mr. Sarsour directly coordinated with the Cities of Rialto and Fontana as well as the County of Riverside to identify whether there were any significant impacts or cumulative projects within their jurisdictions. Mr. Sarsour identified significant impacts and also provided mitigation measures to ensure acceptable LOS performance and developer fair share percentages of contributions.

City of Ontario, Active Transportation Plan Cycle 4

This project was for the design of six square miles of street improvements and walking paths in the City of Ontario. On this project Mr. Sarsour's role included preparing the survey parameters for the base map to supplement design. He then reviewed the topographic data to identify any grading issues, right-of-way limitations, utility conflicts, and other factors that could affect design in order to bring it to the City's attention proactively. Mr. Sarsour led monthly project status meetings with the City of Ontario to discuss project progress and identify ways to mitigate any potential issues. He prepared in Autocad Civil 3D the street improvement plans including street profiles, drainage patterns, typical cross sections, and construction notes. Improvement designs included ADA ramps, ADA walk paths, roadway widening and determination of appropriate pavement structure, sidewalk improvements, grading limits for driveway designs that sometimes required depressed driveways or specialized configurations to accommodate ROW limitations, pedestrian-activated beacon signals that required Caltrans coordination as they were located on Euclid State Route 83, tree installations, street light plans, and the preparation of legals and plats for additional ROW acquisitions for road widenings. Additionally, Mr. Sarsour prepared the engineer's estimate and specification package for the project to incorporate City of Ontario and Caltrans special provisions.

Omnitrans, Bus Stop Improvements (County of San Bernardino)

On this project Mr. Sarsour's role included preparing the survey parameters for the base map to supplement design. He then reviewed the topographic data to identify any grading issues, right-of-way limitations, utility conflicts, and other factors that could affect design in order to bring it to Omnitrans' attention proactively to see the impact to their budget. He led monthly project status meetings with Omnitrans to discuss project progress and identify ways to mitigate any potential issues. The County had 12 different bus stop locations in six different jurisdictional locations, one of which being Caltrans. One big factor was coordinating each City and Caltrans' different standards and requirements to the plan set and specifications. One bus stop location had a property wall that was located on public right-of-way. Based on the ADA requirements for a bus stop, this presented challenging design factors due to space limitations for constructing the new sidewalk. The property owner also had a driveway located directly next to a utility pole. Design at this location required a uniquely configured depressed driveway to avoid relocating the property wall due to political issues. Mr. Sarsour prepared in Autocad Civil 3D road widening design, pavement structure, drainage calculations, grading limits, sidewalk, curb and gutter improvements, typical cross sections of roads, road profiles, and most importantly for this project, ADA compliance upgrades to sidewalks, bus stops, and ADA ramps. Additionally, to avoid deterioration of existing roadways, he designed and developed concrete pads for buses to stall on at bus stops due to their weight. He prepared the engineer's estimate and specification package for the project and had to incorporate six different jurisdictional specifications.

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Santa Monica, CA 90403
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NOVEMBER 18, 2020

Mr. Jim Minnick
Director, Imperial County Planning & Development Services
801 Main St.
El Centro, CA 92243

Dear Mr. Minnick,

Catalyst Environmental Solutions Corporation (Catalyst) is pleased to submit this proposal to the Imperial County Planning and Development Services Department (County) to prepare a comprehensive Environmental Impact Report (EIR), pursuant to the California Environmental Quality Act (CEQA), for the proposed VEGA SES 2, 3, and 5 Solar Projects (Project). We offer the County a team with direct experience working with the County and analyzing the natural and social resources present in the Imperial Valley, including the anticipated key issues of land use/planning, biological resources, visual resources, water resources, and transportation. Our proposed Project Manager, Ms. Megan Schwartz, is an astute CEQA practitioner and has prepared Initial Studies and EIRs for a wide range of energy projects throughout southern California. Her project experience in Imperial County includes the Salton Sea Species Conservation Habitat Project EIS/EIR, NEPA Environmental Assessments for transboundary projects in Mexicali/Calexico, and CDFA's Hydrilla Eradication Project, which includes evaluation of project activities in the Imperial Irrigation District (IID) canals.

Catalyst has an excellent track record for performing CEQA compliance and permitting for energy projects in southern California and possesses a strong understanding of the technical requirements established by CEQA and the County to prepare a defensible EIR. In particular, our recent work on the Heber 2 Geothermal Repower Project provides us a unique insight into the major stakeholders and issues that are likely to be raised during the CEQA process for this Project, and gives us a head start in developing a sound approach to address these issues proactively. We anticipate this Project to confront a degree of legal scrutiny from interested parties, and through our recent work on the Heber 2 Geothermal Repower Project, we understand the tactics these parties will use to contest the EIR. Our team is accustomed to working on controversial and high-profile energy projects that expect to have their CEQA process/decision legally contested. We have never lost a legal challenge and offer the County valuable insights to protecting the CEQA and CUP process to result in a secure decision.

Thank you for the opportunity to propose on this Project. Please do not hesitate to contact me with any questions.

Sincerely,

Megan Schwartz, MESM
Director of Regulatory Compliance & Permitting
Catalyst Environmental Solutions
PHONE: 818.387.5875
EMAIL: MSCHWARTZ@CE.SOLUTIONS

Mr. Ben Pogue, MPA, PMP, AICP
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Proposal to Prepare an EIR for VEGA SES 2, 3, and 5 Solar Projects

Prepared for the Imperial County Planning & Development Services Department

November 18, 2020

Innovative solutions for a complex world

Catalyst ENVIRONMENTAL SOLUTIONS

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SECTION 1 Introduction and Project Understanding

Catalyst is pleased to submit this proposal to the Imperial County Planning & Development Services Department (County) to prepare a comprehensive Environmental Impact Report (EIR) pursuant to the California Environmental Quality Act (CEQA) for the VEGA SES 2, 3, and 5 Solar Project (Project). This proposal has been prepared based on our understanding of the County's CUP process and the technical requirements for preparing a highly defensible EIR and is organized in accordance with the specifications in the Request for Proposal: 1. Project Understanding, 2. Project Team, 3. Scope of Work, 4. Schedule, 5. Cost Estimate and Milestones. Catalyst is excited about the possibility of working with the County to prepare an EIR for this important Project. As described throughout this proposal, our team would work closely with the County to conduct a legally defensible CEQA and CUP process. We confirm that neither Catalyst, nor our teaming partner Pax Environmental, have any conflicts of interest in working on this Project.

We are uniquely well-suited for this assignment for the following reasons.

	Why Work with Our Team?
Experts in Preparing Defensible CEQA Documents and Understand Tactics of Likely Contesting Parties	Our track record for managing controversial, high-profile projects that anticipate a lot of public interest or potential legal contest is excellent. We expect this Project to confront a degree of legal scrutiny from particular organizations, and through our recent work on the Heber 2 Geothermal Repower Project, we understand the legal tactics and arguments these parties will use to contest the EIR. We have never lost a legal challenge and offer the County valuable insights to protecting the CEQA and CUP process to result in a secure decision, substantiated by a strong project/administrative record.
Our Team Has Direct Experience with Imperial County CUP and CEQA Processes and Renewable Energy Projects	Through our prior work (detailed in Section 2), we know Imperial County's CUP and CEQA processes, and we offer the County an entire team of subject matter experts with direct experience working in the County and analyzing the natural and social resources present in the Imperial Valley. Catalyst has teamed with PAX Environmental, and together we bring strong qualifications in analysis of the anticipated key issues of land use/planning, biological resources, visual resources, water resources, and traffic/transportation. Our team has an excellent resume for assessing the potential impacts of solar energy and battery storage projects, as demonstrated by our experience on the Sardana Battery Storage CUP/CEQA project, Clackamas/Marion Solar CUP/permitting projects, Aeroman Solar project, and Celsia Battery Storage EIA project.
Experienced Project Management Team with Strong CEQA and Energy Experience	Our proposed project manager, deputy project manager and all subject matter experts included on our team have over a decade of experience preparing CEQA documents and technical resource reports for energy projects in southern California, including for solar, geothermal, battery storage, and transmission projects. Most recently we completed the Heber 2 Geothermal Repower Project CUP and IS/MND. Our staff also led the environmental impact reviews for the Energia Sierra Juarez Transmission Line Project, the Devers to Palos Verde II Project, groundwater analyses and monitoring for the Ivanpah Solar Project (in accordance with the final CEQA document), and biological reviews for the Aeroman Solar Project.

1.1 Renewable Energy: Climate Change Goals vs Local Land Use Decisions

Climate change is a key issue that currently affects and will continue to affect the nearly 40 million Californians who reside in our state. While it is not uncommon for Californians to deal with fire and flooding in any given year, the increased temperatures and extreme weather systems that have been witnessed in recent years have exacerbated these conditions that most Californians have acknowledged is a part of living here. No year has been more affected by these extremes than 2020, where southern California broke two temperature records in back to back months: In August, Death Valley set a record for the hottest temperature reliably recorded on earth at 130° Fahrenheit; and, in July, Los Angeles County recorded its highest ever temperature, in the San Fernando Valley, at 121° Fahrenheit. Concurrently, wildfires raged with little or no containment over the entire state from San Diego to the Oregon border, burning over 3.7 million acres – making 2020 the largest wildfire season recorded in California history.[1] While the fires themselves were not the result of climate change alone (rather the result of increased building in the urban/wildland interface, and overcharged utilities trying to meet the electricity demands of 10 million households during an unprecedented heatwave), climate change added to these causative factors through extremely dry hot weather and prolonged drought that has enabled the fires to burn hotter and spread faster than ever before.

California has been at the forefront of climate change action and adaptation, with direct action to reduce greenhouse gas (GHG) emissions and plan for the expected future. Executive Order S-3-05 (signed in 2005) served as a catalyst for climate policy in California, and as a result the State has invested significant time and energy in evaluation of climate change and GHG emissions and following a policy of demand reduction. Two capstone examples include the goals for reduction of GHG emissions to 40% below 1990 levels by 2030 (Senate Bill 32) and to have an electric power grid 100% sourced by zero-emission energy by 2045 (Senate Bill 100). The California Energy Commission (CEC) and the California Air Resources Board (CARB) are on track to satisfy these climate change goals over time by focusing on reducing the demand for fossil fuels. *Renewable energy projects that can satisfy baseload generation needs in the State and provide a reliable source of electricity are key to meeting these climate change goals.*

Imperial County has been a leader in renewable power generation in California. In 2018, Imperial County produced 8,067 GWh of renewable energy, which ranks the County as sixth in renewable energy production in the State (behind Kern, Los Angeles, Contra Costa, San Bernardino and Riverside Counties). Overall, Imperial County produces about 13% of California's 62,960 GWh of renewable energy.[2] With Governor Newsom's September 23, 2020 Executive Order, calling for a transition from gas-powered vehicles to zero emission electric vehicles by 2035,[3] the demand for renewable energy projects in the State is anticipated to grow significantly in the coming decade. However, while renewable energy projects are heralded at the State level, there is often conflict at the local level, as rural communities and large open space areas are generally those selected for large renewable energy projects designed to meet the electricity demands of heavily populated cities on the coast. In 2019, opposition from local residents near Joshua Tree and Lucerne Valley effectively argued in favor of a ban on large-scale wind and solar projects in San Bernardino County.[4] The primary issues of concern related to these projects include adverse effects to the desert ecosystem, conversion of open space and agricultural lands, and visual impacts. Over time, the opposition groups have become well-organized and coordinated in their efforts to slow the spread of renewable energy projects. Local land use officials need to balance the concerns of local residents and opposition groups with County and State goals

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[1] California Department of Forestry and Fire Protection (CDFFP). 2020. 2020 Incident Archive. Accessed on September 21, 2020. Available: https://www.fire.ca.gov/incidents/2020/

[2] Southern California Association of Governments. 2020. Imperial County 2019 Economic Report. http://economy.scag.ca.gov/Economy%20site%20document%20library/2019_economic_reports_Imperial.pdf

[3] https://www.gov.ca.gov/2020/09/23/governor-newsom-announces-california-will-phase-out-gasoline-powered-cars-drastically-reduce-demand-for-fossil-fuel-in-californias-fight-against-climate-change/

[4] https://www.latimes.com/business/la-fi-san-bernardino-solar-renewable-energy-20190228-story.html

for electric generation. The Imperial County Planning and Development Department has been in the forefront of striking this balance with its recent reviews of the ORMAT Heber 2 project, for which Catalyst Environmental Solutions Corporation (Catalyst) served as the Applicant's consultant in preparation of the Conditional Use Permit (CUP) application and CEQA document, and is now considering a proposal for the VEGA 2, 3, and 5 Solar projects that are likely to garner significant public interest. The County will serve as CEQA lead agency for the VEGA 2, 3, and 5 Solar Projects and is seeking a qualified consultant to review technical resource reports, prepare an Initial Study and comprehensive EIR, and support the County in executing the CEQA process.

1.2 Summary of Proposed Project

Apex Energy Solutions (Applicant) proposes to develop three solar energy projects, the VEGA 2, 3, and 5 solar projects, in north-central unincorporated Imperial County. These three projects were filed under separate CUPs but the County will be conducting a collective CEQA review for all three in a single EIR.

In addition to photovoltaic arrays, the Applicant proposes to develop ancillary facilities, access roads, 100 MW battery energy storage system (BESS), project substations, and interconnection lines (collectively, the Project). The Project would generate upwards of 350 megawatts of renewable energy that would be delivered to the Imperial Irrigation District (IID) and a utility provider, with the interconnections being relatively close to the Project area.

Collectively, the Project site includes the three separate solar development sites spanning five different Assessor Parcel Numbers that total approximately 1,962 acres (Figures 1, 2, and 3). The Project Area is a relatively undeveloped area, with the exception of IID canals, roads, and an agricultural production area in the Vega 5 site. The Vega 2 and 3 sites are designated by the Imperial County General Plan as Recreation/Open Space and Open Space/Preservation within the Renewable Energy Overlay Zone.

The Vega SES 2 would be an up to 240-megawatt alternating current (MWAC) solar photovoltaic energy generation project with an integrated 240 MW BESS on approximately 1,472 acres. The energy produced by Vega SES 2 would be delivered to the IID through the Project interconnection switching station delivering to the IID 230kV "KN/KS" Line.

The Vega SES 3 would be an up to 60 MW MWAC photovoltaic project with an integrated 60 MW BESS on approximately 240 acres. The energy generated by the Vega SES 3 would be connected to the existing utility approved point of interconnection at the northern boundary of the Project parcel to the IID 161 kV "L" Line.

The Vega SES 5 would be a nominal 50 MWAC photovoltaic energy generation project with an integrated 50 MW battery storage project on approximately 250 acres. The energy produced by the Vega SES 5 would be conducted through a proposed 92 kV generator intertie line and delivered to the IID through a short interconnection with the IID 92kV "Midway" Substation or the proposed Project switching station. Vega SES 5 is located across two parcels.

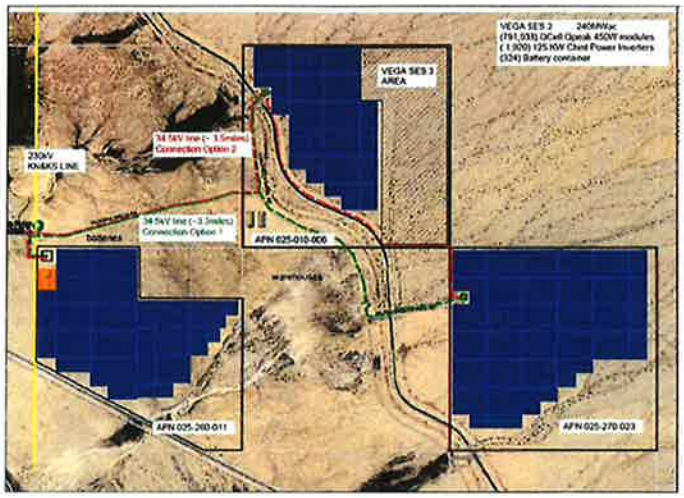


Figure 1. Vega SES 2 Project Site Plan with Vega SES 3 Project Site location shown within APN 025-010-006.

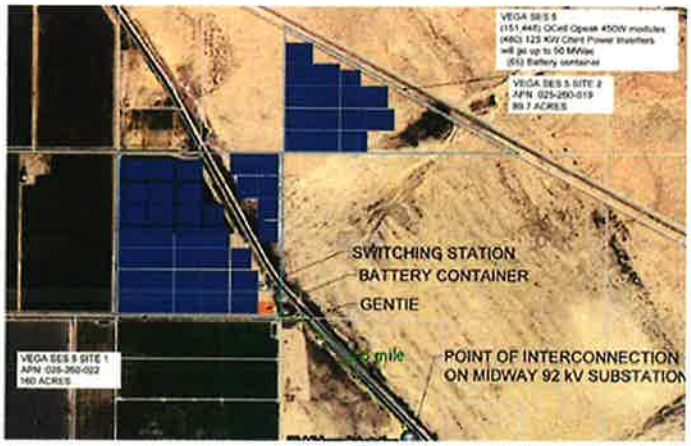


Figure 2. Vega SES 3 Project Site Plan with partial Vega SES 2 Project Site location shown.

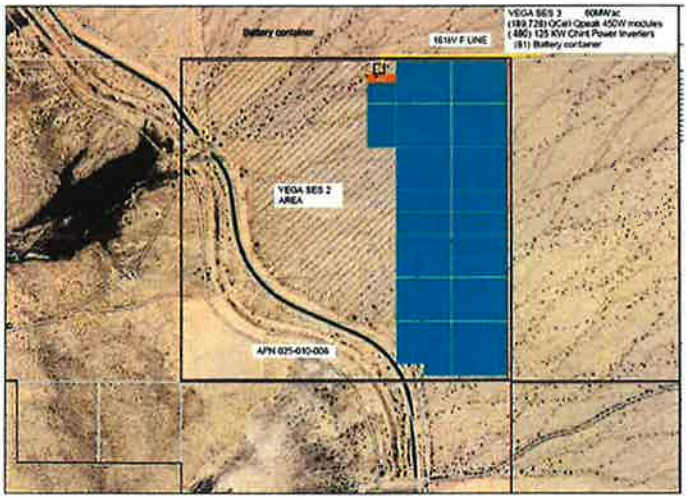


Figure 3. VEGA SES 5 Project Site Plan

1.3 Anticipated Key Issues

We anticipate the Project will generate significant comments and concerns from the same local opposition groups that provided comments on the Heber 2 Geothermal Repower project. Specifically, considering the proposed developments, land uses, and environmental resources, we anticipate detailed analysis of the following technical issues will be key in developing a robust and legally defensible CEQA document for the permitting process:

- Conversion of land zoned for agriculture, open space, recreation, and preservation to renewable energy and associated land use conflicts.
- Air quality and greenhouse gas emissions analysis
- Dust control planning
- Water resource and supply requirements and stormwater pollution prevention
- Potential jurisdictional waters associated with dry wash areas
- Presence of and impacts to sensitive or special status plants and animals, including burrowing owls
- Presence of cultural resources
- Encroachment permitting and right-of-way impacts
- Potential for the solar arrays to be located on slightly elevated lands will require close examination of impacts to visual resources and potential glint and glare impacts on nearby roads
- Potential public safety (fire risk) concerns regarding the energy storage facilities and the Imperial County Fire Department planned response

The CEQA document must disclose significant environmental impacts and areas of disagreement among experts, not necessarily solve all outstanding disputes. It is our responsibility to create an environment in which productive engagement with stakeholders can occur so that the CEQA document will provide the comprehensive factual basis upon which public agencies can base their decisions. The ability of the public to provide input, express concerns, and have those concerns considered before decisions are made is a fundamental aspect of CEQA, and missteps in this key process step can be problematic later.

SECTION 2 About the Project Team

For this proposal Catalyst will serve as the prime contractor and we have teamed with Pax Environmental, a DVBE, SBE. Together, we provide the County with a team of experts in the key areas of land use, cultural resources, biological resources, water resources, hazard assessment, and visual resources. As demonstrated in this section, our proposed Project Manager and Deputy Project Manager and subject matter experts have on point and recent experience conducting environmental impact analyses of energy projects in Southern California, with direct relevant experience in Imperial County. Provided below are brief corporate descriptions, an organization chart, and biosketches of our key team members. Brief resumes for key staff are provided in Appendix A.

2.1 Corporate Descriptions

2.1.1 Catalyst Environmental Solutions

Catalyst
ENVIRONMENTAL SOLUTIONS

At Catalyst, we focus our collective expertise on working with our clients to craft creative, cost-effective solutions to their challenges. We are innovative, objective, and ethical; our priority is your project's success. We serve as the trusted strategic advisors to a diverse client base including private industry and the public sector, and we provide expert consulting services in the areas of water resources management, energy, and land development/management. As respected problem-solvers, we maintain excellent relationships with key decision-makers in regulatory agencies and either participate in or stay well informed on developing policy trends.

Catalyst is a registered small business incorporated in the State of California (Certification #2000479) and our team functions as a cohesive unit that routinely works together on projects across California and the western United States. Catalyst employs an interdisciplinary approach to problem-solving that synthesizes the work of our scientific, economic, engineering, and regulatory experts to create practical solutions for complex environmental and natural resource management issues. Our understanding of complex scientific linkages and regulatory requirements contributes to our success in assisting clients through the planning, permitting, monitoring, closure, and restoration processes.

"The Catalyst team has been outstanding from start to finish in their work with us on CEQA. My group is new to CEQA, and Catalyst took the time to explain the process, provided training in CEQA do's and don'ts that significantly enhanced our public outreach, and they met our challenging schedule goals successfully."

Hubertus Cox, Ph.D.

City of LA Bureau of Sanitation – Watershed Protection Division; Programmatic EIR for Enhanced Watershed Management Plan in the City of Los Angeles

Catalyst provides expert consulting services in the areas of energy, land use/permitting, and CEQA/NEPA compliance. In addition to assisting clients with planning, permitting, and environmental analysis, we craft creative solutions to the most complex environmental issues. We are innovative, objective, and ethical experts. With over 25 years of experience in the field, our experts serve as the trusted strategic advisors to a diverse client base in both private industry and the public sector. Catalyst's experienced staff provide clients with the following key services:

- CEQA/NEPA Compliance
- Land Use Planning/Permitting
- Water Resources
- Site Assessment and Risk Management
- Biological Resources
- Air Quality and Climate Change
- Transportation and Traffic
- Facilitation and Public Involvement

Catalyst maintains a strong presence in southern California, employing a range of professionals with expertise in CEQA compliance, water resources, geology/hazards, and biological resources. Our multi-disciplinary team is deeply experienced in preparing CEQA documentation and resource studies for energy projects in southern California and maintain excellent relationships with key decision-makers in regulatory agencies (including the Imperial Irrigation District).

2.1.2 Pax Environmental

Pax is a disabled veteran-owned environmental consulting firm in Ojai, California (DVBE Certification #1746492). Pax, founded in 2012, offers a range of professional services including ecological restoration, conservation biology, biological monitoring, archaeology, GIS services, environmental regulatory permitting, and multidisciplinary project management. Pax's staff are comprised of scientists, biologists, botanists, planners, archaeologists, GIS analysts, and experienced program managers. Pax biologist regularly conduct biological surveys for renewable energy projects on behalf of Applicants and public utilities, most recently completing biological clearance surveys for the Cinco and Astoria solar projects in California. Through this combination of expertise and environmental disciplines, Pax offers a full-service and solutions-based approach to environmental projects, providing high-quality final products performed cost effectively, on-schedule, and in compliance. Pax provides CEQA/NEPA analysis as well as environmental regulatory permitting expertise to clients in all sectors, and coordinates with state and federal agencies to ensure project compliance. Pax provides comprehensive and beneficial environmental consulting services to both private and public-sector clients while providing employment and training opportunities to US military veterans.

2.2 Project Team Professional Biographies

Figure 4 below provides an organizational chart for this project and is followed by biosketches that describe the qualifications and experience of each of our key team members.

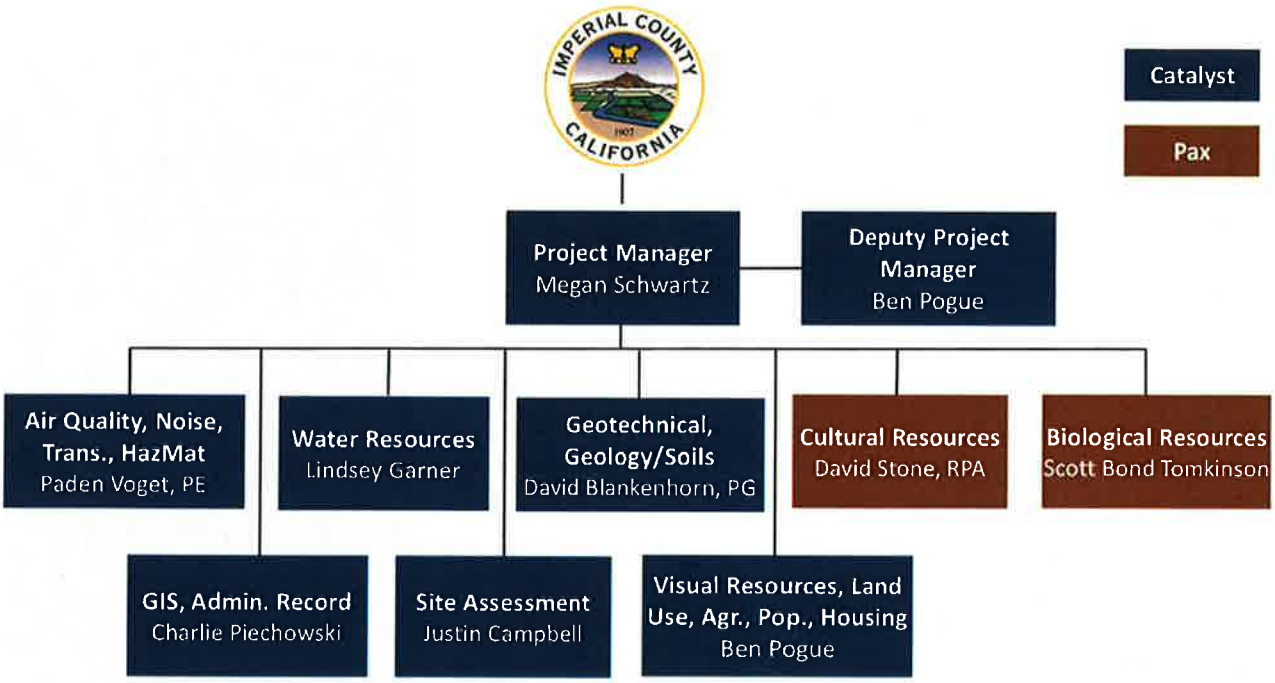


Figure 4 – Organizational Chart

2.2.1 Megan Schwartz, M.E.S.M. – Project Manager

For this project we propose our Directory of Regulatory Compliance and Permitting, Ms. Megan Schwartz. Her 15 years of expertise in permitting of energy projects, CEQA and NEPA analyses, regulatory compliance will be key in ensuring that the CEQA document is legally-defensible and speaks to the key issues of concern from labor unions and local residents. Ms. Schwartz specializes in community compatibility and energy projects, working regularly with energy providers and the regulatory agencies that oversee energy generation. She has a keen understanding of the compatibility issues associated with energy generation and transmission projects in southeastern California, having led the CEQA EIR process for the Energia Sierra Juarez project and the Devers-Palos Verde transmission line. Ms. Schwartz also has direct experience working in the Imperial Valley on the Salton Sea Species Habitat Conservation Project EIR/EIS, the CDFA Hydrilla Eradication Project EIR, and the Mexicali I Los Arenitas Wastewater Treatment Plant Transboundary EA. Ms. Schwartz excels at coordinating numerous resources to develop high quality client deliverables, on time and within budget. In addition, she is meticulous with quality control of all work products related to the project, from technical memorandums, to cover letters and consultation letters, to the overall CEQA document; understanding that the administrative record and agency communications are all part of the legal record of the regulatory process.

2.2.2 Ben Pogue, M.A., PMP, AICP – Deputy Project Manager, Lead Planner, and Social Sciences Lead

Teaming with Ms. Schwartz and serving as Deputy Project Manager on this project is Mr. Ben Pogue. Mr. Pogue is a certified Land Use Planner and Project Management Institute Project Manager and leads Catalyst's renewable energy practice. He has over 15 years of professional experience managing NEPA/CEQA and planning processes for a wide range of renewable energy projects. Most recently, Mr. Pogue worked with the County of the Heber 2 Geothermal Repower Project CUP and CEQA IS/MND. Mr. Pogue worked closely with Imperial County to address information requests and public comments on the CUP and IS/MND. He has worked with public and private clients on executing NEPA and CEQA processes and understands the CUP process in Imperial County. Mr. Pogue's technical expertise includes socioeconomics, facility siting/planning of energy facilities, recreation, visual resources, and land use/planning.

Mr. Pogue is also skilled in stakeholder management and public involvement. In addition to developing scoping and public involvement strategies for NEPA/CEQA projects, his experience includes working with municipalities to develop MOU/MOAs, conflict resolution, NGO engagement/negotiation, and collaborating with U.S. Fish and Wildlife Service and/or regional conservation authorities in informal/formal ESA consultations.

As deputy project manager, Mr. Pogue will be responsible for coordinating the internal subject matter experts, assisting with budget and schedule tracking. Mr. Pogue will also lead the social science analyses for the CEQA document, including aesthetics, land use, recreation, agriculture, and population and housing.

2.2.3 Paden Voget, PE – Air Quality, Greenhouse Gases, Transportation/Traffic, Noise, Hazardous Materials and Waste

Ms. Voget is a licensed Professional Engineer with 16 years of experience in environmental and civil engineering consulting. She has a diverse background that includes CEQA and NEPA projects, environmental compliance, construction project management, environmental permitting, civil/restoration engineering, air emissions modeling, and noise modeling. Her expertise ranges from performing and managing initial due diligence through subsurface investigations and remedial actions at complicated sites under a variety of state and federal programs. In addition, she has significant expertise in performing air emissions modeling/calculations and noise impact modeling/analysis for a wide range of development projects.

Central to our approach is recognition of the importance of policy and process to the successful completion of a CEQA review. Even a seemingly minor slip-up in policy or process can derail a CEQA review and lead to lengthy delay, rework, and recirculation of the document. Close attention to policy and process makes all stakeholders engaged and part of the review, ensures that all procedural matters are attended to in a way that exceeds expectations and requirements, and builds the working relationships that provide the surest pathway to a successful review.

It is primarily the responsibility of the Project Manager and Deputy Project Manager to ensure that policy and process are placed at the forefront of the project team's mission. Our smoothly functioning team, adept at rapid internal communication, has proven to be highly successful in this regard. Ms. Schwartz and Mr. Pogue have a 10-year history of working side-by-side to manage high-profile, complex projects, with a diverse team and stakeholder groups. Their working relationship is seamless and effortless and has repeatedly led to the completion of high quality, legally defensible CEQA reviews on time and within budget.

2.2.4 Lindsey Garner, Ph.D. – Water Resources Lead

Dr. Garner is an environmental toxicologist with 14 years of aquatic toxicology, water resources, biological resources, permitting, litigation support, and risk assessment experience. Dr. Garner has worked on a variety of large and complex projects involving multiple stakeholders including federal, state, and local government agencies, private industry, legal professionals, and the public. She has evaluated the toxicity, fate, and transport for various anthropogenic and natural compounds in support of EIRs, natural resource damage assessments, ecological risk assessments, and various litigated cases. She has served as lead author and subject matter expert for biological resources, water resources, public health and safety, and hazardous materials sections for various CEQA and NEPA analyses. She has conducted critical issues analyses for various solar projects and is currently the DPM for the Hydrilla Eradication Program EIR, which is evaluating the impacts of hydrilla eradication methods in Imperial Valley.

2.2.5 Justin Campbell, RPA, CPESC, QSP/D - Site Assessment Lead

Leading the Phase I Environmental Site Assessment for this project will be Mr. Justin Campbell, a Registered Environmental Assessor and Certified Professional in Erosion and Sediment Control, and Qualified Stormwater Practitioner. Mr. Campbell leads Catalyst's Environmental Remediation program and has conducted dozens of Phase I and Phase II Environmental Site Assessments for industrial and commercial development projects. Mr. Campbell oversaw the installation of groundwater monitoring wells and subsequent groundwater monitoring program for the Ivanpoh Solar Project, and has served as the qualified Environmental Professional for numerous Phase I ESA's for solar projects and battery storage projects in Washington, Oregon, and California. Mr. Campbell knows the ASTM standard for Phase I and II ESAs forward and backward and regularly prepares Phase I ESA reports on behalf of landowners, regulatory agencies, and utilities. Mr. Campbell is skilled at framing and analyzing environmental issues and communicating complex ideas to a wide range of audiences.

2.2.6 Chip Blankenhorn, PG– Geology and Soils Lead

Mr. Blankenhorn has over two decades of experience. His technical background includes developing and implementing hydrology and geomorphology studies, evaluating groundwater resources, conducting geology and hydrogeology studies, and preparing various regulatory permits and environmental planning and compliance documents. He utilizes his diverse, interdisciplinary background to create practical solutions for complex environmental and natural resource management issues. He has conducted CEQA and NEPA impact analyses related to geology and soils and hydrology/water quality for a variety of projects including oil and gas infrastructure and facilities, dam safety, water treatment, and power generation and transmission. This experience includes leading the physical science resource sections for the Southern California Edison Devers-Palo Verde No. 2 Transmission Line Project as well as the Energia Sierra Juarez Transmission Project both of which were located in the southeastern portion of California. Accordingly, he is very familiar with the geological setting and hazards in the proposed Project area.

2.2.7 David Stone, RPA – Cultural Resources Lead

Mr. Stone has over 38 years of experience managing cultural resources analyses and documentation including archaeological and historic resources projects, and Native American values. Mr. Stone has prepared hundreds of cultural resource management technical reports covering initial assessment, significance determination, and mitigation phases. He is an expert at Native American consultation pursuant to federal NHPA Section 106 and California state AB 52 and SB 18 protocols, having coordinated these efforts for numerous complex development activities. He has also managed cultural resource analyses for complex, interdisciplinary National Environmental Policy Act (NEPA) and CEQA compliance projects, as well as cultural resources (archaeology, history, and architectural

history) technical studies. He has extensive experience in environmental review and project management in a variety of issue areas, including residential, commercial, industrial, and energy development, as well as comprehensive, programmatic planning efforts.

2.2.8 Scott Bond Tomkinson – Biological Resources Lead

Mr. Tomkinson holds expertise in California plant taxonomy and an intimate understanding of ecological restoration best management practices. As UCSB's 'Lagoon Steward' he managed, wrote grants for, planned and implemented restoration sites in habitats such as: oak woodlands, coast sage scrub, native grasslands, vernal pools, streams, freshwater and saltwater marshes, dunes, and bioswales. He has extensive experience leading teams performing vegetation surveys and restoration activities on multiple, concurrent grant-funded projects. In addition, he has developed databases and created maps in relation to land management using ArcGIS and QGIS. As a senior biologist he supports stormwater sampling, ecological restoration, biological assessments, species specific surveys, pre-construction surveys, nesting bird surveys, and construction monitoring for projects throughout southern and central California.

2.3 Project Experience

The following project descriptions provide a sample of the relevant project experience for the staff included in this proposal. As demonstrated by these project descriptions, our team has worked on renewable energy, biological resources, and energy infrastructure projects throughout Imperial County. Through our experience, we have a thorough and diverse understanding of the natural and social resources present in the County and Project Area, giving us a head start in developing affected environment and environment impact findings. Further, we understand the unique issues of the proposed Project, including working near/in IID canals and in open-space designated for preservation/conservation. Lastly, we have worked on several environmental reviews for both solar and battery storage projects and have an astute working insight of the technical and planning issues associated with solar and battery storage projects, including visual/glare, land use conversion, biological species in arid environments, and fire safety/management.

Conditional Use Permit Amendment and Initial Study/Mitigated Negative Declaration for Heber 2 Geothermal Repower Project - Imperial County, California

Catalyst prepared a CUP Amendment Application, CEQA IS/MND, and technical resource reports for the proposed Heber 2 Geothermal Repower Project located in southern Imperial County. Proposed developments include two new water-cooled energy converters to replace six old water-cooled units; three 10,000 gallon isopentane above ground storage tanks; and additional pipes to connect the proposed facilities with the existing Heber 2 Geothermal Energy Complex. Key issues included public safety from the storage of additional isopentane, air emissions, water use, and planning/land use. Catalyst coordinated between legal counsel and the County to address legal issues raised in an attorney-prepared comment letter, including the piecemealing of the proposed project; hazard assessment of a catastrophic failure of the isopentane tanks; air emissions; potentially present sensitive species; and, cumulative effects. Catalyst closely coordinated with the Imperial County Planning Department, Fire Department, and state agencies to work through potential environmental and safety issues and prepare defensible technical resource reports and response to comments. *Through this project, we gained familiarity with the legal tactics and technical arguments that all renewable energy projects in Imperial County can expect to confront, and*

worked effectively with the applicant and the County to resolve these issues and ensure certification of a legally-defensible CEQA document.

Hydrilla Eradication Program Environmental Impact Report – Imperial County and Statewide California

Hydrilla verticillata is an invasive aquatic plant that presents a great threat to California waters. The California Department of Food Agriculture (CDFA) has developed the statewide Hydrilla Eradication Program to prevent, detect, and eradicate hydrilla throughout the state. Catalyst and Pax are assisting the CDFA with its preparation of an EIR evaluating the statewide environmental impacts of the Program. The Program consists of cultural, physical, biological, and chemical eradication methods. *This is a complex EIR because it will be a Project-level analysis of a statewide program in order to facilitate CDFA's ability to rapidly respond to any new detections of hydrilla in any waterbody in the state. Catalyst is working closely with the CDFA to describe the parameters used in CDFA decision-making regarding which method is most appropriate for the specific location and infestation, as well as best management practices to avoid and/or minimize any adverse effects of eradication activities.* The EIR evaluates potential future Program activities as well as ongoing activities, which include the use of biological methods (i.e., triploid grass carp) in the Imperial Irrigation District canals to treat a hydrilla infestation that spanned over 600 miles of the canals before treatment. Catalyst led scoping meetings in the Imperial Valley for the Project and will conduct public meetings in the Valley upon the release of the Draft EIR.

Sardana Battery Storage and Substation Conditional Use Permit and Environmental Review – Los Angeles County, California

Catalyst is supporting Strata Solar with assessing the environmental liabilities, environmental permitting, and CUP permit application for a 34kV/66kVbattery storage and substation project in the City of Compton. There are currently no battery storage projects located in the City of Compton and Catalyst is working closely with the City Planning Department to identify and assess key issues, prepare technical resources reports, and CUP application materials. Catalyst prepared a Phase I Environmental Site Assessment, Critical Issues Analysis and Permit Pathway, and performed pre-application coordination activities to review the proposed battery storage and substation preliminary project description and CUP and CEQA pathways.

Salton Sea Species Conservation Habitat Project EIS/EIR - Imperial County, California

The Species Conservation Habitat Project was proposed by the U.S. Army Corps of Engineers and California Natural Resources Agency (the EIS/EIR was prepared by the Department of Water Resources and Department of Fish and Game on behalf of the Natural Resources Agency). The Species Conservation Habitat Project is intended to restore approximately 3,700 of habitat at the Salton Sea for targeted invertebrate, aquatic, and avian species. Ms. Schwartz was the primary author for the agricultural resources and environmental justice analyses for the proposed project and also assisted in the response to comments received during the public review period.

Solar Energy and Battery Storage Conditional Use Permits and Environmental Permitting – Clackamas and Marion Counties, Oregon

Catalyst assisted Strata Solar with assessing eight properties in Marion and Clackamas Counties for critical issues, facility siting, environmental liabilities, CUP applications, and technical resource reports to support environmental permitting. Catalyst performed site visits and prepared technical reports/memorandums documenting the baseline conditions for biological resources, cultural resources, Phase I Environmental Site Assessment, and wetlands/jurisdictional waters. Catalyst also supported Strata in the development of CUP application materials and feasibility assessment.

Celsia Battery Storage Environmental Impact Assessment – Electrical Power Research Institute (EPRI) and Celsia (Columbia)

Columbia's power grid is aging, and the country's population centers are accustomed to routine black outs and outages. To assist with improving gird reliability and service, as well as incorporating additional solar energy, Catalyst prepared an Environmental Impact Assessment (EIA) on the land use, social, and environmental impacts of battery storage throughout Columbia. This EIA served as a programmatic document for Columbia's National Authority for Environmental Licenses (ANLA) and battery storage developers for environmental permitting and issues identification across the country. Catalyst worked closely with the U.S.-based Electrical power Research Institute to review technical sources and develop key findings.

Southern California Edison Pre-Construction Surveys and Biological Compliance Monitoring Services – Los Angeles, Kern, and San Bernardino Counties

Pax has supported over 1,000 work orders since 2018 for Southern California Edison's Environmental Clearance On-Call Program. Pax biologists conduct resource assessments to determine existing environmental conditions, potential for special-status species to occur if they are not observed, and to propose avoidance and minimization measures to limit impacts to existing resources during construction activities.

Pax field biologists conduct technical surveys for biological resources including habitat assessments, vegetation mapping, presence/absence surveys, rare plant surveys, nesting bird surveys, species relocation activities, and protocol level surveys for sensitive species in accordance with environmental documents and permits. Sensitive species experience includes burrowing owl (*Athene cunicularia*), flat-tailed horned lizard (*Phrynosoma mcallii*), western yellow-billed cuckoo (*Coccyzus americanus*), desert tortoise (*Gopherus agassizii*), rare plant species, and more. Depending on survey findings and land ownership, monitoring is provided to avoid sensitive resources during construction activities. All survey and monitoring efforts are reported with photo documentation.

The team consults the California Natural Diversity Database (CNDDB) (CDFW 2019), the Jepson Flora Project website (eFlora, 2019), National Wetlands Inventory (NWI 2019), and National Hydrography Dataset (NHD 2019) to describe habitat, jurisdictional water features, dominant vegetation communities, records of sensitive and listed species, and more. The compiled information is used to determine proper avoidance measures for construction crews. At the end of the project cycle, Pax biologists provide QA-QC services to ensure technically adequate submittals. The Pax analytics team has conducted thousands of biological desktop reviews and QA-QC'd thousands of submittals in support of Southern California Edison's Environmental Clearance program.

Policy & Land Use Analysis of Battery Storage Projects in Oregon – Statewide Oregon

Catalyst prepared policy analysis for Strata on Oregon's and specific counties' land use policies on battery storage facilities, in particular how the State is incorporating battery storage into state plans and how battery storage projects are being classified under county land use codes/plans. This policy analysis assisted Strata with identifying land use permitting pathways for specific battery storage projects and develop understanding of which counties in Oregon have an established pathway for issuing a land use permit for battery storage projects.

Aeroman Solar Project Biological Assessment – Kern County, California

Pax designed and managed the biological studies associated with a Conditional Use Permit and Environmental Impact Report for a proposed 35MW photovoltaic solar facility near Mojave, Kern County, California. The biological studies included focused botanical surveys, and a general habitat assessment, as well as protocol-level surveys for desert tortoise. In addition, Pax conducted avian surveys with particular focus on the presence/absence of burrowing owl. Pax also prepared a technical biological assessment report was submitted on behalf of the client for review by the jurisdictional agencies, in support of Section 7 consultation.

Devers to Palo Verde 2 500 kV Transmission Line NEPA EIS – Riverside, San Bernardino, and Kern Counties, California

Catalyst staff led the NEPA EIS examining environmental impacts associated with Southern California Edison Company's 267 mile-long 500 kV Devers to Palo Verde transmission line project extending from Arizona through multiple counties in California and crossing tribal lands and the Kofa Wilderness. We worked for the FERC to prepare the EIS. This was an extremely controversial project that would provide expanded transmission capacity to meet the growing demand for energy in California, fueling interstate disagreements over the exportation of electricity to one state at the perceived expense of another. This was the first-ever use of the FERC's "backstop" authority granted by the Energy Policy Act of 2005.

Energia Sierra Juarez U.S Transmission Line Project EIS – San Diego County, California

Catalyst staff prepared this Environmental Impact Statement evaluating the potential effects of constructing a controversial transmission line project that would transmit renewable energy from a proposed wind farm in La Rumorosa, Baja California, Mexico to a substation in eastern San Diego County, California. The project was controversial because it was a proposed during the same time that the Sunrise Powerlink transmission line was undergoing CEQA review and residents in the rural areas of eastern San Diego County opposed use of their community for renewable energy projects and transmission lines to power the City of San Diego. Primary issues of concern included transboundary impacts between the US and Mexico, potential effects to designated "Dark Sky" areas, visual impacts, biological effects to birds and Peninsular bighorn sheep and the cumulative impacts of multiple renewable energy projects being proposed in eastern San Diego County.

Mammoth Lakes Visual Resources Impact Analysis – Mono County, California

Catalyst staff prepared a visual resources analysis for ORMAT's Mammoth Lakes Geothermal Energy Expansion Project in Mono County, CA. We directed the development of 3D visual simulations of the proposed energy facilities and preparing a supplemental analysis to a CEQA EIR that was stalled due to the original visual resources analysis. Catalyst staff worked closely with ORMAT in developing facility features and best management practices for the geothermal plant.

SECTION 3 Scope of Work

This section describes our proposed approach to permitting the proposed Project. The scope of work has been organized into the six key tasks below, which are broken down by subtask to provide a clear depiction of the proposed process. We have included tables at the end of each task description that clearly identifies the deliverables. This scope of work uses our team's experience with renewable energy generation and transmission in Southern California, our knowledge of the key stakeholder concerns, and a successful track record in CEQA review that has never been successfully challenged to determine the technical approach. A key guiding principle, as we understand the Request for Proposal, is that the Applicant will provide a number of key technical studies which will be supplemented by technical studies to be prepared by the selected consultant. These studies do not necessarily need to comply with CEQA requirements but provide technical data and analysis to support the CEQA review. Subsequent tasks are CEQA compliant tasks and must rigorously follow both the policy and procedural requirements for legal defensibility.

3.1 Task 1: Project Initiation

3.1.1 Subtask 1.1 – Kick-off Meeting

The kick-off meeting is an important milestone during a project and aids in developing and setting expectations for project success while serving to start a project off on the right path. We anticipate that the agenda for the kick-off meeting will include the introduction of all key staff for the Project Team and the County, discussion of the project schedule and milestones, communication protocol, and serve to provide the Project Team with more detailed information regarding the proposed project. We propose to conduct a kick-off meeting shortly after contract award (either in-person or virtually depending on COVID-19 safety requirements). The Catalyst Project Manager (PM) and Deputy Project Manager (DPM) will organize and attend the project kick-off meeting and provide meeting notes to attendees within 48 hours of the meeting as well as for incorporation in the administrative record.

3.1.2 Subtask 1.2 – Notice of Preparation

The CEQA process is initiated with the publication of a Notice of Preparation (NOP), which begins the scoping period. The public involvement process is intended to inform interested and affected stakeholders, develop trust and credibility, support and improve relations, and avoid misunderstandings based on a mutual exchange of information. Public involvement also provides interested individuals the opportunity to express concerns and have those concerns considered when decisions are made. This is most effective when the public is informed and involved early in the environmental review process and when the mechanisms for conveying and receiving information are clearly understood by the public.

We will prepare the NOP for County review and upon approval will file the NOP with the County Clerk[5]. We will also provide an electronic copy of the NOP to the County to post on the County website. We will also prepare a public notice to be published in the Imperial Valley Press. In addition, we will prepare a letter or postcard to be mailed to interested stakeholders to inform them of the project and the scoping period. We have a mailing list of interested parties (non-governmental organizations, labor unions, legislators, state and federal agencies) that we developed

[5] Note that under Executive Order N-80-20, signed September 23, 2020, the State has conditionally suspended certain requirements for filing, noticing, and posting of CEQA documents at County Clerk offices, and has provided alternate means of complying with noticing requirements. We will work with the County to ensure that all filings meet CEQA requirements and State Guidance during continuation of the State Emergency Order.

during the Heber 2 CEQA process that provides a starting point for stakeholder outreach and engagement. We will review this mailing list with the County and make any County-suggested revisions, to ensure that stakeholders are well-informed of the project and CEQA process. We will mail the stakeholder letters to everyone on the mailing list.

3.1.3 Subtask 1.3 – Scoping Period, Meeting, and Comment Report

We propose a 30-day public comment period and one (1) online public scoping meeting that will include a presentation of the proposed Project and CEQA process, and an oral comment collection period. Our PM and DPM will prepare a Microsoft PowerPoint presentation to present at the meeting which will describe the CEQA process, how to provide an effective scoping comment, and provides sufficient information about the Project in order to solicit informed comments on potential alternatives and the scope of resource area analyses. Both the PM and DPM will attend the meeting.

Following the end of the scoping period, we will submit a report summarizing the scoping comments and recommendations for incorporating issues raised into the environmental document. As part of the report, we will catalogue all comments received in a Microsoft Excel database that can be sorted to easily find comments related to alternatives, issue areas, and cumulative projects. The database will be used during development of the Draft EIR to inform section authors of scoping comments pertinent to their resource area and to track how each issue identified during scoping is addressed within the Draft EIR. We will also update our mailing list to include everyone who provided scoping comments or requested that the County keep them informed of the project.

3.1.4 Subtask 1.4 – Review the CUP Application for Consistency with the Imperial County General Plan Renewable and Transmission Element

We will review the CUP application submitted by the Applicant for consistency with the Imperial County General Plan (Renewable and Transmission Element) and designated land uses. Given the Project site's multiple land use and zoning designations, Catalyst will break down the proposed project components/facilities and develop a matrix that compares the proposed uses with the land use/zoning designations established in the General Plan. We will include consistency discussions for each zoning area in the Project site and identify any potential plan inconsistencies. We will develop a draft technical memorandum with the findings of consistency and submit to the County for review and discussion. We will apply the findings of consistency to the land use discussions in the EIR. If authorized by the County, Catalyst will work with the Applicant to discuss and seek resolution to potential consistency issues.

Table 1 – Task 1 Deliverables

Subtask	Deliverables
Subtask 1.1 – Kickoff Meeting	Meeting Notes
Subtask 1.2 – Notice of Preparation	Draft, Final NOP and IS, Mailing List, Stakeholder Letter, Newspaper Notice
Subtask 1.3 – Scoping Period, Meeting, and Comment Report	Scoping Comment Report and Database
Subtask 1.4 – Review the CUP Application for Consistency with the Imperial County General Plan Renewable and Transmission Element	Draft, Final Consistency Review Memorandum

3.2 Task 2 – Administrative Draft EIR

3.2.1 Subtask 2.1 – Develop Required Studies & Peer-Review Applicant-Prepared Technical Reports

We understand that as part of the CUP process, the Applicant will prepare technical reports that provide detailed information and analyses related to the key technical area listed below:

- Transportation/Traffic
- Biology Resources
- Cultural Resources/Historical/Tribal Cultural/Archaeology
- Aesthetics/Visual Impacts
- Air Quality and Greenhouse Gas
- Noise
- Land Evaluation and Site Assessment

We will review the technical reports for technical accuracy and compliance with relative survey/analysis protocols, as well as sufficient information to inform the CEQA analyses. If the reports do not provide the necessary information, we will prepare a detailed data request for the information that is required and a timeframe for providing the information so that we can meet the overall project schedule.

In addition to the resource reports submitted by the Applicant, based on the RFP, we will prepare the following technical studies.

- Phase I Environmental Site Assessment
- Geotechnical Review Memorandum
- Water Supply Assessment

3.2.1.1 Phase I Environmental Site Assessment

Catalyst will conduct a review of available files to ascertain the environmental history, prior environmental permits and plan, title history, and general characteristics of the area in the vicinity of the proposed conservation easements. This review will include review of database results secured from Environmental Data Resources, Inc. (EDR). According to EDR, the report provided will meet the minimum requirements presented in the ASTM Standard Practice for Phase I ESAs: E1527-13. As part of the EDR review, we will order and review readily available standard historical sources including aerial photographs, topographic maps, Sanborn maps, and a city business directory abstract to evaluate historical property use, and the potential for off-site impacts to the sites. Catalyst will also contact the local CUPA agency for records related to the site. Catalyst will also work with the Applicant, property owner, or manager knowledgeable of the history of the site, to complete a questionnaire.

Following the data review, an Environmental Professional from Catalyst will conduct the field reconnaissance of the subject parcels to assess the environmental condition of the sites and present infrastructure, if present. We assume the site inspection can be completed in one day. Environmental conditions will be photographed and noted. We will also visually inspect adjacent parcels to observe current land use and potential to impact the area in the vicinity of the proposed sites.

Following completion of the prior tasks, Catalyst will prepare a report presenting the findings. The report will include figures depicting the subject sites and any observed RECs, as well as a photographic log of the site visit. In accordance with the ASTM standards, interviews of knowledgeable persons regarding past and present operations of each parcel is required. The report will comply with the ASTM Standard Practice for ESAs and the USEPA AAI Final Rule, 40 CFR

Part 312. We will provide one electronic copy of the draft report for County review and one electronic copy of the final report, following incorporation of any revisions.

3.2.1.2 Geotechnical Review Memorandum

A California-certified Professional Engineer will conduct an independent evaluation of the Applicant-supplied geotechnical investigation data and proposed geotechnical design specifications for the Project. As part of the evaluation, we will review the site-specific soil investigation data as well as laboratory testing results including those for shear strength, maximum dry density and optimum moisture content, Atterberg Limits, expansion index, and consolidation potential. In addition, the evaluation will include geologic considerations such as depth-to-groundwater, fault rupture, and seismic shaking as well as the applicant supplied ground motion analysis. Lastly, we will review the proposed grading and foundation design specifications in the context of the site-specific geotechnical setting and the applicable California Building Code requirements. We will prepare a technical memorandum of our findings to support the Geology and Soils analysis in the EIR and the County CUP review process. We will submit a draft memorandum electronically for County review and following receipt of County comments, will revise and submit a final memorandum for the Project Administrative Record.

3.2.1.3 Water Supply Assessment

To assess the Project's compliance with SB 610 and SB 221, Catalyst will prepare a Water Supply Assessment (WSA) that includes a review of the Project Site's atmospheric and hydrologic conditions; water rights framework; water supplies and availability; project water demand estimates; project impacts on water supply; and, potential water conservation measures. Given the Project's location in close proximity to the IID canals and proposed uses, we will perform a thorough review of the IID system and potential impacts to IID's water supply. We will also assess construction water consumption and develop succinct findings and conclusions, which would be applied to the water resources sections. We will submit a draft of the WSA electronically to the County, and Applicant if authorized, to discuss key findings and, following receipt of County comments, will revise and submit a final memorandum for the Project Administrative Record.

3.2.2 Subtask 2.2 – Draft Project Description, Objective, and Alternatives

We will develop an Introduction section that describes the lead agency and any responsible agencies and develop a clear Project Objectives statement that is compliant with CEQA requirements and supports the development of project alternatives. The Introduction section will also provide an overview of the CEQA process and purpose and scope of the CEQA document, including defining baseline conditions. The Project Description is the heart of the CEQA process, and a detailed project description is also required for all permit applications and consultation processes. Therefore, development of a complete Project Description is a necessary first step for the entire project and is essential to preparing a legally defensible analysis of potential effects.

The statement of the Project Objective(s) is a critical part of the EIR for large solar projects. This is the part of the EIR where the lead agency can tout the benefits of the program; it is also the part that forms the basis for a statement of overriding consideration, in the event the program includes significant impacts. The Project Objectives also form part of the basis for identifying Project Alternatives: all alternatives must be able to substantially meet the Project Objective(s) or they may be discarded from further analysis in the document.

We will also prepare a description of the proposed project alternatives, including the No Project Alternative and up to one additional alternative that may be carried forward for complete analysis. The description of alternatives may also include descriptions of other alternatives considered by the County but eliminated from further analysis. Alternatives will be identified through discussion with the County and the Applicant, and through the scoping process. We typically

apply a sifting process in alternatives analysis, beginning with identification of a broad range of potential alternatives. We then apply screening criteria including the ability to meet the Project Objectives to winnow out some alternatives. Typically, alternatives retained for analysis are responsive to the potential environmental impacts of the project and may provide a way to minimize or avoid those impacts.

We will work with the County and our resource section leads to develop a complete Project Description and potential alternatives and flesh these out so that each resource area has the appropriate information in the project description to facilitate their impact analysis. We propose to submit an electronic draft of these sections to the County for review and comment in advance of the Preliminary Administrative Draft to ensure that these key sections are complete and accurate before resource leads begin their environmental review. Following the County's review of the draft, we will incorporate all of the County's comments and edits into final versions of these sections. We will then distribute these sections to the Project Team to allow them to begin preparation of resource area descriptions.

3.2.3 Subtask 2.3 – Affected Environment and Environmental Consequences

To describe the Affected Environment and evaluate potential effects for all resource areas, we will: 1) use the contents of prior environmental analyses such as Heber 2, supplemented by information provided by the Applicant to document the existing environment; 2) review and verify the evaluation of effects of the proposed Project on each resource based on the reports provided by the County, the Applicant, and/or our team technical expertise using established methods; and 3) propose mitigation measures to reduce any impacts, as necessary. The significance determination for each impact will consider the context (e.g., how the action will affect the resource) and duration of the individual impact. For each significant impact, mitigation measures will be identified that, to the extent feasible, would avoid impacts; minimize impacts by limiting the degree or magnitude of the action; or rectify impacts through restoration, rehabilitation, or repairs to the affected environment.

We will also use data from agency files, published literature, and our own in-house library of relevant studies. We anticipate any additional data required or clarification of data received will be conducted via email, teleconference, or a working meeting in United's offices. We will define the study area for each environmental issue and clearly describe the regulatory frameworks for each resource area and develop technical descriptions of the natural setting and characteristics of each of the following resource areas included in Appendix G of the CEQA guidelines:

- Aesthetics
- Agriculture and Forestry Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Energy
- Geology/Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials (including Public Health and Safety)
- Hydrology/Water Quality
- Land Use/Planning
- Mineral Resources
- Noise
- Population/Housing
- Public Services
- Recreation
- Transportation
- Utilities/Service Systems
- Wildfire
- Cumulative Impact

While the EIR will consider all resource categories, selected environmental resource areas may be eliminated from specific impact analysis if little or no potential exists for the Project to have an impact on the specified resources. For those resource categories where there are numeric regulatory limits, we will apply these as significance criteria (e.g., air quality and noise). The significance criteria serve as benchmarks for determining if components if the Project would result in a significant adverse environmental impact when evaluated against the environmental baseline

conditions. According to State CEQA Guidelines Section 15382, a significant effect on the environment means "...a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the Project..."

Impacts will be categorized as follows:

- *Beneficial Effect.* The Project would result in an overall improvement to the existing baseline condition.
- *No Impact.* The Project would not have any measurable environmental impact on the environment.
- *Less Than Significant Impact.* The Project may have the potential for affecting the environment, although these impacts will be below levels or thresholds that the Districts or other responsible agencies consider to be significant.
- *Less Than Significant Impact with Mitigation.* The Project may have the potential to generate impacts that will have a significant impact on the environment. However, the level of impact may be reduced to levels that are less than significant with the implementation of mitigation measures.
- *Potentially Significant Impact.* The Project may result in environmental impacts that are significant and cannot be reduced to levels that are less than significant even with the implementation of mitigation measures.

To provide clarification on how we would approach each resource analysis, Table 2 below summarizes the issues and technical approach to assessing each affected resource.

Table 2. Proposed Approach to Analysis by Resource Category

Resource Category	Understanding and Approach
Aesthetics	Aesthetic conditions in and around the Project area are primarily dominated by open space views, and agriculture. The Project Area is visible from Interstate 8. We will characterize the existing aesthetic conditions in and around the project area and the types of viewers that may be affected by changes to the visual resources in the area (e.g., residents and visitors) and where these affects may occur. We will evaluate potential changes to visual resources resulting from project implementation that could affect viewers in the area. The installation of photovoltaic panels could result in increased glare in the area and this will need to be quantitatively analyzed through visual simulations and detailed glare analysis models (to be provided by the Applicant in the Technical Report).
Agriculture and Forestry	Land use on a portion of the Project site includes agricultural operations, which also dominates land use on neighboring and surrounding properties. While much of the Project site is zoned for Open Space and Agriculture, as well as Renewable Energy (overlay) development, the Project would effectively convert some agricultural lands to renewable energy use. The EIR agriculture assessment will include a review of the subject soils and correlating crop production types to determine if the site contains prime and/or unique soil types that are unavailable in the surrounding area. We will also determine potential implications of converting agricultural lands for another use to the local economy.
Air Quality	The description of ambient air quality will include a brief description of the Project area's climate and meteorology, air quality attainment status, and air data obtained from local monitoring stations. The air quality analysis will be based on the Imperial County Air Quality Assessment Guidelines. The Project's estimated construction emissions will be quantified using the California Emissions Estimator Model (CalEEMod) will be compared to federal and local standards. The Project's construction emissions, including criteria pollutants and toxic air contaminants (i.e., diesel exhaust), initially will be quantified without mitigation. If the criteria pollutant emissions exceed any recommended thresholds, we will identify feasible and appropriate mitigation. Types of mitigation that can be applied for this Project include reduction in equipment/vehicle idling, use of newer or retrofitted equipment, change in schedule to reduce pollutant concentrations, and application of measures to control fugitive dust. Following completion of construction activities, the Project is not expected to result in any operational emissions.
Biological Resources	Biological resources include vegetation, wildlife, wetlands, special-status species of plants and animals, and invasive species. The first step in preparing the CEQA analysis will be to identify the terrestrial biological resources currently present or likely to occur in the Project area. We anticipate that the Technical Report provided by the Applicants will include a thorough literature review and site reconnaissance survey results, including a map of vegetation and habitat types and evaluation of habitat suitability to support special status species. We will conduct a search for sensitive species that have been recorded at or near the site using the California Natural Diversity Database, and will also closely review National Wetland Inventory maps, past reports for the project area and vicinity, official species lists, literature information relevant to the project, and unpublished information from regulatory agencies. The description of existing conditions will include maps of vegetation communities and wildlife habitats. This description will be tailored to support the impact analysis without providing extraneous information. The impact analysis will follow the Appendix G Guidelines checklist. The project description will be reviewed to determine what types of effects could occur, and the project footprint (total disturbance area, both temporary and permanent) will be overlain on the vegetation and habitat maps to quantify potential impacts. The analysis will consider temporary and permanent impacts during construction and operation. Besides the direct disturbance of habitats, the impacts of noise, lighting, and human presence will be assessed for wildlife based on literature information for responses of animals to these types of disturbances as well as preparer expertise/experience.

Resource Category	Understanding and Approach
Cultural Resources, Tribal Cultural Resources, Tribal Consultation, and Paleontology	We will assess the potential cultural resources impacts associated with the Project in compliance with CEQA. We anticipate the technical report provided by the Applicants will include the results of an intensive ground surface survey of the site, along with the background research conducted at California State University – Fullerton, as to whether there are archaeological sites or resources within the proposed disturbance area. We also will assess potential impacts on paleontological resources, based on a paleontological desktop assessment referencing archives such as the University of California Museum of Paleontology, identifying whether any significant fossils can be expected in the project area. As part of the work we would conduct tribal outreach as required by Assembly Bill 52 and support the Commission in meeting their consultation requirements. The tribal consultation would be verified through the Native American Heritage Commission (NAHC), when we request a search of the sacred lands file to determine if the site is within an area where tribal/cultural resources have been identified in the past, or in the vicinity. The NAHC then provides a list of local tribal representatives to contact. In this particular area, there are approximately eight representatives. We will work with the Commission to prepare outreach letters to each of the tribes. The outcome of this outreach will be incorporated into the environmental review and mitigation requirements for the tribal cultural resources section. We will prepare a letter to support Assembly Bill 52 consultation requirements for distribution concurrent with the Notice of Preparation and Notice of Availability.
Geology and Soils	Our evaluation will address the potential effects related to geology and soils including potential for exposure to seismic risks, landslides, soil erosion, liquefaction, settlement, and stability. The geology and soils evaluation will draw from the results of the Geotechnical Analysis prepared under Subtask 2.1. We will describe in detail the existing topography, regional and local geology, the seismic setting, sediment transport conditions, any existing geologic hazards in the vicinity of the project area, and soils within the project area especially with respect to shrink/swell potential and erosion potential.
Greenhouse Gas Emissions	This section will evaluate greenhouse gas (GHG) emissions from construction activities. The greenhouse gas issues associated with the proposed action will be evaluated due to the construction and operational activities. The section will be prepared in accordance with the Greenhouse Gas Thresholds of Significance Options for Land Use Development Projects in Ventura County. Emissions will be quantified through use of CalEEMod. This section will also provide an analysis of project consistency with State and County climate goals.
Hazards and Hazardous Materials/Risk of Upset	Public health and safety concerns could include the use, transport, generation, and disposal of hazardous materials associated with vehicles and equipment used in construction activities. Additional concerns would include the hazards associated with the potential for encountering contaminated materials at the Project Site. These concerns, as well as any others raised during internal and public scoping will evaluated as part of the CEQA analysis. To characterize current conditions regarding public health and safety, we will summarize information reviewed as part of the Phase I Environmental Site Assessment prepared under Subtask 2.1, and information from the Applicant regarding the use, transport, generation, and disposal of hazardous materials during construction activity. To evaluate the potential direct, indirect, and cumulative effects for public health and safety, from implementation of the proposed project, we will compare existing conditions with risk analyses conducted in developing the alternatives for the proposed project. We will perform a risk of upset analysis to addresses upset scenarios that could immediately and adversely affect public safety, such as explosions, fires and releases of flammable or toxic gas. The analysis will include an assessment of the upsets that could occur based on the Proposed Project and activities, including an estimate of the resulting associated consequences.
Hydrology and Water Quality	Potential environmental concern associated with construction of the Project include potential effects to water quality from erosion into nearby washes. Following construction, concerns related to water resources include water demand for project operation. To conduct this analysis, we will draw from the Water Supply Assessment prepared under Subtask 2.1, as well as the National Wetland Inventory. We will review the Basin Plan for the region to identify designated beneficial uses for all nearby waterbodies.

Resource Category	Understanding and Approach
Land Use	Building off of the Consistency Memorandum developed in Subtask 1.4, Catalyst will review the CUP application submitted by the Applicant for consistency with the Imperial County General Plan (Renewable and Transmission Element) and designated land uses. Given the Project site's multiple land use and zoning designations, Catalyst will break down the proposed project components/facilities and summarize the proposed uses with the land use/zoning designations established in the General Plan. We will apply the findings of consistency to the land use discussions in the EIR. If authorized by the County, Catalyst will work with the Applicant to discuss and seek resolution to potential consistency issues.
Mineral Resources	The Project proposes to perform subsurface activities to install facility foundations and interconnection lines/cables. While these developments are not likely to go deep enough to encounter mineral resources, Catalyst will develop a comprehensive description of the mineral resources present on the Project Site and develop significance findings for the EIR. Where feasible, we will correlate these findings with the Geotechnical Memorandum prepared under Subtask 3.2.1.
Noise	Noise in the Project area is typically related to traffic on Interstate 8 and noise from heavy equipment used in agricultural operations. We will use publicly available information to characterize ambient noise conditions. We will use the Project Description to identify expected sources of noise during construction for each alternative. In addition, we will review relevant noise regulations, standards, and jurisdictional methods/approaches to be used for the noise analysis and will use the regulations, CEQA guidelines, and our professional expertise to identify potential significance criteria for noise impacts.
Population and Housing	The Project is not anticipated to create a significant number of long-term jobs that would require a person to locate to Imperial County, nor is the Project anticipated to facilitate population growth in the area. Therefore, Catalyst does not expect Population and Housing to be a significant issue in the EIR, but we will develop comprehensive descriptions of the area's baseline housing, demographic, and socioeconomic conditions to develop substantiated significance conclusions.
Recreation	Much of the Project site is zoned as Open Space, and while its private property, the scenic value of the site's open space may have indirect effects on the area's recreational quality. Catalyst will perform a through assessment of the area's recreational assets, estimated recreational use, and the Project site's role in the area's scenic (i.e., is there a nearby viewpoint that views the site? Would the Project change access to existing recreational resources?). For the EIR, Catalyst will develop impact assessment of the Project's affect on the area's recreational quality and availability.
Transportation and Traffic	Construction activities could alter traffic and roadway conditions within and around the Project area. Such changes could affect traffic volumes, level of service, frequency of traffic hazards, and emergency access. To evaluate potential transportation changes, we will acquire relevant data from state (i.e. California Department of Transportation) and local transportation agencies to characterize current transportation conditions and anticipated future conditions in and around the Project area. We will rely on the Project Description to obtain an estimate the traffic generation of the Project's construction phases, including an estimate of the Vehicle Miles Traveled (VMT) associated with of the construction worker traffic, deliveries of construction materials and equipment, and/or transport of fill material. As appropriate, heavy vehicle trips will be converted to passenger car equivalent vehicles to account for the disproportionate impact that heavy vehicles have on capacity, due to their large size and sluggish performance. Based on current conditions, we'll use forecasted changes in VMT traffic volumes based on anticipated construction, operation, and maintenance activities, as well as forecasts from local and state transportation agencies, to evaluate potential direct, indirect, and cumulative effects associated with project activities in terms of decreased level of service, increased traffic hazards, roadway damage, and reduced emergency access due to increased traffic volumes.

3.2.4 Subtask 2.4 - Prepare Administrative Draft EIR

Building on Subtask 2.2 and 2.3 above, we will develop a complete Administrative Draft EIR and submit an electronic version to the County for review. A comment matrix will accompany the Administrative Draft EIR to structure the review process and allow for the identification of issue requiring discussion or further analysis. We will submit five (5) hardcopies of the administrative Draft EIR to the County and assume two rounds of review and comment prior to releasing the Draft EIR to the public.

Table 3 – Task 2 Deliverables

Subtask	Deliverables
Subtask 2.1 – Develop Required Studies & Peer-Review Applicant-Prepared Technical Reports	Phase I ESA; Geotechnical Memorandum; Water Supply Assessment Memorandum; Comments on Applicant-Submitted Technical Reports
Subtask 2.2 – Draft Project Description, Objective, and Alternatives	Draft, Final EIR Chapter 1 and Chapter 2
Subtask 2.4 - Prepare Administrative Draft EIR	Draft, Final Administrative Draft EIR; Comment matrix

3.3 Task 3 – Public Review Draft EIR

3.3.1 Subtask 3.1 – Prepare Public Draft EIR

Following the County's second review of the administrative draft EIR, we will incorporate any necessary revisions and produce the Public Draft EIR. We assume that we will provide a screen-check draft of the Draft EIR for the County to review any final revisions made and approve for printing, prior to providing the Public Draft EIR. We will submit five (5) hardcopy EIRs and a final PDF file for electronic distribution of the Draft EIR as well as 50 CDs of the document if requested by the County.

Public engagement plays a critical role in executing successful CEQA processes. The diverse interests and agendas of stakeholders in a project can generate large volumes of comments on the environmental document. Although it is not the responsibility of the EIR and its preparers to craft a solution to all identified issues, it is our responsibility to create an environment in which productive engagement with stakeholders can occur so that the EIR will provide the comprehensive factual basis upon which public agencies can base their decisions. The ability of the public to provide input, express concerns, and have those concerns considered before decisions are made is a fundamental aspect of CEQA, and missteps in this key process step can be problematic later. Our Project Team has in-depth experience in managing robust public engagement processes on controversial projects and leading agency consultations.

3.3.2 Subtask 3.2 – Public Noticing

We will prepare a Notice of Completion for County review. Following County approval, we will file the Notice of Completion with the County Clerk. submittal to the OPR. The notice will summarize the proposed project and alternatives and provide information regarding availability of copies of the Draft EIR, details of the public meetings, and how to submit comments (e.g., via e-mail to a County designee). In addition, we will prepare a newsprint draft notice for publication in the Imperial Valley Press serving areas where the public meetings will be held. In coordination with the County, we will also prepare either a postcard or email that can be mailed to project stakeholders and members of the public that requested participation in the project mailing list during scoping to notify them of the availability of the Draft EIR. As with scoping, we propose a 30-day public comment period.

3.3.3 Subtask 3.3 – Public Meetings

We will coordinate, support, and facilitate one (1) online public meeting after the release of the Draft EIR. We will provide the County with a draft and final agenda and public meeting plan for the online session. We will also prepare a MS PowerPoint presentation for the meeting which summarizes the conclusions in the Draft EIR and provides information on how to prepare an effective comment. The Catalyst PM and DPM will attend the online public comment meeting. Catalyst will have a team member take notes and summarize all oral comments submitted and add these to the comment matrix in Subtask 4.1 below.

Table 4 – Task 3 Deliverables

Subtask	Deliverables
Subtask 3.1 – Prepare Public Draft EIR	Draft, Final Draft EIR; 5 hardcopies and 50 CDs
Subtask 3.2 – Public Noticing	Draft, Final NOC; Newspaper Ad NOC
Subtask 3.3 – Public Meetings	Draft, Final Public Meeting Agenda; Meeting PowerPoint Presentation

3.4 Task 4 – Final EIR

3.4.1 Subtask 4.1 – Prepare Response to Comments

We will compile all comments received on the Draft EIR during the public comment period into a Microsoft Excel database. We will categorize each comment into appropriate resource areas and draft responses to all comments received. We will prepare a summary report of comments received, identifying major themes presented in the comments that may warrant a broader master response, as well as the number of comments received addressing particular issues or resource areas. We will provide the County with the draft comment responses for review. Pursuant to CEQA Section 15088, we will provide individual response to comment letters to each public agency that provided public comment on the Draft EIR at least 10 days before the Final EIR is certified. As described in the RFP, we assume that the majority of the comments will be form letters, and less than 150 actual substantive comments will require unique responses.

3.4.2 Subtask 4.2 – Prepare Final EIR

Following the County's approval of response to comments, we will incorporate any necessary revisions into an Administrative Final EIR. The Administrative Final EIR will be submitted in track changes format for the County's review. Following the County's review of the Administrative Final EIR, we will finalize the document and submit a screen-check Final EIR. We assume that no additional major revisions will be required at this point. Following the County's approval, we will produce the Final EIR and deliver five (5) hard-bound copies of the complete document and a PDF file as well as 50 CDs of the document if requested by the County.

3.4.3 Subtask 4.3 – Environmental Evaluation Committee, Planning Commission, and Board of Supervisors Hearing Attendance

The Catalyst PM will attend the in-person EEC, Planning Commission, and Board of Supervisors hearings and support the County in the preparation for these sessions. We will prepare a project PowerPoint presentation for the County's use at these sessions that will summarize the proposed Project, public concerns/issues, key findings, and mitigation

measures. We will be present to answer any questions the EEC, Planning Commission, or Board of Supervisors may have regarding the EIR.

3.4.4 Subtask 4.4 – Prepare Project/Administrative Record

Having a complete and well-organized administrative record (AR) is essential to responding to California Public Records Act requests, as well as legal challenges. At the Project's onset, we will develop a memorandum describing the procedures for submitting an information source to the AR. We will provide the draft AR to the County when submitting the Draft EIR, and the final AR when submitting the Final EIR and actively maintain the AR as the project progresses.

Throughout the course of the project, the team will coordinate closely with the County while identifying, acquiring, and organizing the AR to document the decision-making process and the basis for the agency's decisions during development of the EIR. Among the steps we will take to ensure that the AR is prepared efficiently and in a timely manner are the following:

- Provide detailed instructions to all team members detailing the types of information to be included in the AR and procedures for providing the information to the point of contact.
- Establish folders in which all documents are placed as soon as they are available, so that the AR is compiled as the project proceeds.
- Establish file-naming conventions to ensure that all files automatically are organized chronologically.
- Establish a separate email address to be copied on all emails included in the AR so that they are readily available.
- Ensure that all documents cited in the Draft and Final EIR are available electronically in a searchable format, to the extent feasible, prior to the release of each iteration to the public.

We will develop an electronic Microsoft Excel database for the AR that includes a chronological history of all correspondence, studies, comments, and other materials and documents CDFA considered in preparation of the EIR.

Table 5 – Task 4 Deliverables

Subtask	Deliverables
Subtask 4.1 – Prepare Response to Comments	Draft, Final Response to Comment Matrix
Subtask 4.2 – Prepare Final EIR	Administrative Final, Screencheck Final, and Final EIR
Subtask 4.3 – Environmental Evaluation Committee, Planning Commission, and Board of Supervisors Hearing Attendance	Meeting Attendance, PowerPoint presentation at County's request
Subtask 4.4 – Prepare Project/Administrative Record	Administrative Record

3.5 Task 5 – Mitigation, Monitoring and Reporting Program

If there are mitigation measures proposed in the EIR, we will prepare a Mitigation, Monitoring, and Reporting Plan (MMRP) to accompany the Final EIR. The MMRP will describe the following: (a) all feasible mitigation measures associated with the Project; (b) the applicable "Monitoring Agency" for each mitigation measure; (c) establish the "Monitoring Requirements" for each measure; and (d) provide an administrative procedure for the acceptance of each mitigation measure by including a column for the future listing of the approval/clearance date for each mitigation measure. We will submit a draft of the MMRP to the County for review and comment and will subsequently finalize the MMRP for inclusion in the Draft EIR and Final EIR.

3.6 Task 6 – CEQA Findings and Notice of Determination

Based on the impact analyses presented in the Final EIR, we will prepare a comprehensive Findings document that identifies impacts that are less than significant; significant but mitigable to a less than significant level; and significant and unavoidable. If there are significant and unavoidable impacts, this document will be accompanied by a Statement of Overriding Considerations, which will explain why the adverse environmental effects of the chosen Project Alternative which cannot feasibly be avoided or substantially lessened are acceptable. Lastly, we will prepare a Notice of Determination to be filed with the County Clerk within five (5) days of certification of the EIR.

3.7 Assumptions

We assume the following scope limitations and budgeting assumptions:

- Four in-person sessions – 1) Kick-Off Meeting; 2) Environmental Evaluation Committee; 3) Planning Commissions; and, 4) Board of Supervisors. The Catalyst PM will attend these sessions, traveling roundtrip from Los Angeles, CA, approximately 500 miles.
- Catalyst will be responsible for placing the NOP and NOC in the Imperial Valley Times for two rounds of publication each.
- Scoping comments will not exceed 50 comments; Draft EIR public comments will not exceed 150 substantive comments.
- No primary analyses/research other than the technical studies included in Task 1 will be conducted for the EIR. All technical studies provided by the Applicant will provide sufficient information and data to facilitate CEQA review.
- All deliverables will be submitted electronically via email or SharePoint site with the exception of 5 hardcopies each of the Draft and Final EIR.
- All GIS shapefiles for the Project will be provided by the Applicant, County or other publicly-accessible government websites. The EIR will include up to 20 figures/maps.
- The County will print and mail all stakeholder and tribal consultation letters.
- The schedule assumes all technical reports will be provided by the Applicants by January 2021 and 2 weeks review by the County for all major deliverables.

3.8 Meetings

Clear and frequent communication between team members is the key to successful projects. For this project, the main point of contact for the Catalyst Project Team will be Ms. Megan Schwartz, the Catalyst PM. The backup point of contact will be DPM, Mr. Ben Pogue. This tandem will manage all internal Project Team communication as well as external communication with the County, other agencies, and the public. We propose monthly ½ hour teleconference meetings with the PM, DPM, and the County to maintain an awareness of the technical progress of the work, progress in relation to the planned schedule, to anticipate issues of concern, and provide the County early notification of and suggested methods to address any unanticipated issues. The DPM will provide agendas to all project call participants at least 48 hours prior to each call and will send meeting minutes to all attendees within 48 hours of each meeting.

We also propose four in-person meetings at the following key points during the CEQA process: 1) Kick-Off Meeting; Environmental Evaluation Committee; 3) Planning Commissions; and 4) Board of Supervisors. The Catalyst PM will attend in-person and the DPM will attend via online.

SECTION 4 Proposed Schedule

We understand that schedule and timely completion of the CEQA process is of the utmost importance to the Applicant. We will prepare a Gantt chart using Microsoft Project software to track project progress and provide regular updates to the County. We will finalize and actively manage a detailed Gantt chart to depict the schedule and identify the critical path. With any change to a schedule element, we will update the Gantt chart, and identify those tasks that may have come on to the critical path, or schedule changes that add time to the critical path. We find that active schedule maintenance of this kind clearly communicates, from the start of the project, the effect of delays, even very early delays, on the final completion date of the CEQA document. In our recent experience, the critical path method has helped demonstrate the importance of key agency meeting dates that could not slip; dates when critical decisions related to project description, baseline, and other matters must be made to avoid delay; and other milestones. Perhaps most importantly, the method allowed us to manage change from unexpected events so that schedule was maintained.

We appreciate the amount of time and effort that the Catalyst team put into this EIS. Even with an expedited schedule, you were able to complete the EIS in advance of the court ordered deadline and under the original budget proposal. Very well done and thank you from everyone at San Juan Mine!

Dan Mumm

Environmental Engineer, Westmoreland regarding the San Juan Mine Deep Lease Extension EIS, which was the first 150-page EIS published in accordance with Secretarial Order 3355.

Ms. Schwartz served as DPM for this project, and Mr. Pogue led the public outreach and stakeholder engagement.

Our team consistently meets scheduled milestones by using decision-making tools to keep agency participation on track, and project management tools to respond to change in a manner that minimizes schedule impact. The PM and DPM will closely monitor progress, assure that deadlines are met successfully, and respond to changes in events as they are encountered. The project schedule will include important milestones, such as dates of task initiation and completion as well as due dates of major deliverables. Particular attention will be given to internal scheduling since some disciplines may require specific input from the Commission regarding available technical information and data sources to be used in the analyses.

Appendix B includes a preliminary Gantt Chart that offers a schedule diagram for the CEQA process, and as summarized in Table 6 below. We propose to execute an efficient EIR process that would last approximately 10 months and conclude in September 2021, assuming that contract is signed by December 1, 2020. We are prepared to immediately initiate the scope of work and propose a project kick-off meeting on December 9, 2020.

Table 6 – Proposed Schedule by Task and Subtask

Task	Subtask	Subtask Duration	Task Duration
Task 1 – Project Initiation	Subtask 1.1 - Kickoff Meeting	December 9 (1 day)	December 9, 2020 – January 29, 2021 (6 weeks)
	Subtask 1.2 - Notice of Preparation	December 14 – December 21 (1 week)	
	Subtask 1.3 - Scoping Period, Meeting, and Report	December 22 – January 29, 2021 (4 weeks)	
	Subtask 1.4 - Review the CUP Application for Consistency	December 10, 2020 – January 29, 2021 (7 weeks)	
Task 2 – Administrative Draft EIR	Subtask 2.1 - Develop Required Studies and Peer-Review Studies	December 10, 2020 – January 29, 2021 (7 weeks)	December 10, 2020 – May 14, 2021 (25 weeks)
	Subtask 2.2 - Draft Project Description, Objective, and Alternatives	December 10, 2020 – January 29, 2021 (7 weeks)	
	Subtask 2.3 - Affected Environment and Environmental Consequences	February 1 – March 12 (6 weeks)	
	Subtask 2.4 - Prepare Administrative Draft EIR	March 15 – May 14 (8 weeks)	
Task 3 – Public Review Draft EIR	Subtask 3.1 – Prepare Public Draft EIR	May 17 – June 18 (4 weeks)	May 17 – July 28 (10 weeks)
	Subtask 3.2 – Public Noticing	June 21 – June 25 (1 week)	
	Subtask 3.3 – Public Comment Period and Meeting	June 28 – July 28 (4 weeks)	
Task 4 – Final EIR	Subtask 4.1 – Prepare Response to Comments	July 15 – August 6 (3 weeks)	July 15 – October 1 (10 weeks)
	Subtask 4.2 - Prepare Final EIR	August 9 – September 10 (4 weeks)	
	Subtask 4.3 - EEC, Planning Commission, and Board of Supervisors	September 6 – October 1 (4 weeks)	
	Subtask 4.4 - Prepare Project/Administrative Record	September 6 – October 1 (4 weeks)	
Task 5 - Mitigation, Monitoring, and Reporting Program	Task 5.1 - Mitigation, Monitoring, and Reporting Program	May 3 – June 4 (4 weeks)	May 3 – June 4 (4 weeks)
Task 6 - CEQA Findings and Notice of Determination	Task 6.1 - CEQA Findings and Notice of Determination	August 9 – September 10 (4 weeks)	August 9 – September 10 (4 weeks)

SECTION 5 Cost Estimate and Milestones

Catalyst proposes to perform the scope of work for a total not to exceed amount of $272,110, as provided in Table 7 below and in the spreadsheet in **Appendix C**, which also includes a Schedule of Charges. The Catalyst PM and DPM will coordinate with the County and the internal project team to keep the project moving forward and ensure clear lines of communication. We will also maintain and track the project schedule and budget and submit a monthly status report to the County. This report will include information regarding project activities and work completed during the previous month, any milestones completed, the status of tasks on the critical path and any identified variances, upcoming tasks, and a summary of budget-to-task completion tracking for all active tasks. The status report will also include an up-to-date Microsoft Project schedule and a discussion of any schedule variances and the approach to shifting resources to maintain schedule. A preliminary draft schedule for completion of the Project is provided in **Appendix B**.

Table 7 – Proposed Cost Estimate

Task	Subtask	Subtask Cost	Task Cost
Task 1 – Project Initiation	Subtask 1.1 - Kickoff Meeting	$5,305	$26,965
	Subtask 1.2 - Notice of Preparation	$2,100	
	Subtask 1.3 - Scoping Period, Meeting, and Report	$15,240	
	Subtask 1.4 - Review the CUP Application for Consistency	$4,320	
Task 2 – Administrative Draft EIR	Subtask 2.1 - Develop Required Studies and Peer-Review Studies	$55,570	$122,160
	Subtask 2.2 - Draft Project Description, Objective, and Alternatives	$6,720	
	Subtask 2.3 - Affected Environment and Environmental Consequences	$42,640	
	Subtask 2.4 - Prepare Administrative Draft EIR	$17,230	
Task 3 – Public Review Draft EIR	Subtask 3.1 – Prepare Public Draft EIR	$36,970	$49,255
	Subtask 3.2 – Public Noticing	$2,245	
	Subtask 3.3 – Public Comment Period and Meeting	$10,040	
Task 4 – Final EIR	Subtask 4.1 – Prepare Response to Comments	$21,290	$57,475
	Subtask 4.2 - Prepare Final EIR	$20,265	
	Subtask 4.3 - EEC, Planning Commission, and Board of Supervisors	$,12,520	
	Subtask 4.4 - Prepare Project/Administrative Record	$3,400	
Task 5 - Mitigation, Monitoring, and Reporting Program	Task 5.1 - Mitigation, Monitoring, and Reporting Program	$7,360	$7,360
Task 6 - CEQA Findings and Notice of Determination	Task 6.1 - CEQA Findings and Notice of Determination	$8,625	$8,625
		TOTAL	**$272,110**

Appendix A
Resumes

Catalyst
ENVIRONMENTAL SOLUTIONS

Megan Schwartz, MESM

Director of Environmental Regulatory Compliance & Permitting

Summary of Qualifications

Ms. Schwartz has fifteen years of experience as an environmental planner and project manager. She is a dedicated client manager, especially adept at delivering high-quality work products, on time and within budget. She has addressed many controversial issues related to energy development and water resources in the southwestern US and globally. She works with electrical utilities, the oil and gas industry, and regulatory agencies with jurisdiction over energy production, and water of the U.S and state. She has worked on a variety of energy issues, including relicensing and decommissioning of a hydroelectric power project, oil and gas development, hydraulic fracturing, and retiring or repowering coal generation facilities, with a primary focus on water quality and community compatibility. She has also evaluated environmental effects of submarine cable installation, natural gas storage, and installation of new transmission lines connecting to renewable energy sources. Ms. Schwartz has extensive experience evaluating potential impacts of proposed projects under the California Environmental Quality Act and National Environmental Policy Act for commercial and government clients for projects ranging from urban redevelopment to stormwater infrastructure to energy generation and transmission. Ms. Schwartz also assists clients with preparation of permit applications including 404 Individual and Nationwide Permits, 401 Water Quality Certifications, and Streambed Alteration Agreements, as well as working with agencies through permit processing and approval. She is especially adept at bringing together the resources needed to produce deliverables that exceed client expectations and are delivered on time and within budget.

Education

- Master of Env. Science & Management, University of California, Santa Barbara, 2004
- Bachelor of Arts, Biological Anthropology, University of California, San Diego, 2002

Disciplines

- CEQA/NEPA
- Clean Water Act permitting
- Streambed Alteration Agreements
- Phase I/II Environmental Site Assessments
- Water Quality Issues
- Community Compatibility

Professional Affiliations

- California Independent Petroleum Association
- Association of Environmental Professionals

Certifications

- 40-hour HAZWOPER
- First Aid and CPR

Representative Project Experience

Team Member – Salton Sea Species Conservation Habitat Project EIS/EIR, Imperial County, California

The SCH Project was proposed by the U.S. Army Corps of Engineers and California Natural Resources Agency (the EIS/EIR was prepared by the Department of Water Resources and Department of Fish and Game on behalf of the Natural Resources Agency). The SCH Project was intended to restore approximately 3,700 of habitat at the Salton Sea for targeted invertebrate, aquatic, and avian species. Ms. Schwartz was the primary author for the agricultural resources and environmental justice analyses for the proposed project and also assisted in the response to comments received during the public review period.

Deputy Project Manager and Lead Analyst – Energia Sierra Juarez U.S Transmission Line Project EIS, San Diego County, California

Ms. Schwartz served as Deputy Project Manager and lead environmental analyst for an EIS for a controversial transmission line project that will transmit renewable energy from a proposed wind farm in La Rumorosa, Baja California, Mexico to a substation in eastern San Diego County, California. Primary issues of concern include

transboundary impacts between the US and Mexico and cumulative impacts of multiple renewable energy projects being proposed in eastern San Diego County. Responsibilities include regular coordination with client and project team members, review of all submitted sections, coordinating production, and preparation of additional materials for public review.

Deputy Project Manager and Lead Analyst – Transboundary Environmental Assessment Wastewater Collection System - Mexicali IV, Imperial County, CA and Mexicali, Mexico

Ms. Schwartz served as Deputy Project Manager and lead environmental analyst for and EA addressing the transboundary environmental effects of wastewater treatment improvements in Mexicali, Mexico. Wastewater from Mexicali is discharged to the New River in Imperial County which flows into the Salton Sea. The proposed project was designed to improve water quality in the New River. Ms. Schwartz prepared the environmental assessment on behalf of the Border Environmental Cooperation Commission.

Environmental Analyst and QA/QC – Hydrilla Eradication Program EIR, Nevada, Yuba, Lake, and Imperial Counties, CA and Statewide

Ms. Schwartz conducted the analysis of potential impacts to water resources of the California Department of Food and Agriculture's Statewide Hydrilla Eradication Program. One of the key ongoing projects evaluated under this program are the State's efforts to control hydrilla in the Imperial Irrigation District canals in Imperial County, CA with the introduction of the triploid carp. Ms. Schwartz is also serving as overall quality control manager for the EIR and also led the scoping and AB-52 public outreach efforts for the project, which included coordination of six public meetings throughout the state, including in Calexico, Fresno, Clearlake, Yuba City, Nevada City, and Sacramento.

CEQA and Regulatory Constraints Team – San Gabriel Valley Trails Network Project, Los Angeles County, California

Ms. Schwartz is serving as deputy project manager for the CEQA environmental review for this important project which would connect a network of bikeway and pedestrian and equestrian pathways through a densely urban area of inland Los Angeles County. As a first part of the project, during project design and development, Ms. Schwartz is working with the team to identify regulatory constraints and permitting requirements for proposed trail segments. These constraints will be included as a feature on the GIS shapefile so that the design team can optimize and prioritize implementation of the trail segments and adjust designs to reduce regulatory and permitting triggers. Following design completion, Ms. Schwartz will co-lead development of the Environmental Impact Report for the proposed project.

Deputy Project Manager – Santa Clara River Arundo and Tamarisk Removal Plan and EIR, Los Angeles and Ventura Counties, California

Ms. Schwartz served as Deputy Project Manager in the development of a long-term arundo and tamarisk removal plan for the Santa Clara River watershed. Development of the plan included vegetation mapping of the entire river system from headwaters to its estuary, coordination with US Army Corps of Engineers, California Department of Fish and Wildlife, and the Regional Water Quality Control Board to develop a programmatic permitting system for individual projects conducted following approval of the plan, and analysis of the various treatment methods for both species. In addition, Ms. Schwartz was Deputy Project Manager for the CEQA analysis of the plan and primary author of the project description, alternatives, and land use analysis. She was also responsible for assisting with team coordination and technical editing.

Project Manager – Facility Environmental Site Assessment, Multiple Locations, Southwestern U.S.

Ms. Schwartz served as project manager for an innovative, first-in-kind project for a major southwestern utility to inventory all regulated equipment at existing generation facilities and identify any current or potential future environmental liabilities related to existing or anticipated future local, state, and federal regulations. Environmental resource areas addressed include air quality, biological resources, cultural resources, greenhouse gases, hazardous

building materials, hazardous materials and waste, and water rights. As part of this project, Ms. Schwartz conducted an interactive workshop with key facility employees to review all identified potential liabilities and associated costs and develop a plan for addressing each issue during future management of the facility. This program was designed to assist the utility in managing facility environmental liabilities prior to decommissioning in order to reduce costs and better plan utility expenditures.

Resource Analyst, Water Resources, Geology – Ballona Creek LFTF CEQA Analysis, Los Angeles, California

Ms. Schwartz served as resource expert related to water resources and geology, evaluating the potential effects of proposed low-flow treatment facility on Ballona Creek in the City of Los Angeles. The proposed project was intended to improve water quality in Ballona Creek and meet requirements of total maximum daily loads. As a result of the initial analysis, the project was redesigned, and Ms. Schwartz served as lead author responsible for evaluating effects to water resources and geology of the project.

Project Management Team and Social Sciences Lead – UWCD Santa Felicia Dam Safety Improvement Project EIR, Ventura County, California

Ms. Schwartz is the resource manager for social science sections for this dam safety project, intended to upgrade the dam for seismic concerns and prevent flooding downstream. Primary issues of concern include recreation impacts to facilities associated with the dam and reservoir during the construction period, and potential effects to hydrology, water quality, and geomorphology due to change in spillway and water release valves. Responsibilities included regular coordination with client and project team members, review of all submitted sections, coordinating production, and preparation of additional materials for public review.

Deputy Project Manager – San Joaquin Valley Community College District Master Plan EIR, Stockton, California

Ms. Schwartz served as deputy project manager for the preparation of an EIR addressing the implementation of the San Joaquin Valley Community College District Master Plan. Significant impacts included biological resources (removal of over 200 trees, and native plant walkway), and traffic.

Management Team and Resource Analyst for Water Resources, Agricultural Resources - EIS for the Four Corners Power Plant and Navajo Mine Energy Project, San Juan County, New Mexico

Ms. Schwartz served as a member of the management team and as social sciences task lead for this high-profile, controversial third-party EIS analyzing the potential effects of lease renewal for coal-fired power plant, permitting of a coal mine, and rights-of-way renewal for four transmission lines. Ms. Schwartz prepared the agricultural resources analysis and water resources analysis (groundwater and surface water). As a member of the management team, she was responsible for tracking and maintaining the schedule and budget and assisting the project manager with daily project needs. Ms. Schwartz was also responsible for coordinating the preparation of responses to comments for the Draft EIS which generated over 5,000 individual public comments and significant controversy. Ms. Schwartz was responsible for tracking the response to all comments in a detailed Microsoft Excel spreadsheet, and working with federal solicitors to ensure that the responses completely and adequately addressed all issues raised to ensure the legal defensibility of the NEPA document. The project was highly successful and completed on-schedule with a Record of Decision published in July 2015.

Benjamin Pogue, MPA, PMP, AICP

Director of Environmental Policy & Natural Resource Management

Summary of Qualifications

Mr. Pogue has over 15 years of professional experience performing environmental compliance and public involvement for a wide range of public, private, and tribal clients. His primary area of practice is managing NEPA and CEQA processes for projects occurring on public lands or proposed by a public entity, having contributed to dozens of NEPA and CEQA documents. Mr. Pogue's technical expertise includes socioeconomics, environmental justice, facility siting of energy facilities, recreation, visual resources, federal Indian trust policy, land use planning, and natural resource management.

Mr. Pogue is skilled in stakeholder management and public involvement. In addition to developing scoping and public involvement strategies for NEPA/CEQA projects, his experience includes working with municipalities to develop MOU/MOAs, conflict resolution, NGO engagement/negotiation, and collaborating with U.S. Fish and Wildlife Service and/or regional conservation authorities in informal/formal ESA consultations.

Before joining Catalyst, Mr. Pogue served as Cardno's Environmental Management, Permitting, & Compliance practice lead in the Pacific Northwest. In 2005, he earned a Master of Public Affairs degree from the School of Public & Environmental Affairs at Indiana University. During his graduate study, Mr. Pogue worked at the Institute for a Secure & Sustainable Environment at the University of Tennessee where he performed regional energy policy analysis through collaborating research efforts with the U.S. Department of Energy's Oak Ridge facility and the Tennessee Valley Authority..

Education

- Master of Public Affairs, Natural Resource Mgt. & Env. Policy, The School of Public & Env. Affairs at Indiana University, 2005
- Bachelor of Arts, History and Env. Science, DePauw University, 2002

Disciplines

- Env. Permitting & Compliance
- Stakeholder Mgt.
- Public Involvement
- Critical Issues Analysis
- Socioeconomics
- Env. & Social Justice
- Env. Planning
- Public Policy & Regulatory Analysis

Professional Affiliations

- American Institute of Certified Planners (AICP)
- Project Management Professional (PMP)
- Northwest Association of Env. Professionals
- Geothermal Energy Association
- American Wind Energy Association

Representative Project Experience

Deputy Project Manager - Ballona Creek Bacteria TMDL CEQA Environmental Impact Report, City of Los Angeles Watershed Protection Division, California

Mr. Pogue is supporting the City of Los Angeles in conducting a CEQA analysis (Environmental Impact Report) of three proposed stormwater treatment/diversion facilities in the Ballona Creek Watershed (Cities of LA and Culver City). The purpose of the projects is to treat and divert flows in Ballona Creek, Cantilena Creek, and Sepulveda Channel to improve downstream water quality in the Ballona Estuary and Wetlands, and meet the water quality requirements provided in the Ballona Creek Bacteria TMDL and Basin Plan. Mr. Pogue collaborated with the City of LA in developing a thorough public involvement process, as well as serving as the lead author of the EIR.

Project Manager – Soboba Band of Luiseño Indians, NEPA Environmental Impact Statement, Riverside County, California

In close coordination with the BIA Pacific Region, Mr. Pogue managed the preparation of a NEPA EIS on a highly-controversial project proposed by the Soboba Band of Luiseño Indians. As part of a fee-to-trust action, the Tribe

proposed to construct a 350-room destination hotel/casino complex in a residential neighborhood in Riverside County, CA. Mr. Pogue directed the technical analysis, and also designed and executed an exhaustive public involvement process to ensure that a stakeholders were involved throughout the environmental review process to ensure that their issues were incorporated into the EIS.

Project Manager – CUP Application and Initial Study/Mit. Neg. Declaration for Heber 2 Geothermal Repower Project, ORMAT Technologies, Imperial County, California

Mr. Pogue oversaw the development of a Conditional Use Permit Application and CEQA Initial Study/Mitigated Negative Declaration for the Heber 2 Geothermal Repower Project. Developments included two new water-cooled ORMAT Energy Converters (OECs) to replace six old water-cooled units; three 10,000 gallon isopentane above ground storage tanks; and, additional pipes to connect the proposed facilities with the existing Heber 2 Geothermal Energy Complex. Key issues included public safety from the storage of additional isopentane, greenhouse gas emissions, water use, and planning/land use. Mr. Pogue closely coordinate with the Imperial County Planning Department and Environmental Evaluation Committee to ensure a smooth CUP and CEQA process for this renewable energy project.

Project Manager – Glass Butte Geothermal Energy Project NEPA Environmental Assessment, BLM Prineville and BLM Burns Districts, Oregon

Mr. Pogue directed the third-party NEPA process for geothermal energy development at Glass Butte, Oregon. Mr. Pogue supported the BLM-Prineville and BLM-Burns Districts in performing all aspects of the NEPA process, including implementing a robust scoping and public involvement plan. The proposed exploration project included a total of 14 geothermal wells and supporting installations (i.e. access/spur roads, gravel quarries) that occur within both the BLM-Prineville and BLM-Burns Districts. Mr. Pogue coordinated the two adjacent BLM Districts, as well as with the BLM-Oregon Energy Administrator, Oregon Department of Fish & Wildlife, U.S. Fish & Wildlife, and local Tribes.

Lead Facilitator and Planner - Mt. Rushmore Connector Trail Siting and Working Group, South Dakota

Mr. Pogue is assisting the South Dakota Department of Game, Fish and Parks (GFP) on siting a pedestrian trail that connects the Mt. Rushmore National Monument to the historic Mickelson Trail near Hill City, SD. Mr. Pogue is assisting GFP with stakeholder engagement and siting trail alternatives for delivery to the Black Hills Forest Service District that is preparing an EIS on the trail system. Mr. Pogue organized and facilitated a technical Working Group that consists of representatives from organizations that have a specific mandate related to the Norbeck Wildlife Preserve and/or Black Elk Wilderness Area.

Consultant - San Felicia Dam Environmental Impact Report

Mr. Pogue is directing a NEPA EA in the BLM Winnemucca District in northwest Nevada for a geothermal energy generation project. The project includes the development of over a dozen geothermal wells, two power plants, transmission facilities, pipeline network, and access roads. Key issues include sensitive habitat for burrowing owls, cultural resources, visual resources, and water resources.

Project Manager – ORMAT Technologies, Visual Resources Analysis, Mammoth Lakes, California

Mr. Pogue oversaw the development of a visual resources analysis for ORMAT's Mammoth Lakes Geothermal Energy Development Project in Mono County, CA. Mr. Pogue directed the development of 3D visual simulations of the proposed energy facilities and preparing a supplemental analysis to a CEQA EIR that was stalled due to the original visual resources analysis. Mr. Pogue worked closely with ORMAT in developing facility features and best management practices for the geothermal plant.

Lindsey Garner, Ph.D.

Senior Scientist

Summary of Qualifications

Dr. Lindsey Garner is a project manager and environmental toxicologist with 15 years of water resources, aquatic toxicology, invasives species management, permitting, litigation support, risk assessment, and project management experience. Dr. Garner has worked on a variety of large and complex projects involving multiple stakeholders including federal, state, and local government agencies, private industry, legal professionals, and the public. She has evaluated the toxicity, fate, and transport for various anthropogenic and natural compounds, including oil constituents, pesticides, drilling fluid-related materials, and metals, in support of environmental impact reports (EIRs), natural resource damage assessments (NRDAs), human health and ecological risk assessments, and various litigated cases. She has also served as subject matter expert and resource lead for various sections of EIRs, environmental impact statements (EISs), and environmental assessments (EAs).

Her doctoral research involved examining the molecular mechanisms by which polycyclic aromatic hydrocarbons (PAHs) cause developmental cardiotoxicity in fish. She also investigated the mechanistic developmental toxicity of dioxins, polychlorinated biphenyls (PCBs), metals, nanomaterials, and emerging contaminants.

Dr. Garner has published peer-reviewed manuscripts, prepared grant applications, taught environmental science, toxicology, and risk assessment classes and seminars to college students and professionals, served as a peer reviewer for various scientific journals, and presented her research findings at international scientific meetings.

Education

- PhD, Integrated Toxicology and Environmental Health, Duke University, 2011
- BS, Biology, Aquinas College, 2005

Disciplines

- Environmental Toxicology
- Ecological Risk Assessment
- Invasive Species Management
- Natural Resource Damage Assessment
- NEPA/CEQA
- Research and Publication

Professional Affiliations

- Society of Toxicology
- Society of Environmental Toxicology and Chemistry (SETAC)
- Pacific Northwest SETAC

Certifications

- 40-hour HAZWOPER
- CPR and First Aid

Representative Project Experience

Conditional Use Permit Amendment and Initial Study/Mitigated Negative Declaration for Heber 2 Geothermal Repower Project – Imperial County, California

Dr. Garner served as Deputy Project Manager for the preparation of a CUP Amendment Application, CEQA IS/MND, and technical resource reports for the proposed Heber 2 Geothermal Repower Project located in central Imperial County. Proposed developments include two new water-cooled energy converters to replace six old water-cooled units; three 10,000 gallon isopentane above ground storage tanks; and additional pipes to connect the proposed facilities with the existing Heber 2 Geothermal Energy Complex. Key issues included public safety from the storage of additional isopentane, air emissions, water use, and planning/land use. Catalyst closely coordinated with the Imperial County Planning Department, Fire Department, and state agencies to work through potential environmental and safety issues and prepare defensible technical resource reports and response to comments.

Deputy Project Manager, Risk Assessor, and EIR Analyst – Hydrilla Eradication Program Environmental Impact Report – California Department of Food and Agriculture – Imperial County and Statewide California

Hydrilla verticillata is an invasive aquatic plant that presents a threat to California waters. The California Department of Food and Agriculture (CDFA) has developed the statewide Hydrilla Eradication Program to prevent, detect, and eradicate hydrilla throughout the state. The Program includes cultural (e.g., pond filling), physical (e.g., dredging, harvesting), chemical (i.e., herbicides) and biological (i.e., triploid grass carp) control methods. Dr. Garner is leading the development of the EIR to evaluate the potential impacts of potential future Program activities as well as ongoing activities, which include the use of triploid grass carp in the Imperial Irrigation District canals to treat a hydrilla infestation that spanned over 600 miles of the canals before treatment. In support of the EIR, she is conducting a Human Health and Ecological Risk Assessment (HHERA) to evaluate potential risk of 14 active ingredients comprising 30 herbicide formulations proposed for use by the Program. Catalyst led five scoping meetings throughout the state, including one in the Imperial Valley for the Project, and will conduct public meetings in the Valley upon the release of the Draft EIR.

Resource Analyst – Critical Issues Analyses – Strata Solar, Washington, Nevada, Wyoming

Dr. Garner authored the water resources, sensitive species and habitat, vegetation, and permitting sections of critical issues analysis reports developed for multiple sites in Washington, Nevada, and Wyoming. These desktop analyses and reports were developed in support of potential solar energy development projects to identify potential key issues that may require permitting or impact project planning and development.

Project Manager – Biological Reconnaissance Survey and Phase I Environmental Site Assessment – Strata Solar, Wyoming

Dr. Garner led a biological reconnaissance survey to evaluate potential sage grouse habitat and presence and conducted a Phase I ESA on a 670-acre site in southwestern Wyoming in support of potential solar energy development. Dr. Garner authored the Phase I report and assisted in development of the biological report.

Field Biologist - Strata Lower Snake River Solar Energy Project – Garfield County, Washington

Dr. Garner conducted a biological reconnaissance of a 1,093-acre project site for the potential development of solar facilities near Pomeroy in Garfield County, Washington. Her focus was on documenting potential sensitive resources, such as jurisdictional features, vegetation communities, and presence of wildlife, including mule deer.

Water Resources Analyst – Alaska LNG Project – exp Energy Services, Inc. for the Alaska Gasoline Development Corporation, BP Alaska LNG LLC, ConocoPhillips Alaska LNG Company, and ExxonMobil Alaska LNG LLC, Alaska

The proposed Alaska LNG Project includes a natural gas liquefaction plant and marine terminal in southcentral Alaska; an approximately 806-mile-long, large-diameter gas pipeline from the North Slope to Cook Inlet; a Gas Treatment Plant (GTP) on the North Slope; and two additional gas transmission lines. Dr. Garner served as primary author for groundwater and surface water impacts sections of Resource Report No. 2 (RR2) Water Resources. The Federal Energy Regulatory Commission (FERC) required RR2 includes descriptions of the existing conditions for groundwater, surface water, wetlands, and floodplains and identifies potential project-related impacts to these resources. Dr. Garner also assisted with evaluation of environmental justice impacts of the proposed project in Resource Report 8.

Resource Analyst for Water Resources and Oil Spills – Line 3 Replacement Pipeline Draft EIS – Minnesota Department of Commerce, Energy, Environmental Review and Analysis (DOC-EERA), Minnesota

Dr. Garner assisted Minnesota DOC-EERA in preparation of a DEIS under the requirements of the Minnesota Environmental Policy Act (MEPA) for the decommissioning and replacement of the Line 3 crude oil pipeline. Dr. Garner authored the Scoping Summary Report and contributed to the Alternative Screening Report and Final Scoping Decision Document following the public scoping process. Dr. Garner was the resource lead and primary author for the surface and groundwater sections and contributed to the potential impacts of crude oil spills chapter of the DEIS.

Paden J. Voget, P.E.

Senior Civil & Environmental Engineer

Summary of Qualifications

Ms. Voget is a licensed Professional Engineer with over 17 years of experience in environmental and civil engineering consulting. She has a diverse background that includes California Environmental Quality Act and National Environmental Policy Act projects, environmental compliance, construction project management, environmental permitting, civil/restoration engineering, and water resources projects. She is highly experienced in working with federal and California environmental regulations and has a working knowledge of many other state and local regulatory requirements and agencies. Much of her past and current projects involve assessing environmental issues, environmental compliance monitoring, and preparing environmental compliance documents.

Ms. Voget has accumulated extensive experience in environmental assessment, remediation, and development of onshore and offshore oil and gas and mining assets. Her expertise ranges from performing and managing initial due diligence through subsurface investigations and remedial actions at complicated sites under a variety of state and federal programs. In addition, she has significant expertise in water resources projects including development of watershed and groundwater management programs, water quality compliance, geomorphic assessment, and stream restoration. A summary of selected project experience is provided below.

Education

- Bachelor of Science, Environmental Resources Engineering, Humboldt University, 2002

Disciplines

- Civil & Environmental Engineering
- CEQA & NEPA
- Due Diligence
- Site Assessment & Remediation
- Stream Restoration
- Water Resources Compliance & Management
- Hydrology & Geomorphology

Registrations

- California Professional Engineer No. C69238

Certifications

- OSHA 40-hour HAZWOPER Training
- Exxon Loss Prevention System (LPS)
- CPR and First Aid Certification

Professional Associations

- American Society of Civil Engineers (ASCE)

Representative Project Experience

Resource Analyst, Air Quality, Greenhouse Gas, Transportation, and Noise – Hydrilla Eradication Program – California Department of Food and Agriculture

Ms. Voget is responsible for the air quality, greenhouse gas, transportation, and noise resource sections of this Environmental Impact Report for the California Department of Food and Agriculture's proposed state-wide Hydrilla Eradication Program. The impact analyses include an assessment of the potential impacts of various eradication methods (cultural, physical, biological, and chemical) throughout the State of California, including ongoing implementation of biological methods in the Imperial Irrigation District canals.

Resource Analyst – Hazards and Hazardous Materials/Noise, Santa Felicia Dam Safety Improvement Project EIR – Ventura County, California

Ms. Voget was the primary section author for the hydrology and water quality, geology and soils, hazards and hazardous materials, and noise resource areas for the Santa Felicia Dam Safety Project EIR. This dam safety project includes the replacement of the existing outlet works and increasing the conveyance capacity of the existing spillway in order to upgrade the dam for seismic concerns and prevent flooding downstream.

Resource Analyst - Ballona Creek Bacteria Total Maximum Daily Load Project, City of Los Angeles Bureau of Sanitation Watershed Projection Division

Ms. Voget completed an assessment of impacts to water quality related to the proposed development of the Low Flow Treatment Facility 1 located in Ballona Creek, Low Flow Treatment Facility 2 located in Sepulveda Channel, and the Mesmer Low Flow Diversion located in Centinela Creek. The primary purpose of the Project is to help the City of Los Angeles and partner agencies (City of Beverly Hills, City of West Hollywood, City of Inglewood, City of Culver City, County of Los Angeles, and Los Angeles County Flood Control District) meet the dry weather Bacteria Total Maximum Daily Load for Ballona Creek. As part of the impact analysis Ms. Voget assessed the downstream water quality impacts as well as impacts to the Ballona Creek Estuary associated with the diversion of dry-weather flows.

Resource Analyst, Surface Water Resources/Noise - Four Corners Power Plant and Navajo Mine Energy Project EIS, San Juan County, New Mexico

Ms. Voget was a responsible for the surface water resources and noise impact sections of this Environmental Impact Study (EIS) completed for Four Corners Power Plant and Navajo Mine Energy Project located on the Navajo Nation in northwestern New Mexico. The surface water and noise analyses included an assessment of the potential impacts of a lease renewal/amendment for the Four Corners Power Plant and associated transmission line rights-of-way renewals, expansion of BHP Navajo Coal Company's operations into the Pinabete Permit area, and the renewal of the overall Navajo Mine permit. The US Office of Surface Mining (OSM) is the lead agency for the EIS, and the US Bureau of Indian Affairs (BIA) is one of eight cooperating agencies participating in the National Environmental Policy Act (NEPA) process.

Resource Analyst - CEQA/NEPA and Focused Hydrology and Geomorphology Studies, Newhall Land and Farming Company, Santa Clarita, California

Ms. Voget has been working with Newhall Land and Farming for over 15 years in supporting their proposed development projects in the Santa Clara River Watershed. She has been involved in conducting focused hydrology and geomorphology studies and preparing selected sections of their CEQA/NEPA documents. Specifically, she prepared the Surface Water Hydrology/Flood Control and Geomorphology/Riparian Resources sections of the Newhall Ranch RMDP/SCP EIR/EIS and is involved with the ongoing geomorphology monitoring program along the Santa Clara River.

Resource Analyst and Engineer - Clearwater Port LNG Facility, Oxnard, California

Ms. Voget assisted in the preparation of the extensive engineering and project design of the Clearwater Port Liquefied Natural Gas Regasification Terminal proposed offshore Ventura County, California. She also coordinated and assisted in the preparation of the Proponent's Environmental Assessment and applications submitted to the U.S. Coast Guard (in compliance with 33 CFR 148) and California State Lands Commission including environmental impact assessments and mitigations for meteorology and oceanography, water quality, public services/utilities, commercial fisheries resources, hazards and hazardous waste, pipeline safety, traffic, and noise.

Environmental Specialist, Noise - Lower Crystal Springs Dam, San Francisco Public Utilities Commission. Crystal Springs Reservoir, California

Ms. Voget performed a noise assessment for the Lower Crystal Springs Dam construction project. The noise assessment consisted of collecting noise data at sensitive receptors in the vicinity of the Lower Crystal Springs Dam as part of the Environmental Impact Statement for the project proposed by the San Francisco Public Utilities Commission. The assessment was used to establish the baseline conditions for the evaluation of potential noise impacts associated with the project.

Scott Bond Tomkinson

Senior Botanist/Biologist

Summary of Qualifications

Mr. Tomkinson holds a Bachelor of Environmental Studies from University of California, Santa Barbara. He worked for the Cheadle Center for Biodiversity and Ecological Restoration (CCBER) at the University of California, Santa Barbara for five years where he developed expertise in California plant taxonomy and an intimate understanding of ecological restoration best management practices. As UCSB's 'Lagoon Steward' he managed, wrote grants for, planned and implemented restoration sites in habitats such as: oak woodlands, coast sage scrub, native grasslands, vernal pools, streams, freshwater and saltwater marshes, dunes, and bioswales. He has extensive experience leading teams performing vegetation surveys and restoration activities on multiple, concurrent grant-funded projects. In addition, he has developed databases and created maps in relation to land management using ArcGIS and QGIS. As a senior botanist he supports stormwater sampling, ecological restoration, biological assessments, species specific surveys, pre-construction surveys, nesting bird surveys, and construction monitoring for projects throughout southern and central California.

Education

Bachelor of Environmental Studies, Minoring in Philosophy. University of California, Santa Barbara. 2012.

Experience

Pax Environmental, Inc., Ojai, CA
Botanist (2019 to Present)

Smith-Hobson, LLC., Ventura, CA
Biologist (2019 to present)

Cheadle Center for Biodiversity and Ecological Restoration, Santa Barbara, CA
GIS Specialist, Executive Assistant (2019 to Present)
Lagoon Steward, Natural Areas Manager (2012 to 2017)

California Native Plant Society, Channel Islands Chapter
Member of the Board of Directors (2015 to 2017)

Selected Projects

Senior Botanist (February 2020 to Present) Baron Ranch Master Plan in Goleta, California Pax is providing special-status species, species of concern, as well as critical habitat expertise for the Baron Ranch Master Plan. As Senior Botanist, identifies site factors and geographic areas of Baron Ranch where environmental sensitivity and constraints need to be considered in the long-term planning of the area, mapping intact vegetation communities and analyzing the current level of disturbance across the site, and identifying and mapping areas of the site that are currently supporting special-status species including California red-legged frog *(Rana draytonii),* and areas that could be enhanced to support special status species.

Senior Botanist (10/2019 to Present) for CDFA Hydrilla Eradication Program CEQA Compliance Report. Pax is leading the biological and cultural resources sections of the Environmental Impact Report (EIR) for the California Department of Food and Agriculture (CDFA) Hydrilla Eradication Program California Environmental Quality Act (CEQA) Compliance Report. As senior botanist, tasks include documenting existing conditions, including special-status species and sensitive natural communities, in various watersheds throughout California with habitat conditions suitable for hydrilla growth. The impact analysis focuses on potential impacts to special-status species and sensitive natural communities as well as pollinators and associated biological resources. For each eradication method, the limitations of the activity, the types of species at risk and examples of special-status species and sensitive natural communities are described to demonstrate potential impacts.

Senior Botanist (January 2019 to Present) Counties of Ventura, Los Angeles, Santa Barbara, San Luis Obispo, Riverside, Bakersfield, San Bernardino & San Diego Biological Assessments for Conditionally Permitted Projects. As a Senior Botanist, conducts biological surveys, including focused botanical surveys during bloom periods, and preparing technical reports in support of proposed projects throughout southern and central California. The assessments report on the existing environmental conditions, potential for special-status species to occur if they are not observed and propose avoidance and minimization measures to limit impacts to existing biological resources during construction activities. In addition, Pax is responsible for meeting agency conditions, and providing as-needed environmental consulting when resource constraints arise.

Waters Qualified Biologist and Senior Botanist (March 2019 –Present) Southern California Edison's Environmental Compliance (EC) Consultant Work Assignment (CWA) On-Call Program. As a Waters Qualified Biologist, provides biological and water quality support services for SCE's EC CWA On-Call Program. Conducts sensitive resource assessments, including jurisdictional waters areas, surrounding infrastructure scheduled for construction to determine existing environmental conditions, potential for special-status species to occur if they are not observed, and to propose avoidance and minimization measures to limit impacts to existing biological resources during construction activities. Depending on the survey findings and landownership, provides on-site monitoring to avoid sensitive resources during construction activities. All survey and monitoring efforts are reported to stay in compliance with federal, state, or private land ownership requirements.

Senior Botanist (June 2019 to Present) Ventura River Watershed Restoration Projects. As A Senior Botanist, conducts biological surveying/monitoring and data collection in support of ecological restoration projects throughout the Ventura River Watershed. Monitoring was required during the removal of invasive species including giant reed (A*rundo donax)*, as well as the reintroduction of native species such as California black walnut *(Juglans californica),* Arroyo willow *(Salix lasiolepis)*, Coast live oak (*Quercus agrifolia*), and mulefat *(Baccharis salicifolia)* to ensure that the riparian zone and any sensitive species in the area, including nesting birds, southern California steelhead (*Oncorhynchus mykiss),* and California red-legged frog were not impacted by restoration activities. Additionally, Mr. Tomkinson contributed to grant efforts by

developing renderings for native planting schemes based on his expertise of native flora and locally occurring vegetation communities. This multi-phase collaboration with Concerned Resource Environmental Workers (C.R.E.W) and The City of Ojai to re-establish native habitat for special-status and native species, has been funded by the Southern California Wetlands Recovery Program, U.S. Fish and Wildlife, and California Department of Fish and Wildlife. The restoration effort spans across multiple reaches of the watershed including San Antonio Creek, Stewart Canyon Creek, and Fox Canyon Barranca. Restoration activities focus on the removal of invasive species as well as the reintroduction of native species to improve critical habitat while providing environmentally oriented jobs for local youth aged 18 to 24.

Lagoon Steward (2014 to 2017) for multiple grant funded ecological restoration projects around the UCSB campus. Invasive species control is a major component of ecological restoration projects. While working for the Cheadle Center, as a Project Manager, developed an expertise in best management practices for many widespread invasive species and employed integrated pest management techniques to accomplish project goals. Some of the invasive species he has worked with include: invasive grasses (*Bromus spp., Stipa miliacea, Pennisetum spp., Arundo donax*), iceplants (*Carpobrotus spp., Mesembryanthemum crystallinum*), cape ivy (*Delairea odorata*), invasive trees (*Tamarix spp., Eucalyptus spp., Schinus spp.*). Scott has extensive experience using physical eradication techniques (hand pulling, weed whacking, chain sawing) along with chemical techniques (herbicides such as glyphosate and garlon). In addition, conducted monthly avian surveys, including nesting bird surveys within the Lagoon Management area where over 200 species of birds have been documented.

Project Manager (2014-2017) for revegetating experimental controlled burn plots in the heart of UCSB. Conversion of invasive grassland to historic coast sage scrub was accomplished through adding supplemental fuel to an area and coordinating with local authorities to conduct controlled burns. Seeds were collected from surrounding areas and propagated in onsite greenhouses before being planted largely by volunteers. In less than two years each site had reached a stable state of 95%+ native cover.

Grant Recipient (2015) for UCSB's The Green Initiative Fund creating a geodatabase of invasive plant species. All UCSB owned properties were surveyed for invasive plant species, focusing on perennial and controllable populations using Trimble handheld units and ArcGIS software. An invasive species management plan was then developed in coordination with the Facilities Department and Housing Department.

David Stone, RPA

Senior Archaeologist

Summary of Qualifications

David Stone is a cultural resources manager with over 38 years of experience in cultural resources management and environmental planning. Mr. Stone's background and experience managing cultural resources analyses and documentation includes archaeological and historic resources projects, and Native American values. Mr. Stone has prepared hundreds of cultural resource management technical reports covering initial assessment, significance determination, and mitigation phases. He has prepared numerous studies pursuant to federal statutes pertaining to the protection of historic properties (Section 106 of the National Historic Preservation Act) and for implementation of CEQA. Several studies have addressed the Bureau of Land Management (BLM) and California Department of Transportation (Caltrans) Section 106 review process, as well as for US Army Corps of Engineers, US Navy, Air Force, Marines, and Bureau of Indian Affairs guidelines.

Mr. Stone is expert at Native American consultation pursuant to federal NHPA Section 106 and California state AB 52 and SB 18 protocols, having coordinated these efforts for numerous complex development activities. He has also managed cultural resource analyses for complex, interdisciplinary National Environmental Policy Act (NEPA) and California Environmental Quality Act (CEQA) compliance projects, as well as cultural resources (archaeology, history, and architectural history) technical studies. He has extensive experience in environmental review and project management in a variety of issue areas, including residential, commercial, industrial, and energy development, as well as comprehensive, programmatic planning efforts. His graduate degree research involved preparing a predictive model of archaeological site location within coastal Santa Barbara, and he has prepared several regional cultural resource sensitivity assessments.

Mr. Stone is also Senior Lecturer in the Environmental Studies Program at the University of California at Santa Barbara, where he teaches environmental impact assessment upper division courses. He served 5 years as a Santa Barbara County Historic Landmarks Committee member.

Education

Master of Anthropology, University of California, Santa Barbara (1983)

Bachelor of Anthropology University of California, Santa Barbara (1978)

Experience

Staff Archaeologist, Environmental Planner. Santa Barbara County Resource Management Department. September 1983- February 1993

Cultural Resource Manager, Senior Environmental Planner. Science Applications International Corporation, Santa Barbara, CA. February 1993 – October 2007.

Cultural Resource Manager, Senior Environmental Planner. Dudek Santa Barbara, CA. October 2007- September 2017.

Cultural Resource Manager, Senior Environmental Planner. Wood Environment and Infrastructure, Inc. Santa Barbara, CA. October 2017- June 2020

Selected Projects

Cold Springs Creek Debris Basin Expansion, MND, Santa Barbara County Flood Control District. Managed preparation of the Mitigated Negative Declaration and Phase 1 archaeological investigation for expansion of the existing debris basin, to improve habitat for steelhead trout migration along Cold Springs Creek.

Las Vegas/San Pedro Creeks Capacity Improvements Project MND, Santa Barbara County Flood Control District, Cities of Goleta and Santa Barbara, Santa Barbara County, CA. Managed technical studies and environmental analysis in compliance with NEPA and CEQA and Caltrans Standard Environmental Reference guidelines for flood control improvements on two stretches of urban creek corridors. Technical studies prepared for cultural resources including Extended Phase I and Phase II Testing and Determination of Eligibility, Historic Properties Survey Report (HPSR), Finding of Effect (FOE), Memorandum of Understanding (MOU); and Data Recovery Plan.

Secondary Treatment Upgrades, Goleta Sanitary District, Goleta, Santa Barbara County, CA. Managed Extended Phase 1 archaeological investigations to define constraints and areas of development potential within ethnohistoric Chumash village site. Proposed alternative engineering design for treatment facilities, resulting in cost savings and meeting critical construction schedules.

Desalination Facility, City of Santa Barbara, CA. Prepared ASR, HPSR, and FOE.

Wastewater Treatment Plan Facility Upgrades, City of Santa Barbara, CA. Prepared ASR, HPSR, and FOE.

Upper-Guadalupe River Flood Control Feasibility Study EIR/EIS, San Francisco District U.S. Army Corps of Engineers (ACOE), San Jose, CA. Section 106 assessment of 7 miles of flood control and redevelopment with passive recreation amenities. Also included riparian studies and socio-economic issues with relocation of residences and businesses.

San Pedro Creek Flood Control Improvements EIR/EIS, San Francisco District ACOE, Marin County, CA. Conducted a cultural resource analysis and prepared the cultural resources EIR/EIS section.

Solid Waste Facility Supplemental Environmental Impact Statement, Campo Indian Reservation, Bureau of Indian Affairs, San Diego County, CA. Managed Subsequent Environmental Impact Statement for 1,000-acre project site with substantial public controversy, including Section 106 ASR and HPSR.

Seismic Retrofit EA, Caltrans District 4 and Bay Area Rapid Transit (BART), Bay Area, CA. Managed cultural resources (archaeology and architectural history) investigation, including preparation of Section 106 documents, ASR, Historical Resources Evaluation Report (HRER), HPSR, and FOE. Successfully nominated BART Underwater Tube to National Register of Historic Places.

Yucca Trail Improvements, Caltrans District 8 and Town of Yucca Valley, CA. Prepared Archaeological Survey Report and HPSR.

Cesar Chavez Boulevard Improvements, Caltrans District 11 and City of Calexico, CA. Prepared Archaeological Survey Report and HPSR.

Santa Gertrudis Creek Bridge, Caltrans District 8 and City of Temecula, CA. Prepared Archaeological Survey Report, HPSR, and FOAE.

College Boulevard Bridge Expansion, Caltrans District 11 and City of Oceanside, CA. Prepared Archaeological Survey Report, HPSR, and FOAE.

Las Positas Road/Cliff Drive Roundabout, City of Santa Barbara, CA. Prepared Archaeological Survey Report, HPSR, and FOAE.

Fairview Avenue/U.S. Highway 101 Overcrossing, Caltrans District 5 and Santa Barbara County Public Works Department, Santa Barbara County, CA. Prepared Phase 2 Significance Assessment Investigation within recorded coastal Chumash village supporting HPSR and Determination of Eligibility (DOE).

Las Positas Road/Cliff Drive Roundabout, Caltrans District 5 and City of Santa Barbara, CA. Prepared Archaeological Survey Report (ASR) and HPSR.

Anacapa Street/Carrillo Street Intersection Improvements Caltrans District 5 and City of Santa Barbara, CA. Prepared ASR and HPSR.

Alisal Road Improvements, Caltrans District 5 and City of Solvang, CA. Prepared ASR and HPSR.

Alisal Bridge Seismic Retrofit, Caltrans District 5 and City of Solvang, CA. Prepared ASR and HPSR.

SH-41 Roundabout and Shell Gas Station Remediation MND, Caltrans District 5 and City of Morro Bay, District 5, San Luis Obispo County, CA. Prepared ASR.

Cultural and Paleontological Resources Overview and Existing Information Summary, Hazard Removal and Vegetation Management Project, Bureau of Land Management, California State Office. Managed preparation of Class I archaeological inventory of existing archaeological reports and recorded archaeological and paleontological sites throughout 551,133-acres in Field Offices in Central and Northern California, identifying high and low areas of potential site sensitivity and a preparing a cultural resource typology for over 3,000 prehistoric and historic-period archaeological sites within the study area.

Jarbidge Section 110 Archaeological Inventory, Bureau of Land Management, BLM Jarbidge Field Office, Twin Falls Office District. Managed the preparation of a Class III archaeological inventory of twenty-two survey units totaling 710 acres in the Jarbidge Foothills, Nevada. Inventory included revisiting and updating site records of two historic-period cultural resources, and identification of recordation of four previously unrecorded prehistoric sites and four prehistoric isolated artifacts.

Archaeological Field Investigations for BRAC Land Parcels Leaving Federal Ownership at Umatilla Chemical Depot, Morrow and Umatilla Counties, Oregon. Managed the report preparation completion a Class III, intensive ground surface inventory survey of 4,165 acres of land within the Umatilla Chemical Depot (UMCD) in Morrow and Umatilla counties, Oregon under contract to the U.S. Army Corps of Engineers (USACE), Mobile District. The inventory provided compliance with the National Historic Preservation Act as these lands were being removed from federal ownership.

Development of Facilities to Support Deep-Draft, Power-Intensive (DDPI) Ships and Dredged Material Disposal Alternatives Analysis EIS, U.S. Department of the Navy (U.S. Navy), Southwest Division, Pacific Fleet, San Diego Bay, CA. Section 106 compliance

documentation addressing assessing infrastructure development and dredging and disposal of unsuitable sediments impacts on cultural resources.

Developing Home Port Facilities for Three Nimitz-Class Aircraft Carriers, U.S. Navy Pacific Fleet, at either San Diego, California; Puget Sound, Washington; or Pearl Harbor, Hawaii. Section 106 compliance documentation for multiple-alternative analysis of nuclear carrier homebased selection. Worked with several levels of Navy personnel, including the Secretary of Navy, in developing strategies for multi-tiered assessment.

Replacement Pier and Dredging EIS, U.S. Navy Pacific Fleet, City of San Diego, San Diego County, CA. Section 106 compliance documentation for programmatic EIS assessment strategies for disposal of unsuitable contaminated sediments throughout San Diego Bay, as well as sediment testing and analysis. Developed in-bay disposal techniques in conjunction with contracting engineers.

Transport of Supplies by Landing Craft, Air Cushioned (LCAC) from Naval Air Weapons Station (NAWS) Point Mugu to San Nicolas Island Environmental Assessment, U.S. Navy Environmental Division, Channel Islands, CA. Section 106 compliance documentation assessing disturbance to archaeological resources.

Construction of an Operations Support Building EA, Vandenberg Air Force Base, City of Santa Maria, CA. EA and archaeological testing done under severe temporal and financial constraints.

Rincon Point Sewer System Expansion, Carpinteria Sanitary District Phase 2 Significance Assessment and Phase 3 Data Recovery and Construction Monitoring for the, Santa Barbara County, CA. Investigations involved the Chumash ethnohistoric village of *Shuku*.

Marriott Residence Inn Phase 2 Significance Assessment and Phase 3 Data Recovery and Construction Monitoring. Investigations involved a Chumash village (CA-SBA-58) adjacent to the Goleta Slough inhabited over a 6,000-year time span.

Direct Relief International Phase 2 and Phase 2 Significance Assessment and Phase 3 Data Recovery and Construction Monitoring. Investigations involved a Chumash village (CA-SBA-59) adjacent to the Goleta Slough inhabited over a 4,000-year time span.

Willow Springs Apartments Phase 2 Significance Assessment and Phase 3 Data Recovery and Construction Monitoring. Investigations involved a Chumash village (CA-SBA-56) adjacent to the Goleta Slough inhabited over 6,000-year time span.

Cabrillo Business Park Phase 3 Data Recovery and Construction Monitoring Project, Sares-Regis, Goleta, Santa Barbara County, CA. Investigations at two extensive Early to Middle Period (5,000+ years old) village sites (CA-SBA-52 and -53).

Phase 3 Data Recovery and Construction Monitoring for the QAD Administrative Facility, Summerland, Santa Barbara County, CA. Investigations at a large Early Period (5,000+ years old) village site (CA-SBA-16).

San Marcos Golf Course, Santa Ynez Valley, CA. Phase 2 Assessment and Phase 3 Data Recovery Mitigation Programs. Investigations at a complex of seasonal camps and specific activity loci.

Cojo-Jalama Ranches, Dangermond Preserve, The Nature Conservancy, Santa Barbara County, CA. Analyzed location of existing archaeological reports and recorded sites

throughout a 20,000-acre coastal property including the Point Concepcion area of coastal Santa Barbara County. Determined high and low areas of potential archaeological site sensitivity.

Gaviota Coast Land Use Plan, Santa Barbara County, CA. Analyzed location of existing archaeological reports and recorded sites throughout a 158-square mile area and over 100,000 acres extending from the City of Goleta to Vandenberg Air Force supporting the development of land use regulations in this planning area of Santa Barbara County. Determined high and low areas of potential archaeological site sensitivity.

Predictive Model of Archaeological Site Location, Southern Santa Barbara County, CA. Master's Thesis research and analysis addressing and synthesizing all archaeological research from the early 20th century through 1984 to prepare a multi-variate statistical predictive model of archaeological site location throughout southern Santa Barbara County, based on environmental characteristics derived from academic studies of hunter-gather settlement location. Also constructed a typology of archaeological site function and land use for the several thousand archaeological site data base.

Publications

Stone, David F. 2020. CA-SBA-58: A Multi-Component Village Site along the North-Central Goleta Slough. In Archaeology of the Goleta Slough, Michael Glassow, editor. Santa Barbara Museum of Natural History, Santa Barbara, CA.

Stone, David F., Jon Erlandson, and Thomas Rockwell. In Press. CA-SBA-56: An "Oak Grove" and "Canaliño" Site on Goleta Lagoon, California. 2020. In Archaeology of the Goleta Slough, Michael Glassow, editor. Santa Barbara Museum of Natural History, Santa Barbara, CA.

Stone, David F. 1987. "Coping with the California Environmental Quality Act (CEQA); Appendix K; Determining Archaeological Resource Significance and Mitigation Costs." The Environmental Professional 9(1):33–42.

Stone, David F. 1982. Sedimentation and Infilling of the Goleta Slough: a 1770 Reconstruction. 1982. Proceedings of the First Annual Conference on Holocene Climate and Archaeology of California Coast and Desert, San Diego State University, California.

Conference Presentations

Unlocking the Black Box: Effective Strategies to Identify and Preserve Archaeological Resources. Association of Environmental Planners Annual Meeting, 2015. Santa Barbara, California.

Maximizing Research Data from Chaos: Results for Data Recovery and Construction Monitoring at Two Early Period Sites. Society for California Archaeology Annual Meeting, 2006. Ventura, California.

Cultural Resource Guidelines Development. Association of Environmental Professional Annual Conference, 1991. Palm Springs, California.

Historical Resources Evaluation and Planning. California Preservation Foundation Annual Conference, 1991. Santa Barbara, California.

Archaeological Resources Management and Preservation. California Preservation Foundation Annual Conference, 1990. Stanford University, California.

Thresholds of Significance and CEQA. Association of Environmental Professional Annual Conference, 1989. Long Beach, California. May.

Coping with the California Environmental Quality Act (CEQA); Appendix K; Determining Archaeological Resource Significance and Mitigation Costs. National Association of Environmental Professional Annual Conference, 1986. San Francisco, California.

Dusty Files: The Productive Use of Existing Archaeological Data. Society for American Archaeology Annual Conference, 1983. Pittsburgh, Pennsylvania.

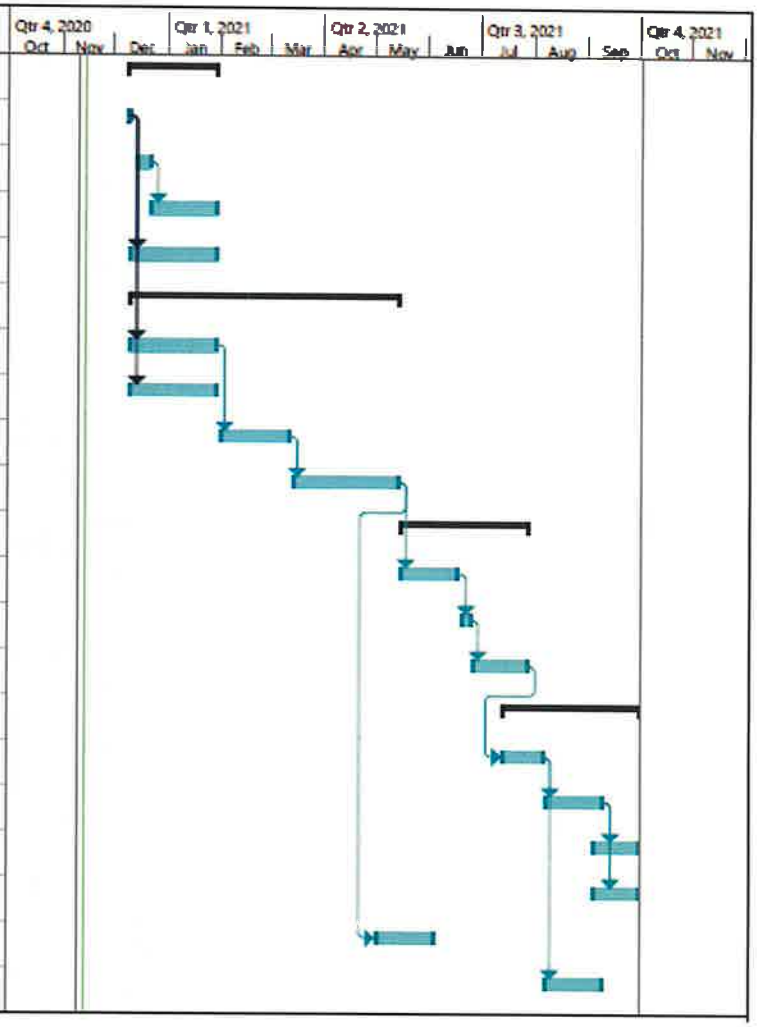
Archaeological Settlement Pattern Predictive Modeling. Paper presented at the Society for California Archaeological Annual Conference, 1983. San Diego, California.

Appendix B

Preliminary Schedule

Catalyst
ENVIRONMENTAL SOLUTIONS

ID	Task Name	Start	Finish
1	**Task 1 - Project Initiation**	**Wed 12/9/20**	**Fri 1/29/21**
2	Subtask 1.1 - Kickoff Meeting	Wed 12/9/20	Wed 12/9/20
3	Subtask 1.2 - Notice of Preparation	Mon 12/14/20	Mon 12/21/20
4	Subtask 1.3 - Scoping Period, Meeting, and Report	Tue 12/22/20	Fri 1/29/21
5	Subtask 1.4 - Review the CUP Application for Consistency	Thu 12/10/20	Fri 1/29/21
6	**Task 2 - Administrative Draft EIR**	**Thu 12/10/20**	**Fri 5/14/21**
7	Subtask 2.1 - Develop Required Studies and Peer-Review Studies	Thu 12/10/20	Fri 1/29/21
8	Subtask 2.2 - Draft Project Description, Objective, and Alterantives	Thu 12/10/20	Fri 1/29/21
9	Subtask 2.3 - Affected Environment and Environmental Consequences	Mon 2/1/21	Fri 3/12/21
10	Subtask 2.4 - Prepare Administrative Draft EIR	Mon 3/15/21	Fri 5/14/21
11	**Task 3 - Public Review Draft EIR**	**Mon 5/17/21**	**Wed 7/28/21**
12	Subtask 3.1 - Prepare Public Draft EIR	Mon 5/17/21	Fri 6/18/21
13	Subtask 3.2 - Public Noticing	Mon 6/21/21	Fri 6/25/21
14	Subtask 3.3 - Public Comment Period and Meeting	Mon 6/28/21	Wed 7/28/21
15	**Task 4 - Final EIR**	**Thu 7/15/21**	**Fri 10/1/21**
16	Subtask 4.1 - Prepare Response to Comments	Thu 7/15/21	Fri 8/6/21
17	Subtask 4.2 - Prepare Final EIR	Mon 8/9/21	Fri 9/10/21
18	Subtask 4.3 - EEC, Planning Commission, and Board of Supervisors	Mon 9/6/21	Fri 10/1/21
19	Subtask 4.4 - Prepare Project/Administrative Record	Mon 9/6/21	Fri 10/1/21
20	**Task 5 - Mitigation, Monitoring, and Reporting Program**	Mon 5/3/21	Fri 6/4/21
21	**Task 6 - CEQA Findings and Notice of Determination**	Mon 8/9/21	Fri 9/10/21



Appendix C
Budget Table and Schedule of Charges

Catalyst
ENVIRONMENTAL SOLUTIONS

Catalyst
ENVIRONMENTAL SOLUTIONS

Catalyst Environmental Solutions Corporation

SCHEDULE OF FEES
FIXED HOURLY RATES FOR TIME AND MATERIALS CONTRACTS
Effective November 2020

Catalyst will bill monthly for the actual time and expenses incurred on the client's behalf in performance of the contracted effort using the hourly rates indicated below.

Category:	Name:	Rate $/hr
Senior Principal	Chip Blankenhorn	$240
Principal	Ben Pogue	$200
Principal	Megan Schwartz	$200
Senior Scientist	Lindsey Garner	$170
Senior Scientist	Paden Voget	$170
Senior Scientist	Clint Olesen	$150
Senior Scientist	Emily Merickel	$140
Staff Scientist	Charlie Piechowski	$140
Junior Scientist	Jack Sieber	$115
Project Coordinator	Sue Varner	$65

Consultant hours spent providing expert witness, deposition, or preparation for deposition will be charged at 1½ times regular billing rate. Catalyst reserves the right to increase these rates annually.

Expenses

Use of a personal vehicle will be at the current IRS allowable rate. Materials and supplies, travel, and any other direct cost identifiable to an assignment will be charged with a 10% fee. Subconsultant management will be charged with a 5% fee.

Payment

Catalyst invoices will be submitted monthly. Payment is due within 45 days of receipt of the invoice. Invoices paid more than forty-five (45) days after the invoice date are subject to a finance charge of one percent (1%) per month.

Conditions

Catalyst specifies that our services are performed, within the limits prescribed by our clients, with the usual thoroughness and competence of the environmental consulting profession. No other warranty or representation, either expressed or implied, is included or intended in our proposals, contracts, or reports. This document is proprietary to Catalyst Environmental Solutions Corporation. No right is granted to the recipient to use, disclose or reproduce any information presented herein.

Catalyst ENVIRONMENTAL SOLUTIONS

	Catalyst Labor													Consultants [TOT		Reimbursable Expenses ($)							
	Don Blankenhorn	Megan Schwartz	Ken Pogue	Lindsay Garner	Robert Viggi	[illegible]	[illegible]	Charlie Pachowski	Chris Salter	Susan Varner	TOTAL LABOR BILLING	TAX	TOTAL SUBCONSULTANT BUDGET (+Markup%)	EIR Report	Meals	Hotel	Mileage (50 % x Km)	Parking	Shipping/Misc	TOTAL REIMBURSABLE EXPENSES (+Markup%)	TOTAL PROJECT BUDGET ($)
Hourly Billing Rate, Markup %, & Unit Cost	$240.00	$200.00	$200.00	$170.00	$170.00	$150.00	$1[illegible]	$140.00	$115.00	$65.00		5%		10%	10%	10%	30%	10%	10%		
Task 1:																					
Subtask 1.1 - Kickoff		18	8							1	$4,865.00		$0.00				$400.00			$440.00	$5,305.00
Subtask 1.2 - NOP			3								$1,440.00		$0.00					$500.00	$100.00	$660.00	$2,100.00
Subtask 1.3 - Scoping ntg, Comment Report		18	24	40							$14,800.00		$0.00				$400.00			$440.00	$15,240.00
Subtask 1.4 - CUP Review			16					8			$4,300.00		$0.00							$0.00	$4,300.00
Task 1 Labor Subtotal	0	52	51	40	0	0		8	0	1	$25,415.00	$0.00	$0.00	$0.00	$0.00	$0.00	$800.00	$500.00	$100.00	$1,540.00	$26,955.00
Task 2: ADEIR																					
Subtask 2.1 - Study Review and Studies	12	20	40	24	80	3			40	2	$42,090.00	$12,000.00	$12,000.00	$330.00	$110.00	$220.00	$220.00			$880.00	$55,970.00
Subtask 2.2 - Ch 1-2		12	16					8			$6,720.00		$0.00							$0.00	$6,720.00
Subtask 2.3 - Affir. Lnv. And Impact	18	16	40	32	40	1		32	40		$42,640.00		$0.00							$0.00	$42,640.00
Subtask 2.4 - ADEIR		24	24					8		40	$16,680.00		$0.00					$550.00		$550.00	$17,230.00
Task 2 Labor Subtotal	30	72	120	56	120	4		48	80	42	$108,130.00	$12,000.00	$12,000.00	$330.00	$110.00	$220.00	$220.00	$550.00	$0.00	$1,430.00	$122,560.00
Task 3: Public review Draft EIR																					
Subtask 3.1 - DEIR		24	40	12	24			12	24	22	$26,870.00	$10,000.00	$10,000.00							$0.00	$36,870.00
Subtask 3.2 - NOA			2	6							$1,420.00		$0.00					$750.00		$825.00	$2,245.00
Subtask 3.3 - Public Meetings		24	24								$8,880.00		$0.00				$400.00			$440.00	$9,320.00
Task 3 Labor Subtotal	0	48	66	18	24	0		12	24	22	$37,690.00	$10,000.00	$10,000.00	$0.00	$0.00	$0.00	$400.00	$825.00	$0.00	$1,265.00	$48,955.00
Task 4: FEIR																					
Subtask 4.1 - RTC	8	24	16	16	16					18	$18,720.00	$2,400.00	$2,520.00							$0.00	$21,240.00
Subtask 4.2 - FEIR		16	40		32						$19,440.00		$0.00					$750.00		$825.00	$20,265.00
Subtask 4.3 - Commitiaos		40	16								$11,200.00		$0.00				$1,300.00			$1,320.00	$12,520.00
Subtask 4.4 - AA		8								40	$3,400.00		$0.00							$0.00	$3,400.00
Task 4 Labor Subtotal	8	88	72	16	48	0		0	0	58	$52,810.00	$2,400.00	$2,520.00	$0.00	$0.00	$0.00	$1,320.00	$825.00	$0.00	$2,145.00	$57,425.00
Task 5: MMRP																					
Subtask 5.1 - MMRP		12	12							1	$7,505.00	$500.00	$525.00							$0.00	$7,030.00
Task 5 Labor Subtotal	0	12	12	0	0	0		0	0	1	$7,505.00	$525.00	$525.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$7,030.00
Task 6: CEQA Findings and NOD																					
Subtask 6.1 - CEQA Findings and NOD		20	16	8						1	$8,625.00		$0.00							$0.00	$8,625.00
Task 6 Labor Subtotal	0	20	16	8	0	0		0	0	1	$8,625.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$8,625.00
Task 10 Subtotal	0	0	0	0	0	0		0	0	0	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
TOTAL PROJECT LABOR (Hours)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1,412										
TOTAL PROJECT LABOR COST	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	$159,585.00	[illegible]	$16,145.00	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	$4,180.00	$171,110.00

Stantec

Stantec Consulting Services Inc.
9665 Granite Ridge Drive Suite 220, San Diego, CA 92123

November 18, 2020

Attention: County of Imperial
Planning and Development Services
801 Main Street
El Centro, CA 92243

Reference: Proposal to Prepare an EIR for the VEGA SES 2, 3, & 5 Solar Project

Stantec Consulting Services Inc. (Stantec) is pleased to submit the following proposal to the County of Imperial Department of Planning and Development Services (County) to prepare an Environmental Impact Report (EIR) for the VEGA SES 2, 3, & 5 Solar Project ("proposed project" or "project"), which is submitted in response to your Request for Proposals dated October 26, 2020.

The Stantec community unites approximately 22,000 employees working in over 400 locations across six continents. We collaborate across disciplines and industries to bring buildings, energy, and resource, environmental, water, and infrastructure projects to life. Our goal is to assist in preparing high quality environmental documents that accurately gauge and disclose risk, that reduce potential danger to people and the environment, and comply with the California Environmental Quality Act (CEQA) in the most time-efficient, technically sound, and cost-effective manner possible. Combined solar and Battery Energy Storage Systems (BESS) are a rapidly emerging technology and Stantec has recent experience performing environmental review of these systems as well as in-house electrical engineers that design these systems which can be valuable resources if technical issues arise during the environmental review process. Our environmental staff have extensive project experience in Imperial County, including preparing General Plan Amendments, Zone Changes, and Conditional Use Permit applications for a number of green energy projects such as the proposed CED Westside Canal Battery Storage Project and Orni Wister Solar Project. This has allowed us to have a deep understanding of the County's entitlement process as well as the development expectations of the applicant.

Our San Diego office will serve as the main project office for this project with additional technical expertise provided from our extensive network of offices throughout Southern California. Our Project Manager, Christine Abraham, has recent experience supporting Imperial County in the preparation of an EIR for the CED Westside Canal Battery Storage Project and is very familiar with the County's renewable energy development policies and CEQA procedures. She applies her legal training to the development of CEQA compliant documents and manages inter-disciplinary teams of environmental planners and Subject Matter Experts to meet her client's goals and objectives in an efficient and cost-effective manner.

Christine Abraham
Principal Environmental Planner
Phone: 323-363-6834
Christine.Abraham@stantec.com

Robert Prohaska PMP, LEED Green Associate
Principal
Phone: 858-633-4244
Robert.Prohaska@stantec.com

Enclosures: VEGA SES 2, 3, and 5 Solar Project – 4 hard copies and 1 CD

Proposal to Prepare an Environmental Impact Report for the VEGA SES 2, 3, & 5 Solar Project

Prepared for:
County of Imperial
Planning and Development Services
801 Main Street
El Centro, CA 92243

Prepared by:
Stantec Consulting Services Inc.
9665 Granite Ridge Drive Suite 220,
San Diego, CA 92123

November 18, 2020

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1 Project Understanding

Apex Energy Solutions LLC is proposing to develop the Vega SES 2, 3, and 5 Solar Project (proposed project), which includes three (3) Conditional Use Permits (CUP) and an Initial Study (IS). The Vega SES 2, 3, and 5 Solar Project entitlements include:

- Conditional Use Permit #20-0021 Vega SES 2: A CUP to allow for the construction and operation of a 240-megawatt (MW) alternating current (AC) solar photovoltaic (PV) energy generation and 240-MW/960-megawatt hour (MWh) battery storage project. The proposed project is to be located on approximately 1,472 acres.

- Conditional Use Permit #20-0022 Vega SES 3: A CUP to allow for the construction and operation of a 60-megawatt (MW) alternating current (AC) solar photovoltaic (PV) energy generation and 60-MW/240-megawatt hour (MWh) battery storage project. The proposed project is to be located on approximately 240 acres.

- Conditional Use Permit #20-0023 Vega SES 5: A CUP to allow for the construction and operation of a 50-megawatt (MW) alternating current (AC) solar photovoltaic (PV) energy generation and 50-MW/200-megawatt hour (MWh) battery storage project. The proposed project is to be located on approximately 249.70 acres.

Vega SES 2 would be located on Imperial County Assessor Parcel Numbers (APNs): 025-260-011-000 (approximately 448.30 acres), APN: 025-270-023 (approximately 624.76 acres) and APN: 025-010-006-000 (approximately 400 acres of the 640 acres). Vega SES 3 would be located on the remainder of APN: 025-010-006-000 (approximately 240 acres of the 640 acres). Vega SES 5 would be located on Imperial County Assessor Parcels (APNs): 025-260-019-000 (approximately 89.7 acres and is zoned S-2-RE) and 025-260-022-000 (approximately 160 acres and is zoned A-2-RE). The land use designation of these two parcels is Recreational/Open Space according to the Imperial County General Plan. The proposed project would utilize either thin film or crystalline solar photovoltaic (PV) technology modules mounted either on fixed frames or horizontal single-axis tracker (HSAT) systems. The electrical energy produced by the proposed project would be conducted through the project substation to the proposed 92kV generator interties ("gen-tie") line and delivered to the existing Imperial Irrigation District (IID) approved point of interconnection (POI) at the IID 92kV "Midway" Substation.

The proposed battery energy storage system (BESS) would be constructed adjacent to the project solar facilities and would consist of either lithium ion (Li-ion) or flow batteries. The batteries will either be housed in storage containers or building fitted with HVAC and fire suppression systems.

Stantec understands the unique challenges related to solar and BESS projects. We have specifically crafted this scope of work to address potential project risks of a thermal runaway event, which could potentially release hazardous materials to the environment. Our technical team of experts have experience in evaluating such potential hazards. Our team as part of this proposal will review the proposed project's application and will make necessary findings of consistency with the Imperial County General Plan Renewable and Transmission Element in order to ensure compliance with the County of Imperial Planning and Development Services Department's goals and objectives.

2 Stantec Team Qualifications

At Stantec, we collaborate across disciplines and industries to bring projects to life. We are ready to be your project partner and meet your needs in a creative and personalized way. We are currently working with the County of Imperial as an extension of their planning staff and have also represented the applicant on the entitlement and environment processing of similar renewable energy projects. We understand the County's CEQA process, have local relationships with responsible agencies, and have a well-rounded and integrated team to work on the proposed project. The key members of our team bring a diverse background and experience related to CEQA, biologists, scientists, and green energy specialists. This combination of our unique strengths and passions, knowledge, and experiences makes it possible for us to deliver successful projects and advance the quality of life in the communities we serve. At Stantec, we pride ourselves on collaborating across disciplines and industries to bring projects to life. To achieve this goal, we assemble project-specific teams that are empowered to deliver directly to our clients.

Stantec has performed due diligence efforts for potential siting of new solar and battery energy storage system projects throughout California, Arizona and Nevada. Stantec has also performed site screening, constraints analysis and permit identification efforts for multiple sites in San Diego Gas and Electric (SDG&E) and Pacific Gas and Electric (PG&E) and Imperial Irrigation District (IID) service territories for multiple proposed solar and BESS developments.

With an integrated service platform, our team operates seamlessly to meet challenges and create solutions. The benefit to our clients is that we can design custom solutions that best meet your schedule, your budget, and, most important, your goals. The proposed organizational chart, with all key team members, is provided below. The chart demonstrates how the Stantec team will be organized and managed for continuity to ensure your project runs smoothly and efficiently. Each of our team members brings specific expertise to contribute to the success of your project. Moreover, we provide a strong leadership structure to support an efficient and cohesive project delivery model. Our people with the most direct and relevant experience will be leading the project and meeting with stakeholders. Document production/preparation personnel will be involved at the outset in preparing technical documentation, including participating in on-site investigations.

2.1 EIR Team Members

At Stantec, we treat our clients as partners with a common goal. We have the necessary experience and processes to assist you through the CEQA process for the proposed project. We offer you a team that is well respected for inventive, cost-effective services that use today's most advanced technology. We are proud of our track record and believe that excellence results from sound project management, communication, and technical expertise. We have carefully selected a team for this project that has the requisite experience and skills to evaluate the technical issues related to the project, knowledge of the issues and resources within Imperial County, as well as producing CEQA compliant documentation. Brief bio sketches of our management team are provided below with full resumes for each of our team members provided in Appendix A.

2.1.1 MANAGEMENT TEAM

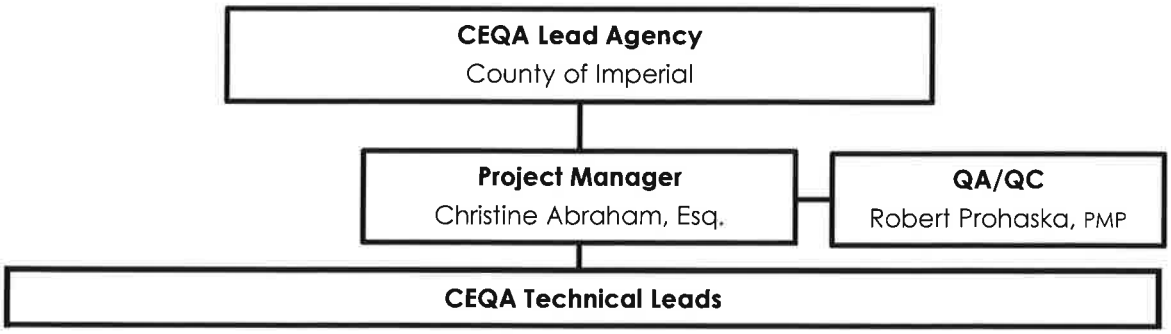
Christine Abraham, Esq. – Project Manager

Christine will serve as Stantec's Project Manager and be responsible for overall project execution, management, scope, schedule, and budget control and serve as the principal point of contact for Imperial County. As an environmental consultant with more than 16 years of experience in environmental review and California Environmental Quality Act (CEQA) compliance documentation, Christine has prepared and managed all levels of CEQA documentation, from Notices of Exemption and Initial Studies in support of Mitigated Negative Declarations (MNDs) to Environmental Impact Reports (EIRs) and Sustainable Communities Environmental Assessments (SCEAs). In addition to document preparation, Christine draws from her legal background to provide a thorough peer review of environmental documents to ensure defensibility, as well as engaging in litigation support when needed. Christine is currently supporting with peer review of the ConEdison Westside Canal Battery Energy Storage Project and the ORNI WIster Solar Project in Imperial County. Christine is working hand in hand with County of Imperial staff currently and has a solid understanding of successfully navigating the CEQA process within the County of Imperial.

Robert Prohaska – QA/QC

Robert has 35 years of experience preparing environmental documents compliant with the California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA), California Public Utilities Commission (CPUC), as well as California Energy Commission (CEC), and environmental permitting and construction compliance. Over the course of his career he has worked on a number of projects in Imperial County including ConEdison Westside Canal Battery Energy Storage Project, the Imperial County segment of the Sunrise Powerlink Project, 8minutenergy Cluster I Solar Farm Power Plants Project, Solar Gen 2 Solar Array Project, Ocotillo Express Wind Farm Project, Ormat Imperial Valley Solar Project, and Salton Sea Restoration Plan Feasibility Study.

Robert has developed a talent for helping resolve complex and controversial environmental issues by building consensus among diverse stakeholder groups. He has been recognized for proactively identifying project challenges and finding solutions before they become obstacles to project success. Robert is certified by the Project Management Institute as a Project Management Professional and utilizes universally recognized project management best practices to guide project execution. He will provide technical support to our Project Manager and the team and lead the Quality Assurance and Quality Control Plan for the project.



Aesthetics	Josh Hohn, AICP
Agriculture and Forestry Resources, Energy	Linn Zukor
Air Quality, Greenhouse Gases, Climate Change	Jonya Lofgren
Biological Resources	Jared Varonin
Cultural/Tribal Cultural Resources	Mitch Marken, LEED AP, RPA, CFP, CRAM
Geology/Soils	Jaret Fischer, PE
Hazards and Hazardous Materials	Jason Stagno, CAC, LIA
Hydrology/Water Quality	Kristy Edblad, PE, QSD/QSP, CAPP
Land Use/Planning	Kevin Kohan, AICP
Noise	StephAnnie Roberts
Transportation	Daryl Zerfass, TE, PTP
Mandatory Findings of Significance	Shruti Ramaker
Alternatives	Kevin Kohan, AICP
Cumulative, Growth	Linn Zukor
Findings for Project	Shruti Ramaker
Mitigation Monitoring and Reporting Program	Linn Zukor, AICP

2.1.2 SUMMARY OF KEY PERSONNEL

EIR	Stantec Lead Preparer
Aesthetics	Josh Hohn
Agriculture and Forestry Resources	Linn Zukor
Air Quality	Jonya Lofgren
Biological Resources	Melissa Tu
Cultural Resources	Mitch Marken
Energy	Linn Zukor
Geology/Soils	Jaret Fischer
Greenhouse Gas Emissions	Jonya Lofgren
Hazards and Hazardous Materials	Jason Stagno
Hydrology/Water Quality	Kristy Edblad
Land Use and Planning	Kevin Kohan
Mineral Resources	Jaret Fischer
Noise	StephAnnie Roberts
Population and Housing	Kevin Kohan
Public Services	Kevin Kohan
Recreation	Kevin Kohan
Transportation	Daryl Zerfass
SB18/AB 52 Tribal Cultural Resources	Mitch Marken
Wildfire	Erick Clark
Mandatory Findings of Significance	Shruti Ramaker
Alternatives	Kevin Kohan
Cumulative, Growth	Linn Zukor
Climate Change	Jonya Lofgren
Findings for Project	Shruti Ramaker
Mitigation Monitoring and Reporting Program	Linn Zukor
Assumes Applicant Prepared Technical Study	**Stantec Lead Reviewer**
Transportation/Traffice	Daryl Zerfas
Biology Resources	Melissa Tu
Cultural Resources/Historical/Tribal Cultural	Mitch Marken
Aesthetics/Visual Impacts	Josh Hohn
Air Quality and Greenhouse Gas	Jonya Lofgren
Noise	StephAnnie Roberts
Land Evaluation and Site Assessment	Shruti Ramaker
Fiscal Impact Analysis	Linn Zukor
Off-Site Consequences Analysis	Eric Clark

2.2 Project Experience

Following are examples of Stantec's experience relevant to the project.

ORNI Wister Solar Project – Imperial, CA

Stantec prepared and processed the Zone Change, General Plan Amendment, and Conditional Use Permit Application on behalf of ORNI 21, LLC (Orni) for the Wister Solar Energy Facility in unincorporated Imperial County. The proposed project would use photovoltaic (PV) technology and would include the construction and operation of a 40 Megawatt (MW) solar farm on approximately 300-acres within the 640-acre Section (T10S, R14E, Section 27) owned by ORNI 21, LLC. The proposed project is located within Assessor's Parcel No. 003 240 001 and is currently

zoned Open Space/Preservation with Geothermal Overlay (S-2-G). The proposed site is located east of the intersection of Wilkins and Wiest Roads, about 3-miles north of the unincorporated town of Niland. Stantec is managing the entitlements of the proposed project and has reviewed and commented on the Draft Environmental Impact Report which was prepared by a third-party environmental firm.

ConEdison Westside Canal Battery Energy Storage Project - Imperial, CA

Consolidated Edison Development (CED) is proposing to develop the Westside Canal Battery Storage Project, which would provide a utility-scale energy storage complex with solar panels, lithium ion battery systems, and/or flow battery technologies distributed throughout the site. The Project would allow for excess, intermittent renewable energy to be stored and later dispatched optimally back into the electric grid as firm, reliable generation. The Project complements both the existing operational renewable energy facilities, and those planned for development, in Imperial County, and supports the broader Southern California bulk electric system by serving as a transmission asset. Stantec is preparing the Environmental Impact Report on behalf of the County of Imperial and leading the project through the entitlement and community outreach process.

Fallbrook Battery Storage Project – Fallbrook, CA

Stantec is supporting the permitting of a 40 MW Battery Storage Facility in Fallbrook located in unincorporated San Diego County, California. Members of the Stantec team have worked with the engineering design team to design the project around environmental constraints. The project is located on lands formerly used for agriculture but now zoned for light industrial uses. The project requires a conditional use permit from San Diego County and Stantec staff have worked closely with the County preparing a CEQA compliant Initial Study checklist as well as all supporting documentation for the project.

Southern California Edison Battery Energy Storage Systems – Santa Barbara County, CA

Southern California Edison (SCE) is pursuing resilience projects for energy delivery in Southern California. On behalf of two different renewable energy clients, Stantec is utilizing our local permit expertise and leading the permit efforts to obtain the required local approvals through the County of Santa Barbara. We currently represent two of the eight new BESS sites awarded under this SCE effort. Our planners review permit requirements and potential pitfalls, creating organized succinct reports for client use and consideration of new facilities.

Grayson Repowering Project Environmental Impact Report – Glendale, CA

Stantec is assisting the City of Glendale with California Environmental Quality Act services for the proposed repowering (modernizing) of the Grayson Power Plant originally constructed in the 1940s. The project is subject to substantial public input and opposition. Stantec assisted with the design and maintenance of a project website, prepared an Initial Study/Notice of Preparation, led public scoping meetings, prepared the Draft EIR and led public comment meetings on the Draft EIR. Stantec regularly organized and participated in a range of community outreach activities such as meetings with homeowner's associations and nearby commercial operations and briefings to advisory commissions. Stantec's Draft EIR included multi-discipline and complex technical study to address key issues associated with re-construction and operation of a natural gas fueled electrical generation plant in an urban setting with nearby residential land uses. To address and adequately analyze the project's key issues, Stantec prepared an Architectural/Historic Resource Evaluation, Phase I and II Environmental Site Assessments, Soil Management Plan, Lead & Asbestos Survey Report, Geotechnical Study, Hazardous Materials Accidental Release Modeling, Hydrology Study, Noise Study, Traffic Study and a Visual Assessment

Study including photo-simulations to support the EIR analyses. Stantec is updating the Draft EIR to include a new alternative that includes a BESS to reduce thermal generation needs. Stantec has also been requested by the Lead Agency to prepare responses to comments and the Final EIR for City Council consideration.

2.3 Project Management and Coordination

We understand that how we deliver to the County is as important as what we deliver. Key to our success is knowledge derived from working on multiple similar projects, and how we will apply that unique knowledge to the proposed project. Our proven management approach provides the County with solutions that mitigate risk and meet project objectives and agreed upon scope, budget, and schedule milestones.

Some of our key tools include:

Critical Path Method (CPM) Scheduling: Stantec will develop a CPM schedule outlining the project's major activities and related durations. We use MS Project as our primary scheduling software.

Budget Control: We know it's important to come in on budget. Our enterprise software application allows management of project design expenditures through close monitoring and earned value analysis reporting.

Quality Control/Quality Assurance: At Stantec, we like to raise the bar on excellence. With our comprehensive quality program, we deliver services that have been through a detailed review, thereby limiting errors and omissions to provide you with high-quality products.

Value-Added Services: Because we have experts and experience in a diverse range of projects, we bring our knowledge of various construction options to designing a project that will best meet your needs.

We recognize that unexpected project changes can occur, our depth of resource capacity will ensure the project continues to run smoothly and on schedule.

The benefit to County is that in the event of unforeseen injury, illness, or family emergency, Stantec is able to quickly deploy a qualified replacement so that productivity and schedules are not impacted.

2.3.1 RISK MANAGEMENT

During project execution, we will employ our extensive knowledge to the scoping/outreach, issue area specific impact analyses, and support for the County during public hearings. Innovative team brainstorming activities with the appropriate subject matter experts, offer maximum potential for life-cycle risk avoidance and cost savings. This also helps ensure that project outcomes meet/exceed schedule, quality, and budget criteria; and avoid potential pitfalls through early identification and planning. All risks are not equal; therefore, risks are separately analyzed and then prioritized. The magnitude of each risk is evaluated in a semi-quantitative manner by calculating the expected outcome, as the product of the probability of the risk occurring, with the consequences of occurrence or failure. This screening-level analysis quickly segregates those risks that must be managed aggressively from those that require only monitoring.

2.3.2 QUALITY ASSURANCE/CONTROL

Our corporate business processes and mandatory 10-Point Project Management (PM) Framework we practice to achieve and sustain our ISO 9001 Quality Management System (QMS) certification. Our framework enables us to outline required tasks to confirm quality and manage project risk. Study Documentation

The final report is more than a formality. It documents the process of the initial project development phase, informs decision makers, and is the foundation for advancing a project. Our priority is to provide professional legally defensible documents that include effective maps, graphs, figures and tables that supplement the text. We take steps to make sure the quality and readability of our reports matches the quality of our data and solutions. That means our reports go through a review process before you see a draft, allowing you to focus on content, not corrections.

2.3.3 COMMUNICATION/COORDINATION

At Stantec, we believe strong communication is the foundation for strong client relationships. To ensure communication is always open and two-way, at a minimum we prepare monthly progress report summarizing project activities and schedule status for submission to County; depending on the level of project activity these may turn into weekly reports.

Monitoring both costs and scheduling is critical to great project management. At a minimum, the progress report will highlight significant activities completed in the reporting period and raise any issues that could affect either cost or scheduling. To give you a high-level look, we provide percent completion to indicate progress to date. We also provide a projection of activities expected during the subsequent reporting period. These reports do not contain technical or scientific information.

2.4 Staff Availability

Because Stantec offers integrated/full-service delivery, we have the ability to work collaboratively to expedite projects. Project coordination meetings are held on a frequent basis to delegate staff responsibilities and make sure that project objectives are being efficiently advanced by all team members. Because of the breadth of our resources, we are able to accommodate large volumes of work in an efficient manner. We have a local staff eager to begin work on your project and additional employees throughout the region to provide support as necessary. Drawing both on experienced personnel and state-of-the-art technology, Stantec delivers the highest level of service to our clients within a complete range of schedule requirements.

3 Scope of Work

Based on the above information and review of the RFP prepared for the Project, ongoing management of the existing similar projects, we have prepared the following scope of work. The scope of work, tasks, and timelines provided below demonstrate rigorous compliance and consistency with all requirements of law, case law, technical advisories, and accepted guidelines for analysis. Stantec has provided for close coordination with the County as this will be essential. Stantec will perform the following tasks as summarized below:

3.1 CEQA Compliance

Stantec has extensive resources dedicated to developing the most legally defensible environmental compliance program and impact assessment documents possible. We have the in-house expertise needed to prepare a well written, technically credible, and legally defensible EIR. With a team of in-house attorneys and Stantec's extensive Quality Assurance Platform, we produce well written legally defensible documents. Furthermore, beyond our experience with CEQA, Stantec has experience designing and engineering solar and battery energy storage projects. Simply put this allows the County a sounding board of hundreds of experts to conduct peer reviews, assist with potential design challenges, and most importantly identify feasible and practical solutions to any challenge the project will encounter.

4 Work Plan

The proposed scope of work that follows is organized into major tasks. Refinements to the scope of work, budget, and project schedule will be discussed, if needed, at the direction of the County.

4.1 Project Initiation, Project Description & Noticing

At the beginning of the project we will meet virtually with County staff to obtain information necessary for preparation of complete project and alternatives descriptions, establish early communication among various project team members, and become familiar with the issues and concerns identified for analysis.

The Project Description is the "sine qua non" of the EIR, or in layman's terms, an essential and indispensable element. One of the first key actions will be the formulation of a working project description for the proposed project. The Vega SES 2, 3, and 5 Solar Energy Storage Projects Description prepared in October 2020 by Apex Energy Solutions will serve as a template for the finalization of the proposed project description. We will work closely with the County to establish project objectives and to prepare a project description that accurately describes how the overall objectives are met. To develop a full and accurate Project Description, we will perform the following:

Research and Investigation. We will receive complete project information, approved by the County, to be used in developing an EIR project description. Information will include such items as documentation from the County, land use data, and existing research already completed for the proposed project. We will work with the Stantec team and the County to compile all relevant data and information needed to prepare the EIR.

Public Scoping Meeting. We will coordinate with County staff in conducting one (1) scoping meeting/workshop and will work closely with County staff and legal counsel to identify the appropriate location and time. We will work with County staff to determine the format, strategies, and content of the scoping presentation. It is anticipated we will make a formal presentation to

scoping meeting attendees summarizing the CEQA process and the relevant issues that will be evaluated in the EIR. We will conduct a public forum meeting to present the project and explain the environmental review process and provide comment cards and sign-in sheets.

Meeting graphics depicting the project and other scoping materials such as handouts will be prepared by Stantec. We will be responsible for compiling all information provided by the public for consideration in determining the issues to be analyzed in the EIR.

Stantec assumes the following deliverable will be required for the Scoping Meeting:

- One (1) electronic copy of the Summary of Comments/Meeting Minutes.
- Scoping Report.

Environmental Evaluation Committee Presentation. We will present the project at the Environmental Evaluation Committee and will work closely with County staff and legal counsel to identify the appropriate location and time. It is anticipated we will make a formal presentation to meeting attendees summarizing the CEQA process and the relevant issues evaluated in the EIR. We will prepare visuals, handouts, and other meeting materials, as necessary.

Planning Commission Meeting. We will participate in the Planning Commission hearing for a recommendation on the Project. Stantec will make a presentation and respond to questions at the hearing if required. Stantec will participate in an additional Planning Commission hearing if the Project is continued. Additional cost may be required for this scenario. Stantec will provide support to County staff at Planning Commission and Board of Supervisors meetings and/or hearings on the DEIR. Stantec assumes that the Planning Commission will hold one public hearing to provide a forum to receive public comments.

Board of Supervisors Meeting. If the project is appealed, Stantec will attend the Board of Supervisors hearing to consider certification of the EIR. Upon request, Stantec will address the Board of Supervisors during the hearing and summarize the potential environmental impacts of the project as well as associated findings.

Peer Review Technical Studies. As part of Initial Study/Administrative Draft EIR preparation, we will review the following studies provided by the applicant to determine adequacy for performing the CEQA analysis.

- Transportation/Traffic Report
- Biological Resources Report
- Cultural Resources Report
- Aesthetics/Visual Impacts Study
- Air Quality/Greenhouse Gas Study
- Noise Report
- Land Evaluation and Site Assessment Analysis (LESA)
- Fiscal Impact Analysis
- Off-site Consequences Analysis

We assume that the applicant will prepare these technical studies in order to support development of the EIR's environmental impact assessments. However, Stantec has provided a separate cost and scope for the optional preparation of the SB 610 Water Supply Assessment and Phase I Environmental Site Assessment on behalf of the applicant. Upon project initiation, our team will confirm or provide additional input based on our more detailed peer review.

Deliverables:

- Stantec will prepare a technical memo summarizing our findings of the peer review of each of the applicant's technical studies.
- Four (4) paper copies and one electronic copy of the Draft EIR outline and Project Description.

4.2 Initial Study

Stantec will prepare an Initial Study that meets the requirements of the latest CEQA Guidelines in order to scope out CEQA topics for evaluation in the Environmental Impact Report.

4.3 Notice of Preparation

Stantec assumes the County will prepare and be responsible for all mailings of the Project's Notice of Preparation (NOP). Pursuant to the Public Resources Code Section 21083.9, a public scoping meeting will be held during the NOP comment period to gather public and agency comments on the scope of the EIR, approximately halfway through the NOP 45-day review period. Stantec will attend the scoping meeting and assist the County in responding to questions regarding the environmental compliance process/content of the EIR that might be raised by agency representatives and other interested parties, as well as identify resource areas that should be removed from the scope of the Project's EIR. Stantec typically asks commenters to make written comments, so the need for a stenographer to record verbal comments is not anticipated as part of this scope of work.

Within one week of the Scoping Meeting, Stantec will provide the applicant and the County with an electronic summary of comments received at the meeting. Stantec will assist in compiling a list of all the NOP comments as necessary.

Deliverables:

- Draft summary of comments received from scoping meeting in electronic format.
- Final summary of comments received from scoping meeting in electronic format.

4.4 EIR Preparation

Stantec will prepare an EIR that meets the requirements of the latest CEQA Guidelines adopted in January 2019.

4.4.1 ADMINISTRATIVE DRAFT EIR

Once a CEQA compliant project description is agreed upon, Stantec will prepare a fully defensible EIR. The final project description will include intended uses of the EIR (as required by Section 15124(d) of the State CEQA Guidelines), including a list of responsible and other agencies expected to use the EIR in decision making, and a list of approvals for which the EIR will be used. Stantec will prepare the Administrative Draft EIR and submit ten copies to the County for review.

Pursuant to the CEQA Guidelines Section 15126.6, Imperial County CEQA Regulations, and direction from the County, Stantec will work closely with County to craft three (3) alternatives for the proposed project; particularly those needed to address any potential unavoidable and significant impacts associated with the proposed project. Stantec will also ask the County for any alternatives already considered. The alternatives analysis will provide a sufficient level of detail to

allow decision makers to gain a greater understanding of all alternatives should a determination be rendered to support an alternative development scenario. This alternatives section will culminate with the selection of the environmentally superior alternative in accordance with CEQA requirements. All impacts in the alternative's analysis will be considered at a qualitative level. Alternatives could potentially include the following: no project; an alternative site location with less significant impacts; or a project with a reduced developable footprint.

Stantec will describe the reasonably foreseeable projects within a County-approved study area that may result in cumulative impacts associated with the proposed project. Stantec will work with the County to develop the appropriate study area for cumulative projects. Often, they are defined as projects constructed, but not occupied; projects approved, but not constructed; pending projects for which pre-filing or filing of an application. However, the evaluation area for cumulative impacts would vary dependent upon the technical issue to be addressed. Findings of recent court cases will be used to address all pertinent issues. Cumulative projects will be discussed for each technical issue. The potential for impacts and levels of significance are contingent upon the radius or area of interaction with the proposed project.

Deliverables:

- Ten (10) hard copies with appendices (in three ring binders);
- Twenty (20) copies as CDs;

4.4.2 PUBLIC REVIEW DRAFT EIR

We will respond to the County comments on the Administrative Draft EIR, complete necessary revisions, and publish the Draft EIR, prior to public review. Once the product is deemed acceptable for public distribution, we will take responsibility for distribution of the Draft EIR. Stantec will prepare and circulate the Notice of Completion of the DEIR through the State Clearinghouse, to local agencies, interested persons, and for public review. Stantec will facilitate all aspects of circulation and noticing related to public review for the DEIR.

Once the DEIR is deemed acceptable for public distribution, Stantec shall prepare the necessary copies of the DEIR and deliver them to the County for distribution. It is assumed that the County shall prepare and publish all public notices including the Notice of Availability (NOA), Notice of Completion (NOC), a notice in a newspaper of general circulation, notice to all organizations and individuals previously requesting such notice, and place copies of the DEIR for review at the County and public library.

Completion of the Draft EIR. We will incorporate any minor last-minute changes the County requests and will prepare and publish the Draft EIR for the required 45-day public review period, performing all noticing requirements.

Deliverables:

- One (1) copy of the Draft EIR in an HTML, or other acceptable web-friendly format, so text and graphics can be easily placed on the County's web site; (this shall include breaking the document in smaller, easily downloadable portions).

4.4.3 FINAL EIR

Administrative Draft Final EIR. The County will compile and transmit to us all written comments on the Draft Program EIR. We will confer with County staff to review written comments on the Draft EIR and comments from public meetings and hearings to develop a general framework and

strategies for preparation of responses. We will prepare thorough, reasoned, and sensitive written responses to relevant environmental issues. Master responses will be used to the extent possible with the assumption that the Responses to Comments will not exceed the lesser of 50 comment letters or 100 individual comments.

Deliverables:

- Ten (10) hard copies with appendices (in three ring binders);
- Twenty (20) copies as CDs;

Final EIR. The County will provide the responses to comments to the applicable agencies at least 10 days prior to the public hearing.

The Final NOD is assumed to be filed with the County Clerk within 5 working days of the project approval. We assume the County will provide the funds necessary for all filing fees at the time of filing the NOD.

The Final EIR will contain the following chapters and items:

- Introduction
- Changes to the Draft EIR
- Index to Comments and Responses
- Each comment letter with individual comments bracketed and numbered followed by response to comments

Deliverables:

- Ten (10) hard copies with appendices (in three ring binders);
- Twenty (20) copies as CDs;

4.4.4 MITIGATION MONITORING AND REPORTING PROGRAM

We will prepare a Draft MMRP in accordance with Public Resources Code section 21081.6. The MMRP will be designed to ensure compliance with adopted mitigation requirements during project implementation. In coordination with County staff, we will prepare the MMRP for mitigation measures that address significant impacts.

After review and comment from the County on the Draft MMRP, we will revise the MMRP, according to the comments provided, and will submit two paper copies, one camera ready original, and one copy on CD/PDF format of the Final MMRP with the submittal of the Final EIR.

Deliverables:

- Two paper copies, one cameral ready original, and one CD/PDF of the Final MMRP

4.4.5 CEQA FINDINGS

Pursuant to Sections 15091 and 15093 of the State CEQA Guidelines Stantec will draft written findings for each of the significant effects identified in the EIR. A Statement of Overriding Considerations will be prepared for all potentially significant impacts that would not be avoided or substantially reduced to a less than significant level.

4.4.6 PUBLIC HEARINGS/PUBLIC ENGAGEMENT AND PROJECT MANAGEMENT/COORDINATION

We will manage the preparation of the EIR and maintain close communication among County staff and project team members. This task is intended to ensure the project is running on time and within budget and is technically correct and legally defensible. Our project manager, with the support of the management team, will provide management liaison among the project team and County staff for communication of issues, transmittal of comments, financial management (i.e., invoices), and other project management matters. Project management for the EIR process will be carried out in accordance with Stantec's rigorous Project Management program. This is one of the benefits of having the document prepared by a single firm.

We have extensive experience in public outreach programs and scoping, including public participation programs and public hearings. We will be present at public meetings and hearings to develop an understanding of the public's comments and concerns, be available to answer questions on environmental issues, and make presentations on the EIR.

Our role is as follows:

Attend up to three internal team meetings (in addition to the kickoff meeting) with Stantec and the County. The Stantec management team will coordinate with the County on needs for the meetings including logistics, materials, and proposed agenda. The Project Manager and up to two (2) members of the Stantec team will attend these meetings. In coordination with the County Stantec will prepare a presentation for the scoping meeting that outlines general project information, the CEQA process, and the proposed schedule for the project. Stantec will compile all comments, both written and oral, from the meeting/workshops that will be used to prepare a Scoping Report that will detail all the scoping comments received; this information will be included and addressed in the EIR.

The Stantec team will assist the County in the planning and preparation for these workshops. The Stantec team is well versed in preparing and presenting at these types of meetings and will prepare a PowerPoint presentation suitable for public review that summarizes the project, goes over the findings of the Draft EIR, and discusses analyzed alternatives. Stantec will prepare visual aids and project related information that can be passed out to the public during the workshop. The Stantec Project Manager and up to two (2) team members will attend each of the workshops. Stantec will attend up to two (2) public hearings in support of the CEQA process for the EIR. The Project Manager and up to three (3) additional team members will attend two (2) of the hearings; the two (2) remaining meetings will be attended by the Project Manager and one (1) team member. Stantec will prepare presentations and review pertinent documents or information based on submitted or anticipated comments. It is assumed that the County will coordinate logistics and advertising for the hearings and arrange for all necessary equipment and/or special services (i.e., translators).

5 Assumptions

Document Review:

The successful completion of the EIR and deliverables described in this scope of work, within the allotted schedule and budget, is wholly dependent upon the timely and efficient review of submitted deliverables. Stantec assumes that the County will coordinate document review and provide Stantec with one reconciled and consolidated set of comments for each deliverable. Should prolonged time be required to provide review comments by the County or applicant, Stantec is not responsible for schedule slip. Should additional review cycles with more than one party be required, or if multiple sets of review comments are received, responding to such comments would be considered out of scope and additional budget would be requested to respond to more than one set of reconciled comments.

Biological Resources:

- Stantec assumes the applicant and their consultant will prepare a Biological Resource Study to perform surveys (wetlands, reconnaissance-level or protocol level species surveys) that may be required to adequately develop the biological resources section of the EIR.
- Stantec also assumes that any environmental permitting for the project will occur prior to construction and any permitting requirements for the project are not included in the scope for this peer review or the development of the EIR.

Cultural Resources:

- Stantec assumes the applicant and their consultant prepare a Cultural Resource Study.
- Stantec assumes that the County will perform the required AB 52 consultation.
- Stantec assumes intensive archaeological surveys for the Project Area will be completed by the applicant and their consultant.
- Stantec assumes CEQA level/ California Register of Historical Resources (CRHR) evaluation of any cultural resources within the Project Area will be completed by the applicant or their consultant and will be part of the Project Cultural Resources Report.
- Stantec assumes qualified Stantec archaeologists will have full access to the cultural resources records search results, the paleontological record search results from the Native American consultation record/results, and survey results for incorporation into the Project EIR Cultural Resources section.
- Stantec assumes all figures and their associated GIS files used for the Project Cultural Resources Report will be provided to Stantec.

Hazards and Hazardous Materials:

- Stantec assumes subsurface investigations including soil sampling, exploratory bore holes, or other investigative techniques to quantify potentially identified hazardous materials is not included within the scope of this environmental assessment.
- Stantec assumes asbestos, lead-based paint, and radon gas surveys are not included within the scope of this environmental assessment.

Technical Studies:

- Stantec's scope of work include reviewing and commenting on the adequacy of the applicant's prepared technical studies. However, Stantec has provided optional tasks to prepare the Phase I Environmental Site Assessment and SB 610 Water Supply Assessment.

Phase I Environmental Site Assessment:

- Stantec has provided an optional task to prepare a Phase I Environmental Site Assessment in accordance with relevant ASTM standards that will be used to support the preparation of the EIR.

SB 610 Water Supply Assessment:

- Stantec has provided an optional task to prepare a Water Supply Assessment consistent with the requirements of SB 610 that will be used to support the preparation of the EIR.

Fiscal Impact Analysis:

- Stantec assumes the applicant will prepare a Fiscal Impact Analysis that will be provided upon project kickoff. However, if requested by the County and the applicant, Stantec can prepare a separate scope and budget for preparation of this technical study.

Off-site Consequence Analysis:

- Stantec assumes the applicant will prepare an Off-site Consequence Analysis that it will be provided upon project kickoff. However, if requested by the County and the applicant, Stantec can prepare a separate scope and budget for this technical study.

Contingency:

Stantec's obligation to update the applicant's technical studies is contingent upon Stantec's determination that the applicant's technical studies are inadequate for CEQA analysis. A contingency rate of up to 20% of the project's total budget shall be applied in order to respond to potential inadequacies in the applicant's technical studies. In the event Stantec will need to exercise the contingency, Stantec will provide the applicant with a written scope of services and cost estimate for the requested services. Stantec will not exceed this contingency authorization without prior approval from the applicant. If Stantec finds that the applicant's technical studies are adequate, then Stantec may choose to not exercise the 20% contingency and not apply it to the project budget.

6 Conflicts

Stantec is not aware of any conflict or potential conflict to serve as the County's consultant for this project. Stantec is not currently engaged, nor have we in the past engaged in any work for the applicant. While we do not believe any current or past work in Imperial Valley poses a conflict with the Vega SES 4 Solar Project, in the spirit of transparency Stantec discloses that we are currently under contract to support development of two green energy projects within Imperial County. They include:

- **Orni Wister Solar Project located at 8601 Wilkins Road in Niland, California.**

ORNI 21, LLC (Orni) is proposing to build, operate and maintain a solar power plant on private lands owned by Orni in unincorporated Imperial County. The Wister Solar Energy Facility will use photovoltaic (PV) technology and would include the construction and operation of a 40 Megawatt (MW) solar farm on approximately 300-acres within the 640-acre Section (T10S, R14E, Section 27) owned by ORNI 21, LLC. The Project is located within Assessor's Parcel No. 003-240-001 and is currently zoned Open Space/Preservation with Geothermal Overlay (S-2-G). The proposed site is located east of the intersection of Wilkins and Wiest Roads, about 3-miles north of the unincorporated town of Niland

- **ConEdison Westside Canal Battery Energy Storage Project**

Stantec was hired to by the County of Imperial to prepare the Environmental Impact Report for the Westside Canal Battery Energy Storage Project. Consolidated Edison Development (CED) is proposing to develop the Westside Canal Battery Storage Project, which would provide a utility-scale energy storage complex with solar panels, lithium ion battery systems, and/or flow battery technologies distributed throughout the project site. The proposed project would allow for excess, intermittent renewable energy to be stored and later dispatched optimally back into the electric grid as firm, reliable generation. The proposed project complements both the existing operational renewable energy facilities, and those planned for development, in Imperial County.

7 Proposed Schedule & Cost Estimate

PROJECT WORK/MILESTONE	Number of Weeks
Project Initiation / Project Description	**3 weeks**
County Review and Approval of Draft Project Description	**2 weeks**
Initial Study	**4 weeks**
Notice of Preparation and Scoping Meeting	**2 weeks**
Prepare Administrative Draft EIR for Review 1	**12 weeks**
County Review 1 of Administrative Draft EIR	**2 weeks**
Prepare Administrative Draft EIR for Review 2	**3 weeks**
County Review 2 of Administrative Draft EIR	**2 weeks**
Prepare and Publish Public Draft EIR	**2 weeks**
Draft EIR Public Review Period	**4 weeks**
Prepare Administrative Final EIR and MMRP for Review 1	**4 weeks**
County Review 1 of Administrative Final EIR and MMRP	**2 weeks**
Prepare Administrative Final EIR and MMRP for Review 2	**2 weeks**
County Review 2 of Administrative Final EIR and MMRP	**2 weeks**
Prepare Final EIR and MMRP	**2 weeks**
Prepare Draft Significant Findings & Statement of Overriding Considerations	**3 weeks**
County Review of Significant Findings & Statement of Overriding Considerations	**2 weeks**
Prepare Final Significant Findings & Statement of Overriding Considerations	**1 week**
Total	**54 weeks**

Tasks	Christine Abraham	Robert Prohaska	Technical Leads	Technical Staff	Total Hours	Expenses	Cost Per Task
Project Initiation							**$47,500.00**
Research	2		8	24	**34**		$4,750.00
Data Collection	2		8	24	**34**		$4,750.00
Peer Review of Technical Studies	4	4	20		**28**		$5,000.00
Project Initiation Meeting	4	4			**8**	$500.00	$2,000.00
Initial Study	16	2	40	120	**178**		$25,200.00
Notice of Preparation	4		8		**12**	$500.00	$2,600.00
CEQA Notices	4			16	**20**	$500.00	$3,200.00
Administrative Draft EIR							**$47,375.00**
Meetings with County	8	4	16		**28**		$5,000.00
Draft CEQA Sections	16	16	65	200	**297**		$42,375.00
Public Review Draft EIR							**$39,250.00**
Document Preparation	8	8	40	150	**206**	$500.00	$29,250.00
CEQA Notices	4			16	**20**	$500.00	$3,200.00
Meetings with County	8	8	16		**32**	$1,000.00	$6,800.00
Final EIR							**$56,525.00**
Document Preparation	4	4	30	80	**118**	$500.00	$17,250.00
Response to Comments	8	8	24	50	**90**		$13,450.00
CEQA Noticing	4	2		8	**14**	$500.00	$2,600.00
Meetings with County	8	8			**16**	$1,000.00	$4,000.00
Attendance at Planning Commission	8	8			**16**	$1,000.00	$4,000.00
Mitigation Monitoring and Reporting Program	2	2	8	24	**36**		$5,150.00
CEQA Findings and Notice of Determination	4	4	24	35	**67**		$10,075.00
Total Hours:	**118**	**82**	**307**	**747**	**1,254**		
Hourly Rate	**$175.00**	**$200.00**	**$175.00**	**$125.00**			
TOTAL COST	**$20,650**	**$16,400**	**$53,725**	**$93,375**		**$6,500**	**$197,150.00**
20% CONTINGENCY							**$39,430.00**

Optional Technical Studies							
SB 610 Water Supply Assessment	4	4	16	29	**53**		$7,925.00
Phase 1 ESA	8	8	30	30	**76**		$12,000.00
Total Cost							**$19,925.00**

APPENDICES

8 Resumes

Christine Abraham Esq.

Principal Planner
17 years of experience · Los Angeles, California

As an environmental consultant with more than 16 years of experience in environmental review and California Environmental Quality Act (CEQA) compliance documentation, Christine has prepared and managed all levels of CEQA documentation, from Notices of Exemption and Initial Studies in support of Mitigated Negative Declarations (MNDs) to Environmental Impact Reports (EIRs) and Sustainable Communities Environmental Assessments (SCEAs). In addition to document preparation, Christine draws from her legal background to provide a thorough peer review of environmental documents to ensure defensibility, as well as engaging in litigation support when needed.

EDUCATION

JD, Certificate in Environmental and Natural Resources Law, Northwestern School of Law of Lewis & Clark College, Portland, Oregon, United States, 1999

BS, Safety and Systems Management (Emphasis: Occupational and Environmental Health and Safety), University of Southern California, Los Angeles, California, United States, 1993

CERTIFICATIONS & TRAINING

29 CFR 1910.120, OSHA 40-Hour HAZWOPER Certification, Simi Valley, California, United States, 2019

PROJECT EXPERIENCE

ConEdison Westside Canal Battery Energy Storage Project | Imperial County, California | CEQA Manager

Christine is currently supporting the preparation of the Environmental Impact Report for the ConEdison Westside Canal Battery Energy Storage Project in Imperial County. Christine is working hand in hand with the County of Imperial and the applicant, Consolidated Edison Development (CED) to develop the Westside Canal Battery Storage Project, which would provide a utility-scale energy storage complex with solar panels, lithium ion battery systems, and/or flow battery technologies distributed throughout the site. Christine is preparing the Environmental Impact Report on behalf of the County of Imperial and leading the project through the entitlement and community outreach process.

Ormat Wister Solar Project | Imperial County, California | CEQA Manager

Christine is currently supporting the review and comment of the Environmental Impact Report for the Wister Solar Project in Imperial County. Christine helped process the Zone Change, General Plan Amendment, and Conditional Use Permit Application on behalf of ORNI 21, LLC (Orni) for the Wister Solar Energy Facility in unincorporated Imperial County.

United Technologies Corporation Soil Management Plan* | Los Angeles, California | Project Manager

As part of a prior and separate environmental action at UTC's former Rocketdyne plant site (Canoga Park community of Los Angeles), Christine managed the preparation of an MND for a related Soil Management Plan, which is currently under review by the Los Angeles Regional Water Quality Control Board. Site-specific remediation goals were established to provide clean-up standards for the site, as required by the Regional Board, and to comply with UTC's environmental due diligence policies. Necessary actions include the abatement and demolition of existing structures to remediate and remove impacted soil and concrete across the 47-acre former rocket engine manufacturing plant.

United Technologies Corporation Interpretive and Commemorative Plan | Present | Project Manager

To implement mitigation required as part of the UTC Soil Management Plan MND, Christine is managing and coordinating the ongoing effort related to the development and implementation of the Interpretive and Commemorative Program (ICP) for the former Rocketdyne plant. In cooperation with ESA's historical resources professionals, Christine has been managing the effort to advance the development of cutting-edge mitigation under design to address the necessary demolition of the former Rocketdyne plant. Elements of the ICP are currently under review by the City of Los Angeles Office of Historic Resources and are planned to include 3-D laser scanned images of the plant, video footage for a documentary film, and a virtual reality module for educational and interpretive purposes.

Exide* | Los Angeles, California | Planner

Christine assisted with strategic input on the development of project alternatives, review of mitigation feasibility preparation, and jurisdictional issues related to the EIR under development by ESA staff on behalf of the Department of Toxic Substances Control. The Exide EIR evaluates the impacts of lead cleanup activities from impacted soils at 10,000 residences surrounding the former Exide battery recycling facility in Vernon, California. The Preliminary Investigation Area includes seven jurisdictions in an approximately 1.7-square-mile area.

** denotes projects completed with other firms*

Robert F. Prohaska PMP, LEED AP

Project Manager

Robert has 33 years of experience preparing environmental documents compliant with the California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA), California Public Utilities Commission (CPUC), as well as California Energy Commission (CEC), and environmental permitting and construction compliance. He has completed Environmental Impact Reports (EIR) and Statements (EIS), international Environmental Impact Assessments (EIA), Proponent's Environmental Assessments (PEA), and Applications for Certification (AFC) for a wide variety of clients and projects. Robert has managed several large and complex EIS and EIR projects involving multiple stakeholders and government agencies. Consequently, he is adept at preparing these documents to satisfy NEPA and CEQA, both from a procedural and technical standpoint. Robert has managed numerous environmental compliance programs for construction of energy facilities for owners, as well as in a third-party oversight role.

Robert has developed a talent for helping resolve complex and controversial environmental issues by building consensus among diverse stakeholder groups. He has been recognized for proactively identifying project challenges and finding solutions before they become obstacles to project success. Robert is certified by the Project Management Institute as a Project Management Professional and utilizes universally recognized project management best practices to guide project execution. He has held business unit and office management responsibilities and served in senior leadership positions.

EDUCATION

MS, Environmental Health Services, University of California, Los Angeles, Los Angeles, CA, 1999

BA, Geography, University of California, Santa Barbara, Santa Barbara, CA, 1984

MEMBERSHIPS

Member, Solar Energy Industries Association

Member, American Wind Energy Association

Certified Project Management Professional, Project Management Institute

Member, California Association of Environmental Professionals

Sunrise Powerlink Project*, San Diego and Imperial Counties, CA (Project Manager)
Client: San Diego Gas and Electric
Robert provided management oversight of staff biologists, including biological monitoring of survey crews and structure surveys in accordance with Sempra's 50-year Natural Community Conservation Plan. He also managed a team that provided compliance monitoring services during project construction. The project footprint covers approximately 115 miles of existing and proposed transmission lines and associated existing and proposed access roads for the preferred route and substations.

** denotes projects completed with other firms*

Robert F. Prohaska PMP, LEED AP

Principal, Environmental Permitting and Planning Program / Project Manager

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Solar Gen 2 Solar Array Project*, Imperial County, CA (Project Director)
Client: Imperial County Planning Department
The Solar Gen 2 Solar Array Project consists of four solar facility sites (Alhambra, Arkansas, Mayflower, and Sonora) comprising 2,000 acres of agricultural land and when completed would generate 200 MW of power. Each of these four parcels was submitted as a separate CUP application to Imperial County for use as solar power plants. Robert served as Project Director for the EIR that evaluated all four project sites as a single project.

8minutenergy Cluster I Solar Farm Power Plants Project*, Imperial County, CA (Project Director)
Client: Imperial County Planning Department
This project proposed by 8minutenergy is comprised of three composite parcels - Calipatria Solar Farm I, Midway Solar Farm I, and Midway Solar Farm II) on 1,731 acres that would generate up to a total of 275 MW of power. Each of these composite parcels was submitted as separate Conditional Use Permit applications to Imperial County for use as solar power plants. Robert served as project director for the EIR that evaluated all three composite parcels as a single project.

Bureau of Land Management South Coast and El Centro Field Office Solar Project Planning and Environmental Support Services*, Riverside and Imperial Counties, CA (Project Director)
Client: Bureau of Land Management
Robert provided project management services to the BLM planning and environmental review process for multiple solar and wind energy projects within the Palm Springs and El Centro field offices. He prepared BLM documents, including plan of development review, data adequacy standards, EIS review and preparation, regulatory agency coordination, GIS services, and technical studies including biological and cultural resource assessments.

Ocotillo Wind Farm Express*, El Centro, CA (Project Director)
Client: Bureau of Land Management
Robert oversaw staff support services to the BLM California Desert Conservation Area District Office and El Centro Field Office. This is a 12,500-acre, 465 megawatt wind energy project developed by Pattern Energy that includes a substation, transmission facilities, administration facilities, operations and maintenance facilities, and temporary construction lay-down areas. The project is located almost entirely on BLM administered lands in the Imperial Valley, approximately 5 miles west of Ocotillo, Imperial County, California. Robert served as third-party consultant under the direction of the BLM El Centro Field Office. Specifically, his team helped implement the BLM NEPA process, including review and support for the project's Plan of Development, Notice of Intent, formal scoping meetings, Plan Amendment to the BLM California Desert Conservation Area Plan, EIS/EIR, required technical studies, Notice of Availability, the Record of Decision, and Administrative Record.

** denotes projects completed with other firms*

Robert F. Prohaska PMP, LEED AP

Principal, Environmental Permitting and Planning Program / Project Manager

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Ormat Imperial Valley PV Project*, Imperial Valley, CA (Project Manager)
Client: Ormat
Robert helped identify entitlements and reviewed environmental photovoltaic (PV) power plants at separate locations predominantly located on former and current agricultural lands within Imperial Valley. He managed Conditional Use Permit applications and associated permitting tasks on these projects and acted as an extension of the client's permitting staff. Robert also provided the client with regular reports and status reports on the progress of the permitting task, as well as identified challenges to the permitting process and recommendations to overcome these challenges.

Salton Sea Restoration Plan Feasibility Study*, Imperial Valley CA (Deputy Project Manager)
Client: Salton Sea Authority
Deputy Project Manager for feasibility studies of various restoration scenarios of the Salton Sea. Services provided include coordination of the public relations and public involvement program as well as overall program management and as-needed support. The restoration program is one of the largest restoration programs in the western United States and is closely linked with California's Colorado River allotment and pending water transfer and supply agreements.

Delta Distribution Planning Area Capacity Increase Substation Project*, Antioch, CA (Senior Advisor)
Robert directed staff to develop a PEA for the siting and construction of a new 230 kV/21 kV distribution substation and associated 230 kV transmission supply extensions at four alternative locations in the San Francisco East Bay.

Sunrise Powerlink Project*, San Diego and Imperial Counties, CA (Project Manager)
Robert provided management oversight of staff biologists, including biological monitoring of survey crews and structure surveys in accordance with Sempra's 50-year Natural Community Conservation Plan. He also managed a team that provided compliance monitoring services during project construction. The project footprint covers approximately 115 miles of existing and proposed transmission lines and associated existing and proposed access roads for the preferred route and substations.

North American Electric Reliability Corporation (NERC) Alert Environmental Support*, CA (Senior Advisor)
Robert provided comprehensive environmental services in support of PG&E's NERC Alert program to assess their high-voltage transmission lines and upgrade transmission facilities to current standards. He was instrumental in assembling a team on very short notice when he assumed responsibility from another contractor. Robert led plan development in partnership with PG&E that minimized work flow disruption and maintained continuity of well-established procedures during transition to the new program team.

** denotes projects completed with other firms*

Kevin Kohan MPA

Senior Environmental Planner

Kevin coordinates major land development projects through the administrative review process at local, state, and federal levels for both public agency and private sector clients. He manages inter-disciplinary teams of regulatory compliance experts, planners, landscape architects, biologists, wetlands specialists, and mitigation monitors. Kevin has consulted on numerous endangered species Section 7 assignments—including coordinating a team of water engineers on implementing reclaimed water usage in Castaic, California. His clear understanding of state water issues and associated environmental policies has resulted in successfully working with the Riverside County Habitat Conservation Agency-Endangered Species. Additionally, Kevin has prepared and processed resource permits through the USACE, USFWS, CDFW, and RWQCB.

Kevin has served as a planner for both the private and public sectors, including the Cities of Anaheim , Pico Rivera, and Lake Elsinore where he managed environmental compliance activities for a number of major master planned communities—such as a 1,400-acre Lake Elsinore master planned community involving mining-related SMARA compliance matters.

From preparing Initial Studies (IS), Environmental Assessments (EA), Negative Declarations (ND), and Mitigated Negative Declarations (MND), to Environmental Impact Reports (EIR), Environmental Impact Statements (EIS), and joint CEQA/NEPA documents for major land development projects, Kevin brings a wealth of knowledge in applying laws, codes, ordinances, and regulations regarding general plans, zoning, and land division.

EDUCATION

MA, Urban Planning, University of Southern California, Los Angeles, Los Angeles, California, 2013

BS, Urban Planning, California Polytechnic State University, Pomona, Pomona, California, 2011

PROJECT EXPERIENCE

Transmission & Distribution

Southern California Edison Valley-Ivyglen Subtransmission Line Project Phase 11*,*, Riverside, California (Urban Planner)
Kevin managed the effort to obtain discretionary permit approvals including processing of USACE 404, CRWQB 401, and CDFW 1603 permits. Kevin prepared biology surveys for burrowing owls and MSHCP compliance for multiple plants and animal species.

Water

Alberhill Ranch Sewer Lift Station*, Lake Elsinore, California (Urban Planner)
Kevin prepared biological surveys and site selection analysis for alternative land planning studies.

Residential Development

Brighton Specific Plan*, Lake Elsinore, California (Urban Planner)
Kevin preformed biological studies for the Southern California Edison Ivyglen Sub-Transmission lines. Kevin also conducted jurisdictional delineations and Habitat Mitigation Monitoring Plans (HMMP) for a large ephemeral stream along Lake Street.

** denotes projects completed with other firms*

Daryl Zerfass TE, PTP

Principal, Transportation Planning & Traffic Engineering

Daryl has more than 28 years of experience in multiple aspects of traffic engineering and transportation planning. He has a proven record of managing large-scale traffic studies efficiently and effectively. His projects include freeway facility and interchange studies for PSRs and PRs, traffic impact studies for large-scale development projects, transportation studies for Specific Plans and General Plan updates, large-area transportation studies, corridor studies, transportation nexus fee studies, traffic model development, and land-use related circulation studies. Daryl views every project as an opportunity to develop innovative transportation solutions and is committed to expanding accessibility for all members of the community.

EDUCATION

Bachelor of Science, Civil Engineering, University of California, Irvine, California, 1990

REGISTRATIONS

Professional Transportation Planner #454, Transportation Professional Certification Board Inc.

Licensed Traffic Engineer #1824, State of California

MEMBERSHIPS

Associate Member, American Society of Civil Engineers

Member, Orange County Traffic Engineers Council

Member, Institute of Transportation Engineers

Traffic Studies

Fontana General Plan Update, Fontana, California (Transportation Lead)
Project Value: USD 2M
Daryl led the traffic analysis and circulation element update being prepared as part of Fontana's 2018 General Plan update. A comprehensive best practices report was prepared to inform the City and the steering committee of current planning practices regarding topics such as mixed-use development, complete streets, VMT analysis, and multi-model transportation options. A version of the SBTAM traffic model was customized specific to the General Plan update to use for calculating VMT metrics and roadway traffic forecasts. Multiple community outreach events were held to determine the public's wishes and concerns regarding transportation in the City, which were used to develop new Goals and Policies for the Circulation Element and was a resource document for the project's EIR.
Role: Transportation Lead | Cost: $1.7M | Dates involved: 02/2015-02/2019

** denotes projects completed with other firms*

Daryl Zerfass TE, PTP

Principal, Transportation Planning & Traffic Engineering

Pereira Drive Collector Road Study and Improvements, Irvine, California (Project Manager)
Daryl is managing safety enhancements and circulation improvements for this high visibility roadway corridor adjacent to the UC Irvine campus facilities. The identified improvements range from operational modifications, such as rerouting access to the heavily utilized parking lots, to safety enhancements like raised crosswalks and bikeways separated from motor vehicle traffic. Recommendations provided in the corridor study are being used to develop improvement plans for constructing the safety and mobility enhancements along the corridor.

Traffic Impact Assessments

Sand Canyon Plaza Traffic Impact Analysis, Santa Clarita, California (Project Manager)
Daryl is project manager for the preparation of the traffic impact analysis that is evaluating the proposed development of 580 residential units and a retail and assisted living facility. The project effort includes the design of two modern roundabouts for project access and an impact analysis for the project's EIR.

The Masters College Master Plan Traffic Studies, Santa Clarita, California (Project Manager)
Daryl is the project manager for the preparation of a traffic impact analysis for the proposed revision to the Master Plan for The Masters College. Daryl prepared the traffic study for the Master Plan in 2008, with is used to guide future development of college facilities. The traffic study also addressed supplemental issues such as the Dockweiler Drive extension. For the current analysis, various circulation system and site access alternatives are being evaluated.

Gates/King Industrial Park Traffic Studies, Santa Clarita, California (Project Manager)
Daryl is the project manager for the preparation of a traffic studies in support of this 4.4 million square foot industrial and business park development in the southwest portion of the City of Santa Clarita. Daryl prepared the original traffic impact analysis that was used for the project's EIR, and is currently assisting the City and the master developer with supplemental analysis addressing site access and the phasing of off-site improvements.

Northlake Traffic Impact Study, Castaic, California (Project Manager)
Daryl is project manager for the preparation of a traffic studies in support of this project site in the Castaic area north of the City of Santa Clarita. A Specific Plan allowing for the development of 3,600 homes was approved in 1992. In the subsequent years, the project has changed ownership multiple times and Daryl has provided assistance in due diligence efforts, alternatives analysis, and is working with the current owners with the preparation of a traffic impact analysis in support of the project's supplemental environmental impact report and first vesting tentative tract map.

Tesoro Del Valle Areas B & C Redesign Traffic Impact Study*, Santa Clarita, California (Project Manager)
Daryl was project manager for the preparation of traffic studies in support of the development of 714 single family homes in the area just north of the City of Santa Clarita. Daryl prepared the traffic impact analysis in support of the project's EIR, and is currently assisting the developer of the site with ongoing analysis work related to site specific items.

** denotes projects completed with other firms*

Jaret Fischer PE

Principal Engineer

Jaret is a Principal Engineer working in Stantec's Redlands, California office. He specializes in geotechnical and environmental engineering, and has more than 15 years of experience in the industry. His responsibilities include managing geotechnical and environmental portfolios and projects for several major oil company clients, solar energy clients, and supporting the geotechnical needs of other regional offices. His duties include conducting and managing subsurface investigations, installing and monitoring geotechnical instrumentation, communicating with clients, managing project budgets, preparing project scopes, completing analyzing laboratory data and potential geologic hazards, preparing geotechnical reports, compaction reports, construction management and oversight, geotechnical soils laboratory testing, and researching and writing Phase I and Phase II environmental site assessments.

In addition, Jaret has a strong background in landfill design and Construction Quality Assurance (CQA) services for the fabrication of leach pads in landfills and heap leach pads in mines; he is familiar with many aspects of soils and geosynthetics testing as they pertain to CQA services.

EDUCATION

BS, Environmental Resources Engineering, Humboldt State University, Arcata, California, 2001

REGISTRATIONS

Professional Engineer #PE-16938, State of Hawaii

Professional Engineer #90587PE, State of Oregon

Professional Engineer #22499, State of Nevada, exp. 6/30/2015

Professional Engineer #50777, State of Washington, expires 5-18-2014

Professional Engineer #113530, State of Texas, Expires: 12/31/2014

Professional Engineer #80383, State of California, expires 2015/03/31

Professional Engineer #54142, State of Arizona

PROJECT EXPERIENCE

Environmental Site Assessments Phase I, II, III

Environmental Site Assessments, Various Locations, California, Nevada, Arizona, and Washington (Project Engineer)

As part of ongoing contracts, Jaret performs Phase I and II environmental site assessments for commercial and industrial property transfers in California, Nevada, Washington, and Arizona. Clients include BP West Coast Products, LLC, Chevron Environmental Management Company, The Olson Company, CT Realty, and G&L Commercial.

Role: Project Manager | Cost: Unknown | Dates involved: 04/2002-Ongoing

Power

Grayson Power Plant, Glendale, California (Senior Engineer)

Jaret completed the geotechnical investigation for the proposed partial rebuild of the Grayson Power Plant located in Glendale, California.

** denotes projects completed with other firms*

Jaret Fischer PE

Principal Engineer

Recurrent Energy Victor Phelan Solar One Gen-Tie, San Bernardino County, California (Senior Engineer)
Jaret managed soils inspectors during the grading and backfill and provided geotechnical support for the grading contractor.

WP3 Project, Southern California, California (Senior Engineer)
Jaret managed concrete inspectors during the grading and backfill and provided geotechnical support for the grading contractor. In addition, he coordinated materials laboratory testing including soils and concrete in accordance with the project specifications and environmental laboratory testing for import and export soils.

Tioga Pass (Highway 120), Sierra Nevada Mountains, California (Senior Engineer)
Jaret managed soils inspectors during the grading and backfill and provided geotechnical support for the grading contractor.

Recurrent Energy Barren Ridge and Recurrent Energy Cinco Gen-Tie and Substation, Kern County, California (Senior Engineer)
Jaret completed the geotechnical investigation for the proposed RE Cinco Gen-Tie and RE Barren Ridge Substation in Kern County, California.

San Francisco Service Center, San Francisco, California (Senior Engineer)
Jaret completed the geotechnical investigation for shoring during the proposed remedial excavation.

Hinkley, Hinkley, California (Senior Engineer)
Jaret oversaw and completed laboratory testing during groundwater monitoring well installation.

66kV Replacement Project, Southern California, California (Senior Engineer)
Jaret managed certified engineering geologists, soils and concrete inspectors during the grading and backfill and provided geotechnical support and geologic mapping for the grading contractor. In addition, he coordinated materials laboratory testing including soils and concrete in accordance with the project specifications.

** denotes projects completed with other firms*

Jason J. Stagno CAC, LIA

Senior Scientist

Jason is a California Certified Asbestos Consultant and Lead Related Construction Inspector/Assessor with more than eleven years of environmental consulting experience. His experience includes Phase I and II environmental site assessments, groundwater assessments, asbestos surveys, lead-based paint surveys, hazardous materials assessments, vapor sampling, sampling for polychlorinated biphenyls (PCBs) in caulk and sealants, remedial investigations, air monitoring, personal noise dosimetry, and biological surveys.

His experience also includes assisting with the preparation of numerous California Environmental Quality Act (CEQA) Initial Studies and Environmental Impact Reports. Jason is proficient with preparing air quality, greenhouse gases, and noise impact analyses sections and technical studies.

REGISTRATIONS

Certified Asbestos Consultant #12-4949, State of California

Lead Inspector/Risk Assessor #19068, California Department of Public Health, Issued 2010, Expires 2011

PROJECT EXPERIENCE

Asbestos Sampling

Asbestos Surveys, Various Locations, California (Associate Scientist)

Jason worked under the direction of a Certified Asbestos Consultant in conducting asbestos surveys on commercial buildings, including visual inspection for representative homogeneous areas of suspect asbestos-containing materials. This also included collecting bulk samples of suspect asbestos-containing materials and submitting the bulk samples under chain of custody to certified laboratories for analysis.

Asbestos, Lead Based Paint, and Hazardous Material Management

Asbestos and Lead-Based Paint Surveys, Various Locations, California, Oregon, Washington, Arizona, New Mexico (Senior Scientist)

Jason has conducted and managed multiple pre-renovation/demolition surveys for asbestos and lead-based paint in addition to quantification of universal wastes (polychlorinated biphenyls [PCBs], mercury-containing equipment, refrigerants, etc.) that would require special handling.

Assessment, Health Risk Evaluation, and Remediation of Soil Vapor

Vapor Intrusion Assessment, Fuel Terminal, Los Angeles, California (Project Scientist)

Jason performed indoor, ambient air, sub-slab, and depth discrete soil vapor sampling to assess vapor intrusion in four large commercial buildings resulting from fuel releases at the terminal.

Confidential Healthcare Provider, Various Locations, California (Project Scientist)

Jason conducted indoor and ambient air sampling to determine whether or not sites had been impacted by chlorinated and/or petroleum hydrocarbons in soil vapor resulting from nearby releases.

Jason J. Stagno CAC, LIA

Senior Scientist

Biological Monitoring

Blunt-Nosed Leopard Lizard (BNLL) Surveys, Kern County, California (Associate Scientist)

Jason conducted Blunt-Nosed Leopard Lizard (BNLL) surveys (under protocol developed by the San Joaquin Valley Southern Sierra Region [SJVSSR] of the California Department of Fish and Wildlife [CDFW] with input from the United States Fish and Wildlife Service [FWS], the Bureau of Land Management [BLM], and various species experts) on several sections of the Elk Hills oil field. Jason obtained the status of Level II: Researcher by demonstrating the ability to distinguish BNLL from other common lizard species that may inhabit the area (with at least one confirmed field sighting as defined by the CDFW and submission to the California Natural Diversity Database) and participating in at least 50 survey days for BNLL. These surveys also included the identification and GPS mapping of other protected, endangered, or animal species associated with BNLL habitat.

Environmental Site Assessments Phase I, II, III

Combined Phase I and II Environmental Site Assessments (ESA) (Project Manager)

Jason served as project manager for combined Phase I and Phase II ESAs, groundwater monitoring, and reporting projects for a major retail tire facility. Projects generally included assessing the extent of contamination associated with hydraulic lifts, underground storage tanks (UST), and other activities associated with operating a tire replacement facility by advancing temporary borings using direct-push drilling techniques to obtain soil samples beneath the site.

Phase I Environmental Site Assessments (ESA), Various Locations, California (Project Scientist)

As project scientist, Jason has performed Phase I ESAs on various types of properties including commercial facilities, office buildings, and undeveloped land to identify the potential magnitude of environmental liability associated with identified recognized environmental conditions at the properties.

Environmental Site Remediation

Pyramid Oil Spill, Angeles National Forest, California (Biologist)

Jason completed a vegetation survey in a reference wash adjacent to an oil spill area, identifying plant species and determining percent cover of species. He created one meter by one meter quadrants at 100-foot intervals along the length of the wash and tabulated field data for use in a report to the client. Jason also performed site health and safety oversight of subcontractors during a phase of the oil spill remediation activities.

Groundwater Monitoring and Reporting

Groundwater Monitoring – Maintenance Facility, Malibu, California (Staff Scientist)

Jason conducted a semi-annual groundwater sampling for a maintenance facility. Groundwater sampling and reporting were required to maintain compliance with Ventura County Environmental Health Division (VCEHD) mandates. The groundwater monitoring activities were completed in accordance with the requirements of the Ventura County Leaking Underground Fuel Tank (LUFT) Guidance Manual (Fourth Edition, April 2001). Upon completion of each groundwater monitoring event, a Groundwater Monitoring Report was submitted to the VCEHD.

Josh Hohn AICP

Senior Planner, Visual Resources Practice Lead - US

Josh is a visual resources expert, permitting specialist, and project manager with experience in land use and environmental planning. In over a decade of work as a visual analyst, Josh has produced technical reports and CEQA/NEPA documents, or their equivalent, for dozens of proposed power generation and transmission projects, including solar, wind, battery storage, and natural gas powered facilities, along with new and reconductored power lines. In support of his work, he has testified at California Energy Commission hearings. He has also conducted visual assessments for a variety of infrastructure projects, including roads, water treatment plants, communications facilities, and California High-Speed Rail. As Stantec's Visual Practice Lead, Josh has written or overseen visual impact analyses for wind projects in California, New York, and West Virginia, and for solar projects in California, Wyoming, Wisconsin, and Nevada.

EDUCATION

Master of Community Planning, Land Use Planning, University of California, Berkeley, Berkeley, California, 2003

Master of Arts, Information and Communication Studies, California State University, Chico, Chico, California, 1997

Bachelor of Arts, Public Administration, California State University, Chico, Chico, California, 1994

REGISTRATIONS

Certified Planner #020089, American Institute of Certified Planners

MEMBERSHIPS

Founder / Coordinator - California Northern Chapter Energy Initiative, American Planning Association, 2012-2016

Renewable Energy

Renewable Energy Systems* (Permitting Specialist)

Josh supported development of utility-scale solar and wind development throughout the western (Western Interconnection) and southeastern (SERC Reliability Corporation) United States, preparing and submitting applications and/or coordinating directly with: US Army Corps of Engineers (USACE); Bureau of Land Management (BLM); Bureau of Indian Affairs (BIA); and agencies administering state lands. He managed environmental permitting component of potential wind and solar project site selection / screening processes and led internal reviews and coordinated consultant preparation of critical issues analyses identifying potential effects related to endangered species, land use conflicts, and cultural, geotechnical, and other environmental resources.

Iberdrola Renewables California Solar PV Program*, California (Solar Permitting Manager)

Under contract and functioning as an adjunct member of Iberdrola's development team, Josh led coordination efforts with state and local agencies and directed environmental subconsultants on numerous projects in California, primarily in Kern, Kings, Riverside, and Los Angeles counties. He led the permitting of nearly 50 megawatts of solar energy.

** denotes projects completed with other firms*

Josh Hohn AICP

Senior Planner, Visual Resources Practice Lead - US

United States Trade and Development Agency Utility-Scale Solar Facilities in Egypt and India* (Environmental Analyst)
Josh managed and coordinated permitting processes for proposed utility-scale solar facilities in multiple California jurisdictions. He was also the lead author of Environmental and Social Impact Assessments for United States Trade and Development Agency funded utility-scale solar projects in India and Egypt. His analyses relied on International Finance Corporation (World Bank Group) Performance Standards on Environmental and Social Responsibility.

Environmental Assessments – Electrical Transmission

Central Valley Power Connect Project*, San Joaquin Valley, California (Project Planner)
Josh was the project planner for the siting and routing phase of this proposed 70-mile, 230kV transmission project. He authored the project's alignment criteria and routing reports, coordinated the team field review effort, and participated in stakeholder outreach efforts, working directly with the project proponent, PG&E, and its partners. He also helped coordinate development of the Proponent's Environmental Assessment (PEA), which was submitted by PG&E to the California Public Utilities Commission (CPUC).

Pacific Gas & Electric Compressed Air Energy Storage Project*, Northern California (Deputy Project Manager and Analyst)
Josh managed the preliminary environmental analysis of compressed air energy storage (CAES) in Lodi, in California's San Joaquin Valley, coordinating with environmental sub-consultants. The project is proposed to utilize a depleted underground natural gas cavern located near the gas-fired power plant Lodi Energy Facility

Role: Project Manager | Dates involved: 01/2015-12/2015

AES Energy Storage Preliminary Permitting Analyses*, Southern California (Analyst)
Josh authored preliminary permitting analyses for battery storage siting efforts at multiple potential AES Energy Storage sites in Los Angeles and Orange Counties.

PUBLICATIONS

"Distributed Renewable Energy: Plan On It". Northern News (APA California Chapter Northern), 2012.

"Distributed Renewable Energy: Anticipating Energy Development in Communities". PAS Memo, 2012.

"50% Renewable Energy in California by 2030". Northern News (APA California Chapter Northern), 2016.

PRESENTATIONS

New Fields of Vision: Using Immersive Technologies for Public Outreach, Preservation, and Environmental Management. *Association of Environmental Professionals California State Conference*, 2019.

New Fields of Vision: Using Immersive Technologies for Public Outreach, Preservation, and Environmental Management. *National Association of Environmental Professionals Annual Conference*, 2019.

** denotes projects completed with other firms*

Kristy A. Edblad PE, QSD/QSP, CAPP, CPSWPPP, CCIS

Senior Engineer

Kristy has more than 14 years of professional experience in the environmental consulting industry. Her experience includes project management; environmental site assessments; hazardous material assessments; remedial investigations; remedial evaluations, design, and installations; soil and air sampling; water sampling (wastewater, groundwater, and surface water); storm water management assistance; and regulatory compliance, and National Environmental Policy Act (NEPA)/California Environmental Quality Act (CEQA) document preparation. Kristy's remediation background includes system design, installation, and operation of soil vapor extraction (SVE) and ozone sparge systems designed to target petroleum hydrocarbon and volatile organic compound impacts to subsurface soil, soil vapor, and groundwater. Kristy's site assessment background includes drilling; soil and water sampling; soil vapor sampling and indoor air/intrusion (Summa canisters, mobile laboratories, and tedlars); excavations; underground storage tank (UST) removals; and well installations. Kristy's experience regarding regulatory compliance and NEPA/CEQA document preparation includes evaluation of air quality, greenhouse gas emissions, traffic/transportation, energy, utilities, and recreational project impacts. Kristy is a technical resource in quantifying emissions for linear (pipelines, roadways, etc.) projects using various emission models (Offroad 2007, EMFAC 2011, CalEEMod, URBEMIS, and Roadway Construction Emissions Model), and regulatory compliance standards for numerous Air Districts within California. Her experience includes projects subject to numerous Federal, state, and local agency jurisdictions.

EDUCATION

BS, Environmental Engineering, California Polytechnic State University, San Luis Obispo, California, 2003

REGISTRATIONS

Professional Engineer #79655, State of California

Qualified Stormwater Pollution Prevention Plan Practitioner (QSP) #24474, California Stormwater Quality Association

Qualified Stormwater Pollution Prevention Plan Developer (QSD) #24474, California Stormwater Quality Association

Certified Inspector #1454201, Certified Professional in Storm Water Quality

Certified Preparer of Storm Water Pollution Prevention Plans (CPSWPPP™), Certified Professional in Storm Water Quality

Environmental Site Assessments Phase I, II, III
Petroleum Hydrocarbon Subsurface Investigations and Assessments, Los Angeles and Ventura Counties, California (Staff Engineer)
Kristy conducted drilling and well installation activities at numerous retail gas station and commercial sites using hollow-stem augers and direct push drilling techniques. She installed groundwater monitoring wells, sparge wells, soil vapor extraction wells, and soil gas sampling probes. The tasks she performed included coordination with private utility location service, air monitoring, soil classification, site documentation, health and safety oversight, well development and sampling, and agency interaction.

** denotes projects completed with other firms*

Kristy A. Edblad PE, QSD/QSP, CAPP, CPSWPPP, CCIS

Senior Engineer

Phase I and II Environmental Site Assessments, Los Angeles, Riverside, Santa Barbara, Orange, and Ventura Counties, California (Staff and Project Engineer)
Kristy performed Phase I and II Environmental Site Assessments and site characterization assessments for several clients including transportation companies, medical groups, major retail tire facilities, residential developers, commercial developers, and banks. Property types included multi-story occupied and vacant buildings, vacant lots, industrial and residential properties, and automotive maintenance facilities.

Vapor Intrusion Assessment, Fuel Terminal, Los Angeles, California (Engineering Associate)
Kristy performed indoor, ambient air, sub-slab, and depth discrete soil vapor sampling to assess vapor intrusion impacts in four large commercial buildings resulting from fuel releases at a terminal in Los Angeles, California. Responsibilities included field oversight and coordination of on-site personnel consisting of property tenants, property owners, third-party consultants, subcontractors, multiple laboratories, and Department of Toxic Substance and Control (DTSC) agency personnel. All field activities were performed under the direct supervision of DTSC personnel due to the ongoing litigation between the responsible party and property owners.

Former Bakery/New Target Store Site, San Pedro, California (Engineering Associate)
Kristy assisted with expedited development and implementation of a site-specific sampling and analysis plan for development of a former bakery facility to a new Target Store in San Pedro. Soils encountered during redevelopment were initially categorized as RCRA hazardous waste due to elevated lead concentrations in soils. The sampling and analysis plan was developed in accordance with current regulatory and health and safety guidelines and consisted of delineating excavated soils into a grid pattern and using statistical analysis with a random number generator to select locations for sampling. Soils met the specifications and were able to be disposed of as Non-RCRA hazardous waste. The sampling and analysis plan was implemented to minimized down time and provide cost savings for the correct characterization and disposal of soils from the site while maintaining adherence to regulatory guidelines.

Soil, Sediment, and Surface Water Sampling, Los Angeles County, California (Staff Engineer)
Kristy conducted soil, sediment, and surface water sampling for Pacific Pipeline System Line 63 Pyramid Lake Spill which included collecting samples within canyons, lake sediment, and at the base of a dam. Her duties included sample collection, preservation, documentation, and transport to the analytical laboratory.

** denotes projects completed with other firms*

Shruti Ramaker

Principal, Environmental Planning; Permitting Specialist

Shruti has over 20 years of experience with impact analyses, agency permitting and management of multiple CEQA/NEPA environmental documents. Project experience has focused on California utility projects, renewable energy projects, power generation, water resources, infrastructure and oil and gas related remediation projects. Having both managed and authored applicant/proponent prepared environmental documentation, Shruti has a strong grasp of important regulatory concepts and strategies for preparing impact analyses and coordinating regulatory permitting submittals. Shruti is an effective project manager known by her clients for her responsiveness and representation of her clients' interests. She is organized, thorough and thoughtful in her approach to project management. Her broad experience is a valuable resource in understanding the big picture on projects.

EDUCATION

B.A., Environmental Studies, University of California, Santa Barbara, Santa Barbara, California, 1999

MEMBERSHIPS

Channel Counties Chapter, California Association of Environmental Professionals

PROJECT EXPERIENCE

Hazardous Materials Assessment and Abatement

Cal Compact Landfill Community Relations Plan*, Carson, California (Public Outreach Lead)
Shruti prepared public outreach materials and meetings and managed agency interaction.

Moses Lake Wellfield Contamination Superfund Site*, Seattle, Washington (Project Manager for Public Outreach)
Shruti managed the Community Relations Program. The project involved remedial investigations to determine the source of trichloroethene (TCE) contaminated groundwater resulting in contaminated drinking water above acceptable federal and state levels.

Santa Barbara Manufactured Gas Plant Remediation Project*, Santa Barbara, California (Public Outreach Lead)
Shruti performed public outreach activities including assembling fact sheets and informational materials. She also obtained local agency construction permits. She also obtained local agency construction permits.

Venoco Lease 421 Permitting Support*, Goleta, California (Deputy Project Manager)
Shruti assisted in agency permit identification in the coastal zone and facilitation for several projects, including alteration to an offshore oil production platform and ongoing permitting that included intertidal oil well sites, access road maintenance, and utilities.

Former Hercules Gas Processing Plant*, Santa Barbara County, California (Deputy Project Manager)
Shruti assisted in managing the multimillion dollar groundwater and contaminated soils cleanup project at Aera Hercules. She prepared multiple technical work plans for agency approval, assisted the client with obtaining agency permits and approvals, performed quarterly groundwater monitoring, and assisted with all aspects of site remediation of contaminated soils and groundwater.

** denotes projects completed with other firms*

Shruti Ramaker

Principal, Environmental Planning; Permitting Specialist

Pacific Heights Development Recirculated EIR*, Hacienda Heights, California (Project Manager)
Shruti managed the Recirculated EIR of the Pacific Heights property development. The Pacific Heights Project consists of 47 single-family lots, a water tank and supporting manufactured slopes, and a private driveway and fire lane on 36 acres of a 114-acre site.

White Wolf Tentative Subdivision EIR, Lake Tahoe*, Placer County, California (CEQA Lead and Technical Author)
Shruti prepared the Traffic and Transportation, Noise, Air Quality and Aesthetics section of the EIR for a project that seeks to create a private alpine resort, including residential and common-use areas in the Lake Tahoe region.

Salinas River Stream Maintenance Program EIR*, Monterey County, California (Technical Author)
Shruti prepared the Traffic and Transporation and Noise sections of the EIR which analyzed traffic impacts resulting from programmatic routine maintenance including vegetation removal sediment management along 96 miles of the Salinas River.

Pajaro River Flood Control Project EIR/EIS*, Santa Cruz and Monterey Counties, California (Technical Author)
Shruti prepared the Traffic and Transportation section of the EIR/EIS which analyzed traffic impacts from several bridge replacements and levee improvements along the southern portion of the Pajaro River.

Upper Llagas Creek EIR*, Santa Clara County, California (Technical Author)
Shruti prepared the Aesthetics, Traffic and Transportation and Noise section of an EIR for flood control improvements proposed to include channel realignment, bridge replacements, and construction of new channels along Upper Llagas Creek.

Sheffield Reservoir EIR*, Santa Barbara, California (Deputy Project Manager)
Shruti participated and conducted field studies and wrote issue area sections of the EIR to convert an open water reservoir into an underground reservoir and recreational park aboveground.

Santa Barbara County Flood Control Program EIR*, Santa Barbara, California (Deputy Project Manager)
Shruti performed policy consistency and impact analysis for several sections of the EIR. The EIR was prepared to address impacts from programmatic maintenance activities along creeks in the Southcoast watersheds in Santa Barbara County.

Ekwill Street and Fowler Road Environmental Impact Report (EIR)/EA*, Goleta, California (Former Deputy Project Manager)
Shruti prepared impact analyses for several sections and coordinated with issue area authors on completing their sections. The project involves the installation of roundabouts near State Route 217 with modifications to ramps and nearby off ramps that involve Caltrans. The project also involved working closely with the design engineers as part of the project design team to help ensure that the project was designed in a manner resulting in the least amount of environmental impact while achieving project objectives.

** denotes projects completed with other firms*

StephAnnie Roberts

Senior Project Manager/National Account Manager

StephAnnie has 23 years of professional experience in environmental consulting. She has been involved in all aspects of regional and site-specific environmental, geohydrologic, and geotechnical investigations; she has also participated on CERCLA/SARA, and RCRA regulated projects. Her experience includes remedial investigations/feasibility studies, risk assessments, soil and groundwater assessments, contaminant fate and transport determinations, and contaminant delineation and treatment or removal. She is involved with management and implementation of major soil and groundwater contamination investigations and remedial activities, projects involving water issues, development of policies and procedures regarding geologic and geohydrologic matters.

Within the last 12 years, StephAnnie's environmental consulting focus comprises of projects involving land uses subject to discretionary agency approvals and public environmental review. She provides environmental services, and leads and supports diverse teams that include project managers, biologists, environmental scientists, and planners, throughout the planning and implementation phases on projects. She works on issues analyses, project permitting, preparation of required environmental documents and supporting technical studies, and mitigation compliance. StephAnnie has experience with commercial, industrial, oil and gas, recreation, renewable energy, residential, transportation, and water.

Environmental Impact Reports and Memorandums of Understanding*, Various, California (Environmental Specialist)

StephAnnie has prepared EIRs and provided memorandum of understandings (MOU) project assistance with regulatory issues and permits pertaining to mining in groundwater and reclamation after mining. She has worked with U.S. Fish and Game, U.S. Fish and Wildlife, U.S. Army Corp of Engineers, and several city planning commissions and supervisor boards throughout California. All of her findings were interpreted to the client and proper remediation and reclamation was recommended.

Tier 1 Release Assessment Investigation and Report, Santa Monica, California (Environmental Specialist)

This project involved a Tier 1 release assessment investigation of a municipal drinking water well field impacted with MTBE. All work was completed under a Unilateral Administrative Order issued jointly by the Los Angeles RWQCB and USEPA. StephAnnie provided oversight of the installation of more than 242 soil borings and 14 groundwater monitoring wells totaling approximately 23,000 linear feet of drilling. She utilized innovative sampling techniques including SimulprobeTM and EncoreTM sampling devices to collect depth-discrete soil and groundwater samples, and participated in the generation of a detailed Tier 1 Release Assessment Report that totaled 136 volumes. The report included interpretation of subsurface hydrogeology utilizing geophysical logs, lithologic logs, and detailed geologic cross-sections.

** denotes projects completed with other firms*

StephAnnie Roberts

Senior Project Manager/National Account Manager

Power Transmission & Distribution

Clearvista Wind Project Environmental Impact Report, County of Kern, California (Environmental Specialist)

StephAnnie served as a member of the project team preparing EIR for the proposed Clearvista Energy Wind Project, a 40-MW capacity wind farm, located in Kern County, east of the City of Tehachapi, in the Tehachapi Valley. The proposed project required a zone change from A (Exclusive Agriculture) to A WE (Exclusive Agriculture Wind Energy Combining).

Power Plants

Grayson Power Plant Repower Project (Environmental Support)

StephAnnie is serving as the assistant environmental task manager responsible for preparing technical studies and CEQA documentation for this controversial project involving the repowering of the Grayson Power Plant in the City of Glendale. The project involves the modernization of the existing power plant including a total generating capacity of approximately 250-megawatts. The environmental analysis includes photo simulations, an air quality and greenhouse gas emissions study, biological resources study, historic resources evaluation, Phase I and II Environmental Site Assessments, hydrology study, geotechnical study, lead and asbestos survey, noise study and preparation of an EIR. Although the City of Glendale is the CEQA Lead Agency, the EIR is being prepared consistent with the environmental review requirements of the California Energy Commission.

Electrical Power Distribution

Huntington Beach to Catalina Island Power Cable Project, Orange and Los Angeles County, California (Environmental Support)

StephAnnie conducted QA/QC of the routing and critical issues analysis, project execution plan and environmental impact analysis for this project that involved a proposal to install a subsea power cable from a power generation plant in Huntington Beach to Catalina Island.

Noise Assessments

Line 2000 Anomaly Repairs Project, Angeles National Forest, California

StephAnnie evaluated potential noise impact from use of heavy lift helicopter aerial operations. This was for proposed pipeline anomaly repairs on an active common carrier crude oil transmission pipeline located in the Angeles National Forest.

Line 63 Re-Route Activation Project, Permitting and Regulatory Compliance, California

StephAnnie assisted with management and preparation of an Initial Study Environmental Assessment/Mitigated Negative Declaration. The project involved replacing pipeline segments and conducting repairs to an out of service pipeline in compliance with a U.S. EPA Consent Decree that are necessary prior to returning the pipeline to active service. StephAnnie conducted noise and vibration monitoring during construction activities to evaluate potential impact to surrounding communities, and avian and aquatic habitat within the project footprint.

** denotes projects completed with other firms*

Mitch Marken Ph.D., LEED AP, RPA

Senior Marine Archeologist, Ethnographer

Mitch has worked internationally and for US state governments concerning the discovery, preservation and exploration of underwater cultural sites including shipwrecks, and he has taught undergraduate courses in underwater archaeology at the University of San Francisco. Marken was the primary author of one of the first US submerged cultural resources management plans: Minnesota's Submerged Cultural Resources Management Plan (1997), contributed to the Oregon State Historic Preservation Office (SHPO) preliminary guidance for Underwater Cultural Resources Survey Permits for offshore energy projects (2014), and authored Cultural Resources Sections of the Office of National Marine Sactuaries (ONMS) Final Environmental Impact Statement, the Final Management Plans and the Final Rule for Cordell Bank, Gulf of the Farallones, and Monterey Bay National Marine Sanctuaries for NOAA. His University Press of Florida book entitled Pottery from Spanish Shipwrecks: 1500 – 1800 analyzes artifact collections from 16 shipwrecks in Florida, the Caribbean, Britain and Bermuda and it continues to be a standard reference for colonial period shipwreck ceramics. He was qualified as the Subject Matter Expert for Archaeology serving the US Department of Treasury's Best Available Science Review of RESTORE Act Projects (2015) while at a previous company.

EDUCATION

Ph.D., Archaeology, University of St. Andrews, Fife, Scotland, 1991

Dpl., Archaeology and Ethnology, Maritime Studies, University of St. Andrews, Fife, Scotland, 1985

CERTIFICATIONS & TRAINING

LEED AP, USGBC, LEED, Irvine, California, 2014

Advanced Section 106 Compliance Training, General Services Administration (GSA) Interagency Training Center, Various, California, 2019

Section 106 Compliance Training, General Services Administration (GSA) Interagency Training Center, Various, California, 2019

Working with Tribal Governments, General Services Administration (GSA) Interagency Training Center, Various, California, 2019

SB 18 Training, Native American Heritage Commission, West Sacramento, California, 2006

Archaeology and Cultural Sensitivity Training Program, Riverside County, California, 2007

Programmatic Agreement Training, Bureau of Land Management (BLM) National, Nevada, California, 2009

Environmental Compliance Training, Federal Energy Regulatory Commission (FERC), Various, California, 2015

REGISTRATIONS

Registered Professional Archaeologist, Register of Professional Archaeologists, 2018

MEMBERSHIPS

Member, American Society of Adaptation Professionals

** denotes projects completed with other firms*

Mitch Marken Ph.D., LEED AP, RPA

Senior Marine Archeologist, Ethnographer

PROJECT EXPERIENCE

Cultural Resource Management and Archaeology

Connected to the Landscape – Ethnographic Landscape Study, Consultation Guidelines Development and Section 106 Facilitation, Bureau of Land Management * (Project Director and Lead Author)

Mitch completed a $1 million ethnographic mitigation study to assist the BLM in their collection of information from 13 federally recognized tribes regarding the effects of several solar projects on the Native landscape. The study involved Native American tribal coordination, ethnographic interviews, and Section 106 consultation assistance. Mitch coordinated public scoping meetings to support agency responsibilities under National Environmental Policy Act (NEPA) and Section 106.

Bonneville Power Administration (BPA), Submerged Resources Study Lower Columbia River* (Project Director)

Dr. Marken was the Project Director for a large records search that identified cultural resources inundated along approximately 150 river miles of the Columbia River shoreline, specifically Lake Bonneville, Lake Celilo, and Lake Umatilla. The goal of the project was to assist BPA's efforts to inform Native American tribes regarding prehistoric and historic resources now submerged within the Columbia River (River Mile 144 to River Mile 295). The study filled in gaps in BPA's data and served as the foundation for a comprehensive submerged cultural resources assessment and mitigation strategy or research design, followed by in-water survey, relocation of physical remains, and evaluation. Data was mapped in such a way that BPA could use the information to create a GIS database. Results were presented at a group meeting that included tribes invited by BPA, the Corps and SHPO.

** denotes projects completed with other firms*

WSDOT SR520 Bridge Replacement: Sunken Vessel Investigation *
Mitch directed a submerged cultural resources investigation that included the identification, documentation and evaluation of an unanticipated discovery of a sunken archaeological resource during construction of WSDOT's I-520 Floating Bridge and Landings Project. The project involved in-depth historic research and geo-referencing of a reported sunken obstruction. The project's Unanticipated Discovery Plan prohibited construction activities affecting newly discovered resources until a significance assessment was performed and reviewed in consultation with DAHP. Relocated using high resolution side-scan sonar, a Remotely Operated Vehicle (ROV) outfitted with video/still capture controls was used to collect high resolution video and imagery of the sunken object at a depth of 200 feet. He also supported WSDOT's archaeological staff with archival research, site forms, and reporting, including an eligibility recommendation based on the findings

Columbia River Crossing Submerged Cultural Resource Study, WSDOT *, Washington
Mitch completed this project for the Washington State Department of Transportation (WSDOT) to support their planned bridge expansion spanning the Columbia River between Portland and Vancouver. Following analysis of multi-beam remote sensing data, a team of qualified diving archaeologists conducted a systematic survey of the area to locate and map submerged artifacts and acquire video footage of the features. Using the results of the comprehensive archival search that included interviews with local historical societies and reviews of historic photos and maps, features found on the river bottom were correlated with documented historic structures. The project included an in-depth record search of archaeological and historic resources, mapping of submerged features to create a 3D GIS layer of the riverbed in and around the Area of Potential Effects, and significance assessments of sites and artifacts.

PUBLICATIONS

Marken, Mitch. Pottery from Spanish Shipwrecks: 1500 - 1800, University Press of Florida, 1994.

Marken, Mitch, et. al. Connected to the Landscape, Bureau of Land Management, 2016.

Marken, Mitch, et al. The History of the Soboba Band of Luiseno Indians, Funded by the Riverside County Transportation Commission, 2018.

PRESENTATIONS

Underwater Archaeology in the Columbia River and Tribal Potential. *Federal Columbia River Power System Bi-Annual Tribal and Agency Meeting*, 2015.

** denotes projects completed with other firms*

Jonya Lofgren

Air Quality Lead Practicioner
8 years of experience · Thousand Oaks, California

Jonya is an experienced air quality and climate change professional in Stantec's Thousand Oaks, CA office. She has experience working for local and federal government agencies, industry leaders, and environmental consulting firms. She has managed projects relevant to greenhouse gas (GHG) emissions and climate change, cap and trade strategy, and regulatory advocacy in a variety of industry segments, including oil production, pipeline, energy, food and beverage, and manufacturing. Jonya has experience in providing technical support related to emerging air, greenhouse gas, climate change, and methane regulations. Other experience includes working with local air pollution control districts within California (San Joaquin Valley, Bay Area, and South Coast) to complete permitting projects, Title V renewals and project studies, CAM analysis, health risk analysis and regulatory compliance. Beyond her role at Stantec, Jonya serves on the Board of Directors for the Western States Petroleum Association San Joaquin Chapter, as well as serving on the Board of Directors for the Air and Waste Management Association, Channel Islands Chapter.

EDUCATION

Environmental Engineering , University of California Riverside, Riverside, CA, 2013

CERTIFICATIONS & TRAINING

In-Use Off-Road Diesel Vehicle Regulation, Course #504, CARB, Bakersfield, California, 2019

PERP & ATCM Training/CR101, CARB, Bakersfield, CA, 2018

Rule 403 South Coast Air Basin Fugitive Dust Control Training , South Coast Air Quality Management District , Diamond Bar, California, United States, 2020

MEMBERSHIPS

Board Member, Western States Petroleum Association

Board Member, Air and Waste Management Association

PROJECT EXPERIENCE

OIL & GAS MIDSTREAM, TERMINALS

Bulk Hydrocarbon Marine Terminals* | NuSTar Energy | Pacific West Coast | Technical Expert

Assisted in Health, Safety and Environmental department perform environmental compliance reviews including topics such as air, water, waste and hazardous materials. Created Storm Water Pollution Prevention Plan (SWPPP) for operating terminal using National Pollutant Discharge Elimination System and Industrial Storm Water Pollution General Permits. Facilitated the implementation of federal, state and local environmental and safety regulations for California, Oregon and Washington State. Conducted environmental audit and evaluated management systems to help terminals implement environmental and safety regulations

ATMOSPHERIC ENVIRONMENT - AIR QUALITY

Well Stimulation Air Quality Monitoring | Bakersfield, CALIFORNIA | Field Supervisor

Completed air quality monitoring as required by the operators Permit to Conduct well stimulation treatments (WST) as provided by California Division of Oil, Gas and Geothermal Resources (DOGGR). Executed sampling plan developed by operator and approved by California Air Resources Board (CARB). Acted as field supervisor during all sampling events including sampling of ambient and background, sampling during WST events and clean out events following WSTs. Methods used and evaluated include those below: 1.EPA Method TO-11A – Aldehydes, DNPH Cartridges 2.EPA Method TO-13A SIM – PAHs, PUF/XAD Sorbent Tubes 3.EPA Method TO-15 - VOCs & ASTM D-1945/3588 - Other Compounds, Summa Canisters 4.NIOSH Method 5523 – Glycols, XAD-7 Sorbent Tubes

Technical Review - Quarterly and Baseline Air Monitoring Report | The Boeing Company | California | Technical Expert

Served as independent, technical expert to provide review and comment on 1-year Baseline Air Monitoring Program at the Santa Susana Field Laboratory (SSFL) completed by a third-party. Reviewed program air quality monitoring results from stations set up surrounding SSFL compared to local meteorological data and air district monitoring stations. Constituents of concern included volatile organic compounds (VOCs) and particulate matter (PM). Helped provide comment for extraneous sampling data related to environmental events in the local area.

** denotes projects completed with other firms*

GHG EMISSION INVENTORIES / CARBON FOOTPRINTING

CDP Sustainability Reporting*

Retained by an upstream oil & gas producer to assist in the development of Scope 1 and Scope 2 emissions reported in CDP sustainability reporting. Reviewed emission calculations and submitted results from yearly third part verification.

California and EPA GHG Reporting*

Retained by an upstream oil & gas producer in California to assist in the continued development of a comprehensive greenhouse gas (GHG) reporting system to comply with the EPA and California Air Resources Board (CARB) GHG Mandatory Reporting Rules (MRR). Worked directly onsite to collect data, develop processes, compile emissions, conduct training, support agency negotiations, and manage overall GHG emissions. Interacted with existing client data management systems to support and further develop a GHG management and reporting system. Completed EPA reporting for Confidential Business Information (CBI) by using Inputs Verification Tool (IVT).

CARB Sulfur Hexafluoride (SF6) Reporting and Support | California | Project Manager

Provided assistance complying and annual reporting with the California Air Resource Board's (CARB) regulation for reducing SF6 emissions from GIS equipment. Created solutions to help our clients effectively manage their equipment inventories, develop and document business processes, and build appropriate controls through value stream mapping and annual reporting. In response to the stringent SF6 emission thresholds, our value-added approach to SF6 management includes comprehensive tools to forecast SF6 emissions by retirement, recycling, acquisition, and divesting associated equipment. Essential in the development of procedures to help increase accuracy including the evacuation of SF6 from retired equipment rather than relying on nameplate capacity and direct installation of pressure monitors on equipment to alert of potential leaks. These procedures have helped our clients report SF6 emissions accurately and potentially lessen than probability of reporting emissions above the regulated limits.

CDP Climate Change Questionnaire Support | Bakersfield, California | Project Manager

Retained to provide support to prepare annual Climate Change CDP questionnaire for leading oil and gas producer. Met with high-level management to construct answers regarding sustainability goals while using CDP scoring methods to provide real-time scoring. Utilized EPA and CARB GHG reports to collect and report data, strategies, and governance.

GHG MANAGEMENT & PLANNING

Methane Rule Gap Assessment*

Retained to assist in development of compliance program for CARB's "Methane Rule". Completed gap assessment of existing facilities and fundamental in closing gaps for compliance with the rule. Completed onsite Leak Detection and Repair (LDAR) and component count training. Facilitated equipment permitting with local air district.

GHG MANAGEMENT AND PLANNING

CA Methane Rule Compliance *

Retained to manage a methane compliance assessment based on changed to CARB's GHG Standards Regulation. Completed full assessment and economic analysis of transmission and gathering and boosting facilities.

GHG MRR Gap Assessment | Upstream Oil & Gas Operations | California | Project Manager

Established detailed gap assessments of current operations against new CARB MRR for oil and gas operations including production, processing and midstream activities. Gap assessments were created by collecting background information from client operations using available data from AB32 reporting to identify sources, facilities, and suppliers. Gathered information about facility equipment and GHG management activities in order to identify potentially covered sources, facility boundaries, the existing emissions calculation methodologies, preventive maintenance activities, and data collection and GHG reporting systems already in place.

Greenhouse Gas Emission Standard for Crude Oil and Natural Gas Facilities | Western US | Technical Support

Assisted with technical and advocacy support for CARB's Greenhouse Gas Emission Standard for Crude Oil and Natural Gas Facilities regulation. During a period of two years, worked with oil and gas companies to prepare for the issues, estimate emissions, met with CARB to understand regulatory basis, developed arguments based on data to drive regulatory development. During regulatory process, supported clients through emissions research strategy, design research, complete emission calculations and associated costs for data, suggest regulatory language for clarification, correctness and developed comments for CARB's consideration. The support resulted in successful providing clear next steps in the regulation, adding accuracy to the regulation and minimizing unnecessary risks and costs.

AIR POLLUTION CONTROL

CAM Analysis*

Retained to complete Compliance Assurance Monitoring (CAM) analysis for refinery located within Bay Area Air Quality Management District (BAAQMD). Completed Title V permit evaluations to create CAM analysis tool sued for reporting. Finalized CAM applicability for all equipment and control devices.

** denotes projects completed with other firms*

Eric Clark

Air Permitting and Compliance
15 years of experience · Boise, Idaho

Mr. Clark has prepared several air quality permit applications for clients in Idaho, Utah, Arizona, California, and Wisconsin. He has completed PSD applicability and BACT analyses, emission inventories, NSPS applicability reviews, Title V applications, AERMOD modeling, MACT applicability analyses, Calpuff modeling, CalEEMod, and MOVES/MOBILE6 transportation emissions modeling.

EDUCATION

M.S., Civil Engineering, Boise State University, Boise, Idaho, 2010

B.S., Environmental Science, University of Idaho, Moscow, Idaho, 2003

PROJECT EXPERIENCE

AIR QUALITY

CS Mining Permit Modification* | CS Mining | Milford, Utah | Environmental Engineer

CS Mining operates a copper mine in west central Utah. A modification to the permit was made in increase throughputs, had a new tailings facility and to incorporate a SX/EW facility onsite.

Gem State Processing Permits* | Gem State Processing, LLC | Heyburn, Idaho | Environmental Engineer

Gem State is a potato processing facility in southern Idaho. Mr. Clark has helped the facility obtain several modifications to their initial air quality permit. This includes NAAQS compliance for all criteria pollutants and an expansion to add new dehydration units.

Greenhouse Gas Assessment* | Merit Energy | Dallas, Texas | Environmental Engineer

Merit Energy is an oil and gas company with locations throughout Texas, Wyoming etc. The facility is required to submit CO2e emissions for several of their locations. Emission inventories and management plans are developed annually to ensure compliance with all applicable regulations.

Houweling's Tomatoes* | Houweling's Nurseries | Mona, Utah | Environmental Engineer

Mr. Clark developed a AERMOD modeling scenario to illustrate that diverting a portion of exhaust gas from a nearby power plant to the nursery would not adversely affect air quality. An initial permit for other emission sources was also developed.

Colowyo - EA Modeling Project* | Colowyo Coal Company | Meeker, Colorado | Environmental Engineer

As part of its Collom expansion, NAAQS modeling compliance is required as part of the EA process. The project consists of a multitude of operating scenarios that were modeling for seven pollutant averaging periods. Modeling was performed for the alternative operating plan, while emission inventories were developed for the both the alternative and proposed action.

Charger Permit Applicability* | Charger Oil & Gas, LLC | Houston, Texas | Environmental Engineer

Charger is an oil and gas company with locations throughout Texas, Wyoming and North Dakota. Several locations in Wyoming within a given oil field basin were evaluated to determine greenhouse gas reporting requirements. An emissions inventory was developed to help assess whether further permitting action was necessary.

General Concrete Batch Plant Permit Development, Various Clients* | Boise, Idaho | Permit Engineer

Mr. Clark developed a general permitting process to increase efficiency in obtaining an air permit for the concrete batch industry. This included both a permit and Statement of Basis template. An emissions estimates spreadsheet was developed based on specific criteria provided by each applicant. Also, a simple application form was created for all applicants. The purpose of the project was to decrease permit processing time, limit the cost and simplify the application.

Hidden Hollow Energy, LLC Air Quality Permit* | Fortistar Methane Group | Boise, Idaho | Permit Engineer

Hidden Hollow Energy is a waste-to-energy project that uses landfill gas to power internal combustion engines, which converts it to electricity. This project entailed the analysis of the EPA definition of "facility," as it relates to ambient air boundary and the ramifications of the 1-hr SO2 National Ambient Air Quality Standards (NAAQS). The permit was developed to confirm that the facility could meet all NAAQS and to maintain a non-major PSD status. It was determined that a very hydrogen sulfide concentration would be required. In order to meet that requirement, a treatment system would need to be installed.

** denotes projects completed with other firms*

Motive Power Air Quality Permit* | Motive Power, LLC | Boise, Idaho | Permit Engineer

Motive Power is a train engine manufacturer. The air quality permit included numerous paint booths, blasting enclosures, boilers and emergency engines. Due to the complexity of the paint coating conducted by the client, a detailed approach was developed for the permit allowing for maximum flexibility.

GIS CARTOGRAPHY

Silver Valley Repository for Yard Waste* | Idaho Department of Environmental Quality | Northern Idaho

Mr. Clark's involvement consisted primarily of two specific components. First, there was extensive field work to determine the best potential location for the development of a contaminated yard waste repository. This included examining the impact a potential site may have on nearby surface/groundwater, proximity to local neighborhoods, ease of access, transportation impacts and economic cost. Secondly, Mr. Clark developed GIS-based maps for all potential households involved in the projects. Each map provided actual dimensions of the yard waste to be removed. This was done for a few hundred homes in and around the towns of Kellogg, Wallace, Smelterville, and Mullan.

Sewer and Electricity Data* | City of Pasadena | Pasadena, California | GIS Technician

Mr. Clark developed an ArcPad-based application that incorporated sewer system data (i.e. manhole location, type of unit etc.) into a Trimble GPS unit. Visual Basic programming code was used to develop user-friendly pull down menus, map acquisition and data gathering. Ultimately, this project allowed for the end user to capture the requested data for inclusion into the GIS quickly and more efficiently.

Sewer Data Transition to GIS* | City of St. Paul | Saint Paul, Minnesota | GIS Technician

Mr. Clark was part of team that converted all of the city of Saint Paul sewer maps into a digital format. There were massive amounts of data that was maintained. Therefore, the use of ArcCatalog and MS Access was vital to keep data integrity. The conversion included the development of shapefiles and utilization of raster data.

PUBLICATIONS

Clark, E.C. Impact of Ground-level Aviation Emissions on Air Quality in the Western United States. *MS Thesis, Boise State University*, 2010.

Clark, E.C. Aviation Emissions Impact on Air Quality in the Western United States.. *Presented at 102nd Annual Conference and Exhibition of the Air and Waste Management Association, June 16, in Detroit, Michigan*, 2009.

** denotes projects completed with other firms*

Melissa Tu

Senior Biologist
22 years of experience

Melissa has more than 22 years of biological resources experience. Her expertise includes surveys for and managing sensitive wildlife including nesting birds and southern California reptile and amphibian species; plant ecology (plant identification, rare plant surveys, vegetation mapping, invasive species management, revegetation, and restoration); vernal pool surveys, and habitat restoration. Melissa has extensive experience conducting coastal California gnatcatcher surveys and is qualified to conduct least Bell's vireo and arroyo toad surveys. She is also a County of San Diego-certified CEQA consultant for biological resources.

With a biological focus, Melissa has extensive experience in report writing, technical review, ESA compliance, and state and federal environmental planning. Additionally, she is experienced in surveying for, documenting, and mapping wildlife, rare plant species; invasive plant species, and California vegetation communities; conducting wetland delineations; preparing CWA permit applications, preparing CDFW lake and streambed alternation permits; and preparing habitat restoration and mitigation plans.

EDUCATION

BA, Environmental Science, Biology Emphasis, University of California at Berkeley, Berkeley, California

CERTIFICATIONS & TRAINING

USFWS Recovery Permit, #TE-6413A-1

USFWS Qualification for least Bell's Vireo Protocol Surveys

San Diego Mitigation and Monitoring Program Rare Plant Monitoring Training, 2019

California Rapid Assessment Method, 5-day training, Berkeley, California, 2015

Wildlife Society Arroyo Toad Workshop, 2014

USFWS Fairy Shrimp Workshop, 2012

USFWS Biological Assessment Training, 2010

USACE 3-day Wetland Delineation Training, 2005

MEMBERSHIPS

California Native Plant Society

San Diego Audubon Society

San Diego Mitigation and Monitoring Program

The Wildlife Society

PROJECT EXPERIENCE

City of El Centro, General Plan Update Program Environmental Impact Report, El Centro, Imperial County, California Senior Biologist

This project included preparation of a Program Environmental Impact Report for the El Centro General Plan Update. Melissa was the senior biologist on the project. She provided the outline for the biological resources letter report, and reviewed the biological resources letter report, and the biological resources section of the Program Environmental Impact Report. She also helps prepare the programmatic biological resources mitigation measures.

SDG&E On-Call Biological Monitoring* | San Diego County, California | Biological Monitor

Melissa supported pole maintenance by documenting vegetation, wildlife, and any rare species in the vicinity of each pole and work area. Work included conducting pre-activity surveys, habitat assessments and focused surveys for burrowing owl, coastal California gnatcatcher, San Diego desert woodrat, western spadefoot toad, and coast horned lizard, preconstruction nesting bird surveys and monitoring, construction monitoring, aquatic resource delineation. Additionally, she provided monitoring and flagged work limits to minimize impacts to sensitive natural resources. Melissa also assigned staff support, managed reporting, schedule and budgets, and maintained client relationships.

SDG&E Cleveland National Forest Powerline Replacement Projects* | San Diego County, California | Senior Biologist

Melissa conducted pre-activity surveys, nesting bird surveys and monitoring, roosting bat surveys, construction monitoring, post-construction monitoring, habitat assessments and focused surveys for coastal California gnatcatcher, coast horned lizard, golden eagle, bald eagle, least Bell's vireo, San Diego desert woodrat, southwestern willow flycatcher, arroyo toad, and burrowing owl in accordance with the project's Mitigation Monitoring and Reporting Program.

SDG&E and Southern California Gas Company, Pipeline Safety and Reliability Project* | San Diego County, California | Senior Biologist

Melissa conducted natural resource surveys for the construction of a new, approximately 50-mile-long natural

** denotes projects completed with other firms*

gas transmission pipeline. She conducted habitat assessment and reporting including coastal California gnatcatcher protocol surveys, botanical surveys, and wetlands and waters surveys. Melissa also conducted vegetation mapping, habitat assessments for special-status species including arroyo toad, western spadefoot toad, burrowing owl, coast horned lizard, least Bell's vireo, southwestern willow flycatcher, coastal California gnatcatcher, and thread-leaved brodiaea, protocol surveys for coastal California gnatcatcher, and delineation of jurisdictional resources for and drafted the Biological Resources Technical Report Addendum and Preliminary Wetlands and Waters Assessment Addendum of the Proponent's Environmental Assessment.

SDG&E and Department of the Navy, Environmental Assessment and Environmental Condition of Property Report for Easement Replacement* | San Diego, California | Biologist

Melissa prepared an environmental assessment for SDG&E's easement 45115 replacement. Her responsibilities included biological data review (including data on the federally endangered willowy monardella), resource analysis, and document preparation.

Southern California Edison (SCE) Right-of-Way Maintenance Project* | Marine Corp Base (MCB), Camp Pendleton, California | Biologist

This project involved the environmental evaluation for the repair of dilapidated access roads and overgrown right-of-way on the northwestern portion of the MCB. Melissa conducted natural resource surveys with SCE's right-of-way maintenance and conducted a habitat assessment, coastal California gnatcatcher protocol surveys, and wetlands and waters surveys. She also assisted with endangered species negotiations with the USFWS and Camp Pendleton Environmental Security staff

SCE Rare Plant Surveys for San Onofre Nuclear Generating Station Environmental Assessment* | San Onofre, California | Biologist

Melissa conducted beach and upland rare plant surveys in support of an environmental assessment. She mapped and collected GPS data for two rare species—the beach morning glory and the red sand verbena.

Otay Pipeline Segment 2 A6 Replacement Project* | Cities of Chula Vista and San Diego, California | Senior Biologist

The purpose of the project is to replace a 40-inch water pipe with a 54-inch diameter pipe. Melissa conducted a habitat assessment, vegetation mapping, rare plant survey, and aquatic resources mapping and prepared the technical reports.

Department of the Navy, Naval Facilities Engineering Command Southwest, Coastal California Gnatcatcher Surveys and Report in Support of the Defense Fuel Support Point San Pedro Environmental Assessment* | San Pedro, California | Biologist

Melissa coordinated with USFWS, conducted coastal California gnatcatcher protocol surveys, and prepared reports in support of the project.

Department of the Navy, Naval Facilities Engineering Command Southwest, Environmental Assessment for Facility Improvements at Camp Billy Machen* | Niland, Imperial County, California | Biologist

This project included preparation of an environmental assessment, biological assessment, and biological resource reports for various infrastructure improvements at the Camp Billy Machen Desert Warfare Training Facility. Melissa's responsibilities included biological field surveys (such as wildlife surveys, vegetation mapping, and wetland delineation in the Colorado/Sonoran Desert), resource analysis, and document preparation. She prepared CWA Section 401 RWQCB Water Quality Certification applications and USACE CWA Section 404 permit applications.

Filanc-Orion Joint Venture, Environmental Management for North/South Potable Water Pipeline* | MCB, Camp Pendleton, California | Environmental Manager

Melissa coordinated to minimize impacts to federally and threatened species including birds, mammals, fairy shrimp, plants, and the arroyo toad, their habitat, and jurisdictional drainages. Her responsibilities included compliance with the USFWS Biological Opinion, compliance with NEPA, implementation of mitigation measures, conservation measures, and best management practices. She has provided environmental training and coordination with biological monitors. Submittals included Environmental Management Plan, technical memos and detailed pipeline maps of sensitive biological resources for USFWS and Habitat Mitigation Plan for the 29-mile pipeline. She also conducted site visits twice a month to monitor and support environmental compliance.

USMC Reclaimed Water Pipeline Installation* | MCB Camp Pendleton, California | Biological Monitor

This project included 12 miles of pipeline installation along paved roads, dirt roads, and through sensitive habitat on the MCB. Responsibilities included ongoing environmental education, pre-construction nesting bird surveys, USACE Section 404 permit implementation, San Diego RWQCB Water Quality Certification implementation, USFWS Biological Opinion implementation, coordination with USMC environmental staff, and weekly reports.

USMC Vernal Pool Surveys and Restoration* | Marine Corps Air Station, Miramar, California | Biologist

Melissa surveyed more than 1,500 vernal pools, wrote a pool restoration plan, restored impacted pools, monitored impacted pools, submitted monthly project updates, and provided annual reports. She surveyed for federally endangered San Diego button celery, San Diego mesa mint, and California Orcutt grass; federally threatened spreading Navarretia and Brodiaea species. She also documented presence of plant species in a complex GIS database and restored vernal pools that supported federally listed plants and fairy shrimp.

Linn Zukor

Senior Environmental Planner
Santa Barbara, California

Ms. Zukor has 20 years of experience in the environmental field. She has a diverse background in environmental documentation, including California Environmental Quality Act (CEQA)-compliant environmental impact reports (EIRs) and initial studies (ISs) for local agencies, and National Environmental Policy Act (NEPA)-compliant environmental impact statements (EISs) and environmental assessments (EAs) for federal installations nationwide. Within the private sector, Ms. Zukor has experience in land use analysis, environmental regulatory due diligence, and permitting, with emphasis on renewable energy development.

EDUCATION

B.A., Environmental Studies and Geography, University of California at Santa Barbara (UCSB), 1995

CERTIFICATIONS & TRAINING

Hazardous Materials Management Professional Certification, UCSB Extension, 1998

Environmental Regulatory Compliance Certification, UCSB Extension, 2003

PROJECT EXPERIENCE

EDUCATION

Pacific Gas & Electric (PG&E) Sanger Substation Expansion Project, Environmental Planning and Permitting Services, Fresno County, CA. Ms. Zukor acted as the senior reviewer and response to comments on permitting documents, including Mitigation Monitoring, Compliance, and Reporting Program (MMCRP), Worker Environmental Awareness Program (WEAP), and Minor Project Refinement Request Form for a substation expansion project in Fresno County, in compliance with CPUC requirements.

AES Battery Energy Storage Project Permitting, Fallbrook, San Diego County, CA. Ms. Zukor performed environmental land use/permitting for a battery energy storage facility on vacant agricultural land in northern San Diego County. The Project includes construction of a 40-megawatt (MW) facility that would tie into an existing nearby San Diego Gas & Electric (SDG&E) substation. Responsible for due diligence review, preparation of the project description, responding to County pre-application requirements, management of various subconsultants (biology, air quality, noise, cultural resources, fire protection planning, traffic), management of internal staff (land use policy consistency, hydrology, stormwater, administrative tasks), and preparation of formal County application submittal.

Fluence Battery Energy Storage Project Permit Review, Oakland, CA.

Ms. Zukor performed environmental land use/due diligence review for a battery energy storage facility on public utility land in the City of Oakland. The Project proposed construction of 10- to 20-MW battery energy storage facility within an existing PG&E substation. Responsibilities included review of existing land use and planning documents, interactive map review of zoning and land use GIS data, and preparation of due diligence memo report, including summaries of existing federal, state, and local regulatory framework and environmental permit matrices.

AES Battery Energy Storage Project Permit Review, Fresno County, CA

Ms. Zukor performed environmental land use/due diligence review for a proposed battery energy storage facility on vacant agricultural land in southern Fresno County. The Project included construction of an up to 50-MW battery energy storage facility adjacent to an existing PG&E substation. Responsible for review of existing land use and planning documents, interactive map review of zoning and land use GIS data, and preparation of due diligence memo report, including summaries of existing federal, state, and local regulatory framework and environmental permit matrices.

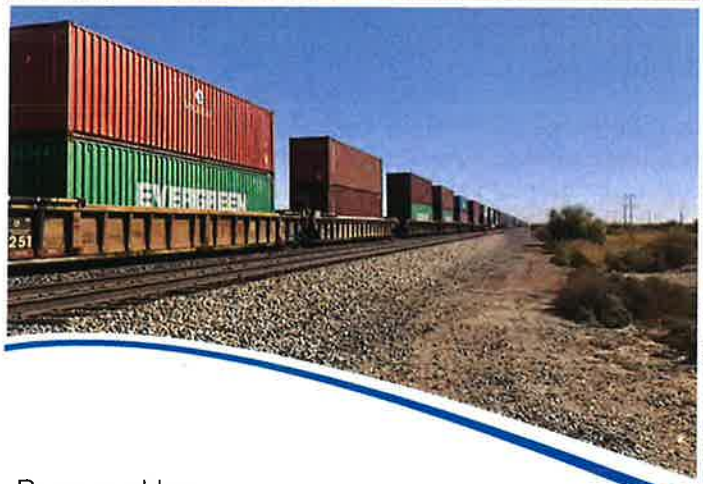
Vereson Environmental Permitting Support Services, Ripon and Pomona, CA.

Ms. Zukor provided management of environmental due diligence review services for natural gas and steam turbine upgrades at cogeneration facilities located in Ripon and Pomona, California. Scope of work included preparation of initial workplan/schedule to determine California Energy Commission (CEC) and local agency permit requirements.

Proposal

VEGA SES 2, 3, AND 5 SOLAR PROJECT EIR

Prepared for
Imperial County
Planning and Development Services
801 Main Street
El Centro, CA 92243



Prepared by

RECON

November 18, 2020

RECON Environmental, Inc. | 3111 Camino del Rio North, Suite 600, San Diego, CA 92108 | 619.308.9333 | reconenvironmental.com

RECON

An Employee-Owned Company

November 18, 2020

Mr. Jim Minnick, Director
Imperial County
Planning & Development Services
801 Main Street
El Centro, CA 92243

Reference: Proposal to Prepare an Environmental Impact Report (EIR) for the VEGA SES 2, 3, and 5 Solar Project (RECON Number P9813)

Dear Mr. Minnick:

RECON Environmental, Inc. (RECON) is excited for the opportunity to provide our proposal to prepare the EIR for the Apex Energy Solutions VEGA SES 2, 3, and 5 Solar project. Located east of Niland, the composite 350 megawatt and 1,961-acre project contains a full complement of solar features including the photovoltaic (PV) solar arrays, substations, transmission lines, switching stations, and battery energy storage systems (BESS). RECON provides the County with the necessary technical expertise with PV projects and also familiarity with the County's Renewable Energy and Transmission Element. RECON has prepared numerous environmental documents and technical studies for PV solar projects of similar scale for utility companies and other private applicants in Imperial and eastern San Diego counties. We are currently working with you and your staff on the utility-scale battery energy storage system complex in the southwestern portion of the valley. Other examples of our staff's PV project experience includes the technical studies and CEQA documentation for the Drew Solar project, Ocotillo Sol, Imperial Solar Energy Center South and West PV project EIRs, Sunrise Powerlink project for SDG&E, General Plan Renewable Energy and Transmission Element EIR, and the DRECP EIR/EIS.

For the VEGA SES 2, 3, and 5 EIR, I will be the principal in charge and Michael Page, who is the principal in charge for our current work with staff on the battery energy storage system project for RECON, will serve as the project manager. Combined we have over 65 years of experience preparing CEQA documents. I managed the preparation of the technical studies for the County's Drew Solar and Imperial Solar South and West project EIRs. Mr. Page has a strong background with renewable energy projects, including PV solar, wind, and geothermal projects, in Imperial and San Diego counties. He also managed the Chapman Ranch Solar project EIR in eastern San Diego County. He will be supported by our team of subconsultants who will conduct peer reviews of the applicant's technical reports and also prepare new technical reports to support the EIR. The RECON team includes Linscott, Law & Greenspan, Engineers (LLG) for the peer review of the transportation/circulation study, Landmark Consultants for the Phase I environmental site assessment and geotechnical study peer review, and DuBose Design Group for the water supply assessment and drainage study/water quality management plan peer review. Each firm has considerable experience in Imperial Valley and we have collaborated on like projects over the years.

Our team is committed to providing the County with a high-quality level of service in an environmentally responsible manner during the processing of the EIR and we look forward to continuing to work with you and your staff. If you have any questions, please feel free to call me directly at 619-308-9333, extension 102.

Sincerely,

Lee Sherwood
Principal

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ATTACHMENT

A: Resumes

1.0 Project Understanding

RECON Environmental, Inc. (RECON) understands that the VEGA SES 2, 3, and 5 solar project (proposed project) requires the issuance of three conditional use permits to allow for the phased development of three separate solar photovoltaic (PV) energy generation facilities on five parcels totaling approximately 1,963 acres and 350 megawatts (MW). As shown on Figure 1, the project sites are generally located east of Niland in the unincorporated area of Imperial County, on both sides of the Union Pacific Railroad (UPRR) and the Coachella Canal. The project sites are located approximately 2.5 miles southeast of Slab City. The project sites are currently vacant, with desert vegetation and small desert washes traversing the properties. The southwestern portion of assessor's parcel number (APN) 025-010-006, which is part of the proposed VEGA 2 SES site, has been cleared of vegetation and the portion of APN 025-260-022, which is the proposed VEGA 5 SES, that is west of the UPRR is currently used for agriculture. The project sites are bordered by open space to the north, east, and south. Agricultural fields are located to the west and south of the proposed VEGA 5 SES project site. The proposed project sites are currently designated as Recreation/Open Space and zoned as Open Space/Recreation with a Renewable Energy Overlay (S-2-RE/A-2- RE/A-3-RE) in the County General Plan.

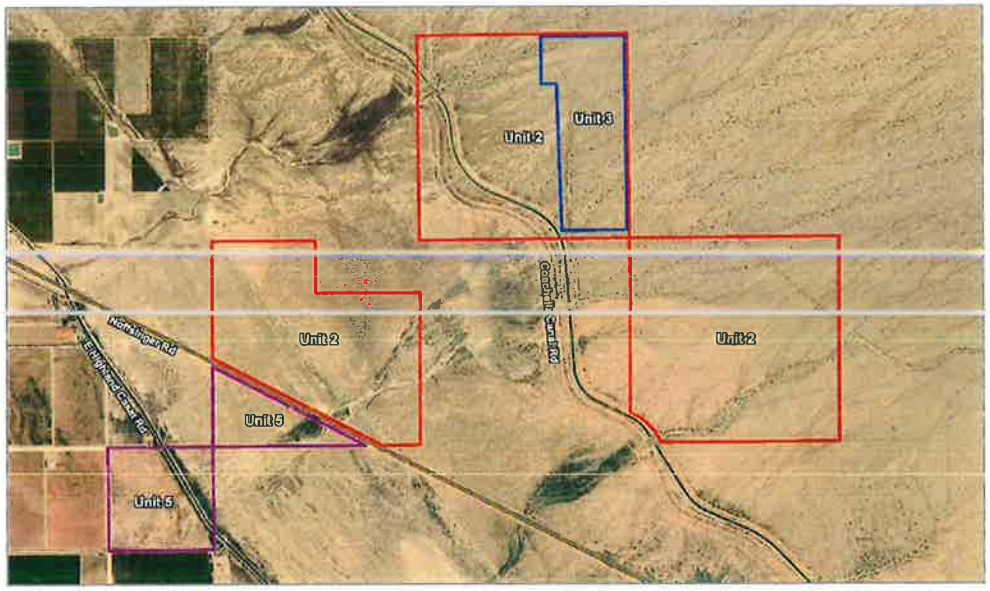


Figure 1. Site Locations

The project would utilize an additional 8 acres of land for development of the proposed substation. The solar PV generating component would consist of 3.2-foot-by-6.5-foot PV modules (or panels) on single-axis horizontal trackers in blocks that each hold 2,520 PV panels, with 90 modules in each of the 28 rows. Each PV module would be constructed out of a polycrystalline silicon semiconductor material encapsulated in glass, in which the PV effect would allow the electrons to flow through that material to produce electricity.

Fundamental to the success of this project will be our expertise related to technical issues and our familiarity with Imperial County and renewable energy policies and projects. We have successfully partnered with public agencies to prepare environmental documents in compliance with the California Environmental Quality Act (CEQA) and other local, state, and federal regulations. RECON has prepared environmental documentation and technical studies for PV projects of similar scale for the Imperial Irrigation District (IID), San Diego Gas & Electric (SDG&E), and other private applicants in Imperial and eastern San Diego counties. Specifically, RECON recently prepared technical studies for the Westside Canal Battery Storage Complex project, as well as technical studies for the Drew Solar Environmental Impact Report (EIR). Previously, we prepared the technical studies for the Imperial Solar Energy Center South and West PV project EIRs in the County. Also, Nick Larkin on our staff is highly familiar with the County Renewable Energy and Transmission Element having prepared the EIR for the General Plan Amendment. In addition, our role in preparing the EIR/Environmental Impact Statement (EIS) for the Desert Renewable Energy Conservation Plan (DRECP) provides RECON with the experience and understanding of the environmental issues surrounding renewable energy development and transmission in Imperial County and throughout the California desert.

Finally, Lee Sherwood will serve as principal in charge and Michael Page, AICP will serve as the project manager for this project. Combined, they provide the County with more than 65 years of CEQA experience. Mr. Sherwood managed the preparation of RECON's technical studies for the Drew Solar and Imperial Solar West and South PV projects. Mr. Page has completed CEQA documents for renewable energy projects, including PV solar and battery energy storage, in Imperial and San Diego counties and has a strong understanding of the environmental issues associated with these types of projects. Mr. Page is currently supporting the environmental review process on behalf of the applicant for the Westside Canal Energy Center project.

RECON has developed the following proposed approach for several of the key EIR issues based on our review of the scope of work, a site visit, our working knowledge of the project vicinity, and our experience working with the County of Imperial on renewable energy projects. Throughout the CEQA process, RECON will work closely with County staff in addressing issues and providing overall project management for staff. A more detailed description of all the tasks required to prepare the EIR and the approach that will be taken to comprehensively address and analyze the scope of issues to be addressed in the EIR are discussed in Section 3.0.

Aesthetics

Our site visit and associated initial research reveals that no scenic vistas or important visual resources have been identified within the area of the proposed project; however, the proposed project would change the look and character of the site and has the potential to cause a significant visual impact. There is also the potential for glare to be produced by the PV panels, which could also be considered a significant visual impact. Therefore, visual studies and simulations, and a glare analysis using Solar Glare Hazard Analysis Tool are anticipated from the project applicant and RECON will address this potentially significant issue in the draft EIR.

Agriculture

The proposed VEGA SES 2 and 3 sites would not impact farmland. However, the proposed VEGA SES 5 Site 1 project would result in the removal of farmland from production. Therefore, a full analysis, including Land Evaluation Site Assessment (LESA) model, will be prepared by the applicant so that we may address the potential for cumulative impacts associated with removing farmland from production in the larger context of the Imperial Valley.

Biological Resources

The majority of the project sites have not been farmed and are covered with native desert scrub and creosote bush scrub. In addition, a small portion of the VEGA SES 5 Site 1 has been farmed. Based on the location of the proposed project site and its proximity to the Salton Sea and riparian areas, there could be potential habitat for the burrowing owl (Athene cunicularia), a California species of special concern (SSC) and possibly other sensitive species. RECON biologists will peer review the biological study prepared by the Applicant and supplement it with additional analysis if deemed inadequate for incorporation into the EIR.

Cultural Resources

RECON archaeologists will peer review the cultural resource study prepared by the Applicant's consultant and supplement it with additional analysis if deemed inadequate for incorporation into the EIR. Additionally, RECON archaeologists will support the County with tribal consultation per Assembly Bill (AB) 52, and incorporate the results of consultation into the EIR.

Hydrology and Water Quality

Site visits and a review of aerial photographs of the proposed project sites reveal the presence of washes adjacent to the project site. Areas within the VEGA SES 2, 3, and 5 project area are located on alluvial fans, with numerous washes draining from northeast to southwest, toward the Salton Sea. The modification of drainage patterns and volumes to the Salton Sea is an issue of concern due to the potential for impacts to wildlife habitat and the Salton Sea from the reduction of groundwater flows into the local waterways. The RECON team will conduct peer reviews of the hydrology and water quality report provided by the Applicant's consultant to ensure the report is adequate for the EIR.

Land Use and Planning

The proposed VEGA SES 2, 3, and 5 project sites are currently zoned S-2-RE/A-2-RE/A-3-RE (Open Space/Agriculture/Renewable Energy Overlay). The County identifies agricultural land as a form of open space. The proposed project is anticipated to be compatible with these adjacent land uses and the County's zoning code allows solar energy facilities in the A-3 zone subject to a Conditional Use Permit (CUP). Additionally, the proposed VEGA SES 2, 3, and 5 project site is located within the Imperial County Renewable Overlay Zone, which allows for the development of any form of renewable energy technology other than geothermal production. The Applicant is not proposing a change in the land use designation or zoning of the project parcels. The Board of Supervisors has also determined that solar projects are consistent with agriculture-related zones, and has approved previous solar farms as a temporary use on a case-by-case basis. This issue will be analyzed in the LESA report and addressed in the EIR.

2.0 Project Team and Relevant Experience

The RECON project team will provide the County with the necessary expertise to provide a thorough analysis of environmental issues related to this project. Michael Page as the project manager will be the primary point of contact for County staff. Mr. Page has 30 years in CEQA compliance with direct experience preparing CEQA documents for solar projects in Imperial County. Supporting Mr. Page on the RECON management team is Lee Sherwood, as principal in charge and technical advisor.

Augmenting the RECON team to provide technical support services for this project are the following firms, each with substantial experience on similar projects in Imperial County:

- **DuBose Design Group, Inc. (DDG)** – SB-610 Water Supply Assessment and Peer Review of the Hydrology/Water Quality Report and Water Quality Management Plan (WQMP).
- **The Bodhi Group** – Peer Review of the Geotechnical Study and Phase I Environmental Site Assessment.
- **Linscott, Law & Greenspan, Engineers (LLG)** – Transportation/Circulation Study Peer Review

An organizational chart for this project has been prepared to identify the personnel committed, as well as the flow of communication proposed for this contract. Qualifications, roles, and responsibilities for the RECON team as well as relevant experience are summarized below. Complete resumes are provided in Attachment A.

Name	Education	Licenses/Certificates	Years of Experience
Michael L. Page, AICP	B.A. Biology-Environmental Science and Geology/Biology	County of San Diego CEQA Consultants List; EIR Preparer American Institute of Certified Planners	30
Lee Sherwood	M.A. Geography (Environmental Studies)	County of San Diego CEQA Consultants List; EIR Preparer	37
Lori Spar	J.D.	County of San Diego CEQA Consultants List; EIR Preparer	20
Nick Larkin	M.A. Urban Planning	County of San Diego CEQA Consultants List; EIR Preparer	18
Susy Morales	M.S. Wildlife Biology	USFWS Permit TE-123070	25
Morgan Weintraub	B.A. Environmental Studies		5

Name	Education	Licenses/Certificates	Years of Experience
Gerry Scheid	M.S. Ecology	County of San Diego CEQA Consultants List; Biological Resources USFWS Permit TE-797665 California Rapid Assessment Method Certified	37
Andy Smisek	B.S. Biology	USFWS Permit TE-797665 CDFW Scientific Collection Permit CDFW Flat-Tailed Horned Lizard Certification California Rapid Assessment Method Certified	7
Carmen Zepeda-Herman	M.A. Anthropology	Registered Professional Archaeologist California BLM Cultural Resource Use Permit County of San Diego CEQA Consultants List; Archaeology	20
Nathanial Yerka	B.A. Anthropology	City of San Diego Qualified Archaeological Monitor	18
Jesse Fleming	B.S. Mathematics	County of San Diego CEQA Consultants List; Noise and Air Quality	15
John Boarman	M.S. Civil Engineering	CA Civil Engineer CA Traffic Engineer	30
Sree Gopinath	M.S., Civil Engineering	Registered Civil Engineer Qualified SWPPP Developer	
Lee Vanderhurst	M.S., Geology	Registered Geologist Certified Engineering Geologist	40
Annette Leon	Bachelor of Landscape Architecture Masters in Urban and Regional Planning	PLA (credential in process)	7
Jose Angel, PE	B.S. Civil Engineering	California Registered Civil Engineer California Hazardous Materials Specialist	22
Frank McDermott, GISP	B.S. Environmental Planning and Design	Geographic Information Systems Professional FAA Part 107 Remote Pilot Certification with Small UAS Rating	22

Project Manager
Michael Page, AICP

Principal in Charge
Lee Sherwood, M.A.

Technical Studies and Peer Reviews

CEQA Analysis
Susy Morales, M.S.
Lori Spar, J.D.
Nick Larkin, M.A.
Morgan Weintraub

Biological Resources
Gerry Scheid, M.S.
Andy Smisek

Cultural Resources
Carmen Zepeda-Herman, RPA
Nate Yerka

Air/Noise/GHG
Jesse Fleming

Traffic (LLG)
John Boarman, PE

Phase I ESA/Hazards (The Bodhi Group)
Sree Gopinath, P.E., Q.S.D.

Geotechnical (The Bodhi Group)
Lee Vanderhurst, P.G., C.E.G.

Water Quality Assessment (DDG)
Annette Leon

Hydrology/Water Quality (DDG)
Jose Angel, PE, RCE

GIS
Frank McDermott

2.1 Project Team

Michael Page, AICP, Project Manager

- 30 years of CEQA/NEPA experience
- B.A. Environmental Science and Geology
- American Institute of Certified Planners
- County of San Diego Approved CEQA Consultants List: EIR Preparer
- American Planning Association Member
- Association of Environmental Professionals Member
- American Public Works Association Member

Mr. Page will serve as the project manager and work closely with Mr. Larkin to ensure the availability of staff and resources and to keep the project on schedule and budget. He will also provide quality control review of documents. Mr. Page's extensive experience includes CEQA documentation for projects in Imperial County; entitlements; policy planning (general and specific plans) and zoning; sustainability and climate change policy; public outreach; and constraints and feasibility studies. He is the principal in charge for the preparation of multiple technical studies in support of a utility-scale battery storage project in Imperial County. Mr. Page's relevant solar project experience includes serving as the project manager for the preparation of CEQA technical studies in support of an Application for Certification submitted to the California Energy Commission for the Black Rock Geothermal facility. In addition, Mr. Page was responsible for technical studies for three concentrator PV projects in eastern San Diego County and the preparation of an Environmental Assessment (EA) for the construction of a PV facility adjacent to the Augustine Casino near the city of Coachella.

Lee Sherwood, Principal in Charge

- 37 years of CEQA experience
- M.A. Geography (Environmental Studies)
- B.A. Geography
- County of San Diego Approved CEQA Consultants List: EIR Preparer
- Association of Environmental Professionals Member

Through his 37-year environmental career, Mr. Sherwood has a strong knowledge of land planning policies, environmental regulations, zoning ordinances, and planning documents in southern California. He has successfully prepared environmental documents for many large-scale and controversial projects for residential, commercial/retail, recreational, and mixed-use developments. For the Imperial Solar Energy Center South and West projects, he acted as project director in coordinating cultural and biological reports and reviewed EIR sections for the County. For the Westside Canal Battery Energy Storage Project in Imperial County, he provided interface with the project applicant during the initial processing of the General Plan Amendment/Rezoning/CUP application package for submittal to the County. He is currently serving as technical advisor for the South Dogwood Avenue Annexation Mitigated Negative Declaration (MND) and Dogwood at Vila Annexation MND project in the city of El Centro.

Susy Morales, Senior Environmental Analyst

- 24 years of CEQA/NEPA experience
- M.S. Wildlife and Fisheries Science
- USFWS Permit TE-123070

Ms. Morales is a senior project manager with expertise on environmental compliance projects (including biological assessments) for utility, land use planning, renewable energy, infrastructure, and recreation projects. She has worked on several large-scale projects that withstood legal review and challenges, including the Bureau of Land Management (BLM) Imperial Sand Dunes Recreation Area Management Plan (RAMP) and EIS that included protection of endangered species while improving recreational opportunities. Ms. Morales also provided NEPA support to the BLM on the Ocotillo Wells State Vehicular Recreation Area partially located within BLM-administered lands. She has worked on renewable energy plans and projects in Imperial County, including the Ocotillo Solar EIS and the Drew Solar EA, and several recreation planning projects for the National Park Service. She has also prepared NEPA documents for U.S. Customs and Border Protection facilities and access roads in Imperial County.

Lori Spar, JD, Senior Environmental Analyst

- 20 years of experience preparing state and federal environmental documents
- LL.M. Environmental Law; J.D.; B.A. Political Science
- Expertise in high-profile, controversial projects

Lori Spar is a valuable member of the project team bringing a broad history of experience in project management, environmental planning and analysis, and environmental litigation. Her work in the legal community allows her to provide valuable insights on land use requirements and procedures. Ms. Spar previously worked for the County of San Diego as an environmental planner and EIR coordinator, co-authoring the County of San Diego EIR and General Content Guidelines. Her experience preparing environmental documents for many large-scale and complex projects has provided her with the expertise required to effectively prepare legally defensible and high quality environmental documents.

Nick Larkin, Senior Environmental Analyst

- 18 years of CEQA/NEPA experience
- M.A. Urban Planning
- Association of Environmental Professionals Member
- Experienced with renewable energy projects

Mr. Larkin is a project manager and environmental analyst with 18 years of experience preparing CEQA and National Environmental Policy Act (NEPA) compliance documents for energy projects. He has extensive experience working with Imperial County including managing the Imperial County General Plan Renewable Energy and Transmission Element Update and corresponding Program EIR. He prepared the Initial Study, presented the project to the Imperial County Environmental Evaluation Committee, and participated in public outreach efforts. He also served as the project manager and primary analyst for preparation of the Draft Program EIR, which addressed potential impacts associated with future development of renewable energy based on the General Plan Element Update. He

managed the responses to comments submitted on the Draft Program EIR and prepared the Final Program EIR.

Mr. Larkin served as the project manager for the Westside Canal Battery Storage Complex Project. He took the lead preparing the CUP application package and oversaw preparation of numerous technical studies. Mr. Larkin worked closely with County staff and the applicant throughout the process to complete the submittal package. Mr. Larkin served as the project manager for the Imperial Valley Solar Company 2 Final EIR. He also served as the representative at the County Board of Supervisors project hearing for certification of the EIR, which was unanimously approved. Mr. Larkin was the project manager for preparing a Major Use Permit for the Energia Sierra Juarez U.S. Generation Tie-in project in Jacumba. He prepared a land use technical report and oversaw preparation of a biological technical report and archaeological and historical investigations report for the proposed construction of a gen-tie line between a proposed wind energy facility in Baja California, Mexico, and a proposed SDG&E energy facility in Jacumba.

Morgan Weintraub, Environmental Analyst

- 6 years of CEQA/NEPA experience
- B.A. Environmental Studies
- Adjunct staff to local municipalities
- Association of Environmental Professionals Member
- Mentorship Committee Member, American Planning Association

Ms. Weintraub is an environmental analyst with RECON responsible for the preparation and management of initial studies, negative declarations, and EIRs in compliance with CEQA and NEPA. She is currently serving as an environmental analyst on the EIR for the City of San Diego Multiple Family Affordable Housing Program. Prior to joining RECON, Ms. Weintraub authored the Ord Mountain Solar EIR project, a solar energy generation and storage project on approximately 484 acres in San Bernardino County. She was an assistant project manager and primary author of the El Centro Town Center MND. In this capacity, she presented the project for approval at the City Council meeting and answered corresponding questions from council members. Ms. Weintraub also served as adjunct staff to the cities of Wildomar and Eastvale planning departments.

Jesse Fleming, Noise, Air Quality, Greenhouse Gas Specialist

- 15 years of experience
- B.S. Mathematics
- Training in FHWA Traffic Noise Model, SoundPLAN, URBEMIS, CalEEMod, EMFAC, AERMOD, ArcGIS

Ms. Fleming is the lead technical specialist at RECON whose responsibilities include conducting acoustical, air quality, and greenhouse gas (GHG) technical studies that require ambient conditions identification, dispersion and emission models, and preparation and processing of reports. She is highly proficient with various air quality and noise models. Ms. Fleming has prepared air quality and GHG assessments in compliance with the Imperial County Air Pollution Control District regulations and guidelines for CEQA

documents, the federal Clean Air Act, and the California Clean Air Act. For a utility-scale battery storage project in Imperial County, she recently prepared technical studies in compliance with CEQA for noise, air quality, and GHG emissions. She also prepared the air quality technical report and air quality conformity analysis for the extension of Imperial Avenue in El Centro in support of the MND.

Gerry Scheid, Senior Biologist/Wetlands Specialist

- 37 years of biological resources experience
- M.S. Ecology
- U.S. Fish and Wildlife Service (USFWS) Permit TE-797665

Mr. Scheid is a senior biologist and wetland permitting specialist with broad experience in conducting field surveys as well as assisting clients in securing wetland permits with state and federal agencies (U.S. Army Corps of Engineers (USACE), USFWS, California Department of Fish and Wildlife, and San Diego Regional Water Quality Control Board). Mr. Scheid will conduct the peer review of the biology technical study, having similar experience with Wistaria Ranch Solar Energy Center and Imperial Solar Energy Center South and West.

Andy Smisek, Biologist/Wetlands Specialist

- 7 year of experience
- B.S. Biology
- USFWS Permit TE-797665 for Quino checkerspot butterfly and vernal pool branchiopods
- CDFW Scientific Collecting Permit for amphibians, birds, invertebrates, and reptiles
- California Rapid Assessment Method (CRAM) Certified

Mr. Smisek has a strong background in biological constraints surveys and resource management planning in southern California. He serves as project manager and conducts wetland delineations, USFWS protocol surveys, report preparation, vegetation analyses, habitat assessments, rare plant surveys, bird nest surveys, and environmental compliance monitoring. For the Westside Canal Battery Energy Storage System Project, Mr. Smisek conducted a wetland delineation survey in accordance with USACE protocol and prepared a wetland/waters delineation report. He also engaged in the agency consultation and prepared the necessary submittals in support of the wetland/waters permitting process.

Carmen Zepeda-Herman, RPA, Senior Archaeologist

- 20 years of experience
- M.A. Anthropology
- Certified by the Register of Professional Archaeologists (RPA)
- San Diego County Archaeological Society Member

Ms. Zepeda-Herman is RECON's lead archaeologist. She is responsible for conducting field surveys, test excavations, data recovery excavations, reporting, and construction monitoring for cultural resource studies. Ms. Zepeda-Herman regularly works with a range of regulatory and assessment frameworks, including the National Register of Historic Places, National Historic Preservation Act (NHPA), California Register of Historic Resources, and

CEQA. She has provided cultural resources management services for local agencies and utility companies in Imperial County such as the Ocotillo Sol Photovoltaic Solar Project, Imperial Solar Energy Center South and West Projects, the Ocotillo Airstrip Extension, and the Goldmine Tap to Knob Wood Pole Replacement Project. She also assisted with the NHPA Section 106 consultation support for the environmental assessment associated with vegetation control activities along the Alamo River for U.S. Customs and Border Protection.

Nathanial Yerka, Archaeologist

- 17 years of experience
- B.A. Anthropology; J.D.
- City of San Diego Qualified Archaeological Monitor
- OSHA 10-hour training course in construction safety and health

Mr. Nathanial (Nate) Yerka has worked on over 50 archaeological projects throughout California and Nevada. He primarily serves as crew chief and has participated in a range of cultural resources investigations including archaeological surveys, BLM fire rehabilitation surveys, test excavations, skeletal excavations, data recovery programs, and various monitoring projects for which he coauthored several technical reports and prepared California Department of Parks and Recreation site forms. He has performed laboratory procedures including analysis of prehistoric artifacts, marine shellfish remains, and historic refuse collections. Mr. Yerka has worked closely with the Native American community in southern California and maintains good working relationships with a variety of community members. His experience in Imperial County includes serving as crew chief of a 330-acre cultural resources survey for the Dogwood at Villa Avenue project in El Centro, cultural resources monitoring for the Goldmine Tap to Knob Wood Pole Replacement Project for Western Area Power Administration, cultural resources surveys for the U.S. Customs and Border Protection facilities and access roads, and a cultural resources survey for the Neckel Road Utility and Roadway Infrastructure Project. Most recently he served as crew chief and survey lead as well as primary author of the cultural resources report for the Westside Canal Battery Energy Storage Project.

John Boarman, PE, Traffic Engineer (LLG)

- 30 years of experience
- M.S. Civil Engineering
- Civil Engineer, CA C50033
- Traffic Engineer, CA TR1855

As a traffic/transportation engineer, Mr. Boarman has prepared, participated in, or directed the preparation of several hundred traffic impact studies and reports that have been used to support EIRs, EISs, and EAs. His work has included not only traffic impact studies but also studies of parking impact and sufficiency, site access and circulation, and internal auto, pedestrian, and public transit traffic circulation. Mr. Boarman's relevant renewable energy project experience includes Lamont Solar Farm, Blythe Solar Energy, 85JP Solar Farm, Redwood Solar, Imperial 81BM Solar Farm, and Imperial79CA Solar Farm.

Annette Leon, Planner (DDG)

- 10 years of experience
- Bachelor of Landscape Architecture
- Master's in Urban and Regional Planning
- Watershed Management Training Certificate

Ms. Leon is an experienced Project Planner and Manager with a demonstrated history of working in the architecture planning, civil engineering industry. She is skilled in AutoCAD, Adobe Suite, ArcGIS products, Urban Planning, Design Research, Land Use Planning, and Environmental Planning (CEQA/NEPA). Ms. Leon performs project coordination and management of complex planning and engineering related projects in Imperial County, primarily industrial and renewable energy projects. She performs water supply assessments, airport land use compatibility analysis, land evaluation and site assessment modeling, electrical and circulation flow diagrams, and air quality modeling (Tier 1). Ms. Leon has a vast knowledge in CEQA and the California Water Code and Energy Code, as well as Imperial County General Plan and Division 5 Ordinance. She was involved with several County projects, including Ocotillo Wind Renewable Energy, Imperial County Solar Ordinance, IV Solar Field, and Imperial Solar Energy.

Jose Angel, P.E., Hydrology/Water Quality (DDG)

- 30 years of experience
- B.S. Civil Engineering
- California Registered Civil Engineer (RCE No. C52035)
- California Hazardous Materials Specialist (HMS No. 435)

Mr. Angel has over 20 years of regulatory expertise dealing with complex water quality issues resulting from discharges of wastes from point and nonpoint sources of pollution and in developing and implementing water quality control policy. He spent the majority of his professional career working for the Colorado River Water Quality Control Board, Colorado River Basin Region. As Executive Officer, he was responsible for the day-to-day operation of the Colorado River Basin Water Board office and regularly advised the Colorado River Basin Water Board on water quality control policies, implementing those policies, and issuing enforcement orders to protect water quality.

Sree Gopinath, P.E., Q.S.D., Senior Engineer (The Bodhi Group)

- 25 years of experience
- M.S. Civil Engineering
- Registered Civil Engineer (57987)
- Qualified SWPPP Developer (01010)

Mr. Gopinath has over 25 years of experience providing environmental engineering and consulting services in San Diego County. He is experienced in hazardous materials and hazardous waste evaluations of public agency (local, state, and federal) projects. He has extensive experience and is knowledgeable of state and federal hazardous waste regulations, CERCLA, RCRA and TSCA as they apply to infrastructure and transportation projects. He managed and completed Phase I and Phase II Environmental Site Assessments, Initial Site Assessments, Aerially-Deposited Lead (ADL) assessments for

highway and rail projects, remediation projects, and industrial hygiene/hazardous materials waste monitoring component of MMRP projects. He has prepared health and safety plans, soil management plans, human health risk assessments, and remedial action plans.

Lee Vanderhurst, P.G., C.E.G., Senior Geologist (The Bodhi Group)

- 40 years of experience
- M.S. Geology
- Registered Geologist (3734)
- Certified Engineering Geologist (1125)

Mr. Vanderhurst has over 40 years of experience managing and preparing geologic/geotechnical evaluations of public agency projects. He has significant experience in providing geologic and geotechnical services for Capital Improvements Projects for public agencies in San Diego County (City of San Diego, County of San Diego, SANDAG, San Diego County Water Authority, University of California, Veterans Administration, and others). Lee oversees and reviews the geologic, geotechnical, and hydrogeologic portions of The Bodhi Group projects. Mr. Vanderhurst's projects in San Diego include Desktop Geotechnical and Geological Hazards Studies for the Ocean Beach Community Plan Update Programmatic EIR, and a Geologic Hazards Evaluation for Road Improvements, Border Field Park.

Frank McDermott, GISP, GIS Specialist

- 22 years of experience
- B.S. Environmental Planning and Design
- Geographic Information Systems Professional
- FAA Part 107 Remote Pilot Certification with Small UAS Rating

Mr. McDermott is RECON's GIS coordinator with 22 years of experience in vector, raster, 3D, and spatial analysis using the latest software from ESRI including ArcGIS, ArcGIS Online, Collector for ArcGIS, and Survey123. He has a bachelor's degree in Environmental Planning and Design and is a Geographic Information Systems Professional. Mr. McDermott works with the RECON GIS team, biologists, archaeologists, and environmental analysts to compile, analyze, and synthesize data from various sources, including UAV (drones), GPS, and tablet-based field data collection technology and data created through digitizing and other secondary sources. He was the GIS manager for the Sunrise Powerlink Species Surveys and the Imperial Solar Energy Center (CSOLAR) South and West Projects.

2.2 Relevant Project Experience

Key to our qualifications is our experience on solar PV projects in southern California and with environmental issues in Imperial County. A sample of our representative project experience is presented below.

Westside Canal Battery Energy Storage System Project Technical Studies

Working with the project applicant and County staff, RECON managed a series of comprehensive technical studies and supporting documents for a utility-scale battery energy storage system project located on 148 acres in southern Imperial County between El Centro and the U.S./Mexico border. The project may include 25 MW of solar generating capacity and up to 2,000 MW of battery energy storage. RECON prepared a permitting plan, General Plan Amendment/Rezoning/CUP application package for submittal to the County of Imperial, compliance documents and support in compliance with CEQA and the County Guidelines for CEQA Compliance, an environmental study plan, and multiple technical studies to support the future EIR. Technical studies included air quality, GHG emissions, noise, cultural, biological resources, jurisdictional waters/wetland delineation report, general plan amendment application, and a LESA.

Drew Solar Project Technical Studies

This PV solar project in the southern part of the county involves construction of an approximately 100 MW alternating current solar generation facility and battery energy storage facility. Working with the County staff and the private applicant, RECON prepared technical studies in support of the project EIR, which included the noise analysis, air quality and GHG modeling and technical report, and the LESA to address agricultural resources impacts. The technical reports addressed potential impacts from both project construction and operation and were included as appendices to the project EIR for the County.

Chapman Solar Ranch Draft EIR

RECON prepared a Draft EIR and technical studies for the County of San Diego for the Chapman Ranch PV solar project on a 132-acre ranch in the eastern San Diego County community of Boulevard. Key issues included potential visual, biological, and cultural resources impacts as well as water supplies, land use, community character, noise, air quality, GHG emissions and the potential for wildland fires. The proposed project included a gen-tie line and approximately one mile of reconductoring of an existing SDG&E transmission line.

Imperial Solar Energy Center South and West Projects

RECON completed the biological and cultural resource surveys and technical documentation for two utility-scale solar energy projects in western Imperial County. The two project sites cover over 2,000 acres of both private lands and Bureau of Land Management (BLM) lands in Imperial County and include habitat for sensitive plant and animal species (e.g., flat-tailed horned lizard). Spring rare plant surveys, general biological surveys, sensitive wildlife species surveys, jurisdictional resource delineation, and a complete field survey for cultural resources were completed for both the solar field sites and the off-site electrical transmission corridors across BLM lands. RECON completed the concurrent biological surveys for both projects within the required survey timeframes. RECON prepared biological technical reports, cultural resource reports, jurisdictional delineation reports, and species' survey reports in support of the projects' EIRs/EAs in accordance with the California Desert Conservation Area (CDCA) Plan and the BLM's Flat-tailed Horned Lizard Range-wide Management Strategy. RECON prepared a BA for the two projects and assisted the BLM in Section 7 consultation. Both projects have been constructed.

Mount Signal PV Solar Farm I, Calexico Solar Farm I, and Mount Signal Solar Farm I

The project proposed construction of a 200 MW solar photovoltaic facility and associated transmission lines located approximately eight miles west of Calexico, in Imperial County. RECON conducted fall rare plant surveys within a survey corridor surrounding the proposed transmission routes within BLM lands. RECON prepared biological technical reports and species' survey reports in support of the projects' EIR/EIS, in accordance with the CDCA Plan and the BLM's Flat-tailed Horned Lizard Range-wide Management Strategy, and provided technical assistance throughout the various environmental permitting processes.

Ocotillo Sol Photovoltaic Project EIS

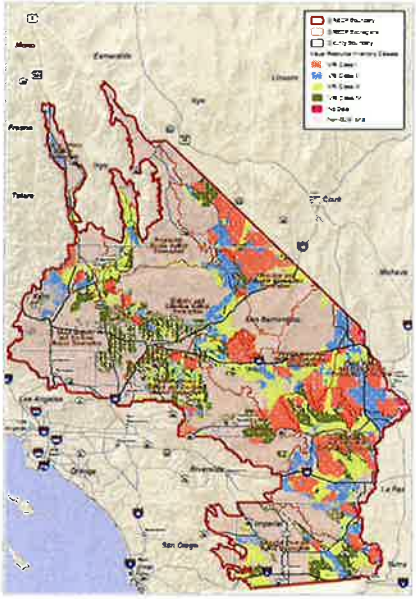
RECON prepared an EIS for the siting of a 20 MW solar photovoltaic power plant facility located on approximately 115 acres of BLM-administered public lands adjacent to the Imperial Valley Substation in Imperial County. The project is located within the Yuha Basin Area of Critical Environmental Concern, which is also managed as the Yuha Desert Wildlife Management

Area. RECON reviewed various biological and cultural resource studies conducted for the project to develop those sections of the EIS. RECON staff, with assistance from BLM specialists, also reviewed military installations in the vicinity.

RECON developed all sections of the EIS, including existing conditions and impact analysis. The analysis included a discussion of cumulative impacts associated with several other solar fields and transmission lines in the area. RECON participated in interdisciplinary team meetings related to endangered species and cultural resource compliance with the USFWS, State Historic Preservation Office, and tribal representatives.

RECON assisted with public notices, public scoping and comment meetings, and Final Scoping Report for the project. Additionally, RECON developed the public review Draft EIS, assisted with public participation, including public comment meetings, conducted public comment analysis, and participated in Native American consultation.

Desert Renewable Energy Conservation Plan EIR/EIS



The DRECP focused on a specific range of covered activities related to renewable energy projects and environmental compliance. These covered activities include the construction, operation, maintenance, and decommissioning of renewable energy projects and required new transmission lines within the plan area. The DRECP addresses renewable energy from solar (photovoltaic and thermal), wind, and geothermal along with identifying transmission corridors that would accommodate renewable energy sources.

Covering approximately 22 million acres in seven counties, including Imperial County, within the California desert, and the Land Use Plan Amendment for the BLM's California Desert Conservation Area Plan, it was intended to conserve habitat for threatened and endangered species in the Mojave and Colorado deserts while facilitating the timely permitting of renewable energy projects to help meet the state's goal of providing electricity generation through renewable energy. Both the USFWS and the BLM were federal co-lead agencies under NEPA. A critical component of the analysis was the consideration of several alternatives that represent a spectrum of options. The development of these alternatives, the analysis of the environmental issues, and the preparation of drafts for public review and comment involved coordination with not only the state and federal lead agencies but also utility companies, local municipalities, and various special interest groups. Working with the California Energy Commission, RECON prepared EIR/EIS sections addressing the affected environment and the anticipated effects on the full range of natural, cultural, visual, recreational, and geological resources; land use; noise; public health and safety; and socioeconomics. RECON also assisted with the development of the Final DRECP BLM Land Use Plan Amendment EIS, which is Phase I of the overall DRECP.

Wistaria Ranch Solar Energy Center Project

RECON biologists conducted a jurisdictional waters delineation within the Wistaria Ranch Solar Energy Center project area located in Imperial County. The solar energy project includes a large acreage for the solar panel collector arrays, and a transmission line corridor from this project will connect to an existing transmission line that terminates at the Imperial Valley Substation. The results of the delineation were used to identify and map the extent of the federal jurisdictional waters of the U.S. and waters of the state, including any adjacent wetlands. Methods for delineating wetlands followed guidelines set forth by the U.S. Army Corps of Engineers. Jurisdictional waters of the state were also delineated in accordance with the California Department of Fish and Wildlife and the San Diego Regional Water Quality Control Board.

Imperial Avenue Extension IS/MND

RECON prepared a joint CEQA/NEPA environmental impact analysis for the proposed one-mile roadway extension of Imperial Avenue to accommodate a four-lane roadway. RECON prepared a Preliminary Environmental Study for Caltrans and a CEQA IS/MND for the City of El Centro. RECON also prepared Caltrans-required technical studies related to biological resources, cultural resources, air quality, noise, community impacts, and visual resources. RECON also oversaw subconsultants preparing technical studies for traffic and hazardous materials.

Dogwood Road at Villa Avenue MND

RECON prepared a draft MND for the Annexation, General Plan Amendment, and Rezone for this 330-acre project. The future development of the land use actions and development agreement would allow for up to three million square feet of general manufacturing, warehousing, or light industrial uses. The analysis was completed in a manner to provide a future mitigation framework and streamline processing once development is proposed. The MND addressed potential agricultural, biological, air, noise, GHG, geology/soils, and traffic issues.

South Dogwood Avenue Annexation MND

RECON is preparing a MND to annex approximately 67.78 gross acres (65.05 net acres after road right-of-way exclusions) of unincorporated lands to the city of El Centro. Concurrent with the application for annexation, the project proposes a General Plan Amendment to allow for General Commercial development and to pre-zone the parcels to CG (General Commercial) and R-3 (Multiple-Family Residential). We are also preparing noise, air quality, and GHG emissions technical reports for the project in support of the MND.

3.0 Scope of Work

Approach

RECON's approach to the EIR documentation and processing for the VEGA SES 2, 3, and 5 PV Solar project is founded on being thorough while also maintaining flexibility. We also have the staff resources to make sure the EIR processing stays on schedule. As always, our goal is to ensure a legally adequate process and CEQA document for the County while avoiding project delays and increased costs for the applicant. RECON's management team for the project (Lee Sherwood and Michael Page) have the wealth of experience to anticipate project issues and manage project timelines to ensure that deliverables are met within budget and on schedule. They provide the County with the experience to ensure a smooth and efficient CEQA process for the project. At the onset of a project, they will establish a working schedule and distribute it to all team members and will make sure deadlines are kept from project kickoff to final EIR certification by the Board.

At the onset of a project, we will establish a working schedule and distribute it to all team members. Project status meetings will be held regularly to identify scheduling and staffing needs and to ensure accountability in meeting timelines. This will allow the project manager, Mr. Page, to identify any scheduling issues early in the process for consideration by County staff. Additionally, RECON uses the latest version of BST Enterprise project management and accounting software to carefully track real time project budgets and to produce invoices to best serve the County. Project budgets are updated regularly and project managers are easily able to view the budgetary status of their projects at any time through a customized dashboard on their individual workstations. This will allow Mr. Page to track the budget on a regular basis.

In addition, RECON understands the importance of providing County staff with EIR submittals that have been scrutinized and undergone a thorough quality control review. We acknowledge that County staff time is valuable and we strive to avoid internal document inconsistencies, poor sentence structure, and incorrect information in all of our submittals. RECON has a quality control procedure in place to ensure that the EIR submittals will meet staff's expectations. Once a work product is prepared, RECON's internal quality control program will be implemented, which centers on regular progress reviews and independent document assessment. Every RECON document associated with the VEGA SES 2, 3, and 5 EIR (e.g., draft and final EIRs and peer review documents) will adhere to the following steps:

- The first review will be conducted by a RECON staff person (other than the original author) with expertise in the specific technical area.
- RECON's production staff will then review the document and provide editing and formatting changes.
- The next review will be performed by the project manager (Mr. Page). With 30 years of CEQA experience, his technical review will ensure that the document adequately

addresses the project and issues associated with the various PV project components (solar array, substations, battery energy storage, and transmission).

- The final review will be completed by the project's principal in charge with 37 years of CEQA expertise (Mr. Sherwood). This review will focus on ensuring that the document is readable for all parties and is consistent with CEQA requirements.

Scope of Work

The following scope of work includes project initiation and site visit (Task 1); preparation of the Administrative Draft EIR, preparation of several technical studies, and peer review of technical studies provided by the project applicant (Task 2); preparation of the Public Review Draft EIR (Task 3); preparation of the Final EIR (Task 4); preparation of the Mitigation Monitoring and Reporting Program (MMRP) (Task 5); and preparation of CEQA Findings and notices (Task 6). For each task, the necessary meetings, deliverables, and notices are identified. Please note that the meetings described below under each task will occur as virtual meetings or conference calls. RECON has current experience with virtual public meetings having arranged and held a virtual Scoping Meeting for an EIR in the City of Chula Vista this past September. .

Task 1 – Project Initiation

Task 1.1: Kick-off Meetings, Site Visit, and Data Collection

Upon receipt of a Notice to Proceed, RECON will participate in a kickoff meeting with County staff to establish lines of communication, collect existing data and documents, refine the scope of work (as needed), and confirm the project timeline. RECON will also conduct another visit to the VEGA SES 2, 3, and 5 sites to further document the specific existing conditions associated with each project component.

Task 1.2: Initial Study/Notice of Preparation

RECON will prepare the Notice of Preparation (NOP) for review and distribution by County staff. The NOP will identify the full range of issues to be addressed in the EIR. RECON will present the project to the Imperial County Environmental Evaluation Committee and facilitate one public scoping meeting following the release of the NOP.

Task 1.3: Scoping/Public Participation

The RECON project manager, Michael Page, will assist the County with conducting a virtual scoping meeting to receive public comment and input on project related issues that should be addressed in the EIR. We will also participate virtually in an Environmental Evaluation Committee (EEC) meeting for the project. RECON will assist the project team in preparing and presenting materials regarding the CEQA scoping process and will coordinate the receipt of public comments. RECON will provide meeting minutes and will compile a list of identified issues of concern in a Scoping Letter Report, which will be included as an appendix to the EIR.

Task 1.4: AB 52 Consultation

According to AB 52 guidance prepared by the Office of Planning and Research, consultation under AB 52 is to be completed by the time the NOP is published. Therefore, RECON archaeologists will support County staff with AB 52 consultation services, including: the preparation of notification letters; tribal consultation and tracking; assessment of information related to tribal cultural resources provided by the Tribe(s); and drafting appropriate mitigation measures.

Task 1.5: Project Description and Project Alternatives

To begin, RECON will review the CUP project applications submitted by the Applicant and will make findings of consistency with the Imperial County General Plan Renewable Energy and Transmission Element. Nick Larkin, who was the primary author of the EIR for the Renewable Energy and Transmission Element General Plan Update, will complete this task for the VEGA SES 2, 3, and 5 Solar project.

RECON will also work with County staff at the project outset to begin to draft and outline the CEQA project alternatives. In addition to alternative project sites and possibly reduced project boundaries, RECON will evaluate alternative connection options between project sites, the switching station, and the point of interconnection at the IID Midway 92 kilovolt Substation. Project alternatives will be identified that reduce or avoid potentially significant environmental impacts.

Finally, building on the project description in the application materials and the consistency review described above, RECON will develop a thorough EIR project description that will include clear and detailed accounts of the proposed PV project components and a discussion of the regional location and local setting. Figures will be provided to accurately represent the scope of the project and its location. As part of this task, RECON will work closely with the County to develop concise and accurate project objectives and to ensure that the project description comprises the "whole of the project," as defined in CEQA Section 21159.27. The project description will also identify all discretionary actions that will be required at the County level and subsequent approvals. RECON will also prepare an Initial Study (IS) to formulate the appropriate scope of issues to be fully analyzed in the EIR. Issues found to be less than significant during the Initial Study process would be addressed briefly in the EIR while those topics that are determined to be potentially significant will be addressed in much greater detail.

Meetings

- RECON will attend a virtual kickoff meeting.
- RECON will attend a virtual EIR public scoping meeting and the EEC meeting.

Deliverables

- One (1) electronic copy of the Draft IS in Microsoft Word and PDF format.
- One (1) electronic copy of the Final IS in Microsoft Word and PDF format.
- One (1) electronic copy of the Draft NOP in Microsoft Word and PDF format.
- One (1) electronic copy of the Final NOP in Microsoft Word and PDF format.

Task 2 – Administrative Draft EIR, Technical Studies, and Peer Review

Technical Studies and Peer Review

RECON will begin Task 2 by conducting peer reviews of the following technical studies provided by the project applicant: air quality technical report, GHG analysis, cultural resources, biological resources technical report, geotechnical study, glare analysis, Phase 1, visual resources technical report, traffic analysis, LESA, hydrology report, and water quality management plan. If inadequacies in any of these studies are identified during the peer review, a letter report will be provided to the County documenting our observations and comments. RECON will prepare the following analysis and technical studies: alternatives; cumulative impacts/growth inducement; ; land use and planning; mineral resources; paleontological resources; population and housing; public health and safety; public services; AB 52 tribal consultation; and energy. The scope of work for each of these technical study peer reviews, technical studies, and EIR sections is described below.

Task 2.1: Administrative Draft EIR Analysis/Peer Reviews

2.1.1 Aesthetics (RECON – Peer Review)

The aesthetics section of the EIR will be based on the results of the visual resources technical report and the glare hazard analysis report submitted by the Applicant and peer-reviewed by RECON. RECON will peer review both reports submitted by the Applicant for consistency with CEQA regulatory guidance, review the methodology, check for accurateness, and review the ability of mitigation measures to successfully mitigate potential impacts. If any deficiencies are identified, RECON will document the identified issues and will coordinate with the consultant to ensure that appropriate report revisions are made in the most time- and cost-efficient manner.

This EIR section will address the potential aesthetics impacts of the VEGA SES 2, 3, and 5 project, including any proposed grading and development of the PV project components (e.g., solar arrays, substation, switching yard, battery energy storage systems (BESS), and transmission). The aesthetics section will also discuss the extent to which the project represents a potentially significant change in the visual setting of the area, the extent to which it is compatible with surrounding uses, and its potential adverse impact on views. The following components will be addressed as part of the analysis:

- Extent of change related to project visibility from key view locations and the degree of visual contrast and compatibility between project elements and its environs.
- Potential impacts to important scenic, including views from major transportation corridors.

- Potential impacts due to topographic alteration, adverse effects on scenic resources, and the visual character of the area.
- Project conformance with General Plan policies regarding visual and scenic resources.
- The potential for direct and cumulative aesthetic impacts from surrounding off-site areas.
- If warranted, identification of mitigation measures required to reduce the aesthetic impacts.

2.1.2 Project Alternatives (RECON)

CEQA requires that an EIR describe a range of reasonable alternatives to the proposed project or to the location of the proposed project site that could feasibly avoid or lessen any significant environmental impacts of the proposed project while attaining most of the project's basic objectives.

As noted above, RECON staff will work with County staff and the project Applicant to identify a reasonable range of project alternatives. The development of project alternatives will take into account the project objectives and the potential to reduce or avoid identified potential environmental impacts. In addition to the No Project Alternative, possible alternatives may include alternative project locations and reduced project size. The potential project alternatives that would not meet the stated project objectives, such as developing alternative types of renewable energy, will be summarized in a section titled Alternatives Considered but Eliminated from Further Consideration. A minimum of two feasible project alternatives, in addition to the No Project Alternative, will be selected for analysis with the intent to reduce or avoid potential environmental impacts.

A comparative analysis table will be included in the EIR to facilitate the reader's understanding of the project alternatives and allow a comparison of the potential impacts of each alternative. All of the issues addressed in the EIR will be evaluated for each alternative.

2.1.3 Agricultural Resources (RECON – Peer Review)

Only the VEGA SES 5 Site 1 project could have a potential impact to active agricultural lands. Therefore, the applicant will complete and submit a California Agricultural LESA report for this portion of the project which will be peer reviewed by RECON. The agricultural resources section of the EIR will address the potential for the project to impact these agricultural resources and will include the following:

- Evaluation of the existing condition of the sites in relation to agricultural resources.
- Discussion of applicable agricultural policies and applicability of the County's policies.
- An assessment of the agricultural potential of the on-site soils.

- Identification of appropriate thresholds of significance and the significance of impacts.
- Identification of appropriate mitigation measures to address any potentially significant impacts consistent with the mitigation framework for agricultural resources documented in the Renewable Energy and Transmission Element Update Program EIR.

2.1.4 Air Quality & GHG (RECON – Peer Review)

RECON will conduct a peer review of the air quality/GHG technical analysis submitted by the Applicant. We will evaluate the adequacy and accuracy of the analysis and conclusions regarding the air quality and GHG impacts resulting from the project, potential impacts, and proposed mitigation measures. The review will focus on the adequacy of the analysis and soundness of the conclusions. If any deficiencies are identified, RECON will document the identified issues and will coordinate with the Applicant's consultant to ensure that appropriate report revisions are made in the most time- and cost-efficient manner. The peer review will include:

- Evaluation of the adequacy and appropriateness of the models employed in forecasting future conditions.
- The assumptions used in the modeling to assure that they appropriately reflect the proposed project as described in the project reports.
- Confirmation that assumptions used in the report are consistent with federal, state, and local County standards, as appropriate.
- The reasonableness of conclusions and data used in the report.

The EIR section will include the quantitative analysis of the project's GHG emissions and emission reductions and a qualitative analysis of the project's consistency with applicable County and state plans, policies, and regulations adopted for the purpose of reducing GHG emissions. In addition, the scope of work for the climate change/GHG section of the EIR includes the following tasks:

<u>GHG</u>

- Inclusion of an introductory discussion of climate change including information regarding the current understanding of the mechanisms behind global climate change and GHG emissions, current conditions and trends, and relevant existing regulations, plans, policies, and programs pertinent to climate change adaptation and GHG emissions reduction.
- A description of the methodology used in completing the analysis.
- Identification of quantifiable significant impacts and a qualitative review of the proposed project's compliance with applicable local and state plans, policies, and regulations adopted for the purpose of reducing GHG emissions.

- Should significant impacts be identified, appropriate mitigation measures to reduce emissions would be recommended.

Air Quality

- Identification of existing air quality conditions in the air basin based on data available from the California Air Resources Board (CARB) for nearby monitoring stations. We will review the federal, state, and local standards and regulatory review requirements.
- Summarization of the federal, state, and local standards and regulatory review requirements pertinent to air quality.
- Description of the analysis methodology used to identify air quality emissions.
- Reporting of the expected emissions for carbon monoxide, nitrogen oxides, and other criteria pollutants using standard emission factors.
- Determination of the significance of any air quality impacts from construction and operation of the project from both vehicular and stationary sources. If necessary, control strategies will be identified. A conclusion will be made as to whether the anticipated emissions would: (1) violate any air quality standard or contribute to a project air quality violation; (2) result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in nonattainment; or (3) expose sensitive receptors to substantial pollution concentrations.
- Identification of the significance of air quality impacts and possible mitigation measures to reduce significant impacts, if required.

2.1.5 Biological Site Assessment (RECON – Peer Review)

RECON biologists will conduct a peer review of the biological resources technical report, as submitted by the Applicant. The peer review will focus on the proper coverage of potential occurrence of rare, threatened, and endangered and other special status species. This will include a review of the following as provided by the client or their agents: the project description, project design and project footprint maps, previously prepared site reports, information on site history, and local planning documents. If any deficiencies are identified, RECON will document the identified issues and will coordinate with the consultant(s) to ensure that appropriate report revisions are made in the most time- and cost-efficient manner.

The biological resources section of the EIR will be based on the biological resources studies to be provided by the Applicant and peer reviewed by RECON. This EIR section is anticipated to include the following:

- Existing biological setting, regulatory framework, and appropriate thresholds of significance.
- The potential for significant impacts to biological resources including whether the project would result in adverse effects to sensitive plant and wildlife species, sensitive habitats, wetlands and waters of the U.S. and state, or wildlife corridors.

- An assessment of project compliance with applicable local, state, and federal biological resources conservation programs.
- Appropriate mitigation measures to address any potentially significant impacts.

2.1.6 Cumulative Impacts/Growth Inducement (RECON)

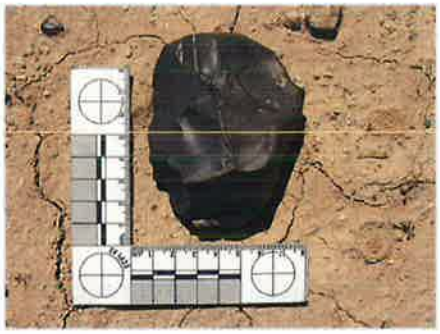
Led by Mr. Page, RECON will address potential cumulative impacts and growth inducement. There have been a number of renewable energy projects proposed in Imperial County. In addition, the Renewable Energy and Transmission Element EIR addresses the topics of cumulative impacts and growth on a county-wide basis. RECON will evaluate potential cumulative impacts and growth inducement from both a project list approach and a regional plan approach.

The cumulative impacts discussion in the EIR will be included within the separate environmental subject area discussions, as appropriate, and additionally discussed in an alternatives section of the EIR. The analysis will consider the impacts of projects currently approved and reasonably anticipated within the County. Appropriate cumulative projects to be considered in the analysis will be developed in consultation with County staff and will include a review of impacts and mitigation associated with cumulative projects. A table listing the cumulative projects and a map depicting their locations will be provided.

The EIR will also evaluate the potential for the project to result in growth inducement. It is anticipated that the project would not induce growth because the project would meet future local and regional demand for power and would not generate excessive energy capacity that would induce population growth. In addition, construction jobs would be short term and the operation would only require several workers who likely already reside in Imperial County and work in the renewable energy business.

2.1.7 Cultural/Archaeological Resources (RECON – Peer Review)

RECON archaeologists will peer review the cultural/ archaeological resources study provided by the Applicant, as well as the data obtained from the completed record search. RECON will evaluate the adequacy of the methodology used in completing the cultural resources survey and the accuracy and completeness of the analysis and conclusions regarding the potential for cultural resources to occur on the project site.



The cultural resources section of the EIR will be based on the cultural resources study provided by the Applicant and peer reviewed by RECON. This section will address the potential for significant impacts to cultural resources, including whether the proposed project would cause a substantial adverse change in the significance of an historical resource or archaeological resource, as defined pursuant to CEQA Guidelines Section 15064.5. The scope of work for the EIR section includes the following tasks:

- A discussion of the physical and historic setting at the project sites as it relates to historic and archaeological resources.
- Applicable thresholds of significance.
- The potential for direct or indirect impacts to cultural resources, including whether the proposed project has the potential to disturb any human remains.
- Mitigation measures, such as grading monitoring, to address any potentially significant impact.

2.1.8 Geology and Soils Analysis (The Bodhi Group – Peer Review)

The Bodhi Group will peer review the CEQA-level geotechnical study submitted by the Applicant for consistency with CEQA regulatory guidance, review the methodology, check for accurateness, and review the ability of mitigation measures to successfully mitigate potential impacts.

The geology and soils section of the EIR will be based on the geotechnical investigation submitted by the Applicant. This section will focus on impacts related to geologic hazards and soil conditions potentially affecting development of the project site. The scope of work includes the following tasks:

- Existing geologic conditions and soils present on the project site.
- Appropriate thresholds for determining potential impacts related to geology and soils as detailed in the CEQA Guidelines, Appendix G.
- Seismic-related impacts (ground shaking, ground failure, and liquefaction); unstable soil or geologic conditions potentially resulting potential impacts to life or property associated with soils.

2.1.9 Hazards and Hazardous Materials/Phase 1 (The Bodhi Group – Peer Review)

The Bodhi Group will peer review the Phase I ESA. The objective of the peer review is to evaluate whether appropriate Recognized Environmental Conditions (RECs) have been identified through a research of standard and site-specific sources of information and if the process and results comply with the American Society for Testing and Materials (ASTM) E1527-13 Standard Practice for Environmental Site Assessment. The RECs will be reviewed in the context of the construction and operation of the Solar Project. Specifically, they will review whether appropriate regulatory agency searches were performed and files reviewed to identify possible hazardous materials releases (if any), whether the appropriate federal, state, local and tribal databases were searched, whether the physical site setting was researched and site reconnaissance completed, whether people knowledgeable of the site were interviewed, whether site ownership and past site uses were researched, and whether the information was compiled and analyzed such that appropriate RECs would be identified (if present).

- The hazardous materials section of the EIR will be based on secondary source information and the Phase 1 submitted by the Applicant. This section will focus on impacts related to hazards potentially affecting development of the VEGA SES 2, 3, and 5 project site.

2.1.10 Hydrology Report and Water Quality Management Plan (DDG – Peer Review)

DDG conjointly with LC Engineering Consultants, Inc. will peer review the hydrology and water quality technical studies provided by the applicant's consultant. DDG will review these studies for adequacy for inclusion in the EIR and provide any comments to RECON. The EIR section will be based on the these peer reviewed studies and other applicable secondary source information.

2.1.11 Land Use and Planning (RECON)

RECON will address all land use and planning issues. The land use and planning section of the EIR will evaluate land use consistency with the County's General Plan, including the Renewable Energy and Transmission Element, applicable zoning, as well as other relevant planning documents. The Coachella Canal, East Highline Canal and the UPRR border the project sites and easements may be required from the UPRR and IID for site access, construction and operational water supplies, and utility crossings. Other significant land uses that were noted on a site visit which immediately surround the CUP boundaries include natural open space and, in the case of VEGA SES 5, active agricultural fields to the south and west. The following describe each of the project sites.

VEGA SES 2 – The Daniel Acosta Dirt Bike Place is off Flowing Wells Road and is immediately north of the western parcel. The wash over Siphon 5 of the Coachella Canal leads to the eastern parcel while the wash over Siphon 6 leads to the northern parcel. Access to both is via the Coachella Canal Road to the two siphon crossings. The washes are full of Paloverde while the alluvial fan is creosote brush scrub. VEGA SES 2 is all natural desert with no evidence of past development or agriculture.

VEGA SES 3 – The VEGA SES 3 project site is located on the eastern portion of VEGA SES 2 northern parcel, which as described above, is natural desert open space.

VEGA SES 5 – McDonald Road forms the northern boundary, Weist Road forms the western boundary, and the Highline Canal bisects the northeastern corner of the southwestern parcel. The N Lateral forms the southern boundary while powerlines form the eastern boundary of the southwestern parcel and the western boundary of the northeastern parcel. This property looks like it supported active agriculture in the Google Earth image but it is currently covered by weeds and is not currently being actively used for agriculture.

This section of the EIR will document how the project meets the requirements of the Renewable Energy Zone per County Title 19, Division 17. This scope of work includes the following tasks:

- A description of the land use setting associated with each of the CUP project sites and the existing on-site and off-site land uses in the vicinity.
- The identification of appropriate thresholds of significance and assess the potential for the project to have an adverse environmental impact related to these criteria.
- An assessment of the project's compliance with applicable County ordinances and polices including the General Plan Renewable Energy and Transmission Element and other applicable General Plan Elements, any applicable Imperial Irrigation District policies, and County Zoning Ordinance.
- A discussion of potential land use compatibility impacts of the project based on the scale and features of the proposed development in relation to the surrounding area.
- A description of the physical impacts resulting from the proposed project and identification of mitigation measures to reduce potentially significant land use planning impacts.

2.1.12 Mineral Resources (RECON)

RECON environmental planners will assess the potential for impacts to mineral resources. A number of mineral resources in Imperial County are currently being extracted for economic gain. These mineral resources include gold, gypsum, sand, gravel, lime, clay, stone, kyanite, limestone, sericite, mica, tuff, salt, potash, and manganese. Several issues influence the extraction of mineral deposits in Imperial County, including the location of geologic deposition, the potential for impacts to the environment, and land use conflicts. As a result, the extraction of mineral resources is limited to a relatively small number of sites throughout the County. There are a number of sand and gravel mineral resources located along the San Andreas Fault. However, the project sites are not used for the extraction of mineral resources. According to the Conservation and Open Space Element of the County of Imperial General Plan, no known mineral resources occur within the project site.

2.1.13 Noise Technical Report (RECON – Peer Review)

To address noise impacts associated with the proposed project in the EIR, RECON will perform a peer review of the noise study submitted by the Applicant. The noise study is expected to include noise measurements and modeling leading to potential impacts and mitigation measures. The noise technical report should also include:

- Mapping of the proposed project that shows and the site plan and proposed grading.
- A description of all anticipated construction activities, and, if known, an estimate of anticipated construction equipment and usage. If not provided, the default setting should be to use typical construction equipment mixes for the analysis.
- A description, and, if available, manufacturer noise specification sheets, for all proposed on-site noise generating equipment including inverters, and any other

noise generating equipment. If noise specifications are not available, the Applicant should model noise levels based on sample noise specifications from similar projects.

- An estimate future vehicular traffic noise levels associated with maintenance vehicles using the Federal Highway Administration (FHWA) Traffic Noise Model or other appropriate acoustic algorithms. The traffic noise study should consider potential impacts to off-site receivers.
- An analysis of the potential for on-site noise generators to impact adjacent properties (e.g., heating, ventilation, and air conditioning equipment, inverters, etc.) using the SoundPlan Essential model or other appropriate noise model. Source noise levels for identified equipment will be obtained from client provided equipment specification sheets.
- A determination of appropriate mitigation measures for identified potential exceedances of applicable standards. The analysis should calculate the necessary barrier heights, operational restrictions, equipment orientation, or other mitigation options to reduce noise levels to the most standards set by Imperial County.
- A noise technical report that contains the following information: (1) a brief project description; (2) an explanation of study methodology; (3) a discussion of the existing noise levels and local noise criteria; (4) a summary of noise impacts, and (5) an identification of noise abatement measures, as necessary.

2.1.14 Paleontological Resources (RECON)

RECON will evaluate the potential impact to paleontological resources. Much of the Imperial Valley is underlain by geologic units comprised of quaternary lake deposits of the ancient Lake Cahuilla. These lake deposits are classified as having a low paleontological sensitivity. Therefore, potential impacts to paleontological resources are anticipated to be less than significant. However, many paleontological resources have been discovered in Imperial County and fossils found 10 feet or more below the surface are often well preserved.

2.1.15 Population and Housing (RECON)

RECON environmental planners will prepare an assessment of population and housing issues. Statistics from the Southern California Association of Governments, the Imperial Valley Association of Governments, the Census 2010 data from the U.S. Census Bureau; and the Imperial County General Plan will be evaluated and presented. Because the project will not construct or displace housing and the long-term operations staff is anticipated to be drawn from the existing population, population and housing impacts are anticipated to be minimal and not significant.

2.1.16 Public Health and Safety (RECON)

RECON environmental planners will prepare an assessment of public health and safety issues. This will include an evaluation of the results of the Phase I Environmental Site Assessment (ESA) as peer reviewed by The Bodhi Group well as consistency with all applicable land use regulations, including Title 9. The purpose of Title 9, the Land Use

Ordinance for the County of Imperial, is to provide comprehensive land use regulations for all unincorporated areas of the County of Imperial. These regulations are adopted to promote and protect the public health, safety, and general welfare through the orderly regulation of land uses throughout the unincorporated areas of the County.

2.1.17 Public Services (RECON)

RECON will assess the ability for all necessary public services to provide for the development and operation of the project VEGA SES 2, 3, and 5 CUPs. It is anticipated that the project would not result in impacts to schools or parks. This scope of work includes the following tasks:

- A description of the existing project setting as it relates to fire protection and police protection services.
- Applicable thresholds of significance, the significance of project impacts, and any required mitigation measures.

2.1.18 Traffic/Transportation/Circulation (LLG – Peer Review)

LLG will provide peer review of a transportation impact study (TIS) submitted by the Applicant to determine if the TIS complies with all County of Imperial requirements. The TIS will be evaluated to determine if it includes the following tasks:

- Review the existing conditions description and analysis.
- Review the trip generation.
- Review the trip distribution.
- Review the intersections and segment analysis.
- Review the vehicle miles traveled (VMT) assessment.
- Review the access analysis.
- Review the figure, tables, and traffic study text.
- Prepare a summary letter report outlining our findings.

The traffic section of the EIR will be based on the traffic study provided by the Applicant as peer reviewed by LLG.

2.1.19 Tribal Consultation (AB 52)/Tribal Cultural Resources (RECON)

RECON archaeologists will assist Imperial County with the AB 52 tribal consultation requirements for the project. It is noted that a tribe that is traditionally and culturally affiliated to the geographic area where a project is located must have requested that the lead agency in question provide notification to the tribe of projects in the tribe's area of traditional and cultural affiliation.

Under AB 52, a project that may substantially change the significance of a tribal cultural resource is a project that may have a significant impact on the environment. If a project

may cause a significant impact on a tribal cultural resource, the lead agency shall implement measures to avoid the impacts when feasible. Environmental documents must incorporate a discussion of the impacts, mitigation measures, and notification and consultation conducted with tribes affiliated with the geographic area.

2.1.20 Utilities and Service Systems (RECON)

RECON will address the potential for increased demand for utilities and services. This section of the EIR will assess the ability for all necessary utilities and service systems to provide for the development and operation of the project. The water supply portion of this EIR section will be based on the findings of the Water Supply Assessment (WSA) prepared by DDG as detailed below. It is anticipated that the project would not result in any impacts related to wastewater or solid waste. This scope of work includes the following tasks:

- A description of the existing and proposed water supply within Imperial County.
- A description of the existing project setting as it relates to energy transmission facilities.
- Applicable thresholds of significance, the significance of project impacts, and any required mitigation measures.

2.1.21 Wildfire (RECON)

While not expected to be a potentially significant impact due to the sparse desert environment and not being located in or near state responsibility lands identified as very high severity hazard zones, RECON will address wildfire as required by the CEQA guidelines.

2.1.22 Energy Assessment (RECON)

RECON energy specialists will incorporate the project's energy implications in the project description and other applicable sections of the EIR, in accordance with Appendix F, Energy Conservation, of the CEQA Guidelines.

2.1.23 Water Supply Assessment (DDG)

DDG will prepare a WSA that will analyze and summarize water supply issues per the tasks below:

- Kickoff Meeting and Data Acquisition. This task is central to the quick evaluation and development of the report. A meeting with a representative of project to discuss key issues of the development as it relates to water consumption will need to occur prior to the preparation of the WSA. This can be accomplished via phone. Information essential to preparation of the WSA will be collected by DDG and may include the following: technical data for project including water consumption estimates for all components of the facility; current and future land use information; water supply information from potentially involved agencies; and historical water use records.
- Coordination with IID's Water Resource Planning Section.

- Prepare WSA.
  - Assess and review all documents received by applicant.
  - Verify and insert any data tables and figures that have been updated by the IID.
  - Research/calculate current and future water demands for the site, and the IID service area (Imperial Unit).
  - Review and analyze historical water use for the project area.
  - Provide a detailed and defensible analysis of the five water supply issues mentioned under the Scope of Study portion of this proposal.
  - Develop maps, exhibits and tables from available and calculated data.
  - Determine annual water consumption estimates for PROJECT that are justifiable and defensible.
  - Prepare a report that can be used by the governing agency for review and approval.
- Meet with Client and Governing Agencies. It is anticipated that there will be a number of times when a meeting will be beneficial to the preparation of the WSA. This can be accomplished by phone conference. Meetings would be expected at the start of the project, during data acquisition activities and initial phases of data tabulation, and after comments have been made on the draft document by the governing agency. It is also anticipated that the IID will require modifications to the WSA for the project due to ongoing litigation that may be concurrent with the preparation of the study. If modifications requested by IID and/or any governing agencies exhaust the quote in this proposal, DDG will advise client. If said litigation ceases prior to completion of the WSA, the outcome of said litigation may have an effect on the study. DDG will advise the client if this is the case.
- Revision and Submission. This task relates to the revision of the document into its final form and the copying of up to two sets of the study. The governing agency will need to formally approve the WSA.

Deliverables and Meetings

During the preparation of peer reviews of the technical studies and the WSA, RECON will participate in virtual meetings and conference calls. Deliverables include a printed copy and electronic copies of the technical study peer review letter reports.

- 10 hard copies of Draft EIR with 50 CDs.

Task 2.2: Administrative Draft EIR

Following the completion of Task 1, RECON will prepare an Administrative Draft EIR for review by the County. The Administrative Draft EIR will include all mandatory CEQA sections and will be supported by technical studies evaluating impacts related to aesthetics, air quality, biological resources, cultural resources, geology and soils, hazardous materials, hydrology and water quality, noise, transportation/traffic, and water supply. As noted

above, we anticipate that the major environmental issues to be addressed in the EIR include land use, aesthetics, biological resources, cultural resources, hydrology/water quality, air quality, GHG emissions, and cumulative impacts.

The Administrative Draft EIR will assemble all available data and new studies, and assess the probable direct, indirect, and cumulative impacts of the project. Each resource section in the EIR will identify existing conditions, thresholds of significance, impacts, levels of significance prior to mitigation, propose appropriate mitigation measures, and identify the level of significance after mitigation. Appropriate tables and figures will be included within sections to summarize and graphically represent the information being presented. Impacts shall be determined considering the existing environmental conditions and the physical changes caused by the proposed project in relationship to established thresholds of significance. The EIR will provide an evaluation of all feasible mitigation measures to reduce or eliminate adverse impacts, if necessary. The EIR, as well as technical studies, where appropriate, will also analyze the proposed alternatives to the project. Throughout this process, Michael Page will utilize his experience in managing and overseeing preparation of PV project EIRs to identify potential impacts and appropriate mitigation measures in a manner that would streamline the environmental evaluation process and produce a high-quality legally defensible document.

To provide a better understanding of tasks involved in preparing the EIR, a detailed scope of services for each of the issues is provided below. RECON will prepare the Draft EIR that complies with the criteria, standards, and procedures of the CEQA of 1970 (Public Resources Code Sections 21000 et seq.); the CEQA Guidelines (California Administrative Code Section 15000 et seq.), the County's environmental review procedures, and the regulations for private projects, requirements, and procedures of any other responsible public agency.

Executive Summary

The executive summary will be prepared in such a manner that it provides sufficient detail to evaluate and review the environmental impacts of the project. The executive summary will provide a concise summary of the contents of the EIR understandable to the lay person. A summary table will be included that identifies each subject area evaluated in the EIR, the significance conclusion, and any recommended mitigation measures. This will allow the reader to easily identify significance conclusions and proposed mitigation in one concise location.

Environmental Topics

See above for all environmental topics to be addressed in the EIR.

Mandatory Findings of Significance

RECON will prepare the Mandatory Findings of Significance chapter following completion of the resource analyses. The chapter will include a discussion on each resource area found to be significantly impacted, as well as the project's potential to degrade the quality of the

environment, substantially reduce habitat or restrict the range of special-status species, cumulatively considerable impacts, and substantial adverse effects on human beings.

In addition to the required Mandatory Findings of Significance, the EIR will address significant irreversible changes resulting from project implementation, such as the project's use of nonrenewable resources.

Effects Found Not to Be Significant

The EIR will focus its discussion on the potentially significant impacts of the project. Based on a review of the RFP and the project description, RECON anticipates that several subjects will be included in the Effects Found Not to be Significant chapter. If the NOP identifies certain subjects as less than significant as part of the NOP process, this chapter will be consistent with those identified subjects. At this time, RECON anticipates that the following issue areas would be effects found not to be significant:

- Mineral resources
- Population and housing
- Recreation
- Wildfire

For these issue areas, the EIR will provide a brief discussion detailing the reasons why significant effects would not occur and therefore are not discussed in further detail in the EIR. This approach will limit the scope and streamline preparation of the EIR. Any other impacts determined to be less than significant during the Initial Study process would be included in this section.

Findings for Project

See Task 6 below.

Mitigation Monitoring and Reporting Program (MMRP)

See Task 5 below.

Deliverables and Meetings

During the preparation of the Administrative Draft, RECON will participate in virtual meetings and conference calls. RECON's project manager, Michael Page, and necessary technical specialists will be available to participate in the virtual project meetings and conference calls. Lee Sherwood will also be available to participate in these meetings as well. Deliverables will include electronic copies of the Administrative Draft EIR.

Task 3 – Public Review Draft EIR

Based on comments received from County staff, RECON will prepare revisions to the Administrative Draft EIR and submit copies of the second screencheck Draft EIR to the County for review, followed by preparation of the Public Review Draft EIR based on County

comments on the second screencheck. Preparation of a Public Review Draft EIR will involve the following:

- Revise the first screencheck EIR based on County staff comments and submit the revised document to the County. RECON will indicate how and where comments were addressed to facilitate review by the County.
- Submit the revised Draft EIR to the County for a second screencheck review.
- Upon receipt of second screencheck EIR comments, if any, from the County, prepare the Public Review Draft EIR for the County. RECON will coordinate with the County to address any remaining comments prior to reproduction of documents for public review.

Deliverables and Meetings

During the preparation of the Administrative Draft, RECON will participate in virtual meetings and conference calls. RECON's project manager, Michael Page, and necessary technical specialists will be available to participate in the virtual project meetings and conference calls. Lee Sherwood will also be available to participate in these meetings as well. Deliverables will include electronic copies of the Administrative Draft EIR.

Deliverables will include 10 printed copies and CDs for the County and for public review distribution. RECON will also prepare the Notice of Completion (NOC) and Notice of Availability (NOA) for the County.

Task 4 – Final EIR

After the close of the public review period, RECON will respond to comments on the Draft EIR and prepare a Final EIR. As discussed in the RFP, costs for responding to comments will be negotiated once available and in the case of excessive comments. RECON anticipates working closely with County staff in preparing and revising the responses to comments. Preparation of the Final EIR will involve the following tasks:

- Review the letters of comment received during public review and identify common themes of comment.
- RECON will organize and number comments for efficiency when working with staff and other consultants. This scope assumes that up to 150 substantive comments submitted during public review.
- RECON will prepare responses to comments. Efficiencies can be achieved by developing a consistent response to the major issues raised by public commenters. These consistent responses can be used and modified as needed to address the specific public comments that are common among several commenters. This scope includes one screencheck revision of responses to comments.

Deliverables and Meetings

During the preparation of the Administrative Draft, RECON will participate in virtual meetings and conference calls. RECON's project manager, Michael Page, and necessary technical specialists will be available to participate in the virtual project meetings and conference calls. Lee Sherwood will also be available to participate in these meetings as well. Deliverables will include electronic copies of the Draft and Final EIR.

RECON will also attend up to two public hearings on the project (Planning Commission and County Board of Supervisors).

Deliverables include 10 printed copies and 50 CDs of the Final EIR for public hearings.

Task 5 – Mitigation Monitoring and Reporting Program

RECON environmental planners will prepare an MMRP to be adopted by the County to ensure that mitigation measures are enforced. The MMRP will contain a list of the mitigation measures and monitoring programs required for each significant impact of the project. For each measure, the MMRP will identify a reference to the applicable project condition of approval; identify how the measure is incorporated into the subsequent stages of development review and permitting, and how the measure will be monitored during construction and final inspection, as well as on an ongoing basis. The program may contain remedies to ensure compliance with the ongoing mitigation measures beyond final inspection.

Deliverables and Meetings

Deliverables include a printed copy and electronic copies of the MMRP.

Task 6 – CEQA Findings, Noticing and Distribution

RECON will prepare Candidate Findings of Fact per CEQA. Information needed to support the Candidate Findings of Fact will be developed with County staff. The Candidate Findings of Fact will specify the mitigation measures that have been incorporated into the project. The scope includes revisions of the Candidate Findings of Fact, if needed. RECON will also prepare the Notice of Determination (NOD) for the County. The County will be responsible for filing the NOD.

Deliverables

Deliverables include a printed copy and electronic copies of the CEQA Candidate Findings of Fact and NOD.

Noticing and Distribution

Notice of Preparation

- RECON will be responsible for submittal of the NOP to the State Clearinghouse. The County will be responsible for local distribution of the NOP.

Public Review Draft EIR

- RECON will be responsible for preparing the NOC and all submittals to the State Clearinghouse for Public Review of the Draft EIR.
- The County will be responsible for local distribution of the Draft EIR.
- RECON will provide the County with a Draft NOA. The County will be responsible for circulating the NOA in the local paper of record and online.

Final EIR

- RECON will prepare the CEQA Findings of Fact and NOD. The County will be responsible for filing the NOD.

4.0 Schedule

A draft schedule for processing the draft and final EIR by task is shown below. The peer review and preparation of new technical studies will begin upon receiving the Notice to Proceed. It is anticipated that the technical studies will be finalized and approved by the County at the same time that RECON receives County comments on the first screencheck Administrative Draft EIR. The RECON team is committed to meeting this project schedule.

Task	Timeline (Weeks)	Timeline (Cumulative Weeks)	Deliverable
Task 1 – Project Initiation			
Notice to Proceed	-	-	-
Attend project kickoff meeting with County staff	-	-	Meeting agenda/ data needs
RECON receives applicant-provided project information	1	1	-
RECON prepares project description	1	2	Draft project description
County reviews project description	2	4	-
RECON prepares NOP concurrent with County review of project description	NA	4	Initial Study and NOP
30-day public review of NOP and Initial Study; facilitate Environmental Evaluation Committee (EEC) and Scoping Meeting during 30-day public review	4	8	-
Task 2 – Prepare Administrative Draft EIR			
RECON and subconsultants peer review technical studies concurrent with 30-day public review of NOP	NA	6	Technical studies
RECON completes first screencheck Administrative Draft EIR	4	10	Electronic and two printed copies of Administrative Draft EIR and one CD
County review of first screencheck Administrative Draft EIR complete	3	13	-

Task	Timeline (Weeks)	Timeline (Cumulative Weeks)	Deliverable
Task 3 – Prepare Public Review Draft EIR			
RECON revises EIR per County comments, submits second screencheck Draft EIR to County	1	14	Electronic and printed copies of EIR as requested by staff
County review of second screencheck Draft EIR complete	2	16	-
RECON makes revisions and submits Draft EIR to County for public review	2	18	Ten printed copies of Public Review Draft EIR & Appendices and 50 CDs; NOA and NOC provided to County
Public review of Draft EIR (45 days)	6	24	-
Tasks 4-6 (Final EIR, MMRP, and CEQA Findings)			
RECON prepares draft responses to comments	2	26	Draft responses to comments
County reviews draft responses to comments	2	28	-
RECON prepares screencheck Final EIR and MMRP	1	29	Electronic and printed copies of responses to comments & Final EIR as requested by staff
County reviews screencheck Final EIR and MMRP	2	31	-
RECON prepares Final EIR, Findings of Fact, and NOD and submits to County for public hearing distribution	2	33	Ten printed copies of Final EIR & Appendices and 50 CDs; Findings of Fact and NOD provided to County
County distribution and docketing for hearing	1	34	-
County hearing and certification of Final EIR	TBD	34	Presentation of EIR conclusions at up to two public hearings

5.0 Cost Estimate/Milestones

RECON's cost estimate to prepare and process the EIR for the VEGA SES 2, 3, and 5 solar projects is $129,878. This total includes the Draft and Final EIR, RECON and subconsultant technical studies and technical study peer reviews, public hearings, and copying expenses. In order to limit costs and provide the County additional savings, we do not mark up subconsultant fees.

The table below provides a breakdown by task of the cost estimate. As noted in the RFP, the costs associated with responding to agency and public comments on the Draft EIR will be negotiated should excessive comments be received.

In agreement with the RFP, prior to any cost overruns, RECON will seek and obtain written approval from the County Planning & Development Services director before such costs are incurred. In terms of billing milestones, we propose the following milestone payment schedule. Each task will be billed monthly based on a percentage complete.

Milestone 1 – 15% Completion of Project Initiation Tasks
Milestone 2 – 30% Submittal of Administrative Draft EIR to County
Milestone 3 – 45% Release of Draft EIR for Public Review
Milestone 4 – 60% Submittal of Draft Responses to Comments to County
Milestone 5 – 75% Submittal of Final EIR
Milestone 6 – 90% Attendance at Council Hearing
Milestone 7 – 100% Completion of all Scope Items and Project Closure

Staff	Env Principal	Env Project Director	Senior	Analyst	Prod Super	GIS Specialist	GIS Technician	Labor Hours	Labor Cost
Hourly Rates	$225	$198	$180	$138	$107	$128	$77		
Task 1 Project Initiation									
1.1 Kick-off Meetings	8	-	-	8	-	-	-	16	$2,904
1.2 Initial Study/NOP	2	4	8	32	4	-	4	54	$7,834
1.3 Scoping/Public Participation	8	-	-	8	-	-	-	16	$2,904
1.4 AB 52 Consultation	-	-	16	-	-	-	-	16	$2,880
1.5 Project Description/Alternatives	2	8	-	16	4	-	-	30	$4,670
Task 2 – Administrative Draft EIR, Technical Studies, and Peer Review									
Administrative Draft EIR Analysis/Peer Reviews	16	6	8	258	-	-	-	288	$41,832
Task 3 – Public Review Draft EIR	4	8	12	48	16	-	16	104	$14,212
Task 4 – Final EIR	6	12	28	80	28	16	-	170	$24,850
Task 4 -Meetings	16	-	-	-	-	-	-	16	$3,600
Task 5 – Mitigation Monitoring and Reporting Program	-	6	-	12	-	-	-	18	$2,844
Task 6 – CEQA Findings, Noticing and Distribution	2	4	-	16	4	-	-	26	$3,878
Labor Totals	64	48	72	478	56	16	20	754	**$112,408**
Subcontractors									**$15,670**
Hydrology Report and Water Quality Management Plan (DDG – Peer Review)									$6,400
Water Supply Assessment (DDG)									$6,530
Hazards and Hazardous Materials/Phase 1 (The Bodhi Group – Peer Review)									$1,270
Geology and Soils Analysis (The Bodhi Group – Peer Review)									$1,470
Expenses									**$1,800**
Total Labor and Expenses									**$129,878**

Attachment A

Resumes

Michael Page, AICP

Principal, Environmental Division

Experience Highlights

- ✓ Experienced CEQA/NEPA preparer
- ✓ Wastewater and water CIP experience
- ✓ City of San Diego, County of San Diego, and San Diego Unified Port District on-call contract management

Experience

29 years

Education/Registrations

B.A. Environmental Science and Geology/ Biology, Colby College

American Institute of Certified Planners, No. 013135

Certifications/Permits

County of San Diego Approved CEQA Consultants List; EIR Preparer

Affiliations

American Planning Association

Association of Environmental Professionals

American Public Works Association

American Institute of Certified Planners

Mr. Page is a senior vice president and project manager in charge of the RECON Environmental Division with more than 29 years of experience preparing documents in conformance with NEPA and CEQA. He has extensive experience in providing environmental services with cities and public agencies throughout San Diego County, Imperial County, and Riverside County. His work has required extensive coordination with the lead agencies, responsible and trustee agencies, and numerous technical specialists in preparing and reviewing project plans and the environmental documentation. Mr. Page provides agencies expertise on both environmental compliance and planning issues, from environmental commitments, permits, and compliance issues to community and land use considerations.

Westside Canal Battery Energy Storage System Project, Imperial County, CA

RECON prepared technical studies and supporting documents for a utility-scale battery storage project located on 148 acres of agricultural land between El Centro and the U.S./Mexico border. As project manager, Mr. Page was responsible for preparation of a permitting plan, General Plan Amendment (GPA)/Rezoning (RZ)/Conditional Use Permit (CUP) application package for submittal to Imperial County, the preparation of technical documents and the provision of permitting support in compliance with the California Environmental Quality Act (CEQA) and the Imperial County Guidelines for CEQA Compliance, an Environmental Study Plan, and multiple technical studies to support the CUP application and a future EIR.

Chapman Solar Ranch Project, San Diego County, CA

Mr. Page served as Project Manager and primary author for the preparation of an EIR for the County of San Diego for a 2.9 megawatt (MW) solar project in the eastern San Diego County community of Boulevard. Key issues included visual, biological, and cultural resources as well as water supplies, land use, community character, and the potential for wildland fires.

SR-78/Glamis Multiuse Grade Separated Crossing Feasibility Study, Imperial County, CA

The State Route 78 (SR-78)/Glamis Multiuse Separated Crossing Feasibility Project is located within the Imperial Sand Dunes Recreation Area. The goal of this study is to identify feasible safe crossing points for hikers, bicyclists, and off-road users that eliminates potential conflicts between

automobiles, recreational vehicles, and frequent trains at this location and ultimately improves safety on SR-78, the Union Pacific Railroad, and for all users of this area. As principal in charge, Mr. Page will oversee the environmental constraints studies prepared by RECON for the Caltrans Preliminary Environmental Assessment Report.

Soitec Solar, Rugged, LanEast, and LanWest Solar Projects, San Diego County, CA

Mr. Page served as Project Manager for the preparation of biological resources, noise, air quality, and greenhouse gas reports in support of an EIR for three concentrator photovoltaic (CPV) projects in eastern San Diego County. The project area covered over 1,000 acres and the CPV trackers will produce up to 108 megawatts (MW) when completed. The technical studies also addressed a generation tie (Gen-Tie) line to the Boulevard Substation.

Augustine Band of Cahuilla Indians/Bureau of Indian Affairs Tribal Photovoltaic Facility, Coachella, CA

Mr. Page was responsible for preparation of an Environmental Assessment (EA) for the construction of a 1- mw photovoltaic facility adjacent to the Augustine Casino near the city of Coachella. Key issues included aesthetics and biological and cultural resources. The Bureau of Indian Affairs (BIA) issued a Finding of No Significant Impact for the project.

CalEnergy Operating Company, Black Rock Geothermal Energy Project Application for Certification, Imperial County, CA

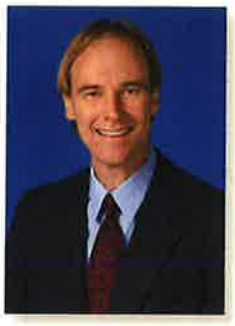
Mr. Page served as Project Manager for the preparation of biological resources, cultural resources, land use, noise, and socioeconomic resources in support of an Application for Certification (AFC) submitted to the California Energy Commission. The Black Rock Geothermal facility would extract geothermal brine from production wells to operate a Power Generation Facility (PGF) consisting of a condensing turbine/generator, gas removal and abatement systems, and the heat rejection system. The PGF also would include a 161 kV switchyard and several power distribution centers.

Imperial Avenue Extension Project, El Centro, CA

Mr. Page served as the principal in charge for the joint CEQA/NEPA environmental impact analysis of a proposed one-mile roadway extension of Imperial Avenue to accommodate a four-lane roadway. In this role he provided overall project guidance, staffing, strategy, and quality assurance/quality control.

Lee Sherwood

Environmental Project Director



Experience Highlights
- ✓ CEQA expert
- ✓ Strong knowledge of CEQA procedures and guidelines
- ✓ Large-scale master planned community expertise

Experience
36 years

Education/Registrations
M.A. Geography (Environmental Studies), San Diego State University

B.A. Geography, San Diego State University

Certifications/Permits
County of San Diego Approved CEQA Consultants List; EIR Preparer

Affiliations
Association of Environmental Professionals

American Planning Association

Mr. Sherwood has 36 years of experience managing the preparation of CEQA documents for projects in southern California. As a CEQA expert, Mr. Sherwood has taught environmental studies courses and has presented CEQA update workshops for San Diego State University Extension and the Association of Environmental Professionals (AEP). He has been a presenter at the CEQA Basics course offered by the AEP throughout the state as part of the annual "Understanding CEQA" workshop series. Through his environmental career, he has a strong knowledge of local land planning policies, zoning ordinances, and planning documents. He has specific expertise in managing the environmental review (Program and Master EIRs) for large-scale master planned communities.

South Dogwood Avenue Annexation MND, El Centro, CA

Mr. Sherwood served as technical advisor for the preparation of an MND for the Annexation, General Plan Amendment, and Rezone of this 330-acre project. The future development allowed by these land use actions would allow for up to 5 million square feet of general manufacturing, warehousing or light industrial uses. The analysis was completed in a manner to provide future mitigation framework and streamline future processing once development is proposed. This program-level document will address potential agricultural, biological, air, noise, greenhouse gas, and traffic issues.

Dogwood Road at Villa Avenue, El Centro, CA

Mr. Sherwood was the project manager for the preparation of a MND to annex approximately 68 gross acres of unincorporated lands to the City of El Centro. Concurrent with the application for annexation, the project proposes a General Plan Amendment to allow for General Commercial development and to Pre-zone the parcels to CG (General Commercial) and R-3 (Multiple-Family Residential).

Drew Solar Project Technical Studies, Imperial, CA

RECON prepared technical studies in support of the EIR for the Drew Solar project, a 100-megawatt alternating current solar generation facility and energy storage facility in Imperial County. These technical studies included the noise analysis, air quality, and greenhouse gas modeling and technical report, and the LESA analysis to address agricultural resources impacts. Mr. Sherwood served as

project manager and coordinated the preparation and submittal of these documents.

Imperial Solar Energy Center (CSOLAR) South and West Projects, Imperial County, CA

The project consists of two utility-scale PV solar energy project sites (photovoltaic solar field and associated transmission lines) covering over 3,000 acres of both private and BLM lands Imperial County. Mr. Sherwood acted as project director for the solar developer, Tenaska Solar Ventures, in coordinating cultural and biological reports, as well as reviewing EIR sections for Imperial County.

Westside Canal Battery Energy Storage System Project, Imperial County, CA

RECON prepared technical studies and supporting documents for a utility-scale battery storage project located on 148 acres of agricultural land between El Centro and the U.S./Mexico border. Mr. Sherwood provided interface with the project applicant during the initial processing of the General Plan Amendment (GPA)/Rezoning (RZ)/Conditional Use Permit (CUP) application package for submittal to Imperial County.

Desert Renewable Energy Conservation Plan, CA

Mr. Sherwood worked with the California Energy Commission as the State Lead Agency in preparing the EIR/EIS for the Desert Renewable Energy Conservation Plan (DRECP), which covers roughly 22 million acres in seven counties within the California desert. Both the U.S. Fish and Wildlife Service and the Bureau of Land Management are federal co-lead agencies under NEPA. The DRECP would provide renewable energy developers and entities take authorizations of certain species for covered activities. He served as the CEQA technical advisor for the EIR/EIS.

Sunrise Powerlink Consultation Services, San Diego, CA

RECON was retained by San Diego Gas & Electric (SDG&E) to provide coordination and support services between the utility and the City of San Diego's Public Utilities Department. The Sunrise Powerlink project traverses City-owned lands at a variety of locations in the eastern portions of the county. Many of these lands are sensitive and are part of the City's Multiple Species Conservation Plan. Mr. Sherwood is acting as a liaison between SDG&E and City staff to ensure that mitigation requirements from the Final EIR/EIS were coordinated and clearly defined.

Lori Spar

Senior Environmental Analyst

Experience Highlights

- ✓ Preparation of state and federal environmental documents
- ✓ Experience drafting CEQA and NEPA documents
- ✓ Project management, planning, and analysis background

Experience

20 years

Education/Registrations

B.A. Political Science, State University of New York, Binghamton

J.D. Benjamin Cardozo School of Law

L.L.M. Environmental Law, University of San Diego

Certifications/Permits

County of San Diego Approved CEQA Consultants List; County of San Diego Approved CEQA Consultants List; EIR Preparer

Ms. Spar is a senior environmental analyst with experience in environmental planning, project management and analysis, and environmental litigation. Her work in the legal community allowed her to become familiar with land use requirements and procedures. Ms. Spar has also worked for the County of San Diego as an environmental planner and EIR coordinator. She has performed varying tasks, from processing and planning of complex projects and CEQA/NEPA document preparation and review.

Oceanside General Plan Update Phase 2, Oceanside, CA

Ms. Spar is currently serving as project manager and primary author of the EIR for the City of Oceanside which is to include analysis for the following multiple projects being processed simultaneously: City's General Plan Update; South Morro Hills Community Plan Update; and the Smart and Sustainable Corridors Plan. Ms. Spar is working closely with the City and planning team to create Background Reports and a Map Atlas that will help guide the planning process.

Eastlake Behavioral Health Hospital EIR, Chula Vista, CA

Ms. Spar is the project manager for this controversial project which included a joint venture between Scripps and Acadia Health for the construction of a new 92,349-square-foot, 120-bed facility to be located within an existing business center. The project requires preparation of an EIR. Ms. Spar is involved in the preparation and presentation of a virtual scoping meeting. Thereafter, RECON's team of specialists is preparing a detailed noise assessment and air quality and greenhouse gas analyses. The most controversial CEQA issues include aesthetics and land use. The consideration of alternatives pursuant to CEQA Section 15126.6 will also be a main focus of the EIR and RECON is working cohesively with the City of Chula Vista to develop and refine the alternatives to the project while achieving the objectives of the project. Due to the anticipated level of community participation, RECON will be assisting in organizing, coordinating, and preparing responses to comments for inclusion in the Final EIR.

Morena Corridor Specific Plan Program EIR, San Diego, CA

Ms. Spar prepared the Program EIR for this controversial large-scale General Plan Update associated with increased

density and intensity of uses through the Clairemont Mesa and Linda Vista community planning areas.

City of Del Mar Zoning Code Amendment Program EIR, Del Mar, CA

Ms. Spar is the project manager for the City of Del Mar Professional Commercial and North Commercial Zoning Code Amendment (ZA18-002) Project and the primary author of the Program EIR. The project would implement several actions associated with the City's Housing Element including rezoning of specific sites within the city to allow for multi-family and mixed-use development. In addition to environmental analysis, the scope of work included reviewing and assessing zoning code revisions to ensure adequate analysis within the context of the Program EIR. As hearing nears, RECON is working closely with City staff to develop a strategic approach to address citizen concerns.

Hillstone Del Mar Restaurant IS/MND, Del Mar, CA

Ms. Spar prepared the IS/MND to address the project's potential impacts associated with the demolition of the Bully's restaurant and construction of a new restaurant and subterranean parking.

Hollister Avenue Project MND, San Diego, CA

Ms. Spar served as project manager for the Bella Mar project, which includes development of 180 residential market rate units and 180 affordable units on a 14.13-acre parcel in the Otay Mesa-Nestor Community Plan area. The project requires a General Plan Amendment and Rezone, along with complex Multi-Habitat Planning Area issues.

Morena Apartment Homes EIR, San Diego, CA

Ms. Spar served as an environmental analyst and primary author of the EIR for the Fairfield Morena Boulevard Project. This residential project would result in the removal an existing recreational vehicle park and construction of 150 residential dwelling units and an approximately 4,400-square-foot clubhouse facility. The project would require a consistency analysis with multiple planning documents including the City's General Plan, Clairemont Mesa Community Plan, and Morena Boulevard Corridor Plan.

Nick Larkin

Environmental Planner

Experience Highlights
✓ CEQA/NEPA specialist

✓ Infrastructure, public works, energy projects

Experience
18 years

Education/Registrations
M.A. Urban Planning, University of California Los Angeles

B.A. Urban Studies and Planning, University of California San Diego

Certifications/Permits
County of San Diego Approved CEQA Consultants List; EIR Preparer

Training
Caltrans Section 4(f) training

Affiliations
Association of Environmental Professionals

Mr. Larkin's experience includes preparation of CEQA and NEPA compliance documents for a variety of project types, including private sector residential and commercial development, as well as public sector large- and small-scale infrastructure, public works, and energy projects. Mr. Larkin's expertise includes management of complex projects, preparation of EIRs and Mitigated Negative Declarations for CEQA, and preparation of EISs and Environmental Assessments for NEPA.

Westside Canal Battery Energy Storage System Project Technical Studies, Imperial County, CA

RECON prepared multiple technical studies and supporting documents for a utility-scale battery storage project located in southern Imperial County. As project manager, Mr. Larkin prepared the Conditional Use Permit Application package and oversaw preparation of numerous technical studies. He worked closely with County staff and the applicant throughout the process to complete the submittal package. Mr. Larkin has continued to provide environmental services to the project applicant during preparation of the Draft EIR.

Drew Solar Project Technical Studies, Imperial County, CA

RECON prepared technical studies in support of the EIR for the Drew Solar Project, a 100-megawatt alternating current solar generation facility and energy storage facility in Imperial County. Mr. Larkin served as the project manager and primary author for the Land Evaluation and Site Assessment. Mr. Larkin also served as the primary contact with the client and served as project manager for the revisions and updates of the air quality/greenhouse gas analysis and noise analysis prepared by RECON.

SR-78/Glamis Multiuse Grade Separated Crossing Feasibility Study, Imperial County, CA

The State Route 78 (SR-78)/Glamis Multiuse Separated Crossing Feasibility Project is located within the Imperial Sand Dunes Recreation Area. The goal of this study is to identify feasible safe crossing points for hikers, bicyclists, and off-road users that eliminates potential conflicts between automobiles, recreational vehicles, and frequent trains at this location and ultimately improves safety on SR-78, the Union Pacific Railroad, and for all users of this area. As project manager, Mr. Larkin will provide

environmental constraints support for the Caltrans Preliminary Environmental Assessment Report.

Imperial Avenue Extension IS/MND, El Centro, CA

Mr. Larkin served as the project manager for the joint CEQA/NEPA environmental impact analysis of a proposed 1-mile roadway extension of Imperial Avenue to accommodate a 4-lane roadway. He also served as the primary author for the CEQA IS/MND and the Caltrans required Community Impact Assessment and Visual Impact Assessment Memorandum. He also coordinated the preparation of Caltrans' required technical studies related to biological resources, cultural resources, air quality, and noise prepared by RECON staff, as well as technical studies for traffic and hazardous materials prepared by subconsultants. Mr. Larkin served as primary contact with the City and Caltrans and attended the City Council hearing for certification of the IS/MND.

Imperial County General Plan Renewable Energy and Transmission Element Update and Programmatic EIR, Imperial County, CA

Mr. Larkin successfully managed the Imperial County General Plan Renewable Energy and Transmission Element Update and corresponding Programmatic EIR (PEIR). He served as the primary point of contact with Imperial County staff and directed research efforts to identify opportunities and constraints for renewable energy throughout Imperial County and the generation of suitability maps identifying locations that could be used for alternative energy generation. Mr. Larkin prepared the Initial Study, presented the project to the Imperial County Environmental Evaluation Committee, and participated in public outreach efforts with stakeholders and the public.

Mr. Larkin also served as the project manager and primary analyst for preparation of the Draft Programmatic EIR identifying potential impacts associated with future development of renewable energy in Imperial County based on the General Plan Element Update. He responded to technical comments provided by Imperial County staff, coordinated graphics production, and provided oversight for document production and delivery. He also served as the project manager and primary analyst responding to comments submitted on the Draft PEIR and preparing the Final PEIR. Mr. Larkin presented the project to Planning Commission and the County Board of Supervisors and both unanimously approved the project.

Susy Morales
Senior Environmental Planner

Experience Highlights

- ✓ Project experience in Imperial County
- ✓ CEQA, NEPA and ESA compliance specialist
- ✓ Experience on recreational planning projects for NPS and BLM

Experience

24 years

Education/Registrations

B.S. Wildlife and Fisheries Science, University of Arizona

M.S. Wildlife and Fisheries Science, University of Arizona

Certifications/Permits

USFWS Permit TE-123070 to conduct surveys for lesser long-nosed bat, bald eagle, Mexican spotted owl, northern Aplomado falcon, southwestern willow flycatcher, cactus ferruginous pygmy-owl, and interior least tern in New Mexico

Utah State University NEPA Certification Coursework

Ms. Susy Morales is a senior project manager and environmental planner specializing in National Environmental Policy Act (NEPA) compliance. She has worked extensively on large- and small-scale environmental impact statements (EISs) and environmental assessments (EAs) for a variety of federal, state, and local agencies throughout the Southwest. She has developed excellent working relationships with the U.S. Army Corps of Engineers, National Park Service (NPS), U.S. Fish and Wildlife Service (USFWS), U.S. Forest Service, and Bureau of Land Management (BLM). Ms. Morales has worked extensively on NEPA and Endangered Species Act (ESA) compliance projects, including biological assessments, for utility, land use planning, renewable energy, infrastructure, and recreation projects in the Southwest.

Drew Solar EA Assistance, Imperial County, CA

Ms. Morales is serving as the NEPA specialist for the Drew Solar project. The Drew Solar project is a 624-acre 100-megawatt solar project located on agricultural lands in southern Imperial County. Ms. Morales is preparing the Draft EA based on Rural Utility Service (an agency of the Department of Agriculture) guidance. She will also assist with public comments, preparation of the final EA, and submittal of the Administrative Record.

Ocotillo Sol Photovoltaic Solar Project EIS, Imperial County, CA

Ms. Morales served as the project manager and NEPA specialist for the development of an EIS for a 20-megawatt solar photovoltaic facility located on 115 acres of BLM-administered public lands in Imperial County. Analysis included a discussion of cumulative impacts associated with solar fields and transmission lines in the area. In addition to the EIS, Ms. Morales managed the preparation of the noise, air quality, climate change, and visual resources studies, and assisted with public meetings, comment analysis, Final EIS/CDCA Plan Amendment, and development of the Record of Decision.

Desert Renewable Energy Conservation Plan, CA

Ms. Morales served as the project manager and NEPA specialist for the development of select chapters of the Desert

Affiliations

Southern Arizona SAME

Women in Transportation

Southern Arizona Association of Environmental Professionals

Arizona Planning Association

Renewable Energy Conservation Plan BLM Land Use Plan Amendment Final EIS. Her roles included project management, chapter author, BLM issues and sections, staff coordination, public comment analysis, GIS data coordination, and agency/consultant meeting participation.

SR-78/Glamis Multiuse Grade Separated Crossing Feasibility Study, Glamis, Imperial County, CA

Ms. Morales assisted with BLM Imperial Sand Dunes Recreation Area background information and review of various sections of the constraints memo for the proposed State Route 78/Glamis multiuse grade separation project.

Ocotillo Wells State Vehicular Recreation Area (SVRA) Off-Highway Vehicle Park NEPA Support, Imperial County, CA

The BLM El Centro Field Office was preparing a joint EIR/EIS for the 85,000-acre Ocotillo Wells State Vehicular Recreation Area, an off-highway vehicle park operated by the California Department of Parks and Recreation. As project manager, Ms. Morales provided project oversite, planning and NEPA analysis, and review of the Draft EIR prior to California Department of Parks and Recreation cancelling the project due to changes in the BLM land disposal process.

Imperial Sand Dunes Recreation Area Management Plan/EIS, Imperial County, CA

As project manager for the BLM El Centro Field Office Recreation Area Management Plan (RAMP)/EIS and California Desert Conservation Area (CDCA) Plan Amendment, Ms. Morales assisted field office staff develop alternatives and management actions during Interdisciplinary Team meetings. She also assisted staff in developing all sections of the RAMP and EIS, prepared draft documents, addressed agency comments, assisted with public comment responses and preparation of final documents, including the ROD amending the CDCA Plan.

Maintenance and Repair of Patrol and Access Roads on BLM Lands, Imperial County, CA

Under a Work Order with Customs and Border Protection (CBP), Ms. Morales serves as NEPA specialist for the preparation of an EA for the maintenance, repair, and improvement of 36 miles of roads due to their poor condition and lack of routine maintenance.

Morgan Weintraub
Environmental Analyst

Experience Highlights

- ✓ Experience writing CEQA and NEPA documents
- ✓ Land use planning and general plan conformance analysis
- ✓ Adjunct staff to local municipalities

Experience

5 years

Education/Registrations

B.A. Environmental Studies, University of California, Santa Cruz

Affiliations

Association of Environmental Professionals

Mentorship Committee Member, American Planning Association

Toastmasters, past Secretary

Ms. Weintraub's responsibilities include preparation of environmental documents, coordination with agency staff, and project management. She has prepared EIRs, MNDs, initial studies, and environmental assessments.
Ms. Weintraub brings agency expertise through her experience serving as adjunct staff for the City of Wildomar and City of Eastvale.

South Dogwood Avenue Annexation, El Centro, CA

Ms. Weintraub served as environmental analyst for the preparation of an IS/MND to annex approximately 67.78 gross acres (65.05 net acres after road right-of-way exclusions) of unincorporated lands to the City of El Centro. Concurrent with the application for annexation, the project proposes a General Plan Amendment to allow for General Commercial development and to Pre-zone the parcels to CG (General Commercial) and R-3 (Multiple-Family Residential).

Dogwood Road at Villa Avenue, El Centro, CA

Ms. Weintraub served as environmental analyst for the preparation of a MND to annex approximately 68 gross acres of unincorporated lands to the City of El Centro. Concurrent with the application for annexation, the project proposes a General Plan Amendment to allow for General Commercial development and to Pre-zone the parcels to CG (General Commercial) and R-3 (Multiple-Family Residential).

Drew Solar Project Technical Studies and EA Support Services, Imperial County, CA

Ms. Weintraub served as environmental analyst for the preparation of an EA for the Drew Solar project. The Drew Solar project was a 624-acre 100-megawatt solar project located on agricultural lands in southern Imperial County. Ms. Weintraub assisted with preparing the Draft EA based on Rural Utility Service (an agency of the Department of Agriculture) guidance.

Ord Mountain Solar EIR, San Bernardino, CA

Ms. Weintraub was an author of the EIR for the project, which proposes to construct and operate a solar energy generation and storage project on approximately 484 acres to produce approximately 160,000 megawatt-hours of renewable energy annually. The project would be a 60-

megawatt (MW) alternating current (AC) photovoltaic solar energy facility with associated on-site substation, inverters, fencing, roads, and supervisory control and data acquisition (SCADA) system. The project would include a 60 MW AC maximum capacity, 4-hour energy storage battery system, and a 220-kilovolt overhead power line, which would extend approximately 0.6 mile southwest to Southern California Edison's proposed Calcite Substation, in close proximity to the existing high-voltage transmission corridor.

El Centro Town Center MND, El Centro, CA

Ms. Weintraub was an assistant project manager and primary author of the MND. She presented the project for approval at the City Council meeting, and answered corresponding questions from council members.

Addendum to the Agriculture Promotion EIR for Agricultural Tourism Community Events and Agriculture Store Ordinance Amendments, San Diego County, CA

Ms. Weintraub served as environmental analyst for the preparation of an addendum to the Agriculture Promotion EIR to address proposed amendments to the Zoning Ordinance to clarify allowances for agricultural tourism activities and streamline regulations for small agricultural stores.

Recycled Water Pipelines, Encinitas, CA

Ms. Weintraub serves as environmental analyst for the preparation of the mitigated negative declarations for two new recycled water pipelines in Encinitas for the Olivenhain Municipal Water District. The 0.9-mile El Camino Real water pipeline is located along El Camino Real and the 1.4-mile Manchester Avenue recycled water pipeline is located along Manchester Avenue.

Adjunct Staff, City of Wildomar, CA

Work included plan checks and counter coverage for the City. Everyday reviews included solar, signs, patios, pools, and accessory structures. Prepared environmental documents, and prepared and presented staff reports and recommendations at Planning Director and Planning Commission hearings. Responded to public inquiries, represented the City's Planning Department at public meetings, and advised the public as to the preparation and filing of discretionary permit applications. Conducted zoning compliance review for building permit issuance as well as prepared Planning Commission agendas and public hearing notices.

Gerry Scheid

Senior Biologist/Permitting Specialist

Experience Highlights

- ✓ Expertise in wetland delineations and USACE and CDFW permitting
- ✓ Excellent relationships with resource and regulatory agencies
- ✓ Understanding of local biological resources

Experience

34 years

Education/Registrations

M.S. Ecology, San Diego State University

B.S. Biology, Arizona State University

Certifications/Permits

County of San Diego Approved CEQA Consultants List; Biological Resources

USFWS Permit for endangered vernal pool and upland plants

Training

Wetland Delineation in Southern California Training, The Wildlife Society

Arid West Supplement Training, Wetland Training Institute

California Rapid Assessment Method Certified

Mr. Scheid specializes in wetlands issues, conducts jurisdictional wetland delineations according to USACE methodologies and assists clients in securing project approvals from USACE for nationwide permits and individual permits under Section 404 of the Clean Water Act, CDFW under Section 1600 of the Fish and Game Code, and from the RWCQB under Section 401 of the Clean Water Act. He plays a major role in all phases of the permit process, from the preparation of biological assessments as part of Section 7 consultations with the USFWS, to preparing permit applications, mitigation planning, and helping with negotiations with state and federal agencies.

Mr. Scheid has delineated wetlands and atypical wetlands according to USACE methods, including using the supplement for the arid west and ordinary high water mark methodologies. He has assessed USACE jurisdiction over isolated wetland/waters of the U.S. using the significant nexus analysis, and prepared mitigation plans according to USACE guidelines. He maintains an excellent working and negotiating relationship with regulatory staff, and his field surveys, delineations, maps, applications, and written documents are well respected.

Wistaria Ranch Solar Energy Center Project, Imperial County, CA

Mr. Scheid conducted a jurisdictional waters delineation within the Wistaria Ranch Solar Energy Center project area located in the county of Imperial. The results of the delineation were used to identify and map the extent of the federal jurisdictional waters of the U.S. and waters of the State, including any adjacent wetlands. Methods for delineating wetlands followed guidelines set forth by the U.S. Army Corps of Engineers. Jurisdictional waters of the State were also delineated in accordance with the California Department of Fish and Wildlife and Regional Water Quality Control Board.

Imperial Solar Energy Center (CSOLAR) South and West Projects, Imperial County, CA

As lead wetlands specialist, Mr. Scheid performed a jurisdictional waters delineation and also conducted rare plant surveys for both solar plant sites and the off-site electrical transmission routes. Mr. Scheid also prepared applications for a Section 404 permit from USACE, a 1602 Streambed Alteration Agreement from the CDFW, and a

State Water Quality Certification (Section 401) from the RWQCB. The project area covers both private lands and Bureau of Land Management lands in Imperial County. The project sites cover approximately 2,000 acres on two separate parcels as well as off-site transmission line corridors.

Sunrise Powerlink Species Surveys, San Diego and Imperial Counties, CA

Mr. Scheid conducted rare plant surveys at designated locations for SDG&E's new electric transmission line and other related system modifications between the existing Imperial Valley Substation and Sycamore Canyon Substation which traversed approximately 120 miles between the El Centro area of Imperial County and southwestern San Diego County.

Mitigation Opportunities Assessment for the San Pasqual Valley Project, San Diego County, CA

Mr. Scheid conducted vegetation mapping, an assessment of the degree of invasive species, and a preliminary jurisdictional waters delineation within the study area located on City-owned land parcels in the San Pasqual Valley. The data from these studies, along with supplemental information on hydrology and a literature review, were used to designate jurisdictional waters mitigation opportunities for future implementation of a mitigation bank to be used for City projects. A preliminary estimate of the mitigation credits for waters of the U.S. and waters of the state, and state waters and City wetlands within the study area were calculated along with an estimate of costs associated with implementation of a phased mitigation approach.

Newport Road Extension, Riverside, CA

Mr. Scheid performed a wetland delineation to determine the extent of wetlands and waters of the U.S. that are under the jurisdiction of USACE for this transportation corridor located between Interstate 215 and State Route 79 in western Riverside County.

Black Mountain Ranch/Santa Luz Permits, San Diego, CA

Mr. Scheid prepared permit applications for this project that included a 404 nationwide permit and 1600 Streambed Alteration Agreement application package. He also assisted in the planning, implementation, monitoring, and subsequent agency approval of the 25 acres of wetland mitigation areas created along Lusardi Creek.

Andrew Smisek
Associate Biologist

Experience Highlights

- ✓ Wetland delineations, reporting, and permitting
- ✓ CRAM
- ✓ Quino checkerspot butterfly surveys and reporting
- ✓ Vernal pool branchiopods surveys and reporting
- ✓ Construction/environmental compliance monitoring
- ✓ Biological constraints surveys and reporting
- ✓ Rare plant surveys and reporting

Experience
7 years

Education/Registrations
B.S. Biology, University of Wisconsin

Certifications/Permits
CDFW Scientific Collecting Permit for amphibians, birds, invertebrates (California vernal pool branchiopods [fairy shrimp] and terrestrial invertebrates), and reptiles

CDFW California Endangered Species Act Plant Voucher Collecting Permit

CDFW Flat-Tailed Horned Lizard Training and Certification

Mr. Smisek has a strong background in biological constraints surveys and resource management planning in southern California. He serves as project manager and conducts wetland delineations, USFWS protocol surveys, report preparation, vegetation analyses, habitat assessments, rare plant surveys, bird nest surveys, and environmental compliance monitoring. He is experienced with GPS and GIS systems to map and record vegetation types and sensitive species occurrences.

Westside Canal Battery Energy Storage System Project, Imperial County, CA

Mr. Smisek conducted a wetland delineation survey within the 148-acre project survey area in accordance with USACE protocol and prepared a wetland/waters delineation report. He also engaged in agency consultation and prepared necessary submittals in support of the wetland/waters permitting process.

Desalination Facility Solar Photovoltaic Project - Riparian Mitigation, Chula Vista, CA

Mr. Smisek served as project manager for this project. In coordination with Sweetwater Authority staff, Mr. Smisek conducted a survey and prepared a letter describing the functions and values of riparian habitat within the Habitat Mitigation Program to request credit withdrawal as compensatory mitigation for impacts to riparian habitat the project. The habitat assessment included the potential for least Bell's vireo use within the mitigation area.

SDG&E Sunrise Powerlink Habitat Restoration AWCS, San Diego and Imperial Counties, CA

Mr. Smisek coordinated remedial restoration tasks including shrub transplantation and protection. He also coordinated seed collection and application tasks specific to U.S. Forest Service requirements. He assisted in primary restoration tasks including qualitative and quantitative monitoring, seed collection, and coordinating the treatment of invasive plants found in temporary and permanent impact areas. He served as a botanical monitor for this project and assisted in rare plant surveys, including listed species such as San Diego thornmint, and rare plant seed collection. Mr. Smisek also assisted in the project-related plot

OSHA 10-Hour Training Course in Construction Safety and Health

USFWS Permit TE-797665 for Quino checkerspot butterfly and vernal pool branchiopods

Training

Wetland Delineation, Wetland Training Institute

California Rapid Assessment Method Certified

Poaceae Workshop, The Jepson Herbarium

Monkeyflowers in the Field, Rancho Santa Ana Botanic Garden

Introductory Bird Course, San Diego Audubon Society

Keying with the Second Edition of The Jepson Manual, The Jepson Herbarium

Affiliations

San Diego River Park Foundation

Friends of Mission Valley Preserve

California Native Plant Society

Center for Natural Lands Management

Friends of Maple Canyon

treatment experiments in Mount Laguna and focused invasive plant surveys.

CBP Maintenance and Repair of Patrol and Access Roads on BLM Lands, Imperial County, CA

Mr. Smisek conducted wetland delineation surveys along the 34-mile project survey area in accordance with USACE protocol and prepared a wetland/waters delineation report. He also prepared a jurisdictional summary report and client consultation for the preparation of a wetland/waters permitting strategy.

SDG&E On-Call Biological Support for Transmission Reconductor Projects, San Diego County, CA

Mr. Smisek provided biological consulting services to SDG&E for transmission reconductor projects. He provided pre-activity constraints surveys, pre-activity survey reports, and post-construction reports. He also provided rare plant surveys and rare plant survey reports for one 3-mile project and one 7-mile project.

Boulder Creek Preserve, San Diego County, CA

Mr. Smisek wrote a grant application on behalf of the San Diego River Park Foundation, who was awarded a SANDAG TransNet EMP grant to conduct focused bat surveys and a preserve management assessment for their Boulder Creek Preserve.

OMWD Recycled Water Pipelines, Encinitas, CA

Mr. Smisek served as project biologist on two new recycled water pipelines in Encinitas for the Olivenhain Municipal Water District. The 0.9-mile El Camino Real water pipeline is located along El Camino Real and the 1.4-mile Manchester Avenue recycled water pipeline is located along Manchester Avenue. He conducted field surveys and prepared a biological resources letter report for each project in support of the MND.

SDG&E NCCP Environmental Enhancement, San Diego and Orange Counties, CA

Mr. Smisek provided restoration consulting services to SDG&E in support of the Natural Community Conservation Plan and the Enhancement and Monitoring Program. He conducted post-construction site assessments and annual monitoring of enhancement sites, prepared implementation plans, and maintained database entries to track progress of various sites throughout San Diego County.

Carmen Zepeda-Herman, RPA

Archaeology Project Director

Experience Highlights

- ✓ Extensive experience on infrastructure construction and maintenance projects
- ✓ Register of Professional Archaeologists
- ✓ Meets the Secretary of Interior Standards for Archaeology

Experience

18 years

Education/Registrations

M.A. Anthropology, San Diego State University

B.A. Anthropology, University of California, Berkeley

Registered Professional Archaeologist, 15119

Certifications/Permits

California BLM Cultural Resource Use Permit

City of San Diego Qualified Archaeological Principal Investigator

County of San Diego Approved CEQA Consultants List; Archaeology

California Department of Transportation, PQS Equivalent, Principal Investigator in Prehistoric Archaeology

Ms. Zepeda-Herman is certified by the Register of Professional Archaeologists (RPA) and is responsible for leading and conducting field surveys, test excavations, data recovery excavations, and construction monitoring for cultural resource studies. She conducts background research, site records maintenance, and assembles crews for completion of projects. Ms. Zepeda-Herman regularly works with a range of regulatory and assessment frameworks including National Historic Preservation Act, National Register of Historic Places, California Register of Historic Resources, and CEQA.

Westside Canal Battery Energy Storage System Project, Imperial County, CA

RECON prepared multiple technical studies and supporting documents for a utility-scale battery energy storage system project located on 148 acres of agricultural lands in southern Imperial County. As principal investigator, Ms. Zepeda-Herman was responsible for overseeing field personnel and participated in the survey. She also completed a quality control review of the results report.

Drew Solar Project Technical Studies and EA Support Services, Imperial County, CA

The Drew Solar project is a 624- acre 100- megawatt solar project located on agricultural lands in southern Imperial County. RECON is preparing and processing an EA with the USDA-RUS by making use of the existing Imperial County EIR. Ms. Zepeda-Herman requested a sacred lands search from the Native American Heritage Commission. She drafted a tribal consultation letter on behalf of the client.

Chapman Solar Ranch Project, San Diego County, CA

Ms. Zepeda-Herman participated in the archaeological survey of approximately 135 acres. An area of approximately 40 acres is proposed for the construction of a solar generating facility and access roads. Ms. Zepeda-Herman assisted in recording 17 new cultural resources and 6 prehistoric isolated artifacts.

Ocotillo Sol Photovoltaic Solar Project EIS, Imperial County, CA

RECON completed the EIS and proposed California Desert Conservation Area Plan Amendment for this project near the U.S. Border west of Calexico. Ms. Zepeda-Herman completed the cultural resources affected environment and impact analysis sections for the EIS. She participated in a Section 106 tribal consultation meeting and a field visit with tribal

Training
Riverside County Cultural Sensitivity Training Course

BBK Webinar for Assembly Bill 52

Affiliations
Society for California Archaeology

San Diego County Archaeological Society

members. She also participated in a public meeting to address cultural resource concerns about the project.

Imperial Solar Energy Center (CSOLAR) South and West Projects, Imperial County, CA

Ms. Zepeda-Herman served as principal investigator for the Imperial Solar Energy Centers South and West projects in Imperial Valley within a portion of the Yuha Desert. The project consists of two utility-scale solar energy project sites (photovoltaic solar field and associated transmission lines) covering over 3,000 acres of both private and Bureau of Land Management lands. As part of this effort she conducted a record search and cultural resources survey pursuant to Section 106 and CEQA guidelines. Additionally, Ms. Zepeda-Herman presented data from surveys at a tribal consultation meeting and conducted three site visits with a member of Cocopah, a member from the San Pasqual Band of Indians, a member of the Kwaaymii Laguna Band of Mission Indians, and a member of the Quechan Indian Nation.

Cultural Resources Monitoring for the Goldmine Tap to Knob Wood Pole Replacement, Imperial County, CA

Western Area Power Administration replaced 161 wood pole structures along the Goldmine Tap to Knob transmission line in Imperial County located on private and BLM lands. Ms. Zepeda-Herman served as the project manager and assisted with the archaeological monitoring activities during construction.

Imperial Avenue Extension Project, El Centro, CA

RECON prepared a joint CEQA/NEPA environmental impact analysis for the proposed one-mile roadway extension of Imperial Avenue to accommodate a four-lane roadway. As part of this project, RECON completed an archaeological and built environment survey for the road extension project using Caltrans guidelines. Two historic properties were identified and evaluated for the National Register. RECON completed the research required from the evaluation, determined the properties were not eligible, and obtained concurrence from Caltrans and the State Historic Preservation Office. Ms. Zepeda-Herman completed quality control for the archaeological and built environment survey reports.

Class I Cultural Resources Literature Review for the Parker-Blythe No.2 Transmission Line, Parker, AZ

Ms. Zepeda-Herman served as lead archaeologist for this Class I review. She conducted record searches from four information centers and compiled the data in a report for Western Area Power Administration.

Nathanial Yerka

Archaeologist/Environmental Analyst

Experience Highlights

- ✓ Field surveying, excavation, and monitoring
- ✓ Prehistoric artifacts analysis
- ✓ Environmental analyst

Experience
18 years

Education/Registrations
J.D. College of Law, Glendale University

B.A. Anthropology, University of California San Diego

Certifications/Permits
City of San Diego Qualified Archaeological Monitor

OSHA 10-Hour Training Course in Construction Safety and Health

Training
BBK Webinar for Assembly Bill 52

AEP CEQA Essentials Workshop - An Introduction & Intermediate-Level Training Workshop

Mr. Yerka is an experienced archaeologist and has worked on over 90 archaeological projects throughout California, Arizona, and Nevada. He primarily serves as crew chief and has participated in a range of cultural resource investigations including archaeological surveys, BLM fire rehabilitation surveys, test excavations, skeletal excavations, data recovery programs and various monitoring projects for which he has authored or co-authored technical reports and letters, and prepared DPR site forms for SHPO. He has performed laboratory procedures including analysis of prehistoric artifacts, marine shellfish remains and historic refuse collections. Mr. Yerka works closely with the Native American community in southern California and maintains good working relationships with a variety of community members.

Westside Canal Battery Energy Storage System Project, Imperial County, CA

RECON prepared multiple technical studies and supporting documents for a utility-scale battery energy storage system project located on 148 acres of agricultural lands in southern Imperial County. Mr. Yerka served as field director of the cultural resources survey of 163.32 acres that resulted in the recording of twelve previously unrecorded prehistoric resources, as well as the updating of three previously recorded resources including several Imperial Irrigation District canal features. Mr. Yerka also served as principal author of the technical report, conducted the record search, and prepared the State Historic Preservation Office site forms.

Chapman Solar Ranch Project, San Diego County, CA

Mr. Yerka participated in the archaeological survey of approximately 135 acres. Approximately 40 acres will be impacted for the construction of a solar generating facility, on-site gen-tie component, and access roads. Additionally, 75.88 acres would be placed within a conservation easement. He assisted in recording 17 new cultural resource sites and 6 prehistoric isolated artifacts, archaeological test excavations of newly recorded sites, as well as performing lab support for recovered cultural materials.

Cultural Resources Monitoring for the Goldmine Tap to Knob Wood Pole Replacement Project, Imperial County, CA

Western Area Power Administration replaced 161 wood pole structures along the Goldmine Tap to Knob transmission line in Imperial County located on private and BLM lands. Mr. Yerka participated in the establishment of exclusion zones and limits-of-work areas around previously identified cultural resources, identified previously undocumented resources, and relocated mismapped previously recorded trails.

Class I Cultural Resources Literature Review for the Parker-Blythe No.2 Transmission Line, Parker, AZ

Mr. Yerka provided document support for this Class I review. He synthesized the sizeable amount of data attained from the requested record searches from four information centers that was compiled in a report for Western Area Power Administration, Desert Southwest Region.

Jacumba Operational Roads EA, Imperial County, CA

Mr. Yerka participated as crew chief in the cultural resources surveys for the Jacumba Roads Project in support of an Environmental Assessment. The project entails maintenance, repair, and improvement of 36 miles of roads due to their poor condition and lack of routine maintenance. The project identified and documented prehistoric and historic-period cultural resources.

Neckel Road Utility and Roadway Infrastructure Project, Imperial County, CA

Mr. Yerka performed a cultural resources survey of approximately 5 miles of developed roadway for the future installation of updated water and sewer lines. The survey recorded two historic canal gate structures. Mr. Yerka authored a letter requesting State Historic Preservation Office concurrence that the proposed project had no effect on historic properties.

Dogwood at Villa Avenue, El Centro, CA

Mr. Yerka served as crew chief of a 330-acre cultural resources survey that resulted in the recording of historic features, which included railroad segments, canal segments, and canal structures, as well as updating previously recorded historic features. Mr. Yerka also conducted the record search and prepared the State Historic Preservation Office site forms.

Jesse Fleming

Air Quality and Noise Specialist

Experience Highlights

- ✓ Specialized in noise, air quality, and greenhouse gas impact analysis
- ✓ Knowledge of applicable local, state, and federal regulations
- ✓ Experienced user of latest modeling software including SoundPLAN, TNM, CALINE, CalEEMod, EMFAC, CalRoads, and CREATE
- ✓ Preparation of CEQA documents

Experience
13 years

Education/Registrations
B.S. Mathematics, University of California, Santa Barbara

Certifications/Permits
County of San Diego Approved CEQA Consultants List; Noise

OSHA 10-Hour Training Course in Construction Safety and Health

Training
CalEEMod

Ms. Fleming is an environmental analyst and noise, air quality, and greenhouse gas specialist whose responsibilities include conducting acoustical, air quality, and greenhouse gas technical studies that require ambient conditions identification, dispersion and emission models, and preparation and processing of reports. Ms. Fleming is proficient with various air quality models (e.g. AERMOD, CalEEMod, EMFAC, CalRoads, and AP42) and noise prediction models (e.g., SoundPLAN, FHWA TNM, FHWA RCNM, and CREATE railroad noise model).She has extensive knowledge of environmental regulations related to noise, air quality, and greenhouse gases.

Drew Solar Project Technical Studies, Imperial County, CA

Ms. Fleming prepared technical studies in support of the EIR for the Drew Solar project, a 100-megawatt alternating current solar generation facility and energy storage facility in Imperial County. These technical studies included the noise analysis, air quality and greenhouse gas modeling and technical report.

Westside Canal Battery Energy Storage System Project Technical Studies, Imperial County, CA

RECON prepared multiple technical studies and supporting documents for a utility-scale battery energy storage system project located on 148 acres in southern Imperial County. Ms. Fleming prepared technical studies in compliance with CEQA for noise, air quality, and greenhouse gas emissions.

Imperial Avenue Extension Project, El Centro, CA

Ms. Fleming prepared the air quality technical report and the air quality conformity analysis for the extension of Imperial Avenue from Interstate 8 to McCabe Road in the City of El Centro. The conformity analysis contains the information that is required by the Federal Highway Administration to make a project-level air quality conformity determination.

On-Call Third-Party Technical Review, Chula Vista, CA

Ms. Fleming is responsible for providing on-call advisory and third-party reviews of noise, air quality, and greenhouse gas reports submitted to the City of Chula Vista. She has provided dozens of reviews to the Development Services Department for large-scale plan projects, such as specific and master plan, as well as smaller individual projects. The

projects assessed include residential developments, institutional uses, as well as landfills.

County of Riverside Air Quality Review and Analysis Services, Riverside County, CA

Ms. Fleming was responsible for providing on-call advisory and third-party reviews of air quality and GHG reports submitted to the County of Riverside and has prepared environmental documents for both planning and public infrastructure projects.

County of San Diego Department of Public Works, As-Needed Environmental Services, San Diego, CA

Ms. Fleming prepared the noise technical reports for County of San Diego Department of Public Works projects including roadway improvements to Camino Del Rey and Ashwood Street. The noise analysis included the calculation of construction noise levels at nearby receivers, and the preparation of noise contour mapping with and without implementation of roadway improvements and widening.

Escondido Industrial Park Addendum, Escondido, CA

Ms. Fleming prepared the air quality and greenhouse gas technical reports as well as the Mitigated Negative Declaration (MND) for the Escondido Victory Industrial Park as well as the air quality, greenhouse gas, and noise technical reports for the adjacent Escondido Innovation Center, which have since merged properties and propose a 215,275-square-foot warehouse and office space with loading docks. Ms. Fleming worked directly with the applicant and project design team to determine the best site design and operational restrictions required for future tenants in order to meet the limits specified in the Escondido Municipal Code.

Sheriff's Department Emergency Vehicle Operations Course, San Diego County, CA

Ms. Fleming assisted in the preparation of noise, air quality, and GHG analyses that assessed the potential impacts resulting from construction and operation of the Emergency Vehicle Operations Course (EVOC) Project. The EVOC is proposed to provide a venue for hands-on vehicle and classroom training courses primarily to public safety personnel. The air quality and GHG analyses included calculation of criteria pollutant and GHG emissions from construction and operational sources including vehicle trips to and from the facility, on-site fueling activities, and vehicle activity on the skills course. The noise analysis included detail modeling of on-site noise sources including vehicles on the skills course.

Frank McDermott, GISP

GIS/UAV Coordinator

Experience Highlights

- ✓ GIS for large-scale habitat conservation plans
- ✓ Data management for large-scale inventories

Experience

22 years

Education/Registrations

B.S. Environmental Planning and Design, Rutgers University

Geographic Information Systems Professional, No. 59274

FAA Part 107 Remote Pilot Certification with Small UAS Rating, No. 3937655

Certificate in Cartography and GIS, San Diego State University

Training

ArcGIS 10.x

Pix4D Photogrammetry

Trimble GPS

Affiliations

Urban and Regional Information Systems Association

Awards

Best Cartography, ESRI San Diego International

Mr. McDermott is RECON's GIS/UAV coordinator with experience in vector, raster, 3D, image and spatial analysis using the latest industry leading software including ArcGIS Desktop, ArcGIS Pro, Pix4D, ArcGIS Online, Collector for ArcGIS, and Survey123. He works with biologists, archaeologists, and environmental analysts to compile, analyze, and synthesize data from various sources, including UAV (drones), GPS and tablet-based field data collection technology and data created through digitizing and other secondary sources. He also has extensive experience building custom geodatabases to fit specific project needs.

Imperial Solar Energy Center (CSOLAR) South and West Projects, Imperial County, CA

Mr. McDermott guided the initial concept design of a 130-megawatt solar installation, helping avoid natural resources which streamlined the environmental review and reduced overall expense of facility installation. He also cooperated with biologists and archaeologists to complete the environmental reporting for the first large-scale solar plant in Imperial County.

Piute-Eldorado Area of Critical Environmental Concern Management Plan and EA, Clark County, NV

Mr. McDermott is serving as lead GIS analyst and assisting with the preparation of the Piute-Eldorado Valley Area of Critical Environmental Concern Management Plan (ACEC Plan) and EA. The ACEC encompasses 329,000 acres within the BLM Las Vegas Field Office. The ACEC Plan includes Mojave Desert tortoise habitat connectivity management actions and will integrate restoration and mitigation measures as compensation for the Dry Lake Solar Energy Zone impacts. The scope of work includes GIS data review and analysis and figure development for all sections of the draft and final EA.

Sunrise Powerlink Species Surveys, San Diego and Imperial Counties, CA

The Sunrise Powerlink project would provide a new 500 kV and 230 kV electric transmission line between the existing Imperial Valley Substation and Sycamore Canyon Substation. The entire project would traverse approximately 120 miles between the El Centro area of Imperial County and southwestern San Diego County.

Users Conference

Best Data Integration, ESRI San Diego International Users Conference

Since the completion of construction in 2012, RECON has been responsible for the annual invasive weed species surveys. Botanists visit each of 500+ weed control management areas by targeted weed species along the project route. These densities are used to coordinate weed treatment priorities to help prevent the onset/spread of wildfires. Mr. McDermott developed a custom ArcGIS Geodatabase and data collection methodology using ArcGIS Online cloud-based maps to be used in this data collection effort. Data collection and analysis was refined over the course of the first few years of the project as advances in technology took place. Using ArcGIS Online coupled with Collector for ArcGIS allowed both surveyors and project managers back in the office to coordinate the surveys, helicopter transportation, weed treatment crews, and monitor survey progress all while viewing and analyzing field data in nearly real-time. The increased efficiency gained through this data collection technique was crucial in managing a project of this scope.

Desert Renewable Energy Conservation Plan, CA

Mr. McDermott was a key member of the team overseeing the GIS data creation and analysis for this project covering over 22 million acres in the California desert. Through intelligent data handling using file-based geodatabases, custom model-builder tools, and repeatable workflow operations, he guided the analysis of 21 resources over 6 plan alternatives.

Secondary Fence Replacement Environmental Stewardship Plan, San Diego Sector, CA

The project involves the replacement of 12.5 miles of existing fence and construction of approximately 1.5 miles of new secondary border wall in the San Diego Border Infrastructure System. Mr. McDermott developed the data collection schema that allowed for the tracking and reporting of multiple project infractions within the construction area. This included the mapping of potential issues as well as geolocated photographs and descriptions. This data was presented at weekly meetings and facilitated discussions between the client, project biologists, and construction crews. This allowed for addressing problems in a timely manner which aided in meeting the project's development goals while also protecting natural resources.

LINSCOTT
LAW &
GREENSPAN
engineers

RESUME

JOHN A. BOARMAN, P.E.
PRINCIPAL

PROFESSIONAL REGISTRATION
Civil Engineer, California (C 50033)
Traffic Engineer, California (TR 1855)

EDUCATION
Purdue University, Master of Science in Civil Engineering

PROFESSIONAL EXPERIENCE
Transportation Engineer: Linscott, Law & Greenspan (1990 to Present)

PROFESSIONAL MEMBERSHIPS
Institute of Transportation Engineers, Associate Member
Association of Environmental Professionals, Member

AREAS OF PROFESSIONAL COMPETENCE
Traffic Sections of Environmental Impact Studies and Reports
Traffic Impact Studies
Parking Studies
Transportation Planning

REPRESENTATIVE ASSIGNMENTS
Mr. Boarman has personally prepared, participated in or directed the preparation of several hundred traffic impact studies and reports and their subsequent integration into Environmental Impact Reports, Statements and Assessments (EIR, EIS, EIA). His work has included not only traffic impact studies but studies of parking impact and sufficiency, site access and circulation, and internal auto, pedestrian and public transit traffic circulation.

Mr. Boarman has worked closely with other professionals in the preparation and presentation of environmental documentation to citizens groups, local government engineers and planners, Transportation Commissions, Planning Commissions, and City Councils. He has also made presentations to the California Coastal Commission.

Mr. Boarman has managed traffic studies for several high profile projects including the North Embarcadero Visionary Plan, the South Embarcadero Urban Development Plan, the City of Santee General Plan, the Imperial County General Plan Update, the San Diego Convention Center Expansion, the Hotel Del Coronado Expansion, the Qualcomm Stadium Expansion, the Imperial Valley Mall, Fanita Ranch, The Del Mar Fairgrounds Master Plan, the I-805/Mira Mesa Blvd. PSR, and the 2,700 home Merriam Mountains project.

Mr. Boarman has recently completed traffic studies for eight (8) separate solar farms in Imperial County. These projects were unique as compared to typical development impact studies in that potential traffic impacts would be associated with the construction phases of the project, not the operation phases. As such, the potential trip generation and impacts of the various construction phases, including the truck trips associated with equipment and material deliveries, as well as the employee trips were determined. Trip generation for the smaller, subsequent operations and maintenance phases were also developed. These studies included comprehensive evaluation of countywide cumulative development, including other alternative energy projects as well as other residential and commercial development. In some cases, focused project access to underdeveloped roadways and intersections was required.

W. Lee Vanderhurst, PG, CEG

EDUCATION

1982/Master of Science/ Geology/San Jose State College/San Jose/California

1976/Bachelor of Science/Geology/San Diego State University/San Diego/California

PROFESSIONAL GEOLOGIST, CALIFORNIA, 3437

CERTIFIED ENGINEERRING GEOLOGIST, CALIFORNIA, 1125

REFERENCES

James Quinn
Senior Engineering Geologist
City of San Diego
Development Services
12 22First Avenue
San Diego, CA 92101
(619)446-5334
JPQuinn@SanDiego.gov

Thomas B. Canady
Principal Engineer
SCST Engineering
(619) 280-4321
6280 Riverdale Street
San Diego, CA 92120
TCanady@SCST.com

Lee Vanderhurst is a California-Certified Engineering Geologist with over 40 years professional experience providing engineering geologic consulting services throughout California. Mr. Vanderhurst is experienced in geologic hazard studies, geotechnical investigations, active fault evaluations, coastal bluff stability analyses, construction and post construction monitoring. Lee's work was used in support of large, planned community developments in hillside terrain, landslide remediation, coastal planning, hospitals, schools, high-rise construction, pipelines, bridges, highways, and municipal planning. Lee oversees field exploration and geologic aspects of all projects.

Recent Representative Project Experience

Geotechnical Information Report, for Design build Bid Package, State Route 91 Corridor Improvement Project, Riverside and Orange Counties, California.

Principal Geologist for preparing a geotechnical reconnaissance for 14 miles of SR-91 and 6 miles of I-15 in Corona California. Work included review of existing geotechnical reports and boring logs, construction documents, analysis of stereo aerial photographs and mapping to create a geotechnical map. The map showed the distribution of the geologic formations that might influence the proposed improvements as well as descriptions of the geotechnical engineering characteristics of the various earth materials underlying the area. Mr. Vanderhurst also reviewed exploratory boring samples and cores to provide geologic interpretations necessary to predict potential construction difficulties.

Fault Rupture Hazard Investigation, 4th Avenue and C Street, San Diego, California.

Principal Geologist and Lead Investigator for a fault hazard investigation in downtown San Diego. Several investigative methods were used to evaluate whether active or potential active faults were located in the footprint of a proposed 40 story building. The presence of old basements and unstable rubble fill required using auger borings and cone penetrometer soundings to supplement backhoe test trenches. Mr. Vanderhurst worked with City of San Diego geologists to create a unique exploration program that was sufficient to show the City that no faulting was present beneath the proposed building.

Geotechnical Investigation of Southwest Fisheries Site, Scripps Institute of Oceanography, University of California, San Diego, La Jolla, California.

Principal Geologist and Project Manager for a geotechnical investigation of stability and feasibility for reusing a portion of the Southwest Fisheries site for classrooms and parking. The coastal bluff-top site had been abandoned and three large buildings razed due to suspected landslide distress. Numerous geotechnical investigations had been performed at the site in the past. However, each investigation did not include systematic exploration so the underlying geology was not sufficiently well understood enough for accurate engineering analysis. By drilling several closely spaced borings the geology could be accurately modeled and the resulting evaluation showed that portions of the site were stable. Building setbacks were established and recommendations for the safe development of the site were presented.

Geotechnical Investigation for Via Tazon Office Development, Rancho Bernardo, California.

Principal Geologist for a geotechnical investigation for a large parking garage and office building planned for a stabilized landslide. The landslide was stabilized in the 1970's. Borings were used to confirm the as-graded conditions and to evaluate the stability of the site. The recommendations included using drilled caissons to support the garage and building to avoid destabilizing the site.

SREE GOPINATH, PE, QSD

Principal Engineer

HIGHLIGHTS

Education

- M.S., Civil Engineering, Texas A&M University
- B.S., Civil Engineering; University of Kerala, India

Registrations and Certifications

- Registered Civil Engineer, California, C57987
- Qualified Stormwater Designer, No. 01010
- 40-Hour OSHA HAZWOPER Certification

PROFESSIONAL EXPERIENCE

Sree has more than twenty years of professional experience in environmental site assessment, hazardous materials technical studies, and remediation on redevelopment projects.

PROJECT EXPERIENCE

Hazardous Materials Technical Study for Market Street Improvements between 47th Street and Euclid Avenue, San Diego. Prepared a hazardous materials technical study and report in support of the City of San Diego Market Street Complete Project. Identified hazardous materials issues, including aerially-deposited lead impacts from historic vehicle emissions, hazardous building materials impacts, underground storage tank release impacts, and former aerospace manufacturing operations impacts. The hazardous material sites were ranked based on degree of adverse effects and recommendations were provided for mitigation.

Evaluation of Environmental Conditions for Water Authority Operations Center, Escondido. Researched environmental conditions of a potential site and surrounding properties by researching regulatory files, performing a federal, state, and local database search to identify significant environmental constraints that would impact the Water Authority's acquisition of the potential site. Significant concerns were identified and relayed to the Water Authority.

Phase I and II Environmental Site Assessment for Flow Control Facility, San Marcos. Prepared a Phase I Environmental Site Assessment for a Flow Control Facility in San Marcos. The Phase I identified lead in soil as a Recognized Environmental Condition. A Phase II Environmental Site Assessment confirmed the presence of hazardous waste-levels of lead. Prepared soil management plan and project specifications for removal of lead impacted soil in advance of project construction.

Phase I Environmental Site Assessment for First Aqueduct Easements, Escondido. Prepared a Phase I Environmental Site Assessment in accordance with ASTM E1527-13 for acquisition of easements for the first aqueduct improvement project. The Phase I identified Recognized Environmental Conditions and recommended additional investigations to investigate potential aerially-deposited lead and pesticide impacts.

Hazardous Materials Technical Study in Support of Iconic Waterfront Restaurant Project, San Diego. Prepared a hazardous materials technical study and report in support of the Port Iconic Waterfront Project CEQA document to convert the iconic Anthony's Fish Grotto restaurant to a new restaurant complex. Identified hazardous materials issues that required further assessment and mitigation.

Hazardous Materials Technical Study for the Mission Valley Community Plan Update. Prepared a hazardous materials technical study and report for the Mission Valley Community Plan Update. The study identified over 2000 locations where hazardous materials had been used, stored, or released. The study evaluated 42 final sites that presented environmental constraints in a scale of 1 (least) to 5 (most).

DUBOSE DESIGN GROUP

Annette Leon
1065 West State St
El Centro, CA - 92243
(760) 353-8110
aleon@dde-inc.net

AFFILITIONS

Parks & Recreation Commissioner
Imperial County
2017- Present

Vice-President
Sister Evelyn Mourey Center (SEMC)
El Centro, CA
2013- Present

Committee Member
House of Hope
El Centro, CA
2013-Present

AWARDS

National Honor Award Recipient
American Society of Landscape Architects (ASLA), Nevada
2009

Interdisciplinary EDR Design Shift Charette Competition Winner
Trash for Teaching-California Edison
Los Angeles, 2012

Graduate Fellowship Fund Scholar
California State Polytechnic University, Pomona, 2013

Women of the Imperial Valley Co-Keynote Speaker
Women's Magazine of the

SUMMARY OF QUALIFICATIONS

Annette Leon serves as the Vice President of DuBose Design Group where she oversees all planning & landscape architecture (under the direction of G. Scott) related projects. She has worked on many complex projects throughout her career in both professions, concentrating on Imperial County. Her past experience and academic accomplishments have made her an asset to Dubose Design Group. Ms. Leon's academic research has been focused primarily in Imperial County. Ms. Leon is currently working towards her Landscape Architecture license under the direct supervision of Landscape Architect Gary Scott, FASLA.

EDUCATION

General Education| Imperial Valley Collage
Bachelor of Landscape Architecture | University of Nevada Las Vegas
Master's in urban and Regional Planning | California State Polytechnic University, Pomona

Academic Research | Undergraduate & Graduate Studies

- Undergraduate Capstone for Professional Undergraduate Degree (BLArch)
  - All Politics Aside: Connecting Bi-National Communities Through the Design of International Land Ports of Entry, Case Study Calexico, CA
- Master Thesis for Professional Graduate Degree (MURP):
  - Agricultural Preservation in the Age of Renewable Energy. Case Study Imperial County.

EXPERIENCE

Vice President | DuBose Design Group

2018 – PRESENT

- Project Lead for Planning and Landscape Architecture Related Projects.
- Technical writing and supporting graphics studies include: Water Supply Assessments, Key
- Observation Point Analysis, Air Port Land Use Compatibility Analysis, Land Evaluation and Site Assessment (LESA) modeling, Electrical and Circulation Flow Diagrams Air Quality Modeling (Tier1), & Noise Assessments, and created cannabis permitting model for Imperial County.
- Vast knowledge in the California Environmental Quality Act, California Water Code & Energy Code, as well as Imperial County General Plan and Division 5 Ordinance.
- Vast knowledge in local (ie, City of Calexico & Imperial Irrigation District's), state and federal permitting process for project ranging from industrial to residential.
- Landscape architectural education concentrating in arid desert climates of the desert southwest portion of the United States.
- Experience Relevant to City of Calexico: Gran Plaza Phase 2, Entitlement, Project Coordination, Water Supply Assessment, & Airport Land Use Compatibility Analysis. Trinity Manufacturing and Cultivation Facility, Planning, Entitlement, Project Coordination and Processing, El Portal Housing Subdivision, Water Supply Assessment.
- Landscape Architectural work under the direct supervision of Landscape Architect Gary Scott

Project Planner | Development Design & Engineering

2013– 2017

- Planning Lead: Project coordination and management of planning and engineering related projects in Imperial County, primarily industrial and renewable energy projects.
- Technical Studies and graphic illustrations
- Landscape conceptual documents

JOSE L. ANGEL, P.E.
PH: (760) 883-8955 --- E-MAIL: JLMAC-PE035@OUTLOOK.COM

EXECUTIVE OFFICER

11/17/2015 – 8/06/2018 CRWQCB, Colorado River Basin Region (Region 7), Palm Desert CA

Responsible for the day-to-day operation of the Colorado River Basin Water Board office. Directly supervised the Colorado River Basin Water Board's Assistant Executive Officer. Indirectly supervised all other administrative and technical staff. Day-today duties included:

- Advised the Colorado River Basin Water Board on water quality control policies, implementing those policies, and issuing enforcement orders to protect water quality.
- Represented the Colorado River Basin Water Board on the Mexicali/New River Sanitation Program, a binational Program with Mexico to fix priority water quality problems, and to implement water quality protection actions to address New River pollution from Mexico.
- Served on the Good Neighbor Environmental Board (GNEB) representing California from 2010 to June 2018. GNEB is an independent, federal committee that advises the President and Congress on good neighbor practices along the United States border with Mexico, with a focus on environmental issues that impact the border region.
- Interacted with media representatives.
- Issued and negotiated sensitive Board water quality control policy and Orders.
- Represented the Board and the Board's interests in various committees and before private individuals and public agencies, and elected officials.
- Provided expert testimony on environmental policy (e.g., New River pollution) before State Legislature oversight committees and in legal proceedings.
- Responsible for office budget and programmatic workload commitments.

ASSISTANT EXECUTIVE OFFICER

2/2005 – 11/17/2015 CRWQCB, Colorado River Basin Region (Region 7), Palm Desert CA

Directly supervise the Regional Board's Administrative, Surface Water Protection, and Land Discharge Division Chiefs. Day-today duties included:

- Development and implementation of water quality control policy, including major permits, water quality standards (e.g., Total Maximum Daily Loads and Basin Plan amendments).
- Leading the Board's Prosecution Team for water quality enforcement matters.
- Developing and implementing collaborative strategies to engage stakeholders and responsible parties to address priority water quality problems and implement water quality protection actions to deal with New River pollution from Mexico
- Ensuring Division Chiefs properly plan, organize, and coordinate the work of Board staff professionals, including engineers, geologists, scientists, technicians, and support staff.
- Reviewing sensitive staff reports, Board orders and resolutions, and correspondence prior to transmittal to others.
- Supervising Regional Board administrative functions, including office budget and grants, preparation of the Board agendas and annual budgets, and office space needs, transportation, and equipment; coordinating staff training and professional development; supervising and reviewing staff performance reports and performance standards.
- Representing the Regional Board at meetings and conferences at a policy level; and addressing public officials, organizations, and other stakeholders concerning the State and Regional Boards' goals, programs, policies, laws and regulations. Currently represent Regional Board and Cal/EPA on various policy and technical committees

(e.g., Binational Technical Committee for New River/Mexicali Sanitation Project, Salton Sea Science Advisory Committee, and Technical Advisory Committee for Strategic Plan for New River Improvement Project).

- Dealing with media and high-ranking public and elected officials regarding sensitive water quality matters. Serving as Regional Board Ombudsman and Skelly Hearing Officer for other Water Boards.

SUPERVISING WRCE – WATER QUALITY STANDARDS DIVISION CHIEF

8/1999 – 1/2005 CRWQCB, Colorado River Basin Region (Region 7), Palm Desert CA

Supervised Nonpoint Source/TMDL Implementation, TMDL Development, Water Quality Policy, and Compliance Assurance and Enforcement Unit Chiefs. Day-to-day responsibilities include:

- Administering Division Units and Programs, including oversight of preparation and implementation of Unit and
- Program work plans and budgets.
- Developing and implementing TMDLs for Region's impaired surface water.
- Supervising over 20 technical staff, including engineers, geologists, scientists, and technicians.
- Advising EO and AEO on overall compliance, enforcement, and policy issues.
- Dealing with stakeholders on enforcement matters
- Representing Regional Board on Binational Technical Committee for New River/Mexicali Project and CalEPA on Salton Sea Science Advisory Committee
- Ensuring proper and ongoing professional development of Division staff.
- Participating in Board outreach programs and recruitment efforts and dealing with media.

SENIOR WRCE—CHIEF OF BASIN PLANNING UNIT

3/1998–8/1999 CRWQCB, Colorado River Basin Region (Region 7), Palm Desert CA

Watershed Management Initiative Coordinator, NPS Program Manager, TMDL Program Manager, New River/Mexicali Project Program Manager, Day-to-day responsibilities included:

- Drafted updates/amendments to Region's Basin Plan, including development of TMDLs.
- Prepared and implemented Program plans and the State's NPS Plan.
- Advised EO and AEO on compliance, enforcement, and policy issues.

ASSOCIATE WRCE—NEW RIVER/MEXICALI PROJECT

6/1997–2/1998 CRWQCB, Colorado River Basin Region (Region 7), Palm Desert CA

- Worked with federal, state, local officials, Mexican officials, and public on Border pollution problems.
- Assisted Chief of Planning Section on Salton Sea and Watershed Management Initiative activities.
- Drafted permits and enforcement orders and participated in Regional Board outreach programs.
- Conducted Pretreatment audits and inspections.

STAFF WRCE, ASSOCIATE WRCE—SOUTH REGULATORY UNIT

1989 – 5/1997 CRWQCB, Central Valley Region (Region 5), Fresno CA

- Provided regulatory oversight for complex Non-Chapter 15 and NPDES discharges of waste.
- Reviewed technical reports on hydrogeologic investigations, water reclamation projects, and EIRs.
- Prepared and presented various permits and enforcement cases during Regional Board hearings.

EDUCATION & PROFESSIONAL DEVELOPMENT

California State University-Fresno — Fresno, CA

- Bachelor of Science Degree in Civil Engineering
  Emphasis on Geotechnical and Environmental Engineering
  Geotechnical: Soil Mechanics, Foundations Design, Geotechnical Design.
  Environmental: Water Supply and Wastewater, Water Quality Control Processes.

Training/Specialized Courses (Partial Listing)

- Water Board Academy Leadership Series (SWRCB, 12/06)
- California Leadership Institute (University of Southern California-DPA, 12/2002)
- Basic Supervision (STC, 1998)
- Princeton Groundwater Course-Groundwater Pollution & Hydrology (Cleary, 2/1995)
  Statistical Analysis of Groundwater Monitoring Data (UC-Davis, 4/1993)
- Water Laws and Audits (UC-Davis, 8/1991)
- Site Characterization for Subsurface Remediation (USEPA, 2/1990)

Professional Licenses/Registrations

- California Registered Civil Engineer (RCE No. C52035)
- California Hazardous Materials Specialist (HMS No. 435)

SKILLS

Leadership—have successfully led numerous teams conducting water quality studies and investigations and prosecuting violations of water quality laws and policy; established and lead various technical advisory committees for TMDLs and Basin Plan amendments. Collaboratively, but assertively represent Regional Water Board interests.

Communication—authored and coauthored numerous water quality reports; provided numerous presentations to audiences of various sizes and backgrounds on complex water quality policy and technical issues. Briefed various federal local, state, and federal elected and high-ranking public officials on key water quality issues.

Project and Resource Management—have to handle numerous administrative and technical projects of various degrees of complexity, including office budget and personnel resources; priority enforcement; Basin Plan amendments that establish prohibitions of discharge, pollution load allocation for point and nonpoint sources of pollution, etc. Over 20 years of experience in overseeing and conducting water quality studies and investigations.

Analytical—able to analyze complex situations and chart sound course of action.

Water Quality Control—Over 20 years of regulatory expertise dealing with complex water quality issues resulting from discharges of wastes from point and nonpoint sources of pollution and in developing and implementing water quality control policy.

PUBLICATIONS (PARTIAL LISTING)

Angel J. et al—Cooperative Partnership Between California Regional Water Quality Control Board and Imperial County Farm Bureau Creates Positive Results in TMDL Implementation, March 2005

Gruenberg P. et al—*New River Pollution from Mexico;* CRWQCB(7), December 1998.

Angel J. et al.--Impact of Wastewater Reclamation on Groundwater Salinity in Central California; APWA Reporter, October 1993.

LECTURES & PRESENTATIONS (PARTIAL LISTING)

Compliance Assurance and Enforcement (CRWQCB-CRBR, 1/2008; State and Regional Water Boards 5/2014)
*California Water (*California Leadership Institute, USC-Sacramento Campus, 12/2002)
Nonpoint Source Pollution Control (USEPA Tribal Workshop, 11/2001)
Compliance Assurance and Enforcement (CRWQCB-CRBR, 10/2000)
Region's 7 Watershed Management Initiative (Salton Sea Symposium, 1/2000)
Defensible Permitting and Enforcement (CRWQCB-CRBR, 10/1999)
TMDL Development and Implementation (Imperial County Farm Bureau, 3/99)
Handling of Hazardous Wastes (University of Guadalajara, Mexico, 6/94)
Engineering Disciplines (CSU-Fresno, IE-10, 11/94)
Industrial WWTFs and Disposal Systems (San Diego County Health Dept., 7/93)
Wastewater Engineering (various courses) (State Water Board Academy, Binational Program 2010)

HONORS (PARTIAL LISTING)

RWQCB Performance Commendation (1991 Cantara Loop Spill).
Nominated for Regional Board 1991-92 Sustained Superior Accomplishment award.
RWQCB Sustained Superior Accomplishment award (1992-93).
University of Guadalajara Commendation (Hazardous Materials Lecture, 1994). RWQCB(5) Commendation Resolution for Civil Service (1997).
Hi-Desert Water District Resolution for State Service (2018)
Imperial County Resolution and Medal of Service (2018)
RWQCB(7) Resolution for State Service (2018)
Assembly Resolution for State Service (2018)

PROFESSIONAL AFFILITATIONS

PECG, SHPE, CSU-Fresno Alumni Association, CSU-Fresno School of Engineering Advisory Board (1992 1997).

REFERENCES: Available upon request

CHAMBERS GROUP

ENVIRONMENTAL IMPACT REPORT FOR A SOLAR ENERGY PROJECT

CUP20-0021 - VEGA SES 2
CUP20-0022 - VEGA SES 3
CUP20-0023 - VEGA SES 5
INITIAL STUDY (IS20-0030)

IMPERIAL COUNTY PLANNING & DEVELOPMENT SERVICES

PROJECT APPLICANT:

APEX ENERGY SOLUTIONS , LLC

AN EMPLOYEE-OWNED COMPANY ESOP CGI

CA DGS CERTIFIED SBE CGI

CPUC CERTIFIED WMBE CGI

NOVEMBER 18, 2020

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CHAMBERS GROUP

Cover Letter

November 18, 2020

Jim Minnick, Planning Director
Imperial County
Planning & Development Services Department
801 Main Street
El Centro, CA 92243

Subject: Request for Proposals (RFP) – Environmental Impact Report (EIR) for a Solar Energy Project (VEGA SES 2,3 & 5 Solar Project)

Dear Mr. Minnick,

With a thorough understanding of California Environmental Quality Act (CEQA) compliance for renewable energy projects, in addition to the regulatory and physical environment within Imperial County, Chambers Group is eager to provide services to Imperial County Planning and Development Services (County) for the VEGA SES 2-3-5 Solar Project (Project). Our team brings an advantage of currently working with the County on the Energy Source Minerals Project and the Brawley Solar Project, completing the CEQA analysis and Conditional Use Permit (CUP) issuance, respectively, we leverage a strong working relationship with Imperial County Planner David Black to successfully complete the EIR for the Project. ***Our experience eliminates a learning curve and facilitates a thorough and accurate environmental impact analyses and review of documents, saving money and time.***

As a comprehensive environmental consulting firm with 40 years of experience, Chambers Group, Inc., is a Small Business Enterprise (SBE) and a women and minority-owned business enterprise (WMBE). We offer a full complement of dedicated staff members who have successfully executed hundreds of environmental reports and studies in full compliance with CEQA and the National Environmental Policy Act (NEPA), in addition to the full range of technical studies and applicable environmental compliance permitting. Our team offers knowledge gained from experience with local projects and we look for an opportunity to serve.

Chambers Group has a successful history of providing CEQA services for renewable energy projects in Imperial County. Further, our Project Manager, Victoria Boyd, has wide-ranging experience with CEQA compliance, including recent renewable energy projects in Imperial County, including the Energy Source Minerals Project and the Brawley Solar Project. Victoria has managed many projects throughout the State of California and is cross trained in different areas to provide further knowledge and understanding of complex environmental issues. Please reach her any time at: (760) 685-4838; vboyd@chambersgroupinc.com.

We are excited to continue our productive relationship with Imperial County by applying our technical experience and thorough knowledge of environmental policies and practices to provide quality, responsive environmental services, and innovative solutions for this and other County projects. ***If selected to prepare both the VEGA SES 2-3-5 and VEGA SES 4 Projects simultaneously, significant cost savings would be recognized by Chambers Group and we are prepared to pass those cost savings along to the County and Applicant, expected to be realized as an approximately 10 percent discount on both proposals.***

Sincerely,

CHAMBERS GROUP, INC.

Mike McEntee

President

1. Project Understanding

Chambers Group understands Apex Energy Solutions, LLC (Applicant) is proposing to construct and operate a 240 MW solar farm and 240 MW battery energy storage system (BESS; VEGA SES 2), a 60 MW solar farm and 60 MW BESS (VEGA SES 3), and a 50 MW solar farm and 50 MW BESS (VEGA SES 5) spanning approximately 1,962 total acres (Project). The electrical energy produced by VEGA SES 2 would be delivered to the Imperial Irrigation District (IID) through the Project interconnection switching station delivering to the IID 230 kV "KN/KS" Line; energy produced by VEGA SES 3 would be connected to the existing utility approved point of interconnection at the northern boundary of the Project parcel to the IID 161 kV "L" line; and energy produced by VEGA SES 5 would be conducted through a proposed 92 kV generation tie-line. The Project would be located within Assessor Parcel Numbers 025-260-019-000, 025-260-022-000, 025-260-011-000, 025-270-023-000, and 025-010-006-000 in the County.

Further, Chambers Group understands that an IS has been prepared for the Project and the following technical studies have been or will be prepared by the Project Applicant:

- Aesthetics/Visual Impacts
- Air Quality and Greenhouse Gas (GHG) Report
- Biological Resources Report
- Cultural/Historical/Tribal Cultural/Archaeological Resources Report
- Noise Study
- Land Evaluation and Site Assessment
- Traffic Impact Study

Our scope of work presented in the following sections outlines our approach to successful completion of the Project and is based on our preliminary review of the studies identified above and our experience with similar projects.

2. Project Team

Chambers Group Information

Work Performance Address	Chambers Group, Inc. Work Performance Address: 9620 Chesapeake Drive, Suite 202, San Diego, CA 92123 Headquarters: 5 Hutton Centre Drive, Suite 750, Santa Ana, CA 92707
Point of Contact	Victoria Boyd, Project Manager M: (760) 685-4838 vboyd@chambersgroupinc.com
Firm Organization / Ownership	ESOP, S-Corporation Employee Stock Ownership Trust Chambers Group is an S-Corporation and owned by Chambers Group Inc.

Professional Qualifications of Team Committed to the Project

Chambers Group has a strong staff of environmental planners and CEQA professionals, many at the top of their field as evidenced by their election to the Association of Environmental Professional (AEP) Boards of Directors on a local and State-wide level. Based on our experience with similar projects, the Chambers Group team will complete the necessary environmental documentation with both in-house staff and with the use of our trusted subconsultants.

Vista Environmental – Services provided for this contract: Prepare Energy Analysis, Peer Review Air Quality, GHG and Noise Studies provided by the Applicant. Vista Environmental specializes in energy, air quality, GHG emissions, health risk assessments (HRAs) and noise impact analyses for governmental agencies and the business community and has completed numerous complex energy, air, and noise studies that conform to CEQA requirements. Vista Environmental, is a certified Women Business Enterprise (WBE) with the City of Los Angeles (Company ID: 81256) and the Supplier Clearinghouse (VON: 14030023).

Haley & Aldrich – Services provided for this contract: Geotechnical/Geology and Soils, Phase 1 Environmental Site Assessments, and Hydrology/Water Quality studies and analysis. Haley & Aldrich, established in 1957, was has over 60 years of experience tackling tough issues for clients. They have leading edge experience in the industry providing strategic environmental, engineering and construction services to a variety of clients in a wide range of areas. With a staff of approximately 800 professionals, Haley & Aldrich serves diverse markets based on long-standing relationships and the changing needs of many client organizations to access in-depth technical resources with a more integrated, collaborative approach to problem solving. Haley & Aldrich provides services through all phases of projects – planning, due diligence, permitting, design, construction, and post-construction monitoring. They provide planning, design and construction recommendations that consider ground conditions, project goals, agency requirements, and stakeholder impacts. With vast experience, they can contribute toward incorporating sustainable, resilient practices into projects. Haley & Aldrich also works with clients and design teams to incorporate feasible sustainable elements into their projects through the application of hydrologic analysis, storm water permitting and compliance, LEED certification, geothermal master planning and design, carbon emissions reductions, and water and wastewater use/reuse.

Project Team Experience

Imperial Valley Solar Company 2 Project (IVC2)

Client: County of Imperial, CA

Chambers Group prepared an EIR for the development of a 20-MW solar PV energy generation facility on approximately 160 acres of land in Imperial County. The project also includes a 92- kilovolt (kV) overhead gen-tie line interconnection to the Imperial Irrigation District Niland Substation. In support of this Environmental Impact Report (EIR), Chambers Group conducted impact studies to assess biological and cultural resources as well.

The EIR identified the environmental impacts from the project and the alternatives and identifies mitigation measures designed to reduce the level of significance of any impact. Notable project issues included impacts from construction to air quality and sensitive species. To address these issues, Chambers Group coordinated with the Imperial County Air Pollution Control District to identify and incorporate appropriate mitigation to reduce any impacts to air quality to less than significant; and Chambers Group biologists assisted the County with California Department of Fish and Wildlife (CDFW) consultation regarding the concern of potential impacts to sensitive species thus, incorporated mitigation to reduce any sensitive species impacts to less than significant.

County of Imperial Geothermal & Alternative Energy Element

Client: County of Imperial, CA

Chambers Group updated the Geothermal/Alternative Energy and Transmission Element that the County previously authored in 2006. The updated Geothermal and Alternative Energy Element was based on the constraints and opportunities identified in an environmental baseline analysis covering the entire County, which was completed as the first phase of the update. Information was obtained in GIS format from a variety of local, State, and federal agencies and mapped for use in determining the most suitable locations within the County for the generation and transmission of energy from renewable resources.

Key issues included eliminating potential conflicts between the various renewable energy generation technologies and existing urban and community developed areas, protection of high-quality park and recreation areas, and conservation of sensitive cultural and biological resources. The task also included any required revisions to other General Plan Elements to assure internal consistency. The Element update also included a consistency analysis with the Land Use, Agricultural, Conservation and Open Space, Water, and the Seismic and Public Safety Elements. In addition, special attention was given to potential conflicts with adopted or proposed Natural Community Conservation Planning (NCCP) and Habitat Conservation Plan (HCP) programs.

A Programmatic Environmental Impact Report (PEIR) was prepared to accommodate the implementation of future renewable energy projects that are in conformance with the Element. Individual future energy generation projects will be able to tier from the PEIR in a manner that will encourage the project to be located in suitable areas and will expedite approval for appropriately sited projects.

Valley Center Battery Storage, San Diego County, CA

Client: Terra-Gen Power, CA

Chambers Group Inc. is providing project development, environmental permitting, site surveys, preparation of technical studies, and impact analysis in compliance with CEQA for the Valley Center Storage Project, a battery energy storage project in Valley Center, San Diego County, CA. The project involves construction and operation of a lithium-ion based battery energy storage facility capable of delivering up to 140 megawatts for up to 4 hours. The batteries will be charged from the CAISO (California Independent System Operator) grid via the adjacent San Diego Gas & Electric (SDG&E) 69kV Valley Center Substation, which the project will connect to via a 0.3-mile underground generation tie-line. Energy stored in the project will be discharged back into the grid when the energy is needed, providing essential electricity reliability services to the local area.

Specific to cultural resources, Chambers Group rapidly mobilized and performed archeological surveys and boundary delineations to allow development within 10-feet of recorded sites while ensuring avoidance of impacts to cultural

resources and provided monitoring services during geotechnical testing with less than 24-hours' notice. These efforts included Native American engagement and outreach, coordination with tribal monitors, and close collaboration with the County of San Diego.

Orni 5 Truckhaven Geothermal Exploratory Wells EA/MND, Ormat Technologies, Inc., Imperial County, CA

Client: County of Imperial, CA

Chambers Group contracted with Imperial County to prepare an Initial Study/Mitigated Negative Declaration (IS/MND) for the Orni 5 Truckhaven Geothermal Exploratory Wells Project in accordance with CEQA. Portions of the Project are located on land managed by the U.S. Bureau of Land Management (BLM); therefore, there is a federal nexus for the Project. Chambers Group is also contracted through Ormat Technologies, Inc. to prepare the NEPA document (Environmental Assessment) for the Project.

Heber I Repower Project, Imperial County, CA

Client: Ormat Nevada, Inc., NV

Chambers Group prepared a CUP amendment for proposed upgrades to the existing Heber 1 geothermal facility southeast of Heber in Imperial County. The upgraded setup is better suited to the current and expected future conditions of the geothermal resource and improves overall efficiency of the operations by restoring the facility's output to capacity. Ultimately, the facility upgrades aid in producing clean renewable energy in the Imperial Valley for the next three decades. In compiling the CUP amendment package Chambers Group supplied an IS in accordance with CEQA, conducted impact studies for biological and cultural resources, and prepared or coordinated preparation of a variety of supporting technical reports. Technical reports included a Biological Resources Technical Report, Phase I Cultural Assessment, Paleontological Report, Water Quality Management Plan, Geology and Soil Evaluation, Air Quality Memorandum, Hazards Assessment, Reclamation Plan, Noise Assessment, Traffic Generation Memorandum, and Visual Assessment.

Brawley Solar Project, Imperial County, CA

Client: Ormat Nevada, Inc.

Chambers Group is providing CEQA services for development and submittal of a Conditional Use Permit (CUP), and all supplemental and supporting documents as required by Imperial County (County) for a proposed solar and storage project just north of Brawley, California. All of the proposed Project parcels are currently zoned General Agriculture (A-2-G), thus in accordance with the County's Zoning Ordinance, development of the Project requires a CUP. The solar site is within private property, wholly owned by ORNI 29 LLC, a subsidiary of Ormat.

Vidal Energy IS, San Bernardino County, CA

Client: Core Development Group, LLC

Chambers Group assisted in the preparation of the Vidal Energy Project Initial Study for a proposed 1,220 acre photovoltaic (PV) and battery energy storage system facility (BESS) to generate renewable energy in Vidal in San Bernardino County. The Project will provide 160 megawatts of alternating current (MW-AC) of renewable energy and would be supported by the existing, adjacent Western Area Power Administration (WAPA) 161-kV overhead transmission corridor. The facility would include the construction of one on-site substation facility which would collect and convert the power generated on site for transmission in an overhead or underground line to the WAPA transmission system and interconnection location. The Project's permanent facilities would include PV panels, BESS, fencing, service roads, a power collection system, communication cables, overhead and underground transmission lines, electrical switchyards, a Project substation, and operations and maintenance facilities.

Team Organizational Chart

Principal-in-Charge
Corinne Lytle Bonine, PMP

Project Manager
Victoria Boyd

Environmental Planning & CEQA Documentation/Peer Review
Meghan Gibson
Eunice Bagwan
Elizabeth Fortin

Water Supply Assessment
Victoria Boyd

AB 52 Tribal Cultural Resources/Peer Review
Richard Shultz, MA, RPA

Biological Resources Peer Review
Paul Morrissey

GIS & Graphics
Phillip Carlos

Energy Analysis/Peer Review of Air Quality/GHG/Noise
Greg Tonkovich, AICP, INCE
Vista Environmental

Geotechnical/Geology & Soils
Catherine Ellis, GE (Geotechnical)
Tom Tatnall, PG, CEG (Soils)
Haley & Aldrich

Phase I ESA
Robert K. Scott, PG, CHg, QISP
Haley & Aldrich

Hydrology/Water Quality Studies
Nancy Gardiner, CPESC, QSD, QISP (Water Quality)
Christopher Jones, PG
Christopher Langham, PE, CFM (Hydrology)
Haley & Aldrich

Brief team resumes are following this page. Full resumes are located in Appendix B.

Key Personnel, Role, Location, Education & Certifications/Affiliations	Similar Past Project Experience
Victoria Boyd **Project Manager** BS, Environmental Management and Protection, California Polytechnic State University, San Luis Obispo **Affiliations** - Member, Association of Environmental Professionals **Certifications** - Certificate of Completion (Esri), Going Places with Spatial Analysis Certificate of Completion (Esri), Working with CAD Data in ArcGIS Desktop	Victoria Boyd has more than 7 years of experience in environmental planning and permitting. Her background in environmental analysis within a variety of fields enables her to provide thorough assistance in the research and preparation of environmental documents. She has successfully worked on several projects complying with CEQA and NEPA, assisting and acting as a project manager with a wide variety of projects in Imperial, Santa Barbara, Ventura, Los Angeles, and San Bernardino Counties. Additionally, she has written Water Supply Assessments (WSA)s for several projects. Victoria utilizes GIS as needed to assist with environmental documentation and planning, and she has created maps for various projects, including the Los Angeles World Airports EIR and the Newhall Ranch EIR. Sampling of projects include: • Brawley Solar Project, Imperial County, CA • Vidal Energy IS, San Bernardino County, CA • Vista Soleada Supplemental EIR, City of La Quinta, CA • Vision Agua Caliente Master Plan, Palm Springs, CA • Section 24 Planning Area 8 Specific Plan, Riverside County, CA • San Fernando Corridors Specific Plan Amendment and WSA, San Fernando, CA • Santa Paula West Business Park Specific Plan EIR and WSA, Santa Paula, CA • University Park Specific Plan WSA, Palm Desert, CA
Corinne Lytle Bonine, PMP **Principal in Charge** BA Environmental Studies, University of California, Santa Barbara, with honors Project Management **Professional Affiliations** - Association of Environmental Professionals Statewide Board of Directors, San Diego Chapter Director Technical Advisory Committee for County of San Diego's Comprehensive Renewable Energy Plan Women of Renewable Industries and Sustainable Energy	Corinne Lytle Bonine is a Vice President and Director of Environmental Planning at Chambers Group, as well as a Senior Project Manager with over 14 years of experience. She has managed an array of NEPA and CEQA documents (including CEQA-equivalency and adjudicated CEQA processes): Environmental Impact Statements (EIS), EIRs, Applications for Certification to the California Energy Commission, Environmental Assessments (EA)s, and IS/MNDs, exemptions/exclusions. Sampling of projects include: • Imperial Valley Solar Project, Tessera Solar, Imperial County, CA • Valley Center Battery Storage, San Diego County, CA • Orni 5 Truckhaven Geothermal Exploratory Wells EA) /MND, County of Imperial, CA • Heber 1 Geothermal Repower Project, County of Imperial, CA • Brawley Solar Project, Imperial County, CA • Vidal Energy IS, San Bernardino County, CA • Willey Reservoir Embankment Stabilization Project, County of Imperial, CA • County of Imperial Geothermal & Alternative Energy Element • OCI Solar Lakeside Project, County of San Diego, San Diego County, CA

Key Personnel, Role, Location, Education & Certifications/Affiliations	Similar Past Project Experience
Meghan Gibson **Environmental Planning and CEQA Documentation** MPP, Public Policy, Environmental Policy, University of Southern California BS, Environmental Management, University of Redlands, CA **Affiliations** - Association of Environmental Professionals: Los Angeles Chapter Board of Directors Chapter President Women of Renewable Industries and Sustainable Energy (WRISE)	Meghan Gibson has more than 12 years of experience providing environmental planning and policy services to public and private clients. She has experience managing both large- and small-scale projects that involved CEQA and NEPA documents. She is responsible for preparing CEQA documentation, including ISs, MNDs, and EIRs. In addition to her CEQA experience, Meghan has prepared multiple joint CEQA/NEPA documents, again, to both public and private clients. She also has extensive experience managing small to large projects, preparing mitigation monitoring summary reports, and compiling information from both survey and monitoring data. Sampling of projects include: • Imperial Valley Solar Company 2 Project EIR, County of Imperial Planning Department, Imperial County, CA • Valley Center Battery Storage, San Diego County, CA • County of Imperial Geothermal & Alternative Energy Element • Willey Reservoir CEQA Compliance, County of Imperial, CA • El Casco System Project, Construction Monitoring and Reporting, Southern California Edison (SCE), Various Locations, Riverside and San Bernardino Counties, CA
Eunice Bagwan **Environmental Planning and CEQA Documentation** MS, Environmental Management and Planning, Johns Hopkins University, Baltimore, MD 2015 BS, Environmental and Occupational Health and Safety, California State University, Northridge, CA 2011 **Affiliations** - Association of Environmental Professionals: Inland Empire Vice President of Membership Conservation Steward: North Etiwanda Preserve	Eunice Bagwan has a background in CEQA and NEPA environmental impact assessments as well as technical writing and editing. She has assisted with the preparation, writing, and editing environmental documents, such as IS/MNDs, CEs, EIRs and safety related documents such as job hazard safety forms and safety plans. Eunice has also managed and co-managed various projects as a Deputy Project Manager and Project Manager. Sampling of projects include: • Orni 5 Truckhaven Geothermal Exploratory Wells EA/MND, County of Imperial, CA • Heber 1 Geothermal Repower Project, County of Imperial, CA • Vidal Energy IS, San Bernardino County, CA • Hale Engineering, Onyx Dust Control Plan, El Centro, CA • County of Imperial Geothermal & Alternative Energy Element • Taihan Electric USA Ltd., Sycamore- Peñasquitos 230-Kilovolt Transmission Line Project Monitoring, El Centro, CA

Key Personnel, Role, Location, Education & Certifications/Affiliations	Similar Past Project Experience
Elizabeth Fortin **Environmental Planning and CEQA Documentation** BA, Environmental Biology, Columbia University, 2015 Training CEQA Essentials: 2019 CEQA Advanced: 2020 **Affiliations** - Association of Environmental Professionals San Diego: Co-Vice President of Programs	Elizabeth Fortin is a highly resourceful Environmental Planner experienced in both CEQA and NEPA compliance. She has experience working on a broad range of complex and highly controversial environmental issues with an emphasis in natural resource management and regulatory compliance in the private and public sectors. Sampling of projects include: • Valley Center Battery Storage, San Diego County, CA • Orni 5 Truckhaven Geothermal Exploratory Wells EA/MND, Ormat Technologies, Inc., Imperial County, CA • Brawley Solar Project, Imperial County, CA • Vidal Energy IS, San Bernardino County, CA • Heber 1 Repower Project, Ormat Technologies, Inc., Heber, Imperial County, CA • San Onofre Nuclear Generation Station Environmental Management and Compliance during Decommissioning General Contractor, SONGS Decommissioning Solutions (SDS), Southern California Edison (SCE) and SDG&E, San Onofre, San Diego County, CA • Superior Avenue Pedestrian and Bike Bridge and Parking Lot, City of Newport Beach, Orange County, CA
Paul Morrissey **Biological Resources Lead** MS, Biology, California State University, Dominguez Hills, 2005 BS, Biology, California State University, Dominguez Hills, 2001 **Certifications** - USFWS Permit, #TE182550-1, CDFW Scientific Collector's Permit, #SC-008151	Paul Morrissey has more than 15 years of experience participating in and conducting terrestrial and aquatic/marine studies, with a comprehensive background in both collecting data and performing biological monitoring surveys. He is an experienced biologist, field manager, and project manager. He has coordinated with State and federal agencies to develop and implement effective mitigation and monitoring plans for listed and sensitive species and to ensure compliance with State and federal laws. Sampling of projects include: • Valley Center Battery Storage, San Diego County, CA • Brawley Solar Project, Imperial County, CA • Vidal Energy IS, San Bernardino County, CA • Heber 1 Repower Project, Ormat Nevada, Imperial County, CA • Desert Valley Monofill CEQA Technical Studies, Terraphase Engineering, Imperial County, CA • Willey Reservoir Embankment Stabilization Project, Imperial Irrigation District, Imperial, CA • Silverado Solar Projects, Biological and Cultural Assessments, Silverado Power –, Los Angeles, Fresno, Imperial, and San Bernardino Counties, CA

Key Personnel, Role, Location, Education & Certifications/Affiliations	Similar Past Project Experience
Richard Shultz, MA, RPA **Cultural Resources** MA, Cultural Resources Management, Sonoma State University BA, Anthropology, San Diego State University **Registrations** - Register of Professional Archaeologist, 15841	As a Principal Investigator and Senior Archaeologist, Richard Shultz has over 30 years of practical experience. Richard's experience emphasizes California planning, CEQA and NEPA, the National Historic Preservation Act, and associated orders and legislation. His education and experience that meets the Secretary of the Interior Standards for Archaeology and Historical Preservation. He has Documented and evaluated historical resources for local, State, and federal jurisdictions, leading to both local and federal agency, and SHPO, concurrence with a number of evaluations and recommendations for various buildings, sites, and objects. Sampling of projects include: • Valley Center Battery Storage, San Diego County, CA • Brawley Solar Project, Imperial County, CA • Vidal Energy IS, San Bernardino County, CA • Chapman Solar Ranch Project, San Diego County, CA • Cultural Resources Monitoring for the Goldmine Tap to Knob Wood Pole Replacement Project, Imperial County, CA
Phillip Carlos **GIS Analyst** BA, Geography, Sonoma State University, 2007	Phillip Carlos has four years of experience in the GIS field. His GIS expertise includes aerial imagery analysis, spatial analyses of potential project impacts to biological resources, incorporating field-collected GPS data into GIS for report mapping and analysis, and natural resource mapping. He is familiar with industry data standards and cartographic requirements to produce figures and maps for reports. He is proficient in his use of Esri's ArcGIS 10.X software including Desktop, Server, ArcGIS Online, Collector, and Survey123. Sampling of projects include: • Valley Center Battery Storage, Terra-Gen Power, San Diego, San Diego County, CA • Orni 5 Truckhaven Geothermal Exploratory Wells EA/ MND, County of Imperial, CA • Heber 1 Repower Project, Imperial County, CA • Brawley Solar Project, Imperial County, CA • Vidal Energy IS, San Bernardino County, CA • County of Imperial Geothermal & Alternative Energy Element • California Valley Solar Ranch EA, San Luis Obispo and Kern Counties, CA • Willey Reservoir Bank Monitoring, Imperial Irrigation District, Imperial County, CA • Desert Valley Monofill CEQA Technical Studies, Terraphase Engineering, Imperial County, CA
Greg Tonkovich, AICP, INCE **Vista Environmental** **Air, Noise, GHG, Energy Analysis** MS, Electrical Engineering, University of Southern California BS, Planning and Development, University of Southern California **Certifications** - American Institute of Certified Planners (AICP)	Greg Tonkovich's air quality analysis experience includes global climate change analyses and HRAs. He is proficient in utilizing CalEEMod, URBEMIS2007, CALINE4, ISCST3, AERMOD, EMFAC2014, and OFFROAD2011 models, in order to quantify emissions impacts as well as to assess the efficacy of proposed mitigation. Greg is also experienced in noise analyses and is proficient in utilizing FHWA Traffic Noise Model (TNM), Federal Highway Administration (FHWA) Roadway Construction Noise Model (RCNM), FAA Integrated Noise Model (INM), and SoundPlan. In addition, he has created and implemented a noise program based on the FHWA Standard. Through the use of the above models he is able to efficiently determine noise impacts to nearby sensitive land uses and assess the efficacy of proposed mitigation. Sampling of projects include:

Key Personnel, Role, Location, Education & Certifications/Affiliations	Similar Past Project Experience
American Planning Association (APA) Institute of Noise Control Engineering (INCE) State of California General 'B' Contractors License	• Orni 5 Truckhaven Geothermal Exploratory Wells EA/MND, Ormat Technologies, Inc., Imperial County, CA • Heber 1 Repower Project, Imperial County, CA • Valley Center Battery Storage, San Diego County, CA • Pacoima Spreading Grounds Improvement Project, Los Angeles County, CA • Highway 127 Baker to US Army National Training Center at Fort Irwin Project, San Bernardino County, CA • Mid-Basin Injection Wells Project, Santa Ana, CA • Lancaster Ethanol Facility, Los Angeles County, CA
Catherine Ellis, PE, PG **Haley & Aldrich** **Geotechnical/Geology & Soils** MBA, Haas School of Business, University of California, Berkeley, 2008 MS, Civil Engineering, California State University, San Jose, 2000, BS, Civil Engineering, University of the Pacific, 1995 **Registrations** - 1998/ CA: Professional Engineer (Reg. No. 58987) 2004/ CA: Geotechnical Engineer (Reg. No. 2650) 2009/ OR: Professional Engineer (Reg. No. 88073PE)	Catherine Ellis has more than 24 years of progressively challenging engineering experience. This experience includes working with owners, design teams, and construction teams to tailor engineering solutions to project and client needs. These services span providing design recommendations and construction support under the roles of geotechnical engineer-of-record and construction materials engineering and testing services. She is well versed in developing mitigation measures for liquefiable soils; soft, marine soils; undocumented fill sites; high groundwater conditions; and sites with bedrock transitions. Catherine is an experienced seller-doer who understands complex engineering assignments, meets tight deadlines, and delivers profitable projects. She appreciates that taking care of people matters, and that stakeholders want to have solutions tailored for their project needs and risk tolerance. She understands how to lead her team to deliver project on time and on schedule. She operates with a strong sense of urgency and thrives in a fast-paced setting. • City of San Jose International Airport Terminal Area Improvement Project (Design Build), San Jose, CA • City of Berkeley Pavement Evaluation and Rehabilitation, Berkeley, CA • BART, Geotechnical Investigation - Transit Village, Dublin, CA • Green Infrastructure Drywell Drainage System, Hillsborough, CA • City of San José Alviso Pump Station and Force Main, San José, CA • City of Orinda Pavement Evaluation and Rehabilitation, Orinda, CA • City of Mountain View Fire Station #5, Mountain View, CA • Union Sanitary District, New Administration and Maintenance Buildings, Geotechnical Investigation and Report, Union City, CA • Zone 7 Flood Control and Water Conservation District, Alameda County, CA

Key Personnel, Role, Location, Education & Certifications/Affiliations	Similar Past Project Experience
Tom Tatnall, PG, CEG **Haley & Aldrich** **Geotechnical/Geology & Soils** BA, Geology, University of Northern Colorado, 1984 BS, Business Administration, University of Northern Colorado, 1984 **Registrations** - 1995/ CA: Registered Environmental Assessor (Reg. No. 6194) 1995/ CA: Certified Engineering Geologist (Reg. No. 1968) 1994/OR: (Reg. No. G1594) 1993/ CA: Registered Geologist (Reg. No. 5588)	Tom Tatnall has over 25 years of professional experience as a geologist in geotechnical and environmental consulting on a variety of projects for municipalities, county agencies, land developers, oil company attorneys and financial institutions. He has extensive experience planning, conducting, and supervising geotechnical and environmental soil and groundwater investigations and remedial actions. His environmental experience includes performing soil, soil gas and groundwater investigations of sites impacted with solvents, petroleum fuel hydrocarbons, methyl tert-butyl ether (MTBE), naphthalene, hexavalent chromium, arsenic and other heavy metals; development and management of Phase I assessments and Phase II investigations; groundwater monitoring programs; remedial excavation projects and implementation of other remediation systems, including multi-phase extraction systems; and performing monitored natural attenuation studies. • Pelican Hill Golf Club, Newport Beach, CA • Pacific Coast Highway, Pelican Hill Golf Course Tunnels, Newport Beach, CA • City of Compton, Landfill Redevelopment Project, Compton, CA • Newport Coast Water Reservoirs, Irvine, CA • Pelican Hill Golf Course Lakes, Newport Beach, CA • Newport Coast Roadways, Irvine, CA • Portola Parkway Extension/Aliso Creek Channel Improvements, El Toro, CA • Battery Manufacturing Site Redevelopment, Site Assessment and Remediation, Anaheim, CA • Orange County Sanitation District, Santa Ana River Interceptor Geologic Evaluation, CA
Robert K. Scott, PG, C.Hg., QISP **Haley & Aldrich** **Senior Environmental Scientist – Phase I ESA** Graduate Studies, Hydrogeology, Syracuse University, 1986-1988 MS, Geology, Pennsylvania State University, 1985 BS, Geological sciences, State University of New York, 1982 **Registrations**- 2001/ CA: Certified Hydrogeologist (Reg. No. 734); 1992/ CA: Professional Geologist (Reg. No. 5334); 1995/ AZ: Professional Geologist (Reg. No. 29659); 1995/ AZ: UST Consultant (Reg. No. 1218); 2016/CA: Qualified Industrial Stormwater Practitioner	Bob Scott is a California-Professional Geologist (PG) and Certified Hydrogeologist (CHg) who has managed and completed a diverse range of environmental projects in northern and southern California, Arizona, Nevada, Guam and Baja California, Mexico for over 25 years. His expertise includes Phase I and II Endangered Species Act (ESA)s, environmental due diligence, preliminary endangerment assessments and removal action plans, remedial investigations and feasibility studies (RI/FS), soil, soil vapor, sediment and groundwater remediation, storm water compliance and management, IS/MNDs, EIRs specific to water resources and hazardous materials, groundwater availability and aquifer studies (hydrogeology), public outreach and expert witness services. He has successfully provided these services to clients in the following sectors: aerospace, manufacturing, mining, education, power, real estate and hospitality, and municipal and other governmental agencies. **CEQA/NEPA - Groundwater Resources** • BrightSource Energy, Inc., Rio Mesa Solar Energy Generating Facility, near Palo Verde, CA • Tessera Solar LLC, Imperial Valley Solar, Plaster City, CA • Tessera LLC, Calico Site, West of Ludlow, CA • SJS 1&2 Hybrid Solar Facility, Coalinga, CA **Site Assessment/Remediation** • Rohr, Inc., Chula Vista, CA • San Onofre Nuclear Generating Station (SONGS), SDG&E, San Diego County, CA • SDG&E, Former South Bay Power Plant, Former Switch Yard Demolition, Chula Vista, CA

Key Personnel, Role, Location, Education & Certifications/Affiliations	Similar Past Project Experience
Nancy E. Gardiner, CPESC, QSD/QSP, QISP, TOR **Haley & Aldrich** **Hydrology/Water Quality Studies** MS, Hydrogeology, University of Wisconsin-Madison, 1988 AB, Geology, Smith College, 1986 **Registrations**-2008: Certified Professional in Erosion and Sediment Control (CPESC) (No. 4690) 2011: Qualified SWPPP Developer/Practitioner (QSD/P) (No. 21022) 2015: Qualified Industrial Stormwater Practitioner (QISP) and Trainer of Record (No. 38)	Known for her expertise and commitment to client service, Nancy Gardner has more than 25 years of consulting experience on with stormwater permitting; watershed planning; drinking water protection, water quality monitoring; total maximum daily load (TMDL) compliance; training; and reporting projects. More than meeting compliance requirements and permit deadlines, Nancy enjoys partnering with clients to build trusted, long-term relationships. She appreciates that clients are people who have limited time, competing needs, and commitments that extend beyond the office. To Nancy, success means her clients not only receive high-quality work product but also benefit from a consultant they can depend on to look out for their interests and make continual improvements over the long term. Some of her consulting assignments have lasted longer than 18 continuous years. Because water resources is a rapidly evolving profession, Nancy stays current on the state of the practice by participating in organizations such as CASQA and ITRC, lecturing on new topics of interest (such as the emerging contaminants per- and polyfluoroalkyl substances [PFAS]), and teaching certificate courses at the University of California – San Diego Extension. • Interstate Technology & Regulatory Council (ITRC) National Stormwater Best Management Practices (BMP) Performance Verification Team • Los Angeles County Flood Control District, Automated Stormwater Monitoring System Design, Los Angeles, CA • Los Angeles County Public Works, Dominguez Channel Watershed Management Plan, Los Angeles, CA • Port of Los Angeles (POLA) Inner Cabrillo Beach Bacteria TMDL Natural Source Exclusion Study, Los Angeles, CA • City of Los Angeles Department of Public Works, Bureau of Engineering, Echo Park Lake Rehabilitation Project, Los Angeles, CA • Los Angeles County Flood Control District (LACFCD), NPDES Annual Monitoring Report, Los Angeles, CA • Metropolitan Water District of Southern California, Castaic Lake Watershed Bacteria Source Identification Study, Los Angeles County, CA
Chris Jones, PG **Haley & Aldrich** **Hydrology/Water Quality Studies** MS, Geosciences, Western Michigan University BS, Geology, State University of New York at Buffalo **Registrations:** NH: Professional Geologist (Reg. No. 843) ID: Professional Geologist (Reg. No. PGL-1509) PA: Professional Geologist (Reg. No. PG005212) **Special Studies and Courses:**	Chris Jones is a senior hydrogeologist with over 12 years of experience with hydrologic and hydraulics analyses for flood control dams, stormwater management plans, lined and un-lined impoundment design, infrastructure projects, and bank stabilization. In addition to surface water hydrology, Chris is experienced in hydrogeology applied to contaminant fate and transport, hydraulic containment, stormwater/wastewater infiltration, water resource development, groundwater capture, construction dewatering, and groundwater flow modeling to facilitate support of excavation design. Chris also has expertise in data analysis and graphical presentation with GIS software, and groundwater modeling for landfills, waste containment projects, contaminant recovery wells, and integrating spatial data techniques with hydrologic and hydraulic modeling. His modeling experience includes finite-element modeling of infiltration and unsaturated flow with SEEP/W for the evaluation of seepage through impoundments or slopes for slope stability evaluations. • Confidential Client, San Bernardino, CA • Seepage Mitigation Project, Confidential Power Client, Mid-Atlantic, USA • Hydrogeological Site Characterization, Confidential Power Client, Mid-Atlantic, USA

Key Personnel, Role, Location, Education & Certifications/Affiliations	Similar Past Project Experience
ASCE HEC-RAS Computer Workshop, February 2012 ASCE Dam Breach Analysis using HEC-RAS, June 2016 40-Hour OSHA HAZWOPER Certification 24-hour Mining Safety & Health Administration (MSHA) Safety Training/Surface Mine Operations	• Remedial Alternatives Feasibility Study, Confidential Power Client, Mid-Atlantic, USA • Floodplain Use Permit, Aggregate Mining Client, Maricopa County, AZ • Copper Mine, Central AZ • Data Gap Analysis, Confidential Client, Southwest, USA • Slurry Wall Seepage Analysis, 350 Boylston Street, Boston, MA • H Street Construction Dewatering, Chula Vista, CA • Confidential Mining Client, Central USA • Lanes Creek Mine, Southeast Idaho
Christopher Langham, PE, CFM **Haley & Aldrich** **Hydrology/Water Quality Studies** BS, Hydrology/Water Resources studies, University of Arizona, In Progress BS, Aviation Business Administration, Embry-Riddle Aeronautical University, in progress **Professional Registrations** AZ: Professional Engineer (Reg. No. 49937) Association of State Certified Floodplain Managers, ASFPM, No. US-04-010162 **Professional Societies** Pima County Flood Control District Advisory Committee, Committee Chairman Arizona Floodplain Management Association So. AZ Regional Rep. Racing the Sun / SARSEF – Team Mechanical Plan Reviewer	Chris Langham is an engineer with over 20 years of experience in preparation and submittal of grading/development/ improvement plans for residential/commercial site design, production of construction documents, drainage maps, Floodplain Use Permits, SWPPPs, and presentation exhibits. He has prepared numerous hydrologic/hydraulic models for technical memorandums, master drainage studies, construction documents, FEMA MT-1 and MT-2 submittals – all maintained through approval. He will focus his time at Haley & Aldrich serving the Energy, Heavy Industry, and Mining markets. As a licensed professional engineer in the State of Arizona, and a Certified Floodplain Manager (CFM), Chris has built his career solving water-related and site design engineering problems. He is experienced in the preparation of preparation of technical reports and proposals, regulatory support of water resource projects, residential and commercial site grading, utility coordination, and business development activities. • City of Hurst, Chesapeake Energy, Tarrant County College Multi-Use Frac Pond, Tarrant County, TX • City of Tucson, Raytheon Technologies Facility, Pima County, AZ • City of Irving, DART Light Rail Transit System Line Section I-3, Irving, TX • U.S. Forest Service, Madera Canyon Bridges, Madera Canyon, Pima County, AZ • Pima County Development Services Department, Contract Drainage Review, Pima County, AZ • Town of Marana, Contract Drainage Review, Pima County, AZ • Capital Region Airport Commission, Master Drainage Study of Richmond International Airport, Richmond, VA • City of Dallas, Trinity Parkway Toll Road Project, Dallas, TX • City of University Park, University Park Drainage Analysis, University Park, TX

3. Scope of Work

Chambers Group has prepared a scope of work to prepare the CEQA documentation according to all applicable federal, State, and local requirements that will be applied to the Proposed Project. Chambers Group can commence work on the Project as soon as we receive written notice to proceed (NTP). We will accomplish the scope of work as described below. As outlined below, we have followed the RFP's request for preparation of an EIR.

Task 1: Project Initiation

Task 1A: Initial Meeting and Data Acquisition

After receiving NTP, the Chambers Group Project Manager, Victoria Boyd, will be prepared to meet with representatives from the County for a Project Initiation/Kick-Off Meeting via teleconference to discuss the project description, specific project issues, upcoming construction schedules and CEQA schedule; as well as receive any pertinent project information or reports.

Chambers Group will review all available Project-related data and reports provided by the County including the IS that was previously prepared. During this process, Chambers Group will discuss with the County the best approach for releasing the document to the public. Following the review of existing data, any gaps in the data and recommendation for correcting the gaps would be discussed with the County. Chambers Group will work closely with the County to determine what additional data must be collected in support of the CEQA document being prepared. It is assumed that the documents are accurate, and that Chambers Group can use these documents in the environmental analysis of the Project.

Assumptions: It is assumed that the IS is finalized.

Meetings: One teleconference meeting to discuss approach to discuss the project description, specific project issues, upcoming construction schedules and CEQA schedule; as well as receive any pertinent project information or reports.

Task 1B: Project Description

Chambers Group will review the CUP applications and IS Project Description and add additional information as necessary to develop a comprehensive description for the Project that will form the basis for the analysis of the potential impacts on the environment, based on the information provided by the County. The Project Description will include a narrative and graphical presentation of the Project, including components, location and boundaries, regional and vicinity maps, and a statement of the Project Goals and Objectives.

Deliverables: One electronic copy of the Project Description for County review.

Task 1C: Prepare Notice of Preparation (NOP)

Draft NOP. Chambers Group will prepare the NOP for the Project. The NOP will contain a description of the Project, a map showing the location of the Project, and a summary of the probable environmental impacts from the checklist.

Deliverables: One electronic copy of the Draft NOP for County review.

Final NOP. Upon receipt of the County's comments, Chambers Group will prepare a Final NOP for public review. Chambers Group will distribute copies of the NOP with the previously prepared IS to the appropriate responsible and trustee agencies, interested parties, and to the mailing list provided by the County. Additionally, Chambers Group will file the NOP with the Office of Planning and Research (OPR) and the County Clerk. The IS/NOP will be circulated for a 30-day public review period. The comments that are received on the IS/NOP will be used to further refine the Project Description and/or scope of the EIR, if needed. The IS, NOP, comments received, and all correspondence will be included in the EIR appendices.

For submittal to the OPR, Chambers Group will submit the IS/NOP electronically on behalf of the County. The County must approve Chambers Group as a submitter for the County on the OPR CEQANet Web portal. For submittal to the County Clerk, documents will be sent via mail. Chambers Group will distribute up to 50 copies of the IS/NOP to affected public agencies and to the mailing list provided by the County.

Deliverables: One electronic copy of the IS/NOP will be provided to the County. Up to 10 hard copies and 20 CDs containing an electronic copy of the IS/NOP for public agency distribution. Up to 50 NOPs to be sent via mail.

Assumptions: It is assumed that the finalized IS would be utilized as a scoping document. It is assumed that the County will provide Chambers Group a mailing list of recipients to receive the notices.

Task 2: Administrative Draft EIR (ADEIR)

Task 2A: Peer Review of Applicant-Prepared Technical Studies

Chambers Group will utilize in-house resource area experts to peer review the Applicant's Aesthetics/Visual Impacts Assessment, Biological Resources Report, Cultural/Historical/Tribal Cultural/Archaeological Resources Report, Land Evaluation and Site Assessment, and Traffic Impact Study. Our trusted subconsultant Vista Environmental will review the Air Quality and GHG Report and the Noise Study. Our in-house and subconsultant team will review all reports and documents for CEQA adequacy during preparation of the EIR.

The Applicant prepared technical studies include:

- Aesthetics/Visual Impacts
- Air Quality and GHG) Report
- Biological Resources Report
- Cultural/Historical/Tribal Cultural/Archaeological Resources Report
- Noise Study
- Land Evaluation and Site Assessment
- Traffic Impact Study

Assumptions: It is assumed that one report will be prepared for the three CUPs, and that the biological resource report will contain the results of the jurisdictional delineation of waters on site. It is assumed that one round of comments will be given on each report and then one review of those changes will be conducted.

Chambers Group will not be responsible for any inaccurate results or analysis described in the Applicant submitted reports. Chambers Group will identify any inconsistencies or potentially inaccurate results/analysis as part of the review. This 3rd party peer review will determine whether the reports are in compliance with current CEQA requirements and whether the report will need to be revised, updated, or reproduced. Chambers Group will provide guidance regarding potential revisions to the current report, however, it is assumed that Chambers Group is not responsible for revisions to the Applicant prepared technical reports.

Task 2B: Additional Technical Analyses to be Included in the EIR

Based on review of the RFP and technical studies provided to date, and preliminary research, Chambers Group suggests the preparation of the following technical analyses – Energy Analysis, Geotechnical/Soils Analysis, Phase I Environmental Site Assessment (ESA), Hydrology and Water Quality Analysis, and WSA. The remaining resource areas will be analyzed first as part of the preparation of the IS and then that analysis will be expanded upon during the Draft EIR.

Energy Analysis

Vista Environmental will provide the following services:

- Provide a project description that details the components of the project.
- Identify applicable energy-related regulations and thresholds of significance for energy usage.
- Calculate construction energy usage through utilization of the CalEEMod model run provided in the Air Report to quantify the total hours off-road equipment will operate, the total worker miles traveled, and total haul and vendor truck miles traveled during construction of the proposed project. Utilize the fuel usage factors from OFFROAD2011 and off-road equipment operating hours to calculate the fuel usage from the off-road equipment. Utilize the vehicle fleet average miles per gallon rates from EMFAC2017 and the worker and truck vehicle miles traveled to calculate the fuel usage from on-road construction trips.

- Provide a qualitative operational analysis that details the benefits that the project will provide with regard to generating non carbon-based energy.
- Provide an assessment of how the applicable renewable energy and energy efficiency rules and regulations will be implemented by the proposed project and where possible, quantify the energy savings achieved through implementing each rule and regulation. If the proposed project is found to be inconsistent with any rule or regulation, provide mitigation to ensure the project meets the requirements.
- Prepare an Energy Report documenting the results of the study and provides responses to each of the energy related CEQA checklist questions.

Phase I ESA

Haley & Aldrich will prepare separate Phase I ESAs for each of the separate areas of the proposed Project described in the RFP. According to the ASTM standard, a Phase I ESA is only valid for 180 days. Therefore, any existing Phase I ESA will need to be updated. The Phase I ESA) and "All Appropriate Inquiry" in accordance with the procedures of ASTM International Standard E 1527-13 entitled "Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process" (ASTM E 1527-13). The deliverable will be a stand-alone document to be included as an appendix to the EIR.

The goal of ASTM E 1527-13 is to assess whether recognized environmental conditions (RECs) exist at the site. REC means the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment. The Phase I ESA will include:

Records Review – In accordance with ASTM E 1527-13, Haley & Aldrich will obtain and review reasonably ascertainable records that will help identify RECs in with the project and adjacent areas. This will include an on-line search as well as an electronic database search by EDR.

Site Reconnaissance - Haley & Aldrich will visit the subject property to obtain information indicating the likelihood of identifying RECs in the project area. On the visit to the property (via the shoreline), Haley & Aldrich will visually observe and document the property and the periphery. Conditions of adjoining properties will also be observed and documented from the subject property boundaries and/or public thoroughfares.

Interviews – An interview will be performed with a "key site manager" (a person with good knowledge of the project area to obtain information indicating RECs in connection with the property). Haley & Aldrich will also review readily available copies of any previous environmental documents (User provided information) related to the project area.

Interviews with State and/or Local Government Officials – Haley & Aldrich will reasonably attempt to interview applicable state and/or local government officials to obtain information indicating RECs in the project area.

Evaluation and Report - The information and data from Items No. 1 through No. 4 above will be assembled and evaluated and will formulate conclusions regarding evidence of RECs in the project and adjoining area and prepare a report set forth in ASTM E 1527-13. The report will be included as an attachment to the EIR. Hydrology and Water Quality Assessment.

Assumptions: It is assumed that no Phase II ESAs (field investigations will be necessary to investigate RECs.

Hydrology Assessment

Haley & Aldrich will prepare a high-level Hydrologic Assessment of the site, in support of the EIR. It is their understanding that site-specific hydrology studies have not previously been performed for the project site permitting efforts. Therefore, this preliminary assessment will provide some baseline information regarding watershed delineation, precipitation, and flow estimates. This data will serve as a basis for evaluating the potential impacts of the project on site runoff and identifying areas that may be prone to scour, and for potential channelization to collect run-on flows to be guided through the site in a manner that will not negatively impact the Coachella Canal. The analysis will be performed using a combination of a literature review and use of the hydrologic estimator StreamStats (Streamflow Statistics and Spatial Analysis Tools for Water-Resources Applications).

Literature Review – The literature review will include publicly available information (e.g., the California Porter-Cologne Water Quality Control Act (2019), Imperial County Hydrology Manual (ICHM), U.S. Geological Survey (USGS) Stream Gage data, National Oceanic and Atmospheric (NOAA) historical precipitation and rainfall data, etc.). The NOAA Atlas 14, Volume 1, will be used to determine the appropriate design precipitation intensities, depths, and distributions.

Use of the StreamStats Application – StreamStats is a free Web application available through the USGS. The application provides the user with access to an assortment of GIS analytical tools that are useful for water-resources planning and management, and for engineering and design purposes. The map-based user interface can be used to delineate drainage areas for user-selected sites on streams, and then obtain some basic basin characteristics (Area, slope, land-use), and estimates of flow statistics for the selected sites anywhere this functionality is available. StreamStats users also can select the locations of USGS data-collection stations, shown as triangles on the StreamStats map, and get flow statistics and other information for the stations. A variety of additional tools are available for discovering information about streams and the activities along them.

Evaluation and Report – The deliverable for this task will be a Hydrologic Assessment Report summarizing descriptive hydrologic information for the site and including map output files from the StreamStats application. The StreamStats rainfall and peak discharge output will be checked for validity against the ICHM and NOAA Atlas 14 data. The output report will provide estimates of different land uses in each of the watersheds. The proposed modifications (disturbed areas) can then be calculated per each proposed solar field. This additional "urban" area can be used to calculate the changes in rainfall-runoff associated with each proposed solar field. The increases in discharge for the site, once quantified, can then be highlighted for potential need of detention/retention and/or channelization within the future design study. The report will be included as an attachment to the EIR.

Water Quality Assessment

Haley & Aldrich will prepare a Caltrans Water Quality Assessment Report using the Caltrans standard template available at the following website: https://dot.ca.gov/programs/environmental-analysis/standard-environmental-reference-ser/forms-templates#water-quality. The Report will address the following technical topics:

- Regulatory Setting
  - Federal Laws and Requirements
  - State Laws and Requirements
  - Regional and Local Requirements
- Affected Environment
  - General Environmental Setting (population and land use, topography, hydrology, geology/soils, and biological communities)
- Environmental Consequences
  - Potential Impacts to Water Quality
  - Impact Assessment Methodology
  - Alternative-Specific Impact Analysis
  - Cumulative Impacts
- Avoidance and Minimization Measures
- References
- Figures
  - Project Vicinity Map
  - Project Site Map

Water Supply Assessment (WSA)

Chambers Group will prepare a WSA for the proposed Project as required by California State Senate Bill 610 (SB 610). The WSA will access the adequacy of the water supply to serve the project over the next 20 years under average year, single dry year, and multiple dry year conditions. Beginning in 2010 Imperial Irrigation District no longer prepared an Urban Water Management Plan (UWMP) and the cities it served were required to prepare and submit their own individual UWMPs therefore, it is assumed that an up-to-date and location appropriate UWMP would be available for Chambers Group to utilize in preparation of the WSA.

Assumptions: It is assumed that the Applicant will provide the water demand estimates and that an up-to- date and location appropriate UWMP would be available for Chambers Group to utilize.

AB 52 Tribal Consultation Support

CEQA Assembly Bill 52 (AB 52) established a new category titled "Tribal Cultural Resources". These resources can only be identified by the lead agency through consultation with local Native American tribes. On behalf of the County, Chambers Group will prepare and send notification letters to the list of Tribes in which the County has identified for notification under AB 52. This task will provide support to the County including, but not limited to preparing and transmitting notification letters to respective Tribes; support with consultation regarding the Proposed Project plans and potential impacts; conference calls with tribes; and/or development of mitigation measures, as appropriate. Based on experience working in Imperial County, we are aware that only two tribes have notified the County to be notified of new projects. This scope and cost include time for preparing two notification letters, setting up no more than two separate conference calls with tribes, and coordinating the conclusion of consultation through emails and up to two additional calls. Should the Tribe(s) request a site visit, it is assumed that the Applicant will cover this expense and provide the Tribe(s) an opportunity to visit the site at their expense.

Assumptions: It is assumed that only two Tribes would require notification letters and if Tribe(s) request a site visit, the Applicant will cover this expense and provide the Tribe(s) an opportunity to visit the site.

Optional Full Geotechnical and Soils Analysis

Haley & Aldrich will prepare a geotechnical and soils analysis. For purposes of providing a response consistent with the RFP and technical studies provided with the previous VEGA solar project, it is assumed that a full geotechnical analysis would be requested, however, based on the findings made in California Building Industry Association v. Bay Area Air Quality Management District, this level of analysis is not required to comply with CEQA. During the project kick-off with the County, it would be discussed if this optional task could be reduced with a desktop review. A desktop analysis would require significantly less labor which would result in a significantly reduced cost. The full geotechnical analysis investigation would consist of performing cone penetration tests (CPTs), a seismic CPT, shallow hand-auger borings, geotechnical laboratory testing, and engineering analyses, and preparing an investigation report that summarizes findings and recommendations. More specifically, the investigation will include the following services:

- Review readily available geotechnical and geologic reports pertaining to the project site.
- Obtain all necessary drilling permits, if applicable.
- Clear proposed investigation locations of underground utilities prior to commencing field work activities by notifying Underground Service Alert (USA), as required by law.
- Perform 60, 20-foot-deep cone penetration tests (CPTs); 15, 50-foot-deep CPTs; and 5, 100-foot-deep seismic CPTs or refusal on dense materials. Pore pressure dissipation tests will be performed at all CPT locations to determine the elevation of the groundwater table. Upon completion of the CPT work, each hole will be backfilled with cement grout.
- Perform 80, approximately 3- to 5-foot-deep hand auger borings, collecting soil samples, and performing geotechnical laboratory testing on selected soil samples, including but not limited to moisture-content, particle size distribution, Atterberg limits, resistance value, and corrosivity, as appropriate; the shallow boring will be backfilled with soil cuttings.

- Prepare a geotechnical investigation report presenting conclusions and recommendations regarding: soil and groundwater conditions at the site; site seismicity and seismic hazards including liquefaction potential; settlement estimates; foundation design criteria, including design criteria for compressive, uplift, and lateral support of pile foundations and shallow foundation systems for battery storage and planned warehouse buildings; flexible asphalt-concrete pavement designs; exterior concrete flatwork; site grading, including criteria for fill quality and compaction; seismic design parameters in accordance with the 2019 California Building Code; and construction considerations (as appropriate).

Task 2C: Preparation of the Administrative Draft EIR (ADEIR)

Conduct Environmental Impact Analysis. The document will contain a section for each environmental issue area that has a potentially significant impact identified in the IS and as further described in the RFP. Discussion of each issue will begin with a description of the environmental setting. Impact evaluations for each environmental issue area will contain the following elements: (1) a statement identifying the impact and its significance; (2) a discussion of the impact and methodology used to evaluate the proposed project; (3) cumulative impacts evaluation; (4) applicable County policies and requirements; (5) recommended measures to mitigate the impact; and (6) a statement identifying the level of significance after measures are implemented. Based on the RFP, Chambers Group will draft the following sections:

Aesthetics
Agriculture and Forest Resources
Air Quality
Biological Resources
Cultural Resources
Energy
Geology and Soils
Greenhouse Gas Emissions
Hazards and Hazardous Materials
Hydrology and Water Quality
Land Use and Planning
Mineral Resources
Noise
Population and Housing
Public Services
Recreation
Transportation
Tribal Cultural Resources
Utilities and Service Systems
Wildfire

General Plan Renewable and Transmission Element Consistency Analysis. As part of the Land Use Section of the ADEIR, Chambers Group would access the Projects consistency with the Imperial County General Plan Renewable and Transmission Element.

Assess Cumulative Impacts. In collaboration with County staff, Chambers Group will develop a list of ongoing or future projects in the area within a reasonable radius around the Project site to develop the cumulative impact analysis. The Project's contribution to the overall cumulative impact will also be evaluated and discussed.

Analyze Alternatives. Chambers Group, in concert with County staff, will develop a range of reasonable alternatives to be evaluated in the EIR. Alternatives will be assessed for their ability to reduce or eliminate significant impacts of the Project, while resolving public, as well as agency concerns. As required by CEQA, the No Project Alternative will also be examined.

Prepare Other Required Sections. In addition to the sections discussed above, Chambers Group will prepare all other required CEQA sections, including: Table of Contents: an executive summary; impacts of the project found not to be significant; growth-inducing impacts of the project; any significant irreversible environmental changes that will be involved with continued operation of the Project; and a list of organizations and persons consulted.

Deliverables: One electronic copy of the ADEIR, five hardcopies of the ADEIR, and 50 CD's of the ADEIR to the County for review.

Assumptions: It is assumed that the County will provide one round of comments and one round of revisions will be made.

Task 3: Public Review Draft EIR (DEIR)

Draft EIR Preparation and Distribution. Upon Chambers Group's receipt of the County's review comments, the Administrative Draft EIR will be modified and the DEIR prepared. Chambers Group will prepare and distribute copies of the Draft EIR to the County, the Office of Planning and Research (OPR), and affected public agencies. The Draft EIR will be circulated for a 45-day public review period

Prepare and Distribute Notice of Completion (NOC)/Notice of Availability (NOA). As soon as the Draft EIR is completed, a NOC must be filed with the OPR and a NOA must be filed with the County Clerk. Additionally, the NOA must be provided to the public, either in a newspaper of general circulation or through direct mail. Chambers Group will provide the Draft NOC/NOA to the County for their review and approval.

Chambers Group will distribute copies to the appropriate responsible and trustee agencies, interested parties, and to the mailing list provided by the County and will file the NOC with the OPR and the NOA with the County Clerk. The NOC/NOA will be circulated with the Draft EIR for a 45-day public review period.

Chambers Group will prepare and file all notices with OPR and the County Clerk. For submittal to the OPR, Chambers Group will draft a NOC and Summary Form, and to be submitted electronically along with the DEIR with associated appendices on behalf of the County. The County must approve Chambers Group as a submitter for the County on the OPR CEQANet Web portal. For submittal to the County Clerk, documents will be sent via mail. Chambers Group will distribute up to 50 copies of the NOC/NOA to affected public agencies and to the mailing list provided by the County.

Deliverables: One electronic copy of the DEIR, five hardcopies of the DEIR, and 50 CD's of the DEIR to the County. One electronic copy of the NOP will be provided to the County. Up to 50 NOC/NOAs to be sent via mail. As required by OPR, electronic copies of the NOC, Summary Form, and DEIR with appendices will be transmitted to OPR.

Assumptions: It is assumed that the County will provide Chambers Group a mailing list of recipients to receive the notices.

Task 4: Final EIR (FEIR)

Coordination before Preparation of FEIR. After the 45-day circulation period on the DEIR, Chambers Group will evaluate the written comments received and attend a virtual meeting with the County on the approach for preparing response to comments. After approach is decided upon, Chambers Group will prepare a set of responses to comments.

Response to Comments. The FEIR will include each comment letter received, which will be followed by a response to each comment. Chambers Group will provide County staff with a complete draft copy of the Response to Comments for review and will modify the Response to Comments in response to County review and comments. The Response to Comments will be contained within the FEIR. Chambers Group will distribute a complete and final set of Response to Comments to each public and private organization that commented on the DEIR.

The scope for this Task assumes no more than 20 commenting agencies/individuals and/or over 150 comments that require answers other than "comment noted" are received on the DEIR. In the event more comments are received, then the costs will be determined on a "negotiated basis" when the public comment period is over, and the County has received all comments.

Administrative FEIR. After the County's review and comments on the Response to Comments, the responses will be finalized for inclusion in the FEIR. Based on comments from the public review and input from the County, some changes to the wording of the DEIR may be needed. Any required changes will be handled by including amended text and/or graphics within the FEIR. It is assumed that no new field work or substantially new analyses or technical studies will be required.

Prepare FEIR. Upon Chambers Group's receipt of the County's review and comments, the Administrative FEIR will be modified and the FEIR prepared.

Planning Commission and Board of Supervisors Meetings: Chambers Group will attend and prepare any appropriate presentation material required during the meetings.

Deliverables: One electronic copy of the FEIR, five hardcopies of the FEIR, and 50 CD's of the FEIR to the County.

Assumptions: It is assumed that the County will provide one round of comments and one round of revisions will be made. It is also assumed no more than 20 commenting agencies/individuals and/or over 150 comments that require answers other than "comment noted" are received on the DEIR. Chambers Group anticipates that no new analysis will need to be conducted as a result of comments received during the public review period.

Chambers Group assumes that in-person meetings will take no more than two hours, and Planning Commission, Board of Supervisor, and Public Scoping meetings will take no more than three hours each. If needed, Chambers Group will attend any other additional meetings requested by the Client on a time and materials basis

Meetings: One teleconference meeting to discuss approach to Response to Comments, one Planning Commission meeting, and one Board of Supervisors meeting.

Task 5: Mitigation, Monitoring, and Reporting Plans (MMRP)

Chambers Group will prepare a MMRP as required by CEQA. Chambers Group will work with the technical staff and the County to develop the MMRP. The MMRP will Include all mitigation measure, identification of all responsible parties, timing, and enforcement. Chambers Group will provide a Draft MMRP at the time of submittal of the Administrative FEIR. The MMRP will be incorporated into the FEIR.

Deliverables: One electronic copy of the MMRP for County review.

Assumptions: It is assumed that the County will provide one round of comments, and one round of revisions will be made.

Task 6: CEQA Findings and Notice of Determination (NOD)

Findings of Fact and Statement of Overriding Considerations, if necessary. Chambers Group shall prepare Findings of Fact (FOF) and if warranted, a Statement of Considerations (SOC).

Notice of Determination (NOD). The NOD is filed following the Board of Supervisor's decision to carry out or approve the project for which the EIR has been prepared. Chambers Group will prepare the NOD and will file the NOD with the OPR and the County Clerk.

Deliverables: One electronic copy of each the FOF, SOC (if warranted), and the NOD.

Assumptions: It is assumed that the County will pay the CDFW filling fee.

Task 7: Assumptions

Assumptions have been made as needed throughout each task. Deliverables were assumed for each task based on the RFP request. If additional copies of either the ADEIR or DEIR are needed the cost of each additional copy will be $150. If additional copies of the FEIR are needed the cost of each additional copy will be $45. Each additional CD copy would be $2 per CD.

Prior to any cost overruns, Chambers Group shall discuss first and then seek written approval from the County Planning and Development Services Director before such costs are incurred.

Task 8: Meetings:

All meetings associated with the scope of work outlined above include all meetings required to complete the EIR. Please note, as a best practice, Chambers Group initiates bi-weekly status update phone calls at the beginning of the Project and increases frequency to every week as the Project moves closer to the Public Review DEIR. The costs associated with these meetings is built into the scope for each task identified above; therefore, there will be no additional cost associated with status update phone calls. Additional in person meetings, aside from those identified in Task 4, would be billed on a time and material basis.

4. Proposed Schedule

Schedule Adherence: As Chambers Group provides these services, we are committed to completing all tasks on time. Chambers Group does not generally anticipate schedule delays on projects, but we are always prepared to address them. In response to conditional changes, Chambers Group will work with the County to determine the cause for delay and take corrective actions to readjust the schedule. Actions to ensure schedule adherence could range from adding additional technical professionals to complete the task, reassessing the direction of the task, and/or utilizing new personnel. Schedule changes due to changing conditions will be immediately brought to the attention of the County and the schedule would be updated and revised only at the County's direction and readjusted with its approval.

Timetable of Completion of Major Tasks and Subtasks for which, Chambers Group, Haley & Aldrich and Vista Environmental will provide services.

Please Note: Tasks with asterisks * occur concurrently with other tasks, thus the sum of all tasks looks to be greater than the time allowed for completion

PROJECT ACTION	PROJECT DURATION
Notice to Proceed	1 Day
Task 1A: Initial Meeting and Data Acquisition	1 Week
Task 1B: Project Description	1 Week
County Review of Project Description	1 Week
Task 1C: Prepare NOP	1 Week
Public Review/Scoping Period	30 Days
Task 2A: Peer Review of Applicant Prepared Technical Studies	3 Weeks
Task 2B: Additional Technical Studies	5 Weeks[1]*
County Review of Technical Studies	2 Weeks
Task 2C: Preparation of the Administrative Draft EIR	6 Weeks*
County Review of Administrative Draft EIR	3 Weeks
Task 3: Public Review Draft EIR	3 Weeks
County Review of Public Review Draft EIR	3 Weeks
Public Review Period	45 days
Task 4: Final EIR	4 Weeks*
County Review of Final EIR	2 Weeks
Task 5: Mitigation and Monitoring Reporting Plan	1 Week*
County Review of MMRP	1 Week
Task 6: CEQA Findings and Notice of Determination	2 Weeks*
County Review of CEQA Findings and Notice of Determination	1 Week
Approximate Total	**40 Weeks**

1 If a full geotechnical study, inclusive of fieldwork and lab results is requested the estimated duration would increase to 13 weeks.

5. Cost Estimate / Milestones

Cost Control

Chambers Group uses Deltek Vision, to track project costs. Raw costs are loaded into the computer daily (staff hours on a weekly basis) to give the project manager up-to-date data and timely management reports. Costs and/or staff hours can be quickly and accurately compared to budgeted costs/hours on a project, task, or activity basis. Weekly, on a work in progress basis, the percent of project cost expended is compared to estimated percent completion. Any variance of project/task cost versus budget, is immediately flagged. This ensures early identification of possible cost overruns and appropriate remedy. Progress is also tracked monthly with a senior management team. In this way, each task is monitored for maximum efficiency and, if necessary, early action is taken to achieve strict budget adherence.

TASK	Hours	FEE
Task 1A: Initial Meeting and Data Acquisition	36	$4,491.00
Task 1B: Project Description	28	$3,442.00
Task 1C: Prepare NOP	20	$2,571.00
Task 2A: Peer Review of Applicant Prepared Technical Studies*		$7,549.00
Task 2B: Additional Technical Analysis to be Prepared		-
Energy*		$1,932.00
Phase I ESA*		$41,482.80
Water Quality Assessment*		$22,862.00
Hydrology Assessment		$23,009.20
Water Supply Assessment	96	$12,674.00
AB 52 consultation	24	$3,115.00
*Optional Full Geotechnical and Soils Analysis**		*$104,017.50*
Task 2C: Administrative Draft EIR	160	$20,042.00
Task 3: Public Review Draft EIR	98	$12,366.00
Task 4: Final EIR	124	$14,767.00
Task 5: MMRP	16	$1,842.00
Task 6: CEQA Findings and Notice of Determination	52	$6,384.00
TOTAL PROJECT COST	**$180,491.00**	
TOTAL PROJECT COST (with optional tasks)	$284,508.50	
TOTAL COST FOR VEGA SES 2-3-5 (if selected to prepare both VEGA SES 2-3-5 and VEGA SES 4)	$162,441.90 - $256,057.65	

Please note that work provided by or that includes subconsultants is a flat fee amount indicated by an asterisk. Detailed Cost Sheet: A more detailed breakdown of cost by personnel, billing rate, hours and task is provided in Appendix C.

Appendix A – Team Hourly Rate Sheets

Chambers Group, Inc. Hourly Rate Schedule

Effective January 2020

CHAMBERS GROUP

BILLING RATES

STAFF. Charges for all professional, technical, and administrative personnel directly charging time to the project will be calculated and billed on the basis of the following staff category hourly "Billing Rates." Billing Rates include fringe benefits, burden, and fee.

Staff Title	Rate	Staff Title	Rate
Senior Director	$225.00	Managing Environ. Planner	$185.00
Director/Program Manager	$200.00	Senior Environ. Planner	$154.00
Sr. Project Manager	$165.00	Project Environ. Planner	$134.00
Project Manager	$140.00	Staff Environ. Planner	$114.00
		Environ. Planner	$104.00
		Assistant Environ. Planner	$93.00
Managing Cultural Resources Specialist	$165.00	Managing Biologist / Botanist	$185.00
Senior Cultural Resources Specialist	$134.00	Senior Biologist / Botanist	$149.00
Project Cultural Resources Specialist	$118.00	Project Biologist / Botanist	$129.00
Staff Cultural Resources Specialist	$103.00	Staff Biologist / Botanist	$113.00
Cultural Resources Specialist	$92.00	Biologist / Botanist	$103.00
Assistant Cultural Resources Specialist	$73.00	Assistant Biologist / Botanist	$93.00
Senior GIS Analyst	$147.00	Managing Restoration Director	$133.00
Staff GIS Analyst	$122.00	Restoration Specialist Foreman (Foreman)	$78.00
GIS Technician	$107.00	Restoration Specialist	$41.00
Project Controls Specialist	$93.00	Maintenance Labor	
Project Assistant/Tech. Editor	$82.00		
Word Processor	$72.00		
Clerical/Technician	$62.00		

EQUIPMENT/OTHER DIRECT COSTS

OTHER DIRECT COSTS	UNIT	UNIT COST
Copies - Internal	per page	$0.15
Color Copies 8"X11"	per page	$1.00
Color Copies 8"X17"	per page	$2.00
GIS Materials	actual	
Field Vehicle Use: Off Road 4WD	per day	$65.00
Mileage	per mile	Fed Rate
GPS – Real time, Trimble	per day	$60.00
CD-ROM's	per CD	$2.00
Mail/Delivery	actual	
Outside Printing	actual	
All Other Outside Services	actual	
Bio Survey/Monitoring Equipment Bio	per day	$6.00
Survey/JD/Restoration Equipment	per day	$8.00
Bio Fish Survey Equipment	per day	$15.00
Focused Plant Survey Equipment	per day	$10.00
Cultural Survey Equipment	per day	$6.00
Cultural Site Recording	per day	$8.00
Cultural Testing/Excavation	per day	$14.00
Cultural Monitoring Equipment	per day	$10.00
iGage	per day	$15.00
Sonabat	per day	$46.00
Electrofisher	per day	$200.00

- All outside services carry a 10% markup

Vista Environmental Hourly Rate Schedule

VISTA ENVIRONMENTAL

VISTA ENVIRONMENTAL
STANDARD HOURLY RATE SCHEDULE
Effective January 1, 2020

SCHEDULE OF FEES
for Professional Services
Time Charges
Hourly Rate

Senior Analyst	$ 120.00

Vista Environmental's Standard Hourly Rate Schedule is subject to adjustment in January of each year.

Reimbursable Expenses

Travel:	Private vehicles @ $0.58 per mile. Commercial travel and related expenses at cost.

Taxes: Any tax and/or fees imposed by a taxing authority based upon gross revenues or sales shall be reimbursable in addition to the fee stated in this Agreement.

Other Project expenses: Cost. If Project expenses other than those mentioned above are necessary, Vista Environmental will obtain prior approval from the client and will charge the client at cost for the expense.

Haley & Aldrich Hourly Rate Schedule

HALEY ALDRICH

Standard Fee Schedule
RS2

FEES FOR SERVICES

Fees for services will be based on the time worked on the project by staff personnel plus reimbursable expenses. The fee will be computed as follows.

1. Labor related fees will be computed based on personnel billing rates in effect at the time the services are performed. Personnel billing rates are subject to revision on, or about, 1 January and 1 July of each year. The hourly rates are fully inclusive of fringe benefits, burden, and fee. Current rates are provided in the table below.

Classification	*Hourly Rate*
Project Support	*$98*
Technician	*$98*
Graphics	*$117*
Senior Technician	*$118*
Project Coordinator	*$142*
Engineer / Geologist / Scientist	*$129*
Staff Engineer / Geologist / Scientist	*$142*
Senior Engineer / Geologist / Scientist	*$159*
Technical Specialist	*$159*
Senior Graphics	*$181*
Project Manager / Senior Technical Specialist 1	*$182*
Senior Project Manager / Senior Technical Specialist 2	*$217*
Technical Expert 1	*$249*
Program Manager / Technical Expert 2 / Senior Consultant	*$278*
Principal Consultant	*$347*

2. Overtime hours will be charged at straight time rates. Pre-trial conferences, depositions, and expert testimony will be billed at one and one-half (1.5) times the rates quoted above.

3. Direct non-salary expenses will be billed at our cost plus ten (10) percent, except for vehicle use which will be billed at IRS allowed mileage rates. H&A equipment will be billed at rates listed in the Equipment Rate Schedule, as applicable.

4. Telephone usage; in-house reproduction; printing costs for reports, drawings, and other project records; and mail and overnight document delivery will be billed as a general communication fee at a rate of four (4) percent of the labor charges.

5. Subcontractors will be billed at our cost plus ten (10) percent.

Page 1

HALEY ALDRICH

Equipment Rate Schedule
2020 RS2

6. Haley & Aldrich Equipment Rate Schedule is as follows:

EQUIPMENT RATE SCHEDULE

AIR MONITORING EQUIPMENT	***Daily***	***Weekly***	***Monthly***
Drager/Rae Sampling Kit (tubes not included)	*$10*	*$40*	*$120*
Dust Monitor	*$100*	*$400*	*$1,200*
Four-Gas Meter	*$43*	*$172*	*$516*
PID - 10.6 or 11.7 eV	*$70*	*$280*	*$840*
SAMPLING EQUIPMENT	***Daily***	***Weekly***	***Monthly***
Groundwater Sampling Bundle w/Bladder Pump	*$329*	*$1,010*	*$2,916*
Groundwater Sampling Bundle w/Peristaltic Pump	*$256*	*$718*	*$2,040*
Groundwater Sampling Bundle w/Grundfos Pump	*$344*	*$1,070*	*$3,096*
Soil Sampling or Tank Pull Equipment Bundle	*$152*	*$363*	*$993*
YSI w/Flow Cell	*$90*	*$360*	*$1,080*
WATER LEVEL METERS AND INTERFACE PROBES	***Daily***	***Weekly***	***Monthly***
Barologger	*$8*	*$32*	*$96*
Levelogger	*$24*	*$96*	*$288*
Oil/Water Interface Probe	*$40*	*$160*	*$480*
Water Level Indicator	*$17*	*$68*	*$204*
GEOTECHNICAL INSTRUMENTATION	***Daily***	***Weekly***	***Monthly***
GPS	*$150*	*$600*	*$1,800*
Nuclear Density Gauge	*$70*	*$280*	*$840*
Seismograph - Manual	*$50*	*$200*	*$600*
Seismograph - Remote Units	*$75*	*$225*	*$725*
Vibration and Sound Monitoring Station	*$63*	*$250*	*$825*
MISCELLANEOUS	***Daily***	***Weekly***	***Monthly***
Truck w/Fuel	*$85*	*$340*	*$1,020*
Decontamination Kit/each	*$45*		
Level C PPE/person	*$45*		
Level D PPE/person	*$25*		
ANALYSES (HALEY & ALDRICH, INC. LAB) *	***Each***		
Hydrometer and Sieve Analysis (Jar Sample)	*$160*		
Modified Proctor	*$160*		
Sieve Analysis (Jar Sample)	*$75*		
Sieve Analysis (Bulk Sample)	*$135*		

****Additional H&A Laboratory analyses and pricing available upon request.***

Appendix B – Resumes

Victoria Boyd

Project Manager

Education

BS, Environmental Management and Protection, California Polytechnic State University, San Luis Obispo

Affiliations

Member, Association of Environmental Professionals
ESRI Certificate of Completion: Going Places with Spatial Analysis Course
ESRI Certificate of Completion: Working with CAD Data in ArcGIS Desktop

Certificates

Certificate of Completion (Esri), Going Places with Spatial Analysis
Certificate of Completion (Esri), Working with CAD Data in ArcGIS Desktop

Professional Summary

Victoria Boyd has more than 7 years of experience in environmental planning and permitting. Her background in environmental analysis within a variety of fields enables her to provide thorough assistance in the research and preparation of environmental documents. She has successfully worked on several projects complying with CEQA and NEPA, assisting and acting as a project manager with a wide variety of projects in Santa Barbara, Ventura, Los Angeles, and San Bernardino Counties. Additionally, she has written WSAs for several projects. In addition, Victoria utilizes GIS as needed to assist with environmental documentation and planning, and she has created maps for various projects, including the Los Angeles World Airports EIR and the Newhall Ranch EIR.

Project Experience

Vidal Energy IS, San Bernardino County, CA

Environmental Planner. Victoria assisted in the preparation of the Vidal Energy Project IS for a proposed 1,220 acre photovoltaic (PV) and battery energy storage system facility (BESS) to generate renewable energy in Vidal in San Bernardino County. Victoria was responsible for reviewing the IS in its entirety.

San Diego Gas & Electric (SDG&E) Proponent's Environmental Assessment (PEA) Checklist Update, San Diego County, CA

Environmental Planner. Chambers Group assisted SDG&E in updating the PEA Guidance Manual and Templates. Victoria assisted in finalizing the Hazards, Wildfire, and Helicopter Operations and Safety templates for all future SDG&E projects to utilize.

Vista Soleada Supplemental EIR, Riverside County, CA

Assistant Project Manager/ Project Planner. Helped to write the Supplemental EIR for the Vista Soleada residential project on approximately 80 acres adjacent to the City of La Quinta. The EIR originally proposed developing 230 residential units; however, after discovering tribal cultural resources on the project site, the Supplemental EIR looked at the impacts of removing 32 residential units from the plans and constructing a Cultural Resources Preservation Lot.

Etiwanda Heights Neighborhood and Conservation Plan (EHNCP) EIR, Rancho Cucamonga, San Bernardino County, CA

Project Planner. Assisted in the preparation of the EHNCP EIR. The EHNCP Plan Area (Plan Area) is located along the northeastern edge of Rancho Cucamonga (City). Roughly 3,565 acres of the Plan Area would provide for conservation within the Rural Conservation Area (RCA) and the northern Neighborhood Area (NA), and roughly 828 acres of the NA would allow for development as further detailed. The Plan would concentrate development in a pattern of compact, walkable new neighborhoods in the NA and implement the City's existing General Plan land use designations in the RCA. The Plan would permit the development of up to 2,900 residential units and 180,000 square feet of neighborhood shops and restaurants in the NA, along with a new K-8 School and other public facilities and limit development in the RCA to a maximum of 100 units on privately owned property in the RCA. The Plan also includes a includes a Conservation Strategy & Transfer of Development Rights Program to encourage and facilitate the conservation of privately-owned land in the RCA by allowing the voluntary transfer of development rights from privately-owned property in the RCA to the NA. Through this

program, the maximum 3,000 residential units allowed by the Plan could be developed in the NA. Victoria assisted in the preparation of the mineral resources and utilities and service systems.

In-N-Out Rancho Mirage EIR, Rancho Mirage, CA

Project Manager. Assisted in managing the preparation of an Environmental Impact Report for an In-N-Out in Rancho Mirage. an approximately 3,885-square-foot building with indoor seating for 74 guests, and outdoor seating for 82 guests on approximately 1.52 acres. A 1,762-square-foot patio cover would be connected to the restaurant building at its southwest corner to provide shade for outdoor dining. The proposed building would include a preparation and kitchen area, a cooler area, an office, two dressing rooms, two restrooms, a dining room, a self-serving bar area, a serving area, and a storage/miscellaneous room. The Project required a zone text amendment to allow fast food restaurants in this location with a conditional use permit which in turn required an analysis of the secondary effects that could be expected from the zone text amendments.

Palm Springs American Hockey League Arena Tribal Preliminary Environmental Review, Palm Springs, CA

Project Manager. Managed the preparation of a Tribal Preliminary Environmental Review Document under the Tribal Environmental Policy Act (TEPA). The 262,000 net square feet Arena was proposed on approximately 14 acres of Tribal land located in downtown Palm Springs and included the main arena, a practice arena, associated facilities, and a surface parking lot. The project involved demolition of the existing parking lot, single-family house, and North Calle Santa Rosa Street and the construction of the new arena and parking lot.

City of Needles Housing Element Update ND, Needles, CA

Project Manager. Prepared a negative declaration for the City of Needles Housing Element Update. The City proposed to adopt the 2019 Housing Element Update as part of its General Plan and an update to its current 2005 Housing Element. Since the City last updated their Housing Element in 2005, the City received a "Notice of Non-Compliance" from the Department of Housing and Community Development. By updating the Housing Element and complying with the environmental review process, the City became compliant. Victoria also assisted in the AB 52 consultation process and helped to prepare the staff report for City Council.

Santa Paula West Business Park Specific Plan EIR and WSA, Santa Paula, CA

Project Manager. Helped to update the EIR for the Santa Paula West Business Park Specific Plan. This Specific Plan would guide future land use development and provide a mix of low-intensity industrial, professional office, and supporting commercial businesses on approximately 54 acres in the City of Santa Paula. Victoria also prepared the for the project.

San Fernando Corridors Specific Plan Amendment and WSA, San Fernando, CA

Staff Planner. Assisted in the preparation of the Specific Plan Amendment for the City of San Fernando. The Specific Plan Amendment was created to provide a policy framework with design guidelines and development standards for the City. The purpose of the framework is to create an attractive, livable, and economically vital community. Wrote the WSA for the San Fernando Corridors Specific Plan, which has the potential to develop a mix of up to 759 residential units, retail, and office space within the City of San Fernando.

University Park Specific Plan WSA, Palm Desert, CA

Project Planner. Prepared the WSA for the University Park Specific Plan, which included development of up to 1,069 dwelling units consisting of eight different types of single- and multifamily residential units. The 1,069 dwelling units would include approximately 623 single family homes constructed on approximately 120 acres, and approximately 446 multifamily homes constructed on 23 acres. The Project would also include six parks on approximately 22.5 acres, retention basins on approximately 7.7 acres, and two well sites on approximately 1.4 acres. Based on the water demand and supply analyses conducted by Victoria for this Project, CVWD had sufficient water supplies available to meet the demands of the Project in addition to current and planned future water uses, including manufacturing, industrial, and agricultural users for the 20-year period.

CHAMBERS GROUP

Corinne Lytle Bonine, PMP

Principal in Charge

Education

BA, Environmental Studies, UC Santa Barbara, 2007, (with honors)

Certifications

Project Management Professional, #2005796

Affiliations

Technical Advisory Committee, San Diego County Comprehensive Renewable Energy plan, 2014 – present
Professional–Association of Environmental Professionals Statewide Board of Directors, San Diego Chapter Director
Technical Advisory Committee for County of San Diego's Comprehensive Renewable Energy Plan
Women of Renewable Industries and Sustainable Energy

Professional Experience

Corinne Lytle Bonine is a Vice President Director of Environmental Planning at Chambers Group, as well as a Senior Project Manager with 15 years of experience. She has managed an array of NEPA and CEQA documents (including CEQA-equivalency and adjudicated CEQA processes): Environmental Impact Statements, Environmental Impact Reports, Applications for Certification to the California Energy Commission, Environmental Assessments, and IS/MNDs, exemptions/exclusions.

Both an accomplished team leader and field agent, Corinne has served as the visual resources and land use specialist on more than 75 projects. Her permitting projects include, but are not limited to Endangered Species Act Sections 7 and 10 consultations, USACE Individual Permits, and Section 106 consultations. She has managed environmental constraints analyses, fatal flaw analyses and technical reports. Her experience includes supervisory roles in general environmental projects, large-scale environmental compliance projects, as well as in visual resources and land use impact analysis.

Project Experience

Imperial Valley Solar Project, Tessera Solar, Imperial County, CA

Assistant Project Manager. The Imperial Valley Solar Project is notable for multiple reasons not the least of which is that it was one of the first major projects to go through a joint BLM and CEC permitting process. Corinne and her team were responsible for developing not only a new permitting strategy, but also for collecting and synthesizing technical analysis from resource leads, coordinating with other agencies and members of the public, and to provide expert testimony. Consisting of a 6,500 acre site, eight miles of transmission line corridor, and 30,000 future solar dishes, the Imperial Valley Solar Project ultimately helped facilitate an MOU with the BLM and CEC for a joint AFC/EIS document to comply with both NEPA and CEQA requirements.

Valley Center Battery Storage, Terra-Gen Power, San Diego County, CA

Project Principal. Chambers Group Inc. is providing project development, environmental permitting, site surveys, preparation of technical studies, and impact analysis in compliance with CEQA for the Valley Center Storage Project, a battery energy storage project. The project involves construction and operation of a lithium-ion based battery energy storage facility capable of delivering up to 140 megawatts for up to 4 hours. The batteries will be charged from the CAISO (California Independent System Operator) grid via the adjacent San Diego Gas & Electric (SDG&E) 69kV Valley Center Substation, which the project will connect to via a 0.3-mile underground generation tie-line. Energy stored in the project will be discharged back into the grid when the energy is needed, providing essential electricity reliability services to the local area.

Orni 5 Truckhaven Geothermal Exploratory Wells EA/MND, Ormat Technologies, Inc., Imperial County, CA

Project Principal. Chambers Group contracted with Imperial County to prepare an IS/MND for the Orni 5 Truckhaven Geothermal Exploratory Wells Project in accordance with CEQA. Portions of the Project are located on land managed by the U.S. Bureau of Land Management (BLM); therefore, there is a federal nexus for the Project. Chambers

Group is also contracted through Ormat Technologies, Inc. to prepare the NEPA document (Environmental Assessment) for the Project.

Heber I Repower Project, Ormat Technologies, Inc., Heber, Imperial County, CA

Project Principal. Chambers Group prepared the CUP Amendment Application to expand the Heber 1 geothermal facility. The CUP Amendment Application package includes an IS, a Reclamation Plan, Water Quality Management Plan, and technical studies for Biological Resources, Cultural Resources, Paleontological Resources, Geology and Soils, Air Quality, Hazards, Noise, Traffic, and Visual Resources.

Brawley Solar Project, Ormat Nevada, Inc., Imperial County, CA

Project Principal. Chambers Group is providing CEQA services for development and submittal of a CUP, and all supplemental and supporting documents as required by Imperial County for a proposed solar and storage project just north of Brawley, California. All of the proposed Project parcels are currently zoned General Agriculture (A-2-G), thus in accordance with the County's Zoning Ordinance, development of the Project requires a CUP. The solar site is within private property, wholly owned by ORNI 29 LLC, a subsidiary of Ormat.

Vidal Energy IS, San Bernardino County, CA

Principal in Charge. Chambers Group is preparing the Vidal Energy Project IS for a proposed 1,220 acre photovoltaic (PV) and battery energy storage system facility (BESS) to generate renewable energy in Vidal in San Bernardino County.

OCI Solar Lakeside Project, County of San Diego, San Diego County, CA

Project Manager. Corinne's oversaw the day to day operations related to the development and submission of technical studies in support of a proposed project entailing 2 MW of Photovoltaic Solar modules on a 35 acre site located on fallow agriculture under the jurisdiction of the County of San Diego.

Renewable Energy and Transmission Element Update and Programmatic EIR, County of Imperial, Imperial County, CA

Staff Environmental Planner. Corinne assisted with the update the Geothermal Alternative Energy and Transmission Element of the Imperial County General Plan and preparation of the corresponding PEIR. She also assisted in the preparation of the EIR identifying potential impacts associated with future development of renewable energy in Imperial County based on the General Plan Element update. The PEIR won the AEP San Diego Chapter award for Outstanding Environmental Analysis Document EIR/EIS, and the Element Update and Implementation Ordinance received a Certificate of Merit for Outstanding Planning Document.

Ocotillo Sol Project, San Diego Gas & Electric (SDG&E), Imperial County, CA

Senior Technical Reviewer. Corinne oversaw preparation of an Environmental Assessment, Findings of No Significant Impact (FONSI), and Decision Record (DR) for proposed geotechnical investigations for a 115-acre photovoltaic project.

Solar Due Diligence, OCI, San Diego County, CA

Project Manager. Corinne conducted an Independent Technical Review of due diligence documentation, Phase 1 ESAs, and geological/geotechnical review of three sites in San Diego, County (80 acres in Lew Lakeside, 190 acres in Potrero and 400 acres in Merrigan.) The constraints analyses included land use, biology, cultural, and water resource focuses.

Naval Base Coronado San Clemente Island ECM-I Project, Schneider Electric, San Clemente Island, CA

Project Manager. Corinne's team was responsible for the development of NEPA document Chapters 1 and 2. To help achieve these goals on San Clemente Island, Schneider Electric proposed to achieve 50-60% Net Zero Energy which included between 400 and 1,400 kilowatt (kW) of solar photovoltaics (PV), between 1.2 and 2.7 megawatts (MW) of additional wind power, 1.5 - 4 megawatt hour (MWh) of energy storage, as well as microgrid and "Green Light" technology demand reduction measures.

CHAMBERS GROUP

Meghan Gibson

Environmental Planning and CEQA Documentation

Education

MPP, Public Policy, Environmental Policy, University of Southern California, 2013
BS, Environmental Management, University of Redlands, 2009

Training

AEP Advanced CEQA Workshop, February 2020
NEPA Advanced Workshop October 2019

Affiliations

Association of Environmental Professionals, Los Angeles Chapter President 2018-present
Association of Environmental Professionals, Los Angeles Chapter Vice President of Membership, 2018
Association of Environmental Professionals, Los Angeles Chapter Secretary, 2017
Women of Renewable Industries and Sustainable Energy

Professional Experience

Meghan Gibson has more than 12 years of experience providing environmental documentation, environmental planning, and policy services to public and private clients. She has experience managing both large- and small-scale projects that involved CEQA and NEPA documents. She is responsible for preparing CEQA documentation, including Initial Studies (ISs), Mitigated Negative Declarations (MNDs), and Environmental Impact Reports (EIRs.) In addition to her CEQA experience, Meghan has prepared multiple joint CEQA/NEPA documents, again, for both public and private clients. She also has extensive experience managing both large- and small-scale projects, preparing mitigation monitoring summary reports and compiling information from both survey and monitoring data. Meghan has multiple years of experience providing project management support to projects of various complexities throughout the western U.S.

Project Experience

Imperial Valley Solar Company 2 Project EIR, County of Imperial Planning Department, Imperial County, CA

Associate Environmental Planner. An EIR was prepared for the development of a 30-megawatt solar farm located on a 158.8-acre parcel of land. Project issues included air quality construction impacts and sensitive species impacts. Meghan assisted in the preparation of the EIR for the Project, including conducting background research and writing sections of the EIR. She also made revisions to the Draft EIR based on comments received during the public review period.

Valley Center Battery Storage, Terra-Gen Power, San Diego County, CA

Environmental Planner. Chambers Group Inc. is providing project development, environmental permitting, site surveys, preparation of technical studies, and impact analysis in compliance with CEQA for the Valley Center Storage Project, a battery energy storage project. The project involves construction and operation of a lithium-ion based battery energy storage facility capable of delivering up to 140 megawatts for up to 4 hours. The batteries will be charged from the CAISO (California Independent System Operator) grid via the adjacent San Diego Gas & Electric (SDG&E) 69kV Valley Center Substation, which the project will connect to via a 0.3-mile underground generation tie-line. Energy stored in the project will be discharged back into the grid when the energy is needed, providing essential electricity reliability services to the local area.

Renewable Energy and Transmission Element Update and Programmatic EIR, County of Imperial, Imperial County, CA

Staff Environmental Planner. Meghan assisted with the update the Geothermal Alternative Energy and Transmission Element of the Imperial County General Plan and preparation of the corresponding PEIR. She also assisted in the preparation of the EIR identifying potential impacts associated with future development of renewable energy in Imperial County based on the General Plan Element update. The PEIR won the AEP San Diego Chapter award for Outstanding Environmental Analysis Document EIR/EIS, and the Element Update and Implementation Ordinance received a Certificate of Merit for Outstanding Planning Document.

AT&T Hwy 127 Project, Forkert Engineering and Surveying, Inc. and AT&T, Baker, San Bernardino County, CA

Staff Environmental Planner. Meghan is assisting in the preparation of the EA/IS/MND for fiber-optic cable installation activities from the unincorporated community of Baker, California, to Cell Site 9 at the United States (U.S.) Army National Training Center (NTC) at Fort Irwin. Environmental review included technical analysis for air quality, biological resources, cultural resources, noise, and a jurisdictional delineation.

AT&T Fiber-Optic Cable Replacement Project, Halloran Summit to Slash X Regeneration Station, CEQA and NEPA Compliance, AT&T, San Bernardino, CA

Staff Environmental Planner. Meghan assisted in the preparation of the EA/IS/MND for the maintenance/replacement of an approximately 88-mile portion of AT&T's fiber-optic cable route. Environmental review included technical analysis for air quality, biological resources, cultural resources, noise, and a jurisdictional delineation.

Wood to Steel Pole Replacement Tie Line 637, CEQA Compliance, SDG&E, San Diego, San Diego County, CA

Deputy Project Manager. Meghan supported the effort to replace 156 transmission lines along a 13-mile stretch from Creelman Substation to Santa Ysabel Substation through preparation of the pre-construction CEQA Checklist for compliance, including incorporating technical reports. In addition, Meghan co-authored sections of a Proponent's Environmental Assessment (PEA) including Hydrology, Land Use, Transportation and Traffic, and Recreation. The PEA document was then submitted to the California Public Utilities Commission (CPUC) as part of an application for a Certificate of Public Convenience and Necessity (CPCN). SDG&E's Tie Line 637 project involved the replacement of 156 transmission, distribution, interest, and stub poles with steel tubular poles along the 13 mile linear project route.

Wood to Steel Pole Replacement Tie Line 649, CEQA Compliance, SDG&E, San Diego County, CA

Associate Environmental Planner. Meghan prepared the pre-construction CEQA checklist in order to support the effort to replace wood poles along a 12-mile expanse of tie line 649 from the existing Otay Substation to the existing San Ysidro Substation, Otay Lake Substation, and Border Substation.

Wood to Steel Pole Replacement Tie Line 685, CEQA Compliance, SDG&E, San Diego County, CA

Associate Environmental Planner. Meghan supported the effort to replace 156 transmission lines with 107 new light duty direct-embedded weatherized steel poles, four new heavy duty direct embedded weatherized steel poles, and 42 micropile foundation poles, including access only to one existing steel pole and the removal of two poles on tie line 685 from the Warner Substation to the Santa Ysabel Substation by preparing the pre-construction CEQA checklist.

Big Horn Sheep Mitigation, NEPA Compliance, SDG&E, San Diego, San Diego County, CA

Project Environmental Planner. Meghan assisted with the preparation of an Environmental Assessment for the invasive species vegetation management in portions of Myer Creek and Devils Canyon Creek to satisfy the Peninsular bighorn sheep (Ovis canadensis nelsoni; PBS) mitigation requirements for the Sunrise Powerlink (SRPL) Project. The writing of the EA includes incorporation of technical studies including a Biological Technical Report, an Archaeological Survey Report, and a Historical Resources Compliance Report.

CHAMBERS GROUP

Eunice Bagwan

Environmental Planning and CEQA Documentation

Education

MS, Environmental Management and Planning, Johns Hopkins University, Baltimore, MD 2015
BS, Environmental and Occupational Health and Safety, California State University, Northridge, CA 2011

Training

NEPA Basics – Fundamentals:2018
Advanced CEQA Essentials: 2019
SCE's EDGE Program Safety First Workshop 2016

Affiliations

Association of Environmental Professionals: Inland Empire Vice President of Membership
Conservation Steward: North Etiwanda Preserve

Professional Experience

Eunice Bagwan has a background in CEQA and NEPA environmental impact assessments as well as technical writing and editing. She has assisted with the preparation, writing, and editing environmental documents, such as IS/MNDs, Categorical Exemptions, EIRs and safety related documents such as job hazard safety forms and safety plans. Eunice has also managed and co-managed various projects as a Deputy Project Manager and Project Manager.

Project Experience

County of Imperial Geothermal & Alternative Energy Element, CA

Environmental Planner. Eunice assisted with the update the Geothermal Alternative Energy and Transmission Element of the Imperial County General Plan and preparation of the corresponding PEIR. She also assisted in the preparation of the EIR identifying potential impacts associated with future development of renewable energy in Imperial County based on the General Plan Element update. The PEIR won the AEP San Diego Chapter award for Outstanding Environmental Analysis Document EIR/EIS, and the Element Update and Implementation Ordinance received a Certificate of Merit for Outstanding Planning Document.

Orni 5 Truckhaven Geothermal Exploratory Wells EA/MND, Ormat Technologies, Inc., Imperial County, CA

Environmental Planner. Chambers Group contracted with Imperial County to prepare an IS/MND for the Orni 5 Truckhaven Geothermal Exploratory Wells Project in accordance with CEQA. Portions of the Project are located on land managed by the U.S. Bureau of Land Management (BLM); therefore, there is a federal nexus for the Project. Chambers Group is also contracted through Ormat Technologies, Inc. to prepare the NEPA document (Environmental Assessment) for the Project.

Heber I Repower Project, Ormat Technologies, Inc., Heber, Imperial County, CA

Environmental Planner. Chambers Group prepared the CUP Amendment Application to expand the Heber 1 geothermal facility. The CUP Amendment Application package includes an IS, a Reclamation Plan, Water Quality Management Plan, and technical studies for Biological Resources, Cultural Resources, Paleontological Resources, Geology and Soils, Air Quality, Hazards, Noise, Traffic, and Visual Resources.

Vidal Energy IS, San Bernardino County, CA

Environmental Planner. Chambers Group is preparing the Vidal Energy Project IS for a proposed 1,220 acre photovoltaic (PV) and battery energy storage system facility (BESS) to generate renewable energy in Vidal in San Bernardino County.

Hale Engineering, Onyx Dust Control Plan, El Centro, CA

Project Manager. The client proposes the development of solar panels on vacant lands located in the City of El Centro in Imperial County. Eunice managed and developed a dust control plan for the proposed solar project in order to mitigate any potential dust and airborne emissions that may arise during project construction and operation.

San Onofre Nuclear Generation Station Environmental Management and Compliance during Decommissioning General Contractor, SONGS Decommissioning Solutions (SDS), Southern California Edison and San Diego Gas & Electric (SDG&E), San Onofre, San Diego County, CA

Planner. SONGS Units 2 and 3 occupy approximately 52.8 acres of SCE's 83.63-acre easement from the U.S. Government. The principal structures consist of two pressurized water reactors with containment structures, turbine buildings, auxiliary buildings, an administrative building, a training building, and cooling system intake and discharge structures. The power block for both units and the site switchyard cover 27.7 acres, with the remaining 25.1 acres for parking, access, and miscellaneous structures. In June 2013, SCE submitted a Certification of Permanent Cessation of Power Operations to the Nuclear Regulatory Commission (NRC), certifying that the company has permanently ceased power operations of SONGS Units 2 and 3. The notification triggered SCE to prepare for the decommissioning process as defined by the NRC. As part of the Decommissioning General Contractor environmental team, the team has assisted with environmental permitting and compliance strategies, submittals, representation with the Community Engagement Panel, and key CEQA and NEPA related documents.

Emergency Storm Projects – Preliminary Environment Studies, Los Angeles County Public Works, Various Sites in Los Angeles County, CA

Assistant Environmental Planner. Eunice supported the Project Manager in the development and delivery of a Preliminary Environment Study (PES) for nine sites as per Caltrans District 7 requirements including mapping out potential hazardous sites nearby the project locations. The PES included project information, a project description complete with a Purpose and Need statement, location maps, photographs, a Visual Impact Assessment, an Envirostor Map, a Geotracker Map and a FEMA/Floodplain Map.

Grayback Wind Project, Critical Issues Assessment and Site Characterization Study, RES Americas., Throckmorton and Haskell County, TX

Assistant Planner. Chambers Group was responsible for conducting a Critical Issues Assessment and Site Characterization Study for a proposed renewable energy site located within Throckmorton County and Haskell County in the state of Texas. Eunice assisted the Project Manager in drafting the Critical Issues Assessment such as conducting a desktop research on locations on possible impacted structures. Eunice also completed the safety forms and risk assessment forms to be used during the site visit.

Tehachapi Renewable Transmission Project (TRTP) Segment 8 Chino Underground, Document control and surveys, Taihan Electric USA, Chino Hills, San Bernardino County CA

Assistant Environmental Planner. Chambers Group was retained by Taihan Electric and Daewoo International to provide safety and environmental support for Southern California Edison's TRTP project, specific to Segment 8 located in Chino Hills. The project includes the addition of new and upgraded transmission infrastructure in order to deliver electricity from new wind farms in the Tehachapi area to SCE customers and the California transmission grid. Eunice assisted the Project Manager in drafting an Environmental Compliance Plan specific to Segment 8. In addition, she drafted safety related forms including a Job Hazard Analysis, Safety Inspection Checklist, Safety Violation, Incident Report, and a Disciplinary Action form.

AT&T Hwy 127 EA, EIR/EA, Forkert Engineering & Surveying, Inc. Baker, San Bernardino County, CA

Assistant Environmental Planner. The Hwy 127 project consists of plans to build a fiber optic cable to provide additional bandwidth support at the National Training Center in Fort Irwin. Eunice assisted the Project Manager in preparing the land use applications to be delivered to the San Bernardino County. Additional duties include researching landowner and parcel information, providing project and biological summaries, drafting responses to the land use application questionnaire, and drafting cultural and biological summaries for Fort Irwin.

CHAMBERS GROUP

Elizabeth Fortin

Environmental Planning and CEQA Documentation

Education

BA, Environmental Biology, Columbia University, 2015

Training

CEQA Essentials: 2019

CEQA Advanced: 2020

Affiliations

Association of Environmental Professionals San Diego: Co-Vice President of Programs

Professional Experience

Elizabeth Fortin is a highly resourceful Environmental Planner experienced in both CEQA and NEPA compliance. She has experience working on a broad range of complex and highly controversial environmental issues with an emphasis in natural resource management and regulatory compliance in the private and public sectors.

Project Experience

Valley Center Battery Storage, Terra-Gen Power, San Diego County, CA

Environmental Planner. Chambers Group Inc. is providing project development, environmental permitting, site surveys, preparation of technical studies, and impact analysis in compliance with CEQA for the Valley Center Storage Project, a battery energy storage project. The project involves construction and operation of a lithium-ion based battery energy storage facility capable of delivering up to 140 megawatts for up to 4 hours. The batteries will be charged from the CAISO (California Independent System Operator) grid via the adjacent San Diego Gas & Electric (SDG&E) 69kV Valley Center Substation, which the project will connect to via a 0.3-mile underground generation tie-line. Energy stored in the project will be discharged back into the grid when the energy is needed, providing essential electricity reliability services to the local area.

Orni 5 Truckhaven Geothermal Exploratory Wells EA/MND, Ormat Technologies, Inc., Imperial County, CA

Assistant Environmental Planner. Chambers Group contracted with Imperial County to prepare an IS/MND for the Orni 5 Truckhaven Geothermal Exploratory Wells Project in accordance with CEQA. Portions of the Project are located on land managed by the U.S. Bureau of Land Management; therefore, there is a federal nexus for the Project. Chambers Group is also contracted through Ormat Technologies, Inc. to prepare the NEPA document (Environmental Assessment) for the Project. Elizabeth assisted in preparation of the IS/MND, MMRP, and Draft EA with associated notices, as well as producing deliverables specific to the BLM such as the Conservation and Management Action table. The project requires coordination between the County of Imperial, California State Lands Commission, California State Parks, the BLM, and the project proponent, Ormat Technologies, Inc.

Brawley Solar Project, Ormat Nevada, Inc., Imperial County, CA

Environmental Planner. Chambers Group is providing CEQA services for development and submittal of a CUP, and all supplemental and supporting documents as required by Imperial County for a proposed solar and storage project just north of Brawley, California. All of the proposed Project parcels are currently zoned General Agriculture (A-2-G), thus in accordance with the County's Zoning Ordinance, development of the Project requires a CUP. The solar site is within private property, wholly owned by ORNI 29 LLC, a subsidiary of Ormat.

Vidal Energy IS, San Bernardino County, CA

Environmental Planner. Chambers Group is preparing the Vidal Energy Project IS for a proposed 1,220 acre photovoltaic (PV) and battery energy storage system facility (BESS) to generate renewable energy in Vidal in San Bernardino County.

Heber 1 Repower Project, Ormat Technologies, Inc., Heber, Imperial County, CA

Assistant Environmental Planner. Elizabeth assisted with preparation of the CUP Amendment Application to expand the Heber 1 geothermal facility. The CUP Amendment Application package includes an IS, a Reclamation Plan, Water Quality Management Plan, and technical studies for Biological Resources, Cultural Resources, Paleontological Resources, Geology and Soils, Air Quality, Hazards, Noise, Traffic, and Visual Resources.

Superior Avenue Pedestrian and Bike Bridge and Parking Lot, City of Newport Beach, Orange County, CA

Assistant Environmental Planner. Elizabeth assisted in the preparation of an IS/MND for the Superior Avenue Pedestrian and Bicycle Bridge and Parking Lot project. The entire project site is located within the boundary of the coastal zone as established by the California Coastal Act and is therefore under the land use planning and regulatory jurisdiction not only of local government agencies, but also the California Coastal Commission. The project required consideration of two architectural design options, application for a Coastal Development Permit, as well as completion of a Visual Assessment, a Hazards Assessment, a Jurisdictional Delineation under Section 404 of the Clear Water Act, a NEPA categorical exclusion, a Biological Technical Report, and various documents for the California Department of Transportation.

Park Master Plan CEQA Review, City of La Puente, Los Angeles County, CA

Assistant Environmental Planner. The City of La Puente prepared a Draft Park Master Plan in 2018 that included a site analysis and inventory of facilities and services for areas throughout the City. Improvements to the 27-acre La Peunte Park were prioritized, which includes a splash pad area, themed playground, skate park area, basketball courts, fitness pathway, fitness area, amphitheater, fitness building, restroom enhancements, sewer improvements, football fields, softball fields, soccer fields, and event pavilions. Elizabeth assisted in the preparation of the IS/MND for compliance with CEQA.

Blue Jay Well IS/MND, Tidewater Inc., Blue Jay, Lake Arrowhead Community Service District (LACSD), San Bernardino County, CA

Assistant Environmental Planner. Elizabeth is aiding in the preparation of an IS/MND and review of associated technical reports. The project involves development of a production well located at a vacant lot adjacent to the LACSD's offices in Blue Jay, California. The well would further utilize existing groundwater resources to supplement the service district's water supply obligations to the Lake Arrowhead community. The project requires permitting through the County of San Bernardino, service district, and State Water Resources Control Board.

San Onofre Nuclear Generating Station Environmental Management and Compliance during Decommissioning, SONGS Decommissioning Solutions, Southern California Edison and SDG&E, San Onofre, San Diego County, CA

Assistant Environmental Planner. SONGS Units 2 and 3 occupy approximately 52.8 acres of SCE's 83.63-acre easement from the U.S. Government. The principal structures consist of two pressurized water reactors with containment structures, turbine buildings, auxiliary buildings, an administrative building, a training building, and cooling system intake and discharge structures. The power block for both units and the site switchyard cover 27.7 acres, with the remaining 25.1 acres for parking, access, and miscellaneous structures. In June 2013, SCE submitted a Certification of Permanent Cessation of Power Operations to the Nuclear Regulatory Commission (NRC), certifying that the company has permanently ceased power operations of SONGS Units 2 and 3. The notification triggered SCE to prepare for the decommissioning process as defined by the NRC. As part of the Decommissioning General Contractor environmental team, Elizabeth has assisted with CEQA documents

Big Horn Sheep Mitigation, NEPA Compliance, SDG&E, San Diego, San Diego County, CA

Assistant Environmental Planner. Elizabeth assisted with the preparation of an Environmental Assessment (EA) for the invasive species vegetation management in portions of Myer Creek and Devils Canyon Creek to satisfy the Peninsular bighorn sheep (Ovis canadensis nelsoni; PBS) mitigation requirements for the Sunrise Powerlink (SRPL) Project. The writing of the EA includes incorporation of technical studies including a Biological Technical Report, an Archaeological Survey Report, and a Historical Resources Compliance Report. The project required coordination between BLM and SDG&E.

Paul Morrissey

Biological Resources

Education

MS, Biology, California State University, Dominguez Hills, 2005
BS, Biology, California State University, Dominguez Hills, 2001

Certifications

USFWS Permit, #TE182550-1, CDFW Scientific Collector's Permit, #SC-008151
USACE, Wetland Training Institute, Wetland Delineator Certification
Desert Tortoise Surveying Techniques Workshop, Desert Tortoise Council, qualified desert tortoise biologist
CDFW authorized to take, possess, and transport flat-tailed horned lizards, 2007
Marvin M. Black Excellence in Partnering Award for the San Gabriel River Project
Southwestern Willow Flycatcher Workshop, Southern Sierra Research Station; Basic Tracking, Earth Skills
Electrofishing and Fish Handling Techniques

Professional Experience

Paul Morrissey has more than 15 years of experience participating in and conducting terrestrial and aquatic/marine studies, with a comprehensive background in both collecting data and performing biological monitoring surveys. He is an experienced biologist, field manager, and project manager. He has coordinated with state and federal agencies to develop and implement effective mitigation and monitoring plans for listed and sensitive species and to ensure compliance with state and federal laws. Working on and managing complex linear projects such as the Pacific Gas and Electric (PG&E) and San Diego Gas & Electric (SDG&E) power transmission line projects has made him familiar with the flora and wildlife species within Riverside, San Diego, and Imperial counties. He has conducted wetlands delineations pursuant to Section 404 of the CWA and riparian delineations pursuant to Section 1601/1603 of the CDFW Code. He has also prepared jurisdictional delineation reports and prepared permit applications for the U.S. Army Corps of Engineers (USACE), CDFW, and Regional Water Quality Control Board (RWQCB). He has performed agency consultations, prepared CDFW and Bureau of Land Management (BLM)/United States Fish and Wildlife Service (USFWS) permits for state and federal-listed species, and developed habitat mitigation monitoring plans and restoration plans for associated impacts. He has authored technical biological sections of PEAs and has negotiated mitigation measures with the CPUC to receive authorization of construction for utility tie line projects.

Paul has assisted in the designs of several projects to identify and minimize potential impacts. In fact, Paul earned Chambers Group the Marvin M. Black Award for partnering by the Associated Contractors of America for a stilling pool design and implementation which allowed the award-winning project to move forward.

Project Experience

Valley Center Battery Storage, Terra-Gen Power, San Diego County, CA

Lead Biologist. Chambers Group Inc. is providing project development, environmental permitting, site surveys, preparation of technical studies, and impact analysis in compliance with CEQA for the Valley Center Storage Project, a battery energy storage project. The project involves construction and operation of a lithium-ion based battery energy storage facility capable of delivering up to 140 megawatts for up to 4 hours. The batteries will be charged from the CAISO (California Independent System Operator) grid via the adjacent SDG&E 69kV Valley Center Substation, which the project will connect to via a 0.3-mile underground generation tie-line. Energy stored in the project will be discharged back into the grid when the energy is needed, providing essential electricity reliability services to the local area.

Brawley Solar Project, Ormat Nevada, Inc., Imperial County, CA

Lead Biologist. Chambers Group is providing CEQA services for development and submittal of a CUP, and all supplemental and supporting documents as required by Imperial County for a proposed solar and storage project just north of Brawley, California. All of the proposed Project parcels are currently zoned General Agriculture (A-2-G), thus in accordance with the County's Zoning Ordinance, development of the Project requires a CUP. The solar site is within private property, wholly owned by ORNI 29 LLC, a subsidiary of Ormat.

Vidal Energy IS, San Bernardino County, CA

Lead Biologist. Chambers Group is preparing the Vidal Energy Project IS for a proposed 1,220 acre photovoltaic (PV) and battery energy storage system facility (BESS) to generate renewable energy in Vidal in San Bernardino County.

Heber I Repower Project, Ormat Nevada, Imperial County, CA

Lead Biologist. Heber Geothermal Company and Ormat Nevada, Inc. propose a Repower Project which will take the existing dual-flash steam turbine generator out of service and install two new two-level geothermal power generation units at the Heber 1. In addition, OEC-11 and OEC-13 will be reconfigured into a combined two-level unit, OEC-11 ITLU. The new and updated units operate by a different process and will perform better than the steam turbine generator at the current lower temperature of the geothermal fluid. Additional new equipment including storage tanks and an evacuation skid/vapor recovery maintenance unit (VRMU) will also be added to the facility. Paul coordinated the biological and jurisdictional waters assessment studies and report. No sensitive resources were found on site.

Willey Reservoir Embankment Stabilization Project, Imperial Irrigation District, Imperial, CA

Biological Services Project Manager. Chambers Group prepared an IS/MND and associated technical studies for the project; additionally, Chambers Group prepared the 401, 404 permit application and 1602 notification letter. The project involves the stabilization of 525 linear feet of the embankment separating the New River from Willey Reservoir.

Centinela and ISEC Solar Restoration Project, Restoration Monitoring, SDG&E, San Diego County, CA

Co-Program/Project Manager. Paul is co-program/project manager of a five-year restoration project consisting of construction of two tie-lines (TL), and deconstruction of one TL, monthly/quarterly/annual restoration monitoring, raven control plan (RCP) surveys, and bird and bat conservation strategy (BBCS) surveys for Centinela and ISEC Solar TLs. He has helped with the transition of scope from ICF, Ultrasystems, PAR, and incumbent contractors to restoration implementation and monitoring by Chambers Group. Restoration activities include success criteria monitoring, weed abatement, seeding, monitoring, and transect sampling. This project is located within flat-tailed horned lizard (FTHL). FTHL monitors are required for all activities. The RCP surveys are conducted monthly. The BBCS surveys are conducted along transects searching for bird carcasses over seven consecutive days each month. When a carcass is observed, a GPS location is recorded at the carcass for DISTANCE analysis (statistical analysis), and information regarding carcass condition are recorded per USFWS protocols (2011). In addition to surveys, Chambers Group is drafting an environmental assessment (EA), quarterly/annual reports, and BLM coordination on a monthly basis.

Sunrise Transmission Line Route, Siting Studies, SDG&E, Various Locations, San Diego County, CA

Field Biologist. Paul surveyed proposed routes in 2005/2006 to identify sensitive wildlife and plant species for future placement of electrical transmission lines. The survey covered approximately 50 miles of 500-kV transmission line corridor from the Imperial Valley Substation to a new substation (known as Central) in central San Diego County. The survey was at a reconnaissance level of detail. The project required identification of sensitive habitat and identified areas needing future focused surveys. In 2009/2010, he conducted environmental trainings for the SDG&E and surveyor teams. Paul led teams in the field to minimize impacts to sensitive resources. He was transported by helicopter to remote locations with SDG&E engineering and surveying teams to identify sensitive resources and offer solutions to minimize impacts to pole and helicopter pad locations for final design.

CHAMBERS GROUP

Richard Shultz,MA, RPA

Cultural Resources Archaeologist

Professional Summary

Education

MA, Cultural Resources Management, Sonoma State University

BA, Anthropology, San Diego State University

Registrations

Register of Professional Archaeologist, 15841

Affiliations

Society for California Archaeology

As a Principal Investigator and Senior Archaeologist, Richard Shultz has over 30 years of practical experience. Richard's experience emphasizes California planning, CEQA and NEPA, the National Historic Preservation Act, and associated orders and legislation. His education and experience that meets the Secretary of the Interior Standards for Archaeology and Historical Preservation. He has Documented and evaluated historical resources for local, State, and federal jurisdictions, leading to both local and federal agency, and SHPO, concurrence with a number of evaluations and recommendations for various buildings, sites, and objects. Richard has experience with the BLM, Bureau of Reclamation for projects associated with Western Area Power Administration and Sempra Energy, California State Water Resources Control Board and various national telecommunications companies, as well as for Federal Energy Regulatory Commission, U.S. Customs and Border Patrol, Department of Homeland Security, USACE, and Federal Aviation Administration.

Project Experience

Valley Center Battery Storage, Terra-Gen Power, San Diego County, CA

Cultural Resources. Chambers Group Inc. is providing project development, environmental permitting, site surveys, preparation of technical studies, and impact analysis in compliance with CEQA for the Valley Center Storage Project, a battery energy storage project. The project involves construction and operation of a lithium-ion based battery energy storage facility capable of delivering up to 140 megawatts for up to 4 hours. The batteries will be charged from the CAISO (California Independent System Operator) grid via the adjacent San Diego Gas & Electric (SDG&E) 69kV Valley Center Substation, which the project will connect to via a 0.3-mile underground generation tie-line. Energy stored in the project will be discharged back into the grid when the energy is needed, providing essential electricity reliability services to the local area.

Vidal Energy IS, San Bernardino County, CA

Cultural Resources. Chambers Group is preparing the Vidal Energy Project IS for a proposed 1,220 acre photovoltaic (PV) and battery energy storage system facility (BESS) to generate renewable energy in Vidal in San Bernardino County.

Brawley Solar Project, Ormat Nevada, Inc., Imperial County, CA

Cultural Resources. Chambers Group is providing CEQA services for development and submittal of a CUP, and all supplemental and supporting documents as required by Imperial County for a proposed solar and storage project just north of Brawley, California. All of the proposed Project parcels are currently zoned General Agriculture (A-2-G), thus in accordance with the County's Zoning Ordinance, development of the Project requires a CUP. The solar site is within private property, wholly owned by ORNI 29 LLC, a subsidiary of Ormat.

Chapman Solar Ranch Project, San Diego County, CA

Participated in the archaeological survey of the 135 acre project area. The project parcel would be impacted by construction of a solar generating facility, gen-tie components, and access roads. Assisted in identifying and recording cultural resources and isolated artifacts. Subsequent work included testing two historic-period archaeological deposits.

Analyzed artifacts, cross referencing type artifacts to derive date ranges of deposits, facilitating resource evaluation for inclusion on the California and National registers.

Cultural Resources Monitoring for the Goldmine Tap to Knob Wood Pole Replacement Project, Imperial County, CA

The Western Area Power Administration, Desert Southwest Region, replaced 161 wood pole structures along the Goldmine Tap to Knob transmission line in Imperial County located on private and BLM lands. As Principal Investigator, served as the primary archaeological monitor, established exclusion zones and limits of work areas around previously identified cultural resources, identified previously undocumented resources, relocated mis-mapped previously recorded trails, and provided cultural resources awareness education to line crews rotating into the project as needed.

CBP San Diego Primary Wall Replacement Restoration and Environmental Monitoring Project, San Diego, CA

As an environmental monitor, performed cultural resources monitoring during construction activities. Project involved plant and topsoil salvage, mechanical excavation, and a revegetation plan for an estimated 14 miles of existing primary border fence within the Roosevelt Reservation along the International Border. Utilized previous experience gathered during 2008 excavation program to coordinate with USACE means and methods to minimize adverse effects on cultural resources, particularly at Lichty Mesa – an intact, minimally disturbed trans-Holocene shell midden and archaeological deposit. Coordinated with Tribal Monitor during ground-disturbing activities occurring in the vicinity of previously recorded sites.

Lawson Valley Road Bridge Replacement Project, San Diego County, CA

Served as interim Principal Investigator on this Caltrans-sponsored bridge replacement project, where he prepared a Caltrans-approved data recovery plan as a response to findings during monitoring operations.

Cultural Resources Services for the San Diego Border Barrier Project, Border Field State Park, San Diego, CA

Served as co-Principal Investigator, and Field and Laboratory Director on the Border Field Border Fence project. Was responsible for managing up to 18 field and 4 laboratory archaeologists. Successfully negotiated the multifaceted aspects of this project through constant open dialogue between federal and state agency heads, project construction personnel, and concerned Native American monitors. Ensured analytical and data accuracy, supported senior Principal Investigators and authors, and coordinated maintenance and transfer of collections. Project identified numerous intact features, defined intact living surfaces, and added extensive radiocarbon data to the archaeological record. Project was undertaken by the U.S. Department of Homeland Security, which proposed to build a new secondary fence along the international border with Mexico. The Fort Worth US Army Corp of Engineers was responsible for overseeing environmental studies.

Group Job 809 Archaeological Data Recovery and Construction Monitoring, San Diego, CA

Performed as Field Director and Laboratory Director for preconstruction data recovery project at two large-area, highly sensitive, archaeological deposits in the urban area of La Jolla. The project required considerable coordination with construction crews, city engineers, local residents, Native American monitors, and offsite wet-screen staff. Excavation program resulted in identifying intact deposits from a site previously described as "destroyed" by Malcolm Rogers. Program also identified a previously undocumented buried deposit, and intact human remains. Conducted historical research at La Jolla Historical Society to identify landform history of the area. Authored geomorphology and unit soils descriptions, conducted laboratory analyses, and presented data to Society for California Archaeology and the San Diego County Archaeological Society.

CHAMBERS GROUP

Phillip Carlos

Geographic Information Systems | GIS Analyst

Education

BA, Geography, Sonoma State University, 2007

Professional Summary

Phillip Carlos has four years of experience in the GIS field. His GIS expertise includes aerial imagery analysis, spatial analyses of potential project impacts to biological resources, incorporating field-collected GPS data into GIS for report mapping and analysis, and natural resource mapping. He is familiar with industry data standards and cartographic requirements to produce figures and maps for reports. He is proficient in his use of Esri's ArcGIS 10.X software including Desktop, Server, ArcGIS Online, Collector, and Survey123. He has regularly been part of a multidisciplinary team and is experienced in working with public agencies and on projects involving interagency coordination.

Project Experience

Valley Center Battery Storage, Terra-Gen Power, San Diego County, CA

GIS Analyst. Chambers Group Inc. is providing project development, environmental permitting, site surveys, preparation of technical studies, and impact analysis in compliance with CEQA for the Valley Center Storage Project, a battery energy storage project. The project involves construction and operation of a lithium-ion based battery energy storage facility capable of delivering up to 140 megawatts for up to 4 hours. The batteries will be charged from the CAISO (California Independent System Operator) grid via the adjacent San Diego Gas & Electric (SDG&E) 69kV Valley Center Substation, which the project will connect to via a 0.3-mile underground generation tie-line. Energy stored in the project will be discharged back into the grid when the energy is needed, providing essential electricity reliability services to the local area.

Orni 5 Truckhaven Geothermal Exploratory Wells EA/MND, Ormat Technologies, Inc., Imperial County, CA

GIS Analyst. Chambers Group contracted with Imperial County to prepare an IS/MND for the Orni 5 Truckhaven Geothermal Exploratory Wells Project in accordance with CEQA. Portions of the Project are located on land managed by BLM; therefore, there is a federal nexus for the Project. Chambers Group is also contracted through Ormat Technologies, Inc. to prepare the NEPA document (Environmental Assessment) for the Project.

Heber I Repower Project IS/MND, County of Imperial, CA

GIS Analyst. Chambers Group scope includes the preparation and submittal of forms associated with an Imperial County CUP, preparation of technical studies, and document preparation and noticing in compliance with the California Environmental Quality Act.

Brawley Solar Project, Ormat Nevada, Inc., Imperial County, CA

GIS Analyst. Chambers Group is providing CEQA services for development and submittal of a CUP, and all supplemental and supporting documents as required by Imperial County for a proposed solar and storage project just north of Brawley, California. All of the proposed Project parcels are currently zoned General Agriculture (A-2-G), thus in accordance with the County's Zoning Ordinance, development of the Project requires a CUP. The solar site is within private property, wholly owned by ORNI 29 LLC, a subsidiary of Ormat.

Vidal Energy IS, San Bernardino County, CA

GIS Analyst. Chambers Group is preparing the Vidal Energy Project IS for a proposed 1,220 acre photovoltaic (PV) and battery energy storage system facility (BESS) to generate renewable energy in Vidal in San Bernardino County.

Desert Valley Monofill CEQA Technical Studies, Terraphase Engineering, Imperial County, CA

GIS Analyst. for the Phase II Evaluations for sites recorded during field surveys. Tasks include advising on the Phase II test design, client consultation, Native American coordination, and fieldwork.

CEQA-NEPA Compliance Services for Willey Reservoir Bank Stabilization Project, Imperial Irrigation District, San Diego County, CA

GIS Analyst. Managed GIS for the preparation of the IS/MND and associated technical studies for the project; additionally, Chambers Group prepared the 401, 404 permit application and 1602 notification letter. The project involves the stabilization of 525 linear feet of the embankment separating the New River from Willey Reservoir.

Potential Well Sites Investigation CEQA, Lake Arrowhead Community Services District, Tidewater Inc., San Bernardino County, CA

A draft IS was prepared to analyze the environmental impacts of the construction and operation of the wells in five locations within the District's service area. Recommendations were also provided to provide further analysis on impacts to biological resources, cultural resources, noise, and Tribal Cultural resources.

BSOA Otay Lakes Campground, Boy Scouts of America, San Diego County, CA

GIS Analyst. Chambers Group performed cultural resources technical study for the development of an EIR for a campground development in Otay Mesa. Conducted a desktop analysis, led archaeological survey, recorded new sites, and submitted DPR Site Forms, and prepared cultural resources report following CEQA and San Diego County guidelines.

Operations and Maintenance, Major Projects and Restoration Master Service Agreement, SDG&E, San Diego, CA

GIS Analyst. Chambers Group performs Environmental reviews and releases, record searches, cultural resource surveys and reporting, subsurface testing and construction monitoring to help meet project goals for this MSA. Phillip supports the team as a GIS Analyst.

Marblehead Coastal Development, SunCal Marblehead, LLC, San Clemente, Orange County, CA

GIS Analyst. Supported team with mapping for protocol-level focused surveys and nest monitoring for coastal California gnatcatcher during the breeding season. Mapped active coastal California gnatcatcher nests at various stages and the buffer/foraging area during vegetation removal in the vicinity.

Skookumchuck Wind Project and Eagle/Large Avian Use Studies, RES America Developments Inc, Lewis & Thurston Counties, WA

GIS Analyst. Phillip managed an Enterprise GIS system for this multi-disciplinary team in support of a proposed 100 mW wind energy in Washington state. Phillip managed our in-house web app viewer to view project data, planning and land use data among other pertinent data. This viewer allowed the project team to access project-related data from their desktops, or from mobile devices in the field, and allowed project design update changes to be streamlined immediately throughout the team. Phillip was also relied upon by the project team as a point-of-contact for a variety of site-specific concerns regarding access, site safety, among other project-related needs. 20898 RES Americas

Big Tujunga Dam and Reservoir Cleanout Project, Phase II, Monitoring, County of Los Angeles, Sunland, Los Angeles County, CA

GIS Analyst. Phillip managed GIS databases, and supported mapping of the revegetation enhancement of upland and riparian habitat in the 200-acre mitigation bank for LACDPW. The revegetation components of the master plan included the restoration of existing riparian habitat by removing exotic plant species and revegetating with native plant species.

CHAMBERS GROUP

Greg Tonkovich, AICP, INCE

Air, Noise, GHG, and Energy Analysis

Vista Environmental

Education

MS, Electrical Engineering, University of Southern California
BS, Planning and Development, University of Southern California

Certifications

American Institute of Certified Planners (AICP)
American Planning Association (APA)
Institute of Noise Control Engineering (INCE)
State of California General 'B' Contractors License

Training

Stays up to date with modeling techniques and regulations through continuing education courses

Professional Experience

Greg Tonkovich has over 15 years of environmental consulting experience and over 13 years of air quality and noise analysis experience. He specializes in air quality and noise impact analyses for governmental agencies and the business community and has completed numerous complex air and noise studies that conform to both CEQA and NEPA requirements.

Greg's air quality analysis experience includes global climate change analyses and health risk assessments. He is proficient in utilizing CalEEMod, URBEMIS2007, CALINE4, ISCST3, AERMOD, EMFAC2014, and OFFROAD2011 models, in order to quantify emissions impacts as well as to assess the efficacy of proposed mitigation.

Greg is also experienced in noise analyses and is proficient in utilizing FHWA Traffic Noise Model (TNM), FHWA Roadway Construction Noise Model (RCNM), FAA Integrated Noise Model (INM), and SoundPlan. In addition, he has created and implemented a noise program based on the FHWA Standard. Through the use of the above models he is able to efficiently determine noise impacts to nearby sensitive land uses and assess the efficacy of proposed mitigation.

He has successfully run an environmental consulting business for over nine years and has been responsible in managing costs, scheduling, and accounting. Greg has a proven record of preparing air quality and noise impact analyses to successful completion. During his 15 year career he has prepared more than 400 environmental documents with a 100 percent success rate. Greg is experienced in a wide range of project types, including: residential, commercial, industrial, and recreational projects as well as public projects that include specific plans and general plans. He has experience in preparing studies to specific standards and formats such as Caltrans Air Quality and Noise Study Reports and has completed air quality and/or noise analyses in over 150 different local jurisdictions throughout California.

Project Experience

Orni 5 Truckhaven Geothermal Exploratory Wells EA/MND, Ormat Technologies, Inc., Imperial County, CA

Prepared an Air Quality, Noise Analysis and GHG Emissions Impact Analysis. Chambers Group contracted with Imperial County to prepare an IS/MND for the Orni 5 Truckhaven Geothermal Exploratory Wells Project in accordance with CEQA. Portions of the Project are located on land managed by the U.S. Bureau of Land Management (BLM); therefore, there is a federal nexus for the Project. Chambers Group is also contracted through Ormat Technologies, Inc. to prepare the NEPA document (EA) for the Project.

Heber I Repower Project, Imperial County, CA, Imperial County, CA

Prepared the Noise Section of an Initial Study/Mitigated Negative Declaration (IS/MND) for Chambers Group that analyzed the upgrading of the Heber 1 geothermal facility with new equipment. The noise analysis utilized the FHWA RCNM model to calculate the noise levels from each phase of construction activities and utilized manufacturer noise specifications to analyze the operational noise levels from the new equipment. The noise analysis found that both construction and operational activities would result in less than significant impacts and no mitigation was required.

Salton City Landfill Expansion Project, Imperial County, CA

Prepared a Health Risk Assessment (HRA) and Local Air Concentrations Analysis that analyzed the expansion of the landfill from 50 tons of waste per day to 6,000 tons of waste per day. The HRA utilized OFFROAD2007 to calculate the emissions rates from the onsite equipment, EPA's AP42 emissions factors to calculate the emissions rates from the propane-powered generator, and the LANDGEM model to calculate the landfill gas emissions. The AERMOD was utilized to calculate the emissions concentrations at the nearby homes. No significant health risk impacts were found.

Blair Ranch Hay Processing Project, Imperial County, CA

Prepared a HRA and Local Air Concentrations Analysis that analyzed the development of a hay pressing facility near the City of Calipatria. The HRA utilized CalEEMod to calculate the emissions rates from the onsite equipment and EMFAC2014 to calculate the emissions rates from trucks. The AERMOD was utilized to calculate the emissions concentrations at the nearby homes. No significant health risk impacts were found.

Pacoima Spreading Grounds Improvement Project, Los Angeles County, CA

Prepared an Air Quality, Greenhouse Gas Emissions and Health Risk Assessment and Noise Impact Analysis for project that analyzed the removal of up to 1.6 million cubic yards of sediment and reconfiguration of the spreading grounds. The air quality analysis utilized the CalEEMod model to calculate the criteria pollutant and GHG emissions from construction of the proposed project, utilized the SCAQMD Look-Up Tables and AERMOD to calculate the local concentrations at the nearby homes, and the AERMOD model to calculate the DPM concentrations and associated cancer risks at the nearby homes. No significant construction or operational air quality, GHG, or health risks were found. The noise analysis utilized the FHWA's RCNM model to analyze the noise impacts from onsite construction activities and utilized the FHWA RD-77-108 model to analyze the noise impacts associated with the haul trucks on the roads to the sediment depository locations. No significant construction or operational noise or vibration impacts were found.

Highway 127 Baker to US Army National Training Center at Fort Irwin Project, San Bernardino County, CA

Prepared the Air Quality Section for an EIS for Chambers Group that analyzed the installation of approximately 12.25 miles of fiber optic cable that roughly parallels Highway 127 from Baker to the north. The air quality analysis utilized the CalEEMod model to calculate air emissions from each phase of construction activities and the results were compared to the MDAQMD thresholds of significance. The air quality analysis found that all analyzed criteria pollutants and greenhouse gas emissions were below both the MDAQMD thresholds and de minimis levels and no mitigation was required.

Surprise Valley Geothermal Project, Modoc County, CA

Principal. Greg prepared an air quality and global climate change analysis and noise impact analysis for the development of six exploratory wells located in Surprise Valley. The air quality analysis utilized URBEMIS2007 to analyze the project's regional criteria pollutant and GHG emissions. The air quality analysis found less than significant emissions during the construction of the proposed project and no operational emissions. The noise analysis utilized the FHWA RCNM model to calculate the noise levels from construction activities at the nearby homes. The noise analysis found that a significant construction noise impact would occur at the closest well to the nearby homes and provided mitigation that required the use of mufflers on all equipment as well as placement of storage containers between the well drilling activities and the nearest home.

Catherine H. Ellis, PE, GE

Geotechnical/Geology and Soils, Geologist Engineer **Haley & Aldridge**

Education

MBA, Haas School of Business, University of California, Berkeley, 2008
MS, Civil Engineering, California State University, San Jose, 2000
BS, Civil Engineering, University of the Pacific, 1995

Professional Registrations

1998/ CA: Professional Engineer (Reg. No. 58987)
2004/ CA: Geotechnical Engineer (Reg. No. 2650)
2009/ OR: Professional Engineer (Reg. No. 88073PE)

Professional Societies

American Society of Civil Engineers. San Francisco Section Past Director; Silicon Valley, Past President, 2009
American Society of Engineering Consultants (formerly CELSOC), Peninsula Chapter, Past President, 2007

Professional Experience

Catherine Ellis has more than 24 years of progressively challenging engineering experience. This experience includes working with owners, design teams, and construction teams to tailor engineering solutions to project and client needs. These services span providing design recommendations and construction support under the roles of geotechnical engineer-of-record and construction materials engineering and testing services. She is well versed in developing mitigation measures for liquefiable soils; soft, marine soils; undocumented fill sites; high groundwater conditions; and sites with bedrock transitions.

Project Experience

City of Mountain View Fire Station #5, Mountain View, CA

Senior Engineer provided design level support for the new fire station. The fire station is located within the former Crittenden Landfill. One of the key considerations of the design was to account for the impacts from the former landfill on the new building. Through detailed research of closure documents, review of historical aerial photographs, and a focused field investigation, team was able to define limits of the landfill and provide recommendations for a shallow foundation system.

City of San Jose Redevelopment Agency, On-Call Services, San Jose, CA

Senior Geotechnical Engineer led the geotechnical services provided to the City of San Jose's Redevelopment Agency for the on-call contract. Our services included providing geotechnical studies for redevelopment projects. Hurdles overcome as part of this contact include taking into consideration previous site use and it potential impacts to the proposed development including existing fill and the presence of old foundation elements. In its effort to support Green Building, team provided recommendations to the City to allow re-use of building materials such as recycled base rock as well as providing recommendations for pavers, permeable movement, and bioswales.

City of Palo Alto Reservoir, Pump Station, and Well at El Camino Park and Mayfield Pump Station, Palo Alto, CA

Senior Engineer and Project Manager for geotechnical services for the new 2.5 million gallon below grade reservoir, adjacent pump station, rehabilitation of existing wells, and development of new wells. These elements were the largest component of the $18 Million project package. One of the key project drivers was the groundwater elevation as it dictated the bottom elevation of the tank. Worked with the City and the design team to review historical and collect current data to best set the groundwater design level impacting construction approaches and costs.

City of Palo Alto Main Library & Mitchell Library, Palo Alto, CA

Project Manager which included construction of a new library and community center in the southeastern portion of the park for the Mitchell Branch library and expansion of the existing Main Library. The Mitchell Branch Library is two stories and covers an area of about 45,000 square feet. The Main Library expansion added about 2,800-square foot to the existing building and blended new construction with the existing building.

City of Menlo Park Emergency Water Supply and Pump Station, Menlo Park, CA

As the local discipline manager, directed the provision of geotechnical, environmental, and hydrogeological services for the critical project for the City of Menlo Park. The project included the design and construction of a pump station and below ground reservoir for use during emergencies. The site was a City park and was returned to service as a park following the installation of the below grade reservoir. Specific challenges included soft, compressible soils, a high groundwater table, and stability of the excavation during construction.

City of South San Francisco Wet Weather Program, South San Francisco, CA

Project Manager that oversaw the geotechnical investigation to perform subsurface exploration at the site of the sewer replacement. Scope of services included site reconnaissance, subsurface exploration, laboratory testing, engineering analysis, and report preparation. The improvements were separated into two major groups: The Airport Boulevard Relief Trunk and the Hillside Boulevard, Westborough Boulevard, Portola Avenue, and 1st Street Subtrunks. Also provided technical oversight during construction as the quality assurance engineer for the City.

Union Sanitary District, New Administration and Maintenance Buildings, Geotechnical Investigation and Report, Union City, CA

Senior Staff Engineer managing field investigations and providing geotechnical design recommendations for proposed developments over lying soft bay deposits and liquefiable soils. Site conditions included a high ground water table and associated issues. In addition, as Project Engineer, she was responsible for overseeing and providing geotechnical construction observation and testing services.

Zone 7 Flood Control and Water Conservation District, Alameda County, CA

Provided engineering support on a variety of project for the District including consultation, engineering recommendations, geotechnical design, modeling, observation and testing services. Her specific experience includes the District's projects for removal of debris and silt accumulation in channel beds, de-silting analysis for materials export, evaluation of slope stability of creek banks, upgrade of rock roadways at the top of banks, installation and monitoring of inclinometers for slope movement, and Arroyo De Laguna slope repairs and channel stabilization modeling.

Pacific Gas and Electric Gas Line Replacement, Gilroy, CA

Project Manager for the geotechnical investigation for the installation of a replacement gas line to be installed using horizontal directional drilling methods.

Thomas S. Tatnall, PG, GE

Geotechnical/Geology and Soils, Geologist Engineer **Haley & Aldridge**

Professional Experience

Education

BA, Geology, University of Northern Colorado, 1984

BS, Business Administration, University of Northern Colorado, 1984

Professional Registrations

1995/ CA: Registered Environmental Assessor (Reg. No. 6194)

1995/ CA: Certified Engineering Geologist (Reg. No. 1968)

1994/OR: (Reg. No. G1594)

1993/ CA: Registered Geologist (Reg. No. 5588)

Professional Societies

Association of Engineering Geologists

Tom Tatnall has over 25 years of professional experience as a geologist in geotechnical and environmental consulting on a variety of projects for municipalities, county agencies, land developers, oil company attorneys and financial institutions. He has extensive experience planning, conducting and supervising geotechnical and environmental soil and groundwater investigations and remedial actions. His environmental experience includes performing soil, soil gas and groundwater investigations of sites impacted with solvents, petroleum fuel hydrocarbons, methyl tert-butyl ether (MTBE), naphthalene, hexavalent chromium, arsenic and other heavy metals; development and management of Phase I assessments and Phase II investigations; groundwater monitoring programs; remedial excavation projects and implementation of other remediation systems, including multi-phase extraction systems; and performing monitored natural attenuation studies.

Project Experience

Pelican Hill Golf Club, Newport Beach, CA

Planned and conducted a large preliminary geotechnical site investigation for land development feasibility purposes. Studies included review of proposed grading plans, preliminary field and aerial photograph mapping of geologic conditions to design efficient subsurface investigation programs, compilation and interpretation of geologic data including geologic maps and cross-sections and evaluation of proposed grading with respect to potentially hazardous geologic conditions during and after development. Advised geotechnical engineers and design firm of potentially hazardous conditions and recommended design changes. Estimated remedial grading quantities and prepared remedial measures reports for client planning purposes.

City of Compton, Landfill Redevelopment Project, Compton, CA

Planned a geotechnical review of a 17-acre parcel previously used as a city dump. Reviewed existing investigation reports and aerial photographs of the site to determine the site's history and conducted literature reviews for a known potentially active fault running through part of the site. Developed fill thickness contour and physical constraint maps showing required building setbacks from the fault zone and the most suitable locations within the site for permanent buildings and improvements that could tolerate settlement.

Newport Coast Water Reservoirs, Irvine, CA

Lead Field Geologist and assistant project manager for siting evaluations of two multi-million-gallon water tanks. Planned and conducted geotechnical evaluations including downhole logging to collect data and interpret geologic conditions to evaluate slope stability conditions.

Pelican Hill Golf Course Lakes, Newport Beach, CA

Planned and conducted preliminary geotechnical investigations to evaluate proposed sites for golf course lakes. Prepared maps of select materials for mining and use as low permeability lining materials. Performed geologic mapping and review of remedial grading measures during construction and interacted with engineers, soil technicians, grading foremen, construction superintendents and county reviewers.

Newport Coast Roadways, Irvine, CA

Planned and conducted preliminary geotechnical investigations for main arterial roadways in the San Joaquin Hills. Studies included review of aerial photos, planning, and conducting field investigations, interpretation of geologic conditions and review of design grading plans. Worked with design engineers to revise slope design to reduce remedial grading measurers and determine final alignments of roadways.

San Joaquin Hills Road Extension, Newport Beach, CA

Planned and conducted forensic investigation to evaluate existing graded conditions. Performed downhole investigations and field mapping to evaluate existing 1.5:1 fill slopes and landslide removals for design grading and siting of extension alignment.

Portola Parkway Extension/Aliso Creek Channel Improvements, El Toro, CA

Planned and performed preliminary geotechnical investigation for a one-mile extension of roadway that included a bridge, channel lining improvements and a freeway overpass. Conducted trenching and borehole logging activities to identify poorly consolidated alluvial materials and manmade fills from mining activities throughout the canyon alignment. Interpreted geologic conditions and performed review of geologic conditions during mass grading. Reviewed and approved remedial grading activities and interacted with project engineers, grading foremen and county inspectors.

San Bernardino County Superintendent of Schools, Chino, CA

Program manager for soil investigation of school site, for an early education center for children with disabilities. Assessed impacts from pesticides and arsenic and prepared remedial action plan. Worked with DTSC Schools Program project managers to achieve No Further Action for the site.

Fontana Unified School District ES #29 Lineament Study, Fontana, CA

Planned and managed a study of potential fault identified on City's general plan for a proposed school site. Reviewed geologic conditions, supervised logging of a large fault trench and worked with California Geological Survey (CGS) and United States Geological Survey (USGS) staff to determine appropriate scope of work. Supervised trench logging activities and worked with USGS and CGS staff to estimate age of soils to determine there was no evidence for the potential fault. Prepared report for submittal and review by California Department of Education in order to obtain approval from the State for school site development.

Battery Manufacturing Site Redevelopment, Site Assessment and Remediation, Anaheim, CA

Program manager for soil, soil gas and groundwater assessment and corrective measures at a 22-acre automotive battery manufacturing facility to comply with the DTSC Tiered-Permitting Branch Resource Conservation and Recovery Act (RCRA) facility requirements. Developed site assessment programs to perform initial site investigation and then characterize lead, arsenic, polychlorinated biphenyl (PCB) and volatile organic compound (VOC) impacts discovered. Prepared assessment and corrective action work plans and reports of conditions for submittal to DTSC. Assisted with review of Corrective Action Consent Agreement, preparation Corrective Measures. Directed demolition oversight and remedial actions by soil excavation, soil vapor extraction and monitored natural attenuation of groundwater to achieved closure of the site from DTSC for redevelopment.

Orange County Sanitation District, Santa Ana River Interceptor Geologic Evaluation, CA

Planned, implemented, and managed geotechnical and environmental evaluation of proposed 5-mile long sewer line replacement along the Santa Ana River. Performed management of field program, mapped site, and interpreted data to define complex geologic conditions and delineate an active fault. Authored Geotechnical Data Report presenting geologic and environmental conditions for tunnel planning construction planning. Obtained permits for site work and managed logistics to drill in public and private right-of-way areas.

Robert K. Scott, PG, C.Hg., QISP

Phase 1 ESA, Senior Associate Hydrogeologist Haley & Aldridge

Education

MS, Pennsylvania State University, 1985
BS, Geological sciences, State University of New York, 1982

Registrations

2001/ CA: Certified Hydrogeologist (Reg. No. 734)
1992/ CA: Professional Geologist (Reg. No. 5334)
1995/ AZ: Professional Geologist (Reg. No. 29659)
1995/ AZ: UST Consultant (Reg. No. 1218)
2016/CA: Qualified Industrial Stormwater Practitioner

Professional Experience

Robert Scott's is a California-Professional Geologist (PG) and Certified Hydrogeologist (CHg) who has managed and completed a diverse range of environmental projects in San Diego, northern and southern California, Arizona, Nevada, Guam and Baja California, Mexico for over 25 years. His expertise includes Phase I and II ESAs, environmental due diligence, preliminary endangerment assessments and removal action plans, remedial investigations and feasibility studies (RI/FS), soil, soil vapor, sediment and groundwater remediation, storm water compliance and management, IS/MNDs, EIRs specific to water resources and hazardous materials, groundwater availability and aquifer studies (hydrogeology), public outreach and expert witness services. He has successfully provided these services to clients in the following sectors: aerospace, manufacturing, mining, education, power, real estate and hospitality, and municipal and other governmental agencies.

Project Experience

BrightSource Energy, Inc., Rio Mesa Solar Energy Generating Facility, near Palo Verde, CA

Hydrogeology/Water Resources Lead for the permitting of this solar project with the California Energy Commission (CEC) and BLM. Prepared a groundwater availability study and managed field program to complete a well survey on site. Prep that included sampling of two site wells installed as part of the SunDesert Project in the 1970s. Groundwater samples were analyzed to evaluate groundwater quality for potential water supply and to identify engineering design requirements. The data obtained was used in support of the Water Resources section of the Application for Certification (AFC). The AFC met the requirements of the NEPA and CEQA.

Tessera Solar LLC, Imperial Valley Solar, Plaster City, CA

Groundwater Expert who addressed water supply data requests for the AFC and supplemental filings made to the California Energy Commission. A groundwater availability study was conducted that involved siting and installing a test well to a depth of 300 feet to identify the quantity and quality of water at the site for potential use during construction and operation. Because quality and quantity were not adequate for the project, and alternative water supply was needed. A nearby off-site well was considered for temporary water supply. Aquifer testing and evaluations of drawdown demonstrated that the use of water from this well would not result in significant impacts to neighboring wells and water quality in an USEPA-designated Sole Source Aquifer. Although the CEC concurred, it concluded that any groundwater extraction would be a significant impact to the sole source aquifer. In addition, wells were installed for baseline monitoring associated with evaporation ponds to be constructed at the facility to comply with CCR Title 27.

Tessera LLC, Calico Site, west of Ludlow, CA

Groundwater Expert for the permitting of this facility with the CEC and BLM. An initial groundwater availability study was conducted for the project in a basin where there was limited groundwater knowledge in the Mojave Desert of San Bernardino County and an adjoining basin. The team conducted a groundwater exploration program through drilling of a series of wells up to a depth of 1,150 feet. The boreholes were geophysically logged to identify potential water-bearing zones. Aquifer testing of the wells was

conducted. A potential supply well in an adjacent basin was also tested to identify whether there was sufficient water available for the project and to evaluate whether there would be a significant impact to other nearby water users or the environment. This information supported supplemental filings and data requests of the CEC and interveners. He appeared at public and evidentiary hearings and was cross examined by the CEC and interveners. He also prepared and implemented plans to meet the conditions of certification issued by the CEC.

SJS 1&2 Hybrid Solar Facility, Coalinga, CA

Groundwater and Hazardous Waste lead for the AFC for this proposed hybrid power generating facility and assisted in preparation of the AFC. This included addressing various data requests by CEC and interveners related to groundwater availability and supply from an on-site water well. A Phase I ESA was also completed for the site that identified several recognized environmental conditions associated with the past property use for agriculture and oil extraction. Work plans were prepared on an accelerated schedule for Phase II assessment that required close collaboration with the CEC and DTSC to obtain concurrence on remedial actions that would be necessary to protect worker health and safety. He served as the expert in public hearings related to water supply and hazardous materials.

Ausra, Carrizo Energy Solar Field, Carrizo Plain, CA

Groundwater/Hydrogeology Expert responsible for addressing the availability and quality of groundwater beneath the site and potential effects its water use might have on surrounding property owners. CEC data requests were addressed, and hearings were attended with interveners to demonstrate that the water use at the site would not affect the neighboring properties. A hydrogeology report was prepared that included modeling by a third-party expert to justify our conclusions.

Kinder Morgan, CalNev Pipeline, San Bernardino County, CA and Clark County, NV

Prepared a groundwater monitoring plan for groundwater use associated with the construction of a proposed pipeline corridor from San Bernardino to Las Vegas traversing San Bernardino County and the Mojave Desert. Identified the locations of potential water supply wells and the aquifer characteristics for the basins traversed by the pipeline corridor.

San Onofre Nuclear Generating Station (SONGS), SDG&E, San Diego County, CA

As part of the decommissioning of this facility, SDG&E was responsible for redesigning its portion of a switch yard that was necessary to install a synchronous condenser as part of its energy transmission network. Services included characterizing soil to be excavated and exported from the site prior to construction to identify disposal and reuse alternatives. A Soil Management Plan (SMP) was prepared and implemented during construction.

NRG, El Segundo Power Generating Facility, El Segundo, CA

Professional Geologist in charge of developing a work plan and its implementation as due diligence for a property transaction. The project involved installing wells in multiple aquifers and soil sampling in areas of concern (AOC) identified during the Phase I ESA. Work was completed on an accelerated project schedule. Chemicals of concern (COCs) included petroleum hydrocarbons, volatile organic compounds (VOCs) and metals.

CHAMBERS GROUP

Nancy E. Gardiner, CPESC, QSD, QSP

Hydrology/Water Quality – Water Quality **Haley & Aldridge**

Education

MS, Hydrogeology, University of Wisconsin-Madison
BA, Geology, Smith College

Registrations

2008: Certified Professional in Erosion and Sediment Control (CPESC) (No. 4690)

2011: Qualified SWPPP Developer/Practitioner (QSD/P) (No. 21022)

2015: Qualified Industrial Stormwater Practitioner (QISP) and Trainer of Record (No. 38)

Professional Societies

California Stormwater Quality Association
Water Environment Federation

Professional Experience

Nancy Gardiner has 25 years of consulting experience in surface water quality, hydrology, and water resources projects. She has provided stormwater management; National Pollutant Discharge Elimination System (NPDES) permitting; watershed planning; water quality monitoring; groundwater investigations; and inspection, maintenance, and monitoring of best management practices. She has led multi-disciplinary teams to provide environmental compliance, CEQA analysis, and monitoring and research to develop new technical approaches to solving real-world problems. Nancy is a specialist in erosion and sediment control and has assisted clients with controlling discharges from construction sites and other disturbed land surfaces.

Project Experience

Water Quality Assessment, Trabuco Canyon Bridge Replacement Project, Orange County, CA

Nancy is currently on the Chambers Group, Inc. team preparing a Caltrans Water Quality Assessment for the replacement of Trabuco Canyon Bridge in eastern Orange County. The scope of work addresses the regulatory setting, affected environment, environmental consequences, and water quality impact avoidance/minimization measures for the replacement of the 2-lane bridge.

Statewide Stormwater Management, Monitoring, and Research and Development for the California Department of Transportation (Caltrans)

Nancy played a major role in one of the nation's landmark stormwater programs for over 18 years, beginning with development of a comprehensive litigation settlement agreement. She oversaw teams of colleagues and subconsultants to develop numerous technical documents and guidance manuals and conducted monitoring and research studies that advanced the state of the stormwater practice throughout the United States.

Stormwater Management Program for Confidential Aerospace Company, Southern CA

Nancy is the Program Manager for a comprehensive stormwater management program at a 2,500-acre site in Southern California covered under a complex individual National Pollutant Discharge Elimination System (NPDES) permit. Nancy is responsible for oversight of all field activities associated with stormwater permit implementation, including planning, water quality monitoring, and operating a state-of-the-art stormwater treatment system. After assuming management responsibilities for this program, Nancy implemented Lean tools to help the client thoughtfully examine their stormwater program, thereby increasing efficiency and saving them over $10,000. Recently, Nancy worked side-by-side with the client and their attorneys to prepare the Report of Waste Discharge for permit reissuance through 2025.

Stormwater Compliance Services for the Santa Clara Valley Transportation Authority, San Jose, CA

Nancy is the Technical Director for a stormwater compliance program at three bus maintenance facilities and a light rail facility. In this role, Nancy evaluates monitoring data, consults with the client on BMP selection, develops training programs, and

prepares Annual Reports. She also assists with the implementation of the Underground Vault General Permit for the management of water in subsurface electrical vaults.

Big Bear Lake Nutrient TMDL Watershed-Wide Monitoring for the Santa Ana Watershed Project Authority, San Bernardino County, CA

For this project, Nancy worked closely with the Regional Water Board and agency stakeholders to prepare a monitoring plan and quality assurance project plan (QAPP) for water quality monitoring in creeks draining into Big Bear Lake. The work established a long-term set of nutrient data needed to develop a TMDL for dry hydrologic conditions and assess progress in achieving phosphorous targets under the existing TMDL for wet hydrologic conditions.

Middle Santa Ana River Pathogen TMDL Monitoring for the Santa Ana Watershed Project Authority, Riverside and San Bernardino Counties, CA

Collaborating with municipal stakeholders and the Regional Water Board, Nancy directed a bacteria field monitoring program within the Middle Santa Ana River Watershed. She employed microbial source tracking methods to identify host organisms and identify sources. She also monitored the bacteria removal effectiveness of BMPs to help meet TMDL waste load allocations.

Lake Elsinore and Canyon Lake Nutrient TMDL Monitoring for the Santa Ana Watershed Project Authority, Riverside County, CA

As Project Manager for this nutrient TMDL, Nancy coordinated a large group of stakeholders to formulate a monitoring plan and stormwater sampling program that met the needs of these diverse participants (municipalities, water agency, wastewater authority). Her workplan and QAPP included innovative satellite imagery-based monitoring of algae and chlorophyll in the lakes to demonstrate progress toward attaining TMDL targets.

Southern California Edison – Cerritos Channel Relocation Project, Long Beach, CA

Nancy is currently the Construction Stormwater Compliance Lead and QSD for this project, which involves the relocation of electric power transmission lines across a major shipping channel within the Port of Long Beach. Nancy coordinates between Edison and the Port in meeting the requirements of both the Construction General Permit and the City of Long Beach MS4 permit, including making real-time recommendations for site improvements and stormwater BMPs to address potential water quality concerns.

Regional MS4 Management Program for Fresno Metropolitan Flood Control District, Fresno, CA

As project manager for the District's stormwater MS4 permit compliance program, Nancy managed and implemented a comprehensive area-wide Stormwater Management Plan, including conducting NPDES permit negotiations, developing a master stormwater model ordinance, supervising water quality monitoring, and developing guidance materials for industrial and construction activities throughout the Fresno-Clovis area.

San Diego Stormwater Copermittees MS4 Stormwater Monitoring Program, San Diego County, CA

Nancy managed the areawide MS4 stormwater quality monitoring program for 18 years on behalf of the City and County of San Diego and 19 municipal NPDES stormwater Copermittees. In addition, she assisted the City of San Diego in investigating non-stormwater discharges, including source tracking and follow-up investigations.

Hydromodification Management Plan (HMP) for the County of San Diego and San Diego County Copermittees, San Diego, CA

Nancy was responsible for developing and implementing San Diego County's HMP to address accelerated erosion from priority development projects. Required by the County's Areawide MS4 Permit, the HMP establishes a range of flow conditions over which post-development flows must be maintained as pre-development levels.

MS4 Compliance Staff Training Program for Riverside County Flood Control and Water Conservation District, Riverside, CA

Nancy prepared training materials and presented training covering the requirements of all three Riverside County MS4 permits, the general industrial stormwater permit, local ordinances, SWPPPs, and BMPs.

Christopher K. Jones, PG

Hydrology/Water Quality – Water Quality **Haley & Aldridge**

Education

MS, Geosciences, Western Michigan University

BS, Geology, State University of New York at Buffalo

Professional Registrations

NH: Professional Geologist (REG. NO. 843)
ID: Professional Geologist (REG. NO. PGL-1509)
PA: Professional Geologist (REG. NO. PG005212)

Professional Societies

National Groundwater Association, National Stone Sand and Gravel Association

Professional Experience

Chris Jones is a senior hydrogeologist with over 12 years of experience with hydrologic and hydraulics analyses for flood control dams, stormwater management plans, lined and un-lined impoundment design, infrastructure projects, and bank stabilization. In addition to surface water hydrology, Chris is experienced in hydrogeology applied to contaminant fate and transport, hydraulic containment, stormwater/wastewater infiltration, water resource development, groundwater capture, construction dewatering, and groundwater flow modeling to facilitate support of excavation design.

Chris also has expertise in data analysis and graphical presentation with GIS software, and groundwater modeling for landfills, waste containment projects, contaminant recovery wells, and integrating spatial data techniques with hydrologic and hydraulic modeling. His modeling experience includes finite-element modeling of infiltration and unsaturated flow with SEEP/W for the evaluation of seepage through impoundments or slopes for slope stability evaluations.

Project Experience

Confidential Client, San Bernardino, CA

As project hydrologist and surface water modeler, completed H&H study using (HEC-RAS) and Hydrologic Engineering Center Hydrologic Modeling System (HEC-HMS) to support repair recommendations for infrastructure traversing mountainous drainage area. Conducted site specific LiDAR survey with ground control, of the entire catchment contributing to the project area to accurately model the surface water hydraulics.

Seepage Mitigation Project, Confidential Power Client, Mid-Atlantic, USA

As lead hydrogeologist, Chris conducted hydrogeological site characterization in a phased approach to evaluate seepage of groundwater daylighting along adjacent riverbank. This characterization supported the subsequent evaluation of remedial options, leading to the selection of a remedy. He worked with several stakeholders to complete the design and subsequent construction of a monitoring well network, groundwater collection trench, and deep groundwater extraction wells.

Hydrogeological Site Characterization, Confidential Power Client, Mid-Atlantic, USA

As lead hydrogeologist, Chris designed, executed, and evaluated hydrogeological site characterization of large (>500 AC) CCR storage site. Characterization included evaluation of multiple hydrostratigraphic units and detailed evaluation of multi-media subsurface conditions. He completed design of temporary extraction wells, and monitoring well network, and conducted multiple pumping tests. Results of pumping test were used to calibrate a groundwater flow model to evaluate multiple remedial design alternatives.

Remedial Alternatives Feasibility Study, Confidential Power Client, Mid-Atlantic, USA

As lead hydrogeologist, Chris developed the initial conceptual site model and understanding of data gaps of CCR storage facility. He designed supplemental field investigation to assess deeps groundwater impacts and groundwater surface water interaction. Following the refined conceptual site model development, the project team

conducted a remedial alternative feasibility assessment and preliminary design and construction cost estimates for each alternative.

Floodplain Use Permit, Aggregate Mining Client, Maricopa County, AZ

As project hydrologist and surface water modeler, completed hydrology and hydraulics (H&H) study of pre and post mining conditions using Hydrologic Engineering Center River Analysis System (HEC-RAS) and conducted sediment transport modeling of study area using HEC-6T moveable boundary modeling software. Hydraulic modeling conducted to estimate head cut and tail cut conditions that could be expected to develop during a 100-YR flood event, in support of a floodplain use permit.

Copper Mine, Central AZ

As lead hydrologist and surface water modeler, Chris conducted preliminary HEC-HMS modeling to provide recommendations for long-term meteorological and hydrologic monitoring. He worked to maintain and validate precipitation and flow data collected over multiple years. The collected meteorological information was used to calibrate a site-specific rainfall run-off model to assess the efficacy of the current water management and conveyance system.

Data Gap Analysis, Confidential Client, Southwest, USA

As lead hydrogeologist, Chris reviewed existing data for legacy mining project, and CCR storage facilities. He worked with multiple stakeholders to design a field program to evaluate data gaps, following initial conceptual site model development. The site review and subsequent data gap study was prioritized based on potential receptors.

Slurry Wall Seepage Analysis, 350 Boylston Street, Boston, MA

As hydrogeologist and SEEP/W modeler, Chris completed seepage modeling with SEEP/W to aid design of concrete diaphragm wall in challenging ground conditions with basal instability. Modeling included transient analyses to evaluate multiple de-pressurization scenarios and a spatial impact analysis. Results aided development of construction dewatering requirements to prevent bottom of excavation instability.

H Street Construction Dewatering, Chula Vista, CA

As project hydrogeologist worked to develop a groundwater monitoring plan in response to a construction dewatering project. A monitoring plan and contingency remedy plan was developed to limit the hydraulic impacts on the site in response to the dewatering project.

Confidential Mining Client, Central USA

As lead hydrologist and surface water modeler, Chris conducted dam break analysis of a tailings and water impoundment. Dam break analyses and associated flood inundation mapping were completed using FLO-2D, to maximum flood elevations and flood wave arrival times. The information was used to develop two separate emergency action plans (EAP).

Lanes Creek Mine, Southeast ID

As lead hydrologist, conducted (H&H) analysis employing HydroCAD modeling software for the development of a stormwater management plan and subsequent design and construction of water management structures. Analysis focused on groundwater surface water interaction and, sizing detention areas and designing hydraulic structures to prevent run-off from the site to the nearby river during the design (100-year) precipitation event and annual snowmelt runoff. In addition to surface water control structures, passive groundwater interceptor trenches, and underdrains were also constructed to limit shallow groundwater from daylighting on the site.

CHAMBERS GROUP

Christopher Langham, PE, CFM

Hydrology/Water Quality – Water Quality **Haley & Aldridge**

Education

BS, Hydrology/Water Resources studies, University of Arizona, In Progress

BS, Aviation Business Administration, Embry-Riddle Aeronautical University, in progress

Professional Registrations

AZ: Professional Engineer (REG. NO. 49937)

Association of State Certified Floodplain Managers, ASFPM, NO. US-04-010162

Professional Societies

Pima County Flood Control District Advisory Committee, Committee Chairman

Arizona Floodplain Management Association So. AZ Regional Rep.

Racing the Sun / SARSEF – Team Mechanical Plan Reviewer

Professional Experience

Chris Langham is an engineer with over 20 years of experience in preparation and submittal of grading/development/ improvement plans for residential/commercial site design, production of construction documents, drainage maps, Floodplain Use Permits, SWPPPs, and presentation exhibits. He has prepared numerous hydrologic/hydraulic models for technical memorandums, master drainage studies, construction documents, FEMA MT-1 and MT-2 submittals – all maintained through approval. He will focus his time at Haley & Aldrich serving the Energy, Heavy Industry, and Mining markets. As a licensed professional engineer in the State of Arizona, and a Certified Floodplain Manager (CFM), Chris has built his career solving water-related and site design engineering problems. He is experienced in the preparation of preparation of technical reports and proposals, regulatory support of water resource projects, residential and commercial site grading, utility coordination, and business development activities.

Project Experience

City of Hurst, Chesapeake Energy, Tarrant County College Multi-Use Frac Pond, Tarrant County, TX

Duties included site reconnaissance, acquisition of topographic information and local drainage study research, spot elevation survey to define specific drainage areas, and existing infrastructure. An on-site drainage analysis for a multi-use pond was conducted. The multi-use pond serves as a water supply storage impoundment for fracturing operations necessary for natural gas drilling, storm water detention to provide downstream flood hazard mitigation, and an aesthetic amenity for the college campus. Services included pre-construction and post-construction hydrologic and hydraulic parameter development, StormNET (a version of EPA SWMM) modeling; preparation of the drainage report and exhibits; and coordination with the client and City of Hurst.

City of Tucson, Raytheon Technologies Facility, Pima County, AZ

Part of a team hired by Raytheon, a leader in defense and security, for numerous projects to prepare the site plan and construction documents for the development of various office and technology buildings within their campus. Duties on multiple projects included coordination of the site civil design with the architectural; coordination and/or preparation of the grading/site plans, demolition plans, horizontal control plans, and all hydrologic/hydraulic components related to the design and drainage report; and worked with the client through the submittal and bidding processes.

City of Irving, DART Light Rail Transit System Line Section I-3, Irving, TX

Chris worked as a sub-consultant to URS Engineering, provided hydrologic and hydraulic modeling services for the I-3 section of the DART light rail system as it crosses Belt Line Road, extends around the north end of DFW International Airport, and ends at Terminal A. Analyzed four floodplain crossings: Hackberry Creek – Tributary 3, Mud Springs Creek, Hackberry Creek, and Grapevine Creek. Using F.I.S. discharge data, prepared HEC-RAS models using updated topographic cross-sections to determine the approximate floodplain widths for design of the rail crossings. A Technical Memorandum and exhibits were produced, and the construction documents were prepared.

U.S. Forest Service, Madera Canyon Bridges, Madera Canyon, Pima County, AZ

Chris worked in conjunction with a local structural engineer to update and modify a plan-set for the proposed replacements for the existing bridge crossings numbers 4 and 5. This included using HEC-RAS modeling software for hydraulic analysis of the canyon with consideration of various bridge/culvert crossings to determine the most efficient and cost-effective measures. Tasks also included preparation of exhibits, drainage statement, and construction documents.

Pima County Development Services Department, Contract Drainage Review, Pima County, AZ

Chris reviewed formal drainage reports and platting documents for hydrologic/hydraulic analysis. Services included verification of conformance to local hydrologic design standards as well as best engineering practices, verification of design particulars including: sub-basin delineation, sub-basin parameters, routing modeling, detention/ retention calculations, roadway capacity calculations, storm-drain/culvert/ channel design, erosion protection calculations, scour analysis, lateral migration analysis, and the process of mitigation of riparian and pygmy owl zones.

Town of Marana, Contract Drainage Review, Pima County, AZ

Chris reviewed formal drainage reports and platting documents for hydrologic/hydraulic analyses. Particulars included verification of conformance to local hydrologic standards as well as best engineering practices; verification of design particulars including: sub-basin delineation, sub-basin parameters, routing modeling, detention/retention calculations, roadway capacity calculations, storm-drain/culvert/channel design, erosion protection calculations, scour analysis, and lateral migration analysis.

Capital Region Airport Commission, Master Drainage Study of Richmond International Airport, Richmond, VA

As the contract engineer for air-side duties, the team prepared a Master Drainage Study to determine the existing conditions of the drainage facilities on the airport, with emphasis on preparing ranked recommendations to implement future drainage modifications. Duties included acquisition of topographic information, FEMA F.I.S. data, Henrico County (VA) drainage studies, and drainage infrastructure plans in preparation for the existing-condition analysis. Chris prepared work maps with storm sewer lines and connections and provided on-site assistance during survey acquisition of existing drainage infrastructure. Responsible for evaluation of storm-drain CCTV video to determine the current physical conditions of the culverts, and StormNET modeling of the drainage collection points, storm-drain system, channels, and detention basins, including routings to determine inlet ponding, pipe efficiency and channel capacity throughout the system to determine areas of inadequacy. A Master Drainage Study report with extensive mapping exhibits, addressing existing drainage conditions and recommendations for improvements and/or maintenance, was prepared.

City of Dallas, Trinity Parkway Toll Road Project, Dallas TX

As sub-consultant for the drainage and roadway design on the levee-placed toll-road project, extending from approximately Commerce Street to US Hwy 77/Stemmons Freeway (IH 35E), Chris worked on team who was responsible for the 30% completion documents, incorporating alignments to match adjoining design sections prepared by other consultants. He worked extensively in MicroStation for the design, incorporating hydrologic information into WinStorm for design of storm-drain. The storm-drain system was connected through a central trunk line and, ultimately, into an underground storage system for mechanical pumping into the Trinity River.

City of University Park, University Park Drainage Analysis, University Park, TX

Chris prepared an analysis of Turtle Creek through the City of University Park from north of Turtle Creek Blvd. and Vassar Drive to the weir outfall within the Dallas Country Club, immediately north of Shenandoah Ave. Concerns with high flood stages during several previous flooding events prompted City officials to analyze the capacity of the existing crossings, determine the water surface elevations during specific storm events (up to, and including the Q100). Chris acquired updated topographic information and previous Flood Insurance Studies to update the hydraulic modeling and verify the existing floodplain within the City of University Park. Modeling included verification of the Effective HEC-2 models and producing Duplicate Effective and Corrected Effective versions using HEC-RAS.

Appendix C - Detailed Cost Sheet

Client:	Imperial County	Project Name:	VEGA SES 2-3-5
Proposal #:	63594	Project Number:	63594
Proposal Manager:	Victoria Boyd	Project Manager:	Victoria Boyd

LABOR (Chambers Group **ONLY** - Subs and Vendors below)

Staff Type	and/or Staff Name	Rate	Initial Meeting & Data Acqu. Task 1A Hrs	Cost	Project Description Task 1B Hrs	Cost	Prepare NOP Task 1C Hrs	Cost	Review of Applicant Prepped St Task 2A Hrs	Cost	Additional Technical Analysis Task 2B Hrs	Cost	Prep of the ADEIR Task 2C Hrs	Cost	Public Review Draft EIR Task 3 Hrs	Cost	Final EIR Task 4 Hrs	Cost
Project Manage	Victoria Boyd	$134	12	$1,608.00	6	$804.00	2	$268.00	6	$804.00	80	$10,720.00	30	$4,020.00	14	$1,876.00	12	$1,608.00
Principal	Corinne Lytle Bosine	$185	4	$740.00	2	$370.00	2	$370.00	0	$0.00	2	$370.00	12	$2,220.00	8	$1,480.00	6	$1,110.00
Environmental Planner	Eunice Bagwan	$104	8	$832.00	4	$416.00	4	$416.00	12	$1,248.00	0	$0.00	40	$4,160.00	26	$2,704.00	38	$3,952.00
Environmental Planner	Elizabeth Fortin	$93	8	$744.00	6	$558.00	8	$744.00	0	$0.00	0	$0.00	40	$3,720.00	32	$2,976.00	38	$3,534.00
Environmental Planner	Meghan Gibson	$154	2	$308.00	4	$616.00	2	$308.00	10	$1,540.00	4	$616.00	20	$3,080.00	10	$1,540.00	22	$3,388.00
GIS Analyst 2	Phillip Carlos	$122	2	$244.00	4	$488.00	0	$0.00	0	$0.00	4	$488.00	6	$732.00	0	$0.00	0	$0.00
Tech Ed	Linda St. John	$80	0	$0.00	2	$160.00	2	$160.00	0	$0.00	6	$480.00	12	$960.00	8	$640.00	8	$640.00
SUB-TOTAL LABOR			**36**	**$4,476.00**	**28**	**$3,412.00**	**20**	**$2,266.00**	**28**	**$3,592.00**	**96**	**$12,674.00**	**160**	**$18,892.00**	**98**	**$11,216.00**	**124**	**$14,232.00**

OTHER DIRECT COSTS

ODC Type		Fee/Rate	Units	Handling	Initial Meeting & Data Acqu. Task 1A # Units	Cost	Project Description Task 1B # Units	Cost	Prepare NOP Task 1C # Units	Cost	Peer Review of Applicant Prepped St Task 2A # Units	Cost	Additional Technical Analysis Task 2B # Units	Cost	Prep of the ADEIR Task 2C # Units	Cost	Public Review Draft EIR Task 3 # Units	Cost	Final EIR Task 4 # Units	Total
Communication & Reproduction (C&R)																				
Standard Project Fee for C&R	(Labor cost x set %)	1	task labor	0%	4476.00	$0.00	3412.00	$0.00	2266.00	$0.00	3592.00	$0.00	12674.00	$0.00	18892.00	$0.00	11216.00	$0.00	14232.00	$0.00
Standard Project Fee for C&R	Flat Rate	$0	per unit	0%	0.00	$0.00	0.00	$0.00	0.00	$0.00	0.00	$0.00	0.00	$0.00	0.00	$0.00	0.00	$0.00	0.00	$0.00
Certified Mail		$6.70	each		0	$0.00	0	$0.00	0	$0.00	0	$0.00	0	$0.00	0	$0.00	0	$0.00	0	$0.00
					0	$0.00	0	$0.00	0	$0.00	0	$0.00	0	$0.00	0	$0.00	0	$0.00	0	$0.00
Specific Report Mass Reproduction																				
B&W Photocopies		$0.15	per copy		0	$0.00	0	$0.00	1100	$165.00	0	$0.00	0	$0.00	5000	$750.00	5000	$750.00	800	$120.00
Color copies (8.5" x 11")		$1.00	per copy		0	$0.00	0	$0.00	100	$100.00	0	$0.00	0	$0.00	300	$300.00	300	$300.00	200	$200.00
Color copies (11" x 17")		$2.00	per copy		0	$0.00	0	$0.00	0	$0.00	0	$0.00	0	$0.00	0	$0.00	0	$0.00	0	$0.00
CD copies		$2.00	per CD		0	$0.00	0	$0.00	20	$40.00	0	$0.00	0	$0.00	50	$100.00	50	$100.00	50	$100.00
Binding (3" 3-Ring Binder)		$10.60	per binder		0	$0.00	0	$0.00	0	$0.00	0	$0.00	0	$0.00	0	$0.00	0	$0.00	0	$0.00
					0	$0.00	0	$0.00	0	$0.00	0	$0.00	0	$0.00	0	$0.00	0	$0.00	0	$0.00
					0	$0.00	0	$0.00	0	$0.00	0	$0.00	0	$0.00	0	$0.00	0	$0.00	0	$0.00
Travel																				
Mileage		$0.575	per mi		0	$0.00	0	$0.00	0	$0.00	0	$0.00	0	$0.00	0	$0.00	0	$0.00	200	$115.00
Fuel - Trucks and Rental Vehicle		Actual			0.00	$0.00	0.00	$0.00	0.00	$0.00	0.00	$0.00	0.00	$0.00	0.00	$0.00	0.00	$0.00	0.00	$0.00
Lodging & food		$123.00	per day		0	$0.00	0	$0.00	0	$0.00	0	$0.00	0	$0.00	0	$0.00	0	$0.00	0	$0.00
Airfare		Actual			0.00	$0.00	0.00	$0.00	0.00	$0.00	0.00	$0.00	0.00	$0.00	0.00	$0.00	0.00	$0.00	0.00	$0.00
Computer Usage																				
GIS/CAD Computer/Plotter		$ 15.00	per hour	100%	1	$15.00	2	$30.00	0	$0.00	0	$0.00	2	$30.00		$0.00	0	$0.00	0	$0.00
Misc. GIS Materials				15%	0.00	$0.00	0	$0.00	0	$0.00	0	$0.00	0	$0.00	0	$0.00	0	$0.00	0	$0.00
SUB-TOTAL OTHER DIRECT COSTS					**4,477.00**	**$15.00**	**3,414.00**	**$30.00**	**3,486.00**	**$305.00**	**3,592.00**	**$0.00**	**12,676.00**	**$30.00**	**24,242.00**	**$1,150.00**	**16,566.00**	**$1,150.00**	**15,482.00**	**$535.00**

SUBCONTRACTORS/FLAT FEE SERVICES

	Activity	Fee/Rate	Units	Mark-up	Initial Meeting & Data Acqu. Task 1A # Units	Cost	Project Description Task 1B # Units	Cost	Prepare NOP Task 1C # Units	Cost	Review of Applicant Prepped St Task 2A # Units	Cost	Additional Technical Analysis Task 2B # Units	Cost	Prep of the ADEIR Task 2C # Units	Cost	Public Review Draft EIR Task 3 # Units	Cost	Final EIR Task 4 # Units	Total
Vista Environmental	AQ/GHG/Noise Review and Energy Analysis	$3,360.00	flat fee	15%	0.00	$0.00	0	$0.00	0	$0.00	0	$0.00	1	$3,864.00	0	$0.00	0	$0.00	0	$0.00
Haley and Aldrich	Phase 1	$36,072.00	flat fee	15%	0.00	$0.00	0	$0.00	0	$0.00	0	$0.00	1	$41,482.80	0	$0.00	0	$0.00	0	$0.00
Haley and Aldrich	Water Quality Assessment	$19,880.00	flat fee	15%	0.00	$0.00	0	$0.00	0	$0.00	0	$0.00	1	$22,862.00	0	$0.00	0	$0.00	0	$0.00
Haley and Aldrich	Hydrology Assessment	$20,008.00	flat fee	15%	0.00	$0.00	0	$0.00	0	$0.00	0	$0.00	1	$23,009.20	0	$0.00	0	$0.00	0	$0.00
Haley and Aldrich	Optional Full Geotechnical Analysis	$90,450.00	flat fee	15%	0.00	$0.00	0	$0.00	0	$0.00	0	$0.00	1	$104,017.50	0	$0.00	0	$0.00	0	$0.00
Chambers Group	AB 52 Consult	$3,115.00	flat fee	0%	0.00	$0.00	0	$0.00	0	$0.00	0	$0.00	1	$3,115.00	0	$0.00	0	$0.00	0	$0.00
Chambers Group	Cultural Report Review	$1,875.00	flat fee	0%	0.00	$0.00	0	$0.00	0	$0.00	1	$1,875.00	0	$0.00	0	$0.00	0	$0.00	0	$0.00
Chambers Group	Biology Report Review	$2,082.00	flat fee	0%	0.00	$0.00	0	$0.00	0	$0.00	1	$2,082.00	0	$0.00	0	$0.00	0	$0.00	0	$0.00
SUB-TOTAL SUBCONTRACTORS					0.00	$0.00	0.00	$0.00	0.00	$0.00	2.00	$3,957.00	6.00	$198,350.50	0.00	$0.00	0.00	$0.00	0.00	$0.00
TOTAL OTHER DIRECT COSTS					4477.00	$15.00	3414.00	$30.00	3486.00	$305.00	3592.00	$0.00	12676.00	$30.00	24242.00	$1,150.00	16566.00	$1,150.00	15482.00	$535.00
TOTAL SUBCONTRACTORS/VENDORS					0.00	$0.00	0.00	$0.00	0.00	$0.00	2.00	$3,957.00	6.00	$198,350.50	0.00	$0.00	0.00	$0.00	0.00	$0.00
TOTAL TASK-PROJECT						$4,491.00		$3,442.00		$2,571.00		$7,549.00		$211,054.50		$20,042.00		$12,366.00		$14,767.00

Client:	Imperial County	**Project Name:**	VEGA SES 2-3-5
Proposal #:	63594	**Project Number:**	63594
Proposal Manager:	Victoria Boyd	**Project Manager:**	Victoria Boyd

LABOR

Staff Type	and/or Staff Name	Rate	MMRP Task 5 Hrs	MMRP Task 5 Cost	Findings & NOD Task 6 Hrs	Findings & NOD Task 6 Cost
Project Manager	Victoria Boyd	$134.00	2	$268.00	10	$1,340.00
Principal	Corinne Lytle Bonine	$185.00	2	$370.00	8	$1,480.00
Environmental Planner	Eunice Bagwan	$104.00	8	$832.00	8	$832.00
Environmental Planner	Elizabeth Fortin	$93.00	4	$372.00	16	$1,488.00
Environmental Planner	Meghan Gibson	$154.00	0	$0.00	6	$924.00
GIS Analyst 2	Phillip Carlos	$122.00	0	$0.00	0	$0.00
Tech Ed	Linda St. John	$80.00	0	$0.00	4	$320.00
SUB-TOTAL LABOR			16	$1,842.00	52	$6,384.00

OTHER DIRECT COSTS

ODC Type		Fee/Rate	Units	Handling	MMRP Task 5 # Units	MMRP Task 5 Cost	Findings & NOD Task 6 # Units	Findings & NOD Task 6 Cost
Communication & Reproduction								
Standard Project Fee for C&R	(Labor cost x set %)	1	task labor	0%	1842.00	$0.00	6384.00	$0.00
Standard Project Fee for C&R	Flat Rate	0	per unit	0%	0.00	$0.00	0.00	$0.00
Specific Report Mass Reproduction								
B&W Photocopies	0	$0.15	per copy	0%	0	$0.00	0	$0.00
Color copies (8.5" x 11")	0	$1.00	per copy	0%	0	$0.00	0	$0.00
Color copies (11" x 17")	0	$2.00	per copy	0%	0	$0.00	0	$0.00
CD copies	0	$2.00	per CD	0%	0	$0.00	0	$0.00
Binding (3" 3-Ring Binder)	0	$10.60	per binder	0%	0	$0.00	0	$0.00
0	0	$0.00	0	0%	0	$0.00	0	$0.00
0	0	$0.00	0	0%	0	$0.00	0	$0.00
Travel								
Mileage	0	$0.575	per mi	0%	0	$0.00	0	$0.00
Fuel - Trucks and Rental Vehicle	0	Actual	0	0%	0	$0.00	0.00	$0.00
Lodging & food	0	$123.00	per day	0%	0	$0.00	0	$0.00
Airfare	0	Actual	0	0%	0	$0.00	0.00	$0.00
				0%	0	$0.00	0.00	$0.00
Computer Usage								
GIS/CAD Computer/Plotter	0	$15.00	per hour	100%	0	$0.00	0	$0.00
Misc. GIS Materials	0	0	0	15%	0.00	$0.00	0	$0.00
SUB-TOTAL OTHER DIRECT COSTS					1,842.00	$0.00	6,384.00	$0.00

SUBCONTRACTORS/FLAT FEE SERVICES

Activity	Fee/Rate	Units	Mark-up	MMRP Task 5 # Units	MMRP Task 5 Cost	Findings & NOD Task 6 # Units	Findings & NOD Task 6 Cost
		flat fee	15%	0.00	$0.00	0	$0.00
		flat fee	15%	20.00	$0.00	0	$0.00
		flat fee	0%	0.00	$0.00	0	$0.00
SUB-TOTAL SUBCONTRACTORS VENDORS				20.00	0.00	0.00	0.00

TOTAL LABOR	16	$1,842.00	52	$6,384.00
TOTAL OTHER DIRECT COSTS	1842.00	$0.00	6384.00	$0.00
TOTAL SUBCONTRACTORS/VENDORS	20.00	0.00	0.00	0.00
TOTAL TASK-PROJECT		$1,842.00		$6,384.00

Santa Ana Glendale San Diego El Centro

9620 CHESAPEAKE DRIVE, SUITE 202
SAN DIEGO, CA 92123
858-541-2800 (OFFICE) 866-261-3100 (FAX)

CHAMBERS GROUP

CA DGS CERTIFIED SBE CGI

AN EMPLOYEE-OWNED COMPANY ESOP CGI

CPUC CERTIFIED WMBE CGI

www.chambersgroupinc.com

REQUEST FOR PROPOSAL

Environmental Impact Report for VEGA SES 2, 3 & 5 Solar Project

CUP20-0021, CUP 20-0022, & CUP 20-0023

SUBMITTED BY

AZTEC TYPSA

November 18, 2020

AZTEC Engineering Group, Inc.
2151 Michelson Drive, Suite 100
Irvine, CA 92612
P: 714.656.2805 | F: 714.754.1690
www.aztec.us

November 18, 2020

Jim Minnick, Director
Imperial County Planning & Development Services Department
801 Main Street
El Centro, CA 92243

RE: Response to Request for Proposal
VEGA SES 2, 3 & 5 Solar Project – CUP20-0021, CUP 20-0022, & CUP 20-0023

Dear Mr. Minnick and Members of the Selection Committee:

AZTEC Engineering Group, Inc. (AZTEC) applauds Imperial County (County)'s tremendous growth in recent years. Much of that is attributed to your forward-thinking and proactive approach in embracing renewable energy projects that are vital to everyone's future. As a full-service environmental and engineering design firm, we are proud to have worked in the County for the last decade with some of our recent experience including the Mount Signal Solar project and Seville Solar Project. **We are sincerely interested to lead the VEGA SES 2, 3 & 5 Solar Project** to deliver a comprehensive Environmental Impact Report (EIR), including the Conditional Use Permit (CUP) and an Initial Study (IS), **that is legally defensible, accurate, and useful to decision makers considering the approval of the project.**

AZTEC's Environmental Practice has been providing quality professional environmental consulting services for a variety of clients across the Southwest since 2002. We have completed hundreds of environmental compliance documents for all stages of project development from Initial Studies to construction compliance and monitoring. Coupled with our in-house Solar/Photovoltaic experts in planning, design and construction oversight, AZTEC brings a very unique and customized team of subject matter experts that are well-positioned to serve the County needs. **Our team is purpose-built.**

Our Southern California-based environmental team, led by Liz Cutler as project manager (PM), brings relevant expertise, proven experience and the necessary availability/capacity to work on this project. Liz has significant experience managing high-profile, multi-faceted projects and multi-disciplinary teams and has a demonstrated record of developing innovative environmental (CEQA/NEPA and federal/state permitting) and construction solutions for the most-challenging environments and projects. She is supported by qualified and experienced team members including our project principal, Michael Shirley, who will ensure the necessary resources are always available and that we prioritize this project.

At the heart of all successfully completed projects is efficient, responsive, and innovative environmental diligence that keeps projects moving forward. That is what we do, and what we will do for the County on this project.

Our team is committed and prepared to perform this work. We are excited about the prospect of working with the County on the VEGA SES 2, 3 & 5 Solar Project. Thank you for the opportunity to present this proposal. Should you have any questions, please contact Liz at the information below.

Sincerely,
AZTEC Engineering Group, Inc.

Liz Cutler
Project Manager
Associate Vice President

Michael Shirley
Project Principal
Senior Vice President

1. Project Understanding

AZTEC Engineering Group, Inc. (AZTEC) understands that the Imperial County Planning & Development Services Department (County) seeks a consultant to prepare a single combined Environmental Impact Report (EIR) for the VEGA SES 2, 3 & 5 Solar Project, which is proposed on three different sites within Imperial County ("proposed project"). We also understand that the project includes preparation of an Initial Study (IS) and consistency findings for a Conditional Use Permit (CUP) for each site within the project area to allow for construction and operation of the proposed solar facilities, pursuant to the provisions of Section 91703.02 of the County's Municipal Code.

Each project site will include new internal access roads, supporting structures, and on-site substations to construct the proposed utility-scale solar energy generation and battery storage facilities. The facilities at each site are anticipated to generate 50 to 240 megawatt (MW) using photovoltaic (PV) modules mounted on either fixed frames or horizontal single-axis tracker (HSAT) systems, which will be affixed to driven piles. Modules will be connected by low-voltage underground, rack-mounted electrical wiring to one of the pad-mounted inverters located throughout the facility, where the electricity will be converted from direct current (DC) to three-phase alternating current (AC).

VEGA SES 2, 3 and 5 Overview

Features of VEGA SES 2, 3 and 5 are summarized in Figure 1 below. In addition, we understand that the project parcels for both VEGA SES 2 and VEGA SES 3 have land use designations of Recreation/Open Space in the Imperial County General Plan and are zoned Open Space/Preservation with a Renewable Energy Overlay (S-2-RE). We also understand that all project parcels for VEGA SES 5 have land use designations of Recreation/Open Space in the Imperial County General Plan and that parcel APN 025-260-019 is zoned Open Space/Preservation with a Renewable Energy Overlay

FIGURE 1. VEGA SES 2, 3 AND 5 FEATURES

VEGA SES 2

- Construction and operation of a 240 MW AC solar PV energy generation facility with an associated battery storage system of up to 240 MW/960 megawatt hour (MWh), supporting structures, on-site substations, and internal access roads on an 1,472-acre site comprised of three parcels (APNs 025-260-011; 025-010-006; 025-270-023)
- Three new project substations will be constructed within the project area (northwestern corner of APN 025-260-011; APN 025-010-006; and APN 025-270-023)
  - » Each substation will include a transformer, circuit breaker, meters, disconnect switches, communication facilities, and other necessary equipment to reliably and safely protect the electrical infrastructure
- To distribute generated electricity, power would be conveyed underground from the two eastern most parcel substations to the new project substation on the western most parcel where the electricity will feed into the proposed interconnection switching station for metering and delivery to the Imperial Irrigation District (IID) KN/KS transmission line

VEGA SES 3

- Construction and operation of a 60 MW AC solar PV energy generation facility with an associated battery storage system of up to 60 MW/ 240 MWh, supporting structures, on-site substations, and internal access roads on a 240-acre site (APN 025-010-006)
- One new project substation and adjacent interconnection switching station are proposed in the northwestern corner of the project site, which will be connected by a single overhead 161 kV transmission line
  - » The proposed interconnection switching station will include circuit breakers, switches, overhead bus work, protective relay equipment, a control building, and other necessary equipment to reliably and safely protect the electrical infrastructure
- The interconnection station will feature a breaker-and-a-half or three breaker ring bus arrangement to allow for metering and delivery of electricity to the IID 161 kV "L" transmission line and project tie line, which connects the proposed project substation and interconnection switching station

VEGA SES 5

- Construction and operation of a 50 MW AC solar PV energy generation facility with an associated battery storage system of up to 50 MW/ 200 MWh, supporting structures, on-site substations, and internal access roads on a 249.70-acre site (APNs 025-260-019 & 025-260-022)
- A new project substation will be constructed on the southwestern boundary of APN 025-260-022, which will deliver electricity to the IID 92 kV "Midway" Substation
  - » The proposed substation will include a transformer, circuit breakers, meters, disconnect switches, and other necessary equipment to reliably and safely protect the electrical infrastructure
- Electrical energy generated by the project will be transported through a proposed 92 kV generator intertie ("gen-tie") line for delivery to the existing IID approved point of interconnection at the 92 kV "Midway" substation

(S-2-RE); while parcel APN 025-260-022 is zoned General Agriculture with a Renewable Energy Overlay (A-2-RE) on the western portion of the parcel, Heavy Agriculture with a Renewable Energy Overlay (A-3-RE) on the central portion of the parcel, and Open Space/Preservation with a Renewable Energy Overlay (S-2-RE) on the northeastern portion of the parcel. Pursuant to Section 91703.03 of the Imperial County Code of Ordinances, "Renewable energy projects must be located within the renewable energy overlay zone and may be permitted only through the issuance of a conditional use permit (CUP) within applicable zones as approved by the approving authority unless otherwise allowed by applicable law. Renewable energy projects may consist of the following technologies: geothermal, solar, wind, deep solar ponds, biofuel, bio-mass, algae production, concentrated solar-thermal power, and concentrated photovoltaics." Thus, each of the projects are subject to approval of a CUP.

Project Approach

AZTEC will prepare an IS and EIR to analyze the buildout of the VEGA SES 2, 3 & 5 Solar Projects in compliance with the CEQA Statute (Public Resources Code 21000-21189) and CEQA Guidelines (California Code of Regulations, Title 14, Sections 15000-15387). Using advanced GIS tools, reconnaissance site visits, available data from state and local agencies, and desktop research, our approach will be to characterize and quantify the project area to ensure analysis of a reasonable projection of the location and range of impacts that will occur under the proposed project. Additionally, we will integrate key industry data and local information regarding the methods and technologies for other solar facilities within the area to help specify the extent of impacts that may occur. This includes review of recent County documents, technical resources, and reports related to solar facilities, such as the VEGA SES Solar Energy Project EIR prepared in 2018.

In support of the CEQA process, AZTEC will conduct a preliminary analysis in the IS to focus the scope of the EIR to only those few issues that are likely to result in significant impacts. This approach avoids the necessity of detailed environmental analyses for topical areas that conclusively can be shown to not result in significant impacts.

With a clear understanding of the environmental setting and the proposed project, AZTEC will work closely with County staff to develop the Notice of Preparation (NOP) and IS, prepare a thorough project description for the proposed project, develop a range of feasible alternatives, and deliver a high quality and legally defensible EIR. AZTEC will concurrently deliver project tasks, when or where feasible, to minimize timeframes for document completion. As shown in the schedule in Section 5, we propose to initiate preparation of the environmental documentation immediately after releasing the IS/NOP for public review.

AZTEC's approach to preparation of the proposed EIR will include a high level of environmental impact analysis with a range of reasonable project commitments and/or mitigation that could avoid or substantially reduce potentially significant impacts while still achieving the project's overall objectives.

Overall, AZTEC will manage the concurrent completion of multiple tasks through strong team collaboration and efficient project management, with a more focused review of project issues occurring during weekly planning meetings. In addition, AZTEC will utilize Deltek® project management software to track the project budget and use Microsoft Project to track the project's schedule and progress.

2. Project Team

About AZTEC

AZTEC was established in 1992 and has grown from a two-person Disadvantaged Business Enterprise (DBE) to a full-service environmental and engineering consulting firm with over 140 professional, technical and administrative personnel throughout our offices in California, Arizona, Nevada, Colorado, and Indiana. Over those 28 years, we built an excellent reputation as a quality consulting firm that is dedicated to meeting clients' needs through strong project management and experienced, dedicated staff.

AZTEC is part of the TYPSA Group, an international multi-disciplinary consulting firm with over 2,600 employees in 50 offices worldwide. AZTEC is organized into five business practices:

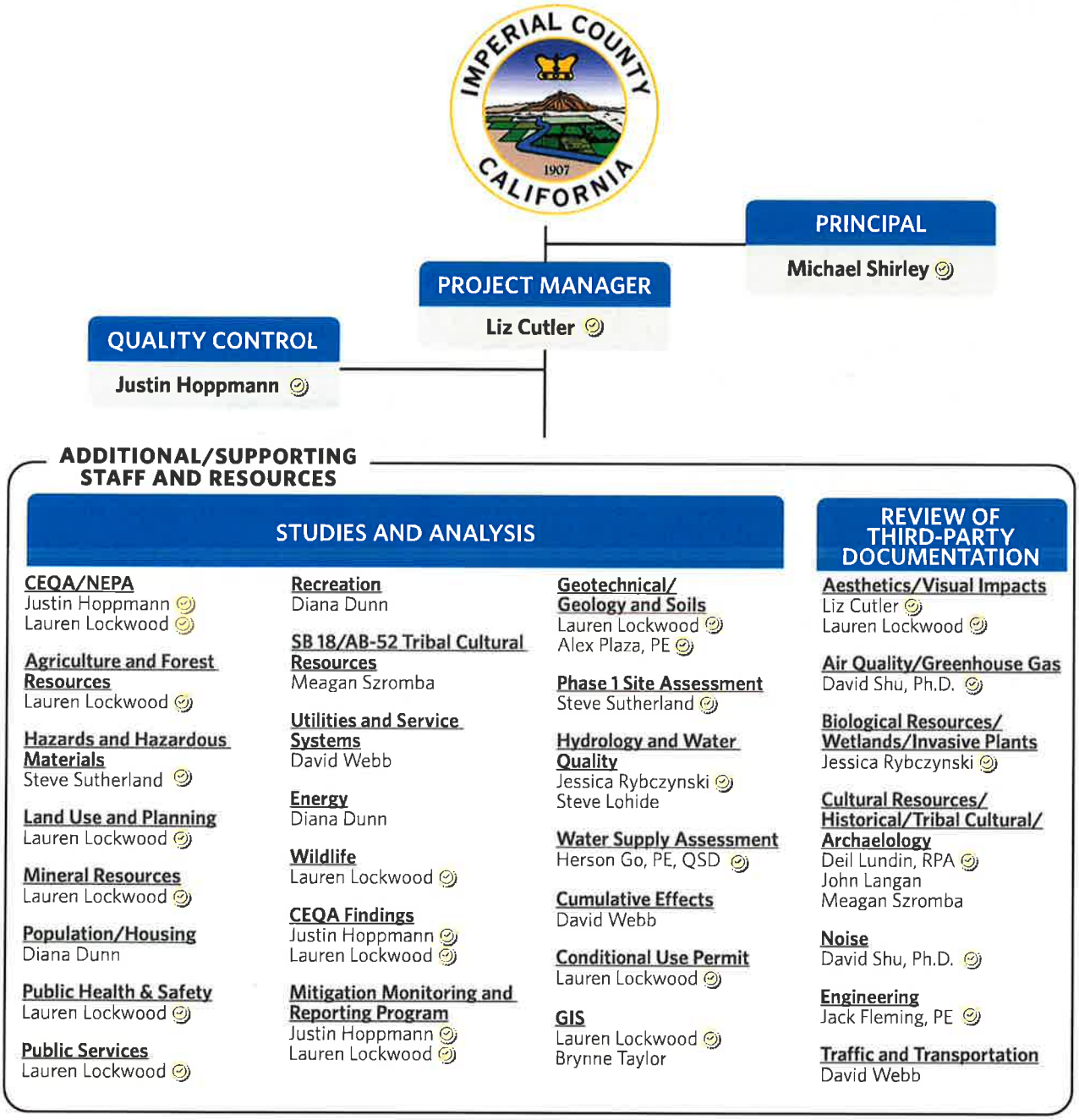
- Environmental Services
- Transportation
- Energy
- Field Services
- Rail and Transit

AZTEC's Environmental Practice has been providing quality professional environmental consulting services for a variety of clients across the Southwest since 2002. Initially, our staff was based in our Phoenix office. In 2019, we officially expanded our Environmental Practice and opened a Southern California Division based out of Irvine. From here, AZTEC can provide the same level of day-to-day on-call or other environmental services that our clients have come to expect. We understand the value and importance of a local presence and are dedicated to successfully providing our Southern California clients with environmental support from planning through environmental clearance to project closeout.

Key Team Personnel, Resumes and Organization Chart

AZTEC is committed to providing the County with a team of responsive, proven specialists that will meet all your needs and schedule requirements for this project. We have customized a team to leverage the knowledge and experience of our technical resources to effectively meet the County's goals. Figure 2 below shows our team proposed for this project. Brief resumes of our key personnel follow. Their full resumes are provided in the Appendix.

FIGURE 2. TEAM ORGANIZATION CHART



Denotes Key Personnel - Resume provided

LIZ CUTLER IS THE IDEAL PM TO LEAD THIS PROJECT. HER HANDS-ON, QUALITY-DRIVEN APPROACH AND YEARS OF EXPERIENCE WORKING ON A VARIETY OF ENVIRONMENTAL PROJECTS WILL ENHANCE OUR TEAM'S ABILITY TO DELIVER ON TIME AND BUDGET.

- MICHAEL SHIRLEY, PROJECT PRINCIPAL

Liz Cutler | Project Manager

Education: MS, Geology; BS, Geology

Experience: As our PM, Liz will actively manage the contract. She is known for her results-driven approach to deliver projects. Her primary responsibilities are to manage the scope, schedule and budget of the project. Liz will keep the County apprised of our performance on our tasks, including regular progress updates, along with communicating opportunities for efficiencies and constraints to resolve. She is a senior project manager and lead environmental specialist who also serves as an AZTEC Associate Vice President. Her more than 25 years of experience includes environmental siting, licensing, permitting, compliance during construction, restoration, mitigation and management of simple-to-complex federal, state, and local projects in California, Arizona, Nevada, Utah, Idaho, Wyoming, Alaska, Hawaii, and across the US.

WHY LIZ?

- **Significant experience managing high-profile, multi-faceted projects and multi-disciplinary teams**—and has a demonstrated record of developing innovative environmental (CEQA/NEPA and federal/state permitting) and construction solutions for the most-challenging environments and projects.
- **Provides strategic and tactical support** to project client teams and excels at client-focused delivery.
- **Proven record of identifying efficiencies in project delivery approaches** in the design, construction, and mitigation phases that have resulted in demonstrable savings to project schedules and costs.

REPRESENTATIVE PROJECTS

- **Salt Wells Photovoltaic Solar Facility EA**, Enel Green Power Salt Wells Solar, LLC, Salt Wells, NV | Senior PM and Senior Technical Consultant
- **Cove Fort Photovoltaic Solar Facility Feasibility Study**, Enel Green Power, North America, Inc., Beaver and Millard Counties, UT | Senior PM and Senior Technical Consultant
- **Southern California Edison Capital Improvement Program**; Ventura, Los Angeles, Kern, Riverside, San Bernardino Counties, CA and Clark County, NV | Program Manager, Principal PM, and Principal Technical Consultant
- **Ivanpah Solar Energy Project**, Bright Source Energy, San Bernardino County, CA | Senior Technical Consultant
- **Federal Highway Administration – Central Federal Lands Highway Division (FHWA – CFLHD) Programs and Projects**, CA, NV, AZ, UT, NE, HI | Principal Environmental Manager and Principal Technical Consultant

Additional information and more projects for Liz are included in her resume in the Appendix.

Michael Shirley | Project Principal

Education: BS, Biology

Experience: Mike has over 27 years of relevant experience. He is AZTEC's Environmental Practice Lead and provides support to Project Managers in both our Arizona and California offices. Mike will serve as the Project Principal where he will be ultimately responsible for the quality and timeliness of our performance. As a Senior Vice President and an officer at AZTEC, Mike has the organizational authority to legally bind this contract and oversee all contractual matters, while ensuring the right personnel and resources are assigned to meet the County's quality, schedule and performance expectations. He has a background in wildlife biology and project management and has authored numerous environmental documents as well as serving in the role as the Environmental Compliance Manager managing multiple environmental disciplines on large complex projects.

Justin Hoppmann | Quality Manager

Education: MS, Environmental Planning; BS, Forest Resources and Conservation

Experience: Justin brings 20 years of experience leading the preparation of a variety of environmental studies including EIRs, categorical exclusions, environmental assessments, environmental overviews, visual impact analyses, socioeconomic analyses, land use studies, recreation master plans, and other environmental documents. His diverse experience makes him the ideal candidate to lead quality control. He has worked on a large number of transportation-related planning and design projects for federal, state, and local agencies in California, Arizona, and other states. Justin has conducted and assisted with wetland delineations, jurisdictional delineations, Clean Water Act Section 404 permitting, and biological surveys for endangered species. He is qualified as an Environmental Professional under ASTM 1527-13 and 40 CFR §312.10(b), and has completed numerous Phase I environmental site assessments, as well as hundreds of preliminary initial site assessments and hazardous materials records checks for numerous clients. Justin is a Certified Asbestos Hazard Emergency Response Act (AHERA) Building Inspector and is current in Hazardous Waste Operations and Emergency Response Standard (HAZWOPER) training. In addition, he has over 15 years of experience with GIS programs and is proficient in the use of ArcView as well as the Spatial Analyst and 3-D Analyst Extensions.

Lauren Lockwood | Environmental Planner/ CEQA Lead

Education: MS, Environmental Science; BS, Earth Systems

Experience: Lauren has 7 years of experience in the areas of environmental planning, entitlements, and coastal planning. As a young professional, she has had the opportunity to work on a wide variety of projects with a range of environmental documents, as well as management experience in both the private and public sector. Lauren brings a unique perspective and skill set to the team. In her undergraduate and graduate career, Lauren focused her studies on a wide range of environmental topics including geology, coastal and marine sciences, and GIS. Since then, she has developed relevant experience in engineering, planning, permitting, and compliance, which allows her to bring an all-encompassing approach to environmental analyses.

David Shu, PhD | Air and Noise Quality

Education: PhD, Civil Engineering; MS, Control Theory; BS, Traffic Engineering

Experience: David has extensive knowledge and 16 years of experience with noise measurement, noise modeling and analyses using STAMINA 2.0, FHWA TNM 2.5, SoundPlan, CadnaA, and INM. He also conducted extensive highway noise research and has published many papers in technical journals. In addition, Dr. Shu is proficient with air quality analyses with programs such as Mobile 6.2, MOVES, and Cal3QHCR for project level Carbon Monoxide (CO), PM10, Mobile Source Air Toxic (MSAT), Greenhouse Gas (GHG) analysis. He is very experienced with MicroStation, AutoCAD, Inroads, and ArcView GIS and has completed the noise and air quality analyses for over 100 projects.

Jessica Rybczynski | Biological Resources and Wetlands/Invasive Plants

Education: BS, Applied Biological Sciences

Experience: Jessica has 12 years of experience as a wildlife biologist who also specializes in CWA compliance and management of hazmat. Her biological experience includes research, monitoring, surveys, biological evaluations and assessments, ESA compliance including Section 7 consultation, and working with clients to develop and implement conservation/mitigation measures for the protection of biological resources. Her CWA experience includes all levels of CWA permitting and compliance including conducting jurisdictional delineations (including wetlands); assessing project impacts and determining CWA Section 404/401 compliance; and preparing project-appropriate Section 404 Permit applications and Section 401 Water Quality Certification applications. Jessica is also a CPESC and ECC and has worked on several of AZTEC's CWA Section 402 compliance tasks including preparation of SWPPPs.

Deil Lundin, RPA | Cultural Resources

Education: MS, Anthropology (Concentration in Physical Anthropology); BA, Anthropology

Experience: Deil has over 28 years of experience in archaeology and cultural resource management. She has directed over 200 projects in the state of Arizona, and assisted with projects in AL, CA, LA, NV, and UT, writing and editing technical reports, Section 106 and NEPA documents; developing research designs and mitigation plans; and assisting clients with Federal, State, Tribal, and municipal regulatory compliance. She has served as a principal investigator on projects involving the inventory, documentation, and recovery of archaeological data as well as historic preservation. Deil meets Secretary of Interior Professional Qualifications Standards in Archaeology and currently holds several blanket and project-specific federal, state, and tribal permits in Arizona.

Steve Sutherland, RG, PG, CEM | Hazards and Hazardous Materials

Education: MS, Environmental Management & Sustainability; BA, Geography; BS, Geology

Experience: Steve is a Registered Geologist, Certified Environmental Manager, qualified Environmental Professional, AHERA Building Inspector and Management Planner, and US Environmental Protection Agency Lead Paint Inspector and Risk Assessor, with over 26 years of experience working in the southwest and Mexico. He is also HAZWOPER and Site Supervisor-certified, and has experience conducting and managing activities in a wide variety of transportation, RCRA/CERCLA, environmental/ hazardous materials, water resources, and safety-related fields. He is experienced in conducting and managing Phase I/II ESAs following ASTM protocols and has conducted numerous Phase III remedial actions based upon the findings of Phase I/II ESAs. As a portion of his duties, he also manages the Due Diligence practice for AZTEC. He also is experienced in brownfields investigations; asbestos, lead-based paint (LBP) and regulated building materials surveys; RCRA waste determinations and hazardous waste management; CERCLA/state Superfund investigations & remediation (WQARF in Arizona); Underground Storage Tank (UST) removal investigations; LUST investigations and remediation/risk assessment to closure; environmental compliance audits; management of site safety and generation of health & safety and other plans; surface water and groundwater investigations; various air, soil and groundwater sampling requirements; Indoor Air Quality (IAQ), silica, and

mold investigations; data analysis and interpretation; client and regulatory liaison; and environmental plan and report preparation and completion. He has also participated in and managed teams in multiple emergency response actions for hazardous materials spills and railroad derailments.

Herson Go, PE, QSD | Water Supply Assessment

Education: BS, Civil Engineering; Graduate Studies, Environmental & Engineering Water Resources

Experience: Herson has over 25 years of experience in managing and delivering civil engineering design (PS&E), construction project management, feasibility study and CADD implementation projects. The focus of his entire career has been water resources and hydraulics. He is skilled in hydraulic and hydrologic modeling methods including 2D modeling. He has played a role in numerous transportation, public works, site development and drainage projects. Herson has proven successes in developing and winning business opportunities in state, local government and transportation agencies. He oversaw the delivery of numerous Engineering, GIS and IT systems. He is a certified and highly advanced user of MicroStation and InRoads suite products. Herson is also an experienced user of ProjectWise and AutoCAD.

Alex Plaza, PE | Geotechncial / Geology and Soils

Education: MS, Tunneling; MS, Geological Engineering; BS, Civil Engineering

Experience: Alex is a specialist in geotechnical engineering, geo-structural design and tunnel design. He has participated in many infrastructure design projects of various sizes including wind/solar energy projects and roadways, railways, metro lines, dams and hydroelectric power plants. His geotechnical expertise includes several softwares for 2D/3D Fininte Element Modelling for foundation design, tunnel design (TBM and NATM), dam design (earth-fill and concrete), groundwater studies and slope stability analyses.

Jack Fleming, PE | Engineering Review

Education: BS, Civil Engineering

Experience: Jack has 10 years of civil engineering experience including the design of roadway expansions/reconstruction, utility coordination, utility design and pedestrian improvements. He also has extensive experience in construction administration, construction observation and field engineering/inspections. A registered professional engineer in California, Jack will draw upon his local experience having lived in the Imperial Valley for 30 years (El Centro - 24 years, Imperial - 5 years, Brawley - 1 year) and worked directly for the City of El Centro as the Associate Engineer for 3.5 years. His unique perspective and understanding of the region will be valuable as he supports engineering clearance for this project.

Specialized Experience/Technical Competence

AZTEC's local history includes delivering engineering, environmental planning, and field services projects for the County, City of El Centro, Orange County, Riverside County, Caltrans (Districts 7, 8, 12), San Bernardino County, LA Metro, Southern California Edison, and City of Rialto, to name a few.

Our Southern California Environmental Division, led by PM Liz Cutler, is backed by the full services of AZTEC's in-house resources of environmental experts. We have the flexibility and capacity to lead this project, and can draw from lessons learned and best practices to deliver this project.

A Partner to Imperial County

The growth of Imperial County is impressive and many members of the AZTEC team have been fortunate to have been part of this growth by working on and delivering several exciting projects for and within the County. As a firm, AZTEC has provided engineering and environmental solutions to clients in Imperial County for the last 15 years. **Through our Energy/Solar practice, we have provided design services for several solar plants for private developers in the County** with services spanning civil, electrical and mechanical design that required substantial coordination to ensure environmental compliance, timely permitting and due diligence. **Through our Field Services practice, our survey and subsurface utility engineering (SUE) teams have worked all throughout the County**, including construction staking, topographic survey, ALTA surveys, legal descriptions, right-of-way mapping, potholing and utility designation. Currently, **AZTEC is on the City of El Centro's on-call for civil engineering, which includes environmental support services.**

Project Examples

The following project descriptions demonstrate innovative solutions, proactive project management, and cost-effective strategies that we employed and are similar to those required in your scope of work. These projects represent successful partnerships with our clients - reaching performance goals and delivering within the required schedule.

Mount Signal Solar 200 MWac PV Solar Plant | Imperial Valley, CA

RELEVANCE:
- ✓ AZTEC Solar Project
- ✓ Environmental Compliance and Documentation
- ✓ Located in Imperial County, CA
- ✓ Integrated environmental and engineering services

AZTEC was retained by AES Solar Corporation to provide preliminary and final design services for the development of a 2,000 acre, 200 MWac PV solar plant project located in Imperial Valley, CA. This project involved the planning and development of several alternative PV plant layouts using various panel layout configurations with either Fixed Tilt or Single Axis Tracking panels. AZTEC performed all of the preliminary and detailed civil, electrical and mechanical design including development of the Owner's Requirements document (Specifications) for the plant. The project required producing design plans for grading, drainage, roadways, array layout configurations and detailed design of the PV Plant systems. A preliminary drainage report for the project was also developed. AZTEC performed the boundary survey for the project including development of the ALTA survey and submittal of a Record of Survey to Imperial County. AZTEC assisted with review of EPC bid documents and development of permitting exhibits and documentation. In addition, AZTEC provided post design, project controls management, administrative services and environmental monitoring services to the owner during construction.

Mountain View 9 MWac PV Solar Plant | Palm Springs, CA

RELEVANCE:
- ✓ AZTEC Solar Project
- ✓ Environmental Compliance and Documentation
- ✓ Integrated environmental and engineering services
- ✓ Southern CA project

This 9 MWac PV Solar Plant project involved the planning and development of the solar plant to share interconnection facilities with an existing wind farm in California using a panel fixed tilt panel layout configuration. AZTEC performed all of the preliminary and detailed civil, electrical and mechanical design for the project including development of the Owners Requirements document (Specifications) for the Plant. The project required producing design plans for grading, drainage, and WQMP for CUP approval.

On-Call Civil Engineering | El Centro, CA

RELEVANCE:
- ✓ Local Project
- ✓ On-Call that includes environmental services
- ✓ Liz Cutler (PM) is a key task lead

AZTEC is an on-call consultant for the City of El Centro and will perform engineering design services resulting in contract documents (plans, specifications and cost estimates) for various projects on an as-needed basis. The range of projects may include design of arterial and local streets; including traffic engineering/ design, landscaping, water, sewer and storm drain design. These projects can be state or federally funded. As a part of the scope, we will conduct an environmental assessment for each project , if needed, and prepare all documentation required to comply with the California Environmental Quality Act (CEQA). We are utilizing the latest technologies to design and construct/ rehabilitate pavements in the most cost-effective way.

Salt Wells PV Solar Facility Environmental Assessment | Salt Wells, NV

RELEVANCE:
- ✓ Liz Cutler (PM) Experience
- ✓ CEQA/NEPA Documentation
- ✓ Environmental Clearances and Permits
- ✓ Solar Project

This project was led by AZTEC's Liz Cutler while with another firm. She was the Project Manager for the update of the Environmental Assessment prepared for and submitted to the U.S. Bureau of Land Management (BLM) - Carson City District, Stillwater field Office, Carson City Nevada, as part of a lease application package. The proposed project would be located on 150 acres of land approximately 15 miles southeast of Fallon, in Churchill County, NV, and adjacent to the existing Salt Wells Geothermal Power Plant. The project would be the first geothermal-solar hybrid facility developed solely on federally administered lands and will have a PPA separate from the geothermal project, though the two would share common equipment including a substation and upgraded transformer.

Cove Fort PV Solar Facility Feasibility Study | Beaver and Millard Counties, UT

This project was led by AZTEC's Liz Cutler while with another firm. Liz was the PM for the preparation of a Site-Specific feasibility study for a 40-MW photovoltaic solar project to be located on up to 1600 acres of mixed undeveloped land and existing agricultural fields in Beaver and Millard Counties, UT. The study resulted in the generation of a project development work plan that provided ENEL with a clear understanding of the level of environmental and permitting work, including field work, required to develop the proposed project.

RELEVANCE:

- ✓ Liz Cutler (PM) Experience
- ✓ CEQA/NEPA Documentation
- ✓ Environmental Clearances and Permits
- ✓ Solar Project

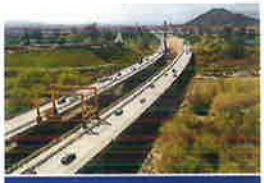
John Longville Metrolink Depot Parking Lot Expansion | Rialto, CA

AZTEC served as the prime consultant for the FTA-funded expansion of the John Longville Metrolink parking facility in Rialto. The project expanded the parking capacity of the existing facility from 208 spaces to 663 spaces and included landscaping, sidewalks, crosswalks, lighting and ADA accessibility requirements. Our work included the preparation of preliminary design plans and a Project Report, and the completion of a traffic analysis and environmental clearances. AZTEC was responsible for the development of alternative locations, project cost estimates, determining right-of-way impacts, and evaluation of multiple alternative concepts. For environmental, AZTEC completed the required environmental documentation for multiple jurisdictions, including the information needed for entry into the FTA TEAM database to obtain a Categorical Exclusion determination under NEPA, as well as the documentation required by the State of California under CEQA.

RELEVANCE:

- ✓ CEQA/NEPA Documentation
- ✓ Environmental Clearances
- ✓ Traffic Impact Analysis
- ✓ Southern CA project

I-15 Express Lanes Project Design-Build | Riverside County, CA



AZTEC served as the Lead Designer for this high-profile $250M design-build project that will improve traffic capacity on I-15 in Riverside County between Cajalco Road and SR 60 by adding two tolled express lanes in each direction for a distance of 15 miles in the Inland Empire. AZTEC led final design for almost 60 lanes-miles of new express lanes that included 11 bridge widenings including a major structure over the Santa Ana River and a complex structure crossing the BNSF tracks, retaining and sound walls, toll infrastructure, lighting, and landscaping. Our Environmental Management Plan included quality reviews on the supporting technical plans. We managed design compliance reviews that identified constraints and environmental conflicts during the development of construction plans. Other responsibilities included the preparation of CEQA/NEPA re-validations, CWA and SAA permit amendments, and jurisdictional analysis reports. For training, AZTEC developed and scripted the environmental protection training program given to all contractor and owner staff. AZTEC also managed the project file organization and archiving of all government approvals and environmental compliance records.

RELEVANCE:

- ✓ CEQA/NEPA Compliance
- ✓ Water Quality Permitting
- ✓ Monitoring and Mitigation Plans / Management
- ✓ Quality Reviews
- ✓ Integrated environmental and engineering services
- ✓ Southern CA project

Tehachapi Renewable Transmission Project (Segments 4 through 11) | Kern, Los Angeles, and San Bernardino Counties, and USFS - Angeles National Forest, CA

This project was led by AZTEC's PM Liz Cutler while with another firm. Liz was the Principal Project Manager and Principal Technical Consultant for this project that included CEQA/NEPA and permitting during siting, licensing, pre-construction, construction, mitigation, and restoration. Scope included planning, strategic consulting, siting, onsite staff support, fieldwork, reporting, documentation, review, agency coordination and negotiation,

RELEVANCE:

- ✓ Liz Cutler (PM) Experience
- ✓ CEQA/NEPA Documentation
- ✓ Environmental Clearances and Permits
- ✓ Federal, State and Local Agency Coordination and Negotiations
- ✓ Southern CA project

scheduling, and ancillary support (e.g., drafting expert testimony and white papers, photo-documentation, developing online database/monitoring/reporting platform). This project was delivered under a Master Services agreement (on-call) with Southern California Edison (SCE), where Liz managed more than 19 transmission, distribution, substation, coalfired and nuclear generating station projects from 2006 to 2018.

Palomino Business Park Environmental Impact Report | Norco, CA

This project was performed by AZTEC's Lauren Lockwood while with another firm. Lauren assisted in the preparation of an EIR that is proposed to redevelop approximately 110 acres of land within the City of Norco for a new business park that would provide industrial, commercial, and office uses. The project includes construction of approximately 2.05 million square feet of new building space and related on- and offsite improvements. Important areas of impact assessment include biological resources, energy, greenhouse gas emissions, and hydrology and water quality.

RELEVANCE:

- ✓ Lauren Lockwood (CEQA/Environmental Lead) Experience
- ✓ EIR Deliverable
- ✓ Land Development Project
- ✓ Southern CA project

North Coast Highway Solar | Humboldt County, CA

This project was performed by AZTEC's Lauren Lockwood while with another firm. Lauren prepared an Initial Study/ Mitigated Negative Declaration for the proposed North Coast Highway Solar project in Humboldt County. The project consists of the construction, operation, maintenance, and decommissioning of a 1 MW solar project that will be sited on primarily agricultural land in Hydesville. The project will include ground mounted PV solar power generating system, supporting structures, internal access roads, and fencing.

RELEVANCE:

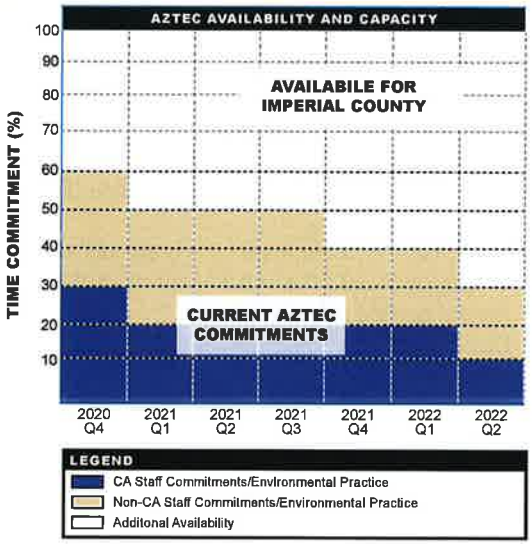
- ✓ Lauren Lockwood (CEQA/Environmental Lead) Experience
- ✓ IS/MND
- ✓ Solar Project
- ✓ Integrated environmental and engineering services

Availability and Capacity

The capacity to accomplish work in a strict timeframe requires strong and experienced leaders backed by skilled team members. With this in mind, we have composed our team of qualified personnel in all the required categories of work in the County's Scope of Services for this contract.

We have the resources to start immediately. Our key personnel are ready to start directly upon receiving notice to proceed (NTP) and are committed to providing exceptional service to the County. We work collaboratively with fully-equipped offices with the latest technologies, facilities and equipment to successfully complete our projects. Figure 3 - Availability and Capacity shows we have ample capacity based on current staff levels. We will be ready to provide the County available, committed and energized staff ready to deliver your project!

FIGURE 3. AVAILABILITY AND CAPACITY



3/4. Scope of Work/Tasks

The following scope of work details our proven process for efficiently producing a reliable, quality, and defensible EIR for Imperial County. Each task is completed with a deliverable to the County with details on our approach to each task and the work products that will be produced. The team members responsible for each environmental resource area and associated work products are shown in Figure 2 - Team Organization Chart.

While all tasks identified in the RFP have been included, the following scope of work is recommended to ensure efficient and expeditious document preparation and review; however, AZTEC will adhere to the specific requests from County staff.

General assumptions include:

- Available project data and documentation will be provided in electronic format within 5 days of NTP.
- County-provided data and documentation is provided in usable format and no manipulation is required.
- County will provide site access for fieldwork.
- County can complete review of submitted deliverables as shown in the proposed project schedule (Figure 5 on Page 22).
- Responses to comments on draft deliverables will be incorporated into the subsequent draft (Draft or Final) of the deliverable.
- Deliverables are electronic unless specific hard copies/ CDs are listed

Task 1 | Project Initiation

As a first step in project implementation, AZTEC will coordinate with County staff to establish roles and protocols to guide communication between County staff and AZTEC. The purpose of this step is to establish and maintain credibility with the County and ensure the legal defensibility of the CEQA documentation. This step will occur within 5 working-days of receiving Notice to Proceed (NTP).

AZTEC will also review County-provided and Applicant-provided available project plans, data, other project documentation, and any relevant regulatory documents and studies to assist in understanding the framework within which the project is going to be implemented.

Task 1.1 Kickoff Meeting and Site Visit

Upon receipt of the NTP, the AZTEC team will schedule a kickoff meeting with County staff and the Project Applicant. Key topics to be discussed during this meeting may include obtaining additional detail on the project, community or agency concerns, anticipated environmental impacts, communications processes and roles, the initiation of technical studies, the target project schedule, and any requested adjustments to the scope of work contained in this proposal, such as:

1. Obtaining project description information, preliminary plans and design specifications, phasing information, construction and operational details, existing relevant technical studies, existing GIS and CAD files; and any other pertinent information;
2. Identifying project objectives;
3. Discussing parameters of any project alternatives;
4. Identifying projects to be used for cumulative analysis;
5. Obtaining technical studies completed for the project and discussing the preparation of new technical studies; and
6. Refining the EIR schedule

Subsequent to the kickoff meeting, a focused and coordinated team site visit will also be conducted. This site visit will be used to supplement any photographic documentation that may be necessary for project analysis.

Deliverables:

- Draft and Final Project Schedule (format: MSProject and .pdf)
- Draft and Final Project Contact List

Task 1.2 Project Description

One of the keys to successful CEQA compliance is a clear definition of the project and its components. The project description must be complete, comprehensive, stable, and finite. The Project Applicant will be identified, along with a statement of project objectives, and detailed project phasing. Required discretionary approvals and anticipated uses also will be identified. Report figures will include regional, vicinity, and site location maps; project plans; circulation and infrastructure plans; and others as necessary to clarify the project.

AZTEC will confer with County staff during this early process to discuss the potential environmental impacts of the proposed project. This upfront evaluation of impacts will allow the County to request modifications to the project in order to minimize environmental impacts, a process known as "mitigation by design." Upon receipt of the County's comments on the administrative draft project description, AZTEC will revise the project description and resubmit for final approval before beginning the analysis.

Deliverables:

- Draft and Final Project Description

Task 1.3 Native American Outreach and Consultation

At this initial stage, AZTEC will assist the County in meeting Assembly Bill 52 (AB 52) requirements ***and federal requirements*** by drafting consultation letters and emailing to Tribal Representatives as determined by the County's AB 52 Tribal Consultation list and/or as provided by the NAHC. If requested, AZTEC will attend Native American consultations, and will provide mitigation measures, agreed upon as necessary by the County to reduce potential impacts to a less than significant level.

Assumptions: Up to 10 Federal and California Native American Tribal Representatives will be contacted by email under this task.

Meetings: None included at this time.

Deliverables:

- Draft and Final Native American Consultant Letters

Task 1.4 Technical Studies

Task 1.4.1 Review and Validation of Existing Technical Studies

It is our understanding that completed, or studies anticipated to be prepared by the Applicant or their consultants include:

- Transportation/Traffic
- Biological Resources (Wildlife and Plants Biological Assessment; Noxious Weeds; Waters of U.S, including wetland)
- Cultural Resources/Historical/Tribal Cultural/Archaeology
- Aesthetics/Visual Impacts, including visual simulations
- Air Quality and Greenhouse Gas Emissions
- Noise
- Land Evaluation and Site Assessment

AZTEC will review these documents for CEQA adequacy in support of the EIR. It is expected that the above listed studies will be adequate to respond to Appendix G questions related to the relevant CEQA impacts areas, technically accurate, and consistent with the project description.

Upon completion of the initial peer review for CEQA adequacy, AZTEC will submit a memo to County staff listing additional information required to be included or necessary revisions to the studies if warranted. With the County's permission, AZTEC is willing to coordinate directly with the applicant's subconsultants to clarify comments and expedite the review process. Upon receiving updated studies, we will conduct a second review and will submit a second memo, if necessary, to ensure that the studies provide the necessary information for a legally defensible EIR.

Deliverables:

- Seven (7) sets of Review Comments (as applicable)

Task 1.4.2 Preparation of New Technical Studies

The RFP indicates the following technical studies are to be prepared by AZTEC:

- CEQA-Level Preliminary Geotechnical Study
- Phase I ESA
- Water Supply Assessment

Below is a summary of the scope of work for the proposed technical studies to be prepared by the AZTEC team.

Assumptions: AZTEC will prepare responses to comments on a draft deliverable and incorporate the responses into the final deliverable.

CEQA-LEVEL PRELIMINARY GEOTECHNICAL STUDY

The CEQA-Level Preliminary Geotechnical Study will include an evaluation of the project in relation to existing geologic and soils conditions and geohazards within the project study areas. The evaluation will be based on available publications by the California Geological Survey (CGS), the USDA Natural Resources Conservation Services database, and published county and local information. No site-specific geotechnical/geologic investigation will be performed for the purpose of this Geotechnical/Geology and Soils Report for the EIR. The report will address the following topics:

- Site description, regional geologic setting, and local geology
- Description of geological hazards including landslides; soil expansivity and hydrocollapse; tsunamis, seiches, and flooding; soil corrosivity; settlement and subsidence.
- Description of seismic hazards including identification of the faults/fault zones within the vicinity of and surrounding the project study areas; estimation of the groundshaking parameters; surface rupture; liquefaction and seismic settlements.
- Description of the soil resources

Assumptions: No fieldwork is required for the CEQA-Level Preliminary Geotechnical Study.

Deliverables:

- Draft and Final Preliminary Geotechnical Report

PHASE I ESA

AZTEC will prepare a Phase I Environmental Site Assessment for this location in accordance with ASTM Standard E 1527-13, Standard Practice for Phase I Environmental Site Assessments: Phase I Environmental Site Assessment Process. The objectives of the proposed Phase I ESA are to estimate the property's potential of containing substantial levels of contaminants that may be present in the soil, surface water, and/or ground water, and which may have resulted from activities either on the subject site or from nearby off-site sources. The following tasks will be completed upon Notice to Proceed:

- A targeted environmental database records check of the project site and surroundings from State and Federal sources, including information from historical sources such as topographical maps, aerial photographs, city directories, and fire insurance maps
- Obtaining current and historical information of the project site from local and County sources
- Interviews of site owners and/or occupants, and local government officials, to obtain information regarding potential Recognized Environmental Conditions (RECs) associated with the project site and adjacent properties
- Review of existing available/applicable data, reports, and hazardous materials reporting records, specifically related to agricultural use of fertilizers, pesticides, herbicides, and rodenticides, including data prepared for recent environmental documents
- A thorough reconnaissance of the project site will be conducted to evaluate current use and conditions of the site and surrounding properties, and to generate a photographic log. During the visit, evidence observed of hazardous or potentially hazardous site conditions will be noted.
- Preparation of a report that will identify, to the extent practical, known or suspected environmental conditions associated with the project site, including RECs, controlled RECs (CRECs), historic RECs (HRECs), and de minimis conditions. Recommendations for additional work, as well as mitigation measures necessary to address hazards and hazardous material concerns, including consideration of existing regulation and best management practices (BMPs) or development standards will also be included, if necessary.

Assumptions: AZTEC staff will conduct fieldwork over one 8-hour day.

Deliverables:
- Draft and Final Phase 1 ESA Report

WATER SUPPLY ASSESSMENT

AZTEC will provide a project Water Supply Assessment (WSA) report determination according to California SB 610 where any project under CEQA shall provide a WSA if the project meets the definitions of CWC Section 10912.2. This project requires a WSA because the project is a renewable energy large-scale development use that occupies more than 40 acres.

AZTEC will develop the WSA Report outline following the Integrated Regional Water Management Plan Appendix J: Imperial Irrigation District (IID) - SB 610 WSA Supporting Documentation.

AZTEC will evaluate the following water elements:

- Water availability during a normal year
- Water availability during a single dry, and multiple dry water years
- Water availability during a 20 year projection to meet existing demands
- Expected 30-year water demand of the proposed project
- Reasonably foreseeable planned future water demands to be served by the water supplier

The following is excluded from this scope of work:

- Hydrology site analysis
- Water quality site analysis
- Onsite drainage hydraulics and analysis
- Temporary stormwater protection plan site measures
- Drainage impact analysis
- Floodplain impact analysis

Assumptions: No fieldwork is required.

Deliverables:
- Draft and Final Water Supply Assessment Report

Task 1.5 Preparation of Initial Study

Task 1.5.1 Administrative Draft Initial Study

AZTEC will prepare an Administrative Draft IS for the project to address CEQA requirements. AZTEC will apply the County's standard environmental checklist to assess each environmental impact.

AZTEC's strategy will be to focus the scope of the EIR by excluding impact areas that do not require mitigation measures. AZTEC will make maximum use of standard conditions of approval and existing plans, policies, and programs, as applicable, to minimize any potential impacts.

Although the IS will address each of the environmental topics in the CEQA Guidelines, the environmental analysis will focus on the following issues in the IS and proposed EIR:

AESTHETICS

The project site is mostly flat and located in a predominantly agricultural area. The County's General Plan does not designate any scenic views or vistas within the project area, and no state scenic highways are located within or in the proximity of the project. Nonetheless, the IS will discuss potential visual and aesthetic impacts related to scenic vistas, scenic highways, the visual quality and character of the site, and the Aesthetics Analysis with Visual Simulations prepared by the Project Applicant. The EIR will evaluate whether implementation of the project could result in significant alterations to viewsheds and visual character, as well as lighting and glare conditions within the County.

AGRICULTURE AND FORESTRY RESOURCES

Agricultural production is not currently taking place on the project site; however, the project will be developed adjacent to productive agricultural lands. The General Plan designates the project site as Recreation/Open Space, and the project site is zoned Open Space/Preservation with a Renewable Energy Overlay (S-2-RE); General Agriculture with a Renewable Energy Overlay (A-2-RE); and Heavy Agriculture with a Renewable Energy Overlay (A-3-RE). However, according to California Department of Conservation's Important Farmland Finder, the project site is designated as "Other Land", and therefore is not considered Prime Farmland or Farmland of State Importance. Additionally, no forestry resources are located within the Project site. Therefore, we anticipate that the IS will determine no impacts towards Agriculture and Forestry Resources and will not require additional analysis in the EIR.

AIR QUALITY

The proposed project includes construction of a solar facility that will result in construction and operational air quality impacts. The Project Applicant is coordinating preparation of an Air Quality and Greenhouse Gas Report, which will be peer reviewed by AZTEC for technical and CEQA adequacy. The majority of air quality impacts are anticipated to occur from construction. However, the IS will include a comprehensive evaluation of regional and local emissions and odors for construction and operation of the project. The IS will compare the findings of the Air Quality and Greenhouse Gas Report with thresholds of significance established by the Imperial County Air Quality Management District and the thresholds defined in Appendix G of the 2020 CEQA Guidelines. Further, the assessment will evaluate whether the project will be consistent with the Air Quality Management Plan. AZTEC anticipates providing a complete analysis of air quality impacts within the proposed EIR based on the results of the Air Quality and Greenhouse Report prepared by the Applicant or their consultant.

BIOLOGICAL RESOURCES

The project site is undeveloped land. The Project Applicant is coordinating preparation of a Biological Resources Report(s), which will be peer reviewed by AZTEC for technical and CEQA adequacy. A summary of important biological resources (habitats, known locations of special-status species, movement corridors, noxious weeds, jurisdictional wetlands, etc.) will be analyzed and a summary provided in the EIR. The extent of potential impacts described in the EIR will be based on the Biological Resources Reports(s).

CULTURAL RESOURCES

Imperial County contains numerous prehistoric archaeological resources and hundreds of historical era resources; however, many of these resources have been impacted due to the intensive agricultural uses throughout the County. AZTEC will peer review the Cultural Resources Assessment prepared by the Project Applicant, and take the findings and recommendations form the assessment to assess the project's potential impacts to cultural resources. We anticipate that the proposed project will not have the potential to result in significant and unavoidable archaeological impacts. The recommendations of the Cultural Resources Assessment will be carried forward into the EIR, along with required mitigation measures, as necessary.

ENERGY

As discussed previously, the project will develop a solar facility on the project site, which has the potential to increase the consumption of energy resources during project construction. In addition, the generation of electrical energy by the project is anticipated to outweigh the energy resources used to construct the solar facilities. Energy calculations will be used to determine if the proposed project could result in a potentially significant impact due to wasteful, inefficient, or unnecessary consumption of energy resources or conflict with or obstruct a state or local plan for renewable energy or energy efficiency. Additionally, the project will be analyzed for consistency with state and local renewable energy programs. The extent of potential impacts related to energy resources that will be discussed within the Energy section of the proposed EIR.

GEOLOGY AND SOILS

A Geotechnical Report will be prepared by AZTEC to evaluate the project site. The investigation will examine existing site conditions, including hazards such as liquefaction, earthquake faults, and subsidence. In addition, the EIR will provide mapping and technical information on geologic and seismic stability of renewable sites and transmission corridors including information on soil conditions. A discussion of the recommendations of the Geotechnical Report, as well as potential impacts will be carried forward into the Geology and Soils section of the EIR.

GREENHOUSE GAS EMISSIONS

AZTEC anticipates that there will be potential significant impacts related to GHG emissions during construction, which will be analyzed within the proposed EIR to evaluate the significance of these potential impacts. Conversely, long-term operations of the proposed project are not anticipated to generate significant impacts. The project will be analyzed for consistency with thresholds for Imperial County, Senate Bill 32, and the Global Warming Solutions Act of 2006 (AB 32). Potential significant impacts related to greenhouse gas emissions will be discussed within the proposed EIR.

HAZARDS AND HAZARDOUS MATERIALS

According to the California Department of Toxic Substances Control (DTSC) EnviroStor database, the project site is not located on a federal Superfund site, State response site, voluntary cleanup site, school cleanup site, corrective action site, or tiered permit site[1]. Therefore, the proposed Project will not result in an impact related to a known hazardous materials site pursuant to Government Code Section 65965.5. In addition, the project is not expected to generate any hazardous waste during construction or operations. However, AZTEC will prepare a Phase I Environmental Site Assessment to determine potential hazards and hazardous materials within the project area. The extent of exposure of County residents to be exposed to hazards and hazardous materials will be addressed in the EIR. In addition, the EIR will identify and address both natural and man-made hazards (e.g., wildland fires, hazardous materials and exposure to contamination, and potential aviation impacts).

HYDROLOGY AND WATER QUALITY

The proposed project will be implemented on a vacant site. The IS and proposed EIR will detail the extent of the solar energy site's impact to surface water features and groundwater resources of the County. Applicable federal, state, and County policies and regulations (e.g., implementation of National Pollutant Discharge Elimination System (NPDES) permit requirements to protect water quality) will also be identified and addressed. Impacts are expected to be less than significant with implementation of the recommendations of the Hydrology Study; however, a full discussion of impacts will be provided in the EIR.

LAND USE AND PLANNING

As previously discussed, the proposed project will not require any changes to the site's General Plan or zoning designations. The EIR will address potential impacts resulting from land use conflicts including potential conflicts with any additional land use plans, policies, or regulations. Additionally, the EIR will address potential growth-inducing impacts, and the relationship of the project to current and proposed land use plans and policies.

MINERAL RESOURCES

This section of the IS will briefly define the existing mineral resources onsite and note and explain the potential loss of availability of a local mineral resource. Mitigation measures known to be successful in addressing the various geotechnical constraints will be defined, including reference to existing geological and soils tests and plan-checking requirements administered by Imperial County. However, we anticipate no impacts related to Mineral Resources from implementation of the proposed project, therefore, this section will not be discussed within the EIR.

NOISE

A Noise Study will be prepared by the Project Applicant, which will be peer reviewed by AZTEC. The findings of the study will support a full analysis within the proposed EIR of the potential noise impacts, including construction noise from implementation of the proposed project. However, it is anticipated that project construction will adhere to current County noise standards and policies and noise impacts can be mitigated to less than significant level. AZTEC will incorporate the information from the Noise Study in the proposed EIR, along with the required mitigation measures, as necessary.

POPULATION AND HOUSING

The project is not expected to result in any significant changes to population or housing in the County as no employees will be based at the project sites. Because the proposed project will be consistent with the General Plan or zoning designations, this section will not be discussed within the EIR.

PUBLIC SERVICES

The proposed project may result in environmental impacts to public services and utilities. The EIR will also address potential public service demands of the proposed project based on consultation with applicable service providers. Consultation with the service providers will determine the need for additional public facilities or personnel to serve the proposed project. Public services (i.e., schools, libraries, etc.) are not expected to experience detrimental impacts because of the project and existing law enforcement, and fire protection providers will continue to provide coverage of the site. However, an analysis of these potential impacts will be discussed within the proposed EIR.

RECREATION

It is anticipated the proposed project will not result in an increased demand for recreational facilities and will not require further analysis within the proposed EIR.

TRANSPORTATION

A Traffic Impact Report will be prepared by the Project Applicant. Potential traffic impacts are anticipated to be limited to construction activities. The extent of potential traffic impacts will be described in the EIR based on the conclusions of Traffic Impact Report.

TRIBAL CULTURAL RESOURCES

As discussed previously, the proposed project will not result in any changes to the General Plan or zoning designation of the project site. Therefore, the project will not require initiation of Senate Bill 18 (SB 18). The results of the Cultural Study and Assembly Bill 52 (AB 52) consultations will be summarized, along with any mitigation measures, in this section of the EIR.

UTILITIES AND SERVICE SYSTEMS

To determine the effect on existing utility providers and infrastructure, the Water Supply Assessment prepared by

1 https://www.envirostor.dtsc.ca.gov/public/search?basic=True

AZTEC and CalRecycle data will be reviewed to determine the current levels of service and the project's potential impact on utility demand. In addition, the EIR will identify where transmission facilities are available for use by the project and the associated capacity available. It is anticipated that there will be no significant impacts related to utilities, however, mitigation measures will be provided, if necessary. We anticipate that this section will be carried forward in the EIR.

WILDFIRE

According to the CAL FIRE Fire Hazard Severity Zone Map, the project sites is not within a Very High Fire Hazard Severity Zone (VHFHSZ). The project site is also not within a Local Responsibility Area VHFHSZ or State or Federally Responsible Area VHFHSZ. The IS will evaluate the proposed project's potential to impair an adopted response plan or emergency evacuation plan, exacerbate wildlife risks, require installation of infrastructure that could exacerbate wildlife risk, or expose people or structures to risks due to post-fire slope instability or drainage changes. However, since the project site is not within a VHFHSZ, we anticipate no impacts from the proposed project, which will not require analysis within the EIR.

MANDATORY FINDINGS OF SIGNIFICANCE

This section of the EIR will summarize findings from other sections related to the potential of the project to degrade the environment, reduce habitat, effect wildlife and plant populations, and eliminate important examples of California history or prehistory.

Assumptions: None

Deliverables:

- Admin Draft Initial Study - Five (5) hard copies
- Admin Draft Initial Study - One (1) CD - Word and .PDF format

Task 1.5.2 Public Draft Initial Study

AZTEC will incorporate modifications to the Initial Study based on the specific comments received from the County and prepare a Draft Initial Study for public review. Exhibits and graphics will be used to describe, evaluate, and analyze information within the document.

Prior to release, AZTEC will submit to the County a PDF of the "print-ready" Draft Public Draft Initial Study for final review and comment. Minimal comments are expected at this stage. Hard copies of the Public Draft Initial Study, as well as digital copies will be distributed to the County, as indicated in the deliverables below.

Assumptions: Information from publicly available sources, technical reports, and the County/Applicant will be used to prepare the IS.

Deliverables:

- Public Draft Initial Study - Five (5) hard copies
- Public Draft Initial Study - One (1) CD - Word and .PDF format

Task 1.5.3 Notice of Preparation

AZTEC will prepare a Notice of Preparation (NOP) consistent with Section 15082 of the CEQA Guidelines. AZTEC will then provide the NOP to the County at the same time the draft IS is provided to the County review, including all required text and graphics. County comments will be incorporated into the NOP. AZTEC will coordinate NOP/IS distribution, including submittal to the State Clearinghouse. This scope assumes that the County will distribute the NOP/IS to other agencies, stakeholders, and interested parties, including those within 500 feet of the project limits. Distribution will be per CEQA requirements and via U.S. mail.

The NOP/IS will initiate a 30-day review period for agencies to provide specific comments about the scope and content of the environmental information related to the responsible agency's area of statutory responsibility, which must be included in the Draft EIR pursuant to Section 15082 of the CEQA Guidelines.

Deliverables:

- One (1) electronic copy of the Draft and Final Notice of Preparation/Public Scoping Meeting Notice

Task 1.5.4 Scoping Meeting

During the 30-day review period, the County and AZTEC will coordinate to schedule a Scoping Meeting to accept public comments. AZTEC staff will attend the Scoping Meeting and, at the County's discretion, to either lead the presentation or provide materials in support of a County staff-led presentation.

AZTEC will also develop various handouts and a PowerPoint presentation for the Scoping Meeting, as well as coordinate with the County for review of the handouts and PowerPoint presentation prior to the meeting date. The scoping meeting presentation will be focused exclusively on the environmental aspects of the project and will not address public policy or entitlement issues related to the project. AZTEC assumes the City will perform all mailing and distribution of public meeting notices and will forward all scoping comments to AZTEC for determination of the review and analyses necessary for the EIR.

Assumptions: Up to 25 individuals will attend the one 2-hour public scoping meeting. A court recorder is not required or will be provided by the County. Up to four (4) handouts will be prepared and County will arrange for printing of meeting handouts. Facilities and equipment for the public scoping meeting will be provided by the County in El Centro, California.

Meetings: Up to two (2) AZTEC staff will attend one up to 2-hour public scoping meeting in a County approved location.

Deliverables:

- Draft and Final Public meeting notices (2 pages, 8 ½ x 11, double-sided, black and white)
- Draft and Final Public meeting handouts (1 page, 8 ½ x 11, single-sided, color)
- Draft and Final PowerPoint presentation (up to 30 slides using County-provided template)

Task 2 | Administrative Draft EIR

AZTEC will use information from the IS/NOP and scoping process, including any comments received from the state, other jurisdictions, and the public, to focus the analysis on those issues identified as potentially significant and of general concern. The AZTEC team will use and incorporate by reference, to the maximum extent feasible, existing information identified in prior tasks.

AZTEC will prepare an Administrative Draft EIR for review by the County. The Administrative Draft EIR will include all CEQA-required sections based on the analysis in the IS. We can begin working on sections (e.g., Existing Setting) of the Administrative Draft EIR during the IS process and submit draft sections of the document to the County before the entire document is complete. This approach will allow for early review of some of the document, which could result in expediting the EIR project review schedule.

The methodology and criteria used for determining the impacts of the project will be explicitly and clearly described in the EIR, including assumptions, models, or modeling techniques used in the analysis. Exhibits and graphics will be used to describe, evaluate, and analyze information within the document. The level of impact will be stated, and a determination will be made as to whether there is no impact, or an impact is less than significant, less than significant with mitigation incorporated, or significant and unavoidable.

AZTEC will identify standard policies, programs, standard conditions of approval, or other obligation on the project that will effectively reduce impacts. Where such standard conditions are not adequate to mitigate impacts to below a level of significance, mitigation measures will be developed. The extent to which the proposed mitigation measures will reduce the level of significance of the identified impact will identified.

Where potentially significant impacts are identified in the Administrative Draft EIR, practicable and project-specific level mitigation measures will be formulated. The impact will be numbered, as will the corresponding mitigation measures, pursuant to standard County practices. Cross-references will be provided where necessary.

The Administrative Draft EIR will include a discussion of the environmental impacts associated with each alternative and compare the impacts with those identified for the proposed project. In addition, a summary matrix that presents and contrasts the environmental effects of each alternative as compared to the proposed project will be prepared.

The following is an outline of the sections which will be included in the EIR:

Chapter 1: Executive Summary. The executive summary section includes a summary of the pertinent project issues and briefly describes the impacts and mitigation measures. The executive summary will also include a brief description of the alternatives to the proposed project. A summary table will be provided consisting of a matrix of impacts and corresponding mitigation measures, including levels of significance of impacts before and after implementation of mitigation.

Chapter 2: Introduction. The introduction section provides a discussion of the purpose and authority of the EIR, organization of the document, identification of the County as the lead agency, a list of responsible and trustee agencies, and other general information on the project.

Chapter 3: Project Description. The Project Description will include regional and vicinity location maps, a description of ownership, jurisdictional boundaries, a detailed description of existing and proposed site facilities and equipment, project phasing, a discussion of required entitlements, and an overview of cumulative impacts.

A statement of project objectives (to be prepared by the Project Applicant and the County) is also included in the Project Description. Project objectives identify the underlying purpose of the proposed project. The statement of project objectives helps a lead agency develop a reasonable range of alternatives to evaluate in an EIR and aids in the preparation of Findings of Fact and a Statement of Overriding Considerations, if necessary.

Chapter 4: Environmental Setting. The environmental setting section includes an overview of the general setting of the environment in the vicinity of the project site and identifies the related projects used in the cumulative impact analysis.

Chapter 5: Environmental Impacts. The environmental impacts and mitigation measures part of this chapter includes an analysis of the applicable environmental issue areas. For each significant impact that would result from implementation of the project, CEQA requires that an EIR discuss feasible mitigation measures to avoid or substantially reduce the project's significant environmental effect. Drafting effective mitigation measures involves clearly explaining the mitigation measure's objectives and implementation—

specifically, how the mitigation measure will be put into action, who is responsible for its implementation, where it will occur, and when it will occur. Many adverse project-related impacts may be mitigated by Standard Conditions of Approval, and Best Management Practices. These types of mitigation will be identified separately from project-specific mitigation measures identified in the EIR.

Each environmental issue will include the following sub-sections:

- *An Introduction* identifying the primary documents used in the preparation of the section and any other pertinent information.
- *An Existing Conditions* section identifies and describes the existing physical environmental conditions that constitute the baseline physical conditions. The baseline assists in determining the significance of an impact.
- *Applicable Federal, State, and local Laws, Regulations, and Standards* that apply to the project and, when implemented, may minimize potential impacts of the project.
- *A listing of Criteria for Determining Impact Significance and Thresholds of Significance* as adopted by the County (if available) or as included in Appendix G of the CEQA Guidelines (2020).
- *Project Impacts* will describe environmental changes to the existing physical conditions that may occur if the proposed project is implemented and evaluates these changes with respect to the thresholds of significance to determine potential significance of identified impacts. In addition, this section will include any Project Design Features proposed to reduce potentially significant impacts.
- *Cumulative Impacts* refers to two or more individual effects that are considerable when taken together or that compound or increase other environmental impacts (CEQA Guidelines Section 15355). CEQA requires the cumulative impacts discuss to reflect the likelihood that impacts would occur and the severity if they did occur.
- *Mitigation Measures* are those specific measures that may be required of the project by the Lead Agency in order to: 1) avoid an impact; 2) minimize an impact; 3) rectify an impact by restoration; 4) reduce or eliminate an impact over time by preservation and maintenance operations; or 5) compensate for the impact by replacing or providing substitute resources.
- *Level of Significance after Mitigation* describes the level of impact significance remaining after mitigation measures have been implemented.

Chapter 6: Other CEQA Considerations. This chapter summarizes those environmental effects that are found to have no impact or a less-than-significant and those which are deemed significant and unavoidable. This section also includes other EIR sections mandated by CEQA, including a discussion of irreversible impacts, significant cumulative impacts, and growth inducement resulting from the project.

Chapter 7: Alternatives. The project alternatives section includes a range of alternatives to be analyzed that meet the applicant-provided project objectives; are feasible on an economic, legal, and regulatory basis; and will avoid or substantially lessen at least one significant impact of the project. AZTEC will analyze three project alternatives, including the required "No Project" alternative. These alternatives will be developed as part of the preparation of the Administrative Draft EIR. The Administrative Draft EIR will include a discussion of the environmental impacts associated with each alternative and compare the impacts with those identified for the proposed project. In addition, a summary matrix that presents and contrasts the environmental effects of each alternative as compared to the proposed project will be prepared.

Chapter 8: Organizations and Persons Consulted. This section lists the organizations and persons consulted during the preparation of the EIR.

Chapter 9: List of Preparers. This section lists the individuals who contributed to the preparation of the EIR.

Chapter 10: References. This chapter will include a list of the references cited in the body of the EIR, organized by chapter.

Technical Appendices. The technical appendices will include the IS/NOP and the technical studies used in the preparation of the EIR. This may be included as a separate volume.

Deliverables:

- Administrative Draft EIR - Five (5) hard copies
- Administrative Draft EIR - One (1) CD - Word and .PDF format

Task 3 | Public Review Draft EIR

Subsequent to the County's review of the Administrative Draft EIR, the AZTEC team will prepare a Public Review Draft EIR for submittal. We assume that changes will be minimal due to early consultation with the County, and prior review and approval of technical reports by County staff.

AZTEC will incorporate modifications to the Administrative Draft EIR based on the specific comments received from the County and prepare a Draft EIR for public review. Exhibits and graphics will be used to describe, evaluate, and analyze information within the document.

Included as appendices to the Draft EIR will be the NOP, comments received on the NOP, and technical studies prepared for the project.

Prior to release, AZTEC will submit to the County a PDF of the "print-ready" Draft EIR for final review and comment. Minimal comments are expected at this stage. Hard copies of the EIR, as well as CDs will also be provided to the County.

In addition, AZTEC will coordinate preparation of the Notice of Completion (NOC) to the SCH in compliance with CEQA Guidelines Section 15085. As of November 3, 2020, the Office of Public Research (OPR) requires one (1) hard copy of the Draft NOC and one (1) hard copy OPR's summary form (in lieu of having 15 hard copies of the 2 page summary or executive summary of a EIR) to be submitted to the State Clearinghouse to begin public review of the Draft EIR.

Assumption: Due to the current COVID-19 conditions, no in-person public hearing will be scheduled and responses will be returned via US mail or email.

Deliverables:

- Public Review Draft EIR - Five (5) hard copies (1000 pages each, 900 black and white, 100 color)
- Public Review Draft EIR - Twenty (20) CDs - Word and .PDF format
- Two (2) hard copies of the Notice of Completion submitted to County and one (1) hard copy returned to County and AZTEC
- One (1) electronic copy of the Notice of Completion and OPR's summary form

Task 4 | Final EIR

4.1 Final EIR and Response to Comments

As comments are provided by to County, AZTEC staff will provide adequate and complete responses to each issue of concern. Regular communication will occur with County staff to ensure that responses are accurate and thorough. As appropriate, "global responses" will be prepared and placed near the front of the responses to comments. These global responses will reduce the need to duplicate responses to repetitive comments. Once the comment period has closed, AZTEC will finalize the Responses to Comments section and submit an Administrative Draft of the Responses to Comments to the County for review.

In addition to responses to comments, this task will include the completion of any required revisions to the Draft EIR and technical studies. Revisions will be included in an errata section of the Final EIR.

Based on County comments, AZTEC will finalize the Responses to Comments section, including revisions to the Draft EIR. The Final EIR and Responses to Comments will be distributed to all parties who submitted comments; each party will receive a notice with an electronic link to the Final EIR document posted on the County's website. An additional 10 printed copies will be submitted to County staff. AZTEC understands that the Final EIR must be released at least 10 days before any public hearings.

This proposal assumes that comments received will not raise issues that were not addressed in the Draft EIR and that no new surveys, additional modeling, or new technical studies will be required to complete adequate responses. Should this not be the case, the AZTEC team will initiate discussion immediately with County staff to receive direction about conducting this extra work.

Deliverables:

- Final EIR - Five (5) hard copies - Word and .PDF format (1000 pages each, 900 black and white, 100 color)
- Final EIR - Twenty (20) CDs - Word and .PDF format
- One (1) electronic copy of the Draft and Final Response to Comments, if any

Task 5 | Mitigation, Monitoring, and Reporting Program

An MMRP will be prepared pursuant to Section 21081.6 of the Public Resources Code. It will be prepared using the County's preferred standard format and will identify the significant impacts that will result from the project, mitigation measures for each impact, the time at which each measure will need to be conducted, the entity responsible for implementing the mitigation measure, as well as the County department or other agency responsible for monitoring the mitigation effort and ensuring its success. Based on County comments, AZTEC will update the document to its final form and provide it to County staff in digital format.

Deliverables:

- One (1) electronic copy of the Draft and Final Mitigation Monitoring Reporting Program

Task 6 | CEQA Findings and Notice of Determination

Task 6.1 Findings of Fact and Statement of Overriding Considerations

Pursuant to Sections 15091 and 15093 of the CEQA Guidelines, we will prepare all necessary CEQA findings with the County. A strategy meeting will be held with the County to discuss the findings, the County's preferred format for the findings, and to identify any information or data needs from County staff or the applicant team to address in the findings. We will submit the draft prior to the Planning Commission hearing.

A Statement of Overriding Considerations will be drafted in collaboration with the County if the Final EIR identifies significant, unavoidable impacts that the County determines will be acceptable in light of the overall benefits of the project. The AZTEC team will use a Statement of Overriding Considerations format approved by the County and will submit the draft prior to the Planning Commission hearing on the Final EIR.

Task 6.2 Notice of Determination (NOD)

If the project is approved, AZTEC will prepare a Notice of Determination for filing with the County Clerk and submission to the State Clearinghouse.

Deliverables:

- One (1) electronic copy of the Draft and Final Findings of Fact and if applicable, Statement of Overriding Considerations
- One (1) electronic copy of the Draft and Final Notice of Determination

Task 7 | Assumptions

General assumptions also are included above in the introduction to this Section 3/4 Scope of Work/Tasks section.

- To facilitate building the proposed project schedule, AZTEC assumed a Notice-to-Proceed (NTP) date of February 1, 2021. We understand NTP will be identified and issued by the County and the schedule will adjust accordingly.
- Electronic and/or hard copy versions of relevant County documents and available data, reports, and technical studies (e.g., available maps, GIS data, geotechnical studies, project plans, utilities assessment, etc.) will be provided in a timely manner.
- AZTEC is not responsible for any omission of data or analyses that are not provided or identified to AZTEC by the County, its representatives, or contractors.
- Deliverables from the baseline conditions investigation will include comprehensive GIS to map existing County resources based on available County data, as well as an administrative record of all sources consulted and referenced. We assume that GIS data from the County will be available in native and .mxd format to provide environmental baseline conditions.
- Technical reports prepared for the project by the Project Applicant will become technical appendices to the EIR and will include a traffic impact assessment, biological resources assessment, cultural resources assessment, aesthetics analysis with visual impacts, air quality/ greenhouse gas impact analysis, land evaluation and site assessment, and noise impact analysis.
- Time traveling to a meeting, attending a meeting, and developing meeting minutes is covered under the Meetings task.
- Minimal comments on the administrative draft by the County are anticipated.
- The County will be responsible for public noticing. The County will also be responsible for environmental process, approval, and permit fees.
- AZTEC will assist in preparation and distribution of newspaper notices.
- Responses to comments on administrative or draft documents will not require new data collection or additional fieldwork or analyses beyond the stated scope of work.
- If unanticipated resources are identified, AZTEC will prepare a supplemental scope and budget for documentation and analysis of these resources.
- Any in-person background research needed will be performed in conjunction with travel for meetings. Field work is priced separately.
- AZTEC reserves the right to manage the project budget at the project level; and approved budget may be moved between tasks, if needed.
- It is anticipated that no major environmental impacts due to the project will be identified. Assessment for environmental resources will be based on existing and/ or reports prepared specifically for the project reports, available databases, regional plans, and site visits.
- Print pricing is an estimate and will be actual with no markup.

Task 8 | Meetings

AZTEC will coordinate with County staff to prepare and conduct the PowerPoint presentation for use at the public hearings before the Planning Commission. AZTEC's presentations will be limited to the environmental analysis. AZTEC will also be prepared to provide responses, as needed, to questions regarding the CEQA document.

AZTEC will attend:

- Kick-off Meeting with County staff. Up to two AZTEC staff will attend one 4-hour meeting in El Centro, CA.
- Public Scoping Meeting. Up to two AZTEC staff will attend one 2-hour meeting in El Centro, CA.
- Planning Commission Hearings. Up to two AZTEC staff will attend up to two 2-hour meetings in El Centro, CA.
- Board of Supervisors Hearings. Up to two AZTEC staff will attend up to two 2-hour meetings in El Centro, CA.
- Monthly Progress Meetings. Up to two AZTEC staff will attend twelve 1-hour meetings by teleconference.
- Additional Meetings with County staff to discuss work program and progress, resolve issues, review comments on administrative and draft documents and/or receive any necessary direction from County staff. Up to two AZTEC staff will attend up to 5 additional 2-hour meetings by teleconference.

NOTE: As required by COVID-19 practices, in-person meetings may be replaced by hosted teleconference meetings as appropriate.

Assumptions: Comments on the Public Review Draft EIR will be returned via email or U.S. mail and no in-person public hearing is required.

Task 9 | Permitting

Conditional Use Permits

Pursuant to Section 90203.09 of the Imperial County Code, AZTEC will prepare the findings of consistency for the requested Conditional Use Permits to ensure the proposed project complies with the requirements of the Imperial County Code and the Imperial County General Plan, including the Imperial County General Plan Renewable and Transmission Element, in accordance with State Planning and Zoning law.

Findings of consistency will be made for the following:

A. The proposed use is consistent with the goals and policies of the adopted county general plan;
B. The proposed use is consistent with the purpose of the zone or sub-zone within which the use will be located;
C. The proposed use is listed as a use within the zone or sub-zone or is found to be similar to a listed conditional use according to the procedures of Section 90203.10;
D. The proposed use meets the minimum requirements of this title applicable to the use and complies with all applicable laws, ordinances and regulations of the county of Imperial and the state of California;
E. The proposed use will not be detrimental to the health, safety, and welfare of the public or to the property and residents in the vicinity;
F. The proposed use does not violate any other law or ordinance;
G. The proposed use is not granting a special privilege.

Deliverables:

- Conditional Use Permit Consistency Findings

Task 10 | Project Management

As AZTEC's PM, Liz Cutler will coordinate closely with County staff to ensure that the EIR and associated documents delivered to the County are legally defensible, accurate, and useful to decision makers considering the approval of the project. The project manager will also coordinate with County staff throughout the process not only to streamline the CEQA process, but to avoid or anticipate any changes that could result in delays.

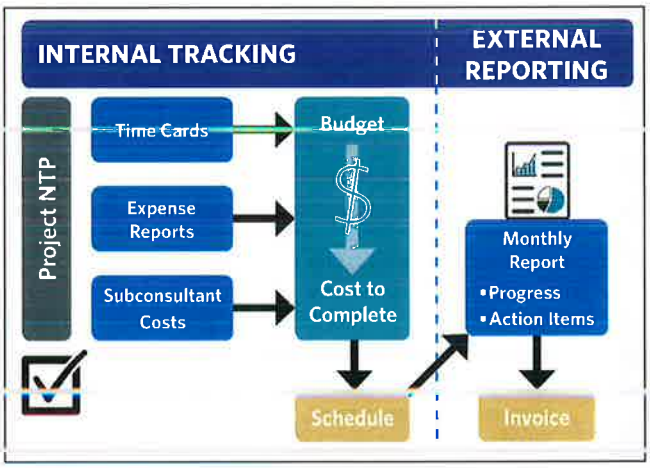
Project/Cost Control

We use a combination of specialized software and company-developed tools and procedures to track and report on a project's status (Figure 4). To effectively manage the costs of the project, AZTEC will attend monthly conference calls (briefings) to update the County on upcoming deliverables and discuss any potential issues that may impact the scope of work. AZTEC will draft agendas in advance of these meetings and deliver minutes via email to the entire project team. The minutes will identify action items and the responsible party to implement said action item. In addition to standing meetings, AZTEC will be available to County staff to answer questions, address concerns, or to clarify issues as they arise.

Liz will be the key contact for the County. Among other things, she will be responsible for:

- EIR task scheduling and assignment, management of resources, monitoring of costs, and schedule adherence
- Consultation and coordination with local and state agencies relative to the environmental document and the environmental review process
- Coordination and communications with the County's project team to ensure that policies, procedures, and any applicable codes are complied with and, where applicable, are incorporated into the EIR
- Ensuring that the environmental review process and the EIR satisfy the statutes and guidelines of CEQA and CEQA procedures
- Presenting in public meetings and project progress meetings as requested by the County.

FIGURE 4. PROJECT CONTROLS



Quality Control

AZTEC implements a Quality Control Plan (QCP) that establishes comprehensive multiple reviews for all documents. Technical documents undergo a three level review process that includes the technical lead, the project manager, and a copy editor. CEQA/NEPA documents require a four-level review process that includes technical and peer reviewers as well as a PM and copy editor review. This allows the internal disciplines the opportunity to review submittals, ensure that guidelines are met, and verify that the documents are technically correct and complete. AZTEC has used this process successfully on current and recent projects including the I-15 Express Lanes Design-Build Project and several Arizona Department of Transportation On-Call task orders.

Our QC program, led by Justin Hoppmann, promotes quality at every review stage. When comments are received from the County, our PM and task leads work together to address those comments. If there is a concern or question regarding a comment, we will follow up with you for clarification. For larger deliverables, a comment resolution form is completed tracking each comment and action. Once complete, this form is included with the revised document submittal.

Leveraging Communication Tools / Virtual Collaboration

Routine and effective communication is key for any contract, but especially for this project to keep approvals on time. We champion practices like over-the-shoulder (OTS) reviews to promote project collaboration in real time. However, OTS is not always possible. In order to maximize opportunities to advance the project's design and stay on schedule, AZTEC uses a variety of collaborative, cloud-based tools to assist us in our delivery including Microsoft Teams, OneNote, SharePoint, and BlueBeam Revu.

AZTEC team members have successfully managed and led virtual design and construction meetings using these collaboration tools and have received all positive feedback from clients for facilitating productivity without delays to schedule. AZTEC plans to utilize these cloud-based project collaboration tools to maintain effective communication to sustain project schedules, especially in situations where everyone is working remotely and safely due to COVID-19. Alternatively, we can use any other preferred programs or platforms preferred by the County (such as GoToMeeting, WebEx, Zoom and Google Hangouts).

Integrating Bluebeam Into Our Quality Program

AZTEC continually strives to improve our quality program by embracing innovation. Fast-tracked project schedules are the new normal, which can put proper quality control (QC) of deliverables at risk. As a supplement to our Quality Control Program (QCP), we have developed a very efficient procedure to utilize Bluebeam Revu as part of our internal review. Bluebeam allows for cloud-based, real-time document review, response and verification that tremendously reduces the time and administration of traditional comment documentation processes via spreadsheets or word documents. Bluebeam reduces the duration of the review-response-resolve process because there is no delay while documents are compiled and delivered because it is centralized in the cloud and is real-time. It also collects the comments directly on the documents being reviewed improving comment understanding and action implementation. This is a substantial efficiency and flexibility improvement that ensures our QCP is implemented properly on all deliverables and is easily audited. Especially for larger project deliverables that require coordination from multiple contributing members, such as the I-15 Express Lanes Project Design-Build, we have successfully deployed Bluebeam to expedite but streamline the quality reviews in an efficient manner.

5. Proposed Schedule

We recognize that meeting the project delivery goal is a County top priority and understand the importance of schedules and deadlines, and the impacts to the project if they are not maintained. We take our schedule commitments very seriously. We have provided the Project Schedule (Figure 5) on the next two pages, which shows in detail the duration and functional relationship of major tasks and key milestones for this project.

Schedule Control

We will carefully monitor schedule-critical tasks to ensure successful project delivery. We will create a master schedule that will monitor progress and identify slippage. The project schedule will be a standing agenda item for virtual regular coordination meetings with the County and any other agencies/stakeholders. During the meetings, the schedule will be reviewed, discussed, and modified as required. If a task should fall behind schedule, we will discuss the reasons for the delay and determine schedule recovery plans. Strategies that we use to avoid schedule slippage are:

- Schedule a kick-off meeting with all stakeholders to establish communication links and agreement on the project's objectives and schedule
- Provide all stakeholders with timely, up-to-date information and submittal status
- Ensure and monitor adequate resources are committed
- Foster team spirit and accountability to meet deadlines and deliverable dates
- Hold regular progress sessions among team members
- Maintain close contact with the County
- Conduct QA/QC reviews well before submittal milestones

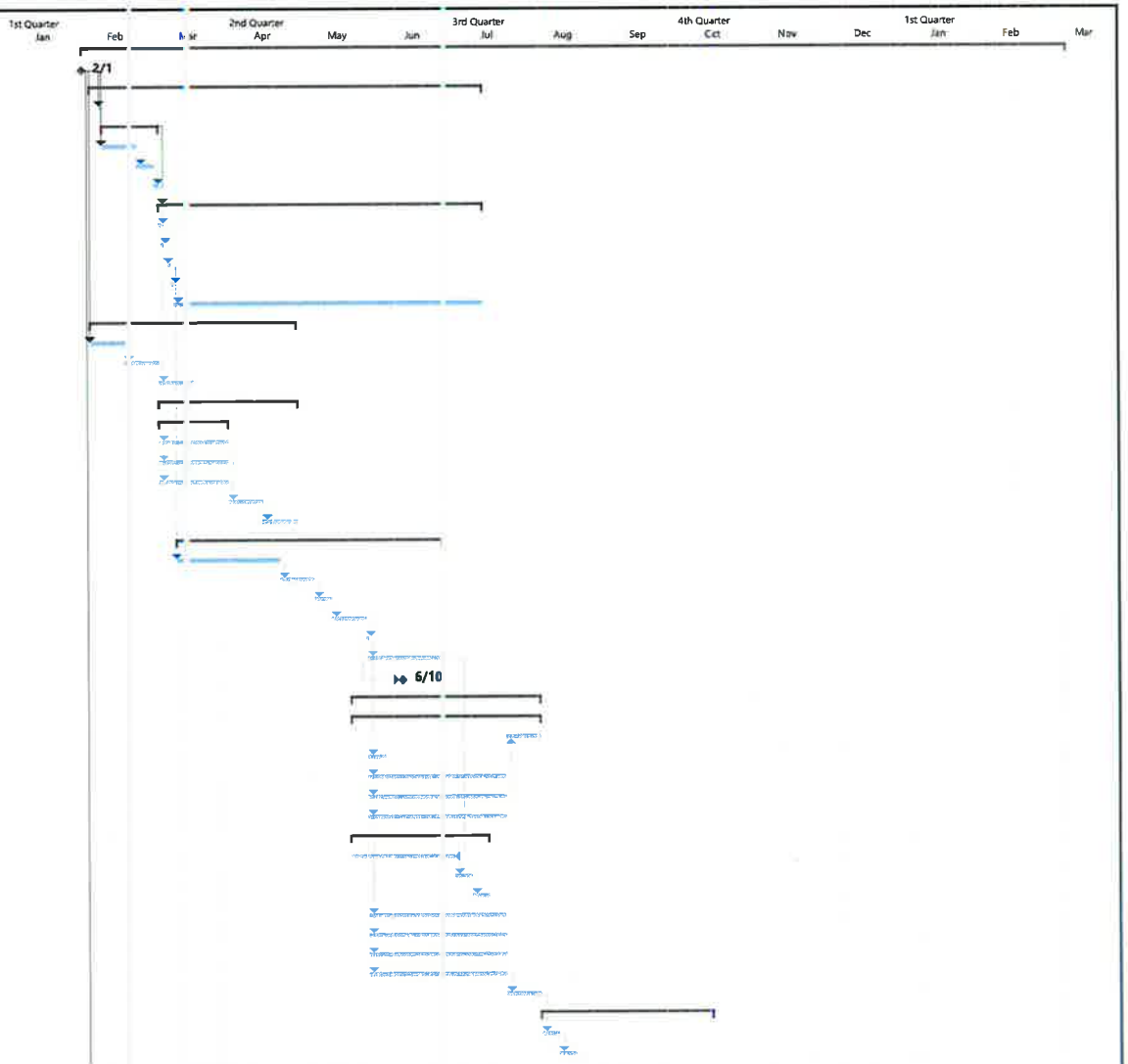
By regularly monitoring the project's progress, Liz Cutler, AZTEC's PM, will track work task status. She will work closely with AZTEC Project Principal, Michael Shirley, who will assign all resources necessary to deliver this project successfully.

6. Cost Estimate/ Milestones

We have carefully assembled our cost estimate identifying major milestones for the project in accordance to the scope and schedule. Our cost estimate (Figure 6) is provided on Page 24.

FIGURE 5. SCHEDULE (PAGE 1 OF 2)

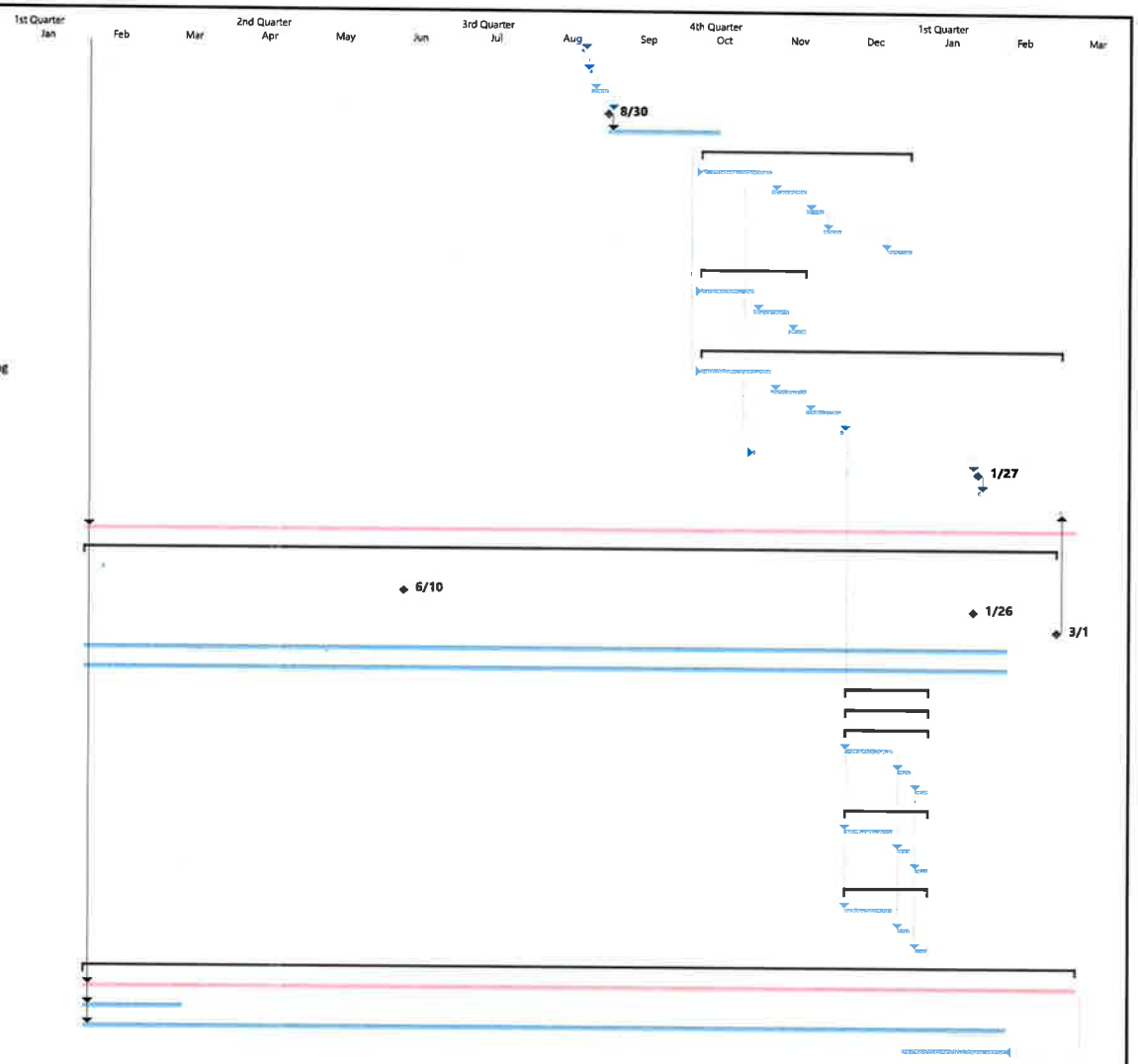
ID	Task Name
1	**COUNTY OF IMPERIAL - VEGA SES 2, 3 & 5 SOLAR PROJECT**
2	**Notice to Proceed**
3	**TASK 1: Project Initiation**
4	1.1 Kickoff Meeting and Site Visit
5	**1.2 Project Description**
6	Prepare Draft Project Description
7	County Review of Project Description
8	Revisions to Project Description
9	**1.3 Native American Outreach and Consultation**
10	Prepare Native American Consultation Letters
11	County Review of Consultation Letters
12	Revisions to Consultation Letters
13	Email Consultation Letters to Native American Tribal Representatives
14	90-day Consultation Request Period
15	**1.4 Technical Studies**
16	Conduct Peer Review of Existing Technical Studies
17	County Review of Peer Review Comments
18	Revisions to Peer Review Comments
19	**Technical Studies Preparation**
20	**Prepare Technical Studies**
21	Geotechnical Report
22	Phase 1 ESA
23	Water Supply Assessment
24	County Review of Technical Studies
25	Revisions to Technical Studies
26	**1.5 Preparation of Initial Study and Notice of Preparation**
27	Prepare Draft Initial Study (IS) and Notice of Preparation (NOP)
28	County Review of Draft Initial Study and Notice of Preparation
29	Revisions to Initial Study and Notice of Preparation
30	County Screencheck of Initial Study and Notice of Preparation
31	Submit IS and NOP to Office of Planning and Research (OPR)
32	30-Day Public Review
33	Scoping Meeting
34	**TASK 2: Administrative Draft EIR**
35	**Prepare ADEIR (3 weeks after last technical study is approved)**
36	Executive Summary
37	Introduction
38	Environmental Setting
39	Environmental Impacts
40	Other CEQA Considerations
41	**Project Alternatives**
42	Prepare Draft Alternatives Descriptions (up to two additional)
43	County Review of Draft Alternatives
44	Revisions of Alternatives Descriptions
45	Organizations and Persons Consulted
46	List of Preparers
47	References
48	Technical Appendices
49	County Review of ADEIR
50	**TASK 3: Public Review Draft EIR**
51	Preparation of Public Review Draft EIR
52	County Review of Public Review Draft EIR



Critical | Split | Finish-only | Baseline Milestone | Manual Summary | Inactive Task
Critical Split | Task Progress | Duration only | Milestone | Project Summary | Inactive Milestone
Critical Progress | Manual Task | Baseline | Summary Progress | External Tasks | Inactive Summary
Task | Start-only | Baseline Split | Summary | External Milestone | Deadline

FIGURE 5. SCHEDULE (PAGE 2 OF 2)

ID	Task Name
53	Preparation of Notice of Completion (NOC)
54	County Review of NOC
55	Revisions to Public Review Draft EIR and NOC
56	DEIR and NOC Submittal to SCH
57	45-day Public Review
58	**TASK 4: Final EIR**
59	Preparation of Final EIR, incluudng Reponses to Comments (RTCs)
60	1st County Review of RTCs and Final EIR
61	Revisions to RTCs & Final EIR
62	2nd County Review of RTCs & Final EIR
63	Public Review of Final EIR, including RTCs (10 days prior to hearing)
64	**TASK 5: Mitigation Monitoring and Reporting Program (MMRP)**
65	Prepare Mitigation Montitoring and Reporting Program (MMRP)
66	County Review of MMRP
67	Revisions to MMRP
68	**TASK 6: CEQA Findings and Notice of Determination (NOD)**
69	Prepare Findings of Fact and Statement of Overriding Considerations (Finding
70	County Review of Findings
71	Revisions to Findings
72	Submit Findings to County
73	Prepare Notice of Determination (NOD)
74	County Review of NOD
75	Revisions to NOD
76	Submit NOD to County and OPR
77	**TASK 7: Assumptions**
78	**TASK 8: Meetings**
79	Kickoff Meeting and Site Visit
80	Public Scoping Meeting
81	Planning Commission Hearings (2nd & 4th Weds)
82	Board of Supervisors Hearings (Tues)
83	Monthly Progress Meetings
84	Additional Meetings with County Staff
85	**TASK 9: Conditional Use Permits**
86	**Prepare Findings of Consistency**
87	**SES 2**
88	Prepare Findings of Consistency
89	County Review of Findings of Consistency
90	Revisions to Findings of Consistency
91	**SES 3**
92	Prepare Findings of Consistency
93	County Review of Findings of Consistency
94	Revisions to Findings of Consistency
95	**SES 5**
96	Prepare Findings of Consistency
97	County Review of Findings of Consistency
98	Revisions to Findings of Consistency
99	**TASK 10: Project Management**
100	Project Management
101	Project Startup
102	Administrative Record
103	Project Closeout



Critical | Critical Split | Critical Progress | Task | Split | Task Progress | Manual Task | Start-only | Finish-only | Duration-only | Baseline | Baseline Split | Baseline Milestone | Milestone | Summary Progress | Summary | Manual Summary | Project Summary | External Tasks | External Milestone | Inactive Task | Inactive Milestone | Inactive Summary | Deadline

Derivation of Cost – VEGA SES 2, 3 & 5 Solar Project

LABOR	Hours	Billable Rate	Cost
Project Principal	0	$258.89	$0.00
Project Manager	308	$253.14	$77,967.12
Project Engineer	84	$201.36	$16,914.24
Environmental Planner/Scientist V	228	$186.98	$42,631.44
Environmental Planner/Scientist IV	262	$158.21	$41,451.02
Environmental Planner/Scientist III	860	$129.45	$111,327.00
Environmental Planner/Scientist II	112	$100.68	$11,276.16
Environmental Planner/Scientist I	142	$71.92	$10,212.64
Environmental Technician	100	$43.15	$4,315.00
Labor Total	*2096*		*$316,094.62*

EXPENSES (AT COST, NO MARKUP)	Units	Unit Cost	Cost
Flight (Roundtrip)	0	$0.00	$0.00
Mileage (GSA FY 2020 Rate)	1000	$0.58	$575.00
Lodging (GSA FY 2020 Rate for Area)	2	$96.00	$192.00
Per Diem (GSA FY 2020 Rate for Area)	7	$55.00	$385.00
Vehicle Rental (Standard Car, Daily)	0	$41.00	$0.00
Vehicle Rental (Pickup, Daily)	0	$49.00	$0.00
Vehicle Rental (Large SUV/4X4 Pickup, Daily)	0	$88.00	$0.00
Fuel	0	$3.15	$0.00
Equipment/Supplies (Description)	0	$0.00	$0.00
AZSITE Database Check	0	$75.00	$0.00
ASM Project Registration Fees	0	$150.00	$0.00
ASM Digitial Curation Fee	0	$90.00	$0.00
Environmental Database Report	1	$1,052.75	$1,052.75
Lead Sample Analysis	0	$0.00	$0.00
Asbestos Sample Analysis	0	$0.00	$0.00
Direct Expenses Total			*$2,204.75*

OUTSIDE SERVICES (AT COST, NO MARKUP)	Units	Unit Cost	Cost
CDs/USB drives (32 GB)	22	$5.00	$110.00
Printing - Black and White (8 1/2 x 11)	13500	$0.10	$1,350.00
Printing - Color (8 1/2 x 11)	15000	$0.50	$7,500.00
Binding/Cover/Tabs - post binding	15	$8.00	$120.00
FedEX/UPS	3	$40.00	$120.00
Outside Services/Consultants Total			*$9,090.00*

TOTAL COST ESTIMATE (LABOR TOTAL + EXPENSES) $327,389.37

Michael Shirley, Senior Vice President

November 18, 2020
Date

FIGURE 6. COST ESTIMATE/MILESTONES (PAGE 2 OF 4)

Labor Hours Worksheet

	Project Principal	Project Manager	Project Engineer	Environmental Planner/Scientist V	Environmental Planner/Scientist IV	Environmental Planner/Scientist III	Environmental Planner/Scientist II	Environmental Planner/Scientist I	Environmental Technician	Subtotal Hours	Subtotal Cost
Billable Rate	$258.89	$253.14	$201.36	$186.98	$158.21	$129.45	$100.68	$71.92	$43.15		
Task 1 Project Initiation											
Task 1.1 Kickoff Meeting and Site Visit		4				4				8	$ 1,530.36
Task 1.2 Project Description		8				24		16		48	$ 6,282.64
Task 1.3 AB 52 Consultation Letters		4				12				16	$ 2,565.96
Task 1.4 Technical Studies										0	$ -
Task 1.4.1 Review and Validation of Existing Technical Studies		20		36	36	24	8			124	$ 21,401.88
Task 1.4.2 Preparation of New Technical Studies											
Preliminary Geotechnical Report		4	48			108	64			224	$ 31,101.96
Phase I Env Site Assessment		4			20			26		50	$ 6,046.68
Water Supply Assessment		4	36	72		24				136	$ 24,830.88
Task 1.5 Preparation of Initial Study											
Task 1.5.1 Administrative Draft Initial Study		24		24	16	96			40	200	$ 27,247.44
Task 1.5.2 Public Draft Initial Study		8		12	2	24				46	$ 7,692.10
Task 1.5.3 Notice of Preparation		4				8				12	$ 2,048.16
Task 1.5.4 Scoping Meeting		8				40				48	$ 7,203.12
Subtotal Hours	0	92	84	144	74	364	72	42	40	912	$ 137,951.18
Subtotal Cost	$ -	$ 23,288.88	$ 16,914.24	$ 26,925.12	$ 11,707.54	$ 47,119.80	$ 7,248.96	$ 3,020.64	$ 1,726.00		
Task 2 Administrative Draft EIR											
Task 2 Administrative Draft EIR		40		24	64	200		60	8	396	$ 55,288.96
Subtotal Hours	0	40	0	24	64	200	0	60	8	396	$ 55,288.96
Subtotal Cost	$ -	$ 10,125.60	$ -	$ 4,487.52	$ 10,125.44	$ 25,890.00	$ -	$ 4,315.20	$ 345.20		
Task 3 Public Review Draft EIR											

Labor Hours Worksheet

	Project Principal	Project Manager	Project Engineer	Environmental Planner/Scientist V	Environmental Planner/Scientist IV	Environmental Planner/Scientist III	Environmental Planner/Scientist II	Environmental Planner/Scientist I	Environmental Technician	Subtotal Hours	Subtotal Cost
Billable Rate	$258.89	$253.14	$201.36	$188.98	$158.21	$129.45	$100.68	$71.92	$43.15		
Task 3 Public Review Draft EIR		24		24	60	60		24	8	200	$ 29,893.76
										0	$ -
Subtotal Hours	0	24	0	24	60	60	0	24	8	*200*	*$ 29,893.76*
Subtotal Cost	$ -	$ 6,075.36	$ -	$ 4,437.52	$ 9,492.60	$ 7,767.00	$ -	$ 1,726.08	$ 345.20		
Task 4 Final EIR											
Task 4 Final EIR		16		16	24	60		16	8	140	$ 20,101.88
Subtotal Hours	0	16		16	24	60	0	16	8	*140*	*$ 20,101.88*
Subtotal Cost	$ -	$ 4,050.24	$ -	$ 2,991.68	$ 3,797.04	$ 7,767.00	$ -	$ 1,150.72	$ 345.20		
Task 5 MMRP											
Task 5 MMRP		8		20		40	40		8	116	$ 15,315.12
Subtotal Hours	0	8	0	20	0	40	40	0	8	*116*	*$ 15,315.12*
Subtotal Cost	$ -	$ 2,025.12	$ -	$ 3,739.60	$ -	$ 5,178.00	$ 4,027.20	$ -	$ 345.20		
Task 6 CEQA Findings and NOD											
Task 6.1 Findings of Fact and Statement of Overriding Considerations		8				48			4	60	$ 8,411.32
Task 6.2 Notice of Determination (NOD)		2				4				6	$ 1,024.08
Subtotal Hours	0	10	$ -	0	0	52	0	0	4	*66*	*$ 9,435.40*
Subtotal Cost	$ -	$ 2,531.40		$ -	$ -	$ 6,731.40	$ -	$ -	$ 172.60		
Task 7 Assumptions											
Task 7 Assumptions										0	$ -
Subtotal Hours	0	0	0	0	0	0	0	0	0	*0*	*$ -*
Subtotal Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -		

FIGURE 6. COST ESTIMATE/MILESTONES (PAGE 4 OF 4)

Labor Hours Worksheet

	Project Principal	Project Manager	Project Engineer	Environmental Planner/Scientist V	Environmental Planner/Scientist IV	Environmental Planner/Scientist III	Environmental Planner/Scientist II	Environmental Planner/Scientist I	Environmental Technician	Subtotal Hours	Subtotal Cost
Billable Rate	$258.89	$253.14	$201.36	$186.98	$158.21	$129.45	$100.68	$71.92	$43.15		
Task 8 Meetings											
Kick-off Meeting		16				16				32	$ 6,121.44
Public Scoping Meeting		8				10				18	$ 3,319.62
Planning Commission Hearings		4				4				8	$ 1,530.36
Board of Supervisors Hearings		4				4				8	$ 1,530.36
Monthly Progress Meetings		12				18				30	$ 5,367.78
Additional Meetings		10				20				30	$ 5,120.40
Subtotal Hours	*0*	*54*	*0*	*0*	*0*	*72*	*0*	*0*	*0*	*126*	*$ 22,989.96*
Subtotal Cost	*$ -*	*$ 13,669.56*	*$ -*	*$ -*	*$ -*	*$ 9,320.40*	*$ -*	*$ -*	*$ -*		
Task 9 Permitting											
Task 9 Preparation of CUP Findings		4				12				16	$ 2,565.96
Subtotal Hours	*0*	*4*	*0*	*0*	*0*	*12*	*0*	*0*	*0*	*16*	*$ 2,565.96*
Subtotal Cost	*$ -*	*$ 1,012.56*	*$ -*	*$ -*	*$ -*	*$ 1,553.40*	*$ -*	*$ -*	*$ -*		
Task 10 Project Management											
Task 10 Project Management		60			40				24	124	$ 22,552.40
Subtotal Hours	*0*	*60*	*0*	*0*	*40*	*0*	*0*	*0*	*24*	*124*	*$ 22,552.40*
Subtotal Cost	*$ -*	*$ 15,188.40*	*$ -*	*$ -*	*$ 6,328.40*	*$ -*	*$ -*	*$ -*	*$ 1,035.60*		
Total Labor Hours	***0***	***308***	***84***	***228***	***262***	***860***	***112***	***142***	***100***	***2096***	***$ 316,094.62***
Total Labor Cost	***$ -***	***$ 77,967.12***	***$ 16,914.24***	***$ 42,631.44***	***$ 41,451.02***	***$ 111,327.00***	***$ 11,276.16***	***$ 10,212.64***	***$ 4,315.00***		

7. Consultant Selection Criteria

Through the submission of this proposal, we hope the County can see AZTEC's genuine interest, availability and experience to work on this project. Figure 7 below highlights AZTEC's qualifications in line with the consultant selection criteria provided in the County's RFP.

Conflicts of Interest Disclosure

AZTEC does not have any conflicts of interests to disclose. We do not have any current/ongoing or previous contracts (within the past year) with the County, including any involvement with the current technical studies for the project. We believe this will be an added-value to the County - a proven consultant who can bring fresh eyes and energy to the delivery of this project!

FIGURE 7. SUMMARY OF CONSULTANT SELECTION CRITERIA TO AZTEC'S APPROACH/ QUALIFICATIONS

Criteria/Description in RFP	AZTEC Qualifications
Understanding of the Project	
▪ Demonstrate understanding of key elements of the project ▪ Povide the names of personnel and their expertise.	✓ Our Project Understanding provides a high-level overview of the key elements of the project for VEGA SES 4 [See Pages 1-2] ✓ Our key personnel, led by PM Liz Cutler, are identified in Section 2 and resumes provided in the Appendix [See Pages 3-5 and Appendix]
Approach to the Project	
▪ Recognized and identified special circumstances on the project and provided logical approach to tasks and issues of the project	✓ Our Project Approach includes project management practices focused on quality delivery, on time and on budget. Our Scope of Services and approach to the work tasks are discussed in a clear, logical way outlining expected meetings and deliverables at each step [See Pages 9-20]
Professional Qualifications	
▪ Qualified PM and key team members to perform the work categories on the project with demonstrated knowledge of standards and procedures	✓ Liz Cutler will lead our team as PM and is supported by the expertise of in-house key personnel [See Pages 4-6]
Specialized Experience and Technical Competence	
▪ Information about comparable projects and past performance past performance on contracts with government agencies and private industry ▪ Capacity to accomplish the work in the required time	✓ Example projects demonstrating comparable experience provide a glimpse to AZTEC's capabilities and reputation to deliver contracts with public and private clients [See Pages 6-9] ✓ Our key personnel are available and committed to this project! [See Pages 9]. We understand the priority of this project and have outlined a logical schedule [See Pages 22-23] to provide the County exceptional services within the required time.

APPENDIX

AZTEC TYPSA

APPENDIX

LIZ CUTLER

Project Manager

EXPERIENCE

2020 - Present (AZTEC)

25 Years Other Firms

EDUCATION

MS, Geology, University of Wyoming, 1984

BS, Geology, University of California - Los Angeles, 1979

TRAINING

BLM – Visual Impact Assessment, BLM National Training Center

AFFILIATIONS

Women's Transportation Seminar - Orange County Chapter, Member

Society of Military Engineers (SAME)

AZTEC TYPSA

BACKGROUND

Liz is a senior project manager and lead environmental specialist with more than 25 years of experience in environmental siting, licensing, permitting, compliance during construction, restoration, mitigation and management of simple-to-complex federal, state, and local projects in California, Arizona, Nevada, Utah, Idaho, Wyoming, Alaska, Hawaii, and across the US. She brings significant experience managing high-profile, multi-faceted projects and multi-disciplinary teams—and has a demonstrated record of developing innovative environmental (CEQA/NEPA and federal/state permitting) and construction solutions for the most-challenging environments and projects. Liz also provdes strategic and tactical support to project client teams and excels at client-focused delivery. She has identified project approaches in the design, construction, and mitigation phases that have results in demonstrable project schedules and costs.

RELEVANT EXPERIENCE

Senior Project Manager and Senior Technical Consultant. Salt Wells Photovoltaic Solar Facility Environmental Assessment, Enel Green Power Salt Wells Solar, LLC, Salt Wells, NV.: Liz was the Project Manager for the update of the Environmental Assessment prepared for and submitted to the U.S. Bureau of Land Management (BLM) – Carson City District, Stillwater field Office, Carson City Nevada, as part of a lease application package. The proposed Salt Wells Photovoltaic Solar Facility (Project) would be located on 150 acres of land approximately 15 miles southeast of Fallon, in Churchill County, Nevada, and adjacent to the existing Salt Wells Geothermal Power Plant. The project would be the first geothermal-solar hybrid facility developed solely on federally administered lands and will have a PPA separate from the geothermal project, though the two would share common equipment including a substation and upgraded transformer.

Senior Project Manager and Senior Technical Consultant. Cove Fort Photovoltaic Solar Facility Feasibility Study, Enel Green Power, North America, Inc., Beaver and Millard Counties, UT.: Liz was the Project Manager for the preparation of a Site-Specific feasibility study for a 40-MW photovoltaic solar project to be located on up to 1600 acres of mixed undeveloped land and existing agricultural fields in Beaver and Millard Counties, Utah. The study resulted in the generation of a project development work plan that provided ENEL with a clear understanding of the level of environmental and permitting work, including field work, required to develop the proposed project.

Southern California Edison Capital Improvement Program, Ventura, Los Angeles, Kern, Riverside, San Bernardino Counties, California and Clark County, Nevada.: Program Manager, Principal Project Manager, and Principal Technical Consultant. Liz supported Southern California Edison (SCE) on more than 19 transmission, distribution, substation, and coal-fired and nuclear generating station projects since 2006 during siting, licensing, permitting, preconstruction, construction, post-construction, mitigation/restoration, and demolition/decommissioning project phases. The projects ranged from licensing one substation to technical consulting and support during licensing, construction, and mitigation for the 172-mile long new and replacement of 220/500 kV transmission and substation project. Projects were located on federal, state, county, local, and private lands, covered by more than 25 land management plans, general plans, specific plans, developments codes, and zoning regulations. Liz provided strategic consulting and review and managed the preparation of documentation consistent with NEPA and/or CEQA requirements, including demolition and decommissioning of the San Onofre Nuclear Generating Facility.

MIKE SHIRLEY

Project Principal

EXPERIENCE

2002 - Present (AZTEC)

9 Years Other Firms

EDUCATION

BS, Biology (Fish and Wildlife Management), Northern Arizona University, 1993

PERMITS

Permit No. TE-064431; US Fish and Wildlife Service; permitted for cactus ferruginous pygmy-owl, Mexican spotted owl, Chiricahua leopard frog, and Southwestern willow flycatcher (Arizona, California, Nevada, New Mexico, and Texas)

TRAINING

Burrowing Owl Survey Technique and Protocol Training, Arizona Game and Fish Department (AGFD), Casa Grande, AZ, 2008

Wildlife Crossings Field Course, Southern Rockies Ecosystem Project, Payson, AZ, 2005

AFFILIATIONS

National Association of Environmental Professionals (NAEP)

Town of Queen Creek Parks and Recreation Advisory Committee

AZTEC TYPSA

BACKGROUND

Michael Shirley has 27 years of experience as an environmental planner and a wildlife biologist. Through his employment with the US Forest Service and private consulting firms, his career has included project and program management, construction compliance, authoring NEPA documents, conducting field studies and preparing resource documents, as well as assisting clients obtain permits and other project-related approvals. He has diverse project experience which includes a variety of linear and large landscaped-based projects. Michael is currently AZTEC's Senior Vice President in charge of Environmental Services, but continues to be actively engaged assisting clients in project-level environmental compliance and completion of environmental deliverables.

RELEVANT EXPERIENCE

Interim US 89 Detour; Bodaway-Gap to LeChee, AZ (ADOT/Navajo Nation): Michael is the principal in charge of AZTEC's 4th consecutive Statewide Environmental Services Contract which this emergency task was assigned under. A landslide in February 2013 on US 89 caused ADOT to close down this vital route to Page, Arizona. ADOT agreed that a 1-2 year detour route was required to provide a more efficient route for this region. The project involved the reconstruction and paving of approximately 27 miles of a dirt road, Navajo Route 20. AZTEC completed all required environmental clearances and permits within 3 months. During this period, Michael assisted AZTEC biologists with field surveys for locating raptor nests as requested by the Navajo Nation. AZTEC was also responsible for implementing avoidance flagging and monitoring during construction.

Procurement Environmental On-Call; Statewide, AZ (ADOT): Michael has worked as the principal on this contract and oversees tasks for services that include the inventorying and mapping of wildlife features on the state highway system, an EA for herbicide use within ADOT rights-of-way through BLM lands, and municipal separate storm sewer system (MS4) data collection and permitting.

US Forest Service Payson Ranger District Administrative Site Sale and Facilities Environmental Assessment (EA); Tonto National Forest, AZ: Project Manager. Michael was responsible for assisting the Tonto National Forest with the completion of an EA as a third party NEPA contractor for the sale of 296 acres of the Payson Ranger Administrative Site parcel. AZTEC also was responsible for completing technical studies for air quality, cultural resources (survey report, treatment plan), biological and wildlife resources (migratory bird analysis, management indicatory species analysis, and biological assessment), hazardous materials (Phase 1 site assessment), historic structures (evaluation report), socioeconomic impacts, noise (modeling and report for new helitack site), and water resources (jurisdictional waters and potential wetlands).

Tonto National Forest Environmental Compliance Studies; Globe, AZ (City of Globe): Project Manager. Michael was in charge of co-authoring an EA, environmental stewardship plan, range safety plan, and two categorical exclusions for the City of Globe's Police Department Firearms Shooting Range and Cutter Well Field. The purposes of the proposed actions were to reauthorize the City's Special Use Permits for each facility that are both located on US Forest Service Land.

Nogales-Mariposa US Port of Entry EA; Nogales, AZ (GSA): Michael managed AZTEC's preparation of an EA and technical studies that included biological/wildlife resources, cultural resources and water resources. This project was for the expansion the International Border crossing facility to increase capacity for cargo inspections and security. Public involvement, including public scoping and meetings, was also done under this contract. Michael served as the contract principal and a co-author of the EA.

JUSTIN HOPPMANN

Quality Control Manager

EXPERIENCE

2002 - Present (AZTEC)

2 Years Other Firms

EDUCATION

MS, Environmental Planning (Landscape Ecological Planning), Arizona State University, 2003

BS, Forest Resources and Conservation, University of Florida, 1998

CERTIFICATIONS

AHERA Building Inspector #F9939; The Asbestos Institute, 2008-2017

TRAINING

CEQA – Understanding the California Environmental Process, Association of Environmental Professionals. Los Angeles, California. (October, 2008)

CEQA Tools – CEQA and Climate Change, Association of Environmental Professionals. Los Angeles, California. (February, 2009)

NEPA and the Transportation Decision Making Process, National Highway Institute. (October 2001)

AFFILIATIONS

Arizona Association of Environmental Professionals (AZAEP)

California Association of Environmental Professionals (CAEP)

AZTEC TYPSA

BACKGROUND

Justin Hoppman has experience preparing a variety of environmental studies including categorical exclusions, environmental assessments, environmental overviews, visual impact analyses, socioeconomic analyses, land use studies, recreation master plans, and other environmental documents. He has worked on a large number of transportation-related planning and design projects for federal, state, and local agencies in Arizona, California, and other states. Justin has conducted and assisted with wetland delineations, jurisdictional delineations, Clean Water Act Section 404 permitting, and biological surveys for endangered species. He is qualified as an Environmental Professional under ASTM 1527-13 and 40 CFR §312.10(b), and has completed numerous Phase I environmental site assessments, as well as hundreds of preliminary initial site assessments and hazardous materials records checks for numerous clients. Justin is a Certified Asbestos Hazard Emergency Response Act (AHERA) Building Inspector and is current in Hazardous Waste Operations and Emergency Response Standard (HAZWOPER) training. Mr. Hoppmann has many years of experience with GIS programs and is proficient in the use of ArcView as well as the Spatial Analyst and 3-D Analyst Extensions.

RELEVANT EXPERIENCE

Annual Environmental and Safety Regulatory Assistance Services Contracts; Phoenix, AZ (City of Phoenix): Environmental/NEPA Specialist. Assisted on several projects. Compliance efforts included cultural resources data recovery, Section 404 Individual Permit mitigation implementation, biological evaluation, and extensive project coordination with the applicable City departments and outside agencies.

MCDOT On-Call Environmental Support Services: Justin is the Project Manager for this on-call contract with MCDOT for environmental services. AZTEC has prepared numerous environmental documents including environmental overviews as well as categorical exclusions to comply with the National Environmental Policy Act (NEPA). Many projects have required technical studies for biological, cultural, hazmat, air quality, traffic noise, and water quality (Section 404 permitting). Environmental services typically required include assisting MCDOT with ensuring project compliance with the Federal, state, and local regulations concerning impacts to natural and physical resources potential affecting the environment.

Statewide Environmental On-Call Contract (ADOT): Environmental planner completing documentation, performing coordination, and providing technical input pursuant to compliance with NEPA, FHWA regulations, and state and local environmental regulations for dozens of transportation and maintenance projects including transportation enhancement project in urban settings.

Avenida Rio Salado/Broadway Road Preliminary Engineering Phase I; Phoenix, AZ (City of Phoenix): Environmental Planner. Prepared an Environmental Assessment and NEPA documentation for Avenida Rio Salado. The project included the development and evaluation of corridors and subsequent specific alternatives to provide an improved traffic capacity on sections of Broadway Road, a major thoroughfare. Detailed socioeconomic surveys were developed to identify protected minority and low-income populations both living and working in the project vicinity. This information was used in the development of alternatives and mitigation measure that minimized impacts to these populations. Additionally, extensive historic property investigations, cultural resource evaluations, biological resource evaluation, and water quality analyses and permitting (including Section 404 permitting, wetland delineations, and floodplain permitting) were conducted.

LAUREN LOCKWOOD

Senior Enviromental Planner/CEQA Lead

EXPERIENCE

2020 - Present (AZTEC)
6 Years Other Firms

EDUCATION

M.S., Environmental Science, University of New Haven

B.S., Earth Systems, University of Massachusetts at Amherst

AFFILIATIONS

California Association of Environmental Professionals

BACKGROUND

Lauren has experience in the areas of environmental planning, entitlements, and coastal planning. As a young professional, she has had the opportunity to work on a wide variety of projects with a range of environmental documents, as well as management experience in both the private and public sector. Lauren brings a unique perspective and skill set to the team. In her undergraduate and graduate career, Lauren focused her studies on a wide range of environmental topics including geology, coastal & marine sciences, and GIS. Since then, she has developed relevant experience in engineering, planning, permitting, and compliance, which allows her to bring an all-encompassing approach to environmental analyses.

RELEVANT EXPERIENCE

North Coast Highway Solar; Humboldt County, California: Lauren prepared an Initial Study/Mitigated Negative Declaration for the proposed North Coast Highway Solar project in Humboldt County. The project consists of the construction, operation, maintenance, and decommissioning of a 1 MW solar project that will be sited on primarily agricultural land in Hydesville. The project will include ground mounted PV solar power generating system, supporting structures, internal access roads, and fencing.

Palomino Business Park; Norco, California: Lauren assisted in the preparation of an EIR that is proposed to redevelop approximately 110 acres of land within the City of Covina for a new Specific Plan and mixed-use development that would provide commercial and residential uses. The project includes adaptive reuse of the former Covina Bowl, which is qualifies as a historic structure. Lauren also managed the preparation of technical studies in support of the EIR. Important areas of impact assessment include cultural and historical resources, land use, and aesthetics.

Covina Bowl Specific Plan; Covina, California: Lauren assisted in the preparation of an EIR that is proposed to redevelop approximately 110 acres of land within the City of Covina for a new Specific Plan and mixed-use development that would provide commercial and residential uses. The project includes adaptive reuse of the former Covina Bowl, which is qualifies as a historic structure. Lauren also managed the preparation of technical studies in support of the EIR. Important areas of impact assessment include cultural and historical resources, land use, and aesthetics.

Bowery Mixed-Use Project; Santa Ana, California: Lauren assisted in the preparation of an EIR and coordination with the City of Santa Ana to accommodate the addition of 1,150 residential units, as well as a total of 80,000 square feet of retail and restaurant commercial space. Lauren also assisted with the preparation of the technical studies and environmental documents, including the preparation of permitting and coordination with the Orange County Airport Land Use Commission.

Well 28; Orange, California: Lauren assisted the City of Orange in a productive and innovative partnership that included the preparation of an Initial Study and related environmental documentation for the Well 28 Project located in the Old Towne Historic District. The project consists of the construction of a new City water well, identified as Well 28, at 235 W. Maple Avenue, and the creation of a public minipark. The project also includes the installation of additional well infrastructure, such as resurfacing of the site, perimeter landscaping, wall and/or fence installation, and driveway, curb, and water line installation.

ATAS Building Improvements; Mission Viejo, California: Lauren assisted with the preparation of an EIR addendum to the Saddleback College Program EIR for an addition to the existing ATAS building on the Saddleback College campus.

AZTEC TYPSA

EXPERIENCE

2006 - Present (AZTEC)

2 Years Other Firms

EDUCATION

PhD, Civil Engineering, University of Louisville, 2005

MS, Control Theory and Control Engineering, South China University of Technology, 2001

BS, Traffic Engineering, South China University of Technology, 1998

REGISTRATIONS

2011 / Professional Engineer / Arizona #53315

TRAINING

NEPA Air Quality Analysis for Highway Projects Course, 2015

Quantitative PM Hot-Spot Analyses: 3-Day Course, 2011

CRC Mobile Source Air Toxics Workshop, 2008

Arizona Mobile Source Air Toxic Workshop, 2006

Arizona Air Quality Conformity Workshop, 2006

AFFILIATIONS

Institute of Noise Control Engineering of the USA (INCE)

Transportation Research Board, Committee on Transportation-Related Noise and Vibration – ADC40

AZTEC TYPSA

DAVID SHU, PHD

Air and Noise

BACKGROUND

Dr. Shu has extensive knowledge and experience with noise measurement, noise modeling and analyses using STAMINA 2.0, FHWA TNM 2.5, SoundPlan, CadnaA, and INM. He also conducted extensive highway noise research and has published many papers in technical journals. In addition, Dr. Shu is proficient with air quality analyses with programs such as Mobile 6.2, MOVES, and Cal3QHCR for project level Carbon Monoxide (CO), PM10, Mobile Source Air Toxic (MSAT), Greenhouse Gas (GHG) analysis. He is very experienced with MicroStation, AutoCAD, Inroads, and ArcView GIS and has completed the noise and air quality analyses for over 100 projects.

RELEVANT EXPERIENCE

I-15 Express Lanes – Design – Build, Riverside, CA (RCTC): Noise Specialist responsible for preparing sound wall design reports to certify the noise abatement measures were implemented in accordance with the requirements of the environmental commitment record from the Initial Study with Mitigated Negative Declaration/EA with FONSI.

Concordia University Campus Master Build-Out Plan Update; Irvine, CA (Concordia University): Noise Specialist responsible for noise monitoring, noise and vibration analysis, and noise section in EIR in compliance with CEQA. This project includes a proposed Campus Master Build-Out Plan Update includes the type of new and improved venues that are necessary to implement Concordia University's Strategic Plan, and to meet the educational and extra-curricular expectations of the future students. La Palma Complex Reservoir Rehabilitation and Pump Station Replacement, Anaheim, CA (City of Anaheim): Noise Specialist responsible for noise monitoring, noise analysis, and noise section in EIR in compliance with CEQA.

SR 202L (South Mountain Freeway) I-10 (Maricopa Freeway) – I-10 (Pecos Freeway), Phoenix, AZ (ADOT): Noise specialist responsible for traffic noise monitoring, TNM 2.5 modeling, noise barrier design, data and study management, and technical reporting. The South Mountain Freeway Project (Project) is a new 22-mile traffic corridor that connects Interstate 10 (I-10) in west Phoenix (Papago Freeway) with I-10 in Chandler (Maricopa Freeway), thereby allowing long-distance travelers to bypass downtown Phoenix and reducing traffic congestion during peak travel hours.

I-10/SR 303L System Traffic Interchange (Phase I); Phoenix, AZ (ADOT): Noise specialist responsible for traffic noise monitoring, TNM 2.5 modeling, noise barrier design, data and study management, and technical reporting for final design of the I-10/SR 303L interchange.

SR101L HOV Lanes Princess Drive to SR202L (Red Mountain Freeway); Scottsdale, AZ (ADOT): Noise Specialist responsible for traffic noise monitoring, TNM 2.5 modeling, noise barrier design, data and study management, and technical reporting for the DCR of GP lanes. This project includes the widening and closing of the open median on the existing SR101L (Pima Freeway) to add 14 miles of HOV lanes between Princess Drive and the SR101L/SR202L interchange.

Black Mountain Boulevard SR 51/101 TI – Cave Creek Road, Phoenix, AZ (ADOT): Noise specialist responsible for traffic noise monitoring, TNM 2.5 modeling, noise barrier design, data and study management, and technical reporting. Black Mountain Boulevard (BMB) is a proposed major arterial roadway in the City of Phoenix General Plan extending south approximately five miles from the Sonoran Blvd/Cave Creek Road intersection to ramp connections with SR 51.

JESSICA RYBCZYNSKI, CPESC

Biological Resources and Wetlands/Invasive Plants

EXPERIENCE

2010 - Present (AZTEC)

2 Years Other Firms

EDUCATION

BS, Applied Biological Sciences (Wildlife Habitat Management), Arizona State University, 2006

CERTIFICATIONS/PERMITS

Certified Professional in Erosion and Sediment Control #8004, 2015

Certified Erosion Control Coordinator, 2017

AHERA Building Inspector; The Asbestos Institute in Phoenix, Arizona, 2008–Present

EPA Lead Risk Assessor Certified in Arizona and Region 9 Tribal Lands, 2008–2012

40 Hour OSHA HAZWOPER , 20010–Present

Permit No. TE-064431; US Fish and Wildlife Service; permitted to conduct presence absence surveys for black-footed ferret, cactus ferruginous pygmy-owl, Chiricahua leopard frog and Southwestern willow flycatcher

TRAINING

Yellow-billed Cuckoo Surveyor Training, Audubon Society, Patagonia, AZ 2018

AZTEC TYPSA

BACKGROUND

Jessica has 12 years of experience as a wildlife biologist who also specializes Clean Water Act (CWA) compliance and in management of hazardous materials. Her CWA experience includes conducting jurisdictional delineations (JD) and wetland delineations (WD) and preparing preliminary jurisdictional determination (PJD) and approved jurisdictional determinations (AJD) including significant nexus analyses; assessing project impacts to waters of the US (WOUS) and special aquatic resources to determine appropriate Section 404 permitting and Section 401 Water Quality Certification requirements; and preparing all levels of Section 404 permit application packages including Section 404(b)1 alternative analyses and compensatory mitigation proposals. She is also a Certified Professional in Erosion and Sediment Control (CPESC) and has experience with Section 402 compliance tasks including preparation of Stormwater Pollution Prevention Plans and Erosion and Sediment Control plans in Texas, Illinois, Georgia, Arkansas and Arizona; and documentation for Rule 5 compliance in Indiana. As a biologist, Jessica's experience includes research, monitoring, surveys and habitat assessments for endangered species and special status species; preparation and/or oversight of over 100 biological evaluations/assessments; coordination with various local, state, tribal and federal agencies; consultations with US Fish and Wildlife Service (USFWS) pursuant to Section 7 of the federal Endangered Species Act (ESA) and developing and implementing conservation/mitigation measures to mitigate project impacts to endangered species and special status species. Jessica's experience in the management of hazardous materials includes preliminary Initial Site Assessments (PISAs) and surveys of suspect asbestos-containing material (ACM) and painted surfaces (for lead-based paint [LBP]), and she is proficient in ESRI Geographic Information System (GIS) software and Global Positioning System (GPS) equipment.

RELEVANT EXPERIENCE

Biological Evaluation Streamlining, Statewide Program (ADOT): As-sisted ADOT Environmental Planning Biology Team with three biological evaluation (BE) streamlining task. Duties performed by Ms. Rybczynski in-clude: Peer reviewed the new Sonoran Desert Tortoise Awareness Handout to be included in all future ADOT projects that may impact tortoise; Developed a list of 10 species most commonly evaluated in ADOT BEs and 20 species most commonly included in exclusion tables; and assisted in drafting standard detailed evaluation language for 10 commonly evaluated species and table with exclusion language for 20 species.

Herbicide Applications on BLM Lands, Statewide, AZ (ADOT): Completed an Environmental Assessment (EA) to address environmental issues related to use of herbicides for treatment of undesirable vegetation within ADOT rights-of-way on Bureau of Land Management (BLM) lands in Arizona. Tasks included: Extensive GIS analysis to identify treatment areas and areas of special concern for natural resources and all ESA and BLM listed species; and conducted in-depth review of recent literature on herbicide effects to various species, and research on conservation measures used by other state and federal entities for herbicide programs.

State Route 86, Kitt Peak, Santa Rosa, Sells to Fresnal segments; Tohono O'odham Nation, AZ (ADOT): Jessica surveyed for species listed on the Endangered Species Act (ESA) at the time including cactus ferruginous pygmy owl, Pima pineapple cactus and Sonoran Desert Tortoise and completed the BE. As a CWA specialist, conducted the field work and assisted in preparing the documentation of a preliminary jurisdictional delineation and NWP 14 PCN for submittal to the US Army Corps of Engineers and an individual Section 401 water quality certification to the EPA.

DEIL LUNDIN, MA, RPA

Cultural Resources

EXPERIENCE

2012 - Present (AZTEC)

20 Years Other Firms

EDUCATION

MA, Anthropology (Physical Anthropology), Louisiana State University

BA, Anthropology, Albion College

REGISTRATIONS

Registered Professional Archaeologist / #16336

CERTIFICATION/PERMITS

Arizona Antiquities Act Blanket Permit: Arizona State Museum, expires 2017

Archaeological Resources Protection Act Permit; BLM, expires 2017

Navajo Nation Cultural Resources Investigation Permit Class B, expires 2017

Permit for Archaeological Investigations, US Dept. of Agriculture Forest Service: Coconino, Coronado, Kaibab, Prescott, Tonto

TRAINING

OSHA Excavation Safety for Competent Person Training, United Rentals (sponsor)

NEPA Compliance and Cultural Resources; National Preservation Institute, HI

AZTEC TYPSA

BACKGROUND

Deil Lundin has 28 years of experience in cultural resource management directing all aspects of field survey, testing, monitoring and data recovery throughout Arizona (and in parts of California, Louisiana, Nevada and Utah). Her experience involves a variety of cultural traditions and management of over 150 projects in the state of Arizona. Deil's expertise includes budget development and management; tracking project schedules; fieldwork coordination and execution; coordination with clients and agency/tribal representatives; editing/reviewing technical documents; proposal writing; data collection; identification, documentation and evaluation of cultural resources; assessing project effects; preparation of technical reports, state and federal consultation letters, work plans and agreement documents; and assisting with federal, state and local regulatory compliance. Deil also performs archival and ethnographic research and specializes in the analysis of human skeletal remains.

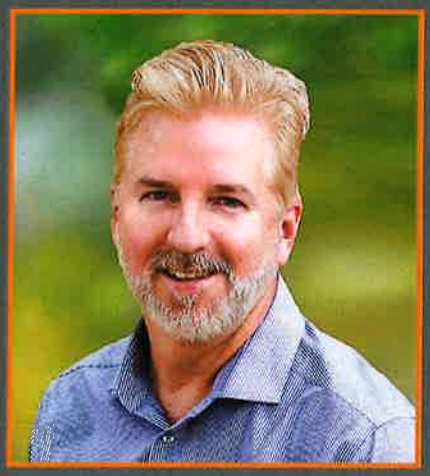
RELEVANT EXPERIENCE

SR202L South Mountain Freeway PPP; Phoenix, AZ (ADOT): Principal Investigator. Ensure cultural resource compliance (as part of the environmental commitments under the Record of Decision) for the design, construction, and maintenance phases of a new freeway that will bypass the Interstate 10 Downtown segment. Compile GIS cultural data, assist with compliance review, develop training for project personnel on cultural resource avoidance and archaeological discovery plan. The project is a Public Private Partnership (PPP).

Northern Parkway Phased Data Recovery, El Mirage, AZ (ADOT/FHWA); 2015–2018: In advance of federally funded road construction, Deil implemented phased data recovery investigations at site AZ T:7:174(ASM), a National Register-eligible Hohokam habitation site along a western terrace of the Agua Fria River. The project was conducted in compliance with Section 106 of the NHPA. Ms. Lundin developed the cost proposal, tracked the budget and scope, reviewed/approved invoices, directed fieldwork and oversaw preparation of/edited all submittals. A total of 24 features, including two pithouses, the remains of a brush kitchen and 21 thermal and non-thermal pits, was investigated. The site appears to represent the western locus of a moderately intensive occupation focused on resource procurement and processing.

Payson Administrative Site Testing, Data Recovery, Payson, AZ (Rim Country Educational Alliance): Principal Investigator. In accordance with an MOA prepared for this project under Section 106 of the NHPA, Deil developed and implemented a historic properties treatment plan to assist TNF with NEPA compliance for a private land purchase. To mitigate adverse effects, testing/data recovery was performed at ten archaeological sites. Most sites represented seasonal occupation for procurement of natural resources; two were likely used for hunting. A rock shelter revealed both Formative and Protohistoric period use.

SR86, San Isidro Segment Data Recovery and Monitoring; Pima County, AZ (ADOT): Principal Investigator. Undertake phased data recovery at seven prehistoric sites located in or near the bajada of the Baboquiviri Mountains. The work was performed in advance of federally funded road construction on the Tohono O'odham Nation as part of ongoing Section 106 compliance. Eighteen features were investigated, including two inhumation burials, several rock piles and clusters, five pits, and two extramural surfaces. Dates of occupation cluster around A.D. 400–500. At the request of the TON THPO, perform archaeological monitoring during project construction.



STEVEN SUTHERLAND, RG, PG, CEM

Hazards and Hazardous Materials

EXPERIENCE

2018 - Present (AZTEC)

25 Years Other Firms

EDUCATION

MS, Environmental Management/ International Environmental Management & Sustainability, Arizona State University, 2006

BA, Geography (Environmental Emphasis), University of Texas – San Antonio, 1993

BS, Geology (Environmental Emphasis), University of Texas – San Antonio, 1993

REGISTRATIONS

Registered Geologist / Arizona / #33269

Professional Geologist / Texas / #12102

CERTIFICATIONS/PERMITS

Certified Environmental Manager (CEM)/ Nevada #2393

Candidate for Certified Hazardous Materials Manager (CHMM)

RCRA Hazardous Waste & Non-Hazardous Waste Management Training Certificate

EPA AHERA Asbestos Building Inspector/ Management Planner, with updates

EPA Lead Inspector

AZTEC TYPSA

BACKGROUND

Steve is a Registered Geologist, Certified Environmental Manager, qualified Environmental Professional, AHERA Building Inspector and Management Planner, and US Environmental Protection Agency Lead Paint Inspector and Risk Assessor, with over 26 years of experience working in the southwest and Mexico. He is also HAZWOPER and Site Supervisor-certified, and has experience conducting and managing activities in a wide variety of transportation, RCRA/CERCLA, environmental/ hazardous materials, water resources, and safety-related fields. He is experienced in conducting and managing Phase I/II ESAs following ASTM protocols and has conducted numerous Phase III remedial actions based upon the findings of Phase I/II ESAs. As a portion of his duties, he also manages the Due Diligence practice for AZTEC. He also is experienced in brownfields investigations; asbestos, lead-based paint (LBP) and regulated building materials surveys; RCRA waste determinations and hazardous waste management; CERCLA/state Superfund investigations & remediation (WQARF in Arizona); Underground Storage Tank (UST) removal investigations; LUST investigations and remediation/risk assessment to closure; environmental compliance audits; management of site safety and generation of health & safety and other plans; surface water and groundwater investigations; various air, soil and groundwater sampling requirements; Indoor Air Quality (IAQ), silica, and mold investigations; data analysis and interpretation; client and regulatory liaison; and environmental plan and report preparation and completion. He has also participated in and managed teams in multiple emergency response actions for hazardous materials spills and railroad derailments.

RELEVANT EXPERIENCE

202L South Mountain Freeway; Phoenix, AZ (ADOT): Hazardous Materials Manager. Steve is currently the Hazardous Materials Manager for the construction of the South Mountain Freeway, with primary tasks associated with pre-construction preparation and completion of remaining construction activities. This project involved construction of a 22-mile freeway that required the acquisition of multiple parcels of land. Half of the parcels (11 miles) were developed with residential properties, commercial properties, gas stations, light industrial properties, and heavy industrial properties. Work included over 120 Phase I ESAs, 8 Phase II ESAs, nearly 40 Demolition-level asbestos/LBP/ regulated building material surveys, 40 drywell investigations and closures, two UST removal investigations, two LUST site investigations and remediation (both opened and closed in less than one year), three Phase III remedial investigations (RIs) and site closures, twirty-four emergency response actions/spills, numerous RCRA waste determinations and waste management, and many other related activities that have been managed and conducted by Steve and other staff under his direction.

Pima County On-Call Contract for Environmental Services; Tucson, AZ (PDEQ):): Hazardous Materials Manager. AZTEC was awarded this On-Call contract from the Pima County Department of Environmental Quality (PDEQ) in April 2019 (one of only two firms), with a hazardous materials scope of work including: Phase I/ II environmental site assessments, environmental compliance audits, preparation of various compliance plans, asbestos and lead-based paint surveys, surface and sub-surface soil sampling, surface and subsurface landfill gas investigation and monitoring analysis, landfill gas monitoring for well placement, groundwater monitoring for well placement, surface/groundwater sampling, UST and LUST investigations, air monitoring, supervising environmental cleanups, and technical support for various federal/state projects.

HERSON GO, PE, QSD

Water Supply Assessment

EXPERIENCE

2017 - Present (AZTEC)

31 Years Other Firms

EDUCATION

MS, Environmental Engineering & Water Resource, Howard University

BS, Civil Engineering, Mapua Institute of Technology

REGISTRATIONS

Professional Engineer / California #47313

TRAINING

Bentley CADD Software

AZTEC TYPSA

BACKGROUND

Herson has over 25 years of experience in managing and delivering civil engineering design (PS&E), construction project management, feasibility study and CADD implementation projects. The focus of his entire career has been water resources and hydraulics. He is skilled in hydraulic and hydrologic modeling methods including 2D modeling. He has played a role in numerous transportation, public works, site development and drainage projects. Herson has proven successes in developing and winning business opportunities in state, local government and transportation agencies. He oversaw the delivery of numerous Engineering, GIS and IT systems. He is a certified and highly advanced user of MicroStation and InRoads suite products. Herson is also an experienced user of ProjectWise and AutoCAD.

RELEVANT EXPERIENCE

I-15 Express Lanes - Design-Build; Riverside, CA (Riverside County Transportation Commission): Lead Drainage Designer. The Riverside County Transportation Commission (RCTC), in partnership with Caltrans, is investing approximately $455 million to improve I-15 between Cajalco Road and State Route 60 (SR-60). The project will add two tolled express lanes in each direction on I-15 between Cajalco Road and SR-60, a distance of approximately 15 miles. An enhanced project feature is that drivers will be able to access and exit the tolled facility at multiple locations, and the project continues RCTC's ongoing commitment to expand the express lanes network.

I-5/22/57 Interchange Reconstruction Project - Construction Management & Inspection; CA (Caltrans): Lead Drainage Designer. Work performed includes hydrology, hydraulic analysis, plan, specs and estimates. Herson coordinated preparation of stage construction, pavement delineation, utilities, sewer and specifications for this PS&E.

I-5 Widening from I-5/22/57 Interchange to I-5/55 Interchange; CA (Caltrans): Lead Drainage Designer. Herson performed PS&E services for drainage and pavement delineation.

I-5 Ramp Metering Study; Los Angeles, CA (Caltrans): Lead Drainage Designer. Herson performed ramp metering studies in various locations in Los Angeles.

Del Amo Over Crossing at Alameda Street; CA (Caltrans): Lead Drainage Designer. Herson provided PS&E services and lead a study and report on the feasibility of the Del Amo Over Crossing at the Alameda Corridor Caltrans State Route 91/110 Park and Ride.

I-5 Sound Wall Feasibility Study and Design; Los Angeles, CA (Caltrans): Lead Drainage Designer. Herson lead a study and report on the feasibility of a sound wall along the I-5 corridor in multiple locations in Los Angeles.

I-10 Double 15'x15' RC Box; CA (Caltrans): Lead Drainage Designer. Herson provided a PS&E and performed hydrology, hydraulics analysis, plan and profile design, preparation of specs and estimates on this project.

High Speed Rail at Union Station William Mead Homes Project; Los Angeles, CA: Lead Drainage Designer. Herson prepared impact reports and recommendations for roadway, drainage, traffic flow, fire access and parking based on various alignment of the high speed rail track along William Mead Homes in Los Angeles.

ALEX PLAZA, PE

Geotechnical/Geology and Soils

EXPERIENCE

2008 - Present (AZTEC/TYPSA)

6 Years Other Firms

EDUCATION

MS, Tunneling, Technical University of Madrid, 2011

MS, Geological Engineering, Technical University of Catalonia, 2008

REGISTRATIONS

2019 / Professional Engineer / Arizona #68783

2018 / Professional Engineer / Texas #133264

2019 / Professional Engineer / Virginia #0402060519

AZTEC TYPSA

BACKGROUND

Alex is a specialist in geotechnical engineering, geo-structural design and tunnel design. He has participated in many infrastructure design projects of various sizes including wind/solar energy projects and roadways, railways, metro lines, dams and hydroelectric power plants. His geotechnical expertise includes several softwares for 2D/3D Fininte Element Modelling for foundation design, tunnel design (TBM and NATM), dam design (earth-fill and concrete), groundwater studies and slope stability analyses.

RELEVANT EXPERIENCE

I-15 Express Lanes - Design-Build, Riverside, CA (Riverside County Transportation Commission): The Riverside County Transportation Commission (RCTC), in partnership with Caltrans, is investing approximately $455 million to improve I-15 between Cajalco Road and State Route 60 (SR-60). The project will add two tolled express lanes in each direction on I-15 between Cajalco Road and SR-60, a distance of approximately 15 miles. AZTEC was the lead design firm for this Design-Build Project. Alex performed general geotechnical coordination, QA, Peer Review of Foundation Reports as well as geotechnical design of some specific elements of the project. Alex also performed extensive numerical analyses of the effect of construction on existing 108-inch diameter water main line owned by the Metropolitan Water District of Southern California.

Purple Line Segment 3 Tunnel Contract, Los Angeles: The Purple Line Extension is a critically important rail project that will provide a high-capacity, high-speed and, dependable alternative for commuters to travel between downtown Los Angeles, the Miracle Mile, Beverly Hills and Westwood, where stations will be near UCLA and the VA Hospital. During the proposal stage AZTEC was requested by one of the teams to review the project specifications and preliminary design to provide alternative, economic, solutions to shaft shafts, dewatering requirements, and the special steel lining at fault crossing. Alex performed three-dimensional numerical modeling to design 50-foot diameter, 90-foot-deep access shaft, and optimize the number and location of dewatering wells.

Transform 66 Outside the Beltway Project, VA.: This project will transform Northern Virginia's I-66 into a multimodal corridor that moves more people, provides reliable trips and offers new travel options. The $2.3 billion I-66 Outside the Beltway Project is a public-private partnership between the Virginia Department of Transportation (VDOT), the Department of Rail and Public Transportation (DRPT) and private partner. Alex was the Geotechnical Engineer of Record of over 20 new bridges and 15 retaining walls including MSE walls and Post-and-Panel walls.

High Speed 2 (HS2) Project, UK.: HS2 is the new High Speed Rail Network running between London in the South and Manchester and Leeds to the North. Phase 1 involves the route between London and Birmingham with approximately 125 miles of new high-speed rail being laid. SCS (Skanska-Costain-Strabag) JV together with the Design House JV (Arup-TYPSA-Strabag) was awarded the Lot 2 consisting of segments S1 and S2. S1 includes two 5.7-mile long twin bored tunnels between the new HS2 stations of Euston and Old Oak Common, in London. S2 continues from Old Oak Common with 9.3 miles of twin bored tunnels to West Ruislip where there is approximately 3 miles of at-grade alignment before transitioning into the C1 lot. Alex performed numerical 3D FE modeling of the Victoria Road Crossover Box, a complex underground structure involving deep diaphragm walls, props, and connecting tunnels.

JACK FLEMING, PE

Engineering Review

EXPERIENCE

2018 - Present (AZTEC)

8 Years Other Firms

EDUCATION

BS, Civil Engineering, University of Arizona, 2010

REGISTRATIONS

2014 / Professional Engineer/ California #85373

2017 / Professional Engineer/ Arizona #63752

2017 / Professional Engineer/ Oregon #92166PE

2018 / Professional Engineer/ Texas #131203

TRAINING

Qualified SWPPP Developer (QSD)

Qualified SWPPP Practitioner (QSP)

AFFILIATIONS

American Society of Civil Engineers (ASCE)

American Public Works Association (APWA)

AZTEC TYPSA

BACKGROUND

Jack has 10 years of civil engineering experience including the design of roadway expansions/reconstruction, utility coordination, utility design and pedestrian improvements. He also has extensive experience in construction administration, construction observation and field engineering/inspections. He has completed roadway design projects for ADOT, the City of El Centro, MCDOT, and the City of Apache Junction. Tasks within these projects included the preparation of design concept reports, final design plans, post design activities, specifications and estimates, utility coordination and various levels of public outreach participation. Jack's experience includes the design of local roads, widening of State Routes, water and sewer lines (including necessary pressure, leakage, and mandrel testing), and single lot grading and drainage plans. His inspection experience includes water lines, sewer lines, storm drain lines, roadway construction/reconstruction/ rehabilitation, traffic signals, street lights, curb/gutter and sidewalk and traffic striping/signage.

RELEVANT EXPERIENCE

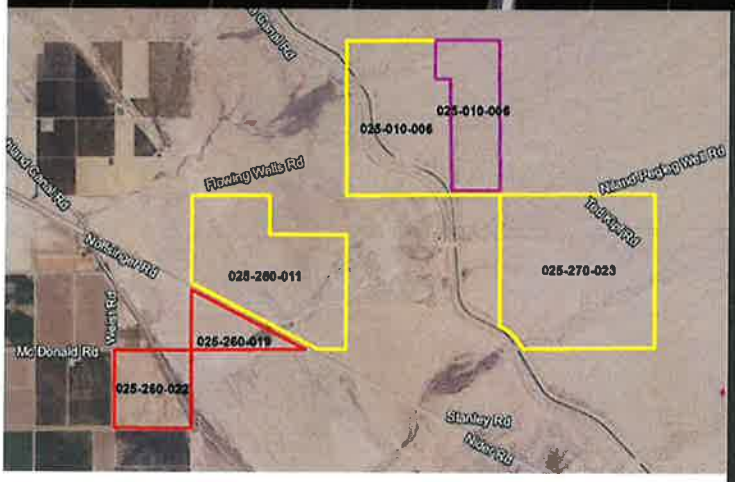
Town Center Villas Project; El Centro, CA (City of El Centro): Construction Manager/Field Inspector responsible for all field inspections, material submittal reviews, RFI's and design changes for all of the off-site improvements. This project consisted of dewatering measures due to the shallow groundwater table, construction of a new collector roadway with curb, gutter, sidewalk, driveways and traffic calming measures, installation of ½ miles of waterline (including laterals for fire protection and domestic use, as well as vertical dips), installation of ½ miles of sewer line (including manholes and sewer services), installation of ¾ miles of storm drain (including catch basins, manholes, and laterals), and the installation of street lights along the corridor. Jack then administered all of the tests for the utilities (water, sewer, storm drain, street lights) to ensure acceptance with the requirements in the specifications and governing agency tests (APWA for water, Standard Specifications for Public Works Construction.

Gila River Indian Community District 4 Booster Station and Reservoirs; Sacaton, AZ (Gila River Indian Community): Project Engineer responsible for the completion of project plans, specifications and cost estimate for the two 750,000 gallon reservoir project that included a booster pump station and water line extension to service the new community center in District 4. The water line was designed to act as fire protection for the community center, as well as serve multiple businesses along the stretch. At the completion of the design, Jack acted as the Construction Manager for the project which included reviewing material submittals, responding to RFI's and coordinating the subconsultants on the team.

Chandler Bike Lane Improvements (Kyrene Road and McClintock Drive); Chandler, AZ (City of Chandler): Utility Coordinator for the final design of the addition of new 5-foot wide bike lanes along both Kyrene Road and McClintock Drive from the Loop 202 Freeway to the north edge of the Chandler City Limits. Coordination was completed with various utility owners, ADOT and the City of Chandler in order to obtain the Utility Clearance Letter for funding/advertisement.

8th Avenue Intersection Improvements Project; Safford, AZ (ADOT): Utility Coordinator for the final design of the roundabout intersection improvements. Jack coordinated utility relocations with various utility companies throughout the duration of the project, ensuring that all utilities were cleared of the proposed improvements. He obtained clearance from ADOT prior to the project being advertised for construction.

November
2020



Proposal

Environmental Impact Report for the VEGA SES 2, 3, & 5 Solar Energy Project

Imperial County Planning & Development Services Department

HDR

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November 18, 2020

Jim Minnick, Director
Imperial County Planning & Development Services Department
801 Main Street
El Centro, CA 92243

RE: Environmental Impact Report for the VEGA SES 2, 3, & 5 Solar Energy Project

Dear Mr. Minnick,

HDR appreciates this opportunity to submit our proposal for the preparation of an Environmental Impact Report (EIR) for the proposed VEGA SES 2,3, & 5 Solar Energy Project. HDR is well suited to support the County with the environmental documentation for this project, as a result of our extensive experience in the County and depth of technical expertise and resources available to support the CEQA process for this project. We have long been a trusted partner with the County in successfully preparing and processing CEQA documents for solar projects in the County, and our recent experience includes the successful completion of the VEGA SES solar project EIR.

By selecting HDR, you get access to:

- **Principal Level Project Manager.** To support your needs and work seamlessly with County staff, Tim Gnibus will serve as the Principal-in-Charge/Project Manager for the completion of this CEQA work program. As with every project we have worked on in partnership with the County, Tim will be involved on a daily basis providing principal-level oversight, project management, environmental strategy, quality control, and meeting representation. Sharyn Del Rosario will serve as the Deputy Project Manager and will be the primary contact for document preparation and management. Tim and Sharyn have a highly successful, proven track record with Imperial County preparing EIRs on aggressive schedules and within budget, with no cost overruns and successfully withstanding legal challenges.

- **Commitment to Schedule.** We are committed to delivering the CEQA program on schedule, as identified in Section 4.

- **Cost Efficiencies.** Our extensive EIR experience in the County translates directly to cost efficiencies in EIR preparation. We are flexible, addressing project challenges and other project dynamics without budget amendments.

- **In-depth Project Understanding.** We have an expert understanding of all the various components of solar PV projects (including energy storage), as well as a thorough understanding of the County's land use and environmental policies with directly-relevant experience as it relates to the Renewable Energy and Transmission Element. This understanding and extensive experience will provide many benefits to the County, including maximizing efficiencies in document preparation, and various coordination activities.

- **Industry Know-How.** Our team can address all technical and environmental issues with its in-house staff of experts that will maximize efficiency of EIR preparation and provide an in-depth resource to the County to address any issues that may arise during the process. HDR continues to maintain a strong presence in the dynamic renewable energy market, and the various environmental regulations and planning issues that are involved in each project processed through the County, such as the County's Renewable Energy and Transmission Element and renewable energy policies.

We appreciate the opportunity to partner with you on this project. HDR is the partner you can count on to successfully complete the environmental process. Should you have any questions regarding our proposal, please call Tim Gnibus at 760.845.9258. We look forward to working with you!

Sincerely,
HDR Engineering, Inc.

Kip Field
Vice President

Tim Gnibus
Environmental Science Business Class Lead

hdrinc.com

591 Camino de la Reina, Suite 300 San Diego California 92108
T 858.712.8400

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6 Conflict of Interest 17
Appendix A - Detailed Cost Breakdown
Appendix B - Solar Qualifications

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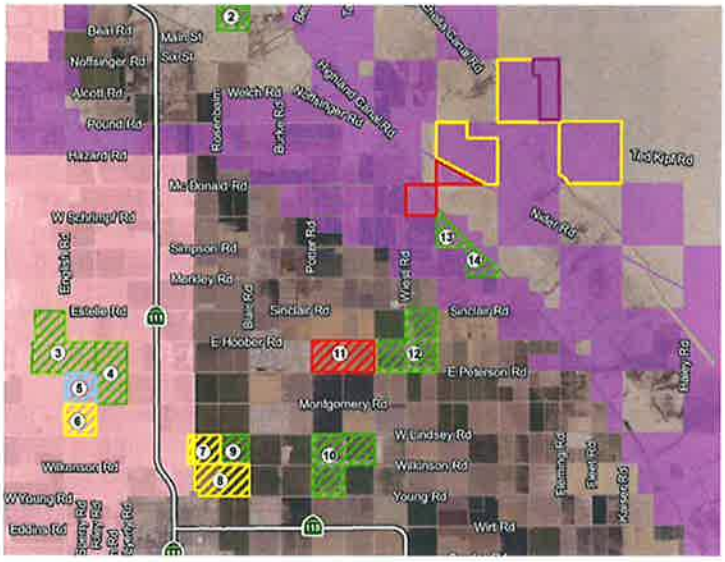
1. PROJECT UNDERSTANDING

HDR understands the project will consist of these primary components:

- Solar PV generation
- Energy storage
- Substation
- Gen-tie
- Site access
- On-site/ Remote communication
- Fencing



The proposed VEGA SES 2, 3 & 5 Solar Energy Project would involve the approval of three Conditional Use Permits (CUP) for the construction and operation of solar energy facilities as follows:

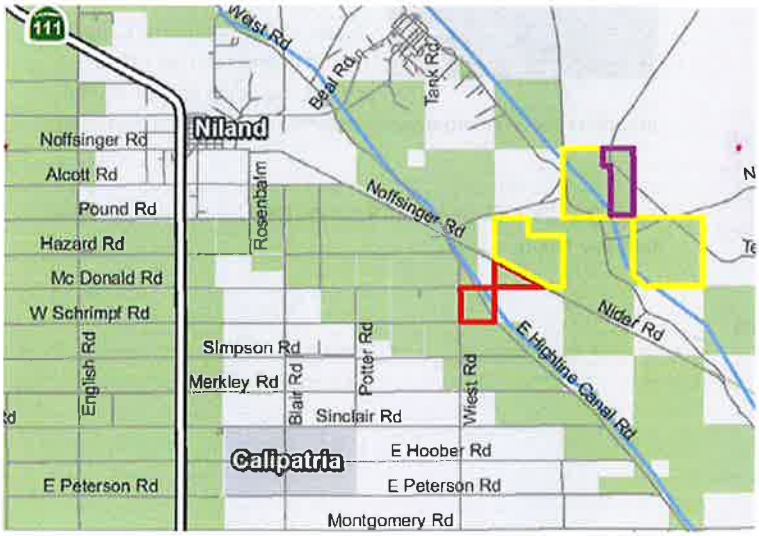
- **CUP #20—0021 VEGA SES 2** - 240 Megawatt (MW) solar energy generation and 240 MW/960 MWh battery storage project located on approximately 1,472 acres
- **CUP #20-0022 VEGA SES 3** - 60 MW solar energy generation and 60 MW/240 MWh battery storage project located on approximately 240 acres
- **CUP #20-0023 VEGA SES 5** - 50 MW solar energy generation and 50 MW/200 MWh battery storage project location on approximately 249.70 acres

VEGA SES 2 consists of three non-contiguous parcels located north of Noffsinger Road (APN# 025-260-011), both north and south of the Coachella Canal and Coachella Canal Road (APN# 025-010-006), and immediately north of the Coachella Canal, with the northern extent of the site generally defined by Niland-Pegleg Well Road and Ted Kipf Road.

The VEGA SES 3 site consists of one parcel (APN# 025-010-006) immediately north and east of the Coachella Canal and sharing the eastern boundary with VEGA SES 2 (APN# 025-010-006).

The VEGA SES 5 site is located east of Wiest Road and south of Noffsinger Road (APN# 025-260-022 and 025-260-019). The E. Highline Canal bisects the southern parcel of this CUP area (APN# 025-260-022).

Energy generated would be delivered to the Imperial Irrigation District. The VEGA 2 facility would include connections from the solar generating and energy storage facilities via 34.5kV lines, which depending on the ultimate configuration would generally extend along Coachella Canal Road, Niland-Pegleg Well Road and Flowering Wells Road, ultimately connecting to the existing 230 kV KN&KS Line. The VEGA 3 facility would be connected to the existing utility approved point of interconnection at the northern boundary VEGA 3 parcel to the IID 161 kV "L" line.



The proposed project would be comprised of solar PV panels on fixed frames or single-axis horizontal trackers, an on-site substation and inverters, transformers, and underground electrical cables. The proposed project parcels General Plan designation is "Recreation/Open Space" and they are zoned S-2-RE (Open Space/Preservation with a Renewable Zone Overlay).

Renewable Energy Overlay Zone

As shown in the exhibit, all the CUP sites are located within the existing RE Overlay Zone. As such, no General Plan Amendment or Rezone would be required for implementation of the project. Pursuant to Title 9, Division 5, Chapter 9, "Solar Energy Plants" and "Transmission lines, including supporting towers, poles microwave towers, utility substations" are uses that are permitted in the S-2-RE Zone, subject to approval of a CUP.

2. PROJECT TEAM OVERVIEW

Tim Gnibus, Principal/Project Manager, Principal Oversight, Strategy, Point of Contact

Tim Gnibus will serve as the Project Manager, providing day to day management, CEQA strategy and oversight of the environmental documentation preparation and meeting attendance and presentations. Tim has 31 years of experience, including substantial experience in utility-scale solar projects located in Imperial, Kern, Riverside, San Diego, and San Bernardino Counties. Tim's directly relevant experience includes preparation of the VEGA SES Solar Project EIR, Wister Solar Project EIR, Laurel Solar Project EIR, Citizens Energy Solar EIR, SEPV Dixieland East and West Solar EIR, Iris Solar Farm EIR, Mount Signal and Calexico Solar Farm Projects EIR and Addendum, Cluster I EIR Addendums (for the Calipatria and Midway Projects), Imperial Solar Energy Center South and West EIRs/EAs, and Longboat Solar IS/MND in San Bernardino County, and other alternative energy and infrastructure projects throughout California.

Education: BA, Social Ecology (Environmental Health andPlanning), UC Irvine, 1989
Industry Tenure: 31 years

Clint Meyer, AICP Quality Assurance

Clint Meyer, AICP, will serve as the quality assurance document review. Clint has more than 19 years of CEQA and regulatory permitting experience, and has a comprehensive understanding of all the technical aspects of solar projects as well as the environmental processing requirements. Clint's specific experience in Imperial County includes management, technical analysis, and quality assurance for several utility scale solar projects in the County, including the VEGA SES Solar Energy Project and Citizen's Energy Solar Project.

Education: BS, Environmental Planning (BS, Natural Resources Planning), CSU Humboldt, 2000; Certificate, GIS, CSU Humboldt, 2000; Certificate, Environmental Policy, CSU Humboldt, 1999
Industry Tenure: 19 years

Sharyn Del Rosario, Deputy Project Manager| Primary EIR Preparer

Sharyn Del Rosario will serve as the Deputy Project Manager and will be one of the primary preparers of the EIR and related CEQA documents (e.g. scoping meeting materials, CEQA Notices, CEQA Findings, MMRP). Ms. Rosario has 11 years of environmental document preparation experience, including the VEGA SES Solar Project EIR, Wister Solar Project EIR, Laurel Solar Project EIR, Citizens Energy Solar EIR, SEPV Dixieland East and West Solar EIR, Cluster EIR Addendums (Calipatria and Midway), Iris Solar Farm EIR, Addendum to the Mount Signal and Calexico Solar Farm Projects EIR, the 946- acre (200 Mw) Imperial Solar Energy Center South EIR/EA, and the 1,130-acre (250 Mw) Imperial Solar Energy West EIR/ EA, the Addendum to the Beacon Photovoltaic Solar Project EIR (addition of 3,594 acres/480 Mw) (Kern County), San Luis Rey Water Treatment Plant Solar Project (City of Oceanside) and Regulus Solar project mitigation monitoring compliance (Kern County).

Education: BA, Geography, San Diego State University, 2008
Industry Tenure: 11 years

Ronell Santos, EIR Preparer

Ronnell Santos joins our team as one of the primary preparers of the EIR and related CEQA documents. Mr. Santos has assisted in the preparation of envrionmental documentation pursuant to CEQA for the Laurel Cluster Solar Farm EIR, VEGA SES Solar Project EIR, Citizens Solar Project EIR, and Cluster EIR Addendums (Calipetria I, II and III and Midway I, II, III and IV), including environmental impact reports, environmental assessments, and initial studies.

Education: BS, Environmental Science, CSU Monterey Bay, 2016
Industry Tenure: 4 years

HDR Support Staff

HDR offers the primary advantage of in-house technical experts to support the project as needed, including conducting peer-review of the applicant-provided technical studies for the project. As shown on the Organization Chart, our in-house expertise includes highly-experienced biologists, cultural resource specialists, hydrology/water quality engineers, air quality and noise specialists, hazardous materials experts, traffic engineers, geologists, and energy utility development engineers. Each of these specialists have contributed, as needed, to the completion of more than seven utility-scale solar project EIRs in the County.

PLANNING STAFF

Diana Robinson, Planner III

PRINCIPAL-IN-CHARGE/PROJECTMANAGER

Tim Gnibus

DEPUTYPROJECTMANAGER/EIRPREPARER

Sharyn Del Rosario

DOCUMENT PRODUCTION	QUALITY ASSURANCE	EIR PREPARERS
Renee Stueber **GIS & Graphics** Anders Burvall	Clint Meyer, AICP	Ronell Santos Elaine Lee Natalie Brim Terrileigh Pellarin

Technical Support Staff

BIOLOGICAL RESOURCES	HAZARDOUS MATERIALS	CULTURAL / ARCHAEOLOGICAL RESOURCES
Ingrid Eich, MS	Andrew Cherene, PG	Nina Delu, MS, RPA

AIR QUALITY / GREENHOUSE GAS	NOISE	HYDROLOGY / WATER QUALITY	AGRICULTURAL RESOURCES
Keith Lay	Keith Lay	Jake Hyles	Tim Gnibus

TRAFFIC	VISUAL SIMULATIONS	CEQA APPENDIX F ENERGY ANALYSIS	GEOLOGY AND SOILS
Doug Smith, PE	Adrienne Moore	Keith Lay	Gary Goldman, PE, CG

This section responds to the RFP requirement to identify all staff working on the project, their education and an overview of their experience.

Table 2: Additional Key Staff List

NAME / ROLE / YEARS	EDUCATION	SUMMARY EXPERIENCE
Elaine Lee Environmental Analysis / EIR Preparer 6 Years Experience	MS, City Planning, University of Southern CA, 2015 BS, Public Affairs/ Environmental, University of CA Irvine, 2011	Elaine Lee has six years of CEQA/NEPA experience in southern California. She has contributed to preparation of several EIRs and NEPA documents, and she has been responsible for the preparation of Initial Studies and Negative Declarations for several infrastructure projects. She has substantial experience working on compliance monitoring efforts for photovoltaic solar projects in Kern County. She also assisted with the preparation of the SEPV Dixieland East and West EIR recently completed for the County of Imperial, as well as the Cluster I Addendums.
Natalie Brim Environmental Analysis / EIR Preparer 3 years experience	BS, Earth Science, Cal Poly San Luis Obispo, 2014	Natalie has three years of professional experience in environmental planning. As an environmental planner, Natalie's experience includes the preparation and coordination of environmental documentation pursuant to the California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA). This includes initial studies, environmental impact reports, and mitigated negative declarations. Natalie has also been involved with the preparation of Stormwater Pollution Prevention Plan (SWPPP).
Terrileigh Pellarin Environmental Analysis / EIR Preparer 3 Years Experience	BA, Environmental Science and English Literature, Whittier College, 2015	Terrileigh is an environmental planner with a broad range of California Environmental Quality Act/National Environmental Policy Act (CEQA/NEPA) technical writing and research experience. She has worked in CEQA/NEPA compliance throughout California. She has worked with clients to prepare legally defensible documents covering an extensive range of project types and sizes including several renewable energy projects located in Imperial and Kern counties.
Anders Burvall GIS & Graphics 13 Years Experience	MS, Geography, San Diego State University, 2007 BS, Environmental Sciences/Studies, San Diego State University, 2004	Anders Burvall is a GIS analyst located in HDR's San Diego Office. He has worked with GIS professionally and in an academic research environment for more than 13 years. During this time Anders has worked on a wide range of technical reports encompassing many disciplines including but not limited to LESA Analysis, Environmental, Biological, Transportation, Solid Waste, Waste Water, and Hydrology. He has worked directly on all of HDR's solar projects in Imperial County, providing GIS and graphic support. Anders is proficient in a number of software applications, primarily the ESRI GIS (ArcInfo, ArcEditor, ArcView) program suite.
Renee Stueber Document Production 13 Years Experience	BA, Journalism, University of Wisconsin, Milwaukee, 2008	Renee Stueber has industry experience, ranging from production and editorial services. She has managed the CEQA and NEPA documentation efforts (i.e., EIS, EIR) for projects along the west coast. This includes working closely with various team members and consultants to ensure project deliverables are created and finalized consistent with HDR standards, regularly exceeding client expectations. Her experience includes VEGA SES EIR, Laurel Cluster EIR, Citizens Energy EIR and Wister Solar Project EIR.
Ingrid Eich Biological Resources 14 Years Experience	MS, Environmental Studies, California State University Fullerton, 2003 BS, Environmental Biology/Ecology, University of CA Irvine, 1993	Ingrid has vast experience in conducting impact analysis in support of CEQA and NEPA documents, Section 1602 of the California Department of Fish and Game Code, Sections 401 and 404 of the Clean Water Act, the Porter-Cologne Act and the Endangered Species Act. Her experience includes multiple solar projects in Imperial County, including the Wister Solar EIR and SEPV Dixieland East and West EIR. She is also an experienced teacher and has conducted presentations for the Southern California Academy of Science and the Wildlife Society
Nina Delu, MS, RPA Cultural/Archaeological Resources; AB-52 Consultation 28 Years Experience	MS, Anthropology, University of CA Riverside	Nina Delu has more than 28 years of experience in cultural resource management. She has successfully conducted various field research and managed projects reviewed under guidelines of CEQA, as well as those specified in Section 106 of the National Historic Preservation Act (NHPA). Specific duties include archival research, field preparation, research design development, proposal and budget development, project design and management, staff management, eligibility determinations, direction of projects for federal clients, utility companies and state agencies, field evaluations, survey and excavations, and report writing in a wide range of regulatory and geographic settings.

NAME / ROLE / YEARS	EDUCATION	SUMMARY EXPERIENCE
Keith Lay Air Quality/Greenhouse Gas Report; Noise; CEQA Energy Analysis 20 Years Experience	BS, Civil Engineering, Civil & Environmental Engineer, University Of Manitoba, 1998	Keith is a senior air quality specialist with 20 years of experience in environmental studies, specializing in noise and air quality impact analysis. He has conducted air quality and noise studies for a variety of renewable energy projects, in accordance with procedures specified in state and local protocols and guidelines. In addition, Keith has prepared global warming/climate change analyses in response to recent changes to State laws. He has specific expertise in the use of the CALINE4 carbon monoxide dispersion model, AERMOD, CalEEMod, the EMFAC emission model, and the TNM noise model.
Jake Hyles, PE Hydrology / Water Quality 13 Years Experience	BS, Civil Engineering , University of Southern CA, 2005	Jake Hyles is based in San Diego and is part of the Water Resources team. His technical background includes hydraulic modeling, scour analysis, river mechanics and hydraulic analysis of flood conveyance structures and bridges. Additionally, he has experience in hydrologic modeling, sediment transport, and fish passage design. He has worked extensively with many software programs including HEC-RAS, HEC-GeoRAS, Civil Design, HEC-2 and HY-8 modeling programs, as well as ArcGIS and AutoCAD.
Adrienne Moore Visual Simulation 17 Years Experience		Adrienne Moore has more than 17 years of experience in graphic design and illustration, specifically for technical projects. Her design certifications include graphic design production, digital illustration, image editing, page layout, prepress, and web design. She has experience creating materials for a variety of audiences. She also creates a variety of materials for public outreach audiences, including video and audio media.
Gary Goldman, PE, CG Geology and Soil Study 28 Years Experience	MS, Civil Engineering, California St U Long Beach, 1995 BS, Civil Engineering, California St U Long Beach, 1991	Gary Goldman has more than 28 years of experience in geotechnical engineering. Responsibilities have included the preparation of preliminary soils, foundation and percolation reports, and special reports dealing with specific geotechnical challenges. Gary has successfully been involved in the project management, technical review and project-level report writing of several projects including geotechnical work for large commercial and industrial development projects and renewable energy projects.
Doug Smith, PE Traffic 37 Years Experience	BS, Civil & Environmental Engineer, University of Rhode Island, 1981 MS, Transportation Engineering, University of Rhode Island Certificate, Management for Engineering and Tech, University of CA Irvine, 1998 Certificate, Engineering (Traffic Engineering Short Course), Georgia Institute of Technology, 1985	Doug Smith has 37 years of broad experience in the management and development of ITS, transportation and traffic engineering projects. He is a registered engineer in California and has over 37 years of experience in providing maintenance of traffic design on complex freeway and managed lane projects. His project experience includes numerous highway traffic/electrical design and interchange improvement projects, ITS and traffic operations improvements, construction traffic control planning, and design of over 500 traffic signals and systems. Doug has extensive experience with transit and rail related traffic operations and analysis and he has managed ITS design/build projects which include the preparation of extensive amounts of electrical/lighting, signing and stripping design for transit improvements. Doug was a senior traffic engineer on three segments of High Speed Rail preliminary engineering and environmental documentation. He has a background in developing traffic impact analysis for CEQA and NEPA documents.

3. SCOPE OF WORK

TASK 1 – PROJECT INITIATION TASKS

Task 1 – Project Initiation will include the initial stages of the environmental document preparation process. We will properly archive the relevant environmental documents in a fashion to ensure a proper administrative record is maintained for the project. This task will involve:

- Initial project setup (file, database, QA/QC procedures, accounting)
- Preparation for and attendance at a project kick-off meeting with County and applicant (see Task 10)
- Initial coordination activities with County staff
- An initial site visit, research and data collection
- Preparation of the NOP and EIR Project Description
- Attendance and presentation at the Environmental Evaluation Committee meeting (see Task 10)
- Preparation for, and conducting the scoping meeting (see Task 10)
- Preparation of the CEQA Notice of Preparation and Initial Study Checklist (NOP/IS) for distribution to applicable public agencies
- AB52 Consultation Support

EIR Project Description

HDR will prepare a draft EIR Project Description utilizing the CUP Application and Project Description contained therein as provided by the applicant. We will utilize this applicant-provided information as the basis of the EIR Project Description, supplementing the description with HDR-prepared exhibits and text, as necessary, so that it is adequate from a CEQA standpoint.

The draft EIR Project Description would be distributed to the team for review/concurrence to ensure that the entire project team (HDR, County staff, applicant, and applicant technical consultants) have a common understanding of the whole project including such things as project phasing, construction parameters and operational characteristics of the project. The project description will serve as the basis for preparation of the NOP, IS, and EIR and should be consistent between the various technical reports that will be provided by the applicant.

Any informational gaps or questions related to the project description will be discussed and resolved at the kick-off meeting. A final Project Description will be produced based on the collective review and comment of the project team and we will move through our EIR preparation and technical study reviews based on the agreed-upon final Project Description.

The contents of the Project Description will include the proposed project location and setting, site characteristics, project phasing attributes , distinguishing attributes between site plans, project objectives, and other the characteristics of the proposed project. The Project Description will also include the discretionary permits and approvals, and any approvals associated with any other agency with jurisdiction over the proposed project.

The Project Description will be prepared to be consistent with the State CEQA Guidelines using a combination of graphics and text to document the following:

- Precise location and boundary of project
- Brief overview of environmental setting
- Objectives of the project
- Project's technical, economic and environmental characteristics
- Project Phasing and a breakdown of the CUP site plan features
- Intended uses of the EIR (agencies intended to use the EIR for approvals, list of permits and approvals, list of related environmental review)

Notice of Preparation and Initial Study (NOP and IS)

A screencheck and final NOP and IS will be prepared by HDR for review and comment by County staff. HDR will finalize these documents based on County comment and provide copies as identified under Deliverables. As is currently practiced at the County, this scope of work assumes that the County will be responsible for distribution of the NOP/IS to the appropriate agencies and individuals. The County would also be responsible for publishing the NOP in a newspaper of general circulation; however, HDR will prepare a version of the NOP in a format suitable for inclusion in the newspaper. HDR will assist the County with posting on state clearinghouse website consistent with new electronic submission protocol.

Scoping Meeting

HDR will prepare the powerpoint presentation, sign-in sheets, and comment cards for the scoping meeting and will furnish these to County staff in advance of the meeting to provide County staff the opportunity to review and comment before the final presentation materials are assembled. Tim Gnibus, HDR's Project Manager, will present the powerpoint presentation at the scoping meeting.

HDR will assist the county with preliminary AB 52 Consultation. This will include providing direction to the County, if needed, on AB52 Consultation Requirements for the project, and assistance with drafting the AB52 Consultation letter(s).

TASK 1 DELIVERABLES

- Draft EIR Project Description (one electronic copy)
- Finalized EIR Project Description (accompanies CEQA documentation)
- Screencheck CEQA NOP and IS (one electronic copy for review by County staff)
- CEQA NOP/IS (50 copies for distribution)
- CEQA NOP suitable for newspaper advertisement
- Scoping Meeting Materials (powerpoint presentation, sign-in sheets, comment cards)

TASK 2 – FIRST ADMINISTRATIVE DRAFT EIR

Imperial County, as the Lead Agency for CEQA, will review the EIR for consistency with CEQA requirements and regulations. The EIR will be prepared in accordance with the CEQA Guidelines, and the County Guidelines (Rules and Regulations to Implement CEQA).

As part of the environmental review process and CEQA documentation, HDR will provide the County with a practical mitigation monitoring compliance mechanism which will facilitate staff's review and mitigation compliance activities as the project is constructed and operated in the future.

HDR has highly-experienced staff implementing Mitigation and CUP Conditions compliance, in particular with utility scale solar energy projects in Imperial County, with a real world understanding of the practicalities and feasibility of implementing measures and how this could affect the mitigation program for this project.

HDR will prepare a First Administrative Draft EIR for project team review. Prior to beginning document preparation, HDR will prepare an EIR document format outline for review and approval by the County to facilitate subsequent environmental document reviews. We have reviewed the suggested EIR Format/Outline as provided in the RFP and would prepare the EIR in the following format, pending concurrence with the County Planning and Development Services Department:

Table of Contents

I. Acronyms

II. Introduction and Summary

III. Corrections and Additions (Placeholder – for Final EIR)

IV. Response to Comments (Placeholder – for Final EIR)

V. Mitigation, Monitoring and Reporting Program

1. ***Executive Summary***
2. ***Introduction***
3. ***Environmental Setting***
4. ***Project Description***
5. ***Introduction to Environmental Analysis***

Supporting EIR Technical Studies

Based on review of the RFP and the CUP application, HDR understands the following studies will be provided by the Applicant:

- aesthetics/visual resources
- air quality/greenhouse gas
- agriculture/LESA
- biological resources
- cultural resources/historic/tribal
- geotechnical
- hydrology/water quality management
- noise
- Phase I ESA
- transportation/traffic

HDR's base cost for preparation of the EIR assumes that these technical studies would be utilized for the EIR. Our EIR base cost includes providing one round of peer review of the technical studies.

5.1 Aesthetics/Visual Resources.
This section will address the regulatory setting, methodology for visual assessment and visual quality criteria, assessment of the visual character (vividness, intactness, unity), viewer sensitivity, designated scenic roadways, and light and glare. Visual resources study and glare hazard analysis to be provided by applicant.

5.2 Agricultural Resources.
The environmental setting will be described including County-wide trends in agricultural conversion utilizing the California Department of Conservation Farmland Mapping and Monitoring Program data. The regulatory setting will be addressed, including the project's consistency with applicable goals and policies of the General Plan. A LESA Analysis will be provided by Applicant only if determined to be necessary based on site conditions.

5.3 Air Quality.
The air quality section of the EIR will address the regional context of the project site with respect to air quality management, the regulatory setting, and local environmental conditions including ambient air quality data. Sensitive receptors in proximity to the project site would be identified. Construction and operational impacts of the proposed project would be assessed utilizing the air emissions of the project as quantified in the technical report in comparison to the Imperial County Air Pollution Control District's significance thresholds. Mitigation measures will be identified where applicable (e.g. fugitive dust control measures). Air quality report to be provided by applicant.

5.4 Biological Resources.
The biological resources section of the EIR will address potential impacts to vegetation communities on-site, potentially present sensitive plants, and animals. Project impacts to federal and state jurisdictional areas will also be addressed. Both direct and indirect impacts of construction and operation of the facilities will be addressed based on the findings of the biological technical report, and mitigation measures identified for any significant impacts. Biology study to be provided by applicant.

5.5 Cultural Resources/Tribal Cultural Resources
The cultural resources section of the EIR will address the environmental setting and regulatory context. The cultural resources setting will be described and the results of the records search and cultural resources pedestrian survey will be included. HDR will assist the County with implementation of AB-52 and SB-18 Native American consultation. Cultural study to be provided by applicant.

5.6 Geology and Soils.
The development of solar facilities are generally not associated with significant geological impacts. HDR will address general geology and soils conditions of the project site utilizing the applicant provided geotechnical study.

5.7 Greenhouse Gas Emissions (Climate Change).
The greenhouse gas emissions section of the EIR will focus generally on construction related greenhouse gas emissions impacts. In the long-term (operational) the project would have an overall beneficial impact as it relates to the generation of greenhouse gas emissions as the project is a clean, renewable energy resource. This section will be prepared in accordance with the most recent industry standard of analyzing greenhouse gas emissions impacts and potential climate change as a result of the 2015 Newhall Ranch California Supreme Court decision. Air quality report to be provided by applicant.

5.8 Hazards and Hazardous Materials.
Potential hazards associated with the construction and operation of the project will be addressed, such as the use, storage, and transport of hazardous materials during construction and operation. The potential for hazardous materials on-site will be addressed utilizing the Phase I report provided by Applicant.

5.9 Hydrology/Water Quality.
Typically, the hydrology and water quality analysis for the project is generated in

the preliminary stages of engineering, and therefore, we anticipate that this information would be available from the Applicant. The hydrology/water quality analysis in the EIR will address potential water quality impacts utilizing available sources of information with respect to surface water quality conditions, and standard water quality best management practices during construction and operation of the project. Water quality management plan to be provided by applicant.

5.10 Land Use and Planning.
This section of the EIR will address the project's consistency with applicable elements of the County's General Plan, including the Renewable Energy and Transmission Element. This section will include an analysis of applicable General Plan goals and policies, consistency with zoning, and compatibility with off-site land uses. The project site's context in relationship to the County's Airport Land Use Plan will be addressed.

5.11 Noise and Vibration.
The primary noise associated with the project will be during the construction phase. Only a limited number of noise sensitive receptors are known to exist in the general area of the project site, therefore, the evaluation of construction noise would need to consider only these receptors as a result of construction activities and operational characteristics. Operational noise impacts are limited, and primarily associated with tracking systems. The construction and operational noise impacts would be evaluated in the context of County noise standards. Noise report to be provided by Applicant.

5.12 Public Services.
Because the project will not introduce new housing or population on the project site, the operation of the project requires minimal public service demands and would be limited to potential service requirements for law enforcement and fire.

5.13 Recreation.
The project's potential to impact recreational activities, including formal recreation, and informal recreation, such as passive hiking and/or hunting activities would be evaluated. Because the project will not introduce new housing or population on the project site, minimal recreational demands would be anticipated by the project.

5.14 Transportation/Circulation.
The traffic analysis provided in the EIR would focus on the construction trips associated with the construction phase of the project, and the potential impacts of these trips on adjacent roadways accessing the project site. It is anticipated that public works will require a haul route study. VMT analysis (or screenings) to address newly-adopted CEQA thresholds will need to be performed. HDR assumes the traffic report and a haul route study would be provided by the Applicant.

5.15 Utilities and Service Systems/CEQA Appendix F Energy Analysis.

The potential impacts as a result of the project's need for new or expanded utility systems would be evaluated to ensure that potential environmental issues are addressed. This section will address the project's energy usage in accordance with CEQA Guidelines Appendix F: Energy Conservation. This evaluation will include an evaluation of energy consuming equipment and processes used during construction, operation, and/or removal of the project (site restoration), energy use, energy conservation, energy supplies that would serve the project, and total estimated daily vehicle trips generated by the project. The sources for this section will include the traffic study, air quality study, restoration plan, and evaluation by HDR engineering staff with expertise in electrical generation and utility planning.

SB 610 Water Supply Assessment.
As an optional task, HDR will utilize DD&E to prepare the SB610 Water Supply Assessment for the project. The Water Supply Assessment will address:

- Water availability during a normal year
- Expected water availability during multiple dry years
- Water availability for a 20-year projection to meet existing demands
- Historical site water consumption and project water demands
- Foreseeable planned water demands to be served by Imperial Irrigation District (IID)

6. Analysis of Long-Term Effects

7. Cumulative Impacts

8. Effects Found Not to be Significant

9. Alternatives.
Alternatives will be established in discussions between the County, Applicant, and HDR. For the purposes of this proposal, a total of two project alternatives in addition to the mandatory no project alternative, will be considered in this section of the document per the requirements of CEQA.

For each alternative, a description of the alternative, consideration of the alternative's feasibility in relation to the proposed project's basic objectives, and a comparative analysis of the environmental impacts attributable to the alternative versus those associated with the proposed project for each of the environmental categories discussed above will be provided.

10. References

TASK 2 DELIVERABLES

- First Administrative Draft EIR (5 hard copies + electronic copies in PDF and Word)

TASK 3 - SECOND ADMINISTRATIVE DRAFT ENVIRONMENTAL IMPACT REPORT

HDR will prepare a Second Administrative Draft EIR which incorporates the County comments on the First Administrative Draft EIR. The Second Administrative Draft EIR will include the main EIR text, figures, and EIR technical appendices, as revised to reflect all County edits, comments, and recommendations. The HDR Project Manager will be prepared to meet with the County to discuss comments and our proposed approach for addressing the comments within the Second Administrative Draft EIR.

TASK 3 DELIVERABLES

- Second Administrative Draft EIR (5 hard copies + electronic copies in PDF and Word)

TASK 4 - DRAFT ENVIRONMENTAL IMPACT REPORT

Following the County's review of the Second Administrative Draft EIR, HDR will prepare the public review Draft EIR document that incorporates final changes as approved by the County. We will deliver the copies to the County as provided below. As is the current practice, HDR assumes that the County will distribute the Draft EIR, including the Notice of Availability (NOA) and Notice of Completion (NOC). We will provide a copy in an electronic format that can be easily uploaded to the County's website at the start of the 50-day public review period, which is the County's standard practice.

We will provide the County with the electronic copy of the EIR. The County will be responsible for posting the EIR on their website.

We will assist the County with electronic submittal to the state clearinghouse.

TASK 4 DELIVERABLES

- Draft EIR (5 hard copies + 50 CDs and one CD master copy in PDF and Word)
- Notice of Completion (accompanies the Draft EIR)
- Notice of Availability (accompanies the Draft EIR)
- NOA suitable for inclusion as a newspaper notice

TASK 5 – RESPONSE TO COMMENTS

HDR will coordinate with the County to obtain all comments received on the Draft EIR. After consultation with the County, HDR will prepare the responses to comments. Per the RFP, the proposed scope of work and cost estimate are a "not-to-exceed" amount. The only exception to the "not to exceed" cost shall be the response to public comments received on the draft document. If the County receives excessive comments, then the costs will be determined on a "negotiated basis" when the draft document and comments on the project become available. HDR understands that excessive comments are generally considered to be more than 20 commenting agencies/individuals and/or over 150 comments that require answers other than "comment noted." This scope of work and cost estimate includes time to respond to up to 150 individual comments.

TASK 5 DELIVERABLES

- Screencheck Responses to Comments (digital copy to be e-mailed to team for review)

TASK 6 – SCREENCHECK FINAL EIR

After the responses to comments have been revised and concurrence has been received from the County for any proposed EIR text revisions (as will be shown in the Screencheck Responses to Comments), HDR will prepare a Screencheck Final EIR. The Screencheck Final EIR will include the finalized responses to comments, and revisions to the Draft EIR identified in strikeout/underline format. The Final EIR will contain the sections and components as required by CEQA Guideline Section 15132.

TASK 6 DELIVERABLES

- Screencheck Final EIR (5 hard copies and CD copy in PDF and Word)

TASK 7 – FINAL EIR

Upon incorporation of comments on the Screencheck Final EIR, HDR will prepare the Final EIR and deliver the copies to the County for distribution to the Planning Commission and other County departments and public agencies commenting on the Draft EIR.

TASK 7 DELIVERABLES

- Final EIR (5 hard copies + 50 CDs and one CD master copy in PDF and Word)

TASK 8 – MITIGATION MONITORING AND REPORTING PROGRAM

The preparation of the Mitigation Monitoring and Reporting Program (MMRP) will be a key component to the environmental work program for this project. HDR will prepare the MMRP that will detail all of the mitigation requirements and responsibilities, as identified in the EIR.

HDR will prepare the Draft MMRP for team review. HDR will revise the MMRP based upon County comment to produce the Final MMRP for adoption.

TASK 8 DELIVERABLES

- Draft MMRP (one electronic copy each)
- Final MMRP (five hard copies and one electronic copy each)

TASK 9 – CEQA FINDINGS OF FACT

Under this task, HDR will prepare the CEQA Findings of Fact, pursuant to Section 15090 of the CEQA Guidelines. If the EIR determines that the project will have significant and unmitigated impacts, this task would also include the preparation of a Statement of Overriding Considerations, if required. HDR will submit a draft of the CEQA Findings for County review. Based upon County comment, HDR will finalize the CEQA Findings for adoption by the County Planning Commission and/or Board of Supervisors should they approve the project. HDR will also prepare the Notice of Determination (NOD) and provide the NOD to County staff for signature and filing with the County Clerk's office.

TASK 9 DELIVERABLES

- Draft CEQA Findings (one electronic copy)
- Final CEQA Findings (15 hard copies and one electronic copy)
- Notice of Determination (one copy)

TASK 10 – MEETINGS AND HEARINGS

HDR's Project Principal/Project Manager will attend and actively participate in project related meetings and/or hearings. The following meetings are anticipated:

- Kickoff meeting (1)
- Public scoping meeting (1)
- Coordination meetings with Imperial County staff and Applicant (2)
- Environmental Evaluation Committee (1)
- Planning Commission (1)
- Board of Supervisors (1)

Assumptions

Pursuant to the RFP, HDR confirms the following:

- Prior to any cost overruns, HDR shall seek and obtain written approval from the Imperial County Planning & Development Services Director before such costs are incurred. Failure to get prior written approval may result in such costs being disallowed.
- HDR has assumed the printing of 5 hard copies of the Administrative Draft EIR, 5 hard copies of the Draft EIR, and 5 hard copies of the Final EIR. Any additional copies beyond the 5 of either the Draft and/or Final EIR would be prepared at cost.
- The cost estimate assumes 50 CD copies of the Draft EIR and Final EIR.
- If alternative site plans are required to conduct alternative analysis, these shall be furnished by the project applicant
- Applicant would be responsible for coordination with other agencies (BLM, Caltrans, IID) as it relates to additional permits that may be required from these agencies.
- Applicant will be responsible for the provision of supporting technical studies for the EIR. One round of technical peer review is included.

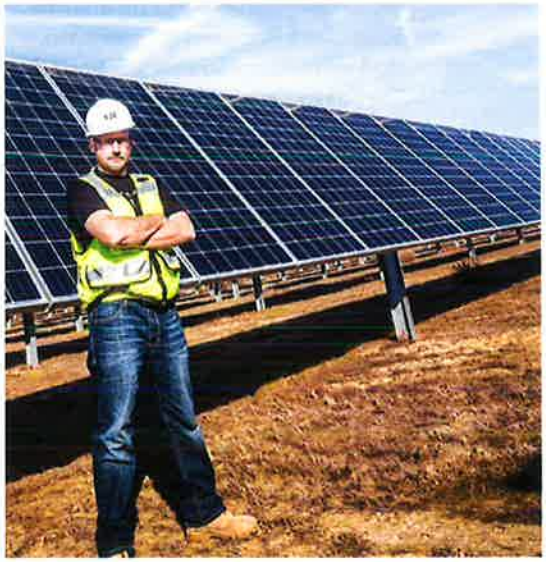
Exclusions

Technical Study Assumptions

TECHNICAL STUDY	COMMENT/ASSUMPTION
Aesthetics/Visual Resources	Applicant to provide per RFP and pg. 8 of CUP Application Project Description
Agricultural/LESA	Applicant to provide per RFP. May not be required as project not located on active agricultural lands.
Air Quality/Greenhouse Gas	Applicant to provide per RFP and pg. 9 of CUP Application Project Description
Biological Resources	Applicant to provide per RFP and pg. 9 of CUP Application Project Description
Cultural Resources	Applicant to provide per RFP and pg. 9 of CUP Application Project Description
Geotechnical	Necessary for preliminary site plan concept, will be used if provided by Applicant (Geology Report provided as EIR Optional Task)
Hydrology/Water Quality	Applicant to provide per CUP Application and pg. 10 of CUP Application Project Description (Necessary for preliminary site plan concept)
Noise	Applicant to provide per RFP
Phase I Environmental Site Assessment	Applicant to provide per pg. 10 of CUP Application Project Description
Transportation/Traffic	Applicant to provide per RFP and pg. 10 of CUP Application Project Description
SB 610 Water Supply Assessment	Provided as EIR Optional Task

The following are not included as part of the proposed scope of work:

- Permit/Filing fees (e.g., County Recorder/Clerk fees for submittal of an NOD)
- Regulatory Permitting (e.g., 401, 404, 1602)
- Federal and State Endangered Species permitting, including preparation of a Biological Assessment
- Mitigation Plans (e.g., restoration and revegetation plans)
- Grading Plans



4. PROPOSED SCHEDULE

HDR is committed to the successful completion of the EIR process within the timeframe desired by the County and the Applicant. The schedule will ultimately be under the discretion of the County. We have a proven track record and the necessary experience working with County staff and the County's environmental procedures to meet the draft project schedule identified below. As defined in Task 1, HDR would refine this schedule as an outcome of the kickoff meeting for the project.

Table 3: Draft Schedule Summary EIR Certification in 2021

TASK	DAYS	DATE	WEEK
Notice to Proceed/EIR Kickoff (estimated date)	1	December 14, 2020	1
Data Collection/Existing Conditions	7	December 21, 2020	2
Draft Project Description	7	December 21, 2020	2
Draft NOP/Initial Study	7	December 21, 2020	2
County Comments on Project Description, NOP, IS	14	January 4, 2021	4
Finalize Project Description, NOP, IS	3	January 7, 2021	4
Release NOP for Public Review	3	January 7, 2021	4
NOP Public Review Period	35 (per County)	January 11 - February 15, 2021	5 - 10
EEC Meeting (Informational)	1	January 28, 2021	7
EIR Scoping Meeting	1	January 28, 2021	7
HDR Submits First Screencheck Draft EIR	65	February 19, 2021	10
County Review	14	March 5, 2021	12
HDR Submits Second Screencheck Draft EIR	14	March 19, 2021	14
County Review	14	April 2, 2021	16
Draft EIR (finalize, printing, notices)	7	April 9, 2021	17
County Distribution of Draft EIR	1	April 12, 2021	18
State Clearinghouse Receipt of Draft EIR	1	April 12, 2021	18
Documents posted on County Website	1	April 12, 2021	18
Draft EIR Public Review Period	50 (per County)	April 13 - June 2, 2021	18-25
Screencheck Response to Comments	14	June 16, 2021	27
County Review	14	June 30, 2021	29
Screencheck Final EIR	7	July 7, 2021	30
Draft MMRP	7	July 7, 2021	30
Draft CEQA Findings	7	July 7, 2021	30
County Review	7	July 14, 2021	31
Final MMRP	2	July 16, 2021	31
Final CEQA Findings	2	July 16, 2021	31
Final EIR	2	July 16, 2021	31
Planning Commission	1st Wednesday of August	August 11, 2021	35
Board of Supervisors	Est.	September 2021	40

5. COST ESTIMATE / MILESTONES

The following cost estimate has been prepared to outline costs to complete the above outlined scope of work tasks. Reimbursable expenses, including printing, postage and mileage, will be invoiced in accordance with HDR standard rate schedule and is included in the total cost estimate provided. Appendix A provides a detailed budget spreadsheet showing our estimated hours for staff, hourly rate and proposed time on the project. The base EIR cost is $124,500.

Table 4: EIR Cost Summary Table

TASK	COST ESTIMATE
1. Project Initiation (Project Description, NOP/Scoping and Initial Study)	$6,500
2. First Administrative Draft Environmental Impact Report	$48,500
3. Second Administrative Draft Environmental Impact Report	$19,250
4. Draft EIR	$11,250
5. Screencheck Response to Comments	$10,000
6. Screencheck Final EIR	$9,250
7. Final EIR	$7,000
8. Mitigation Monitoring and Reporting Program	$3,450
9. CEQA Findings of Fact	$3,300
10. Meetings and Hearings	$6,000
Total	**$124,500**

Optional water supply assessment: $6,530. Optional Geology report: $8,500.

Table 5 provides a conceptual milestone payment schedule based on the EIR work program and budget.

Table 5: Milestone Payment Schedule

NO	TASK	COST ESTIMATE
1	Completion of Project Description, NOP/IS and Scoping Meeting	$6,500
2	Completion of 50% of the 1st Admin Draft EIR	$24,250
3	Completion and submittal of the 1st Admin Draft EIR	$24,250
4	Completion of 50% of the 2nd Admin Draft EIR	$9,625
5	Completion and submittal of the 2nd Admin Draft EIR	$9,625
6	Completion and circulation of the Draft EIR for public review	$11,250
7	Completion of Screencheck Response to Comments and 50% of the Screencheck Final EIR	$14,625
8	Completion and submittal of the Screencheck Final EIR and submittal of the Final EIR	$11,625
9	Completion and submittal of the Final CEQA Findings, Final MMRP, Administrative Record and Meetings	$12,750
	Total	**$124,500**

6. CONFLICT OF INTEREST

We currently do not have any contracts with the Applicant. No conflicts or potential conflicts are anticipated should HDR be selected to perform the work on this project.

A. Detailed Cost Breakdown

HDR Engineering, Inc.
COST ESTIMATION WORKSHEET - SO CAL Environmental - RESOURCES
Fully Burdened Rates, Including Profit
Rev. 01/28/2020 - 2020 Rates

DATE OF ESTIMATE:

A-E FIRM: **HDR Engineering**
CONTRACT NO.: NA

PAGE 1

PROJECT : VEGA SES 2-3-5

LOCATION: County of Imperial

PART I - DIRECT SERVICES			Task 1		Task 2		ask 3		Task 4		Task 5		Task 6		Task 7					
			Project Initiation		First Admin Draft EIR		Second Admin Draft EIR		Draft EIR		Response to Comments		Screencheck Final EIR		Final EIR		TOTAL THIS PAGE		TOTAL PAGE 1 TO 2	
ITEM		FFP/HR	HRS	COST	HRS	COST	HRS	COST	HRS	COST	HRS	COST	HRS	COST	HRS	COST	HRS	COST	HRS	COST
Name Title	Adjusted																			
Gnibus, Tim - Private Development Market Sector Lead	384.00	$384.00	4	$1,536	16	$6,144	8	$3,072	6	$2,304	6	$2,304	5	$1,920	2	$768	47	$18,048	61	$23,424
Meyer, Clint - Senior Environmental Planner	261.00	$261.00	2	$522	8	$2,088	4	$1,044	2	$522	2	$522		$0	2	$522	20	$5,220	20	$5,220
Del Rosario, Sharyn - Environmental Planner	175.00	$175.00	14	$2,450	110	$19,250	44	$7,700	24	$4,200	22	$3,850	30	$5,250	14	$2,450	258	$45,150	270	$47,250
Lee, Elaine - Environmental Planner	136.00	$136.00	2	$272	72	$9,792	26	$3,536	4	$544	4	$544		$0	8	$1,088	116	$15,776	140	$19,040
Santos, Ronnel - Biologist	93.00	$93.00	4	$372	36	$3,348	12	$1,116	9	$837	7	$651	4	$372	2	$186	74	$6,882	76	$7,068
Brim, Natalie - Environmental Planner	130.00	$130.00		$0		$0		$0		$0		$0		$0		$0	0	$0	0	$0
Burvall, Anders - Sr. GIS Analyst	151.00	$151.00	2	$302	8	$1,208	4	$604	2	$302	2	$302	2	$302		$0	20	$3,020	20	$3,020
	0.00	$0.00		$0		$0		$0		$0		$0		$0		$0	0	$0	0	$0
	0.00	$0.00		$0		$0		$0		$0		$0		$0		$0	0	$0	0	$0
Eich, Ingrid - Senior Biologist	242.00	$242.00		$0	2	$484		$0		$0		$0		$0		$0	2	$484	2	$484
Leonard, Daniel - Cultural Resources Specialist	96.00	$96.00		$0	2	$192		$0		$0		$0		$0		$0	2	$192	2	$192
Lay, Keith - Sr Air Quality Specialist	257.00	$257.00		$0	2	$514		$0		$0		$0		$0		$0	2	$514	2	$514
Hyles, Jacob - Water Resources Engineer	177.00	$177.00		$0	2	$354		$0		$0		$0		$0		$0	2	$354	2	$354
Starick, James - Sr Geotech Engineer	198.00	$198.00		$0	2	$396		$0		$0		$0		$0		$0	2	$396	2	$396
Smith, Doug - Senior Program Manager	362.00	$362.00		$0	2	$724		$0		$0		$0		$0		$0	2	$724	2	$724
	0.00	$0.00		$0		$0		$0		$0		$0		$0		$0	0	$0	0	$0
Stueber, Renee - Technical Editor	116.00	$116.00	4	$464	28	$3,248	12	$1,392	10	$1,160	12	$1,392	8	$928	6	$696	80	$9,280	86	$9,976
Helsens, Sharon - Business Group Accountant	173.00	$173.00	2	$346	2	$346	2	$346	2	$346	2	$346		$0	2	$346	12	$2,076	12	$2,076
	0.00	$0.00		$0		$0		$0		$0		$0		$0		$0	0	$0	0	$0
	0.00	$0.00		$0		$0		$0		$0		$0		$0		$0	0	$0	0	$0
	0.00	$0.00		$0		$0		$0		$0		$0		$0		$0	0	$0	0	$0
	0.00	$0.00		$0		$0		$0		$0		$0		$0		$0	0	$0	0	$0
	0.00	$0.00		$0		$0		$0		$0		$0		$0		$0	0	$0	0	$0
	0.00	$0.00		$0		$0		$0		$0		$0		$0		$0	0	$0	0	$0
	0.00	$0.00		$0		$0		$0		$0		$0		$0		$0	0	$0	0	$0
	0.00	$0.00		$0		$0		$0		$0		$0		$0		$0	0	$0	0	$0
	0.00	$0.00		$0		$0		$0		$0		$0		$0		$0	0	$0	0	$0
SUBTOTAL DIRECT LABOR			34	6,264	292	48,088	112	18,810	59	10,215	57	9,911	49	8,772	36	6,056	639	$108,116	697	$119,738

PART II - SUPPORT SERVICES - ITEMIZED ON SUPPLEMENT SHEETS															THIS PAGE		PAGE 1 TO 2	
ITEM	AMT	COST	AMT	COST	AMT	COST	AMT	COST	AMT	COST	AMT	COST	AMT	COST	AMT	COST	AMT	TOTAL
Printing/Mailing		$236		$412		$440		$1,035		$89		$478		$944		$3,634		$3,720
Travel																$0		$1,042
																$0		$0
																$0		$0
																$0		$0
																$0		$0
																$0		$0
SUBTOTAL SUPPORT SERVICES		$236		$412		$440		$1,035		$89		$478		$944		$3,634		$4,762
TASK SUBTOTAL		$6,500		$48,500		$19,250		$11,250		$10,000		$9,250		$7,000		$111,750	697	$124,500

HDR Engineering, Inc.
COST ESTIMATION WORKSHEET - SO CAL Environmental - RESOURCES
Fully Burdened Rates, Including Profit
Rev. 01/28/2020 - 2020 Rates

DATE OF ESTIMATE:

A-E FIRM: **HDR Engineering**
CONTRACT NO.: NA

PROJECT : VEGA SES 2-3-5

LOCATION: County of Imperial

PAGE 2

PART I - DIRECT SERVICES

ITEM Name Title		Adjusted	FFP/HR	Task 8 MMRP HRS	COST	Task 9 CEQA Findings HRS	COST	Task 10 Meetings and Hearings HRS	COST	HRS	COST	HRS	COST	HRS	COST	HRS	COST	TOTAL THIS PAGE HRS	COST	TOTAL PAGE 1 TO 2 HRS	COST
Gnibus,Tim - Private Development Market Sector Lead		384.00	$384.00	1	$384	1	$384	12	$4,608		$0		$0		$0		$0	14	$5,376	61	$23,424
Meyer, Clint - Senior Environmental Planner		261.00	$261.00		$0		$0		$0		$0		$0		$0		$0	0	$0	20	$5,220
Del Rosario, Sharyn - Environmental Planner		175.00	$175.00	4	$700	6	$1,050	2	$350		$0		$0		$0		$0	12	$2,100	270	$47,250
Lee, Elaine - Environmental Planner		136.00	$136.00	12	$1,632	12	$1,632		$0		$0		$0		$0		$0	24	$3,264	140	$19,040
Santos, Ronnel - Biologist		93.00	$93.00	2	$186		$0		$0		$0		$0		$0		$0	2	$186	76	$7,068
Brim, Natalie - Environmental Planner		130.00	$130.00		$0		$0		$0		$0		$0		$0		$0	0	$0	0	$0
Burvall, Anders - Sr. GIS Analyst		151.00	$151.00		$0		$0		$0		$0		$0		$0		$0	0	$0	20	$3,020
	0.00	0.00	$0.00		$0		$0		$0		$0		$0		$0		$0	0	$0	0	$0
	0.00	0.00	$0.00		$0		$0		$0		$0		$0		$0		$0	0	$0	0	$0
Eich, Ingrid - Senior Biologist		242.00	$242.00		$0		$0		$0		$0		$0		$0		$0	0	$0	2	$484
Leonard, Daniel - Cultural Resources Specialist		96.00	$96.00		$0		$0		$0		$0		$0		$0		$0	0	$0	2	$192
Lay, Keith - Sr Air Quality Specialist		257.00	$257.00		$0		$0		$0		$0		$0		$0		$0	0	$0	2	$514
Hyles, Jacob - Water Resources Engineer		177.00	$177.00		$0		$0		$0		$0		$0		$0		$0	0	$0	2	$354
Starick, James - Sr Geotech Engineer		198.00	$198.00		$0		$0		$0		$0		$0		$0		$0	0	$0	2	$396
Smith, Doug - Senior Program Manager		362.00	$362.00		$0		$0		$0		$0		$0		$0		$0	0	$0	2	$724
	0.00	0.00	$0.00		$0		$0		$0		$0		$0		$0		$0	0	$0	0	$0
Stueber, Renee - Technical Editor		116.00	$116.00	4	$464	2	$232		$0		$0		$0		$0		$0	6	$696	86	$9,976
Helsens, Sharon - Business Group Accountant		173.00	$173.00		$0		$0		$0		$0		$0		$0		$0	0	$0	12	$2,076
	0.00	0.00	$0.00		$0		$0		$0		$0		$0		$0		$0	0	$0	0	$0
	0.00	0.00	$0.00		$0		$0		$0		$0		$0		$0		$0	0	$0	0	$0
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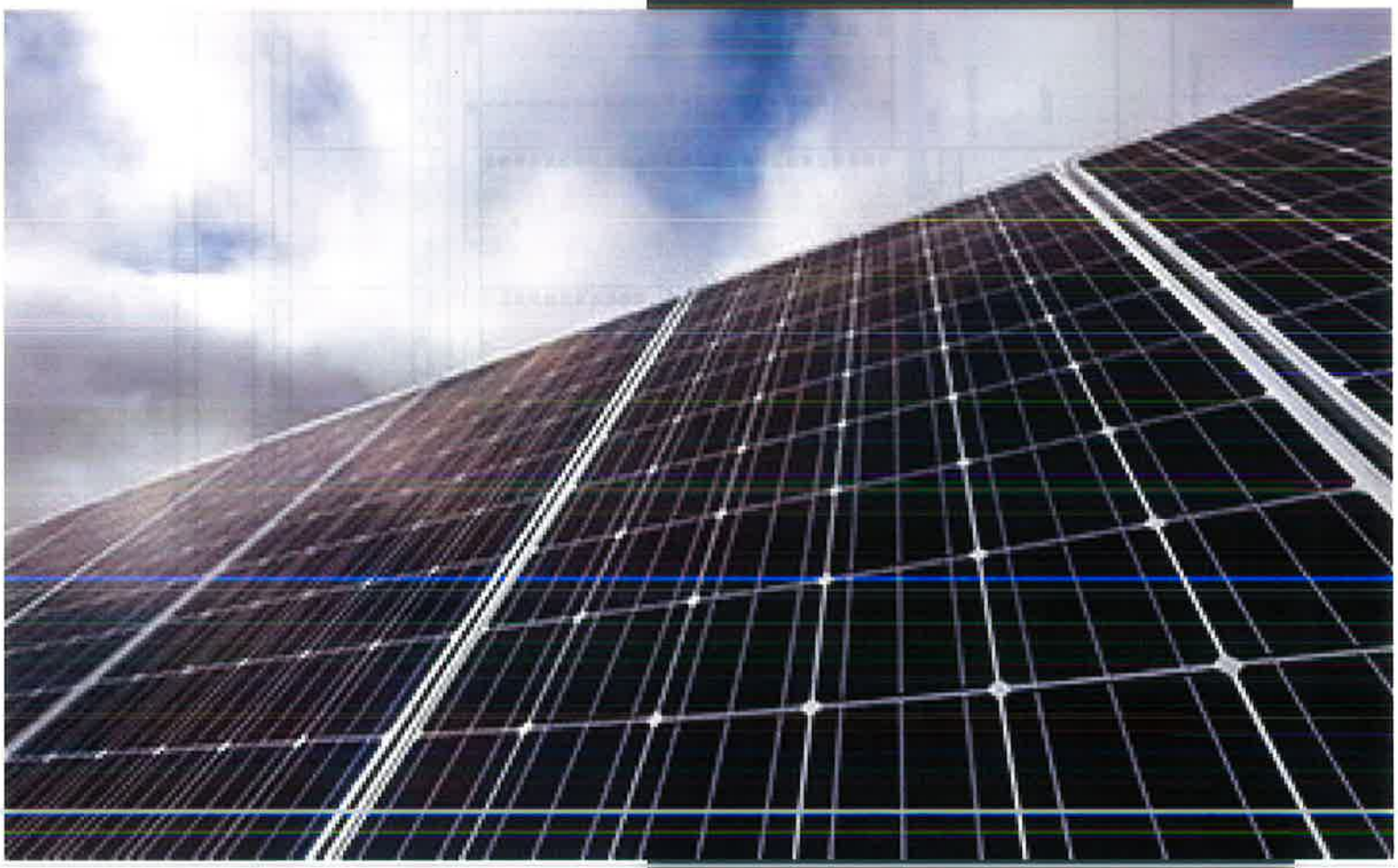
	0.00	0.00	$0.00		$0		$0		$0		$0		$0		$0		$0	0	$0	0	$0
SUBTOTAL DIRECT LABOR				23	3,366	21	3,298	14	4,958	-	-	-	-	-	-	-	-	58	$11,622	697	$119,738

PART II - SUPPORT SERVICES - ITEMIZED ON SUPPLEMENT SHEETS

ITEM	AMT	COST	AMT	COST	AMT	COST	AMT	COST	AMT	COST	AMT	COST	AMT	COST	THIS PAGE AMT	COST	PAGE 1 TO 2 AMT	TOTAL
Printing/Mailing		$84		$2												$86		$3,720
Travel						$1,042										$1,042		$1,042
0.00																$0		$0
0.00																$0		$0
0.00																$0		$0
0.00																$0		$0
0.00																$0		$0
SUBTOTAL SUPPORT SERVICES		$84		$2		$1,042		$0		$0		$0		$0		$1,128		$4,762
TASK SUBTOTAL		$3,450		$3,300		$6,000		$0		$0		$0		$0		$12,750		$124,500

*** GRAND TOTAL FEE ***	$124,500
PM SIGNATURE	



B. Solar Environmental Qualifications

Our Experience in Imperial County

PROJECT	ACRES	MEGAWATTS	CEQA DOCUMENT
Wister Solar Project	100	20	EIR
Citizens Imperial Solar, LLC	222.8	30	EIR
SEPV Dixieland East and West	53	5	EIR
Laurel Cluster Solar Farms	1,380	325	EIR
VEGA SES Solar Energy Project	574	100	EIR
Iris Cluster Solar Farm	1,400	360	EIR
Mount Signal and Calexico Solar Farms	4,228	600	EIR
Midway Solar Farm 1	480	50	EIR Addendum
Midway Solar Farm 2	320	30	EIR Addendum
Midway Solar Farm 3	320	40	EIR Addendum
Midway Solar Farm 3 (mod)	160	20	EIR Addendum
Midway Solar Farm 4	152	15	EIR Addendum
Calexico Solar Garm 1A	159	15	EIR Addendum
Lindsey Solar Farm	148	20	EIR Addendum
Wilkinson Solar Farm	302	30	EIR Addendum
Imperial Solar Energy Center South	946	200	CEQA/NEPA EIR/EA support, staff support
Imperial Solar Energy Center West	1,130	250	CEQA/NEPA EIR/EA support, staff support
Ferrell 2 Solar Farm	204	60	EIR Addendum

VEGA SES Solar Energy Project

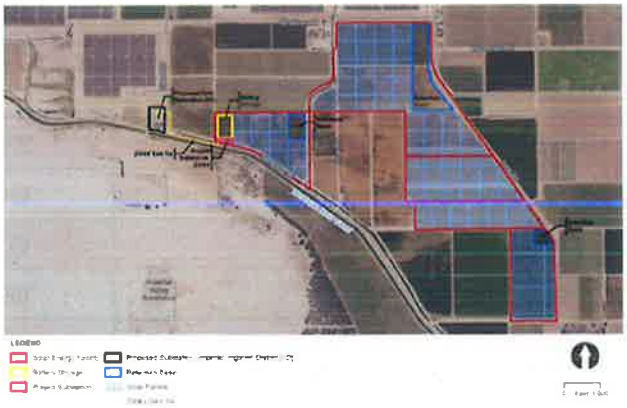
Imperial County, CA

HDR prepared the EIR for the VEGA SES Solar Project. The project consists of three primary components: 1) solar generation equipment and associated facilities (herein referred to as "solar energy facility"); 2) battery storage system; and, 3) above ground 230 kilovolt (kV) generator intertie (herein referred to as "gentie"). The proposed project involves the construction of a 100 MW PV solar energy facility with an integrated 100 MW battery storage system on approximately 574 gross acres of land. Of the total 574 gross acres, approximately 555 acres would be developed with a ground mounted PV solar power generating system, supporting structures, on site substation, battery storage system, and internal access roads.

The project would employ the use of PV power systems to convert solar energy into electricity using non reflective technology. The major components of the facility are PV modules, fixed frame or horizontal single axis sun tracking (HSAT) support structures, and electronic/electrical equipment to convert the electricity from the PV modules from direct current (DC) electricity to alternating current (AC). Ancillary equipment includes switch/fuse panels, control and protection equipment, and communications hardware. Additional auxiliary facilities would include lighting and security systems.

In addition, a major component of the project would be the restoration of the project site to pre project conditions once the project is no longer in use.

The electrical energy produced by the project would be conducted through the project's substation to a proposed 230 kV gentie line and delivered to the Imperial Irrigation District (IID) at the proposed IID 230 kV Fern Substation. The project's power would then be transmitted by the IID to the point of interconnection with the utility which has agreed to purchase the output from the solar project pursuant to a power purchase agreement (PPA).



Wister Solar Energy Facility EIR

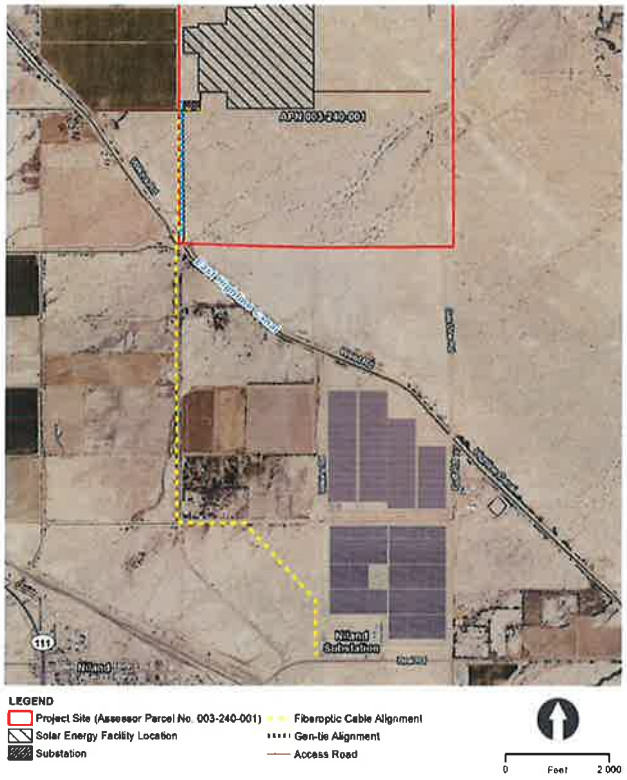
Imperial County, CA

HDR prepared the EIR for the Wister Solar Energy Facility Project, which included solar energy generation equipment and associated facilities including a substation and access roads, gen tie line that would connect the proposed on site substation to the Point of Interconnection (POI) at the existing IID 92 kV "K" line; and an on-site wireless communication system or off-site fiberoptic cable.

The project is a 20 MW (PV solar energy facility on approximately 100 acres of privately owned land north of Niland. The proposed project would be comprised of solar PV panels on single axis horizontal trackers, an on site substation and inverters, transformers, and underground electrical cables.

The power produced by the proposed project would be conveyed to the local power grid via an on site 92 kilovolt (kV) substation, which will be tied directly to the Imperial Irrigation District's (IID) 92 kV transmission line. A gen tie line would connect the Wister substation to the POI at the existing IID 92kV "K" line.

Discretionary actions associated with the project include approval of a CUP to allow for the construction and operation of the proposed solar energy facility project, including an on-site microwave tower, approval of a CUP for a groundwater well, an amendment to the County's General Plan, Renewable Energy and Transmission Element is required to implement the proposed project, zone change to include/classify into the RE Overlay Zone, and variance to exceed the height limit for transmission towers within the S 2 zone.

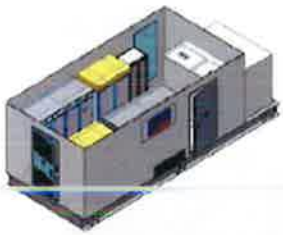


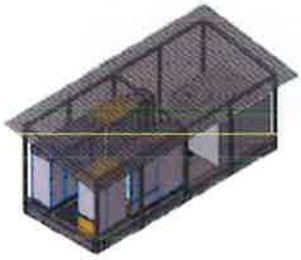
Citizens Imperial Solar, LLC Project

Imperial County, CA

HDR prepared the EIR for the Citizens Solar Project. The project involved the construction of a 30 MW AC solar PV energy generating facility on approximately 223 acres of land owned by IID. Of the total 223 acres, approximately 159 acres (area within the fence line) would be developed with a ground mounted PV solar power generating system, supporting structures, on site substation, access driveways, and transmission structures. Approximately 12.02 acres is currently developed with the Midway Substation.

The proposed project would connect to the electric grid at the IID's Midway Substation, located on the northern parcel of the project site. The project has a PPA with IID for the sale of power from the project. The lifespan of the project is expected to be 25 years. The project would provide lower cost energy to low income customers through the eGreen program administered by IID.





The northern parcel is located at the northwest corner of Simpson Road and the IID's East Highline Canal. The existing Midway Substation is located on the southeast corner of the northern parcel of the project site. The northern parcel is bound by IID's 'M' Lateral on the south, 'N' Lateral on the north, and the East Highline Canal diagonally along the east. The southern parcel is bounded by IID's 'L' Lateral (irrigation supply canal) on the south, 'M' Lateral on the north, and the East Highline Canal diagonally along the east.

Laurel Solar Farm

Imperial County, CA

HDR prepared an EIR for the proposed Laurel Solar Farm Cluster Project. The project sites encompass approximately 1,380 acres of land located approximately 8 miles southwest of the City of El Centro in the unincorporated area of Imperial County. Four separate CUP applications were filed with the County, which together define the project sites. The project sites are located outside of the County's Renewable Energy (RE) Overlay Zone. Therefore, the EIR addressed a General Plan Amendment and Zone Change to add the project area to the County's RE Overlay Zone.

The four projects will generate up to a combined 325 MW of alternating current (AC) on a daily basis. Power generated by the projects will be delivered from the project sites via up to 230 kilovolts (kV) overhead and/or underground electrical transmission line(s) originating from an on-site substation(s)/ switchyard(s) and terminating at the proposed Fern/Liebert Substation. Each project will include a ground mounted photovoltaic solar power generating system, supporting structures, inverter modules, pad mounted transformers, energy storage system, access roads and fencing, an operations and maintenance building, and an on-site substation.

Iris Cluster Solar Farm Project EIR

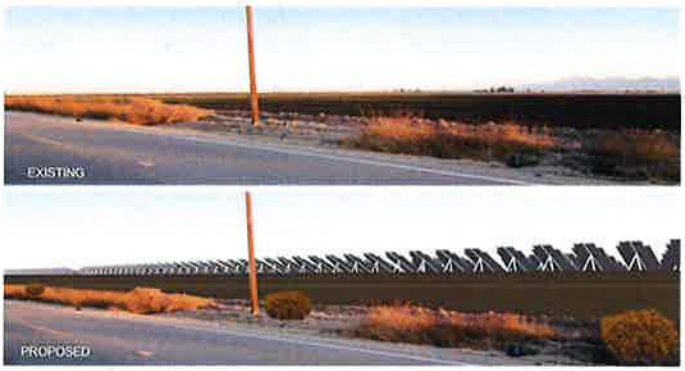
Imperial County, CA

HDR prepared the EIR for the Iris Cluster Solar Farms project. The solar farm portions of the project are located on privately owned, primarily undeveloped agricultural land encompassing approximately 1,422 acres. The project area is located in southern Imperial County (County). The projects would employ the use of PV (or CPV) power systems to convert solar energy into electricity using non-reflective technology. The project facilities would consist of solar PV (or CPV) panels, inverter modules, pad mounted transformer(s), and optional, on-site O&M buildings and substation(s). Each solar project facility may have its own O&M building and substation, or may share among the projects. Up to four O&M buildings and substations are contemplated. Each O&M building would include its own emergency power, fire suppression, potable water system and septic system. Additional auxiliary facilities would include lighting, grounding, backup uninterruptable power supply (UPS) systems and diesel power generators, fire and hazardous materials safety systems, security systems, chemical safety systems, and emergency response facilities.

At build-out, the proposed projects would facilitate the generation of up to 360 MW of alternating current (AC) on a daily basis.

Mount Signal and Calexico Solar Farm Projects EIR

Imperial County, CA



HDR prepared the Mount Signal and Calexico Solar Farm Projects EIR for the County of Imperial Planning and Development Services Department. The project area encompasses a total of 4,228 acres of land within the southern portion of Imperial County and would involve the construction and operation of a 800-1000 Megawatt Photovoltaic Solar Energy Facility, consisting of photovoltaic solar arrays, transmission lines, and ancillary uses including electrical substations, operations and maintenance buildings, and water quality control basins. Additionally, transmission lines would be constructed to connect the project to electrical substations. The project site was comprised of five distinct Conditional Use Permit sites, with varying acreage and megawatt generation potential, allowing for flexibility in developing the project in phases as specific solar developers were not known at the time the EIR was prepared. Key features of the project include:

- Fast-track schedule
- 4,228 acre project site
- Analysis of off-site transmission
- 800-1000 MW PV Solar Energy Facility (PV solar arrays, transmission lines, substations, operations and maintenance buildings, and water quality control basins)
- Five Conditional Use Permit sites, with varying acreage and MW potential, providing flexibility for a phased development to allow PPAs to be obtained by future solar developers
- Visual and Glint analysis (Calexico International Airport and private airstrip)
- Biological Resources
- Water quality
- Alternatives

SEPV Dixieland East and West Solar Farm Projects

Imperial County, CA

HDR prepared the EIR for the SEPV Dixieland East and West Solar Farm Projects. The proposed projects are located on privately owned, undeveloped, but partially disturbed land encompassing approximately 53 acres. Two separate Conditional Use Permit (CUP) applications have been filed with the County, which together define the project sites. The project sites are located adjacent to the existing Dixieland Substation, which is located between the two project sites.

The project sites are located within the County's Renewable Energy/Geothermal overlay zone. The DESF project site consists of three parcels totaling 24 acres within the eastern portion of the project area. The DWSF project site consists of one parcel totaling 29 acres within the western portion of the project area.

The proposed projects (DESF and DWSF facility sites) would consist of construction and operation of an expansive photovoltaic (PV) solar energy facility and supporting uses. The projects would employ the use of PV power systems to convert solar energy into electricity using non-reflective technology. The major components of the facility are PV modules, single-axis sun tracking support structures, and electronic/electrical equipment to convert the electricity from the PV modules from direct current ("DC") electricity to alternating current ("AC") electricity and transfer the electricity to IID's existing Dixieland Substation. Ancillary equipment includes switch/fuse panels, control and protection equipment, communications hardware, and meteorological data equipment. Additional auxiliary facilities would include lighting and security systems.

At build-out, the proposed projects would facilitate the generation of up to 5 MW of alternating current (AC) on a daily basis. Electricity generated by DESF would be interconnected to the IID electrical distribution system at an existing IID 12kV distribution line (Pole Number T-18700). Electricity generated by DWSF would be interconnected to the IID electrical distribution system at an existing IID 12kV distribution line (Pole Number T-51071).

The projects have a 20-year Power Purchase Agreement (PPA) with the IID awarded through its Feed-in Tariff (FIT) program. SB 32, enacted in 2009, required the IID to implement a FIT. This tariff is mandated to be offered on a first-come, first-served basis. The tariff provides a simple mechanism for small renewable generators (less than 3MW) to sell power to the utility at predefined terms and conditions, without engaging in contract negotiations. Eligibility criteria for IID's FIT consists of the following:

1. The project must be located within the IID service territory;
2. The project must be between 1kW and 3MW;
3. The project must be located and interconnected in a manner that optimizes deliverables of generation to load centers; and
4. The project must install eligible renewable generation.

Through the tariff, IID will purchase all generation from the facility and all Renewable-Energy Credits (REC) will belong to IID. The projects will help California meets its Renewable Portfolio Standard of 33 percent of retail electricity sales from renewable sources by the end of 2020.

Imperial Solar Energy Center South EIR/EA and Planning Services

Imperial County, CA

HDR was retained by the Imperial County Planning and Development Services Department to serve as an extension of the County's planning department staff to process the Conditional Use Permit for the Imperial Solar Energy Center South EIR/EA. The Imperial Energy Center South project consisted of a 950-acre, 80 MW PV project, and associated supporting infrastructure. A major component of the project included a 5-mile long 230kV transmission line traversing BLM lands within Utility Corridor "N" of the California Desert Conservation Area Plan. HDR's project manager, Tim Gnibus, was responsible for the preparation of the EIR/EA document prior to joining HDR, and continued his involvement on the project in its final stages under this contract at HDR. HDR's responsibilities included serving as a liaison for internal County staff (planning, building, public works), the project applicant, and other entities such as the Bureau of Land Management. Key features of the project include:

- Extension of planning department staff to facilitate project approval
- Managed completion of the CEQA/NEPA documentation
- Preparation of the staff report and conditions of approval for the CUPs
- Responsible for presenting the project to the Planning Commission and Board of Supervisors

Calexico Solar Farm IA and IB Projects EIR Addendum

Imperial County, CA

HDR prepared a CEQA EIR Addendum to the previously certified Mount Signal and Calexico Solar Farms Project EIR to address the potential impacts associated with the Calexico IA and IB utility-scale Concentrated Photovoltaic (CPV) solar projects. CPV technology uses optics such as lenses to concentrate a large amount of sunlight onto a small area of PV cells to generate electricity. The image on the following page provides a representative example of CPV technology. The CPV technology focuses the sunlight onto highly efficient solar cells using Fresnel lenses. The proposed technology utilizes a dual-axis tracking system that is a proprietary application and algorithm to position the tracker to ensure that concentrated sunlight remains focused on the solar cells with a high degree of precision throughout the day. The dual-axis tracking structures use single pole/mast-mounted panels that are spaced approximately 80 feet apart rather than in continuous rows of steel framing set approximately 10 feet apart. Key features of the project include:

- Portion of the larger 4,200 was purchased by a solar developer with a PPA who intended to develop the site with CPV technology solar panels, which was not considered or mentioned in certified EIR
- CEQA EIR Addendum prepared to analyze potential impacts of CPV development, with height of 30 feet, as compared to that analyzed in the certified EIR which assumed PV panels at a height up to 15 feet
- Builds on "lessons learned" and strengthens strategy for CEQA documentation of solar projects to maintain flexibility and reduce need for subsequent environmental documentation
- Strategy applied to more recently prepared EIRs to maintain flexibility
- The Calexico 1A and 1B sites consist of 719 acres and 613 acres respectively, with the potential placement of up to 1.6 million PV panels that would be capable of generating up to 200 MW

Imperial Solar Energy Center West EIR/EA and Planning Services

Imperial County, CA

- 1,110-acre, 120 MW PV
- 5-mile, 230 KV transmission (BLM)

Calipatria Solar Farm Addendum

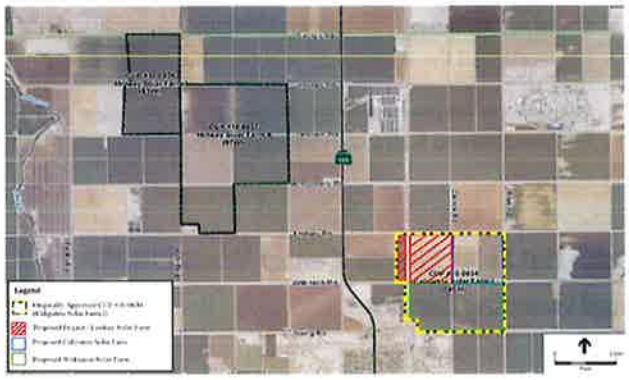
Imperial County, CA

HDR prepared a CEQA EIR Addendum to address the proposed Calipatria Solar Farm. The applicant, 70SM1 8ME, LLC sought approval of a CUP for the construction of a utility-scale solar farm. The Calipatria Solar Farm (proposed project) would generate approximately 20 megawatts on approximately 159 acres. The proposed project would be located within the northeast portion of the previously evaluated 609-acre Calipatria Solar Farm I development area. The CUP will simply be the reorganization of the previously-approved Calipatria Solar Farm I (CUP #10-0034) development area.

Lindsey Solar Farm Addendum

Imperial County, CA

HDR prepared a CEQA EIR addendum to address the Lindsey Solar Farm project. The applicant, 70SM 8ME, LLC sought approval of a CUP for the construction of a utility-scale solar farm. The Lindsey Solar Farm would generate approximately 20 megawatts on approximately 148 acres. The proposed project would be located within the northwest portion of the previously evaluated 609-acre Calipatria Solar Farm I development area. The CUP will simply be the reorganization of the previously-approved Calipatria Solar Farm I (CUP #10-0034) development area.



Midway I, II, and III Solar Farm CUPs, CEQA EIR Addendums

Imperial County, CA

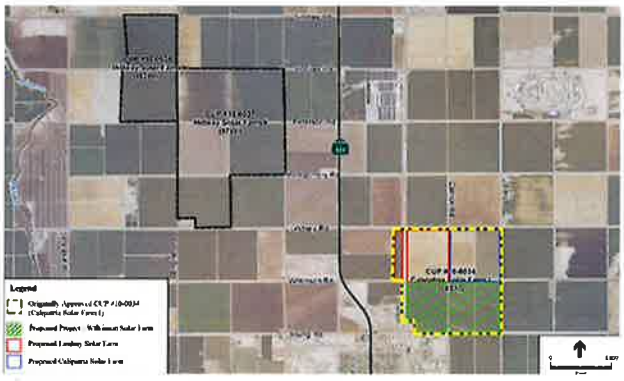
HDR prepared three separate Initial Studies and EIR Addendums to the previously-certified Final Environmental Impact Report for the Cluster I Solar Power Project. The Cluster I Solar Power Project consisted of three photovoltaic (PV) solar farm facilities and associated infrastructure, which would collectively generate up to 255 megawatts on approximately 1,731 acres. The three separate EIR Addendums addressed the reorganization of the previously-approved Cluster I Solar Project into three new CUPs/Solar Farm Projects - Midway Solar Farm 1, Midway Solar Farm 2, and Midway Solar Farm 3.

The Midway Solar Farm 1 would generate up to 50 megawatts on approximately 480 acres. The proposed project, Midway Solar Farm 2, would generate up to 30 megawatts on approximately 320 acres. The Midway Solar Farm 3 would generate up to 40 megawatts on approximately 320 acres.

Wilkinson Solar Farm Addendum

Imperial County, CA

HDR prepared a CEQA EIR Addendum to address the Wilkinson Solar Farm. The applicant, 70SM 8ME, LLC sought approval of a CUP for the construction of a utility-scale solar farm. The Wilkinson Solar Farm would generate approximately 30 megawatts on approximately 302 acres. The proposed project would be located within the southern portion of the previously evaluated 609-acre Calipatria Solar Farm I development area. The CUP will simply be the reorganization of the previously-approved Calipatria Solar Farm I (CUP #10-0034) development area.



Longboat Solar Environmental Documentation

EDF Renewable Energy

San Bernardino County, CA

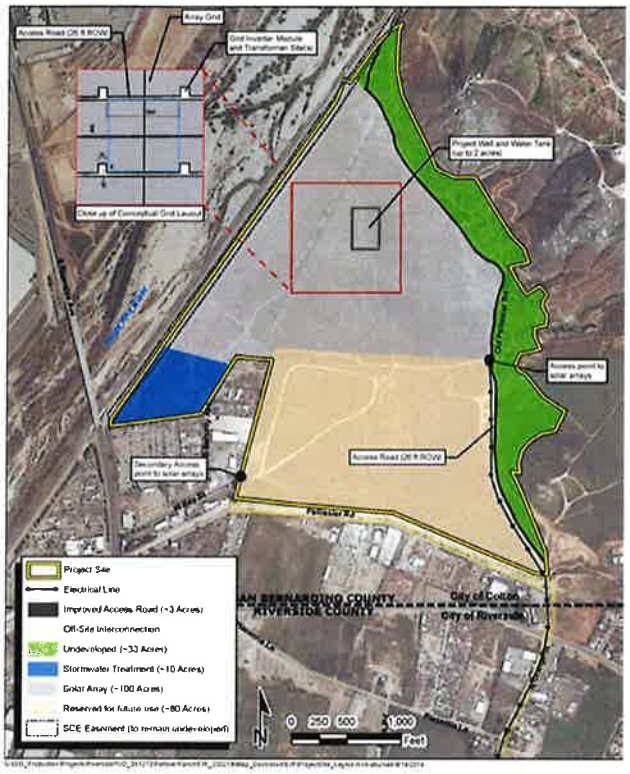
The Longboat Solar Project is a solar energy facility that would generate up to 20 (MW) of alternative current electricity using single axis tracker solar photovoltaic (PV) technology within an approximately 232 acre portion of 345 acres of previously disturbed agricultural lands. The project is located on unincorporated lands to the immediate northwest of the City of Barstow, and north of the community of Lenwood, in San Bernardino County, California. State Route 58 bounds the site to the east and north. HDR's scope of work includes visual assessment, peer review of technical reports including biological resource report. We are also responsible for the preparation of the IS/MND.

Dagget Solar Project

NRG

San Bernardino County, CA

The proposed project consists of constructing and operating a utility-scale, solar photovoltaic, electricity generation and energy storage facility near Daggett, CA on approximately 3,500 acres of land that would produce up to 650 megawatts of power and include up to 450 megawatts of battery storage capacity. The project would utilize existing electrical transmission infrastructure adjacent to the existing Coolwater Generating Station, a recently retired natural gas-fired power plant, to deliver renewable energy to the electric grid. HDR conducted cultural resources surveys and testing for the entire project area.



Pellissier Ranch Solar Project EIR

Riverside, CA

HDR prepared an EIR for the proposed Pellissier Ranch Solar Project. The project involves the construction and operation of a solar energy facility on a portion of a vacant, 227-acre site currently owned by the City and located within the jurisdictional boundary of the City of Colton, San Bernardino County. As proposed, Riverside would construct an up to a 10-megawatt (MW) photovoltaic (PV) generation facility on approximately 100-acres in the northern half of the project site. The proposed project will generate solar power using non-reflective technology for use within the Riverside Public Utility's (RPU) current service area.

On-site improvements contemplated as part of the PV facility, and contained within the project impact footprint of 103 acres, may include, but are not limited to, solar arrays, inverter modules, pad mounted transformer(s), security lighting, perimeter fencing, drainage infrastructure, and access improvements. Additional auxiliary facilities may include grounding, backup interruptible power supply (UPS) systems and diesel power generators, fire and hazardous materials safety systems, security systems, chemical safety systems, and emergency response facilities.

Solar Project IS/MND and Construction Monitoring

San Luis Rey Water Reclamation Plant

City of Oceanside, CA

HDR was retained by the City of Oceanside Water Utilities Department to prepare a detailed IS/MND pursuant to Sections 15063 and 15070 of CEQA, and environmental construction monitoring services, for the now operational San Luis Rey Water Reclamation Plant Solar Project in the City of Oceanside. Key features of the project include:

- Project Proponent – City Water Utilities Department
- Fast-track CEQA schedule to initiate construction within only a few months of notice to proceed in order to avoid expiration of the City's second grant extension
- Power Purchase Agreement/Lease Agreement with SunPower
- 12-acre site (1.5 MW)
- Generates 25-30% of the power needed to operate the San Luis Rey Water Reclamation Plant
- Biological and cultural resources surveying and construction monitoring
- Site immediately adjacent to the San Luis Rey River as well as single-family residential uses
- Mitigation negotiations for loss of habitat

Beacon of Photovoltaic Solar Project EIR Addendum (Springbok and Oryx Solar Farms)

Kern County, CA

HDR prepared a CEQA EIR Addendum to the Beacon Photovoltaic Project EIR to include two additional PV solar projects, Springbok and Oryx. The Beacon Photovoltaic Project EIR evaluated a 250 megawatt (MW) solar photovoltaic (PV) development project and a three mile transmission line connecting to the nearby Barren Ridge Substation. The original project area is 2,298 acres, which was increased by 1,296 acres. Key features of the project include:

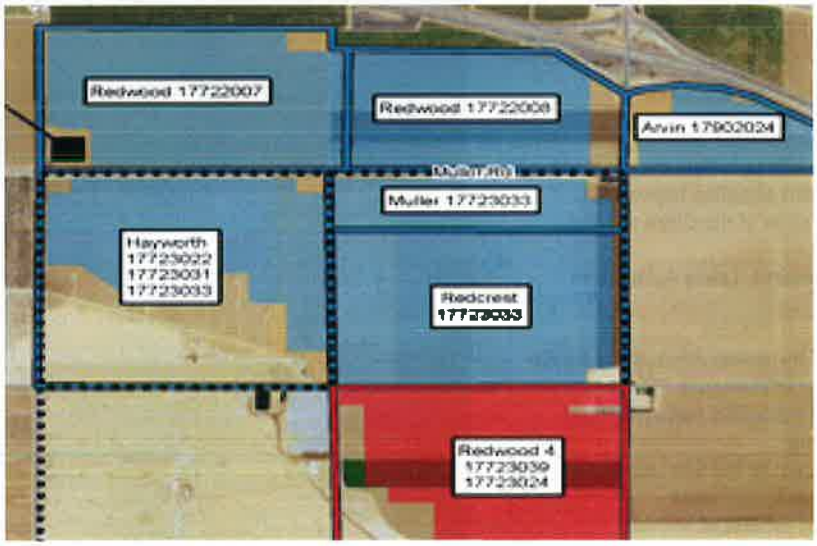
- CEQA document prepared on fast-track schedule
- EIR Addendum addressed two utility-scale PV solar generation facilities including potential substations, transmission, and operations and maintenance
- 345-acre Oryx Solar Farm (80 MW)
- 951-acre Springbok Solar Farm I (150 MW)
- Biological resources (endangered species)
- Cultural resources
- Visual/aesthetics impacts to nearby public open space

Redwood Clusters Solar Farm EIR Addendum

Kern County, CA

HDR prepared a CEQA EIR Addendum to the Redwood Cluster Solar Project EIR pursuant to CEQA Guideline 15164, which evaluated an addition to a previously-approved 135 megawatt (MW) solar photovoltaic (PV) development project located on 633 acres in unincorporated Kern County. The additional solar facility analyzed under the EIR Addendum is referred to as the Redwood 4 Solar Project, located on 161 acres of land with the potential to produce 35 MW of power.

The Addendum addressed the proposed collector system route options that would deliver the power generated by the project to the existing Redwood Cluster Substation. The power generated by RW4 would be delivered via an overhead and/or underground a collector line up to 34.5 kV originating from an on-site substation/switchyard and terminating at the Redwood Cluster Substation.



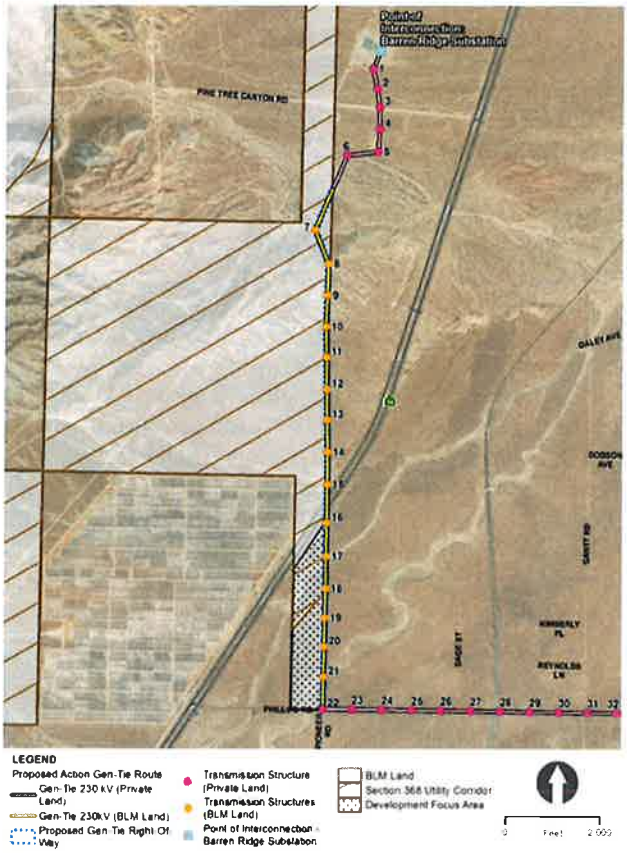
Eland 1 EA

Kern County, CA

HDR prepared the NEPA Environmental Assessment, Finding of No Significant Impact, and Decision Record in accordance with the Bureau of Land Management policies that addressed an up to 230 kV gen-tie line from the Proposed Eland 1 Solar Farm within unincorporated Kern County to the existing Los Angeles Department of Water and Power (LADWP) Barren Ridge Substation. The EA was prepared pursuant to the National Environmental Policy Act of 1969 (NEPA, 42 U.S.C. Section 4321), Council on Environmental Quality (CEQ) regulations (40 CFR Parts 1500-1508), BLM NEPA Handbook H-1790-1, Executive Order (EO) 13807 and Secretary's Order (SO) 3355.

The BLM's purpose and need for the Proposed Action is to respond to the Applicant's (68SF 8me LLC) application under Title V of the Federal Land Policy and Management Act (FLPMA; 43 USC §1761 et seq.) for a right-of-way (ROW) grant to construct, operate, maintain, and decommission an up to 2.88-mile transmission gen-tie line, with a voltage of up to 230 kilovolt (kV), in compliance with FLPMA, BLM ROW regulations, and other applicable federal laws.

In accordance with FLPMA and the BLM's ROW regulations, 43 CFR Part 2800, the BLM must manage public lands for multiple uses that take into account the long-term needs of future generations for renewable and non-renewable resources. The Secretary of the Interior is authorized to grant ROWs "over, upon, under, or through [public] lands" for "systems for generation, transmission, and distribution of electric energy" (43 USC 1761(a)(5). The BLM will decide whether to approve, approve with modification, or deny issuance of a ROW for the purposed Eland 1 Transmission Gen-Tie Line Project.



SEPV Mojave West Biological Monitoring

S-Power

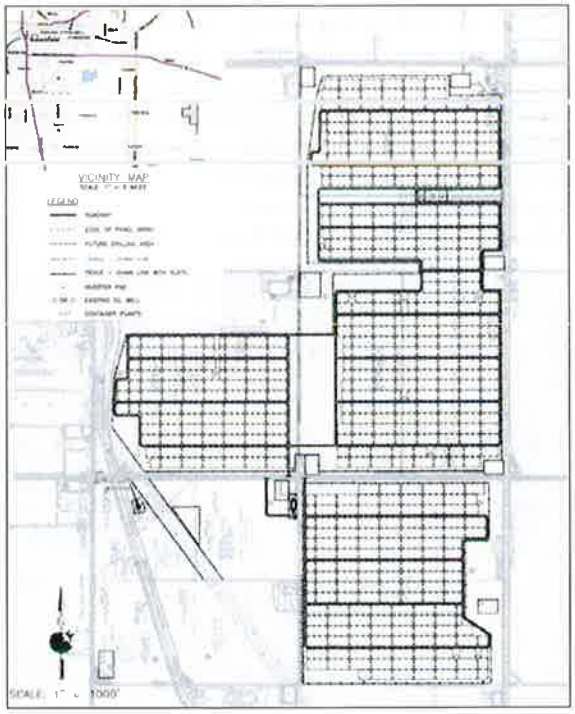
Kern County, CA

HDR provided S-Power regulatory compliance (biological monitoring services) support during construction of the Mojave West Solar Project. HDR's scope of services included pre-construction surveys, and nesting bird surveys. Pre-construction surveys identified four potential dens/burrows that required subsequent den monitoring. HDR conducted den monitoring to ensure dens were not occupied by the Desert Tortoise or Kit Fox. This monitoring effort included three-nights of den monitoring using wildlife motion sensor cameras were conducted for both of the potential kit fox dens. In addition, den monitoring using a fiber optic scope and motion sensor wildlife cameras was conducted for the two potential desert tortoise burrows in response to comments from the United States Fish and Wildlife Service (USFWS) and the California Department of Fish and Wildlife (CDFW). This task includes monitoring and incorporation of the results into the pre-construction survey report.

Additionally, HDR biologists are conducting annual monitoring inspections which will qualitatively assess fitness and health of the seeded species, pest problems, evidence of erosion or areas of compacted soil, weed establishment, drought stress, and recruitment of native plants.

Regulus PV Solar Project Environmental Construction Monitoring

Kern County, CA



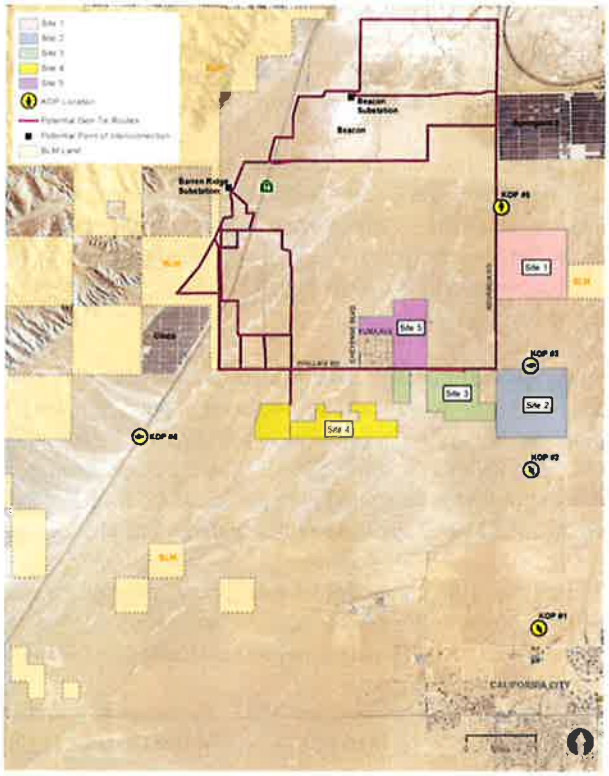
HDR was retained by SunEdison to provide civil site design, entitlement/environmental pre-construction services and environmental construction monitoring services to support the 60 MW Regulus Solar Project, located on a 743-acre site in Kern County. Key features of the project include:

- Utility scale solar project
- Exemplifies HDR's integrated environmental and PV engineering services facilitating design and construction of the project
- Provided Conditions of Approval and Mitigation Monitoring Compliance (prior to and during construction)
- HDR's Mitigation Compliance mechanism facilitated County concurrence to keep project on schedule
- Biological and cultural resources monitoring
- Entitlement processing (e.g., grading plans, building permits)

HDR's mitigation compliance mechanism facilitated County concurrence to keep the project on schedule and was well received by County planning staff as a model example to follow. Our services included general biological and cultural resources construction monitoring, implementing the specific mitigation measures and conditions of approval for the project. This biological monitoring effort included kit fox, nesting bird and burrowing owl surveys and den monitoring. Restoration Plan for the project and is providing three years of annual wildlife and restoration monitoring. Our staff was responsible for coordination the entire project team for compliance submittals and processing the building permits through the County building department.

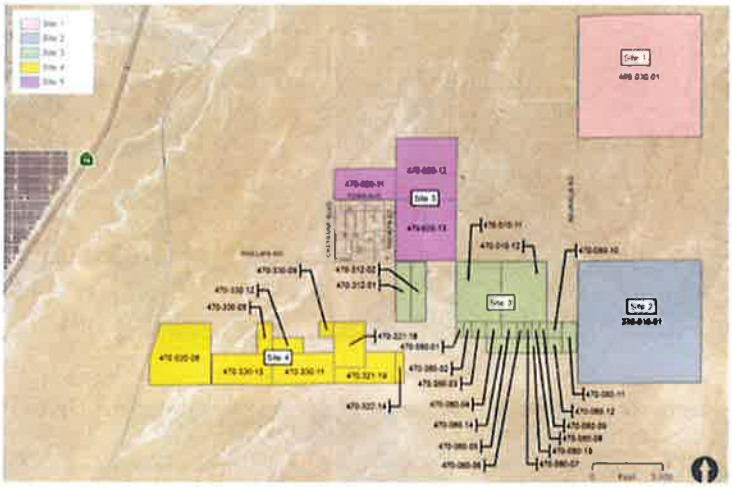
Eland 1 Solar Project Supplemental EIR

Kern County, CA



HDR prepared a Supplemental EIR for the Eland 1 Solar Project. The Beacon Photovoltaic Project (original Beacon Project) included the construction and operation of a solar facility capable of generating up to 250 megawatts (MW) of electricity on 2,298 acres. The original Beacon Project also included a 3-mile transmission line to connect the solar facility to the existing Barren Ridge Substation. In 2013, subsequent applications for three individual CUPs were filed with the County to allow the construction and operation of two additional solar facility sites in proximity to the original Beacon Project. The CUPs were for the 345-acre Oryx Solar Farm and 951-acre Springbok Solar Farm I. These two additional solar facility sites were analyzed in the Addendum to the Beacon Photovoltaic Solar Project Final EIR prepared in November 2013, which was adopted by the Kern County Board of Supervisors in early 2014.

In 2018, 68SF 8me LLC (applicant) submitted applications for five individual CUPs to allow the construction and operation of five additional solar facility sites in proximity to the Expanded Beacon Project boundaries. Collectively, the five solar facility sites would generate up to 500 MW of renewable electrical energy on approximately 2,652.7 acres of privately-owned land. The Kern County Planning and Natural Resources Department, as lead agency (per California Environmental Quality Act [CEQA] Guidelines Section 15052), has determined that a Supplemental EIR (SEIR) must be prepared for the proposed project, known as the Eland 1 Solar Project, pursuant to Sections 15162 and 15163 of the *CEQA Guidelines*.



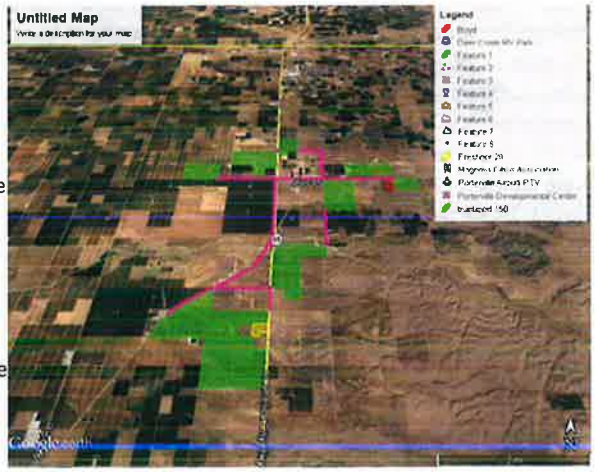
The project proponent is requesting: (a) two Amendments to the Circulation Element of the Kern County General Plan Circulation Element to Eliminate road reservations along section and midsection lines in Section 23, 28, 31, 32, 33, 34, and 45 T31S/R37E, in zoning Maps 152 and 152-28; (b) four changes in zone classification from the existing zone district A-1 (Limited Agriculture) to A (Exclusive Agriculture) on 265.3 acres of the project site within zoning Map 152, from the existing zone district A-1 MH (Limited Agriculture - Mobilehome Combining) to A on 81.7 acres of the project site within zoning Map 152, from the existing zone district E (20) RS (Estate - 20 acres - Residential Suburban Combining) to A on 81.5 acres of the project site within zoning Map 152-28, from the existing zone district PL RS MH (Platted Lands - Residential Suburban Combining - Mobilehome Combining) to A on 81.4 acres of the project site within zoning Map 152; (e) five Conditional Use Permits to allow for the construction and operation of 500 megawatt solar photovoltaic electrical generating facility (Section 19.12.030.G) in an A District.

The project would be supported by a 230-kV gen-tie overhead and/or underground electrical transmission line(s) originating from one or more on-site substation(s)/switchyard(s) and terminating at the Los Angeles Department of Water and Power's (LADWP) Barren Ridge Substation. The project's permanent facilities would include, service roads, a power collection system, communication cables, overhead and underground transmission lines, electrical switchyards, project substations, and operations and maintenance facilities.

Rexford Solar Project EIR

Tulare County, CA

HDR is preparing an EIR for the proposed Rexford Solar Project, located in Tulare County. The Rexford Solar Farm Project involves the construction and operation of an up to 500 megawatt (MW) solar photovoltaic (PV) facility, including an energy storage system (ESS) with up to 500 MW storage capacity, on-site substation, gen-tie line, and ancillary components on approximately 3,140 acres of land historically used as agricultural farmland.

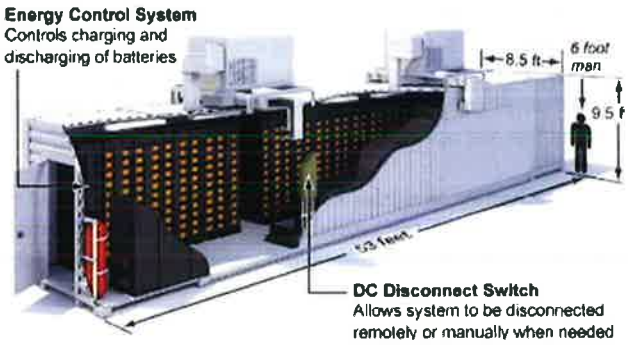


The project site is located near Ducor, a census-designated place, in south-central Tulare County. Neighboring unincorporated communities include Terra Bella to the north and Richgrove to the southwest. The project site is generally located south of Avenue 68, west of Road 256, north of Avenue 12, and east of Road 216. The majority of the project site is bisected by State Route 65.

The proposed project involves the construction of a utility-scale PV solar facility on approximately 3,140 acres of privately-owned land. The proposed project would generate up to 500 MW of alternating current (AC) on a daily basis. Power generated by the proposed project would be transmitted to the Southern California Edison (SCE) Vestal Substation via an up to 230 kV overhead and/or underground gen-tie line.

The proposed project would include a ground mounted PV solar power generating system, supporting structures, inverter modules, pad mounted transformers, energy storage system (ESS), access roads and fencing, and on-site substation. An operations and maintenance (O&M) building may be constructed on the site.

The proposed project may share O&M, substation, ESS, and/or transmission facilities with one or more nearby or future projects. Any unused O&M, substation, ESS, and/or transmission facility areas on the project site could be covered by solar panels under such scenarios.



Proposal to Prepare an Environmental Impact Report for the VEGA SES 2, 3 & 5 Solar Project

November 18, 2020

Prepared For:
Imperial County
Planning and Development Services Department

Prepared by:
McIntyre Environmental LLC
1900 West Desert Highlands Drive
Oro Valley AZ
85737

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November 18, 2020

Jim Minnick, Planning Director
Imperial County Planning and Development Services
801 Main Street
El Centro, California 92243

SUBJECT: PROPOSAL TO PREPARE AN ENVIRONMENTAL IMPACT REPORT FOR THE PROPOSED VEGA SES 2, 3, and 5 SOLAR PROJECT

Dear Mr. Minnick,

McIntyre Environmental, LLC (McIntyre) has teamed with BRG Consulting, Inc. (BRG) to provide the enclosed proposal for preparation of an Environmental Impact Report (EIR) that complies with the California Environmental Quality Act (CEQA) for the proposed VEGA SES 2, 3 and 5 Solar Project. Together, McIntyre and BRG offer the County the following advantages:

- A management team that is well versed in the County's regulations, permitting requirements and processes. Our proposed Project Manager, Mr. David McIntyre, and our senior CEQA advisor, Ms. Christina Willis, have worked together on multiple EIRs for the County dating back to 2010. They recently completed the Hell's Kitchen Geothermal Project Addendum EIR in 2017 and are currently working together on the Glamis Specific Plan Area Program EIR and the Discovery Valley Landfill EIR for the County.
- Technical experts with substantial experience preparing analyses for projects in this part of Imperial County as well as having experience with solar energy projects. Both Mr. McIntyre and Ms. Willis have been heavily involved in preparing CEQA documents for solar energy projects in Southern California including Imperial, Riverside, and San Bernardino Counties. They are both intimately familiar with solar energy activities and issues. The knowledge gained through these experiences means our technical experts are already familiar with the environmental resources that will be encounter and will have "no learning curve."
- As small firms with principal and senior-level staff, McIntyre and BRG offer experienced professionals at affordable rates. Our low-overhead is passed on to our clients in billing rates that are significantly less than our competitors while providing principal and senior-level staffing. This provides our clients with superior expertise and efficiency in the quality of work we deliver. In addition, our staff are accessible, responsive and flexible. We respond to e-mails and phone calls within 24-hours and can be available with limited notice to attend meetings with County staff or to attend public hearings. In addition, McIntyre does not charge for mileage or travel time, another feature that differentiates McIntyre from our competitors.

We look forward to working with the County on this important project. Please contact me at 520.775.1490 or via email at david@mcintyre-environmental.com if you have any questions or comments regarding our proposal.

Sincerely,
McIntyre Environmental LLC

David L McIntyre,
Principal

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Appendix A – Key Staff Resumes

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1.0 PROJECT UNDERSTANDING

1.1 Project Overview

Apex Energy Solutions, LLC. is proposing to develop three (3) utility-scale photovoltaic (PV) energy generation and storage facilities, referred to herein as the VEGA SES 2 Solar, VEGA SES 3 Solar, and VEGA SES 5 Solar Projects. The Project consists of five (5) parcels (APN 025-010-006-000, 025-270-023-000, 025-260-011-000, 025-260-019-000, and 025-260-022-000) in Imperial County, and encompasses approximately 1,961.7 acres of private land located between the unincorporated communities of Iris and Slab City, approximately 9 miles east of the Salton Sea. (See Figure 1, Regional Project Location and Figure 2, Project Location).

Three (3) separate Conditional Use Permit applications have been submitted to the County, which together comprise the proposed Project. Table 1 summarizes parcel information, General Plan and Zoning designations, as well the proposed energy generation of each CUP. (See Figure 1, Regional Project Location and Figure 2, Project Location).

Table 1. Project Parcels

APN	Size (acres)	General Plan Designation	Zoning	Energy Generation (MW)	Battery Storage
SES VEGA SOLAR 2					
025-260-011-000	448.30	Recreation	S-2-RE	240	240 MW
025-270-023-000	624.76	Recreation	S-2-RE		
025-010-006-000 (*)	400	Recreation	S-2-RE		
SES VEGA SOLAR 3					
025-010-006-000 (*)	240	Recreation	S-2-RE	60	60 MW/ 240 MWh
SES VEGA SOLAR 5					
025-260-019-000	89.70	Recreation	S-2-RE	50	50 MW
025-260-022-000	158.94	Recreation and Agriculture	S-2-RE/A-2-RE/ A-3-RE		
TOTAL	**1,961.70**			**350**	

Notes:

(1) S-2-RE = Open Space/Preservation within the Renewable Energy Overlay
(2) A-2-RE = General Agriculture within the Renewable Energy Overlay
(3) A-3-RE = Heave Agriculture within the Renewable Energy Overlay

* SES VEGA Solar 2 and 3 would both be located on this parcel.

Four of project parcels are designated for recreational use under the Imperial County General Plan Land Use Element and one is designated for recreational and agricultural use (APN 025-260-022-000) (See Figure 3, General Plan Land Use Designations). Existing zoning on the parcels includes S-2 (Open Space/Preservation), A-2 (General Agriculture), and A-3 (Heavy Agriculture), and are all within the County of Imperial Renewable Energy Overlay Zone (Figure 4, Zoning Designation).

1.2 Project Facilities

The VEGA SES 2 Solar Project (VS2) would be located on three parcels (VS2 Site 1; VS2 Site 2; and VS2 Site 3) totaling approximately 1,473 acres and would generate 240-megawatts (MW) with an integrated 240 MW battery energy storage system (BESS). One new Project substation would be constructed on APN 025-260-011 and would take delivery of the power from the VEGA SES 2 Solar Project and increase the voltage to 230 kilovolt (kV), where it would feed into the interconnection switching station for metering and delivery to the Imperial Irrigation District (IID) 230 kV "KN/KS" Line (See Figure 5, Proposed Site Plan – VEGA 2). Two new parcel substations would be constructed on APN 025-010-006 and APN 025-270-023. These substations would transmit to the primary Project substation on APN 025-260-011 via one of the proposed 34.5 or 60 kV lines. A new interconnection switching station would be constructed on APN 025-260-011, immediately adjacent to the Project substation which would be connected via single overhead 230 kV line.

The VEGA SES 3 Solar Project (VS3) would be located on a on a portion of APN 025-010-006-000, immediately east of and adjacent to VS2, and would generate 60 MW with an integrated 60 MW battery storage system. The electrical energy produced by VEGA SES 3 would be conducted through the existing utility approved point of interconnection and delivered to IID's 161 kV "L" line. (See Figure 6, Proposed Site Plan – VEGA SES 3). A new Project substation and interconnection switching station would be constructed on APN 025-101-006, which would be connected via a single overhead 161 kV line.

The VEGA SES 5 (VS5) Solar Project consists of two parcels (VS5 Site 1 and VS5 Site 2) totaling 248.64 acres and would generate 50 WM with an integrated 50 MW battery storage system. The electrical energy produced by VEGA SES 5 would be conducted through the proposed 92 kV gen-tie line and delivered to the IID through an interconnection with the IID 92 kV "Midway" Substation or the proposed switching station. (See Figure 7, Proposed Site Plan – VEGA SES 5). A new Project substation would be constructed on the southwestern border of APN 025-260-022 and would take the delivery of power from the Project and increase the voltage to 92 kV, where it would be delivered to the IID 92 kV "Midway" substation.

The Project would use either thin film or crystalline solar photovoltaic (PV) technology modules mounted on fixed frames or on horizontal single-axis tracker (HSAT) systems. The fixed frame PV module arrays would be mounted on racks that would provide a two-foot ground clearance with a panel height of approximately 7.5 feet. If HSAT technology is used, the PV modules would rotate around the north-south axis and reach a maximum height of up to nine (9) feet above the ground.

Each proposed battery energy storage system (BESS) would be constructed adjacent to the Project solar facilities and would consist of either lithium ion (Li- ion) or flow batteries. The batteries would be housed either in storage containers or buildings fitted with HVAC and fire suppression systems. Underground trenches with conduits will be used to connect the batteries to the control and monitoring systems, and inverters.

Site access for VS2 and VS3 would be provided via a primary access driveway off the adjacent public roads. No new access across IID lateral canals or drains is expected. Site access for VS5 would include one primary access driveway per parcel for a total of two primary access points. The driveway for APN 025-260-019 will be located in the northwestern corner of the parcel off of Noffsinger Road. The driveway for APN 025-260-022 will be located along Weist Road which runs parallel to the western boundary of the parcel.

The RFP did not identify the duration of the construction, however, the peak number of on-site construction workers for each solar generating facility is not anticipated to exceed 150 workers. The number of construction workers for each battery storage facility and Project substation are not expected to exceed 100.

Water would be required during both the construction and operational phases of the Project. During construction, water would be obtained from local IID irrigation canals or laterals and delivered to the construction location by water trucks with a capacity of 4,000 gallons per load. During operation, water would be purchased from IID and delivered to the Project sites by water trucks. Project water requirements are presented on Table 2.

Table 2. Project Water Requirements

Project	Water Requirements	
	Construction	Operation/ Maintenance *
VS2	750 AF	2 AFY
VS3	200 AF	10 AFY
VS5	550 AF	20 AFY
Total	**1,500 AF**	**32 AFY**

Note:
* For panel washing AF = Acre Feet AFY = Acre Feet per Year

Vegetation removal would occur approximately every three months, via manual removal and/or treatment with herbicides. The RFP did not identify the lifespan of the Project. However, upon completion of the useful life of the project, a decommissioning/reclamation plan would be implemented.

Table 3 lists the state and local permits and consultations that may be required for the proposed Project.

Table 3. Potential Consultation & Permitting Requirements

Jurisdiction Level	Type of Permit/Approval	Agency
Federal	Consultation for Bird and Bat Conservation Strategy	U.S. Fish and Wildlife Service
State	Consultation for Sensitive Species	California Dept. of Fish and Wildlife
State	General Construction Storm Water Permit Notice of Intent/Storm Water Pollution Prevention Plan	California Regional Water Quality Control Board, Colorado River Basin, Region 7 (RWQCB)
Local	Conditional Use Permit	Imperial County Planning and Development Services (ICPDSD)
Local	Dust Control Plan and Rule 310 Exemption	Imperial County Air Pollution Control District (ICAPCD)
Local	Building Permit	ICPDSD

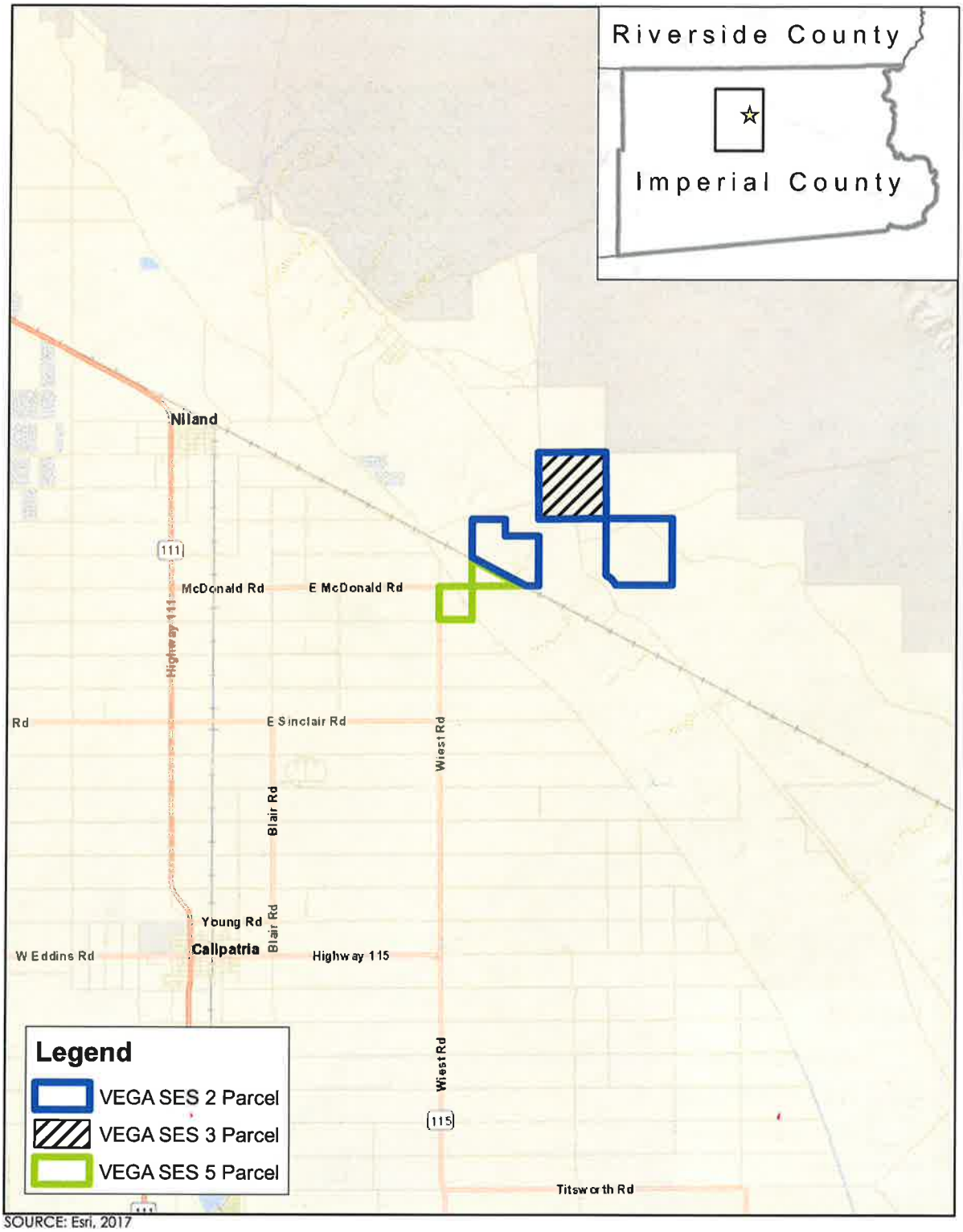
Table 3. Potential Consultation & Permitting Requirements

Jurisdiction Level	Type of Permit/Approval	Agency
Local	Grading Permit	County Department of Public Works (DPW)
Local	Encroachment Permit (Public ROW)	DPW
Local	Encroachment Permit (IID Easement)	Imperial Irrigation District
Local	Water Supply Agreement	Imperial Irrigation District

2.0 PROJECT TEAM

2.1 Project Management

McIntyre Environmental, LLC (McIntyre) is a certified as a Veteran Owned Small Business (VOSB) by the U.S. Department of Veterans Affairs (VA). We are also certified as a small business enterprise (SBE) in the State of Arizona. We are a certified SBE Disadvantaged Business Enterprise (DBE) in the State of New Mexico. We are registered with the State of California. All our certifications are current and can be made available upon request. McIntyre is headed by our managing principal, Mr. David L McIntyre. McIntyre staff have a combined work history that spans almost 80 years. McIntyre was founded to meet a need that was lacking in the current market. While there is no shortage of environmental consultants in Southern California, it is rare to find a firm that provides only principal and senior-level environmental planners for all its clients. Unlike many of our larger competitors, we do not use junior staff for any portion of our work. We pride ourselves on only providing senior staff to meet our clients' needs and ensure well-written, thorough, and legally defensible documents. McIntyre is dedicated to serving the public sector. Our clients include cities, counties, special districts, and federal land management agencies. By working almost exclusively with public agencies, McIntyre avoids potential conflict of interest issues that can be a detriment in the planning industry. Our primary services include planning, project management, and lead agency compliance with California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA). Our office is in Oro Valley, Arizona (a suburb of Tucson). We have extensive experience working on projects in Imperial County for both the County and the BLM. Mr. McIntyre will be the Project Manager operating from this office with support from Principal and Senior-level staff.



SOURCE: Esri, 2017

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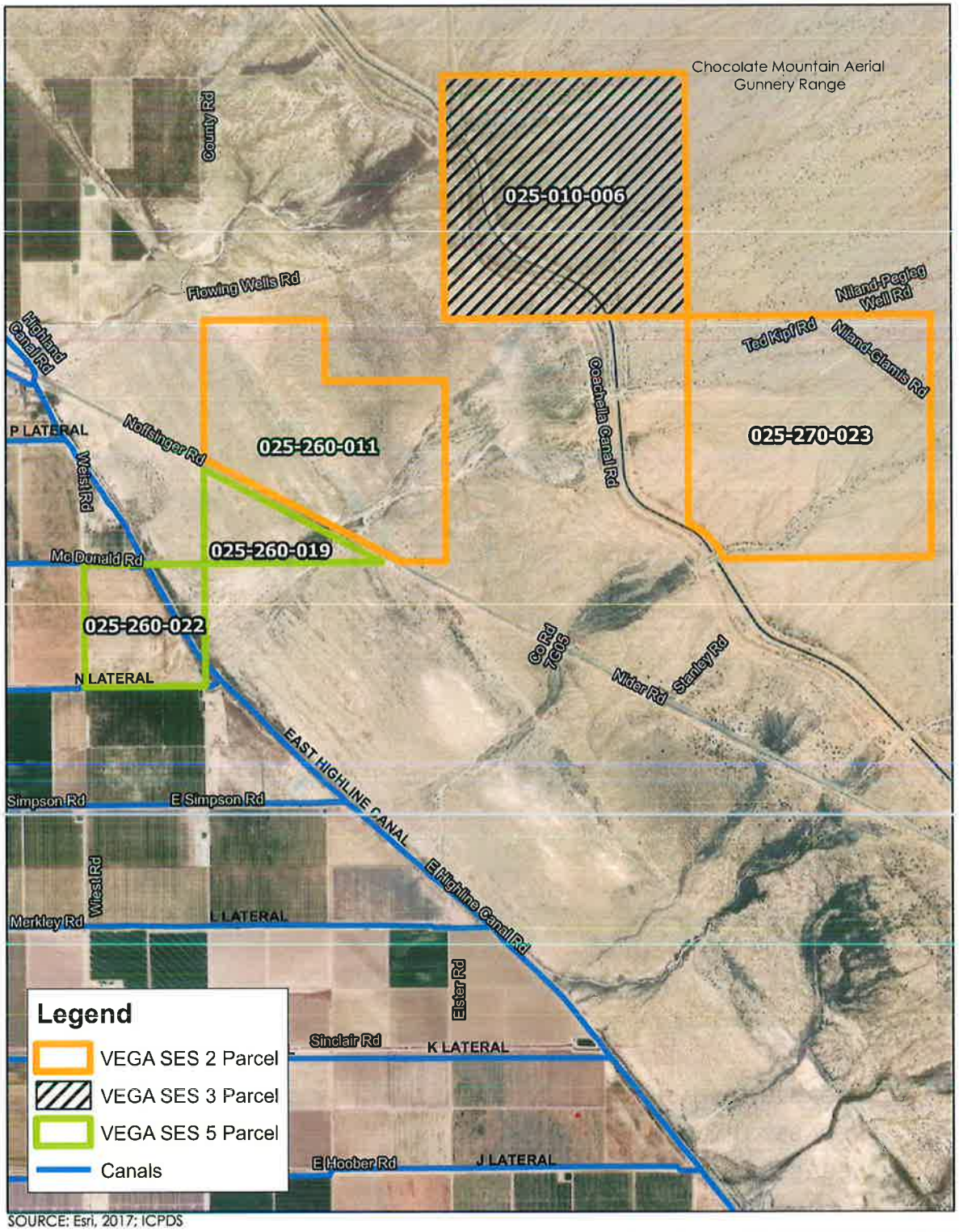
Regional Location
VEGA SES 2, 3 and 5 Solar Project
Figure 1

McINTYRE ENVIRONMENTAL



SOURCE: Esri, 2017; ICPDS

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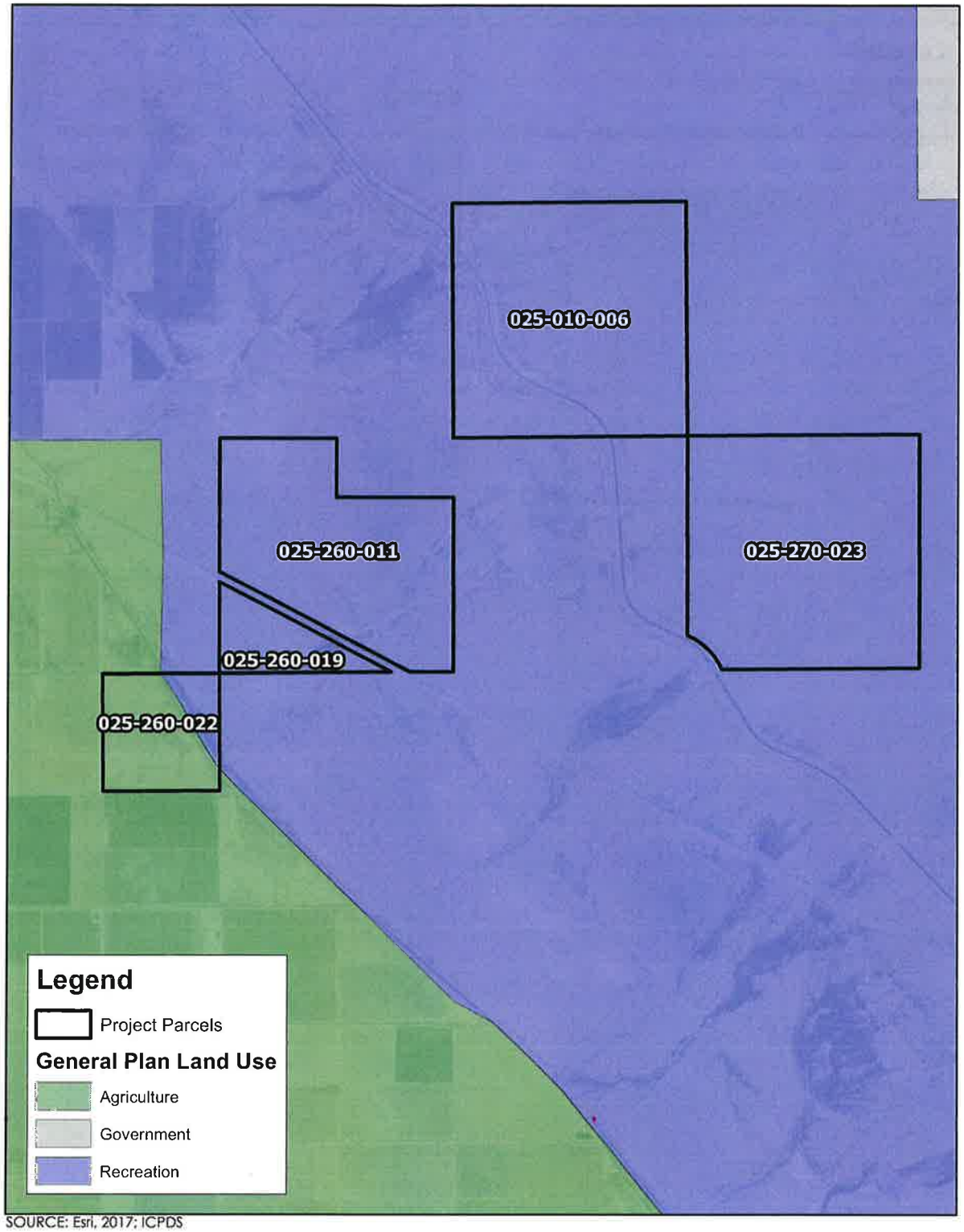
0 0.5 1 Miles

Project Location
VEGA SES 2, 3 and 5 Solar Project
Figure 2

McINTYRE ENVIRONMENTAL



SOURCE: Esri, 2017; ICPDS

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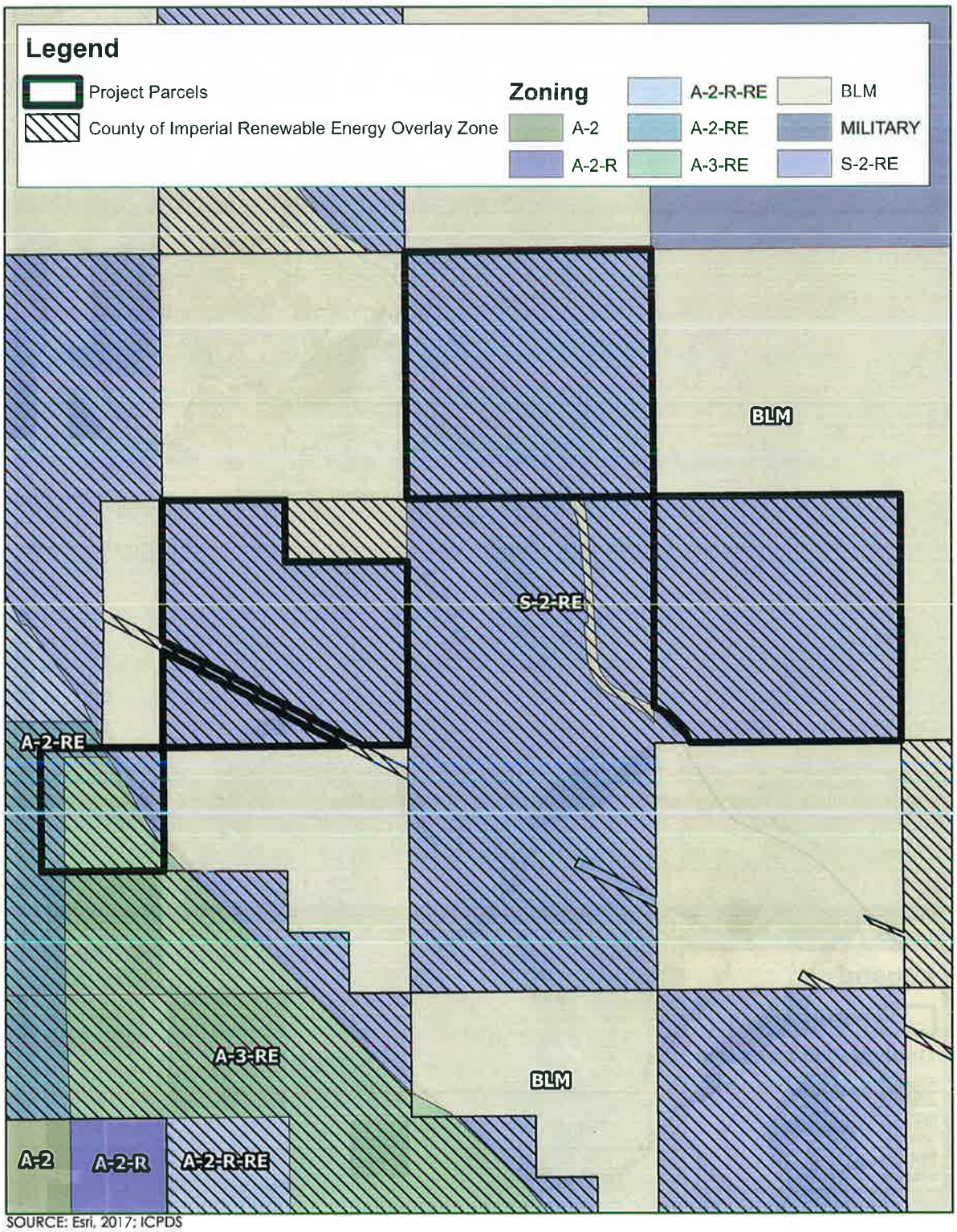
General Plan Land Use Designations
VEGA SES 2, 3 and 5 Solar Project
Figure 3

McINTYRE ENVIRONMENTAL



SOURCE: Esri, 2017; ICPDS

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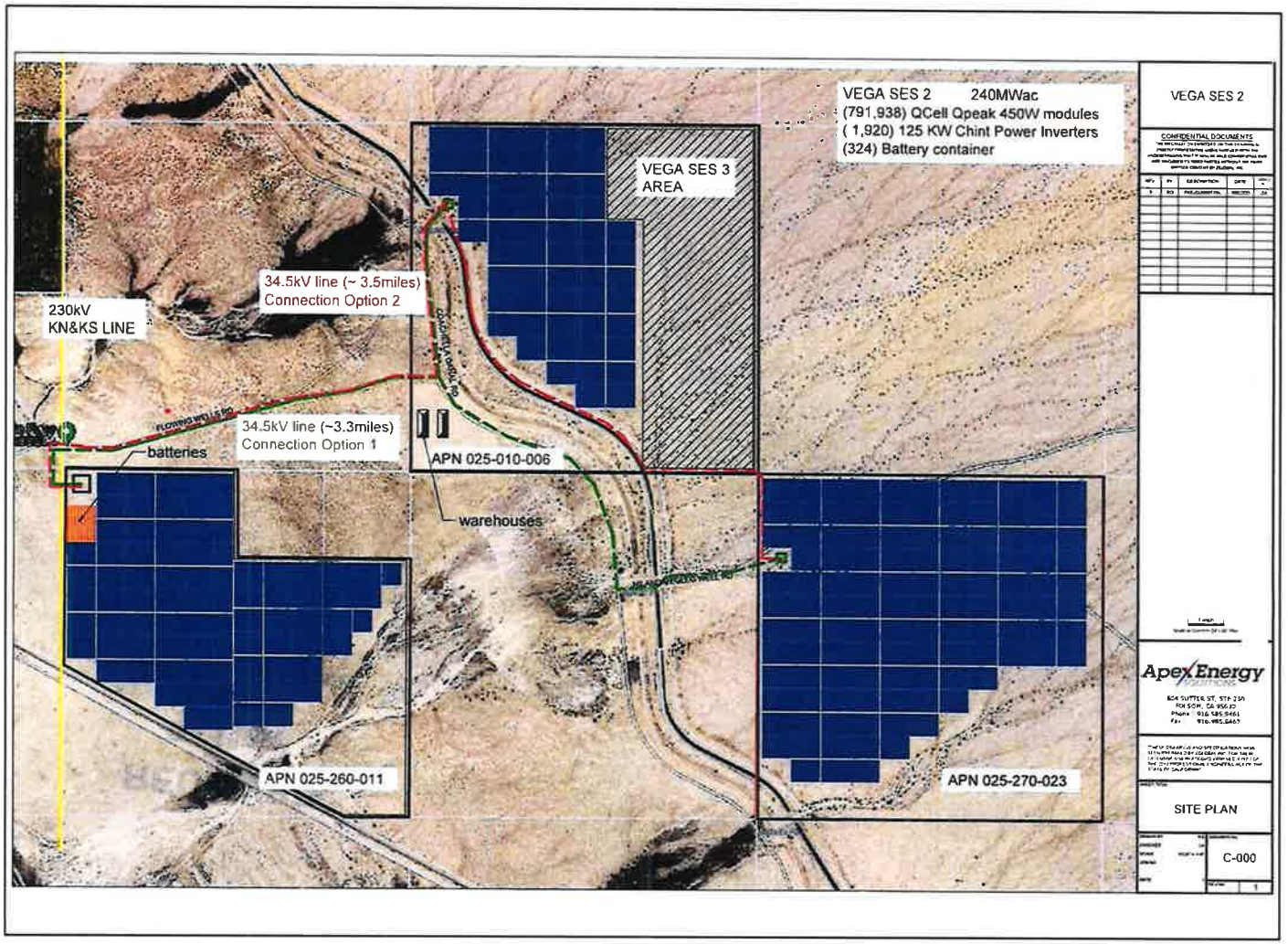
0 0.5 1 Miles

Zoning Designation
VEGA SES 2, 3 and 5 Solar Project
Figure 4

McINTYRE ENVIRONMENTAL



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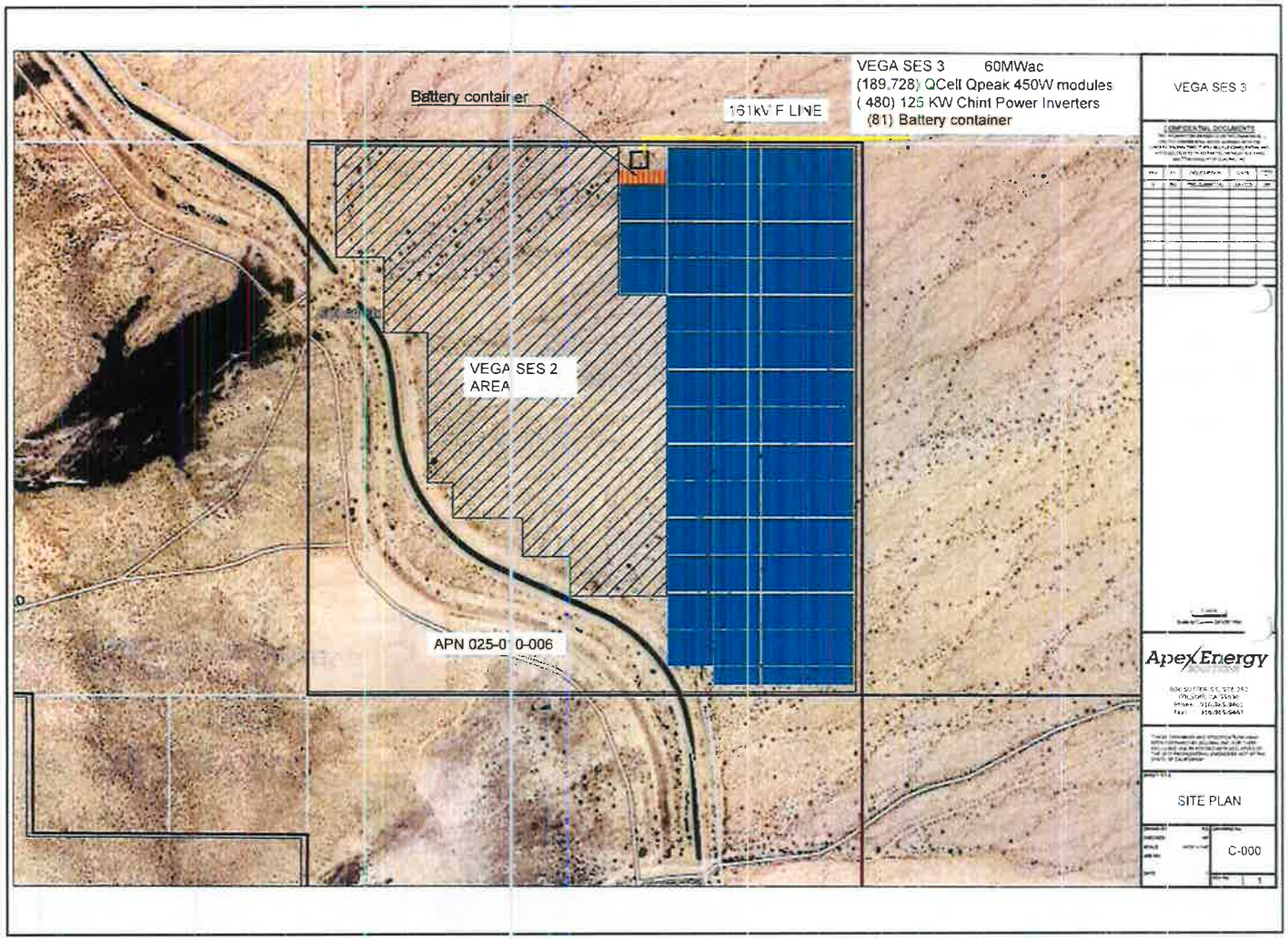
Proposed Site Plan – VEGA SES 2
VEGA SES 2, 3 and 5 Solar Project
Figure 5



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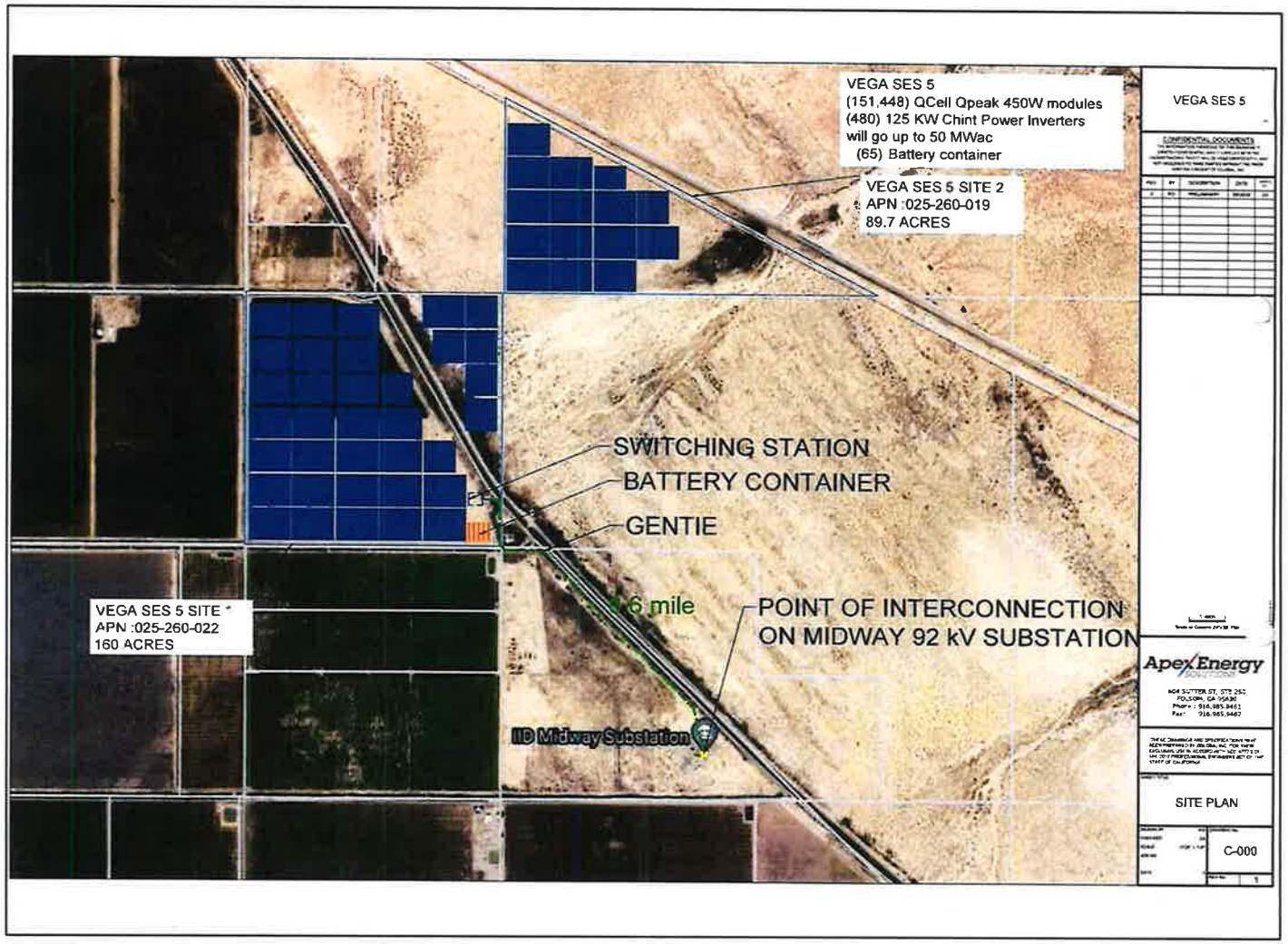
Proposed Site Plan – VEGA SES 3
VEGA SES 2, 3 and 5 Solar Project
Figure 6



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Proposed Site Plan – VEGA SES 5
VEGA SES 2, 3 and 5 Solar Project
Figure 7

McIntyre Environmental has teamed with BRG Consulting, Inc. (BRG) to assist in the management of this Project and preparation of the EIR. BRG's President, Ms. Christina (Tina) Willis, and Mr. McIntyre worked together on projects in Imperial County for several years while managing the San Diego office of Ecology and Environment (E&E). Since leaving E&E, Ms. Willis and Mr. McIntyre have successfully teamed on several projects, including three for Imperial County (Hell's Kitchen Geothermal Addendum EIR, the Desert Valley Monofill EIR, and the Glamis Specific Plan Area EIR). BRG is a California Department of General Services certified SBE, and a California Public Utilities Commission (CPUC) certified woman business enterprise (WBE).

McIntyre and BRG have supplemented our in-house experts with the services of Birdseye Planning Group (Air Quality/Greenhouse Gas/Noise), Cogstone (Cultural Resources and AB-52 Support); Dubose Design Group (SB 610 Water Supply Assessment); Mizuta Traffic Planning (Traffic), Ninyo and Moore (Geotechnical Study and Phase I ESA), the San Diego Natural History Museum (SDNHM) (Paleontology), and SeaJay Environmental (Biological Resources). All are local experts who have successfully completed numerous surveys, studies, and evaluations for projects in Imperial County and are ideally suited to provide third-party peer review of the Applicant-prepared technical reports or prepare the additional technical analyses needed in support of a technically accurate and legally defensible EIR. Additionally, their participation further strengthens our team's local presence for interfacing with the County's staff, understanding of local laws, ordinances, regulations, policies, as well as permitting and environmental documentation requirements. Staff resumes are included in Appendix A.

2.2 Team Organization

Our team has the depth, skills, and experience to produce clear, concise, and legally defensible EIRs, in accordance with the goals and objectives of Imperial County. Our experts cover all key areas required for this project, including aesthetics/visual resources, air quality/greenhouse gas emissions, agricultural conversion, biological resources, cultural/paleontological resources, tribal consultations, geology, hazards and hazardous materials, hydrology/water quality, noise, transportation, and utilities and service systems. Our team members' extensive backgrounds also include agency and public consultation, resource agency permitting, as well as technical writing and editing experience. McIntyre selected the proposed team on the basis of:

- Technical expertise and ability to evaluate issues and efficiently generate environmental analysis;
- Knowledge of CEQA;
- Solar/renewable energy and planning project experience in Imperial County;
- The availability to work on the project;
- Knowledge of regulatory framework and land planning requirements within the County; and
- Familiarity with state, and local regulatory staff and local issues and concerns.

We will be responsive to the County and will prepare high-quality work products on time, the first time.

2.3 Clearly Defined Management Approach

The project will be managed by Mr. David McIntyre. Mr. McIntyre has been involved with projects in Imperial County since 2006. He will be assisted by Ms. Christina Willis, the President of BRG. Ms. Willis has worked on numerous EIRs for Imperial County over the last 25 years.

Over the past 13 years, Mr. McIntyre and Ms. Willis have worked together on more than 20 projects. Mr. McIntyre, as Project Manager will have overall responsibility for the CEQA process and EIR Deliverables. Ms. Willis will support Mr. McIntyre by developing strategies for project-level analysis for each environmental resource area. Their experience working together will allow them to produce quality Deliverables on time that meet CEQA requirements.

David L McIntyre, Project Manager. Our proposed project manager, Mr. David McIntyre, has over 20 years of environmental planning experience. Ms. McIntyre has extensive experience working in both the public and private sectors. He started E&E's San Diego office in 2006 before moving to Tucson, Arizona in 2011. Prior to that Mr. McIntyre was a senior project manager for EDAW, Inc (now AECOM) in San Diego. He was a planning and environmental coordinator for the BLM Tucson Field Office from 2014 to 2016. Mr. McIntyre has worked in Imperial County since 2006. He was recently involved in the preparation of two EIRs for the City of Calexico. One, the El Portal Housing Subdivision, was located adjacent an IID canal and there were issues related to water supply availability and surface runoff into the canal. The second involved the preparation of an EIR for the City of Calexico for a cannabis manufacturing and distribution facility in which one of the key issues was an adequate electrical supply from IID.

While managing E&E's San Diego Office, Mr. McIntyre served as Project Manager for the Truckhaven Geothermal Leasing EIS and the West Chocolate Mountains Renewable Energy Evaluation Area (REEA) EIS for the BLM. Both projects are in Imperial County. He has also been involved in preparation of a variety of NEPA projects for Naval Facilities Engineer Command (NAVFAC) Southwest, primarily at Naval Auxiliary Field (NAF) El Centro. During his time at E&E Mr. McIntyre worked closely with Ms. Willis on the following EIRs for Imperial County:

- Hudson Ranch II/Simbol Calipatria Project
- Orni 21 LLC Geothermal Project
- Simbol Minerals I Lithium Extraction Project

Mr. McIntyre is the Secretary for the Arizona Association of Environmental Professionals (AZAEP). He is involved in the planning for the National Association of Environmental Professionals (NAEP) National Conference in Phoenix in May 2023.

Lead CEQA Specialist. Our Lead CEQA Specialist, Ms. Christina (Tina) Willis, is an experienced CEQA planner with 30 years' experience. Ms. Willis has worked in the public and private sectors managing all project phases from conception through construction. She is a recognized leader in the environmental field and is routinely solicited by agency staff and project proponents to provide training and expertise on environmental impacts, mitigation and permitting strategies. In this capacity, she is currently providing strategic consulting services to Southern California Edison on their Eldorado-Lugo-Mohave Series Capacitor Project. She is assisting in the development of project schedules and reviewing the Proponent's Environmental Assessment prior to submittal to the California Public Utilities Commission (CPUC), Ms. Willis is facilitating agency coordination to ensure the timely issuance of permits from the BLM, the CPUC, the Nevada Public Utility Commission, the National Park Service, the Bureau of Reclamation and the Clark County Planning Department (Nevada).

As the project manager for the California Valley Solar Ranch Environmental Assessment, which at 250-MW on 4,700 acres of land is one of the world's largest operating solar photovoltaic (PV) power plants, Ms. Willis possesses the unique experience, expertise and track record needed to provide the CEQA compliance strategies that will ensure preparation of an environmental compliance document that is technically accurate and legally defensible. Additionally, her experience as project manager for the Orni 21, LLC Geothermal Project, the Simbol Calipatria Plant I EIR (CUP #12-0004), and the Hudson Ranch Power II (HR-2) Geothermal Project (CUP # G10-0002) / Simbol Calipatria Plant II (SmCP-2) Project EIR (CUP# 12-0005), affords her a unique understanding of the regulatory framework and environmental compliance requirements for renewable energy projects in Imperial County.

The project that best exemplifies Ms. Willis' Imperial County experience is the third-party EIR for the Hudson Ranch II (HR-2) Geothermal Project and the SmCP-2 Project [1]. Ms. Willis was the project manager for this EIR, which evaluated two distinct projects co-located on land in the Salton Sea Known Geothermal Resource Area (KGRA). Having received a 5,000-page comment letter from Labor Unions International of North America (LIUNA) on the Final EIR less than 30 minutes before the Planning Commission hearing, Ms. Willis and her team reviewed and provided oral responses to all comments, which enabled the Planning Commission to certify the Final EIR and approve the Project. LIUNA appealed this decision to the Board of Supervisors and submitted an additional set of comments the morning of the Board of Supervisors Hearing. Again, Ms. Willis presented oral responses and the Board unanimously upheld the Planning Commission's decision.

2.4 Subconsultant Team

We have augmented our team with the services of the subconsultants listed below. This team was selected based on their expertise, experience and successful working history with McIntyre Environmental and BRG. All are local experts who have successfully completed numerous surveys, studies, and evaluations for projects in Imperial County or Southern California.

Birdseye Planning Group

Third-Party Review Of Air Quality Greenhouse Gas And Noise Reports

Birdseye Planning Group (BPG) prepares Air Quality/Greenhouse Gas and Noise Studies, which provide detailed evaluations of specific resources and potential project-related impacts. Mr. Birdseye has over 25 years of environmental planning experience working with both public and private sector clients for a diverse range of land development, renewable energy and infrastructure projects. BPG's recent experience in Imperial County includes preparation of the Air Quality/Greenhouse Gas and Noise Impact Reports for the Hell's Kitchen Geothermal Exploratory Wells Program Addendum EIR. BPG also conducted a peer review of the Air Quality and Greenhouse Gas Report for Additional Use of the Mesquite Intermodal Facility Addendum EIR. Both tasks were completed under contract to BRG.

Cogstone

Cultural Resources and AB 52 Support

Cogstone Resource Management, Inc. (Cogstone) is a California corporation and DBE (#33150) that specializes in paleontology, archaeology, and history. Since their establishment in 2001, they have completed technical reports,

1 Prepared while employed as Ecology & Environment's San Diego Office Manager and Principal Planner.

significance evaluations, planning documents, mitigation plans, mitigation monitoring, testing and data recovery on archaeological, architectural or paleontological resources more than 1,000 projects throughout California to assist clients in meeting project compliance requirements for federal, state, and local regulations, including the California Environmental Quality Act (CEQA), the National Environmental Protection Act (NEPA), Section 106 of the National Historic Preservation Act (NHPA), the Native American Graves Protection and Repatriation Act (NAGPRA), among others. Cogstone holds statewide BLM cultural permits and the qualifications of their staff is well recognized. Under contract to BRG Consulting, Cogstone has successfully provided cultural resource assessments for several projects on the Cahuilla and Soboba Indian Reservations. In addition, they are currently providing cultural resource construction monitoring at the Torres Martinez Indian Reservation.

Dubose Design Group

SB610 Water Supply Assessment

McIntyre has included Dubose Design Group on our team to prepare an SB-610 Water Supply Assessment. Dubose Design Group is the County's leading firm in complex permitting, first-time projects and the first and locally based firm to offer landscape architecture services. Dubose prides themselves in connecting with client needs and goals by strategically assembling a team of experts to bring projects into success.

Mizuta Traffic Consulting

Third-Party Review of a Traffic/Transportation Study

Mizuta Traffic Consulting is headed by its firm principal, Marc Mizuta, and specializes in providing clients with transportation planning and traffic engineering solutions. Mr. Mizuta (P.E., PTOE.) has extensive experience leading traffic engineering assessments, traffic operations studies, transportation planning and traffic impact projects. He has successfully managed projects that involved coordination between multi-jurisdictional agencies and balanced the needs of transit, highway, and local roadway operators and led tasks that have involved traffic operations analysis, alternative evaluations, feasibility assessments, cost-benefit analyses, identification of potential impacts, and development of mitigations and alternatives. Marc also has extensive experience in evaluating and determining the potential impacts of private development projects containing various land uses of varying magnitudes, and he understands the process of obtaining project approvals and minimizing project impacts.

Ninyo & Moore

Third-Party Peer Review of Geotechnical Investigation and Phase I ESA

Ninyo & Moore is a multi-disciplinary environmental engineering, geotechnical, materials testing, and special inspection consulting firm that is headquartered in San Diego (State of California General Engineering "A" contractor's License number 697063). Ninyo & Moore will provide hazardous material evaluation and geotechnical expertise for our team. Their environmental engineering expertise includes Phase I and II environmental site assessments; site remediation; asbestos, lead containing materials, engineering geology and hydrogeology; and Brownfields program development. Ninyo & Moore's geotechnical division provides geotechnical engineering, feasibility studies, seismic and geologic hazards investigations, slope stability evaluations, soil classification, geophysical evaluations, subsurface explorations, water resource development planning, and forensic engineering.

San Diego Natural History Museum

Paleontological Resources

McIntyre has included the San Diego Natural History Museum, Department of Paleo Services under the direction of Tom Deméré, PhD, to provide paleontological services for this Project. The Department of PaleoServices at the San Diego Natural History Museum (SDNHM) provides full-service paleontological consulting services in San Diego, Riverside, Orange, Los Angeles, and Imperial counties, as well as other parts of southern California. As Director of PaleoServices, Dr. Deméré is a recognized expert in paleontological resource assessment and mitigation. Within Imperial County, PaleoServices has conducted paleontological record searches, field surveys, prepared paleontological resource assessment reports and/or conducted paleontological resource mitigation during project construction for numerous renewable energy projects including three (3) geothermal projects (Hell's Kitchen, Hudson Ranch II, Orni 21). They also prepared the El Centro GIS/PFYC Database for the Bureau of Land Management.

SeaJay Environmental

Biological Resources

SeaJay Environmental is a woman-owned, small business consulting firm that specializes in analyzing energy and environmental policies, providing regulatory compliance support, preparing environmental impact assessments, conducting stormwater monitoring, preparing pollution prevention plans, working with stakeholders, facilitating at workshops, and other direct project management support. SeaJay Environmental has been providing high quality, time sensitive and cost effective services to governmental and private section clients since 2007.

Key Project Experience

Our team has worked with multiple public agencies in California on CEQA documents for infrastructure projects. Our clients include the Planning and Development Services Departments for Imperial County, San Diego County, Kern County, San Bernardino County, Solano County, City of Calexico, the BLM El Centro Field Office and the California Desert District Office, as well as numerous cities, water districts, and school districts.

Our team is well acquainted with the issues related to the project, which will allow us to prepare a well written, legally defensible EIR the first time and prevent the time consuming and costly rewrites that could occur from using a less experienced contractor. Our team provides the Applicant and the County with substantial experience in:

- Preparing CEQA documents for large, complicated, and potentially controversial projects in Imperial County;
- Extensive understanding of the biological resources, land use, air quality, agriculture, cultural resources, water quality, geology, visual quality, construction impacts, traffic, noise, and recreation issues that may arise during the EIR process; and
- Efficiency meeting project deadlines and budgets and coordinating with the Applicant, its contractors, and stakeholders to ensure adherence to the overall program schedule and budget.

Select representative project experience is detailed on the following pages.

Glamis Specific Plan Area EIR

For the Imperial County Planning and Development Services Department McIntyre Environmental is preparing and Environmental Impact Report for the Glamis Specific Plan Area under CEQA. Polaris Industries Inc (the Applicant) acquired 166 acres of land and buildings associated with the historic Glamis Beach Store in Glamis, California in early 2018. The Project Area is contained within the County's designated Glamis Specific Plan Area (GSPA). The GSPA allows for the development of a Specific Plan in accordance with design criteria, objectives and policies that are consistent with the County's General Plan Land Use Element. Polaris Inc. (the Applicant) is proposing a Specific Plan for the development of the GSPA. The GSPA allows for the development of a Specific Plan in accordance with the design criteria, objectives and policies that are consistent with the County's General Plan Land Use Element. The proposed Glamis Specific Plan (GSP) would implement the County's objectives for the development of this area which is to accommodate recreation supporting land uses including retail and service commercial, motel accommodations, recreational vehicle and mobile home parks, and community facilities (Imperial County General Plan Land Use Element).

The GSP would create a distinctive masterplan for recreation-serving land uses which are consistent with the historical use of the Glamis area. It provides for a great deal of flexibility as to the development of potential land uses within the GSP to promote the concept of an open desert playground that derives from the "Camp RZR" event, historically held in October of each year at the GSP area, and the surrounding ISDRA. This area attracts hundreds of thousands of OHV enthusiasts every Halloween, Thanksgiving, Christmas, New Years, and President's Day weekend.

The GSP would consist of eight proposed Planning Areas. Planning Areas 1, 2, 3, and 4 are proposed for designation as Commercial-Recreation 3 (CR-3). Planning Areas 5 and 6 are proposed for designation as Commercial-Recreation 1 (CR-1). Planning Area 7 is proposed for designation as Commercial-Recreation 2 (CR-2). Planning Area 8 would be re-zoned to the County's existing S-1 (Open Space/Recreation) designation. As envisioned, the GSP will facilitate an entertainment enclave among the iconic dunes. This enclave will enhance the historic experiences that OHV riders and visitors expect when they visit the dunes The EIR will evaluate the impacts of granting a General Plan Amendment; a Zone Change; and a Conditional Use Permit to support development and creation of a Specific Plan. Mr. McIntyre presented to the Imperial County Environmental Evaluation Committee and also hosted a public scoping meeting for the project on October 29.

Relevance

- ✓ *Conditional Use Permit*
- ✓ *Complex Environmental Compliance*
- ✓ *Coordination with local regulatory agencies at state and local levels*

Location
Imperial California, CA

Duration
2020 – Present

Value
$167,000

Size
141 acres

Services

- *CEQA Documentation*
- *EIR Preparation*
- *Specific Plan*

Key McIntyre Staff/Roles

- *David McIntyre, CEQA Analyst*

Client
Patricia Valenzuela
Imperial County Planning and Development Services
442-265-1749
patriciavalenzuela@co.imperial.ca.us

El Portal Housing Project EIR

McIntyre Environmental assisted in the preparation of an EIR for the City of Calexico (CEQA Lead Agency) for the El Portal Housing Project.

The project proposed to build 627 single-family homes on four lot sizes covering 75.2 acres. The Project also included 17.5 acres (762,890 square feet [sq. ft.]) of apartments on 20.72 acres. Approximately 39.1 acres of the subdivision would be devoted to streets. Two parks (one .90 acre and another 1.05 acres) were proposed within the subdivision. An on-site linear detention pond was proposed along the norther boundary of Project site, adjacent to the southern bank of the Central Main Canal.

The Imperial Irrigation District will have a 2.02-acre easement located along the southern boundary of the Project site on the north side of East Cole Boulevard. A 2,200 square foot storm drainage easement was proposed in the northern portion of the subdivision connecting to the detention pond."

As a subcontractor to another consulting firm, McIntyre Environmental prepared the public services and utilities, hazards, hydrology, and recreation sections of this EIR.

Project issues identified during development of the project included concerns regarding the adequacy of public services in the City of Calexico to handle the increase in population. This included potential adverse effects to schools, fire and police services from population increase as well as water supply. Also, of concern was the ability of the existing and proposed storm drain system to handle the increased runoff from the Proposed Project and potential impacts to Imperial Irrigation District (IID) facilities. McIntyre worked closely with the City of Calexico to determine mitigation measures that would address these concerns. At present, the project is on hold as the developer attempts to address these proposed issues.

Relevance

- ✓ *Effects to Hydrology and Water Quality*
- ✓ *Effects to Public Services*
- ✓ *CEQA Documentation in Imperial County*

Location
Calexico, CA

Duration
2018

Value
$98,800

Size
156 acres

Services

- *CEQA Documentation*
- *Hazards*
- *Hydrology*
- *Public Services*
- *Recreation*

Key McIntyre Staff/Roles

- *David McIntyre, CEQA Analyst*

Client
Ralph Morales
City of Calexico Planning Department
760.768.2118

Trinity Cultivation and Manufacturing Facility EIR

McIntyre Environmental assisted in the preparation of an EIR for the City of Calexico (CEQA Lead Agency) for the Trinity Cultivation and Manufacturing Facility. This project was one of the first legal cannabis cultivation and manufacturing facilities to be approved in the State of California.

The Project includes an existing structure at 2421 Enterprise Boulevard and four vacant parcels to be developed with three cannabis cultivation and manufacturing facilities. A 10,000 square foot parcel is to be created for a transportation and distribution facility. The new parcel would be carved out of the existing parcel on which 2421 Enterprise Boulevard is located. The Project includes a total of 353,480 square feet. Each cannabis cultivation and manufacturing facility will require approximately 3 mega-watts (MW) of electricity and the transportation and distribution facility is anticipated to use approximately 200 to 240 volts of power. The proposed Project would receive electricity from the Imperial Irrigation District (IID).

As a subcontractor to another consulting firm, McIntyre Environmental prepared the public services and utilities and noise sections of this EIR. McIntyre quantitatively analyzed potential noise impacts from construction and operationally related traffic.

Project issues identified during development of the project included concerns regarding the adequacy of public services in the City of Calexico. Specifically, this related to impacts to fire and police services as well as the ability of the Imperial Irrigation District to provide enough electricity to the site. McIntyre worked closely with the City of Calexico to determine mitigation measures that would address these concerns. The Project was approved by the City in August 2018.

Relevance

- ✓ *Effects to Public Services*
- ✓ *CEQA Documentation in Imperial County*

Location
Calexico, CA

Duration
2018

Value
$98,800

Size
353,480 square feet

CEQA Documentation
- *Noise*
- *Public Services*

Key McIntyre Staff/Roles
- *David McIntyre, CEQA Analyst*

Client
Ralph Morales
City of Calexico Planning Department
760.768.2118

Hell's Kitchen Geothermal Exploration Wells Addendum EIR

McIntyre Environmental LLC assisted BRG Consulting in the preparation of an Addendum EIR for the Hell's Kitchen Geothermal Exploratory Wells Project (Geothermal Permit# G16-0001). This project "tiered off" the County's previously certified Final EIR for the Renewable Energy and Transmission Element. The applicant, Control Thermal Resources, sought approval of a CUP to construct, operate and test geothermal exploration wells and implement a resource appraisal program to support future development of a geothermal power plant. The 1,880-acre geothermal leasing area is east of the Salton Sea around Mullet Island, within the Salton Sea Known Geothermal Resource Area (KGRA). The project's area of disturbance, including well pads, move-on areas, and access road improvements, was slightly less than 30-acres.

McIntyre Environmental prepared the geology and soils, hydrology, public services and utilities and minerals sections of this EIR. The Addendum EIR documented that a geothermal exploratory project is "separate" from any subsequent geothermal field development. It also confirmed that, in accordance with Section 21090.1 of the PRC, an exploratory project's environmental document need not describe impacts of any future exploratory or development projects.

Having received a revised project description for new well pad locations, new move on areas and new/alternative access routes after our analysis had commenced, BRG was able to modify the Addendum EIR and update the supporting technical analyses to enable to Addendum EIR's consideration by the EEC in April 2017 and adoption by the Planning Commission in July 2017.

Relevance

- ✓ *Conditional Use Permit*
- ✓ *Complex Environmental Compliance*
- ✓ *Coordination with local regulatory agencies at state and local levels*

Location
Imperial County, California (Salton Sea)

Duration
2016/ 2017

Value
$81,450

Size
30 acres within 1,800-acre geothermal leasing area

Services

- *CEQA Document Preparation*
- *Minerals*
- *Hydrology*
- *Public Services*
- *Geology and Soils*

Key McIntyre Staff/Roles

- *David McIntyre, CEQA Analyst*

Client
Imperial County Planning and Development Services
Richard Cabanilla (retired)/
Jim Minnick, 442-265-1736

West Chocolate Mountain REEA EIS

While working for another consulting firm, our proposed Project Manager, Mr. David McIntyre, was responsible for preparation of an EIS to identify BLM managed lands in the West Chocolate Mountains Renewable Energy Evaluation Area (REEA) as suitable for geothermal leasing and development as well as moderate solar development. The EIS addressed the issuance of solar and wind energy rights of way (ROWs) and geothermal leases for BLM's California Desert District.

This planning area has high-potential solar, wind, and geothermal energy resources. The EIS provided an evaluation of the impacts of leasing public land for geothermal energy development and the granting of ROW applications for solar and wind energy projects. The project included public scoping meetings, preparation of a Class I cultural resource report, preparation of interim visual resource management classifications, and preparation of a draft and final EIS and Record of Decision (ROD). The Final EIS was published in December 2012 and the ROD in August 2013.

Relevance

- ✓ *Complex Environmental Compliance*
- ✓ *Coordination with Federal, State and Local agencies.*
- ✓ *Environmental Impact Documentation in Imperial County*

Location
Imperial County, CA

Completion
EIS - 2013

Value
$700,000 (EIS)

Size
56,000 acres

Services

- *NEPA Document Preparation*
- *Peer Review of Applicant prepared technical studies*
- *Public Meeting/Hearing Support*

Key McIntyre Staff/Roles

- *David L McIntyre, Project Manager*

Client
BLM California Desert District
John Dalton
951-697-5311

Imperial Solar Energy Center South

BRG prepared a joint EIR/EA for the County of Imperial (CEQA Lead Agency) and for the Bureau of Land Management (BLM) (NEPA Lead Agency) for the Imperial Solar Energy Center South Project. The project consisted of construction, operations/maintenance and decommissioning of a 200 MW solar energy facility on 950 acres of private undeveloped and agricultural lands in in the unincorporated Mt. Signal area of Imperial County. The project also required construction of a new 230-kV transmission line, five miles in length, extending to connect to the Imperial Valley substation. The steel lattice transmission towers ranged in size from 100 to 140 feet and were the dominate visual component of the Project. The electrical interconnection facility and a portion of the access road is located within BLM's Utility Corridor "N."

Similar to the Imperial Solar Energy Center West project, the EIR/EA evaluated potential impacts to 19 resource categories and identified potentially significant impacts to air quality; agricultural resources; biological resources; cultural resources; fire and fuels management; geology/soils & mineral resources; health, safety & hazardous materials, hydrology & water quality; paleontological resources; and, transportation/circulation. Mitigation measures identified in the EIR/EA were incorporated into the project to avoid or reduce impacts to below a level of significance.

BRG prepared a visibility analysis of the project using the BLM's Visual Resource Management System. The visibility analysis included preparing visual simulations of the solar generating facilities and 230-kV transmission line from nine key observation points within the surrounding area. The visibility analysis was used to support the EIR/EA's finding that the project would not substantially degrade the existing visual character or quality of the area.

This project has been built and has been operational since November 2013.

SOLAR

Location
Imperial County

Duration
2008 – 2011

Size
946.6 acres

Services
- *CEQA Environmental Document Preparation*
- *CEQA Findings*
- *NEPA Environmental Document Preparation*
- *FONSI/Decision Record*
- *Peer Review of Applicant Prepared Cultural Resources Report; Phase I ESA; Hydrology and Water Quality Report; Geotechnical Report; and Biological Resources Reports*
- *Traffic Report*
- *Visual Simulations*
- *Land Evaluation and Site Assessment*
- *Public Meeting/Hearing Support*

Client
Imperial County Planning and Development Services
Richard Cabanilla (retired)
Jim Minnick, 442-265-1736
jimminnick@co.imperial.ca.us

Mt. Signal Solar Power Station – Concentrated Solar Thermal

As a third-party contractor, BRG helped the Imperial County Planning and Development Services Department (ICPDS) meet their CEQA compliance requirements by preparing an EIR for the Mt. Signal Hybrid Solar Power Station.

Southwestern Solar Solutions, LLC (Applicant), proposed to construct and operate the Mt. Signal Solar Power Plant, a solar energy power station in Imperial County, California, approximately 13.5 miles northwest of the town of Calexico. The 49.9 MW power station planned to generate renewable energy using concentrated solar thermal technologies during the day and biomass (wood waste, agricultural waste, and manure) at night. The Project included two (2) solar fields, a biomass facility, evaporation pond, water treatment area, power block area (consisting of numerous facilities), solar substation, and a 230 kV substation.

The BRG team evaluated the direct, indirect and cumulative impacts associated with construction, operation/maintenance and decommissioning, as well as the beneficial re-use of "ash" produced by the biomass facilities.

SOLAR

Location
Imperial County, CA

Duration
2007 – 2008

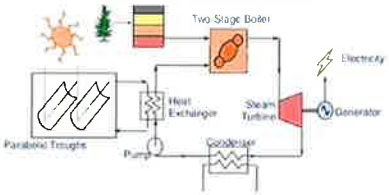
Size
974 acres

Services
- *CEQA Environmental Document Preparation*
- *Visual Simulations*
- *Land Evaluation and Site Assessment*
- *Alternatives Analysis*
- *Public Meeting/Hearing Support*

Client
Imperial County Planning and Development Services

Bethel Solar Hybrid Power Plant

Hybrid Solar Thermal◆Biomass



BRG staff prepared an Initial Study for the Bethel Solar Hybrid Power Plant for the construction, operation, maintenance and decommissioning of a 49.9 MW solar hybrid power plant on 400 acres of agricultural land in Imperial County. The project included a solar field electric generating system; a steam turbine, generator and cooling towers; biomass-fired heaters to generate steam at night during off-peak solar production; and a two-mile transmission line to connect to IID's existing transmission system.

The Initial Study found that an EIR would be required because the project could result in significant effects on the environment. BRG prepared the Notice of Preparation for the EIR; conducted public scoping meetings; and presented the results of the Initial Study to the County's Environmental Evaluation Committee.

SOLAR

Location
Imperial County

Duration
2007

Size
400 acres

Services
- *CEQA Environmental Document Preparation*
- *Public Notices*
- *Public Scoping/ Public Meeting/Hearing Support*

Client
Imperial County Planning and Development Services

Imperial Solar Energy Center West

BRG prepared a joint EIR/EA for the Imperial Solar Energy Center West Project. The County of Imperial was the CEQA Lead Agency and BLM was the NEPA Lead Agency. The project, now in operation, consisted of a 250 MW solar energy facility on 1,130 acres in the unincorporated Seeley area of Imperial County. The solar generating facilities included two optional technologies: "concentrating photovoltaic" (CPV) solar and "photovoltaic" (PV) solar. The solar generating facilities interconnected to the utility grid at the Imperial Valley Substation via a five-mile 230-kV transmission line within BLM's Utility Corridor "N". Key resource impacts included conversion of agricultural lands; biological impacts from habitat loss; and visual impacts from the solar generating and transmission facilities.

The EIR/EA included a Land Evaluation and Site Assessment to determine impacts from the temporary conversion of agricultural lands several options for mitigating significant impacts. In addition to disturbed/ agricultural lands, seven (7) vegetation communities were identified within the project area, including desert washes that flowed through the transmission corridor. Also, the transmission corridor alternatives were within the Yuha Desert Flat-tailed Horned Lizard Management Area. Biological surveys included rare plant surveys; protocol surveys for burrowing owl and southwestern willow flycatcher; and a preliminary delineation for jurisdictional resources. A protocol survey for wintering mountain plover was conducted for the entire agricultural complex surrounding El Centro.

Using the BLM's Visual Resource Management System, BRG prepared visual simulations of the proposed solar generating facilities (both CPV and PV technologies) and the 230 kV transmission line. Five (5) Key Observation Points (KOPs) were used to identify viewsheds, visual resources, and to prepare the simulations. A visual simulation from the Project is shown below:

Existing setting from I-8 looking west towards the project site

Visual Panoramic Simulation - View of Solar Energy Facility Site CPV panels and on-site transmission line towers

SOLAR

Location
Imperial County, CA

Duration
2008 – 2011

Size
1,130 acres

Services
- *CEQA and NEPA Documentation*
- *FONSI/Decision Record*
- *Peer Review of Applicant Prepared Cultural Resources Report; Phase I ESA; Hydrology and Water Quality Report; Geotechnical Report; and Biological Resources Reports*
- *Traffic Report*
- *Visual Simulations*
- *LESA*
- *Public Meeting/Hearing Support*

Client
Imperial County Planning and Development Services
Richard Cabanilla (retired)
Jim Minnick, 442-265-1736
jimminnick@co.imperial.ca.us

Dagget Solar 33 and Dagget Solar 66 Projects

BRG prepared a Visual Impact Analysis (VIA) for the proposed Daggett Solar 33 Project (5 MW) and for the Dagget Solar 66 Project (7 MW) in unincorporated areas of San Bernardino County. Both projects would be located on undeveloped land, totaling 168-acres, and would require a Conditional Use Permit. Both project sites are located north of Interstate 40 and are bisected by National Trails Highway Historic Route 66 near the community of Nebo. Sensitive views were identified along Historic Route 66, a County-designated scenic route, and on I-40. While I-40 is not designated by the County as a scenic highway, it is "eligible for designation" under the California Scenic Highway Program.

The VIA included a visual resource inventory using BLM's Visual Resource Management System and evaluated each projects' consistency with the San Bernardino General Plan and Development Code. The VIA also included photographic simulations from four key observation points along Historic Route 66 and I-40. Based on the low profile of the solar panels (9-12 feet tall), as well as the projects' compliance with setback and screening requirements, no significant visual impacts were identified.

SOLAR

Location
San Bernardino County

Duration
July 2018 – September 2018

Size
167.24 acres

Services
- *Field Survey/Visual Resource Inventory*
- *Visual Simulations*
- *Visual Impact Assessment Report*

Client
Ralph Laks
Laks Construction
lariatlake@aol.com

3.0 DETAILED SCOPE

McIntyre understands the expectations of the County staff with respect to project management and team leadership. Our approach for preparation of the EIR is to execute our internal quality assurance and quality control process to ensure that the environmental document is internally consistent, technically sound, and legally adequate, which will expedite the review process, maximize efficiency, and maintain the project schedule.

The following is a list of tasks that are included in our proposed scope of work for the EIR:

Task 1: Project Initiation
Task 2: Administrative Draft EIR (ADEIR)
Task 3: Public Review Draft EIR (DEIR)
Task 4: Final EIR (FEIR)
Task 5: Mitigation, Monitoring, and Reporting Program
Task 6: CEQA Findings and Notice of Determination (NOD)

TASK 1 – PROJECT INITIATION

Task 1.1 – Kick off Meeting

A kickoff meeting will occur within one week of contract execution and will include a discussion of the project goals, the project schedule and any other areas of particular concern. The kickoff meeting will also serve to discuss assumptions

and parameters for all technical studies and McIntyre's project manager and the Lead CEQA Specialist will provide a draft project schedule and draft EIR table of contents to facilitate the discussions.

Key Deliverable(s):

- Draft Project Schedule;
- Draft Table of Contents;
- Meeting Agenda; and
- Meeting Minutes.

Task 1.2 – Data Collection/Site Visit

Site Visit

We've scheduled the site visit to occur within one week of the kickoff meeting. Having a site visit early in the process will help all parties to quickly get acquainted with the project site and enable us to identify potential issues of concern.

Data Collection and Review

McIntyre shall conduct initial data collection for information as necessary to complete preparation of the EIR. Our efforts will be focused on updating information as needed (i.e., updating GIS datasets, etc.). Any "outstanding information" needed to complete the analysis will be presented to the County in the form of a "data needs list".

Key Deliverable(s):

- Data Needs List.

Task 1.3 –Project Description

A clear and accurate description of the proposed project is one of the cornerstones of an EIR. The description of the project will contain information on its location and boundaries and a description of its technical characteristics, including all components, both on and off the project site. It will also include a clearly written statement of project objectives, which will assist in developing a reasonable range of alternatives and aid in the preparation of findings and a statement of overriding considerations, if necessary. McIntyre will develop the draft project description and alternatives for the proposed project based upon information provided in the CUP Application. The project description will include a description of all phases (construction, operation/maintenance, and decommissioning) of a utility scale solar project, electrical and transmission improvements and a battery energy storage system. The project description will clearly describe the various components of the project and at an appropriate level of detail. We assume the Applicant will provide all necessary project information to prepare a detailed project description.

McIntyre will prepare a draft project description and submit it to the County for review and comment. The draft project description will be revised based on one round of comments received from the County. The final project description will be the basis of the environmental analysis conducted in the EIR and those technical reports prepared by the McIntyre team.

Key Deliverable(s):

- Draft and Final Project Descriptions and Alternatives.

Task 1.4 – Bi-Weekly Teleconferences

To support ongoing communication, we propose bi-weekly teleconferences with the County during critical phases of the Project, and on an as-needed basis thereafter. These meetings will be attended by McIntyre's project manager and Lead CEQA Specialist as well as any required technical specialists. This regular and open line of communication ensures that any unforeseen concerns are addressed quickly and will keep the project on schedule.

Key Deliverable(s):

- Teleconference Agenda and Minutes; and
- Task List(s).

Task 1.5 – Initial Study (Draft and Final) and CEQA Notices

McIntyre shall prepare a Draft and Final Notice of Preparation (NOP) in accordance with CEQA Guidelines Section 15082, along with a Draft and Final Initial Study (IS). The Draft NOP and IS shall be electronically submitted to the County for review. Comments/edits received on the documents shall be incorporated and revised documents electronically resubmitted.

The NOP and IS, which will open the public scoping comment period, will include the following:

- A brief description of the proposed project and location;
- An explanation of the scoping process and how to comment;
- Imperial County's Initial Study Checklist identifying whether the proposed project would have "no impact," "less than significant impact," "less than significant with mitigation incorporated," or "potentially significant impact" for all environmental resource areas;
- Deadline for submitting comments;
- Date, time, and format of the public scoping meeting;
- Locations where project documents and files are available for public review; and
- Lead agency contact information.

Once County comments are received, McIntyre will submit the revised NOP/IS to the County, for consideration by the Environmental Evaluation Committee (EEC) as an information item.

The Final NOP / IS shall then be submitted by the County to the Office of Planning and Research (OPR) and State Clearinghouse (SCH) for transmittal to responsible and trustee agencies requesting input on the scope and content of the EIR within 35-days.

Pursuant to Executive Order N-80-20, signed on September 23, 2020, certain requirements for filing, noticing, and posting of CEQA documents with county clerk offices have been conditionally suspended and alternate requirements identified in lieu of those requirements. This proposal assumes that the ICPDSD will fully satisfy CEQA's requirements for filing, posting and issuing public notices by

- Posting CEQA notices on the ICPDSD'S website for the same length of time that would be required for physical posting; and,
- Submitting all CEQA Notices to the OPR via the State Clearinghouse's CEQAnet web portal.

As of November 3, 2020, the Office of Planning and Research (OPR), State Clearinghouse (SCH) Unit no longer accepts hard copies of environmental documents and notices of determinations and/or exemptions. All agencies are required to submit online to the CEQA Database

Key Deliverable(s):

- Draft and Final versions of the NOP and Checklist IS;
- Notice of Completion & Environmental Document Transmittal (Appendix C of the State CEQA Guidelines); and
- Summary Form for Electronic Document Submittal (Form F).

Task 1.6 –Public Scoping and Comment Review

McIntyre's Project Manager and Lead CEQA Specialist will attend one public scoping meeting, arranged by the County. We will provide a PowerPoint presentation to support the County at the meeting, along with speaker cards. To expedite the schedule, we propose that the virtual public scoping meeting and the EEC meeting be held on the same day.

Due to the COVID-19 pandemic, we assume that the County will hold a virtual scoping meeting and will provide information on how the public can join the meeting remotely (either by computer or telephone) will be provided.

At the conclusion of the public scoping period, McIntyre will prepare a draft scoping memorandum summarizing the scoping process as well as issues and comments received during the scoping period and where they will be addressed in the EIR. We will consider all relevant and substantive scoping comments in the development of the EIR to ensure the document reflects and addresses the issues of concern to the public and agencies. The information gathered during scoping will also be used in developing project alternatives. Any public comments requesting an expansion of the scope beyond that described herein will be addressed with the County staff.

Key Deliverable(s):

- Public scoping materials and a PowerPoint presentation on the project.

Task 1.7 – Peer Review of Technical Reports

This subtask includes a critical review of technical reports that will be prepared by the Applicant or its Consultants. As noted in the RFP, the following surveys and technical reports will be, or have been, developed by the Applicant:

- Aesthetics/Visual Impact Assessment
- Air Quality and Greenhouse Gas
- Biology Resources Report
- Cultural Resources Report
- Geology and Soils/Geotechnical Report
- Hydrology/Drainage Report
- Land Evaluation and Site Assessment
- Noise Report
- Phase 1 Environmental Site Assessment
- Transportation/Traffic Study

Each peer review by our technical experts will consist of the following tasks:

- Review Applicant-prepared technical reports to identify any data gaps and determine whether additional, supplemental or new analyses are required to appropriately analyze the project and its potential impacts.

- Ensure that Applicant-prepared technical reports address all project components and phases, and include appropriate approaches, methodologies, models, software, tools, significance criteria, permit conditions, and current data sources.
- Review comment letters received by the County in response to notification of the proposed CUP Application, to ensure responsible agencies or other stakeholder comments, if any, have been addressed.
- Prepare a draft/final memo summarizing peer review findings and any additional analysis that may be needed. Rather than preparing a single memo that summarizes the findings of "all peer reviews", our proposal recommends a separate memo be completed for each resource area. This approach facilitates a more efficient flow of information to County staff, and enables technical reports to be revised/updated as needed, and thereby avoids potential delays waiting for other reviews to be completed.
- Participate in teleconference with McIntyre; County, Applicant and their consultant to discuss peer review findings and review revised reports (if revisions necessary).

Key Deliverable(s):

- Draft and Final Peer Review Memos based on review of the project description and Applicant-prepared technical reports.

Task 1.8 – Completion of Additional Technical Studies

This subtask includes preparation of additional technical reports that are necessary to produce a legally defensible EIR, including:

- Paleontological Resources Report; and
- Water Supply Assessment (SB 610).

Details on scope of the technical studies are described below under Subtask 2.1, First and Second Administrative Draft EIR (DEIR).

Upon completion of the draft technical reports, our staff and technical specialists would participate in a teleconference with the County, Applicant, and their consultant to discuss comments on draft technical reports and review revised reports (if revisions necessary).

Key Deliverable(s):

- Draft and Final Paleontological Resources Report; and
- Draft and Final SB 610 Water Supply Assessment.

Task 1.9– Regulatory Review and Agency Coordination

From our current and previous on projects in the Imperial Valley, we have established relationships with many of the agencies that will have regulatory authority over the Project. We will contact regulatory agencies to ensure that they received the NOP and IS and encourage they respond in writing. We assume consultation with regulatory agencies will take place via teleconference. Upon completion of the consultation process, we will submit a memo to the County identifying agencies/individuals contacted and the outcome(s) of the conversations. The agencies relevant to the project may include but are not limited to the following:

- California Department of Fish & Wildlife
- Caltrans District 11
- Imperial County Fire Department
- Imperial Irrigation District

- Colorado River RWQCB
- Imperial County Air Pollution Control District
- Imperial County Dept. of Public Works
- Native American Heritage Commission
- US Bureau of Reclamation
- US Fish and Wildlife Service

Key Deliverable(s):

- Draft and final agency consultation memorandum.

Task 1.10 –Assembly Bill 52 Tribal Consultation Support

McIntyre will utilize Cogstone to provide support for the tribal consultation required under Assembly Bill 52 (AB 52). We recognize that the County distributes their own AB 52 consultation letters, as a part of the Conditional Use Permit process. If any tribes wish to participate in government to government consultation on this project, Cogstone will assist by coordinating meetings, preparing correspondence, compiling responses, and/or scheduling/attending one (1) tribal consultation meeting held via telephone or virtual meeting

Key Deliverable(s):

- Draft and Final minutes of AB-52 consultation meeting(s); and
- Draft and Final memo compiling Native American responses.

TASK 2 – ADMINISTRATIVE DRAFT EIR

Task 2.1 - 1st and 2nd Administrative Draft EIR (ADEIR)

McIntyre will develop the ADEIR to fully address the requirements of CEQA, the Imperial County Zoning Ordinance and General Plan Elements, including significance determinations; alternatives analysis; state, local, and federal laws; regulations; executive orders; and resource analyses. We will prepare two versions of the ADEIR. The ADEIR will analyze and disclose impacts from a variety of issues including:

- Aesthetics
- Agricultural & Forestry Resource
- Air Quality
- Biological Resources
- Cultural Resources
- Energy
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology/Water Quality
- Land Use and Planning
- Mineral Resources
- Noise
- Recreation
- Population and Housing
- Public Services
- Utilities and Service Systems
- Transportation
- Wildfire
- Cumulative Impacts
- Alternatives

Based on our initial review of potential impacts, we do not anticipate impacts to mineral resources, population and housing, public services, and recreation, energy conservation, or wildfire. While these issues would be identified in the Initial Study, they would not be addressed in detail in the EIR. The CUP Application identifies Environmental Protection Measures (EPM) which will be incorporated into the Project to avoid or minimize potential environmental impacts.

Key Environmental Issues to be Addressed in the EIR and Our Approach to Analysis

The approach to analyzing the environmental resource areas are discussed below. It is our intent to evaluate each of the solar projects along with their accompanying battery storage and transmission systems separately in the EIR. Mitigation measures will be identified by resource; and the EIR will clearly identify to which solar project (e.g. CUP) the measure(s) apply.

Aesthetics

The project site is located in an unincorporated part of the county, four (4) miles east of Highway 111 and five (5) miles north of Highway 115. Neither of these highways are designated as scenic highways. No VRM classified lands exist on the project sites, but they are adjacent to VRM Class IV BLM land. The project sites are not considered a scenic vista nor are they in the vicinity of a designated scenic route in Imperial County. The project sites do not contain scenic resources, including but not limited to trees, rock outcroppings, and historic buildings, or state scenic highways.

Given the relative isolation of the sites, it is highly unlikely there the only sensitive viewers present would be vehicles on adjacent roadways. Nonetheless, the construction of solar arrays, substations, switching stations, a battery system and electrical distribution lines, will change the rural character of the area.

In accordance with the Renewable Energy and Transmission Element Update PEIR mitigation measure AESTH-1g, the Applicant has prepared a Visual Impact Assessment (VIA) to provide a detailed assessment of potential impacts to aesthetic and visual resources. The RFP indicates the VIA will also include visual simulations will also be prepared. We will review the Applicant-prepared Visual Impacts Analysis to determine conformity with the County's Visual Resource Element and with the surround BLM VRM classifications. The findings of the visual impact assessment will be presented in the EIR, along with feasibility mitigation measures.

Agricultural Resources and Forestry Resources

Based on a review of aerial photographs, project parcels for the VS2, VS3 and VS5 are typical of the desert landscape with row crops on the surrounding parcels. According to the California Department of Conservation's Farmland Mapping and Monitoring Program, VS2 and VS3 consists of "Other Land" and "Areas Not Mapped" under the Program. VS5 consists of other land and "Farmland of Local Importance". While only a portion of VS5 parcel (APN 025-260-022) contains "Farmland of Local Importance." Because the County considers all agricultural land to be "important farmlands", the Applicant has prepared a California Land Evaluation and Site Assessment (LESA) to evaluate potential impacts resulting from the conversion of agricultural lands to non-agricultural uses. We will conduct a "peer review" of the LESA and incorporate the findings into the EIR.

Additionally, the project sites are zoned S-2-RE and S-2-RE/A-2-RE/A-3-RE. The EIR will evaluate potential impacts associated with the conversion of agriculturally zoned land to non-agricultural uses and identify feasible mitigation measure, if necessary, to reduce temporary conversion impacts to below a level of significance. There are no lands under Williamson Act contracts within or adjacent to the project sites.

Air Quality/Greenhouse Gas Emissions

Most air quality impacts from solar projects are temporary in nature and occur during construction or from vehicular activity. The sources are usually combustion engines for equipment and fugitive dust. The short-term combustion emissions can be criteria air pollutants of carbon monoxide, nitrogen dioxide, sulfur dioxide and particulate matter < 10 microns in size (CO, NO2, SO2 and PM10), or precursors of criteria air pollutants such as volatile organic compounds

(VOCs), and minor emissions of air toxics (diesel PM, acetaldehyde, benzene and formaldehyde). The Project site is located in the Salton Sea Air Basin (SSAB). Responsibility for attaining and maintaining ambient air quality standards in California is divided between the California Air Resources Board (CARB) and the Imperial County Air Pollution Control District (APCD).

Most air quality impacts from solar projects are temporary and occur during construction. The sources are usually combustion engines for equipment and fugitive dust. The short-term combustion emissions can be criteria air pollutants of carbon monoxide, nitrogen dioxide, sulfur dioxide and particulate matter < 10 microns in size (CO, NO2, SO2 and PM10), or precursors of criteria air pollutants such as VOCs, and minor emissions of air toxics (diesel PM, acetaldehyde, benzene and formaldehyde).

McIntyre will utilize BPG to provide a third-party review of the Applicant-prepared air quality technical report which should evaluate potential air quality and greenhouse gas/climate change impacts associated with the construction and operation of the Project. The air quality report and appendices will be reviewed for consistency with industry standard methods and protocol for preparing studies evaluating impacts associated with the construction and operation of solar generating facilities and intended uses as well as consistency with Imperial County regulations and standard requirements to minimize related impacts during construction and operation. We expect that the proposed Project would not conflict with an applicable plan, policy, or regulation adopted to reduce greenhouse gas emissions and would result in an overall reduction in greenhouse gas emissions.

Biology

The project site is located in an unincorporated part of the county. Based on a review of aerial photographs, project parcels for the VS2, 3 and 5 are typical of the desert landscape with row crops on the surrounding parcels. Based on preliminary review of the California Natural Diversity Database (CNDDB), there are listed species that have the potential to occur within the vicinity of the Project. Burrowing owl, California black rail, loggerhead strike, glandular ditaxis, and Munz's cholla are all in the project vicinity, but all with a presence of Presumed Extant.

McIntyre's biologist, Ms. Carliane Johnson, will provide an objective, critical review and verification of the applicant supplied biological technical report. McIntyre will conduct a search on the California Native Plant Society (CNPS), the California Natural Diversity Database (CNDDB) California Department of Fish and Wildlife (CDFW) databases for any listed species in the vicinity. We will ensure that our biological resources impacts/effects analysis includes project/proposed action permanent and temporary, direct and indirect and cumulative impacts to habitats and special-status plant and wildlife species. This includes impacts associated with re-routing the desert washes that traverse each of the project sites in a general northeast to southwest direction.

Our team is aware that the EPA and the US Army Corps of Engineers have modified the definition of what resources qualify as "waters of the United States". This information will be considered as part of our peer review. After describing the project's impacts to biological resources, we will identify the avoidance, minimization and/or mitigation measures proposed by the applicant, and if necessary, suggest feasible avoidance, minimization and/or mitigation measures to reduce impacts to below a level of significance/reduce or avoid adverse effects.

Cultural/Tribal Resources

Our archaeological consulting firm, Cogstone, has substantial experience in Southern California and will conduct a peer review of the Applicant-submitted cultural resources assessment. They will work closely with the County staff to ensure the cultural resources report is technically accurate and covers impacts (direct and indirect) from all project components.

We will also review the proposed mitigation measures for protection of Native American cultural interests and if necessary, suggest additional mitigation to reduce impacts to below a level of significance. The findings of the cultural resources report will be included in the cultural resource and tribal resource sections of the EIR.

As part of its Best Management Practices, the County sends letters to Native American Tribes informing them of projects and extending an offer for government-to-government consultation. We will need copies of this correspondence and any responses to document the County's AB-52 Native American consultation efforts and outcome.

Cogstone assumes that no additional fieldwork will be necessary for the third-party review. If a field visit is necessary to provide a thorough third-party review, a contract modification may be required. All work shall be performed by Cogstone senior staff who meet or exceed qualifications per the County of Imperial's cultural resource guidelines.

Geology/Soils

McIntyre will use Ninyo & Moore to evaluate the adequacy and accuracy of the Geotechnical Report prepared by the applicant for the Project to ensure compliance with the California Environmental Quality Act (CEQA) and with Imperial County's guidelines. The information presented in the geotechnical report will be incorporated into the EIR to ensure that the proposed mitigation measures are adequate for the design features of the Project. We will also analyze potential erosion concerns and impacts from grading, construction and operation of all project components. We will develop and incorporate standard industry methods to prevent surface runoff and erosion impacts, as applicable. We will pay special attention to any areas containing soils susceptible to erosion or seismic concerns. We will write this section in close coordination with the hydrology/water quality and air quality sections due to the many interrelated issues and impacts.

Paleontological resources, if present, may be impacted by grading of the project site, trenching for subsurface conduits, and other surface disturbing activities. McIntyre has retained the San Diego Natural History Museum to prepare a Paleontological Resources Report for the Project. This report will include the following:

- Document Review — A review of published and unpublished paleontological and geological reports dealing with the proposed project area will be conducted.
- Records Search — A search of paleontological collection records at the San Diego Natural History Museum (SDNHM) to determine the extent of known fossil collection sites within and adjacent to the proposed project area.
- Pedestrian Survey — A survey of the proposed project area will be conducted to field check the results of the document review and records search.
- Paleontological Sensitivity — An evaluation of the resource significance/sensitivity of individual geologic units exposed within the proposed project area will be conducted.

  A GIS database will be produced that summarizes the paleontological sensitivity of the geologic units underlying the project area.
- Technical report — A paleontological resources technical report will be prepared that will summarize the results of the tasks described above. The report will also include a discussion of potential impacts to paleontological resources and general mitigation measures to reduce any potential impacts.

Energy

The EIR will include an energy analysis based on the following:

- Identification of energy consuming equipment and processes which will be used during construction, operation and/or removal of the project;
- Total project energy requirements, by fuel type and end use;
- Energy conservation equipment and design features, if any;
- Identification of energy supplies that would serve the project; and
- Total estimated daily vehicle trips to be generated by the project and the additional energy consumed per trip by mode.
- The "existing setting" discussion will identify existing energy supplies and energy use patterns in the region and the impact discussion will focus on potential energy impacts of the project, with particular emphasis on avoiding or reducing inefficient, wasteful and unnecessary consumption of energy.

Hazards and Hazardous Materials

Our team will evaluate possible construction hazards such as major fluid spills, earthquakes, fires, floods and other emergencies. In addition, we will evaluate potential worker safety issues during project construction and operation for all activities involving use and storage of flammable and explosive or highly corrosive or reactive materials, fire and explosion suppression equipment, and pesticides/herbicides. The applicant prepared Phase I Environmental Site Assessment will be peer reviewed by Ninyo & Moore to ensure compliance with ASTM E1527-13.

Hydrology and Water Quality

The project is located within the Colorado River Hydrologic Region, which includes the lower Colorado River system; the Salton Sea drainage system; and several internal basins. The project lies within the Salton Sea watershed southeastern portion of the irrigated portion of the Imperial Valley. Imperial County is a desert region with less than six inches of rainfall per year, but rainfall can be concentrated and lead to flooding. Most of the surface-water supplies in the area are a result of irrigation from the Colorado River. The water is diverted from the Colorado River at the Palo Verde Weir north of Blythe by the Palo Verde Irrigation District for use in the Palo Verde Valley of northeast Imperial County and southeast Riverside County; and at the Imperial Dam into the All-American Canal by the IID and the Bard Irrigation District for use in the Imperial, Yuma, Bard, and Coachella Valleys. The IID manages over 3,000 miles of canals and drains in the area and is the largest irrigation district in the United States. Since 1942, the area has received its water through the All-American Canal, which runs 82 miles from the Imperial Dam on the Colorado River west to agricultural areas and cities in the Imperial Valley. The 82-mile All-American Canal has several main canals that branch off, including the Westside Main canal. These three canals supply water service to Imperial Valley and are operated and maintained by IID. The IID serves irrigation water and electric power to farmers and residents in the lower southeastern portion of California's desert.

The project area is in an area of minimal flood hazard as defined by the Federal Emergency Management Agency (FEMA). The project is adjacent to the All-American Canal and proposes to provide access to the site, across the East Highline Check of the All-American Canal, in the far northeastern corner of the Project area.

Our team will use the information prepared for the SB-610 Water Supply Assessment as well as information from the topographic maps, and databases to identify surface waters, IID canals and smaller irrigation drains in the project area.

We will also identify the County's Engineering Guidelines Manual that are applicable to the Project along with the plans that must be prepared and BMPs that must be implemented to reduce impacts to below a level of significance.

Hydrology and Water Quality

The projects are located within the Colorado River Hydrologic Region, which includes the lower Colorado River system; the Salton Sea drainage system; and several internal basins. The project lies within the Salton Sea watershed southeastern portion of the irrigated portion of the Imperial Valley. Imperial County is a desert region with less than six inches of rainfall per year, but rainfall can be concentrated and lead to flooding. Most of the surface-water supplies in the area are a result of irrigation from the Colorado River. The water is diverted from the Colorado River at the Palo Verde Weir north of Blythe by the Palo Verde Irrigation District for use in the Palo Verde Valley of northeast Imperial County and southeast Riverside County; and at the Imperial Dam into the All-American Canal by the IID and the Bard Irrigation District for use in the Imperial, Yuma, Bard, and Coachella Valleys. The IID manages over 3,000 miles of canals and drains in the area and is the largest irrigation district in the United States.

The project area is in an area of minimal flood hazard with portions of the site in an area of high risk (1% annual chance of flood) as defined by the Federal Emergency Management Agency (FEMA). The flood risk is due to desert washes that traverse each of the project parcels in a general northeast to southwest direction.

The IID Laterals "N" and "O" form the southern and northern borders, respectively of VS5 APN 025-260-022. Additionally, the East Highline Canal bisects this parcel as well.

Water quality findings will be made based on the results of the hydrology /drainage study and the applicant prepared Draft SWPPP. If a Draft SWPPP is not available assumptions on appropriate BMPs will be made based on other approved solar projects in Imperial County. According to the RFP, the project will be constructed in compliance with storm water quality management measures designed to meet state and local storm water management plan requirements. All applicable local RWQCB discharge requirements and County of Imperial's water quality regulations would be adhered to in the development and maintenance of the project sites.

McIntyre's subcontractor, Dubose Design Group, will prepare SB-610 Water Supply Assessment for the project to determine if there is an adequate groundwater supply. We will use this as well as information from the County, topographic maps, and databases to identify surface waters, IID canals and smaller irrigation drains in the project area. This information will also be used to validate the Applicant's estimated demand for water during construction, operations, and decommissioning. We will also evaluate the potential change in run-off from the site and its direct and indirect impacts to IID facilities.

Land Use and Planning

The project site is located within an unincorporated section of Imperial County, California on lands designated for Recreation/Open Space and Agricultural use under the Imperial County General Plan Land Use Element. Existing zoning on the site includes lands zoned as S-2-RE (Open Space/Preservation, with a Renewable Energy Overlay) and S-2-RE/A-2-RE/A-3-RE (Open Space/Preservation, Agricultural Lands with a Renewable Energy Overlay).

McIntyre will evaluate the existing and proposed land uses within the project sited and the surrounding area to identify any potential conflicts with land use plans and policies and habitat conservation plans. Each project's compatibility with relevant goals, policies, and programs of the General Plan will be presented in each resource section of the EIR.

ME will review the Airport Land Use Compatibility (ALUC) Plans/Zones for the nearby airports to ensure that the project will not conflict with these plans. We are assuming that the Applicant will provide sufficient information for our team to evaluate the project's impacts on communications, including microwave, radio/television, and aircraft navigation. In addition, we assume that the FAA has not reviewed the project nor completed an aeronautical study, finding no proposed structures that exceed obstruction standards or pose a hazard to air navigation, and the project has not received its determination of no hazard. If this has not already been accomplished, then we assume it will occur before the EIR is published.

Noise

The project sites are located within a rural area with few sensitive receptors. Dominant noise sources in the vicinity of the Project sites include agricultural uses/machinery, vehicles on roadways and the Union Pacific Railroad.

McIntyre has retained BPG to review the applicant prepared noise analysis for the Project. Ryan Birdseye will ensure the noise analysis to ensure report addresses all components of the project, both on- and off-site improvements, as well as all project phases. The EIR will discuss baseline conditions and identify "sensitive receptors." Any noise impacts will be assessed relative to the County's noise standards. Based on the results of the impact analysis, we will identify whether noise levels will exceed noise standards at residences or properties; and provide mitigation, if necessary, to avoid or reduce significant impacts to the extent feasible.

Utilities and Service Systems

The EIR will include an evaluation of the whether the Project will require new or relocated water, wastewater, stormwater, electrical power, natural gas, telecommunication facilities. We will quantify the project's solid waste generation during construction, operations and decommissioning and compare those volumes to available landfill capacity within the County. However, the quantity of water needed to construct and maintain solar projects (e.g., washing of panels), as well as the source of that water, is a growing concern for renewable energy developments based on CEQA case law (such as Center for Biological Diversity v. County of San Bernardino (CBD) (2010) 185 Cal.App.4th 866) and will be the primary focus of this section. A Water Supply Assessment will be prepared by Dubose Design Group. The Water Supply Assessment will evaluate whether a sufficient water supply is available to meet the project's maximum water demands over a 20-year period under normal year, single dry-year, and multiple-dry-year conditions.

Traffic

McIntyre's traffic consultant, Mizuta Traffic Consulting, will conduct a peer review of the Applicant-prepared traffic study to ensure it will meet Imperial County's requirements for traffic impacts, including the Project's potential impacts to increase vehicle miles traveled in compliance with S.B. 743. We anticipate the traffic analysis will focus primarily on the construction-related traffic impacts of the proposed project, as the long-term operations of the facility will involve minimal staff/workers, and therefore minimal traffic. We also presume the assessment will focus on the transport of project components to the site via local roadways and the impacts associated with the temporary increase of vehicles on local and regional roadways related to the Project. Due to the project site's rural location, impacts on bicycle and pedestrian facilities, and public transit services are not anticipated.

In terms of VMT, the County has not yet adopted a significance criteria for SB 743 and VMT; nonetheless the EIR must include an analysis of the project's potential to increase VMT. We anticipate the traffic study will identify project-

generated daily VMT estimated separately for each project trip type, based on construction, operation/ maintenance and decommission phases.

Wildfire

The Project site is not located in a State Responsibility Area, but portions are located in a moderate fire hazard severity zone and non-wildland/non-urban in the Draft Local Responsibility Area as mapped by CAL FIRE. Fire Hazard Severity Zones (FHSZs) are areas of significant fire hazards based on fuels, terrain, weather, and other relevant factors that have been mapped by the California Department of Forestry and Fire Protection (CAL FIRE) under the direction of Public Resources Code (PRC) 4201-4204 and Government Code 51175-89. FHSZs are ranked from moderate to very high and are categorized for fire protection as within a federal responsibility area (FRA) under the jurisdiction of a federal agency, within a State responsibility area (SRA) under the jurisdiction of CAL FIRE, or within a local responsibility area (LRA) under the jurisdiction of a local agency. The fire risk at the Project site is moderate, and the potential for a major fire to occur in the area surrounding the Project site is moderate. The EIR will evaluate the risk of wildfires at the Project site, its potential to impair an emergency response or evacuation plan, and identify project features and/or mitigation measures that would reduce impacts to the extent feasible.

Cumulative Impact Assessment

Ms. Willis, our proposed CEQA Compliance Specialist, has considerable experience conducting comprehensive cumulative impact analyses for renewable energy projects as demonstrated by her work on the Hudson Ranch II, Simbol I, and Orni 21 Geothermal Project, as well as on the Lucerne Valley and California Valley Solar Ranch projects. To ensure that the cumulative impact analysis receives the attention it deserves we shall begin evaluating cumulative impacts early in the CEQA process. While the date of the NOP typically establishes the "baseline of analysis" for an EIR, we propose to update the list of potential cumulative projects, throughout the EIR preparation, to ensure an up-to-date and adequate identification of potential projects. This will ensure an adequate and legally defensible cumulative impact assessment. Given the number of solar project that have been developed in the Imperial Valley, we anticipate that cumulatively considerable impacts could result from conversion of agricultural land to non-agricultural uses, use of IID water for construction/maintenance, visual/aesthetics related to the solar panels (height, glint and glare) and from potential habitat loss for sensitive biological resources.

McIntyre will utilize a list of current and potential projects developed during the preparation of the County's Land Use Plan and update it, based on projects that have been planned/approved since that time. Several solar projects have been processed in recent months and the Westside Battery Storage Project, North Gila II Transmission Line Project, Orni 21 Solar, and Truckhaven Geothermal Energy Project are also under consideration. These projects, along with current projects shown on the County's website would be added to list of potential cumulative projects.

In addition, McIntyre will collect additional data and information on projects not managed by the County in the evaluation of cumulative impacts. We recognize that cumulative impacts assessment is of major importance for this project, as the County receives multiple development applications. The incremental impacts of these projects, when added to impacts from other past, present, and reasonably foreseeable future actions, could be considerable.

To ensure that the cumulative impact analysis receives the attention it deserves, we will begin identifying and evaluating cumulative impacts early in the CEQA process. Specifically, we will:

- Determine which issues identified for analysis may involve a cumulative effect with other past, present, or reasonably foreseeable future actions;

- Establish the geographic scope for each cumulative effect issue;
- Establish the timeframe for each cumulative effect issue; and
- Identify past, present, and reasonably anticipated future projects to consider in the analysis, including other renewable energy projects as well as non-energy (i.e., residential, commercial, or industrial) developments.

Alternatives

CEQA requires consideration of a reasonable range of alternatives selected pursuant to CEQA Guidelines Section 15126.6. We will work closely with County staff to develop and refine the alternatives to the proposed project and will keep in mind the goal of selecting alternatives capable of reducing the impacts associated with implementing the Project. We anticipate the alternatives analyzed for this project could be:

- "No Project Alternative." Under this alternative, the proposed project would not be constructed.
- "Reduced Project Alternative". This alternative would be reduced to avoid on-site important farmlands.

Alternatives would be a topic of one of our earliest teleconference meetings. A matrix summarizing the comparative analysis of the alternatives to the proposed project will be included in the EIR to facilitate the reader's understanding of the project alternatives relative to the identified potentially significant impacts associated with the proposed Project. As required by CEQA Guidelines Section 15126.6(d)(2), of these alternatives, an environmentally superior alternative will ultimately be identified.

Other CEQA Requirements

The EIR will identify irreversible and irretrievable commitment of resources that would occur if the project is implemented. A resource commitment is considered irreversible when direct and indirect effects from its use limit future option. This section will identify significant and unavoidable impacts as well as growth inducing impacts.

The EIR will also include a list of citations and consultations (references), list of preparers, and a list of persons contacted.

Key Deliverable(s):

- Administrative Draft EIR (5 hard copies and 20 electronic copies on CD).

Task 2.3 – Staff Update/Coordination Meetings

We will be available to attend additional meetings, as needed. We anticipate having Mr. McIntyre attend up to five additional face-to-face meetings with the County when review of key deliverables is required. These meetings would likely take place when the first and second ADEIR are submitted for County review as well as when the administrative draft of the Final EIR (FEIR) is submitted. We recommend that these meetings include attendance at the EEC meeting, a meeting to discuss ADEIR comments, a meeting to discuss DEIR comments, a meeting to discuss FEIR comments and one other meeting at the discretion of the County. These meetings are discussed in detail under their appropriate tasks.

Key Deliverable(s):

- Meeting Agenda and Minutes.

TASK 3 – PUBLIC REVIEW DRAFT EIR

Task 3.1 - Document Preparation

Our team will incorporate the Applicant's and the County's comments on the ADEIR into a Public Review DEIR. The County will be provided with 5 hard copies (including copies of the Volume II technical appendices) and 50 copies of the camera-ready DEIR on a CD for public dissemination. We will also upload an electronic version of the DEIR and technical appendices to the Imperial County Web site.

Key Deliverable(s):

- Public Review Draft EIR (5 hard copies and 50 electronic copies on CD).

Task 3.2 – CEQA Notices - Notice of Completion/Availability

McIntyre shall prepare the NOC to inform reviewers that the Public Review DEIR is complete. McIntyre will also prepare the CEQA Summary Form for Electronic Document Submittal, which will enable the County to submit copies of the EIR to the SCH on CD, thereby reducing printing and shipping costs associated with this task.

McIntyre shall also prepare a Notice of Availability (NOA) that would accompany each hard copy of the DEIR distributed to stakeholders. Imperial County shall file the NOA with the County Clerk's office and publish the NOA in a newspaper of general circulation. Imperial County shall pay all publishing fees as required by any newspapers.

Key Deliverable(s):

- NOC/NOA and CEQA Summary Form for Electronic Document Submittal for County filing with SCH, publication and distribution;

TASK 4 – FINAL EIR

Task 4.1 – Response to Comments.

McIntyre will review public comments with the County and determine an appropriate response to each one. Following receipt of final public comments, our team will prepare an administrative draft of the responses to comments and submit to the County for internal review. We will organize the responses to comments by comment and letter, responding in the following order:

- Federal, state, and local agencies;
- Tribes;
- Organizations and businesses; and
- Local residents.

Following receipt of comments regarding the draft responses to comments document, our team will prepare and submit electronic screen-check versions of the responses to comments for the County's review. Our team will provide the County all final responses to comments, which can be used in conjunction with the FEIR.

Key Deliverable(s):

- Responses to comments on the Public Review DEIR.

Task 4.2 – Preparation of Administrative Final Draft and Public Review Final EIR

Two administrative drafts of the FEIR will be prepared and provided to the County for review and comment. McIntyre shall incorporate the County's comments on the 1st Administrative Draft FEIR's and provide a 2nd Administrative Draft FEIR.

Key Deliverable(s):

- One (1) electronic version of the First Administrative Draft FEIR;
- One (1) electronic version of the Second Administrative Draft FEIR;
- Camera-ready FEIR (5 hard copies, 50 copies on CD); and

Task 4.3 – CEQA Notice – Notice of Availability of Final EIR

McIntyre shall prepare the NOA that would accompany the FEIR to the SCH.

Key Deliverable(s):

- NOA and NOC for County transmittal of FEIR to the SCH.

Task 4.4 – Public Hearing Attendance

McIntyre's Project Manager and lead CEQA specialist will attend one Planning Commission Hearing and one Board of Supervisor Hearing. Our team will be prepared to answer general and technical questions regarding the plan, findings and other technical reports from the decision-making bodies and will provide a PowerPoint presentation to support the County at the meeting.

Key Deliverable(s):

- Draft and Final PowerPoint presentation for each meeting.

TASK 5 – MITIGATION, MONITORING AND REPORTING PROGRAM (MMRP)

In October 2015, the Imperial County Board of Supervisors (Board) approved the Renewable Energy & Transmission Element of the Imperial County General Plan; Certified the Final Programmatic Environmental Impact Report (Final EIR) for the Imperial County Renewable Energy and Transmission Element (EIR/SCH # 2014071062. The Board also adopted the Mitigation Monitoring and Reporting Program. The Renewable Energy and Transmission serves as the Board's primary policy statement for implementing development policies for geothermal and other renewable energy land uses in Imperial County.

The Renewable Energy and Transmission Element consisted of four key elements to guide future of renewable energy facilities in Imperial County:

1. The Renewable Energy and Transmission Element Overlay Zone (Map) - which includes the Geothermal Overlay Zone Category, the Renewable Energy (RE) Overlay Zone Category and the Renewable Energy/Geothermal overlay Zone Category;
2. The Renewable Energy and Transmission Element Goals and Objectives;

3. The Renewable Energy and Transmission Element Implementation Ordinance; and,
4. Related minor consistency revisions to all of the other elements of the General Plan.

Under the Renewable Energy and Transmission Element, development and operation of renewable energy projects are allowed within the Renewable Energy overlay zone, with an approved Renewable Energy Conditional Use Permit.

The previously certified FEIR analyzed the direct, indirect and cumulative changes to the physical environment that would result from the construction and operation of renewable energy facilities within the Renewable Energy (RE) Overlay Zone. It was the County's intent that future renewable energy projects developed per the Renewable Energy and Transmission Element would be reviewed in the context of the FEIR to determine if additional environmental documentation would be required. If a subsequent renewable energy project is proposed for an area that is not within the RE Overlay Zone, additional environmental review is required and the EIR should implement the applicable mitigation measures developed in the FEIR.

McIntyre will prepare a draft and final version of the Mitigation, Monitoring and Reporting Program for submittal to the County during preparation of the DEIR. The MMRP will be based on the conditions of approval issued by the County. This report will detail all mitigation measures, identify the responsible party for monitoring each mitigation measure, when in the project timeline the mitigation measure is applicable to, and who is responsible for enforcing the measure.

Key Deliverable(s):

- Draft and Final MMRP (electronic copies only).

TASK 6 – CEQA FINDINGS/ NOTICE OF DETERMINATION

McIntyre will prepare draft CEQA findings pursuant to Sections 15091 and 15093 of the State CEQA Guidelines. The findings will identify:

(1) Those changes or alterations that have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the FEIR;

(2) Those changes or alterations that are within the responsibility and jurisdiction of another public agency and not the County of Imperial. Such changes have been adopted by such other agency or can and should be adopted by such other agency; or

(3) The specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, that make infeasible the mitigation measures or project alternatives identified in the final EIR.

Additionally, the Findings will provide an overview of the project's CEQA process; identify impacts that were found to be less than significant; identify potentially significant /significant impacts and the mitigation measures that would avoid or substantially lessen them; and identify cumulatively significant impacts; findings associated with project alternatives; and, findings associated with mitigation monitoring and reporting program.

Our team will provide these to the County in both MS Word and PDF format for final editing by County staff. We will also be available to provide information and support in finalizing these documents.

McIntyre will prepare the NOD for the County, the filing of which with the County Recorder will start a 30-day statute of limitations on court challenges to the CEQA approval.

Key Deliverable(s):

- Draft CEQA Findings and Statement of Overriding Considerations (SOC) if necessary; and
- Notice of Determination.

4.0 ASSUMPTIONS

This proposal assumes that the Applicant provided technical reports will be high quality, thorough, and sufficient for CEQA level analysis. We assume that the Applicant will provide complete information (for example, in response to data requests) in a timely manner and in accordance with the project schedule provided. Substantial changes to the project description, aside from selection of the preferred site, after McIntyre commences preparation of the CEQA document will require additional work under this contract; in that event, McIntyre will request a change order to increase the hours and costs approved under this contract.

4.1 Key Assumptions by Task

Task 1.1 – Project Kickoff Meeting Assumption(s)

- Detailed project description and proposed EPMs as well as comments on CUP Application from County internal departments and other standard reviewers (e.g., IID, Native American Tribes) will be provided at kickoff meeting.
- Kickoff Meeting – One (1) representative from McIntyre will attend the kickoff meeting in person, one will attend via teleconference.

Task 1.4 – Bi-Weekly Teleconferences Assumption(s)

- This proposal assumes that a total of 60 hours of meeting time for the Project manager and 40 hours for the Lead CEQA Specialist.

Task 1.5 – Initial Study (Draft and Final) CEQA Notices Assumption(s)

- Assumes County will provide comments on the Draft NOP and IS within 2 weeks of receipt.
- McIntyre prepares NOC and environmental Summary form for State Clearinghouse.
- County files NOC for NOP/IS through State Clearinghouse's online submittal system.
- McIntyre prepares NOP. County publishes NOP in Imperial Valley Paper.
- One representative from BRG/McIntyre attends EEC and Scoping Meeting.
- No hard copies or CDs of the Initial Study will be required.
- County shall cover all costs for distributing copies of the NOP and IS and publication of the NOP.
- We assume the County will publish the NOP in the Imperial Valley Press, the Calexico Chronicle or another paper of record.
- As a result of SCH's requirement, this proposal assumes the McIntyre will prepare the CEQA notices and provide them to the County for filling with SCH/OPR.

Task 1.6 – Public Scoping and Comment Review Assumption(s)

- McIntyre's Project Manager will attend one virtual public scoping meeting and one EEC meeting. The CEQA Lead will attend virtually.
- Virtual public scoping meeting and EEC meeting are held on same day.

Task 1.7 – Peer Review of Technical Reports Assumption(s)

- For scheduling purposes, we assume all applicant prepared technical reports will be available at the kickoff meeting.
- We assume that the Applicant prepared Air Quality and Greenhouse Gas Emissions Study includes a Health Risk Assessment.
- We assume the Phase I Environmental Site Assessment includes soil test for pesticides.
- Schedule assumes that Peer Reviewed Technical Reports will be resubmitted with all required revisions within two (2) weeks of request.
- Imperial County will provide copies of all inter-department/agency comment letters received in response to the notification of the CUP Application.

Task 1.8 – Completion of Additional Technical Studies Assumption(s)

- McIntyre will respond to one set of consolidated comments on the draft technical reports.

Task 1.9 – Regulatory Review and Agency Coordination Assumption(s)

- Consultation with regulatory agencies will take place via teleconference.

Task 1.10 –Assembly Bill 52 Tribal Consultation Support Assumption(s)

- The County will provide McIntyre copies of Formal Notification letters mailed to the Tribes and any responses received.

Task 2.1 - First and Second Administrative Draft EIR Assumption(s)

- McIntyre will respond to one set of consolidated comments on the First and Second Administrative DEIR. McIntyre's Project Manager and lead CEQA specialist would attend a telephonic meeting to discuss Applicant and County comments.
- McIntyre will prepare and submit five (5) hard copies of the First ADEIR; 50 CDs.
- McIntyre will revise County Comments and submit five (5) hard copies of the Second ADEIR.

Task 2.3 – Staff Update/Coordination Meeting Assumption(s)

As discussed within the Section 3.1 Detailed Scope, the Project includes multiple meetings and hearings. Our scope includes the following meetings and hearings:

- Project Kickoff Meeting;
- Bi-Weekly Teleconferences;
- Public Scoping and Comment Review;
- EEC Meeting;
- Staff Update/Coordination Meetings – attendance at additional meetings, as needed;
- Planning Commission Hearing; and

- Board of Supervisor Hearing.

Task 3.1 Public Review Draft EIR

- Printing costs of the Draft EIR and Technical Appendices are assumed to be $140 per EIR and $220 per technical appendix, based on a total page count of 2,156 pages. It should be noted that the Laurel Cluster Solar Farms Project EIR was 562 pages in length and the technical appendices (Appendix A thru L) were 1,594 pages in length.

Task 3.2 – CEQA Notice(s) - Notice of Completion/Availability Assumption(s)

- Imperial County shall file the NOA with the County Clerk's office and publish the NOA in a newspaper of general circulation. Imperial County shall pay all publishing fees as required by any newspapers.
- Imperial County will distribute Public Review DEIR to stakeholders.

Task 4.1 – Response to Comments Assumption(s)

- If the County receives excessive comments on the Public Review DEIR, then the costs will be determined on a "negotiated basis" when the Draft EIR comments become available.
- Excessive comments are generally considered to be more than twenty (20) commenting agencies/individuals and/or over 150 comments that require answers other than "comment noted."

Task 4.2 – Preparation of Administrative Final Draft and Public Review Final EIR Assumption(s)

- County shall cover all costs for distributing copies of the FEIR.

5.0 PROJECT SCHEDULE

McIntyre's project management team is committed to managing this EIR in close coordination with the County, and in navigating the process as quickly and efficiently as possible. We will apply several techniques to increase efficiency and meet schedules, including:

- Early and on-going communication with County staff;
- Conducting a joint site visit with planning staff, project applicant, and McIntyre staff to identify key resources and concerns;
- Providing early drafts of the project description, and the description of alternatives; and
- Where possible, conducting tasks simultaneously rather than sequentially.

McIntyre is prepared to commence work upon receipt of the County's notice to proceed (NTP), and we propose to complete the EIR within an 11-month period (See Project Schedule in Exhibit 1). To ensure adherence to the project schedule, we emphasize the need for a clear, accurate project description, and a well-defined range of alternatives. Through our work on solar and other renewable energy projects, we know the design details that matter most in an effective project description. Our proposed schedule also includes time for the County's review of the drafts, preparation of final reports as well as identification of key project milestones.

Based on our previous experience operating as a third-party EIR preparer for renewable energy developments throughout California, we understand that the project schedule is often subject to variance based on issues and circumstances that are unforeseen. As unknown events may arise, we are willing to adapt our proposed timeframe,

allowing for flexible work scheduling to accommodate the County and the Applicant. A copy of our proposed schedule is provided at the end of this proposal as Exhibit 1.

6.0 COST ESTIMATE/MILESTONES

6.1 Cost

McIntyre's estimated time and materials (T&M) "not to exceed" price to perform the scope of work as stated in Section 3 is $152,982.35. The only exception to the "not to exceed cost" shall be the response to public comments received on the Draft EIR. If the County receives excessive comments on the DEIR (e.g. more than twenty (20) commenting agencies/individuals and/or more than 150 comments that require responses other than "comment noted"), then the costs will be determined on a "negotiated basis" when the Draft EIR comments become available.

Prior to any cost overruns or costs associated with the performance of services outside the scope of this proposal; McIntyre will discuss first then seek written approval from the County Planning and Development Services Director, or Jim Minnick, before such costs are incurred. Failure to get prior written approval may result in such costs being disallowed.

A detailed cost summary by task is provided at the end of this proposal as Exhibit 2.

6.1.1 Other Direct Costs and Travel Expenses

McIntyre's direct labor rates do not include specific job-identifiable expenditures. Such costs are categorized as other direct costs (ODCs), which include:

- Report production;
- Outside consulting fees and subcontractors; and
- Travel.

Travel expenses are chargeable directly to the project for actual expenses incurred and include airfare, lodging and per-diem; automobile, van, and truck rental; mileage; tolls; parking; and taxies. Lodging and per-diem expenses are paid in accordance with Federal Travel Regulation guidelines. Note that McIntyre does not charge for travel time or mileage.

6.1.2 Markup

ODCs (out-of-pocket expenses), including travel and subcontractor costs, are invoiced at actual plus 10%.

6.1.3 Invoicing

Invoices shall be submitted by McIntyre on a monthly basis. McIntyre's standard invoice provides a list of labor hours and rates by labor category plus a list of project Other Direct Costs (ODCs) and subcontracted services.

Customized formats and copies of individual timesheets and receipts can be provided for an additional administrative charge.

Invoices will be provided based on the project milestones described herein and include a percentage complete of that milestone.

6.1.4 Terms

McIntyre's payment terms are net 30 days from date of invoice. Late payments will be assessed a 1% per month carrying charge.

6.2 Summary of Staff Costs and Hours

The Exhibit 2 provides a summary of estimated staff time and cost breakdowns by task, including those from our subconsultant team.

These costs are valid for a period of 90 days from the date of this proposal.

6.3 Project Milestones

A summary of project milestones for this effort is provided in Table 4 below.

Table 4. Project Milestones

Project Milestones Milestone	Week (estimated time frame)
TASK 1 - PROJECT INITATION/PROJECT MANAGEMENT	
▪ Kick-Off Meeting/Site Visit	Week 1
▪ Data Collection/Data Needs List	Weeks 2-3
▪ Draft Project Description	Week 1-8
▪ Draft NOP/Initial Study	Weeks 1-8
▪ Final Project Description	Week 9
▪ Final NOP/Initial Study	Week 9
▪ EEC and Scoping Meeting Preparation/Attendance	Weeks 15-16
▪ Scoping Summary Memo/Table	Weeks 17
▪ Peer Review of Applicant Prepared Technical Reports	Weeks 1-4
▪ Preparation of Additional Tech Reports	Weeks 1-6
▪ AB-52 Tribal Consultation Efforts	Weeks 5-14
TASK 2 - ADMINISTRATIVE DRAFT EIR	
▪ 1st Administrative Draft EIR	Weeks 5-16
▪ 2nd Administrative Draft EIR	Weeks 21-24
▪ ACLU Hearing	Week 25
TASK 3 - PUBLIC REVIEW DRAFT EIR	
▪ Finalize and Print Draft EIR	Weeks 27-28
▪ Publish NOA/Draft EIR	Weeks 29-35
TASK 4 - FINAL EIR	
▪ Draft Responses to Comments, 1st Administrative Draft Final EIR	Weeks 36-40
▪ 2nd Administrative Draft Final EIR	Weeks 43-45
▪ Final EIR	Week 46

Table 4. Project Milestones

Project Milestones Milestone	Week (estimated time frame)
TASK 5 - MITIGATION MONITORING AND REPORTING PROGRAM	
▪ Draft MMRP	Weeks 15-20
▪ Final MMRP	Weeks 37-42
TASK 6 - FINDINGS AND SOC	
▪ CEQA Findings/Statement of Overriding Consideration	Weeks 46-49
▪ PC Hearing Preparation/Attendance	Weeks 50-52
▪ Board Hearing Preparation/Attendance	Week 52

7.0 CONFLICT OF INTEREST

To the best of its knowledge, McIntyre does not have any conflict or potential conflict concerning the submission of this proposal. McIntyre has no current or ongoing contracts and has not maintained any previous contracts with the applicant during the past year. Furthermore, McIntyre has not prepared any technical studies for the Applicant, whether currently or within the past year.

8.0 CONTRACT EXCEPTIONS

To the Regarding the County's standard contract language. McIntyre requests the following change in the language in Section 18 Indemnification.

"CONSULTANT shall hold harmless, defend, and indemnify COUNTY and its officers, officials, employees and volunteers from and against any and all liability, loss, damage, expense, costs (including without limitation costs and fees of litigation) of every nature solely arising out of ~~or in connection~~ with CONSULTANT's ~~performance of work hereunder or its~~ failure to comply with any of its obligations contained in this Agreement, except such loss or damage which was caused by the sole negligence or willful misconduct of COUNTY."

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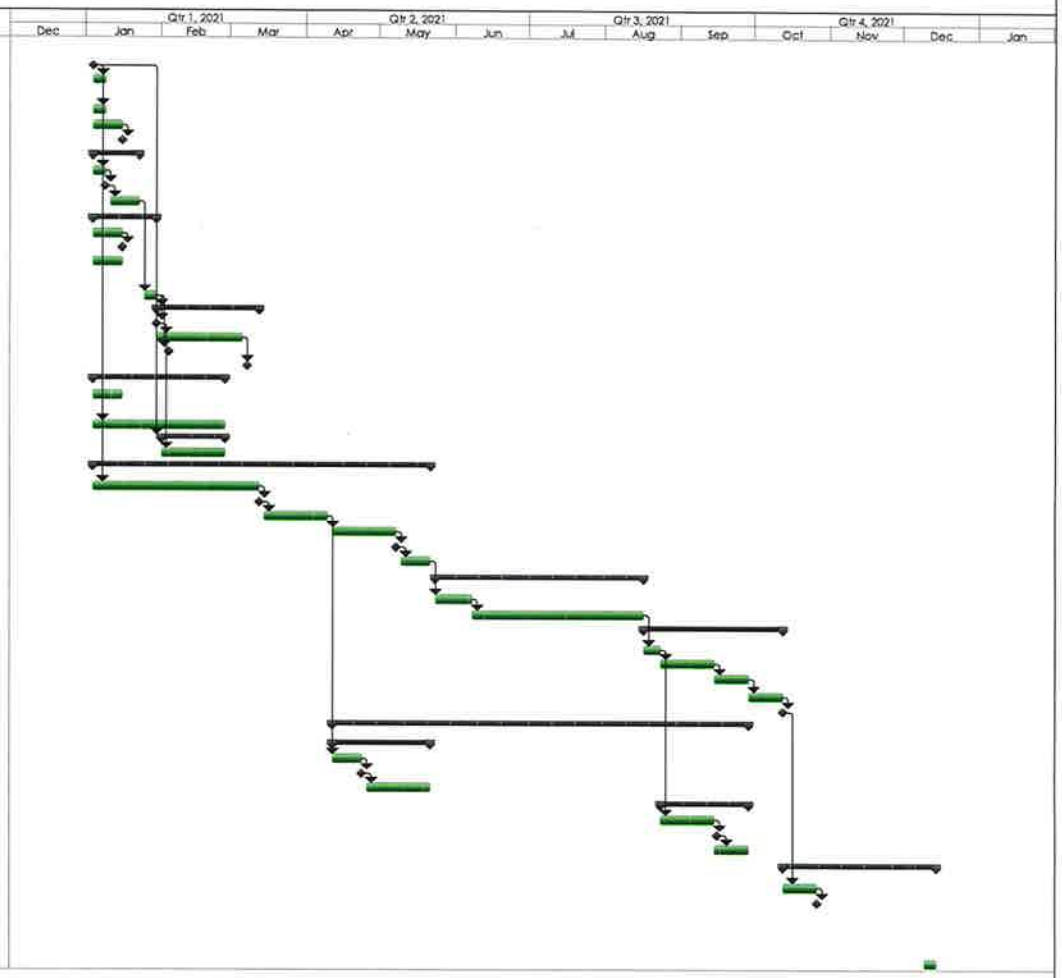
Exhibit 1 - VEGA SES 2, 3, & 5 Solar EIR Schedule

ID	Task Name	Duration	Start	Finish	Predecessors
1	***TASK 1 - PROJECT INITATION/PROJECT MANAGEMENT***	***62.38 days***	***Mon 1/4/21***	***Wed 3/31/21***	
2	NTP	0 days	Mon 1/4/21	Mon 1/4/21	
3	Kick-Off Meeting/Submit Data Needs List/Receive Technical Reports	1 wk	Mon 1/4/21	Fri 1/8/21	2
4	Site Visit (concurrent with kickoff mtg)	1 wk	Mon 1/4/21	Fri 1/8/21	2
5	Data Collection	2 wks	Mon 1/4/21	Fri 1/15/21	
6	Submit Data Needs List	0 days	Fri 1/15/21	Fri 1/15/21	5
7	**Draft Project Description**	**15 days**	**Mon 1/4/21**	**Fri 1/22/21**	
8	Prepare Draft Project Description	1 wk	Mon 1/4/21	Fri 1/8/21	2
9	Submit to County	0 days	Fri 1/8/21	Fri 1/8/21	8
10	***County Reviews Draft PD, Provides Comments***	***2 wks***	***Mon 1/11/21***	***Fri 1/22/21***	9
11	**NOP/Initial Study and CEQA Notices**	**20 days**	**Mon 1/4/21**	**Fri 1/29/21**	
12	Prepare Draft NOP/Initial Study/CEQA Notices	2 wks	Mon 1/4/21	Fri 1/15/21	
13	Submit to County	0 days	Fri 1/15/21	Fri 1/15/21	12
14	***County Reviews Draft NOP/IS/CEQA Notices; Provides Comments***	***2 wks***	***Mon 1/4/21***	***Fri 1/15/21***	
15	ME Finalizes NOP/Initial Study/County Reviews	1 wk	Mon 1/25/21	Fri 1/29/21	10
16	**Public Scoping**	**30 days**	**Fri 1/29/21**	**Fri 3/12/21**	**15**
17	Publish and post NOP/IS to SCH	0 days	Fri 1/29/21	Fri 1/29/21	15
18	NOP Public Review Period	35 edays	Fri 1/29/21	Fri 3/5/21	17
19	EEC Meeting/Scoping Meeting (EEC Meets Thursdays)	1 day	Thu 2/4/21	Thu 2/4/21	15
20	ME Receives All Scoping Comments	1 wk	Mon 3/8/21	Fri 3/12/21	18
21	**Technical Reports**	**40 days**	**Mon 1/4/21**	**Fri 2/26/21**	
22	ME Conduct Peer Reviews (Applicant Studies Available at Kick-Off)	2 wks	Mon 1/4/21	Fri 1/15/21	
23	ME Completes Additional Tech Reports	8 wks	Mon 1/4/21	Fri 2/26/21	2
24	**AB-52 Consultation Support**	**20 days**	**Mon 2/1/21**	**Fri 2/26/21**	**2**
25	Conduct Followup (as nec - during Public Scoping Period)	20 days	Mon 2/1/21	Fri 2/26/21	17
26	***TASK 2 - ADMINISTRATIVE DRAFT EIR***	***100 days***	***Mon 1/4/21***	***Fri 5/21/21***	
27	Prepare 1st Admin Draft EIR	10 wks	Mon 1/4/21	Fri 3/12/21	2
28	Submit to County	0 days	Fri 3/12/21	Fri 3/12/21	27
29	County Reviews/Provide Comments	4 wks	Mon 3/15/21	Fri 4/9/21	28
30	Prepare 2nd Admin Draft EIR	4 wks	Mon 4/12/21	Fri 5/7/21	29
31	Submit to County	0 days	Fri 5/7/21	Fri 5/7/21	30
32	***County Reviews/Provide Comments***	***2 wks***	***Mon 5/10/21***	***Fri 5/21/21***	31
33	***TASK 3 - PUBLIC REVIEW DRAFT EIR***	***60 days***	***Mon 5/24/21***	***Mon 8/16/21***	
34	Finalize and Print Draft EIR/Submit to SCH	2 wks	Mon 5/24/21	Mon 6/7/21	32
35	Publish NOA/Draft EIR Public Review Period	50 days	Tue 6/8/21	Mon 8/16/21	34
36	***TASK 4 - FINAL EIR***	***40 days***	***Tue 8/17/21***	***Tue 10/12/21***	
37	County Provides all comments on Draft EIR Comments	1 wk	Tue 8/17/21	Mon 8/23/21	35
38	ME Prepares Responses To Comments/ Admin FEIR	3 wks	Tue 8/24/21	Tue 9/14/21	37
39	***County Reviews/Provide Comments***	***2 wks***	***Wed 9/15/21***	***Tue 9/28/21***	38
40	Finalize & Print Final EIR	2 wks	Wed 9/29/21	Tue 10/12/21	39
41	Submit FEIR to County	0 days	Tue 10/12/21	Tue 10/12/21	40
42	***TASK 5 - MMRP***	***120 days***	***Mon 4/12/21***	***Tue 9/28/21***	
43	**Draft MMRP (concurrent with 2nd Admin DEIR)**	**30 days**	**Mon 4/12/21**	**Fri 5/21/21**	
44	ME Prepares Draft MMRP (Concurrent with 2nd SCDEIR)	2 wks	Mon 4/12/21	Fri 4/23/21	29
45	Submit to County (Concurrent with 2nd SC DEIR)	0 days	Fri 4/23/21	Fri 4/23/21	44
46	***County Reviews, Provides Comments***	4 wks	Mon 4/26/21	Fri 5/21/21	45
47	**Final MMRP (concurrent with Admin FEIR)**	**25 days**	**Tue 8/24/21**	**Tue 9/28/21**	
48	ME Prepares Final MMRP (Concurrent with RTC)	3 wks	Tue 8/24/21	Tue 9/14/21	37
49	Submit to County (Concurrent with RTC)	0 days	Wed 9/15/21	Wed 9/15/21	48FS+1 day
50	***County Reviews/Provide Comments***	2 wks	Wed 9/15/21	Tue 9/28/21	49FS-1 day
51	***TASK 6 - CEQA FINDINGS/NOTICE OF DETERMINATION***	***43 days***	***Wed 10/13/21***	***Tue 12/14/21***	
52	Prepare Findings/SOC/Consistency Findings	2 wks	Wed 10/13/21	Tue 10/26/21	41
53	***PC Hearing (Billed under Task 4, placed here for scheduling purposes only)*****	2.2 wks	Wed 10/27/21	Wed 11/10/21	52
54	***Board Hearing (Billed under Task 4, placed here for scheduling purposes only)******	3.8 wks	Thu 11/11/21	Thu 12/9/21	53
55	County Files NOD	5 edays	Thu 12/9/21	Tue 12/14/21	54



**-Estimated: Planning Commission meets 2nd and 4th Wednesday of the month
***-Estimated: Board of Supervisors meets Thursdays
ME = McIntyre Environmental LLC

Task | Milestone | Summary | Project Summary | Progress

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EXHIBIT 2 - VEGA SES 2, 3 & 5 PROPOSED PROJECT BUDGET

			Task 1 Project Initiation/Project Management		Task 2 Admin Draft EIR		Task 3 Public Review Draft EIR		Task 4 Final EIR		Task 5 MMRP		Task 6 CEQA Findings/NOD		PROJET TOTALS	
PART I		DIRECT SERVICES														
STAFF		FFP/HR	HRS	COST	HRS	COST	HRS	COST	HRS	COST	HRS	COST	HRS	COST	HRS	COST
Project Manager		$ 115.00	100	$ 11,500	60	$ 6,900	28	$ 3,220	60	$ 6,900	12	$ 1,380	16	$ 1,840	276.00	$ 31,740
Environmental Planner		$ 100.00	18	$ 1,800	40	$ 4,000			16	$ 1,600					74.00	$ 7,400
Environmental Analyst		$ 95.00	24	$ 2,280	120	$ 11,400			40	$ 3,800					184.00	$ 17,480
	McIntyre Subtotal		142	$ 15,580.00	220	$ 22,300.00	28	$ 3,220.00	116	$ 12,300.00	12	$ 1,380.00	16	$ 1,840.00	534.00	$ 56,620.00
Sub-Consultants																
BRG Consulting (CEQA Compliance)			116	$ 15,326.44	176	$ 19,466.34	56	$ 5,279.86	68	$ 8,717.11	10	$ 1,519.30	6	$ 837.89	432	$ 51,146.93
Senior Project Manager		$ 170.35	60	$ 10,221.12	48	$ 8,176.90	8	$ 1,362.82	36	$ 6,132.67	8	$ 1,362.82	4	$ 681.41	164	$ 27,937.73
Senior Environmental Planner		$ 167.65		$ -		$ -		$ -		$ -		$ -		$ -	0	$ -
Enironmental Analyst/Planner II		$ 97.34	8	$ 778.72	16	$ 1,557.44		$ -		$ -		$ -		$ -	24	$ 2,336.16
Visual Simulations Specialist		$ 91.94	24	$ 2,206.56		$ -		$ -		$ -		$ -		$ -	24	$ 2,206.56
GIS Specialist		$ 98.43	12	$ 1,181.16	48	$ 4,724.64	8	$ 787.44	4	$ 393.72		$ -		$ -	72	$ 7,086.96
Documents Manager		$ 78.24	12	$ 938.88	64	$ 5,007.36	40	$ 3,129.60	28	$ 2,190.72	2	$ 156.48	2	$ 156.48	148	$ 11,579.52
Birdseye (Peer Review Air/ GHG, Noise Report)			32	$ 5,120.00	0	$ -		$ -		$ -		$ -		$ -	32	5,120.00
Principal		$ 160.00	32	$ 5,120.00		$ -									32	5,120.00
Mileage (b)(1)				$ -		$ -									-	-
															-	-
Cogstone (Cult Report Peer Review, AB52 Support)				$ 1,970.00	0	$ -		$ -		$ -		$ -		$ -	-	1,970.00
Principal Investigator III		$ 145.00	2	$ 290.00	0	$ -									2	290.00
Principal Investigator I		$ 105.00	16	$ 1,680.00		$ -									16	1,680.00
Mazuta (Peer Review Traffic Report)			12.5	$ 2,000.00	0	$ -		$ -		$ -		$ -		$ -	13	2,000.00
Senior Engineer I		$ 150.00	12.5	$ 2,000.00		$ -									13	2,000.00
Ninyo & Moore (Peer Review Geotech Report & Phase I ESA)			75	$ 12,645.00	0	$ -		$ -		$ -		$ -		$ -	75	$ 12,645.00
Principal Engineer/Geologist/Environmental Scientist		$ 178.00	12	$ 2,136.00		$ -									12	$ 2,136.00
Senior Engineer/Geologist/Environmental Scientist		$ 168.00	59	$ 9,912.00		$ -									59	$ 9,912.00
Data Processor		$ 73.00	4	$ 292.00		$ -									4	$ 292.00
Environmental Data Base Fee		$ -		$ 305.00		$ -									0	$ 305.00

EXHIBIT 2 - VEGA SES 2, 3 & 5 PROPOSED PROJECT BUDGET

			Task 1		Task 2		Task 3		Task 4		Task 5		Task 6			
			Project Initiation/Project Management		Admin Draft EIR		Public Review Draft EIR		Final EIR		MMRP		CEQA Findings/NOD		PROJET TOTALS	
PART I		DIRECT SERVICES														
STAFF		FFP/HR	HRS	COST	HRS	COST	HRS	COST	HRS	COST	HRS	COST	HRS	COST	HRS	COST
PaleoServices/SDNHM (Paleo Report)			47	$ 4,824.75	0	$ -		$ -		$ -		$ -		$ -	47	$ 4,824.75
Principal Investigator		$ 135.00	5	$ 675.00		$ -									5	$ 675.00
Paleontologist		$ 65.00	8	$ 520.00		$ -									8	$ 520.00
Report Writer		$ 88.00	34	$ 2,992.00		$ -									34	$ 2,992.00
Record Search Fees				$ 264.00		$ -									0	$ 264.00
Mileage (650 miles @ 0575/mile)				$ 373.75											0	$ 373.75
															0	

EXHIBIT 2 - PROPOSED PROJECT BUDGET, Pg. 2

SesJay (Peer Review Biological Report)			50	$ 4,500.00	0	$ -		$ -		$ -	0	$ -		$ -	0	$ 4,500.00
Senior Biologist		$ 100.00	25	$ 2,500.00		$ -									25	$ 2,500.00
Staff		$ 80.00	25	$ 2,000.00		$ -									25	$ 2,000.00
															0	$ -
TOTAL DIRECT SERVICES (LABOR)			353	$ 61,966.19	96	$ 41,766.34	84	$ 8,499.86	184	$ 21,017.11	22	$ 2,899.30	22	$ 2,677.89	1,633	$ 138,826.68
PART II		DIRECT COSTS														
ITEM		RATE	AMT	COST	AMT	COST	AMT	COST	AMT	COST	AMT	COST	AMT	COST		COST
Vehicle Milnage (100 miles per trip (2x) @ $0.575/mile)		$ -		$ -						$ 115.00						$ 115.00
EIR Printing		$ 140.00			10	$ 1,400.00	5	$ 700.00	5	$ 700.00						$ 2,800.00
Appendices Printing		$ 220.00					5	$ 1,100.00	5	$ 1,100.00						$ 2,200.00
CDs		$ 5.00		$ -		$ -	50	$ 250.00	50	$ 250.00						$ 500.00
Lodging (4)		$ 110.00	1	$ 110.00		$ -		$ -		$ -		$ -		$ -		$ 110.00
Shipping (USPS Priority Mail - Own box fits/ships $35)		$ 35.00		$ -	2	$ 70.00	2	$ 70.00	2	$ 70.00		$ -		$ -		$ 210.00
Subconsultant Administrative Cost (10%)				$ 4,638.62		$ 1,946.63		$ 527.99		$ 871.71		$ 151.93		$ 83.79		$ 8,220.67
TOTAL DIRECT COSTS (ODCs)				$ 4,748.62		$ 3,416.63		$ 2,647.99		$ 3,106.71		$ 151.93		$ 83.79		$ 14,155.67
TOTAL FEE				$ 66,714.81		$ 45,183		$ 11,147.84		$ 24,123.82		$ 3,051.23		$ 2,761.68		$ 152,982.35

Notes

Miles Costs Based on 2020 Federal Standard Milage Rates: $ 0.575

Detailed assumptions provided in Proposal

Appendix A: KEY STAFF RESUMES

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DAVID L MCINTYRE, CEP

MCINTYRE ENVIRONMENTAL

PROJECT MANAGER

EDUCATION

M.A. Geography, 2000, San Diego State University,
M.S. Environmental Management, 1997, National University
B.S. History, 1990, U.S. Naval Academy,

CERTIFICATIONS

LEED AP

CEP

Seasoned project manager with 27 years of private-sector and DOD experience. Over 18 years in the environmental consulting industry and over 10 years' experience as a U.S. Marine Corps officer. Prior to moving to Tucson, he established Ecology and Environment's (E & E) San Diego office in 2006 and grew it to 11 Full Time staff with annual revenues in excess of $2M. Primary contract representative for E & E's Naval Facilities Engineering Command (NAVFAC) Southwest NEPA contract; managed three Range and Aviation Installation Compatible Use Zone (RAICUZ) studies and four EAs for NAVFAC Southwest **worth in excess of $2M**.

Details of Mr. McIntyre's specific experience is as follows:

MCINTYRE ENVIRONMENTAL LLC July 2016 to Present

Principal Environmental Scientist

- Responsible for all aspects of marketing and business development for McIntyre Environmental, LLC.

Select Project Experience

- **Glamis Specific Plan Area, Imperial County, CA**

For the Imperial County Planning and Development Services Department McIntyre Environmental is preparing and Environmental Impact Report for the Glamis Specific Plan Area under CEQA. Polaris Industries Inc (the Applicant) acquired 166 acres of land and buildings associated with the historic Glamis Beach Store in Glamis, California in early 2018. This acreage encompasses the Glamis Specific Plan Area (GSPA) which was designated in the Imperial County General Plan Land Use Element. The EIR will evaluate the impacts of granting a General Plan Amendment; a Zone Change; and a Conditional Use Permit to support development and creation of a Specific Plan.

- **Controlled Thermal Resources Hell's Kitchen Geothermal Exploration Project. Imperial County, CA.** Working as a subcontractor to BRG Consulting, McIntyre Environmental helped to prepare an Addendum Environmental Impact Report (EIR) under CEQA for the Hell's Kitchen geothermal energy project near the Salton Sea in Imperial County, CA. This project analyzed the impacts of geothermal exploration including seismic surveys and exploration well drilling. This EIR was completed less than 9 months from notice to proceed.

- **Trinity Cultivation and Manufacturing Facility, Calexico, CA.** As a subcontractor to Ericsson-Grant Inc. (EGI), McIntyre Environmental helped to prepare an EIR for the Trinity Cultivation and Manufacturing Facility for the City of Calexico, California. McIntyre is prepared the public services and utilities and noise sections of this EIR. The project was approved August

22, 2018 by the Calexico City Council in a unanimous vote. It was one of the first EIRs prepared in support of a commercial cannabis cultivation and manufacturing business.

- **El Portal Housing Project, Calexico, CA.** As a subcontractor to EGI, McIntyre Environmental helped to prepare an EIR for the El Portal Housing Project for the City of Calexico, California. McIntyre prepared the hydrology, recreation, public services and utilities, and hazards sections.

BUREAU OF LAND MANAGEMENT **January 2014 to July 2016**

Planning and Environmental Coordinator (January 2014 to July 2016)

- Planning and Environmental Coordinator for the BLM Tucson Field Office. Primary focus on preparation of the San Pedro Riparian National Conservation Area (SPRNCA) RMP and Environmental Impact Statement (RMP/EIS). Oversaw relations with five cooperating agencies as well as an extensive public involvement process. Prepared Alternatives Analysis and oversaw preparation of the Travel Management Plan (TMP) which was being done concurrent with the RMP/EIS. Facilitated more than 20 public meetings and field trips related to alternatives development and TMP development in support of the RMP.

Select Project Experience

- **Keystone Peak Prescribed Fire EA:** Managed preparation of the Keystone Peak Prescribed Fire EA for the BLM Tucson Field Office. This EA analyzed the environmental impacts of a prescribed fire on over 3,000 acres of public, private and state-managed lands in Pima County, Arizona. Mr. McIntyre worked closely with the Natural Resources Conservation Service (NRCS) and the Altar Valley Conservation Alliance on development of the proposed action and conservation measures.

- **Las Cienega Watershed Grassland Restoration EA:** Managed preparation of the Las Cienega Watershed Grassland Restoration EA for the BLM Tucson Field Office. Almost all of this area is within the Las Cienegas National Conservation Area (LCNCA) in Pima County, Arizona. The LCNCA includes the Empire Ranch, a historic cattle ranching operation dating back to the 19th century which is still in operation today.

ECOLOGY AND ENVIRONMENT **June 2006 to January 2014**

Office Manager, Tucson, AZ (September 2011 – January 2014)

- Responsible for marketing and winning two geothermal leasing EIS with the BLM California Desert District. Both EIS included public scoping and comment meetings and development of public scoping documents and responses to public comments. Both projects amended the California Desert Conservation Area Plan.

Select Project Experience

- **West Chocolate Mountain Renewable Energy Evaluation Area EIS:** Managed preparation of an EIS addressing issuance of solar and wind energy rights of way (ROWs) and geothermal leasing for BLM's California Desert District. This planning area has high-potential solar, wind, and geothermal energy resources. The EIS provided an evaluation of the impacts of leasing public land for geothermal energy development and the granting of ROW applications for solar and wind energy projects. The project included public scoping meetings, preparation of a Class I cultural resource report, preparation of interim visual resource management

classifications, and preparation of a Draft and Final EIS and Record of Decision (ROD). The Final EIS was published in December 2012 and the ROD in August 2013.

- **Truckhaven Geothermal Leasing Area EIS:** For BLM's California Desert District Office, preparation of an EIS addressing the leasing of 14,700 acres of BLM land in Imperial County, CA for a geothermal energy project. Sited within a state off-highway vehicle recreation area, the project generated more controversy than BLM had anticipated. The team responded to over 1,000 comments, some of which required changes to the final EIS. The ROD was published in July 2008. The project was completed in less than two years.

- **Hudson Ranch II and Orni 21 Geothermal Power Plant EIRs.** For the Imperial County, California, Department of Planning and Development Services, directed the preparation of EIRs addressing issuance of conditional use permits for the proposed geothermal flash plants located in the Salton Sea Known Geothermal Resource Area. The EIRs evaluated the impacts of developing fallowed agricultural land for geothermal energy. The projects included public scoping meetings, paleontological surveys, and preparation of the draft and final EIRs. The ORNI 21 project also included burrowing owl surveys.

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Christina J. Willis

President | Lead CEQA Specialist

Education:
B.A. Economics,
Urban Planning
University of California,
San Diego

Christina has more than 30 years of environmental and project management experience in both the public and private sectors to ensure compliance with the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA). Christina has successfully completed more than 200 environmental documents ranging from Initial Studies and Environmental Assessments (EA) to Environmental Impact Reports (EIR), Environmental Impact Statements (EIS), and other CEQA/NEPA-related studies. She has effectively managed all project phases from conception through construction with diverse project teams of up to 15 technical specialties. Christina's projects— some highly complex and controversial —encompass large infrastructure projects. Christina is a leader in the environmental field and is routinely solicited by agency staff and project proponents to provide training and expertise on environmental impacts, mitigation and permitting strategies.

As the former Office Manager and Principal Planner at Ecology & Environment's San Diego Office, Ms. Willis' experience with utility scale renewable energy and transmission projects stretches back to 2007. She has also prepared environmental documents for small scale solar and battery storage projects.

RELEVANT EXPERIENCE

California Public Utilities Commission As-Needed Consultant

Ms. Willis is serving as the CEQA/NEPA Compliance Strategist for Ecology & Environment's As-Needed Consulting Contract awarded in January 2020 by the California Public Utilities Commission (CPUC).

Eldorado-Lugo Mohave Series Capacitor Upgrade, San Bernardino County, California, and Clark County, Nevada

As a subconsultant to 7Skyline, Ms. Willis successfully provided strategic consulting services to Southern California Edison (SCE) on the Eldorado-Lugo-Mohave Series Capacitor Project. In this role, Ms. Willis reviewed the Proponents Environmental Assessment and Technical Reports and identified a critical flaw in the multi-state air quality assessment. Because her technical expertise covers a wide range of environmental resources, she developed an air-quality assessment methodology that qualified the project for a CEQA Mitigated Negative Declaration and a NEPA Environmental Assessment and avoided preparation of an EIR and an EIS. She also facilitated agency coordination to ensure the timely issuance of a Permit to Construct from the California Public Utilities Commission, a Utility Environmental Protection Act permit from the Nevada Public Utility Commission, a Right of Way Grant from the Bureau of Land Management (BLM) and a Special Use Permit from the National Park Service.

Hudson Ranch II Geothermal Plant/Simbol Calipatria Plant II EIR, El Centro, CA (Project Manager) *

One project that exemplifies Ms. Willis' Imperial County experience is the single third-party EIR for the Hudson Ranch Power II (HR-2) Geothermal Project and the Simbol Calipatria Plant II (SmCP-2) Project prepared for Imperial County Planning & Development Services Department. Ms. Willis was the project manager for this EIR, which evaluated two distinct projects co-located on private land in the Salton Sea Known Geothermal Resource Area and included an electrical connection to the Imperial Irrigation District's 230-kV transmission line system.

Christina prepared the initial study, coordinated two public scoping meetings, and developed mitigation measures that helped the EIR withstand two legal challenges from both the California Union for Reliable Energy (CURE) and the Laborers International Union of North America (LIUNA), all on an accelerated schedule. Despite receiving a 5,000-page comment letter from LIUNA less than 30 minutes before the Planning Commission hearing, Ms. Willis was able to review and provide oral responses to all comments, which enabled the Planning Commission to certify the Final EIR and approve the project. Her team successfully defended the EIR and completed the entire fast-track CEQA process in six months.

*** Denotes projects completed with Ecology & Environment**

California Valley Solar Ranch EA, San Luis Obispo and Kern Counties, California (Project Manager) *

As a first-party consultant for SunPower Corporation, Christina managed the applicant-prepared NEPA EA for this 250-MW solar photovoltaic facility in eastern San Luis Obispo County, including upgrades to a 35-mile, 230-kV, transmission line spanning Kern and San Luis Obispo Counties. She prepared the EA to qualify for a loan guarantee through the United States Department of Energy (DOE) in record time, assessing controversial topics as water supply, prime farmland conversion, and biological impacts on San Joaquin kit fox and giant kangaroo rat. To keep pace with this fast-moving project, Christina worked with the applicant to incorporate project design features into the Proposed Action so that all significant impacts identified in the County-prepared EIR were reduced to minor impacts in the EA. Her rapid turnaround enabled the client to meet Federal requirements and secure a loan guarantee before the program deadline.

The EA received high praise from the DOE who remarked that the document, and in particular, the Administrative Record, was one of the best that they had ever seen. Now in operation in San Luis Obispo, at 250-MW on 4,700 acres of land, it is one of the world's largest operating solar photovoltaic (PV) power plants.

Clean Line Energy Partners Plains and Eastern Clean Line Transmission Project (Multiple States) *

Christina prepared two traffic technical reports for the Plains and Eastern Clean Line Transmission Project. This project included a 700-mile, ±600-kV high voltage direct current (HVDC) electric transmission system in Oklahoma, Texas, Arkansas and Tennessee; an alternating current (AC) collection system; and two converter stations in Oklahoma and Tennessee and numerous access roads. Both reports, prepared for the DOE, were accepted for use in preparing the project EIS.

Lucerne Valley Solar Project, San Bernardino County, California (Project Manager) *

Christina managed preparation of the third-party EIS for Chevron Energy Solutions' Lucerne Valley Solar Project. The project consisted of a 49-MW solar PV power plant on 422 acres of land. Prepared for BLM, the EIS addressed environmental impacts arising from construction, operation and decommissioning of the solar field and substation. In addition to an EIS, the project required an amendment to the California Desert Conservation Area Plan. The project was approved in 2010, becoming the first solar project approved on public land in BLM history and the first project approved under the "fast track" process created for the American Recovery and Reinvestment Act (ARRA) of 2009.

Eldorado Valley Utility Corridor Programmatic EA, Clark County, Nevada (Project Director) *

Christina served as the Project Director for preparation of the programmatic EA for the Las Vegas Field Office of the BLM. The Programmatic EA analyzed the potential impacts of permitting rights-of-way onto or across the Federally-administered utility corridors. The Programmatic EA will be used to assist future projects to comply with the Federal Land Policy Management Act (FLPMA) (Pub. Law 94-579) to grant Right-of-Ways to help ensure each facility authorized is constructed, operated, and terminated in a safe and environmentally sound manner.

Silver State Solar Project, Nevada (Deputy Project Manager) *

Christina helped prepare the third-party EIS addressing the 400-MW PV solar project on 2,900 acres of BLM land in the Primm Valley, 40 miles south of Las Vegas, Nevada. She assisted in the public scoping meetings, reviewed studies prepared by the proponent on behalf of the BLM and collaboratively developed alternatives with BLM management. She routinely oversaw project review meetings and took on other project management responsibilities, including completion of the final EIS, in absence of the project manager.

*** Denotes projects completed with Ecology & Environment**

Rachel V. Rowe

Environmental Planner | GIS Specialist

Education:
B.S. in Environmental Management and Protection/ Environmental Policy
California Polytechnic State University, San Luis Obispo

Rachel Rowe has three years of experience in environmental planning. As an environmental planner, Ms. Rowe's responsibilities include preparation, production, and review of environmental documentation including Environmental Impact Reports (EIR), Mitigated Negative Declarations, and Environmental Assessments and Initial Studies, pursuant to the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA). In addition, Ms. Rowe's experience includes data collection and Geographic Information Systems (GIS) applications for environmental impact analysis, land use planning, and permitting. Ms. Rowe has served as Project Manager, Environmental Planner, and GIS technician for numerous projects.

RELEVANT EXPERIENCE

Mesquite Regional Landfill Additional Uses of Rail Yard & Intermodal Facility, Imperial County, California (Environmental Planner)

Ms. Rowe served as an Environmental Planner on an Addendum EIR prepared for the Imperial County Planning and Development Services Department for Additional Uses of the Rail Yard and Intermodal Facilities at the Mesquite Regional Landfill (MRL). MRL is a Class III facility on 4,200 acres near Glamis California. It has a total capacity of 600 million tons that was permitted in 1996 to received 20,000 tons per day (tpd) by rail and 1,000 tpd by truck. In 2017, Los Angeles County Sanitation District (the landfill owner) sought approval of a conditional use permit (CUP) to utilize the MRL rail yard and intermodal facilities (Mesquite Intermodal Facility or MIMF) to deliver agricultural commodities to markets via train. This proposal included the delivery to the MIMF via truck of agricultural products originating within Calipatria, California and other commodities received from Mexico through the East Calexico Port of Entry.

A previously certified Final Subsequent EIR (2010 Final SEIR) evaluated impacts associated with the daily delivery of up to 4,000 tpd of MWS via 220 trucks. The Addendum EIR found that additional uses of the MIMF would not result in new, significant environmental effects or a substantial increase in the severity of effects previously-identified in the 2010 Final SEIR. Ms. Rowe assisted in preparation of the Initial Study Addendum EIR and the Mitigation Monitoring and Reporting Program for the Addendum EIR.

Daggett Solar 33 and Daggett Solar 66 Photovoltaic Solar Projects, San Bernardino County, California (Assistant Project Manager)

Ms. Rowe served as the Assistant Project Manager for preparation of a Visual Impact Analysis (VIA) for the proposed Daggett Solar 33 and Daggett Solar 66 Photovoltaic Solar Projects to assess potential visual impacts resulting from their construction, operation/maintenance and decommissioning activities. Both project sites, totaling 168-acres, are located on undeveloped land in the unincorporated area of San Bernardino County and located north of Interstate 40 (I-40) and are bisected by National Trails Highway (Historic Route 66) a County-designated scenic route near the community of Nebo.

The VIA utilized the Bureau of Land Management's Visual Resource Management System and evaluated each projects' consistency with the San Bernardino General Plan and Development Code. Visual Contrast Rating Sheets were also prepared for the projects in accordance with BLM Handbook H-8431-1. In addition, four (4) photographic simulations were created to represent potentially sensitive views from Historic Route 66/National Trails Highway and from I-40 within the Project area. The VIA incorporated the findings of the rating sheets, discussed applicable regulations and consistency with development criteria, and assessed the visual impact in accordance CEQA Guidelines Appendix G.

Based on the low profile of the solar panels (9-12 feet tall) as well as the projects' compliance with setback and screening requirements, no significant visual impacts were identified.

Riverside – San Bernardino Indian Health Replacement Health Clinic Projects (Environmental Planner)

Ms. Rowe assisted with the preparation of an Amended Environmental Assessment for the replacement of an existing healthcare facility on the Torres-Martinez Desert Cahuilla Indian Reservation in Thermal, California. The EA is being prepared in compliance with NEPA to support a Small Ambulatory Grant from the U.S. Department of Health and Human Services - Indian Health Service for a new 11,650 square foot health clinic on a 2.5 acre site to replace the existing clinic established in 1971 (Proposed Action). The EA analyzes potential impacts from the construction and operation of the Proposed Action and the No Action Alternative.

Ms. Rowe is also serving as the Environmental Planner for preparation of Environmental Assessments for replacement health clinics at the Cahuilla Reservation, in Aguanga California and at the Soboba Reservation, in San Jacinto California. Both EAs are being prepared for the Bureau of Indian Affairs consideration of private land leases for development of the replacement clinics.

BIRDSEYE
PLANNING GROUP

RYAN J. BIRDSEYE, PRINCIPAL

Ryan Birdseye is Principal and Owner of Birdseye Planning Group. Ryan has over 29 years of experience working with both public and private sector clients developing and implementing permitting strategies for a diverse range of infrastructure and land development projects. He is proficient in both the state (CEQA) and federal (NEPA) environmental review process, preparation and review of permitting documents and tracking permits from initial submittal through approval. He has a comprehensive knowledge of regulatory requirements, methods and protocol for evaluating project impacts to Air Quality, Greenhouse Gases and Noise/Vibration and routinely prepares technical reports addressing these topical areas for incorporation into environmental documents. He has a thorough knowledge of local environmental regulations and is a skilled writer and accomplished speaker with experience representing clients at permit hearings and making presentations to boards, commissions and interest groups.

REPRESENTATIVE AIR QUALITY/NOISE PROJECT EXPERIENCE:

Glamis Specific Plan EIR Technical Report Peer Review, Imperial County, CA. BPG provided peer review services for the Air Quality, Greenhouse Gas and Noise Technical Reports prepared for the Glamis Specific Plan application. The Project would result in a change in zoning from S-2 (Open Space / Preservation) to three separate zones (CR-1 neighborhood commercial), (CR-2 light commercial), (CR-3 heavy commercial) to facilitate the development of uses supporting Off-Highway Vehicle (OHV) activities in the Glamis area of unincorporated Imperial County.

Mesquite Landfill Railyard CUP Air Quality Report Peer Review, Imperial County, CA. BPG provided peer review services for the Air Quality Report prepared for the Mesquite Rail Yard Conditional Use Permit (CUP). The proposed project would allow use of existing infrastructure at the Mesquite Regional Landfill in Imperial County, California, for uses other than those approved under the current CUP. BPG evaluated the Air Quality Report prepared by the applicant's consultant for consistency with standard methods used statewide as well as those specifically required by the Imperial County APCD for preparation of air quality analyses.

Hell's Kitchen Exploratory Well Project, Imperial County, CA. BPG prepared the Air Quality/Greenhouse Gas and Noise Impact Reports for the proposed Hell's Kitchen Geothermal Project in unincorporated Imperial County. The technical reports are evaluating potential project-related impacts relative to current County requirements and consistency with the *Imperial County Renewable Energy and Transmission Element Update, Final Programmatic Environmental Impact Report.*

Imperial County/City of El Centro HUD NEPA Review Projects. As part of the NEPA review process for HUD compliance, BPG performed air emissions calculations and noise impact evaluations for three new affordable housing projects. The sites are located in the unincorporated town of Heber and the Cities of Imperial and El Centro.

Riverwalk Air Quality and Noise Technical Reports. BPG prepared Air Quality and Noise Technical Reports for the proposed Riverwalk project in the Mission Valley Planning Area of San Diego, CA. The project would repurpose the Mission Valley Golf Course site and include 4,200 residential apartment units, 1,000,000 square feet of office space and approximately 500,000 square feet of retail. The project would also include a new MTS trolley station.

Heritage Road Bridge Replacement Technical Studies, Chula Vista, CA. BPG prepared the Air Quality/Greenhouse Gas and Noise Studies for the proposed replacement of the Heritage Road Bridge, realignment of the bridge approaches and widening the segment of Main Street west of the bridge in the City of Chula Vista, CA. Reports were prepared consistent with Caltrans District 11 standards.

Price 4th Apartments Air Quality Report, San Diego, CA. Prepared an Air Quality and Noise Report for a 73 DU multi-family development (36- 3BR units; 33 2BR units, and a 1 BR unit), with 90 parking spaces in the City Heights neighborhood of San Diego.

Montezuma Road Hotel Project, San Diego, CA. Prepared an Air Quality/Greenhouse Gas and Noise Report for Montezuma Road hotel in the College Area Community Planning area. The project would redevelop and existing site with a 125-room hotel and related parking infrastructure.

The Aero Apartment Project, San Diego, CA. Prepared and Air Quality and Noise Report for the proposed demolition of approximately 29,280-square feet of buildings, surface parking, and related facilities and construction of a 434-unit multi-family residential project in the Kearney Mesa Community Planning Area.

Seabreeze Senior Living Center Air Quality Report/Greenhouse Gas Report, San Diego, CA. BPG prepared the Air Quality and Greenhouse Gas Reports for the proposed demolition of the existing equestrian facility and construction of a 128-unit senior residential care facility in the Carmel Valley Community Planning Area, San Diego, CA.

Centrum 6 Air Quality Report, San Diego, CA. Prepared an Air Quality Report for the proposed construction of 442 residential condominium units and one commercial condominium as part of the New Century Centre Master Plan in the Kearney Mesa Community Planning Area.

Hilltop/Euclid Mixed Use Project Air Quality Report, San Diego, CA. BPG prepared an Air Quality Report and CAP Checklist for a 160-unit mixed use project proposed for construction on a 9.39-acre site located near the southwest corner of Euclid Avenue and Hilltop Drive in the Encanto Community Planning area. The site is owned by Civic San Diego and currently being entitled for a combined market rate and affordable housing project.

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PALEONTOLOGY - ARCHAEOLOGY - HISTORY

JOHN GUST

Principal Investigator for Archaeology

EDUCATION

2016 Ph.D., Anthropology, University of California, Riverside (UCR)
2011 M.A., Anthropology, UCR
2007 M.A., Applied Geography, University of Colorado, Colorado Springs (UCCS)
2002 B.A., Anthropology, minor in Geography/Environmental Studies, UCCS

SUMMARY QUALIFICATIONS

Dr. Gust is a Registered Professional Archaeologist (RPA; #17432) with over 8 years of experience in field archaeology. He meets the qualifications required by the Secretary of the Interior's *Standards and Guidelines for Archaeology and Historic Preservation* and his field expertise includes pedestrian surveys, excavation monitoring, resource recording, and historic artifact analysis. Gust has managed cultural assessments for over 20 cellular tower projects and multiple assessments for construction of commercial and residential structures. He has also managed cultural resources monitoring projects for both public and private sector clients. Dr. Gust is a member of the Society for California Archaeology, Society for American Archaeology, and the American Anthropological Association.

SELECTED EXPERIENCE

Southern California Edison (SCE) Environmental Clearance On-Call Program, Statewide, CA. Cogstone was sub-contracted to provide on-call cultural resource monitoring services for various SCE projects throughout California. Cogstone conducted archaeological monitoring, GIS mapping, and prepared technical reports for over 57 task orders. Sub to Cardno. Principal Investigator for Archaeology. 2019-*ongoing*

Pacific Gas and Electric (PG&E) Master Services Agreement, Statewide, CA. Cogstone was sub-contracted to provide on-call cultural resource monitoring services for various PG&E projects throughout California. Cogstone conducted archaeological monitoring reports for over 14 task orders. Sub to Cardno. Principal Investigator for Archaeology. 2019-*ongoing*

Bell Gardens Water Reservoir Project, City of Bell Gardens, Los Angeles County, CA. Cogstone conducted a cultural and paleontological resources assessment to determine the potential impacts to cultural and paleontological resources during improvements which included a new two-million-gallon reservoir, booster pump station, well to be drilled, and other components. Services included record searches, Sacred Lands File search from the Native American Heritage Commission, and an intensive-pedestrian survey of the 1.7-acre project area. Sub to Infrastructure Engineers. Principal Investigator for Archaeology. 2019-2020

Santiago Canyon Estates Fuel Mod Project, unincorporated Orange County, CA. Cogstone conducted a cultural resources assessment to determine the potential for surface cultural resources for compliance with Orange County Fire Authority's Precise Fuel Modification Plan for zones of the Santiago Canyon Estates Community. Services included a cultural resources records search, Sacred Lands File search from the Native American Heritage Commission, and conducted a reconnaissance survey. Sub to Fire Safe Council East Orange County Canyons. Principal Investigator for Archaeology. 2020

Gaviota Telecommunications Monitoring Project, Gaviota State Park, Santa Barbara County, CA. Cogstone conducted cultural resources monitoring within a known archaeological site and contracted Native American monitoring through the Santa Ynez Band of Mission Indians per SHPO recommendations. All work and documentation was in compliance with NHPA, NEPA, and CEQA. The project involved the removal and replacement of a telecommunications pole and associated infrastructure. A total of 40 artifacts were recovered including groundstone, flaked tools, and lithic debitage. Sub to Trileaf Corporation. Principal Investigator for Archaeology & Report Author. 2019-2020

Dogwood Road Project, City of El Centro, Imperial County, CA. Cogstone conducted a cultural resources assessment to determine the potential effects to cultural resources resulting from the construction of United States Department of Agriculture (USDA) Part 70-B RD Funding assisted housing on a 2.2-acre parcel.

Cogstone conducted a record search, pedestrian survey, and determined that no further cultural resources work was necessary. The assessment provided environmental documentation as required by Section 106 of the National Historic Preservation Act (NHPA) and the California Environmental Quality Act (CEQA). The City of El Centro acted as the lead agency. Sub to Partner Science & Engineering, Inc. Principal Investigator for Archaeology. 2019-2020

Gates Canyon Stormwater Capture Project, unincorporated area of Calabasas, Los Angeles County, CA. Cogstone conducted cultural and paleontological resources monitoring for 31 days during proposed improvements to Gates Canyon Park that will allow the capture and storage of stormwater runoff from an adjacent 105-acre residential area. Monitoring was in compliance with Program Mitigation Measures (PMM) Cultural 3 (CUL-3), CUL-4, CUL-6, and CUL-7 (Environmental Science Associates 2015:3.4-23, 3.4-25, 3.4-26) and Task 11 of the Project scope of work as defined by the County of Los Angeles, Department of Public Works (LACDPW), Project Management Division II. LACDPW was the project proponent and acted as the lead agency under CEQA. Sub to Aspen Environmental. Monitoring Supervisor & Report Author. 2019

OC-44 Pipeline Rehabilitation Project, City of Newport Beach, Orange County, CA. Cogstone conducted cultural resources monitoring during ground-disturbing activities following a Cultural Resource Assessment of the APE in 2014 by Cogstone pursuant to the involvement of land managed by United States Army Corps of Engineers (Section 404 of the Clean Water Act), California Department of Fish and Wildlife, and California Coastal Commission (CCC). Although no cultural resources were identified within the APE, cultural resources and Native American monitoring were required as was stipulated in the Conditions of Approval by the CCC, as detailed in the Archaeological Construction Monitoring Treatment Plan for the project. Sub to Michael Baker. Supervisor. 2019

Faith Home/Garner Road Connection Project, Caltrans District 10, Stanislaus County, CA. Cogstone identified and evaluated cultural, paleontological, and historic resources present in or adjacent to the construction of a four-lane one-mile expressway. Cogstone produced an Archaeological Survey Report (ASR), Historic Properties Survey Report (HPSR), Historic Resources Evaluation Report (HRER), and Paleontological Identification and Evaluation Report (PIR-PER). Services included intensive level pedestrian surveys, mapping, records searches, DPR forms, and Native American consultation. Sub to Environmental Intelligence. Principal Investigator for Archaeology. 2019

Felicita Park Project, 742 Clarence Lane, City of Escondido, San Diego County, CA. This report documented compliance with the NHPA, NEPA, CEQA, County of San Diego guidelines and regulations, and other applicable laws and regulations during the demolition of an existing transmission facility. The monitoring program followed the Cultural Resources Monitoring and Inadvertent Discoveries Plan developed by Cogstone for the Project. The County of San Diego Department of Parks and Recreation acted as the lead agency. Project construction activities involved demolition of an existing transmission tower facility, including removal of a faux-broadleaf monopole tower by truck-mounted crane, the security fence area, and the upper portion of the reinforced concrete footing. Cogstone conducted monitoring during all ground-disturbing activities due to the sensitivity of the project area. Sub to Partner Science & Engineering. Supervisor & Report Author. 2019

Los Serranos Park Project, Chino Hills, San Bernardino County, CA. Cogstone conducted cultural, paleontological, and Native American monitoring during ground-disturbing activities of undeveloped lands during the construction of a new 6.6 acre neighborhood park. Record searches, background research, and lab analysis of recovered materials from the project area were completed. As a result, mitigation measures were recommended via a monitoring compliance report. Principal Investigator for Archaeology & Report Author. 2018-2019

Livery-Ramona MONO Cell Facility Project, City of Ramona, San Diego County, CA. Cogstone was contracted by CA Telecom Trileaf to conduct a record search review and site visit for the candidate site in anticipation of changes to equipment in use at the existing facility. This study was conducted in accordance with Section 106 of the National Historic Preservation Act. Services included background research, pedestrian survey, record search, and produced a cultural resources letter report. Archaeology Supervisor & Report Author. 2019

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PALEONTOLOGY - ARCHAEOLOGY - HISTORY

KIM SCOTT

Principal Investigator for Paleontology

EDUCATION

2013 M.S., Biology with paleontology emphasis, California State University, San Bernardino

2000 B.S., Geology with paleontology emphasis, University of California, Los Angeles

2015 Immersion course in geomorphology/geoarchaeology, National Park Service

TRAINING AND CERTIFICATIONS

2015 Trained and certified in geomorphology techniques, National Park Service, National Center for Preservation Technology and Training

2015 Certified 40-hour OSHA HAZWOPER, LA METRO, UPRR, NCTD, and RCTC rail safety

SUMMARY QUALIFICATIONS

Ms. Scott is a qualified Geologist and field Paleontologist with extensive survey, monitoring, and fossil salvage experience. She is familiar with the environmental compliance guidelines outlined in the Caltrans SER Vol. 1, Paleontology. She supervises field crews during surveys and construction monitoring, and conducts construction crew sensitivity training. Her work for heavy and light rail has involved extensive excavation activities for construction of tunnels, tracks, stations and associated facilities. Scott has managed multiple projects and prepared technical reports with Caltrans/FHWA/FTA/FRA as the lead agency and is knowledgeable of the processes and procedures required to obtain NEPA, NHPA Section 106 and CEQA environmental approvals. Major clients include L.A. Metro, Metrolink, LOSSAN, OCTA, RCTC, SANDAG, SANBAG, multiple Caltrans districts and municipalities. She is a Member of the Society of Vertebrate Paleontology and the Geological Society of America, serves as company safety officer and is the author of the company safety and paleontology manuals.

SELECTED PROJECTS

State Route 132 West Freeway/Expressway – Phase I, Caltrans District 10, City of Modesto, Stanislaus County, CA. Cogstone prepared the PMP for the project and is now conducting paleontological monitoring during the construction of approximately four miles of a four-lane freeway/expressway connecting SR-132 with the City of Modesto on a new alignment south of Kansas Avenue from Dakota Avenue to east of Needham Street. Weekly and Monthly reports are prepared. Sub to WSP. Principal Investigator for Paleontology. 2019-*ongoing*

Environmental and Biological Support Services for Transportation Improvement, Caltrans District 1, Lake, Mendocino, Humboldt, and Del Norte counties, CA. Managed multiple task orders for paleontological resources for Caltrans District 1. Work conducted for the task orders for paleontological assessments (PIR/PER). Projects included: Elk Creek Bridge Environmental Studies, Carlotta Curve Improvement, Three Bridges Replacement and Widening, South Eel River Bridge Seismic, Gualala Shoulders and Rumble, Albion Bridge, and Salmon Creek Bridge. Sub to ICF. Principal Investigator for Paleontology & Report Author. 2019-*ongoing*

Faith Home/Garner Road Connection Project, Caltrans District 10, Stanislaus County, CA. Cogstone identified and evaluated cultural, paleontological, and historic resources present in or adjacent to the construction of a four-lane one-mile expressway. Cogstone produced an Archaeological Survey Report (ASR), Historic Properties Survey Report (HPSR), Historic Resources Evaluation Report (HRER), and Paleontological Identification and Evaluation Report (PIR-PER). Services included intensive level pedestrian surveys, mapping, records searches, DPR forms, and Native American consultation. Sub to Environmental Intelligence. Principal Investigator for Paleontology, Geoarchaeologist, & Report Author. 2020

Purple Line Extension (Westside Subway) Section 1, Los Angeles County Metropolitan Transit Authority/Federal Transit Authority, Los Angeles County, CA. The project involved the extension of the subway from Wilshire/Western to the VA Facility in Westwood for 9 miles. Cogstone prepared the paleontological and cultural sections of the Final Environmental Impact Statement (FEIS) and Final

Environmental Impact Report (FEIR). Subsequently, Cogstone monitored test excavations for the exploratory shaft, prepared the paleontological mitigation and monitoring plans for the entire project and performed updated assessment, consultation, testing and new documents for refinements to the Section 3 alignment. Over 1,000 fossils were recovered. Sub to WSP. Principal Investiator for Paleontology. 2017-2019

State Route 57, Orangewood to Katella, Caltrans District 12, Cities of Orange and Anaheim, Orange County, CA. California Department of Transportation District 12, with assistance from cities of Anaheim and Orange, proposed to widen and restripe portions of the northbound side of the freeway from the Orangewood Avenue to Katella Avenue. Cogstone performed the survey, prepared a combined Paleontological Identification Report and Paleontological Evaluation Report, an Archaeological Survey Report with geoarchaeological section, and a Historical Property Survey Report. Sub to Michael Baker International. Principal Investigator for Paleontology, Geoarchaeologist, & Report Author. 2018

Interstate 605 and Katella, Caltrans District 12, City of Los Alamitos, Orange County, CA. OCTA with Caltrans District 12 and the City of Los Alamitos, proposed to update the I-605 and Katella Avenue interchange. Cogstone performed the survey, prepared a combined Paleontological Identification Report and Paleontological Evaluation Report, an Archaeological Survey Report with a geoarchaeological section on the potential for buried sites, a Historical Property Survey Report, and a Historical Resources Evaluation Report. Sub to WSP USA, Inc. Principal Investigator for Paleontology, Geoarchaeologist, & Report Author. 2018

Rancho del Oro Detention Basin Project, City of Oceanside, San Diego County, CA. The project involved a comprehensive flood control improvement program in the region of Loma Alta Creek to reduce downstream flooding in the lower region of the creek. Proposed improvements included realignment and channelization, reconstruction of 2 bridges, and construction of six detention basins in 3 separate locations. Services included a records search, a pedestrian survey of the estimated 27.1-acre project area, and prepared paleontological technical reports for inclusion in the project EIR. The lead agency under CEQA is the City of Oceanside and the federal lead agency is the Army Corps of Engineers. Sub to Michael Baker. Principal Investigator for Paleontology & Report Author. 2016

State Route 91 and Magnolia Avenue Improvements, Caltrans District 8, City of Riverside, Riverside County, CA. The City of Riverside with the California Department of Transportation District 8 proposed to improve the Magnolia Avenue onramp of State Route 91 between Buchanan Drive and Banbury Drive. Cogstone performed the survey and prepared an Archaeological Survey Report with geoarchaeological section. Sub to Michael Baker International. Geoarchaeologist & Report Author. 2016

Elvira to Morena Double Track Project, SANDAG , City of San Diego, San Diego County, CA. The project proposed to construct a second main track and realignment along a 10.3 mile stretch of double track, new bridges, retaining walls and extension or replacement of existing culverts under the railroad. Cogstone conducted a records search, background research, field survey, and assessment report. Sub to HDR Engineering. Co-Principal Investigator for Paleontology & Report Co-author. 2012-2016

Batiquitos Lagoon Double Track, SANDAG, Cities of Encinitas and Carlsbad, San Diego County, CA. Cogstone conducted a paleontological resources sensitivity assessment, paleontological records search at the San Diego Natural History Museum, literature review, field survey, and submitted a Paleontological Resources Report addressing potential impacts and mitigation measures, if any, applicable to construction and operation of the proposed one-mile-long segment of double-track addition. Sub to Helix/HNTB. Field and Laboratory Director. 2016

San Diego River Bridge Double Track Project, SANDAG, San Diego County, CA. The project involved an approximate one-mile segment of second main track (double tracking) and a bridge replacement with associated track and signal improvements starting in the vicinity of Control Point (CP) Tecolote and goes to the vicinity of CP Friar. Work is through the existing LOSSAN corridor as planned for in the 2003 LOSSAN Corridor Strategic Plan and evaluated in the Final Program EIR/EIS. Prepared a Paleontological Assessment Report. Simon Wong Engineering. Co-Principal Investigator for Paleontology/Report Co-author. 2013-2015

cogstone

PALEONTOLOGY - ARCHAEOLOGY - HISTORY

ERIC SCOTT
Paleontology QA/QC

EDUCATION

1990 M.A., Anthropology (Biological), University of California, Los Angeles
1985 B.A., Anthropology (Physical), California State University, Northridge

SUMMARY QUALIFICATIONS

Mr. Scott meets the qualifications outlined in Chapter 1, Volume 8, on paleontology of the Caltrans Standard Environmental Reference (SER). Scott also serves as an emeritus paleontology curator at the San Bernardino County Museum, an adjunct instructor at California State University, San Bernardino, and a research associate of the Natural History Museum of Los Angeles County and the La Brea Tar Pits and Museum. He is a 30+ year member of the Society of Vertebrate Paleontology where he currently serves on the Government Affairs Committee. He is a member of the Geological Society of America and is an editor for the Journal of Vertebrate Paleontology.

SELECTED PROJECTS

State Route 60 Truck Lanes Project, Caltrans District 8, City of Banning, Riverside County, CA. The Riverside County Transportation Commission (RCTC), in cooperation with Caltrans, proposed to construct an eastbound truck-climbing lane and westbound truck-descending lane – along with inside and outside standard shoulders in both directions. The total length of the project is 4.51 miles. A combined Paleontological Identification Report and Paleontological Evaluation Report (PIR/PER) found a high likelihood for this project to impact paleontological resources. Mitigation measures included a Paleontological Mitigation Plan (PMP) which included requiring a paleontological Worker Environmental Awareness Program (WEAP) training, signed repository agreement to establish a curation process, monitoring by a principal paleontologist, and defined standard field and laboratory methods. Cogstone is currently providing paleontological monitoring. To date, one fossil has been recovered. At the end of construction, Cogstone will prepare a Paleontological Monitoring Report (PMR). Caltrans is the lead agency under NEPA and CEQA. Sub to ECORP. Task Manager. 2019-*ongoing*

State Route 132 West Freeway/Expressway – Phase I, Caltrans District 10, City of Modesto, Stanislaus County, CA. Cogstone prepared the PMP for the project and is now conducting paleontological monitoring during the construction of approximately four miles of a four-lane freeway/expressway connecting SR-132 with the City of Modesto on a new alignment south of Kansas Avenue from Dakota Avenue to east of Needham Street. Weekly and Monthly reports are prepared. Sub to WSP. Task Manager. 2019-*ongoing*

Environmental and Biological Support Services for Transportation Improvement, Caltrans District 1, Lake, Mendocino, Humboldt, and Del Norte counties, CA. Managed multiple task orders for paleontological resources for Caltrans District 1. Work conducted for the task orders for paleontological assessments (PIR/PER). Projects included: Elk Creek Bridge Environmental Studies, Carlotta Curve Improvement, Three Bridges Replacement and Widening, South Eel River Bridge Seismic, Gualala Shoulders and Rumble, Albion Bridge, and Salmon Creek Bridge. Sub to ICF. Task Manager. 2019-*ongoing*

OCTA I-405 Monitoring SR-73 to I-605, Caltrans District 12, Orange County, CA. Cogstone prepared a Paleontological Mitigation and Monitoring Plan (PMMP) addressing the potential paleontological resources discovered during proposed work on approximately 16-miles of I-405 on the I-405 Improvement Project (project), between SR-73 and I-605 in Orange and Los Angeles Counties, California. Caltrans, in cooperation with the OCTA, propose to improve the available capacity by adding General Purpose lanes and a tolled Express Lane in each direction as well as other improvements to ramps and bridges. All work required is to satisfy CEQA and NEPA. This plan has also been prepared for compliance with Mitigation Measure PAL-1 of the Final EIR/EIS and the Environmental Management Plan, as well as Technical Provisions for the Design-Build Contract between OCTA and OC405 Partners Joint Venture Contract for the Design and Construction of the I-405 Improvement Project. Cogstone is current providing paleontological monitoring for the project. Task Manager. 2018-*ongoing*

Purple Line Extension (Westside Subway) Section 1, Los Angeles County Metropolitan Transit Authority/Federal Transit Authority, Los Angeles County, CA. The project involved the extension of the subway from Wilshire/Western to the VA Facility in Westwood for 9 miles. Cogstone prepared the

paleontological and cultural sections of the Final Environmental Impact Statement (FEIS) and Final Environmental Impact Report (FEIR). Subsequently, Cogstone monitored test excavations for the exploratory shaft, prepared the paleontological mitigation and monitoring plans for the entire project and performed updated assessment, consultation, testing and new documents for refinements to the Section 3 alignment. Over 1,000 fossils were recovered. Sub to WSP. Task Manager & Report Contributor. 2017-2019

Highway 111 Street Improvement Project, City of Indio, Riverside County, CA. In compliance with mitigation measures, Cogstone provided paleontological resources monitoring during the excavation and grading of a ~1.7 mile stretch of highway on a full-time basis for sediments five feet or more below the original ground surface. This project received Federal funding and this report has been produced in compliance with the National Environmental Policy Act (NEPA). Sub to ECORP. Task Manager & Report Author. 2018

Charcot Avenue Extension Over I-880 Project, Caltrans District 4, City of San Jose, Santa Clara County, CA. Cogstone produced a Paleontological Identification Report (PIR) to assess the potential for impacting fossil resources during the proposed construction of a two-lane extension. Cogstone consulted published literature and records for fossil localities within a one-mile radius of the project. Non-auguring excavations into native sediments were expected to be fairly minimal for embankments, utilities, and signal and lighting pole foundations. Due to the limited amount of excavations more than 10 feet deep, it was considered unlikely that fossils meeting significance criteria will be encountered on this project; therefore, no mitigation was recommended. Sub to David J. Powers. Principal Investigator for Paleontology & Report Author. 2018

SR 14 / Avenue N Operational Interchange Improvements Project, Caltrans District 7, City of Palmdale, Los Angeles County, CA. The purpose of this study was to identify and evaluate paleontological resources during the proposed upgrades and improvements to transportation facilities. Cogstone conducted a ground truthing survey and requested a record search from the Natural History Museum of Los Angeles County. Online records from the University of California Museum of Paleontology database and the Paleobiology Database were searched for fossil records as well as print sources. Ultimately, a combined PIR/PER were submitted and accepted with minimal comments. Sub to ECORP. Principal Investigator for Paleontology & Report Author. 2018

I-5 HOV Lane Expansion Project, SR-73 to Oso Pkwy, Caltrans District 12, Orange County, CA. Cogstone produced a Paleontological Mitigation Plan (PMP) to identify and evaluate any resources that may be affected by the widening of the I-5 between SR-73 and Oso Parkway, to assess any potential impacts to significant resources, and to recommend mitigation measures. The PMP identified paleontologically sensitive areas within the project area, the organization and responsibilities of the paleontological team, the responsibilities of other parties and the treatment and communications procedures to be implemented if paleontological resources are encountered during the project. Sub to ECORP. Principal Investigator for Paleontology & Report Author. 2017

Grove Avenue Corridor Project, Caltrans District 8, City of Ontario, San Bernardino County, CA. Cogstone produced a combined Paleontological Identification and Evaluation Report (PIR/PER) and Paleontological Mitigation Plan (PMP) to assess and plan for the potential for impacting fossil resources during proposed improvements to Grove Avenue south of Interstate 10. The proposed improvements included the widening of Grove Avenue from a four-lane roadway to a six-lane roadway from 4th Street to State Street/Airport Drive. The City of Ontario acted as the lead agency under CEQA and NEPA. Sub to Parsons. Task Manager. 2017

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PALEONTOLOGY - ARCHAEOLOGY - HISTORY

MOLLY VALASIK

Technical Expert – QA/QC

EDUCATION

2009 M.A., Anthropology, Kent State University, Kent, Ohio
2006 B.A., Anthropology, Ohio State University, Columbus, Ohio

TRAINING & CERTIFICATIONS

2017 Section 106 Advanced Seminar, Advisory Council for Historic Preservation, Washington D.C.

SUMMARY QUALIFICATIONS

Ms. Valasik is a Registered Professional Archaeologist (RPA; #989162) with over 10 years of experience in cultural resources management. She is a skilled professional who is well-versed in the compliance procedures of CEQA, NEPA, and Section 106 of the NHPA and regularly prepares cultural resources assessment reports for a variety of federal, state, and local agencies throughout California including Metro, Caltrans, OCTA, and SANDAG. She meets the qualifications required by the Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation and the standards outlined in Attachment 1 to Caltrans Section 106 Programmatic Agreement with the FHWA; and Chapter 2 on cultural resources, of the Caltrans Standard Environmental Reference (SER). She is accepted as a principal investigator for prehistoric archaeology by the State Office of Historic Preservation's Information Centers.

SELECTED PROJECTS

Faith Home/Garner Road Connection Project, Caltrans District 10, Stanislaus County, CA. Cogstone identified and evaluated cultural, paleontological, and historic resources present in or adjacent to the construction of a four-lane one-mile expressway. Cogstone produced an Archaeological Survey Report (ASR), Historic Properties Survey Report (HPSR), Historic Resources Evaluation Report (HRER), and Paleontological Identification and Evaluation Report (PIR-PER). Services included intensive level pedestrian surveys, mapping, records searches, DPR forms, and Native American consultation. Sub to Environmental Intelligence. Task Manager. 2019-2020

State Route 108/Highway 49 and Mackey Ranch Road Intersection Improvements Project, Caltrans District 10, Tuolumne County, CA. The Chicken Ranch Rancheria of Me-Wuk Indians of California (Tribe), in partnership with Caltrans, proposed to replace an intersection and convert to a roundabout designed to accommodate forecasted future traffic volumes and provide an alternative access route to the Chicken Ranch Rancheria. Cogstone completed an intensive-level pedestrian survey, CHRIS records search, sacred lands file search from the NAHC, Native American consultation, consulted with local history societies and preservation groups, and produced a Historical Resources Compliance Report (HRCR) and Archaeological Survey Report (ASR). Sub to Foothill Associates. Principal Investigator for Archaeology. 2019-2020

State Route 57 Northbound Improvement Project, Caltrans District 12, Orange County, CA. For this project on behalf of OCTA and Caltrans an Archaeological Survey Report (ASR) and Historic Property Survey Report (HPSR) technical reports were prepared for Section 106 of the NHPA compliance. Managed record search, Sacred Lands File search, extended Native American consultations, pedestrian archaeological survey, as well as coordination and approval by District 12 of an Area of Potential Effects (APE) map. Authored technical reports. Sub to WSP. Principal Investigator for Archaeology. 2018

Interstate 605/Katella Avenue Interchange Improvements Project, Caltrans District 12, Orange County, CA. Cogstone prepared a Historic Property Survey Report (HPSR), Historical Resources Evaluation Report (HRER), Archaeological Survey Report (ASR), and Extended Phase I (XPI) for Section 106 of the NHPA compliance. The project involved modifications to the interchange ramps and Katella Avenue. Managed record search, Sacred Lands File search, Native American consultations, intensive-level pedestrian archaeological and architectural surveys, subsurface testing, as well as coordination and approval by District 12 of an APE map. Sub to Michael Baker. Principal Investigator for Archaeology. 2018

Park Place Extension and Grade Separation EIR EA, Caltrans District 7, City of El Segundo, Los Angeles County, CA. For this local assistance project on behalf of the City of El Segundo, the project involved producing ASR/HRER/HPSR technical reports for Section 106 of the NHPA compliance. The City proposed extending Park Place from Allied Way to Nash Street with a railroad grade separation to implement a critical project improving traffic and circulation in the project area. Managed record search, Sacred Lands File search, Native American consultations, and intensive-level pedestrian archaeological and architectural surveys of the ~0.5-mile project along NBSF and UPRR rail lines and spur tracks, as well as coordinated approval by District 7 of an APE map. The HRER included DPR series 523 forms for seven built environment resources. Sub to Michael Baker. Principal Investigator for Archaeology. 2015-2017

Enterprise Canal/State Route 168 Pedestrian Bridge Project, Caltrans District 6, Clovis, Fresno County, CA. For this local assistance project on behalf of the City of Clovis, the project involved producing ASR/HPSR technical reports for Section 106 of the NHPA compliance. The City proposed construction of a pedestrian bridge over State Route 168 to provide direct access to the Clovis Community Hospital Complex. Cogstone conducted a record search, Sacred Lands File search, Native American consultations, intensive-level pedestrian archaeological survey, as well as coordination and approval by District 6 of an APE map. Principal Investigator for Archaeology for Archaeology. 2017

Magnolia Avenue Improvements, Caltrans District 8, Riverside, Riverside County, CA. For this local assistance project on behalf of the City of Riverside, the project involved producing ASR/HRER/HPSR technical reports for Section 106 of the NHPA compliance. The City proposed widening Magnolia Avenue between Buchanan and Banbury by narrowing the existing median. Managed record search, Sacred Lands File search, Native American consultations, intensive-level pedestrian archaeological and architectural surveys, as well as coordination and approval by District 8 of an APE map. The HRER included DPR series 523 forms for the evaluation of six properties all of which were determined not eligible for listing in the National Register. Sub to Michael Baker/PMC. Principal Investigator for Archaeology. 2016-2017

Batiquitos Lagoon Double Track, SANDAG, Cities of Encinitas and Carlsbad, San Diego County, CA. Prepared Cultural Resources Report for compliance with NEPA and Section 106 of the NHPA to support the one-mile-long segment of double-track. Managed record search, Sacred Lands File search, Native American consultations, pedestrian survey and subsurface testing, as well as coordination and approval by U.S. Army Corps of Engineers of an APE map. Sub to Helix/HNTB. Principal Investigator for Archaeology. 2016

Arlington Avenue Widening, Caltrans District 8, City of Riverside Public Works, Riverside County, CA. For this local assistance project on behalf of the City of Riverside, the project involved producing ASR/HPSR technical reports for Section 106 of the NHPA compliance. The City proposed widening Arlington Avenue one linear mile in order to construct safety improvements. Managed record search, Sacred Lands File search, Native American consultations, and intensive-level pedestrian archaeological survey of the 5-acre site with negative results, as well as coordinated approval by District 8 of an APE map. Sub to Michael Baker. Project Manager and Report Author. 2015

San Diego River Bridge Double Track, SANDAG, San Diego County, CA. Prepared GIS maps for inclusion in cultural, historic and paleontological resources reports for a bridge project at the intersection of I-8 and Pacific Highway in proximity to the Mid-Coastal Light Rail APE. The project involves an approximate one-mile segment of second main track (double tracking) and a bridge replacement with associated track and signal improvements starting in the vicinity of Control Point (CP) Tecolote and goes to the vicinity of CP Friar. Work is through the existing LOSSAN corridor as planned for in the 2003 LOSSAN Corridor Strategic Plan and evaluated in the Final Program EIR/EIS. Sub to Simon Wong Engineering. Archaeologist/GIS Specialist. 2013-2015

Elvira to Morena Double Track, SANDAG, San Diego County, CA. Prepared maps for inclusion in the paleontological resources assessment technical study for SANDAG's main track and realignment from the vicinity of Control Point (CP) Elvira to the vicinity of CP Moreno. The project resulted in a 10.3 mile stretch of double track, new bridges, retaining walls and extension or replacement of existing culverts under the railroad. Project development closely coordinated with the Mid-Coast LRT Project, California High Speed Rail (Los Angeles to San Diego) and the Rose Canyon and Coastal Rail Trail Projects. GIS Manager. 2014-2015

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PALEONTOLOGY - ARCHAEOLOGY - HISTORY

SHANNON LOPEZ
Architectural Historian

EDUCATION

2018 M.A., History (with an emphasis in architecture), California State University, Fullerton

2012 B.A., History, Minor in Asian-Pacific Studies, California State University, Dominguez Hills

SUMMARY QUALIFICATIONS

Ms. Lopez is a qualified historian and she meets the *Secretary of the Interior's Standards and Guidelines for Architectural History.* Ms. Lopez is experienced in architectural history research and surveys along with photo documentation and recording of built environment resources for local and federal projects. Ms. Lopez is acknowledged as an approved Architectural Historian by Caltrans. She has extensive knowledge with Native American consultation, consultation with city and county historical societies, and analysis of primary and secondary sources. Additionally, she is an approved Reader at the Huntington Library by the Los Angeles Office of Historic Resources.

SELECTED EXPERIENCE

State Route 108/Highway 49 and Mackey Ranch Road Intersection Improvements Project, Caltrans District 10, Tuolumne County, CA. The Chicken Ranch Rancheria of Me-Wuk Indians of California (Tribe), in partnership with the California Department of Transportation (Caltrans), proposed to replace an intersection and convert to a roundabout designed to accommodate forecasted future traffic volumes and provide an alternative access route to the Chicken Ranch Rancheria. Cogstone completed an intensive-level pedestrian survey, CHRIS records search, sacred lands file search from the NAHC, Native American consultation, consulted with local history societies and preservation groups, and produced a Historical Resources Compliance Report (HRCR) and Archaeological Survey Report (ASR). Sub to Foothill Associates. Historian. 2019-2020

Faith Home/Garner Road Connection Project, Caltrans District 10, Stanislaus County, CA. Cogstone identified and evaluated cultural, paleontological, and historic resources present in or adjacent to the construction of a four-lane one-mile expressway. Cogstone produced an Archaeological Survey Report (ASR), Historic Properties Survey Report (HPSR), Historic Resources Evaluation Report (HRER), and Paleontological Identification and Evaluation Report (PIR-PER). Services included intensive level pedestrian surveys, mapping, records searches, DPR forms, and Native American consultation. Sub to Environmental Intelligence. Architectural Historian. 2019

Character Defining Features (CDF) Assessment for Contributing Buildings and Structures at Marine Corps Recruit Depot Parris Island, S.C. Cogstone conducted an assessment of CDFs for contributing resources of the Mainside Historic District and individually eligible historic properties at Marine Corps Recruit Depot Parris Island, South Carolina. The study was conducted in order to determine which elements of the buildings and structures of the historic district are character-defining features for the elements that are eligible for the National Register of Historic Places. The assessment satisfied Section 110 of the National Historic Preservation Act of 1966 as amended, and will assist the United States Marine Corps with the management of their historic properties. Architectural Historian. 2019

Irvine General Plan Update, Phase II, City of Irvine, Orange County, CA. Cogstone conducted a study to review and summarize available information regarding known paleontological, archaeological, and historical resources within the boundaries of the City of Irvine to support the Phase II update of the City's General Plan. A general analysis of impacts of future projects within the City of Irvine that may adversely affect paleontological, archaeological, or historic resources was provided along with mitigation recommendations. Sub to PlaceWorks. Architectural Historian. 2018-2019

Rhode Island Historical Resource Archive of Melville Naval Historic District and U.S. Naval Hospital, Newport Historic District, Naval Station Newport, R.I. This purpose of this project is to produce Rhode

Island Historical Resources Archive (RIHRA) documentation of the Melville Naval Historic District and the U.S. Naval Hospital Newport Historic District, at Naval Station (NAVSTA) Newport, Newport, Rhode Island. Conducted research, form contributor, and assistant Architectural Historian. 2018

Purple Line Extension (Westside Subway) Crack Propagation Reassessment, City of Beverly Hills, Los Angeles County, CA. On behalf of METRO, Cogstone was approved to reassess the exterior façade of the old Porsche building located on Wilshire Boulevard. The purpose of this reassessment was to document and compare the cracks of the current building during construction of the underground subway with those recorded in a pre-construction survey. Architectural Monitor. 2018

Southwest Valley Community Plan, City of Los Angeles, Los Angeles County, CA. Cogstone conducted a cultural resources review to contribute to the project's EIR. Cogstone conducted background research including a records search as part of the archaeological and historical resources review, Native American consultation to meet the requirements of Section 106 of the National Historic Preservation Act and Assembly Bill 52. The project area was approximately 60 square miles in size, encompassing the Canoga Park-West Hills-Winnetka-Woodland Hills, Reseda-West Van Nuys, and Encino-Tarzana Community Plan Areas. Sub to PlaceWorks. Architectural Historian. 2018

Dos Palos Water Treatment Facility, City of Dos Palos, Merced County, CA. The purpose of this study was to determine the potential effects to cultural resources resulting from the proposed development of the Dos Palos Water Treatment Facility, where the Dos Palos' allotment of water is removed from the California Aqueduct and travels through 17.5 miles of pipeline to the main facility for processing. This project had a federal nexus and required compliance with Section 106 of the Nation Historic Preservation Act. Services included archaeological and historical record searches, Sacred Lands search, pedestrian survey, built environment evaluation of three structures, and the production of a cultural assessment. Sub to QK, Inc. Architectural Historian. 2018

20000 Skyline Boulevard, Redwood City, San Mateo County, CA. Cogstone conducted a built environment evaluation to assist the Midpeninsula Regional Open Space District in determining whether selected buildings on one of their properties are historic in age and whether they are eligible for listing on the California Register of Historical Resources. Cogstone conducted a cultural records search, two intensive level pedestrian surveys, and ultimately determined no mitigation was required due to lack of significance. Architectural Historian. 2018

Bloomington Affordable Housing Project-Phase III, Community of Bloomington, San Bernardino County, CA. Cogstone conducted an assessment to determine the potential effects to cultural and paleontological resources resulting from construction of the proposed construction an affordable housing apartment complex and community amenities. Two historic homes, built in 1912 and 1947, within the APE were assessed. The project utilized funding through the United States Department of Housing and Urban Development (HUD), and thus the cultural resources work required compliance with Section 106 of the National Historic Preservation Act (NHPA). Sub to Michael Baker. Architectural Historian. 2018

Desert Sage Wellness Center, City of Hemet, Riverside County, CA. Cogstone completed a National Register of Historic Places eligibility re-evaluation for a proposed historical ranching line camp on behalf of the California Area Office Indian Health Service. This study was performed pursuant to Section 110 of the National Historic Preservation Act. Services included an archaeological and architectural pedestrian survey, records search, update to DPR forms, public outreach, additional research, and reported updates to SHPO. Architectural Historian. 2018

Fire Camp 8 Helispot Improvement Project, National Park Service, Los Angeles County, CA. The project involved the construction of a 6-inch diameter, 1,807 foot long water pipe to supply water to three fire hydrants. The route ran through the historic age Nike Missile site – LA-78 L&A. Cogstone conducted an intensive survey, photographed and recorded the historic features and evaluated the site for its potential eligibility for National Register of Historic Places (NRHP) eligibility listing in accordance with Section 106 procedures. Assistant Architectural Historian. 2018

DUBOSE DESIGN GROUP

Annette Leon
1065 West State St
El Centro, CA - 92243
(760) 353-8110
aleon@dde-inc.net

AFFILITIONS

Parks & Recreation Commissioner
Imperial County
2017- Present

Vice-President
Sister Evelyn Mourey Center (SEMC)
El Centro, CA
2013- Present

Committee Member
House of Hope
El Centro, CA
2013-Present

AWARDS

National Honor Award Recipient
American Society of Landscape Architects (ASLA), Nevada
2009

Interdisciplinary EDR Design Shift Charette Competition Winner
Trash for Teaching-California Edison
Los Angeles, 2012

Graduate Fellowship Fund Scholar
California State Polytechnic University, Pomona, 2013

Women of the Imperial Valley Co-Keynote Speaker
Women's Magazine of the

SUMMARY OF QUALIFICATIONS

Annette Leon serves as the Vice President of DuBose Design Group where she oversees all planning & landscape architecture (under the direction of G. Scott) related projects. She has worked on many complex projects throughout her career in both professions, concentrating on Imperial County. Her past experience and academic accomplishments have made her an asset to Dubose Design Group. Ms. Leon's academic research has been focused primarily in Imperial County. Ms. Leon is currently working towards her Landscape Architecture license under the direct supervision of Landscape Architect Gary Scott, FASLA.

EDUCATION

General Education| **Imperial Valley Collage**
Bachelor of Landscape Architecture | **University of Nevada Las Vegas**
Master's in urban and Regional Planning | **California State Polytechnic University, Pomona**

Academic Research | Undergraduate & Graduate Studies

- Undergraduate Capstone for Professional Undergraduate Degree (BLArch)
  - All Politics Aside: Connecting Bi-National Communities Through the Design of International Land Ports of Entry, Case Study Calexico, CA
- Master Thesis for Professional Graduate Degree (MURP):
  - Agricultural Preservation in the Age of Renewable Energy. Case Study Imperial County.

EXPERIENCE

Vice President | DuBose Design Group

2018 – PRESENT

- Project Lead for Planning and Landscape Architecture Related Projects.
- Technical writing and supporting graphics studies include: Water Supply Assessments, Key
- Observation Point Analysis, Air Port Land Use Compatibility Analysis, Land Evaluation and Site Assessment (LESA) modeling, Electrical and Circulation Flow Diagrams Air Quality Modeling (Tier1), & Noise Assessments, and created cannabis permitting model for Imperial County.
- Vast knowledge in the California Environmental Quality Act, California Water Code & Energy Code, as well as Imperial County General Plan and Division 5 Ordinance.
- Vast knowledge in local (ie, City of Calexico & Imperial Irrigation District's), state and federal permitting process for project ranging from industrial to residential.
- Landscape architectural education concentrating in arid desert climates of the desert southwest portion of the United States.
- Experience Relevant to City of Calexico: Gran Plaza Phase 2, Entitlement, Project Coordination, Water Supply Assessment, & Airport Land Use Compatibility Analysis. Trinity Manufacturing and Cultivation Facility, Planning, Entitlement, Project Coordination and Processing, El Portal Housing Subdivision, Water Supply Assessment.
- Landscape Architectural work under the direct supervision of Landscape Architect Gary Scott

Project Planner | Development Design & Engineering

2013– 2017

- Planning Lead: Project coordination and management of planning and engineering related projects in Imperial County, primarily industrial and renewable energy projects.
- Technical Studies and graphic illustrations
- Landscape conceptual documents

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Marc Mizuta, PE, TE, PTOE

Mr. Mizuta has over 21 years of experience leading traffic engineering assessments including preparation of traffic operations studies, transportation planning, and traffic impact projects. He has successfully managed projects that required coordination between multi-jurisdictional agencies and balanced the needs of transit, highway, and local roadway operators, while leading tasks that involved traffic operations analysis, alternative evaluations, feasibility assessments, cost-benefit analyses, identification of potential impacts, and development of mitigations and alternatives.

In addition, Mr. Mizuta has developed a strong reputation for project designs and project management for various transportation-related projects.

Education

B.S. Civil Engineering, University of Washington, 1998

Certifications

Professional Engineer (Civil) California, #67801
Professional Engineer (Traffic) California, #2716
Professional Traffic Operations Engineer, #1762

Professional Affiliations

Institute of Transportation Engineers (ITE), Member/Past President, 2017 District Conference Financial Chair

Project Experience

Project manager and engineer for the following transportation planning and traffic engineering projects:

Mobility Plans

- Little McGonigle Ranch Rd, San Diego, CA
- University Community Plan Update, San Diego, CA
- University Avenue Mobility Plan, San Diego, CA
- San Ysidro Land Port of Entry Mobility Study, San Diego, CA
- Barrio Logan Community Plan Update, San Diego, CA
- San Ysidro Mobility Strategy, San Diego, CA

Corridor/Interchange Studies

- SR-91 Corridor Improvements PR/ED, Riverside and Orange County, CA
- I-215/University Parkway Interchange, San Bernardino, CA
- Del Mar Heights Traffic Signal Synchronization Program, San Diego, CA
- I-5/Sorrento Valley Road Interchange, San Diego, CA
- Lemon Grove Avenue Realignment, Lemon Grove, CA
- Cedar City South Interchange, Cedar City, UT
- I-15; Hamilton Fort to Cedar City, Cedar City, UT

- Honolulu High-Capacity Transit Corridor Project, Honolulu, HI
- SR-178 Widening, Bakersfield, CA
- I-5/Genesee Avenue Interchange, San Diego, CA
- I-215/Van Buren Boulevard, Riverside County, CA

Traffic Engineering
- Various Line of Sight Surveys, San Diego County, CA
- Poseidon Desalination Project, Carlsbad, CA
- Installation of Vehicle Speed Feedback Signs, San Marcos, CA
- Citywide Safety Lights LED Retrofit, San Marcos, CA
- Forestdale Drive Traffic Calming, Encinitas, CA
- Swami's Pedestrian Crossing Signal, Encinitas, CA
- Harbor and Shelter Island Speed Survey, Port of San Diego, CA

On-Call Traffic Engineering
- On-Call Traffic Engineering Services, National City, CA

Traffic Impact Studies
- Various Residential, Commercial, & Mixed-Use Developments, Southern CA

Third Party Review of Traffic Impact Studies
- Soccer City, San Diego, CA
- Various Development Projects, Menifee, CA
- Various Development Projects, Oceanside, CA

Grants
- HSIP Cycle 7, National City, La Mesa, Oceanside, Temecula, & Menifee, CA
- Caltrans Cycle 2 ATP, Vista, CA
- SANDAG ATGP & SGIP, National City & Oceanside, CA
- Caltrans Cycle 1 ATP, Vista, CA

Rail
- Street Avenue Underpass Signal Modifications, Riverside, CA
- Grade Crossing Hazard Analysis, Bay Area, CA
- Richland Communities Signal Preemption, Jurupa Valley, CA

Military Studies
- CVN Homeport at NBC, Coronado, CA
- Various BRAC Realignment Projects, San Diego, China Lake, Concord, CA
- Various PPV Military Family Housing Projects, San Diego and San Bernardino Counties, CA
- Miramar and Camp Pendleton Grow the Force Projects, San Diego County, CA

Stephan A. Beck, PG, CHG, CEG, EM, QSD/QSP

Principal Environmental Geologist

EDUCATION

M.A., Geology, 1981, California State University, Fresno

B.A., Geology, 1976, University of California at Santa Barbara

Professional Certificate, Hazardous Materials Management, 1989, University of California at San Diego

REGISTRATIONS/CERTIFICATIONS

PG 4375 (California)

CEG 1512 (California)

CHG 126 (California)

PG 33080 (Arizona)

EM 1545 (Nevada)

PG 2234 (Wyoming)

QSP/QSD 20443 (California)

40-Hour OSHA HAZWOPER Certification (with annual updates)

8 hour OSHA HAZWOPER Supervisor Training

Transportation Worker Identification Credential

PROFESSIONAL AFFILIATIONS

Association of Environmental Planners, San Diego Chapter

Mr. Beck's project experience includes technical studies for inclusion in CEQA/NEPA documents, soil, groundwater, sediment, sludge, surface water, and soil vapor surface and subsurface site assessments. He is Principal-in-Charge of projects involving property transfers, hazardous building materials, human health and ecological risk assessments, remedial design, and remedial/removal actions involving volatile and semi-volatile organic compounds, polychlorinated biphenyls, metals, refined petroleum products, and pesticides, underground storage tanks, radiological surveys, and various phases of hydrologic/groundwater supply projects. Other experience includes site assessment investigations for school sites, power and coal gasification plants, Brownfields, pipelines, transportation and railroad rights-of-way.

EXPERIENCE

McCabe Ranch II Specific Plan EIR, Imperial County, California: Principal Environmental Geologist for a Hazardous Materials Technical Study (HMTS) of the agricultural property designated as McCabe Ranch II. The development of the site (the Specific Plan) involved the construction of single- and multi-family residences, schools, community facilities, parks, and commercial establishments. The HMTS was incorporated into an Environmental Impact Report (EIR) for the Specific Plan. The HMTS estimated the potential for existing environmental impacts to the site from the presence of hazardous materials/wastes on or in proximity to the site, and discussed mitigation measures that can be implemented to reduce or eliminate the potential impacts with respect to the proposed adoption of the Specific Plan. The environmental issues identified during the preparation of the HMTS included historic fuel-containing underground storage tanks with an associated leaking underground storage tank case at an adjacent property, and the presence of suspected organochlorine pesticides as a result of current and historical agricultural uses of the site.

Six Solid Waste Disposal Sites Brawley, Calexico, Hot Spa, Imperial, Niland, and Picacho Solid Waste Disposal Sites, Imperial County, California: Technical Advisor for landfill projects that involved designing and constructing landfill gas monitoring systems at six County of Imperial solid waste disposal sites. He provided technical assistance during the re- design of the landfill gas wells for the single, dual, and triple completion wells to take into account subsurface geology, depths of buried wastes, and depth to groundwater at each of the sites. The projects were successfully completed in an accelerated time period by utilizing two drill rigs at each site. Within 15 days of beginning the drilling and constructing landfill gas wells at six site, boring logs, well construction schematics, daily field reports and photographic documentation and other required submittals were provided to the client.

City of San Diego Chollas Triangle Master Plan EIR, San Diego, California: Principal Environmental Geologist for a Hazardous Materials Technical Study for the Chollas Triangle project. The purpose of the HMTS is to document the presence of properties, which may have been impacted by hazardous materials or wastes, and to document, with respect to the California Environmental Quality Act (CEQA), the significance of impacts from the project area with respect to hazardous materials and wastes, and to discuss measures that can be implemented to reduce or mitigate the potential impacts. We prepared an HMTS report documenting our findings and providing opinions and recommendations regarding possible environmental impacts

to the project area from potential releases of hazardous materials or wastes and potential impacts from hazardous materials or wastes from future development in the project area.

City of San Diego Interstate 5 South Multimodal Corridor Study and Environmental Impact Report, Chula Vista, California: Principal Environmental Geologist for a Hazardous Waste Initial Site Assessment (ISA) that was prepared to evaluate potential impacts to the project from hazardous materials or wastes along the corridor. Historical resources, such as aerial photographs and topographic maps, were reviewed to document the presence of facilities (e.g., gas stations, large industrial plants) or land uses (e.g., industrial, agricultural) indicative of potential environmental concerns. Environmental regulatory databases and files were reviewed for properties associated with unauthorized releases of hazardous materials or wastes to soil and/or groundwater. A comprehensive ISA report summarizing the research activities described above and providing conclusions regarding hazardous material/waste constraints and recommendations for further assessment was provided for the project.

Grantville Redevelopment Project and Study Area, Hazardous Materials Technical Study, San Diego, California: Principal Environmental Geologist for a Hazardous Materials Technical Study of the Grantville Redevelopment Area. The HMTS was performed as part of the Program Environmental Impact Report that was prepared for the project area. The project area consisted of three non-contiguous areas generally located north of Interstate 8, south of Mission Gorge Road, east of Interstate 15, and west of Jackson Drive, totaling approximately 1,400 acres. Facilities of potential environmental concern identified in, within and near the project area included gasoline service stations, car washes, automobile dealerships and automobile repair facilities that had experienced unauthorized releases. The HMTS contained a table that identified the sites of potential environmental concern, the nature of the releases, contaminants released and areal extent of the contaminant plume. Mitigation measures recommended for the identified properties of potential environmental concern included performing a risk assessment where contamination has been identified or is discovered during construction activities, and at which soil is to be disturbed; and characterizing and properly disposing of contaminated soil that is excavated during future redevelopment activities.

City of San Diego, As-Needed Environmental Services Site Assessment and Mitigation Process Contract, San Diego, California: Principal-in-Charge for this five-year contract awarded to Ninyo & Moore, which included conducting environmental site assessments at contaminated, City-owned properties throughout the County of San Diego. Services included work plan and health and safety plan preparation; field investigations (drill, sample, analytical testing); human health risk assessments; groundwater monitoring and sampling; and report preparation including corrective action plans and site conceptual models. The purpose of the contract was to assist the City of San Diego in obtaining regulatory agency closure of its properties that have been affected by unauthorized releases from underground storage tanks.

County of San Diego Department of General Services, San Diego County, California: Program Manager provided environmental and geotechnical consulting services to the County of San Diego Department of General Services (DGS) under a three-year contract awarded in 2011. Consulting services were provided for a total of approximately 20 individual DGS properties. Geotechnical services included geotechnical and hydrogeologic evaluations and floor flatness testing. Most of the environmental projects involved soil, groundwater, and soil vapor investigations and remediation associated with leaking USTs. For each site, we obtained, reviewed, and compiled background information, met with DEH staff to discuss the planned investigation strategy, prepared DEH-approved site assessment work plans, and implemented work plans to delineate the extent of impacted soil, groundwater, and soil vapor. Of the more than 15 UST release cases, all but two have received regulatory closure.

Chula Vista Bayfront Master Plan EIR, Chula Vista, California: Principal Environmental Geologist for a hazardous materials technical study for the Chula Vista Bayfront Master Plan. The project area consists of a number of parcels along the bayfront in the city of Chula Vista, California totaling approximately 550 acres under the ownership and jurisdiction of the Port of San Diego, including land acquired from B.F. Goodrich, vacant and underutilized areas, and the existing South Bay Power Plant parcel. Services included review of maps, reports and other environmental documents pertaining to the site; review regulatory agency databases for the site and for properties located within a 1,000-foot radius of the project area; and review of a HMTS report documenting findings and providing opinions and recommendations regarding possible environmental impacts to the project area.

Adrian Olivares, MPH

Senior Environmental Scientist

EDUCATION

M.P.H., Environmental Health Concentration, 2016, San Diego State University

B.S., Environmental Studies, 2002, University of California Santa Barbara

CERTIFICATIONS

EPRO Services, Inc. Gas Vapor Barrier Inspector

40-Hour OSHA HAZWOPER Certification (with annual updates)

CPR / First Aid Certification

PROFESSIONAL AFFILIATIONS

Association of Environmental Planners, San Diego Chapter

As a Senior Environmental Scientist for Ninyo & Moore, Mr. Olivares manages and conducts Phase I and Phase II Environmental Site Assessments (ESAs), underground storage tank unauthorized release case investigations, human health risk assessments, indoor air quality studies, Caltrans Initial Site Assessments (ISAs), and hazardous materials technical studies (HMTS) for California Environmental Quality Act (CEQA) documents. Mr. Olivares performs all phases of environmental investigations, coordinates and observes subsurface drilling activities, conducts investigations of subsurface contamination and logging of exploratory borings, conducts groundwater monitoring utilizing a variety of methods, performs statistical data analysis, authors reports, and interfaces with regulatory agencies.

EXPERIENCE

Cruickshank Road Disposal Site, El Centro, Imperial County, California: Senior Environmental Scientist during on-call services contracts with CalRecycle for the investigation of CIA solid waste disposal sites. Services consisted of obtaining; reviewing and summarizing historical aerial photographs, topographic maps, and obtaining other relevant data regarding the history of the site. With CalRecycle staff, we obtained critical information pertaining to partial remedial action activities previously conducted at the site by interviewing knowledgeable persons. Site reconnaissance documented site conditions and indicated exposed burned materials and waste piles scattered through out the site. Services also included development of a scope of work and assisted with preparing a work plan. With CalRecycle, we characterized and delineated the horizontal and vertical extent of burned wastes by excavating and sampling 54 exploratory trenches at the site. This disposal site differed from most other sites investigated in that it consisted of numerous, scattered, and compositionally varied piles of wastes and debris that varied in size and content, that were not laterally continuous. At locations explored, we evaluated the presence, thicknesses, and quality of final cover; however, typically, wastes at the site were exposed at the surface.

Multiple Geothermal Power Plants, Imperial Valley, California: Project Environmental Scientist for preparation of regulatory compliance documents including: California Accidental Release Plan; EPA Risk Management Plan; OSHA Process Safety Plant; Spill Prevention, Control, and Countermeasure Plan; and Hazardous Materials Business Plan. Responsibilities included the inspection of facilities, client and regulatory interaction, and coauthoring of reports.

Southeastern San Diego Community Plan Update, San Diego, California: Senior Project Environmental Scientist during the Hazardous Materials Technical Study to support the comprehensive update for the City of San Diego Southeastern San Diego Community. The Southeastern Community Plan Update resulted in two updates, one for Southeastern San Diego Group area and one for the Encanto Neighborhoods Group area. The purpose of the HMTS is to document the presence of properties, which may have been impacted by hazardous materials or wastes, and to document, with respect to CEQA, the significance of impacts from the project area with respect to hazardous materials and wastes, and to discuss measures that can be implemented to reduce or mitigate the potential impacts. The purpose of the Community Plan Update is to reflect the long-term vision for these communities.

Adrian Olivares

Senior Environmental Scientist

Port of San Diego Master Plan Update EIR, San Diego, California: Senior Project Environmental Scientist during EIR-level technical studies for hazards and hazardous materials, and geology and soils in support of the Integrated Planning Port Master Plan Update project. The program-level analyses evaluated each of the 10 Planning Districts to assist the planning process with future land use changes that may be affected by hazardous materials/wastes and geology and soils related conditions. The Port property is separated into 10 planning districts within the cites of Chula Vista, Coronado, Imperial Beach, National City, and San Diego, and extends from Shelter Island in the north to the Imperial Beach Oceanfront in the south. Our hazards and hazardous materials evaluation services included background review; review of federal, state, and local regulatory agency databases for the project area; review of online regulatory databases; and preparation of a hazardous materials technical study, which documented findings and provided opinions and recommendations regarding portions of the project area that have a higher likelihood of being associated with soil and/or groundwater contamination, and potential impacts from hazardous materials or wastes.

Chollas Triangle Master Plan, San Diego, California: Senior Project Environmental Scientist during the preliminary geotechnical evaluation and HMTS for the Chollas Triangle Master Plan and EIR for 52-acres. The City of San Diego's intent was to create a Master Plan for an urban village within approximately 36-acres of the Chollas Triangle site. Services included performance of a HMTS to document the presence of properties in the project area which may have been impacted by hazardous materials or wastes; to document, with respect to CEQA, the significance of impacts in the project area with respect to hazardous materials and wastes; and to discuss measures that can be implemented to reduce or mitigate the potential impacts. Ninyo & Moore prepared an HMTS report documenting its findings and providing opinions and recommendations regarding possible environmental impacts to the project.

Grantville Redevelopment Project and Study Area, San Diego, California: Senior Project Environmental Scientist during the Hazardous Materials Technical Study for a Grantville Redevelopment project and Study Area. Services included review of physical setting information; review of regulatory databases for hazardous waste facilities within the Master Plan area; field reconnaissance; review of historical resources such as aerial photographs and fire insurance maps to document the general history of the project area and facilities/features of potential environmental concern; evaluation of potential impacts to sensitive receptors (i.e., schools, hospitals) from exposure to hazardous materials associated with the Master Plan; and preparation of a report presenting our preliminary findings and evaluation with respect to the City of San Diego's CEQA Significance Determination Thresholds for Health and Safety.

Port of San Diego Tenth Avenue Marine Terminal, San Diego, California: Senior Project Environmental Scientist during the preparation of a HMTS that provided a general overview of the potential impacts related to hazardous materials and wastes associated with the project, and documented, for CEQA purposes, the significance of potential impacts from existing property contamination. The HMTS was used to support the hazards and hazardous materials analysis contained in the EIR. Services included review of environmental databases for the project area and properties within a specified radius; review of historical data sources including aerial photographs, topographic maps, and fire insurance maps to document historical uses of potential environmental concern; and review of previous environmental reports pertaining to the project area. Information was compiled into a succinct report, which documented the findings of the above efforts and provides recommendations regarding portions of the proposed project area that may have a higher likelihood of being associated with soil, soil vapor, and/or groundwater contamination, and potential impacts from hazardous materials or wastes.

City of San Diego, As-Needed Environmental Services Site Assessment and Mitigation Process Contract, San Diego, California: Project Manager for two, five-year contracts awarded to Ninyo & Moore, which included conducting ESAs at contaminated, City-owned properties throughout the County of San Diego. Services included work plan and health and safety plan preparation; field investigations (drill, sample, analytical testing); remediation; human health risk assessments; groundwater monitoring and sampling; and report preparation including corrective action plans and site conceptual models. The purpose of the contract was to assist the City of San Diego in obtaining regulatory agency closure of its properties that have been affected by unauthorized releases from underground storage tanks.

Gregory T. Farrand, PG, CEG

Principal Geologist

EDUCATION

Masters in City Planning, 1976, San Diego State University

B.S., Geology, 1969, California State University, Northridge

REGISTRATIONS

PG 3645 (California)

CEG 1087 (California)

PROFESSIONAL AFFILIATIONS

American Public Works Association

American Society of Civil Engineers

American Water Works Association

Association of Engineering Geologists

San Diego Association of Geologists

Society of American Value Engineers
- San Diego Chapter Director of Professional Development
- Vice President of Programs

Mr. Farrand's professional experience includes geologic and geotechnical investigations for treatment plants, reservoirs, dams, tunnels, pipelines, highways, bridges, power plants, quarries, groundwater resources, and environmental impact reports. Mr. Farrand has authored scientific papers on fault and landslide hazards, and coastal bluff stability in southern California and Baja California. He has performed extensive field mapping, analyses of borings and trenches, seismic refraction surveys, remote sensing surveys, and environmental studies. His responsibilities consist of technical direction to the staff of geologists and field personnel, and in-house Quality Assurance/Quality Control review of investigations and analyses on geologic, hydrogeologic, and geotechnical projects.

EXPERIENCE

Imperial County Center II Expansion Environmental Impact Report, El Centro, Imperial County, California: Principal Geologist during the geologic reconnaissance study and geological technical report to assist in the preparation of the EIR for the expansion of the Imperial County Center II facility. The project site included the existing county center and 195 acres lying to the west and south. Our study indicated that the site had a high potential for strong ground shaking due to earthquakes on active faults in the region, in particular, the Imperial Fault located only 7 miles to the northeast. The study also indicated that potentially liquefiable soils, as well as compressible and/or expansive soils, might be present in the area. Our technical report addressed regional geologic setting, site-specific geologic conditions, groundwater, topography, and soils. The report included an analysis of potential impacts and constraints regarding geology/soils and the project.

Gateway Specific Plan and Interstate 8 Corridor, Imperial County, California: Technical Advisor during the geologic and preliminary geotechnical evaluation to assist in the preparation of environmental impact documents for the Gateway Specific Plan and Interstate 8 Corridor. The project site was located adjacent to, and north of, the Calexico East Port of Entry, approximately 5 miles east of the City of Calexico. The project area consisted of approximately 1,700 acres of existing farmland and several irrigation and drainage canals, including the South Alamo Canal, which traverse the site. The Gateway Specific Plan had provisions for phased improvements to provide a broad array of industrial, commercial, and transportation services as well as retail shopping, business offices and transient habitation supportive of the Calexico East Port of Entry. Services included evaluation of the regional geology, site-specific geology, faulting and seismicity, groundwater, liquefaction and seismically induced settlement, agricultural soils, and geotechnical constraints and possible mitigation measures. The active Imperial fault was found to cross a portion of the project site where building setbacks away from the fault will be needed.

Eastside Reservoir and Water Line, Calexico, Imperial County, California: Principal Geologist during the geotechnical reconnaissance for preparation of environmental impact documents for the City of Calexico Water Department's Eastside Reservoir. The purpose of our studies was for compliance with CEQA/NEPA requirements. The facilities consisted of a new above ground, 6 million-gallon treated water storage reservoir, a booster pumping station, and a 12,000-foot long, 24-inch diameter distribution water main. The pipeline crosses beneath State Highway 98,

Bowler Road, the All American Canal, and Central Main Canal. Microtunneling, horizontal directional drilling and other tunneling methods were utilized for construction of the pipeline beneath the canals. Services included review of background data consisting of geologic maps and reports, seismic data, topographic maps, stereoscopic aerial photographs, and reports provided by the client; a geologic reconnaissance to map the site; analysis of data; and preparation of a report summarizing our findings, conclusions and recommendations.

Holtville Materials Borrow Pit, Holtville, Imperial County, California: Principal Geologist during geotechnical design and environmental consulting services as part of the update to the Reclamation Plan for the Holtville Materials Borrow Pit. The project included a 150-acre plot of land that was being used as a material borrow pit for various projects in the City of Holtville and Imperial County. At the time of our services, approximately 26 acres had already been mined and there were plans for further expansion of the mining operations. Services included the performance of a geotechnical evaluation of the site. As part of this evaluation, we performed a background review of geotechnical resources such as geology and fault maps, performed a geologic reconnaissance of the site, acquired boring permits from Imperial County, performed a subsurface exploration consisting of exploratory borings, converted two boring into monitoring wells, performed of geotechnical laboratory testing, compiled data and analyzed the data obtained, and prepared of a report that addressed geotechnical aspects of the project and site including existing soil characteristics, liquefaction, lateral spread, and slope stability.

West Main Waterline Project, El Centro, Imperial County, California: Principal Geologist during the geotechnical evaluation for the West Main Waterline project. The evaluation consisted of the construction of an 18-inch waterline in West Main Street between Lotus Avenue and Glenwood Road. The West Main Waterline project is approximately 3,000 foot long, 18-inch waterline extension in West Main Street from Lotus Avenue to Glenwood Road. The 18-inch waterline crosses under the Lotus Canal and Lotus Drain (west of Lotus Avenue) using jack-and-bore methods with a 32-inch diameter stainless steel pipe casing. Services included review of background information including available geotechnical reports, geologic maps, and topographic maps; performance of a geologic reconnaissance of the site; drilling, logging, and sampling of exploratory borings; performance of geotechnical laboratory testing; compilation and analysis of the data obtained; and preparation of a geotechnical report for preliminary design of the waterline.

Chula Vista Bayfront Master Plan EIR, Chula Vista, California: Principal-in-Charge for the technical study to address geologic and geotechnical issues and a hazardous materials technical study for the Chula Vista Bayfront Master Plan site located on the City of Chula Vista Bayfront. The technical report was utilized in the preparation of an Environmental impact report, and was not intended for the purpose of design or construction. Services provided included review of pertinent available geotechnical literature including topographic maps, geologic maps, stereoscopic aerial photographs, and available geologic reports; and review of draft and final reports presenting our findings and conclusions related to geotechnical conditions at the site, and potential geotechnical constraints on the proposed construction; and attendance at project meetings during the course of completion of the project.

Grantville Redevelopment Project Study, San Diego, California: Principal-in-Charge for the geologic reconnaissance and limited geotechnical evaluation for the Grantville Redevelopment project. The study area consisted of three non-contiguous subareas (Subareas A, B, and C) of urbanized land totaling approximately 1,400 acres. Services provided included review of pertinent, available geotechnical literature including topographic maps, geologic maps, aerial photographs, and existing environmental and geologic reports; and review of a report presenting our preliminary findings and conclusions.

Port of San Diego Master Plan Update EIR Project, San Diego to Chula Vista, California: Principal Geologist during an Environmental Impact Report level geology and soils evaluation and hazards and hazardous materials evaluation for the Integrated Planning Port Master Plan Update project. The Port of San Diego (Port) property is separated into 10 planning districts within the cites of Chula Vista, Coronado, Imperial Beach, National City, and San Diego, and extends from Shelter Island in the north to the Imperial Beach Oceanfront in the south. The Port's planning areas cover approximately 2,403 acres of land and 3,535 acres of water. The purpose of our study was to estimate the potential for existing environmental impacts to the project from geologic or soil conditions in the vicinity of the project, and to discuss measures that could be implemented to reduce or mitigate the potential impacts with respect to the design and construction of the project.

Christina Tretinjak, PG, CEG

Senior Project Geologist

EDUCATION

M.S., Geology, 2004, San Diego State University

B.S., Geology, 2001, San Diego State University

REGISTRATIONS

CEG 2650 (California)

PG 8478 (California)

PROFESSIONAL AFFILIATIONS

San Diego Association of Geologists

San Diego State University Geology Alumni Association

As a Senior Project Geologist for Ninyo & Moore, Ms. Tretinjak conducts geotechnical evaluations, prepares geotechnical reports, reviews plans and specifications, and coordinates and conducts field and laboratory investigations. Ms. Tretinjak has provided these services for water and wastewater facilities, schools, commercial buildings, bridges, and other public works projects.

EXPERIENCE

McCabe Ranch II Specific Plan, Imperial County, California: Project Manager for a geology and soils evaluation that was utilized as part of an Environmental Impact Report study for the agricultural property. The development of the site (the Specific Plan) involved the construction of single- and multi-family residences, schools, community facilities, parks, and commercial establishments. Services included review of background information; performance of a geologic reconnaissance of the project study area to document apparent geologic and soils conditions; compilation and analysis of the data obtained; and preparation of a report presenting our findings and conclusions related to geologic and geotechnical conditions at the site, and potential geologic and geotechnical constraints for the development of the project.

El Centro Family Courthouse Duggins Site, El Centro, Imperial County, California: Senior Project Geologist during geotechnical consulting services for the El Centro Family Courthouse project. The project involved construction of a building that contained four courtrooms and associated support space in approximately 54,000 gross square-feet constructed on approximately 2.5 acres of land. Services included preparation of an indictor pile program to be implemented during the installation of the 14-inch square driven concrete piles for the planned courthouse; review of the project plans for general conformance with the project geotechnical report; and preparation of a letter documenting our review of the project plans.

Calexico West Border Station, Calexico, Imperial County, California: Senior Project Geologist during geotechnical design services for the new international border crossing facility. The project consisted of the construction of new administrative offices, service facilities, traffic and pedestrian crossing inspection areas, parking, and roadways located just west of the existing Calexico border crossing. The new crossing included approximately 14 traffic inspection booths covered by a two-story canopy structure. The project also included rechannalization and bridging of the New River at the border. Services included a subsurface evaluation; laboratory testing; data analysis; and report preparation with recommendations.

West Main Waterline Project, El Centro, Imperial County, California: Senior Project Geologist during the geotechnical evaluation for the West Main Waterline project. The evaluation consisted of the construction of an 18-inch waterline in West Main Street between Lotus Avenue and Glenwood Road. The project consisted of a 3,000 foot long, 18-inch waterline extension in West Main Street from Lotus Avenue to Glenwood Road. Services included review of background information; performance of a geologic reconnaissance of the site; drilling, logging, and sampling of exploratory borings; performance of geotechnical laboratory testing including insitu moisture content and dry density, gradation (sieve) analysis, Atterberg limits, shear strength, and soil corrosivity; compilation and analysis of the data obtained; and preparation of a geotechnical report for preliminary design of the waterline.

Christina Tretinjak

Senior Project Geologist

Grantville Redevelopment Project and Study Area, San Diego, California: Senior Project Geologist during a geologic reconnaissance and limited geotechnical evaluation of the Grantville Community Redevelopment project. The project area consisted of three non-contiguous areas generally located north of Interstate 8, south of Mission Gorge Road, east of Interstate 15, and west of Jackson Drive, totaling approximately 1,400 acres. Services included review of geotechnical literature including topographic maps, geologic maps, aerial photographs, and existing environmental and geologic reports; geologic reconnaissance of the project study area, which included written and photographic documentation of the observed site conditions; compilation and analysis of the data obtained; and preparation of a report presenting preliminary findings and conclusions regarding soil and issues in the project area. Specifically, our report addressed geologic hazards, soil erosion, and topsoil loss.

Safari Highlands Ranch EIR, San Diego, California: Project Manager for the geotechnical peer review for the Safari Highlands Ranch Environmental Impact Report. The project consisted of the construction of 550 residential lots in five neighborhoods, fire station, and water quality basin. Services included a third party review of reconnaissance-level study performed in 2014. The report included geologic mapping, 30 seismic refraction traverses, and review of 21 previous air track borings. The report addressed the presence and potential impact of geologic hazards and potentially adverse geologic conditions.

Port Master Plan Update EIR Project, San Diego to Chula Vista, California: Project Geologist during an Environmental Impact Report level geology and soils evaluation for the Integrated Planning Port Master Plan Update (PMPU) project. The Port District property is separated into 10 planning districts within the cites of Chula Vista, Coronado, Imperial Beach, National City, and San Diego, and extends from Shelter Island in the north to the Imperial Beach Oceanfront in the south. The District's planning areas cover approximately 2,403 acres of land and 3,535 acres of water. The purpose of our study was to estimate the potential for existing environmental impacts to the project from geologic or soil conditions in the vicinity of the project, and to discuss measures that could be implemented to reduce or mitigate the potential impacts with respect to the design and construction of the project. The project involved a comprehensive update to the existing PMPU to provide goals and policies, as well as land and water uses, consistent with the Port Act and Public Trust Doctrine, for the physical development and conservation of District Tidelands. The PMPU implemented the 30-year planning vision by addressing allowable land and water uses, coastal access, mobility, economic development, safety, and natural resources, among other topics. Services included background review; a geologic reconnaissance vicinity; data compilation and analysis; and preparation of a report documenting findings and providing opinions and recommendations regarding possible geologic and soil impacts at the site.

Thomas A. Deméré, PhD

Director, Department of PaleoServices, SDNHM

Dr. Deméré has worked as a professional paleontologist since 1974 and has been with the San Diego Natural History Museum since 1979. Since 1994, Tom has served as Curator of Paleontology and Director of PaleoServices at the Museum. As Director of PaleoServices, Tom has served as principal paleontologist and project manager for hundreds of paleontological resource projects ranging from initial resource assessments, through impact evaluation, to actual impact mitigation. Dr. Deméré has served as principal paleontologist and report writer for many power generation and transmission line projects and is well versed in the permitting and approval requirements of state agencies (California Energy Commission, California Public Utilities Commission, and California State Parks) and federal agencies (Bureau of Land Management, National Forest Service, and National Park Service) having jurisdiction oversight of such projects. Although the majority of this work has been with residential, commercial, and roadway projects within San Diego County, it has also involved a number of water, sewer, natural gas pipeline, and utility transmission line projects throughout the southern California area. These projects have included CEQA-level paleontological resource assessment technical studies, as well as CEQA-mediated paleontological resource mitigation programs.

Dr. Deméré is experienced with city, county, state, and federal laws, ordinances, and regulations dealing with the evaluation and protection of paleontological resources, and has assisted several municipalities in developing procedures for assessing, monitoring, and collecting fossil remains in construction settings. He is also a member of the Society of Vertebrate Paleontology and served as a committee member in drafting the original and revised SVP standard guidelines for the assessment and mitigation of adverse impacts to nonrenewable paleontological resources.

Project Experience

Paleontological Services On-Call Contract —San Diego Gas & Electric, San Diego and Imperial counties (2010-Ongoing)

Project Manager and Principle Investigator. As project manager and principal investigator, Dr. Deméré was responsible for establishing the research design and directing field mitigation and laboratory preparation activities for the paleontological mitigation program implemented during construction. Dr. Deméré also oversaw production of and coauthored all relevant record searches, paleontological resource assessments, paleontological monitoring and treatments plants, and paleontological mitigation final reports. Department of PaleoServices (DPS) staff members are currently working with SDG&E on a key infrastructure project to replace

Years of Experience

- Professional start date: 1974
- SDNHM: 1979

Education

- PhD, Evolutionary Biology, University of California, Los Angeles, 1994
- MS, Geology, University of Southern California, 1978
- BS, Geology, San Diego State University, 1972

Professional Memberships

- Society of Vertebrate Paleontology
- Paleontological Society
- Society for Marine Mammalogy
- San Diego Association of Geologists

Certifications

- Qualified Paleontologist, City of San Diego, County of San Diego, County of Orange, County of Riverside, Los Angeles County, Kern County, County of San Luis Obispo

older wooded power poles with fire-proof steel power poles. This work is focused on the back country and rural parts of San Diego County. DPS involvement includes monitoring of excavation activities associated with installation of steel power poles (i.e., boring for concrete footings), discovery of unearthed fossil remains, field recovery of fossil remains, documentation of geology and stratigraphy of the project site, laboratory preparation (cleaning and repair) of recovered fossil remains, cataloguing of prepared fossils, and preparation of final reports. Over one-hundred work orders ongoing or completed under the on-call contract.

El Centro BLM GIS/PFYC Database Project—BLM-CA El Centro Office, Imperial County, CA

Project Manager and Principle Investigator. As project manager and principal investigator, responsible for establishing research design and partial preparation and final review of paleontological assessment report. Completion of the assessment report involved an extensive literature search of existing paleontological and geological literature in order to write a summary of the geology and paleontology of all geologic formations within the Study Area, and assess the resource potential of each formation.

SCG Imperial Valley Loop—Insignia Environmental, Inc., Brawley, Imperial County, CA

Project Manager and Principle Investigator. As project manager and principal investigator, responsible for establishing research design and directing field mitigation and laboratory preparation activities for this paleontological mitigation project. This project involved monitoring of trenching operations, salvage of unearthed fossil remains, laboratory preparation & curation of fossils, & preparation of a final project report. A series of fossil producing strata were discovered and collected from ~14,000 to 7,000 year old lacustrine sedimentary rocks (Lake Cahuilla). Recovered fossils consisted of significant fossil remains of late Pleistocene- to early Holocene-age freshwater invertebrates.

Centinela Solar Energy CIP—ICF International, Imperial County, CA

Project Manager and Principle Investigator. As project manager and principal investigator, responsible for establishing research design and directing field mitigation and laboratory preparation activities for this paleontological mitigation project. This project included a monitoring program implementation, salvage, preparation, cataloging, and storage of fossil discoveries, and preparation of a final report.

Sunrise Powerlink—Burns & McDonnell, San Diego & Imperial Counties, CA

Project Manager and Principle Investigator. As project manager and principal investigator, responsible for establishing research design and directing field mitigation and laboratory preparation activities for this paleontological mitigation project. This project included preparation of the Sunrise Powerlink Paleontological Records Search, Monitoring and Treatment Plan, monitoring program implementation, salvage, preparation, cataloging, and storage of fossil discoveries, and preparation of a final report.

IID Imperial to Dixieland 230kV Transmission Line & Expansion of Dixieland Substation—AECOM, Imperial County, CA

Project Manager and Principle Investigator. As project manager and principal investigator, responsible for establishing research design and directing field survey and preparation of paleontological assessment report. The paleontological assessment program included completion of a paleontological records search and literature review, completion of a field survey, and preparation of a final report summarizing findings and proposing appropriate mitigation measures to reduce potential adverse impacts to a level below significace. The findings of this paleontological assessment report indicated that the potential adverse impacts to a variety of marine and non-marine sedimentary rocks could be avoided.

Katie M. McComas, M.S.

Report Writer and GIS Specialist, Department of PaleoServices, SDNHM

Ms. McComas has been a Report Writer and GIS Specialist for the SDNHM since mid-2018, and was previously a Paleontology Collections Assistant for the SDNHM starting in 2016. She currently prepares final paleontological mitigation reports, paleontological resource assessments, paleontological records searches, and paleontological resource mitigation plans, and creates associated geologic maps, paleontological sensitivity maps, fossil locality maps, and other graphics. She has experience as a paleontological field monitor in San Diego County and has completed pedestrian surveys for paleontological resource assessments. She also aids in curation duties, including identification of Eocene terrestrial mammal and Plio-Pleistocene marine invertebrate fossils and data compilation for fossil collecting localities. For her Master's thesis at the University of Colorado Boulder (2014), she performed collections-based research on early Paleocene fossil mammals from the Greater Green River Basin of Wyoming, and also has research experience working on the late Eocene mammalian fauna of the Florissant Formation at Florissant Fossil Beds National Monument, Colorado. She also has prior experience and training in the management of vertebrate and invertebrate paleontology collections, and dry screening and picking of sedimentary matrix for the recovery of microvertebrate fossils.

Years of Experience

- Professional start date: 2012
- SDNHM: 2016

Education

- M.S., Museum and Field Studies, University of Colorado Boulder, 2014
- B.S., Geology-Biology, Brown University, 2008

Professional Memberships

- Society for the Preservation of Natural History Collections

Certifications

- Qualified Paleontologist, City of San Diego, County of San Diego

Project Experience

Titan Solar I—Blackhawk Environmental, Imperial County, CA

Report Writer/GIS Specialist. Katie was responsible for preparing the paleontological resource monitoring plan (PRMP) and associated graphics, which included summarizing the existing paleontological technical study, analyzing proposed project impacts, and providing detailed paleontological mitigation recommendations for the proposed impacts.

BLM California Desert District Potential Fossil Yield Classification Study—BLM California Desert District Office, Southern California, CA

Report Writer/GIS Specialist. Katie aided in the creation of a GIS geodatabase containing geologic mapping and paleontological potential mapping for the BLM California Desert District Office (San Diego, Imperial, Orange, Los Angeles, Riverside, San Bernardino, eastern Kern, and eastern Inyo counties), and completion of an associated paleontological resource assessment. Creation of the GIS database involved: 1.) merging nearly 150 individual geologic maps into a composite geology feature class, 2.) converting the geology polygon layer into a paleontological resource potential map by ranking the paleontological potential of individual geologic rock units within the District, and 3.) recording reference map data in an index map feature class. The associated report summarizes the geology and paleontology of all geologic rock units exposed on BLM managed lands, and provides recommendations for the management of paleontological resources on BLM managed lands under the

unique conditions present in the California Desert District. Completion of both the geodatabase and report included conducting extensive searches of existing paleontological and geological literature, mapping catalogues, and museum paleontological collection records.

South Mountain Lease Assessment—California Resources Corporation, Ventura County, CA
Report Writer/GIS Specialist. Katie was responsible for completion of the technical report and associated graphics. Preparation of the resource assessment report included completing a literature search and paleontological records search, summarizing existing paleontological resource data in the vicinity of the study area, discussing the significance of these resources, and examining potential impacts to paleontological resources that may occur during future projects relating to oil and gas development activities.

SoCalGas Line 85 North Replacement—Elk Hills Road to Lake Station — Kern County, CA

Report Writer/GIS Specialist. Katie was responsible for preparing the resource assessment report and associated graphics, which included summarizing the field survey data, completing a literature search and paleontological records search, analyzing proposed project impacts, and providing paleontological mitigation recommendations for the proposed impacts. The paleontological assessment program included completion of a paleontological records search and literature review, completion of a field survey, and preparation of a final report summarizing findings and proposing appropriate mitigation measures to reduce potential adverse impacts.

Fanita Ranch Assessment—HomeFed Corporation, San Diego County, CA

Field Paleontologist/Report Writer/GIS Specialist. Katie was responsible for preparing the resource assessment report and associated graphics, which included summarizing the field survey data, completing a literature search and paleontological records search, analyzing proposed project impacts, and providing paleontological mitigation recommendations for the proposed impacts. As field paleontologist, Katie was responsible for conducting a field survey. The paleontological assessment program included completion of a paleontological records search and literature review, completion of a field survey, and preparation of a final report summarizing findings and proposing appropriate mitigation measures to reduce potential adverse impacts.

SDG&E Mount Soledad Steel Gas Main Relocation Project—San Diego Gas & Electric Company, San Diego, CA

Report Writer/GIS Specialist. Katie was responsible for completion of the final paleontological mitigation report and associated graphics. The approximately 3.0 mile-long Project alignment lies along a short segment of Soledad Mountain Road north of Soledad Road, along Soledad Road/Lamont Street between Soledad Mountain Road and Garnet Avenue, and along Garnet Avenue between Lamont Street and Mission Bay Drive. Earthwork operations along the Project alignment were conducted in order to install approximately 15,840 feet of 6-inch diameter steel gas main. The mitigation program included construction monitoring of trench excavation activities, salvaging of unearthed fossil remains, laboratory preparation of salvaged specimens, curation of prepared specimens, storage of curated specimens, and a final mitigation report. Recovered fossils include a moderately diverse assemblage of Pliocene- to Pleistocene-age marine trace fossils, as well as body fossils of marine invertebrates (e.g., foraminiferans, bryozoans, snails, clams, crustaceans, sand dollars, and sea urchins), and marine vertebrates (e.g., sharks, rays, and bony fish). Fossils recovered from the Ardath Shale represent a low diversity assemblage of marine invertebrates (foraminiferans, snails, clams, oysters, mussels, tusk shells, crabs, and sea urchins), along with vascular land plants and a cardinal fish.

Carliane Danièle Johnson

Phone: (510) 967-4337 / E-mail: carliane@seajayenv.com

Carliane Johnson has 29 years of experience conducting environmental effects analyses, preparing best management practices plans, and providing other regulatory compliance support primarily for the marine transportation and offshore energy industries. Ms. Johnson has individually prepared, has led, and has been a part of larger teams that have prepared environmental and feasibility documents both in the United States and abroad. She has also prepared integrated natural resources management for natural resource stewardship and compliance at U.S. Department of Defense bases on the East Coast. She has developed marine resources inventories to identify indicator species and existing environmental conditions. She led the work to create a searchable database and then helped to categorize, review and summarize all historical documents that were part of a Supreme Court litigation effort over water allocation within the states of Georgia, Alabama and Florida. She currently provides regulatory compliance support for a large, commercial boat yard in California. This diversity and breadth of experience allows her to quickly identify policy, stakeholder, local planning and environmental concerns at the beginning stages of a project, which ensures that appropriate methods or actions are considered early to reduce or eliminate potential project impacts.

In 2007, she founded SeaJay Environmental, a small consulting firm located in Oakland, California. SeaJay Environmental supports governmental, private and non-profit clients manage complex environmental projects and make sound management decisions though expert planning support, environmental reviews, environmental permitting, analysis of public policy concerns, project compliance, third-party reviews of documents, and public engagement.

SeaJay Environmental (www.seajayenv.com), October 2007 to present

OWNER/PRINCIPAL BIOLOGIST

Independent environmental consultant providing regulatory and intergovernmental support to clients. This work has primarily involved analyzing offshore energy and environmental policy initiatives and proposed federal agency regulations, preparing environmental permit applications and conducting assessments under the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA). Also represent clients at public hearings, meetings, conferences and other stakeholder events.

Ecology & Environment Inc., August 2001 - October 2007
PROJECT MANAGER/CHIEF BIOLOGIST

Conducted coastal zone management evaluations and assessed environmental effects under NEPA, and developed permit applications to meet U.S. regulations or international environmental guidance requirements. Primary duties involved all aspects of managing complex energy and environmental projects including marketing, developing cost and technical proposals, and preparing research reports and site-assessments. Was also responsible for maintaining budgets, invoicing, meeting deadlines, and training and supervising staff.

FL Dept. of Environmental Protection (DEP), Office of Intergovernmental Programs, July 2000 – Aug. 2001
ENVIRONMENTAL MANAGER

Coordinated Florida's Outer Continental Shelf (OCS) program pertaining to the review of mineral activities (i.e., sand and gravel as well as hydrocarbons) in federal waters. This also included analyzing proposed federal rules and legislative actions. Prepared briefing documents, developed state policy positions, communicated with senior management and Governor's staff on issues, and attended public hearings, meetings and technical conferences. Also coordinated with state and federal partners in the U.S. Environmental Protection Agency's *Gulf of Mexico Program* to implement projects to improve the health and productivity of the Gulf of Mexico.

Florida Governor's Office, Environmental Policy Unit, January 1996 - June 2000
GOVERNMENT ANALYST III

Assisted in the development of policies to protect Florida's marine resources focusing on offshore oil and gas, dredge materials management, fisheries and aquaculture. From 1998 to 1999, was assigned to the Florida Governor's Ocean Committee, which was tasked with developing policy recommendations on the use and protection of ocean resources around the state. Also managed an ocean and coastal policy grant-funded program, represented the Governor's office at conferences and meetings, prepared and submitted testimony at public hearings, analyzed state and federal legislation, prepared briefing papers on significant issues, reviewed projects for federal consistency under the Florida Coastal Management Program, analyzed agency budget proposals, prepared grant reports, and interacted with the public on the Governor's behalf. I transitioned the OCS program from the Governor's office to the state's environmental protection agency in June 2000.

Florida DEP, Office of Intergovernmental Programs, March 1994 - January 1996
ENVIRONMENTAL SPECIALIST II

Reviewed and coordinated the review of local government comprehensive plan amendments and federal consistency projects to ensure that proposals were in accord with DEP's statutes and programs. The position involved extensive writing, critical evaluation of documents, strong organizational skills, coordination between department staff throughout the state, and the ability to work cooperatively with government agencies related to comprehensive land use planning and coastal management issues.

EDUCATION

Bachelor of Science
FLORIDA STATE UNIVERSITY, APRIL 1989. Biological Science degree with an interdisciplinary minor in chemistry.

ENERGY PROJECT EXPERIENCE

Shell Oil Company, New Orleans, Louisiana. Currently providing regulatory support and conducting research on various topics (e.g., marine sound, protected species, air and water permitting, proposed federal regulations, artificial reefs) pertinent to Shell's domestic offshore oil and gas activities in the Gulf of Mexico. Also conducting research and collecting environmental data for Shell's wind energy projects on the East Coast. This effort will be used to better understand conditions at the offshore sites and to support the required environmental and operational documentation that will be required under NEPA and the Outer Continental Shelf Lands Act (OCSLA).

Walsh Perú South America. Prepared a regulatory document summarizing the applicable international legal framework pertaining to the discharge of drill cuttings containing non-aqueous drilling residues and potential concerns related to the proposed use of thermal-treatment technology to clean those cuttings. The project involved reviewing the applicable international legal framework and guidelines and reviewing technical reports regarding the marine discharge of treated cuttings obtained from a "Hammermill" process. Also reviewed the Technical Report (or ITS) that was prepared by Walsh Perú S.A. for the Peruvian regulatory authorities.

Offshore Operators Committee MedEvac Workshop, New Orleans, Louisiana. Organized an industry workshop to better understand the scope of medical evacuation assets, practices, and available procedures in federal waters of the Gulf of Mexico. Prepared the workshop report on best management practices and gaps.

Offshore Operators Committee Sandblasting Best Practices Workshop, New Orleans, Louisiana. Organized a workshop on sandblasting and surface coating operations in the marine environment. The purpose of this workshop was to obtain best management practices from offshore operators and their contractors related to procedures used to minimize the discharge of spent blast abrasives and paint overspray in the Gulf of Mexico. This culminated in the preparation of a paper describing best practices related to the periodical inspection and maintenance of offshore oil and gas facilities to assure structural integrity and minimize pollution and safety risks. SeaJay Environmental worked with Shell Exploration &

Production engineers and operations managers to draft this paper that was presented by Shell at the Society of Petroleum Engineers conference in 2009.

National Petroleum Council, Washington, DC. Provided technical and editorial support to the Operations and Environment Subgroup of the National Petroleum Council, a federal advisory committee. The study was requested by former Secretary Chu and was prepared by a team of experts from industry, state and federal government agencies, conservation groups, financial institutions and academia.

LNG Import Terminal, Grand Bahama Island, Bahamas. Oversaw the efforts of research divers conducting offshore benthic surveys in Freeport Harbour for Tractebel LNG North America for a proposed offloading pipeline. The team quantified sponges, soft corals, and hard corals in the project area and assessed the overall condition of the marine communities.

Gulf Landing LNG Import Terminal, Offshore Louisiana. Helped develop a port operations manual that was part of the licensing process for the *Gulf Landing* LNG project.

Main Pass Energy Deepwater Port, offshore Central Gulf of Mexico. Managed the application process associated with an onshore pipeline under Federal Energy Regulatory Commission (FERC) jurisdiction for the *Main Pass Energy Hub* LNG terminal project. This involved working closely with the client's team of contractors to develop the application and interacting frequently with state and federal officials to address regulatory and permitting requirements for the pipeline.

BOOTS Deepwater Oil Port, offshore Central Gulf of Mexico. Collected vessel and shipping data and environmental information to support the licensing of a proposed deepwater port, the Bulk Oil Offshore Transfer System (BOOTS), intended to accommodate large vessels for petroleum product offloading.

Cascade / Chinook FPSO Development, Central Gulf of Mexico. Prepared an Environmental Impact Assessment (EIA) for Petrobras America, Inc., (a subsidiary of Petróleo Brasileiro SA [Petrobras] the Brazilian national oil company) for the proposed first use of a floating production, storage and offloading (FPSO) system in the U.S. Gulf of Mexico. The EIA was submitted to the Minerals Management Service as a component of the exploration plan.

Petrobras Produced Water Survey, Rio de Janeiro, Brazil. Conducted a literature search and prepared a report for Petrobras that evaluated how offshore oil terminals and refineries around the world have managed their produced water. Also presented the study results to the client's technical operations staff in Brazil and hosted Petrobras staff during their visit to a United States facility that treats waste from oil and gas operations in the Gulf of Mexico.

Chevron Corporation, Houston, Texas. Helped develop a biodiversity guidance document for Chevron that incorporates biodiversity into their existing Operational Excellence Management Systems for new projects and existing projects worldwide.

Oil and Gas Development Project, offshore Southern Gulf of Mexico. Conducted the technical review and quality assurance of environmental documents to ensure that they met international standards associated with a large offshore development project off the coast of Mexico for a client of Citigroup to meet loan requirements from the Overseas Private Investment Corporation.

Rubiales Field, Colombia. Managed the due diligence review to support Marathon Oil Company's decision-making regarding oilfield acquisition. This included an assessment of the current operator's existing documents for compliance with health, safety and environmental standards, Colombian environmental licensing requirements, and consistency with Marathon's policies concerning corporate social responsibility.

Marathon Offshore Exploration Project, offshore Gulf of Mexico. Collected data and prepared environmental reports for an individual National Pollutant Discharge Elimination System (NPDES) permit application for Marathon Oil Company's proposed offshore oil and gas exploration in the Eastern Gulf of Mexico. This was the first such permit issued by Environmental Protection Agency (EPA) Region 4 for the discharge of cuttings associated with synthetic-based drilling fluids. The application included a best management practices and pollution plan to ensure the highest level of minimization of waste discharges.

South Dachshund Offshore Exploration, offshore Eastern Gulf of Mexico. Managed the preparation of an EIA, coastal zone management consistency certification, NPDES permit application, and best management practices and pollution prevention plan on behalf of Murphy Exploration and Production-USA, for their proposed oil and gas exploration project in the Gulf of Mexico.

Dalmatian Exploration Plan, offshore Eastern Gulf of Mexico. Prepared the EIA for Newfield Exploration Company's offshore oil and gas exploration plan and obtained the individual NPDES permit from EPA Region 4.

FEDERAL AND STATE PROJECT EXPERIENCE

Glen Canyon Dam Adaptive Management Program support, Phoenix, Arizona. Providing administrative and note taking support services required by the U.S. Bureau of Reclamation's Glen Canyon Dam Adaptive Management Program (GCDAMP), a Federal Advisory Committee. This support is to cover discussions and action items of the Adaptive Management Work Group (AMWG), the Technical Work Group (TWG) and potentially Ad Hoc work groups. The GCDAMP was developed to provide an organization and process for cooperative integration of dam operations, downstream resource protection and management, and monitoring and research information, as well as to improve the values for which the Glen Canyon National Recreation Area and Grand Canyon National Park were established.

National Oceanic and Atmospheric Administration (NOAA) National Marine Fisheries Service, Silver Spring, Maryland. Developed a process to summarize and analyze Automatic Identification System (AIS) data consisting of tens of thousands of records received from ships transiting right whale (*Eubalaena glacialis*) management areas along the U.S. Atlantic seaboard.

NOAA Office of National Marine Sanctuaries. San Francisco. California. Prepared two environmental assessments (EA) for the Greater Farallones National Marine Sanctuary office. The first EA was a programmatic document to assess the effects of all existing and proposed research and ecotourism activities on great white sharks off Northern California. The other was to assess the impacts on continued discharges of U.S. Coast Guard live fire training activities in newly expanded areas of two sanctuaries.

Fort Irwin Flora Planning Level Survey, California. Provided health and safety and botanical support services during field surveys at the U.S. Army's National Training Center in Fort Irwin, California. The work consisted of daily safety briefings followed by field surveys conducting plant transects within 284 one-hectare plots, 11 springs, 10 playas and approximately 30 additional areas of interest on the base. Remote data were collected using ArcGIS Collector on an iPad. Voucher specimens were also collected.

State of Florida Department of Environmental Protection. Helped create a searchable database of documents in support of the state's lawsuit against the U.S. Army Corps of Engineers over sharing the waters within the Apalachicola, Chattahoochee and Flint (ACF) rivers basin. My team was responsible for documenting, reviewing and summarizing a variety of records that were then scanned into the database and used by the litigation team.

Naval Support Activity Norfolk, Chesapeake, Virginia. Developed an Encroachment Action Plan (EAP) to identify potential challenges that could affect the Navy's mission at their Northwest Annex. This included meeting with officials in Virginia and North Carolina to better understand their planning practices, current and future land use activities, conservation programs for land and water and other activities, which became

the basis for recommendations in the EAP.

Avon Park Air Force Range, Highlands, Florida. Prepared portions of the environmental impact statement addressing the use of live-fire training at the Navy's Avon Park facility. Also prepared the consistency certification required under the State of Florida's Coastal Management Program.

Pope Air Force Base, Fayetteville, North Carolina. Managed the development of an environmental assessment for the Army and Air Force Exchange Service to address potential environmental effects related to the construction of an on-base gas station and shopping facility.

Homestead Air Reserve Base, Homestead, Florida. Helped to develop an integrated natural resources management plan (INRMP) for the U.S. Air Force Headquarters 311th Human Systems Wing that would chart a 10-year course for natural resource stewardship and compliance at the base.

LOCAL PROJECT EXPERIENCE

Bay Ship & Yacht Co., Alameda, California. Providing regulatory compliance support to this ship building and vessel repair yard. Responsibilities include federal, state and local permitting and reporting for hazardous waste, air quality, National Pollutant Discharge Elimination System (NPDES)/stormwater discharges and other environmental protection programs.

San Mateo County Harbor District Eelgrass Survey, Princeton-by-the-sea, California. Conducted a presence/absence survey for eelgrass near the public boat launch ramp facility at Pillar Point Harbor (Half Moon Bay) prior to a dredging project there. A remotely operated vehicle (ROV) was used as well as visual observations during an extreme low tide period, which determined that no eelgrass was present near the boat ramps, but that a large bed existed along the east side near the outer breakwater -- the first time it has ever been reported in this harbor.

Surface Water Spill Response Training with EBMUD, Northern California. Worked with the rangers and environmental staff of the East Bay Municipal Utility District (EBMUD) at the Camanche and San Pablo reservoirs to provide spill drill training that included the deployment of sorbent boom and other emergency response procedures.

South Miami-Dade County Watershed Study, Miami, Florida. Helped develop a marine resources inventory of Biscayne Bay for the South Florida Regional Planning Council, which involved identifying environmental objectives for the project area, indicator species, and existing environmental conditions.

O'Brien's Response Management, Marshall, Michigan. Provided incident response support for the Enbridge pipeline spill in 2010. Evaluated proposed oil treatment options for environmental effects on marsh and wetland habitats. Prepared standard operating procedures for sediment curtains and gabion boxes; and for site preparation, soil removal and disposal activities of contaminated sediments. Also reviewed quality assurance plans.

Smithsonian Environmental Research Center, Monterey Bay, California. Provided dive support for an invasive species survey in the kelp forests between Monterey and Carmel, and within the Monterey Bay National Marine Sanctuary. Invasive species (primarily *Watersipora*) were counted in 1-meter quadrats along 25-meter-long transect lines.

Weber Readiness, Incident and Risk Management Services, Oakland, California. Provided 40-hour training in Hazardous Waste Operations and Emergency Response (HAZWOPER) and oil spill incident response training to the energy and marine transportation industries. Also conducted worker training to SSA Marine at the Port of Oakland. The training was intended to enhance workplace efficiency and safety while workers maintain the cranes and material handling equipment during terminal operations. Will soon be providing Covid-19 workplace safety training.

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CORI CURRIER

currier.cori@gmail.com | 732.580.5430 | San Francisco, CA 94121
Master of Marine Affairs 2019 - University of Washington

PROFESSIONAL EXPERIENCE

UW Green Futures Lab - Duwamish River Floating Wetlands - *Field Project Advisor* 02/2019 - 09/2019

- Developed research protocols for assessing the impact of engineered floating wetlands on outmigrating juvenile salmon and invertebrate prey production; Led and conducted weekly on-water ecological monitoring
- Assessed findings to provide recommendations for future biobarge design, testing locations, and targets
- Engaged and supported local community scientists interested in environmental justice and mitigation
- Advised and collaborated with an interdisciplinary team: stakeholders, Port of Seattle employees, architects

48 North Solutions, Inc., Seattle, WA - *Environmental Scientist* 10/2018 - 09/2019

- Write and edit Biological Evaluations and permits for aquatic projects, including tidal energy devices, stream restoration projects, and fiber optic cable landings, in compliance with federal and state policy processes
- Conducted a Critical Area Report and Habitat Assessment for the city, including characterizing plant and wildlife species and communities within riparian, scrub-shrub, and stream areas, and reporting
- Research marine and estuarine habitat and species for Environmental Impact Statements under the Endangered Species Act, Magnuson-Stevens Act, and other policies

Digital Observer Inc., Bristol Bay, Alaska - *Fisheries Quality Control Technician* Summer 2018

- Assessed salmon catch received from fishing boats for quality parameters while living aboard tender boats

University of Washington - *Graduate Student Researcher* 2017 - 2019

- Conducted in-depth estuarine intertidal plant surveys of over 60 species at rehabilitated industrial shorelines
- Designed and carried out on-site intercept interviews with shoreline users and key community informants
- Conducted fish and habitat snorkel surveys of Salmon Creek, CA stream tributaries and Stillaguamish, WA river reaches to understand cold water refugia and impacts of drought on population ecology
- Analyzed and visualized spatial ecological data in R programming language: stream habitat, salmon, plants

Richardson Bay Audubon Center and Sanctuary, Tiburon, CA - *Coastal Restoration Volunteer* 2015 and 2017

- Mapped and analysed restored estuarine and living shoreline spatial data sets from San Pablo Bay
- Conducted field research and monitoring of living shoreline restoration/enhancement; Identified and processed marine invertebrates from sediment samples
- Led community engagement for involvement in project; taught process to lab class at Dominican University
- Developed plant nursery project plan, identified and removed invasive plants, and prepared native plants

Google - San Francisco, CA - *Program Coordinator, Making & Science* 2015 - 2016

- Expanded Google's outreach to include local marine, maritime, and outdoor science organizations
- Advised Google Earth team on ocean-focused partnerships and virtual marine natural history tours
- Managed end to end supply chain of Science Journal kits for 30,000 students; advised experiment design
- Established collaborations with Maker Camp, NPR's Science Friday, California Academy of Sciences, etc.
- Launched youtube.com/makingscience channel; led outreach to establish national podcast partnerships

Save Nature - San Francisco, CA 2011 - 2015

Co-Founder of Nature Connection, *2013*

- Developed and piloted a 12-unit, hands-on biodiversity education program after writing and receiving a $50K/year, 5-year grant from the San Francisco Department of Children, Youth, and Families (DCYF)
- Taught and evaluated biodiversity lessons and science literacy skills at 6 urban schools and centers
- Trained and managed new educators; Nature Connection program expanded to serve 20 locations

Save Nature - San Francisco, CA - ***Sr. Conservation Associate/Program Manager*** 2011 - 2015

- Managed the Insect Discovery Lab program and up to 10 employees, which included over 800 annual school and library visits across the Bay area
- Assisted with growth of international conservation programs; presented talks to the public and stakeholders
- Analyzed client statistics to refine program reach and impact strategy; Managed operating budget

South Carolina Maritime Foundation - Charleston, SC - ***Grant Writer, Curriculum, Educator*** 2008-09 & 2010-11

- Conducted prospect research, wrote 15 grants, maintained donor relations; 12 grants awarded: $200,000
- Created and taught a 32 week hands-on Ocean Literacy curriculum; Title 1 after school, 4th - 8th grade
- Delivered shipboard education programs to middle & high school students; led overnight sails and transits

Catalina Island Marine Institute - Toyon Bay, CA - ***Marine Science Instructor*** 2009 - 2010

- Planned, taught, and led marine and terrestrial activities and lab classes; 5th - 12th grade week-long trips
- Guided daily ocean snorkels, tide pool studies, dissections, astronomy hikes, and ocean kayaks

National Oceanic and Atmospheric Association - South Carolina - ***Recreational Fisheries Surveyor*** 2006

- Interviewed recreational fishermen, weighed and measured fish, conducted statistical and social surveys

EDUCATION

University of Washington, *Master of Marine Affairs* 2017 - 2019

Thesis: *"Spaces for people and salmon along restored urban shorelines: a critical reflective analysis"*

The College of Charleston - *Bachelor of Science in Marine Biology* 2003 - 2008

Researched urban impacts on salt marsh ecology; Assisted graduates with barrier island beach profiles

Sea Education Association - Oceans and Climate Semester - *S.S.V. Robert C. Seamans* 2006 - 2007

- Designed and carried out original oceanographic research on the marine microbial loop, celestial navigation, and sailing and ship operations, on a 6-week 4,200 mile ocean crossing sail, Mexico to Tahiti
- Deckhand: trained crew in ship operations & wet/dry lab equipment on open-ocean sails; 24-hour schedule

LEADERSHIP, SKILLS, SERVICE

- Maritime: 325+ days sea time, 10 years; S.S.V.s, fishing vessels, deliveries, international ocean transits
- STCW 95: Basic Safety Training and fire-fighting for ocean-going vessels; experienced small-boat driver
- Student Advisory Council Representative: UW College of the Environment - launched peer mentor program
- San Francisco State University: Intertidal Research Assistant, 2017
- Bay Area Climate Literacy Impact Collaborative (Bay-CLIC): Working Group Member 2016 - 2017
- Mission Blue, Sylvia Earle Alliance: Researched Baja, MX shark finning activities, pre-expedition, 2017
- GirlVentures: Mentored San Francisco youth in leadership, rock-climbing, and self-efficacy program
- Wilderness First Responder 2015
- SCUBA certified 2003; Advanced Open Water and NAUI Reef Check California Eco-diver 2010
- R computer programming language for data analysis and visualization
- Foundation Directory Online, Adobe Creative Suite, Microsoft Office Suite, Introductory ArcGIS

Proposal For:

EIR FOR THE VEGA SES 2, 3, & 5 SOLAR PROJECT

Submitted To:

IMPERIAL COUNTY

Planning & Development Services Department
Attn: Jim Minnick
Director of Planning and Development Services
801 Main Street
El Centro, CA 92243

Submitted By:

CASC ENGINEERING AND CONSULTING, INC.

Frank Coyle
Director of Planning
77-564 Country Club Drive, Suite 211
Palm Desert, CA 92211
(760) 259-0108 ext. 5370
fcoyle@cascinc.com

Submittal Date:

November 18, 2020

CASC
Engineering and Consulting
www.cascinc.com

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CASC
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Palm Desert, CA 92211
Phone: 760.259.0108
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November 18, 2020

Imperial County
Planning & Development Services Department
Attn: Jim Minnick, Director of Planning and Development Services
801 Main Street
El Centro, CA 92243

PROPOSAL FOR: EIR FOR THE VEGA SES 2, 3, & 5 SOLAR PROJECT

Dear Mr. Minnick,

CASC Engineering and Consulting, Inc. (CASC), is pleased to provide the Imperial County Planning & Development Services Department (County) with the enclosed Request for Proposal (RFP) for the ***"Preparation of a Comprehensive Environmental Impact Report (EIR) for the VEGA SES 2, 3, & 5 Solar Project"*** (Project). The purpose of the Project is to process VEGA 2, 3, and 5 under one (1) EIR and VEGA 4 under a separate EIR. CASC understands that the County desires to partner with a competent and a qualified team to provide "top-notch" and legally defensible environmental documents. As demonstrated in our proposal, it is our position that CASC can successfully meet the County's goal with the preparation and completion of the Environmental Impact Report, three (3) Conditional Use Permits, and an Initial Study.

CASC recognizes that ultimately the success of this Project comes down to the people involved, and we are proposing a technically seasoned team who is committed to serve the County on this Project. The CASC Team will be led by Kim Boydstun, Senior Project Manager/ Biologist, who brings over 25 years of environmental consulting experience, Claudia Steiding, Technical Advisor/Senior CEQA Writer, who has over 25 years of experience in Federal and State environmental regulatory compliance and land use planning, and Frank Coyle, Director of Planning, who has over 30 years of experience working in both the public and private sectors in the Southern California and has managed over 30 on-call planning and environmental agreements. As a few examples, Mr. Coyle successfully led the preparation and completion of an EIR for the Shopoff Group's I-10 Distribution Center in the County of Riverside and the preparation of environmental documents and construction monitoring services for the ColGreen North Shore Solar Project located east of the Salton Sea in the County of Riverside. Ms. Boydstun also assisted with the preparation of the EIR.

CASC, and our Subconsultants DUKE CRM, Urban Crossroads, Leighton Consulting, and Ackerman Law are leaders in providing planning and environmental support services for cities and counties in Southern California. With our office located in Palm Desert, the close proximity will make in-person coordination with the County convenient, eliminating unnecessary logistical challenges that face out-of-area firms, and ensuring that Project funds are spent on the Project, and immediately available if needed.

In closing, we look forward to serving the Imperial County Planning & Development Services Department. If you have any questions or would like to schedule an interview, our Director of Planning, Mr. Coyle may be reached by phone at 760-259-0108 ext. 5370, or by email at fcoyle@cascinc.com.

Sincerely,

CASC ENGINEERING AND CONSULTING

Michelle E. Furlong
Operations Manager (Authority to bind)
855-383-0101 ext. 5460
mfurlong@cascnc.com

CASC ENGINEERING AND CONSULTING

Frank Coyle
Director of Planning (Day-to-day contact)
760-259-0108 ext. 5370
fcoyle@cascinc.com

1. PROJECT UNDERSTANDING

CASC understands that the Imperial County Planning & Development Services Department ("County") is soliciting proposals for the preparation of a comprehensive Environmental Impact Report (EIR) for the Vega SES 2, 3, and 5 Solar Energy Storage ("Project"), which includes three (3) Conditional Use Permits (CUP) and an Initial Study (IS). Based on the application packet provided, we understand that the Project Site applies to five separate properties located east of Niland in unincorporated Imperial County. CASC noted that VEGA SES 2 and 3 both occupy APN 025-010-006.

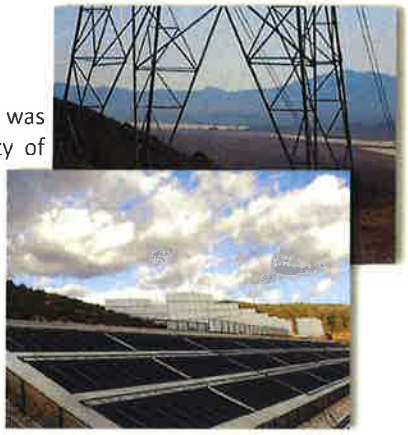
A summary of the three projects is as follows:

1. **CUP #20-0021 Vega SES 2:** An up to two-hundred and forty (240) – megawatt alternating current (MWAC) solar photovoltaic (PC) energy generation project with an integrated 240 MW Battery Energy Storage System (BESS), on approximately 1,472 acres of land. Two (2) new parcel substation would be constructed on each of the Project parcels, APN 025-010-006 and APN 025-270-023. One (1) new Project interconnection switching station would be constructed immediately adjacent to the Project substation on APN 025-260-011.
2. **CUP #20-0022 Vega SES 3 –** An up to sixty (60) – megawatt alternating current (MWAC) soar photovoltaic (PV) energy generation project with an integrated 60 MW Battery Energy Storage System (BESS), on approximately 240 acres of land. Vega SES 3 appears to use the same Project substation and interconnection switching station proposed on 025-010-006 for Vega SES 2.
3. **CUP #20-0023 Vega SES 5** – A nominal fifty (50) – megawatt alternating current (MWAC) solar photovoltaic (PV) energy generation project with an integrated 50 MW battery storage project on approximately 249.8 acres of land. A new Project substation would be constructed on the southwestern boundary of APN 025-260-022. The medium voltage power produced by the Project would be conveyed underground, or above ground where necessary to cross over any sensitive site features, to connect to the Projects' interconnection facilities.

Project	APN	Size of Property (acres of square feet)	Zoning
Vega SES 2	025-260-011	448.30	Open Space/Preservation - Recreation (S-2-RE)
Vega SES 2	025-270-023	624.76	
Vega SES 2 & 3	025-010-006	640.00	
Vega SES 5	025-260-019	89.70	
Vega SES 5	025-260-022	160 (approx.)	Open Space/Preservation - Recreation (S-2-RE) / General Agriculture - Recreation (A-2-RE) / Heavy Agriculture - Recreation (A-3-RE)

CASC understands that time is of the essence on this Project and has provided an expedited schedule to assist the County and the Consultant throughout the complex CEQA process. Our firm has extensive experience in the preparation of CEQA compliance documents and our goal is to prepare comprehensive and legally sound documents in a timely manner. Our teaming partner, Ackerman Law, is available to review documents and public comments to assist the Applicant through to project entitlement. We have prepared a specific Scope of Work included herein detailing our approach to prepare findings of consistency, required technical studies, the Initial Study, the Draft Environmental Impact Report (DEIR), the Final Environmental Impact Report (FEIR), Mitigation, Monitoring and Reporting Program (MMRP), response to public comments, and CEQA notices. Our Planning Team is also equipped to attend public hearings in support of the Project through to approval for the County of Imperial Planning & Development Services Department.

2. PROJECT TEAM



FIRM PROFILE

CASC Engineering and Consulting, Inc. (CASC), a California S corporation, was established in 1993 to provide professional consulting services to a variety of industry sectors. CASC is a mid-sized consulting firm that combines the personal touch of a small firm, with the stability of the large publicly-traded consulting conglomerates. CASC was established to provide Professional Planning, Environmental Services, Water Quality, and Civil Engineering to small and large municipal and County governments throughout Southern California. CASC has served a wide variety of municipal partners within Los Angeles, Riverside, San Bernardino, and Orange Counties, with services including but not limited to Contract Planning and Plan Check Services, Environmental Planning and CEQA Practioner Services, Municipal Water Quality Inspection, document preparation, and management in compliance with the Clean Water Act and Municipal Storm Water Permits. In addition, CASC provides a wide variety of Field Survey and Civil Engineering services to most municipal governments within Los Angeles, Riverside, San Bernardino, and Orange Counties.

THE BEST CHOICE FOR YOUR COUNTY

CASC has over 27 years of experience providing Land Use Planning and Professional CEQA and Environmental Support services to numerous governmental agencies, local water districts, public utility companies, local utility districts, school districts, private enterprises, and industry groups throughout Southern California. Our diverse portfolio of services offered has allowed us to maintain stability even through rough economic conditions. Our multi-year, multi-million dollar contracts with Caltrans and Southern California Edison, among others, demonstrates our ability to weather economic cycles and to see your projects through to completion. The primary aspects that set CASC apart from our competitors, is our level of experience and intimate knowledge within Southern California. Secondly, CASC is experienced and able to achieve quality performance, under budget, and on time with the flexibility to achieve project success for a wide variety of clients.

CEQA MATRIX—PROJECT TEAM

CASC provides a variety of services to our Public Agency Partners, which includes, but is not limited to:

TASK	CASC	SUBCONSULTANT
Agriculture and Forest Resources	X	
Hazards and Hazardous Materials		X
Land Use Planning	X	
Mineral Resources		X
Population & Housing	X	
Public Health & Safety	X	
Public Services	X	
Recreation	X	
SB18/AB-52 Tribal Cultural Resources		X
Utilities & Service Systems	X	
Energy		X
Wildfire	X	
Findings for Project	X	
MMRP	X	
Geotechnical/Geology and Soils		X
Phase 1 ESA		X
Hydrology and Water Quality	X	
Water Supply Assessment	X	

PARTIAL LIST OF GOVERNMENT CLIENTS

The quality of CASC's services is exemplified by our continuous work for many prominent clients, including:

AGENCY/CLIENT	PROMINENCE	YEARS
Caltrans	Largest Transportation Department in the USA	24
DR Horton	Largest Home Builder in the USA	20
LAUSD	Largest School District in California	18
San Bernardino County	Largest County (Area) in the USA	12
Southern California Edison	Largest Privately Held Utility Company in California	11
Los Angeles County DPW	Largest County (Population) in the USA	8

PARTIAL LIST OF RELEVANT PROJECTS

- Engineering Services—Gestamp Solar, LLC, Imperial County, CA
- Land Use and Environmental Impact Analysis for a 100MW Photovoltaic (PV) Solar Facility, City of Needles, CA
- Due Diligence Report for a proposed 40MW Solar Project, Mirasol Development, Kern County, CA
- 1.4MW Ground Mounted Concentrated PV Solar Project, Crafton Hills College, Yucaipa, CA
- 165-acre Photovoltaic Solar Energy Power Plant, Thousand Palms Solar 1, LLC., Thousand Palms, CA
- Due Diligence Report for a proposed 450MW Solar Project, Sustainable Power Group, Riverside County, CA
- Coolwater-Lugo 220kV and 500kV T/L Project (San Bernardino County), Southern California Edison, CA
- Vincent Substation Physical Security Project (Los Angeles County), Southern California Edison, CA
- San Joaquin Cross Valley Loop Transmission Upgrade (Tulare County), Southern California Edison, CA
- Titanium BESS Santa Ana CA, Southern California Edison, CA
- Horoscope Battery Energy Storage System (BESS), Irvine, CA, Southern California Edison, CA

OUR STAFF - UNMATCHED

The CASC Project Team brings extensive experience in all aspects of the RFP's Scope of Services. The list below identifies the CASC team and our "go-to" subconsultants.

TEAM MEMBER	CONTRACT ROLE	YEARS OF EXPERIENCE
Kim Boydstun	Senior Project Manager	30+
Frank Coyle	Director of Planning / Quality Assurance/Control	30+
Claudia Steiding	Technical Advisor/Senior CEQA Writer	25+
Dave Jones	Senior Project Manager (Geotechnical)	30+
Tom Nievez	Senior Project Manager	30+
Jessie Bruckhart	Associate Planner II	7
Serena Dudas	Associate Planner II/GIS Analyst	5
Justin Palmer	On-Call Contract GIS Specialist	15+
Lauren Thompson	Project Coordinator/ Quality Assurance/Control	10
Rick Furlong	Director of Survey & Mapping/PLS	30+
Barbara Sherman	Senior Project Manager (Engineering)	30+
Anthony Mistretta	Project Manager (Engineering)	20+
Michael Gentile	Senior Engineer	20+
Jeff Endicott	Director of Engineering/ Quality Assurance/Control	30+
Urban Crossroads , Inc.	Traffic, AQ/GHG, Noise, Energy	Please see each team member's resume - Appendix 2
DUKE CRM	Cultural/Tribal/Historical	
Leighton Consulting, Inc.	Phase 1 ESA, Geotechnical, Hazardous Materials	
Ackerman Law PC	CEQA Attorney/ Quality Assurance/Control	

SUBCONSULTANT TEAM

DUKE CRM

DUKE CRM provides private and public clients with the highest quality archaeological, historical, and paleontological consulting services. At DUKE CRM we balance the importance of preserving significant historical, archaeological, and scientific resources with the needs of a growing and changing human environment. To do this we approach each project with sound science combined with regulatory strategy to seek development solutions. DUKE CRM staff are experts in the California Environmental Quality Act (CEQA), the National Environmental Policy Act (NEPA), and the National Historic Preservation Act (NHPA, Section 106). DUKE CRM staff has vast experience on several thousands of projects working with many federal and state agencies, including: Caltrans, FHWA, SHPO, ACOE, FRA, CPUC, CEC, BLM, USFS, ACHP, DOD, FCC, DWR, and SWRCB, to name a few. In addition, we regularly work for local agencies. Our services include:

- Archaeological surveys
- Native American consultation
- Archaeological test excavations
- Historic Resource evaluations and surveys
- Archaeological data recovery
- 3rd Party/Peer Review
- Archaeological/Paleontological monitoring
- National and California Register nominations
- Paleontological surveys and salvage
- HABS/HAER documentation

LEIGHTON CONSULTING, INC.

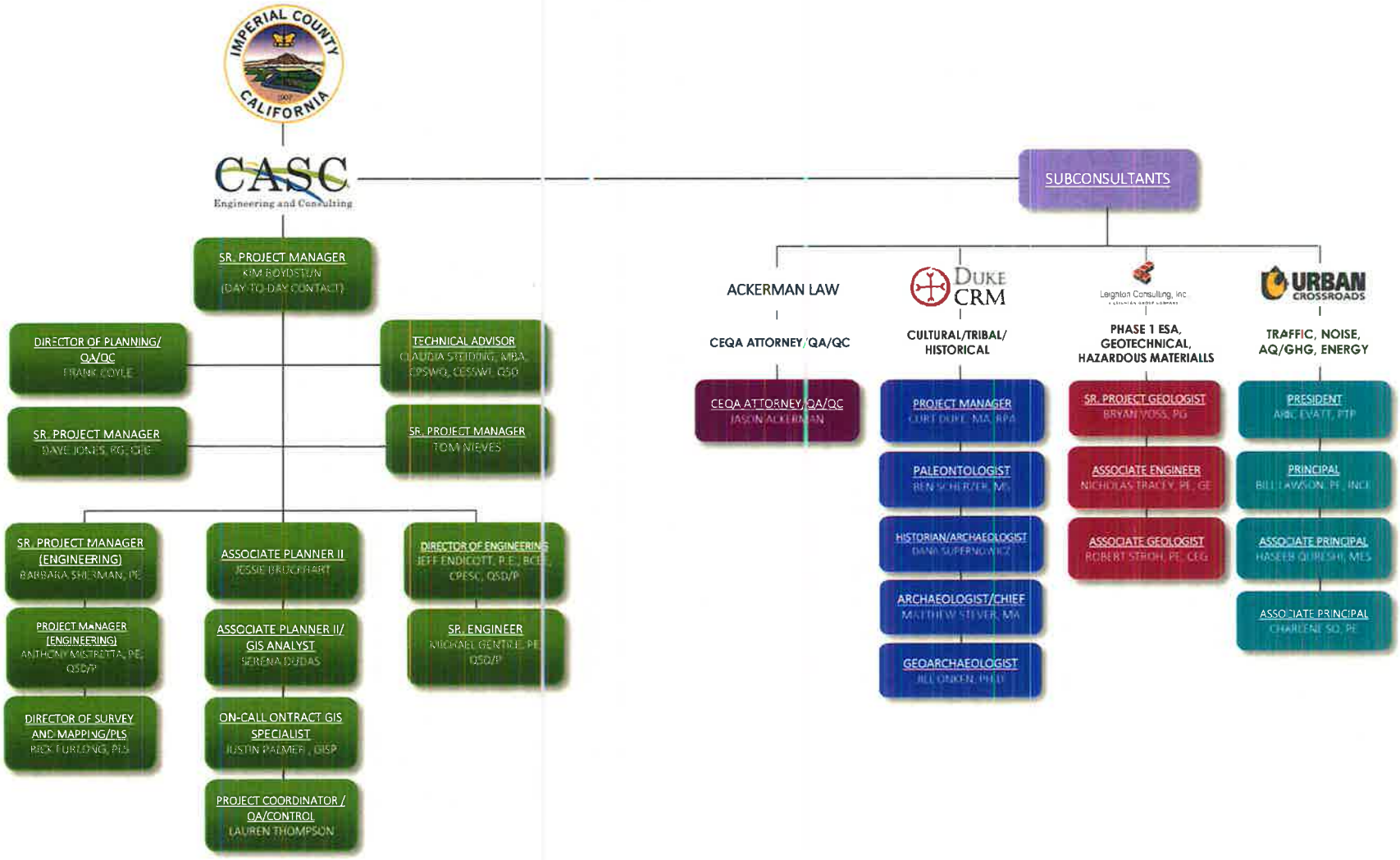
Leighton Consulting, Inc. (Leighton) is an award-winning engineering firm recognized as a 2020 Top Design Firm by Engineering News-Record (ENR). Founded in 1961, Leighton provides geotechnical, geological and environmental engineering solutions, as well as testing and inspection services, for the planning, design, and construction of engineered structures and master planned communities across California. Leighton has eight offices across Southern California, with Rancho Cucamonga as the local office, and a workforce of 170+ people comprised of qualified and experienced California Registered Professional Engineers, Geotechnical Engineers, Professional Geologists, and Certified Engineering Geologists who are OSHA HAZWOPER 40-hour trained and certified to recognize hazardous substances during field geotechnical/environmental field investigations. As a licensed General Engineering Contractor with a hazardous substances removal certification (License No. 858635 A-HAZ), Leighton is a single source for geo-environmental expertise, from performing initial site assessments to managing remedial action workplans.

URBAN CROSSROADS

Founded in 2000, Urban Crossroads, Inc. is a California "S" Corporation and certified Small Business (SBE_#48585) and a leading provider of traffic, air and noise consulting services. Urban serves both public and private sector clients to provide forecasting, analysis and design for all modes of transportation. Members of Urban Crossroads personnel have performed major assignments for over 30 different cities in California, as well as regional organizations such as the Southern California Association of Governments (SCAG) and the Riverside County Transportation Commission. Urban Crossroads' recommendations and conceptual designs maximize the utility of the planning and engineering process as clients are able to anticipate potential problems and resolve them accordingly. Urban Crossroads provides a full range of traffic services that include traffic impact analysis, traffic engineering, travel demand modeling, simulations and many other traffic related services.

PROJECT TEAM ORGANIZATIONAL CHART

CASC is pleased to present our highly experienced project team shown in the organization chart below. Our team of professionals hold credentials that attest to their knowledge, skills, and abilities. By presenting credentialed and experienced staff, the Imperial County Planning and Development Services Department will have exceptional confidence in the team.



TEAM INTRODUCTIONS

CASC is proposing a seasoned team of qualified environmental managers, planners, analysts, and technicians to complete the services identified within our Scope of Work. Project Team resumes may be located in the Appendices Section (A2. Project Team Resumes) for more information on relevant project experiences and qualifications.

Kim Boydstun, Senior Project Manager: Ms. Boydstun will be the Senior Project Manager and **serve as the day-to-day point of contact** responsible for managing the contract, the CASC Team, and overseeing the Project to ensure successful delivery of services. Ms. Boydstun brings over 20 years of environmental consulting experience as a Senior Biologist/Project Manager for large-scale multidisciplinary projects in both the public and private sector. Her experience encompasses regulatory and permitting compliance, restoration installation and mitigation monitoring, CEQA/NEPA support, sensitive flora and fauna surveys, habitat classification and constraints analysis, and construction monitoring.

Frank Coyle, Director of Planning/Quality Assurance/Quality Control: Mr. Coyle will oversee Quality Control for the Project. As the Planning Director, he will also be ultimately responsible for ensuring that the resources and support are available and fully adequate to successfully support the County's objective. Mr. Coyle will serve as the back-up Project Manager. Mr. Coyle is highly experienced and has more than 30 years of experience in urban and regional planning for both private and public sectors. He has managed over 35 on-call environmental contracts in Southern California.

Claudia Steiding, Technical Advisor/Senior CEQA Writer: Ms. Steiding will serve as the Technical Advisor for the Project and will be responsible for reviewing the technical documents to ensure consistency with CEQA. Ms. Steiding has over 25 years of experience in Federal and State environmental regulatory compliance and land use planning. Ms. Steiding earned her MBA at the University of Phoenix and has the following certifications: CPSWQ, CESSWI, and QSD/QSP.

Dave Jones, Senior Project Manager (Geotechnical): Mr. Jones will serve as the Senior Project Manager for all Geotechnical and Geological work and will oversee the Geotechnical subconsultants throughout this Project. Prior to joining CASC, Mr. Jones was the Chief Engineering Geologist for the County of Riverside TLMA for over 25 years. Mr. Jones is a Registered Geologist in California, a Certified Engineering Geologist, and a Certified Dive Master.

Tom Nievez, Senior Project Manager: Mr. Nievez will serve as the Senior Project Manager for this Project and will review the EIR and IS pursuant to CEQA. Mr. Nievez brings over 30 years of practical and comprehensive experience in the environmental, project management, planning and land development industries.

Jeff Endicott, Director of Engineering/Quality Assurance/Quality Control (Water Quality): Mr. Endicott will provide Quality Assurance/Quality Control for all Water Quality work throughout this Project. Mr. Endicott has extensive environmental and civil engineering experience as a consultant and in the public sector. Water, as a resource and as a force in nature, has been a central element of Jeff's work, with projects ranging from development of potable water supplies to prevention of environmental damage initiated by rainfall and runoff. The California Stormwater Quality Association (CASQA) bestowed upon Jeff the CASQA Leadership Award in 2019. The Leadership Award recognizes his "outstanding leadership within CASQA and for making exceptional contributions to the stormwater quality management profession over a significant time period." Jeff was only the 7th individual in CASQA's long history to receive this honor.

Mike Gentile, Senior Engineer (Hydrology): Mr. Gentile will serve as the Senior Engineer responsible for preparing Hydrology studies and preparing the WQMP for this Project. Mr. Gentile has over 20 years of experience project management, project engineering, design, and production for a wide variety of civil engineering projects. His diverse project experience includes hydrology and hydraulics, drainage master plans, storm drain and water quality facilities design, roadway and drainage design, transportation studies (highways and rail), water, sewer, and site development. He is an expert in hydrology, stormwater management and water quality best management practices (BMPs).

Rick Furlong, Director of Survey and Mapping/Professional Land Surveyor: Mr. Furlong will provide Land Surveying and Mapping services as requested by the County for this Project. He is an accomplished professional surveyor with over 30 years of surveying experience in Southern California and is currently in his 19th year as Director of Survey and Mapping for CASC. Mr. Furlong has a broad survey background including construction staking, hydrographic, topographic mapping, boundary surveys, design surveys, parcel mapping and records of survey.

Barbara Sherman, Senior Project Manager (Engineering): Ms. Sherman will oversee the Utilities and Service Systems analysis and all engineering functions throughout this Project. Ms. Sherman is a registered civil engineer in the State of California. She has over 25 years of experience in the civil engineering industry. Her design experience includes sewer, water, street, grading, and storm drain projects throughout Southern Californian. She has design and management experience with various government agencies, public and private utility companies, state and federal agencies, school districts, special districts, private developments, renewable energy developers, and railroad companies.

Anthony Mistretta, Project Manager (Engineering): Mr. Mistretta will serve as the Project Manager for preparing the Utilities and Service Systems analysis and assisting with the Hydrology studies. Mr. Mistretta has been responsible for the civil design of a variety of developments including but not limited to residential tracts, parking facilities, street and highway improvements, substation sites, solar facilities, and various other commercial sites. Additional experience includes the development of multiple detailed hydrology studies and drainage reports, as well as the water quality design and development of Storm Water Pollution Prevention Plans (SWPPPs) and Water Quality Management Plans (WQMPs) for a variety of traditional and linear developments.

Jessie Bruckhart, Associate Planner II: Ms. Bruckhart will prepare key CEQA documents, promote regulatory compliance, communicate with agencies, and conduct research in the analysis of key environmental issues. Ms. Bruckhart launched her career following graduation from Indiana University of Pennsylvania with a Bachelor of Science degree in Environmental Planning and GIS. Prior to her experience at CASC, Ms. Bruckhart worked for the County of San Bernardino as a Planner for 5 years as a Planner and 3 years as a Planning Technician.

Serena Dudas, Associate Planner II/GIS Analyst: Ms. Dudas has several years of experience in environmental consultation services and will prepare key CEQA/NEPA documents, facilitate public outreach, promote regulatory compliance and communication with agencies, and conduct research in the analysis of key environmental issues.

Justin Palmer, On-Call Contract GIS Specialist: Mr. Palmer will serve as an On-Call GIS Specialist. Mr. Palmer has over 20 years of experience with GIS and is a certified GISP. If GIS services are needed for the Project, Mr. Palmer will provide database management, map production, web maps, mobile applications, quantitative analyses, modeling, resource mapping, and data migration.

Lauren Thompson, Project Coordinator/Quality Assurance/Quality Control: Ms. Thompson will handle all administrative tasks for this Project including invoicing, tracking Project budget and schedule, contract administration. Ms. Thompson will also conduct background project research, analyze specific environmental impacts, manage project schedules, and promote quality control assurance for environmental documents.

DUKE CRM (SB18/AB-52 Tribal Cultural Resources/Historical/Archaeology)

Curt Duke, Project Manager/Principal Archaeologist: Mr. Duke will serve as the Project Manager responsible for all studies pertaining to Cultural Resources, Tribal Cultural Resources, and Historical. Mr. Duke has served as the Principal Archaeologist for several Solar Projects in the Mojave Desert and Coachella Valley. Mr. Duke meets the Secretary of Interior's Professional Qualifications Standards for Prehistoric and Historical Archaeology. He has more than 25 years of professional cultural resources experience. He received his B.A. in Anthropology in 1994 from the University of California, Santa Cruz, and his M.A. in Anthropology in 2006 from California State University, Fullerton. His M.A. thesis focused on prehistoric mortuary analysis in Southern California. Mr. Duke is a Registered Professional Archaeologist (RPA No. 15969).

Brian Glenn, Principal Investigator/Archaeologist: Mr. Glenn has worked on several Solar Projects throughout his career. This is in addition to the hundreds of cultural resources management projects over his 30-year career. This includes projects throughout California in compliance with Section 106 of the National Historic Preservation Act (NHPA) and California Environmental Quality Act (CEQA).

Ben Scherzer, Paleontologist: Mr. Scherzer has more than 15 years of experience in paleontological research, field surveys, fossil salvage, fossil preparation, laboratory analysis, report preparation, and curatorial experience. Mr. Scherzer has experience in multiple areas of paleontology, with research experience with dinosaurs, Cenozoic mammals, marine mammals, and invertebrates. Mr. Scherzer leads all paleontological resources investigations for DUKE CRM. He coordinates with research institutions, museums/curation facilities, and other paleontological specialists.

Dana Supernowicz, Architectural Historian: Mr. Supernowicz has been professionally involved in the research, documentation, and mitigation of historic districts, sites, buildings and structures since 1976. He has worked for a variety of federal and state agencies including Caltrans, the Department of Parks and Recreation, U.S Forest Service, National Park Service, and Bureau of Land Management. He was the first full-time historian and historical archaeologist employed by the U.S. Forest Service in California and served as the first Regional Historian and Zone Historian for California. Mr. Supernowicz has served as the Principal Investigator for numerous historical projects, as well as carrying out laboratory analysis, and preparing research designs.

Matthew Stever, Archaeologist/Crew Chief: Mr. Stever is an Archaeologist with DUKE CRM. He has 7 years of professional archaeological experience in conducting research, field surveys, Native American consultation, archaeology/ paleontology monitoring, processing and cataloging artifacts from excavation and report writing. Mr. Stever is a Registered Professional Archaeologist, (RPA No. 49570975). He received his B.A. in Anthropology in 2014 from CSU, San Bernardino and his M.A. in Applied Archaeology in 2017 from CSU, San Bernardino.

Jill Onken, Geoarchaeologist: Dr. Onken has 30 years' experience conducting geoarchaeological investigations throughout the western United States, including work at more than 80 sites in southern California, one-third of which are in coastal counties. Her areas of expertise include alluvial stratigraphy, geomorphology, site formation processes, and radiocarbon and obsidian hydration dating. Her education and experience in both archaeology and the geosciences allow her to focus on questions most relevant to archaeological inquiries.

Leighton Consulting (Hazardous Materials, Mineral Resources, Geotechnical/Geological, Phase I ESA)

Bryan Voss, Senior Project Geologist: Mr. Voss has over 20 years of extensive experience as a project manager for site characterizations, contaminant delineation, risk assessments, remediation, groundwater monitoring, permitting, remedial system design, operation oversight and regulatory agency permitting, and Phase I, II, and III Environmental Site Assessments (ESAs).

Nicholas Tracey, Associate Engineer: Mr. Tracy has 15 years of experience performing and managing geotechnical investigations utilizing a variety of techniques and tools, including hollow-stem auger, cone penetrometer testing (CPT), test pits, seismic refraction, inclinometer, and manometer. Mr. Tracy has provided geotechnical design parameters and earthwork recommendations for San Diego Gas & Electric (SDG&E), Pacific Gas & Electric (PG&E), Southern California Gas (SoCal Gas), and City of San Diego energy projects. Additionally, he has served as an expert witness for SDG&E and PG&E on more than 30 claims relating to erosion following wildfires.

Robert Stroh, Associate Geologist: Mr. Stroh has over 30 years of experience in engineering geology and conducting geotechnical engineering evaluations. He has extensive experience in geotechnical and geologic investigations including geologic field mapping, fault hazard investigations, soil stratigraphy, aerial photograph interpretation and geomorphology studies, seismic hazard, slope stability evaluations, geotechnical subsurface exploration, sampling and logging, rock core logging, grading quality control and soils testing, marine and coastal studies, mineral resources, and geophysical evaluations including velocity, resistivity, and ground penetrating radar surveys. His areas of specialized experience include fault hazard studies, soil stratigraphy, and performance-based seismic hazard analysis.

Urban Crossroads (Energy, Traffic, AQ, GHG, and Noise)

Aric Evatt, Principal/Senior Transportation Engineer: Mr. Evatt is the President of Urban Crossroads, Inc. Mr. Evatt leads the transportation studies group with a focus on helping clients and communities develop mitigation strategies in response to ever evolving environmental and legislative requirements. As President of Urban Crossroads, Inc. Mr. Evatt works to ensure our continued success by maintaining strong client relationships, providing timely and complete work products and supporting our technical studies throughout the public hearing process.

Bill Lawson, Traffic Engineer/Noise Specialist: Mr. Lawson is a founding principal partner, a Registered Professional Traffic Engineer and a Certified Acoustical Consultant. Mr. Lawson maintains a wide range of technical expertise that includes transportation planning, traffic engineering, neighborhood traffic control, and noise impact analysis. Mr. Lawson has over 25 years of community noise experience and has personally prepared and directed the development of well over 2,000 noise study reports throughout Southern California.

Charlene So, Senior Transportation Engineer: Ms. So, P.E., has worked in transportation planning and traffic engineering since 2002. Since earning her Bachelor of Science degree in Civil Engineering from the University of California, Irvine, Charlene So has developed a wide range of expertise in transportation planning and traffic impact analyses. She is a registered professional traffic engineer in the State of California.

Haseeb Qureshi, Air Quality/GHG Specialist: Mr. Qureshi has been working in the field of air quality, climate change, health risk assessment, and vehicular and non-motorized transportation planning and analysis since 2006. In this time he, has authored numerous air quality, health risk, greenhouse gas, traffic impact analysis studies, and provided input into project design to promote sustainability and walkability for projects ranging from small development projects to citywide General Plan updates and large scale specific plans. Recent activities include efforts to inventory greenhouse gas emissions for various projects and provide recommendations to reduce carbon impacts through innovative mitigation strategies. Mr. Qureshi earned his Master of Science degree in Environmental Studies from California State University, Fullerton and his Bachelor of Arts degree in Environmental Analysis & Design from University of California, Irvine.

TEAM QUALIFICATIONS

PROFESSIONAL CERTIFICATIONS/LICENSES/REGISTRATIONS/EDUCATION

Our team of professionals hold degrees and credentials that attest to their knowledge, skills, and abilities to ensure that the County has exceptional confidence in the team.

CERTIFICATE/LICENSE/REGISTRATION/EDUCATION	CASC	ACKERMAN	DUKE CRM	LEIGHTON	URBAN
Bachelors Degree (B.S. / B.A.)	X	X	X	X	X
Masters Degree (M.S. / M.A.)	X		X	X	X
Juris Doctor Degree (J.D.)		X			
Ph.D.			X		
Professional Engineer (PE)	X			X	X
Professional Geologist (PG)	X			X	
Geotechnical Engineer (GE)				X	
Certified Engineering Geologist (CEG)	X			X	
Certified SMARA Mine Inspector (SMARA)	X				
Qualified SWPPP Developer (QSD)	X				
Qualified SWPPP Practitioner (QSP)	X				
Qualified Industrial Stormwater Practitioner (QISP)	X				
Board Certified Environmental Engineer (BCEE)	X				
Certified Professional in Erosion and Sediment Control (CPESC)	X				
Certified Erosion, Sediment, and Stormwater Inspector (CESSWI)	X				
Trainer of Record (TOR)	X				
Registered Professional Archaeologist (RPA)			X		
Certified Asbestos Consultant (CAC)				X	
Professional Transportation Planner (PTP)					X
American Planning Association (APA)	X		X		X
Association of Environmental Professionals (AEP)	X		X		X
Building Industry Association (BIA)	X	X	X	X	
Society for California Archaeology (SCA)			X		
Pacific Coast Archaeology Society (PCAS)			X		
California Public Utilities Commission (CPUC)	X	X		X	
Prehistoric Quarry & Early Mines Interest Group	X				
Institute of Transportation Engineers (ITE)					X
Institute of Noise Control Engineering (INCE)					X
Geographic Information System Mapping (GIS)	X		X		X
Quino Checkerspot Butterfly Permit (QUINO)	X				
California Department of Fish & Wildlife	X	X			
OSHA Hazwoper	X		X	X	

3. SCOPE OF WORK

CASC understands that Imperial County ("County") is soliciting proposals from qualified and technically seasoned firms to provide planning and environmental consulting services for the VEGA SES 2, 3 & 5 Solar Projects ("Project"). Based on the RFP, we understand that the Project includes three (3) Conditional Use Permits (CUP), an Initial Study, and the preparation of an Environmental Impact Report (EIR). The Project is located east of the town of Niland in the unincorporated area of Imperial County. The Project will be constructed on approximately 1,962 gross acres of predominantly undeveloped/agricultural land.

The proposed Project involves the following:

- **CUP #20-0021 VEGA SES 2** – Construction and operation of a 240-megawatt (MW) alternating current (AC) solar photovoltaic (PV) energy generation and 240 MW/960 megawatt hour (MWh) battery storage project on approximately 1,472 acres. The electrical energy produced by VEGA SES 2 would be delivered to the Imperial Irrigation District (IID);
- **CUP #20-0022 VEGA SES 3** – Construction and operation of a 60 MW AC solar PV energy generation and 60 MW/240 MWh battery storage project on approximately 240 acres. The electrical energy produced by VEGA SES 3 would be connected to the existing utility approved point of interconnection (POI) at the northern boundary of the parcel to the IID 161 kV "L" Line; and
- **CUP #20-0023 VEGA SES 5** – Construction and operation of a 50 MW AC solar PV energy generation and 50 MW/200 MWh battery storage project on approximately 249.7 acres. The electrical energy produced by VEGA SES 5 would be conducted through a proposed 92 kV generator intertie ("gen-tie") line and delivered to the IID through a short interconnection with the IID 92kV "Midway" Substation or the proposed Project switching station.

Imperial County is considered a national leader in the development of its renewable energy resources. As such, the County will be considering approval of the Project upon the completion of the CEQA process. As part of the CEQA process the environmental documents will examine the Project for consistency with its General Plan with empasis on the General Plan's *Renewable Energy and Transmission Element*. (The *Renewable Energy and Transmission Element* provides a framework for the review and approval of renewable energy projects in the County.)

CASC understands that satisfying environmental compliance under the California Environmental Quality Act (CEQA) will require thorough research, investigation, and consultation. Our Team is experienced in the preparation of environmental documents such as Categorical Exemptions (CE), Initial Studies culminating in a Negative Declaration (IS/ND) or Mitigated Negative Declaration (IS/MND), Mitigation Monitoring and Reporting Programs (MMRP), and Environmental Impact Reports (EIR). The following approach demonstrates CASC's Scope of Work and deliverables to satisfy the preparation of the VSP EIR and environmental clearance through the CEQA process:

TASK 1: PROJECT INITIATION

Task 1.1. Project Kick-Off Meeting

CASC's Director of Planning, Frank Coyle, and Kim Boydstun, Project Manager will attend a Project kick-Off meeting with County Staff to discuss the Project scope of work, schedule, budget, and management. Our leaders will spearhead the preparation of a Project Management Plan to streamline the preparation process of studies and documents and solicit input from County Staff and the Applicant. CASC will also provide a preliminary list of relevant information and documents that are needed for the Project and Environmental Analysis (culminating in an EIR).

On large projects, clear communication between entities is important for efficient and timely work. To aid this effort, we will identify communication protocol between the consultant and County Staff, as well as others who the Project Team believes could provide valuable input into the process. CASC shall update the Project Schedule based on the initiation meeting to include accurate timing estimates for components that will be provided by the County. The Project Team will also discuss the management details of the process, including an identification of team responsibilities and communications, important milestones, and quality control procedures.

Deliverables:

- Project Kick-Off Meeting with Staff
- Meeting minutes (Word and PDF format)

Task 1.2 Review of Existing Planning Materials, Project Conditions, and Evaluate Project Setting

It is important to have a solid project understanding early in the planning process to anticipate controversial issues, devise solutions, and provide expert compliance consultation in order to maintain budget, objectives, and schedule. Our Planning Team shall prepare preliminary research on the Project beforehand, including but not limited to, data collection, due diligence research, literature review, scoping meetings, GIS data analysis, review of the General Plan (with emphases on the *Renewable Energy and Transmission Element*), Zoning, and Policy documents, as well as other appropriate documentation associated with the Project materials. These findings shall be summarized and our primary conclusions will be addressed during the kick-off meeting. Additionally, the CASC team may find it necessary to conduct one (1) site visit to discern the environmental and physical conditions of the Project Sites and the surroundings.

Deliverables:

- Technical memorandum summarizing available information
- One (1) site visit to evaluate the project setting

Task 1.3 Prepare Project Description

If necessary, CASC may update the Project Description in collaboration with the County and the Applicant based on the Project Initiation. Three (3) separate Project Descriptions, one each for VEGA SES 2, 3 & 5 were included within the Project materials released with the Request for Proposal. Based on findings from Subtask 1.2, CASC will prepare any comments, organize feedback, and consult with the County and the Project applicant to address any discrepancies found within the Project Descriptions themselves. CASC will evaluate the Project Description for consistency with the General Plan (with emphases on the *Renewable Energy and Transmission Element*), Zoning, and Policy documents. Any inconsistencies between the Project Description and the aforementioned documents, will be discussed with the County and the Applicant. Upon confirmation of a final comprehensive Project Description, CASC will confirm with the County and begin to draft the Initial Study, based upon the final Project Description and the Technical studies provided.

Deliverables:

- Final Project Description

Note: Any revisions to the Final Project Description after initiation of the environmental document, preparation of technical studies may require an addendum to the Scope of Services prior to start of the additional work.

Task 1.4 Peer-Review Technical Studies

Based on the RFP, CASC understands that the consultant is requested to peer-review and prepare technical studies for the EIR. CASC has hand selected a group of our "go-to" subconsultants to join our team and assist with the peer-review and preparation of specialty studies. Our team shall review the following Applicant-prepared technical reports, as submitted to the County by the Applicant, which are anticipated to include the following reports:

CONSULTANT	STUDY			
CASC Engineering and Consulting, Inc.	Aesthetics/ Visual Impacts	Biological Resources	Land Evaluation & Site Assessment	-
Urban Crossroads	Air Quality	Greenhouse Gas	Noise	Transportation/ Traffic
DUKE CRM	Cultural Resources	Tribal Resources (includes AB-52)	Archaeological/ Paleontological Resources	Historic Resources Assessment

Assumptions: The Cultural, Tribal Resources and Archaeology report addresses AB52 Consultation as well as Paleontological Resources (which will appear in the Geology Sections of the Initial Study and EIR). CASC assumes that the AB52 Consultation process has been completed. CASC assumes the Biological Resources Assessment will include a Jurisdictional Delineation and assess the need, if any, for Regulatory Permitting/Certification. CASC assumes that the technical reports prepared by the Applicant and their consultants will include findings of significance and mitigation measures pursuant to CEQA Guidelines. CASC assumes and has budgeted for one round of comments and a second review of the Technical Reports (if needed).

Deliverables:

- One (1) Technical Memorandum addressing the adequacy (and recommended revisions if applicable) for each of the technical reports prepared by the Applicant and their consultants as described above.

Task 1.5 Prepare Technical Studies

Upon preliminary review, CASC has identified the potential need to prepare the following studies:

CONSULTANT	STUDY		
Leighton Consulting, Inc.	Phase I ESA	Geotechnical Report	Mineral Resources
Urban Crossroads, Inc.	Energy Analysis	-	-
CASC Engineering and Consulting, Inc.	Water Demand Estimate	-	-

Assumptions: Additional technical studies/reports can be provided under a separate Authorization, submitted in writing between the County and CASC. Coordination with County Staff and County direction will solidify what technical report efforts are required to comply with CEQA and result in a comprehensive and defensible CEQA documents.

Deliverables:

- Leighton Consulting, Inc. shall prepare one (1) electronic report documenting the results of the **Phase I ESA**, summarizing findings and recommendations while identifying potential data gaps due to an inability to obtain information, despite Leighton's good faith efforts. This study does not include subsurface exportation, air, water, asbestos, or other media sampling or analysis, nor investigation for radioactivity, radon, methane gas, mildew, mold, or other biohazards. Leighton is not responsible for handling or disposal of hazardous materials and shall not consider possibilities of future contamination from adjacent sites and surrounding facilities. Leighton will require the following to complete the report: Liens/Use Restrictions Disclosures, Client Disclosures, Price Reduction Disclosures, Owner Contact Information, Owner/Tenant Interview Form, User Questionnaire, Prior Reports, Title, and Plans. This information will be requested upon Project initiation. Leighton shall be available to revise the report based on comments provided by Staff for up to one (1) review cycle.
- Leighton Consulting, Inc. shall prepare one (1) **Geology/Soils Report** which will be signed and stamped by a California-license Certified Engineering Geologist (CEG) and Professional Engineer (PE). This will include an evaluation of the overall geologic setting, geologic hazards, and groundwater. Leighton shall be available to revise the report based on comments provided by Staff for up to one (1) review cycle.
- Leighton Consulting, Inc. shall prepare one (1) **Mineral Resources Memorandum** discussing the potential feasibility of the mineral resources in the site area. Leighton shall be available to revise the report based on comments provided by Staff for up to one (1) review cycle.
- Urban Crossroads will prepare a digital version of the draft and final **Energy Analysis Report** and revise the report based on comments provided by Staff for up to one (1) review cycle.
- CASC Engineering and Consulting, Inc. shall prepare a **Water Demand Estimate** for the proposed project. The assessment shall discuss the availability of water resources for the proposed project and shall be available to revise the report based on comments provided by Staff for up to one (1) review cycle.
- All Technical Studies/Reports prepared by CASC and subcontractors, will be submitted to the County in electronic format on a CD or thumb drive.

TASK 2: PREPARE INITIAL STUDY

Task 2.1 Prepare Initial Study

CASC will prepare an Initial Study (IS) for the proposed Project to identify potentially significant environmental impacts. The format of the Initial Study will be consistent with the CEQA Guidelines Checklist in Appendix G: Environmental Checklist Form. The intent of the Initial Study is to identify the Project's potential environmental impacts, verify the need (if any) for additional technical studies, and to accompany the EIR Notice of Preparation to

facilitate public agencies and concerned individuals/groups in providing meaningful input into the environmental evaluation process. CASC will provide an electronic copy of the Draft Initial Study for review by County Staff. After County Staff's review, CASC will modify the Initial Study, prepare a Final Initial Study, and submit an electronic copy of the final Initial Study to County Staff for review and comment.

CASC will prepare a summary, presenting the conclusions of the Initial Study in a manner that is easy to understand. A summary "table" format will be used to identify the significant impacts and the effectiveness of the recommended mitigation measures.

Assumptions: CASC assumes one round of comments by County Staff on the Draft Initial Study and one round of comments on the Final Initial Study. CASC assumes that the County will be available for coordination throughout the preparation of the Initial Study.

Deliverables:

- Draft and Final Initial Study, Summary Table of Impacts

Task 2.2 Notice of Preparation

Once the Initial Study is complete, CASC shall prepare a Notice of Preparation (NOP) notifying the public, interested parties, and agencies that an Environmental Impact Report (EIR) will be prepared for the Project. CASC will assist the City with conducting a scoping meeting during the 30-day public review period to educate the public on the Project and solicit comments. A copy of the completed Initial Study will be attached to the NOP to provide information on the environmental issues and analysis that will be contained in the EIR. CASC will also keep a record of all comments/responses received during the NOP period so they are included and addressed in the EIR.

Additionally, CASC shall conduct one (1) scoping meeting that would target interested parties such as the public (property owners and concerned residents), State and local agencies such as the Imperial Irrigation District and State of California Department of Conservation Division of Oil, Gas, Regional Water Quality Control Board, and Geothermal Resources Southern Division, the agricultural community, the Planning Commission and the Board of Supervisors, and others.

Deliverables:

CASC will provide the following deliverables as part of the Notice of Preparation *and* Initial Study submittal:

- Fifty (50) CD's containing the IS/NOP
- Submit the IS/NOP to the State Clearinghouse's CEQAnet Web Portal. *(As of 11/03/2020, hard copies are not accepted by OPR and SCH)*
- Five (5) paper copies of the IS/NOP to the County
- Electronic files (Word and PDF format) ofthe IS/NOP to the County
- Paper copies of Scoping Meeting handouts and materials
- Electronic files of NOP Comments that have numerical tracking, and Technical Memorandum on how to address comments in the EIR
- Scoping Meeting

TASK 3: PREPARE DRAFT ENVIRONMENTAL IMPACT REPORT

Task 3.1 Prepare Administrative Draft EIR

CASC shall prepare a Draft EIR for the County's review and approval, pursuant to State CEQA Guidelines and the County of Imperial Environmental Review Procedures. CASC shall work with the County to prepare the Project's objectives and proposed actions. The Draft EIR will use the final Initial Study to identify all potentially significant effects of the Project on the physical environment, determine the significance of impact, assess the extent to which the significant effects may be reduced or avoided, and identify and evaluate feasible alternatives to the Project. CASC shall also collaborate with Staff to identify reasonable alternatives to the Project for inclusion in the Draft EIR. Intended uses of the EIR (as required by CEQA Guidelines Section 15124(d)) will be provided, including a list of responsible and other agencies expected to use the EIR in decision making, and a list of required Project approvals (e.g., Final Project Conditions of Approval).

CASC shall conduct an environmental analysis of the proposed Project to include the documentation of baseline conditions, conducting Project and cumulative impact evaluations, and formulating mitigation measures for each environmental issue that could potentially be impacted by the Project . In addition to preparing the assessments, CASC will prepare a summary, presenting the significant conclusions of the EIR in a manner that is easy to understand. A summary "table" format will be used to identify the significant impacts and the effectiveness of the recommended mitigation measures. A summary of the Project Alternatives analyses will also be presented, as will issues to be resolved and issues subject to potential controversy, as required by CEQA compliance procedures.

Establishment of Thresholds of Significance: CASC shall work with the County to establish thresholds of significance for each environmental issue to be addressed in the EIR. In addition to the general standards of significance identified in the CEQA Guidelines, there are established thresholds applicable to this Project including, but not limited to, air quality (South Coast Air Quality Management District [SCAQMD]), biological resources (California Department of Fish and Wildlife [CDFW] and United States Fish and Wildlife Service [USFWS]), hydrology and water quality (County, Regional Water Quality Control Board), noise (County), traffic (County), and energy (County and Appendix F, Energy Conservation, CEQA Guidelines). The thresholds will be stated in each topical section of the EIR to clearly illustrate analytical processes used to identify potential Project effects.

Significant Unavoidable Adverse Impacts: CASC shall discuss any significant unavoidable adverse impacts, pursuant to CEQA Guidelines Section 15126(b). If needed, the discussion will include any impacts that can be partially mitigated, but not to a level that is less than significant. Any mitigation measures considered but eliminated from suggestion because of new impacts that would be associated with their implementation, will also be discussed.

Evaluate Significant Irreversible, Growth-inducing, and Cumulative Impacts: Pursuant to CEQA Guidelines Section 15126(g), CASC will discuss any potential growth-inducing impacts and significant irreversible effects of the proposed Project. The analysis will also consider population growth, both direct and indirect from Project implementation. Additionally, CASC will use projected growth and a list of subsequent projects in the cumulative analysis.

EIR Project Alternatives: CASC shall prepare an Alternatives to the Project section for the EIR that will incorporate the alternatives identified through conversations with the County. One of the alternatives will be the CEQA-required "No Project Alternative". An evaluation of a minimum of two additional alternatives to the No Project Alternative will be provided in this task. Each alternative shall be described in detail and evaluated on a topical section basis against the proposed Project to determine if it will have fewer, equivalent, or greater impacts. A summary matrix will be provided comparing each alternative's impacts on the various topical areas and demonstrate the degree to which significance can be mitigated. The Alternatives section will also include a description of alternatives that were initially considered, but ultimately rejected from further consideration. Based on the results of the environmental assessments throughout the EIR and the alternatives assessment, CASC will identify the environmentally superior alternative.

Other CEQA-Mandated Sections: CASC shall be responsible for the preparation of the following:

- Table of Contents
- Executive Summary
- Irreversible and Irretrievable Commitment of Resources
- List of Organizations and Persons Consulted
- Preparers of the Environmental Document
- References
- Appendices

Deliverables:

- Five (5) paper copies of the Administrative Draft EIR, each with a CD containing all Technical Appendices.
- Electronic files (Word and PDF format) of the Administrative Draft EIR and Appendices.

Task 3.2 Prepare Screencheck Draft EIR

The intent of the Screencheck Draft EIR is to allow County Staff to review the final changes to the Draft EIR prior to publication and circulation. We anticipate that any comments on the Screencheck Draft EIR would concern minor points and not require major revisions.

CASC shall respond to one (1) round of County comments on the Administrative Draft EIR. This Scope of Work assumes that comments will be provided either in written form or as tracked changes on the Word files. Upon receipt of the sets of comments, CASC shall prepare the Screencheck Draft EIR, which will show revisions in tracked changes.

Assumptions: CASC assumes one (1) round of comments will be required on the Administrative Draft EIR.

Deliverables:

- Five (5) paper copies of the Screencheck Draft EIR, each with a CD containing all Technical Appendices, and revisions to comments in tracked changes.
- Electronic files (Word and PDF format) of the Screencheck Draft EIR and Appendices

Task 3.3 Prepare Draft EIR

Upon receipt of any final comments from the County, CASC shall prepare the Draft EIR and issue it for public review. CASC shall provide the Notice of Completion to the State Clearinghouse (Office of Planning and Research) to formally begin the 45-day public review process. CASC shall reproduce and distribute paper copies and CDs to the County and the distribution list that is approved by County Staff. CASC will provide electronic files to the County for posting on the County's website.

Assumptions: CASC assumes one (1) meeting for coordination with County Staff.

Deliverables

- Preparation of Notice of Completion
- Fifty (50) CD's containing the Draft EIR
- Five (5) paper copies of the Draft EIR, each with a CD containing all Technical Appendices
- Electronic files (Word and PDF format) of the Draft EIR and Appendices
- Submit notices, DEIR, and all Technical Appendices to the State Clearinghouse's CEQAnet Web Portal. *(As of 11/03/2020 hard copies are not accepted by OPR and SCH)*
- Electronic PDF files of the Draft EIR and appendices to the County for posting on the County's website

TASK 4: PREPARE FINAL EIR

Task 4.1 Prepare Response to Comments

CASC shall prepare written responses to comments received on the Draft EIR that raise significant environmental issues and submit them for County Staff review after the close of the public comment period. The responses to comments will be prepared based upon the CEQA Guidelines and the County's CEQA implementing procedures.

The following steps are proposed:

- The County will compile and transmit to CASC all written comments on the Draft EIR no later than the first business day after closure of the 45-day public review period. We strongly recommend that comments be forwarded to CASC as they arrive to allow an early start on response preparation.
- CASC will confer with County Staff regarding comments received in order to develop a general framework and strategy for preparation of responses. The format of the Final EIR will be as an attachment of responses to comments to the text of the Draft EIR.
- Responses to Comments within this proposal's Scope of Work and budget consist of explanation, elaboration, or clarification of the data contained in the Draft EIR.

Task 4.2 Prepare Mitigation Monitoring and Reporting Program

Pursuant to CEQA Guidelines Section 15097, CASC will prepare a comprehensive Mitigation Monitoring and Reporting Program (MMRP). The MMRP will contain all mitigation measures identified in the Draft EIR, as well as any text changes that are identified in the Final EIR, and it will provide columns for necessary actions, timing, and parties responsible for verification. The Draft MMRP will be provided during the Final EIR submittal and the Final MMRP will be provided as part of the complete Final EIR submittal.

Task 4.3 Prepare Final EIR

Once County Staff provides final comments on the Administrative Final EIR, CASC will proceed with finalizing and producing the Final EIR for public review. CASC will be responsible for local distribution, noticing, and posting of the Final EIR. In addition, CASC will send copies of the Final EIR directly to State Agencies that commented on the Draft EIR. CASC will furthermore provide electronic files to the County for posting on the County's website. The Final EIR will contain:

- Comments and recommendations received on the Draft EIR either verbatim or in summary
- A list of persons, organizations, and public agencies commenting on the Draft EIR.
- Responses to Comments
- Any other information added by the County

Deliverables:

- Fifty (50) CD's containing the Final EIR
- Five (5) paper copies of the Draft EIR, each with a CD containing all Technical Appendices
- Electronic files (Word and PDF format) of the Draft EIR and Appendices

Task 4.4 Prepare Findings and Notice of Determination

CASC shall prepare a recommendation to find the Project consistent with the County's General Plan Renewable Energy and Transmission Element. CASC shall prepare the Findings Pursuant to CEQA Guidelines Section 15091 and Notice of Determination per CEQA Guidelines Section 15094. The Findings will identify the basis for which the Project will not have a significant effect on the environment (e.g., implementation of the MMRP) and will comply with CEQA Guidelines Section 15091.

CASC shall file the Notice of Determination. The purpose of the Notice of Determination filing is to limit the legal challenge period to 30 days. If a Notice of Determination is not filed within five (5) business days of certification, the legal challenge period defaults to 180 days. The Notice of Determination filing requires payment of the California Department of Fish and Game CEQA filing fee and a County handling fee.

Assumptions: CASC assumes that County Staff will provide CASC with a check needed to pay the California Department of Fish and Game CEQA filing fee and a County handling fee in order to file of the Notice of Determination with the County of Imperial Clerk's Office within five (5) business days of Draft EIR certification.

Deliverables:

- Electronic Copy of Project Findings and Notice of Determination

TASK 5: PUBLIC HEARING ATTENDANCE

Task 5.1 Public Hearing Attendance

CASC shall be present at public meetings/hearings to develop an understanding of the public's comments and concerns, answer questions on environmental issues, and make presentations on the Draft EIR as directed by County Staff. The team shall also prepare handout materials regarding the Draft EIR process, if needed. Meeting graphics depicting the Project and other Project description materials are assumed to be provided by County Staff in drafting staff reports and recommendations to the Planning Commission and Board of Supervisors. This shall include two (2) public hearings (i.e., Planning Commission and Board of Supervisors, if necessary). The allocations of meetings can be altered by mutual agreement. This Scope of Work also includes CASC's attendance at the scoping meeting identified in Task 2.2, above. CASC may attend additional meetings on a time-and-materials basis, with Authorization.

TASK 6: PROJECT MANAGEMENT

Task 6.1 Project Management

CASC understands from experience that a strong commitment to and emphasis on communication results in higher satisfaction of project objectives, conformance to standards and guidelines, and public outlook. CASC will schedule conference call meetings between Staff as appropriate to ensure good communication throughout the preparation of the IS and EIR. CASC proposes forty (40) hours to complete this task. CASC will also provide monthly written progress reports to Staff, which will be submitted with invoices. If additional hours are needed and/or requested, they will be provided under separate authorization prior to start of work.

4. TASKS A-H (OVERVIEW)

Section 3. Scope of Work describes the proposed tasks to be accomplished which includes deliverables, site visits, scoping meetings, staff meetings, public hearings, etc. Although the tasks identified below are described in depth in Section 3, CASC has provided the County a brief outline of the specific tasks A-H as shown in #4 of the RFP.

Scope of Work:

a. Project Initiation
   I. The Project Initiation Task is located in Task 1 of the Scope of Work Section. This includes a Project Kick-Off Meeting, Review of Existing Planning Materials, Project Conditions, and Evaluate Project Setting, Prepare a Project Description, Peer-Review Technical Studies, Prepare Technical Studies, Initial Study (IS) and Notice of Preparation (NOP).
   II. Deliverables may be located in Section 3. Scope of Work.
   III. CASC anticipates this milestone to be completed in ten (10) weeks, which includes the Peer-Review of Technical Studies, preparing the Technical Studies, and the County review time.

b. Administrative Draft EIR
   I. The Administrative Draft EIR Task is located in Task 3.1 of the Scope of Work Section. This includes mandatory CEQA sections, number of revisions, and meetings and coordination with County Staff.
   II. Deliverables may be located in Section 3. Scope of Work.
   III. CASC anticipates this milestone to be completed in twenty-four (24) weeks.

c. Public Review Draft EIR
   I. The Public Review Draft EIR Task is located in Task 2.2 and Task 3.3 of the Scope of Work Section. This includes document preparation, CEQA noticing (45-day review), scoping meetings, and coordination with County Staff.
   II. Deliverables may be located in Section 3. Scope of Work.
   III. CASC anticipates this milestone to be completed in eighteen (18) weeks, which includes a 30-day review.

d. Final EIR
   I. The Final EIR Task is located in Task 4 of the Scope of Work Section. This includes document preparation, CEQA noticing, scoping meetings, and coordination with County Staff.
   II. Deliverables may be located in Section 3. Scope of Work.
   III. *CASC anticipates this milestone to be completed in eight (8) weeks.*

e. Mitigation, Monitoring, and Reporting Program (MMRP)
   I. The MMRP Task is located in Task 4.2 of the Scope of Work Section. This includes the preparation per CEQA identification of mitigation measures, identification of applicable responsible parties, timing and enforcement.
   II. Deliverables may be located in Section 3. Scope of Work.
   III. *CASC anticipates this milestone to be completed in two (2) weeks.*

f. CEQA Findings and Notice of Determination
   I. The CEQA Findings and Notice of Determination Task is located in Task 4.4 of the Scope of Work Section. This includes the preparation of findings pursuant to CEQA Guidelines Section 15094.
   II. Deliverables may be located in Section 3. Scope of Work.
   III. *CASC anticipates this milestone to be completed in two (2) weeks.*

g. Assumptions
   I. CASC did not provide a stand-alone section for Assumptions. Any assumptions noted within the Scope of Work are located under each of the task items. CASC has included a $10,000 budget for direct costs which includes travel time, mileage, public noticing, printing, and any other applicable direct cost.

h. Meetings
   I. The Meetings Task is located in Task 5 and Task 6 of the Scope of Work Section. This includes two (2) Public Hearings and up to forty (40) hours of Project Management/Meetings and Coordination with the County Staff.

5. PROPOSED SCHEDULE

TASK	DESCRIPTION	ESTIMATED START	ESTIMATED COMPLETION
TASK 1. PROJECT INITIATION			
1.1	Project Kick-Off Meeting	Week 1	Week 1
1.2	Review of Existing Planning Materials, Project Conditions, and Evaluate Project Setting	Week 1	Week 2
1.3	Prepare Project Description	Week 2	Week 3
1.4	Peer-Review Technical Studies	Week 2	Week 5
1.5	Prepare Technical Studies	Week 3	Week 8
TASK 2. PREPARE INITIAL STUDY			
2.1	Prepare Initial Study	Week 6	Week 10
2.2	Notice of Preparation Thirty (30) day review cycle	Week 10 Week 13	Week 12 Week 17
TASK 3. PREPARE DRAFT ENVIRONMENTAL IMPACT REPORT			
3.1	Prepare Administrative Draft EIR	Week 15	Week 18
3.2	Prepare Screencheck Draft EIR	Week 19	Week 23
3.3	Prepare Draft EIR Forty-five (45) day review cycle	Week 24 Week 29	Week 28 Week 36
TASK 4. PREPARE FINAL EIR			
4.1	Prepare Response to Comments	Week 36	Week 37
4.2	Prepare Mitigation Monitoring and Reporting Program	Week 36	Week 37
4.3	Prepare Final EIR	Week 36	Week 40
4.4	Prepare Findings and Notice of Determination	Week 40	Week 42
TASK 5. MEETING ATTENDANCE			
5.1	Public Hearings	TBD	TBD
5.2	Planning Commission - One (1) Hearing	TBD	TBD
5.3	Board of Supervisors – One (1) Hearing	TBD	TDB
TASK 6. PROJECT MANAGEMENT			
6.1	Project Management	Ongoing	Ongoing

Proposal No. 2020-0237
Project Imperial County - EIR for VEGA SES 2, 3, & 5 Solar Project
Date 11/18/2020

TASK	DESCRIPTION	CASC		DUKE		URBAN		LEIGHTON		ACKERMAN LAW		GRAND TOTAL		
		HOURS	TOTAL	HOURS	TOTAL	HOURS	TOTAL	HOURS	TOTAL	HOURS	TOTAL	HOURS	TOTAL	
TASK 1. PROJECT INITIATION														*MILESTONE
1.1	Project Kick-Off Meeting	11	$ 2,050.00	0	$ -	0	$ -	0	$ -	0	$ -	11	$ 2,050.00	*This includes travel time & deliverables
1.2	Review of Existing Planning Materials, Project Conditions.	12	$ 1,696.00	0	$ -	0	$ -	0	$ -	0	$ -	12	$ 1,696.00	
1.3	Prepare Project Description	10	$ 1,524.00	0	$ -	0	$ -	0	$ -	0	$ -	10	$ 1,524.00	
1.4	**Peer-Review Technical Studies**													
	a. Aesthetics/Visual Impacts	19	$ 2,497.00	0	$ -	0	$ -	0	$ -	0	$ -	19	$ 2,497.00	
	b. Biological Resources	24	$ 4,080.00	0	$ -	0	$ -	0	$ -	0	$ -	24	$ 4,080.00	
	c. Land Evaluation & Site Assessment	19	$ 2,517.00	0	$ -	0	$ -	0	$ -	0	$ -	19	$ 2,517.00	
	d. Air Quality and Greenhouse Gas Emissions	0	$ -	0	$ -	31	$ 3,735.00	0	$ -	0	$ -	31	$ 3,735.00	
	e. Noise Study	0	$ -	0	$ -	20	$ 3,315.00	0	$ -	0	$ -	20	$ 3,315.00	
	f. Transportation/Traffic	0	$ -	0	$ -	22	$ 3,360.00	0	$ -	0	$ -	22	$ 3,360.00	
	g. Cultural Resources	0	$ -	37	$ 4,860.00	0	$ -	0	$ -	0	$ -	37	$ 4,860.00	
	h. Archaeological/Paleontological Resources	0	$ -	36	$ 4,420.00	0	$ -	0	$ -	0	$ -	36	$ 4,420.00	
	i. Historic Resources Assessment	0	$ -	16	$ 2,160.00	0	$ -	0	$ -	0	$ -	16	$ 2,160.00	
1.5	**Prepare Technical Studies and Analysis**													
	a. Phase I ESA	0	$ -	0	$ -	0	$ -	79	$ 12,073.00	0	$ -	79	$ 12,073.00	
	b. Geotech	0	$ -	0	$ -	0	$ -	52	$ 7,469.00	0	$ -	52	$ 7,469.00	
	c. Mineral Resources	0	$ -	0	$ -	0	$ -	26	$ 4,086.00	0	$ -	26	$ 4,086.00	
	d. Energy Analysis	0	$ -	0	$ -	49	$ 6,770.00	0	$ -	0	$ -	49	$ 6,770.00	
	e. Water Demand Estimate	28	$ 4,488.00	0	$ -	0	$ -	0	$ -	0	$ -	28	$ 4,488.00	
	TASK 1 TOTAL:	***123***	***$ 18,852.00***	***89***	***$ 11,440.00***	***122***	***$ 17,180.00***	***157***	***$ 23,628.00***	***0***	***$ -***	***491***	***$ 71,100.00***	
TASK 2. PREPARE INITIAL STUDY														*MILESTONE
2.1	Prepare Initial Study	20	$ 2,742.00	0	$ -	0	$ -	0	$ -	0	$ -	20	$ 2,742.00	
2.2	Notice of Preparation	14	$ 2,026.00	0	$ -	0	$ -	0	$ -	0	$ -	14	$ 2,026.00	
	TASK 2 TOTAL:	***34***	***$ 4,768.00***	***0***	***$ -***	***0***	***$ -***	***0***	***$ -***	***0***	***$ -***	***34***	***$ 4,768.00***	
TASK 3. PREPARE DRAFT ENVIRONMENTAL IMPACT REPORT														*MILESTONE
3.1	Prepare Administrative Draft EIR	298	$ 41,055.00	0	$ -	0	$ -	0	$ -	0	$ -	298	$ 41,055.00	
3.2	Prepare Screencheck Draft EIR	90	$ 11,987.00	0	$ -	0	$ -	0	$ -	0	$ -	90	$ 11,987.00	
3.3	Prepare Draft EIR	38	$ 5,316.00	0	$ -	0	$ -	0	$ -	0	$ -	38	$ 5,316.00	
	TASK 3 TOTAL:	***426***	***$ 58,358.00***	***0***	***$ -***	***0***	***$ -***	***0***	***$ -***	***0***	***$ -***	***426***	***$ 58,358.00***	
TASK 4. PREPARE FINAL EIR														*MILESTONE
4.1	Prepare Responses to Comments	67	$ 10,067.00	0	$ -	0	$ -	0	$ -	0	$ -	67	$ 10,067.00	
4.2	Prepare Mitigation Monitoring and Reporting Program	18	$ 2,560.00	0	$ -	0	$ -	0	$ -	0	$ -	18	$ 2,560.00	
4.3	Prepare Final EIR	56	$ 7,587.00	0	$ -	0	$ -	0	$ -	0	$ -	56	$ 7,587.00	
4.4	Prepare Findings and Notice of Determination	41	$ 5,056.00	0	$ -	0	$ -	0	$ -	0	$ -	41	$ 5,056.00	
	TASK 4 TOTAL:	***182***	***$ 25,270.00***	***0***	***$ -***	***0***	***$ -***	***0***	***$ -***	***0***	***$ -***	***182***	***$ 25,270.00***	
TASK 5. PUBLIC HEARING ATTENDANCE														*MILESTONE
5.1	Public Hearing Attendance	30	$ 5,550.00	0	$ -	0	$ -	0	$ -	0	$ -	30	$ 5,530.00	
	TASK 5 TOTAL:	***30***	***$ 5,550.00***	***0***	***$ -***	***0***	***$ -***	***0***	***$ -***	***0***	***$ -***	***30***	***$ 5,530.00***	
TASK 6. PROJECT MANAGEMENT														*MILESTONE
6.1	Project Management	40	$ 7,400.00	0	0	0	0	0	0	0	0	40	$ 7,400.00	
	TASK 6 TOTAL:	***40***	***$ 7,400.00***	***0***	***$ -***	***0***	***$ -***	***0***	***$ -***	***0***	***$ -***	***40***	***$ 7,400.00***	
DIRECT COSTS														
	Direct Costs												**$ 10,000.00**	
											GRAND TOTAL:	***1203***	***$ 182,426.00***	*This includes the direct costs

Proposal No. 2020-0237
Project Imperial County - EIR for VEGA 54 S.E. 3, & 1 Solar Project
Date 11/18/2020

#	Task	Frank Coyle		Tom Nemer		Kim Boydstun		Claudia Stelding		Dave Jones		Jeff Endicott		Michael Gentile		Rick Rusing		Barbara Sherman		Anthony Malanoski		Jessie Bouchhart		Serene Dudas		Lauren Thompson		Justin Palmer		
		Planning Director/PM		Senior Project Manager		Senior Biologist		Senior CEQA Writer		Senior Project Manager		Engineering Director		Senior Project Manager/Senior Engineer IV		Director of Survey and Mapping		Senior Project Manager		Project Manager		Associate Planner I		Associate Planner II/ GIS Analyst		Project Coordinator/ Clerical II		On-Call Contract GIS Specialist		
	Billing Rate	$ 200.00	Cost	$ 175.00	Cost	$ 170.00	Cost	$136	Cost	$175	Cost	$210	Cost	$ 185.00	Cost	$250	Cost	$185	Cost	$165	Cost	$ 121.00	Cost	$ 118.00	Cost	$ 90.00	Cost	$ 185.00	Cost	Total Budget
1	**Project Initiation**																													
1.1	Project Kick-Off Meeting	6	$ 1,200.00	0	$ -	5	$ 850.00	0	$ -		0 $ -	0	$ -	0	$ -		0 $ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	$ 2,050.00
1.2	Review of Existing Planning Materials, Project Conceptions	3	$ 600.00	0	$ -	2	$ 340.00	0	$ -		0 $ -	0	$ -	0	$ -		0 $ -	0	$ -	0	$ -	4	$ 484.00	4	$ 472.00	0	$ -	0	$ -	$ 1,696.00
1.3	Prepare Project Description	2	$ 400.00	0	$ -	1	$ 170.00	1	$ 136.00		0 $ -	0	$ -	0	$ -		0 $ -	0	$ -	0	$ -	2	$ 242.00	2	$ 236.00	0	$ -	0	$ -	$ 1,584.00
1.4	Peer Review Technical Studies	Reference next page																												
1.5	Prepare Technical Studies	Reference next page																												
2	**Prepare Initial Study**																													
2.1	Prepare Initial Study	1	$ 200.00	1	$ 175.00	4	$ 680.00	1	$ 136.00		0 $ -	0	$ -	1	$ 185.00		0 $ -	0	$ -	0	$ -	2	$ 242.00	8	$ 944.00	2	$ 180.00	0	$ -	$ 2,742.00
2.2	Notice of Preparation	2	$ 400.00	0	$ -	5	$ 850.00	0	$ -		0 $ -	0	$ -	0	$ -		0 $ -	0	$ -	0	$ -	2	$ 242.00	1	$ 354.00	2	$ 180.00	0	$ -	$ 2,026.00
3	**Prepare Draft Environmental Impact Report**																													
3.1	Prepare Administrative Draft EIR	15	$ 3,000.00	15	$ 2,625.00	42	$ 7,140.00	50	$ 6,800.00		8 $ 1,400.00	3	$ 630.00	9	$ 1,665.00		1 $ 250.00	3	$ 555.00	2	$ 330.00	96	$ 11,616.00	64	$ 7,552.00	13	$ 1,170.00	12	$ 2,220.00	$ 41,815.00
3.2	Prepare Screencheck Draft EIR	5	$ 1,000.00	2	$ 350.00	10	$ 1,700.00	15	$ 2,040.00		2 $ 350.00	1	$ 210.00	2	$ 370.00		2 $ -	2	$ 370.00	0	$ -	17	$ 2,057.00	24	$ 2,832.00	3	$ 270.00	2	$ 370.00	$ 11,847.00
3.3	Prepare Draft EIR	2	$ 400.00	1	$ 175.00	8	$ 1,360.00	10	$ 1,360.00		0 $ -	0	$ -	0	$ -		0 $ -	0	$ -	0	$ -	5	$ 605.00	12	$ 1,416.00	0	$ -	0	$ -	$ 5,318.00
4	Prepare Final EIR																													
4.1	Prepare Responses to Comments	5	$ 1,000.00	3	$ 525.00	21	$ 3,570.00	8	$ 1,088.00		0 $ -	1	$ 210.00	5	$ 925.00		0 $ -	2	$ 370.00	1	$ 165.00	3	$ 363.00	12	$ 1,416.00	3	$ 270.00	2	$ -	$ 10,847.00
4.2	Prepare Mitigation Monitoring and Reporting Program	2	$ 400.00	0	$ -	5	$ 850.00	0	$ -		0 $ -	0	$ -	0	$ -		0 $ -	0	$ -	0	$ -	4	$ 484.00	7	$ 826.00	0	$ -	0	$ -	$ 2,560.00
4.3	Prepare Final EIR	4	$ 800.00	1	$ 175.00	10	$ 1,700.00	15	$ 2,040.00		0 $ -	0	$ -	0	$ -		0 $ -	2	$ 370.00	0	$ -	8	$ 968.00	13	$ 1,534.00	0	$ -	0	$ -	$ 7,587.00
4.4	Prepare Findings and Notice of Determination	1	$ 200.00	0	$ -	5	$ 850.00	0	$ -		0 $ -	0	$ -	0	$ -		0 $ -	0	$ -	0	$ -	12	$ 1,452.00	23	$ 2,714.00	2	$ 180.00	0	$ -	$ 5,396.00
5	**Public Hearing Attendance**	0																												
5.1	Public Hearing Attendance	11	$ 2,200.00	8	$ 1,400.00	6	$ 1,020.00	0	$ -		2 $ 350.00	0	$ -	0	$ -		0 $ -	0	$ -	0	$ -	0	$ -	0	$ -	6	$ 540.00	0	$ -	$ 5,510.00
6	**Project Management**	0																												
6.1	Project Management	20	$ 4,000.00	0	$ -	20	$ 3,400.00	0	$ -		0 $ -	0	$ -	0	$ -		0 $ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	$ 7,400.00
	Total Hours:	78		30		146		100			12	5		17			1	9		3		115		124		29		14		
																													Direct Costs:	$ 18,806.00
																													Grand Total:	$ 116,696.00

Project File: [illegible]
Project: [illegible]
Date: [illegible]

| | | |

CASC
Engineering and Consulting

1470 E. Cooley Drive
Colton, CA 92324
Office: 909.783.0101
Fax: 909.783.0108

CASC ENGINEERING AND CONSULTING RATE SCHEDULE

Civil and Environmental Engineering/Consulting	
President/Principal Engineer	$256
Sr. Director	$227
Director	$210
Program Manager/ Technical Specialist	$200
Senior Project Manager/ Senior Engineer IV/Senior Scientist IV	$185
Project Manager III/Senior Engineer III/ Senior Scientist III	$174
Project Manager II/Senior Engineer II/ Senior Scientist II	$164
Project Manager I/Senior Engineer I/ Senior Scientist I	$159
Assistant Project Manager/ Senior Environmental Analyst	$154
Project Engineer/ Environmental Analyst III/ Scientist III	$149
Senior Designer II/ Environmental Analyst II/ Scientist II	$144
Senior Designer I /Environmental Analyst I/ Scientist I	$138
Design Engineer II	$128
Design Engineer I	$121
Designer II/ Staff Analyst II	$116
Designer I/ Staff Analyst I	$111
CADD Drafter/Project Analyst III	$98
Staff Assistant II/Project Analyst II	$93
Staff Assistant I/Project Analyst I	$88

Planning and Environmental	
Planning Director	$200
Senior Project Manager	$175
Senior Biologist	$170
Project Manager II	$164
Project Manager I	$159
Senior Planner II/Biologist II	$134
Senior Planner I/Biologist I	$121
Associate Planner II/GIS Specialist II	$111
Associate Planner I/GIS Specialist I	$101
Construction Monitor	$89-111

Clerical	
Project Coordinator/Clerical III	$90
Project Coordinator/Clerical II	$85
Project Coordinator/Clerical I	$80

Landscape Architectures	
Licensed Landscape Architect	$169
Senior Landscape Designer	$144
Associate Landscape Designer	$121
Assistant Landscape Designer	$101

Construction Management	
Resident Engineer	$159
Field Inspector III	$133
Field Inspector II	$118
Field Inspector I	$108

Surveying and Mapping	
Licensed Surveyor/ Director	$200
Senior Survey Project Manager	$169
Senior Survey Analyst	$144
Senior Calculator	$134
Calculator II	$121
Calculator I	$111
Survey Analyst II	$101
Survey Analyst I	$91
Technical Aide	$86

Field Survey Crews	
Three Person Survey/GPS Crew	$251
Two Person Survey/GPS Crew	$215
One Person Survey/GPS Crew	$204

REIMBURSABLE EXPENSES:

The following expenses will be billed at cost plus 15% unless otherwise noted:

Outside Services: Includes fees paid to sub-consultants, consultants, analytical laboratories, and other providers of services required for execution of the project.

Permits, Applications, and Fees: Includes fees for Notices of Intent (NOI), Notices of Termination (NOT), application fees, submittal fees, permit fees, and other fees required as part of the project and not paid directly by Client.

Reproduction Services: Includes blueprinting, copying, printing and plotting. In-house plots will be billed at $6.00 per sheet for each client set and for a final in-house review set. B&W / Color copies: $0.08 / $0.90 for 8.5 X 11 and $0.20 / $1.20 for 11 X 17.

Rental Fees: Includes rental fees paid by the firm, including required vehicles, equipment, and tools required to complete the work.

Commercial Delivery Services: Including Express Mail, Federal Express, UPS and independent courier services.

In-House Pick-Up and Delivery Services: When provided by the firm, these services will be billed at $50.00 per hour plus current IRS mileage reimbursement rates per mile round trip, with no additional markup.

Travel Expenses: Includes travel expenses incidental to performance of the work, including airfare, parking, tolls, taxi, lodging, and etc. Vehicle mileage will be billed at a rate of current IRS mileage reimbursement rate per mile with no additional markup. Travel time for professional and administrative staff will be billed per the hourly fee rate schedule with no additional markup and survey crews will be billed at ***$60 per hour, per 2-man crew***.

Per Diem: Per diem for meals for overnight stays will be billed at Caltrans current state rates.

NOTES:

Prevailing Wage: Projects and/or portions thereof designated by Client to be subject to Prevailing Wage shall be billed at the regular staff rate or the Prevailing Wage rate, whichever is higher plus a multiplier of approximately 2.3 to 2.8 for overhead and profit. The Prevailing Wage rate shall be based upon the Wage Rate Determination issued by California's Director of Industrial Relations for the locality and employee classification at the time the work is performed. Please contact CASC for specific project prevailing wage rates.

Waiver of Subrogation: When a Waiver of Subrogation for Workman's Compensation Insurance is required by the Client, the Client will be required to pay the additional insurance premium. **The approximate amount for the waiver is $250 per year.**

Litigation Support and Expert Witness shall be at 2.0 times the above noted hourly rates.

Annual Increase in rate: CASC will increase their rates annually, usually at the beginning of a calendar year. A new fee rate schedule will be provided.

Client Initial _____

APPENDIX 2 (A2). PROJECT TEAM RESUMES

KIMBERLY BOYDSTUN

SENIOR PROJECT MANAGER

Ms. Boydstun brings over 25 years of environmental consulting experience as a Senior Biologist/Project Manager for large-scale multidisciplinary projects in both the public and private sector. Her experience encompasses regulatory and permitting compliance, restoration installation and mitigation monitoring, CEQA/NEPA support, sensitive flora and fauna surveys, habitat classification and constraints analysis, and construction monitoring. Ms. Boydstun has current project experience managing technical staff and day-to-day project operations, leading project tasks, and managing scope and budget allotments. She has worked directly with clients and resource agencies in the development of mitigation and permitting strategies, provided QA/QC review of documents, is experienced in concepts for compliance during agency negotiations and associated agency submittals, and has participated as a subject matter expert for technical analyses.

EDUCATION:

- B.S./Biology and Chemistry/California State University, San Marcos

PROFESSIONAL REGISTRATIONS, TRAINING, CERTIFICATES, LICENSES & AFFILIATIONS:

- Quino Checkerspot Butterfly Permit #TE-71221B-0
- Quino Checkerspot Butterfly Workshop, UC Riverside
- Delhi Sands Flower-Loving Fly Workshop, UC Riverside
- Desert Tortoise Training Workshop, Desert Tortoise Council
- Southwestern Willow Flycatcher Workshop, Southern Sierra Research Station
- San Joaquin Kit Fox Field Qualification Surveys, Endangered Species Recovery Program, CSU Bakersfield
- Regulatory Framework Workshop, Wetland Training Institute
- Jepson Herbarium Workshop, UC Berkeley
- Applied Biology of California Hydrology, UC Berkeley
- Wetland Delineation Workshop, Association of Environmental Professionals
- CEQA Spring and Fall Workshops, Association of Environmental Professionals
- Scientific Diving Marine Invertebrate Collection, US Fish and Wildlife Service
- WTS International, Advancing Women in Transportation

SKILL HIGHLIGHTS

- Experienced with development and implementation of environmental scopes & budget, permit clearance strategies, compliance monitoring, environmental awareness programs for contractors, & reporting.
- Successfully coordinates specialty teams to perform focused resource surveys across varying ecological landscapes & overlapping agency jurisdictions.
- Ability to provide solutions, strategies, & project design suggestions to avoid, reduce or minimize project impact & costs.
- Development & implementation of project mitigation strategies & successful negotiating with resource agencies.
- Infrastructure, linear & transportation project experience.
- Upland & riparian habitat planning, installation, long-term mitigation monitoring, & habitat conservation banking experience.
- Conducts special-status species inventories & protocol level surveys for multiple species.
- Served as a multidisciplinary team leader for San Diego Gas and Electric, Southern California Edison, California High-Speed Rail Authority, Los Angeles Sanitation Districts, Los Angeles Department of Water and Power, Granite Construction, & Sukut Construction.
- Experienced with Habitat & Species-Specific Mitigation & Monitoring Plans, resource management plans, PEAR, NES, Jurisdictional Determination Reports, Biological Assessments for Section 7 and 10 compliance with USFWS, Biological Resources Reports for CEQA compliance, EA/IS, BE/BA for the US Forest Service, & Biological Resource Sections of EIR/EIS.
- Experience working within the parameters of the Western Riverside County MSHCP & HANS process, West Mojave Plan, Coachella Valley Multiple Species Habitat Conservation Plan.

RELEVANT PROJECTS

Southern California Gas and Electric (SDG&E), Land Use and Planning, San Diego, CA: Role: Adjunct Environmental Planner. Provided environmental support to SDG&E's Environmental Program's Group. Specific responsibilities included coordination and preparation of environmental documents. Reviewing consultant prepared documents including engineering, legal, and regulatory. Identify project revisions to avoid significant impacts, and participation in preconstruction coordination.

Kramer-Tortilla Deteriorated 115k V Transmission Line Pole Replacement—Southern California Edison (SCE), Barstow, CA: Role: Biological Task Manager. SCE replaced three deteriorated H-frame structures located within the Mojave River. In support of the regulatory permits issued to SCE, performed preconstruction desert tortoise surveys and

CONT. KIM BOYDSTUN RESUME

monitored construction crews during removal and replacement of the poles and structures. Formal consultation with USFWS and CDFG including a final biological assessment report of findings and recommendations was submitted to the resource agencies for final approval.

Calcite Substation and Renewable Power Generators, Southern California Edison, Barstow and Lucerne Valley, CA: Role: Project Manager/Biologist. Directed biological studies for the implementation of an 80-mile, 220-kV substation, overhead lines, and cable to support the power generator. Managed field teams to perform habitat assessment, rare plant surveys, Mohave ground squirrel, desert tortoise and burrowing owl protocol level surveys.

Green Path Project Constraints Analysis—Los Angeles Department of Water and Power, Los Angeles County, CA: Role: Biological Task Manager. Assisted with analyzing constraints associated with project alternatives including land use and biological resources. Assisted LADWP with mapping and constraints evaluation for a planned 500kV electric transmission line. LADWP has identified 3 possible transmission line routes, varying in length from approximately 50 to 70 miles, to bring electrical power from the Devers area to the Los Angeles urban area. Conducted vegetation mapping and identified areas with potential to support sensitive flora and fauna species.

Tehchapi Renewable Transmission Project, Southern California Edison, Los Angeles County, CA: Nesting Bird Survey-July–August 2010, May-June 2011, February-August 2012, February-March 2013, Los Angeles and San Bernardino Counties, CA. Role: Biologist. Conducted nesting bird surveys. Developed WEAP training and pamphlet for construction crews, provided tail-board trainings for field staff.

Tehachapi Renewable Transmission Project, Southern California Edison, Los Angeles County, CA: Role: Biologist. Environmental Compliance Inspector on the Southern California Edison (SCE) 173 miles of new and upgraded high-voltage transmission power line construction project on Segment 8; phases 1 and 3. Inspections and monitoring included preconstruction avian and mammal surveys, workers environmental awareness training (WEAP), biological/environmental construction inspecting/monitoring and postconstruction terrain topographic re-configuration/hydro-seed activities.

Tehachapi Renewable Transmission Project, Southern California Edison, Kern, San Bernardino and Los Angeles Counties, CA: Role: Biologist. Southern California Edison's (SCE) 173 miles of new and upgraded high-voltage transmission line construction on Segments 4, 5, 8, and 10. Project delivers power from wind farms in Kern County to Los Angeles County. Monitoring included pre-construction avian and mammal surveys, workers environmental awareness training (WEAP) and biological/environmental construction monitoring activities.

Southern California Edison (SCE) deteriorated power pole replacement project. Angeles National Forest (ANF), Los Padres National Forest (LPNF) San Diego, San Bernardino, and Los Angeles Counties, CA: Role: Biologist. Biological Construction Compliance Monitor conducting deteriorated S.C.E. power pole replacement surveying and monitoring activities throughout Southern California. Survey and monitor construction crews conducting power pole replacement activities. Conduced Workers Environmental Awareness Program (WEAP) detailing environmental awareness and compliance issues. Coordinate with construction foremen.

AT&T Fiber Optic installation Project, Baker to Fort Irwin; Mojave Desert, CA: Role: Project Manager. Directed field crews of biologists for preconstruction flora and fauna surveys, and construction monitoring for Mojave Desert Tortoise and other sensitive species along the 12.5-mile fiber optic installation project, located along Highway127 and Silver Lake Rd., Northwest of Baker, CA.

Los Angeles Regional Interoperable Communications Systems (LA Rics), Los Angeles County, CA: Role Biologist. Biological Environmental Construction Monitor for L.A. Rics (Motorola) Land Mobile Radio (LMR) System. Duties include biological construction monitoring, nesting bird surveys and monitoring, pre-construction surveys, implementation of environmental compliance and mitigation measures, and WEAP training.

Lamb Canyon Landfill, County of Riverside, CA: Role: Project Manager/Biologist. Assessment of site conditions in preparation for eradication effort. Preparation of Work Plans which outline timing and schedule of maintenance activities, and extent of eradication efforts. Each Work Plan provides the framework to successfully implement enhancement and monitoring strategies with the objective of meeting the intended performance criteria of each enhancement area. Bi-annual maintenance activities performed by CASC's licensed herbicide maintenance and restoration specialists. Annual monitoring which includes qualitative and quantitative data collection and assessment and preparation of annual reports.

CLAUDIA STEIDING, MBA, CPSWQ, CESSWI, QSD/P

TECHNICAL ADVISOR/SENIOR CEQA WRITER

Ms. Steiding has over 25 years of experience in Federal and State environmental regulatory compliance and land use planning. She is proficient in Project and Program Management, with emphasis on the Riverside County's three Municipal Separate Storm Sewer System (MS4) Permits, the State NPDES Industrial General Permit and the Construction General Permit. She has extensive knowledge in the Clean Water Act (CWA), National Pollutant Discharge Elimination System (NPDES), California Environmental Quality Act (CEQA), National Environmental Policy Act (NEPA), Western Riverside Multiple Species Habitat Conservation Plan and Coachella Valley Multiple Species Habitat Conservation Plan. She has excellent working relationships with Riverside County Departments/ Agencies/Districts, EPA, State and Regional Water Quality Control Boards, contractors, the general public, other government agencies (e.g., City Co-permittees, Water Districts, etc.) and non-governmental organizations (NGOs).

EDUCATION:

- M.B.A./University of Phoenix
- B.A./California State University, San Bernardino

PROFESSIONAL REGISTRATIONS/ AFFILIATIONS:

- Certified Professional in Storm Water Quality (CPSWQ) No. 982
- Certified Erosion, Sediment and Storm Water Inspector (CESSWI) No. 2860
- Qualified Storm Water Pollution Prevention Plan Developer and Practitioner (QSD/QSP) No. 25162

RELEVANT EXPERIENCE

CEQA/NEPA: Ms. Steiding has been responsible for the preparation of numerous environmental documents in accordance with NEPA and CEQA. She was required to work closely with Caltrans, municipalities, and school districts on transportation-related projects including the Ramon Road/I-10 Freeway Interchange Project, State Street Improvement Project, and Milliken Road Expansion. Other projects included General Plan updates, park expansions, landfill closures, commercial and residential developments, flood control improvements, annexations, and cell sites.

Interstate 215 and Van Buren Boulevard Interchange Project, Caltrans District 8, Moreno Valley, CA: The interchange reconstruction included two new bridge structures, a freeway overcrossing and a railroad overhead. It also included freeway realignment, new auxiliary lanes, ramp reconfigurations, relocation of a high-pressure gas line, right-of-way acquisition, traffic signals, ramp metering, guide signs, lighting, pavement delineation, and traffic staging. Various aesthetic treatments were proposed on the bridge structures, retaining walls, and decorative landscaping to reflect the area's military influence. An Initial Study/Mitigated Negative Declaration (IS/MND) was prepared for the project. The Project Environmental Issues included Aesthetic/Visual, Air Quality, Archaeologic-Historic, Biological Resources, Drainage/Absorption, Flood Plain/Flooding, Geologic/Seismic, Noise, Soil Erosion/ Compaction/Grading, Toxic/Hazardous, Traffic/Circulation, Vegetation, Water Quality, Water Supply, Wetland/ Riparian, Wildlife, and Cumulative Effects. Ms. Steiding specifically monitored the project for consistency between the CEQA analysis and mitigation; and subsequent NPDES analysis, documentation, post construction water quality treatment features, and vernal pool protection/buffer areas.

Riverside County Facilities Management and Economic Development Agency (EDA): Ms. Steiding served as Environmental Compliance Unit Supervisor/ Senior Environmental Planner. She established and supervised EDA's Environmental Compliance Unit; planned, organized, directed, reviewed, and evaluated professional and consultant staff within the Environmental Compliance Unit; represented the Agency during MSHCP, AQMD, and NPDES audits and mitigated regulatory citations; provided oversight of environmental processes for all EDA projects; developed and implemented environmental compliance policies; and ensured each County facility maintained current Business Emergency Plans (BEPs), Facility Pollution Prevention Plans (FPPPs), Spill Prevention, Control and Countermeasure Plans (SPCC Plans), and Water Quality Management Plans (WQMPs), as applicable.

On-Call Environmental Programs Assistance with the City of Hesperia, CA: Ms. Steiding served as the Senior Environmental Planner for this project. Her duties include managing the project budget, monitoring deliverables, timelines, as well as performing the majority of the tasks detailed in the scope of work. Examples from the scope of services include review and update of City Planning process and procedures; review of existing prepared plans and recommend updates as applicable for specific Municipal Codes, Spill Response Plans, Pollution Prevention Plans, and others; review and update the City's Training Program, review guidance manuals and templates and update to City-specific information; and other Planning-related work.

FRANK COYLE

DIRECTOR OF PLANNING

Mr. Coyle is highly experienced and has more than 30 years of experience in urban and regional planning in both the private and public sectors. He has prepared and managed a wide variety of high-quality policy planning and environmental documents, achieving an impressive record of accomplishment in successfully managing projects through the entitlement process. Mr. Coyle was employed as the Deputy Planning Director for Riverside County, overseeing both the Advanced Planning and Current Planning divisions. In addition, Mr. Coyle has managed over 30 on-call environmental contracts in southern California. This includes the preparation of categorical exemptions, initial studies/mitigated negative declarations and environmental impact reports for mixed-use, residential, commercial, industrial, and infill development for both public and private projects. As a result, he possesses strong knowledge and understanding of development economics, governing agencies, and bureaucratic procedures. He has reviewed and processed various planning and environmental documents; managed a wide variety of specific plans, planned development districts, site-specific projects through the CEQA process; evaluated general plan amendments (GPAs), zone changes, conditional use permits, plot plans, and subdivision requests; prepared and presented reports; and made recommendations to various planning bodies. His thorough knowledge of CEQA and experience with the principles and practices of urban and regional planning, zoning, and subdivision concepts make him a leader in the industry and an asset to the CASC team. In December 2008, the mayor appointed Mr. Coyle to the City of Redlands Climate Action Task Force; the purpose of this group was to identify strategies for the City to reduce GHG emissions, which concluded with the preparation of a Sustainability Master Plan in 2011.

EDUCATION:

- B.S./Community and Regional Planning/ Iowa State University, IA

PROFESSIONAL REGISTRATIONS, TRAINING, CERTIFICATES, LICENSES & AFFILIATIONS:

- City of Redlands Climate Action Task Force Committee (Member), 2008—2011
- American Planning Association (APA)
- Urban Land Institute
- Water Quality Management Plan (WQMP) Seminar, Riverside County, 12/2007
- ASTM International, Phase I Environmental Site Assessments (ESAs) for Commercial Real Estate, 10/2004
- Registered Environmental Assessor I (REA I -07926), 2004—2011

RELEVANT PROJECTS

Leadership in Energy and Environmental Design Certified I-10 Distribution Center EIR, Shopoff Group, Riverside County, CA: Prepared an EIR for the Shopoff Group's I-10 Distribution Center project located in Riverside County. The proposed distribution center consists of two industrial buildings totaling approximately 2,555,600 square feet for industrial-type use. In addition, the project included photovoltaic solar facilities and the building rooftops were designed to facilitate solar energy conversion apparatus. The project site is located on 228 acres on the north side of Cherry Valley Boulevard, between the cities of Calimesa and Beaumont.

ColGreen North Shore Solar Project, County of Riverside, CA. Successfully managed the preparation of technical studies (biological and cultural) and monitoring services during construction activities for the Sunpin Solar Project. The Project site is located on approximately 485 acres in the Coachella Valley east of the Salton Sea. The Project is a 96.7 MWdc installation with the capacity to power as many as 22,300 homes annually.

Riverside County General Plan Update and General Plan Environmental Impact Report, Riverside County, CA. Assisted with the Riverside County General Plan Update from 2011 to 2014. The GPA was developed to ensure that the comprehensive plan of 2003 remained a useful blueprint for future County growth. The GPA encompassed a variety of General Plan changes to address focused and balanced growth. Specific changes were proposed throughout the various General Plan Elements and Area Plans. In conjunction with the GPA, Mr. Coyle was directly involved with the preparation of the Draft EIR and Draft CAP.

Temecula Wine Country Community Plan and Programmatic EIR, Riverside County, CA. Oversaw the preparation and completion of the Temecula Wine Country Community Plan which was initiated by the Board of Supervisors in 2008 to ensure that the region developed in an orderly manner that preserves Temecula Valley's viticulture potential and enhances its economic contribution to the County. The purpose of the Plan is to provide a blueprint for future growth including existing and future residents, while providing opportunities for continued preservation and expansion of winery and equestrian operations. Project components included a General Plan Amendment; Ordinance Amendment; a Community Plan, and a Programmatic Environmental Impact Report.

TOM NIEVEZ

SENIOR PROJECT MANAGER

EDUCATION:

- B.S./Urban and Regional Planning/ California State Polytechnic University, Pomona

PROFESSIONAL REGISTRATIONS, TRAINING, CERTIFICATES, LICENSES & AFFILIATIONS:

- Building Industry Association (BIA) Riverside and Mt. Baldy Chapters
- American Planning Association (APA)

Mr. Nievez brings over 30 years of practical and comprehensive experience in the environmental, project management, planning and land development industries. He brings both public and private sector experience, including experience with land developers, professional consulting firms, home builders, and public agencies. Mr. Nievez has extensive experience in preparing and processing countless land development entitlement projects including master-planned community Specific Plans, General Plan Amendments, Zone Changes, Tentative Tract Maps, Conditional Use Permits, Lot Line Adjustments, and Certificates of Compliance. Additionally, Mr. Nievez experience includes a wide range of CEQA-related assignments; examples of which include preparation of numerous Environmental Assessments (EA), Initial Studies (IS), and Environmental Impact Reports (EIR) involving private development projects pursuant to CEQA.

RELEVANT PROJECTS

City of Banning Environmental Impact Report (Banning Quarry): Mr. Nievez served as the Senior Project Manager for a Project Specific EIR associated with a legacy Surface Mining Activities, located within the northeastern portions of the City of Banning, adjacent to the Morongo Reservation. As part of the preparation of an Environmental Impact Report (EIR) associated with a Surface Mining Operation and Revised Reclamation Plan for the Robertson's/Banning Quarry, CASC managed a team of experts in Biology, Air Quality, Traffic, Greenhouse Gas Emissions, Geology, and Mining. CASC provided the CEQA expertise and knowledge of the regional stakeholders, such as the Riverside County Flood Control District, the County of Riverside, officials and staff within the City of San Jacinto, the Morongo Band of Mission Indians, and representatives from the State Water Board, in charge of regional watershed management protection. CASC's Scope of Work includes the research, environmental and regulatory analysis, preparation of the Initial Study, issuance of the Notice of Preparation (NOP), and completion of the DEIR and FEIR associated with this existing project and its proposed 23-acre/2 million cubic foot excavation expansion. CASC was also in charge of the public outreach and presentations associated with the environmental documents through the required CEQA process.

Wilson Avenue Extension Environmental Impact Report, City of Rancho Cucamonga, CA: Mr. Nievez was responsible for writing the environmental impact report, including managing and overseeing the preparation of technical reports, compiling findings and mitigation measures into the document, preparing Mitigation Monitoring Program, writing responses to comments received, writing findings and statements of overriding consideration, participation at public hearings, interface and coordination with City of Rancho Cucamonga staff as well as City Attorney, issuance of Notice of Preparation (NOP), Notice of Completion (NOC) and Notice of Determination (NOD).

On-Call Planning Services, County of San Bernardino, CA: Mr. Nievez is responsible for the management and processing of private development applications through the County of San Bernardino entitlement process, including environmental documentation/CEQA, NEPA compliance; coordination with applicant and project team, County departments, affected agencies and County Counsel; preparation of Staff Report, Conditions of Approval, Public Notices; presentation before Planning Commission.

Zoning Ordinance Amendment Sections, San Bernardino County, CA: Mr. Nievez provided technical services to the County staff, conducted advisory committee meetings, and was instrumental in writing the award-winning County ordinance.

Initial Study/Mitigated Negative Declaration, City of Temecula, CA: Mr. Nievez is currently preparing an Initial Study/ Mitigated Negative Declaration for a professional office development compromised of 100,000 square feet of office space in two buildings on an approximately 15-acre project site.

Initial Study/Mitigated Negative Declaration, City of Temecula, CA: Mr. Nievez is currently drafting an Initial Study/ Mitigated Negative Declaration for a public storage facility compromised of approximately 84,000 square feet of storage space in three buildings and recreational vehicle storage parking spaces on a 5.9-acre project site

City CEQA Assistance, San Jacinto, CA: Mr. Nievez prepared the environmental documentation and mitigated negative declaration for The Cove Specific Plan for the City of San Jacinto.

DAVE JONES, RG, CEG, SMARA

SENIOR PROJECT MANAGER

Mr. Jones brings over 35 years of professional experience in a variety of geological and geotechnical settings. Mr. Jones was employed at the County of Riverside TLMA—Geology Division as the Chief Engineering Geologist for over 20 years. Some of his responsibilities include evaluating field entitlement plans and grading plans for a variety of industry sectors in accordance with County Ordinance and Policy, managing the County's mining program in relating to the State Surface Mining and Reclamation Act (SMARA), serving as a liaison to the State Mining and Geology Board (SMGB), and reviewing technical studies pertaining to CEQA. He brings both public and private sector experience, including experience with land developers, professional consulting firms, home builders, and public agencies. Mr. Jones also has experience in forensic investigations as it relates to geological and geotechnical issues including residential and commercial building distress, land sliding, flood hazards, and earthquake damage. His geotechnical project experience includes investigations and evaluations of numerous land development and public works projects. Additionally, Mr. Jones experience includes a wide range of CEQA-related assignments with geological components; examples include numerous Environmental Assessments (EA), Initial Studies (IS), and Environmental Impact Reports (EIR) involving private development projects pursuant to CEQA.

EDUCATION:

- M.S./Geological Sciences/University of California, Riverside
- B.S./Geology/University of California, Riverside

PROFESSIONAL REGISTRATIONS, TRAINING, CERTIFICATES, LICENSES & AFFILIATIONS:

- CA, Registered Geologist #5812
- OR, Registered Geologist #G1629
- CA, Certified Engineering Geologist #2283
- CA, Certified SMARA Mine Inspector #18005
- Certified Dive Master-Professional Association of Diving Instructors

RELEVANT PROJECTS

County of Riverside Geology Division, Riverside, CA: Mr. Jones served as the Chief Engineering Geologist for the County since 2005. Mr. Jones has a countywide responsibility for reviewing, evaluating, and field checking project entitlement plans and grading plans for proposed industrial, commercial, and residential developments in accordance with the County Ordinance and Policy, the Alquist-Priolo Earthquake Fault Zoning Act, the Seismic Hazards Mapping Act, and Industry standards. Mr. Jones performs review of grading plans and initial studies under the California Environmental Quality Act (CEQA) to assess potential impacts from proposed grading projects. Mr. Jones is also responsible for performing geologic research and analysis for environmental impact reports (CEQA) and environmental impact statements (NEPA) in the seismic safety elements and cultural resources element of the County's General Plan. In addition, Mr. Jones utilizes and assists in maintenance of County Arcview/GIS databases for site-specific/regional geologic research and project review, enforce County Ordinances and State Legislation pertaining to soil and earth stability, geologic hazards, surface mining, water supply, and provides legal assistance and serve as geologic, paleontological, and mining consultant to various County Departments and State programs.

University of California at Riverside Department of Earth Sciences, Riverside, CA: Mr. Jones served as a Lab Technician and Research Assistant/Teaching Assistant where he performed field and laboratory analysis of geologic hypothesis and provided independent field, laboratory, and classroom instruction pertaining to geology, mineralogy, geomorphology, crystallography, and paleontology for groups up to 35 college students. Mr. Jones also collected, interpreted, and recorded pertinent data regarding various geologic formations and provinces, and performed field reconnaissance of central Nevada and Southern California including Death Valley, Salton Sea, and Mojave Desert regions.

Lockheed Martin Corporation – Corporate Environment, Safety, and Health, Burbank, CA: Mr. Jones served as the Project Supervisor for about 10 years and was responsible for managing staff and contract personnel for the environmental assessment, investigation, decontamination, demolition, and soil/groundwater remediation of company-owned facilities throughout the United States, was involved in all facets of planning, design, and project implementation at numerous company own facilities, and was instrumental in numerous project closures, both state and federal by coordinating site cleanups and by negotiating regulatory site closures with limited to no physical remediation, where appropriate.

Soil Tech, Inc., Temecula, CA: Mr. Jones served as the Investigations Division Manager where he managed field, office, and lab personnel and served as the lead geologist for site assessments on both geotechnical and environmental investigations. Projects include geotechnical investigation, seismic hazard studies, faults investigations, slope stability studies, liquefaction investigations, fuel tank investigations, and vadose zone and groundwater contamination studies.

JEFF ENDICOTT, P.E., BCEE, CPESC, QSD/P, QISP, TORCGP

ENGINEERING DIRECTOR

Jeff Endicott has extensive environmental and civil engineering experience as a consultant and in the public sector. Water, as a resource and as a force in nature, has been a central element of Jeff's work, with projects ranging from development of potable water supplies to prevention of environmental damage initiated by rainfall and runoff. Mr. Endicott draws upon his public sector and private sector experience to produce practicable solutions to complex environmental problems. The California Stormwater Quality Association (CASQA) bestowed upon Jeff the CASQA Leadership Award in 2019. The Leadership Award recognizes his "outstanding leadership within CASQA and for making exceptional contributions to the stormwater quality management profession over a significant time period." Jeff was only the 7th individual in CASQA's long history to receive this honor.

EDUCATION:

- BS/ Environmental Resources Engineering / Humboldt State University, California

PROFESSIONAL REGISTRATIONS:

- Professional Civil Engineer
  - California / #040658
  - Nevada / #013503
  - North Dakota / PE-8749
- Board Certified Environmental Engineer / National / #04-20040
- Certified Professional in Erosion and Sediment Control (CPESC) / International / #5414
- Qualified SWPPP Developer / California / #00004
- California Stormwater Quality Association / Approved Trainer-of-Record
- EnviroCert International / Approved Trainer for Certified Professional in Erosion and Sediment Control (CPESC)

PROFESSIONAL AFFILIATIONS:

- California Stormwater Quality Association / Director: 2003-2009, 2012-2017; Executive Program Coordinator 2004, 2005; Secretary of the Corporation 2003, 2007
- International Erosion Control Association - Western Chapter / Director: 2014-2019; President 2016-2019.
- American Public Works Association - Inland Empire Branch / Director: 2014-2016, President: 2019
- American Society of Civil Engineers - San Bernardino and Riverside Counties Branch / President: 1993-1994
- Inland Empire Council of Engineers and Scientists / President: 1995 - 1996

RELEVANT EXPERIENCE

San Bernardino Community College District, Crafton Hills College, Yucaipa, CA: San Bernardino Community College District engaged CASC to assist the District in complying with the mandates of federal, state, and local storm water program requirements such as those that stem from the Federal Clean Water and the NPDES regulations, the State's Porter-Cologne Water Quality Act and Construction General Permit, and locally from Municipal NPDES permits.

At Crafton Hills College, CASC was engaged to provide engineering and water quality services for development of the college's Solar Farm. The CHC Solar Farm is a 1.29 megawatt, high performance solar plant that utilizes tower-mounted concentrator photovoltaic panels to generate over 90% of the power needs for the 6,200 student campus. The CHC Solar Farm Project was recognized by the San Bernardino and Riverside Counties Branch of the American Society of Civil Engineers as an outstanding civil engineering project. CASC provided surveying and civil engineering services to place the Solar Farm on campus hillsides while maximizing solar power generation, minimizing grading, and maintaining the pre-project hydrologic flow regime. CASC prepared the project's Water Quality Management Plan (WQMP) to identify the Low Impact Development (LID) techniques to be incorporated into the project to protect water quality and to prevent hydromodification impacts potentially associated with the development. CASC also prepared the project's Storm Water Pollution Prevention Plan (SWPPP) to help control construction-related impacts to water quality. Jeff Endicott coordinated the development and implementation of the WQMP and the SWPPP, including close coordination with campus maintenance staff that will be responsible for maintenance of the solar project, and with construction staff responsible for implementation of the SWPPP. Jeff supervised staff providing Qualified SWPPP Practitioner (QSP) inspections services, including weekly, pre-storm, post-storm, and quarterly inspections, through construction of the project.

ADDITIONAL EXPERIENCE

- **East Valley Water District - San Bernardino, CA** - Plant 37 4 MG Pre-Stressed Reservoir Construction (2002-2003); Plant 39 Forebay for Fluoride Blending (2002-2003); Perchlorate Treatment Assessment (2003-2004); and Emergency Response Plan (2003).
- **Long Beach Water Department - Long Beach, CA** - Redondo Avenue Cast Iron Main Replacement Project; Community Injection-Extraction Well; and Record Drawing Management System Demonstration Project.
- **San Bernardino Valley Municipal Water District - San Bernardino, CA** - Regional Water Facilities Master Plan (1995).
- **City of Colton - Colton, CA** - Urban Water Management Plan.

MICHAEL GENTILE, PE, QSD/P

SENIOR ENGINEER

Mr. Gentile has more than twenty years of experience in project management, project engineering, design, and production for a wide variety of civil engineering projects. His diverse project experience includes hydrology and hydraulics, drainage master plans, storm drain and water quality facilities design, roadway and drainage design, transportation studies (highways and rail), water, sewer, and site development. He is an expert in hydrology, stormwater management and water quality best management practices (BMPs). Mr. Gentile brings a collaborative approach among various disciplines to produce concepts tailored to the site features and needs of each project.

EDUCATION:

- B.A./Physics/Carton College/Northfield, MN

PROFESSIONAL REGISTRATIONS / AFFILIATIONS:

- Professional Civil Engineer/California #058953
- Qualified SWPPP Developer and Qualified SWPPP Practitioner #01162

RELEVANT EXPERIENCE

SunPower Stormwater Assessment – Western Municipal Water District: Mr. Gentile was project manager for the investigation of the erosion that occurred on the bank of the inlet channel to Lake Matthews after the construction of the Sunpower solar project at the Western Municipal Water District Operations Center. Mr. Gentile oversaw and conducted the field investigation by a team of three (Mr. Gentile, Mr. Secrist, and Mr. Sidor), which included the use of a drone to photodocument the site, managed the preparation of the hydrology study and analyzed the grading plans in comparison with the conditions in the field. Mr. Gentile prepared and revised the Technical Memorandum (TM) and conceptual plan per internal review and client comments. The TM documented the findings from the investigation, proposed mitigation measures to stabilize the site and divert runoff away from the eroding banks, and recommended topics for further study.

Annual Report of Inspection and Maintenance of Stormwater Facilities, Wild Horse Canyon Subdivision, Tract 5207, Simi Valley – D.R. Horton: D.R. Horton was required to submit an annual report to the City of Simi Valley of the inspection and maintenance operations for the stormwater Best Management Practices (BMPs) that were constructed for Tract 5207. D.R. Horton retained CASC to inspect the facilities, report maintenance deficiencies, and reinspect upon completion of recommended maintenance. Mr. Gentile performed the initial inspections with Mr. Secrist, and submitted maintenance recommendations to the client. After reinspection, Mr. Gentile prepared the annual report that summarized the initial findings, recommended procedures, conditions after reinspection, and work still to be completed at the time of the annual report. The facilities included several debris basins, inlet and outlet structures, riprap blankets, and treatment control BMPs.

Metropolitan Water District (MWD) Headquarters, Los Angeles, CA: As lead design engineer, prepared plans for the parking lots and access road for the new MWD Headquarters adjacent to Union Station in Los Angeles. The design of this project required the preservation of certain historical facilities, while developing an efficient traffic system for the site.

Master Drainage Plan, City of Indio, Riverside County, CA: Hydrology / hydraulic analysis for Master Drainage Plan, which included integration with City staff, data collection, modeling, water quality compliance (NPDES MS4 permit), establishment of design guidelines and capital projects.

Master Drainage Plan, City of La Quinta, Riverside County, CA: Hydrology / hydraulics analysis for forthcoming Master Drainage Plan. Project includes data collection, establishment of infiltration/percolation parameters, FEMA LOMR submittals, modeling, water quality compliance (NPDES MS4 permit), establishment of design guidelines, and capital projects.

Scotts Valley Transportation Center, Scotts Valley, CA: Project Engineer in charge of the design and production of drainage plans and estimates. This fast-track project included bus platforms, passenger drop-off areas, parking facilities, access driveways, grading, and utility improvements. As part of the environmental mitigation, increased drainage from the site was retained underground so as not to exceed the runoff from the pre-constructed condition. Drainage calculations included rational method hydrology and synthetic unit hydrographic calculations in order to determine the size of the underground retention system.

Water Quality Management Plans/Drainage Studies for Development, San Bernardino and Riverside Counties: Project Engineer for drainage reports, drainage design, and Water Quality Management Plans (WQMP) for various land development projects in San Bernardino and Riverside Counties. The reports include hydrology and water quality calculations, and descriptions of the proposed design. Most projects are infill projects with tight constraints requiring cost-effective and land-efficient solutions for the treatment of stormwater runoff.

RICK FURLONG, PLS

DIRECTOR OF SURVEY AND MAPPING

Mr. Furlong is the Director of Survey and Mapping for CASC. He is an accomplished professional surveyor with over 30 years of surveying experience in Southern California and is currently in his 19th year as Director of Survey and Mapping for CASC. Mr. Furlong has a broad survey background including construction staking, hydrographic, topographic mapping, boundary surveys, design surveys, parcel mapping and records of survey. Mr. Furlong has a strong understanding of writing a legal description in conjunction with land survey boundary control principals. He has served as project manager for various construction projects and on-call surveying services for public and private sectors, and is currently a contract surveyor for the City of Redlands, checking, signing and sealing final maps, parcel maps and lot line adjustments for technical correctness. He is very knowledgeable with the surveying and mapping standards of the various municipal agencies and Caltrans. Mr. Furlong's extensive work for a variety of public agencies and private owners gives him insight into conditions that may affect scheduling, costs, and contractual procedures.

EDUCATION:

- Completed Local 12 Party Chief Program, Santa Ana College, Santa Ana, CA

PROFESSIONAL REGISTRATIONS / AFFILIATIONS:

- CA Licensed Land Surveyor # 8422
- California Land Surveyors Association (CLSA)
- National Society of Professional Surveyors (NSPS)

RELEVANT EXPERIENCE

- **Gestamp Solar, Calipatria Imperial County, CA:** Aerial Topographic Mapping, Base Mapping, Boundary Surveying, ALTA Survey and Mapping, tentative and final map for planned 160 acre 20 MW PV Solar plant.
- **Allegretti Farms Solar Project, Imperial County, CA:** Aerial Topographic Mapping, Base Mapping, Boundary Surveying, ALTA Survey and Mapping, tentative and final map for planned 20 KV PV Solar plant.
- **Crafton Hills College Photovoltaic Solar Field:** Aerial Topographic Mapping, Yucaipa, CA
- **Four Photovoltaic Solar sites totaling 1,700 acres, Imperial County, CA:** Aerial Topographic Mapping, Boundary Surveying and ALTA Survey and Mapping.
- **Ormat Technologies:** Aerial Topographic Mapping for 3 proposed geothermal / Photovoltaic Solar sites totaling 1000 acres, Imperial County, CA
- **Solar Thermal Project, Needles, CA:** Topographic Mapping, Base Maps
- **SCE Lighthipe Substation Long Beach CA** – Conventional Topographic Survey using existing SCE survey control for engineering design site improvements
- **SCE Triton Substation Temecula CA** – Aerial and Conventional Topographic Mapping, research, Static GPS, RTK Control Survey that discovered and allowed for the correction of an incorrect benchmark elevation on an original topographic survey prepared by others.
- **SCE Tenaja Substation Wildomar CA Grand Ave Widening** – Research, Control Survey and Curb Construction Staking
- **SCE Horoscope Bess Irvine CA** – Conventional Topographic Mapping, research, property survey, base mapping of overhead and underground facilities, Static GPS, RTK Control Survey. Final deliverable, survey plat conforming to SCE standard requirements.
- **SCE Titanium Bess Santa Ana CA** – Conventional Topographic Mapping, research, property survey, base mapping of overhead and underground facilities, Static GPS, RTK Control Survey. Final deliverable, survey plat conforming to SCE standard requirements.
- **SCE Pronghorn Bess Lancaster CA**– Conventional Topographic Mapping, research, property survey, base mapping of overhead and underground facilities, Static GPS, RTK Control Survey. Final deliverable, survey plat conforming to SCE standard requirements.
- **Inland Empire Utility Agency, Inland Empire, CA:** Contract manager for this on-call survey contract in our 6th year that includes mapping, legal descriptions, plats, control surveys, high definition laser scanning, and construction surveying for numerous water and wastewater projects including reclamation plants, reservoir sites and large diameter recycled water transmission lines.
- **U.S. Gypsum Solar Facility – Plaster City, CA:** Aerial Topographic Mapping for proposed solar facility improvements, Boundary Surveying and recorded Record of Survey.
- **300 acre proposed Photovoltaic Solar site, Lancaster, CA:** Encumbrance Mapping for Tuusso Energy - Aerial Topographic Mapping and Boundary Surveying, Encumbrance Mapping for a proposed Photovoltaic Solar sites.
- **Solar-One Solar Thermal Project**: Construction Surveying, Daggett, CA

BARBARA SHERMAN, PE, QSD/P

SENIOR PROJECT MANAGER

EDUCATION:

- B.S./Civil Engineering/California State Polytechnic University/Pomona , CA
- B.S./Biology/University of California/ Riverside, CA

PROFESSIONAL REGISTRATIONS, TRAINING, CERTIFICATES, LICENSES & AFFILIATIONS:

- Professional Engineer/California/54609

Ms. Sherman is a registered civil engineer in the State of California. She has over 25 years of experience in the civil engineering industry. Her design experience includes, sewer, water, street, grading, and storm drain projects throughout Southern Californian. She has design and management experience with various government agencies, public and private utility companies, state and federal agencies, school districts, special districts, private developments, renewable energy developers, and railroad companies. As a manager, she is responsible for client relations, staffing, project documentation, construction support and Quality Assurance/Quality Control on all projects. She also prepares or supervises the preparation of, sewer and water reports, project schedules and project status reports, construction design plans including street, street light, signing and striping, sewer and water, reclaimed water, storm drain, grading, Water Quality Management Plans, SWPPP, NOI, hydrology/hydraulic reports, and erosion control plans. Ms. Sherman has a working knowledge of both AutoCADD and Microstation.

RELEVANT PROJECTS

50 MW Photovoltaic Project located in Imperial County, CA – 480 Acres: Ms. Sherman is providing the civil engineering support on this 480 acre project located in the East Mesa area of Imperial County, CA. The proposed project is zoned agricultural but has been fallowed for a few years. The proposed project was an old citrus vineyard and is surrounded by land controlled by the Bureau of Land Management (BLM). The project's terrain is relatively flat and small sand dunes abut the project. AEI-CASC performed an on and off-site hydrology analysis, flood plain analysis, and coordinated closely with the BLM for access and Imperial Irrigation District (IID) for water service.

27 MW Photovoltaic Project located in Imperial County, CA – 190 Acres: Ms. Sherman is providing the civil engineering support on this 190 acre project located north of the City of Brawley in Imperial County, CA. AEI-CASC performed an on and off-site hydrology analysis and a flood plain analysis to determine the extents of the potential flooding of the New River and its impacts to the project.

REDCO 40 acre Solar Thermal/Photovoltaic Energy Project, City of Needles, CA: Ms. Sherman provided civil engineering design on this 49 MW, 640 acre, Solar project located in the Southern California desert near Needles, California. The project which originally started to be 100% solar/thermal will now include a PV component in order to expedite power delivery. Ms. Sherman prepared grading plans, access road plans and other civil engineering design services.

70 MW Photovoltaic Project in Niland, CA – 640 Acres: Ms. Sherman is providing the civil engineering support on this 640 acre project located in Niland, CA which includes the development of a specific "Siting" plan demonstrating the layout of solar arrays, access roads, switchyards, and site drainage control for the project in support of a Conditional Use Permit Application.

San Bernardino Community College District, Crafton Hills College CPV Solar Project, Yucaipa, CA: Project Manager for this 1.4 MW CPV Solar project located in the hills near Yucaipa, Ca. Project included hillside grading, access roads, drainage facilities and erosion control. Work was performed while class was in session.

SCE, San Joaquin Cross Valley Loop Transmission Upgrade, Kern Co., Ca: Ms. Sherman served as Project Manager on this SCE T/L project located in the County of Tulare. The project consists of approximately 25 miles of new double-circuit 220kV transmission line. CASC provided Grading and Erosion Control Plans for access roads, Traffic Control Plans, Restoration Plans, Hydrology Studies, GIS Support, administrative support, and as-built services.

SCE, Coolwater-Lugo T/L Project, San Bernardino, Ca - Ms. Sherman served as Project Manager for the design of the PEA supporting civil engineering plans for this 113-mile 220 kV & 500 kV transmission line project.

SCE BESS Siting Project, CA: Ms. Sherman served as the project manager for the BESS Siting Project. Engineer services included attending site visits and providing desktop research for various projects in CA. Desktop research included review of Google maps, agency criteria, flood maps and APN maps. CASC prepared Siting Matrices which identified information and any major concerns prior to site visits. CASC attended team meetings in which various disciplines discussed the site ranking based on information provided by the team. Based on the ranking, SCE identified sites in which CASC provided Conceptual Site Development Plans for SCE's use. CASC also prepared a Site Feasibility Study for a potential BESS Facility site.

ANTHONY MISTRETTA, PE, QSD/P

PROJECT MANAGER

EDUCATION:

- B.S./Civil Engineering/California State Polytechnic University/Pomona, CA

PROFESSIONAL REGISTRATIONS, TRAINING, CERTIFICATES, LICENSES & AFFILIATIONS:

- Professional Engineer/California/ #82755
- Certified Professional in Erosion and Sediment Control IT #6692
- American Society of Civil Engineers, Member

Mr. Mistretta has been responsible for the civil design of a variety of developments including but not limited to residential tracts, parking facilities, street and highway improvements, substation sites, solar facilities, and various other commercial sites. Additional experience includes the development of multiple detailed hydrology studies and drainage reports, as well as the water quality design and development of Storm Water Pollution Prevention Plans (SWPPPs) and Water Quality Management Plans (WQMPs) for a variety of traditional and linear developments. In addition to his current work in the private sector, Mr. Mistretta has also worked for the San Bernardino County Flood Control District in the Flood Control Engineering Department. His work consisted of the civil design of various flood control facilities including but not limited to open channels, drainage pipes, flood basins, and access roads. Other public sector work included the creation of hydraulic models/analyses; the development of final plan sets, specifications and cost estimates; plan checking; and the organization of field investigations. Further work experience includes land surveying, mapping, heavy equipment operation, and conducting NPDES compliance inspections.

RELEVANT PROJECTS

Plaster City, CA, U.S. Gypsum Solar Facility: Responsible for the site grading design and development of the precise grading plan; as well as completion of the on-site and off-site hydrology study and development of the final drainage report.

Southern California Edison, Coolwater-Lugo 220kV Transmission Project: Mr. Mistretta provided support to the primary design team for the "Coolwater-Lugo Project". Mr. Mistretta assisted with the calculations, design and drafting of horizontal layouts of the access roads and pads. Mr. Mistretta is versed in SCE's Civil CAD standards, procedures, and processes.

Southern California Edison, San Joaquin Cross Valley Loop Transmission Line Project: Mr. Mistretta provided support to the primary design team for the "San Joaquin Cross Valley Loop Project". Mr. Mistretta assisted with the calculations, design and drafting of disturbance areas, and the Horizontal layouts of the access roads and pads and Erosion Control Plans. Mr. Mistretta is versed in SCE's Civil CAD standards, procedures, and processes.

Castor Solar Project, Taft, Kern County, CA: Mr. Mistretta is the Engineer of Record of the project. He was responsible for the development of the Precise Grading Plan, Erosion Control Plan, and Storm Water Pollution Prevention Plan (SWPPP). Mr. Mistretta also performed the detailed On-site and Off-site Hydrology Studies, and was responsible for the design of the on-site drainage facilities.

Crafton Hills College Solar CPV Project, City of Yucaipa, CA: Mr. Mistretta was responsible for the preparation of the Water Quality Management Plan (WQMP). He was in charge of the document preparation, exhibit creation, and Site Design BMP design. Due to the uniqueness of a renewable energy solar facility, the project qualifies as a Non-category Project as defined by the San Bernardino County Water Quality Management Plan Guidance Document. As this type of project is not required to use Treatment BMPs to treat project runoff, this project's Site Design BMP was designed specifically to reduce the amount of post-development project runoff from the pre-development condition. Mr. Mistretta also assisted in the development of the project's Storm Water Pollution Prevention Plan (SWPPP).

Southern California Edison On Call Stormwater Services, Statewide, CA: Mr. Mistretta's tasks have included the preparation of Erosion and Sediment Control Plans using SCE's in-house CAD drawings as a base, preparation of SWPPPs, WPCPs, and NOI preparation. Mr. Mistretta has also assisted in site inspections during construction and has assisted SCE with obtaining permits.

Plan Review Services, Southern California Edison, CA: Responsible for the review of precise grading and drainage plans and report along with coordinating the design of the structural, and electrical plans during the review process for several projects in California.

JESSIE BRUCKHART

ASSOCIATE PLANNER II

Ms. Bruckhart has over 6 years of planning and environmental experience in the private and public sectors. Ms. Bruckhart launched her career following graduation from Indiana University of Pennsylvania with a Bachelors of Science degree in Environmental Planning and GIS. Prior to her experience at CASC, Ms. Bruckhart worked for the County of San Bernardino as a Planner for 4 years as a Planner from 2018-2020 and a Planning Technician from 2016-2018. During her tenure with the County, she worked on various planning projects including the Countywide Plan for the San Bernardino County General Plan Update, County Community Action Plan, Greenhouse Gas General Plan Element Update, RHINA Reporting, and Development Code Updates. Ms. Bruckhart is very passionate about public engagement, project management, and process improvement. Ms. Bruckhart brings valuable perspective to addressing compliance measures for projects which stems from her unique background in project management of commercial, residential, and subdivision projects, General Plan updates, zoning ordinances, map creation and data analysis, and data and GIS analysis as well as process improvement and software implementation experience.

EDUCATION:

- B.S./Environmental Planning and GIS/ Indiana University of Pennsylvania

AREAS OF EXPERTISE:

- Experienced in project management for development projects, including environmental review (CEQA)
- Plan review and development code consistency
- Process Improvement
- Website Design and Social Media engagement
- Spatial Analysis and Map Creation
- Public Engagement and Facilitation
- Document Generation using Microsoft office as well as the Adobe Creative Suite

RELEVANT PROJECTS

Solar Farm Mapping and Tracking: Ms. Bruckhart was the GIS Analyst responsible for creating a series of public and internal online mapping applications that have been used at public hearings in order to help the decision makers make informed decisions as to the impact of solar development on the environment as well as where these developments should be permitted.

USPS Trailer Storage Project, County of San Bernardino, CA: Ms. Bruckhart was the Project Manager responsible for the entitlement process that includes coordinating review of the development plan, consistency with development standards from the Development Code, communicating required studies and site plan revisions and environmental review for the potential impacts of the proposed development. Responding to public comments and decision hearing with the Zoning Administrator

Joshua Tree as a Protected Species Overlay: Ms. Bruckhart was the GIS Analyst/Permitting Software Support Analyst. Joshua Trees are now being considered as an endangered species. In order to protect them, spatial habitat data for the Joshua Tree was used to create an overlay. This overlay connects to the permitting software (EZOP) to inform customers as well as staff that there is a potential for Joshua Trees on the lot and requires extra review.

GIS Viewer Tool Enhancement: Ms. Bruckhart was the GIS Analyst/ Process Improvement Specialist. The County of San Bernardino staff depend on one mapping tool to help them make informed decisions and create trusting relationships with customers. This project is intended to update that tool to make it easier to use and provide more information than ever.

Illegal Truck Storage Analysis: Ms. Bruckhart was the GIS Analyst responsible for data collection of all open code enforcement cases for illegal commercial truck parking. Creation of a spatial layer and static map for use at public hearings to secure grant funding to allow the Code Enforcement Division to address these issues.

Countywide Plan, San Bernardino County General Plan Update: This project is a comprehensive General Plan Update for the County of San Bernardino that includes a new set of plans and tools that go beyond a traditional general plan. There is also a web-based version of the Countywide Plan with interactive dynamic maps and content that make it easier for staff and the public to use the new plan. Ms. Bruckhart was responsible for facilitating and coordinating an extensive public engagement process that included: management and content creation for social media platforms like Instagram, twitter, and Facebook, email newsletters and in person meetings.

Yearly Open Space Subvention Report: Ms. Bruckhart was the GIS Analyst responsible for Data Analysis of open space contracts in the County of San Bernardino and Map Generation for the yearly Open Space Subvention Act Survey required by the state of California.

RHINA Reporting: Ms. Bruckhart was the GIS/Database Analyst responsible for Data Analysis and report creation for all housing units permitted by income level for the reporting year.

SERENA DUDAS

ASSOCIATE PLANNER II / GIS ANALYST

Ms. Dudas graduated from the University of Redlands with a Bachelors of Science degree in Environmental Policy and Management. She has acquired planning skills and an advanced understanding of public and private works through various capacities of consultation, including her assignment to help the University of Redlands achieve compliance with State recycling laws. Ms. Dudas brings valuable perspective to addressing compliance measures for projects which stems from her unique background in community development, data analysis, and consulting services.

EDUCATION:

- B.S./Environmental Policy and Management/University of Redlands, CA

AREAS OF EXPERTISE:

- Geographic Information System Mapping Technology (GIS)
- Front-end web development
- Database management
- NEPA/CEQA requirements
- Waste management

RELEVANT PROJECTS

Initial Study/Mitigated Negative Declaration (IS/MND), GKH Partners, County of Riverside, CA: The Project proposes the development and operation of a sportsmen's park with an onsite recreational vehicle park that includes parking, vending and assembly areas, and administrative buildings. The Project is proposed on an approximately 240-acre site located in the unincorporated community of Temecula, in the lower foothills of southwest Riverside County. Ms. Dudas advised on the site planning and design of exhibits for the Preliminary Application Review. Ms. Dudas analyzed several environmental factors including aesthetics, agricultural resources, hazards and hazardous materials, land use/planning, mineral resources, population/housing, public services, recreation, and utility/service systems for the preparation of the Initial Study document.

Initial Study/Mitigated Negative Declaration (IS/MND), Riverside 40, Meridian Development, County of Riverside, CA: The Project includes 80 residential lots and site improvements such as paved roadways, concrete walkways, patios and driveways, landscape areas, a water quality retention basin and various underground utilities on approximately 40-acre development in the unincorporated Riverside County. Ms. Dudas performed spatial analysis and produced a GIS exhibit of nearby projects to the site specific development to evaluate the projected market for housing in the community. In addition, Ms. Dudas incorporated findings and recommendations from the Project's Water Quality Management Plan, prepared by CASC, into the Initial Study/Mitigated Negative Declaration for the Project.

Environmental Impact Report (EIR), Phase I ESA, and Natural Resources Services, Prado Raceway, Sukut Construction and Etter Motorsports LLC, City of Corona CA: The Project is located on an approximately 162-acre site in unincorporated Riverside County adjacent to State Route 71. This project proposes nine off-road motorsport racetracks, sites for car and RV parking, concession stands, restrooms, seating, an operations office, eight desilting basins for drainage, and the ongoing sand extraction and asphalt reclamation. Ms. Dudas expedited and completed the reformatting, editing, and drafting of the Draft Environmental Impact Report for this Project.

Initial Study/Mitigated Negative Declaration, 20701 Currier Road, City of Industry, County of Los Angeles, CA: CASC was selected to prepare an Initial Study culminating in a likely Mitigated Negative Declaration for a freezer/cold storage expansion project at an existing food distribution warehouse owned and operated by Sysco. Ms. Dudas assisted in initiating the project kick-off and is leading the preparation of the IS/MND through to Project approval. Currently, CASC is awaiting the completion of Applicant-prepared technical studies for incorporation into the environmental document.

Initial Study/Mitigated Negative Declaration, 17150 Gale Avenue, City of Industry, County of Los Angeles, CA: CASC was selected to prepare an Initial Study culminating in a Mitigated Negative Declaration for the construction of a new gasoline service station at 17150 Gale Avenue which will contain eight (8) fuel dispensers that will accommodate for sixteen (16) fuel pumps, with a 5,699 sq. ft. fuel canopy, and a 403.43 sq. ft. convenience store ("Project"). The Project is proposed on an approximately 1.33-acre (57,934 sq. ft.) portion of an irregular-shaped parcel that totals approximately 12.07-acres in the City (APN 8242-02-4090) Ms. Dudas assisted in initiating the project kick-off and is leading the preparation of the IS/MND through to Project approval.

Recycling Consultant, University of Redlands, Redlands, CA: Ms. Dudas acted as a liaison between the City of Redlands and the University to head the development of a food waste recycling program to achieve compliance with state mandates. She organized meetings, led business proposals, presented innovative solutions, consulted waste specialists, performed manual data collection, and published a report with best-practice recommendations for the clientele.

LAUREN THOMPSON

PROJECT COORDINATOR / QA/QC

Ms. Thompson joined CASC in May of 2019 as a Project Coordinator. She is a seasoned and motivated administrative professional specializing in bringing value to clients and fostering positive relationships. Ms. Thompson graduated from California Baptist University with a bachelors of science in Psychology. As a Project Coordinator at CASC, Ms. Thompson is responsible for proposals, formatting/editing reports and manuals, invoicing/billing, project budget tracking, data collection, coordination with clients and subconsultants, research, quality control/ quality assurance, contract administration, and developing/maintaining databases. She brings over 8 years of experience within the corporate and non-profit sectors. Prior to her experience at CASC, Ms. Thompson was Marketing/Executive Assistant at a Real Estate firm in Riverside. Her diverse experience brings insight, strategy, and resources to the table. Ms. Thompson is extremely driven to accomplish her goals and is currently pursuing her Salesperson License. She is also proficient in Microsoft Project, Word, Excel, Publisher, Adobe, PowerPoint, and Office.

EDUCATION:

- B.S./Psychology/California Baptist University, Riverside CA

PROFESSIONAL REGISTRATIONS/ AFFILIATIONS:

- Fingerprint Rolling Certification, DOJ
- Salesperson License (Real Estate) - In Progress

AREAS OF EXPERTISE:

- Contract Review/Proposals
- Accounts Payable/Invoicing/Payroll
- Formatting/Editing/Data Entry
- Written Correspondence
- Report Preparation
- Quality Assurance/Quality Control

RELEVANT PROJECTS

Initial Study/Mitigated Negative Declaration, City of Industry, County of Los Angeles, CA: CASC was selected to prepare an Initial Study culminating in a likely Mitigated Negative Declaration for the construction of a new gasoline service station at 17150 Gale Avenue owned and operated by Walmart. Ms. Thompson assisted in initiating the project kick-off, reviewing contract requirements, and will perform quality control/quality assurance before the IS/MND is submitted to the client.

KTM Motosports, French Valley, CA: Ms. Thompson is currently assisting with the quality control/quality assurance of all crucial City forms, and the formatting and proofing of addendums associated with the Commercial Land Use and Environmental Planning to develop up to 250,000 sf of commercial office, warehousing, storage, and retail space. Ms. Thompson also coordinates with our client and sub-consultants for timely payment on invoices.

Highway 74 Business Corridor Community Plan and Programmatic EIR, Riverside County, CA: The County of Riverside is currently developing four Community Plans within the following locations: Highway 74 (between the cities of Lake Elsinore and Perris), Winchester, Cabazon, and Thousand Palms. Because each community has unique opportunities, constraints, and stakeholders that inform the process, each Community Plan may move forward as individual GPAs. Ms. Thompson is responsible for providing environmental QA/QC compliance of the project budget, associated research, and coordinating with the client and subconsultants.

RELEVANT EXPERIENCE

Proposals & Marketing: Ms. Thompson creates proposals, visual aids, forms, and PowerPoint presentations for the Planning Department, Survey Department, Landscaping Department, and Engineering Department. Ms. Thompson effectively utilizes illustrations and other types of artistic design to transform technical documents into visually pleasing, user-friendly tools geared specifically to the target audience. Her experience with public and private Requests for Proposals (RFPs), has given her the credentials to recognize an Agency's needs, and in-turn, provide a thorough demonstration of qualifications to meet those particular needs. Ms. Thompson has assisted with the formatting/editing of a Small Unmanned Aircraft System (sUAS) Safety Policy Handbook in accordance with SCE standards. She has also assisted the Marketing Department with CASQA (California Storm Water Quality Association) flyers, brochures, and promotional exhibits.

Accounting & Record Keeping: Ms. Thompson has aided project managers with project setup, invoicing of clients, and project cost monitoring to insure that projects are performed in accordance with each contract. She has also drafted addendums and technical reports. Ms. Thompson is responsible for maintaining project file organization and record keeping. Ms. Thompson is experienced in invoicing, account reconciliation, P.O. reconciliation, job costing, financial statements, collections, EFT/ACH payments, banking deposits, and change orders.

JUSTIN PALMER, GISP

ON-CALL CONTRACT GIS SPECIALIST

Geographic Information Systems (GIS) and graphics specialist with 20 years of project experience, including professional coordination with public and private clients, project managers, engineers, and planners to ensure that data, maps, and graphics produced accurately reflect the needs of the individual project. Experience includes more than 1000 land development, resource management, restoration, transportation, utilities, education, and recreation projects.

EDUCATION:

- B.A./Geography, Natural Resource and Environmental Conservation/San Diego State University

PROFESSIONAL REGISTRATIONS/ AFFILIATIONS:

- GISP, Geographic Information System Professional

RELEVANT EXPERIENCE

TLRR Devers-Colorado River #1 500 kilovolt (kV) Project, AECOM/Southern California Edison (SCE), San Bernardino County, CA. Senior GIS specialist providing jurisdictional delineation survey and permitting services for this 115-mile linear project. Services include providing a mobile based GPS data collection system using Esri's ArcGIS Collector that utilizes SCE's GIS data schema for jurisdictional features. Jurisdictional waters and wetlands features are subject to oversight by California Department of Fish and Wildlife (CDFW), Regional Water Quality Control Board (RWQCB), and U.S. Army Corps of Engineers (USACE); a formal jurisdictional delineation report and GIS data in SCE's Hydro Schema; and, an impact analysis will be completed to support the AECOM team for regulatory permitting efforts.

Ocotillo Wind Energy Facility, Pattern Energy Group. GIS Director for a wind turbine project in Imperial County, CA. Created an extensive GIS database for biological resources, cultural resources, and project design features. Provided GIS support as part of the Bureau of Land Management's (BLM) variance request process and as part of micro-siting of project features to avoid and minimize impacts to biological and cultural resources noted during pre -construction surveys. Completed maps, graphics, and analyses for several technical documents, meetings, fieldwork, and public informational purposes. Maps were published online using Esri's mobile application for iOS to keep field staff supplied with the most current project data and impact footprint changes. Worked closely with the project planners and engineers to evaluate, adjust, and record specific windmill locations to minimize adverse effects to the mapped sensitive resources on-site.

City of San Diego Public Utilities Department, As-Needed Environmental Services. Senior GIS Specialist providing GIS support for as-needed environmental services on over 40 task orders. GIS work included biological resource mapping, preparation of restoration plans, impact calculations, and report graphics.

Sunrise Powerlink, California Public Utilities Commission. Lead GIS Specialist for an approximately 117-mile-long project that includes a 500-kilovolt (kV) transmission line from the Imperial Valley Substation to a new substation southeast of Alpine, and a 230-kV transmission line with both overhead and underground components to the Sycamore Canyon Substation in San Diego County. Activities included mapping vegetation and alternatives, managing/coordinating GIS work as a subconsultant to Aspen Environmental Group, and creating and managing a GIS database to support the extensive analyses of impacts associated with the project, all of the alternative routes, and other potentially related project components. Provided hundreds of graphics as part of the Draft EIR/EIS, with large quantities of data transfer occurring between project managers, engineers, agency staff, and field survey crews.

State Route 94 Express Lanes Project, Caltrans. Senior GIS Specialist responsible for overseeing development of GIS database and completion of GIS maps for public and agency meetings, technical studies, Community Impact Assessment, and EIR/EIS. Project plans were received from Caltrans in MicroStation and manipulated for display in a GIS database. Included resolution of property boundaries between SanGIS and Caltrans surveyors and creation of public-friendly project design graphics for community meetings.

PROJECT TEAM RESUMES - SUBCONSULTANTS

CURT DUKE, MA, RPA

PROJECT MANAGER/PRINCIPAL ARCHAEOLOGIST

Mr. Duke has served as the Principal Archaeologist for several Solar Projects in the Mojave Desert and Coachella Valley. Mr. Duke meets the Secretary of Interior's Professional Qualifications Standards for Prehistoric and Historical Archaeology. He has more than 25 years of professional cultural resources experience. He received his B.A. in Anthropology in 1994 from the University of California, Santa Cruz, and his M.A. in Anthropology in 2006 from California State University, Fullerton. His M.A. thesis focused on prehistoric mortuary analysis in southern California. Mr. Duke is a Registered Professional Archaeologist (RPA No. 15969) and a Riverside County qualified archaeologist (No. 151). He is well-versed in Section 106 of the NHPA, NEPA, and CEQA. He has conducted more than 3,500 cultural resources assessments for various clients in California, Nevada, and Arizona. Mr. Duke is responsible for ensuring that the quality of analysis and reporting meets or exceeds appropriate local, state, and federal standards.

EDUCATION:

- CSU, Fullerton, M.A., Anth, 2006
- SDSU, Grad Studies, Anth, 1996/97
- UC Santa Cruz, B.A., Anth, 1994

PROFESSIONAL REGISTRATIONS, TRAINING, CERTIFICATES, LICENSES & AFFILIATIONS:

- RPA, No. 15969
- County of Riverside (No. 151)
- County of Orange
- Society for California Archaeology
- Society for American Archaeology
- Pacific Coast Archaeological Society
- Assoc. of Environmental Professionals
- Building Industry Association

RELEVANT PROJECTS

Superstition Solar I Project, Salton Sea, Imperial County, CA: Superstition Solar I was a 5,600-acre project located on BLM Land. Mr. Duke was the Principal-in-Charge for this project. His team conducted a records search, reconnaissance survey, Native American scoping, and prepared a Class III Intensive Survey Research Design.

Coolwater-Lugo Transmission Line, Barstow to Victorville, CA: DUKE CRM staff performed cultural and paleontological 3rd party review for the CPUC and BLM, and provided EIR assistance. This project was especially complex given that it involved many significant cultural resources and was located on BLM land.

Sycamore-Peñasquitos Transmission Line, San Diego, CA: DUKE CRM was contracted to provide cultural and paleontological 3rd party review and EIR assistance.

Chuckwalla Solar I Project, Desert Center, Riverside County, CA: Chuckwalla Solar I was a 4,000-acre project located on BLM Land. Mr. Duke was the Principal-in-Charge for this project. His team conducted a records search, intensive field survey, Native American scoping, and prepared a Class III Intensive Survey Report.

Livermore Community Solar Farm, LLC, Livermore, CA: DUKE CRM was contracted to perform a cultural resources assessment and historic evaluation in compliance with CEQA for the 72-acre project. DUKE CRM conducted a records search, Native American consultation and a archaeological field survey of the project. DUKE CRM documented and evaluated an historic ranch complex for eligibility for the California Register of Historic Resources. Role: Project Manager/Principal Archaeologist.

California Valley Solar Ranch, California Valley, San Luis Obispo County, CA: California Valley Solar Ranch is a 4,000-acre project located on the Carrizo Plain in eastern San Luis Obispo County. Mr. Duke was the Principal-in-Charge for this project. His team conducted a records search, field survey, Native American scoping, and prepared an archaeological survey report. His team identified, recorded, and evaluated several historical archaeological sites.

Mesquite Regional Landfill, Imperial County, CA: Under contract to the Sanitary Districts of Los Angeles County, Mr. Duke conducted a Class III Data Recovery project for ten Native American cultural resources within the boundaries of the proposed Mesquite Regional Landfill (MRL) Project, located in Imperial County, California. This effort was combined with a supplementary cultural resource reconnaissance of adjacent Bureau of Land Management (BLM) land to identify the extension of these resources beyond the project boundaries.

BRIAN GLENN, MA, RPA

PRINCIPAL INVESTIGATOR/ARCHAEOLOGIST

DUKE CRM

Mr. Glenn has worked on several Solar Projects throughout his career. This is in addition to the hundreds of cultural resources management projects over his 30 year career. This includes projects throughout California in compliance with Section 106 of the National Historic Preservation Act (NHPA) and California Environmental Quality Act (CEQA). His recent experience includes cultural resources surveys and studies for clients such as the Los Angeles Department of Water and Power, Metropolitan Transit Authority, and La Plaza Foundation. His responsibilities have included the preparation of technical reports (assessment, evaluation, and mitigation), cultural resources management plans and EIS/EIR sections, as well as archaeological monitoring. He has training and significant experience in lithic, faunal, typological and spatial analyses, as well as obsidian source and hydration studies. He has identified, evaluated, and investigated historic era resources from a 1792 Spanish gun emplacement on Ballast Point overlook San Diego Bay to late 19th to mid-20th century household and commercial deposits.

EDUCATION:

- UCLA , M.A. Anthropology, 1991
- UC, Santa Barbara, B.A., Anthropology, 1986
- UC, Santa Barbara, B.A., Geography, 1986
- San Diego Mesa College, Certificate, GIS, 2010

PROFESSIONAL REGISTRATIONS/ AFFILIATIONS:

- RPA, No. 989903
- Society for California Archaeology
- Society for American Archaeology
- San Diego County Archaeological Society President, 1999

RELEVANT PROJECTS

- Solar Alternative Site Study, Imperial County, CA
- Sterling Energy Solar 2 Project, Imperial County, CA
- Sterling Energy Solar 1 Project, near Barstow, CA
- First Solar Energy Blythe # 1, Blythe, CA

BEN SCHERZER, MS

PALEONTOLOGIST

DUKE CRM

Mr. Scherzer has more than 15 years of experience in paleontological research, field surveys, fossil salvage, fossil preparation, laboratory analysis, report preparation, and curatorial experience. Having worked throughout California, Nevada, Utah, and Montana he brings a wide variety of expertise and background with experience working on federal, state, and private land. Mr. Scherzer has experience in multiple areas of paleontology, with research experience with dinosaurs, Cenozoic mammals, marine mammals, and invertebrates. Mr. Scherzer leads all paleontological resources investigations for DUKE CRM. He coordinates with research institutions, museums/curation facilities, and other paleontological specialists.

EDUCATION:

- M.S., Earth Science, 2008, MSU, Bozeman, MT
- B.A., Geology/Math, 2002, Earlham College, IN

PROFESSIONAL REGISTRATIONS/ AFFILIATIONS:

- Paleontologist, County of Orange
- Paleontologist, County of Riverside
- Society of Vertebrate Paleontology
- Geological Society of America
- Society for Sedimentary Geology
- American Association of Petroleum Geologists, Pacific Section
- South Coast Geological Society
- Western Association of Vertebrate Paleontologists

RELEVANT PROJECTS

- Mojave Solar Power, Hinkley, CA
- Rio Grande and Columbia 3, Rosamond, CA
- Genesis Solar Energy, Blythe, CA
- ON Line Transmission, Las Vegas, NV
- Blythe Solar Project, Blythe, CA
- Solar Star, Lancaster, CA
- Sycamore to Peñasquitos 230 kV Transmission Line, San Diego, CA

DANA SUPERNOWICZ, MA, RPA

ARCHITECTURAL HISTORIAN

DUKE CRM

Mr. Supernowicz worked for the California State Historic Preservation Office (SHPO) as a staff reviewer in the Section 106 unit. During his tenure with the SHPO, Supernowicz assisted in the development of HABS/HAER documentation, Programmatic Agreements (PAs), Memorandum of Agreements (MOAs), and other agreement documents, reviewed historical and archaeological reports prepared by over 20 federal agencies, and assisted in planning efforts for the office. Mr. Supernowicz has been professionally involved in the research, documentation, and mitigation of historic districts, sites, buildings and structures since 1976. He has worked for a variety of federal and state agencies including Caltrans, the Department of Parks and Recreation, U.S Forest Service, National Park Service, and Bureau of Land Management. He was the first full-time historian and historical archaeologist employed by the U.S. Forest Service in California and served as the first Regional Historian and Zone Historian for California. Mr. Supernowicz has served as the Principal Investigator for numerous historical projects, as well as carrying out laboratory analysis, and preparing research designs. Mr. Supernowicz has authored and co-authored numerous reports and published articles. Several of those reports focused on establishing design guidelines and standards for evaluating historic properties throughout California.

EDUCATION:

- UCLA , M.A. Anthropology, 1991
- UC, Santa Barbara, B.A., Anthropology, 1986
- UC, Santa Barbara, B.A., Geography, 1986
- San Diego Mesa College, Certificate, GIS, 2010

PROFESSIONAL REGISTRATIONS/ AFFILIATIONS:

- RPA, No. 989903
- Society for California Archaeology
- Society for American Archaeology
- San Diego County Archaeological Society President, 1999

MATTHEW STEVER, MA

ARCHAEOLOGIST / CREW CHIEF

DUKE CRM

Mr. Stever is an Archaeologist with DUKE CRM. He has 7 years of professional archaeological experience in conducting research, field surveys, Native American consultation, archaeology/ paleontology monitoring, processing and cataloging artifacts from excavation and report writing. Mr. Stever is a Registered Professional Archaeologist, (RPA No. 49570975). He received his B.A. in Anthropology in 2014 from CSU, San Bernardino and his M.A. in Applied Archaeology in 2017 from CSU, San Bernardino.

EDUCATION:

- BA/ Anthropology/ CSU San Bernardino
- MA/Anthropology / CSU San Bernardino

PROFESSIONAL REGISTRATIONS/ AFFILIATIONS:

- Society for American Archaeology
- Society for California Archaeology

JILL ONKEN, PH.D

GEOARCHAEOLOGIST

DUKE CRM

Dr. Onken has 30 years' experience conducting geoarchaeological investigations throughout the western United States, including work at more than 80 sites in southern California, one-third of which are in coastal counties. Her areas of expertise include alluvial stratigraphy, geomorphology, site formation processes, and radiocarbon and obsidian hydration dating. Her education and experience in both archaeology and the geosciences allow her to focus on questions most relevant to archaeological inquiries. Accordingly, in addition to recording and interpreting the soils and stratigraphy at archaeological sites, determining the relationship of site deposits to the geomorphologic history of the surrounding region, and estimating the age of the deposits, her work has also focuses on elucidating site formation processes, evaluating the integrity of archaeological deposits, reconstructing changing environmental conditions and landscapes, evaluating the potential for deeply buried deposits, and consulting with field directors on optimal excavation strategies and dating techniques.

EDUCATION:

- Ph.D., University of Arizona. Geosciences (Anthropology minor), 2015.
- M.S., University of Arizona. Geosciences (Geoarchaeology Curriculum), 1991.
- B.A., University of California, Davis. Anthropology, 1985.
- GIS Intensive Institute Certificate, 1996. University of California Extension, Riverside.

PROFESSIONAL REGISTRATIONS/ AFFILIATIONS:

- Registered Professional Archaeologist (No. 15825)
- Geological Society of America
- American Quaternary Association
- Society for American Archaeology
- Society for California Archaeology

BRYAN VOSS, PG

SENIOR PROJECT GEOLOGIST

Leighton Consulting, Inc

Mr. Voss has over 20 years of extensive experience as a project manager for site characterizations, contaminant delineation, risk assessments, remediation, groundwater monitoring, permitting, remedial system design, operation oversight and regulatory agency permitting, and Phase I, II, and III Environmental Site Assessments (ESAs). He works to develop the most reasonable, cost-effective approach based on the client's objectives, and successfully negotiates with environmental regulatory agencies.

EDUCATION:

- BS, Geological Sciences, San Diego State University, San Diego, CA

PROFESSIONAL REGISTRATIONS/ AFFILIATIONS:

- CA – Professional Geologist - #8709
- CFR 1910.120 OSHA 40-Hour Training
- CFR 1910.120 OSHA 8-Hour Refresher Training
- Respirator Fit Test

RELEVANT PROJECTS

Sol Orchard Solar Farm, El Centro, Imperial County, CA: Project Geologist for Phase I Environmental Site Assessments (ESAs) for a 20-Megawatt (MW) solar photovoltaic facility located on Imperial Irrigation District (IID) land both in the City of El Centro and Imperial County. The project proposed to install 100,000 to 120,000 panels on portions of four parcels totaling 140 acres, however development would be limited to approximately 118 acres. The Phase I ESA was performed as part of the CEQA environmental review process, resulting in a mitigated negative declaration (MND), with the City of El Centro as the lead agency.

Sol Orchard Valley Center Solar Energy, San Diego County, CA: Project Geologist for Phase I and Phase II ESAs for a major use permit (MUP) for the construction and operation of a solar photovoltaic farm. The project proposed the installation of solar panels over approximately 46.1 acres of the 54.6-acre site with a production capacity of 7.5 MW with a trail dedication and landscaping to screen the facility. The ESAs were conducted as part of the CEQA environmental review process, resulting in an MND, with the County of San Diego Planning Commission as the lead agency.

NICHOLAS TRACEY, PE, GE

ASSOCIATE ENGINEER

Leighton Consulting, Inc

Mr. Tracy has 15 years of experience performing and managing geotechnical investigations utilizing a variety of techniques and tools, including hollow-stem auger, cone penetrometer testing (CPT), test pits, seismic refraction, inclinometer, and manometer. He has in-depth experience providing foundation design parameters, pavement design, slope stability analysis, retaining wall design, settlement analyses, and seismic hazard evaluation, as well as performing forensic investigations relating to erosion, settlement, slope failure, and water damage. Specializing in the utility and energy sector, Mr. Tracy has provided geotechnical design parameters and earthwork recommendations for San Diego Gas & Electric (SDG&E), Pacific Gas & Electric (PG&E), Southern California Gas (SoCal Gas), and City of San Diego energy projects. Additionally, he has served as an expert witness for SDG&E and PG&E on more than 30 claims relating to erosion following wildfires.

EDUCATION:

- BS, Civil Engineering, California Polytechnic State University, San Luis Obispo

PROFESSIONAL REGISTRATIONS/ AFFILIATIONS:

- CA - Civil Engineer - #74777
- CA - Geotechnical Engineer - #3058
- American Society of Civil Engineers (ASCE), Government Relations Committee

RELEVANT PROJECTS

Capital Dynamics, Cal Flats Solar Substation and Battery Energy Storage System Yard, Parkfield, CA: Project Manager for the geotechnical investigation for the proposed Substation and BESS site supporting the existing solar energy farm. The field investigation consisted of a combination of hollow-stem auger borings and cone penetration tests. A detailed geologic and seismic hazard review was performed including liquefaction analysis and ground motion analysis. Using the data obtained from the subsurface exploration, geotechnical parameters were provided for the design of the mat foundations for the substation structures and drilled pier foundations supporting the storage containers and transmission monopoles. General grading recommendations for preparation of the substation and storage yards were also provided.

SDG&E Borrego Springs Substation, Borrego Springs, CA: Geotechnical Engineer for multiple improvements completed in phases at Borrego Springs Substation. The projects included installation of a battery energy storage yard, a control shelter, telecommunication poles, and a Microgrid Ultra Capacitor. Geotechnical parameters were provided for drilled pier and mat foundations supporting the improvements. Also served as project manager for construction monitoring services during the construction phase.

ROBERT STROH, PG, CEG

ASSOCIATE GEOLOGIST

Leighton Consulting, Inc

EDUCATION:

- BS, Geological Sciences, San Diego State University, San Diego, CA

PROFESSIONAL REGISTRATIONS/ AFFILIATIONS:

- CA – Certified Engineering Geologist - #2099
- CA – Professional Geologist - #6707
- CFR 1910.120 OSHA 40-Hour Training
- CFR 1910.120 OSHA 8-Hour Refresher Training

Mr. Stroh has over 30 years of experience in engineering geology and conducting geotechnical engineering evaluations. He has extensive experience in geotechnical and geologic investigations including geologic field mapping, fault hazard investigations, soil stratigraphy, aerial photograph interpretation and geomorphology studies, seismic hazard, slope stability evaluations, geotechnical subsurface exploration, sampling and logging, rock core logging, grading quality control and soils testing, marine and coastal studies, mineral resources, and geophysical evaluations including velocity, resistivity, and ground penetrating radar surveys. His areas of specialized experience include fault hazard studies, soil stratigraphy, and performance-based seismic hazard analysis. Mr. Stroh is professionally recognized in the field of fault hazards and has presented nationally and locally on the topic several times. Mr. Stroh is a past president of San Diego Association of Geologists, currently serves on the Board of Directors for the San Diego Geological Society and is a past chair for the Association of Engineering Geologists, San Diego Chapter. He also consults as a Technical Expert for the Board for Professional Engineers, Land Surveyors and Geologists.

RELEVANT PROJECTS

Jacumba Solar Development, San Diego County, CA: Associate Geologist/Project Manager for the mineral resource technical study memorandum for a 1,345-acre site in the Jacumba Hot Springs area of unincorporated San Diego County. The project proposes to develop approximately 680 acres of the site with solar panels and a substation for electrical distribution. Scope of work included review of conceptual plans and preliminary geotechnical report as well as managing a geotechnical site reconnaissance. The memorandum discusses existing site conditions, presents the geologic site conditions and preliminary mineral resource potential, and evaluates the significant impacts the project would have on local mineral resources.

Weapons Impact Scoring Set (WISS), Target 68, Imperial County, CA: Project Geologist conducted a preliminary geotechnical study of the site and provided a geotechnical report. The project consisted of the performance of two exploration borings to a depth of 20 feet and laboratory testing. The purpose of the study was to provide geotechnical recommendations for the construction of the proposed camera site to include a concrete slab-on-grade with approximate dimensions of 40-feet by 9-feet for the support of solar panels, and a free standing, steel camera tower approximately 40-feet high supported at each of four leg corners on 5-foot square footings approximately 8.5-feet in depth.

Level 3, Fiber Optic In-Line Amplification Station, El Centro, CA: Project Engineering Geologist. Conducted field evaluations and prepared a geotechnical design reports for the proposed in-line amplification stations across southern California and Arizona. Specifically, the El Centro location included a subsurface exploration with the performance of two HSA borings to a depth of 40 feet and a geophysical survey to include ground resistivity properties. The geotechnical and geophysical exploration provided data needed to develop design recommendations regarding foundation design, seismic hazard, and ground material electrical properties for the facilities.

SunPower, Photovoltaic Arrays at Six School Sites, San Diego and Chula Vista, CA: Project Geologist for geotechnical design of carports or canopies equipped with photovoltaic (PV) arrays with associated support equipment. Subsurface exploration consisting of the excavation, logging, and sampling of six exploratory hollow-stem auger borings at each site along with obtaining soil samples for laboratory testing to include thermal resistivity testing. Deep Foundation recommendations were provided for individual sites based on the results of exploration and soils and seismic conditions.

Poway Heritage, Unit II EIR, Poway, CA: Project Geologist and Manager, reviewed pertinent geotechnical literature, including geologic maps, stereoscopic aerial photographs and geotechnical and geologic reports. Performed a geologic reconnaissance and mapping of the project study area, compiled and analyzed data, with an emphasis on potential geologic and geotechnical hazards such as soft ground conditions, shallow groundwater, expansive soils, unstable slopes, landslides, faulting and seismicity, and liquefaction, and prepared a report presenting preliminary findings, conclusions, and geotechnical recommendations, particularly regarding geotechnical constraints and mitigation measures.

ARIC EVATT, PTP

PRINCIPAL / SENIOR TRANSPORTATION ENGINEER

URBAN CROSSROADS

Mr. Evatt is the President of Urban Crossroads, Inc. Mr. Evatt leads the transportation studies group with a focus on helping clients and communities develop mitigation strategies in response to ever evolving environmental and legislative requirements. As President of Urban Crossroads, Inc. Mr. Evatt works to ensure our continued success by maintaining strong client relationships, providing timely and complete work products and supporting our technical studies throughout the public hearing process.

EDUCATION:

- B.S./Finance, Real Estate, and Law/ California State Polytechnic University, Pomona

PROFESSIONAL REGISTRATIONS/ AFFILIATIONS:

- Professional Transportation Planner (PTP)
- Institute of Transportation Engineers (ITE)
- Roundabout Task Force—Institute of Transportation Engineers (ITE)
- American Planning Association (APA)

RELEVANT PROJECTS

- Calipatria State Prison Solar, County of Imperial, CA
- Centinela State Prison Solar, County of Imperial, CA
- CVWD CR6 Water Treatment Noise Analysis, County of Riverside, CA
- SGVWC Plant Construction Noise Monitoring, El Monte, CA
- San Emidio Mine Expansion Noise Impact Analysis, County of Kern, CA
- Ontario Ranch Business Park, City of Ontario, CA
- Kimball Business Park, City of Chino, CA
- Moreno Valley Logistics Center, City of Moreno Valley, CA
- Toscana Specific Plan (TTM 36826), County of Riverside, CA
- Riverside County Housing Element, County of Riverside, CA
- Falloncrest at the Preserve Specific Plan, City of Chino, CA
- Rancho Palma, City of San Bernardino, CA
- Sierra Lakes Commerce Center, City of Fontana, CA
- Watson Industrial Park, City of Chino, CA

BILL LAWSON, PE, INCE

PRINCIPAL/TRAFFIC ENGINEER/NOISE SPECIALIST

URBAN CROSSROADS

Mr. Lawson is a founding principal partner, a Registered Professional Traffic Engineer and a Certified Acoustical Consultant. Mr. Lawson maintains a wide range of technical expertise that includes transportation planning, traffic engineering, neighborhood traffic control, and noise impact analysis. Mr. Lawson has over 25 years of community noise experience and has personally prepared and directed the development of well over 2,000 noise study reports throughout Southern California.

EDUCATION:

- M.S./Civil and Environmental Engineering/ California Polytechnic University, San Luis Obispo
- B.S./City and Regional Planning/California Polytechnic State University, San Luis Obispo

PROFESSIONAL REGISTRATIONS/ AFFILIATIONS:

- Registered Professional Traffic Engineer, PE #TR2537
- American Institute of Certified Planners, AICP #013011
- Professional Transportation Planner (PTP)
- Institute of Noise Control Engineering (INCE)
- American Planning Association (APA)
- Acoustical Society of America (ASA)
- Institute of Transportation Engineers (ITE)
- Certified Acoustical Consultant, County of Orange and County of San Diego

RELEVANT PROJECTS

- Calipatria State Prison Solar, County of Imperial, CA
- Centinela State Prison Solar, County of Imperial, CA
- SGVWC Plant Long-Term Construction Noise Monitoring, City of El Monte, CA
- Canyon Springs Health Care Campus & Senior Living, City of Riverside, CA
- Bear Creek Master Association Traffic Calming Evaluation, City of Murrieta, CA
- Santee Walmart Expansion Noise Impact Analysis, City of Santee, CA
- CV Link Noise Impact Analysis, Coachella Valley Association of Governments, CA
- Aliso Viejo Medical Center Parking Demand Analysis, City of Aliso Viejo, CA
- Moreno Valley Logistics Center Noise Analysis, City of Moreno Valley, CA

CHARLENE SO, PE

SENIOR TRANSPORTATION ENGINEER

URBAN CROSSROADS

Ms. So, P.E., has worked in transportation planning and traffic engineering since 2002. Since earning her Bachelor of Science degree in Civil Engineering from the University of California, Irvine, Charlene So has developed a wide range of expertise in transportation planning and traffic impact analyses. She is a registered professional traffic engineer in the State of California. Ms. So is an experienced transportation analyst and is familiar with the analysis techniques of the most current Highway Capacity Manual. She is proficient in the use of unique software tools such as SYNCHRO, SimTraffic, VISSIM, VISTRO, and HCS 2010.

EDUCATION:

- B.S./Civil Engineering/University of California, Irvine

PROFESSIONAL REGISTRATIONS/ AFFILIATIONS:

- Registered Civil Engineer, PE #TR2414
- Institute of Transportation Engineers, ITE

RELEVANT PROJECTS

- Calipatria State Prison Solar, County of Imperial, CA
- Centinela State Prison Solar, County of Imperial, CA
- Chino Traffic Model Update, City of Chino, CA
- Rancho Mirage General Plan Update, City of Rancho Mirage, CA
- Fontana North Walmart, City of Fontana, CA
- Vantage Point Church, City of Eastvale, CA
- Fontana South Walmart, City of Fontana, CA
- Kimball Business Park, City of Chino, CA
- Moreno Valley Logistics Center, City of Moreno Valley, CA
- Toscana Specific Plan (TTM No. 36826), County of Riverside, CA
- Riverside County Housing Element, County of Riverside, CA
- Sierra Lakes Commerce Center, City of Fontana, CA

HASEEB QURESHI, MES

AIR QUALITY/GHG SPECIALIST

URBAN CROSSROADS

Haseeb Qureshi has been working in the field of air quality, climate change, health risk assessment, and vehicular and non-motorized transportation planning and analysis since 2006. In this time he, has authored numerous air quality, health risk, greenhouse gas, traffic impact analysis studies, and provided input into project design to promote sustainability and walkability for projects ranging from small development projects to citywide General Plan updates and large scale specific plans. Recent activities include efforts to inventory greenhouse gas emissions for various projects and provide recommendations to reduce carbon impacts through innovative mitigation strategies. Mr. Qureshi earned his Master of Science degree in Environmental Studies from California State University, Fullerton and his Bachelor of Arts degree in Environmental Analysis & Design from University of California, Irvine. Mr. Qureshi is also proficient in the use of unique software tools such as CalEEMod, AERMOD, ISCST3, CALINE4 and EMFAC.

EDUCATION:

- M.S./Environmental Studies/California State University, Fullerton, CA
- B.S./Environmental Analysis and Design/ University of California, Irvine, CA

PROFESSIONAL REGISTRATIONS/ AFFILIATIONS:

- Association of Environmental Planners (AEP)
- Air and Waste Management Association (AWMA)
- American Society for Testing and Materials (ASTM)

RELEVANT PROJECTS

- Calipatria State Prison Solar, County of Imperial, CA
- Centinela State Prison Solar, County of Imperial, CA
- Lincoln Landing, AQ/GHG Analysis, City of Hayward, CA
- Space Center AQ/GHG/HRA Analysis, City of Jurupa Valley, CA
- Moreno Valley Logistics Center, AQ/GHG/HRA/Energy Analysis—City of Moreno Valley, CA
- Arcadia Logistics Center, AQ/GHG/HRA Analysis, City of Arcadia, CA
- Sierra Lakes Commerce Center, AQ/GHG/HRA Analysis, City of Fontana, CA
- Watson Industrial Park, AQ/GHG/HRA Analysis, City of Chino, CA
- Shelter Island Boat Launching Facility, AQ/GHG Impact Analysis, City of San Diego, CA
- The Boulevard Development, AQ/GHG, City of Hayward, CA
- Saddleback/Irvine Valley College Master Plan, AQ/GHG, County of Orange, CA

APPENDIX 3 (A3). PROJECT EXPERIENCES

165-ACRE PHOTOVOLTAIC SOLAR ENERGY PROJECT

THOUSAND PALMS SOLAR, RIVERSIDE COUNTY, CA

CASC served as the Project Manager for a 165-acre photovoltaic solar energy power plant located in the lower desert of Riverside County. CASC managed all environmental and engineering aspects of the proposed PV Solar Project which proposed to interconnect with the Imperial Irrigation District (IID) to provide renewable energy power into the publicly regulated grid. Thousand Palms Solar proposed to develop approximately 20 megawatts (MW) of renewable energy power over 165 acres, including access roads, and set asides for permanent open space. The project also included a Development Agreement and Zoning Amendment in order to achieve compatibility with the County Land Use and Zoning Districts, as well as, the County Development Code.

CONTRACT PLANNING AND ENVIRONMENTAL SERVICES

CITY OF NEEDLES, NEEDLES, CA

CASC completed a Land Use and Environmental Impact Analysis (EIA) associated with a proposed 100MW Photovoltaic (PV) solar facility. The project is proposed by Mojave Valley Energy, LLC (MVE) and CASC serves as an extension of the City's technical staff to evaluate the short-term and long-term benefits and possible impacts to the City and the Needles Public Utility Agency (NPUA).

ENVIRONMENTAL IMPACT REPORT

CITY OF RANCHO CUCAMONGA, CA

CASC Project Manager, Mr. Tom Nievez, was in charge of the Project-specific Environmental Impact Report (SCH#2008071044) associated with the Wilson Avenue Extension (East) project. CASC was responsible for all major aspects of the public works improvements; including civil engineering, improvement plans and grading plans, hydrological design and water quality mitigation. The purpose of the Wilson Avenue Environmental Impact Report (EIR) is to identify and evaluate the existing and potential impacts related to the Wilson Avenue extension project. The project site is vacant of any permanent structures and is currently used as a maintenance access road for the San Bernardino County Flood Control. In addition, the proposed project involves the construction of street and drainage improvements with appurtenant improvements such as landscaping and lighting. The ultimate land uses included public use of the project site as a public road for vehicular, bicycle, and pedestrian circulation. CASC continues as the project manager and primary CEQA consultant to the City of Rancho Cucamonga for the Wilson Creek Avenue Extension. CASC has managed the EIR process and guided the City through the resource permitting process with both Federal and State agencies. Upon completion of these necessary permits Having written several EIR's and other CEQA-driven environmental documents, CASC is capable and experienced with the preparation and management of Initial Studies for major residential, commercial, industrial, and civic development proposals.

CONTRACT ENVIRONMENTAL SERVICES

CITY OF BANNING, CA

CASC managed a Project Specific Environmental Impact Report (EIR) for the legacy Surface Mining Activities (Robertson's Redi-Mix), located within the northeastern portions of the City of Banning, adjacent to the Morongo Reservation. As part of the preparation of an Environmental Impact Report (EIR) associated with a Surface Mining Permit (SMP) Operation and Revised Reclamation Plan (RCL) for the Robertson's/Banning Quarry, CASC managed a team of experts in Biology, Air Quality, Traffic, Greenhouse Gas Emissions, and Geotechnical Engineers. CASC provided the CEQA expertise and environmental documentation and preparation support services. In addition, CASC coordinated the regional stakeholders, such as the Riverside County Flood Control District, RCA, USFWS, CDFW, RWQCB, as well as the County of Riverside, officials and staff within the City of San Jacinto, the Morongo Band of Mission Indians, and representatives from the State Water Board, in charge of regional watershed

management protection. CASC's Scope of Work included the research, environmental and regulatory analysis, preparation of the Initial Study, issuance of the Notice of Preparation (NOP), and preparation of the Draft EIR associated with this existing project and its proposed 23-acre/2 million cubic foot excavation expansion. CASC was also in charge of the public outreach and presentations associated with the environmental documents through the required CEQA process.

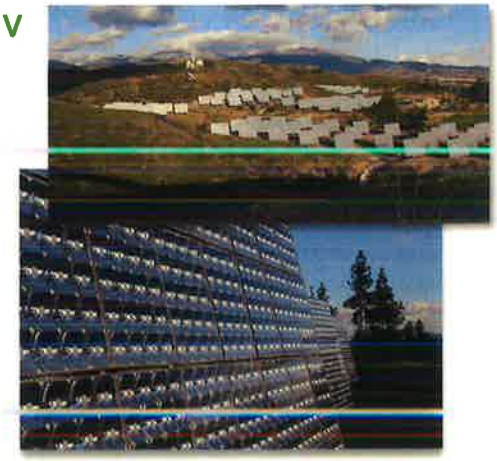
DUE DILIGENCE REPORT

MIRASOL DEVELOPMENT, KERN COUNTY, CA

CASC provided comprehensive due diligence, land acquisition, and coordination of interconnection studies and Power Purchase Agreements (PPA) for Mirasol Developments two (2) 20MW or greater Photovoltaic (PV) solar project. CASC evaluated and researched all aspects of the County's Environmental Documentation procedures; including, but not limited to analyzing the type and scope of Technical Studies/Reports associated with the necessary CEQA/NEPA clearances for the project. In addition, CASC assisted with the land acquisition aspects of the project, associated with the interconnection and PPA aspects related to this project. CASC reviewed two (2) projects total—The first is PG025 Kern County Industrial No. 1 and the second one is PG041 Delano Land 1, both of which are located within Kern County.

1.4MW GROUND MOUNTED CONCENTRATED PV SOLAR PROJECT

CRAFTON HILLS COLLEGE, YUCAIPA, CA



CASC was selected by the San Bernardino Community College District to prepare plans for hillside grading, access roads, drainage facilities and erosion control, for this 1.4MW Ground Mounted Concentrated PV Solar project located on approximately 8 acres in the hills near Yucaipa, CA. The civil plans were completed on a fast-track basis in order to meet the College's aggressive schedule. CASC worked closely with the College to develop bridging documents (similar to SCE's PEA level civil support), then completed the final engineering plans for processing through the local agencies. CASC also provided the aerial survey, prepared the topographic maps and provided QSP field support during construction.

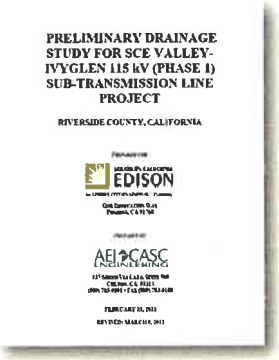
DUE DILIGENCE AND CONSTRUCTION MANAGEMENT

SUSTAINABLE POWER GROUP, LLC, RIVERSIDE COUNTY, CA

CASC completed a comprehensive Due Diligence and Construction Management Schedule for two (2) PV solar projects located within the eastern portion of the Riverside County, in the Palo Verde Valley. In total, the project encompasses approximately 3,800 +/- acres that will produce over 450 MW. CASC provided a complete Construction Management schedule, that includes all necessary construction-level permits necessary after the project entitlement and environmental documents are certified by the Riverside County Board of Supervisors. In addition, CASC assisted the Sustain Power Group in their property acquisition efforts by identifying all costs associated with the County's Development Impact Fees (DIF) and Transportation Impact Mitigation Fees.

VALLEY-IVYGLEN 115 KV SUB-TRANSMISSION LINE PROJECT (PHASE 1)

SOUTHERN CALIFORNIA EDISON (SCE), RIVERSIDE COUNTY, CA


PRELIMINARY DRAINAGE STUDY FOR SCE VALLEY-IVYGLEN 115 kV (PHASE I) SUB-TRANSMISSION LINE PROJECT

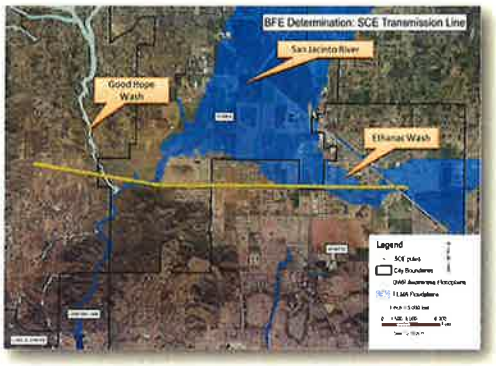
RIVERSIDE COUNTY, CALIFORNIA

EDISON

AEI CASC ENGINEERING

The Valley-Ivyglen (VIG) project (Phase 1) is located in Riverside County, California and it consists of approximately 13 miles of single circuit 115kV sub-transmission line. It originates from Valley Substation and runs westerly along the north side of the existing Serrano-Valley 500 kV Transmission line easement to State Route 74 (SR-74). From that point, the VIG 115 kV sub-transmission project continues southerly along SR -74 and terminates at the intersection of 3rd Street and Collier Avenue. The VIG Sub-

Transmission Line project (Phase 1) includes approximately 346 poles. CASC prepared for SCE a drainage report in support of the Valley-Ivyglen (VIG) 115 kV Sub-Transmission Line project (Phase 1). The report was prepared to determine and establish the existing 100-year storm flows tributary to the proposed Sub-Transmission Line project and to identify the existing 100-year flood hazard within the project area. Additionally, the study was prepared to evaluate the scour/debris load potential impacting the proposed poles located in the San Jacinto River, Good Hope Wash, Ethanac Wash, Wasson Canyon Wash and Local Drainage Area Wash.



The scope of this study included; (1) Determination of the points of flow concentration and drainage areas, (2) Determination of the 100-year peak storm flows based upon the existing condition utilizing the Riverside County Flood Control District's Hydrology methods, (3) Preparation of hydrology map, (4) Review of the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps, (5) Determination of the 100-year flood hazard within the project area, (6) Determination of the proposed pole scour and debris load potential, (7) Preparation of hydrology map and flood hazard map, and (8) Preparation of the drainage report.

ON-CALL SURVEYING SERVICES INLAND EMPIRE UTILITY AGENCY (IEUA)

CHINO, CA

CASC has provided survey services on various projects throughout the Chino and Ontario areas since 2013. We are currently providing construction survey services for a 5 million gallon recycled water reservoir as well as a 5 mile long water line to supply the reservoir in Chino, CA. The majority of the on call surveying requires the use of GPS technology, filling in with conventional total stations and digital levels as needed. All requested design topographic and utility location surveys are performed, compiled and delivered to the Agency in autocad civil 3D format. IEUA has numerous facilities throughout the Inland Empire and we can be requested to perform topographic and or construction surveying at all of them to facilitate their on going facilities improvements.

- CCRWF Secondary Clarifier No. 2 Rehabilitation
- Turner Basin Turnout Capacity Improvements
- RP-1 Primary Clarifier Rehabilitation Project
- 930 Zone Recycled Water Reservoir
- 930 Zone Recycled Water Pipeline
- 1630 West Recycled Water Pipeline Segment B
- RP-4, RP-5 Drainage Improvements
- Carbon Canyon Recycling Facility Pump Station Exp.

CONTRACT PLANNING AND ENVIRONMENTAL SERVICES

CITY OF INDUSTRY, CA

CASC has successfully been providing "on-call" Development Review, Environmental Review and Environmental Planning Services for the City of Industry Planning Department since 2017. As such, the City is faced with expanded growth opportunities within the realm of limited resources. CASC serves as a much-needed asset to the City by providing cost-effective and efficient services within a 24-hour notice. CASC analyzes and processes development applications including, but not limited to; Specific Plans, Site Development Permits, Tract Maps, Zone Changes, Overlays, and Conditional Use Permits. CASC also provides Environmental Review Services, specifically in regards to the preparation of environmental review documents. These documents include, but are not limited to; Environmental Impact Reports, Initial Studies, Mitigated Negative Declarations, and Categorical Exemptions pursuant to CEQA and NEPA regulations. In addition, CASC also provides the City with Environmental Planning Services, which include services such as staff support and reporting for open space and habitat areas.

VARIOUS SUBSTATIONS, TRANSMISSION LINES, AND INFRASTRUCTURES

SOUTHERN CALIFORNIA EDISON (SCE), CA

CASC is under contract with Southern California Edison to provide On-Call Environmental, NPDES, Engineering and Survey support services for a variety of SCE facilities throughout Southern and Central California.

As part of our ongoing support we provide coordination with Edison Planning, Engineering (Civil and Electrical), Real Properties Mapping, Survey, and Construction personnel to develop Erosion Control Plans, Water Pollution Control Drawings, Phase 1 ESAs, and Storm Water Pollution Prevention Plans to support the projects. Additionally, CASC provides on-site inspections for both pre-and post-storms to assist SCE to maintain compliant with the NPDES General Permit through the California Regional Water Quality Control Board

PARTIAL LIST OF ONGOING SUPPORT PROJECTS

- Tulare Solar Plant Linear
- Interstate Highway 5– Segment 2
- Natural Substation
- Lakeview LUP
- Lakeview Substation
- Natural Project Linear Construction Phase 1 & 2
- Natural Project Linear Construction Phase 3
- Silver State South Project
- Eldorado Substation No. 5 AA Bank
- Interstate Highway 5– Segment 5
- POLB GDB
- I-5 Segment 3 &4
- Acton
- Alder-Declez-Thrive
- Alpine Q297
- Bliss
- Bliss Linear Work
- Bliss Serenity/Bardsley
- Bottle Substation
- Calelectric Substation
- Carodean Substation
- Caswell Road Repair
- Coso 115 kV Substation
- CSUCI
- Cyber Substation
- EITP - California Transmission Line
- Equinix Substation
- Etiwanda-Alder-Randall
- Gaviota 66KV Transmission Line Pole Replacement
- Glenn Annie
- Grand Crossing Substation
- Guava Street
- Hi-Desert
- High Desert Health Systems Substation
- Huntington Beach Wave
- I5 Carmenita SWPPP
- I5 Widening Pole Relocation Project (La Mirada)
- Ironwood SWPPP
- Jefferson Avenue
- Jeffrey Railroad Crossing
- Julian Hinds SWPPP
- Katella Avenue Widening
- Kitching Pole Replacement
- LA 4 SWPPP
- Las Lomas
- Leatherneck Substation
- Lugo Firewall
- Lugo Substation
- Mascot Substation
- Mountainview IV Wind
- MWD Diemer
- Newmark Substation
- Oasis Substation Expansion
- Pepper Substation
- Port of Long Beach Pier E Ship Substation
- San Bernardino-Vista Reconductor
- San Joaquin Cross Valley Loop
- Sanderson Street Widening Project
- Sanderson Street Widening Project
- Tenaja Ariel/Babylon/Cor
- Tenaja Catt
- Tenaja COMM
- Tenaja Harwood
- Tenaja Nutmeg
- Tenaja Substation
- Thrive
- Thrive Telecom
- Thrive Transition
- Tierra Subida Pole Replacement
- Triton Substation
- Vincent Retention Basin
- Vincent Substation
- Weymouth

SUBCONSULTANT PROJECT EXPERIENCES

URBAN CROSSROADS

CALIPATRIA STATE PRISON SOLAR

IMPERIAL COUNTY, CA

Urban Crossroads, Inc. prepared a Focused Air Quality and Greenhouse Gas Memorandum for the Calipatria State Prison Solar: ("Project"), which is located at 7018 Blair Road in unincorporated Imperial County, northeast of the City of Calipatria. The proposed project consists of an 8-megawatt solar photovoltaic power that would occupy a 57-acre site.

CENTINELA STATE PRISON SOLAR

IMPERIAL COUNTY, CA

Urban Crossroads, Inc. prepared a Focused Air Quality and Greenhouse Gas Memorandum for the Centinela State Prison Solar ("Project"), which is located at 2302 Brown Road in unincorporated Imperial County, west of the cities of El Centro and Imperial. The proposed project consist of an 8-megawatt solar photovoltaic power that would occupy a 58-acre site.

GOODMAN LOGISTICS CENTER TRAFFIC IMPACT ANALYSIS

CITY OF EL MONTE, CA

Urban Crossroads, Inc. prepared a traffic impact analysis for an industrial development located south of Lower Azusa Road and east of Baldwin Avenue in the City of El Monte. The Traffic Impact Analysis evaluated the potential impacts to traffic and circulation associated The traffic study was prepared in support of an addendum to the City of El Monte General Plan and Zoning Coode Update Environmental Impact Report (EIR). The TIA was prepared in accordance with the Los Angeles County Traffic Impact Analysis Report Guidelines and Caltrans Guide for the Preparation of Traffic Impact Studies. A comparison of the project's impact with the impacts of the project analyzed in the General Plan Update EIR was provided.

DUKE CRM

MESQUITE REGIONAL LANDFILL

IMPERIAL COUNTY, CA

Under contract to the Sanitary Districts of Los Angeles County, Mr. Duke conducted a Class III Data Recovery project for ten Native American cultural resources within the boundaries of the proposed Mesquite Regional Landfill (MRL) Project, located in Imperial County, California. This effort was combined with a supplementary cultural resource reconnaissance of adjacent Bureau of Land Management (BLM) land to identify the extension of these resources beyond the project boundaries.

SUPERSTITION SOLAR I PROJECT, SALTON SEA

IMPERIAL COUNTY, CA

Mr. Duke worked with SunPeak Solar, LLC, to conduct a Class III Cultural Resources Assessment for the proposed Superstition Solar I Project. The 5,600-acre project was proposed on public lands managed by the Bureau of Land Management (BLM). Native American scoping and preliminary survey fieldwork were carried out in July 2008.

CHUCKWALLA SOLAR I PROJECT, DESERT CENTER

RIVERSIDE COUNTY, CA

Mr. Duke worked with SunPeak Solar, LLC, to conduct a Class III Cultural Resources Assessment for the proposed Chuckwalla Solar I Project. The 4,000-acre project was proposed on public lands managed by the BLM. Native American scoping, survey fieldwork, the preliminary preparation of the appropriate Department of Parks and Recreation (DPR) 523 forms, and the draft report writing were accomplished from October 2007 to July 2008. Field surveys were accomplished pursuant to Section 106 of the NHPA.

STERLING ENERGY SOLAR 1 PROJECT

BARSTOW, CA

Mr. Glenn provided oversight for a multidisciplinary analysis of an 8,500-acre solar power station project located near Barstow, CA in support of the preparation of an Application for Certification. Hundreds of Prehistoric and Historic era resources including transmission lines and a substation were recorded and evaluated for historic significance.

SUBCONSULTANT PROJECT EXPERIENCES, CONT.

LEIGHTON CONSULTING'S SOLAR PROJECT EXPERIENCE

Leighton Consulting, Inc.

Project Name	City	Client	Scope of Service
Blythe II Solar Project	Blythe	M+W Energy, Inc.	Environmental
Garnet Solar Power Station 1	Palm Springs	Hanwha Q CELLS USA	Environmental
Avangrid Photovoltaic Power Station	Lucerne Valley	Aurora Solar LLC	Environmental
West Antelope Solar Ranch	Lancaster	Canadian Solar (USA) Inc	Environmental
Jacumba Solar Development	Jacumba Hot Springs	Dudek	Geotechnical
Sunline Transit Agency Solar Shade Structure	Thousand Palms	Renova Energy Corp	Geotechnical
Auto Dealer - Solar Canopies	Newport Beach	Fletcher Jones Motorcars Inc.	Geotechnical
Mt. SAC Solar Farm South Campus	Walnut	Mt. San Antonio College	Geotechnical
San Diego Unified School District, Multiple School Sites, Carport Solar Canopies	San Diego	Zagrodnik & Thomas Architects LLP.	Geotechnical
Sweetwater Union High School District, Multiple High School Campuses, Carport Solar Canopies	San Diego and Chula Vista	SunPower	Geotechnical
Lake Elsinore Unified School District, Multiple School Sites including District Maintenance and Operations Building, Solar Structures	Lake Elsinore	Lake Elsinore Unified School District	Geotechnical
Temecula Valley Unified School District, Multiple Sites, Solar Shade Structures	Temecula	Temecula Valley Unified School District	Geotechnical Materials Testing & Inspection

APPENDIX 4 (A4). CONFLICTS

CASC does not have any current or ongoing contracts with Imperial County within the past year.

ATTACHMENT E

RFP for VEGA SES 2, 3 & 5
Energy and Storage Project for and
Environmental Impact Report (EIR)

Imperial County Planning & Development Services
Planning / Building

October 26, 2020

Jim Minnick
DIRECTOR

CERTIFIED MAIL # 7016-2140-0000-2124-3371

HDR
Tim Gnibus
Environmental Business Class Leader
591 Camino de la Reina, Suite #300
San Diego, CA 92108

Subject: **Request for Proposal - Environmental Impact Report (EIR) for a Solar Energy Project (VEGA SES 2, 3 & 5 Solar Project)**
Project Applicant: Apex Energy Solutions, LLC

- CUP20-0021 – VEGA 2
- CUP20-0022 – VEGA 3
- CUP20-0023 – VEGA 5
- Initial Study (IS20-0030)

Dear Consultant:

The Imperial County Planning & Development Services Department is soliciting proposals for the preparation of a comprehensive Environmental Impact Report (EIR) for the VEGA SES 2, 3 & 5 Solar Project, which includes three (3) Conditional Use Permits (CUP) and an Initial Study (IS). **The Planning & Development Services Department** will act as the "Lead Agency" for the preparation of the EIR pursuant to the California Environmental Quality Act (CEQA). The successful consultant will work directly for the County Planning & Development Services Director in the preparation of the Draft and Final EIR.

The VEGA SES 2, 3, & 5 Solar Project includes:

1. **One (1) Conditional Use Permit (CUP#20-0021 VEGA SES 2) to allow for the construction and operation of a 240-megawatt (MW) alternating current (AC) solar photovoltaic (PV) energy generation and 240MW/960 megawatt hour (MWh) battery storage project. The Project is to be located on approximately 1,472 acres;**
2. **One (1) Conditional Use Permit (CUP#20-0022 VEGA SES 3) to allow for the construction and operation of a 60-megawatt (MW) alternating current (AC) solar photovoltaic (PV) energy generation and 60 MW/240 megawatt hour (MWh) battery storage project. The Project is to be located on approximately 240 acres; and**
3. **One (1) Conditional Use Permit (CUP#20-0023 VEGA SES 5) to allow for the construction and operation of a 50-megawatt (MW) alternating current (AC) solar photovoltaic (PV) energy generation and 50MW/200 megawatt hour (MWh) battery storage project. The Project is to be located on approximately 249.70 acres.**

Attached is a copy of the application package.

I. **The County hereby requests the following information; for each item (as appropriate) the hourly rate and estimated total hours for the specific task must be documented.**

a. Identified milestones representing specific tangible work products (tasks) to which payments by the County would be linked and become part of the legal contract. (Please note that all subsequent bills/invoices will be required to include both the identified milestones and percent completed).

b. All potential subcontractor(s) that will be utilized along with their estimated staff time and cost breakdown;

c. An estimated "not to exceed cost" to prepare the Drafts (DEIR) and Final Environmental (FEIR) documents;

d. Review the attached proposed application and make findings of consistency with the *Imperial County General Plan Renewable and Transmission Element;* and

e. An electronic version (i.e. thumb drive or CD) of all documents prepared by the prime CEQA consultant and potential subcontractor(s).

The only exception to the "not to exceed" cost shall be the response to public comments received as a result of the joint environmental document's circulation. If the County receives excessive comments on the draft document, then the costs will be determined on a "negotiated basis" when the draft document and comments on the project become available. Excessive comments are generally considered to be more than twenty (20) commenting agencies/individuals and/or over 150 comments that require answers other than "comment noted."

The proposal must incorporate the cost estimate for the printing of five (5) hard copies of the Administrative Draft EIR, five (5) hard copies of the Draft EIR and five (5) hard copies of the Final EIR, along with the creation of 50 CD's of the aforementioned environmental documents, as determined. Also, the proposal must provide a cost estimate for each additional hard copy and/or CD, if additional copies are needed.

The proposal must provide that prior to any cost overruns; the consultant shall discuss first and then seek written approval from the County Planning and Development Services Director, Jim Minnick before such costs are incurred. Failure to get prior written approval may result in such costs being disallowed.

II. We request that you provide within your cost estimate for the EIR, including the hourly rate and total estimated hours, a preparation of the following studies and analysis.

- Agriculture and Forest Resources
- Hazards and Hazardous Materials
- Land Use and Planning
- Mineral Resources
- Population and Housing
- Public Health & Safety
- Public Services
- Recreation
- SB18/AB-52 Tribal Cultural Resources
- Utilities and Service Systems
- Energy
- Wildfire
- Findings for Project
- Mitigation, Monitoring & Reporting Program (MM&RP)
- Geotechnical/Geology and Soils
- Phase 1 Environmental Site Assessment
- Hydrology and Water Quality
- Water Supply Assessment

It is expected that the applicant will be submitting the following documentation for review; we request that you provide within your estimate for the EIR the cost for the peer-review of this work and these studies, prepared by the applicant and their consultants.

- Transportation/Traffic
- Biology Resources
- Cultural Resources/Historical/Tribal Cultural/Archaeology
- Aesthetics/Visual Impacts
- Air Quality and Greenhouse Gas
- Noise
- Land Evaluation and Site Assessment

At the very least, you will be expected to review such outside studies as a third-party review and determine whether or not they are adequate, need to be revised, updated or, in fact, be reproduced. However, at this time, the applicant will not be submitting any studies.

III. The following format should be used in preparing the proposal, additional information/items may be used to further bolster your proposal:

One page cover letter introducing your firm.

1. **Project Understanding**
2. **Project Team**
   - Identify all company and consultant team personnel who will work on the project and short description of their education and work experience.
   - Resumes of the prime and technical consultants should be included and can be attached to the proposal as an appendix.
   - Organization Charts-Elaborate organization charts are not necessary.
3. **Scope of Work**
   - Describe the proposed tasks to accomplish the scope of work.
   - Include deliverables, when applicable, for each task.
   - Include all applicable site visits, scoping meetings, staff meetings and public hearings.
   - Be specific regarding your approach to complete the CEQA noticing requirements.
4. **The tasks should be presented as follows:**
   a. Project Initiation
   Include research, site visit, data collection, CEQA notices, scoping meetings, etc;

   b. Administrative Draft EIR
   Include mandatory CEQA sections, required and technical studies, peer review of applicant-prepared technical studies, number of revisions, meetings and coordination with County Staff;

   c. Public Review Draft EIR
   Include document preparation, CEQA notice, Scoping meeting, and coordination with County Staff;

   d. Final EIR

Include document preparation, Response to Comments, CEQA notice, meetings, coordination with County Staff and attendance at Planning Commission and Board of Supervisors hearing;

e. Mitigation, Monitoring and Reporting Program
Include the preparation per CEQA identification of all mitigation measures, identification of all responsible parties, timing and enforcement;

f. CEQA Findings and Notice of Determination
Include the preparation per CEQA requirements;

g. Assumptions
Please provide a specific section for assumptions. Include your assumptions regarding travel time, mileage, public noticing, or anything else that needs clarification; and

h. Meetings
The number of meetings and hearings that are included in your proposal should be detailed under each task.

5. Proposed Schedule

Provide the number of weeks for each task in tabular form from project initiation to public hearings, Planning Commission, and Board of Supervisors.

6. Cost Estimate/Milestones

- Provide a discussion of the proposed cost and any optional costs.
- Include a spread sheet that details your personnel, any subcontractors to be used, their estimated hours, and associated costs per task (can be attached as an appendix).
- A table of project milestones should be included in the Cost Estimate discussion.

7. Consultant Selection Criteria

a) **Understanding of the project:** the proposer should demonstrate understanding of key elements of the project and, accordingly, provide the names of personnel and their expertise.

b) **Approach to the project:** The selection process will evaluate the extent to which the proposer has recognized and identified special circumstances on the project and whether the proposer has provided logical approach to tasks and issues of the project.

c) **Professional qualifications necessary for satisfactory performance:** The project manager and key team members should be qualified to perform the work categories on the project; and the proposer's knowledge of standards and procedures will be examined.

d) **Specialized experience and technical competence in the type of work required:** The proposer should provide information about comparable projects they have been involved with and/or successfully accomplished; past performance on contracts with government agencies and private industry will be considered together with past performance evaluations; and the capacity to accomplish the work in the required time will also be evaluated.

III. **It is requested that you disclose any conflict** or potential conflict that you may have if you are submitting a proposal. The conflict by the County envisions, at the very minimum, current/ongoing or previous contracts (within the past year) with the applicant(s); this also includes current technical studies that either are or have been prepared for the applicant(s) within the last year.

IV. **Not providing the extent of information (including hourly rate and total estimated hours per task) may negatively impact the evaluation of your proposal.**

If you are interested in submitting a proposal, please submit it to the Director at Imperial County Planning & Development Services Department, 801 Main Street, El Centro, CA, 92243, **no later than November 18, 2020 at 5:00 p.m.** This must be postmarked or sent via facsimile on or before this date and time.

Please note that it is **not necessary to present us with voluminous references or individualized background data** on persons or personnel within your organization. We may require this at a later date. We look forward to receiving your RFP submittal.

Please submit a total of 4 hard copies and a CD.

Should you have any questions or comments, please contact the assigned Planner for this project, Diana Robinson, Planner III (442) 265-1736, extension 1751, or via-email at dianarobinson@co.imperial.ca.us.

Sincerely,

Jim Minnick, Director
Planning & Development Services Department

Attachments: VEGA SES 2, 3, & 5 Project Application Package

cc: Tony Rouhotas, County Executive Officer
Adam Crook, Deputy County Counsel
Jim Minnick, Director of Planning and Development Services
Michael Abraham, AICP, Asst. Director of Planning & Development Services
Jurg Heuberger jurgheuberger@gmail.com
Project File: CUP20-0020
APN 052-170-056-000, et. al.
Files: 10.101, 10.102, 10.105, 10.109, 10.110, 10.130, 10.133, 10.104

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