



RESEARCH SUBAWARD AGREEMENT

Institution/Organization Cal Poly Humboldt Sponsored Programs Foundation ("Prime Recipient") 1 Harpst Street Arcata, CA 95521-8299		Institution/Organization County of Humboldt, Division of Aviation ("Subrecipient") 3561 Boeing Avenue, McKinleyville, CA 95519 EIN/TIN No.: 94-6000513 UEI No.: CMJEJLMH2YK4			
Prime Award No. (if applicable):	NA	PO #:			
Awarding Agency:	Pacific Gas & Electric Company				
Budget Period:	5/1/2024 – 12/31/2024	Est. Total:	\$104,147.42	Funded This Action:	\$104,147.42
Performance Period:	5/1/2024 – 12/31/2024	Cost Sharing Amount:		NA	
PROJECT TITLE: RCAM V2G PILOT (C2388)					
TERMS AND CONDITIONS					
<ol style="list-style-type: none"> 1) CPH-SPF hereby awards a Cost-Reimbursable Subaward, as described above, to SUBRECIPIENT. The statement of work and budget for this subaward are as shown in Attachment 5. In its performance of subaward work, SUBRECIPIENT shall be an independent entity and not an employee or agent of CPH-SPF. 2) In undertaking the performance of this subaward, SUBRECIPIENT represents that the work or services performed by SUBRECIPIENT under this Subaward will be performed in compliance with such standards as may reasonably be expected. 3) CPH-SPF shall reimburse SUBRECIPIENT not more often than monthly for allowable costs. All invoices shall be submitted using SUBRECIPIENT's standard invoice, but at a minimum shall include invoicing period, current and cumulative costs (including cost sharing), Purchase Order (PO) Number, a SUBRECIPIENT invoice contact telephone number and/or email address, and certification as to truth and accuracy of invoice. <i>Invoices that do not reference CPH-SPF's Purchase Order Number shall be returned to SUBRECIPIENT.</i> It is understood that no substantial variations will be made in the budget without prior written approval by the CPH-SPF. Invoices and questions concerning invoice receipt or payments should be directed to the appropriate party's Administrative Contact, as shown in Attachment 3. 4) A final statement of cumulative costs incurred, including cost sharing, marked "FINAL," must be submitted to the CPH-SPF Administrative Contact, as shown in Attachment 3 NOT LATER THAN thirty (30) days after subaward end date. The final statement of costs shall constitute SUBRECIPIENT's final financial report. 5) All payments shall be considered provisional and subject to adjustment within the total estimated cost in the event such adjustment is necessary as a result of an adverse audit finding against the SUBRECIPIENT. 6) Matters concerning the technical performance of this subaward should be directed to the appropriate party's Project Director, as shown in Attachment 3. Reporting requirements are as shown in Attachment 4. 7) Matters concerning the request or negotiation of any changes in the terms, conditions, or amounts cited in this subaward agreement, and any changes requiring prior approval, should be directed to the appropriate party's Administrative Contact, as shown in Attachment 3. Any such changes made to this subaward agreement require the written approval of each party's Authorized Official, as shown in Attachment 3. 8) Each party shall be responsible for its negligent acts or omissions and the negligent acts or omissions of its employees, officers, or directors, to the extent allowed by law. 9) Either party may terminate this agreement with thirty (30) days written notice to the appropriate party's Administrative Contact, as shown in Attachment 3. CPH-SPF shall pay SUBRECIPIENT for any allowable costs incurred to date of termination upon receipt and acceptance of any applicable technical or financial reports as detailed in Attachment 4. 10) No-cost time extensions require the written approval of the CPH-SPF. Any requests for a no-cost time extension should be addressed to and received by the Administrative Contact, as shown in Attachment 3, not less than thirty (30) days prior to the desired effective date of the requested change. 11) The Subaward is subject to the provisions of the Prime Award and other special terms and conditions, as identified in Attachments 2 & 6. 12) This Subaward, including any referenced attachments, appendices and references, constitutes the entire Subaward and supersedes any other written or oral representations, statements negotiations, or agreements. 13) By signing below SUBRECIPIENT accepts all the terms and conditions of this agreement, and makes the certifications and assurances shown in Attachments 1 & 2. 					
By an Authorized Official of CPH-SPF DocuSigned by:  _____ 05/13/2024 <small>778F1AA3FF8A405...</small> Name: Kacie Flynn Date Title: Executive Director			By an Authorized Official of SUBRECIPIENT: DocuSigned by:  _____ 05/09/2024 <small>0E203D2B730E4A3</small> Name: Cody Roggatz Date Title: Director of Aviation		

ATTACHMENT 1
Certifications and Assurances

By signing the Subaward Agreement, the authorized official of SUBRECIPIENT certifies, to the best of his/her knowledge and belief, that:

1. CERTIFICATION REGARDING LOBBYING

a) No Federal appropriated funds have been paid or will be paid, by or on behalf of the SUBRECIPIENT, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

b) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or intending to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the SUBRECIPIENT shall complete and submit Standard Form -LLL, "Disclosure Form to Report Lobbying," to the CPH-SPF.

c) The SUBRECIPIENT shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U. S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

2. DEBARMENT, SUSPENSION, AND OTHER RESPONSIBILITY MATTERS

SUBRECIPIENT certifies by signing this Subaward Agreement that neither it nor its principals are presently debarred, suspended, proposed for debarment, declared ineligible or voluntarily excluded from participation in this transaction by any federal department or agency.

3. TITLE 2 CFR ASSURANCE

SUBRECIPIENT assures the CPH-SPF that it complies with the Code of Federal Regulations Title 2: Grants and Agreements PART 200, and that it will notify the CPH-SPF of completion of required audits and of any adverse findings, which impact this subaward.

4. DAVIS-BACON AND RELATED ACTS

If applicable, by signing this Agreement, Subrecipient certifies that it complies with the Davis-Bacon act and warrants proper wages are applied to federally-funded or assisted construction projects.

5. ANTI-DISCRIMINATION / EQUAL OPPORTUNITY COMPLIANCE

This contractor and subcontractor shall abide by the requirements of 41 CFR 60-1.4(a), 60-300.5(a), 60-741.5(a) and 29 CFR Part 471, Appendix A to Subpart A. These regulations prohibit discrimination against qualified individuals based on their status

as protected veterans or individuals with disabilities, and prohibit discrimination against all individuals based on their race, color, religion, sex, sexual orientation, gender identity or national origin. Moreover, these regulations require that covered prime contractors and subcontractors take affirmative action to employ and advance in employment individuals without regard to race, color, religion, sex, sexual orientation.

ATTACHMENT 2

Prime Award and Special Terms and Conditions

PRIME AWARD

*All references to the Cal Poly Humboldt Sponsored Programs Foundation and its variants, Awardee, Grantee, Recipient, etc. in the Prime Award shall mean the SUBRECIPIENT. Prime Award included in **Attachment 6**.*

SPECIAL TERMS AND CONDITIONS

1. INSURANCE

Without limiting the parties' indemnification, Subrecipient warrants that it has and will maintain Workers' compensation insurance coverage as required by the State of California, with Statutory Limits; General Liability insurance of not less than one million dollars (\$1,000,000), and Automobile Liability insurance of not less than one million dollars (\$1,000,000) combined single limit per occurrence applicable to all owned, non-owned, and hired vehicles.

2. RETENTION OF RECORDS

Subrecipient agrees to maintain and preserve all records relative to this Agreement, for three (3) years after termination. Subrecipient agrees to permit Prime Recipient's duly authorized representatives to have access to and to examine and audit, any pertinent books, documents, papers, and records related to this Agreement. Furthermore, all records related to this Agreement shall be reasonably available for inspection by the State of California pursuant to Government Code § 8546.7 which states in pertinent part: "...every contract involving the expenditure of public funds in excess of ten thousand dollars (\$10,000) entered into by any state agency, ... or by any other public entity, including a city, county..., shall be subject to the examination and audit of the State Auditor, at the request of the public entity or as part of any audit of the public entity, for a period of three years after final payment under the contract."

3. GOVERNING LAW

This Agreement and any disputes concerning it shall be interpreted under the laws of the State of California.

4. CONFIDENTIALITY

Each Party agrees that it shall not disclose any Confidential Information received from the other Party in performing the obligations, or activities stemming from the Performance Obligations, in this Agreement without the prior written consent. "Confidential Information" includes confidential and proprietary documents, records, reports, agreements and associated documents, all technical, financial and business information of any kind, all written procedures, all data, specifications, technology, ideas, know-how, improvements, maps, technical drawings, inventions (whether or not patentable or copyrightable), or trade secrets that are provided by or on behalf of one Party and marked "Confidential" or include similar words or phrases to indicate that it is Confidential Information under this Agreement. The Party receiving Confidential Information agrees to use the Confidential Information only for the Pilot Purpose.

5. INDEMNIFICATION

Subrecipient must release, defend, indemnify, and hold harmless CPH-SPF, State of California, Trustees of the California State University, California State University, Cal Poly Humboldt and its trustees, officers, agents, and employees from all suits, actions, or claims of any character, name, or description, including reasonable attorney fees, brought on account of any injuries or damage, or loss, whether real or alleged, received or sustained by them or any person, persons, or property, arising out of or related to the performance of this Agreement or Subrecipient's failure to perform or comply with any requirements of this Agreement, including, but not limited to, any claims for personal injury, property damage, or proprietary rights.

ATTACHMENT 3**Contacts**

CPH-SPF Contacts	SUBRECIPIENT Contacts
<p>Administrative Contact</p> <p>Name: Anthony Johnson, Grant Analyst CPH-Sponsored Programs Foundation</p> <p>Address: 1 Harpst Street Arcata, CA 95521</p> <p>Telephone: 707-826-5164 Fax: 707-826-4783 Email: aj27@humboldt.edu</p>	<p>Administrative Contact</p> <p>Name: Cathy Canepa</p> <p>Address: 3561 Boeing Avenue McKinleyville, CA 95519</p> <p>Telephone: 707-267-9157 Fax: Email: ccanepa@co.humboldt.ca.us</p>
<p>Principal Investigator</p> <p>Name: David Carter</p> <p>Address: Schatz Energy Research Center 1 Harpst Street Arcata, CA 95521</p> <p>Telephone: 707-826-4306 Fax: 707-826-4347 Email: djc34@humboldt.edu</p>	<p>Project Director</p> <p>Name: Cody Roggatz</p> <p>Address: 3561 Boeing Avenue McKinleyville, CA 95519</p> <p>Telephone: 707-839-5401 Fax: Email: croggatz@co.humboldt.ca.us</p>
<p>Financial Contact</p> <p>Name: Accounts Payable Cal Poly Humboldt</p> <p>Address: 1 Harpst Street Arcata, CA. 95521</p> <p>Telephone: 707-826-3512 Fax: 707-826-3312 Email: accountspayable@humboldt.edu</p>	<p>Financial Contact</p> <p>Name: Cathy Canepa</p> <p>Address: 3561 Boeing Avenue McKinleyville, CA 95519</p> <p>Telephone: 707-267-9157 Fax: Email: ccanepa@co.humboldt.ca.us</p>
<p>Authorized Official</p> <p>Name: Kacie Flynn, Executive Director</p> <p>CPH-Sponsored Programs Foundation</p> <p>Address: 1 Harpst Street Arcata, CA. 95521</p> <p>Telephone: 707-826-5159 Fax: 707-826-4783 Email: Kacie.Flynn@humboldt.edu</p>	<p>Authorized Official</p> <p>Name: Cody Roggatz</p> <p>Address: 3561 Boeing Avenue McKinleyville, CA 95519</p> <p>Telephone: 707-839-5401 Fax: Email: croggatz@co.humboldt.ca.us</p>

ATTACHMENT 4
Additional Reporting Requirements

Subrecipient agrees to submit the following reports (Prime Recipient's contacts are identified in Attachment 3):

Technical Reports:

- Monthly technical/progress reports will be submitted to the Prime Recipient's Principal Investigator Contact within 15 days of the end of the month.
- Quarterly technical/progress reports will be submitted to the Prime Recipient's Principal Investigator Contact within 30 days after the end of each project quarter.
- Annual technical/progress reports will be submitted to the Prime Recipient's Administrative Contact within 60 days prior to the end of each budget period. Such report shall also include updated other support for key personnel, certification of appropriate education in the conduct of human subject research of any new key personnel, and annual IRB or IACUC approval, if applicable.
- A Final technical/progress report will be submitted to the Prime Recipient's Administrative Contact within 60 days of the end of the project period or after termination of this award, whichever comes first.
- Technical/progress reports on the project as may be required by Prime Recipient's Administrative Contact in order for the Prime Recipient to satisfy its reporting obligations to the Prime Awarding Agency.

Financial Reports:

- Quarterly financial reports will be submitted to the Prime Recipient's Principal Investigator Contact within 30 days after the end of each project quarter.
- Annual financial reports will be submitted to the Prime Recipient's Administrative Contact within 60 days prior to the end of each budget period. Such report shall also include a detailed budget for the next budget period.
- A Final financial report will be submitted to the Prime Recipient's Administrative Contact within 60 days of the end of the project period or after termination of this award, whichever comes first.

Other Reports:

- If applicable, in accordance with 37 CFR 401.14, Subrecipient agrees to notify both the Prime Awarding Agency via iEdison and Prime Recipient's Administrative Contact within 60 days after Subrecipient's inventor discloses invention(s) in writing to Subrecipient's personnel responsible for patent matters. The Subrecipient will submit a final invention report using Prime Awarding Agency specific forms to the Prime Recipient's Administrative Contact within 60 days of the end of the Project Period to be included as part of the Prime Recipient's final invention report to the Prime Awarding Agency.
**A negative report is required upon request from the Prime Recipient.*

None of the above listed reporting is required for this award.

See Attachment 5, Scope of Work for additional reporting requirements.

ATTACHMENT 5

Scope of Work and Budget

VEHICLE-GRID INTEGRATION PILOT

California Redwood Coast – Humboldt County Airport, County of Humboldt

Background

With funding from PG&E, the Schatz Energy Research Center will coordinate the design, installation, commissioning, testing, and reporting for Vehicle-to-Grid (V2G) Electric Vehicle (EV) Charging Station pilot project at the California Redwood Coast – Humboldt County Airport (ACV), inside the electrical boundary of the Redwood Coast Airport Microgrid (RCAM). The California Redwood Coast – Humboldt County Airport, County of Humboldt, as a subawardee, will lead the following tasks:

Scope of Work

Task 1: As part of the planned Parking Lot Renovation Project at the California Redwood Coast - Humboldt County Airport, The County of Humboldt Aviation Division agrees to install four vehicle-to-grid electric (V2G) vehicle chargers in accordance with Bid Schedule VI of the as-bid construction documentation for that project. The V2G charging stations themselves will be provided by CPH-SPF.

Task 2: After installation is complete, the County of Humboldt Aviation Division will establish software and cloud services with Fermata Energy, manufacturer of the V2G Chargers. The V2G chargers will be commissioned by Schatz Energy Research Center. Configuration of the V2G chargers for demand charge management, as well as training on their use, will be provided by Fermata Energy with support by Schatz Energy Research Center.

Description	Cost Book Section	Equip	Material	Labor	Total	Total w O&P	Qty	Units	Extended Price	Notes
Insulated Splice Connectors	26 05 19.35 0150		\$17.78	\$36.75	\$54.53	\$80.63		8 EA	\$645.07	Gordon Electric
Trip Unit, 300A			\$1,151.07	\$180.20	\$1,331.27	\$1,331.27		1 EA	\$1,331.27	Platt R-1A Crew for 1hr
Trip Unit, 700A			\$1,159.28	\$180.20	\$1,339.48	\$1,339.48		1 EA	\$1,339.48	Platt R-1A Crew for 1hr
Panelboard,	26 24 16.30 3360		\$1,850.00	\$269.00	\$2,119.00	\$2,425.00		2 EA	\$4,850.00	
Panelboard,	26 24 16.30 3370		\$3,100.00	\$540.00	\$3,640.00	\$4,200.00		1 EA	\$4,200.00	
EV Feeder Breakers,bolt-on,3p,80-100A	26 24 16.20 0900		\$264.00	\$150.00	\$414.00	\$515.00		2 EA	\$1,030.00	
EV Feeder breaker, 22kAIC,240V,3p,70-225A	26 24 16.20 1100		\$515.00	\$234.00	\$749.00	\$920.00		1 EA	\$920.00	
Meter Feeder Breakersbolt-on,1p,15-50A	26 24 16.20 0100		\$25.00	\$54.00	\$79.00	\$108.00		3 EA	\$324.00	
Pavement removal,bitumous roads,4-6" thick	02 41 13.17 5050	\$3.17		\$5.10	\$8.27	\$11.05		40 SY	\$442.00	
Dumpster,weekly rental, 1 dump/wk, 6CY capacity	02 41 19.19 0600	\$415.00			\$415.00	\$415.00		1 Wk	\$415.00	
Trenching,common earth,no slope, 2'W,2'D,3/8CY bucket,wcompaction/backfill and spoils removal	G1030 805	\$0.75		\$2.38	\$3.13	\$6.26		115 LF	\$719.90	
Pavement									\$7,363.86	2021 quote escalated to 2023
Conduit,direct burial,PVC,sched40,w/coupling,1 1/2"	33 71 19.15 1040		\$3.02	\$2.57	\$5.59	\$7.15		230 LF	\$1,644.50	
Conduit,direct burial,PVC,sched40,elbows,1 1/2"	33 71 19.15 1140		\$3.51	\$25.50	\$29.01	\$42.00		8 EA	\$336.00	
Conduit,direct burial,PVC,sched40,adapters,1 1/2"	33 71 19.15 1240		\$1.18	\$15.40	\$16.58	\$24.50		8 EA	\$196.00	
PVC LB/LR/LL fittings/covers, 1 1/2"	26 05 33.13 9630		\$12.45	\$77.00	\$89.45	\$128.00		7 EA	\$896.00	
Conduit,EMT,to 10'H,includes 2 terms, 2 elbows,1 1/2"	26 05 33.13 5080		\$6.75	\$6.00	\$12.75	\$16.30		10 LF	\$163.00	
Conduit,EMT,to 10'H,LB,LR,LL fitting with cover,1 1/2"	26 05 33.13 7400		\$34.00	\$49.00	\$83.00	\$111.00		1 EA	\$111.00	
Conduit,direct burial,PVC,sched40,w/coupling,3"	33 71 19.15 1060		\$7.20	\$4.49	\$11.69	\$7.15		115 LF	\$822.25	
Conduit,direct burial,PVC,sched40,elbows,3"	33 71 19.15 1160		\$13.55	\$45.00	\$58.55	\$81.50		4 EA	\$326.00	
Conduit,direct burial,PVC,sched40,adapters,3"	33 71 19.15 1260		\$3.82	\$27.00	\$30.82	\$44.00		4 EA	\$176.00	
PVC LB/LR/LL fittings/covers, 2 1/2"	26 05 33.13 9650		\$83.50	\$90.00	\$173.50	\$225.00		2 EA	\$450.00	
Conduit,EMT,to 10'H,includes 2 terms, 2 elbows,2 1/2"	26 05 33.13 5120		\$10.90	\$9.00	\$19.90	\$25.50		10 LF	\$255.00	
Conduit,EMT,to 10'H,LB,LR,LL fitting with cover,2 1/2"	26 05 33.13 7480		\$66.00	\$70.00	\$136.00	\$181.88		1 EA	\$181.88	
Conduit,EMT,to 10'H,includes 2 terms, 2 elbows,1"	26 05 33.13 5040		\$3.28	\$4.69	\$7.97	\$10.55		20 LF	\$211.00	
Conduit,EMT,to 10'H,LB,LR,LL fitting with cover,1"	26 05 33.13 7440		\$18.25	\$33.50	\$51.75	\$70.00		8 EA	\$560.00	
Conduit,direct burial,PVC,sched40,w/coupling,1"	33 71 19.15 1030		\$1.83	\$2.07	\$3.90	\$5.10		265 LF	\$1,351.50	
Conduit,direct burial,PVC,sched40,elbows,1"	33 71 19.15 1130		\$1.25	\$16.85	\$18.10	\$27.00		8 EA	\$216.00	
Conduit,direct burial,PVC,sched40,adapters,1"	33 71 19.15 1230		\$0.69	\$13.80	\$14.49	\$21.50		8 EA	\$172.00	
PVC LB/LR/LL fittings/covers,1"	26 05 33.13 9610		\$7.00	\$45.00	\$52.00	\$52.00		4 EA	\$208.00	
Smart Metering, 3ph, 120/208V,200A	26 09 13.30 1140		\$1,075.00	\$115.00	\$1,190.00	\$1,350.00		1 EA	\$1,350.00	
Smart Metering, 3ph, 120/208V,400A	26 09 13.30 1140		\$1,075.00	\$115.00	\$1,190.00	\$1,350.00		1 EA	\$1,350.00	
Smart Metering, 3ph, 120/208V,800A	26 09 13.30 1140		\$1,075.00	\$115.00	\$1,190.00	\$1,350.00		1 EA	\$1,350.00	
Conduit,direct burial,PVC,sched40,w/coupling,1/2"	33 71 19.15 1040		\$1.90	\$2.84	\$4.74	\$6.30		112 LF	\$705.60	
Conduit,direct burial,PVC,sched40,elbows,1/2"	33 71 19.15 1140		\$1.06	\$10.80	\$11.86	\$17.15		6 EA	\$102.90	
Conduit,direct burial,PVC,sched40,adapters,1/2"	33 71 19.15 1240		\$0.32	\$10.80	\$11.12	\$16.35		6 EA	\$98.10	
PVC LB/LR/LL fittings/covers,1/2"	26 05 33.13 9630		\$4.41	\$27.00	\$31.41	\$45.00		6 EA	\$270.00	
Conduit,RGS,to 10'H,nipple,1/2"	26 05 33.15 2500		\$8.60	\$16.85	\$25.45	\$34.50		3 EA	\$103.50	
Conduit,EMT,to 10'H,LB,LR,LL fitting with cover,1/2"	26 05 33.13 7400		\$34.00	\$49.00	\$83.00	\$111.00		1 EA	\$111.00	
Wire,stranded,#14	26 05 19.90 1000		\$13.50	\$41.50	\$55.00	\$0.77		448 EA	\$342.72	
Wire,stranded,#8	26 05 19.90 1300		\$63.00	\$67.50	\$130.50	\$170.00		16.07 EA	\$2,731.90	
Wire,stranded,#3	26 05 19.90 1450		\$189.00	\$108.00	\$297.00	\$370.00		3.28 LF	\$1,213.60	
Wire,stranded,#2	26 05 19.90 1500		\$236.00	\$120.00	\$356.00	\$371.00		0.63 LF	\$233.73	
Wire,stranded,4/0	26 05 19.90 2000		\$635.00	\$245.00	\$880.00	\$1,075.00		2.52 LF	\$2,709.00	
Safety Switch, 240V,3p,no hubs, fusible,60A	26 28 16.20 4700		\$375.00	\$245.00	\$620.00	\$780.00		4 EA	\$3,120.00	
Transformer,dry-type,energy efficient,3ph,30kVA,480-	26 22 13.10 9405	\$129.00	\$1,975.00	\$900.00	\$3,004.00	\$3,650.00		2 EA	\$7,300.00	
Transformer,dry-type,energy efficient,3ph,75kVA,480-	26 22 13.10 9415	\$154.00	\$3,175.00	\$1,075.00	\$4,404.00	\$5,275.00		1 EA	\$5,275.00	
EV Charging,level2,free standing,single connector, wRFID	26 33 43.55 2310		\$15,500.00	\$110.00	\$110.00	\$122.41		4 EA	\$489.66	Material not included. Purchased by PG&E (4) 2'x2'x2' equipment pads in Armstrong's Scope
Structural Excavation minor structures, Common										
Earth, hydraulic backhoe, 1/2 C.Y bucket/BCY	31 23 16.16 6030		\$16.50	\$13.90	\$30.40	\$40.00		7.11 CY	\$284.44	Scope
Forms in place slab on grade	03 11 13.65 3000		\$0.83	\$2.97	\$3.80	\$5.35		8 LF	\$42.80	
Reinforcement in place, slab on grade #3-#7	03 21 11.60 0602	0.008	\$0.89	\$0.54	\$1.43	\$1.81		8.016 lb	\$14.47	
Anchor bolts, 1/2"x8"	03 15 19.45 0200	3.68	\$89.00	\$26.00	\$118.68	\$142.00		4 EA	\$568.00	
Concrete in place,Slab on grade (3500psi) 6" thick	03 30 53.40 4700	\$0.33	\$191.00	\$55.00	\$246.33	\$292.00		0.30 CY	\$86.52	
Concrete in-place 20"x20", reinforced	03 30 53.40 4750	\$0.04	\$52.00	\$8.50	\$60.54	\$52.00		16.00 LF	\$832.00	
Backfill, by hand, no compaction, heavy soil	31 23 16.23 0015		\$27.00	\$27.00	\$54.00	\$51.00		19.56 CY	\$997.33	
Compaction in 6" layers, hand tamp, add to above	31 23 16.23 0300		\$18.35	\$18.35	\$36.70	\$27.50		19.56 CY	\$537.78	
Vibrating plate, add	31 23 16.23 0600		\$6.30	\$2.40	\$8.70	\$12.05		19.56 CY	\$235.64	
Bollards	26 56 33.10 6500		\$672.77	\$180.00	\$852.77	\$987.97		4.00 EA	\$3,951.87	2021 quoted material escalated to 2023, in Armstrong's Scope
Hangers, Channels, steel1 58x1-5/8.12ga.	26 05 29.20 4150		\$13.15	\$10.80	\$23.95	\$30.50		50.00 LF	\$1,525.00	
Hangers,U-support,large	26 05 29.20 5700		\$14.45	\$13.45	\$27.90	\$36.00		12.00 EA	\$432.00	
Hangers, junction box, 1 channel	26 05 29.20 4650		\$139.00	\$33.50	\$172.50	\$203.00		3.00 EA	\$609.00	
Structural Excavation minor structures, Common										10'x6'x4" equipment pad in Armstrong's Scope
Earth, hydraulic backhoe, 1/2 C.Y bucket/BCY	31 23 16.16 6030		\$16.50	\$13.90	\$30.40	\$40.00		4.00 CY	\$160.00	Scope
Forms in place slab on grade	03 11 13.65 3000		\$0.83	\$2.97	\$3.80	\$5.35		25 LF	\$133.75	
Reinforcement in place, slab on grade #3-#7	03 21 11.60 0602	0.008	\$0.89	\$0.54	\$1.43	\$1.81		76.82 lb	\$138.67	
Anchor bolts, 1/2"x8"	03 15 19.45 0200	3.68	\$89.00	\$26.00	\$118.68	\$142.00		EA	\$0.00	
Bollards	26 56 33.10 6500		\$672.77	\$180.00	\$852.77	\$987.97		3.00 EA	\$2,963.90	2021 quoted material escalated to 2023, in Armstrong's Scope
Concrete in place,Slab on grade (3500psi) 6" thick	03 30 53.40 4700	\$0.33	\$191.00	\$55.00	\$246.33	\$292.00		0.74 CY	\$216.30	

Concrete in-place 20"x20", reinforced	03 30 53.40 4750	\$0.04	\$52.00	\$8.50	\$60.54	\$52.00	12.00 LF	\$624.00
Backfill, by hand, no compaction, heavy soil	31 23 16.23 0015			\$27.00	\$27.00	\$51.00	2.81 CY	\$143.56
Compaction in 6" layers, hand tamp, add to above	31 23 16.23 0300			\$18.35	\$18.35	\$27.50	2.81 CY	\$77.41
Vibrating plate, add	31 23 16.23 0600		\$6.30	\$2.40	\$8.70	\$12.05	2.81 CY	\$33.92
Total								\$75,321.77
With Location Adder - Eureka							1.257 TOT	\$94,679.47
With Contingency							1.1 TOT	\$104,147.42 Paid for by PG&E

Notes: All Pricing based on 2023 RSMMeans data unless

ATTACHMENT 6

Prime Award

Prime Award Agreement follows this page.