GENERAL SERVICES ADMINISTRATION
FEDERAL SUPPLY SERVICES
AUTHORIZED FEDERAL SUPPLY SCHEDULE
FEDERAL SUPPLY GROUP: PROFESSIONAL SERVICES
MULTIPLE AWARD SCHEDULE (MAS)

On-line access to contract ordering information, terms and conditions, up-to-date pricing and the option to create an electronic delivery order is available through GSA *Advantage!*™

CONTRACT NUMBER:
47QRAA19D008Z

CONTRACT PERIOD:
JUNE 6, 2019 - JUNE 5, 2024

BUSINESS SIZE:
SMALL BUSINESS

BUSINESS TYPE:
HUBZONE

Price list current as of Modification #PA-0009 effective August 30, 2020




CONTRACTOR:
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www.CitrineEnergy.com

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Citrine Energy is an engineering and consulting company specializing in infrastructure projects including energy, buildings, and facilities. Our firm offers a wide variety of services including owner's engineering, construction consulting, detailed design, feasibility studies, commissioning consulting, project management, and technical staffing support. Citrine Energy has expertise in civil, mechanical, process, electrical, and structural engineering as well as construction management, field engineering, special inspections, and commissioning. Our team has a proven track record for delivering projects that meet or exceed our client's expectations. In addition to the Citrine Energy team, our firm has a strong working relationship with major well-known engineering and construction firms, which we sometimes use to enhance our capabilities and deliver comprehensive services.

CITRINE ENERGY SPECIALIZED EXPERIENCE

ARC FLASH STUDIES:
Our engineers are very experienced in arc flash studies. Our average engineer has 20 years of experience in performing such studies. We use ETAP Enterprise as our arc flash analysis software. This software is accepted as a standard electrical engineering analysis platform worldwide and is certified for the nuclear energy industry. We use an industrial label manufacturer that produces high quality arc flash labels, which are very popular with our current customers. Our lead electrical engineer is qualified by the NFPA in NFPA 70E requirements as a Certified Electrical Safety Compliance Professional (CESCP). We use various CAD drafting software platforms and are well versed in creating new or updating existing electrical drawings and documentation.

BACKFLOW PREVENTION:
We have performed backflow prevention and cross connection surveys with related services. Our surveyors and technicians have certifications from IAPMO and AWWA for Backflow Testing and Cross-Connection Survey execution. We are familiar with AWWA, EPA, and municipal requirements regarding potable water systems. We have provided Cross-Connection Survey Reports, which included all actual and potential cross-connections, each items hazard classification, and recommendations for corrective actions with their associated estimated costs.

CAMPUS DESIGN AND FACILITIES:
Our project team has experience in designing larger scale commercial and industrial campuses and institutional facilities that include administration buildings, operations buildings, warehouses, general housing quarters, parking facilities, roadways, and laydown areas.

CIVIL ENGINEERING:
We have performed design and inspections duties in the areas of grading, drainage, roads, stormwater, erosion control, containments, watershed analysis, detention/retention basins, and flood plain analysis. We have provided detailed plans for Storm Water Pollution Prevention, Spill Prevention Control and Countermeasures Design, and analysis of water and wastewater facilities, storm sewers, right-of-way improvements, roadways, and parking areas.

CONSTRUCTION SUPPORT:
The majority of our staff have provided field support during complex projects that require real-time engineering solutions during construction. We are very capable of being able to solve problems in the field to help keep the project moving forward. Our staff is available to be deployed to the field on a part-time or full-time basis.

DETAILED ENGINEERING ANALYSIS AND CALCULATIONS:
Our project team has decades of experience creating design specifications, design drawings, calculations, studies, evaluations, and as-built drawings. We use industry standard calculation software such as ETAP for electrical studies and STAAD from structural modeling. We typically use AutoCAD for 2D design drawings and AutoCAD or MicroStation for 3D models.

ELECTRICAL ENGINEERING:
Our firm has strong electrical engineering capability and experience. We have experience in performing the electrical design for buildings and industrial facilities. We have engineering experience up to 500 kV systems. In addition to creating detailed design documents like one-line diagrams, cable schedules, and equipment specifications, we have performed loads studies, short-circuit studies, coordination studies, and grounding studies.

ENERGY AUDITS:
We offer three levels of energy audits for buildings and various infrastructure assets. Our auditing process analyzes energy usage and patterns to identify ways to improve overall energy efficiency and reduce energy costs. More detailed audits provide quantitative analysis and return-on-investment projections for energy savings that can be gained through infrastructure upgrades and capital improvements.

FEASIBILITY STUDIES:
Citrine Energy has completed many feasibility studies that examine a known issue or problem. These studies determine various solutions and discuss the advantages and disadvantages of each potential solution. A cost estimate is often provided for each solution to help choose the best option.

FIRE PROTECTION:
Our fire protection engineers have performed detailed fire protection design, fire protection code review, and retrofit fire protection designs. They have experience with the major fire protection equipment vendors such as Honeywell, Protectowire, and Chemetron.

INSTRUMENTATION, ELECTRONICS, AND COMMUNICATIONS:
The electrical and instrumentation engineers on our project teams have experience in commercial and industrial electronics like PLCs, DCSs, and protective relaying. They also have experience in the various communication protocols that are frequently used with these electronics, such as Modbus ethernet, DNP, Profibus, DeviceNet, ControlNet, Honeywell, HART, and industrial wireless communications.

MECHANICAL ENGINEERING:
Our firm has a wide range of mechanical engineering ability. We have experience in piping, water systems, HVAC, steam systems, industrial process, pumps, fans, turbines, and cooling systems. We typically produce flow diagrams, process and instrumentation diagrams, technical specifications, evaluations, and studies.

NFPA 70E TRAINING:
We offer a standard NFPA 70E training course or we can create a customized training course. All our training includes training documentation, testing, and certificate of completion. Our lead instructor is qualified by the NFPA in NFPA 70E requirements as a Certified Electrical Safety Compliance Professional (CESCP). We can provide or recommend arc flash specific safety equipment that complies with the latest NFPA 70E requirements.

POWER GENERATION AND DISTRIBUTION:
Many members of the project team have extensive experience in the design and construction of small to large generation facilities. These projects often included the detailed design of a generation facility consisting of diesel generators, solar photovoltaic panels, wind turbines, gas turbines, and steam turbines.

PROJECT ESTIMATING:
Our approach to cost estimation uses a combination of in-house software, professional experience, and a large database of as-performed cost data. The software program that is used has been developed over the last 20 years and provides a clear representation of the costs and risks associated with a particular project. The estimation values within the program are regularly validated with recent actual project costs to ensure the best accuracy. All estimates are verified with our senior estimator that has over 40 years of estimating experience. Our estimators have performed project estimates ranging from class 1 to class 5 for projects costing $10,000 to over $500 million. All our estimates include a scope summary, quantity basis, construction approach, labor plan, schedule, indirect cost summary, escalation basis, exclusions, and special assumptions.

PROJECT MANAGEMENT:
Our average project manager has 20 years of experience and has managed a wide variety of projects ranging from small preliminary study projects to large scale engineering, procurement, and construction (EPC) projects in excess of $500 million dollars. We have both domestic and international project experience.

SITE AND EQUIPMENT ASSESSMENTS:
Our project team members have performed a variety of assessment studies ranging from entire industrial site assessments to single equipment assessments, such as a pump, tank, or transformer. Each study examines the benefits of the most feasible options and includes cost, efficiency, and performance estimates.

WATER TREATMENT AND PROCESS:
Citrine Energy has many team members that have designed various water treatment facilities. Frequently, these projects involved making use of grey water or wastewater through the means of reverse osmosis, water polishers, and even biological aerated filters.

CLIENTS

• DEPARTMENT OF ENERGY	• GENERAL SERVICES ADMINISTRATION
• DEPARTMENT OF COMMERCE	• CR MEYER
• CH2M	• UNITED STATES AIR FORCE
• TETRA TECH	• WYOMING DEPT OF CORRECTIONS
• JACOBS	• BLACK HILLS CORPORATION
• TC ENERGY	• TURLOCK IRRIGATION DISTRICT
• BUREAU OF LAND MANAGMENT	• GOOGLE

SENIOR EXECUTIVES

JEFF ABBATE, PE, PMP, CESCP
Mr. Abbate has over twenty years of experience in design engineering, field engineering, and project management. He has managed a variety of projects involving engineering, procurement, construction, and commissioning ranging in size from $50,000 to over $650 million. Mr. Abbate has expertise in detailed engineering, project management, estimating, scheduling, cost engineering, change control, and construction management. Mr. Abbate is a licensed professional engineer with a degree in electrical engineering and a master's degree in business administration. He is recognized among his peers as a performing team leader with insightful perspectives for successful project execution.

SHANNON RASMUSSEN, PE, PMP, CSEP
Mr. Rasmussen has over twenty years of experience in the industrial and commercial sectors performing program management, project management, engineering, construction, and consulting. His knowledge includes the oil & gas, power generation, and construction industries. He has successfully participated in projects up to $7B in value providing key experience. Mr. Rasmussen is a licensed professional engineer with a degree in mechanical engineering. He has a proven record of success and leads with integrity and genuineness. He is a key factor in the efficient, driven, and organized manner in which the company conducts its business.

GENERAL SERVICES ADMINISTRATION CONTRACT SUMMARY

1a. Table of Awarded Special Item Number(s)

SIN	DESCRIPTION
541330ENG	Engineering Services
541380	Testing Laboratory Services
541420	Engineering System Design and Integration Services
541690E	Energy Consulting Services
541715	Engineering Research and Development and Strategic Planning
OLM	Order-Level Materials

1b. Identification of the lowest priced model number and lowest unit price for that model for each special item number awarded in the contract. This price is the Government price based on a unit of one, exclusive of any quantity/dollar volume, prompt payment, or any other concession affecting price. Those contracts that have unit prices based on the geographic location of the customer, should show the range of the lowest price, and cite the areas to which the prices apply.

1c. If the Contractor is proposing hourly rates, a description of all corresponding commercial job titles, experience, functional responsibility and education for those types of employees or subcontractors who will perform services shall be provided. If hourly rates are not applicable, indicate "not applicable" for this item.

2. Maximum Order: $1,000,000

3. Minimum Order: $100

4. Geographic Coverage: 50 States/DC

5. Points of production (city, county, and state or foreign country): Same as company address

6. Discount from list prices or statement of net price: Government net prices (discounts already deducted).

7. Quantity Discounts:

TIER	THRESHOLD AMOUNT	ADDITIONAL DISCOUNT
1	$150,000.00	0.25%
2	$350,000.00	0.50%
3	$700,000.00	1.0%

8. Prompt Payment Terms: Net 30 days. Information for Ordering Offices: Prompt payment terms cannot be negotiated out of the contractual agreement in exchange for other concessions

9a. Notification that Government purchase cards are accepted up to the micro-purchase: Yes

9b. Notification whether Government purchase cards are accepted or not accepted above the micro-purchase threshold: Yes

10. Foreign Items (list items by country of origin): None

11a. Time of Delivery: Specified on Task Order

11b. Expedited Delivery: The Contractor will insert the sentence, "items available for expedited delivery are noted in this price list." under this heading. The Contractor may use a symbol of it's choosing to highlight items in its price lists that have expedited delivery: Contact Contractor

11c: Overnight and 2-day delivery: The Contractor will indicate whether overnight and 2-day delivery are available. Also, the Contractor will indicate that the schedule customer may contact the Contractor for rates for overnight and 2-day delivery: Contact Contractor

11d. Urgent Requirements: The Contractor will note in its price list the "Urgent Requirements" clause of its contract and advise agencies that they can also contact the Contractor's representative to effect a faster delivery: Contact Contractor

12. F.O.B Point(s): Destination

13a. Ordering Address: Same as Contractor

13b. Ordering Procedures: For supplies and services, the ordering procedures, information on Blanket Purchase Agreements (BPA's), and a sample BPA can be found at the GSA/FSS Schedule homepage (fss.gsa.gov/schedules).

14. Payment Address(es): Same as company address

15. Warranty Provision: Contractor's standard commercial warranty

16. Export Packing Charges (if applicable): N/A

17. Terms and Conditions of Government Purchase Card Acceptance (any thresholds above the micro-purchase level): Contact Contractor

18. Terms and Conditions of Rental, Maintenance and Repair (if applicable): N/A

19. Terms and Conditions of Installation (if applicable): N/A

20a. Terms and Conditions of Repair Parts Indicating Date of Parts Price Lists and Any Discounts From List Prices (if applicable): N/A

20b. Terms and Conditions For Any Other Services (if applicable): N/A

21. List of Service and Distribution Points (if applicable): N/A

22. List of Participating Dealers (if applicable): N/A

23. Preventative Maintenance (if applicable): N/A

24a. Environmental Attributes (e.g. recycled content, energy efficiency, and/or reduced pollutants): N/A

24b. If applicable, indicate that Section 508 compliance information is available on Electronic and Information Technology (EIT) supplies and services and show where full details can be found (e.g. contractor's website or other location). The EIT standards can be found at: www.Section508.gov/.

25. Data Universal Number System (DUNS) number: 080360887

26. Notification Regarding Registration on Central Contractor Registration (CCR) Database: Registered

SERVICE CONTRACT ACT (SCA) LABOR CATEGORIES

SCA Eligible Labor Category	SCA Equivalent Code Title	Wage Determination No.
Sr. Designer	30063 – Drafter/CAD Operator III	2015-5419
Designer	30062 – Drafter/CAD Operator II	2015-5419
CAD Technician	30061 – Drafter/CAD Operator I	2015-5419
Administrative	01020 – Administrative Assistant	2015-5419

The Service Contract Labor Standards, formerly the Service Contract Act (SCA), apply to this contract and it includes SCLS applicable labor categories. Labor categories and fixed price services marked with a (**) in this pricelist are based on the U.S. Department of Labor Wage Determination Number(s) identified in the SCLS/SCA matrix. The prices awarded are in line with the geographic scope of the contract (i.e., nationwide).

LABOR POSITIONS • SINS • DESCRIPTIONS • PRICING

The following table reflects the final proposed pricing for CITRINE ENERGY LLC for Year 2 of the Schedule and confirms that the pricing is accurate and that all prices include the required 0.75% Industrial Funding Fee (IFF). The pricing increases at an annual escalation of 2.3%.

POSITION & SIN	DESCRIPTION	MINIMUM YEAR EXPERIENCE	MINIMUM EDUCATION
Principal 541330ENG, 541380, 541420, 541690E, 541715	A Principal has a vested interest in the success of the firm as an owner and key manager. He has process quality oversight responsibility. His role is to ensure the team is meeting its functional requirements and keeping the Owner adequately informed of progress. He is involved in all aspects of the commissioning plan as well as the Owner program requirements validation. He applies a set of disciplines for the planning, analysis, design, and construction of information systems on an enterprise-wide basis or across a major sector of the enterprise. Develops analytical and computational techniques and methodology for problem solutions. Performs strategic systems planning, business information planning and analysis. Performs process and data modeling in support of the planning and analysis efforts using both manual and automated tools.	10	Bachelors
Sr. Consultant 541330ENG, 541380, 541420, 541690E, 541715	Considered a SME (Subject Matter Expert) in a specific area of knowledge. Provides specific consulting expertise for a customer to solve highly complex problems. Performs in-depth or sophisticated audits or studies.	10	Bachelors

POSITION & SIN	DESCRIPTION	MINIMUM YEAR EXPERIENCE	MINIMUM EDUCATION
Sr. Project Manager 541330ENG, 541380, 541420, 541690E, 541715	Responsible with functional and technical specifications to meet customer functionality, customization, and integration requirements. Manage the engineering, procurement, and construction work associated with the facilities as defined by the customer. Track engineering, procurement, and construction progress to ensure timely completion of activities and to take action where necessary. Ensure that the project is being designed and constructed in compliance with required design standards and specifications and all applicable permit and environmental requirements. Ensure that comprehensive safety standards are in place and being enforced. Review invoices from the vendors and recommend approval. Review Contractor staffing plans to ensure the efficient use of personnel. Manage costs and manpower to achieve stated financial objectives. Review and evaluate all scope changes prior to implementation. Maintain frequent communication with the design team, the Engineer, and the Construction Manager. Interact with the Engineer, the Construction Manager and Operations to ensure a smooth transition through commissioning, start-up, integration, and operation. Ensure that commitments made during the respective hearing processes are being satisfied. Track all contract correspondence. Ensure that risks are being tracked, evaluated, and managed. Perform other duties as directed as required.	8	Bachelors
Project Manager 541330ENG, 541380, 541420, 541690E, 541715	Responsible for developing system design with functional and technical specifications to meet customer functionality, customization, and integration requirements. Manage the engineering, procurement, and construction work associated with the facilities as defined by the customer. Track engineering, procurement, and construction progress to ensure timely completion of activities and to take action where necessary. Ensure that the project is being designed and constructed in compliance with required design standards and specifications and all applicable permit and environmental requirements. Ensure that comprehensive safety standards are in place and being enforced. Review invoices from the vendors and recommend approval. Review Contractor staffing plans to ensure the efficient use of personnel. Manage costs and manpower to achieve stated financial objectives. Review and evaluate all scope changes prior to implementation. Maintain frequent communication with the design team, the Engineer, and the Construction Manager. Interact with the Engineer, the Construction Manager and Operations to ensure a smooth transition through commissioning, start-up, integration, and operation. Ensure that commitments made during the respective hearing processes are being satisfied. Track all contract correspondence. Ensure that risks are being tracked, evaluated, and managed. Perform other duties as directed as required.	4	Bachelors

POSITION & SIN	DESCRIPTION	MINIMUM YEAR EXPERIENCE	MINIMUM EDUCATION
Construction Manager 541330ENG	Shall plan and direct construction projects and oversee their progress along the way in a timely and cost-effective manner. Responsible for budgeting, organization, implementation, and scheduling of the project construction. Review the project in-depth to schedule deliverables and estimate costs. Oversee all onsite and offsite constructions to monitor compliance with building and safety regulations. Coordinate and direct construction workers and subcontractors. Select tools, materials and equipment and track inventory. Meet contractual conditions of performance. Review the work progress on daily basis. Prepare internal and external reports pertaining to job status. Plan ahead to prevent problems and resolve any emerging ones. Negotiate terms of agreements, draft contracts and obtain permits and licenses. Analyze, manage, and mitigate risks. Ensure quality construction standards and the use of proper construction techniques.	10	HS Diploma and Field Experience
Project Engineer 541330ENG, 541380, 541420, 541690E, 541715	Manage the engineering, procurement, and construction work associated with the facilities as defined by the contract documents. Track engineering, procurement, and construction progress to ensure timely completion of activities and to take action where necessary. Ensure that the project is being designed and constructed in compliance with required design standards and specifications, and all applicable permit and environmental requirements. Ensure that comprehensive safety standards are in place and being enforced. Review and evaluate all scope changes prior to implementation. Track all contract correspondence. Ensure that risks are being tracked, evaluated, and managed. Perform other duties as directed by the Manager. Manage the workflow with external consultants and contractors. Oversee and track the work of the internal staff, external consultants and contractors and ensure that the work is executed and managed in accordance with approved plans, schedules, and budgets. Lead programs in one or more areas as needed. Ensure that engineering work is executed and managed in accordance with project goals and objectives. Ensure that the work of the engineering contractor is efficiently and effectively carried out and that effective project planning and control processes are utilized. Effectively manage project deliverables, schedules, and budgets. Work collaboratively with other project groups to share and implement best practices.	5	Bachelors
Energy Engineer/ Auditor 541330ENG, 541380, 541420, 541690E, 541715	Design, develop, or evaluate energy-related projects or programs to reduce energy costs or improve energy efficiency during the designing, building, or remodeling stages of construction. May specialize in electrical systems, heating, ventilation, and air-conditioning (HVAC) systems or green buildings, lighting, air quality, or energy procurement.	3	Bachelors

POSITION & SIN	DESCRIPTION	MINIMUM YEAR EXPERIENCE	MINIMUM EDUCATION
Sr. Industrial Civil Engineer 541330ENG, 541380, 541420, 541690E, 541715	Industrial/Civil system(s) design, review and implement new processes or improvements in the operations or construction of a manufacturing, building, or related facility. Analyze material and labor costs, set procedures and standards, review construction or production bids, and may also be responsible for overall plant/building operations. Plan, design, and oversee the reconfiguration, maintenance, and alteration of equipment, machinery, buildings, structures, and other facilities. Ensure the optimal operation of high-rise commercial real estate, commercial and industrial plants, university campuses, medical centers, offices, and government facilities. Work in both offices and work sites, depending on the nature of the project.	5	Bachelors
Sr. Electrical Engineer 541330ENG, 541380, 541420, 541690E, 541715	Electrical systems design, review and implement new processes or improvements in the operations or construction of a manufacturing, building, or related facility. Analyze material and labor costs, set procedures and standards, review construction or production bids, and may also be responsible for overall plant/building operations. Plan, design, and oversee the reconfiguration, maintenance, and alteration of equipment, machinery, buildings, structures, and other facilities. Ensure the optimal operation of high-rise commercial real estate, commercial and industrial plants, university campuses, medical centers, offices, and government facilities. Work in both offices and work sites, depending on the nature of the project.	5	Bachelors
Sr. QA/QC Manager 541330ENG, 541380, 541420, 541690E, 541715	Performing oversight of a vendors QMS for planning, fabrication, inspection, documentation, deliverables, and operations activities. Planning duties within the QA/QC staff and related work schedules. Establishing service standards for customers. Approves vendor incoming materials by confirming specifications, conducting visual inspections, and rejecting unacceptable materials. Approves in-process production of vendors by confirming specifications, conducting visual inspections, and communicating required adjustments to the fabricator. Approves vendor finished products by confirming conformance to specifications and drawings. Able to supervise 6 or more employees and set the example for teamwork, corporation, safety, respect, and work ethic for all employees. Supervision and assignment of quality control line inspectors. Documents inspection results by completing reports and logs; summarizing re-work and rejects; inputting data into quality database.	8	High School Diploma

POSITION & SIN	DESCRIPTION	MINIMUM YEAR EXPERIENCE	MINIMUM EDUCATION
Sr. Project Controls 541330ENG, 541380, 541420, 541690E, 541715	Primary role is to work closely with project managers to ensure that all budgeting, scheduling, and coordination processes run smoothly. They monitor the progress of a project to ensure that it is working within the confines of set deadlines and budget limitations and generate progress reports to managers. Make suggestions for improvements to project operations as needed. Co-create and update project specific schedules and have expert working knowledge of software such as Primavera. Co-create and update project specific budgets. Report to project managers, operations managers and other upper-management personnel involved in particular projects. Assist with cost and schedule control and monitor for efficient project execution. Ability to train others and be a team lead if required.	7	Bachelors
Sr. Mechanical Engineer 541330ENG, 541380, 541420, 541690E, 541715	Design, develop, or evaluate energy-related projects or programs to reduce energy costs or improve energy efficiency during the designing, building, or remodeling stages of construction. May specialize in electrical systems, heating, ventilation, and air-conditioning (HVAC) systems or green buildings, lighting, air quality, or energy procurement.	5	Bachelors
Engineer 541330ENG, 541380, 541420, 541690E, 541715	Engineer design, review and implement new processes or improvements in the operations or construction of a manufacturing, building, or related facility. Analyze material and labor costs, set procedures and standards, review construction or production bids, and may also be responsible for overall plant/building operations. Plan, design, and oversee the reconfiguration, maintenance, and alteration of equipment, machinery, buildings, structures, and other facilities. Ensure the optimal operation of high-rise commercial real estate, commercial and industrial plants, university campuses, medical centers, offices, and government facilities. Work in both offices and work sites, depending on the nature of the project.	3	Bachelors
QA/QC Manager 541330ENG, 541380, 541420, 541690E, 541715	Performing oversight of a vendors QMS for planning, fabrication, inspection, documentation, deliverables, and operations activities. Planning duties within the QA/QC staff and related work schedules. Establishing service standards for customers. Approves vendor incoming materials by confirming specifications, conducting visual inspections, and rejecting unacceptable materials. Approves in-process production of vendors by confirming specifications, conducting visual inspections, and communicating required adjustments to the fabricator. Approves vendor finished products by confirming conformance to specifications and drawings. Able to supervise 3-6 employees and set the example for teamwork, corporation, safety, respect, and work ethic for all employees. Supervision and assignment of quality control line inspectors. Documents inspection results by completing reports and logs; summarizing re-work and rejects; inputting data into quality database.	4	HS Diploma

POSITION & SIN	DESCRIPTION	MINIMUM YEAR EXPERIENCE	MINIMUM EDUCATION
Construction Inspector 541330ENG	General day-to-day oversight of the construction activities. Review plans to ensure building codes, local ordinances, and zoning regulations are being complied with. Use survey instruments, metering devices, and test equipment to perform inspections. Inspect plumbing, electrical, and other systems to ensure that they meet code and drawings. Prepare daily, specific, and progress reports with photos. Witness and authorize hold points.	10	HS Diploma and Field Experience
Industrial/ Civil Engineer 541330ENG 541380, 541420, 541690E, 541715	Industrial/Civil system(s) design, review and implement new processes or improvements in the operations or construction of a manufacturing, building, or related facility. Analyze material and labor costs, set procedures and standards, review construction or production bids, and may also be responsible for overall plant/building operations. Plan, design, and oversee the reconfiguration, maintenance, and alteration of equipment, machinery, buildings, structures, and other facilities. Ensure the optimal operation of high-rise commercial real estate, commercial and industrial plants, university campuses, medical centers, offices, and government facilities. Work in both offices and work sites, depending on the nature of the project.	1	Bachelors
Electrical Engineer 541330ENG, 541380, 541420, 541690E, 541715	Electrical systems design, review and implement new processes or improvements in the operations or construction of a manufacturing, building, or related facility. Analyze material and labor costs, set procedures and standards, review construction or production bids, and may also be responsible for overall plant/building operations. Plan, design, and oversee the reconfiguration, maintenance, and alteration of equipment, machinery, buildings, structures, and other facilities. Ensure the optimal operation of high-rise commercial real estate, commercial and industrial plants, university campuses, medical centers, offices, and government facilities. Work in both offices and work sites, depending on the nature of the project.	1	Bachelors
Mechanical Engineer 541330ENG, 541380, 541420, 541690E, 541715	Mechanical system(s) design, review and implement new processes or improvements in the operations or construction of a manufacturing, building, or related facility. Analyze material and labor costs, set procedures and standards, review construction or production bids, and may also be responsible for overall plant/building operations. Plan, design, and oversee the reconfiguration, maintenance, and alteration of equipment, machinery, buildings, structures, and other facilities. Ensure the optimal operation of high-rise commercial real estate, commercial and industrial plants, university campuses, medical centers, offices, and government facilities. Work in both offices and work sites, depending on the nature of the project.	1	Bachelors

POSITION & SIN	DESCRIPTION	MINIMUM YEAR EXPERIENCE	MINIMUM EDUCATION
Project Controls 541330ENG, 541380, 541420, 541690E, 541715	Primary role is to work closely with project managers to ensure that all budgeting, scheduling, and coordination processes run smoothly. They monitor the progress of a project to ensure that it is working within the confines of set deadlines and budget limitations and generate progress reports to managers. Make suggestions for improvements to project operations as needed. Update project specific schedules. Update project specific budgets. Reports to Sr. Project Controls Manager or Project Manager. Assist with cost and schedule control and monitor for efficient project execution.	5	Bachelors
Commissioning Technician 541330ENG, 541380, 541420, 541690E, 541715	General day-to-day oversight of the commissioning activities. Preparing or making improvements to, and offering advice about, operational procedures. Scheduling and coordinating work to tight deadlines. Ensuring that equipment works to its specification. Creating and carrying out test procedures. Investigating problems and diagnosing and repairing faults. Troubleshooting. Liaising with installation/project engineers. Writing reports and documentation. Providing technical support. Training maintenance and operative staff where appropriate.	10	HS Diploma and Field Experience
Sr. Designer 541330ENG, 541380, 541420, 541690E, 541715	Lead designer on large engineering projects. Designing and integrating complex projects. Integration of multiple engineering disciplines for large and complex projects. CAD software design management. Manage designers and design work schedules. Ability to mentor others. Management of design-based staff and scheduling. Formal department reporting and quality assurance/risk checks. Design department and project-based reporting.	7	HS Diploma and Technical Training
Designer 541330ENG, 541380, 541420, 541690E, 541715	Designer on large engineering projects, direction taken from Sr. Designer. Designing and integrating complex projects. Integration of multiple engineering disciplines for large and complex projects. CAD software design management. Formal department reporting and quality assurance/risk checks. Design department and project-based reporting.	5	HS Diploma
CAD Technician 541330ENG, 541380, 541420, 541690E, 541715	CAD Software design and integration of customer/client needs per project. CAD relevant compliance review. CAD based compliance audit(s) per project. CAD based compliance change implementation per project. CAD based design process implementation on design aspects per project.	2	HS Diploma
Administrative 541330ENG, 541380, 541420, 541690E, 541715	Perform day-to-day activities including answering phones, filing paperwork, populating paperwork, creating invoices, creating shipments, sending/receiving mail, copies, etc. Must have a good working knowledge of Microsoft Excel, Word, Publisher, Power Point, Adobe, and images.	2	HS Diploma

Citrine Energy LLC

5 Year Price Escalation at 2.3% Annually (with IFF included)

Labor Category	Year 1	Year 2	Year 3	Year 4	Year 5
Principal	$171.03	$174.96	$178.99	$183.10	$187.32
Sr. Consultant	$166.15	$169.97	$173.88	$177.88	$181.97
Sr. Project Manager	$153.00	$156.52	$160.12	$163.80	$167.57
Project Manager	$151.13	$154.61	$158.16	$161.80	$165.52
Construction Manager	$136.83	$139.98	$143.20	$146.49	$149.86
Project Engineer	$131.94	$134.97	$138.08	$141.25	$144.50
Energy Engineer/Auditor	$131.94	$134.97	$138.08	$141.25	$144.50
Sr. Industrial/Civil Engineer	$127.05	$129.97	$132.96	$136.02	$139.15
Sr. Electrical Engineer	$127.05	$129.97	$132.96	$136.02	$139.15
Sr. QA/QC Manager	$122.17	$124.98	$127.85	$130.80	$133.80
Sr. Project Controls	$122.17	$124.98	$127.85	$130.80	$133.80
Sr. Mechanical Engineer	$117.28	$119.98	$122.74	$125.56	$128.45
Engineer	$112.39	$114.97	$117.62	$120.32	$123.09
QA/QC Manager	$112.39	$114.97	$117.62	$120.32	$123.09
Construction Inspector	$112.39	$114.97	$117.62	$120.32	$123.09
Industrial/Civil Engineer	$102.62	$104.98	$107.39	$109.86	$112.39
Electrical Engineer	$102.62	$104.98	$107.39	$109.86	$112.39
Mechanical Engineer	$102.62	$104.98	$107.39	$109.86	$112.39
Project Controls	$92.85	$94.99	$97.17	$99.41	$101.69
Commissioning Technician	$92.85	$94.99	$97.17	$99.41	$101.69
Sr. Designer	$87.96	$89.98	$92.05	$94.17	$96.34
Designer	$68.41	$69.98	$71.59	$73.24	$74.92
CAD Technician	$58.64	$59.99	$61.37	$62.78	$64.22
Administrative	$39.09	$39.99	$40.91	$41.85	$42.81