

On-line access to contract ordering information, terms and conditions, up-to-date pricing, and the option to create an electronic delivery order are available through GSA Advantage!, a menu-driven database system. The INTERNET address GSA Advantage! is: [GSAAdvantage.gov](http://GSAAdvantage.gov).



**Contract # GS-10F-0020V**

**Contract Period**

**November 12, 2018 - November 11, 2023**

**Federal Supply Group: Professional Services**

**MAS: Multiple Award Schedule**

**Headquarters:** 7578 El Cajon Boulevard  
La Mesa, California 91942  
Phone: 619.462.1515

**Additional offices:**  
703 Palomar Airport Road, Suite 200 Carlsbad, California 92011  
P: 760.517.9060  
16485 Laguna Canyon Road, Suite 150 Irvine, CA 92618  
P: 949.234.8770  
11801 Pierce Street, 2nd Floor Riverside, CA 92505  
P: 951.710.3275  
11 Natoma Street, Suite 155 Folsom, California 95630  
P: 916.365.8700  
1677 Eureka Road, Suite 100 Roseville, California 95661  
P: 916.435.1202

**Socio-Economic: other than small business**

**Email:** [MikeS@helixepi.com](mailto:MikeS@helixepi.com)

**Web Address:** [www.helixepi.com](http://www.helixepi.com)

**POC (Contract Administrator) Michael Schwerin, Chief Executive Officer**

**For more information on ordering form Federal Supply Schedules go to the GSA Schedules page at GSA.gov**

**GSA pricelist is active and current. Prices Shown Herein are Net (discount deducted)**

**Price List Current as of Modification #PS-0033 effective May 27, 2021**

**CUSTOMER INFORMATION:**

**1a. Table of Awarded Special Item Number(s) with appropriate cross-reference to page numbers:**

SIN	Recovery	SIN Description
541620	541620 RC	Environmental Consulting Services

541370GIS	541370GISRC	Geographic Information System (GIS) Services
OLM	OLM RC	Order Level Materials OLM's

**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. – SEE PAGE #4**

**1c. Contractor is proposing hourly rates a description of all corresponding commercial job titles, experience, functional responsibility, and education are provided below under 7Labor Category Descriptions attached herein. - SEE PAGE # 7**

**2. Maximum Order:** \$1,000,000.00

**3. Minimum Order:** \$100.00

**4. Geographic Coverage (delivery Area):** Domestic only: 50 States, DC

**5. Point(s) of production (city, county, and state or foreign country):** N/A

**6. Discount from list prices or statement of net price:** Government net prices (discounts already deducted). See price list chart attached herein.

**7. Quantity discounts:** N/A.

**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.

**9. Foreign items (list items by country of origin). Not Applicable**

**10a. Time of delivery. To Be Determined at the Task Order level**

**10b. Expedited Delivery. Contact Contractor**

**10c. Overnight and 2-day delivery. Contact Contractor**

**10d. Urgent Requirements. Contact Contractor**

**11. F.O.B. point(s). Destination**

**12a. Ordering address(es).** 7578 El Cajon Boulevard La Mesa, California 91942

**12b. Ordering procedures: For supplies and services, the ordering procedures, information on Blanket Purchase Agreements (BPA's) are found in Federal Acquisition Regulation (FAR) 8.405-3.**

**13. Payment address(es). 7578 El Cajon Boulevard La Mesa, California 91942**

**14. Warranty provision. Standard Commercial Warranty Terms & Conditions**

**15. Export packing charges, if applicable. Not Applicable**

**16. Terms and conditions of rental, maintenance, and repair (if applicable). Not Applicable**

**17. Terms and conditions of installation (if applicable). Not Applicable**

**18a. Terms and conditions of repair parts indicating date of parts price lists and any discounts from list prices (if applicable). Not Applicable**

**18b. Terms and conditions for any other services (if applicable). Not Applicable**

**19. List of service and distribution points (if applicable). Not Applicable**

**20. List of participating dealers (if applicable). Not Applicable**

**21. Preventive maintenance (if applicable). Not Applicable**

**22a. Special attributes such as environmental attributes (e.g., recycled content, energy efficiency, and/or reduced pollutants). Not Applicable**

**22b. 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/](http://www.Section508.gov/).**

**Not Applicable**

**23. Unique Entity Identifier (UEI) number: ZA5ZZ42XGR68**

**24. Notification regarding registration in System for Award Management (SAM) database. Contractor is registered and active in SAM**

**Final Pricing: Prices, Including 0.75% IFF PS-0033 effective May 27, 2021**

<b>SINs</b>	<b>Labor Category</b>	<b>GSA Hourly Rate Including IFF</b>
541370GIS/541620	Principal	\$201.76
541370GIS/541620	Sr. Project Manager III	\$170.89
541370GIS/541620	Sr. Project Manager II	\$138.92
541370GIS/541620	Sr. Project Manager I	\$128.99
541370GIS/541620	Project Manager II	\$113.56
541370GIS/541620	Project Manager I	\$98.12
541370GIS/541620	Noise & Acoustics Manager	\$170.89
541370GIS/541620	Sr. Environmental Specialist	\$156.82
541370GIS/541620	Environmental Planner III	\$88.20
541370GIS/541620	Environmental Planner II	\$82.69
541370GIS/541620	Environmental Planner I	\$77.70
541370GIS/541620	Biologist V	\$108.15
541370GIS/541620	Biologist IV	\$98.12
541370GIS/541620	Biologist III	\$88.20
541370GIS/541620	Biologist II	\$77.18
541370GIS/541620	Biologist I	\$69.30
541370GIS/541620	Operations Manager	\$87.15
541370GIS/541620	Sr. Scientist II	\$162.75
541370GIS/541620	Sr. Scientist I	\$134.51
541620	Principal Regulatory Specialist	\$199.50

SINs	Labor Category	GSA Hourly Rate Including IFF
541620	Regulatory Specialist/Environmental Specialist	\$99.75
541620	Sr. Fisheries Scientist	\$205.79
541620	Sr. Archaeologist/Archaeology Project Manager	\$149.62
541620	Field Director	\$95.21
541620	Staff Archaeologist	\$72.54
541620	Architectural Historian	\$108.82
541620	Director of Operations (Habitat Restoration)	\$150.04
541620	Sr. Project Manager (Habitat Restoration)	\$205.79
541620	Project Manager III (Habitat Restoration)	\$124.43
541620	Project Manager II (Habitat Restoration)	\$119.65
541620	Project Manager I (Habitat Restoration)	\$81.36
541620	Assistant Project Manager (Habitat Restoration)	\$62.22
541620	Sr. Restoration Supervisor (Habitat Restoration)	\$121.56
541620	Restoration Supervisor II (Habitat Restoration)	\$95.48
541620	Restoration Supervisor I (Habitat Restoration)	\$66.83
541620	Assistant Restoration Supervisor (Habitat Restoration)	\$70.02
541620	Operator (Habitat Restoration)	\$81.36
541620	Foreman (Habitat Restoration)	\$65.47

SINs	Labor Category	GSA Hourly Rate Including IFF
541620	Restoration Lead	\$56.47
541620	Restoration Technician III	\$47.86
541620	Restoration Technician II	\$43.07
541620	Restoration Technician I	\$37.33
541620	Nursery Manager	\$79.45
541620	Nursery Technician	\$40.20
541370GIS/541620	Sr. Landscape Architect	\$157.50
541370GIS/541620	Project Landscape Architect	\$84.00
541370GIS/541620	Asst. Landscape Designer	\$82.69
541370GIS/541620	Graphics Coordinator	\$108.05
541370GIS/541620	Sr. GIS Specialist	\$119.07
541370GIS/541620	GIS Specialist III	\$88.20
541370GIS/541620	GIS Specialist II	\$77.18
541370GIS/541620	Sr. Technical Editor	\$89.25
541370GIS/541620	Technical Editor	\$72.77
541370GIS/541620	Word Processor	\$55.00
541370GIS/541620	Clerical	\$34.65

## Labor Category Descriptions

### Title: **Principal**

**Functional Duties/Responsibilities:** Provides senior-level management of company, manages complex multidisciplinary projects, provides direction to all levels of staff, and conducts Quality Assurance reviews. Serves as client liaison and manages business development.

**Minimum Education:** A Bachelor's degree in science, engineering, government, planning, or policy or an equivalent combination of education and practical experience is required.

**Minimum Experience Requirements:** Must have twelve (12) years of experience that exhibit increasing levels of responsibility. Principals must demonstrate expert knowledge in a relevant service area offered by HELIX and have experience directing management staff.

### Title: **Senior Project Manager III**

**Functional Duties/Responsibilities:** Manages large, multi-disciplinary environmental compliance and/or environmental permitting projects, directs HELIX staff working on those projects, coordinates subcontractors, serves as client liaison, and tracks budgets and schedules.

**Minimum Education:** A Bachelor's degree in science, engineering, government, planning, or policy or an equivalent combination of education and practical experience is required.

**Minimum Experience Requirements:** Must have twelve (12) years of experience that exhibits increasing levels of responsibility managing multi-disciplinary projects. Must have directly related experience helping clients comply with the NEPA, federal and state CWAs, federal and state ESAs, and/or other relevant environmental laws and regulations.

### Title: **Senior Project Manager II**

**Functional Duties/Responsibilities:** Manages large, multi-disciplinary environmental compliance and/or environmental permitting projects, directs HELIX staff working on those projects, coordinates subcontractors, serves as client liaison, and tracks budgets and schedules.

**Minimum Education:** A Bachelor's degree in science, engineering, government, planning, or policy or an equivalent combination of education and practical experience is required.

**Minimum Experience Requirements:** Must have ten (10) years of experience that exhibit increasing levels of responsibility managing multi-disciplinary projects. Must have directly related experience helping clients comply with the NEPA, federal and state CWAs, federal and state ESAs, and/or other relevant environmental laws and regulations.

### Title: **Senior Project Manager I**

**Functional Duties/Responsibilities:** Manages large, multi-disciplinary environmental compliance and/or environmental permitting projects, directs HELIX staff working on those projects, coordinates subcontractors, serves as client liaison, and tracks budgets and schedules.

**Minimum Education:** A Bachelor's degree in science, engineering, government, planning, or policy or an equivalent combination of education and practical experience is required.

**Minimum Experience Requirements:** Must have eight (8) years of experience that exhibit increasing levels of responsibility managing multi-disciplinary projects. Must have directly related experience helping clients comply with the NEPA, federal and state CWAs, federal and state ESAs, and/or other relevant environmental laws and regulations.

**Title: Project Manager II**

**Functional Duties/Responsibilities:** Manages and prepares environmental compliance documents such as NEPA Environmental Assessments (EAs) and Categorical Exclusions (CEs) (and equivalent California environmental compliance documents), assists Senior Project Managers with the management and preparation of complex, multi-disciplinary environmental compliance documents (such as Environmental Impact Statements [EISs]), manages schedules and budgets, directs the work of HELIX staff, coordinates with subcontractors, and serves as client liaison.

**Minimum Education:** A Bachelor's degree in science, engineering, government, planning, or policy or an equivalent combination of education and practical experience is required.

**Minimum Experience Requirements:** Must have six (6) years of experience helping clients comply with the NEPA, federal and state CWAs, federal and state ESAs, and/or other relevant environmental laws and regulations. Must have prepared analyses of most issue areas commonly included in environmental compliance documents and demonstrated some expertise in at least one of those issue areas.

**Title: Project Manager I**

**Functional Duties/Responsibilities:** Manages and prepares relatively simple environmental compliance documents; assists Senior Project Managers with the management and preparation of complex, multidisciplinary environmental compliance documents; manages schedules and budgets with oversight by more senior staff; helps direct the work of HELIX staff on assigned projects; coordinates with subcontractors; and helps with client coordination.

**Minimum Education:** A Bachelor's degree in science, engineering, government, planning, or policy or an equivalent combination of education and practical experience is required.

**Minimum Experience Requirements:** Must have four (4) years of experience helping clients comply with the NEPA, federal and state CWAs, federal and state ESAs, and/or other relevant environmental laws and regulations. Must have prepared analyses of most issue areas commonly included in environmental compliance documents and demonstrated some expertise in at least one of those issue areas.

**Title: Noise & Acoustics Manager**

**Functional Duties/Responsibilities:** Conducts noise and acoustics (including ground vibration) modeling and analysis, directs less experienced noise and acoustics staff on projects, provides support to managers of multidisciplinary environmental compliance projects, and serves as primary author for noise and acoustics technical reports.

**Minimum Education:** A Bachelor's degree in science or engineering or an equivalent combination of education and practical experience is required.

**Minimum Experience Requirements:** Must have five (5) years of experience conducting noise and acoustics modeling and analysis and describing the modeling/analysis results in written documents.

**Title: Senior Environmental Specialist**

**Functional Duties/Responsibilities:** Prepares well-written reports or sections of environmental compliance documents (such as EISs) addressing technical environmental topics such as water quality, geology/soils, agriculture, land use, air quality, and/or visual resources.

**Minimum Education:** A Bachelor's degree in science, engineering, government, planning, or policy or an equivalent combination of education and practical experience is required.

**Minimum Experience Requirements:** Must have five (5) years of experience preparing written analyses of technical environmental issue areas.

**Title: Environmental Planner III**

**Functional Duties/Responsibilities:** Researches and writes sections of environmental compliance documents with moderate oversight by a Project Manager or Senior Project Manager. May work as an assistant to Project Managers or Senior Project Managers on more complex assignments.

**Minimum Education:** A Bachelor's degree in science, engineering, government, planning, or policy or an equivalent combination of education and practical experience is required.

**Minimum Experience Requirements:** Must have at least three (3) years of experience producing written analysis of environmental issues.

**Title: Environmental Planner II**

**Functional Duties/Responsibilities:** Researches and writes sections of environmental compliance documents with substantial direction and oversight by a Project Manager or Senior Project Manager.

**Minimum Education:** A Bachelor's degree in science, engineering, government, planning, or policy or an equivalent combination of education and practical experience is required.

**Minimum Experience Requirements:** Minimum one (1) year of experience. Experience in positions outside the environmental industry may be acceptable to demonstrate relevant experience provided that the prior position required analytical thought and the preparation of written analyses of scientific or socioeconomic issues.

**Title: Environmental Planner I**

**Functional Duties/Responsibilities:** Researches and writes sections of environmental compliance documents with substantial direction and oversight by a Project Manager or Senior Project Manager.

**Minimum Education:** A Bachelor's degree in science, engineering, government, planning, or policy or an equivalent combination of education and practical experience is required.

**Minimum Experience Requirements:** None.

**Title: Biologist V**

**Functional Duties/Responsibilities:** Prepares complex biological resources technical reports and/or habitat restoration plans, manages/participates in field mapping of existing biological resources for large and/or complex projects, assesses potential constraints to undertakings based on documented conditions and applicable laws/regulations protecting biological resources (such as ESA and CWA), assesses potential effects on biological resources of proposed developments or actions, and conducts focused surveys for sensitive (e.g., federally listed Threatened or Endangered) plant or wildlife species.

**Minimum Education:** A Bachelor's degree in science or geography or an equivalent combination of education and practical experience is required.

**Minimum Experience Requirements:** Must have eight (8) years of experience conducting biological resource investigations and providing written documents of results.

**Title: Biologist IV**

**Functional Duties/Responsibilities:** Prepares biological resources technical reports and/or habitat restoration plans, manages/participates in field mapping of existing biological resources, assesses potential effects on biological resources of proposed undertakings or actions, and conducts focused surveys for sensitive (e.g., federally listed Threatened or Endangered) plant or wildlife species.

**Minimum Education:** A Bachelor's degree in science or geography or an equivalent combination of education and practical experience is required.

**Minimum Experience Requirements:** Must have six (6) years of experience conducting biological resource investigations and providing written documents of results.

**Title: Biologist III**

**Functional Duties/Responsibilities:** Under the direction of more senior biologists, prepares biological resources technical reports and/or habitat restoration plans, conducts field mapping of existing biological resources, assesses potential effects on biological resources of proposed developments or actions, conducts focused surveys for sensitive (e.g., federally listed Threatened or Endangered) plant or wildlife species, and monitors project construction activities for compliance with environmental permit requirements and/or mitigation monitoring plans.

**Minimum Education:** A Bachelor's degree in science or geography or an equivalent combination of education and practical experience is required.

**Minimum Experience Requirements:** Must have four (4) years of experience conducting biological resource investigations and providing written documents of results.

**Title: Biologist II**

**Functional Duties/Responsibilities:** Under the direction of more senior biologists, provides input into the preparation of biological resources technical reports and/or habitat restoration plans, conducts field mapping of existing biological resources, helps assess potential effects on biological resources of proposed undertakings or actions, conducts or helps to conduct focused surveys for sensitive (e.g., federally listed Threatened or Endangered) plant or wildlife species, and monitors project construction activities for compliance with environmental permit requirements and/or mitigation monitoring plans.

**Minimum Education:** A Bachelor's degree in science or geography or an equivalent combination of education and practical experience is required.

**Minimum Experience Requirements:** Must have two (2) years of experience conducting biological resource investigations and providing written documents of results.

**Title: Biologist I**

**Functional Duties/Responsibilities:** Under the direction of more senior biologists, provides input into the preparation of biological resources technical reports and/or habitat restoration plans, conducts field mapping of existing biological resources, helps assess potential effects on biological resources of proposed developments or

actions, conducts or helps to conduct focused surveys for sensitive (e.g., federally listed Threatened or Endangered) plant or wildlife species, and monitors project construction activities for compliance with environmental permit requirements and/or mitigation monitoring plans.

**Minimum Education:** A Bachelor's degree in science or geography or an equivalent combination of education and practical experience is required.

**Minimum Experience Requirements:** Prior experience with field biology as part of previous employment, education (e.g., college coursework) and/or volunteer work with government agencies or non-governmental organizations.

**Title: Biology Operations Manager**

**Functional Duties/Responsibilities:** Leads staff and equipment scheduling using HELIX's existing scheduling software and assists with workload management. Maintains tracking system to ensure fieldwork is scheduled and completed, and that deliverables are submitted by due dates. Interacts with existing and potential clients. Provides integrated project support through assistance with project planning and implementation, data organization, report writing, resume updates, and other operations-related items. Provides production support related to survey reports and technical reports. Maintains the Biology Division's permits and certifications, including required reporting. Maintains Biology Division tracking logs of completed training and upcoming training opportunities and assists with Biology Division's trainings. Coordinates with the Biology Division Manager regarding division's financial data, budgets, and operations plans. Contributes towards the Biology Division's and company's strategic planning goals. Contributes towards operational improvements in the Biology Division, as appropriate.

**Minimum Education:** A Bachelor's degree in biology, natural resources, or a related field; or equivalent experience in a similar role will also be considered

**Minimum Experience Requirements:** Must have at least two (2) years of experience performing similar duties to those outlined above.

**Title: Senior Scientist II**

**Functional Duties/Responsibilities:** Manages complex biological resource investigations that require an expert understanding of local and regional biological resources, including specific expertise in the identification of sensitive wildlife species, rare plants, and/or the delineation of wetlands, streambeds and Waters of the U.S. pursuant to applicable laws (e.g., CWA) and regulations (e.g., U.S. Army Corps of Engineers [USACE] guidance). Prepares survey reports, habitat restoration plans, and other biology technical reports. Advises clients on strategies for compliance with the ESA, CWA, and other federal, state, and local laws and regulations that protect biological resources. Helps train in-house staff and others in the identification of sensitive plant or wildlife species and/or in the assessment of sensitive biological communities (habitat types).

**Minimum Education:** A Bachelor's degree in science or geography or an equivalent combination of education and practical experience is required.

**Minimum Experience Requirements:** Must have twelve (12) years of experience conducting biological resource investigations and helping clients to comply with laws and regulations that protect biological resources.

**Title: Senior Scientist I**

**Functional Duties/Responsibilities:** Manages complex biological resource investigations that require an expert understanding of local and regional biological resources, including specific expertise in the identification of sensitive wildlife species, rare plants, and/or the delineation of wetlands, streambeds and Waters of the U.S. pursuant to applicable laws (e.g., CWA) and regulations (e.g., USACE guidance). Prepares survey reports, habitat

restoration plans, and other biology technical reports. Helps train in-house staff and others in the identification of sensitive plant or wildlife species and/or in the assessment of sensitive biological communities (habitat types).

**Minimum Education:** A Bachelor's degree in science or geography or an equivalent combination of education and practical experience is required.

**Minimum Experience Requirements:** Must have ten (10) years of experience conducting biological resource investigations and helping clients to comply with laws and regulations that protect biological resources.

**Title:**     **Principal Regulatory Specialist**

**Functional Duties/Responsibilities:** Manages complex regulatory compliance projects requiring an expert understanding of local and regional resources and applicable statutes and regulations, including Waters of the U.S. (CCWA/USACE guidance), Waters of the State (Porter-Cologne Water Quality Control Act/Section 401 of the CWA), State and federally listed species, Essential Fish Habitat, aquatic resources, riparian and wildlife habitats covered under State Fish and Game Code, as well as cultural resources, and other resources subject to the applicable regulations and federal supplemental authorities. Develops and negotiates mitigation strategies. Manages and prepares Open Space/Preserve Long-term Management Plans, preliminary endowment estimates, and Draft Conservation Easements according to current agency standards. Coordinates with potential preserve managers. Represents HELIX and our clients in meetings with public agencies in support of project or proposal efforts. Oversees subconsultant and independent contractor activities and work by HELIX staff on projects, including coordination activities, subconsultant invoice review and approval, subconsultant performance schedules, and work product quality. Advises clients on strategies, including cost- and time-effective mitigation strategies, for compliance with the ESA, CWA, and other federal, state, and local laws and regulations that protect biological resources. Ensures quality control on work products.

**Minimum Education:** A Bachelors' degree or equivalent in an environmental science, biology or related field.

**Minimum Experience Requirements:** Must have eight (8) years of professional experience.

**Title:**     **Regulatory Specialist/Environmental Specialist**

**Functional Duties/Responsibilities:** Manages, prepares, and assists with processing of permit applications with regulatory agencies in support of development projects, including Waters of the U.S. (CWA/USACE guidance), Waters of the State (Porter-Cologne Water Quality Control Act/Section 401 of the CWA), State and federally listed species, Essential Fish Habitat, aquatic resources, riparian and wildlife habitats covered under State Fish and Game Code, as well as cultural resources, and other resources subject to the applicable regulations and federal supplemental authorities. Assists with research and preparation of compliance documents and technical studies, jurisdictional delineations, and associated documentation. Interacts with clients, agencies, and the public. Represents HELIX and our clients in meetings with public agencies in support of project or proposal efforts. Oversees subconsultant and independent contractor activities and work by HELIX staff on projects and proposals, including coordination activities, subconsultant invoice review and approval, subconsultant performance schedules, and work product quality.

**Minimum Education:** A Bachelor's degree or equivalent in an environmental science, biology or related field.

**Minimum Experience Requirements:** Must have four (4) years of professional experience.

**Title:**     **Senior Fisheries Scientist**

**Functional Duties/Responsibilities:** Provides senior-level expertise and task and project management to project teams related to fisheries issues. Conducts surveys and assess habitats for threatened, endangered and sensitive fish and aquatic species; consultations. Leads the preparation and management of fisheries biology technical reports, including impact analysis and mitigation measures. Adherence to schedules and budgets is expected. Leads the preparation of wetland permit applications and supporting materials. Leads agency negotiations related to fisheries biology, including mitigation requirements, permit conditions, and habitat restoration. Manages complex fisheries biology resource investigations that require an expert understanding of local and regional fisheries biology and related regulations. Advises clients on strategies for compliance with the ESA, CWA, and other federal, state, and local laws and regulations that protect biological resources. Leads (and provides guidance to biologists who are assisting Clients with) fisheries biology monitoring for construction/restoration projects. Leads in-house training for fisheries biology staff in the identification of sensitive species and/or in the assessment of sensitive fisheries biology communities.

**Minimum Education:** A Bachelor's degree or equivalent in fisheries, an environmental science, biology or related field.

**Minimum Experience Requirements:** Must have ten (10) years of professional experience.

**Title:** Senior Archaeologist/Archaeology Project Manager

**Functional Duties/Responsibilities:** Conducts or leads archaeological surveys, testing, and data recovery excavation as Principal Investigator. Develops research designs, data recovery plans, and preservation plans; supervises laboratory studies, including artifact cataloging and analysis. Supervises archaeological monitoring for construction projects. Leads due diligence cultural resources assessments and prepares constraints reports. Leads the preparation of technical reports, including impact analysis and mitigation measures, for multiple jurisdictions. Conducts or leads Native American coordination and consultation. Leads agency coordination for cultural resources issues. Manages complex cultural resources investigations that require an expert understanding of local and regional cultural resources issues. Advises clients on strategies for compliance with federal, state, and local laws and regulations that protect cultural resources. Provides high-quality deliverables on schedule and within budget. Manages projects and/or task orders, tracks budgets, prepares proposals and interacts with clients. Engages in senior-level management of the company; manages complex multi-disciplinary projects; provides guidance and direction to all levels of staff; conducts QA reviews; maintains good client relationships and excels in business development.

**Minimum Education:** A Master's degree in archaeology, anthropology, or a closely related field.

**Minimum Experience Requirements:** Must have 15 years of professional experience, including at least two years of full-time professional experience or equivalent specialized training in archaeological research, administration, or management. At least four months of supervised field and analytical experience in North American archaeology. Must have a demonstrated ability to carry research to completion and one year of full-time professional experience at a supervisory level in the study of prehistoric or historic archaeology.

**Title:** Field Director

**Functional Duties/Responsibilities:** Conducts or leads archaeological field studies, including surveys, testing, and data recovery excavations. Performs and coordinates archaeological monitoring. Prepares site documentation and other forms of archaeological documents. Conducts or supervises laboratory studies, including cataloging and analyzing cultural material. Conducts or supervises archaeological monitoring for construction projects. Assists with report preparation, including data gathering, research, meeting assistance, technical analysis, and report writing. Drafts memos, letters, and sections of reports. Works with Principal Investigators and firm management to manage and schedule staff archaeologists and field crew. Maintains accurate field notes and maps, project files, work logs, etc. Provides high-quality deliverables on schedule and within budget.

**Minimum Education:** A Bachelor's degree in archaeology, anthropology, or a closely related field.

**Minimum Experience Requirements:** Must have ten (10) years of experience conducting field studies, overseeing field crews, and identifying and documenting cultural resources.

**Title:**     **Staff Archaeologist**

**Functional Duties/Responsibilities:** Assists with archaeological surveys, testing, and data recovery excavations. Conducts or leads small archaeological surveys or test excavations. Assists with laboratory work, including cataloging cultural material and preparing collections for curation. Conducts archaeological monitoring for construction projects. Assists with report preparation, including data gathering, research, meeting assistance, technical analysis, and report writing. Drafts simple memos, letters, and sections of reports. Manages workload and coordinates schedule with Field Director and Senior Archaeologists, as appropriate. Maintains accurate field notes and maps, project files, work logs, etc. Provides high-quality deliverables on schedule and within budget.

**Minimum Education:** A Bachelor's degree in archaeology, anthropology, or a closely related field.

**Minimum Experience Requirements:** Must have three (3) years of experience conducting field studies, overseeing field crews, and identifying and documenting cultural resources.

**Title:**     **Architectural Historian**

**Functional Duties/Responsibilities:** Conducts historic built environment studies. Develops research designs, mitigation plans, and preservation plans. Leads due diligence architectural resources assessments and prepares constraints reports; the preparation of architectural history technical reports, including impact analysis and mitigation measures, for multiple jurisdictions; agency coordination for historic built environment issues; and manages complex architectural history investigations that require an expert understanding of local and regional historical issues. Advises clients on strategies for compliance with federal, state, and local laws and regulations that protect historic architectural resources. Provides high-quality deliverables on schedule and within budget. Manages projects and/or task orders, tracks budgets, and interacts with clients. Helps to manage the Division by participating in scheduling meetings, periodic staff meetings, operations plan review, Strategic Planning Group, and other events. Provides guidance and direction to all levels of staff regarding historic studies, architectural history, and related issues; conducts QA reviews; maintains good client relationships and excels in business development.

**Minimum Education:** A Master's degree in architectural history, art history, historic preservation, or a closely related field with coursework in American architectural history or a closely related field. Or a Bachelor's degree plus meeting the experience requirements listed below.

**Minimum Experience Requirements:** Must have ten (10) years of professional experience, including at least two (2) years of full-time professional experience in research, writing or teaching in American architectural history or restoration architecture with an academic institution, historical organization, or agency, museum, or other professional institution or a substantial contribution through research and publication to the body of scholarly knowledge in the field of American architectural history.

**Title:**     **Director of Operations (Habitat Restoration)**

**Functional Duties/Responsibilities:** Oversees habitat restoration crew activities, including crew performance and quality control. Prepares cost estimations, including plan takeoffs and labor estimations; ensures a safe working environment, including proper training and documentation; maintains Qualified Applicator's License (QAL); and maintains plant material and growing facilities/plant nurseries.

**Minimum Education:** Associates degree in Construction Management, Natural Resources, Environmental Sciences, or related field

**Minimum Experience Requirements:** Must have 10 years of professional experience in the construction or landscaping industry or related environmental field.

**Title:** Senior Project Manager (Habitat Restoration)

**Functional Duties/Responsibilities:** Manages projects, tracks budgets, interacts with clients, conveys project information to supervisory and field staff, and develops and coordinates contract augments. Ensures project quality through conducting periodic project site visits, reviews daily reports, and coordinates with field personnel regarding work product and production rates. Maintains work records as required, including pesticide notification and scheduling worksheets. Coordinates with biologists before, during, and after and preparation of daily project logs. Maintains safety standards including notifying staff of unsafe activities field activities. Prepares project photo-documentation. Assists staff with day-to-day operations including scheduling and following individual safety guidelines. Trains new employees throughout the organization

**Minimum Education:** Bachelor's degree in Natural Resources/Environmental Science or a related field.

**Minimum Experience Requirements:** Must have five (5) years of professional experience of full-time project management in habitat restoration or a related environmental field.

**Title:** Project Manager III (Habitat Restoration)

**Functional Duties/Responsibilities:** Manages projects through budget tracking, client interaction, conveying project information to supervisory and field staff, and developing and coordinating contract augments. Ensures project quality. Conducts periodic project site visits, reviews daily reports, and coordinates with field personnel regarding work product and production rates. Maintains work records as required, including pesticide notification and scheduling worksheets. Interacts with biologists including coordinating before, during, and after field activities. Prepares project photo-documentation. Assists staff with day-to-day operations including scheduling and preparation of daily project logs. Maintains safety standards, including notifying staff of unsafe activities and following individual safety guidelines. Trains new employees throughout the organization

**Minimum Education:** Bachelor's degree in Natural Resources/Environmental Science or related field.

**Minimum Experience Requirements:** Must have three (3) years of professional experience of full-time project management in habitat restoration or a related environmental field.

**Title:** Project Manager II (Habitat Restoration)

**Functional Duties/Responsibilities:** Manages projects including tracking budgets, interacting with clients, conveying project information to supervisory and field staff, and developing and coordinating contract augments. Ensures project quality through periodic project site visits, review of daily reports, and coordination with field personnel regarding work products and production rates. Maintains work records as required, including pesticide notification and scheduling worksheets. Interacts with biologists including coordinating before, during, and after field activities. Prepares project photo-documentation. Assists staff with day-to-day operations, including personnel scheduling and the preparation of daily project logs. Maintains safety standards by notifying staff of unsafe activities and following individual safety guidelines. Participates in training of new employees throughout the organization.

**Minimum Education:** Bachelor's degree in Natural Resources/ Environmental Science or related field.

**Minimum Experience Requirements:** Must have two (2) years of professional experience of full-time project management in habitat restoration or a related environmental field.

**Title:** Project Manager I (Habitat Restoration)

**Functional Duties/Responsibilities:** Manages projects including tracking budgets, interacting with clients, conveying project information to supervisory and field staff, and developing and coordinating contract augments. Ensures project quality by conducting periodic project site visits, reviewing daily reports, and coordinating with field personnel regarding work product and production rates. Maintains work records as required, including pesticide notification and scheduling worksheets. Interact with biologists including coordinating before, during, and after field activities. Prepares project photo-documentation. Assists staff with day-to-day operations including scheduling and the preparation of daily project logs. Maintains safety standards, notifies staff of unsafe activities, and follows individual safety guidelines. Participates in training of new employees throughout the organization

**Minimum Education:** Bachelor's degree in Natural Resources/Environmental Science or a related field.

**Minimum Experience Requirements:** One (1) year of professional experience of full-time project management in habitat restoration or a related environmental field.

**Title:** Assistant Project Manager (Habitat Restoration)

**Functional Duties/Responsibilities:** Assists in providing project oversight including tracking budgets, interacting with clients, and conveying project information to supervisory and field staff. Ensures project quality, including performing periodic project site visits, reviewing daily reports, and coordinating with field personnel regarding work product and production rates. Maintains work records as required, including pesticide notification and scheduling worksheets. Interacts with biologists including coordination before, during, and after field activities. Prepares project photo-documentation. Assists staff with day-to-day operations, scheduling, and preparing daily project logs. Maintains safety standards and notifies staff of unsafe activities, following individual safety guidelines

**Minimum Education:** Bachelor's degree in Natural Resources/Environmental Science or a related field (or be working towards a degree)

**Minimum Experience Requirements:** None; entry level

**Title:** Senior Restoration Supervisor (Habitat Restoration)

**Functional Duties/Responsibilities:** Creates and maintains effective schedules for projects, including planning and deploying the appropriate level of personnel, resources and equipment to complete assignments and projects. Plans and supervises project sites. Effectively handles multiple priorities and meets strict deadlines. Coordinates and manages the installation, repair, and troubleshooting of irrigation systems. Supervises and participates in assigned maintenance and construction activities. Maintains time and material records pertaining to assigned projects. Establishes and maintains effective working relationships with those contacted in the course of work, including the general public. Operates equipment, including motorized equipment. Directs crews with grading and leveling soil; digging and compaction of irrigation trenches; installation of fences; collection, installation and cutting of seeds; and planting techniques. Recommends types, sizes and arrangements of plants, trees, and irrigation systems for proposed landscape areas. Monitors and trains field staff in the safe and effective use of herbicides (mixing, loading, application, cleaning, etc.). Provides plan reading and take off. Teaches proper use and care of hand and power tools. Reports project and crew issues to the Director of Operations in a timely matter. Able to drive vehicles with trailers. Maintains a safe work environment for all employees. Maintains accurate logs and reports electronically. Provides minor electrical knowledge, expert knowledge of native and non-native plants, and experience in managing multiple crews and projects simultaneously. Must possess a valid and appropriate Driver's License and acceptable driving record, a QAL, and a CLT certification.

**Minimum Education:** High school diploma, or equivalent, preferred

**Minimum Experience Requirements:** At least five (5) or more years of experience in landscaping, horticultural, habitat restoration, or a similar industry

**Title:**     **Restoration Supervisor II (Habitat Restoration)**

**Functional Duties/Responsibilities:** Creates and maintains effective schedules for projects, including planning and deploying the appropriate level of personnel, resources, and equipment to complete assignments and projects. Provides day-to-day planning and supervision of project sites, and effectively handles multiple priorities and meets strict deadlines. Coordinates and manages the installation, repair, and troubleshooting of irrigation systems. Supervises and participates in assigned maintenance and habitat restoration activities. Maintains time and material records pertaining to assigned projects. Establishes and maintains effective working relationships with those contacted in the course of work, including the general public. Works in a team-based environment to achieve common goals. Able to use equipment, including motorized equipment. Directs crews with grading and leveling soil; digging and compaction of irrigation trenches; installation of fences; collection, installation, and cutting of seeds; and planting techniques. Participates in assigned habitat restoration activities, as needed. Recommends types, sizes and arrangements of plants, trees, and irrigation systems for proposed landscape areas. Monitors the safe and effective use of herbicides (mixing, loading, application, cleaning, etc.). Reads plans. Prepares estimations and cost sheets. Teaches the proper use and care of hand and power tools. Reports project and crew issues to the Director of Operations in a timely matter. Able to drive vehicles with trailers. Maintains a safe work environment for all employees. Maintains accurate logs and reports electronically. Maintains attention to detail and passes such knowledge on to crew through instruction and coaching. Provides minor electrical knowledge, expert knowledge of native and non-native plants, and experience in managing multiple crews and projects simultaneously. Must possess a valid and appropriate Driver's License and acceptable driving record. Must possess a QAL and have the ability to obtain a CLT certification.

**Minimum Education:** High school diploma, or equivalent, preferred

**Minimum Experience Requirements:** Four (4) or more years of experience in the landscaping, horticultural, habitat restoration, or similar industry

**Title:**     **Restoration Supervisor I (Habitat Restoration)**

**Functional Duties/Responsibilities:** Assists with creating and maintaining effective schedules for projects, including planning and deploying the appropriate level of personnel, resources, and equipment to complete assignments and projects. Provides day-to-day planning and supervision of project sites, and effectively handles multiple priorities and meets strict deadlines. Coordinates and manages the installation, repair, and troubleshooting of routine irrigation systems. Supervises and participates in assigned maintenance and habitat restoration activities. Maintains time and material records pertaining to assigned projects. Establishes and maintains effective working relationships with those contacted in the course of work, including the general public. Works in a team-based environment to achieve common goals. Able to use equipment, including motorized equipment. Directs crews with grading and leveling soil; digging and compaction of irrigation trenches; installation of fences; collection, installation, and cutting of seeds; and planting techniques. Participates in assigned habitat restoration activities, as needed. Recommends types, sizes and arrangements of plants, trees, and irrigation systems for proposed landscape areas. Monitors the safe and effective use of herbicides (mixing, loading, application, cleaning, etc.). Reads plans. Assists with estimations and cost sheets. Teaches the proper use and care of hand and power tools. Reports project and crew issues to the Director of Operations in a timely matter. Able to drive vehicles with trailers. Maintains a safe work environment for all employees. Maintains accurate logs and reports electronically. Maintains attention to detail and passes such knowledge on to crew through instruction and coaching. Provides expert knowledge of native and non-native plants and has experience in managing multiple

crews and projects simultaneously. Must possess a valid and appropriate Driver's License and acceptable driving record. Must have the ability to obtain a QAL and CLT certification.

**Minimum Education:** High school diploma, or equivalent, preferred

**Minimum Experience Requirements:** Two (2) or more years of experience in the landscaping, horticultural, habitat restoration, or similar industry

**Title:**     **Assistant Restoration Supervisor (Habitat Restoration)**

**Functional Duties/Responsibilities:** Creates and maintains an effective schedule for projects, including planning and deploying the appropriate level of personnel and equipment to complete assignments and projects. Conducts day-to-day planning and supervises project sites, effectively handles multiple priorities and meets strict deadlines. Coordinates and manages the installation, repair, and troubleshooting of irrigation systems. Supervises and participates actively in assigned maintenance and habitat restoration activities. Maintains time and material records pertaining to assigned work projects. Establishes and maintains effective working relationships with those contacted in the course of work, including the general public. Works in a team-based environment and achieves common goals. Able to use equipment, including motorized equipment. Directs crews with grading and leveling soil; digging and compaction of irrigation trenches; installation of fences; and collection, installation and cutting of seeds; and planting techniques. Recommends types, sizes and arrangements of plants, trees, and irrigation systems for proposed landscape areas. Monitors the safe and effective use of herbicides (mixing, loading, application, cleaning, etc.). Reads plans. Participates in estimations and prepares cost sheets. Teaches the proper use and care of hand and power tools. Reports project and crew issues to the Director of Operations in a timely matter. Able to drive vehicles with trailers. Maintains a safe work environment for all employees. Maintains accurate logs and reports electronically. Maintains attention to detail and pass on to crew through instruction and coaching. Provides minor electrical knowledge. Provides expert knowledge of native and non-native plants. Provides experience in managing multiple crews and projects simultaneously. Must possess a valid and appropriate Driver's License and acceptable driving record. Must possess a QAL and the ability to obtain a CLT certification.

**Minimum Education:** High school diploma, or equivalent, preferred

**Minimum Experience Requirements:** Two (2) or more years of experience in the landscaping, horticultural, habitat restoration, or similar industry.

**Title:**     **Operator (Habitat Restoration)**

**Functional Duties/Responsibilities:** Operates heavy equipment for habitat restoration projects. Excavates and compacts irrigation trenches. Delivers and picks up excavation equipment. Establishes and maintains effective working relationships with those contacted in the course of work, including the general public. Participates in the installation of irrigation systems. Mows and removes non-native plant material. Conducts finish grading and soil movement. Assists with installing fencing. Maintains accurate logs and reports electronically. Excavates auger holes for planting, and plants trees and shrubs (seeds, cuttings, and container stock). Maintains equipment. Participates in other habitat restoration activities. Performs manual work such as digging, sweeping, weeding, planting, etc. Uses herbicides (mixing, loading, application, cleaning, etc.) safely and effectively. Offers planning and organizational skills and minor electrical knowledge. Able to drive vehicles with trailers and operate heavy equipment (backhoe, ride-on trenchers, skid steer, front-end loaders, excavator, dozer, etc. Offers knowledge of native and non-native plants and the ability to read and understand grading plans. Must possess a valid and appropriate Driver's License and acceptable driving record.

**Minimum Education:** High school diploma, or equivalent, preferred

**Minimum Experience Requirements:** At least five (5) or more years of experience in the landscaping, horticultural, habitat restoration, or similar industry

**Title:**     **Foreman (Habitat Restoration)**

**Functional Duties/Responsibilities:** Responsible for the day-to-day planning and supervision of a project site, including supervising construction crews, establishing and maintaining effective working relationships with those contacted in the course of work, including the general public; and working in a team-based environment and achieve common goals. Effectively handles multiple priorities and meets strict deadlines. Operates heavy equipment; communicates, both orally and in writing, in a clear and concise manner; and operates and programs irrigation controllers. Maintains accurate logs and reports electronically; monitors crew work assignments; and supervises, coordinates, and participates in the installation of irrigation systems. Directs crews with grading and leveling of soil; digging and compaction of irrigation trenches; installation of fences; and collection, installation, and cutting of seeds. Participates in assigned habitat restoration activities and offers proper grading and planting techniques. Recommends types, sizes, and arrangements of plants, trees, and irrigation systems for proposed landscape areas. Safely and effectively uses herbicides (mixing, loading, application, cleaning, etc.) and properly operates motorized equipment. Operates heavy equipment (backhoe, ride-on trenchers, skid steer, front-end loaders, etc.) to support habitat restoration. Properly uses and cares for of hand and power tools. Repairs and troubleshoots irrigation. Reports project and crew issues to the Supervisor in a timely matter. Maintains a safe work environment for all employees. Offers planning and organizational skills; minor electrical knowledge; and knowledge of irrigation systems, such as installation, repairs, valves, etc. Offers plan reading and some take off experience and has knowledge of native and non-native plants. Manages multi-person crews. Able to obtain a CLT certification and/or a QAL license. Must possess a valid and appropriate Driver's License and acceptable driving record

**Minimum Education:** High school diploma, or equivalent, preferred

**Minimum Experience Requirements:** At least five (5) or more years of experience in the landscaping, horticultural, habitat restoration, or similar industry

**Title:**     **Restoration Lead (Habitat Restoration)**

**Functional Duties/Responsibilities:** Responsible for the day-to-day planning and supervision of a project site. Supervises maintenance crews. Establishes and maintains effective working relationships with those contacted in the course of work, including the general public. Effectively handles multiple priorities and meets strict deadlines. Works with machinery and equipment, operates and programs irrigation controllers, maintains accurate logs and reports electronically, and monitors crew work assignments. Assists crews with the removal of unwanted plant material, installs fences, and collects and propagates cuttings and seeds. Performs manual work and proper planting techniques. Recommends types, sizes, and arrangements of plants, trees, and irrigation systems for proposed landscaping areas. Safely and effectively uses herbicides (mixing, loading, application, cleaning, etc.). Participates actively in assigned maintenance activities. Programs, operates, and troubleshoots irrigation controllers and irrigation systems. Reports project and crew issues to the Lead or Supervisor in a timely matter. Maintains a safe work environment for all employees. Offers planning and organizational skills; knowledge of irrigation systems such as installation, repairs, valves, etc.; plan reading, and some take off experience; and knowledge of native and non-native plants. Offers experience leading multi-person work crews. Must possess a valid and appropriate Driver's License and acceptable driving record and the ability to obtain a CLT certification and/or a QAL license.

**Minimum Education:** High school diploma, or equivalent, preferred

**Minimum Experience Requirements:** At least four (4) or more years of experience in the landscaping, horticultural, habitat restoration, or similar industry

**Title:**     **Habitat Restoration Technician III**

**Functional Duties/Responsibilities:** Removes unwanted plant material (weeds), plants trees and shrubs (seeds, cuttings, and container stock), and assists with the installation, maintenance and repair of irrigation systems. Installs and maintains fencing and performs grading and leveling. Excavates and compacts irrigation trenches. Mixes and applies herbicides. Operates and maintains small gasoline-powered equipment. Performs manual work and proper planting techniques and operates motorized equipment. Provides irrigation repair and troubleshooting. Safely and effectively uses herbicides (mixing, loading, application, cleaning, etc.). Maintains a safe work environment for all employees. Reports project and crew issues to the Lead or Supervisor in a timely matter. Offers planning and organizational skills. Able to carry out the duties of the Maintenance Lead in the absence of the crew leader. Offers knowledge of native and non-native plants. Possesses a valid and appropriate Driver's License and acceptable driving record.

**Minimum Education:** High school diploma, or equivalent, preferred

**Minimum Experience Requirements:** At least three (3) or more years of experience in the landscaping, horticultural, habitat restoration, or similar industry

**Title:**     **Habitat Restoration Technician II**

**Functional Duties/Responsibilities:** Removes unwanted plant material (weeds); plants trees and shrubs (seeds, cuttings, and container stock); excavates and compacts irrigation trenches; assists with the installation, maintenance and repair of irrigation systems. Assists with installation and maintenance of fencing, grading and leveling, collection and pick up of trash; and mixes and applies herbicides. Operates and maintains small gasoline-powered equipment and performs manual work. Offers proper planting techniques and ensures the safe and proper use of hand tools and the proper methods of operating motorized equipment. Conducts irrigation repair and troubleshooting.

**Minimum Education:** High school diploma, or equivalent, preferred

**Minimum Experience Requirements:** At least two (2) or more years of experience in the landscaping, horticultural, habitat restoration, or similar industry

**Title:**     **Habitat Restoration Technician I**

**Functional Duties/Responsibilities:** Removes unwanted plant material (weeds); plants trees and shrubs (seeds, cuttings, and container stock); excavates and compacts irrigation trenches; and assists with the installation of irrigation systems, fencing, and grading and leveling. Collects and picks up trash, mixes and applies herbicides, maintains hand tools, performs manual work, and safely uses hand tools. Safely and effectively uses herbicides (mixing, loading, application, cleaning, etc.).

**Minimum Education:** High school diploma, or equivalent, preferred

**Minimum Experience Requirements:** 0-1 years of experience.

**Title: Nursery Manager**

**Functional Duties/Responsibilities:** Responsible for the overall management of the HELIX yard. Assigns work schedules and duties to nursery staff, trains staff members, and supervises their work. Communicates organizational policies and procedures. Positions and regulates plant irrigation systems, and programs environmental and irrigation control systems; ensures all plant material is of nursery quality; and properly and safely uses hand tools and motorized equipment. Performs manual work, lifts and/or moves heavy objects and communicates effectively with those contacted in the course of work including clients.

Included in the management and maintenance of the plant materials, the Nursery Manager:

- Determines types and quantities of horticultural plants to be grown, based on budgets, projected sales volumes, or executive directives.
- Selects and purchases seeds, plant nutrients, disease control chemicals, and garden and lawn care equipment.
- Determines plant growing conditions, such as greenhouses or natural settings, and set planting and care schedules.
- Prepares soil for planting, and plant or transplant seeds, bulbs, and cuttings.
- Prunes trees, shrubs, flowers, and plants.
- Identifies plants as well as problems such as diseases, weeds, and insect pests; label plant materials by areas collected and dates propagated.
- Applies pesticides and fertilizers to plants.
- Collects seed and cuttings.

**Minimum Education:** Associates degree in Horticulture, Botany, Environmental Sciences, or a related field

**Minimum Experience Requirements:** Eight (8) years of professional experience in the horticultural, nursery, or environmental industry.

**Title: Nursery Technician**

**Functional Duties/Responsibilities:** Grows plant material for future habitat restoration projects; labels plant materials by areas collected and dates propagated; collects seeds and cuttings; maintains watering systems at Construction Group facilities; and ensures all plant material is of nursery quality. Safely and properly uses hand tools and motorized equipment and performs manual work, lifts and/or moves heavy objects, and communicates effectively with those contacted in the course of work.

**Minimum Education:** High school diploma, or equivalent, preferred

**Minimum Experience Requirements:** 0-1 years

**Title: Senior Landscape Architect**

**Functional Duties/Responsibilities:** Prepares landscape plans, including complex site layouts and habitat restoration plans. "Stamps" landscape architecture plans and specifications. Prepare cost estimates. Oversees work of less senior landscape architects and landscape designers. Prepares visual resource impact analyses.

**Minimum Education:** A Bachelor's degree in landscape architecture or planning or an equivalent combination of education and practical experience is required.

**Minimum Experience Requirements:** Minimum of ten (10) years of experience providing landscape architecture services.

**Required/Supplemental Certifications:** Must be licensed to practice landscape architecture in the State of California.

**Title: Project Landscape Architect**

**Functional Duties/Responsibilities:** Prepares landscape plans, including site layouts. Helps to prepare habitat restoration plans. “Stamps” landscape architecture plans and specifications. Helps prepare cost estimates and visual resource impact analyses.

**Minimum Education:** A Bachelor’s degree in landscape architecture or planning or an equivalent combination of education and practical experience is required.

**Minimum Experience Requirements:** Minimum of three (3) years of experience providing landscape architecture services and demonstrated working knowledge of CAD software.

**Required/Supplemental Certifications:** Must be licensed to practice landscape architecture in the State of California.

**Title: Assistant Landscape Designer**

**Functional Duties/Responsibilities:** Assists landscape architects with the preparation of landscape plans and visual resource analyses.

**Minimum Education:** A Bachelor’s degree in landscape architecture or planning or an equivalent combination of education and practical experience is required.

**Minimum Experience Requirements:** Must have working knowledge of CAD and/or visual photo-simulation software.

**Title: Graphics Coordinator**

**Functional Duties/Responsibilities:** Prepares graphic displays of information and helps prepare (non-GIS) maps and report figures. Oversees preparation of display boards for public meetings and coordinates with vendors involved in the production of graphic materials such as project “fact sheets” and brochures.

**Minimum Education:** High school degree or GED.

**Minimum Experience Requirements:** Minimum of five (5) years of experience working with graphics computer programs and preparing graphics/report figures for environmental compliance projects or similar (graphics experience in non-environmental industries may be applicable).

**Title: Senior GIS Specialist**

**Functional Duties/Responsibilities:** Provides GIS support to outside clients and to technical specialists within HELIX. Manages spatial databases, imports data from other software into GIS systems, coordinates with vendors (such as GIS software providers and digital aerial imagery providers), manipulates data, conducts 2-D and 3-D spatial modeling, converts resource mapping into vector data, prepares meta-data consistent with federal and other applicable documentation requirements, assesses potential effects to environmental resources by overlaying project features with mapped resources, and generates maps and other graphical displays of project elements and impacts. Directs the work of other GIS specialists as required; conducts QA reviews of internal and external GIS work products.

**Minimum Education:** A Bachelor’s degree in science, geography, engineering, or planning or combination of education and practical experience is required.

**Minimum Experience Requirements:** Minimum of six (6) years of experience using GIS to manipulate and display spatial data.

**Title:** GIS Specialist III

**Functional Duties/Responsibilities:** Provides GIS support to outside clients and to technical specialists within HELIX. Manage spatial databases, imports data from other software into GIS systems, coordinates with vendors (such as GIS software providers and digital aerial imagery providers), manipulates data, conducts 2-D and 3-D spatial modeling, converts resource mapping into vector data, prepares meta-data consistent with federal and other applicable documentation requirements, assesses potential effects to environmental resources by overlaying project features with mapped resources, and generates maps and other graphical displays of project elements and impacts.

**Minimum Education:** A Bachelor's degree in science, geography, engineering, or planning or combination of education and practical experience is required.

**Minimum Experience Requirements:** Minimum of four (4) years of experience using GIS to manipulate and display spatial data.

**Title:** GIS Specialist II

**Functional Duties/Responsibilities:** Provides GIS support to outside clients and to technical specialists within HELIX. Manages spatial databases, imports data from other software into GIS systems, manipulates data, converts resource mapping into vector data, prepares meta-data consistent with federal and other applicable documentation requirements, assesses potential effects to environmental resources by overlaying project features with mapped resources, and generates maps and other graphical displays of project elements and impacts.

**Minimum Education:** A Bachelor's degree in science, geography, engineering, or planning or combination of education and practical experience is required.

**Minimum Experience Requirements:** Minimum of two (2) years of experience using GIS to manipulate and display spatial data.

**Title:** Senior Technical Editor

**Functional Duties/Responsibilities:** Reviews technical reports for style and clarity, grammar, word usage, consistency with client and/or resource agency guidelines (if applicable) and consistency with HELIX's internal style guidelines. Helps to develop and update internal style guidelines.

**Minimum Education:** A Bachelor of Arts or Bachelor of Science degree or an equivalent combination of education and practical experience is required.

**Minimum Experience Requirements:** Must have five (5) years of technical editing experience with a demonstrated increase in proficiency over time.

**Title:** Technical Editor

**Functional Duties/Responsibilities:** Reviews technical reports for style and clarity, grammar, word usage, and consistency with applicable style guidelines.

**Minimum Education:** A Bachelor of Arts or Bachelor of Science degree or an equivalent combination of education and practical experience is required.

**Minimum Experience Requirements:** None.

**Title: Word Processor**

**Functional Duties/Responsibilities:** Converts hand-written text and hand-written edits to documents into typed text using word processing programs. Formats documents for production in-house or by outside reprographic vendors. Produces bound copies of reports and produces copies of reports on CD in Adobe Acrobat (pdf) format.

**Minimum Education:** High school degree or equivalent.

**Minimum Experience Requirements:** No minimum years of experience but must be able to demonstrate working knowledge of word processing software such as Microsoft Word.

**Title: Clerical**

**Functional Duties/Responsibilities:** Provides clerical support, including filing and mailings.

**Minimum Education:** None.

**Minimum Experience Requirements:** None.

**Note:** Five (5) years of related experience may be substituted for a bachelor's degree where applicable.

SERVICE CONTRACT LABOR STANDARDS MATRIX

SCLS Eligible Labor Categories Category/Fixed Price Service	SCLS Equivalent Code Titles	Wage Determination No's
Clerical	01112 – General Clerk II (San Diego County)	2015-5636
Word Processor	01612 – Word Processor II (San Diego County)	2015-5636

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).

## Executive Summary

HELIX Environmental Planning, Inc. (HELIX) is a California-based environmental consulting firm with expertise in a broad range of environmental planning services. Established in 1991, HELIX has extensive experience helping government agencies comply with environmental laws and regulations, manage natural resources, and site/design facilities in an environmentally sensitive manner. HELIX provides environmental planning services throughout the western United States and beyond. Creative problem-solving, a high level of commitment to our clients, and high-quality work products are the hallmark of our success.

HELIX's areas of expertise include compliance with the National Environmental Policy Act (NEPA), Endangered Species Act (ESA), Clean Water Act (CWA), Coastal Zone Management Act, Clean Air Act, and Executive Orders related to wetlands and floodplains, Environmental Justice, and health risks for children. We also routinely help clients comply with National Historic Preservation Act (NHPA) requirements. HELIX's biologists are permitted to survey for a wide range of federally listed Threatened and Endangered species.

HELIX staff work with public agencies to prepare natural resource management plans, habitat conservation plans (HCPs), cultural resources management plans, area-specific management directives, and related management plans for public lands. We also have specific expertise in the preparation and implementation of natural habitat restoration plans. Our staff can provide a wide range of services, from the development of conceptual restoration plans to the preparation of detailed designs, specifications, and estimates. HELIX's natural resource experts work closely with our wholly owned subsidiary, HELIX Environmental Construction Group, Inc., which specializes in the installation and maintenance of native habitats. Accordingly, our staff have a keen understanding of what works

and what does not when it comes to resource management and habitat restoration. Our cultural resources staff has considerable experience in conducting the full range of archaeological and historical resource studies for prehistoric and historical sites and the historic built environment.

Our Geographical Information System (GIS) services are well integrated with our environmental planning and natural resource management capabilities. HELIX provides comprehensive GIS services either as a stand-alone service to our customers or as an integrated component of multi-disciplinary environmental planning efforts.

HELIX's strong track record of repeat clients—including federal agencies—is evidence of the excellent service we provide on all our projects. Through our GSA contract, we look forward to the opportunity to continue and expand our strong working relationship with the federal government.

### Environmental Planning and Documentation

HELIX manages the environmental regulatory process and documentation requirements for both large- and small-scale programs, including military, public works, utilities, and private development projects. Services offered under this SIN are typically initiated during early project planning and continue through development and operation. Specific services offered by HELIX include:

- Environmental screening of potential development or facility sites and designs,
- Identification of key environmental issues,
- Jurisdictional responsibilities, permit, and documentation needs,
- Assistance in developing environmental compliance strategies and environmentally preferred project sites and designs,
- Project implementation.

HELIX also provides services ranging from issue-specific focused analyses (e.g., surveys for sensitive species) to the preparation of full environmental documents under general environmental services contracts, providing services on an as-needed basis. In other cases, HELIX has overall responsibility for large-scale project environmental documentation and permitting phases. HELIX assembles consultant teams, directs consultant work efforts, and produces and/or reviews deliverables. Of critical importance to a project's success is HELIX's participation in project strategy meetings, meetings with regulatory agencies, and mediation of issues.



### NEPA Compliance

HELIX has extensive experience in the preparation of compliance documents for a wide range of projects under the requirements of the NEPA and the CEQA. The types of documents that have been prepared by HELIX include:

- Categorical Exclusions/Exemptions
- Preliminary Environmental Assessments (PEAs)
- Environmental Assessments (EAs)
- Environmental Impact Statements (EISs)
- Initial Studies (ISs)
- Negative Declarations (NDs)

- Findings of No Significant Impact (FONSIs)
- Environmental Impact Reports (EIRs)
- Joint EPA/CEQA documents

HELIX prepares NEPA and CEQA public notices, directs public scoping meetings, and (as necessary) defends documents in public hearings. This expertise has been applied to important public and private development projects, including major infrastructure and mixed-use development projects, many of which have been highly controversial. HELIX staff members have prepared NEPA and CEQA documents for many types of projects, including:

- Military installations
- Water storage and distribution systems
- Wastewater treatment and re-use facilities
- Residential subdivisions and their associated utility infrastructure
- Public transit and rail lines, bridges, and highway transportation projects
- Ocean engineering and marina projects
- International border crossings
- Solid waste transfer, disposal and recycling facilities
- Oil drilling and fuel storage facilities
- Industrial parks
- Mining projects and mine reclamation plans
- Institutional facilities such as university master plans, schools and correctional facilities
- Electrical generation and transmission facilities
- Telecommunications facilities

### Biological Resources Studies

HELIX staff includes biologists with skills in resource management, botany, mammalogy, ornithology, herpetology, wetland ecology, restoration ecology and environmental permitting. The company's experienced staff have collectively completed hundreds of biological inventories and environmental documents ranging from small development projects to large-scale specific plans and resource planning efforts. HELIX regularly conducts surveys for sensitive plant and animal species, biological baseline studies, wetland delineations, ecological research, construction monitoring, mitigation monitoring, resource management planning and environmental impact assessments. HELIX works regularly with both the public and private sectors on monitoring and surveying development-related projects, including landfills; military bases; large- and small-scale housing and commercial developments; road, highway, and other civil projects; pipeline and powerline alignment studies; and parks and recreation facilities. HELIX's specialists and consulting biologists hold U.S. Fish and Wildlife Service (USFWS) permits for:



- Threatened Species (e.g., coastal California gnatcatcher, desert tortoise, California tiger salamander)
- Endangered Species (e.g., least Bell's vireo, Quino checkerspot butterfly, vernal pool branchiopods [fairy shrimp], southwestern willow flycatcher)

HELIX specialists and consulting biologists also hold Scientific Collectors Permits and a Memorandum of Understanding to survey for coastal California gnatcatcher, least Bell's vireo, southwestern willow flycatcher and western yellow-billed cuckoo from the California Department of Fish and Wildlife (CDFW). Specifically, HELIX provides biological expertise in several areas of regulatory compliance including Sections 4(d), 7 and 10 of the ESA; Section 404 of the CWA; and Sections 2081 and 1600 of the California Fish and Game Code.

### Fisheries and Aquatic Resource Studies

HELIX's qualified aquatic biologists and fisheries scientists are experienced with federal- and state-listed fish and other sensitive aquatic species. We routinely conduct habitat assessments and focused surveys for a wide variety of aquatic species within most habitats and are well versed with regulatory requirements. We specialize in anadromous and resident salmonids (e.g., Chinook salmon, Coho salmon, steelhead, and cutthroat trout), and other native and non-native species. HELIX's fisheries services span freshwater, marine, and estuarine habitats and include:

- Aquatic ecology
- Threatened, endangered, and special-status fish species
- Fish population dynamics and modeling
- Fish passage and engineering support
- Fish movement and behavior
- Acoustic tagging
- DIDSON and ARIS sonar cameras
- Aquatic habitat assessment
- Mapping and spatial information
- Spawning gravel and large woody material assessment, augmentation and placement
- Benthic macroinvertebrate bioassessments – Surface Water Ambient Monitoring Program (SWAMP)
- State and Federal ESA compliance
- CWA compliance
- Environmental permit acquisitions
- Water quality
- Underwater sound assessment

HELIX conducts fisheries population assessments using electrofishing, snorkeling, seining, trapping, and remote sensing methodologies, including Passive Integrated Transponders (PIT) and acoustic tagging and DIDSON/ARIS sonar cameras. Our aquatic biologists and fisheries scientists have training and expertise in benthic macroinvertebrate (i.e., SWAMP) sampling, sensitive amphibian species survey, and water quality sampling. We are routinely approved by the National Marine Fisheries Service (NMFS), USFWS, and CDFW to oversee special-status fish species relocation actions, assist project engineers with planning and conducting dewatering actions, and provide the necessary gear and staff for freshwater and estuarine special-status fish



relocation projects. Additionally, we evaluate aquatic habitat, especially for spawning and rearing salmonids. Our biologists can inventory and predict stream habitat conditions, based on model output (e.g., River2D, PHabSim, and HEC-RAS).

HELIX is a trusted advisor for environmental compliance and permitting. With comprehensive services, we provide necessary input to project engineers for successful stream restoration design. We are experts in NEPA, Federal Energy Regulatory Commission (FERC) hydroelectric relicensing, and state and federal ESAs, as well as CEQA. HELIX routinely manages and prepares USFWS and NMFS biological assessments and supports Section 7 consultation for special-status fish and wildlife species. We have extensive experience in environmental document preparation for permitting of water development projects, including FERC Exhibit E documentation (hydroelectric relicensing), and CWA Sect. 401 and 404 certifications.

### Archaeological Studies

HELIX staff includes archaeologists with skills in the fields of cultural resources management, prehistoric and historical archaeology, history, and special studies, including lithic analysis, GIS, scientific illustration, and Native American consultation. The company's experienced cultural resources staff have collectively completed hundreds of archaeological surveys, site evaluations, data recovery efforts, and mitigation monitoring programs. HELIX regularly conducts surveys for compliance with NEPA and state and local agency requirements; records searches and archival research; Native American consultation; site evaluations and mitigation programs; and management planning studies such as preservation plans. HELIX's archaeologists are permitted by the Bureau of Land Management (BLM) for archaeological studies throughout California.

HELIX provides archaeological expertise in several areas of regulatory compliance including NEPA, sections 106 and 110 of the NHPA, the Archaeological Resources Protection Act, Native American Graves Protection and Repatriation Act, the Antiquities Act of 1906, and state and regional cultural resources requirements.

### Architectural History

HELIX's qualified architectural historians offer experience in preservation planning and administration adhering to the Secretary of the Interior's Standards for the Treatment of Historic Properties, archival research, local non-profit consultation, oral history interviews and transcription, writing historic context statements and narratives, historic resource management, curation, and interpretation, preparation of National Register of Historic Places and National Historic Landmark nominations, Historic American Building Survey (HABS) documentation, Historic American Engineering Record (HAER) documentation, Historic American Landscapes (HALs) documentation, and architectural and large-format photography.

HELIX offers qualified architectural historians to survey, identify, inventory, document, research, evaluate, and mitigate impacts to historic built environment resources including buildings, structures, landscapes, districts, and objects (resources). Our architectural history services include the identification and recordation of historic resources, including resource setting and character-defining features. Historic resource assessments include property- and resource-specific archival research, preparation of relevant historic contexts, thorough significance and integrity evaluations, and creative



mitigation recommendations. Report types prepared by our team include Historical Resources Evaluation Reports, Historic Property Survey Reports, Historic Building Assessment Reports, Condition Assessment Reports, Treatment of Historic Property Reports (preservation, rehabilitation, restoration, and reconstruction), and cultural resources Phase I and II reports, to satisfy compliance requirements under Section 106 of the NHPA, CEQA, and local government preservation ordinances.

### Habitat Conservation Plans

HELIX biologists and planners are experienced in the preparation and processing of HCPs. Our staff have been involved in several HCPs of varying sizes. Activities typically include coordinating stakeholder (participant/agency) involvement, preparing the HCP and associated EA, negotiating with the wildlife agencies regarding appropriate conservation measures, responding to public comments, and arranging for ongoing biological management of preserve areas. In addition to understanding the biology of sensitive species, HELIX possesses the knowledge and experience necessary to steer HCPs successfully through the oftentimes complex approval process.

### Habitat Restoration & Revegetation Services

HELIX biologists are experienced in the restoration and enhancement of native habitats. HELIX is involved in all aspects of habitat restoration including development of conceptual plans and preparation of construction drawings (plans, specifications, and estimates). HELIX Environmental Construction Group, our wholly owned subsidiary, installs restoration projects and provides long-term restoration site maintenance. HELIX staff have been involved in dozens of successful upland and wetland habitat restoration projects. HELIX has prepared habitat restoration projects for a wide variety of habitats (including riparian woodland, coastal sage scrub, vernal pools, saltmarsh, etc.) and individual species. Typical restoration projects include preparation of conceptual and final restoration plans, construction documents, biological oversight of site preparation and installation, and long-term biological monitoring and preparation of annual reports. In addition to their knowledge of native habitats and restoration, HELIX staff possess an understanding of federal, state, and local regulatory requirements for successful restoration projects.

HELIX's habitat restoration team offers native habitat restoration services including site selection and habitat restoration planning, site preparation and weeding, Best Management Practices (BMP) installation, irrigation system planning and installation, plant propagation, planting, plant establishment and long-term maintenance services. HELIX maintains a California Class A and C-27 Landscape contractor's license (#831496), and multiple California Qualified Applicator's Licenses (QAL), and Qualified Storm Water Pollution Prevention Plan (SWPPP) Practitioner (QSP) certifications. HELIX also employs full-time restoration ecologists, project managers, and implementation and maintenance field crews, and maintains a native plant nursery that specifically collects seed and exclusively propagates plant material for habitat restoration projects throughout the western United States. Successful habitat restoration requires a tailored approach to address unique, site-specific, and often complex challenges, and ultimately meet the needs of a variety of stakeholders. It also requires a planning and construction team that can quickly adapt to a variety of issues and produce solutions that not only look good on paper but will be cost-effective and practical during implementation. No two projects are alike, and as such, HELIX's habitat restoration experience spans a variety of habitats, geographic areas, and project sizes. Our focus includes on-site



Before restoration



After restoration

habitat revegetation of areas temporarily disturbed during project construction, on-site and off-site habitat restoration of previously disturbed areas, creation of new habitat, and enhancement of existing habitat.

Providing a full range of habitat restoration and revegetation services for more than 28 years, HELIX has the necessary team in place that can take your project through all the environmental requirements to final sign-off. Our habitat construction team works side-by-side with our biologists, landscape architects, and environmental planners throughout the planning, design, and implementation phases of a project to ensure a seamless transition, necessary compliance, and successful completion.

HELIX is involved in all aspects of habitat restoration including:

- Identification and evaluation of potential sites
- Conceptual design and constructability reviews
- Permitting and agency coordination
- Site preparation
- Sensitive species surveys
- Long-term maintenance and monitoring
- Native plant nursery services
- Construction Drawings
- Rare plant propagation and salvage
- Habitat installation, planting, and seeding
- Invasive plant eradication
- Erosion control
- Long-term management
- Fuels and brush management

### Adaptive Management

From upland to wetland restoration, projects completed by HELIX have involved transplantation of individual plant species for desert/xeric shrubland areas (such as cactus, agave, and ocotillo), and coastal/montane areas (including ambrosia, brodiaea, dudleya, and goldenstar). Our adaptive approach has led us to include several progressive techniques such as prescribed burning, which involves complex coordination with regulatory and fire agencies, development of a burn plan, and preparation of smoke management plans. Through our comprehensive services; knowledge of federal, state, and local regulatory requirements; relationships developed with agencies at every level; and insight gained from the many projects that we have successfully completed, HELIX has become the go-to consultant in California for the design and implementation of habitat restoration projects.

Members of HELIX's Construction Group are fully trained in habitat restoration practices, including native and non-native plant identification, seed collection and plant propagation, herbicide application (QAL holders), invasive exotic species removal techniques, site preparation, irrigation installation, planting, seeding, and the installation and maintenance of erosion control devices. Our Project Managers and field crews are experienced in the restoration of native habitat types, including woodland forest, riparian, wetland, vernal pool, scrub shrub, desert, grassland, tidal wetlands, and more.

HELIX's nursery exclusively specializes in the collection of location-specific seed and cultivation of native species specifically for habitat restoration projects. Our nursery is capable of growing tens of thousands of plants of various sizes for specific projects, clients, and geographic regions. HELIX is also capable of establishing on-site nurseries for

projects that demand locality, volume, and specificity and where an on-site nursery is advantageous to our clients' needs.

### Regulatory Permitting and Agency Coordination

HELIX has extensive experience with resource-based legislation, land development procedures, and permit processing requirements and has prepared numerous NEPA/CEQA reports for local, state, and federal lead agencies. Our firm has participated directly in a variety of resource-oriented permit processes and mitigation program planning efforts including projects under the jurisdiction of many federal, state, and local public agencies. These include:

- U.S. Army Corps of Engineers
- U.S. Bureau of Land Management
- U.S. Environmental Protection Agency
- U.S. Forest Service
- California Coastal Commission
- California Department of Fish and Wildlife
- California State Water Resources Control Board
- Regional Water Quality Control Boards
- Regional Air Quality Control Boards and Air Pollution Control Districts

HELIX's regulatory specialists manage complex regulatory compliance projects requiring expert understanding of local and regional resources and applicable statutes and regulations, including Waters of the U.S. (CWA/USACE guidance), Waters of the State (Porter-Cologne Water Quality Control Act/Section 401 of the CWA), State and federally listed species, Essential Fish Habitat, aquatic resources, riparian and wildlife habitats covered under State Fish and Game Code, as well as cultural resources, and other resources subject to the applicable regulations and federal supplemental authorities. Regulatory services provided by HELIX include researching and preparing compliance documents and/or technical studies, as related to CEQA, NEPA, and other various federally funded undertakings. Regulatory services offered by HELIX include assisting with documentation, technical editing, production, and submittal of delineation of wetlands, streambeds, and Waters of the U.S. and other environmental documents pursuant to applicable laws (e.g., CWA) and regulations (e.g., USACE guidance). We prepare and process CWA and California Fish and Game Code permit applications, lead federal and state ESA consultations and permitting, and develop and negotiate mitigation strategies. HELIX's Regulatory Specialists manage and prepare Open Space/Preserve Long-term Management Plans, preliminary endowment estimates, and Draft Conservation Easements according to current agency standards; coordinate with potential preserve managers; advise clients on strategies, including cost- and time-effective mitigation strategies, for compliance with the ESA, CWA, and other federal, state, and local laws and regulations that protect natural and cultural resources.



### Mitigation Monitoring Programs

HELIX has experience both with the design of Mitigation Monitoring and Reporting Programs and their implementation in the field. These programs are prepared in consultation with the project NEPA and/or CEQA Lead Agency and affected regulatory agencies and often incorporate project permit conditions. Specific mitigation measures, success criteria and the parties responsible for carrying out the measure and reporting requirements are identified. Monitoring programs are prepared for a variety of projects including large-scale land developments, water reservoirs, water reclamation facilities and ocean outfall construction.



### Landscape Architecture

HELIX's landscape architecture expertise is complementary to many of the other services we provide. Our landscape architecture group provides an integral part of the firm's native habitat restoration services, including conceptual design and construction documents. HELIX's licensed landscape architects work closely with our biologists and installation group to achieve successful design and construction solutions for restoration projects. HELIX staff also specializes in urban creek restoration. Our landscape architects are experienced with outdoor environmental learning centers, visual impact assessment studies, park planning and design, and site planning. We have provided clients with interpretive plans, signage and brochures and assisted in the design and construction of large- and small-scale interpretive centers.



### Natural Resource Interpretation and Public Education Services

HELIX provides interpretive/education plans and programs as well as interpretive displays. Interpretation is often an element of mitigation and habitat management plans and adds value to development projects. Resource agencies often require projects to include public education and interpretation components. A key to the long-term conservation of natural resources is to get the surrounding community to understand their importance and preservation.



HELIX identifies important biological resources to be interpreted with trail maps, interpretive signs and educational brochures, and then develops programs that do so. An Interpretive Master Plan is often a development-wide plan that includes maps, signs and brochures which focus on listed and sensitive species of plants and animals, conservation measures and wildlife corridors. Effective interpretive and education programs which HELIX has designed and implemented include:

- Providing and enhancing recreational uses
- Helping to conserve listed and sensitive species and their habitats
- Facilitating public uses that are compatible with the protection and preservation of natural resources in conformance with HCPs
- Increasing public awareness
- Discouraging illegal and unauthorized activities
- Helping to ensure the biological integrity of open space

### Acoustics, Vibration, and Noise Studies

Our acoustical specialists prepare technical studies that help our clients comply with applicable local, state and federal environmental regulations, including local noise ordinances, NEPA, CEQA, and the state and federal ESAs. Most frequently, these studies focus on predicting transportation and construction equipment noise impacts on sensitive uses such as residential developments or recreational areas. In addition to evaluating the impact of noise on humans, HELIX specializes in evaluating noise impacts on wildlife, especially Threatened and Endangered species. We also offer monitoring services to ensure that specified noise level goals are achieved. Our architectural acoustics services include initial and ongoing planning and regulatory submittals for Community Standards and Building Code Requirements.



The industrial noise control design services focus on assisting industry compliance with local, state, and federal regulations. In this capacity, we have conducted studies for a variety of industrial uses including public utilities, diesel engine and turbine prime and backup power systems, and manufacturing facilities. Our services typically begin with an evaluation of the expected or actual noise generated by sources such as compressors, generators, pump stations, turbines, and air handling systems. Once the noise potential is identified, our noise specialists make specific recommendations for noise control solutions that are not only successful but cost-effective as well.

### Air Quality and Greenhouse Gas Studies

HELIX conducts air quality and air pollution analyses for environmental documents and impact statements. We prepare air quality impact analyses that meet federal and state requirements, regional air authority regulations, and the transportation conformity requirements and general conformity requirements of the Clean Air Act Amendments of 1990. We are also experienced with the permitting and compliance aspects of air quality management for existing and proposed stationary emission sources.



Our air quality specialists also analyze greenhouse gas (GHG) emissions and pollutant concentrations from mobile, area, and point sources as they relate to climate change. The HELIX air quality staff have over 20 years of experience providing air quality and related services for a wide range of projects including land use developments, highways, electricity generation, transmission lines, utility pipelines, public transit, marine ports, and airports, for a variety of government and industrial clients.

HELIX provides analyses of air quality, climate change and health risk, including:

- Emissions inventories for criteria pollutants, GHG, and air toxins for stationary, mobile, and area sources
- Air quality permitting and compliance planning for New Source Review, Prevention of Significant Deterioration, Title V, and Toxic Air Contaminant programs and for compliance with the NEPA and CEQA processes
- Dispersion modeling and impact analysis employing state-of-the-art, agency approved models
- Emission estimating models include: CATEF, CalEEMod, EMFAC, OFFROAD, MOBILE, and MOVES
- Air quality dispersion models include: AERMOD, ISCST3, SCREEN3, CALINE4, CAL3QHC, and EDMS

- Health risk models include APEX, HARP, HAPEM, and TRIM
- Air Quality Technical Studies
- General Plan Air Quality Elements
- Impact analysis and mitigation, including development of control strategies, technology evaluation, and emissions offset analysis

### Public Involvement Programs

In conjunction with its environmental projects, HELIX staff conduct public scoping meetings, respond to public concerns during public meetings and hearings, conduct public opinion surveys, meet with neighborhood and special interest groups, design public information programs and emergency evacuation programs, develop public agency and property owner mailing lists, prepare and distribute public notices, respond to public comments, and advise clients regarding the best public involvement strategies. HELIX also presents technical reports in formal public hearings. Additionally, HELIX has provided expert witness testimony, and participated on panels, planning commissions, and special committees.



### Land Use Planning/Facility Siting

HELIX staff have prepared local and regional land use planning documents, including general plan elements, specific and recreational plans, land use inventories, zoning and subdivision ordinances, relocation plans, local coastal programs, and land use impact studies. Our work has also included the preparation of facility siting studies to aid clients in the siting of developments in environmentally or politically sensitive settings. HELIX's staff are knowledgeable regarding land use law. HELIX's land use impact studies typically address the compatibility of a proposed project with surrounding existing and planned land uses as well as compatibility and compliance with local general plans and zoning.



### Geologic and Hydrologic Investigations

HELIX staff have performed numerous investigations under federal, state, and local guidelines related to the disposition of water rights issues and mining laws, mineral resource potentials, site-specific mineral exploration and development activities, and environmental analysis of geologic and hydrologic resources. HELIX's in-house geologist is knowledgeable regarding technical geologic, mineral and hydrologic resource values, federal mining laws, water rights legislation and judicial policy, NEPA, pertinent Code of Federal Regulation (CFR) titles, Federal Land Policy and Management Act and applicable Titles of the California Code of Regulations (e.g., Titles 22 and 23). Specific application of this expertise has involved mineral resource inventories for major planning and land disposal efforts, technical environmental and economic evaluations of mineral exploration and development activities (including mineral patent examinations), analysis of geotechnical and hydrologic impacts for proposed land use and development actions and investigation of complex mining law and water rights issues on federal lands.



## Water Quality Investigations

HELIX staff have conducted numerous technical evaluations of water quality effects for projects involving federal, state, and local jurisdictions. Studies conducted have included review and interpretation of existing literature and water quality data, evaluation of project-related erosion/sedimentation impacts, identification of applicable regulatory standards (e.g., National Pollutant Discharge Elimination System) and associated project design requirements, calculation of highway generated contaminants, research of historical development patterns and related water quality effects upon watersheds, and assessment of project impact levels and mitigation options. HELIX staff have prepared water quality assessments under NEPA guidelines for a variety of projects, including bridges and pipelines crossing major drainage courses, shoreline stabilization efforts, coastal development projects, major roadways, wastewater treatment and disposal facilities, landfill construction and reclaimed water use.

HELIX's QSP Practitioner/Qualified SWPPP Developer (QSD) (QSP/QSD) staff provide field monitoring and inspection services for water quality impact and mitigation efforts related to regulatory permit requirements. This includes assessment of erosion-related water quality/biological effects and monitoring/reporting for construction activities and associated water quality BMPs. These efforts also include assessments of compliance with stated permits/approval conditions as well as evaluation of BMP effectiveness and recommendations for remedial facilities and/or actions where appropriate.

## Aesthetics/Visual Analysis

HELIX has extensive experience addressing aesthetics impacts, including degradation of scenic views, view blockage, and the related issues of light, glare, and shadow impacts. HELIX staff have determined viewsheds and key observation points, taken photographs, determined community values regarding views and architectural designs, determined the degree of potential view interruption or degradation, ascertained the length and configuration of shadows at various times of the year, identified potential sources of light and glare and potential sensitive receptors, provided graphic depictions of existing views and anticipated view impacts (including computer visual simulations) and provided appropriate mitigation recommendations to reduce impacts to less than significant levels. Due to the subjectivity of this issue, public comments are often a factor in determining the significance of project impacts.



Existing Site



Visual Simulation of  
Proposed Action

## Geographic Information System (GIS) Services

HELIX's in-house Geographic Information Systems (GIS) group provides a wide range of conceptual design and mapping services that combine field data collection with the use of mobile Global Positioning System (GPS) units and high-resolution digital aerial photographic coverage. Depending on the needs of our clients and projects, HELIX can present spatial analysis in the form of maps, charts, or tables. By visually representing geographic information and its associated characteristics and attributes, clients have a multitude of options for communicating project information. HELIX provides a full range of comprehensive GIS consulting services, including data creation for integration and asset management software; inventory analysis; mobile device applications (including iPad and other tablets); 3D and spatial analysis and mapping; terrain modeling and analysis; resource mapping; field data acquisition/GPS data; and GIS, AutoCAD, and MicroStation data acquisition and manipulation, as well as training in all of these skills. Applications used include ArcGIS 10.x, AutoCAD, MicroStation, and Adobe Creative Suite.

