



Proposal

Construction Management and Inspection Services
Fort Bragg Lift Station Project



PREPARED FOR:

City of Fort Bragg
416 North Franklin Street
Fort Bragg, CA 95437

DATE:

March 2019

PREPARED BY:

SHN
335 S. Main St.
Willits, CA 95490-3977

#419000.020

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Reference: 419000.020

March 7, 2019

City of Fort Bragg
Attn: June Lemos, CMC, City Clerk
416 North Franklin Street
Fort Bragg, CA 95437

Subject: Proposal for Construction Management and Inspection Services for the Fort Bragg Sewer Lift Station Project #2019-01, Fort Bragg, California

Dear Ms. Lemos:

Thank you for the opportunity to propose our services for this work, but also thank you for your trust in SHN in past projects. The City of Fort Bragg (City) is an important client to us, and we very much wish to continue assisting the City in its infrastructure needs. Of course, part of our motivation is professional, but as residents of the coast and in Mendocino County, we also derive a sense of pride in our ability to design and construct lasting improvements for the benefit of our communities. With this proposal, we are confident that we will demonstrate that we will continue to provide excellent engineering, construction management and inspection, surveying, geologic, and planning/permitting services.

We propose Jason Island, PE, as the Resident Engineer and Construction Manager for this project. Jason and City staff have developed clear lines of communication during previous City projects, made easier by Jason living on the coast. Jason also currently serves as SHN's Resident Engineer and Construction Manager for the City's ongoing wastewater treatment plant (WWTP) construction project. For the role of Resident Construction Inspector, we propose that Steve Peckham be responsible for daily construction inspections, testing, and reporting. Steve was the construction inspector on four previous City projects, including the Coastal Trail Phase II and Summers Lane Reservoir Liner Installation projects, and the WWTP construction project. Mike Veach, PE, who has more than three decades of engineering experience, will serve as our team's electrical and control systems advisor. Our technical team is rounded out by Tom Herman, PLS, who we propose as the Principal-in-Charge/Project Manager for project coordination and our Quality Assurance/Quality Control reviewer.

SHN is a small business (staffing 105 employees) but we assure the City that, should we be awarded this project, we have sufficient staff resources. We anticipate that Jason and Steve will be able to work simultaneously on this upcoming project as well as the City's ongoing WWTP project. Jason and Steve will be able to spend most of their time on technical matters because we also plan to assign two administrative staff to manage records and documentation and to assure that funding requirements are met. Jason and Steve would also be supported by our team of special inspectors and materials lab technicians.



June Lemos

**Proposal for Construction Management and Inspection Services for the City of Fort Bragg
Sewer Lift Station Project**

March 7, 2019

Page 2

Of primary concern to all municipalities, but especially small cities with limited budgets, is the Resident Engineer's ability to limit change orders, resolve conflicts, and manage claims. SHN's approach is to identify potential issues or ambiguities early in the project, and to clearly communicate the issues and possible solutions to all parties. Realistic expectations are communicated so that change orders are limited; our goal is to keep the City well informed so that a change order is never a surprise.

Although we anticipate that construction proceeds as designed, we are realistic that circumstances change and unforeseen things occur. Should additional services be required, SHN's in-house support includes surveyors, geologists and geotechnical engineers, biologists, stormwater compliance specialists, and environmental permitting specialists. In-house support assures the City of prompt service, and a smooth and efficient work flow between Jason as the Resident Engineer and other SHN staff who can assist.

Our cost proposal is based upon the projected construction period; however, it has been our experience in similar projects that the means and methods of the chosen contractor will often dictate the schedule and the project completion date. We are prepared to adapt to the contractors schedule and competency.

SHN is proud to have assisted the City in many projects over the years, including the Coastal Trail Phase II, Summers Lane Reservoir Project, the Chestnut Street Corridor Improvement Project, the Streets and Alleys Project, and the ongoing WWTP Construction Project. Please consider us for this project and do not hesitate to call me at (707) 459-4518 with any questions or to discuss our proposal.

Respectfully,

SHN



Thomas M. Herman, PLS
Project Manager and Principal-in-Charge

TMH/JGI:dla



Jason Island, PE, QSD/P
Construction Manager and Resident Engineer



Proposal to Provide Construction Management and Inspection Services

Fort Bragg Sewer Lift Station Project (#2019-01)

Prepared for:



City of Fort Bragg
416 North Franklin Street
Fort Bragg, CA 95437

March 2019

Prepared by:



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Project photography from two recent SHN projects within Fort Bragg (the new WWTP construction and the harbor boat-launch facility).



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A. Firm Description

Established in 1979, **SHN** is a small business meeting the engineering, geology, surveying, construction management and inspection, materials testing, environmental, and planning needs of communities in Northern California and southern Oregon.

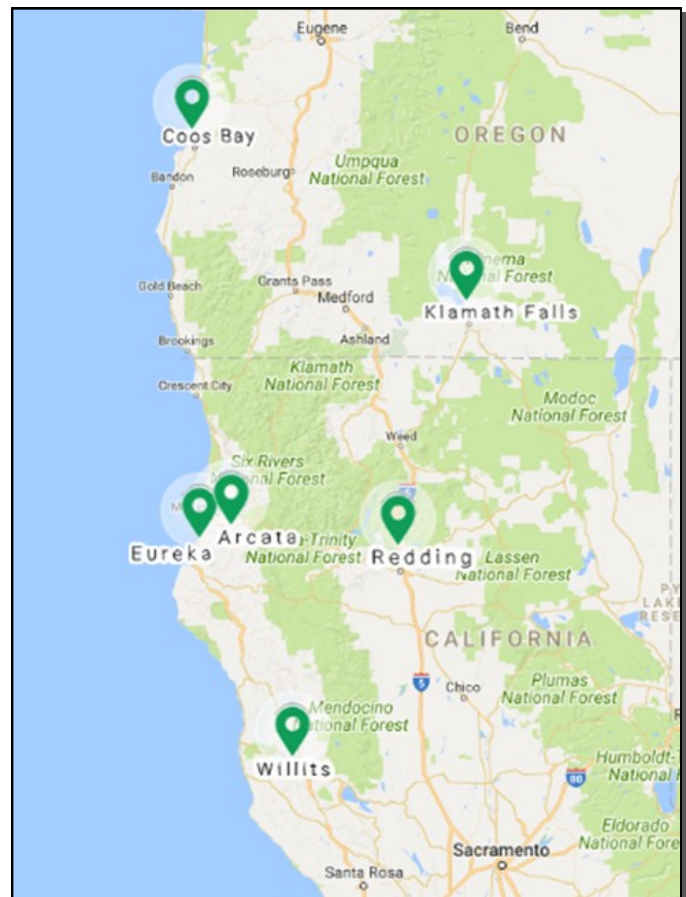
As a small company with a flat organizational structure, we provide direct lines of communication between our clients and our staff who are doing project work. Over 39 years, we have weathered recessions and natural disasters and have grown to six offices located in Arcata, Eureka, Redding, and Willits, California, and in Coos Bay and Klamath Falls, Oregon.

SHN's records indicate that our first project with the City was in 1994, when K. Jeff Nelson (the "N" of SHN) designed a 1.5 million-gallon water storage tank for the City. Since that time, we have served the City steadily, assisting in school modernization projects, materials testing at numerous street repair sites, and providing plans for components of the City's wastewater treatment plant. In 2003, SHN merged with T.M. Herman and Associates, an engineering and surveying company serving Lake and Mendocino Counties. Our current Willits office is the result of this merger, and is the office that would serve the City, should we be selected for this work.

The City is a very important client to us, and we are excited to be a part of the City's ongoing projects, including construction of the new WWTP, of which SHN is currently providing construction management services.

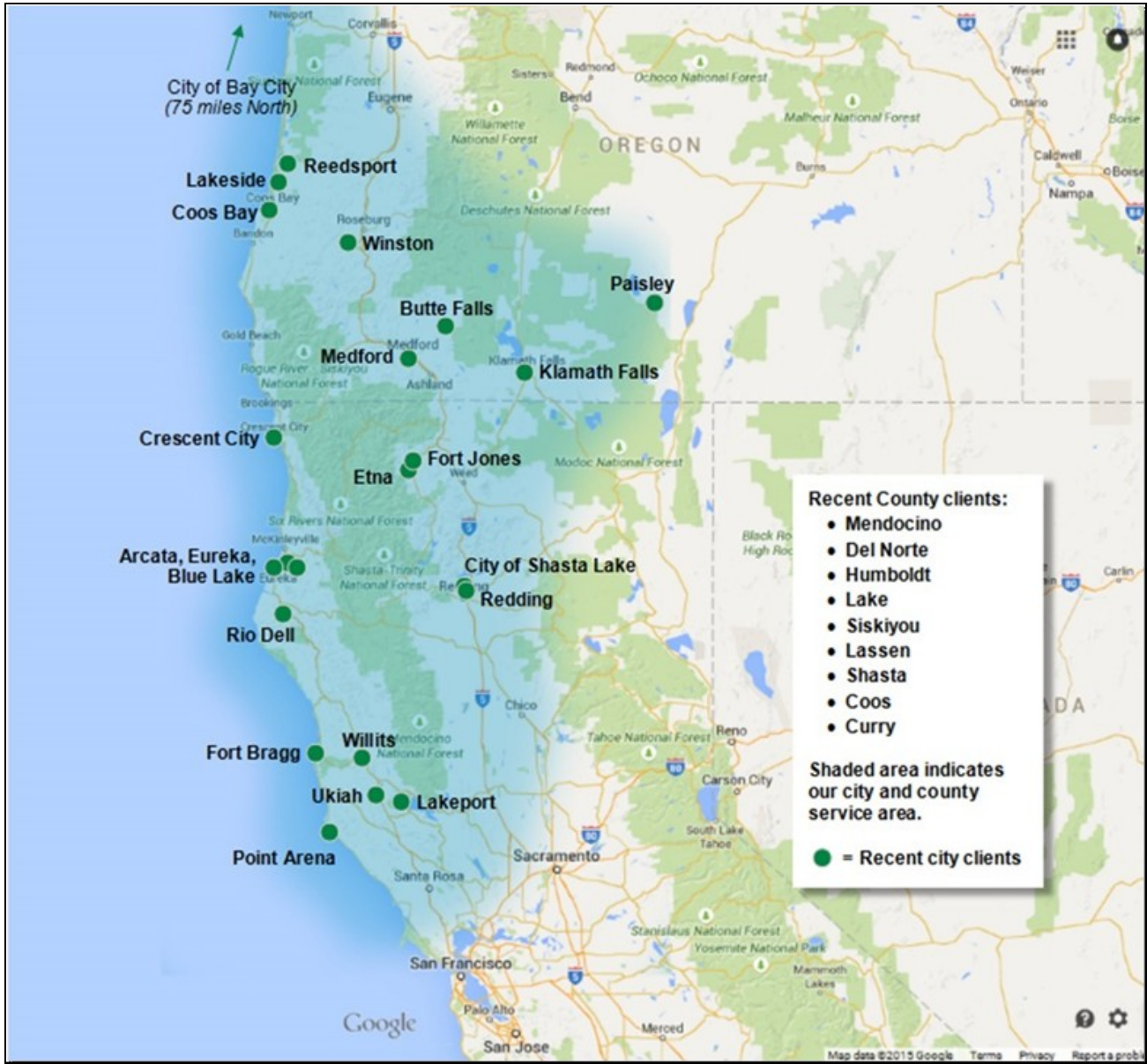


The City's project will be managed and staffed from SHN's Willits office.



During its 40-year-history, SHN has expanded its service regions and provides services from six offices in northern California and southern Oregon.

Assisting small, rural communities such as the City of Fort Bragg is SHN’s client focus. At any one time, we are serving approximately 20 cities or service districts. We serve as on-call City or District Engineers and also as consulting engineers, geologists, surveyors, and construction specialists on a project-by-project basis.



A “snapshot” of cities, service districts, and counties served by SHN.

To best serve our clients, we are organized into five service areas, with two sub-service areas. In the Willits office, we offer services in engineering, geosciences, surveying, materials testing, and biological sciences. However, should the City require environmental or planning services, SHN staff from the Eureka and Arcata offices would be readily available.

SHN's 5 Service Areas and 2 Specialties

Civil Engineering

Environmental Services

Surveying

Geosciences

Materials Testing

Planning and Permitting

Biological Sciences



SHN's Construction Management Team is comprised of Professional Engineers, Certified Engineering Geologists, Registered Geotechnical Engineers, Professional Geologists, Certified Construction Inspectors and Materials Testing Technicians, and labor compliance and project funding and development specialists. SHN staff has worked directly with funding agencies such as Caltrans Local Assistance, local redevelopment agencies, US Department of Agriculture (USDA) Rural Development, Federal Aviation Administration (FAA), Federal Emergency Management Authority, (FEMA), and Housing and Urban Development (HUD).



Our construction managers have established procedures to process submittals, administer contract cost controls and schedule compliance, manage inspections and testing to assure quality, to review and recommend change orders and pay requests, to compile a variety of informative reports for distribution to clients, agencies and others, to coordinate with agencies and client, and to facilitate contract closeout. Staff is well versed in SHN's internal hard copy and electronic work flow systems and with specialized paperwork utilized by various agencies such as Caltrans Local Assistance.

SHN's construction managers and special inspectors are highly trained in all aspects of materials and compliance testing. Our inspectors are certified by Caltrans, American Concrete Institute, American Association of State Highway and Transportation Officials (AASHTO) and the International Code Council. These organizations certify that our construction managers and inspectors provide expert construction observation and quality control. When requested, our inspectors can provide Independent Assurance Testing as identified in the Caltrans Quality Assurance Program. Our inspectors are keenly aware of the importance of their role on a construction site, and they work cooperatively with the contractors, agency inspectors and our clients.



SHN’s Materials Testing and Inspection Division maintain dedicated laboratories in its Eureka and Willits offices for engineering construction materials testing. The lab adheres to a quality system based on criteria and guidelines set forth by California Department of Transportation (Caltrans) Independent Assurance Manual and the Quality Assurance Program. Our laboratories hold the following certifications and adhere to the following standards for performance:

| | |
|---|--|
| State of California Department of Transportation (Caltrans) | Approved for California testing procedures and annually inspected by Caltrans Inspectors. |
| American Association of State Highway and Transportation Officials (AASHTO) | Fully accepted in the Accreditation Program (AAP) |
| Office of Statewide Health Planning and Development (OSHPD) | Approved construction materials laboratory with special inspection experience in hospital construction |
| Division of State Architect/Office of Regulation Services (DSA/ORS) | Accepted into Laboratory Evaluation and Acceptance (LEA) program for testing and inspection agencies |
| National Institute of Standards and Technology (NIST) | Enrolled in the Aggregate Materials Reference Laboratory (AMRL) and Cement and Concrete Reference Laboratory (CCRL) and participates in Proficiency Sample Programs |
| American Concrete Institute (ACI) | Certified concrete field-testing, and laboratory testing technicians. Lab capabilities of 400,000 pounds for compressive strength testing of concrete cylinders and masonry blocks |
| International Code Council (ICC) | Certified special inspectors |
| Technologically-Advanced | Computerized data acquisition instrumentation for Direct Shear, Consolidation, and Unconfined Compression of soils |



SHN’s materials testing laboratory has a robust array of certifications and can provide the City with the confidence that our team has the capabilities of performing verification testing and quality assurance during construction activities.



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B. Relevant Experience

SHN's Recent Professional Services for the City of Fort Bragg

Since 2014, SHN has provided the City with professional services on various diverse projects focused on roadway rehabilitation efforts, pedestrian and bicycle trail construction, and coastal trail creation. SHN's contributions to the following City projects are provided below:

Coastal Restoration and Trail Project

SHN provided construction staking and materials testing for Phase I of the new 4.5 mile multi-use and pedestrian-only trail. This trail was funded by a State Parks Grant, Coastal Conservancy Grant and Caltrans BTA grant

Chestnut Street Corridor Project

SHN provided Resident Engineering, construction staking, materials testing, inspection, and construction management for the construction of a pedestrian and bicycle trail along East Chestnut Street.

2017 Streets and Alleys Rehab Project

SHN provided construction staking, materials testing, environmental conformance and reporting (including prevailing wage compliance, budget administration, contract administration, compiling field and lab data) for the rehabilitation of three streets and four alleyways.

Coastal Trail Phase II

SHN provided construction management, construction staking, and materials testing for Phase II of the Coastal Trail project. Tasks also included construction inspection, environmental conformance, construction management and reporting. This project was funded by grants from the Caltrans Alternative Transportation Program (ATP) and State Parks Prop 84.

Featured construction management projects for the City are provided on pages B-2 through B-5.



Wastewater Treatment Plant, City of Fort Bragg



The Fort Bragg WWTP project has included various elements of construction management and inspection services, including a strict adherence to management of American Iron and Steel certifications and tracking.

Project Relevance

- **Construction Management**
- **Construction Contractor Selection**
- **Organizing and Coordinating Meetings**
- **Daily Inspection and Record-Keeping**
- **Materials Testing**
- **Coordination of Submittals**
- **RFI Tracking**
- **Payroll Administration Duties**

Since May 2018, SHN has been working with the City of Fort Bragg as Construction Manager for their Wastewater Treatment Plant Upgrade Project.

As Construction Manager, SHN participated in construction contractor selection, and starting with the pre-construction meeting, has served as the single point of contact for the project since June 2018.



To date, SHN is proud to report that the Fort Bragg WWTP project has proceeded ahead of schedule and under budget.

SHN has provided full service construction management, including organizing and running weekly onsite construction meetings with the Design Engineer, Contractor, City staff, SHN staff, and Funding Agency Representative; daily inspections and records by a certified Inspector; materials testing; coordination of Submittals (including AIS tracking) and RFI processing; and Resident Engineer input. Administratively, SHN has been the single point of contact for Certified Payroll processing, Pay Request processing, Funding Agency reporting, and comprehensive record keeping.

Seven months into the construction phase the project has proceeded ahead of schedule and under budget. Careful oversight has also assured adherence to design specifications and quality of product. SHN's Construction Manager has strived to maintain a cohesive project team, utilizing a cooperative and productive management style. In the few cases where the Contractor or Subcontractors have not met expectations, SHN has dealt with the issue and solved the problem quickly and decisively.

The SHN team has developed a strong professional Construction Management track record with the City with this project and past projects demonstrating consistent performance and responsive management.

Project Reference

**John Smith, Assistant Director of Public Works
City of Fort Bragg
416 North Franklin Street
Fort Bragg, CA 95437
707-961-2823 ext. 136**

Inner-Harbor Boat Launch Facility, Noyo Harbor District



This major renovation project to the parking lot and boat ramp in South Noyo Harbor included a resurfaced parking lot and a new drainage system for runoff into the Noyo River, a new sidewalk, handicapped-accessible bathrooms similar to those on the coastal trail and a new boat ramp.

Project Relevance

- **Construction Management**
- **Civil Design and Permitting Assistance**
- **Multi-Agency Coordination**
- **LID Features and ADA Compliance**
- **Materials Testing and Inspection**
- **Coordination of Onsite Meetings**
- **RFI Tracking**
- **Payroll Administration Duties**

SHN is currently in the final phase of assisting the Noyo Harbor District (NHD) with the construction phase of its Inner Harbor Boat Launch Facility. Prior to construction, SHN provided civil design services and permitting assistance over a four-year-period. Due to the project's waterside work component, the permitting involved working with six different agencies, including the California Coastal Commission and California Department of Fish and Wildlife.



The new ramp extends farther into the river and should make for an easier time getting vessels into and out of the water. Also the new parking lot will feature a circular 4,500-square-foot “bioretention area,” essentially a large drain with soil and gravel filters to treat surface water running over the asphalt and into the river.

The Project includes complete LID Stormwater treatment, boat ramp design in accordance with Department of Boating and Waterways specifications, and ADA compliant bathroom, parking and path of travel compliant design. Permitting agency conditions and budgetary constraints were also important elements of the final design.

SHN has continued to assist NHD with the project, provided bidding assistance and single point of contact construction management services including organizing and running bi-weekly onsite construction meetings with the Design Engineer, Contractor and NHD staff; daily inspections and records by a certified Inspector; materials testing; coordination and responding to Submittals and RFI’s; and Resident Engineer input. Administratively, SHN has been the single point of contact for Certified Payroll processing, Pay Request processing, Funding Agency reporting, and comprehensive record keeping. SHN has also been responsible for verifying that permit conditions have been met.

Throughout the project, SHN’s Resident Engineer has attended NHD Commission meetings to provide updates and provide guidance with project based decisions. The successful completion of this extremely challenging project is a great benefit to NHD and has demonstrated SHN’s start-to-finish capabilities for our clients.

Project Reference

**Bill Sanborn, Harbormaster
 Noyo Harbor District
 19101 South Harbor Drive
 Fort Bragg, CA 95437
 707-964-4719**

Willits Wastewater Treatment Facilities Upgrade, City of Willits



Various construction activities at the Willits WWTP, including: effluent distribution weir placement, 16-inch influent and effluent lines to the aeration basins, and excavation of the (+/-) 20-foot-deep wet well for the project headworks.

Project Relevance

- Bidding Assistance
- Construction Contract Negotiations
- Engineering Support During Construction
- Labor Compliance
- Funding Compliance
- Environmental Compliance
- Daily Construction Inspection
- Construction Materials Acceptance Testing
- Special Inspections
- Project Change Negotiation
- Project Punch List
- Substantial Completion Determination
- Project Close Out

The City Willits Wastewater Treatment Facility was nearing the end of its economic life and was subject to discharge violations. SHN was consulted with to develop a plan to improve the facility, establish permit compliance, obtain funding and oversee the construction of the rehabilitated facility.

SHN's design team developed a solution to the discharge problem, which included upgrades to the influent facilities, a new advanced secondary treatment system and a 30-acre surface storage/wetland treatment lagoon.



Various construction activities at the Willits WWTP, including: wet well pump bases before placement, rebar fabrication for the wet well and foundation of the head works building, and installation of wet well pumps.

Working closely with City Staff and potential funding sources, SHN helped obtain \$23.8 million in grants and loans from USDA, Rural Development, the Small Communities Wastewater Grants and the Environmental Protection Agency.

To contribute to the success of the multiple phase and year project, the City contracted with SHN to provide construction administration and management, funding oversight, permit compliance, operational integration, special inspections and the daily Resident Project Representative during the entire construction of the new facilities.

The construction administration/management team consisted of SHN's staff of civil and geotechnical engineers, systems and electrical engineers, certified special inspectors, construction surveyors, permit compliance specialists, labor compliance specialists, funding sources administrators and project oversight from senior management.

Following the completion of the construction, SHN prepared the Operations and Maintenance Manual and provided staff with hands on start up and operational assistance.

The project was completed on time and on budget. Permit compliance was achieved. The funding sources were appreciative of the management of the project budget.

Project Reference

Scott Herman, Utilities Superintendent
City of Willits Public Works
111 East Commercial Street
Willits, CA 95490
707-459-4605

WWTP Improvements and Recycled Water System, Mendocino City CSD

Project Relevance

- Bidding Assistance
- Construction Contract Negotiations
- Engineering Support During Construction
- Labor Compliance
- Funding Compliance
- Environmental Compliance
- Daily Construction Inspection
- Construction Materials Acceptance Testing
- Special Inspections
- Project Change Negotiation
- Project Punch List
- Substantial Completion Determination
- Project Close Out

SHN is currently working with the Mendocino City Community Services District (MCCSD) to provide design and construction management services to repair and replace aging facilities to ensure permit compliance and environmental protection.



The MCCSD WWTF is designed to treat up to 0.3 million gallons per day at average dry weather capacity and 1.0 million gallons per day at a peak daily wet weather capacity.

SHN's design team prepared a Preliminary Engineering Report (PER) for the project to be used by MCCSD to submit to USDA, Rural Development (RD) for potential project funding. Because of its previous experience with the regional RD office, SHN facilitated the funding process with RD and the MCCSD staff and Board of Directors. The PER was reviewed and approved by RD staff and over \$3 million in funding was approved with nearly one third of the project funding as a grant.

Subsequent to the funding approval, RD, MCCSD and SHN entered into a contract to prepare contract documents, prepare project plans and specifications, oversee the project construction bidding, provide Resident Engineering services during construction, provide daily onsite inspection services, provide construction period funding administration, prepare the project Operations and Maintenance Manual, provide permit and labor compliance, oversee start up of the new facilities, and provide project close out documents for RD.

Previously, SHN teamed with MCCSD to update the wastewater treatment plant main aeration blower system and install a new back-up generator. SHN provided project plans and specifications, contract documents, bidding assistance, resident engineering and daily inspection, permit and labor compliance and project close out documents.

Project Reference

Mike Kelley, District Superintendent
Mendocino City Community Services District
10500 Kelly Street
Mendocino, CA 95460
707-937-5790

Martin Slough Interceptor Project, City of Eureka

Project Relevance

- Bidding Assistance
- Construction Contract Negotiations
- Engineering Support During Construction
- Labor Compliance
- Funding Compliance
- Environmental Compliance
- Daily Construction Inspection
- Construction Materials Acceptance Testing
- Special Inspections
- Project Change Negotiation
- Project Punch List
- Substantial Completion Determination
- Project Close Out

The City of Eureka and the Humboldt Community Services District (HCSD) teamed to construct the Martin Slough Interceptor project. SHN has been instrumental in the Martin Slough project since its inception. The project includes a new interceptor, pump station, and force main, which will eliminate the need for 13 pump stations that convey flows around the City before reaching the Elk River Wastewater Treatment Plant.

HCSD's sewage collection system drains into the City's, and in 2001, the City took the lead in contracting with SHN for the Martin Slough Interceptor Project. Contract services included tasks typical of any municipal wastewater project, such as mapping and surveying, biological and botanical surveys, hydrologic and hydraulic modeling, property and easement acquisition, runoff and erosion control, environmental permitting, design, and construction management.

Phase 1 of the project was completed in 2012, and involved constructing approximately 1½ miles of wastewater interceptor pipeline.

Phase 2 included the decommissioning of five existing lift stations and construction of several short gravity collector pipelines, a new pump station, approximately 9,300 linear feet of force main, and approximately 6,100 linear feet of which was accomplished by horizontal directional drilling (HDD). Construction of the pump station was finished in 2015.

Phase 3 includes future work, primarily by HCSD, to decommission lift stations and construct additional collector pipelines.

SHN successfully engaged the City of Eureka in the overall project development process, as evidenced by our close working relationship over the 15 years of the Project.



SHN supervised the force main installation under Pine Hill.

Project Reference

Jesse Willor, PE; Deputy Dir. of Public Works
City of Eureka
531 K Street
Eureka, CA 95501
707-441-4031

SHN's Funding Experience

SHN has assisted our clients to obtain a number of grants and loans which have enabled those municipalities to plan, design, and construct their respective projects. Many of these grant and loan funding agencies pose specific and detailed reporting and invoicing requirements; SHN has experience in communicating information in formats useful to these agencies.

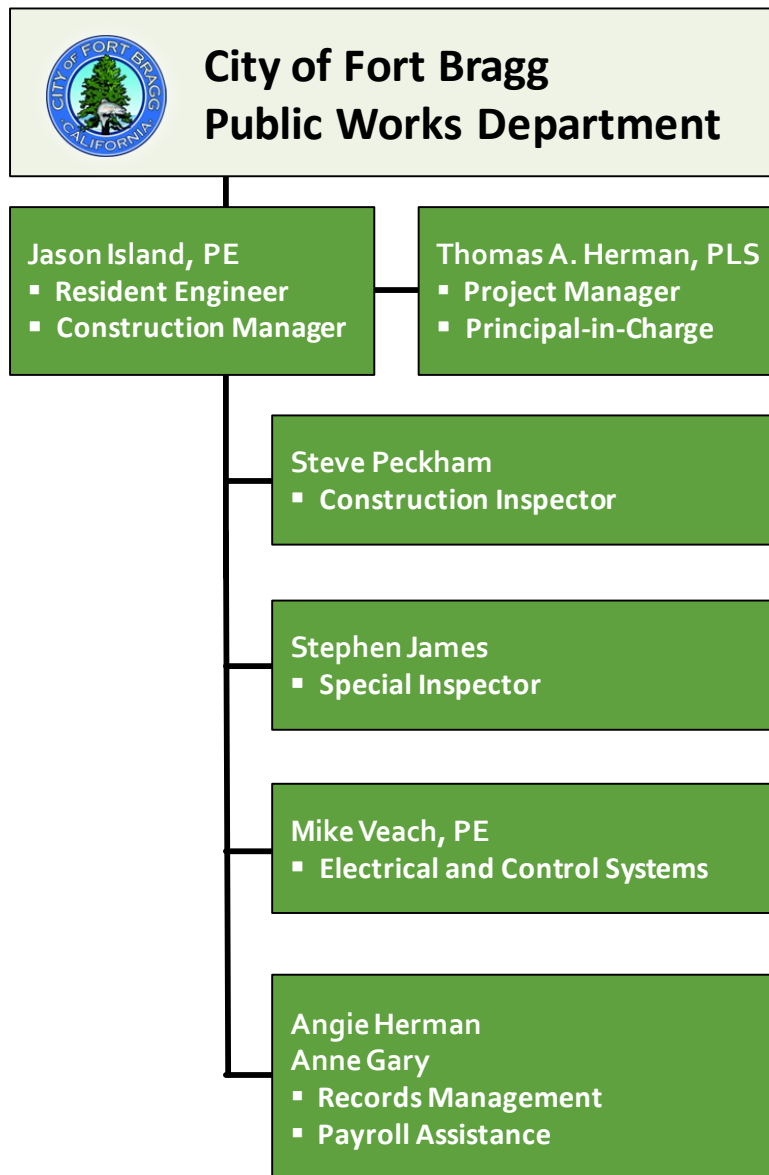
| Funding Program or Agency | Project Title | Assisted in Funding Acquisition? | Provided Services Specified in Funding? | Amount of Grant/Loan Funding |
|--|---|----------------------------------|---|------------------------------|
| Various (USDA-Rural Development, Small Communities Wastewater Grants, and EPA) | Willits Wastewater Treatment Facilities Upgrades | Yes | Yes | \$23.8 million |
| USDA-Rural Development | Mendocino City WWTP Improvements and Recycled Water System | Yes | Yes | \$3 million |
| USDA-Rural Development | Big Valley Rancheria Water Treatment | Yes | Yes | \$2.2 million |
| SWRCB Clean Water SRF | Loleta WWTP Improvements | In progress | In progress | \$6.3 million (pending) |
| SWRCB Prop 1 | Town of Fort Jones, Wastewater Services | Yes | Yes | \$348,000 |
| SWRCB Prop 1 | Lake Shastina CSD, Wastewater Planning Study | Yes | Yes | \$500,000 |
| SWRCB, Prop 50 | Trinidad-Westhaven Integrated Coastal Watershed Management Plan | Yes | Yes | \$500,000 |
| SWRCB, Prop 50 | Trinidad-Westhaven Coastal Water Quality Restoration Project | Yes | Yes | \$470,350 |
| SWRCB, Prop 84 | Trinidad Stormwater Management Improvement Project | Yes | Yes | \$2.5 million |
| SWRCB, Prop 84 | Trinidad-Westhaven Coastal Water Quality Restoration Project | Yes | In Progress | \$480,075 |

C. Key Personnel Qualifications

Organization Chart

SHN's Construction Management Team is comprised of Registered Civil and Geotechnical Engineers, Certified Construction Inspectors and Materials Testing Technicians. Our team has extensive experience managing construction projects from small road construction projects to complex utility facilities. Below is an organization chart depicting the key personnel identified for the City's Project.

Resumes of these staff members are in Appendix 1.





Project Team Biographies

Thomas M. Herman, PLS – Project Manager, Principal-in-Charge

Mr. Herman will be the Principal-in-Charge on this project. He has more than 46 years of experience providing professional land surveying, engineering and surveying project development, construction and project management, and environmental permitting services throughout northern California. Mr. Herman specializes in the development and management of large scale public works projects including wastewater treatment and collection, roadway route location and development, utility infrastructure analysis and development and project coordination with environmental resources agencies. Because of Mr. Herman's extensive experience in professional land surveying, construction and project management, infrastructure development and environmental permitting he has served several municipalities as City Surveyor and City Engineering Director. Mr. Herman is highly experienced in working with multiple agencies and stake holders to coordinate and facilitate the timely completion of complex projects.

Jason Island, PE – Resident Engineer, Construction Manager

Mr. Island will serve at the Resident Engineer and Construction Manager on this project. He will be the single point of contact responsible for all aspects of construction management. Mr. Island will coordinate and direct the SHN staff dedicated to this project. He has more than 21 years of experience working on large development projects and small residential projects. His broad range of experience and excellent communication skills has led to proficiency in being part of a larger project team as well as managing entire projects start-to-finish. Mr. Island is currently serving as Resident Engineer and Construction Manager for the City's new wastewater treatment plant project. Currently, the WWTP project is progressing ahead of schedule and under budget. Mr. Island also served as Resident Engineer and Construction Manager on the City of Fort Bragg's Chestnut Street Improvement Project – a project that was completed on budget and on schedule despite challenging weather conditions. Mr. Island lives in Fort Bragg.

Steve Peckham – Construction Inspector

Mr. Peckham will serve as the Resident Project Representative and onsite construction inspector for this project and will be responsible for daily construction inspection, testing, and reporting (as required). Mr. Peckham has more than 40 years of construction experience including installation of wastewater utilities, supervising construction crews and inspection of public works projects. He has a strong background in construction materials testing of aggregate base and sub grade, concrete, and asphalt. Mr. Peckham currently serves as the construction inspector for the City's WWTP project, and was construction inspector on the Noyo Boat-Launch project, the Coastal Trail Phase II, Streets & Alleys Rehabilitation Project, and the Summer's Lane Reservoir Liner Installation project.



Stephen James – Special Inspector

Mr. James will serve as Special Inspector on this project. Mr. James has over 18 years of experience providing special inspections including structural steel welding, structural concrete, structural masonry, hot mix asphalt and other construction materials. Mr. James also provides a wide range of construction materials laboratory testing experience and certifications as well as the educational background to provide Quality Assurance and Quality Control for all field inspections and laboratory testing procedures. As a Certified Welding Inspector, Mr. James is competent in visual weld inspections, nondestructive testing, and evaluation, writing welding procedure specifications (WPS), and qualifying welders and welding operators.

Mike Veach, PE – Electrical and Control Systems Advisor

Mr. Veach will serve as the Electrical and Control Systems Advisor on this project. He has more than 34 years of professional experience working on a variety of engineering assignments, with an emphasis on water and wastewater treatment facilities. Mr. Veach performed a peer review of the Aero-Mod treatment system for the Ferndale WWTP, one of the Wastewater Treatment Plants toured by the City of Fort Bragg staff. He has extensive expertise in process/mechanical design for water and wastewater treatment plants ranging in capacities from 0.5 million gallons per day to 210 million gallons per day. Mr. Veach has been involved in all phases of project development including conceptual design, final design, plans and specifications, construction, and startup.

Anne Gary – Records Management

Ms. Gary will be in day-to-day charge of records management. She will compile project correspondence, daily reports, submittals, change requests, media coverage, etc. into the project record. The project record will be maintained both digitally and hard copy format. At the end of the project, Ms. Gary will provide the City with both digital and hard copy binder of the project record and the project close out.

Angie Herman – Payroll Assistance

Ms. Herman will monitor payroll reporting for this project. She will coordinate with City Staff to assure that the project payroll documents are submitted on a regular and routine basis. In addition she will work directly with City staff to assure that labor compliance records are complete and up to date.



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D. Project References

We have included the following references to highlight our clients' opinion of our professional services. Please feel free to discuss SHN's track record for reliability, effectiveness, and quality. Our clients often tell us that we have saved them time, money, and headaches by helping them with their projects in a reliable and professional manner. Project references from our representative projects are provided below. We have also included additional client references and several client testimonials.

| | |
|--|---|
| <ul style="list-style-type: none"> • Bill Sanborn Harbormaster Noyo Harbor District 707-459-4605 | <ul style="list-style-type: none"> • Scott Herman Utilities Superintendent City of Willits 707-459-4605 |
| <ul style="list-style-type: none"> • Mike Kelley District Superintendent Mendocino City CSD 707-937-5790 | <ul style="list-style-type: none"> • Jesse Willor, PE Deputy Dir., Public Works City of Eureka 707-441-4031 |

Additional Client References

- **Frank Bacik**
President
Town of Scotia, LLC
707-764-5063
- **Marcus Drumm**
General Manager
Loleta Community Services District
707-733-1717
- **Dan Berman**
City Manager
City of Trinidad
707-677-3876

Selected Client Testimonials

"It was a pleasure to work with the SHN team on this project, particularly Jason Island...every time it rains here, like yesterday, I love to watch all the stormwater drain off and flow around the Museum and into the channels, bioswales, and stormwater pond, just exactly as it was designed to do!"

*Sherrie Smith-Ferri, Curator of Education and Exhibits
Grace Hudson Museum*

"SHN is thorough and conscientious, and frankly, knowing that they're on it gives me a lot of comfort. With all of the problems that occur regularly on construction projects, it's great when one can totally trust the other members of the team—as I believe that I can with SHN."

*Jeff Smith, Chief Executive Officer
Lenders Construction Services, LLC*



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E. Scope of Work



Our project understanding and scope of work is based upon a review of the Project plans and specifications and the specific items of work identified in the Request for Proposal (RFP) Construction Management and Inspection Services (CM) for the Fort Bragg Lift Station Project—City Project No. 2019-01. We agree with the City that all tasks as listed in the RFP are necessary, and this proposal includes all the bullet point tasks by reference. We are providing additional information below to describe SHN’s approach to specific tasks.

Pre-construction Assistance

SHN’s familiarity with the City’s needs, procedures, and staff will allow pre-construction assistance to progress smoothly and efficiently. We plan to thoroughly review and familiarize ourselves with the project specifications and design plans prior to the CM contract start date to prepare for pre-construction tasks. We will coordinate with City staff and HDR Engineering, Inc. (HDR) as we review the design plans and project specifications, and we will obtain any needed clarifications. If agreed to by the City, we could continue our established lines of communication.

We are familiar with the City’s standard contract document format and will draw on this knowledge and our own experience with contract documents for comparable wastewater treatment projects. The order of work requirements will be reviewed and discussed with City staff prior to the pre-construction meeting to identify critical path items, and to schedule flexibility with regard to product delivery, installation sequencing and seasonal weather constraints. CEQA mitigation measures (CDP 2-16) will be reviewed and relevant team members will be briefed by the Resident Engineer (Jason Island, PE) to ensure that all conditions are understood and communicated effectively to the Contractor. If the Contractor, City, or Resident Engineer have questions on a mitigation measure’s implementation or efficacy, Mr. Island can contact SHN’s in-house planning and permitting department for advice and recommendations.

As the City is aware, SHN's proposed Resident Engineer/Construction Manager (Jason Island, PE) lives and works within minutes of the project site. As stated in the RFP, our team's Construction Inspector (Steve Peckham) will be onsite to provide daily inspections of construction activities. SHN's Willits office, where additional technical and administrative staff work, is less than an hour's drive from Fort Bragg. Our close proximity allows us to be responsive, prepared, and actively engaged in pre-bid conferences and other impromptu meetings. Prior to the pre-construction conference, we will have completed the project review described above, establishing a good rapport with the selected Contractor and setting the standard for a well-managed project. Submittal and Request for Information (RFI) processing will be timely and thorough, with our Resident Engineer consulting our staff technical advisors when needed to verify adherence to project specifications and sound design interpretation. In our review of submittal and RFIs, we will coordinate with the City and Contractor as needed and respond in a timely manner. We anticipate regular discussions on design intent and solutions to any necessary design modifications with City staff and HDR; because keeping to a schedule is important, SHN's proximity to City staff allows face-to-face meetings and better communication.

Schedule management will occur at a daily level, and, most importantly, at regular construction meetings to keep the project on schedule. Project phasing will also be reviewed and understood prior to any meetings with the Contractor and discussed at the pre-construction meeting. We will work diligently to gain a full understanding how the new systems will be integrated into the existing facility to maintain daily facility operations.

Construction Management

Excellent construction management depends on the ability to limit unforeseen circumstances, and to respond to them quickly and efficiently by being prepared. SHN will limit unforeseen circumstances by relying on our construction management experience of projects of similar size and scope, with prepared staff who have many years of construction management and inspections experience. We will utilize our existing WWTP Upgrade Project administrative documentation structure and distribution channels that comply with all construction and contract administration requirements.



SHN has assisted with the procurement and management of funding for several USDA-RD-funded projects, including projects for the City of Willits and the Mendocino City CSD.

Further, we will rely on in-house staff for construction and specialty inspections for electrical and instrumentation, mechanical systems, construction safety, and structural steel, wood framing and concrete. Relying on in-house staff provides continuity and uniformity in data and documentation. The diverse experiences held by our project team and technical advisors insure that we understand the code requirements, field inspection requirements, and operational and acceptance testing (where applicable) that pertain to these specialty tasks. We will complete the required inspections accurately and efficiently.

Besides engineering and construction management, SHN's in-house capabilities also include:

- materials testing and special inspections
- surveying and construction staking
- environmental planning and permitting

Use of our in-house certified materials testing laboratory will guarantee that samples are processed and handled properly. Once entered into our lab's sample system, we will also guarantee timely and consistent testing. Our inspectors and field technicians are cross-trained and hold numerous certifications, so often a single person can perform tests and/or collect samples. This allows for a smooth and efficient work flow because a single person, such as Steve Peckham, is responsible for this work.

Although the project's environmental permitting is completed, we are prepared for unforeseen environmental issues through our familiarity with applicable regulations and guidelines, regulatory staff, and successful mitigations measures. SHN's in-house environmental planning and permitting staff is available for quick consultation, so that construction schedules are impacted as little as possible. We will verify compliance with environmental permitting and mitigation measures in accordance with the requirements of the applicable documents and regulatory permits. We will rely on our good reputation with local environmental regulators to troubleshoot any issues that may arise during construction. Having a readily accessible environmental planning and permitting department is another way we prepare for a smooth and uneventful construction management project.



SHN inspector verifying rebar placement and dimensions to assure consistence with project plans.

We have successfully worked with local Native American monitors. We have worked with Jeremy Center, the Sherwood Pomo Tribal Monitor, on the City's Coastal Trail project. Although we assume a biologist will not be needed, Warren Mitchell in our Willits office would offer his expertise; Mr. Mitchell's experience in Fort Bragg includes stream habitat typing for fish and macroinvertebrates.

Limiting change orders, resolving conflicts, and managing claims is best approached by identifying potential issues or ambiguities early in the project, and then developing cost effective solutions by close coordination between HDR, the City, the Contractor, and SHN. Communications and realistic expectations need to be clear so that change orders and claims are limited. In the construction management phase, we will function as the point-of-contact for processing RFIs and change orders, if any. In the case of change orders, we will coordinate with City staff to process change orders and manage the construction budget. For example, our Field Inspector will provide daily on-site inspections of construction activities and coordinate with the Resident Engineer and Contractor as needed to discuss construction-related questions and issues. The Resident Engineer will then work with City staff and HDR if needed to provide guidance to the Contractor. Our goal is to keep the City well informed so that a change order is never a surprise.



Jason Island served as Project Manager for the City of Ukiah's Grace Hudson Nature Education Center project which included planning and design of parking lots, walkways, and trails surrounding the museum. SHN provided design and construction management for this effort under budget despite several challenging deadlines met ahead of schedule.

During four previous construction management projects with the City, we have prepared and submitted all paperwork and documentation to the City's Project Analyst for her review. This process seems to have worked well and we propose to continue this approach. SHN will process progress payments, coordinate payment management, and assist with labor compliance as needed. We will verify classifications and rates for all contractors at the project outset, verify online payroll submissions to the Department of Industrial Relations, assist with Certified Payroll Verifications as needed, and verify compliance with Apprentice requirements. Due to the size of this project, we propose to dedicate an experienced administrative assistant to these tasks.

The image shows two overlapping forms. The top form is an 'Inspection Record' from SHN Consulting Engineers & Designers, Inc. It includes fields for Project No., Date, Project Name, Basis, Date, Time, Year, Day, Hour, Minute, and Second. It also has sections for 'CONTRACTOR'S REPORT' and 'INSPECTOR'S REPORT'. The bottom form is a 'Punch List Completion Report' with columns for 'Description of Repair', 'Closed By', 'Inspected By', and 'Date Completed'.

These are examples of SHN's documentation forms. Our team understands the importance of reporting during construction projects and how proper record keeping reduces risk for our clients.

An essential part of a construction management role is to regularly chair construction meetings, prepare agendas, and distribute meeting minutes. As we have proved in previous projects, our ability to run efficient and productive meetings will contribute to the Project's success by providing a forum to cover critical items including schedule, budget, administrative issues, and design concerns.

Our Inspector will verify that field conditions match those required by the design and inspect existing facilities throughout the course of construction to ensure that they remain operable and are not damaged. Our Inspector and Resident Engineer (RE) will schedule and attend warranty inspections with the Contractor before the end of the one-year warranty period. We are familiar with this process and have experience from similar past projects.

Daily Field Inspection and Documentation

Our approach to daily field inspection and documentation will be to continue procedures that have been successful with the City in the past, which is to provide reports that are comprehensive, clear, and timely. We strive to be responsive and have at times modified our field report formats to address a specific need of the City. Our Inspector will provide all the required daily documentation from the project site. The reports will be completed throughout the course of the day and distributed to the project team on a weekly basis, or as needed. We will document the following in our Daily Field Reports: construction activities, anticipated changes, important conversations, weather conditions, names of all workers, equipment used, hours of work, safety concerns or accidents, quality of work and materials, materials testing performed, a record of any other significant information, information for record drawings (as-builts), preservation/ protection of sensitive habitat and areas of other environmental concern, preservation/ protection of historically and archeologically sensitive areas, , construction video and photos, construction schedule, a record of visitors to the site, DEE verifications, and daily quantities (agreed upon with Contractor daily).

Reporting

As construction managers, our top priorities are:

- reporting to the City as the project dictates;
- responding to City-generated questions and concerns;
- ensuring that coordination between the Contractor, the City, and applicable agencies is as fluid as possible;
- adherence to verification and documentation of AIS requirements; and
- adherence to certified payroll verification and documentation.

We will document construction and safety issues with the use of Daily Inspection Reports, phone calls, emails, and correspondence, progress meeting agendas and minutes, Weekly Statement of Working Days, Weekly Construction Summary Report, weekly look-ahead schedules, monthly as-built plans prior to payment of Contractor's invoices, and press releases as requested. SHN is well-versed in the use and application of all the reporting methods described above. Our Inspector and Resident Engineer will carefully prepare the reports and our administrative team will disseminate the information according to the agreed-upon schedule. We take communication seriously and believe that is a critical element of successful project management.

Close-out

Similar to our approach on daily field inspections, our approach close-out will be to continue procedures that have been successful in the past. Project close-out will commence as the project nears completion. SHN has successfully closed-out many large construction projects and we are familiar with standard-of-practice procedures. The Inspector and Resident Engineer will prepare a punch list for the project manager and coordinate the completion of the preliminary and final punch lists with the Contractor and the City. All punch lists will be discussed with City staff for input prior to being shared with the Contractor.

We will verify completion of the punch list and facility improvements and schedule a walk-through and final inspection with City staff and funding agency representatives within the pre-determined time limit. SHN will document end-of-project procedures and coordinate meeting funding source requirements for project close-out.

Remaining close-out requirements, including furnishing the City with a photo log, information for record drawings, Operations and Maintenance (O&M) manual via the Contractor, and all record drawings made by the Contractor and HDR during construction, will be completed within thirty days of project acceptance by the City and funding agencies. Final documents will be delivered to the City electronically to be the sole property of the City in approved formats such as Microsoft Word, Excel, and AutoCad DWG.

Project close-out is as important as every other task under the Construction Management scope of work. We will be timely and efficient in our close-out procedures.



F. Cost

The following Not-to-Exceed Cost Proposal is based upon the understanding that the potential construction period for the Project will be 260 working days (or 8.6 months). At this time, the means, methods, schedule and competency of the chosen contractor for the Project are unknown. If the contractor is able to complete construction of the Project in a reduced period, the final cost for the these services will be only the cost incurred to that point; conversely, if the contractor works beyond the allotted construction period, an adjustment to this cost may be required.

The personnel assigned to the Project are identified in a previous section of this proposal. Personnel Rates, Equipment Charges, and Travel Reimbursement are inclusive in this Cost Proposal and outlined in the attached Schedule of Charges (Appendix B). This cost includes travel expenses from our Willits office and does not include costs associated with living expenses for out-of-town staff.

SHN’s Not-to-Exceed cost to provide Construction Management and Inspection Services for the Fort Bragg Lift Station Project is **Forty-Nine Thousand Five Hundred Dollars (\$49,500)**.

G. Work Schedule

For the City’s upcoming project, SHN proposes the following work schedule, which will include 30 days for pre-construction preparation activities, 260 prevailing wage working days (not including weekends or public holidays), and 30 days for post-construction project closeout activities.

A pointed discussion of the these activities are described within the previous Scope of Work section.

| Starting Date | Activity | Ending Date |
|---------------|---------------------------------------|---------------|
| May 1, 2019 | Pre-Construction Activities | May 31, 2019 |
| June 3, 2019 | Construction Activities | June 12, 2020 |
| June 15, 2020 | Post-Construction Closeout Activities | July 14, 2020 |

If the City chooses to award SHN with this project, we believe that this will be an ideal use of our team’s resources because SHN will already be in the area, working on the City’s wastewater treatment plant project. The City does not need to worry about our team’s availability because we have already committed our team’s resources to the City for the duration of the wastewater treatment plant’s construction, and we will have the latitude to provide services for both projects, as needed.



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H. Insurance

SHN shall procure and maintain for the duration of the contract insurance against claims for injuries to persons or damages to property that may arise from or in connection with the performance of the work hereunder by the Consultant, his agents, representatives, employees or subcontractors as set forth in Section 13 of Exhibit A of the RFP for Professional Services. The cost of the insurance has been included in our cost proposal.

I. Consultant Agreement

SHN has no exceptions with the provisions to the City's standard consulting services agreement as set forth in Exhibit A of the RFP.

J. Prevailing Wage Requirements

SHN conforms to the Department of Industrial Relations requirements for labor compliance. Our inspectors, surveyors and materials testing technicians are paid the designated prevailing wage for their classifications. Certified Payrolls for each staff member that has worked on the Project are compiled on a weekly basis and provided to clients on a bi-weekly basis.



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Distinguishing Qualifications

- Experienced in site development, project teamwork and agency coordination.
- Broad (“hands-on”) experience in residential architectural design and structural engineering.

Years of Experience: 20

Years with SHN: 4

Education

BS, Civil Engineering, University of Colorado; 1998

Professional Registrations

Registered Professional Engineer (Civil), CA; RCE #64809

Qualified Stormwater Practitioner and Developer (CASQUA registered)

Jason Island, PE, QSD/P

Resident Engineer, Construction Manager

Relevant Experience

Mr. Island has over 20 years of experience in professional engineering services. He has worked on large development projects and small residential projects. His broad range of experience has led to proficiency in being part of a larger project team as well as managing entire projects start-to-finish. Mr. Island has “hands-on” experience in construction and landscaping giving him practical insights throughout the design process.

Representative Projects

Resident Engineer, Fort Bragg Wastewater Treatment Plant Upgrade, City of Fort Bragg, Fort Bragg, CA. Mr. Island served as Resident Engineer and Construction Manager for this \$15,000,000 Project providing construction management including organizing and running weekly onsite construction meetings with the Design Engineer, Contractor, City staff, SHN staff, and Funding Agency Representative. Mr. Island maintained a cohesive project team, utilizing a cooperative and productive management style. To date the project is ahead of schedule and on budget.

Grace Hudson Museum Nature Education Center, Ukiah, CA. Mr. Island was both Design Engineer and Resident Engineer for this public project. His role in the project included solving design related problems and integrating low impact development storm water features in the planning stage as well as providing comprehensive construction management for the client.

Design Engineer, Noyo Harbor District Boat Launch Facility, Fort Bragg, CA. Mr. Island served as principal design engineer on this highly constrained State-funded project. In addition to leading the design effort, Mr. Island has advocated for the Harbor District to secure an additional 1 million in funding for the project, undertaken coordination with the California Coastal Commission, NCRWQCB, CDFW, ACOE, and the Pomo Tribal Historic Preservation Officer to obtain permitting to construct the project. Mr. Island has also advised the District on Stormwater LID compliance and developed practical, cost-effective solutions for meeting state guidelines.

Resident Engineer, Chestnut Street Improvement Project, Fort Bragg, CA. Mr. Island served as Resident Engineer and Construction Manager (single point-of-contact) for this Caltrans funded multi-use path adjacent to a busy city street. The project required Mr. Island to cover a broad range of CM tasks including Caltrans documentation, ADA compliance, budget management, responding to, and resolving, construction-related design changes, and public relations. The project was completed within the approved budget, and on-schedule, despite weather-related setbacks.

Consulting City Engineer, City of Point Arena, CA. Mr. Island serves as City Engineer in this isolated coastal community with limited funds and staff. Since his tenure as City engineer, Mr. Island has worked with City staff to successfully complete a City funded street improvement project, secure FEMA and CalOES funding for storm related damage to infrastructure, and implement City Development Standard Details that will help to ensure that future development in the City meets current standards and undergoes the correct approval process consistent with comparable local cities.

Distinguishing Qualifications

- Over 45 years engineering and survey experience
- Land Surveying, Municipal Engineering, and Utility Engineering
- Project and Construction Management
- Environmental Permitting
- Construction Materials Quality Assurance

Years of Experience: 45

Years with SHN: 15

Education

San Diego State University,
Business Administration

Santa Rosa Junior College, AA, Civil
Engineering Technology

Professional Registrations

March 1980, California Registered
Professional Land Surveyor #4805

Professional Affiliations

California Land Surveyors
Association

American Council of Engineering
Companies

Public Service

Volunteer Firefighter & Director /
Little Lake Fire Protection District,
25 yrs

Howard Hospital Foundation Board
Member

Mendocino Community College
Foundation Board Member

Rotary International

Local Agency Formation
Commission of Mendocino County
Executive Committee for Special
Districts

Revitalization / Economic
Development Committee, City of
Willits

Three-term Director, Willits
Chamber of Commerce

Thomas M. Herman, PLS

Principal Surveyor / Regional Manager

Relevant Experience

Mr. Herman has over 45 years of experience providing professional land surveying, engineering and surveying project development, construction and project management, and environmental permitting services throughout northern California. He specializes in the development and management of large scale public works projects including wastewater treatment and collection, roadway route location and development, utility infrastructure analysis and development and project coordination with environmental resources agencies. Because of Mr. Herman's extensive experience in professional land surveying, construction and project management, infrastructure development and environmental permitting he has served several municipalities as City Surveyor and City Engineering Director.

Representative Projects

Fort Bragg Wastewater Treatment Plant Upgrade, Fort Bragg, California. Mr. Herman serves as the Principal in Charge and Project Manager. He oversees the SHN Administrative Staff charged with Certified Payroll processing, Pay Request processing, Funding Agency reporting, and comprehensive record keeping. He is the single point of contact on behalf of the City with the funding agencies: USDA, Rural Development and the California State Water Resources Control Board Proposition 1 Small Community Wastewater Grant. To date the project is ahead of schedule and on budget.

Noyo Harbor Tsunami Damage Repair, Fort Bragg, CA. In March of 2011, Noyo Harbor experienced over two million dollars of damage to its docks and related facilities as a result of a tsunami. The Noyo Harbor District (District) contracted with SHN to facilitate emergency repairs, coordinate with regulatory and emergency assistance agencies and develop an analysis of the extent of the damage to the harbor as a result of the tsunami. Mr. Herman served as the project manager and coordinated the emergency assistance efforts, arranged for SHN staff and various sub contractors to assess and repair the damage and negotiated directly with the District's insurance carrier to achieve a reasonable settlement for the damage.

Wastewater Treatment and Recycled Water Distribution Project, Mendocino City Community Services District, CA. Mr. Herman is currently managing the funding, design and permitting for a \$3,000,000 wastewater treatment plant rehabilitation and recycled water distribution. His was instrumental in obtaining USDA, Rural Development funding with nearly \$1,000,000 as a grant.

Fort Bragg Unified School District On-Call Construction Management and Testing, Fort Bragg, CA. As the project manager and initial point of contact with the construction manager and the Inspector of Record for the Fort Bragg Unified School District's modernization program, Mr. Herman provided immediate communication for construction needs to SHN's technical staff to eliminate delays in the construction schedule. Because the project included many separate projects, Mr. Herman structured the project to include each of the individual construction/remodel areas as separate project elements to provide the District with the ability to fund each separately.

Distinguishing Qualifications

- Construction materials
- Construction Materials Testing – Field and Soils Laboratory
- Project Scheduling
- Reading and interpreting plans and specifications

Years of Experience: 39

Years with SHN: 9

Professional Registrations

ACI Int'l. Concrete Field Testing Technician Grade I

ACI Int'l. Concrete Strength Testing Technician

Caltrans Proficiency Certificate CT105, 125, 201, 202, 216, 217, 226, 231, 375, 504, 518, 521, 533, 539, 540, 556, 557.

Hazwoper Certified

Continued Studies

Various Institute of Transportation Studies courses

Steven L. Peckham

Construction Inspector

Relevant Experience

Mr. Peckham has more than 39 years of construction experience including installation of utilities, supervising construction crews and inspection of public works projects. Steve's areas of inspection expertise are underground water and sewer system projects, repair and re-construction of roadways and sidewalks. Mr. Peckham has a strong background in construction materials testing of road base and subgrade, concrete, and asphalt and is proficient in reading plans and specifications.

Representative Projects

Wastewater Treatment Plant Upgrade Project, City of Fort Bragg. Resident Inspector responsible for inspections, materials testing, and daily reporting.

Summer's Lane Reservoir Liner Installation, City of Fort Bragg. Quality Assurance Inspector responsible for observing and reporting liner installation.

Wastewater Treatment Project Phase I, City of Willits. Resident Project Representative responsible for inspection, testing, and reporting for Stage I Headworks, Influent Pump Structure and plant electrical service. Mr. Peckham reviewed progress billing for accuracy and assisted engineering staff in problem solving.

Wastewater Treatment Project Phase 2 & 3, City of Willits. Resident Project Representative responsible for inspection, material testing and reporting for Phase 2 & 3 mitigated enhanced wetlands, irrigation pump station/outfall, aeration basins and clarifiers. Mr. Peckham reviewed monthly progress billing for accuracy and assisted engineering staff in the completion of the Project.

Streets & Alleys Rehab Project, City of Fort Bragg. Resident Inspector responsible for inspections, materials testing, and daily reporting.

Orchard Avenue Bridge and Related Street Improvements, City of Ukiah. Resident Inspector provided complete inspection services for reinforcing steel, concrete placement, and construction observation. Acted as liaison between engineering staff and contractor. Provided daily reporting and construction photos for the project.

Oak Manor Trail Project, City of Ukiah. Resident Inspector responsible for inspections, materials testing and reviewing progress payments for accuracy. Provided daily construction reports and photos for the project. Acted as liaison between the contractor and engineer to resolve construction problems.

Chestnut Street Corridor Project, City of Fort Bragg. Resident Inspector responsible for inspections, materials testing, and daily reporting.

Coastal Trail Phase II, City of Fort Bragg. Resident Inspector responsible for inspections, materials testing, and daily reporting.

North State Street Sewer Main Replacement, City of Ukiah. Responsible for inspection, testing and reporting for all phases of the project. Assisted engineering staff in problem solving.

Distinguishing Qualifications

- Project Management
- Special Inspection
- Construction Materials Testing

Years of Experience: 20

Years with SHN: 9

Registrations and Certifications

Caltrans Certificate of Proficiency

American Concrete Institute –
Concrete Field Testing Technician –
Grade 1 ID# 00030068

ICC Certified Structural Masonry,
Reinforced Concrete, and Structural
Steel & High Strength Bolting
Special Inspector

NICET Level 2 Asphalt, Soils, and
Concrete #123262

TxDOT Hot Mix Asphalt Center –
Superpave Training Program

TxDOT Level 1A(e) HMA Plant
Operations Specialist

AWS Certified Welding Inspector
#09021121

Magnetic Particle Level 2 NDT
Inspector

Ultrasonic Level 2 NDT Inspector

Sharp Industrial Radiation Safety
Training Certified

Radiation Safety Officer Training

24 Hour Hazwoper Training

Stephen James

Laboratory and Inspections Manager / Certified Special Inspector

Relevant Experience

Mr. James has over 20 years of experience providing special inspections including structural steel welding, structural concrete, structural masonry, hot mix asphalt and other construction materials. In addition to a long list of special inspection certifications, Mr. James provides effective and timely project management for all types of public and private sector projects. Mr. James also provides a wide range of construction materials laboratory testing experience and certifications as well as the educational background to provide Quality Assurance and Quality Control for all field inspections and laboratory testing procedures. As a Certified Welding Inspector, Mr. James is competent in visual weld inspections, nondestructive testing, and evaluation, writing welding procedure specifications (WPS), and qualifying welders and welding operators.

Representative Projects

Mendocino Transit Authority, New Maintenance Facility, Ukiah, CA. The project consisted of the construction of a fabricated steel building capable of housing the MTA bus fleet for maintenance. The project was funded by grants from the Federal Transit Administration. The inspections consisted of structural steel fabrication shop inspections, nondestructive testing of complete joint penetration welds (CJP), visual inspection of all shop and field welding, high strength bolt testing and inspections, concrete and reinforcing steel placement inspections, reinforcing steel shop fabrication inspections and sampling, concrete sampling and testing, post installed anchor inspection and testing, masonry construction inspections and testing, and asphalt paving compaction testing.

Mendocino Coast District Hospital, Various Facility Improvements, Fort Bragg, CA. This ongoing project consists of several facility improvements projects. The New Radiology Building Addition was a modular building, installed on a perimeter footing with a connecting corridor to the main facility. The Central Plant Renovation and Pharmacy Remodel are projects that are both ongoing and require testing and special inspections on an on-call basis. The inspection and testing tasks for these projects are as follows: Pipe welding inspections, reinforcing steel sampling and testing, post installed anchor inspections and testing, concrete inspections and testing, masonry inspections and testing, soil compaction testing, and torque and tension testing of epoxy installed dowels and anchors.

Caltrop District 1 Lake County Paving Projects, Lake County, CA. Mr. James served as a Hot Mix Asphalt (HMA) Plant Inspector and a Quality Assurance Tester for HMA and Rubberized HMA on two large paving projects in Lake County. This work was done at night to alleviate traffic congestion and was interrupted numerous times due to wild fires. Mr. James collected samples at the plant and performing acceptance tests at the Kelseyville and Clear Lake Caltrans laboratories.

Distinguishing Qualifications

- Project manager for numerous water and wastewater treatment facilities
- Mechanical design for water & wastewater treatment plants
- Computer-aided design, hydraulic & facility modeling

Years of Experience: 33

Years with SHN: 6

Education

A.S., Civil Engineering Technology;
Umpqua Community College,
Roseburg, OR; 1975

Professional Registrations

P.E. #17302, Oregon

General Contractor, Oregon
(2003-2006)

Professional Affiliations

Water Environmental Association
(W.E.F)

California Water Environment
Association (CWEA), Current Board
Member

Mike Veach, PE

Senior Engineer / Senior Advisor

Relevant Experience

Mr. Veach has over 33 years of professional experience working on a variety of engineering assignments, with an emphasis on water and wastewater treatment facilities. He is a registered Oregon civil engineer.

Mr. Veach's area of expertise is process/mechanical design for water and wastewater treatment plants ranging in capacity from 0.5 million gallons per day (mgd) to 210 mgd. He also has experience as a facility design manager on several projects nationwide. He has been involved in all phases of project development including conceptual design, final design, plans and specifications, construction, and startup.

Mr. Veach is skilled in all levels of computer aided design, including hydraulic and facility modeling. His computer skills include proficiency in Hydro, and Fathom for hydraulic modeling, MicroStation in both 2-D and 3-D, and a working knowledge of AutoCAD for drawing production.

Representative Projects

Wastewater Treatment and Water Reclamation Project, City of Willits, CA. Stage 1: Quality advisor responsible for senior review of plans and specifications of Stage 1 of the treatment plant design, which included the design of an influent pump station and headworks facility. Headworks facility included the design of preliminary screening of the plant influent and grit removal. **Stages 2 and 3:** senior engineer and design lead for several mechanical plant and enhancement wetlands improvements, including the blower system, irrigation system, new and modified buildings, and solids-handling area. Performed QA on other portions of the design project. Provided preliminary recommendations for future reclaimed water improvements. Design includes aeration blower design, solids handling facility and irrigation pump station and outlet structure. Provided senior review of plans and specifications of Stage 2 of the treatment plant design, which included the design of an extended air secondary treatment facility and UV disinfection of the plant effluent.

Wastewater Treatment Plant 2, City of Coos Bay, OR. Lead process engineer responsible for preliminary and final design of the new Headwork facility. Design included the installation of two center-fed perforated plate screens, screenings washer/compactor, and screened solids transfer conveyors. The design also included the installation of a new Headcell grit collector followed by a Tea Cup Grit cyclone and grit snail for clarification. The Plant 2 design was a multi-firm multi-discipline design performed in three separate offices. Mr. Veach was responsible for the inter-office coordination with other disciplines associated with the headworks design. Developed the basic design criteria and functionality of the headworks structure which also housed the aeration basin blowers.

Water Treatment Facility Upgrades, Garberville, CA. Design manager for the multidisciplinary project to upgrade the District's drinking water system, which includes upgrades at the filtration point, a new surface water treatment plant, improvements to the booster pump station, and telemetry.

Distinguishing Qualifications

- Report preparation
- Proposal preparation
- Technical writing/editing
- Labor Compliance
- Project Accounting

Years of Experience: 44

Years with SHN: 16

Community Service

Author, Pine Mountain Mutual Water Company Newsletter

Volunteer, Pine Mountain Firewise Fire-Safe Council

Former Board Member, Sonoma Action for Equine Rescue

Former Fundraising Committee Member, Event Coordinator, Phoenix Hospice, Willits, CA

Former Fundraising Committee Member, Event Coordinator, Humane Society for Inland Mendocino County

Angela L. Herman

Administrative Assistant

Relevant Experience

Ms. Herman has more than 40 years of experience preparing and maintaining files, records and reports. As Office Manager for SHN Willits Region, Ms. Herman has 16 years of technical writing and editing experience in the consulting engineering and geotechnical field. Her experience includes State and Federal prevailing wage labor compliance and reporting. Ms. Herman has 10 years previous experience as Controller for T.M. Herman & Associates. Duties included payroll and project record keeping in the engineering and land surveying field.

Representative Projects

Labor Compliance and Record Keeping, Fort Bragg Wastewater Treatment Plant Upgrade, City of Fort Bragg, Fort Bragg, CA. Reviewed prevailing wage reports from the contractor and all sub-contractors for accuracy. Prepared and submitted monthly Status Reports to the State Water Resources Division of Financial Assistance. Submitted Contractor Pay Requests and USDA Outlay Reports to the client and USDA Rural Development for approval of Project funding. Ms. Herman was in responsible charge of all correspondence record keeping.

Valley Fire Erosion Control Plan Reporting, Pacific States Environmental, Middletown Area, Lake County, CA. Record keeping and report submission of erosion control plans after debris removal for over 1,500 individual residential parcels impacted by the Valley Fire. Also responsible for maintaining SHN employee's timesheets, per diem, and lodging records for inclusion in State funding pay requests.

Reports and Record Keeping, Highway 101 Bypass, Pre-Construction Wildlife Survey, Willits, CA. Prepared and submitted daily biological inspection records and quarterly compliance reports documenting the monitoring of State and Federally protected species to prevent impact during construction. Responsible for maintaining and disseminating inspection records to Cal Trans and CDFW for 3+ years.



Consulting Engineers & Geologists, Inc.

Fee Schedule January 1, 2019

When accurate definition of the proposed work is not possible, an hourly charge out rate for determining compensation shall be used. Hourly charge rates include payroll costs, overhead, and profit. Hourly services are billed portal to portal and are subject to a 2-hour minimum. Current rates are as follows:

| Hourly Charge Rates | | |
|--|--------------|---|
| Position ¹ | Hourly Rates | |
| Senior Engineer | \$ 140.00 | - |
| Senior Geotechnical Engineer | \$ 140.00 | - |
| Senior Engineering Geologist | \$ 140.00 | - |
| Senior Geologist | \$ 135.00 | - |
| Senior Planner | \$ 120.00 | - |
| Senior Environmental Scientist | \$ 130.00 | - |
| Senior Land Surveyor | \$ 130.00 | - |
| Project Manager | \$ 100.00 | - |
| Project Engineer | \$ 110.00 | - |
| Project Geologist | \$ 110.00 | - |
| Project Land Surveyor | \$ 100.00 | - |
| Associate Planner | \$ 90.00 | - |
| Associate Environmental Scientist | \$ 110.00 | - |
| Staff Engineer | \$ 90.00 | - |
| Staff Geologist | \$ 90.00 | - |
| Staff Planner | \$ 80.00 | - |
| Staff Environmental Scientist | \$ 90.00 | - |
| Staff Land Surveyor ³ | \$ 90.00 | - |
| Certified Industrial Hygienist | \$ 110.00 | - |
| GIS/UAV Specialist | \$ 80.00 | - |
| Construction Inspector ³ | \$ 90.00 | - |
| Lab/Field Technician ³ | \$ 90.00 | - |
| Survey Technician ³ | \$ 80.00 | - |
| Engineering Technician/Draftsperson | \$ 70.00 | - |
| Technical Writer | \$ 65.00 | - |
| Clerical | \$ 65.00 | - |
| Expert Witness ^{2,4} | \$ 175.00 | - |
| ¹ Incidental expenses, i.e., lodging, meals, airplane tickets, etc., are billed at cost plus 15%. ² Minimum daily charge is four hours. ³ Rates depend on the specific personnel assigned and if prevailing wage rates are required in the area of work. ⁴ Rates for Expert Witness are charged for preparation and testimony for both deposition(s) and trial(s). | | |

Reimbursables

The following direct charges are charged in addition to the hourly charge rates set forth above.

Direct Charges:

| | |
|--|-----------------|
| CADD plots (black & white) | \$ 0.40/sq. ft. |
| CADD plots (color) | \$ 0.90/sq. ft. |
| Copies | \$.15/ea. |
| Equipment and other expenditures (required for projects) | Cost + 15% |
| Field office | Cost + 15% |
| Filing fees, telephone expense, etc. | Cost + 15% |
| Iron pipe, monuments, flagging, etc. | Cost + 15% |
| Mylars | \$ 15.00 |
| Services of other consultants | Cost + 15% |
| Stakes, hubs, lath, etc. | Cost + 15% |
| Subsistence, air travel, etc. | Cost + 15% |
| Vehicles | \$ 50.00/day |

Field Testing and Equipment:

| | |
|--|----------------------------------|
| Anchor bolt tension testing | \$ 80.00/day plus operator |
| CO ₂ Meter | \$ 10.00/day |
| Concrete Compression Impact Hammer | \$ 25.00/day*+ |
| Core Drilling Machine | \$ 75.00/day + \$3.00/inch cored |
| Dissolved Oxygen Meter | \$ 58.00/day*+ |
| Expendable Supplies | \$ 40.00/day*+ |
| Fyrite Meter | \$ 33.00/day*+ |
| Generator | \$ 58.00/day*+ |
| Geophysical Equipment | By Quotation |
| Grundfos Controller & Pump | \$275.00/day |
| Hand Auger | \$ 36.00/day |
| Health & Safety Level D | \$ 35.00/day*+ |
| Health & Safety Level C | \$ 60.00/day*+ |
| High Pressure Controller | \$ 60.00/day*+ |
| Inclinometer | \$200.00/day* |
| LEL Meter | \$ 73.00/day*+ |
| Nuclear Density Testing | \$ 25.00/hour plus operator |
| Other equipment including drill rigs, backhoes, etc. | Cost + 15% |
| ORP Meter | \$ 15.00/day |
| OVA | \$145.00/day*+ |
| Peristaltic Pump | \$ 50.00/day*+ |
| pH/Conductivity Meter | \$ 58.00/day*+ |
| Pumps | \$ 45.00/day*+ |
| Quad (ATV) | \$150.00/day |
| Rebar Locating Device | \$ 40.00/day plus operator |

* 1/2 Day Minimum Charge.
 + 25% Weekly Discount, 40% Monthly Discount.
(1) If concrete is sampled and delivered to SHN lab by outside contractor, add \$5.00/ea. for processing and curing per ASTM C-31.

Reimbursables, Continued

Field Testing and Equipment, Continued:

| | |
|---|-----------------------------|
| Roto-hammer | \$ 50.00/day*+ |
| Skidmore-Wilhelm Bolt Tension Calibration | \$ 50.00/day |
| Soil/Gas Purge Pumps | \$ 30.00/day*+ |
| Soil Gas Probes | \$200.00/day*+ |
| Torque Wrench (0 to 250 ft lbs) | \$ 25.00/day |
| Torque Wrench (250 to 1,000 ft lbs) | \$ 50.00/day |
| Turbidity Meter | \$ 29.00/day*+ |
| Ultrasonic Test Device | \$ 20.00/hour plus operator |
| Vapor Extraction System | \$500.00/day*+ |
| Water Level Data Logger | \$ 60.00/day*+ |
| Water Level Meter | \$ 36.00/day*+ |
| Well Point | \$ 50.00/day |

Survey Equipment:

| | |
|--------------------------------|----------------|
| GPS Station | \$300.00/day* |
| Level | \$ 25.00/day* |
| Resource GPS | \$ 150.00/day* |
| Robotic Total Station | \$ 200.00/day |
| Total Station | \$ 7.50/hour |
| Total Station w/Data Collector | \$ 100.00/day |
| Toughbook | \$ 150.00/day* |
| Trimble GeoXT GPS Unit | \$ 150.00/day* |

Laboratory Tests:

| | |
|--|-----------------------------|
| Asphalt Briquette Compaction | \$ 50.00/ea. ⁽¹⁾ |
| Asphalt Bulk Specific Gravity | \$ 30.00/ea. |
| Asphalt Content by Nuclear Method | \$ 75.00/test |
| Asphalt Content Gauge Calibration | \$200.00/ea. |
| Asphalt Extraction (% Bitumen) | On Request |
| Asphalt (Hveem) Mix Design | On Request |
| Brass Tube (Liner) | \$ 5.00/ea. |
| Cleanness Value (CT 227) | \$ 75.00/ea. |
| Compaction Curves (ASTM D 1557 or Caltrans CT216): | |
| 4-inch Mold | \$200.00/ea. |
| 6-inch Mold | \$200.00/ea. |
| Check Point | \$ 75.00/ea. |
| Concrete Compressive Strength (CT 521 or ASTM C39) | \$ 25.00/ea. ⁽²⁾ |
| Concrete Linear Shrinkage (3 Bars) | \$200.00 |
| Concrete Moisture | \$ 25.00/test (floor test) |
| Consolidation Test | \$300.00/ea. |
| Direct Shear, per point: (ASTM D3080) | |
| Consolidated-Drained (CD) | \$145.00/point |
| Unconsolidated-Undrained (UU) (Modified ASTM) | \$115.00/point |
| Consolidated-Undrained (CU) (Modified ASTM) | \$130.00/point |
| Additional cycles (each) | \$ 65.00/ea. |
| Disposable Concrete Molds | \$ 3.00/ea. |

* 1/2 Day Minimum Charge.

+ 25% Weekly Discount, 40% Monthly Discount.

(1) If asphalt is delivered to SHN lab unmixed, add \$75.00/ea. for processing and mixing per Caltrans CT304.

(2) If concrete is sampled and delivered to SHN lab by outside contractor, add \$5.00/ea. for processing and curing per ASTM C-31.

Reimbursables, Continued

Laboratory Tests, Continued:

| | |
|--|----------------|
| Durability Index | \$ 75.00/ea. |
| Expansion Index | \$175.00/test |
| Fireproofing Density | \$ 50.00/ea. |
| Grout Compressive Strength | \$ 40.00/ea. |
| LA Rattler (abrasion resistance) | \$200.00/test |
| Liquid Limit | \$100.00/ea. |
| Masonry Block Compressive Strength | \$ 65.00/ea. |
| Masonry Block Linear Shrinkage | \$ 85.00/ea. |
| Masonry Block Prism Compressive Strength | \$125.00/ea. |
| Masonry Core Shear Test | \$ 50.00/core |
| Moisture Content | \$ 20.00/ea. |
| Moisture-Density Test | \$ 30.00/ea. |
| Particle Size Analysis (ASTM 422) | \$115.00/ea. |
| Percent Crushed Particles | \$125.00/ea. |
| Percent Organics | \$ 50.00/ea. |
| Plastic Limit | \$ 50.00/ea. |
| Plasticity Index | \$150.00/ea. |
| R-Value | \$300.00/ea. |
| Rice Specific Gravity of Asphalt (ASTM D2041) | \$ 75.00/ea. |
| Sand Equivalent | \$ 50.00/ea. |
| Sawing Rocks and Concrete Cores | \$ 30.00/unit |
| Sieve Analysis--Coarse | \$ 50.00/ea. |
| Sieve Analysis--Fine | \$ 60.00/ea |
| Sieve Analysis--Passing 200 | \$ 45.00/ea. |
| Specific Gravity, Rock | \$ 45.00/ea. |
| Stabilometer of Premixed AC | \$ 75.00/ea. |
| Sulfate Soundness | \$ 80.00/cycle |
| Swell Test | \$ 55.00/point |
| Triaxial Compression | |
| Unconsolidated Undrained (TXUU) (ASTM D2850) | \$115.00/point |
| Consolidated Undrained (TXCU) (ASTM D4767) | \$385.00/point |
| Consolidated Drained (TXCD) (ACOE) | \$500.00/point |
| Consolidated Undrained (TXCU-3 stage) (ASTM D4767) | \$810.00/test |
| Consolidated Drained (TXCD-3 stage) (ACOE) | \$860.00/test |
| USDA Bulk Density Test | \$ 30.00/ea. |
| USDA Textural Suitability Test | \$ 60.00/ea. |
| Unconfined Compression | \$ 65.00/ea. |
| Unit Weight of Lightweight Concrete | \$ 50.00/unit |

Notes:

All samples of soil or rock from physical testing are discarded 30 days after submission of final report unless prior arrangements are made. Samples of soil or rock submitted for testing for hazardous substances will be returned to the Client, who is responsible for proper disposal.

This fee schedule is subject to review and adjustment, as required.

Certain services may require prevailing wages or overtime at premium pay to SHN employees. In such circumstances, fees will be adjusted to reflect increased labor costs.



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