



COUNTY OF HUMBOLDT

AGENDA ITEM NO.

C-21

For the meeting of: August 9, 2016

Date: July 22, 2016

To: Board of Supervisors

From:  Thomas K. Mattson, Public Works Director

Subject: Agreement for Consultant Services with SHN Consulting Engineers & Geologists for the Eel River Valley Groundwater Basin Assessment

RECOMMENDATION(S):

That the Board of Supervisors authorizes the Chair to sign the attached Agreement for Consultant Services with SHN Consulting Engineers & Geologists to perform professional geologist services for the Eel River Valley Groundwater Basin Assessment.

SOURCE OF FUNDING: California Department of Water Resources – Proposition 1 Sustainable Groundwater Planning Grant Program

DISCUSSION:

On May 31, 2016, the Board authorized Public Works to issue a Request for Proposals (RFP) for professional geologist services related to the Eel River Valley Groundwater Basin Assessment (the "Project"). The RFP was prepared in accordance with the County's Purchasing Policy. The Board directed Public Works to return to the Board with a contract with the selected consulting firm for review and approval.

The RFP was circulated from June 1, 2016, through June 15, 2016. The RFP was sent directly to an existing list of consultant firms and posted on the County's web site. Submittals were

Prepared by Hank Seemann

CAO Approval 

REVIEW:

Auditor _____ County Counsel Sm Human Resources KW Other _____

TYPE OF ITEM:

- Consent
- Departmental
- Public Hearing
- Other _____

BOARD OF SUPERVISORS, COUNTY OF HUMBOLDT

Upon motion of Supervisor Fennell Seconded by Supervisor Sundberg

Ayes Sundberg, Fennell, Lovelace, Bohn, Bass

- Nays _____
- Abstain _____
- Absent _____

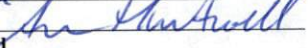
PREVIOUS ACTION/REFERRAL:

Board Order No. C-15

Meeting of: May 31, 2016

and carried by those members present, the Board hereby approves the recommended action contained in this Board report.

Dated: Aug. 9, 2016

By: 
Kathy Hayes, Clerk of the Board

received by two firms. A selection committee composed of representatives from City of Fortuna, Humboldt County Farm Bureau, the Geology Department of Humboldt State University, Humboldt County Division of Environmental Health, and Public Works interviewed each firm on June 23, 2016, and then ranked the written submittals according to the criteria and rating system contained in the RFP. SHN Consulting Engineers & Geologists was the highest ranking consultant candidate.

Public Works recommends that the Board authorizes the Chair to sign the attached Agreement for Consultant Services. Public Works will be returning at a later date for review and approval of an agreement with the drilling contractor selected under a separate RFP.

FINANCIAL IMPACT:

Funds for the Project have been incorporated into the Fiscal Year 2016-17 budget in revenue line 1100251-525001 and expenditure line 1100251-3452. The total estimated cost for the Project is \$270,418. Public Works has a grant agreement with the Department of Water Resources to provide up to \$250,000 for the Project. The cost-share amount of \$20,418 will be funded from the General Fund portion of the Water Management budget. The maximum amount payable under the attached Agreement is \$137,236.

The requested action will advance two of the Board of Supervisors' core roles: providing for and maintaining infrastructure, and creating opportunities for improved safety and health.

OTHER AGENCY INVOLVEMENT:

California Department of Water Resources, Humboldt County Division of Environmental Health, Planning and Building Department, Agricultural Commissioner, UC-Cooperative Extension, City of Fortuna, City of Rio Dell, Bear River Band of Rohnerville Rancheria, Hydesville Community Services District, Loleta Community Services District, Palmer Creek Community Services District, Riverside Community Services District, Scotia Community Services District.

ALTERNATIVES TO STAFF RECOMMENDATIONS:

Board discretion

ATTACHMENTS:

Agreement for Consultant Services

**AGREEMENT FOR CONSULTANT SERVICES
BY AND BETWEEN
COUNTY OF HUMBOLDT
AND
SHN CONSULTING ENGINEERS & GEOLOGISTS, INC.
PROJECT NAME: Eel River Valley Groundwater Basin Assessment
PROJECT NUMBER: 251032**

This Agreement, entered into this ____ day of August, 2016, by and between the County of Humboldt, a political subdivision of the State of California, hereinafter referred to as "COUNTY," and SHN Consulting Engineers & Geologists, Inc., a corporation, hereinafter referred to as "CONSULTANT," is made upon the following considerations:

WHEREAS, COUNTY, by and through its Department of Public Works – Environmental Services, desires to retain the services of CONSULTANT to assist with a geologic and hydrogeologic investigation of the Eel River Valley groundwater basin to support the region's compliance with the Sustainable Groundwater Management Act; and

WHEREAS, such work involves the performance of professional and technical services of a temporary and occasional character, and COUNTY has no employees available to perform such services and is unable to hire employees for the performance thereof for the temporary period; and

WHEREAS, Pursuant to California Government Code Section 31000, COUNTY may retain independent contractors to perform special services for COUNTY or any department thereof; and

WHEREAS, CONSULTANT has represented that it is qualified to perform said services.

NOW THEREFORE, the parties hereto mutually agree as follows:

1. OBLIGATIONS OF CONSULTANT:

- A. Professional Services. CONSULTANT agrees to furnish professional consulting services in accordance with the criteria, schedule and fiscal requirements set forth in Exhibit A – Scope of Services, Exhibit B – Project Schedule, Exhibit C – Project Budget and Exhibit D – Billing Rate Schedule, which are attached hereto and incorporated herein by reference. In providing such services CONSULTANT agrees to fully cooperate with the Humboldt County Department of Public Works Director or designee thereof, hereinafter referred to as "Director."
- B. Additional Services. No additional services shall be performed by CONSULTANT prior to the execution of a written amendment to this Agreement and the issuance of a separate "Notice to Proceed" authorizing the performance of such additional services. Any amendments authorizing the performance of additional services shall include a detailed description of such services, the dollar value thereof and the method by which such services shall be compensated.

2. OBLIGATIONS OF COUNTY:

- A. Provision of Necessary Data and Materials. COUNTY shall provide CONSULTANT with all background data necessary for CONSULTANT to complete the services required hereunder.

- B. COUNTY Representative. COUNTY shall designate a representative with complete authority to transmit instructions and information, receive correspondence, interpret policy and define decisions pertaining to this Agreement. COUNTY's representative shall have overall charge and responsibility of COUNTY's activities and obligations hereunder. All correspondence pertaining to the performance of CONSULTANT's duties and obligations contained herein shall be submitted to COUNTY's representative.
- C. Review of Submitted Materials. COUNTY shall thoroughly review all draft reports, sketches, proposals and other documents submitted by CONSULTANT. COUNTY shall provide CONSULTANT with a written response pertaining to the review of documents submitted by CONSULTANT within five (5) calendar days from the receipt thereof.

3. TERM:

This Agreement shall begin upon execution by both parties and remain in full force and effect for a period of three hundred and sixty-five (365) calendar days, unless sooner terminated as provided herein.

4. TERMINATION:

- A. Breach of Contract. If, in the opinion of COUNTY, CONSULTANT fails to adequately perform the services required hereunder within the time limits specified herein, or otherwise fails to comply with the terms of this Agreement, or violates any ordinance, regulation or other law applicable to its performance herein, COUNTY shall have the right to cancel or terminate this Agreement immediately, upon notice.
- B. Without Cause. COUNTY may terminate this Agreement without cause upon thirty (30) days advance written notice. Such notice shall state the effective date of the termination.
- C. Insufficient Funding. COUNTY's obligations under this Agreement are contingent upon the availability of local, state and/or federal funds. In the event such funding is terminated, COUNTY shall, at its sole discretion, determine whether this Agreement shall be terminated. COUNTY shall provide CONSULTANT seven (7) days advance written notice of its intent to terminate this Agreement due to insufficient funding.
- D. Compensation. In the event of any termination of this Agreement, CONSULTANT shall be entitled to compensation for uncompensated services rendered hereunder through and including the effective date of such termination. However, this provision shall not limit or reduce any damages owing to COUNTY resulting from a breach of this Agreement.

5. COMPENSATION:

The maximum amount payable by COUNTY for services rendered, and expenses incurred, by CONSULTANT pursuant to the terms and conditions of this Agreement is One Hundred and Thirty-Seven Thousand and Two Hundred and Thirty-Six Dollars (\$137,236). The specific rates and costs applicable to this Agreement shall be as set forth in Exhibit D – Billing Rate Schedule.

6. PAYMENT:

CONSULTANT shall submit to COUNTY monthly progress reports and invoices which itemize all work completed as of the invoice date. All invoices submitted by CONSULTANT shall be in a format approved by, and shall include backup documentation as specified by, Director and the Humboldt County Auditor-Controller. CONSULTANT shall submit a final undisputed invoice for payment not more than thirty (30) days following the expiration or termination date of this Agreement. Payment for services rendered and expenses incurred hereunder shall be made within thirty (30) days after the receipt of approved invoices.

7. NOTICES:

Any and all notices required to be given pursuant to the terms of this Agreement shall be in writing and served personally, or sent by certified mail, return receipt requested, to the respective addresses set forth below. Notice shall be effective upon actual receipt or refusal as shown on the receipt obtained pursuant to the foregoing.

COUNTY: County of Humboldt
Department of Public Works – Environmental Services
Attn: Hank Seemann
1106 Second Street
Eureka, California, 95501

CONSULTANT: SHN Consulting Engineers & Geologists, Inc.
Attn: Jason Buck
812 W. Wabash
Eureka, CA 95501-2138

8. REPORTS:

CONSULTANT agrees to provide COUNTY with any and all reports which may be required by local, state or federal agencies for compliance with this Agreement. Reports shall be submitted no later than fifteen (15) days after the end of each calendar quarter using the format required by the State of California as appropriate.

9. RECORD RETENTION AND INSPECTION:

A. Maintenance and Preservation of Records. CONSULTANT agrees to timely prepare accurate and complete financial, performance and payroll records relating to the services provided hereunder, and to maintain and preserve said records for at least three (3) years from the date of final payment under this Agreement, except that if any litigation, claim, negotiation, audit or other action is pending, the records shall be retained until completion and resolution of all issues arising therefrom. The books and records shall be original entry books with a general ledger itemizing all debits and credits for the work performed.

B. Inspection of Records. Pursuant to California Government Code Section 8546.7, all records, documents, conditions and activities of CONSULTANT, and its subcontractors, related to the services provided hereunder, shall be subject to the examination and audit of the California State Auditor and other duly authorized agents of the State of California for a period of three (3) years after final payment under this Agreement. CONSULTANT hereby agrees to make

such records available during normal business hours to inspection, audit and reproduction by COUNTY and any duly authorized local, state or federal agencies. CONSULTANT further agrees to allow interviews of any of its employees who might reasonably have information related to such records by COUNTY and any duly authorized local, state or federal agencies. All examinations and audits conducted under this section shall be strictly confined to those matters connected with the performance of this Agreement.

- C. Audit Costs. In the event of an audit exception or exceptions, the party responsible for not meeting the requirements of the project shall be responsible for the deficiency and for the cost of the audit. If the allowable expenditures cannot be determined because CONSULTANT's documentation is nonexistent or inadequate, according to generally accepted accounting practices, the questionable cost shall be disallowed by COUNTY.

10. MONITORING:

CONSULTANT agrees that COUNTY has the right to monitor all activities related to this Agreement, including the right to review and monitor CONSULTANT's records, programs or procedures, at any time, as well as the overall operation of CONSULTANT's programs in order to ensure compliance with the terms and conditions of this Agreement. However, COUNTY is not responsible, and will not be held accountable, for overseeing or evaluating the adequacy of the results of services performed by CONSULTANT pursuant to the terms of this Agreement.

11. CONFIDENTIAL INFORMATION:

- A. Disclosure of Confidential Information. In performance of this Agreement, CONSULTANT may receive information that is confidential under local, state or federal law. CONSULTANT hereby agrees to protect all confidential information in conformance with any and all applicable local, state and federal laws and regulations, including, but not limited to: California Welfare and Institutions Code Sections 827, 5328 and 10850; California Health & Safety Code Sections 1280.15 and 130203; the California Confidentiality of Medical Information Act ("CMIA"); the federal Health Information Technology for Economic and Clinical Health Act, ("HITECH Act"); the federal Health Insurance Portability and Accountability Act of 1996 ("HIPAA") and any current and future implementing regulations promulgated thereunder, including, without limitation, the Federal Privacy Regulations contained in Title 45 of the Code of Federal Regulations ("C.F.R.") Parts 160 and 164, the Federal Security Standards contained in 45 C.F.R. Parts 160, 162 and 164 and the Federal Standards for Electronic Transactions contained in 45 C.F.R. Parts 160 and 162, all as may be amended from time to time.
- B. Continuing Compliance with Confidentiality Laws. The parties acknowledge that federal and state confidentiality laws are rapidly evolving and that amendment of this Agreement may be required to ensure compliance with such developments. Each party agrees to promptly enter into negotiations concerning an amendment to this Agreement embodying written assurances consistent with the standards and requirements of HIPAA, the HITECH Act, the CMIA and any other applicable local, state and federal laws or regulations.

12. NUCLEAR FREE HUMBOLDT COUNTY ORDINANCE COMPLIANCE:

CONSULTANT certifies by its signature below that it is not a Nuclear Weapons Contractor, in that CONSULTANT is not knowingly or intentionally engaged in the research, development, production or testing of nuclear warheads, nuclear weapons systems or nuclear weapons components, as defined

by the Nuclear Free Humboldt County Ordinance. CONSULTANT agrees to notify COUNTY immediately if it becomes a Nuclear Weapons Contractor, as defined above. COUNTY may immediately terminate this Agreement if it determines that the foregoing certification is false or if CONSULTANT becomes a Nuclear Weapons Contractor.

13. NONDISCRIMINATION COMPLIANCE:

- A. Professional Services and Employment. In connection with the execution of this Agreement, CONSULTANT shall not discriminate in the provision of professional services or against any employee or applicant for employment because of race, religion or religious creed, color, age (over forty (40) years of age), sex (including gender identity and expression, pregnancy, childbirth and related medical conditions), sexual orientation (including heterosexuality, homosexuality and bisexuality), national origin, ancestry, marital status, medical condition (including cancer and genetic characteristics), mental or physical disability (including HIV status and AIDS), political affiliation, military service, or any other classification protected by local, state or federal laws and regulations. Nothing herein shall be construed to require employment of unqualified persons.
- B. Compliance with Anti-Discrimination Laws. CONSULTANT further assures that it will abide by the provisions of Title VI and Title VII of the Civil Rights Act of 1964, Section 504 of the Rehabilitation Act of 1973, as amended, the Age Discrimination Act of 1975, California Welfare and Institutions Code Section 10000, CDSS MPP Division 21, United States Executive Order 11246, as amended, and any other applicable local, state and federal laws and regulations. Practices in hiring, compensation, benefits and firing are among the employment practices subject to this requirement.

14. DRUG-FREE WORKPLACE:

By signing this Agreement, CONSULTANT hereby certifies that CONSULTANT will comply with the requirements of the Drug-Free Workplace Act of 1990 (California Government Code Sections 8350 et seq.), and will provide a drug-free workplace by doing all of the following:

- A. Drug-Free Policy. Publish, as required by California Government Code Section 8355(a)(1), a Drug-Free Policy Statement which notifies employees that the unlawful manufacture, distribution, dispensation, possession or use of a controlled substance is prohibited, and specifies the actions to be taken against employees for violations.
- B. Drug-Free Awareness Program. Establish, as required by California Government Code Section 8355(a)(2), a Drug-Free Awareness Program which informs employees about the following:
 - 1. The dangers of drug abuse in the workplace;
 - 2. CONSULTANT's policy of maintaining a drug-free workplace;
 - 3. Any available counseling, rehabilitation and employee assistance programs; and
 - 4. Penalties that may be imposed upon employees for drug abuse violations.

C. Drug-Free Employment Agreement. Ensure, as required by California Government Code Section 8355(a)(3), that every employee who provides services hereunder will:

1. Receive a copy of CONSULTANT's Drug-Free Policy Statement; and
2. Agree to abide by the terms of CONSULTANT's Drug-Free Policy as a condition of employment.

D. Noncompliance. Failure to comply with the above-referenced requirements may result in suspension of payments under this Agreement and/or termination thereof, and CONSULTANT may be ineligible for award of future contracts if COUNTY determines that the foregoing certification is false or if CONSULTANT violates the certification by failing to carry out the above-referenced requirements.

15. INDEMNIFICATION:

To the fullest extent permitted by law, and in accordance with California Civil Code Section 2782.8, CONSULTANT shall hold harmless, defend and indemnify COUNTY, its agents, officers, officials, employees and volunteers from and against any and all claims, demands, losses, damages, liabilities, expenses and costs of any kind or nature, including, without limitation, attorney fees and other costs of litigation, arising out of, or in connection with, CONSULTANT's performance of, or failure to comply with, any of the obligations contained in this Agreement, except such loss or damage which was caused by the sole negligence or willful misconduct of COUNTY.

16. INSURANCE REQUIREMENTS:

This Agreement shall not be executed by COUNTY, and CONSULTANT is not entitled to any rights hereunder, unless certificates of insurance, or other sufficient proof that the following provisions have been complied with, are filed with the Clerk of the Humboldt County Board of Supervisors.

A. General Insurance Requirements. Without limiting CONSULTANT's indemnification obligations provided for herein, CONSULTANT shall, and shall require that all subcontractors hereunder, take out and maintain, throughout the entire period of this Agreement, and any extended term thereof, the following policies of insurance, placed with insurers authorized to do business in the State of California with a current A.M. Bests rating of no less than A; VII or its equivalent, against personal injury, death and property damage which may arise from, or in connection with, the activities of CONSULTANT, its agents, officers, directors, employees, licensees, invitees, assignees and subcontractors:

1. Comprehensive or Commercial General Liability Insurance at least as broad as Insurance Services Office Commercial General Liability Coverage (occurrence form CG0001), in an amount of Two Million Dollars (\$2,000,000) per occurrence for any one incident, including, but not limited to, personal injury, death and property damage. If a general aggregate limit is used, such limit shall apply separately hereto or shall be twice the required occurrence limit.
2. Automobile/Motor Liability Insurance with a limit of liability not less than One Million Dollars (\$1,000,000) combined single limit coverage. Such insurance shall include

coverage of all owned, non-owned and hired vehicles. Said coverage shall be at least as broad as Insurance Service Offices Form Code 1 (any auto).

3. Workers' Compensation Insurance, as required by the California Labor Code, with statutory limits and Employers' Liability Insurance with a limit of no less than One Million Dollars (\$1,000,000) per accident for bodily injury or disease. Said policy shall contain, or be endorsed to contain, a waiver of subrogation against COUNTY, its agents, officers, officials, employees and volunteers. In the event CONSULTANT is self-insured, a Certificate of Permission to Self-Insure, signed by the California Department of Industrial Relations Administration of Self-Insurance shall be filed with the Clerk of the Humboldt County Board of Supervisors.
 4. Professional Liability Insurance – Error and Omission Coverage, including coverage in an amount no less than Two Million Dollars (\$2,000,000) for each occurrence and Four Million Dollars (\$4,000,000) general aggregate. Said insurance shall be maintained for the statutory period during which CONSULTANT may be exposed to liability. CONSULTANT shall require that such coverage be incorporated into its professional services agreements with any other entities.
- B. Special Insurance Requirements. Said policies shall, unless otherwise specified herein, be endorsed with the following provisions:
1. The Comprehensive or Commercial General Liability Policy shall provide that COUNTY, its agents, officers, officials, employees and volunteers, are covered as additional insureds for liability arising out of the operations performed by or on behalf of CONSULTANT. The coverage shall contain no special limitations on the scope of protection afforded to COUNTY, its agents, officers, officials, employees and volunteers. Said policy shall also contain a provision stating that such coverage:
 - a. Includes contractual liability.
 - b. Does not contain exclusions as to loss or damage to property caused by explosion or resulting from collapse of buildings or structures or damage to property underground, commonly referred to as "XCU Hazards."
 - c. Is the primary insurance with regard to COUNTY.
 - d. Does not contain a pro-rata, excess only and/or escape clause.
 - e. Contains a cross liability, severability of interest or separation of insureds clause.
 2. The above-referenced policies shall not be canceled, non-renewed or materially reduced in coverage without thirty (30) days prior written notice being provided to COUNTY in accordance with the notice provisions set forth herein. It is further understood that CONSULTANT shall not terminate such coverage until COUNTY receives adequate proof that equal or better insurance has been secured.
 3. The inclusion of more than one insured shall not operate to impair the rights of one insured against another insured, and the coverage afforded shall apply as though separate

policies had been issued to each insured, but the inclusion of more than one insured shall not operate to increase the limits of the insurer's liability.

4. For claims related to this Agreement, CONSULTANT's insurance is the primary coverage to COUNTY, and any insurance or self-insured programs maintained thereby are excess to CONSULTANT's insurance and will not be used to contribute therewith.
 5. Any failure to comply with the provisions of this Agreement, including breach of warranties, shall not affect coverage provided to COUNTY, its agents, officers, officials, employees and volunteers.
 6. CONSULTANT shall furnish COUNTY with certificates and original endorsements effecting the required coverage prior to execution of this Agreement. The endorsements shall be on forms approved by the Humboldt County Risk Manager or County Counsel. Any deductible or self-insured retention over One Hundred Thousand Dollars (\$100,000) shall be disclosed to, and approved by, COUNTY. If CONSULTANT does not keep all required policies in full force and effect, COUNTY may, in addition to other remedies under this Agreement, take out the necessary insurance, and CONSULTANT agrees to pay the cost thereof. COUNTY is also hereby authorized to deduct the cost of said insurance from the monies owed to CONSULTANT under this Agreement.
 7. COUNTY is to be notified immediately if twenty-five percent (25%) or more of any required insurance aggregate limit is encumbered, and CONSULTANT shall be required to purchase additional coverage to meet above-referenced aggregate limits.
- C. Insurance Notices. Any and all insurance notices required to be given pursuant to the terms of this Agreement shall be sent to the addresses set forth below in accordance with the notice provisions described herein.

COUNTY: County of Humboldt
Risk Management
825 Fifth Street, Room 131
Eureka, CA 95501

County of Humboldt
Department of Public Works – Environmental Services
Attn: Hank Seemann
1106 Second Street
Eureka, California, 95501

CONSULTANT: SHN Consulting Engineers & Geologists, Inc.
Attn: Jason Buck
812 W. Wabash
Eureka, CA 95501-2138

17. RELATIONSHIP OF PARTIES:

It is understood that this Agreement is by and between two independent contractors and is not intended to, and shall not be construed to, create the relationship of agent, servant, employee, partnership, joint venture or any other similar association. Both parties further agree that

CONSULTANT shall not be entitled to any benefits to which COUNTY employees are entitled, including, but not limited to, overtime, retirement benefits, leave benefits or workers' compensation. CONSULTANT shall be solely responsible for the acts or omissions of its agents, officers, directors, employees, licensees, invitees, assignees and subcontractors.

18. THIRD PARTY BENEFICIARIES:

CONSULTANT shall require that all subcontractors hereunder agree to be bound by the terms and conditions of this Agreement as applicable. However, nothing in this provision shall operate to confer any rights, remedies, obligations or liabilities upon any third parties.

19. PREVAILING WAGE RATES:

CONSULTANT shall comply with the State of California's General Prevailing Wage Rate requirements in accordance with California Labor Code Section 1770, and all federal, state, and local laws and ordinances applicable to the work required hereunder.

Any subcontract entered into as a result of this contract, if for more than Twenty Five Thousand Dollars (\$25,000.00), for public works construction or more than Fifteen Thousand Dollars (\$15,000.00) for the alteration, demolition, repair, or maintenance of public works, shall contain all of the provisions of this section.

When prevailing wages apply to the services described herein and Exhibit A – Scope of Services, transportation and subsistence costs shall be reimbursed at the minimum rates set by the Department of Industrial Relations (DIR) as outlined in the applicable Prevailing Wage Determination. (See <http://www.dir.ca.gov>.)

20. COMPLIANCE WITH APPLICABLE LAWS:

CONSULTANT agrees to comply with all local, state and federal laws and regulations applicable to the services covered by this Agreement. CONSULTANT further agrees to comply with all applicable local, state and federal licensure and certification requirements.

21. PROVISIONS REQUIRED BY LAW:

This Agreement is subject to any additional local, state and federal restrictions, limitations or conditions that may affect the provisions, terms or funding of this Agreement. This Agreement shall be read and enforced as though all legally required provisions are included herein, and if for any reason any such provision is not included, or is not correctly stated, the parties agree to amend the pertinent section to make such insertion or correction.

22. SEVERABILITY:

If any provision of this Agreement, or any portion thereof, is found by any court of competent jurisdiction to be unenforceable or invalid for any reason, such provision shall be severable and shall not in any way impair the enforceability of any other provision of this Agreement.

23. ASSIGNMENT:

CONSULTANT shall not delegate its duties or assign its rights hereunder, either in whole or in part,

without COUNTY's prior written consent. Any assignment by CONSULTANT in violation of this provision shall be void, and shall be cause for immediate termination of this Agreement. This provision shall not be applicable to service agreements or other arrangements usually or customarily entered into by CONSULTANT to obtain supplies, technical support or professional services.

24. AGREEMENT SHALL BIND SUCCESSORS:

All provisions of this Agreement shall be fully binding upon, and shall inure to the benefit of, the parties and to each of their heirs, executors, administrators, successors and assigns.

25. NO WAIVER OF DEFAULT:

A. General Waivers. The waiver by either party of any breach or violation of any requirement of this Agreement shall not be deemed to be a waiver of any such breach in the future, or of the breach of any other requirement of this Agreement.

B. Payment. In no event shall any payment by COUNTY constitute a waiver of any breach of this Agreement or any default which may then exist on the part of CONSULTANT. Nor shall such payment impair or prejudice any remedy available to COUNTY with respect to the breach or default. COUNTY shall have the right to demand repayment of, and CONSULTANT shall promptly refund, any funds disbursed to CONSULTANT, which in the judgment of COUNTY were not expended in accordance with the terms of this Agreement.

26. NON-LIABILITY OF COUNTY OFFICIALS AND EMPLOYEES:

No official or employee of COUNTY shall be personally liable for any default or liability under this Agreement.

27. AMENDMENT:

No addition to, or alteration of, the terms of this Agreement shall be valid unless made in writing and signed by the parties hereto.

28. STANDARD OF PRACTICE:

CONSULTANT warrants that it has the degree of learning and skill ordinarily possessed by reputable professionals practicing in similar localities in the same profession and under similar circumstances. CONSULTANT's duty is to exercise such care, skill and diligence as professionals engaged in the same profession ordinarily exercise under like circumstances. It is hereby understood that COUNTY's acceptance of the services performed by CONSULTANT hereunder shall not operate as a waiver or release of any breach of this Agreement.

29. TITLE TO INFORMATION AND DOCUMENTS:

It is understood that any and all documents, information, and reports concerning the subject matter of this Agreement prepared and/or submitted by CONSULTANT shall become the property of COUNTY. However, CONSULTANT may retain copies of such documents and information for its records. In the event of termination of this Agreement, for any reason whatsoever, CONSULTANT shall promptly turn over all information, writings and documents pertaining to the services provided hereunder to COUNTY without exception or reservation.

30. ADVERTISING AND MEDIA RELEASE:

All informational material related to this Agreement shall receive approval from COUNTY prior to being used as advertising or released to the media (television, radio, newspapers and internet). CONSULTANT shall inform COUNTY of all requests for interviews by media related to this Agreement before such interviews take place; and COUNTY is entitled to have a representative present at such interviews. All notices required by this provision shall be given to Director.

31. SUBCONTRACTS:

CONSULTANT shall obtain prior written approval from COUNTY before subcontracting any of the services to be delivered hereunder. Any and all subcontracts will be subject to all applicable provisions of this Agreement. CONSULTANT shall remain legally responsible for the performance of all terms and conditions of this Agreement, including work performed by third parties under subcontracts, whether approved by COUNTY or not.

32. JURISDICTION AND VENUE:

This Agreement shall be construed in accordance with the laws of the State of California. Any dispute arising hereunder, or relating hereto, shall be litigated in the State of California and venue shall lie in the County of Humboldt unless transferred by court order pursuant to California Code of Civil Procedure Sections 394 or 395.

33. ATTORNEY FEES:

If either party shall commence any legal action or proceeding, including an action for declaratory relief, against the other by reason of the alleged failure of the other to perform or keep any provision of this Agreement from being performed, the prevailing party in said action or proceeding shall be entitled to recover court costs and reasonable attorneys' fees, including the reasonable value of services rendered by the Humboldt County Counsel's Office, to be fixed by the court, and such recovery shall include court costs and attorney's fees on appeal, if applicable. As used herein, "prevailing party" means the party who dismisses an action or proceeding in exchange for payment of substantially all sums allegedly due, performance of provisions allegedly breached or other considerations substantially equal to the relief sought by said party, as well as the party in whose favor final judgment is rendered.

34. SURVIVAL:

The duties and obligations of the parties set forth in Sections 4(D), 9, 11 and 15 shall survive the expiration or termination of this Agreement.

35. CONFLICTING TERMS OR CONDITIONS:

In the event of any conflict in the terms or conditions set forth in any other agreements in place between the parties hereto and the terms and conditions set forth in paragraphs 1 through 39 of this Agreement, paragraphs 1 through 39 of this Agreement shall have priority.

36. INTERPRETATION:

This Agreement, as well as its individual provisions, shall be deemed to have been prepared equally by both of the parties hereto, and shall not be construed or interpreted more favorably for one party on the basis that the other party prepared it.

37. INDEPENDENT CONSTRUCTION:

The titles of the sections, subsections, and paragraphs set forth in this Agreement are inserted for convenience of reference only, and shall be disregarded in construing or interpreting any of the provisions of this Agreement.

38. FORCE MAJEURE:

Neither party hereto shall be liable or responsible for delays or failures in performance resulting from events beyond the reasonable control of such party and without fault or negligence of such party. Such events shall include, but not be limited to, acts of God, strikes, lockouts, riots, acts of war, epidemics, acts of government, fire, power failures, nuclear accidents, earthquakes, unusually severe weather, acts of terrorism or other disasters, whether or not similar to the foregoing.

39. ENTIRE AGREEMENT:

This Agreement contains all of the terms and conditions agreed upon by the parties hereto and no other agreements, oral or otherwise, regarding the subject matter of this Agreement shall be deemed to exist or to bind either of the parties hereto. In addition, this Agreement shall supersede in its entirety any and all prior agreements, promises, representations, understandings and negotiations, whether oral or written, concerning the same subject matter.

40. AUTHORITY TO EXECUTE:

Each person executing this Agreement represents and warrants that he or she is duly authorized and has legal authority to execute and deliver this Agreement. Each party represents and warrants to the other that the execution and delivery of this Agreement and the performance of such party's obligations hereunder have been duly authorized.

[Signatures on Following Page]

IN WITNESS WHEREOF, the parties have entered into this Agreement as of the date written above.

TWO SIGNATURES ARE REQUIRED FOR CALIFORNIA CORPORATIONS:

- (1) CHAIRPERSON OF THE BOARD, PRESIDENT, OR VICE PRESIDENT; AND
- (2) SECRETARY, ASSISTANT SECRETARY, CHIEF FINANCIAL OFFICER OR ASSISTANT TREASURER.

SHN CONSULTING ENGINEERS & GEOLOGISTS, INC.:

By: _____

Date: _____

Name: _____

Title: _____

By: _____

Date: _____

Name: _____

Title: _____

COUNTY OF HUMBOLDT:

By: *[Signature]*
Chair, Board of Supervisors

Date: 01/29/16

(SEAL)

ATTEST:
Clerk of the Board

By: *[Signature]*
Deputy

INSURANCE AND INDEMNIFICATION REQUIREMENTS APPROVED:

By: *[Signature]*
Risk Manager

- Exhibit "A" – Scope of Services
- Exhibit "B" – Project Schedule
- Exhibit "C" – Project Budget
- Exhibit "D" – Billing Rate Schedule

EXHIBIT A
SCOPE OF SERVICES



Exhibit A

Scope of Services

SHN will serve as the prime contractor for the Eel River Valley Groundwater Basin Assessment Project, working with Palmer Environmental and Thomas Gast & Associates under subcontracts with SHN. The scope of services outlined below is based on our understanding of the project and is in general alignment with the Project Work Plan included as Appendix A of the Request for Proposal issued by Humboldt County Public Works on June 1, 2016. The fees for the project have been established within the Grant Application and SHN is committed to working within these budgets.

Task 1 **Compilation of Existing Data and Previous Studies**

This task will include gathering and reviewing all available background information relevant to the hydrogeologic conditions of the Eel River Valley Groundwater basin. In our project archives, we have access to project-related subsurface data including boring logs and monitoring well logs, and much of the published geologic mapping has already been incorporated into our Geographic Information System (GIS) database.

As part of the compilation effort, we will work with County staff to develop a GIS database specific to this project. All spatial data, including all existing monitoring wells, borings, geologic maps, soil maps, and surface water features, will be compiled into a GIS database so that it can be readily shared and analyzed using GIS tools. Historical water level information will be compiled into Microsoft Excel (or other tabulation software) for analysis and preparation of graphs.

Although the compilation of data will continue through the duration of the project, initial efforts will be focused on acquiring the necessary data for site selection and optimization of the field studies.

- **Management and Coordination - 6 hours**
- **Data Review - 24 hours**
- **Compilation (GIS/Excel) - 18 hours**
- **Correspondence - 10 hours**

Total Est. - \$6,700

Task 2 **New Data Collection**

Task 2.1 **Exploratory Borings**

It is our understanding that Fisch Drilling has been selected as the drilling contractor for the installation of the borings and monitoring wells. SHN will work with the County and the drilling contractor to evaluate accessible locations that will provide the most valuable information for the overall project objectives. Data gaps identified in Task 1 will be important in siting the borings and monitoring wells. SHN will assist in obtaining any necessary clearances and permits.

SHN will provide oversight (as needed) during the drilling of the borings and the construction of the wells for the purposes of logging stratigraphy and documenting well construction.

- Management and Planning - 6 hours
 - Field Geologist - 40 hours
 - Log Preparation - 12 hours
 - Data Analysis - 6 hours
 - Report of Findings - 16 hours
- Total Est. - \$10,000**

Task 2.2 Surface Water/Groundwater Level Coupled Monitoring

A focused review of the existing monitoring wells within the study area will be conducted to search for wells screened within the alluvial aquifer in close proximity to the river system. If no wells are available and/or suitable for the study, the option of installing monitoring wells will be evaluated (which is not covered in this cost). A minimum target of three wells will be outfitted with transducers along with corresponding transducers set in the river. The transducers will be left in place into the spring season. Data will be retrieved as needed during the study period (two times minimum) for analysis of surface water/groundwater interaction. A report of findings with figures will be prepared for inclusion in the final report.

- Management and Planning - 6 hours
 - Field Reconnaissance - 8 hours
 - Instrumentation Installation and Removal - 36 hours
 - Equipment (transducers) - \$2,000
 - Data Download and Analysis - 8 hours
 - Preparation of Report of Findings - 16 hours
- Total Est. - \$10,500**

Task 2.3 Pump Tests

SHN will work with the drilling contractor to design the aquifer testing program. Two pumping tests have been specified in the *Work Plan* and these tests may be conducted either in existing wells or in the newly installed wells. Single well testing or testing using observation wells will be considered. Other alternatives to the pumping tests (such as slug tests) may also be considered based on data gaps identified in the initial compilation of existing data and the needs of the water balance.

An aquifer testing design plan will be developed to acquire the most valuable data and optimize the available funding. SHN will provide the transducers and depth-to-water meters for the water level monitoring during the testing. All testing will be documented and a report of findings will be prepared which will include a thorough description of the methods and results.

- Planning - 6 hours
 - Test Design Plan development - 4 hours
 - Field Testing - 40 hours
 - Data Analysis and Reporting - 24 hours
- Total Est. - \$9,000**

Task 2.4 Surface Water Flow Measurements

Thomas Gast will conduct the surface flow measurements within the Eel and Van Duzen Rivers. A minimum of four locations will be identified during the initial compilation of existing data. If possible, sites will be chosen where on-land monitoring wells are nearby so that surface water/groundwater relationships can also be evaluated.

Discharge measurements at all locations will be conducted in a single day in July, August, September, and October.

Transects will be carefully selected at each site. Data will be collected using high quality vertical axis cup meters (USGS-type Gurley Meters) and wading measurement techniques at shallow transects, and using an acoustic Doppler current profiler (ADCP) mounted on a rigid trimaran, manned jet boat, or inflatable kayak in deep water transects.

- **Management and Planning - 4 hours**
 - **Initial Field Reconnaissance - 10 hours**
 - **Field Measurements - 80 hours**
 - **Data Analysis and Reporting - 8 hours**
 - **Equipment - \$3,500**
- Total Est. - \$10,236**

Task 2.5 Irrigation Pumpage Estimation

It is our understanding that the County will be working with other agencies and irrigators to development estimates of total irrigation pumpage for the Eel River Valley basin. SHN is prepared to assist in organizing and compiling the existing data and evaluating the sensitivity of these estimates to the overall water balancing effort.

- **Correspondence - 8 hours**
 - **Data Review/Analysis - 8 hours**
- Total Est. - \$2,000**

Task 2.6 Water Level Measurements and Chloride Testing

SHN will assist in the identification of suitable wells for both water level and chloride testing during review of existing data. Up to forty wells will be measured and sampled, once during the dry season and once during the wet season. Samples will be collected using established protocols and field meters capable of monitoring a broad range of water quality parameters will be used to insure collection of water samples that are representative of formation water at the time of sampling. Samples will be submitted to North Coast Laboratories for analysis. Groundwater elevations recorded during each sampling campaign will be developed into a groundwater contour map. The results of the chloride testing will be reviewed and the data will be used to develop a map depicting the location of the freshwater-seawater transition zone.

- Management and Planning - 12 hours
 - Well Sampling - 120 hours
 - Laboratory Testing - 80 chloride tests - \$1,500
 - Data Analysis and Compilation - 20 hours
 - Preparation of Report of Findings - 16 hours
- Total Est. - \$27,000

Task 3 Conceptualization of Basin Hydrogeology and River-Aquifer Exchange

SHN will review all relevant existing data to develop a conceptual model of the stratigraphic, structural, and hydrologic configuration of the Eel River basin. The inventory and quality of the available data will provide guidance on what information should be targeted as part of the drilling and aquifer testing programs. New data from the field studies associated with this project will be used to refine the conceptual model.

Representative maps, figures and cross sections will be developed to illustrate the stratigraphic and hydrologic features. Relevant spatial information will be incorporated into a GIS database and a narrative discussion of the source data, interpretations and overall conditions of the Eel River Groundwater basin will be prepared as the main body of the final report.

Preparation of the Final Report (Alternative Plan, if appropriate) for the project is included in this scope item.

- Data Review and Compilation - 120 hours
 - Preparation of Report and Figures - 160 hours
- Total Est. - \$33,000

Task 4 Water Balance

Palmer Environmental will be the lead on the development of the water balance. A working draft of the water balance model will be developed early in the project based on the current data, and understanding of existing conditions. The results of this model can be used to identify information gaps, and improve the selection of field-based activities. The final water balance model will include all project data collected.

The water balance for this project will be derived from a GIS-based model. The water balance will be setup to analyze temporal variations as frequent as monthly or seasonally, as determined to be appropriate.

As described in the RFP, inputs to the water balance model will include precipitation (partitioned to evapotranspiration and surplus), irrigation losses, streambed recharge, and groundwater aquifer inputs. Outputs of groundwater include agricultural (licensed and unlicensed), municipal and domestic water supplies, groundwater discharge and recharge of deeper aquifer systems and/or discharge to the ocean. A sensitivity analysis for various factors (such as agriculture taking,

municipal pumping, drought, et cetera) will be used to determine the relative importance of these factors on the water balance results. This information will ultimately be used to evaluate sustainable yield, and explore basin susceptibility to overdraft or undesirable conditions.

- **Planning and Coordination** **Total Est. \$23,800**
- **Draft Water Balance Development**
- **Final Water Balance Development**
- **Figures and Reporting**

Task 5 Stakeholder Involvement and Initial Management Planning

It is our understanding that the County will take the lead on this task. SHN, Palmer Environmental, and/or Thomas Gast will assist with technical presentations or support as requested.

- **Meeting preparation and participation - 40 hours** **Total Est. \$5,000**

Changes to Scope and Fees

The scope and fees outlined above are based on the preliminary scope of services developed as part of the County's grant application for the project. By design, some of the scope items will be refined once an assessment has been made of existing data. As an example, the number and distribution of existing, and available, monitoring wells for use in this study will play an important role in the location and design of the Tasks 2.1, 2.2, 2.3, and 2.6. SHN is committed to the scope and fees that the County is obligated to as part of the administration of the grant, and any changes to the proposed scope/fees above will be discussed and approved prior to modification.

EXHIBIT B
PROJECT SCHEDULE

August 2016	Initiate Tasks 1, 2, 3, and 4
September 2016	Assist County with first stakeholder meeting
September-October 2016	Complete majority of data collection
November 2016	Provide preliminary results to support decision by County whether to prepare an "Alternative Submittal" for compliance with SGMA
December 2016	If Alternative Submittal is chosen as the compliance pathway, complete Final Report in format appropriate for this submittal by December 28, 2016
Spring 2017	Complete second round of water level measurements and chloride testing (Task 2.6)
May 2017	If Alternative Submittal is not chosen as the compliance pathway, complete Final Report in mutually agreeable format

**EXHIBIT C
PROJECT BUDGET**

Task 1	\$6,700
Task 2	\$68,736
Task 3	\$33,000
Task 4	\$23,800
Task 5	<u>\$5,000</u>
Total:	\$137,236

EXHIBIT D
BILLING RATE SCHEDULE



Consulting Engineers & Geologists, Inc.

Fee Schedule January 1, 2016

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	
Principal Engineer	\$ 135.00	- \$180.00
Principal Engineering Geologist	\$ 125.00	- \$155.00
Principal Surveyor	\$ 125.00	- \$155.00
Project Manager	\$ 85.00	- \$155.00
Senior Planner	\$ 100.00	- \$140.00
Senior Engineer	\$ 115.00	- \$150.00
Senior Geotechnical Engineer	\$ 125.00	- \$155.00
Senior Geologist	\$ 115.00	- \$145.00
Senior Surveyor	\$ 105.00	- \$135.00
Engineer	\$ 85.00	- \$120.00
Traffic Engineer	\$ 85.00	- \$140.00
Geologist	\$ 85.00	- \$115.00
Certified Industrial Hygienist	\$ 95.00	- \$140.00
Environmental Specialist	\$ 75.00	- \$130.00
Environmental Planner	\$ 75.00	- \$115.00
Staff Surveyor ³	\$ 75.00	- \$105.00
Assistant Engineer	\$ 75.00	- \$120.00
Survey Party Chief ³	\$ 75.00	- \$105.00
Junior Engineer	\$ 65.00	- \$ 90.00
Engineering Technician/Draftsperson ³	\$ 65.00	- \$ 90.00
Lab/Field Technician ³	\$ 65.00	- \$100.00
Survey Technician ³	\$ 65.00	- \$ 90.00
Technical Writer	\$ 55.00	- \$ 70.00
Clerical	\$ 50.00	- \$ 70.00
Expert Witness ^{2,4}	\$155.00	- \$255.00

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)	\$ 4.00/ea.
CADD plots (color)	\$ 20.00/ea.
Copies	\$.15/ea.
Equipment and other expenditures (required for projects)	Cost + 15%
FAX	\$ 2.00/sheet
Field office	Cost + 15%
Filing fees, telephone expense, etc.	Cost + 15%
Iron pipe, monuments, flagging, etc.	Cost + 15%
Mylars	\$ 2.50/sq. ft.
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	\$ 53.00/day**
Expendable Supplies	\$ 40.00/day**
Fyrite Meter	\$ 33.00/day**
Generator	\$ 53.00/day**
Geophysical Equipment	By Quotation
Grundfos Controller & Pump	\$275.00/day
Hand Auger	\$ 33.00/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	\$ 66.00/day**
Nuclear Density Testing	\$ 25.00/hour plus operator
Other equipment including drill rigs, backhoes, etc.	Cost + 15%
ORP Meter	\$ 15.00/day
OVA	\$132.00/day**
Ozone Sparge Trailer	\$2,000.00/day
Peristaltic Pump	\$ 50.00/day**
pH/Conductivity Meter	\$ 53.00/day**
Power Auger	\$100.00/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	\$ 26.00/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	\$ 33.00/day**
Well Point	\$ 50.00/day
Well Wizard	\$100.00/day**

Survey Equipment:

GPS Station	\$300.00/day*
Level	\$ 25.00/day*
Robotic Total Station	\$ 200.00/day
Total Station	\$ 7.50/hour
Total Station w/Data Collector	\$ 100.00/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	\$190.00/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	\$150.00/ea.
6-inch Mold	\$150.00/ea.
Check Point	\$ 50.00/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)	\$130.00/point
Unconsolidated-Undrained (UU) (Modified ASTM)	\$100.00/point
Consolidated-Undrained (CU) (Modified ASTM)	\$115.00/point
Additional cycles (each)	\$ 50.00/ea.
Disposable Concrete Molds	\$ 2.00/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	\$150.00/test
Fireproofing Density	\$ 50.00/ea.
Grout Compressive Strength	\$ 40.00/ea.
LA Rattler (abrasion resistance)	\$150.00/test
Liquid Limit	\$ 75.00/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	\$ 15.00/ea.
Moisture-Density Test	\$ 25.00/ea.
Particle Size Analysis (ASTM 422)	\$100.00/ea.
Percent Crushed Particles	\$125.00/ea.
Percent Entrained Air In Concrete	\$ 10.00/ea.
Percent Organics	\$ 50.00/ea.
Plastic Limit	\$ 50.00/ea.
Plasticity Index	\$125.00/ea.
R-Value	\$250.00/ea.
Rice Specific Gravity of Asphalt (ASTM D2041)	\$ 70.00/ea.
Sand Equivalent	\$ 50.00/ea.
Sawing Rocks and Concrete Cores	\$ 30.00/unit
Sieve Analysis--Coarse	\$ 45.00/ea.
Sieve Analysis--Fine	\$ 55.00/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	\$ 50.00/ea.
Unconfined Compression	\$ 50.00/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.