PROFESSIONAL SERVICES AGREEMENT

AGREEMENT

This Agreement is made and entered into this _____ day of January, 2019 by and between the City of Fort Bragg, a California Municipal Corporation, 416 N. Franklin Street, Fort Bragg, California, 95437 ("City"), and Coleman Engineering, Inc., a California corporation, 1358 Blue Oaks Boulevard, Suite 200, Roseville, California 95678 ("Consultant").

RECITALS

WHEREAS, City has determined that it requires the following professional services from a consultant: to provide engineering design services for the Raw Water Line Replacement Project, City Project No. 2018-02; and

WHEREAS, Consultant represents and warrants that it is fully qualified to perform such professional services by virtue of specialized experience and training, education and expertise of its principals and employees. Consultant further represents that it is willing to accept responsibility for performing such services in accordance with the terms and conditions set forth in this Agreement; and

WHEREAS, the legislative body of the City on January 14, 2019, by Resolution No. _____-2019 authorized execution of this Agreement on behalf of the City in accordance with Chapter 3.20 of the City Municipal Code and/or other applicable law;

NOW, THEREFORE, City and Consultant, for the consideration hereinafter described, mutually agree as follows:

1. CONTRACT DOCUMENTS

This Agreement consists of the following documents, all of which are incorporated into and made a part of the Agreement:

- a. Professional Services Agreement;
- b. Consultant's Scope of Services (Exhibit 1)

2. DESCRIPTION OF SERVICES

The services to be performed under this Agreement ("Services") are as follows: Provide engineering design services for the Raw Water Line Replacement Project, City Project No. 2018-02. The Services are further described in Consultant's Scope of Services (the "Scope of Services"), which is attached to and made a part of this Agreement as Exhibit 1. Changes in the scope, character, or complexity of the Services, if such changes become desirable or necessary as the work progresses, shall be agreed upon by both parties in a written change order. For special cases where it is essential that the extra services be performed immediately, execution of a change order or amendment to the Agreement covering the changes shall be completed as soon as possible.

3. TERM

The Agreement term will commence on January 15, 2019, and expire on June 1, 2020, unless the Agreement term is amended or the Agreement is terminated in accordance with its terms.

4. PAYMENT TERMS

a. City agrees to pay Consultant for Services that are actually performed in accordance with this Agreement. To be eligible for payment, Consultant invoices must be submitted not more often than monthly to the City and list the Services performed and the amounts to be paid according to the cost categories and prices in the Scope of Services.

b. NOT TO EXCEED CONTRACT: In no event will the City's obligation to pay the Consultant under this Agreement exceed **Six Hundred Eighty Thousand Dollars (\$680,000.00)** (the "Not to Exceed Amount"), unless this Agreement is first modified in accordance with its terms. The Not to Exceed Amount includes salary, fringe benefits, overhead, profit, and all other expenses incurred by the Consultant in completing its Services under this Agreement.

c. [SECTION REMOVED.]

d. In accordance with California Government Code § 8546.7, if this Agreement exceeds TEN THOUSAND DOLLARS (\$10,000.00), this Agreement and the Consultant's books and records related to this Agreement shall be subject to the examination and audit of the State Auditor, at the request of City or as part of any audit of the City, for a period of four (4) years after final payment under the Agreement.

e. COST PRINCIPLES. The Cost Principles and Procedures, 48 CFR, Federal Acquisition Regulations System, Chapter 1, Part 31 et seq., are the governing factors regarding allowable elements of cost. Also the administrative requirements set forth in 49 CFR, Part 18, Uniform Administrative Requirements for Grants and Cooperative Agreements to State and Local Governments are also included in this Agreement. This also applies to all subcontracts in excess of \$25,000.

5. TIME OF COMPLETION

Consultant must commence performance of the Services upon receipt of written direction to proceed from City. Consultant shall devote such time to the performance of services pursuant to this Agreement as may be reasonably necessary to meet the standard of performance provided in Section 9 below and to satisfy Consultant's obligations hereunder. Consultant will complete the Services in accordance with this Agreement by **June 1, 2020** (the "Time of Completion"). The Time of Completion may only be modified by a written amendment of the Agreement signed by both the City and the Consultant and in accordance with its terms. The Consultant shall not be liable for delays caused by factors outside of its control.

6. INDEPENDENT CONTRACTOR

Consultant and City agree that the Consultant will perform the Services as an independent contractor and not as an employee or agent of the City. Persons employed or utilized by Consultant in the performance of the Services will not be employees or agents of the City. Consultant is solely responsible for the payment of employment taxes incurred under this Agreement and any similar federal or state taxes.

7. SUBCONTRACTING

a. The Consultant shall perform the services contemplated with resources available within its own organization; and no portion of the services pertinent to this Agreement shall be subcontracted out without written authorization by the City's Contract Manager, except that, which is expressly identified in the approved Scope of Services.

b. Any subcontract in excess of \$25,000 entered into by the Consultant relating to this Agreement shall incorporate by reference all of the provisions of this Agreement and make them applicable to said subcontractor.

c. Consultant will be solely responsible for payment of such subcontracted Services.

d. Any substitution of subcontractors must be approved in writing by the City's Contract Manager.

e. Subcontractors are bound to Consultant and City in the same manner and to the same extent as Consultant is bound to City under the Agreement. Subcontractor further must agree to include the same requirements and provisions of this Agreement, including the indemnity and insurance requirements, with any sub-subcontractor to the extent they apply to the scope of the sub-subcontractor's services. A copy of the City indemnity and insurance provisions will be furnished to the subcontractor upon request.

f. If the Consultant uses subcontractors, it must comply with Civil Code § 8814 and all other California law relating to the prompt payment of subcontractors.

8. RECORD RETENTION

For the purpose of determining compliance with Public Contracts Code §§ 10115, *et seq.* and Title 21, California Code of Regulations, Chapter 21, §§ 2500 *et seq.*, when applicable, and other matters connected with the performance of the Agreement

pursuant to Government Code § 8546.7, the Consultant, subcontractors, and the City shall maintain all books, documents, papers, accounting records, and other evidence pertaining to the performance of this Agreement, including but not limited to, the costs of administering the Agreement. All parties shall make such materials available at their respective offices at all reasonable times during the Agreement period and for three (3) years from the date of final payment under the Agreement. The State, the State Auditor, City, Federal Highway Administration ("FHWA"), or any duly authorized representative of the federal government shall have access to any books, records, and documents of the Consultant and its subcontractors that are pertinent to the Agreement for audit, examination, excerpts, and transactions, and copies thereof shall be furnished if requested.

9. STANDARD OF PERFORMANCE

a. Consultant will perform the Services in the manner and according to the standards observed by a competent practitioner of the profession in which Consultant is engaged in the geographical area in which Consultant practices its profession and will prepare all instruments of professional services required by this Agreement in accordance with such standards. Consultant will comply with federal, state, and local laws and regulations applicable to performance of the Services, including, but not limited to, the California Building Standards Code as in effect in the City, the Americans with Disabilities Act, any air pollution control laws and regulations applicable to Consultant, and any laws and regulations related to any copyright, patent, trademark, or other intellectual property right involved in performance of the services. Consultant's failure to comply with any law(s) or regulation(s) applicable to the performance of the services hereunder shall constitute a material breach of this agreement.

b. The Consultant should not substitute key personnel (Project Manager and others listed by name in the Scope of Services) or subcontractors without prior written approval from the City. The Consultant must request and justify the need for the substitution and obtain approval from the City prior to use of a different subcontractor on the Agreement. The proposed substituted person or subcontractor must be as qualified as the original, and at the same or lower cost.

c. If this Agreement includes engineering services, the Consultant's Project Manager must be a registered Engineer in the State of California.

d. Consultant shall assign only competent personnel to perform services pursuant to this Agreement. In the event that City, in its sole discretion, at any time during the term of this Agreement, desires the reassignment of any such persons, Consultant shall, immediately upon receiving notice from City of such desire of City, reassign such person or persons.

10. OTHER GOVERNMENTAL REGULATIONS

To the extent that this Agreement may be funded by fiscal assistance from another governmental entity, Consultant and any subcontractors shall comply with all applicable rules and regulations to which City is bound by the terms of such fiscal assistance program.

11. USE OF RECYCLED PRODUCTS

Consultant shall endeavor to prepare and submit all reports, written studies, and other printed material on recycled paper to the extent it is available at equal or less cost than virgin paper.

12. INDEMNITY

To the maximum extent permitted by law, Consultant shall, at its own expense, indemnify, defend with counsel acceptable to the City (which acceptance will not be unreasonably withheld), and hold harmless City and its officers, officials, employees, agents, and volunteers ("Indemnitees") from and against any and all liability, loss, damage, claims, suits, actions, arbitration proceedings, administrative proceedings, regulatory proceedings, civil penalties and fines, expenses and costs (including, without limitation, claims expenses, attorneys' fees and costs and litigation costs) (collectively, "Liability") of every nature, whether actual, alleged or threatened, arising out of or in connection with the Services, or Consultant's failure to comply with any of the terms of this Agreement, regardless of any fault or alleged fault of the Indemnitees but excepting the sole negligence or willful misconduct of the Indemnitees.

Notwithstanding the foregoing, to the extent that the Services include design professional services subject to Cal. Civil Code § 2782.8, as amended from time to time, Consultant's duty to indemnify shall only be to the maximum extent permitted by Civil Code § 2782.8.

In the event that Consultant or any employee, agent, or subcontractor of Consultant providing services under this Agreement is determined by a court of competent jurisdiction or the California Public Employees Retirement System (PERS) to be eligible for enrollment in PERS as an employee of City, Consultant shall indemnify, defend, and hold harmless City for the payment of any employee and/or employer contributions for PERS benefits on behalf of Consultant or its employees, agents, or subcontractors, as well as for the payment of any penalties and interest on such contributions, which would otherwise be the responsibility of City.

The defense and indemnification obligations of this agreement are undertaken in addition to, and shall not in any way be limited by, the insurance obligations contained in this agreement.

Consultant/subcontractor's responsibility for such defense and indemnity obligations shall survive the termination or completion of this Agreement for the full period of time allowed by law.

13. INSURANCE

a. Before commencing performance of the Services, Consultant, at its own cost and expense, must: (1) procure "occurrence coverage" insurance of the kinds and in the amounts specified below against claims for injuries to persons or damages to property that may arise from or in connection with the performance of the Services hereunder by the Consultant or its agents, representatives, employees, or subcontractors; and (2) submit to the City certificates of insurance and endorsements evidencing insurance coverage that meets the requirements of this section. Consultant must maintain the insurance policies required by this section throughout the Agreement term. The cost of such insurance must be included in the Consultant's Scope of Services.

Consultant agrees to include with all subcontractors in their subcontract the same requirements and provisions of this Agreement including the indemnity and insurance requirements to the extent they apply to the scope of the subcontractor's services. The Consultant shall require all subcontractors to provide a valid certificate of insurance and the required endorsements included in this Agreement prior to commencement of any services and Consultant will provide proof of compliance to the City.

Consultant may not allow any subcontractor to commence work on the Services until Consultant and/or the subcontractor have obtained all insurance required by this Agreement for the subcontractor(s) and submitted certificates of insurance and endorsements evidencing such coverage to City.

b. Workers Compensation Insurance. Consultant must, at its sole cost and expense, maintain Workers' Compensation Insurance and Employer's Liability Insurance for any and all persons employed directly or indirectly by Consultant. Workers' Compensation Insurance as required by the State of California, with coverage providing Statutory Limits, and Employer's Liability Insurance with limits of not less than ONE MILLION DOLLARS (\$1,000,000.00) per occurrence must be provided. The insurance must be endorsed to waive all rights of subrogation against City and its officials, officers, employees, and volunteers for loss arising from or related to the Services.

c. For the Term of this Agreement, Consultant, at its own cost and expense, must maintain: (1) commercial general liability insurance in an amount not less than ONE MILLION DOLLARS (\$1,000,000.00) per occurrence, TWO MILLION DOLLARS (\$2,000,000.00) aggregate, combined single limit coverage for risks associated with Services; and (2) automobile liability insurance in an amount not less than ONE MILLION DOLLARS (\$1,000,000.00) combined single limit coverage. If a Commercial General Liability Insurance or an Automobile Liability form or other form with a general aggregate limit is used, either the general aggregate limit shall apply separately to the Services or the general aggregate limit shall be at least twice the required occurrence limit. Such coverage shall include, but shall not be limited to, protection against claims arising from bodily and personal injury, including death resulting therefrom, and damage

to property resulting from activities contemplated under this Agreement, including the use of owned and non-owned automobiles.

d. Except for Workers' Compensation insurance and Professional Liability insurance, all other insurance coverages required pursuant to this Agreement must include or be endorsed to include the following:

(1) City and its officials, officers, employees, agents, and volunteers ("Additional Insured") shall be covered as insureds with respect to each of the following: liability arising out of activities performed by or on behalf of Consultant; products and completed operations of Consultant; premises owned, occupied, or used by Consultant; and automobiles owned, leased, or used by Consultant. The coverage may contain no special limitations on the scope of protection afforded to City or its officials, officers, employees, agents, or volunteers.

(2) The Additional Insured coverage under the Consultant's policy shall be "primary and non-contributory" and Consultant's coverage will not seek contribution from the City's insurance or self-insurance and shall be at least as broad as CG 20 01 04 13.

e. It shall be a requirement under this Agreement that any available insurance proceeds broader than or in excess of the specified minimum insurance coverage requirements and/or limits shall be available to the Additional Insured. Furthermore, the requirements for coverage and limits shall be (1) the minimum coverage and limits specified in this Agreement; or (2) the broader coverage and maximum limits of coverage of any insurance policy or proceeds available to the named Insured; whichever is greater.

f. The limits of insurance required in this Agreement may be satisfied by a combination of primary and umbrella or excess insurance. Any umbrella or excess insurance shall contain or be endorsed to contain a provision that such coverage shall also apply on a primary and non-contributory basis for the benefit of City (if agreed to in a written contract or agreement) before the City's own insurance or self-insurance shall be called upon to protect it as a named insured.

g. Insurance coverage required pursuant to this Agreement must include or be endorsed to include the following:

(1) Any failure of Consultant to comply with reporting provisions of the policy shall not affect coverage provided to City and its officers, employees, agents, and volunteers.

(2) Required insurance coverage may not be suspended, voided, canceled, reduced in coverage or in limits, except after thirty (30) days' prior written notice by certified mail, return receipt requested, has been given to City.

h. Consultant, at its own cost and expense, must maintain for the period covered by this Agreement professional liability insurance in an amount not less than TWO MILLION DOLLARS (\$2,000,000) covering errors and omissions. Any deductible or self-insured retention under the required professional liability insurance may not exceed \$150,000 per claim.

i. All insurance required under this Agreement must be placed with insurers with a Best's rating of no less than A:VII unless otherwise approved by the City.

j. The City may approve a variation in the foregoing insurance requirements, upon a determination that the coverages, scope, limits, and forms of such insurance are either not commercially available, or that the City's interests are otherwise fully protected.

k. All self-insured retentions (SIR) must be disclosed to City for approval and shall not reduce the limits of liability. Policies containing any self-insured retention (SIR) provision shall provide or be endorsed to provide that the SIR may be satisfied by either the named Insured or by the City. City reserves the right to obtain a full certified copy of any Insurance policy and endorsements. Failure to exercise this right shall not constitute a waiver of right to exercise later.

14. NON DISCRIMINATION

During the performance of this Agreement, Consultant will not discriminate against any employee of the Consultant or applicant for employment because of race, religion, creed, color, national origin, gender, sexual orientation, or age. Consultant will take affirmative action to ensure that applicants are employed and that employees are treated during employment without regard to their race, religion, creed, color, national origin, gender, or age.

15. FAIR EMPLOYMENT PRACTICES ADDENDUM AND NON-DISCRIMINATION ASSURANCES

The Consultant shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The Consultant shall carry out applicable requirements of 49 CFR, Part 26 in the award and administration of DOT-assisted contracts. Failure by the Consultant to carry out these requirements is a material breach of this Agreement, which may result in the termination of this Agreement, or such other remedy as recipient deems appropriate.

- 16. [SECTION REMOVED.]
- 17. LICENSES & PERMITS
 - a. BUSINESS LICENSE

Before the City will issue a notice to proceed with the Services, Consultant and any subcontractors must acquire, at their expense, a business license from City in accordance with Chapter 5.04 of the Fort Bragg Municipal Code. Such licenses must be kept valid throughout the Agreement term.

b. OTHER LICENSES AND PERMITS

Consultant represents and warrants to City that Consultant and its employees, agents, and any subcontractors have all licenses, permits, qualifications, and approvals of whatsoever nature that are legally required to practice their respective professions.

18. CONSULTANT REPORTS AND/OR MEETINGS

a. The Consultant shall submit progress reports at least once a month. The report should be sufficiently detailed for the Contract Manager to determine, if the Consultant is performing to expectations, or is on schedule; to provide communication of interim findings, and to sufficiently address any difficulties or special problems encountered, so remedies can be developed.

b. The Consultant's Project Manager shall meet with the City's Contract Manager, as needed, to discuss progress on the contract.

19. DOCUMENTATION, OWNERSHIP OF INSTRUMENTS OF PROFESSIONAL SERVICES, AND TREATMENT OF DOCUMENTS

a. Consultant shall document the results of the services to the satisfaction of the City as detailed in the Scope of Services.

b. The Consultant shall sign plans, specifications, estimates, and engineering data furnished by him/her, and where appropriate, indicate his/her California registration number as required by State Code.

c. All plans, specifications, reports, designs and other documents prepared by Consultant pursuant to this Agreement shall be and remain the property of the City. Reuse of Consultant's documents by the City requires the Consultant's prior written approval. Any modification or reuse of such documents by the City without Consultant's prior consultation will be at the City's sole risk. Except as may be otherwise required by law, Consultant will disclose no data, plans, specifications, reports or other documents pertaining to the Services without the prior written consent of City.

20. DISPUTES

a. Any dispute, other than an audit, concerning a question of fact arising under this Agreement that is not disposed of by agreement shall be decided by a committee consisting of the City's Contract Manager and the City Manager, who may consider written or verbal information submitted by the Consultant. b. Not later than thirty (30) days after completion of all services under the Agreement, the Consultant may request review by the City Council of unresolved claims or disputes, other than audit. The request for review will be submitted in writing.

c. Neither the pendency of a dispute, nor its consideration by the committee will excuse the Consultant from full and timely performance in accordance with the terms of this Agreement.

d. Should a dispute not be resolved by the procedures set forth above, then the parties must mediate the dispute before a mutually agreed upon neutral within ninety (90) days of the completion of all Services under the Agreement. If mediation is not successful, the Consultant and City may pursue all rights and remedies available under California law.

21. TERMINATION AND REMEDIES

a. City or Consultant may terminate this Agreement for convenience by giving at least 30 days written notice to the other party specifying the termination effective date. Upon receipt of such notice from City, Consultant may continue performance of the Services through the date of termination. City shall pay Consultant for all Services actually performed in accordance with this Agreement through the termination effective date.

b. If Consultant materially breaches any term of this Agreement, in addition to any other remedies the City may have at law or equity, the City may:

(1) Terminate the Agreement by notice to the Consultant specifying the termination effective date;

(2) Retain, and/or recover from the Consultant at no additional cost to the City, the plans, specification, drawings, reports, and other design documents and instruments of professional services prepared by Consultant, whether or not completed;

(3) Complete the unfinished Services itself or have the unfinished Services completed, and/or;

(4) Charge Consultant, or deduct from monies that may be due or become due the Consultant under this Agreement, the difference between the cost of completing the unfinished Services pursuant to this Agreement and the amount that would otherwise be due Consultant had Consultant completed the Services in accordance with this Agreement.

22. BINDING EFFECT AND ASSIGNMENT PROHIBITION

This Agreement is binding upon City, Consultant, and their successors. Except as otherwise provided herein, neither City nor Consultant may assign, sublet, or transfer their interest in this Agreement or any part thereof without the prior written consent of the other, and any purported assignment without such consent will be void.

23. REPRESENTATIVES

a. City Contract Manager for purposes of this Agreement will be Diane O'Connor, Engineering Technician. Consultant's representative for purposes of this Agreement will be Chad Coleman, Principal Engineer. The parties' designated representatives will be the primary contact persons regarding the performance of the Services. The parties intend that their designated representatives will cooperate in all matters regarding this Agreement and in such manner so as to achieve performance of the Services in a timely and expeditious fashion.

b. Notices:

Any written notice to Consultant shall be sent to:

Chad Coleman, Principal Engineer Coleman Engineering, Inc. 1358 Blue Oaks Boulevard, Suite 200 Roseville, CA 95678

Any written notice to City shall be sent to:

Diane O'Connor, Engineering Technician City of Fort Bragg 416 N. Franklin Street Fort Bragg, CA 95437

24. INTEGRATION AND AMENDMENT

This Agreement represents the entire and integrated agreement between City and Consultant and supersedes all prior negotiations, representations, or agreements between the parties, whether written or oral. If a discrepancy, disagreement, ambiguity, inconsistency, or difference in interpretation of terms arises as to terms or provisions of this Agreement and any Exhibit(s) attached to this Agreement, this Agreement shall control and shall be deemed to reflect the intent of the parties with respect to the subject matter hereof. This Agreement may only be amended by a writing signed by a representative authorized to bind the Consultant and a representative authorized to bind the City.

25. COVENANT AGAINST CONTINGENT FEES, REBATES, KICKBACKS, OR OTHER UNLAWFUL CONSIDERATION a. The Consultant warrants that it has not employed or retained any company or person, other than a bona fide employee working for the consultant, to solicit or secure this agreement; and that it has not paid or agreed to pay any company or person other than a bona fide employee any fee, commission, percentage, brokerage fee, gift, or any other consideration, contingent upon or resulting from the award, or formation of this agreement. For breach or violation of this covenant, the City shall have the right to annul this agreement without liability, or at its discretion, to deduct from the Agreement price or consideration, or otherwise recover the full amount of such fee, commission, percentage, brokerage fee, gift, or contingent fee.

b. The Consultant warrants that this Agreement was not obtained or secured through rebates, kickbacks, or other unlawful consideration, either promised or paid to any City employee. For breach or violation of this warranty, City shall have the right in its discretion, to terminate the Agreement without liability, to pay only for the value of the services actually performed, or to deduct from the Agreement price, or otherwise recover the full amount of such rebate, kickback, or other unlawful consideration.

c. The Consultant warrants and represents that it has not participated in any lobbying activities.

26. CONFLICT OF INTEREST PROHIBITION

City and Consultant will comply with the requirements of the City's Conflict of Interest Code adopted pursuant to California Government Code § 87300 *et seq.*, the Political Reform Act (California Government Code § 81000 *et seq.*), the regulations promulgated by the Fair Political Practices Commission (Title 2, § 18110 *et seq.* of the California Code of Regulations), California Government Code § 1090 *et seq.*, and any other ethics laws applicable to the performance of the Services and/or this Agreement. Consultant may be required to file with the City Clerk a completed Form 700 before commencing performance of the Services unless the City Clerk determines that completion of a Form 700 is not required, pursuant to City's Conflict of Interest Code. Form 700 forms are available from the City Clerk.

Consultant may not perform Services for any other person or entity that, pursuant to any applicable law or regulation, would result in a conflict of interest or would otherwise be prohibited with respect to Consultant's obligations pursuant to this Agreement. Consultant agrees to cooperate fully with City and to provide any necessary and appropriate information requested by City or any authorized representative concerning potential conflicts of interest or prohibitions concerning Consultant's obligations pursuant to this Agreement.

Consultant may not employ any City official, officer, or employee in the performance of the Services, nor may any official, officer, or employee of City have any financial interest in this Agreement that would violate California Government Code § 1090 *et seq*. Consultant hereby warrants that it is not now, nor has it been in the previous twelve (12) months, an employee, agent, appointee, or official of City. If Consultant was an

employee, agent, appointee, or official of City in the previous twelve months, Consultant warrants that it did not participate in any manner in the forming of this Agreement. Consultant understands that, if this Agreement is made in violation of Government Code § 1090 *et seq.*, the entire Agreement is void and Consultant will not be entitled to any compensation for Consultant's performance of the Services, including reimbursement of expenses, and Consultant will be required to reimburse City for any sums paid to Consultant under this Agreement. Consultant understands that, in addition to the foregoing, penalties for violating Government Code § 1090 *et seq.* may include criminal prosecution and disqualification from holding public office in the State of California.

Any violation by Consultant of the requirements of this provision will constitute a material breach of this Agreement, and the City reserves all its rights and remedies at law and equity concerning any such violations.

27. APPLICABLE LAW AND VENUE

The laws of the State of California shall govern the rights, obligations, duties and liabilities of the parties to this Agreement and the interpretation of this Agreement. Any action or proceeding that is initiated or undertaken to enforce or interpret any provision, performance, obligation or covenant set forth in this Agreement shall be brought in a state court in Mendocino County.

28. SEVERABILITY

If a court of competent jurisdiction finds or rules that any provision of this Agreement is invalid, void, or unenforceable, the provisions of this Agreement not so adjudged will remain in full force and effect. The invalidity in whole or in part of any provision of this Agreement shall not void or affect the validity of any other provision of this Agreement.

29. COUNTERPARTS

This Agreement may be executed in multiple counterparts, each of which shall be an original and all of which together shall constitute one agreement.

IN WITNESS WHEREOF, the parties have caused their authorized representative to execute this Agreement on the date first written above.

CITY

CONSULTANT

By: _

Tabatha Miller Its: City Manager By: _

Chad Coleman Its: Principal Engineer

[Attach Notary Acknowledgment Page]

ATTEST:

By: _____ June Lemos, CMC City Clerk

APPROVED AS TO FORM: Russe all = By: Russell Hildebrand **City Attorney**

Exhibit 1: Consultant's Scope of Services



F. SCOPE OF WORK

BACKGROUND

Scope of Work section details the tasks that are needed to implement the approach presented in the previous section. The tasks included here are used as the basis for the project schedule and fee to be consistent. We have presented the Scope of Services in a format below, so it can be easily incorporated as an "Exhibit 1" to the City's Professional Services Agreement for the project.

Sections of the City of Fort Bragg's raw water supply pipeline are reaching the end of their service lives. This transmission main is a critical element of the City's water supply infrastructure and it consists of a mixture of PVC, asbestos cement, ductile iron and steel pipe materials. A portion of the existing raw water supply pipe is above ground and is supported on a trestle. The pipeline conveys raw water by gravity from two raw water sources at the Waterfall Gulch and Newman Gulch intakes to the City's water treatment plant (WTP) at the east end of Cedar Street. The elevation at the pipeline's highest point is approximately 400 feet (Waterfall Gulch intake), while the low point in the profile is at the Noyo River crossing just above sea level. The Noyo River crossing is one of two river crossings, the other is at Hare Creek.

This Scope of Services describes design engineering and associated services required to prepare design plans, specifications, cost estimates and bid documents for Phases II, III, IV, and V of a replacement raw water pipeline. Phase 1 of the project, which comprises the section of pipeline from the north side of State Highway 20 to the Summers Lane Reservoir, was completed in 2013 and is not part of this project. Phases II – V are as follows:

- » Phase II from the WTP to the north side of the Noyo River crossing.
- » Phase III from the south side of the Noyo River crossing to the Summers Lane Reservoir.
- » Phase IV from the north side of Highway 20 (and also

replacing the current Highway 20 crossing) to the north side of the Hare Creek crossing.

» Phase V – from the south side of the Hare Creek crossing along Waterfall Gulch to a connection with the new pipeline section which ends at Forest Road 450.

The existing and new pipelines are located in an area characterized by steep slopes, shallow groundwater, springs, heavy forestation and sensitive riparian environments. There are areas prone to landslides and ground movement. Phases II and III are located in part within the Coastal Zone, which requires additional permitting to be supported under this project.

Coleman Engineering, Inc (Consultant), supported by our specialist sub consultants, will perform the services described in this scope under three tasks as follows, with potential additional services included under an optional Task 4:

- » Task 1 Project Management and Meetings
- » Task 2 Preliminary Design Studies
- » Task 3 Preliminary and Final Design
- » Task 4 Additional Services (OPTIONAL)

Scope of Services

TASK 1 - PROJECT MANAGEMENT AND MEETINGS

Task 1.1 - Project Administration. Coleman Engineering will administer the project and maintain project schedule and budget. The Project Manager will be available to discuss with the City the project progress, planned services in the next billing period, updated schedule, and budget status monthly to coincide with the regular invoice.

Task 1.2 - Project Meetings. Coleman Engineering will meet with the City through project meetings and conference calls. Coleman Engineering will prepare an agenda and brief meeting summaries for each of the meetings and will prepare



and update Action and Decision Logs. 7 meetings have been budgeted for, as identified below:

- » Project Kick-off Meeting (City offices). At this meeting, the Consultant and the City will review and refine a work plan and schedule, including critical milestones, that form part of an overall Project Management Plan (PMP). The PMP will also include the Quality Management Plan. Prior to the meeting, the Consultant will have presented the City with a data and information request and it is assumed that the City will provide the requested data and information at the meeting. This will include, but not be limited to details of easements and right-of-way, previous design documents, previous topographical mapping and survey, record drawings, operations and maintenance records, any previous condition assessment studies, and details of any pipeline rehabilitation work.
- » Project Meetings (up to 6: 3 in-person meetings at City offices and 3 conference calls). These meetings are to review progress and to resolve design questions requiring City input.

Workshops (up to 4) to review City comments on the draft Project Practicability Report, the 30% Draft Plans, the 60% Draft Design documents, and 100% Final design are budgeted under separate tasks below.

Task 1.3 – Quality Management. Quality control will be monitored throughout the entirety of the project. Coleman Engineering will peer-review deliverables internally prior to delivery to the City in accordance with its quality assurance / quality control program and the procedures described in the project-specific Quality Management Plan.

Task 1: Deliverables

- » Monthly invoices and progress report discussions.
- » Meeting agendas and notes, Action and Decision Logs.
- » Project Management Plan and Quality Management Plan.

TASK 2 - PRELIMINARY DESIGN STUDIES

Task 2 details project preliminary design studies, including a review of data and information, site reconnaissance, development and evaluation of potential alignment alternatives and modifications, initial topographical mapping and survey, reporting on the existing pipeline, and recommendation of a preferred project.

2.1 Data Collection and Review. The City will provide Coleman Engineering with all relevant and available data and information in its possession relating to the project at the project kick-off meeting (See Task 1). Coleman Engineering will review this data and information under this task for subsequent use in future tasks. Coleman Engineering, after completing this review, may request further data and information from the City.

Coleman Engineering will also obtain and review any utility records, maps, and information as part of this task.

2.2 Full Team Site Reconnaissance Walk. A one-day site reconnaissance walk involving the full design team, sub consultants, and available City staff will be organized, coincident with the project kick-off meeting. The intent of the site walk is to identify key technical issues such as geotechnical issues, access constraints, tree removal, constructability and applicable construction methods by segment. The site walk will include not only the anticipated pipeline alignment but also potential alternative alignments. Notes of the walk findings with photographs documenting the walk's conclusions will be prepared and circulated to the design team.

2.3 Alternative Alignments Development and "Fatal

Flaw" Evaluation. Following review of received data and information and the site reconnaissance walk, a series of alternative alignments will be developed for investigation and evaluation. Potential alignment adjustments will be assessed for "fatal flaws" caused by adverse pipe hydraulics, proximity to geotechnical and geologic hazards, constructability and access concerns, extensive tree removal requirements, adverse environmental impacts, ease of easement acquisition, and



other factors. The results of this fatal flaw evaluation will be documented in the Project Practicability Report prepared in a subsequent task.

2.4 Initial Topographical Mapping and Survey. In this task, the Surveying sub consultant Cinquini and Passarino will perform an initial topographical mapping of the proposed alignment and potential alignment modifications that have passed the fatal flaw analysis of the previous task. Cinquini and Passarino will collect topographic LiDAR data along the project alignment. Mapping will include a 200-foot wide strip of mapping. Mapping will include the following:

- » Aerial photography, 13 color mapping exposures at 15cm GSD with ABGPS/IMU collection
- » Analytical aerotriangulation for densification of control
- » Collection of lidar at 12 pts/m2
- » Extraction of ground class from collected lidar, delivery of contour keypoint file and contours at a 2-ft interval in AutoCAD format, classified lidar deliverable in las format
- » Orthorectification using results of aerotriangulation and lidar DSM, mosaic of imagery into north and south tiles with 0.5' pixel resolution
- » Mapping will also include the intake elevation at Waterfall Gulch.

Mapping will be prepared on California Coordinate System of 1983, Zone 2 and NAVD 1988 Vertical Datum.

Coleman Engineering will utilize the LiDAR data files to prepare base maps for plan sheets and to evaluate optional alignments.

2.5 Prepare Pipeline Existing Conditions and

Constraints Technical Memorandum. Under this task Coleman Engineering will prepare a Technical Memorandum (TM) that will include its review of data and information received, findings of the site reconnaissance walk, selected relevant conclusions from the alternative alignments' evaluation, and discussions with City staff. The TM will report on the existing conditions of, and constraints on, the existing raw water pipeline and associated appurtenances. Data will be included in an appendix to the TM. **2.6 Prepare Project Practicability Report.** The Project Practicability Report will summarize previous findings from the Pipeline Existing Conditions and Constraints TM and the alternative alignments evaluation. Under this task, Coleman Engineering will perform additional hydraulic analyses of potential alternative alignments and pipe diameters, and a detailed technical evaluation of alternative alignments in order to recommend a preferred pipeline route and project. The evaluation will include geotechnical and geologic hazard assessment, pipe hydraulics, constructability reviews, extent of tree removal, environmental impact, and ease of easement acquisition. Findings, analyses, conclusions and recommendations will be presented in the Report. The Report will also include operations and maintenance costs over the likely service life of the project.

2.7 Workshop No. 1. Workshop No. 1 will be held to review the City's comments on the Project Practicability Report and to confirm the proposed project to be carried forward to preliminary and final design under Task 3.

Task 2: Deliverables

- » Site reconnaissance walk notes for design team use.
- » Topographical mapping and survey for use in subsequent design tasks.
- » Pipeline Existing Conditions and Constraints TM (electronic copy in pdf format, with 5 hard copies).
- » Project Practicability Report (electronic copy in pdf format, with 5 hard copies).
- » Workshop No. 1 agenda and notes.



Task 2: Assumptions

- » The City will provide all relevant data and information at the kick-off meeting in response to a detailed request from Coleman Engineering.
- » The City will identify and mark the alignment of the existing pipe in the field.
- » Topographical survey to NAVD 1988 Vertical Datum, with mapping related horizontally to California Coordinate System of 1983, Zone 2.

TASK 3 - PRELIMINARY AND FINAL DESIGN

Task 3 develops the preferred project defined in Task 2 into a preliminary and final design. The task also includes development of a detailed project description to support environmental review and permitting analysis, and for use in seeking project funding from a variety of state and federal sources. 30% design level plans will be prepared for City review. Final design documents will include plans, specifications and cost estimates, and submittals will be made at 60% and 100% design levels of completion for City review and comment. Individual document sets will be prepared for each project phase at each submittal. Workshops to discuss the City's comments and to agree on any changes to be incorporated into the design will be held after each submittal. Final bid-ready documents will be completed after Workshop No. 4.

3.1 Final Topographical Mapping and Survey. Under this task, Cinquini and Passarino will perform additional topographical mapping and survey to provide more detailed topographic features as well as legal surveying data of the adopted pipeline alignments.

The topographic survey will be at a drawing scale of 1 inch = 20 feet, with a one-foot contour interval. The topographic survey will include the following:

» Topographic survey coverage area will include a strip of mapping approximately 20 feet in width along the proposed pipeline alignment. The alignment will need to be flagged in the field prior to mapping.

- Mapping for Phase II will be approximately 2200 LF
- Mapping for Phase III will be approximately 3950 LF
- Mapping for Phase IV will be approximately 2850 LF
- Mapping for Phase V will be approximately 1200 LF
- » Topographic survey will include all necessary work to produce a topographic map, including features such as, but not limited to; building corners and elevations, curb lines, water meters, sewer cleanouts, valves, manholes (including rim, invert and pipe information), utility markings on the pavement, utility poles, driveway and doorway locations, sidewalks, trees six (6) inches and larger, retaining wall or decorative walls, and other pertinent information that could apply to the project during design.
- » Retrace the boundary lines and look for the existing property corners along the project alignment. Work will be limited to the retracement of the following locations and will not establish the interior property lines for large ownership tracts of land. We will establish the property lines near Sherwood Road based on existing record maps. We will establish the property lines at the Fort Bragg Newman Gulch intake based on record maps. Work will include the establishment of the property lines for the parcels that are proposed to have the waterline located within the parcel.
- » Topographic survey will be provided on NAVD 1988 Vertical Datum
- » Topographic map to horizontally relate to California Coordinate System of 1983, Zone 2.

Cinquini and Passarino will also prepare legal descriptions and plats for the proposed waterline alignment. Title reports will not be researched or obtained. The following legal descriptions have been assumed in the Scope and Budget.

» Phase II will require 3 Legal descriptions and plats



- » Phase III will require 3 Legal descriptions and plats
- » Phase IV will require 6 Legal descriptions and plats
- » Phase V will require 3 Legal descriptions and plats

3.2 Geotechnical and Geological Investigation, Testing and Report

3.2.1 Geotechnical Investigation Planning. Under this sub-task, geotechnical sub consultant Crawford and Associates (CAI) will coordinate with the design team and the City to confirm project definition and schedule; review project data; review published topographic, geologic, and seismic mapping; and review available geotechnical data. CAI will have participated in the Task 2 site reconnaissance walk and will have initially identified critical areas such as landslides, springs, and other adverse geologic/geotechnical conditions that may affect pipeline location and design during that inspection. If necessary, CAI will obtain exploration permits as required by the Mendocino County Environmental Health Department.

3.2.2 Subsurface Exploration. CAI will complete backhoe test pits, extended to depths of 5 to 8 feet, along accessible sections of the new pipeline. For areas inaccessible to backhoe equipment, CAI will utilize hand-auger and hand-probe equipment to assess soil conditions within the upper 5 to 8 feet. They will obtain bulk soil samples for laboratory testing and reference. CAI has included for 3 days of backhoe and 2 days of hand-auger/probes for this task.

3.2.3 Laboratory Testing. Laboratory testing will include gradation and plasticity index for soil classification and bearing capacity analysis, as well as minimum resistivity, pH, sulfate content, and chloride content for soil corrosivity analysis.

3.2.4 Geotechnical Engineering Evaluation and Analysis. Based on the results of sub-tasks 3.2.1 through 3.2.3, CAI will conduct engineering evaluation and analysis in support of geotechnical recommendations for design and construction. These will include slope stability analysis, excavation stability, pipeline foundation support, and groundwater assessment. will prepare a Draft Geotechnical Report that will include a discussion of geologic conditions; soil/groundwater conditions; potential hazards; and design recommendations for the new pipeline, including trench excavation, pipe support and backfill, thrust block parameters, drainage/sub-drainage, and soil corrosivity. CAI will prepare a Final Geotechnical Report that will address comments received on the Draft Report.

3.3 Prepare 30% Draft Plans. Using the documents prepared as part of Task 2, including the Project Practicability Report, and the subsequent geotechnical investigation in Task 3, Coleman Engineering will develop the recommended project plans to a 30% design level of completion. One plan set will be prepared for each of the four phases identified in the RFP: Phase II, Phase III, Phase IV, and Phase V. The four draft plan sets will be submitted to the City for review and comment.

It is anticipated that the plan set will include the sheets shown in the following table. Plans to be submitted at the 30% and 60% stages are identified. All plan sheets will be submitted with the 100% Draft and 100% Final sets.

3.2.5 Prepare Draft and Final Geotechnical Report. CAI



PHASE II PROJECT PLANS					
30%	60%	Sheet	Title		
\checkmark	\checkmark	G1	Cover Sheet (maps, sheet index, legend, abbreviations)		
	\checkmark	G2	Project Notes (Standard Notes and Project Specific Notes)		
\checkmark	\checkmark	C1	Sheet Layout Plan		
Plan only	\checkmark	C2	Raw Water Pipeline Plan and Profile 1		
Plan only	\checkmark	C3	Raw Water Pipeline Plan and Profile 2		
Plan only	\checkmark	C4	Raw Water Pipeline Plan and Profile 3		
	\checkmark	C5	Design Details 1		
		C6	Standard Details 1		
		C7	Standard Details 2		

PHASE III PROJECT PLANS					
30%	60%	Sheet	Title		
\checkmark	\checkmark	G1	Cover Sheet (maps, sheet index, legend, abbreviations)		
	\checkmark	G2	Project Notes (Standard Notes and Project Specific Notes)		
\checkmark	\checkmark	C1	Sheet Layout Plan		
Plan only	\checkmark	C2	Raw Water Pipeline Plan and Profile 1		
Plan only	\checkmark	C3	Raw Water Pipeline Plan and Profile 2		
Plan only	\checkmark	C4	Raw Water Pipeline Plan and Profile 3		
Plan only	\checkmark	C5	Raw Water Pipeline Plan and Profile 4		
Plan only	\checkmark	C6	Raw Water Pipeline Plan and Profile 5		
	\checkmark	C7	Design Details 1		
		C8	Design Details 2		
		C9	Standard Details 1		
		C10	Standard Details 2		

PHASE IV PROJECT PLANS					
30%	60%	Sheet	Title		
\checkmark	\checkmark	G1	Cover Sheet (maps, sheet index, legend, abbreviations)		
	\checkmark	G2	Project Notes (Standard Notes and Project Specific Notes)		
\checkmark	\checkmark	C1	Sheet Layout Plan		
Plan only	\checkmark	C2	Raw Water Pipeline Plan and Profile 1		
Plan only	\checkmark	C3	Raw Water Pipeline Plan and Profile 2		
Plan only	\checkmark	C4	Raw Water Pipeline Plan and Profile 3		
	\checkmark	C5	Design Details 1		
		C6	Standard Details Sheet 1		
		C7	Standard Details Sheet 2		

PHASE V PROJECT PLANS					
\checkmark	\checkmark	G1	Cover Sheet (maps, sheet index, legend, abbreviations)		
	\checkmark	G2	Project Notes (Standard Notes and Project Specific Notes)		
Plan only	\checkmark	C1	Sheet Layout Plan		
Plan only	\checkmark	C2	Raw Water Pipeline Plan and Profile 1		
Plan only	\checkmark	C3	Raw Water Pipeline Plan and Profile 2		
	\checkmark	C4	Design Details 1		
		C5	Standard Details 1		
		C6	Standard Details 2		

3.4 Workshop No. 2. Workshop No. 2 will be held to review the City's comments on the draft 30% Draft Plans and to agree changes to be incorporated into the 60% Draft plans. Review comments and responses to comments will be documented in a comment log as part of the workshop minutes.

3.5 Prepare Project Description for Environmental and Funding Support. An Environmental Project Description to support environmental review and permitting, and applications needed to seek state and federal funding, will be prepared under this task. Likely sources of funding include USDA, SRF and CDBG programs although others may be possible. The Coleman Engineering team will engage the services of Brewer Environmental Consulting to prepare a CEQA and NEPA compliant level project description. The project description is anticipated to include the following topics: project goals and objectives, project funding, project elements, construction phasing and implementation.

3.6 Prepare 60% Draft Design Submittal. Incorporating agreed review comments from the 30% Draft plans, 60% Draft plans will be developed using Coleman Engineering's AutoCAD standards. Technical specifications will be prepared using Microsoft Word and will be in CSI format. An estimate of probable construction cost will be prepared to reflect the 60% level of design, with appropriate contingencies applied. An electronic PDF of the cost estimate will be provided with the

60% submittal. The 60% design submittal will be provided to the City for review and comment.

3.7 Workshop No. 3. Workshop No. 3 will be held to review the City's comments on the 60% Design Submittal and to agree changes to be incorporated in the 100% design. All review comments and responses to comments will be documented in a comment log as part of the workshop minutes.

3.8 Prepare 100% Design Submittal Incorporating agreed review comments from Workshop No. 3, 100% design level plans will be developed using Coleman Engineering's AutoCAD standards. All technical specification documents will be prepared using Microsoft Word and will be in CSI format. An estimate of probable construction cost will be prepared to reflect the 100% level of design, with appropriate contingencies applied. An electronic PDF of the cost estimate will be provided with the 100% submittal. The 100% design submittal will be provided to the City for review and comment.

3.9 Workshop No. 4. Workshop No. 4 will be held to review the City's comments on the 100% Design Submittal and to agree changes to be incorporated in the final bid-ready documents. All review comments and responses to comments will be documented in a comment log as part of the workshop minutes.



3.10 Prepare Final Bid Documents. Agreed comments received from the City at Workshop No. 4 will be incorporated into the plans and specifications to develop sets of final bid-ready documents by Phase. The cost estimate will be updated to reflect the final design and it will be separated into individual phases.

<u> Task 3: Deliverables</u>

- » Additional topographical mapping and survey data for use in design.
- » Draft and Final Geotechnical Reports (electronic copy in pdf format for the draft and final reports, and 3 hard copies of the final report).
- » Phases II-V 30% Draft Plans (4 separate plan sets, pdf format, with plans at 11 x 17 half size).
- » Phases II-V 60% Draft Plans, Technical Specification Table of Contents, and Construction Cost Opinions (4 separate plan sets, pdf format, with plans at 11 x 17 half size).
- » Phases II-V 100% Draft Plans, Technical Specifications, and Construction Cost Opinions (4 separate plan sets, pdf format, with plans at 11 x 17 half size).
- » Phases II-V 100% Final Plans, Technical Specifications, and Construction Cost Opinions (4 separate plan sets, pdf format, with plans at 11 x 17 half size).
- » Workshop Nos. 2, 3 and 4 agenda and notes.

Task 3: Assumptions

- » Geotechnical field explorations for each project phase can be completed concurrently and in one mobilization.
- » Geotechnical exploration for the Highway 20 crossing (Phase III) will be completed outside of the Caltrans Rightof-Way and not require an encroachment permit.
- » All geotechnical explorations will be outside of Mendocino County Right-of-Way and not require an encroachment permit.
- » A Coastal Zone permit (applicable to portions of Phase II and III) for the geotechnical exploration will be obtained by the City.

- » All necessary rights-of-entry to the geotechnical exploration sites and site inspections will be provided by the City.
- » Plans and technical specifications for all Phases will be combined into one review document for the 60% and 100% submittals. The final bid-ready plans and specifications will be prepared such that there is a stand-alone set for each Phase. Common plans, such as standard details, will be incorporated into each bid-ready document set.
- » City or County building permit reviews are not required.
- » Traffic control plans are not included and will be prepared by the construction contractor.
- » The City will provide its standard front-end bidding and contracting documents in Word format.
- » Bid documents will be prepared to comply with requirements of funding sources if those sources are known when the documents are being finalized.
- » City will be responsible for obtaining title reports for the affected parcels for preparation of plats and legal descriptions.

TASK 4 - ADDITIONAL SERVICES (OPTIONAL)

For this task, as requested we have included for additional environmental consulting services, preparation of Timber Harvest Plans, and for funding support. Tasks are scoped below to be stand-alone. In the event that the City wishes to implement both Tasks 4.1 and 4.2 together, we will work with the City to remove overlaps that exist between these two tasks which will result in some decrease in the fee.

4.1 Environmental Consulting Services

Task 4.1 describes Coleman Engineering's approach to providing detailed environmental compliance and permitting services for the proposed raw water pipeline project. These are additional, optional services to the services proposed in Tasks 1-3 for the City's consideration. We recognize that the City and other local municipalities have invested substantial budget in preparing CEQA environmental documents and obtaining



necessary permits on their projects that trigger CEQA compliance. If the CEQA documents are relatively recent (< 5 years old), we will seek to use existing certified environmental documents to maximize efficiency in achieving environmental compliance for this project. For example, we intend to use the City's 2014 Summers Lane Reservoir Initial Study Mitigated Negative Declaration to the extent feasible for this project. The City intends to build the project in phases over time as City funding and as state or federal loan program funding levels allows. As such, the goal is to prepare one environmental document to cover all phases, so the project can be evaluated in its totality but be constructed in phases. If new significant information arises in the future in later phases (e.g., new species listing in the area), the City can evaluate the need to provide supplemental analysis or prepare an addendum to the original document. This is the proper approach to CEQA environmental analysis: otherwise challengers could claim the City is evaluating each phase by itself and not looking at the whole project.

The project is situated in the Noyo River redwood forest watershed which has abundant natural resources which support numerous special status species (e.g. Coastal Tailed frog, Red-legged frogs, Pygmy cypress trees, Southern Torrent salamander) that will need to be considered in developing an efficient compliance strategy and realistic schedule for the project. The City must first comply with the CEQA requirement for detailed planning and disclosure of environmental impacts through a public and state agency review process. In addition, the City will likely have to comply with several federal environmental laws including Clean Water and Clean Air Acts, National Historic Preservation Act as part of the federal funding programs (e.g., SRF Program CEQA Plus or USDA RA Program). If federal funds are considered and used, these funding programs have their own separate environmental compliance processes in addition to CEQA. Some of the potential environmental issues that the team will address including, but not limited to, are:

- » Coastal Zone Impacts. Phases II and III are partially located within the regulatory boundaries of the State Coastal Commission Coastal Zone. The Coastal Zone policies and procedures are administered by Mendocino County Coastal Zone Administrator. The permit and approval process with this Administrator can be thorough and time-consuming in our experience. The process requires full disclosure of environmental impacts to the area and the Administrator will require the City's document to issue the permit. We recommend the City initiate consultation with the Mendocino County Coastal Commission on this permit as soon as practicable.
- » Potential Impacts to Special-Status Species and Endangered Species Act compliance. The watersheds in the Fort Bragg and the Mendocino County region supports numerous special status species that are protected either under the state or federal ESA. The Noyo River and Hare Creek support Coho salmon and steelhead fisheries and numerous wildlife species in their watersheds. We understand the City intends to provide biological and cultural resources studies as part of the pre-design to assist with pipeline planning. We will use that work as well as conduct detailed biological surveys to assess existing habitats and to determine whether the project area supports these species. Our approach will be to identify key species and habitats and conduct habitat assessments and wildlife surveys early in the process.
- » Potential Impacts to Historical and Cultural Resources: National Historic Preservation Act Section 106 and Tribal Consultation under AB 52. The project is in an area with a local lumber industry history, as well as occupation by Native American Indian Tribes that inhabited the Fort Bragg area. There are several recognized Indian Tribes in the Fort Bragg area including the Noyo Pomo Tribe, Sherwood, Coyote Valley Band of Pomo Indians. In addition, as part of the CEQA compliance process required by Assembly Bill 52, the City must now conduct early coordination with local Indian Tribes that have expressed



interest in City projects. We realize that substantial work has already been done for the Summers Lane Reservoir project and we intend to use it, if possible. We will conduct database searches and field surveys early in the process to determine if there are significant resources in the project corridor.

- Impacts to Wetlands and Waters of the United States. The pipeline crosses the Noyo River and Hare Creek and their floodplains that will potentially trigger compliance with the Clean Water Act Section 404 and California Department of Fish and Wildlife (CDFW) Fish and Game Code Section 1600. We observed several seeps and springs along the pipeline route during our field survey with the City. The City will be required to obtain both 404 permit authorization from US Army Corps of Engineers and a Streambed Alteration Agreement with CDFW, even if the river crossings are not re-constructed, as the pipeline is located in the floodplains.
- » Land Use Impacts. There may not be legal easements or rights-of-way for the entire pipeline and that it crosses both private (Georgia Pacific) and State Lands Commission sovereign property.
- » Issues Associated with Timber Harvest Plan (THP) We understand that the City will need to remove secondary growth redwood, alder and other trees in the pipeline corridor in order to construct the new water line. This action will trigger the need for preparation of a THP by a certified forester. We have retained a local Forester on our team, Mr. Lee Susan of Summit Forestry, who successfully assisted the City on the Summers Lane project. The THP approval process is administered by State Department of Forestry (CDF) under the requirements of the Forest Practices Act and is a separate permitting process with its own public review and comment period. CDF will likely use the City's CEQA compliance document to assist with processing the THP permit but we will need to ensure the document covers all of their issues of concern.

We understand that City staff would like if possible to process this project with a CEQA Initial Study Mitigated Negative Declaration (ISMND) document. This approach requires that the project not have any significant unavoidable impacts (e.g., loss of heritage trees, impacts to special-status species, or controversy from the public or state agencies.) We will need to start work on the biology and cultural surveys, and on technical sections, to determine whether this is feasible. We will work with City staff to prepare the Initial Study to determine whether an ISMND is possible. If not, we will work with the design team to evaluate alternative pipeline alignments to avoid fatal flaw issues. If there are major impacts or substantial controversy over the project, it is likely a legallydefensible Focused EIR will have to be prepared to protect the City. This scope of services and associated fee is for preparation of an ISMND only: should a Focused EIR be found necessary, additional scope and fee would be required.

The City's raw water pipeline project may likely require the following agency permits and approvals:

- » State Coastal Commission Development Permit.
- » CDFW 1602 Streambed Alteration Agreement.
- » U.S. Army Corps of Engineers Clean Water Act Section 404 Permit.
- » Clean Water Act (CWA) Section 401 Water Quality Certification.
- » National Historic Preservation Act Section 106 Compliance.
- » California AB 52 Tribal Consultation compliance.
- » USFWS Endangered Species Act Section 7 permit.
- » California Department of Forestry and Fire Protection (Cal Fire) Timber Harvest Permits.
- » North Coast RWQCB Construction Stormwater Permit.
- » Caltrans Region 2 Encroachment Permit.



In addition to preparing one comprehensive environmental document that covers all phases of the project, we will also prepare permit applications and packages for Phase II in parallel with preparation of the CEQA document. Our goal is to have the Phase II permit applications ready for submission when the City Council certifies the CEQA document. An environmental project description is to be prepared under an earlier task within the main scope of services.

4.1.1 Prepare Admin Draft and Final ISMND. Our

environmental subconsultant Brewer Environmental (BEC) will provide technical responses to the Office of Planning and Research (OPR) CEQA checklist in this task for review and comment by Coleman Engineering and the City. We will prepare responses to the OPR initial study checklist questions and prepare a basic CEQA Initial Study/Mitigated Negative Declaration (IS/MND) for this project. An IS/MND will provide an in-depth environmental project review and provide recommended mitigation measures for all significant impacts from the project. We will respond to comments and prepare the final draft IS/MND for submittal to the OPR State Clearinghouse. We will print a total of 20 copies and deliver 15 CD copies of the IS/MND to the State Clearinghouse and complete the Notice of Completion. We will provide the City with a CD-ROM of the document and any appendices for use in uploading documents to City's website (if desired).

BEC will prepare all required CEQA notices (Public Notice, OPR Notice of Completion, OPR Notice of Determination (NOD)). The City will be responsible for paying for the public notice in the Fort Bragg Advocate News and the required CDFW CEQA review fee when filing the NOD. Our budget does not include attendance at the City Council meeting for certification of the ISMND.

BEC will prepare a standard Mitigation Monitoring and Reporting Program (MMRP) as required by CEQA to ensure that the City implements mitigation measures that are approved and adopted by the City Council. The MMRP will delineate roles and responsibilities of the City and the selected contractor for the project. 4.1.2 Biological Resources and Wetlands. Biological Resources. For the Summers Lane Project, CDFW was concerned about CRLF and other amphibians in an area which is within the raw water pipeline project area. BEC will prepare a response to the Section VI. Biological Resources of the ISMND. BEC will conduct a search of the CDFW California Natural Diversity Database (CNDDB) and USFWS Information for Planning and Consultation (Ipac) to develop a list of potential special-status species of concern for consideration in the environmental analysis. BEC will conduct a one-day general field survey (10 feet on each side of pipeline for total of 20 feet) of the project elements to assess existing conditions and wildlife habitats in the project area. The project is located in coastal mixed coniferous forest (secondary growth redwood forest). Based on the alignment shown in the RFP, Phases II and III are in upland areas away from Newman Gulch but the pipe does enter the Noyo River floodplain near the crossing. At this time, based on our current knowledge of the project we have assumed no special-status species protocol-level surveys will be needed for this project based on preliminary review using Google Earth. We will prepare a general biological analysis that will meet CEQA and SRF funding requirements. If detailed species-specific surveys are required for California Red-legged frogs etc., we will prepare a scope and fee amendment for approval of this as additional work.

Wetland Delineation. The Project pipeline is located within the Newman Gulch, Hare Creek and Noyo River watersheds and as such may be subject to Clean Water Act Section 404 jurisdiction. BEC will conduct a preliminary federal wetland delineation to identify wetland and waters of the United States and the State of California. BEC will document ordinary highwater marks on streams and the Noyo River that will be affected by the project. BEC will conduct a wetland delineation, identifying boundaries, types, and acreages of all aquatic resources that are under the jurisdiction of the U.S. Army Corps of Engineers, Regional Water Quality Control Board, California Department of Fish and Wildlife, and the California Coastal Commission. Prior to field work, BEC will review project-specific hydrological feature data and publicly available information. Potential Federal and State waters



contained within the survey area will be evaluated using the methodology set forth by the U.S. Army Corps of Engineers.

4.1.3 Cultural Resources. The City may receive funding through the Drinking Water State Revolving Fund (DWSRF), which is subsidized by the federal Safe Drinking Water Act. Because the project is federally funded, the project must comply with Section 106 of the National Historic Preservation Act of 1966 (Section 106), which is codified in Title 54 US Code of Federal Regulations (CFR) § 306108. BEC will conduct the following tasks necessary for Section 106 compliance and consultation with the State Historic Preservation Office (SHPO) under the National Historic Preservation Act. In addition, BEC will assist the lead agency consultation in compliance with Public Resources Code 21080.3.1 and Chapter 532 Statutes of 2014 (AB 52).

Create Area of Potential Effects Map. An Area of Potential Effects (APE) map will be created depicting the length and width and all areas (e.g., new construction, easements, staging areas, and access roads) directly affected by the proposed project.

Pre-field Background Research/Records Search. A record search at the NEIC and background research to identify previously recorded resources in or near the proposed project.

Section 106 Consultation. Native American tribal organizations or individuals identified by the Native American Heritage Commission will be contacted by mail, and by a follow-up phone call after two weeks. Local historical societies will also be contacted to inquire on any known historic-era properties in the proposed project area.

AB 52 Consultation. Native American tribal organizations or individuals tribally and geographically affiliated with the proposed project area will be contacted by certified mail, and the letter will include a map depicting the project location, lead agency point contact, project status, and a description of the proposed project. *Field Survey.* An intensive pedestrian survey will be performed of the entire APE, after the pre-field background research is completed.

Draft and Final Historic Properties Inventory Report. BEC will prepare a draft and final Historical Properties Inventory Report (HPIR) that documents the methods and findings of the cultural resources study. The HPIR will follow the requirements outlined in the California State Water Resources Control Board Basic Criteria for Cultural Resources Report Preparation guide.

Draft and Final Letter to SHPO. BEC will prepare, on behalf of the State Water Resources Control Board, a consultation letter to SHPO.

Cultural Resources/ Tribal Cultural Resources. BEC will provide support for the Cultural Resources/Climate Change sections of the ISMND.

4.1.4 Air Quality and Greenhouse Gases. As part of the environmental analysis, an air quality and greenhouse gas analysis must be prepared to satisfy CEQA requirements. The emission calculations CalEEMod model will be used to quantify emissions from construction, if the lead agency deems fit to quantify construction emissions. BEC will provide support for the GHG/Climate Change sections of the ISMND. If needed, quantification of GHG will be performed to determine emission levels from both the construction and operational aspects of the proposed project.

4.1.5 Other CEQA Topics. Using existing available information from state and federal resources, as well as from previous City Council adopted documents, BEC will prepare basic responses to the other topics in the CEQA checklist.

4.1.6 CEQA Mitigation Monitoring and Reporting

Program. BEC will prepare the required CEQA MMRP under this task. It will include detailed descriptions of recommended mitigation measures, entity responsible, timing, frequency and reporting requirements.



4.1.7 Prepare for and attend the City Council

Certification Hearing. Under this task, we will prepare, and assist City staff with, a PowerPoint presentation to the City Council on the CEQA process and the MMRP.

4.1.8 Prepare Admin Draft and Final Federal Funding Program Environmental Information Checklists. BEC

will assist the City with preparation of either a USDA or SRF environmental information packages under this task. BEC will coordinate with City staff to determine what compliance pathway this project will take in their process. BEC will prepare the Environmental Report (ER) in this task and will rely heavily on information in the CEQA document for its preparation. BEC will respond to one round of comments on the checklist package from CE/City.

4.1.9 Regulatory and Responsible Agency Coordination. BEC will attend meetings and teleconferences with the City/USDA/ State of California and other funding agencies as necessary within the fee associated with this task.

Timeline - Environmental Consulting Services

The administrative draft ISMND could be completed within 6-8 weeks from receipt of the complete and City-approved Project Description. Preparation of the ISMND is a critical milestone as the required Timber Harvest Plans (THP) will need to include the mitigation measures the City has agreed to implement to mitigate various environmental issues. After the ISMND is certified by City Council, the THP(s) can be submitted to Cal Fire for their review and approval. Permit packages for the CWA Section 404 permit, CDFW 1602 agreement and associated approvals will be prepared for the first phase of construction in parallel with preparation of the draft ISMND. The intent is to have the packages completed after the CEQA document is certified by the City Council.

4.2 Preparation of a Timber Harvest Plan. Construction of the raw water pipeline will require the removal of a significant number of trees and the preparation of Timber Harvest Plans (THP) to manage that removal. It is likely that a THP will be needed for each of the planned project phases.

This optional task includes for preparation of the THP(s).

Our sub consultant, Summit Forestry (Summit) will prepare the appropriate THP(s) and/or exemption(s). They will initially determine the nature of the THP(s) and/or exemption associated with the replacement of the City's raw water pipeline, once the method of pipeline replacement and construction equipment needed is known. The firm will then lay out in the field the appropriate flagging and marking for each THP and/or exemption. The THP and/or exemption will be prepared per State regulations and will be submitted to the California Department of Forestry and Fire Protection (Cal Fire) for review, acceptance and approval.

Summit will query appropriate databases including the California Natural Diversity Database (CNDDB), the California Native Plant Society (CNPS) and the Northwest Information Center (NWIC) to gain an understanding of potential and known occurrences of biological and cultural resources. Summit will then perform seasonally appropriate surveys for herpetofauna, raptors, NSOs, botanical and archaeological resources. Reports will be prepared for the species surveyed and those reports will be submitted to the appropriate agencies.

Detailed below are various logging contract administrative tasks that could be performed by Summit should they be required by the City. These are not currently included in Task 4.2, but could be added if requested by the City.

- » Timber sales. This includes arranging and showing the timber to log buyers from interested mills, acceptance of bids and determination of the best price per Thousand Board Feet (MBF) when logging and trucking is considered.
- » Logging contractor selection. Summit can arrange and show the project to interested logging contactors, accept bids, and determine the recommended course of action.
- » Logging contract administration. Summit will coordinate with the selected logging contractor to resolve any potential issues that arose during the survey work. They will check on the project as it is being logged to make



sure the intent of the THP is being followed, and that the end result will allow for pipeline replacement construction equipment access.

Timeline - Timber Harvest Plan

Depending on when the project is awarded, Summit will begin the process of determining the best course of action with regard to THP and/or exemption preparation and begin work to secure an approved plan from Cal Fire. The process generally takes 3 to 4 months from commencement to approval, including a public comment period.

Surveys for Environmentally Sensitive Habitat Areas (ESHA) and biological resources of special concern must be done at seasonally appropriate times per the various protocols which govern said surveys.

The NSO survey protocol has a two-year protocol period, with six calls being performed in the spring of year one and six calls in the spring of year two ending in May. This allows for potential harvesting in mid to late May through the summer months of year two.

Botanical surveys tend to span from early spring to late summer in order to survey for certain species of special concern during their flowering period.

Herpetofauna surveys likewise must be done during seasonally appropriate times which vary between species and can span the entire year.

In general, it takes a year for permit and survey work to be completed with an additional spring time NSO survey, once the project is awarded. If, for example, the City awards the project in December of 2018, then the earliest possible date of commencement of timber harvesting would be mid May 2020. This assumes that biological surveys and THP/exemption preparation would be completed in 2019, including the NSO first year six-call survey, and one final six-call survey to be completed in May 2020.

4.3 Funding Acquisition Support

Coleman Engineering has budgeted a total of \$20,000 to plan for multiple staff to assist the City in obtaining project construction funding. The following are examples of services we anticipate that the City may request of the Coleman Engineering team.

- » Preparing technical information required by State and Federal funding applications
- » Meeting with potential funding agencies
- » Revising design documents to match funding agency requests
- » Coordinating with sub-consultants to obtain information requested by funding agencies
- » Updating Construction Cost Opinions to match future funding applications

Coleman Engineering will be pleased to assist the City in many ways, including those not listed above that are not anticipated at the time of this writing. Our professionals are very experienced interacting with local State and Federal funding agency staff, understanding funding programs, and assisting our clients to successfully apply for funds and then manage those funds. The purpose of these Services and associated Budget are to allocate and reserve funds so that the full team will be available to the City to assist as requested with all tasks related to Funding Acquisition Support. We expect to provide these services only as requested by the City on a Time & Materials basis.

4.4 Pipeline Locating Services

Coleman Engineering has planned to coordinate assistance with locating and documenting the alignment of the existing pipeline in sections that may be unknown to the City. We assume that the City may not be able to identify some sections of the pipe that are not well defined in As-Built drawings or on the ground surface. Accordingly, we suggest a budget of \$15,000 for pipeline location services to be used on a Time & Materials basis only as authorized and requested by the City.



G. BUDGET AND SCHEDULE OF CHARGES

Coleman Engineering 2018 Billing Rate Schedule

Classification	Billing Rates
Principal Engineer	\$196
Project Manager	\$184
Asst. PM	\$170
Project Engineer	\$155
Staff Engineer	\$135
Engineering Intern	\$80
CAD Drafter/Designer	\$114
Project Technician	\$104
Project Assistant	\$83

- Billing rates and expense charges are subject to annual update.
- Hourly rates include Indirect Costs such as general computers, telephone, fax, routine in-house reproductions, first class letter postage, miscellaneous supplies, and other incidental general expenses.
- Direct Costs of services and materials such as vendor reproductions/prints, shipping, major in-house Coleman Engineering reproduction efforts, travel expenses, special engineering supplies, etc. will be billed at actual cost plus 10%.
- Sub-Consultants will be billed at actual cost plus 10%.
- Mileage will be billed at the current Federal Rate (\$0.545/mile as of Jan. 1, 2018)
- Expert Witness Services will be billed at standard rates plus a 25% premium.
- Computer charges are included in the Standard Hourly Rates for those employees and contract personnel assigned to use such specialty hardware and software.
- Billing rates apply to all computers and equipment, whether owned or rented by Coleman Engineering, and to all employment categories including regular full-time, part-time, limited term and contract personnel, etc.
- A finance charge of 1.5% per month (an annual rate of 18%) on the unpaid balance will be added to invoice amounts if not paid within 45 days from the date of the invoice.