



2251 Douglas Boulevard
Suite 200
Roseville, CA 95661
P 916.677.4800

gannettfleming.com

PROPOSAL FOR ENGINEERING CONSULTING SERVICES

To: Jennifer Blackman
General Manager, Bolinas Community Public Utility District
Phone: (415) 868-1224
jblackman@bcpud.org

From: William Millhone, PE
Principal Engineer, Gannett Fleming
Phone: (916) 677-4764
wmillhone@gfnet.com

Date: November 13, 2023

Re: **Proposal for Engineering Consulting Services – Radial Gate Condition Assessment
Lower Diversion, Arroyo Hondo Creek, Point Reyes National Seashore
Marin County, CA**

As requested by Bolinas Community Public Utility District (BCPUD), we have prepared this proposal to perform a condition assessment of the radial gate at the lower diversion on Arroyo Hondo Creek in the Point Reyes National Seashore.

PURPOSE & BACKGROUND

The lower diversion on the Arroyo Hondo Creek is a small domestic water diversion structure equipped with a radial gate (gate) to impound water during low flow periods for diversion. The gate was manufactured by Armco Drainage and Metal Products and the installation date is unknown.

We understand that BCPUD personnel have observed significant rust on the drum and structural components as well as seal leakage at the bottom and sides when the gate is in the closed position. The manual handwheel operating system is currently functional, but the condition of the handwheel system (i.e., the speed reducer, hoisting drums, cables, and shafts), the gate trunnions and bearings, the lubricant, and the concrete piers that support the gate and form the diversion structure, are all unknown.

We understand the BCPUD would like to rehabilitate the gate and/or diversion structure, if possible (rather than replace it/them entirely) and has requested that Gannett Fleming perform a field inspection of the gate and diversion structure in anticipation of preparing plans and specifications for a rehabilitation or replacement project, as may be appropriate based on the finding of the inspection.

SCOPE OF WORK

Pursuant to BCPUD's request, we propose the following scope of work:



1. Field Inspection – Two Gannett Fleming engineers will perform a one-day site visit to conduct a visual condition assessment of the lower diversion, focusing on the condition of the gate components and the exposed concrete elements of the diversion structure. The inspection will include the following items:

- Measure pertinent dimensions on the gate drum and appurtenant components and evaluate said components for trueness, section loss, condition of connections, and apparent serviceability.
- Conduct interviews with BCPUD maintenance & operations personnel regarding the operation, condition, performance, and prior repairs and maintenance of the gate components and diversion structure.
- Visually observe a full operating cycle of the gate to evaluate operating conditions and gate functions.
- Collect photos and record field measurements of the gate condition and operation.

Assumptions

- BCPUD will provide and facilitate access to the lower diversion for the field inspection.
- BCPUD maintenance & operations personnel will be on site to support the field inspection, operate the gate, and be available for interviews.
- BCPUD will lead a safety tailboard meeting and prepare any necessary safety paperwork.
- BCPUD will provide a dedicated staff member and vehicle to effect transportation or contact emergency services in the event of an emergency.

2. Post-Inspection Debrief and Technical Memorandum – Subsequent to the field inspection, Gannett Fleming will host an up-to 2-hour teleconference call (via MS Teams, or similar) in order to discuss the following with BCPUD:

- A general overview of the site conditions, observed performance/operation of the gate and its mechanisms, condition of the gate and gate components, and other key observations from the assessment.
- Our opinions regarding options for rehabilitating or replacing all or some of the gate/diversion components, and conceptual/screening-level estimates of construction costs and schedules associated with each option.

Gannett Fleming participants will, at a minimum, include the radial gate inspection team, and our Senior Consultant gate specialist, Greg O'Haver.

The proceedings from the debriefing will be captured in a technical memorandum distributed to attendees via email, and will include the following:

- Descriptions of key observations, annotated photos, estimated dimensions/ sizes/ thicknesses of radial gate structural elements and appurtenant structures;
- commentary on the radial gate structure's current serviceability;
- Gannett Fleming's opinions of feasible rehabilitation alternatives (including conceptual sketches, as appropriate) and conceptual cost/schedule estimates; and,

- Recommendations/ next steps to rehabilitate the radial gate.

ESTIMATED SCHEDULE

The following preliminary project schedule was developed based on discussions with BCPUD. Once authorization is received, we will coordinate with BCPUD to adjust the schedule as appropriate.

Description	Estimated Milestone Date
Field Inspection	TBD based on BCPUD staff availability and potential to combine with site visits for other projects with BCPUD.
Debriefing Conference Call	2-3 weeks after field inspection
Technical Memorandum	2 weeks after conference call

ESTIMATED FEES

Based on the Scope of Work and Estimated Schedule, we estimate a fee of up to \$26,929.00¹.

A project budget backup is attached showing our expected level of effort for the above tasks.

CONDITIONS

Our services will be performed on a 'time and expenses' basis and will be billed in accordance with our Schedule of Charges, which is attached. We will not exceed the budget presented above to perform the proposed Scope of Work. Should additional work, site visits, or meetings be required in addition to the Scope of Work above, or should significant changes be required due to reasons beyond the control of Gannett Fleming, the time required for these items will be billed on a 'time and expenses' basis in accordance with our attached Schedule of Charges.

CLOSURE

Gannett Fleming looks forward to working with you on this assignment. If this proposal is acceptable, please forward a contract referencing this proposal for our review and approval.

Attachments: Budget Backup
Schedule of Charges

¹ Please note that we will consolidate travel days for other work we may perform for BCPUD to the extent practicable, in which case the estimated site visit time and mileage charges may be reduced to some extent.

Project Budget Backup

Arroyo Hondo Creek-Radial Gate Condition Assessment				\$26,928.75
Labor				\$26,705.00
Expenses				\$223.75
	Planned QTY	Planned Quantity	Billing Rate	Planned Bill
Task 100 – Arroyo Hondo Creek-Radial Gate Condition Assessment				\$7,613.75
<i>Field Support</i>				
Syed M. Ul Haque	10		\$240.00	\$2,400.00
William L. Millhone	8		\$295.00	\$2,360.00
<i>Expenses</i>				
Travel: Meals	1		60	\$60.00
Travel: Mileage	250		\$0.6550	\$163.75
<i>Office Support</i>				
Syed M. Ul Haque	4		\$240.00	\$960.00
William L. Millhone	2		\$295.00	\$590.00
George G. O'Haver	4		\$270.00	\$1,080.00
Debriefing & Technical Memo				\$17,580.00
George G. O'Haver	20		\$270.00	\$5,400.00
William L. Millhone	18		\$295.00	\$5,310.00
Drew G. Kennedy	2		\$315.00	\$630.00
Syed M. Ul Haque	26		\$240.00	\$6,240.00
Project Management				\$1,735.00
William L. Millhone	1		\$295.00	\$295.00
Syed M. Ul Haque	4		\$240.00	\$960.00
Karen C. Taylor	4		\$120.00	\$480.00



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SCHEDULE OF CHARGES

Visual Inspection: Lower Diversion, Arroyo Hondo Creek
Bollinas Community Public Utility District
2023

The Schedule of Charges applies to all services provided by and/or through Gannett Fleming. Charges for our services are divided into three categories: Personnel, Travel/Reimbursables and Outside Services. A new Schedule of Charges is issued at the beginning of each year. The Schedule of Charges may also be revised during the year, as conditions require. Changes will not be made within a calendar year on a project in progress without prior authorization from Client.

PERSONNEL

Personnel charges are for technical work and project management, including technical typing, editing, graphics and support services involved in the preparation of reports and correspondence, for the time associated with production of such documents, and for the time to perform project management and control functions. Personnel category per-hour charge rates are as follows:

<u>Civil/Geotechnical/Geological</u>	<u>Hourly Rate</u>
Chief Engineer/Geologist	\$ 330.00
Principal Engineer/Geologist II	315.00
Principal Engineer/Geologist I	295.00
Senior Consultant	265.00
Senior Project Engineer/Geologist III	270.00
Senior Project Engineer/Geologist II	240.00
Senior Project Engineer/Geologist I	220.00
Project Engineer/Geologist II	205.00
Project Engineer/Geologist I	180.00
Staff Engineer/Geologist	170.00
Senior Designer/Geologist	150.00
Designer/Geologist	140.00
<u>Electrical/Mechanical</u>	
Chief Electrical/Mechanical Engineer	330.00
Principal Electrical/Mechanical Engineer II	315.00
Principal Electrical/Mechanical Engineer I	295.00
Senior Consultant	270.00
Senior Project Electrical/Mechanical Engineer III	270.00
Senior Project Electrical/Mechanical Engineer II	260.00
Senior Project Electrical/Mechanical Engineer I	230.00
Project Electrical/Mechanical Engineer II	220.00
Project Electrical/Mechanical Engineer I	200.00
Staff Electrical/Mechanical Engineer	180.00
Senior Electrical/Mechanical Designer	155.00
Designer Electrical/Mechanical	140.00



Schedule of Charges

Bolinas Community Public Utility District

<u>Security & Safety</u>	<u>Hourly Rate</u>
Senior SME	\$ 344.00
Director	298.00
Deputy Director	287.50
Senior Principal	287.50
Principal	263.50
Senior Project Analyst	251.00
Senior Consultant	242.00
Project Analyst	209.00
Consultant	209.00
Senior Analyst	176.00
Analyst	142.60
Associate Analyst	116.30
<u>Support Services</u>	
Senior GIS Analyst	175.00
Chief CADD Technician	170.00
CADD/GIS Technician	140.00
Senior Admin	135.00
Technical Writer/Admin	120.00
Intern	75.00

The charge for expert witness services, depositions (2-hour minimum per day) and court (4-hour minimum per day) is \$660 per hour.

TRAVEL / REIMBURSABLES

Time spent in travel in the interest of the Client will be charged at the above hourly rates plus mileage at the current IRS rate, except that no more than eight (8) hours of travel time will be charged in any day. When it is necessary for an employee to be away from the office overnight, all actual costs, including meals and out-of-pocket expenses will be charged. Reimbursable items (e.g., airfare, hotel, automobile/equipment rental, supplies etc.) will be charged at cost plus fifteen percent (15%).

<u>Specialty Design Software</u>	<u>Hourly Rate</u>	<u>Specialty Field Equipment</u>	<u>Daily Rate</u>
Maptek Point Studio	\$85.00	Trimble R1 Antenna + Tablet	\$150.00
		Trimble R2 Antenna + Tablet	300.00
	<u>Flat Rate</u>	Protective Relay Test Set	250.00
Easypower, SKM, Etap, CDEGS	\$500.00	Rope Access Gear	200.00

OUTSIDE SERVICES

Outside services will be charged at cost plus fifteen percent (15%). Common outside items to which this 1.15 multiplier applies include, but are not limited to drilling services, laboratory testing, printing and photographic work, special insurance and outside consultants.