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May 20, 2021

Ms. Eva Blumenstein, Planning Program Manager
County of Maui Department of Water Supply
200 S. High Street
Wailuku, HI 96793

071117.064

Subject: Revised Proposal for Feasibility Study for East Maui Source Development.

Dear Ms. Blumenstein:

Brown and Caldwell (BC) is pleased to present our revised proposal for the subject project. The County of Maui Department of Water Supply (County) desires to prepare a feasibility study for the development of new water sources in East Maui. Our proposal is based on the Request for Proposal and Scope of Services document dated April 14, 2021, and virtual meetings with County personnel on April 29, 2021, May 5, 2021, and May 11, 2021.

Project Team

BC's project manager will be **Ms. Michelle Sorensen, PE, P. Eng.** Michelle is based on the Big Island but is a member of our Maui office team. Michelle has considerable water supply planning experience, having most recently prepared a Water Resources Master Plan for Guam Waterworks Authority.

Mr. Dean Nakano will be a key member of Michelle's project team, helping to steer the project to success. Dean's lengthy career has focused on water supply issues in Hawaii, including tenure at the City and County of Honolulu Board of Water Supply and the State of Hawaii Commission on Water Resource Management. Dean's recent BC experience includes an Impacts of Climate Change Study and a Central Oahu Watershed Management Plan, both for the Honolulu Board of Water Supply.

Mr. Craig Lekven, PE, will serve as the project director. Craig formerly provided assistance to the County on the Na Wai Eha and East Maui IIFS cases, giving him an understanding of the County's water systems and the issues at hand.

Scope of Services

Our proposed scope of services, including key assumptions, services to be provided by the County, and the intended deliverables is included as Attachment A.

Construction cost estimates, financial analyses and feasibility projections are subject to many influences including, but not limited to, price of labor and materials, unknown or latent conditions of existing equipment or structures, and time or quality of performance by third parties. The County acknowledges that such influences may not be precisely forecasted and are beyond the control of BC and that actual costs incurred may vary substantially from the estimates prepared by BC. BC does not warrant or guarantee the accuracy of construction or development cost estimates.

Schedule

Our proposed schedule is presented in Table 1. Additional detail can be provided upon request.

Table 1. Proposed Schedule	
Description	Duration
Notice to proceed	--
Phase 1 – Central Maui and Upcountry Systems Demand and Capacity Analysis – draft report submittal	6 months
Phase 2 – Availability of Surface Water and Cost/Benefit Study for Waikapu, Iao, and/or Waihee Hydrologic Units – draft report submittal	9 months
Total	15 months

We suggest a contract duration of 548 calendar days (18 months) to provide a schedule contingency for this complex planning project.

BC will submit a detailed project schedule within 30 days of receiving notice to proceed and will periodically update the schedule as the project progresses.

At the time this proposal was prepared, COVID-19 is a global pandemic with dynamic implications. While BC has made reasonable efforts to incorporate into our proposal known current project impacts of the COVID-19 pandemic, we have not accounted for, and are not responsible for, unknown future changes due to the COVID-19 pandemic, including, without limitation, additional restrictions by government agencies or others (such as the availability of the site for access or client or consultant staff or others) to the extent they delay or otherwise impact the project. In the event of additional delays, BC will notify you and work in good faith to equitably address any unexpected impacts therefrom.

Fee

BC will complete the scope of services defined for phases 1 and 2 for a lump-sum fee of \$499,912.00. Details are provided as Attachment B. Work will be invoiced monthly on a percentage complete basis by phase.

Special Conditions

BC requests the following revisions to the County's General Terms and Conditions (GTCs) for this contract. These special conditions have been granted by the County of Maui on recent contracts with other departments.

1. Paragraph 7 of the GTCs is deleted in its entirety and replaced with the following:

Indemnification and Defense - Except as provided for in Section 103D-713, HRS, the Contractor shall defend, indemnify and hold harmless the County, the contracting department and their directors, employees and agents from and against all liability, loss, damage, cost and expense, including all attorney's fees and costs, and all claims, suits, and demands therefor, to the extent caused by the negligence of the Contractor or the Contractor's employees, officers, agents, or subcontractors under this Contract. The provisions of this Paragraph shall remain in full force and effect notwithstanding the expiration or early termination of this Contract for any reason.

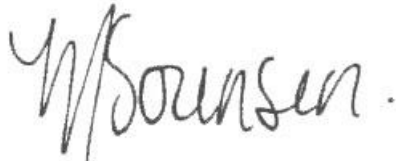
2. Paragraph 8 of the GTCs is deleted in its entirety, and replaced with the following:

Cost of Litigation. In case the County, without any fault on its part, be made a party to any litigation commenced by or against the Contractor in connection with this Contract, the Contractor shall pay any cost and expense incurred or imposed on the County, including attorneys' fees to the extent such costs or expenses incurred or imposed on the County are caused by the negligence of Contractor.

Our tax clearance is included as Attachment C. We look forward to helping the County with this vital project. If you have any questions, please call Michelle Sorensen at 808-442-3306 or Craig Lekven at 808-442-3301.

Very truly yours,

Brown and Caldwell



Michelle Sorensen
Project Manager



Craig Lekven
Project Director

Attachments (3)

- Attachment A: Scope of Services
- Attachment B: Fee Estimate
- Attachment C: Tax Clearance

Attachment A: Scope of Services



Proposal: Feasibility Study for East Maui Source Development - Phases 1 and 2

Scope of Work and Project Description (Revised 5/20/2021)

Island-wide, new water source and infrastructure are needed to accommodate planned growth as directed in the Maui Island Plan (MIP). To help meet this need, the County of Maui Department of Water Supply (MDWS) is conducting a feasibility study to evaluate water source alternatives that assures reliable potable water supply to accommodate growth associated with the Central and Upcountry Maui water systems.

Brown and Caldwell (BC) proposes to conduct an assessment of existing capacity, refine future MDWS water demand projections and evaluate viable water resource alternatives in accordance with the Project objectives outlined in the Request for Proposal (RFP) received April 14, 2021. The assessment will include a holistic system capacity study and cost benefit analysis of identified new water resource alternatives. MDWS seeks to develop sources that are in accordance with established groundwater sustainable yields (SY) and current interim instream flow standards (IIFS) and will build upon the 2019 Draft Water Use and Development Plan for Maui Island (WUDP), MIP and other relevant studies. The East Maui Source Development Feasibility Study (EMFS) will include four (4) phases to assess existing capacity, refine future potable water demand projections for the MDWS Central and Upcountry Maui systems, evaluate viable surface and ground water resource alternatives, and recommend a stream restoration plan in accordance with section 4.2 of the 2003 East Maui Consent Decree. This analysis will consider factors that may affect water supply resiliency, as well as environmental, regulatory, hydrological and permitting constraints. Appropriate consultation regarding potential impacts and/or opportunities for Native Hawaiian traditional and customary practices associated with the identified resource alternatives will also be conducted. The study is intended to comply with the provisions of 4.1 through 4.5 of the 2003 East Maui Consent Decree. The study is divided into four separate phases:

- **Phase 1** – MDWS Central Maui and Upcountry Systems Demand and Capacity Analysis.
- **Phase 2** – Availability of Surface Water and Cost/Benefit Study for Waikapu, Iao, and/or Waihee Hydrologic Units.
- **Phase 3** – Cost/Benefit Study for Central Maui Region, Upcountry Maui Region, and East Maui Region.
- **Phase 4** – Assess and Recommend a Plan for Stream Restoration in the Portion of the East Maui Region Outlined in Exhibit A of the Consent Decree.

Due to budget limitations, this proposal encompasses Phase 1 and Phase 2 of the EMFS only. A proposal for a contract amendment to complete Phases 3 and 4 will be submitted at a later date.

Phase 1 – MDWS Central Maui and Upcountry Systems Demand and Capacity Analysis

The first phase of the EMFS will provide an analysis that examines current/future MDWS water demands, reliable capacity, and identifies potential new source options for the MDWS Central and Upcountry Systems.

Task 1.1: Project Management

BC staff will manage the scope, schedule, and budget to ensure that the Phase 1 work is managed in a manner that meets contract requirements. This includes, but is not limited to, management of documents, change, risk, and quality assurance and control. This task shall include regular progress conference calls or meetings between BC and MDWS personnel to review project progress, issues to be resolved, early results, etc. This task covers efforts associated with the internal quality control and technical review process.

Task 1.2: Update Water Use Demand Projections for Regions Served by the Central Maui and Upcountry Systems

1.2.1. Gather and Review Existing Relevant Data

Gather, organize, and review available data and reports for Maui Island from Federal, State, County, and other sources, including but not limited to information on land and water resources, water uses and users, water demand trends, land use and development plans, and population. Planning documents such as the Maui Water Use and Development Plan (WUDP) and Maui Island Plan (MIP), and applicable MDWS technical information, (including but not limited to the 2013 MDWS Engineering Division Studies and the 2020 AWIA Risk and Resiliency Analysis) will also be reviewed.

1.2.2. Update Current Water Use Demands to 2020

MDWS water use data for the years 2015 through 2020 along with current water use data contained in the 2019 draft of the WUDP will be reviewed to determine current potable and non-potable demand for the MDWS Central Maui and Upcountry Systems. Readily available information regarding land use and/or population projections not currently reflected in the 2019 WUDP will be reviewed in updating the current potable water demands up to 2020. Available 2020 Census and American Community Survey data will be relied upon for population growth information to 2020.

1.2.3. Develop Water Demand Projections to 2040

BC will review the current water demand projections and methodologies used in the WUDP to develop water demand projections to 2040 based on population growth and current land use projections. WUDP projections beyond 2020 will be updated and the planning horizon will be extended from 2035 (as utilized in the WUDP) to 2040. The Upcountry meter priority list will be incorporated into demand projections, and applicable policies adopted as part of relevant community plans (e.g., Haiku-Paia, Kahului-Wailuku, and Kihei-Makena) will be considered as part of the feasibility study.

Task 1.3: Review Available Reliable Capacity

1.3.1. Evaluate MDWS Source and Production Capacity

Maximum source capacity and permitted withdrawal limits will be reviewed for sources serving the Central and Upcountry Systems. For existing surface water supply, this will include consideration of current IIFS/IFS and permitted stream diversion withdrawals. For existing groundwater sources, current (2019) Commission on Water Resource Management (CWRM) estimates of SY and permitted pumping capacity will be reviewed.

Existing raw surface water collection, storage, and treatment facilities serving the Central and Upcountry Systems will be evaluated from a design capacity perspective, and current pumpage (i.e., existing use) of existing groundwater withdrawal systems assessed. System, operational and use limitation assumptions affecting production and delivery of capacity will be reviewed with MDWS personnel.

Applicable policies adopted as part of relevant community plans (e.g., Haiku-Paia, Kahului-Wailuku, and Kihei-Makena) will be considered.

1.3.2. Determine Current Available Reliable Capacity

As outlined in the County of Maui Administrative Rules (Title 16) "maximum reliable capacity" is defined as the volume of water that can be reliably produced on an ongoing basis in any given department water system. Such value shall be based on engineering principles and shall take into account various uncertainties, including but not limited to, mechanical failures, human error, and weather events. Transmission and distribution storage infrastructure are not evaluated for this determination.

Reliable capacities for the Central and Upcountry systems were determined in the 2013 MDWS Engineering Division studies *Water Source Development Options Report for the South-Central Maui and the Upcountry Maui Areas* and updated in the WUDP. These previous findings will be examined and updated/refined as applicable.

It is anticipated that up to two (2) workshops will be conducted with MDWS staff to gather input from the Engineering and Operations Divisions, confirm systems standards utilized in the calculation of system capacity, examine known system limitations/constraints, discuss potential additional limitations, and review the results of the reliable capacity analysis.

1.3.3. Identify Source Surplus/Deficit to Accommodate Demand Projections

Reliable capacity from Task 1.3.2 will be compared with updated demand projections through 2040 and source capacity needs identified for each system.

Task 1.4: Report Preparation

A draft report will be provided at the completion of Phase 1, detailing the capacity determinations as described, updated demand projections and system capacity/new source needs through year 2040. The final report will address MDWS comments.

Phase 1 Key Assumptions

1. BC staff will manage the scope, schedule, and budget. Periodic progress reports, no less than quarterly, will be provided to MDWS.
2. Land use, population projections and other relevant information contained within the MIP and WUDP will provide the basis upon which water demand projections are developed for the EMFS. The WUDP will be relied upon for actual demand to 2014 and methodology for projections to 2035.
3. MDWS will:
 - Attend meetings, review progress reports, and assist as necessary towards the EMFS completion.
 - Provide a list of relevant background documents to be reviewed.
 - Furnish water use data in editable spreadsheet format through December 2020.
 - Provide an editable copy of the most current Upcountry Meter Priority List.
 - Provide information relevant to changes in land use since publication of the WUDP (such as land use entitlements awarded 2015-2020).
 - Furnish an electronic copy of MDWS's risk assessment prepared in compliance with the America's Water Infrastructure Act of 2018 (AWIA).
 - Furnish the 2013 MDWS Engineering Division studies *Water Source Development Options Report for the South-Central Maui and the Upcountry Maui Areas*.
 - Provide latest available demand projections, planning information and documentation for the Mahi Pono farm (current at NTP).
 - Furnish documents requested by BC in a timely manner, in electronic format (pdf or link for download) or hard copy.
 - Identify and ensure that appropriate MDWS personnel (operations, engineering, and planning) are available for all proposed workshops.
 - Provide pertinent information on pumpage and permitted surface water and ground water withdrawals.
 - Be responsible for transmitting the final report to plaintiffs in accordance with the Consent Decree paragraph 4.6.
4. Information contained within the 2013 Engineering Division studies and WUDP will provide the basis of the facility evaluation and available capacity analysis. Relevant findings of the 2013 Engineering Division studies will be refined in consultation with MDWS based on the updated demand projections and identified source development alternatives.
5. The following are outside the scope of the EMFS:
 - Evaluation of MDWS distribution and storage systems to identify potential system improvements to increase efficiency or decrease non-revenue water.
 - Condition assessment for facilities.
 - Analysis of DWS water conservation program measures or initiatives.

Phase 1 Deliverables

- One (1) workshop will be conducted with MDWS staff to review the results of Task 1.2.
- Up to two (2) workshops will be conducted with MDWS staff as outlined in Task 1.3.2.
- Draft and Final Reports as outlined in Task 1.4 (electronic format - .pdf, GIS or shape files as applicable).

Phase 2 – Availability of Surface Water and Cost/Benefit Study for Waikapu, Iao and/or Waihee Hydrologic Units

The second phase of the EMFS will consist of an assessment of the availability of surface water supply from the Waikapu, Iao, and/or Waihee hydrologic units and preparation of a rigorous analysis of the costs and benefits of using these water resources for the DWS Central System.

Task 2.1: Project Management

BC staff will manage the scope, schedule, and budget to ensure that the Phase 2 work is managed in a manner that meets contract requirements. This includes, but is not limited to, management of documents, change, risk, and quality assurance and control. This task shall include regular progress conference calls or meetings between BC and MDWS personnel to review project progress, issues to be resolved, early results, etc. This task covers efforts associated with the internal quality control and technical review process.

Task 2.2: Identify Potential Surface Water Resources in Each Hydrologic Unit

Existing and potential surface water sources at the stream level within the Waikapu, Iao and/or Waihee hydrologic units will be identified/confirmed. The current interim instream flow standards (IIFS) or instream flow stream standards (IFS) will be identified for each surface water source.

Task 2.3: Analyze the Potential Water Resources in Each Hydrologic Unit

2.3.1. Review surface water availability and resource resiliency.

Hydrological and environmental constraints will be identified and reviewed for existing and potential surface water resources identified within the Waikapu, Iao and/or Waihee hydrologic units. A range of surface water availability scenarios will be evaluated including current IIFS/IFS and potential adjustments associated with projected climate change impacts.

Regulatory constraints (e.g., designated water management area provisions and applicable contested case hearing Decision and Order provisions) and other permitting requirements will be considered as part of this evaluation.

Background information to be considered in assessing surface water availability may include (but not be limited to):

- Petitions to Amend the Interim Instream Flow Standard for Waihee, North and South Waiehu, Iao, and Waikapu Streams and their tributaries.
- CCH-MA06-01: Iao Ground Water Management Area High-Level Source Water Use Permit Applications and Petition to Amend Interim Instream Flow Standards of Waihee, Waiehu, Iao, and Waikapu Streams Contested Case Hearing.
- Surface Water Management Area Designation of Waihee, Waiehu, Iao, and Waikapu Surface Water Hydrologic Units.
- Surface Water Use Permits, Na Wai Eha, Maui.
- CCH-MA13-02: Provisional Recognition of Appurtenant Rights, Na Wai Eha Surface Water Management Area, Waihee, Waiehu, Iao, Waikapu Streams, Maui, Hawaii.
- CCH-MA15-01: Surface Water Use Permit Applications, Integration of Appurtenant Rights and Amendments to the Interim Instream Flow Standards, Na Wai Eha Surface Water Management Areas of Waihee, Waiehu, Iao and Waikapu Streams, Maui.

Current stream diversion withdrawals (i.e., existing use) and projected water demands will be evaluated for up to two (2) surface water availability scenarios (e.g., existing 2019 IIFS/IFS and potential climate change adjusted IIFS/IFS), including potential new IIFS if proposed by CWRM prior to the start of Task 2.3.

Operational limitations and source resiliency considerations (e.g., drought, treatment, and water quality impacts) relative to the Central Water System will be identified and reviewed.

2.3.2 Review Legal, Regulatory and Permitting Considerations

The identification of potential sources of surface water supplies from the Waikapu, Iao and/or Waihee hydrologic units shall consider water use regulation programs to permit reasonable beneficial uses of water (i.e., designated water management areas) to protect instream flows and to maintain sustainable yields of groundwater, as defined in the State Water Code.

The evaluation of existing and potential water supply sources shall include appropriate review of relevant development plans, studies, and scientific investigations (e.g., available USGS Reports) involving existing assessments for water supply and demand, and instream uses of water, including the hydrological aspects of Hawaiian stream systems.

2.3.3. Identify Source or Combination of Source Options to Take Forward for Further Analysis

Potential water supply options and/or combination of options shall be identified in accordance with county land use and water planning information related to the Central Water System.

The assessment of surface water availability and cost/benefit study for Waikapu, Iao and/or Waihee hydrologic units will not include an evaluation of the tradeoffs between competing uses for the same water resource, but these issues will be acknowledged as part of the EMFS analysis and may be addressed as part of the future detailed planning of specific projects or in the further development of a particular resource development strategy.

Resource development strategies identified as part of Phase 2 shall be geared to meet a range of scenarios and shall consider the physical, environmental, and other socioeconomic costs and impacts of the strategies.

Potential resource options will be filtered and screened in consultation with MDWS to eliminate inappropriate or fatally flawed options. The goal being to identify a manageable number of resource options that can be combined into resource development sequences to meet planned and projected growth served by the Central Water System.

The legal and regulatory authorities pertaining to water resource management in Hawaii, and specific to Maui, will be reviewed and considered in the evaluation of existing and potential surface water resources applicable to the Central Water System.

This task will not identify specific locations for future surface water diversions or withdrawals and will be limited to identification of potential availability of surface water resources within the study area. Should the analysis undertaken in Task 2.3.3 determine that there are no opportunities for additional surface water availability (i.e., potential surface water supply) within the Waikapu, Iao or Waihee hydrologic units, no further work will be performed under Tasks 2.3 through 2.6.

The identification of resource options under Task 2.3 will not include an analysis of DWS water conservation program measures or initiatives.

2.3.4. Develop a Supply and Development Strategy for Sources and/or Combination of Sources

Using the information developed from the above tasks, BC will develop up to three (3) strategies for detailed analysis. The strategies will consist of combinations of sources and associated infrastructure needed to treat and deliver water to the DWS water systems.

BC will conduct a workshop with the County to review and confirm the supply and development strategies before proceeding with more-detailed analysis.

Task 2.4: Ka Paakai Analysis

In consultation with MDWS, knowledgeable individuals and organizations (e.g., Native Hawaiian cultural organizations and community leaders) will be identified and contacted to gather information relative to new potential surface water resources in each hydrologic unit. A review of cultural practices and possible impacts associated with potential surface water source development within the study areas will be conducted and mitigative actions investigated as appropriate. In general, the methodology utilized in the 2019 WUDP will be followed. BC will subcontract with a cultural specialist (to be determined) to assist with this task.

The framework for the Ka Paakai Analysis is anticipated to include the following elements:

1. **Message Development.** Key topics will be identified to facilitate communication with relevant stakeholders. Work products for this element will include:
 - A standalone information sheet, fact sheet, or newsletter.
 - Written correspondence with agencies and cultural stakeholders.
 - Media / PowerPoint summary for online distribution.
2. **Stakeholder Identification and Organization,** including agencies, cultural organizations and community leaders. This will include a review of relevant previous stakeholder communications and development of a stakeholder database.
3. **Outreach.** Preliminary telephone or virtual interviews will be conducted with key cultural stakeholders (up to 15), and one (1) online focus group meeting convened.

4. **Ka Paakai Analysis.** A generalized assessment of impacts of preliminary measures and strategies on traditional and customary practices of Native Hawaiians will be summarized in report form for inclusion in the overall Phase 2 report. This report will also include the identification of feasible mitigative actions, if any, to reasonably protect Native Hawaiian rights if they are found to exist.

Task 2.5: Cost/Benefit Analysis

BC will prepare a robust cost/benefit analysis of up to three identified options, consisting of a business case evaluation (BCE) for the source options that will include monetization of risks and benefits.

2.5.1. Develop Capital and O&M Cost Estimates and Timelines

BC will prepare planning-level capital cost estimates for the identified options. The planning-level cost estimates will be “Class 5” estimates in accordance with the Association for the Advancement of Cost Engineering International (ACE). The planning-level estimates will not be site specific, but rather will be set at the stream level. The estimates will include costs to develop the source, transmission pipelines, water treatment plant expansions, pumping systems, and other expenditures necessary to deliver new source water to the existing MDWS systems. Transmission and treatment strategies will be identified in Task 2.3.4. Upgrades within existing DWS customer delivery systems will not be included.

BC will also develop planning-level O&M costs for the identified options. The O&M costs will include fixed costs that are not dependent on production rates (e.g., labor, asset maintenance) and variable costs that are dependent on production rates (e.g., electricity, chemicals). Existing MDWS water treatment plant costs will be used to develop future source treatment costs.

MDWS shall provide recent project costs and bid information in order to complete this Task. BC will conduct a workshop with MDWS staff to establish and review cost estimate assumptions.

2.5.2. BCE

BC will prepare a BCE to cover the identified new source options, and a “no project” option. The BCE will calculate the net present value (NPV) of cash flows developed for each option over a defined planning period. The 20-year BCE for this project will include capital costs, annual O&M costs, equipment replacement at the end of the 20-year planning period, monetized risks, and monetized benefits. Life-cycle costs will be compared for the options, based on the capital and O&M cost portions of the BCE. A cost benefit analysis will be prepared that considers the capital, O&M, risk, and benefits portions of the BCE.

If needed, BC will subcontract with an economist (to be determined) to assess the macro-scale economic benefits to the County of Maui that will be realized by providing water in support of the orderly growth of the community in accordance with the Maui Island Plan. An allowance has been provided in the budget for this work by a subconsultant.

BC will conduct a workshop with the MDWS to present the BCE methods, assumptions, and preliminary results.

Task 2.6: Non-Economic Analysis

Many important factors, such as environmental and cultural impacts, cannot be effectively monetized and incorporated into a BCE. BC proposes to conduct a non-economic analysis on the identified options to evaluate factors that are inherently subjective in nature. The non-economic analysis will consist of a weighted scoring matrix of the non-economic factors to derive an overall non-economic score for each option. BC will conduct a non-economic analysis workshop with the County to collectively establish the weighting factors to reflect the community’s values, and to assign the scores for the identified options.

Task 2.7: Recommend Alternatives

The results from analyses 2.2 through 2.6 will be combined to recommend the alternative, or combination of alternatives, that will be most cost effective and beneficial at increasing water supply to meet projected demand, considering financial, environmental, social, and cultural impacts and technical feasibility. Additional preliminary design criteria will be developed for the recommended alternative(s) as appropriate for the level of analysis. An implementation plan will be developed to assist the County with capital improvements planning.

Task 2.8: Report Preparation

The findings from Phase 2 will be incorporated into a stand-alone deliverable to MDWS in accordance with 4.3 of the 2003 CD. A draft report will be provided at the completion of Phase 2, including maps and detailing all reviewed

options, costs, factors and constraints considered in the analyses, findings and recommendations. The final report will address County comments.

Phase 2 Key Assumptions

1. BC staff will manage the scope, schedule, and budget. Periodic progress reports, no less than quarterly, will be provided to MDWS.
2. MDWS will:
 - Attend meetings, review progress reports, and assist as necessary towards the EMFS completion.
 - Provide available modeling information.
 - Identify and provide documents germane to legal constraints requiring consideration during preparation of the EMFS.
 - Participate in a workshop to screen and filter potential resource options.
 - Provide most recent project costs and bid information for wells, pipelines, tanks, booster pump stations, GAC treatment at Piiholo WTP, the new Iao WTP, and any other projects identified as needed for the analyses. If these costs are not available, BC will prepare a proposal for a contract amendment for additional effort required to develop these cost estimates.
 - Provide existing water treatment plant O&M costs, if available.
 - Identify and ensure that appropriate MDWS and other County personnel (operations, engineering, and planning) are available for all proposed workshops, as applicable.
 - Responsible for transmitting the final report to plaintiffs in accordance with the Consent Decree paragraph 4.6.
3. The EMFS is meant to discern surface water resources and not to specifically identify locations for any future surface water development.
4. Current stream diversion withdrawals (i.e., existing use) and projected water demands will be evaluated for up to two (2) surface water availability scenarios.
5. Interim instream flow standards (IIFS) or instream flow stream standards (IFS) will be defined upon the initiation of the Phase 2 work as outlined in the Project Schedule.
6. The following are outside the scope of the EMFS:
 - An evaluation of the tradeoffs between competing uses for the same water resource.
 - Specific locations for future surface water diversions or withdrawals.
 - An analysis of DWS water conservation program measures or initiatives.
7. Should the analysis undertaken in Task 2.3.3 determine that there are no opportunities for additional surface water availability within the Waikapu, Iao or Waihee hydrologic units, no further work will be performed under Tasks 2.3 through 2.6.
8. A maximum budget of \$20,000 has been established for the cultural subconsultant. BC will prepare a proposal for a contract amendment if the needed services exceed the budgeted amount.
9. Up to three (3) new source options will be considered for the BCE and subsequent analysis.
10. A maximum budget of \$20,000 has been established for the economist subconsultant. BC will prepare a proposal for a contract amendment if the needed services exceed the budgeted amount.

Phase 2 Deliverables

- One (1) overview figure with the three (3) hydrologic units delineated for inclusion in draft and final reports.
- One (1) figure for each hydrologic unit labeling and delineating surface water resources, including those currently utilized and those not currently utilized by MDWS for inclusion in draft and final reports.
- One (1) workshop with MDWS staff to review and confirm the supply and development strategies as outlined in Task 2.3.
- Work products associated with Task 2.4 including:
 - A standalone information sheet, fact sheet, or newsletter (electronic .pdf format).
 - Copies of written correspondence (electronic .pdf format) with agencies and cultural stakeholders.
 - A media/PowerPoint summary for online distribution.
 - A stakeholder database (electronic .pdf format).

- Preliminary telephone or virtual interviews with key cultural stakeholders (up to 15).
- One (1) online focus group meeting.
- A summary report specific to Task 2.4 for inclusion in the overall Phase 2 report (electronic .pdf format).
- Up to two (2) workshops will be conducted as part of Task 2.5.
- One (1) workshop will be conducted as part of Task 2.6.
- Draft and final reports (electronic format - .pdf, GIS or shape files as applicable).

Attachment B: Fee Estimate

Table A-1. Proposed Fee - East Maui Source Water Feasibility Study (EMFS) - REVISED 5/20/2021

	Labor Hours							Labor Cost	Other Direct Costs	Subtotal
	Lekven Engineer VIII	Nakano Engineer VIII	Sorensen Engineer VI	Engineer III	Drafting Tech/CAD Operator VI	Clerical/ Word Processor	Total			
Billing Rate (\$/hr)	\$255.90	\$255.90	\$179.70	\$124.80	\$128.70	\$86.10				
Phase 1 - Central Maui and Upcountry Systems Demand and Capacity Analysis	136	83	256	460	56	111	1102	\$176,218	\$1,000	\$177,218
Phase 2 - Availability of Surface Water and Cost/Benefit Study for Waikapū, `Iao and/or Waihe`e hydrologic units	166	143	440	666	46	171	1632	\$261,901	\$40,800	\$302,701
<i>Total</i>	<i>302</i>	<i>226</i>	<i>696</i>	<i>1126</i>	<i>102</i>	<i>282</i>	<i>2734</i>	<i>\$438,119</i>	<i>\$41,800</i>	<i>\$479,919</i>

Excise Tax: \$19,993

Grand Total: \$499,912

Attachment C: Tax Clearance



**STATE OF HAWAII
STATE PROCUREMENT OFFICE**

CERTIFICATE OF VENDOR COMPLIANCE

This document presents the compliance status of the vendor identified below on the issue date with respect to certificates required from the Hawaii Department of Taxation (DOTAX), the Internal Revenue Service, the Hawaii Department of Labor and Industrial Relations (DLIR), and the Hawaii Department of Commerce and Consumer Affairs

Vendor Name: **BROWN AND CALDWELL & Subs**

DBA/Trade Name: **BROWN AND CALDWELL**

Issue Date: **05/10/2021**

Status: **Compliant**

Hawaii Tax#: W20214674-01

New Hawaii Tax#:

FEIN/SSN#: XX-XXX6346

UI#: XXXXXX6997

DCCA FILE#: 7794

Status of Compliance for this Vendor on issue date:

Form	Department(s)	Status
A-6	Hawaii Department of Taxation	Compliant
8821	Internal Revenue Service	Compliant
COGS	Hawaii Department of Commerce & Consumer Affairs	Compliant
LIR27	Hawaii Department of Labor & Industrial Relations	Compliant

Status Legend:

Status	Description
Exempt	The entity is exempt from this requirement
Compliant	The entity is compliant with this requirement or the entity is in agreement with agency and actively working towards compliance
Pending	The entity is compliant with DLIR requirement
Submitted	The entity has applied for the certificate but it is awaiting approval
Not Compliant	The entity is not in compliance with the requirement and should contact the issuing agency for more information