



CONSOLIDATED COMMISSION ON UTILITIES
Guam Power Authority | Guam Waterworks Authority
P.O. Box 2977 Hagatna, Guam 96932 | (671)649-3002 | guamccu.org

GWA RESOLUTION NO. 51-FY2018

**RELATIVE TO CONTRACT EXTENSION TO THE WELL REHABILITATION AND
NEW WELLS DESIGN WITH GHD, INC.**

WHEREAS, under 12 G.C.A. § 14105, the Consolidated Commission on Utilities (“CCU”) has plenary authority over financial, contractual, and policy matters relative to the Guam Waterworks Authority (“GWA”); and

WHEREAS, the Guam Waterworks Authority (“GWA”) is a Guam Public Corporation established and existing under the laws of Guam; and

WHEREAS, the CCU approved Resolution No. 08–FY2011 on April 28, 2011 which authorized GWA Management to enter into a contract with the engineering firm Winzler and Kelly, which subsequently became the engineering firm GHD, Inc., in the amount of Nine Hundred Eighty Four Thousand Eight Hundred Fifty Seven Dollars (\$984,857.00) with a not to exceed maximum of One Million Dollars (\$1,000,000.00) total authorized funding amount for the engineering design services for three new wells locations and seven well rehabilitation designs (D-3, D-17, D-18, D-22, A-28, M-14 and M-9); and

WHEREAS, the original scope of work for the design contract did involve engineering services during bidding but this was removed from the contract to essentially work to close the design contract given any construction activities for the wells were deferred until after much of the Court Order projects were completed and GWA management at the time did not want to have an open-ended contract; and

WHEREAS, the original scope of work for the design contract unfortunately did not have EOR services during construction period as a line item thus GWA managements seeks

1 CCU approval to add such services to ensure design issues that may come up are addressed by
2 the EOR; and

3
4 **WHEREAS**, in the course of the active contract with GHD, six (6) Change Orders were
5 executed where the last Change Order required CCU and PUC approval given this Change Order
6 resulted in the contract value being One Million Thirty-Three Thousand Three Hundred Eight
7 Dollars (\$1,033,308.00); and

8
9 **WHEREAS**, in 2016 GWA moved forward with the well rehabilitation construction
10 project for production wells D-3, D-17, D-18, D-22 and M-9 for which US EPA SRF Grant were
11 used to fund the project; and

12
13 **WHEREAS**, GWA management is working to execute the construction procurement for
14 the GWA New Wells at AG-10, AG-12 and Y-8 project for which the engineering firm GHD,
15 Inc. was the Engineer of Record (EOR); and

16
17 **WHEREAS**, the development of the three new wells noted will allow GWA to increase
18 its production capacity reserve that may be necessary for anticipated growth from the military
19 build-up as well as directly improve water pressure to properties close to the new well locations;
20 and

21
22 **WHEREAS**, the EOR's involvement in the project is critical to the procurement for
23 construction services, as well as the success of the construction activities, and is necessary to
24 respond to all technical questions specific to the design that may be raised by perspective bidders
25 during the bidding process or from the winning contractor during the construction contract
26 period, and as such, GWA Management seeks CCU approval to "reopen" the design contract
27 with GHD and extend the period of this contract until the new wells at AG-10, AG-12 and Y-8
28 are complete; and

29
30 **WHEREAS**, GWA has negotiated with GHD for additional scope of work related to
31 bidding and construction activities as well as updating the design drawings that were originally
32 completed in 2014; and

1 **WHEREAS**, GWA has also negotiated with GHD for fees related to the additional scope
2 and GHD have submitted for GWA's review and approval, a proposal for One Hundred Seventy
3 Thousand (\$170,000.00) which will be handle on a Time and Materials basis (SEE EXHIBIT A);
4 and

5
6 **WHEREAS**, the source of funding for the Change Order will be from the Bond
7 proceeds under CIP PW PW 05-14 "New Deep Wells and Down Hard", PW 09-02 Water
8 Wells or SDC; and

9
10 **NOW BE IT THEREFORE RESOLVED**, the Consolidated Commission on Utilities
11 does hereby approve the following:

- 12 1. The recitals set forth above hereby constitute the findings of the CCU.
- 13 2. The CCU finds that the development of the new production wells AG-10, AG-
14 12 and Y-8 will allow GWA to increase its production capacity reserve that
15 may be necessary for anticipated growth from the military build-up as well as
16 directly improve water pressure to properties close to the new well locations
- 17 3. The CCU hereby authorizes GWA to "re-open" and extend the contract with
18 GHD, Inc. as the Engineer of Record, for the New Well Design to ensure that
19 all technical inquiries are addressed during the bidding period as well as
20 during the construction period to ensure the success of the construction
21 project.
- 22 4. The CCU hereby further authorizes the management of GWA to Change
23 Order the contract with GHD for services related to bidding and construction
24 activity support (Exhibit A).
- 25 5. The CCU hereby further approves the fee proposal amount of One Hundred
26 Seventy Thousand (\$170,000.00) which will be handled on a Time and
27 Materials basis, bringing the total authorized contract amount to One Million
28 Two Hundred Three Thousand Three Hundred Eight Dollars (\$1,203,308.00).
- 29 6. GWA management is authorized to seek from the PUC its approval of Change
30 Order No. 7 which increases the total authorized amount as noted above.


1 **RESOLVED**, that the Chairman certified and the Board Secretary attests to the adoption
2 of this Resolution.

3
4 **DULY AND REGULARLY ADOPTED**, this 25th day of September, 2018.

5
6 Certified by:

Attested by:

7
8 

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10 

11
12 **JOSEPH T. DUENAS**
Chairperson

13
14 **J. GEORGE BAMBA**
Secretary

15
16
17 **SECRETARY'S CERTIFICATE**

18
19 I, J. George Bamba, Board Secretary of the Consolidated Commission on Utilities as
20 evidenced by my signature above do hereby certify as follows:

21
22 The foregoing is a full, true and accurate copy of the resolution duly adopted at a regular
23 meeting by the members of the Guam Consolidated Commission on Utilities, duly and
24 legally held at a place properly noticed and advertised at which meeting a quorum was
25 present and the members who were present voted as follows:

26 AYES: 5
27 NAYS: 0
28 ABSTENTIONS: 0
29 ABSENT: 0





Exhibit A (1 of 5)

May 21, 2018

Mr. Miguel Bordallo, PE
General Manager
Guam Waterworks Authority
Sent Via Email

Att.: Mr. Thomas Cruz, PE

SUBJECT: Construction Phase Engineering and Survey Services Proposal for GWA ISLAND-WIDE NEW WELL SITE DEVELOPMENT PROJECT, GWA Project No. PW 09-02 For Wells AG-10, AG-12 and Y-08

Resolution 57

Dear Mr. Bordallo

GHD is pleased to submit our formal proposal for construction phase professional engineering services for the above-referenced project in accordance with Guam PEALS regulations for Construction Contract Administration (CCA) services. In general, the CCA role includes a supporting role for responding to Request for Information (RFIs), and Submittals. It also includes making periodic visits to the site by a registered engineer, architect or land surveyor or authorized representatives as the case may require, to observe the progress and quality of the executed work and to determine, in general, if the work is proceeding in accordance with the contract documents. Under CCA services, GHD will not review Pay Request, prepare Change Order documents or make exhaustive or continuous on-site inspections to check the quality or quantity of the work. However, GHD will support GWA to prepare supporting documents such as drawing revisions for a change orders as requested by GWA but handling and processing of the Change Order will be by others. In addition, under the CCA role it is not intended that the engineer, architect and land surveyor be responsible for construction means, methods, techniques, sequences or procedures, or for safety precautions and programs in connection with the work. The following detailed scope of work is based on the plans and specifications for this project as well as our experience on the GWA Island-Wide Well Site Rehabilitation Project with EA Science & Technology.

I. REFERENCES

1. The Drawings and Technical Specifications for Project No. PW 09-02 titled "Island-Wide Well Site Rehabilitation and New Well Site Development", dated March 25, 2014, stamped by Jarrett Brown P.E., and attached for reference.

II. PROJECT DESCRIPTION AND UNDERSTANDING

This project involves the construction of three (3) new wells (AG-10, AG-12 and Y-08). The project generally consists of preparing the site, drilling and constructing new wells, installing wellheads and wellhead piping, miscellaneous site improvements, well buildings including generator, fuel storage, electrical and chlorinator rooms, and installing new equipment in well buildings. GHD's role in the project is to assist in updating the plans and specifications, support GWA for RFI and submittal review, and periodic observations of installation and testing of critical items as requested by GWA or its authorized representative.

III. SCOPE OF WORK

GHD, as the Engineer of Record (EOR), will coordinate with GWA to provide limited construction phase

Exhibit A (2 of 5)

services relating to the construction of the three new (3) wells.

IV. SCOPE OF SERVICES

A. PRECONSTRUCTION PHASE TASKS

Task A1.0: Review and Update Existing Plans and Specifications. GHD will review and coordinate with GWA Engineering and Operations to update the plan set to match GWA's latest standards and re-stamp the plans and specifications with a currently licensed GHD PE on Guam. Information discovered during construction activities from the well rehab project that are considered design corrections will be undertaken at no added cost.

Task A2.0: Bid Period Support Services. GHD will assist GWA to prepare for the bid opening including but not limited to responding to RFI's, issuing addendums, attending the pre-bid conference, and preparing a bid recommendation memo as requested by GWA.

B. CONSTRUCTION PHASE TASKS

Task B1.0: Submittals & Shop Drawings. GHD will review and provide comment and approval for all process, equipment and controls submittals and other submittals and shop drawings when requested by GWA or the CM. This scope of services estimates a review of thirty (30) submittals and/or shop drawings in aggregate. A submittal or shop drawing is defined as one item on the submittal register. Submittals and shop drawings that request for modification to the design shall be reviewed and approved by GHD.

Task B2.0: Project Meetings. GHD will participate in meetings with the CM, Contractor, GWA, and other parties such as GEPA and DPW as necessary to address design matters that require decisions that cannot be made by GWA or the CM. This scope of services estimates attendance of five (5) project meetings by one (1) engineer. GHD's civil engineer will participate at the physical meeting location. GHD's electrical or mechanical engineer will participate in electronic (i.e., teleconference and/or WebEx) meetings. Should the need arise for the electrical and/or mechanical engineer to travel for these meetings, travel costs will be 100% reimbursable on a time and materials basis after written approval by GWA. Others shall prepare agenda and meeting minutes.

Task B3.0: Request for Information. Respond to Requests for Information (RFI) as requested by GWA or the CM for design related questions, issues, and clarifications. RFI responses will be coordinated with the CM and GWA. The scope of services estimates review of thirty (30) RFIs. RFIs that request for modification to the design shall be reviewed and approved by GHD.

Task B4.0: Site Visits. GHD will visit the well sites during construction to observe the work when requested by the CM. A site visit report will be submitted to the CM following each site visit. This scope of services estimates three (3) site visits during construction at each site.

Task B5.0: Pump Sizing and Settings. GHD will provide technical assistance to the CM and GWA with determining the final pump sizing, settings, and pump intake elevation after completion of the 72-hour pump testing; and will assist with setting final elevations of casing, screened interval and bottom of well which will occur after completion of the 72-hour pump testing but before final well completion. This task also includes making required revisions to the civil and electrical design based on the final pump selection including selection of VFD and chlorination system and pump.

Task B6.0: Prepare Final As-built Drawings. GHD will prepare the Final As-built drawings from the jobsite redline drawings maintained by the contractor. GHD will review and provide comments on the contractor's set, GWA personnel shall also provide all comments on the Contractor's redline set prior to GHD initiating the work to transfer the redlines into AutoCAD format.

Exhibit A (3 of 5)

V. PERFORMANCE SCHEDULES

Work will commence on the date specified in the Notice to Proceed for the Contractor and continue throughout the performance period specified in the Construction Contract. This scope of services assumes the project has a 365-calendar day construction schedule.

VI. SCOPE OF SERVICES ASSUMPTIONS AND EXCLUSIONS

1. Services will be performed under a Time & Materials Contract.
2. A formal partnering meeting is not required.
3. Preparation of As-Built Drawings will be based upon the drawings provided by the Construction Contractor and will be issued in AutoCAD format to GWA.
4. Preparation and maintenance of the submittal register is excluded.
5. Preparation of Operations and Maintenance (O&M) Manuals is excluded.
6. Owner will provide access to the site.
7. No project specific permitting services are included in this scope of work.
8. Special inspection services are excluded.
9. Project specific training services are excluded.
10. No Archeological survey, Section 106 Historic Preservation, biological resource monitoring, Section 7 Endangered Species Act or related work is included.
11. Warranty follow-up is not included in the scope. If required, the fee will be negotiated with GWA.
12. These EOR Services are being provided for the construction of improvements shown on the final construction plans. If additional improvements are added to the construction contract, the fees for additional EOR Services will be negotiated with GWA.
13. Our scope of work does not include resolving hazardous material investigation or testing/sampling.
14. GHD attendance is not required at the Facility Turnover Meeting.
15. Construction Phase EOR services performed will be billed based on a Time and Material basis using the agreed to hourly rates plus 10 percent markup on expenses and GRT.

VII. SCOPE OF SERVICES FEE

GHD estimates the cost to perform the scope of services elements outlined above is \$100,000 as set forth in Exhibit A (the Estimated Project Cost). Services will be performed on a time and materials basis per our Fee Schedule in effect at the time services are performed. Exhibit A is an estimate only, and actual costs may be higher or lower. Work that exceeds the Estimated Project Cost will be brought to your attention for review, approval, and fee adjustment. Our estimated fees are valid for a period of 60 days from the date of this proposal, after which they are subject to change.

If you have any questions, we would be glad to meet with you to discuss this proposal at your convenience. Otherwise, if the scope and fee above are acceptable, this letter can serve as our agreement by concurring below and initialing the attached GHD Standard Terms and Conditions.

Sincerely,

Paul K. Baron
Principal/Pacific Service Group Manager

Concurred
Authorized Representative

Date

EXHIBIT A. ESTIMATED PROJECT COST

5-21-2018

Exhibit A (5 of 5)

GWA Island-Wide Well Project

Phase Letter and Task Number	Task Description	Principal/Mechanical Engineer (Paul Baron/Dan Reiter)	Senior Electrical Engineer (Rick Guggiana)	Electrical Engineer (Joseph Liberato)	Structural Engineer (Andre Tenorio)	Civil Engineer (Jecelia Llegado)	Amount
HOURLY LABOR RATES							
A	CONSTRUCTION PHASE TASKS						
A1.0	Update Plans and Specifications						\$ 40,000
A2.0	Bid Period Support						\$ 10,000
B1.0	Submittals & Shop Drawings (30 estimated)						\$ 30,000
B2.0	Project Meetings (5 estimated)						\$ 4,000
B3.0	Request for Information (30 estimated)						\$ 40,000
B4.0	Site Visits (9 estimated)						\$ 4,000
B5.0	Pump Sizing and Settings						\$ 7,000
B6.0	Final As-built Drawings						\$ 15,000
	CONSTRUCTION PHASE SERVICES HOUR SUBTOTAL						
	CONSTRUCTION PHASE SERVICES SUBTOTAL						\$ 170,000
ALL	TOTAL						\$ 170,000