



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

RESOLUTION NO. 43-FY2017

**RELATIVE TO INCREASE FUNDING FOR THE YIGO AND ASTUMBO RESERVOIR
CONSTRUCTION MANAGEMENT CONTRACT**

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, GWA is currently working on critical reservoir projects under the 2011 Court Order (“CO”) Paragraph 29 – Storage Tank/Reservoir Repair, Replacement, and Relocation Program; and

WHEREAS, the CCU passed Resolution No. 53-FY2016 on August 23, 2016 that approved Pernix Guam, LLC to construct the new Yigo No. 1 reservoir, new Astumbo No. 1 reservoir, and new Yigo Elevated booster pump station after which the Notice to Proceed was issued on December 2, 2016; and

WHEREAS, GWA management subsequently executed Change No. 1 to Pernix Guam, LLC that advanced the construction of Yigo No. 3 reservoir and its associated work which was stipulated in the construction contract to potentially occur as a later phase once Yigo #1 reservoir was completed; and

WHEREAS, the advancement of the construction of the new Yigo #3 reservoir was not taken into account in the initial Construction Management (CM) services scope thus GWA negotiated with GHD to continue CM services for the Yigo No. 3 reservoir in the amount of

1 Three Hundred Ninety Seven Thousand Five Hundred Sixty Six Dollars (\$397,566.00) (see
2 EXHIBIT A); and

3
4 **WHEREAS**, GWA has already executed one Change Order to the Construction Manager
5 contact which leaves a balance in the contingency of approximately One Hundred Three
6 Thousand Eight Hundred Seventy Five Dollars (\$103,875.00); and

7
8 **WHEREAS**, GWA management seeks CCU approval of the increase in funding, on top
9 of current available contingency fund, for the additional CM services in the amount of Two
10 Hundred Ninety Three Thousand Six Hundred Ninety One Dollars (\$293,691.00); and

11
12 **WHEREAS**, as this increase is actually required for planned future construction, and not
13 an unplanned need, GWA management seeks CCU approval of a ten percent (10%) contingency
14 to the additional fund request of Twenty Nine Thousand Three Hundred Sixty Nine Dollars and
15 Ten Cents (\$29,369.10), to bring the additional fund request to Three Hundred Twenty Three
16 Thousand Sixty Dollars and Ten Cents (\$323,060.10); and

17
18 **WHEREAS**, CCU Resolution No. 02-FY2015 (see EXHIBIT B) approved the original
19 funding total of One Million Five Hundred Twenty Six Thousand Seven Hundred Eighty Dollars
20 and Twenty Cents (\$1,526,780.20) for the construction management services of the Yigo No. 1
21 reservoir, Astumbo No. 1 reservoir, Yigo Elevated booster pump station and associated work;
22 and

23
24 **WHEREAS**, GWA management seeks CCU approval of the increased funding total of
25 One Million Eight Hundred Forty Nine Thousand Eight Hundred Forty Dollars and Thirty Cents
26 (\$1,849,840.30); and

27
28 **WHEREAS**, funding for this project will be from the bond funds under the line item -
29 PW 09-11 "Water System Reservoirs 2005 Improvements" and PW 12-05 "Tank Major Repair
30 Yigo #1, Mangilao #2, Astumbo #1"; and

1 **NOW BE IT THEREFORE RESOLVED**, the Consolidated Commission on Utilities
2 does hereby approve the following:

- 3
- 4 1. The recitals set forth above hereby constitute the findings of the CCU.
 - 5 2. The CCU finds that the terms of the fee proposal submitted by GHD are fair
6 and reasonable.
 - 7 3. The CCU finds that the terms of the conditions set by GWA relative to
8 commencement of subsequent work activities are fair and reasonable and
9 serve as a measure of Quality Assurance/Quality Control (QA/QC).
 - 10 4. The CCU hereby approves the funding increase of Three Hundred Twenty
11 Three Thousand Sixty Dollars and Ten Cents (\$323,060.10) for the
12 construction management of Yigo No. 3 reservoir and its associated work.
 - 13 5. The CCU hereby approves total authorized funding amount to One Million
14 Eight Hundred Forty Nine Thousand Eight Hundred Forty Dollars and Thirty
15 Cents (\$1,849,840.30), which includes the original approve funding.
 - 16 6. The source of funding for the additional CM services will be from the bond
17 funds under the line item - PW 09-11 "Water System Reservoirs 2005
18 Improvements" and PW 12-05 "Tank Major Repair Yigo #1, Mangilao #2,
19 Astumbo #1".

20

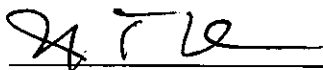
21 **RESOLVED**, that the Chairman certified and the Board Secretary attests to the adoption
22 of this Resolution.

23

24 **DULY AND REGULARLY ADOPTED**, this 25th day of July 2017.

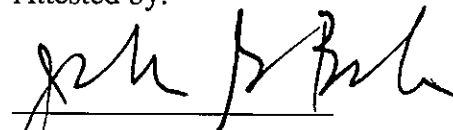
25

26 Certified by:

27 

28 **JOSEPH T. DUENAS**
29 Chairperson

26 Attested by:

27 

28 **J. GEORGE BAMBA**
29 Secretary

30 //

31 //

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

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

7
8 AYES: 5
9 NAYS: 0
10 ABSTENTIONS: 0
11
12 ABSENT: 0
13
14

15 ///

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18 ///

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32 ///



Exhibit A (1 of 14)

February 3, 2017

Mr. Tom Cruz , P.E.
Chief Engineer
Guam Waterworks Authority
Gloria B. Nelson Public Service Building
688 Route 15
Mangilao, Guam 96913

RE: Change Proposal 02 (CP-2) for Construction Management Services for PW12-05 GWA Yigo and Astumbo Replacement Reservoirs, GWA Project W13-001-BND Additional CM Services for Yigo No. 2 Reservoir Construction

Dear Mr. Cruz:

GHD is pleased to submit this proposal for an amendment to our Scope of Work and Fee for the above referenced project. This scope of work defines the construction management services that will be provided by GHD Inc. and their subconsultants for additional CM service for construction of Yigo No. 2 Reservoir. The additional scope for **CP-02** as discussed with GWA is detailed below. The original project scope will be changed on a lump sum basis per the fees in the table below.

SCOPE OF WORK

General: GHD shall provide additional Construction Management (CM) Services for a six (6) month period, from December 5, 2017 to June 5, 2018, with final completion and closeout services to July 30, 2018 in conjunction with GWA's contract modification to construct Yigo Reservoir No. 2. The original contract completion date for CM services was for twelve (12) months after the notice to proceed for the contractor on December 5, 2016. The July 30, 2018 completion date is taken from the Contract Change Request No. 1 from Pernix.

Details: The Scope of Work will provide an extension of the construction phase tasks provided in the original Scope of Work that relate to the construction of Yigo Reservoir No. 2. See attached Fee Proposal for QA testing and survey service to be included.

Data and Assumptions:

- a. These CM Services are being provided for the construction of improvements shown on the construction plans and include in the bid schedule that was awarded to Pernix, including Tank No. 2. If additional improvements are added to the construction contract then the fees for additional CM Services will be negotiated with GWA.



Exhibit A (2 of 14)

- b. It is understood that the intent is for GHD to provide six (6) consecutive months (126 work days or 182 calendar days) of Resident Engineer (RE)/Project Manager (PM) services and six (6) consecutive months of full time onsite inspection. An additional full time onsite inspector is anticipated for an estimated period of two months when both Yigo 1 and Yigo 2 are under construction. RE/PM services have been estimated at 20 hours per week. This is based upon a standard 40 hour work week.
- c. GWA agrees to negotiate with GHD for change orders for additional construction phase services due to construction delays, additional work for substantial completion beyond June 5, 2018 and final completion beyond July 30, 2018, adverse weather delays, or any other reason not due to the negligent acts of GHD until final acceptance of the project is achieved.

Our lump sum fees are summarized in the following Fee Schedule:

FEE SCHEDULE FOR ADDITIONAL CONSTRUCTION MANAGEMENT SERVICES

TASKS	TOTALS
Original Contract Amount	\$1,387,982
Contract Amount with CO #1	\$1,422,905
Yigo No. 2 Construction Phase CM Services	\$381,663
SUBTOTAL COST	\$381,663
GUAM GRT (at 4.167%)	\$15,904
TOTAL CHANGE PROPOSAL COST	\$397,566
AMENDED CONTRACT AMOUNT	1,820,471

* Work which exceeds the scope of this proposal will be brought to your attention for review, approval and fee adjustment. Such extra services, will be performed on a time and materials basis (per our Fee Schedule in effect at the time services are performed), or for a mutually agreed upon lump sum. Work performed will be billed monthly based on estimated percent complete. Payment is due within 30 days of receipt and acceptance of the invoice. We stand ready to provide the professional services necessary to assist GWA in this endeavor.

Sincerely,

Aaron Sutton
Construction Manager

Attachments: GHD Change Proposal Fee dated 02/01/17

Cc: file

Phase Letter and Task Number	Principal Engineer (Paul/Jeff)	PM/Resident Engineer (Bryan/Aaron)	Asst. PM (Aaron)	Prestress Structural Specialty (Eric Magee)	Civil Engineer/CA (Branketh/Andre)	Structural/Special Inspector (Branketh/Andre)	SR Electrical Engineer (EMCE)	Electrical Engineer (EMCE)	CM Safety Officer (Mark)	Civil Inspector/Structural (Branketh/Andre)	Civil Inspector (Peter/Paul)	Electrical Inspector (EMCE)	P6 Scheduler (Larry Watson)	Submittal/RFI Manager (Branketh/Andre)	Estimating Support (Emile Roux or RLB)	Project Manager Ass't (Bobbe)	Admin (Bobbe)	Amount
HOURLY LABOR RATES																		
A PRECONSTRUCTION PHASE TASKS																		
A1																		
A2																		
A3																		
A4																		
PRECONSTRUCTION PHASE HOURS SUBTOTAL																		
PRECONSTRUCTION PHASE SUBTOTAL																		
PRECONSTRUCTION PHASE EXPENSES SUBTOTAL																		
PRECONSTRUCTION PHASE SERVICES & EXPENSES TOTAL																		
B CONSTRUCTION PHASE TASKS																		
B1.0																		
B2.0																		
B2.1																		
B2.2																		
B2.3																		
B2.4																		
B3.0																		
B3.1																		
B3.2																		
B4.0																		
B4.1																		
B5.0																		
B5.1																		
B5.2																		
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B5.4																		
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B7.0																		
B7.1																		
B7.2																		
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B8.0																		
B8.1																		
B8.2																		
B8.3																		
B8.4																		
B8.5																		
B8.6																		
B8.7																		
B9.0																		
B10.0																		

Phase Letter and Task Number	Task Description	Principal Engineer (Paul/Jeff)	PM/Resident Engineer (Bryan/Aaron)	Asst. PM (Aaron)	Prestress Structural Specialty (Eric Magee)	Civil Engineer/QA (Branketh/Andre)	Structural/Special Inspector (Branketh/Andre)	SR Electrical Engineer (EMCE)	Electrical Engineer (EMCE)	CM Safety Officer (Mark)	Civil Inspector/Structural (Branketh/Andre)	Civil Inspector (Peter/Paul)	Electrical Inspector (EMCE)	P6 Scheduler (Larry Matson)	Submital/RFI Manager (Branketh/Andre)	Estimating Support (Emile Roux of RL.B)	Project Manager Asst (Gobbe)	Admin (Gobbe)	Amount	
B10.1	Onsite Inspector (assumes 1500 hr. 1/2 time for RE & Asst. RE)		17	30			118	3	4	26	360	522	20					27	107,782	
B10.2	Special Inspections																		12,980	
B10.3	Testing																		500	
B10.3.1	Contractor Testing (part of Task B10.1)							2												
B10.3.2	CM/CQA Testing (also see expenses)																			
B10.3.3	GWA Testing (part of Task B10.1)																			
B10.3.4	Acceptance (part of Task B10.1)							2											1,250	
B11.0	Construction QA Survey Services (also see expenses)																		1,812	
B12.0	Project Closeout																			
B12.1	Punchlist Development		4	12				2											3,240	
B12.2	Project Closeout Inspections		4	8															5,574	
B13.0	Training and Warranty Periods		4	4																
B13.1	Training		1	1															3,772	
B13.2	Warranties		1	600															365	
		Sum PIM/RE Hours	600																	
		Sum Inspector Hours	1,400																	
	CONSTRUCTION PHASE SERVICES HOUR SUBTOTAL	44	141	460	16	12	167	19	57	26	529	871	72	58	250	50		79		
	CONSTRUCTION PHASE SERVICES SUBTOTAL	10,780	28,803	73,520	2,640	1,320	18,370	3,040	7,125	2,470	61,152	78,913	9,000	8,700	22,500	5,500		4,740	338,573	
	CONSTRUCTION PHASE EXPENSES SUBTOTAL																			43,090
	CONSTRUCTION PHASE SERVICES & EXPENSES TOTAL	10,780	28,803	73,520	2,640	1,320	18,370	3,040	7,125	2,470	61,152	78,913	9,000	8,700	22,500	5,500		4,740	381,663	
C	POST CONSTRUCTION SERVICES																			
C1	Final Report																			
C2	Record Drawings																			
	POST CONSTRUCTION PHASE SERVICES HOUR SUBTOTAL																			
	POST CONSTRUCTION PHASE SERVICES SUBTOTAL																			
	POST CONSTRUCTION PHASE EXPENSES SUBTOTAL																			
	SUBTOTAL POST CONSTRUCTION SERVICES																			
ALL	SUBTOTAL HOURS	44	141	460	16	12	167	19	57	26	529	871	72	58	250	50		79		
ALL	SUBTOTAL																			381,663
ALL	GRT AT 4.167%																			15,904
ALL	GRAND TOTAL																			397,566

Exhibit A (5 of 14)

GHD - PROJECT ESTIMATING SHEET- GHD EXPENSES					
Project Name: GWA Construction of Yigo Reservoir - CM Services Change Proposal 2			Attachment:		
GHD Project Number: 8411481			of:		
Prepared by: Aaron Sutton			Checked by: Bryan Ryley		
			Date: 1/31/2017		
EXPENSE ITEM	QUANTITY	UNIT COST	AMOUNT	MARKUP	TOTAL
PRECONSTRUCTION PHASE TASKS					
Report Reproduction, misc.	0	750	0	0	0
SUBTOTAL		750	0	0	0
CONSTRUCTION PHASE TASKS					
Mileage (0.52/mile)	18750	0.52	9,750	1,463	11,213
Report Reproduction, misc	1	375	375	56	431
Live Video feed, website access & maintenance (6 months)	6	173	1,035	155	1,190
CQA Compaction Testing	1	1,965	1,965	295	2,259
CQA Concrete Testing	1	10,065	10,065	1,510	11,575
CQA Survey Verification	1	14,280	14,280	2,142	16,422
SUBTOTAL		26,858	37,470	5,620	43,090
POST CONSTRUCTION SERVICES					
SUBTOTAL			0	0	0
TOTAL		27,608	37,470	5,620	43,090

Exhibit A (6 of 14)

GHD - PROJECT ESTIMATING SHEET - GHD QA SERVICES SUMMARY	
Project Name: GWA Construction of Yigo Reservoir - CM Services Change Proposal 2	Attachment:
GHD Project Number: 8411481	of:
Prepared by: Aaron Sutton	Checked By: Bryan Ryley
	Date: 1/31/2017
QA SURVEY ESTIMATE	
<u>Under Tank Piping:</u>	<u>Quantity</u>
Inlet Piping & Top of Flange	\$800
Outlet Piping & Top of Flange	\$800
Over-Flow Piping & Top of Flange	\$800
Drain Line Piping & Top of Flange	\$800
Wash Down Piping	\$800
Ring Drain, high points and outlets	\$1,200
<u>Over Excavation:</u>	
Bottom of Over Excavation	\$800
Top of Type G - Fine Aggregate	\$1,200
Top of Type H - Drian Rock	\$1,200
<u>Tank Foundation:</u>	
Top of Formwork	\$800
<u>Pump House Foundation:</u>	
Top of Formwork	\$0
<u>Generator Bldg Foundation:</u>	
Top of Formwork	\$0
<u>Overflow Manhole:</u>	
Below Base	\$0
Top of Manhole	\$0
Bottom of Overflow Pipe	\$0
<u>Detention Basin:</u>	
Bottom of Pond	\$0
<u>Vaults:</u>	
Top Outlet Vault #1 Footing Formwork	\$0
Top Outlet Vault #1 Roof Slab Formwork	\$0
Top Outlet Vault #2 Footing Formwork	\$0
Top Outlet Vault #2 Roof Slab Formwork	\$0
Top Drain Vault #1 Footing Formwork	\$0
Top Drain Vault #1 Roof Slab Formwork	\$0
Top Inlet Vault #1 Footing Formwork	\$0
Top Inlet Vault #1 Roof Slab Formwork	\$0
Top Inlet Vault #2 Footing Formwork	\$0
Top Inlet Vault #2 Roof Slab Formwork	\$0
Top Inlet Meter Vault Footing Formwork	\$0
Top Inlet Meter Vault Roof Slab Formwork	\$0
Top Inlet/Outlet Meter Vault Footing Formwork	\$0
Top Inlet/Outlet Meter Vault Roof Slab Formwork	\$0
Top Electrical Handholds	\$800
Top Communication Handholds	\$800

Exhibit A (7 of 14)

<u>Pavement:</u>		
Ribbon Gutter Formwork	\$800	
Pavement Formwork	\$800	
<u>Bench Marks:</u>		
Establish bench marks on top of all vaults, top of retaining wall, top of footing at water height gauge, over-flow, drian, & outlet.	\$1,200	
Contingency 5%	\$680	
TOTAL ESTIMATED BUDGET	\$14,280	
	<u>Rate</u>	
Half Day	\$800	
Full Day	\$1,200	
Hourly	\$150	

CQA TESTING ESTIMATE			
Material Laboratory Testing:			
<u>Procotor & Sieve Analysis:</u>	<u>Unit Cost</u>	<u>Quantity</u>	<u>Cost</u>
Type - G Crushed Aggregate	\$295.00	0	\$0.00
Type - H Drain Rock	\$295.00	0	\$0.00
Type - E Pea Gravel	\$295.00	0	\$0.00
Type - I Backfill Material	\$295.00	0	\$0.00
Compaction Testing:			
<u>Over-Excavation:</u>			
Bottom of Over-Excavation	\$74.00	1	\$74.00
Type G - Crushed Aggregate	\$74.00	5	\$370.00
Top of Type H - Drian Rock	\$340.00	1	\$340.00
Type-E Certificate of Observation	\$340.00	1	\$340.00
<u>Pump House:</u>			
Foundation	\$74.00	0	\$0.00
<u>Generator Bldg:</u>			
Foundation	\$74.00	0	\$0.00
<u>Overflow Manhole</u>			
Below Base	\$55.00	0	\$0.00
<u>Outlet Vault #1</u>			
Below Foundation	\$55.00	0	\$0.00
First Lift	\$55.00	0	\$0.00
Middle	\$55.00	0	\$0.00
Last	\$55.00	0	\$0.00

Exhibit A (8 of 14)

<u>Outlet Vault #2</u>			
Below Foundation	\$55.00	0	\$0.00
First Lift	\$55.00	0	\$0.00
Middle	\$55.00	0	\$0.00
Last	\$55.00	0	\$0.00
<u>Drain Vault #1</u>			
Below Foundation	\$55.00	0	\$0.00
First Lift	\$55.00	0	\$0.00
Middle	\$55.00	0	\$0.00
Last	\$55.00	0	\$0.00
<u>Inlet Vault #1</u>			
Below Foundation	\$55.00	0	\$0.00
First Lift	\$55.00	0	\$0.00
Middle	\$55.00	0	\$0.00
Last	\$55.00	0	\$0.00
<u>Inlet Vault #2</u>			
Below Foundation	\$55.00	0	\$0.00
First Lift	\$55.00	0	\$0.00
Middle	\$55.00	0	\$0.00
Last	\$55.00	0	\$0.00
<u>Inlet Meter Vault</u>			
Below Foundation	\$55.00	0	\$0.00
First Lift	\$55.00	0	\$0.00
Middle	\$55.00	0	\$0.00
Last	\$55.00	0	\$0.00
<u>Inlet/Outlet Meter Vault</u>			
Below Foundation	\$55.00	0	\$0.00
First Lift	\$55.00	0	\$0.00
Middle	\$55.00	0	\$0.00
Last	\$55.00	0	\$0.00
<u>Electrical Handholes (estimated)</u>			
Below Foundation	\$55.00	1	\$55.00
First Lift	\$55.00	1	\$55.00
Middle	\$55.00	1	\$55.00
Last	\$55.00	1	\$55.00
<u>Communications Handholes (estimated)</u>			
Below Foundation	\$55.00	1	\$55.00
First Lift	\$55.00	1	\$55.00
Middle	\$55.00	1	\$55.00
Last	\$55.00	1	\$55.00
<u>Pavement:</u>			
Ribbon Gutter	\$74.00	1	\$74.00
Pavement	\$74.00	2	\$148.00
		Contingency	10% \$178.60
TOTAL ESTIMATED BUDGET:			\$1,964.60

Exhibit A (9 of 14)

	<u>Rate</u>
1st Test	\$55
2nd Test	\$19
	\$74

Concrete Testing:

<u>Outlet Vault #1:</u>	<u>Unit Cost</u>	<u>Quantity</u>	<u>Cost</u>
Footing	\$305.00	0	\$0.00
Walls	\$305.00	0	\$0.00
Roof Slab	\$305.00	0	\$0.00
 <u>Outlet Vault #2:</u>			
Footing	\$305.00	0	\$0.00
Walls	\$305.00	0	\$0.00
Roof Slab	\$305.00	0	\$0.00
 <u>Drain Vault #1:</u>			
Footing	\$305.00	0	\$0.00
Walls	\$305.00	0	\$0.00
 <u>Inlet Vault #1:</u>			
Footing	\$305.00	0	\$0.00
Walls	\$305.00	0	\$0.00
Roof Slab	\$305.00	0	\$0.00
 <u>Inlet Vault #2:</u>			
Footing	\$305.00	0	\$0.00
Walls	\$305.00	0	\$0.00
Roof Slab	\$305.00	0	\$0.00
 <u>Inlet Meter Vault:</u>			
Footing	\$305.00	0	\$0.00
Walls	\$305.00	0	\$0.00
Roof Slab	\$305.00	0	\$0.00
 <u>Inlet/Outlet Meter Vault:</u>			
Footing	\$305.00	0	\$0.00
Walls	\$305.00	0	\$0.00
Roof Slab	\$305.00	0	\$0.00
 <u>Encasement:</u>			
Inlet Piping	\$305.00	1	\$305.00
Outlet Piping	\$305.00	1	\$305.00
Over-Flow Piping	\$305.00	1	\$305.00
Drain Line Piping	\$305.00	1	\$305.00
Wash Down Piping	\$305.00	1	\$305.00
Electrical & Communications	\$305.00	1	\$305.00
 <u>Handholds:</u>			
Electrical	\$305.00	1	\$305.00
Communications	\$305.00	1	\$305.00

Exhibit A (10 of 14)

<u>Pavement:</u>				
Ribbon Gutter	\$305.00	1	\$305.00	
Pavement	\$305.00	2	\$610.00	
 <u>Pump House:</u>				
Footing	\$305.00	0	\$0.00	
Walls	\$305.00	0	\$0.00	
Roof Slab	\$305.00	0	\$0.00	
 <u>Generator Building:</u>				
Footing	\$305.00	0	\$0.00	
Walls	\$305.00	0	\$0.00	
Roof Slab	\$305.00	0	\$0.00	
 <u>Water Tank:</u>				
Foundation	\$305.00	1	\$305.00	
Core Walls (7 ea.)	\$305.00	7	\$2,135.00	
Columns (4 ea.)	\$305.00	4	\$1,220.00	
Column Footings (4 ea.)	\$305.00	4	\$1,220.00	
Roof Slab	\$305.00	1	\$305.00	
Shotcrete	\$305.00	2	\$610.00	
		85		
		Contingency 10%	\$915.00	
TOTAL ESTIMATED BUDGET:			\$10,065.00	
 <u>DESCRIPTION OF TESTS:</u>				
Compressive Strength of Cylindrical Concrete Specimens (4 at \$17.00 ea.):			\$68.00	
Curing and Disposal of Cylindrical Concrete Specimens without test, each:			\$12.00	
Air Content of Freshly Mixed Concrete by the Pressure/Volumetric Method, per test:			\$50.00	
Unit Weight and Yield of Fresh Concrete, each:			\$50.00	
Slump Test & Making Concrete Specimens in the field (2.5 Hours of Labor):			\$125.00	
		SUBTOTAL:	\$305.00	
 QA SPECIAL INSPECTIONS				
Special Inspections:				
 <u>Outlet Vault #1:</u>				
Footing	Unit hours	Quantity 0	Amount 110	Total \$0
Walls	hours	0	110	\$0
Roof Slab	hours	0	110	\$0
 <u>Outlet Vault #2:</u>				
Footing	hours	0	110	\$0
Walls	hours	0	110	\$0
Roof Slab	hours	0	110	\$0
 <u>Drain Vault #1:</u>				
Footing	hours	0	110	\$0
Walls	hours	0	110	\$0
Roof Slab	hours	0	110	\$0

Exhibit A (11 of 14)

<u>Inlet Vault #1:</u>					
Footing	hours	0	110	\$0	
Walls	hours	0	110	\$0	
Roof Slab	hours	0	110	\$0	
<u>Inlet Vault #2:</u>					
Footing	hours	0	110	\$0	
Walls	hours	0	110	\$0	
Roof Slab	hours	0	110	\$0	
<u>Inlet Meter Vault:</u>					
Footing	hours	0	110	\$0	
Walls	hours	0	110	\$0	
Roof Slab	hours	0	110	\$0	
<u>Inlet/Outlet Meter Vault:</u>					
Footing	hours	0	110	\$0	
Walls	hours	0	110	\$0	
Roof Slab	hours	0	110	\$0	
<u>Encasement:</u>					
Inlet Piping	hours	2	110	\$210	
Outlet Piping	hours	2	110	\$210	
Over-Flow Piping	hours	2	110	\$210	
Drain Line Piping	hours	2	110	\$210	
Wash Down Piping	hours	2	110	\$210	
Electrical & Communications Ducts	hours	2	110	\$210	
<u>Handholds:</u>					
Electrical	hours	1	110	\$210	
Communications	hours	1	110	\$210	
<u>Pavement:</u>					
Ribbon Gutter	hours	2	110	\$210	
Pavement	hours	4	110	\$420	
<u>Overflow Manhole:</u>					
Pre-Cast Sections	hours	0	110	\$210	
<u>Pump House:</u>					
Footing	hours	0	110	\$210	
Walls	hours	0	110	\$210	
Roof Slab	hours	0	110	\$210	
<u>Generator Bldg:</u>					
Footing	hours	0	110	\$210	
Walls	hours	0	110	\$210	
Roof Slab	hours	0	110	\$210	
<u>Water Tank:</u>					
Foundation	hours	8	110	\$840	
Core Walls (7 at 2 hours each)	hours	14	110	\$1,470	
Columns (4 at 2 hours each)	hours	8	110	\$840	
Column Footings (4 at 2 hours each.)	hours	8	110	\$840	
Roof Slab (3 at 4 hours each)	hours	12	110	\$1,260	

Exhibit A (12 of 14)

Shotcrete (3 days at 8 hours)	hours	24	110	\$2,520
Vertical Post-tensioning	hours	8	110	\$840
Circumferential Pre-stressing	hours	16	110	\$1,680
		118		\$14,070

Exhibit A (13 of 14)

GHD - PROJECT ESTIMATING SHEET- GHD EXPENSES					
Project Name: GWA Construction of Yigo Reservoir - CM Services Change Proposal 2			Attachment:		
GHD Project Number: 8411481			of:		
Prepared by: Aaron Sutton			Checked by: Bryan Ryley		
			Date: 1/31/2017		
EXPENSE ITEM	QUANTITY	UNIT COST	AMOUNT	MARKUP	TOTAL
PRECONSTRUCTION PHASE TASKS					
SUBTOTAL					
CONSTRUCTION PHASE TASKS					
Photovoltaic Solar Panel (EA.)	0	700	0	0	0
Marine Batteries (EA.)	0	125	0	0	0
Tristar MPPT Controller (EA.)	0	850	0	0	0
Camera Housing, Mounting Hardware (LS)	0	600	0	0	0
Internet Service - Static IP (Monthly)	12	150	1,800	270	2,070
Wiring, Battery Encloser, Misc. (LS)	0	400	0	0	0
NVR Recorder Hardware/Software (LS)	0	3,000	0	0	0
SUBTOTAL			1,800	270	2,070
POST CONSTRUCTION SERVICES					
SUBTOTAL					
TOTAL			1,800	270	2,070

Exhibit A (14 of 14)

NOTES

- 1 Survey cost assumes \$1,000 per crew day and 10 crew days total over the length of the project
- 2 GEO CQA costs assumes 10% check on Contractor's testing
- 3 Original contract was for 1 year (360 days)
- 4 Reduced contract with approval of Yigo 2 - contract is 330 (substantial completion)
+ 196 (Substantial completion) + 75 days (Final) - 360 (original contract) = 241 days extra
- 5 Negotiated to provide 180 days (6 months)
- 6 Extra costs considered:
Will need extra inspector because of complication of additional tank
extra time beyond 360 days at Astumbo for final

Exhibit B (1 of 4)

GUAM CONSOLIDATED COMMISSION ON UTILITIES

RESOLUTION NO. 02-FY2015

RELATIVE TO APPROVAL OF THE YIGO AND ASTUMBO RESERVOIR CONSTRUCTION MANAGEMENT CONTRACT

1
2
3
4
5
6
7 **WHEREAS**, under 12 G.C.A. § 14105, the Consolidated Commission on Utilities
8 (“CCU”) has plenary authority over financial, contractual and policy matters relative to the
9 Guam Waterworks Authority (“GWA”); and

10
11 **WHEREAS**, the Guam Waterworks Authority (“GWA”) is a Guam Public Corporation
12 established and existing under the laws of Guam; and

13
14 **WHEREAS**, GWA is currently working on critical reservoir projects under the 2011
15 Court Order (“CO”) Paragraph 29 – Storage Tank/Reservoir Repair, Replacement, and
16 Relocation Program; and

17
18 **WHEREAS**, structural inspections of the Yigo #1, Yigo Elevated, and Astumbo #1
19 reservoirs has been completed and the reservoirs were found to be in poor condition; and

20
21 **WHEREAS**, the design of Yigo and Astumbo reservoirs are on its pre-final stage and
22 nearly completed; and

23
24 **WHEREAS**, GWA has advertised the Request For Proposals (RFP-05-ENG-2014)
25 soliciting statement of qualifications from experienced and qualified engineering firms to
26 provide construction management services for the Yigo and Astumbo Replacement Reservoir
27 project; and

28
29 **WHEREAS**, RFP packages were picked up by thirty (30) interested parties, from which
30 GWA received proposal submittals from eleven (11) firms before the RFP submittal deadline;
31 and
32

Exhibit B (2 of 4)

1 **WHEREAS**, the GWA A-E Selection committee reviewed and evaluated the eleven (11)
2 proposals (see EXHIBIT A) and generated a short list of the top three (3) firms with a
3 recommendation to award a contract to the firm GHD and any successor at interest thereto (see
4 EXHIBIT B – Evaluation Summary and GM Determination); and

5
6 **WHEREAS**, GHD and GWA negotiated the price for the services to be provided in the
7 total amount of One Million Three Hundred Eighty Seven Thousand Nine Hundred Eighty Two
8 Dollars (\$1,387,982.00) (see EXHIBIT C); and

9
10 **WHEREAS**, GWA management seeks approval of the fee proposal amount of One
11 Million Three Hundred Eighty Seven Thousand Nine Hundred Eighty Two Dollars
12 (\$1,387,982.00), along with a ten percent (10%) contingency of One Hundred Thirty Eight
13 Thousand Seven Hundred Ninety Eight Dollars and Twenty Cents (\$138,798.20) to bring the
14 total authorized funding amount to a maximum of One Million Five Hundred Twenty Six
15 Thousand Seven Hundred Eighty Dollars and Twenty Cents (\$1,526,780.20); and

16
17 **WHEREAS**, funding for this project will be from the 2013 Bond Funds under the line
18 item “PW 12-05 Tank Major Repair Yigo #1, Mangilao #2, Astumbo #1”; and

19
20 **NOW BE IT THEREFORE RESOLVED**, the Consolidated Commission on Utilities
21 does hereby approve the following:

- 22
- 23 1. The recitals set forth above hereby constitute the findings of the CCU.
 - 24 2. The CCU finds that the terms of the fee proposal submitted by GHD are fair
25 and reasonable.
 - 26 3. The CCU finds that the terms of the conditions set by GWA relative to
27 commencement of subsequent work activities are fair and reasonable and
28 serve as a measure of Quality Assurance/Quality Control (QA/QC).
 - 29 4. The CCU hereby authorizes the management to accept the fee proposal from
30 GHD which is also incorporated into this Resolution in its entirety (Exhibit
31 C).
- 32

Exhibit B (3 of 4)

- 1 5. The CCU hereby further authorizes the management of GWA to enter into a
2 contract with GHD, in the amount of One Million Three Hundred Eighty
3 Seven Thousand Nine Hundred Eighty Two Dollars (\$1,387,982.00).
4 6. The CCU hereby further approves the total funding amount for this project of
5 One Million Three Hundred Eighty Seven Thousand Nine Hundred Eighty
6 Two Dollars (\$1,387,982.00), along with a ten percent (10%) contingency of
7 One Hundred Thirty Eight Thousand Seven Hundred Ninety Eight Dollars and
8 Twenty Cents (\$138,798.20) to bring the total authorized funding amount to
9 One Million Five Hundred Twenty Six Thousand Seven Hundred Eighty
10 Dollars and Twenty Cents (\$1,526,780.20).
11

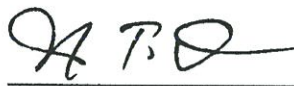
12 **RESOLVED**, that the Chairman certified and the Board Secretary attests to the adoption
13 of this Resolution.
14

15 **DULY AND REGULARLY ADOPTED**, this 28th day of October 2014.
16

17 Certified by:

Attested by:

18 

19 

20 **SIMON A. SANCHEZ, II**
21 Chairperson

22 **JOSEPH T. DUENAS**
23 Secretary

24
25
26
27 **SECRETARY'S CERTIFICATE**
28

29 I, Joseph T. Duenas, Board Secretary of the Consolidated Commission on Utilities as
30 evidenced by my signature above do hereby certify as follows:

31 The foregoing is a full, true and accurate copy of the resolution duly adopted at a regular
32 meeting by the members of the Guam Consolidated Commission on Utilities, duly and

Exhibit B (4 of 4)

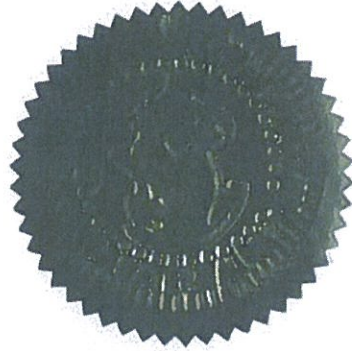
legally held at a place properly noticed and advertised at which meeting a quorum was present and the members who were present voted as follows:

AYES: _____ 4 _____

NAYS: _____ 0 _____

ABSTENTIONS: _____ 0 _____

ABSENT: _____ 1 _____



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