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BENJAMIN CRUZ <speaker@senatorbjcruz.com>

MC Fwd: FW: GWA WORK SESSION 11/20/17 / MATERIALS

BENJAMIN CRUZ <speaker@senatorbjcruz.com> Tue, Nov 21, 2017 at 12:27 PM
To: 34th Guam Legislature Clerks <clerks@guamlegislature.org>
Cc: Rennae Meno <rennae@guamlegislature.org>

11/21/2017	11/21/2017	Consolidated Commission on Utilities	GWA Work Session 11/20/17 / Materials*	34-17-1251

---------- Forwarded message ----------
From: **Bernadette Lou Sablan** <l.sablan@gpagwa.com>
Date: Tue, Nov 21, 2017 at 12:18 PM
Subject: FW: GWA WORK SESSION 11/20/17 / MATERIALS
To: "Andy Niven (ndynvn@yahoo.com)" <ndynvn@yahoo.com>, Angelica Perez <aperez@amibrokers.com>, Ann Borja - GWA <annborja@guamwaterworks.org>, "Annmarie Muna (amuna@ambrokers.com)" <amuna@ambrokers.com>, Artemio S Perez <aperez@gpagwa.com>, BENJAMIN CRUZ <speaker@senatorbjcruz.com>, "Bill Chang (bchang@brwncald.com)" <bchang@brwncald.com>, "Cameron Mulka (cimiculka@guampdn.com)" <cimiculka@guampdn.com>, "Charlene Calvo (charlene.calvo@ipehq.com)" <charlene.calvo@ipehq.com>, Chilang F Unpingco <cfejeran@gpagwa.com>, "Fred Horecky (horeckylaw@teleguam.net)" <horeckylaw@teleguam.net>, "Gaynor Delano (gdumat-ol@guam.gannett.com)" <gdumat-ol@guam.gannett.com>, Gilda Mafnas <gildam@guamwaterworks.org>, Governor's Office <joy.unpingco@guam.gov>, "Greg P. Cruz" <gpcruz@guamwaterworks.org>, Heidi Ballendorf <heidi@guamwaterworks.org>, "Jams Y Kim (pacguam@gmail.com)" <pacguam@gmail.com>, "Jeff Johnson (jeffcharjohnson@hotmail.com)" <jeffcharjohnson@hotmail.com>, "Jessica Peterson (webmaster@theguamguide.com)" <webmaster@theguamguide.com>, "Jessy Gogue (ocp.mayor@gmail.com)" <ocp.mayor@gmail.com>, "Joe John Mantanona (joejohnmantanona@gmail.com)" <joejohnmantanona@gmail.com>, "John O'Connor (john@postguam.com)" <john@postguam.com>, Joyce N Sayama <jsayama@gpagwa.com>, Karla Tydingco <ktydingco@guamwaterworks.org>, "Louella Losinio (louella@postguam.com)" <louella@postguam.com>, Manny Apuron <mapuron@guamwaterworks.org>, "Maripaz N. Perez" <mnperez@gpagwa.com>, "Michael White (whitema@cdmsmith.com)" <whitema@cdmsmith.com>, "Nestor Licanto (nestor@kuam.com)" <nestor@kuam.com>, "PDN Newsroom (news@guampdn.com)" <news@guampdn.com>, "Peter Montinola (peter@isuguam.com)" <peter@isuguam.com>, Selma HG Blas <sblas@gpagwa.com>, "Telena Nelson (senatortcnelson@gmail.com)" <senatortcnelson@gmail.com>, "Therese Terlaje (senatorterlajeguam@gmail.com)" <senatorterlajeguam@gmail.com>

Hi everyone.

Apologize for late transmittal.

Best,

Lou

GL# 34-17-1251
Speaker Benjamin J.F. Cruz

NOV 21 2017
Time: 1227 AM / PM File No.
Received By:

B. Lou Sablan

Board Secretary

Consolidated Commission on Utilities

Admin Asst., Legal Counsel, GPA

GLORIA B. NELSON PUBLIC SERVICE BLDG.

3RD Floor, Executive Division

688 Route 15, Mangilao, GU 96913

P.O. Box 2977, Hagatna, GU 96932

Tel: (671) 648-3002

Fax: (671) 648-3290

Email: l.sablan@gpagwa.com

Website: http://guamccu.org/

http://guampowerauthority.com/home.html

http://guamwaterworks.org/

2017 NOV 21 PM 12:44

OFFICE OF SPEAKER BENJAMIN J.F. CRUZ

Committee on Appropriations and Adjudication

I Mina'trentai Kuattro na Liheslaturan Guahan

Guam Congress Building | 163 Chalan Santo Papa | Hagatna, GU 96910

T: (671) 477-2520/1 | F: (671) 477-2522 | www.senatorbjcruz.com

GWAWS 11.20.17.pdf
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CONSOLIDATED COMMISSION ON UTILITIES
Guam Power Authority | Guam Waterworks Authority
P.O. Box 2977 Hagatna, Guam 96932 | (671) 648-3002 | guamccu.org

GUAM WATERWORKS AUTHORITY WORK SESSION
CCU Conference Room
4:30 p.m.., November 20, 2017

AGENDA

1. **ISSUES FOR DECISION**
   - 1.1 Relative to the Authorization to Accept MasterCard Payments From Commercial Account Holders / Resolution No. 04-FY2018
   - 1.2 Relative to Approving the Construction Contract for the Tumon No. 2, Hyundai, and Chaot No. 2 Reservoirs / Resolution No. 05-FY2018
   - 1.3 Relative to Approval of Change Order Work for Construction Management Services for the Rehabilitation of GWA Wells (D-03, D-17, D-18, D-22, M-09) Project W11-008-BDN / Resolution No. 06-FY2018
   - 1.4 Relative to Approval of Contingency Fund to the Route 1 Sanitary Sewer Rehabilitation and Replacement (Asan-Adelup-Hagatna) Asan Sewer Break Repair / Resolution No. 07-FY2018
   - 1.5 GPWA Customer Care & Billing Upgrade / Resolution No. 08-FY2018 (GPA Resolution 2017-45)
   - 1.6 Relative to Approval of NDWWTP Land Acquisition Funding / Resolution No. 09-FY2018
2. GM REPORT
3. ISSUES FOR DISCUSSION
4. DIVISION REPORTS
   - 4.1 Communications
   - 4.2 Compliance & Safety
   - 4.3 Customer Service
   - 4.4 Engineering
   - 4.5 Finance
   - 4.6 Operations
5. ANNOUNCEMENTS
   - 5.1 Next CCU Meetings: GPA Work Session: 11/21/17; CCU Meeting: 11/22/17
6. ADJOURNMENT

GUAM WATERWORKS AUTHORITY
"Better Water, Better Lives."
Gloria B. Nelson Public Service Building| 688 Route 15 | Mangilao, Guam 96913
Tel: (671) 300-6846

ISSUES FOR DECISION

Resolution No. 04-FY2018
Relative to the Authorization to Accept MasterCard Payments from Commercial Account Holders

What is the project's objective and is it necessary and urgent?
In March 2016, the Guam Power Authority (GPA) and Guam Waterworks Authority (GWA) procured and awarded the merchant banking services contract to the Bank of Hawaii (BOH). BOH is able to offer both GPA and GWA the Utility Interchange rate when utility bills are paid with MasterCard which will offer commercial customers the convenience of paying their bills using their MasterCard.

Where is the location?
At all three locations (Fadian-Mangilao, Julale Shopping Center, Agana & GWA Upper Tumon), Online, Pay-by-Phone, and future releases of the Integrated Voice Response Pay-by-Phone and Mobile App.

How much will it cost?
This rate is $0.65/transaction for MasterCard consumer credit cards, $0.45/transaction for MasterCard debit cards and $1.50/transaction for MasterCard commercial and business cards plus BOH's nominal processing fee passed on to GWA.

A large commercial customer would generate fees of approximately between $50 - $100 using a commercial or business MasterCard. GWA estimates the total cost to the Authority will be approximately $115,000 annually assuming all commercial accounts use MasterCard.

When will it be completed?
Immediately, upon the approval by the CCU.

What is the funding source?
Revenue Funding

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

GWA RESOLUTION NO. 04-FY2017

RELATIVE TO THE AUTHORIZATION TO ACCEPT MASTERCARD PAYMENTS FROM COMMERCIAL ACCOUNT HOLDERS

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, in March 2016, the Guam Waterworks Authority (GWA) and Guam Power Authority (GPA) procured and awarded the merchant banking services contract with the Bank of Hawaii (BOH); and

WHEREAS, BOH is able to offer both GWA and GPA the Utility Interchange rate when utility bills are paid with a MasterCard. This rate is $0.65/transaction for MasterCard consumer credit cards, $0.45/transaction for MasterCard debit cards and $1.50/transaction for MasterCard commercial and Business cards plus BOH's nominal processing fee passed on to GWA; and

WHEREAS, during the last year, BOH has assessed an average of 1.25% in fees of the total debit and credit card payments processed, including MasterCard and Visa; and

WHEREAS, a large commercial customer would generate fees of approximately between $50 - $100 using a commercial or business MasterCard; and

WHEREAS, GWA estimates the total cost to the Authority will be approximately $115,000 annually assuming all commercial accounts use MasterCard; and

WHEREAS, currently, GWA caps credit card payments for all customers at $500 per month except for residential which has no cap; and

WHEREAS, GWA feels with the favorable Utility Interchange rates for MasterCard it can now offer to commercial customers the convenience of paying their utility bills with MasterCard debit and credit cards at a reasonable cost; and

WHEREAS, GWA is now requesting for the authority to extend the use of MasterCard debit and credit cards as payments for commercial accounts.

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

1. The recitals set forth above hereby constitute the findings of the CCU.
2. The CCU finds that the rates for MasterCard are fair and reasonable.
3. The CCU hereby authorizes GWA to accept MasterCard debit and credit card payments from Commercial customers for payment on their utility bills.

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

DULY AND REGULARLY ADOPTED, this 22nd day of November, 2017.

Certified by:

_____

JOSEPH T. DUENAS
Chairperson

Attested by:

_____

J. GEORGE BAMBA
Secretary

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

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

NAYS: _____

ABSTENTIONS: _____

ABSENT: _____

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DRAFT

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Gloria B. Nelson Public Service Building| 688 Route 15 | Mangilao, Guam 96913
Tel: (671) 300-6846

Issues for Decision

Resolution No. 05-FY2018
Relative to Approving the Construction Contract for the Central Reservoirs - Tumon No. 2, Hyundai, and Chaot No. 2

What is the project's objective and is it necessary and urgent?
The project is spread across three different water reservoir sites as well as at water system control devices such as Pressure Regulating Valves. The following describes the project locations and general scope of work.

Tumon No. 2 (Nissan) Reservoir
- The existing steel reservoir will be replaced with a new concrete reservoir (1.0 MG). The work will also include upgrading three PRVs on Pale San Vitores Road and Marine Corps Drive.
- The work is listed in the Base Bid.

Hyundai Reservoir
- The existing steel reservoir will be replaced with a new concrete reservoir (1.0 MG). The work will also include a new booster pump station at the reservoir site and water line upgrades in the surrounding service area.
- The reservoir work is listed in the Base Bid. The booster pump station and water line upgrades are listed in the Additive Bid.

Chaot Reservoir
- A new reservoir (0.5 MG) will be constructed adjacent to the newly built Chaot No. 1 reservoir (0.5 MG). This will bring the capacity of the site back to 1.0 MG. The A-series wells that feed the Chaot and Agana Heights system will be disconnected from the distribution line; making the wells feed directly to the Sinajana-Agana Heights transmission lines. The chlorination systems at the central chlorination building will be modified. The Dero Road PRV will be rehabilitated.
- The A-series well, chlorination system, and Dero Road work are listed in the Base Bid. The reservoir work is listed in the Additive Bid.
- This project is a Court Order project thus falls under the deadline requirements established.

Where is the project located?
- Tumon No. 2 is located off Marine Corps. Drive next to the Nissan dealership.
- Hyundai is located at the top of Barrigada Heights off of North Sabana Drive.
- Chaot No. 2 is located at the end of Dero Road. The A-series wells are located along Route 8.

How much will it cost?
The bid proposal submitted by AIC International, Inc. is $14,828,194.00. With a 10% contingency of $1,482,819.40, the total project funding amount will be $16,311,013.40.

When will it be completed?
1. Tumon No. 2 Base Bid Substantial Completion: The Contractor shall begin work upon issuance of the Notice to Proceed (NTP) and Tumon No. 2 base bid work shall be substantially complete as specified no later than 425 calendar days from NTP.
2. Hyundai Base Bid Substantial Completion: The Contractor shall begin work upon issuance of the Notice to Proceed (NTP) and Hyundai base bid work shall be substantially complete as specified no later than 425 calendar days from NTP.
3. Chaot No. 2 Base Bid Substantial Completion: The Contractor shall begin work upon issuance of the Notice to Proceed (NTP) and Chaot No. 2 base bid work shall be substantially complete as specified no later than 180 calendar days from NTP.
4. Hyundai Additive Bid Items Substantial Completion: Additive Bid Item #8 if awarded will add 60 calendar days to the Hyundai Base Bid Substantial Completion. Additive Bid Item #9 if awarded will add zero (0) calendar days to the Hyundai Base Bid Substantial Completion. Additive Bid Item #10 if awarded will add 60 calendar days to the Hyundai Base Bid Substantial Completion.
5. Chaot No. 2 Additive Bid Item Substantial Completion: Additive Bid Item #5 if awarded will add 185 calendar days to the Chaot No. 2 Base Bid Substantial Completion. Additive Bid Item #6 if awarded will add zero (0) calendar days from NTP to the Chaot No. 2 Base Bid Substantial Completion. Additive Bid Item #7 if awarded will add zero (0) calendar days from NTP to the Chaot No. 2 Base Bid Substantial Completion.

What is the funding source?
1. PW 09-11: Water System Reservoirs 2005 Improvements
2. PW 12-04: Agana Heights and Chaot Tank Construction
3. PW 12-06: Tank Replacement Piti and Hyundai Tanks

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GWA RESOLUTION NO. 05-FY2018

RELATIVE TO APPROVING THE CONSTRUCTION CONTRACT FOR THE TUMON NO. 2, HYUNDAI, AND CHAOT NO. 2 RESEVOIRS

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 currently has a number of critical Court Order ("CO") Projects, including the construction (i.e. repair, rehabilitate, replace or relocate) of the Tumon No. 2, Hyundai, and Chaot No. 2, as stated in Paragraph 29 (b) (4), (5), and (6) of the Court Order; and

WHEREAS, in compliance with the Court Order, GWA intends to execute a construction project to address the following:

1. The construction of the new Tumon No. 2 reservoir (1.0 MG) to replace the existing Tumon No. 2 steel tank; and
2. The construction of the new Hyundai reservoir (1.0 MG) to replace the existing Hyundai steel tank; and
3. The disconnection of the A-series well from the Sinajana-Agana Heights distribution lines, Chaot and Agana Heights central chlorination system modifications, and Dero Road PRV rehabilitation to improve the Sinajana-Agana Heights water system;

WHEREAS, GWA has advertised an Invitation for Bid (IFB) soliciting bid proposal from experienced, responsible, and responsive bidders to construct the Tumon No. 2 reservoir, Hyundai reservoir, and Chaot-Agana Heights reservoir off-site work in the Base Bid and to

construct the Chaot No. 2 reservoir, Hyundai booster pump station, and Hyundai off site water line improvements in the Additive Bid; and

WHEREAS, the Base Bid work consists of the Contractor furnishing all labor, tools, equipment and materials necessary to complete the construction of the Tumon No. 2 and Hyundai reservoirs to include, but not limited to foundation, earthwork, pipework, retaining wall, storm water detention basin, off-site PRVs, concrete work, electrical work, fences and gates, protective coatings, SCADA, disinfection, testing and start-up under the provisions of the bid documents and in accordance with applicable GWA standards; and

WHEREAS, the Base Bid work will also consist of disconnection of the A-Series wells to the distribution lines, modification to the Chaot and Agana Heights reservoir central chlorination system, and rehabilitation of the Dero Road PRV; and

WHEREAS, IFB packages were picked up by 12 interested parties, from which GWA received bid proposals from 2 of the 12 parties before the bid proposal deadline (See EXHIBIT A – Abstract of Bids); and

WHEREAS, GWA engineering and the design team analyzed all bid proposals received on November 1st, 2017 and determined that AIC International, Inc., who submitted the lowest Base Bid as being the responsive and responsible bidder and met all the bid requirements set forth by GWA (See EXHIBIT B – Recommendation Memorandum); and

WHEREAS, GWA Management finds the AIC International, Inc. Base Bid proposal of Fourteen Million Eight Hundred Twenty Eight Thousand One Hundred Ninety Four Dollars ($14,828,194.00) to be acceptable (See EXHIBIT C – Bid Proposal); and

WHEREAS, GWA Management will assess any additional funding availability from the latest Capital Improvements Plan to ascertain if any or all the Additive bid items as part of this IFB can be awarded later through a change order or via a subsequent CCU approval process as a means of maximizing system improvements efficiently; and

WHEREAS, GWA Management is seeking approval to enter into contract with AIC International, Inc. for IFB-09-ENG-2017 in the amount of Fourteen Million Eight Hundred Twenty Eight Thousand One Hundred Ninety Four Dollars ($14,828,194.00), along with a ten percent (10%) contingency of One Million Four Hundred Eighty Two Thousand Eight Hundred Nineteen Dollars and Forty Cents ($1,482,819.40), bringing the total requested funding amount to Sixteen Million Three Hundred Eleven Thousand Thirteen Dollars and Forty Cents ($16,311,013.40); and

WHEREAS, the funding source for the construction project will be from the CIP PW 09-11: Water System Reservoirs 2005 Improvements, PW 12-04: Agana Heights and Chaot Tank Construction, and PW 12-06: Tank Replacement Piti and Hyundai Tanks; and

NOW BE IT THEREFORE RESOLVED, the Consolidated Commission on Utilities does hereby approve and authorize the following:

1. The recitals set forth above hereby constitute the findings of the CCU.
2. The CCU finds that the terms of the bid proposal submitted by AIC International, Inc. are fair and reasonable.
3. The CCU hereby authorizes the management of GWA to accept the bid from AIC International, Inc. attached hereto as EXHIBIT C, and which is also incorporated into this Resolution in its entirety.
4. The CCU hereby further authorizes the management to enter into a contract with AIC International, Inc. in the amount of Fourteen Million Eight Hundred Twenty Eight Thousand One Hundred Ninety Four Dollars ($14,828,194.00).
5. The CCU hereby approves the funding total of Fourteen Million Eight Hundred Twenty Eight Thousand One Hundred Ninety Four Dollars ($14,828,194.00), along with a ten percent (10%) contingency of One Million Four Hundred Eighty Two Thousand Eight Hundred Nineteen Dollars and Forty Cents ($1,482,819.40), bringing the total requested funding amount to Sixteen Million Three Hundred Eleven Thousand Thirteen Dollars and Forty Cents ($16,311,013.40.)

DRAFT

6. The CCU hereby approves the use of funding from CIP PW 09-11: Water System Reservoirs 2005 Improvements, PW 12-04: Agana Heights and Chaot Tank Construction, and PW 12-06: Tank Replacement Piti and Hyundai Tanks.

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

DULY AND REGULARLY ADOPTED, this 22nd day of November 2017.

Certified by: Attested by:

_____ _____

JOSEPH T. DUENAS **J. GEORGE BAMBA**
Chairperson Secretary

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

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

NAYS: _____

ABSTENTIONS: _____

ABSENT: _____

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GUAM WATERWORKS AUTHORITY
ABSTRACT OF BIDS

EXHIBIT A (1 OF 1)

ORIGINAL

Project Name: **CENTRAL GUAM RESERVOIRS - TUMON NO. 2, HYUNDAI, AND CHAOT NO. 2 RESERVOIRS**

Bid Opening Date: November 1, 2017
Bid Opening Time: 3:00 pm

Project Number: W14-006-BND IFB NO.: IFB-09-ENG-2017

	Bidders Name	Section A-5 Bid Bond	CERTIFICATIONS								Addendum			Table A, B, C Base Bid Total	Table A, B, C Base Bid and Additive Bid Total
			Qualifications Statement	Non-Collusion Affidavit	EEO Certification	Non-Segregated Facilities	Sex Offender Certification	Wage & Benefit Determination	Major Shareholders Affidavit	Special Instructions to Bidders	1	2	3		
1.	AISI														
2.	ORION CONSTTUCTION CORP., GUAM														
3.	JMI EDISON														
4.	PERNIX														
5.	PACIFIC DEVELOPMENT														
6.	HDCC GUAM, LLC														
7.	DN TANKS														
8.	HSG CO., LTD														
9.	AIC INTERNATIONAL, INC	Fidelity and Deposit Company of Maryland 15% of accompanying bid	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	$14,832,144.00	$22,650,801.00
10.	CORETECH INTL	Fidelity and Deposit Company of Maryland 15% of bid amount	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	$19,998,000.00	$29,360,519.00
11.	SUMITOMO-MITSUI CONST. CORP., LTD														
12.	MCCONELL DOWELL														
	GWA Estimate													$17,659,268.00	$25,054,067.00

Bids Opened and Read by:
GLORIA R. BENSAN
(Name and Signature)

Tabulated By:
NICOLE B. QUAN
(Name and Signature)

GWA Procurement Representative:
Victoria Heacock
(Name and Signature)

Witnesses:
WILLIE NICOLAS
Willie Gaiva
Edmond Salvador
JOSE MARIANO
NELSON DEGALA
ALON ELAMPARO

Christian Manyac
Genjo Dayag
Aaron Santos

Exhibit B (1 of 4)

Memorandum

November 8, 2017

To:	Mr. Tom Cruz, P.E. Chief Engineer, GWA		
Cc:	Brett Railey, Engineering Supervisor, GWA, Garrett Yeoh, Senior Engineer, GWA		
From:	Aaron Sutton, P.E., Civil Engineer	**Tel:**	671-472-6792
Subject:	GWA Central Guam Reservoirs (Tumon No. 2, Hyundai, and Chaot No. 2) Project No. W14-006-BND IFB No. IFB-09-ENG-2017 **Bid Recommendation Memorandum**	**GHD Job No.:**	8411830

COMMENTS:

Table 1 provides a summary of the Base Bids from lowest apparent to the highest apparent Bidder. The apparent low bidder is AIC International, Inc. (AIC) with a base bid amount of $14,828,194 which was 16.2% below the Engineer's Estimate of $17,689,268. Note that the bid form had a summation error and was corrected from $14,832,194 via letter from AIC dated November 8, 2017. The discrepancy did not affect the outcome of the bid results. The Engineer's Estimate included a contingency for the labor shortage on Guam. If that contingency is removed and the assumed general contractor markup is reduced to 5%, then the Engineer's Estimate reduces to $15,649,991 for a 5.2% difference.

TABLE1. SUMMARY OF BASE BIDS

BIDDER	BASE BID AMOUNT
AIC International, Inc.	**$14,828,194**
Core Tech – Hawaiian Dredging, LLC	**$19,998,000**

AIC's list of suppliers and subcontractors was review and there were no concerns.

RECOMMENDATION:

Based on GHD's review of the Bid Documents, it is our professional opinion that AIC has submitted a bid which conforms in all material respects to the Invitation for Bids and has the capability to satisfy the contract requirements. Based on this, we recommend award of the contract to AIC as the lowest responsive and responsible Bidder. See Exhibits A, B, and C for copies of low bid information and Exhibit D for a detailed spreadsheet summary of the Bidders' Schedule of Values.

Attachments: Exhibit A, AIC Bid Proposal
Exhibit B, AIC Bid Bond
Exhibit C, GWA Abstract of Bids
Exhibit D, Detailed Spread Sheet

GHD Inc.
865 S Marine Corps Dr Ste 202 Tamuning GU 96913
T 1 671 472 6792 F 1 671 477 6229 E guam@ghd.com W www.ghd.com

AIC INTERNATIONAL, INC.
Engineered Construction

Exhibit B (2 of 4)

November 8, 2017

Guam Waterworks Authority
Engineering Division, Room 202
Gloria B. Nelson Public Service Building
688 Route 15, Mangilao, Guam 96913

Attention: Thomas F. Cruz/Gloria Bensan

Project: IFB-09-ENG-2017
GWA Central Guam Reservoir (Tumon No. 2, Hyundai, and Chaot No. 2 Reservoirs)
GWA Project No. W14-006-BND

Hafa Adai Mr. Cruz:

Thank you for your letter dated November 7, 2017 in which you indicated that there was an apparent error on Table B Base Bid Subtotal of our bid for referenced project, which gave a total of $7,377,308.00 instead of $7,373,308.00.

We have reviewed the bid schedule and wish to confirm that you are correct in your findings. The error was due to an incorrect summation of the bid prices in Table B of the Bid Schedule and we apologize for any inconvenience that our error may have caused you.

We attach a corrected complete Bid Schedule including Table B showing the correct amount of $7,373,308.00 and Table C showing the corrected Base Bid Total of $14,828,194.00 and Base Bid and Additive Bid Total of $22,646,801.00, which we trust you will find to be in order.

Please feel free to contact us should you have any further questions on our proposal and we would look forward with great pleasure to working with the Guam Waterworks Authority on this vital project.

Regards,

Henry Stewart
President
AIC International, Inc.
HS/as
Encl. a/s

GWA Central Guam Reservoirs - Tumon No. 2, Hyundai, and Chaot No. 2
Project No. W14-006-BND
IFB No. IFB-09-ENG-2017

Exhibit B (3 of 4)

BID SUMMARY - DETAILED SPREAD SHEET

Item No.	Description	Core Tech/HDCC	AIC	AVG	MEDIAN	STD DEV	ENG. EST	Low Bidder Delta from ENG. EST
	Base Bid Schedule							
Table A	**Tumon No. 2 Site**							
1	Mobilization	$1,123,198	$331,354	$727,276	$727,276	$395,922	$625,000	-$293,646
2	Demolition	$288,900	$97,952	$193,426	$193,426	$95,474	$203,953	-$106,001
3	Tumon No. 2 Reservoir							
3.1	Earthwork	$143,191	$152,139	$147,665	$147,665	$4,474	$289,855	-$137,716
3.2	Tank foundation	$585,212	$149,581	$367,397	$367,397	$217,816	$450,000	-$300,419
3.3	Tank piping & valving	$113,876	$60,904	$87,390	$87,390	$26,486	$150,000	-$89,096
3.4	Pre-stressed concrete tank	$3,339,829	$3,267,643	$3,303,736	$3,303,736	$36,093	$2,999,530	$268,113
3.5	Tank appurtenances	$229,184	$3,616	$116,400	$116,400	$112,784	$190,000	-$186,384
3.6	Tank coating	$59,816	$62,181	$60,999	$60,999	$1,183	$33,073	$29,108
3.7	Tank & piping disinfection	$9,470	$17,957	$13,714	$13,714	$4,244	$20,000	-$2,043
3.8	Testing & startup	$9,470	$2,035	$5,753	$5,753	$3,718	$10,000	-$7,965
3.9	Electrical system	$187,248	$99,572	$143,410	$143,410	$43,838	$83,405	$16,167
3.10	Instrumentation and control	$97,064	$134,743	$115,904	$115,904	$18,840	$95,075	$39,668
3.11	Yard piping & valving	$288,986	$371,620	$330,303	$330,303	$41,317	$209,630	$161,990
3.12	Five vaults, piping, valving and overflow discharge basin	$950,468	$288,571	$619,520	$619,520	$330,949	$535,273	-$246,702
3.13	Fencing and gates	$41,159	$48,237	$44,698	$44,698	$3,539	$53,367	-$5,130
3.14	All other appurtenant work	$61,154	$245,848	$153,501	$153,501	$92,347	$69,074	$176,774
	3 Subtotal	**$6,116,127**	**$4,904,647**	**$5,510,387**	**$5,510,387**	**$605,740**	**$5,188,282**	**-$283,635**
4	Site grading and pavement	$293,994	$355,310	$324,652	$324,652	$30,658	$252,212	$103,098
5	Control building	$88,104	$70,008	$79,056	$79,056	$9,048	$100,520	-$30,512
6	PRV vault and meter vault on 12-inch on Pale San Vitores	$640,612	$359,696	$500,154	$500,154	$140,458	$408,521	-$48,825
7	PRV replace and meter vault on 16-inch on Pale San Vitores	$432,597	$264,494	$348,546	$348,546	$84,052	$358,250	-$93,756
8	PRV replace and meter vault on Marine Corps Drive	$752,480	$314,782	$533,631	$533,631	$218,849	$641,532	-$326,750
Subtotal		**$9,736,012**	**$6,698,243**	**$8,217,128**	**$8,217,128**	**$1,518,885**	**$7,778,270**	**-$1,080,027**
Table B	**Hyundai Site**							
1	Mobilization	$1,335,155	$570,933	$953,044	$953,044	$382,111	$995,000	-$424,067
2	Demolition	$358,197	$294,877	$326,537	$326,537	$31,660	$441,142	-$146,265
3	Hyundai Reservoir							
3.1	Earthwork	$317,211	$123,071	$220,141	$220,141	$97,070	$282,499	-$159,428
3.2	Tank foundation	$124,047	$431,508	$277,778	$277,778	$153,731	$490,000	-$58,492
3.3	Tank piping & valving	$184,996	$53,521	$119,259	$119,259	$65,738	$150,000	-$96,479
3.4	Pre-stressed concrete tank	$3,308,935	$3,135,529	$3,222,232	$3,222,232	$86,703	$3,199,530	-$64,001
3.5	Tank appurtenances	$229,384	$206,711	$218,048	$218,048	$11,337	$190,000	$16,711
3.6	Tank coating	$117,296	$61,605	$89,451	$89,451	$27,846	$34,872	$26,733
3.7	Tank & piping disinfection	$7,103	$17,968	$12,536	$12,536	$5,433	$20,000	-$2,032
3.8	Testing & startup	$7,103	$10,182	$8,643	$8,643	$1,540	$10,000	$182
3.9	Electrical system	$221,175	$273,146	$247,161	$247,161	$25,986	$76,531	$196,615
3.10	Instrumentation and control	$87,978	$100,681	$94,330	$94,330	$6,352	$98,992	$1,689
3.11	Yard piping & valving	$599,756	$309,728	$454,742	$454,742	$145,014	$278,391	$31,337
3.12	Three vaults, piping, valving and overflow discharge basin	$1,022,911	$247,161	$635,036	$635,036	$387,875	$334,894	-$87,733
3.13	Fencing and gates	$68,774	$54,659	$61,717	$61,717	$7,058	$67,279	-$12,620
3.14	All other appurtenant work	$58,403	$50,918	$54,661	$54,661	$3,743	$64,290	-$13,372
	3 Subtotal	**$6,355,072**	**$5,076,388**	**$5,715,730**	**$5,715,730**	**$639,342**	**$5,297,278**	**-$220,890**
4	Site grading and pavement	$171,308	$386,009	$278,659	$278,659	$107,351	$408,297	-$22,288
5	380,000 temporaty steel tank	$743,093	$501,896	$622,495	$622,495	$120,599	$1,697,321	-$1,195,425
6	Control Buillding	$34,652	$151,149	$92,901	$92,901	$58,249	$100,520	$50,629
7	Barrigada Pump Station improvements	$371,787	$392,056	$381,922	$381,922	$10,135	$248,940	$143,116
Subtotal		**$9,369,264**	**$7,373,308**	**$8,371,286**	**$8,371,286**	**$997,978**	**$9,188,498**	**-$1,815,190**
Table B	**Chaot No. 2 Site**							
1	Mobililzation	$468,471	$222,631	$345,551	$345,551	$122,920	$383,000	-$160,369
2	Well improvements	$49,036	$106,423	$77,730	$77,730	$28,694	$131,500	-$25,077
3	PRV vault on Dero Road	$187,189	$182,283	$184,736	$184,736	$2,453	$125,000	$57,283
4	Chlorination improvements to Chaot and Agana Heights	$188,028	$245,306	$216,667	$216,667	$28,639	$83,000	$162,306
Subtotal		**$892,724**	**$756,643**	**$824,684**	**$824,684**	**$68,041**	**$722,500**	**$34,143**
	Total Base Bid Schedule Subtotal	**$19,998,000**	**$14,828,194**	**$46,052,311**	**$17,413,097**	**$2,584,903**	**$17,689,268**	**-$2,861,074**
Table B	**Additive Bid Items**							
8	Hyundai Booster Pump Station							
8.1	Building	$575,388	$326,235	$450,812	$450,812	$124,577	$408,962	-$82,727
8.2	Triplex pump system	$72,209	$71,564	$71,887	$71,887	$323	$65,900	$5,664
8.3	Fire pump system	$153,288	$109,398	$131,343	$131,343	$21,945	$62,840	$46,558
8.4	Piping and valving	$244,936	$356,696	$300,816	$300,816	$55,880	$55,500	$301,196
8.5	Flow meters	$11,682	$27,701	$19,692	$19,692	$8,010	$11,730	$15,971
8.6	Hoist system	$132,860	$6,971	$69,916	$69,916	$62,945	$11,220	-$4,249
8.7	Generators	$181,092	$215,122	$198,107	$198,107	$17,015	$272,401	-$57,279
8.8	Diesel fuel tank	$96,354	$70,520	$83,437	$83,437	$12,917	$54,013	$16,507
8.9	Electrical system	$51,443	$24,282	$37,863	$37,863	$13,581	$224,564	-$200,282
8.10	Fire sprinkler system	$61,208	$44,295	$52,752	$52,752	$8,457	$38,820	$5,475
8.11	SCADA system	$51,443	$67,052	$59,248	$59,248	$7,805	$65,000	$2,052
8.12	All other appurtenant work	$34,718	$44,948	$39,833	$39,833	$5,115	$288,404	-$243,456
8.13	Deletion of control building	-$59,867	-$151,149	-$59,867	-$105,508	$45,641	-$100,520	-$50,629
	8 Subtotal	**$1,606,754**	**$1,213,635**	**$1,410,195**	**$1,410,195**	**$196,560**	**$1,458,834**	**-$245,199**
9	8-inch and 12-inch waterlines on Sabana loop	$1,226,743	$1,011,427	$1,119,085	$1,119,085	$107,658	$822,289	$189,138
10	8-inch and 12-inch waterlines on Bello Road	$2,101,459	$1,864,644	$1,983,052	$1,983,052	$118,408	$1,805,760	$58,884
	Total Table B Additive Bid Items Subtotal	**$4,934,956**	**$4,089,706**	**$345,551**	**$4,934,956**	**$0**	**$4,086,883**	**$2,823**
	Total Table B Base + Additive Bid Items Subtotal	**$14,304,220**	**$11,463,014**	**$423,281**	**$14,304,220**	**$0**	**$13,275,381**	**-$1,812,367**
Table C	**Additive Bid Items**							
5	Chaot No. 2 Reservoir							
5.1	Earthwork	$116,744	$111,060	$113,902	$113,902	$2,842	$61,636	$49,424
5.2	Tank foundation	$259,244	$280,566	$269,905	$269,905	$10,661	$330,000	-$49,434
5.3	Tank piping & valving	$133,027	$45,618	$89,323	$89,323	$43,705	$141,309	-$95,691
5.4	Pre-stressed concrete tank	$2,517,499	$2,219,954	$2,368,727	$2,368,727	$148,773	$1,855,612	$364,342
5.5	Tank appurtenances	$322,000	$323,892	$322,946	$322,946	$946	$150,000	$173,892
5.6	Tank coating	$38,535	$46,936	$42,736	$42,736	$4,201	$31,000	$15,936
5.7	Tank & piping disinfection	$6,401	$4,148	$5,275	$5,275	$1,127	$20,000	-$15,852
5.8	Testing & startup	$6,401	$1,125	$3,763	$3,763	$2,638	$10,000	-$8,875
5.9	Electrical system	$89,775	$53,299	$71,537	$71,537	$18,238	$36,680	$16,619
5.10	Instrumentation and control	$7,091	$110,265	$58,678	$58,678	$51,587	$61,334	$48,931
5.11	Yard piping & valving	$279,909	$116,250	$198,080	$198,080	$81,830	$45,000	$71,250
5.12	Three vaults, piping, valving and overflow discharge basin	$315,690	$114,181	$214,936	$214,936	$100,755	$177,660	-$63,479

GWA Central Guam Reservoirs - Tumon No. 2, Hyundai, and Chaot No. 2
Project No. W14-006-BND
IFB No. IFB-09-ENG-2017

Exhibit B (4 of 4)

5.13	Fencing and gates	$45,507	$15,061	$30,284	$30,284	$15,223	$30,040	-$14,979
5.14	All other appurtenant work	$49,285	$6,170	$49,285	$27,728	$21,558	$77,707	-$71,537
	5 Subtotal	**$4,187,108**	**$3,448,525**	**$4,187,108**	**$3,817,817**	**$369,292**	**$3,027,978**	**$420,547**
6	Site grading and pavement	$178,085	$160,664	$169,375	$169,375	$8,711	$219,938	-$59,274
7	Grading of gravel access road	$62,370	$119,712	$91,041	$91,041	$28,671	$35,000	$84,712
	Total Table C Additive Bid Items Subtotal	**$4,427,563**	**$3,728,901**	**$39,214**	**$4,427,563**	**$0**	**$3,282,916**	**$445,985**
	Total Table C Base + Additive Bid Items Subtotal	**$5,320,287**	**$4,485,544**	**$1,390,161**	**$5,320,287**	**$0**	**$4,005,416**	**$480,128**
	Total Additive Bid Items Subtotal	**$9,362,519**	**$7,818,607**	**$2,469,413**	**$9,362,519**	**$0**	**$7,369,799**	**$448,808**
	Total Base Bid + Additive Bid Items	**$29,360,519**	**$22,646,801**	**$26,003,660**	**$26,003,660**	**$ 3,356,859.00**	**$25,059,067**	**$4,301,452**

EXHIBIT C (1 OF 19)

BID FORM

ARTICLE 1 - BID RECIPIENT

1.01 This Bid is submitted to:

Guam Waterworks Authority
Engineering Division, Room 202
Gloria B. Nelson Public Service Building
688 Route 15
Mangilao, Guam 96913

1.02 The undersigned Bidder proposes and agrees, if this Bid is accepted, to enter into a Contract with Buyer in the form included in the Bidding Documents to furnish the Goods and Special Services as specified or indicated in the Bidding Documents, for the prices and within the times indicated in this Bid, and in accordance with the other terms and conditions of the Bidding Documents.

ARTICLE 2 - BIDDER'S ACKNOWLEDGMENTS

2.01 Bidder accepts all of the terms and conditions of the Instructions to Bidders, including without limitation those dealing with the disposition of Bid security. This Bid will remain subject to acceptance for 60 days after the Bid opening, or for such longer period of time that Bidder may agree to in writing upon request of Buyer.

ARTICLE 3 - BIDDER'S REPRESENTATIONS

3.01 In submitting this Bid, Bidder represents that:

A. Bidder has examined and carefully studied the Bidding Documents, the related data identified in the Bidding Documents, and the following Addenda, receipt of which is hereby acknowledged:

Addendum No.	Addendum Date
Addendum No. 1	September 26, 2017
Addendum No. 2	October 5, 2017
Addendum No. 3	October 17, 2017
Addendum No. 4	October 24, 2017

B. Bidder has visited the Point of Destination and site where the Goods are to be installed or Special Services will be provided and become familiar with and is satisfied as to the observable local conditions that may affect cost, progress, or the furnishing of Goods and Special Services, if required to do so by the Bidding Documents, or if, in Bidder's judgment, any local condition may affect cost, progress, or the furnishing of Goods and Special Services.

EXHIBIT C (2 OF 19)

C. Bidder is familiar with and is satisfied as to all Laws and Regulations in effect as of the date of the Bid that may affect cost, progress, and the furnishing of Goods and Special Services.

D. Bidder has carefully studied, considered, and correlated the information known to Bidder; information commonly known to sellers of similar goods doing business in the locality of the Point of Destination and the site where the Goods will be installed or where Special Services will be provided; information and observations obtained from Bidder's visits, if any, to the Point of Destination and the site where the Goods will be installed or Special Services will be provided; and any reports and drawings identified in the Bidding Documents regarding the Point of Destination and the site where the Goods will be installed or where Special Services will be provided, with respect to the effect of such information, observations, and documents on the cost, progress, and performance of Seller's obligations under the Bidding Documents.

E. Bidder has given Engineer written notice of all conflicts, errors, ambiguities, and discrepancies that Bidder has discovered in the Bidding Documents, and the written resolution (if any) thereof by Engineer is acceptable to Bidder.

F. The Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for furnishing the Goods and Special Services for which this Bid is submitted.

ARTICLE 4 - BIDDER'S CERTIFICATIONS

4.01 Bidder certifies that:

A. This Bid is genuine and not made in the interest of or on behalf of any undisclosed individual or entity and is not submitted in conformity with any collusive agreement or rules of any group, association, organization, or corporation;

B. Bidder has not directly or indirectly induced or solicited any other Bidder to submit a false or sham Bid;

C. Bidder has not solicited or induced any individual or entity to refrain from bidding; and

D. Bidder has not engaged in corrupt, fraudulent, collusive, or coercive practices in competing for the Contract. For the purposes of this Paragraph 4.01.D:

1. "corrupt practice" means the offering, giving, receiving, or soliciting of anything of value likely to influence the action of a public official in the bidding process;

2. "fraudulent practice" means an intentional misrepresentation of facts made (a) to influence the bidding process to the detriment of Buyer, (b) to establish bid prices at artificial non-competitive levels, or (c) to deprive Buyer of the benefits of free and open competition;

EXHIBIT C (3 OF 19)

3. "collusive practice" means a scheme or arrangement between two or more Bidders, with or without the knowledge of Buyer, a purpose of which is to establish bid prices at artificial, non-competitive levels; and

4. "coercive practice" means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the bidding process.

ARTICLE 5 - BASIS OF BID

5.01 Bidder will furnish the Goods and Special Services in accordance with the Contract Documents for the following price(s):

EXHIBIT C (4 OF 19)

BID SCHEDULE

Interested Bidders must complete Table A, Table B, and Table C. All blanks in the tables must be filled out.

Definitions:

LS = lump sum

TABLE A
TUMON NO. 2 SITE BID SCHEDULE

(BASE BID ITEMS NO. 1 – 8)

Item No.	Description	Quantity	Unit	Extended Amount
1.	Mobilization, as specified in the Contract Documents.	1	LS	$ 331,354.00
2.	Demolition of existing facilities, including the steel tank and foundation, paving, chain link fences and gates, piping, concrete vaults, headwall, and appurtenances, as shown and specified in the Contract Documents.	1	LS	$ 97,952.00

EXHIBIT C (5 OF 19)

TABLE A
TUMON NO. 2 SITE BID SCHEDULE

(BASE BID ITEMS NO. 1 – 8)

Item No.	Description	Quantity	Unit	Extended Amount
3.	Construction of Tumon No. 2 Reservoir, including a 1.0 million gallon (MG) nominal capacity pre-stressed concrete tank, earthwork, yard piping, fences and gates, coatings, control building, electrical, instrumentation and controls, disinfection, testing, startup, and all appurtenant work, complete and operable, as shown and specified in the Contract Documents.			
	Item 3 Breakdown			
	3.1 Earthwork			$ 152,139.00
	3.2 Tank Foundation			$ 149,581.00
	3.3 Tank Piping & Valving			$ 60,904.00
	3.4 Pre-stressed Concrete Tank			$ 3,267,643.00
	3.5 Tank Appurtenances			$ 3,616.00
	3.6 Tank Coating			$ 62,181.00
	3.7 Tank & Piping Disinfection			$ 17,957.00
3.	Item 3 Breakdown (Cont.)			
	3.8 Testing & Startup			$ 2,035.00
	3.9 Electrical System			$ 99,572.00
	3.10 Instrumentation and Control			$ 134,743.00
	3.11 Yard Piping & Valving			$ 371,620.00
	3.12 Five Vaults, Piping, Valving and Overflow Discharge Basin			$ 288,571.00
	3.13 Fencing and Gates			$ 48,237.00
	3.14 All other appurtenant work			$ 245,848.00
	Subtotal	1	LS	$ 4,904,647.00
4.	Site Grading and pavement including curbs, concrete gutters, headwall, sidewalk, stormwater swales, and riprap.	1	LS	$ 355,310.00

EXHIBIT C (6 OF 19)

TABLE A
TUMON NO. 2 SITE BID SCHEDULE

(BASE BID ITEMS NO. 1 – 8)

Item No.	Description	Quantity	Unit	Extended Amount
5.	Construction of Control Building, including electrical and controls, earthwork, and all appurtenant work, complete and operable as shown and specified in accordance with the Contract Documents.	1	LS	$ 70,008.00
6.	Construction of PRV Vault and Meter Vault on the 12-inch waterline on Pale San Vitores Road. Including construction of concrete vaults, manhole covers, piping, valves, meters, pressure reducing valves, protective coating, connection to existing pipes, connection of 12-inch and 16-inch waterlines, earthwork, testing and disinfection, electrical and SCADA, and all appurtenant work, complete and operable, as shown and specified in accordance with the Contract Documents.	1	LS	$ 359,696.00
7.	Construction of PRV replacement and Meter Vault on the 16-inch waterline on Pale San Vitores Road. Including construction of concrete vault, manhole cover, piping, valves, meters, pressure reducing valve, protective coating, connection to existing pipes, earthwork, testing and disinfection, electrical and SCADA, and all appurtenant work, complete and operable, as shown and specified in accordance with the Contract Documents.	1	LS	$ 264,494.00

EXHIBIT C (7 OF 19)

TABLE A
TUMON NO. 2 SITE BID SCHEDULE

(BASE BID ITEMS NO. 1 – 8)

Item No.	Description	Quantity	Unit	Extended Amount
8.	Construction of PRV replacements and Meter Vault at St. John's on Marine Corps Drive. Including construction of concrete vault, manhole covers, piping, valves, meters, pressure reducing valves, protective coating, connection to existing pipes, 14-inch connection of 24-inch and 14-inch waterlines, earthwork, electrical, testing and disinfection, and all appurtenant work, complete and operable, as shown and specified in accordance with the Contract Documents.	1	LS	$ 314,782.00
Table A Base Bid Subtotal				$ 6,698,243.00

Page 8

EXHIBIT C (8 OF 19)

TABLE B
HYUNDAI SITE BID SCHEDULE

(BASE BID ITEMS NO. 1 – 7, ADDITIVE BID ITEMS NO. 8 – 10)

Item No.	Description	Quantity	Unit	Extended Amount
1.	Mobilization, as specified in the Contract Documents.	1	LS	$ 570,933.00
2.	Demolition of existing facilities, including the steel tank, foundation, paving, electrical building, chain link fences and gates, power pole, piping, concrete vaults, headwall, and appurtenances, as shown and specified in the Contract Documents.	1	LS	$ 294,877.00
3.	Construction of Hyundai Reservoir, including a 1.0 million gallon (MG) nominal capacity pre-stressed concrete tank, earthwork, yard piping, fences and gates, protective coating, electrical, instrumentation and controls, disinfection, testing, startup, and all appurtenant work, complete and operable, as shown and specified in the Contract Documents.			
	Item 3 Breakdown			
	3.1 Earthwork			$ 123,071.00
	3.2 Tank Foundation			$ 431,508.00
	3.3 Tank Piping & Valving			$ 53,521.00
	3.4 Pre-stressed Concrete Tank			$ 3,135,529.00
	3.5 Tank Appurtenances			$ 206,711.00
	3.6 Tank Coating			$ 61,605.00

EXHIBIT C (9 OF 19)

TABLE B
HYUNDAI SITE BID SCHEDULE

(BASE BID ITEMS NO. 1 – 7, ADDITIVE BID ITEMS NO. 8 – 10)

Item No.	Description	Quantity	Unit	Extended Amount
3.	Item 3 Breakdown (Cont.)			
	3.7 Tank & Piping Disinfection			$ 17,968.00
	3.8 Testing & Startup			$ 10,182.00
	3.9 Electrical System			$ 273,146.00
	3.10 Instrumentation and Control			$ 100,681.00
	3.11 Yard Piping & Valving			$ 309,728.00
	3.12 Three Vaults, Piping, Valving, Overflow Discharge Basin and Piping			$ 247,161.00
	3.13 Fencing and Gates			$ 54,659.00
	3.14 All other appurtenant work			$ 50,918.00
	Subtotal	1	LS	$ 5,076,388.00
4.	Site Grading and pavement including curbs, concrete gutters, sidewalks, stormwater swales, headwalls, riprap, and stormwater infiltration basin and outlet structure and piping.	1	LS	$ 386,009.00
5.	Construction of 380,000 gallon temporary bolted steel tank, including earthwork, piping, electrical, instrumentation and controls, disinfection, testing, startup, and all appurtenant work, complete and operable, as shown and specified in the Contract Documents.	1	LS	$ 501,896.00
6.	Construction of Control Building, same as Tumon No. 2 Control Building if additive bid for pump station is not awarded. Locate at pump northeast corner of pump building. Complete and operable, as shown and specified in accordance with the Contract Documents.	1	LS	$ 151,149.00

EXHIBIT C (10 OF 19)

TABLE B
HYUNDAI SITE BID SCHEDULE

(BASE BID ITEMS NO. 1 – 7, ADDITIVE BID ITEMS NO. 8 – 10)

Item No.	Description	Quantity	Unit	Extended Amount
7.	Improvements to the Barrigada Pump Station including piping, meters, pumps, valves, earthwork, testing and startup, door replacement, retaining wall, and all appurtenant work, complete and operable as shown and specified in accordance with the Contract Documents. Include the painting of Barrigada Reservoir No. 2 GWA logo.	1	LS	$ 392,056.00

Page 11

EXHIBIT C (11 OF 19)

TABLE B
HYUNDAI SITE BID SCHEDULE

(BASE BID ITEMS NO. 1 – 7, ADDITIVE BID ITEMS NO. 8 – 10)

Item No.	Description	Quantity	Unit	Extended Amount
8.	Additive Bid Item: Construction of Hyundai Booster Pump Station, including triplex booster pumps, fire pump, electrical and controls, generators, fuel tank, hoist, piping, valves, meters, earthwork, testing and startup, and all appurtenant work, complete and operable as shown and specified in accordance with the Contract Documents.			
	Item No. 8 Breakdown			
	8.1 Proposed Booster Pump Building			$ 326,235.00
	8.2 Triplex Pump System			$ 71,564.00
	8.3 Fire Pump System			$ 109,398.00
	8.4 Piping and Valving			$ 356,696.00
	8.5 Flow Meters			$ 27,701.00
	8.6 Hoist System			$ 6,971.00
	8.7 Generators			$ 215,122.00
	8.8 Diesel Fuel Tank			$ 70,520.00
	8.9 Electrical System			$ 24,282.00
	8.10 Fire Sprinkler System			$ 44,295.00
	8.11 SCADA System			$ 67,052.00
	8.12 All other appurtenant work			$ 44,948.00
	8.13 Deletion of Control Building			($ 151,149.00)
	Subtotal	1	LS	$ 1,213,635.00

EXHIBIT C (12 OF 19)

TABLE B
HYUNDAI SITE BID SCHEDULE

(BASE BID ITEMS NO. 1 – 7, ADDITIVE BID ITEMS NO. 8 – 10)

Item No.	Description	Quantity	Unit	Extended Amount
9.	Additive Bid Item: Installation of 8-inch and 12-inch PVC AWWA C900, transmission and distribution waterlines on North and South Sabana Drives and sides streets as shown on sheets C-201 through C-209. Installation of inline valves shown on sheet C-228. The work will include: valves, valve boxes and valve covers, fire wet barrel hydrants, blow-off assemblies, combination air release valves, fittings, installation of service line materials and fittings, disinfection and testing, and pavement restoration complete and operable as shown and specified in accordance with the Contract Documents.	1	LS	$ 1,011,427.00
10.	Additive Bid Item: Installation of 8-inch and 12-inch PVC AWWA C900, waterlines on Bello Road, and farther west as shown on sheets C-210 through C-227. The work will include: construction of PRV concrete vault, manhole covers, piping, electrical and SCADA, pressure reducing valves, protective coating, valves, valve boxes and valve covers, fire wet barrel hydrants, blow-off assemblies, combination air release valves, fittings, installation of service line materials and fittings, disinfection and testing, and pavement restoration complete and operable as shown and specified in accordance with the Contract Documents.	1	LS	$ 1,864,644.00

EXHIBIT C (13 OF 19)

Table B Base Bid Subtotal	$	7,377,308.00
Table B Base Bid and Additive Bid Subtotal	$	11,467,014.00

EXHIBIT C (14 OF 19)

TABLE C
CHAOT NO. 2 SITE BID SCHEDULE

(BASE BID ITEMS NO. 1 – 4, ADDITIVE BID ITEMS NO. 5 – 7)

Item No.	Description	Quantity	Unit	Extended Amount
1.	Mobilization, as specified in the Contract Documents.	1	LS	$ 222,631.00
2.	Well improvements including analyzer relocations, piping disconnections, door hardware replacement, fencing replacement, and all appurtenant work, complete and operable, as shown and specified in the Contract Documents.	1	LS	$ 106,423.00
3.	Construction of PRV Vault in front of Well A-12. Including construction of concrete vault, manhole covers, piping, valves, pressure reducing valves, protective coating, connection to existing pipes, earthwork, testing and disinfection, and all appurtenant work, complete and operable, as shown and specified in accordance with the Contract Documents.	1	LS	$ 182,283.00
4.	Chlorination and analyzer improvements to Chaot and Agana Heights Reservoir Sites, including partition wall, chlorine system reduction, electrical, instrumentation and controls, and all appurtenant work, complete and operable as shown and specified in accordance with the Contract Documents.	1	LS	$ 245,306.00

EXHIBIT C (15 OF 19)

TABLE C
CHAOT NO. 2 SITE BID SCHEDULE

(BASE BID ITEMS NO. 1 – 4, ADDITIVE BID ITEMS NO. 5 – 7)

Item No.	Description	Quantity	Unit	Extended Amount
5.	Additive Bid Item: Construction of Chaot Reservoir No. 2, including a 0.5 million gallon (MG) nominal capacity pre-stressed concrete tank, earthwork, yard piping, fences, protective coating, electrical, instrumentation and controls, disinfection, testing, startup, and all appurtenant work, complete and operable, as shown and specified in the Contract Documents.			
	Item 5 Breakdown			
	5.1 Earthwork			$ 111,060.00
	5.2 Tank Foundation			$ 280,566.00
	5.3 Tank Piping & Valving			$ 45,618.00
	5.4 Pre-stressed Concrete Tank			$ 2,219,954.00
	5.5 Tank Appurtenances			$ 323,892.00
	5.6 Tank Coating			$ 46,936.00
	5.7 Tank & Piping Disinfection			$ 4,148.00
	5.8 Testing & Startup			$ 1,125.00
	5.9 Electrical System			$ 53,299.00
	5.10 Instrumentation and Control			$ 110,265.00
	5.11 Yard Piping & Valving			$ 116,250.00
	5.12 Drain Vault, Inlet Vault, Piping and Overflow Manhole			$ 114,181.00
	5.13 Fencing			$ 15,061.00
	5.14 All other appurtenant work			$ 6,170.00
	Subtotal	1	LS	$ 3,448,525.00
6.	Additive Bid Item: Site Grading and pavement including concrete gutters, headwalls, retaining wall, stormwater swales, riprap, outlet control structure and stormwater detention basin.	1	LS	$ 160,664.00

Page 16

EXHIBIT C (16 OF 19)

TABLE C
CHAOT NO. 2 SITE BID SCHEDULE

(BASE BID ITEMS NO. 1 – 4, ADDITIVE BID ITEMS NO. 5 – 7)

Item No.	Description	Quantity	Unit	Extended Amount
7.	Additive Bid Item: Grading of gravel access road from end of pavement on Dero Road to the Chaot Reservoirs east property line, including gabion repairs of culvert outlet and all appurtenant work, complete and operable as shown and specified in accordance with the Contract Documents.	1	LS	$ 119,712.00
Table C Base Bid Subtotal				$ 756,643.00
Table C Base Bid and Additive Bid Subtotal				$ 4,485,544.00
Table A, B, and C Base Bid Total				$ 14,832,194.00
Table A, B, and C Base Bid and Additive Bid Total				$ 22,650,801.00

TOTAL BASE BID PRICE FOR THE BID SCHEDULE (Table A, B and C)

For the lump sum of

$ 14,832,194.00
(Price in Figures)

FOURTEEN MILLION EIGHT HUNDRED THIRTY TWO THOUSAND ONE HUNDRED NINETY FOUR DOLLARS
(Price in Words)

Bidder acknowledges that estimated quantities are not guaranteed, and are solely for the purpose of comparison of Bids, and final payment for all unit price Bid items will be based on actual quantities, determined as provided in the Contract Documents. Bidder also acknowledges that each unit price includes an amount considered by Bidder to be adequate to cover Bidder's overhead and profit for each separately identified item.

EXHIBIT C (17 OF 19)

ARTICLE 6 - TIME OF COMPLETION

6.01 Bidder agrees that the furnishing of Goods and Special Services will conform to the schedule set forth in Article 5 of the Agreement.

6.02 Bidder accepts the provisions of the Agreement as to liquidated damages.

ARTICLE 7 - ATTACHMENTS TO THIS BID

7.01 The following documents are attached to and made a condition of this Bid:

A. Required Bid security in the form of Bid Bond.

B. List of Proposed Major Suppliers;

C. Required Bidder Qualification Statement with Supporting Data.

ARTICLE 8 - DEFINED TERMS

8.01 The terms used in this Bid with initial capital letters have the meanings stated in the Instructions to Bidders, the General Conditions, and the Supplementary Conditions.

ARTICLE 9 - BID SUBMITTAL

9.01 This Bid submitted by:

If Bidder is:

An Individual

Name (typed or printed): N/A

By: _____

(Individual's signature)

Doing business as: _____

Business address: _____

_____

Phone: _____ Facsimile: _____

E-mail address: _____ _____

EXHIBIT C (18 OF 19)

A Partnership

Partnership Name: N/A (SEAL)

By: _____

(Signature of general partner - attach evidence of authority to sign)

Name (typed or printed): _____

Business address: _____

_____

Phone: _____ Facsimile: _____

E-mail address: _____

A Corporation

Corporation Name: AIC International, Inc.

State of Incorporation: Guam

Type (General Business, Professional, Service, other): General Contractor

By: _____

(Signature - attach evidence of authority to sign)

Name (typed or printed): Henry Stewart

Title: President

(CORPORATE SEAL)

Attest _____

(Signature of Corporate Secretary)

Business address: Route 2A, Agat Guam 96928

P.O. Box DR, Hagatña, Guam 96932

Phone: 671-565-9142 Facsimile: 671-565-9145

E-mail address: henry@aicconstruction.com

A Limited Liability Company (LLC)

LLC Name: N/A

State in which organized: _____

By: _____

(Signature - attach evidence of authority to sign)

Name (typed or printed): _____

Title: _____

Business address: _____

_____

Phone: _____ Facsimile: _____

E-mail address: _____

EXHIBIT C (19 OF 19)

A Joint Venture

First Joint Venturer Name: N/A (SEAL)

By: _____

(Signature - attach evidence of authority to sign)

Name (typed or printed): _____

Title: _____

Business address: _____

_____

Phone: _____ Facsimile: _____

E-mail address: _____

Second Joint Venturer Name: _____ (SEAL)

By: _____

(Signature - attach evidence of authority to sign)

Name (typed or printed): _____

Title: _____

Business address: _____

_____

Phone: _____ Facsimile: _____

E-mail address: _____

Phone and Facsimile Number, and Address for receipt of official communications to Joint Venture: _____

_____

_____

(Each joint venturer must sign. The manner of signing for each individual, partnership, corporation, and limited liability company that is a party to the joint venture should be in the manner indicated above.)

GUAM WATERWORKS AUTHORITY
"Better Water, Better Lives."
Gloria B. Nelson Public Service Building| 688 Route 15 | Mangilao, Guam 96913
Tel: (671) 300-6846

Issues for Decision

Resolution No. 06-FY2018
Relative to Approval of Change Order No. 3 for the Construction Management Services for the Rehabilitation of GWA Wells D-03, D-17, D-18, D-22, and M-09

What are the objectives of the proposed changes and are they necessary and urgent?
The objective of Change Order No. 3 is to extend the Construction Management (CM) services 97 days to match the contract time extension approved for the construction contract. Additional funding is needed for Change Order No. 3 to manage the construction, on a time and materials basis.

Where is the project located?
This project is located at Groundwater Wells D-03, D-17, D-18, D-22, and M-09 within the villages of Dededo, and Mangilao. Construction activities will be limited to the property boundaries of the well sites.

How much will it cost?
The original contract value for this CM Services was Seven Hundred Forty Nine Thousand One Hundred Eighty Four Dollars ($749,184.00), plus a ten percent (10%) contingency of Seventy Four Thousand Nine Hundred Eighteen Dollars and Forty Cents ($74,918.40). The value of the Change Order No. 3 proposal is One Hundred Nineteen Thousand Three Hundred Eighty One Dollars ($119,381.00). Approval of Change Order No. 3 will bring the total authorized funding amount to a maximum of Nine Hundred Forty Three Thousand Three Hundred Sixty One Dollars and Thirty Two Cents ($943,361.32).

When will it be completed?
The project is scheduled to be substantially completed by end of November 2017.

What is the funding source?
The funding for this project will be from USEPA Grant and, if necessary, GWA Bond funds applicable to the project type.

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. 06-FY2018

RELATIVE TO APPROVAL OF CHANGE ORDER WORK FOR CONSTRUCTION MANAGEMENT SERVICES FOR THE REHABILITATION OF GWA WELLS (D-03, D-17, D-18, D-22, M-09) PROJECT W11-008-BDN

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 has received a grant from the United States Environmental Protection Agency ("USEPA") under the State Revolving Fund ("SRF") program to repair and rehabilitate the water and wastewater system infrastructure; and

WHEREAS, GWA has a number of important USEPA SRF projects including the rehabilitation, repair, or replacement of groundwater wells D-03, D-17, D-18, D-22, and M-09, which have been inoperable for a significant amount of time; and

WHEREAS, the inoperability of the wells has inhibited the full optimization of the island's system water pressure and contributed to supply deficiencies; and

WHEREAS, on December 30, 2015, GWA entered into a contract with EA Engineering, Science and Technology, Inc., PBC (EA) to perform the Construction Management (CM) Services for the Rehabilitation of GWA Wells D-03, D-17, D-18, D-22, and M-09 project; and

DRAFT

WHEREAS, on August 22, 2016, GWA awarded the construction contract for the Island-wide Well Site Rehabilitation (D-03, D-17, D-18, D-22, and M-09) to Pacific Rim Corporation with a completion date of August 22, 2017; and

WHEREAS, on August 22, 2017, GWA extended the construction contract for the Island-wide Well Site Rehabilitation (D-03, D-17, D-18, D-22, and M-09) to November 25, 2017, to allow for extra time for the completion of the associated wells due to capacity issues with some initial wells that required re-drilling and changes that were required for the electrical systems; and

WHEREAS, due to the extension of the construction time, GWA requested a proposal from EA to extend their CM contract to the new construction completion date of November 25, 2017; and

WHEREAS, GWA has discussed the proposal with the USEPA (the funding agency for this project) and received the USEPA's support to use the SRF grant to fund CM contract extension for the Island-wide Well Site Rehabilitation project; and

WHEREAS, GWA received a final proposal from EA on November 3, 2017 (SEE EXHIBT A), in the amount of One Hundred Nineteen Thousand Three Hundred Eighty One Dollars ($119,381.00), and reviewed EA's proposal with GWA's PMO, and determined the proposal as fair and reasonable; and

WHEREAS, CCU approved the original contract value for this project in the amount of Seven Hundred Forty Nine Thousand One Hundred Eighty Four Dollars ($749,184.00), plus a ten percent (10%) contingency of Seventy Four Thousand Nine Hundred Eighteen Dollars and Forty Cents ($74,918.40), which brought the total authorized funding amount to a maximum of Eight Hundred Twenty Four Thousand One Hundred Two Dollars and Forty Cents ($824,102.40); and

WHEREAS, with two (2) previously approved changed orders in the amount of Seventy Four Thousand Seven Hundred Ninety Six Dollars and Thirty Two Cents ($74,796.32), the

current total contract value is Eight Hundred Twenty Three Thousand Nine Hundred Eighty Dollars and Thirty Two Cents ($823,980.32); and

WHEREAS, GWA Management seeks CCU approval of the proposed Change Order No. 3 in the amount of One Hundred Nineteen Thousand Three Hundred Eighty One Dollars ($119,381.00) which will bring the authorized funding for the Contract to Nine Hundred Forty Three Thousand Three Hundred Sixty One Dollars and Thirty Two Cents ($943,361.32); and

WHEREAS, funding for the change order work will be from the USEPA State Revolving Fund and, if necessary, GWA Bond funds applicable to the project type; and

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

1. The recitals set forth above hereby constitute the findings of the CCU.
2. The CCU finds that the terms of the fee proposal submitted by EA Engineering, Science and Technology, Inc., PBC (EA) are fair and reasonable.
3. The CCU hereby authorizes the management of GWA to approve the Change Order No. 3 in the amount of One Hundred Nineteen Thousand Three Hundred Eighty One Dollars ($119,381.00).
4. The CCU hereby further approves the total funding amount for this project to a maximum of Nine Hundred Forty Three Thousand Three Hundred Sixty One Dollars and Thirty Two Cents ($943,361.32).

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

DULY AND REGULARLY ADOPTED, this 22nd day of November 2017.

Certified by: Attested by:

_____ _____

JOSEPH T. DUENAS
Chairperson

J. GEORGE BAMBA
Secretary

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

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

NAYS: _____

ABSTENTIONS: _____

ABSENT: _____

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DRAFT

Exhibit A (1 of 6)

GUAM WATERWORKS AUTHORITY
Gloria B. Nelson Public Service Building
688 Route 15, Mangilao, GU 96913
Engineering Division
Phone: (671) 300-6058 Fax: (671) 647-2621

CHANGE ORDER NO. 3

Project No. & Title: Construction Management Services for the Rehabilitation of GWA Well Nos. D03, D17, D18, D22, and M09
GWA Project No. W11-008-BND

Contractor's Name: EA Engineering, Science, and Technology, Inc., PBC Original Contract Date: August 22, 2016

TO: EA Engineering, Science, and Technology, Inc., PBC

You are directed to make changes noted below in the subject contract. The changes are accepted by:

TRESSIE WORD, OWNER'S REPRESENTATIVE
Contractor Representative (Print Name & Title)

14 NOV 2018
Signature Date

PREPARED BY:
11/14/17
George Watson Date
Project Engineer

11/14/2017
Kurt Bilz, P.E. Date
Engineering Supervisor

RECOMMEND APPROVAL:

Thomas Cruz, P.E. Date
Chief Engineer

G.L. NO.	**W203.105321.520000**
Contract No.:	**760 OM**
Vendor No.:	**26730**
Amount:	**$119,381.00**

Nature of Changes:

This change order serves to extend Construction Management (CM) services for the extended construction period of 97 days, from 22 August to 25 November, 2017, on a time and materials basis.
Project closeout and post-construction services remain unchanged.
Total cost of extended CM services is $181,656, with a credit for the unused CM services budget as of 22 August, 2017 at $62,275.
Work to be performed on a Time and Materials basis adds to total cost of $119,381 as indicated in Enclosure 1.

Enclosures:

1) CM Request for Potential Change Order (with Cost Proposal)

The changes result in the following adjustment of contract price and time:

Contract price prior to this change order	**$823,980.32**
Net (increase)(~~decrease~~) from this Change Order (subject to approved terms & conditions)	**$119,381.00**
Current contract price including this Change Order	**$943,361.32**
Contract time prior to this Change Order 365 calendar days	
Net (increase)(~~decrease~~) resulting this Change Order 97 calendar days	
Current contract time including this Change Order 462 calendar days	

CERTIFIED FUNDS AVAILABLE:

Greg Cruz
Chief Certifying Officer

Date:

APPROVED:

Miguel C. Bordallo, PE
General Manager

Date:

(Name & Title)
Finance/Accounting
Date:

Exhibit A (2 of 6)

EA Engineering, Science, and Technology, Inc., PBC

1001 Army Drive, Suite 103
Barrigada, Guam 96913
Telephone: 671-646-5231
Fax: 671-646-5230
www.eaest.com

Date: 3 November 2017

To: Mr. Miguel C. Bordallo, PE
Guam Waterworks Authority
Engineering Division, Room 202
Gloria B. Nelson Public Service Building
688 Route 15, Mangilao, GU 96913

Delivered via email

RE: CHANGE ORDER No. 003 to Extend Construction Management Services from the Original Contract Completion Date of 22 August to 25 November 2017, Revision 003
GWA Project No. W11-008-BND

Mr. Bordallo:

EA Engineering, Science, and Technology, Inc., PBC (EA) hereby submits this Change Order (CO) No. 003 for GWA Project No. PW W11-008-BND to extend construction management services from the original construction contract completion date, 22 August 2017, to 25 November 2017 on a time and materials cost up to $119,381. This cost estimate also includes extended engineer of record (EOR) services for technical submittal reviews, design refinements, request for information responses and CADD as-built drawings.

EOR services through CO No. 002 are complete. Project closeout and post-construction services authorized per the original contract remain unchanged. In addition, EA efficiently executed construction management services through 22 August 2017 and applied an adjustment of ($62,275) to this CO, itemized in Table 1 below.

Table 1. EA Adjustment Value for Efficiently Executing Construction Management Services

Element	**Value**
Budget – Original	$749,184
Engineer of Record Services – Change Order No. 001	$49,319
Engineer of Record Services – Change Order No. 002*	$25,477
Budget – Total	***$823,980***
Expenditures from Notice to Proceed until 22 August 2017	($695,012)
Project Closeout – Original	($25,779)
Post Construction – Original	($40,914)
Past and Planned Expenditures – Total	***($761,705)***
Adjustment	**$62,275**
* As of 22 August 2017, Change Order No.002 EOR services complete, but not invoiced.	

Exhibit (3 of 6)

EA Engineering, Science, and Technology, Inc., PBC

1001 Army Drive, Suite 103
Barrigada, Guam 96913
Telephone: 671-646-5231
Fax: 671-646-5230
www.eaest.com

Due to the following change conditions that occurred under the associated D-Series Wells rehabilitation project (PW 05-14), EA anticipates that construction will require three months in addition to the contract period of performance:

- PCO 001: Video Logs of 12-inch Boreholes (CO 001)
- PCO 002: Fencing Curb Removal (CO 003)
- PCO 003: Chlorine Analyzer Relocation (CO 003)
- PCO 004: Door Replacement at D-18 and D-22 (CO 005)
- PCO 005: New Borehole at D-18 (CO 002)
- PCO 006: Electrical Modifications (CO 004)
- PCO 007: New Borehole at D-03 (CO 003)
- PCO 008: Sounding Tube Modifications (CO 004)
- PCO 009: Resize D-17 Pump (CO 003)
- PCO 010: Well Materials (CO 004)
- PCO 011: Guam EPA Requirement to Increase Pump Test Duration (CO 004)
- PCO 012: Traffic Control Plan (CO 004)
- PCO 013. 72-Hour Pump Test (CO 005)
- PCO 014. D-18 Pump Upsize (CO 005)
- PCO 015. D-03 Pump Upsize (CO 005)
- PCO 016. M-09 Additional Grout (CO 005)
- PCO 017. Schedule 80 Pump Columns (CO 005)
- PCO 018. D-17 and 18 Asbestos Taps (CO 005)
- PCO 019. Human Machine Interface (CO 005)
- PCO 020. Partial M-09 Credit (CO 005)
- PCO 021. Well Equipment (CO 006)
- PCO 022. Isolation Valves (Proposed CO 007)
- PCO 023. Gravel Pack (Proposed CO 007)
- PCO 024. Request for Equitable Adjustment (Proposed CO 007)
- PCO 025. Fencing (Proposed CO 007)
- PCO 026. New Instrumentation (Proposed CO 007)
- PCO 027. Electrical Connection (Proposed CO 007)
- PCO 028. Revised Well M-09 Scope (Proposed CO 007)

EA estimates that this project will be substantially complete by 25 November 2017. The basis of this CO 003 is estimating utilization over this 3.25 month extended period of performance, as shown in Table 2 below.

Exhibit A (4 of 6)

EA Engineering, Science, and Technology, Inc., PBC

1001 Army Drive, Suite 103
Barrigada, Guam 96913
Telephone: 671-646-5231
Fax: 671-646-5230
www.eaest.com

Table 2. Estimated Utilization for 3.25 Month Extended Period of Performance

Description/Labor Class	August-17	September-17	October-17	November-17
Construction Manager	85%	85%	75%	75%
Deputy Construction Manager	20%	0%	0%	0%
Construction Field Coordinator	100%	100%	100%	85%
Administration/Document Control	30%	20%	20%	20%
Procurement Administrator	1%	1%	1%	1%
Principal	1%	2%	2%	2%
Program Manager	2%	2%	2%	2%
Construction Quality Engineer	3%	3%	4%	4%

Please do not hesitate to contact me if you have any questions or comments regarding this CO at tword@eaest.com. EA respectfully requests a response by Friday, 10 November 2017 to prevent potential impacts to the construction management services.

Sincerely,

Tressie Word, PE
Owner's Representative
EA Engineering, Science, and Technology, Inc., PBC

Attachments:
Cost estimate

cc:
Bill Chang, BC
Kurt Bilz, BC
George Watson, BC
Matthew Bowman, EA
Richard Price, EA
Shelly Rice, EA
File

GWA Work Session - November 20, 2017 - ISSUES FOR DECISION

Exhibit A (5 of 6)

COST PROPOSAL

CHANGE ORDER No. 003 to Extend Construction Management Services from 22 August to 25 November 2017

GWA Project No. W11-008-BND

(1) DIRECT LABOR COSTS

				TASK 2 Project Controls (22 Aug to 25 Nov 2017)		TASK 3 Construction Inspection (22 Aug to 25 Nov 2017)		TOTAL	
STAFF	***CLASSIFICATION***	**Units**	**Rate**	**No.**	**Amount**	**No.**	**Amount**	**No.**	**Amount**
T. Word	Construction Manager	Hour	**$151**	292	$44,070	162	$24,357	454	$68,427
B. Shambach	Deputy Construction Manager	Hour	**$156**	0	$0	11	$1,716	11	$1,716
T. Chargualaf	Construction Field Coordinator	Hour	**$88**	66	$5,834	484	$42,754	550	$48,588
M. Heppe	Administration	Hour	**$121**	114	$13,812	7	$851	121	$14,663
P. Occhiogrosso	Procurement Administrator	Hour	**$175**	4	$701	2	$308	6	$1,009
R. Price	Principal	Hour	**$208**	6	$1,173	4	$824	10	$1,997
C. Brown	Program Manager	Hour	**$172**	11	$1,829	2	$302	12	$2,131
M. Bowman	Construction Quality Engineer	Hour	**$187**	8	$1,587	13	$2,389	21	$3,976
TOTAL LABOR COSTS					$69,007		$73,501		$142,508

(2) OTHER DIRECT COSTS

OTHER DIRECT COSTS		**Units**	**Rate**	**No.**	**Amount**	**No.**	**Amount**	**No.**	**Amount**
1. Equipment and Supplies Usage									
Vehicle		mo	$848.89		$0	6	$5,093	6	$5,093
Mileage		ea	$0.26		$0	5400	$1,404	5400	$1,404
Procore CM Software		year	$5,500.00		$0	0	$0	0	$0
Total Equipment and Supplies Usage					$0		$6,497		$6,497
2. Travel and Per Diem Costs									
Airfare		ea	$2,500.00	0	$0		$0	0	$0
Lodging		mo	$2,232.00	0	$0	0	$0	0	$0
Total Travel and Per Diem					$0		$0		$0
3. Subcontractor Costs									
See subcontractor detail for breakdown		T&M	$26,517.00		$24,545		$1,972		$26,517
Total Subcontractors					$24,545		$1,972		$26,517
G&A Applied to Subcontractor Costs and ODCs			7.80%		$1,915		$661		$2,575
Fee Applied to Subcontractos Costs and ODCs			10.00%		$2,646		$913		$3,559
TOTAL OTHER DIRECT COSTS					$29,106		$10,043		$39,148

(3) TOTAL COST

SUBTOTAL	$98,112		$83,544	$181,656
ADJUSTMENT				($62,275)
TOTAL COST				$119,381

Doc. No. 34GL-17-1251. *

Exhibit A (6 of 6)

SUBCONTRACTOR COST PROPOSAL

(1) SUBCONTRACTOR DIRECT LABOR COSTS

				TASK 2 Project Controls (22 Aug to 25 Nov 2017)		TASK 3 Construction Inspection (22 Aug to 25 Nov 2017)		TOTAL	
STAFF	*CLASSIFICATION*	Units	Rate	No.	Amount	No.	Amount	No.	Amount
TOTAL LABOR COSTS					$0.00		$0.00		$0.00

(2) SUBCONTRACTOR OTHER DIRECT COSTS

SUBCONTRACTOR COSTS		Units	Rate	No.	Amount	No.	Amount	No.	Amount
GHD (Extended Services)		T&M	$9,859.00	0.8	$7,887.20	0.2	$1,971.80	1	$9,859.00
GHD (CADD Format As-Builts)		T&M	$16,658.00	1	$16,658.00	0	$0.00	1	$16,658.00
Total Subcontractor Costs					$24,545.20		$1,971.80		$26,517.00
TOTAL OTHER DIRECT COSTS					$24,545.20		$1,971.80		$26,517.00

(3) TOTAL COST

Subtotal Labor, Other Direct Costs, NOT Including G&A and Fee					$24,545.20		$1,971.80		$26,517.00

GUAM WATERWORKS AUTHORITY
"Better Water, Better Lives."
Gloria B. Nelson Public Service Building| 688 Route 15 | Mangilao, Guam 96913
Tel: (671) 300-6846

Issue for Decision

Resolution No. 07-FY2018
Relative to Approving the Contingency Fund to the Route 1(Asan-Adelup-Hagatna) Sewer Rehabilitation Asan Sewer Break Repair Contract

What is the project's objective and is it necessary and urgent?
Due to the deteriorating conditions of the sewer lines on Route 1 in Asan and Adelup, GWA is requesting additional funding authorization via a contingency fund to the contract with Pacific Rim Constructors, Inc. (PRC) for the Route 1 (Asan-Adelup-Hagatna) Sewer Rehabilitation Asan Sewer Break Repair Project. This additional authorization funding will provide GWA with construction services as, and if needed, on a time and materials basis, should additional sewer lines collapse before the re-bid of Route 1 Sewer Rehabilitation and Replacement (Asan-Adelup-Hagatna) Project for Asan and Adelup is awarded and is under construction which is expected to occur before March 3, 2018.

Where is the project located?
The primary location of the repair work is along Route 1 in the village of Asan.

How much will it cost?
The contingency amount is ten percent (10%) of the original contract value of Two Million Four Hundred Seventy Thousand Six Hundred Fifty Eight Dollars ($2,470,658.00) or Two Hundred Forty Seven Thousand Sixty Five Dollars and Eighty Cents ($247,065.80). Approval of the contingency will bring the authorized total amount for the contract with PRC to Two Million Seven Hundred Seventeen Thousand Seven Hundred Twenty Three Dollars and Eighty Cents ($2,717,723.80).

When will it be completed?
GWA intends to change order the construction services contractor to March 2018 when GWA anticipates an award to the Route 1 Sewer Rehabilitation and Replacement (Asan-Adelup-Hagatna) Project for Asan and Adelup area.

What is the funding source?
The funding for the additional work will be from the USEPA State Revolving Fund and, if necessary, GWA Bond funds applicable to the project.

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. 07-FY2018

RELATIVE TO APPROVAL OF CONTINGENCY FUND TO THE ROUTE 1 (ASAN-ADELUP-HAGATNA) SEWER REHABILITATION ASAN SEWER BREAK REPAIR 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 has received a grant from USEPA under the State Revolving Fund program to improve the sewer collection system, which included the gravity sewer line along Route 1, from the Asan "War in the Pacific" National Historical Park to the Agana Main Pump Station; and

WHEREAS, the stretch of gravity sewer line indicated is deteriorating and has experienced collapses in a number of locations, and the intent of this project is to rehabilitate, repair or replace these collapsed sections; and

WHEREAS, GWA and USEPA agree that efforts to rehabilitate, repair or replace these sewer lines are necessary to properly maintain and operate the sewer collection system; and

WHEREAS, The CCU approved Resolution 18-FY2017 on February 21, 2017 that authorized GWA to enter into a contract with Pacific Rim Constructors, Inc. (PRC) in the amount of Two Million Four Hundred Seventy Thousand Six Hundred Fifty Eight Dollars ($2,470,658.00) to perform construction services for the Route 1 (Asan-Adelup-Hagatna) Sewer Rehabilitation Asan Sewer Break Repair Project; and

WHEREAS, on August 30, 2017, GWA extended the construction contract for the Route 1 (Asan-Adelup-Hagatna) Sewer Rehabilitation Asan Sewer Break Repair Project to October 31, 2017, to allow for additional time for completion of additional work added onto the contract; and

WHEREAS, within the time of the extension, GWA has experienced three additional sections of collapsed pipe within the area of the scope; and

WHEREAS, due to the deteriorating conditions of the sewer lines on Route 1 in Asan and Adelup, GWA is requesting additional funding authorization via a contingency fund to the Route 1 (Asan-Adelup-Hagatna) Sewer Rehabilitation Asan Sewer Break Repair Project, to provide GWA with construction services as and if needed, on a time and materials basis, should additional sewer lines collapse before the "re-bid" of *Route 1 Sewer Rehabilitation and Replacement (Asan-Adelup-Hagatna) Project for Asan and Adelup* is awarded and is under construction which is expected to occur before March 3, 2018; and

WHEREAS, the unforeseen sewer line collapses have been occurring during the project, facilitating the need to request a contingency of ten percent (10%) of the original project amount of Two Million Four Hundred Seventy Thousand Six Hundred Fifty Eight Dollars ($2,470,658.00), or Two Hundred Forty Seven Thousand Sixty Five Dollars and Eighty Cents ($247,065.80) for assistance to GWA in the rehabilitation, repair and/or replacement of any additional collapsed sections under the unit price line items currently included in the contract; and

WHEREAS, the approval of the contingency fund plus the original contract value will bring the total authorized funding amount to a maximum of Two Million Seven Hundred Seventeen Thousand Seven Hundred Twenty Three Dollars and Eighty Cents ($2,717,723.80) and

WHEREAS, funding for the additional work will be from the USEPA State Revolving Fund and, if necessary, GWA Bond funds applicable to the project; and

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

1. The recitals set forth above hereby constitute the findings of the CCU.
2. The CCU finds that the terms of the contracted unit rates submitted by PRC are fair and reasonable.
3. The CCU finds that the terms of the conditions set by GWA relative to commencement of work activities are fair and reasonable and serve as a measure of Quality Assurance/Quality Control (QA/QC).
4. The CCU hereby authorizes the management of GWA to increase the authorized funding to include a contingency of ten percent (10%) of the original project amount, in the amount of Two Hundred Forty Seven Thousand Sixty Five Dollars and Eighty Cents ($247,065.80).
5. The CCU hereby further approves an increase in the total authorized funding amount for this project to a maximum of Two Million Seven Hundred Seventeen Thousand Seven Hundred Twenty Three Dollars and Eighty Cents ($2,717,723.80).
6. The CCU hereby further approves the funding for the additional work will be from the USEPA State Revolving Fund and, if necessary, GWA Bond funds applicable to the project.

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

DULY AND REGULARLY ADOPTED, this 22nd day of November 2017.

Certified by:

JOSEPH T. DUENAS
Chairperson

Attested by:

J. GEORGE BAMBA
Secretary

//

//

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

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

NAYS: _____

ABSTENTIONS: _____

ABSENT: _____

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GUAM POWER AUTHORITY
ATURIDÅT ILEKTRESEDÅT GUAHAN
P.O.BOX 2977 • AGANA, GUAM U.S.A. 96932-2977

Issues for Decision

GPA Resolution No. 2017-45 & GWA Resolution No. 08-FY2018

What is the project's objective? Is it necessary and urgent?

The Consolidated Commission on Utilities has undertaken a number of initiatives to identify opportunities within, in which the ratepayers of Guam will be better served if both utilities work together as a consolidated utility.

GPA and GWA have planned and implemented the replacement of its previous Customer Information System (CIS) with Oracle's Customer Care & Billing (CC&B) system as of March 2015. GPA and GWA both realize that there are efficiencies and cost savings in having a consolidated effort in implementing and maintaining a single CIS.

In April of 2016 GPA and GWA procured the services of Prithibi LLC to provide training, GAP analysis review and ongoing support for the operation of CC&B and extended off site support of the system till June 2018.

In November of 2016, the GAP analysis document was presented to both GPA and GWA which listed deficiencies in the implementation of the CC&B system that impacts the short and long term operation of the CC&B System. In one of the noted deficiencies is that GPA and GWA are utilizing physically separate databases in Oracle CC&B and that there will be efficiencies in terms of cost and resources if one CC&B database is utilized for both utilities.

How much will it cost?

Change order increase amount:

- **GPA – From: $552,853 to $1,312,853 ($760,000)**
- **GWA –From: $551,853 to $1,391,853 ($840,000)**

Total: $1,600,000

When will it be completed?

September 2018

What is its funding source?

Revenue Funded

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

GUAM CONSOLIDATED COMMISSION ON UTILITIES
GPA RESOLUTION NO. 2017-45
GWA RESOLUTION NO. 08-FY2018

RELATIVE TO AUTHORIZING THE APPROVAL FOR THE UPGRADE AND COMBINED DATABASE OF GUAM POWER AUTHORITY AND GUAM WATERWORKS AUTHORITY CUSTOMER CARE AND BILLING (CC&B) SYSTEM

WHEREAS, the Consolidated Commission on Utilities has undertaken a number of initiatives to identify opportunities within, in which the ratepayers of Guam will be better served if both utilities work together as a consolidated utility; and

WHEREAS, GPA and GWA have planned and implemented the replacement of its previous Customer Information System (CIS) with Oracle's Customer Care & Billing (CC&B) system as of March 2015; and

WHEREAS, the GPA and GWA both realize that there are efficiencies and cost savings in having a consolidated effort in implementing and maintaining a single CIS; and

WHEREAS, in April of 2016 GPA and GWA procured the services of Prithibi LLC to provide training, GAP analysis review and ongoing support for the operation of CC&B and extended off site support of the system till June 2018; and

WHEREAS, in November of 2016, the GAP analysis document was presented to both GPA and GWA which listed deficiencies in the implementation of the CC&B system that impacts the short and long term operation of the CC&B System; and

WHEREAS, one of the noted deficiencies is that GPA and GWA are utilizing physically separate databases in Oracle CC&B and that there will be efficiencies in terms of cost and resources if one CC&B database is utilized for both utilities and

WHEREAS, GPA and GWA has proposed a ten (10) month project with Prithibi LLC, to perform an upgrade to the current CC&B program and to also allow the GPA and GWA databases to co-exist in one instance; and

WHEREAS, GPA and GWA now request authorization for additional expenditures to address the professional services for the CC&B upgrade and combining of the two databases that amounts to $1,600,000, with the portion of GPA ($760,000) and GWA ($840,000), respectively.

NOW, THEREFORE BE IT RESOLVED, the following policy is adopted by the Consolidated Commission on Utilities;

1. The General Manager of the Guam Power Authority (GPA) and the General Manager of the Guam Waterworks Authority (GWA) is authorized to approve the Change Order Agreement with Prithibi LLC, to increase the authorized amount from $552,853 to $1,312,853 for GPA and $551,853 to $1,391,853 for GWA, respectively; and

2. The General Manager of GPA and GWA is hereby authorized the additional expenditure (cost share) for each agency as follows:

GPA Share: $760,000
GWA Share: $840,000

3. The General Manager of GWA is authorized to petition the Public Utilities Commission for review and approval of the additional expenditures to address the professional services for the CC&B upgrade and database merge.

RESOLVED, that the Chairman certifies and the Board Secretary attests to the adoption of this Resolution.

DULY AND REGULARLY ADOPTED AND APPROVED THIS 22ND DAY OF NOVEMBER 2017.

Certified by:

_____

JOSEPH T. DUENAS
Chairperson
Consolidated Commission on Utilities

Attested by:

_____

J. GEORGE BAMBA
Secretary
Consolidated Commission on Utilities

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

The foregoing is a full, true and correct copy of a resolution duly adopted at a regular meeting of the members of Guam Consolidated Commission on Utilities, duly and 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: _____

Nays: _____

Absent: _____

Abstain: _____

GUAM WATERWORKS AUTHORITY
"Better Water, Better Lives."
Gloria B. Nelson Public Service Building| 688 Route 15 | Mangilao, Guam 96913
Tel: (671) 300-6846

Issue for Decision

Resolution No. 09-FY2018
Relative to Approval of the Northern District Wastewater Treatment Plant (NDWWTP) Land Acquisition Funding

What is the projects objective and is it necessary and urgent?
The objective of the resolution is to seek CCU approval to use other funding sources such as System Development Charge Fund and bond funds under CIP line items applicable to the project to supplement the balance of the funds required to use towards the purchase of the GALC property for the purposes of upgrading the NDWWTP to secondary treatment.

Where is the project located?
The subject property is currently Guam Ancestral Land Commission property adjacent to the existing NDWWTP.

How much will it cost?
The fair market value for the purchase of the GALC property adjacent to the NDWWTP is Two Million Four Hundred Ninety Thousand Dollars ($2,490,000.00). GWA currently has Five Hundred Sixty Thousand Dollars ($560,000.00) from the OEA grant and One Million Dollars ($1,000,000.00) for 2010 Bond funds applicable for the purchase of the GALC property. The balance of the funds required is approximately One Million Dollars ($1,000,000.00).

When will it be completed?
Acquisition of the subject property should take approximately 3-4 months after approval of funding availability. This time frame includes final property map approval and recording at Guam Land Management as well as escrow services to purchase the property from GALC.

What is the funding source?
The funding will be from System Development Charge Fund and bond funds under CIP line items applicable to the NDWWTP Secondary Treatment Upgrade project.

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. 09-FY2018

RELATIVE TO APPROVAL OF NORTHERN DISTRICT WASTEWATER TREATMENT PLANT (NDWWTP) LAND ACQUISITION FUNDING

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 U.S. Department of Defense, Office of Economic Adjustment (OEA) awarded to GWA a General Assistance Grant for community investment August 26, 2016 for $21,000,000, with subsequent additional grants forthcoming; and

WHEREAS, the General Assistance Grant is to be used for water and wastewater improvements in support of the relocation of U.S. Marines and their dependents to Guam; and

WHEREAS, the report "Final Guam Water and Wastewater Assessment Report in Support of the Economic Adjustment Committee Implementation Plan," (NAVFAC, Department of the Navy, February 2015) has recommended the design and construction of NDWWTP treatment upgrades to comply with current National Pollutant Discharge Elimination System (NPDES) permit and mitigate impacts to wastewater utilities, nearshore waters, and marine biological resources; and

WHEREAS, GWA had identified property owned by the Guam Ancestral Lands Commission (GALC) adjacent to the existing NDWWTP for the purpose of construction of the expansion of the plant to meet NPDES permit limits and to handle the additional flows due to

DRAFT

increased military and civilian population expected for the 2020 relocation of Marines to Guam; and

WHEREAS, the CCU had approved Resolution 61-FY2016 on September 27, 2016 that supported proposed draft legislative language relative to the acquisition of certain Guam Ancestral Lands Commission properties; and

WHEREAS, the draft legislative language approved by the CCU subsequently became law via Public Law 33-198 which contained certain requirements for both the Guam Water Works Authority and the Guam Ancestral Lands Commission; and

WHEREAS, GWA conducted, after the passing of PL 33-198, preliminary land survey work and two land appraisal reports for the subject GALC property to work towards determining a fair compensation for the property; and

WHEREAS, the appraisal companies, one of which was selected by GALC, completed their appraisal reports which was then transmitted to the GALC for their acceptance of the averages of the two appraisals to be the amount of compensation due to acquire the subject property; and

WHEREAS, the GALC has responded back to GWA regarding the appraisals and have accepted that the Fair Market Values for the subject property is Two Million Four Hundred Ninety Thousand Dollars ($2,490,000.00) (See Exhibit A); and

WHEREAS, the CCU had further approved Resolution 14-FY2017 on January 24, 2017 that reallocated One Million Dollars ($1,000,000.00) of 2010 Bond funds to a new Capital Improvement Plan (CIP) line item specific for the Northern District Wastewater Treatment Plant Secondary Treatment Upgrades; and

WHEREAS, the General Assistance Grant from OEA had a specific amount for land acquisition related to the NDWWTP upgrades in the amount of Five Hundred Sixty Thousand Dollars ($560,000.00); and

WHEREAS, GWA management is seeking CCU approval to use other funding sources such as System Development Charge Fund and bond funds under CIP line items applicable to the project to supplement the balance of the funds required, or approximately One Million Dollars ($1,000,000.00), to use towards the purchase of the GALC property; and

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

1. The recitals set forth above hereby constitute the findings of the CCU.
2. The CCU hereby authorizes the management of GWA to use other funding sources such as System Development Charge Fund and bond funds under CIP line items applicable to the project to supplement the balance of the funds required, or approximately One Million Dollars ($1,000,000.00), to use towards the purchase of GALC property for purposes related to the NDWWTP Secondary Treatment Upgrades.
3. The CCU hereby further approves GWA management to seek PUC approval of the use of SDC funds if required.

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

DULY AND REGULARLY ADOPTED, this 22nd day of November 2017.

Certified by: Attested by:

_____ _____

JOSEPH T. DUENAS **J. GEORGE BAMBA**
Chairperson Secretary

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DRAFT

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

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

NAYS: _____

ABSTENTIONS: _____

ABSENT: _____

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Exhibit A (1 of 4)

DIPÅTTAMENTON MINANEHAN TÅNO'
(Department of Land Management)
GUBETNAMENTON GUÅHAN
(Government of Guam)

EDDIE BAZA CALVO
Governor

RAY TENORIO
Lieutenant Governor

MICHAEL J.B. BORJA
Director

DAVID V. CAMACHO
Deputy Director

Street Address:
590 S. Marine Corps Drive
Suite 733 ITC Building
Tamuning, GU 96913

Mailing Address:
P.O. Box 2950
Hagåtña, GU 96932

Website:
http://dlm.guam.gov

E-mail Address:
dlmdir@land.guam.gov

Telephone:
671-649-LAND (5263)

Facsimile:
671-649-5383

November 16, 2017

Miguel C. Bordallo, P.E.
General Manager
Guam Waterworks Authority
PO Box 3010
Hagatna, GU 96932

RE: Guam Ancestral Lands Commission Approval of Appraisals Defined By Public Law 33-198 for Proposed Lot 10190-1, Municipality of Dededo

Hafa Adai Mr. Bordallo,

This letter acknowledges receipt of your November 8, 2017, letter and its attachment of appraisals required by the referenced public law for the transfer of Guam Ancestral Lands Commission (GALC) property to the Guam Waterworks Authority.

A recorded land survey map and land registration of the desired property is required before the parcel may be portioned for transfer. The Department of Land Management and the Guam Ancestral Lands Commission will assist in every way necessary to reasonably complete the land registration.

Listed below is the breakdown of the appraisals and the fair market value that will serve as the necessary compensation for the transfer of the lot known as a 70,000 square meter portion of Andersen Communications Annex No. 1 (AJKD), Municipality of Dededo, and tentatively proposed to be identified as Lot 10190-1, Municipality of Dededo.

GWA NDWWTP Appraisals P.L. 33-198	
Proposed Lot 10190-1, Municipality of Dededo (70,000 sq m)	
Portion of Lot Andersen Communication Annex No. 1 (AJKD)	
1. Milo Appraisal Group Dated: July 28, 2017 As Zone "H" Resort-Hotel Zone	**$2,260,000**
2. Cornerstone Valuation Dated: October 16, 2017 As Zone "H" Resort-Hotel Zone	**$2,720,000**
FAIR MARKET VALUE	**$2,490,000**

Exhibit A (2 of 4)

At the GALC regularly scheduled board of commissioners meeting on November 15, 2017, the commissioners approved by motion and transmits GALC Resolution No. 2017-04 its acceptance of the appraisals and its acceptance of the Fair Market Value of $2,490,000. Resolution No. 201-04 is attached.

Sincerely,

MICHAEL J.B. BORJA
Director

Attachment: GALC Resolution No. 201-04

Exhibit A (3 of 4)

GUAM ANCESTRAL LANDS COMMISSION
RESOLUTION NO. 2017-04

Fair Market Value Determination
for Portion of Andersen Communication Annex No. 1 (AJKD)
as Authorized by Public Law 33-198

WHEREAS, Public Law 33-198 authorizes the transfer of seventy thousand (70,000) square meters from the Guam Ancestral Lands Commission (GALC) Spanish Crown Lands inventory to Guam Waterworks Authority (GWA) for the construction of the Northern District Waste Water Treatment Plant; and

WHEREAS, Public Law 33-198 identified the property to be transferred as a portion of Andersen Communications Annex No. 1 (AJKD), Municipality of Dededo; and

WHEREAS, Public Law 33-198 required GWA to survey the designated property and to pay for two appraisals of the property based on Hotel Zone (H) to determine fair market value as the average of the two appraisals to be the purchase price; and

WHEREAS, GWA has identified the parcel in their proposed Lot Parceling Survey Map prepared by DCA & Associates as Lot 10190-1, Municipality of Dededo; and

WHEREAS, GWA submitted to GALC on November 7, 2017, two appraisals of the designated property completed by Milo Appraisal Group and Cornerstone Valuation with the following determinations:

GWA NDWWTP Appraisals P.L. 33-198 Proposed Lot 10190-1, Municipality of Dededo (70,000 sq m) Portion of Lot Andersen Communication Annex No. 1 (AJKD)	
1. Milo Appraisal Group Dated: July 28, 2017 As Zone "H" Resort-Hotel Zone	$2,260,000
2. Cornerstone Valuation Dated: October 16, 2017 As Zone "H" Resort-Hotel Zone	$2,720,000
FAIR MARKET VALUE	$2,490,000

WHEREAS, on November 15, 2017, the Guam Ancestral Lands Commission board of commissioners at their regularly scheduled meeting, Tamuning, Guam, approved a motion to accept the appraisals with the purchase price to be the fair market value of two million four hundred ninety thousand dollars ($2,490,000).

NOW THEREFORE BE IT RESOLVED,

The Guam Ancestral Lands Commission board of commissioners transmits to the Consolidated Commission on Utilities and the Guam Waterworks Authority its acceptance of the appraisals identified above; and

P.O. Box 2950, Hagatna, Guam 96932 | (671) 649-5381 | dlmdir@land.guam.gov

Exhibit A (4 of 4)

The Guam Ancestral Lands Commission board of commissioners determines the purchase price for the 70,000 square meter portion of Andersen Communications Annex No. 1 (AJKD), Municipality of Dededo, also proposed to be identified in a Lot Parceling Survey Map prepared by DCA & Associates as Lot 10190-1, Municipality of Dededo, to be **two million four hundred ninety thousand dollars ($2,490,000)**.

DULY AND REGULARLY ADOPTED BY THE GUAM ANCESTRAL LANDS COMMISSION THIS 15TH DAY OF NOVEMBER 2017.

Anthony J.P. Ada 15 Nov 2017

ANTHONY J.P. ADA, Chairman Date: 15 Nov 2017

Maria G. Cruz

MARIA G. CRUZ, Secretary Date: Nov. 15, 2017

Michael J.B. Borja

MICHAEL J.B. BORJA, Executive Director Date: NOV 15, 2017

P.O. Box 2950, Hagatna, Guam 96932 | (671) 649-5381 | dlmdir@land.guam.gov

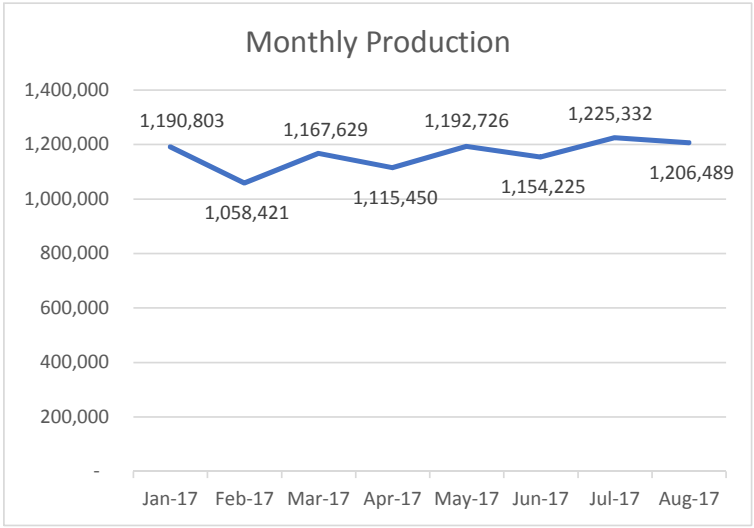
GUAM WATERWORKS AUTHORITY

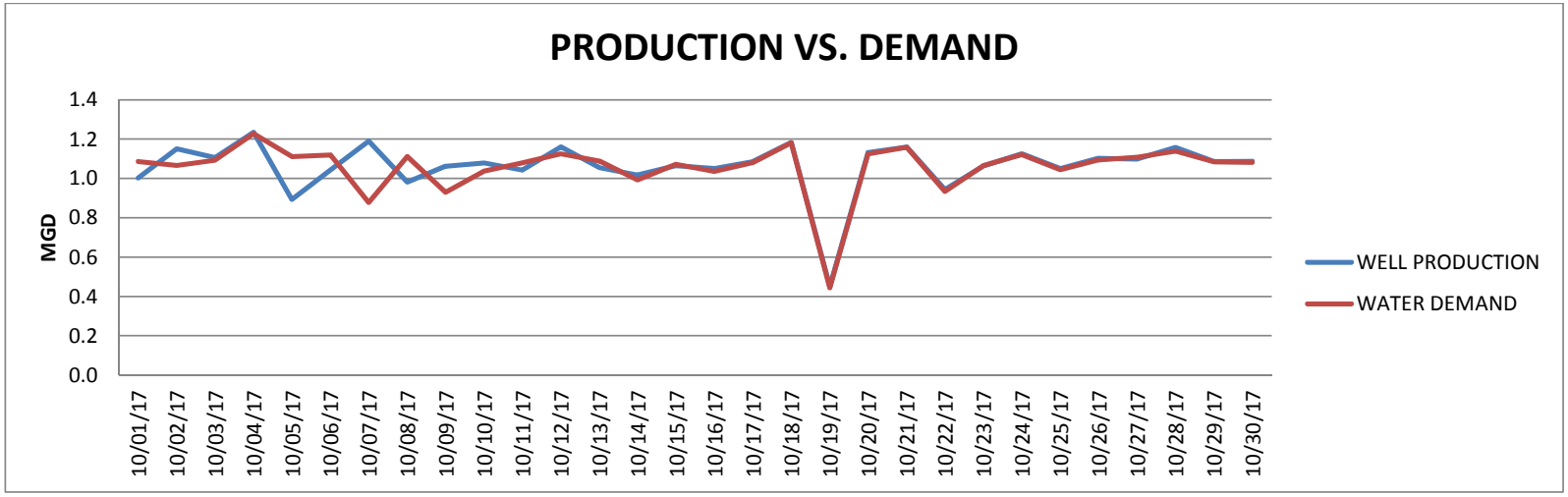
General Manager's Report
GWA Work Session, November 20, 2017

Operations Update

Production

Monthly Production Summary - August 2017				
Deep Wells			35.5	MGD
Active wells =	94	of 120		
Avg days in operation =	30.11	days		
Total Production =	1,102,007	Kgals		
Springs			0.22	MGD
Avg days in operation =	31	days		
Total Production =	6912	Kgals		
Ugum Surface Water Plant			2.1	MGD
Avg days in operation =	31	days		
Total Production =	65,037	Kgals		
Tumon Maui Well			1.05	MGD
Avg days in operation =	31	days		
Total Production =	32,534	Kgals		
	1,206,489	Kgals	38.9	MGD



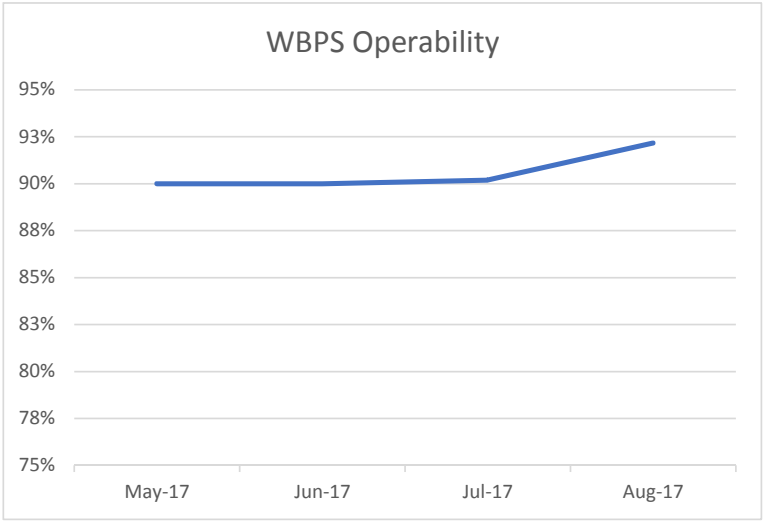


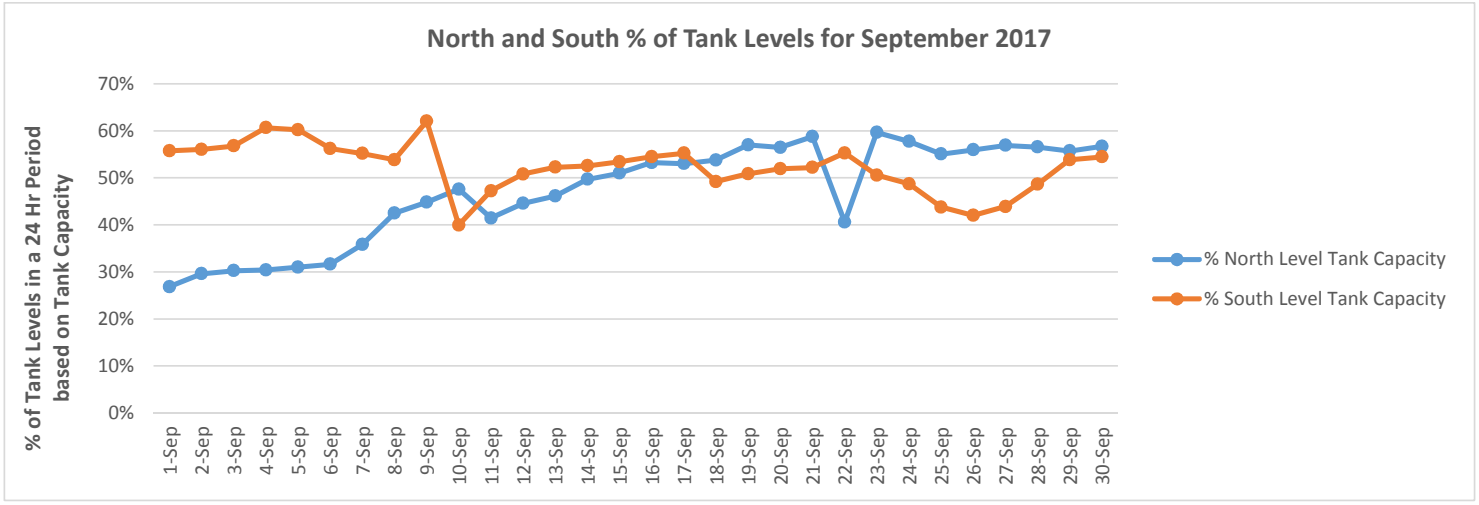
Distribution

Monthly Distribution Summary - August 2017

Water Booster Pump Stations

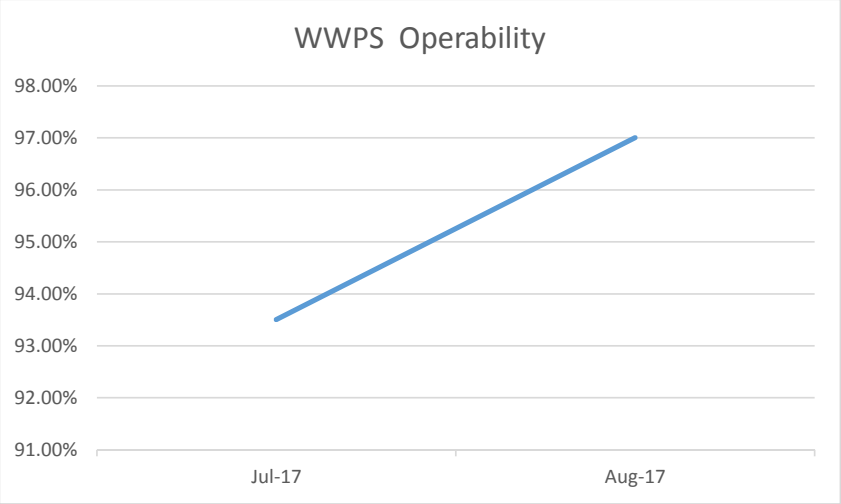
District	No. of Stations	Total Pumps	Pumps Operating	% Operational
Northern	11	21	20	95.2%
Central	7	15	12	80.0%
Southern	7	15	15	100.0%
	25	51	47	92.2%





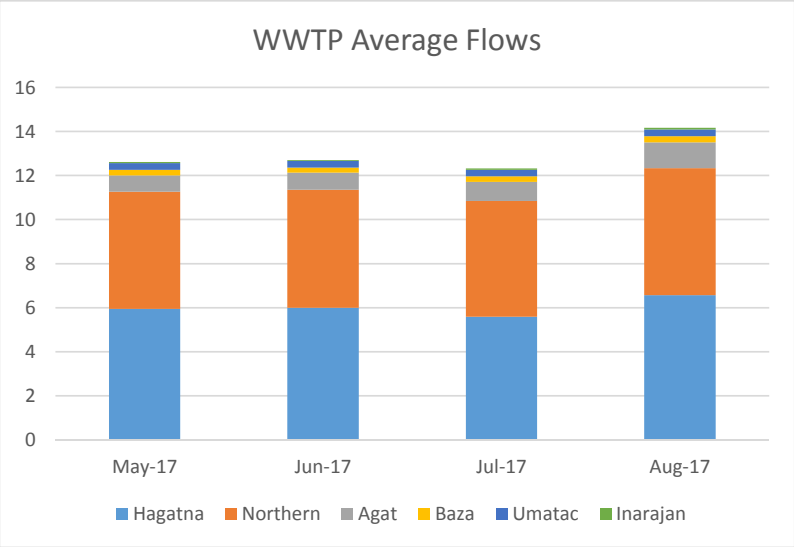
Wastewater Collections

Monthly Collections Summary - August 2017*					
Wastewater Pump Stations					
	District	No. of Stations	Total Pumps	Pumps Operating	% Operational
	Northern	22	52	51	98.1%
	Central	29	65	62	95.4%
	Southern	25	51	50	98.0%
		76	168	163	97.0%

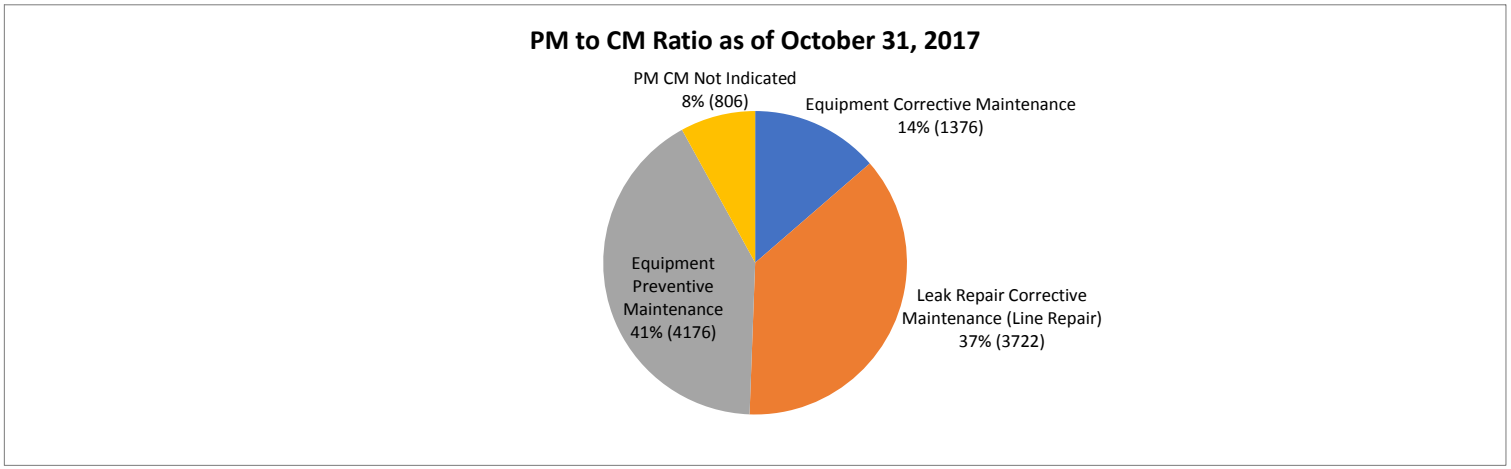


Wastewater Treatment

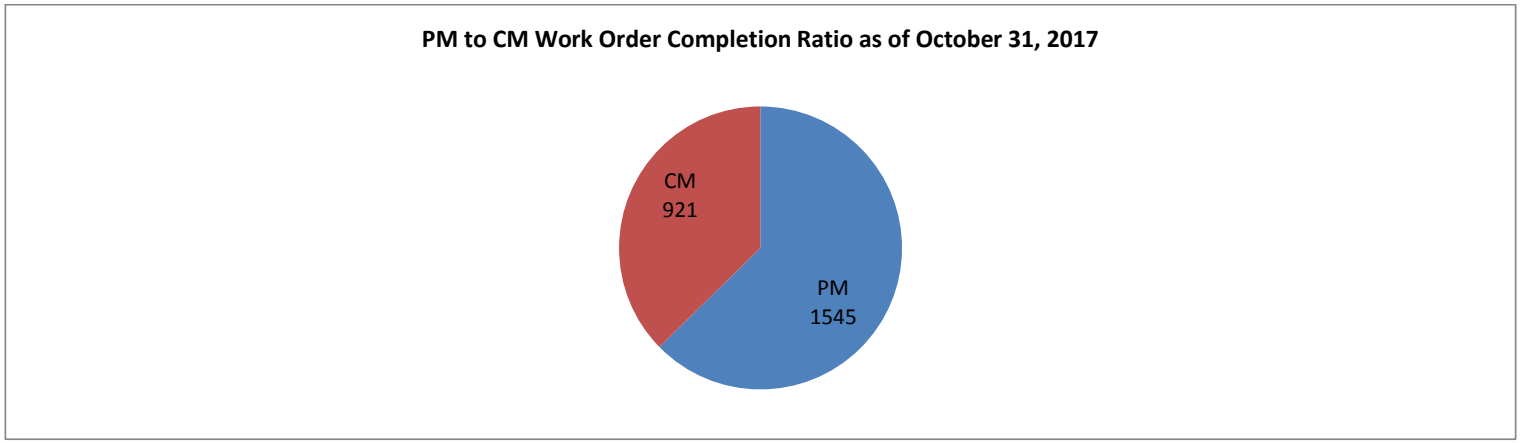
Monthly Wastewater Treatment Summary - August 2017				
WW Treatment Plants - Flows				
	Facility	**Avg. Daily Flows**	**Sludge (lbs)**	**Sludge Disp. ($)**
	Hagatna	6.57	694,420	$ 62,498
	Northern	5.77	690,200	$ 62,118
	Agat	1.16		
	Baza	0.29		
	Umatac	0.30		
	Inarajan	0.08		
		14.17	1,384,620	$ 124,616

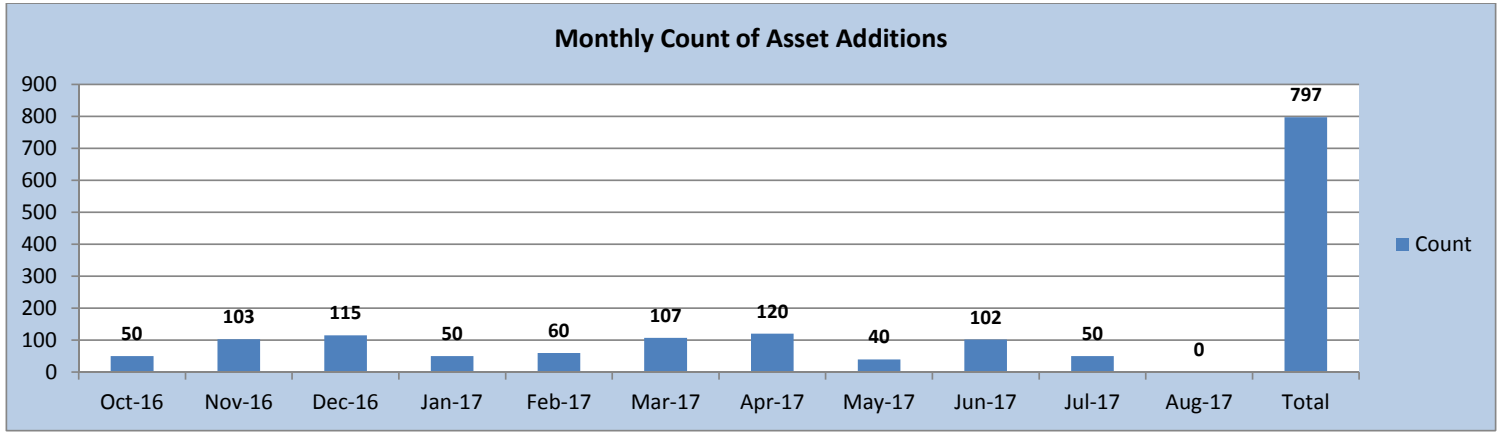


Asset Management



Equipment CM =1376
Leak Repair= 3722
Equipment PM=4176
PM/CM Not Indicated= 806





- **No new asset additions for October 2017**

On-Going Asset Management Activities

- Ongoing routine asset condition assessment for all water and wastewater assets and update asset registry.
  Goal: once a year for critical assets and every three years for non-critical.
- Risk identification based on asset condition
- Improved PM scheduling
- Establishment of an Asset Management System based on ISO 5500 standards through effective and efficient management of GWA assets.

Operational Issues

- Operations crew completed two additional sewer line replacement projects in Asan/Piti and Adelup. Adeulp work pending asphalt paving work by sub-contractor.

Marbo (Andy-South) Wells – Status

- GWA management has approved sketch from surveyor.
- Technical descriptions submitted to GSA for their review and approval.

One Guam Update

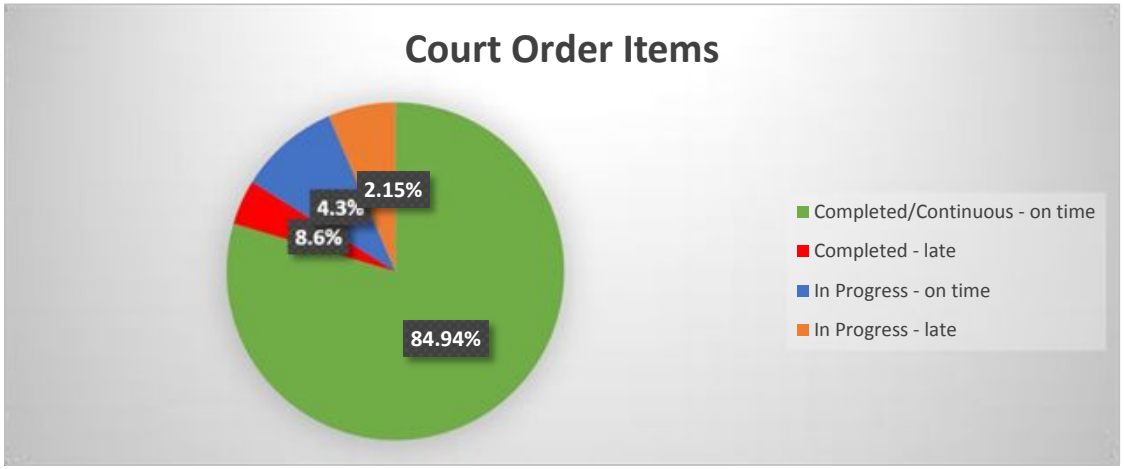
- Tumon Maui Well: Leaks from the vent shaft were observed during the inspection, GM Miguel Bordallo will follow up if it's recurring or bilateral and keep NFM apprised of the issue.
- Santa Rosa Tank:
  - MOU for Santa Rosa Tank – in progress.
  - Still waiting for B&C to do the modelling; Tom Cruz will obtain the date on when.
- Agat Santa Rita WWTP: For the in-kind, Cynthia Blas is waiting for the response from NBG PWD. The easement will be transferred to GovGuam; GWA has to reserve it & make the survey office is aware of the reservation of easement.
- OEA Projects:
  - Chief Engineer Tom Cruz will email the project manager (Brown and Caldwell) for an update on the progress (sewer interceptor, wells & northern district).
  - Sewer Line Interceptor –
    - Going out for design-build this month; hope to have someone on contract the 1st quarter of next year.
    - Miguel Bordallo will talk to GPA GM John Benavente regarding the South Finegayan property lease. The lease can be adjusted to include the land where the housing previously was such that the interceptor can be avoided.
    - For the Right-of-Entry, Cynthia Blas submitted a range of $2,045 to $3,425. DOD will draft a letter using $3,425 for GWA to submit to their Finance Section for payment. If the cost is less, the Navy will return the difference to GWA.
  - NDWWTP – Upgrades under design; haven't received the design deliverables.
  - Observation wells – Maria Lewis is requesting the coordinates for the existing wells on the DoD property; Michael Pierson will assist to get them.
    - Installations. Generally the well is owned by the utility; but the land is owned by the military. DoD will work it out.
    - There was an inquiry regarding NEPA work done in the area of Northwest field or NCTS. Maria Lewis stated that MCAG should be asked about their NEPA reviews to avoid duplicating the work.

One Guam Update

- Route 5 Sewer Line Replacement:
  - GWA's project is at the cutting of the asphalt. Miguel Bordallo stated that DPW asked GWA to do less repaving on Rt. 5 and more on Rt. 17.
  - Navy has a sewer line replacement in the same area, and proposed possibly tying into GWA's line and sending the Navy flow from Naval Magazine and the Apra Heights area to the Agat-Santa Rita plant.
  - It would be beneficial if the Navy could connect to GWA's system. Michael Pierson suggested to have design coordination meetings in general; will do so on this project for now since don't foresee any other projects in the near future that are in the same area.
- Training Collaboration: GPA is doing a SCADA training and invited GWA. Tom Cruz will ask if others can attend, then let Navy know.
- Other:
  - Connection by Developer to Navy/Murray Road -
    - Property already transferred but just a matter of transferring the lines. Want to have lateral on each side to tie in. Easement map is being worked on. Maria Lewis stated the water lines map was sent. She will send both maps once they have been updated with easement outlines.
  - ACEORP -
    - Michael Pierson shared the data today; have to download from the website sent.
    - Before gets turned over to GWA, ECPs have to be performed.

Court Order

	Items	On-time Items Completed/Continuous	Items Delayed	Completed Late	Items on Schedule	Performance %
Court order total	93	79	2	8	4	97.8%



Status Information

- 2 items delayed
  - Cl Residual Monitors
  - Meters
- Final Date to complete all Court Order items is December 31, 2020.
- Overflow or Bypass events reported to USEPA:
  - Umatac By-Pass 10/09/17 – 10/29/17 ended.
  - Liguan Terrace, South Grenada Ct. 11/02/17 – blockage in sewer line.

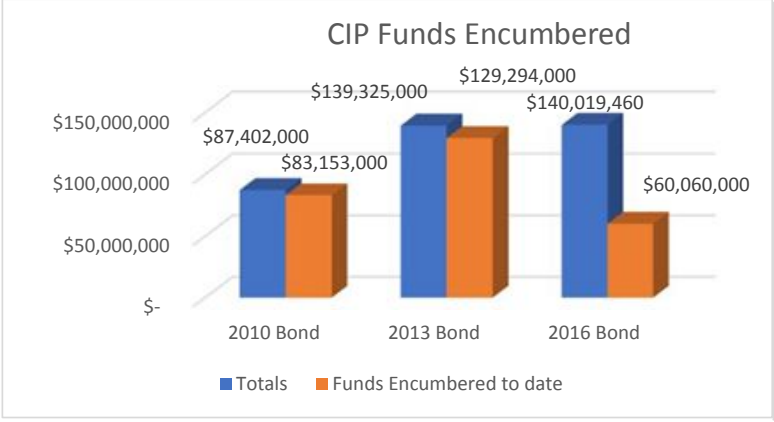
CIP Summary

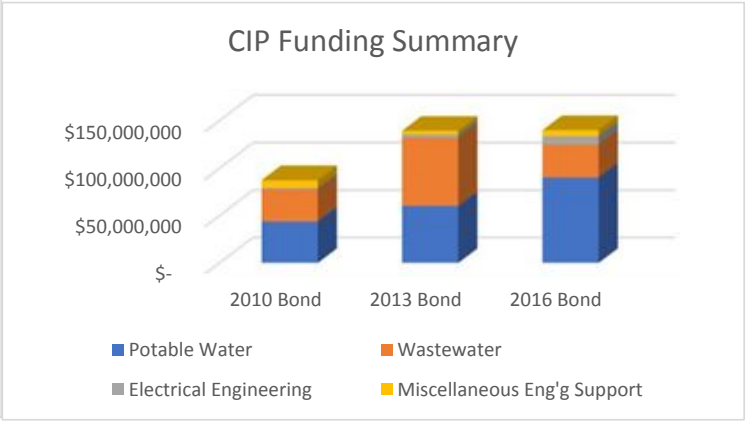
CIP Summary: Project Encumbrance

	2010 Bond		2013 Bond		2016 Bond			
	Funded	Complete	Funded	Complete	Funded	Complete	Total CIP Projects	%
Potable Water	28	17	21	7	20	0	35	49%
Wastewater	16	13	7	3	8	1	22	31%
Electrical Engineering	5	5	6	1	5	0	10	14%
Miscellaneous Eng'g Support	2	0	3	1	4	1	4	6%
Totals	51	35	37	12	37	2	71	100%
% of Total CIP by Fund Source	72%		52%		52%			

CIP Summary: Project Amounts

	2010 Bond		2013 Bond		2016 Bond			
	Funded	%	Funded	%	Funded	%	Total CIP Projects	%
Potable Water	$ 41,903,305	48%	$ 58,317,117	42%	$ 64,647,830	46%	$ 164,868,252	45%
Wastewater	$ 36,009,577	41%	$ 73,837,883	53%	$ 60,227,170	43%	$ 170,074,630	46%
Electrical Engineering	$ 1,748,118	2%	$ 3,395,000	2%	$ 8,750,000	6%	$ 13,893,118	4%
Miscellaneous Eng'g Support	$ 7,741,000	9%	$ 3,775,000	3%	$ 6,394,460	5%	$ 17,910,460	5%
Totals	$ 87,402,000	100%	$ 139,325,000	100%	$ 140,019,460	100%	$ 366,746,460	100%
Funds Encumbered to date	$ 83,153,000	95%	$ 129,294,000	93%	$ 60,060,000	43%		
% of Total CIP Funding	23.8%		38.0%		38.2%			





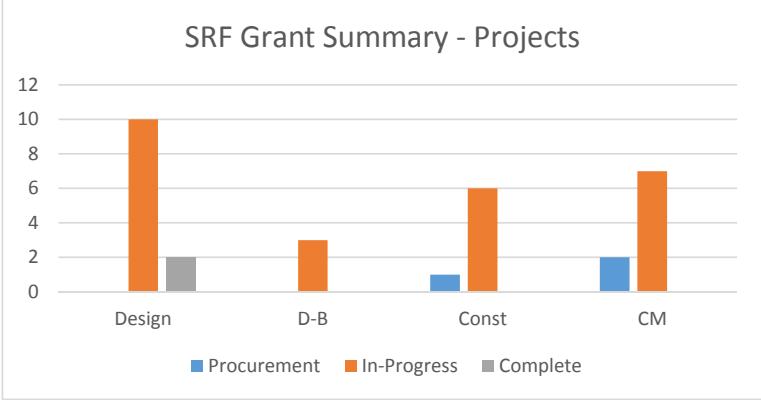
SRF Grant Summary

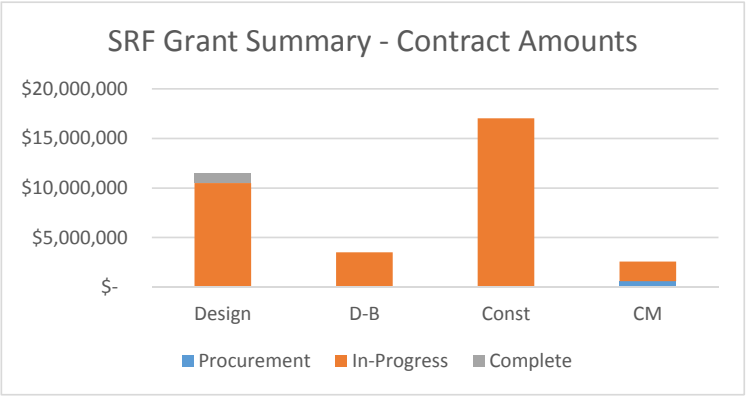
SRF Grant Summary - Projects

	Procurement	In-Progress	Complete	Totals	%
Design	0	10	2	12	39%
D-B	0	3		3	10%
Const	1	6		7	23%
CM	2	7		9	29%
Totals	3	26	2	31	
%	10%	84%	6%		

SRF Grant Summary - Contract Amounts

	Procurement	In-Progress	Complete	Totals	%
Design	$ -	$ 10,490,197	976,151	$ 11,466,348	33%
D-B	$ -	$ 3,502,453		$ 3,502,453	10%
Const	$ -	$ 17,043,244		$ 17,043,244	49%
CM	$ 584,725	$ 1,989,176		$ 2,573,901	7%
Totals	$ 584,725	$ 33,025,070	$ 976,151	$ 34,585,946	
%	2%	95%	3%		





OEA Grant Summary

- Grant application submitted for remainder of funding; OEA meeting schedule in early October
- NDWWTP Upgrades
  - Kick-off and Technical Review Meeting conducted end of August
  - Currently conducting WW sampling and characterization study
- Outfall Diffuser
  - 30% Design received August 30th – under review
  - GWA assisting with CCTV inspection of old outfall for bypass use
- Interceptor
  - Bridging Documents for Design-Build procurement received September 1st ; Under GWA review
  - Right-of-entry documents required (ALC and Navy) for completion of environmental documents
- NGLA Monitoring Wells
  - Design conference schedule for early October
  - Design in progress; GWA waiting for review set - 30% due November 2017

Action Item	Date (Target)	Date (Actual)	Status	Remarks
Project Funds Available	July-16	AUG-30-16	Completed	
Land Acquisition	Jan-17	Jan-17 (Compensation Pending)	Pending	Survey complete, appraisals complete – under review
Procure PM/CM Firm	Jan-17	Jan-17 (NTP Issued Feb 10th)	Completed	
Procure Design Firm	Jul-17		Completed	Contract issued; kickoff pending
Design -- 30/60/90/Final -- Review	Jun-18		On-target	Project design schedule under review by PM/CM
NEPA Analysis and Determination	Feb-17		Delayed	USEPA work on-going; procurement of contractor completed
Procure Construction Firm	Dec-18		On-target	
Construction Complete/Commence Operations	Nov-21		On-target	
Sewer line connection from MCB to GWA infrastructure	Jul-19		On-target	
MCB Initial Operating Capability	Jul-22		On-target	

Land Acquisition Summary

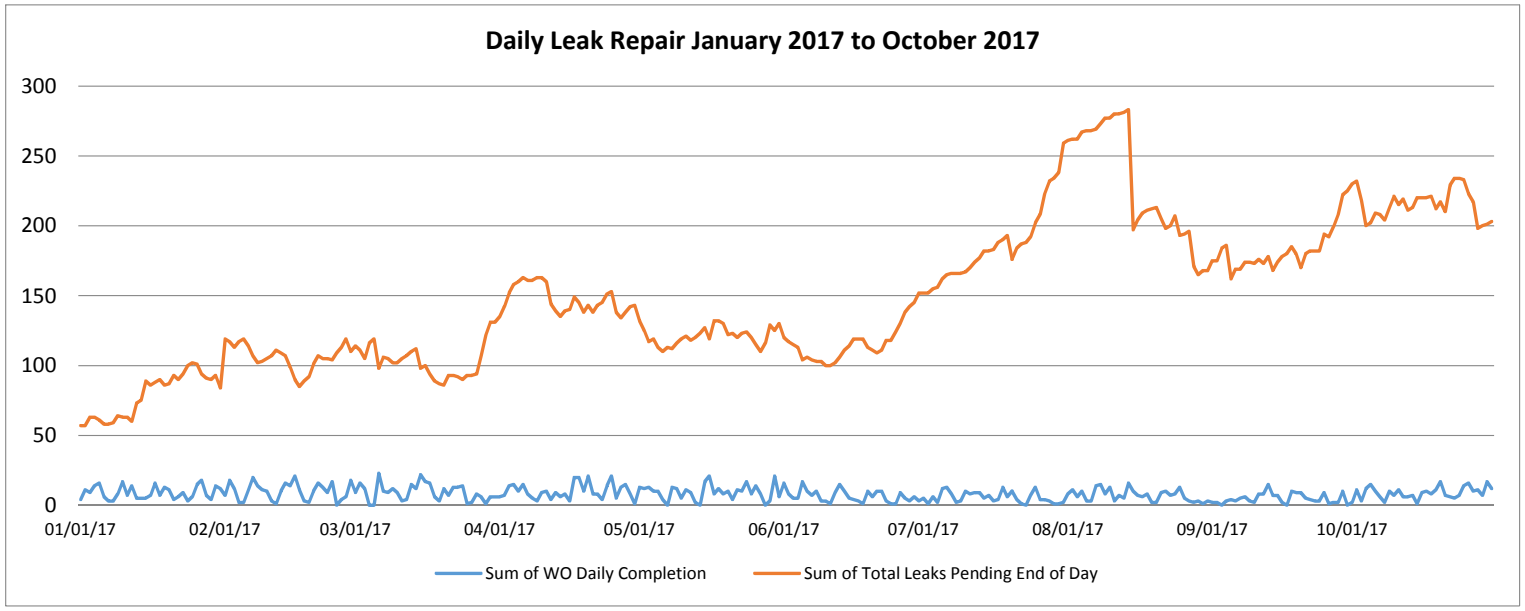
GWA Facility	Location	Gov. or Private Property	Land Acquisition Status
	Ugum	Private	TGE to draft Letter of Decision for private property owners 11/09/17.
	Property Adjacent to Southern Link	Private	GWA started acquisition process on 12/23/2016. Property ownership vested in GWA 08/11/2017.
	Astumbo	Gov't. - CLTC	GWA and DLM working together on Land Registration process. Pending Notification of surrounding lot owner information from DLM.
	Piti	Private	Letter of Intent for private property owners submitted to GWA Land Agent for review 11/01/17.
	A-12	Private	Property ownership vested in GWA 10/16/17.
Expansion of the Northern District Wastewater Treatment Plant (NDWWTP)	Dededo	Gov't - GALC	Lot Parceling Survey Map sent to DLM for review and comments 08/07/17. Appraisal Reports completed 08/11/17. Appraisal Reports sent to DLM for review 11/07/17.
Deep Well	Y-8	Gov't. - CLTC	DCA currently working on severance property map.
	AG-12	Dept. of Agriculture/ Manhita Farms	Land Registration Map submitted to DLM for review and comments 09/29/17.
Booster Pump Station	Brigade	Private	Property ownership vested in GWA 10/16/17.
Booster Pump Station	Agfayan	Private	GWA started land acquisition inquiry process on 11/18/16; Letter of Intent sent out to property owners 08/11/17; 2nd follow up Letter of Intent sent up for signature 11/09/17.

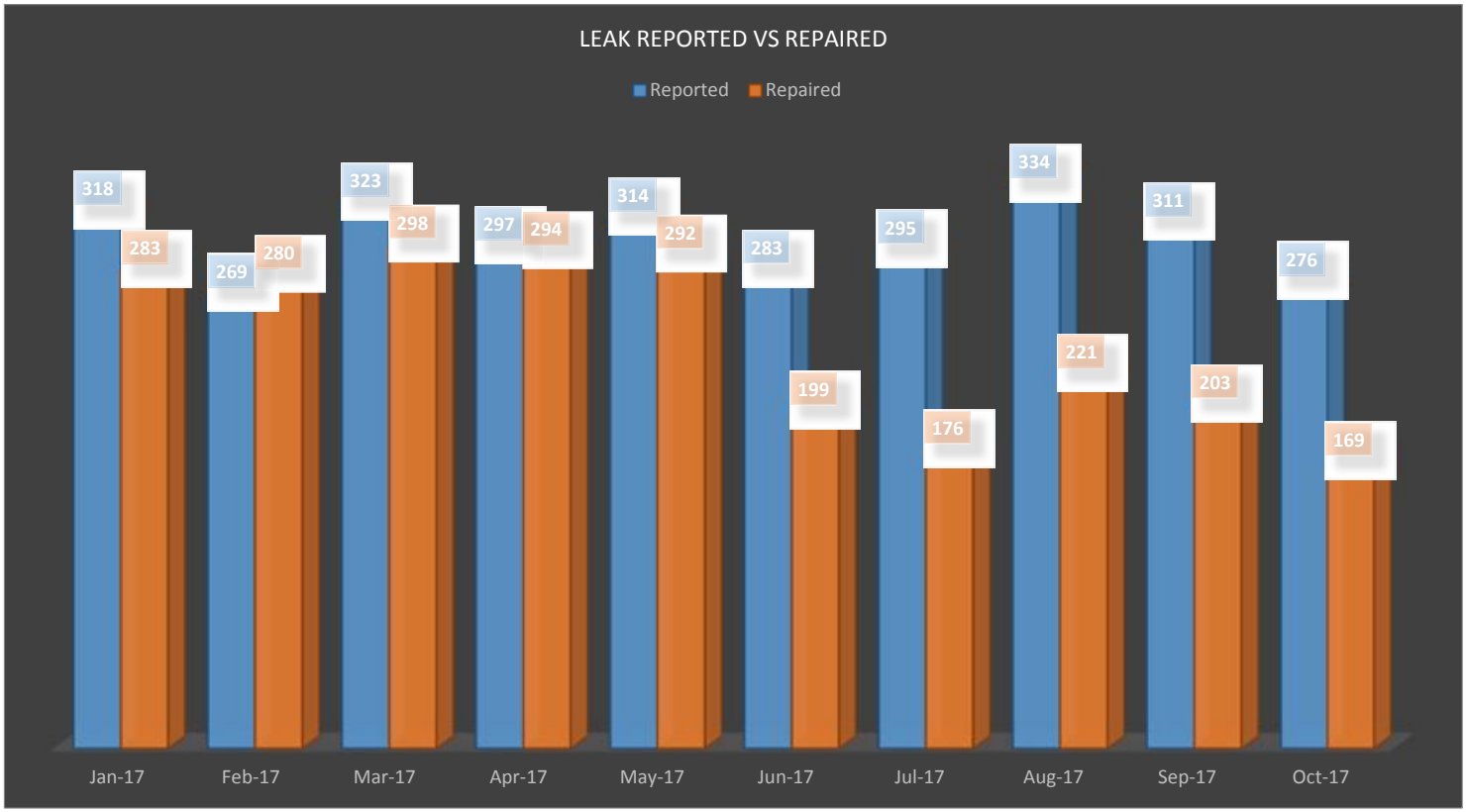
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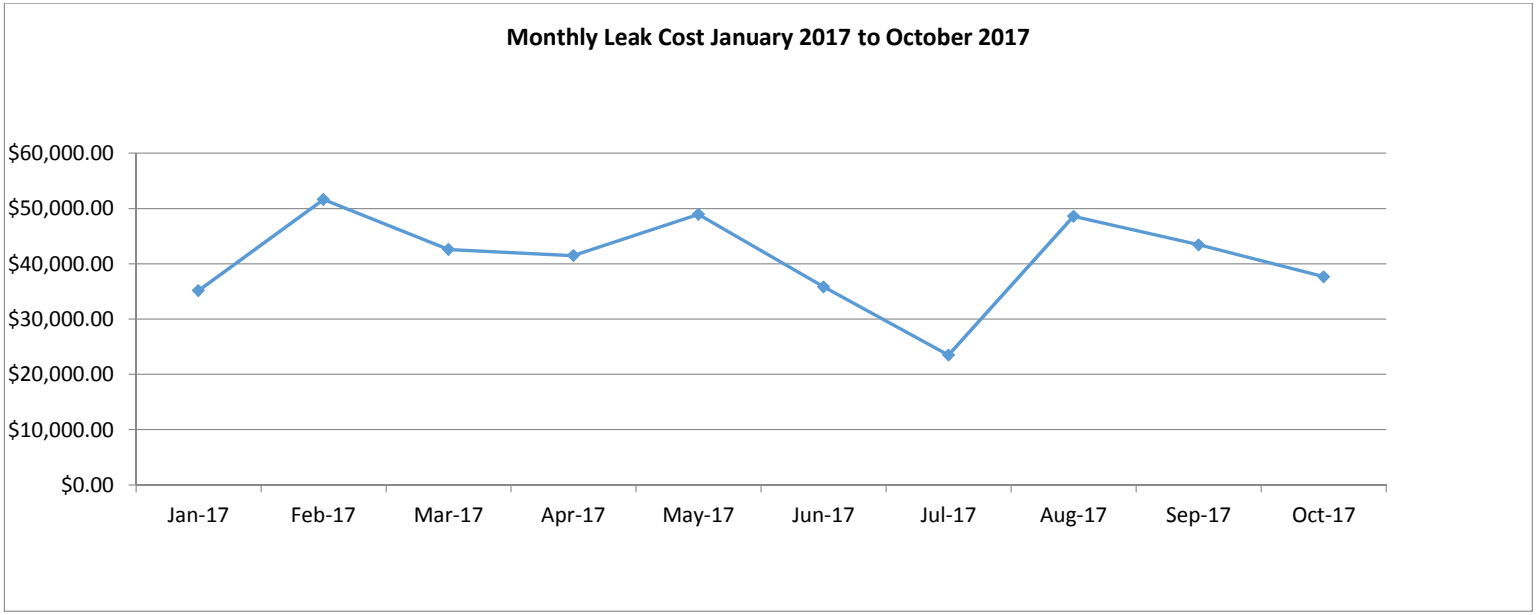
NRW – Update

- Water Audit update on-going
  - Production rates are being reviewed for accuracy and refined
  - Unmetered, Authorized uses are being quantified
  - Meter and billing inaccuracies are being reviewed and refined

Leak Repair Summary




LEAK REPORTED VS REPAIRED
Reported
Repaired
318
283
269
280
323
298
297
294
314
292
283
199
295
176
334
221
311
203
276
169
Jan-17
Feb-17
Mar-17
Apr-17
May-17
Jun-17
Jul-17
Aug-17
Sep-17
Oct-17



Assumptions:

1. Leak rate = 4 gpm
2. Cost per kgal = $4.00



Unlimited Services Group workers prepare containers of cooking and motor oil for transportation at the farmers' co-op market and flea market in Dededo on Saturday. PHOTOS BY FRANK SAN NICOLAS/PDN

Fats, oil, grease gathered

GWA tries to keep sewers flowing

JOHN I BORJA
JBORJA@GUAMPDN.COM

The Guam Waterworks Authority received hundreds of gallons of oily and greasy liquids from the community for proper disposal, in an effort to keep Guam's sewer lines unclogged.

GWA on Saturday partnered with Unlimited Services Group LLC, which operates the Household Hazardous Waste Facility in Harmon, to hold a disposal station at the Farmer's Co-op and Flea Market in Dededo.

The pilot project informed residents not to clog drains with fats, oil and grease. For four hours, GWA offered to collect these wastes to prevent environmental hazards and to protect the island's wastewater system. At the end of the event's second hour, the water agency had collected nearly 400 gallons of waste.



Unlimited Services Group worker Jonas Manzano empties a container of motor oil into a drum.

"When you pour fats, oil and grease down the drain, it really affects our sewer lines. It clogs them up to the point where we really have these sewer back-ups," said Heidi Ballendorf, GWA communications manager.

When there's backed up sewage, especially during the rainy season, it costs GWA hundreds of thousands of dollars to clean it up. Ultimately, it affects the ratepayer, Ballendorf said.

Instead of dumping oils down the drain, Ballendorf recommended keeping them in plastic containers and coffee cans. Residents should mix used cooking oil with wood chips, sawdust or coffee grounds before dumping it at the Layon Landfill, she added.

Ratepayers drove in with containers filled with oil and grease. Dededo resident Ed Castro had at least 10 gallons of used cooking oil in his truck, which he kept for the past five years.

"It's a pretty good program. It's nice to know we have something so that people won't throw (oils) on the side of the road," Castro said.

Ballendorf said residents can always dump their oil and hazardous waste at the Harmon waste station. Guam Solid Waste Authority customers can dump up to 15 gallons, or 100 pounds per visit.

Hazardous wastes include kitchen cleaning products, antifreeze, used oils and vehicle fluids, paint thinner, unusable electronics and car batteries. The waste facility does not accept explosives, ammunition, asbestos, tires and radioactive materials.

Now that the water agency knows there is a need for this kind of collection event, Ballendorf said GWA would likely continue to this project in other parts of Guam.

2011 Court Order Performance Report Card / Dashboard as of 09/30/2017

GUAM WATERWORKS AUTHORITY

Court Order Performance Report Card

	Items	On-time Items Completed/Continuous	Items Delayed	Completed Late	Items on Schedule	Performance %
Court order total	93	79	2	8	4	97.8%

Legend in detail section below.

Fill Color	Meaning
Lime green	Done/Completed
Yellow	On Schedule
Blue	Behind Schedule
Violet	Completed Behind Schedule
Yellow Green	Ongoing and Continuous

2011 Court Order Performance Report Card / Dashboard as of 09/30/2017

Name	SO #	No	Project	GWA SO Timeline	Due to EPA	Status
Northern District WWTP Primary Treatment Upgrades.	2	1	Interim Primary Treatment Improvements Complete	09/30/2012	@EPA	**Done** Construction completed 12/13/2012
	3(a)	2	Interim Effluent to meet Table 1	09/30/2012 monitoring started	@EPA	**Done** Table 1 compliance beginning January 9, 2013.
	3(a)(1)	3	PE Review (Application for 7.5 MGD pending)	3 months after compliance with 3(a)	@EPA	3(a)(1) Application to increase to 7.5 MGD Submitted 07/26/2016
	3(a)(2)	4	(Application for 9 MGD)	3 months after compliance with 3(a)(1)	TBD	
	3(c)	5	Effluent monitoring (calendar-year quarter)	**Completed**	@EPA	**Done. Full year completed 01/08/2012**
	4(a)	6	Sludge & Biosolids Management Plan	12/31/2011	@EPA	**Done.** Biosolids to Landfill EPA Approval 08/17/2014
	4(a)	7	Adequate stabilization and dewatering	9/30/2012	@EPA	**Done.** By Design-Build contract.
	4(b)	8	Biosolids Management, Quarterly Report	Quarterly Report	@EPA	Routine Monitoring Report, **Repeats Quarterly**
	4(c)	9	Biosolids Management, repair & replace facilities	09/30/2012	@EPA	**Done** Construction Complete 12/13/2012. Biosolids to Landfill
	4(d)	10	Biosolids Management, implement plan	9/30/2012	@EPA	**Done** - Biosolids to Landfill
Agaña WWTP Interim Measures.	5	11	Primary Treatment Plant Upgrades	06/30/2013	@EPA	**Done.** CEPT is operational and in final tune-up stages.
	5(a)	12	Scope and schedule	09/30/2011	@EPA	
	5(b)	13	Septage Handling Complete	06/30/2013	@EPA	**Done.** Septage Receiving is completed at the NDWWTP (location option) reported 06/26/2013.
	5(b) 1	14	Septage handling design contract signed	12/31/2011	@EPA	
	5(b) 2	15	Septage handling construction notice to proceed	06/30/2012	@EPA	
	5(c)	16	Grit and FOG Complete	06/30/2013	@EPA	Phase III CEPT is in operations.)
	5(c) 1	17	Grit and FOG design contract signed	12/31/2011	@EPA	**Done** Grit and FOG reported 06/06/2013
	5(c) 2	18	Grit and FOG construction notice to proceed	06/30/2012	@EPA	**Done** Submitted 11/17/2011
	5(d)	19	Repair Solids handling	11/17/2011	@EPA	**Done** O & M Plan reported 05/31/2012
	5(e)	20	O & M Plan	05/31/2013	@EPA	
	5(f)	21	Effluent monitoring (calendar-year quarter)	**Completed**	@EPA	**Done. Full year completed 01/08/2012**
	6	22	Prevent Effluent Back Surge	06/30/2013	@EPA	**Done** Old outfall decommissioned (plugged) 06/25/2013 **Done** Old outfall
	6	23	Effluent Back Surge Plan	12/30/2011	@EPA	decommissioned (plugged) 06/25/2013
I&I SSES	7	24	Collection System SSES and I/I evaluation	**Done**.	@EPA	**Done**.
SSES Work Plan	8	25	Work Plan	180 days	@EPA	**Done** Reported 08/13/2012
	8(a)	26	Flow and rainfall data	N/A	@EPA	**Done** Reported 04/25/2013
	8(b)	27	I/I Southern	540 days	@EPA	**Done** Reported 04/25/2013
	8(c)	28	I/I Central	900 days	@EPA	**Done** Reported 04/28/2014
	8(d)	29	SSES Southern	540 days	@EPA	**Done** Reported 04/30/2013 – update 04/29.2016
	8(e)	30	SSES Central	900 days 09/15/2015 EPA Disap. Ltr.	@EPA	**Done** – Completed June 2, 2017
	8(e) 2	31	SSES Central Report	09/15/2015 EPA Disapproval Letter	@EPA	**Done** – Completed June 2, 2017
Agat / Santa Rita,	9(a)	32	By Pass Report	60 days	@EPA	**Done** Reported 01/04/2012
	9(b)	33	Flow Meter	180 days	@EPA	**Done** Reported 07/26/2012
	9(c)1,2,3	34	Report evaluating near term measures	180 days response sent 09/29/2014	@EPA	**Done** Reported 05/07/2012 GWA response 09/292014.
	9(d)	35	Implement near term measures d - Disinfection	03/23/2016	@EPA	**EPA specifications of 9(c), 9(d) and 9(f) on 09/24/2015.**
	9(e)	36	Implement near term measures e – sludge mgmt.	03/23/2016	@EPA	
	9(f)	37	Implement near term measures f – 75% Bypass Red.	03/23/2016	@EPA	
	10	38	System Evaluation	12/31/2013 response sent 09/29/2014	@EPA	CO **Done** Reported 12/28/2013 GWA response 09/29/2014.- update 04/29/2016
	11	39	System Upgrades	03/14/2017 Plant became operational.	@EPA	New Agat WWTP on line 03/14/2017
	11(a)	40	System Upgrades design	06/30/2014-NTP 10/13/2014	@EPA	CCU approval 08/26/2014. NTP was issued on 10/13/2014
	11(b)	41	System Upgrades notice to proceed	06/30/2015-NTP 10/02/2015	@EPA	NTP Ph.1 issued 10/02/2015 - NTP Ph.2 due 01/04/2016
Baza Gardens	12(a)	42	Interim Measures Evaluation (Independent PE)	180 days	@EPA	**Done** Reported 05/07/2012, PMO task
	12(b)	43	Interim Measures Complete	540 days	@EPA	**Done** Reported 05/01/2013 PMO task
	12(c)	44	Evaluation Bio Solids Report	180 days	@EPA	**Done**-EPA Approval 08/28/2014
	12(d)	45	Complete Bio Solids	360 days	@EPA	**Done** Reported 03/21/2013
	13	46	System Evaluation	04/30/2014	@EPA	**Done** Reported 04/30/2014 GWA response 10/02/2014
	14	47	System Upgrades	04/31/2018	@EPA	Critical path, need to complete I&I/SSES
	14(a)	48	System Upgrades, Design Starts	10/31/2015 NTP DCA 02/05/2016	@EPA	Linked to new Agat WWTP NTP DCA 02/05/2016
	14(b)	49	System Upgrades, Construction Starts	10/31/2016	@EPA	Linked to new Agat WWTP

2011 Court Order Performance Report Card / Dashboard as of 09/30/2017

Name	SO #	No	Project	GWA SO Timeline	Due to EPA	Status
Umatac-Merizo	15	50	Complete Evaluation	12/31/2013	@EPA	CO 15 **Done** Reported 12/31/2013 -- Critical path, completed I&I/SSES
	16	51	System Upgrades	12/31/2018	@EPA	Design Build contract executed 06/29/2017
	16(a)	52	System Upgrades, Design Starts	06/30/2016	@EPA	Design Build contract executed 06/29/2017
	16(b)	53	System Upgrades, Notice to Proceed	06/30/2017	@EPA	NTP Issued 06/30/2017
Sewer Cleaning	17	54	Sewer Cleaning (in annual and quarterly reports)	2017-2022 Preliminary Goal set.	@EPA	2017-2022 Preliminary Goal set.
Hot Spot Plan	18	55	Hot Spot Plan	EPA Revision letter o9/08/2015	@EPA	Last Revision submitted 10/23/2015 GWA WW Ops
CCTV	19	56	CCTV (in annual and quarterly reports)	2017-2022 Preliminary Goal set.--- Entire System Every5 years	@EPA	2017-2022 Preliminary Goal set.--- Entire System Every5 years
Sewer Hook-Up	20	57	Sewer Hook-Up	In Operation	@EPA	**Done –** available on GWA web site or at GWA Customer Service
Groundwater Chlorination	21	58	Groundwater Chlorination	540 days	@EPA	**Done** Reported 04/29/2013
Chlorine Residual Monitors	22	59	Plan	180 days	@EPA	**Done** Reported 09/94/2012
	22(a)	60	High Risk Wells	540 days	@EPA	**Done** Reported 05/02/2013
	22(b)	61	Moderate Risk Wells	2 years	@EPA	**Done** Reported 07/31/2013
	22(c)	62	All Other Wells	3 years (Substantially complete)	@EPA	All but 5–10/27/2015 Site electrical upgrade in progress at 5 locations
Water Metering	23(a)	63	Plan & schedule	180 days	@EPA	**Done** Reported 05/08/2012
	23(a)	64	All connections are metered and mapped	2 years	@EPA	10/31/2016 Substantially complete-- 2 Sensus, **0** Metron left
	23(b)	65	Plan repair & maintain	180 days	@EPA	**Done** GWA Test facility operational 06/28/2013
Ugum Surface Water Treatment Plant	24	66	Construction complete	One year	@EPA	**Done** Reported 11/09/2012
	24	67	PE Inspection	60 days before start-up	@EPA	**Done** EPA Approval 08/26/2014
	25	68	PE Performance Operation Assessment	60 days before start-up	@EPA	**Done** EPA Approval 08/26/2014
	26	69	O&M Plan and Procedures	90 days before start-up	@EPA	**Done** Reported 08/10/2012 EPA Approval 08/17/2014
	27	70	Plant compliance	365 days	@EPA	**Done** Reported 02/07/2013
Sinajana Water Transmission Line	28(a)	71	Existing Construction Complete	180 days	@EPA	**Done** Reported 12/23/2011
	28(b)	72	Hydraulic Evaluation	180 days	@EPA	**Done** EPA No Further Comment 08/26/2014
	28(c)	73	Construction Complete (2 tanks)	540 days from 11/21/2013	@EPA	**GEPA Delays** Tank Constr. Completed August 2015: **In Service July 2016.**
	28(d) 1	74	Monitoring Plan	90 days prior	@EPA	**Done** Reported 09/07/2012
	28(d) 1	75	Implement- Monitoring Plan	For one year after start up	@EPA	GWA Compliance
	28(d) 2	76	Monitoring Plan	180 days prior	@EPA	**Done** EPA Approval 08/26/2014
	28(e)	77	Implement- Monitoring Plan	For one year after start up	@EPA	**Start 09/01/2015 – end 08/31/2016**
Storage Tank/Reservoir Rehabilitation and Replacement Program.	29(a) 1	78	Plan hydraulic analysis	90 days	@EPA	**Done** Reported 11/09/2012
	29(a) 2	79	Hydraulic analysis	540 days	@EPA	**Done** EPA No Further Comment 08/26/2014
	29(b) 1	80	Plan minimize service interruptions	90 days after approval	@EPA	**Done** EPA approval 08/26/2014
	29(b) 2	81	Tank inspection schedule	540 days	@EPA	**Done** EPA approval 08/26/2014
	29(b) 3	82	Complete Barrigada (1 @ 2 MG tank)	540 days	@EPA	**Done**
	29(b) 4	83	Assess additional 7 tanks	5 years (11/10/2016)	@EPA	**Done** DCA contract task
	29(b) 5	84	RRRR 7 additional tanks	5 years (11/10/2016)	@EPA	**Done** PMO executed procurement
	29(b) 6 i	85	RRRR 10 additional tanks	7 years (11/10/3018)	@EPA	**Ongoing** - Completed the hydraulic analysis
	29(b) 6 ii	86	RRRR remaining	12/31/2020	@EPA	
	29(c)	87	In Quarterly / Annual Report	Quarterly / Annual Report	@EPA	GWA Compliance **Repeats Quarterly**
Section III REPORTING REQUIREMENTS	31(a)(1)	88	Quarterly Report	Jan., April, July, Sept. Continuous	@EPA	Due by the 30th of the specified months
	31(a)(2)	89	Reports on Non Compliance	Within 30 days from determination of delay	@EPA	As determined by GWA
	31(b)	90	SSO and Bypass Report	Jan., April, July, Sept. Continuous	@EPA	Due by the 30th of the specified months
	31(c)	91	Annual Report	January each year	@EPA	Included with 31(a) each Year
Section IV NOTICES	35	92	CO contacts		@EPA	GWA Compliance report 06/29/2016
	36	93	Formal notices of change in CO contacts	Whenever specified staffing changes	@EPA	GWA Compliance report 06/29/2016

GUAM WATERWORKS AUTHORITY

Engineering Monthly Report
November 2017

Prepared By:
Thomas Cruz, P.E. Chief Engineer

Table of Contents

Section	Description	Page
A	Summary Table of 2010, 2013 and 2016 Bond	3
B	Projects Procurement	5
C	CIP Water Section	8
D	CIP Wastewater Section	12
E	CIP Engineering Support	16
F	GIS Section	17
G	Permits Section	18
H	SRF Project Status Report	19

A. Summary Table of 2010, 2013 and 2016 Bond

Potable Water

CIP #	CIP Description	2010 Bond Allotment	% encumbered	% available	2013 Bond Allotment	% encumbered	% available	2016 Bond Allotment	% encumbered	% available
PW 05-01	Ground Water Disinfection	$ 500,000.00	100.00%	0.00%	$ -	N/A	N/A	$ -	N/A	N/A
PW 05-03	Santa Rita Springs Booster Pump Rehab Phase II	$ -	N/A	N/A	$ 100,000.00	100.00%	0.00%	$ -	N/A	N/A
PW-05-05	"A Series Well Transmission Line	$ 518,143.96	100.00%	0.00%	$ 400,000.00	100.00%	0.00%	$ -	N/A	N/A
PW 05-06	Water Booster Pump Station	$ 500,000.00	100.00%	0.00%	$ 1,861,000.00	99.49%	0.51%	$ 4,139,000.00	0.00%	100.00%
PW 05-07	Meter Replacement Program	$ 10,300,000.00	99.84%	0.16%	$ 999,000.00	99.75%	0.25%	$ 4,501,000.00	3.33%	96.67%
PW 05-08	Barrigada Tank Repair/Replacement	$ 5,450,000.00	99.92%	0.08%	$ 4,987,000.00	99.32%	0.68%	$ 1,013,000.00	0.00%	100.00%
PW 05-09	Leak Detection	$ 200,000.00	100.06%	-0.06%	$ 20,000.00	96.25%	3.75%	$ 1,180,000.00	0.00%	100.00%
PW 05-10	Potable Water System Planning	$ 200,000.00	100.00%	0.00%	$ 624,000.00	100.00%	0.00%	$ 2,276,000.00	20.93%	79.07%
PW 05-11	Implement Ground Water Rule	$ 1,700,000.00	100.00%	0.00%	$ 1,000,000.00	100.00%	0.00%	$ -	N/A	N/A
PW 05-12	Brigade II (Ugum Lift) BPS Upgrade	$ 1,700,000.00	18.03%	81.97%	$ -	N/A	N/A	$ -	N/A	N/A
PW 05-13	Deep Well Rehabilitation	$ 548,000.00	100.00%	0.00%	$ 200,000.00	100.00%	0.00%	$ 250,000.00	0.00%	100.00%
PW 05-14	New Deep Wells at Dow n Hard	$ 638,252.85	76.11%	23.89%	$ 810,000.00	0.00%	100.00%	$ 1,190,000.00	0.00%	100.00%
PW 05-15	Rehabilitation of Asan Springs	$ 900,000.00	37.87%	62.13%	$ -	N/A	N/A	$ -	N/A	N/A
PW 05-16	Master Meters	$ 1,600,000.00	99.44%	0.56%	$ 784,000.00	99.88%	0.12%	$ 3,616,000.00	4.19%	95.81%
PW 09-01	Ugum Water Treatment Plant Intake	$ 700,000.00	99.47%	0.53%	$ 982,000.00	100.00%	0.00%	$ 18,000.00	0.00%	100.00%
PW 09-02	Water Wells	$ -	N/A	N/A	$ 4,200,000.00	46.77%	53.23%	$ 2,500,000.00	13.60%	86.40%
PW 09-03	Water Distribution System	$ 3,174,748.00	100.00%	0.00%	$ 11,151,000.00	81.25%	18.75%	$ 49,000.00	0.00%	100.00%
PW 09-04	Pressure Zone Realignment	$ -	N/A	N/A	$ 431,000.00	99.95%	0.05%	$ 1,141,000.00	0.00%	100.00%
PW 09-06	Central Water Distribution System 2005	$ 900,000.00	91.67%	8.33%	$ -	N/A	N/A	$ -	N/A	N/A
PW 09-08	Mechanical/Electrical Equipment	$ 1,200,000.00	100.00%	0.00%	$ 430,000.00	99.60%	0.40%	$ 100,000.00	0.00%	100.00%
PW 09-09	Water Reservoir Internal/External	$ 2,000,000.00	73.20%	24.53%	$ -	N/A	N/A	$ -	N/A	N/A
PW 09-10	Water Reservoir Internal/External	$ -	N/A	N/A	$ -	N/A	N/A	$ 800,000.00	0.00%	100.00%
PW 09-11	Water System Reservoirs 2005 Improvements	$ 1,050,000.00	100.00%	0.00%	$ 13,878,000.00	99.06%	0.94%	$ 28,350,000.00	9.32%	90.68%
PW 11-01	Distribution System Upgrades	$ 474,159.85	100.00%	0.00%	$ -	N/A	N/A	$ -	N/A	N/A
PW 11-02	Ugum Water Treatment Plant Reservoir	$ -	N/A	N/A	$ 90,000.00	0.00%	100.00%	$ -	N/A	N/A
PW 12-01	Water Audit Program & Water Loss Control Plan	$ 100,000.00	78.46%	21.54%	$ -	N/A	N/A	$ 1,000,000.00	0.00%	100.00%
PW 12-02	Production Plan / Reduce Navy Purchases	$ 100,000.00	100.00%	0.00%	$ -	N/A	N/A	$ -	N/A	N/A
PW 12-03	Hydraulic Assessment of Tanks	$ 500,000.00	100.00%	0.00%	$ -	N/A	N/A	$ -	N/A	N/A
PW 12-04	Agana Heights & Chaot Tanks	$ 4,700,000.00	100.00%	0.00%	$ 3,280,000.00	8.51%	91.49%	$ 1,220,000.00	0.00%	100.00%
PW 12-05	Tank Major Repair Yigo #1, Mangilao #2, Astumbo#1	$ 1,900,000.00	95.16%	4.84%	$ 11,605,000.00	99.99%	0.01%	$ 1,895,000.00	96.15%	3.85%
PW 12-06	Tank Replacement Piti & Hyundai	$ -	N/A	N/A	$ -	N/A	N/A	$ 7,409,830.00	0.00%	100.00%
PW 12-07	Assessment of Maloloj Elevated & Yigo Elevated	$ 200,000.00	100.00%	0.00%	$ 485,117.00	100.00%	0.00%	$ -	N/A	N/A
PW 12-08	Public Water System Asset Inventory/ Condition Assessment	$ 100,000.00	100.00%	0.00%	$ -	N/A	N/A	$ -	N/A	N/A
PW 12-09	Public Water System GIS & Mapping	$ 50,000.00	100.00%	0.00%	$ -	N/A	N/A	$ -	N/A	N/A
PW 14-01	Fire Hydrant Replacement Program	$ -	N/A	N/A	$ -	N/A	N/A	$ 2,000,000.00	0.00%	100.00%
		$ 41,903,304.66			$ 58,317,117.00			$ 64,647,830.00		

Wastewater

CIP #	CIP Description	2010 Bond Allotment	% encumbered	% available	2013 Bond Allotment	% encumbered	% available	2016 Bond Allotment	% encumbered	% available
WW 05-04	Wastew ater System Planning	$ 1,500,000.00	100.00%	0.00%	$ 651,000.00	100.00%	0.00%	$ 349,000.00	97.56%	2.44%
WW 05-05	Wastew ater Vehicles	$ 235,000.00	100.00%	0.00%	$ -	N/A	N/A	$ -	N/A	N/A
WW 05-07	NDWWTP - Chlorine Tanks	$ 250,000.00	100.00%	0.00%	$ -	N/A	N/A	$ -	N/A	N/A
WW 09-01	Lift station upgrades	$ -	N/A	N/A	$ 946,000.00	84.08%	0.06%	$ 2,404,000.00	12.21%	87.79%
WW 09-06	Wastew ater Collection System Repl/ Rehabilitation	$ 1,105,000.00	99.93%	0.07%	$ 780,000.00	97.55%	2.45%	$ 2,920,000.00	0.00%	100.00%
WW 09-08	Facilities Plan/Design for Baza Gardens WWTP	$ 1,250,000.00	100.00%	0.00%	$ -	N/A	N/A	$ -	N/A	N/A
WW 09-10	Facilities Plan/Design for Agat-Santa Rita WWTP	$ 899,630.00	100.00%	0.00%	$ -	N/A	N/A	$ -	N/A	N/A
WW 11-03	Baza Gardens STP Replacement	$ 1,301,947.00	24.27%	11.57%	$ 3,114,883.00	99.97%	0.03%	$ 29,400,170.00	99.31%	0.69%
WW 11-04	Facilities Plan/Design for Umatac-Merizo WWTP	$ 900,000.00	100.00%	0.00%	$ 473,000.00	100.00%	0.00%	$ 527,000.00	47.44%	52.56%
WW 11-08	Agat/Santa Rita STP Replacement	$ 2,218,000.00	99.91%	0.09%	$ 67,200,000.00	99.43%	0.57%	$ 3,000,000.00	14.91%	85.09%
WW 12-01	Northern District WWTP Primary Treatment Upgrade	$ 11,750,000.00	100.00%	0.00%	$ -	N/A	N/A	$ -	N/A	N/A
WW 12-02	Biosolids Management Plan	$ 200,000.00	100.00%	0.00%	$ -	N/A	N/A	$ -	N/A	N/A
WW 12-03	Agana WWTP Interim Measures	$ 11,500,000.00	100.00%	0.00%	$ 673,000.00	100.00%	0.00%	$ 827,000.00	0.00%	100.00%
WW 12-04	I&I SSES Southern	$ 800,000.00	100.00%	0.00%	$ -	N/A	N/A	$ -	N/A	N/A
WW 12-05	I&I SSES Central	$ 850,000.00	100.00%	0.00%	$ -	N/A	N/A	$ -	N/A	N/A
WW 12-06	I&I SSES Northern	$ -	N/A	N/A	$ -	N/A	N/A	$ -	N/A	N/A
WW 12 -07	Umatac Merizo Replacement	$ 250,000.00	100.00%	0.00%	$ -	N/A	N/A	$ 20,800,000.00	99.26%	0.74%
WW 12-08	Wastew ater System GIS & Mapping	$ -	N/A	N/A	$ -	N/A	N/A	$ -	N/A	N/A
WW 12-09	Wastew ater Facility Back Up Pow er	$ -	N/A	N/A	$ -	N/A	N/A	$ -	N/A	N/A
WW 12-10	Wastew ater System Asset Inventory	$ -	N/A	N/A	$ -	N/A	N/A	$ -	N/A	N/A
WW 17-01	Wastew ater Sew er System Expansion									
WW 17-02	Northern District WWTP Secondary Treatment Upgrade	$ 1,000,000.00	0.00%	100.00%						
		$ 36,009,577.00			$ 73,837,883.00			$ 60,227,170.00		

Electrical Engineering Support

CIP #	CIP Description	2010 Bond Allotment	% encumbered	% available	2013 Bond Allotment	% encumbered	% available	2016 Bond Allotment	% encumbered	% available
EE 05-02	SCADA Pilot Project	$ 61,950.00	100.00%	0.00%	$ -	N/A	N/A	$ -	N/A	N/A
EE 09-01	Wastew ater Pumping Station Electrical Upgrade	$ -	N/A	N/A	$ 620,000.00	16.13%	83.87%	$ 100,000.00	0.00%	100.00%
EE 09-02	Electrical Upgrade - Water Wells	$ 354,226.63	100.00%	0.00%	$ 1,500,000.00	100.00%	0.00%	$ 650,000.00	76.92%	23.08%
EE 09-03	Electrical Upgrade - Water Booster	$ -	N/A	N/A	$ 2,000.00	0.00%	100.00%	$ 323,000.00	0.00%	100.00%
EE 09-04	Electrical Upgrade - Water Booster	$ -	N/A	N/A	$ 200,000.00	0.49%	99.51%	$ -	N/A	N/A
EE 09-05	Electrical Upgrade - Other Water	$ -	N/A	N/A	$ 150,000.00	40.47%	59.53%	$ -	N/A	N/A
EE 09-06	SCADA Improvements - Phase I	$ 250,000.00	100.00%	0.00%	$ -	N/A	N/A	$ -	N/A	N/A
EE 09-07	SCADA Improvements - Phase 2	$ 1,056,986.00	100.00%	0.00%	$ -	N/A	N/A	$ -	N/A	N/A
EE 09-08	SCADA Improvements - Phase 3	$ 24,955.71	100.00%	0.00%	$ 923,000.00	99.93%	0.07%	$ 1,177,000.00	36.76%	63.24%
EE 09-09	SCADA Improvements - Phase 4	$ -	N/A	N/A	$ -	N/A	N/A	$ 6,500,000.00	0.00%	100.00%
		$ 1,748,118.34			$ 3,395,000.00			$ 8,750,000.00		

Miscellaneous Engineering Support

CIP #	CIP Description	2010 Bond Allotment	% encumbered	% available	2013 Bond Allotment	% encumbered	% available	2016 Bond Allotment	% encumbered	% available
MC 05-01	Laboratory Modernization	$ -	N/A	N/A	$ 1,173,000.00	100.00%	0.00%	$ 1,127,000.00	100.00%	0.00%
MC 05-02	Land Survey	$ 500,000.00	99.94%	0.06%	$ 2,000.00	0.00%	100.00%	$ 1,998,000.00	63.09%	36.91%
MC 09-01	General Plant Improvements	$ 7,241,000.00	99.58%	0.42%	$ 2,600,000.00	99.48%	0.52%	$ 2,769,460.00	53.31%	46.69%
MC 15-01	Information Technology Intergration Improvements							$ 500,000.00	40.70%	59.30%
		$ 7,741,000.00			$ 3,775,000.00			$ 6,394,460.00		

	2010 Bond Allotment	2013 Bond Allotment	2016 Bond Allotment
CIP Water	$ 41,903,304.66	$ 58,317,117.00	$ 64,647,830.00
CIP Wastewater	$ 36,009,577.00	$ 73,837,883.00	$ 60,227,170.00
CIP Electrical	$ 1,748,118.34	$ 3,395,000.00	$ 8,750,000.00
CIP Miscellaneous	$ 7,741,000.00	$ 3,775,000.00	$ 6,394,460.00
	$ 87,402,000.00	$ 139,325,000.00	$ 140,019,460.00

Bond Fund	Construction Fund Amount ($M)	Estimated # of months fund available for use		Total Funds encumbered to date ($M)	% of fund used	Rate of Spending: ($M) per year
2005	$82.930	82	*	$82.930	100.00%	12.14
2010	$87.402	82	**	$83.354	95.37%	12.20
2013	$139.325	45	**	$129.536	92.97%	34.54
2015	$140.019	15		$61.728	44.09%	49.38
	* - End date November 2013 via CCU Resolution 06-FY2014					
	** - Includes month of October 2017					

B. Projects Procurement

Percentage Key:

100%	Approved by GM
99%	Signature required from either Accounting/Legal/GM
98%	Processing engineering service or construction contract (with legal)
95%	Request for CCU approval (GM/engineering)
90%	A/E fee negotiation or contractor bid evaluation (engineering)
80%	Selected A/E or Conducted bid opening (engineering)
70%	Advertised RFP/IFB (engineering)
60%	RFP/IFB Package under legal review
50%	RFP/IFB Package completed (engineering)
Less than 50%	Project Scope of work development in progress

- Red text anywhere indicates a change from the last report.

BOX KEY FOR PROCUREMENT:

(Type of Procurement) (Relevant CIP NO. or Funding Source)	**(Project Title)**	
(Percentage complete for procurement)	**Activities/Notes:** (see percentage key above)	**Consultant** (listed when selected)
Project Description	Summary of project description	

BID PACKAGE PW 09-02	**New Well Construction**	
<50% Complete	**Activities/Notes:** GWA engineering continuing discussion with Dept. of Agriculture and lessee on options of acquisition of property for well site at AG-10. Internal GWA discussions underway for survey and appraisal services.	
Project Description:	The project is to construct three new production wells for GWA as well as installation of a water main to connect the new production wells to the Ysengsong Reservoirs.	

RFP PW 09-02	**New Well Construction (Construction Management)**	
<50% Complete	**Activities/Notes:** SOW being developed	
Project Description:	The work performed under this project procurement shall consist of Construction Management and Inspection Services for the construction of up to three (3) new production wells for GWA. GWA plans to increase source water production to improve system redundancy that allows for operating the water production wells more effectively. The overall goal of the Construction Manager (CM) is to manage the entire construction process so that the project can be delivered efficiently and professionally.	

RFP PW 12-04, PW 12-06 AND PW 09-11	**Central Tank Phase I (Chaot #2, Tumon #2, Hyundai) Construction Management**	
98% Complete	**Activities/Notes:** CM agreement submitted to Finance on November 1, 2017..	
Project Description:	The work performed under this project procurement shall consist of Construction Management and Inspection Services for the construction of three water reservoirs; 0.5MG Chaot #2, 1MG Tumon #2 (Nissan) and 1MG Hyundai. The overall goal of the Construction Manager (CM) is to manage the entire construction process so that the project can be delivered efficiently and professionally.	

BID PACKAGE PW 12-04, PW 12-06 AND PW 09-11	**Central Tank Phase I (Chaot #2, Tumon #2, Hyundai) Construction**	
70% Complete	**Activities/Notes:** Bids were opened on November 1, 2017. Notice of Award issued on November 14, 2017.	
Project Description:	The work performed under this project procurement shall consist of Construction of three water reservoirs; 0.5MG Chaot #2, 1MG Tumon #2 (Nissan) and 1MG Hyundai. Some piping work off site from the reservoir is also required to ensure the reservoirs function optimally.	

BID PACKAGE PW 14-01	**Fire Hydrant Replacement Phase I**	
<50% Complete	**Activities/Notes:** Bid package being prepared.	
Project Description:	The work performed under this project consist of replacing all know dry barrel fire hydrants down to the lateral as well as any defective wet barrel fire hydrant. Where necessary the gate valve for the fire hydrant may also be replaced.	

RFP WW 09-01	**Yigo SPS Flood Protection and Rehabilitation Design**	
50% Complete	**Activities/Notes:** RFP package approved by the legal counsel. Waiting for PO approval.	
Project Description:	The work performed under this project procurement shall consist of a design services to implement storm water mitigation measures to protect the facility during extreme weather as well as rehabilitate the facility to provide better redundancy and operate efficiently.	

RFP PW 09-11	**Northern and Southern Tank Phase I (Santa Rosa, Sinifa, Santa Rita) Construction Management**	
90% Complete	**Activities/Notes:** GWA negotiating scope and fee with highest rank firm.	
Project Description:	The work performed under this project procurement shall consist of Construction Management and Inspection Services for the construction of three water reservoirs; 1MG Santa Rosa, 1MG Sinifa and 1MG Santa Rita. The overall goal of the Construction Manager (CM) is to manage the entire construction process so that the project can be delivered efficiently and professionally.	

BOX KEY FOR PROJECT:

(Type of Project) (Relevant CIP NO.)	**(Project Title)** **(Contractor or consultant)**	**Start Date:** (month and year)
(Percentage complete for project)	**Activities/Notes:** (brief description of activity)	**Completion Date:** (month and year)
(Court Order Paragraph No.)	(Project type)	
Project Description	Project Description Narrative	

C. CIP Water Section

INSPECTION CIP PW 05-02	**Inspection & Maintenance Repairs to GWA Island-Wide Steel Water Tank Reservoirs Phase 2 (DCA)**	**Start Date:** April 2010
80% Complete	**Activities/Notes:** Still waiting for Quotes for tank bypass/take down for Umatac #1 and Pigua. Supplier for Agat/Umatac tank by-pass ordered and installed wrong controller, sill requires contractor to rectify. Testing occurred for Malojloj tank take down, Ops to shut valve, another by-pass is needed. Working on plan for Kaiser, Windward and Agat #1 take down.	**Completion Date:** Anticipate December 2021
CO 38C	Engineering inspection services	
Project Description:	The Court Order requires GWA to inspect all active and in some cases inactive water reservoirs. The inspection results will allow GWA to determine if a reservoir requires repair or replacement.	

DESIGN CIP PW 05-12	**Brigade II BPS Upgrade** **(EM Chen)**	**Start Date:** April 2012
100% complete (Basis of Design) 0% (Design)	**Activities/Notes:** Property issue resolved. Designer is working on 30% Design.	**Completion Date:** Due to property acquisition issues GWA anticipate May 2018
N/A	Engineering design services	
Project Description:	The design project is intended to assess system water supply feed from the north as well as Ugum WTP and the water demands downstream from the Brigade BPS so as to reconfigure the piping into the BPS and resize the pumps to me system head requirements.	

DESIGN / BUILD CIP PW 12-04	**Reservoirs 2005 Improvements,** **Chaot & Agana Heights Reservoirs** **(GSI Construction)**	**Start Date:** April 2013
99% Complete	**Activities/Notes:** Warranty work complete at both reservoirs. Remaining work is deep well flow meter replacement.	**Completion Date:** Due to delays from contractor new anticipate completion is

		November 2017
CO 38B	Design/Construction services	
Project Description:	The project is to replace the existing 1.0MG steel reservoirs with 0.5MG concrete tanks at the Chaot and Agana Heights reservoir locations. The contractor shall also link certain A-series wells to the reservoir via SCADA.	

DESIGN CIP PW 12-05	**Yigo and Astumbo 2MG Tank Design Project (Lyons)**	**Start Date:** September 2013
99% complete	**Activities/Notes:** Design firm to provide RFI support during the construction.	**Completion Date:** January 2016
CO 9 (b)(4)	Engineering design services	
Project Description:	Develop the construction documents for two (2) 2.0 million-gallon (MG) nominal capacity concrete reservoirs in the Yigo service zones and one (1) 2.0 MG reservoir in the Astumbo service area. The design services will consist of preparation of plans, specifications, and estimates (PS&E), including Basis of Design, design calculations, construction schedule, topographical survey, property mapping, geotechnical engineering, cultural resource inventory and evaluation of historic resources, hazardous materials survey, construction documents, design drawings in Auto CAD (latest version), and relevant permits. Other services will include construction bid support service, meetings, and response to request for interpretation/information during construction. The consultant is required to incorporate and modify existing GWA concrete reservoir specifications to meet the project objective.	

DESIGN PW 09-11	**Northern and Southern Guam Reservoir Design** **(TG Engineers)**	**Start Date:** May 2015
60% Complete	**Activities/Notes:** Santa Rosa – 100% design in hand. Santa Rita – 100% design in hand. Inarajan – Land procurement second site related to new BPS's still on-going. Sinifa – 100% design in hand. Ugum – GWA still in discussion with re-evaluation and discussion with property owner of alternative property on-going.	**Completion Date:** Update: Due to property acquisitions issues for Piti and Tumon #1, design completion 6 months after property issue resolved.
CO 29 (b)(4)	Engineering design services	
Project Description:	The design services will consist of preparation of plans, specifications, and estimates (PS&E), which includes Basis of Design, design calculations, hydraulic modeling (EPANET), computational fluid dynamic modeling (CFD), construction schedule, topographical survey, property research, property mapping, geotechnical engineering, cultural resource inventory and evaluation of historic resources, hazardous materials survey, construction documents, design drawings in Auto CAD, relevant permit, construction bid support service, and response to request for interpretation/information during construction. The tank locations are Ugum, Santa Rita, Santa Rosa, Inarajan and Sinifa.	

DESIGN PW 12-04	**Central Guam Reservoirs Design (GHD Inc.)**	**Start Date:** May 2015
65% Complete	**Activities/Notes:** Chaot #2 –Bid award pending CCU resolution. Tumon #2 – Bid award pending CCU resolution. Hyundai - Bid award pending CCU resolution. Piti – GWA still evaluating alternative solutions to storage needs in Piti area. Manenggon – Geotech work complete. 60% design near complete. Tumon #1 – GWA working on land issues.	**Completion Date:** Update: Due to property acquisitions issues for Piti and Tumon #1, design completion 6 months after property issue resolved.
CO 29 (b)(4)	Engineering design services	
Project Description:	The design services will consist of preparation of plans, specifications, and estimates (PS&E), which includes Basis of Design, design calculations, hydraulic modeling (EPANET), computational fluid dynamic modeling (CFD), construction schedule, topographical survey, property research, property mapping, geotechnical engineering, cultural resource inventory and evaluation of historic resources, hazardous materials survey, construction documents, design drawings in Auto CAD, relevant permit, construction bid support service, and response to request for interpretation/information during construction The tank locations are Hyundai, Pulantat, Chaot #2, Tumon #2, Piti and Tumon #1.	

CONSTRUCTION PW 09-03	**Line Replacement Phase IV (Giant Construction)**	**Start Date:** 02/14/16
60% Complete	**Activities/Notes:** Contractor working in Santa Rita (Santa Rosa Subd.) and still working on ROW/easement issue along Famha Rd. Making reconnections/finalizing in Agafa Gumas, Chalan Agoan and Perez Gardens, Machanao.	**Completion Date:** 02/06/18
	Construction Services	
Project Description:	The project is intended for a contractor to replace existing water lines that have been found by operations to be leaking and/or are causing service delivery to less than what GWA is required to provide. The project will replace water mains and ten known locations throughout the island and there is a component within the bid where line replacement work for unknown locations is accounted for.	

DESIGN PW 05-15	**Asan Spring Rehabilitation Design (HDR)**	**Start Date:** August 24, 2016
10% Complete	**Activities/Notes:** GWA receive approval from Parks Service start design field investigation work. Design Investigation is proceeding.	**Completion Date:** Due to delays from the Park Services related to property access the anticipated completion of the design is May 2018.
	Engineering design services	
Project Description:	- Perform site visits and condition assessment for site conditions to	

	determine demolition and rehabilitation requirement, process equipment condition, structural condition, and electrical system. Site condition assessment shall include all disciplines to execute the project. - Review and validate the current property boundary information to confirm the available space for the project development. - Perform an environmental impact study and prepare all required permits as needed. - Perform an archeological and historical resources study to identify potential impact to the project, prepare all required permits as needed. - Coordinate with Guam Historic Resources Division State Historic Preservation Office (SHPO) on historical resources study. Prepare all necessary reports and documents as required by SHPO. - Coordinate with Guam Department of Agriculture, Division of Aquatic and Wildlife Resources (DAWR) on vegetation clearance. Prepare all necessary reports and documents required by DAWR. - Identify the existing and projected service area, period of design. - Identify and recommend conceptual water treatment system. - Perform a Class 4 engineering cost estimate according to the American Association of Cost Engineers (AACE) International Cost Estimate Classification System for construction fee. Cost must include all disciplines, permit, construction and administration that are necessary to execute the project. All costs will be in current dollars and escalated to the estimated midpoint of construction.

CONSTRUCTION PW 09-11, PW 12-05	**Yigo/Astumbo Tank Construction (Pernix)**	**Start Date:** 12/1/16
40% Complete	**Activities/Notes:** Yigo #1 core wall #1 through #6 complete. Yigo #2 preparing main foundation. Astumbo #1 preparing main foundation.	**Completion Date:** 02/06/18
	Construction Services	
Project Description:	This project will involve construction of two (2) 2MG concrete tanks and Booster Pump Station at the Yigo site and a one (1) 2MG concrete tank at the Astumbo site. Work will involve new pipe line, valves, electrical controls, pumps and motors, site drainage, paving, generator for the BPS, SCADA, etc.	

CONSTRUCTION MANAGEMENT PW 09-11, PW 12-05	**Yigo/Astumbo Tank Construction Management (GHD)**	**Start Date:** December 2016
35% complete	**Activities/Notes:** Processing submittals and on-site inspection	**Completion Date:** February 2018
N/A	Construction Management services	
Project Description:	The work performed under this project procurement shall consist of Construction Management and Inspection Services for the demolition of existing steel elevate and ground tanks as well as the construction of the 2MG concrete tanks at the Yigo tank location and Astumbo tank location. The overall goal of the Construction Manager (CM) is to manage the entire construction process so that the project can be	

	delivered efficiently and professionally.

D. CIP Wastewater Section

DESIGN WW 11-08	**Agat-Santa Rita WWTP Replacement (DCA)**	**Start Date:** October 2014
99% Complete	**Activities/Notes:** Design complete. Services during construction on-going through Nov 2017. GWA working on contract amendment to extend post design services until construction completion in April 2018.	**Completion Date:** Nov. 2015 (design); April 2018 (construction)
CO 11	Engineering design services	
Project Description:	The engineering design consultant is required to design a new wastewater treatment facility that will meet secondary treatment limits. The new facilities will incorporate provisions for redundancy to improve reliability and facilitate operations and maintenance activities at the existing facility	

INSPECTION 2010 BOND WW 12-05 2010 BOND WW 05-04 2013 BOND WW 05-04	**SSES Central Sewer System (HDR)**	**Start Date:** November 2014
98% Complete	**Activities/Notes:** Draft final report submitted. Edits to final report yet to be completed.	**Completion Date:** November 2017
CO 8 (c)	Engineering Inspection Services	
Project Description:	Work specifically required includes data analysis, development of hydraulic modeling, and development of an SSES fieldwork plan, manhole inspections, smoke testing, CCTV inspection and preparation of a Project Report.	

CONSTRUCTION MANAGEMENT WW 11-08	**Agat Santa Rita WWTP CM (GHD)**	**Start Date:** November 2014
100% (PH 1) 100% Complete (PH 2, Part 1) 80% Complete (PH 2, Part B)	**Activities/Notes:** Typical CM inspections on-going. Change order required to continue services through April 2018.	**Completion Date:** December 2017, projected through April 2018
CO 11	Construction Management services	
Project Description:	The work performed under this project procurement shall consist of Construction Management and Inspection Services for the construction of the Agat Santa Rita WWTP Phase II project. GWA plans to replace the existing wastewater treatment plant for a new plant that can meets permit limits. The overall goal of the Construction Manager (CM) is to manage the entire construction process so that the project can be delivered efficiently and professionally.	

CONSTRUCTION WW 11-08	**Agat Santa Rita WWTP Phase II (Sumitomo Construction)**	**Start Date:** January 2016
Part 1 of Phase II- 100% Complete Part 2 of Phase II- 25% complete	**Activities/Notes:** Due to heavy rains in September/October work slow. Contractor still working on second ditch, second clarifier, headworks, aerobic digester, equalization basin, admin and maintenance buildings.	**Completion Date:** Phase A: 03/15/17 Phase B: 12/31/17 will not be met, April 2018 projected
CO 11	Construction services	
Project Description:	This project includes construction of the head works, clarifier, oxidation ditches and UV disinfection and administration facilities. Rehabilitation work at the existing WWTP will also occur to ensure the wastewater can be pumped to the new plant. The new plant will also tie into the Tipalao SPS.	

DESIGN WW 09-08, WW11-03	**Baza Gardens Cross Island Sewer Design (DCA)**	**Start Date:** 02/05/16
95% Complete	**Activities/Notes:** DCA providing engineering services during construction. Change Order required to extend services through April 2018.	**Completion Date:** 04/30/18
CO 11	Engineering design services	
Project Description:	The intent of this project for an engineering firm to prepare design drawings and specification for a sewer conveyance from the Baza Garden WWTP to the new Agat Santa-Rite WWTP. The design will take into account growth in the Baza Gardens/Talofofo areas as wells as new connection along the Route 17 route.	

DESIGN WW 11-04	**Toguan River Sample Collection for Umatac WWTP (EA Engineering and Science)**	**Start Date:** 03/16/16
100% Complete	**Activities/Notes:** Final Report is on hand.	**Completion Date:** Anticipate completion 09/30/17
	Engineering services	
Project Description:	The scientific/engineering firm will perform surface water sampling, wastewater treatment plant discharge monitoring and site observation at Toguan River and Umatac-Merizo Wastewater Treatment Plant (UMWWTP). The goal of this sampling and monitoring effort is to better understand the characteristics of the effluent and the receiving water, which will be used to determine the necessary plant upgrades	

DESIGN WW 09-06	**Bayside SPS Improvements Design (EMPSCO)**	**Start Date:** July 29, 2016
99% Complete	**Activities/Notes:** Design consultant continuing to work on Army	**Completion Date:** Due to issue with

	Corp of Engineers permit. GWA received 100% design and under review.	ACOE anticipate December 2017 for design only.
	Engineering design services	
Project Description:	The intent of this project for an engineering firm to prepare design drawings and specification to upgrade the Bayside Sewer Pump Station given the facility is in major disrepair and the adjacent river is eroding away the access road to the facility which is causing maintenance challenges.	

CONSTRUCTION WW 09-08, WW 11-03	**Baza Gardens Cross Island Road Sewer Conveyance Construction Phase I (BME and Sons)**	**Start Date:** October 2016
21% Complete	**Activities/Notes:** Excavation for wet wall complete, flowable fill concrete poured for base. Continue force main and gravity sewer installation along Route 17 and beginning gravity sewer line on Route 5. Continue manhole and gravity line installation along Route 17.	**Completion Date:** Phase I: 03/01/18
	Construction services	
Project Description:	The work performed under this project consist of construction of 14,714' of gravity main, 2,767' of force main and sewer pump station #3 next to the Aplacho River in Santa Rita.	

CONSTRUCTION MANAGEMENT WW 09-08 WW 11-03	**Baza Gardens Cross Island Road Sewer Conveyance (Construction Management) (SSFM)**	**Start Date:** December 5, 2016
51% Complete	**Activities/Notes:** Field inspection, project coordination and invoice review on-gong.	**Completion Date:** April 2018
	Construction Management services	
Project Description:	The work performed under this project shall consist of Construction Management and Inspection Services for the construction of gravity main, force mains and sewer pump station as well as an equalization basin at the Baza Garden WWTP.	

CONSTRUCTION WW 09-08, WW 11-03	**Baza Gardens Cross Island Road Sewer Conveyance Construction Phase II (BME and Sons)**	**Start Date:** March 2017
35% Complete	**Activities/Notes:** Excavating wet well at new SPS. Continue force main installation along Route 17.	**Completion Date:** Phase II: 03/16/18
	Construction services	
Project Description:	The work performed under this project consist of construction of 1,767' of gravity main, 14,400' of force mains and sewer pump station #2 along Route 17.	

CONSTRUCTION WW 09-08,	**Baza Gardens Cross Island Road Sewer Conveyance Construction Phase III**	**Start Date:** June 2017

WW 11-03	**(Sumitomo Construction)**	
5% Complete	**Activities/Notes:** Building permit obtained October 24, 2017. Clearing of construction site and installation of field offices complete. Starting pipeline construction on Route 17.	**Completion Date:** Phase III: 03/16/18
	Construction services	
Project Description:	The work performed under this project consist of construction of, but not limited to, 10,481' of force mains and sewer pump station at existing WWTP, equalization tanks, stand-by generator, improved headworks, grit removal system, and associated equipment.	

CONSTRUCTION WW 11-04	**Umatac Merizo WWTP Design Build Improvements Project (CoreTech)**	**Start Date:** June 2017
5% Complete	**Activities/Notes:** Initial design work on-going. Coordination with operation for field survey on-going.	**Completion Date:** December 31, 2018
	Construction services	
Project Description:	The project is intended to improve the aeration basin, construct a new sewer pump station, regrade the overland field, construct a new effluent storage tank and disinfection facility. The overland percolation basin will undergo regarding work to ensure appropriate distribution of effluent through the whole basin.	

CONSTRUCTION MANAGEMENT WW 11-04	**Umatac Merizo WWTP Design Build Improvements Project (SSFM Inc)**	**Start Date:** September 7, 2017
5%	**Activities/Notes:** Establishing communication links with project management team and contractor.	**Completion Date:** December 31, 2018
	Construction Management services	
Project Description:	The work performed under this project procurement shall consist of Construction Management and Inspection Services for the improvements works at the aeration basin, new sewer pump station, overland field improvements, effluent storage tank. The overall goal of the Construction Manager (CM) is to manage the entire construction process so that the project can be delivered efficiently and professionally.	

DESIGN OEA GRANT	**Design Services for the Upgrade of the Northern District WWTP (DCA)**	**Start Date:** August 8, 2017
5% Complete	**Activities/Notes:** Preliminary survey work on-going.	**Completion Date:** December 2018.
	Engineering design services	
Project Description:	The work performed under this project procurement shall consist of engineering design services for the conversion of the existing WWTP to secondary treatment. The design will require the existing plant to stay operational and the designer will use the new 17 acres GWA acquired to place new headworks, oxidation ditches and UV disinfection systems.	

E. CIP Engineering Support

DESIGN EE 09-08	**SCADA System for Water and Wastewater Facilities Phase A-1 (AECOM)**	**Start Date:** June 2015
99% complete	**Activities/Notes:** Final review scheduled on Nov 22. 100% Final Submittals on or before November 30. IFB advertisement by early December.	**Completion Date:** November 2017 - Design January 2019 - (Bid and Construction Support)
N/A	Engineering design services	
Project Description:	The A/E firm will design an integrated, robust and secure Supervisory Control and Data Acquisition (SCADA) system for GWA's water and wastewater systems, and to provide support services during bid and construction. The 22 sites will consist of a combination of water facilities such as production wells, reservoirs, booster pump station and wastewater sites include sewer treatment plants and sewer pump stations. Executed by approved change orders, number of sites in original design scope has changed from 22 sites to 19 sites and design of High Water Alarm for 20 critical sewer pump stations has been added. Scope also includes bid and construction support of the design-build project of GPWA SCADA EMS project.	

DESIGN MC 05-01	**New GWA Lab Design Project (Laguana Architects)**	**Start Date:** June 2015
100% complete	**Activities/Notes:** Design complete however services continue into construction phase.	**Completion Date:** February 2016
N/A	Engineering design services	
Project Description:	The design firm is required to review all laboratory activities GWA's lab staff conduct for water and wastewater analysis after which they are to develop design drawing and specification to be bid out for construction. The design firm shall also take into account power and water needs to ensure the facility is self-sufficient.	

CONSTRUCTION MC 05-01	**New GWA Lab Construction (Mega United Construction)**	**Start Date:** NTP issued August 18, 2016
96% Complete	**Activities/Notes:** Change Order no. 9 on time extension is approved.	**Completion Date:** November 25, 2017
	Construction services	
Project Description:	The project will involve construction of a new building at the GWA Upper Tumon compound to house the laboratory section. The facility will include office, laboratory and storage space for the lab employees. The facility will also include a back-up generator.	

F. GIS Section

MAPPING MC 05-02	**Island Wide Survey-** **(Duenas, Camacho & Ass.)**	**Start Date:** December 2007
91% complete	**Activities/Notes:** Surveyor near complete with Task #12 which involves DW M-08. Task #13 was developed to address the registration maps for Barrigada tanks. Task #14 encumber complete contract value with goal to complete all work and spending by December 2017.	**Completion Date:** New anticipated complete is December 2017
	Survey services	
Project Description:	The contracted land surveyor is required to conduct title research, property valuation and mapping of property boundaries where GWA facilities are located but the lot is not registered under GWA's name.	

MAPPING MC 05-02	**Island Wide Survey PH II -** **(Duenas, Camacho & Ass.)**	**Start Date:** August 30, 2017
5% complete	**Activities/Notes:** Surveyor to send first set of preliminary property maps to GWA Land Agent III for review 11/17/17.	**Completion Date:** December 2018
	Survey services	
Project Description:	The work performed under this project procurement shall consist of a professional land surveyor conducting field work to mark corners of existing government properties as a means of severing out portions of the larger property to be deeded to GWA. Surveyor shall also prepare all necessary maps and documents for recording at DLM	

G. Permits Section

PERMITS
MONTHLY REPORT 2017

	2017									
Description	Jan	Feb	Mar	Apr	May	Jun/Jul	Aug	Sept	Oct	Nov
Building Permit	27	11	13	17	23	27	27	27	12	7
Occupancy Permit	64	10	17	5	25	28	28	30	13	9
New Installation	11	5	10	15	15	33	33	25	17	3
Sewer Application	10	5	4	3	4	3	3	7	5	18
Sewer Inspection	6	0	1	0	1	0	0	1	1	1
Private Utility Acceptance	0	0	0	0	0	0	0	0	0	0
Relocation of Water Meter	1	0	1	0	0	0	0	0	0	0
Tapping-Water	4	2	2	0	3	8	8	0	0	0
Tapping-Sewer	3	2	2	1	3	5	5	0	0	0
Clearance-Water	15	13	15	2	20	26	26	11	1	2
Clearance-Sewer	15	13	15	2	20	26	26	11	0	2
Highway Encroachment	59	3	27	6	20	12	12	25	4	19
Verification of Utilities	12	15	2	5	1	8	8	7	0	1
Fire Flow Test	1	0	0	0	0	3	3	1	3	0
Schedule Water Outage	1	0	0	0	0	0	0	0	0	0

H. SRF Project Status Report

- Projects listed below that are noted to be in the procurement phase will follow the "Percentage Key" below.

Percentage Key:

100%	Approved by GM
99%	Signature required from either Accounting/Legal/GM
98%	Processing engineering service or construction contract (with legal)
95%	Request for CCU approval (GM/engineering)
90%	A/E fee negotiation or contractor bid evaluation (engineering)
80%	Selected A/E or Conducted bid opening (engineering)
70%	Advertised RFP/IFB (engineering)
60%	RFP/IFB Package under legal review
50%	RFP/IFB Package completed (engineering)
Less than 50%	Project Scope of work development in progress

- Red text anywhere indicates a change from the last report.
- Cells highlighted in green indicate contract amount certified and project active.

	Project	Project Description	Project Manager	Grant Expiration Date	Phase		Start Date (NTP Issued)	Anticipated Completion Date	Contract Amount (+) change orders	Contractor	Status as of 11/15/17
Grant Number M96902611-5											
1	Northern District SSES & I/I Study	Sanitary sewer system evaluation study (SSES) and inflow and infiltration (I/I) study designed to evaluate high I/I areas within the Northern sewer basin with the goal of identifying projects to eliminate them.	J. Davis	9/30/2017	Design	1	10/10/2014	2/29/2016	$ 792,980	Stanley	100% Complete.
					Construction				*The project does not involve construction.*		
					Const. Mgmt						
2	Southern SSES Rehabilitation (Agat-Santa Rita-Umatac-Merizo)	Rehabilitation of segments of sewer lines in Umatac, Merizo, Agat, and Santa Rita where the Sanitary Sewer Evaluation Study recommends rehabilitation.	Brown & Caldwell	9/30/2017	Design				*The design was previously completed under bond funding.*		
					Construction	1	10/30/2015	2/28/2017	$ 1,395,471	Reliable Builders	· On 8/28, issued contractor letter from GM requiring completion of CIPP repairs by 10/31. Holding final invoice. Deadline has passed, but contractor is still working to complete repairs. · RBI had Todo Mauleg conduct CCTV on 10/21. - Now evaluating CCTV footage.
					Const. Mgmt	1	11/10/2015	3/30/2017	$ 211,722	TG Engineers	· Awaiting CM release of claims and final invoice to close the CM contract.
3A	Asan-Adelup-Hagatna RT1 Sewer Line Rehabilitation and Replacement	Rehabilitation of sewer lines from the War in the Pacific Asan Park to the Governor's Complex in Adelup. This line is asbestos concrete that is dilapidated and some areas have disintegrated crowns.	Brown & Caldwell	9/30/2017	Design	2	12/11/2015	3/30/2017 for Design requirements	$ 1,702,903	HDR	See Project 3B below.
4A	RT2 Agat War in the Pacific Sewer Line Rehabilitation and Replacement	Rehabilitation of a large segment of sewer line fronting the War in the Pacific Park in Agat that has collapsed.	Brown & Caldwell	9/30/2017	Design	3	11/17/2015	3/30/2017 for Design requirements	$ 316,681	SSFM	SSFM providing services during bidding process as well as construction phase.
5	Brown & Caldwell Project Management	Brown & Caldwell to provide program management services and support.	T. Cruz	9/30/2017	Design	4	3/24/2015	2/28/2019	$ 1,089,850	B&C	Project underway.
					Construction				*The project does not involve construction.*		
					Const. Mgmt						
6	Wastewater, Water and Source Water System Master Plan Upgrade	Update of the existing water and wastewater master plan while factoring in military integration and secondary treatment plant options.	Brown & Caldwell	9/30/2017	Design	5	7/6/2015	11/30/2017 (revised due to financial workshop)	$ 2,623,300	B&C	• Meetings being held in New York to finalize financial scenarios to evaluate and include in the report. • Updating all volumes to incorporate review comments.
					Construction				*The project does not involve construction.*		
					Const. Mgmt						

7A	Groundwater Wells Rehabilitation (F-3, A-2, A-7, A-12, D-5)	Rehabilitation of existing deep wells and/or in cases where pipe column needs replacing, wells will be re-drilled. The deep wells to be rehabilitated are A-2, A-7, A-12, D-5, & F-3.	Brown & Caldwell	9/30/2017	Design	6	5/27/2016	10/31/2017 (for design only)	$ 1,758,247	AECOM	• 100% design received on 11/7. 100% design review meeting scheduled for 11/22. • A-2: Design rate of 250 gpm (35 ft drawdown). Proceeding toward Final design. • A-12: Design rate of 200 gpm (46 ft drawdown). Proceeding toward Final design. • D-5: Design rate of 126 gpm (38 ft drawdown). Proceeding toward Final design. • F-3: Design rate of 200 gpm (1 ft drawdown). Proceeding toward Final design.
8A	Tumon Sewer Hot Spots	Investigation, evaluation, and repair of possible solutions, to long plaguing issues where sewer overflows are known to	Brown & Caldwell	9/30/2017	Design	7	6/24/2016	10/30/2017 for design only	$ 572,089	TG Engineers	• TGE draft 100% design under review.
9	Critical Sewer Pump Stations (7 stations)	Rehabilitation of various components of 7 pump stations that were identified to by the CDM design team: Macheche, Ypaopao, Astumbo 1, Fujita, Santa Ana, Southern Link, and Route 1.	CDM	9/30/2017	Design				*The design will be incorporated into the design/build package.*		
			J. Davis		Design/Build	1	8/8/2016	12/30/2017	$ 1,505,760	ProPacific	Upcoming change orders 1.Ypaopao, Fujita and Route 16 PS – Rehabilitate Roof Ventilation Curbs $ 12,500.00 2.Southern Links PS Air conditioned VFD enclosure No additional cost 3.Fujita PS Request for additional painting (Additive) and Macheche PS- Wet well coating below water surface eliminated. (Deductive)- under review. 4. Route 16 PS – Waiting for contractor to submit plan of action (methodology) for the wet well evaluation. 5. Southern Link PS – Four (4) 12" Flow meter, cannot be installed, use it for other work.
					Const. Mgmt	2	9/9/2016	12/30/2017	$ 299,519.00	Stanley	CM work ongoing. GWA working on Change Order proposal to extend contract to match constructions activities.
10	Sewer Pump Station High Water Alarm Systems (20 stations)	This project will design and installed telemetry equipment/SCADA type alarms that will alert when pump station failure occurs.	C. Yam	9/30/2017	Design				*The design will be incorporated into the design/build package.*		
					Design	8	8/12/2016	02/30/2017	$ 183,171	AECOM	Design complete
					Construction	5	4/5/2017	9/30/2017	$ 1,444,888	Pacific Rim	Project complete
					Const. Mgmt	3	02/30/2017	9/30/2017	$ 145,186	EMSPCO	CM work complete
11	Sewer Pump Station Backup Power (2 stations)	Construction of the housing and installation of new generators for the Casimero pump station (Mongmong) and the Namo pump station (Yona central).	B. Cruz	9/30/2017	Design				*The design will be incorporated into the design/build package.*		
					Design/Build	2	6/24/2016	9/30/2017	$ 362,693	ProPacific	Substantial completion letter submitted to contractor however issue regarding contractor not conforming to Davis Bacon Act needs to be resolved.
					Const. Mgmt				*B. Cruz is the construction manager.*		

12A	RT4 Relief Sewer Line Rehabilitation and Replacement	Rehabilitation of sewer lines that are located from Agana McDonalds to Marine Drive that have been known to overflow due to structural issues.	Brown & Caldwell	9/30/2017	Design	9	3/1/2016	4/22/2017	$ 794,000	AECOM	· AECOM to provided services during bidding process.
13	Groundwater Wells Rehabilitation (D-3, D-17, D-18, D-22, M-9)	Rehabilitation of existing deep wells and/or in cases where pipe column needs replacing will be re-drilled. D-3, D-17, D-18, D-22, and M-9.	Brown & Caldwell	9/30/2017	Design				*The design was previously completed under bond funding.*		
					Construction	2	8/19/2016	10/31/2017	$ 6,149,647	Pacific Rim	• Main issues - GPA and PRC working on resolving 5 JAW vs 7 JAW issue for connect to island power. - D-03 pump tests continue; PRC/APDI trying to solve low gpm/high drawdown issue. - Final PLC programing/training to start after Thanksgiving. - General construction nearing completion. Pump test D-17/18/22 completed. Just need final Electrical/PLC/Controls check-out and water quality analysis results. D-17 water quality result received this week; under review.
					Const. Mgmt	4	3/22/2016	10/31/2017	$ 798,503	EA	• CO#3 for CM submitted (~$119, 381) to GWA. Will need to go up to CCU for approval.
14	Southern SSES Sewer Rehabilitation (Baza Gardens-Talofofo)	Rehabilitation of segments of sewer lines in Windward Hills, Talofofo area where the Sanitary Sewer Evaluation Study recommends rehabilitation.	Brown & Caldwell	9/30/2017	Design				*The design was previously completed under bond funding.*		
					Construction	3	8/2/2016	7/2/2017	$ 1,189,815	ProPacific	· Contractor submitted letter requesting to continue CIPP work with Todo Mauleg has the authorized CIPP subcontractor. · GWA response allowed PPBC to work until 10/27, or be terminated for default. · Santa Rita Wetland area (drawing AG-101): · PPBC continually bypass pumping through the wetland area, due to collapse of CIPP liner. · Liner removal work ongoing. Contractor awaiting CIPP liner materials. · Baza Gardens area: Contractor conducting lateral repairs.
					Const. Mgmt	5	7/29/2016	5/28/2017	$ 289,096	EMPSCO	· CM CO #3: With GWA Finance. Provides CM additional funds due to continued contractor delays.
15A	Tamuning Sewer Hot Spots	Sewer rehabilitation for lines at Winner Apartments, Segund Leon Guerrero, and behind Guam	Brown & Caldwell	9/30/2017	Design	10	9/9/2016	10/31/2017 (for design only)	$ 663,629	TG Engineers	• TGE draft 100% design under review.
16A	Talofofo Sewer Pump Stations (4 stations)	Design and construction of 4 sewer lift stations in the Talofofo village where sewer lines are installed but never completed.	J. Davis	9/30/2017	Design (for Talofofo and Chalan Pago PS)	11	8/17/2016	11/30/2017	$ 478,000	EMPSCO	Design preparing bid package for Talafofo. GWA received draft Chalan Pago 100% design which is under review.
17A	Chalan Pago Sewer Pump Station	Design and construction of sewer lift stations and gravity lines in Scott Laguana, Santa Cruz Street Chalan Pago.	J. Davis	9/30/2017	Design		8/17/2016	11/30/2017	*The design will be included with the Talofofo Pump Station design project.*		

18A	Water Hydraulic Model (SCADA ready instruments to update Model)	Design and construction of instrumentation at key water sites in the Barrigada service area necessary to update GWA Water hydraulic model.	Barbara Cruz	9/30/2017	Design	12	8/3/2016	3/15/2017	$ 491,498	GHD	Design complete. See 18B below.
19	Macheche Hill Sewer Rehabilitation/ Replacement	Rehabilitation of sewer lines on Macheche road. Segments of this sewer line has collapsed recently and is consider a high priority.	J. Davis	9/30/2017	Design-Build	3	8/29/2016	12/31/2017	$ 1,634,000	Giant Const.	Gravity portion: 120LF last segment of line to be installed this week. Next, connect Nandez and Cueto Street. Afterwards, pressure test, and monitor for leaks. Change Order #2 installation of additional manhole (10th) sent to GM for approval.
					Const. Mgmt	6	9/16/2016	12/31/2017	$ 245,150	Am Orient	CM continuing field inspection work for remaining work.
20	Asan-Adelup-Hagatna Rt. 1 Sewer Line Rehabilitation and Replacement Emergency Repairs	Rehabilitation of sewer line in Asan that collapsed and which is current fitted with a temporary pumping system.	Brown & Caldwell	9/30/2017	Design				Design cost covered under 3A above.		
					Construction	4	3/8/2017	5/31/2017	$ 2,470,658		• Asan Sewer Break Repair (CM - HDR / Contractor - PRC) • Phase I: -Work on 222' section on going; completed ~180 LF of pipe, and backfilled. - Trench extended to valve box; finalized engineered support for valve box. - PRC/HDR working with DZSP/Navy to solve water in valve box issue; causing delays due to possible undermining of valve box. - DZSP/Navy expecting to replace valve soon. • Phase II: - All pipe installed; backfill/flowable fill, asphalt completed; striping to be finished 11/20. - Testing to begin next week on pipe/MH; Interior coating on new MH finishing up this week. • PRC Invoice #4 paid out. • PRC Invoice #5 under BC review; received 11/19.
					Const. Mgmt	7	1/24/2017	5/31/2017	covered under 3A		· CO#3 (for HDR CM) submitted to GWA 10/5; HDR currently beyond time and short on budget until CO processed.

Grant Number M96902615-1											
3B	Asan-Adelup-Hagatna RT1 Sewer Line Rehabilitation and Replacement	Rehabilitation of sewer lines from the War in the Pacific Asan Park to the Governor's Complex in Adelup. This line is asbestos concrete that is dilapidated and some areas have disintegrated crowns.	Brown & Caldwell	9/30/2021	Construction		10/16/2016	4/30/2018			Procurement 75%. Route 1 Phase I re-bid on 10/31, Pre-bid on 11/9, site visit 9am on 11/13, current bid opening on 11/30; indications of requesting time extension. No RFIs received as of 11/19.
					Const. Mgmt		6/30/2017	12/30/2018			Procurement 90%. CM scope and fee proposal received 6/23 ($698K); due to canceling of bid GWA will repackaging bid therefore scope and fee will need to be refined.
4B	RT2 Agat War in the Pacific Sewer Line Rehabilitation and Replacement	Rehabilitation of a large segment of sewer line fronting the War in the Pacific Park in Agat that has collapsed.	Brown & Caldwell	9/30/2021	Construction	6	8/31/2017	10/1/2018	$ 4,392,765		Contractor still working through building permit, HEP, etc. Contractor received some comments back from DPW for their action.
					Const. Mgmt	8	9/19/2017	10/1/2018	$ 584,725		CM reviewing and commenting on submittals.
7B	Groundwater Wells Rehabilitation (F-3, A-2, A-7, A-12, D-5)	Rehabilitation of existing deep wells and/or in cases where pipe column needs replacing, wells will be re-drilled. The deep wells to be rehabilitated are A-2, A-7, A-12, D-5, & F-3.	Brown & Caldwell	9/30/2021	Construction		3/23/2017	4/30/2018			
					Const. Mgmt		3/23/2017	4/30/2018			
8B	Tumon Sewer Hot Spots	Investigation, evaluation, and repair of possible solutions, to long plaguing issues where sewer overflows are known to occur in Tumon San Vitores.	Brown & Caldwell	9/30/2021	Construction		3/23/2017	3/22/2018			
					Const. Mgmt		3/23/2017	3/22/2018			
12B	RT4 Relief Sewer Line Rehabilitation and Replacement	Rehabilitation of sewer lines that are located from Agana McDonalds to Marine Drive that have been known to overflow due to structural issues.	Brown & Caldwell	9/30/2021	Construction		4/23/2017	10/31/2018			Procurement 70%, Bid opening occurred with no interest. Designer to reorganize plans to remove CIPP from base bid, and move as an option/additive; expected next week
					Const. Mgmt		4/23/2017	10/31/2018	$ 647,000		Procurement 90%, EMPSCO submitted revised fee ($647K). B&C recommending renegotiating given the plans to reorganize the bid package.
15B	Tamuning Sewer Hot Spots	Sewer rehabilitation for lines at Winner Apartments, Segund Leon Guerrero, and behind Guam Premium Outlets.	Brown & Caldwell	9/30/2021	Construction		4/29/2017	4/30/2018			
					Const. Mgmt		4/29/2017	4/30/2018			
16B	Talofofo Sewer Pump Stations (4 stations)	Design and construction of 4 sewer lift stations in the Talofofo village where sewer lines are installed but never completed.	J. Davis	9/30/2021	Construction		4/29/2017	4/30/2018			
					Const. Mgmt		4/29/2017	4/30/2018			
17B	Chalan Pago Sewer Pump Station	Design and construction of sewer lift stations and gravity lines in Scott Laguana, Santa Cruz Street Chalan Pago.	J. Davis	9/30/2021	Construction		4/29/2017	4/30/2018			
					Const. Mgmt		4/29/2017	4/30/2018			
18B	Water Hydraulic Model (SCADA ready instruments to update Model)	Design and construction of instrumentation at key water sites in the Barrigada service area necessary to update GWA Water hydraulic model.	C. Huntington	9/30/2021	Construction		2/1/2017	9/30/2017			Engineering to start preparing IFB package.
					Const. Mgmt		2/1/2017	9/31/2017			

DASHBOARD

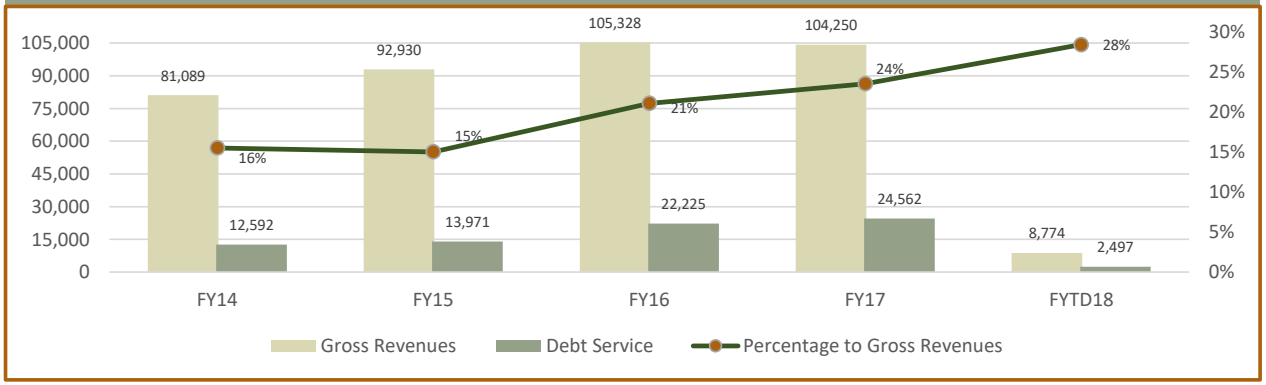
FYTD October 2018 Budget vs Actual ($000)

Category	Description	Budget FYTD18	Actual FYTD18	Variance
Rate Based Revenues	Water	$5,942	$5,478	($463)
	Wastewater	3,322	3,253	(69)
	Total	9,263	8,732	(532)
Operations & Maintenance	Salaries & Benefits	2,210	1,933	(276)
	Power	1,058	1,192	134
	Water Purchases	721	685	(36)
	A&G	1,072	723	(349)
	Contractual	373	270	(104)
	Total	$7,044	$6,417	($627)

Key Financial Ratios ($000)

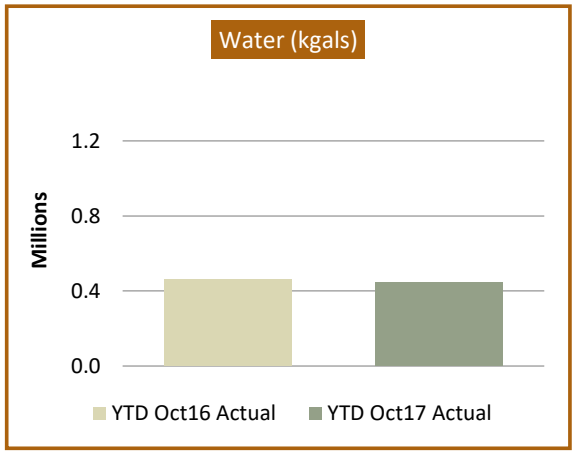
Category	FY18	FY17
Accounts Payable $$/Days	$5,925 / 61 days	$5,393 / 59 days
Accounts Receivable $$/Days	$15,505 / 71 days	$15,466 / 51 days
Days Cash On Hand	173 days	184 days
Annual Debt Service (Revenue Bonds)	$29,961	$24,563
Debt Service Coverage (Bond/PUC)	1.59 / 1.96	1.99 / 2.40

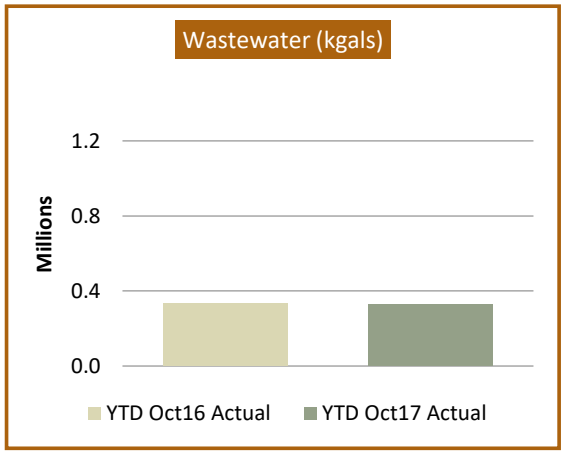
Debt as a Percent to Gross Revenue

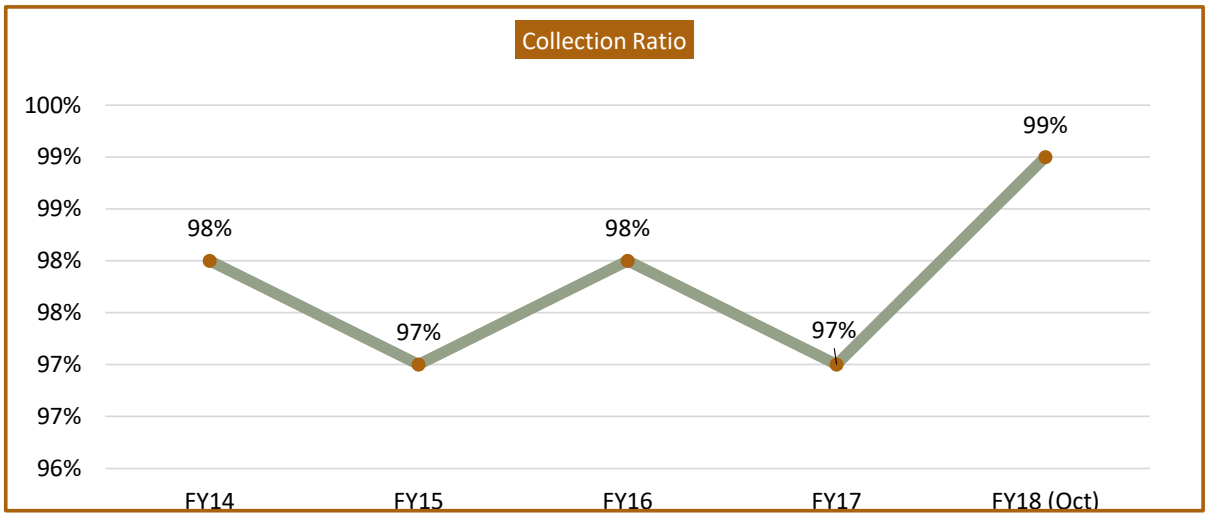


(1) Gross Revenues excludes SDC
(2) Debt Service Excludes Cap I

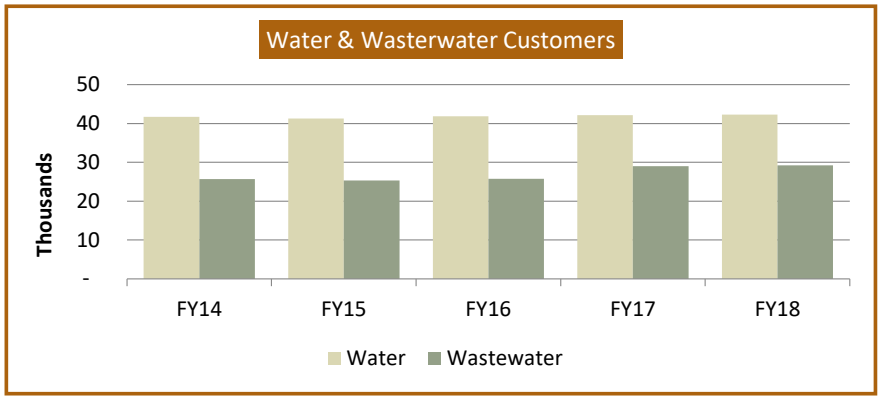
Water & Wastewater Analytics

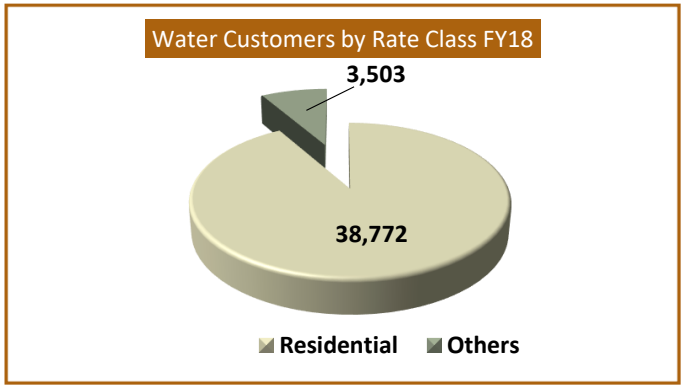


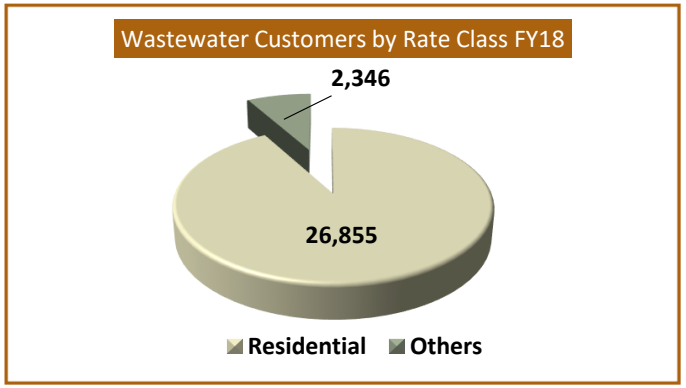


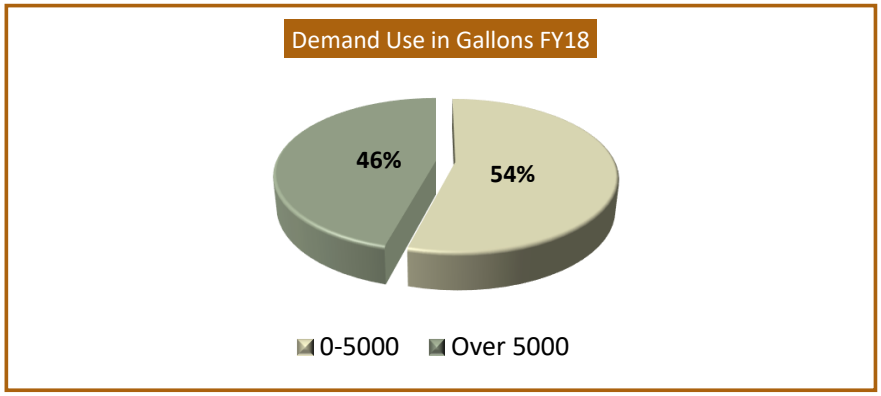


Water & Wastewater Customers





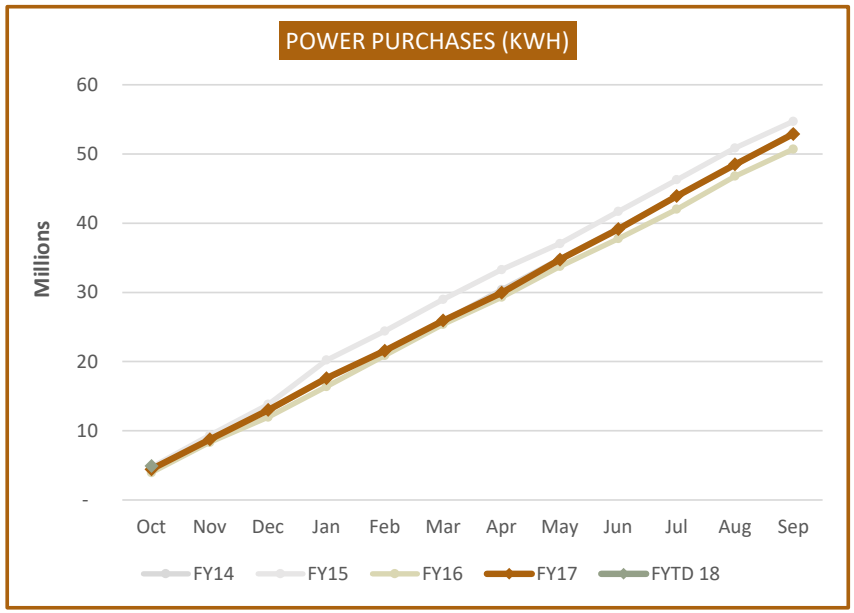


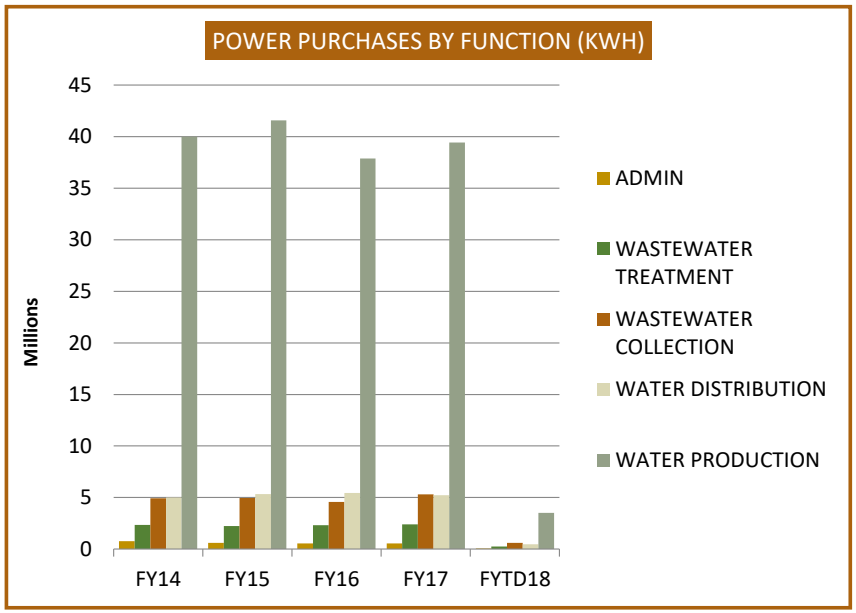


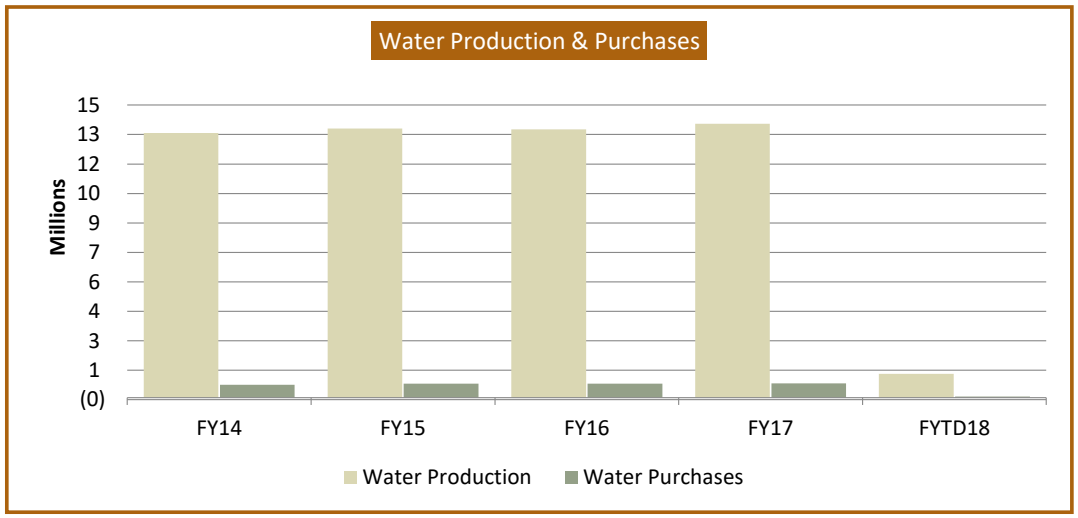
Top Ten Largest Water and Wastewater Customers – October 2017

Water			Wastewater		
Customer Name	FYTD18 Revenues	% of Total	Customer Name	FYTD18 Revenues	% of Total
1) MDI GUAM CORPORATION/LEOPALACE	$104,276	1.90%	1) AIR FORCE DOD	$300,000	9.23%
2) PACIFIC ISLANDS CLUB	90,963	1.66%	2) NAVY DOD	150,000	4.61%
3) HOTELS OF THE MARIANAS INC	84,366	1.54%	3) HOTELS OF THE MARIANAS INC	90,226	2.77%
4) GUAM REEF HOTEL INC	80,529	1.47%	4) GUAM REEF HOTEL INC	86,366	2.66%
5) HYATT	73,913	1.35%	5) HYATT	79,124	2.43%
6) HOTEL NIKKO GUAM	70,424	1.29%	6) HOTEL NIKKO GUAM	75,250	2.31%
7) PACIFIC STAR RESORT & SPA	57,949	1.06%	7) PACIFIC STAR RESORT & SPA	61,850	1.90%
8) SHERATON LAGUNA GUAM RESORT	55,551	1.01%	8) SHERATON LAGUNA GUAM RESORT	59,400	1.83%
9) TANOTA DEVELOPMENT LLC	54,580	1.00%	9) TANOTA DEVELOPMENT LLC	58,569	1.80%
10) MDI GUAM CORPORATION/WESTIN	51,433	0.94%	10) MDI GUAM CORPORATION/WESTIN	54,976	1.69%
Total	**$723,984**	**13.21%**	**Total**	**$1,015,760**	**31.24%**

Power, Water Purchases and Water Production

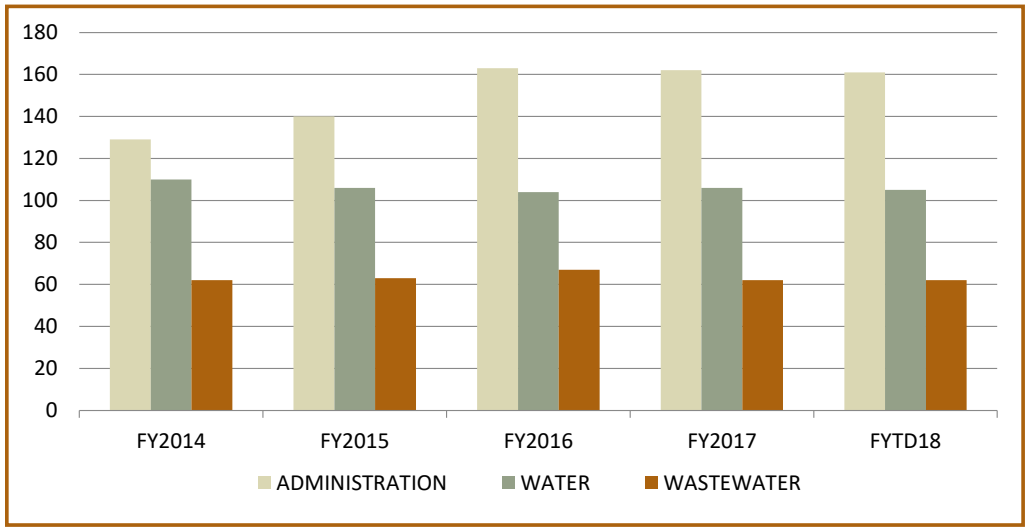




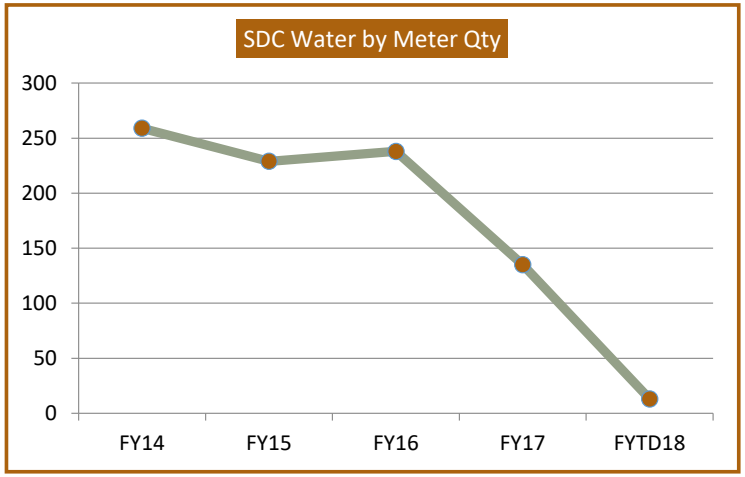


FTE by Major Division

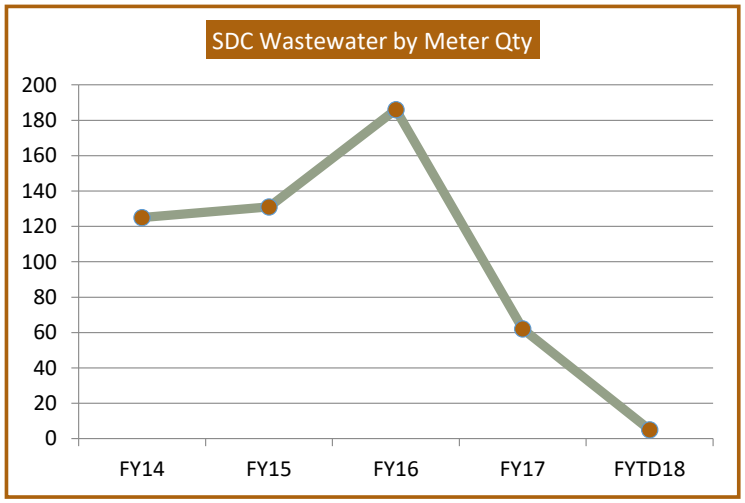
DIVISION	FY2014	FY2015	FY2016	FY2017	FYTD18
ADMINISTRATION	129	140	163	162	161
WATER	110	106	104	106	105
WASTEWATER	62	63	67	62	62
TOTAL NUMBER OF STAFF	301	309	334	330	328
Gross Salaries & Wages ($000)	15,532	15,805	16,442	17,210	1,456
Water Customers	41,702	41,274	41,858	42,181	42,275
Staff to Customers Ratio	0.72%	0.75%	0.80%	0.78%	0.78%



SDC Water & Wastewater (Meter Quantity)



Actual Meter Sizes (Inches)	FY 2014	FY 2015	FY 2016	FY 2017	FYTD18
5/8 x 3/4	248	220	239	129	9
1	5	5	7	2	0
1 1/2	1	1	1	1	2
2	3	2	4	2	2
3	1	-	1	-	-
4	-	1	-	-	-
6	-	-	-	1	0
8	1	-	-	-	-
10	-	-	-	-	-
Total SDC by Water	259	229	252	135	13



Actual Meter Sizes (Inches)	FY 2014	FY 2015	FY 2016	FY 2017	FYTD18
5/8 x 3/4	115	124	179	58	1
1	4	3	2	-	
1 1/2	1	1	1	1	2
2	3	2	3	2	2
3	1	-	1	-	
4	-	1	-	-	
6	-	-	-	1	
8	1	-	-	-	
10	-	-	-	-	
Total SDC by Wastewater	125	131	186	62	5

GUAM WATERWORKS AUTHORITY
OCTOBER 31, 2017
FINANCIAL AND RELATED REPORTS
TABLE OF CONTENTS

	SCHEDULES	PAGE
BALANCE SHEET	A	2
INCOME STATEMENT MTD ACTUALS VS MTD BUDGET	B	3
INCOME STATEMENT MTD ACTUALS FY18 VS FY17	C	4
INCOME STATEMENT YTD ACTUALS VS YTD BUDGET	D	5
INCOME STATEMENT YTD ACTUALS FY18 VS FY17	E	6
BOND COMPLIANCE	F	7
SCHEDULE OF CASH RESTRICTED/UNRESTRICTED	G	8
STATEMENT OF CASH FLOWS	H	9
AGING REPORT - GOVERNMENT ACCOUNTS	I	10
SCHEDULE OF SERIES 2010 BOND STATUS	J	11
SCHEDULE OF SERIES 2013 BOND STATUS	K	12
SCHEDULE OF SERIES 2014 REFUNDED BOND STATUS	L	13
SCHEDULE OF SERIES 2016 BOND STATUS	M	14
SUMMARY OF BOND BANK BALANCES	N	15

GUAM WATERWORKS AUTHORITY
Balance Sheet
October 31, 2017

SCHEDULE A

ASSETS	Unaudited October 31, 2017	Unaudited September 30, 2017	Increase (Decrease)
Current Assets:			
Cash:			
Unrestricted (Schedule G)	5,131,245	4,875,775	255,470
Restricted Funds (Schedule G)	66,202,512	65,107,563	1,094,949
Accounts Receivable Trade, Net of Allowance for Doubtful Receivables of $12,676,137 at Oct 31, 2017 and $12,619,034 at Sep 30, 2017	15,505,009	15,466,038	38,971
Other Receivable	5,976,708	8,709,494	(2,732,786)
Materials & Supplies Inventory, Net of Allowance for Obsolescence of $457,370 at Oct 31, 2017 and Sep 30, 2017	2,561,149	2,166,557	394,592
Total Current Assets	95,376,623	96,325,427	(948,804)
Property, Plant and Equipment			
Utility plant in service:			
Water system	332,659,493	332,659,493	-
Wastewater system	284,814,829	284,814,829	-
Non-utility property	25,147,057	25,147,057	-
Total property	642,621,379	642,621,379	-
Less Accumulated Depreciation	(300,309,893)	(298,781,718)	(1,528,175)
Land	1,110,998	1,110,998	-
Construction Work in Progress	119,897,135	116,100,369	3,796,766
Property, Plant and Equipment, net	463,319,618	461,051,027	2,268,591
Other noncurrent assets			
Restricted cash (Schedule G)	235,030,652	236,550,002	(1,519,350)
Investments (Schedule G)	43,104,560	41,042,038	2,062,521
Other Prepaid Expenses	737,748	551,128	186,620
Total other noncurrent assets	278,872,960	278,143,169	729,791
TOTAL ASSETS	837,569,201	835,519,623	2,049,578
Deferred outflows of resources:			
Debt defeasance loss on refunding	1,683,537	1,695,981	(12,444)
Deferred outflows from pension	3,366,232	3,414,242	(48,010)
Total Assets and Deferred Outflows of Resources	**842,618,970**	**840,629,846**	**1,989,124**
LIABILITIES AND NET ASSETS			
Current Liabilities:			
Current maturities of long-term debt			
-Series 2010 Bond	1,655,000	1,655,000	-
-Series 2014 Refunding	3,385,000	3,385,000	-
-Notes Payable	2,873,988	2,873,988	-
Accounts Payable -Trade	5,925,695	5,392,756	532,939
Interest Payable	8,844,099	6,656,499	2,187,600
Accrued Payroll and Employee Benefits	1,750,588	2,604,471	(853,883)
Accrued Annual Leave	1,729,291	1,729,291	-
Current portion of employee annual leave	567,057	567,057	-
Contractors' Payable	13,123,216	13,803,156	(679,940)
Customer and Other Deposits	2,088,293	2,087,210	1,083
Total Current Liabilities	41,942,227	40,754,429	1,187,798
Long Term Debt, less current maturities			
Series 2010 Revenue Bond	112,870,000	112,870,000	-
Series 2013 Revenue Bond	172,630,000	172,630,000	-
Series 2014 Refunding	72,610,000	72,610,000	-
Series 2016 Revenue Bond	143,310,000	143,310,000	-
Unamortized Discount - Bond 2010	(1,860,801)	(1,867,525)	6,723
Unamortized Discount - Bond 2013	(1,334,493)	(1,338,751)	4,258
Unamortized Premium - Bond 2014	4,782,476	4,804,694	(22,218)
Unamortized Premium - Bond 2016	17,212,351	17,262,975	(50,625)
Notes Payable	5,454,417	5,697,499	(243,082)
Unfunded Ret Liability (GASB 67/68)	38,195,938	38,195,938	-
Employee Annual Leave, Less Current Portion	783,992	783,992	-
TOTAL LIABILITIES	606,596,106	605,713,251	882,855
Net Assets	**236,022,864**	**234,916,595**	**1,106,269**
Total Liabilities and Net Assets	**842,618,970**	**840,629,846**	**1,989,124**

GUAM WATERWORKS AUTHORITY
Statement of Operations and Retained Earnings (Unaudited) **SCHEDULE B**
Comparative Budget vs. Actual for the period ending October 31, 2017 and 2016

	Budget October-17	Month to Date Encumbered October-17	Actual (Unaudited) October-17	Variance Increase / (Decrease)
OPERATING REVENUES				
Water Revenues	5,743,160		5,294,759	(448,402)
Wastewater Revenues	3,228,257		3,176,575	(51,682)
Legislative Surcharge	291,896		260,173	(31,723)
Other Revenues	57,638		42,711	(14,927)
System Development Charge	46,136		159,296	113,160
Total Operating Revenues	9,367,087	-	8,933,513	(433,574)
OPERATING AND MAINTENANCE EXPENSES				
Water Purchases	721,113		685,218	(35,895)
Power Purchases	1,057,997		1,192,451	134,455
Total Utility Costs	1,779,110	-	1,877,669	98,559
Salaries and Wages	1,625,056		1,456,170	(168,886)
Pension and Benefits	584,558		477,269	(107,289)
Total Salaries and Benefits	2,209,614	-	1,933,439	(276,175)
Capitalized Labor and Benefits	(208,333)		(200,000)	8,333
Net Salaries and Benefits	2,001,281	-	1,733,439	(267,842)
Administrative and General Expenses				
Sludge removal	174,514		115,630	(58,884)
Chemicals	204,997		197,525	(7,471)
Materials & Supplies	277,900	116,763	105,122	(56,016)
Transportation	52,370		45,914	(6,456)
Communications	16,182		11,526	(4,655)
Claims	11,100		3,237	(7,863)
Insurance	104,757		75,480	(29,277)
Training & Travel	21,814		4,053	(17,761)
Advertising	13,910		9,205	(4,705)
Miscellaneous	115,515		69,933	(45,583)
Total Administrative and General Expense	993,059	116,763	637,626	(238,671)
Regulatory Expense	22,086		28,112	6,026
Bad Debts Provision	57,103		57,099	(4)
Depreciation Expense	1,528,175		1,528,175	0
Contractual Expense				
Audit & Computer Maint.	78,630	14,193	57,241	(7,197)
Building rental	37,955		36,557	(1,398)
Equipment rental	57,375		33,393	(23,981)
Legal	4,167		600	(3,567)
Laboratory	64,752		39,075	(25,677)
Other	130,363	13,344	102,701	(14,319)
Total Contractual Expense	373,241	27,537	269,566	(76,138)
Retiree Supp. Annuities and health care costs	240,008		235,392	(4,616)
Contribution to Government of Guam	49,500		49,833	333
Total Retiree Benefits	289,508	-	285,225	(4,283)
Total Operating Expenses	7,043,563	144,299	6,416,911	(482,353)
Earnings (Loss) from Operations	2,323,524	(144,299)	2,516,602	48,779
Interest Income-2010/13/14/16 Series Bond	15,727		147,890	132,163
Interest Income-Other Funds	2,935		22,820	19,885
Interest Income-SDC	2,414		3,981	1,567
Interest Expense- 2010/13/14/16 Series Bond	(2,625,587)		(2,211,025)	414,562
Interest Expense- ST BOG	(33,288)		(18,493)	14,795
Federal Expenditures	(51,332)		-	51,332
Loss on Asset Disposal	-		-	-
AFUDC	625,000		625,000	-
Amortization of Discount, Premium and Issuance Costs	(61,861)		61,861	123,722
Loss on Defeasance Bond05 Refunding	(15,218)		(12,444)	2,775
Deferred outflows from pension	(105,281)		(48,010)	57,271
Prior Year Adjustment	-		-	-
Total non-operating revenues (expenses)	(2,246,492)	-	(1,428,419)	818,072
Net Income (Loss) before capital contributions	77,032	(144,299)	1,088,182	866,851
Capital Contributions				
Grants from US Government	873,108		-	(873,108)
Grants from GovGuam & Others	-		18,087	18,087
Other Contributions	-		-	-
Total Capital Contributions	873,108	-	18,087	(855,021)
Change in Net Assets	950,140	(144,299)	1,106,269	11,830
Debt Service Calculation				
Earnings From Operations	2,323,524		2,516,602	
System Development Charge	(46,136)		(159,296)	
Interest/Investment Income	2,935		22,820	
Retire COLA	49,500		49,833	
Depreciation	1,528,175		1,528,175	
Balance Available for Debt Service per Section 6.12	3,857,998		3,958,135	
Working Capital Reserve Available for Debt Service	935,321		935,321	
Transfer to Working Capital Debt Service Reserve	(150,000)		-	
Transfer to Working Capital for O & M Reserve	(266,667)		-	
Balance Available for Debt Service inclusive of reserves	4,376,652		4,893,456	
Debt Service				
Principal	433,333		433,333	
Interest	2,063,402		2,063,402	
Total	2,496,736		2,496,736	
Debt Service Coverage (1.25X)- per Section 6.12 (Indenture)	1.55		1.59	
Debt Service Coverage (1.75X) inclusive of reserves (PUC)	1.75		1.96	

GUAM WATERWORKS AUTHORITY
Statement of Operations and Retained Earnings (Unaudited) **SCHEDULE C**
Comparative for the period ending October 31, 2017 and 2016

	Month to Date		Variance
	Actual (Unaudited) October-17	Actual (Unaudited) October-16	Increase / (Decrease)
OPERATING REVENUES			
Water Revenues	5,294,759	5,331,404	(36,645)
Wastewater Revenues	3,176,575	3,099,528	77,048
Legislative Surcharge	260,173	267,269	(7,096)
Other Revenues	42,711	36,293	6,418
System Development Charge	159,296	72,662	86,634
Total Operating Revenues	8,933,513	8,807,155	126,358
OPERATING AND MAINTENANCE EXPENSES			
Water Purchases	685,218	609,094	76,124
Power Purchases	1,192,451	1,006,355	186,096
Total Utility Costs	1,877,669	1,615,449	262,220
Salaries and Wages	1,456,170	1,413,608	42,561
Pension and Benefits	477,269	477,546	(276)
Total Salaries and Benefits	1,933,439	1,891,154	42,285
Capitalized Labor and Benefits	(200,000)	(262,516)	62,516
Net Salaries and Benefits	1,733,439	1,628,638	104,801
Administrative and General Expenses			
Sludge removal	115,630	140,487	(24,857)
Chemicals	197,525	174,001	23,524
Materials & Supplies	105,122	128,788	(23,666)
Transportation	45,914	53,744	(7,830)
Communications	11,526	10,884	643
Claims	3,237	22,151	(18,914)
Insurance	75,480	90,603	(15,123)
Training & Travel	4,053	23,055	(19,001)
Advertising	9,205	8,988	217
Miscellaneous	69,933	71,963	(2,030)
Total Administrative and General Expense	637,626	724,663	(87,037)
Regulatory Expense	28,112	23,244	4,868
Bad Debts Provision	57,099	109,700	(52,601)
Depreciation Expense	1,528,175	1,329,008	199,167
Contractual Expense			
Audit & Computer Maint.	57,241	76,901	(19,660)
Building rental	36,557	36,557	-
Equipment rental	33,393	59,374	(25,981)
Legal	600	1,305	(705)
Laboratory	39,075	10,627	28,449
Other	102,701	156,747	(54,046)
Total Contractual Expense	269,566	341,510	(71,944)
Retiree Supp. Annuities and health care costs	235,392	231,895	3,496
Contribution to Government of Guam	49,833	49,500	333
Total Retiree Benefits	285,225	281,395	3,830
Total Operating Expenses	6,416,911	6,053,607	363,304
Earnings (Loss) from Operations	2,516,602	2,753,548	(236,946)
Interest Income-2010/13/14/16 Series Bond	147,890	65,354	82,536
Interest Income-Other Funds	22,820	10,020	12,800
Interest Income-SDC	3,981	1,060	2,921
Interest Expense- 2010/13/14/16 Series Bond	(2,211,025)	(2,220,744)	9,719
Interest Expense- ST BOG	(18,493)	(43,736)	25,243
Federal Expenditures	-	(42,501)	42,501
Loss on Asset Disposal	-	(19,346)	19,346
AFUDC	625,000	1,172,241	(547,241)
Amortization of Discount, Premium and Issuance Costs	61,861	61,861	-
Loss on Defeasance Bond05 Refunding	(12,444)	(15,218)	2,775
Deferred outflows from pension	(48,010)	(104,481)	56,471
Prior Year Adjustment	-	(26,756)	26,756
Total non-operating revenues (expenses)	(1,428,419)	(1,162,246)	(266,174)
Net Income (Loss) before capital contributions	1,088,182	1,591,302	(503,120)
Capital Contributions			
Grants from US Government	-	1,838,776	(1,838,776)
Grants from GovGuam & Others	18,087	1,664	16,422
Other Contributions	-	-	-
Total Capital Contributions	18,087	1,840,440	(1,822,353)
Change in Net Assets	1,106,269	3,431,743	(2,325,473)
Debt Service Calculation			
Earnings From Operations	2,516,602	2,753,548	
System Development Charge	(159,296)	(72,662)	
Interest/Investment Income	22,820	10,020	
Retiree COLA	49,833	49,500	
Depreciation	1,528,175	1,329,008	
Balance Available for Debt Service per Section 6.12	3,958,135	4,069,414	
Working Capital Reserve Available for Debt Service	935,321	934,811	
Transfer to Working Capital Debt Service Reserve	-	-	
Balance Available for Debt Service inclusive of reserves	4,893,456	5,004,225	
Debt Service			
Principal	433,333	420,000	
Interest	2,063,402	1,626,858	
Total	2,496,736	2,046,858	
Debt Service Coverage (1.25X)- per Section 6.12 (Indenture)	1.59	1.99	
Debt Service Coverage (1.75X) inclusive of reserves (PUC)	1.96	2.44	

GUAM WATERWORKS AUTHORITY
Statement of Operations and Retained Earnings (Unaudited) **SCHEDULE D**
Comparative Budget vs. Actual for the period ending October 31, 2017 and 2016

	Budget October-17	Year to Date Encumbered October-17	Actual (Unaudited) October-17	Variance Increase / (Decrease)
OPERATING REVENUES				
Water Revenues	5,743,160		5,294,759	(448,402)
Wastewater Revenues	3,228,257		3,176,575	(51,682)
Legislative Surcharge	291,896		260,173	(31,723)
Other Revenues	57,638		42,711	(14,927)
System Development Charge	46,136		159,296	113,160
Total Operating Revenues	9,367,087	-	8,933,513	(433,574)
OPERATING AND MAINTENANCE EXPENSES				
Water Purchases	721,113		685,218	(35,895)
Power Purchases	1,057,997		1,192,451	134,455
Total Utility Costs	1,779,110	-	1,877,669	98,559
Salaries and Wages	1,625,056		1,456,170	(168,886)
Pension and Benefits	584,558		477,269	(107,289)
Total Salaries and Benefits	2,209,614	-	1,933,439	(276,175)
Capitalized Labor and Benefits	(208,333)		(200,000)	8,333
Net Salaries and Benefits	2,001,281	-	1,733,439	(267,842)
Administrative and General Expenses				
Sludge removal	174,514		115,630	(58,884)
Chemicals	204,997		197,525	(7,471)
Materials & Supplies	277,900	116,763	105,122	(56,016)
Transportation	52,370		45,914	(6,456)
Communications	16,182		11,526	(4,655)
Claims	11,100		3,237	(7,863)
Insurance	104,757		75,480	(29,277)
Training & Travel	21,814		4,053	(17,761)
Advertising	13,910		9,205	(4,705)
Miscellaneous	115,515		69,933	(45,583)
Total Administrative and General Expense	993,059	116,763	637,626	(238,671)
Regulatory Expense	22,086		28,112	6,026
Bad Debts Provision	57,103		57,099	(4)
Depreciation Expense	1,528,175		1,528,175	0
Contractual Expense				
Audit & Computer Maint.	78,630	14,193	57,241	(7,197)
Building rental	37,955		36,557	(1,398)
Equipment rental	57,375		33,393	(23,981)
Legal	4,167		600	(3,567)
Laboratory	64,752		39,075	(25,677)
Other	130,363	13,344	102,701	(14,319)
Total Contractual Expense	373,241	27,537	269,566	(76,138)
Retiree Supp. Annuities and health care costs	240,008		235,392	(4,616)
Contribution to Government of Guam	49,500		49,833	333
Total Retiree Benefits	289,508	-	285,225	(4,283)
Total Operating Expenses	7,043,563	144,299	6,416,911	(482,353)
Earnings (Loss) from Operations	2,323,524	(144,299)	2,516,602	48,779
Interest Income-2010/13/14/16 Series Bond	15,727		147,890	132,163
Interest Income-Other Funds	2,935		22,820	19,885
Interest Income-SDC	2,414		3,981	1,567
Interest Expense- 2010/13/14/16 Series Bond	(2,625,587)		(2,211,025)	414,562
Interest Expense- ST BOG	(33,288)		(18,493)	14,795
Federal Expenditures	(51,332)		-	51,332
AFUDC	625,000		625,000	-
Amortization of Discount, Premium and Issuance Costs	(61,861)		61,861	123,722
Loss on Defeasance Bond05 Refunding	(15,218)		(12,444)	2,775
Deferred outflows from pension	(105,281)		(48,010)	57,271
Prior Year Adjustment	-		-	-
Total non-operating revenues (expenses)	(2,246,492)	-	(1,428,419)	818,072
Net Income (Loss) before capital contributions	77,032	(144,299)	1,088,182	866,851
Capital Contributions				
Grants from US Government	873,108		-	(873,108)
Grants from GovGuam & Others	-		18,087	18,087
Other Contributions	-		-	-
Total Capital Contributions	873,108	-	18,087	(855,021)
Change in Net Assets	950,140	(144,299)	1,106,269	11,830
Debt Service Calculation				
Earnings From Operations	2,323,524		2,516,602	
System Development Charge	(46,136)		(159,296)	
Interest/Investment Income	2,935		22,820	
Retiree COLA	49,500		49,833	
Depreciation	1,528,175		1,528,175	
Balance Available for Debt Service per Section 6.12	3,857,998		3,958,135	
Working Capital Reserve Available for Debt Service	935,321		935,321	
Transfer to Working Capital Debt Service Reserve	(150,000)		-	
Transfer to Working Capital for O & M Reserve	(266,667)		-	
Balance Available for Debt Service inclusive of reserves	4,376,652		4,893,456	
Debt Service				
Principal	433,333		433,333	
Interest	2,063,402		2,063,402	
Total	2,496,736		2,496,736	
Debt Service Coverage (1.25X)- per Section 6.12 (Indenture)	1.55		1.59	
Debt Service Coverage (1.75X) inclusive of reserves (PUC)	1.75		1.96	

GUAM WATERWORKS AUTHORITY
Statement of Operations and Retained Earnings (Unaudited)
Comparative for the period ending October 31, 2017 and 2016

SCHEDULE E

	Year to Date ACTUAL (Unaudited) October-17	Year to Date ACTUAL (Unaudited) October-16	Variance Increase / (Decrease)
OPERATING REVENUES			
Water Revenues	5,294,759	5,331,404	(36,645)
Wastewater Revenues	3,176,575	3,099,528	77,048
Legislative Surcharge	260,173	267,269	(7,096)
Other Revenues	42,711	36,293	6,418
System Development Charge	159,296	72,662	86,634
Total Operating Revenues	8,933,513	8,807,155	126,358
OPERATING AND MAINTENANCE EXPENSES			
Water Purchases	685,218	609,094	76,124
Power Purchases	1,192,451	1,006,355	186,096
Total Utility Costs	1,877,669	1,615,449	262,220
Salaries and Wages	1,456,170	1,413,608	42,561
Pension and Benefits	477,269	477,546	(276)
Total Salaries and Benefits	1,933,439	1,891,154	42,285
Capitalized Labor and Benefits	(200,000)	(262,516)	62,516
Net Salaries and Benefits	1,733,439	1,628,638	104,801
Administrative and General Expenses			
Sludge removal	115,630	140,487	(24,857)
Chemicals	197,525	174,001	23,524
Materials & Supplies	105,122	128,788	(23,666)
Transportation	45,914	53,744	(7,830)
Communications	11,526	10,884	643
Claims	3,237	22,151	(18,914)
Insurance	75,480	90,603	(15,123)
Training & Travel	4,053	23,055	(19,001)
Advertising	9,205	8,988	217
Miscellaneous	69,933	71,963	(2,030)
Total Administrative and General Expense	637,626	724,663	(87,037)
Regulatory Expense	28,112	23,244	4,868
Bad Debts Provision	57,099	109,700	(52,601)
Depreciation Expense	1,528,175	1,329,008	199,167
Contractual Expense			
Audit & Computer Maint.	57,241	76,901	(19,660)
Building rental	36,557	36,557	-
Equipment rental	33,393	59,374	(25,981)
Legal	600	1,305	(705)
Laboratory	39,075	10,627	28,449
Other	102,701	156,747	(54,046)
Total Contractual Expense	269,566	341,510	(71,944)
Retiree Supp. Annuities and health care costs	235,392	231,895	3,496
Contribution to Government of Guam	49,833	49,500	333
Total Retiree Benefits	285,225	281,395	3,830
Total Operating Expenses	6,416,911	6,053,607	363,304
Earnings (Loss) from Operations	2,516,602	2,753,548	(236,946)
Interest Income-2010/13/14/16 Series Bond	147,890	65,354	82,536
Interest Income-Other Funds	22,820	10,020	12,800
Interest Income-SDC	3,981	1,060	2,921
Interest Expense- 2010/13/14/16 Series Bond	(2,211,025)	(2,220,744)	9,719
Interest Expense- ST BOG	(18,493)	(43,736)	25,243
Federal Expenditures	-	(42,501)	42,501
Loss on Asset Disposal	-	(19,346)	19,346
AFUDC	625,000	1,172,241	(547,241)
Amortization of Discount, Premium and Issuance Costs	61,861	61,861	-
Loss on Defeasance Bond05 Refunding	(12,444)	(15,218)	2,775
Deferred outflows from pension	(48,010)	(104,481)	56,471
Prior Year Adjustment	-	(26,756)	26,756
Total non-operating revenues (expenses)	(1,428,419)	(1,162,246)	(266,174)
Net Income (Loss) before capital contributions	1,088,182	1,591,302	(503,120)
Capital Contributions			
Grants from US Government	-	1,838,776	(1,838,776)
Grants from GovGuam & Others	18,087	1,664	16,422
Other Contributions	-	-	-
Total Capital Contributions	18,087	1,840,440	(1,822,353)
Change in Net Assets	1,106,269	3,431,743	(2,325,473)
Debt Service Calculation			
Earnings From Operations	2,516,602	2,753,548	
System Development Charge	(159,296)	(72,662)	
Interest/Investment Income	22,820	10,020	
Retiree COLA	49,833	49,500	
Depreciation	1,528,175	1,329,008	
Balance Available for Debt Service per Section 6.12	3,958,135	4,069,414	
Working Capital Reserve Available for Debt Service	933,333	934,811	
Transfer to Working Capital Debt Service Reserve	-	-	
Balance Available for Debt Service inclusive of reserves	4,891,468	5,004,225	
Debt Service			
Principal	433,333	420,000	
Interest	2,063,402	1,626,858	
Total	2,496,736	2,046,858	
Debt Service Coverage (1.25X)- per Section 6.12 (Indenture)	1.59	1.99	
Debt Service Coverage (1.75X) inclusive of reserves (PUC)	1.96	2.44	

SCHEDULE F

Bond Compliance		**($$$) Per Indenture**	**As of 10/31/17 ($$$) Bond 2010/2013/2014/2016**
• Operation and Maintenance Fund-BOG	*Equivalent to 55 days of the annual O&M budget less depreciation*	$10.5M	$10.5M
• Bond Reserve Fund - US Bank	*Fully funded- Principal and Interest (Bond Series 2010, 2013, 2014 Refunding and 2016)*	$34.9M	$34.9M
• Operation, Maintenance, Renewal and Replacement Reserve Fund-BOG Trust	*Equivalent to 1/4 of the annual O&M budget & CIP budget to be funded in 5 years ($2M/year)*	$17.4M	$17.4M
• Capital Improvement Fund	*Balance remaining in the Revenue Fund after the foregoing deposits*	$5.6K	$5.6K
• Capitalized Interest Fund		$2.4M	$2.4M

GUAM WATERWORKS AUTHORITY
Restricted and Unrestricted Cash Summary
FY 2018

SCHEDULE G

Description	Unaudited October 31, 2017	Unaudited September 30, 2017	Increase (Decrease)
UNRESTRICTED			
Change Fund	2,000	2,000	0
Petty Cash	5,000	5,000	0
BOG - General Fund	5,094,206	4,838,736	255,470
BOG - PRN Payroll	30,039	30,039	0
Sub-total Unrestricted	5,131,245	4,875,775	255,470
RESTRICTED			
BOG - Sweep Account	10,037	-	10,037
Bank of Hawaii	86,361	134,657	(48,296)
ANZ Bank	77	-	77
First Hawaiian Bank	10,654	10,284	370
Bank Pacific	12,932	15,825	(2,894)
Community First FCU	3,830	3,449	381
BOG - Customer Refunds	1,832,589	1,831,426	1,163
Bank Pacific - Surcharge	1,165,604	278,104	887,500
Bank Pacific - Escrow Deposit	666,040	666,040	0
BOG Emergency Reserve Fund	6,122	6,122	1
BOG - Revenue Trust	211,378	184,190	27,188
BOG Revenue Trust Fund	6,924,261	7,782,227	(857,966)
BOG Capital Improvement Fund-Bond	5,598	5,598	0
BOG Capital Improvement Revenue Fund	880,235	-	880,235
BOG-O & M Reserve	13,523,792	13,516,540	7,251
BOG-Debt Service Reserve	11,223,852	11,217,733	6,119
BOG-CAPEX Reserve	15,469,637	15,462,869	6,768
BOG Sewer Hookup Revolving Fund	64,205	63,590	615
BOG Subord. Sec. Fund	859,233	859,233	0
BOG Operation and Maintenance Fund	3,083,482	3,083,482	0
	56,039,919	55,121,369	918,550
BOG - SDC Deposit	2,162,593	1,486,219	676,374
BOG - SDC CDs	8,000,000	8,500,000	(500,000)
Total Restricted	66,202,512	65,107,587	1,094,924
Reserve Funds			
BOG Series 05 OMRRRF Fund	17,423,213	17,423,213	0
BOG Series 10 Construction Fund	9,083,302	9,299,311	(216,010)
BOG Series 13 Construction Fund	73,218,819	74,461,765	(1,242,947)
BOG Series 14 Refunding Construction Fund	771,720	771,281	439
BOG Series 16 Construction Fund	132,149,734	132,811,449	(661,714)
BOG Series 16 Cap Int Fund	2,383,864	1,782,982	600,882
Total Restricted - Held by Trustee	235,030,652	236,550,002	(1,519,350)
USB Series 2010 Debt Service Fund	2,692,950	2,020,121	672,829
USB Series 2010 Debt Service Reserve Fund	7,566,460	7,566,460	0
USB Series 2013 Debt Service Fund	3,115,232	2,336,754	778,478
USB Series 2013 Debt Service Reserve Fund	12,031,688	12,031,688	0
USB Series 2014 Refunding Debt Service Fund	2,394,690	1,796,559	598,131
USB Series 2014 Refunding Debt Service Reserve Func	7,717,841	7,707,602	10,239
USB Series 2016 Debt Service Fund	130	130	0
USB Series 2016 Debt Service Reserve Fund	7,585,568	7,582,725	2,843
Total Investments	43,104,560	41,042,038	2,062,521
Total Restricted and Unrestricted Cash	349,468,968	347,575,403	1,893,566

SCHEDULE H

Guam Waterworks Authority
Statement of Cash Flows (Unaudited)
FY 2018

	YTD Oct-17
Increase (decrease) in cash	
Cash flows from operating activities:	
Cash received from trade and others	8,853,961
Cash payments to suppliers/contractors for goods and services	(2,892,446)
Cash payments to employees for services	(2,824,538)
Net cash provided by operating activities	3,136,977
Cash flows from capital and related financing activities:	
Contributed capital received (grants)	2,735,438
Acquisition of utility plant	(3,820,507)
Repayment of Long Term Debt	(61,860)
Interest expense	(283,593)
Net cash provided by (used in) capital and related financing activities	(1,430,522)
Cash flows from investing activities:	
Transfers from (to) restricted fund	(1,625,676)
Interest income received	174,691
Net cash provided by investing activities	(1,450,985)
Net increase (decrease) in cash	255,470
Unrestricted cash at beginning of the period	4,875,775
Unrestricted cash at end of period	5,131,245
Reconciliation of operating loss to net cash provided by operating activities:	
Operating Income (loss)	2,470,903
Adjustments to reconcile to net cash provided by operating activities:	
Depreciation expense	1,528,175
Other Expense/income	105,109
(Increase) decrease in assets:	
Accounts receivable	(80,636)
Materials and supplies inventory	(394,592)
Other Assets	(186,620)
Increase (decrease) in liabilities:	
Accounts, Contractors and Retention Payables	547,439
Accrued payroll	(853,883)
Customer and Other deposits	1,083
Net cash provided by operating activities	3,136,977

Guam Waterworks Authority
Accounts Receivable - Government
As of October 31, 2017

SCHEDULE I

Customer Name	No. of Accounts	AGING Current Balance	31-60 days	61-90 days	91-120 days	Over 120 days	Outstanding Balance
Guam International Airport Authority	4	31,829	44,169	27,962	31,277	125,271	260,508
Guam Power Authority	21	30,776	1,000	79,697	70,420	9,452	191,346
Port Authority of Guam	1	56,411	11,365	-	-	-	67,776
Guam Memorial Hospital Authority	3	38,198	-	-	-	-	38,198
University of Guam	3	5,290	-	-	-	-	5,290
Guam Housing & Urban Renewal Authority	9	6,660	-	-	-	184	6,844
Guam Community College	3	6,369	-	-	-	-	6,369
Guam Housing Corporation	1	33	-	-	-	-	33
Autonomous Agencies	**45**	**175,565**	**56,534**	**107,659**	**101,697**	**134,907**	**576,363**
Department of Education	49	199,985	250,685	119,887	-	22,821	593,377
Department of Parks & Recreation	21	195,431	49,752	50,866	36,425	84,001	416,475
Department of Public Health & Social Services	5	2,646	1,123	995	-	103,692	108,457
Mayors' Council of Guam	44	13,631	4,614	7,575	-	7,551	33,370
Department of Chamorro Affairs	7	9,319	5,000	-	-	-	14,319
Department of Agriculture	6	3,611	5,316	5,310	-	-	14,238
Guam Fire Department	11	7,518	3,080	90	-	-	10,688
Department of Public Works	9	5,108	811	-	-	-	5,919
Department of Youth Affairs	4	1,430	4,051	-	-	-	5,481
Department of Mental Health and Substance Abuse	3	2,270	1,339	-	-	-	3,609
Office of The Governor	2	3,219	-	-	-	-	3,219
Sanctuary Inc	1	2,750	-	-	-	-	2,750
Department of Administration	2	467	134	103	832	-	1,535
GHURA-Agafa Gumas Park	1	28	47	33	119	604	831
Department of Customs & Quarantine	1	389	374	-	-	-	763
New Guam Mental Health	1	721	-	-	-	-	721
Guam Veterans Affairs Office	2	233	483	-	-	-	716
Guam Police Department	1	679	-	-	-	-	679
Division of Senior Citizens, DPHSS	2	322	351	-	-	-	672
Guam Legislature	1	84	93	112	-	-	289
Guam Environmental Protection Agency	2	234	-	-	-	-	234
Department of Agriculture-Fisheries	1	105	116	-	-	-	220
The Office of the Dededo Mayor	1	121	47	45	-	-	213
Merizo Mayor	1	109	28	-	-	-	137
Guam Public Library	3	132	-	-	-	-	132
Department of Corrections	1	53	-	-	-	-	53
Line Agencies	**182**	**450,594**	**327,442**	**185,015**	**37,375**	**218,669**	**1,219,096**
Total as of October 31, 2017	**227**	**626,160**	**383,977**	**292,675**	**139,072**	**353,576**	**1,795,459**
Total as of September 30, 2017	**232**	**713,084**	**442,522**	**169,120**	**72,476**	**396,347**	**1,793,549**
% Increase / (Decrease)	**-2%**	**-12%**	**-13%**	**73%**	**92%**	**-11%**	**0%**

GUAM WATERWORKS AUTHORITY
2010 Series Bond Project Status
As of October 31, 2017

SCHEDULE J

PROJECT NAME	ORIGINAL APPROVED PROJECT COST	Adjusted Project Cost	EXPENDITURES AS OF 10/31/17	OUTSTANDING ENCUMBRANCES	TOTAL EXPENDITURES AND ENCUMBRANCES	UNOBLIGATED PROJECT COST	Construction fund balance AS OF 10/31/17
Ground Water Disinfection	$ -	$ 500,000	$ 438,141	$ 61,859	$ 500,000	$ 0	$ 61,859
"A" Series Well Transmission Line	$ 600,000	$ 518,144	$ 474,434	$ 1,274	$ 475,709	$ 42,435	$ 43,710
Water Booster Pump Station	$ 500,000	$ 500,000	$ 418,844	$ 81,156	$ 500,000	$ (0)	$ 81,156
Meter Replacement Program	$ 2,500,000	$ 10,300,000	$ 10,254,220	$ 19,409	$ 10,273,628	$ 26,372	$ 45,780
Barrigada Tank Repair/Replacement	$ -	$ 5,450,000	$ 5,442,302	$ 7,698	$ 5,450,000	$ 0	$ 7,698
Leak Detection		$ 200,000	$ -	$ 200,000	$ 200,000	$ -	$ 200,000
Potable Water System Planning	$ 200,000	$ 200,000	$ 179,638	$ 20,362	$ 200,000	$ -	$ 20,362
Implement Ground Water Rule		$ 1,700,000	$ 1,499,464	$ 200,535	$ 1,700,000	$ 1	$ 200,536
Brigade II (Ugum Lift) BPS Upgrade	$ 1,200,000	$ 1,700,000	$ 135,695	$ 202,199	$ 337,895	$ 1,362,105	$ 1,564,305
Deep Well Rehabilitation	$ 548,000	$ 548,000	$ 548,000	$ -	$ 548,000	$ -	$ -
New Deep Wells at Down Hard	$ 3,773,000	$ 638,252	$ 485,743	$ -	$ 485,743	$ 152,509	$ 152,509
Rehabilitation of Asan Springs	$ 900,000	$ 900,000	$ 188,771	$ 152,068	$ 340,838	$ 559,162	$ 711,229
Master Meters	$ 1,600,000	$ 1,600,000	$ 1,421,267	$ 68,690	$ 1,489,957	$ 110,043	$ 178,733
Ugum Water Treatment Plant Intake	$ 3,670,000	$ 700,000	$ 543,615	$ 156,385	$ 700,000	$ -	$ 156,385
Water Wells	$ 2,000,000	$ -	$ -		$ -	$ -	$ -
Water Distribution System	$ 384,000	$ 3,174,748	$ 3,174,748	$ -	$ 3,174,748	$ (0)	$ (0)
Pressure Zone Realignment /	$ 3,550,000	$ -	$ -		$ -	$ -	$ -
Northern System Water Distribution	$ 2,725,000	$ -	$ -	$ -	$ -	$ -	$ -
Central Water Distribution System 2005	$ 1,200,000	$ 900,000	$ 692,926	$ 82,076	$ 775,002	$ 124,998	$ 207,074
Southern Water Distribution System	$ 1,800,000	$ -	$ -		$ -	$ -	$ -
Mechanical/Electrical Equipment	$ 1,360,000	$ 1,200,000	$ 1,079,495	$ 120,505	$ 1,200,000	$ (0)	$ 120,505
Water Reservoir Internal/External	$ 500,000	$ 2,000,000	$ 890,583	$ 573,410	$ 1,463,993	$ 536,007	$ 1,109,417
Water Reservoir Internal/External	$ 2,400,000	$ -	$ -		$ -	$ -	$ -
Water System Reservoirs 2005 Improvements	$ 11,697,000	$ 1,050,000	$ 1,050,000		$ 1,050,000	$ 0	$ 0
Distribution System Upgrades	$ 3,182,000	$ 474,160	$ 451,462	$ 22,698	$ 474,160	$ 0	$ 22,698
Ugum Water Treatment Plant Reservoir	$ 3,672,000	$ -	$ -		$ -	$ -	$ -
Water Audit Program & Water Loss Control Plan		$ 100,000	$ 15,031	$ 63,428	$ 78,459	$ 21,541	$ 84,970
Production Plan / Reduce Navy Purchases		$ 100,000	$ 94,286	$ 5,714	$ 100,000	$ -	$ 5,714
Hydraulic Asessment of Tank		$ 500,000	$ 497,004	$ 2,996	$ 500,000	$ -	$ 2,996
Agana Heights & Chaot Tanks		$ 4,700,000	$ 4,327,370	$ 372,630	$ 4,700,000	$ -	$ 372,630
Tank Major Repair Yigo#1 Mangilao#2 Agat#2		$ 1,900,000	$ 1,750,355	$ 97,659	$ 1,848,013	$ 51,987	$ 149,645
Tank Major Repair Yigo#1 Mangilao#2 Agat#2		$ -			$ -	$ -	$ -
Assessment of malojloj Elevetad & Yigo Elevated		$ 200,000	$ 200,000	$ -	$ 200,000	$ -	$ -
Public Water System Asser Inventory/Condition Assesment		$ 100,000	$ 96,554	$ 3,446	$ 100,000	$ -	$ 3,446
Public Water System GIS & Mapping		$ 50,000	$ 50,000	$ -	$ 50,000	$ -	$ -
		$ -			$ -	$ -	$ -
Wastewater System Planning	$ 1,500,000	$ 1,500,000	$ 1,465,858	$ 8,142	$ 1,474,000	$ 26,000	$ 34,142
Wastewater Vehicles	$ 235,000	$ 235,000	$ 209,795	$ 25,205	$ 235,000	$ 0	$ 25,205
NDWWTP - Chlorine Tanks	$ 250,000	$ 250,000	$ 250,000		$ 250,000	$ -	$ -
Tumon Bay Sewer Upgrades	$ 100,000	$ -	$ -		$ -	$ -	$ -
Wastewater Collection System Repl/Rehab		$ 1,105,000	$ 718,036	$ 283,287	$ 1,001,323	$ 103,677	$ 386,964
Facilities Plan/Design for Baza Gardens WWTP	$ 1,250,000	$ 1,250,000	$ 1,239,250	$ 10,750	$ 1,250,000	$ -	$ 10,750
Facilities Plan/Design for Agat-Santa Rita WWTP	$ 900,000	$ 899,630	$ 881,749	$ 17,881	$ 899,630	$ -	$ 17,881
Priority 1 Sewer Upgrades – Baza Gardens WWTP	$ 650,000	$ -	$ -		$ -	$ -	$ -
Baza Gardens STP Replacement	$ 3,567,000	$ 1,301,947	$ 268,150	$ 48,850	$ 317,000	$ 984,947	$ 1,033,797
Facilities Plan/Design for Umatac Merizo WWTP		$ 900,000	$ 683,211	$ 170,646	$ 853,858	$ 46,142	$ 216,789
Agat/Santa Rita STP Replacement	$ 2,968,000	$ 2,218,000	$ 2,215,591	$ 2,109	$ 2,217,701	$ 300	$ 2,409
Northern District WWTP Primary Treatment Upgrades	$ -	$ 11,750,000	$ 11,532,253	$ 211,261	$ 11,743,514	$ 6,486	$ 217,747
Biosolids Management Plan		$ 200,000	$ 196,414	$ 3,586	$ 200,000	$ -	$ 3,586
Agana WWTP Interim Measures	$ -	$ 11,500,000	$ 11,242,386	$ 57,614	$ 11,300,000	$ 200,000	$ 257,614
I&I SSES Southern		$ 800,000	$ 733,872	$ 66,129	$ 800,000	$ (0)	$ 66,128
I&I SSES Central		$ 850,000	$ 794,325	$ 55,675	$ 850,000	$ -	$ 55,675
I&I SSES Northern		$ -			$ -	$ -	$ -
Umatac Merizo Replacement		$ 250,000	$ 247,431	$ 2,569	$ 250,000	$ -	$ 2,569
Northern District WWTP Secondary Treatment Upgrades		$ 1,000,000					$ 1,000,000
		$ -					
Well Electrical Protection	$ 26,000	$ -	$ -		$ -	$ -	$ -
SCADA Pilot Project	$ 300,000	$ 61,950	$ 19,812	$ 42,138	$ 61,950	$ (0)	$ 42,138
Electrical Upgrade - Water Wells	$ 3,000,000	$ 354,227	$ 335,378	$ 18,849	$ 354,227	$ 0	$ 18,849
Electrical Upgrade - Water Booster	$ 325,000	$ -	$ -		$ -	$ -	$ -
Electrical Upgrade -Water Booster	$ 350,000	$ -	$ -		$ -	$ -	$ -
Electrical Upgrade - Other Water	$ 250,000	$ -			$ -	$ -	$ -
SCADA Improvements – Phase 1	$ 250,000	$ 250,000	$ 193,989	$ 56,011	$ 250,000	$ -	$ 56,011
SCADA Improvements – Phase 2	$ 1,100,000	$ 1,056,986	$ 1,027,424	$ 29,562	$ 1,056,986	$ -	$ 29,562
SCADA Improvements – Phase 3	$ 2,500,000	$ 24,956	$ 24,956	$ -	$ 24,956	$ 0	$ 0
SCADA Improvements – Phase 4	$ 850,000	$ -	$ -		$ -	$ -	$ -
		$ -					
Laboratory Modernization	$ 1,200,000	$ -	$ -		$ -	$ -	$ -
Land Survey	$ 1,500,000	$ 500,000	$ 461,986	$ 37,701	$ 499,687	$ 313	$ 38,014
General Plant Improvements / Water	$ 14,370,000	$ 7,241,000	$ 7,241,000	$ 0	$ 7,241,000	$ 0	$ 0
Interest Earned							$ 64,115
Total Construction Fund (2010 Series Revenue Bond)	**$ 87,402,000**	**$ 87,402,000**	**$ 78,382,814**	**$ 3,664,161**	**$ 82,046,975**	**$ 4,355,025**	**$ 9,083,302**

1.) PUC's Docket 11-01 $29,000,000.00 dated
09/19/11authorized GWA for reallocation
2) PUC's Docket 11-01 Reallocation of $23,246,000.00 dated 07/30/12
3) PUC's Dockect Reallocation dated February 2013

GUAM WATERWORKS AUTHORITY
2013 Series Bond Project Status
As of October 31, 2017

SCHEDULE K

PROJECT NAME	ORIGINAL APPROVED PROJECT COST	Adjusted Project Cost	EXPENDITURES AS OF 10/31/17	OUTSTANDING ENCUMBRANCES	TOTAL EXPENDITURES AND ENCUMBRANCES	UNOBLIGATED PROJECT COST	Construction fund balance AS OF 10/31/17
Santa Rita Springs Booster Pump Rehab Phase II	$ 100,000	$ 100,000	$ 61,482	$ 38,518	$ 100,000	$ -	$ 38,518
"A" Series Well Transmission Line	$ 400,000	$ 400,000	$ 314,479	$ 55,367	$ 369,846	$ 30,154	$ 85,521
Water Booster Pump Station	$ 6,000,000	$ 1,861,000	$ 1,656,428	$ 23,536	$ 1,679,964	$ 181,036	$ 204,572
Meter Replacement Program		$ 999,000	$ 996,532	$ -	$ 996,532	$ 2,468	$ 2,468
Barrigada Tank Repair/Replacement	$ 6,000,000	$ 4,987,000	$ 4,924,959	$ 62,041	$ 4,987,000	$ 0	$ 62,041
Leak Detection	$ 100,000	$ 20,000	$ 16,916	$ -	$ 16,916	$ 3,084	$ 3,084
Potable Water System Planning	$ 800,000	$ 624,000	$ 598,825	$ 25,175	$ 624,000	$ -	$ 25,175
Implement Ground Water Rule	$ 1,000,000	$ 1,000,000	$ 1,000,000	$ -	$ 1,000,000	$ -	$ -
Deep Well Rehabilitation	$ 800,000	$ 200,000	$ 189,930	$ 10,071	$ 200,000	$ (0)	$ 10,070
New Deep Wells at Down Hard	$ 2,000,000	$ 810,000			$ -	$ 810,000	$ 810,000
Master Meters	$ 4,000,000	$ 784,000	$ 531,188	$ 180,872	$ 712,060	$ 71,940	$ 252,812
Ugum Water Treatment Plant Intake	$ 1,000,000	$ 982,000	$ 578,858	$ 280,943	$ 859,801	$ 122,199	$ 403,142
Water Wells	$ 4,200,000	$ 4,200,000	$ 2,279,115	$ 750,914	$ 3,030,029	$ 1,169,971	$ 1,920,885
Water Distribution System	$ 12,000,000	$ 11,151,000	$ 4,366,442	$ 4,680,418	$ 9,046,860	$ 2,104,140	$ 6,784,558
Pressure Zone Realignment /	$ 1,000,000	$ 431,000	$ 321,651	$ 1,074	$ 322,725	$ 108,275	$ 109,349
Mechanical/Electrical Equipment	$ 430,000	$ 430,000	$ 328,686	$ 98,112	$ 426,798	$ 3,202	$ 101,314
Water Reservoir Internal/External	$ 800,000	$ -			$ -	$ -	$ -
Water System Reservoirs 2005 Improvements	$ 21,000,000	$ 13,878,000	$ 10,089,027	$ 3,660,426	$ 13,749,454	$ 128,547	$ 3,788,973
Ugum Water Treatment Plant Reservoir	$ 7,000,000	$ 90,000			$ -	$ 90,000	$ 90,000
Agana Heights & Chaot Tanks	$ 4,500,000	$ 3,280,000	$ 233,265	$ 47,022	$ 280,287	$ 2,999,713	$ 3,046,735
Tank Major Repair Yigo#1 Mangilao#2 Agat#2	$ 13,500,000	$ 11,605,000	$ 847,731	$ 10,757,269	$ 11,605,000	$ 0	$ 10,757,270
Tank Major Repair Yigo#1 Mangilao#2 Agat#2	$ 8,000,000	$ -			$ -	$ -	$ -
Assessment of maloiloi Elevetad & Yigo Elevated	$ 500,000	$ 485,117	$ 461,813	$ 23,304	$ 485,117	$ -	$ 23,304
Fire Hydrant Replacement Program	$ -	$ -			$ -	$ -	$ -
		$ -					
Wastewater System Planning	$ 800,000	$ 651,000	$ 550,480	$ 100,520	$ 651,000	$ (0)	$ 100,520
Lift Station Upgrades	$ 5,000,000	$ 946,000	$ 561,748	$ 363	$ 562,111	$ 383,889	$ 384,252
Wastewater Collection System Repl/Rehab	$ 6,500,000	$ 780,000	$ 476,682	$ 168,631	$ 645,314	$ 134,687	$ 303,318
Baza Gardens STP Replacement		$ 3,114,883	$ 889,234	$ 2,225,634	$ 3,114,869	$ 15	$ 2,225,649
Facilities Plan/Design for Umatac-Merizo WWTP		$ 473,000	$ 335,000	$ 36,699	$ 371,699	$ 101,301	$ 138,000
Agat/Santa Rita STP Replacement	$ 19,000,000	$ 67,200,000	$ 29,069,906	$ 38,130,093	$ 67,200,000	$ 0	$ 38,130,094
Agana WWTP Interim Measures		$ 673,000	$ 548,597	$ 124,403	$ 673,000	$ (0)	$ 124,403
Umatac Merizo Replacement	$ 2,000,000	$ -			$ -	$ -	$ -
		$ -					
Wastewater Pump Station Electrical Upgrade	$ 620,000	$ 620,000	$ 91,348	$ 8,513	$ 99,861	$ 520,139	$ 528,652
Electrical Upgrade - Water Wells	$ 1,500,000	$ 1,500,000	$ 1,480,769	$ 19,230	$ 1,500,000	$ 0	$ 19,231
Electrical Upgrade - Water Booster	$ 325,000	$ 2,000			$ -	$ 2,000	$ 2,000
Electrical Upgrade -Water Booster	$ 350,000	$ 200,000	$ 977	$ -	$ 977	$ 199,023	$ 199,023
Electrical Upgrade - Other Water	$ 250,000	$ 150,000	$ 60,700	$ -	$ 60,700	$ 89,300	$ 89,300
SCADA Improvements – Phase 3	$ 1,850,000	$ 923,000	$ 427,949	$ 294,410	$ 722,359	$ 200,641	$ 495,051
SCADA Improvements – Phase 4	$ 500,000	$ -			$ -	$ -	$ -
		$ -					$ -
Laboratory Modernization	$ 1,500,000	$ 1,173,000	$ 1,137,574	$ 33,891	$ 1,171,465	$ 1,535	$ 35,426
Land Survey	$ 2,000,000	$ 2,000	$ 1,038	$ 15	$ 1,053	$ 948	$ 963
General Plant Improvements / Water	$ 2,000,000	$ 2,600,000	$ 1,265,043	$ 1,176,695	$ 2,441,737	$ 158,263	$ 1,334,957
Allowance for COI							$ 275,005
Interest Earned							$ 313,186
Total Construction Fund (2013 Series Revenue Bond)	**$ 139,325,000**	**$ 139,325,000**	**$ 66,694,373**	**$ 63,014,159**	**$ 129,708,532**	**$ 9,616,468**	**$ 73,218,819**

PUC's Docket 14-04 dated February 25, 2014

GUAM WATERWORKS AUTHORITY
2014 Series Refunded Bond Project Status
As of October 31, 2017

SCHEDULE L

PROJECT NAME	ORIGINAL APPROVED PROJECT	ADJUSTED PROJECT COST	EXPENDITURES AS OF 10/31/17	OUTSTANDING ENCUMBRANCES	TOTAL EXPENDITURES AND ENCUMBRANCES	UNOBLIGATED PROJECT COST	20% PUC AS OF 10/31/17	Construction fund balance AS OF 10/31/17
Agana Treatment Plant	$ 10,475,000	$ 11,065,512	11,065,512	$ -	$ 11,065,512	$ (0)	$ 2,095,000	$ (0)
								$ -
Agana Outfall	$ 5,030,000	$ 10,127,198	10,127,198	$ -	$ 10,127,198	$ 0	$ 1,006,000	$ 0
								$ -
								$ -
Northern District (Outfall)	$ 4,700,000	$ 10,251,423	10,251,423	$ -	$ 10,251,423	$ 0	$ 940,000	$ 0
Northern District WWTP Upgrade		$ 173,681	173,681		$ 173,681	$ -		$ -
Northern Treatment Plant		$ -	-		$ -	$ -		$ -
Baza Gardens Wastewater Treatment Plant	$ 500,000	$ 297,177	297,177	$ -	$ 297,177	$ (0)	$ 100,000	$ (0)
Interim Disinfection Facilities	$ 581,000	$ 3,437,311	3,408,599	$ 28,712	$ 3,437,311	$ (0)	$ 116,200	$ 28,712
						$ -		$ -
Electrical Protection	$ 1,000,000	$ 1,512,483	1,512,483.3	$ -	$ 1,512,483	$ (0)	$ 200,000	$ (0)
Well Vulnerability Reduction	$ 600,000	$ 185,522	185,522	$ -	$ 185,522	$ 0	$ 120,000	$ 0
Old Agat Wastewater Collection (I/I Reducti	$ 2,155,000	$ 1,931,659	1,931,659	$ -	$ 1,931,659	$ (0)	$ 431,000	$ (0)
				$ -		$ -		$ -
Chaot WW Pump Station/Collection System	$ 410,000	$ 399,120	399,120	$ -	$ 399,120	$ -	$ 82,000	$ -
Lift Station Upgrades	$ 230,000	$ 149,895	149,895	$ -	$ 149,895	$ 0	$ 46,000	$ 0
Collection Line Upgrades	$ 200,000	$ 62,755	62,755	$ -	$ 62,755	$ 0	$ 40,000	$ 0
"A" Well Transmission Line	$ 2,413,000	$ 3,833,175	3,790,888	$ 42,287	$ 3,833,175	$ (0)	$ 482,600	$ 42,287
					$ -	$ -		$ -
Santa Rita Springs - Booster Pump Rehab.	$ 648,000	$ 306,841	306,841	-	$ 306,841	$ (0)	$ 129,600	$ (0)
						$ -	$ -	$ -
Fena Bypass Transmission line		$ 160,913	160,913	$ -	$ 160,913	$ (0)	$ -	$ (0)
Storage Additions	$ 950,000	$ -			$ -	$ -	$ 190,000	$ -
Booster Station Upgrades	$ 390,000	$ 66,734	66,734	$ -	$ 66,734	$ -	$ 78,000	$ -
Mangilao Tank Repair	$ 800,000	$ 398,367	397,933	$ 434	$ 398,367	$ (0)	$ 160,000	$ 434
Ugum Tank Replacement	$ 2,500,000	$ -			$ -	$ -	$ 500,000	$ -
Ugum WTPlant Refurbishment ($1.724,970EPA)		$ 6,588,473	6,531,525	$ 56,949	$ 6,588,473	$ (0)		$ 56,948
Barrigada Tank Repair/Replacement	$ 3,000,000	$ 65,019	65,019	$ -	$ 65,019	$ 0	$ 600,000	$ 0
						$ -		$ -
Water Reservoir Condition Assessment		$ 1,250,000	1,249,227.16	$ 772	$ 1,250,000	$ 0	$ -	$ 773
EarthTech Well Buyout	$ 5,000,000	$ 5,975,000	5,975,000	$ -	$ 5,975,000	$ -	$ 1,000,000	$ -
Water Wastewater Master Plan	$ 4,900,000	$ 4,881,308	4,881,308	$ -	$ 4,881,308	$ 0	$ 980,000	$ 0
Laboratory Modernization	$ 800,000	$ 135,055	135,055	$ -	$ 135,055	$ 0	$ 160,000	$ 0
Land Survey	$ 800,000	$ 577,836	565,670	$ 12,166	$ 577,836	$ 0	$ 160,000	$ 12,166
Ground Water Disinfection		$ -				$ -		$ -
GWUDI Study		$ 262,234	260,430	1,804	$ 262,234	$ -		$ 1,804
						$ -		$ -
Contingency	$ 12,276,023	$ 154	-	$ -	$ -	$ -		$ 732
						$ -		$ -
						$ -		$ -
						$ -		$ -
						$ -		$ -
						$ -		$ -
Vehicles	$ 1,100,000	$ 1,280,000	2,130,305	$ (850,305)	$ 1,280,000	$ -	$ 220,000	$ -
Generation Equipment	$ 700,000	$ 880,000	2,712	$ 877,288	$ 880,000	$ 0		$ 27,033
Leak Detection/Line Replacement	$ 8,200,000	$ 5,988,494	5,988,494	$ -	$ 5,988,494	$ -	$ 1,640,000	$ -
						$ -		$ -
						$ -		$ -
Automated Meter Reading	$ 12,572,063	$ 17,468,359	16,870,522	$ 537,157	$ 17,468,359.32	$ 0	$ 2,514,413	$ 597,837
Total Construction Fund (2014 Series Refu	$ 82,930,086	$ 89,711,698	88,891,990	$ 758,873.38	$ 89,711,543	$ 1	$ 13,990,813	$ 768,726
Interest Earned	$ 6,781,612	$ (0)				$ (0)		$ 2,994
Total Project Cost Funding	**$ 89,711,698**	**$ 89,711,698**	**88,891,990**	**$ 758,873.38**	**$ 89,711,543**	**$ 1**	**$ 13,990,813**	**$ 771,721**

GUAM WATERWORKS AUTHORITY
2016 Series Bond Project Status
As of October 31, 2017

SCHEDULE M

PROJECT NAME	ORIGINAL APPROVED PROJECT COST	Adjusted Project Cost	EXPENDITURES AS OF 10/31/17	OUTSTANDING ENCUMBRANCES	TOTAL EXPENDITURES AND ENCUMBRANCES	UNOBLIGATED PROJECT COST	Construction fund balance AS OF 10/31/17
Water Booster Pump Station	$ 4,139,000	$ 4,139,000			$ -	$ 4,139,000	$ 4,139,000
Meter Replacement Program	$ 4,501,000	$ 4,501,000		$ 150,000	$ 150,000	$ 4,351,000	$ 4,501,000
Barrigada Tank Repair/Replacement	$ 1,013,000	$ 1,013,000		$ -	$ -	$ 1,013,000	$ 1,013,000
Leak Detection	$ 1,180,000	$ 1,180,000		$ -	$ -	$ 1,180,000	$ 1,180,000
Potable Water System Planning	$ 2,276,000	$ 2,276,000	$ 159,105	$ 317,189	$ 476,294	$ 1,799,706	$ 2,116,895
Deep Well Rehabilitation	$ 250,000	$ 250,000		$ -	$ -	$ 250,000	$ 250,000
New Deep Wells at Down Hard	$ 1,190,000	$ 1,190,000			$ -	$ 1,190,000	$ 1,190,000
Master Meters	$ 3,616,000	$ 3,616,000		$ 151,539	$ 151,539	$ 3,464,461	$ 3,616,000
Ugum Water Treatment Plant Intake	$ 18,000	$ 18,000			$ -	$ 18,000	$ 18,000
Water Wells	$ 2,500,000	$ 2,500,000			$ -	$ 2,500,000	$ 2,500,000
Water Distribution System	$ 2,049,000	$ 49,000			$ -	$ 49,000	$ 49,000
Pressure Zone Realignment /	$ 1,141,000	$ 1,141,000			$ -	$ 1,141,000	$ 1,141,000
Mechanical/Electrical Equipment	$ 100,000	$ 100,000			$ -	$ 100,000	$ 100,000
Water Reservoir Internal/External	$ 800,000	$ 800,000			$ -	$ 800,000	$ 800,000
Water System Reservoirs 2005 Improvements	$ 42,350,000	$ 28,350,000	$ 456,038	$ 1,893,343	$ 2,349,381	$ 26,000,620	$ 27,893,963
Ugum Water Treatment Plant Reservoir	$ 6,410,000	$ -			$ -	$ -	$ -
Water Audit Program & Water Loss Control Plan	$ 1,000,000	$ 1,000,000				$ 1,000,000	$ 1,000,000
Agana Heights & Chaot Tanks	$ 1,220,000	$ 1,220,000			$ -	$ 1,220,000	$ 1,220,000
Tank Major Repair Yigo#1 Mangilao#2 Agat#2	$ 1,895,000	$ 1,895,000			$ -	$ 1,895,000	$ 1,895,000
Tank Major Repair Yigo#1 Mangilao#2 Agat#2	$ 10,500,000	$ 7,409,830		$ 1,822,133	$ 1,822,133	$ 5,587,697	$ 7,409,830
Fire Hydrant Replacement Program	$ 2,000,000	$ 2,000,000			$ -	$ 2,000,000	$ 2,000,000
						$ -	
Wastewater System Planning	$ 349,000	$ 349,000	$ 30,708	$ 282,275	$ 312,983	$ 36,017	$ 318,292
Lift Station Upgrades	$ 2,404,000	$ 2,404,000	$ 37,571	$ 227,184	$ 264,755	$ 2,139,245	$ 2,366,429
Wastewater Collection System Repl/Rehab	$ 2,920,000	$ 2,920,000			$ -	$ 2,920,000	$ 2,920,000
Baza Gardens STP Replacement	$ 16,700,000	$ 29,400,170	$ 5,556,788	$ 23,642,302	$ 29,199,091	$ 201,079	$ 23,843,382
Facilities Plan/Design for Umatac-Merizo WWTP	$ 527,000	$ 527,000	$ 190,947	$ 61,158	$ 252,105	$ 274,895	$ 336,053
Agat/Santa Rita STP Replacement	$ 3,000,000	$ 3,000,000	$ 337,891	$ 348,828	$ 686,719	$ 2,313,281	$ 2,662,109
Agana WWTP Interim Measures	$ 827,000	$ 827,000			$ -	$ 827,000	$ 827,000
Umatac Merizo Replacement	$ 8,000,000	$ 20,800,000	$ 199,684	$ 20,574,598	$ 20,774,282	$ 25,718	$ 20,600,316
						$ -	
Wastewater Pump Station Electrical Upgrade	$ 100,000	$ 100,000			$ -	$ 100,000	$ 100,000
Electrical Upgrade - Water Wells	$ 650,000	$ 650,000			$ -	$ 650,000	$ 650,000
Electrical Upgrade - Water Booster	$ 323,000	$ 323,000			$ -	$ 323,000	$ 323,000
SCADA Improvements – Phase 3	$ 1,177,000	$ 1,177,000		$ 432,705	$ 432,705	$ 744,295	$ 1,177,000
SCADA Improvements – Phase 4	$ 6,500,000	$ 6,500,000			$ -	$ 6,500,000	$ 6,500,000
						$ -	
Laboratory Modernization	$ 1,127,000	$ 1,127,000	$ 985,038	$ 141,962	$ 1,127,000	$ -	$ 141,962
Land Survey	$ 1,998,000	$ 1,998,000		$ 1,246,376	$ 1,246,376	$ 751,624	$ 1,998,000
General Plant Improvements / Water	$ 2,769,463	$ 2,769,463	$ 120,192	$ 1,357,165	$ 1,477,357	$ 1,292,106	$ 2,649,271
Information Technology Integration Improvements	$ 500,000	$ 500,000	$ 244,068	$ -		$ 500,000	$ 255,932
Interest Earned		$ -					$ 448,300
		$ -					
Total Construction Fund (2016 Series Revenue Bond)	**$ 140,019,463**	**$ 140,019,463**	**$ 8,318,029**	**$ 52,648,757**	**$ 60,722,719**	**$ 79,296,744**	**$ 132,149,734**

GUAM WATERWORKS AUTHORITY
Schedule of Series 2010, 2013, 2014 Refunding and 2016 Bond Bank Accounts
As of October 31, 2017

SCHEDULE N

		10/31/2017
BANK OF GUAM		
BOG - Revenue Account	$	6,924,261
BOG - Operations and Maintenance Reserve		3,083,482
BOG - Operations, Maintenance, Renewal and Replacement Reserve Fund		17,423,213
BOG - Capital Improvement Fund		885,833
BOG - O & M Reserve		13,523,792
BOG - Debt Service Reserve		11,223,852
BOG - CAPEX Reserve		15,469,637
Total BOG Bank Account Balance	**$**	**68,534,070**
Series 2010 Bond:		
BOG - Construction Account	$	9,083,302
USB - Debt Service Fund		2,692,950
USB - Debt Service Reserve Fund		7,566,460
Total Series 2010 Bond Bank Balance	**$**	**19,342,712**
Series 2013 Bond:		
BOG - Construction Fund	$	73,218,819
USB - Debt Service Fund		3,115,232
USB - Debt Service Reserve Fund		12,031,688
Total Series 2013 Bond Bank Balance	**$**	**88,365,739**
Series 2014 Refunding Bond:		
BOG - Construction Fund	$	771,720
USB - Debt Service Fund		2,394,690
USB - Debt Service Reserve Fund		7,717,841
Total Series 2014 Refunding Bond Bank Balance	**$**	**10,884,251**
Series 2016 Bond:		
BOG - Construction Account	$	132,149,734
BOG - Capitalized Interest Fund		2,383,864
USB - Debt Service Fund		130
USB - Debt Service Reserve Fund		7,585,568
Total Series 2016 Bond Bank Balance	**$**	**142,119,297**

GUAM WATERWORKS AUTHORITY

GWA WASTEWATER TREATMENT O&M REPORT

October, 2017

General Utility Improvements & Significant Events:

HAGÅTÑA WWTP
Pending repair on one centrifuge (gear drive) and two mixers for coagulation/flocculation tank.

NORTHERN DISTRICT WWTP
Repairs pending on mechanical bar screen and septage receiving mixer. Upgrade to secondary treatment project is presently underway with completion expected 2021.

AGAT WWTP
Normal operations
The plants monthly flow average continues to be excessive and over design capacity. One sludge drying bed cleaned out and sludge disposed at Layon landfill.

AGAT SANTA RITA WWTP
Construction of new facility is underway, phase 1 completed including clarifier, oxidation ditch and UV disinfection. Second oxidation ditch and clarifier completed. Final completion expected April 2018.

BAZA GARDENS WWTP
Normal operations
Design completed and bidding process completed to eliminate this facility and replace with a series of pump stations to divert flow to the new Agat Santa Rita Treatment Plant. Contractor on site starting construction, scheduled completion expected April 2018.

UMATAC WWTP

Experienced lower lagoon overflow due to heavy rain event.
Design/build upgrade of system processes underway to include flow equalization basin, new pump stations, renovation of overland flow system, and UV disinfection.

Guam Waterworks Authority	Date: 11/17/2017 Time:

REVIEWS			
TOTAL PUMPS INSTALLED	51	OVERAL AVERAGE	94%
TOTAL PUMPS OPERATIONAL	48	% OF OPERATING PUMPS	94%
TOTAL BOOSTER PUMP STATIONS	25		

GUAM WATERWORKS AUTHORITY

WATER DISTRIBUTION FACILITIES REPORT

Northern District

NO:	FACILITY	PUMP HORSEPOWER	NO OF INSTALLED PUMPS	NO OF OPERATIONAL PUMPS	PUMP AVAILABILITY %	GENERATOR OPERATIONAL FAULT	ATS MANUAL/AUTO	PUMP UNIT REMARKS	WORK ORDER NO:	VALVES, ELECTRICAL,STRUCTURAL REMARKS	WORK ORDER NO:	ESTIMATED REPAIR DATE	PUMP AND MOTOR INVENTORY
1	Gayinero	20	2	2	100%	OP	A						
2	Mataguac	25	2	2	100%	OP	A						
3	Santa Rosa	15	2	2	100%	OP	A						
4	Hyundai	40	2	1	50%	OP	A	Pump # 1 requires pump and motor. Station to undergo renovation during reservoir project.					
5	Access	60	2	2	100%	OP	A						
6	Chln. Palauan	5	2	2	100%	N/A							
7	Nimitz Hill	7.5	2	2	100%	N/A							
8	Adawag	1.5	2	2	100%	N/A							
9	Pale Kiren	1	1	1	100%	N/A							
10	Ulloa/Untalan	1	2	2	100%	OP	A						
11	Latte Heights	15	2	2	100%	OP	A						
	TOTAL = 11		**21**	**20**	**95%**								
pump availability =no of operational pumps/no of pumps*100%													

Central District

NO:	FACILITY	PUMP HORSEPOWER	NO OF INSTALLED PUMPS	NO OF OPERATIONAL PUMPS	PUMP AVAILABILITY %	GENERATOR OPERATIONAL FAULT	ATS MANUAL/AUTO	PUMP UNIT REMARKS	WORK ORDER NO:	VALVES, ELECTRICAL,STRUCTURAL REMARKS	WORK ORDER NO:	ESTIMATED REPAIR DATE	UPDATES
1	Pago	150 / 100	3	2	67%	0P	A	Pump 2 leaking at seal, pump operational, work ongoing.					
2	Brigade	60	3	3	100%	OP	A						
3	Windward Hills	200 / 75	3	3	100%	OP	A						
4	Santa Rita Springs	40	2	2	100%	OP	A						
5	Santa Ana (Lower)	25	2	1	50%	N/A						CIP required for new unit and electrical for generator	
6	Camacho	1	1	1	100%	N/A						CIP required for new unit and electrical for generator	
7	Tenorio	1.5	1	1	100%	N/A						CIP required for new unit and electrical for generator	
	Total=7		**15**	**13**	**87%**								
pump availability =no of operational pumps/no of pumps*100%													

Southern District

NO:	FACILITY	PUMP HORSEPOWER	NO OF INSTALLED PUMPS	NO OF OPERATIONAL PUMPS	PUMP AVAILABILITY %	GENERATOR OPERATIONAL FAULT	ATS MANUAL/AUTO	PUMP UNIT REMARKS	WORK ORDER NO:	VALVES, ELECTRICAL,STRUCTURAL REMARKS	WORK ORDER NO:	ESTIMATED REPAIR DATE	UPDATES
1	Malojloj Line	125 / 50	3	3	100%	OP	A						
2	Geus	25	2	2	100%	OP	A						
3	Pigua	7.5	2	2	100%	N/A							
4	Toguan	25	2	2	100%	OP	A						
5	WBP-2	25	2	2	100%	OP	A						
6	WBP-1	5	2	2	100%	OP	A						
7	Malojloj Elevated	15	2	2	100%	OP	A						
	Total=7		**15**	**15**	**100%**								
pump availability =no of operational pumps/no of pumps*100%													

GUAM WATERWORKS AUTHORITY

Guam Waterworks Authority

VEHICLE FLEET STATUS

11/17/2017

EQUIPMENT STATUS				
Description	Number of Equipment	Number of Equipment Available	Number of Equipment Not Available	Percentage
Backhoe	5	1	4	20%
Bobcat	1	1	0	100%
Boom Truck	2	1	1	50%
Crane	2	0	2	0%
Dump Truck	3	1	2	33%
Flat Bed	1	0	1	0%
Forklift	7	6	1	86%
Fuel Tanker	1	1	0	100%
Heavy Duty	3	0	3	0%
Light	150	101	49	67%
Mini Backhoe	4	1	3	25%
Pumper Truck	1	0	1	0%
Sludge Truck	4	2	2	50%
Tow	1	0	1	0%
Tractor	2	2	0	100%
Trailer	12	7	5	58%
Trencher	1	1	0	100%
Vaccon	1	1	0	100%
Vacuum Truck	3	2	1	67%
Water Buffalo	2	2	0	100%
Water Tanker	5	3	2	60%
Total	211	133	78	

SUMMARY						
Operational	Operational w/Rprs Pending	In Shop-Accident Repairs	In Shop-Assessment Pending	In Shop-Repairs Pending	In Shop-Vendor Repairs	Recommend Survey
1	0	0	0	2	1	1
1	0	0	0	0	0	0
1	0	0	0	1	0	0
0	0	0	0	0	1	1
1	0	0	0	2	0	0
0	0	0	0	0	0	1
6	0	0	0	0	0	1
1	0	0	0	0	0	0
0	0	0	0	0	2	1
101	0	3	11	4	6	25
1	0	0	0	3	0	0
0	0	0	0	0	1	0
2	0	0	0	1	1	0
0	0	0	0	0	0	1
2	0	0	0	0	0	0
7	0	0	0	1	2	2
1	0	0	0	0	0	0
1	0	0	0	0	0	0
2	0	0	0	0	1	0
2	0	0	0	0	0	0
3	0	0	0	1	0	1
133	0	3	11	15	15	34