



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., Tues., February 18, 2020

AGENDA

1. ISSUES FOR DECISION

- 1.1** [Relative to Authorizing the Modernization of the Guam Waterworks Authority Enterprise Resource Planning System / Resolution No. 13-FY2020](#)
- 1.2** [Relative to Approval of Change Order No. 2 for the Route 4 Relief Sewer line Rehabilitation and Replacement Projects S15-006-EPA / Resolution No. FY16-2020](#)

2. GM REPORT

- 2.1** [GM Summary](#)

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: Feb 20; CCU Regular Monthly Mtg.: Feb 21

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. 13-FY2020

Relative to Authorizing the Modernizations of the Guam Waterworks Authority Enterprise Resource Planning System

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

GWA first implemented JD Edwards (JDE) Enterprise Resource Planning system (ERP) in 1998 to manage day-to-day accounting, procurement and human resources business activities. The JDE World ERP v9.3 will no longer be supported or enhanced by the vendor in March 2020. Over the years, GWA employees have developed manual workarounds using stand-alone software applications to perform tasks and create reports because of JDE World's limitations and its complicated and inefficient legacy green screen "command line interface."

GWA has evaluated the DXC Red Projects JDE EnterpriseOne (E1) solution for engineering and construction firms and determined it is a state-of-the-art ERP solution that provides all the tools necessary to transform GWA to paperless digital business processes and integrate with other GWA business systems.

GWA requires a transformational ERP upgrade to automate and integrate business systems and processes that will improve employee productivity, more efficiently streamline operations and provide timely decision support information in order to achieve the objectives in the 2018 Water Resource Master Plan Update (WRMPU).

A major component of the WRMPU is more than 160 Capital Improvement Projects (CIP) for implementation between 2018 and 2037 estimated to cost \$1.2 billion. The Red Projects modernization of the ERP will allow GWA to automate CIP project workflow for multi-fund/year budgeting, procurement, contracting, project management, job forecasting, financial tracking/payments and capitalization of assets. Red Projects will allow the engineering and finance departments to focus on high value work by cutting down on the amount of time spent on gathering and reconciling information from several siloed information systems. It will also enable internal staff, external agencies, contractors and partners to collaborate on both CIP planning and implementation.

The GWA Asset Management program is using a Computerized Maintenance Management System (CMMS) that requires double entry for work orders, inventory and time and labor. The CMMS system is also not integrated with the JDE ERP and thus is unable to track the cost of asset maintenance and reconcile with Fixed Asset valuations. The software program has been problematic to upgrade. Significant IT resources are dedicated to developing and maintaining it and, despite multiple efforts, been unable to implement a mobile solution with simplified forms for use on smart phones by field operations.

Red Projects will completely integrate Asset Management with Fixed Assets, Inventory and Time and Labor functions to allow condition-based maintenance and accurate and historical cost reporting and analysis. Integration of financial information will allow real-time cost of service predictive modeling and reporting. A pre-integrated Mobile Workforce Solution will provide employees in the field with real time access to information to conduct preventive and corrective maintenance on GWA assets. Work orders can be completed in the field using a smartphone by allowing employees to enter job-based time and materials information as well as complete inspections and assessments.

Modernizing the ERP system is necessary and urgent to provide many of the tools necessary to move GWA's organizational performance to the next level. In order to elevate to a well-rounded world class water and wastewater utility, GWA must be more agile in recording, processing and reporting information. Too much time and effort are currently wasted on low-value activity such as manually collecting, modifying, editing and formatting data for reports. The use of paper-based forms and physical routing of documents for approvals also slows processes such as procurement, recruitment, employee evaluations, employee on-boarding and incident reporting to list a few. The Red Projects JDE E1 solutions will completely digitize GWA's work processes, freeing up employees to perform more of the high value work needed to achieve high levels of internal and external customer service.

Where is the location?

The project will have two JD Edwards E1 database environments. One environment will reside in the Oracle Cloud in an Arizona data center and the second environment will reside in the Fadian data center. Toward the end of the project implementation, GWA will determine whether the production environment will reside in the Cloud or on-premise at Fadian. The disaster recovery environment will be located at the other location. The disaster recovery design will guarantee a Recovery Point Objective of 1 hour or less. The data replication between the production and backup environment is estimated to be a 15-minute delay.

How much will it cost?

The proposal to modernize the GWA Enterprise Resource Planning system is Five Million Two Hundred and Eighty-Six Thousand Three Hundred and Eighty-Five Dollars (\$5,286,385).

When will it be completed?

The estimated project length is approximately seven months after PUC approval. If the contract is approved as part of the February 27, 2020 docket then the completion date would be January 2021.

What is the funding source?

GWA received a \$500,000 grant and will apply for an additional grant in April 2020 from the Office of Insular Affairs Technical Assistance Program. The terms of the grant require GWA contribute not less than a 50% cost share toward the project. The non-grant funding source for the project is from bonds, internally CIP and revenue funds.

The RFP/BID responses (if applicable):

GWA was directed by Oracle to work with DXC Redrock, the only Oracle Platinum Partner contractor in the Western Pacific with a proprietary pre-built JDE E1 configuration and implementation plan for engineering and construction firms, to upgrade to E1. In December 2018, a sole source procurement was awarded for first phase of the E1 upgrade implementation labeled the "Discovery Phase." The Discovery Phase included defining scope for both a technical and transformational upgrade and provided several key project planning deliverables including pricing. In October 2019, DXC Red Rock provided pricing for their proprietary product Red Projects to implement a transformational upgrade that could be completed within (7) seven months.



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. 13-FY2020

**RELATIVE TO AUTHORIZING THE MODERNIZATIONS OF THE GUAM
WATERWORKS AUTHORITY ENTERPRISE RESOURCE PLANNING SYSTEM**

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 first implemented JD Edwards (JDE) Enterprise Resource Planning system (ERP) in 1998 and continues to use the JDE World ERP which will no longer be supported or enhanced by the vendor in April 2022; and

WHEREAS, over the years, GWA employees have developed manual workarounds using stand-alone software applications to perform tasks because of JDE World’s limitations and its complicated and inefficient legacy green screen “command line interface;” and

WHEREAS, GWA requires a transformational ERP upgrade to automate and integrate business systems and processes that will improve employee productivity, more efficiently streamline operations and provide timely decision support information in order to achieve the objectives in the 2018 Water Resource Master Plan; and

WHEREAS, Oracle Corporation purchased JDE and agreed to allow GWA to migrate JDE World licenses to its new, modern, browser-based digital platform, JDE EnterpriseOne, with enhanced features and functions including mobility, robotics processing and user defined customization; and

1 **WHEREAS**, GWA has evaluated JDE EnterpriseOne and determined it is a state-of-the-
2 art ERP that provides all the tools necessary to transform to paperless digital business processes
3 and integrate with other GWA business systems; and

4
5 **WHEREAS**, independent 3rd party research estimates the typical cost for a mid-size
6 business transformational ERP upgrade is between 3% and 6% of annual revenue. For GWA,
7 this is \$3.3 to \$7.4 million; and

8
9 **WHEREAS**, GWA is requesting authorization for expenditure to purchase additional
10 licenses, support, infrastructure and professional services from Oracle Corporation and Red Rock
11 Consulting Pty Ltd; and

12
13 **WHEREAS**, Red Rock Consulting Pty Ltd (Red Rock) is the largest independent
14 provider of Oracle consulting and managed services in Australia and New Zealand with more
15 than 4500 customers. Red Rock is an Oracle Platinum Partner offering a full range of services
16 around Oracle's applications, platform services, and engineered systems and has been awarded
17 the JD Edwards Partner of the Year in the Asia-Pacific region for the last 5 years; and

18
19 **WHEREAS**, GWA is anticipating the cost of the implementation of the upgrade and
20 licenses at a total cost of \$5.2 million; and

21
22 **WHEREAS**, GWA received a Five Hundred Thousand Dollar (\$500,000.00) grant and
23 will apply for an additional grant funding in April 2020 from the Office of Insular Affairs
24 Technical Assistance Program for the JDE EnterpriseOne upgrade; and

25
26 **WHEREAS**, the terms of the grant require GWA contribute not less than a fifty percent
27 (50%) cost share toward the project. The source of matching and non-grant funding is from
28 bond, internal CIP and revenue funds; and

29
30 **NOW BE IT THEREFORE RESOLVED**, the Consolidated Commission on Utilities
31 does hereby approve the following:
32

1. The recitals set forth above hereby constitute the findings of the CCU.
2. The CCU finds that the terms of the proposal submitted by Red Rock Consulting Pty Ltd are fair and reasonable.
3. The CCU hereby authorizes the management of GWA to accept the bid from Red Rock Consulting Pty Ltd attached hereto as Exhibit A and which is also incorporated into this Resolution in its entirety.
4. The CCU hereby further authorizes the management of GWA to enter into a contract with Red Rock Consulting Pty Ltd. in the amount of Five Million Two Hundred Eighty-Six Thousand Three Hundred Eighty-Five Dollars (\$5,286,385.00).
5. The CCU hereby approves the funding total of Five Million Two Hundred Eighty-Six Thousand Three Hundred Eighty-Five Dollars (\$5,286,385.00).
6. The CCU hereby approves the use of funding sources from the Office of Insular Affairs Grants and the following GWA line items:
 - CDFA Number 15.875, Technical Assistance Program
 - CIP MC 15-01
 - Internally Funded CIP
 - Operating Revenue
 - Any other fund source as appropriate that may become available during the duration of the project period.
7. GWA Management is hereby authorized to seek PUC approval of contract as required by Docket 00-04.

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

DULY AND REGULARLY ADOPTED, this 21st day of February, 2020.

Certified by:

Attested by:

JOSEPH T. DUENAS
 Chairperson

MICHAEL T. LIMTIACO
 Secretary

SECRETARY'S CERTIFICATE

I, Michael T. Limtiaco, 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: _____

///

///

///

///

///

///

///

Exhibit A

DXC Red Projects Upgrade Proposal for GWA¹

| | Year 1 | Year 2 | Year 3 | Grand Total |
|--|--------------------|--------------------|------------------|--------------------|
| Fixed (One-time Cost) | \$2,808,210 | \$483,000 | \$0 | \$3,291,210 |
| License | \$473,000 | | | \$473,000 |
| Implementation | \$1,230,000 | | | \$1,230,000 |
| Extensions | \$717,200 | \$460,000 | | \$1,177,200 |
| Business Privilege Tax & Pass Through Expenses | \$388,010 | \$23,000 | \$0 | \$411,010 |
| Recurring (Operational Cost) | \$591,325 | \$705,075 | \$698,775 | \$1,995,175 |
| License | \$71,500 | \$191,500 | \$191,500 | \$454,500 |
| Platform | \$146,000 | \$100,000 | \$100,000 | \$346,000 |
| Managed Services | \$257,667 | \$292,000 | \$286,000 | \$835,667 |
| Support & Maintenance | \$88,000 | \$88,000 | \$88,000 | \$264,000 |
| Business Privilege Tax | \$28,158 | \$33,575 | \$33,275 | \$95,008 |
| Grand Total | \$3,399,535 | \$1,188,075 | \$698,775 | \$5,286,385 |

¹ inclusive of pass through expenses



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. 16-FY2020

Relative to Approval of Change Order No. 2 for the Route 4 Relief Sewerline Rehabilitation and Replacement Construction Contract with ProPacific Builder Corporation

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

The objective of this project is to improve the sewer collection system, which included repairing and/or replacing sewer manholes and over 4,200 linear feet of gravity sewer line along Route 4 and Route 1 in the village of Agana. These sewer infrastructure elements have been identified by GWA, through an SSES investigation, to be subjected to either inactivity due to incomplete construction work or excessive infiltration and inflow (I&I). Successful completion of this project will result in proper maintenance and operation of the sewer collection system and USEPA agrees that efforts to rehabilitate, repair or replace the sewer line are necessary.

Change Order No. 2 is necessary to avoid costly delays in the Cured-In-Place-Pipe (CIPP) lining work by the 2nd contractor on this project (Insituform) by accelerating work to resolve infiltration at manholes ahead of the scheduled manhole rehabilitation. Until the infiltration at the manholes is resolved, the lining work cannot happen. There is the potential for liner failure if the CIPP does not cure properly due to the heavy infiltration that this change order will address. Additionally, there is an existing concrete plug at SMH-6897 that needs to be removed to allow that segment of pipe to be lined ahead of when SMH-6897 is scheduled to be rehabilitated. Manhole rehabilitation cannot happen until after lining is completed due to the potential damage of the interior epoxy coating in the manholes from the high heat during the liner curing process.

Where is the project located?

This project is located along Route 4 and Route 1, from the in front of Vons Chicken in Agana to the Agana Main Pump Station. Construction activities will be limited to the government easements of the sewer infrastructure elements.

How much will it cost?

The total cost of Change Order No. 2 comes out to the amount of One Hundred Eleven Thousand Eight Hundred Eighty-One Dollars and Thirty-Five Cents (\$111,881.35), of which Sixty-Four Thousand Twenty-Four Dollars and Sixty-One Cents (\$64,024.61) will come from the remaining contingency funds.

GWA Management seeks CCU approval of PPBC's proposal for accelerated construction services in the additional funding amount of Forty-Seven Thousand Eight Hundred Fifty-Six Dollars and Seventy-Four Cents (\$47,856.74), to bring the total authorized funding amount to Three Million Seven Hundred Ninety-Six Thousand Four Hundred Eighty-Nine Dollars and Fifty-Four Cents (\$3,796,489.54).

When will it be completed?

The accelerated construction work associated with Change Order No. 2 is estimated to be completed by March 2020.

What is the funding source?

The funding for this project will be from USEPA SRF Grant Funds and, if necessary, GWA Bond Funds with a maximum project budget of Three Million Seven Hundred Ninety-Six Thousand Four Hundred Eighty-Nine Dollars and Fifty-Four Cents (\$3,796,489.54).



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. 16-FY2020

**RELATIVE TO APPROVAL OF CHANGE ORDER NO. 2 FOR THE
ROUTE 4 RELIEF SEWERLINE REHABILITATION
AND REPLACEMENT PROJECT S15-006-EPA**

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 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 over 4,200 linear feet of gravity sewer line along Route 4 and Route 1, from in front of Vons Chicken on Route 4 in Agana to the Agana Main Pump Station; and

WHEREAS, the gravity sewer line noted above has a section that has been inactive since its original installation due to incomplete construction work, and sections that need repair due to high infiltration and inflow (I/I), and the intent of this project is to rehabilitate, repair or replace these sections; and

WHEREAS, on March 23, 2018, GWA advertised the Invitation to Re-bid (IFB-04-ENG-2018) for the Route 4 Relief Sewer Line Rehabilitation and Replacement soliciting bid proposals from experienced and responsive bidders to repair and/or replace segments of gravity sewer lines and manholes subjected to I&I in the village of Agana; and

1 **WHEREAS**, after receiving and reviewing bid proposals for the manhole rehabilitation
2 and sewerline replacement work on the Route 4 Relief Sewerline, it was determined that
3 ProPacific Builder Corporation (PPBC) was the lowest responsive and responsible bidder; and
4

5 **WHEREAS**, the CCU approved via Resolution 40-FY2018 (Exhibit A) funding
6 authorization for PPBC in the amount of Three Million Four Hundred Seven Thousand Eight
7 Hundred Forty-Eight Dollars (\$3,407,848.00), plus a ten percent (10%) contingency of Three
8 Hundred Forty Thousand Seven Hundred Eighty-Four Dollars and Eighty Cents (\$340,784.80) to
9 bring the authorized funding amount for Schedule A to a maximum of Three Million Seven
10 Hundred Forty-Eight Thousand Six Hundred Thirty-Two Dollars and Eighty Cents
11 (\$3,748,632.80); and
12

13 **WHEREAS**, in September 2018 GWA management executed a construction contract
14 (Exhibit B) to rehabilitate and replace portions of the Route 4 Relief Sewerline with ProPacific
15 Builder Corporation; and
16

17 **WHEREAS**, while the Notice to Proceed for PPBC was issued in September 2018, the
18 start of construction was delayed due to complications with obtaining approvals during the
19 permitting process; and
20

21 **WHEREAS**, due to permitting delays, unanticipated time restrictions enforced on
22 construction work hours by DPW, and coordination challenges, GWA negotiated Change Order
23 No. 1 (Exhibit C), for a time extension of 193 days and additional funding to PPBC's contract in
24 the amount of Two Hundred Seventy-Six Thousand Seven Hundred Sixty Dollars and Nineteen
25 Cents (\$276,760.19);
26

27 **WHEREAS**, the negotiated Change Order No. 1 (Exhibit C) extends the estimated time
28 to construction completion to July 2020, and PPBC's total contract value to Three Million Six
29 Hundred Eighty-Four Thousand Six Hundred Eight Dollars and Nineteen Cents (\$3,684,608.19);
30 and
31
32

1 **WHEREAS**, during the ongoing construction, the second contractor, Insituform
2 Technologies, LLC (Insituform), responsible for the Cured-In-Place-Pipe (CIPP) lining work that
3 is part of the overall Route 4 sewerline improvements, discovered heavy infiltration in many of
4 the manholes, which would prevent Insituform from completing the pipe lining work; and

5
6 **WHEREAS**, in order to prevent costly delays in lining operations due to the infiltration
7 at the manholes, PPBC needed to accelerate manhole grouting work to resolve the infiltration;
8 and

9
10 **WHEREAS**, GWA has negotiated with PPBC for a fee proposal for Change Order No. 2
11 to accelerate the work to resolve manhole infiltration and the removal of the concrete plug at
12 SMH-6897 to prevent costly delays for lining operations; and

13
14 **WHEREAS**, the total cost of Change Order No. 2 comes out to the amount of One
15 Hundred Eleven Thousand Eight Hundred Eighty-One Dollars and Thirty-Five Cents
16 (\$111,881.35) (Exhibit D), of which Sixty-Four Thousand Twenty-Four Dollars and Sixty-One
17 Cents (\$64,024.61) will come from the remaining contingency funds; and

18
19 **WHEREAS**, GWA Management seeks CCU approval of PPBC's proposal for
20 accelerated construction services in the additional funding amount of Forty-Seven Thousand
21 Eight Hundred Fifty-Six Dollars and Seventy-Four Cents (\$47,856.74), to bring the total
22 authorized funding amount to Three Million Seven Hundred Ninety-Six Thousand Four Hundred
23 Eighty-Nine Dollars and Fifty-Four Cents (\$3,796,489.54); and

24
25 **WHEREAS**, funding for this project will be from the USEPA State Revolving Fund and,
26 if necessary, GWA Bond funds with an estimated project budget of Three Million Seven
27 Hundred Ninety-Six Thousand Four Hundred Eighty-Nine Dollars and Fifty-Four Cents
28 (\$3,796,489.54); and

29 //

30
31 //
32

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 approves the funding increase for accelerated construction services in the additional funding amount of Forty-Seven Thousand Eight Hundred Fifty-Six Dollars and Seventy-Four Cents (\$47,856.74) (Exhibit D).
3. The CCU hereby further approves the total funding authorization for the contract with ProPacific Builder Corporation to an amount of Three Million Seven Hundred Ninety-Six Thousand Four Hundred Eighty-Nine Dollars and Fifty-Four Cents (\$3,796,489.54).

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

DULY AND REGULARLY ADOPTED, this 21st day of February, 2020.

Certified by:

Attested by:

JOSEPH T. DUENAS
Chairperson

MICHAEL T. LIMTIACO
Secretary

//

//

//

//

//

SECRETARY'S CERTIFICATE

I, Michael T. Limtiaco, 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: _____

///

///

///

///

///

///

///

Exhibit A



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

RESOLUTION NO. 40-FY2018

**RELATIVE TO CONTRACTS APPROVAL FOR THE ROUTE 4 RELIEF SEWER
LINE REHABILITATION AND REPLACEMENT
PROJECT S15-006-EPA**

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 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 over 4,200 linear feet of gravity sewer line along Route 4 from the bottom of the hill in Agana to Route 1, and along Route 1 to the Agana Main Pump Station; and

WHEREAS, the gravity sewer line noted above has a section that has been inactive since its original installation due to incomplete construction work, and sections that are in need of repair due to high infiltration and inflow (I/I), and the intent of this project is to rehabilitate, repair or replace these sections along with associated roadway surface improvements; and

WHEREAS, GWA and USEPA agree that efforts to rehabilitate, repair or replace these sewer lines are necessary to provide sufficient capacity, and properly maintain and operate the sewer collection system, and the first step in doing so is through scope of services that includes general civil engineering, geotechnical engineering, and archeological investigation for wastewater collection system evaluation, analysis and design; and

1 **WHEREAS**, in July 2015 GWA Management began the procurement process to find a
2 consulting engineering team to design the sewer rehabilitation and replacement, and via
3 Resolution No. 16-FY2016, approved by the CCU in January 2016, GWA Management was
4 authorized to enter into a contract with AECOM to design the sewer rehabilitation and
5 replacement; and

6
7 **WHEREAS**, in February of 2016 GWA Management entered into a contract with
8 AECOM to design the sewer rehabilitation and replacement, and in May of 2017 the final design
9 was completed; and

10
11 **WHEREAS**, on August 25, 2017, GWA advertised the Invitation to Bid (IFB-10-ENG-
12 2017) for the Route 4 Relief Sewer Line Rehabilitation and Replacement soliciting bid proposals
13 from experienced and responsive bidders to repair and/or replace segments of gravity sewer lines
14 and manholes subjected to I&I in the village of Hagatna, but ultimately GWA received no bids at
15 that time; and

16
17 **WHEREAS**, following the initial Invitation to Bid, GWA discussed with contractors the
18 challenges that may have prevented them from bidding, reviewed all the available information,
19 and split the contract into two separate parts, a Schedule A and a Schedule B; and

20
21 **WHEREAS**, on March 23, 2018, GWA advertised another Invitation to Bid (IFB-04-
22 ENG-2018) for the Route 4 Relief Sewer Line Rehabilitation and Replacement soliciting bid
23 proposals from experienced and responsive bidders to repair and/or replace segments of gravity
24 sewer lines and manholes subjected to I&I in the village of Hagatna; and

25
26 **WHEREAS**, this project consists of furnishing all labor, tools, equipment and materials,
27 necessary to install, replace, and repair sewer along Rt.4 and Rt.1, including coordination with
28 GWA Wastewater Operations, GWA Engineering, the Construction Manager, the project Design
29 Engineer, GWA's Program Management Office and the Department of Public Works; and

30
31 **WHEREAS**, IFB packages were obtained by multiple interested parties, from which
32 GWA received bid proposals from three (3) parties (SEE EXHIBIT A – Abstract of Bids) before

1 the bid proposal deadline, with one (1) party submitting a proposal for only Schedule A, one (1)
 2 party submitting a proposal for only Schedule B, and one (1) party submitting a proposal for both
 3 Schedule A and B; and

4
 5 **WHEREAS**, the project Design Engineer, in conjunction with GWA, analyzed the bid
 6 proposals received (SEE EXHIBIT B – Evaluation) on June 8, 2018 and determined that the bid
 7 proposal submitted by ProPacific Builder Corporation (PPBC) (SEE EXHIBIT C – ProPacific
 8 Bid) for Schedule A, and the bid proposal submitted by Insituform Technologies, LLC
 9 (Insituform) (SEE EXHIBIT D – Insituform Bid) for Schedule B, were the lowest responsive and
 10 responsible bids and met all the bid requirements set forth by GWA; and

11
 12 **WHEREAS**, GWA Management finds both PPBC's bid proposal for Schedule A, and
 13 Insituform's bid proposal for Schedule B acceptable; and

14
 15 **WHEREAS**, for Schedule A, PPBC's bid proposal in the amount of Three Million Four
 16 Hundred Seven Thousand Eight Hundred Forty-Eight Dollars (\$3,407,848.00), plus a ten percent
 17 (10%) contingency of Three Hundred Forty Thousand Seven Hundred Eighty-Four Dollars and
 18 Eighty Cents (\$340,784.80) to bring the authorized funding amount for Schedule A to a total of
 19 Three Million Seven Hundred Forty-Eight Thousand Six Hundred Thirty-Two Dollars and
 20 Eighty Cents (\$3,748,632.80); and

21
 22 **WHEREAS**, for Schedule B, Insituform's bid proposal in the amount of Three Million
 23 Nine Hundred Ninety-Eight Thousand Six Hundred Eighty-Eight Dollars (\$3,998,688.00), plus a
 24 ten percent (10%) contingency of Three Hundred Ninety-Nine Thousand Eight Hundred Sixty-
 25 Eight Dollars and Eighty Cents (\$399,868.80) to bring the authorized funding amount for
 26 Schedule B to a total of Four Million Three Hundred Ninety-Eight Thousand Five Hundred
 27 Fifty-Six Dollars and Eighty Cents (\$4,398,556.80); and

28
 29 **WHEREAS**, GWA Management seeks CCU approval of PPBC's bid proposal plus the
 30 10% contingency for Schedule A of Three Million Seven Hundred Forty-Eight Thousand Six
 31 Hundred Thirty-Two Dollars and Eighty Cents (\$3,748,632.80), and Insituform's bid proposal
 32 plus contingency for Schedule B of Four Million Three Hundred Ninety-Eight Thousand Five

1 Hundred Fifty-Six Dollars and Eighty Cents (\$4,398,556.80), to bring the total authorized
2 funding amount to Eight Million One Hundred Forty-Seven Thousand One Hundred Eighty-Nine
3 Dollars and Sixty Cents (\$8,147,189.60); and

4
5 **WHEREAS**, funding for this project will be from the USEPA State Revolving Fund and,
6 if necessary, GWA Bond funds and System Development Charge funds applicable to the project
7 intent; and

8
9 **NOW BE IT THEREFORE RESOLVED**, the Consolidated Commission on Utilities
10 does hereby approve the following:

- 11 1. The recitals set forth above hereby constitute the findings of the CCU.
- 12 2. The CCU finds that the terms and conditions set by GWA relative to
13 commencement of work activities are fair and reasonable and serve as a measure
14 of Quality Assurance/Quality Control (QA/QC).
- 15 3. The CCU hereby authorizes the management of GWA to accept the bid proposals
16 from "ProPacific Builder Corporation" and "Insituform Technologies, LLC."
17 (EXHIBITS C and D)
- 18 4. The CCU hereby further authorizes the management of GWA to enter into a
19 contract with "ProPacific Builder Corporation" in the amount of Three Million
20 Four Hundred Seven Thousand Eight Hundred Forty-Eight Dollars
21 (\$3,407,848.00).
- 22 5. The CCU hereby further authorizes the management of GWA to enter into a
23 contract with "Insituform Technologies, LLC" in the amount of Three Million
24 Nine Hundred Ninety-Eight Thousand Six Hundred Eighty-Eight Dollars
25 (\$3,998,688.00).
- 26 6. The CCU hereby further approves the funding total for Schedule A of Three
27 Million Four Hundred Seven Thousand Eight Hundred Forty-Eight Dollars
28 (\$3,407,848.00), plus a ten percent (10%) contingency of Three Hundred Forty
29 Thousand Seven Hundred Eighty-Four Dollars and Eighty Cents (\$340,784.80),
30 and for Schedule B of Three Million Nine Hundred Ninety-Eight Thousand Six
31 Hundred Eighty-Eight Dollars (\$3,998,688.00), plus a ten percent (10%)
32 contingency of Three Hundred Ninety-Nine Thousand Eight Hundred Sixty-Eight


Dollars and Eighty Cents (\$399,868.80), for a total authorized funding amount of Eight Million One Hundred Forty-Seven Thousand One Hundred Eighty-Nine Dollars and Sixty Cents (\$8,147,189.60).

7. The CCU hereby further approves the funding for this project will be from the USEPA State Revolving Fund and, if necessary, GWA Bond funds and System Development Charge Funds applicable to the project.
8. In the event funds other than SRF are used and they exceed One Million Dollars (\$1,000,000.00), GWA is authorized to petition the PUC for approval.


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

DULY AND REGULARLY ADOPTED, this 24th day of July 2018.

Certified by:


JOSEPH T. DUENAS
Chairperson

Attested by:


J. GEORGE BAMBA
Secretary

SECRETARY'S CERTIFICATE

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: | <u>5</u> |
| NAYS: | <u>0</u> |
| ABSTENTIONS: | <u>0</u> |
| ABSENT: | <u>0</u> |





AECOM
414 W. Soledad Avenue
Suite 708
Hagåtña, GU 96932
www.aecom.com

671 477 8326/7 tel
671 472 8324 fax

Exhibit B (1 of 1)

June 8, 2018

The Guam Waterworks Authority
Thomas F. Cruz, P.E., Chief Engineer
Engineering Division
Gloria B. Nelson Public Service Building
688 Route 15, Mangilao, GU 96913

Subject: Bid Review and Recommendation for the Route 4 Relief Sewer Line Rehabilitation and Replacement (Re-bid) Project, GWA Project No. S15-006-EPA, IFB No. IFB-04-ENG-2018.

Håfa Adai Tom,

The bids for this project were opened on May 29, 2018. Out of 10 bidders who expressed interest in the project, only 3 bid proposals were received and included ProPacific Builder Corporation (ProPacific), Insituform Technologies, LLC (Insituform), and Core Tech/Hawaiian Dredging, LLC (CHL). Pro Pacific submitted a bid for only Schedule A. Insituform submitted a bid for only Schedule B. CHL submitted a bid for both schedules. A summary of the bids prices along with the Engineer's Opinion of Construction Cost Estimate are provided in the table below.

| Bid Schedule | Engineer's Estimate | ProPacific | Insituform | CHL |
|---------------------------------|---------------------|-----------------|-----------------|-----------------|
| SCHEDULE A - Base Bid | \$ 2,701,217.00 | \$ 3,407,848.00 | No Bid | \$ 6,191,463.33 |
| SCHEDULE A - Additive Bid No. 1 | \$ 7,000.00 | \$ 150,000.00 | No Bid | \$ 20,592.67 |
| SCHEDULE A - Total | \$ 2,708,217.00 | \$ 3,557,848.00 | No Bid | \$ 6,212,056.00 |
| SCHEDULE B - Base Bid | \$ 2,482,494.00 | No Bid | \$ 3,998,688.00 | \$ 7,570,573.65 |
| SCHEDULE B - Additive Bid No. 1 | \$ 62,880.00 | No Bid | \$ 1,296,700.00 | \$ 799,818.94 |
| SCHEDULE B - Additive Bid No. 2 | \$ 7,000.00 | No Bid | \$ 35,000.00 | \$ 20,583.15 |
| SCHEDULE B - Total | \$ 2,552,374.00 | No Bid | \$ 5,330,388.00 | \$ 8,390,975.74 |

It is understood that the bids are to be evaluated by each schedule separately and contract(s) awarded using the Base Bid. After contract award, GWA may consider adding items in the additive bids into the contract by change orders. If the bid is within the amount of funds available to finance the construction Contract, then the award will be made to the lowest responsive and responsible bidder. In the event all bids exceed the available budget, GWA may reject bids by individual line items until the individual line items fit within the available budget.

AECOM conducted an evaluation of the bids received and provide recommendations for award to the responsible Bidder submitting the lowest responsive Bid. The following is a brief summary of the bid evaluation:

- Overall, the CHL bid prices appeared to be excessive in comparison with the other bidders and the Engineer's Estimate for both bid schedules evaluated separately.
- For Schedule A - Base Bid, ProPacific's bid price was approximately 26% more than the Engineer's Estimate and is the lowest responsive bid. ProPacific's total bid including the bid additive was approximately 31% more than the Engineer's Estimate.
- For Schedule B - Base Bid, Insituform's bid price was approximately 61% more than the Engineer's Estimate and is the lowest responsive bid. Insituform's total bid including the bid additives was approximately double the Engineer's Estimate.

Based on the bid evaluation conducted, it is recommended that ProPacific be awarded a construction contract for Schedule A - Base Bid and Insituform be awarded a separate construction contract for Schedule B - Base Bid. It is also recommended that if needed, GWA can consider rejecting individual line items to fit within the available budget; particularly for all the bid additives.

Respectfully,

Agapito (Pete) Diaz, PE
Project Manager
671-477-8326/7
pete.diaz@aecom.com

Exhibit C (1 of 15)



GUAM WATERWORKS AUTHORITY

**BID INVITATION NO.
IFB-04-ENG-2018
GWA Project No.: S15-006-EPA**

**Route 4 Relief Sewer Line Rehabilitation and
Replacement**

BID PROPOSAL

Submitted by:



PROPACIFIC BUILDER CORPORATION

(formerly Guam Yoashin Corporation)

750 Route 8 Suite 202 Hanam Plaza,

Barrigada, Guam 96913

T. 671.477.3109 | F. 671.477.7424 | jgyc@guam.net

Exhibit C (2 of 15)

Procurement Checklist

CHECKLIST OF FORMS AND DOCUMENTS REQUIRED TO BE SUBMITTED IN CONJUNCTION WITH BIDS

| <u>A. Form or document that must be submitted with bid</u> | <u>Initial if Submitted:</u> |
|--|------------------------------|
| 1. Bid Bond Equal to 15% of total amount of bid | <u>lin</u> |
| 2. Bidder Qualification Form | <u>lin</u> |
| 3. Bid Proposal and Bid Schedule | <u>lin</u> |
| 4. Non-Collusion Affidavit | <u>lin</u> |
| 5. Certification of Bidder Regarding Equal Employment Opportunity | <u>lin</u> |
| 6. Certification Regarding Non-Segregated Facilities | <u>lin</u> |
| 7. Sex Offender Certification | <u>lin</u> |
| 8. Wage and Benefit Determination | <u>lin</u> |
| 9. Major Shareholders Disclosure Affidavit | <u>lin</u> |
| 10. Special Instructions to Bidders | <u>lin</u> |
| 11. Proof of Licensure to Perform Work Called For by the Bid | <u>lin</u> |
| 12. Financial Statements | <u>lin</u> |
| 13. Proof of Status as Veteran (if applies) | <u>N/A</u> |
| 14. Forms or Documents Required by Bid or Bid Amendments not referred to above | <u>lin</u> |

I, Jean Yeon Yu, a duly authorized representative of PPBC, do hereby certify, that the forms list above have in fact been submitted with my firm's bid. I acknowledge that, failure to submit any of the above documents will result in my firm being deemed non-responsive and having my firm's bid rejected.

Signed: 

Date: 05/29/2018

Exhibit C (3 of 15)

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 | April 19, 2018 |
| Addendum No. 2 | April 26, 2018 |
| Addendum No. 3 | May 15, 2018 |
| Addendum No. 4 | May 18, 2018 |

- 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 (4 of 15)

- 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 where 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;
 - 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

Exhibit C (5 of 15)

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 AND AWARD OF CONTRACTS

- 5.01 This contract is a multi-award contract through which more than one contract may be awarded through this solicitation. The Bid Schedule contains two schedules, Schedule A and Schedule B. Bidder will furnish the Goods and Special Services in accordance with the Contract Documents for the prices indicated under this article. The Bidder can elect to provide prices under Schedule A or Schedule B or both schedules. Bids must include all items under Schedule A or Schedule B, or both Schedule A and B. Each of Schedules A and B comprise Base Bid items and Additive Bid items. The Bidder shall provide base bid and additive bid(s) prices under each elected schedule.

Bids shall be evaluated by Schedule. Each of Schedules A and B shall be evaluated separately. The lowest responsive and responsible bidder shall be determined for each of Schedule A and Schedule B. Separate contracts will be awarded under Schedule A and Schedule B. One contract will be awarded to the lowest responsive and responsible bidder for Schedule A and one contract will be awarded to the lowest responsive and responsible bidder for Schedule B. If the same contractor is the lowest responsive and responsible bidder for both Schedules A and B, one contract for all the work under Schedules A and B will be awarded.

Exhibit C (6 of 15)

| Route 4 Relief Sewer Line Rehabilitation and Replacement (Re-Bid) | | | | | |
|---|--|------|--------------|-----|---------------|
| SCHEDULE A – Base Bid | | | | | |
| Description of Work: Work consists of replacing 24" Spirolite pipe with 30" PVC pipe, installation of new 18" PVC pipe intertie, construction of precast concrete manholes, sewer manhole rehabilitation with epoxy coating, channel construction, disconnection and re-connection of lateral sewer pipes, abandoning existing sewer pipes and providing temporary bypass and traffic control as necessary to complete the rehabilitation and replacement work. | | | | | |
| Item No. | Description | Unit | Unit Price | Qty | Bid Amount |
| 1 | Mobilization and Demobilization | LS | \$293,780.00 | 1 | \$ 293,780.00 |
| 2 | Insurance and Bonds | LS | \$132,201.00 | 1 | \$ 132,201.00 |
| 3 | Permits | LS | \$44,067.00 | 1 | \$ 44,067.00 |
| 4 | 12" PVC pipe, installed by open trench, including PVC pipe, fittings, warning/identification tape, cleaning, connections to manholes, adjustment existing channel and bench, testing, and all incidentals, in place complete. | LF | \$ 1,500.00 | 22 | \$ 33,000.00 |
| 5 | 18" PVC pipe, installed by open trench, including PVC pipe, fittings, warning/identification tape, cleaning, connections to existing manholes, adjustment existing channel and bench, testing, and all incidentals, in place complete. | LF | \$ 1,800.00 | 12 | \$ 21,600.00 |
| 6 | 30" PVC pipe, installed by open trench, including existing pipe removal, pipe, fittings, warning/identification tape, cleaning, manhole connections, testing, and all incidentals, in place complete. | LF | \$ 2,000.00 | 461 | \$ 922,000.00 |
| 7 | Unclassified Trench Excavation and Backfill, including protection of existing utilities if necessary, excavation, installation of sheet piles, cutting and removal of sheet piles, shoring, groundwater cutoff wall, dewatering and dewatering effluent disposal, muck handling and disposal, backfill, pipe bedding, CLSM, temporary erosion control measures, traffic control work, miscellaneous restoration work, and all incidentals required to complete the work. | CY | \$ 600.00 | 913 | \$ 547,800.00 |
| 8 | Precast Sewer Manhole, SMH-6901A and 493A, including reinforced concrete base, precast concrete riser and cone, flexible pipe seals and connectors, grade adjustment ring(s), frame and cover, epoxy-coating, channelized inverts, testing, CLSM, temporary erosion control measures, traffic control work, incidentals, and all necessary labor, materials and equipment, in place complete. | EA | \$ 30,000.00 | 2 | \$ 60,000.00 |

Exhibit C (7 of 15)

| Route 4 Relief Sewer Line Rehabilitation and Replacement (Re-Bid) | | | | | |
|---|--|------|---------------|-------|---------------|
| SCHEDULE A – Base Bid | | | | | |
| Description of Work: Work consists of replacing 24" Spirolite pipe with 30" PVC pipe, installation of new 18" PVC pipe intertie, construction of precast concrete manholes, sewer manhole rehabilitation with epoxy coating, channel construction, disconnection and re-connection of lateral sewer pipes, abandoning existing sewer pipes and providing temporary bypass and traffic control as necessary to complete the rehabilitation and replacement work. | | | | | |
| Item No. | Description | Unit | Unit Price | Qty | Bid Amount |
| 9 | Drop Precast Sewer Manhole, SMH-6908B, including demolition of existing SMH-10312, reinforced concrete base, precast concrete riser and cone, chimney, flexible pipe seals and connectors, grade adjustment ring(s), frame and cover, epoxy-coating, channelized inverts, testing, CLSM, temporary erosion control measures, traffic control work, incidentals, and all necessary labor, materials and equipment, in place complete. | EA | \$ 30,000.00 | 1 | \$ 30,000.00 |
| 10 | Rehabilitation of sewer manhole with epoxy coating, including cleaning, surface preparation, cementitious underlayment, concrete channel and bench construction, existing pipe cut & connection, plugging existing pipe, epoxy topcoat, grout injection for leak repair, traffic control work, and all incidentals, in place complete. | EA | \$ 22,500.00 | 14 | \$ 315,000.00 |
| 11 | Abandon existing sewer pipes including plugging and filling with CLSM, all incidentals, in place complete. | LF | \$ 250.00 | 280 | \$ 70,000.00 |
| 12 | Unplug 21" existing pipe, plug 15" existing SL-9650 and channel & bench reconstruction at SMH-6897 | LS | \$ 30,000.00 | 1 | \$ 30,000.00 |
| 13 | Sewer Flow Control, including diversion and bypass pumping plan, temporary bypass piping and pumps, pipe plugs, bypassing at sewer laterals (including locating and exposing cleanouts), temporary trenches (including pavement demolition, excavation, backfill, trench covers, temporary and permanent asphalt concrete (AC) pavement, muck handling and disposal), electrical and standby power/pumps, monitoring, spill containment/mitigation, traffic control work, temporary erosion control measures, all related restoration work, in place complete. | LS | \$ 300,000.00 | 1 | \$ 300,000.00 |
| 14 | Removal of existing pavement including all necessary labor, materials and equipment, in place complete | SY | \$ 50.00 | 2,867 | \$ 143,350.00 |

Exhibit C (8 of 15)

| Route 4 Relief Sewer Line Rehabilitation and Replacement (Re-Bid) | | | | | |
|---|---|------|-------------|-------|------------------------|
| SCHEDULE A – Base Bid | | | | | |
| Description of Work: Work consists of replacing 24" Spirolite pipe with 30" PVC pipe, installation of new 18" PVC pipe intertie, construction of precast concrete manholes, sewer manhole rehabilitation with epoxy coating, channel construction, disconnection and re-connection of lateral sewer pipes, abandoning existing sewer pipes and providing temporary bypass and traffic control as necessary to complete the rehabilitation and replacement work. | | | | | |
| Item No. | Description | Unit | Unit Price | Qty | Bid Amount |
| 15 | AC Pavement Resurfacing, including asphalt concrete base, cold planing, pavement transitions, prime coat, tack coat, traffic striping, miscellaneous restoration, and all necessary labor, materials and equipment, in place complete | SY | \$ 150.00 | 2,867 | \$ 430,050.00 |
| 16 | Pavement marking including all necessary labor, materials and equipment, in place complete | LS | \$25,000.00 | 1 | \$ 25,000.00 |
| 17 | As-Built drawings | LS | \$10,000.00 | 1 | \$ 10,000.00 |
| SCHEDULE A – Base Bid (TOTAL Items 1 through 17, inclusive) | | | | | \$ 3,407,848.00 |

| Route 4 Relief Sewer Line Rehabilitation and Replacement (Re-Bid) | | | | | |
|--|---|----|---------------|---|--|
| SCHEDULE A – Additive Bid No. 1 | | | | | |
| Description of Work: Archaeological monitoring. | | | | | |
| | | | | | SCHEDULE A – Additive Bid No. 1 |
| 1 | Archaeological and cultural resource services to add new laydown staging areas outside of the suggested areas or outside of the area of potential effect as defined the Archaeological Monitoring and Data Recovery Plan for the project and resubmit to the Department of Parks and Recreation, Guam Historic Resources Division/State Historic Preservation Office for approval and acceptance. | LS | \$ 150,000.00 | 1 | \$ 150,000.00 |
| SCHEDULE A - Additive Bid No. 1 (TOTAL Items 1, inclusive) | | | | | \$ 150,000.00 |

Exhibit C (9 of 15)

| Route 4 Relief Sewer Line Rehabilitation and Replacement (Re-Bid) | | | | | |
|---|---|------|------------|-----|------------|
| SCHEDULE B – Base Bid | | | | | |
| Description of Work: CIPP lining 21", 24", 30" and 36" existing sewer pipes, providing temporary bypass and traffic control as necessary to complete the rehabilitation and replacement work. | | | | | |
| Schedule B – Base Bid | | | | | |
| Item No. | Description | Unit | Unit Price | Qty | Bid Amount |
| 1 | Mobilization and Demobilization | LS | \$ _____ | 1 | \$ _____ |
| 2 | Insurance and Bonds | LS | \$ _____ | 1 | \$ _____ |
| 3 | Permits | LS | \$ _____ | 1 | \$ _____ |
| 4 | Installation of cured in place pipe (CIPP) lining in existing 21" sewer line, including all labor, materials, supplies, equipment, tools, and incidentals for the complete installation of the liner, cleaning, wet out, preparation, leak repair, transition sections, removal and restoration of sewer manhole cone (if required for access), restoration of pavement and landscaping, removal of protruding laterals, liner termination at manholes, reworking manhole inverts and benches, testing of installed liner, Closed Circuit Television (CCTV) inspection for pre- and post- rehabilitation, traffic control work, and for all other related work. | LF | \$ _____ | 674 | \$ _____ |
| 5 | Installation of cured in place pipe (CIPP) lining in existing 24" sewer line, including all labor, materials, supplies, equipment, tools, and incidentals for the complete installation of the liner, cleaning, wet out, preparation, leak repair, transition sections, removal and restoration of sewer manhole cone (if required for access), restoration of pavement and landscaping, removal of protruding laterals, liner termination at manholes, reworking manhole inverts and benches, testing of installed liner, Closed Circuit Television (CCTV) inspection for pre- and post- rehabilitation, traffic control work, and for all other related work. | LF | \$ _____ | 723 | \$ _____ |

Exhibit C (10 of 15)

| Route 4 Relief Sewer Line Rehabilitation and Replacement (Re-Bid) | | | | | |
|--|---|-------------|-------------------|------------------------------|-------------------|
| SCHEDULE B –Base Bid | | | | | |
| Description of Work: CIPP lining 21", 24", 30" and 36" existing sewer pipes, providing temporary bypass and traffic control as necessary to complete the rehabilitation and replacement work. | | | | | |
| Item No. | Description | Unit | Unit Price | Schedule B – Base Bid | |
| | | | | Qty | Bid Amount |
| 6 | Installation of cured in place pipe (CIPP) lining in existing 30" sewer line, including all labor, materials, supplies, equipment, tools, and incidentals for the complete installation of the liner, cleaning, wet out, preparation, leak repair, transition sections, removal and restoration of sewer manhole cone (if required for access), restoration of pavement and landscaping, removal of protruding laterals, liner termination at manholes, reworking manhole inverts and benches, testing of installed liner, Closed Circuit Television (CCTV) inspection for pre- and post- rehabilitation, traffic control work, and for all other related work. | LF | \$ _____ | 1,590 | \$ _____ |
| 7 | Installation of cured in place pipe (CIPP) lining in existing 36" sewer line, including all labor, materials, supplies, equipment, tools, and incidentals for the complete installation of the liner, cleaning, wet out, preparation, leak repair, transition sections, removal and restoration of sewer manhole cone (if required for access), restoration of pavement and landscaping, removal of protruding laterals, liner termination at manholes, reworking manhole inverts and benches, testing of installed liner, Closed Circuit Television (CCTV) inspection for pre- and post- rehabilitation, traffic control work, and for all other related work. | LF | \$ _____ | 798 | \$ _____ |
| 8 | Sewer Flow Control, including diversion and bypass pumping plan, temporary bypass piping and pumps, pipe plugs, bypassing at sewer laterals (including locating and exposing cleanouts), temporary trenches (including pavement demolition, excavation, backfill, trench covers, temporary and permanent AC pavement, muck handling and disposal), electrical and standby power/pumps, monitoring, spill containment/mitigation, traffic control work, temporary erosion control measures, all related restoration work, in place complete. | LS | \$ _____ | 1 | \$ _____ |

Exhibit C (11 of 15)

| Route 4 Relief Sewer Line Rehabilitation and Replacement (Re-Bid) | | | | | |
|---|-------------|------|------------|-----------------------|------------|
| SCHEDULE B – Base Bid | | | | | |
| Description of Work: CIPP lining 21", 24", 30" and 36" existing sewer pipes, providing temporary bypass and traffic control as necessary to complete the rehabilitation and replacement work. | | | | | |
| | | | | Schedule B – Base Bid | |
| Item No. | Description | Unit | Unit Price | Qty | Bid Amount |
| Schedule B – BASE BID (TOTAL Items 1 through 8, inclusive) | | | | | \$ _____ |

| Route 4 Relief Sewer Line Rehabilitation and Replacement (Re-Bid) | | | | | |
|--|--|----|----------|---------------------------------|----------|
| SCHEDULE B – Additive Bid No. 1 | | | | | |
| Description of Work: CIPP part-liner or chemical grouting to control infiltration/inflow prior to CIPP lining. | | | | | |
| | | | | Schedule B – Additive Bid No. 1 | |
| 1 | CIPP part-liner or grouting to control infiltration on the existing 21" sewer line, where approved by the Owner, including full compensation for all labor, materials, supplies, equipment, tools, and all incidentals for completed work. | LF | \$ _____ | 70 | \$ _____ |
| 2 | CIPP part-liner or grouting to control infiltration on the existing 24" sewer line, where approved by the Owner, including full compensation for all labor, materials, supplies, equipment, tools, and all incidentals for completed work. | LF | \$ _____ | 80 | \$ _____ |
| 3 | CIPP part-liner or grouting to control infiltration on the existing 30" sewer line, where approved by the Owner, including full compensation for all labor, materials, supplies, equipment, tools, and all incidentals for completed work. | LF | \$ _____ | 160 | \$ _____ |
| 4 | CIPP part-liner or grouting to control infiltration on the existing 36" sewer line, where approved by the Owner, including full compensation for all labor, materials, supplies, equipment, tools, and all incidentals for completed work. | LF | \$ _____ | 160 | \$ _____ |
| SCHEDULE B – Additive Bid No. 1 (TOTAL Items 1 through 4, inclusive) | | | | | \$ _____ |

Exhibit C (12 of 15)

| Route 4 Relief Sewer Line Rehabilitation and Replacement (Re-Bid) | | | | | |
|--|---|----|----------|--|-----------------|
| SCHEDULE B - Additive Bid No. 2 | | | | | |
| Description of Work: Archaeological monitoring. | | | | | |
| | | | | SCHEDULE B – Additive Bid No. 2 | |
| 1 | Archaeological and cultural resource services to add new laydown staging areas outside of the suggested areas or outside of the area of potential effect as defined the Archaeological Monitoring and Data Recovery Plan for the project and resubmit to the Department of Parks and Recreation, Guam Historic Resources Division/State Historic Preservation Office for approval and acceptance. | LS | \$ _____ | 1 | \$ _____ |
| SCHEDULE B - Additive Bid No. 2 (TOTAL Items 1, inclusive) | | | | | \$ _____ |

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.

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.

Exhibit C (13 of 15)

ARTICLE 9 - BID SUBMITTAL

9.01 This Bid submitted by:

If Bidder is:

An Individual

Name (typed or printed): _____

By: _____
(Individual's signature)

Doing business as: _____

Business address: _____

Phone: _____ Facsimile: _____

E-mail address: _____

A Partnership

Partnership Name: _____ (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: PROPACIFIC BUILDER CORPORATION

State of Incorporation: GUAM

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

By: _____
(Signature - attach evidence of authority to sign)

Name (typed or printed): Jean Yeon Yu

Title: President

(CORPORATE SEAL)

Attest _____
(Signature of Corporate Secretary)

Business address: 750 Route 8 Suite 202 Hanam Plaza, Barrigada, GU 96913

Exhibit C (14 of 15)

Phone: 671-477-3109 Facsimile: 671-477-7424
E-mail address: jgyc@guam.net

A Limited Liability Company (LLC)

LLC Name: _____
State in which organized: _____

By: _____
(Signature - attach evidence of authority to sign)

Name (typed or printed): _____
Title: _____
Business address: _____

Phone: _____ Facsimile: _____
E-mail address: _____

A Joint Venture

First Joint Venturer Name: _____ (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: _____

Exhibit C (15 of 15)

(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.)

Exhibit D (1 of 17)



**SEALED BID FOR: ROUTE 4 RELIEF
SEWER LINE REHABILITATION AND
REPLACEMENT (RE-BID)**

**BIDDER: INSITUFORM TECHNOLOGIES, LLC
17988 EDISON AVE
CHESTERFIELD, MO 63005**

GWA PROJECT NO. S15-006-EPA

CLOSING DATE AND TIME

~~5/25/2018~~

3:00 PM

5/29/2018

**ATTENTION: GUAM WATERWORKS AUTHORITY
GLORIA B. NELSON PUBLIC SERVICES BUILDING
688 ROUTE 15
MANGILAO, GUAM 96913**

Vol. 1 of 2

Exhibit D (2 of 17)

TABLE OF CONTENTS

| | |
|--|----|
| Article 1 - BID RECIPIENT | 2 |
| Article 2 - BIDDER'S ACKNOWLEDGMENTS | 2 |
| Article 3 - BIDDER'S REPRESENTATIONS..... | 2 |
| Article 4 - BIDDER'S CERTIFICATIONS | 3 |
| Article 5 - BASIS OF BID AND AWARD OF CONTRACTS..... | 4 |
| Article 6 - TIME OF COMPLETION..... | 11 |
| Article 7 - ATTACHMENTS TO THIS BID | 11 |
| Article 8 - DEFINED TERMS | 11 |
| Article 9 - BID SUBMITTAL | 12 |

Exhibit D (3 of 17)

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
Manallao, 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 |
|--------------|----------------|
| 1 | April 19, 2018 |
| 2 | April 24, 2018 |
| 3 | May 15, 2018 |
| 4 | May 18, 2018 |

- 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 D (4 of 17)

- 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 where 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;
 - 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

Exhibit D (5 of 17)

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 AND AWARD OF CONTRACTS

- 5.01 This contract is a multi-award contract through which more than one contract may be awarded through this solicitation. The Bid Schedule contains two schedules, Schedule A and Schedule B. Bidder will furnish the Goods and Special Services in accordance with the Contract Documents for the prices indicated under this article. The Bidder can elect to provide prices under Schedule A or Schedule B or both schedules. Bids must include all items under Schedule A or Schedule B, or both Schedule A and B. Each of Schedules A and B comprise Base Bid items and Additive Bid items. The Bidder shall provide base bid and additive bid(s) prices under each elected schedule.

Bids shall be evaluated by Schedule. Each of Schedules A and B shall be evaluated separately. The lowest responsive and responsible bidder shall be determined for each of Schedule A and Schedule B. Separate contracts will be awarded under Schedule A and Schedule B. One contract will be awarded to the lowest responsive and responsible bidder for Schedule A and one contract will be awarded to the lowest responsive and responsible bidder for Schedule B. If the same contractor is the lowest responsive and responsible bidder for both Schedules A and B, one contract for all the work under Schedules A and B will be awarded.

Exhibit D (6 of 17)
No bid on Schedule A

Route 4 Relief Sewer Line Rehabilitation and Replacement (Re-Bid)

SCHEDULE A – Base Bid

Description of Work: Work consists of replacing 24" Spirolite pipe with 30" PVC pipe, installation of new 18" PVC pipe intertie, construction of precast concrete manholes, sewer manhole rehabilitation with epoxy coating, channel construction, disconnection and re-connection of lateral sewer pipes, abandoning existing sewer pipes and providing temporary bypass and traffic control as necessary to complete the rehabilitation and replacement work.

| Item No. | Description | Unit | Unit Price | SCHEDULE A – Base Bid | |
|----------|--|------|------------|-----------------------|------------|
| | | | | Qty | Bid Amount |
| 1 | Mobilization and Demobilization | LS | \$ _____ | 1 | \$ _____ |
| 2 | Insurance and Bonds | LS | \$ _____ | 1 | \$ _____ |
| 3 | Permits | LS | \$ _____ | 1 | \$ _____ |
| 4 | 12" PVC pipe, installed by open trench, including PVC pipe, fittings, warning/identification tape, cleaning, connections to manholes, adjustment existing channel and bench, testing, and all incidentals, in place complete. | LF | \$ _____ | 22 | \$ _____ |
| 5 | 18" PVC pipe, installed by open trench, including PVC pipe, fittings, warning/identification tape, cleaning, connections to existing manholes, adjustment existing channel and bench, testing, and all incidentals, in place complete. | LF | \$ _____ | 12 | \$ _____ |
| 6 | 30" PVC pipe, installed by open trench, including existing pipe removal, pipe, fittings, warning/identification tape, cleaning, manhole connections, testing, and all incidentals, in place complete. | LF | \$ _____ | 461 | \$ _____ |
| 7 | Unclassified Trench Excavation and Backfill, including protection of existing utilities if necessary, excavation, installation of sheet piles, cutting and removal of sheet piles, shoring, groundwater cutoff wall, dewatering and dewatering effluent disposal, muck handling and disposal, backfill, pipe bedding, CLSM, temporary erosion control measures, traffic control work, miscellaneous restoration work, and all incidentals required to complete the work. | CY | \$ _____ | 913 | \$ _____ |
| 8 | Precast Sewer Manhole, SMH-6901A and 493A, including reinforced concrete base, precast concrete riser and cone, flexible pipe seals and connectors, grade adjustment ring(s), frame and cover, epoxy-coating, channelized inverts, testing, CLSM, temporary erosion control measures, traffic control work, incidentals, and all necessary labor, materials and equipment, in place complete. | EA | \$ _____ | 2 | \$ _____ |

EJCDC P-400, Suggested Bid Form for Procurement Contracts.

Copyright © 2010 National Society of Professional Engineers, American Council of Engineering Companies, American Society of Civil Engineers, and Associated General Contractors of America. All rights reserved.

Page 5

Exhibit D (7 of 17)
No bid on Schedule A

Route 4 Relief Sewer Line Rehabilitation and Replacement (Re-Bid)

SCHEDULE A – Base Bid

Description of Work: Work consists of replacing 24" Spirolite pipe with 30" PVC pipe, installation of new 18" PVC pipe intertie, construction of precast concrete manholes, sewer manhole rehabilitation with epoxy coating, channel construction, disconnection and re-connection of lateral sewer pipes, abandoning existing sewer pipes and providing temporary bypass and traffic control as necessary to complete the rehabilitation and replacement work.

| SCHEDULE A – Base Bid | | | | | |
|-----------------------|--|------|------------|-------|------------|
| Item No. | Description | Unit | Unit Price | Qty | Bid Amount |
| 9 | Drop Precast Sewer Manhole, SMH-6908B, including demolition of existing SMH-10312, reinforced concrete base, precast concrete riser and cone, chimney, flexible pipe seals and connectors, grade adjustment ring(s), frame and cover, epoxy-coating, channelized inverts, testing, CLSM, temporary erosion control measures, traffic control work, incidentals, and all necessary labor, materials and equipment, in place complete. | EA | \$ _____ | 1 | \$ _____ |
| 10 | Rehabilitation of sewer manhole with epoxy coating, including cleaning, surface preparation, cementitious underlayment, concrete channel and bench construction, existing pipe cut & connection, plugging existing pipe, epoxy topcoat, grout injection for leak repair, traffic control work, and all incidentals, in place complete. | EA | \$ _____ | 14 | \$ _____ |
| 11 | Abandon existing sewer pipes including plugging and filling with CLSM, all incidentals, in place complete. | LF | \$ _____ | 280 | \$ _____ |
| 12 | Unplug 21" existing pipe, plug 15" existing SL-9650 and channel & bench reconstruction at SMH-6897 | LS | \$ _____ | 1 | \$ _____ |
| 13 | Sewer Flow Control, including diversion and bypass pumping plan, temporary bypass piping and pumps, pipe plugs, bypassing at sewer laterals (including locating and exposing cleanouts), temporary trenches (including pavement demolition, excavation, backfill, trench covers, temporary and permanent asphalt concrete (AC) pavement, muck handling and disposal), electrical and standby power/pumps, monitoring, spill containment/mitigation, traffic control work, temporary erosion control measures, all related restoration work, in place complete. | LS | \$ _____ | 1 | \$ _____ |
| 14 | Removal of existing pavement including all necessary labor, materials and equipment, in place complete | SY | \$ _____ | 2,867 | \$ _____ |

EJCDC P-400, Suggested Bid Form for Procurement Contracts.

Copyright © 2010 National Society of Professional Engineers, American Council of Engineering Companies, American Society of Civil Engineers, and Associated General Contractors of America. All rights reserved.

Page 6

Exhibit D (8 of 17)

No Bid schedule A

Route 4 Relief Sewer Line Rehabilitation and Replacement (Re-Bid)**SCHEDULE A – Base Bid**

Description of Work: Work consists of replacing 24" Spirolite pipe with 30" PVC pipe, installation of new 18" PVC pipe intertie, construction of precast concrete manholes, sewer manhole rehabilitation with epoxy coating, channel construction, disconnection and re-connection of lateral sewer pipes, abandoning existing sewer pipes and providing temporary bypass and traffic control as necessary to complete the rehabilitation and replacement work.

| SCHEDULE A – Base Bid | | | | | |
|--|---|------|------------|-------|------------|
| Item No. | Description | Unit | Unit Price | Qty | Bid Amount |
| 15 | AC Pavement Resurfacing, including asphalt concrete base, cold planing, pavement transitions, prime coat, tack coat, traffic striping, miscellaneous restoration, and all necessary labor, materials and equipment, in place complete | SY | \$ _____ | 2,867 | \$ _____ |
| 16 | Pavement marking Including all necessary labor, materials and equipment, in place complete | LS | | 1 | |
| 17 | As-Built drawings | LS | | 1 | |
| SCHEDULE A – Base Bid (TOTAL Items 1 through 17, inclusive) | | | | | \$ _____ |

Route 4 Relief Sewer Line Rehabilitation and Replacement (Re-Bid)**SCHEDULE A – Additive Bid No. 1**

Description of Work: Archaeological monitoring.

| SCHEDULE A – Additive Bid No. 1 | | | | | |
|---|---|----|----------|---|----------|
| | | | | | |
| 1 | Archaeological and cultural resource services to add new laydown staging areas outside of the suggested areas or outside of the area of potential effect as defined the Archaeological Monitoring and Data Recovery Plan for the project and resubmit to the Department of Parks and Recreation, Guam Historic Resources Division/State Historic Preservation Office for approval and acceptance. | LS | \$ _____ | 1 | \$ _____ |
| SCHEDULE A - Additive Bid No. 1 (TOTAL Items 1, inclusive) | | | | | \$ _____ |

EJCDC P-400, Suggested Bid Form for Procurement Contracts.

Copyright © 2010 National Society of Professional Engineers, American Council of Engineering Companies, American Society of Civil Engineers, and Associated General Contractors of America. All rights reserved.

Page 7

Exhibit D (9 of 17)

| Route 4 Relief Sewer Line Rehabilitation and Replacement (Re-Bid) | | | | | |
|---|---|------|------------|-----|------------|
| SCHEDULE B - Base Bid | | | | | |
| Description of Work: CIPP lining 21", 24", 30" and 36" existing sewer pipes, providing temporary bypass and traffic control as necessary to complete the rehabilitation and replacement work. | | | | | |
| Schedule B - Base Bid | | | | | |
| Item No. | Description | Unit | Unit Price | Qty | Bid Amount |
| 1 | Mobilization and Demobilization | LS | \$ 800,000 | 1 | \$ 800,000 |
| 2 | Insurance and Bonds | LS | \$ 100,000 | 1 | \$ 100,000 |
| 3 | Permits | LS | \$ 34,300 | 1 | \$ 34,300 |
| 4 | Installation of cured in place pipe (CIPP) lining in existing 21" sewer line, including all labor, materials, supplies, equipment, tools, and incidentals for the complete installation of the liner, cleaning, wet out, preparation, leak repair, transition sections, removal and restoration of sewer manhole cone (if required for access), restoration of pavement and landscaping, removal of protruding laterals, liner termination at manholes, reworking manhole inverts and benches, testing of installed liner, Closed Circuit Television (CCTV) inspection for pre- and post- rehabilitation, traffic control work, and for all other related work. | LF | \$ 310.00 | 674 | \$ 208,940 |
| 5 | Installation of cured in place pipe (CIPP) lining in existing 24" sewer line, including all labor, materials, supplies, equipment, tools, and incidentals for the complete installation of the liner, cleaning, wet out, preparation, leak repair, transition sections, removal and restoration of sewer manhole cone (if required for access), restoration of pavement and landscaping, removal of protruding laterals, liner termination at manholes, reworking manhole inverts and benches, testing of installed liner, Closed Circuit Television (CCTV) inspection for pre- and post- rehabilitation, traffic control work, and for all other related work. | LF | \$ 412.00 | 723 | \$ 297,876 |

Exhibit D (10 of 17)

| Route 4 Relief Sewer Line Rehabilitation and Replacement (Re-Bid) | | | | | |
|---|---|------|----------------------|-------|--------------|
| SCHEDULE B - Base Bid | | | | | |
| Description of Work: CIPP lining 21", 24", 30" and 36" existing sewer pipes, providing temporary bypass and traffic control as necessary to complete the rehabilitation and replacement work. | | | | | |
| Schedule B - Base Bid | | | | | |
| Item No. | Description | Unit | Unit Price | Qty | Bid Amount |
| 6 | Installation of cured in place pipe (CIPP) lining in existing 30" sewer line, including all labor, materials, supplies, equipment, tools, and incidentals for the complete installation of the liner, cleaning, wet out, preparation, leak repair, transition sections, removal and restoration of sewer manhole cone (if required for access), restoration of pavement and landscaping, removal of protruding laterals, liner termination at manholes, reworking manhole inverts and benches, testing of installed liner, Closed Circuit Television (CCTV) inspection for pre- and post- rehabilitation, traffic control work, and for all other related work. | LF | \$ 667 ⁰⁰ | 1,590 | \$ 1,060,530 |
| 7 | Installation of cured in place pipe (CIPP) lining in existing 36" sewer line, including all labor, materials, supplies, equipment, tools, and incidentals for the complete installation of the liner, cleaning, wet out, preparation, leak repair, transition sections, removal and restoration of sewer manhole cone (if required for access), restoration of pavement and landscaping, removal of protruding laterals, liner termination at manholes, reworking manhole inverts and benches, testing of installed liner, Closed Circuit Television (CCTV) inspection for pre- and post- rehabilitation, traffic control work, and for all other related work. | LF | \$ 929 ⁰⁰ | 798 | \$ 741,342 |
| 8 | Sewer Flow Control, including diversion and bypass pumping plan, temporary bypass piping and pumps, pipe plugs, bypassing at sewer laterals (including locating and exposing cleanouts), temporary trenches (including pavement demolition, excavation, backfill, trench covers, temporary and permanent AC pavement, muck handling and disposal), electrical and standby power/pumps, monitoring, spill containment/mitigation, traffic control work, temporary erosion control measures, all related restoration work, in place complete. | LS | \$ 755,700 | 1 | \$ 755,700 |

EJCDC P-400, Suggested Bid Form for Procurement Contracts.

Copyright © 2010 National Society of Professional Engineers, American Council of Engineering Companies, American Society of Civil Engineers, and Associated General Contractors of America. All rights reserved.

Page 9

Exhibit D (11 of 17)

| Route 4 Relief Sewer Line Rehabilitation and Replacement (Re-Bid) | | | | | |
|--|-------------|------|------------|-----|--------------------|
| SCHEDULE B – Base Bid | | | | | |
| Description of Work: CIPP lining 21", 24", 30" and 36" existing sewer pipes, providing temporary bypass and traffic control as necessary to complete the rehabilitation and replacement work. | | | | | |
| Item No. | Description | Unit | Unit Price | Qty | Bid Amount |
| Schedule B – BASE BID (TOTAL Items 1 through 8, inclusive) | | | | | \$3,998,688 |

| Route 4 Relief Sewer Line Rehabilitation and Replacement (Re-Bid) | | | | | |
|---|--|----|-----------------------------|--|---------------------------------|
| SCHEDULE B – Additive Bid No. 1 | | | | | |
| Description of Work: CIPP part-liner or chemical grouting to control infiltration/inflow prior to CIPP lining. | | | | | |
| | | | | Schedule B – Additive Bid No. 1 | |
| 1 | CIPP part-liner or grouting to control infiltration on the existing 21" sewer line, where approved by the Owner, including full compensation for all labor, materials, supplies, equipment, tools, and all incidentals for completed work. | LF | \$ <u>2330⁰⁰</u> | 70 | \$ <u>163,100⁰⁰</u> |
| 2 | CIPP part-liner or grouting to control infiltration on the existing 24" sewer line, where approved by the Owner, including full compensation for all labor, materials, supplies, equipment, tools, and all incidentals for completed work. | LF | \$ <u>2330⁰⁰</u> | 80 | \$ <u>186,400⁰⁰</u> |
| 3 | CIPP part-liner or grouting to control infiltration on the existing 30" sewer line, where approved by the Owner, including full compensation for all labor, materials, supplies, equipment, tools, and all incidentals for completed work. | LF | \$ <u>2960⁰⁰</u> | 160 | \$ <u>473,600⁰⁰</u> |
| 4 | CIPP part-liner or grouting to control infiltration on the existing 36" sewer line, where approved by the Owner, including full compensation for all labor, materials, supplies, equipment, tools, and all incidentals for completed work. | LF | \$ <u>2960</u> | 160 | \$ <u>473,600⁰⁰</u> |
| SCHEDULE B – Additive Bid No. 1 (TOTAL Items 1 through 4, inclusive) | | | | | \$5,295,388⁰⁰ |

Exhibit D (12 of 17)

| Route 4 Relief Sewer Line Rehabilitation and Replacement (Re-Bid) | | | | | |
|---|---|----|-----------|------------------------------------|---------------------------|
| SCHEDULE B - Additive Bid No. 2 | | | | | |
| Description of Work: Archaeological monitoring. | | | | | |
| | | | | SCHEDULE B - Additive Bid No. 2 | |
| 1 | Archaeological and cultural resource services to add new laydown staging areas outside of the suggested areas or outside of the area of potential effect as defined the Archaeological Monitoring and Data Recovery Plan for the project and resubmit to the Department of Parks and Recreation, Guam Historic Resources Division/State Historic Preservation Office for approval and acceptance. | LS | \$ 35,000 | 1 | \$ 35,000 |
| SCHEDULE B - Additive Bid No. 2 (TOTAL Items 1, inclusive) | | | | | \$5,330,388 ⁰⁰ |

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.

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 bidder's 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.

Exhibit D (13 of 17)



World HQ: 17988 Edison Avenue 636-530-8000
Chesterfield MO 63005 Fax: 636-530-8701

Local Off: 9654 Titan Court 303-791-7199
Littleton CO 80125 Fax: 303-791-7399

GWA Route 4 Relief Sewer Line Rehabilitation and Replacement, Project No. S15-006-EPA

LIST OF SUBCONTRACTORS Selection for Insituform

1. CCTV/CLEARING - MOCON
2. BYPASS - MOCON
3. _____
4. _____
5. _____
6. _____

Exhibit D (14 of 17)



| | |
|---|---|
| World HQ: 17988 Edison Avenue Chesterfield MO 63005 | 636-530-8000 Fax: 636-530-8701 |
| Local Off: 9654 Titan Court Littleton CO 80125 | 303-791-7199 Fax: 303-791-7399 |

GWA Route 4 Relief Sewer Line Rehabilitation and Replacement, Project No. S15-006-EPA

LIST OF Suppliers Selection for Insituform

1. CIPP—Insituform
2. _____
3. _____
4. _____
5. _____

Exhibit D (15 of 17)

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: _____

A Partnership

N/A

Partnership Name: _____ (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

N/A

Corporation Name: _____

State of Incorporation: _____

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

By: _____
(Signature - attach evidence of authority to sign)

Name (typed or printed): _____

Title: _____

(CORPORATE SEAL)

Attest _____
(Signature of Corporate Secretary)

Business address: _____

Exhibit D (16 of 17)

Phone: _____ Facsimile: _____

E-mail address: _____

A Limited Liability Company (LLC)

LLC Name: Insituform Technologies, LLC

State in which organized: Delaware

By: Whittney Schulte
(Signature - attach evidence of authority to sign)

Name (typed or printed): Whittney Schulte

Title: Contracting & Attesting Officer

Business address: 17988 Edison Avenue
Chesterfield, MO 63005

Phone: 636-530-8000 Facsimile: 636-530-8701

E-mail address: WSchulte@Aegion.com

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: _____

Exhibit D (17 of 17)

INSITUFORM TECHNOLOGIES, LLC

PRESIDENT APPOINTMENT OF OFFICERS

Pursuant to the authority set forth in the Limited Liability Company Agreement of Insituform Technologies, LLC (the "Company"), I hereby determine that:

1. Christlanda Adkins, Laura M. Andreski, Janet Hass, Jana Lause, Diane Partridge, Whitney Schulte, and Ursula Youngblood are appointed as Contracting and Attesting Officers of the Company, each with the authority, individually and in the absence of the others, subject to the control of the Board of Managers of the Company, (i) to certify and to attest the signature of any officer of the Company, (ii) to enter into and to bind the Company to perform pipeline rehabilitation activities of the Company and all matters related thereto, including the maintenance of one or more offices and facilities of the Company, (iii) to execute and to deliver documents on behalf of the Company, and (iv) to take such other action as is or may be necessary and appropriate to carry out the project, activities and work of the Company; and
2. All other Contracting and Attesting Officers of the Company appointed by the President of the Company prior to the date of this appointment are hereby removed from office.

Dated: September 20, 2017

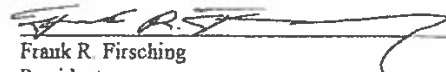

Frank R. Firsching
President

Exhibit B

**AGREEMENT
BETWEEN OWNER AND CONTRACTOR
FOR CONSTRUCTION CONTRACT (STIPULATED PRICE)**

THIS AGREEMENT is by and between the Guam Waterworks Authority ("Owner") and ProPacific Builder Corporation ("Contractor").

Owner and Contractor hereby agree as follows:

ARTICLE 1 – WORK

- 1.01 Contractor shall complete all Work as specified or indicated in the Contract Documents. The Work is generally described as follows:

Work under Schedule A consists of replacing 24" Spirolite pipe with 30" PVC pipe, installation of new 18" PVC pipe intertie, construction of precast concrete manholes, sewer manhole rehabilitation with epoxy coating, channel construction, disconnection and re-connection of lateral sewer pipes, abandoning existing sewer pipes and providing temporary bypass and traffic control as necessary to complete the rehabilitation and replacement work.

ARTICLE 2 – THE PROJECT

- 2.01 The Project, of which the Work under the Contract Documents is a part, is generally described as follows: Route 4 Relief Sewer Line Rehabilitation and Replacement (Re-Bid); GWA Project No. S15-006-EPA.

ARTICLE 3 – ENGINEER

- 3.01 The part of the Project that pertains to the Work has been designed by AECOM.
- 3.02 The Owner has retained EMPSCO Engineering Consultants ("Engineer") to act as Owner's representative, assume all duties and responsibilities, and have the rights and authority assigned to Engineer in the Contract Documents in connection with the completion of the Work in accordance with the Contract Documents.

ARTICLE 4 – CONTRACT TIMES

4.01 *Time of the Essence*

- A. All time limits for Milestones, if any, Substantial Completion, and completion and readiness for final payment as stated in the Contract Documents are of the essence of the Contract.

4.02 *Contract Times: Days*

- A. The Work for the Base Bid contains two schedules, Schedule A and Schedule B. Contract Times will be awarded separately as indicated below under Schedule A and Schedule B. One contract will be awarded to the lowest responsive and responsible bidder for Schedule A and one contract will be awarded to the lowest responsive and responsible bidder for Schedule B. If the same contractor is the lowest responsive and responsible bidder for both Schedules A and B, one contract will be awarded for all the work under Schedules A and B.

1. For a separate contract for Schedule A, the Work for the Schedule A Base Bid will be substantially completed within 450 days after the date when the Contract Times commence to run as provided in Paragraph 4.01 of the General Conditions and completed and ready for final payment in accordance with Paragraph 15.06 of the General Conditions within 480 days after the date when the Contract Times commence to run.
- B. Parts of the Work shall be substantially completed on or before the following Milestone(s):
 1. Milestone 1 [event & date/days] NA
 2. Milestone 2 [event & date/days] NA
 3. Milestone 3 [event & date/days] NA

4.03 *Liquidated Damages*

- A. Contractor and Owner recognize that time is of the essence as stated in Paragraph 4.01 above and that Owner will suffer financial and other losses if the Work is not completed and Milestones not achieved within the times specified in Paragraph 4.02 above, plus any extensions thereof allowed in accordance with the Contract. The parties also recognize the delays, expense, and difficulties involved in proving in a legal or arbitration proceeding the actual loss suffered by Owner if the Work is not completed on time. Accordingly, instead of requiring any such proof, Owner and Contractor agree that as liquidated damages for delay (but not as a penalty):
 1. Substantial Completion: Contractor shall pay Owner **\$3,000.00** for each day that expires after the time (as duly adjusted pursuant to the Contract) specified in Paragraph 4.02.A above for Substantial Completion until the Work is substantially complete.
 2. Completion of Remaining Work: After Substantial Completion, if Contractor shall neglect, refuse, or fail to complete the remaining Work within the Contract Times (as duly adjusted pursuant to the Contract) for completion and readiness for final payment, Contractor shall pay Owner **\$3,000.00** for each day that expires after such time until the Work is completed and ready for final payment.
 3. Liquidated damages shall be assessed against the Contractor(s) separately for the work performed under Schedule A and the work performed under Schedule B.
 4. Liquidated damages for failing to timely attain Substantial Completion and final completion are not additive and will not be imposed concurrently.
 5. Milestones: Contractor shall pay Owner \$ NA for each day that expires after the time (as duly adjusted pursuant to the Contract) specified above for achievement of Milestone 1, until Milestone 1 is achieved.

4.04 *Special Damages*

- A. In addition to the amount provided for liquidated damages, Contractor shall reimburse Owner (1) for any fines or penalties imposed on Owner as a direct result of the Contractor's failure to attain Substantial Completion according to the Contract Times, and (2) for the actual costs reasonably incurred by Owner for engineering, construction observation, inspection, and administrative services needed after the time specified in Paragraph 4.02 for Substantial Completion (as duly adjusted pursuant to the Contract), until the Work is substantially complete.

- B. After Contractor achieves Substantial Completion, if Contractor shall neglect, refuse, or fail to complete the remaining Work within the Contract Times, Contractor shall reimburse Owner for the actual costs reasonably incurred by Owner for engineering, construction observation, inspection, and administrative services needed after the time specified in Paragraph 4.02 for Work to be completed and ready for final payment (as duly adjusted pursuant to the Contract), until the Work is completed and ready for final payment.

ARTICLE 5 – CONTRACT PRICE

5.01 Owner shall pay Contractor for completion of the Work in accordance with the Contract Documents the amounts that follow, subject to adjustment under the Contract:

- A. For all Work under Schedule A - Base Bid other than Unit Price Work, a lump sum of: \$Three Million Four Hundred Seven Thousand Eight Hundred Forty Eight US Dollars (\$3,407,848.00).

All specific cash allowances are included in the above price in accordance with Paragraph 13.02 of the General Conditions.

- B. For all Unit Price Work, an amount equal to the sum of the extended prices (established for each separately identified item of Unit Price Work by multiplying the unit price times the actual quantity of that item):

| Unit Price Work | | | | | |
|---|-------------|------|--------------------|------------|----------------|
| Item No. | Description | Unit | Estimated Quantity | Unit Price | Extended Price |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| Total of all Extended Prices for Unit Price Work (subject to final adjustment based on actual quantities) | | | | | \$ |

The extended prices for Unit Price Work set forth as of the Effective Date of the Contract are based on estimated quantities. As provided in Paragraph 13.03 of the General Conditions, estimated quantities are not guaranteed, and determinations of actual quantities and classifications are to be made by Engineer.

- C. Total of Schedule A Lump Sum Amount and Unit Price Work (subject to final Unit Price adjustment) \$3,407,848.00.
- D. For all Work, at the prices stated in Contractor's Bid, attached hereto as an exhibit.

ARTICLE 6 – PAYMENT PROCEDURES

6.01 *Submittal and Processing of Payments*

- A. Contractor shall submit Applications for Payment in accordance with Article 15 of the General Conditions. Applications for Payment will be processed by Engineer as provided in the General Conditions.

6.02 Progress Payments; Retainage

- A. Owner shall make progress payments on account of the Contract Price on the basis of Contractor's Applications for Payment on or about the 15th day of each month during performance of the Work as provided in Paragraph 6.02.A.1 below, provided that such Applications for Payment have been submitted in a timely manner and otherwise meet the requirements of the Contract. All such payments will be measured by the Schedule of Values established as provided in the General Conditions (and in the case of Unit Price Work based on the number of units completed) or, in the event there is no Schedule of Values, as provided elsewhere in the Contract.
 - 1. Prior to Substantial Completion, progress payments will be made in an amount equal to the percentage indicated below but, in each case, less the aggregate of payments previously made and less such amounts as Owner may withhold, including but not limited to liquidated damages, in accordance with the Contract
 - a. 90 percent of Work completed (with the balance being retainage). And
 - b. 90 percent of cost of materials and equipment not incorporated in the Work (with the balance being retainage).
- B. Upon Substantial Completion, Owner shall pay an amount sufficient to increase total payments to Contractor to 100 percent of the Work completed, less such amounts set off by Owner pursuant to Paragraph 15.01.E of the General Conditions, and less 200 percent of Engineer's estimate of the value of Work to be completed or corrected as shown on the punch list of items to be completed or corrected prior to final payment.

6.03 Final Payment

- A. Upon final completion and acceptance of the Work in accordance with Paragraph 15.06 of the General Conditions, Owner shall pay the remainder of the Contract Price as recommended by Engineer as provided in said Paragraph 15.06.

ARTICLE 7 – INTEREST

- 7.01 All amounts not paid when due shall bear interest at the rate of 6 percent per annum.

ARTICLE 8 – CONTRACTOR'S REPRESENTATIONS

- 8.01 In order to induce Owner to enter into this Contract, Contractor makes the following representations:
 - A. Contractor has examined and carefully studied the Contract Documents, and any data and reference items identified in the Contract Documents.
 - B. Contractor has visited the Site, conducted a thorough, alert visual examination of the Site and adjacent areas, and become familiar with and is satisfied as to the general, local, and Site conditions that may affect cost, progress, and performance of the Work.
 - C. Contractor is familiar with and is satisfied as to all Laws and Regulations that may affect cost, progress, and performance of the Work.
 - D. Contractor has carefully studied all: (1) reports of explorations and tests of subsurface conditions at or adjacent to the Site and all drawings of physical conditions relating to existing surface or subsurface structures at the Site that have been identified in the

Supplementary Conditions, especially with respect to Technical Data in such reports and drawings, and (2) reports and drawings relating to Hazardous Environmental Conditions, if any, at or adjacent to the Site that have been identified in the Supplementary Conditions, especially with respect to Technical Data in such reports and drawings.

- E. Contractor has considered the information known to Contractor itself; information commonly known to contractors doing business in the locality of the Site; information and observations obtained from visits to the Site; the Contract Documents; and the Site-related reports and drawings identified in the Contract Documents, with respect to the effect of such information, observations, and documents on (1) the cost, progress, and performance of the Work; (2) the means, methods, techniques, sequences, and procedures of construction to be employed by Contractor; and (3) Contractor's safety precautions and programs.
- F. Based on the information and observations referred to in the preceding paragraph, Contractor agrees that no further examinations, investigations, explorations, tests, studies, or data are necessary for the performance of the Work at the Contract Price, within the Contract Times, and in accordance with the other terms and conditions of the Contract.
- G. Contractor is aware of the general nature of work to be performed by Owner and others at the Site that relates to the Work as indicated in the Contract Documents.
- H. Contractor has given Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Contractor has discovered in the Contract Documents, and the written resolution thereof by Engineer is acceptable to Contractor.
- I. The Contract Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performance and furnishing of the Work.
- J. Contractor's entry into this Contract constitutes an incontrovertible representation by Contractor that without exception all prices in the Agreement are premised upon performing and furnishing the Work required by the Contract Documents.

ARTICLE 9 – CONTRACT DOCUMENTS

9.01 Contents

- A. The Contract Documents consist of the following:
 - 1. This Agreement (pages 1 to 8, inclusive).
 - 2. Performance bond (pages 1 to 3, inclusive).
 - 3. Payment bond (pages 1 to 3, inclusive).
 - 4. Other bonds.
 - a. (pages to , inclusive).
 - 5. General Conditions (pages 1 to 65, inclusive).
 - 6. Supplementary Conditions (pages 1 to 18, inclusive).
 - 7. Specifications as listed in the table of contents of the Project Manual.
 - 8. The Drawings listed on the attached sheet index.
 - 9. Addenda (numbers 1 to 4, inclusive).
 - 10. Exhibits to this Agreement (enumerated as follows):

- a. Contractor's Bid (pages 1 to 10, inclusive).

NOTE(S) TO USER:

- 11. The following which may be delivered or issued on or after the Effective Date of the Contract and are not attached hereto:
 - a. Notice to Proceed.
 - b. Work Change Directives.
 - c. Change Orders.
 - d. Field Orders.
- B. The documents listed in Paragraph 9.01.A are attached to this Agreement (except as expressly noted otherwise above).
- C. There are no Contract Documents other than those listed above in this Article 9.
- D. The Contract Documents may only be amended, modified, or supplemented as provided in the General Conditions.

ARTICLE 10 – MISCELLANEOUS

10.01 Terms

- A. Terms used in this Agreement will have the meanings stated in the General Conditions and the Supplementary Conditions.

10.02 Assignment of Contract

- A. Unless expressly agreed to elsewhere in the Contract, no assignment by a party hereto of any rights under or interests in the Contract will be binding on another party hereto without the written consent of the party sought to be bound; and, specifically but without limitation, money that may become due and money that is due may not be assigned without such consent (except to the extent that the effect of this restriction may be limited by law), and unless specifically stated to the contrary in any written consent to an assignment, no assignment will release or discharge the assignor from any duty or responsibility under the Contract Documents.

10.03 Successors and Assigns

- A. Owner and Contractor each binds itself, its successors, assigns, and legal representatives to the other party hereto, its successors, assigns, and legal representatives in respect to all covenants, agreements, and obligations contained in the Contract Documents.

10.04 Severability

- A. Any provision or part of the Contract Documents held to be void or unenforceable under any Law or Regulation shall be deemed stricken, and all remaining provisions shall continue to be valid and binding upon Owner and Contractor, who agree that the Contract Documents shall be reformed to replace such stricken provision or part thereof with a valid and enforceable provision that comes as close as possible to expressing the intention of the stricken provision.

10.05 Contractor's Certifications

- A. Contractor certifies that it has not engaged in corrupt, fraudulent, collusive, or coercive practices in competing for or in executing the Contract. For the purposes of this Paragraph 10.05:
1. "corrupt practice" means the offering, giving, receiving, or soliciting of any thing of value likely to influence the action of a public official in the bidding process or in the Contract execution;
 2. "fraudulent practice" means an intentional misrepresentation of facts made (a) to influence the bidding process or the execution of the Contract to the detriment of Owner, (b) to establish Bid or Contract prices at artificial non-competitive levels, or (c) to deprive Owner of the benefits of free and open competition;
 3. "collusive practice" means a scheme or arrangement between two or more Bidders, with or without the knowledge of Owner, 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 or affect the execution of the Contract.

10.06 Other Provisions

- A. Owner stipulates that if the General Conditions that are made a part of this Contract are based on EJCDC® C-700, Standard General Conditions for the Construction Contract, published by the Engineers Joint Contract Documents Committee®, and if Owner is the party that has furnished said General Conditions, then Owner has plainly shown all modifications to the standard wording of such published document to the Contractor, through a process such as highlighting or "track changes" (redline/strikeout), or in the Supplementary Conditions.

IN WITNESS WHEREOF, Owner and Contractor have signed this Agreement.

This Agreement will be effective on 9-13-18 (which is the Effective Date of the Contract).

OWNER:

Guam Waterworks Authority

By: MIGUEL C. BORDALLO, P.E.

Title: General Manager

Attest: [Signature]

Title: Legal Secretary III

Address for giving notices:

Gloria B Nelson Public Service Building

688 Route 15

Mangilao Guam 96913

CONTRACTOR:

ProPacific Builder Corporation

By: JEAN YEON YU

Title: President

(If Contractor is a corporation, a partnership, or a joint venture, attach evidence of authority to sign.)

Attest: [Signature]

Title: Office Manager

Address for giving notices:

750 Route 8

Suite 202, Hanam Plaza

Barrigada, Guam 96913

License No.: 5135

Certificate No.: C-0518-0147

(where applicable)

(If Owner is a corporation, attach evidence of authority to sign. If Owner is a public body, attach evidence of authority to sign and resolution or other documents authorizing execution of this Agreement.)

CERTIFIED FUNDS AVAILABLE:

By: [Signature]

GREG P. CRUZ

GWA Chief Financial Officer

Date: 9.13.18

Contract Amount: \$3,407,848.00

Contingency: \$ 340,784.80

Amount Certified: \$3,748,632.80

Funding Source: \$3,407,848.00 USEPA State Revolving Fund – Grant No. M96902617

\$ 340,784.80 2016 GWA Bond WW 09-06 Wastewater Collection System/Rehabilitation Program

APPROVED AS TO FORM:

By: [Signature]

KELLY O. CLARK

GWA General Counsel

Date: 9/5/18

EXHIBIT A

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
Manqilao, 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 | April 19, 2018 |
| Addendum No. 2 | April 26, 2018 |
| Addendum No. 3 | May 15, 2018 |
| Addendum No. 4 | May 18, 2018 |

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.

- 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 where 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;
 - 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 AND AWARD OF CONTRACTS

- 5.01 This contract is a multi-award contract through which more than one contract may be awarded through this solicitation. The Bid Schedule contains two schedules, Schedule A and Schedule B. Bidder will furnish the Goods and Special Services in accordance with the Contract Documents for the prices indicated under this article. The Bidder can elect to provide prices under Schedule A or Schedule B or both schedules. Bids must include all items under Schedule A or Schedule B, or both Schedule A and B. Each of Schedules A and B comprise Base Bid items and Additive Bid items. The Bidder shall provide base bid and additive bid(s) prices under each elected schedule.

Bids shall be evaluated by Schedule. Each of Schedules A and B shall be evaluated separately. The lowest responsive and responsible bidder shall be determined for each of Schedule A and Schedule B. Separate contracts will be awarded under Schedule A and Schedule B. One contract will be awarded to the lowest responsive and responsible bidder for Schedule A and one contract will be awarded to the lowest responsive and responsible bidder for Schedule B. If the same contractor is the lowest responsive and responsible bidder for both Schedules A and B, one contract for all the work under Schedules A and B will be awarded.

Route 4 Relief Sewer Line Rehabilitation and Replacement (Re-Bid)**SCHEDULE A – Base Bid**

Description of Work: Work consists of replacing 24" Spirolite pipe with 30" PVC pipe, installation of new 18" PVC pipe intertie, construction of precast concrete manholes, sewer manhole rehabilitation with epoxy coating, channel construction, disconnection and re-connection of lateral sewer pipes, abandoning existing sewer pipes and providing temporary bypass and traffic control as necessary to complete the rehabilitation and replacement work.

| SCHEDULE A – Base Bid | | | | | |
|------------------------------|--|-------------|-------------------|------------|-------------------|
| Item No. | Description | Unit | Unit Price | Qty | Bid Amount |
| 1 | Mobilization and Demobilization | LS | \$ 293,780.00 | 1 | \$ 293,780.00 |
| 2 | Insurance and Bonds | LS | \$ 132,201.00 | 1 | \$ 132,201.00 |
| 3 | Permits | LS | \$ 44,067.00 | 1 | \$ 44,067.00 |
| 4 | 12" PVC pipe, installed by open trench, including PVC pipe, fittings, warning/identification tape, cleaning, connections to manholes, adjustment existing channel and bench, testing, and all incidentals, in place complete. | LF | \$ 1,500.00 | 22 | \$ 33,000.00 |
| 5 | 18" PVC pipe, installed by open trench, including PVC pipe, fittings, warning/identification tape, cleaning, connections to existing manholes, adjustment existing channel and bench, testing, and all incidentals, in place complete. | LF | \$ 1,800.00 | 12 | \$ 21,600.00 |
| 6 | 30" PVC pipe, installed by open trench, including existing pipe removal, pipe, fittings, warning/identification tape, cleaning, manhole connections, testing, and all incidentals, in place complete. | LF | \$ 2,000.00 | 461 | \$ 922,000.00 |
| 7 | Unclassified Trench Excavation and Backfill, including protection of existing utilities if necessary, excavation, installation of sheet piles, cutting and removal of sheet piles, shoring, groundwater cutoff wall, dewatering and dewatering effluent disposal, muck handling and disposal, backfill, pipe bedding, CLSM, temporary erosion control measures, traffic control work, miscellaneous restoration work, and all incidentals required to complete the work. | CY | \$ 600.00 | 913 | \$ 547,800.00 |
| 8 | Precast Sewer Manhole, SMH-6901A and 493A, including reinforced concrete base, precast concrete riser and cone, flexible pipe seals and connectors, grade adjustment ring(s), frame and cover, epoxy-coating, channelized inverts, testing, CLSM, temporary erosion control measures, traffic control work, incidentals, and all necessary labor, materials and equipment, in place complete. | EA | \$ 30,000.00 | 2 | \$ 60,000.00 |

EJCDC P-400, Suggested Bid Form for Procurement Contracts.

Copyright © 2010 National Society of Professional Engineers, American Council of Engineering Companies, American Society of Civil Engineers, and Associated General Contractors of America. All rights reserved.

Page 5

Route 4 Relief Sewer Line Rehabilitation and Replacement (Re-Bid)**SCHEDULE A – Base Bid**

Description of Work: Work consists of replacing 24" Spirolite pipe with 30" PVC pipe, installation of new 18" PVC pipe intertie, construction of precast concrete manholes, sewer manhole rehabilitation with epoxy coating, channel construction, disconnection and re-connection of lateral sewer pipes, abandoning existing sewer pipes and providing temporary bypass and traffic control as necessary to complete the rehabilitation and replacement work.

| SCHEDULE A – Base Bid | | | | | |
|------------------------------|--|-------------|-------------------|------------|-------------------|
| Item No. | Description | Unit | Unit Price | Qty | Bid Amount |
| 9 | Drop Precast Sewer Manhole, SMH-6908B, including demolition of existing SMH-10312, reinforced concrete base, precast concrete riser and cone, chimney, flexible pipe seals and connectors, grade adjustment ring(s), frame and cover, epoxy-coating, channelized inverts, testing, CLSM, temporary erosion control measures, traffic control work, incidentals, and all necessary labor, materials and equipment, in place complete. | EA | \$ 30,000.00 | 1 | \$ 30,000.00 |
| 10 | Rehabilitation of sewer manhole with epoxy coating, including cleaning, surface preparation, cementitious underlayment, concrete channel and bench construction, existing pipe cut & connection, plugging existing pipe, epoxy topcoat, grout injection for leak repair, traffic control work, and all incidentals, in place complete. | EA | \$ 22,500.00 | 14 | \$ 315,000.00 |
| 11 | Abandon existing sewer pipes including plugging and filling with CLSM, all incidentals, in place complete. | LF | \$ 250.00 | 280 | \$ 70,000.00 |
| 12 | Unplug 21" existing pipe, plug 15" existing SL-9650 and channel & bench reconstruction at SMH-6897 | LS | \$ 30,000.00 | 1 | \$ 30,000.00 |
| 13 | Sewer Flow Control, including diversion and bypass pumping plan, temporary bypass piping and pumps, pipe plugs, bypassing at sewer laterals (including locating and exposing cleanouts), temporary trenches (including pavement demolition, excavation, backfill, trench covers, temporary and permanent asphalt concrete (AC) pavement, muck handling and disposal), electrical and standby power/pumps, monitoring, spill containment/mitigation, traffic control work, temporary erosion control measures, all related restoration work, in place complete. | LS | \$ 300,000.00 | 1 | \$ 300,000.00 |
| 14 | Removal of existing pavement including all necessary labor, materials and equipment, in place complete | SY | \$ 50.00 | 2,867 | \$ 143,350.00 |

EJCDC P-400, Suggested Bid Form for Procurement Contracts.

Copyright © 2010 National Society of Professional Engineers, American Council of Engineering Companies,
American Society of Civil Engineers, and Associated General Contractors of America. All rights reserved.

Page 6

Route 4 Relief Sewer Line Rehabilitation and Replacement (Re-Bid)**SCHEDULE A – Base Bid**

Description of Work: Work consists of replacing 24" Spirolite pipe with 30" PVC pipe, installation of new 18" PVC pipe intertie, construction of precast concrete manholes, sewer manhole rehabilitation with epoxy coating, channel construction, disconnection and re-connection of lateral sewer pipes, abandoning existing sewer pipes and providing temporary bypass and traffic control as necessary to complete the rehabilitation and replacement work.

| SCHEDULE A – Base Bid | | | | | |
|--|---|-------------|-------------------|------------|------------------------|
| Item No. | Description | Unit | Unit Price | Qty | Bid Amount |
| 15 | AC Pavement Resurfacing, including asphalt concrete base, cold planing, pavement transitions, prime coat, tack coat, traffic striping, miscellaneous restoration, and all necessary labor, materials and equipment, in place complete | SY | \$ 150.00 | 2,867 | \$ 430,050.00 |
| 16 | Pavement marking including all necessary labor, materials and equipment, in place complete | LS | \$25,000.00 | 1 | \$ 25,000.00 |
| 17 | As-Built drawings | LS | \$10,000.00 | 1 | \$ 10,000.00 |
| SCHEDULE A – Base Bid (TOTAL Items 1 through 17, inclusive) | | | | | \$ 3,407,848.00 |

Route 4 Relief Sewer Line Rehabilitation and Replacement (Re-Bid)**SCHEDULE A – Additive Bid No. 1**

Description of Work: Archaeological monitoring.

| SCHEDULE A – Additive Bid No. 1 | | | | | |
|---|---|-------------|-------------------|------------|----------------------|
| Item No. | Description | Unit | Unit Price | Qty | Bid Amount |
| 1 | Archaeological and cultural resource services to add new laydown staging areas outside of the suggested areas or outside of the area of potential effect as defined the Archaeological Monitoring and Data Recovery Plan for the project and resubmit to the Department of Parks and Recreation, Guam Historic Resources Division/State Historic Preservation Office for approval and acceptance. | LS | \$ 150,000.00 | 1 | \$ 150,000.00 |
| SCHEDULE A - Additive Bid No. 1 (TOTAL Items 1, inclusive) | | | | | \$ 150,000.00 |

| Route 4 Relief Sewer Line Rehabilitation and Replacement (Re-Bid) | | | | | |
|--|---|----|----------|--|----------|
| SCHEDULE B - Additive Bid No. 2 | | | | | |
| Description of Work: Archaeological monitoring. | | | | | |
| | | | | SCHEDULE B – Additive Bid No. 2 | |
| 1 | Archaeological and cultural resource services to add new laydown staging areas outside of the suggested areas or outside of the area of potential effect as defined the Archaeological Monitoring and Data Recovery Plan for the project and resubmit to the Department of Parks and Recreation, Guam Historic Resources Division/State Historic Preservation Office for approval and acceptance. | LS | \$ _____ | 1 | \$ _____ |
| SCHEDULE B - Additive Bid No. 2 (TOTAL Items 1, inclusive) | | | | | \$ _____ |

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.

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.

Exhibit C

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. 1

Project No. & Title: Route 4 Relief Sewerline Rehabilitation and Replacement
GWA Project No. S15-006-EPA
Contractor's Name: ProPacific Builders Corporation Original Contract Date: September 13, 2018

TO: ProPacific Builders Corporation

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

Vicente Escabillas, Operations Manager

Contractor Representative (Print Name & Title)

Signature

Date

PREPARED BY:

George Watson

Project Engineer

John Riegel P.E.

Managing Engineer

RECOMMEND APPROVAL:

Thomas Cruz, P.E.

Chief Engineer

Maurice McDaniel

Acting Chief Engineer

G.L. NO. S202.105321.420000Contract No.: 795 OSVendor No.: 28731Amount: \$276,760.19 (199692612)

Nature of Changes:

This Change Order serves to 1) extend the contract 193 days, and 2) add \$276,760.19 due to permitting and permit conditions.

1) As described in Enclosure 1, due to delays and challenges with obtaining the permit and the restricts on the contractor in the permit conditions, 193 days are to be added to the contract time.

2) Due to permitting, permit time restrictions, additional traffic control to satisfy permit conditions, as well as other direct costs as described on page 3 in Enclosure 2, \$276,760.19 will be added to the contract value.

With the addition of the 193 days, the contract now extends to July 17, 2020.

The costs of \$276,760.19 will come from the project contingency.

With the addition of the \$276,760.19, the new contract value will be \$3,684,608.19.

Enclosures:

1) ProPacific "Request for Time Extension" letter

2) ProPacific "Request for Cost Adjustment Due to DPW Permit Conditions" letter

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

Contract price prior to this change order

\$3,407,848.00

Net (increase)(decrease) from this Change Order (subject to approved terms & conditions)

\$276,760.19

Current contract price including this Change Order

\$3,684,608.19

Contract time prior to this Change Order 480 calendar daysNet (increase)(decrease) resulting this Change Order 193 calendar daysCurrent contract time including this Change Order 673 calendar days

CERTIFIED FUNDS AVAILABLE:

Talling M. Taitano

Chief Financial Officer, GWA

Date:

APPROVED:

Miguel C. Bordallo, PE
General Manager

Date:

| |
|--------------------------------------|
| (Name & Title) Finance/Accounting |
| Date: |

GUAM WATERWORKS AUTHORITY
BUDGET OFFICE
GMM - From GMM
BUDGET OFFICER

DATE: 2/7/20 TIME: 11:33 AM

S15-006-EPA Route 4 Relief Sewerline Rehabilitation And Replacement

| Cost Adjustment Due to DPW Permit Conditions | | | | | | | | | |
|---|---------------------------|-----|------|-----------|---|-------------------|--------|-----------------|--|
| Description | Cost on Existing Contract | | | | | Change Order Cost | | | |
| | Contract Cost | Qty | Unit | Unit Cost | Reference | Add'l Qty | Unit | Cost Adjustment | |
| 1 Extended Permit and Clearance Fees (DZSP & HEP only) | | | | | See Cost Reference "A" | | | | |
| Highway Encroachment Permit | | | | 25.00 | HEP -19-007 | 6 | Mo | 150.00 | |
| DZSP Clearance | | | | 1,650.00 | DZSP21 Dig Permit | 2 | /3 Mo. | 3,300.00 | |
| 2 Direct Costs | 340,784.80 | 15 | Mo | 22,718.99 | | 6.5 | Mo | | |
| Operations Manager | | | | 4,000.00 | | 3 | Mo | 12,000.00 | |
| Project Manager | | | | 6,000.00 | | 6.5 | Mo | 39,000.00 | |
| Liaison Officer/Project Engineer | | | | 4,000.00 | | 6.5 | Mo | 26,000.00 | |
| Site Superintendent | | | | 4,000.00 | | 2 | Mo | 8,000.00 | |
| Office Expenses & Service Vehicles | | | | 4,718.99 | | 6.5 | Mo | 30,673.44 | |
| 3 Additional Traffic Control Devices and Set-ups. | | | | | See Cost Reference "C": | | | | |
| Traffic Signs | | 18 | Set | 145.20 | Pacific Sign Shop Invoice | 56 | Set | 8,131.20 | |
| Number of Set-ups (& Removal) | | 107 | Ea | 20.00 | See Cost Reference "C" | 168 | Ea | 3,360.00 | |
| Advisory Boards (first 3 sets not charged) | | 0 | Set | 491.48 | Pacific Sign Shop Invoice | 3 | Set | 1,474.45 | |
| Arrow Panel | | 2 | Set | 14,139.00 | Nico & CTSI Invoice | 1 | Set | 14,139.00 | |
| 4 Workers 1 Hr. Idle Time Adjustment (Equipments not charged) | | | | 167.66 | See Cost Reference "D" | 188 | WD | 31,521.00 | |
| | | | | | SUB-TOTAL | | | 177,749.09 | |
| | | | | | Overhead & Profit (15%) | | | 26,662.36 | |
| | | | | | SUB-TOTAL | | | 204,411.45 | |
| | | | | | GRT (5.21%) | | | 10,654.95 | |
| 5 Extended Bond & Insurance | 132,201.00 | 15 | Mo | 8,813.40 | See Cost Reference "E": SOV Item 2.0 | 7 | Mo | 61,693.80 | |
| | | | | | TOTAL COST | | | 276,760.19 | |

Enclosure 1



PROPACIFIC BUILDER CORPORATION

(formerly Guam Yooshin Corporation)
750 Route 8 Suite 202 Hanam Plaza,
Barrigada, Guam 96913
T. 671.477.3109 | F. 671.477.7424 | igyc@guam.net

Date; August 15, 2019

To: George Watson, PE
Program Manager
Brown & Caldwell

Thru: Tyrone De Guzman, PE
Project Manager
EMPSO Engineering Consultants

Subject: **S15-006-EPA (Schedule A)**
Route 4 Relief Sewerline Rehabilitation and Replacement

Reference: **REQUEST FOR TIME EXTENSION**

Dear Mr. Watson,

May I inform you that the remaining time of 126 CD under our contract is no longer sufficient to successfully finish the project. Based on PPBC's contract time of 450 CD and the approved revised Construction Schedule, PPBC's scheduled permitting time = 161 CD, other General Requirements = 147, and Construction = 276 CD including Close-outs (*please see Exhibit "A"*).

PPBC initially allotted 71 CD permitting time on the Start-up Construction Schedule for the remaining agencies not completed by AECOM submitted on Nov. 7, 2018 and later adjusted it to 161 CD on the revised Construction Schedule which was approved on March 01, 2019. Still, duration of permit application process took longer which also exceed the time allotted to General Requirements, (Administrative & Material Submittals, Government Reviews, Off-island Material Procurement , & Fabrications including deliveries) and to include Guam DPW permit conditions, the remaining time under our Construction is no longer sufficient. The following are the circumstances that go beyond our control:

1. Supporting Documents:

- Although PPBC continue the permit application right-away upon receipt of the permit application form and permit drawings from AECOM dated Oct. 5, 2018, PPBC requested the required supporting documents such as Section 106 Review as well as authorization letters in advance from BrnCald & RPR (during the Pre-Con Meeting) but just recieved the Section 106 Review on Oct. 17, 2018 (after 2 weeks) and the authorization on Nov. 1, 2018 (after a month) which resulted the clearance application stucked in DPR. Not until copy of Section 106 was provided to DPR they did sign the clearance.

2. New Requirements:

- New requirements in the processing of Building Permit were applied in this project and being high visibility project, permitting agencies became more stringent in processing the permit. Some forms were revised by permitting agencies such as the HEP routing slip wherein a lot of government agencies and private utility companies were added, each have their own requirement especially DZSP-21.
- PPBC processed HEP clearance upon receipt of the Permit application form and Permit Drawings knowing that this is a pre-requisite of DPW-Highways Division in processing Building Permits for road projects. The new routing slip have added a lot of utility companies and agencies that need to sign off in the clearance (please see attachment "2" in the Timelines).
- **Difficulty in acquiring clearance from DZSP-21 due to base access** is also an additional factor. We have to set-up meetings with DZSP personnel outside the base on their convenient times during the processing of the clearance. Furthermore, even though I have explained to them that the project is off-base and is not DoD-funded project, they still applied their own procedure with their own Dig Permit routing slip that went to many sections similar to the one from DPW-HEP before DZSP supervisor will sign the clearance form from DPW. After regular follow-up & communications, they sign the clearance **after 2 weeks, dated Oct. 22, 2018.**

3. GEPA Processing:

- While processing the DPW-HEP clearance, PPBC started in doing plans & shop drawing submittals required by GEPA (simultaneous with the project submittals intended for the CM) including those which are not required by contract. Researches, study of methods, & sourcing of materials & equipments to be incorporated in these plans were also done during this period. PPBC submitted these to GEPA on October 16, 2018 and received review comments on Nov. 9, 2018 after constant follow-up thru personal appearances, phone calls, & e-mails.
- **GEPA is not satisfied on the Erosion & Sediment Control Drawings** incorporated in the Permit Drawings so they require a separate pages of ESC Plans. PPBC relayed the comments on Nov.9, 2018 to CM and BrnCald since this is still part of the design but they just asked us to do it. We requested CAD files right-away to generate the required drawings and **received the requested CAD files from BrnCald, almost 3 weeks after the request.** We finally able to submit the PE signed & sealed ESC Drawings to GEPA on January 24, 2019. Submittals that previously have "RR" reviews were also re-submitted on February 6, 2019 and the BP clearance was finally signed on February 14, 2019 while the HEP clearance was signed on February 20 and both clearances were released on February 20, 2019. It took **4 months & 4 days** (from Oct. 16, 2018 - Feb. 20, 2019) before it was signed off.
- Just like the DPW-Highways Div, GEPA are hesitant to sign the clearance and approve the submitted plans citing the complexity of the project. They sign off the clearance after PPBC provided all information they are requiring and with aggressive follow ups. With all these difficulties and delays incurred from GEPA, still **PPBC did not include the delay of 100 CD on our claim for time extension.**

4. DPW Processing:

- Traffic control plans were **resubmitted to and rejected by DPW-Highways multiple times.** It took seven (7) revisions and resubmissions before it was finally accepted by DPW-Highways Division and forwarded the processing to DPW-Engineering Div.
- DPW-Highways Division required Night-time Traffic Control Plans, Re-routing Schemes, and a new Laydown area. Although PPBC drafted the drawings to fast-track the design, AECOM that will sign and seal the drawings is off-island for 2 weeks.

- **DPW-Highway Division personnel does not want to sign the clearance** eventhough we comply to all requirements citing the complexity of the project and their frustrations to other GWA highway projects. It took **four (4) months** (from February 20, 2019 to June 20, 2019) with multiple meetings, interference by Agency General Managers, and revision in design and scope to reduce lane closures before it was finally approved with conditions by DPW-Highways Division and forwarded the processing to DPW-Engineering Div.

•
(Please see exhibit "B").

5. Permit Conditions:

a. Working Time Limitations: DPW approved the permit with conditions that "No work between the hours of 6:00AM-9:00AM and 4:00PM-6:00PM during weekdays" . This reduced our production time of 2 hours daily or 25% although we need to pay our equipment rentals and our workers the complete 8 hours daily otherwise we are going to lose them.

(Please see exhibit "C")

b. Construction Sequence Limitations: DPW-Highways does not allow us to have open excavation works in 2 locations simultaneously per our meeting with them (BrnCald was represented in that meeting). In our submitted Initial Construction Schedule, constructions of new SMHs will be done simultaneously. In their condition, we need to add time for the duration to construct 1 SMH in the schedule.

Although we recognize that the time for performing under the agreement is essential, with these circumstances that are beyond our control, which have made a great impact on our construction schedule to complete the project on time, we are requesting for an **extension of 193 CD** in order for us to complete the project that conforms to our agreement.

Please do not hesitate to get in touch with us if you wish to discuss this further.

Thank you very much.

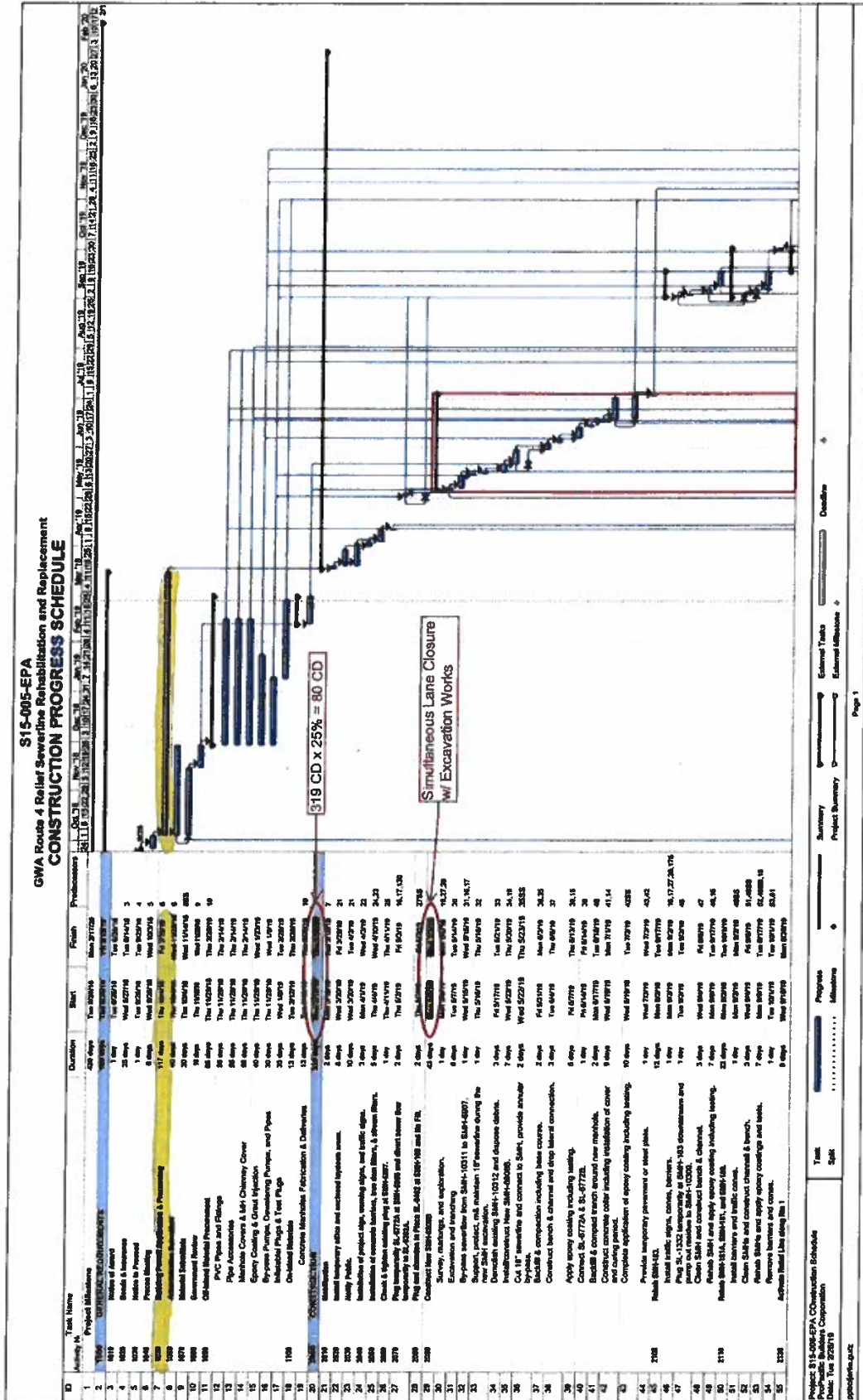
Sincerely,

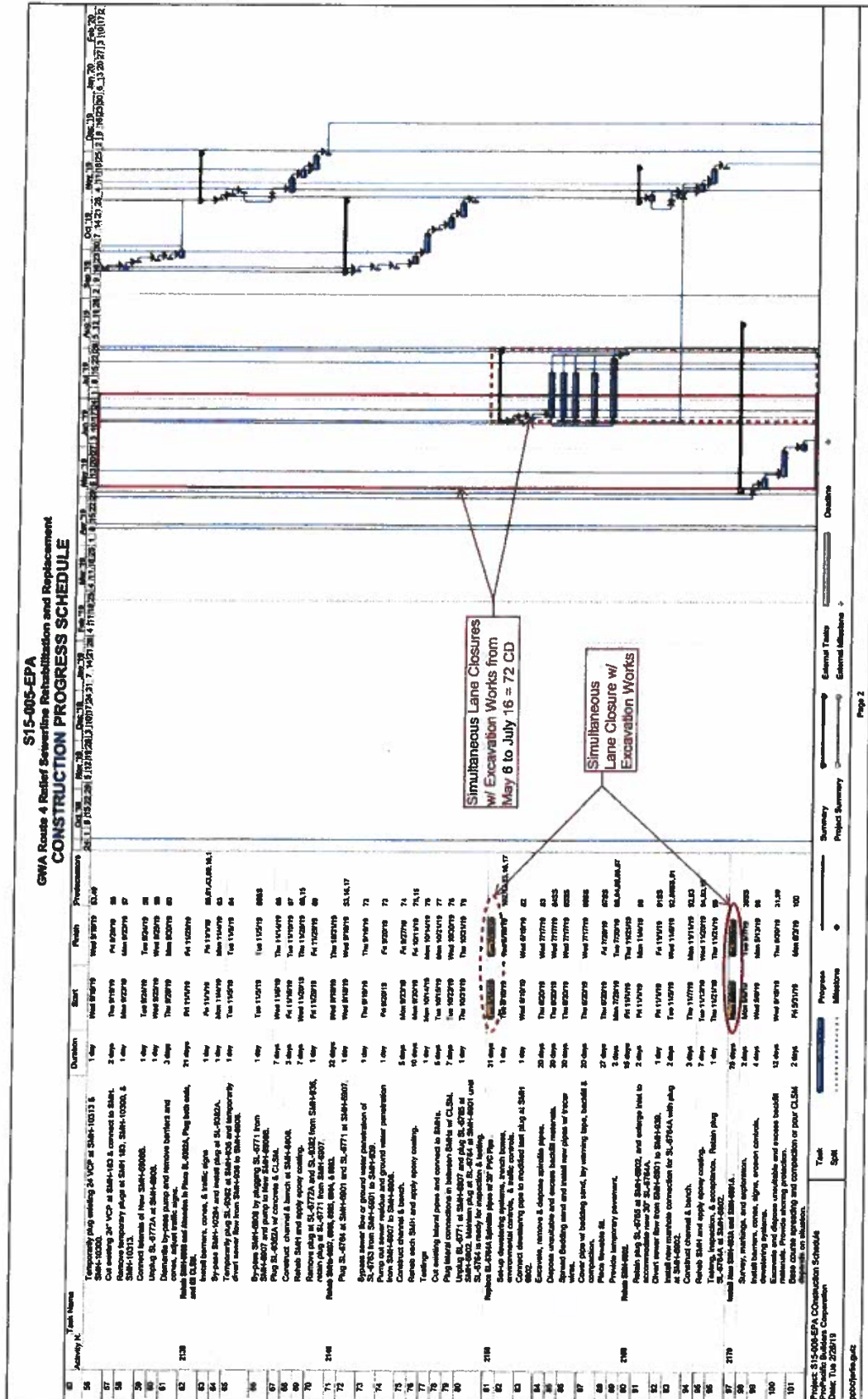


Jerlie M. Gutierrez
Project Manager
ProPacific Builders Corp.

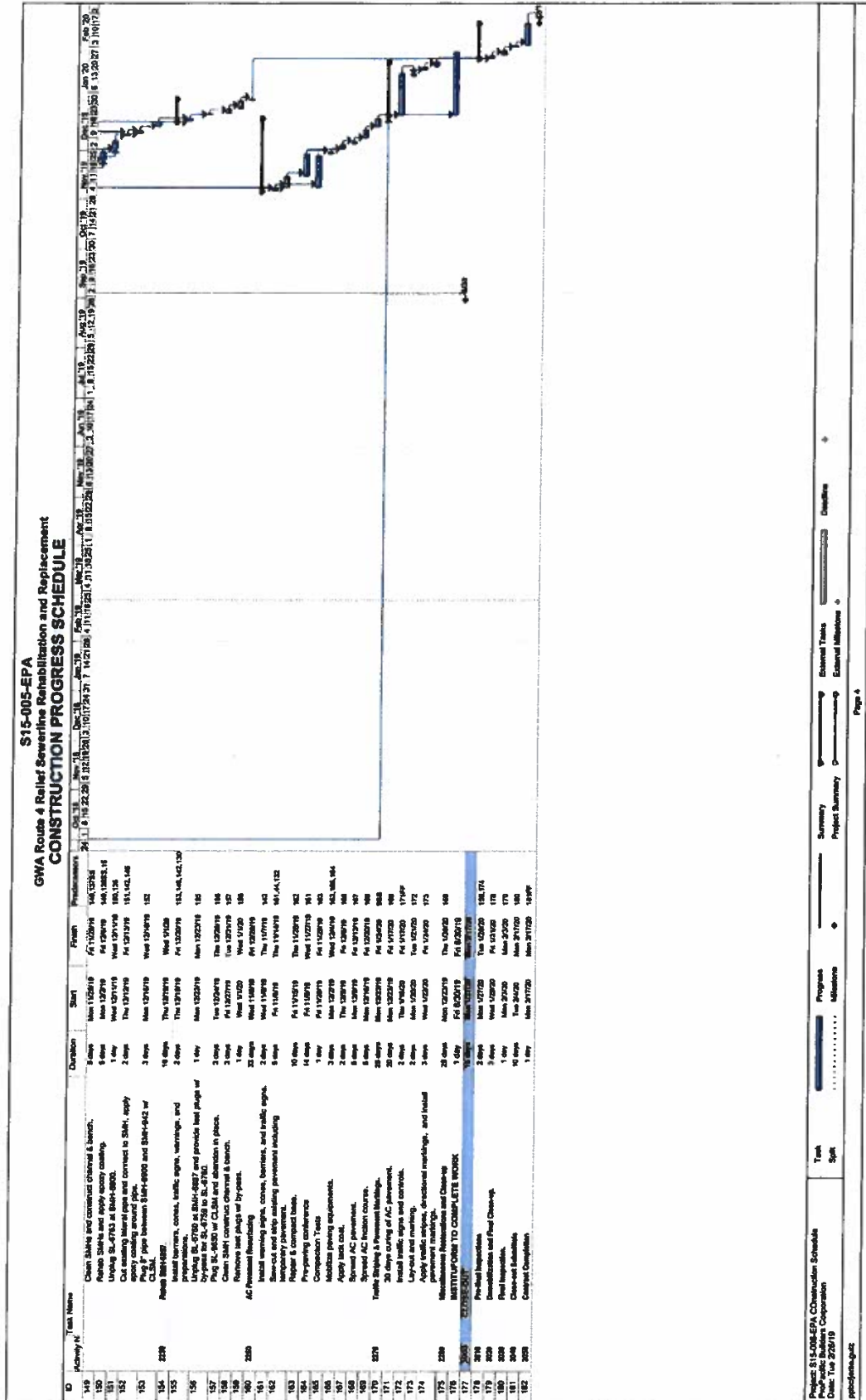
| SUMMARY BREAKDOWN: | | | | | |
|--|---|--|--------------|------------|-----------|
| I. TIME LOST | | | | | |
| | A. Permitting Application: | | | | |
| | 1. | Supporting Documents | | 9 | CD |
| | 2. | New Requirements | | 14 | CD |
| | 3. | GEPA Processing | 127-27 | 100 | CD |
| | 4. | DPW Processing | 120-13 | 107 | CD |
| | B. Permit Conditions: | | | | |
| | 1. | 2 hrs/day lost or 25% of Const. Period | 276 CD x 25% | 69 | CD |
| | 2. | Lost Days for Supposedly Simultaneous Lane Closure associated w/ Excavation Work | | 72 | CD |
| | C. Total : | | | | |
| | | | | 371 | CD |
| II. TIME REQUESTED: | | | | | |
| | A. Permit Process: | | | | |
| | 1. | Anticipated Bldg. Permit released on approved Const. Schedule to actual released: From March 15, 2019 to June 27, 2019 | | 104 | CD |
| | B. Permit Conditions: | | | | |
| | 1. | 2 hrs/day lost or 25% of Const. Period | 276 CD x 25% | 69 | CD |
| | 2. | Lost Days for Supposedly Simultaneous Lane Closure associated w/ Excavation Work | | 72 | CD |
| | C. Total number of days requested: | | | | |
| | | | | 245 | CD |
| III. Negotiated by EMPSCO (to be only by end of June 2020). | | | | | |
| | | | | 193 | CD |

12" A"





175



Enclosure 2



PROPACIFIC BUILDER CORPORATION

(formerly Guam Yoashin Corporation)
750 Route 8 Suite 202 Hanam Plaza,
Barrigada, Guam 96913
T. 671.477.3109 | F. 671.477.7424 | lgyc@guam.net

Date; November 29, 2019

To: George Watson, PE
Program Manager
Brown & Caldwell

Thru: Tyrone De Guzman, PE
Project Manager
EMPSCO Engineering Consultants

Subject: **S15-006-EPA (Schedule A)**
Route 4 Relief Sewerline Rehabilitation and Replacement

Reference: **REQUEST FOR COST ADJUSTMENT DUE TO DPW PERMIT CONDITIONS**

Dear Mr. Watson,

Due to the conditions set by DPW on our Building Permit and Highway Encroachment Permit which limit the working time during normal work days to just six (6) hours per day instead of 8 hours, a time adjustment is necessary and this will likewise impact the cost to successfully complete the project. Attached is the detailed calculations and references for our request of cost adjustment associated with the impact of DPW Permit Conditions for the said project. Below are the explanations for the calculations:

1. **Permits & Clearances:** All utility clearances are required to be renewed to cover the duration of the construction phase. DPW-HEP and DZSP charge fee for these (please see attached copies of the receipts). We did not put our marked up on these as well as labor cost for processing.
2. **Direct Costs** : Please see breakdown on the calculation.
3. **Additional Traffic Control Devices and Set-ups:** Please see the attached spreadsheet comparing the quantities of temporary traffic signs from Bid Drawings versus the Final Permit Drawings approved by DPW. We minimized the order quantities as much as possible.
4. **Workers 1-hr Idle Time Adjustment:** DPW approved the permit with conditions that "No work between the hours of 6:00AM-9:00AM and 4:00PM-6:00PM during weekdays". This reduced our production time of 2 hours daily although we need to pay our workers the complete 8 hours daily otherwise we are going to lose them. Only 1-hr idle time was charged based on our 2nd negotiation with EMPSCO and the other 1-hr will be shouldered by PPBC.
5. **Bond & Insurance:** Insurance companies insured the projects by month. We divided our contract cost item by month to the original duration of the project in getting the unit cost as a basis.

To have our share of the burden with the government, although the following are direct cost on our part we did not charge these:

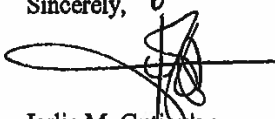
1. We did not put labor cost for the processing of Permits and Clearances renewals.
2. Additional dewatering costs brought about by this limitation in time such as manpower, pumps & hoses, and gasoline consumptions. Since number of days for excavation activity became greater than an 8-hour working days, so as the number of times we have to dewater the trenches. Dewatering the trenches each day before we can start digging usually takes 2-3 hours or more.
3. Heavy equipments idle time and extended rental cost.
4. Concrete barriers and the additional traffic drums required by DPW and other high visibility warning devices.
5. The first set of re-routing advisory boards (3 each) including installation cost. These were replaced with new ones.
6. Additional temporary traffic signs with stands requested by Sinajana Mayor.
7. Although we already have a big excavator on site intended for trenching works, we were forced to rent a smaller excavator to fit in our activity area just to comply with the "2-lane open at all times" condition of the permit.
8. Overtime payment for Outside Normal Work Hours of the RPR and archeological monitor due to necessity of working during the weekends to be able to close one more lane of the road.

With these circumstances that are beyond our control, which have made a great impact on our construction cost, we are requesting for an **additional of \$ 276,760.19** in order for us to complete the project that conforms to our agreement.

Please do not hesitate to get in touch with us if you wish to discuss this further.


Thank you very much.

Sincerely,



Jerlie M. Gutierrez
Project Manager
ProPacific Builder Corp.

Noted:



Jean Yeon Yu
President
ProPacific Builder Corp.

S15-006-EPA Route 4 Relief Sewerline Rehabilitation And Replacement

| Cost Adjustment Due to DPW Permit Conditions | | | | | | | | | |
|--|---------------------------|-----|------|-----------|---|-----------|--------|-----------------|--|
| Description | Cost on Existing Contract | | | | Change Order Cost | | | | |
| | Contract Cost | Qty | Unit | Unit Cost | Reference | Add'l Qty | Unit | Cost Adjustment | |
| 1 Extended Permit and Clearance Fees (DZSP & HEP only) | | | | | See Cost Reference "A" | | | | |
| Highway Encroachment Permit | | | | 25.00 | HEP -19-007 | 6 | Mo | 150.00 | |
| DZSP Clearance | | | | 1,650.00 | DZSP21 Dig Permit | 2 | /3 Mo. | 3,300.00 | |
| 2 Direct Costs | 340,784.80 | 15 | Mo | 22,718.99 | | 6.5 | Mo | | |
| Operations Manager | | | | 4,000.00 | | 3 | Mo | 12,000.00 | |
| Project Manager | | | | 6,000.00 | | 6.5 | Mo | 39,000.00 | |
| Liaison Officer/Project Engineer | | | | 4,000.00 | | 6.5 | Mo | 26,000.00 | |
| Site Superintendent | | | | 4,000.00 | | 2 | Mo | 8,000.00 | |
| Office Expenses & Service Vehicles | | | | 4,718.99 | | 6.5 | Mo | 30,673.44 | |
| 3 Additional Traffic Control Devices and Set-ups. | | | | | See Cost Reference "C": | | | | |
| Traffic Signs | | 18 | Set | 145.20 | Pacific Sign Shop Invoice | 56 | Set | 8,131.20 | |
| Number of Set-ups (& Removal) | | 107 | Ea | 20.00 | See Cost Reference "C" | 168 | Ea | 3,360.00 | |
| Advisory Boards (first 3 sets not charged) | | 0 | Set | 491.48 | Pacific Sign Shop Invoice | 3 | Set | 1,474.45 | |
| Arrow Panel | | 2 | Set | 14,139.00 | Nico & CTSI Invoice | 1 | Set | 14,139.00 | |
| 4 Workers 1 Hr. Idle Time Adjustment (Equipments not charged) | | | | 167.66 | See Cost Reference "D" | 188 | WD | 31,521.00 | |
| | | | | | SUB-TOTAL | | | 177,749.09 | |
| | | | | | Overhead & Profit (15%) | | | 26,662.36 | |
| | | | | | SUB-TOTAL | | | 204,411.45 | |
| | | | | | GRT (5.21%) | | | 10,654.95 | |
| 5 Extended Bond & Insurance | 132,201.00 | 15 | Mo | 8,813.40 | See Cost Reference "E": SOV Item 2.0 | 7 | Mo | 61,693.80 | |
| | | | | | TOTAL COST | | | 276,760.19 | |



Government of Guam
Intra-Office Memorandum

RECEIVED

JUN 21 2019

TREASURER OF GUAM
ONE STOP OFFICE

Date: _____

HEP-19-007

TO: Treasurer of Guam

PAYOR : PROPACIFIC BUILDER CORPORATION

| Description | Account Name | Account No. | Amount |
|--|-------------------------------------|-----------------|---------------------------|
| Highway Encroachment Permit Fee | Application Fee (Non-refundable) | 310056204 | 7 X \$25.00 (7 MONTHS) |
| Cash Deposit Fee for Excavation in the Roadway (Public Law 31-83) | Cash Deposit Fees (Refundable) | 120823110 | |
| Contractor Cash Deposit Fees prior to Public Law 31-83 (Oct.31, 2011) | Cash Deposit Fee (Refundable) | 110023110 | |
| Performance Bond (Company Insurance) | Company Insurance Bond Number #. | Bond Number: | 515-006-EPA |
| TOTAL: | | | \$175.00 |

PURPOSE: SEWER LINE REHABILITATION & REPLACEMENT

TREASURER OF GUAM
(671)475-1122/(671)475-1105
RECEIPT NO 2219093888
DATE 06/21/2019 14:36
LOC/STATION 04/0000000001
CASHIER TOGQUICV
PAY METHOD CHECK
AMOUNT \$175.00

REFERENCE #####-007
NO
DOCUMENT PROPACIFIC
NO BLDR
TAX TYPE 310056204
AMOUNT \$175.00

TOP COPY-MERCHANT BOT
COPY-CUSTOMER

Signature of Authorizing Agent/ Issuing Office



DZPMT
RTE 4

Customer Payment Information Sheet

| | |
|--|---|
| Company/ or Command ProPacific Builders Corp | Date October 17, 2018 |
| Point of Contact Jerlie M. Gutierrez | Telephone & Fax No. 888-5602 / 477-3109 |
| Address 750 Rta 8 Ste 202 Barrigada GU | E-mail Address rgyc@guam.net |

DZSP 21 LLC
BLDG 100 NBG COMPLEX
SANTA RITA, GU 96915

10/19/2018

09:47:22

k:

line along Rte 4 in the intersection of O'Brian drive and install
les along Rte 4 in Hagatna in the intersection of O'Brian Drive
n of Marine Drive.

CREDIT CARD
MC SALE

Payment Information

Method of payment:

CARD #
INVOICE
SEQ #:
Batch #:
Approval Code:
Entry Method:
Mode:
Tax Amount:

XXXXXXXXXXXX6598
0001
0001
001519
016743
Manual
Online
\$0.00

☐ Cash☐ Check

\$1,650.00

x 2

If a credit card, please fill in the following information:

Name:

KEVIN Y K YU

Expiration Date:

SALE AMOUNT

\$1,650.00

CUSTOMER COPY

ZSP does NOT accept AMERICAN EXPRESS)

VISA or MASTERCARD

Kevin Yu

(NOTE: Failure to provide this information will cause delay in processing payment). Please
e-mail the completed form to: DZSP21CommercialProject@dzsp21.com or fax it to 671-
339-3987.

TO BE COMPLETED BY DZSP 21

| | |
|----------------------------|----------------------|
| UOR No./ Cost Estimate No. | Project Abbreviation |
|----------------------------|----------------------|

KALIO FOR 3 MONTHS ADV

FIN-F-0004 R5

Printed document may be obsolete - verify before use
Effective date: 18 SEPT 2017

Printed on: 9/20/2017

2



B5 145-2019

WO# 691604

ANNEX 1501 FACILITIES MANAGEMENT AND ENGINEERING SERVICES Abbrev: VFMDIG

| SECTION D - CLEARANCE APPROVAL (To be completed by DZSP 21) | | |
|---|--|--|
| CLEARING ELEMENTS | REMARKS | SIGNATURE |
| 1. NAVY ELECTRICAL DISTRIBUTION | See attached clearance. | SABER.MILDRED R.1267342004 <small>Digitally signed by SABER.MILDRED.R.1267342004 Date: 2019.06.06 17:08:27 +1000</small> |
| 2. NAVY POTABLE WATER DISTRIBUTION | See attached clearance. | SABER.MILDRED R.1267342004 <small>Digitally signed by SABER.MILDRED.R.1267342004 Date: 2019.06.06 17:08:10 +1000</small> |
| 3. NAVY STEAM DISTRIBUTION | N/A | |
| 4. NAVY WASTE WATER DISTRIBUTION | See attached clearance. | SABER.MILDRED R.1267342004 <small>Digitally signed by SABER.MILDRED.R.1267342004 Date: 2019.06.06 17:08:34 +10</small> |
| 5. ENVIRONMENTAL | (See attached Clearance, reference Form. no. ENV-F-0120/Annex 1800 document) | |
| SECTION E - CLEARANCE REVIEW/APPROVAL (To be completed by NAVFAC Marianas, coordinated by DZSP21) | | |
| 1. NAVY COMMUNICATION LINE (by BaseComm) | See attached clearance. | SABER.MILDRED R.1267342004 <small>Digitally signed by SABER.MILDRED.R.1267342004 Date: 2019.06.06 17:08:10 +1000</small> |
| 2. NAVY POL (by Fuel Division) | N/A | |
| SECTION F - CLEARANCE REVIEW/APPROVAL (To be provided by Requester) | | |
| 1. OTHERS (Non NAVY UTILITIES) (by respective owner) <input checked="" type="checkbox"/> DOCOMO PACIFIC <input type="checkbox"/> GWA <input checked="" type="checkbox"/> GTA TELEGUAM <input type="checkbox"/> GWA <input type="checkbox"/> Others (Specify) | | (See attached Clearance documents submitted by CME/Requester) |
| SECTION G - ESS/UNEXPLODED ORDNANCE (NEC/MPPEH) (To be Identified by DZSP 21) | | |
| Per Explosives Safety Submission Munitions Response Sites GUAM CONSTRUCTION SUPPORT, Amendment series. NOTE: For DZSP21 Internal requests and DZSP21 contracted work, Excavation Permit will not be approved without ESS Compliance. For all others, ESS Compliance is the responsibility of the requesting Department/Activity (See section 8.1). Contact NBS PWD 333-1526 for compliance requirements. | | |
| UNLILHOOD AREA (See JRM ESS Figures 2-2 Series) | COMPLIANCE | |
| <input checked="" type="checkbox"/> Not Applicable (Non DoD Project) | No action required ahead of construction. Construction site shall be managed as a low likelihood. | |
| <input type="checkbox"/> Low (Green) | | |
| <input type="checkbox"/> Moderate (Yellow) or High (Red). Site requires compliance for the construction footprint to applicable depths | NOT cleared. Actions required ahead of construction. Area is a safety hazard and may constitute an imminent and substantial endangerment to personnel and the local population. For all areas, emergency excavation on existing utility trench footprint is designated as occurring in a low likelihood. <input type="checkbox"/> Proceed with Excavation per Anomaly Avoidance technique as per JRM ESS Sec 6.1.5 | |
| SECTION H - REMARKS/CAVEATS/VALIDITY/APPROVAL (To be completed by DZSP 21) | | |
| If unexploded ordnance is uncovered, STOP EXCAVATION, and call the following: - 911 - JRM Region Operation Center (ROC) at 349-4004 - NBS Emergency Operation Center (EOC) at 339-7760/7338 If any utility damages occur, contact DZSP 21 Service Support Center (SSC) at 339-4400. If any inadvertent archaeological discovery, STOP WORK, and contact NAVFAC Environmental at 339-2083. Upon project completion, discard utility marking flags, if any. | | |
| 1. CLEARANCE VALID UNTIL (MM/DD/YYYY) 11/06/2019 | 2. SIGNATURE Agustin M. Sapalo, P.E. | 3. DATE (MM/DD/YYYY) 08/06/2019 |

⑤

Pacific Signshop

Mailing Address: 111 Chalan Balako PMB 565
Dededo Guam 96929

Phone: 649-3581/ 888-5880/ 483-5650

Fax: 649-5650

Email: psignshop@gmail.com /

psignshop2@gmail.com

Invoice

Physical Address: 1270 N. Marine
Corps Drive
Ste 105 Upper Tumon, Guam 96913

| Date | Invoice # |
|-----------|------------|
| 8/19/2019 | 19-08-0079 |

| | |
|--|--------------------------|
| Bill To PROPACIFIC BUILDERS Attn: BRO. JERLIE Ce: 888-5602 Tel: 477-3109 Fax: 477-7424 | SIC-006-EPA RTE 4 GWA |
|--|--------------------------|

| Quantity | Description | P.O. No. | Terms |
|---|-------------|----------|-----------------|
| | | | 30 days |
| Rate | Amount | | |
| 2 ea. 36" x 36" Reflective vinyl print mounted on galvanize MERGE LINE (symbol) | 75.00 | 150.00 | |
| TRAFFIC SIGNS WOOD STAND (PAINT NOT INCL) LABOUR FOR WOOD STAND OH/PWFTT/STG SHIPY - (21%) 25.00 15.00 30.00 120.00 25.20 \$ 145.20 EACH | | | |
| Paid | | | |
| Total | | | \$150.00 |

Back ID: 1394
Merchant ID: 9487
Term ID: 001

Sale

XXXXXXXXXXXX6598

MASTERCARD

Entry Method: Chip

Amount: \$ 150.00

Tax: \$ 0.00

Total: \$ 150.00

08/19/19

10:39:52

Inv #: 000004

Appr Code: 064290

Apprvd: OnLine

Batch#: 230001

Net Level Ref. #: 34219277

MasterCard
AID: A000000000000000
TSI: E800
TVR: 0000000000

Customer Copy

Term net 30, this invoice is payable within 30 days.

A late payment charge of 10% per month will be added to any invoice not paid w/in 30 days of invoices date. In case of default, addressee is responsible for collection cost of up to 33-13% in referred to collection agency, and for attorneys & court filing fee if referred for legal action.

Print & Signature

Date

(3)

Pacific Signshop

Mailing Address: 111 Chalan Balako PMB 565
Dededo Guam 96929

Phone: 649-3581/ 888-5880/ 483-5650

Fax: 649-5650

Email: psignshop@gmail.com /

psignshop2@gmail.com

Physical Address: 1270 N. Marine
Corps Drive
Ste 105 Upper Tumon, Guam 96913

Invoice

| Date | Invoice # |
|----------|------------|
| 7/3/2019 | 19-07-0016 |

| Bill To |
|---|
| PROPACIFIC BUILDERS Attn: Bro. JERLIE Ce: 888-5602 Tel: 477-3109 Fax: 477-7424 |

ADVISORY BOARD

| Quantity | Description | Rate | Amount |
|----------|---------------------------|--------|--------|
| 3 | Project: GWA Route 4 Sign | | |
| | ea. 4' x 8' Banner print | 160.00 | 480.00 |
| | Discount | -30.00 | -30.00 |

PACIFIC SIGN SHOP
1270 NORTH CORP DR
STE 105
TUMON, GU 96913
(671) 649-3581

Bank ID: 1294
Merchant ID: 9491
Term ID: 001

Sale

XXXXXXXXXXXX6598

MASTERCARD

Entry Method: Chip

Amount: \$ 450.00

Tax: \$ 0.00

Total: \$ 450.00

07/05/19

09:07:16

Inv #: 000001

Appr Code: 01992J

Approved: Online

Batch#: 185001

Retrieval Ref. #: 31865434

Test Card
1ID: A00000000041010
1ST: E000
1VR: 0000000000

Customer Copy

BANNERS

FRAME - 3 PCS PLYWOOD @ 28.55 = 85.55

18 PCS 2X4X10 @ 3.50 = 63.00

MISC. MATS

20.00

LABOR COST

450.00

168.55

600.00

SUB TOTAL

1,218.55

OH/PROFIT/SITE SUP. (21%)

255.90

1,474.45

paid

07/05/19

- MC -

le within 30 days.

month will be added to any invoice not paid w/in 30 days of invoices
& responsible for collection cost of up to 33-13% in referred to
& court filing fees if referred for legal action.

Total

\$450.00

Print & Signature

Date

7/5/2019

4

NICO ELECTRONICS**INVOICE**

Mailing Address: P.O.Box 9984

Business Address: 252-1 Mabini Street

City, State, ZIP: Tamuning, GUAM 96931

(671) 864-9963

Dededo, Guam 96912

Business License no. 201200054 / D.U.N.S # 855021733

Customer:

PROPACIFIC BUILDERS

JERLIE GUTIERREZ

6718885602

QUOTATION NUMBER NEI052320191

QUOTATION DATE May 23, 2019

ACCOUNT NO.

TERMS

SALES REP GERALD

SHIPPED VIA OCEAN FREIGHT

F.O.B. CALIFORNIA

PREPAID or COLLECT PREPAID

ARROW PANELS

Sales Tax Rate:

0.00%

| QUANTITY | | EACH | AMOUNT |
|---------------------------------------|---|--------------------------|-----------------|
| 3 | Arrow Board Solar assisted 15 LED light with batteries mounted on trailer. Dimensions: 100"x96"x92" Weight (approx.): 420 kg (920 lb.) ea | \$10,999.00 | \$32,997.00 |
| 3 | Replacement Taillights for arrow Board | Free of Charge | |
| 8 | Tire ring replacement for Drums | Free of Charge | |
| **** Product lead time is 2 Weeks ARO | | | |
| | | SUBTOTAL | \$32,997.00 |
| | | INLAND FREIGHT | INCLUDED |
| | | OCEAN FREIGHT / DELIVERY | |
| | | INSURANCE | \$0.00 |
| | | TAX | INCLUDED |
| | | TOTAL | \$32,997.00 |
| | | | \$32,997.00 |
| | | | PAY THIS AMOUNT |

DIRECT ALL INQUIRIES TO:

Name: Gerald Driza

(671) 864-9963

nicoelectronics@guam.netnicoelectronics10@gmail.com

MAKE ALL CHECKS PAYABLE TO:

Nico Electronics

Gerald V. Driza

Address: P.O.Box 9984

City, State, ZIP: Tamuning, Guam 96931

THANK YOU FOR YOUR BUSINESS!

ARROW PANELS — 10,999.00
 SHIPPING COST — 3,140.00

14,139.00 EXACT

(5)



P.O. Box 6067 • Tamuning, Guam 96931

Tel: (671) 646-2853/54 • Fax: (671) 646-2855

Invoice No: SI1907172

Invoice Date: 09/11/2019

INVOICE

Bill To :
NICO ELECTRONICS (NICOE1501)

SIS 005-EP2
RTE 4 GWA

Job Type/Job No : SI / SI1902336GUM
Flight/Vessel No : RJ PFEIFFER 445"
MAWB/MBL No. : 7012808
HAWB/HL No. : CTIBGUM194482LAX
Credit Terms : Pay Immediately
Due Date : 09/14/2019
Shipper : NICO ELECTRONICS
Consignee : NICO ELECTRONICS

| Description | QTY | Unit Price | Amount |
|---------------------------|------|------------|----------|
| OFC OCEAN FREIGHT CHARGES | 1.00 | 9420.080 | 9,420.08 |

Commodity : GENERAL CARGO

Remarks :

MATU4612170/45 - 3 UNT

Bank Details :

BANK OF GUAM

P. O. Box BW

Hagatna Guam 96932

ACCT. NAME: CTSI LOGISTICS

ACCT. NO.0102-071693

3
3,140.00

Total Amount

9,420.08

Prepared By: Aisa Pineda

signature over printed name

* SHIPPING COST OF ARROW BOARD

Authorized Signature

Please read carefully - additional terms and conditions.

1. Customer by signing this invoice expressly agrees with all the terms and conditions hereof.
2. Overdue amounts refer to those accounts not paid within 30 days after each separate transaction. In the event of late payment, CTSI may convert your account to "Cash Basis Only" and late penalty charge of 1.5% per month shall be assessed on over due accounts.
3. If your account is referred to an attorney or collection agency for collection, you shall be required to pay collection charges, cost of suit(s), and reasonable attorney's fees.
4. If you have any question on the above transaction(s), or any portion of this invoice, you should communicate your questions to CTSI in writing within 10 days from receipt of this invoice.
5. You will be required to pay \$25.00 fee for each check returned by the bank.
6. For credit card payment, a convenience fee applies.

CUSTOMER'S COPY - WHITE • FINANCE COPY - YELLOW • MASTER COPY - GREEN

Gum-FD-009
May 17, 2004
Issue No. 01

MARIANA
EXPRESS LINES, Ltd.
CTSI Logistics as Agent

9/13/2019

6

COST REFERENCE "D"

Manpower Idle Time Calculation**NORMAL CONSTRUCTION DAYS***Per Revised Construction Schedule: Jul 15, 2019 to - Jun 17, 2020*

| | Month | Calendar Days | Holidays | Regular Work Days |
|----|--------------|---------------|----------|-------------------|
| 1 | July | 16 | 1 | 13 |
| 2 | August | 31 | | 22 |
| 3 | September | 18 | 0 | 13 |
| 4 | October | 31 | | 23 |
| 5 | November | 30 | 3 | 18 |
| 6 | December | 31 | 2 | 20 |
| 7 | January | 31 | 2 | 21 |
| 8 | February | 28 | | 20 |
| 9 | March | 26 | 1 | 18 |
| 10 | April | 31 | | 22 |
| 11 | May | 31 | 1 | 20 |
| 12 | June | 17 | | 13 |
| | TOTAL | 274 | 9 | 188 |

IDLE TIME COST*1-hour per work day*

| | CATEGORY | NO. | RATE | FICA | TOTAL RATE/HR | IDLE TIME COST/WD |
|---|---------------------|-----|-------|----------|-------------------------|-------------------|
| 1 | Site Superintendent | 1 | 23 | 1.7595 | 24.7595 | 24.7595 |
| 2 | Supervisor | 1 | 23 | 1.7595 | 24.7595 | 24.7595 |
| 3 | Foreman | 1 | 20 | 1.53 | 21.53 | 21.53 |
| 4 | Mason | 1 | 20 | 1.53 | 21.53 | 21.53 |
| 5 | Operator | 1 | 18 | 1.377 | 19.377 | 19.377 |
| 6 | Unskilled Laborer | 5 | 10.35 | 0.791775 | 11.141775 | 55.708875 |
| <i>Note: Health Insurance was not included in this calculation. Workers only, the heavy equipment idle time was not included.</i> | | | | | Sub-total | 167.66488 |
| | | | | | Work days | 188 |
| | | | | | Manpower Idle Time Cost | 31,521.00 |

SCHEDULE OF VALUES

COST REFERENCE 'E'

| | | |
|-----------------------|---------------------------|--|
| Owner: | Guam Waterworks Authority | Name & Address of Contractor: |
| Project Number: | S15-006-EPA | Pro-Pacific Builder Corp. |
| Project Location: | Route 4 Hagatna, Guam | 750 Rte.8 Ste. 202, Hanam Palza, Barrigada, Guam |
| Construction Manager: | EMPSCO | (671) 477-3109 |
| Contract Description | | |

Route 4 Relief Sewer Line Rehabilitation And Replacement GWA Project No#. S15-006-EPA

| BID ITEM NO. | ITEM DESCRIPTION | UNIT | QTY | UNIT PRICE | TOTAL COST |
|-----------------------------|--|------|--------|------------|------------|
| GENERAL REQUIREMENTS | | | | | |
| 2.0 | Bond & Insurance | LS | 1.00 | 132,201.00 | 132,201.00 |
| 3.0 | Building Permit Fees & Clearances | LS | 1.00 | 44,067.00 | 44,067.00 |
| CONSTRUCTION | | | | | |
| 1.0 | Mobilization & Demobilization | LS | 1.00 | 293,780.00 | 293,780.00 |
| 1.1 | Mobilization | LS | 1.00 | 205,646.00 | 205,646.00 |
| 1.2 | Demobilization | LS | 1.00 | 88,134.00 | 88,134.00 |
| 4.0 | 12" PVC pipe, installed by open trench, including PVC pipe, fittings, warning/identification tape, cleaning, connections to manholes, adjustment existing channel and bench, testing, and all incidentals, in place complete. | LF | 22.00 | 1,500.00 | 33,000.00 |
| 4.1 | Installation of new 12" PVC Pipe & fittings, including warning/identification tape, cleaning, testing, & CCTV. | LF | 22.00 | 1,260.00 | 27,720.00 |
| 4.2 | Connection to manholes, adjustment existing channel & bench. | EA | 2.00 | 2,640.00 | 5,280.00 |
| 5.0 | 18" PVC pipe, installed by open trench, including PVC pipe, fittings, warning/identification tape, cleaning, connections to existing manholes, adjustment existing channel and bench, testing, and all incidentals, in place complete. | LF | 12.00 | 1,800.00 | 21,600.00 |
| 5.1 | Installation of new 18" PVC Pipe & fittings, including warning/identification tape, cleaning, testing, & CCTV. | LF | 12.00 | 1,350.00 | 16,200.00 |
| 5.2 | Connection to existing manholes, adjustment existing channel & bench. | EA | 2.00 | 2,700.00 | 5,400.00 |
| 6.0 | 30" PVC pipe, installed by open trench, including existing pipe removal, pipe, fittings, warning/identification tape, cleaning, manhole connections, testing, and all incidentals, in place complete. | LF | 461.00 | 2,000.00 | 922,000.00 |
| 6.1 | Removal of existing Spirolite pipes & fittings including hauling and disposal. | LF | 461.00 | 320.00 | 147,520.00 |
| 6.2 | Installation of new 30" PVC Pipe & fittings, including cleaning, testing, warning/identification tape, & CCTV. | LF | 461.00 | 1,650.00 | 760,650.00 |
| 6.3 | Installation of manhole connections. | EA | 4.00 | 3,457.50 | 13,830.00 |

Exhibit D

Exhibit D

| | |
|---|--------------|
| Cost Adjustment for Accelerated Work Along Route 4: | \$90,223.20 |
| Cost to Accelerate Work at SMH-181A: | \$21,658.15 |
| Total Cost: | \$111,881.35 |
| Remaining Contingency Funds: | \$64,024.61 |
| Change Order Amount: | \$47,856.74 |

**Route 4 Relief Sewer Line Rehabilitation And Replacement
GWA Project No#. 815-006-EPA**

COST ADJUSTMENT FOR ACCELERATED WORK ALONG ROUTE 4

| BID ITEM NO. | ITEM DESCRIPTION | UNIT | QTY | UNIT PRICE | TOTAL COST |
|-------------------|---|------|------|------------|------------------|
| 10.0 | Grout Injection | | | | |
| 10.1 | Cleaning & disinfecting of SMH, flushing of odor, air monitoring. | EA | 8.00 | 2,000.00 | 12,000.00 |
| 10.4a | Additional Materials | | | | |
| | Air freight cost of Grout Injection materials. | LS | 2.00 | 711.60 | 1,423.20 |
| 10.6 | Traffic Control, environmental control, and safety devices. | EA | 6.00 | 4,000.00 | 24,000.00 |
| 12.0 | Unplug 21" existing pipe at SMH-6897. | | | | |
| 12.3 | Cleaning & disinfecting of SMH, flushing of odor, air monitoring. | EA | 1.00 | 2,000.00 | 2,000.00 |
| 12.4 | Traffic Control, environmental control, and safety devices. | LS | 1.00 | 4,000.00 | 4,000.00 |
| 13.5 | Sewer flow control | LS | 1.00 | 7,200.00 | 7,200.00 |
| | Temp. plug 21" SL after CIPP Installation. | | | | by Instituform. |
| 13.0 | By-pass Work for Grout Injection | | | | |
| 13.5 | Sewer flow control | EA | 6.00 | 3,600.00 | 21,600.00 |
| 13.7 | Monitoring | LS | 1.00 | 6,000.00 | 6,000.00 |
| | Air compressor, air hose, & accessories @ \$ 800.00 | | | | |
| | Supply/exhaust fans w/ flexible hose @ \$ 600.00 | | | | |
| | Power generator & gasoline @ 800.00 | | | | |
| | Labor - 1 guy @ \$260/day @ 16 days | | | | |
| 13.8 | Spill containment/mitigation, temporary erosion control, traffic control measures, & related restoration works. | LS | 1.00 | 12,000.00 | 12,000.00 |
| | Watertank in trailer @ \$ 3,000.00 | | | | |
| | Standby submersible pumps w/ hose & fittings @ \$ 1,950.00 | | | | |
| | Standby annular plugs, test plugs, & inflatable plugs @ \$ 2,100.00 | | | | |
| | Vacuum for erosion control @ \$ 450.00 | | | | |
| | Labor for removing & disposal of sediments- 2 guys @ \$150/day @ 16 days | | | | |
| TOTAL COST | | | | | 90,223.20 |

Route 4 Relief Sewer Line Rehabilitation And Replacement
GWA Project No#. S15-006-EPA

CHANGE ORDER TO ACCELERATE WORK AT SMH-181A

| ITEM NO. | ITEM DESCRIPTION | UNIT | QTY | UNIT PRICE | TOTAL COST |
|---|---|-------------------------|------|------------|--------------------|
| 1.0 | Grout Injection Works | | | | |
| | Air freight cost of Grout injection materials. | LS | 1.00 | 500.00 | 500.00 |
| | High-grade Acetone for cleaning of injection pump after each use. | GAL | 8.00 | 82.00 | 656.00 |
| | Service vehicles, grout injection pump, & other tools. | LS | 1.00 | 2,400.00 | 2,400.00 |
| | Labor - 3 guys (w/ 1 Certified Installer & 1 Confined Spaced Competent Person) | LS | 1.00 | 3,600.00 | 3,600.00 |
| | | SUB-TOTAL | | | 7,156.00 |
| | | Overhead & Profit (15%) | | | 1,073.40 |
| | | SUB-TOTAL | | | 8,229.40 |
| | | GRT(5.21%) | | | 428.75 |
| | | TOTAL | | | \$8,658.15 |
| 2.0 | Cleaning & disinfecting of SMH. | EA | 1.00 | 2,000.00 | 2,000.00 |
| 3.0 | Traffic Control. | EA | 1.00 | 4,000.00 | 4,000.00 |
| 4.0 | By-pass and temporary plugs to isolate 181A. | | | | by Instruform. |
| 5.0 | Ground water pumping/dewatering. | EA | 1.00 | 4,500.00 | 4,500.00 |
| 6.0 | Safety | | | | |
| | Confined space equipments, retrieval, & air monitoring equipment. | LS | 1.00 | 1,250.00 | 1,250.00 |
| | Supply/exhaust fans w/ flexible hose, lightings, and power generator. | LS | 1.00 | 750.00 | 750.00 |
| | Miscellaneous disposable safety materials | | | | |
| | Tyvek suits | LS | 1.00 | 60.00 | 60.00 |
| | Rubber gloves & hand gloves. | LS | 1.00 | 40.00 | 40.00 |
| | Face-mask with multi-gas cartridge & respirators. | SET | 2.00 | 200.00 | 400.00 |
| TOTAL COST | | | | | \$21,658.15 |
| Allocate at least 5 days Additional Time | | | | | |

No additional time



Management Report

GWA Work Session, February 18, 2020

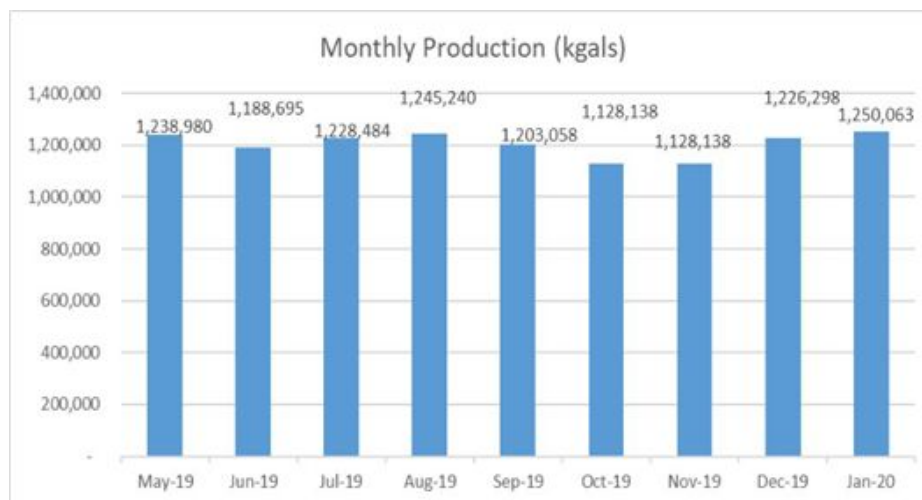


Operations Update

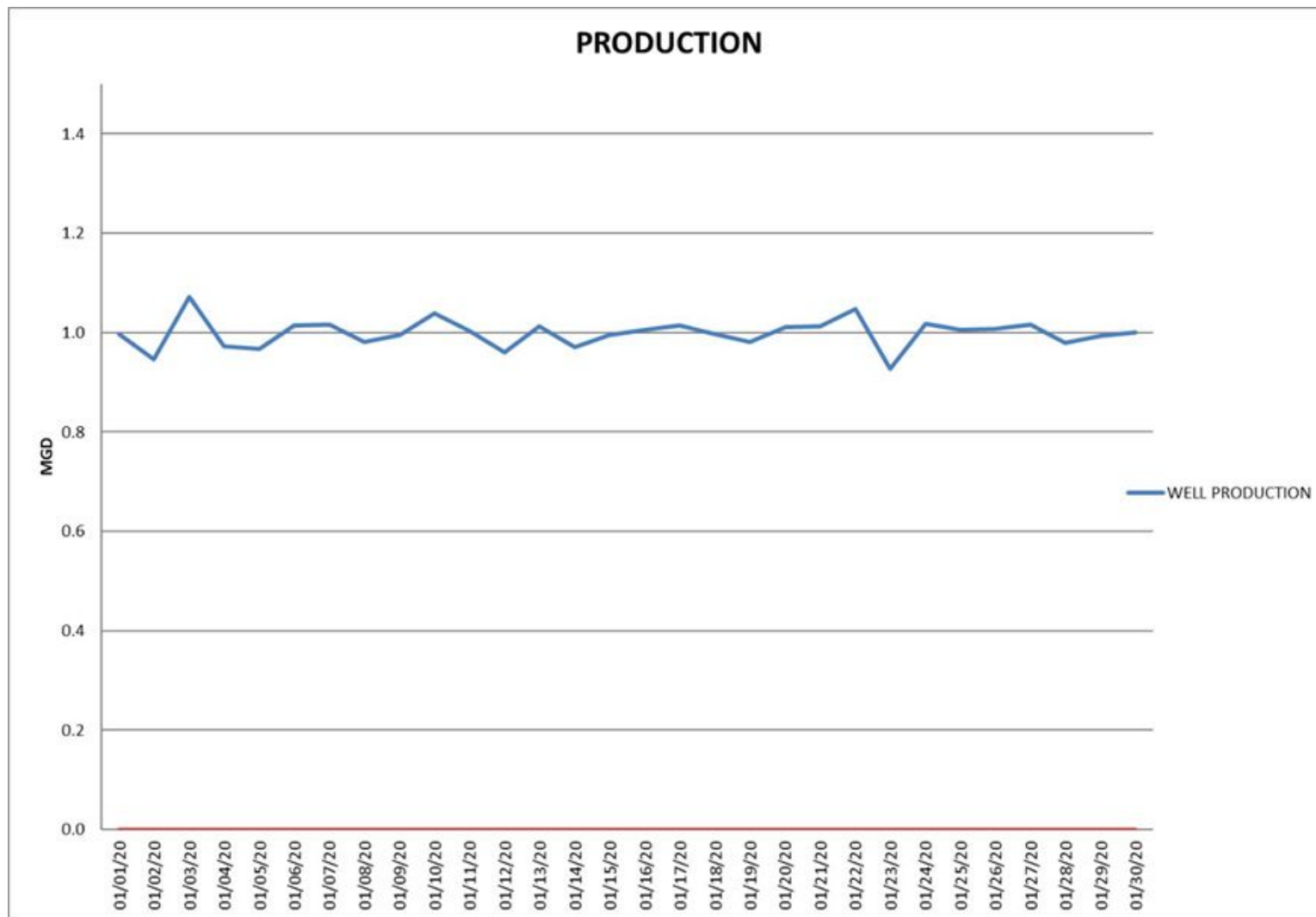
Production (January 2020)

| Monthly Production Summary - January 2020 | | | | |
|---|-----------------|-----------------|----------|--|
| Deep Wells | | 36.7 MGD | | |
| Active wells = | 96 of 120 | | | |
| Avg days in operation = | 31 days | | | |
| Total Production = | 1,137,530 Kgals | | | |
| Springs | | 0.34 MGD | | |
| Avg days in operation = | 31 days | | | |
| Total Production = | 10456 Kgals | | | |
| Ugum Surface Water Plant | | 2.3 MGD | | |
| Avg days in operation = | 31 days | | | |
| Total Production = | 71,110 Kgals | | | |
| Tumon Maui Well | | 1.00 MGD | | |
| Avg days in operation = | 31 days | | | |
| Total Production = | 30,967 Kgals | | | |
| | | 1,250,063 Kgals | 40.3 MGD | |

| DW Status as of 1/31/2020 | | | | |
|--------------------------------|-----|-----------------------------------|--|--|
| Active | 96 | | | |
| Grounded motor or Pump Failure | 7 | A26-D03-D08-D19-D20-F06-M17A | | |
| Out of commission | 8 | A02-A07-A28-D05-D13-M14-MJ01-MJ05 | | |
| Temporarily Secured | 4 | A23-A25-A32-F10 | | |
| Standby | 5 | A10-A29-F05-F16-M12 | | |
| TOTAL | 120 | | | |

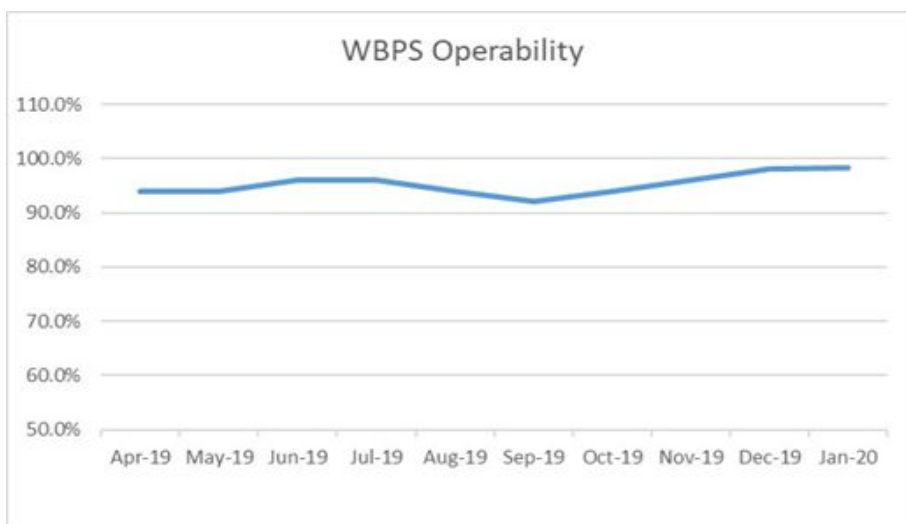


Tumon Maui Well Production (January 2020)

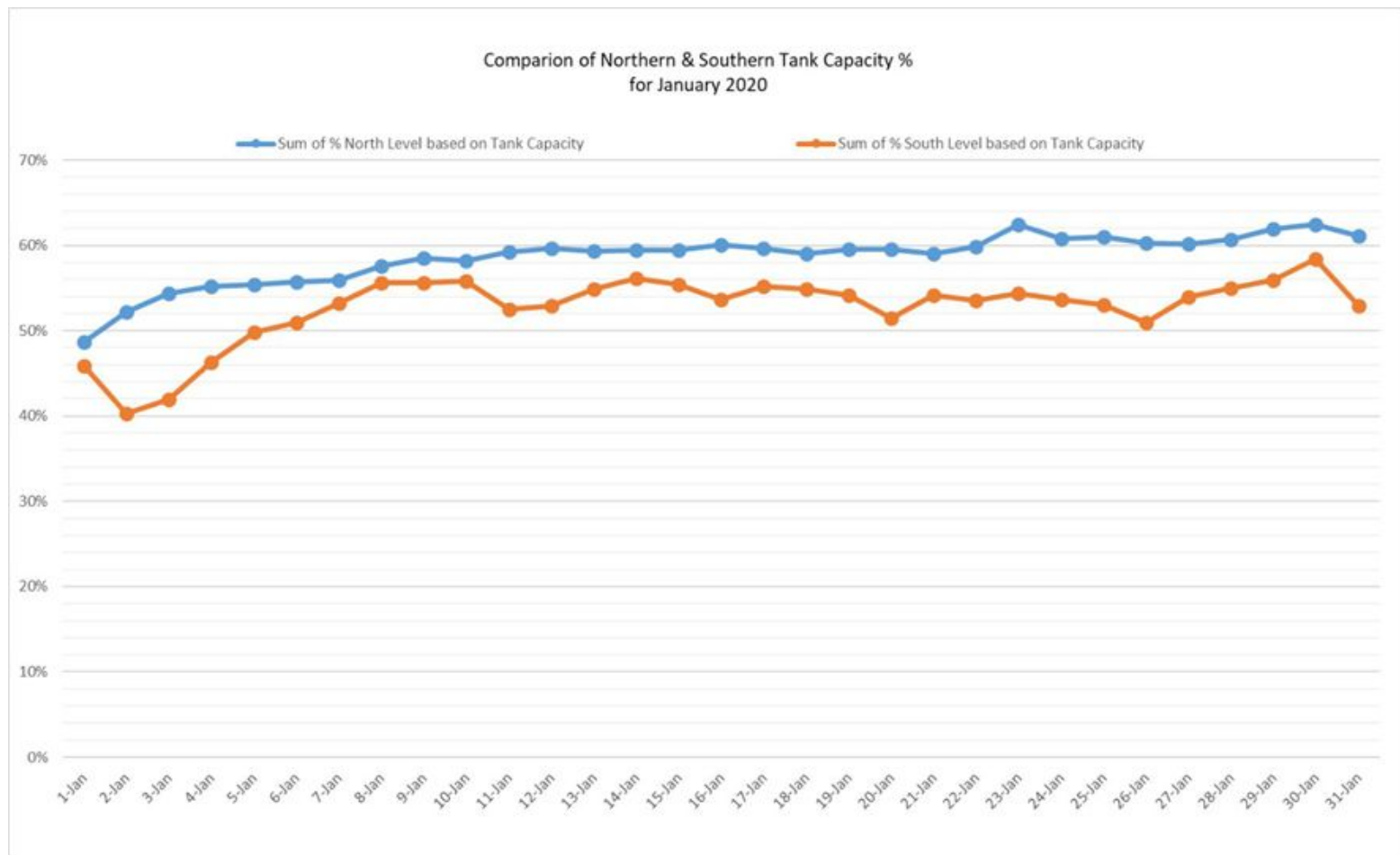


Distribution (January 2020)

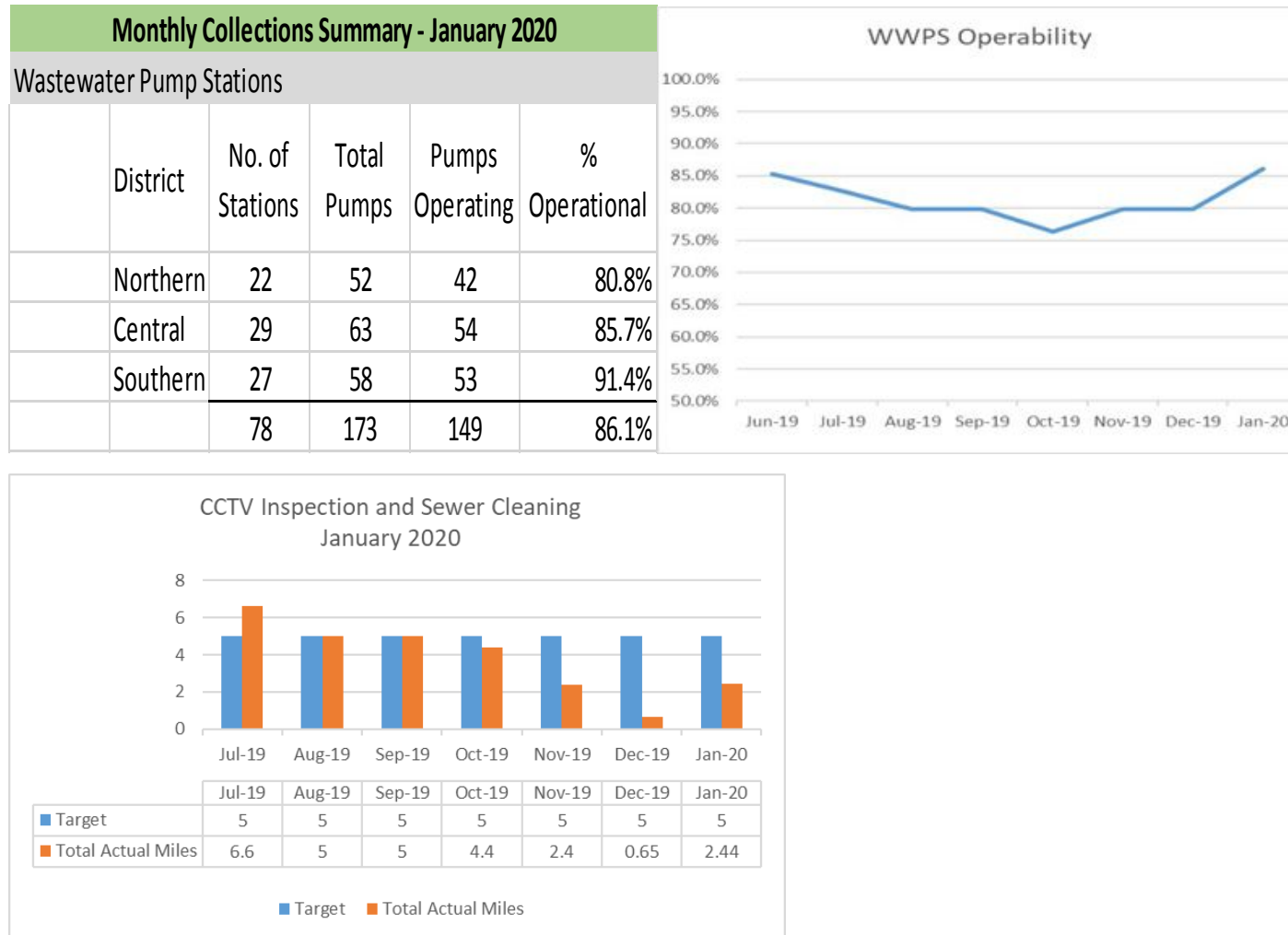
| Monthly Distribution Summary - January 2020 | | | | | |
|---|----------|-----------------|-------------|-----------------|---------------|
| Water Booster Pump Stations | | | | | |
| | District | No. of Stations | Total Pumps | Pumps Operating | % Operational |
| | Northern | 13 | 26 | 25 | 96.2% |
| | Central | 7 | 15 | 15 | 100.0% |
| | Southern | 7 | 15 | 15 | 100.0% |
| | | 27 | 56 | 55 | 98.2% |



Distribution – Tank Levels (January 2020)

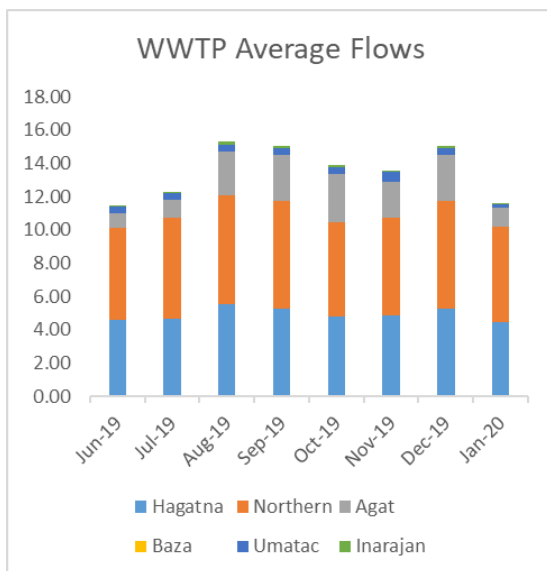


Wastewater Collections (January 2020)



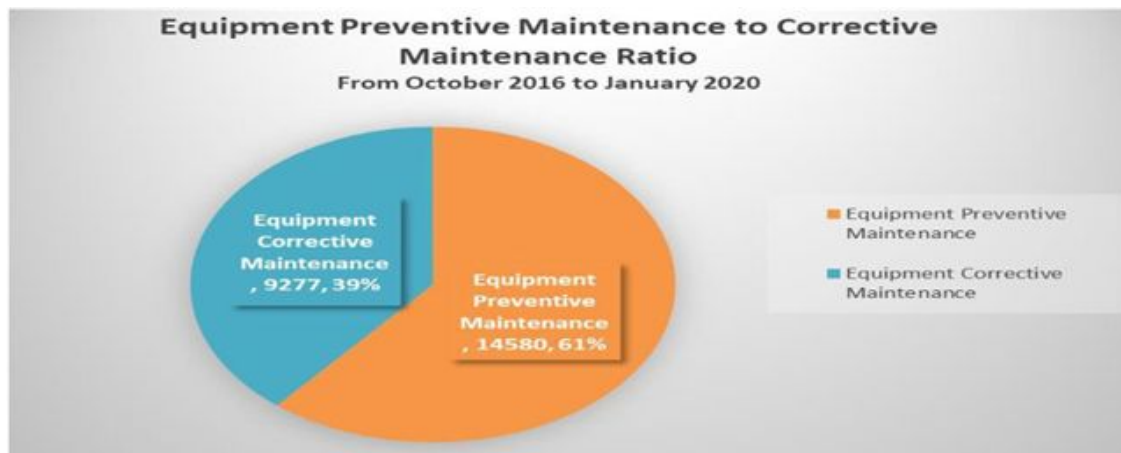
Wastewater Treatment (January 2020)

| Monthly Wastewater Treatment Summary - January 2020 | | | | |
|---|----------|------------------|--------------|-------------------|
| WW Treatment Plants - Flows | | | | |
| | Facility | Avg. Daily Flows | Sludge (lbs) | Sludge Disp. (\$) |
| | Hagatna | 4.44 | 283,080 | \$ 25,477 |
| | Northern | 5.77 | 1,055,960 | \$ 95,036 |
| | Agat | 1.1 | 72,740 | \$ 6,547 |
| | Baza | 0 | | |
| | Umatac | 0.24 | | |
| | Inarajan | 0.05 | | |
| | | 11.60 | 1,411,780 | \$ 127,060 |

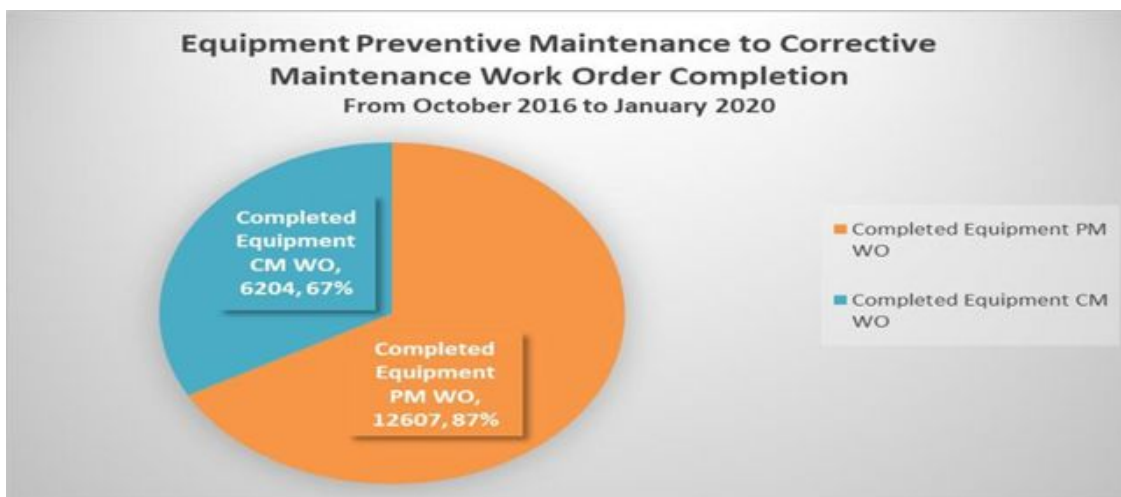


Asset Management (January 2020)

I. Equipment Preventive Maintenance to Corrective Maintenance *Ratio*

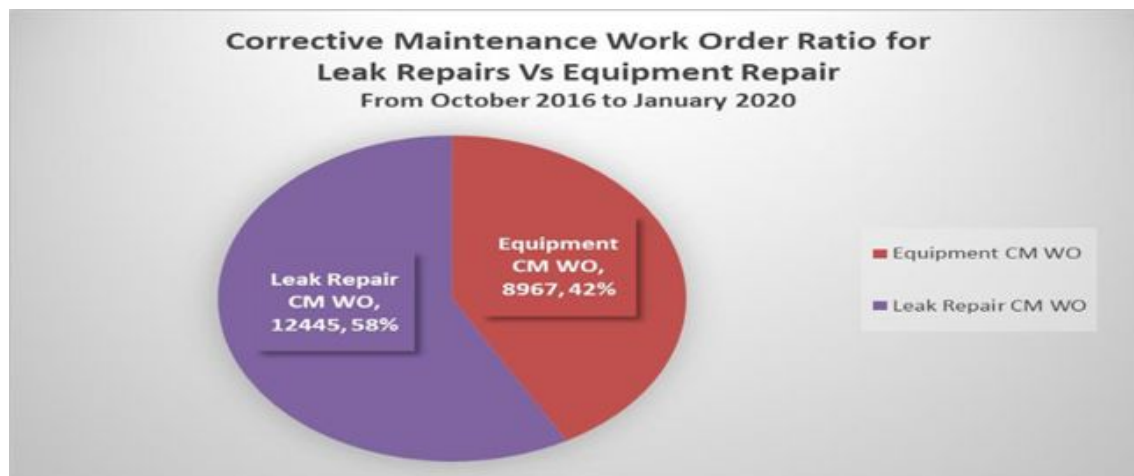


II. Equipment Preventive Maintenance to Corrective Maintenance *Work Order Completion*

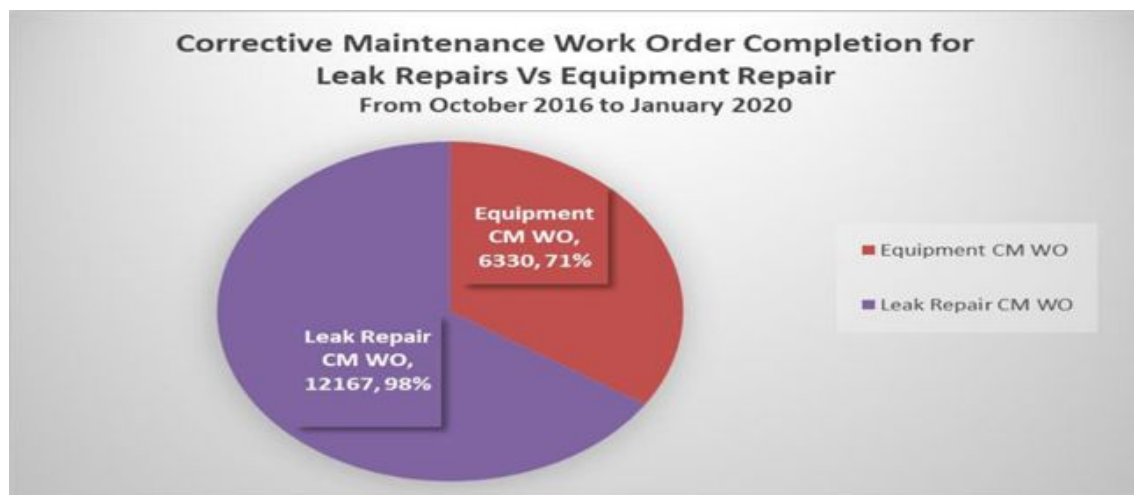


Asset Management (January 2020)

III. Corrective Maintenance Work Order *Ratio* for Leak Repairs vs. Equipment Repair



IV. Corrective Maintenance Work Order *Completion* for Leak Repairs vs. Equipment Repair



Operational Issues

Production & Distribution

- Valve Issues:
 - Addressed long-standing pressure issues in isolated area in Tamuning due to a failed partially-closed valve. Pressures have improved around GPO
 - Togcha valve separating Ugum supply from northern well water supply broke and required replacement
- Problems with line breaks on older ACP lines in
 - Toto-Canada (Jan 6th, Jan 12th)
 - 6" ACP Main Break in Tumon (Jan 23rd)
 - Santa Rita (Jan 31st)

Wastewater Collection & Treatment

- Collection System:
 - Route 2 project final lateral connections have been completed.
 - Route 1 and Route 4 projects still in progress; traffic impacts are on-going
 - Route 3 and Route 9 interceptor work is about 61% complete
- Hagatna WWTP
 - Parts for two clarifiers ordered; basins being inspected for needed repairs; plant operating satisfactorily on one clarifier
- NDWWTP
 - Major excavation work for clarifiers on-going; steelwork for foundations / concrete pour anticipated this week
 - Water supply issues continue until lines in the area are upgraded

Meters from January 2017 through January 2020

| COMPLETED FIELD ACTIVITY JAN 2017 THRU JAN 2020 (POSTED IN CIS) | 2017 | 2018 | 2019 | Jan-20 | TOTAL: | COMPLETED FIELD ACTIVITIES (IN PROCESS) TO BE POSTED IN CIS |
|--|------|-------|-------|--------|--------|---|
| GWA - Meter Exchange | 6487 | 13353 | 10850 | 1079 | 31769 | 178 |

| | | | | | |
|--|-----------|-----------|-----------|-----------|-------|
| # OF METERS TESTED AS PER METER TEST FACILITY REPORTS: | 6079 | 12259 | 9278 | 749 | 28365 |
| AVG # OF FIELD STAFF PERFORMING CHANGE OUTS (MON THRU FRI): | 19 | 16 | 7 | 7 | |
| # OF ADMIN STAFF TO CREATE AND POST FIELD ACTIVITIES IN CIS: | 10 | 6.3 | 5 | 5 | |
| TOTAL: | 29 | 22 | 12 | 12 | |

REMAINING ACTIVE BADGER LP MODELS TO BE REPLACED AS OF Jan 31 2020:

1871

3/4" BADGER METERS IN STOCK AS OF Feb 07 2020:

| Size | Meter Description | New Meters Passed | New Meters Untested | Passed Field Meters | MMP | Meters Available |
|------|---|-------------------------|---------------------------|---------------------------|-----|---------------------|
| 3/4" | METER, Badger AMR 5/8" X 3/4" RCDL Model M25 Disc Meter | 1420 | 0 | 246 | 0 | 1666 |
| 3/4" | METER, Badger AMR 5/8" x 3/4" **WARRANTY** RCDL Model M25 | 0 | 0 | 0 | 0 | 0 |
| 3/4" | METER,Badger 5/8"x3/4" NSF61-G RCDL M25LL Disc Meter Integral | 38 | 0 | 0 | 0 | 38 |
| 3/4" | METER, Badger AMR 5/8" x 3/4" RCDL Model M25 ***RMI*** | 0 | 0 | 0 | 0 | 0 |
| 3/4" | METER, Badger E-SERIES 5/8"X3/4" ULTRASONIC | 975 | 0 | 0 | 0 | 975 |

Backbilling through January 2020

Guam Waterworks Authority

Collections Report¹ on Accounts Backbilled thru January 31, 2020

For fiscal years 2015 through 2020 (Jan)

| Accounts Billed | | | Collection Status | | | | | | | | | | | |
|-----------------|-----------------|---------------------|--------------------------------|---------------------|------------|------------------|-------------------|-----------|----------------------------|-------------------|------------|------------------------------|-------------------|-----------|
| | | | Amounts Collected ¹ | | | Amounts Adjusted | | | Total Uncollected (Active) | | | Total Uncollected (Inactive) | | |
| FY Billed | No. of Accounts | Amount | No. of Accounts | Amount | % | No. of Accounts | Amount | % | No. of Accounts | Amount | % | No. of Accounts | Amount | % |
| FY2015 | | | | | | | | | | | | | | |
| FY2016 | 17 | \$ 882 | 17 | \$ 882 | 100% | 0 | \$ - | | 0 | \$ - | | 0 | \$ - | |
| FY2017 | 537 | \$ 397,450 | 472 | 322,762 | 81% | 14 | 20,967 | 5% | 24 | 29,833 | 8% | 27 | 23,887 | 6% |
| FY2018 | 1,374 | \$ 742,109 | 1,220 | 574,467 | 77% | 45 | 59,378 | 8% | 62 | 68,495 | 9% | 47 | 39,768 | 5% |
| FY2019 | 8,324 | \$ 3,064,384 | 7,581 | 2,430,067 | 79% | 119 | 103,453 | 3% | 436 | 428,165 | 14% | 188 | 102,699 | 3% |
| FY2020 | 1,391 | \$ 385,270 | 585 | 68,645 | 18% | 6 | 1,631 | 0% | 778 | 311,552 | 81% | 22 | 3,442 | 0% |
| Total | 11,643 | \$ 4,590,095 | 9,875 | \$ 3,396,823 | 74% | 184 | \$ 185,429 | 4% | 1,300 | \$ 838,045 | 18% | 284 | \$ 169,796 | 4% |

¹ Collections thru February 12, 2020

One Guam Update

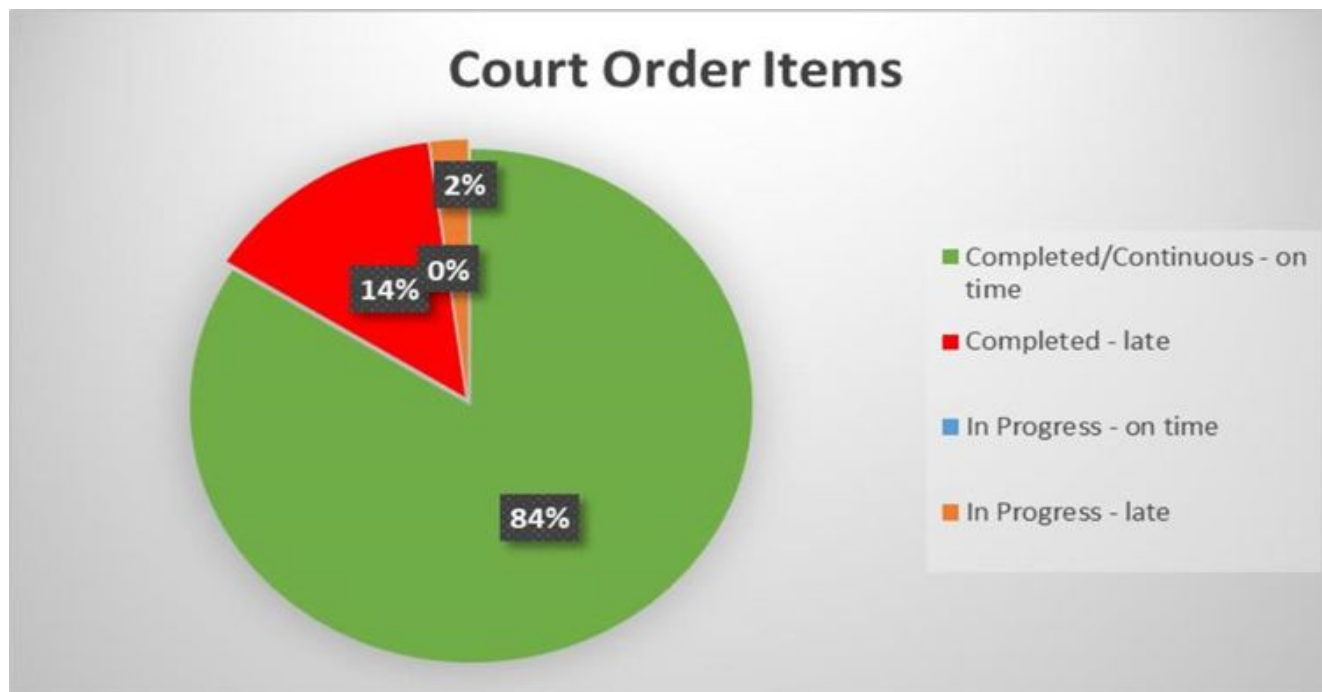
- Tumon Maui Well
 - Well Inspection was completed; Some corrective actions for mostly minor issues.
 - GWA will be replacing the GAC based on sampling data at the vessels; pending the availability of a crane.
 - DOD and GWA discussed formalizing the inspections. Future inspections will need to be signed by someone from GWA & NBG inspector for documentation.
 - Needed repairs to be done within one cycle if possible.
- OEA Projects
 - Observation Wells/NGLA
 - Maria Lewis is still waiting on response on acceptance of well locations. There are no issues on Y well. M1 well is the one adjacent to the training site for the large vehicles. B&C pushed the actual site 30' SW within the 100'x100' Area of Potential Effect that was surveyed (cultural/biological).
 - Need to coordinate the construction schedules. Easements will be granted for all wells.
 - GWA is reviewing the draft MOA on recurring costs for data collection and evaluation.
 - Sewer Interceptor
 - MEC exemption was expiring this month. B&C notified DoD & MEC exemption was extended one more year.
 - Extension on the License has been approved until September 2020.
- Property Transfers
 - Transfer of BPM-1: There is a cloud on the title, however it can still be transfer in its current state. DOD will wait for GWA to make a decision if they are interested in obtaining the property with the issues related to the title.
 - Marbo Areas: verifying property surveys for potential easements from Navy.
 - Transfer of Navy Laterals at Murray Road to GWA: The approval letter is still at Naval Base Guam. Installation Commanding Officer needs to sign, then approval package has to be prepared.

One Guam Update

- Other
 - Cabras Island Water Lines
 - DOD descope the line upgrade project.
 - GWA will not be accepting the line, if the repairs are not completed.
 - DOD will abandon the line properly if GWA doesn't want it.
 - ACEORP Tunnel
 - The letter and package are being reviewed by Federal GSA before it goes to Congress. The schedule for it to be turned into a quit claim deed is November.
 - Utility Data Sharing: Maria Lewis sent the non-disclosure agreement (NDA) to Miguel Bordallo; needs his approval or his comments. Once received, will put in with MOU for submittal to the CO & then get the signatures.
 - Marine Corps Base
 - Connection at Potts Junction will be in about 5-6 months. Once they connect & test it, they will shut the valve until ready to use it. Don't expect force flow (full base operation) and the increased water requirement until 2024.
 - GWA will provide water to the Operation of Potts Junction intertie based on the Tumon Maui Well MOU.
 - In the future, a contractual agreement to operate it needs to be in place. Need to talk about maximums, requirements, etc. Water exchange is preferred.
 - Andersen AFB
 - Andersen will pursue the installation of a wastewater meter to obtain actual wastewater discharge amounts. Andersen will work with GWA in determining the specification for the meter and the appropriate location for the installation of the meter. The monthly water readings are provided by Andersen to GWA. GWA bills 80% of the water consumption as the charge for wastewater. Andersen will be responsible to purchasing the meter and the cost of installation.
 - AG-1 Access for GWA/GPA
 - DOD is working with GWA to establish easier access to AG-1. This will elevate the issues related to security of the well for GWA personnel.

Court Order

| | Items | On-time Items Completed/Continuous | Items Delayed | Completed Late | Items on Schedule | Performance % |
|------------------------------|-----------|---------------------------------------|------------------|-------------------|----------------------|------------------|
| Court order total | 93 | 78 | 2 | 13 | 0 | 97.8% |



Court Order

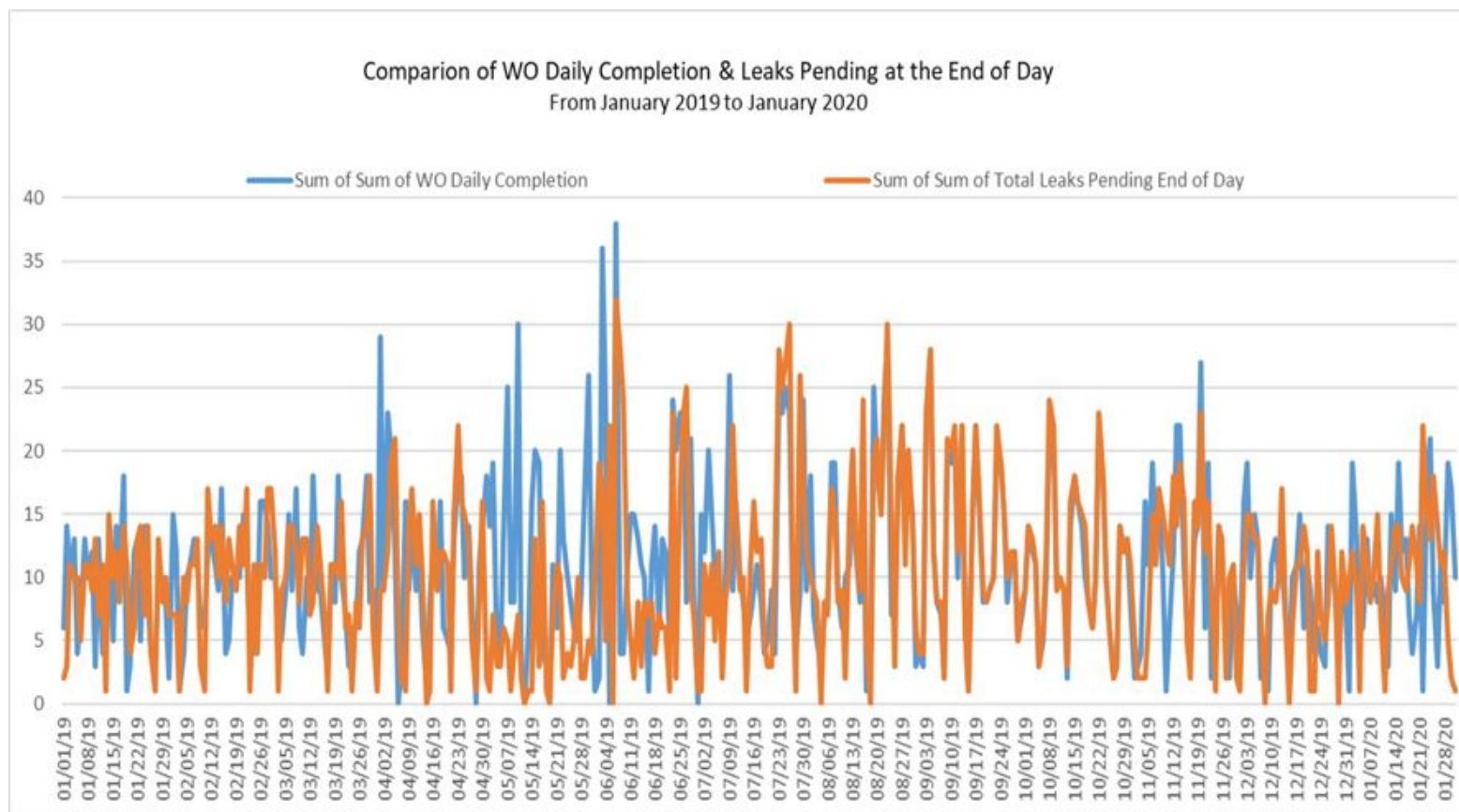
Status Information (for January 2020)

- 2 items delayed
 - Water Reservoir Repair. Replacement or Relocation program, CO II C 29(b)(6)(ii)–(all remaining tanks). (Affects final date of the Court Order.)
 - Umatac-Merizo Wastewater Treatment Plant – completed in December; ribbon cutting held in January.
- Final Date to complete all Court Order items may be delayed past December 31, 2020. [CO 29(b) has been expanded by 31% beyond the original Court Order Requirements (General Counsel is reviewing filing requirements and content).]
- Overflow or Bypass events reported to USEPA:
 - 01/25/2020 Ignacio P. Quitugua St. -- FOG
 - 01/31/2020 Chalan Nette St. Yigo – FOG
 - 02/01/2020 Roy T. Damien St. – Mongmong – Sensor clogged

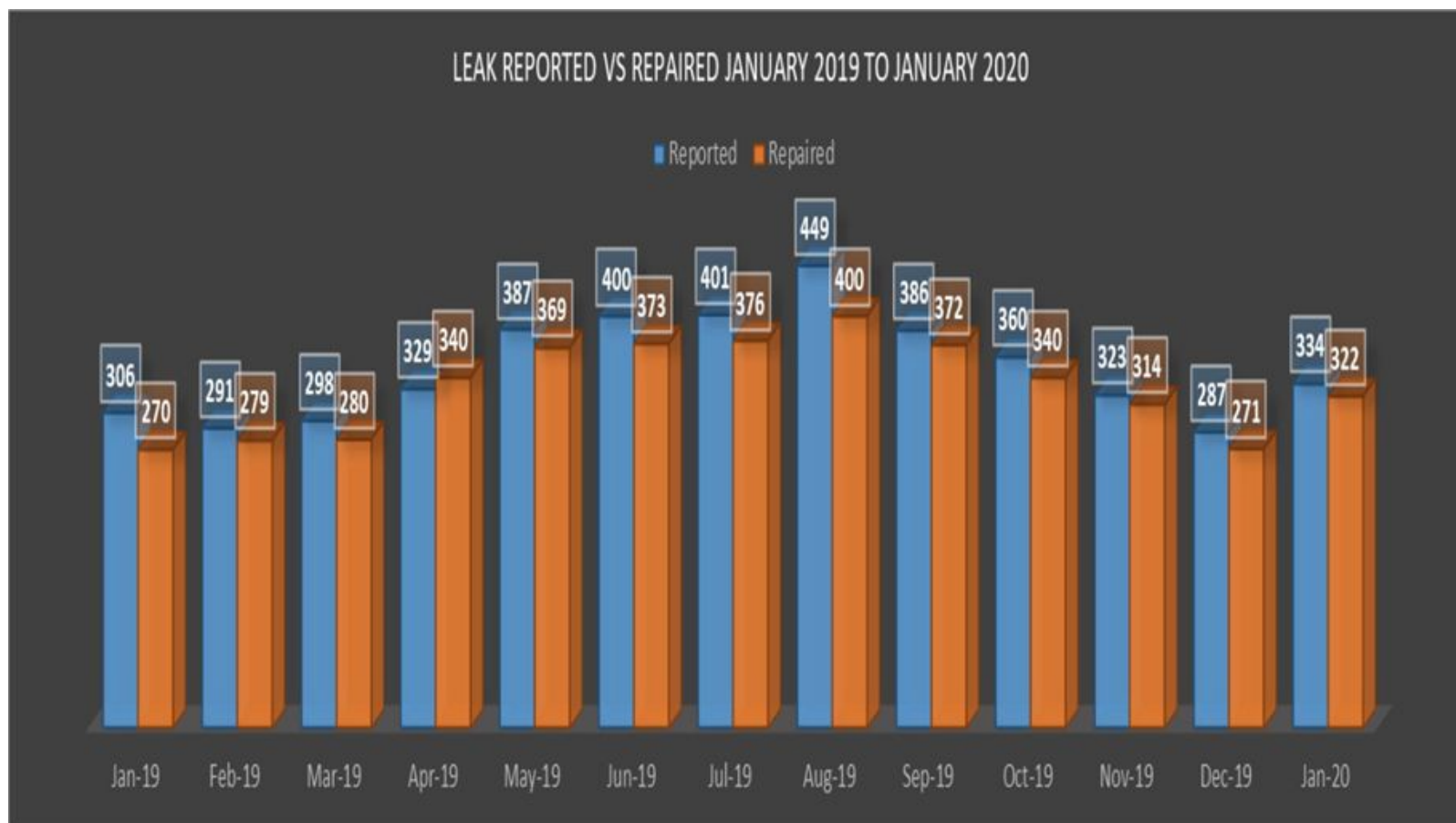
Land Acquisition Summary (as of January 2020 – no changes from Nov/Dec 2019 reports)

| GWA Facility | Location | Gov. or Private Property | Land Acquisition Status |
|----------------------|----------|------------------------------------|--|
| Tanks | Astumbo | Gov't. - CLTC | Petition of Land Registration package forwarded to Attorney General by DLM 11/04/19. |
| | Piti | Private | Pending comments from Federal and GovGuam agencies on Section 106 documents 11/07/19. |
| Deep Wells | AG-12 | Dept. of Agriculture/Manhita Farms | Right of Entry Agreement sent to Dept of AG for signature 05/24/18. 2 nd follow up sent on 09/12/18. 3rd follow up sent on 04/10/19. Retracement Survey Property Map filed and recorded at DLM 7/10/19. |
| Booster Pump Station | Agfayan | Private | TGE working on structural design for pump station area for L28, B19, T3734, Inarajan 11/07/19. |
| Asan Springs | Asan | Federal | Pending comments from Federal and GovGuam agencies on Section 106 documents 11/07/19. |

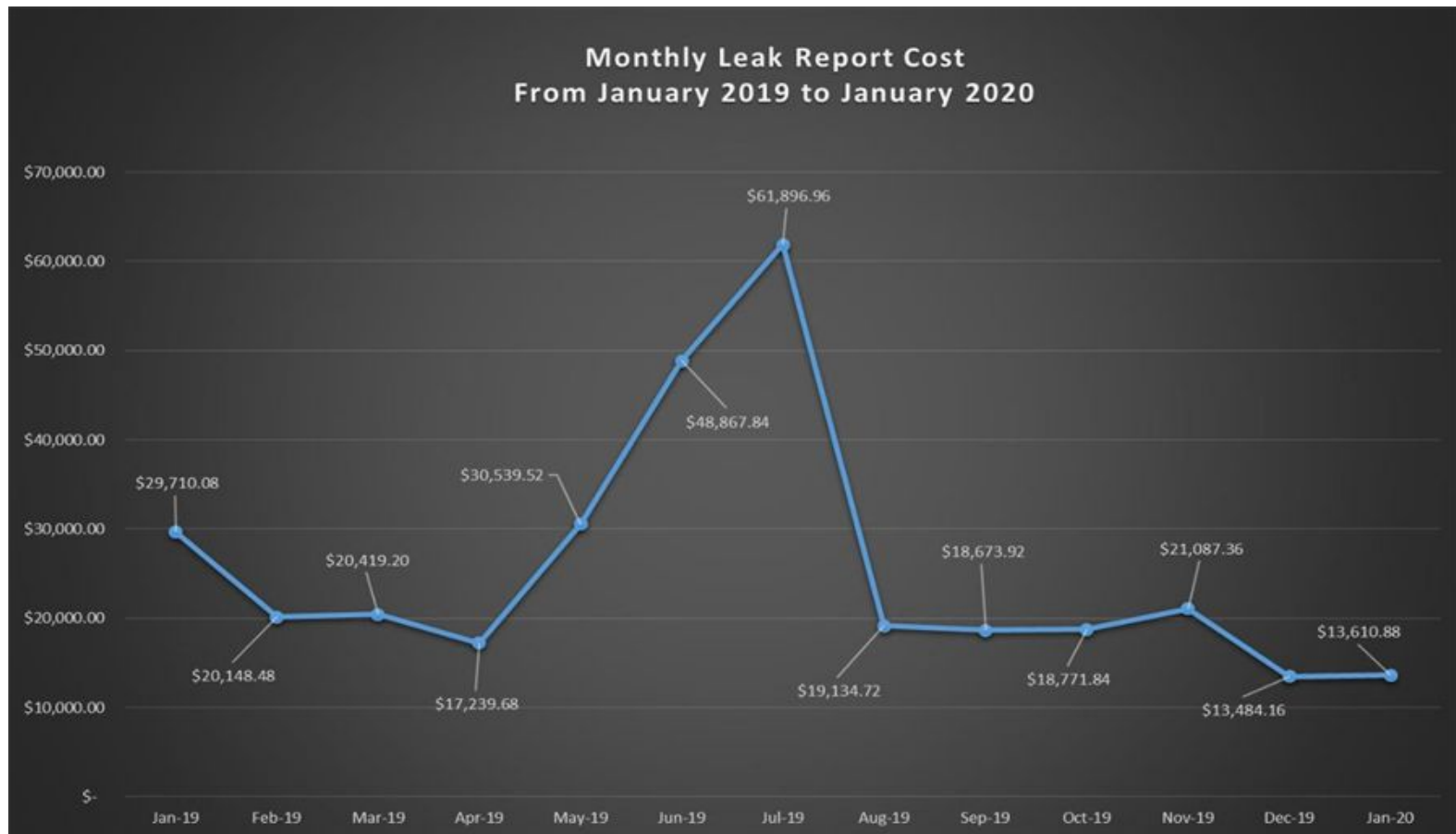
Leak Repair Summary (January 2020)



Comparison of Leaks Reported vs. Leaks Repaired (January 2020)



Monthly Leak Report Cost (January 2020)



Assumptions:

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

GWA Utility Services Division
Monthly Status Report
Month ending JAN 2020

| FY2020 | | WEEK ENDING: 01/04/20 | WEEK ENDING: 01/11/20 | WEEK ENDING: 01/18/20 | WEEK ENDING: 01/25/20 | WEEK ENDING: 02/01/20 | JAN 2020 MONTH LY TOTAL | WEEKLY AVERAGE JAN 2020 | PREVIOUS MONTH | |
|--|---|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-------------------------------------|-------------------------------|-------------------------------|-------------------------------|
| UTILITY SERVICES DIVISION ACTIVITIES | | | | | | | | | WEEKLY AVERAGE DEC 2019 | DEC 2019 MONTHL Y TOTAL |
| Collections Activities: | | | | | | | | | | |
| I. | Number of accounts cut for nonpayment: | 63 | 69 | 36 | 65 | 63 | 296 | 59 | 34 | 170 |
| II. | Number of accounts restored for nonpayment: | 51 | 46 | 43 | 38 | 44 | 222 | 44 | 28 | 139 |
| III. | Number of No water reports responded to: | 6 | 2 | 4 | 0 | 5 | 17 | 3 | 3 | 17 |
| IV. | Number of Secure/Unsecure valve reports responded to: | 6 | 9 | 1 | 5 | 1 | 22 | 4 | 4 | 21 |
| V. | Number of Verify reads responded to: | 3 | 3 | 2 | 2 | 1 | 11 | 2 | 2 | 10 |
| VI. | Number of new pay plans negotiated for active accounts: | 209 | 220 | 148 | 145 | 189 | 911 | 182 | 162 | 812 |
| VII. | Number of active pay plans negotiated and ongoing: | 847 | 859 | 823 | 773 | 762 | | 813 | 642 | |
| VIII. | Number of inactive accounts with a payment arrangement: | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | |
| IX. | Number of broken payment plans: | 41 | 75 | 94 | 64 | 99 | 373 | 75 | 20 | 101 |
| Customer Service Activities (lobby visits): | | | | | | | | | | |
| A. GBN Public Service Building – Fadlan | | | | | | | | | | |
| i. | Total Customers Assisted: | 245 | 228 | 261 | 175 | 230 | 1139 | 228 | 211 | 1056 |
| ii. | Total Abandoned Requests: | 23 | 14 | 21 | 4 | 9 | 71 | 14 | 13 | 65 |
| iii. | Average Wait Time: | 8 minutes | 6 minutes | 5 minutes | 7 minutes | 8 minutes | | 6.8 minutes | 8 minutes | |
| iv. | Average Service Time: | 9 minutes | 9 minutes | 8 minutes | 11 minutes | 11 minutes | | 9.6 minutes | 11.8 minutes | |
| v. | Purpose of lobby visit: | | | | | | | | | |
| 1. | Apply for water: | 45 | 63 | 49 | 27 | 43 | 227 | 45 | 44 | 218 |
| 2. | Restore water cut for non payment: | 6 | 11 | 15 | 5 | 14 | 51 | 10 | 8 | 40 |
| 3. | Terminate Water: | 17 | 12 | 18 | 3 | 12 | 62 | 12 | 16 | 78 |
| 4. | Copy of Bill: | 41 | 51 | 34 | 10 | 29 | 165 | 33 | 35 | 175 |
| 5. | Billing Dispute: | 63 | 44 | 45 | 34 | 49 | 235 | 47 | 53 | 265 |
| 6. | Billing Dispute follow up: | 7 | 0 | 0 | 0 | 0 | 7 | 1 | 4 | 20 |
| 7. | General Questions & Other: | 31 | 21 | 94 | 95 | 84 | 325 | 65 | 26 | 129 |
| 8. | Report a water leak: | 1 | 1 | 2 | 0 | 2 | 6 | 1 | 1 | 5 |
| 9. | Report water theft: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 10. | Payment Arrangement: | 37 | 55 | 28 | 10 | 13 | 143 | 29 | 27 | 133 |
| B. Julale Satellite Office – Hagatna | | | | | | | | | | |
| i. | Total Customers Assisted: | 255 | 319 | 267 | 225 | 236 | 1302 | 260 | 242 | 1209 |
| ii. | Total Abandoned Requests: | 44 | 23 | 21 | 10 | 32 | 130 | 26 | 28 | 139 |
| iii. | Average Wait Time: | 8 minutes | 4 minutes | 7 minutes | 5 minutes | 9 minutes | | 6.6 minutes | 6 minutes | |
| iv. | Average Service Time: | 8 minutes | 7 minutes | 8 minutes | 8 minutes | 10 minutes | | 8.2 minutes | 8.2 minutes | |
| v. | Purpose of lobby visit: | | | | | | | | | |
| 1. | Apply for water: | 42 | 54 | 56 | 50 | 62 | 264 | 53 | 46 | 230 |
| 2. | Restore water cut for non payment: | 5 | 17 | 19 | 12 | 9 | 62 | 12 | 6 | 28 |
| 3. | Terminate Water: | 24 | 16 | 19 | 12 | 25 | 96 | 19 | 19 | 94 |
| 4. | Copy of Bill: | 61 | 88 | 71 | 52 | 53 | 325 | 65 | 63 | 314 |
| 5. | Billing Dispute: | 57 | 88 | 75 | 77 | 58 | 355 | 71 | 57 | 283 |
| 6. | Billing Dispute follow up: | 5 | 6 | 5 | 3 | 5 | 24 | 5 | 4 | 21 |
| 7. | General Questions & Other: | 26 | 31 | 32 | 26 | 25 | 140 | 28 | 15 | 77 |
| 8. | Report a water leak: | 2 | 0 | 2 | 0 | 1 | 5 | 1 | 2 | 10 |
| 9. | Report water theft: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 10. | Payment Arrangement: | 52 | 51 | 34 | 27 | 29 | 193 | 39 | 38 | 192 |
| C. Upper Tumon Satellite Office – Upper Tumon | | | | | | | | | | |
| i. | Total Customers Assisted: | 283 | 356 | 290 | 285 | 326 | 1540 | 308 | 309 | 1546 |
| ii. | Total Abandoned Requests: | 16 | 26 | 11 | 16 | 21 | 90 | 18 | 15 | 75 |
| iii. | Average Wait Time: | 10 minutes | 7 minutes | 4 minutes | 4 minutes | 10 minutes | | 7 minutes | 9.4 minutes | |
| iv. | Average Service Time: | 11 minutes | 10 minutes | 11 minutes | 10 minutes | 10 minutes | | 10.4 minutes | 12 minutes | |
| v. | Purpose of lobby visit: | | | | | | | | | |
| 1. | Apply for water: | 78 | 74 | 68 | 62 | 86 | 368 | 74 | 74 | 370 |
| 2. | Restore water cut for non payment: | 4 | 14 | 14 | 18 | 24 | 74 | 15 | 12 | 61 |
| 3. | Terminate Water: | 25 | 27 | 31 | 28 | 31 | 142 | 28 | 27 | 136 |
| 4. | Copy of Bill: | 42 | 81 | 59 | 46 | 61 | 289 | 58 | 62 | 312 |
| 5. | Billing Dispute: | 68 | 92 | 67 | 67 | 75 | 369 | 74 | 73 | 367 |
| 6. | Billing Dispute follow up: | 4 | 2 | 1 | 4 | 4 | 15 | 3 | 19 | 94 |
| 7. | General Questions & Other: | 43 | 42 | 33 | 29 | 27 | 174 | 35 | 43 | 216 |
| 8. | Report a water leak: | 4 | 1 | 4 | 0 | 1 | 10 | 2 | 3 | 13 |
| 9. | Report water theft: | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 |
| 10. | Payment Arrangement: | 22 | 57 | 33 | 50 | 48 | 210 | 42 | 34 | 170 |

GWA Work Session - February 18, 2020 - DIVISION REPORTS

GWA Utility Services Division
Monthly Status Report
Month ending JAN 2020

| FY2020 UTILITY SERVICES DIVISION ACTIVITIES | WEEK ENDING: 01/04/20 | WEEK ENDING: 01/11/20 | WEEK ENDING: 01/18/20 | WEEK ENDING: 01/25/20 | WEEK ENDING: 02/01/20 | JAN 2020 MONTH LY TOTAL | WEEKLY AVERAGE JAN 2020 | PREVIOUS MONTH | |
|---|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-------------------------------------|-------------------------------|-------------------------------|-------------------------------|
| | | | | | | | | WEEKLY AVERAGE DEC 2019 | DEC 2019 MONTHL Y TOTAL |
| Customer Service Activities (Electronic): | | | | | | | | | |
| i. Emails Recieved: | | | | | | | | | |
| 1. customers@guamwaterworks.org: | 41 | 42 | 44 | 34 | 40 | 201 | 40 | 46 | 231 |
| Request type (email): | | | | | | | | | |
| a. Apply for water: | 0 | 1 | 1 | 3 | 0 | 5 | 1 | 3 | 14 |
| b. Terminate Water: | 3 | 1 | 6 | 2 | 4 | 16 | 3 | 2 | 10 |
| c. Copy of Bill: | 3 | 3 | 5 | 1 | 4 | 16 | 3 | 3 | 14 |
| d. Billing Dispute & follow up: | 6 | 9 | 6 | 5 | 5 | 31 | 6 | 8 | 40 |
| e. General Questions & Other: | 13 | 19 | 16 | 11 | 23 | 82 | 16 | 12 | 62 |
| f. Report a water leak: | 8 | 1 | 5 | 2 | 3 | 19 | 4 | 4 | 22 |
| g. Report water theft: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| h. Online services inquiry: | 8 | 8 | 5 | 10 | 1 | 32 | 6 | 12 | 58 |
| 2. gwaservesme@guamwaterworks.org (realtors/prop mgrs): | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ii. Emails Replied (both): | 38 | 30 | 47 | 35 | 17 | 167 | 33 | 27 | 135 |
| Call Center Activities: | | | | | | | | | |
| i. Calls Recieved: | 1667 | 2244 | 1408 | 1248 | 1813 | 8380 | 1676 | 1358 | 6788 |
| ii. Calls Immediately Answered: | 705 | 625 | 736 | 639 | 651 | 3356 | 671 | 625 | 3127 |
| iii. Calls Abandoned: | 88 | 106 | 70 | 57 | 88 | 409 | 82 | 60 | 300 |
| iv. Calls Handled by Voice mail: | 874 | 1513 | 602 | 552 | 1074 | 4615 | 923 | 671 | 3357 |
| v. Average duration of call: | 3 minutes | 4 minutes | 4 minutes | 4 minutes | 5 minutes | | 4 minutes | 4.2 minutes | |
| vi. Breakdown by request type: | | | | | | | | | |
| 1. Apply/Terminate info: | 16 | 20 | 20 | 31 | 24 | 111 | 22 | 19 | 97 |
| 2. Automated Telephone Call: | 62 | 81 | 96 | 73 | 85 | 397 | 79 | 23 | 117 |
| 3. Balance Inquiry: | 60 | 34 | 57 | 64 | 60 | 275 | 55 | 75 | 373 |
| 4. Call Back: | 20 | 44 | 47 | 29 | 41 | 181 | 36 | 35 | 175 |
| 5. Dispatch: | 23 | 16 | 28 | 40 | 17 | 124 | 25 | 25 | 127 |
| 6. Dispute: | 1 | 3 | 0 | 0 | 1 | 5 | 1 | 1 | 3 |
| 7. Follow-up: | 43 | 61 | 58 | 46 | 72 | 280 | 56 | 51 | 253 |
| 8. General Questions & Other: | 113 | 163 | 120 | 166 | 158 | 720 | 144 | 149 | 747 |
| 9. GWA Staff: | 53 | 75 | 91 | 83 | 86 | 388 | 78 | 63 | 317 |
| 10. No Water: | 15 | 11 | 11 | 10 | 23 | 70 | 14 | 16 | 82 |
| 11. Online/Phone App Help: | 5 | 7 | 18 | 20 | 10 | 60 | 12 | 21 | 103 |
| 12. Pay by Phone: | 116 | 104 | 118 | 112 | 100 | 550 | 110 | 135 | 673 |
| 13. Pay Plan: | 46 | 92 | 93 | 59 | 52 | 342 | 68 | 62 | 309 |
| 14. Restore Non-payment: | 0 | 13 | 4 | 7 | 14 | 38 | 8 | 5 | 25 |
| 15. Secure/Unsecure Valve: | 2 | 8 | 12 | 2 | 7 | 31 | 6 | 10 | 52 |
| 16. Voice Mail: | 47 | 188 | 70 | 63 | 114 | 482 | 96 | 68 | 341 |
| 17. Water leak: | 3 | 6 | 12 | 9 | 4 | 34 | 7 | 6 | 32 |
| Bill Dispute & Resolution Activities: | | | | | | | | | |
| i. Dispute Resolution: | | | | | | | | | |
| 1. Number of disputed accounts resolved: | 11 | 26 | 15 | 25 | 14 | 91 | 18 | 23 | 114 |
| 2. Number of disputed accounts under review: | 1977 | 1953 | 1963 | 1967 | 1977 | | 1967 | 1506 | |
| Data Entry of Completed Field work in CIS: | | | | | | | | | |
| i. Document Control: | | | | | | | | | |
| 1. Number of field activities posted: | 388 | 428 | 493 | 421 | 310 | 2040 | 408 | 381 | 1903 |
| 2. Number of field activities pending: | 761 | 708 | 609 | 558 | 652 | 3288 | 658 | 549 | 2747 |
| Field Response Activities: | | | | | | | | | |
| I. Number of field activities received: | 280 | 224 | 211 | 190 | 271 | 1176 | 235 | 207 | 1036 |
| II. Number of field activities completed: | 351 | 285 | 277 | 242 | 334 | 1489 | 298 | 259 | 1294 |
| III. Number of field activities pending field action: | 6 | 3 | 5 | 10 | 2 | 26 | 5 | 5 | 24 |

GWA Utility Services Division
 Monthly Status Report
 Month ending JAN 2020

| FY2020 | | WEEK ENDING: | WEEK ENDING: | WEEK ENDING: | WEEK ENDING: | WEEK ENDING: | JAN 2020 MONTH LY TOTAL | WEEKLY AVERAGE JAN 2020 | PREVIOUS MONTH | |
|---|--|-----------------|-----------------|-----------------|-----------------|-----------------|-------------------------------------|-------------------------------|-------------------------------|------------------------------|
| UTILITY SERVICES DIVISION ACTIVITIES | | 01/04/20 | 01/11/20 | 01/18/20 | 01/25/20 | 02/01/20 | | | WEEKLY AVERAGE DEC 2019 | DEC 2019 MONTHLY TOTAL |
| Meter Reading Activities: | | | | | | | | | | |
| I. | Number of meters read: | | | | | | | | | |
| A. | Electronically Read Meters: | 4527 | 10960 | 13761 | 7271 | 5725 | 42244 | 8449 | 8434 | 42170 |
| B. | Manually Read Meters: | 19 | 34 | 42 | 25 | 34 | 154 | 31 | 33 | 164 |
| i. | Unread meters (Meters scheduled to be read but not read): | 4 | 17 | 16 | 12 | 53 | 102 | 20 | 18 | 92 |
| ii. | Number of data logs received: | 11 | 60 | 32 | 31 | 46 | 180 | 36 | 29 | 147 |
| iii. | Number of data logs retrieved: | 5 | 68 | 25 | 27 | 34 | 159 | 32 | 34 | 170 |
| iv. | Number of data logs pending field action: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 3 |
| v. | Communication Errors/Reprogramming requests: | 1 | 5 | 1 | 4 | 0 | 11 | 2 | 1 | 6 |
| vi. | Number of estimated readings (for the week): | 7 | 20 | 21 | 14 | 60 | 111 | 22 | 22 | 111 |
| vii. | Reasons for Estimations: | | | | | | | | | |
| 1. | Cant locate meter: | 0 | 1 | 3 | 0 | 1 | 5 | 1 | 2 | 8 |
| 2. | Temporary Obstruction: | 1 | 0 | 0 | 0 | 1 | 2 | 0 | 0 | 2 |
| 3. | Vicious Dog: | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 1 |
| 4. | Flooded meter: | 0 | 1 | 0 | 0 | 1 | 2 | 0 | 0 | 1 |
| 5. | Corrective action to database requested: | 4 | 3 | 5 | 2 | 4 | 18 | 4 | 5 | 23 |
| 6. | Possible changed out meter: | 1 | 14 | 10 | 9 | 45 | 79 | 16 | 17 | 85 |
| 7. | Communication/Programming error (code 92's): | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8. | Other: | 1 | 1 | 3 | 3 | 7 | 15 | 3 | 1 | 5 |
| a. | Leaks detected on customer's private line: | 703 | 1673 | 2336 | 1198 | 770 | 6680 | 1336 | 1307 | 6536 |
| b. | Reverse Flow Detected: | 29 | 241 | 51 | 59 | 35 | 415 | 83 | 150 | 749 |
| c. | No Usage Detected: | 164 | 313 | 490 | 257 | 253 | 1477 | 295 | 298 | 1492 |
| d. | Tamper Code: | 3 | 16 | 11 | 7 | 12 | 49 | 10 | 11 | 54 |
| C. | Electronic Read Percentage: | 99.6% | 99.7% | 11.0% | 99.7% | 99.4% | | 99.6% | 99.6% | |
| Illegal Connection & Unauthorized Use of Water Activities: | | | | | | | | | | |
| I. | Number of Inactive Still Consuming Reports rec'd & investigated: | 0 | 0 | 3 | 2 | 1 | 6 | 1 | 0 | 2 |
| II. | Number of Illegal Connection reports rec'd & investigated: | 1 | 1 | 0 | 1 | 1 | 4 | 1 | 1 | 4 |



Engineering Monthly Report February 2020

**Prepared By:
Mauryn McDonald, P.E., Acting 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 | 7 |
| D | CIP Wastewater Section | 13 |
| E | CIP Engineering Support | 15 |
| F | GIS Section | 16 |
| 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 | 93.00% | 7.00% | \$ - | 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 | \$ 475,709.00 | 100.00% | 0.00% | \$ 369,846.00 | 100.00% | 0.00% | \$ - | N/A | N/A |
| PW 05-06 | Water Booster Pump Station | \$ 500,000.00 | 99.94% | 0.06% | \$ 1,679,964.00 | 99.24% | 0.76% | \$ - | N/A | N/A |
| PW 05-07 | Meter Replacement Program | \$ 10,450,000.00 | 98.64% | 1.36% | \$ 996,532.00 | 100.00% | 0.00% | \$ 1,400,000.00 | 68.10% | 31.90% |
| PW 05-08 | Barrigada Tank Repair/Replacement | \$ 5,450,000.00 | 96.50% | 3.50% | \$ 4,987,000.00 | 99.99% | 0.01% | \$ - | N/A | N/A |
| PW 05-09 | Leak Detection | \$ 200,000.00 | 0.06% | 99.94% | \$ 16,916.00 | 100.00% | 0.00% | \$ 100,000.00 | 0.00% | 100.00% |
| PW 05-10 | Potable Water System Planning | \$ 210,487.45 | 95.51% | 4.49% | \$ 624,000.00 | 100.00% | 0.00% | \$ 876,294.00 | 100.00% | 0.00% |
| PW 05-11 | Implement Ground Water Rule | \$ 1,699,999.00 | 98.93% | 1.07% | \$ 1,000,000.00 | 100.00% | 0.00% | \$ - | N/A | N/A |
| PW 05-12 | Brigade II (Ugum Lift) BPS Upgrade | \$ 1,900,000.00 | 16.06% | 83.94% | \$ - | N/A | N/A | \$ - | N/A | N/A |
| PW 05-13 | Deep Well Rehabilitation | \$ 548,000.00 | 95.95% | 4.05% | \$ 200,000.00 | 100.00% | 0.00% | \$ 250,000.00 | 44.01% | 55.99% |
| PW 05-14 | New Deep Wells at Down Hard | \$ 485,743.00 | 100.00% | 0.00% | \$ - | N/A | N/A | \$ 1,190,000.00 | 0.00% | 100.00% |
| PW 05-15 | Rehabilitation of Asan Springs | \$ 1,100,000.00 | 22.87% | 77.13% | \$ - | N/A | N/A | \$ - | N/A | N/A |
| PW 05-16 | Master Meters | \$ 1,489,957.00 | 96.32% | 3.68% | \$ 712,060.00 | 100.00% | 0.00% | \$ 2,151,539.00 | 7.04% | 92.96% |
| PW 09-01 | Ugum Water Treatment Plant Intake | \$ 700,000.00 | 89.08% | 10.92% | \$ 859,801.00 | 51.77% | 48.23% | \$ - | N/A | N/A |
| PW 09-02 | Water Wells | \$ - | N/A | N/A | \$ 3,030,029.00 | 71.18% | 28.82% | \$ 2,500,000.00 | 6.80% | 93.20% |
| PW 09-03 | Water Distribution System | \$ 3,174,748.00 | 99.31% | 0.69% | \$ 10,912,453.00 | 95.30% | 4.70% | \$ - | N/A | N/A |
| PW 09-04 | Pressure Zone Realignment | \$ - | N/A | N/A | \$ 337,110.00 | 100.00% | 0.00% | \$ 1,141,000.00 | 98.81% | 1.19% |
| PW 09-06 | Central Water Distribution System 2005 | \$ 775,002.00 | 93.08% | 6.92% | \$ - | N/A | N/A | \$ - | N/A | N/A |
| PW 09-08 | Mechanical/Electrical Equipment | \$ 1,200,000.00 | 90.71% | 9.29% | \$ 426,799.00 | 98.71% | 1.29% | \$ - | N/A | N/A |
| PW 09-09 | Water Reservoir Internal/External | \$ 2,150,000.00 | 70.20% | 29.80% | \$ - | 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 | 100.00% | 0.00% |
| PW 09-11 | Water System Reservoirs 2005 Improvements | \$ 1,050,000.00 | 99.03% | 0.97% | \$ 13,878,000.00 | 100.00% | 0.00% | \$ 58,830,170.00 | 80.83% | 19.17% |
| PW 11-01 | Distribution System Upgrades | \$ 474,160.00 | 100.00% | 0.00% | \$ - | N/A | N/A | \$ - | N/A | N/A |
| PW 11-02 | Ugum Water Treatment Plant Reservoir | \$ - | N/A | N/A | \$ - | N/A | N/A | \$ - | N/A | N/A |
| PW 12-01 | Water Audit Program & Water Loss Control Plan | \$ 78,459.00 | 19.16% | 80.84% | \$ - | N/A | N/A | \$ 550,000.00 | 70.83% | 29.17% |
| PW 12-02 | Production Plan / Reduce Navy Purchases | \$ 100,000.00 | 99.90% | 0.10% | \$ - | 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% | \$ 1,330,287.00 | 100.00% | 0.00% | \$ 1,220,000.00 | 40.98% | 59.02% |
| PW 12-05 | Tank Major Repair Yigo #1, Mangilao #2, Astumbo#1 | \$ 1,848,013.00 | 95.81% | 4.19% | \$ 11,605,000.00 | 100.00% | 0.00% | \$ 1,822,133.00 | 99.62% | 0.38% |
| PW 12-06 | Tank Replacement Piti & Hyundai | \$ - | N/A | N/A | \$ - | N/A | N/A | \$ 7,300,000.00 | 100.00% | 0.00% |
| PW 12-07 | Assessment of Malojig 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 | \$ 1,200,000.00 | 99.70% | 0.30% |
| | | \$ 42,110,277.45 | | | \$ 53,550,914.00 | | | \$ 81,331,136.00 | | |

Wastewater

| CIP # | CIP Description | 2010 Bond Allotment | % encumbered | % available | 2013 Bond Allotment | % encumbered | % available | 2016 Bond Allotment | % encumbered | % available |
|----------|--|---------------------|--------------|-------------|---------------------|--------------|-------------|---------------------|--------------|-------------|
| WW 05-04 | Wastewater System Planning | \$ 1,492,857.19 | 98.22% | 1.78% | \$ 650,901.00 | 88.51% | 11.49% | \$ 312,983.00 | 100.00% | 0.00% |
| WW 05-05 | Wastewater Vehicles | \$ 235,000.00 | 89.27% | 10.73% | \$ - | N/A | N/A | \$ - | N/A | N/A |
| WW 05-07 | NDWWTP - Chlorine Tanks | \$ 457,981.68 | 100.00% | 0.00% | \$ - | N/A | N/A | \$ - | N/A | N/A |
| WW 09-01 | Lift station upgrades | \$ - | N/A | N/A | \$ 563,148.00 | 96.89% | 3.11% | \$ 1,714,755.00 | 27.10% | 72.90% |
| WW 09-06 | Wastewater Collection System Repl/ Rehabilitation | \$ 1,001,323.00 | 90.98% | 9.02% | \$ 732,358.36 | 101.15% | -1.15% | \$ 1,055,478.00 | 56.98% | 43.02% |
| WW 09-08 | Facilities Plan/Design for Baza Gardens WWTP | \$ 1,250,000.00 | 101.34% | -1.34% | \$ - | 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 | \$ 1,488,378.00 | 77.42% | 22.58% | \$ 9,656,874.00 | 99.69% | 0.31% | \$ 25,048,522.50 | 99.52% | 0.48% |
| WW 11-04 | Facilities Plan/Design for Umatac-Merizo WWTP | \$ 853,858.00 | 100.00% | 0.00% | \$ 371,699.00 | 100.00% | 0.00% | \$ 252,105.00 | 100.00% | 0.00% |
| WW 11-08 | Agat/Santa Rita STP Replacement | \$ 2,217,700.00 | 100.04% | -0.04% | \$ 67,200,000.00 | 100.00% | 0.00% | \$ 2,002,331.00 | 100.00% | 0.00% |
| WW 12-01 | Northern District WWTP Primary Treatment Upgrade | \$ 11,743,514.00 | 97.12% | 2.88% | \$ - | N/A | N/A | \$ - | N/A | N/A |
| WW 12-02 | Biosolids Management Plan | \$ 200,000.00 | 90.08% | 9.92% | \$ - | N/A | N/A | \$ - | N/A | N/A |
| WW 12-03 | Agana WWTP Interim Measures | \$ 11,300,000.00 | 101.14% | -1.14% | \$ 718,075.68 | 100.00% | 0.00% | \$ - | N/A | N/A |
| 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 | 93.57% | 6.43% | \$ - | 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 | 99.93% | 0.07% |
| WW 12-08 | Wastewater System GIS & Mapping | \$ - | N/A | N/A | \$ - | N/A | N/A | \$ - | N/A | N/A |
| WW 12-09 | Wastewater Facility Back Up Power | \$ - | N/A | N/A | \$ - | N/A | N/A | \$ - | N/A | N/A |
| WW 12-10 | Wastewater System Asset Inventory | \$ - | N/A | N/A | \$ - | N/A | N/A | \$ - | N/A | N/A |
| WW 17-01 | Wastewater Sewer System Expansion | \$ - | N/A | N/A | \$ - | N/A | N/A | \$ - | N/A | N/A |
| WW 17-02 | Northern District WWTP Secondary Treatment Upgrade | \$ 1,000,000.00 | 94.83% | 5.18% | \$ 79,893,056.04 | | | \$ 51,186,174.50 | | |
| | | \$ 36,040,241.87 | | | | | | | | |

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 | 31.98% | 68.02% | \$ - | N/A | N/A | \$ - | N/A | N/A |
| EE 09-01 | Wastewater Pumping Station Electrical Upgrade | \$ - | N/A | N/A | \$ 99,861.00 | 100.00% | 0.00% | \$ - | N/A | N/A |
| EE 09-02 | Electrical Upgrade - Water Wells | \$ 354,227.00 | 97.09% | 2.91% | \$ 1,500,000.00 | 100.00% | 0.00% | \$ - | N/A | N/A |
| EE 09-03 | Electrical Upgrade - Water Booster | \$ - | N/A | N/A | \$ - | N/A | N/A | \$ - | N/A | N/A |
| EE 09-04 | Electrical Upgrade - Water Booster | \$ - | N/A | N/A | \$ 977.00 | 100.00% | 0.00% | \$ - | N/A | N/A |
| EE 09-05 | Electrical Upgrade - Other Water | \$ - | N/A | N/A | \$ 60,700.00 | 100.00% | 0.00% | \$ - | N/A | N/A |
| EE 09-06 | SCADA Improvements - Phase I | \$ 250,000.00 | 91.01% | 8.99% | \$ - | 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 | \$ 74,955.00 | 33.29% | 66.71% | \$ 722,359.00 | 100.00% | 0.00% | \$ 1,077,497.00 | 74.43% | 25.57% |
| EE 09-09 | SCADA Improvements - Phase 4 | \$ - | N/A | N/A | \$ - | N/A | N/A | \$ 4,378,118.00 | 84.07% | 15.93% |
| | | \$ 1,798,118.00 | | | \$ 2,383,897.00 | | | \$ 5,455,615.00 | | |

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 | \$ 1,171,465.00 | 99.95% | 0.05% | \$ 1,127,000.00 | 100.00% | 0.00% |
| MC 05-02 | Land Survey | \$ 499,688.00 | 100.38% | -0.38% | \$ 1,052.00 | 100.05% | -0.05% | \$ 1,260,524.00 | 99.35% | 0.65% |
| MC 09-01 | General Plant Improvements | \$ 7,241,000.00 | 99.96% | 0.04% | \$ 2,441,737.00 | 54.83% | 45.17% | \$ 1,543,760.00 | 96.97% | 3.03% |
| MC 15-01 | Information Technology Intergration Improvements | | | | | | | \$ 500,000.00 | 48.81% | 51.19% |
| | | \$ 7,740,688.00 | | | \$ 3,614,254.00 | | | \$ 4,431,284.00 | | |

| | 2010 Bond Allotment |
|-------------------|---------------------|
| CIP Water | \$ 42,110,277 |
| CIP Wastewater | \$ 36,040,242 |
| CIP Electrical | \$ 1,798,118 |
| CIP Miscellaneous | \$ 7,740,688 |
| | \$ 87,689,325 |

| | 2013 Bond Allotment |
|--|---------------------|
| | \$ 53,550,914 |
| | \$ 79,893,056 |
| | \$ 2,383,897 |
| | \$ 3,614,254 |
| | \$ 139,442,121 |

| | 2016 Bond Allotment |
|--|---------------------|
| | \$ 81,331,136 |
| | \$ 51,186,175 |
| | \$ 5,455,615 |
| | \$ 4,431,284 |
| | \$ 142,404,210 |

| 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 | 108 ** | \$83.541 | 95.58% | 9.28 |
| 2013 | \$139.325 | 71 ** | \$136.483 | 97.96% | 23.07 |
| 2015 | \$140.019 | 41 | \$90.326 | 64.51% | 26.44 |

* - End date November 2013 via CCU Resolution 06-FY2014

** - Includes month of February 2020

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 | |

| | | |
|---------------------------------------|---|--|
| <u>BID PACKAGE</u> PW 09-02 | New Well Construction (AG-10-Y-8 & AG-12) | |
| <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-12. Internal GWA discussions underway for survey and appraisal services. GWA executed Change Order with GHD to update the design plans specific to the new well locations. | |
| 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. | |

| | | |
|-------------------------------|--|--|
| <u>RFP</u> 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. | |

| | | |
|---------------------------------------|---|--|
| <u>BID PACKAGE</u> PW 05-07 | Groundwater Well Production Meter Replacement Project | |
| 98% Complete | Activities/Notes: Bid opening held September 27, 2019. Contract processing on-going. | |
| Project Description: | Work to be performed under this project shall consist of replacing the production well meter and associated well head piping. | |

| | | |
|---------------------------------------|--|--|
| <u>BID PACKAGE</u> WW 09-06 | Bayside Sewer Pump Station Improvements Project | |
| 50% Complete | Activities/Notes: Project was advertised on January 28, 2020. Pre-Bid was held of February 7, 2020. | |
| Project Description: | Work to be performed under this project shall consist of converting existing facility to pump station to house two submersible pumps along with improvements to the electrical system and the relocation of a power transformer located near the facility out to the nearest GPA power pole. | |

| | | |
|---------------------------------------|---|--|
| <u>BID PACKAGE</u> PW 09-11 | Tank Repair and Bypass | |
| 95% Complete | Activities/Notes: Processing construction contract. | |
| Project Description: | The work to be performed under this project consist of installing by-pass piping, valves, etc. ahead of certain tank inspection work. The operation of the by-pass will allow the tank inspector to determine appropriate repairs after which the contractor will proceed to repair the tank. | |

| | | |
|---|--|--|
| <u>BID PACKAGE</u> PW 12-01, PW 09-11 | Pressure Zone Realignment Construction Phase I | |
| 95% Complete | Activities/Notes: Bid opening on November 22, 2019. PUC petition to be submitted for February for approval. | |
| Project Description: | Work to be performed under this project consist of installing Pressure Regulating Valves (PRV's), piping, gate valves, etc. at strategic locations within the water distribution system to control the pressure ranges to the customers. | |

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: Resolution No. 10-FY2020 approved construction contract award to AIC, Intl. | 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) 100% (Design) | Activities/Notes: Final design in hand. Additional funding needs to be allotted to construction phase due to expanded design scope. Designer needs to revise 100% plan and specification set. | Completion Date: To be determined (TBD) |
| 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 meet system head requirements. | |

| | | |
|---------------------------|---|--|
| DESIGN PW 09-11 | Northern and Southern Guam Reservoir Design (TG Engineers) | Start Date: May 2015 |
| 80% Complete | Activities/Notes: Design engineer to provide services during construction for Santa Rosa, Sinifa and Santa Rita bid. Inarajan – Land procurement second site | Completion Date: Update: Due to property acquisitions issues for Inarajan and Ugum, design completion 6 months |

| | | |
|----------------------|---|---|
| | related to new BPS's still on-going. Ugum – Tank design on-going, approximately 60% complete. | after property issue resolved. Due to soil conditions, change order for additional foundation design is needed. Designer to submit change order proposal. |
| 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 |
| 80% Complete | Activities/Notes: Chaot #2 – See Central Tank Phase I Updates. Tumon #2 – See Central Tank Phase I Updates. Hyundai – See Central Tank Phase I Updates. Piti – 60% design. GWA is awaiting consultation letter response from Dept. of Agriculture. Consultation letter response is needed before GWA can apply for ROW application to NPS. Manenggon – Awaiting 100% submittal for review. Tamuning #2 (New Airport) – 40% design. | Completion Date: GWA is looking to purchase adjacent lot from private owner. Lot will be used for driveway and detention basin. Cost may be too high to purchase. |
| 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 & Tumon #1. | |

| | | |
|---------------------------------|---|---|
| CONSTRUCTION PW 09-03 | Line Replacement Phase IV (Giant Construction) | Start Date: February 14, 2016 |
|---------------------------------|---|---|

| | | |
|----------------------|---|---|
| 92% Complete | Activities/Notes: Work is on-going at Famha (Chalan Pago), Hahasu (Dededo), Assumption Drive (Piti). | Completion Date: April 30, 2020 |
| | Construction Services | |
| Project Description: | The project is intended 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 at ten known locations throughout the island and 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 |
| 95% Complete | Activities/Notes: GWA working with National Park Service and designer relative to biological/environmental survey. Negotiating Change Order no. 2 with Designer for additional services. Designer met with Army Corp to discuss Clean Water Act Section 404. | Completion Date: TBD |
| | Engineering design services | |
| Project Description: | <ul style="list-style-type: none"> - 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: December 1, 2016 |
| 99% Complete | Activities/Notes: Yigo #1: Final inspection conducted 02/07/2020. Yigo #2: Final inspection conducted 02/07/2020. Astumbo #1 (New Concrete): Contractor remaining work items include testing of instrumentation and electrical upgrade work. Electrical work cannot start until Pernix receives Contractor Licensing Board renewal. | Completion Date: 10/31/18 (LD are being totaled) |
| | 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 |
| 99% complete | Activities/Notes: Working to complete project close out requirements but due to additional time required by contractor the CM services required as well. GWA executed Change Order after CCU approval. | Completion Date: August 2019 |
| 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. | |

| | | |
|--|--|--|
| CONSTRUCTION MANAGEMENT PW 12-04-11, PW 12-06 AND PW 09-11 | Central Tank Phase I (Chaot #2, Tumon #2, Hyundai) Construction Management (TG Engineers, PC) | Start Date: December 2017 |
| 100% complete | Activities/Notes: Conducting field inspection, reviewing submittals from contractor. | Completion Date: Negotiating change order to extend CM services |
| N/A | Construction Management services | |
| 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. |
|--|--|

| | | |
|--|--|--|
| CONSTRUCTION PW 12-04, PW 12-06 AND PW 09-11 | Central Tank Phase I (Chaot #2, Tumon #2, Hyundai) Construction (AIC) | Start Date: February 8, 2018 |
| 65% Complete | Activities/Notes: Tumon #1 tank and offsite work: DPW extended highway permit from January 2020 to end of Feb 2020 for 1 portion of Rt. 1 work. After Feb 2020, Contractor will request DPW for permit extension for remaining work. Remaining major work: St. John PRV/Flow Meter and water line connection, San. Vitores PRVs/Flow Meter and water line connection, Rt. 1 piping. Hyundai tank, bps, and waterline: 8th wall poured. Remaining major work: tank, water line installation, and booster pump station. Chaot #2 tank: Roof poured, wall shotcrete applied, working on interior baffles. | Completion Date: September 9, 2020 (Tumon #1 Tank) December 14, 2020 (Hyundai Tank) May 10, 2020 (Chaot #2 Tank) |
| | Construction Services | |
| 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. | |

| | | |
|--|---|--|
| CONSTRUCTION MANAGEMENT PW 09-11 | Northern and Southern Tank Phase I (Santa Rosa, Sinifa, Santa Rita) Construction Management (GHD) | Start Date: April 2018 |
| 5% Complete | Activities/Notes: Negotiating with CM for contract extension. | Completion Date: Contract expired. |
| N/A | Construction Management services | |
| 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. | |

| | | |
|---------------------------------|---|--|
| CONSTRUCTION PW 09-11 | Northern and Southern Tank Phase I (Santa Rosa, Sinifa, Santa Rita) Construction (AIC) | Start Date: October 2019 |
| 0% Complete | Activities/Notes: Awaiting permit approval from 3 agencies: Dept of Parks and Recreation, GEPA and DPW. | Completion Date: February 21, 2021 |

| | | |
|----------------------|---|--|
| | Permits were submitted October 2019. | |
| | Construction Services | |
| Project Description: | The work performed under this project procurement shall consist of Construction Services of three water reservoirs; 1MG Santa Rosa, 1MG Sinifa and 1MG Santa Rita. Some piping work off site from the reservoir is also required to ensure the reservoirs function optimally. | |

| | | |
|---|---|---|
| DESIGN PW 05-12 | Pressure Zone Realignment and Tank Repair-Replacement (GHD) | Start Date: August 2018 |
| 20% Complete Design will be done in Phases. Phase 1 - 100% (Design) Phase 2 - 30% (Design) | Activities/Notes: Design on-going for Phase 2. Phase 1 - Final plans and specification completed. Phase 2 - 30% submitted in January 2020 | Completion Date: Due to property acquisition issues GWA anticipate December 2020 Phase 1 – August 2019 |
| N/A | Engineering design services | |
| Project Description: | The design project is intended to assess current and recommended pressure zones, and design and install control valves (PRVs, PRSVs) to properly control and measure system flow between zones. Scope also includes setting up pilot DMAs; and design for new or repaired water tanks needed to complete the court order tank requirements. | |

| | | |
|----------------------|---|---|
| CONSTRUCTION | Pressure Zone Realignment and Tank Repair-Replacement (Sumitomo) | Start Date: December 17, 2019 (Notification of Award) |
| | Activities/Notes: Bids Submitted on 11/22/2020. CCU approval of Resolution on 1/28/20. Pending PUC approval. Contract not yet signed. | Completion Date: January 2021 (Anticipated) |
| N/A | Construction Services | |
| Project Description: | The work performed under this project procurement shall consist of Construction Services for the installation of control valves (PRVs, PRSVs), piping, and related electrical upgrades to properly control and measure system flow between zones. | |

| | | |
|---------------------------|---|---|
| DESIGN PW 09-02 | New Well Site Development - Y-08, AG-10, AG-12 (GHD) | Start Date: September 2018 (Extension) |
| 100% (Design) | Activities/Notes: 100% submittal under revision | Completion Date: Design services during construction 2020 |
| N/A | Engineering Design Services | |

| | |
|-----------------------------|---|
| Project Description: | The design project is intended to design 3 new wells to increase production capacity. The design services will consist of preparation of plans, specifications, and estimates (PS&E), which includes Basis of Design, design calculations, construction schedule, construction documents, design drawings in Auto CAD, relevant permit, construction bid support service, and response to request for interpretation/information during construction. |
|-----------------------------|---|

| | | |
|--------------------------------|--|---|
| BID PACKAGE PW 14-01 | Fire Hydrant Replacement Phase I (Mega United Corporation, Ltd.) | Start Date: October 19, 2019 |
| 0% Complete | Activities/Notes: NTP issued last October 15, 2019. Awaiting permit approval from Guam Department of Parks and Recreation. | Completion Date: October 25, 2020 |
| 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. | |

D. CIP Wastewater Section

| | | |
|--------------------------------------|---|--|
| CONSTRUCTION WW 11-08 | Agat-Santa Rita WWTP Phase II (Sumitomo Construction) | Start Date: January 2016 |
| Part 1 of Phase II- 100% Complete | Activities/Notes: Waiting for final CO #16 from the contractor. GWA will release retention. | Completion Date: Part 2 of Phase II – November 26, 2019 |
| Part 2 of Phase II- 100% complete | | |
| CO #14 | 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 Tupalao SPS. | |

| | | |
|--|--|--|
| DESIGN WW 09-06 | Bayside SPS Improvements Design (EMPSCO) | Start Date: July 29, 2016 |
| 100% Design 0% Construction Services | Activities/Notes: Pre- Bid Conference and site visit on February 7, 2019. | Completion Date: December 2019 – Pump Station Rehabilitation |
| CO #3 | 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 and install underground power cable due to GPA's concern that existing power pole, located on the bank is at risk of being lost due to storm surges. | |

| | | |
|--|---|---|
| CONSTRUCTION WW 09-08, WW 11-03 | Baza Gardens Cross Island Road Sewer Conveyance Construction Phase II (BME and Sons) | Start Date: March 2017 |
| 100% Complete | Activities/Notes: Contractor will install the two repaired pumps. GWA will re investigate the low discharge flow rates. | Completion Date: January 14, 2019 |
| CO #6 | 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, WW 11-03 | Baza Gardens Cross Island Road Sewer Conveyance Construction Phase III (Sumitomo Construction) | Start Date: June 2017 |
| 100% Complete | Activities/Notes: Project Close out documents underway. Contractor requested the GM to evaluate CO #5. Deduct of EQ tank2 and Time extension. | Completion Date: To be determined |
| CO #3 | 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 |
| 100% Design 98% Construction | Activities/Notes: <ul style="list-style-type: none"> - Ribbon Cutting Ceremony held on January 9, 2020 - Plant has been commissioned and all components are operational except the recirculation pump station. - Temporary inflatable dam has been installed in the recirculation pond to allow completion of the pipeline to the recirculation pump station. - DCA has been monitoring Moorhens and have not seen any detrimental impacts due to the construction. - Final SCADA checkout scheduled for week of 2/17. - Substantial Completion determined to be January 3, 2020 and recommended to GWA. Change Proposals: <ul style="list-style-type: none"> - Compensation request for 21 calendar days for inclement weather delays is in Change Order #19. - CO#20 - Painting existing building exterior - CTHD signed on 12/3/19; Submitted to GWA Finance on 12/5/19. | Completion Date: January 6, 2020 |

| | | |
|----------------------|---|--|
| | <ul style="list-style-type: none"> - CO#21 - Installation of Aqua Barrier sent to contractor. - Executed Change Orders through #18. | |
| | 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 terraces are being regraded to ensure appropriate distribution of effluent through the entire terrace. | |

| | | |
|--|--|---|
| CONSTRUCTION MANAGEMENT WW 11-04 | Umatac-Merizo WWTP Design Build Improvements Project (SSFM Inc) | Start Date: September 7, 2017 |
| 98% | Activities/Notes: Continuing on-site inspection of field activities. Value of services may exceed current contract amount, depending on length of work required in December. A change order is needed to extend the services provided by the OSR beyond December 31, 2019. | Completion Date: January 2020 |
| | 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 On-Site Representative is to ensure materials are installed and installation conforms to the contract plans and specifications and that all required testing is performed and passes. | |

E. CIP Engineering Support

| | | |
|--|---|---|
| DESIGN EE 09-08 | SCADA System for Water and Wastewater Facilities Phase A-1 (AECOM) | Start Date: June 11, 2015 |
| 100% Complete (Design) 81% Services during construction | Activities/Notes: Continuing to provide support. | Completion Date: November 2017 - Design December 31, 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. |
|--|---|

| | | |
|---|---|--|
| CONSTRUCTION EE 09-08, EE 09-09 | SCADA Phase A1 Construction (G4S Security) | Start Date: July 13, 2018 |
| 43% Construction | Activities/Notes: Contractor continuing to progress however willfully ignoring certain contract requirements. | Completion Date: December 31, 2019 |
| | Construction services | |
| Project Description: | The work performed under this project procurement shall consist of Construction of SCADA ready instrumentation at several water and waste water facilities throughout the island. | |

| | | |
|--|--|--|
| CONSTRUCTION MANAGEMENT EE 09-08, EE 09-09 | SCADA Phase A1 Construction Management (GHD) | Start Date: July 13, 2018 |
| 96% Complete | Activities/Notes: Change order submitted for Time and Material work as Special Damages to Contractor. | Completion Date: December 31, 2019 |
| | Construction Management services | |
| Project Description: | The work performed under this project procurement shall consist of Construction Management and Inspection Services for the installation SCADA ready instrumentation at several water and waste water facilities throughout the island. 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. | |

F. GIS Section

| | | |
|----------------------------|---|---|
| MAPPING MC 05-02 | Island Wide Survey- (Duenas, Camacho & Ass.) | Start Date: December 2007 |
| 99% complete | Activities/Notes: Map regarding Airport Tank easement boundary is pending easement agreement with GIAA and final parceling map. | Completion Date: October 2019 |
| | 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, including the lots which are not registered under GWA's name. | |

| | | |
|----------------------------|--|---------------------------------------|
| MAPPING MC 05-02 | Island Wide Survey PH II - (Duenas, Camacho & Ass.) | Start Date: August 30, 2017 |
|----------------------------|--|---------------------------------------|

| | | |
|----------------------|--|---|
| 78% complete | Activities/Notes: First set of land registration maps (5): DCA performing field survey. Second set (20): 20 maps signed by the Governor of Guam. | Completion Date: December 2019 - Request for extension sent to GM 10/29/2019 – due to myriad of reasons, extended periods of inclement weather, delays in DLM Survey review and approval of property maps and changes of additional scope of survey work. |
| | 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 2019-2020


| | 2020 | | | | | | | | | | | |
|----------------------------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Description | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
| Building Permit | 23 | | | | | | | | | | | |
| Occupancy Permit | 6 | | | | | | | | | | | |
| New Installation | 4 | | | | | | | | | | | |
| Sewer Application | 0 | | | | | | | | | | | |
| Sewer Inspection | 0 | | | | | | | | | | | |
| Private Utility Acceptance | 0 | | | | | | | | | | | |
| Relocation of Water Meter | 0 | | | | | | | | | | | |
| Tapping-Water | 1 | | | | | | | | | | | |
| Tapping-Sewer | 1 | | | | | | | | | | | |
| Clearance-Water | 14 | | | | | | | | | | | |
| Clearance-Sewer | 14 | | | | | | | | | | | |
| Highway Encroachment | 36 | | | | | | | | | | | |
| Verification of Utilities | 6 | | | | | | | | | | | |
| Fire Flow Test | 0 | | | | | | | | | | | |
| Schedule Water Outage | 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.

NOTE: Table below only reflects SRF projects that are still active. All other projects previously shown are on prior reports

PROJECT STATUS FOR FEBRUARY 2020 TO BE UPDATED PRIOR TO THE FEBRUARY CCU MEETING

| Project | Project Description | Project Manager | Phase | | Start Date (NTP Issued) | Anticipated Completion Date | Contract Amount (+) change orders | Contractor | Status as of 1/16/2020 |
|---------|---|------------------|--------------|----------------|-------------------------|-----------------------------|-----------------------------------|--------------|---|
| 7 | Groundwater Wells Rehabilitation (F-3, A-2, A-7, A-12, D-5) | Brown & Caldwell | Design | 4 | 5/27/2016 | 2/28/2018 (for design only) | \$ 1,758,247.00 | AECOM | Design services during construction on hold until construction IFB is issued |
| | | | Construction | | 8/15/2019 | 8/30/2020 | | | No bid proposals were received by the deadline. GWA Engineering is exploring other options, prior to rebidding. |
| | | | Const. Mgmt | | 8/15/2019 | 8/30/2020 | | | RFP received and evaluated. GM Determination approved and GWA to start scope and fee negotiations. |
| 8 | Tumon Sewer Hot Spots | Brown & Caldwell | Design | 3 | 6/24/2016 | 10/30/2017 for design only | \$ 572,089.00 | TG Engineers | TGT to provide engineering services during bid process. |
| | | | Construction | | 12/1/2018 | 12/31/2019 | | | Given that the bids received for just the Tamuning Hotspots have come in much higher than the engineers cost estimates GWA is planning to separate the bids for Tumon Hotspots from the Tamuning bids. |
| | | | Const. Mgmt | See Project 15 | 5/31/2019 | 5/31/2020 | See Project 15 | Am Orient | Procurement 100%. Contract fully executed. CM services to be on hold until bidding restarted. |
| 12 | RT4 Relief Sewer Line Rehabilitation and Replacement | Brown & Caldwell | Design | 9 | 3/1/2016 | 4/22/2017 | \$ 794,000.00 | AECOM | AECOM assisting as needed. Submitted CO for AMDRP revision and additional funding for monitoring. |
| | | | Construction | 5 | 9/3/2018 | 6/30/2020 | \$ 3,990,608.00 | Insituform | Insituform/Mocon still cleaning and pre-CCTV; there have been continuous issues with the vector truck breaking down further delaying the completion of the cleaning, and thereby the CCTV and lining operations. Insituform start CIPP on 10/25. Finished first three shots. Next shot scheduled for... whenever they can finish cleaning. Mocon has started cleaning again this week, but until they can finish, the remaining lining will be delayed. Looking like lining will finish beginning of February. Received CCTV for review on completed sections. Areas completed looks acceptable, with mostly just minor wrinkles. Still looking at possible need for grouting, depending on what is seen on along Rt 1. |
| | | | Construction | 6 | 9/25/2018 | 6/30/2020 | \$ 3,407,848.00 | ProPac | PPBC working on manhole rehab. Currently an issue with infiltration between pipe and liner entering the manholes, which Insituform has said they will fix. Finished 18" intertie and new SMH-6901A. Working on installation of new pipe between SMH-6901A to the upstream SMH-6901. Submitted CO1 (193 days for \$276,760.19) for time extension and associated costs, mainly due to permitting delays, work hour time restrictions, additional traffic control requirements, and coordination. |
| | | | Const. Mgmt | 6 | 11/15/2018 | 12/31/2019 | \$ 702,678.13 | EMPSCO | Working with contractors on schedules, submittals, permitting, and contractor's request for additional time and costs. Also working with contractors in the field. |
| 13 | Groundwater Wells Rehabilitation | Brown & Caldwell | Design | | | | | | The design was previously completed under bond funding. |

GWA Work Session - February 18, 2020 - DIVISION REPORTS

| Project | Project Description | Project Manager | Phase | | Start Date (NTP Issued) | Anticipated Completion Date | Contract Amount (+/- change orders) | Contractor | Status as of 1/16/2020 |
|------------------------------|---|------------------|--------------|----|-------------------------|---|---|--------------|---|
| (D-3, D-17, D-18, D-22, M-9) | needs replacing will be re-drilled. D-3, D-17, D-18, D-22, and M-9. | | Construction | 7 | 8/19/2016 | 3/30/2018 (completion date under analysis) | \$ 6,158,240.67 | Pacific Rim | Final invoice paid on 9/20/2019 Record drawings are complete Final Documents have been turned over to GWA |
| | | | Const. Mgmt | 7 | 3/22/2016 | 3/30/2018 (completion date under analysis) | \$ 1,041,722.56 | EA | Submitted final invoice to GWA. Finance requested additional documentation which is not typical of closeout for CM. Working with Finance. |
| 14 | Southern SSES Sewer Rehabilitation (Baza Gardens-Talofofo) | Brown & Caldwell | Design | | | | The design was previously completed under bond funding. | | |
| | | | Construction | 8 | 8/2/2016 | Due to issue related to Santa Rita sewer project completion under analysis. | \$ 1,189,815.00 | ProPac | <p><u>Santa Rita</u></p> <ul style="list-style-type: none"> • 401C application submitted to GEPA on 8/12/19. Continuing to provide information as requested. Requiring Wetland Delineation map; PPBC contracting DCA to perform services. • Federal Consistency submitted approved 11/25/2019. • SHPO – need AMDP; PPBC having difficulty obtaining services due to archaeologists being overwhelmed with work. • NWP delivered to USEPA for submission on 10/24/19 (included biological assessment and AMDP from Phase I). • GWA has prepared the perpetual legal easement document, Property owner reviewed and agreed to legal documents, under government review. • Final design documents not received, only Civil drawing sheets. Continuing to follow up. Anticipated next week. • BC conducted hydraulic analysis of force main discharging into existing sewer, one segment is at capacity. • Pre-Fab Wet Well: initial quotation is ~\$150,000. Lead time is 25-28 weeks. <p><u>Baza Gardens/Talofofo</u></p> <ul style="list-style-type: none"> • PPBC completed work for Change Order 4 on 11/4/19 (\$5,161.52). Will process invoice this week. • Requesting change order for unanticipated ground water management (~\$1,200). • Need final CCTV of finished work. |
| | | | Const. Mgmt | 8 | 7/29/2016 | | \$ 347,945.93 | EMPSCO | Will start close out process once invoice is processed. Negotiated Change Order for additional CM services covering project closeout amounts to \$6,067.66. Change Order executed by GWA on 3/28/19 and transmitted to CM on 3/29/2019. A deductive change order will be issued to PPBC for the final amount of this change order after all CM services are complete. |
| 15 | Tamuning Sewer Hot Spots | G. Gattoc | Design | 10 | 9/9/2016 | 10/31/2017 (for design only) | \$ 663,629.00 | TG Engineers | TGE to provide engineering services during bid process. |
| | | | Construction | | 1/30/2020 | 12/31/2020 | | | Project awarded to Ian Corporation. Base Bid \$1,093,955. Engineering is processing the contract. Contractor acquiring pollution liability insurance. Contractor to begin permitting process. |
| | | | Const. Mgmt | 9 | 3/31/2019 | 3/31/2020 | \$531,000.75 | Am Orient | CM services to be on hold until bidding restarted. |

GWA Work Session - February 18, 2020 - DIVISION REPORTS

| Project | Project Description | Project Manager | Phase | | Start Date (NTP Issued) | Anticipated Completion Date | Contract Amount (+) change orders | Contractor | Status as of 1/16/2020 |
|---------|---|-------------------------|--------------|----|-------------------------|-----------------------------|--|--------------|--|
| 16 | Talofofo Sewer Pump Stations (4 stations) | J. Miller | Design | 1A | 8/17/2016 | 11/30/2017 | \$ 495,818.86 | EMPSCO | <u>Talofofo Wastewater Pump Stations</u> • Final Design completed June 2018 <u>Chalan Pago Wastewater Pump Station</u> • Awaiting execution of CO-03 for EMPSCO to update Biological Assessment. CFO required a Memo to Procurement File prior to approval. Memo signed by GMA and sent to Finance 1/14/20. • Previous Mechanical PE left design firm. Awaiting updated mechanical BOO and plans from new EMPSCO's Mechanical PE. |
| | | | Construction | 9 | 12/27/2018 | 4/27/2020 | \$2,363,718 | Giant Const. | • Installation of valve vaults, lift stations, and electrical handholes ongoing for Ladera 1 and Ayuyu. Terminal manhole collars completed on Ayuyu, Ladera 1, and Ladera 2. • DPW approved temporary access to ponding basins on 12/26/2019. • Change Order #02 to include deduct for incorrect bid item subtotal, Ayuyu waterline adjustment, and GPA compliance modifications. Sent to Finance on 1/14/20. • Payment Application #05 submitted on 1/9/20. Pending corrections to SOV and missing payroll reports. • RFI-07 regarding relocation of GTA line on Taitague. GTA conduct obstructing installation of lift station. Jacob Miller currently in contact with GTA. • RFI-08 requiring new location of CMU Wall and Electrical Handhole on Ladera 1 because of space constraints. Under review. |
| | | | Const. Mgmt | | 12/1/2018 | 12/31/2019 | | | GWA Engineering will manage construction management tasks. |
| | | | | | | | | | |
| 17 | Chalan Pago Sewer Pump Station | J. Davis | Design | | 8/17/2016 | 11/30/2017 | The design will be included with the Talofofo Pump Station design project. | | |
| | | | Construction | | 5/15/2019 | 3/30/2020 | | | • Awaiting execution of CO3 for EMPSCO to update Biological Assessment. |
| | | | Const. Mgmt | | 5/15/2019 | 3/30/2020 | | | |
| 18 | Water Hydraulic Model (SCADA ready instruments to update Model) | Barbara Cruz | Design | 12 | 8/3/2016 | 3/15/2017 | \$ 523,268.00 | GHD | Design complete. |
| | | | Construction | | 6/15/2019 | 6/30/2020 | | | Pressure Zone Realignment (Phase 1 for the Water Hydraulic Model) construction awarded to Sumitomo, \$4.1 mil. Pending CCU approval and contract signing. |
| | | | Const. Mgmt | | 6/15/2019 | 6/30/2020 | | | |
| 23 | Project Advertisement | Engineering/Procurement | MISC | 1 | | | \$ 25,172.50 | PDN/Post | On-going |

**GUAM WATERWORKS AUTHORITY
JANUARY 31, 2020
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 FY20 VS FY19 | C | 4 |
| INCOME STATEMENT YTD ACTUALS VS YTD BUDGET | D | 5 |
| INCOME STATEMENT YTD ACTUALS FY20 VS FY19 | E | 6 |
| SCHEDULE OF CASH RESTRICTED/UNRESTRICTED | F | 7 |
| AGING REPORT - GOVERNMENT RECEIVABLES | G | 8 |
| AGING REPORT - RECEIVABLES BY RATE CLASS | H | 9 |
| AGING REPORT - ACCOUNTS PAYABLE | I | 10 |
| SYSTEM DEVELOPMENT CHARGES PROJECT STATUS | J | 11 |
| WATER DEMAND BY RATE CLASS FY2015 - FY2020 | K | 12 |

GUAM WATERWORKS AUTHORITY
Balance Sheet
January 31, 2020

SCHEDULE A

| ASSETS AND DEFERRED OUTFLOWS of RESOURCES | Unaudited January 31, 2020 | Unaudited September 30, 2019 | Increase (Decrease) |
|--|---------------------------------------|---|--------------------------------|
| <u>Current Assets</u> | | | |
| Cash | | | |
| Unrestricted (Schedule F) | 8,118,701 | 4,962,036 | 3,156,665 |
| Restricted Funds (Schedule F) | 84,800,314 | 86,491,728 | (1,691,414) |
| Accounts Receivable Trade, Net of Allowance for Doubtful Receivables of \$8,529,250 at Jan 31, 2020 and \$7,789,943 at Sep 30, 2019 | 13,683,257 | 14,346,247 | (662,990) |
| Federal Receivable | 434,326 | 3,711,435 | (3,277,109) |
| Other Receivable | 1,722,107 | 1,794,082 | (71,973) |
| Materials & Supplies Inventory, Net of Allowance for Obsolescence of \$64,131 at Jan 31, 2020 and \$64,131 at Sep 30, 2019 | 3,855,253 | 3,897,352 | (42,100) |
| Total Current Assets | 112,613,958 | 115,202,881 | (2,588,922) |
| <u>Property, Plant and Equipment</u> | | | |
| Utility plant in service | | | |
| Water system | 382,393,656 | 381,484,623 | 909,033 |
| Wastewater system | 429,975,528 | 429,896,579 | 78,949 |
| Non-utility property | 23,780,964 | 23,200,625 | 580,339 |
| Total property | 836,150,149 | 834,581,827 | 1,568,322 |
| Less: Accumulated Depreciation | (329,523,060) | (321,561,403) | (7,961,656) |
| Land | 3,914,815 | 3,914,815 | - |
| Construction Work in Progress | 117,721,139 | 100,162,613 | 17,558,525 |
| Property, Plant and Equipment, net | 628,263,042 | 617,097,852 | 11,165,191 |
| <u>Other noncurrent assets</u> | | | |
| Restricted cash (Schedule F) | 97,036,284 | 109,937,511 | (12,901,227) |
| Investments (Schedule F) | 42,699,026 | 43,808,664 | (1,109,638) |
| Other Prepaid Expenses | 1,326,884 | 1,667,816 | (340,932) |
| Total other noncurrent assets | 141,062,193 | 155,413,991 | (14,351,798) |
| Total Assets | 881,939,193 | 887,714,724 | (5,775,529) |
| Deferred outflows of resources | | | |
| Debt defeasance due to bond refunding | 11,700,478 | 11,976,380 | (275,902) |
| Deferred outflows from pension | 4,233,025 | 4,233,025 | - |
| Deferred outflows from OPEB | 9,070,814 | 9,070,814 | - |
| Total Assets and Deferred Outflows of Resources | 906,943,510 | 912,994,943 | (6,051,431) |
| LIABILITIES, DEFERRED INFLOWS of RESOURCES AND NET ASSETS | | | |
| <u>Current Liabilities</u> | | | |
| Current maturities of long-term debt | | | |
| Series 2010 Revenue Bond | 1,895,000 | 1,895,000 | - |
| Series 2013 Revenue Bond | 2,695,000 | 2,695,000 | - |
| Series 2014 Refunding Bond | 3,760,000 | 3,760,000 | - |
| Series 2016 Revenue Bond | 420,000 | 420,000 | - |
| Notes Payable | 1,213,388 | 2,319,108 | (1,105,720) |
| Accounts Payable -Trade | 3,487,059 | 4,121,364 | (634,305) |
| Accrued and Other Liabilities | 957,346 | 1,374,650 | (417,304) |
| Interest Payable | 2,117,099 | 6,359,303 | (4,242,204) |
| Accrued Payroll and Employee Benefits | 1,439,845 | 1,685,235 | (245,390) |
| Accrued Annual Leave | 1,054,545 | 1,054,545 | - |
| Current portion of employee annual leave | 584,204 | 584,204 | - |
| Contractors' Payable | 13,723,534 | 22,094,820 | (8,371,286) |
| Customer and Other Deposits | 2,224,603 | 2,349,490 | (124,888) |
| Total Current Liabilities | 35,571,622 | 50,712,718 | (15,141,095) |
| <u>Long Term Debt, less current maturities</u> | | | |
| Series 2013 Revenue Bond | 169,935,000 | 169,935,000 | - |
| Series 2014 Refunding Bond | 65,140,000 | 65,140,000 | - |
| Series 2016 Revenue Bond | 142,890,000 | 142,890,000 | - |
| Series 2017 Refunding Bond | 107,365,000 | 107,365,000 | - |
| Unamortized Bond Premium/Discount | 31,383,711 | 31,863,590 | (479,879) |
| Net pension liability | 45,451,352 | 45,451,352 | - |
| Net OPEB obligation | 88,950,661 | 88,950,661 | - |
| Employee Annual Leave, Less Current Portion | 838,545 | 838,545 | - |
| Total Liabilities | 687,525,891 | 703,146,866 | (15,620,975) |
| Deferred inflows of resources: | | | |
| Deferred inflows from pension | 1,870,115 | 1,870,115 | - |
| Deferred inflows from OPEB | 8,741,900 | 8,741,900 | - |
| Total Liabilities and Deferred Inflows of Resources | 698,137,906 | 713,758,880 | (15,620,975) |
| Net Assets | 208,805,604 | 199,236,062 | 9,569,542 |
| Total Liabilities, Deferred Inflows of Resources and Net Assets | 906,943,510 | 912,994,943 | (6,051,433) |

GUAM WATERWORKS AUTHORITY
Statement of Operations and Retained Earnings
Comparative Budget vs. Actual for the period ending January 31, 2020

SCHEDULE B

| | Month to Date | | Variance |
|---|------------------|--------------------|--------------------|
| | Budget | Actual (Unaudited) | Favorable / |
| | January-20 | January-20 | (Unfavorable) |
| OPERATING REVENUES | | | |
| Water Revenues | 5,887,215 | 5,677,227 | (209,989) |
| Wastewater Revenues | 3,401,093 | 3,231,118 | (169,975) |
| Legislative Surcharge | 304,243 | 288,036 | (16,207) |
| Other Revenues | 38,254 | 25,810 | (12,444) |
| System Development Charge | 97,773 | 20,849 | (76,924) |
| Total Operating Revenues | 9,728,578 | 9,243,040 | (485,537) |
| OPERATING AND MAINTENANCE EXPENSES | | | |
| Water Purchases | 667,577 | 664,907 | 2,670 |
| Power Purchases | 1,251,315 | 1,348,139 | (96,824) |
| Total Utility Costs | 1,918,892 | 2,013,046 | (94,154) |
| Salaries and Wages | 1,782,365 | 1,734,611 | 47,754 |
| Pension and Benefits | 562,238 | 553,171 | 9,067 |
| Total Salaries and Benefits | 2,344,603 | 2,287,782 | 56,821 |
| Capitalized Labor and Benefits | (308,333) | (311,461) | 3,128 |
| Net Salaries and Benefits | 2,036,269 | 1,976,321 | 59,949 |
| Administrative and General Expenses | | | |
| Sludge removal | 132,971 | 125,324 | 7,647 |
| Chemicals | 185,801 | 182,191 | 3,610 |
| Materials & Supplies | 191,906 | 191,862 | 43 |
| Transportation | 51,148 | 50,688 | 459 |
| Communications | 17,054 | 16,727 | 327 |
| Claims | 10,417 | 10,052 | 364 |
| Insurance | 79,461 | 77,860 | 1,601 |
| Training & Travel | 8,417 | - | 8,417 |
| Advertising | 6,500 | 1,829 | 4,671 |
| Miscellaneous | 114,632 | 113,950 | 682 |
| Regulatory Expense | 45,029 | 41,129 | 3,900 |
| Bad Debts Provision | 180,148 | 179,932 | 216 |
| Total Administrative and General Expense | 1,023,483 | 991,547 | 31,936 |
| Depreciation Expense | 1,759,065 | 1,993,832 | (234,767) |
| Contractual Expense | | | |
| Audit & Computer Maintenance | 58,783 | 44,709 | 14,074 |
| Building rental | 38,361 | 35,141 | 3,220 |
| Equipment rental | 43,980 | 37,299 | 6,681 |
| Legal | 512 | - | 512 |
| Laboratory | 20,862 | 16,976 | 3,886 |
| Other | 214,458 | 214,442 | 16 |
| Total Contractual Expense | 376,956 | 348,566 | 28,390 |
| Retiree Supp. Annuities and health care costs | 249,871 | 187,512 | 62,359 |
| Contribution to Government of Guam | 51,975 | 50,334 | 1,641 |
| Total Retiree Benefits | 301,846 | 237,846 | 64,000 |
| Total Operating Expenses | 7,416,512 | 7,561,157 | (144,646) |
| Earnings (Loss) from Operations | 2,312,066 | 1,681,883 | (630,183) |
| Interest Income - 2010/13/14/16/17 Series Bond | 84,943 | 175,824 | 90,881 |
| Interest Income - Other Funds | 13,856 | 44,294 | 30,438 |
| Interest Income - SDC | 2,072 | 10,563 | 8,491 |
| Interest Expense - 2010/13/14/16/17 Series Bond | (2,387,785) | (2,117,099) | 270,686 |
| Interest Expense - ST BOG | (19,762) | (7,577) | 12,185 |
| Loss on Asset Disposal | - | (60,489) | (60,489) |
| AFUDC | 1,157,306 | - | (1,157,306) |
| Amortization of Discount, Premium and Issuance Costs | (17,798) | 119,970 | 137,768 |
| Defeasance due to bond refunding | (16,201) | (68,976) | (52,775) |
| Deferred outflows from pension | - | - | - |
| Prior Year Adjustment | - | 36,592 | 36,592 |
| Total non-operating revenues (expenses) | (1,183,369) | (1,866,898) | (683,529) |
| Net Income (Loss) before capital contributions | 1,128,697 | (185,015) | (1,313,712) |
| Capital Contributions | | | |
| Grants from US Government | 5,533,205 | 313,163 | (5,220,043) |
| Grants from GovGuam & Others | - | - | - |
| Total Capital Contributions | 5,533,205 | 313,163 | (5,220,043) |
| Change in Net Assets | 6,661,902 | 128,147 | (6,533,755) |
| Debt Service Calculation | | | |
| Earnings From Operations | 2,312,066 | 1,681,883 | |
| System Development Charge | (97,773) | (20,849) | |
| Retiree COLA | 51,975 | 50,334 | |
| Interest/Investment Income | 13,856 | 44,294 | |
| Depreciation | 1,759,065 | 1,993,832 | |
| Balance Available for Debt Service per Section 6.12 | 4,039,190 | 3,749,494 | |
| Working Capital Reserve Available for Debt Service | 934,811 | 968,394 | |
| Transfer to Working Capital - Debt Service Reserve | - | - | |
| Transfer to Working Capital - O&M Reserve | - | - | |
| Balance Available for Debt Service inclusive of reserves | 4,974,001 | 4,717,888 | |
| Debt Service | | | |
| Principal | 730,833 | 730,833 | |
| Interest | 2,117,099 | 2,117,099 | |
| Total | 2,847,932 | 2,847,932 | |
| Debt Service Coverage (1.25X) - per Section 6.12 (Indenture) | 1.42 | 1.32 | |
| Debt Service Coverage (1.75X) inclusive of reserves (PUC) | 1.75 | 1.66 | |

GWA Work Session - February 18, 2020 - DIVISION REPORTS

GUAM WATERWORKS AUTHORITY
Statement of Operations and Retained Earnings (Unaudited)
Comparative for the period ending January 31, 2020 and 2019

SCHEDULE C

| | Month to Date | | Variance |
|---|------------------|------------------|--------------------|
| | Actual | Actual | Increase / |
| | January-20 | January-19 | (Decrease) |
| OPERATING REVENUES | | | |
| Water Revenues | 5,677,227 | 5,566,664 | 110,563 |
| Wastewater Revenues | 3,231,118 | 2,825,660 | 405,458 |
| Legislative Surcharge | 288,036 | 301,610 | (13,574) |
| Other Revenues | 25,810 | 48,922 | (23,111) |
| System Development Charge | 20,849 | 26,652 | (5,803) |
| Total Operating Revenues | 9,243,040 | 8,769,508 | 473,532 |
| OPERATING AND MAINTENANCE EXPENSES | | | |
| Water Purchases | 664,907 | 519,364 | 145,543 |
| Power Purchases | 1,348,139 | 1,231,315 | 116,824 |
| Total Utility Costs | 2,013,046 | 1,750,679 | 262,368 |
| Salaries and Wages | 1,734,611 | 1,549,552 | 185,060 |
| Pension and Benefits | 553,171 | 487,383 | 65,788 |
| Total Salaries and Benefits | 2,287,782 | 2,036,934 | 250,848 |
| Capitalized Labor and Benefits | (311,461) | (308,333) | (3,128) |
| Net Salaries and Benefits | 1,976,321 | 1,728,601 | 247,720 |
| Administrative and General Expenses | | | |
| Sludge removal | 125,324 | 72,446 | 52,879 |
| Chemicals | 182,191 | 105,280 | 76,911 |
| Materials & Supplies | 191,862 | 152,143 | 39,719 |
| Transportation | 50,688 | 66,517 | (15,829) |
| Communications | 16,727 | 12,460 | 4,267 |
| Claims | 10,052 | 28,240 | (18,188) |
| Insurance | 77,860 | 75,172 | 2,689 |
| Training & Travel | - | 29,764 | (29,764) |
| Advertising | 1,829 | 7,635 | (5,806) |
| Miscellaneous | 113,950 | 91,795 | 22,156 |
| Regulatory Expense | 41,129 | 20,330 | 20,799 |
| Bad Debts Provision | 179,932 | 114,625 | 65,307 |
| Total Administrative and General Expense | 991,547 | 776,407 | 215,139 |
| Depreciation Expense | 1,993,832 | 1,759,065 | 234,767 |
| Contractual Expense | | | |
| Audit & Computer Maintenance | 44,709 | 47,012 | (2,303) |
| Building rental | 35,141 | 35,211 | (70) |
| Equipment rental | 37,299 | 139,716 | (102,417) |
| Legal | - | - | - |
| Laboratory | 16,976 | 34,440 | (17,464) |
| Other | 214,442 | 212,923 | 1,518 |
| Total Contractual Expense | 348,566 | 469,302 | (120,735) |
| Retiree Supp. Annuities and health care costs | 187,512 | 234,857 | (47,345) |
| Contribution to Government of Guam | 50,334 | 50,000 | 334 |
| Total Retiree Benefits | 237,846 | 284,857 | (47,011) |
| Total Operating Expenses | 7,561,157 | 6,768,911 | 792,247 |
| Earnings (Loss) from Operations | 1,681,883 | 2,000,597 | (318,714) |
| Interest Income - 2010/13/14/16/17 Series Bond | 175,824 | 376,950 | (201,126) |
| Interest Income - Other Funds | 44,294 | 77,874 | (33,579) |
| Interest Income - SDC | 10,563 | 16,188 | (5,625) |
| Interest Expense - 2010/13/14/16/17 Series Bond | (2,117,099) | (2,137,785) | 20,686 |
| Interest Expense - ST BOG | (7,577) | (23,855) | 16,277 |
| Loss on Asset Disposal | (60,489) | - | (60,489) |
| AFUDC | - | 1,157,306 | (1,157,306) |
| Amortization of Discount, Premium and Issuance Costs | 119,970 | 119,709 | 261 |
| Defeasance due to bond refunding | (68,976) | (69,534) | 558 |
| Deferred outflows from pension | - | (8,931) | 8,931 |
| Prior Year Adjustment | 36,592 | (4,746) | 41,338 |
| Total non-operating revenues (expenses) | (1,866,898) | (496,823) | (1,370,075) |
| Net Income (Loss) before capital contributions | (185,015) | 1,503,774 | (1,688,789) |
| Capital Contributions | | | |
| Grants from US Government | 313,163 | 635,266 | (322,104) |
| Grants from GovGuam & Others | - | - | - |
| Total Capital Contributions | 313,163 | 635,266 | (322,104) |
| Change in Net Assets | 128,147 | 2,139,040 | (2,010,893) |
| Debt Service Calculation | | | |
| Earnings From Operations | 1,681,883 | 2,000,597 | |
| System Development Charge | (20,849) | (26,652) | |
| Retiree COLA | 50,334 | 50,000 | |
| Interest/Investment Income | 44,294 | 77,874 | |
| Depreciation | 1,993,832 | 1,759,065 | |
| Balance Available for Debt Service per Section 6.12 | 3,749,494 | 3,860,884 | |
| Working Capital Reserve Available for Debt Service | 968,394 | 950,860 | |
| Transfer to Working Capital - Debt Service Reserve | - | - | |
| Transfer to Working Capital - O&M Reserve | - | - | |
| Balance Available for Debt Service inclusive of reserves | 4,717,888 | 4,811,744 | |
| Debt Service | | | |
| Principal | 730,833 | 476,250 | |
| Interest | 2,117,099 | 2,137,785 | |
| Total | 2,847,932 | 2,614,035 | |
| Debt Service Coverage (1.25X) - per Section 6.12 (Indenture) | 1.32 | 1.48 | |
| Debt Service Coverage (1.75X) inclusive of reserves (PUC) | 1.66 | 1.84 | |

GUAM WATERWORKS AUTHORITY
Statement of Operations and Retained Earnings
Comparative Budget vs. Actual for the period ending January 31, 2020

SCHEDULE D

| | Year to Date Budget January-20 | Actual (Unaudited) January-20 | Variance Favorable / (Unfavorable) |
|---|--------------------------------------|----------------------------------|--|
| OPERATING REVENUES | | | |
| Water Revenues | 23,548,861 | 22,719,472 | (829,389) |
| Wastewater Revenues | 13,604,371 | 13,076,153 | (528,218) |
| Legislative Surcharge | 1,216,973 | 1,167,793 | (49,180) |
| Other Revenues | 153,015 | 120,925 | (32,090) |
| System Development Charge | 391,090 | 132,286 | (258,804) |
| Total Operating Revenues | 38,914,310 | 37,216,630 | (1,697,681) |
| OPERATING AND MAINTENANCE EXPENSES | | | |
| Water Purchases | 2,375,309 | 2,374,676 | 633 |
| Power Purchases | 5,395,260 | 5,392,557 | 2,703 |
| Total Utility Costs | 7,770,569 | 7,767,233 | 3,336 |
| Salaries and Wages | 7,129,460 | 6,608,807 | 520,654 |
| Pension and Benefits | 2,248,951 | 2,133,977 | 114,974 |
| Total Salaries and Benefits | 9,378,411 | 8,742,784 | 635,628 |
| Capitalized Labor and Benefits | (1,233,333) | (1,150,124) | (83,210) |
| Net Salaries and Benefits | 8,145,078 | 7,592,660 | 552,418 |
| Administrative and General Expenses | | | |
| Sludge removal | 508,085 | 501,297 | 6,788 |
| Chemicals | 755,206 | 754,481 | 725 |
| Materials & Supplies | 724,422 | 626,899 | 97,523 |
| Transportation | 184,590 | 182,960 | 1,630 |
| Communications | 50,217 | 44,598 | 5,618 |
| Claims | 33,667 | 31,693 | 1,974 |
| Insurance | 317,843 | 311,666 | 6,177 |
| Training & Travel | 61,667 | 59,248 | 2,418 |
| Advertising | 10,000 | 7,100 | 2,900 |
| Miscellaneous | 370,527 | 365,822 | 4,705 |
| Regulatory Expense | 210,116 | 205,876 | 4,240 |
| Bad Debts Provision | 741,593 | 739,228 | 2,365 |
| Total Administrative and General Expense | 3,967,932 | 3,830,869 | 137,063 |
| Depreciation Expense | 7,036,260 | 7,993,697 | (957,437) |
| Contractual Expense | | | |
| Audit & Computer Maintenance | 163,133 | 144,435 | 18,698 |
| Building rental | 153,444 | 140,563 | 12,881 |
| Equipment rental | 329,918 | 326,013 | 3,905 |
| Legal | 19,048 | 18,082 | 967 |
| Laboratory | 99,450 | 94,029 | 5,421 |
| Other | 773,830 | 770,507 | 3,323 |
| Total Contractual Expense | 1,538,824 | 1,493,629 | 45,195 |
| Retiree Supp. Annuities and health care costs | 999,483 | 759,083 | 240,401 |
| Contribution to Government of Guam | 207,900 | 201,336 | 6,564 |
| Total Retiree Benefits | 1,207,383 | 960,419 | 246,965 |
| Total Operating Expenses | 29,666,046 | 29,638,507 | 27,539 |
| Earnings (Loss) from Operations | 9,248,264 | 7,578,122 | (1,670,141) |
| Interest Income - 2010/13/14/16/17 Series Bond | 339,772 | 763,333 | 423,561 |
| Interest Income - Other Funds | 55,425 | 202,028 | 146,603 |
| Interest Income - SDC | 8,287 | 48,010 | 39,723 |
| Interest Expense - 2010/13/14/16/17 Series Bond | (9,551,138) | (8,468,396) | 1,082,742 |
| Interest Expense - ST BOG | (79,048) | (26,274) | 52,774 |
| Loss on Asset Disposal | - | (102,757) | (102,757) |
| AFUDC | 4,629,222 | - | (4,629,222) |
| Amortization of Discount, Premium and Issuance Costs | (71,192) | 479,879 | 551,071 |
| Defeasance due to bond refunding | (64,804) | (275,902) | (211,098) |
| Deferred outflows from pension | - | - | - |
| Prior Year Adjustment | - | (28,268) | (28,268) |
| Total non-operating revenues (expenses) | (4,733,476) | (7,408,347) | (2,674,871) |
| Net Income (Loss) before capital contributions | 4,514,788 | 169,776 | (4,345,012) |
| Capital Contributions | | | |
| Grants from US Government | 22,132,820 | 9,399,767 | (12,733,054) |
| Grants from GovGuam & Others | - | - | - |
| Total Capital Contributions | 22,132,820 | 9,399,767 | (12,733,054) |
| Change in Net Assets | 26,647,608 | 9,569,542 | (17,078,066) |
| Debt Service Calculation | | | |
| Earnings From Operations | 9,248,264 | 7,578,122 | |
| System Development Charge | (391,090) | (132,286) | |
| Retiree COLA | 207,900 | 201,336 | |
| Interest/Investment Income | 55,425 | 202,028 | |
| Depreciation | 7,036,260 | 7,993,697 | |
| Balance Available for Debt Service per Section 6.12 | 16,156,758 | 15,842,897 | |
| Working Capital Reserve Available for Debt Service | 3,739,244 | 3,873,576 | |
| Transfer to Working Capital - Debt Service Reserve | - | - | |
| Transfer to Working Capital - O&M Reserve | - | - | |
| Balance Available for Debt Service inclusive of reserves | 19,896,003 | 19,716,474 | |
| Debt Service | | | |
| Principal | 2,923,333 | 2,923,333 | |
| Interest | 8,468,396 | 8,468,396 | |
| Total | 11,391,729 | 11,391,729 | |
| Debt Service Coverage (1.25X) - per Section 6.12 (Indenture) | 1.42 | 1.39 | |
| Debt Service Coverage (1.75X) inclusive of reserves (PUC) | 1.75 | 1.73 | |

GWA Work Session - February 18, 2020 - DIVISION REPORTS

GUAM WATERWORKS AUTHORITY
Statement of Operations and Retained Earnings (Unaudited)
Comparative for the period ending January 31, 2020 and 2019

SCHEDULE E

| | Year to Date | | Variance |
|---|-------------------|-------------------|--------------------|
| | Actual | Actual | Increase / |
| | January-20 | January-19 | (Decrease) |
| OPERATING REVENUES | | | |
| Water Revenues | 22,719,472 | 22,559,475 | 159,997 |
| Wastewater Revenues | 13,076,153 | 12,709,841 | 366,312 |
| Legislative Surcharge | 1,167,793 | 1,205,894 | (38,101) |
| Other Revenues | 120,925 | 158,560 | (37,635) |
| System Development Charge | 132,286 | 189,967 | (57,681) |
| Total Operating Revenues | 37,216,630 | 36,823,737 | 392,893 |
| OPERATING AND MAINTENANCE EXPENSES | | | |
| Water Purchases | 2,374,676 | 1,922,541 | 452,134 |
| Power Purchases | 5,392,557 | 4,823,924 | 568,633 |
| Total Utility Costs | 7,767,233 | 6,746,465 | 1,020,768 |
| Salaries and Wages | 6,608,807 | 6,427,403 | 181,403 |
| Pension and Benefits | 2,133,977 | 2,052,369 | 81,608 |
| Total Salaries and Benefits | 8,742,784 | 8,479,772 | 263,011 |
| Capitalized Labor and Benefits | (1,150,124) | (1,233,332) | 83,208 |
| Net Salaries and Benefits | 7,592,660 | 7,246,440 | 346,220 |
| Administrative and General Expenses | | | |
| Sludge removal | 501,297 | 504,385 | (3,088) |
| Chemicals | 754,481 | 634,305 | 120,175 |
| Materials & Supplies | 626,899 | 632,667 | (5,768) |
| Transportation | 182,960 | 177,143 | 5,817 |
| Communications | 44,598 | 40,904 | 3,694 |
| Claims | 31,693 | 35,426 | (3,733) |
| Insurance | 311,666 | 300,687 | 10,979 |
| Training & Travel | 59,248 | 69,097 | (9,849) |
| Advertising | 7,100 | 24,684 | (17,584) |
| Miscellaneous | 365,822 | 355,217 | 10,604 |
| Regulatory Expense | 205,876 | 52,108 | 153,768 |
| Bad Debts Provision | 739,228 | 729,504 | 9,725 |
| Total Administrative and General Expense | 3,830,869 | 3,556,129 | 274,741 |
| Depreciation Expense | 7,993,697 | 7,036,260 | 957,437 |
| Contractual Expense | | | |
| Audit & Computer Maintenance | 144,435 | 175,440 | (31,005) |
| Building rental | 140,563 | 140,843 | (280) |
| Equipment rental | 326,013 | 339,887 | (13,874) |
| Legal | 18,082 | - | 18,082 |
| Laboratory | 94,029 | 111,797 | (17,768) |
| Other | 770,507 | 840,355 | (69,848) |
| Total Contractual Expense | 1,493,629 | 1,608,322 | (114,693) |
| Retiree Supp. Annuities and health care costs | 759,083 | 949,799 | (190,716) |
| Contribution to Government of Guam | 201,336 | 200,000 | 1,336 |
| Total Retiree Benefits | 960,419 | 1,149,799 | (189,380) |
| Total Operating Expenses | 29,638,507 | 27,343,415 | 2,295,092 |
| Earnings (Loss) from Operations | 7,578,122 | 9,480,322 | (1,902,199) |
| Interest Income - 2010/13/14/16/17 Series Bond | 763,333 | 1,382,676 | (619,343) |
| Interest Income - Other Funds | 202,028 | 261,256 | (59,228) |
| Interest Income - SDC | 48,010 | 55,852 | (7,842) |
| Interest Expense - 2010/13/14/16/17 Series Bond | (8,468,396) | (8,551,138) | 82,742 |
| Interest Expense - ST BOG | (26,274) | (73,965) | 47,691 |
| Loss on Asset Disposal | (102,757) | - | (102,757) |
| AFUDC | - | 4,629,224 | (4,629,224) |
| Amortization of Discount, Premium and Issuance Costs | 479,879 | 478,836 | 1,044 |
| Defeasance due to bond refunding | (275,902) | (278,136) | 2,234 |
| Deferred outflows from pension | - | (35,723) | 35,723 |
| Prior Year Adjustment | (28,268) | (25,896) | (2,372) |
| Total non-operating revenues (expenses) | (7,408,347) | (2,157,015) | (5,251,332) |
| Net Income (Loss) before capital contributions | 169,776 | 7,323,307 | (7,153,531) |
| Capital Contributions | | | |
| Grants from US Government | 9,399,767 | 3,071,379 | 6,328,388 |
| Grants from GovGuam & Others | - | - | - |
| Total Capital Contributions | 9,399,767 | 3,071,379 | 6,328,388 |
| Change in Net Assets | 9,569,542 | 10,394,686 | (825,144) |
| Debt Service Calculation | | | |
| Earnings From Operations | 7,578,122 | 9,480,322 | |
| System Development Charge | (132,286) | (189,967) | |
| Retiree COLA | 201,336 | 200,000 | |
| Interest/Investment Income | 202,028 | 261,256 | |
| Depreciation | 7,993,697 | 7,036,260 | |
| Balance Available for Debt Service per Section 6.12 | 15,842,897 | 16,787,871 | |
| Working Capital Reserve Available for Debt Service | 3,873,576 | 3,803,441 | |
| Transfer to Working Capital - Debt Service Reserve | - | - | |
| Transfer to Working Capital - O&M Reserve | - | - | |
| Balance Available for Debt Service inclusive of reserves | 19,716,474 | 20,591,311 | |
| Debt Service | | | |
| Principal | 2,923,333 | 1,905,000 | |
| Interest | 8,468,396 | 8,551,138 | |
| Total | 11,391,729 | 10,456,138 | |
| Debt Service Coverage (1.25X) - per Section 6.12 (Indenture) | 1.39 | 1.61 | |
| Debt Service Coverage (1.75X) inclusive of reserves (PUC) | 1.73 | 1.97 | |

GUAM WATERWORKS AUTHORITY
Restricted and Unrestricted Cash Summary
FY2020

SCHEDULE F

| Description | Unaudited January 31, 2020 | Unaudited September 30, 2019 | Increase (Decrease) |
|---|-------------------------------|---------------------------------|------------------------|
| UNRESTRICTED | | | |
| Change Fund | 2,000 | 2,000 | - |
| Petty Cash | 4,450 | 4,450 | - |
| BOG Deposit Accounts | 8,112,251 | 4,955,587 | 3,156,665 |
| Sub-total Unrestricted | 8,118,701 | 4,962,036 | 3,156,665 |
| RESTRICTED | | | |
| ANZ Bank | - | 19 | (18.63) |
| Bank Pacific | 6,549 | 12,321 | (5,772) |
| Bank of Hawaii | 131,059 | 220,158 | (89,099) |
| Community First FCU | 1,668 | 2,530 | (863) |
| First Hawaiian Bank | 11,218 | 11,761 | (544) |
| Bank Pacific Surcharge | 552,911 | 302,837 | 250,074 |
| Bank Pacific Escrow Deposit | 841,894 | 836,528 | 5,366 |
| BOG Customer Refunds | 2,012,231 | 1,871,553 | 140,679 |
| BOG Emergency Reserve Fund | 6,239 | 6,237 | 3 |
| BOG Sewer Hookup Revolving Fund | 67,298 | 67,094 | 203 |
| BOG Subordinate Security Fund | 859,233 | 859,233 | - |
| BOG Operation and Maintenance Fund | 3,083,482 | 3,083,482 | - |
| BOG OMRRRF Fund | 17,423,213 | 17,423,213 | - |
| BOG Revenue Trust | 610,750 | 1,164,224 | (553,474) |
| BOG Revenue Trust Fund | 8,989,341 | 7,613,000 | 1,376,341 |
| BOG Capital Improvement Revenue Fund | 2,395,323 | 1,001,292 | 1,394,031 |
| BOG O & M Reserve | 14,001,995 | 13,933,323 | 68,672 |
| BOG Debt Service Reserve | 11,620,729 | 11,563,736 | 56,993 |
| BOG CapEx Fund | 12,859,881 | 17,244,823 | (4,384,941) |
| | 75,475,013 | 77,217,363 | (1,742,350) |
| BOG - SDC Deposit | 3,575,302 | 2,024,365 | 1,550,936 |
| BOG - SDC CDs | 5,750,000 | 7,250,000 | (1,500,000) |
| Total SDC | 9,325,302 | 9,274,365 | 50,936 |
| Total Restricted | 84,800,314 | 86,491,728 | (1,691,414) |
| Reserve Funds | | | |
| BOG Series 2013 Construction Fund | 12,419,615 | 14,170,759 | (1,751,144) |
| BOG Series 2014 Refunding Construction Fund | 218,530 | 217,448 | 1,082 |
| BOG Series 2016 Construction Fund | 78,107,356 | 89,235,554 | (11,128,198) |
| BOG Series 2017 Refunding Construction Fund | 6,290,782 | 6,313,750 | (22,968) |
| Total Restricted - Held by Trustee | 97,036,284 | 109,937,511 | (12,901,227) |
| USB Series 2013 Debt Service Fund | 2,443,610 | 3,082,212 | (638,602) |
| USB Series 2013 Debt Service Reserve Fund | 12,031,688 | 12,031,688 | - |
| USB Series 2014 Refunding Debt Service Fund | 2,575,961 | 1,885,637 | 690,324 |
| USB Series 2014 Refunding Debt Service Reserve Fund | 7,947,044 | 7,798,212 | 148,832 |
| USB Series 2016 Debt Service Fund | 904,107 | 1,946,774 | (1,042,667) |
| USB Series 2016 Debt Service Reserve Fund | 7,591,999 | 7,591,999 | - |
| USB Series 2010 Debt Service Fund | 1,142,320 | 523,353 | 618,967 |
| USB Series 2017 Refunding Debt Service Reserve Fund | 7,566,460 | 7,566,460 | - |
| USB Series 2017 Debt Service Fund | 495,837 | 1,382,329 | (886,492) |
| Total Investments | 42,699,026 | 43,808,664 | (1,109,638) |
| Total Restricted and Unrestricted Cash | 232,654,325 | 245,199,940 | (12,545,615) |

Guam Waterworks Authority
Accounts Receivable - Government (Active)
January 31, 2020

SCHEDULE G

| | A G I N G | | | | | | | |
|---|--------------------|------------|--------------|--------------|---------------|---------------|----|-----------|
| Customer Name | No. of Accounts | Current | 31 - 60 days | 61 - 90 days | 91 - 120 days | Over 120 days | | Total |
| Autonomous Agencies (Active) | | | | | | | | |
| Guam Int'l Airport Authority | 8 | \$ 64,528 | \$ 60,470 | \$ 69,981 | \$ 10,034 | \$ 229,128 | \$ | 434,140 |
| Guam Power Authority | 25 | 256,342 | - | - | - | - | | 256,342 |
| Guam Memorial Hospital Authority | 3 | 35,860 | 2,054 | - | - | - | | 37,914 |
| Guam Housing & Urban Renewal Authority | 9 | 5,959 | 804 | 505 | - | - | | 7,268 |
| Port Authority of Guam | 5 | 2,081 | - | - | - | - | | 2,081 |
| Guam Housing Corporation | 1 | 30 | - | - | - | - | | 30 |
| Total Autonomous Agencies | 51 | \$ 364,800 | \$ 63,328 | \$ 70,486 | \$ 10,034 | \$ 229,128 | \$ | 737,775 |
| Line Agencies (Active) | | | | | | | | |
| Department of Education | 53 | \$ 238,178 | \$ 242,192 | \$ 46,310 | \$ - | \$ - | \$ | 526,679 |
| Department of Parks & Recreation | 17 | 29,575 | 34,753 | 22,785 | 5,757 | 19,520 | | 112,391 |
| Mayors Council of Guam | 60 | 21,640 | 15,627 | 17,678 | 6,277 | 46,046 | | 107,267 |
| Department of Corrections | 8 | 59,978 | 45 | - | - | - | | 60,023 |
| Department of Public Works | 11 | 14,737 | 12,751 | 1,360 | 54 | 7,157 | | 36,058 |
| Department of Agriculture | 6 | 4,937 | 5,971 | 7,545 | 1,340 | - | | 19,794 |
| University of Guam | 44 | 6,867 | - | - | - | - | | 6,867 |
| Guam Police Department | 7 | 5,370 | 941 | - | - | - | | 6,311 |
| Department of Public Health & Social Services | 8 | 3,517 | 880 | 885 | 478 | - | | 5,760 |
| Guam Fire Department | 11 | 3,599 | 1,894 | - | - | - | | 5,493 |
| Office of Civil Defense | 2 | 592 | 467 | 499 | 501 | - | | 2,060 |
| Department of Administration | 2 | 791 | 525 | 487 | - | - | | 1,802 |
| Department of Youth Affairs | 3 | 1,460 | - | - | - | - | | 1,460 |
| Department of Chamorro Affairs | 7 | 356 | 420 | 410 | - | - | | 1,186 |
| Division of Senior Citizens, DPHS&S | 2 | 383 | 205 | 146 | - | - | | 734 |
| The Office of The Dededo Mayor | 1 | 156 | 157 | 201 | - | - | | 514 |
| Guam Veterans Affairs Office | 2 | 187 | 176 | 133 | - | - | | 496 |
| Department of Customs & Quarantine | 1 | 389 | - | - | - | - | | 389 |
| Department of Mental Health | 2 | 290 | - | - | - | - | | 290 |
| Department of Agriculture-Fisheries | 1 | 281 | - | - | - | - | | 281 |
| Guam Energy Office | 1 | 59 | 62 | 95 | - | - | | 216 |
| Guam Public Library | 6 | 125 | - | - | - | - | | 125 |
| Merizo Mayor | 1 | 51 | 33 | - | - | - | | 84 |
| Department of Mental Health and Substance | 1 | 23 | - | - | - | - | | 23 |
| Guam Solid Waste Authority | 2 | 19 | - | - | - | - | | 19 |
| Total Line Agencies | 259 | \$ 393,561 | \$ 317,098 | \$ 98,534 | \$ 14,407 | \$ 72,723 | \$ | 896,322 |
| Total as of January 31, 2019 (Active) | 310 | \$ 758,360 | \$ 380,426 | \$ 169,020 | \$ 24,441 | \$ 301,850 | \$ | 1,634,098 |

GUAM WATERWORKS AUTHORITY**Accounts Receivable Aging Summary by Rate Class****SCHEDULE H****As of January 31, 2020**

| Rate Class | A G I N G | | | | | | Total |
|---------------------------------------|--------------------|-------------------|------------------|----------------|------------------|------------------|-------------------|
| | No. of Accounts | Current | 31 - 60 days | 61 - 90 days | 91 - 120 days | Over 120 days | |
| Agriculture | 445 | 2,924,538 | 378,097 | 169,916 | 24,542 | 921,920 | 4,419,014 |
| Commercial I | 383 | 39,396 | 3,429 | 2,147 | 1,546 | 67,173 | 113,690 |
| Commercial II | 2,703 | 1,130,662 | 43,781 | 48,662 | 14,617 | 358,487 | 1,596,209 |
| Commercial III | 25 | 322,619 | 23,431 | 2,232 | 4,274 | 253,041 | 605,597 |
| Golf Course | 303 | 679,721 | 46,983 | 21,688 | 19,846 | 204,310 | 972,548 |
| Government | 16 | 5,540 | - | - | - | - | 5,540 |
| Hotel | 57 | 3,147,862 | 275,185 | 34,634 | 13,563 | 124,420 | 3,595,665 |
| Irrigation | 29 | 3,040 | 439 | 262 | 266 | 3,368 | 7,375 |
| Residential | 50,365 | 4,261,115 | 715,937 | 429,076 | 268,422 | 5,222,318 | 10,896,870 |
| Total | 54,326 | 12,514,493 | 1,487,282 | 708,618 | 347,078 | 7,155,037 | 22,212,507 |
| Less Allowance for Doubtful Accounts: | | | | | | | (8,529,250) |
| Net Accounts Receivable: | | | | | | | 13,683,257 |

Days Receivables Outstanding

47

GUAM WATERWORKS AUTHORITY
Accounts Payable Aging
As of January 31, 2020

SCHEDULE I

| AGING | | | | | |
|-----------------|---------------------|---------------------|----------------------|----------------------|-----------------|
| <u>Current</u> | <u>31 - 60 Days</u> | <u>61 - 90 Days</u> | <u>91 - 120 Days</u> | <u>> 120 Days</u> | <u>Total</u> |
| \$ 2,679,531.53 | \$ 168,706.82 | \$ 200,893.94 | \$ 145,549.07 | \$ 292,377.43 | \$ 3,487,058.79 |

Days Payable Outstanding

36

Guam Waterworks Authority
System Development Charges Project Status
As of January 31, 2020

SCHEDULE J

Funding Summary

| | |
|---|---------------------|
| Total available project funds | \$ 12,489,198 |
| Total project expenditures and encumbrances | 10,503,358 |
| Total unobligated project funds | \$ 1,985,840 |

Projects Funded

| Project Description | Expenditures | Outstanding Encumbrances | Expenditures and Encumbrances |
|---|---------------------|-------------------------------------|--|
| Agat-Santa Rita Wastewater Treatment Plant Replacement | 1,016,576 | 603,466 | 1,620,043 |
| Baza Gardens Wastewater Cross Island Pumping & Conveyance | 1,150,881 | 3,090 | 1,153,971 |
| Central Guam Reservoirs | | 280,040 | 280,040 |
| Line Replacement Phase IV | | 256,937 | 256,937 |
| Northern DWWTP | | 5,422,599 | 5,422,599 |
| Northern DWWTP (Land Purchase) | 1,000,000 | | 1,000,000 |
| Route 4 Relief Sewerline Rehab & Replacement | | 399,869 | 399,869 |
| South Paulino Heights Waterline Upgrade | 84,056 | 4,714 | 88,770 |
| Talofofo Sewer Improvement | | 241,142 | 241,142 |
| Umatac Merizo WWTP | | 39,988 | 39,988 |
| | \$ 3,251,513 | \$ 7,251,845 | \$ 10,503,358 |

Future planned projects

| | FY2020 |
|--|---------------------|
| Water Wells | 540,000 |
| Water Dist Sys Pipe Replacement & Upgrades | 540,000 |
| WWTP Priority 1 Upgrades | 300,000 |
| Umatac Merizo STP Replacement | 300,000 |
| Wastewater Sewer System Expansion | 300,000 |
| | \$ 1,980,000 |

GUAM WATERWORKS AUTHORITY
WATER DEMAND BY RATE CLASS BY METER SIZE
FY2015 - FY2020

SCHEDULE K

| CLASS | AUDITED | | | | | | UNAUDITED | | | |
|--------------------|--|--|-------------------|--|-------------------|--|-------------------|--|-------------------|--|
| | FY2015 TOTAL CONSUMPTION (kGal) | FY2016 TOTAL CONSUMPTION (kGal) | % Inc / (Dec.) | FY2017 TOTAL CONSUMPTION (kGal) | % Inc / (Dec.) | FY2018 TOTAL CONSUMPTION (kGal) | % Inc / (Dec.) | FY2019 TOTAL CONSUMPTION (kGal) | % Inc / (Dec.) | FY2020 (4 Mos Annualized) TOTAL CONSUMPTION (kGal) |
| R Residential | 3,415,662 | 3,429,689 | 0% | 3,206,811 | -6% | 3,313,613 | 3% | 3,359,905 | 1% | 3,461,322 |
| C Commercial | 1,020,089 | 1,022,890 | 0% | 964,639 | -6% | 910,905 | -6% | 906,192 | -1% | 895,084 |
| F Federal | 1,168 | 1,180 | 1% | 2,508 | 113% | 1,813 | -28% | 1,602 | -12% | 1,258 |
| G Government | 515,974 | 475,366 | -8% | 448,430 | -6% | 450,165 | 0% | 405,980 | -10% | 449,642 |
| H Hotel | 999,116 | 1,008,087 | 1% | 1,004,525 | 0% | 989,723 | -1% | 1,079,919 | 9% | 1,045,904 |
| G Golf | 6,850 | 6,770 | -1% | 5,252 | -22% | 2,741 | -48% | 2,793 | 2% | 6,203 |
| A Agriculture | 67,376 | 78,628 | 17% | 69,482 | -12% | 81,127 | 17% | 90,803 | 12% | 67,724 |
| I Irrigation | 10,385 | 11,351 | 9% | 10,143 | -11% | 8,504 | -16% | 7,896 | -7% | 5,976 |
| GRAND TOTAL | 6,036,620 | 6,033,960 | 0% | 5,711,790 | -5% | 5,758,590 | 1% | 5,855,091 | 2% | 5,933,114 |

| | | | |
|-----------------------------|----|----------------------|--|
| Guam Waterworks Authority | | Date: 1/31/2020 |  GUAM WATERWORKS AUTHORITY WATER DISTRIBUTION FACILITIES REPORT |
| | | Time: | |
| REVIEWS | | | |
| TOTAL PUMPS INSTALLED | 56 | OVERALL AVERAGE | 99% |
| TOTAL PUMPS OPERATIONAL | 55 | % OF OPERATING PUMPS | 98% |
| TOTAL BOOSTER PUMP STATIONS | 27 | | |

Northern District

| NO. | FACILITY | PUMP HP | 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 | Yigo | 30 | 3 | 3 | 100% | OP | A | | | | | | |
| 2 | Gayvhero | 20 | 2 | 2 | 100% | OP | A | | | | | | |
| 3 | Mataguec | 25 | 2 | 2 | 100% | OP | A | | | | | | |
| 4 | Santa Rosa | 15 | 2 | 2 | 100% | OP | A | | | | | | |
| 5 | Hyundai | 40 | 2 | 1 | 50% | OP | A | Pump # 1 requires pump and motor. Station undergoing renovation with new pumps installed. | | | | Work ongoing. New pumps will be installed. | |
| 6 | Chin, Palauan | 5 | 2 | 2 | 100% | N/A | | | | | | | |
| 7 | Access | 60 | 2 | 2 | 100% | OP | A | | | | | | |
| 8 | Agana Heights | 30 | 3 | 3 | 100% | | | | | | | | |
| 9 | Nimitz Hill | 7.5 | 2 | 2 | 100% | N/A | | | | | | | |
| 10 | Adawag | 1.5 | 1 | 1 | 100% | N/A | | | | | | | |
| 11 | Pale Kiren | 1 | 1 | 1 | 100% | N/A | | | | | | | |
| 12 | Ulisoa/Unifalan | 1 | 2 | 2 | 100% | OP | A | | | | | | |
| 13 | Latte Heights | 15 | 2 | 2 | 100% | OP | A | | | | | | |
| TOTAL = 13 | | | 26 | 25 | 96% | | | | | | | | |
| pump availability = no of operational pumps/no of pumps*100% | | | | | | | | | | | | | |

Central District

| NO. | FACILITY | PUMP HP | 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 | 3 | 100% | OP | A | | | | | | |
| 2 | Brocade | 60 | 3 | 3 | 100% | OP | A | | | | | | |
| 3 | Windward Hills | 200 / 75 | 3 | 3 | 100% | OP | A | | | | | | |
| 4 | Santa Rita Spring | 40 | 2 | 2 | 100% | OP | A | | | | | | |
| 5 | Santa Ana (Lower) | 25 | 2 | 2 | 100% | N/A | | Pump # 1 is operational on manual. | | Check valve for pump #1 not working properly. | | Station will be renovated for tank inspections. | |
| 6 | Camacho | 1 | 1 | 1 | 100% | N/A | | | | | | | |
| 7 | Tenorio | 1.5 | 1 | 1 | 100% | N/A | | | | | | | |
| Total=7 | | | 15 | 15 | 100% | | | | | | | | |
| pump availability = no of operational pumps/no of pumps*100% | | | | | | | | | | | | | |

Southern District

| NO. | FACILITY | PUMP HP | 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 | Loquan | 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

VEHICLE FLEET STATUS

2/10/2020

| EQUIPMENT STATUS | | | | |
|--------------------|---------------------|-------------------------------|-----------------------------------|------------|
| Description | Number of Equipment | Number of Equipment Available | Number of Equipment Not Available | Percentage |
| Backhoe | 4 | 2 | 2 | 50% |
| Backhoe (Lease) | 3 | 3 | 0 | 100% |
| Bobcat | 1 | 0 | 1 | 0% |
| Boom Truck | 2 | 0 | 2 | 0% |
| Crane | 1 | 1 | 0 | 100% |
| Dump Truck | 3 | 1 | 2 | 33% |
| Dump Truck (Lease) | 3 | 1 | 2 | 33% |
| Forklift | 6 | 6 | 0 | 100% |
| Fuel Tanker | 1 | 1 | 0 | 100% |
| Heavy Duty | 8 | 7 | 1 | 88% |
| Hoist Rig | 1 | 0 | 1 | 0% |
| Light | 170 | 117 | 53 | 69% |
| Mini Backhoe | 4 | 1 | 3 | 25% |
| Pumper Truck | 1 | 1 | 0 | 100% |
| Skidster | 1 | 0 | 1 | 0% |
| Sludge Truck | 5 | 4 | 1 | 80% |
| Tow | 0 | 0 | 0 | 0% |
| Tractor | 2 | 1 | 1 | 50% |
| Tractor Mower | 1 | 1 | 0 | 100% |
| Trailer | 16 | 13 | 3 | 81% |
| Trailer (Lease) | 3 | 3 | 0 | 100% |
| Trencher | 1 | 0 | 1 | 0% |
| Vaccon | 1 | 1 | 0 | 100% |
| Vacuum Truck | 3 | 0 | 3 | 0% |
| Water Buffalo | 2 | 2 | 0 | 100% |
| Water Tanker | 5 | 5 | 0 | 100% |
| Compressor | 1 | 1 | 0 | 100% |
| Total | 252 | 176 | 77 | |

| SUMMARY | | | | | | |
|-------------|----------------------------|--|-------------------------------------|----------------------------------|---------------------------------|------------------|
| Operational | Operational w/Rprs Pending | Not in Operation-Accident (Docs Pending) | Not in Operation-Assessment Pending | Not in Operation-Repairs Pending | Not in Operation-Vendor Repairs | Recommend Survey |
| 2 | 0 | 0 | 0 | 0 | 1 | 1 |
| 3 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| 0 | 1 | 0 | 0 | 0 | 0 | 0 |
| 1 | 0 | 0 | 0 | 0 | 0 | 2 |
| 1 | 0 | 0 | 0 | 0 | 2 | 0 |
| 6 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| 7 | 0 | 0 | 0 | 0 | 0 | 1 |
| 0 | 0 | 0 | 1 | 0 | 0 | 0 |
| 113 | 4 | 1 | 6 | 8 | 8 | 30 |
| 1 | 0 | 0 | 0 | 1 | 2 | 0 |
| 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 1 | 0 | 0 |
| 4 | 0 | 0 | 0 | 0 | 1 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1 | 0 | 0 | 0 | 0 | 1 | 0 |
| 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| 13 | 0 | 0 | 0 | 2 | 0 | 1 |
| 3 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 1 | 0 | 0 | 0 |
| 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 1 | 1 | 1 | 0 |
| 2 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| 176 | 5 | 1 | 9 | 13 | 17 | 37 |

GWA Work Session - February 18, 2020 - DIVISION REPORTS

Guam Waterworks Authority

Date: 2/4/2020

Time:

REVIEWS

TOTAL PUMPS INSTALLED174OVERALL AVERAGE89%

TOTAL PUMPS OPERATIONAL159% OF OPERATING PUMPS86%

TOTAL PUMP STATIONS79

GUAM WATERWORKS AUTHORITY

WASTEWATER FACILITIES REPORT

Northern District

| NO: | FACILITY | PRIORITY LISTED | 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 | SOUTHERN LINK | 1 | 4 | 2 | 50% | OP | A | P#1 in for rewinding at Washland. P#2 awaiting repair | | Line 4 discharge clogged. VFD #3 & #4 awaiting repair. | | | |
| 2 | FUJITA | 1 | 4 | 3 | 75% | OP | A | pump 3 secured due to bearing issue | | | | | |
| 3 | ROUTE 16 | 1 | 4 | 4 | 100% | OP | OP | | | #2 and #4 secured due to ongoing contractor work. | | | |
| 4 | YPAO | 1 | 2 | 2 | 100% | OP | A | Pump 2 @ JM; utilizing machanao pump and volute on line. | | | | | |
| 5 | YIGO | 1 | 3 | 3 | 100% | OP | A | | | | | | |
| 6 | HARMON | 2 | 2 | 1 | 50% | OP | M | Pump #1 in for repairs. | | | | | OP# 35069 |
| 7 | MACHECHE | 2 | 2 | 1 | 100% | GPA | A | #2 secured pending further assessment. | | | | | |
| 8 | LATTE DOUBLE TROUBLE | 2 | 2 | 1 | 50% | GPA | A | Pump #2 was removed for repairs | | | | | |
| 9 | LATTE SUBMARINE | 2 | 2 | 2 | 100% | GPA | A | | | | | | |
| 10 | MACHANAO | 2 | 2 | 2 | 100% | OP | M | #1 pump and volute utilized at Ypao. New pump installed on line 1. | | | | | |
| 11 | YPAO PAO ESTATES | 1 | 3 | 3 | 100% | GPA | A | | | | | | |
| 12 | PGD | 2 | 2 | 2 | 100% | NO | A | | | | | | BOL 11/4/2019 |
| 13 | LATTE PLANTATION | 2 | 2 | 1 | 50% | GPA | A | P#1 removed for repairs. | | | | | |
| 14 | PASEO DE ORO | 2 | 2 | 2 | 100% | OP | A | | | | | | |
| 15 | ASTUMBO #1 | 2 | 2 | 2 | 100% | OP | A | P#1 removed, awaiting repairs. New pump installed | | | | | |
| 16 | ASTUMBO #2 | 2 | 2 | 2 | 100% | OP | A | P#2 removed, Awaiting repairs. New pump installed | | Pending Controller for old pump. | | | |
| 17 | FEMA 96 | 2 | 2 | 2 | 100% | OP | A | P#1 and #2 removed. Awaiting rewinding. Utilizing pump from Hafa Adai, and Old Station 13 pump (Big Blue) | | | | | |
| 18 | LATTE SUN RISE | 2 | 2 | 1 | 50% | | A | Pump #2 burnt. | | | | | |
| 19 | HAFA ADAI | 2 | 2 | 2 | 100% | NO | A | | | | | | |
| 20 | PACIFIC LATTE | 2 | 2 | 1 | 50% | OP | A | P#1 awaiting rewinding. | | | | | |
| 21 | SANTA ANA | 2 | 2 | 1 | 50% | | M | P#2 burnt, in for rewinding | | | | | |
| 22 | ZERO DOWN | 2 | 2 | 2 | 100% | NO | | | | | | | |
| Total | 22 | | 52 | 42 | 81% | | | | | | | | |

pump availability = no of operational pumps/no of pumps*100%

GWA Work Session - February 18, 2020 - DIVISION REPORTS

| Central District | | | | | | | | | | | | | |
|--|-----------------|-----------------|-----------------------|-------------------------|---------------------|-----------------------------|-----------------|---|----------------|---|----------------|-----------------------|-----------------------|
| NO: | FACILITY | PRIORITY LISTED | 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 | AGANA MAIN | 1 | 4 | 3 | 75% | GP | A | Pump 2 in for repairs. | | line 4 clogged riser. Awaiting cleaning. | | | |
| 2 | CHAOT | 1 | 3 | 2 | 67% | OP | A | P#2 pending install. (awaiting truck for transport) | | | | | |
| 3 | MAMAJANAO | 1 | 3 | 2 | 67% | MANUAL | A | pump 1 awaiting refit. (CIP) | | | | | |
| 4 | BARRIGADA | 1 | 2 | 2 | 100% | GPA | A | | | | | | |
| 5 | BAYSIDE | 1 | 1 | 1 | 100% | Op | A | | | | | | |
| 6 | TAI MANGILAO | 1 | 3 | 3 | 100% | GPA | A | | | | | | |
| 7 | MONGMONG/TOTO | 2 | 2 | 1 | 50% | OP | A | P#2 awaiting repairs. | | | | | |
| 8 | PAGO DOUBLE | 1 | 3 | 1 | 33% | M | A | PUMP #1 IN NEED OF REPLACEMENT (CIP). Pump #3 burnt, in for repairs. Pump #2 shaft and seal failure, motor burnt, in for repairs. #1 running old station 19 pump. | | | | | FCP: JOB#A294 for CIP |
| 9 | MANGILAO | 1 | 2 | 2 | 100% | GPA | A | | | | | | |
| 10 | PITI | 1 | 2 | 2 | 100% | GPA | A | P#2 in for rewinding. Installed New pump. | | P#2 need contactor. Station secured due to ongoing contractor work in ASAN. | | | |
| 11 | ASAN | 1 | 2 | 2 | 100% | GPA | A | | | | | | |
| 12 | SINAJANA | 2 | 2 | 1 | 50% | GPA | A | pump #2 used at asan by-pass | | | | | |
| 13 | DAIRY ROAD | 1 | 2 | 1 | 50% | OP | A | P#2 removed, awaiting repairs. | | | | | |
| 14 | FLORA GARDENS | 2 | 2 | 2 | 100% | INOP | A | | | | | | |
| 15 | ORDOT | 2 | 2 | 2 | 100% | INOP | A | | | | | | |
| 16 | CHALAN PAGO #5 | 2 | 2 | 2 | 100% | INOP | A | | | | | | |
| 17 | COMMERCIAL PORT | 1 | 3 | 3 | 100% | OP | A | | | #3 awaiting electrical parts | | | |
| 18 | CHALAN PAGO #3 | 2 | 2 | 2 | 100% | OP | A | | | | | | |
| 19 | CABRAS ISLAND | 1 | 2 | 2 | 100% | PORTABLE | M | | | | | | |
| 20 | ALUPANG COVE | 1 | 2 | 2 | 100% | OP | A | | | | | | |
| 21 | MAITE EJECTOR | 1 | 2 | 2 | 100% | GPA | A | | | | | | |
| 22 | TOTO GARDENS | 2 | 2 | 2 | 100% | NONE | A | pump 2 awaiting rewinding, new pump installed on 1 | | | | | |
| 23 | NAMO | 2 | 1 | 1 | 100% | NONE | NONE | | | | | | |
| 24 | CASIMERO | 2 | 2 | 1 | 50% | NONE | NONE | P#1 awaiting rewinding at RCG | | | | | |
| 25 | LEYANG | 2 | 2 | 2 | 100% | GP | | | | | | | |
| 26 | SAGAN BONITA 1 | 2 | 2 | 2 | 100% | GP | | | | | | | |
| 27 | SAGAN BONITA 2 | 2 | 2 | 2 | 100% | GP | A | | | | | | |
| 28 | FADIAN | 2 | 2 | 2 | 100% | GP | A | | | | | | |
| 29 | DERO ROAD | 2 | 2 | 2 | 100% | GP | | | | P#2 not running on auto | | | |
| Total | 29 | | 63 | 54 | 86% | | | | | | | | |
| pump availability = no. of operational pumps/no. of pumps*100% | | | | | | | | | | | | | |

GWA Work Session - February 18, 2020 - DIVISION REPORTS

| Southern District | | | | | | | | | | | | | |
|--|------------------|-----------------|-----------------------|-------------------------|---------------------|-----------------------------|-----------------|---|----------------|---|----------------|-----------------------|---------|
| NO: | FACILITY | PRIORITY LISTED | 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 | GAAN #1 | 1 | 4 | 4 | 100% | Op | A | | | | | | |
| 2 | PUMP STATION #11 | 1 | 2 | 2 | 100% | GPA | A | | | | | | |
| 3 | PUMP STATION #12 | 2 | 2 | 2 | 100% | GPA | A | #1 @ JMI due to seal failure; #2 burnt, removed for rewinding. Utilizing spare pump on #2. New Pump installed from JMI on #1 (12-4-2019) | | | | | |
| 4 | PUMP STATION #13 | 1 | 2 | 2 | 100% | GPA | A | | | | | | |
| 5 | PUMP STATION #14 | 2 | 2 | 1 | 50% | GPA | A | Pump #1 in for repair. | | | | | |
| 6 | PUMP STATION #15 | 2 | 2 | 2 | 100% | GPA | A | | | | | | |
| 7 | PUMP STATION #16 | 2 | 2 | 2 | 100% | GPA | A | P#1 seal failure, @ maint shop awaiting repair (02.04.2020). Pump #2 removed / BEING UTILIZED AT STATION 11. Installed 2 New Wilo Pumps into Station on 2-4-2020. | | | | | |
| 8 | PUMP STATION #17 | 2 | 2 | 1 | 50% | GPA | A | P#1 Pending repairs. | | | | | |
| 9 | PUMP STATION #18 | 2 | 2 | 2 | 100% | GPA | A | | | | | | |
| 10 | INARAJAN MAIN | 1 | 2 | 2 | 100% | OP | A | | | | | | |
| 11 | INARAJAN LIFT | 1 | 2 | 2 | 100% | OP | M | New WIL0 Pump installed on line #1. 10.18.19 | | | | | |
| 12 | TALOFOFO | 1 | 2 | 2 | 100% | OP | A | | | 6-6-19 Exhaust blower for wet well is defective and needs replacement. Requested for electricians to relocate the existing blower unit at the old Agri treatment plant wet well and install it at Talofoto. | | | |
| 13 | PAGACHAO | 2 | 2 | 2 | 100% | PORTABLE | A | | | | | | |
| 14 | CHALIGAN | 2 | 2 | 2 | 100% | Op | A | | | | | | |
| 15 | EJECTOR #2 | 2 | 2 | 2 | 100% | no | ATS | | | | | | |
| 16 | EJECTOR #3 | 2 | 2 | 1 | 50% | no | ATS | | | #1 needs capacitor | | | |
| 17 | EJECTOR #4 | 2 | 2 | 2 | 100% | OP | M | | | | | | |
| 18 | EJECTOR #5 | 2 | 2 | 2 | 100% | PORTABLE | M | | | | | | |
| 19 | EJECTOR #6 | 2 | 2 | 2 | 100% | OP | M | | | | | | |
| 20 | EJECTOR #7 | 2 | 2 | 2 | 100% | OP | M | | | | | | |
| 21 | NORTH REYES | 2 | 2 | 1 | 50% | OP | M | Pump 2 in for rewinding and new power cable. | | | | | |
| 22 | LEYON #3 | 2 | 2 | 2 | 100% | OP | A | | | | | | |
| 23 | LEYON #4 | 2 | 2 | 2 | 100% | OP | A | | | | | | |
| 24 | MTL PUMP STATION | 1 | 1 | 1 | 100% | OP | ATS | | | | | | |
| 25 | BAZA GARDENS | 2 | 3 | 3 | 100% | OP | ATS | | | | | | |
| 26 | WINDWARD HILLS | 1 | 3 | 2 | 67% | OP | ATS | PUMPS 2 & 3 IN FOR REWIND AND SEALS, UTILIZING SPARE PUMP. | | | | | |
| 27 | APLACHAO | 2 | 3 | 3 | 100% | OP | ATS | | | | | | |
| Total | 27 | | 58 | 53 | 91% | | | | | | | | |
| Pump availability=no of operational pumps/no of pumps*100% | | | | | | | | | | | | | |

GWA Work Session - February 18, 2020 - DIVISION REPORTS

| Bypass | | | | | | | | | | | | | |
|--------|--------------|-----------------|-----------------------|-------------------------|---------------------|-----------------------------|-----------------|-------------------|----------------|---------------------------------------|----------------|-----------------------|---------|
| NO: | FACILITY | PRIORITY LISTED | 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 | Asian Bypass | 1 | 1 | 1 | 100% | | | | | | | | |
| Total | 1 | | 1 | 1 | 100% | | | | | | | | |



5 miles a month required, 59.2 miles a year to complete for 2019 (296 miles to complete in 5 years)

59.2 miles x 5 years = 296 miles

296 miles / 5yrs = 59.2 miles a year required to be completed

59.2 miles /12 months = 4.93 miles a month required to be completed

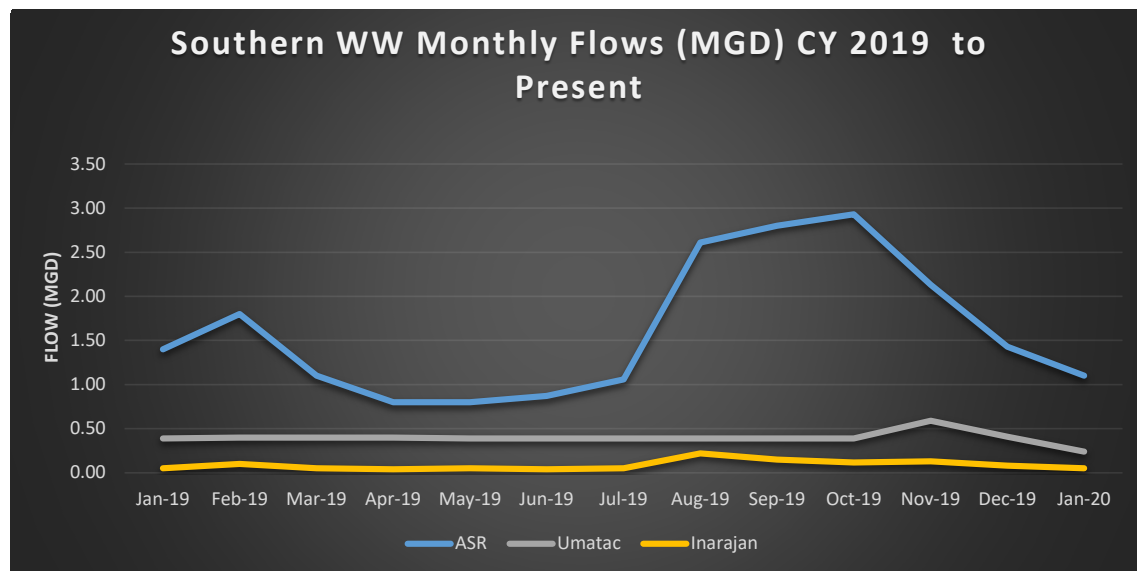
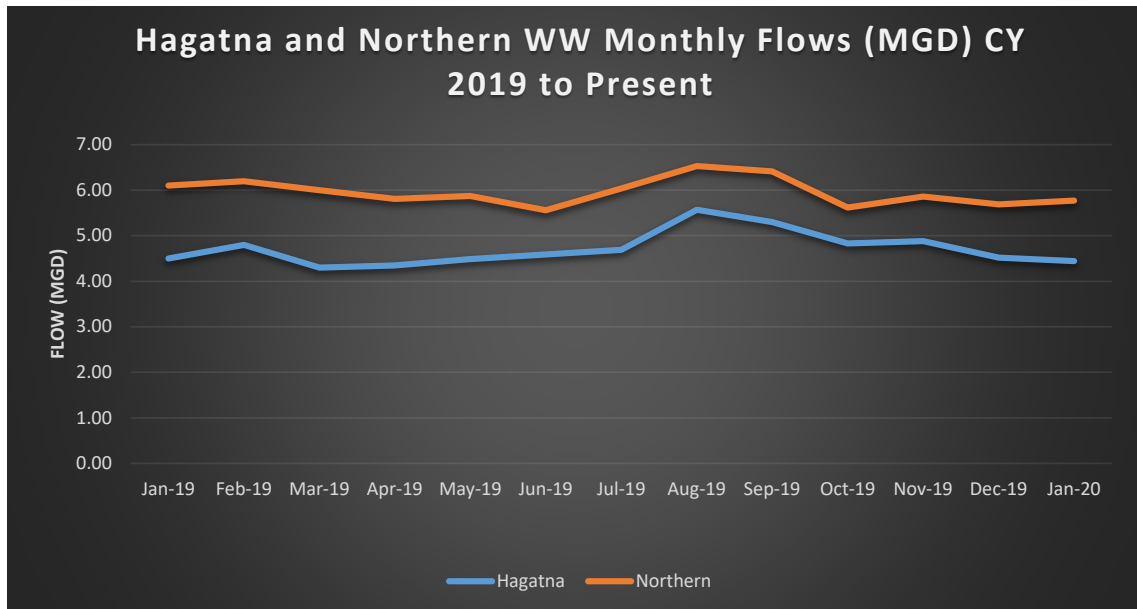
4.92 miles x 5,280 = 25,977.6ft. / 4 weeks = 6,494.4ft. Per week required to be completed

6,494.4ft / 5 days = 1,298.8ft required to be completed daily

Wastewater Treatment Plant Average Monthly Flows Million Gallons Per Day

| 2019 | Hagatna | Northern | ASR | Umatac | Inarajan |
|-------------------------|--------------|--------------|-------------|-------------|-------------|
| Jan-19 | 4.50 | 6.10 | 1.40 | 0.39 | 0.05 |
| Feb-19 | 4.80 | 6.20 | 1.80 | 0.40 | 0.10 |
| Mar-19 | 4.30 | 6.00 | 1.10 | 0.40 | 0.05 |
| Apr-19 | 4.35 | 5.81 | 0.80 | 0.40 | 0.04 |
| May-19 | 4.49 | 5.87 | 0.80 | 0.39 | 0.05 |
| Jun-19 | 4.59 | 5.56 | 0.87 | 0.39 | 0.04 |
| Jul-19 | 4.69 | 6.04 | 1.06 | 0.39 | 0.05 |
| Aug-19 | 5.57 | 6.53 | 2.61 | 0.39 | 0.22 |
| Sep-19 | 5.30 | 6.41 | 2.80 | 0.39 | 0.15 |
| Oct-19 | 4.83 | 5.62 | 2.93 | 0.39 | 0.12 |
| Nov-19 | 4.88 | 5.86 | 2.13 | 0.59 | 0.13 |
| Dec-19 | 4.52 | 5.69 | 1.43 | 0.41 | 0.08 |
| 2019 Average MGD | 4.74 | 5.97 | 1.64 | 0.41 | 0.09 |
| 2019 Total MGY | 1,728 | 2,181 | 600 | 150 | 33 |

| 2020 | Hagatna | Northern | ASR | Umatac | Inarajan |
|-------------------------|--------------|--------------|-------------|-------------|-------------|
| Jan-20 | 4.44 | 5.77 | 1.10 | 0.24 | 0.05 |
| Feb-20 | | | | | |
| Mar-20 | | | | | |
| Apr-20 | | | | | |
| May-20 | | | | | |
| Jun-20 | | | | | |
| Jul-20 | | | | | |
| Aug-20 | | | | | |
| Sep-20 | | | | | |
| Oct-20 | | | | | |
| Nov-20 | | | | | |
| Dec-20 | | | | | |
| 2020 Average MGD | 4.44 | 5.77 | 1.10 | 0.24 | 0.05 |
| 2020 Total MGY | 1,621 | 2,106 | 402 | 88 | 18 |



GWA Work Session - February 18, 2020 - DIVISION REPORTS

| | Hagatna WWTP | | Northern | | Agat (ASR) | | Hagatna + Northern + Agat | |
|--------------------|------------------|------------------|-------------------|--------------------|----------------|-----------------|---------------------------|--------------------|
| 2019 | Qty | Amount | Qty | Amount | Qty | Amount | Qty | Amount |
| Month- Yr | lbs | \$ | lbs | \$ | lbs | \$ | lbs | \$ |
| Jan-19 | 307,380 | \$27,664 | 830,460 | \$74,741.4 | 0 | \$0 | 1,137,840 | \$102,406 |
| Feb-19 | 426,480 | \$38,383 | 675,120 | \$60,760.8 | 0 | \$0 | 1,101,600 | \$99,144 |
| Mar-19 | 609,100 | \$54,819 | 986,500 | \$88,785.0 | 0 | \$0 | 1,595,600 | \$143,604 |
| Apr-19 | 568,620 | \$51,176 | 1,754,280 | \$157,885.2 | 0 | \$0 | 2,322,900 | \$209,061 |
| May-19 | 316,320 | \$28,469 | 1,351,300 | \$121,617.0 | 0 | \$0 | 1,667,620 | \$150,086 |
| Jun-19 | 564,640 | \$50,818 | 736,660 | \$66,299.4 | 11680 | \$1,051 | 1,312,980 | \$118,168 |
| Jul-19 | 511,700 | \$46,053 | 735,260 | \$66,173.4 | 0 | \$0 | 1,246,960 | \$112,226 |
| Aug-19 | 577,680 | \$51,991 | 756,240 | \$68,061.6 | 0 | \$0 | 1,333,920 | \$120,053 |
| Sep-19 | 336,200 | \$30,258 | 606,740 | \$54,606.6 | | \$0 | 942,940 | \$84,865 |
| Oct-19 | 532,200 | \$47,898 | 697,260 | \$62,753.4 | 74,320 | \$6,689 | 1,303,780 | \$117,340 |
| Nov-19 | 471,840 | \$42,466 | 803,500 | \$72,315.0 | 112440 | \$10,120 | 1,387,780 | \$124,900 |
| Dec-19 | 501,020 | \$45,092 | 911,480 | \$82,033.2 | 86360 | \$7,772 | 1,498,860 | \$134,897 |
| Grand Total | 5,723,180 | \$515,086 | 10,844,800 | \$976,032.0 | 284,800 | \$25,632 | 16852780 | \$1,516,750 |

| | Hagatna WWTP | | Northern | | Agat (ASR) | | Hagatna + Northern + Agat | |
|--------------------|----------------|-----------------|------------------|-------------------|---------------|----------------|---------------------------|------------------|
| 2020 | Qty | Amount | Qty | Amount | Qty | Amount | Qty | Amount |
| Month- Yr | lbs | \$ | lbs | \$ | lbs | \$ | lbs | \$ |
| Jan-20 | 283,080 | \$25,477 | 1,055,960 | \$95,036.4 | 72740 | \$6,547 | 1,411,780 | \$127,060 |
| Feb-20 | | | | | | | - | \$0 |
| Mar-20 | | | | | | | - | \$0 |
| Apr-20 | | | | | | | - | \$0 |
| May-20 | | | | | | | - | \$0 |
| Jun-20 | | | | | | | - | \$0 |
| Jul-20 | | | | | | | - | \$0 |
| Aug-20 | | | | | | | - | \$0 |
| Sep-20 | | | | | | | - | \$0 |
| Oct-20 | | | | | | | - | \$0 |
| Nov-20 | | | | | | | - | \$0 |
| Dec-20 | | | | | | | - | \$0 |
| Grand Total | 283,080 | \$25,477 | 1,055,960 | \$95,036.4 | 72,740 | \$6,547 | 1411780 | \$127,060 |

