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# **COST OF SERVICE STUDY MISCELLANEOUS FEES AND CHARGES**

September 2015

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## **COST OF SERVICE STUDY MISCELLANEOUS FEES AND CHARGES**

### **SUMMARY**

This Cost of Service study is being submitted in conjunction with the Guam Public Utilities Commission's (PUC) Rate Order dated October 29, 2013, GWA Docket No. 13-01, which contained among other provisions, a requirement for the Guam Waterworks Authority (GWA) to re-examine its miscellaneous fees and charges and make any revisions where warranted and to petition the adoption of the revised fee schedule by the PUC.

GWA receives revenues from fees assessed for various miscellaneous services such as turning on or off water service, application fees and meter installation charge. In general, these activities are services and functions that primarily benefit an individual(s) and in turn, GWA charges specific fees to the beneficiary of the service. The principle for charging the fee is that those who use the service pay for the cost of producing it or supplying it.

The American Waterworks Association (AWWA) suggest that utilities should consider examining fees and charges on an annual basis to align fees against the cost of providing the service. The economic realities of increasing labor costs, material and equipment cost supports this guidance to ensure fees are sufficient to cover the full cost of providing a service. The previous fee revision predated GWA's creation in 1996.

To determine if any revision to the fees and charges are necessary, a Cost of Service study was conducted to evaluate and calculate the actual cost to provide the specific services. The current costs of labor, materials and supplies were utilized in developing and updating the cost components of the fee. This report documents GWA's findings and may be utilized in the future as a model for determining, if any, a modification to the rate of fees and charges in effect. It is

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the intent of GWA management to use this information to request the Consolidated Commission on Utilities (CCU) to authorize GWA management to petition the Guam Public Utilities Commission (PUC) for approval of GWA's updated fees and charges based on the Cost of Service Study.

The results of the cost of service analysis are discussed below. It should be noted that costs calculated using the cost of service methodology represent the cost that could be justified for a specific service. The principal goal of this study was to calculate the full cost of providing the services including all direct, indirect, and support costs associated with the programs and individual services. The calculations and supporting data are provided further along in the study.

The cost of service study is comprised of three (3) basic elements; (1) hourly rates of staff providing the service; (2) time spent to provide the service; and (3) materials and supplies supporting the service. A fourth element, overhead costs (common costs not allocable directly to the service), is expressed as a percentage and is derived from the respective ratio of indirect water and wastewater costs to total operational costs.

Direct costs are defined as those that can be identified specifically to a particular function or activity, including labor, and possibly materials or supplies. Indirect costs are those that support more than one program area and are not easily identifiable to specific activities. Examples of indirect costs are: departmental administrative and support staff, training, telephone time, some service and supply costs.

### **METHODOLOGY**

The hourly methodology is used to develop and calculate the fees and charges for services covered in this study. The concept of the methodology is to identify direct costs associated with

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the service such as hourly rates of personnel engaged in completing the service, materials and equipment used in the activity together with a proportionate share of allowable indirect overhead costs, altogether the sum of which accounts for the total cost of providing the service.

The methodology employs a “bottom-up” approach which consists of interviews with administrative and operational staff connected with the activity with the intent of determining the amount of time spent and tasks involved to complete each activity.

Each staff classification within a department or division directly or indirectly involved in performing the service is interviewed in the study. Staff classifications are then categorized as either direct (operational) or indirect (administrative or supervisory) labor. The indirect portion of staff cost is added to indirect costs to arrive at overall overhead cost percentage which is then applied to the direct hourly rate to calculate the overhead portion allocable to the service.

The next step in the process was to identify staff time spent directly on each of the user fee activities. Each staff person involved in the user fee services identified time spent to complete each task associated with all user fee services. A labor and overhead rate is then assigned for each activity and applied to the amount of time spent on each activity. The labor rate varies based on the activities being performed and the personnel typically involved in those activities.

The cost of equipment utilized in performing the service is also taken into account. If applicable, the cost is determined according to the amount and cost of fuel expended for transporting personnel to and from a job site based on the prevailing price for fuel and total distance (miles) driven equal to a round trip route between GWA and customer’s premises.

Travel time was also factored to account for the staff’s cost associated with time where travel is required. Travel costs are determined based on the proportion of time relative to the hourly rate of the personnel involved in the activity.

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Finally, the cost of materials and supplies typically used in conducting the activity taken into account for the cost of providing the service and is based on the prevailing cost of the material(s) and/or supply(ies) at the time of this study.

### **FEE BASIS**

The hourly rate calculation methodology is determined as follows:

- Fully Burdened Hourly Rates – incorporates all the elements that comprise the hourly rates used in the study:
    - Each staff directly associated with the activity is determined, together with the average annual salary.
    - The hourly salary rate is calculated by the taking annual salary and dividing by 2,080 available productive hours in a year.
  - Equipment - the costs of equipment used to perform the services. It is the product of the prevailing fuel rate at the time of this study and total miles (distance) for a round trip route between GWA and customer's premises. One (1) truck is the standard equipment used for services associated with the fees and charges in this study.
  - Travel - the product of the time expressed in increments of ¼ of an hour. Cost is calculated based on the length of time to travel to the customer and back to GWA times the hourly rate of personnel involved in providing the service.
  - Materials and Supplies - the cost of materials and supplies typically used in conducting the activity such as coupling costs and meter costs. The cost is based on the prevailing cost of the material(s) and/or supply (ies) at the time of this study.
  - Overhead Rate - the internal indirect overhead rate is derived from FY2013 actual data. Approximately 1/3<sup>rd</sup> of GWA's total operating expenses are indirect costs. Of this amount, water accounts for 62% of the costs and wastewater the remaining 38%. These costs include
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indirect labor and benefits of administrative staff and other costs not directly supporting specific program areas.

The product of the hourly rate times the time spent and overhead percentage plus travel costs plus the cost of materials yields the cost of the service for carrying out the activity.

The following tables illustrate and describe the fees and charges currently assessed for the field activity along with a comparison to the results of our cost of service study conducted on the full cost for the given activity. Those activities where \$0 is indicated in the column “Current Fee” denote a new fee in addition to making known that there is no fee currently being charged by GWA for that particular activity.

### **REVENUE PROJECTIONS**

Annual volume statistics were gathered in order to develop total annual workload information. Given this information, GWA was able to calculate the cost of providing each service, both on a per-unit and total annual basis (per-unit cost multiplied by annual volume equals total annual cost). Full costs are then compared to current fees/revenues collected, and subsidies (or over-recoveries) are identified. By annualizing and combining the results for each fee, we identified the potential revenue impacts of the current fees and charges set at the full (100%) cost-recovery levels. The following table illustrates the impacts. For those activities where it is noted that GWA was not tracking and charging certain activities or whereby a fee does not exist, the revenue impact was undeterminable.



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FEES AND CHARGES				ANNUAL REVENUE	
Description	No. of Transaction(s) (1)	Current Fee	Full Cost Recovery Fee	Current Revenue	Full Cost Recovery Revenue
Bill Analysis	25	\$10	\$10	\$250	\$250
Copy of Bill	(4)	\$1	\$2	\$0	\$0
Illegal Connection	10	Set by law	Set by law	\$50,000	\$50,000
New Meter Installation Fee	333	At Cost	(2)	\$234,626	\$247,144
Meter Reconnect Fee	2,954	(2)	(2)	\$134,030	\$265,970
Meter Reconnect -Same day	(4)	(5)	(2)	\$0	\$0
Meter Reconnect Fee ( same day after business hours)	(4)	(5)	(2)	\$0	\$0
Meter Relocate	(4)	(5)	(2)	\$0	\$0
Return Check Fee	396	\$30	\$50	\$11,880	\$19,800
Special Reading	(4)	\$15	\$90	\$0	\$0
Data Log	(4)	\$0	\$60	\$0	\$0
Verification Time Test	(4)	\$45	\$100	\$0	\$0
Application Fee	(4)	(5)	\$25	\$0	\$0
Bench Test	(4)	(2)	(2)	\$0	\$0
Late Payment Fee	(4)	(5)	6%	\$0	\$0
Pressure Reading	(4)	\$25	\$90	\$0	\$0
Plan Review	(4)	(5)	\$38	\$0	\$0
Door Notice Hanger	(4)	(5)	\$5	\$0	\$0
Verification of Utilities	(4)	(5)	\$50	\$0	\$0
Septage Hauler Permit	12	\$200	\$250	\$2,400	\$3,000
<b>SUB-TOTAL</b>				\$433,186	\$586,164





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FEES AND CHARGES				ANNUAL REVENUE	
Description	No. of Transactions <sup>(1)</sup>	Current Fee	Full Cost @ Recovery Fee	Current Revenue	Full Cost Recovery REVENUE
Open/Close GWA or Customer Valve	0 <sup>(4)</sup>	<sup>(5)</sup>	\$80	\$0	\$0
Open/Close GWA or Customer Valve (after business hours)	<sup>(4)</sup>	<sup>(5)</sup>	\$120	\$0	\$0
Sewer Inspection Fee	88	\$50 residential, at cost all others	\$50 residential, at cost all others	\$4,400	\$4,400
Water Inspection Fee	<sup>(4)</sup>	<sup>(5)</sup>	\$50 residential, at cost all others	\$0	\$0
Meter Tampering Penalty	3	Set by law, \$500 per incident	Set by law, \$500 per incident	\$1,500	\$1,500
Septage Haulers Fee	2,096	Per truck load	\$60/kgal	\$52,400	<sup>(4)</sup>
Damage To GWA Infrastructure	<sup>(4)</sup>	Set by law	Set by law	\$0	\$0
Leachate	5,154	\$17.32	\$1	\$89,268	\$5,154
Illegal Sewage Dumping	<sup>(4)</sup>	\$500	\$2,500	\$0	\$0
Bulk Water Sales	<sup>(4)</sup>	\$3/kgal	Based on applicable GWA tariff	\$0	\$0
Plan Review	align="center"> <sup>(4)</sup>	align="center"> <sup>(5)</sup>	Water: \$300+.5% E.E.C.C.	\$0	\$0
			Water: \$300+.5% E.E.C.C.	\$0	\$0
<b>TOTAL</b>				\$580,754	\$597,218



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REFUNDABLE DEPOSIT				ANNUAL DEPOSITS	
Description	No. of Transactions <sup>(1)</sup>	Current Deposit	Full Cost @ Deposit Requirement	Current	Full Cost Recovery
Water Deposit <sup>(7)</sup>	3,815	(2)	(2)	\$123,179 <sup>(3)</sup>	\$430,200 <sup>(3)</sup>
Sewer Deposit <sup>(7)</sup>	2,871	(6)	(6)	\$69,060 <sup>(6)</sup>	\$162,900 <sup>(6)</sup>
<b>TOTAL</b>				<b>\$192,239</b>	<b>\$593,100</b>

- (1) based on FY2013 volume
- (2) fee based on meter size
- (3) combined total for all meter sizes
- (4) activity not tracked
- (5) no current fee
- (6) combined total by rate class
- (7) based on FY2014 assessed deposit



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Service	Description	Meter Detail	Current Fee	Full Cost Recovery Fee
METER RECONNECTION FEE	The reconnection fee is a service charge for customers whose accounts were disconnected for non-payment or failed to comply with the promissory note. This service requires five customer service representatives collectively to analyze and research the account and to prepare the work service order for payment; and a pair of water/sewer technicians to reconnect the meter. One vehicle to drive round trip anywhere between 3 miles to 25 miles distance with an average travel time of between 15 – 45 minutes. Approximately 15 minutes, for meter size smaller than 2”, and 30 minutes for meter size 2” and larger, to reconnect the meter.	Smaller than 2” meters	\$45	\$ 90
		2” and larger meters	\$145	\$100
METER RECONNECTION FEE - SAME DAY SERVICE (Business Hours)	A customer initiated request for reconnection of service on the same day the customer makes full restitution due to a non-payment or failed to comply with GWA regulations. This service requires five customer service representatives to collectively analyze and research the account and to prepare the work service order for payment; and a pair of water technicians to reconnect the meter. One vehicle to drive round trip anywhere between 3 miles to 25 miles distance with an average travel time of between 15 – 45 minutes. Approximately 15 minutes, for meter size smaller than 2”, and 30 minutes for meter size 2” and larger, to reconnect the meter.	Smaller than 2” Meters	\$0	\$ 125
		2” Meter and larger	\$0	\$ 150



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Service	Description	Meter Detail	Current Fee	Full Cost Recovery Fee
<p>METER RECONNECTION FEE - SAME DAY SERVICE (After Business hours)</p>	<p>A customer initiated request for reconnection of service on the same day the customer makes full restitution due to a non-payment or failed to comply with GWA regulations. This service requires five customer service representatives to collectively analyze and research the account and to prepare the work service order for payment; and a pair of water technicians to reconnect the meter. One vehicle to drive round trip anywhere between 3 miles to 25 miles distance with an average travel time of between 15 – 45 minutes. Approximately 15 minutes, for meter size smaller than 2”, and 30 minutes for meter size 2” and larger, to reconnect the meter.</p>	<p>Smaller than 2” Meters</p>	<p>\$0</p>	<p>\$ 125</p>
		<p>2” Meter and larger</p>	<p>\$0</p>	<p>\$ 150</p>
<p>SPECIAL READING</p>	<p>The special reading is a customer request to have the meter consumption data recorded ("read") between cycles or at a particular date. This service would require five customer service representatives to collectively process the work service order and a pair of meter technicians to drive to the premise which should take approximately 15-45 minutes traveling a round trip distance between 3-25 miles; approximately 15 minutes to locate the meter, examine for any unusual aberration, record the consumption data ("read the meter"), download and submit the recorded data to customer service.</p>	<p>All Meter sizes</p>	<p>\$15</p>	<p>\$90</p>



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Service	Description	Meter Detail	Current Fee	Full Cost Recovery Fee
BILL ANALYSIS	The Bill Analysis is a customer request of their account record showing the annual charges and consumption. It would require one customer service representative approximately 2 minutes to lookup the account, setup the data parameter for the specific dates, print the data, and review the document prior to releasing to customer.	All meter sizes	\$10	\$10
DATA LOG	The Account Analysis (Data Log) for residential or commercial customers is a request by the customer to determine high consumption. The first data log will be free. An entry will be made on the account reflecting the date/time the data log was done. All subsequent data logs will be assessed to the customer. This service would require five customer service representatives to collectively process the work service order and a pair of meter technician to record the consumption data. A round trip drive could be between 3 to 25 miles with an average travel time of between 15 to 45 minutes. It would take about 15 minutes to locate the meter, examine for any unusual aberration, record the meter data, download and submit the recorded data to customer service.	All meter sizes	\$0	\$60

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Service	Description	Meter Detail	Current Fee	Full Cost Recovery Fee
VERIFICATION READING/TIME TEST (Customer Requested)	The special reading is a customer request to have the meter recorded ("read") at a particular date. The service is specific to determine the water outlet flow at a preset time normally expressed in gallon per minute. This service would require five customer service representatives to collectively process the work service order and a pair of meter technician to drive to the premise which should take approximately 15-45 minutes traveling a round trip distance between 3-25 miles, locate the meter, examine for any unusual aberration, record the data ("read the meter"), download and submit the reading data to customer service.	All meter sizes	\$45	\$100
COPY OF BILL	A fee charged to customer for requesting copy of bill. It would require one customer service representative to lookup the customer account for the specific dates, print the bill data, and review the document prior to releasing to customer.	All meter sizes	\$0	\$2
APPLICATION FEE	The application fee is a nonrefundable administrative cost that is associated with the establishment of a new customer account. It would require one customer service representative approximately 15-30 minutes to process the account and review and validate the application, set up customer record on computerize system.	All meter sizes	\$0	\$25



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Service	Description	Meter Detail	Current Fee	Full Cost Recovery Fee
BENCH TEST (Customer Requested)	A customer initiated request to test for accuracy of the meter. Charges will be waived, if the meter is determined to be inaccurate. No charge within first year from date of new established meter account. This service requires removal of the meter, installation of a temporary meter for service, testing, calibration, verification and then installing the same meter to the customer premise. It would require one customer service representative to process the work service order, one meter technician to perform the meter testing and calibration, and a pair of meter technician to change out the meters and to re-install the tested meter at customer site. A round trip drive could be between 3 to 25 miles with an average travel time of between 15 to 45 minutes. It would take approximately 20 minutes to change out the meters and install the meter; and it would take approximately 90 and 60 minutes to test the smaller than 2" and 2" and larger size meters, respectively.	1 <sup>st</sup> Test (w/in one year)	Free	Free
		Smaller than 2" Meters	\$85	\$160
		2" Meter and larger	\$175	\$140
BULK WATER SALES	Bulk water intended for potable uses which is transported by tank trucks or provisioned through the rental of a hydrant meter via fire hydrant connection	Does not apply	\$3/kgal	Based on applicable GWA tariff effective at the time and relative to rate class



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Service	Description	Meter Detail	Current Fee	Full Cost Recovery Fee
NEW METER INSTALLATION FEE	The new meter installation fee is a service charge for customers applying for a new meter residential installation. The fee is based on meter size. This service would require eleven employees involving the Customer Service Section, Permit Section, and Warehouse Section collectively to perform the installation of the meter from time of application, site inspection, material issuance, meter installation and final new customer account setup; the use of a vehicle by Permit Section to inspect the property site for the meter and a vehicle for the crew to install the meter. A round trip drive could be between 3 to 25 miles with an average travel time of between 15 to 45 minutes. It would take approximately 30 minutes to inspect the meter; and 30 minutes and 60 minutes to install meter size smaller than 2" and meter size 2" and larger, respectively.	¾"	At Cost	\$ 650
		1"	At Cost	\$ 942
		1 ½"	At Cost	\$ 1,301
		2"	At Cost	\$ 2,163
		3"	At Cost	\$ 3,956
		4"	At Cost	\$ 5,033
		6"	At Cost	\$ 8,169
		8"	At Cost	\$ 7,287
		10"	At Cost	\$ 10,048
METER RELOCATION FEE	The meter relocation fee is a service charge for customers applying for meter relocation. This service would require ten employees involving the Customer Service Section, and Permit Section to perform services from time of application, site inspection, and installation of meter at relocated site. The use of a vehicle by Permit Section to inspect the property site and a vehicle for the crew to install the meter. A round trip drive could be between 3 to 25 miles with an average travel time of between 15 to 45 minutes. Inspection time would take about 30 minutes and installation of meter about 30 minutes for smaller than 2" size meter and about 60 minutes for 2" and larger meters.	Smaller than 2" size meters	At Cost	\$180
		2" and larger size meters	At Cost	\$ 220





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Service	Description	Meter Detail	Current Fee	Full Cost Recovery Fee
PRESSURE READING	The special reading is a customer request to have the meter recorded ("read") at a particular date. The service is specific to determine the water pressure reading/produce. This service would require five customer service representatives to collectively process the work service order and a pair of meter technicians to drive to the premise which should take approximately 15-45 minutes traveling a round trip distance between 3-25 miles, locate the meter, examine for any unusual aberration, record reading of the meter, download and prepare report of the reading data.	All meter sizes	\$25	\$90
LATE PAYMENT FEE (See 28 G.A.R. Section 2108(g) applies to all payment agreements except for an illegal connection payment agreement)	A 6% interest charge on any amount more than 30 days past due. Interest to be calculated using accrual methodology. This interest rate is identical to the statutory limit on court judgments and the same with Title 28 GAR section 2121.	Does not apply	\$0	Set by Law  6% of past due amount
RETURN CHECK FEE	This charge is applicable to all customers when a demand for payment on an account cannot be honored, i.e. a check or bank draft returned by a financial institution for insufficient funds, closed or other appropriate reasons. This service would require three employees collectively to make entry on customer account, to make accounting entry, and to collect payment from customer.	Does not apply	\$30	\$50



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Service	Description	Meter Detail	Current Fee	Full Cost Recovery Fee
<p>OPEN / CLOSE GWA OR CUSTOMER CONTROL VALVE (Customer Requested)</p>	<p>This is a customer initiated request that requires a GWA control valve to be opened or closed. This request may originate because of a defective customer shut off valve; the customer requires a major construction of the dwelling which will require relocation, replacement of supporting pipes, to commence receiving water services, or customer emergency. This service would require one customer service representative to process the work service order; a pair of water service technicians to drive to the premise which should take approximately 15-45 minutes traveling a round trip distance between 3-25 miles, locate the government control valve, and open/shut off the water. It will take approximately 5 minutes to open / shut off the value.</p>	<p>All meter sizes</p>	<p>\$0</p>	<p>\$80</p>
<p>OPEN / CLOSE GWA OR CUSTOMER CONTROL VALVE (CUSTOMER REQUESTED AFTER BUSINESS HOURS)</p>	<p>This is a customer initiated request that requires a GWA control valve to be opened or closed. This request may originate because of a defective customer shut off value; the customer requires a major construction of the dwelling which will require relocation, replacement of supporting pipes, to commence receiving water services, or customer emergency. This service would require one customer service representative to process the work service order; a pair of water service technicians to drive to the premise which should take approximately 15-45 minutes traveling a round trip distance between 3-25 miles, locate the government control valve, and open/shut off the water. It will take approximately 5 minutes to open / shut off the value.</p>	<p>All meter sizes</p>	<p>\$0</p>	<p>\$120</p>



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Service	Description	Meter Detail	Current Fee	Full Cost Recovery Fee
VERIFICATION OF UTILITIES (aka Utility Clearance)	This is a customer initiated request that requires determination of water and/or wastewater utility at a particular location. This request is necessitated because customer anticipates construction activity on location. This service would require one Administrative Assistance to process the work service order; one construction inspection to drive to the premise for inspection which should take approximately 15-45 minutes traveling a round trip distance between 3-25 miles. It will take approximately 15 minutes to inspect the site.	All meter sizes	\$0	\$50
ILLEGAL HOOKUP OR ILLEGAL CONNECTION PENALTY	Any hookup to water and/or sewer pipes belonging to the Government of Guam made without prior written permission of the Guam Waterworks Authority, the removal of water from any other of the GWA's lines, fire hydrant, etc., without obtaining prior approval of GWA or the unauthorized dumping of sewage or any other matter into the GWA's water and/or sewer systems. GWA shall determine the estimated value of the water/wastewater usage by the illegal connection for a period of up to four (4) years, based upon the estimated time the illegal hookup was in place, using average consumption figures for the type of consumption of the illegal hookup system-wide for all consumers of that class of figures. A twelve percent (12%) annual interest shall be assessed on the unpaid balance. Interest to be calculated using accrual methodology. Interest rate is based on Title 28 GAR.	¾" & 1"	*\$2,500 plus	*\$2,500 plus
		1 ½" & 2"	*\$5,000 plus	*\$5,000 plus
		3"	*\$7,500 plus	*\$7,500 plus
		4"	*\$10,000 plus	*\$10,000 plus
		6"	*\$12,500 plus	*\$12,500 plus
		8"	*\$15,000 plus	*\$15,000 plus
		10"	*\$17,500 plus	*\$17,500 plus
		12"	*\$20,000 plus	*\$20,000 plus
		14"	*\$22,500 plus	*\$22,500 plus
		16"	*\$25,000 plus	*\$25,000 plus
* penalty plus usage based on applicable GWA water & wastewater tariff effective at the time for respective rate class (Public Law 19=14)				



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Service	Description	Meter Detail	Current Fee	Full Cost Recovery Fee
<b>SEWER INSPECTION FEE</b>	Is issued to contractors jointly by GWA and GEPA, and is required before such contractors can construct a sewer service connection. This service would require one Administrative Assistance to process the work service order; one construction inspector to drive to the premise for inspection which should take approximately 15-45 minutes traveling a round trip distance between 3-25 miles. It will take approximately 15 minutes to inspect the site.	Does not apply	\$50 residential  At Cost for all other rate classes	\$50  At Cost for all other rate classes
<b>WATER INSPECTION FEE</b>	Is issued to contractors jointly by GWA and GEPA, and is required before such contractors can construct a water service connection. This service would require one Administrative Assistance to process the work service order; one construction inspector to drive to the premise for inspection which should take approximately 15-45 minutes traveling a round trip distance between 3-25 miles. It will take approximately 15 minutes to inspect the site.	Does not apply	At Cost for all other rate classes	\$50  At cost for all other rate classes
<b>DEPOSIT – WATER CUSTOMERS</b>	The deposit secures payment in the event that the consumer fails to pay or has caused damage to GWA meters or water lines and has discontinued service. The amount of the deposit is an estimate of the average amounts of billings for two (2) months that the customer leaves with GWA (on average higher than normal average customer bill by class). The deposit is refundable subject to GWA service rules.	¾”	\$32	\$100
		1”	\$37	\$300
		1 ½”	\$55	\$800
		2”	\$73	\$2,000
		3”	\$123	\$5,000
		4”	\$178	\$7,000
		6”	\$313	\$14,000
		8”	\$378	\$44,000
		10”	\$660	\$44,000
		12”	\$773	\$15,000



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Service	Description	Meter Detail	Current Fee	Full Cost Recovery Fee
DEPOSIT – WASTEWATER CUSTOMERS	The deposit secures payment in the event that the consumer fails to pay and has discontinued service. The amount of the deposit is an estimate of the average amounts of billings for two (2) months that the customer leaves with GWA (on average higher than normal average customer bill by class). The deposit is refundable subject to GWA service rules.	Residential	\$20	\$50
		Commercial I	\$60	\$300
		Commercial II	\$650	\$22,000
		Commercial III	\$1,400	\$2,000
METER TAMPERING PENALTY (Not constituting an illegal connection)	A situation where a meter has been illegally altered. GWA shall determine the estimated value of the water/wastewater usage by the illegal meter tampering for a period of up to four (4) years, based upon the estimated time the illegal meter tampering was in place, using average consumption figures for the type of consumption of the illegal meter tampering system-wide for all consumers of that class of figures. A twelve percent (12%) annual interest shall be assessed on the unpaid balance. Interest to be calculated using accrual methodology. Interest rate is based on Title 28 of Government Administrative Rules and Regulations.	All meter sizes	\$500 plus estimated water loss based on applicable GWA tariff effective at the time	Set by Law



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Service	Description	Meter Detail	Current Fee	Full Cost Recovery Fee
PLAN REVIEW	A service initiated by Customer to review construction plans relative to water and/or wastewater connections. The service requires an administrative assistant & an Engineer.	Water	\$0	\$300 + .5% **E.E.C.C.
		Wastewater	\$0	\$300 + 1% **E.E.C.C.
DOOR NOTICE HANGER	A fee charged to customer for posting a notice on Customer's premises. The fee is generally initiated due to non-payment or past due amounts. Requires a Customer Service Representative to collectively analyze and validate account status and issue a work order and water meter reader to post the notice on customer's premises.	All meter sizes	\$0	\$5
SEPTAGE HAULERS FEE	A service initiated by a private waste hauling contractor to dispose into GWA's wastewater treatment facility. The fee/charge is per 1,000 gallons of disposal.	Annual Permit Fee	\$200	\$250
		Less than 5Kgal discharge	\$5/truck	\$60/kgal
		Greater than 5kgal discharge	\$25/truck	\$60/kgal
DAMAGE TO GWA INFRASTRUCTURE	The consumer shall be liable for any damage to a meter or other equipment or property of GWA caused by the consumer or person representing the consumer and GWA shall be promptly reimbursed by the consumer for all costs to such damage. Title 28 GAR.	All meter sizes	Set by Law	Set by Law – actual cost to GWA to repair

\*\* E.E.C.C. – Engineering Estimated Cost of Construction



**GUAM WATERWORKS AUTHORITY**

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Service	Description	Meter Detail	Current Fee	Full Cost Recovery Fee
LEACHATE	Any leachate discharge from any dump or landfill.	None	\$17.32/kgal	\$1/kgal
Illegal Sewage Dumping Penalty	Unlawful or unauthorized discharge of sewage into GWA system	Not Applicable	\$500	\$2,500



## GUAM WATERWORKS AUTHORITY

### METER RECONNECTION FEE (smaller than 2" meters)

Description: The reconnection fee is a service charge for customers whose accounts were disconnected for non-payment or failed to comply with the promissory note.

Process: This service requires five customer service representative collectively to analyze and research the account and to prepare the work service order for payment; and a pair of water technicians to reconnect the meter. One vehicle to drive round trip anywhere between 3 to 25 miles distance with an average travel time of between 15 to 45 minutes. Approximately 15 minutes to reconnect the meter.

### VEHICLE AND EQUIPMENT COSTS

	Equipment Description	Cost per Mile	# Required	Total Miles	Cost
	Passenger Vehicle / Light Truck	\$ 0.21	1	25	\$ 5.14
Total					\$ 5.14

### LABOR COSTS

	Position Description	Hourly Rate	Benefits	# Required	Travel Hrs	Hours	Cost
	Customer Service Rep	\$ 19.67	\$ 5.90	5	0.00	0.10	\$ 12.79
	Water/Wastewater Maint. Worker	\$ 20.43	\$ 6.13	2	0.75	1.00	\$ 53.13
7					Total		\$ 65.91

### SUPPLIES AND MATERIALS COSTS

	Item Description	Unit Cost	Quantity	Cost
	Paper	\$ 0.05	10	\$ 0.50
Total				\$ 0.50

### SUMMARY OF COSTS

Equipment Costs	\$ 5.14
Labor Costs	\$ 65.91
Supplies and Materials	\$ 0.50
Overhead	\$ 19.77
Total	\$ 91.32





## GUAM WATERWORKS AUTHORITY

### METER RECONNECTION FEE (2" and larger meters)

Description: The reconnection fee is a service charge for customers whose accounts were disconnected for non-payment or failed to comply with the promissory note.

Process: This service requires five customer service representatives collectively to analyze and research the account and to prepare the work service order for payment; and a pair of water technicians to reconnect the meter. One vehicle to drive round trip anywhere between 3 to 25 miles distance with an average travel time of between 15 to 45 minutes. Approximately 30 minutes to reconnect the meter.

#### VEHICLE AND EQUIPMENT COSTS

Equipment Description	Cost per Mile	# Required	Total Miles	Cost
Passenger Vehicle / Light Truck	\$ 0.21	1	25	\$ 5.14
Total \$				5.14

#### LABOR COSTS

Position Description	Hourly Rate	Benefits	# Required	Travel Hrs	Hours	Cost
Customer Service Rep	\$ 19.67	\$ 5.90	5	0.00	0.10	\$ 12.79
Water/Wastewater Maint. Worker	\$ 20.43	\$ 6.13	2	0.75	1.25	\$ 66.41
Total \$						79.19

#### SUPPLIES AND MATERIALS COSTS

Item Description	Unit Cost	Quantity	Cost
Paper	\$ 0.05	10	\$ 0.50
Total \$			0.50

#### SUMMARY OF COSTS

Equipment Costs	\$ 5.14
Labor Costs	\$ 79.19
Supplies and Materials	\$ 0.50
Overhead	\$ 23.76
Total	\$ 108.59



**GUAM WATERWORKS AUTHORITY**

**METER RECONNECTION FEE - SAME DAY SERVICE (Business Hours / Smaller than 2" meters)**

Description: A customer initiated request for reconnection of service on the same day the customer makes full restitution due to non-payment or failure to comply with GWA regulations.

Process: This service requires five customer service representatives to collectively analyze and research the account and to prepare the work service order for payment; and a pair of water technician to reconnect the meter. One vehicle to drive round trip anywhere between 3 to 25 miles distance with an average travel time of between 15 to 45 minutes. Approximately 15 minutes to reconnect the meter.

**VEHICLE AND EQUIPMENT COSTS**

	Equipment Description	Cost per Mile	# Required	Total Miles	Cost
	Passenger Vehicle / Light Truck	\$ 0.21	1	25	\$ 5.14
Total \$					5.14

**LABOR COSTS**

	Position Description	Hourly Rate	Benefits	# Required	Travel Hrs	Hours	Cost
	Customer Service Rep	\$ 19.67	\$ 5.90	5	0.00	0.10	\$ 12.79
	Water/Wastewater Maint. Worker	\$ 33.72	\$ 6.13	2	0.75	1.00	\$ 79.69
Total \$							92.48

**SUPPLIES AND MATERIALS COSTS**

	Item Description	Unit Cost	Quantity	Cost
	Paper	\$ 0.05	10	\$ 0.50
Total \$				0.50

**SUMMARY OF COSTS**

Equipment Costs	\$ 5.14
Labor Costs	\$ 92.48
Supplies and Materials	\$ 0.50
Overhead Costs	\$ 27.74
<b>Total</b>	<b>\$ 125.86</b>



**GUAM WATERWORKS AUTHORITY**

**METER RECONNECTION FEE - SAME DAY SERVICE (Business Hours / 2" and larger meters)**

Description: A customer initiated request for reconnection of service on the same day the customer makes full restitution due to non-payment or failure to comply with GWA regulations.

Process: This service requires five customer service representatives to collectively analyze and research the account and to prepare the work service order for payment; and a pair of water technician to reconnect the meter. One vehicle to drive round trip anywhere between 3 to 25 miles distance with an average travel time of between 15 to 45 minutes. Approximately 30 minutes to reconnect the meter.

**VEHICLE AND EQUIPMENT COSTS**

	Equipment Description	Cost per Mile	# Required	Total Miles	Cost
	Passenger Vehicle / Light Truck	\$ 0.21	1	25	\$ 5.14
Total \$					5.14

**LABOR COSTS**

	Position Description	Hourly Rate	Benefits	# Required	Travel Hrs	Hours	Cost
	Customer Service Rep	\$ 19.67	\$ 5.90	5	0.00	0.10	\$ 12.79
	Water/Wastewater Maint. Worker	\$ 33.72	\$ 6.13	2	0.75	1.25	\$ 99.61
Total \$							112.40

**SUPLIES AND MATERIALS COSTS**

	Item Description	Unit Cost	Quantity	Cost
	Paper	\$ 0.05	10	\$ 0.50
Total				\$ 0.50

**SUMMARY OF COSTS**

Equipment Costs	\$ 5.14
Labor Costs	\$ 112.40
Supplies and Materials	\$ 0.50
Overhead Costs	\$ 33.72
Total	\$ 151.76



**GUAM WATERWORKS AUTHORITY**

**METER RECONNECTION FEE - SAME DAY SERVICE (After Business hours / Smaller than 2" meters)**

Description: A customer initiated request for reconnection of service on the same day the customer makes full restitution due to non-payment or failure to comply with GWA regulations.

Process: This service requires five customer service representatives to collectively analyze and research the account and to prepare the work service order for payment; and a pair of water technician to reconnect the meter. One vehicle to drive round tr

**VEHICLE AND EQUIPMENT COSTS**

	Equipment Description	Cost per Mile	# Required	Total Miles	Cost
	Passenger Vehicle / Light Truck	\$ 0.21	1	25	\$ 5.14
Total					\$ 5.14

**LABOR COSTS**

	Position Description	Hourly Rate	Benefits	# Required	Travel Hrs	Hours	Cost
	Customer Service Rep	\$ 19.67	\$ 5.90	5	0.00	0.10	\$ 12.79
	Water/Wastewater Maint. Worker	\$ 33.72	\$ 6.13	2	0.75	1.00	\$ 79.69
Total							\$ 92.48

**SUPPLIES AND MATERIALS COSTS**

	Item Description	Unit Cost	Quantity	Cost
	Paper	\$ 0.05	10	\$ 0.50
Total				\$ 0.50

**SUMMARY OF COSTS**

Equipment Costs	\$ 5.14
Labor Costs	\$ 92.48
Supplies and Materials	\$ 0.50
Overhead Costs	\$ 27.74
<b>Total</b>	<b>\$ 125.86</b>



**GUAM WATERWORKS AUTHORITY**

**METER RECONNECTION FEE - SAME DAY SERVICE (After Business hours / 2" meter and larger)**

Description: A customer initiated request for reconnection of service on the same day the customer makes full restitution due to non-payment or failure to comply with GWA regulations.

Process: This service requires five customer service representatives to collectively analyze and research the account and to prepare the work service order for payment; and a pair of water technician to reconnect the meter. One vehicle to drive round trip anywhere between 3 miles to 25 miles distance with an average travel time of between 15 -m 45 minutes. Approximately 30 minutes to reconnect the meter.

**VEHICLE AND EQUIPMENT COSTS**

Equipment Description	Cost per Mile	# Required	Total Miles	Cost
Passenger Vehicle / Light Truck	\$ 0.21	1	25	\$ 5.14
Total				\$ 5.14

Position Description	Hourly Rate	Benefits	# Required	Travel Hrs	Hours	Cost
Customer Service Rep	\$ 19.67	\$ 5.90	5	0.00	0.10	\$ 12.79
Water/Wastewater Maint. Worker	\$ 33.72	\$ 6.13	2	0.75	1.25	\$ 99.61
Total						\$ 112.40

**SUPPLIES AND MATERIALS COSTS**

Item Description	Unit Cost	Quantity	Cost
Paper	\$ 0.05	10	\$ 0.50
Total			\$ 0.50

**SUMMARY OF COSTS**

Equipment Costs	\$ 5.14
Labor Costs	\$ 112.40
Supplies and Materials	\$ 0.50
Overhead Costs	\$ 33.72
<b>Total</b>	<b>\$ 151.76</b>



**GUAM WATERWORKS AUTHORITY**

**SPECIAL READING**

Description: The special reading is a customer request to have the meter consumption data recorded ("read") between cycles or at a particular date; because the customer request for a final bill amount or for other reasons.

Process: This service would require five customer service representatives to collectively process the work service order and a pair of meter technician to drive to the premise which should take approximately 15-45 minutes traveling a round trip distance between 3-25 miles; approximately 15 minutes to locate the meter, examine for any unusual aberration, record the consumption data ("read the meter"), download and submit the recorded data to customer service.

**VEHICLE AND EQUIPMENT COSTS**

	Vehicle/Equipment Description	Cost per Mile	# Required	Total Miles	Cost
	Passenger Vehicle / Light Truck	\$ 0.21	1	25	\$ 5.14
Total					\$ 5.14

**LABOR COSTS**

	Position Description	Hourly Rate	Benefits	# Required	Travel Hrs	Hours	Cost
	Customer Service Rep	\$ 19.67	\$ 5.90	5	0.00	0.10	\$ 12.79
	Water/Wastewater Maint. Worker	\$ 20.43	\$ 6.13	2	0.75	1.00	\$ 53.13
Total							\$ 65.91

**SUPPLIES AND MATERIALS COSTS**

	Item Description	Unit Cost	Quantity	Cost
	Paper	\$ 0.05	10	\$ 0.50
Total				\$ 0.50

**SUMMARY OF COSTS**

Equipment Costs	\$ 5.14
Labor Costs	\$ 65.91
Supplies and Materials	\$ 0.50
Overhead Cost	\$ 19.77
Total	\$ 91.32



## GUAM WATERWORKS AUTHORITY

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### BILL ANALYSIS

Description: The Bill Analysis is a customer request of their account record showing the annual charges and consumption.

Process: It would require one customer service representative approximately 2 minutes to lookup the account, setup the data parameter for the specific dates, print the data, and review the document prior to releasing to customer.

#### LABOR COSTS

	Position Description	Hourly Rate	Benefits	# Required	Hours	Cost
	Customer Service Representative	\$ 19.67	\$ 5.90	1	0.25	\$ 6.39
Total						\$ 6.39

#### SUPPLIES AND MATERIALS COSTS

	Item Description	Unit Cost	Quantity	Cost
	Paper	\$ 0.05	10	\$ 0.50
Total				\$ 0.50

#### SUMMARY OF COSTS

Equipment Costs	\$ -
Labor Costs	\$ 6.39
Supplies and Materials	\$ 0.50
Overhead Cost	\$ 1.92
Total	\$ 8.81



## GUAM WATERWORKS AUTHORITY

### DATA LOG

Description: The Account Analysis (Data Log) for residential or commercial customers is a request by the customer to determine high consumption. The first data log will be free. An entry will be made on the account reflecting the date/time the data log was done. All subsequent data logs will be assessed the customer.

Process: This service would require five customer service representatives to collectively process the work service order and a pair of meter technician to record the consumption data. A round trip drive could be between 3 to 25 miles with an average travel time of between 15 to 45 minutes. It would take about 15 minutes to locate the meter, examine for any unusual aberration, record the meter data, download and submit the recorded data to customer service.

#### VEHICLE AND EQUIPMENT COSTS

	Equipment Description	Cost per Mile	# Required	Total Miles	Cost
	Passenger Vehicle / Light Truck	\$ 0.21	1	25	\$ 5.14
Total					\$ 5.14

#### LABOR COSTS

	Position Description	Hourly Rate	Benefits	# Required	Travel Hrs	Total Hours	Cost
	Customer Service Representative	\$ 19.67	\$ 5.90	5	0.00	0.06	\$ 7.67
	Water/Wastewater Maint. Worker	\$ 20.43	\$ 6.13	2	0.75	0.65	\$ 34.53
Total							\$ 42.20

#### SUPPLIES AND MATERIALS COSTS

	Item Description	Unit Cost	Quantity	Cost
	Paper	\$ 0.05	10	\$ 0.50
Total				\$ 0.50

#### SUMMARY OF COSTS

Equipment Costs	\$ 5.14
Labor Costs	\$ 42.20
Supplies and Materials	\$ 0.50
Overhead Cost	\$ 12.66
Total	\$ 60.50





**GUAM WATERWORKS AUTHORITY**

**Verification Reading/Time Test (Customer Requested)**

Description: The special reading is a customer request to have the meter recorded ("read") at a particular date. The service is specific to determine the water out flow at a pre-set time normally expressed in gallon per minute.

Process: This service would require five customer service representatives to collectively process the work service order and a pair of meter technician to drive to the premise which should take approximately 15-45 minutes traveling a round trip distance between 3-25 miles; approximately 20 minutes to locate the meter, examine for any unusual aberration, record the data ("read the meter"), download and submit the reading data to customer service.

**VEHICLE AND EQUIPMENT COSTS**

	Vehicle/Equipment Description	Cost per Mile	# Required	Total Miles	Cost
	Passenger Vehicle / Light Truck	\$ 0.21	1	25	\$ 5.14
<b>Total</b>					<b>\$ 5.14</b>

**LABOR COSTS**

	Position Description	Hourly Rate	Benefits	# Required	Travel Hrs	Hours	Cost
	Customer Service Rep	\$ 19.67	\$ 5.90	5	0.00	0.10	\$ 12.79
	Water/Wastewater Maint. Worker	\$ 20.43	\$ 6.13	2	0.75	1.25	\$ 66.41
<b>Total</b>							<b>\$ 79.19</b>

**SUPPLIES AND MATERIALS COSTS**

	Item Description	Unit Cost	Quantity	Cost
	Paper	\$ 0.05	10	\$ 0.50
<b>Total</b>				<b>\$ 0.50</b>

**SUMMARY OF COSTS**

Equipment Costs	\$ 5.14
Labor Costs	\$ 79.19
Supplies and Materials	\$ 0.50
Overhead Cost	\$ 23.76
<b>Total</b>	<b>\$ 108.59</b>



## GUAM WATERWORKS AUTHORITY

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### COPY OF BILL

Description: A fee charged to customer for requesting copy of bill.

Process: It would require one customer service representative to lookup the customer account for the specific dates, print the bill data, and review the document prior to releasing to customer.

### LABOR COSTS

	Position Description	Hourly Rate	Benefits	# Required	Hours	Cost
	Customer Service Representative	\$ 19.67	\$ 5.90	1	0.07	\$ 1.70
Total						\$ 1.70

### SUPPLIES AND MATERIALS COSTS

	Item Description	Unit Cost	Quantity	Cost
	Paper	\$ 0.05	1	\$ 0.05
Total				\$ 0.05

### SUMMARY OF COSTS

Equipment Costs	\$ -
Labor Costs	\$ 1.70
Supplies and Materials	\$ 0.05
Overhead Cost	\$ 0.51
Total	\$ 2.26



## GUAM WATERWORKS AUTHORITY

### APPLICATION FEE

Description: The application fee is a non refundable administrative cost that is associated with the establishment of a new customer account.

Process: It would require one customer service representative approximately 15-30 minutes to process the account - review and validate the application, set up customer record on computerize system.

### VEHICLE AND EQUIPMENT COSTS

	Equipment Description	Cost per Mile	# Required	Total Miles	Cost
Total \$					-

### LABOR COSTS

	Position Description	Base Hr Rate	Benefits Hr Rate	# Required	Hours	Cost
	Customer Service Rep	\$ 19.67	\$ 5.90	1	0.75	\$ 19.18
Total \$						19.18

### SUPPLIES AND MATERIALS COSTS

	Item Description	Unit Cost	Quantity	Cost
	Paper	\$ 0.05	10	\$ 0.50
Total				\$ 0.50

### SUMMARY OF COSTS

Equipment Costs	\$ -
Labor Costs	\$ 19.18
Material & Supplies Costs	\$ 0.50
Overhead Cost	\$ 5.75
Total	\$ 25.43



## GUAM WATERWORKS AUTHORITY

### Bench Test (Customer Requested / smaller than 2" meters)

Description: A customer initiated requests to test for accuracy of the meter. Charges will be waived, if the meter is determined to be inaccurate. No charge within first year from date of new established meter account.

Process: This service requires removal of the meter, installation of a temporary meter for service, testing, calibration, verification and then installing the same meter to the customer premise. It would require one customer service representative to process the work service order, one meter technician to perform the meter testing and calibration, and a pair of meter technician to change out the meter and to re-install the tested meter at customer site. A round trip drive could be between 3 to 25 miles with an average travel time of between 15 to 45 minutes. It would take approximately 20 minutes to change out the meter and install the meter; and it would take approximately 90 minutes to test the meter.

#### VEHICLE AND EQUIPMENT COSTS

	Vehicle/Equipment Description	Cost per Mile	# Required	Total Miles	Cost
	Passenger Vehicle / Light Truck	\$ 0.21	1	25	\$ 5.14
Total \$					5.14

#### LABOR COSTS

	Position Description	Hourly Rate	Benefits	# Required	Travel Hrs	Hours	Cost
	Customer Service Rep	\$ 19.67	\$ 5.90	4	0.00	0.13	\$ 12.79
	Water/Wastewater Maint. Worker	\$ 20.43	\$ 6.13	2	0.75	1.25	\$ 66.41
	Water/Wastewater Maint. Worker	\$ 20.43	\$ 6.13	1	0.00	1.50	\$ 39.85
Total							\$119.04

#### SUPPLIES AND MATERIALS COSTS

	Item Description	Unit Cost	Quantity	Cost
	Paper	\$ 0.05	10	\$ 0.50
Total \$				0.50

#### SUMMARY OF COSTS

Equipment Costs	\$ 5.14
Labor Costs	\$ 119.04
Supplies and Materials	\$ 0.50
Overhead Cost	\$ 35.71
Total	\$ 160.39



## GUAM WATERWORKS AUTHORITY

### Bench Test (Customer Requested / 2" Meter and larger )

Description: A customer initiated requests to test for accuracy of the meter. Charges will be waived, if the meter is determined to be inaccurate. No charge within first year from date of new established meter account.

Process: This service requires removal of the meter, installation of a temporary meter for service, testing, calibration, verification and then installing the same meter to the customer premise. It would require one customer service representative to process the work service order, one meter technician to perform the meter testing and calibration, and a pair of meter technician to change out the meter and to re-install the tested meter at customer site. A round trip drive could be between 3 to 25 miles with an average travel time of between 15 to 45 minutes. It would take approximately 20 minutes to change out the meter and install the meter; and it would take approximately 60 minutes to test the meter.

#### VEHICLE AND EQUIPMENT COSTS

Vehicle/Equipment Description	Cost per Mile	# Required	Total Miles	Cost
Passenger Vehicle / Light Truck	\$ 0.21	1	25	\$ 5.14
Total				\$ 5.14

#### LABOR COSTS

Position Description	Hourly Rate	Benefits	# Required	Travel Hrs	Hours	Cost
Customer Service Rep	\$ 19.67	\$ 5.90	4	0.00	0.13	\$ 13.30
Water/Wastewater Maint. Worker	\$ 20.43	\$ 6.13	2	0.75	1.25	\$ 66.41
Water/Wastewater Maint. Worker	\$ 20.43	\$ 6.13	1	0.00	1.00	\$ 26.56
Total						\$ 106.27

#### SUPPLIES AND MATERIALS COSTS

Item Description	Unit Cost	Quantity	Cost
Paper	\$ 0.05	10	\$ 0.50
Total			\$ 0.50

#### SUMMARY OF COSTS

Equipment Costs	\$ 5.14
Labor Costs	\$ 106.27
Supplies and Materials	\$ 0.50
Overhead Cost	\$ 31.88
Total	\$ 143.79



**GUAM WATERWORKS AUTHORITY**

**NEW METER INSTALLATION FEE (3/4" Meter size)**

Description: The new meter installation fee is a service charge for customers applying for a new meter installation.

Process: This service would require eleven employees involving the Customer Service Section, Permit Section, and Warehouse Section collectively to perform the installation of the meter from time of application, site inspection, material issuance, meter installation and final new customer account setup; the use of a vehicle by Permit Section to inspect the property site for the meter and a vehicle for the crew to install the meter. A round trip drive could be between 3 to 25 miles with an average travel time spent of between 15 to 45 minutes. It would take approximately 30 minutes to inspect the meter and 30 minutes to install the meter.

**VEHICLE AND EQUIPMENT COSTS**

Equipment Description	Cost per Mile	# Required	Total Miles	Cost
Passenger Vehicle / Light Truck	\$ 0.21	2	25	\$ 10.28
Total				\$ 10.28

**LABOR COSTS**

Position Description	Hourly Rate	Benefits	# Required	Travel Hrs	Hours	Cost
Customer Service Rep	\$ 19.67	\$ 5.90	6	0	0.13	\$ 19.18
Water/Wastewater Maint. Worker	\$ 20.43	\$ 6.13	2	0.75	1.25	\$ 66.41
Administrative Assistance	\$ 20.94	\$ 6.28	1	0	0.50	\$ 13.61
Construction Inspector I	\$ 24.85	\$ 7.46	1	0.75	1.25	\$ 40.38
Storekeeper	\$ 16.09	\$ 4.83	1	0	0.25	\$ 5.23
Total						\$ 144.81

**SUPPLIES AND MATERIALS COSTS**

Item Description	Unit Cost	Quantity	Cost
Paper	\$ 0.05	10	\$ 0.50
Meter	\$ 140.05	1	\$ 140.05
Meter box and fittings	\$ 311.03	1	\$ 311.03
			\$ -
Total			\$ 451.58

**SUMMARY OF COSTS**

Equipment Costs	\$ 10.28
Labor Costs	\$ 144.81
Supplies and Materials	\$ 451.58
Overhead	\$ 43.44
Total	\$ 650.11



## GUAM WATERWORKS AUTHORITY

### NEW METER INSTALLATION FEE (1" Meter size)

Description: The new meter installation fee is a service charge for customers applying for a new meter installation.

Process: This service would require eleven employees involving the Customer Service Section, Permit Section, and Warehouse Section collectively to perform the installation of the meter from time of application, site inspection, material issuance, meter installation and final new customer account setup; the use of a vehicle by Permit Section to inspect the property site for the meter and a vehicle for the crew to install the meter. A round trip drive could be between 3 to 25 miles with an average travel time of between 15 to 45 minutes. It would take approximately 30 minutes to inspect the meter and 30 minutes to install the meter.

#### VEHICLE AND EQUIPMENT COSTS

Equipment Description	Cost per Mile	# Required	Total Miles	Cost
Passenger Vehicle / Light Truck	\$ 0.21	2	25	\$ 10.28
Total				\$ 10.28

#### LABOR COSTS

Position Description	Hourly Rate	Benefits	# Required	Travel Hrs	Hours	Cost
Customer Service Rep	\$ 19.67	\$ 5.90	6	0	0.13	\$ 19.18
Water/Wastewater Maint. Worker	\$ 20.43	\$ 6.13	2	0.75	1.25	\$ 66.41
Administrative Assistance	\$ 20.94	\$ 6.28	1	0	0.50	\$ 13.61
Construction Inspector I	\$ 24.85	\$ 7.46	1	0.75	1.25	\$ 40.38
Storekeeper	\$ 16.09	\$ 4.83	1	0	0.25	\$ 5.23
Total						\$ 144.81

#### SUPPLIES AND MATERIALS COSTS

Item Description	Unit Cost	Quantity	Cost
Paper	\$ 0.05	10	\$ 0.50
Meter	\$ 218.69	1	\$ 218.69
Meter box and fittings	\$ 524.67	1	\$ 524.67
			\$ -
Total			\$ 743.86

#### SUMMARY OF COSTS

Equipment Costs	\$ 10.28
Labor Costs	\$ 144.81
Supplies and Materials	\$ 743.86
Overhead	\$ 43.44
Total	\$ 942.39



**GUAM WATERWORKS AUTHORITY**

**NEW METER INSTALLATION FEE (1.5" Meter size)**

Description: The new meter installation fee is a service charge for customers applying for a new meter installation.

Process: This service would require eleven employees involving the Customer Service Section, Permit Section, and Warehouse Section collectively to perform the installation of the meter from time of application, site inspection, material issuance, meter installation and final new customer account setup; the use of a vehicle by Permit Section to inspect the property site for the meter and a vehicle for the crew to install the meter. A round trip drive could be between 3 to 25 miles with an average travel time of between 15 to 45 minutes. It would take approximately 30 minutes to inspect the meter and 30 minutes to install the meter.

**VEHICLE AND EQUIPMENT COSTS**

Equipment Description	Cost per Mile	# Required	Total Miles	Cost
Passenger Vehicle / Light Truck	\$ 0.21	2	25	\$ 10.28
<b>Total</b>				<b>\$ 10.28</b>

**LABOR COSTS**

Position Description	Hourly Rate	Benefits	# Required	Travel Hrs	Hours	Cost
Customer Service Rep	\$ 19.67	\$ 5.90	6	0	0.13	\$ 19.18
Water/Wastewater Maint. Worker	\$ 20.43	\$ 6.13	2	0.75	1.25	\$ 66.41
Administrative Assistance	\$ 20.94	\$ 6.28	1	0	0.50	\$ 13.61
Construction Inspector I	\$ 24.85	\$ 7.46	1	0.75	1.25	\$ 40.38
Storekeeper	\$ 16.09	\$ 4.83	1	0	0.25	\$ 5.23
<b>Total</b>						<b>\$ 144.81</b>

**SUPPLIES AND MATERIALS COSTS**

Item Description	Unit Cost	Quantity	Cost
Paper	\$ 0.05	10	\$ 0.50
Meter	\$ 349.53	1	\$ 349.53
Meter box and fittings	\$ 752.80	1	\$ 752.80
			\$ -
			\$ -
<b>Total</b>			<b>\$ 1,102.83</b>

**SUMMARY OF COSTS**

Equipment Costs	\$ 10.28
Labor Costs	\$ 144.81
Supplies and Materials	\$ 1,102.83
Overhead	\$ 43.44
<b>Total</b>	<b>\$ 1,301.36</b>





**GUAM WATERWORKS AUTHORITY**

**NEW METER INSTALLATION FEE (2" Meter size)**

Description: The new meter installation fee is a service charge for customers applying for a new meter installation.

Process: This service would require eleven employees involving the Customer Service Section, Permit Section, and Warehouse Section collectively to perform the installation of the meter from time of application, site inspection, material issuance, meter installation and final new customer account setup; the use of a vehicle by Permit Section to inspect the property site for the meter and a vehicle for the crew to install the meter. A round trip drive could be between 3 to 25 miles with an average travel time of between 15 to 45 minutes. It would take approximately 30 minutes to inspect the meter and 60 minutes to install the meter.

**VEHICLE AND EQUIPMENT COSTS**

Equipment Description	Cost per Mile	# Required	Total Miles	Cost
Passenger Vehicle / Light Truck	\$ 0.21	2	25	\$ 10.28
Total				\$ 10.28

**LABOR COSTS**

Position Description	Hourly Rate	Benefits	# Required	Travel Hrs	Hours	Cost
Customer Service Rep	\$ 19.67	\$ 5.90	6	0	0.13	\$ 19.18
Water/Wastewater Maint. Worker	\$ 20.43	\$ 6.13	2	0.75	2	\$ 89.52
Administrative Assistance	\$ 20.94	\$ 6.28	1	0	0.50	\$ 13.61
Construction Inspector I	\$ 24.85	\$ 7.46	1	0.75	1.25	\$ 40.38
Storekeeper	\$ 16.09	\$ 4.83	1	0	0.25	\$ 5.23
Total						\$ 167.92

**SUPPLIES AND MATERIALS COSTS**

Item Description	Unit Cost	Quantity	Cost
Paper	\$ 0.05	10	\$ 0.50
Meter	\$ 517.00	1	\$ 517.00
Meter box and fittings	\$ 1,417.48	1	\$ 1,417.48
			\$ -
			\$ -
Total			\$ 1,934.98

**SUMMARY OF COSTS**

Equipment Costs	\$ 10.28
Labor Costs	\$ 167.92
Supplies and Materials	\$ 1,934.98
Overhead	\$ 50.38
Total	\$ 2,163.56



## GUAM WATERWORKS AUTHORITY

### NEW METER INSTALLATION FEE (3" Meter size)

Description: The new meter installation fee is a service charge for customers applying for a new meter installation.

Process: This service would require eleven employees involving the Customer Service Section, Permit Section, and Warehouse Section collectively to perform the installation of the meter from time of application, site inspection, material issuance, meter installation and final new customer account setup; the use of a vehicle by Permit Section to inspect the property site for the meter and a vehicle for the crew to install the meter. A round trip drive could be between 3 to 25 miles with an average travel time of between 15 to 45 minutes. It would take approximately 30 minutes to inspect the meter and 60 minutes to install the meter.

#### VEHICLE AND EQUIPMENT COSTS

Equipment Description	Cost per Mile	# Required	Total Miles	Cost
Passenger Vehicle / Light Truck	\$ 0.21	2	25	\$ 10.28
Total				\$ 10.28

#### LABOR COSTS

Position Description	Hourly Rate	Benefits	# Required	Travel Hrs	Hours	Cost
Customer Service Rep	\$ 19.67	\$ 5.90	6	0	0.13	\$ 19.18
Water/Wastewater Maint. Worker	\$ 20.43	\$ 6.13	2	0.75	1.69	\$ 89.52
Administrative Assistance	\$ 20.94	\$ 6.28	1	0	0.50	\$ 13.61
Construction Inspector I	\$ 24.85	\$ 7.46	1	0.75	1.25	\$ 40.38
Storekeeper	\$ 16.09	\$ 4.83	1	0	0.25	\$ 5.23
Total						\$ 167.92

#### SUPPLIES AND MATERIALS COSTS

Item Description	Unit Cost	Quantity	Cost
Paper	\$ 0.05	10	\$ 0.50
Meter	\$ 1,640.96	1	\$ 1,640.96
Meter box and fittings	\$ 2,085.96	1	\$ 2,085.96
			\$ -
			\$ -
Total			\$ 3,727.42

#### SUMMARY OF COSTS

Equipment Costs	\$ 10.28
Labor Costs	\$ 167.92
Supplies and Materials	\$ 3,727.42
Overhead	\$ 50.38
Total	\$ 3,956.00



**GUAM WATERWORKS AUTHORITY**

**NEW METER INSTALLATION FEE (4" Meter size)**

Description: The new meter installation fee is a service charge for customers applying for a new meter installation.

Process: This service would require eleven employees involving the Customer Service Section, Permit Section, and Warehouse Section collectively to perform the installation of the meter from time of application, site inspection, material issuance, meter installation and final new customer account setup; the use of a vehicle by Permit Section to inspect the property site for the meter and a vehicle for the crew to install the meter. A round trip drive could be between 3 to 25 miles with an average travel time of between 15 to 45 minutes. It would take approximately 30 minutes to inspect the meter and 60 minutes to install the meter.

**VEHICLE AND EQUIPMENT COSTS**

Equipment Description	Cost per Mile	# Required	Total Miles	Cost
Passenger Vehicle / Light Truck	\$ 0.21	2	25	\$ 10.28
<b>Total</b>				<b>\$ 10.28</b>

**LABOR COSTS**

Position Description	Hourly Rate	Benefits	# Required	Travel Hrs	Hours	Cost
Customer Service Rep	\$ 19.67	\$ 5.90	6	0	0.13	\$ 19.18
Water/Wastewater Maint. Worker	\$ 20.43	\$ 6.13	2	0.75	1.69	\$ 89.52
Administrative Assistance	\$ 20.94	\$ 6.28	1	0	0.50	\$ 13.61
Construction Inspector I	\$ 24.85	\$ 7.46	1	0.75	1.25	\$ 40.38
Storekeeper	\$ 16.09	\$ 4.83	1	0	0.25	\$ 5.23
<b>Total</b>						<b>\$ 167.92</b>

**SUPPLIES AND MATERIALS COSTS**

Item Description	Unit Cost	Quantity	Cost
Paper	\$ 0.05	10	\$ 0.50
Meter	\$ 2,523.36	1	\$ 2,523.36
Meter box and fittings	\$ 2,280.62	1	\$ 2,280.62
			\$ -
			\$ -
<b>Total</b>			<b>\$ 4,804.48</b>

**SUMMARY OF COSTS**

Equipment Costs	\$ 10.28
Labor Costs	\$ 167.92
Supplies and Materials	\$ 4,804.48
Overhead	\$ 50.38
<b>Total</b>	<b>\$ 5,033.06</b>



**GUAM WATERWORKS AUTHORITY**

**NEW METER INSTALLATION FEE (6" Meter size)**

Description: The new meter installation fee is a service charge for customers applying for a new meter installation.

Process: This service would require eleven employees involving the Customer Service Section, Permit Section, and Warehouse Section collectively to perform the installation of the meter from time of application, site inspection, material issuance, meter installation and final new customer account setup; the use of a vehicle by Permit Section to inspect the property site for the meter and a vehicle for the crew to install the meter. A round trip drive could be between 3 to 25 miles with an average travel time of between 15 to 45 minutes. It would take approximately 30 minutes to inspect the meter and 60 minutes to install the meter.

**VEHICLE AND EQUIPMENT COSTS**

Equipment Description	Cost per Mile	# Required	Total Miles	Cost
Passenger Vehicle / Light Truck	\$ 0.21	2	25	\$ 10.28
<b>Total</b>				<b>\$ 10.28</b>

**LABOR COSTS**

Position Description	Hourly Rate	Benefits	# Required	Travel Hrs	Hours	Cost
Customer Service Rep	\$ 19.67	\$ 5.90	6	0	0.13	\$ 19.18
Water/Wastewater Maint. Worker	\$ 20.43	\$ 6.13	2	0.75	1.69	\$ 89.52
Administrative Assistance	\$ 20.94	\$ 6.28	1	0	0.50	\$ 13.61
Construction Inspector I	\$ 24.85	\$ 7.46	1	0.75	1.25	\$ 40.38
Storekeeper	\$ 16.09	\$ 4.83	1	0	0.25	\$ 5.23
<b>Total</b>						<b>\$ 167.92</b>

**SUPPLIES AND MATERIALS COSTS**

Item Description	Unit Cost	Quantity	Cost
Paper	\$ 0.05	10	\$ 0.50
Meter	\$ 3,576.16	1	\$ 3,576.16
Meter box and fittings	\$ 4,364.28	1	\$ 4,364.28
			\$ -
			\$ -
<b>Total</b>			<b>\$ 7,940.94</b>

**SUMMARY OF COSTS**

Equipment Costs	\$ 10.28
Labor Costs	\$ 167.92
Supplies and Materials	\$ 7,940.94
Overhead	\$ 50.38
<b>Total</b>	<b>\$ 8,169.52</b>



**GUAM WATERWORKS AUTHORITY**

**NEW METER INSTALLATION FEE (8" Meter size)**

Description: The new meter installation fee is a service charge for customers applying for a new meter installation.

Process: This service would require eleven employees involving the Customer Service Section, Permit Section, and Warehouse Section collectively to perform the installation of the meter from time of application, site inspection, material issuance, meter installation and final new customer account setup; the use of a vehicle by Permit Section to inspect the property site for the meter and a vehicle for the crew to install the meter. A round trip drive could be between 3 to 25 miles with an average travel time of between 15 to 45 minutes. It would take approximately 30 minutes to inspect the meter and 60 minutes to install the meter.

**VEHICLE AND EQUIPMENT COSTS**

Equipment Description	Cost per Mile	# Required	Total Miles	Cost
Passenger Vehicle / Light Truck	\$ 0.21	2	25	\$ 10.28
<b>Total</b>				<b>\$ 10.28</b>

**LABOR COSTS**

Position Description	Hourly Rate	Benefits	# Required	Travel Hrs	Hours	Cost
Customer Service Rep	\$ 19.67	\$ 5.90	6	0	0.13	\$ 19.18
Water/Wastewater Maint. Worker	\$ 20.43	\$ 6.13	2	0.75	1.69	\$ 89.52
Administrative Assistance	\$ 20.94	\$ 6.28	1	0	0.50	\$ 13.61
Construction Inspector I	\$ 24.85	\$ 7.46	1	0.75	1.25	\$ 40.38
Storekeeper	\$ 16.09	\$ 4.83	1	0	0.25	\$ 5.23
<b>Total</b>						<b>\$ 167.92</b>

**SUPPLIES AND MATERIALS COSTS**

Item Description	Unit Cost	Quantity	Cost
Paper	\$ 0.05	10	\$ 0.50
Meter	\$ 2,507.00	1	\$ 2,507.00
Meter box and fittings	\$ 4,551.32	1	\$ 4,551.32
			\$ -
			\$ -
<b>Total</b>			<b>\$ 7,058.82</b>

**SUMMARY OF COSTS**

Equipment Costs	\$ 10.28
Labor Costs	\$ 167.92
Supplies and Materials	\$ 7,058.82
Overhead	\$ 50.38
<b>Total</b>	<b>\$ 7,287.40</b>



**GUAM WATERWORKS AUTHORITY**

**NEW METER INSTALLATION FEE (10" Meter size)**

Description: The new meter installation fee is a service charge for customers applying for a new meter installation.

Process: This service would require eleven employees involving the Customer Service Section, Permit Section, and Warehouse Section collectively to perform the installation of the meter from time of application, site inspection, material issuance, meter installation and final new customer account setup; the use of a vehicle by Permit Section to inspect the property site for the meter and a vehicle for the crew to install the meter. A round trip drive could be between 3 to 25 miles with an average travel time of between 15 to 45 minutes. It would take approximately 30 minutes to inspect the meter and 60 minutes to install the meter.

**VEHICLE AND EQUIPMENT COSTS**

	Equipment Description	Cost per Mile	# Required	Total Miles	Cost
	Passenger Vehicle / Light Truck	\$ 0.21	2	25	\$ 10.28
Total					\$ 10.28

**LABOR COSTS**

	Position Description	Hourly Rate	Benefits	# Required	Travel Hrs	Hours	Cost
	Customer Service Rep	\$ 19.67	\$ 5.90	6	0	0.13	\$ 19.18
	Water/Wastewater Maint. Worker	\$ 20.43	\$ 6.13	2	0.75	1.69	\$ 89.52
	Administrative Assistance	\$ 20.94	\$ 6.28	1	0	0.50	\$ 13.61
	Construction Inspector I	\$ 24.85	\$ 7.46	1	0.75	1.25	\$ 40.38
	Storekeeper	\$ 16.09	\$ 4.83	1	0	0.25	\$ 5.23
Total							\$ 167.92

**SUPPLIES AND MATERIALS COSTS**

	Item Description	Unit Cost	Quantity	Cost
	Paper	\$ 0.05	10	\$ 0.50
	Meter	\$ 3,307.00	1	\$ 3,307.00
	Meter box and fittings	\$ 6,512.12	1	\$ 6,512.12
				\$ -
				\$ -
Total				\$ 9,819.62

**SUMMARY OF COSTS**

Equipment Costs	\$ 10.28
Labor Costs	\$ 167.92
Supplies and Materials	\$ 9,819.62
Overhead	\$ 50.38
<b>Total</b>	<b>\$ 10,048.20</b>



**GUAM WATERWORKS AUTHORITY**

**METER RELOCATION FEE (Smaller than 2" size meters)**

Description: The meter relocation fee is a service charge for customers applying for a meter relocation.

Process: This service would require ten employees involving the Customer Service Section, and Permit Section to preform services from time of application, site inspection, and installation of meter at relocated site. The use of a vehicle by Permit Section to inspect the property site and a vehicle for the crew to install the meter. A round trip drive could be between 3 to 25 miles with an average travel time of between 15 to 45 minutes. Inspection time would take about 30 minutes and installation of meter about 30 minutes.

**VEHICLE AND EQUIPMENT COSTS**

	Equipment Description	Cost per Mile	# Required	Total Miles	Cost
	Passenger Vehicle / Light Truck	\$ 0.21	2	25	\$ 10.28
<b>Total</b>					<b>\$ 10.28</b>

**LABOR COSTS**

	Position Description	Hourly Rate	Benefits	# Required	Travel Hrs	Hours	Cost
	Customer Service Rep	\$ 19.67	\$ 5.90	6	0.00	0.11	\$ 17.03
	Water/Wastewater Maint. Worker	\$ 20.43	\$ 6.13	2	0.75	1.25	\$ 66.41
	Administrative Assistance	\$ 20.94	\$ 6.28	1	0.00	0.50	\$ 13.61
	Construction Inspector I	\$ 24.85	\$ 7.46	1	0.75	1.25	\$ 40.38
<b>Total</b>							<b>\$ 137.43</b>

**SUPPLIES AND MATERIALS COSTS**

	Item Description	Unit Cost	Quantity	Cost
	Paper	\$ 0.05	10	\$ 0.50
<b>Total</b>				<b>\$ 0.50</b>

**SUMMARY OF COSTS**

Equipment Costs	\$ 10.28
Labor Costs	\$ 137.43
Supplies and Materials	\$ 0.50
Overhead Cost	\$ 41.23
<b>Total</b>	<b>\$ 189.44</b>



**GUAM WATERWORKS AUTHORITY**

**METER RELOCATION FEE (2" and larger size meters)**

Description: The meter relocation fee is a service charge for customers applying for a meter relocation.

Process: This service would require ten employees involving the Customer Service Section, and Permit Section to preform services from time of application, site inspection, and installation of meter at relocated site. The use of a vehicle by Permit Section to inspect the property site and a vehicle for the crew to install the meter. A round trip drive could be between 3 to 25 miles with an average travel time of between 15 to 45 minutes. Inspection time would take about 30 minutes and installation of meter about 60 minutes.

**VEHICLE AND EQUIPMENT COSTS**

Equipment Description	Cost per Mile	# Required	Total Miles	Cost
Passenger Vehicle / Light Truck	\$ 0.21	2	25	\$ 10.28
Total				\$ 10.28

**LABOR COSTS**

Position Description	Hourly Rate	Benefits	# Required	Travel Hrs	Hours	Cost
Customer Service Rep	\$ 19.67	\$ 5.90	6	0.00	0.13	\$ 19.18
Water/Wastewater Maint. Worker	\$ 20.43	\$ 6.13	2	0.75	1.75	\$ 92.97
Administrative Assistance	\$ 20.94	\$ 6.28	1	0.00	0.50	\$ 13.61
Construction Inspector I	\$ 24.85	\$ 7.46	1	0.75	1.25	\$ 40.38
Total						\$ 166.14

**SUPPLIES AND MATERIALS COSTS**

Item Description	Unit Cost	Quantity	Cost
Paper	\$ 0.05	10	\$ 0.50
Total			\$ 0.50

**SUMMARY OF COSTS**

Equipment Costs	\$ 10.28
Labor Costs	\$ 166.14
Supplies and Materials	\$ 0.50
Overhead Cost	\$ 49.84
<b>Total</b>	<b>\$ 226.76</b>





**GUAM WATERWORKS AUTHORITY**

**PRESSURE READING**

Description: The special reading is a customer request to have the water pressure reading ("read") at a particular date. The service is specific to determine the water pressure reading/produce.

Process: This service would require five customer service representative to collectively process the work service order and a pair of meter technician to drive to the premise which should take approximately 15-45 minutes traveling a round trip distance between 3-25 miles; approximately 15 minutes to locate the meter, examine for any unusual aberration, record reading of the water pressure, and prepare report of the reading data.

**VEHICLE AND EQUIPMENT COSTS**

	Vehicle/Equipment Description	Cost per Mile	# Required	Total Miles	Cost
	Passenger Vehicle / Light Truck	\$ 0.21	1	25	\$ 5.14
Total					\$ 5.14

**LABOR COSTS**

	Position Description	Hourly Rate	Benefits	# Required	Travel Hrs	Hours	Cost
	Customer Service Rep	\$ 19.67	\$ 5.90	5	0.00	0.10	\$ 12.79
	Water/Wastewater Maint. Worker	\$ 20.43	\$ 6.13	2	0.75	1.00	\$ 53.13
Total							\$ 65.91

**SUPPLIES AND MATERIALS COSTS**

	Item Description	Unit Cost	Quantity	Cost
	Paper	\$ 0.05	10	\$ 0.50
Total				\$ 0.50

**SUMMARY OF COSTS**

Equipment Costs	\$ 5.14
Labor Costs	\$ 65.91
Supplies and Materials	\$ 0.50
Overhead Cost	\$ 19.77
<b>Total</b>	<b>\$ 91.32</b>



## GUAM WATERWORKS AUTHORITY

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### RETURNED CHECK

Description: This charge is applicable to all customers when a demand for payment on an account cannot be honored i.e. a check or bank draft returned by a financial institution for insufficient funds, closed account or other appropriate reasons.

Process: This service would require three employees to collectively to make entry on customer account, to make accounting entry, and to collect payment from customer.

#### LABOR COSTS

	Position Description	Hourly Rate	Benefits	# Required	Hours	Cost
	Collection Agent	\$ 14.71	\$ 4.41	1	0.25	\$ 4.78
	Accountant	\$ 28.05	\$ 8.42	1	0.25	\$ 9.12
	Cashier	\$ 11.56	\$ 3.47	1	0.25	\$ 3.76
						\$ -
						\$ -
Total Labor Costs						\$ 17.66

#### SUPPLIES AND MATERIALS COSTS

	Item Description	Unit Cost	Quantity	Cost
	Paper	\$ 0.05	10	\$ 0.50
Total Materials Costs				0.5

#### SUMMARY OF COSTS

Bank Cost	\$ 15.00
Labor Costs	\$ 17.66
Supplies and Materials	\$ 0.50
Overhead Cost	\$ 17.66
<b>TOTAL FEE</b>	<b>\$ 50.82</b>



**GUAM WATERWORKS AUTHORITY**

**Open / Close GWA or Customer Control Valve (Customer Requested)**

Description: This is a customer initiated request that requires a GWA control valve to be opened or closed. This request may originate because of a defective customer shut off valve or the customer requires a major construction of the dwelling which will require relocation or replacement of supporting pipes.

Process: This service would require one customer service representative to process the work service order; a pair of water service technician to drive to the premise which should take approximately 15-45 minutes traveling a round trip distance between 3-25 miles, locate the government control valve, and open/shut off the water. It will take approximately 5 minutes to open / shut off the valve.

**VEHICLE AND EQUIPMENT COSTS**

	Vehicle/Equipment Description	Cost per Mile	# Required	Total Miles	Cost
	Passenger Vehicle / Light Truck	\$ 0.21	1	25	\$ 5.14
Total					\$ 5.14

**LABOR COSTS**

	Position Description	Hourly Rate	Benefits	# Required	Travel Hrs	Hours	Cost
	Customer Service Rep	\$ 19.67	\$ 5.90	1	0	0.25	\$ 6.39
	Water/Wastewater Maint. Worker	\$ 20.43	\$ 6.13	2	0.75	1.00	\$ 53.13
Total							\$ 59.52

**SUPPLIES AND MATERIALS COSTS**

	Item Description	Unit Cost	Quantity	Cost
	Paper	\$ 0.05	10	\$ 0.50
Total				\$ 0.50

**SUMMARY OF COSTS**

Equipment Costs	\$ 5.14
Labor Costs	\$ 59.52
Supplies and Materials	\$ 0.50
Overhead Cost	\$ 17.86
<b>Total</b>	<b>\$ 83.02</b>



**GUAM WATERWORKS AUTHORITY**

**Open / Close GWA or Customer Control Valve (Customer Requested After Business Hours)**

Description: This is a customer initiated request that requires a GWA control valve to be opened or closed. This request may originate because of a defective customer shut off valve, the customer requires a major construction of the dwelling which will require relocation or replacement of supporting pipes to commence water services, or customer emergency.

Process: This service would require one customer service representative to process the work service order; a pair of water service technician to drive to the premise which should take approximately 15-45 minutes traveling a round trip distance between 3-25 miles, locate the government control valve, and open/shut off the water. It will take approximately 5 minutes to open / shut off the value.

**VEHICLE AND EQUIPMENT COSTS**

	Vehicle/Equipment Description	Cost per Mile	# Required	Total Miles	Cost
	Passenger Vehicle / Light Truck	\$ 0.21	1	25	\$ 5.14
Total					\$ 5.14

**LABOR COSTS**

	Position Description	Hourly Rate	Benefits	# Required	Travel Hrs	Hours	Cost
	Customer Service Rep	\$ 19.67	\$ 5.90	1	0	0.25	\$ 6.39
	Water/Wastewater Maint. Worker	\$ 33.72	\$ 6.13	2	0.75	1.00	\$ 79.69
Total							\$ 86.08

**SUPPLIES AND MATERIALS COSTS**

	Item Description	Unit Cost	Quantity	Cost
	Paper	\$ 0.05	10	\$ 0.50
Total				\$ 0.50

**SUMMARY OF COSTS**

Equipment Costs	\$ 5.14
Labor Costs	\$ 86.08
Supplies and Materials	\$ 0.50
Overhead Cost	\$ 25.83
<b>Total</b>	<b>\$ 117.55</b>



**GUAM WATERWORKS AUTHORITY**

**Verification of Utilities (aka Utility Clearance)**

Description: This is a customer initiated request that requires determination of water and/or wastewater utility at a particular location. This request is necessitated because customer anticipate construction activity on location.

Process: This service would require one Administrative Assistance to process the work service order; one construction inspector to drive to the premise for inspection which should take approximately 15-45 minutes traveling a round trip distance between 3-25 miles. It will take approximately 15 minutes to inspect the site.

**VEHICLE AND EQUIPMENT COSTS**

	Vehicle/Equipment Description	Cost per Mile	# Required	Total Miles	Cost
	Passenger Vehicle / Light Truck	\$ 0.21	1	25	\$ 5.14
Total					\$ 5.14

**LABOR COSTS**

	Position Description	Hourly Rate	Benefits	# Required	Travel Hrs	Hours	Cost
	Administrative Assistance	\$ 20.94	\$ 6.28	1	0	0.25	\$ 6.80
	Construction Inspector	\$ 24.85	\$ 7.46	1	0.75	1.00	\$ 32.31
Total							\$ 39.11

**SUPPLIES AND MATERIALS COSTS**

	Item Description	Unit Cost	Quantity	Cost
	Paper	\$ 0.05	10	\$ 0.50
Total				\$ 0.50

**SUMMARY OF COSTS**

Equipment Costs	\$ 5.14
Labor Costs	\$ 39.11
Supplies and Materials	\$ 0.50
Overhead Cost	\$ 11.73
<b>Total</b>	<b>\$ 56.48</b>



# GUAM WATERWORKS AUTHORITY

## Sewer Inspection Permit

Description: Is issued to contractors jointly by GWA and GEPA, and is required before such contractors can construct a sewer service connection.

Process: This service would require one Administrative Assistance to process the work service order; one construction inspection to drive to the premise for inspection which should take approximately 15-45 minutes traveling a round trip distance between 3-25 miles. It will take approximately 15 minutes to inspect the site.

### VEHICLE AND EQUIPMENT COSTS

	Vehicle/Equipment Description	Cost per Mile	# Required	Total Miles	Cost
	Passenger Vehicle / Light Truck	\$ 0.21	1	25	\$ 5.14
Total					\$ 5.14

### LABOR COSTS

	Position Description	Hourly Rate	Benefits	# Required	Travel Hrs	Hours	Cost
	Administrative Assistance	\$ 20.94	\$ 6.28	1	0	0.25	\$ 6.80
	Construction Inspector	\$ 24.85	\$ 7.46	1	0.75	1.00	\$ 32.31
Total							\$ 39.11

### SUPPLIES AND MATERIALS COSTS

	Item Description	Unit Cost	Quantity	Cost
	Paper	\$ 0.05	10	\$ 0.50
Total				\$ 0.50

### SUMMARY OF COSTS

Equipment Costs	\$ 5.14
Labor Costs	\$ 39.11
Supplies and Materials	\$ 0.50
Overhead Cost	\$ 11.73
Total	\$ 56.48



**GUAM WATERWORKS AUTHORITY**

**Water Inspection Permit**

Description: Is issued to contractors and is required before such contractors can connect into GWA water system.

Process: This service would require one Administrative Assistance to process the work service order; one construction inspection to drive to the premise for inspection which should take approximately 15-45 minutes traveling a round trip distance between 3-25 miles. It will take approximately 15 minutes to inspect the site.

**VEHICLE AND EQUIPMENT COSTS**

	Vehicle/Equipment Description	Cost per Mile	# Required	Total Miles	Cost
	Passenger Vehicle / Light Truck	\$ 0.21	1	25	\$ 5.14
Total					\$ 5.14

**LABOR COSTS**

	Position Description	Hourly Rate	Benefits	# Required	Travel Hrs	Hours	Cost
	Administrative Assistance	\$ 20.94	\$ 6.28	1	0	0.25	\$ 6.80
	Construction Inspector	\$ 24.85	\$ 7.46	1	0.75	1.00	\$ 32.31
Total							\$ 39.11

**SUPPLIES AND MATERIALS COSTS**

	Item Description	Unit Cost	Quantity	Cost
	Paper	\$ 0.05	10	\$ 0.50
Total				\$ 0.50

**SUMMARY OF COSTS**

Equipment Costs	\$ 5.14
Labor Costs	\$ 39.11
Supplies and Materials	\$ 0.50
Overhead Cost	\$ 11.73
Total	\$ 56.48



**GUAM WATERWORKS AUTHORITY**

**DOOR NOTICE HANGER**

Description: A fee charged to customer for posting a notice on customer's premises. The fee is generally initiated due to non-payment or past due amounts.

Process: This service would require one customer service representative to collectively analyze, validate account status, and issue work order; a water meter reader to post the notice on customer premises. One vehicle to drive round trip anywhere between 3 to 25 miles distance with an average travel time of between 15 to 45 minutes.

**VEHICLE AND EQUIPMENT COSTS**

	Vehicle/Equipment Description	Cost per Mile	# Required	Total Miles	Cost
Total					\$ -

	Position Description	Hourly Rate	Benefits	# Required	Hours	Cost
Total						\$ -

**SUPPLIES AND MATERIALS COSTS**

	Item Description	Unit Cost	Quantity	Cost
	Door Hanger	\$ 5.00	1	\$ 5.00
Total				\$ 5.00

**SUMMARY OF COSTS**

Equipment Costs	\$ -
Labor Costs	\$ -
Supplies and Materials	\$ 5.00
Overhead Cost	\$ -
Total	\$ 5.00





**GUAM WATERWORKS AUTHORITY**

<b>SEPTAGE HAULERS FEE</b>	
<b>Treatment Cost per 1000 gals. of Septage</b>	
a. NDWWTP Total Flow million gallons (See sheet 2)	2,108
b. TSS influent mg/L average (See sheet 2)	220
c. Loading in lbs. = B7*B8*8.34	3,867,529
d. Typical Septage TSS mg/L	12,300
e. Septage from Haulers million gallons (Actual billed amount)	6.00
f. Loading in lbs. from Septage dry wt. = B11*B10*8.34	615,492
g. % Loading in lbs. from Septage = B12/B9*100	16
<b>NDWWTP 2014 O&amp;M Cost</b>	
Salaries	560,618
Power	201,032
Chemicals	380,053
Materials, Supplies, Repairs, & Others	130,572
Landfill Tipping Fees @ \$180/wet ton	705,424
<b>h. Total O&amp;M Cost = Sum B16 through B20</b>	<b>\$ 1,977,699</b>
i. Cost to Treat Septage = (19% of B22)	314,738
<b>j. Cost to Treat Septage per 1000 gal. = (i/e/1000)</b>	<b>\$ 52.46</b>
<b>Capital Cost per 1000 gals.</b>	
k. Septage Receiving Station Cost (20 yr. return)	\$ 867,000
l. Depreciation Cost/yr. = (k/20)	43,350
m. Septage hauled per year MG = (e x 1000)	6,000
n. Cost per 1000 gals. = (l/m)	\$ 7
<b>o. Total Cost per 1000 gals. Capital plus O&amp;M</b>	<b>\$ 59.68</b>



**GUAM WATERWORKS AUTHORITY**

<b>LEACHATE</b>	
<b>Layon Landfill Leachate Cost 2014</b>	
Inarajan WWTP Total Flow million gallons	37.4
Layon Landfill leachate Total Flow million gallons	4.9
Electrical Cost Pump stations #3, #4, & Inarajan Annual	\$ 6,223.65
Electrical cost Inarajan Treatment Facility Annual	33,714.73
Annual Labor Collections ? hrs./day x 365 x \$30/hr.	21,900.00
Annual Labor Treatment 1 hr./day x 365 x \$30/hr.	10,950.00
Annual Labor & Rental Equipment for Line Cleaning	7,500.00
Maintenance Cost Pump Stations #3 & #4	10,000.00
<b>(Cost of services represents 13% total operational cost)</b>	
<b>Total O&amp;M Cost</b>	<b>90,288</b>
Cost per 1000 gal.	\$ 2.41
<b>Ordot Landfill Leachate Cost Projected for 2015</b>	
2014 Hagatna WWTP Total Annual Flow million gallons	2356.4
Ordot Landfill leachate Total Annual Flow million gallons projected	4.2
<b>(Flow based upon Feb. 2014 leachate meter reading x 12)</b>	
<b>Hagatna 2014 O&amp;M Cost</b>	
Salaries	\$ 626,711
Power	179,698
Chemicals	424,859
Materials, Supplies, Repairs, & Others	145,966
Landfill Tipping Fees @ \$180/wet ton	788,588
<b>Collection Sytem 2015 O&amp;M Cost Projection</b>	
2015 Electrical Cost Pump stations Annual Projected	\$ 6,223.65
Annual Labor Collections ? hrs./day x 365 x \$30/hr.	\$ 10,950.00
Maintenance Cost Pump Station	\$ 15,000.00
<b>Total O&amp;M Cost</b>	<b>\$2,197,996</b>
Cost per 1000 gal.	\$0.93



GUAM WATERWORKS AUTHORITY

Water Deposit Calculation by Meter Size (based on FY2014 Annual Revenue)

METER SIZE	No of Customers	Total Revenue by meter size	Average Monthly Bill by Meter Size	Average Two (2) Monthly Bill by Meter Size	Proposed Water Deposit
3/4"	478,700	\$ 25,678,361	\$ 53.64	\$ 107.28	\$ 100
1"	9,194	\$ 1,360,171	\$ 147.94	\$ 295.88	\$ 300
1 1/2"	6,549	\$ 2,598,192	\$ 396.73	\$ 793.46	\$ 800
2"	3,183	\$ 3,328,194	\$ 1,045.62	\$ 2,091.23	\$ 2,000
3"	1,029	\$ 2,291,267	\$ 2,226.69	\$ 4,453.39	\$ 5,000
4"	1,461	\$ 5,275,921	\$ 3,611.17	\$ 7,222.34	\$ 7,000
6"	881	\$ 6,343,121	\$ 7,199.91	\$ 14,399.82	\$ 14,000
8"	136	\$ 2,958,008	\$ 21,750.06	\$ 43,500.12	\$ 44,000
10"	66	\$ 1,404,561	\$ 21,281.23	\$ 42,562.47	\$ 44,000
12"	6	\$ 34,473	\$ 5,745.56	\$ 11,491.12	\$ 15,000

Sewer Deposit Calculation by Meter Size (based on FY2014 Annual Revenue)

CLASS TYPE	No of Customers	Total Revenue by meter size	Average Monthly Bill by Meter Size	Average Two (2) Monthly Bill by Meter Size	Proposed Water Deposit
Residential	317,520	\$ 8,449,207	\$ 26.61	\$ 53.22	\$ 50.00
CommI	21,581	\$ 2,545,343	\$ 117.94	\$ 235.89	\$ 300.00
CommII	829	\$ 8,847,655	\$ 10,672.68	\$ 21,345.37	\$ 22,000.00
CommIII	2,603	\$ 2,350,414	\$ 902.96	\$ 1,805.93	\$ 2,000.00