

1 **GUAM CONSOLIDATED COMMISSION ON UTILITIES**

2 **RESOLUTION NO. 16-FY2016**

3 **RELATIVE TO APPROVAL OF THE ROUTE 4 RELIEF**  
4 **SEWERLINE DESIGN CONTRACT WITH AECOM**  
5 **PROJECT S15-006-EPA**

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

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

13  
14 **WHEREAS**, GWA has received a grant from USEPA under the State Revolving Fund  
15 program to improve the sewer collection system, which included approximately Seven  
16 Thousand Five Hundred (7,500) linear feet of gravity sewer line along Route 4 and Route 1,  
17 from Sinajana to the Agana Main Pump Station; and

18  
19 **WHEREAS**, the stretch of gravity sewer line indicated is incompletely constructed, in  
20 need of repair and inactive in most of its length causing the current active portions of sewer line  
21 on Route 4 to have SSOs and surcharging; and

22  
23 **WHEREAS**, GWA and USEPA agree that efforts to rehabilitate, repair or replace the  
24 sewer line are necessary and the first order to do so is through a scope of services that includes  
25 general civil engineering, geotechnical engineering, and archaeological investigation for  
26 wastewater collection system evaluation, analysis and detailed design; and

27  
28 **WHEREAS**, GWA has advertised the Request for Proposal (RFP-09-ENG-2015)  
29 soliciting a statement of qualification from experienced and qualified engineering firms to  
30 provide engineering design services for the Route 4 Relief Sewerline Rehabilitation and  
31 Replacement Project; and

1           **WHEREAS**, Request for Proposal (RFP) packages were downloaded by twenty-five  
2 (25) interested parties, from which GWA received proposal submittals from nine (9)  
3 engineering firms before the RFP submittal deadline; and

4  
5           **WHEREAS**, the GWA A-E Selection Committee reviewed and evaluated the nine (9)  
6 proposals (see EXHIBIT A - Evaluation Scores) and generated a short list of the top three (3)  
7 firms with a recommendation to award a contract to the firm AECOM and a conditional notice  
8 of award was provided to the top firm (see EXHIBIT B - Conditional Notice of Award); and

9  
10           **WHEREAS**, AECOM and GWA negotiated the scope and fee for the Engineering  
11 services to be provided in the fixed fee amount of Six Hundred Thousand Dollars (\$600,000.00)  
12 with design service options related to Construction Procurement and Engineering Services in  
13 the amount of One Hundred Ninety Four Thousand Dollars (\$194,000.00) should this service  
14 option be needed on a time and materials basis (see EXHIBIT C – Fee Proposal); and

15  
16           **WHEREAS**, the design service options noted above are viewed by GWA Engineering  
17 as potentially necessary based on several factors, 1) the condition of the existing sewer pipe, 2)  
18 the discovery of archaeological and cultural resources along the sewer line route, and 3) the  
19 need for engineering services during construction: and

20  
21           **WHEREAS**, these options for design service will be based on negotiated Time and  
22 Materials rates for service; and

23  
24           **WHEREAS**, GWA Management seeks approval of the fee proposal amount of Seven  
25 Hundred Ninety Four Thousand Dollars (\$794,000.00), plus a ten percent (10%) contingency of  
26 Seventy Nine Thousand Four Hundred Dollars (\$79,400.00), for a total amount of Eight  
27 Hundred Seventy Three Thousand Four Hundred Dollars (\$873,400.00); and

28  
29           **WHEREAS**, funding for this project will be from USEPA Grant Funds with an  
30 estimated project budget for field investigation, Engineering design and rehabilitation of Three  
31 Million Four Hundred Ten Thousand Seven Hundred Dollars (\$3,410,700.00); and,

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

- 3
- 4           1. The recitals set forth above hereby constitute the findings of the CCU.
  - 5           2. The CCU finds that the terms of the fee proposal submitted by AECOM are fair  
6           and reasonable (EXHIBIT C).
  - 7           3. The CCU finds that the terms and conditions set by GWA relative to  
8           commencement of work activities are fair and reasonable and serve as a measure  
9           of Quality Assurance/Quality Control (QA/QC).
  - 10          4. The CCU hereby authorizes the management of GWA to enter into a contract  
11          with AECOM in the amount of Seven Hundred Ninety Four Thousand Dollars  
12          (\$794,000.00) from which One Hundred Ninety Four Thousand Dollars  
13          (\$194,000.00) will be on a Time and Materials basis.
  - 14          5. The CCU hereby further approves the total funding amount for this project of  
15          Seven Hundred Ninety Four Thousand Dollars (\$794,000.00), plus a ten percent  
16          (10%) contingency of Seventy Nine Thousand Four Hundred Dollars  
17          (\$79,400.00), to bring the total authorized funding amount to a maximum of  
18          Eight Hundred Seventy Three Thousand Four Hundred Dollars (\$873,400.00).

19  
20           **RESOLVED**, that the Chairman certified and the Board Secretary attests to the  
21 adoption of this Resolution.

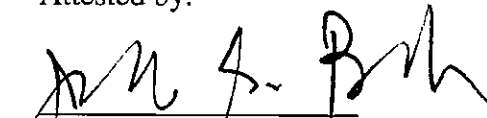
22           **DULY AND REGULARLY ADOPTED**, this 26<sup>th</sup> day of January 2016.

23  
24  
25           Certified by:

26           

27           **JOSEPH T. DUENAS**  
28           Chairperson

25           Attested by:

26           

27           **J. GEORGE BAMBA**  
28           Secretary

29  
30           //

31  
32           //




**GUAM WATERWORKS AUTHORITY**

Gloria B. Nelson Public Service Building • 688 Route 15 • Mangilao, Guam 96913

October 20, 2015

To: Thomas F. Cruz, P.E., Chief Engineer

From: Gloria P. Bengan   
Chairperson, Consultant Selection Board

Subject: RFP-09-ENG-2015  
Design Services for Route 4 Relief Sewer Line Rehabilitation and Replacement  
GWA Project No. S15-006-EPA

The following information is intended to document the evaluation process undertaken for the referenced solicitation.

EVALUATION COMMITTEE MEMBERS	
Name	Title
John Davis, P.E.	CIP Wastewater Engineer Supervisor
Vincent Pangelinan	Centralized Wastewater Maintenance Superintendent
George Watson	PMO, Brown & Caldwell
Evangeline Lujan	Senior Regulatory Analyst, Compliance & Safety

Consultant	Evaluation Score				DBE	Total	Rank
1. AmOrient Engineering	72	79	87	55	-	293	8
2. Duenas, Camacho & Associates, Inc.	87	83	95	91	-	356	2
3. LYON	72	75	84	70	-	301	7
4. TG Engineers, PC	76	85	89	75	5	330	5
5. AECOM Technical Services	82	85	96	90	5	358	1
6. Stanley Consultants	79	80	94	73	5	331	4
7. HDR	82	85	96	77	5	345	3
8. SSFM International, Inc.	72	83	88	55	5	303	6
9. EMPSCO	72	73	80	55	-	280	9

Scores were evaluated based on sum of the individual scores plus additional five points for firms meeting DBE qualifications. The recommendation of the evaluation committee is shown in the ranking above.

Please review and approve at your earliest convenience so that we may proceed with the notification letters.



**GUAM WATERWORKS AUTHORITY**

Gloria B. Nelson Public Service Building, 688 Route 15, Mangilao, Guam 96913 • Tel. (647) 300-6035

**Exhibit B (1 of 3)**

November 9, 2015

Rudolph Mina, P.E.  
Area General Manager – Hawaii/Guam Area  
AECOM Technical Services  
414 W. Soledad Avenue  
GCIC Building Suite 708  
Hagatna, Guam 96910

RE: Conditional Notice of Award and Intent to Negotiate Relative to  
RFP-09-ENG-2015  
Design Services for Route 4 Relief Sewer Line Rehabilitation and Replacement

Hafa Adai Mr. Mina,

The Guam Waterworks Authority (GWA) has completed its re-evaluation of all proposals received for the above referenced solicitation in compliance with the USEPA Disadvantage Business Enterprise (DBE) requirements as well as the Guam procurement regulations. After a thorough and careful review of proposals your firm has been rated the best qualified to provide the services as described in the solicitation and as such you are hereby issued this Conditional Notice of Award. You are hereby invited to enter into negotiations with GWA in order to establish fair and reasonable compensation and terms and conditions for the required services in accordance with the terms of the solicitation.

Enclosed with this Notice is a sample of spreadsheet format to be used to establish fees for the requested services. Prior to preparation of the fee spreadsheet, your attendance at a scoping meeting to be held at Engineering Library on **November 12, 2015 at 1:30 p.m.** is hereby requested. The intent of the meeting is to provide you with additional project specific information and to address any scope questions and/or issues prior to establishing a mutual understanding of the expected scope and estimating your fees.

This selection is contingent upon the interview and negotiation of a fair and mutually satisfactory fee and terms and conditions for your work. The right is reserved by GWA to rescind this selection if it deems the fee proposal or any term or condition proposed is unreasonable. GWA further notes that it will not pay for any costs incurred by your firm during up to the date a contract is executed.

## Exhibit B (2 of 3)

This notice supersedes the letter dated August 24, 2015 sent your firm.

Thank you for your continued interest and support to GWA projects. Should you find the scheduled meeting inconvenient, please call Gloria Bensen at 300-6042.

Sincerely,



Mark Miller

GWA General Manager (Interim)

Enclosure

Exhibit B (3 of 3)

Phase Letter and Task Number	Task Description	Principal Engineer	Project Manager	Staff Engineer	Project Inspector	Secretary/Clerk	CADD Operator	Survey Crew	Geo. Subcontract	Amount
	<b>HOURLY LABOR RATES</b>									
<b>A</b>	<b>PROJECT PLANNING</b>									
1	Project Meetings									
2	Planning and Project Management									
3	Preliminary well site assessment									
4	Site investigation									
	Expenses									
	<b>SUBTOTAL</b>									
<b>B</b>	<b>30% Design Submittal</b>									
1	<b>Project Controls</b>									
1.1	Topographic Survey									
1.2	Analysis of existing gravity lines									
1.3	Review and evaluation of data									
1.4	Existing and future sewer flows									
1.4	Evaluation of existing forcemain									
	<b>SUBTOTAL</b>									
2										
2.2.1	Onsite inspection									
2.2.2	Evaluation of existing well facilities									
2.2.3	Review and evaluation of data									
2.4	Review and evaluation of plant operations and maintenance									
2.4.1	<b>SUBTOTAL</b>									
3	<b>Deliverables</b>									
3.1	Site plan, demolition plan									
3.2	Basis of Design									
3.3	mechanical plan									
3.4	process and instrumentation diagrams									
	Expenses									
<b>C</b>	<b>60% Design Submittal</b>									
<b>D</b>	<b>90% Design Submittal</b>									
<b>E</b>	<b>Final Design Submittal</b>									
	<b>SUBTOTAL</b>									
	<b>TOTAL FEE</b>									

January 19, 2015

The Guam Waterworks Authority  
c/o Greg P. Cruz, GWA Acting General Manager, or  
Thomas F. Cruz, P.E., Chief Engineer  
Engineering Division, Room 202  
Gloria B. Nelson Public Service Building  
688 Route 15, Mangilao, GU 96913

Subject: Scope of Work and Fee Proposal for the RFP-09-ENG-2015 Route 4 Relief Sewer Line Rehabilitation and Replacement Project.

Háfa Adai,

AECOM is pleased to submit a scope of work and fee proposal for the subject project. The goal of the project is to bring the inactive Route 4 relief sewer line into service through rehabilitation, repair or replacement. The scope of work is divided into 8 tasks as noted in RFP-09-ENG-2015. The scope of services includes general civil engineering, surveying, manhole and sewer line inspections, geotechnical engineering, archaeological evaluation and monitoring.

Scoping meetings were held between Brown and Caldwell and AECOM on November 17, 2015, December 22, 2015, with subsequent discussions. The following is a summary of the scope of work used in the preparation of the fee:

1. Task 1 – Project Management
  - a. Task will span the entire life of the project from Notice to Proceed to end of construction support services. The fee is based on a period of performance of 26 months.
  - b. Prepare a Project Management Plan in accordance with the GWA Program Management Manual.
    - i. Includes the project description, scope of work, Work Plan, list of subconsultants and organization chart.
  - c. Prepare, update and submit a project schedule
    - i. Includes all phases of project, monthly meetings, milestone tasks and deadlines, and review periods.
    - ii. Throughout the project, AECOM will routinely evaluate if the target dates will be accomplished and notify GWA immediately of any delay in schedule is likely.
  - d. Prepare and submit monthly progress reports. AECOM's team shall prepare reports/written accounts of meetings, conferences and telephone instructions, and deliver an electronic copy via email to GWA. The record shall include a statement as to the impact, if any, of the decisions on the scope, funding and/or design schedule of the project.
  - e. Coordinate and attend meetings with entities within and outside of the project
2. Task 2 – Data Research and Review
  - a. Perform a search of available data on the sewer line, associated pump stations, and any other related facility.
  - b. Includes but not limited to record drawings, planning and evaluation studies, maintenance and repair history, pipeline/manhole inspection data, pump station operation data, existing flow monitoring data, future flow estimates and interviews with GWA Staff.
  - c. Some information will need to be obtained from other consulting firms for previous or current GWA projects.
3. Task 3 – Field Investigation
  - a. Will be conducted by Underground Services, inc. (USi) and coordinated with AECOM.
  - b. Conduct field investigation to cover any data gaps that may prevent a clear understanding of the existing sewer system
  - c. Activities to include pipeline and manhole inspections conducted in accordance with National Association of Sewer Service Companies ("NASSCO") standards.
  - d. Pipeline Inspections
    - i. Fee includes mobilization/demobilization to the project location, closed-circuit television (CCTV) vehicle and equipment, traffic control and permitting, documentation on NASSCO compliant computer generated inspection forms.
    - ii. Inspections are generally limited to the Route 4 relief sewer line and sections of the Route 1 sewer line tied to the Route 4 relief sewer line, where inspection data is not available.



- iii. Pipeline sections included in the scope:
  - 1.) From MH 6885 to MH 950; 10" by-pass sewer
  - 2.) From MH 6896 to MH 6897; active Route 4 relief sewer
  - 3.) From MH 6900 to MH 180; inactive Route 4 relief sewer; includes dewatering in downstream sections.
  - 4.) From MH 6897 to MH 949A; 12" by-pass sewer
  - 5.) From MH 6908 to MH 10294; inactive sewer, includes dewatering.
  - 6.) From MH 187 Haga to MH 180; inactive Route 1 relief sewer
  - 7.) From MH 10312 to MH 10313; Soledad Ave. sewer
  - 8.) From MH 10313 to MH 10300; Route 1 sewer
  - 9.) Total length of pipeline inspection is approximately 4,700LF.
- iv. Pipeline sections excluded from the scope:
  - 1.) From MH 6885 to MH 6896; per scoping meeting section is in good condition.
  - 2.) From MH 6897 to MH 6900; inspection data is available.
- v. Deliverables
  - 1.) One (1) DVD of the CCTV inspections
  - 2.) One (1) PDF file of each inspection, in standard NASSCO Pipeline Assessment and Certification Program format.
  - 3.) One (1) PDF file of each inspection, in standard USi format
  - 4.) One (1) summary spreadsheet, in Microsoft Excel format, of the CCTV inspections
- e. Manhole Inspections
  - i. Fee includes mobilization/demobilization to the project location, vehicle, equipment, staff, NASCO-certified crew leader, traffic control and permitting, Manhole Assessment and Certification Program (MACP) level 2 inspections, documentation on MACP format.
  - ii. Manholes included in the scope include:
    - 1.) MH 6898, MH 6899, MH 6900, MH 6901 – MH 6907
    - 2.) Total number of manhole inspections is 10.
  - iii. Manholes excluded from the scope include:
    - 1.) MH 6885, MH 950, MH 6896, MH 949A, MH 180, MH 6897, MH 6908; Manholes previously inspected by USi.
    - 2.) MHs along Route 1 have been previously inspected by others (HDR)
  - iv. Deliverables
    - 1.) One (1) PDF of each computer-generated manhole inspection report including photographs
    - 2.) One (1) summary spreadsheet, in Microsoft Excel format, of the manhole inspections
- 4. Task 4 – Hydraulic Analysis
  - a. Perform a hydraulic analysis of the Route 4 relief sewer from Chaot Pump Station to the Agana Main Pump Station to determine capacity of existing system and whether sufficient capacity is available during peak flow conditions.
  - b. Develop recommendations for improvements to increase capacity including options such as increased pipe diameters, pipe material and rehabilitation methods.
  - c. Hydraulic model from the hydraulic analysis provided in the RFP will be provided to AECOM.
  - d. AECOM will update the hydraulic model with data from the field investigation.
  - e. The hydraulic model to be used will be compatible with InfoSWMM.
- 5. Task 5 – Design Alternatives Report (DAR)
  - a. DAR to summarize the data, findings and conclusions from Tasks 2, 3 and 4.
  - b. The DAR will compare feasible design alternatives for rehabilitation, repair, or replacement of the relief gravity sewer pipeline between Sinajana and Hagatna.
  - c. The alternatives analysis shall include, but not be limited to, the following comparison items:
    - i. geotechnical investigation requirements
    - ii. cultural resource and historical survey requirements
    - iii. construction cost estimates

- iv. construction schedules
  - v. construction implementation (equipment staging, traffic control, sewer bypass requirements, pump station modifications, etc.)
  - vi. permitting requirements
  - d. The DAR will recommend a preferred alternative.
  - e. Deliverables
    - i. Will include a draft and final submittal.
    - ii. Five (5) hard copies of DAR of each submittal.
    - iii. One (1) CD or DVD of the Final DAR in PDF format and hydraulic modeling files.
  - f. After written approval of the final DAR by the Chief Engineer, the scope of services may continue into Task 6. As part of the SRF grant conditions, the DAR will be forwarded by GWA to USEPA for concurrence.
6. Task 6 – Design
- a. Topographical survey
    - i. Will be conducted by a licensed Guam surveyor.
    - ii. Limits will generally begin from MH 6885 to the influent MH at the Agana Main Pump Station. A full topographic survey will be conducted along the roadway alignment where improvements are anticipated based on information provided in the RFP and during scoping meetings. Limited topographic survey will be conducted along Route 4 from MH 6889 to MH 6895 to capture roadway centerline, manhole location and elevations, edge of pavement and boundary lines.
    - iii. The scope will include pre-field work planning, as-built conversion, traffic control plans, permitting, field surveying, post processing, plotting and Civil 3D mapping.
  - b. Geotechnical Investigation
    - i. Will be provided by Pacific Soils Engineering & Testing (PSE&T).
    - ii. To explore the subsurface conditions along the sewer line route to provide geotechnical recommendations for design and construction.
    - iii. Fee includes four test borings, review of historical data, laboratory testing, engineering analyses and preparation of a written report. Historical data from PSE&T's archives will be reviewed to further supplement the field explorations.
    - iv. Safety/Traffic control, permitting, drilling, and restoration of test boring will be conducted by PSE&T and a subcontractor.
    - v. Reimbursables include permitting fees, specialty testing for corrosion, and test sample shipment costs.
    - vi. Deliverable
      - 1.) Five (5) hard copies of Geotechnical Report.
      - 2.) One (1) CD or DVD of the Geotechnical Report in PDF format..
  - c. Archaeological Monitoring and Data Recovery Plan (AMDRP)
    - i. Will be provided by Garcia and Associates
    - ii. Fee includes archival research and preparation of an AMDRP. The AMDRP will present the research background of the project area, propose archaeological monitoring methodology, and describe inadvertent discovery protocols to be followed during construction.
    - iii. Deliverable
      - 1.) Five (5) hard copies of AMDRP.
      - 2.) One (1) CD or DVD of the AMDRP in PDF format.
  - d. 30% Design
    - i. Will include 30% plans, specifications, Class 2 AACE construction cost estimate, and contract documents conforming to the GWA and Program Management Design Guidelines.
    - ii. Additionally, profiles, by-pass pumping, construction phasing, construction staging, and traffic control will be included.
  - e. 90% Design
    - i. Includes plans, specifications, Class 1 AACE construction cost estimate, and contract documents, conforming to the GWA Design Guidelines.

- f. Final (100%) "Issued for Bid"
    - i. includes general terms and conditions, plans and specifications and which also utilize the most recent versions of GWA's procurement templates.
    - ii. Brand name specifications will not be used other than in a manner approved in advance by the GWA General Manager and the GWA legal counsel.
    - iii. GWA will submit to USEPA for review and concurrence.
  - g. Permitting and Utility Clearances
    - i. AECOM will assist GWA in preparing permit applications and consultations with local authorities, highway departments and other utilities.
      - 1.) AECOM will assist in preparing the Department of Public Works Highway Encroachment Permit and coordinate design reviews to ensure traffic control plans are acceptable.
      - 2.) AECOM will assist GWA in coordination of design reviews by the Guam Environmental Protection Agency to ensure construction plans conform with Guam Soil Erosion and Sediment Control Regulations and Guam Water Quality Standards requirements.
      - 3.) AECOM will consult with utility (water, sewer, storm water, electrical, communication, fuel) agencies and companies for utility clearances.
  - h. Deliverables
    - i. To be provided in accordance with GWA Guidelines.
    - ii. Five (5) hard copies will be provided each deliverable.
    - iii. One (1) CD or DVD of the Design Documents in PDF and native file format.
  - i. GWA Review
    - i. Three weeks for GWA review will be allotted for each deliverable.
    - ii. AECOM will coordinate over-the-shoulder reviews to help expedite the review process.
7. Task 7 – Procurement
- a. Task will be on a time and materials basis.
  - b. Pre-bid meeting
    - i. AECOM will prepare meeting agenda and sign-in sheets, coordinate and facilitate the meeting with GWA, and record meeting minutes
  - c. AECOM will compile requests for clarification and prepare addenda as needed.
  - d. AECOM will attend bid evaluation conference, review, evaluate, and certify bid tabulations and make a recommendation for construction contract award.
8. Task 8 – Services During Construction
- a. AECOM understands a third party construction management firm will be provided.
  - b. Task will be on a time and materials basis.
  - c. It was assumed construction would last for 15 months.
  - d. AECOM will provide the following:
    - i. Prepare final (100%) "Issued for Construction" conformed plans and specifications incorporating addenda, change orders and changes during the bid phase.
      - 1.) Deliverables
        - a.) To be provided in accordance with GWA Guidelines.
        - b.) Five (5) hard copies will be provided.
        - c.) One (1) CD or DVD of the Design Documents in PDF and native file format.
    - ii. Attend weekly construction progress meetings as required by the CM.
    - iii. Perform field observations as required by the CM and submit field reports documenting any findings
    - iv. Review contractor submittals, Request for Information, Change Orders and contractor's schedule and provide responses/comments, as requested by the CM. Assumptions for the limits of documentation for review are as follows:
      - 1.) Submittals/Shop Drawings – 15.
      - 2.) Request for Information – 30.
      - 3.) Request for Clarification/Change Orders – 30.

- v. Perform final inspections and submit punch list, as requested by the CM.
- vi. Provide Final Record Drawings based on marked-up construction drawings.
- e. AECOM shall provide archaeological services as required by GHRD to monitor impacts of the project on cultural resources in the project area. This will be performed as additional services once identified as required by GHRD.
  - i. Archaeological monitoring will be provided by Garcia and Associates.
  - ii. Fee is based on (1) on-site archaeological monitor, 14 weeks (70 work days) of full-time, on-site archaeological monitoring during ground disturbance associated with construction of the sewer line and preparation and submission of an archaeological monitoring report following construction to GHRD.

The estimated lump sum fee for Tasks 1-6 of this project is \$600,000. The estimated time and materials fee for Tasks 7 and 8 is \$194,000 for a total fee of \$794,000. A fee breakdown is provided as Attachment A.

It is our understanding that progress payments shall be made on a monthly basis by percent complete on tasks deemed acceptable to GWA.

Thank you for this exciting opportunity to serve you, and we look forward to successfully working with you on this project. If you have any questions or require additional information, please do not hesitate to contact me or Pete Diaz at 671.477.8327.

Sincerely yours,  
AECOM Technical Services, Inc.



Rae M. Loui, PE  
Vice President, Business Unit Leader  
808.529.7221  
rae.loui@aecom.com

SUMMARY	
TASK 1: Project Management	\$36,000
TASK 2: Data Research	\$15,000
TASK 3: Field Investigation	\$77,000
TASK 4: Hydraulic Analysis	\$38,000
TASK 5: Design Alternatives Report	\$87,000
TASK 6: Design	\$347,000
TASK 7: Procurement	\$24,000
TASK 8: Construction Support	\$170,000
<b>TOTAL</b>	<b>\$794,000</b>

Fee Summary Breakdown by Company

SUMMARY (AECOM)	
TASK 1: Project Management	\$36,000
TASK 2: Data Research	\$15,000
TASK 3: Field Investigation	\$27,000
TASK 4: Hydraulic Analysis	\$38,000
TASK 5: Design Alternatives Report	\$87,000
TASK 6: Design	\$298,460
TASK 7: Procurement	\$24,000
TASK 8: Construction Support	\$108,000
<b>SUB TOTAL</b>	<b>\$633,460</b>
SUMMARY (USi)	
TASK 3: Field Investigation	\$50,000
<b>SUB TOTAL</b>	<b>\$50,000</b>
SUMMARY (Pacific Soils)	
TASK 6: Design	\$41,540
<b>SUB TOTAL</b>	<b>\$41,540</b>
SUMMARY (Garcia & Associates)	
TASK 6: Design	\$7,000
TASK 8: Construction Support	\$62,000
<b>SUB TOTAL</b>	<b>\$69,000</b>
<b>TOTAL</b>	<b>\$794,000</b>

# Exhibit C (7 of 14)

TASK 1: Project Management	RATE (\$/HR)	STAFF LABOR					NON LABOR					
		QA/QC	PM	PE	SENIOR ENGR	STAFF ENGR	CADD	CLERICAL	TOTAL	REPRODUCTION	TRAVEL	ODCs
	\$ 270	\$ 162	\$ 207	\$ 234	\$ 138	\$ 132	\$ 87					
Project Administration	0	52	0	0	0	0	26	78	\$ 500	\$ -	\$ 457	\$ 957
Monthly Progress Meetings	0	22	0	0	0	0	0	22	\$ 50	\$ -	\$ 457	\$ 507
Kick-Off and Close-out Meetings	0	8	4	4	4	0	0	20	\$ 50	\$ -	\$ 457	\$ 507
Project Management Plan	4	40	0	0	0	0	24	68	\$ 500	\$ -	\$ 457	\$ 957
Progress Reports/Schedule Updates	0	22	0	0	0	0	0	22	\$ 100	\$ -	\$ 457	\$ 557
TOTAL HOURS	4	144	4	4	4	0	50	210				
	COST (\$)	\$ 1,080	\$ 23,328	\$ 828	\$ 936	\$ -	\$ 4,350	\$ 31,074	\$ 1,200	\$ -	\$ 2,285	\$ 3,485
		LABOR + NON LABOR \$ 34,559										
		TAXES (4.17%) \$ 1,441										
		SUBTOTAL \$ 36,000										

# Exhibit C (8 of 14)

TASK 2: Data Research	STAFF LABOR										NON LABOR			
	QA/QC	PM	PE	SENIOR ENGR	STAFF ENGR	CADD	CLERICAL	TOTAL	REPRODUCTION	TRAVEL	ODCS	TOTAL		
RATE (\$/HR)	\$ 270	\$ 162	\$ 207	\$ 234	\$ 138	\$ 132	\$ 87							
Site Visits	0	16	0	0	0	0	0	16	\$ 50	\$ -	\$ 589	\$ 639		
Analyze Data	0	16	0	0	16	40	0	72	\$ 500	\$ -	\$ 589	\$ 1,089		
TOTAL HOURS	0	32	0	0	16	40	0	88						
COST (\$)	\$ -	\$ 5,184	\$ -	\$ -	\$ 2,208	\$ 5,280	\$ -	\$ 12,672	\$ 550	\$ -	\$ 1,178	\$ 1,728		
								LABOR + NON LABOR				\$ 14,400		
								TAXES (4.17%)				\$ 600		
								SUBTOTAL				\$ 15,000		

# Exhibit C (9 of 14)

TASK 3: Field Investigation	STAFF LABOR										NON LABOR			
	QA/QC	PM	PE	SENIOR ENGR	STAFF ENGR	CADD	CLERICAL	TOTAL	REPRODUCTION	TRAVEL	ODCs	TOTAL		
RATE (\$/HR)	\$ 270	\$ 162	\$ 207	\$ 234	\$ 138	\$ 132	\$ 87							
Field Investigation	0	24	0	0	40	0	0	64	\$ 100	\$ 5,758	\$ 1,772	\$ 7,630		
Analyze Field Data	0	8	0	0	24	0	0	32	\$ 500	\$ -	\$ 1,772	\$ 2,272		
TOTAL HOURS	0	32	0	0	64	0	0	96						
COST (\$)	\$ -	\$ 5,184	\$ -	\$ -	\$ 8,332	\$ -	\$ -	\$ 14,016	\$ 600	\$ 5,758	\$ 3,544	\$ 9,902		
										LABOR + NON LABOR		\$ 23,918		
											USI	\$ 50,000		
											TAXES (4.17%)	\$ 3,082		
											SUBTOTAL	\$ 77,000		



# Exhibit C (10 of 14)

TASK 4: Hydraulic Analysis	STAFF LABOR										NON LABOR				
	QA/QC	PM	PE	SENIOR ENGR	STAFF ENGR	CADD	CLERICAL	TOTAL	REPRODUCTION	TRAVEL	ODCs	TOTAL			
RATE (\$/HR)	\$ 270	\$ 162	\$ 207	\$ 234	\$ 138	\$ 132	\$ 87								
Hydraulic Analysis	16	32	8	16	120	0	0	192	\$ -	\$ -	\$ 5,015	\$ 5,015			
TOTAL HOURS	16	32	8	16	120	0	0	192							
COST (\$)	\$ 4,320	\$ 5,184	\$ 1,656	\$ 3,744	\$ 16,560	\$ -	\$ -	\$ 31,464	\$ -	\$ -	\$ 5,015	\$ 5,015			
	LABOR + NON LABOR											\$ 36,479			
	TAXES (4.17%)											\$ 1,521			
	SUBTOTAL											\$ 38,000			

Exhibit C (11 of 14)

TASK 5: Design Alternatives Report	STAFF LABOR										NON LABOR			
	QA/QC	PM	PE	SENIOR ENGR	STAFF ENGR	CADD	CLERICAL	TOTAL	REPRODUCTION	TRAVEL	OTHER	TOTAL		
RATE (\$/HR)	\$ 270	\$ 162	\$ 207	\$ 234	\$ 138	\$ 132	\$ 87							
Draft DAR	16	96	16	24	160	32	16	360	\$ 500	\$ -	\$ 1,995	\$ 2,495		
Final DAR	8	24	8	16	64	8	8	136	\$ 500	\$ -	\$ 1,995	\$ 2,495		
TOTAL HOURS	24	120	24	40	224	40	24	496						
COST (\$)	\$ 6,480	\$ 19,440	\$ 4,968	\$ 9,360	\$ 30,912	\$ 5,280	\$ 2,088	\$ 78,528	\$ 1,000	\$ -	\$ 3,989	\$ 4,989		
												LABOR + NON LABOR	\$ 83,517	
												TAXES (4.17%)	\$ 3,483	
												SUBTOTAL	\$ 87,000	

# Exhibit C (12 of 14)

TASK 6: Design	STAFF LABOR							NON LABOR				TOTAL	
	QA/QC	PM	PE	SENIOR ENGR	STAFF ENGR	CADD	CLERICAL	TOTAL	REPRODUCTION	TRAVEL	ODCs		
	270	162	207	234	138	132	87						
30% Design	59	35	59	94	118	210	35	610	\$ 1,500	\$ 4,000	\$ 3,986	\$ 9,486	
90% Design	12	14	24	36	47	84	14	233	\$ 1,500	\$ -	\$ 3,986	\$ 5,486	
Final (100%) Design, Issue for Bid	18	21	35	56	71	126	21	348	\$ 1,500	\$ -	\$ 3,986	\$ 5,486	
Permitting		8	0	8	16	24	8	64	\$ -	\$ -	\$ 3,986	\$ 3,986	
<b>TOTAL HOURS</b>	89	78	118	196	252	444	78	1255					
<b>COST (\$)</b>	\$ 24,030	\$ 12,636	\$ 24,426	\$ 45,864	\$ 34,776	\$ 58,608	\$ 6,786	\$ 207,126	\$ 4,500	\$ 4,000	\$ 15,943	\$ 24,443	
								<b>LABOR + NON LABOR</b>	\$ 231,569				
											SURVEY	\$53,000	
											GEOTECHNICAL	\$41,540	
											ARCHAEOLOGY	\$7,000	
											TAXES (4.17%)	\$ 13,891	
											<b>SUBTOTAL</b>	\$ 347,000	

# Exhibit C (13 of 14)

TASK 7: Procurement	STAFF LABOR										NON LABOR			
	QA/QC	PM	PE	SENIOR ENGR	STAFF ENGR	CADD	CLERICAL	TOTAL	REPRODUCTION	TRAVEL	ODCs	TOTAL		
RATE (\$/HR)	\$ 270	\$ 162	\$ 207	\$ 234	\$ 138	\$ 132	\$ 87							
Prebid Conference	0	8	0	0	8	0	0	16	\$ 300	\$ -	\$ 436	\$ 736		
Addenda (4 addenda)	8	8	12	4	16	24	20	92	\$ 500	\$ -	\$ 436	\$ 936		
Bid Review	0	8	8	4	4	0	0	24	\$ 100	\$ -	\$ 436	\$ 536		
TOTAL HOURS	8	24	20	8	28	24	20	132						
COST (\$)	\$ 2,160	\$ 3,888	\$ 4,140	\$ 1,872	\$ 3,864	\$ 3,168	\$ 1,740	\$ 20,832	\$ 900	\$ -	\$ 1,307	\$ 2,207		
LABOR + NON LABOR												\$ 23,039		
TAXES (4.17%)												\$ 961		
SUBTOTAL												\$ 24,000		

# Exhibit C (14 of 14)

TASK 8: Construction Support	STAFF LABOR										NON LABOR			
	QA/QC	PM	PE	SENIOR ENGR	STAFF ENGR	CADD	CLERICAL	TOTAL	REPRODUCTION	TRAVEL	ODCs	TOTAL		
	270	162	207	234	138	132	87							
Preconstruction Meeting	0	4	0	0	4	0	0	8	\$ -	\$ -	\$ 631	\$ 631		
Final (Issue for Construction) Drawings, Specs, Addenda	8	12	8	0	20	32	20	100	\$ 1,500	\$ -	\$ 631	\$ 2,131		
Construction Meetings (Bi-weekly 15 months)	0	30	0	0	60	0	0	90	\$ 50	\$ -	\$ 631	\$ 681		
Shop Drawing Submittals - Estimate 15 submittals and resubmittals	0	30	0	8	60	0	20	118	\$ 100	\$ -	\$ 631	\$ 731		
RFI (2 per month for 15 months construction - 30 total)	0	36	16	8	32	16	0	108	\$ 100	\$ -	\$ 631	\$ 731		
RFC (2 per month for 15 months construction - 30 total)	0	16	16	8	72	0	0	112	\$ 100	\$ -	\$ 631	\$ 731		
Final Inspection	0	16	0	0	0	0	0	16	\$ 50	\$ -	\$ 631	\$ 681		
Final Record Plans	4	8	0	4	32	40	0	88	\$ 300	\$ -	\$ 631	\$ 931		
<b>TOTAL HOURS</b>	12	152	40	28	280	88	40	640						
<b>COST (\$)</b>	\$ 3,240	\$ 24,624	\$ 8,280	\$ 6,552	\$ 38,640	\$ 11,616	\$ 3,480	\$ 96,432	\$ 2,200	\$ -	\$ 5,045	\$ 7,245		
<b>LABOR + NON LABOR</b>												\$ 103,677		
1. ARCHAEOLOGICAL MONITORING												\$ 52,000		
ARCHAEOLOGICAL REPORT												\$ 10,000		
TAXES (4.17%)												\$ 4,323		
<b>SUBTOTAL</b>												\$ 170,000		

Notes:

1. Archaeological monitoring is based on \$740 daily rate for one monitor for 70 work days.

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

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

6 AYES: 4  
7 0  
8 NAYS: 0  
9 0  
10 ABSTENTIONS: 1  
11 1

12 ///

14 ///

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