AMERICAN SAMOA POWER AUTHORITY

REQUEST FOR QUOTES (RFQ)

RFQ NO. ASPA18.010.ESD-WTR

SUPPLY OF ELECTRO-MECHANICAL EQUIPMENT FOR THE UPPER PAGO PAGO IMPROVEMENTS PROJECT (RE-BID)

Issuance Date:	December 14, 2017
Closing Date/Time:	December 28, 2017 at 2:00 pm American Samoa Time
Quote Delivery Location:	New Operations Center Building Tafuna Power Plant Compound

APPROVED FOR ISSUANCE: **UTU ABE MALAE**
ASPA Executive Director

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NOTICE TO OFFERORS'

ISSUANCE DATE:	December 14, 2017
RFQ NO.	**ASPA18.010.ESD-WTR**
PROJECT NAME:	SUPPLY OF ELECTRO-MECHANICAL EQUIPMENT FOR THE UPPER PAGO PAGO IMPROVEMENTS PROJECT (RE-BID)
CLOSING DATE/TIME:	**December 28, 2017 at 10:00 am American Samoa Time**

The American Samoa Power Authority (ASPA) invites OFFERORS' to provide quotations for the Supply of Electro-Mechanical Equipment for the Upper Pago Pago Improvements Project.

Scope of Purchase: The complete description of required deliverables is listed in the attached Scope of Purchase Quote Form

Documents:
This RFQ may be viewed online on ASPA Website www.aspower.com. Offerors may also pick up a complete package at:

ASPA New Operations Center Building
Tafuna Power Plant Compound
Tafuna, American Samoa 96799

For more information about this RFQ, you may contact ASPA:

Ioana S. Uli, Procurement Manager
New Operations Center Building
Tel. (684) 699-3057
bids@aspower.com

The American Samoa Power Authority reserves the right to:

1. Reject all quotes and reissue a new or amended RFQ;
2. Request additional information from any Offeror submitting a quote;
3. Negotiate a Contract with the firm selected for award; and
4. Waive any non-material violations of rules set up in this RFQ at its sole discretion.

Approved for Issuance: Utu Abe Malae, Executive Director

QUOTE INVITATION

AMERICAN SAMOA POWER AUTHORITY:
New Operations Center Building
P.O. BOX PPB
PAGO PAGO, AS 96799
(684) 699-3057

ISSUANCE DATE:	December 14, 2017
RFQ NO.	**ASPA18.010.ESD-WTR**
PROJECT NAME:	**Supply of Electro-Mechanical Equipment for the Upper Pago Pago Improvement Project (RE-BID)**

This Request for Quote shall require an original and one PDF electronic copy to be submitted in a box, or other enclosure. All submittals must be received at ASPA New Operations Center Building - Procurement no later than **10:00 a.m. on December 28, 2017**. The envelope or box must be labeled:

ASPA New Operations Center Building
Attn: Ioana S. Uli, Procurement Manager
P.O. Box PPB, Pago Pago, AS 96799.
RFQ NO. ASPA18.010.ESD-WTR
Supply of Electro-Mechanical Equipment for the Upper Pago Pago Improvements Project (Re-bid).

Quotes must be in the actual possession of the Material Management Office at the location indicated, on or prior to the exact date and time indicated above.

A copy of this solicitation and any addenda may be obtained from our Internet Website at: **http://www.aspower.com** by selecting the Procurement link and the associated solicitation number.

Late submittals will not be opened or considered and will be determined as non-responsive. The prevailing clock shall be ASPA Materials Management clock. All Offerors shall provide sufficient written and verifiable information that responds to the requirements set forth herein, the Contract Documents, and in the Scope of Work OR Material Specifications.
Offerors may submit their quotes through the following mean:

Electronic File Transfer – The Offeror may submit a quote using the electronic mail facility. This will enable the Offeror to upload Quote file by email attachment. The Quotes must be uploaded before **10:00 AM on December 28, 2017, American Samoa Time.**

NOTICE TO OFFERORS':
This quote is subject to the attached General Terms and Conditions of the Request for Quotes for:

"RFQ NO. ASPA18.010.ESD-WTR
Supply of Electro-Mechanical Equipment for the Upper Pago Pago Improvements Project (Re-bid)."

The undersigned offers and agrees to furnish within the time specified, the articles and services at the price stated opposite the respective terms listed on the schedule provided, unless otherwise specified by a Offeror. In consideration of the expense of the American Samoa Power Authority in opening, tabulating, and evaluating this and other quotes, and other considerations such as the schedule, the undersigned agrees that this quote shall remain firm and irrevocable for One Hundred Twenty Day (120) calendar days from the listed quote opening date or until a construction services agreement may be jointly enacted between ASPA and the undersigned party.

It is the responsibility of each Offeror before submitting a quote to (a) examine the documents contained in the quote package thoroughly; (b) visit the site or to otherwise become familiar with local conditions that may in any manner affect cost, progress, or performance of the work; (c) become familiar with federal, territorial, and local laws and ordinances, rules and regulations that may in any manner affect cost, progress, or performance of the work; (d) study and carefully correlate Offeror's observations with the quote package documents; and (d) notify ASPA of all conflicts, errors, or discrepancies in the quote package documents.

Soliciting or accepting any gift, gratuity, favor, entertainment, kickback or any items of monetary value from any person who has or is seeking to do business with ASPA is prohibited. Any vendor knowing of this type of activity is encouraged to report in confidence to ASPA's legal department so the matter can be dealt with.

SIGNED:_____ DATE_____

AMERICAN SAMOA POWER AUTHORITY

SPECIAL NOTICE TO PROSPECTIVE OFFERORS'

Offerors are reminded to read the Sealed Quote Solicitation Instructions and General Terms and Conditions attached to a Quote Invitation to ascertain that all of the following requirements (see check boxes) of the quotes are submitted in the quote envelope at the date and time for quote opening.

[x] **1. QUOTE FORMS**

Attachment A: Quote Transmittal Form
Attachment B: Materials Specifications
Attachment C: Quote Form
Attachment D: Offeror's Qualifications Sheet
Attachment E: Disclosure Statements
Attachment F: Non-Collusion Affidavit of Prime Offeror

[x] **2. BUSINESS LICENSE**

Offerors must submit current business AND current contractor's license as stated below (see General Terms and Condition for more information).

[x] **3. QUOTE**

The Quote must include all of the following to be deemed responsive:

a. The contractor's quote price for the purchase and delivery of all materials listed in the Quote form.
b. All items as listed above in #1 from Attachments A to F.

This Notice must be signed and returned in the Quote envelope. Failure to comply with requirements will mean disqualification and rejection of the quote.

I, _____, authorized representative of _____, acknowledge receipt of this special reminder to prospective Offerors together with Quote Invitation #: **RFQ NO. ASPA18.010.ESD-WTR Supply of Electro-Mechanical Equipment for the Upper Pago Pago Improvements Project (Re-bid).**
this date of _____, 2017.

_____

Offeror's Representative's Signature

TERMS AND CONDITIONS OF THE REQUEST FOR QUOTATIONS
(SUPPLY CONTRACTS)

1. QUOTE PREPARATION INSTRUCTION

The quote must contain two (2) parts. Offerors shall prepare their quotes in detail accordingly.

1. Prior Related Experience/Past Performance – A description of the firm's related experience, background, past performance and credentials as stated on the Offeror Qualification Sheet, Attachment D, which is incorporated herein as if fully set forth. This part includes a dossier of personnel qualifications. Offerors should provide references (4 or more) and a project history that verifies a minimum of three (3) years of specific or related experience. Offeror must hold appropriate and current business license(s) and contractor's license(s) for these services.

2. Contract Price – The contractor's quote price for all services and materials, including a breakdown of project costs (e.g. estimated costs for materials, cost for labor, shipping, etc.) must be provided on the Quote Form, Attachment C.

All blank spaces in the quote form must be completed in ink. **Prices quoted shall be in United States dollars in both words and figures where required**. No changes shall be made in the phraseology of the forms. Written amounts shall govern in cases of discrepancy between the amounts stated in writing and the amounts stated in figures. In case of discrepancy between unit prices and totals, unit prices will prevail. Any quote shall be deemed informal which contains omissions, erasure, alterations or additions of any kind, or prices uncalled for, or in which any of the prices are obviously unbalanced, or which in any manner shall fail to conform to the conditions of the Notice to Offerors. The OFFERORS' shall sign the quote in the space provided. If the offeror is a corporation, the legal name of the corporation shall be set for the above, together with the signature of the officer or offices authorized to sign Contracts on behalf of the corporation. The typewritten name shall be inserted with each signature. If the OFFERORS' is a partnership, the true name of the firm shall be set forth above, together with the signature of the partner or partners authorized to sign Contracts on behalf of the partnership. If signature is by an agent, other than an officer of a corporation or a member of a partnership, a notarized power-of-attorney must be on file with ASPA prior to opening of quotes or submitted with the quote, otherwise the quote will be regarded as not properly authorized.

Offerors are expected to examine the specifications, invitations, and all instructions. Failure to do so will be at the OFFERORS' risk.

Offeror's quotations must be in ink or printed on the quote form(s) furnished herewith. Quotations submitted in partial will be rejected. Quotations containing alterations will be rejected unless the alterations are crossed out and corrections thereof printed in ink or typewritten adjacent thereto and initialed by the person signing the quote. In addition, a statement must be furnished with the quote signed by the offeror explaining the correction of the alteration or erasure.

If the OFFERORS' is a partnership, a letter of authorization shall be furnished and signed by all of the general partners. If the OFFERORS' is a proprietor, and the person signing the quote is other than the owner, a letter of authorization signed by the owner shall be furnished.

The OFFERORS' must sign his quote correctly and in ink. If the quote is offered by an individual or partnership, his name, office and post addresses must be shown. If offered by a corporation, the person signing the quotes must give his name, title and business address. Anyone signing a quote as agent must file legal evidence of his authority to do so, and that the signature is binding upon the firm or corporation.

Alternate quotations will not be considered unless authorized by the invitation. Alternate quotations are those offered which do not meet the specification and are not considered approved equal to the item specified.

When not otherwise specified, the OFFERORS' must state a definite time of proposed delivery.
Time, if stated as a number of days will include Sundays and holidays.

Submission of Quotes:

All interested parties must submit sealed quotes subject to the Terms and Conditions of the Request for Quotes and General Conditions, which are incorporated herein by reference, and such other provisions and specifications are attached or incorporated by reference.

Quotes shall be submitted to the ASPA New Operations Center Building no later than **December 28, 2017 at 2:00 pm American Samoa Time**.

Rejection of Quotes
ASPA may, after opening but prior to award and within the time specified for acceptance, reject any or all quotes, or the quote for any one or more commodities or contracted services included in the proposed contract, when the public interest will be served thereby.

2. ATTACHMENTS

Attachment A is the Quote Transmittal Form
Attachment B is the detailed Materials Specifications
Attachment C is the Quote Form
Attachment D is Offerors Qualification Sheet
Attachment E is the Disclosure Statement
Attachment F is the Non-Collusion Affidavit

3. PRE-QUOTE QUESTIONS

Any pre-quote questions and/or clarifications shall be submitted in writing to the Procurement Office via bids@aspower.com through electronic mail or in hard copy. All pre-quote questions must be received no later than **4:00 p.m. on December 18, 2017**. After that time, ASPA will issue addenda to address any questions and/or clarifications as may be necessary.

4. PAYMENT TERMS

Net 30 days upon receipt of materials.

Payment terms may be negotiable. (Pre-payment is **NOT** acceptable)

5. TYPE OF CONTRACT

Services, materials, product or equipment provided and delivered by the successful offeror will be performed under a firm fixed-price, lump sum contract agreement. The successful offeror, as an independent contractor shall furnish the necessary equipment, personnel, tools, parts, supplies, insurance, licenses, and all other required items and services and otherwise do all things necessary to meet the requirements specified in these documents to the satisfaction of ASPA on a per unit cost basis.

The Contractor shall be an independent contractor and not an agent or employee of ASPA.

ASPA will not be held responsible in any way for claims filed by the Contractor or its employees for services performed under the terms of this RFQ or the contract.

6. AWARD OF CONTRACT

Within twenty (20) calendar days after the opening of quotes, unless otherwise stated in the Notice to Offerors, ASPA will accept one of the quotes in accordance with the section entitled "Basis of Award," below. The acceptance of the quote will be by written Notice of Award, mailed or delivered to the office designated in the quote. In the event of failure of the lowest responsive, responsible offeror to sign and return the Contract with acceptable payment and performance bonds, as prescribed herein, ASPA may award the contract to the next lowest responsive, responsible qualified offeror. Such award, if made, will be made within one hundred and twenty (120) days after the opening of quotes. Before a Contract is finalized, ASPA may require the apparent low offeror to submit a complete statement of the origin, composition, manufacture and availability of replacement parts and services for any or all materials to be used in the work, together with samples. These samples may be subjected to the tests provided for in these Contract Documents to determine their quality and fitness for the work.

7. PRIMARY OFFERORS'

The award, if made, will be to a single Offeror. The selected primary Offeror will be responsible for successful performance of all subcontractors and support services offered in response to this Quote. Furthermore, the ASPA will consider the primary Offeror to be the sole point of contact regarding contractual matters for the term of the Agreement. The Offeror must not assign financial documents to a third-party without prior written approval by ASPA, and an amendment to the resulting Agreement.

8. BUSINESS LICENSE

All offerors shall be appropriately licensed in accordance with the state, territory, and/or country of the offeror's origin and shall be skilled and regularly engaged in the general type and capacity of work called fo under this RFQ.

9. INSURANCE

The Contractor shall obtain the insurance coverage designated herein and pay all costs associated therewith. Such insurance shall be for the coverage of the shipment of materials to ASPA Tafuna Compound

10. BASIS OF AWARD

Award is made to the lowest responsive, responsible offeror providing the best value to the American Samoa Power Authority.

At the time of quote opening, each quote will be checked for the presence or absence of required information in conformance with the submission requirements of this RFQ.

ASPA will evaluate each quote to determine its responsiveness to the published requirements.

Unless the Procurement Manager determines that satisfactory evidence exists that a "mistake" has been made, as set forth in Procurement Rule § 3-114, offerors will not be permitted to revise their Quotes after quote opening.

Negotiations are not allowed and price is the major determining factor for selection and award.

Quotes will be evaluated by according to ASPA's Procurement Rules and criteria set forth in these quote documents.

11. QUALIFICATION OF OFFERORS'

ASPA may make such investigations as it deems necessary to determine a offeror's ability to enter into and perform the agreement, and the offeror shall furnish to ASPA such information and data for this purpose as ASPA may request, or the offeror may be deemed non-responsive.

12. MULTIPLE QUOTES – COLLUSION

If more than one quote is submitted by any one party or in the name of its clerk, partner or other person; all quotes submitted by said party may be rejected by ASPA. This shall not prevent an offeror from submitting alternate quotes when called for. A party who has proposed prices on materials is not thereby disqualified from quoting prices to other offerors or from submitting a quote directly to ASPA.

If ASPA believes that collusion exists among any offerors, none of the participants in such collusion shall be considered.

Quotes in which the contract prices are unbalanced or unrealistic may be rejected at ASPA's sole discretion.

13. OFFERORS'S UNDERSTANDING

Each offeror must understand and acknowledge the conditions relating to the execution of the work and it is assumed that it will make itself thoroughly familiar with all of the Contract Documents prior to execution of the written contract.

Each offeror shall inform itself of, and shall comply with, federal and territorial statutes and ordinances relative to the executing of the work. This requirement includes, but is not limited to, applicable regulations concerning protection of public and employee safety and health, environmental protection, historic preservation, the protection of natural resources, fire protection, burning and non-burning requirements, permits, fees, and similar subjects.

Costs of Transportation. The Contractor will be expected to include in its quote, among other things, costs of transporting product, equipment and materials to and from the American Samoa Power Authority Tafuna Warehouse.

Equipment Warranty and Maintenance Requirements. All quotes should include the warranty cost of equipment and workmanship warranty, or length of warranty specified in the materials specifications, attached hereto as Attachment B. Warranties shall include the cost of all parts, labor, equipment, shipping, and onsite visits to repair or replace any deficient equipment, material, or workmanship.

14. WITHDRAWAL OF QUOTE

Any quote may be withdrawn prior to the scheduled time for the opening of quotes by notifying ASPA in a written request. No quote may be withdrawn after the time schedule for opening of quotes.

15. OPENING AND EVALUATION OF QUOTES

In accordance with ASPA Procurement Rule §3-110, quotes will be opened and recorded on the assigned date and at the time indicated above at the Materials Management Conference Room located at the ASPA Tafuna Plant or in another place designated by the ASPA Procurement Manager in writing.

16. EXECUTION OF CONTRACT

The Contractor shall, after receiving the Notice of Award, sign a contract within ten (10) days and deliver to ASPA the contract, together with all any requirements included in this quote document.

17. ASSIGNMENT

The Contractor shall not assign, transfer, convey or otherwise dispose of the award or the contract, or its right, title or interest therein, or its power to execute such contract, to any other persons, firms or corporations without the prior consent in writing of ASPA.

18. RFQ CONDITIONS

This RFQ does not commit ASPA to award a contract or to pay any cost incurred in the preparation of a quote. The American Samoa Power Authority reserves the right to:

Reject any offeror for being non-responsive to quote requirements contained in this RFQ or for being non-responsible;

Reject all quotes and reissue an amended RFQ;

Negotiate a contract with the offeror selected for award; and

Waive any non-material violations of rules contained in this RFQ.

ASPA reserves the right to issue any addendum to this RFQ. Offerors shall send ASPA a signed form confirming receipt of any addendum, and shall submit supporting/additional information as required by any addendum. In the event that an offeror fails to acknowledge receipt of any such addendum in the space provided, such offeror's quote shall be considered irregular and will be accepted by ASPA only if it is in ASPA's best interest, as determined by ASPA in its sole discretion. In the event that addenda are not received until after the offeror has submitted its quote, a supplementary quote may be submitted revising the original quote. Such supplementary quotes must be received by ASPA prior to the scheduled time for opening of quotes.

19. COMPLIANCE WITH LAWS

Offerors who are awarded a contract under this solicitation shall comply with the applicable standards, provisions and stipulations of all pertinent Federal and/or local laws, rules and regulations relative to the performance of this contract and the furnishing of goods.

20. AWARD, CANCELLATION, AND REJECTION

Contract award shall be made to the responsible offeror submitting the lowest responsive quote. No other factors or criteria shall be used in the evaluation.

ASPA reserves the right to waive any minor irregularities in the quote received. The Procurement Manager shall have the authority to award, cancel, or reject quotes, in whole or in part for any one or more items if she determines it is in the best public interest. It is the policy of ASPA to award contracts to qualified offerors. ASPA reserves the right to increase or decrease the quantity of the items for award and make additional awards for the same type items based on the quotation prices for a period of thirty (30) days after the original award.

21. OFFERORS'S QUALIFICATION DATA

It is the intention of ASPA to award a contract only to the Contractor who is able to furnish satisfactory evidence that it has the requisite experience and ability and that it has sufficient capital, facilities and plant to enable it to perform the work successfully and promptly and to complete it within the term set forth in the contract. Each offeror shall submit as part of the total quote package, the following information:

Name of organization;

Address and phone number of home office, principal place of business and locations and contact information for any branch offices;

Type of business structure, e.g., corporation, partnership, joint venture, proprietorship;

Place of organization or state of incorporation;

Names and addresses for all owners for businesses other than corporations;

For corporations, list the names and addresses of directors, officers and stockholders with twenty percent (20%) ownership interest or greater;

Places, including individual states and territories of the United States, where registered as a foreign corporation;

Name of awarding agency or owner for which work was performed;

Dates of performance;

Whether performance was completed within the specified time under the contract and, if not, why; and

The names and addresses of three references, at least one of which should be a bank or other lending institution, governmental agency or bonding company.

22. <u>Delivery and Remedies for Default</u>

All quote prices are to include delivery to the place designated by ASPA which shall be **CIF American Samoa Power Authority Tafuna Compound Warehouse**. No charges for delivery, parcel post, packing, cartage, insurance, license fees, or for any other purpose will be paid by ASPA.

All items covered by this contract shall be subject to inspection and acceptance at destination. Any material found to be damaged, as well as broken seals on packages or unmarked packages shall be removed and replaced by the Contractor at no cost to ASPA.

In the event any item furnished by the Contractor in performance of the contract should fail to comply with the specifications established as a basis for award of the Invitation, ASPA may reject the same, and it shall thereupon become the duty of the Contractor to reclaim and remove the same forthwith without expense to ASPA, and immediately to replace all such rejected items with others conforming to said specifications; provided that should the Contractor fail, neglect or refuse to do so, ASPA shall thereupon have the right to purchase in the open market, at the then prevailing price, a corresponding quantity of any such items, and to deduct from any monies due or that may thereafter become due to the Contractor the difference between the price named in the contract and the actual cost thereof to ASPA. In addition and without limiting any other remedies available to ASPA, the Contractor shall be liable for all losses, costs and expenses incurred by ASPA.

Acceptance of items at destination shall not relieve the Contractor from the obligation to correct any incomplete, inaccurate, or defective deliveries in accordance with these General Conditions.
The time of delivery as set forth herein is an integral part of this Invitation and resulting contract. If Contractor fails to make delivery within the time established and agreed upon by both parties, ASPA may, at its option, declare the Contractor to be in default, and his quotes and resulting contract to be null and void or ASPA shall charge the Contractor a fee of $100 per day until the default has been remedied.
Contractors shall be excused from performing hereunder during the time and to the extent that they are prevented from obtaining, delivering, or performing in the customary way because of fire, strike, acts of God, partial or total interruption, providing it is satisfactorily established that the non-performance is not due to fault or negligence of the party not performing.

Offeror shall indicate in its quote the lead time for delivering.

ASPA shall be notified by the vendor if the product ordered cannot be delivered within the time period to give ASPA the opportunity to secure product elsewhere.

ASPA reserves the right to purchase products on open market if vendor cannot supply products within time specified in this contract.

Prices

All prices quoted shall be firm and not subject to increase if accepted during the acceptance period. Quotes containing an "escalation clause" will not be considered unless specifically authorized by ASPA in the Request for Quotes.

For each item quote, a unit price and a total for the quantity must be stated. The unit price shall always control.

All prices shall be CIF (Cost, Insurance and Freight) destination. The seller hereunder must at his own expense and risk, transport the goods to the American Samoa Power Authority Tafuna Warehouse.

Product Guarantee

Products sold under the contract must be guaranteed by the vendor.
Orders not filled and partials shall be indicated on the packing list. Vendor shall inform the Procurement Manager of anticipated delivery date for unfilled and partial orders.

Return Policy
Products can be returned for full credit within 30 days from the date of purchase. If an item is received damaged or defective, the vendor will replace the item at no charge. Should ASPA encounter a warranty/return issue, the product will be returned to the vendor for full credit or a replacement.

Specifications
All specifications included as a part of this Invitation are designed to set forth the level of quality and performance desired by ASPA, and is intended to be descriptive, not restrictive. Whenever any article, material, or equipment is described by use of a product or brand name, or by using the name of a manufacturer or vendor, the use of same is for informative purposes only, and the term "or equal" if not inserted, is implied.

Offerors may submit alternate offers on items they deem to be equal or superior in quality and performance to the specifications set forth. However, such offers must designate the manufacturer, brand or trade name, and model number of the items offered, and be accompanied by descriptive material in the form of literature, catalog cuts and specifications fully describing the items proposed, and detailing any deviations from the specification established by ASPA. Failure to provide this information will be at offeror's risk and may be cause for rejection of the items offered.

ASPA reserves the right to require such additional information, samples and, if practicable, demonstration of items offered as may be necessary to allow a full and complete evaluation of all quotes. Samples and/or demonstrations will be supplied promptly and free of charge to ASPA. Failure to provide samples within a set of business days agreed upon by both parties may be grounds for quote rejection. Samples will upon request, and if not destroyed by testing, be returned at the OFFERORS'' expense.

The responsibility to determine the equivalence of quality and performance of any item offered to the specifications established for this Invitation rests solely with ASPA and its decision shall be final.

ASPA reserves the right to require such additional information, samples and, if practicable, demonstration of items

Warranty
The Contractor warrants;

- that goods, supplies, materials, and equipment covered by this contract conform to the specifications, design, drawings, samples and other descriptions referred to in this contract;
- that such goods, supplies, materials, and equipment are free from defects in materials and workmanship, patent or latent; and
- that such goods, supplies, materials and equipment are fit for ordinary purposes for which they are used, and fit for such particular purposes as the Contractor has reason to know or should know.

23. Conflict of Interest
No member, officer, or employee of ASPA during his/her tenure or for one year thereafter shall have any interest , direct or indirect, in any property included, or any contract for property, materials, or services to be furnished or used in connection with this contract or the proceeds thereof.

24. Assignment

The Contractor's obligation and duties under this contract shall not be assigned in whole or in part by the Contractor without the prior written approval of ASPA.

25. Indemnification

Contractor agrees to investigate, defend and hold ASPA harmless from and against any and all loss, damage, liability, claims, demands, detriments, cost, charges and expense (including attorney's fees), and causes of action of whatsoever character which ASPA may incur, sustain or be subjected to, arising out of or in any way connected to the services to be performed by Contractor or subcontractor under this Contract and arising from any cause, except the sole negligence of ASPA.

ATTACHMENT A

QUOTE TRANSMITTAL FORM

Date: _____

AMERICAN SAMOA POWER AUTHORITY
American Samoa Government

To Whom It May Concern:

The undersigned (hereafter called a Offeror), _____ (Corporation, Partnership or Individual)

hereby proposes and agrees to furnish all the necessary information pertaining to:

RFQ NO. ASPA18.010.ESD-WTR

SUPPLY OF ELECTRO-MECHANICAL EQUIPMENT FOR THE

UPPER PAGO PAGO IMPROVEMENTS PROJECT (RE-BID)

In accordance with the Materials Specification (Attachment B), General Terms and Conditions, the Project Specifications, Approved Design and Construction Plans, and other procurement requirements specified in this document for the prices stated in the itemized quote form(s) attached hereto, plus any and all sums to be added and/or deducted resulting from all extra and/or omitted work in accordance with the unit and/or lump sum prices stated in the itemized quote form attached hereto.

The undersigned has read and understands the quote requirements, and is familiar with and knowledgeable of the local conditions at the island-wide location(s) where the work is to be performed. The Offeror has read the RFQ Instructions and General Terms and Conditions attached to ascertain that all of the requirements (see boxes) of the quote are submitted in the quote envelope, with an original, one PDF electronic copy, and five (5) hard copies, at the date and time for quote opening. (See Page 6 of this document, "SPECIAL NOTICE TO PROSPECTIVE OFFERORS" to verify that all submittal requirement boxes have been checked).

_____
Signed

Date: _____

ATTACHMENT B

MATERIALS AND EQUIPMENT SPECIFICATIONS

VERTICAL IN LINE (VIL) BOOSTER PUMP

OPERATING REQUIREMENTS – The Vertical In-Line (VIL) booster pumps shall meet the following operating requirements. The Pump shall be of Grundfos, Paco Brand or ASPA approved equal.

Item	Description/Particulars	Upper Pago-Fagasa Booster Station
1	Number of Unit/s	2
2	Capacity/Design Flow, GPM	150
3	Total Dynamic Head (TDH), Feet	400
4	Minimum Efficiency @ Design Head, %	74
5	Design Speed, RPM	3450
6	Horsepower Rating, HP	25
7	Variable Frequency Drive (VFD) Rating, HP	30
7	Size of Common Header, inches	6
8	Size of Identical Suction Pipe, inches	6
9	Size of Discharge Common Header, inches	4
10	Size of Identical Discharge Pipe, inches	4
11	VIL Pump Model	CR32-6-2

PUMP CONSTRUCTION - The pump shall be Vertical In Line Booster Pump, **CLOCKWISE ROTATION** and consists mainly of stainless steel impeller and pump shaft. The pump shall be equipped with vertical induction type U.S. brand electric motor. The pump shall be designed to operate safely at all times without cavitations at any actual head in the operating range. **It shall be manufactured to satisfy the above operational requirements and shall pass the pre-determined and pre-delivery performance test.**

CASING - The casing material shall be stainless steel. Water passageways shall be smooth to permit maximum efficiency. Casing shall be hydrostatically tested at 150% of the maximum working pressure under which the pump could operate at design speed.

The suction and discharge flange shall be drilled 125 lbs. ANSI flanges. The bearing brackets shall be cast as an integral part of the lower casing and have removable brackets caps. It shall be designed to withstand internal pressure, vibrations and shall be resistive to corrosion and wear. It shall be constructed free of blow holes, smoothly finished and

hydro-dynamically balanced. Assembly and disassembly is permitted without disturbing the suction and discharge piping.

2.1.4 **IMPELLERS** - The impellers shall be constructed with stainless steel, enclosed type, suitable to operate trouble free in pumping clear, accurately fitted, smoothly finished and dynamically balance at normal pump speeds. The impeller skirt shall be grooved and fit with close tolerances to the casing ring to permit a minimum of recirculation between the impeller and the casing ring for maximum efficiency.

2.1.5 **PUMP SHAFT** - The shaft shall be stainless steel adequately sized for the loads transmitted. Shaft deflection shall not exceed .002 inches at the face of the stuffing box when operating between 95% and 105% at capacity at the best efficiency at the pump's maximum 60 Hz speed and with full diameter impeller. The shaft shall be protected through the stuffing box by means of bronze shaft sleeves and they shall be threaded against shaft rotation and locked in place with set screws.

2.2 VERTICAL INDUCTION TYPE MOTOR

The motor shall be vertical induction type, rated at 25 HP, 460 volts, 3-phase, 60 hertz AC with 1.10 minimum service factor. The motor shall be either a NEMA design B, or JEC B or its equivalent with drip proof TEFC. Motor shall be of class B or class F insulation with temperature rise as specified by NEMA standards class insulation used. It shall be fitted with permanent non-corrosive nameplate on which all standard data shall be stamped or engraved in English. The Horizontal type Induction Motor shall be U.S. Motors brand or ASPA approved equal.

2.3 ELECTRO-MAGNETIC FLOW METERING SYSTEM

2.3.1 SCOPE OF WORK

The work in this section consists of furnishing, installing, and start-up of electromagnetic flow measuring equipment including, but not limited to, seals, power supply, mounting hardware, signal wiring at locations shown on the drawings, labor, equipment, materials supervision and incidentals necessary for a complete and properly functioning flow measurement system.

Item	Qty.	Location	Size of Flow Meter
1	1 unit	Upper Pago-Fagasa Booster Pump Station	4"Ø

SYSTEM DESCRIPTION

Sensors, signal processors, displays, hardware and wiring to produce flow indication, flow totals, data logging, flow trend lines, SCADA system communications, control I/O and alarm data along with transmitting a linear signal proportional to the current flow rate in the closed pipe location indicated in the plans.

The electromagnetic flow measurement system shall consist of a Flow Sensor which uses Faradays law of electromagnetic induction along with a microprocessor based Flow Converter and Display.

The flow meter shall have built in self-diagnostics, technician service functions and be suitable for use with the manufacturer's system certifying kit to confirm meter's sensor functions, accuracy of electronics including a calibration check of electronics at a zero flow and a mid-range flow rates, and for confirming all components meet factory specifications for accuracy and feature operation.

FLOW SENSOR

Construction: The sensor shall be produced from 304 stainless steel pipe, coils, 316L stainless steel electrodes and a hard rubber liner, soft rubber liner, or PTFE liner as required for compatibility with the media. The sensor shall have a 304 stainless steel outer jacket, carbon steel ANSI 150 psi ANSI Class D or ANSI Class E flanges. Carbon steel flanges shall be protected with two part epoxy coating for corrosion resistance.

Installation: A minimum of 3 pipe diameters up stream and 2 pipe diameters down stream of straight smooth pipe are recommended. (Consult Factory for any variations.)

a. Flow Sensor Operating Temperature shall be: Media Temperature -25ºC to 110ºC (-13ºF to +230ºF), Ambient Temperature -30ºC to 80ºC (-22ºF to + 176ºF).

b. Flow Sensor Sizing shall conform to the manufacturer's sizing recommendations for the expected flow rates per the table below:

Flow Sensor Sizing

Min and max flow:								
Size:	Qmin: 0.6 ft/s [gpm]	Qmax: 30 ft/s [gpm]	Size:	Qmin: 0.6 ft/s [gpm]	Qmax: 30 ft/s [gpm]	Size:	Qmin: 0.6 ft/s [gpm]	Qmax: 30 ft/s [gpm]
			¾"	0.995	49.76	2½"	10.52	523.9
			1"	1.550	77.82	3"	15.03	706.9
			1¼"	2.549	127.4	4"	24.87	1246
¼"	0.091	4.45	1½"	3.984	199.7	5"	38.92	1946
½"	0.559	28.0	2"	6.226	310.7	6"	55.91	2800

Min and max flow:								
Size:	Qmin: 0.6 ft/s [gpm]	Qmax: 30 ft/s [gpm]	Size:	Qmin: 0.6 ft/s [gpm]	Qmax: 30 ft/s [gpm]	Size:	Qmin: 0.6 ft/s [gpm]	Qmax: 30 ft/s [gpm]
8"	99.50	4979	16"	506.3	25210	36"	2017	100800
10"	155.4	7780	20"	620.8	31120	40"	2497	124500
12"	224.1	11205	24"	900.1	44910	48"	3584	179300
14"	305.1	15258	28"	1220	74020	20mA output is factory preset to Qmax		
16"	398.5	19919	32"	1594	79620			

c. Flow Sensor shall be capable of being installed for permanent burial or submergence up to 30 ft. (IP 68/NEMA 6P) using manufacturer's submergence and waterproofing kits. Flow sensor shall be capable of temporary (30 minutes) submergence up to 3 ft. (IP 67) without a submergence kit.

d. Flow Sensor shall be full bore internal diameter throughout to reduce liner erosion and reduce turbulence at high flow ranges.

e. Flow Sensor shall be factory calibrated and wet tested to deliver ±0.25% reading accuracy for sizes from ¼ inch up to 12 inch diameters, and ±0.5% reading accuracy up from 14 inch to 20 inch diameters, ±1% reading accuracy from 24 inch to 40 inch diameters, and ±2% reading accuracy in sizes above 40 inches diameter. Accuracies will be NIST Traceable.

f. Flow Sensor shall be delivered with a calibration certificate for verification of performance.

g. The Flow Sensor shall have calibration and flow set up data marked on the sensor.

h. No tools or instruments shall be required to enter or confirm calibration data during set-up.

i. The Flow Sensor shall have no electronic components except the electrodes and coils.

j. Flow Sensor shall be capable of operating in 100% humidity on a permanent basis with manufacturer's recommended gel potting.

k. Flow sensor shall be capable of being mounted in at angles up to 45º from vertical around the centre axis of a horizontal pipe.

l. Flow Sensor shall be capable of being installed in any direction without regard to flow direction.

m. The Flow Sensors 316L electrodes shall be lobed so as to create a scouring effect with flow through the tube.

n. The Flow Sensor shall also include a grounding electrode to eliminate the need for grounding rings in wastewater applications (except when using non-conducting pipe).

FLOW CONVERTER

a. Flow Converter shall have an enclosure rating of IP 67 (NEMA 6).

b. Flow Converter shall have a measurement accuracy of ±0.1%.

c. Flow Converter shall energize and detect signals generated at the flow Sensor electrodes and self-adjust frequency and amplitude to maximize accuracy across a wide range of flow velocities.

d. Flow Converter shall include program for periodic self-cleaning off the Flow Sensor electrodes using cyclic reverse polarization systems to prevent material attachment and to detach plated materials.

e. Flow Converter shall be capable of measuring fluid velocities in low 0 to 0.2m/S (0.6ft/sec.) and up to a maximum velocity up to 10m/s (30ft/sec).

f. Maximum accuracies shall be achieved from 2% of the flow sensors maximum flow rate up through the sensors maximum flow rate.

g. Flow Converter shall be a flow rate transmitter with a fully scalable 4-20mA output proportional to all or part of the full-scale flow rate and capable of transmitting with a maximum line load of 800 Ω.

h. The Flow Converter shall be capable of transmitting a 4-20mA output proportional to the flow in either direction, or 4-20 mA proportional to flow in both directions, selectable after installation.

i. Flow Converter shall have one voltage free electromechanical relay rated for a maximum of 50VDC at 1 Amp one voltage free relay rated for 50VAC/VDC 120mA max. Both relays are programmable for totalizer counter output, batch counters, high/low flow alarm, system error, empty pipe alarm, and flow direction indication.

j. The Flow Converter shall accept one external digital input rated at a maximum of 30VDC with a signal less than 5VDC registered as = 0 and a signal greater than 10 VDC as registered as = 1, minimum pulse length 100ms. Digital input can be used for reset of batch counters, start and stop batches or alarm acknowledgement.

k. The Flow Converter shall be capable of reading flow in both directions and have three re-settable totalizers and three non-resettable totalizers capable of totalizing the total flow or net flow in both directions.

l. The Flow Converter shall have two batch counters utilizing dynamic adaptive batch counting to minimize under shooting and over shooting of batch volume by self-adjusting the batch cycle based on actual batch size measurement results.

m. Flow Converter shall have a MODBUS RTU-mode for control and communication using either the MJK MagFlux Display unit or for communication with a PLC. The manufacturer shall supply a document with the list of program registers upon request.

n. Flow Converter shall use an RS 485 communication interface capable of transmitting up to 3000 ft. the controls and data in the MODBUS RTU mode to a PLC or MJK Display Unit.

o. Flow Converter shall be capable of operating without a display, with a remote display, with an integral display or as a member of a group of two to four converters working from a single display.

p. Flow converter shall be capable of being operated remote to the Flow Sensor.

q. Converter shall have CE conformance for radio signal input and output immunity.

r. Flow converter shall have user adjustable low flow cut off for automatic zeroing of flow rate, totalizing and mA output. No external switching shall be required to achieve zero flow.

t. Flow Converter dimensions with cover or display unit attached shall not exceed 6.4" W x 5.9"H x 3.5"D.

u. Flow Converter and must be capable of interchanging with any other flow sensor from the same manufacturer, without the use of electronic memory media exchange.

v. Flow Converter must be capable of being remote mounted up to 150 ft. from the flow sensor and require only one set of communication cabling to the sensor for operation.

DISPLAY UNIT

a. Display Unit shall be a white dot matrix 64 x128 pixel graphic backlit display.
b. Display Unit shall allow up to four lines of customizable text with automatic font scaling allowing maximum size up to ½ an inch for the primary measurement parameter.
c. Display Unit shall indicate flow, flow direction, volume, totalizers, configuration, and set-up operations in plain English text.

d. The Display Unit shall display a graphical trend line of the flow history which can be expanded to show greater detail down to 5 minutes increments of flow rates.

e. The Display Unit shall collect 160,000 flow data points with date and time at user specified time intervals, and data log daily flow totals.

f. The Display Unit shall communicate with the Flow Converter using a MODBUS RTU mode using RS485 communications on standard twisted wires for distances up to 3000 ft.

g. The Display Unit shall be capable of controlling, configuring, and data logging for up to four Flow Converters and flow sensors at the same time with simultaneous displays of measurements.

h. The Display unit shall also have options for Modbus or Profibus data transmission in addition to the Converter communications modes.

i. The Display Unit shall hold all settings in a flash memory in the event of a power outage. Battery back-up is not acceptable.

j. The Display Unit shall have a USB port for connection or options for Blue Tooth communication to a personal computer for downloading data in CSV file types suitable for use with commonly available spreadsheet and data management software. The USB port shall also be capable of letting the operator store all flow meter settings as a file on a PC, configure the flow meter converter from a PC, upload software updates, and upload standard configurations.

k. The Display Unit shall be able to be remote mounted up to 3000 feet from Flow Converters.

l. The Display Unit shall have four keypad buttons for configuration and operation by the user and for use as a digital input for control.

m. The Display unit shall be capable of showing 'pop-up' alarm messages which shall persist as long as the alarm condition exists and will disappear 5 minutes after alarm stops.

MATERIALS

1. All instruments and sensors shall be supplied by one manufacturer to ensure consistent fit and system-wide functioning.
2. Provide:
   a. Flow Sensor compatible with flow rate and media.
   b. Flow Converter capable of converting conductive liquid velocity signal into flow rate and transmitting proportional signal, totalizing signal and relay signals.
   c. Display Unit capable of displaying all measurements and set-up functions, and capable of providing data logging functions and program uploads.
   d. Provide MJK Mag Flux Electromagnetic Flow Meter System and recommended spare parts.
   e. Calibration shall be by registering the Flow Sensor's serial number to the Flow Converter by keying it into the Display Unit. Use of memory chips or other electronic media for this purpose is not allowed.

3. System shall start-up and accurately measure immediately after Flow Sensor registration.

   a. Operator shall use the integral keypad on the Display unit to program relays for error alarms, limit alarms, totalizer output, batch control output, digital inputs and all operating parameters and variables.
   b. Operator shall use an alarm re-set to manually cancel alarm messages.

c. The flow meter shall have built in self-diagnostics, technician service functions and be suitable for use with a system certifying kit to confirm meter's sensor functions and accuracy of electronics including a calibration check of electronics at a zero flow and a mid-range flow rate for confirming all components meet factory specifications for accuracy and feature operation.

4. Warranty

a. The Vendor or manufacturer of the electro - magnetic Mag Meter shall guarantee for two year of operation that the equipment shall be free from defects in design, materials and workmanship.

Vendor shall, at no cost to the owner, repair or replace any component that is proven to have failed during the warranty period due to a manufacturing defect.

2.4 AIR RELEASE VALVE ASSEMBLY

The air release valves shall be furnished with a stainless steel float, rubber seats, and brass or stainless steel lever arms. Valves bodies and valve covers shall be cast iron with epoxy coating. The valve shall be capable of positive action in releasing air entrained in water under pressure. Air valve shall conform to AWWA C512. Operating pressure shall be at maximum of 15 PSI.

2.5 PRESSURE GAUGES

All pressure gauges shall be 2-1/2' minimum dial with black enamel finish with chrome plated ring. Accuracy shall be ½ of 1% of scale range. Range shall be 0-160 PSI. The movement shall be constructed of stainless steel, rust proof and corrosion resistant and equipped with recalibration mechanism. Gauges mounting locations shall have female connection, tee handle shut-off cocks installed between gauge and gauge tap. Pressure gauges shall be Ashcroft or ASPA approved equal.

2.6 BUTTERFLY VALVES

Butterfly valves shall be lug style, wafer type. The valve shall be equipped with Operating Hand Wheel (OHW). Valves shall be DeZurik model KGC-ES or ASPA approved equal.

2.7 SINGLE ARC RUBBER EXPANSION JOINT

The rubber expansion joint shall be with full face flanges and retaining rings drilled to 150# ANSI or JIS standards. Materials of construction shall be of precision molded, neoprene type or other elastomer tube and cover, suitable for water system, and multiple plies of polyester or nylon cord. The arc is necessary to achieve proper movements.

2.8 DUCTILE IRON FLANGED FITTINGS (TEE'S, ELBOW'S, REDUCERS)

Flanged Fittings shall be manufactured of Ductile Iron in accordance with all applicable terms and provisions of standards ANSI/AWWA C110/A21.10. Flanged surfaced shall be faced and drilled in accordance with ANSI Class 125 B16.1. All Ductile Iron Flanged Fittings shall be rated for water pressure of 150 PSI. Fittings are Cement-Lined and seal coated in accordance with ANSI/AWWA C140/A21.4. All coated fittings shall meet the requirements of NSF-61. Interiors shall be lined and seal coated in accordance with ANSI/AWWA C104/A21.04, "Cement-mortar lining for Ductile Iron Pipe and Fittings for water" unless otherwise specified.

2.9 GLOBE TYPE SILENTCHECK VALVE

The Check Valve shall be globe style, silent type flanged with integral spring to close the valve to eliminate water hammer. The valve seat and disk shall be made of 316 stainless steel, 316SS body with maximum pressure rating of 200 psi. Valves shall be of Flomatic, APCO, or ASPA approved equal.

2.10 SURGE ANTICIPATING VALVE ASSEMBLY

The surge anticipating control valve shall protect the pumps and discharge piping from pressure surge resulting from the sharp flow velocity changes associated with abrupt pump stoppages cause by power failures. The main valve shall be a center guide diaphragm actuated globe valve. The valve shall be designed for a minimum water working pressure of 1.0 Mpa (150 PSI) and shall be factory tested under a hydro static pressure of at least 2.0 Mpa (300 PSI). The valve body and cover shall be cast iron, ASTM A-126 Class B. End connections shall be flanged ends with ANSI or JIS standards. The body shall have a replaceable seat ring. The seat shall be accessible and serviceable without removing the valve from the pipeline. The diaphragm shall be of heavily reinforced synthetic rubber and shall have a stainless steel shaft.

PART 3 ELECTRICAL EQUIPMENT

3.1 SCOPE OF WORK

The Contractor shall furnish, deliver, install, test and commission in accordance with these Specifications and drawings wires and cables, conduits and fittings, outlet boxes and fittings, wall switches and receptacles, lighting fixtures and feeder wires, kilowatt-hour meter, distribution transformers and its protective devices and other appurtenances as specified herein and shown on the drawings.

3.2 WIRES AND CABLES

3.2.1 All wires shall be of copper, annealed, soft drawn, of 98% conductivity, insulated for 600 V working voltage, type "THW" or "THWN" insulation unless otherwise noted on the Drawings. Insulation shall bear the manufacturer's name and trademark, type, voltage, ampere rating and size of the conductor.

3.2.2 Lighting and power systems, no wire smaller than 3.5 mm^2 diameter shall be used. Building wire size 8.0 mm^2 diameters and larger shall be stranded.

3.2.3 Conductors shall not be pulled into the raceway until:

1. Raceway system has been inspected;

2. Plastering and concrete have been completed in the case of concealed work; and

3. Raceway has been freed of moisture and debris.

3.2.4 Conductors shall be hand-pulled using pulling lubricant where necessary.

3.3 RACEWAY

3.3.1 Conduits for interior systems shall be rigid steel or made of PVC material. Joints of steel conduit cast in concrete shall be made up with a conductive water proof compound.

3.3.2 No conduit smaller than 15 mm electrical trade size, nor having more than three 90º bends in any one run shall be used in any system. Bends and offsets shall be smooth and symmetrical and shall be accomplished using tools designed for the purpose intended.

3.3.3 The ends of all conduits shall be tightly plugged to exclude plaster, dust, and moisture while the installation is in progress.

3.3.4 All raceway above ground shall be PVC conduit and shall be secured over concrete surfaces, the screws shall be held in place by expansion sleeves. Conduits on exposed work shall be run at right angles to and parallel with the surrounding walls; no diagonal runs shall be allowed and all ends and offsets shall be avoided as far as possible. Where necessary, conduit fittings shall be furnished and installed.

3.3.5 Junction boxes and pull boxes of code gauge steel shall be provided as indicated in the Drawings with suitable fittings to facilitate cable pulling.

3.3.6 Flexible liquid-tight conduit shall be used for connection of equipment such as motors, transformers, flow and pressure switches and other pilot devices. Erickson couplings shall be used at interconnection with rigid conduits.

3.3.7 All conduits installed underground shall be provided with at least 75 mm thick concrete envelope.

3.4 GROUNDING

3.4.1 Ground continuity throughout each facility shall be maintained by installing an electrically continuous raceway system. Metallic raceway shall be installed with double locknuts or hubs at enclosures; non-metallic raceway for branch circuit when specified shall contain copper grounding conductor either bare or insulated. Such conductor shall be bonded to terminal and intermediate metallic enclosures. Unless otherwise specified, ground cables shall be enclosed in conduits and connections shall be made readily accessible for inspection. For pumping stations/pump houses, plastic conduits shall not be allowed.

3.4.2 Grounding cables shall be sized in accordance with NEC,PEC requirements when not shown on the drawings. Grounding shall be connected to a common grounding rod made of either copper weld or copper coated steel.

3.5 SPLICES AND TERMINATIONS

3.5.1 Control conductors shall be spliced or terminated only at the locations indicated on the Drawings and only on terminal strips or terminal lugs of vendor-furnished equipment. As used in these Specifications, "control conductors" are defined as conductors that control the electric energy delivered to a power consuming device.

3.5.2 Branch circuit conductors may be spliced in suitable fittings at locations determined by the Contractor. Conductors shall be spliced or terminated only at equipment terminals shown on the Drawings. Wire in panels, cabinets, and gutters shall be neatly grouped using nylon straps and spread out to terminals.

3.5.3 Control conductors shall be terminated under terminal screws with pre-insulated fork tongue lugs or approved equal.

3.5.4 All external control wiring shall end on the internal wiring terminal block on the control console and shall be properly identified or coded to facilitate service and repair.

3.5.5 Splices to motor leads in motor terminal boxes shall be taped with varnished cambric tape overlapped with a high temperature vinyl tape or approved equal.

3.6 WIRE AND CABLE IDENTIFICATION

3.6.1 Completed electrical installation shall be provided with adequate identification to facilitate the proper control of circuits and equipment and to reduce maintenance.

3.6.2 Control devices within enclosures shall be identified in accordance with the drawings; identification shall be embossed plastic tape.

3.6.3 General purpose control conductors shall be red. Wire markers shall be plastic impregnated cloth or approved equal.

3.6.4 Control conductor identification legend shall be in accordance with approved shop drawings as well as with the construction drawings. Where these drawings do not state the required identification, the Contractor shall assign numbers. Identification shall be attached within 75 mm of the conductor termination. Supplier may use imprinted plastic, split-sleeve markers cemented together after installation, at his option. Motor control conductors shall be identified at each termination, including intermediate terminal strips.

3.6.5 Terminal strip shall be identified by imprinted varnished market strips, attached under the terminal strip.

PART 4 VARIABLE FREQUENCY DRIVE (VFD) MOTOR CONTROL

VARIABLE FREQUENCY DRIVE (VFD)

The Danfoss VLT Drive Variable Frequency Drive (VFD) shall be **IP66 / enclosed type NEMA 4X with integral fused disconnect.** The Drive shall meet the following requirement listed below:

Main Supply:

For Three (3) Phase Power Supply:

Supply Voltage:	380 - 500 Volts, ± 10%
Supply Frequency:	60 hzAC

Displacement Power factor (cos Ø) near unity: (> 0.98)
Switching on Input Supply, L1, L2, L3: 1 - 2 times/min

Output Data (U, V, W)

Output Voltage: 0 - 100% of Supply
Switching on Output: Unlimited
Ramp Times: 1 - 3600 seconds
Closed Loop: 0 - 132 Hz

Digital Inputs

Programmable Digital Inputs: 6*
Logic: PNP or NPN
Voltage Level: 0 - 24 VDC
* Two of the inputs can be used as digital outputs

Analogue Reference Inputs

Analogue Inputs: 2
Modes: Voltage or Current
Voltage Level: -10 to + 10 V (scalable)
Current Level: 0/4 to 20 mA (scalable)

Pulse Inputs

Programmable Pulse Input: 2
Voltage level: 0 - 24 VDC (PNP positive logic)
Pulse Input Accuracy: (0.1 - 110 kHz)
* Two of the digital inputs can be used for pulse inputs

Analogue Output

Programmable analogue outputs: 1
Current range @ analogue output: 0/4 - 20 mA

Relay Outputs

Programmable relay outputs: (240 VAC, 2A & 400 VAC, 2A)

Field Bus Communication

ModBus, RTU, ModBus TCP, BacNet, DeviceNet, ProfiBus, CanOpen, Ethernet and Profinet, **SCADA** connection

Temperature

Ambient Temperature: up to 55ºC

BUILT - IN PROTECTION

System Overload
Motor Failures
Motor & Drive overloading
Voltage Disturbances
Power Surges
Loss of Phase
Phase to Phase and Phase to Ground Short Circuit
Ground Fault
Switching on Input/Output
Electrical disturbances
Over Voltage
Over Current
Under Voltage
External Fault
Over Temperature

Compact Pressure Transducer

Type: Danfoss MBS3000

Accuracy, max.:	1.00%
Accuracy, typical	0.5%
Output signal type:	4 - 20 mA, 2 - wire transmitter
Operating temp.:	- 40 to 185 ºF
Process Connection:	1/4" NPT, Male
Pressure Range:	0 – 16 Bar
Pressure unit reference:	Gauge (relative)
Response time, max. (ms)	4 ms
Pressure connection standard:	ANSI/ASME B1.20.1

ATTACHMENT C

QUOTE FORM

TO: American Samoa Power Authority, Attn: Procurement Manager
ADDRESS: P.O. Box PPB, Pago Pago, American Samoa, 96799

TITLE: **Supply of Electro-Mechanical Equipment for Upper Pago Pago Improvements Project (Re-bid)**

RFQ #: ASPA18.010.ESD-WTR

OFFEROR: _____
_____
_____
_____

DATE: _____, 2017

QUOTE:

Item	QTY	UNIT	DESCRIPTION	U/COST	AMOUNT
MECHANICAL EQUIPMENT AND MATERIALS					
1	2	set	Grundfos Vertical In-Line (VIL) Pump and Motor Assembly, Pump Model CR32-6-2 equipped with Vertical Hollow Shaft electric motor, 25 HP, 460 volts, three (3) phase, 60 hzAC.		
2	2	unit	30 HP, Danfoss VLT® Brand Aqua Drive Variable Frequency Drive (VFD), 3X380 – 500 VAC, IP66/NEMA 4X enclosure, 460 volts, three (3) phase, 60 hzAC with conformal coating, drive disconnect, Modbus and MCB 109 advanced analog I/O with spare fuses (packed of 3).		
3	1	lot	2 years parts warranty		
4	2	ea.	Danfoss compact pressure transducer, MBS3000, 0-200 psi, pressure range, 4-20mA, 316SS wetted parts, 1/2"Ø connection.		
5	1	set	4"Ø MJK brand Mag Flux flow meter, 7200 sensor, ANSI, 304 SS carbon steel flanges, 316 SS electrodes with SCADA, ModBus, RS485, USB & Bluetooth communication module.		
6	1	set	MJK Mag Flux converter and display with wall mounting housing (with sensor mounted connection board, 120 VAC).		

7	1	set	MJK flow sensor IP68/NEMA 6P, wall mounted electronics, with sensor cable and connection circuit board.		
8	3	ea.	4"Ø 316SS grounding ring flange.		
9	1	spool	Falcon Fine Wire, 1000 ft./spool, p/n 32S16B2		
10	2	ea.	0-300 PSI range Dwyer pressure switch assembly, 403SS bourdon tube, SPDT mercury switch		
11	2	ea.	0-60 PSI range Dwyer pressure switch assembly, 403SS bourdon tube, SPDT mercury switch		
ELECTRICAL EQUIPMENT AND MATERIALS					
1	2	ea.	Cutler Hammer / Allen Bradley, Three (3) phase molded case circuit breaker, 3-pole, 100 Amps. 480 volts, 18 KAIC@480V, with terminal lugs.		
2	1	ea.	Platt Electric Supply Meter sockets with bypass, 200 Amps., three (3) phase, 7 jaw, ring type, 4-wire, 600V, surface mount, top/bottom feed, test block bypass, NEMA3R, 30"X14"X6", 127TB, Item # 015640, Mfg. Copper B-Line		
3	2	ea.	Allen Bradley, 100K05D300 Contactor		
4	2	ea.	Allen Bradley, 100K12D10M Contactor		
5	1	ea.	Laurel QLS-1 Quad Output Splitter		
Above price shall include all costs such as, shipping, insurance and taxes and other cost that may be incurred to satisfy the full requirements of the Quote Documents.					
Total Quote (FOB/CIF ASPA Tafuna): _____ (Amount in Words)				$ _____	

The Offeror shall submit together with this quote all other resources, together with a corresponding schedule required to complete the job. Quotes without the foregoing will be considered non-responsive and may cause the rejection of the quote at ASPA's sole discretion. All blanks on the Quote Form shall be typewritten or handwritten in blue or black ink.

SUBCONTRACTORS. A list of intended subcontracting firms or businesses together with the type or description of the work to be subcontracted shall be attached to this Quote Form.

IN WITNESS THEREOF, the undersigned has caused this instrument to be executed by its duly authorized officers on this _____ day of_____, 2017.

OFFEROR:
By: _____
Name: _____
Title: _____

ATTACHMENT D

OFFERORS'S QUALIFICATIONS SHEET

(Please Print or Type and Complete All Sections. An incomplete section will be considered non-responsive. Use additional sheets if necessary.)

1. Name of Offeror _____

2. Name of Official Representative _____

3. Business Address/e-mail _____

_____

4. Telephone, Fax and Official Contact Person

_____

_____

5. Type of Business Structure (Please check)

____ Corporation ____ Partnership ____ Joint Venture

____ Proprietorship

NOTE: Corporations must complete the recordation of their Articles of Incorporation, which is evidenced by the Certificate of Incorporation issued by the Treasurer of the American Samoa Government. Copies of partnership agreements and articles of incorporation should be submitted to the Revenue Branch along with this application form and relevant documents. Aliens cannot operate sole ownership enterprises, and partnerships with aliens are subject to review by the Immigration Board.

6. Number of years the Offeror has been engaged in its current company business under the present firm name indicated _____

7. Type of work generally performed by Offeror

_____

_____

_____

8. List all major projects of a similar nature for the supply of materials for Water Pipe Projects, which have been completed by the Offeror within the last three years, the total dollar amount of each project and the owner/contact person as a reference (attach additional sheets as necessary).

- Order Name _____
  Date Completed_____Total Order Cost $_____
  Name of Owner_____

Owner's phone number_____

- Order Name _____
  Date Completed_____Total Order Cost $_____
  Name of Owner_____
  Owner's phone number_____

- Order Name _____
  Date Completed_____Total Order Cost $_____
  Name of Owner_____
  Owner's phone number_____

9. Have you ever sued or been sued by any Government Agency?

_____

_____

10. If so, name the agency and reasons thereof

_____

_____

_____

11. If so, state case settlement, if settled

_____

_____

_____

ATTACHMENT E

DISCLOSURE STATEMENTS

This form must be completed by all offerors and submitted with the quote.

I _____(Name of owner or partner- all partners must

complete a form) of_____, the Offeror that has
(Name of company)

submitted the attached quote:

(Complete one of the two following statements)

1. I **have no** immediate relatives (parents, children or siblings) who are currently employed by the American Samoa Power Authority (ASPA).

   _____ (Signed)
   (Title)

2. I have immediate relatives (parents, children or siblings) who are currently employed by ASPA.

   Their names and positions in are as follows.

   Name Relationship to Offeror Position in ASPA

_____

_____

_____

_____

_____
(Signed) (Title)

Note: It is <u>not</u> against ASPA procurement rules for the relatives of ASPA employees to bid on and receive government contracts provided they disclose such relationships at the time of bidding.

ATTACHMENT F

NON-COLLUSION AFFIDAVIT OF PRIME OFFERORS'

_____being first duly sworn deposes and says that:

1. He/She is_____ (Owner, Partner, Representative or Agent) of_____the Offeror that has submitted the attached quote.

2. He is fully informed regarding the preparation and contents of the attached quote and of all pertinent circumstances regarding such quote.

3. Such quote is genuine and is not a collusive or false quote.

4. Neither the said Offeror nor any of its officers, partners, owner, agents, representatives, employees or parties in interest, including this affiant, has in any way colluded, conspired, connived or agreed, directly or indirectly with any other Offeror, firm or person to submit a collusive or false quote in connection with the Contract for which the attached quote has been submitted or to refrain from bidding in connection with such Contract, or has in any manner, directly or indirectly, sought by agreement or collusion or communication or conference with any other Offeror, or to secure through any collusion, conspiracy, connivance or unlawful agreement any advantage against American Samoa Power Authority or any person interested in the proposed Contract; and

5. The price or prices quoted in the attached quote are fair and proper, and are not tainted by any collusion, conspiracy, connivance or unlawful agreement on the part of the Offeror or any of its agent's representatives, owners, employees, or parties in interest, including this affiant.

_____

(Signed)

_____

(Title)

Subscribed and sworn to before me

This _____ day of _____, 2017

_____ _____

(Signed) (Title)

My Commission expires:_____, 2017.