

ON-SITE SODIUM HYPOCHLORITE GENERATION SYSTEM  
AT LAHAINA WATER TREATMENT PLANT  
IFB# DWSP 2018-03

DEPARTMENT OF WATER SUPPLY  
COUNTY OF MAUI

PREPARED BY  
ENGINEERING DIVISION  
DEPARTMENT OF WATER SUPPLY  
COUNTY OF MAUI

JANUARY 2018

NOTICE TO BIDDERS

Pursuant to Chapter 103-D, HRS, sealed offers shall be received up to and be publicly opened at **10 O'CLOCK A.M. THURSDAY, FEBRUARY 22, 2018**, by Department of Water Supply, 200 South High Street, 5<sup>th</sup> Floor, Room 524, Wailuku, Maui, Hawaii, 96793, for:

ON-SITE SODIUM HYPOCHLORITE GENERATION SYSTEM  
AT THE LAHAINA WATER TREATMENT PLANT  
JOB NO. IFB # DWSP 2018-03

Specifications and Offer Form may be obtained at the Engineering Division at the address listed above between the hours of 8:00 a.m. to 4:00 p.m., Monday thru Friday, or obtained from the State of Hawaii Procurement bidding website.

A pre-bid conference has been scheduled at **9:00 AM, ON WEDNESDAY, FEBRUARY 7, 2018**. All Bidders are encouraged to attend. Bidders shall meet at the Department of Water Supply's N.A.S.K.A. Baseyard Office located at 614 Palapala Drive, Kahului, Maui, Hawaii, 96793. A project tour at the Lahaina Water Treatment Plant will be held following the pre-bid conference. Bidders are required to provide their own transportation.

Bidders are required to comply with the newest procurement code, HRS, Chapter 103-D, any rules and regulations and policy directives issued with respects to Chapter 103-D and any amendments. Bidders are to direct all questions regarding this bid to the Engineering Division of the Department of Water Supply at (808) 270-7835.

It is the sole responsibility of the bidder to review the requirements of the project and determine the appropriate licenses that are required to complete the project.



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MARK R. WALKER  
Director of Finance  
County of Maui



## SPECIAL PROVISIONS

### ON-SITE SODIUM HYPOCHLORITE GENERATION SYSTEM AT THE LAHAINA WATER TREATMENT PLANT JOB NO. IFB # DWSP 2018-03

1. This bid is subject to the County of Maui's General Terms and Conditions for Construction Contracts, which can be downloaded or viewed at the Department Finance, Purchasing Division's webpage, <https://www.mauicounty.gov/509/Purchasing-Division> .
2. Bid prices shall include all applicable costs, insurance, taxes, except Federal Excise Tax from which the County is exempt, and freight cost (F.O.B.) to Lahaina Water Treatment Plant, Lahaina, Maui, Hawaii.
3. Installation shall be completed and the OSG System tested and operational within ONE HUNDRED (120) calendar days from the Notice to Proceed date.
4. Liquidated Damages shall be FIVE HUNDRED DOLLARS (\$500.00) for each calendar day the contract time is exceeded.
5. A bid bond shall be required and submitted with the bid.
6. Bids must be submitted in a sealed envelope, bearing on the outside the identity of the project and the bidder's name and address. Bids will be received only at the office designated in the notice to bidders. All bid envelopes will be stamped with the time and date received by the County. The County will reject and return a bid unopened if received after the time set for opening of bids.
7. FAXED OFFERS SHALL BE REJECTED.
8. CLARIFICATION ON BID DOCUMENTS: If it appears to a bidder that the performance of the work or any matter relating thereto is not sufficiently described or explained in the specifications or any addenda issued, or that a discrepancy exists between different parts thereof, or that the full intent of the bid documents is not clear, the bidder shall submit a written request to the Procurement Officer for clarification not less than ten (10) calendar days prior to the day designated for opening of bids. If the Procurement Officer deems that a clarification is in order, it shall be issued in the form of an addendum.

Clarification request may be emailed to [wendy.taomoto@co.maui.hi.us](mailto:wendy.taomoto@co.maui.hi.us) or mailed to:

Wendy Taomoto, Engineering Program Manager  
Engineering Division  
Department of Water Supply  
200 South High Street, 5<sup>th</sup> Floor  
Wailuku, Maui, Hawaii 96793

9. ADDENDA: Any addendum issued prior to the opening of bids shall be binding upon the bidder and shall be made a part of the contract. No addendum will be issued during the five (5) days immediately preceding the day designated for the opening of bids, unless the purpose of the addendum is to postpone the date of bid opening. Failure by the bidder to receive any addendum shall not relieve the bidder from any obligation under its bid as submitted.
10. No oral interpretation, instruction, or information regarding the bid documents given by any officer or employee of the County shall be binding. Nothing stated at the pre-bid conference shall change the solicitation unless a change is made by written addendum. Any acceptable modifications or clarifications shall be made by issuance of an addendum.
11. AWARD OF CONTRACT: The award of the contract, if it be awarded, will be made by written notice to the lowest responsive, responsible bidder. Said notice shall not be construed to be authorization to proceed with the performance of services under the Contract. Any services performed by the Contractor prior to the date indicated in the Notice to Proceed shall be at the Contractor's own risk. The contract will be awarded within sixty (60) days after the opening of the bids. If it appears that the contract cannot be awarded within such time, the award may be made after the specified time as mutually agreed upon between the County and the lowest responsive, responsible bidder. The County may cancel the award of the contract at any time before the execution of the contract. A performance bond is required for contract execution.
12. HAWAII COMPLIANCE EXPRESS: The bidder who is awarded the contract must be registered with Hawaii Compliance Express as a pre-requisite before entering into the contract. Failure to be properly registered is may be cause for the cancellation of award to the bidder. The certificate issued by Hawaii Compliance Express includes a Certificate of Compliance for Hawaii Department of Taxation, Internal Revenue Service, Hawaii Department of Commerce & Consumer Affairs, and Hawaii Department of Labor & Industrial Relations. Bidder may register with Hawaii Compliance Express online at <http://vendors.ehawaii.gov/hce/splash/welcome.html>
13. Any questions pertaining to the solicitation shall be directed to

Wendy Taomoto, Engineering Program Manager  
Telephone: (808) 270-7835  
E-mail: [wendy.taomoto@co.maui.hi.us](mailto:wendy.taomoto@co.maui.hi.us).

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SPECIFICATIONS  
ON-SITE SODIUM HYPOCHLORITE GENERATION SYSTEM  
AT THE LAHAINA WATER TREATMENT PLANT  
JOB NO. IFB # DWSP 2018-03

PART 1 – GENERAL

1.1 SCOPE:

- A. Furnish, assemble and provide start-up/testing of an on-site sodium hypochlorite generation (OSG) system of the type specified herein, in place complete, as shown on the drawings.
- B. This OSG system will be bid as a complete system.
- C. All components associated with the OSG unit, as specified herein, shall also be furnished by the OSG unit manufacturer or its regional representative. The OSG unit manufacturer or regional representative shall also furnish the sodium hypochlorite storage tank level transmitter as specified in the PART 2 - PRODUCTS.

1.2 RELATED WORK:

- A. The OSG unit manufacturer and/or its regional representative shall be responsible for the following:
  - i. OSG unit delivered to the site (Lahainaluna Water Treatment Plant);
  - ii. Site assembly of the system including interconnecting piping between all major components (from the first micro-filter, water softener units, brine tank, OSG Unit, and to the Chlorine Storage Tank);
  - iii. Installation of the electrical conduit from OSG Unit Rectifier to the Water Treatment Plant's power source.
- B. The County of Maui Department of Water Supply shall be responsible for the following:
  - i. Preparation of the proposed location of the OSG Unit within the designated building;
  - ii. Make final water connections to the OSG system and from the OSG Chlorine Storage Tank to the Water Treatment Plant's Finish Water line;
  - iii. Install electrical wiring from OSG Unit Rectifier to the Water Treatment Plant's power source and make the required electrical wiring connections.

1.3 QUALIFICATIONS AND SUBMITTALS:

- A. Submit certification that the OSG unit manufacturer has at least ten (10) years of experience in the design and manufacture of Electrolytic Technology.
- B. Submit evidence that OSG unit of similar capacity and service capability has been in successful operation for at least three (3) years in a minimum of ten (10) separate installations.

- C. As safety is of critical importance, the Manufacturer must submit with the proposal details of any and all safety issues they have had with other sites with hydrogen over-pressurization or ignition. No response may be grounds for proposal disqualification.
- D. As reliability is a priority, manufacturer must submit with the proposal, details of any and all warranty claims from within the last FIVE (5) years. No response may be grounds for proposal disqualification.
- E. Submit certification that OSG unit has been pre-assembled and shop tested to assure compliance with pressure and operation requirements specified herein.
- F. Submit complete dimensioned shop drawings for OSG unit, including wiring diagram and electrical enclosure.
- G. Submit complete dimensioned shop drawings and product cut sheets for all associated components, including but not limited to: water softener, brine tank, sodium hypochlorite storage tank, dosing assembly and dilution panel, hydrogen dilution blower, acid cleaning system, low differential pressure switch, interconnecting pipe between the components, electrical conduit and hydrogen detector.
- H. Submit operation and maintenance (O&M) manuals for OSG unit and all associated components, including spare parts list and warranty.

#### 1.4 FACTORY REPRESENTATIVE:

An authorized factory representative(s) with a minimum of three (3) years of experience shall oversee in person the assembly/installation of the OSG system and observe the start-up and operation of the system. Representative shall provide a minimum of two (2) days on-site of instructional and training time for Department of Water Supply personnel. Refer to Sections 3.2, 3.3 & 3.4 for additional responsibilities.

## PART 2 – PRODUCTS

### 2.1 GENERAL:

The OSG system shall be a complete Sodium Hypochlorite Generator system. Any proposed system must meet every operational and material aspect of this specification.

Hydrogen management shall be accomplished by passive venting for each electrolytic cell. For operator safety, the cells shall be operated at atmospheric pressure, so that hydrogen gas cannot be contained or pressurized. No hydrogen shall be vented directly to the hypochlorite storage tank where an accumulation could occur.

PSI Model MicroClor MC-60 On-Site Generation System or approved equal shall be accepted.

2.2 OSG UNIT:

Production Capacity:	60 lbs. per day (ppd) chlorine equivalent. The OSG unit shall be built and configured to allow one of the electrolytic cells to be removed and still operate at 66% capacity.
Control:	Automatic, regulated by storage tank level
Percentage sodium hypochlorite:	0.7% ± 0.05%
Consumables per pound of chlorine produced:	2.5-3.5 lbs. salt, 1.8-2.4 kWh (AC) 15 gallons of water
Water input:	Potable water, 50-80 psi, 55-78°F
Salt:	99.7% pure weight Morton White Crystal®, or equivalent
Power:	480VAC, 3-phase, 60Hz
Control and D.C. Rectifier Cabinets:	Type 316 stainless steel NEMA 4X
Skid Assembly	Type 316 Stainless Steel
Operator Interface:	6" color touch screen
Communication Interface:	Ethernet EN2TR
Programmable Logic Controller:	Allen Bradley® MicroLogix 1400
IO Modules:	<ol style="list-style-type: none"> <li>1. Digital Input 1756-IB16</li> <li>2. Digital Output – 1756-OW16I</li> <li>3. Analog Input - 1756 IF6I</li> <li>4. Analog Output – 1756-OFCI</li> </ol>

### 2.3 ELECTROLYTIC CELL

- A. The electrolytic cell shall be constructed of clear acrylic materials, allowing for full visual inspection of electrodes from all angles.
- B. Cell construction shall be recirculating, vertical technology with cell electrodes and housing being a cartridge type designed for removal and installation as a single unit.
- C. Under no circumstance will internal fasteners, assemblies or baffles be part of the electrolytic cell construction. The only wetted parts of the cell construction will be the acrylic housing, free floating electrodes and viton o-ring seal. All cell fasteners shall be titanium, exterior to the electrolytic process and never come into contact with the electrolyte.
- D. The cells must operate at atmospheric pressure while purging hydrogen gas passively at the top of each cell so that hydrogen cannot be contained or pressurized.

### 2.4 WATER SOFTENER:

Water softener shall be a, twin tank design, continuous operation, automatic regenerating water softener. A flow range of 11.5-18.0gpm, 35-gallon capacity and a regeneration time of 45 min. Kinetico dual tank Model CP 208s, or approved equal shall be accepted.

### 2.5 BRINE TANK:

The brine tank shall be one-piece, rotationally-molded of linear high-density polyethylene. A high-quality, chemically-resistant plastic with high stress crack and impact resistance shall be used. The tanks shall be translucent and comply with USDA and FDA regulations for storage and processing of food. The plastic must contain a minimum of 0.25% to a maximum of 0.50% long term U.V. stabilizer. Plastic containing any fillers will not be acceptable. Brine tank shall be a 150-gallon capacity, manual salt fill (1500 Salt Capacity), 3/8-inch wall thickness high-density cross-linked polyethylene (HDLPE) calibrated tank.

### 2.6 CARTRIDGE FILTERS:

Cartridge filters for softened water and brine shall have the following specifications:

- A. 10" Cartridge Housing
- B. Polypropylene Cap
- C. 300 Series SS Button Assembly
- D. Max temperature of 100°F
- E. Max Pressure 100 PSI (6.9 bar)
- F. The filter cartridge shall be a 50-micron, disposable cartridge.



## 2.7 SODIUM HYPOCHLORITE STORAGE TANK:

Tank shall be a vertical tank shall be suitable for storage of 0.8% solution sodium hypochlorite.

- A. Material of construction shall be fiberglass reinforced plastic (FRP), including mounting brackets.
- B. Pipe connections shall be flanged nozzles, ANSI B16.1.
- C. Minimum storage capacity shall be 2,000 gallons.
- D. Ladder, including cage and railings at tank top, shall be of FRP construction at the location indicated on the drawings.
- E. Tank top shall have a 24-inch hinged manway at the location indicated on the drawings.
- F. Tank top shall have pipe connections for hydrogen dilution blower discharge and vent lines of sizes and at the locations indicated on the drawings.
- G. Tank wall shall have pipe connections for fill and overflow near the tank top of size and at the locations indicated on the drawings.
- H. Tank wall shall have pipe connections for outlet and level transmitter mounting near the tank bottom of size and at the locations indicated on the drawings. Level transmitter is specified below.
- I. Tank shall be equipped with tie-down lugs to secure the tank to the concrete slab to conform to Seismic Design Category D.
- J. All hardware of pipe connections, ladder, manway and tie-down lugs shall be of Type 316 stainless steel.

## 2.8 SODIUM HYPOCHLORITE METERING PUMP

- A. Under normal operating conditions, site generated sodium hypochlorite (nominally 0.8%  $\pm$  0.05%) will be injected into the process at locations shown on the drawings for disinfection.
- B. The metering pump shall be a diaphragm metering pump with a TEFC inverter-duty motor. Where multiple pumps are provided, all pumps shall be manufactured by a single manufacturer.
- C. The metering pump shall be suitable to operate twenty-four (24) hours per day.
- D. The solution metering pump shall be able to operate with a 10:1 turn down ratio in conjunction with the VFDs.
- E. The following accessories for the sodium hypochlorite meter pump:
  - 1. PVC calibration column
  - 2. PVC chargeable pulsation dampener
  - 3. PVC backpressure relief valve

- 4. PVC pressure relief valve
  - 5. Wye strainer
  - 6. Pressure gauge with PVC isolator using a Teflon Membrane
- F. The OSHGS Supplier shall provide a VFD as part of the control package to control the metering pump. The VFD shall be provided with an epoxy-coated NEMA 4X enclosure and an easily-replaceable cooling fan. An elapsed timer is required to assist in preventative maintenance. The VFD shall have an LED five-digit display. VFD Model V1000-4X by Yasakawa or approved equal shall be accepted.
- G. Metering pumps Model Encore® 700 by UGSI Chemical Feed, Inc., DMH by Grundfos, or approved equal shall be accepted.

2.9 SODIUM HYPOCHLORITE DILUTION PANEL:

Under emergency conditions commercially available sodium hypochlorite (10-12 percent solution) can be added if required via a commercial strength hypochlorite dilution panel provided by the OSHGS Supplier.

The commercial strength sodium hypochlorite dilution panel shall include a wall-mounted PVC panel with the following instruments and accessories:

- A. Venturi eductor, polypropylene construction.
- B. Polysulfone inline potable water rotameter.
- C. Polysulfone inline commercial strength sodium hypochlorite rotameter.
- D. Two (2) manually-operated flow control valves.
- E. Outlet check valve.
- F. Sch 80 PVC piping and fitting.

2.10 HYDROGEN DILUTION BLOWERS:

Two each (1 duty/1 standby) with the following specification:

- A. Rating point: 163 ACFM @ 3.6 in. wg SP, 0.075./ft.<sup>3</sup> Density
- B. Wheel: 8 x 2-3/4 radial wheel (full width)
- C. Inlet size: 4 inches
- D. Outlet size: 4 inches with ANSI-125 pound flange connection
- E. Motor: 1/2 HP, 115/208-230V, 1- Phase, 60 Hertz, 3450 RPM, TEFC, Std. Efficiency, 1.15 SF, B Insulation, Teflon Shaft Seal, Inlet Guard

Blowers manufactured by Cincinnati Fan, Model PB-8, or approved equal shall be accepted.

2.11 ACID CLEANING SYSTEM:

Acid cleaning system shall be a mobile system consisting of a 50-gallon HDLPE tank filled with cleaning acid through lid on tank top. Tank shall be mounted on a high-density impact resistant cart with (4) swivel casters. The following components shall be mounted on to the tank.

- A. Filter vent with 10" carbon cartridge.
- B. Magnetic drive centrifugal pump with 115 VAC, single phase, 60 Hertz motor and 25-foot long power cord.
- C. Pump suction/discharge piping, including 3-way PVC/Viton ball valves, Kamlok suction/return with PVC cleaning hose and drain with PVC/Viton ball valve.

2.12 LOW DIFFERENTIAL PRESSURE SWITCH:

Low differential pressure switch shall be rated for 15 @ 120-480 VAC, 60 Hz, single-pole double throw (SPDT) switch for general industrial service with operating range of 0.07 to 0.22 inch W.C. Dwyer Model 1823-00, or approved equal shall be accepted.

2.13 HYDROGEN DETECTOR:

A hydrogen gas monitoring system shall be provided to continuously measure and display gas concentration and provide alarms when preset limits are exceeded. A transmitter will send the signal to the control panel. The gas monitoring system shall have a NEMA 4X enclosure and two-line, eight-alphanumeric character LCD display with linear 4-20 mA output signal. Conspec Model CN06, or approved equal shall be accepted.

2.14 LEVEL TRANSMITTER FOR SODIUM HYPOCHLORITE STORAGE TANK:

Level transmitter shall have the following specifications:

- A. Output: 4-20 MA HART
- B. Housing: Aluminum T14, NEMA 4X
- C. Sensor Range: 1 bar (15 psi)
- D. Calibration Unit: inH<sub>2</sub>O / ftH<sub>2</sub>O
- E. Referency Accuracy: 0.2%
- F. Supply Voltage: 11.5 to 45 VDC
- G. Process Connection: Thread
- H. Mounting: Compatible with connection provided at bottom of Storage Tank

An Endress+Hauser Deltapilot M FMB50 compact version hydrostatic level measurement pressure sensor with CONTITE™ measuring cell, or approved equal, shall be accepted.

## PART 3 – EXECUTION

### 3.1 INSTALLATION:

Install all components of the OSG system in accordance with the manufacturers' printed instructions, and as shown on the drawings. An authorized factory representative(s) shall oversee the installation.

### 3.2 START-UP AND TESTING:

Start-up and a 48-hour testing period testing shall be performed in the presence of the DWS Officer-In-Charge. An authorized factory representative(s) with a minimum of three (3) years of experience shall observe the OSG system start-up. The authorized factory representative shall perform any and all adjustments to the OSG system. During start-up operations, the authorize factor representative shall provide instruction and demonstrate that all components of the OSG system operate properly within the full range of their capabilities during the 48-hour testing period. Testing of the system shall include, but not limited to, the following:

- All mechanical equipment is performing as intended;
- All electrical and SCADA and Alarm settings are functioning;
- Confirmation of the OSG System is producing Sodium Hypochlorite (NACL<sub>2</sub>) at the specified concentration of 0.7 percent  $\pm$  0.05%.

The Representative shall submit a written report certifying the successful start-up. If a failure occurs during the startup and 48-hour test period, the report shall include a detailed explanation of the failure and note how the failure was addressed or corrected. A successful start-up operation is defined as: "*The system is correctly installed and is functioning in accordance with their OSG system and the meets requirements of this specification.*"

### 3.3 ON-SITE INSTRUCTION AND TRAINING:

Following a successful start-up, the authorized factory representative shall provide a minimum of two (2) days on-site of instructional and training time after the completion of start-up and testing period for Department of Water Supply personnel. The Representative shall demonstrate all O&M procedures for the proper operation, maintenance, and replacement of components of the OSG system and provide instruction on common fixes and mal-functions that occur when in operation.

### 3.4 ACCEPTANCE OF PROJECT:

- A. Prior to acceptance of the project, the written report required in Section 3.2 shall be submitted and accepted by the Department of Water Supply, and all O&M manuals for OSG unit and all associated components, including spare parts list and warranty. O&M Manuals shall be submitted. Submittal shall include three (3) hard copies and three (3) PDF Format digital CD copies of all O&M Manuals.

B. Refer to the Section 6.40 of the General Terms and Conditions for additional requirements for Acceptance of Project.

3.5 WARRANTY:

Contractor shall warranty all components supplied to be free from defects in materials and workmanship for a period of three (3) years from the date of acceptance of the OSG system by the Department of Water Supply. The OSG system manufacturer shall provide separate warranty of all components supplied as part of their system to be free from defects in materials and workmanship for a period of three (3) years from the date of acceptance of the OSG system by the Department of Water Supply. The Contractor and OSG system manufacturer shall each provide original certificate of warranty.

3.6 SPARE PARTS PRICE LIST:

Contractor shall include with their bid proposal a price list with the associated part or model number for the following replacement parts for the OSG unit:

- A. One (1) electrolytic cell
- B. One (1) metering pump
- C. One (1) brine pump
- D. One (1) differential pressure switch
- E. One (1) cell level switch
- F. One (1) cell temperature switch
- G. One (1) cell temperature sensor
- H. One (1) solenoid valve

These prices are remained unchanged by the OSG unit manufacturer for a period of up to twenty-four (24) months after the three (3) year warranty has expired. All of the items on this price list must be deliverable to the project site by the manufacturer within forty-eight (48) hours of being requested by the Department of Water Supply.

3.7 PAYMENTS

Payment shall not be submitted until the written report required in Section 3.2 is accepted by the Department of Water Supply.

3.8 FINAL PAYMENT-FINAL ACCEPTANCE

Refer to the Section 6.40 of the General Terms and Conditions for additional requirements for Acceptance of Project.

END OF SPECIFICATIONS

BID PROPOSAL FOR:

ON-SITE SODIUM HYPOCHLORITE GENERATION SYSTEM  
AT THE LAHAINA WATER TREATMENT PLANT  
IFB# DWSP 2018-03

Department of Water Supply  
200 South High Street, 5<sup>th</sup> Floor  
County of Maui  
Wailuku, Maui, Hawaii

Dear Sir or Madam:

The undersigned bidder, agrees to furnish and pay for all labor, materials, tools, and equipment, necessary to complete in place, the work called for in the bid documents in accordance with their intent and meaning for the TOTAL SUM BID of:

\_\_\_\_\_ DOLLARS (\$ \_\_\_\_\_),

The undersigned bidder declares the following:

1. Installation shall be completed and the OSG System tested and operational within ONE HUNDRED (120) calendar days from the Notice to Proceed date.
2. It is incorporated or organized under the laws of the State of Hawaii, or is registered to do business in the State of Hawaii as a separate branch or division that is capable of fully performing under the contract and shall submit documents to the Department to demonstrate compliance.
3. It has not, either directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of free competitive bidding in connection with this proposal.
4. It has not been assisted or represented on this matter by any individual who has, in a County capacity, been involved in the subject matter of this contract within the past two years.
5. It has not and will not, either directly or indirectly offered or given a gratuity (i.e., an entertainment or gift) to any State or County employee to obtain a contract or favorable treatment under a contract.
6. It will not maintain for its employees any segregated facilities at any of its establishments.
7. It does not and will not permit its employees to perform their services at any location under its control, where segregated facilities are maintained.

The undersigned bidder further agrees to the following:

1. Contract Time shall not exceed TWO HUNDRED SEVENTY (270) CALENDAR DAYS.

The contract time shall commence on the date of notification to begin work, which date will be issued in the notice to proceed.

2. Liquidated Damages shall be FIVE HUNDRED DOLLARS (\$500.00) for each calendar day the contract time is exceeded.
3. Bids shall be compared on the basis of total sum bid and award made to the lowest responsible bidder, subject to the availability of funds.
4. That the quantities given in the attached Proposal Schedule are approximate only and are intended principally to serve as a guide in determining and comparing the bids.
5. The County does not, expressly or by implication, agree that the actual amount of work will correspond therewith, but reserves the right to increase or decrease the amount of any class or portion of the work, or to omit portions of the work as may deemed necessary or advisable by the Director of Water Supply, and that all increased or decreased quantities of work shall be performed at the unit prices set forth in the attached Proposal Schedule except as provided for in the specifications.
6. In case of a discrepancy between unit prices and the totals in the attached Proposal Schedule, the unit prices shall prevail. If the addition of the totals are incorrect, the total sum bid shall be corrected.
7. If this proposal is accepted, it shall execute a contract with the County to provide all necessary labor, machinery, tools, equipment, apparatus and any other means of construction, to do all the work and to furnish all the materials specified in the contract in the manner and within the contract time, and that it shall accept in full payment therefore the sum of the unit price bid and/or lump sum bid prices as set forth in the attached Proposal Schedule for the actual quantities of work performed and materials furnished.
8. To furnish satisfactory performance and payment bond or security for 100% of the contract price, in accordance with Section 103D-324, Hawaii Revised Statutes, within 10 days after the award of the contract or within such time as the Director of Finance may allow after the undersigned has received the contract documents for execution, and is fully aware that non-compliance with the aforementioned terms will result in the forfeiture of the full amount of the bid guarantee required under Section 103D-323, Hawaii Revised Statutes.
9. The County reserves the right to reject any or all bids and to waive any defects when in the Director's opinion such rejections or waiver will be for the best interest of the public.
10. Upon award of a contract, the bidder to whom the contract is awarded shall comply with Chapters 237 (general excise tax); 383 (employment security); 386 (workers compensation); 392 (temporary disability insurance); and 393 (pre-paid health care), Hawaii Revised Statutes.

The undersigned bidder acknowledges receipt of and certifies that it has completely examined the following listed items:

1. Notice to Bidders
2. Instructions to Bidders
3. Special Provisions and all Addenda
4. Bid Proposal
5. Contract Form
6. Performance and Payment Bond Forms
7. Project Specifications

Accompanying this proposal is bid security in the amount of:

\_\_\_\_\_ DOLLARS (\$ \_\_\_\_\_),  
in the form checked below and in accordance with Section 103D-323, Hawaii Revised Statutes.

- |  |   |                     |
|--|---|---------------------|
| <input type="checkbox"/> Surety Bond*    | ) | * Use standard form |
|  | ) |                     |
| <input type="checkbox"/> Cash            | ) |                     |
|  | ) |                     |
| <input type="checkbox"/> Cashier's Check | ) |                     |
|  | ) |                     |
| <input type="checkbox"/> Certified Check | ) |                     |
|  | ) |                     |
| <input type="checkbox"/> _____           | ) |                     |
| (Fill in other acceptable security)      | ) |                     |

The undersigned acknowledges receipt of any addendum issued by the Department of Water Supply by recording in the space below the date of receipt.

Addendum No. 1: _____	Addendum No. 2: _____
Addendum No. 3: _____	Addendum No. 4: _____
Addendum No. 5: _____	Addendum No. 6: _____



**SUBCONTRACTOR AND JOINT CONTRACTOR LISTING**

In accordance with Section 103D-302, Hawaii Revised Statutes, the undersigned as bidder has listed below the name of each person or firm, who will be engaged by the bidder on the project as joint contractor or subcontractor and the nature of work to be done by each. It is understood that failure to comply with these requirements may be cause for rejection of the bid submitted.

If no joint contractor or subcontractor is to be engaged, the bidder must complete the form by writing "NONE". If left blank, the Department will interpret the blank as no joint contractor or subcontractor will be used.

**CONTRACTOR:**

	<u>NAME</u>	<u>NATURE OF WORK</u>	<u>LICENSE CLASS</u>	<u>LICENSE NO.</u>
1.	_____	_____	_____	_____

**SUBCONTRACTOR:**

	<u>NAME</u>	<u>NATURE OF WORK</u>	<u>LICENSE CLASS</u>	<u>LICENSE NO.</u>
1.	_____	_____	_____	_____
2.	_____	_____	_____	_____
3.	_____	_____	_____	_____
4.	_____	_____	_____	_____
5.	_____	_____	_____	_____
6.	_____	_____	_____	_____

**JOINT CONTRACTOR:**

	<u>NAME</u>	<u>NATURE OF WORK</u>	<u>LICENSE CLASS</u>	<u>LICENSE NO.</u>
1.	_____	_____	_____	_____
2.	_____	_____	_____	_____

(Use additional sheets, if necessary.)

The undersigned hereby certifies that the bid prices contained in the attached Bid Proposal have been carefully checked and are submitted as correct and final.

This declaration is made with the understanding that the undersigned is subject to the penalty of perjury under the laws of the United States and violation of the Hawaii Penal Code, Section 710-1063, unsworn falsification to authorize, of the Hawaii Revised Statutes, for knowingly rendering a false declaration.

\_\_\_\_\_  
Bidder

\_\_\_\_\_  
By  
Authorized Signature

\_\_\_\_\_  
Title

\_\_\_\_\_  
Business Address

\_\_\_\_\_/\_\_\_\_\_  
Business Telephone Business Facsimile

\_\_\_\_\_  
Contractor's License No.

\_\_\_\_\_  
Date

NOTE:

Bids must be signed in ink by a duly authorized representative of the bidder on the spaces provided for signatures.

If the bidder is a corporation, the title or titles of the person or persons signing must be stated and the corporate seal affixed thereto. If the corporation does not have a corporate seal, it should be indicated in the form of acknowledgment attached thereto. A copy of a resolution of the Board of Directors of the corporation, or other written evidence of authority signed by an officer of the corporation, authorizing the person or persons to execute bids, contracts, and other necessary documents in connection therewith shall be attached.

Where the bidder is an association or group, the title or titles of the person or persons signing must be stated and an affidavit which acknowledges the authority of the signer or signers to sign bids and all other necessary documents in connection therewith for the association or group must be attached.

**CERTIFICATION OF COMPLIANCE  
WITH HRS 396-18, SAFETY AND HEALTH PROGRAMS  
FOR CONTRACTOR BIDDING ON COUNTY JOBS IN EXCESS OF \$100,000**

PROJECT NAME AND NUMBER:

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This is to certify that the undersigned will comply with the requirements of Section 396-18, Hawaii Revised Statutes, as follows:

- (A) Pursuant to Section 396-18, HRS, all bids and proposals in excess of \$100,000 shall include a signed certification from the bidder that a written safety and health plan for the job will be available and implemented by the notice to proceed dates of the project. The written safety and health plan shall include:
- (1) A safety and health policy statement reflecting management commitment;
  - (2) A description of the safety and health responsibilities of all levels of management and supervisors on the job and a statement of accountability appropriate to each;
  - (3) The details of:
    - (a) The mechanism for employee involvement in job hazard analysis;
    - (b) Hazard identification, including periodic inspections and hazard correction and control.
    - (c) Accident and "near-miss" investigations; and
    - (d) Evaluations of employee training programs;
  - (4) A plan to encourage employees to report hazards to management as soon as possible and to require management to address these hazards promptly; and
  - (5) A certification by a senior corporate or company manager that the plan is true and correct
- (B) Failure to submit the required certification may be grounds for disqualification of the bid.
- (C) Failure to have available on site or failure to implement the written safety and health plan by the project's notice to proceed date shall be considered willful noncompliance and be sufficient grounds to disqualify the award and terminate the contract.

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Name of Contractor

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Signature and Title

Date: \_\_\_\_\_