



## SERVICES AGREEMENT

**THIS AGREEMENT** is made and entered into \_\_\_\_\_, by and between the **CITY OF BILLINGS, MONTANA**, a municipal corporation organized and existing under the laws of the State of Montana, P.O. Box 1178, Billings, Montana 59103, hereinafter referred to as "**CITY**," and **GRANITE PEAK PUMP SERVICE, INC.**, of 2639 MEADOW CREEK LOOP, BILLINGS, MT 59105 hereinafter referred to as "**CONTRACTOR**."

In consideration of the mutual covenants and agreements herein contained, the receipt and sufficiency whereof being hereby acknowledged, the parties hereto agree as follows:

1. **PURPOSE:** **CITY** agrees to hire **CONTRACTOR** as an independent contractor to install new irrigation pump station at Mountview Cemetery, more accurately described in the Scope of Work attached hereto as Exhibit "A" and by this reference made a part hereof.
2. **EFFECTIVE DATE:** This **AGREEMENT** is effective upon the date of its execution and will terminate on 30 April, 2024. The parties may extend this **AGREEMENT**, by mutual concurrence, for 30 days, in writing prior to its termination.
3. **SCOPE OF WORK:** The **CONTRACTOR** shall perform the services outlined in Exhibit "A". In performing these services, the **CONTRACTOR** shall at all times comply with all federal, state and local statutes, rules and ordinances applicable. These services and all duties incidental or necessary therefor, shall be performed diligently and completely and in accordance with professional standards of conduct and performance.
4. **INCORPORATION BY REFERENCE:** All exhibits and addenda attached hereto, as well as any bid or proposal referenced, are hereby incorporated into this **AGREEMENT** and made a part hereof. If there is any conflict between such exhibits or addenda and the terms of this **AGREEMENT**, the terms of this **AGREEMENT** shall control.
5. **PAYMENT:** **CITY** agrees to pay **CONTRACTOR** one-hundred, eighty-five thousand, five-hundred, seventy-eight dollars and no/100 (\$185,578.00) for the work described in the Scope of Work in Exhibit "A". Any alteration or deviation from the described work that involves extra costs will be executed only upon written request by the **CITY** to **CONTRACTOR** and will become an extra charge over and above the contract amount. The parties must agree upon any extra charges in writing.

**CITY** agrees to pay **CONTRACTOR** a production deposit of ninety-two thousand, seven-hundred, eighty-nine dollars and no/100 (\$92,789.00)

Except as otherwise specified herein, the **CONTRACTOR** shall invoice the **CITY** for all services rendered pursuant to this **AGREEMENT**. Such invoices shall specify the services provided to the **CITY** and identify the applicable fees, and shall be accompanied by reasonable documentation or other reasonable explanations supporting such charges.

Except as otherwise specified herein, the **CITY** shall pay, net of applicable withholding tax, if any, the **CONTRACTOR** for said invoice within thirty (30) days after receipt.

The prices established in this **AGREEMENT** may be extended to other political subdivisions within the State of Montana solely at the **CONTRACTOR'S** discretion.

6. **INDEPENDENT CONTRACTOR STATUS:** The parties agree that **CONTRACTOR** is an independent contractor for purposes of this **AGREEMENT** and may not to be considered an employee of the **CITY** for any purpose. **CONTRACTOR** is not subject to the terms and provisions of the **CITY'S** personnel policies handbook and may not be considered a **CITY** employee for workers' compensation or any other purpose. **CONTRACTOR** is not authorized to represent the **CITY** or otherwise bind the **CITY** in any dealings between **CONTRACTOR** and any third parties.

7. **INDEMNITY:**

The **CONTRACTOR** SHALL:

- A. Indemnify and hold **CITY**, its officers, agents and employees harmless from any and all losses, damage and liability to the extent caused by any intentional or negligent act on the part of **CONTRACTOR** or its agents or employees.
- B. Not indemnify and hold the **CITY** harmless from claims, causes of action, lawsuits, damages, judgments, liabilities, and litigation costs and expenses or reasonable attorneys' fees and costs to the extent caused by the wrongful or negligent acts, error or omission of the **CITY** occurring during the course of or as a result of the performance of the **AGREEMENT**.
- C. Where claims, lawsuits or liability, including reasonable attorneys' fees and costs arise from any wrongful or negligent act of both the **CITY** and the **CONTRACTOR**, the **CONTRACTOR** shall indemnify and hold the

**CITY** harmless from only that portion of claims, causes of action, lawsuits, damages, judgments, liabilities, and litigation costs and expenses including reasonable attorneys' fees and costs, to the extent caused by the **CONTRACTOR'S** or any subcontractor's wrongful or negligent acts occurring as a result from the **CONTRACTOR'S** performance pursuant to this **AGREEMENT**.

The **CITY** SHALL:

- D. Indemnify and hold **CONTRACTOR**, its officers, agents and employees harmless from any and all losses, damage and liability to the extent caused by any intentional or negligent act on the part of **CITY** or its agents or employees.
- E. Not indemnify and hold the **CONTRACTOR** harmless from claims, causes of action, lawsuits, damages, judgments, liabilities, and litigation costs and expenses or reasonable attorneys' fees and costs to the extent caused by the wrongful or negligent acts, error or omission of the **CONTRACTOR** occurring during the course of or as a result of the performance of the **AGREEMENT**.
- F. Where claims, lawsuits or liability, including reasonable attorneys' fees and costs arise from any wrongful or negligent act of both the **CONTRACTOR** and the **CITY**, the **CITY** shall indemnify and hold the **CONTRACTOR** harmless from only that portion of claims, causes of action, lawsuits, damages, judgments, liabilities, and litigation costs and expenses including attorneys' fees and costs, to the extent caused by the **CITY'S** or any subcontractor's wrongful or negligent acts occurring as a result from the **CITY'S** performance pursuant to this **AGREEMENT**.

## **8. INSURANCE:**

- A. The **CONTRACTOR** shall maintain in good standing the insurance described in this Section. Before rendering any services under this **AGREEMENT**, the **CONTRACTOR** shall furnish the **CITY** with proof of insurance in accordance with this Section.

The **CONTRACTOR** shall provide the following insurance:

- Workers' compensation and employer's liability coverage as required by Montana law.
- Commercial general liability, including contractual liability assumed under an insured agreement and personal injury coverage's -- \$750,000 per claim and \$1,500,000 per occurrence.
- Automobile liability -- \$1,500,000 per accident.

Each policy of insurance required by this Section shall provide for no less than 30 days' advance written notice to the **CITY** prior to cancellation.

The **CITY** shall be listed as an additional insured on all policies except Worker's Compensation Policies.

**CONTRACTOR** shall comply with the applicable requirements of the Workers' Compensation Act, Title 39, Chapter 71, MCA, and the Occupational Disease Act of Montana, Title 39, Chapter 71, MCA. **CONTRACTOR** shall maintain workers' compensation insurance coverage for all members and employees of **CONTRACTOR's** business, except for those members who are exempted as independent contractors under the provisions of §39-71-401, MCA.

**CONTRACTOR** shall furnish **CITY** with copies showing one of the following: **(1)** proof of registration as a registered contractor under Title 39, Chapter 9, MCA; **(2)** a binder for workers' compensation coverage by an insurer licensed and authorized to provide workers' compensation insurance in the State of Montana; or **(3)** proof of exemption from workers' compensation granted by law for independent contractors.

9. **WARRANTY:** **CONTRACTOR** warrants that all services and work will be performed in a good workman-like manner. **CONTRACTOR** acknowledges that it will be liable for any breach of this warranty for the lesser period of one (1) year from the time services are completed or any warranty described in the Scope of Work in Exhibit "A".
10. **COMPLIANCE WITH LAWS:** **CONTRACTOR** agrees to comply with all federal, state, and local laws, ordinances, rules and regulations. **CONTRACTOR** agrees to purchase a **CITY** business license.
11. **PREVAILING WAGE REQUIREMENTS – MONTANA – BOOKLET ATTACHED:**

Unless superseded by federal law, Montana law requires that contractors and subcontractors give preference to the employment of Montana residents for any public works contract in excess of \$25,000 for construction or nonconstruction services in accordance with sections 18-2-401 through 18-2-432, MCA, and all administrative rules adopted pursuant thereto. Unless superseded by federal law, each contractor shall ensure that at least 50% of the contractor's workers performing labor on a construction project are bona fide Montana residents. The Commissioner of the Montana Department of Labor and Industry has established the resident requirements in accordance with sections 18-2-403 and 18-2-409, MCA. Any and all questions concerning prevailing wage and Montana resident

issues should be directed to the Montana Department of Labor and Industry.

In addition, unless superseded by federal law, all employees working on a public works contract shall be paid prevailing wage rates in accordance with sections 18-2-401 through 18-2-432, MCA, and all administrative rules adopted pursuant thereto. Montana law requires that all public works contracts, as defined in section 18-2-401, MCA, in which the total cost of the contract is in excess of \$25,000, contain a provision stating for each job classification the standard prevailing wage rate, including fringe benefits, travel, per diem, and zone pay that the contractors, subcontractors, and employers shall pay during the public works contract.

Section 18-2-406, MCA, requires that all contractors, subcontractors, and employers who are performing work or providing services under a public works contract post in a prominent and accessible site on the project staging area or work area, no later than the first day of work and continuing for the entire duration of the contract, a legible statement of all wages and fringe benefits to be paid to the employees in compliance with section 18-2-423, MCA. Section 18-2-423, MCA, requires that employees receiving an hourly wage must be paid on a weekly basis.

Furthermore, Section 18-2-417, requires allowance for a 3% annual increase in wages for a multiyear contract. (1) Any public works contract that by the terms of the original contract calls for more than 30 months to fully perform must include a provision to adjust, as provided in subsection (2), the standard prevailing rate of wages to be paid to the workers performing the contract. (2) The standard prevailing rate of wages paid to workers under a contract subject to this section must be adjusted 12 months after the date of the award of the public works contract. The amount of the adjustment must be a 3% increase. The adjustment must be made and applied every 12 months for the term of the contract. (3) Any increase in the standard rate of prevailing wages for workers under this section is the sole responsibility of the contractor and any subcontractors and not the contracting agency.

Each contractor, subcontractor, and employer must maintain payroll records in a manner readily capable of being certified for submission under section 18-2-423, MCA, for not less than three years after the contractor's, subcontractor's, or employer's completion of work on the public works contract.

The nature of the work performed or services provided under this contract meets the statutory definition of a "public works contract" under section 18-2-401(11)(a), MCA. The booklet is attached and may also be found at <http://erd.dli.mt.gov/labor-standards/state-prevailing-wage-rates>.

12. **CONTRACTORS' GROSS RECEIPTS TAX:** **CONTRACTOR** understands that all contractors or subcontractors working on a publicly funded construction project, including any work requiring the installation, addition, placement, replacement, or removal of any equipment, parts, structures, or materials of any kind whatsoever, are required to pay or have withheld from earnings one percent (1%) of the gross contract price if the gross contract price is Eighty Thousand Dollars (\$80,000) or more.
13. **NONDISCRIMINATION:**
- A. **CONTRACTOR** shall, in performance of work under this **AGREEMENT**, fully comply with all applicable federal, state, or local laws, rules, regulations, and executive orders including but not limited to, the Montana Human Rights Act, the Equal Pay Act of 1963, the Civil Rights Act of 1964, the Age Discrimination Act of 1975, the Americans with Disabilities Act of 1990, and Section 504 of the Rehabilitation Act of 1973. **CONTRACTOR** is the employer for the purpose of providing healthcare benefits and paying any applicable penalties, fees and taxes under the Patient Protection and Affordable Care Act [P.L. 111-148, 124 Stat. 119]. Any subletting or subcontracting by **CONTRACTOR** subjects subcontractors to the same provisions. In accordance with 49-3-207, MCA, and Executive Order No. 04-2016. **CONTRACTOR** agrees that the hiring of persons to perform this Contract will be made on the basis of merit and qualifications and there will be no discrimination based on race, color, sex, pregnancy, childbirth or medical conditions related to pregnancy or childbirth, political or religious affiliation or ideas, culture, creed, social origin or condition, genetic information, sexual orientation, gender identity or expression, national origin, ancestry, age, disability, military service or veteran status, or marital status by the persons performing this **AGREEMENT**.
- B. The **CONTRACTOR** shall state, in all solicitations or advertisements for employees to work on jobs, that all qualified applicants will receive equal consideration for employment without regard to race, color, religion, national origin, ancestry, age, sex or marital status, or mental or physical impairment/disability.
- The **CONTRACTOR** and subcontractor shall abide by the requirements of 41 CFR 60-300.5(a) and 41 CFR 60-741.5(a), which prohibit discrimination against qualified protected veterans and/or qualified individuals on the basis of disability, and requires affirmative action by covered prime contractors and subcontractors to employ and advance in employment qualified protected veterans and individuals with disabilities.
- The **CONTRACTOR** and any subcontractor shall abide by the requirements

of 41 CRF 60-1.4, which states employees or applicants may not be discharged or in any other manner discriminated against because they have inquired about, discussed, or disclosed their own pay or the pay of another employee or applicant. However, employees who have access to the compensation information of other employees or applicants as a part of their essential job functions cannot disclose the pay of other employees or applicants to individuals who do not otherwise have access to compensation information, unless the disclosure is (a) in response to a formal complaint or charge, (b) in furtherance of an investigation, proceeding, hearing, or action, including an investigation conducted by the employer, or (c) consistent with the **CONTRACTOR'S** legal duty to furnish information.

- C. The **CONTRACTOR** shall comply with any and all reporting requirements that may apply to it that the **CITY** may establish by regulation.
  - D. The **CONTRACTOR** shall comply with all applicable federal, state, and city laws concerning the prohibition of discrimination.
  - E. The **CONTRACTOR** shall include the provisions of Subsections A through D of this Section in every subcontract or purchase order under this **AGREEMENT**, so as to be binding upon every such subcontractor or vendor of the **CONTRACTOR** under this **AGREEMENT**.
  - F. The **CONTRACTOR** agrees to post, in conspicuous places available to employees and applicants for employment, notices setting forth the provisions of this non-discrimination clause.
14. **DEFAULT AND TERMINATION:** If either party fails to comply with any condition of this **AGREEMENT** at the time or in the manner provided for, the other party may, at its option, terminate this **AGREEMENT** and be released from all obligations if the default is not cured within ten (10) calendar days after written notice is provided to the defaulting party. Said notice shall set forth the items to be cured. Additionally, the non-defaulting party may bring suit for damages, specific performance, and any other remedy provided by law. These remedies are cumulative and not exclusive. Use of one remedy does not preclude use of the others. Notices shall be provided in writing and hand-delivered or mailed to the parties at the addresses set forth in the first paragraph of this **AGREEMENT**.
15. **LIAISON:** **CITY's** designated liaison for this **AGREEMENT** is Brandon Schmidt and **CONTRACTOR's** designated liaison for this **AGREEMENT** is Jay Glen.
16. **GOVERNING LAW AND VENUE:** This **AGREEMENT** shall be construed and enforced in accordance with the laws of the State of Montana. Venue for any suit

between the parties arising out of this **AGREEMENT** shall be the State of Montana Thirteenth Judicial District Court, Yellowstone County.

17. **SEVERABILITY:** Any provision or part of the **AGREEMENT** held to be void or unenforceable under any law or regulation shall be deemed stricken and all remaining provisions shall continue to be valid and binding upon the **CITY** and the **CONTRACTOR**, who agree that the **AGREEMENT** shall be reformed to replace such stricken provision or part thereof with a valid and enforceable provision that comes as close as possible to expressing the intention of the stricken provision.
18. **SUCCESSORS AND ASSIGNS:** Neither the **CITY** nor the **CONTRACTOR** shall assign, transfer or encumber any rights, duties or interests accruing from this **AGREEMENT** without the written consent of the other.
19. **OWNERSHIP OF DOCUMENTS:** All documents, data, drawings, specifications, software applications and other products or materials produced by the **CONTRACTOR** in connection with the services rendered under this **AGREEMENT** shall be the property of the **CITY** whether the project for which they are made is executed or not. All such documents, products and materials shall be forwarded to the **CITY** at its request and may be used by the **CITY** as it sees fit. The **CITY** agrees that if the documents, products and materials prepared by the **CONTRACTOR** are used for purposes other than those intended by the **AGREEMENT**, the **CITY** does so at its sole risk and agrees to hold the **CONTRACTOR** harmless for such use. All or any portions of materials, products and documents produced under this **AGREEMENT** may be used by the **CONTRACTOR** upon confirmation from the **CITY** that they are subject to disclosure under the Public Disclosure Act. All services performed under this **AGREEMENT** will be conducted solely for the benefit of the **CITY** and will not be used for any other purpose without written consent of the **CITY**. Any information relating to the services will not be released without the written permission of the **CITY**. The **CONTRACTOR** shall preserve the confidentiality of all **CITY** documents and data accessed for use in **CONTRACTOR's** work product.



**IN WITNESS WHEREOF**, the parties hereto have executed this instrument the day and year first above written.

**CITY OF BILLINGS, MONTANA**

**Granite Peak Pump Service, Inc.**  
**BUSINESS NAME (CONTRACTOR)**

\_\_\_\_\_  
**WILLIAM A. COLE,**  
**MAYOR**

\_\_\_\_\_  
**SIGNATURE**

**APPROVED AS TO FORM:**

**Jay Glen**  
**PRINT NAME**


By \_\_\_\_\_  
**CITY ATTORNEY'S OFFICE**

\_\_\_\_\_  
**PRINT TITLE**

**ATTEST:**

\_\_\_\_\_  
**DENISE BOHLMAN, CITY CLERK**

## EXHIBIT A

	Granite Peak Pump Service, Inc. 2639 Meadow Creek Loop Billings, MT 59105 406-254-9972 (O) 406-254-9533 (F) 406-698-6313 (C)
<b>CUSTOM PUMP SYSTEM QUOTATION</b>	
<b>Project Name:</b> Mountview Cemetery	<b>Date:</b> 8/8/2023
<b>Site Location:</b> Billings, MT	<b>Quotation:</b> Q23053
	<b>Quoted By:</b> Jay Glen
<b>Customer Contact Name:</b> Brandon Schmidt	<b>Sales Rep:</b> Jay Glen
<b>Company Name:</b> Mountview Cemetery	<b>Phone:</b> 406-254-9972
<b>Address:</b>	<b>Email:</b> <a href="mailto:jay@granitepeakpumpservice.com">jay@granitepeakpumpservice.com</a>
<b>Phone:</b> 406-657-8299	
<b>Email:</b> <a href="mailto:schmidtb@billingsmt.gov">schmidtb@billingsmt.gov</a>	
<b>Performance:</b> 800GPM @ 85PSI	<b>Panel SCCR:</b> 35KA
<b>Site Voltage:</b> 480Y/277 volt, 3Phase/60Hz only	<b>FCC Type:</b> None
<b>Model Number:</b> HCFV-7C-30X2/5VMS-480-3-800-85	

CATEGORY	DESCRIPTION	QTY
Approvals and Certifications	• UL Listed - Industrial Control Panel	1
Paint Color	• Paint Color - Watertronics - Sandstone	1
Pump Motors -HC	• 30HP HC Prem Efficiency Motor - 460V/3Ph	2
Pumps - HC	• Pump Horizontal Centrifugal 30HP 3600RPM	2
Pumps - VMS	• Pump and Motor VMS 5HP-460V/3Ph	1
Pump Discharge Headers	• Discharge Header - 100 GPM	1
Pump Discharge Headers	• Discharge Header - 400 GPM	2
Pump Seals	• Mechanical Shaft Seal	2
Discharge Manifolds	• Discharge Manifold - Duplex Pump	1
Pressure Relief Valves	• 3 Pressure Relief Valve	1
Regulation EBVs	• Electronic Butterfly Valve - 2-6	2
Flow Meters	• Data Industrial 220 Series Flowmeter Brass	1
Intake Manifolds	• Common Intake Header - HC Duplex	1
Pump Station Bases	• Pump Station Base - Formed Steel	1
Pump Station Base Accessories	• Skid Shim Kit Stainless Steel	1
Disconnects	• Station Disconnect Switch - 200A Fused	1
VFDs	• Variable Frequency Drive 30HP380-480V/3ph	1
XL Contactors	• VFD (XL) Contactor - 460-575V/3Ph -30HP	2
XL Contactors	• Motor Starter - 460-575V/3Ph - 5HP	1
Control System	• Power - Phase Monitor Protection	1
Control System	• Type 7C - M262 PLC	1
Touchscreen Displays	• 10" Raspberry Pi ComFile	1
Control Switches	• Lighted HOA Switch	3
Surge Protection	• Premium Surge/Lightning Protection	1
Optical Devices	• Flow Signal Opto Coupler - For Sharing Signal	1
Optical Devices	• Flow Sensor Opto Isolator	1
Remote Start Options	• Remote Disable Relay - 24VAC/DC	1
Communication and RTUs	• WaterVision Cloud - Verizon 4G - w/1YR Subscription	1
Fertigation Accessories	• Fertigation Run Relay	1
Electrical Enclosure	• Electrical Enclosure - 75x48x16 STL/WHT	1
Electrical Enclosure Cooling	• Heat Exchanger - Standard - (2-4K Btu)	1



Documentation	• Operation & Maint Manual (English) - Electronic Copy	3
Custom - Write In Option	• 12" Wye Strainer for well fill	1
Custom - Write In Option	• 3" EBV for 12" Wye Strainer Auto Flush	1
Custom - Write In Option	• Filter V-1000-6" with 500 Micron Screen	1

STANDARD EQUIPMENT FEATURES : (Included In Total Station Price)		
OPTION NO	DESCRIPTION	QTY
001-000006	<b>Horizontal Centrifugal - Station Spec</b>	<b>1</b>
	<ul style="list-style-type: none"> <li>A variable speed Horizontal Centrifugal pump station shall be provided. The pump station shall include variable frequency drive speed control horizontal centrifugal pumps piping valves electrical panel base and all other features (where applicable as specified below). Station shall be designed to be installed either outside or inside a weather resistant building furnished by the owner as specified above. A formed and reinforced base platform will support all manifolding pumps motors and control panels to provide an integral unit ready to quickly install at the job site. Configuration of station inlet discharge power connections and layout/orientation of basic system components shall be indicated on the sales drawing. The station shall be completely assembled (where applicable) calibrated and subjected to a dynamic run test including safety check prior to breakdown and shipment to customer.</li> </ul>	
005-000002	<b>UL Listed - Industrial Control Panel</b>	<b>1</b>
	<ul style="list-style-type: none"> <li>The station ELECTRICAL CONTROL PANEL shall be UL listed and meet or exceed UL508A specifications for safety of industrial control panels. Panel shall be assembled and tested in a UL508A certified panel shop.</li> </ul>	
010-000002	<b>Paint Color - Watertronics - Sandstone</b>	<b>1</b>
	<ul style="list-style-type: none"> <li>Pump station plumbing components shall be painted Watertronics SANDSTONE for maximum durability and resistance to corrosion. The paint system shall consist of a multi-step system including media blasting application of a rust prohibitive epoxy prime coat followed by a two part industrial grade ultraviolet resistant polyurethane finish having a total dry film thickness of not less than 5 mils. Each coat will be applied and baked for one half hour at 165 degrees F. Pump station components including base pipework discharge heads manifolds isolation and relief valves grooved clamps and supports shall be painted unless otherwise specified on sales drawing.</li> </ul>	
102-000006	<b>30HP HC Prem Efficiency Motor - 460V/3Ph</b>	<b>2</b>
	<ul style="list-style-type: none"> <li>A 30HP premium efficient (HC) horizontal centrifugal motor shall be provided. The motor shall be (ODP) open drip proof construction inverter ready rated with class F windings. The motor shall be sized properly for continuous operation of the pump at any point along the designed pump performance curve without exceeding the motors specified horsepower rating.</li> </ul>	
122-000006	<b>Pump Horizontal Centrifugal 30HP 3600RPM</b>	<b>2</b>
	<ul style="list-style-type: none"> <li>A 30HP single stage close coupled Horizontal Centrifugal pump shall be provided. The pump assembly shall be bolted directly to the motor face and be constructed of heavy duty cast iron with a single dynamically balanced bronze impeller. A mechanical carbon/ceramic motor shaft seal shall be provided for long life and maintenance free operation. A temperature sensor shall also be provided in the pump volute case to facilitate safety shut down of the pump under high temp conditions. The pump shall be selected specifically for the application by Watertronics to maximize performance and efficiency.</li> </ul>	
123-000002	<b>Pump and Motor VMS 5HP-460V/3Ph</b>	<b>1</b>
	<ul style="list-style-type: none"> <li>A 5HP (VMS) Vertical Multi-Stage pump and motor assembly shall be provided. The motor shall meet or exceed NEMA standards for high durability. The pump shall be constructed of stainless steel with multi stage dynamically balanced stainless impellers and mechanical carbon/ceramic motor shaft seal for long life and maintenance free operation. A temperature sensor shall also be provided to facilitate safety shut down of the pump under high temp conditions. The pump assembly shall be selected specifically for the application by Watertronics to maximize performance and efficiency.</li> </ul>	
145-000001	<b>Discharge Header - 100 GPM</b>	<b>1</b>
	<ul style="list-style-type: none"> <li>A pump discharge header assembly shall be provided for a maximum flow of 100GPM. The header assembly shall include a check valve butterfly valve and related pipework required to connect pump to discharge manifold or spool. The pipework shall be fabricated from A53 Grade B schedule 40 CARBON STEEL and painted per job specifications.</li> </ul>	

<b>145-000003</b>	<b>Discharge Header - 400 GPM</b>	<b>2</b>
	<ul style="list-style-type: none"> <li>A pump discharge header assembly shall be provided for a maximum flow of 400GPM. The header assembly shall include a check valve butterfly valve and related pipework required to connect pump to discharge manifold or spool. The pipework shall be fabricated from A53 Grade B schedule 40 CARBON STEEL and painted per job specifications.</li> </ul>	
<b>180-000002</b>	<b>Mechanical Shaft Seal</b>	<b>2</b>
	<ul style="list-style-type: none"> <li>Each turbine pump discharge head shall contain a mechanical seal assembly located where the line shaft protrudes through the discharge head. The mechanical seal assembly shall consist of a main housing shaft sleeve assembly locking and drive collars. The shaft sleeve shall be machined from 416 stainless steel. The locking and driving collars shall be machined from 7075 aluminum. Integral to the seal housing a permanently lubricated ball bearing shall be mounted located out of the pumping media. The mechanical seal shall be resistant to corrosion and abrasives totally self lubricating and rated for no less than 300 PSI. The seal assembly shall require no bypass tubes or related devices to provide cooling or lubrication. One seal required per Vertical Turbine pump.</li> </ul>	
<b>200-000002</b>	<b>Discharge Manifold - Duplex Pump</b>	<b>1</b>
	<ul style="list-style-type: none"> <li>A custom fabricated DUPLEX PUMP discharge manifold shall be provided. The manifold shall be designed and fabricated by Watertronics to maximize flow and efficiency and to meet specific customer installation requirements. All fabricated piping shall conform to ASTM specifications A53 for Grade B welded or seamless pipe. Discharge piping 12" and larger shall be a minimum "Standard Wall" thickness. Discharge piping 10" and smaller shall be Schedule 40. All welded flanges shall be forged steel slip-on or weld neck type. All welded fittings shall be seamless conforming to ASTM Specification A234 with pressure rating not less than 150 psi. The manifold assembly shall include a main discharge isolation valve discharge pressure gauge three 3/4" fertigation ports and a winterization drain port with 3/4" ball valve.</li> </ul>	
<b>210-000001</b>	<b>3 Pressure Relief Valve</b>	<b>1</b>
	<ul style="list-style-type: none"> <li>A 3" pressure relief valve shall be installed on the discharge piping downstream of the pressure regulating valves. The valve shall be sized to bypass sufficient water back to the water source to avoid the discharge pressure from exceeding the maximum programmed pressure set point by more than 10 PSI.</li> </ul>	
<b>270-000001</b>	<b>Electronic Butterfly Valve - 2-6</b>	<b>2</b>
	<ul style="list-style-type: none"> <li>A patented Watertronics 2-6" EBV "Electronic Butterfly Valve" shall be provided on the pump discharge head. The EBV shall provide for gradual entry of water from the pump into the discharge manifold to allow for complete purging of pump column air and elimination of water hammer surges and check valve slam. The EBV shall also facilitate smooth pump sequencing enhanced flow and pressure regulation. In the event of a VFD failure the EBV shall function as a by-pass regulation device to maintain constant pressure regulation and flow without disruption of the irrigation process.</li> </ul>	
<b>280-000001</b>	<b>Data Industrial 220 Series Flowmeter Brass</b>	<b>1</b>
	<ul style="list-style-type: none"> <li>A high quality impeller style flow meter shall be provided to measure water flow with an accuracy of +/- 1%. full scale The flow meter housing shall be made of BRASS. The sensor electronics shall be fully sealed in epoxy potting suitable for indoor or outdoor installation.</li> </ul>	
<b>300-000002</b>	<b>Common Intake Header - HC Duplex</b>	<b>1</b>
	<ul style="list-style-type: none"> <li>A custom fabricated DUPLEX PUMP common intake manifold shall be provided. The manifold shall be designed and fabricated by Watertronics to maximize flow and efficiency and to meet specific customer installation requirements. All fabricated piping shall conform to ASTM specifications A53 for Grade B welded or seamless pipe. Discharge piping 12" and larger shall be a minimum "Standard Wall" thickness. Discharge piping 10" and smaller shall be Schedule 40. All welded flanges shall be forged steel slip-on or weld neck type. All welded fittings shall be seamless conforming to ASTM Specification A234 with pressure rating not less than 150 psi. The manifold assembly shall include a intake isolation valve where applicable intake pressure gauge and a winterization drain port with 3/4" ball valve.</li> </ul>	
<b>400-000001</b>	<b>Pump Station Base - Formed Steel</b>	<b>1</b>

	<ul style="list-style-type: none"> <li>Pump station components shall be mounted on a formed steel base. Formed steel construction is used to minimize weld seams and maximize strength. The base material shall be 3/8" thick ASTM A-26 hot rolled carbon steel plate. Structural steel shall be welded on the underside of the base to maximize structural rigidity. Base shall have a minimum of 8 (eight) lifting points (two at each corner). Base shall include a hinged wet well hatch whenever possible. Base shall be supplied with four anchor brackets and concrete wedge anchor bolts if base length is under 12ft. For base lengths over 12ft six anchors shall be provided. The base size shall be approximately</li> </ul>	
<b>410-000001</b>	<b>Skid Shim Kit Stainless Steel</b>	<b>1</b>
	<ul style="list-style-type: none"> <li>A skid shim kit shall be provided to take up small gaps between skid and floor and to insure level installation of skid. Each kit shall include the following stainless steel shims; Qty (2) - 1/2"x2"x5" Qty(2) - 3/8"x2"x5" Qty(4) - 1/4"x2"x5" Qty(4) - 1/8"x2"x5" .</li> </ul>	
<b>500-000011</b>	<b>Station Disconnect Switch - 200A Fused</b>	<b>1</b>
	<ul style="list-style-type: none"> <li>A 3-pole 200 amp maximum FUSED UL Listed main disconnect switch shall be provided. The disconnect switch shall include an operating handle mounted in the main electrical panel door that shall open all ungrounded conductors of the service entrance to the panel. The disconnect switch shall be mechanically interlocked to prevent access while the operating handle is in the ON position. The station disconnect switch shall be correctly sized for the maximum station load and shall meet all applicable NEC and UL508A requirements.</li> </ul>	
<b>520-000025</b>	<b>Variable Frequency Drive 30HP380-480V/3ph</b>	<b>1</b>
	<ul style="list-style-type: none"> <li>A high efficiency industrial grade 30HP variable frequency drive shall be provided. The VFD shall be specifically designed for water pumping applications and include a graphical control interface keypad. All internal printed circuit boards shall be conformal coated for long service life.</li> </ul>	
<b>540-000035</b>	<b>VFD (XL) Contactor - 460-575V/3Ph -30HP</b>	<b>2</b>
	<ul style="list-style-type: none"> <li>A 460-575V/3Ph - 30HP cross line (XL) industrial grade dual interlocking contactor set shall be provided for the pump. The contactor set shall allow the assigned pump to be run manually across the line or from the VFD output. It will also facilitate sequencing of pumps when more than one main pump is present. An HOA (Hand-Off-Auto) switch will be provided for each pump. When HOA is in Hand position the contactor set will engage to power pump directly across the line. If Off position pump will be disabled and when in Auto pump will run on VFD when assigned as lead pump otherwise the contactor set will sequence the pump on as a lag pump where applicable.</li> </ul>	
<b>540-000070</b>	<b>Motor Starter - 460-575V/3Ph - 5HP</b>	<b>1</b>
	<ul style="list-style-type: none"> <li>A 460-575VAC/3Ph - 5HP industrial grade Motor Starter shall be provided. The motor starter shall provide integrated switching thermal and current overload protection per NEC article 430 safety requirements. The switching contacts shall be rated for a minimum of 200000 cycles under full load conditions.</li> </ul>	
<b>600-000003</b>	<b>Power - Phase Monitor Protection</b>	<b>1</b>
	<ul style="list-style-type: none"> <li>An advanced microprocessor based Power Phase Monitoring system shall be provided to protect the pump system from equipment failure due to power faults occurring on the incoming electrical service to the pump station. The monitor shall actively monitor for phase loss phase reversal phase unbalance under voltage and overvoltage conditions. In the event that these one or more of these conditions occur the Phase Monitor shall signal the PLC logic controller to shut down the pump system preventing damage to pump system components. The phase monitor fault limits and time to trip shall be adjustable. A status LED shall indicate the fault type causing the shutdown event.</li> </ul>	
<b>600-000004</b>	<b>Type 7C - M262 PLC</b>	<b>1</b>

- The electrical control system shall be an Industrial grade PLC with custom programming written specifically for this project. Control logic shall be based on redundant design and interlocking of control devices for maximum safety and proper sequence of operation. The PLC controller shall have diagnostic LEDs for monitoring status of discrete inputs and outputs as well as a general PLC error feedback. The PLC shall contain RS485 and Ethernet communication ports for monitoring and programming purposes. The PLC will have a high speed counter clock and calendar function with year month day hour minute and day of week.

610-000006	<b>10" Raspberry Pi ComFile</b>	<b>1</b>
	<ul style="list-style-type: none"> <li>• An industrial grade 10.1" (1024 × 600) LCD touchscreen user interface display shall be provided for monitoring and diagnostic purposes featuring: Digital flow (GPM) and pressure (PSI) display. Both cumulative and resettable gallons pumped indicators. Pump ready/running status with elapsed run time display per pump. Flow-based pressure regulation to match discharge pressure with irrigation demand Individual motor overload reporting Minute by minute data logging saved internally for Historic and real time X-Y plotting of pump station operation. Filter controls. Alarm log. Ability to change system parameters such as setpoint pressure time delays Fertigation graphic and control interface when sold with a Watertronics EZ Feed Injection Package. Life of the display shall be 50000 hours. The display software shall be configured for the pump station features.</li> </ul>	
620-000001	<b>Lighted HOA Switch</b>	<b>3</b>
	<ul style="list-style-type: none"> <li>• A lighted switch actuator shall be provided which shall be illuminated GREEN whenever the controlled item is active. One required per switch.</li> </ul>	
630-000002	<b>Premium Surge/Lightning Protection</b>	<b>1</b>
	<ul style="list-style-type: none"> <li>• A Premium 200kA max impulse current rated surge protective device shall be provided on the incoming power connections to the station. The SPD shall utilize high energy solid state suppression circuitry to effectively protect electrical equipment from extreme electrical disturbances. An additional 70kA max impulse current rated surge protective device shall be installed on the secondary of the control transformer. Diagnostic LEDs shall be provided on the devices to indicate operational status when powered.</li> </ul>	
640-000001	<b>Flow Signal Opto Coupler - For Sharing Signal</b>	<b>1</b>
	<ul style="list-style-type: none"> <li>• An optical coupling device shall be provided for sharing of pump station flow signal with external customer control systems. The opto-coupler is rated for 3-30VDC (24VDC) nominal supply from customer control system and shall provide a minimum of 2500V isolation between station control system and external systems.</li> </ul>	
640-000002	<b>Flow Sensor Opto Isolator</b>	<b>1</b>
	<ul style="list-style-type: none"> <li>• An optical isolation device shall be provided for isolating OFF SKID station flow sensor from the control system. The optical isolator shall effectively improve flow signal quality and eliminate interference ground loops and other signal disturbances from entering station control electronics.</li> </ul>	
650-000003	<b>Remote Disable Relay - 24VAC/DC</b>	<b>1</b>
	<ul style="list-style-type: none"> <li>• A 24VAC/DC remote disable relay input shall be provided. The remote disable relay shall effectively disable the pump station when the remote start relay coil is supplied 24VAC/DC power from an irrigation controller or other external power source provided by customer. If the station is running and relay is powered the station will safely shutdown. When power is removed from the relay the station will return to normal operation.</li> </ul>	
680-000006	<b>WaterVision Cloud - Verizon 4G - w/1YR Subscription</b>	<b>1</b>

- WaterVision Cloud - Verizon Network 4G/LTE CELLULAR remote pump system monitoring package shall be provided. The system includes all hardware software and 1 YEAR SUBSCRIPTION for connection of a single pump station to the WaterVision Cloud Network via a cellular connection. The system shall allow customer to remotely monitor the pump station and the customer's other WaterVision Cloud enabled pump stations on the same property or multiple properties at any time from a cell phone tablet PC or other web based device. The system shall also allow control of the pump station enable/disable and reset of alarms. The communication hardware will accept up to eight additional CHOICE CARD inputs The WaterVision Cloud system is also expandable through connection of additional WaterVision Cloud enabled pump systems. Additional hardware required for system expansion. Subscription may be renewed in future years for low annual fee approximatley \$450/year. Contact PSN for future subscription pricing.

<b>720-000001</b>	<b>Fertigation Run Relay</b>	<b>1</b>
	<ul style="list-style-type: none"> <li>A Fertigation Run relay shall be provided to activate a customer provided chemical injection system. The relay output shall turn on when the station reaches a minimum flow set point and turn off when station flow drops below set point. The minimum flow set point shall be adjustable through the touchscreen display where provided.</li> </ul>	
<b>750-000003</b>	<b>Electrical Enclosure - 75x48x16 STL/WHT</b>	<b>1</b>
	<ul style="list-style-type: none"> <li>A heavy duty industrial grade 75Hx48Wx16D UL Listed NEMA 4 outdoor rated enclosure shall be provided to protect electrical control system components. The enclosure shall be custom built to Watertronics specifications specifically for water pumping applications and shall be fabricated of no less than 12GA carbon steel finished on all inside and outside surfaces in polyester based WHITE powder coat finish for maximum durability. The enclosure shall be provided with heavy duty integral hinges with lift off doors INTERIOR LIGHTING PACKAGE heavy duty key lockable door handles continuously welded seams mechanical interlocks and drip shield. The electrical component back panel shall be galvanized steel for superior EMC performance.</li> </ul>	
<b>770-000001</b>	<b>Heat Exchanger - Standard - (2-4K Btu)</b>	<b>1</b>
	<ul style="list-style-type: none"> <li>A premium quality closed loop water to air HEAT EXCHANGER cooling system shall be provided. The heat exchanger shall control temperature levels within the electrical enclosure protecting sensitive electronic components from overheating conditions. The heat exchanger shall be rated NEMA 4 for indoor/outdoor installations and prevent outside air or cooling water from entering electrical enclosure. The heat exchanger shall be properly sized to the application up to a maximum of 2-4K Btu cooling capacity.</li> </ul>	
<b>975-000001</b>	<b>Operation &amp; Maint Manual (English) - Electronic Copy</b>	<b>3</b>
	<ul style="list-style-type: none"> <li>A detailed OPERATION and MAINTENANCE manual shall be provided detailing basic system operation alarms general maintenance procedures and use of the operator interface. The manual shall be in English and provided in electronic format.</li> </ul>	
<b>999-000002</b>	<b>12" Wye Strainer for inlet protection</b>	<b>1</b>
	<ul style="list-style-type: none"> <li>12" Wye Strainer for well fill</li> </ul>	
<b>999-000003</b>	<b>3" EBV for 12" Wye Strain Flush</b>	<b>1</b>
	<ul style="list-style-type: none"> <li>3" EBV for 12" Wye Strainer Auto Flush</li> </ul>	
<b>999-000004</b>	<b>Filter V-1000-6" with 500 Micron Screen</b>	<b>1</b>
	<ul style="list-style-type: none"> <li>A VAF model V1000 series filter shall be provided for superior discharge filtering performance. The filter body and filtration screen shall be fabricated from 316L stainless steel and include VAFs patented bi-directional hydrodynamic flush system that does not require additional motors and electronic controls on the filter for facilitation of the flushing process. The flush cycle shall be fully programmable, be controlled by the system PLC and initiated by pressure drop across the filter or on a time interval basis. Flushing shall be controlled by an industrial grade electronic valve actuator and shall occur during normal operation without suspension of the normal irrigation process. Filter assembly includes inlet and outlet isolation valves and includes a filter bypass where applicable as specified on the sales drawing. Maximum flow rate shall be 850GPM per filter with 500 micron screen.</li> </ul>	



<b>PUMP STATION PRICE (INCLUDES ALL STANDARD EQUIPMENT FEATURES) U.S. Dollars Only</b>	<b>\$185,578.00</b>
Domestic US Freight from Factory to Job Site: FOB Factory	INCLUDED
Off Load & Setup Supervision:	INCLUDED
Crane To Off-Load and Set Pump Station:	NOT INCLUDED
Start-Up:	INCLUDED
Warranty - (Including Parts and Labor)	2 YR STANDARD
Shipment: Estimated <b>24-28</b> weeks after receipt of signed contract and drawing approval. A firm delivery date will be established and transmitted within 5 days of receipt of all final details and documents.	