

Advertisement Bid

Desert Canyon Golf Course – Irrigation Pump Station and Wet Well

Bids Due: September 25, 2025, by 3 P.M. local time

August 25, 2025

Dear Respondent:

The City of Mountain Home, Idaho, is seeking sealed bids for the purchase and installation of a fully operational Vertical Turbine Irrigation Pump Station and associated Wet Well to serve the Desert Canyon Golf Course.

Sealed bids must be clearly labeled: "Desert Canyon Golf Course – Pump Station and Wet Well Bid." Submit bids to: City Clerk's Office, City of Mountain Home, 160 South 3rd East, Mountain Home, Idaho 83647.

Bids must be received no later than Wednesday, September 3, 2025, at 3:00 p.m. MST. Bids will be publicly opened and read aloud at 3:05 p.m. in the City Council Chambers.

The City reserves the right to reject any or all bids, to waive irregularities, and to accept the bid deemed in the best interest of the City.

Tiffany Belt
City Clerk

Instructions to Bidders

1. Bidder Qualifications: Must hold a valid Idaho Public Works License. Proof of insurance and a bid bond are required.
2. Submission: Bids must be sealed and labeled correctly. Late bids will not be accepted.
3. Bid Security: Each bid must include a certified check or bid bond for 5% of the total bid.
4. Schedule: Bids due September 25, 2025. Notice of Award within 60 days—completion required within 120 calendar days from Notice to Proceed.

Project Information

Background: Desert Canyon Golf Course is a City-owned course serving approximately 16,000 residents.

- Scope: Complete installation of prefabricated pump station and associated wet well.
- Technical Specifications: Refer to Written Specifications (Watertronics).
- Wet Well Construction Requirements: Reinforced concrete, 12' depth minimum, 48" ID, hatch, ventilation, inlet screen, piping penetrations, epoxy lining.
- Equipment Specifications: Pumps, motors, valves, electrical, controls, instrumentation, and monitoring.

General Conditions

- All work shall comply with applicable federal, state, and local codes.
- Contractor responsible for excavation, backfill, compaction, and site restoration.
- Coordination with City staff is required during installation.
- Final acceptance contingent upon testing and demonstration of performance.

TECHNICAL SPECIFICATIONS

Pumping System Model # VTV-7C-75X2/5ST-480-3-1600-110

Total Design Criteria: Quantity of Pumps: 3

Design Flow: 1600GPM @ 110PSI Station Discharge

Third Party Listing

Starting Equipment	U.L. Listed as and Industrial Control Device
Controls	U.L. Listed as and Industrial Control Assembly
VFD Controls	U.L. Listed as and Industrial Control Assembly

Total Design Criteria

Zone	Flow (GPM)	Pressure (PSI)
1	1600	110

Pump Station Incoming Power Requirement

DEVICE	AMP		KVA	Voltage	Phase	Hertz
Lead Pump (60 HP)/VFD	87			480	3	60
Lag Pumps (60 HP)X1	87					
Sustain Pump (5 HP)	8					
Control Power	3					
Accessories	2					
Total Full load Amps	187					

Pump Station Main Disconnect Rating

Non-Fused	Amps	Volts
Control Panel	400	480

Operator Interface

Color	10" Raspberry Pi Touchscreen	Touchscreen	Memory Card
YES	Yes	-	YES

Variable Frequency Drive

Operating Temperature	0 to 50°C (32° -150°F)
Humidity	Non-Condensing
Minimum Efficiency	98% (full load, base speed)
Frequency Rating	100% continuous drive rating, Intermittent 111% Drive rating for one minute

Safeties

Safety	Setting
Incoming Phase Failure and Low Voltage and Phase Reversal	10% +/-
Individual Power Phase Failure and Low Voltage	10% +/-
Low Discharge Pressure Shut down	25 PSI Below Setpoint
High Discharge Pressure Shutdown	15 PSI Above Setpoint
Low Water Level Shutdown	2' Above Pump Suction

Motor and Pump Data

	PMP	Pump #1	Pump #2	Pump #3	Pump #4	Pump#5 Future
Motor HP	5	75	75	N/A	N/A	N/A
Motor Starting Code G, Class F Insulation						
Motor/Pump RPM	3600	1800	1800			
Motor Service Factor	1.15	1.15	1.15			
Motor Efficiency	74%	95%	95%			
Motor Power Factor	81%	85.3%	85.3%			
Motor Type	SUB	VHS	VHS			
Motor Disconnect Volts	480	480	480			
Motor Full Load Amps	8	87	87			
Motor Starter Type	XL	VFD/XL	VFD/XL			
Motor Space Heater	N/A	Yes	Yes			
Motor De-rate For Altitude	N/A	N/A	N/A			
Motor CFM Requirements	N/A	1275	1275			
Total Station CFM Req'd	2550					
Pump GPM	50	800	800			
Pump TDH	290	290	290			
Pump Efficiency at Design	65%	85.4	85.4			
Pump Shut Off Head, FT	430	333	333			
Pump Column Pipe ID	2"	8"	8"			
Pump Column Material	Steel	Steel	Steel			
Pump Shaft Material	17-4 PH SS	Stainless Steel	Stainless Steel			
Pump Impeller Material	Noryl	Stainless Steel	Stainless Steel			
Pump Bowl Material	AISI 304SS	Cast Iron	Cast Iron			
Pump Discharge Size	2"	6"	6"			
Pump Check Valve Size	2"	6"	6"			
Check Valve Rating, PSI	200	200	200			
Check Valve Drop at Capacity, PSI	.75	1.5	1.5			
Pump Isolation Valve Size	2"	5"	5"			
Isolation Valve Rating, PSI	200	200	200			
Electronic Butterfly Valve	N/A	5"	5"			
Station Relief Valve Size	4"					

Sequence of Operation.

The system will Start or Stop based on the differential pressure setpoint.

Non-Irrigation times: The pressure maintenance pump (PM) should cycle ON and OFF to maintain irrigation setpoint system pressure. Pressure maintenance pump (PM) should turn OFF when main irrigation pumps Start.

Irrigation times: When the pressure maintenance pump cannot maintain the system pressure, the VFD on the main pump station will start the first main pump and gradually ramp the pressure up to desired irrigation system pressure. The start pressure of the VFD pump should be a differential below the setpoint. The pump speed will be modulated to hold a constant station pressure regardless of the flow. As the flow rate of the system increases and the VFD on the main pump can no longer maintain the system pressure at pump maximum speed, the next sequential pump should start on station VFD and first pump should accordingly reduce its speed and modulate. As the flow keep increasing, the pumps should sequentially be started until all the pumps are running to satisfy the system flow at the setpoint pressure.

When the irrigation demand of flow start to decrease, pumps should be sequentially turned off until a single VFD driven pump is operating.

When no flow demand is required the station pumps should turned OFF.

An algorithm should be written and included with the pump station for reducing the VFD pump speed as the next sequential pump is started so that no pressure surges are generated during the transition between pumps (even with across the line starting). If the operator/customer prefer to switch the VFD from pump to pump for sequential starting, he should be able to select this option with the HMI.

Pump Stuffing Box Style

Type	Mechanical Seal	Packing
	X	

Station Discharge Information

Zone	Isolation Valve	Meter Run Size	Flow Meter Type	Z Pipe	TOL's
1	TBD	8"	Electromagnetic	N/A	3 @ 3/4"
Water Feature	N/A	N/A	N/A	N/A	N/A

Auto Flush Strainer

Type	Size	Quantity	Perforation
Wye	10"	1	1/8"

Remote Interface Software & Alarm Notification (Optional)

Watervision PC Based Remote Monitoring	Direct	N	Short Haul	N	Radio	N	Fiber Optic	N
Watervision Web Based	Cellular	YES	Radio Bridge	N	Ethernet Bridge	N	Ethernet Local	N

Remote Monitoring								
-------------------	--	--	--	--	--	--	--	--

Special Remote Monitoring

Custom Views	Wet Well Level Monitoring & Multiple Fill Control
Custom Views	Fertigation Monitoring & Control

Main Electrical Enclosure Lighting

Interior	X	Exterior	N/A
----------	---	----------	-----

Fertigation System Interface (Optional)

Run Relay	X	Optical Isolator	X
-----------	---	------------------	---

Remote Recharge System Interface

Level Sensor Type	Quantity	Voltage
Level Transducer	1	Dry Contact
Remote Pump Start	1	Dry Contact
City Water Supply Valve	1	24 or 120v

Site Conditions & Intake Screen

Wet Well Depth	12'-0"
Wet Well Diameter	48" (To be confirmed)
Intake Flume Size, Type & Length	24" diameter (material TBD)
Static Reservoir Inlet Screen Size*	SBS-36 (provided by Watertronics)
Self-Cleaning Inlet Screen	N/A

QUESTIONS

Direct questions to Jake Olsen, Golf Superintendent

(208) 590-1271 or jolsen@mountain-home.us

or

Tiffany Belt, City Clerk

(208) 587-2104 or tbelt@mountain-home.us

EXHIBITS TO THIS BID:

Exhibit A: Submittal Cover Sheet – Required for Submission

Exhibit B: Bid Proposal- Required for Submission

Exhibit C: Bid Bond Form – Required for Submission

Exhibit D: Technical Specifications (Watertronics Pump Station & Wet Well details)

EXHIBIT A
Desert Canyon Golf Course – Irrigation Pump Station and Wet Well
SUBMITTAL COVER SHEET
(REQUIRED FOR SUBMISSION)

TO: City of Mountain Home
Attn: Tiffany Belt, | City Clerk
P.O. Box 10
Mountain Home, ID 83647

FROM:
Company Name: _____

Mailing Address: _____

Physical Address: _____

Telephone: _____ Fax: _____

E-mail Address: _____

The company officer responsible to the City of Mountain Home for the Irrigation Pump Station and Wet Well contemplated by this submittal:

SIGNATURE: X _____

Print Name and Title: _____

License Information: State of Idaho Public Works License number: _____

State of Idaho Contractor License number: _____

EXHIBIT B
BID SCHEDULE OF ITEMS AND PRICES
(REQUIRED FOR SUBMISSION)

Project title: Desert Canyon Golf Course – Irrigation Pump Station and Wet Well

Contractor Name: _____

Base Bid:	
Add Alternates (if any):	
Company Name:	
Authorized Representative:	
Address:	
Phone / Email:	
Signature:	
Date:	

EXHIBIT C
Bid Bond Form
(REQUIRED FOR SUBMISSION)

KNOW ALL PERSONS BY THESE PRESENTS:

That we, _____-[Bidder's Legal Name], as Principal,
and _____ [Surety Company Name], a corporation organized
and existing under the laws of the State of Idaho, and authorized to do business in the State
of Idaho, as Surety, are held and firmly bound unto the City of Mountain Home, Idaho,
hereinafter called the Obligee, in the penal sum of [5% of Bid Amount or Specified Amount
in Words and Figures], lawful money of the United States, for the payment of which we
bind ourselves, our heirs, executors, administrators, successors, and assigns, jointly and
severally, firmly by these presents.

WHEREAS, the Principal has submitted a bid to the Obligee for the following project:

Project Title: Desert Canyon Golf Course – Irrigation Pump Station and Wet Well

NOW, THEREFORE, the condition of this obligation is such that if the Principal is awarded
the contract and enters into a contract with the Obligee in accordance with the terms of
such bid, and provides the required performance and payment bonds within the time
specified, then this obligation shall be null and void; otherwise, it shall remain in full force
and effect.

In the event the Principal fails to enter into such contract or provide such bonds, the Surety
hereby agrees to pay the Obligee the penal sum stated above.

Signed, sealed, and dated this ____ day of _____, 20

PRINCIPAL:

Legal Name: _____

By: _____

Title: _____

(Seal if Corporation)

SURETY:

Legal Name: _____

By: _____

Attorney-in-Fact

(Attach Power of Attorney)

EXHIBIT D Technical Specification

Pumping System Model # VTV-7C-75X2/5ST-480-3-1600-110

Total Design Criteria: Quantity of Pumps: 3

Design Flow: 1600GPM @ 110PSI Station Discharge

Third Party Listing

Starting Equipment	U.L. Listed as and Industrial Control Device
Controls	U.L. Listed as and Industrial Control Assembly
VFD Controls	U.L. Listed as and Industrial Control Assembly

Total Design Criteria

Zone	Flow (GPM)	Pressure (PSI)
1	1600	110

Pump Station Incoming Power Requirement

DEVICE	AMP		KVA	Voltage	Phase	Hertz
Lead Pump (60 HP)/VFD	87			480	3	60
Lag Pumps (60 HP)X1	87					
Sustain Pump (5 HP)	8					
Control Power	3					
Accessories	2					
Total Full load Amps	187					

Pump Station Main Disconnect Rating

Non-Fused	Amps	Volts
Control Panel	400	480

Operator Interface

Color	10" Raspberry Pi Touchscreen	Touchscreen	Memory Card
YES	Yes	-	YES

Variable Frequency Drive

Operating Temperature	0 to 50°C (32° -150°F)
Humidity	Non-Condensing
Minimum Efficiency	98% (full load, base speed)
Frequency Rating	100% continuous drive rating, Intermittent 111% Drive rating for one minute

Safeties

Safety	Setting
Incoming Phase Failure and Low Voltage and Phase Reversal	10% +/-
Individual Power Phase Failure and Low Voltage	10% +/-
Low Discharge Pressure Shut down	25 PSI Below Setpoint
High Discharge Pressure Shutdown	15 PSI Above Setpoint
Low Water Level Shutdown	2' Above Pump Suction

Motor and Pump Data

	PMP	Pump #1	Pump #2	Pump #3	Pump #4	Pump#5 Future
Motor HP	5	75	75	N/A	N/A	N/A
Motor Starting Code G, Class F Insulation						
Motor/Pump RPM	3600	1800	1800			
Motor Service Factor	1.15	1.15	1.15			
Motor Efficiency	74%	95%	95%			
Motor Power Factor	81%	85.3%	85.3%			
Motor Type	SUB	VHS	VHS			
Motor Disconnect Volts	480	480	480			
Motor Full Load Amps	8	87	87			
Motor Starter Type	XL	VFD/XL	VFD/XL			
Motor Space Heater	N/A	Yes	Yes			
Motor De-rate For Altitude	N/A	N/A	N/A			
Motor CFM Requirements	N/A	1275	1275			
Total Station CFM Req'd	2550					
Pump GPM	50	800	800			
Pump TDH	290	290	290			
Pump Efficiency at Design	65%	85.4	85.4			
Pump Shut Off Head, FT	430	333	333			
Pump Column Pipe ID	2"	8"	8"			
Pump Column Material	Steel	Steel	Steel			
Pump Shaft Material	17-4 PH SS	Stainless Steel	Stainless Steel			
Pump Impeller Material	Noryl	Stainless Steel	Stainless Steel			
Pump Bowl Material	AISI 304SS	Cast Iron	Cast Iron			
Pump Discharge Size	2"	6"	6"			
Pump Check Valve Size	2"	6"	6"			
Check Valve Rating, PSI	200	200	200			
Check Valve Drop at Capacity, PSI	.75	1.5	1.5			
Pump Isolation Valve Size	2"	5"	5"			
Isolation Valve Rating, PSI	200	200	200			
Electronic Butterfly Valve	N/A	5"	5"			
Station Relief Valve Size	4"					

Sequence of Operation.

The system will Start or Stop based on the differential pressure setpoint.

Non-Irrigation times: The pressure maintenance pump (PM) should cycle ON and OFF to maintain irrigation setpoint system pressure. Pressure maintenance pump (PM) should turn OFF when main irrigation pumps Start.

Irrigation times: When the pressure maintenance pump cannot maintain the system pressure, the VFD on the main pump station will start the first main pump and gradually ramp the pressure up to desired irrigation system pressure. The start pressure of the VFD pump should be a differential below the setpoint. The pump speed will be modulated to hold a constant station pressure regardless of the flow. As the flow rate of the

system increases and the VFD on the main pump can no longer maintain the system pressure at pump maximum speed, the next sequential pump should start on station VFD and first pump should accordingly reduce its speed and modulate. As the flow keep increasing, the pumps should sequentially be started until all the pumps are running to satisfy the system flow at the setpoint pressure.

When the irrigation demand of flow start to decrease, pumps should be sequentially turned off until a single VFD driven pump is operating.

When no flow demand is required the station pumps should turned OFF.

An algorithm should be written and included with the pump station for reducing the VFD pump speed as the next sequential pump is started so that no pressure surges are generated during the transition between pumps (even with across the line starting). If the operator/customer prefer to switch the VFD from pump to pump for sequential starting, he should be able to select this option with the HMI.

Pump Stuffing Box Style

Type	Mechanical Seal	Packing
	X	

Station Discharge Information

Zone	Isolation Valve	Meter Run Size	Flow Meter Type	Z Pipe	TOL's
1	TBD	8"	Electromagnetic	N/A	3 @ 3/4"
Water Feature	N/A	N/A	N/A	N/A	N/A

Auto Flush Strainer

Type	Size	Quantity	Perforation
Wye	10"	1	1/8"

Remote Interface Software & Alarm Notification (Optional)

Watervision PC Based Remote Monitoring	Direct	N	Short Haul	N	Radio	N	Fiber Optic	N
Watervision Web Based Remote Monitoring	Cellular	YES	Radio Bridge	N	Ethernet Bridge	N	Ethernet Local	N

Special Remote Monitoring

Custom Views	Wet Well Level Monitoring & Multiple Fill Control
Custom Views	Fertigation Monitoring & Control

Main Electrical Enclosure Lighting

Interior	X	Exterior	N/A
----------	---	----------	-----

Fertigation System Interface (Optional)

Run Relay	X	Optical Isolator	X
-----------	---	------------------	---

Remote Recharge System Interface

Level Sensor Type	Quantity	Voltage
Level Transducer	1	Dry Contact
Remote Pump Start	1	Dry Contact
City Water Supply Valve	1	24 or 120v

Site Conditions & Intake Screen

Wet Well Depth	12'-0"
Wet Well Diameter	48" (To be confirmed)
Intake Flume Size, Type & Length	24" diameter (material TBD)
Static Reservoir Inlet Screen Size*	SBS-36 (provided by Watertronics)
Self-Cleaning Inlet Screen	N/A