

Job Number: 2020580

Model Number : VTV-1-60x3/15V/5ST-480-3-1800-120

Project Name: Lakewood Country Club

Salesperson: Mike Green

Order Date : 10/26/2020

Ship Date : 12/29/2020

Apps Engineer : Chandler Blaschka

Station Type : Vertical Turbine

Site Voltage : 460VAC/3Phase/60hz

Configuration : N/A

Power Configuration : WYE 3PH 4 Wire

Prime System : N/A

SCCR Rating : 35 kA

Dynamic Inlet PSI : N/A

FCC Type : N/A

Feet of Lift : N/A

Station Location : Inside - Weather Resistant Building

Discharge PSI : 120

Site Elevation : 720

Total Flow : 1800

Regulatory Compliance : UL Listed - Industrial Control Panel

Station Color : WT Green

Wet Well Depth : See CSO

Elec. Encl. Location : On Skid

Flow Meter Location : On Skid

Sold To

Customer PO : 2008110728Q002

City : Mt. Pleasant

Company Name : Thielen Turf & Irrigation

State : Michigan

Address 1 : 600 Industrial Ave

Zip : 48858

Address 2 :

Country : United States

Sold To Contact

First Name : Doug

Phone Number :

Last Name : Thielen

Fax Number :

Mobile Number : (989) 506-6037

Email Address :

Invoice Price Information

Invoice Price : \$148,917

Refer to WT Change Order :

Muiltiplier :

Term of Sale : 50% Down

Corrected Price :

Special Terms Approved by :

Ship To

Company Name : Lakewood Country Club

City : Westlake

Address 1 : 2613 Bradley Road

State : Ohio

Address 2 :

Zip : 44145

Country : United States

Ship To Contact

First Name : Aaron

Phone Number :

Last Name : Archambauh

Fax Number :

Mobile Number : (603) 502-7438

Email Address :

Shipment Details

24 Hour Advance Notice : Yes

Notification of Shipment : All

Carrier : FOB Hartland - WT Selects Carrier

Other :

Services Included in Total Price : Full Installation

Arrival Confirmation Notes :

Installation Service Type : None

Station Weight :

Comments

Mechanical Engineer: Andy Casper

Controls Engineer: Cory Wolgast

Electrical Engineer: Sandy McElhinny

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Skid Construction

Skid Construction : Formed Steel 8-3/8"
Fit in Shipping Container : No
Skid Construction Details :
Lifting Points : 10

Coating for Skid : Painting
Skid Color : Same as Station
Describe Special Coating Under Skid :
Leveling Kit : 1

Comments

Pump / Manifold / Piping

Piping Material : Mild Steel
Pipe Coating : Paint Only
Pipe Coating Application : Exterior Only - Specify
Pipe Color (Exterior) : Same as Station
Injection Taps Per Zone : 5-3/4" - See CSO
Pressure Relieve Valve Type : Flanged Angle
Wet Well to Sub Motor : 6 IN
Wet Well to VT Basket : 12 IN

Station Iso Butterfly Valve Size (in) : 8
Station Iso Butterfly Valve Style : Lug Style
Station Butterfly Valve Operator : Gear Wheel
Flow Meter Type : Mag Meter (Growsmart)
PRV Size (in) : 4
System Relief Piped To : Wet Well
Column Material of Construction : Mild Steel

Comments

Station Enclosure - None

Drop Pipes - None

Pumps

Sustain Pump

Pump Specification

Watertronics Part Number : 46-09-4009
Manufacturer : Goulds
Manufacturer Model Number : 65GS50
Pump Type : Sub
Efficiency :
TDH : 280FT
Flow : 45GPM
TPL : 158.375"
Stages : 16
RPM : 3600
Discharge Size : 2IN
Impeller Trim :
Check Valve Above Skid : Yes
Comments : Pump Column is 304SS

Motor Specificaiton

Watertronics Part Number : 48-31-0504
Manufacturer : Franklin
Manufacturer Model Number : 2343278802G
Horse Power : 5
Efficiency :
Enclosure : Submersible
Frame : NEMA-4
Motor FLA : 8.2
Coupling Type :
Motor Coupling Size :
Winding Heaters : No
Motor Temp Switch : No
Vibration Sensor : No

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Pumps

Motor Efficiency for All Motors : Premium

Motor Elevation Derate : N/A

Jockey Pump (#1)

Jockey Sequence : 8

Temperature Sensor at Intake : N/A

Pump Specification

Watertronics Part Number : NP-11-2937
Manufacturer : Integrity
Manufacturer Model Number : 7ILH
Pump Type : VT
Efficiency : 76%
TDH : 295 FT
Flow : 125GPM
TPL : 152.375"
Stages : 10
RPM : 1800
Discharge Size : 4IN
Impeller Trim : 5.705IN
Comments : 7IML-12 Stage

Motor Specification

Watertronics Part Number : 48-29-0017
Manufacturer : Nidec
Manufacturer Model Number : FG70
Horse Power : 15
Efficiency : 93%
Enclosure : WP1
Frame : 254TP
Motor FLA : 36
Coupling Type : Self-Release Coupling
Motor Coupling Size : 1IN
Winding Heaters : Yes
Motor Temp Switch : No
Vibration Sensor : No

Main Pump (#2)

Temperature Sensor at Intake : N/A

Pump Specification

Watertronics Part Number : NP-11-2936
Manufacturer : Integrity
Manufacturer Model Number : 12ICH
Pump Type : VT
Efficiency : 83.1%
TDH : 295 FT
Flow : 600GPM
TPL : 152.38"
Stages : 4
RPM : 1800
Discharge Size : 6IN
Impeller Trim : 9.125IN
Comments : 12ICH-4 Stage

Motor Specification

Watertronics Part Number : 48-29-0055
Manufacturer : Nidec
Manufacturer Model Number : DT-95
Horse Power : 60
Efficiency : 95%
Enclosure : WP1
Frame : 364TP
Motor FLA : 68
Coupling Type : Self-Release Coupling
Motor Coupling Size : 1-1/4"
Winding Heaters : Yes
Motor Temp Switch : No
Vibration Sensor : No

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Main Pump (#3)

Temperature Sensor at Intake : N/A

Pump Specification

Watertronics Part Number : NP-11-2936
Manufacturer : Integrity
Manufacturer Model Number : 12ICH
Pump Type : VT
Efficiency : 83.1%
TDH : 295 FT
Flow : 600GPM
TPL : 152.38"
Stages : 4
RPM : 1800
Discharge Size : 6IN
Impeller Trim : 9.125IN
Comments : 12ICH-4 Stage

Motor Specification

Watertronics Part Number : 48-29-0055
Manufacturer : Nidec
Manufacturer Model Number : DT-95
Horse Power : 60
Efficiency : 95%
Enclosure : WP1
Frame : 364TP
Motor FLA : 68
Coupling Type : Self-Release Coupling
Motor Coupling Size : 1-1/4"
Winding Heaters : Yes
Motor Temp Switch : No
Vibration Sensor : No

Main Pump (#4)

Temperature Sensor at Intake : N/A

Pump Specification

Watertronics Part Number : NP-11-2936
Manufacturer : Integrity
Manufacturer Model Number : 12ICH
Pump Type : VT
Efficiency : 83.1%
TDH : 295 FT
Flow : 600GPM
TPL : 152.38"
Stages : 4
RPM : 1800
Discharge Size : 6IN
Impeller Trim : 9.125IN
Comments : 12ICH-4 Stage

Motor Specification

Watertronics Part Number : 48-29-0055
Manufacturer : Nidec
Manufacturer Model Number : DT-95
Horse Power : 60
Efficiency : 95%
Enclosure : WP1
Frame : 364TP
Motor FLA : 68
Coupling Type : Self-Release Coupling
Motor Coupling Size : 1-1/4"
Winding Heaters : Yes
Motor Temp Switch : No
Vibration Sensor : No

Additional Pump Details

Discharge Head Material (Mains) : Ductile Iron
Check Valve Design (Mains) : Silent Slam
ISO Valve Design (Mains) : EBV

Shaft Material (Mains) : 416SS
Discharge Head Seal (Mains) : Mechanical Seal

Pump Comments

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Level Controls

Level Sensing Method : Level Float (normally closed) & Transducer

Location : Wet Well

Number of Set Points : 1

Pond Fill Logic (2)

Fill Source	Type	HOA
Pond 1	Contact	No
Pond 2	Contact	No

Leve Control Comments

Filtration

Inlet Filter

Inlet Flume Size (OD) :

Filter Flume Type / Schedule : 24" SDR35

Filter Manufacturer : Watertronics

Type : Stainless Box Screen

Model : SBS-36

Inlet Screen Size :

Comments : Shipped Early

WYE Strainer

WYE Strainer Manufacturer : Metraflex

Type/Size : Autoflush WYE (LPD) - 10" w/ 1/8" Perforated Screen

Comments :

Filtration Comments

Flush line gets 3" flanged drop pipe - 36" bury

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Model Number : VTV-1-60x3/15V/5ST-460-3-1800-120

Project Name: Lakewood Country Club

Salesperson: Mike Green

Electrical Spec

Pump ID	HP	RPM	GPM	HTR	XL	VFD	SS	EBV	Temp SW	Pump Temp Sensor
Sustain	5	3600	46	No	Yes	None	No	No	No	No
Jockey (#1)	15	1800	125	Yes	Yes	1	No	Yes	No	No
Main (#2)	60	1800	600	Yes	Yes	1	No	Yes	No	No
Main (#3)	60	1800	600	Yes	Yes	1	No	Yes	No	No
Main (#4)	60	1800	600	Yes	Yes	1	No	Yes	No	No

Mechanical Reference

Inlet Pressure : N/A	Inlet Pressure Transducer : N/A
Discharge Flow : 1800	Flow Meter Type : Mag Meter (Growsmart)
Discharge Pressure : 120	Discharge Size : 8IN

Options

Control System : Sigma w/ Touchscreen	Disconnect Type : Fused
Display : 7" Color	Panel Location : On Skid
Surge Protection : Standard	Dead Front : No
Opto Coupler : Yes	NEMA Rating : 3R
Opto Isolator : Yes	Station Heating : No
Lighted HOAs : Yes	Panel Leg Height : Not Set
ETMs on Panel : No	Window Kit : No
Panel Lighting : Interior Only	VFD Viewing Window : Yes
Power Phase Monitor Protection : Yes	Enclosure Cooling : Heat Exchanger Left
Individual Motor Disconnects : No	Chemical Treatment Relay : Yes
Accessory Junction Box : No	Remote Disable Relay : Yes
Fertigation Run Relay : Yes	Electrical Enclosure Size : 75X72X16

Option Comments

Power Phase Monitor Protection, Remote Disable Relay, Fertigation Run Relay

Station Enclosure - None

Level Controls - None

Level Sensing Method : Level Float (normally closed) & Transducer	Location : Wet Well
Number of Set Points : 1	

Fill Source	Type	HOA
Pond 1	Contact	No
Pond 2	Contact	No

Level Control Comments

Fertigation - None

Auxiliary Power - None

Power Conditioning - None

Mechanical Engineer: Andy Casper

Controls Engineer: Cory Wolgast

Electrical Engineer: Sandy McElhinny

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Telemetry

Type : WV Cloud Provider : 4G Verizon Software and Version : 5 Year Standard
Latitude : 41 26'56.42" N Longitude : 81 57'26..06" W

WYE Strainer

WYE Strainer Manufacturer : Metraflex Type Size : Autoflush WYE (LPD) - 10"

Sequence of Operations

ALARMS: Low pressure, high pressure, low wet well level, phase/voltage and VFD fault (when applicable) are standard alarms. Please list additional alarms below:

Alarm 1 : N/A

Alarm 2 : N/A

Alarm 3 : N/A

Alarm 4 : N/A

Sequence of Operations Comments

Standard (pressure drop start / flow drop retire)

Additional Items Comments