fishbeck
Engineers | Architects | Scientists | Constructors

1515 Arboretum Drive, SE
Grand Rapids, Michigan 49546

616.575.3824 | fishbeck.com

July 8, 2025
Project No. 210262

Adam Smith
City Manager
City of Grand Ledge
310 Greenwood Street
Grand Ledge, MI 48837

Change Order 15 – City of Grand Ledge Iron Removal Plant, Description, and Impact

The following is a description of the items for Change Order 15 of the Grand Ledge Iron Removal Plant Project:

Contract Modifications from Change Order:

- Original Contract Price – $17,338,148.00
- Contract Price following previous Change Orders – $17,446,063.03
- Modification to Contract Price from Change Order 15 – $9,375.39
- Modification to Contract Price from all Change Orders – $117,290.42
- Revised Contract Price with current Change Order – $17,455,438.42
- Change Order as percentage of original Contract Price (without Value Engineering) – 1.94%

Table 1 – Change Order 15 Monetary Impact Breakdown

Item No.	Item Description	Contract Modification	Cumulative Contract Price
1	Adjustment of Allowance	($4,076.03)	$17,441,987.00
2	Move HMO Skid Pump Suction Valves	$2,371.83	$17,444,358.83
3	Exhaust Fan Switch Outside of Chlorine Gas Room	$9,228.84	$17,453,587.67
4	Move Thermostat in Blower Room	$1,555.35	$17,455,143.02
5	Paint Pipe in Existing Well House	$295.40	$17,455,438.42

Narrative Description of Change Order

Change Order 15 includes the adjustment of allowances in the project to the final number, moving of the HMO skid suction valves to a more accessible location, the installation of a switch outside the chlorine gas room to allow the large exhaust fan to operate, the moving of a thermostat in the blower room to avoid the excess heat off the air compressor, and a change proposal to provide additional painting of pipe and valves in Wellhouse 6.

The items are as follows:

ITEM NO. 1

- Adjustment in Allowances
  - As part of the project, a number of cash allowances were specified for items where the cost could not be established during design or bidding. Of these items, the special inspections allowance was increased $6,094.10 to account for the special inspection agency's costs. The electrical installation allowance, which is paid to the electrical utility for their work on the project, was reduced by $5,000. The natural gas allowance, which is paid to the natural gas utility for their work on the project has been reduced by $4,800. Finally, the Security allowance was reduced by $8.28. Altogether, this results in a deduction of $4,076.03 from the contract price.

ITEM NO. 2

- Move HMO skid pump suction valves
  - The HMO metering and transfer pumps came prefabricated on skids that were then installed in place by the Mechanical Contractor. Access to the suction valves for the pumps were difficult to access once the skids were installed. This item pays the Mechanical contractor to install replacement valves in a more accessible area.

ITEM NO. 3

- Exhaust Fan Switch Outside of Chlorine Gas Storage Room
  - As part of Ten States Standards, the Chlorine Gas Storage Room is recommended to have a large fan, sized at 60 air changes per hour, with a switch outside of the room to actuate it. The intention is for plant staff to turn on this fan to evacuate the space before entering. In addition, there is a second smaller fan which is intended to satisfy code requirements to provide one air change per hour at all times. The electrical plans showed a switch for the smaller fan rather than the larger fan. This item will rectify this issue. Given this is rework for the project (the switch for the smaller fan was already installed), Fishbeck will cover the cost of installing a switch for the larger fan.

ITEM NO. 4

- Move Thermostat in Blower Room
  - The thermostat that controls the exhaust fan in the blower room was located near the air compressor for the facility. The waste heat from the air compressor is causing the thermostat to read too high. This item moves the thermostat away from the compressor. Given this is rework for the project (the switch for the smaller fan was already installed), Fishbeck will cover the cost of installing a switch for the larger fan.

ITEM NO. 5

- Paint Additional Pipe in Existing Well House
  - Some work on the piping was done in Well House 6 to add a blowoff to the facility. While the painter was deployed painting the new piping and valving, City staff requested additional painting of the pipe throughout the well house. This was a cost-effective way to complete some operation and maintenance work given the painter was already deployed with the correct paint.

Impact to Project

The items within this Change Order add cost to the project but are recommended as being necessary to the project. It adds a net total of $9,375.39 to the project. Fishbeck is offering to pay for $10,784.19 of the items in this Change Order as this portion is for rework, which would not have been necessary to the project if not omitted in the initial Contract Documents. This will result in a net decrease in total project cost to the City of $1,408.80.

If you have any questions or require additional information, please contact me at 616.464.3825 or cmccorkle@fishbeck.com.

Sincerely,

Colin G. McCorkle, PE
Senior Water and Wastewater Engineer

Attachments
By email
Copy: David Pawley – City of Grand Ledge
Kurt Ristow – City of Grand Ledge
Dave Baar, PE – Fishbeck
John Willemin, PE – Fishbeck

City of Grand Ledge
Iron Removal Plant
Project Number 210262

Change Order No. 15

Date: July 7, 2025

CHANGE ORDER
PAGE 1 OF 2

CONTRACT FOR:	City of Grand Ledge Iron Removal Plant
OWNER:	City of Grand Ledge 310 Greenwood Street Grand Ledge, MI 48837
CONTRACTOR:	RK Davis, Inc. 4457 40th Street, SE Kentwood, MI 49512
ENGINEER:	Fishbeck 1515 Arboretum Drive, SE Grand Rapids, MI 49546
ATTACHMENTS:	Bulletins 14 Pricing Responses, Change Proposal for Allowance Adjustments, and Change Proposal for Additional Well 6 Pipe Painting

Contractor shall indicate approval of Change Order through signing of this document and returning to Engineer. Engineer will forward to Owner, who shall indicate approval of Change Order through signing of this document and returning to Engineer. Upon receipt of fully executed (all signatures) Change Order, Engineer will distribute to all parties.

YOU ARE DIRECTED TO MAKE THE FOLLOWING CHANGES IN THE CONTRACT DOCUMENTS:

The following items changing the contract documents were chosen by the Owner for execution:

ITEM NO. 1: Adjustment in Allowances
Section: 01 21 13 – Cash Allowances

A. Special Inspections adjusted by $5,732.25 to allow for services of special inspection on building structure.
B. Reduce allowance for electrical improvements to $0.00
C. Reduce allowance for natural gas improvements to $200.00
D. Reduce allowance for Security Improvements to $9,991.72

DEDUCT: $4,076.03

ITEM NO. 2: Move HMO skid pump suction valves
Sheet: P301 – Sections

A. Move HMO pump suction valves to accessible location. Reuse previously installed ball valves, and piping as applicable.

ADD: $2,371.83

ITEM NO. 3: Exhaust Fan Switch Outside of Chlorine Gas Storage Room
Sheet: E201 – Power Plans
E503 – Wiring Diagrams

A. Provide switch outside exterior door to control Exhaust Fan EF-110-1.

ADD: $9,228.84

ITEM NO. 4: Move Thermostat in Blower Room

A. Move thermostat in Blower Room away from compressors to avoid waste heat.

ADD: $1,555.35

ITEM NO. 5: Paint Additional Pipe in Existing Well House

A. Additional painting in Well House 6.

ADD: $295.40

CHANGE ORDER
PAGE 2 OF 2

CHANGE IN CONTRACT PRICE:	CHANGE IN CONTRACT TIMES: N/A
Original Contract Price:	Original Contract time: March 7, 2023
	Substantial Completion: January 16, 2025
$17,338,148.00	Ready for final payment: February 17, 2025
Net Change from Previous Change Orders: 1-14	Net change from previous Change Orders:
$107,915.03	0 Days
Contract Price prior to this Change Order:	Contract Time prior to this Change Order:
	Substantial Completion: January 30, 2025
$17,446,063.03	Ready for final payment: March 3, 2025
Net increase of this Change Order:	Net change of this Change Order:
$9,375.39	0 Days
Contract Price with all approved Change Orders:	Contract Time with all approved Change Orders:
	Substantial Completion: January 30, 2025
$17,455,438.42	Ready for final payment: March 3, 2025

RECOMMENDED	APPROVED	APPROVED
By: _____ Engineer	By: _____ Contractor	By: _____ Owner
Colin G. McCorkle, PE Senior Water/Wastewater Engineer	Peter C. Elzinga, P.E., Project Manager Name and Title of Signatory	_____ Name and Title of Signatory
Date: July 7, 2025	Date: July 7, 2025	Date: _____

END OF CHANGE ORDER

BULLETIN
PAGE 1 OF 3

CONTRACT FOR:	City of Grand Ledge Iron Removal Plant
OWNER:	City of Grand Ledge, 310 Greenwood Street, Grand Ledge, MI 48837
CONTRACTOR:	RK Davis, Inc., 4457 40th Street, SE, Kentwood, MI 49512
ENGINEER:	Fishbeck, 1515 Arboretum Drive, SE, Grand Rapids, MI 49546
DRAWING REVISION NO.:	B14 – Revised
ISSUED HEREWITH:	
SPECIFICATION SECTIONS:	None
SHEETS:	P003, P102, P103, P202, P301, M601, E201, E503
DISTRIBUTION:	City of Grand Ledge – Kurt Ristow RK Davis, Inc – Peter Elzinga, Rob Kaliniak Fishbeck – Ariana Wade, PE, John Willemin, PE

The items below are being considered as possible changes to the Contract Documents for this Project. Contractor is requested to submit changes in cost, if any, for each item and indicate whether it is an addition to or deduction from the Contract Price. Costs are requested as lump sums unless otherwise noted as a unit cost. Include all labor, materials, overhead and profit, trades, subcontractors, and related costs. After reviewing the effects of those changes in the Work, Owner may issue a Change Order specifying which changes are to be incorporated in the Work, if any.

This Bulletin is not a Change Order and is not to be deemed authorization to proceed with the changes listed.

Additional work or materials, where proposed, shall meet the requirements of the Contract Documents, except where noted.

Contractor is responsible for notifying Engineer, in writing, concerning any revision or clarification which causes a change in the Contract Documents, but not specifically mentioned as a cost item in this Bulletin.

Return one completed and signed copy of the Bulletin to Engineer on or before the due date noted above.

Each proposed change has been described briefly with additional information provided concerning detailed changes required for the major trades concerned. Only one total cost figure has been requested for each item on the Bulletin; however, a complete breakdown is required for each item as supporting documentation. This will allow Owner to more easily evaluate the proposed cost changes. Each Bulletin item is an all-inclusive item and may concern work from several trades or Subcontractors. It is Contractor's responsibility to ensure that all work for each item has been included in the total cost figure provided to Owner.

ITEM NO. 1:
Sheet: P003 – Schedules and Details (reissued)
P103 – Flow Schematic and P&ID (reissued)
P202 – Enlarged Plans and Isometric (reissued)
P301 – Sections (reissued)
E201 – Power Plans (reissued)
Section: 40 90 00 – Instrumentation and Control for Process Systems (not reissued)

A. Provide 1/2-inch electrically actuated stainless steel ball valve (437). Model No.: Valworx 5602 with Battery Spring Return system, fail open.
B. Install 1/2-inch threadolet on air scour main, isolation ball valve, and the actuated valve 437, as indicated on Drawings.
C. Add Valve 437 to Valve Schedule.
D. Provide conduit and wiring and update existing PLC programming.
E. Revise Specification Section 40 90 00 Paragraph 1.7 J. Filter System, 2. c. to include the following:

10. Normally-open actuated ball valve (437) closes.

F. Revise Specification Section 40 90 00 Paragraph 1.7 K. Airwash Blower System to include the following:

5. The airwash header shall be equipped with a 1/2-inch drain and normally-open actuated ball valve (437). Valve 437 shall be called to close (ZCC-437) when either BL-1 or BL-2 is called to run. When the blowers, BL-1 or BL-2, stop running, valve shall be called to open (ZCO-437).

(ADD)/DEDUCT: $ 12,844.52

ITEM NO. 2:
Sheet: P301 – Sections (reissued)

A. Move HMO pump suction valves to accessible location. Reuse previously installed ball valves, and piping as applicable.

(ADD)/DEDUCT: $ 2,371.83

ITEM NO. 3:
Sheet: P003 – Schedules and Details (reissued)
P102 – Flow Schematic and P&ID (reissued)
P202 – Enlarged Plans and Isometric (reissued)
P301 – Sections (reissued)
E201 – Power Plans (reissued)
E503 – Wiring Diagrams (reissued)
Section: 40 90 00 – Instrumentation and Control for Process Systems (not reissued)

A. Provide magnetic drive sample pump (SP-1). Model No.: Iwaki MD-30RZ
B. Install sample pump SP-1 and associated raw water sample piping.
C. Provide conduit and wiring and update existing PLC programming.
D. Replace Specification Section 40 90 00 Paragraph 1.7 E. 1. with the following:

1. A magnetic drive sample pump (SP-1) shall deliver a continuous raw water sample (Sample Point SP-1) to the WTP laboratory when wells are in operation. Pump SP-1 shall have a HAND-OFF-AUTO (HOA) selector switch mounted at the manual motor starter in the treatment plant. Control and operation of SP-1 shall be as follows:
   a. Pump operation shall be as detailed on the pump motor wiring diagram when the HOA switch is placed in HAND position.
   b. In AUTO mode under SCADA control, control and operation of SP-1 shall be as follows:
      1) The pump shall receive a call to start (CS-105) when any well pump supplying the treatment plant (Well Nos. 2, 6, 7 or 8) is in operation.
      2) The pump shall receive a call to stop when no well pump supplying the treatment plant (Well Nos. 2, 6, 7 or 8) is in operation.
      3) Pump operation shall be able to be controlled via the SCADA system. It shall be possible to start and stop (CS-105) the pump from a SCADA screen. Remote control status shall be indicated on the SCADA Screen (HS-105).

(ADD)/DEDUCT: $ 22,422.37

ITEM NO. 4:
Sheet: E201 – Power Plans (reissued)
E503 – Wiring Diagrams (reissued)

A. Provide switch outside exterior door to control Exhaust Fan EF-110-1.

(ADD)/DEDUCT: $ 9,228.84

ITEM NO. 5:
Sheet: M601 – First Floor Mechanical Piping Plan (reissued)

A. Move thermostat in Blower Room away from compressors to avoid heat source.

(ADD)/DEDUCT: $ 1,555.35

ITEM NO. 6:
Sheet: M601 – First Floor Mechanical Piping Plan (reissued)

A. Relocate AHU display interface from base of AHU to first floor.
B. Provide temperature sensor as was noted on bid set plans.
C. Add NEMA 3R enclosure around display for protection.

(ADD)/DEDUCT: $ 3,847.45

Contractor: RK Davis, Inc

Signature

Peter C. Elzinga, P.E., Project Manager

Name and Title of Signatory

06/19/2025

Date

END OF BULLETIN

RK Davis, Inc.

Grand Ledge Iron Removal Plant

Change Proposal - Bulletin 14 Item 2 Move HMO Pump

Prepared By: PE

June 19, 2025

RK Davis Job# C730

Item	Description	Labor Hours	Labor Rate	Labor Total	Materials	Tools/Equip	Subcontract	Line Item Total
1	Frankin Holwerda Company			-			2,231.00	2,231.00
				-				-
				-				-
				-				-
				-				-
				-				-
				-				-
				-				-
				-				-
				-				-
	Subtotals			**-**	**-**	**-**	**2,231.00**	**2,231.00**

Notes:

Self Perform Work		-
Mark up on Self Perform Work:	15%	-
Subcontractor Work		2,231.00
Mark up on Subcontractor Work:	5%	111.55
Subtotal		2,342.55
Bonds & Insurances	1.25%	29.28
Total Quote		**2,371.83**
Additional Time Required	**0**	**Days**

RK Davis, Inc.

Grand Ledge Iron Removal Plant

Change Proposal - Bulletin 14 Item 3 Provide Sample Line Booster

Prepared By: PE

June 19, 2025

RK Davis Job# C730

Item	Description	Labor Hours	Labor Rate	Labor Total	Materials	Tools/Equip	Subcontract	Line Item Total
1	Dave Cole Decorators			-			500.00	500.00
2	Frankin Holwerda Company			-			2,207.00	2,207.00
3	Centennial Electric			-			18,384.00	18,384.00
				-				-
				-				-
				-				-
				-				-
				-				-
				-	22,422.37			22,422.37
				-				-
	Subtotals			**-**	**22,422.37**	**-**	**21,091.00**	**43,513.37**

Notes:

Self Perform Work		22,422.37
Mark up on Self Perform Work:	15%	3,363.36
Subcontractor Work		21,091.00
Mark up on Subcontractor Work:	5%	1,054.55
Subtotal		47,931.28
Bonds & Insurances	1.25%	599.14
Total Quote		**48,530.42**
Additional Time Required	**0**	**Days**

RK Davis, Inc.

Grand Ledge Iron Removal Plant

Change Proposal - Bulletin 14 Item 4 Provide Outside Switch for Exhaust Fan EF-110-1

Prepared By: PE

June 19, 2025

RK Davis Job# C730

Item	Description	Labor Hours	Labor Rate	Labor Total	Materials	Tools/Equip	Subcontract	Line Item Total
1	RK Davis, Inc.	8.0		-	75.00	165.00		240.00
2	Centennial Electric			-			8,418.00	8,418.00
				-				-
				-				-
				-				-
				-				-
				-				-
				-				-
				-				-
				-				-
	Subtotals			**-**	**75.00**	**165.00**	**8,418.00**	**8,658.00**

Notes:

Self Perform Work		240.00
Mark up on Self Perform Work:	15%	36.00
Subcontractor Work		8,418.00
Mark up on Subcontractor Work:	5%	420.90
Subtotal		9,114.90
Bonds & Insurances	1.25%	113.94
Total Quote		**9,228.84**
Additional Time Required	**0**	**Days**

RK Davis, Inc.

Grand Ledge Iron Removal Plant

Change Proposal - Bulletin 14 Item 5 Relocate Thermostat in Blower Room

Prepared By: PE

June 19, 2025

RK Davis Job# C730

Item	Description	Labor Hours	Labor Rate	Labor Total	Materials	Tools/Equip	Subcontract	Line Item Total
1	RK Davis	4.0	62.00	248.00	25.00			273.00
2	Centennial Electric			-			1,164.00	1,164.00
				-				-
				-				-
				-				-
				-				-
				-				-
				-				-
				-				-
				-				-
	Subtotals			**248.00**	**25.00**	**-**	**1,164.00**	**1,437.00**

Notes:

Self Perform Work		273.00
Mark up on Self Perform Work:	15%	40.95
Subcontractor Work		1,164.00
Mark up on Subcontractor Work:	5%	58.20
Subtotal		1,536.15
Bonds & Insurances	1.25%	19.20
Total Quote		**1,555.35**
Additional Time Required	**0**	**Days**

RK Davis, Inc.

Grand Ledge Iron Removal Plant

Change Proposal - Bulletin 14 Item 6 - Relocate AHU Display Interface

Prepared By: PE

June 19, 2025

RK Davis Job# C730

Item	Description	Labor Hours	Labor Rate	Labor Total	Materials	Tools/Equip	Subcontract	Line Item Total
1	Frankin Holwerda Company			-			3,619.00	3,619.00
				-				-
				-				-
				-				-
				-	3,847.40			3,847.40
				-				-
				-				-
				-				-
				-				-
				-				-
	Subtotals			**-**	**3,847.40**	**-**	**3,619.00**	**7,466.40**

Notes:

Self Perform Work		3,847.40
Mark up on Self Perform Work:	15%	577.11
Subcontractor Work		3,619.00
Mark up on Subcontractor Work:	5%	180.95
Subtotal		8,224.46
Bonds & Insurances	1.25%	102.81
Total Quote		**8,327.27**
Additional Time Required	**0**	**Days**

Peter Elzinga

From: Daniel Oosterink <dano@dcd-inc.com>
Sent: Friday, May 30, 2025 11:56 AM
To: Peter Elzinga
Subject: RE: Grand Ledge Iron Removal Plant Bulletin 14R1

Peter,

I would think there would be some touch-up for me on this.
You should probably plug in an allowance of $1,000.00 for a days' worth of painting.

Dan Oosterink, LEED® AP
Vice President
Dave Cole Decorators, Inc.
325 Martindale St.
Sparta, MI 49345
(616)887-9465
(616)887-9464 (fax)
(616)813-6660 (cell)

From: Peter Elzinga <pelzinga@rkdavis.us>
Sent: Tuesday, May 20, 2025 3:34 PM
To: 'Tracy Sears' <tracys@centennial-electric.com>; Tim Karr <timk@centennial-electric.com>; Doug Holt <doug@franklinholwerda.com>; rfisher@perceptivecontrols.com; Daniel Oosterink <dano@dcd-inc.com>
Cc: Rob Kaliniak <rkaliniak@rkdavis.us>; Mike Flook <mflook@rkdavis.us>
Subject: Grand Ledge Iron Removal Plant Bulletin 14R1

Please see attached Bulletin 14 Revised. Please review and provide a price quote for your affected work. Thank you.

Peter C. Elzinga, P.E.
RK Davis, Inc.
4457 40th St SE
Kentwood MI 49512
(616) 456-0059
pelzinga@rkdavis.us

City of Grand Ledge
Iron Removal Plant
Project Number 210262

Revised Bulletin No. 14
Date: May 20, 2025
Due Date: June 3, 2025

BULLETIN
PAGE 1 OF 3

CONTRACT FOR:	City of Grand Ledge Iron Removal Plant
OWNER:	City of Grand Ledge, 310 Greenwood Street, Grand Ledge, MI 48837
CONTRACTOR:	RK Davis, Inc., 4457 40th Street, SE, Kentwood, MI 49512
ENGINEER:	Fishbeck, 1515 Arboretum Drive, SE, Grand Rapids, MI 49546
DRAWING REVISION NO.:	B14 – Revised
ISSUED HEREWITH:	
SPECIFICATION SECTIONS:	None
SHEETS:	P003, P102, P103, P202, P301, M601, E201, E503
DISTRIBUTION:	City of Grand Ledge – Kurt Rlstow RK Davis, Inc – Peter Elzinga, Rob Kaliniak Fishbeck – Ariana Wade, PE, John Willemin, PE

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ITEM NO. 1:
Sheet: P003 – Schedules and Details (reissued)
P103 – Flow Schematic and P&ID (reissued)
P202 – Enlarged Plans and Isometric (reissued)
P301 – Sections (reissued)
E201 – Power Plans (reissued)
Section: 40 90 00 – Instrumentation and Control for Process Systems (not reissued)

A. Provide 1/2-inch electrically actuated stainless steel ball valve (437). Model No.: Valworx 5602 with Battery Spring Return system, fail open.
B. Install 1/2-inch threadolet on air scour main, isolation ball valve, and the actuated valve 437, as indicated on Drawings.
C. Add Valve 437 to Valve Schedule.
D. Provide conduit and wiring and update existing PLC programming.
E. Revise Specification Section 40 90 00 Paragraph 1.7 J. Filter System, 2. c. to include the following:

10. Normally-open actuated ball valve (437) closes.

F. Revise Specification Section 40 90 00 Paragraph 1.7 K. Airwash Blower System to include the following:

5. The airwash header shall be equipped with a 1/2-inch drain and normally-open actuated ball valve (437). Valve 437 shall be called to close (ZCC-437) when either BL-1 or BL-2 is called to run. When the blowers, BL-1 or BL-2, stop running, valve shall be called to open (ZCO-437).

ADD/DEDUCT: $ 3030⁻

ITEM NO. 2:
Sheet: P301 – Sections (reissued)

A. Move HMO pump suction valves to accessible location. Reuse previously installed ball valves, and piping as applicable.

ADD/DEDUCT: $ 2231⁻

ITEM NO. 3:
Sheet: P003 – Schedules and Details (reissued)
P102 – Flow Schematic and P&ID (reissued)
P202 – Enlarged Plans and Isometric (reissued)
P301 – Sections (reissued)
E201 – Power Plans (reissued)
E503 – Wiring Diagrams (reissued)
Section: 40 90 00 – Instrumentation and Control for Process Systems (not reissued)

A. Provide magnetic drive sample pump (SP-1). Model No.: Iwaki MD-30RZ
B. Install sample pump SP-1 and associated raw water sample piping.
C. Provide conduit and wiring and update existing PLC programming.
D. Replace Specification Section 40 90 00 Paragraph 1.7 E. 1. with the following:

1. A magnetic drive sample pump (SP-1) shall deliver a continuous raw water sample (Sample Point SP-1) to the WTP laboratory when wells are in operation. Pump SP-1 shall have a HAND-OFF-AUTO (HOA) selector switch mounted at the manual motor starter in the treatment plant. Control and operation of SP-1 shall be as follows:
   a. Pump operation shall be as detailed on the pump motor wiring diagram when the HOA switch is placed in HAND position.
   b. In AUTO mode under SCADA control, control and operation of SP-1 shall be as follows:
      1) The pump shall receive a call to start (CS-105) when any well pump supplying the treatment plant (Well Nos. 2, 6, 7 or 8) is in operation.
      2) The pump shall receive a call to stop when no well pump supplying the treatment plant (Well Nos. 2, 6, 7 or 8) is in operation.
      3) Pump operation shall be able to be controlled via the SCADA system. It shall be possible to start and stop (CS-105) the pump from a SCADA screen. Remote control status shall be indicated on the SCADA Screen (HS-105).

ADD/DEDUCT: $ 2207⁻

ITEM NO. 4:
Sheet: E201 – Power Plans (reissued)
E503 – Wiring Diagrams (reissued)

A. Provide switch outside exterior door to control Exhaust Fan EF-110-1.

ADD/DEDUCT: $ By Others

City of Grand Ledge
Iron Removal Plant
Project Number 210262

Revised Bulletin No. 14
Date: May 20, 2025
Due Date: June 3, 2025

BULLETIN
PAGE 3 OF 3

ITEM NO. 5:
Sheet: M601 – First Floor Mechanical Piping Plan (reissued)

A. Move thermostat in Blower Room away from compressors to avoid heat source.

ADD/DEDUCT: $ By others

ITEM NO. 6:
Sheet: M601 – First Floor Mechanical Piping Plan (reissued)

A. Relocate AHU display interface from base of AHU to first floor.
B. Provide temperature sensor as was noted on bid set plans.
C. Add NEMA 3R enclosure around display for protection.

ADD/DEDUCT: $ 3,619

Contractor:

RHC
Signature

D Reynolds
Name and Title of Signatory

5/27/25
Date

END OF BULLETIN

PROJECT NAME: Grand Ledge Iron Removal

QUOTED TO: RK Davis

DESCRIPTION: Bulletin 14 Item 1
Add Electric ball valve

DATE: 05/22/25

FHC JOB # 23-0010-11

FHC X# 16-1

SM X#

DESCRIPTION	MATERIAL W/OUT TAX	SUBS	FAB	FIELD	DETAILING
1/2" Valworx SS electric ball valve #560204H	$510.20			8	
Valworx battery backup 5610E BSR-NC	$422.76				
Tap 4" SS BF	$250.00		4		
1/2" copper pipe and fittings	$95.00				
No electrical					
No paint					
No insulation					
SUB TOTALS	$1,277.96	$0.00	4.0	8.0	0.0

TOOLING	$32.96
EQUIPMENT RENTAL	$16.00
PROJECT MANAGEMENT HOURS	1.0
FIELD FOREMAN	0.4
FAB SHOP FOREMAN	0.0
DELIVERY	0.0

	HOURS	RATE	COST	MARK UP	PRICE
MATERIALS including sales tax			$1,354.64	$203.20	$1,557.83
SUBCONTRACTORS			$0.00	$0.00	$0.00
SHOP JOURNEYMAN	4.0	$91.55	$366.20	$54.93	$421.13
FABRICATION SHOP FEE	0.0	$91.55	$0.00	$0.00	$0.00
FIELD JOURNEYMAN	8.0	$91.55	$732.40	$109.86	$842.26
DETAILING	0.0	$75.00	$0.00	$0.00	$0.00
TOOLING			$32.96	$4.94	$37.90
EQUIPMENT RENTAL			$16.00	$2.40	$18.40
PROJECT MANAGEMENT	1.0	$94.55	$94.55	$14.18	$108.73
FIELD FOREMAN	0.4	$94.55	$37.82	$5.67	$43.49
FAB SHOP FOREMAN	0.0	$94.55	$0.00	$0.00	$0.00
DELIVERY	0.0	$65.00	$0.00	$0.00	$0.00
		TOTAL THIS QUOTATION:			$3,030
				Time extension required (days)	1

Note: No LD's
No Tariffs

Quoted by: *dr*

Date: 5/22/2025

PROJECT NAME: Grand Ledge Iron Removal

QUOTED TO: RK Davis

DESCRIPTION: Bulletin 14 Item 2
Relocate HMO pipe

DATE: 05/22/25

FHC JOB # 23-0010-11

FHC X# 16-2

SM X#

DESCRIPTION	MATERIAL W/OUT TAX	SUBS	FAB	FIELD	DETAILING
3/4 PVC ball valves x 4	$160.00			16	
3/4" S80 pvc pipe 20'	$20.00				
3/4" PVC cplg x 4	$15.00				
No electrical					
No paint					
No insulation					
SUB TOTALS	$195.00	$0.00	0.0	16.0	0.0
TOOLING					$65.92
EQUIPMENT RENTAL					$32.00
PROJECT MANAGEMENT HOURS					1.0
FIELD FOREMAN					0.8
FAB SHOP FOREMAN					0.0
DELIVERY					0.0

	HOURS	RATE	COST	MARK UP	PRICE
MATERIALS including sales tax			$206.70	$31.01	$237.71
SUBCONTRACTORS			$0.00	$0.00	$0.00
SHOP JOURNEYMAN	0.0	$91.55	$0.00	$0.00	$0.00
FABRICATION SHOP FEE	0.0	$91.55	$0.00	$0.00	$0.00
FIELD JOURNEYMAN	16.0	$91.55	$1,464.80	$219.72	$1,684.52
DETAILING	0.0	$75.00	$0.00	$0.00	$0.00
TOOLING			$65.92	$9.89	$75.80
EQUIPMENT RENTAL			$32.00	$4.80	$36.80
PROJECT MANAGEMENT	1.0	$94.55	$94.55	$14.18	$108.73
FIELD FOREMAN	0.8	$94.55	$75.64	$11.35	$86.99
FAB SHOP FOREMAN	0.0	$94.55	$0.00	$0.00	$0.00
DELIVERY	0.0	$65.00	$0.00	$0.00	$0.00
		TOTAL THIS QUOTATION:			$2,231
				Time extension required (days)	1

Note: No LD's
Note: No Tariffs

Quoted by: *dr*

Date: 5/22/2025

PROJECT NAME: Grand Ledge Iron Removal

QUOTED TO: RK Davis

DESCRIPTION: Bulletin 14 Item 3
Sample pump

DATE: 05/22/25

FHC JOB # 23-0010-11

FHC X# 16-3

SM X#

DESCRIPTION	MATERIAL W/OUT TAX	SUBS	FAB	FIELD	DETAILING
Iwakaki sample pump	$444.00			8	
freight	$50.00				
shelf bluebook	$309.52				
freight	$50.00				
Misc pipe and ftgs	$95.00				
No electrical					
No paint					
No insulation					
SUB TOTALS	$948.52	$0.00	0.0	8.0	0.0
TOOLING					$32.96
EQUIPMENT RENTAL					$16.00
PROJECT MANAGEMENT HOURS					1.0
FIELD FOREMAN					0.4
FAB SHOP FOREMAN					0.0
DELIVERY					0.0

	HOURS	RATE	COST	MARK UP	PRICE
MATERIALS including sales tax			$1,005.43	$150.81	$1,156.25
SUBCONTRACTORS			$0.00	$0.00	$0.00
SHOP JOURNEYMAN	0.0	$91.55	$0.00	$0.00	$0.00
FABRICATION SHOP FEE	0.0	$91.55	$0.00	$0.00	$0.00
FIELD JOURNEYMAN	8.0	$91.55	$732.40	$109.86	$842.26
DETAILING	0.0	$75.00	$0.00	$0.00	$0.00
TOOLING			$32.96	$4.94	$37.90
EQUIPMENT RENTAL			$16.00	$2.40	$18.40
PROJECT MANAGEMENT	1.0	$94.55	$94.55	$14.18	$108.73
FIELD FOREMAN	0.4	$94.55	$37.82	$5.67	$43.49
FAB SHOP FOREMAN	0.0	$94.55	$0.00	$0.00	$0.00
DELIVERY	0.0	$65.00	$0.00	$0.00	$0.00
		TOTAL THIS QUOTATION:			**$2,207**
				Time extension required (days)	1

Note: No LD's
No Tariffs

Quoted by: *dr*

Date: 5/22/2025

PROJECT NAME: Grand Ledge Iron Removal

QUOTED TO: RK Davis

DESCRIPTION: Bulletin 14 Item 6
Relocate AHU display

DATE: 05/27/25

FHC JOB # 23-0010-11

FHC X# 16

SM X#

DESCRIPTION	MATERIAL W/OUT TAX	SUBS	FAB	FIELD	DETAILING
Relocate AHU Display - Trane		$3,265.00			
No paint					
No insulation					
SUB TOTALS	$0.00	$3,265.00	0.0	0.0	0.0

TOOLING	$0.00
EQUIPMENT RENTAL	$0.00
PROJECT MANAGEMENT HOURS	1.0
FIELD FOREMAN	0.0
FAB SHOP FOREMAN	0.0
DELIVERY	0.0

	HOURS	RATE	COST	MARK UP	PRICE
MATERIALS including sales tax			$0.00	$0.00	$0.00
SUBCONTRACTORS			$3,265.00	$244.88	$3,509.88
SHOP JOURNEYMAN	0.0	$91.55	$0.00	$0.00	$0.00
FABRICATION SHOP FEE	0.0	$91.55	$0.00	$0.00	$0.00
FIELD JOURNEYMAN	0.0	$91.55	$0.00	$0.00	$0.00
DETAILING	0.0	$75.00	$0.00	$0.00	$0.00
TOOLING			$0.00	$0.00	$0.00
EQUIPMENT RENTAL			$0.00	$0.00	$0.00
PROJECT MANAGEMENT	1.0	$94.55	$94.55	$14.18	$108.73
FIELD FOREMAN	0.0	$94.55	$0.00	$0.00	$0.00
FAB SHOP FOREMAN	0.0	$94.55	$0.00	$0.00	$0.00
DELIVERY	0.0	$65.00	$0.00	$0.00	$0.00
		TOTAL THIS QUOTATION:			$3,619
				Time extension required (days)	0

Note: No LD's

Quoted by: *dr*

Date: 5/27/2025

QUOTE

DOCUMENT: Order Quote

CUST #: 90001304

INVOICE DATE	QUOTE NO.	
	3624678q	
P.O. DATE	P.O. NO.	PAGE #
05/14/25		1

BILL TO:

FRANKLIN HOLWERDA CO
PO BOX 9100

WYOMING, MI 49519

SHIP TO:

FRANKLIN HOLWERDA CO
2509 29TH STREET

WYOMING, MI 49519

CORRESPONDENCE TO:

SUNSOURCE-FLUID PROCESS
4797 CAMPUS DR

KALAMAZOO, MI 49008

INSTRUCTIONS:

STAGING AREA:

SHIP POINT	VIA	SCHEDULED DATE	TERMS
SUNSOURCE-FLUID PROCESS EQUIP	UPS Ground		net 30

THANK YOU FOR THE OPPORTUNITY TO PRESENT THE FOLLOWING QUOTE

LINE NO.	PRODUCT AND DESCRIPTION	QUANTITY ORDERED		QUANTITY U/M	UNIT PRICE	PRICE U/M	SHIP DATE	AMOUNT (NET)
	ATTN: DAVE REYNHOT PHONE: 616-538-3231 REF: IWAKI AMERICA MD-30RZ MAGNETIC DRIVE PUMP .							
1	MD-30RZ-115NL01 IWAKI MAG DRIVE PUMP 5/8" HOSE BARB, 115 VAC IWAKI AMERICA MD-30RZ-115NL01 POLYPROPYLENE, MAGNETIC DRIVE, CENTRIFUGAL PUMP, WITH HIGH HEAD IMPELLER, 5/8" HOSE CONNECTIONS, AND 1/16 HP, 3150 RPM, TENV, UL LISTED MOTOR, 115/1/60. -SHIPMENT: 3-4 WEEKS ARO. ---------- ACCT MGR: PARKER SCOTT, CELL 616-729-3188	1		each	429.00	each	06/16/25	429.00
1 Lines	Qty Quoted Total	1		Total				429.00
				Frt/Hndlg/Tax to be added at Shipping				
				Order Total				429.00

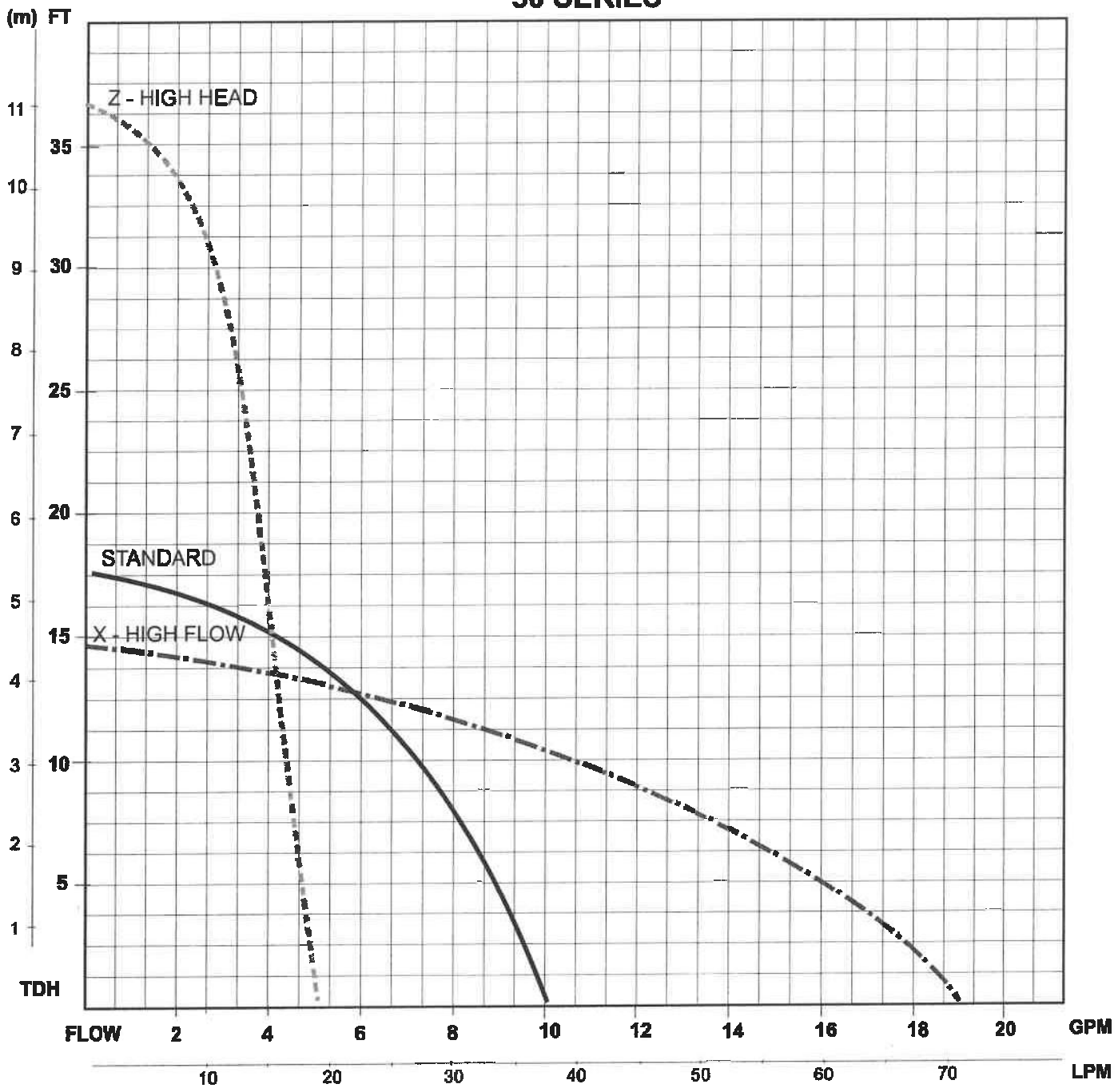
Inc. 3½% 15

444.00

Continued

IWAKI AMERICA

WMD/MD
30 SERIES

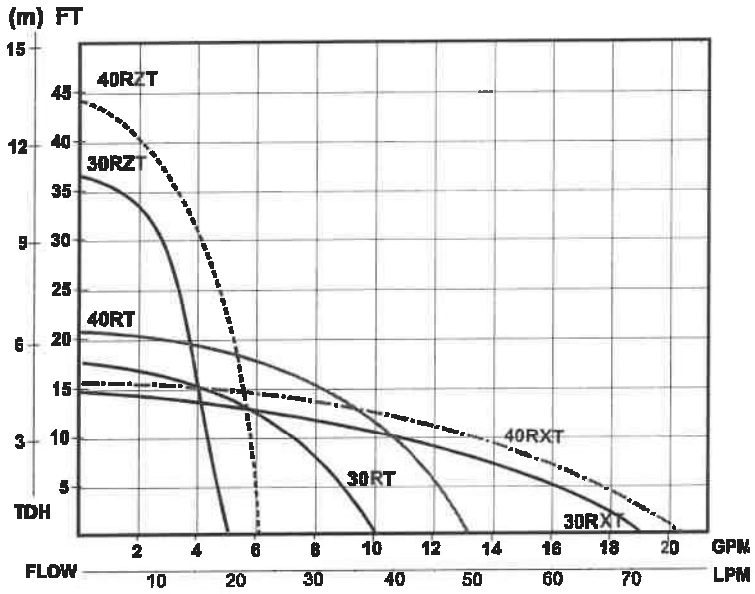


Curve No: IP20276.B	Date: 9/5/2012	Approved:

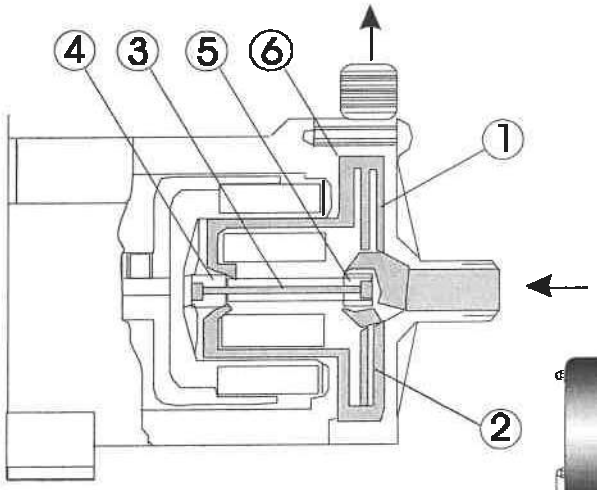
5 BOYNTON ROAD HOPPING BROOK PARK HOLLISTON, MA 01746 USA
TEL: 508-429-1440 FAX: 508-429-1386 www.iwakiamerica.com

IWAKI AMERICA

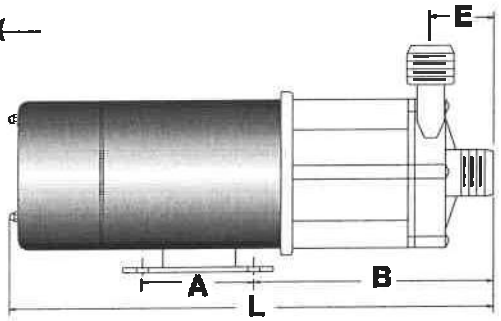
MD-30/40

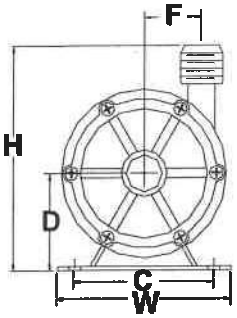


- **Twin bearing system handles thrust loads, extends service life**
- **Hollow rotating / Internal cooling circuit reduces bearing temperature**
- **Compact / Quiet energy efficient design**
- **Few moving parts for easy maintenance**
- **Other sizes, voltages & materials available**



Part	Material
1 Casing	GFRPP
2 Impeller	GFRPP
3 Spindle	Ceramic
4 Bearing	PTFE
5 Thrust ring	Ceramic or PE
6 O-ring	FKM or EPDM





Dimensions (Inches) and Specifications

Model	W	H	L	A	B	C	D	E	F
MD-30R(T)	4.72	5.12	9.76	1.57	5.87	3.94	2.36	1.89	1.22
MD-30RX(T)	4.72	5.51	10.00	1.57	6.10	3.94	2.36	1.97	40+
MD-30RZ(T)	4.72	5.12	9.05	1.57	5.16	3.94	2.36	1.56	1.53
MD-40R(T)	4.72	5.12	9.85	1.57	5.87	3.94	2.36	1.89	1.22
MD-40RX(T)	4.72	5.51	10.08	1.57	6.10	3.94	2.36	1.97	43+

+ Degrees offset from vertical

Model	CONNECTIONS		MOTOR		AMPS 115V	MAX FLOW GPM	MAX HEAD FT	MAX SYS PRESSURE PSI	S.G.	WEIGHT LBS
	HOSE	NPTM	OUTPUT (HP)	SPEED (RPM)						
MD-30R(T)	¾	¾	1/16	3150	1.0	10.0	17.7	11.6	1.3	7.7
MD-30RX(T)	1	1	1/16	3150	1.1	19.0	13.5	8.54	1.1	8.82
MD-30RZ(T)	5/8	¾	1/16	3100	1.1	4.50	36.1	24.18	1.0	7.70
MD-40R(T)	¾	¾	1/12	3200	1.3	13.7	21.3	14.22	1.1	8.60
MD-40RX(T)	1	1	1/12	3200	1.2	22.4	15.4	9.95	1.1	8.60

IF20401.E 9/5/2012 5 BOYNTON ROAD HOPPING BROOK PARK HOLLISTON, MA 01746-1446 USA
TEL: 508-429-1440 FAX: 508-429-1386 ON THE INTERNET: WWW.IWAKIAMERICA.COM

IWAKI

MD
series

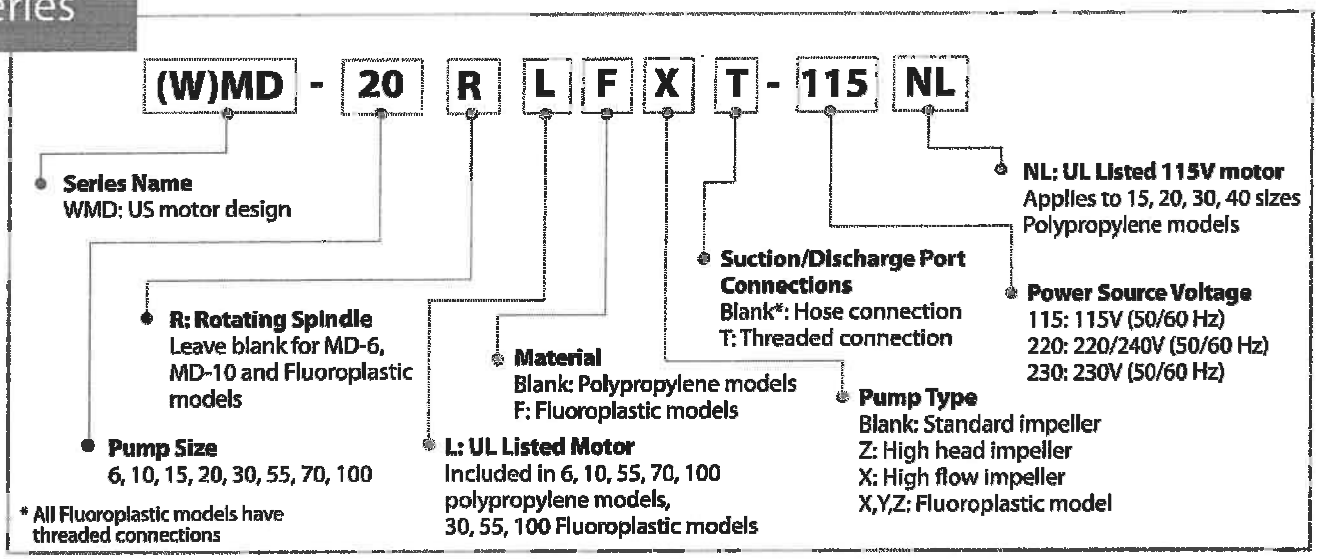
Magnetic Drive Pump

Iwaki America, the world leader in small magnetically coupled centrifugal pump technology, offers the premier line of non-metallic centrifugal pumps.

- **Excellent chemical compatibility** - Manufactured from the most corrosion-resistant materials including Polypropylene, ETFE, SiC, or Alumina Ceramic to handle your most aggressive chemicals and high purity applications.
- **Motor options** - Choice of premium, high efficiency motors in AC and DC voltages.
- **Multiple impeller options** - Choose from enclosed, open or semi-open impellers to ensure a perfect hydraulic fit for your application.
- **Dual bearing system** - Leads to longer pump life.
- **Rotating spindle** - Reduces friction and heat generation.
- **Dynamically balanced drive magnet** - Reduces unbalanced loads on the motor shaft leading to longer motor life.
- **Unique internal cooling loop** - Allows for lower pump operating temperature.
- **Impeller balance holes** - Minimize axial thrust for better hydraulics.

MD series

Model Code



Specifications

* Varies with motor

Polypropylene Model	Connections		Motor Output (HP)	Motor Speed (RPM)	Current (Amps)	Max Flow (GPM)	Max Head (Ft)	Max Sys. Pressure (PSI)	Specific Gravity	Weight (Lbs)
	Hose	NPT								
MD-6	1/2	---	1/250	3100	0.25	2.3	4.5	2.80	1.2	1.8
MD-10	1/2	---	1/125	2900	0.40	3.1	6.8	4.30	1.1	1.6
MD-15R(T)	1/2	1/2	1/75	3100	0.29	5.0	11.1	7.20	1.3	3.5
WMD-15R(T)	1/2	1/2	1/38	3100	0.82	5.0	11.1	7.20	1.3	6.0
MD-20RT(T)	5/8	3/4	1/38	3100	0.48	8.2	14.1	9.95	1.1	4.4
WMD-20R(T)	5/8	3/4	1/38	3100	0.48	8.2	14.1	9.95	1.1	7.0
MD-20RX(T)	1	1	1/38	3100	0.50	13.7	8.2	5.69	1.3	4.4
WMD-20RX	1	1	1/38	3100	0.50	13.7	8.2	5.69	1.3	7.0
MD-20RZ	5/8	3/4	1/38	3100	0.53	2.9	22.6	14.22	1.1	4.4
WMD-20RZ	5/8	3/4	1/38	3100	0.53	2.9	22.6	14.22	1.1	7.0
MD-30R	3/4	3/4	1/16	3150	0.80	10.0	17.7	11.60	1.3	7.7
WMD-30R	3/4	3/4	1/16	3150	1.00	10.0	17.7	11.60	1.3	9.0
MD-30RX	1	1	1/16	3150	1.10	19.0	13.5	8.54	1.1	7.7
WMD-30RX	1	1	1/16	3150	1.00	19.0	13.5	8.54	1.1	9.0
MD-30RZ	5/8	3/4	1/16	3150	1.10	4.5	36.1	24.18	1.0	7.7
WMD-30RZ	5/8	3/4	1/16	3150	1.00	4.5	36.1	24.20	1.0	9.0
MD-40R	3/4	3/4	1/12	3200	1.30	13.7	21.3	14.22	1.1	8.6
WMD-40R	3/4	3/4	1/12	3200	1.90	13.7	21.3	14.22	1.1	10.0
MD-40RX	1	1	1/12	3200	1.20	22.4	15.4	9.95	1.1	8.6
WMD-40RX	1	1	1/12	3200	1.90	22.4	15.4	9.95	1.1	10.0
MD-55R	1	1	1/8	3400	1.60	18.4	26.9	17.06	1.2	10.1
MD-70R	1	1	1/4	3400	2.80	25.6	31.8	21.33	1.0	13.2
MD-70RZ	3/4	3/4	2/7	3400	3.80	11.4	66.6	42.70	1.0	13.2
MD-100R	1	1	1/3	3300	3.40	35.6	39.0	25.60	1.2	18.7
WMD-100R	1	1	1/3	3400	*	35.6	39.0	25.60	1.2	*

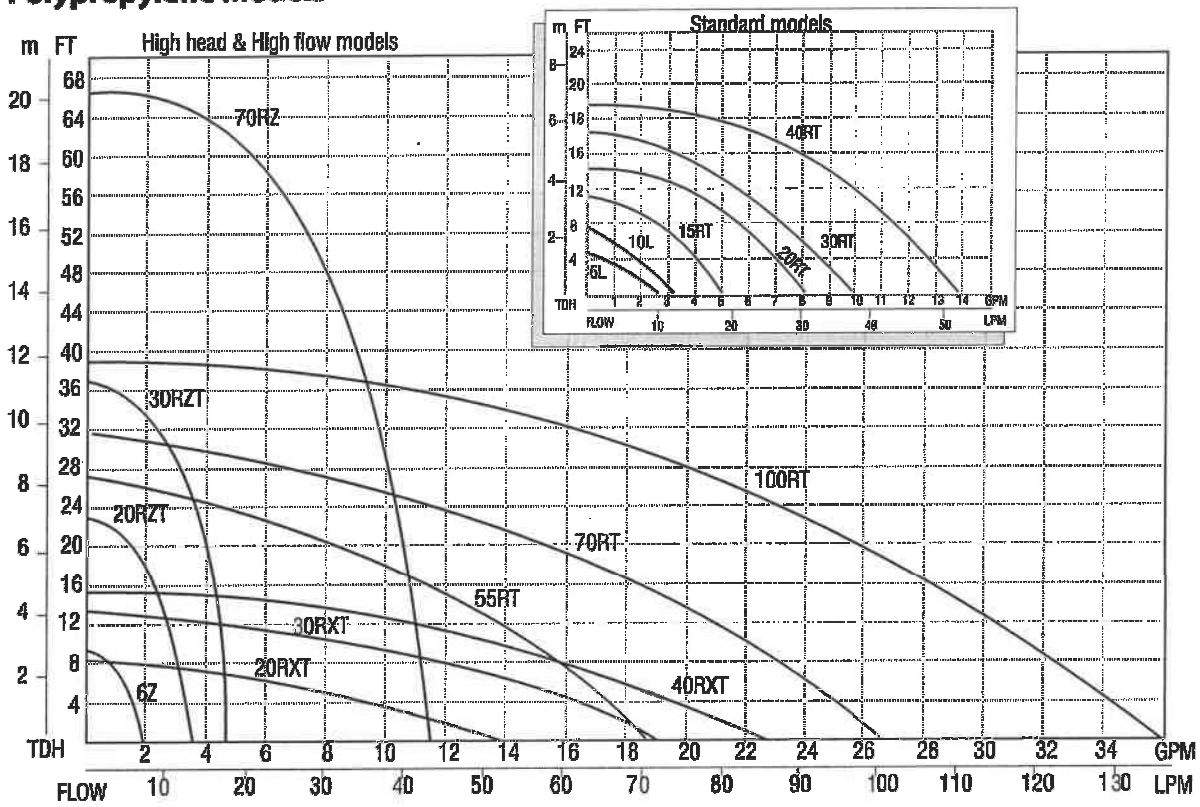
Fluoroplastic Model	Connections		Motor Output (HP)	Motor Speed (RPM)	Current (Amps)	Max Flow (GPM)	Max Head (Ft)	Max Sys. Pressure (PSI)	Specific Gravity	Weight (Lbs)
	Hose	NPT								
WMD-30FX	—	1/2	1/16	3200	0.9	3.2	35.2	17.0	1.3 (1.5)	9.0
WMD-30FY	—	1/2	1/16	3200	0.9	3.2	26.0	17.0	1.5 (1.8)	9.0
WMD-30FZ	—	1/2	1/16	3200	0.9	2.6	24.0	21.3	1.9 (2.1)	9.0
MD-55FY	—	1	1/8	3300	1.9	17.1	25.6	21.3	1.3 (1.5)	11.9
MD-55FZ	---	1	1/8	3300	1.6	13.0	19.0	31.2	2.0 (2.2)	11.9
WMD-100FY	—	1	1/3	3450	*	36.0	38.0	31.2	1.3 (1.6)	*
MD-100FY	---	1	1/3	3300	3.4	35.7	37.7	31.2	1.3 (1.6)	18.7
WMD-100FZ	---	1	1/3	3450	*	28.0	27.2	31.2	1.9 (2.2)	*
MD-100FZ	---	1	1/3	3300	3.4	28.0	27.2	31.2	1.9 (2.2)	18.7

Pumps with "T" in the model number have NPT connections, models without "T" have hose barb connections.
GFRPP pumps rated to 80°C max. liquid temperature.
Metric threads available upon request. Please call Iwaki America for details.

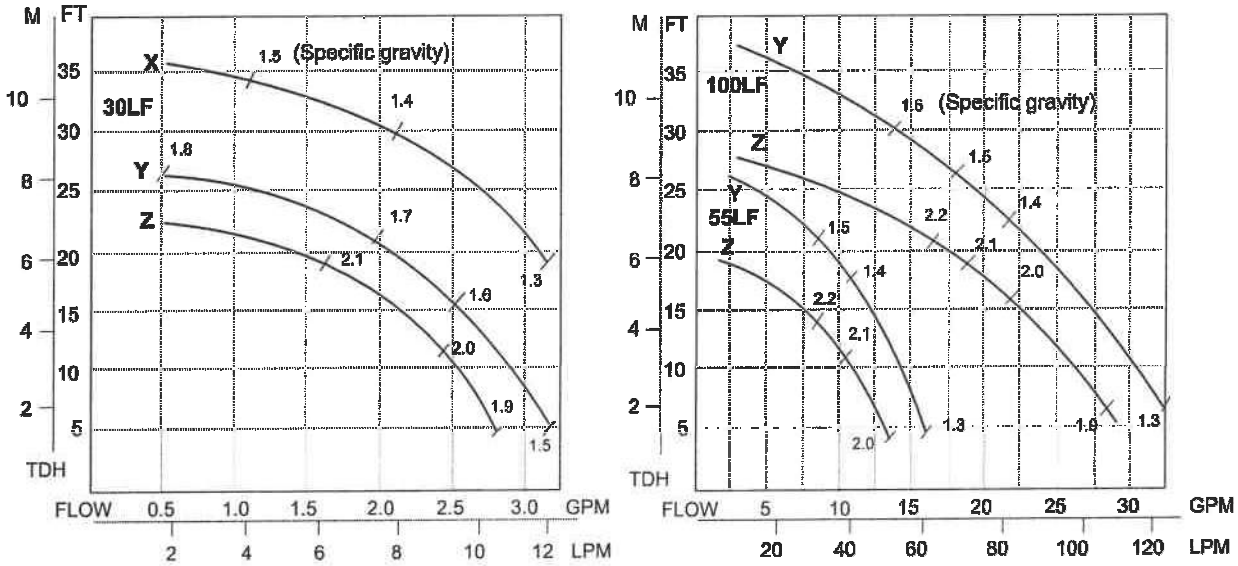
Consult factory for available DC motor options.

MD series

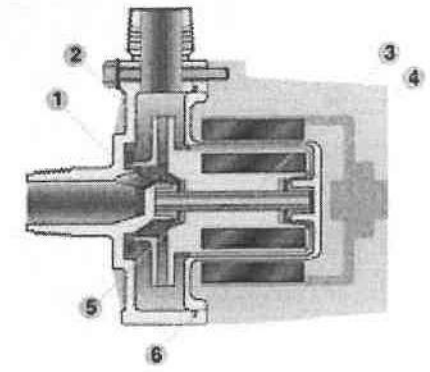
Polypropylene Models



Fluoroplastic Models



Wet End Materials

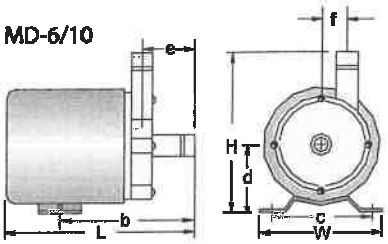


	Part	Polypropylene	Fluoroplastic
1	Casing	GFRPP	CFRETFE
2	Impeller	GFRPP or CFRPP	CFRETFE
3	Spindle	Alumina Ceramic	Silicon carbide
4	Bearing	PTFE or PPS	Silicon carbide
5	Thrust ring	Alumina Ceramic or PE	Silicon carbide
6	O-ring*	FKM or EPDM	FKM

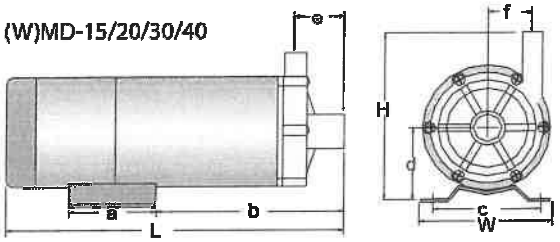
* Other materials available upon request

Dimensions

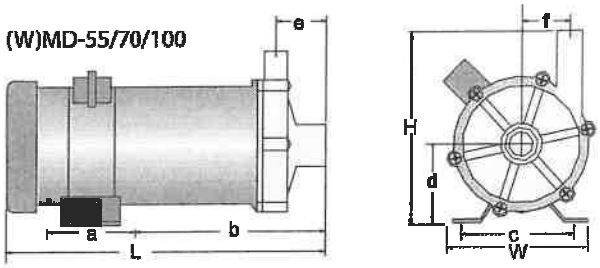
MD-6/10



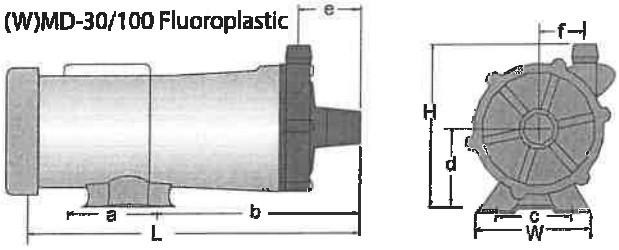
(W)MD-15/20/30/40



(W)MD-55/70/100



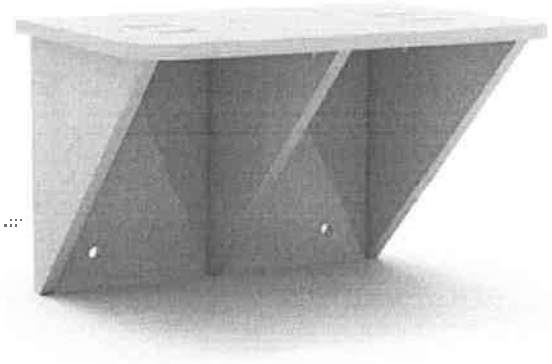
(W)MD-30/100 Fluoroplastic



Model	Connections		W	H	L	a	b	c	d	e	f
	Hose	NPTM									
POLYPROPYLENE (MD-115V shown)											
MD-6/10	1/2	---	2.91	3.62	4.09	1.18	2.87	2.36	1.77	1.22	0.67
WMD-15R(T)	1/2	1/2	3.50	4.26	9.46	2.37	4.15	2.50	1.94	1.52	0.85
MD-15R(T)	1/2	1/2	3.74	4.39	7.05	1.97	4.59	3.35	2.17	1.52	0.85
WMD-20R(T)	5/8	3/4	3.50	4.35	9.70	2.37	4.39	2.50	1.94	1.30	1.12
MD-20R(T)	5/8	3/4	4.17	4.19	7.99	1.73	4.05	3.54	1.77	1.52	1.12
WMD-20RX(T)	1	1	3.50	4.95	10.37	2.37	5.06	2.50	1.94	1.83	40°
MD-20RX(T)	1	1	4.17	4.75	8.66	1.73	4.45	3.54	1.74	1.83	40°
WMD-20RZ(T)	5/8	3/4	3.50	4.70	9.98	2.37	4.67	2.50	1.94	1.56	1.52
MD-20RZ(T)	5/8	3/4	4.17	4.92	8.31	1.73	4.17	3.54	2.17	1.56	1.52
WMD-30R(T)	3/4	3/4	3.50	4.70	11.65	2.37	5.72	2.50	1.94	1.89	1.22
MD-30R(T)	3/4	3/4	4.72	5.12	9.76	1.57	5.87	3.94	2.36	1.89	1.22
WMD-30RX(T)	1	1	3.50	5.09	11.89	2.37	5.96	2.50	1.94	1.97	40°
MD-30RX(T)	1	1	4.72	5.51	10.00	1.57	6.10	3.94	2.36	1.97	40°
WMD-30RZ(T)	5/8	3/4	3.50	4.70	10.97	2.37	5.04	2.50	1.94	1.56	1.53
MD-30RZ(T)	5/8	3/4	4.72	5.12	9.05	1.57	5.16	3.94	2.36	1.56	1.53
WMD-40R(T)	3/4	3/4	4.38	4.84	11.34	3.09	6.66	3.37	2.08	1.89	1.22
MD-40R(T)	3/4	3/4	4.72	5.12	9.85	1.57	5.87	3.94	2.36	1.89	1.22
WMD-40RX(T)	1	1	4.38	5.23	11.30	3.09	7.02	3.37	2.08	1.97	43°
MD-40RX(T)	1	1	4.72	5.51	10.08	1.57	6.10	3.94	2.36	1.97	43°
MD-55R (T)	1	1	4.72	6.10	10.77	1.57	7.05	3.94	2.36	2.42	1.57
MD-70R(T)	1	1	5.63	6.11	10.18	2.76	5.71	4.25	2.56	2.07	1.70
MD-70RZ (T)	3/4	3/4	5.63	6.50	9.72	2.76	5.24	4.25	2.56	1.65	1.87
MD-100R(T)	1	1	6.14	6.89	12.67	2.76	6.38	4.33	2.95	2.55	1.71
WMD-100R(T)	1	1	*	7.44	*	3.00	10.43	4.87	3.50	2.55	1.71
FLUOROPLASTIC (MD-115V shown)											
WMD-30F(X,Y,Z)	---	1/2	3.50	4.69	11.00	2.37	5.07	2.50	1.94	1.54	1.52
MD-30(X,Y,Z)	---	1/2	4.72	5.12	9.09	1.57	6.77	3.94	2.36	1.53	1.52
MD-55F (Y,Z)	---	1	4.72	6.11	10.53	1.57	6.61	3.94	2.56	2.30	1.56
WMD-100F (Y,Z)	---	1	*	6.80	*	3.00	12.05	4.88	3.56	2.55	1.71
MD-100F (Y,Z)	---	1	6.14	6.89	12.67	2.76	6.38	4.33	2.95	2.55	1.71

* Varies with motor manufacturer

‹ Back to overview



+ Hover to zoom | Click to enlarge

Blue-White® Pump Shelf, HDPE, 150-lb Capacity, KIT-PSM

Item number	30530
Net weight	2
Condition	New

$309.52 price per each excl. tax

In Stock

− 1 +

Add to cart ›

Add to Order Template

♥ Add to wish list

Need Help? Call 800-548-1234

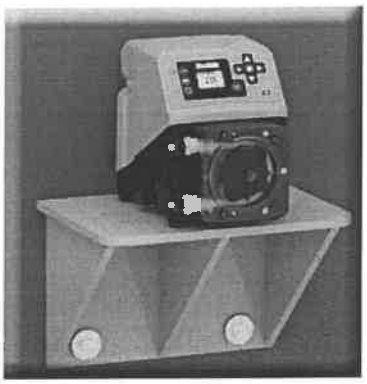
The optional pump shelf allows easy wall mounting of all A2, A3 and A4 Blue-White pumps and improved ergonomics. Shelves are made of chemical-resistant HDPE and include four 3/8"Dia x 2-3/4"L stainless steel anchor bolts.

Documents

› Specification

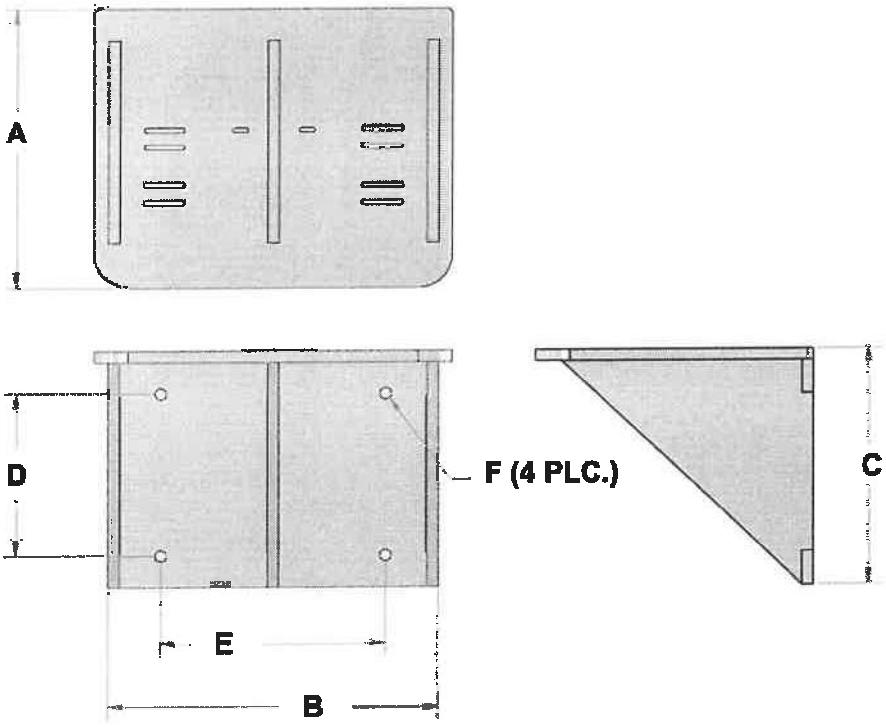
Engineering Specifications

General Operation	
Compatible with Pump Models	
	A1, A2, A3, A4 Flex-Flo® Peristaltic Pumps
	M1, M2, M3, M4 Flex-Flo® Peristaltic Pumps
	C2 , C3 , CD1, CD3 Chem-Feed® Diaphragm Pumps
	MC2 , MC3 , MD1, MD3 Chem-Feed® Diaphragm Pumps
Max Capacity	150 lbs (68 kg)
Mounting Hardware	Four (4) 3/8" dia. x 2-3/4" long stainless steel anchor bolts

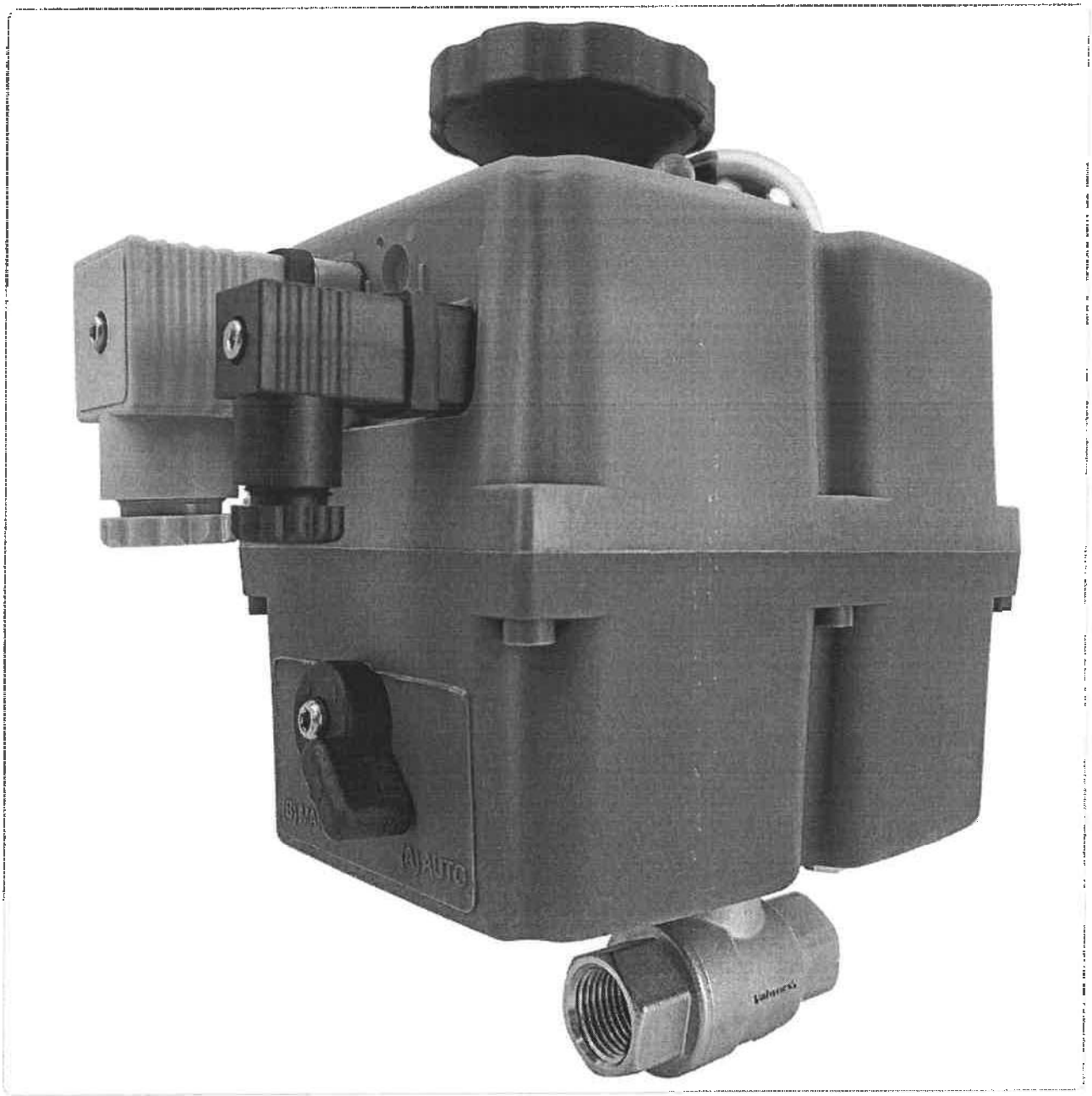


Dimensions

Dim	Inch	cm
A	12.38"	31.4
B	14.75"	37.5
C	10.47"	26.6
D	7.20"	18.3
E	10.10"	25.7
F	0.5" dia.	1.3 dia.



5300 Business Drive, Huntington Beach, CA 92649
TEL 714-893-8529 | FAX 714-894-9492 | www.blue-white.com | sales@blue-white.com






1/2" Electric Actuated Stainless Ball Valve 24-240V

Stock #: 560204H
Series: 5602

List Price: $637.75

Price: **$510.20**

Buy 3 or more for **$459.18** each

Usually Ships: **Same Day**

Quantity: - 1 +

ADD TO CART BUY NOW

Description | Specifications | Accessories | Data Sheets | CAD | Video | Repair Parts

Valworx 560204H electric actuated 2-piece stainless steel ball valves for on-off control of water, air, oil, and other media compatible with the materials of construction. Standard unit is power-to-open and power to close, stays in last known position with loss of power. On receipt of a continuous voltage signal, the motor runs and via a flat gear system rotates the ball valve. The motor is stopped by internal cams striking micro switches. On receipt of a reversing continuous signal, the motor turns in the opposite direction reversing the valve position. High temperature valve mounting kit available for extended temperature range or wall mounting applications.

Ball Valve Standard Features

- 1000 PSI working pressure (see P/T chart)
- Direct mounting valve per ISO5211
- Full port for unrestricted flow
- 316 stainless steel body, ball and stem
- Blow out proof stem
- RTFE ball seats extend cycle life
- Triple PTFE/Viton stem seal design, live loaded

Electric Actuator Standard Features

- Highly visible LED light gives continuous actuator status indication
- Multi-voltage capable with auto-voltage sensing
- Electronic torque limiter - protects against valve jams
- Anti-condensation heater
- Manual override with visual valve position indicator
- All electrical connections via external DIN plugs (included) - no need to remove cover
- Two dry contact limit switches used to confirm open/closed valve position
- Rugged IP67 weatherproof housing, CE marked

Options (see Accessories tab)

Commonly Purchased Together

1/2" Stainless Spring Check Valve, NPT

Stock #: 549804

Hover to zoom

5610E BSR-NC Failsafe Battery Kit - Installed

Stock #: 561104E
Series: 5611

List Price: $528.45

Price: **$422.76**

Buy 3 or more for **$380.48** each

Usually Ships: **Same Day**

Quantity: - 1 +

ADD TO CART BUY NOW

Description Data Sheets Video

The 561104E BSR-Spring Return Fail Closed kit is available as a factory pre-installed option for Valworx 5610 & 5615 series electric actuators. The BSR kit will work with both on-off models and actuators with DPS positioners. The battery failsafe system provides an alternative source of power to drive the actuator to the Normally Closed position in the event of an external power failure. The industrial quality battery is constantly trickle charged during normal operation to assure maximum charge when required. The battery kit is installed under the actuator cover. No separate modules or boxes are required.

The installed BSR kit will provide enough power to move the actuator/valve to a failsafe position with loss of external power. The actuator operates in the normal power open and power close mode while external power is available. Internal circuitry monitors the incoming main power and automatically switches within a few seconds to the battery backup with loss of external power. The battery will then provide enough power to move the actuator to a failsafe position.

In the normal mode of operation, an LED status light located on top of the actuator cover will be continuously lit. With a loss of power, the LED status light will blink slowly. When external power is restored, conditional that the actuator control signal remained unchanged, the actuator will reset to the position it saw at the time of the main power failure.

In many applications, the BSR battery spring return function tends to be a very economical option when compared to the alternate true mechanical spring return actuator. Valworx actuators with the BSR option are much smaller, lighter and less expensive.

The BSR option returns the valve to a fail-safe position in the event of a loss of electrical power. It is not intended and should not be used for normal operation.

Commonly Purchased Together

Electric Actuator 177 in.lbs (20Nm), 24-240V

Stock #: 561020E
Usually Ships: Same Day
Price: $415.66

Quantity: 1

Add to Cart

Electric Actuator 752 in.lbs (85Nm), 24-240V

Stock #: 561085E
Usually Ships: Same Day
Price: $909.14

Quantity: 1

Add to Cart

5/22/2025

Project: Grand Ledge Iron Removal
Location: Grand Ledge, MI
Project Number: 22-1082C

Control Solutions, Inc. to provide labor and materials necessary to provide temperature controls per Bulletin #14 Item #6.

Scope of Work:

- Relocation of zone temperature sensor. Replacement of Trane provided zone temperature sensor with a blank plate 10k Type II sensor considering conditions of the space the sensor will be located in.

- Relocation of Trane display down to proposed location on the first floor. NEMA 3R panel included to protect display.

Including:

- Pertinent Input/Output Sensors
- Installation Labor and Material
- System Start-up and Check-out of CSI provided Controls

Exclusions:
The following are not included in the scope of this proposal unless otherwise agreed upon:

- All low voltage installation labor and material by Control Solutions, Inc.
- No allowance to provide fire, smoke or control dampers unless otherwise noted.
- No allowance to install control valves or dampers.
- No allowance to provide VFDs unless otherwise noted.
- This proposal may be withdrawn/adjusted if not accepted within 60 days of proposal date.

Total Sum to Complete the Scope of Work Above: $3,265.00

This price includes all materials, labor, and equipment necessary for the successful completion of the project.

Terms and Conditions:

- All work will be performed in compliance with local building codes and industry standards.

- Control Solutions Inc. will not be held liable for delays caused by unforeseen circumstances, such as material shortages or site inaccessibility.
- A change order will be issued for any modifications to the scope of work.

Authorization:
By signing below, the client authorizes Control Solutions Inc. to proceed with the scope of work as outlined in this proposal.

Client Name: _____

Signature: _____

Date: _____

Submitted by:
Justin Tickle
Project Manager
Control Solutions, Inc.

O 517.543.9900
F 517.543.9911

CENTENNIAL ELECTRIC
COMMERCIAL INDUSTRIAL

PO BOX 490
POTTERVILLE,MI 48876

6/6/2025

RK Davis
ATTN: Peter Elzinga
4457 40th St SE
Kentwood, MI 49512

RE: Grand Ledge Iron Removal Plant- Bulletin 14 Quote

Dear Peter Elzinga,

Centennial Electric, LLC, is pleased to quote you for the above-mentioned project based off the Bulletin 14 summary and drawings issued 5/20/2025. We have included the following:

Item No. 1

Included
- Conduit and wire from CP-FILT3 to Valve 437
- (2) Interposing relays inside of CP-FILT3
- Update existing PLC programming
- Bonds

Excluded
- Overtime and shift premiums
- Painting and patching of block
- Painting of conduit

Total $8,289.00

Item No. 3

Included
- Conduit and wire from CP-Main to CP-FILT1 ahead of UPS for SP-1 power
- Provide and install manual motor starter for SP-1
- Conduit and wire from CP-FILT1 to SP-1
- Update PLC programming for new sample pump SP-1
- Bonds

Excluded
- Overtime and shift premiums
- Painting and patching of block
- Painting of conduit

Total $18,384.00

O 517.543.9900
F 517.543.9911

CENTENNIAL ELECTRIC
COMMERCIAL INDUSTRIAL

PO BOX 490
POTTERVILLE,MI 48876

Item No. 4

Included

- Conduit and wire between EF-110-1, On/Off switch, and combination motor starter
- On/off switch located on the exterior of Chlorine Gas Storage Room 110
- Nema 3R weatherproof box and cover
- Bonds

Excluded

- Overtime and shift premiums
- Painting and patching of block
- Painting of conduit

Total $8,418.00

Please do not hesitate to contact me with any questions.

Sincerely,

Tracy Sears
Project Manager

O 517.543.9900
F 517.543.9911

CENTENNIAL ELECTRIC
COMMERCIAL INDUSTRIAL

PO BOX 490
POTTERVILLE,MI 48876

6/18/2025

RK Davis
ATTN: Peter Elzinga
4457 40th St SE
Kentwood, MI 49512

RE: Grand Ledge Iron Removal Plant- Bulletin 14 Item 5 Quote

Dear Peter Elzinga,

Centennial Electric, LLC, is pleased to quote you for the above-mentioned project based off the Bulletin 14 summary and drawings issued 5/20/2025. We have included the following:

Item No. 5

Included

- Remove existing thermostat
- Reroute conduit and wire to new location
- Reinstall the thermostat in new location

Excluded

- Overtime and shift premiums
- Painting and patching of block
- Painting of conduit

Total $1,164.00

Several suppliers are noting the potential for tariffs on imported goods. The costs for tariffs on goods needed to supply materials to this project are not included in our proposal

Please do not hesitate to contact me with any questions.

Sincerely,

Tracy Sears
Project Manager

Revised Bulletin No. 14
Date: May 20, 2025
Due Date: June 3, 2025

BULLETIN
PAGE 1 OF 3

CONTRACT FOR:	City of Grand Ledge Iron Removal Plant
OWNER:	City of Grand Ledge, 310 Greenwood Street, Grand Ledge, MI 48837
CONTRACTOR:	RK Davis, Inc., 4457 40th Street, SE, Kentwood, MI 49512
ENGINEER:	Fishbeck, 1515 Arboretum Drive, SE, Grand Rapids, MI 49546
DRAWING REVISION NO.:	B14 – Revised
ISSUED HEREWITH:	Centennial Electric LLC
SPECIFICATION SECTIONS:	None
SHEETS:	P003, P102, P103, P202, P301, M601, E201, E503
DISTRIBUTION:	City of Grand Ledge – Kurt Ristow RK Davis, Inc – Peter Elzinga, Rob Kaliniak Fishbeck – Ariana Wade, PE, John Willemin, PE

The items below are being considered as possible changes to the Contract Documents for this Project. Contractor is requested to submit changes in cost, if any, for each item and indicate whether it is an addition to or deduction from the Contract Price. Costs are requested as lump sums unless otherwise noted as a unit cost. Include all labor, materials, overhead and profit, trades, subcontractors, and related costs. After reviewing the effects of those changes in the Work, Owner may issue a Change Order specifying which changes are to be incorporated in the Work, if any.

This Bulletin is not a Change Order and is not to be deemed authorization to proceed with the changes listed.

Additional work or materials, where proposed, shall meet the requirements of the Contract Documents, except where noted.

Contractor is responsible for notifying Engineer, in writing, concerning any revision or clarification which causes a change in the Contract Documents, but not specifically mentioned as a cost item in this Bulletin.

Return one completed and signed copy of the Bulletin to Engineer on or before the due date noted above.

Each proposed change has been described briefly with additional information provided concerning detailed changes required for the major trades concerned. Only one total cost figure has been requested for each item on the Bulletin; however, a complete breakdown is required for each item as supporting documentation. This will allow Owner to more easily evaluate the proposed cost changes. Each Bulletin item is an all-inclusive item and may concern work from several trades or Subcontractors. It is Contractor's responsibility to ensure that all work for each item has been included in the total cost figure provided to Owner.

ITEM NO. 1:
Sheet: P003 – Schedules and Details (reissued)
P103 – Flow Schematic and P&ID (reissued)
P202 – Enlarged Plans and Isometric (reissued)
P301 – Sections (reissued)
E201 – Power Plans (reissued)
Section: 40 90 00 – Instrumentation and Control for Process Systems (not reissued)

A. Provide 1/2-inch electrically actuated stainless steel ball valve (437). Model No.: Valworx 5602 with Battery Spring Return system, fail open.
B. Install 1/2-inch threadolet on air scour main, isolation ball valve, and the actuated valve 437, as indicated on Drawings.
C. Add Valve 437 to Valve Schedule.
D. Provide conduit and wiring and update existing PLC programming.
E. Revise Specification Section 40 90 00 Paragraph 1.7 J. Filter System, 2. c. to include the following:

10. Normally-open actuated ball valve (437) closes.

F. Revise Specification Section 40 90 00 Paragraph 1.7 K. Airwash Blower System to include the following:

5. The airwash header shall be equipped with a 1/2-inch drain and normally-open actuated ball valve (437). Valve 437 shall be called to close (ZCC-437) when either BL-1 or BL-2 is called to run. When the blowers, BL-1 or BL-2, stop running, valve shall be called to open (ZCO-437).

ADD/DEDUCT: $ 8,289.00

ITEM NO. 2:
Sheet: P301 – Sections (reissued)

A. Move HMO pump suction valves to accessible location. Reuse previously installed ball valves, and piping as applicable.

ADD/DEDUCT: $ N/A

ITEM NO. 3:
Sheet: P003 – Schedules and Details (reissued)
P102 – Flow Schematic and P&ID (reissued)
P202 – Enlarged Plans and Isometric (reissued)
P301 – Sections (reissued)
E201 – Power Plans (reissued)
E503 – Wiring Diagrams (reissued)
Section: 40 90 00 – Instrumentation and Control for Process Systems (not reissued)

A. Provide magnetic drive sample pump (SP-1). Model No.: Iwaki MD-30RZ
B. Install sample pump SP-1 and associated raw water sample piping.
C. Provide conduit and wiring and update existing PLC programming.
D. Replace Specification Section 40 90 00 Paragraph 1.7 E. 1. with the following:

1. A magnetic drive sample pump (SP-1) shall deliver a continuous raw water sample (Sample Point SP-1) to the WTP laboratory when wells are in operation. Pump SP-1 shall have a HAND-OFF-AUTO (HOA) selector switch mounted at the manual motor starter in the treatment plant. Control and operation of SP-1 shall be as follows:
   a. Pump operation shall be as detailed on the pump motor wiring diagram when the HOA switch is placed in HAND position.
   b. In AUTO mode under SCADA control, control and operation of SP-1 shall be as follows:
      1) The pump shall receive a call to start (CS-105) when any well pump supplying the treatment plant (Well Nos. 2, 6, 7 or 8) is in operation.
      2) The pump shall receive a call to stop when no well pump supplying the treatment plant (Well Nos. 2, 6, 7 or 8) is in operation.
      3) Pump operation shall be able to be controlled via the SCADA system. It shall be possible to start and stop (CS-105) the pump from a SCADA screen. Remote control status shall be indicated on the SCADA Screen (HS-105).

ADD/DEDUCT: $ 18,384.00

ITEM NO. 4:
Sheet: E201 – Power Plans (reissued)
E503 – Wiring Diagrams (reissued)

A. Provide switch outside exterior door to control Exhaust Fan EF-110-1.

ADD/DEDUCT: $ 8,418.00

ITEM NO. 5:
Sheet: M601 – First Floor Mechanical Piping Plan (reissued)

A. Move thermostat in Blower Room away from compressors to avoid heat source.

ADD/DEDUCT: $ 1,164.00

ITEM NO. 6:
Sheet: M601 – First Floor Mechanical Piping Plan (reissued)

A. Relocate AHU display interface from base of AHU to first floor.
B. Provide temperature sensor as was noted on bid set plans.
C. Add NEMA 3R enclosure around display for protection.

ADD/DEDUCT: $ N/A

Contractor:

Signature

Name and Title of Signatory

Date

END OF BULLETIN

Bid Summary Report

Grand Ledge Iron Plant **Estimator: Mike** **Job #2187**

Job Name: Grand Ledge Iron Plant

Contractor:

Estimator: Mike

Notes:

Bid Date: 12/1/2022

Summary Description	Material			Labor		
	Extended	%	Adjusted	Extended	%	Adjusted
Bulletin #14 Item 1	$1,176.82	100.00%	$1,176.82	31.03	100.00%	31.03

Top Sheet

Raw Cost		$7,081.96	Sales per Month	$0.00
Tax		$70.61	Return per Month	$0.00
Raw Cost with Tax		$7,152.56	Price per Square Foot	$0.00
Overhead		$1,062.29	Hours per Square Foot	0.00
Profit		$0.00	Square Feet	0.00
Total Return Amount		$1,062.29	Job Months	0.00
Total Return %		12.82%	Hours per Week	0.00
Remaining Labor Hours		0.00	Average Hourly Rate w/ Burden	116.17
Price		$8,214.86	Workers per Day	0.00
Bond		$73.93	Total Hours	31.03
Sell Price		**$8,288.79**	Markup Sales Tax (Overhead)	No
Adjusted Sell		$0.00	Markup Sales Tax (Profit)	No
Adjusted Sell Return	0.00%	$0.00	Use Bond Table	Yes

Labor

Class Description	Percent of Total	Hours Distributed	Hourly Rate	Burden Rate	Burden Percent	Labor Cost
Journeyman Local 665	0.00%	0.00	$99.62	$0.00	0.00%	$0.00
Foreman Local 665	83.85%	26.02	$114.56	$0.00	0.00%	$2,980.85
Project Manager Time	16.16%	5.01	$124.53	$0.00	0.00%	$624.28
Totals	100.01%	31.03	$116.17	$0.00	0.00%	$3,605.13

Bid Summary Report

Grand Ledge Iron Plant **Estimator: Mike** **Job #2187**

Mark Ups

			OVERHEAD			PROFIT	
	Total		**%**	**Amount**		**%**	**Amount**
Materials	$1,176.82	+	15.00%	$1,353.34	+	0.00%	$1,353.34
Labor	$3,605.13	+	15.00%	$4,145.90	+	0.00%	$4,145.90
Supplier Quotes	$2,100.00	+	15.00%	$2,415.00	+	0.00%	$2,415.00
SubContractors	$0.00	+	5.00%	$0.00	+	0.21%	$0.00
Direct Job Expense	$200.00	+	15.00%	$230.00	+	0.00%	$230.00
Equipment Rental	$0.00	+	15.00%	$0.00	+	0.00%	$0.00
Fixtures Quotes	$0.00	+	15.00%	$0.00	+	0.00%	$0.00
Totals	**$7,081.96**		**15.00%**	**$8,144.25**		**0.00%**	**$8,144.25**

Tax Report

	Taxed Amount	**Tax Rate %**	**Tax Amount**
Materials	$1,176.82	6.00%	$70.61
Labor	$3,605.13	0.00%	$0.00
Supplier Quotes	$0.00	6.00%	$0.00
SubContractors	$0.00	0.00%	$0.00
Direct Job Expense	$0.00	0.00%	$0.00
Equipment Rental	$0.00	6.00%	$0.00
Fixtures Quotes	$0.00	6.00%	$0.00
		Total Tax:	$70.61

Supplier Quotes

Name	**Supplier**	**Tax (6.0%)**	**Unit Cost**	**Mult**	**Amount**
Instrumentation/SCADA	Perceptive	No	$2,100.00	1.00	$2,100.00
Totals:					$2,100.00

Direct Job Expense

Name	**Supplier**	**Tax (0.0%)**	**Unit Cost**	**Mult**	**Amount**
As Builts		No	$200.00	1.00	$200.00
Totals:					$200.00

Job Name: Grand Ledge Iron Plant
Job Number: 2187
Extension Name: Bulletin #14 Item 1

Item #	Item Name	Quantity	Book Price	U	Ext Book Price	NECA 1	U	Labor 1 Ext	CCode	% of Extended Price	% of Extended Hours
Label Set: Combined, Combined, Combined, Combined, Combined					**$1,176.82**			**31.03**		**100%**	**100%**
CCode: <none>					$72.14			1.50		6.13%	4.84%
60,178	14 THHN CU STRANDED	300.58	$240.00	M	$72.14	5.00	M	1.50			
CCode: <undefined>					$160.00			15.73		13.6%	50.69%
60,233	R/R Grates	2.00	$0.00	E	$0.00	3.00	E	6.00			
60,234	Barricading	2.00	$50.00	E	$100.00	2.00	E	4.00			
60,235	Valve Termination	1.00	$10.00	E	$10.00	1.25	E	1.25			
60,236	Wire Relay	2.00	$25.00	E	$50.00	2.00	E	4.00			
60,237	3/4" GRC Bend	4.00	$0.00	E	$0.00	12.00	C	0.48			
CCode: Branch Rough					$458.32			5.76		38.95%	18.56%
1,262	3/4 GRC	40.61	$602.50	C	$244.65	6.00	C	2.44	cb		
1,276	3/4 GRC 90 ELBOW	2.00	$32.70	E	$65.40	0.40	E	0.80	cb		
2,731	3/4 LOCKNUT	8.12	$127.96	C	$10.39	0.12	E	0.97	cb		
2,769	3/4 BUSH PLASTIC	4.06	$158.23	C	$6.42	0.12	E	0.49	cb		
5,489	1/2 FLEX WP	10.00	$194.42	C	$19.44	4.00	C	0.40	cb		
5,501	1/2 FLEX WP CONN	2.00	$2,126.91	C	$42.54	0.15	E	0.30	cb		
5,549	1/2 FLEX WP 90 CONN	2.00	$3,474.13	C	$69.48	0.18	E	0.36	cb		
CCode: Hangers/Anchors					$469.08			5.60		39.86%	18.04%
3,315	1/4-20 X 3/4 RH MACH SCREW	5.08	$8.08	C	$0.41	2.75	C	0.14	ch		
3,696	1/4 FLAT STL WASHER	5.08	$282.75	C	$14.35	0.70	C	0.04	ch		
3,769	3/8" X 2 1/4 STUD ANCHOR	10.00	$45.53	C	$4.55	18.00	C	1.80	ch		
3,774	1/4 MACHINE BOLT ANCH	5.08	$19.88	C	$1.01	16.00	C	0.81	ch		
3,876	3/8" SADDLE WASHER	10.00	$17.85	C	$1.79	0.70	C	0.07	ch		
3,880	3/8" WASHER	20.00	$220.10	C	$44.02	0.70	C	0.14	ch		
3,888	3/8" NUT	30.00	$39.85	C	$11.96	2.00	C	0.60	ch		
3,895	3/8" ALL THREAD	20.00	$917.00	C	$183.40	5.50	C	1.10	ch		
3,944	1 5/8 strut	7.50	$2,767.92	C	$207.59	12.00	C	0.90	ch		
CCode: Straps					$16.29			0.20		1.38%	0.65%
3,092	3/4 GRC 1H MAL STP	5.08	$320.97	C	$16.29	4.00	C	0.20	cs		
CCode: Lugs/Termination/Ground					$0.99			2.24		0.08%	7.22%

Job Name: Grand Ledge Iron Plant
Job Number: 2187
Extension Name: Bulletin #14 Item 1

Item #	Item Name	Quantity	Book Price	U	Ext Book Price	NECA 1	U	Labor 1 Ext	CCode	% of Extended Price	% of Extended Hours
5,736	12 GA TERMINATION	8.00	$0.00	X	$0.00	0.14	E	1.12	sl		
5,767	20A WIRE TERMINATION	8.00	$0.00	X	$0.00	0.14	E	1.12	sl		
5,837	RED 3M WIRE NUT	8.00	$12.37	C	$0.99	0.00	C	0.00	sl		
CCode: Branch Wire					$0.00			0.00		0%	0%
					$1,176.82			**31.03**			

Bid Summary Report

Grand Ledge Iron Plant **Estimator: Mike** **Job #2187**

Job Name: Grand Ledge Iron Plant

Contractor:

Estimator: Mike

Notes:

Bid Date: 12/1/2022

Summary Description	Material			Labor		
	Extended	%	Adjusted	Extended	%	Adjusted
Bulletin #14 Item 3	$3,697.44	100.00%	$3,697.44	59.89	100.00%	59.89

Top Sheet

Raw Cost		$15,599.44	Sales per Month	$0.00
Tax		$280.83	Return per Month	$0.00
Raw Cost with Tax		$15,880.28	Price per Square Foot	$0.00
Overhead		$2,339.92	Hours per Square Foot	0.00
Profit		$0.00	Square Feet	0.00
Total Return Amount		$2,339.92	Job Months	0.00
Total Return %		12.73%	Hours per Week	0.00
Remaining Labor Hours		0.00	Average Hourly Rate w/ Burden	116.17
Price		$18,220.19	Workers per Day	0.00
Bond		$163.98	Total Hours	59.89
Sell Price		**$18,384.17**	Markup Sales Tax (Overhead)	No
Adjusted Sell		$0.00	Markup Sales Tax (Profit)	No
Adjusted Sell Return	0.00%	$0.00	Use Bond Table	Yes

Labor

Class Description	Percent of Total	Hours Distributed	Hourly Rate	Burden Rate	Burden Percent	Labor Cost
Journeyman Local 665	0.00%	0.00	$99.62	$0.00	0.00%	$0.00
Foreman Local 665	83.84%	50.21	$114.56	$0.00	0.00%	$5,752.06
Project Manager Time	16.16%	9.68	$124.53	$0.00	0.00%	$1,204.83
Totals	99.99%	59.89	$116.17	$0.00	0.00%	$6,956.89

Bid Summary Report

Grand Ledge Iron Plant **Estimator: Mike** **Job #2187**

Mark Ups

			OVERHEAD			PROFIT	
	Total		**%**	**Amount**		**%**	**Amount**
Materials	$3,697.44	+	15.00%	$4,252.05	+	0.00%	$4,252.05
Labor	$6,956.89	+	15.00%	$8,000.42	+	0.00%	$8,000.42
Supplier Quotes	$3,395.12	+	15.00%	$3,904.39	+	0.00%	$3,904.39
SubContractors	$0.00	+	5.00%	$0.00	+	0.00%	$0.00
Direct Job Expense	$900.00	+	15.00%	$1,035.00	+	0.00%	$1,035.00
Equipment Rental	$650.00	+	15.00%	$747.50	+	0.00%	$747.50
Fixtures Quotes	$0.00	+	15.00%	$0.00	+	0.00%	$0.00
Totals	**$15,599.44**		**15.00%**	**$17,939.36**		**0.00%**	**$17,939.36**

Tax Report

	Taxed Amount	**Tax Rate %**	**Tax Amount**
Materials	$3,697.44	6.00%	$221.85
Labor	$6,956.89	0.00%	$0.00
Supplier Quotes	$333.12	6.00%	$19.99
SubContractors	$0.00	0.00%	$0.00
Direct Job Expense	$0.00	0.00%	$0.00
Equipment Rental	$650.00	6.00%	$39.00
Fixtures Quotes	$0.00	6.00%	$0.00
		Total Tax:	$280.83

Supplier Quotes

Name	**Supplier**	**Tax (6.0%)**	**Unit Cost**	**Mult**	**Amount**
Instrumentation/SCADA	Perceptive	No	$3,062.00	1.00	$3,062.00
Eaton Controls	Kendall	Yes	$333.12	1.00	$333.12
Totals:					$3,395.12

Direct Job Expense

Name	**Supplier**	**Tax (0.0%)**	**Unit Cost**	**Mult**	**Amount**
Permit / Fees		No	$350.00	1.00	$350.00
As Builts		No	$200.00	1.00	$200.00
Equipment Mobilization		No	$350.00	1.00	$350.00
Totals:					$900.00

Equipment Rental

Name	**Supplier**	**Tax (6.0%)**	**Unit Cost**	**Mult**	**Amount**
Lift		Yes	$300.00	1.00	$300.00
PU/DO		Yes	$350.00	1.00	$350.00
Totals:					$650.00

Job Name: Grand Ledge Iron Plant
Job Number: 2187
Extension Name: Bulletin #14 Item 3

Item #	Item Name	Quantity	Book Price	U	Ext Book Price	NECA 1	U	Labor 1 Ext	CCode	% of Extended Price	% of Extended Hours
Label Set: Combined, Combined, Combined, Combined, Combined					**$3,697.44**			**59.89**		**100%**	**100%**
CCode: <none>					$104.85			1.41		2.84%	2.36%
60,066	MMS	1.00	$85.00	E	$85.00	1.00	E	1.00			
60,178	14 THHN CU STRANDED	82.69	$240.00	M	$19.85	5.00	M	0.41			
CCode: <undefined>					$284.83			12.36		7.7%	20.63%
60,209	#12 THHN	567.75	$316.75	M	$179.83	6.00	M	3.41			
60,232	15A 1-P Circuit Breaker	1.00	$30.00	E	$30.00	0.75	E	0.75			
60,233	R/R Grates	1.00	$0.00	E	$0.00	3.00	E	3.00			
60,234	Barricading	1.00	$50.00	E	$50.00	2.00	E	2.00			
60,236	Wire Relay	1.00	$25.00	E	$25.00	2.00	E	2.00			
60,237	3/4" GRC Bend	10.00	$0.00	E	$0.00	12.00	C	1.20			
CCode: Branch Rough					$1,780.06			25.52		48.14%	42.61%
1,262	3/4 GRC	211.86	$602.50	C	$1,276.44	6.00	C	12.71	cb		
1,276	3/4 GRC 90 ELBOW	10.00	$32.70	E	$327.00	0.40	E	4.00	cb		
2,446	3/4 GRC LR BODY	1.00	$23.15	E	$23.15	0.65	E	0.65	cb		
2,731	3/4 LOCKNUT	42.37	$127.96	C	$54.22	0.12	E	5.08	cb		
2,769	3/4 BUSH PLASTIC	21.19	$158.23	C	$33.52	0.12	E	2.54	cb		
5,489	1/2 FLEX WP	5.00	$194.42	C	$9.72	4.00	C	0.20	cb		
5,501	1/2 FLEX WP CONN	1.00	$2,126.91	C	$21.27	0.15	E	0.15	cb		
5,549	1/2 FLEX WP 90 CONN	1.00	$3,474.13	C	$34.74	0.18	E	0.18	cb		
CCode: Hangers/Anchors					$1,442.20			18.98		39.01%	31.69%
3,315	1/4-20 X 3/4 RH MACH SCREW	26.48	$8.08	C	$2.14	2.75	C	0.73	ch		
3,696	1/4 FLAT STL WASHER	26.48	$282.75	C	$74.88	0.70	C	0.19	ch		
3,769	3/8" X 2 1/4 STUD ANCHOR	30.00	$45.53	C	$13.66	18.00	C	5.40	ch		
3,774	1/4 MACHINE BOLT ANCH	26.48	$19.88	C	$5.26	16.00	C	4.24	ch		
3,876	3/8" SADDLE WASHER	30.00	$17.85	C	$5.36	0.70	C	0.21	ch		
3,880	3/8" WASHER	60.00	$220.10	C	$132.06	0.70	C	0.42	ch		
3,888	3/8" NUT	90.00	$39.85	C	$35.87	2.00	C	1.80	ch		
3,895	3/8" ALL THREAD	60.00	$917.00	C	$550.20	5.50	C	3.30	ch		
3,944	1 5/8 strut	22.50	$2,767.92	C	$622.78	12.00	C	2.70	ch		

Job Name: Grand Ledge Iron Plant
Job Number: 2187
Extension Name: Bulletin #14 Item 3

Item #	Item Name	Quantity	Book Price	U	Ext Book Price	NECA 1	U	Labor 1 Ext	CCode	% of Extended Price	% of Extended Hours
CCode: Straps					$85.00			1.06		2.3%	1.77%
3,092	3/4 GRC 1H MAL STP	26.48	$320.97	C	$85.00	4.00	C	1.06	cs		
CCode: Lugs/Termination/Ground					$0.49			0.56		0.01%	0.94%
5,736	12 GA TERMINATION	4.00	$0.00	X	$0.00	0.14	E	0.56	sl		
5,837	RED 3M WIRE NUT	4.00	$12.37	C	$0.49	0.00	C	0.00	sl		
CCode: Branch Wire					$0.00			0.00		0%	0%
					$3,697.44			**59.89**			

Bid Summary Report

Grand Ledge Iron Plant **Estimator: Mike** **Job #2187**

Job Name: Grand Ledge Iron Plant

Contractor:

Estimator: Mike

Notes:

Bid Date: 12/1/2022

Summary Description	Material			Labor		
	Extended	%	Adjusted	Extended	%	Adjusted
Bulletin #14 Item 4	$3,014.62	100.00%	$3,014.62	27.11	100.00%	27.11

Top Sheet

Raw Cost		$7,082.99	Sales per Month	$0.00
Tax		$197.01	Return per Month	$0.00
Raw Cost with Tax		$7,280.00	Price per Square Foot	$0.00
Overhead		$1,062.45	Hours per Square Foot	0.00
Profit		$0.00	Square Feet	0.00
Total Return Amount		$1,062.45	Job Months	0.00
Total Return %		12.62%	Hours per Week	0.00
Remaining Labor Hours		0.00	Average Hourly Rate w/ Burden	116.17
Price		$8,342.45	Workers per Day	0.00
Bond		$75.08	Total Hours	27.11
Sell Price		**$8,417.54**	Markup Sales Tax (Overhead)	No
Adjusted Sell		$0.00	Markup Sales Tax (Profit)	No
Adjusted Sell Return	0.00%	$0.00	Use Bond Table	Yes

Labor

Class Description	Percent of Total	Hours Distributed	Hourly Rate	Burden Rate	Burden Percent	Labor Cost
Journeyman Local 665	0.00%	0.00	$99.62	$0.00	0.00%	$0.00
Foreman Local 665	83.83%	22.73	$114.56	$0.00	0.00%	$2,603.95
Project Manager Time	16.16%	4.38	$124.53	$0.00	0.00%	$545.50
Totals	99.98%	27.11	$116.17	$0.00	0.00%	$3,149.44

Bid Summary Report

Grand Ledge Iron Plant **Estimator: Mike** **Job #2187**

Mark Ups

			OVERHEAD			PROFIT	
	Total		**%**	**Amount**		**%**	**Amount**
Materials	$3,014.62	+	15.00%	$3,466.81	+	0.00%	$3,466.81
Labor	$3,149.44	+	15.00%	$3,621.86	+	0.00%	$3,621.86
Supplier Quotes	$268.93	+	15.00%	$309.27	+	0.00%	$309.27
SubContractors	$0.00	+	5.00%	$0.00	+	0.00%	$0.00
Direct Job Expense	$650.00	+	15.00%	$747.50	+	0.00%	$747.50
Equipment Rental	$0.00	+	15.00%	$0.00	+	0.00%	$0.00
Fixtures Quotes	$0.00	+	15.00%	$0.00	+	0.00%	$0.00
Totals	**$7,082.99**		**15.00%**	**$8,145.44**		**0.00%**	**$8,145.44**

Tax Report

	Taxed Amount	**Tax Rate %**	**Tax Amount**
Materials	$3,014.62	6.00%	$180.88
Labor	$3,149.44	0.00%	$0.00
Supplier Quotes	$268.93	6.00%	$16.14
SubContractors	$0.00	0.00%	$0.00
Direct Job Expense	$0.00	0.00%	$0.00
Equipment Rental	$0.00	6.00%	$0.00
Fixtures Quotes	$0.00	6.00%	$0.00
		Total Tax:	$197.01

Supplier Quotes

Name	**Supplier**	**Tax (6.0%)**	**Unit Cost**	**Mult**	**Amount**
Corrosion Room EF Switch	Kendall	Yes	$268.93	1.00	$268.93
Totals:					$268.93

Direct Job Expense

Name	**Supplier**	**Tax (0.0%)**	**Unit Cost**	**Mult**	**Amount**
As Builts		No	$200.00	1.00	$200.00
Equipment Mobilization		No	$450.00	1.00	$450.00
Totals:					$650.00

Job Name: Grand Ledge Iron Plant
Job Number: 2187
Extension Name: Bulletin #14 Item 4

Item #	Item Name	Quantity	Book Price	U	Ext Book Price	NECA 1	U	Labor 1 Ext	CCode	% of Extended Price	% of Extended Hours
Label Set: Combined, Combined, Combined, Combined, Combined					**$3,014.62**			**27.11**		**100%**	**100%**
CCode: <none>					$18.00			0.25		0.6%	0.92%
60,060	WP Cover	1.00	$18.00	E	$18.00	0.25	E	0.25			
CCode: <undefined>					$1,353.51			17.76		44.9%	65.51%
60,209	#12 THHN	152.26	$316.75	M	$48.23	6.00	M	0.91			
60,230	8x8x4 PVC Box	1.00	$400.00	E	$400.00	1.25	E	1.25			
60,231	Core Wall	1.00	$150.00	E	$150.00	2.00	E	2.00			
60,237	3/4" GRC Bend	4.00	$0.00	E	$0.00	12.00	C	0.48			
60,238	B905 Plasti-Bond	7.00	$1,449.26	C	$101.45	12.00	C	0.84			
60,239	FD Box	1.00	$81.00	E	$81.00	1.00	E	1.00			
60,240	PVC Coated GRC	47.00	$1,218.79	C	$572.83	24.00	C	11.28			
CCode: Branch Rough					$290.21			3.15		9.63%	11.62%
4,290	3/4 GRC/PVC 90 ELBOW	4.00	$4,517.44	C	$180.70	0.60	E	2.40	cb		
4,438	3/4X12 GRC/PVC NIP	1.00	$67.66	E	$67.66	0.30	E	0.30	cb		
15,297	4/S BOX 1-1/2" DEEP	1.00	$2,694.84	C	$26.95	30.00	C	0.30	cb		
15,300	4/S SG MUD RING 1/2"DP	1.00	$1,490.41	C	$14.90	15.00	C	0.15	cb		
CCode: Hangers/Anchors					$727.21			4.88		24.12%	17.99%
3,315	1/4-20 X 3/4 RH MACH SCREW	5.86	$8.08	C	$0.47	2.75	C	0.16	ch		
3,696	1/4 FLAT STL WASHER	5.86	$282.75	C	$16.56	0.70	C	0.04	ch		
3,769	3/8" X 2 1/4 STUD ANCHOR	14.00	$45.53	C	$6.37	18.00	C	2.52	ch		
3,774	1/4 MACHINE BOLT ANCH	5.86	$19.88	C	$1.16	16.00	C	0.94	ch		
3,865	HEX LAG BLT 3/8X3	14.00	$47.78	E	$668.92	8.00	C	1.12	ch		
3,880	3/8" WASHER	14.00	$220.10	C	$30.81	0.70	C	0.10	ch		
3,923	BOX SUPPORTS-CLIP ON	1.00	$290.32	C	$2.90	0.00	C	0.00	ch		
CCode: Straps					$591.99			0.44		19.64%	1.64%
4,846	3/4 GRC/PVC 1H STRAP	5.86	$30.61	E	$179.26	4.00	C	0.23	cs		
4,872	3/4 GRC/PVC CLAMP BACK	5.86	$46.35	E	$271.44	0.00	C	0.00	cs		
4,965	3/4 GRC/PVC C105 STRAP	7.00	$2,018.50	C	$141.30	3.00	C	0.21	cs		
CCode: Trim Devices/Plates					$33.70			0.35		1.12%	1.29%
14,895	SP TOGGLE SW, 20A SPEC.	1.00	$30.80	E	$30.80	25.00	C	0.25	dt		

Job Name: Grand Ledge Iron Plant
Job Number: 2187
Extension Name: Bulletin #14 Item 4

Item #	Item Name	Quantity	Book Price	U	Ext Book Price	NECA 1	U	Labor 1 Ext	CCode	% of Extended Price	% of Extended Hours
14,950	1G SS SWITCH PLATE	1.00	$2.90	E	$2.90	10.00	C	0.10	dt		
CCode: Lugs/Termination/Ground					$0.00			0.28		0%	1.03%
5,767	20A WIRE TERMINATION	2.00	$0.00	X	$0.00	0.14	E	0.28	sl		
					$3,014.62			**27.11**			

Bid Summary Report

Grand Ledge Iron Plant **Estimator: Mike** **Job #2187**

Job Name: Grand Ledge Iron Plant

Contractor:

Estimator: Mike

Notes:

Bid Date: 12/1/2022

Summary Description	Material			Labor		
	Extended	%	Adjusted	Extended	%	Adjusted
Bulletin #14 Item 5	$289.55	100.00%	$289.55	6.01	100.00%	6.01

Top Sheet

Raw Cost		$988.12	Sales per Month	$0.00
Tax		$17.37	Return per Month	$0.00
Raw Cost with Tax		$1,005.49	Price per Square Foot	$0.00
Overhead		$148.22	Hours per Square Foot	0.00
Profit		$0.00	Square Feet	0.00
Total Return Amount		$148.22	Job Months	0.00
Total Return %		12.73%	Hours per Week	0.00
Remaining Labor Hours		0.00	Average Hourly Rate w/ Burden	116.17
Price		$1,153.71	Workers per Day	0.00
Bond		$10.38	Total Hours	6.01
Sell Price		**$1,164.09**	Markup Sales Tax (Overhead)	No
Adjusted Sell		$0.00	Markup Sales Tax (Profit)	No
Adjusted Sell Return	0.00%	$0.00	Use Bond Table	Yes

Labor

Class Description	Percent of Total	Hours Distributed	Hourly Rate	Burden Rate	Burden Percent	Labor Cost
Journeyman Local 665	0.00%	0.00	$99.62	$0.00	0.00%	$0.00
Foreman Local 665	83.83%	5.04	$114.56	$0.00	0.00%	$577.58
Project Manager Time	16.16%	0.97	$124.53	$0.00	0.00%	$121.00
Totals	99.98%	6.01	$116.17	$0.00	0.00%	$698.57

Bid Summary Report

Grand Ledge Iron Plant **Estimator: Mike** **Job #2187**

Mark Ups

			OVERHEAD			PROFIT	
	Total		**%**	**Amount**		**%**	**Amount**
Materials	$289.55	+	15.00%	$332.98	+	0.00%	$332.98
Labor	$698.57	+	15.00%	$803.36	+	0.00%	$803.36
Supplier Quotes	$0.00	+	15.00%	$0.00	+	0.00%	$0.00
SubContractors	$0.00	+	5.00%	$0.00	+	0.00%	$0.00
Direct Job Expense	$0.00	+	15.00%	$0.00	+	0.00%	$0.00
Equipment Rental	$0.00	+	15.00%	$0.00	+	0.00%	$0.00
Fixtures Quotes	$0.00	+	15.00%	$0.00	+	0.00%	$0.00
Totals	**$988.12**		**15.00%**	**$1,136.34**		**0.00%**	**$1,136.34**

Tax Report

	Taxed Amount	**Tax Rate %**	**Tax Amount**
Materials	$289.55	6.00%	$17.37
Labor	$698.57	0.00%	$0.00
Supplier Quotes	$0.00	6.00%	$0.00
SubContractors	$0.00	0.00%	$0.00
Direct Job Expense	$0.00	0.00%	$0.00
Equipment Rental	$0.00	6.00%	$0.00
Fixtures Quotes	$0.00	6.00%	$0.00
		Total Tax:	$17.37

Job Name: Grand Ledge Iron Plant
Job Number: 2187
Extension Name: Bulletin #14 Item 5

Item #	Item Name	Quantity	Book Price	U	Ext Book Price	NECA 1	U	Labor 1 Ext	CCode	% of Extended Price	% of Extended Hours
Label Set: Combined, Combined, Combined, Combined, Combined					**$289.55**			**6.01**		**100%**	**100%**
CCode: <undefined>					$121.19			3.10		41.85%	51.47%
291	6 COND STAT WIRE	48.58	$312.66	M	$15.19	10.00	M	0.49			
60,237	3/4" GRC Bend	3.00	$0.00	E	$0.00	12.00	C	0.36			
60,239	FD Box	1.00	$81.00	E	$81.00	1.00	E	1.00			
60,241	R/R Thermostat	1.00	$25.00	E	$25.00	1.25	E	1.25			
CCode: Branch Rough					$149.97			2.24		51.79%	37.18%
1,262	3/4 GRC	23.29	$602.50	C	$140.32	6.00	C	1.40	cb		
2,731	3/4 LOCKNUT	4.66	$127.96	C	$5.96	0.12	E	0.56	cb		
2,769	3/4 BUSH PLASTIC	2.33	$158.23	C	$3.69	0.12	E	0.28	cb		
CCode: Hangers/Anchors					$9.05			0.57		3.12%	9.41%
3,315	1/4-20 X 3/4 RH MACH SCREW	2.91	$8.08	C	$0.24	2.75	C	0.08	ch		
3,696	1/4 FLAT STL WASHER	2.91	$282.75	C	$8.23	0.70	C	0.02	ch		
3,774	1/4 MACHINE BOLT ANCH	2.91	$19.88	C	$0.58	16.00	C	0.47	ch		
CCode: Straps					$9.34			0.12		3.23%	1.94%
3,092	3/4 GRC 1H MAL STP	2.91	$320.97	C	$9.34	4.00	C	0.12	cs		
					$289.55			**6.01**			

Revised Bulletin No. 14
Date: May 20, 2025
Due Date: June 3, 2025

BULLETIN
PAGE 1 OF 3

CONTRACT FOR:	City of Grand Ledge Iron Removal Plant
OWNER:	City of Grand Ledge, 310 Greenwood Street, Grand Ledge, MI 48837
CONTRACTOR:	RK Davis, Inc., 4457 40th Street, SE, Kentwood, MI 49512
ENGINEER:	Fishbeck, 1515 Arboretum Drive, SE, Grand Rapids, MI 49546
DRAWING REVISION NO.:	B14 – Revised
ISSUED HEREWITH:	
SPECIFICATION SECTIONS:	None
SHEETS:	P003, P102, P103, P202, P301, M601, E201, E503
DISTRIBUTION:	City of Grand Ledge – Kurt Ristow RK Davis, Inc – Peter Elzinga, Rob Kaliniak Fishbeck – Ariana Wade, PE, John Willemin, PE

PCI Pricing
5/30/2025

The items below are being considered as possible changes to the Contract Documents for this Project. Contractor is requested to submit changes in cost, if any, for each item and indicate whether it is an addition to or deduction from the Contract Price. Costs are requested as lump sums unless otherwise noted as a unit cost. Include all labor, materials, overhead and profit, trades, subcontractors, and related costs. After reviewing the effects of those changes in the Work, Owner may issue a Change Order specifying which changes are to be incorporated in the Work, if any.

This Bulletin is not a Change Order and is not to be deemed authorization to proceed with the changes listed.

Additional work or materials, where proposed, shall meet the requirements of the Contract Documents, except where noted.

Contractor is responsible for notifying Engineer, in writing, concerning any revision or clarification which causes a change in the Contract Documents, but not specifically mentioned as a cost item in this Bulletin.

Return one completed and signed copy of the Bulletin to Engineer on or before the due date noted above.

Each proposed change has been described briefly with additional information provided concerning detailed changes required for the major trades concerned. Only one total cost figure has been requested for each item on the Bulletin; however, a complete breakdown is required for each item as supporting documentation. This will allow Owner to more easily evaluate the proposed cost changes. Each Bulletin item is an all-inclusive item and may concern work from several trades or Subcontractors. It is Contractor's responsibility to ensure that all work for each item has been included in the total cost figure provided to Owner.

ITEM NO. 1:
Sheet: P003 – Schedules and Details (reissued)
P103 – Flow Schematic and P&ID (reissued)
P202 – Enlarged Plans and Isometric (reissued)
P301 – Sections (reissued)
E201 – Power Plans (reissued)
Section: 40 90 00 – Instrumentation and Control for Process Systems (not reissued)

A. Provide 1/2-inch electrically actuated stainless steel ball valve (437). Model No.: Valworx 5602 with Battery Spring Return system, fail open.
B. Install 1/2-inch threadolet on air scour main, isolation ball valve, and the actuated valve 437, as indicated on Drawings.
C. Add Valve 437 to Valve Schedule.
D. Provide conduit and wiring and update existing PLC programming.
E. Revise Specification Section 40 90 00 Paragraph 1.7 J. Filter System, 2. c. to include the following:

10. Normally-open actuated ball valve (437) closes.

F. Revise Specification Section 40 90 00 Paragraph 1.7 K. Airwash Blower System to include the following:

5. The airwash header shall be equipped with a 1/2-inch drain and normally-open actuated ball valve (437). Valve 437 shall be called to close (ZCC-437) when either BL-1 or BL-2 is called to run. When the blowers, BL-1 or BL-2, stop running, valve shall be called to open (ZCO-437).

ADD/DEDUCT: $ ADD $2,100.00

ITEM NO. 2:
Sheet: P301 – Sections (reissued)

A. Move HMO pump suction valves to accessible location. Reuse previously installed ball valves, and piping as applicable.

ADD/DEDUCT: $ NA

ITEM NO. 3:
Sheet: P003 – Schedules and Details (reissued)
P102 – Flow Schematic and P&ID (reissued)
P202 – Enlarged Plans and Isometric (reissued)
P301 – Sections (reissued)
E201 – Power Plans (reissued)
E503 – Wiring Diagrams (reissued)
Section: 40 90 00 – Instrumentation and Control for Process Systems (not reissued)

A. Provide magnetic drive sample pump (SP-1). Model No.: Iwaki MD-30RZ
B. Install sample pump SP-1 and associated raw water sample piping.
C. Provide conduit and wiring and update existing PLC programming.
D. Replace Specification Section 40 90 00 Paragraph 1.7 E. 1. with the following:

1. A magnetic drive sample pump (SP-1) shall deliver a continuous raw water sample (Sample Point SP-1) to the WTP laboratory when wells are in operation. Pump SP-1 shall have a HAND-OFF-AUTO (HOA) selector switch mounted at the manual motor starter in the treatment plant. Control and operation of SP-1 shall be as follows:
   a. Pump operation shall be as detailed on the pump motor wiring diagram when the HOA switch is placed in HAND position.
   b. In AUTO mode under SCADA control, control and operation of SP-1 shall be as follows:
      1) The pump shall receive a call to start (CS-105) when any well pump supplying the treatment plant (Well Nos. 2, 6, 7 or 8) is in operation.
      2) The pump shall receive a call to stop when no well pump supplying the treatment plant (Well Nos. 2, 6, 7 or 8) is in operation.
      3) Pump operation shall be able to be controlled via the SCADA system. It shall be possible to start and stop (CS-105) the pump from a SCADA screen. Remote control status shall be indicated on the SCADA Screen (HS-105).

ADD/DEDUCT: $ ADD $3,062.00

ITEM NO. 4:
Sheet: E201 – Power Plans (reissued)
E503 – Wiring Diagrams (reissued)

A. Provide switch outside exterior door to control Exhaust Fan EF-110-1.

ADD/DEDUCT: $ NA

ITEM NO. 5:
Sheet: M601 – First Floor Mechanical Piping Plan (reissued)

A. Move thermostat in Blower Room away from compressors to avoid heat source.

ADD/DEDUCT: $ NA

ITEM NO. 6:
Sheet: M601 – First Floor Mechanical Piping Plan (reissued)

A. Relocate AHU display interface from base of AHU to first floor.
B. Provide temperature sensor as was noted on bid set plans.
C. Add NEMA 3R enclosure around display for protection.

ADD/DEDUCT: $ NA

Contractor:

Signature

Ryan Fisher, Pres.

Name and Title of Signatory

5/30/25

Date

END OF BULLETIN

KENDALL ELECTRIC
A MEMBER OF THE KENDALL GROUP

KENDALL ELECTRIC
7633 LANAC ST
LANSING MI 48917-9517
517-322-2411 Fax 517-322-0743

Quotation S115621099

Order Date: 06/04/25	
Terms: 2% 10th PROX Net 30th	
Customer PO#	Release #
BULLETIN 14	
Ordered By: TRACY	
Phone: 517-543-9900	

Sold To: 46324
CENTENNIAL GRAND LEDGE REMOVEL PLT
PO BOX 490
POTTERVILLE, MI 48876-0490

Ship To: 234654
CENTENNIAL GRAND LEDGE REMOVEL PLT
@GRAND LEDGE REMOVEL PLT
320 E SAGINAW HWY
GRAND LEDGE, MI 48837-2282

Warehouse	Ship Via	Freight Allowed	Account Manager	Inside Salesperson
EKDC	ELAN33	Out: No In: No	BRENDON RANKIN, ELAN	JOE FILIPIAK, ELAN

Cust Ln #	Order Qty	ID #	Description	Rec Date	Price / UOM	Ext Amount
	1ea	34216	A864CHSCFG HOF NEMA 4X FIBERGLASS ENCL..	06/04/	96.028/e	96.03
	1ea	7182	800H-R1A AB PB MOMENTARY NEMA 4-4X-13 GREEN	06/04/	124.373/e	124.37
	1ea	16858	FD-1-75L APP 3/4 1G FD UNILET W/ MNTG LUGS..	06/04/	19.934/e	19.93
	1ea	16956	FSK1VS APP 1-GANG V/T SWITCH FS COVER..	06/04/	28.501/e	28.50
	1ea	3777405	LOT OF EATON CONTROLS CONSISTING OF Enclosed Manual Motor Starter with Hand-Auto AND HEATER ELEMENT *** TAXES NOT INCLUDED ***	06/04/	333.120/ea	333.12

The Kendall Group reserves the right, due to current economic uncertainty, to adjust prices at any time prior to shipment and upon notice to Buyer.

Subtotal	601.95
S&H CHGS	TBD
Sales Tax	TBD
Amount Due	601.95

Thank You - We Appreciate Your Business

Printed: 11:27:42 05 JUN 2025

Enclosed Manual Motor Starter with Hand-Auto

Type text here

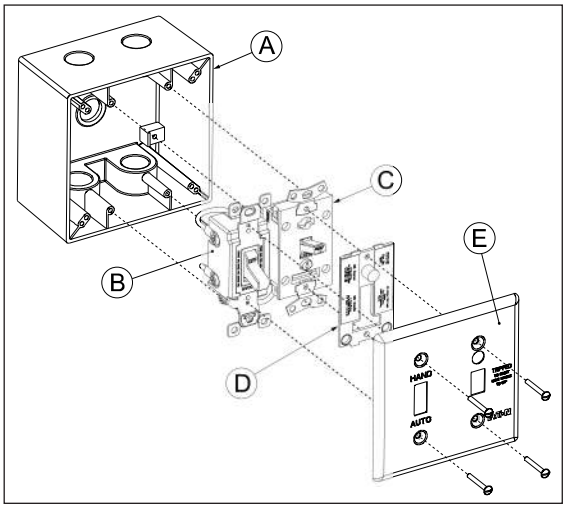


Figure 1. Exploded View

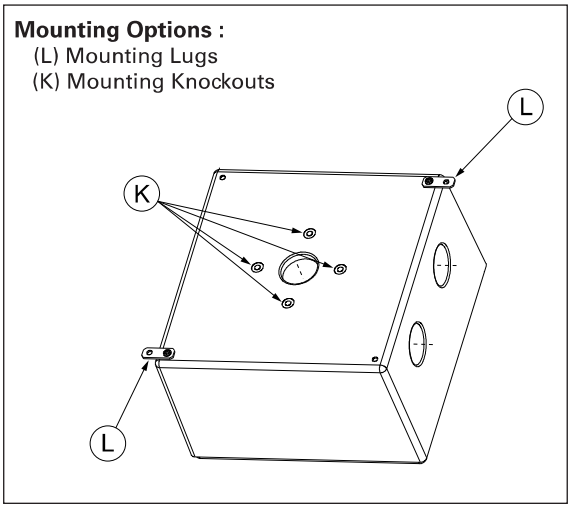


Figure 2. Mounting Options

This packaged solution, in conjunction with the appropriate sized heater pack, will provide all the necessary components to provide local and remote control, overload protection, and running light indications for small motor applications.

1. Remove the cover plate (E) from the enclosure.
2. Remove the motor starter (C) with the pilot light (D), the hand / auto switch (B), the wiring diagram, heater pack diagram, and the packaged mounting lugs & closure plugs from the enclosure (A).
3. If the hole located at the back of the enclosure will not be used, twist the closure plug into location.
4. Mount the enclosure into location utilizing the mounting lugs or by using the integral mounting knockouts as shown in Figure 2.
5. Remove the pilot light from the motor starter as shown in Figure 3.
6. Install the MSH heater pack into location within the starter (C) as shown in Figure 4. (Available heater packs are shown in Table 1.)
7. Access the terminals of the starter (C) as shown in Figure 5.
8. Wire the line and load side terminals of the starter (C) per the wiring diagram shown in Figure 6.
9. Wire the available line terminal of the switch (B) into your remote source.
10. Re-install the pilot light into location.
11. Re install the starter with pilot light and the hand / auto switch back into the enclosure with wire leads hanging out of the appropriate conduit outlets.
12. Secure the cover plate back onto the enclosure.

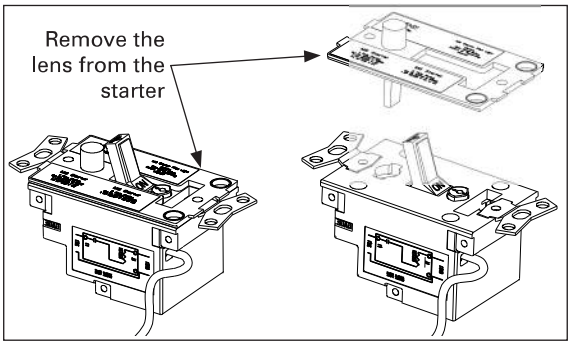


Figure 3. Pilot Light Removal

Powering Business Worldwide

TABLE 1. MST HEATER PACK TABLE
(Wire with 60°C / 70°C wire)

Code Marking	Full-Load Current of Motor (Amps) (40°C Ambient)	Max. Protect. Device (Amp)
MSH .5A	.40 - .43	1 Amp Fuse*
MSH .55A	.44 - .48	2 Amp Fuse*
MSH .61A	.49 - .53	2 Amp Fuse*
MSH .67A	.54 - .58	2 Amp Fuse*
MSH .74A	.59 - .64	2 Amp Fuse*
MSH .81A	.65 - .71	3 Amp Fuse*
MSH .89A	.72 - .78	3 Amp Fuse*
MSH .98A	.79 - .87	3 Amp Fuse*
MSH 1.1A	.88 - .95	3 Amp Fuse*
MSH 1.2A	.96 - 1.03	3 Amp Fuse*
MSH 1.3A	1.04 - 1.15	3 Amp Fuse*
MSH 1.45A	1.16 - 1.27	3 Amp Fuse*
MSH 1.6A	1.28 - 1.35	5 Amp Fuse*
MSH 1.7A	1.36 - 1.51	5 Amp Fuse*
MSH 1.9A	1.52 - 1.67	5 Amp Fuse*
MSH 2.1A	1.68 - 1.83	6 Amp Fuse*
MSH 2.3A	1.84 - 1.99	6 Amp Fuse*
MSH 2.5A	2.00 - 2.23	6 Amp Fuse*
MSH 2.8A	2.24 - 2.47	6 Amp Fuse*
MSH 3.1A	2.48 - 2.71	10 Amp Fuse*
MSH 3.4A	2.72 - 2.95	10 Amp Fuse*
MSH 3.7A	2.96 - 3.27	15 Amperes
MSH 4.1A	3.28 - 3.59	15 Amperes
MSH 4.5A	3.60 - 3.99	15 Amperes
MSH 5.0A	4.00 - 4.39	15 Amperes
MSH 5.5A	4.40 - 4.79	15 Amperes
MSH 6.0A	4.80 - 5.26	20 Amperes
MSH 6.6A	5.27 - 5.83	20 Amperes
MSH 7.3A	5.84 - 6.39	20 Amperes
MSH 8.0A	6.40 - 7.03	25 Amperes
MSH 8.8A	7.04 - 7.74	25 Amperes
MSH 9.7A	7.75 - 8.46	25 Amperes
MSH 10.6A	8.47 - 9.35	30 Amperes
MSH 11.7A	9.36 - 10.30	35 Amperes
MSH 12.9A	10.31 - 11.35	40 Amperes
MSH 14.2A	11.36 - 12.47	40 Amperes
MSH 15.6A	12.48 - 13.67	45 Amperes
MSH 17.1A	13.68 - 15.12	50 Amperes
MSH 18.6A	15.13 - 16.00	60 Amperes

*15 Ampere protective device is permitted by NEC. Fuse size shown in table limits fault current.

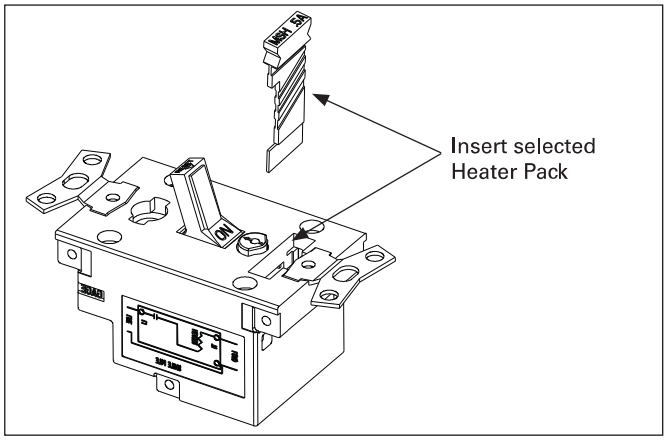


Figure 4. Installation of Heater Pack

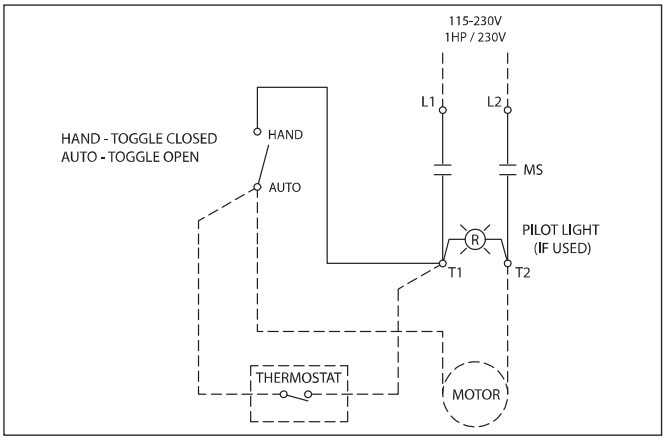


Figure 6. Wiring Diagram

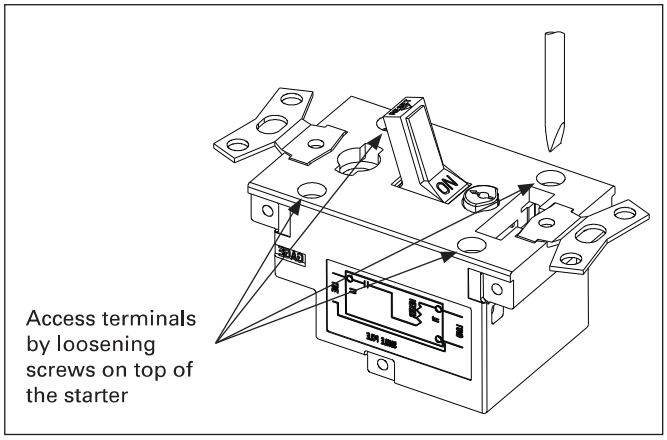


Figure 5. Terminal Access

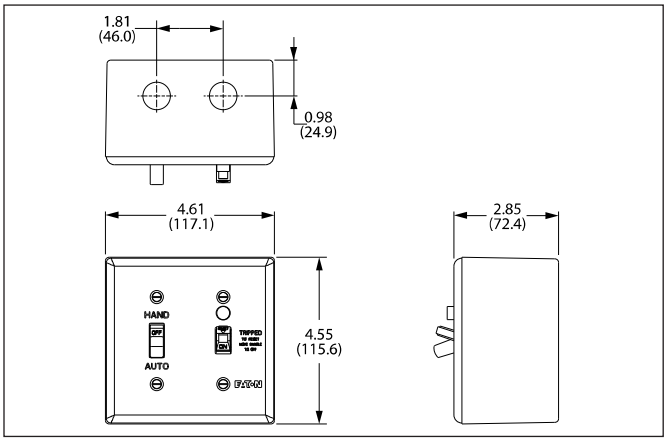


Figure 7. General Dimensions

Eaton
1000 Eaton Boulevard
Cleveland, OH 44122
United States
Eaton.com

Publication No. P52977 / 001
July 2015

Powering Business Worldwide

RK Davis, Inc.

Grand Ledge Iron Removal Plant

Change Proposal - Adjust Contract Allowances

Prepared By: PE

June 26, 2025

RK Davis Job# C730

Item	Description	Labor Hours	Labor Rate	Labor Total	Materials	Tools/Equip	Subcontract	Line Item Total
1	Adjust Testing Services Allowance			-	5,732.25			5,732.25
2	Adjust Electrical Service Allowance			-	(5,000.00)			(5,000.00)
3	Adjust Gas Service Allowance			-	(4,800.00)			(4,800.00)
4	Adjust Security Allowance			-	(8.28)			(8.28)
				-				-
				-				-
				-				-
				-				-
				-				-
				-				-
	Subtotals			**-**	**(4,076.03)**	**-**	**-**	**(4,076.03)**

Notes:

Self Perform Work		(4,076.03)
Mark up on Self Perform Work:	15%	-
Subcontractor Work		-
Mark up on Subcontractor Work:	5%	-
Subtotal		(4,076.03)
Bonds & Insurances	1.25%	-
Total Quote		**(4,076.03)**
Additional Time Required	**0**	**Days**

Grand Ledge Iron Removal Plant
Special Inspections / Material Testing
Allowance Reconcilitation
5/9/2025

1	Special Inspections Allowance		25,000.00
2	Material Testing Allowance		10,000.00
3	CO No. 11 Adjustment		10,720.55
		Budget Total	**45,720.55**
	Expended to Date		50,437.80
	05/06/23 Invoice		1,015.00
		Total Expense	**51,452.80**
		Shortage	**5,732.25**

Consumers Energy
Count on Us
A CMS Energy Company

CEM Support Center
Consumers Energy, CEM Support Center, Lansing Service Center, Rm. 122, 530 W. Willow St., P.O. Box 30162 Lansing, MI 48909-7662

December 29, 2022

NOTIFICATION #:
1061220813

CITY OF GRAND LEDGE
13253 LAWSON RD
GRAND LEDGE, MI 48837-9755

REFERENCE: 318 E SAGINAW HWY, GRAND LEDGE

Dear Valued Customer,

Thank you for contacting Consumers Energy for your energy needs. Please note the Notification Number above and include it on any correspondence you send. Please note the Account Number, located above the Account Name on your invoice, when submitting payment.

A copy of our design drawing showing the proposed location of the gas service entrance is enclosed.

The estimated cost for your energy request is as follows:

Gas Service Connection Fee:	$	200.00
Excess Footage Charge:	$	-
Winter Construction Costs:	$	-
Gas Fuel Line Tie In:		
Permit(s):		
Additional Costs - See Invoice:		
Total Estimated Cost:	**$**	**200.00**
Less Prepayment Received:	$	-
Total Estimated Cost Due:	**$**	**200.00**

Costs may also result from practical difficulties encountered during construction and additional payment may be required if:

- Work presently designed is done outside normal business hours.
- Change to the location of the service entrance.
- Changes to the design or route.
- Other construction delays.

Enclosed is an estimated invoice that is valid for 60 days from the date of this letter and is subject to change thereafter. This cost estimate includes only work required for Consumers Energy and does not reflect any work or costs that may be required by other parties, including other utilities. Once we receive your payment and any required easements, contracts, permits or inspections we can proceed with your request.

CONTACT OUR SECURE CREDIT/DEBIT CARD PAYMENT CENTER @ 1-866-329-9593 TO PAY "FEE FREE" WITH YOUR VISA OR MASTERCARD OR MAKE A PAYMENT ONLINE AT: www.consumersenergy.com AND CLICK "MAKE PAYMENT" TO USE THE GUEST PAY FEATURE.

Please review all attached materials carefully and direct inquiries for your request to:
Brandon Tuthill at 517-247-8365

Consumers Energy
Count on Us®

Amount Due:	$200.00
Please pay by:	January 12, 2023

CITY OF GRAND LEDGE
13253 LAWSON RD
GRAND LEDGE MI 48837-9755

Invoice Number	9324113886
PO Number	
PO Date	
Bill Date	12/29/22

Account: 3000 2063 4055

318 E SAGINAW HWY GRAND LEDGE - GAS UTILITY INSTALLATION - NOTIFICATION NUMBER (s): - - 1061220813

NONENERGY INVOICE

DESCRIPTION	QUANTITY	UNIT PRICE	AMOUNT
Gas CIAC Meter Connection Fee	1.0 EA	$200.00	$200.00

TOTAL DUE: $200.00

See Page 2 for Payment Options.

Consumers Energy is regulated by the Michigan Public Service Commission, Lansing, Michigan

INVOICE QUESTIONS - Contact: Brandon Tuthill -517-247-8365

Fold, detach and mail this stub with your check made payable to Consumers Energy. Please write your account number on your check.

Consumers Energy
Count on Us®

Account: 3000 2063 4055

CONSUMERS ENERGY
CEM Support Ctr - Lansing RM 122
PO Box 30162
Lansing, MI 48909-7662

PREPAYMENT REQUEST

Amount Due:	$200.00
Please pay by:	January 12, 2023
Enclosed:	

6 330033337311 000000200006 0000 2056 2 300020634055 H

CHECK REQUEST

Date: Sept 15, 2023

Payable to: Consumers Energy

In the amount of: $200.00

G/L account number: 01554

Job # and Code or Equipment name: C730 Natural Gas Allowance

What is this check for? City of Grand Ledge IRP Gas Connection

Date check required: 09/28/23 Requested by: Laura Elzinga

■ Return check to Requestor

❒ Mail check to: _____

RK Davis, Inc.

Grand Ledge Iron Removal Plant

Change Proposal - Paint Pipe in Existing Well House

Prepared By: PE

May 1, 2025

RK Davis Job# C730

Item	Description	Labor Hours	Labor Rate	Labor Total	Materials	Tools/Equip	Subcontract	Line Item Total
1	Dave Cole Decorators, Inc.			-			241.75	241.75
				-				-
				-				-
				-				-
				-				-
				-				-
				-				-
				-				-
				-				-
				-				-
	Subtotals			**-**	**-**	**-**	**241.75**	**241.75**

Notes: The Owner and Engineer requested that the existing piping be coated to match the newly installed piping in the existing well house.

Self Perform Work		-
Mark up on Self Perform Work:	15%	-
Subcontractor Work		241.75
Mark up on Subcontractor Work:	5%	50.00
Subtotal		291.75
Bonds & Insurances	1.25%	3.65
Total Quote		**295.40**
Additional Time Required	**0**	**Days**

DAVE COLE DECORATORS INC

March 10, 2025

Project Manager:	Peter Elzinga
Company:	RK Davis
Email Address:	pelzinga@rkdavis.us

Re:	Change Order Request
Project Name:	Grand Ledge Iron Removal Plant
Description of work:	Paint existing pipes in well house with 1 coat of Macropoxy 646 - 2nd • coat in High Solids Urethane

Shown below is a cost summary of labor and/or material that has exceeded the contract amount. Upon your review and acceptance, please issue a change order so we may include on our next billing.

	QTY	UNIT	RATE	COST
Labor	3	hrs	$72.00	$216.00
Material	1	ls	$25.75	$25.75
			TOTAL:	**$241.75**

TIME AND MATERIAL

DAVE COLE DECORATORS, INC.
325 Martindale St.
Sparta, MI 49345
Phone: (616) 887-9465
Fax: (616) 887-9464

CONTRACTOR'S NAME: RK DAVIS

JOB NAME: Grandledge iron Removal Plant

DESCRIPTION OF WORK: Paint Existing Pipes in well House
1 coat macropoxy 646 2nd Coat High Solids Urethane

DATE	EMPLOYEE'S NAME	TYPE OF WORK	HOURS
2-27-25	Eric Darling	Paint pipes well house 1st coat	1.5 hrs
		2nd coat	1.5 hrs
		LABOR 3 HOURS	
		MAT'L $25.75	

AMOUNT	TYPE OF MATERIAL	AMOUNT	TYPE OF MATERIAL
1	Black china Brush	15.75	
1	½ whizz skin	10.00	

OWNER/CONTRACTOR AUTHORIZATION: Mike Flook DATE: 3/4/25

FOREMAN: _____ DATE: _____