

AN ORDINANCE OF THE CITY OF OSAGE BEACH, MISSOURI, AUTHORIZING THE MAYOR TO EXECUTE CONTRACT MODIFICATION NO. 5 FOR AN AMOUNT NOT TO EXCEED \$37,085.10 FOR PROJECT NO OB19-010 WITH HEGGEMANN, INC FOR THE SWISS VILLAGE WELL NO. 3 FOR A TOTAL CONTRACT AMOUNT NOT TO EXCEED \$652,038.60.

BE IT ORDAINED BY THE BOARD OF ALDERMEN OF THE CITY OF OSAGE BEACH, MISSOURI, AS FOLLOWS, WIT:

Section 1. The Board of Aldermen hereby authorizes the Mayor to execute on behalf of the City a contract modification No. 5 with Heggemann, Inc., under substantially the same terms and conditions as set forth in the form attached hereto as ("Exhibit A").

Total expenditures or liability authorized under this contract modification is Thirty-Seven Thousand, Eighty-Five Dollars and Ten Cents. (\$37,085.10) for a new total contract price not to exceed Six Hundred Fifty-Two Thousand and Thirty-Eight Dollars and Sixty Cents (\$652,038.60).

Section 2. The City Administrator is hereby authorized to take such further actions as are necessary to carry out the intent of this Ordinance and Contract.

Section 3. This Ordinance shall be in full force and effect from date of passage and approval by the Mayor.

READ FIRST TIME: March 17, 2020

READ SECOND TIME: March 17, 2020

I hereby certify that the above Ordinance No. 20.19 was duly passed on March 17, 2020, by the Board of Aldermen of the City of Osage Beach. The votes thereon were as follows:

Ayes: 4      Nays: 0      Abstain: 0      Absent: 2

This Ordinance is hereby transmitted to the Mayor for his signature.

March 17, 2020  
Date

Tara Berreth  
Tara Berreth, City Clerk

Approved as to form:

Edward B. Rucker  
Edward B. Rucker, City Attorney

I hereby approve Ordinance No. 20.19.

March 17, 2020  
Date

John Olivarri  
John Olivarri, Mayor

ATTEST:

Tara Berreth  
Tara Berreth, City Clerk

**CONTRACT CHANGE ORDER**

Contractor's  
Change Order No. 5

February 19, 2020

City Project No. OB19-010  
HDR Project No. 10136782

\_\_\_\_\_ of \_\_\_\_\_ County, \_\_\_\_\_ State of Missouri  
City of Osage Beach (Owner) Camden

To \_\_\_\_\_ for \_\_\_\_\_  
Heggemann, Inc. (Contractor) Swiss Village Well No. 3 (Project Name)

I. Item 7. Install the well pump at a lower depth of 630 feet, which is 130 feet beyond the 500 feet indicated on the Bid plans. The lower depth is required based on actual field conditions of well drawdown. The Contractor provided a unit price in the bid documents, as Bid Alternate No. 2, for additional pump column, submersible cable, etc installed at \$48 per vertical foot. With 130 additional feet required, the total additional cost for this item is \$6,240.

Item 8. Install a 125 HP well pump, motor and cable capable of 500 gallons per minute at 765 feet of total dynamic head, in place of the 100 HP well pump, motor and cable indicated on the bid documents. The Contractor has provided an additive cost proposal for this item, for a total additional cost of \$16,183.20.

Item 9. Install a 125 HP Variable Frequency Drive with automatic synchronized bypass, in place of the 100 HP Reduced Voltage Soft Start indicated in the bid documents. The Contractor has provided an additive cost proposal for this item for a total additional cost of \$14,661.90.


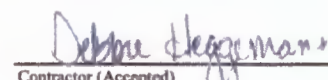
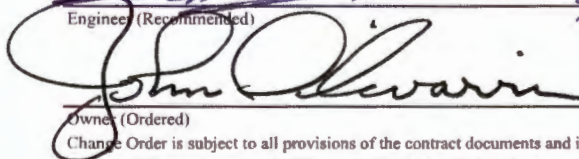
II. Cost of work affected by Change Order.

(A) Item No.	(B) Unit Description	(C) Units Provided For	(D) Units To Be Built	(E) Units Add Or Deduct	(F) Contract Or Unit Price	(G) Amount Added	(H) Amount Deducted
7	Install well pump at a depth of 630 feet, which is 130 feet beyond the 500' depth indicated in the bid documents.	500	630 FT	130	\$48.00	\$6,240.00	
8	Install a 125 HP well pump, motor and cable capable of 500gpm at 765 feet of total dynamic head in place of the 100 HP well pump, motor and cable indicated in the bid documents.	0	1 LS	1	\$16,183.20	\$16,183.20	
9	Install a 125 HP Variable Frequency Drive in place of the 100 HP Reduced Voltage Soft Start indicated on the bid documents.	0	1 LS	1	\$14,661.90	\$14,661.90	

**TOTALS** \$37,085.10

1.	Original Contract Amount	\$553,292.00
2.	Add or Deduct This Order (G-H of Totals)	<u>\$37,085.10</u>
3.	Add or Deduct Previous (Line 4 on Previous Order)	<u>\$61,661.50</u>
4.	Total Add or Deduct To Date	<u>\$98,746.60</u>
5.	Revised Contract Amount (1+4)	<u>\$652,038.60</u>

III.


3/24/2020

02/19/2020  
 Engineer (Recommended) Date Contractor (Accepted) Date  

3/17/2020  
 Owner (Ordered) Date  
 Change Order is subject to all provisions of the contract documents and is not in effect unless signed by all parties indicated.



February 24, 2020

Kim Ingham  
City of Osage Beach  
1000 City Parkway  
Osage Beach, MO 65065

Re: Swiss Village Well #3 - Proposed Change Order No. 5

Dear Kim Ingham,

The results of the additional well production test show the well has significantly more water level drawdown than the City's other wells in the area. As a result, we recommend that the well pump be set at a lower depth of 630 feet, which is 130 feet beyond the 500 feet called for on the bid plans. The contractor provided a unit price in the bid documents, as bid alternate no. 2 of \$48 per vertical foot, for additional installation of additional pump column submersible cable to set the pump beyond the 500 feet call for on the plans. The total additional cost for the additional 130 feet of pump column and cable is \$6,240.

Additionally, we recommend the well pump be changed from the 100 HP well pump with reduced voltage soft starter, to a 125 HP well pump with a variable frequency drive. The larger 125 HP is necessary for the well to produce the desired capacity while meeting the additional pump head due to the additional water level drawdown of this well per the well production tests. The variable frequency drive is necessary for the pump to operate within the pump manufacturer's recommended operating range during pump startup. The contractor provided an additive cost proposal for switching to a 125 HP well pump capable of 500 gallons per minute at 765 feet of total dynamic head in the amount of \$16,183.20 along with additive cost of \$14,661.90 for the variable frequency drive with synchronized bypass necessary for the larger 125HP well pump in lieu of the 100 HP reduced voltage soft start.

The enclosed change order includes the items above, which result in a total cost of \$37,085.10. Please feel free to contact me with any questions.

Sincerely,  
HDR Engineering, Inc.



Scott Fleming, PE

Enclosures

**PROPOSAL**  
**HEGEMANN**  
 Plumbing • Piping  
WARRENTON WASHINGTON  
**636-456-8524 636-239-2161**

FAX: 636-456-1172 PO Box 768 Warrenton, MO 63383

**ATTN: Kimberly Ingham**

<small>PROPOSAL SUBMITTED TO</small> City of Osage Beach	<small>PHONE</small> 573-302-2020	<small>DATE</small> 2/10/2020
<small>STREET</small> 5757 Chapel Drive	<small>JOB NAME</small> Additional Electrical Installation	
<small>CITY, STATE AND ZIP CODE</small> Osage Beach, MO 65065	<small>JOB LOCATION</small> Swiss Village Well #3	

We propose to furnish material and labor - complete in accordance with specifications below, for the sum of:

See Below

Payment to be made as follows:

**Draw as job progresses. Net in 30 days. Service charges will accrue.**

We hereby submit specifications and estimates for:

For 130' of additional column piping:  
 130' \* \$48/ft= **\$ 6,240.00**

For the upgrade of the deep well pump: **\$16,183.20**

Includes: 500 GPM pump with 125 HP motor and 4/0000 power cable  
 Grundfos-SP475S Pump  
 630' upsized 4/0000 power cable  
 1 - additional 6" DI VFD Check Valve

Midwest Hydro - pump upgrades:	\$14,712.00
10% overhead and profit:	<u>\$ 1,471.20</u>
<b>Total:</b>	<b>\$16,183.20</b>

Price to replace soft starter with VFD: **\$14,661.90**

Includes: See attached scope from Aesthetix Electric

Aesthetix Electric - electrical:	\$13,329.00
10% overhead and profit:	<u>\$ 1,332.90</u>
<b>Total:</b>	<b>\$14,661.90</b>

Estimators: Mike Jordan

All material is guaranteed to be as specified. All work to be completed in a workmanlike manner according to standard practices. Any alteration or deviation from specifications above involving extra costs will be executed only upon written orders, and will become an extra charge over and above the estimate. Owner to carry fire, tornado and other necessary insurance. Our workers are fully covered by Workman's Compensation Insurance.

**All agreements contingent upon strikes, accidents or delays beyond our control**

NOTE: This proposal may be withdrawn by us if not accepted within: **30** days.

Authorized Signature:

ACCEPTANCE OF PROPOSAL - The prices, specifications and conditions are satisfactory and are hereby accepted. You are authorized to do the work as specified. Payment will be made as outlined above.

Date of Acceptance: *March 17, 2020*

Signature: *[Handwritten Signature]*  
 Signature: *[Handwritten Signature]*



## Midwest Hydro

Drilling & Service, Inc.  
1297 Gravols  
St. Clair, MO 63077  
(636) 629-2424

February 9, 2020

Mr. Mike Jordan  
Heggemann, Inc.  
508 Booneslick Rd.  
Warrenton, MO 63383

Re: Osage Beach Swiss Village Well No.3, Pump Change Order Proposal

Dear Mr. Jordan:

We are pleased to furnish you with a pump change order proposal for the revised pump for Swiss Village Well No.3 in Osage Beach, MO. The pump has been redesigned to meet the larger total dynamic head. The new design conditions were determined by Scott Fleming as follows:

500 GPM  
775' - 790' of TDH  
Set 630' deep

The new revised pump will be a 500 GPM pump with 125 Hp motor and 4/0000 power cable. We propose the following additional pricing for the revised pump for new well #3.

Grundfos SP475S, 630' of upsized 4/0000 power cable, 630' of 6" column pipe and 1 additional 6" DI VFD check valve.

Add: 130' of 6" column pipe & power cable @ \$48/ft	\$6,240.00
Add: Upsize to 125 Hp pump	\$14,712.00
<b>Total Change Order Price:</b>	<b>\$20,952.00</b>

~~The VFD drive for a 125 Hp motor estimate: \$22,790.00~~

I have attached a Franklin pump curve for review and approval.

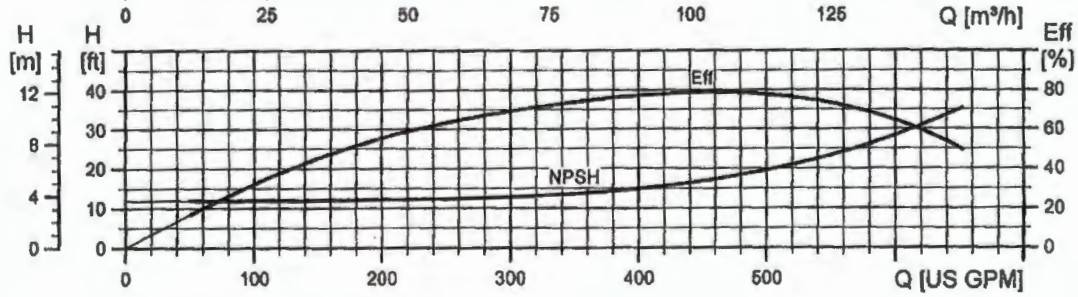
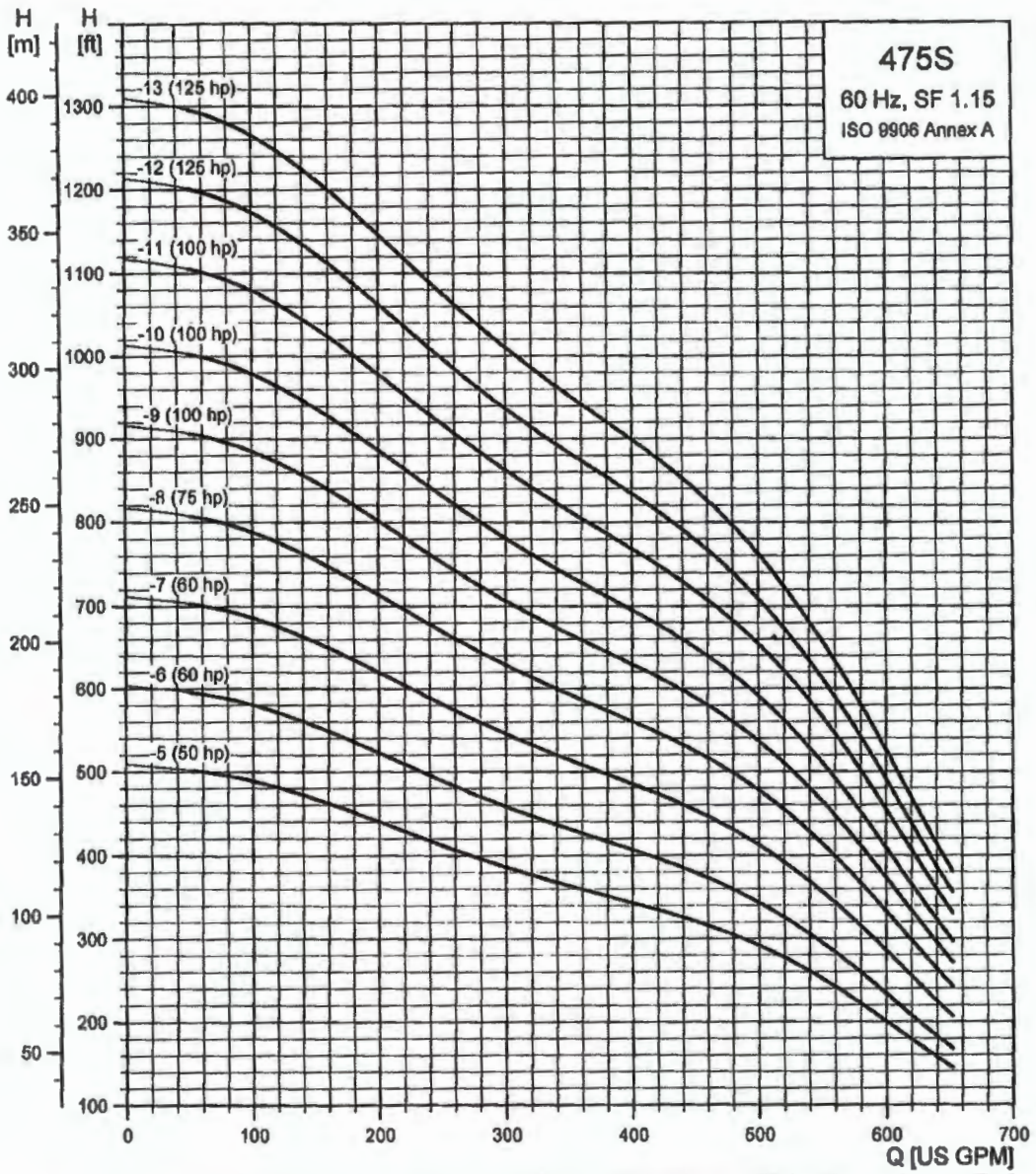
Please review and forward to the city and engineer for approval.

Sincerely,

Phil Luther

Approved: Phil Luther

475S (475 gpm)





February 12, 2020

Heggemann Inc.  
PO Box 768  
Warrenton, Mo 63383

Quote #2620112

Osage Beach Swiss Village Well #3 125HP Upgrade:

A. EGS 6-Pulse Enclosed Drive w/ 5% Dual DC Link Choke, 125 HP (93 KW) Low Overload (IL) Rated, 480VAC Three Phase Input, NEMA 12 Enclosure  
Catalog # EGS1564A211GA00000

- Manual HOA Bypass
- 22MM HOA Switch
- DV/DT Filter
- DX Enclosure Floor Mounted
- Varnished Boards (Standard)
- Installation of above
- Start up and testing

**Additions above original quote, \$13,329.00**

**Items NOT Included:**

- Premium Time
- Applicable Taxes
  
- Prices are firm 60 days from the date of proposal
- Net 30 days with 1.5% added monthly

Accepted By \_\_\_\_\_

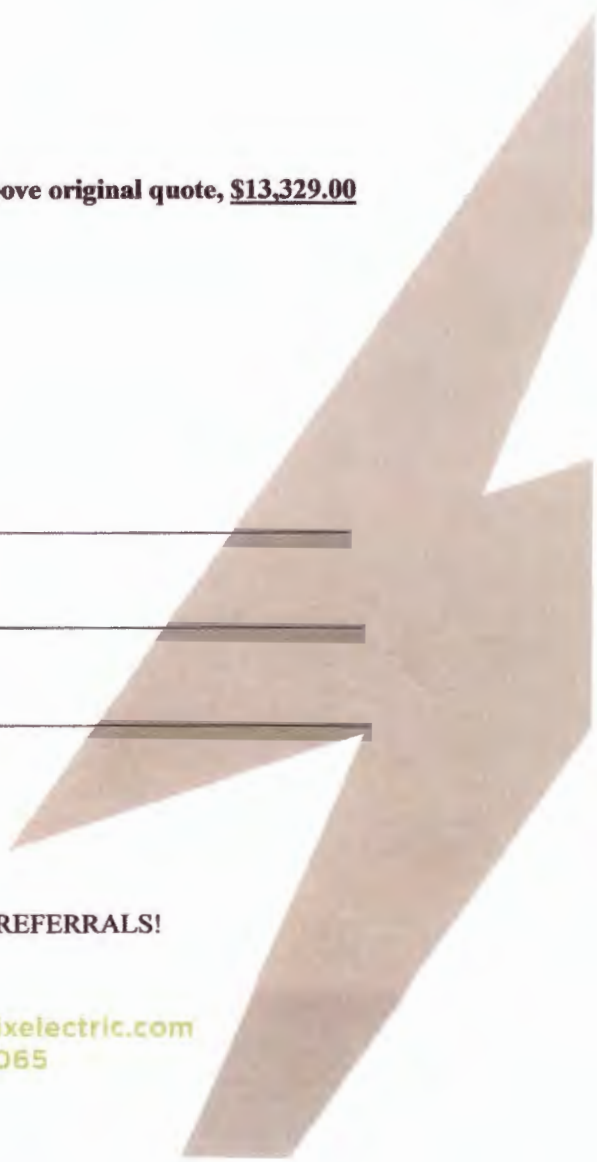
Company \_\_\_\_\_

Date \_\_\_\_\_

Steve Durbin  
Aesthetix Electric

THANK YOU FOR YOUR BUSINESS AND REFERRALS!

573.348.1429  
aesthetixelectric.com | steve@aesthetixelectric.com  
PO Box 972 | Osage Beach MO, 65065



### General Information: Drives - Enclosed

**Drive Schedule**

Item	Qty	Equipment ID	Catalog Number	Output HP	Output Amps	Output Voltage
	1		EGS1564A211GA0 0000	125	156	480VAC Three Phase

**Item Information**

Design Series:	Enclosed 6-Pulse DG1 Drive
Output Power:	125 HP (93 KW)
Rated Output Current (Amps):	156
Input Voltage:	480VAC Three Phase
Input Frequency:	45 to 66 Hz
Output Voltage:	480VAC Three Phase
Output Frequency:	0 to 320 Hz
Branch Protection:	??
Short Circuit Current Rating:	100KAIC
Enclosure NEMA Rating:	NEMA 12
Enclosure Size:	DX
Drive Frame Size:	FR5
Onboard Comms:	BACnet MS/TP, Ethernet/IP, Modbus, & Modbus TCP
Optional Comms:	None

**Enclosure Information**

NEMA Rating:	NEMA 12
Height (in):	
Width (in):	
Depth (in):	
Weight (lbs):	1000

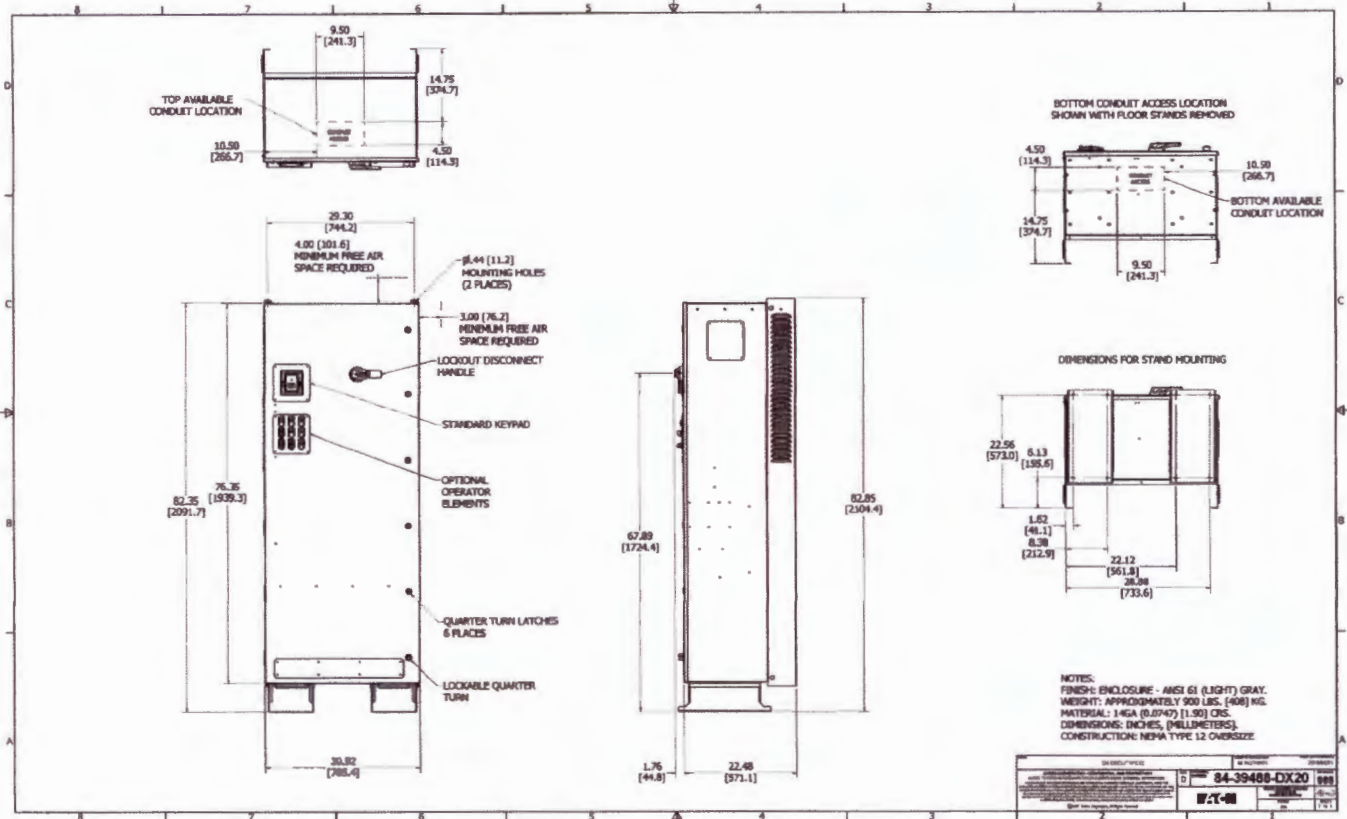
**Circuit Protection**

HMCP250L5C

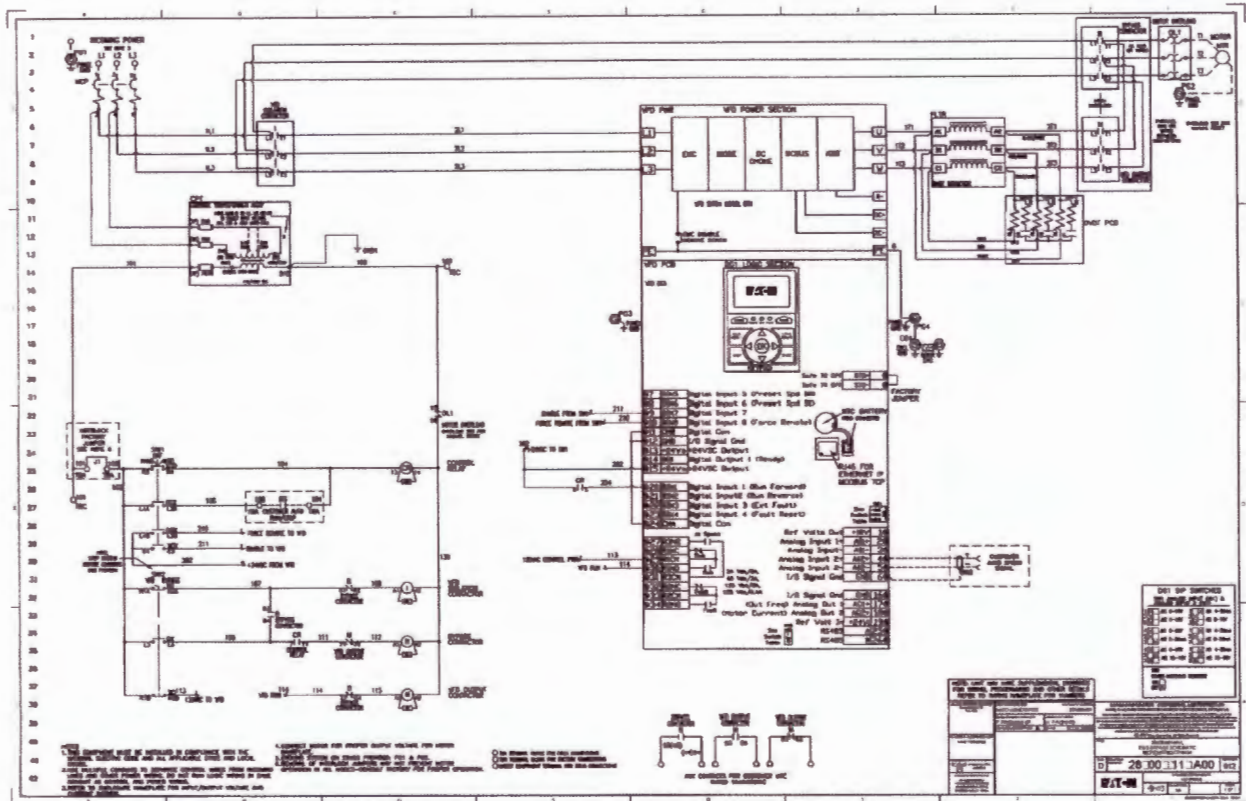
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PREPARED BY IRVIN LEE	DATE 2/11/2020	<b>Eaton</b>		
APPROVED BY	DATE	JOB NAME Aesthetix - 125 hp DG1	DESIGNATION	
VERSION 10.0.0.0	TYPE Drives - Enclosed	DRAWING TYPE Customer Appr.		
NEG-ALT Number ST510206X0K3-0000	REVISION 0	DWG SIZE A	G.O.	ITEM SHEET 1 of 1

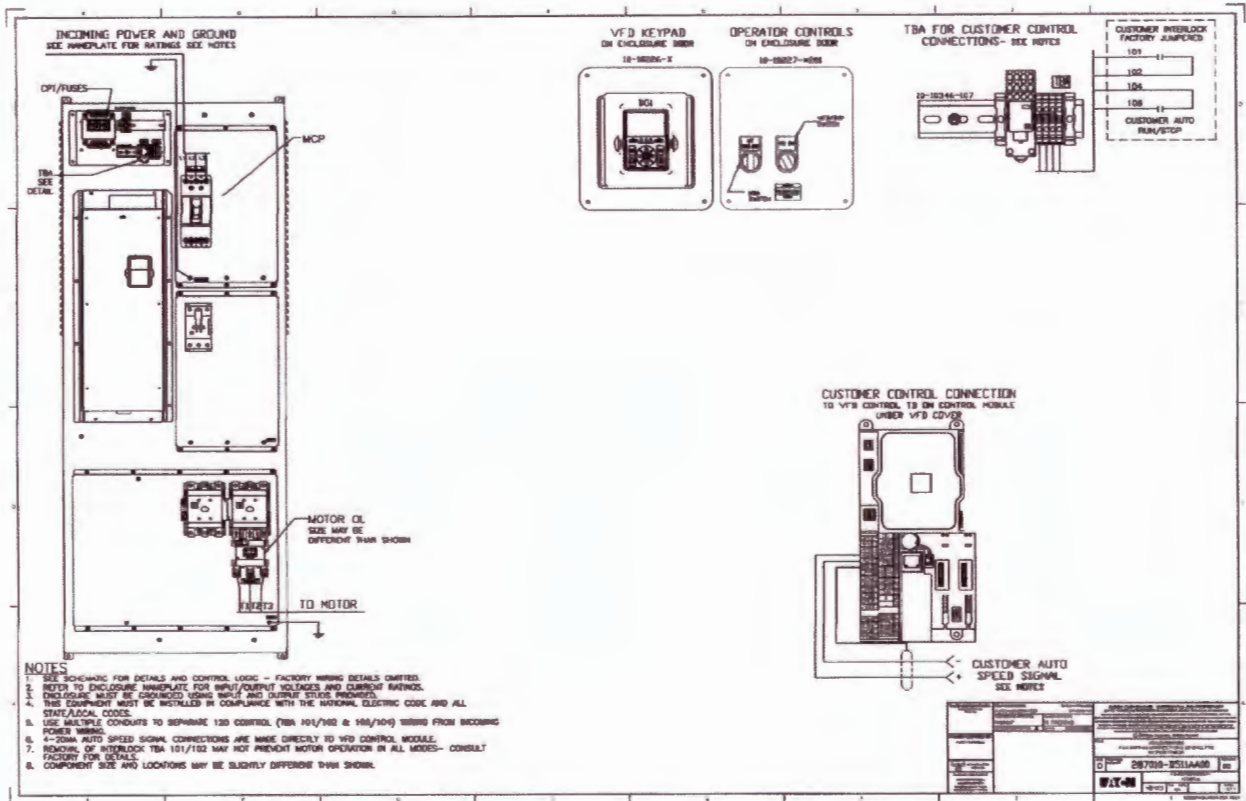




80000-Alt-Item: STS1020820K3-0005-2/1 10820 Item Number: Cabling Number: EGB1904A211G400000	Job Name: Aesthetix - 125 hp DG1 Designer:
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Doc No:	ST5100000K3-000-0110200	Auth Name:	Aesthetix - 125 hp DG1
Rev Number:	001	Design No:	EGS1064Z11GA0000



<b>WIRING-Alt-Date:</b> ST516206X0K3-6000-0111/0200 <b>Draw Number:</b> <b>Cabling Number:</b> 6061964A2110A00000	<b>Job Name:</b> <b>App-Prefix:</b> - 125 hp DG1 <b>Designation:</b>
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