

## Request for Proposals

Proposals Due:

**Friday, May 17, 2024 @ 3:00 pm local time**

General

1. Project Scope

This Request for Proposals is for procurement of two 60/80/100 MVA Transformers, 138KV – 34.5KV and delivery to the project site, 305 Lewis and Clark Blvd, East Alton, IL.

2. Deliverables

Offeror shall provide, at a minimum, the following with their Proposal, **DUE Friday, May 17, 2024 @ 3:00 pm local time.**

- a. Cost for the transformers and transportation to the job site.
- b. Product data/cut sheet for the transformers being proposed.
- c. Lead time for full submittal package from Letter of Intent.
- d. Lead time of the transformers from shop drawing approval.
- e. Shipping duration from the manufacturing facility to the job site.

3. Commercial Terms

- a. The project is in an enterprise zone and materials are tax exempt.
- b. Proposal to accept America's Central Port standard terms and conditions, included in the bid package.
- c. Proposal to accept Graycor's Purchase Order terms and conditions, included in the bid package.

4. Selection Process

Following a receipt of proposals, a thorough review of all received Proposals will occur. The ACP and Graycor review team will utilize a numerical evaluation process to rank the proposals received. The firm with the highest rank will enter into a Purchase Order agreement with Graycor.

Each Proposal will be assessed on the following:

- |                                |                   |
|--------------------------------|-------------------|
| a. Cost of the work            | <b>40% Weight</b> |
| b. Lead times                  | <b>30% Weight</b> |
| c. Adherence to Specifications | <b>30% Weight</b> |

5. Overall Schedule

Evaluation and Selection	May 24, 2024
Approval of Final Selection	June 10, 2024
Issuance of Contract	June 14, 2024

6. Point of Contact

All proposals are to be submitted electronically in PDF format to: [P24-PLAN-02@americascentralport.com](mailto:P24-PLAN-02@americascentralport.com)

Any questions can be addressed via email to:

Matt Lewallen, Project Manager II  
[matt.lewallen@graycor.com](mailto:matt.lewallen@graycor.com)

**SPECIFICATION FOR**

**60/80/100 MVA POWER TRANSFORMERS**

**RATED 138KV – 34.5KV**

For Wieland Rolled Products, North America

East Alton, Illinois

SPECIFICATION NUMBER 261211

Project Name: EA2030

Discipline: Electrical

Client: Wieland Rolled Products, North America

**Revision Signatures**

Prepared by: JCA

Date: 24-APR-2024

Approved by

Date:

Checked by:

Date:

Approved by:

Date:

Status (Estatus)	Rev No.	Date)	Prepared by	Pages	Description of Changes
IFB	A	24-APR-2024	JCA	19	Issued for Bid

## POWER TRANSFORMER SPECIFICATION

### **I. INTENT**

These specifications cover the electrical and mechanical characteristics of a Class II ONAN/ONAF/ONAF, outdoor, 60-Hz, two-winding, three phase, delta-wye connected, mineral oil-filled transformer.

Two transformers shall be supplied meeting the Specifications contained herein.

### **II. RATINGS**

H.V. Voltage:	138,000 volts
L.V. Voltage:	34,500 volts
MVA @ 65 degrees. Rise	60/80/100MVA
Altitude:	1,000 meters(3,300 ft.) or less above sea level.
Seismic:	Seismic Design Category-D

The transformer H.V. winding shall have two 2 ½ percent full capacity taps above and two 2 ½ percent full capacity taps below rated voltage.

These taps shall be de-energized taps operated by a DETC handle which passes through the side of the transformer tank at a location accessible from ground level.

The tap changer handle shall have a nameplate and provisions for pad locking in any tap position.

### **III. CONNECTIONS FOR OPERATION**

Primary Voltage - Delta  
Secondary Voltage – Wye Impedance Grounded

### **IV. COOLING**

The transformer cooling class shall be ONAN/ONAF/ONAF. The transformer shall have two stages of cooling: 133% percent of base MVA rating and 167% of base rating.

ONAN – Oil Natural, Air Natural – Used for MVA base rating

ONAF – Oil Natural, Air Forced - First set of fans for 133% of base MVA rating

ONAF – Oil Natural, Air Forced - Second set of fans for 167% of base MVA rating

### **V. BASIC IMPULSE LEVEL**

H.V. - 550 kV BIL  
L.V. - 200 kV BIL  
L.V.N. - 200 kV BIL

## **VI. IMPEDANCE**

ANSI standard per C57.12.10, Table 3. Impedance value shall 9%.

## **VII. POLARITY**

According to ANSI Standard C57.12.00, and ANSI Terminal Marking Connections C57.12.70.

## **VIII. ASSEMBLY**

The transformer shall be shipped oil filled, if possible, and as completely assembled as practical. No welding shall be required to complete field assembly. Manufacturer shall specify the total shipped weight of the transformer oil-filled and as completely assembled as possible. However, purchaser reserves the right to specify whether the transformer shall be shipped oil-filled or otherwise. Radiators shall be removable and shipped separately. Connections shall be flanged with shut off valves.

## **IX. STANDARDS**

The transformer shall be designed, built and tested per ANSI, IEEE and NEMA Standards.

## **X. TRANSFORMER EQUIPMENT**

### **A. Supply the following standard accessories per ANSI C57.12.10.**

The alarms specified below shall all be wired out to terminal blocks in order for all monitoring points to be brought out to a master control system that will report transformer status and alarms.

1. De-energized tap changer.
2. Magnetic liquid-level indicator.  
( ) Low Alarm  
( X ) Low Alarm & Trip
3. Liquid temperature indicator with one form "C" alarm and one form "C" trip contact. Dial calibration of this indicator shall be in degrees centigrade with one pointer to indicate liquid temperature and a red pointer to show previous maximum temperature. An external reset shall be provided for the red pointer. Mount gage at eye-level or below.
4. Winding temperature indicator with two form "A" alarm contacts and one form "C" trip contact: Dial calibration of this indicator shall be in degrees centigrade with one pointer to indicate winding temperature and a red pointer to show previous maximum temperature. An external reset shall be provided for the red pointer. Mount gage at eye-level or below.

5. Pressure-vacuum gage.
6. Drain and filter press valve globe type – 2 inch NPT female with .375 inch sampler.
7. Top filter press valve globe type – 1.0 inch NPT female on top of tank.
8. Vacuum filling connection – 2 inch NPT male, on top of main transformer tank.
9. Lifting facilities for cover, core and entire transformer.
10. Moving facilities.
11. Jacking facilities.
12. Diagrammatic Nameplate.
13. Two tank grounding pads with connectors for 4/0 copper ground cable.
14. Self-resetting pressure relief device, with visible indicator and one form “C” alarm contact.
15. Fault pressure relay. This relay shall be designed to operate on the sudden abnormal change of pressure in the transformer due to an internal fault.

**B. Oil Preservation System**

The Bid shall include the manufacturer standard for oil preservation system. The manufacturer shall indicate if they can furnish an alternate method for the oil preservation system and provide an alternate quote for that system. Item 3 below shall be quoted as an alternate, unless that is the standard offered by the manufacturer.

1. Sealed Tank
2. N<sub>2</sub> System
3. Conservator system with bladder and silicagel dehydrating breather. A dual column regeneration system shall be included to dry the silicagel. The dual column shall allow one silica bed to regenerate while the other column stays in service.

**C. Bushings**

1. Cover mounted condenser type bushings for primary, secondary and neutral terminal.
2. Governing Standards: IEEE C57.19.01.
3. Location: Per ANSI C57.12.10.
4. Neutral Bushing:

Insulation Class: Same as neutral insulation.

5. Bushing Studs:
6. Manufacturer's Standard. Studs to accommodate both copper and aluminum.

**D. Bushing Terminal Connectors**

1. ( ) None
2. ( X ) H.V.
3. ( X ) L.V.
4. ( X ) Neutral

**E. Radiators**

If the physical size of the transformer requires the transformer to be shipped with the radiators removed then the following shall apply:

1. Supply removable type shutoff valves at top and bottom to permit removing radiators without draining transformer oil.

**G. Fan Motors**

1. Motors shall be Krenz, three phase, capacitor start, 480 volt, induction motors. They shall be designed and built in compliance with IEEE, NEMA and ANSI standards.

**H. Control Cabinet**

1. Supply a NEMA 4X control cabinet for power, control, alarm and current transformer connections. All connections are required to be landed on terminal blocks.

**I. Insulating Oil**

1. Oil must conform or exceed the specifications given in ASTM #D3487.
2. PCB content in the oil shall not exceed 2 PPM.
3. Oil shall be mineral oil.

**J. Arresters**

1. Two sets of three (3) station class surge arresters mounted on the transformer. The following ratings apply:

<u>Winding</u>	<u>Duty Cycle</u>	<u>MCOV</u>
H.V	138 kV	111 kV
M.V.	34.5 kV	29 kV

**K. Bushing Current Transformers**

H.V. , L.V. and L. V. N. bushings shall be supplied with the quantity of customer specified CT's required. CT ratios shall be per ANSI C57.13.

Check required CT Qty/bushing, ratios and accuracy's below:

- |  |                  |
|--|------------------|
| 1. HV CT's Required:   |                  |
| HV: (X) 600:5MR, accuracy class (X) C400   | Qty/Bushing<br>1 |
| 2. LV CT's Required:   |                  |
| LV: (X) 2000:5MR, accuracy class: (X) C400   | Qty/Bushing<br>1 |
| 3. LVN CT's Required:  |                  |
| LVN: ( ) 600:5MR, accuracy class: (X) C400   | Qty/Bushing<br>1 |
| 4. Current transformers shall have all taps wired to shorting type terminal blocks in the control cabinet. |                  |

**L. Gasket and Gasket Compound**

1. Necessary nitrile rubber gaskets and compound for installing shall be provided for initial field installation.

**M. Touch-up Paint**

1. Manufacturer to supply one quart.

**N. Provided by Purchaser**

1. 115 VAC Potential source from customer's lowside potential transformers for operation of voltage regulating relay.
2. 480VAC three phase and 120 VAC single phase source for controls, fans, and LTC mechanism.
3. Battery voltage for station control.  
( ) 48 VDC  
(X) 125 VDC



**O. Tank Assembly**

1. Tank:
  - a. Shall be welded steel plate construction.
  - b. Shall be absolutely oil-tight with all fittings in place.
  - c. Shall withstand 10 psig internal pressure without showing leak when using warm oil.
  - d. Shall be suitable for full vacuum filling and drying in the field.
  - e. Shall be provided with tanking guides for centering core and coil assembly.

2. Joints and Gaskets:

All gasketed joints to have machined surfaces on both sides:

- a. To assure even and effective pressure.
- b. To avoid overstressing gasket and to maintain an oil-tight joint under all service conditions.

NOTE: Joints are to be provided with gasket retainers and metal to metal stops.

**P. Core and Coil Assembly:**

1. Windings shall be copper.
2. Core Laminations: shall be high permeability, laser scribed steel
2. Joints in windings or at bushings: Brazed or clamped.
3. Coil Insulation: Dennison densified insulation with mechanical toughness, tear strength and elongation strength. Also it must have superior electrical impulse strength.
4. Rigidity: Assembly to be braced or bolted adequately to prevent displacement and distortion under all normal conditions of handling and operation under short circuit conditions.
5. Inside bolted connections: Locking provision required.
6. Serial Number: Stamped on core in conspicuous place.
7. A lead shall be brought out from the core of the transformer to a termination point adjacent to a manhole and easily accessible to the person inspecting the transformer.

**Q. Base:**

1. The transformer base shall be a flat base with beveled edges.

**R. Neutral grounding resistor:**

1. A neutral grounding resistor shall be provided.
2. Resistor to be transformer mounted.
3. Resistor to be edgewound stainless steel and shall be 50 Ohm and limit the current to 400A.
4. The resistors shall be mounted in corrosion resistant support frames, using stainless-steel hardware.
5. The entire resistor frame shall be mounted on insulators rated for the system voltage.
6. All resistor terminals and interconnections between units shall be stainless-steel, using

stainless-steel hardware including lock washers. High current connections shall be spot or TIG welded as appropriate.

7. Connections between resistors and bushings or current transformers shall be solid copper or stainless steel bus or copper cables
8. The frame of the enclosure shall be made from structural steel angles made from heavy gauge steel, welded together, or bolted together with stainless-steel hardware. The top of the enclosure shall be solid, slightly overhung and sloped. It shall be embossed with stiffening ribs. The enclosure shall have forged eyebolts in each corner for lifting purposes.
9. The bottom of the enclosure shall be screened with expanded or perforated metal with openings of 1/2" or less. This screening shall be welded or bolted in and is not removable. It shall be elevated 4 to 6 inches above the base of the unit.
10. Bolt-on side covers on all four sides shall be used.

## **XI. PAINTING**

All exterior surfaces to be thoroughly cleaned of mill scale and rust by grit blasting. Oil and grease to be removed chemically. At least three air-dried coats of paint to be applied.

1. Primer Coat
2. Intermediate Coat
3. Finish Coat (Light gray ANSI #70)  
Total dry film thickness 3 mils.

## **XII. TESTS**

The following standard test shall be made on all transformers. All test shall be made in accordance with the latest revision of "Test Code for Distribution, Power, and Regulating Transformers, and Shunt Reactors," ANSI C57.12.90.

- A. Resistance measurements of all windings on rated voltage and all taps.
- B. Ratio Tests at rated voltage and all taps.
- C. Polarity and phase relation tests.
- D. No-load loss and excitation current at rated voltage and frequency.
- E. Exciting current at 100% and 110% rated voltage.
- F. Impedance and load loss at full load current and frequency.
- G. Optional tests of all devices
- H. Auxiliary system losses

- I. Positive and Zero phase sequence impedance
- J. Temperature Test:
  - 1. Temperature test or tests shall be made on one unit of an order covering one or more units of a given rating, but only when records of all temperature tests made in accordance with American Standards for a duplicate or an essentially duplicate unit performed within the past two years are not available.
  - 2. Subject to the limitations of the preceding paragraph when a transformer is supplied with auxiliary cooling equipment to provide more than one MVA rating, temperature tests shall be made at base OA & Maximum FA MVA's.
- K. Audible sound test
- L. Winding insulation resistance on all tap positions
- M. Core insulation resistance
- N. Insulation power factor and capacitance
- O. Partial discharge
- P. Leak test
- Q. Applied potential tests.
- R. Induced potential tests.
- S. Standard ANSI impulse tests on all windings on one unit of an order covering one or more units of a given rating for all transformers with a primary voltage higher than 69 kV (if test data is not available on an essentially duplicate unit performed within the past two years.); others at the option of the Purchaser at the Purchaser's expense.

### **XIII. TRANSPORTATION**

- A. All transformers shall be shipped F.O.B. destination. Freight allowed and prepaid. Unloading to be done by others. Manufacturer representative to be present at time of unloading and placing on foundation.
- B. Impact recorder shall accompany the transformer during transit, if rail shipment is required. The Seller shall be responsible for inspecting the transformer and impact recorder in the presence of the Purchaser upon arrival at the shipping destination to determine if any damage has occurred.
- C. Purchaser shall be notified by the Seller at least 72 hours prior to shipment and by the

Carrier 24 hours prior to arrival of each transformer at its destination.

- D. Insulating oil shipped separately shall be delivered F.O.B. destination, freight prepaid. For transformers shipped dry, oil shall be delivered by tank truck. Seller shall be responsible for final oil filling. For transformers shipped oil filled, any make-up oil of quantities less than 1,000 gallons shall be provided in 55-gallon non-returnable drums. Oil to be shipped by tank truck shall not be released for shipment until release is received from the Owner.

#### **XIV WARRANTY**

- A. Manufacturer shall provide a five (5) year full warranty for all items from date of release to Wieland power as ready for service on site. Warranty shall include all transportation expenses within the first twelve (12) months following energizing or up to fifteen (15) months following delivery, whichever is less.

#### **XV INSPECTIONS**

Wieland reserves the right to inspect the core and coil assembly before tanking. Manufacturer shall provide a five (5) days notice to Wieland before tanking to allow Wieland to witness the tanking, if so desired.

The Manufacturer shall notify Wieland one month before testing of the transformer at the factory. Wieland reserves the right to witness all factory tests on one or both of the transformers. The transformer shall not be shipped until certified test reports are available and sent to Wieland.

#### **XVI. INFORMATION TO BE SUPPLIED BY SUCCESSFUL BIDDER**

- A. Certified test reports.
- B. Guaranteed no-load, load and auxiliary losses
- C. Certified transformer impulse test reports, if applicable.
- D. Installation instructions.
- E. Manufacturer and specifications of oil furnished.
- F. Outline drawings, bushing data, nameplate drawings, and wiring and connection diagrams shall be furnished as part of the bid.
- G. Instruction Book.
- H. Supply complete performance specifications per ANSI C57.12.00.
- I. Complete a schedule of events including estimated dates for the following: drawing

approval, start of coil work, completion of coil work, start of core stacking work, start of tanking work, start of transformer testing, and estimated shipping date. This schedule of events will be provided to purchaser. The successful bidder will be responsible for updating this schedule and informing purchaser when changes occur.

**XVII. MANUFACTURER REPRESENTATIVE**

The manufacturer shall have a representative on site for unloading, assembly and filling of the transformer. Once assembled and ready for energization, a manufacturer representative shall be on-site to perform a final inspection of the installation, all connections and provide approval that the transformer is ready to energize.

**XVIII. SHORT CIRCUIT**

A complete listing of all full size transformers manufactured, in ratings 501 through 100,000 KVA, which have been short circuit tested, shall be submitted as a part of the bid. The list shall include all full-size units tested, whether they were development test or test of customer units. Complete ratings shall be given of each unit, and each shall be noted as to whether copper or aluminum windings were used – for comparison.

In the case of units tested for or by the ultimate customer, indications shall be given on each as to whether the test was successful or unsuccessful and, if tested more than once, each subsequent test shall be so listed and appropriate comments given as to design changes made, if any.

**XIX. EVALUATION OF BIDS**

Proposals will be evaluated on a Present Worth Calculation. That is, the present worth of the annual losses for a 30-year period will be added to the quoted price of the transformer. The loss evaluation will be based on no-load losses at 20 degrees Celsius and 100% of rated voltage and load losses at base OA and 85 degrees Celsius. The penalties will be calculated as follows:

No Load Losses (Core Losses)	@ \$_____ per kW
Load Losses (Copper Losses)	@ \$_____ per kW

When the dollar sum of both guaranteed (quoted) losses are exceeded, penalties will be assessed and by amount per kW as shown above. The amount of penalty will be deducted from quoted price and balance paid. No credit will be given when dollar sum of the losses are less than the guaranteed (quoted) value.

**XX. EXCEPTIONS**

Any exception taken to these specification should be stated and clarified on a page marked “EXCEPTIONS AND CLARIFICATIONS.” All exceptions will be subject to purchaser’s approval before awarding purchase order.

**XXI. APPROVAL DRAWINGS**

Following the award of the order, the successful bidder shall prepare a complete set of drawings showing equipment and controls. Each part and part number of the equipment shall be indicated on these drawings as well as correct location on the equipment. Three (3) complete sets of prints shall be submitted for purchaser's approval before start of manufacture. Manufacturing will not commence until drawings have been approved by purchaser.

**XXII. FINAL DRAWINGS**

Two (2) complete sets of drawings and instruction books will be furnished upon or before delivery of the transformer. All relevant information pertaining to the transformer, such as serial numbers and purchaser's purchase order numbers, should be on all final drawings.

**XXIII. SPARE PARTS**

Bushings

One high voltage bushing, complete with gaskets.	\$ _____
One low voltage bushing, complete with gaskets.	\$ _____
One Primary Surge Arrester	\$ _____
One Secondary Surge Arrester	\$ _____

Miscellaneous

One complete set of contacts and coils for each type of contactor relay furnished.	\$ _____
Additional spare parts as may be recommended by the Manufacturer (if necessary, use additional sheets).	\$ _____
_____	\$ _____

**XXIV.        TRANSFORMER DETAILS**

<b>Description</b>	<b>Units</b>	<b>Manufacturer Data</b>
Transformer Manufacturer		
Manufacturing Plant Location		
No Load Losses at 20°C	kW	
Load Losses at 60 MVA, at 85°C	kW	
Load Losses at 80 MVA, at 85°C	kW	
Load Losses at 100 MVA, at 85°C	kW	
Auxiliary Losses	kW	
Guaranteed Maximum Noise level	dB	
Total weight of transformer	lbs	
Shipping weight of largest piece	lbs	
Impedance, per IEEE C57.12.10	%Z	
Warranty Duration	Months	

**DATA SHEET**

ITEM	DESCRIPTION	UNIT	SPECIFIED VALUE	BIDDER VALUE
1	Rated Power ONAN/ONAF/ONAF	MVA	60/80/100	
2	Rated Frequency	Hz	60	
3	Rated Primary Voltage	KV	138	
4	Rated Secondary Voltage	KV	34.5	
5	Number of Phases		3	
6	Transformer Type		Oil Immersed	
7	HV-LV Vector Group		Dyn11	
8	Cooling Type		ONAN/ONAF/ONAF	
9	No of Taps Steps	No	5	
10	Max Tap Position Above Nominal	%	2	
11	Max Tap Position Below Nominal	%	2	
12	Tap Steps	%	2.5	
13	Magnetic Flux Density (one minute at normal tap) (20% overvoltage at 95% of rated frequency)			
14	No Load Current	A	1% to 2% of In	
15	No-load Loss at Nominal Tap Position and Rated Primary Voltage	kW		
16	Load Loss at Nominal Tap Position and Rated Load Current	kW		
17	Voltage Regulation at Full Load and Power Factor of 1	%	<=1	
18	Voltage Regulation at Full Load and Power Factor of 80%	%	<1.25	
19	Rated Short-circuit withstand Current (HV side/ MV side)	kA	40/40	
20	Rated Short-circuit Current withstand duration (both sides)	s	10	



21	Impedance measured at 65 oC and nominal tap position			
22	X/R Ratio			
23	Type of Winding material on HV Side (Copper is the preferred material type)		Copper	
24	Type of Winding material on LV Side (Copper is the preferred material type)		Copper	
25	Connections - HV windings		Delta	
26	Connections - MV windings		Impedance Grounded Wye	
<b>TRANSFORMER OIL</b>				
27	Oil Type		Class 1 Mineral Oil	
28	Dielectric Strength of Oil	kV	>50	
<b>OVERLOADING</b>				
29	25% overload at service conditions	Minutes	180	
30	50% overload at service conditions	Minutes	90	
<b>TEMPERATURE RISE</b>				
31	Max design outdoor temperature	°C	40	
32	Continuous Design ambient temperature	°C	35	
33	Minimum design ambient temperature	°C	-18	
34	Max temp rise over ambient			
	a) In oil by thermometer	°C	65	
	b) Winding RTD in Winding	°C	65	
	c) Limit hotspot temperature	°C	<80	
	d) Temperature gradient between oil and winding	°C	20	
	e) Type of winding		RTD	

	hotspot detector			
	f) Type of max winding temperature indicator		Analog/digital	
35	Average winding temp rise	°C	65	
36	Max temperature rise	°C	105	
GENERAL TRANSFORMER DATA				
37	Manufacturer			
38	Type		Double wound, sealed type, oil immersed with natural oil cooling and forced air cooling	
39	Operating flux density	Tesla	1.5	
40	Manufacturer data sheet supplied		Required	
WINDINGS/COILS				
41	Conductor in HV winding		Copper	
42	Conductor in MV winding		Copper	
BUSHINGS AND TERMINALS				
43	Type of bushing – HV		Paper Oil Capacitor with porcelain upper	
44	Type of bushing - MV		Porcelain	
45	Type of bushing - neutral		Porcelain	
46	Voltage rating HV bushing	kV	145	
47	Voltage rating MV bushing	kV	38	
48	Current rating HV bushing	A	2xIn	
49	Current rating MV bushing	A	2xIn	
50	HV Bushing BIL	kV	550	
51	HV Bushing Power Frequency withstand Voltage - Dry	kV		
52	HV Bushing Power Frequency withstand Voltage - Wet	kV		
53	Type and Metal used in	kV		

	HV Terminal			
54	MV Bushing BIL	kV	200	
55	MV Bushing Power Frequency withstand Voltage - Dry	kV		
56	MV Bushing Power Frequency withstand Voltage - Wet	kV		
57	Type and Metal used in MV Terminal			
58	Type and Metal used in Earth Terminal			
59	Bushing Type		Outdoor type and easily replaceable	
60	Creepage Distance (minimum) line to ground – Heavy contamination	mm/kV	44	
<b>TAP CHANGER</b>				
61	Catalog of tap changer with bid		Required	
62	Tap changer lockable		Required	
<b>CURRENT TRANSFORMERS</b>				
63	HV Bushing CT		600:5	
64	MV Bushing CT		2000:5	
65	Neutral CT		600:5	
<b>TANK</b>				
66	Steel			
67	Thickness of tank steel	mm	>11	
68	Paint method attached to bid		Required	
69	Dimensions			
	a) Tank Width	Inch		
	b) Tank Height	Inch		
	c) Tank Depth	Inch		
	d) Shipping dimensions of transformer	Inches		
	e) Weight of core and coils	Lbs		
	f) Weight of tank	Lbs		
	g) Weight of oil @ 20 °C	Lbs		

	h) Total weight of transformer w/o oil	Lbs		
	i) Shipping weight of transformer	Lbs		
	j) Completely assembled weight of transformer with oil, fans, etc.	Lbs		
<b>NEUTRAL GROUNDING RESISTOR</b>				
70	Material of construction		Stainless steel	
71	Enclosure		NEMA 3R	
72	CT Ratio		600:5	
73	Resistance	$\Omega$	50	
74	Current	A	400	
<b>LIGHTNING ARRESTERS</b>				
75	HV arrester BIL	kV	735	
76	HV arrester voltage rating	kV	144	
77	HV arrester MCOV	kV	115	
78	HV arrester short circuit rating	kA	65	
79	HV arrester creep distance	Inches - Very Heavy Pollution	177	
80	HV arrester type		Station class	
81	MV arrester BIL	kV		
82	MV arrester voltage rating	kV	36.2	
83	MV arrester MCOV	kV	29	
84	MV arrester short circuit rating	kA		
85	MV arrester creep distance	inches	69	
86	MV arrester type		Station class	

## DESCRIPTION OF GOODS ATTACHMENT

to  
Purchase Order  
of  
Graycor Construction Company Inc. and **Enter Seller's FULL Company Name**

Seller's Signer: **Enter PO Signer's Name**  
Delivery Date: **Enter Delivery Date**

Signer's Email: **Enter PO Signer's Email Address**

### **PURCHASE ORDER SUMMARY**

#### **Base Purchase Order:**

	<b>Cost Code:</b>	<b>Dollar Amount:</b>
<b>Enter Scope of Work Description</b>	<b>Enter Cost Code</b>	<b>\$ Enter Dollar Amount</b>
<b>Enter Scope of Work Description</b>	<b>Enter Cost Code</b>	<b>\$ Enter Dollar Amount</b>
<b>Enter Scope of Work Description</b>	<b>Enter Cost Code</b>	<b>\$ Enter Dollar Amount</b>
<b>Enter Scope of Work Description</b>	<b>Enter Cost Code</b>	<b>\$ Enter Dollar Amount</b>
<b>Enter Scope of Work Description</b>	<b>Enter Cost Code</b>	<b>\$ Enter Dollar Amount</b>
<b>Total Purchase Order Amount:</b>		<b>\$ Enter Dollar Amount</b>

#### **Alternates:**

<b>Enter Scope of Work Description</b>	<b>Enter Cost Code</b>	<b>\$ Enter Dollar Amount</b>
<b>Enter Scope of Work Description</b>	<b>Enter Cost Code</b>	<b>\$ Enter Dollar Amount</b>
<b>Enter Scope of Work Description</b>	<b>Enter Cost Code</b>	<b>\$ Enter Dollar Amount</b>

### **ENTER COMMENTS FOR PROCESSOR HERE**

This Attachment provides a description of the Goods to be furnished by Seller:

- In addition to the referenced Plans and Specifications listed on the Purchase Order Agreement, the Goods are to be provided per the Plans and Specifications listed below:
  - Specification Sections or Plans complete:
    - Enter number – Enter description of doc**
    - Enter number – Enter description of doc**
    - Enter number – Enter description of doc – \*\*\* delete or add lines as needed**
  - Seller shall supply:
    - Enter quantity – Enter description of goods or attached bill of material**
    - Enter quantity – Enter description of goods or attached bill of material**
    - \*\*\* Enter quantity – Enter description of goods or attached bill of material**
- Seller shall furnish the Goods based on the following:
  - Enter any clarifications**
  - \*\*\* Enter any clarifications**
- Seller shall not be required to:
  - Enter any exclusions**
  - \*\*\* Enter any exclusions**
- Seller shall provide submittals per the schedule below:
  - Submittal #**enter #** – due **enter date**
  - Submittal #**enter #** – due **enter date**
  - Submittal #**\*\*\* enter #** – due **enter date**
- Seller shall deliver Goods per the schedule below:
  - Delivery #**enter #** – due **enter date** – **define contents of the delivery**
  - Delivery #**enter #** – due **enter date** – **define contents of the delivery**
  - Delivery #**\*\*\* enter #** – due **enter date** – **define contents of the delivery**
  - Seller shall provide to Buyer a weekly update of the status of the fabrication / manufacture of the Goods. If requested by Buyer, Seller shall participate in an initial Kick-Off Meeting as well as weekly update meetings.
- Delivery Instructions
  - Deliveries of the Goods shall be to the address on the Purchase Order between **enter time + am/pm** and **enter time + am/pm** local time, Monday through Friday.
  - Seller shall notify Buyer's Representative (**Graycor Representative, Graycor Rep Phone #**) a minimum of twenty-four (24) hours prior to delivery. Deliveries without prior notification may be turned away and/or offloading delayed.
    - All Goods shall be tagged according to – N/A
    - Material certifications shall be included with the Bill of Materials at the time of delivery.
- Seller's payment terms are as follows:
  - Net 60 days.
  - Seller's invoice shall include lien waivers using the attached form "Lien Waiver" (**Waiver attachment is in 06.4.**)
- In case of termination of this Order, Seller's termination schedule is as follows:
  - Define Seller's Termination Schedule**
- Sellers shall provide the following Warranty Period for Goods:

- a. List Standard Warranty & Starting Date – i.e., Substantial Completion Date
- b. List any Special Warranties and Starting Date

INITIAL BELOW TO ACKNOWLEDGE RECEIPT AND AGREEMENT:

Seller Initials: \_\_\_\_\_

Buyer Initials: \_\_\_\_\_

[End of Attachment 2]

# Purchase Order

Order Date:

Two Mid America Plaza, Suite 400  
Oakbrook Terrace, Illinois 60181

**Graycor Construction Company Inc.**

Additional Documents:

**PO No.: PO-240016-000 \*This number must appear on all invoices**

**Project: Wieland - CU6**

**Project Customer: Wieland Rolled-Products North America, LLC**

<b>Seller:</b>	SAMPLE COMPANY 1234 Sample Street SAMPLE, Arizona 00000
<b>Attn:</b>	
<b>Phone:</b>	
<b>E-mail:</b>	

<b>Ship To:</b>	Graycor Construction Company Inc. c/o: 305 Lewis and Clark Blvd East Alton, Illinois 62024
<b>Attn:</b>	Steve Crowley
<b>Phone:</b>	(708) 906-4581
<b>E-mail:</b>	steve_crowley@graycor.com

<b>Reference Plans and Specifications by</b>
<b>Specifications Dated:</b> See Attached Specification Log
<b>Drawings Dated:</b> See Attached Drawing and Log
<b>With Addenda:</b> See Attached Drawing and Specification Logs
<b>Alternates Accepted by Customer:</b>

<b>Samples Required?</b>
<b>Shop Drawings Required?</b>
<b>Catalog Cuts Required?</b>

Subject to the requirements of this Purchase Order (the "Order"), including without limitation, the above-identified Plans and Specifications and the below-listed Attachments accompanying this Order, Seller shall furnish the Goods as described on the Description of Goods Attachment (Attachment No. 2) in consideration of Buyer agreeing to pay the above Purchase Order Amount according to the below Payment Terms:

Seller may accept this Order, including all terms and conditions, by signing and promptly returning one copy of the Order to the Buyer, by otherwise communicating Seller's acceptance in writing to Buyer, or by delivering the Goods. Regardless of the means of Seller's acceptance, this Order, when accepted, constitutes the complete and exclusive agreement and supersedes all previous agreements, understandings, or communications, whether oral or written, for provision of the Goods. Any term in Seller's other written form of acceptance which modifies, conflicts with, or contradicts any term shall be deemed to be rejected by Buyer unless Buyer delivers to Seller a written confirmation from Buyer's Authorized Representative that Seller's term is to be included as part of this Order.

Delivery Date	F.O.B.	Payment Terms	Tax Status

To assure timely payment, Seller shall: 1) Submit all invoices electronically to graycorap@graycor.com or hard copy to: Graycor—Accounts Payable, Two Mid America Plaza – Suite 400, Oakbrook Terrace, Illinois 60181; 2) Show PO Number, Cost Code, and Cost Type on all invoices; 3) Show PO Number on all bills of lading, cases, bundles, packing lists, time tickets and correspondence; 4) Invoice changes separately, upon completion, indicating Buyer's approved Authorization Number; 5) Verify percentage(s) of completion with Buyer's Authorized Representative prior to submission of monthly invoice.

<b>Seller:</b>	SAMPLE COMPANY	<b>Buyer:</b>	Graycor Construction Company Inc.
<b>By:</b>	_____	<b>Date:</b>	_____
<b>Name:</b>	_____	<b>By:</b>	_____
<b>Title:</b>	_____	<b>Name:</b>	_____
	<b>FEIN:</b> 123456789	<b>Title:</b>	_____

STANDARD TERMS AND CONDITIONS ATTACHMENT

to  
Purchase Order  
of

Graycor Construction Company Inc. and SAMPLE COMPANY

1. **FLOW-DOWN RESPONSIBILITY AS TO SUPPLY OF GOODS:** Buyer a contract with the Project Customer for the Project (the "Customer Contract") which includes any referenced Plans and Specifications and requirements as identified in Attachment 2.
2. **SHOP DRAWINGS; SAMPLES; INSPECTION:** Seller shall furnish Shop Drawings, Samples or descriptive data (collectively "Submittals") required by this Order or by the Plans and Specifications or by the Buyer's Separate Requirements: (a) within the time or times specified by Buyer, or if no time is specified, within a reasonable time for Buyer's purposes, (b) shipped prepaid and delivered as specified, (c) properly marked to show the name of the material, trade name of manufacturer, place of origin, name and location of the work where the material represented by sample is to be used, and the name of Seller submitting the sample. Samples not subjected to destructive tests may be retained until completion of work but will be later returned at Seller's request and expense. For any fabrication or preparation done before delivery to the job site, Seller shall use commercially reasonable efforts to provide Buyer the right of inspection at the place of preparation or fabrication. Any inspection of Goods by Buyer, whether during or after preparation or fabrication shall not relieve Seller of its obligations under this Order or at law. Approval of any Submittals by Buyer or others shall not relieve Seller from responsibility for errors or omissions in the Submittals, and all errors or omissions must be promptly corrected by Seller. If any plans, drawings, or other requirements supplied to Seller contain any inconsistencies or ambiguities, Seller shall immediately notify Buyer in writing of such deficiency; otherwise all fabrication and preparation shall be done at Seller's risk.
3. **SHIPPING; DELIVERY; ACCEPTANCE:** Time is of the essence. Seller shall deliver the Goods within the times specified, subject to Buyer's direction at such times as may be required to avoid any delay in the progress of the Project. All deliveries shall be F.O.B. the job site or other place stated in this Order. Seller shall pay all transportation insurance and other transportation-related costs unless otherwise stated in the Order. Seller shall use the fastest customary routing and means of transportation unless otherwise stated in the Order. Buyer shall not be required to accept all or part of the Goods if Buyer is prevented from accepting or utilizing them for their specified purpose due to cause beyond the reasonable control of Buyer or any cancellation of any contract not due solely to Buyer's fault. Buyer reserves the right to inspect and reject all nonconforming Goods in this Order within a reasonable time after delivery and Buyer's scheduled unpacking. Seller shall retain the risk of loss of all Goods until received and finally accepted by Buyer.
4. **WARRANTIES:** Seller warrants that the Goods (a) shall be free from defects in material and workmanship, (b) conform to the Plans and Specifications and any requirements as identified in Attachment 2 (c) unless otherwise specified in this Order, shall conform to recognized commercial standards of quality and function for the kind of Goods, (d) shall be merchantable, (e) shall be fit for their specified uses or purposes, and as to Goods that are machinery or equipment, shall be in good working condition, shall operate satisfactorily under normal usage, and shall conform to all applicable laws, including without limitation, all occupational health and safety standards and certifications. Any breach of any of the foregoing warranties shall render the Goods defective and deficient. Seller shall replace or repair, as Buyer may direct, any defective or deficient Goods immediately upon notice from Buyer. In the event any of the Goods are not repaired or replaced as directed by Buyer, Buyer, at its option, may hold them at Seller's expense for Seller's disposition or may return them at Seller's expense. In either event, Seller shall refund the purchase or rental price applicable to the Goods. Such replacement, repair, or refund shall not limit Buyer's other rights under this Order or at law to hold Seller responsible for any other damage or loss arising out of Seller's breach of the foregoing warranties or any other obligations under this Order. Buyer shall notify Seller of any rejection and shall afford Seller reasonable opportunity to inspect the Goods before return. The above warranties shall survive the delivery, inspection and acceptance, or payment. Seller warrants that the Goods do not infringe any United States patent or copyright, and Seller shall (a) pay all royalties and license fees associated with the Goods, (b) defend suits, claims or other demands for infringement of patent or copyright rights, any unfair competition or alleged unfair competition resulting from similarity of design or appearance of or trademark on the Goods, and the unauthorized or alleged unauthorized use of any trade secrets, proprietary know-how or other proprietary rights incorporated into the Goods, and (c) indemnify, pay on behalf of, and hold the Buyer harmless from loss on account of such demands.
5. **EXTRAS AND CHANGES:** No increase in the Order Amount or changes in the requirements of this Order shall be allowed unless authorized in writing in advance by Buyer's Authorized Representative.
6. **LIENS:** Seller warrants that all Goods shall be free from any lien or other claim or encumbrance. Payment for Goods may be withheld by Buyer until Buyers' receipt of satisfactory evidence that all liens, claims and demands of any and all parties with an interest in the Goods has been satisfied. To the extent payment is received, Seller hereby waives and releases, to the extent allowable by law, all liens or rights of lien now existing or that may hereafter arise relating to the Project for which the Goods are to be furnished or to the property upon which improvements are to be made and upon any money due or to become due Buyer from any person or persons. Seller shall upon request furnish waivers of any such lien rights, in form and substance satisfactory to Buyer, and if requested by Buyer, Seller shall execute and deliver an agreement not to assert liens in form satisfactory to Buyer.
7. **INSURANCE; INDEMNIFICATION; ON-SITE SERVICES:** As to the Goods, but only to the fullest extent permitted by law, and without limiting any Seller's obligations under this Order or at law, Seller agrees to defend, indemnify, hold harmless from and against, and pay on behalf of the Indemnitees any and all liability, loss, damages, costs and expenses, including reasonable attorneys' fees, claims, and demands for any loss or damage to property, including loss of use, or injury or death to persons arising out of or in connection with the Goods (the "Indemnified Matters"). It is Buyer and Seller's express intent that Seller is to defend, indemnify, hold harmless, and pay on behalf of an Indemnitee from the consequences of the Indemnitee's own wrongdoing, whether such wrongdoing is the contributing, or concurring cause of the Indemnified Matters, but only to the extent permitted by law. Buyer agrees not to enforce Seller's defense and indemnification obligations under this paragraph unless either Seller has failed to provide any applicable insurance required by this Order or such insurance obtained by Seller fails to provide the complete defense and indemnification of the Indemnitees. If fulfillment of this Order requires Seller, or those engaged by Seller, to be present on the premises of another (the "Premises Owner"), Seller agrees, and shall require those engaged by it, to (a) comply with all safety requirements of Premises Owner, (b) comply with all applicable labor agreements, and (c) procure and maintain at its own cost the following insurance: (i) Workmen's Compensation and Employer's Liability Insurance, as required by law, (ii) Commercial General Liability Insurance, including contractual liability coverage insuring Seller's obligations of defense and indemnification, naming the indemnitees as additional insureds using Additional Insured Endorsement ISO form CG 20 10 11 85, or its equivalent for \$1 million, each occurrence and \$2 million general aggregate, per coverage, applied separately to the Project, and (iii) Commercial Automobile Liability Insurance, if motor vehicles are to be used for \$1 million each occurrence. Seller shall maintain all required insurance for not less than two years following final payment of the Purchase Order Amount, and Seller waives all rights against Indemnitees and those with whom Buyer has contracted, for



loss or damage to the extent reimbursed by any insurance furnished by Seller except such rights as may exist to the proceeds of insurance. Seller's obligations under this paragraph shall not limit in any way the liabilities assumed by Seller under this Order or at law. Seller's obligations of defense, indemnification, and payment shall not be limited by any restriction on the amount or type of damages, compensation, or benefits payable by or for Seller, or those for whom Seller is responsible, under workmen's compensation acts, disability benefit acts or other employee benefit acts or by the insurance coverages available to Seller or others. Seller's obligations of defense shall be deemed to be separate and apart from its hold harmless, indemnification, and payment obligations under this Order. Seller agrees its obligations under this paragraph survive any termination of this Order.

8. **DEFAULT AND REMEDIES:** In the event Seller should fail to observe and perform any of the conditions of this Order, Buyer shall have, in addition to any other remedies provided by law, any and all of the following rights and remedies: (a) to cancel this Order with respect to any undelivered or defective Goods, (b) to charge Seller for any actual and direct damages, including reasonable attorney's fees, incurred or suffered as a result of the default, (c) to obtain replacements for the Goods elsewhere and charge Seller with any actual and direct costs incurred as a result (d) to take possession of any Goods delivered or in transit and to use or sell such Goods applying their value against any amounts which may be due to Buyer and (e) to withhold payment for any Goods previously delivered, pending correction of default and satisfactory performance of unfilled portions of the Order., provided Buyer pays all undisputed amounts in accordance with this Order. Payment of all or any portion of the Order Amount or acceptance of any Goods shall not constitute a waiver of any right or remedy of Buyer. No remedy reserved to Buyer under this Order shall be exclusive of any other right or remedy, and Buyer may exercise any other right or remedy available to Buyer at law or otherwise.

9. **TAXES:** Seller shall pay all excise, privilege, occupational, sales, use and other taxes applicable to the purchase, sale, or use of the Goods, unless otherwise stated in this Order, and all Federal, State, or other taxes on payroll or contributions on account of Social Security, unemployment insurance, and other charges payable relative to wages or salaries of employees engaged in performing services associated with the manufacture or furnishing of the Goods, and Seller agrees indemnify and save Buyer harmless from and against all liability for such taxes and charges.

10. **LAWS AND ORDINANCES:** Seller shall comply with all federal, state and local laws, ordinances, and regulations, orders or governmental rules applicable to the Goods (the "Laws"). Any clause required to be included in an Order of this type by any applicable Laws shall be deemed to be a part of this Order. Without limiting the foregoing, Seller warrants that all Goods and services furnished under this Order shall comply with all laws, regulations and rules pertaining to the environment and safety and health, including but not limited to the Federal Occupational Safety and Health Act of 1970, as amended, and all laws, regulations, ordinances, rules and executive orders with regard to equal employment, equal opportunity and discrimination. Without limiting the foregoing, if Seller is a federal government subcontractor or a federally assisted construction subcontractor, Seller agrees (a) to take affirmative action to ensure that employees and applicants are treated without regard to race, color, religion, sex gender, gender identity, gender expression, transgender status, sexual orientation, pregnancy, childbirth and other pregnancy-related conditions, national origin, military or veteran status, marital status (including registered domestic partners), parental status, physical disability, mental disability, medical condition, or genetic information or any other characteristic protected by law. Seller shall not retaliate against any individual who reports discrimination or harassment or participates in an investigation of such reports. Supplier shall actively promote a harassment-free work environment among its officers, agents, servants, employees, subcontractors, and suppliers, (b) to comply with Executive Order 11246, as amended, with all parts that are applicable to the Project and with the rules, regulations and relevant orders of the U.S. Secretary of Labor, all of which are incorporated into and made a part of this Order by reference. Seller warrants that all the Goods delivered under this Order were produced and shipped in compliance with the Fair Labor Standards Act, as amended, and any regulations and orders promulgated thereto. Seller agrees to defend, indemnify and hold harmless Buyer from and against any and all liability, damages, costs and expenses, including reasonable attorneys' fees, which may arise out of the failure of Seller to comply with all applicable Laws. Seller shall furnish Material Safety Data Sheets (MSDS), identified by Order number, to Buyer at the address set forth on the Order, Attn: Buyer's Superintendent. Seller shall determine whether the Goods either are or contain hazardous substances as described under Laws and shall designate the appropriate hazard classification for such Goods.

11. **ASSIGNMENT AND SET-OFF:** Neither this Order nor any payment due under this Order shall be sublet, assigned, or otherwise transferred in whole or in part without Buyer's prior written consent. Buyer shall have the right to credit the payment of any monies that may become due Seller under this Order toward any amounts which may be or become owed by Seller to Buyer arising from or related to this Order.

12. **TERMINATION AND GOVERNING LAW:** Buyer may terminate this Order, in whole or in part, for any reason at Buyer's convenience upon written notice to Seller. Upon such termination, Seller agrees to waive all claims for damages, including those for loss of anticipated profits, and to accept as its sole remedy for termination the value of the Goods furnished prior to termination and reasonable costs occasioned by termination; provided, that Buyer shall have no liability whatsoever for Goods which are Seller's standard stock. The terms and provisions of this Order shall be construed and applied in accordance with the laws of Illinois, or at Buyer's option, the laws of the state required by the provisions of the Customer Contract. If any provision of this Order is invalid or unenforceable, for any reason, such provision shall be deemed reformed or deleted, and the remaining provisions shall remain in full force and effect.

INITIAL BELOW TO ACKNOWLEDGE RECEIPT AND AGREEMENT:

Subcontractor Initials: \_\_\_\_\_

Contractor Initials: \_\_\_\_\_

[End of Attachment No. 1]

**DESCRIPTION OF GOODS ATTACHMENT**

to  
Purchase Order  
of

Select Graycor Company and Enter Seller's FULL Company Name

Seller's Signer: Enter PO Signer's Name  
Delivery Date: Enter Delivery Date

Signer's Email: Enter PO Signer's Email Address

**PURCHASE ORDER SUMMARY**

**Base Purchase Order:**

	<b>Cost Code:</b>	<b>Dollar Amount:</b>
Enter Scope of Work Description	Enter Cost Code	\$ Enter Dollar Amount
Enter Scope of Work Description	Enter Cost Code	\$ Enter Dollar Amount
Enter Scope of Work Description	Enter Cost Code	\$ Enter Dollar Amount
Enter Scope of Work Description	Enter Cost Code	\$ Enter Dollar Amount
Enter Scope of Work Description	Enter Cost Code	\$ Enter Dollar Amount

**Total Purchase Order Amount:** \$ Enter Dollar Amount

**Alternates:**

Enter Scope of Work Description	Enter Cost Code	\$ Enter Dollar Amount
Enter Scope of Work Description	Enter Cost Code	\$ Enter Dollar Amount
Enter Scope of Work Description	Enter Cost Code	\$ Enter Dollar Amount

**ENTER COMMENTS FOR PROCESSOR HERE**

This Attachment provides a description of the Goods to be furnished by Seller:

1. In addition to the referenced Plans and Specifications listed on the Purchase Order Agreement, the Goods are to be provided per the Plans and Specifications listed below:
  - a. Specification Sections or Plans complete:
    - 1) Enter number – Enter description of doc
    - 2) Enter number – Enter description of doc
    - 3) Enter number – Enter description of doc – \*\*\* delete or add lines as needed
  - b. Seller shall supply:
    - 1) Enter quantity – Enter description of goods or attached bill of material
    - 2) Enter quantity – Enter description of goods or attached bill of material
    - 3) \*\*\* Enter quantity – Enter description of goods or attached bill of material
2. Seller shall furnish the Goods based on the following:
  - a. Enter any clarifications
  - b. \*\*\* Enter any clarifications
3. Seller shall not be required to:
  - a. Enter any exclusions
  - b. \*\*\* Enter any exclusions
4. Seller shall provide submittals per the schedule below:
  - a. Submittal #enter # – due enter date
  - b. Submittal #enter # – due enter date
  - c. Submittal #\*\*\* enter # – due enter date
5. Seller shall deliver Goods per the schedule below:
  - a. Delivery #enter # – due enter date – define contents of the delivery
  - b. Delivery #enter # – due enter date – define contents of the delivery
  - c. Delivery #\*\*\* enter # – due enter date – define contents of the delivery
  - d. Seller shall provide to Buyer a weekly update of the status of the fabrication / manufacture of the Goods. If requested by Buyer, Seller shall participate in an initial Kick-Off Meeting as well as weekly update meetings.
6. Delivery Instructions
  - a. Deliveries of the Goods shall be to the address on the Purchase Order between enter time + am/pm and enter time + am/pm local time, Monday through Friday.
  - b. Seller shall notify Buyer's Representative (Graycor Representative, Graycor Rep Phone #) a minimum of twenty-four (24) hours prior to delivery. Deliveries without prior notification may be turned away and/or offloading delayed.
    - a. All Goods shall be tagged according to – numbering system detail
    - b. Material certifications shall be included with the Bill of Materials at the time of delivery.
7. Seller's payment terms are as select option
  - a. Define Special Payment Terms
    - 1) Breakdown including percentage, e.g., Design – 30%. Invoice upon Execution of Order
    - 2) Breakdown including percentage, e.g., Delivery – 20%
    - 3) \*\*\* Breakdown including percentage

b. Seller's invoice shall include lien waivers using the attached form "Lien Waiver" (If applicable, attach the Project Specific Lien Form here. Otherwise delete. Lien Waivers are referenced in the Standard T&C's.)

- 8. In case of termination of this Order, Seller's termination schedule is as follows:
  - a. Define Seller's Termination Schedule
- 9. Sellers shall provide the following Warranty Period for Goods:
  - a. List Standard Warranty & Starting Date – i.e., Substantial Completion Date
  - b. List any Special Warranties and Starting Date

INITIAL BELOW TO ACKNOWLEDGE RECEIPT AND AGREEMENT:

Seller Initials: \_\_\_\_\_

Buyer Initials: \_\_\_\_\_

[End of Attachment 2]