



**Henderson Water Utility**  
WATER • WASTEWATER • STORMWATER

📞 270.826.2421

💻 [www.hkywater.org](http://www.hkywater.org)

📍 111 Fifth Street  
Henderson, KY 42420

**Memo To:** Plan Holders

**From:** Tom Williams, P.E.  
HWU General Manager

**Re:** Generator Project - Addendum No. 1  
Bid Reference: 2021 - 05

**Date:** 17 February 2021

Questions from Bidders, and Answers, so far:

1. Question: Generator spec calls for natural gas, drawings do not show any lines run for natural gas, or meter locations. Please advise?

Answer: Our consultant did not size the gas lines, because depending on the make/model of generator, the sizing may change. HWU will pay directly for all costs of installing a new service line and meter at each location, which will be installed by the local gas supplier. Bidders will only have to price connection to this service, which will be within 20' of the generator location.

2. Question: On print E-2 keynote 3 –states a 400 AMP three phase transfer switch. Is this correct? Existing transformer that feeds the three existing panels is a 480 to 208/120, 3 phase, 75 KVA. It is rated at 200 AMPS feeding three panels fed with one 200 AMP, 3 phase circuit.

Answer: This is correct. The generator can output 400A, so we are building in future capabilities.

3. Question: On print E-1, conduit C111 is a 4" with two sets of three 4/0 and #6 ground. If this is to feed existing 120/208, 3 phase, 4-wire panel, it would need two additional wires. 3 phase, 4-wire with ground. Is this also to be rated at 400 AMPS?

Answer: Conduit and cable schedule on Sheet E-5 has been updated on the attached drawing. It does need to be rated at 400A.

4. Question: On print E-1, conduit C102 and 103, 2 – 4/0 and ground is this correct? Each feeds a 240/120, 1 phase, 3-wire with ground. Is this correct?

Answer: Conduit and cable schedule on Sheet E-5 has been updated on the attached drawing.



5. Question: On print E-3, conduit C121 and 122, two 4/0 and #6 ground to feed a 240/120-volt, 1 phase, 3-wire panel with ground. Is this correct?

Answer: Conduit and cable schedule on Sheet E-5 has been updated on the attached drawing.

6. Question: On print E-4, conduits C131, C132, and C133, show 3 – 1/0 and #6 to feed 480/277, 3 phase 4-wire. Is this correct?

Answer: Conduit and cable schedule on Sheet E-5 has been updated on the attached drawing.

7. Question: How will the Bid Opening be made public, when Kentucky is still under modified lock-down procedures?

Answer: Bidders should submit their sealed bids by customary means, prior to the bid opening time. At the specified time, a video teleconference will be broadcast to the public as allowed under KRS 61.826 and KRS 45A.080(4).

No primary location will be set for public attendance as per Kentucky Attorney General Opinion 20-05, and no public attendance will be permitted at this meeting due to the highly contagious nature of COVID-19.

**The Bid Opening will be broadcast on Zoom:**

When: 25 February 2021, 01:30 PM Central Time (US and Canada)

Register in advance for this meeting:

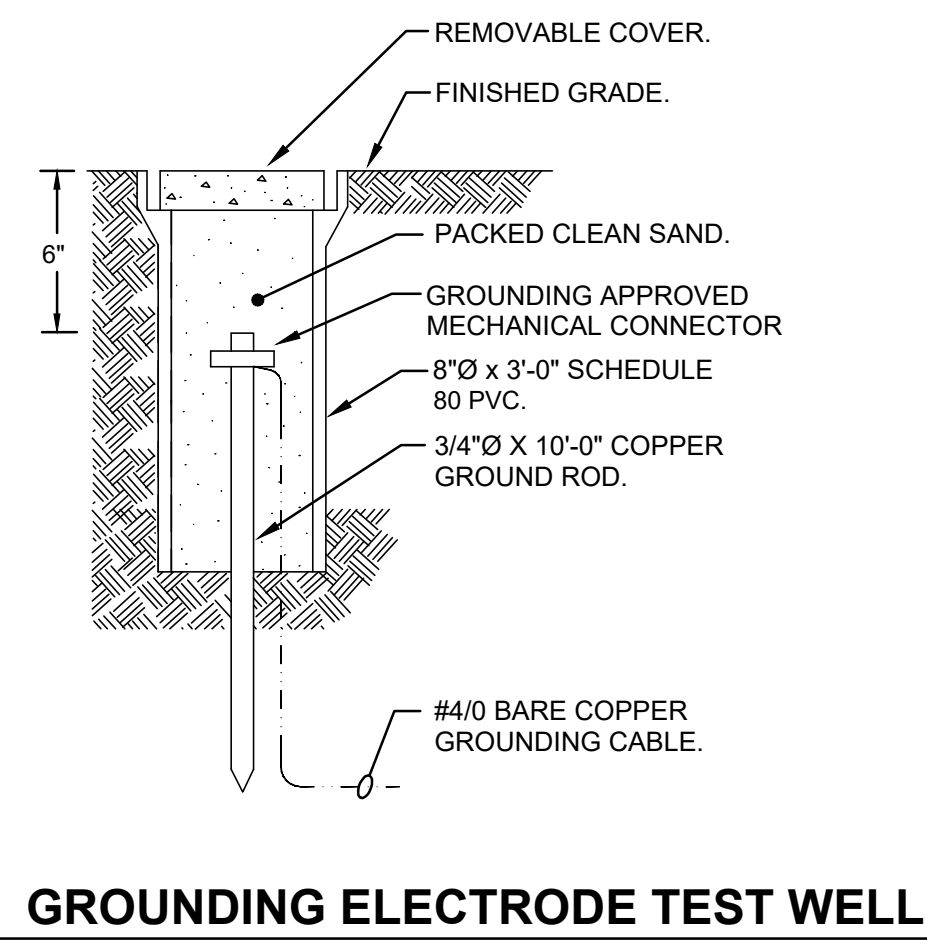
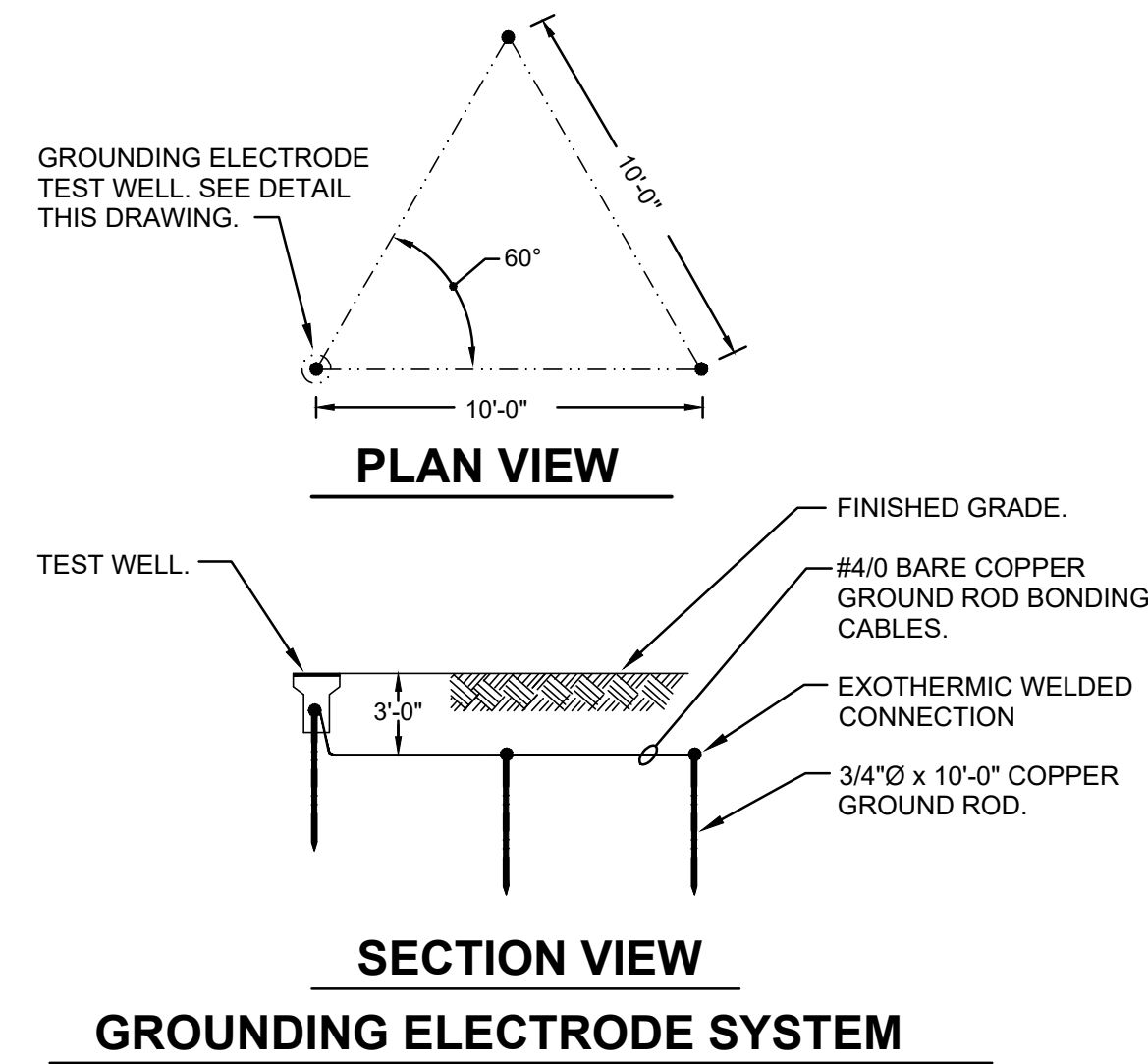
<https://zoom.us/meeting/register/tJclc-ygrDwiGtyATjJ0KVbetDk7dbEPofQP>

After registering, you will receive a confirmation email containing information about joining the meeting.

Bid opening date/time remains the same: 1:30 p.m., 25 February 2021, online, as noted above.

If you have further questions, feel free to call me at 270.826.2421 (Office).

Cc: Bart Boles, HWU Project Engineer  
Kathy Manker, HWU Procurement Manager



**BURNDY GROUNDING LUG DETAIL**

4/0 LUG - BURNDY PART NO. QA282N  
2/0 LUG - BURNDY PART NO. QA262B

**BURNDY GROUNDING BUSS BAR DETAIL**

BURNDY PART NO. BBB144126

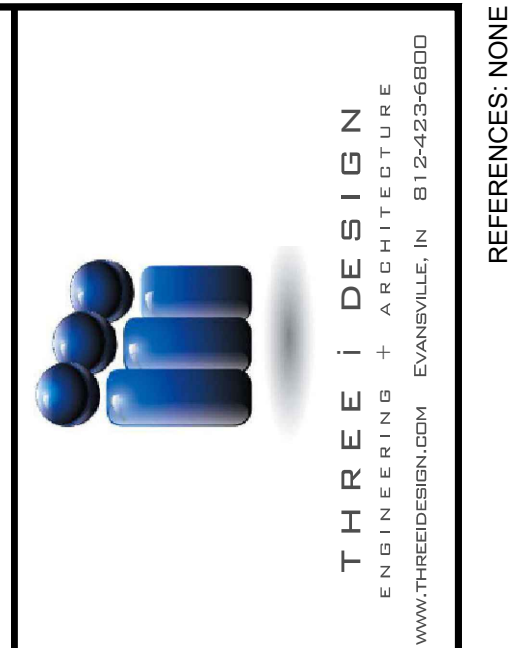
**2 CONDUIT DUCT BANK**

0 6" 1'

**KEYNOTES:**

- 1 CONCRETE WITH REBAR AND MARKED WITH RED OXIDE POWDER.
- 2 BURIED A MINIMUM OF 36" BELOW NEW GRADE, OR AS REQUIRED TO CLEAR OTHER BURIED UTILITIES.
- 3 CONTINUOUS LONGITUDINAL RUNS OF #4 REBAR RUNNING THE ENTIRE LENGTH IN EACH CORNER, WITH #4 LOOPS CONNECTING TO THE LONGITUDINAL REBARS SPACED EVERY 48". COORDINATE WITH SPEC 33 71 19.
- 4 SEE EQUIPMENT MANUFACTURER'S INSTALLATION MANUAL FOR TYPE AND QUANTITY OF CABLES.

CABLE AND CONDUIT SCHEDULE						
CONDUIT NUMBER	SIZE	FROM	TO	CONDUCTOR QUANTITY AND SIZE	VOLTAGE	
101	4"	OFFICE GENERATOR	OFFICE ATS	(2) SETS OF (4) 4/0, #6 GND	120/208V	
102	<span style="border: 1px solid black; padding: 2px;">2 1/2"</span>	OFFICE ATS	OFFICE DISCONNECT #1	(3) 4/0, #6 GND	120/240V	<span style="border: 1px solid black; padding: 2px;">B</span>
103	<span style="border: 1px solid black; padding: 2px;">2 1/2"</span>	OFFICE ATS	OFFICE DISCONNECT #2	(3) 4/0, #6 GND	120/240V	<span style="border: 1px solid black; padding: 2px;">B</span>
104	3/4"	EXISTING 120V PANEL	DISCONNECT	(2) #12 AWG, (1) #12 GND	120V	
105	3/4"	DISCONNECT	OFFICE GENERATOR	(2) #12 AWG, (1) #12 GND	120V	
4 106	1"	OFFICE GENERATOR	OFFICE ANNUNCIATOR AND E-STOP BUTTON	REQUIRED CABLES FOR ANNUNCIATOR AND E-STOP		
111	4"	OFFICE GENERATOR	NWTP ATS	(2) SETS OF (4) 4/0, #6 GND	120/208V	
112	<span style="border: 1px solid black; padding: 2px;">2 1/2"</span>	NWTP ATS	NWTP PANEL	(4) 4/0, #6 GND	120/208V	<span style="border: 1px solid black; padding: 2px;">B</span>
4 113	1"	OFFICE GENERATOR	NWTP ANNUNCIATOR AND E-STOP BUTTON	REQUIRED CABLES FOR ANNUNCIATOR AND E-STOP		
121	<span style="border: 1px solid black; padding: 2px;">2 1/2"</span>	NWWTP GENERATOR	NWWTP ATS	(3) 4/0, #6 GND	120/240V	<span style="border: 1px solid black; padding: 2px;">B</span>
122	<span style="border: 1px solid black; padding: 2px;">2 1/2"</span>	NWWTP ATS	NWWTP PANEL	(3) 4/0, #6 GND	120/240V	<span style="border: 1px solid black; padding: 2px;">B</span>
123	3/4"	EXISTING 120V PANEL	DISCONNECT	(2) #12 AWG, (1) #12 GND	120V	
124	3/4"	DISCONNECT	NWWTP GENERATOR	(2) #12 AWG, (1) #12 GND	120V	
4 125	1"	NWWTP GENERATOR	NWWTP ANNUNCIATOR AND E-STOP BUTTON	REQUIRED CABLES FOR ANNUNCIATOR AND E-STOP		
131	<span style="border: 1px solid black; padding: 2px;">2"</span>	SWTP GENERATOR	SWTP ATS	(4) 1/0, #6 GND	480V	<span style="border: 1px solid black; padding: 2px;">B</span>
132	<span style="border: 1px solid black; padding: 2px;">2"</span>	SWTP ATS	SWTP EMERGENCY PANEL	(4) 1/0, #6 GND	480V	<span style="border: 1px solid black; padding: 2px;">B</span>
133	<span style="border: 1px solid black; padding: 2px;">2"</span>	SWTP PANEL	SWTP ATS	(4) 1/0, #6 GND	480V	<span style="border: 1px solid black; padding: 2px;">B</span>
134	3/4"	EXISTING 120V PANEL	DISCONNECT	(2) #12 AWG, (1) #12 GND	120V	
135	3/4"	DISCONNECT	SWTP GENERATOR	(2) #12 AWG, (1) #12 GND	120V	
4 136	1"	SWTP GENERATOR	SWTP ANNUNCIATOR AND E-STOP BUTTON	REQUIRED CABLES FOR ANNUNCIATOR AND E-STOP		



REV	DATE	BY	ITEM
A	01/29/21	LKT/CRC	ISSUED FOR BID
B	2/17/21	LKT/CRC	ADDENDUM #1

**EMERGENCY GENERATORS  
HENDERSON WATER UTILITY  
HENDERSON, KY**

GROUNDING DETAILS  
AND CABLE AND  
CONDUIT SCHEDULE

DRAWN BY: LKT  
DESIGNED BY: CRC  
CHECKED BY: MFB  
DATE: 01/29/21  
SCALE: NONE

FILE NAME:  
17391BE5

SHEET NO:  
**E5**  
5 of 6

**BID**  
01/29/2021