

**ADDENDUM NO. 4**

**FOR**

**Greenwood Maintenance Building Addition for:  
Monroe Housing Commission  
Greenwood Townhouses**

**JAMES S. JACOBS ARCHITECTS, PLLC**  
25 WASHINGTON STREET  
MONROE, MICHIGAN 48161  
Phone 734-241-7933 Fax 734-241-1181 jimj@jsjacobsarch.com

**DATE: July 21, 2023**  
**PROJECT NO.: 20222**  
**PAGE 1 OF 3**

**THIS ADDENDUM IS ISSUED TO MODIFY, CLARIFY, AND ADD TO THE PREVIOUSLY ISSUED CONTRACT DOCUMENTS.**

**PLEASE ATTACH THIS ADDENDUM THERETO AND INCLUDE COST CHANGES IN THE FINAL BID. ACKNOWLEDGE RECEIPT OF THIS ADDENDUM IN THE APPROPRIATE SPACE ON THE PROPOSAL FORM.**

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**DRAWINGS OR SKETCHES ISSUED:**

None

**SPECIFICATIONS ISSUED:**

None

**DRAWING CORRECTIONS, REVISIONS, MODIFICATIONS, OR CLARIFICATIONS:**

**Drawing E-2 – Site Plan Electrical (Drawing Reissued):**

**ADD:** Underground primary work, CT Cabinet and Site Plan notes as shown.

**Drawing E-4 – Panel Riser & Panel Schedules (Drawing Reissued):**

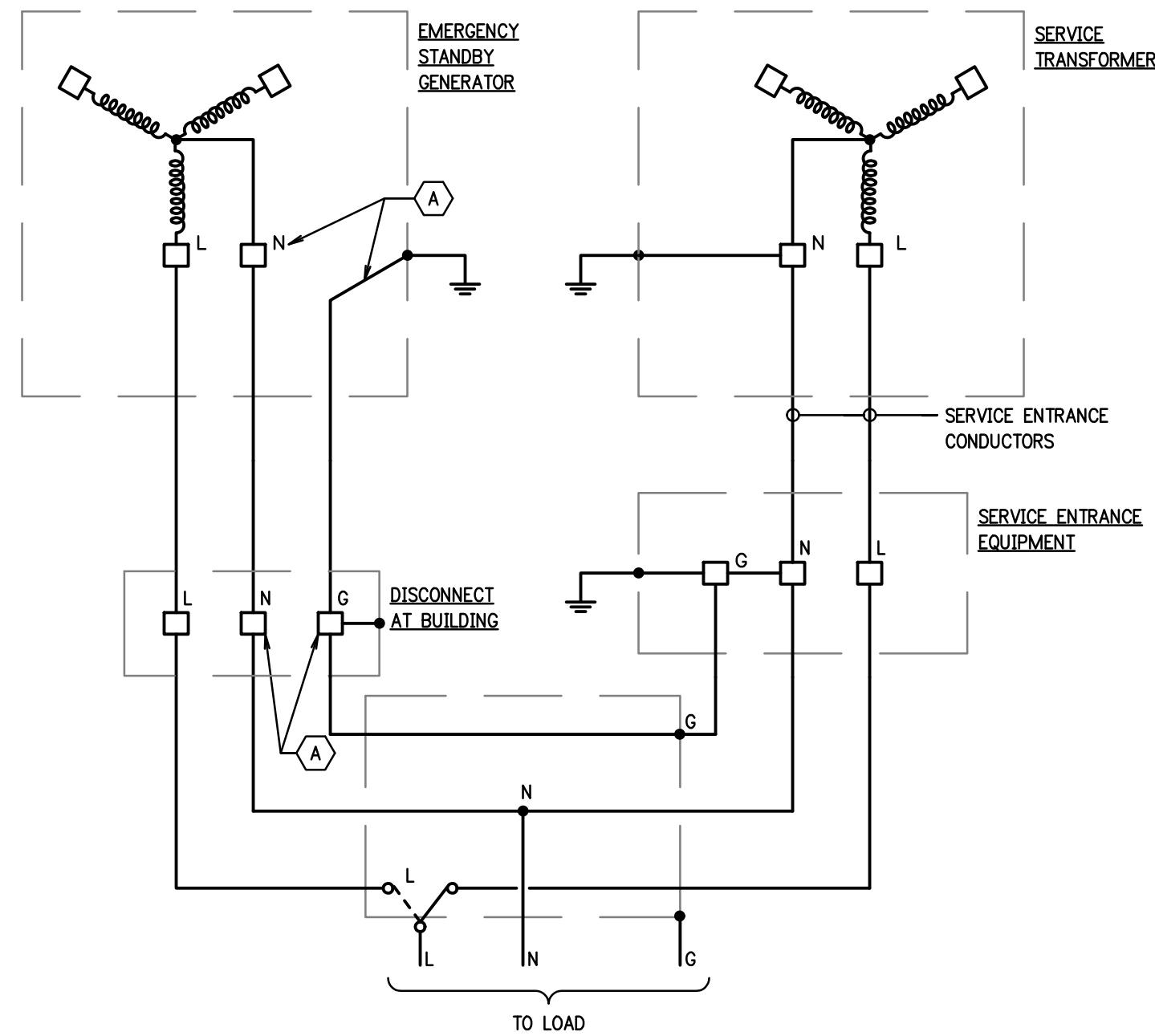
**ADD:** Utility power work and CT cabinet as shown.

**DELETE:** New overhead line.

**SPECIFICATION CORRECTIONS, REVISIONS, MODIFICATIONS, OR CLARIFICATIONS:**

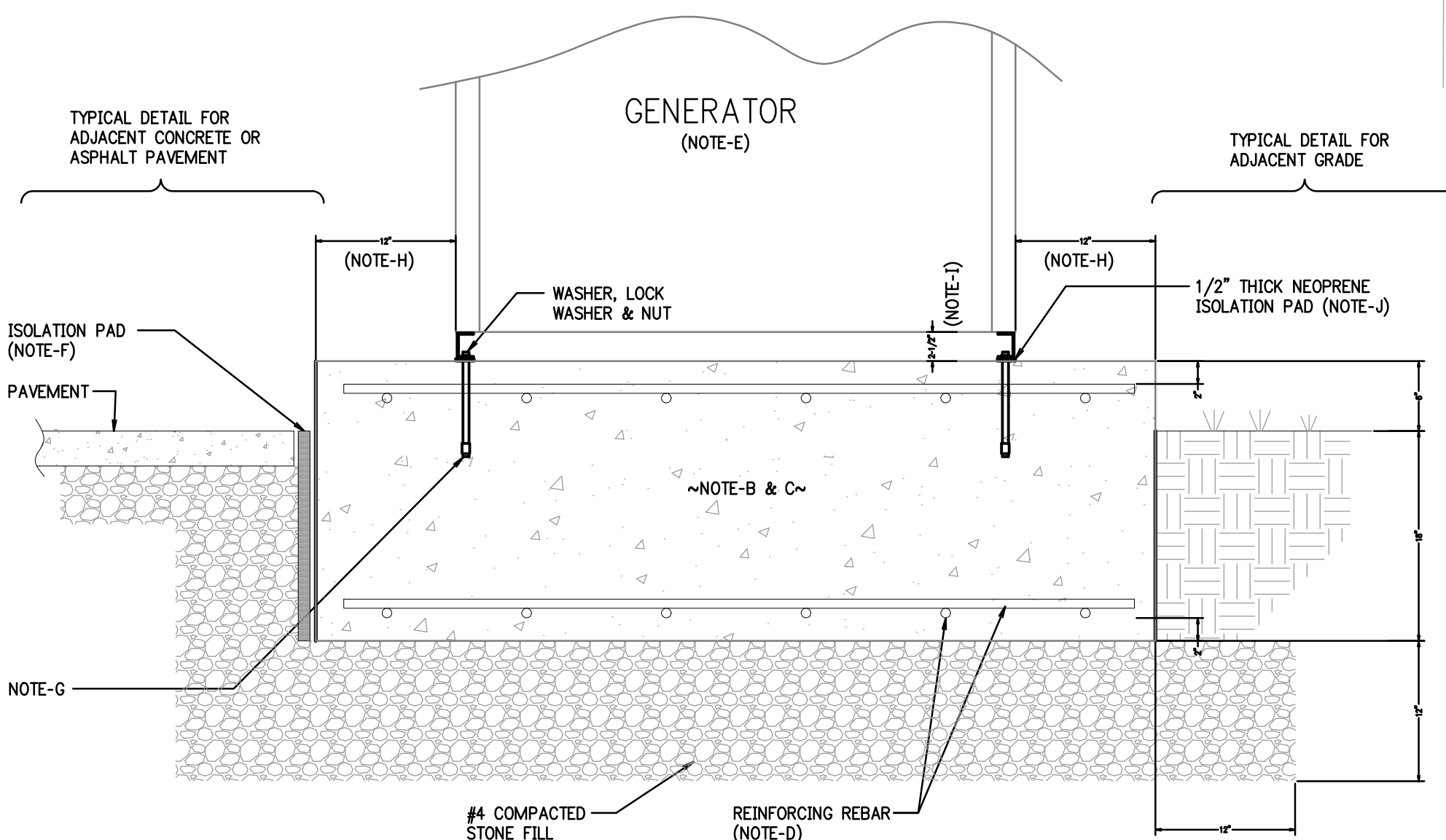
None

**END OF ADDENDUM NO. 4**



- NOTES:**
- A. GROUND AND NEUTRAL SHALL NOT BE BONDED.
  - B. REFER TO ONE LINE OR PANEL RISER FOR CONDUCTOR SIZES.

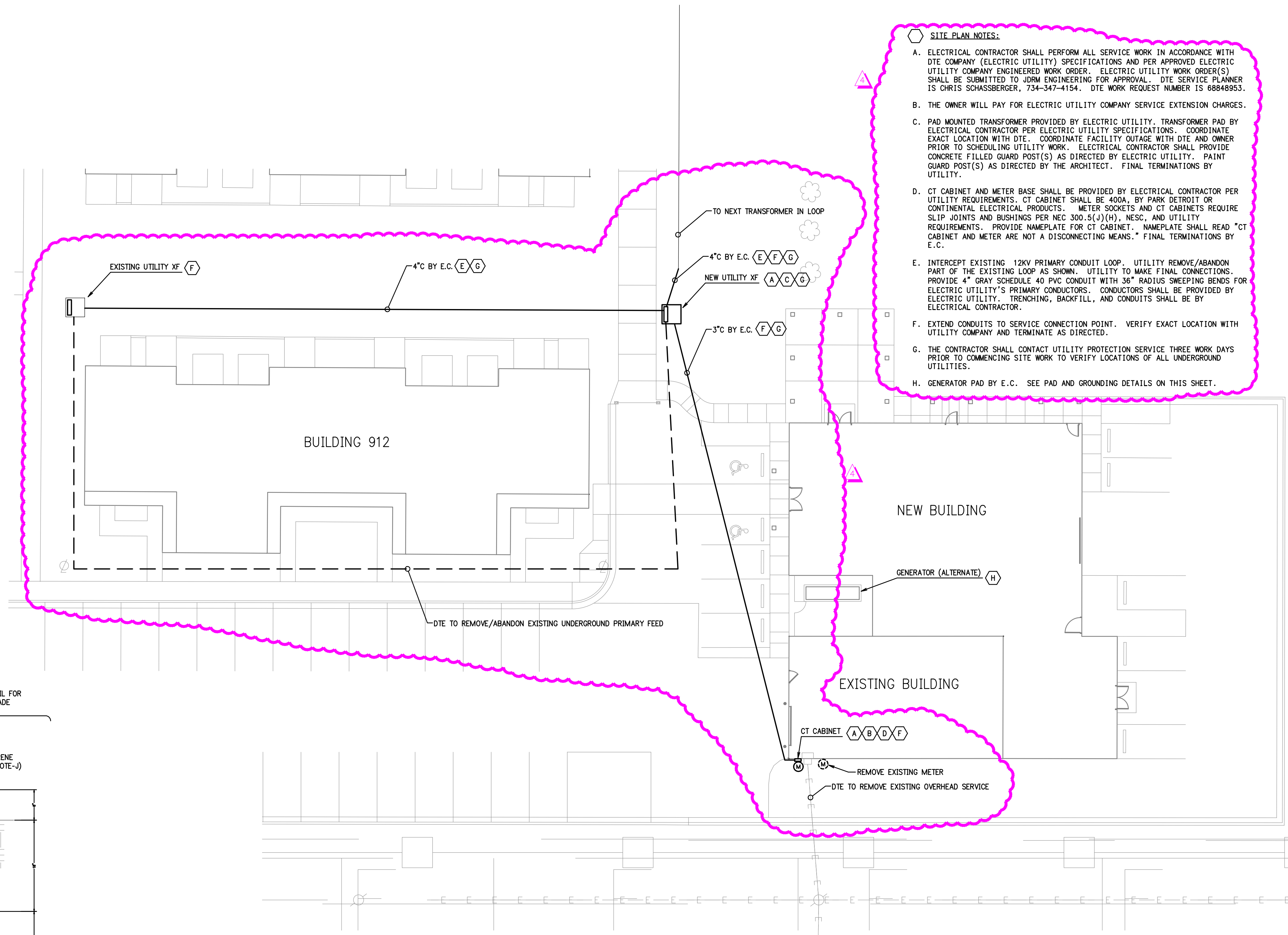
**GENERATOR GROUNDING SCHEMATIC (ALTERNATE)**  
SCALE: NONE



**GENERATOR PAD NOTES:**

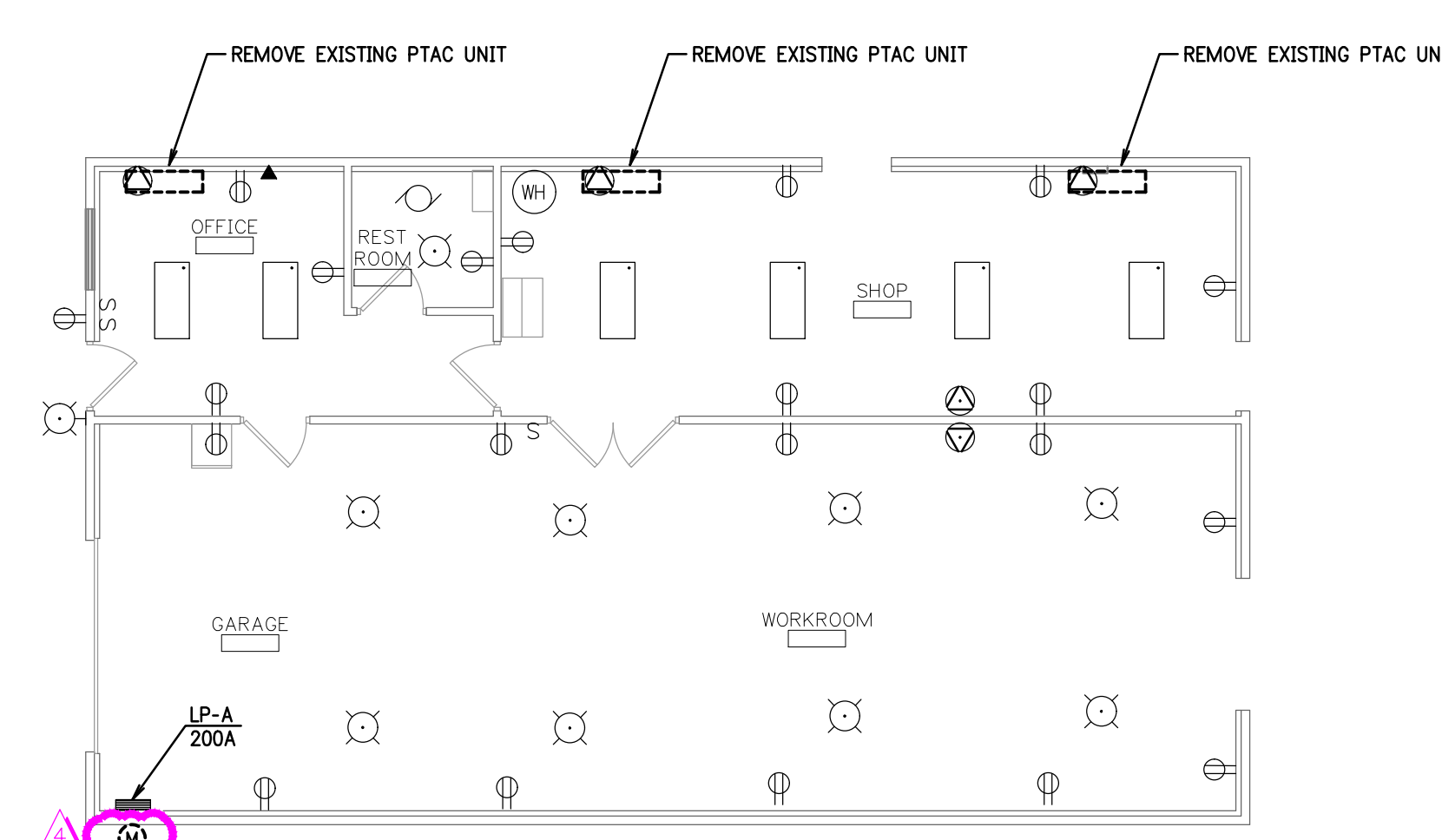
- A. PROVIDE OPENINGS FOR CONDUIT STUB-UPS. DO NOT POUR CONCRETE AROUND CONDUITS.
- B. CONCRETE TO BE 3000 PSI STRENGTH BY 7 DAYS. USE PORTLAND CEMENT TYPE 3 OR 3A.
- C. CONCRETE MUST BE POURED AT LEAST 10 DAYS BEFORE GENERATOR IS SET IN PLACE.
- D. REINFORCING RODS ARE TO BE #4 DEFORMED STEEL. INSTALL RODS AT 12" CENTERS IN EACH DIRECTION.
- E. VERIFY EXACT DIMENSIONS WITH EQUIPMENT SUPPLIER.
- F. WHERE PAD IS LOCATED IN CONCRETE FLOOR AREA IT SHALL BE KEPT ISOLATED FROM ADJACENT CONCRETE.
- G. PROVIDE TYPE STAINLESS STEEL HEAVY-DUTY INSPECTABLE WEDGE TYPE EXPANSION ANCHOR BOLTS (RED HEAD TRUBOLT). BOLTS SHALL BE EMBEDDED 6" (MIN.) IN PAD. VERIFY WITH MANUFACTURER EXACT ANCHOR BOLT REQUIREMENTS, 5/8" DIAMETER MINIMUM.
- H. CONCRETE PAD SHALL EXCEED GENERATOR BY 12" AROUND ALL SIDES.
- I. GENERATOR BOTTOM SHALL BE MAINTAINED AT A MINIMUM OF 2-1/2" ABOVE THE CONCRETE PAD.
- J. GENERATOR MOUNTING RAILS SHALL BE ISOLATED FROM THE CONCRETE PAD WITH 1/2" THICK NEOPRENE PADS. INSTALL PADS WITH 2" GAP ON 24" CENTER TO ALLOW DRAINAGE AND AIR FLOW.

**GENERATOR CONCRETE PAD DETAIL (ALTERNATE)**  
SCALE: NONE

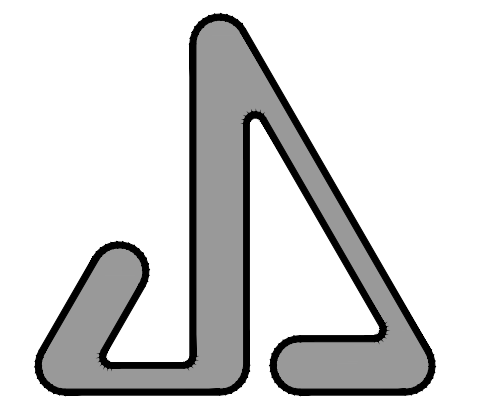


- SITE PLAN NOTES:**
- A. ELECTRICAL CONTRACTOR SHALL PERFORM ALL SERVICE WORK IN ACCORDANCE WITH DTE COMPANY (ELECTRIC UTILITY) SPECIFICATIONS AND PER APPROVED ELECTRIC UTILITY COMPANY ENGINEERED WORK ORDER. ELECTRIC UTILITY WORK ORDER(S) SHALL BE SUBMITTED TO JDRM ENGINEERING FOR APPROVAL. DTE SERVICE PLANNER IS CHRIS SCHASSBERGER, 734-347-4154. DTE WORK REQUEST NUMBER IS 88848953.
  - B. THE OWNER WILL PAY FOR ELECTRIC UTILITY COMPANY SERVICE EXTENSION CHARGES.
  - C. PAD MOUNTED TRANSFORMER PROVIDED BY ELECTRIC UTILITY. TRANSFORMER PAD BY ELECTRICAL CONTRACTOR PER ELECTRIC UTILITY SPECIFICATIONS. COORDINATE EXACT LOCATION WITH DTE. COORDINATE FACILITY OUTAGE WITH DTE AND OWNER PRIOR TO SCHEDULING UTILITY WORK. ELECTRICAL CONTRACTOR SHALL PROVIDE CONCRETE FILLED GUARD POST(S) AS DIRECTED BY ELECTRIC UTILITY. PAINT GUARD POST(S) AS DIRECTED BY THE ARCHITECT. FINAL TERMINATIONS BY UTILITY.
  - D. CT CABINET AND METER BASE SHALL BE PROVIDED BY ELECTRICAL CONTRACTOR PER UTILITY REQUIREMENTS. CT CABINET SHALL BE 400A, BY PARK DETROIT OR CONTINENTAL ELECTRICAL PRODUCTS. METER SOCKETS AND CT CABINETS REQUIRE SLIP JOINTS AND BUSHINGS PER NEC 300.5(J)(H), NESC, AND UTILITY REQUIREMENTS. PROVIDE NAMEPLATE FOR CT CABINET. NAMEPLATE SHALL READ "CT CABINET AND METER ARE NOT A DISCONNECTING MEANS." FINAL TERMINATIONS BY E.C.
  - E. INTERCEPT EXISTING 12KV PRIMARY CONDUIT LOOP. UTILITY REMOVE/ABANDON PART OF THE EXISTING LOOP AS SHOWN. UTILITY TO MAKE FINAL CONNECTIONS. PROVIDE 4" GRAY SCHEDULE 40 PVC CONDUIT WITH 36" RADIUS SWEEPING BENDS FOR ELECTRIC UTILITY'S PRIMARY CONDUCTORS. CONDUCTORS SHALL BE PROVIDED BY ELECTRICAL UTILITY. TRENCHING, BACKFILL, AND CONDUITS SHALL BE BY ELECTRICAL CONTRACTOR.
  - F. EXTEND CONDUITS TO SERVICE CONNECTION POINT. VERIFY EXACT LOCATION WITH UTILITY COMPANY AND TERMINATE AS DIRECTED.
  - G. THE CONTRACTOR SHALL CONTACT UTILITY PROTECTION SERVICE THREE WORK DAYS PRIOR TO COMMENCING SITE WORK TO VERIFY LOCATIONS OF ALL UNDERGROUND UTILITIES.
  - H. GENERATOR PAD BY E.C. SEE PAD AND GROUNDING DETAILS ON THIS SHEET.

**SITE PLAN - ELECTRICAL**  
SCALE: 1/16"=1'-0"



**FLOOR PLAN - DEMOLITION**  
SCALE: 1/8"=1'-0"



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GREENWOOD MAINTENANCE BUILDING ADDITION FOR:

MONROE HOUSING COMMISSION:  
GREENWOOD TOWNHOUSES  
902 GREENWOOD AVENUE  
MONROE, MICHIGAN 48162

PROPERTY CONTACT:  
NANCY WAIN, EXEC. DIRECTOR  
MONROE HOUSING COMMISSION  
20 NORTH ROESSLER STREET  
MONROE, MICHIGAN 48162  
TELEPHONE: (734) 242-5880

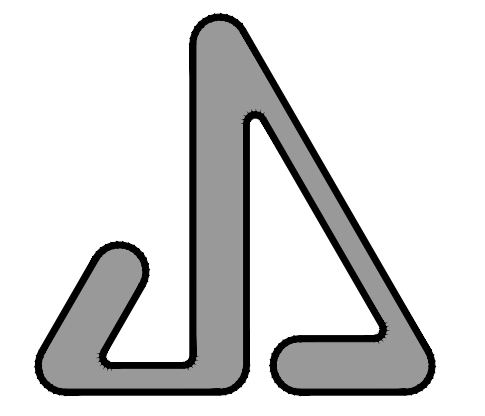
**SITE PLAN ELECTRICAL**

**NOT FOR CONSTRUCTION**

07-21-2023	ADDENDUM NO. 4
06-21-2023	BIDS
DATE:	ISSUED FOR:
DRAWN	RKB
REVIEW'D	DTK
20222	

**E-2**





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# PANEL RISER & PANEL SCHEDULES

NOT FOR CONSTRUCTION

07-21-2023  $\Delta$  ADDENDUM NO.4  
 06-23-2023 ADDENDUM NO.1  
 06-21-2023 BIDS  
 DATE: ISSUED FOR:  
 DRAWN: RKB  
 REVIEW'D: DTK  
 20222

# E-4

Electrical Service Load Summary			
Load Description	Connected Load	Demand Load	
Lighting	5,880 VA	5,880	VA
Receptacle	15,720 VA	12,860	VA
Mechanical	6,784 VA	6,784	VA
Heat	4,500 VA	4,500	VA
Air Conditioning	33,120 VA	33,120	VA
Equipment	9,000 VA	9,000	VA
Kitchen Equipment	3,120 VA	3,120	VA
<b>Grand Total</b>	<b>78,124 VA</b>	<b>75,264 VA</b>	

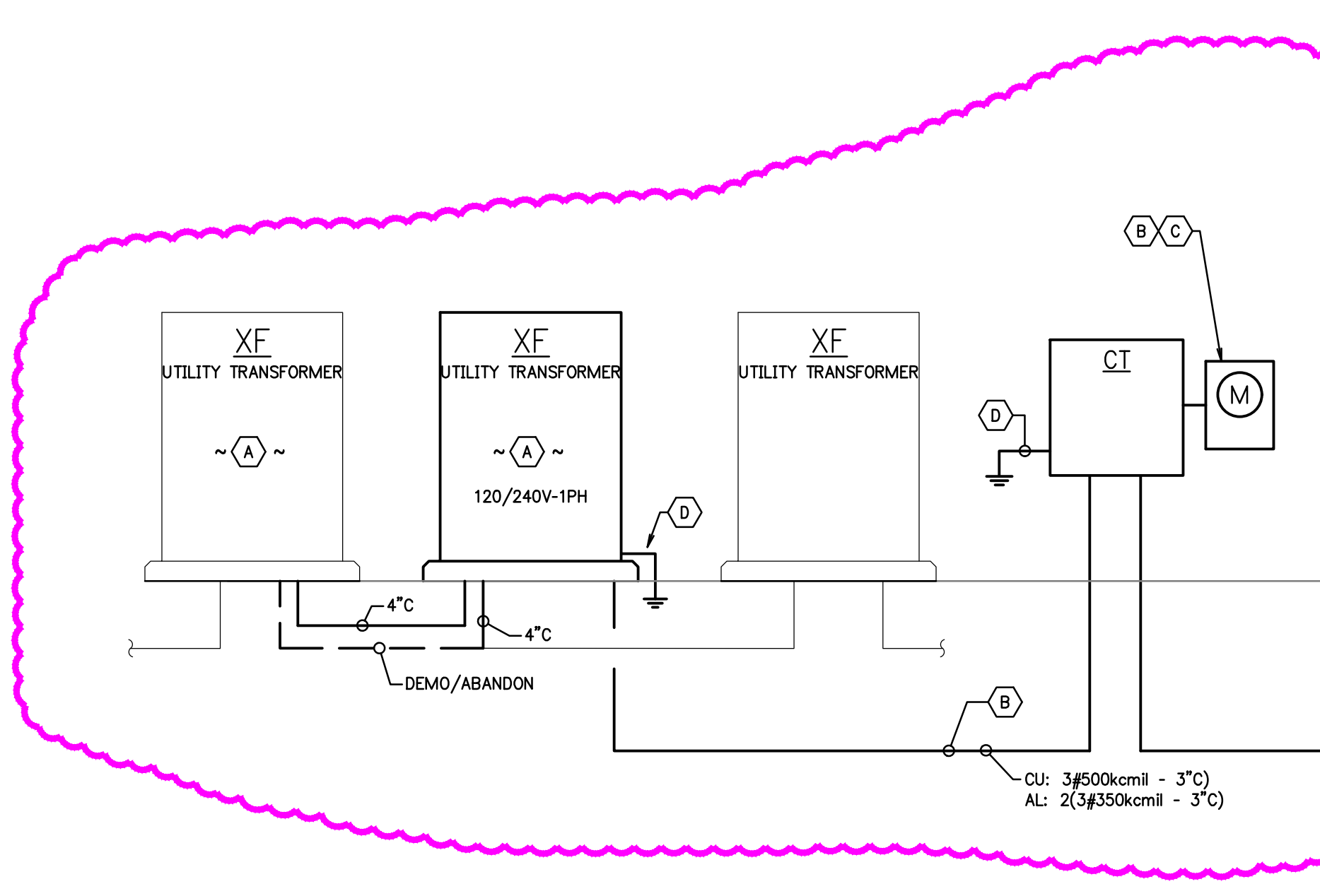
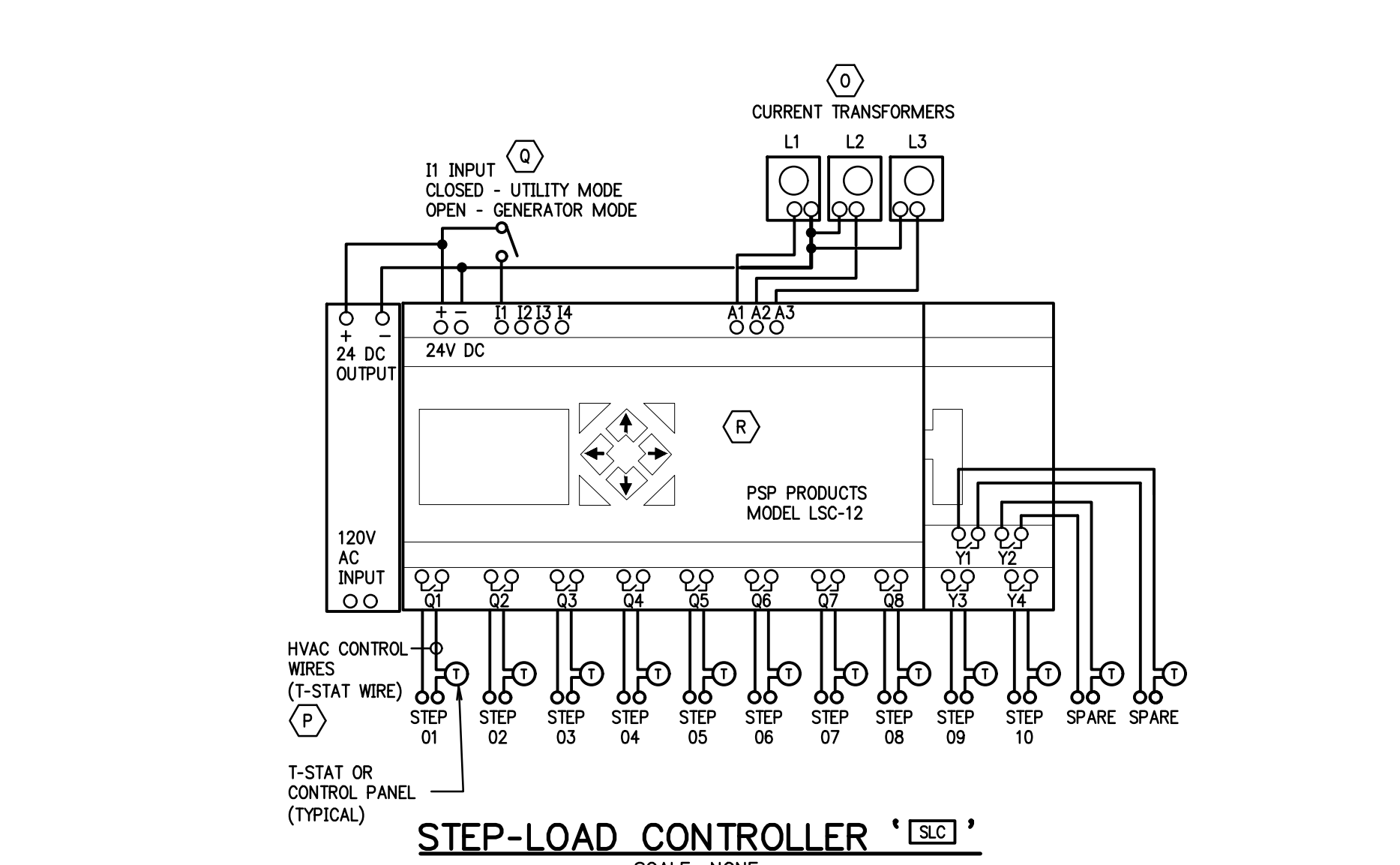
**SERVICE VOLTAGE: 120/240V-1PH-3W**  
**SERVICE AMPACITY: 400A**  
**DEMAND AMPACITY AT SERVICE VOLTAGE: 314 A**

2023-06-14

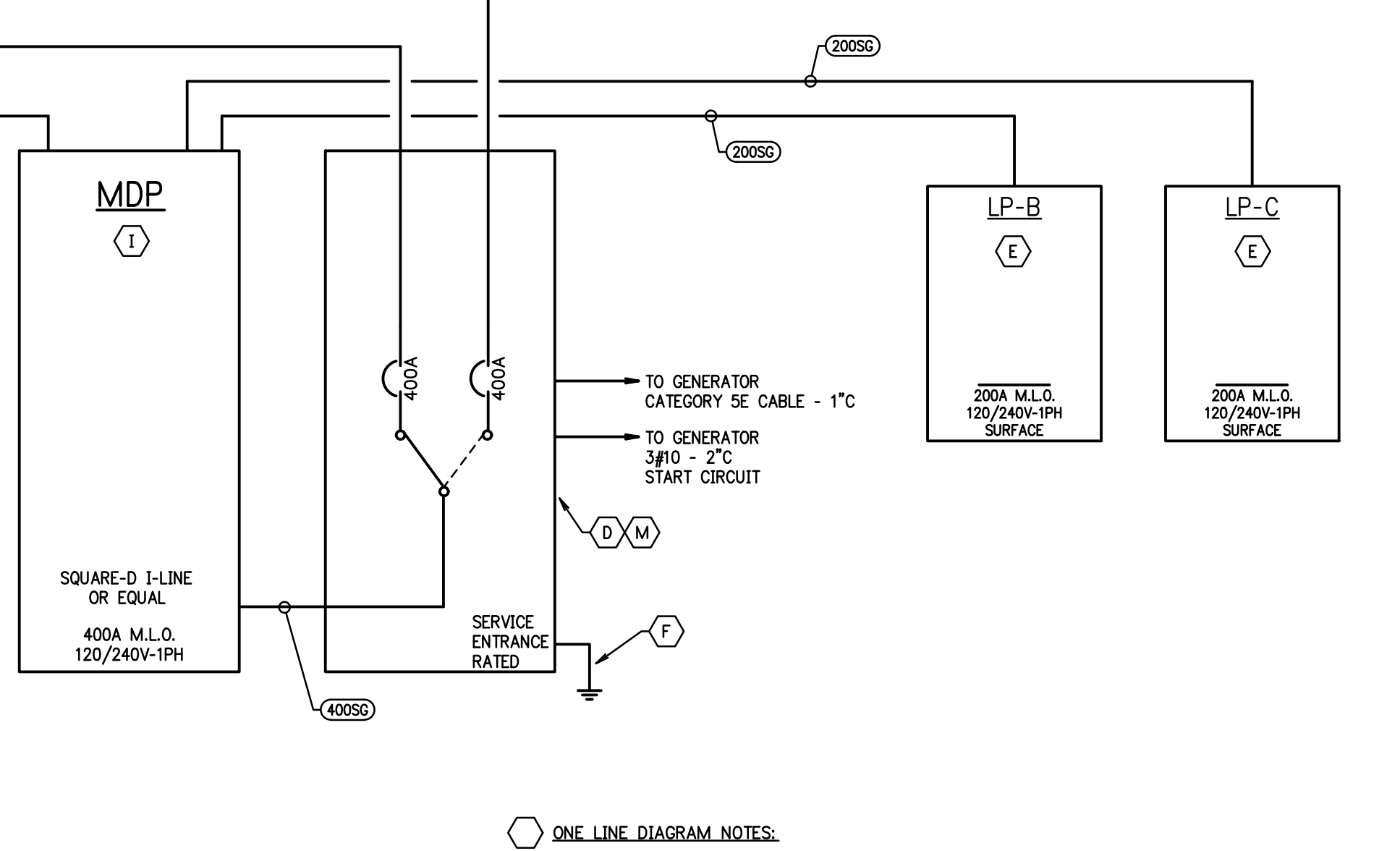
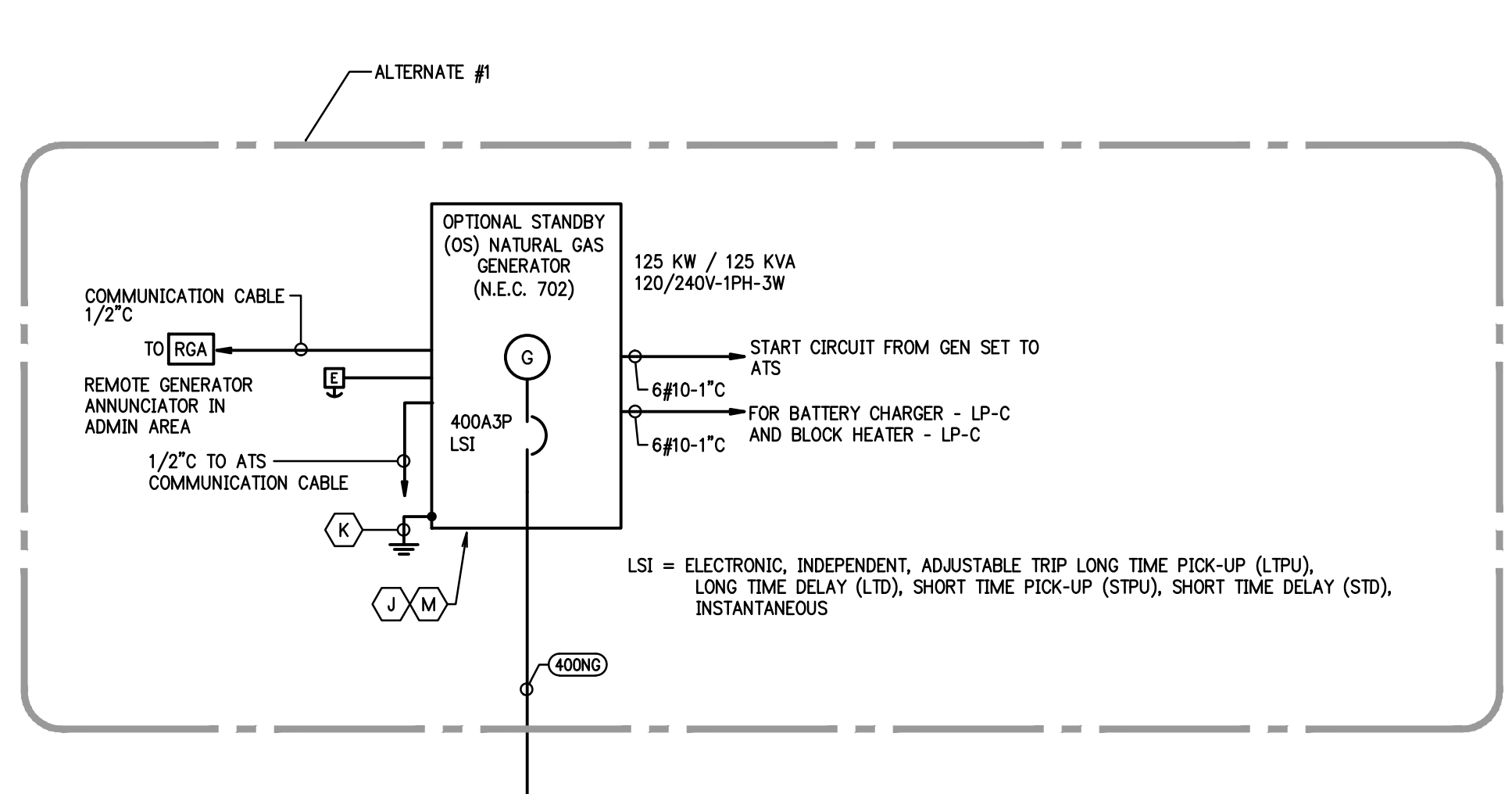
LP-A (EXIST.)													
200A VOLTAGE: 120/240V-1PH-3W SURFACE													
USE	LOAD	BKR AMP	BKR No	PH	BKR No	BKR AMP	LOAD	USE	LOAD	BKR AMP	BKR No	PH	
GARAGE - LIGHTS	1,200	20	1	A	2	20	1,120	OFFICE & WORKROOM - LIGHTS					
GARAGE - RECEPTS.	900	20	3	B	4	20	720	WORKROOM EAST - RECEPTS.					
GARAGE - RECEPTS.	900	20	5	A	6	20	720	WORKROOM WEST & SOUTH - RECEPTS.					
OFFICE & RESTROOM - RECEPTS.	1,080	20	7	B	8	20	360	GARAGE WEST - RECEPTS.					
AIR COMPRESSOR	1,000	20	9	A	10	20		NORTH WORKROOM - HEATER & A/C					
BATH - HEATER	1,500	20	11	B	12	2P		(DEMO)					
WORK ROOM - HEATER & A/C	1,500	20	13	A	14	20		OFFICE - HEATER & A/C					
SEWAGE PUMP	1,500	20	15	B	16	2P		(DEMO)					
	1,500	20	17	A	18	30	1,500	WATER HEATER					
	1,000	20	19	B	20	2P	1,500						
	1,500	30	21	A	22	30		HEATER AC					
	1,500	2P	23	B	24	2P		(DEMO)					
			25	A	26								
			27	B	28								
			29	A	30								
			29	A	30								
TOTAL CONNECTED LOAD:	20,500 W						85 AMP						

LP-B												
200A MLD VOLTAGE: 120/240V-1PH-3W SURFACE												
A/C-1 - COMMUNITY ROOM 101	1,320	30	1	A	2	20		SPARE				
	1,320	2P	3	B	4	20		SPARE				
A/C-2 - COMMUNITY ROOM 101	1,440	30	5	A	6	20	1,840	LIGHTS - COMMUNITY RM. & LIBRARY				
	1,440	2P	7	B	8	20	1,120	LIGHTS - WARMING KIT, REST.RMS,BREAK RM				
COMMUNITY 101 - RECEPTACLES NE WALL	900	20	9	A	10	20	1,160	LIGHTS - MAINT. STORERMS & EXTERIOR				
COMMUNITY 101 - RECEPTACLES NW WALL	900	20	11	B	12	20		SPARE				
COMMUNITY 101 - RECEPTACLES SOUTH WALL	900	20	13	A	14	20	1,000	WARMING KITCHEN 104 - RECEPT. WEST				
COMMUNITY RM. 101 - EWC	800	20	15	B	16	20	1,000	WARMING KITCHEN 104 - RECEPT. WEST				
LIBRARY 103 - RECEPTACLES WEST WALL	900	20	17	A	18	20	1,000	WARMING KITCHEN 104 - RECEPT. NORTH				
LIBRARY 103 - RECEPTACLES WEST WALL	900	20	19	B	20	20	1,000	WARMING KITCHEN 104 - RECEPT. NORTH				
LIBRARY 103 - RECEPTACLES EAST WALL	540	20	21	A	22	20	1,000	WARMING KITCHEN 104 - RECEPT. NORTH				
SPARE		20	23	B	24	20	1,000	WARMING KITCHEN 104 - REFRIGERATOR				
SPARE		20	25	A	26	20	460	JAN. CLOS. 105 - RECEPT, FAN, GWTR.				
SPARE		20	27	B	28	20	520	RESTROOMS 106,108 - RECEPT. & FAN				
SPARE		20	29	A	30	20		SPARE				
SPARE		20	31	B	32	20		SPARE				
SPARE		20	33	A	34	20		SPARE				
SPARE		20	35	B	36	20		SPARE				
SPARE		20	37	A	38	20		SPARE				
SPARE		20	39	B	40	20		SPARE				
SPARE		20	41	A	42	20		SPARE				
TOTAL CONNECTED LOAD:	22,460 W						94 AMP					

LP-C												
200A MLD VOLTAGE: 120/240V-1PH-3W SURFACE												
SPARE		20	1	A	2	20		SPARE				
SPARE		20	3	B	4	20		SPARE				
PUBLIC SERV - LIGHTS	560	20	5	A	6	30	2,220	CU-1				
OFFICE 118 - RECEPTACLES	900	20	7	B	8	2P	2,220					
GARAGE 122 - RECEPTACLES	720	20	9	A	10	30	2,220	CU-2				
GARAGE 122 - DOOR OPERATOR	1,200	20	11	B	12	2P	2,220					
KITCHENETTE 119 - RECEPTACLES	360	20	13	A	14	20	1,080	CU-3				
KITCHENETTE 119 - REFRIGERATOR	1,200	20	15	B	16	2P	1,080					
RESTROOM 120 - RECEPT. & FAN	260	20	17	A	18	20	1,320	CU-4				
SPARE		20	19	B	20	2P	1,320					
MAINTENANCE STOREROM 2 - RECEPTS.	900	20	21	A	22	20	1,440	CU-5				
MAINTENANCE STOREROM 3 - RECEPTS.	900	20	23	B	24	2P	1,440					
MAINTENANCE STOREROM 3 - RECEPTS.	720	20	25	A	26	30	1,272	FURN-1				
SPARE		20	27	B	28	2P	1,272	FURN-2				
SPARE		20	29	A	30	20	768	FURN-3				
SPARE		20	31	B	32	20		SPARE				
SPARE		20	33	A	34	20		SPARE				
SPARE		20	35	B	36	20		SPARE				
SPARE		20	37	A	38	20		SPARE				
SPARE		20	39	B	40	20		SPARE				
SPARE		20	41	A	42	20		SPARE				
TOTAL CONNECTED LOAD:	27,592 W						115 AMP					



FEEDER SCHEDULE		
MARK	1 PHASE - 2 WIRE WITH GROUND	1 PHASE OR 3 PHASE - 3 WIRE WITH GROUND
COPPER		
(20SD)	2#12, 1#12G - 1/2" C	(20C) 3#12, 1#12G - 1/2" C
(30SD)	2#10, 1#10G - 1/2" C	(30C) 3#10, 1#10G - 1/2" C
(50SD)	2#8, 1#10G - 1" C	(50C) 3#8, 1#10G - 1" C
(60SD)	2#6, 1#10G - 1" C	(60C) 3#6, 1#10G - 1" C
(85SD)	2#4, 1#8G - 1" C	(80C) 3#4, 1#8G - 1" C
(100SD)	2#2, 1#8G - 1-1/4" C	(100C) 3#2, 1#8G - 1-1/4" C
COMPACT ALUMINIUM		
		(125C) 3#1, 1#6G - 1-1/4" C
		(150C) 3#1/0, 1#6G - 1-1/2" C
		(175C) 3#2/0, 1#6G - 1-1/2" C
		(200C) 3#3/0, 1#6G - 2" C
		(225C) 3#4/0, 1#4G - 2" C
		(250C) 3#250kcmil, 1#4G - 2-1/2" C
		(300C) 3#350kcmil, 1#4G - 2-1/2" C
		(400C) 3#500kcmil, 1#2G - 3" C
		(F400C) 3#600kcmil, 1#2G - 3-1/2" C
		(500C) 2(3#250kcmil, 1#2G - 2-1/2" C)
		(600C) 2(3#350kcmil, 1#1G - 2-1/2" C)
		(800C) 2(3#500kcmil, 1#1G - 2-1/2" C)
		(F800C) 2(3#600kcmil, 1#1G - 2-1/2" C)
		(1000C) 3(3#400kcmil, 1#2G - 3" C)
		(1200C) 4(3#350kcmil, 1#3G - 2-1/2" C)
		(1600C) 4(3#600kcmil, 1#4G - 3-1/2" C)
		(2000C) 5(3#600kcmil, 1#250kcmilG - 3-1/2" C)



**ONE LINE DIAGRAM NOTES:**

- A. COORDINATE ALL REQUIREMENTS WITH ELECTRIC UTILITY (D.T.E.) PRIOR TO INSTALLATION.
- B. COORDINATE UTILITY UTILITY SERVICE CONNECTION POINT WITH D.T.E. PRIOR TO ROUGH-IN/INSTALLATION.
- C. COORDINATE METER BASE ARRANGEMENT WITH D.T.E. PRIOR TO ROUGH-IN/INSTALLATION.
- D. GROUND PER D.T.E. GROUNDING REQUIREMENTS.
- E. SEE PANEL SCHEDULES ON THIS SHEET.
- F. SEE MAIN SERVICE GROUNDING DETAILS ON SHEET E-5.
- G. RESERVED
- H. RESERVED
- I. PROVIDE LABEL TO PANEL INDICATING "MAXIMUM AVAILABLE FAULT CURRENT OF \_\_\_\_ CALCULATION PERFORMED ON 2-16-2023" PER NEC 2017 ARTICLE 110.24
- J. SEE GENERATOR PAD DETAIL ON SHEET E-2.
- K. SEE GENERATOR GROUNDING DETAIL ON SHEET E-2.
- L. RESERVED
- M. TRANSFER SWITCH U.L. WITHSTAND AND CLOSING RATING SERIES RATED WITH UPSTREAM CURRENT LIMITING FUSE PROTECTION ON NORMAL POWER FEED.
- N. RESERVED
- O. PROVIDE C.T.'s AND INSTALL IN THE MDP. INTEGRATE THE C.T.'s TO THE STEP-LOAD CONTROLLER.
- P. PROVIDE CONTROL WIRING TO THE HVAC EQUIPMENT AS INDICATED BELOW. THIS EQUIPMENT WILL BE STEP-LOADED ONTO THE GENERATOR AFTER THE GENERATOR IS RUNNING. PROVIDE STEP-LOAD RELAYS AS REQUIRED TO INTERFACE THE EQUIPMENT:
 

STEP 01: SPARE	STEP 07: AC-1
STEP 02: CU-1/FURN-1	STEP 08: AC-2
STEP 03: CU-2/FURN-2	STEP 09: SPARE
STEP 04: CU-3/FURN-3	STEP 10: SPARE
STEP 05: CU-4/FURN-4	STEP 11: SPARE
STEP 06: CU-5/FURN-5	STEP 12: SPARE
- Q. INTEGRATE THE STEP LOAD CONTROLLER WITH THE TRANSFER SWITCH FOR INDICATION OF POWER FROM THE ALTERNATE SOURCE.
- R. PROGRAM AND COMMISSION THE STEP LOAD CONTROLLER FOR FULL FUNCTION AND OPERATION.