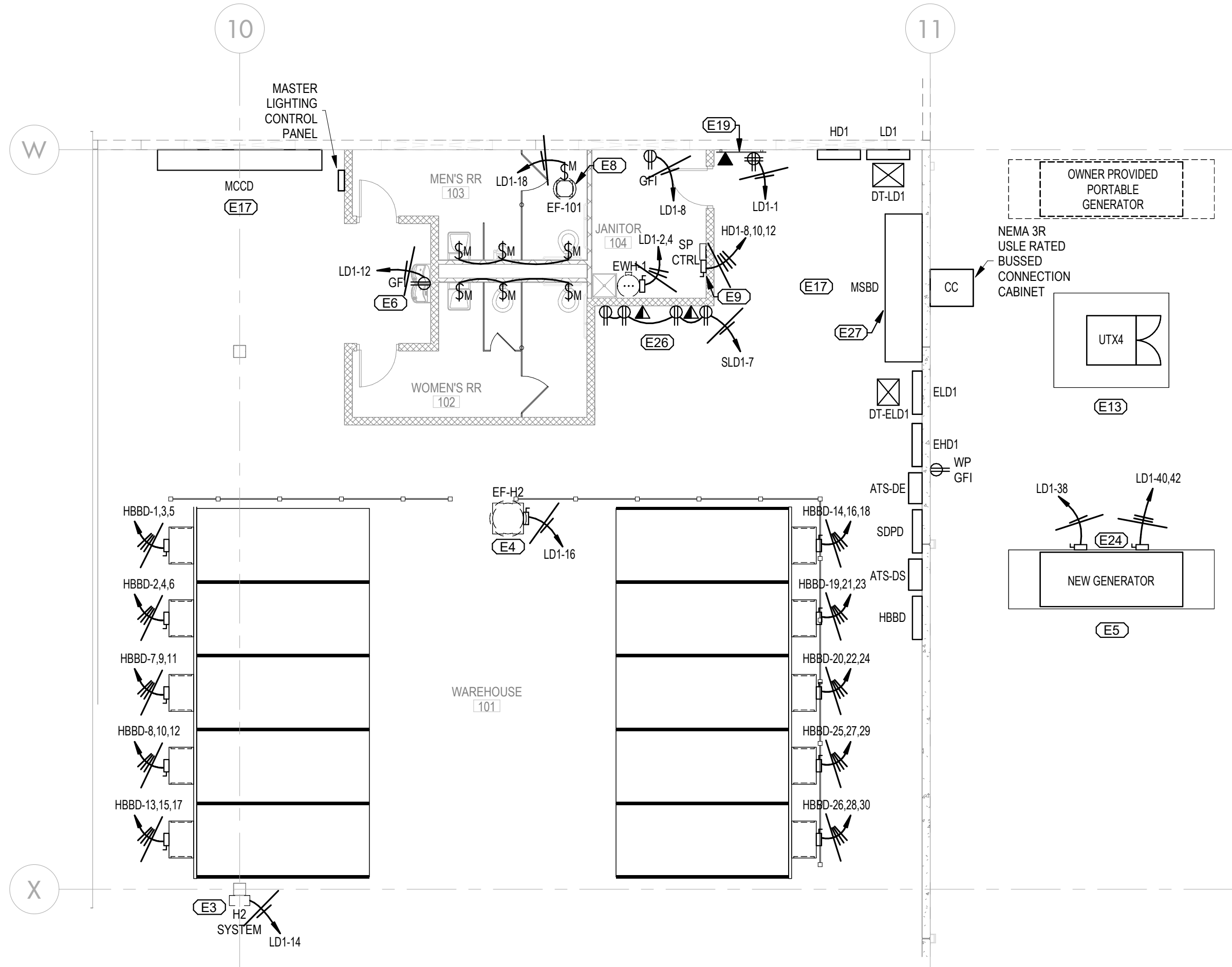
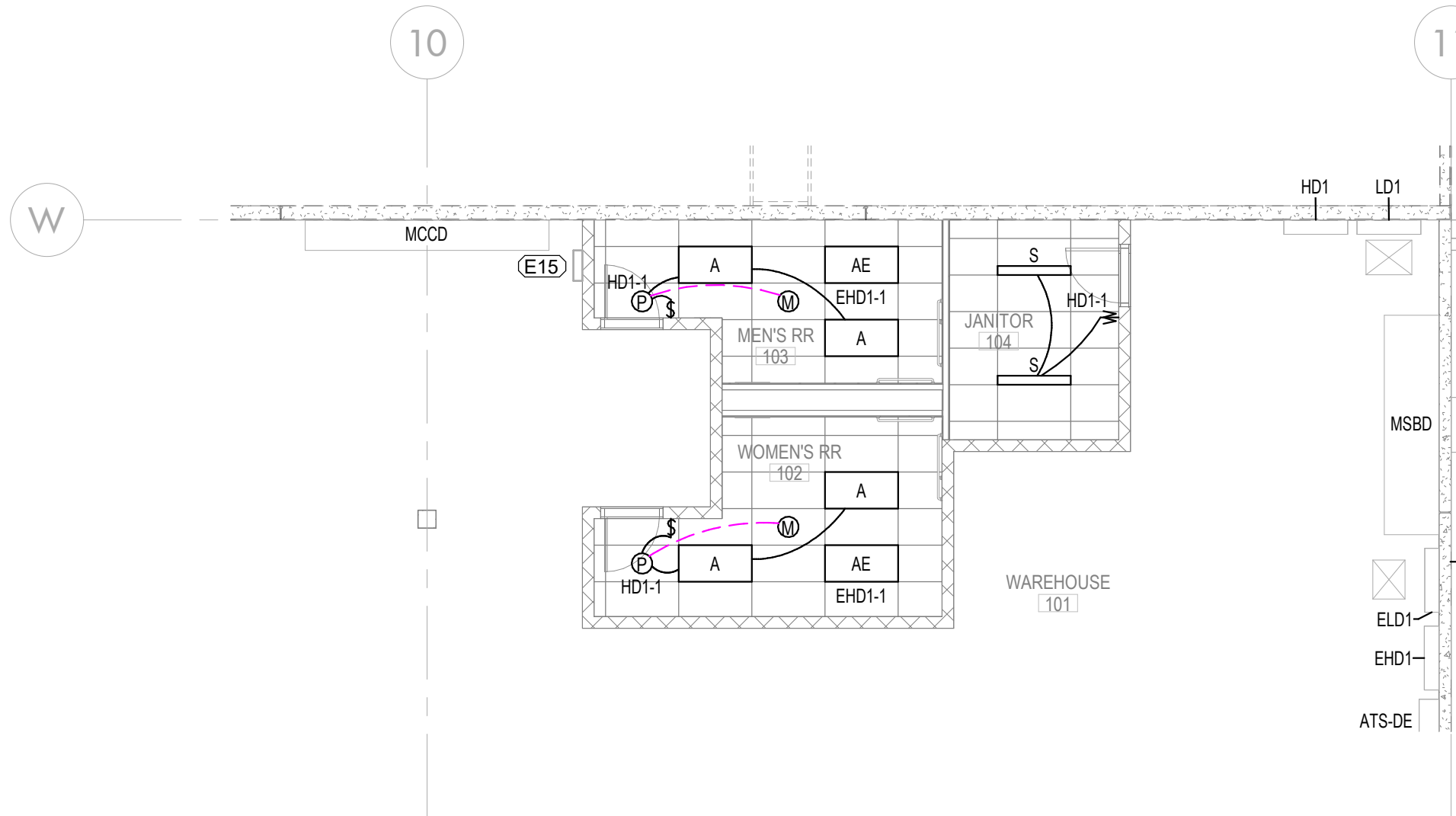
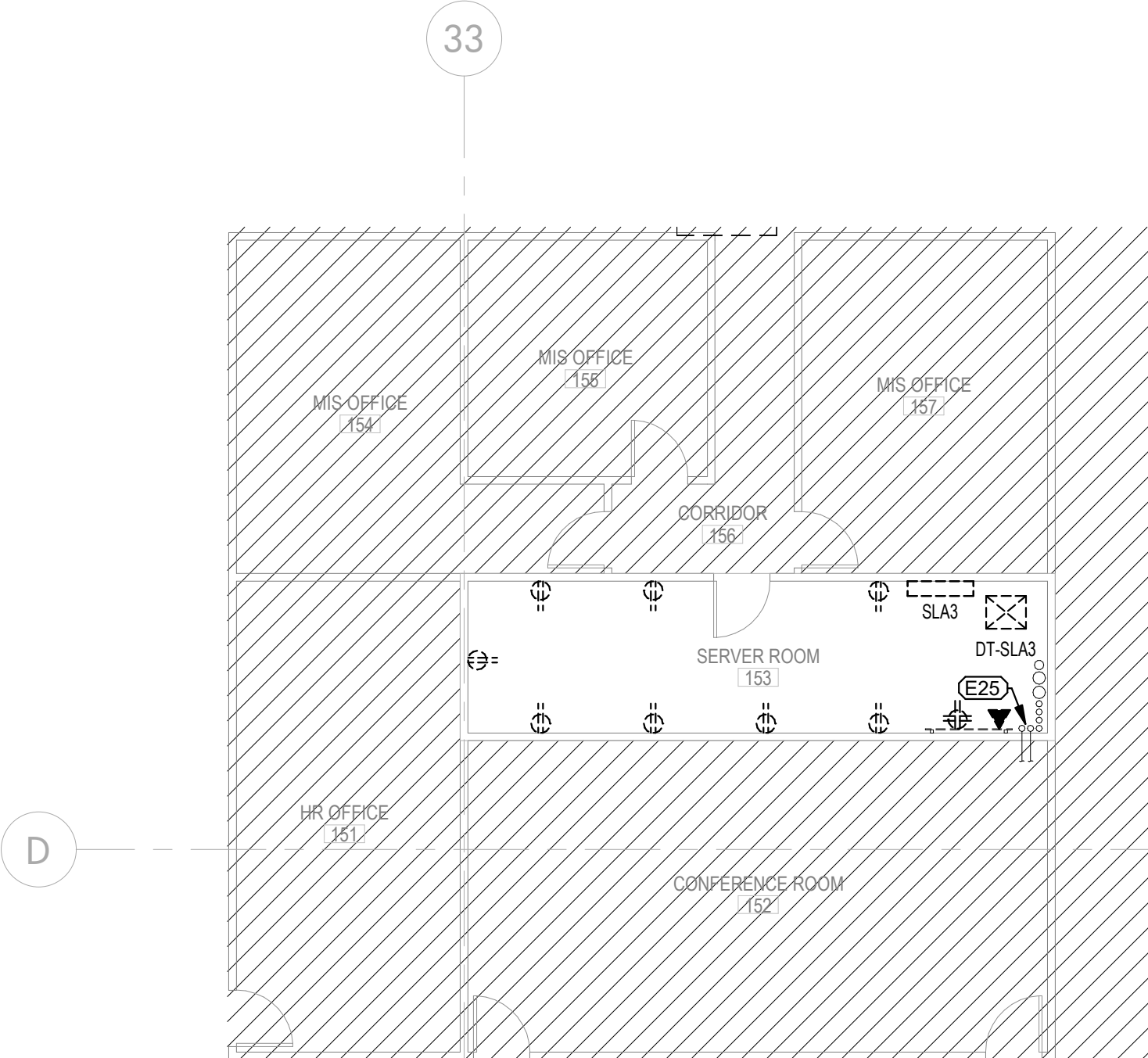




1 RESTROOM ENLARGED PLAN - PWR
SCALE: 1/8" = 1'-0"

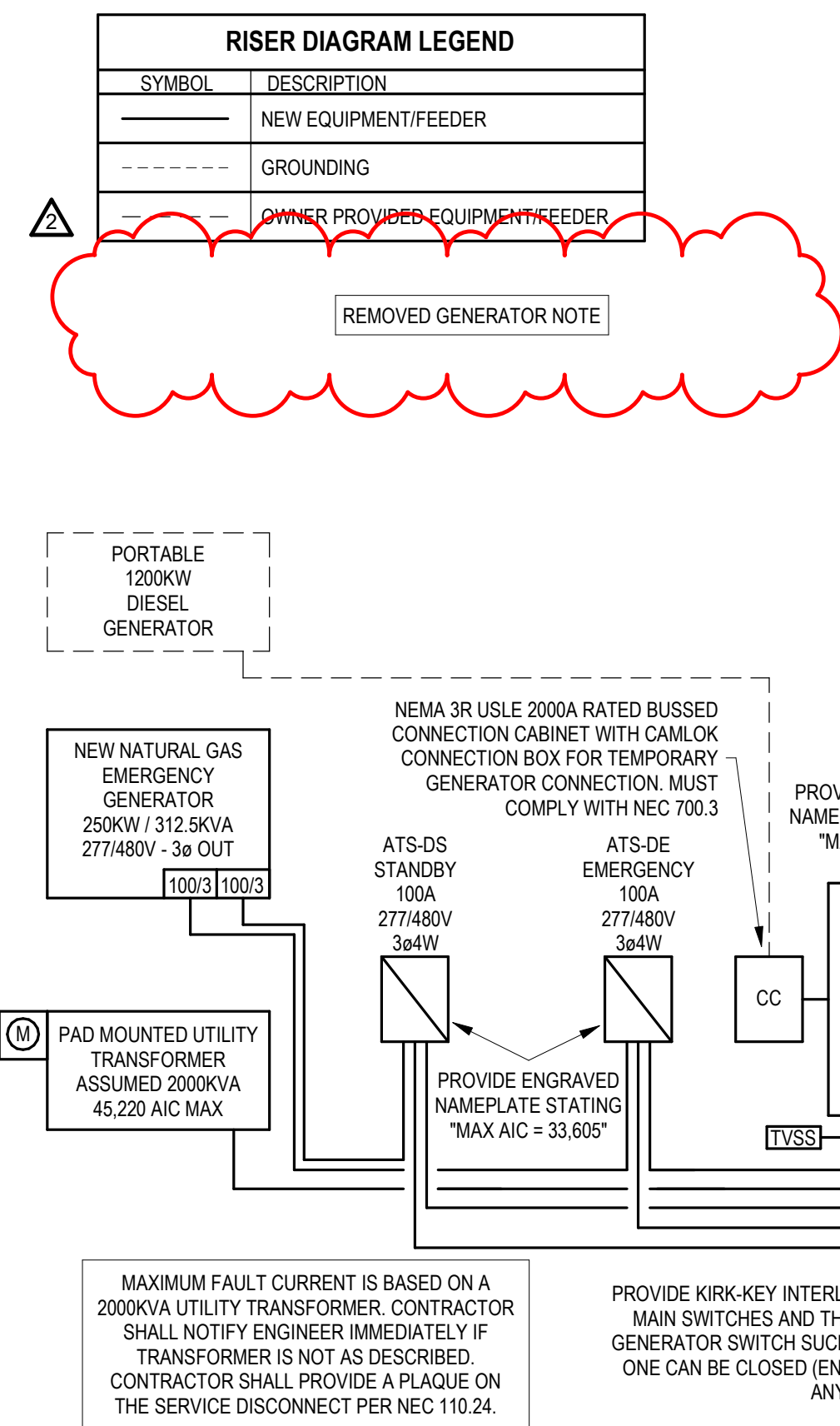


2 RESTROOM ENLARGED PLAN - LTS
SCALE: 1/8" = 1'-0"



3 SERVER ENLARGED PLAN - PWR
SCALE: 1/8" = 1'-0"

KEY VALUE	KEYNOTE TEXT
E3	COORDINATE CONNECTION OF HYDROGEN SENSOR CONTROL PANEL WITH M.C. PRIOR TO ROUGH IN.
E4	E.C. SHALL CONNECT NEW EXHAUST FAN STARTER VIA HYDROGEN DETECTION SYSTEM SENSORS MOUNTED UNDER THE ROOF DECK ADJACENT TO EXHAUST DUCT AT FORKLIFT CHARGING STATION. INTERLOCK MOTORIZED LOUVER WITH NEW EXHAUST FAN STARTER. COORDINATE EXACT LOCATIONS WITH M.C. PRIOR TO ROUGH IN.
E5	E.C. SHALL PROVIDE AND INSTALL GENERATOR. COORDINATE CONNECTION AND EXACT LOCATION WITH ARCHITECT AND OWNER PRIOR TO ROUGH. SEE GENERATOR GROUNDING DETAIL SHEET E-501 DETAIL #4.
E6	E.C. SHALL LOCATE GF RECEPTACLE FOR EWC TO BE CONCEALED IN SHROUD. COORDINATE EXACT LOCATION WITH PLUMBING CONTRACTOR PRIOR TO ROUGH IN.
E8	E.C. SHALL SWITCH EXHAUST FAN WITH LIGHTS IN MEN'S AND WOMEN'S RESTROOMS. SEE EXHAUST FAN CONNECTION DETAIL SHEET E-501 DETAIL #4.
E9	E.C. SHALL PROVIDE POWER TO GRINDER PUMP CONTROL PANEL. COORDINATE ELECTRICAL REQUIREMENTS WITH P.C. PRIOR TO ROUGH IN. SEE GRINDER PUMP DETAIL - SHEET E-501 DETAIL #5.
E13	PAD MOUNTED UTILITY TRANSFORMER PROVIDED BY POWER COMPANY. COORDINATE EXACT LOCATION WITH UTILITY PROVIDER.
E15	MASTER LIGHTING CONTROL SWITCHES - E.C. SHALL PROVIDE AND INSTALL DIGITAL SWITCHES TO CONTROL EACH INDIVIDUAL LIGHTING ZONE WITH A MASTER ON/OFF SWITCH. E.C. SHALL LABEL EACH LIGHTING ZONE SWITCH INDEPENDENTLY FOR DETAILS.
E17	PROVIDE BOLLARD PROTECTION. SEE ARCHITECTURAL PLANS FOR DETAILS.
E19	E.C. SHALL TIE NEW TELECOM BACKBOARD INTO EXISTING BUILDING MAIN TELECOMMUNICATIONS. COORDINATE EXACT LOCATION WITH OWNER PRIOR TO ROUGH IN.
E24	E.C. SHALL CONNECT BLOCK HEATER & BATTERY CHARGER. PROVIDE AND INSTALL (2) 1" CONDUITS WITH FULL STRING FOR CONTROLS.
E25	E.C. SHALL PROVIDE AND INSTALL (2) 2" CONDUIT STUBBED UP THRU CEILING IN EXISTING SERVER ROOM TO BAR JOIST FOR TELEPHONE & COMMUNICATIONS AND CONNECT TO NEW TELECOM BACKBOARD IN WAREHOUSE EXPANSION.
E26	E.C. SHALL PROVIDE POWER FOR OWNER PROVIDED DESK. CONDUIT SHALL BE SURFACE MOUNTED WITH 1" CONDUIT FOR DATA STUBBED ABOVE CEILING. COORDINATE EXACT HEIGHTS AND LOCATIONS WITH OWNER PRIOR TO ROUGH IN.
E27	E.C. SHALL PROVIDE AND CONNECT COPPER BUS BAR - SEE GROUNDING BUS INSTALLATION DETAIL - SHEET E-501 DETAIL #7.



Switchboard: MSBD			
Location: Space 0426 Supply From: UT04 Mounting: SURFACE Enclosure: NEMA1			
Volts: 480/277 Wye Phases: 3 Wires: 4			
A.I.C. Rating: 65K Main Type: CU MCB Rating: 2000 A			
Ckt	Circuit Description	# of Poles	Trip Rating
MSBD-1	ATS-DE	3	100 A
MSBD-2	ATS-DS	3	100 A
MSBD-3	PORTABLE GENERATOR	3	2000 A
MSBD-4	HD1	3	225 A
MSBD-5	HD2	3	225 A
MSBD-6	HD3	3	225 A
MSBD-7	MCCD	3	600 A
MSBD-8	HBBD	3	400 A
MSBD-9	TVSS	3	60 A
MSBD-10			
MSBD-11			
MSBD-12			
MSBD-13			
MSBD-14			
MSBD-15			
MSBD-16			

NEC SERVICE CALC. - SWITCHBOARD MSBD	
NEW LIGHTS (1.2W/SQFT)	403.2 KVA
+25% LIGHTS	100.8 KVA
RECEP(S) (1.0W/SQFT)	336.0 KVA
EVH	2.5 KVA
+25% EVH	0.5 KVA
MECHANICAL EQUIPMENT	255.7 KVA
+25% LARGEST MOTOR	6.0 KVA
FORKLIFT CHARGING	239.4 KVA
120/208V MISC.	35.1 KVA
TOTAL	1385.1 KVA
1666.0 AMPS @ 480V/3Ø ON NEW 2000A MB	

Electrical Circuit Schedule (MECH EQUIPMENT)									
Circuit Name	FLA	Appl. Load	Voltage	Phase	Rating	Wire Size	Conduit Size		
BATTERY CHARGER	13A	1.5KVA	120V		20 A	1-#12, 1-#12, 1-#12	1/2"		
BLOCK HEATER	14A	3.0KVA	208V	2	20 A	1-#12, 1-#12, 1-#12	1/2"		
EF-1	11A	9.2KVA	480V	3	25 A	3-#10, 1-#10, 1-#10	1/2"		
EF-2	11A	9.2KVA	480V	3	25 A	3-#10, 1-#10, 1-#10	1/2"		
EF-3	11A	9.2KVA	480V	3	25 A	3-#10, 1-#10, 1-#10	1/2"		
EF-4	11A	9.2KVA	480V	3	25 A	3-#10, 1-#10, 1-#10	1/2"		
EF-5	11A	9.2KVA	480V	3	25 A	3-#10, 1-#10, 1-#10	1/2"		
EF-6	11A	9.2KVA	480V	3	25 A	3-#10, 1-#10, 1-#10	1/2"		
EF-7	11A	9.2KVA	480V	3	25 A	3-#10, 1-#10, 1-#10	1/2"		
EF-8	11A	9.2KVA	480V	3	25 A	3-#10, 1-#10, 1-#10	1/2"		
EF-9	11A	9.2KVA	480V	3	25 A	3-#10, 1-#10, 1-#10	1/2"		
EF-10	11A	9.2KVA	480V	3	25 A	3-#10, 1-#10, 1-#10	1/2"		
EF-11	11A	9.2KVA	480V	3	25 A	3-#10, 1-#10, 1-#10	1/2"		
EF-12	11A	9.2KVA	480V	3	25 A	3-#10, 1-#10, 1-#10	1/2"		
EF-13	11A	9.2KVA	480V	3	25 A	3-#10, 1-#10, 1-#10	1/2"		
EF-14	11A	9.2KVA	480V	3	25 A	3-#10, 1-#10, 1-#10	1/2"		
EF-15	11A	9.2KVA	480V	3	25 A	3-#10, 1-#10, 1-#10	1/2"		
EF-16	11A	9.2KVA	480V	3	25 A	3-#10, 1-#10, 1-#10	1/2"		
EF-17	11A	9.2KVA	480V	3	25 A	3-#10, 1-#10, 1-#10	1/2"		
EF-18	11A	9.2KVA	480V	3	25 A	3-#10, 1-#10, 1-#10	1/2"		
EF-19	11A	9.2KVA	480V	3	25 A	3-#10, 1-#10, 1-#10	1/2"		
EF-20	11A	9.2KVA	480V	3	25 A	3-#10, 1-#10, 1-#10	1/2"		
EF-21	11A	9.2KVA	480V	3	25 A	3-#10, 1-#10, 1-#10	1/2"		
EF-22	11A	9.2KVA	480V	3	25 A	3-#10, 1-#10, 1-#10	1/2"		
EF-23	11A	9.2KVA	480V	3	25 A	3-#10, 1-#10, 1-#10	1/2"		
EF-101	4A	0.5KVA	120V	1	20 A	1-#12, 1-#12, 1-#12	1/2"		
EF-42	16A	1.9KVA	120V	1	20 A	1-#8, 1-#8, 1-#8	1/2"		
EF-41	12A	2.5KVA	208V	2	20 A	2-#12, 1-#12, 1-#12	1/2"		
FORKLIFT CHARGER	29A	23.9KVA	480V	3	40 A	3-#8, 1-#8, 1-#8	3/4"		
FORKLIFT CHARGER	29A	23.9KVA	480V	3	40 A	3-#8, 1-#8, 1-#8	3/4"		
FORKLIFT CHARGER	29A	23.9KVA	480V	3	40 A	3-#8, 1-#8, 1-#8	3/4"		
FORKLIFT CHARGER	29A	23.9KVA	480V	3	40 A	3-#8, 1-#8, 1-#8	3/4"		
FORKLIFT CHARGER	29A	23.9KVA	480V	3	40 A	3-#8, 1-#8, 1-#8	3/4"		
FORKLIFT CHARGER	29A	23.9KVA	480V	3	40 A	3-#8, 1-#8, 1-#8	3/4"		
FORKLIFT CHARGER	29A	23.9KVA	480V	3	40 A	3-#8, 1-#8, 1-#8	3/4"		
FORKLIFT CHARGER	29A	23.9KVA	480V	3	40 A	3-#8, 1-#8, 1-#8	3/4"		
FORKLIFT CHARGER	29A	23.9KVA	480V	3	40 A	3-#8, 1-#8, 1-#8	3/4"		
GRINDER PUMP	3A	2.8KVA	480V	3	20 A	3-#12, 1-#12, 1-#12	1/2"		
GUH-1	8A	6.3KVA	480V	3	20 A	3-#12, 1-#12, 1-#12	1/2"		
GUH-2	8A	6.3KVA	480V	3	20 A	3-#12, 1-#12, 1-#12	1/2"		
GUH-3	8A	6.3KVA	480V	3	20 A	3-#12, 1-#12, 1-#12	1/2"		
GUH-4	8A	6.3KVA	480V	3	20 A	3-#12, 1-#12, 1-#12	1/2"		
HLS-12	7A	5.7KVA	480V	3	20 A	3-#12, 1-#12, 1-#12	1/2"		
HLS-34	7A	5.7KVA	480V	3	20 A	3-#12, 1-#12, 1-#12	1/2"		
DE CABINET	13A	1.5KVA	120V	1	20 A	1-#12, 1-#12, 1-#12	1/2"		

*- WHERE CIRCUIT CONDUCTORS ARE SHOWN AS LARGER THAN REQUIRED BY BREAKER, THIS CIRCUIT HAS BEEN ADJUSTED FOR VOLTAGE DROP

RELAY PANEL SCHEDULE - LC-HD2				
RELAY NO.	PANEL/BREAKER	POLES	CONTROL ZONE	RELAY NOTE
1	HD2-1	1	SITE	PHOTOCELL TIME CLOCK CONTROLS
2	HD2-3	1	SITE	PHOTOCELL TIME CLOCK CONTROLS
3	HD2-13-21	2	SITE	PHOTOCELL TIME CLOCK CONTROLS
4	HD2-23-25	2	SITE	PHOTOCELL TIME CLOCK CONTROLS

ELECTRICAL FEEDER SCHEDULE					
PANEL NAME	VOLTAGE	RATING	MATERIAL	WIRE SIZE	CONDUIT SIZE
ATS-DE	480V	100 A	AL	3-#1, 1-#1, 1-#6	1-1/2"
ATS-DS	480V	100 A	AL	3-#1, 1-#1, 1-#6	1-1/2"
DT-LD1	480V	50 A	CU	3-#6, 1-#10	3/4"
DT-LD2	480V	70 A	CU	3-#4, 1-#8	1"
DT-LD3	480V	70 A	CU	3-#4, 1-#8	1"
DT-SLD1	480V	50 A	CU	3-#6, 1-#10	3/4"
EHD1	480V	100 A	AL	3-#1, 1-#1, 1-#6	1-1/2"
EHD2	480V	100 A	AL	3-#1, 1-#1, 1-#6	1-1/2"
HBBD	480V	400 A	AL	2 runs of 3-#250, 1-#250, 1-#1	3"
HD1	480V	225 A	AL	3-#30, 1-#30, 1-#2	2"
HD2	480V	225 A	AL	3-#30, 1-#30, 1-#2	2"
HD3	480V	225 A	AL	3-#30, 1-#30, 1-#2	2"
MCCD	480V	600 A	AL	2 runs of 3-#450, 1-#450, 1-#20	3-1/2"
MSBD	480V	2000 A	AL	6 runs of 3-#650, 1-#650, 1-#2	4"
SDPD	480V	100 A	AL	3-#1, 1-#1, 1-#6	1-1/2"
SLD1	208V	150 A	AL	3-#1, 1-#1, 1-#6	1-1/2"
LD1	208V	150 A	AL	3-#30, 1-#30, 1-#2	2"
LD2	208V	150 A	AL	3-#30, 1-#30, 1-#2	2"
SLD1	208V	100 A	AL	3-#1, 1-#1, 1-#6	1-1/2"

*- WHERE CIRCUIT CONDUCTORS ARE SHOWN AS LARGER THAN REQUIRED BY BREAKER, THIS CIRCUIT HAS BEEN ADJUSTED FOR VOLTAGE DROP

5 GENERATOR GROUNDING DETAIL
SCALE: N.T.S.

