LEGEND

SYMBOL	ABBREV.	DESCRIPTION
	CW	COLD WATER
	HW	HOT WATER
	RHW	RECIRCULATED HOT WATER
TW	TW	TEMPERED WATER
SCW	SCW	SOFT COLD WATER
SHW	SHW	SOFT HOT WATER
SRHW	SRHW	SOFT RECIRCULATED HOT WATER
NPCW	NPCW	NON POTABLE COLD WATER
NPHW	NPHW	NON POTABLE HOT WATER
NPRHW	NPRHW	NON POTABLE RECIRCULATED HOT WATER
SNPCW	SNPCW	SOFT NON POTABLE COLD WATER
SNPHW	SNPHW	SOFT NON POTABLE HOT WATER
SNPRHW	SNPRHW	SOFT NON POTABLE RECIRCULATED HOT WATER
DI	DI	DEIONIZED WATER
LSPR	LSPR	LAWN SPRINKLER
FSPR	FSPR	FIRE SPRINKLER
A	A	AIR
O	O	OXYGEN
VAC	VAC	VACUUM
W	W	WASTE BELOW GRADE
W	W	WASTE BELOW FLOOR
W	W	WASTE ABOVE GRADE
AW	AW	ACID WASTE
GW	GW	GREASE WASTE
DS	DS	DOWNSPOUT (RAINWATER)
V	V	VENT
AV	AV	ACID VENT
HWS	HWS	HEATING WATER SUPPLY
HWR	HWR	HEATING WATER RETURN
LPS	LPS	LOW PRESSURE STEAM SUPPLY
LPR	LPR	LOW PRESSURE STEAM RETURN
MPS	MPS	MEDIUM PRESSURE STEAM SUPPLY
MPR	MPR	MEDIUM PRESSURE STEAM RETURN
HPS	HPS	HIGH PRESSURE STEAM SUPPLY
HPR	HPR	HIGH PRESSURE STEAM RETURN
CHS	CHS	CHILLED WATER SUPPLY
CHR	CHR	CHILLED WATER RETURN
DWS	DWS	DUAL WATER SUPPLY
DWR	DWR	DUAL WATER RETURN
CWS	CWS	CONDENSER WATER SUPPLY
CWR	CWR	CONDENSER WATER RETURN
RL	RL	REFRIGERANT LIQUID
RS	RS	REFRIGERANT SUCTION
HG	HG	HOT GAS
COND	COND	CONDENSATE
G	G	NATURAL GAS LINE (FIRM)
IG	IG	NATURAL GAS LINE (INTERRUPTIBLE)
LPG	LPG	LIQUIFIED PETROLEUM GAS
FOS	FOS	FUEL OIL SUPPLY
FOR	FOR	FUEL OIL RETURN
FOV	FOV	FUEL OIL VENT
SMS	SMS	SNOW MELT SUPPLY
SMR	SMR	SNOW MELT RETURN
HPS	HPS	HEAT PUMP SUPPLY
HPR	HPR	HEAT PUMP RETURN

1. SHUT-OFF VALVE
2. PRESSURE REDUCING VALVE
3. BALANCE VALVE
4. CHECK VALVE
5. CONTROL VALVE
6. GAS COCK
7. THERMOMETER
8. PRESSURE GAUGE
9. MANUAL AIR VENT
10. UNION
11. STRAINER W/DRAIN VALVE
12. TOP CONNECTION TEE W/ELBOW
13. BOTTOM CONNECTION TEE W/ELBOW
14. SIDE CONNECTION TEE
15. SHOCK ABSORBER
16. FLOW METER FITTING
17. PIPE ANCHOR
18. BALANCE VALVE W/FLOW METER FITTING
19. FLOW CONTROL VALVE
20. PIPE CAP, PLUG OR CLEANOUT
21. FLOAT AND THERMOSTATIC TRAP
22. PRESSURE AND TEMPERATURE TEST PORT
23. FLOW DIRECTION ARROW
24. EXPANSION JOINT
25. FLEX CONNECTOR
26. PRESSURE AND TEMPERATURE RELIEF VALVE
27. THREE WAY CONTROL VALVE
28. CONTINUATION SYMBOL
29. PIPE DOWN
30. PIPE UP

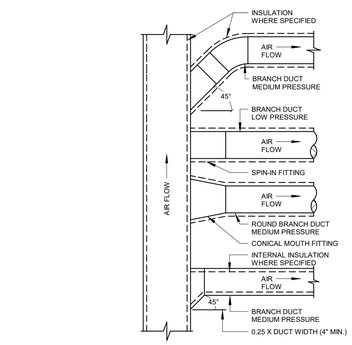
		SPLASH BLOCK
		CONNECTION TO EXISTING
	CO	CLEANOUT
	WH	WALL HYDRANT
	FD	FLOOR DRAIN
	FSK	FLOOR SINK
	HB	HOSE BIBB

SYMBOL	DESCRIPTION
	SUPPLY/OUTSIDE AIR DUCT UP (S/A OR O/A)
	SUPPLY/OUTSIDE AIR ROOF/FLOOR PENETRATION
	SUPPLY/OUTSIDE AIR DUCT DOWN (S/A OR O/A)
	RETURN/EXHAUST AIR DUCT UP (R/A OR E/A)
	RETURN/EXHAUST AIR ROOF/FLOOR PENETRATION
	RETURN/EXHAUST AIR DUCT DOWN (R/A OR E/A)
	ROUND DUCT SECTION UP
	ROUND DUCT ROOF/FLOOR PENETRATION
	ROUND DUCT SECTION DOWN
DR	DUCT RISE IN DIRECTION
DD	DUCT DROP IN DIRECTION
	1. WIDTH DIMENSION 2. WIDTH DIMENSION 3. DEPTH DIMENSION
W R	TYPICAL DUCT TURN R EQUAL TO W (MINIMUM)
	TYPICAL DUCT TURN WITH TURN VANES
	1. CONICAL TAKE-OFF 2. BRANCH DUCT INTO SIDE OF MAIN DUCT 1/2 A
	TYPICAL SQUARE TO ROUND TRANSITION
	FLEXIBLE DUCT CONNECTION (CANVAS)
M F S	1. MOTORIZED DAMPER 2. FIRE DAMPER 3. SMOKE DAMPER
D P S	1. BACKDRAFT DAMPER 2. STATIC PRESSURE SENSOR 3. FIRE/SMOKE DAMPER
	1. REHEAT COIL 2. SPLITTER DAMPER 3. MANUAL VOLUME DAMPER
D1 CFM	REGISTER, GRILLE OR DIFFUSER NO. AIR QUANTITY (CFM)
T	STAT THERMOSTAT
TL	STAT THERMOSTAT W/LOCKING COVER
T N	N.STAT NIGHT THERMOSTAT
T A	R.STAT RECESSED STAT (ASPIRATING)
H	HUMIDISTAT
OS	OCCUPIED-UNOCCUP. SWITCH

ABBREV.	DESCRIPTION
A	Air
AFD	Adjustable Frequency Drive
AFF	Above Finished Floor
AFUE	Annual Fuel Utilization Efficiency
AG	Above Grade
AGA	American Gas Association
AHU	Air Handling Unit
ALUM	Aluminum
AMB	Ambient Air Temperature (°F)
APD	Air Pressure Drop (in. W.C.)
ARCHT	Architect, Architectural
ARI	Air-conditioning and Refrigeration Institute
ASHRAE	American Society of Heating, Refrigeration & Air Conditioning Engineers
ASME	American Society of Mechanical Engineers
ATC	Automatic Temperature Control
AV	Acid Vent
AW	Acid Waste
AWT	Average Water Temperature (°F)
BAS	Building Automation System
BDD	Backdraft Damper
BG	Below Ground, Below Grade
BHP	Brake Horsepower
BTU	British Thermal Unit
BTUH	British Thermal Units Per Hour
C/A	Combustion Air
CAP	Capacity
CAV	Constant Air Volume
CC	Center to Center
CFM	Cubic Feet per Minute
CHR	Chilled Water Return
CHS	Chilled Water Supply
CLG	Ceiling, Cooling
CO	Cleanout
COMB	Combustion, Combustion
CONC	Concrete
COND	Condenser, Condensing, Condensate
CONT	Continuation
COORD	Coordinate
CUH	Cabinet Unit Heater
CW	Cold Water
CWR	Condenser Water Return
CWS	Condenser Water Supply
°F	Degrees Farenheit
D	Diffuser
DB(DBA)	Decibels
DC	Duct Coil
DD	Double Deflection
DDC	Direct Digital Control
DET	Detail
DI	Deionezed Water
DIA	Diameter
DIF	Diffuser
DISCH	Discharge
DIV	Division
DN	Down
DOE	Department of Energy
DPR	Damper
DS	Down Spout
DWR	Dual Water Return
DWS	Dual Water Supply
DWG	Drawing
EAT	Entering Air Temperature(°F)
EER	Energy Efficiency Rating
EEW	Emengency Eye Wash
EF	Exhaust Fan
EFF	Efficiency (Percent)
EH	Exhaust Hood
ELECT	Electrical Characteristics (Volts/PH)
EMG	Expanded Metal grille

ABBREV.	DESCRIPTION
EQUIP	Equipment
ESH	Emergency Shower
ESP	External Static Pressure (IN. W.C.)
EWC	Electric Water Cooler
EWT	Entering Water Temperature(°F)
EXIST	Existing
EXP	Expansion
EXT	External
F/S	Fire/Smoke
FA	Free Area
FCU	Fan Coil Unit
FD	Floor Drain
F. DPR	Fire Damper
FLA	Full Load Amperes
FLEX	Flexible
FOR	Fuel Oil Return
FOS	Fuel Oil Supply
FOV	Fuel Oil Vent
FP	Fan Powered VAV Terminal
FPM	Feet Per Minute
FSK	Floor Sink
FSPR	Fire Sprinkler
FT	Feet
FTG	Fitting
FV	Face Velocity (FPM)
G	Gas, Grille
GA	Gauge
GAL	Gallon
GALV	Galvanized
GPH	Gallons Per Hour
GPM	Gallons Per Minute
GRH	Gravity Relief Hood
H	Height
H2O	Water
HANDI	Handicapped
HC	Heating Coils, Handicapped
HD	Hub Drain
HG	Hot Gas
HP	Horsepower
HPR	High Pressure Steam Return
HPS	High Pressure Steam Supply
HTG	Heating
HW	Hot Water
HWR	Heating Water Return
HWS	Heating Water Supply
ID	Inside Dimension
IG	Interruptable Gas
IH	Intake Hood
IN	Inch
INS	Insulation
I.E.	Invert Elevation
KW	Kilowatts
L	Length, Lavatory
LAT	Leaving Air Temperature(°F)
LBS	Weight in Pounds
LPG	Liquified Petroleum Gas
LPR	Low Pressure Steam Return
LPS	Low Pressure Steam Supply
LR	Line Regulator
LSPR	Lawn Sprinkler
LWT	Leaving Water Temperature(°F)
MANUF	Manufacturer
MAX	Maximum
MBH	British Thermal Units x1000
MCA	Minimum Circuit Ampacity
MHP	Motor Horsepower
MIN	Minimum
MFS	Maximum Fuse Size
MOT	Motorized
M. DPR.	Motorized Damper
MPR	Medium Pressure Steam Return
MPS	Medium Pressure Steam Supply
MSK	Mop Sink
MTD	Mounted
NC	Noise Coefficient

ABBREV.	DESCRIPTION
NFPA	National Fire Protection Agency
NO	Number
NP	Non-potable
O	Oxygen
O/A	Outside Air
OC	On Center
OD	Outside Dimension
ODS	Overflow Downspout
OPER	Operator/Operating
OP WT	Operating Weight
OPNG	Opening
ORD	Overflow Roof Drain
PD	Pressure Drop
PH	Phase
PLBG	Plumbing
PNEU	Pneumatic
PRESS	Pressure
PRV	Power Roof Ventilator
PTAC	Package Terminal Air Conditioner
PVC	Polyvinyl Chloride
R	Register, Round
R/A	Return Air
RAD	Radiated, Radiation
RD	Roof Drain
RECIRC	Recirculating
REG	Register, Regulating
REINF	Reinforce
REINF'G	Reinforcing
REQ'D	Required
RL	Refrigerant Liquid
RM	Room
RPM	Revolutions Per Minute
RS	Refrigerant Suction
S/A	Supply Air
S	Soft
SD	Single Deflection
SEER	Seasonal Energy Efficiency Rating
SF	Square Feet
SH	Shower
SHT	Sheet
SHTMTL	Sheet Metal (S/M)
SK	Sink
SP	Static Pressure
SPECS	Specifications
SQ	Square
SS	Stainless Steel
STL	Steel
STRUCT	Structural
SUCT	Suction
TEMP	Temperature
TSP	Total Static Pressure (IN W.C.)
TW	Tempered Water
TYP	Typical
UBC	Uniform Building Code
UH	Unit Heater
UMC	Uniform Mechanical Code
UPC	Uniform Plumbing Code
UR	Urinal
UV	Unit Ventilator
V	Vent, Volts
V/A	Ventilation Air
VAC	Vacuum
VAV	Variable Air Volume
VOL	Volume
VOLTS	Voltage
W	Waste, Width, Watts
W/	With
W/O	Without
WC	Water Column, Water Closet
WF	Wash Fountain
WG	Water Gauge
WPD	Water Pressure Drop(Ft. of Water)
WT.	Weight
WTD	Water Temerature Drop(°F)



DUCT TAKE-OFF & CONNECTION

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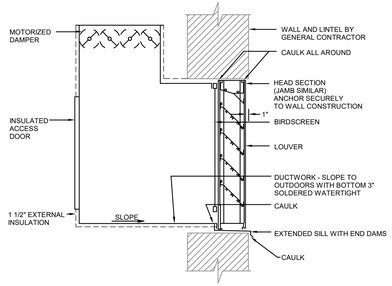

INTAKE AIR LOUVER DETAIL

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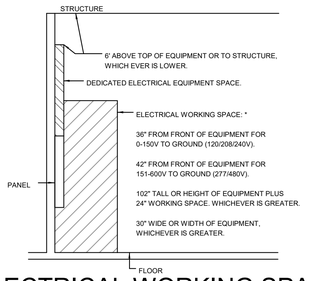
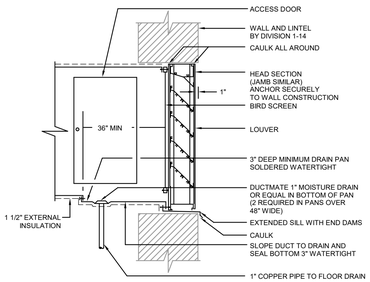


ELECTRICAL WORKING SPACE

NO SCALE

* VERIFY WITH LOCAL CODE REQUIREMENTS, SPECIFICATIONS, AND NATIONAL ELECTRICAL CODE.



LOUVER DETAIL

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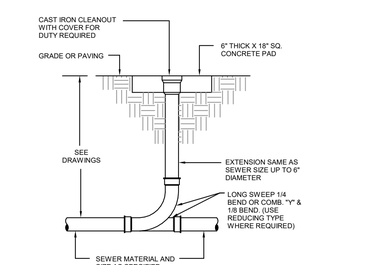

EXTERIOR CLEANOUT DETAIL

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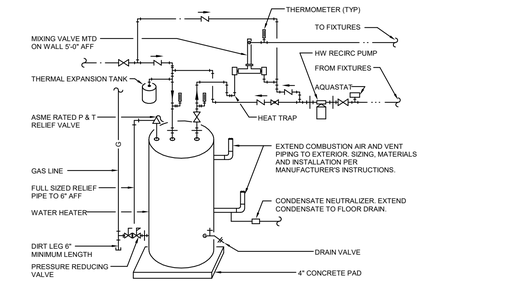

GAS WATER HEATER PIPING DETAIL

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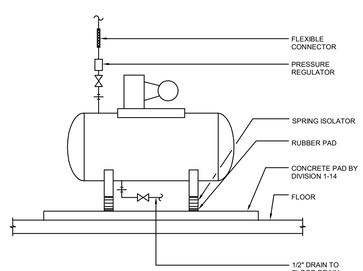

AIR COMPRESSOR PIPING DETAIL

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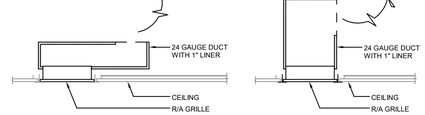
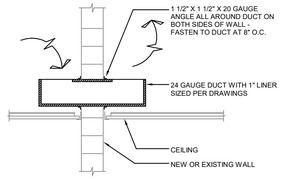


RETURN BOOT DETAIL

NO SCALE



TRANSFER DUCT DETAIL

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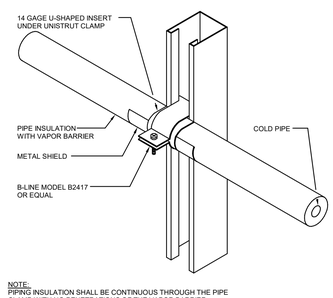
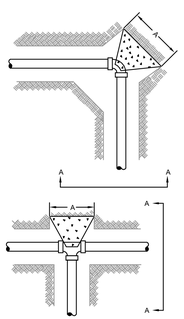


NOTE:
PIPING INSULATION SHALL BE CONTINUOUS THROUGH THE PIPE CLAMP WITH NO PENETRATIONS OF THE VAPOR BARRIER.

COLD PIPING SUPPORT DETAIL

NO SCALE



THRUST BLOCK DETAIL

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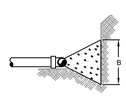


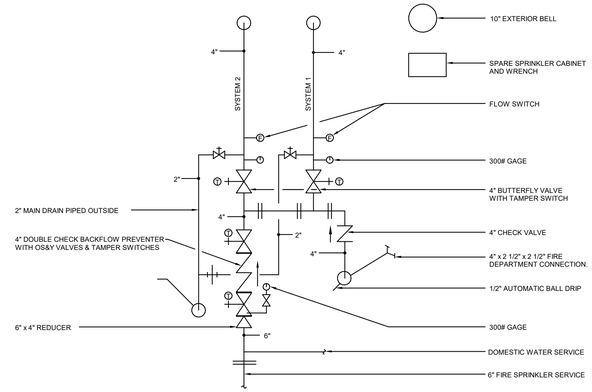
SECTION A-A

NO SCALE

NOTE:
BEARING SURFACE = A x B IN SQUARE FEET.

$$\frac{A \times B}{} \geq \frac{R}{Sp}$$

WHERE R = REACTION IN POUNDS
Sp = ALLOWABLE SOIL BEARING PRESSURE IN POUNDS PER SQUARE FEET



FIRE SPRINKLER SERVICE RISER

NO SCALE

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Signature: Jordan R. deWit
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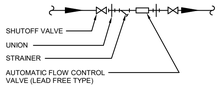
No.: 25494-1 | Date: 11-02-2026
Drawn: DDK | Checked: JRD
Project Manager: GS
Project Status: CONSTRUCTION SET

Sheet Title:
LEGEND & DETAILS

Sheet No.:
M1.10



DOMESTIC RECIRCULATED HOT WATER AUTOMATIC FLOW CONTROL VALVE PIPING DETAIL

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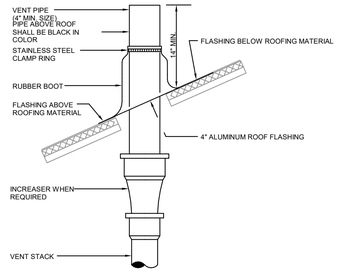

PLUMBING VENT DETAIL

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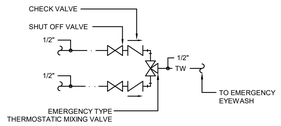
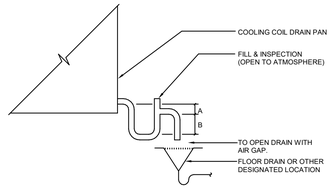


EMERGENCY EYEWASH PIPING DETAIL

NO SCALE

NOTES:
1. PROVIDE TAGS AT SHUT OFF VALVES WHICH READ "EMERGENCY FIXTURE. DO NOT CLOSE UNLESS AUTHORIZED".
2. INSTALL EMERGENCY FIXTURES PER MANUFACTURERS INSTRUCTIONS AND APPLICABLE STANDARDS.



TRAP DIMENSION ("A" AND "B") VARY AS DETERMINED BY INTERNAL STATIC PRESSURE AT POINT OF CONNECTION.

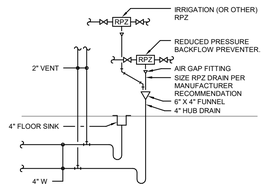
DIMENSION	POSITIVE STATIC PRESSURE	NEGATIVE STATIC PRESSURE
"A"	SP_{MAX}	1.5 X SP
"B"	1.5 X SP	SP_{MAX}

SP_{MAX} = MAXIMUM STATIC PRESSURE TO BE EXPERIENCED (DESIGN AT POINT OF CONNECTION).

COOLING COIL DRAIN TRAP DETAIL

NO SCALE

NOTE:
THIS DETAIL REPRESENTS TYPICAL INSTALLATION REQUIREMENTS. INSTALL CONDENSATE DRAIN IN STRICT ACCORDANCE WITH THE MANUFACTURERS RECOMMENDED INSTRUCTIONS.



BACKFLOW PREVENTER AND DRAIN DETAIL

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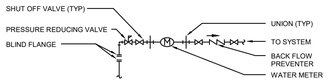
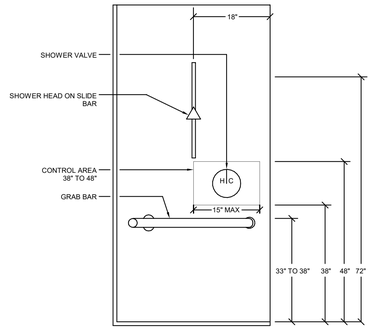


WATER METER PIPING DIAGRAM

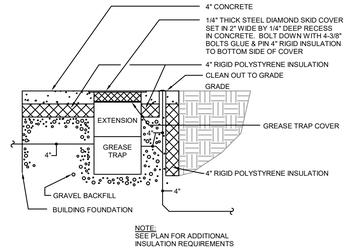
NO SCALE

NOTE:
1. REFER TO DRAWINGS FOR PIPE AND VALVE SIZES.
2. SEE BACKFLOW PREVENTER AND DRAIN DETAIL.



ADA SLIDING SHOWER HEAD DETAIL

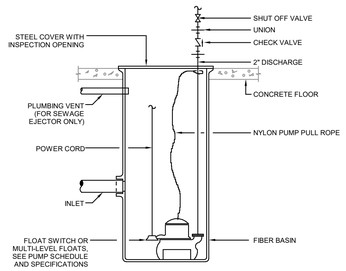
NO SCALE



NOTE:
SEE PLAN FOR ADDITIONAL INSULATION REQUIREMENTS

GREASE TRAP DETAIL

NO SCALE



SUBMERSIBLE SUMP PUMP

NO SCALE

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DETAILS

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M1.11

ENERGY RECOVERY VENTILATOR SCHEDULE

UNIT NO.	MANUF.	MODEL NO.	SUPPLY AIR			EXHAUST AIR			ELECTRICAL			OUTSIDE AIR		ROOM AIR		DISCHARGE AIR TEMP				SUPPLY SIDE FILTER					EXHAUST SIDE FILTER					WEIGHT (LBS)	REMARKS
			CFM	ESP	FAN WATT	CFM	ESP	FAN WATT	VOLT/PH	MCA	MOCP	SUMMER DB/WB	WINTER DB/WB	SUMMER DB/WB	WINTER DB/WB	SUMMER DB/WB	T. EFF. %	WINTER DB/WB	T. EFF. %	MERV	AREA(SF)	MAX FV	APD	THICK	MERV	AREA(SF)	MAX FV	APD	THICK		
ERV-1	RENEWAIRE	HE15-JINH	1050	1.00	453	1050	1.00	427	208/1	7.7	15	89/58	-8	75/63	70/53	79.1/57.0	37.9	47.2/39.5	69.5	MERV 8	4.16	---	---	2"	MERV 8	4.16	---	---	2"	360	ALL

REMARKS:

1. STATIC PLATE ERV. PROVIDE SINGLE WALL CONSTRUCTION, ECM MOTORS, NON-FUSED DISCONNECT.
2. UNIT HUNG FROM STRUCTURE WITH VIBRATION ISOLATION. PROVIDE FLEXIBLE DUCT CONNECTIONS.

CONDENSING UNIT SCHEDULE

UNIT NO.	MANUF.	MODEL NO.	MATCHED UNIT	CAPACITY (NOM.TON)	CAPACITY MBH	AMB.AIR TEMP.	ELECTRICAL VOLTS	PH	MCA	FLA	MOCP	MIN EER2	MIN SEER2	OPER. WT.(LBS)	APPROX. DIMS	REMARKS
CU-1	YORK	HMCG22B60	F-1	5	60	95	208	1	35	28	50	9.8	16.5	207	38"x14"x55"	1
CU-2	YORK	HMCG22B60	F-2	5	60	95	208	1	35	28	50	9.8	16.5	207	38"x14"x55"	1
CU-3	YORK	HMCG22B60	F-3	5	60	95	208	1	35	28	50	9.8	16.5	207	38"x14"x55"	1
CU-4	BOSCH	BMS500-AAS012-1CSXHB	DSS-1	1	12	95	208	1	15.0	---	15	12.0	20.0	80	32"x14"x22"	2
CU-5	BOSCH	BMS500-AAS012-1CSXHB	DSS-2	1	12	95	208	1	15.0	---	15	12.0	20.0	80	32"x14"x22"	2
CU-6	BOSCH	BMS500-AAS018-1CSXHB	DSS-3	1.5	18	95	208	1	19.0	---	20	12.0	18.0	110	36"x14"x27"	2

REMARKS:

1. TWO-STAGE COMPRESSOR, REF. LINE SETS, 5 YEAR COMPRESSOR WARRANTY, R-454B REF., LOW-AMBIENT PRESSURE SWITCH.
2. HEAT PUMP CONDENSING UNIT, PROVIDE REF. LINE SETS, 5 YEAR COMPRESSOR WARRANTY, R-454B REF. LOW-AMBIENT OPERATION CONTROLS AND ACCESSORIES.

GAS FURNACE SCHEDULE

UNIT NO.	SERVES	MANUFACTURER	MODEL NO.	CFM	O/A CFM	E.S.P. (IN.WG.)	FAN HP	MOTOR ELECT.	MOTOR MCA	HEATING (MBH) INPUT	HEATING (MBH) OUTPUT	AFUE	COOLING MBH	REMARKS
F-1	INT. OFFICE	YORK	TM9Y100C20MP11	1995	460	0.5	0.75	120/1	10.3	100/65	96/62	96%	60	ALL
F-2	EXT. OFFICE/LOBBY/GIFT	YORK	TM9Y100C20MP11	1995	300	0.5	0.75	120/1	10.3	100/65	96/62	96%	60	ALL
F-3	TRAINING	YORK	TM9Y100C20MP11	1995	290	0.5	0.75	120/1	10.3	100/65	96/62	96%	60	ALL

REMARKS:

1. PROVIDE 2-STAGE GAS HEAT, CONCENTRIC VENT KIT.
2. PROVIDE EVAPORATOR IN FACTORY CASE.
3. ECM BLOWER MOTOR.
4. PROVIDE PROGRAMMABLE THERMOSTAT FOR 2-STAGE HEAT AND COOLING.

DUCTED MINI-SPLIT SYSTEM SCHEDULE

FAN NO.	SERVES	MANUF.	MODEL NO.	TOTAL CFM	S.P.	MOTOR MHP	VOLTS	PH	MCA	MOCP	COOLING COIL MBH	WEIGHT (LBS)	REMARKS
DSS-1	125 STORAGE	BOSCH	BMS500-AAU012-1AHDXD	580-680-780	0.4"	1/5	208	1	3.0	15	12	50	ALL
DSS-2	124 EVIDENCE	BOSCH	BMS500-AAU012-1AHDXD	580-680-780	0.4"	1/5	208	1	3.0	15	12	50	ALL
DSS-3	122 GAME PROCESSING	BOSCH	BMS500-AAU018-1AHDXD	910-990-1070	0.4"	1/5	208	1	3.0	15	18	50	ALL

REMARKS:

1. PROVIDE FACTORY CONDENSATE PUMP.
2. REFRIGERANT SHALL BE R454B. PROVIDE REFRIGERANT PIPING PER MANUFACTURERS INSTRUCTIONS.
3. PROVIDE REFRIGERANT LEAK DETECTION AS REQUIRED IF OVERALL UNIT CHARGE EXCEEDS MINIMUM AMOUNT.
4. INDOOR UNIT POWERED THROUGH OUTDOOR CONDENSING UNIT. COORDINATE POWER WITH ELECTRICAL CONTRACTOR.

FAN SCHEDULE

FAN NO.	SERVES	MANUF.	MODEL NO.	TYPE	CFM	S.P.	RPM	TIP SPEED (FPM)	MOTOR MHP	MOTOR BHP	ELEC. VOLTS	ELEC. PH	SONES	WEIGHT (LBS)	REMARKS
EF-1	121 GARAGE	GREENHECK	SQ-16-M2-VG	DD INLINE	5500	0.5	1745	9137	2.00	1.07	208	1	19.0	135	1,3
EF-2	121 GARAGE	GREENHECK	SQ-95-VG	DD INLINE	400	0.5	1622	4617	0.17	0.09	120	1	8.5	34	1,3
EF-3	122 GAME PROCESSING	GREENHECK	CSP-A390-VG	DD CEILING	150	0.5	1342	1988	FRAC	0.03	120	1	3.4	23	2
EF-4	123 RR	GREENHECK	CSP-A250	DD CEILING	75	0.5	844	1492	FRAC	0.01	120	1	1.2	23	2

REMARKS:

1. INLINE FAN. PROVIDE BACKDRAFT DAMPER, ECM MOTOR, ELECTRICAL DISCONNECT, VIBRATION ISOLATION HANGING KIT.
2. CEILING MOUNTED FAN. PROVIDE BACKDRAFT DAMPER, ECM MOTOR, ELECTRICAL DISCONNECT, PAINTED WALL CAP.
3. COORDINATE CO/NO2 CONTROLLER REQUIREMENTS.

LOUVER SCHEDULE

LVR NO.	SERVES	MANUF.	MODEL NO.	SIZE W X H X D	FREE AREA S.F.	CFM	VEL. FPM	PD IN. WG.	REMARKS
LVR-1	121 GARAGE CO/NO2 SYSTEM/FURNACE O/A	GREENHECK	ESD-635	52x48x6	9.9	5900	594	0.05	ALL
LVR-2	121 GARAGE CO/NO2 SYSTEM	GREENHECK	ESD-635	60x48x6	11.6	6950	599	0.05	ALL
LVR-3	ERV EXHAUST	GREENHECK	ESD-635	24x20x6	1.4	1050	768	0.09	ALL

REMARKS:

1. COLOR BY ARCHITECT.

2. PROVIDE WITH BIRDSCREEN.

REGISTER, GRILLE & DIFFUSER SCHEDULE

SYMBOL	MANUF.	CONSTR MAT'L	MODEL NO.	MAX CFM	OVERALL SIZE	THROAT SIZE	NC	THROW	TOTAL PD (IN.W.G.)	FRAME	PATTERNS	REMARKS
D1	KRUEGER	S	1400	230	24/24	8"ø	26	12	0.08	LAY-IN	4-WAY	
D2	KRUEGER	S	1400	430	24/24	10"ø	26	17	0.08	LAY-IN	4-WAY	
G1	KRUEGER	A	EGCS	620	24/12	22/10	15	---	0.03	LAY-IN	1/2" GRID	
G2	KRUEGER	A	EGCS	1400	24/24	22/22	15	---	0.03	LAY-IN	1/2" GRID	

LEGEND:

R - REGISTER
G - GRILLE
D - DIFFUSER

SD - SINGLE DEFLECTION
DD - DOUBLE DEFLECTION

A - ALUMINUM CONSTRUCTION
S - STEEL CONSTRUCTION

GENERAL NOTES:

1. THROWS ARE BASED ON TERMINAL VELOCITIES AT 50 FPM.
2. NC VALUES ARE BASED UPON A 10dB ROOM ATTENUATION.
3. SEE SPECIFICATIONS FOR OPPOSED BLADE DAMPER REQUIREMENTS.

REMARKS:

1. COLOR BY ARCHITECT.

PLUMBING FIXTURE SCHEDULE

FIXTURE SYMBOL	TYPE	MANUFACTURER	MODEL NO.	TRIM	SUPPLIES	WASTE	REMARKS
WC-1	WATER CLOSET FLUSH VALVE FLOOR MOUNTED ELONGATED HANDI	AMERICAN STANDARD	3043.001	SLOAN 111-YC-FSC-DFB	---	---	CHURCH 9500SSCT SEAT TRIP LEVER TO WIDE SIDE OF STALL, TOP SPUD
UR-1	URINAL WASHOUT WALL HUNG	AMERICAN STANDARD	6515.001	SLOAN 186-0.5	---	---	JOSAM SERIES 17000 CARRIER TOP SPUD
L-1	LAVATORY INTEGRAL BOWL	---	---	7013.801.243	BRASSCRAFT KTSCR19C	GRID DRAIN	17 GA. C.P. P-TRAP OFFSET WASTE ARM POU ASSE-1070 RATED TMV
L-2	LAVATORY WALL MOUNT	AMERICAN STANDARD	0355.012	CHICAGO 895-317-E3	BRASSCRAFT KTSCR19C	GRID DRAIN	17 GA. C.P. P-TRAP TRUBRO WASTE & WATER PIPE PROTECTOR, OFFSET WASTE ARM POU ASSE-1070 RATED TMV
L-3	LAVATORY WALL MOUNT	AMERICAN STANDARD	0355.012	SPEAKMAN SEF-1800-CA	BRASSCRAFT KTSCR19C	GRID DRAIN	17 GA. C.P. P-TRAP TRUBRO WASTE & WATER PIPE PROTECTOR, OFFSET WASTE ARM LAWLER NO. 911 E/F TMV
MSK-1	MOP SINK FLOOR MOUNTED	ZURN	Z1996-24 -SD-HH-MH	Z843M1-RC-CS W/ VACUUM BREAKER	---	---	CW HB MTD 5'0" AFF
SK-1	SINK-STAINLESS STEEL, SINGLE COMP, UNDERMOUNT	ELKAY	ELUHAD-281655	KOHLER K-34906-BL	BRASSCRAFT KTSCR19C	LK-35 STRAINER	17 GA. C.P. P-TRAP, INSINKERATOR BADGER 5 DISPOSAL DISHWASHER CONNECTIONS
SK-2	SINK-STAINLESS STEEL, TRIPLE COMP, DRAIN BOARDS	ELKAY	3C16X20-2-18X	CHICAGO 510-GVB613L15XKCAB	BRASSCRAFT KTSCR19C	(3) LK-35 STRAINER LK-60 WASTE	17 GA. C.P. P-TRAP, PRE-RINSE FAUCET WITH SWING ARM, INLET CHK VALVES, VAC BREAKER
LT-1	LAUNDRY SINK WALL HUNG	FIAT	L1	CHICAGO 895-317 GN8AJKCP SPOUT	BRASSCRAFT KTSCR19C	---	17 GA. C.P. P-TRAP
SH-1	SHOWER HANDI	BEST BATH	(36"X36")	POWERS E710-K-1-0-0-0-1-0-W	AMERICAN STANDARD 1660774	2" FLOOR DRAIN	ALL METAL TRIM SLIDING SHOWER HEAD ON 30" SLIDE BAR, FLEXIBLE HOSE, FOLDING SEAT, REMOVEABLE THRESHOLD, FLEXIBLE DAM
EWC-1	ELECTRIC WATER COOLER WALL MTD DUAL HEIGHT W/ BOTTLE FILL	ELKAY	LZSTL8WSSP	---	BRASSCRAFT KTSCR19C	---	17 GA. C.P. P-TRAP
UB-1	WASHING MACHINE UTILITY BOX	SIOUX CHIEF	696- G2313MF	---	---	---	MOUNT AT 36" AFF SHOCK ABSORBERS, P-TRAP

REMARKS:

1. HANDICAPPED FLUSH VALVES SHALL BE ADA COMPLIANT.
2. FLUSH VALVES SHALL HAVE A VANDAL RESISTANT STOP CAP.
3. FLUSH VALVE ESCUTCHEONS SHALL BE CHROME PLATED WITH HEAVY WALL THICKNESS AND SET SCREW.

PUMP SCHEDULE

UNIT NO.	MANUF.	MODEL NO.	DESCRIPTION	STYLE	SIZE	GPM	HEAD (FT)	MOTOR MHP	MOTOR BHP	MOTOR RPM	ELECTRICAL VOLT	ELECTRICAL PHASE	SUCTION SIZE	DISCHARGE SIZE	REMARKS
P-1	B&G	PL-36	DOMESTIC RECIRC	INLINE	---	10	30	0.19	---	3300	120	1	1"	1"	1
P-2	ZOELLER	152	DRAIN TILE SUMP	SUMP	---	25	25	0.50	---	3450	120	1	---	---	2

REMARKS:

1. PUMP SHALL BE A BRONZE BODY PUMP.
2. PROVIDE CONTROLLER WITH NORMAL AND HIGH WATER FLOAT SWITCHES, AUDIBLE ALARMS, BEACON, ALARM OUTPUT, ELECTRICAL DISCONNECT, AND SIMPLEX CONTROLS.

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Project Manager: GS
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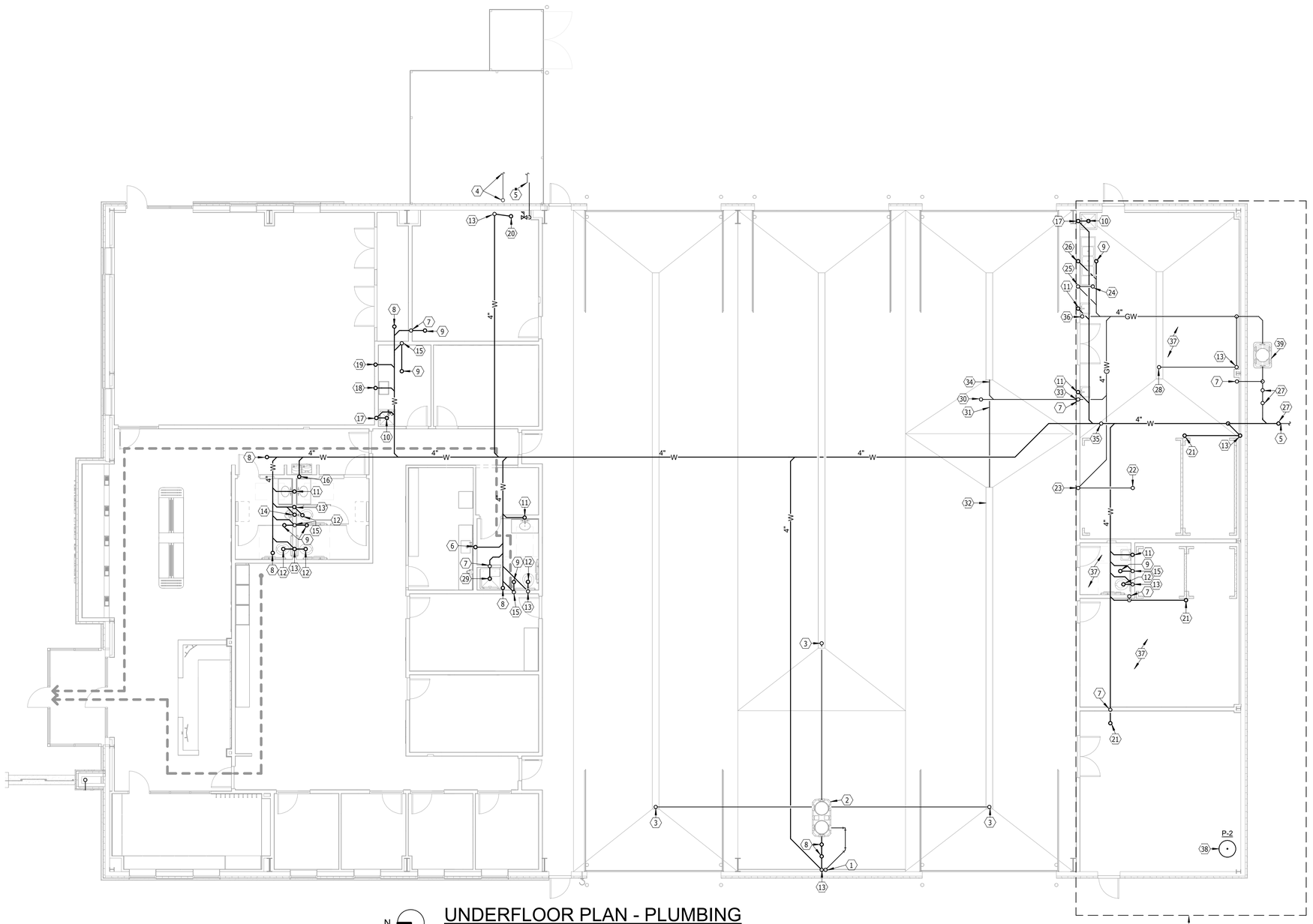
Sheet Title:
SCHEDULES

Sheet No.:
M1.12



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UNDERFLOOR PLAN - PLUMBING

SCALE 0 4 8 12 16

GENERAL SHEET NOTES

A. THE CEILING SPACE AVAILABLE REQUIRES COORDINATION WITH OTHER TRADES. THE CONTRACTORS SHALL PROVIDE ALL OFFSETS AND RELOCATE AS REQUIRED TO COORDINATE THE INSTALLATION OF ALL MATERIALS AND EQUIPMENT WITH OTHER TRADES.

B. ON NEW CONSTRUCTION DRAWINGS, ITEMS SHOWN LIGHT ARE EXISTING TO REMAIN, ITEMS SHOWN BOLD ARE NEW WORK.

PLUMBING NOTES

1 2" FOV UP, 2" V UP/4" W.
2 OIL INTERCEPTOR. STRIEM OS-100 OR EQUAL.
3 4" W UP TO TD.
4 GAS SERVICE PROVIDED BY UTILITY COMPANY.
5 CONNECT TO UTILITY PIPING BY SITE UTILITY CONTRACTOR. VERIFY PIPING INVERTS PRIOR TO SITE UTILITY EXCAVATION. SEE SITE UTILITY DRAWINGS FOR CONTINUATION.
6 2" W UP TO SK.
7 2" V UP.
8 4" W UP TO CO.
9 2" W UP TO FD.
10 3" W UP TO MSK.
11 2" W UP TO LAV.
12 4" W UP TO WC.
13 2" V UP/4" W.
14 2" W UP TO UR.
15 2" V UP/2" W.
16 2" W UP TO EWC.
17 2" V UP/3" W.
18 2" W UP TO LT.
19 2" W UP TO UB.
20 4" W UP TO FSK.
21 4" W UP TO FD.
22 4" GW UP TO FD. PROVIDE 12" DEPTH TAILPIECE BEFORE DRAIN P-TRAP.
23 2" V UP/4" GW.
24 2" GW UP TO FD.
25 2" V UP/2" GW.
26 3" GW UP TO SK.
27 4" W UP TO GRADE CO.
28 4" GW UP TO TD WITH P-TRAP.
29 2" W UP TO SH.
30 4" GW UP TO CO. ITEM TO BE OMITTED UNDER DEDUCT ALTERNATES #2 AND #3.
31 TRENCH DRAIN PIPING TO CONTINUE STRAIGHT AND TIE INTO OTHER TRENCH DRAIN SYSTEM UNDER DEDUCT ALTERNATES #2 AND #3.
32 PROVIDE TRENCH DRAIN OF ADEQUATE DEPTH TO ALLOW PIPING CONNECTION TO WASH BAY TRENCH DRAIN UNDER DEDUCT ALTERNATE #2 AND #3.
33 PIPING ROUTED TO GAME WASTE SYSTEM TO BE OMITTED UNDER DEDUCT ALTERNATE #2 AND #3. PROVIDE SLEEVE THROUGH FOUNDATION WALL AT APPROPRIATE DEPTH TO ALLOW FUTURE CONNECTION WHEN BUILDING AREA IS EVENTUALLY BUILT.
34 TRENCH DRAIN OUTLET TO HAVE TRAP UNDER BASE BID. INSTALL WITHOUT TRAP UNDER DEDUCT ALTERNATE #2 AND #3.
35 GRADE CO TO BE INSTALLED HERE UNDER DEDUCT ALTERNATE #3.
36 4" GW UP TO CO.
37 ALL PIPING SHOWN IN THIS AREA NOT RELATED TO THE MAIN SANITARY SERVICE TO BE OMITTED UNDER DEDUCT ALTERNATE #2 AND #3.
38 DRAIN TILE SUMP PUMP SET IN FIBERGLASS SUMP BASIN. BASIN TO BE 24" DIAMETER BY 72" DEEP. SEE DETAIL AND SCHEDULE. PIT TO BE RELOCATED UNDER DEDUCT ALTERNATE #2 AND #3.
39 GREASE INTERCEPTOR INSTALLED EXTERIOR TO BUILDING. BASIS OF DESIGN SHALL BE SCHIER GB-75, OR EQUAL. SEE DETAIL AND SPECIFICATIONS. ITEM TO BE OMITTED UNDER DEDUCT ALTERNATES #2 AND #3.

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Sheet Title:
UNDERFLOOR PLAN - PLUMBING

Sheet No.:
M2.10

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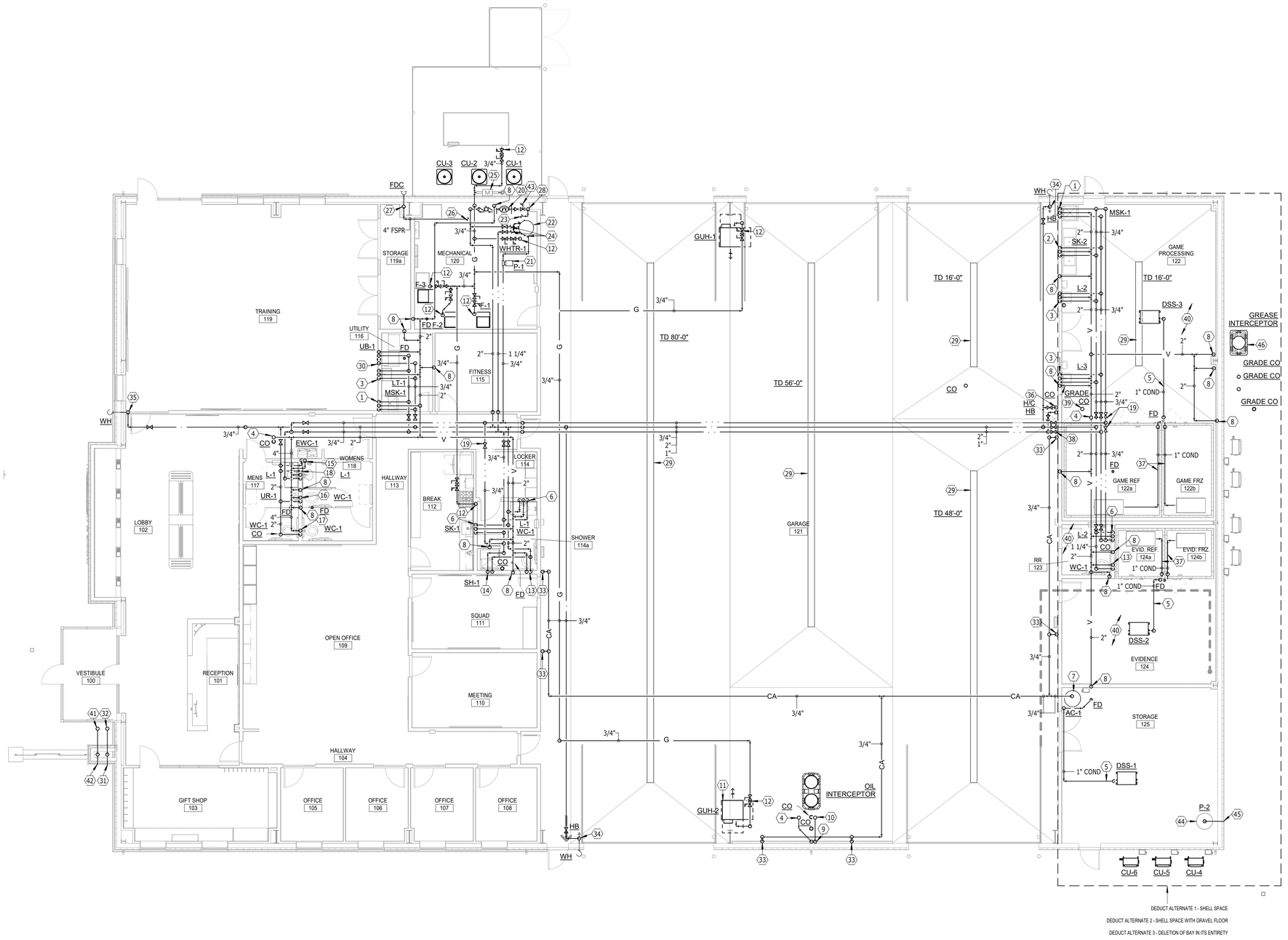

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FLOOR PLAN - PLUMBING & HEATING

SCALE 0 4 8 12 16

GENERAL SHEET NOTES

A. THE CEILING SPACE AVAILABLE REQUIRES COORDINATION WITH OTHER TRADES. THE CONTRACTORS SHALL PROVIDE ALL OFFSETS AND RELOCATE AS REQUIRED TO COORDINATE THE INSTALLATION OF ALL MATERIALS AND EQUIPMENT WITH OTHER TRADES.

B. ON NEW CONSTRUCTION DRAWINGS, ITEMS SHOWN LIGHT ARE EXISTING TO REMAIN, ITEMS SHOWN BOLD ARE NEW WORK.

C. MAINTAIN REQUIRED ELECTRICAL CLEARANCES FOR MECHANICAL EQUIPMENT.

⬡ PLUMBING & HEATING NOTES

1 3/4" CW DN TO HB/MSK, 2" V DN, 1/2" HW DN.
2 3/4" CW DN, 2" V/2" W DN, 3/4" HW DN.
3 1/2" CW DN, 1 1/2" V/2" W DN, 1/2" HW DN.
4 2" V UP (4" VTR).
5 ROUTE 1" COND PIPING FROM DSS DRAIN TO FD.
6 1/2" HW DN, 1 1/2" V/2" W DN, 1/2" CW DN.
7 AIR COMPRESSOR SET ON 4" HOUSEKPEEPING PAD. PAD BY G.C. SEE DETAIL AND SCHEDULE.
8 2" V DN.
9 2" FOV DN, 2" V DN.
10 2" FOV UP (4" FOVTR).
11 GAS-FIRED UNIT HEATER HUNG FROM STRUCTURE.
12 3/4" G TO GAS-FIRED APPLIANCE WITH GAS COCK, PRESSURE REGULATING VALVE, DRIP LEG, AND UNION. PROVIDE FINAL CONNECTION TO EQUIPMENT.
13 2" V DN, 1 1/4" CW DN.
14 1/2" CW DN, 1/2" HW DN.
15 1/2" CW DN, 1 1/2" V/2" W DN.
16 2" V/2" W DN, 2" CW DN.
17 4" V DN, 2" CW DN.
18 3/4" CW DN, 2" V/ 2" W DN, 3/4" HW DN.
19 RECIRCULATING WATER BALANCE VALVE. INSTALL IN ACCESSIBLE LOCATION.
20 2" WATER METER WITH 2" RPZ BACKFLOW PREVENTER MTD BELOW FIRE PROTECTION VALVING AND RISER. EXTEND RPZ DRAIN TO FSK.
21 DOMESTIC HOT WATER RECIRCULATING PUMP. SEE SCHEDULE AND DETAIL.
22 GAS-FIRED WATER HEATER SET ON 4" HOUSEKEEPING PAD. PAD BY G.C. SEE DETAIL AND SCHEDULE.
23 EXTEND 6" CW SERVICE TO FIRE PROTECTION RISER LOCATED ABOVE DOMESTIC WATER RISER. COORDINATE CLEARANCES WITH WATER METER. SEE DETAIL.
24 EXTEND 1 1/4" CW, 1 1/4" HW, AND 3/4" RHW TO WATER HEATER. SEE DETAIL.
25 GAS SERVICE AND GAS METER BY UTILITY PROVIDER. GAS SIZED FOR 3203 MBH AT 2 PSIG, 1 PSIG PRESSURE DROP, WITH A TOTAL SYSTEM LENGTH OF 175FT. PIPE REGULATOR VENT TO AN ACCEPTABLE LOCATION AWAY FROM SOURCES OF IGNITION.
26 EXTEND 4" FSPR TO FIRE PROTECTION RISER. SEE DETAIL.
27 4" FSPR PIPING DN TO FDC MTD 3FT ABOVE GRADE.
28 6" WATER SERVICE DN.
29 TRENCH DRAIN. ZURN Z882-GDF WITH HDPE FRAME AND 12" DUCTILE IRON GRATE, CLASS F OR EQUAL.
30 1 1/2" V/2" W DN, 1/2" CW DN, 2" W, 1/2" HW DN.
31 4" DS DN TO DOWNSPOUT NOZZLE MTD 12" ABOVE GRADE.
32 4" DS UP TO 4" RD.
33 3/4" CA DN TO AIR DROP LOCATION 36" AFF. SEE DETAIL.
34 3/4" CW DN TO HB/WH. MOUNT HB AT 36" AFF AND MOUNT WH AT 24" ABOVE GRADE.
35 3/4" CW DN TO WH MTD AT 24" ABOVE GRADE.
36 3/4" CW DN, 3/4" HW DN TO HOT/COLD WATER HOSE BIBB MTD 36" AFF.
37 ROUTE CONDENSATE PIPING FROM FREEZER/COOLER EVAPORATOR UNIT TO FLOOR DRAIN. COORDINATE EXACT LOCATION FOR LEAVING THE UNIT WITH THE MANUFACTURER. COORDINATE HEAT TRACE FOR FREEZER PIPING.
38 VALVE SET TO ONLY BE INSTALLED IF ANY DEDUCT ALTERNATES ARE TAKEN. PIPING TO STOP AT THIS LOCATION UNDER THESE ALTERNATES.
39 GRADE CO TO BE INSTALLED HERE UNDER DEDUCT ALTERNATE #3.
40 ALL PIPING EXCEPT SANITARY VENT AND DSS CONDENSATE DRAINS TO BE OMITTED IN THIS AREA IF ANY DEDUCT ALTERNATES ARE ACCEPTED. SANITARY WASTE PIPING TO BE ROUGHED IN THROUGH FLOOR UNDER DEDUCT ALTERNATE #1. SANITARY VENT PIPING TO ADDITIONALLY BE OMITTED UNDER DEDUCT ALTERNATE #2. DSS CONDENSATE DRAINS TO ADDITIONALLY BE OMITTED UNDER DEDUCT ALTERNATE #3.
41 4" ODS UP TO 4" ORD.
42 4" ODS DN TO DOWNSPOUT NOZZLE MTD 12" ABOVE GRADE.
43 DOMESTIC WATER PRESSURE REDUCING VALVE.
44 DRAIN TILE SUMP PUMP SET IN FIBERGLASS SUMP BASIN. BASIN TO BE 24" DIAMETER BY 72" DEEP. SEE DETAIL AND SCHEDULE. PIT TO BE RELOCATED UNDER DEDUCT ALTERNATE #2 AND #3.
45 ROUTE 2" DISCH PIPING FROM DRAIN TILE SUMP OUT THROUGH EXTERIOR WALL12" ABOVE GRADE. SEAL WALL PENETRATION WATERTIGHT.
46 GREASE INTERCEPTOR INSTALLED EXTERIOR TO BUILDING. BASIS OF DESIGN SHALL BE SCHIER GB-75, OR EQUAL. SEE DETAIL AND SPECIFICATIONS. ITEM TO BE OMITTED UNDER DEDUCT ALTERNATES #2 AND #3.

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Project:
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REVISION:

No.: 25494-1 Date: 11-02-2026
Drawn: KMT Checked: JRD
Project Manager: GS
Project Status: CONSTRUCTION SET

Sheet Title:
FLOOR PLAN - PLUMBING & HEATING

Sheet No.:
M2.11

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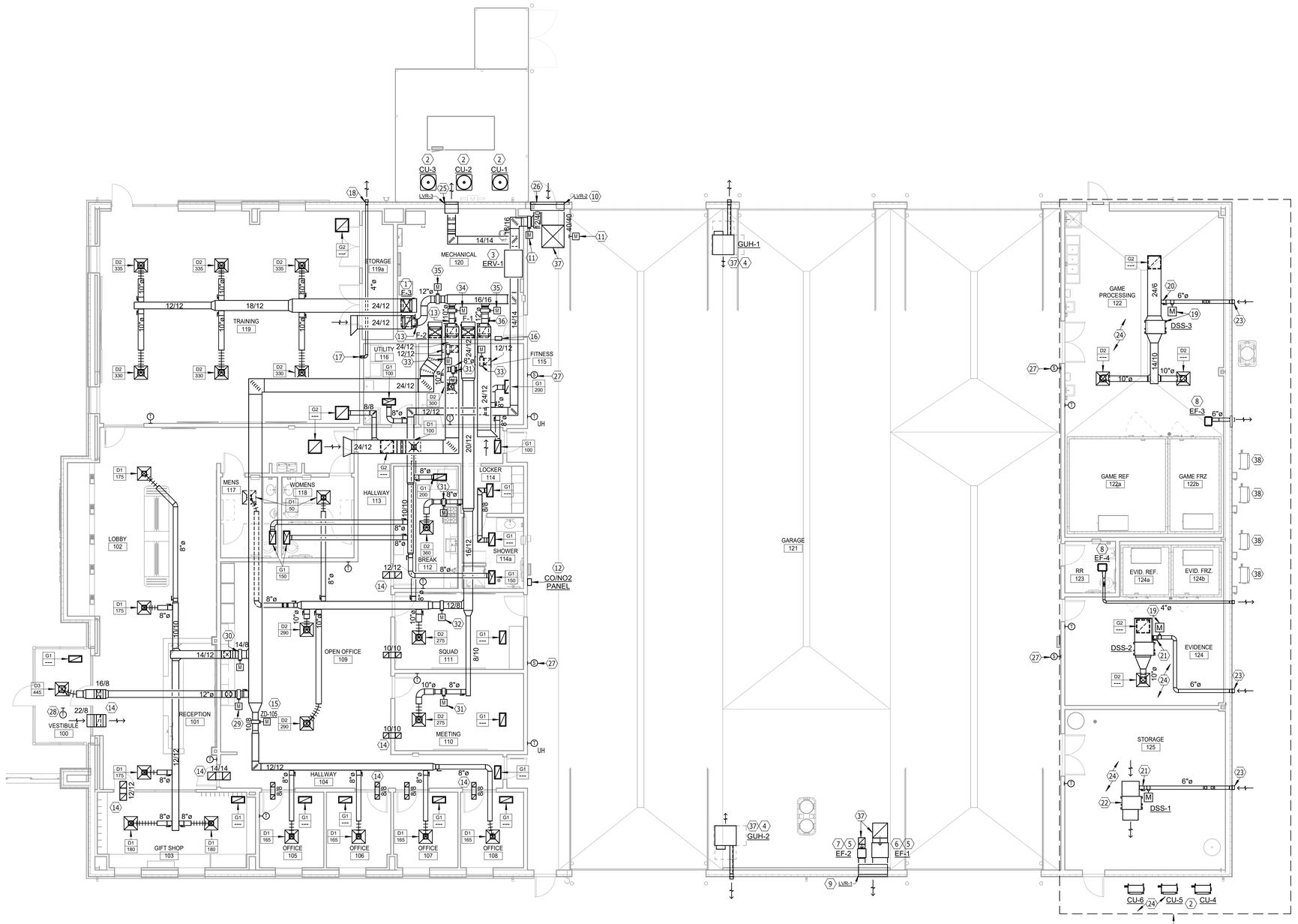

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FIRST FLOOR PLAN - VENTILATION & A/C

SCALE 0 4 8 12 16

GENERAL SHEET NOTES

A. THE CEILING SPACE AVAILABLE REQUIRES COORDINATION WITH OTHER TRADES. THE CONTRACTORS SHALL PROVIDE ALL OFFSETS AND RELOCATE AS REQUIRED TO COORDINATE THE INSTALLATION OF ALL MATERIALS AND EQUIPMENT WITH OTHER TRADES.
B. ON NEW CONSTRUCTION DRAWINGS, ITEMS SHOWN LIGHT ARE EXISTING TO REMAIN, ITEMS SHOWN BOLD ARE NEW WORK.
C. ALL EXPOSED DUCTWORK SHALL BE DUCTMATE OR TDC. EXPOSED DUCTWORK SHALL BE PAINT GRIP TYPE EXCEPT IN MECHANICAL ROOMS.
D. MAINTAIN REQUIRED ELECTRICAL CLEARANCES FOR MECHANICAL EQUIPMENT.

VENTILATION NOTES

1 GAS-FIRED FURNACE INSTALLED ON 4" CONCRETE PAD. PROVIDE RETURN AIR FILTER RACK. TYPICAL OF 3.
2 CONDENSING UNIT INSTALLED ON 4" CONCRETE PAD.
3 ENERGY RECOVERY UNIT HUNG FROM STRUCTURE AS HIGH AS POSSIBLE. PROVIDE VIBRATION ISOLATION AND FLEXIBLE DUCT CONNECTIONS.
4 GAS-FIRED UNIT HEATER. PROVIDE THRU THE WALL CONCENTRIC VENT KIT.
5 IN-LINE EXHAUST FAN. PROVIDE ANTI-VIBRATION HANGING KIT AND FLEXIBLE DUCT CONNECTIONS.
6 INTERLOCK FAN AND LOUVER WITH CO/NO2 SYSTEM.
7 MINIMUM VENTILATION EXHAUST FAN TO RUN CONTINUOUSLY.
8 CEILING MOUNT EXHAUST FAN. ROUTE DUCTWORK TO SIDEWALL AND TERMINATE WITH WALL CAP.
9 LOUVER. SLOPE TOWARD EXTERIOR AND SEAL WATERTIGHT.
10 INTAKE LOUVER. SEE DETAIL.
11 MOTORIZED DAMPER. COORDINATE VOLTAGE REQUIREMENTS. INTERLOCK WITH CO/NO2 SYSTEM.
12 CO/NO2 PANEL. INTERLOCK WITH ASSOCIATED DAMPER AND EXHAUST FAN.
13 BALANCE OUTSIDE AIR TO 300 CFM.
14 TRANSFER AIR DUCT INSTALLED ABOVE CEILING. SEE DETAIL.
15 ZONE DAMPER.
16 ZONE DAMPER CONTROL PANEL.
17 DRYER EXHAUST DUCT UP IN WALL THROUGH DRYER WALL BOX. INSTALL PER MANUFACTURERS INSTALLATION INSTRUCTIONS. ROUTE DUCTWORK TO SIDEWALL AND TERMINATE WITH WALL CAP.
18 4" DRYER VENT OUT THROUGH SIDEWALL TO LISTED DRYER WALL CAP.
19 DUCTED MINI-SPLIT HEAT PUMP SYSTEM INSTALLED ABOVE CEILING. COORDINATE CEILING PANEL ACCESS FOR UNIT AND MOTORIZED DAMPER.
20 BALANCE OUTSIDE AIR TO 150 CFM.
21 BALANCE OUTSIDE AIR TO 80 CFM.
22 DUCTED MINI-SPLIT HEAT PUMP SYSTEM.
23 SIDEWALL INTAKE VENT HOOD. MAINTAIN 10FT CLEARANCE FROM ALL EXHAUST/SANITARY VENTS.
24 ALL EQUIPMENT AND DUCTWORK IN THIS AREA TO BE OMITTED UNDER DEDUCT ALTERNATE #3 ONLY.
25 EXHAUST AIR LOUVER. VERIFY CLEARANCES TO GAS METER REGULATOR FOR EXHAUST AIR APPLICATION WITH GAS UTILITY.
26 INTAKE AIR LOUVER, SEE SCHEDULE AND DETAIL. MAINTAIN 10FT CLEARANCE FROM ALL EXHAUST/SANITARY VENTS. SLOPE TOWARD EXTERIOR AND SEAL WATERTIGHT. DUCT CONNECTIONS TO BE MADE AS HIGH AS POSSIBLE IN FULL-SIZE LOUVER PLENUM BOX.
27 CO/NO2 SENSOR. SEE SEQUENCE OF OPERATION.
28 ZONE TEMPERATURE SENSOR INSTALLED ON CEILING.
29 ZONE DAMPER. SPECIFIED CONTROLS SC-ZD-12 OR EQUAL.
30 ZONE DAMPER. SPECIFIED CONTROLS SC-ZD-1408 OR EQUAL.
31 ZONE DAMPER. SPECIFIED CONTROLS SC-ZD-08 OR EQUAL.
32 ZONE DAMPER. SPECIFIED CONTROLS SC-ZD-1208 OR EQUAL.
33 BYPASS DAMPER. SPECIFIED CONTROLS SC-EB-1212 OR EQUAL.
34 OUTSIDE AIR DAMPER. SPECIFIED CONTROLS SC-OAD-10-MOD OR EQUAL.
35 OUTSIDE AIR DAMPER. SPECIFIED CONTROLS SC-OAD-12-MOD OR EQUAL.
36 BALANCE OUTSIDE AIR TO 450 CFM.
37 PROVIDE VEHICLE IMPACT PROTECTION AROUND EQUIPMENT AS REQUIRED BY AHJ.
38 CONDENSING UNIT FOR COOLER/FREEZER PROVIDED AND INSTALLED BY OTHERS. SHOWN FOR REFERENCE ONLY.

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REVISION:

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Sheet Title:
FLOOR PLAN - VENT. & A/C

Sheet No.:
M3.10

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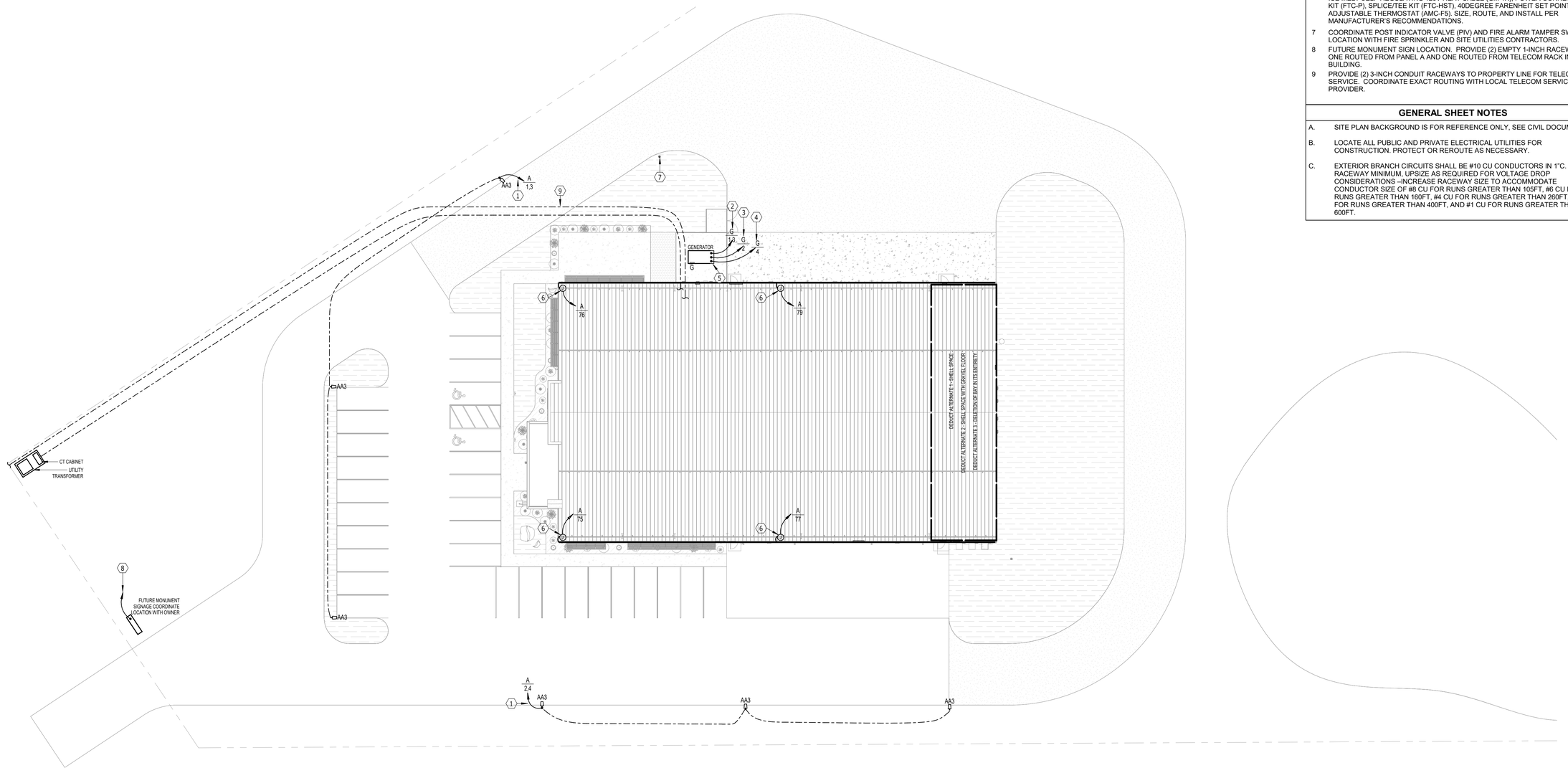

SITE PLAN - ELECTRICAL

SCALE 0 15 30 45 60

N

ELECTRICAL NOTES

1. CONTROL BUILDING EXTERIOR / SITE LIGHTING VIA TIMECLOCK / PHOTOCELL. SEE LIGHTING CONTROL DIAGRAM.
2. PROVIDE ENCLOSURE HEATER EQUAL TO BERKO #HUHAA SERIES, 208V, 1-PHASE, 3KW, 14.5 FLA WITH INTEGRAL DISCONNECTING MEANS AND THERMOSTAT.
3. PROVIDE ELECTRICAL CONNECTIONS TO BATTERY CHARGER, 120V, 20A.
4. PROVIDE ELECTRICAL CONNECTIONS TO BLOCK HEATER, 120V, 20A.
5. PROVIDE GENERATOR WITH OUTDOOR ENCLOSURE. SEE POWER RISER DIAGRAM AND GENERATOR/ATS SPECIFICATIONS. INCLUDE BATTERY BACKUP LIGHTING FIXTURE AT CONTROLLER.
6. PROVIDE RAYCHEM (OR EQUAL) HEAT TRACE SYSTEM TO CANOPY ROOF DRAIN. INSTALL CABLES TO COMPLETELY ENCIRCLE ROOF DRAINS, HELP IN PLACE WITH UV-RESISTANT CABLE TIES. EXTEND HEAT TRACE CABLE ENDS DOWN THROUGH ROOF DRAIN PIPING TO BELOW FROST LINE. SECURE CABLE TO ROOF WITH BELT LOOPS MATCHING ROOF MATERIAL AND GLUED TO THE ROOFING FABRIC (COORDINATE WITH ROOFING CONTRACTOR). COORDINATE HEAT TRACE LENGTH WITH MECHANICAL CONTRACTOR, SYSTEM TO INCLUDE ICE MELT SELF-REGULATING 120V HEAT CABLE (GM-1X), POWER CONNECTION KIT (FTC-P), SPLICE/TEE KIT (FTC-HST), 40DEGREE FARENHEIT SET POINT ADJUSTABLE THERMOSTAT (AMC-FS). SIZE, ROUTE, AND INSTALL PER MANUFACTURER'S RECOMMENDATIONS.
7. COORDINATE POST INDICATOR VALVE (PIV) AND FIRE ALARM TAMPER SWITCH LOCATION WITH FIRE SPRINKLER AND SITE UTILITIES CONTRACTORS.
8. FUTURE MONUMENT SIGN LOCATION. PROVIDE (2) EMPTY 1-INCH RACEWAYS - ONE ROUTED FROM PANEL A AND ONE ROUTED FROM TELECOM RACK IN BUILDING.
9. PROVIDE (2) 3-INCH CONDUIT RACEWAYS TO PROPERTY LINE FOR TELECOM SERVICE. COORDINATE EXACT ROUTING WITH LOCAL TELECOM SERVICE PROVIDER.

GENERAL SHEET NOTES

A. SITE PLAN BACKGROUND IS FOR REFERENCE ONLY, SEE CIVIL DOCUMENTS.

B. LOCATE ALL PUBLIC AND PRIVATE ELECTRICAL UTILITIES FOR CONSTRUCTION. PROTECT OR REROUTE AS NECESSARY.

C. EXTERIOR BRANCH CIRCUITS SHALL BE #10 CU CONDUCTORS IN 1"C. RACEWAY MINIMUM, UPSIZE AS REQUIRED FOR VOLTAGE DROP CONSIDERATIONS --INCREASE RACEWAY SIZE TO ACCOMMODATE CONDUCTOR SIZE OF #8 CU FOR RUNS GREATER THAN 105FT, #6 CU FOR RUNS GREATER THAN 160FT, #4 CU FOR RUNS GREATER THAN 260FT, #2 CU FOR RUNS GREATER THAN 400FT, AND #1 CU FOR RUNS GREATER THAN 600FT.

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Signature: Jeffrey A. Renken
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REVISION:

No.: 25494-1	Date: 11-02-2026
Drawn: JEB	Checked: JAR
Project Manager: GS	
Project Status: CONSTRUCTION SET	

Sheet Title: SITE PLAN - ELECTRICAL

Sheet No.: E1.10

11/2/2026 10:56:25 AM

ELECTRICAL NOTES

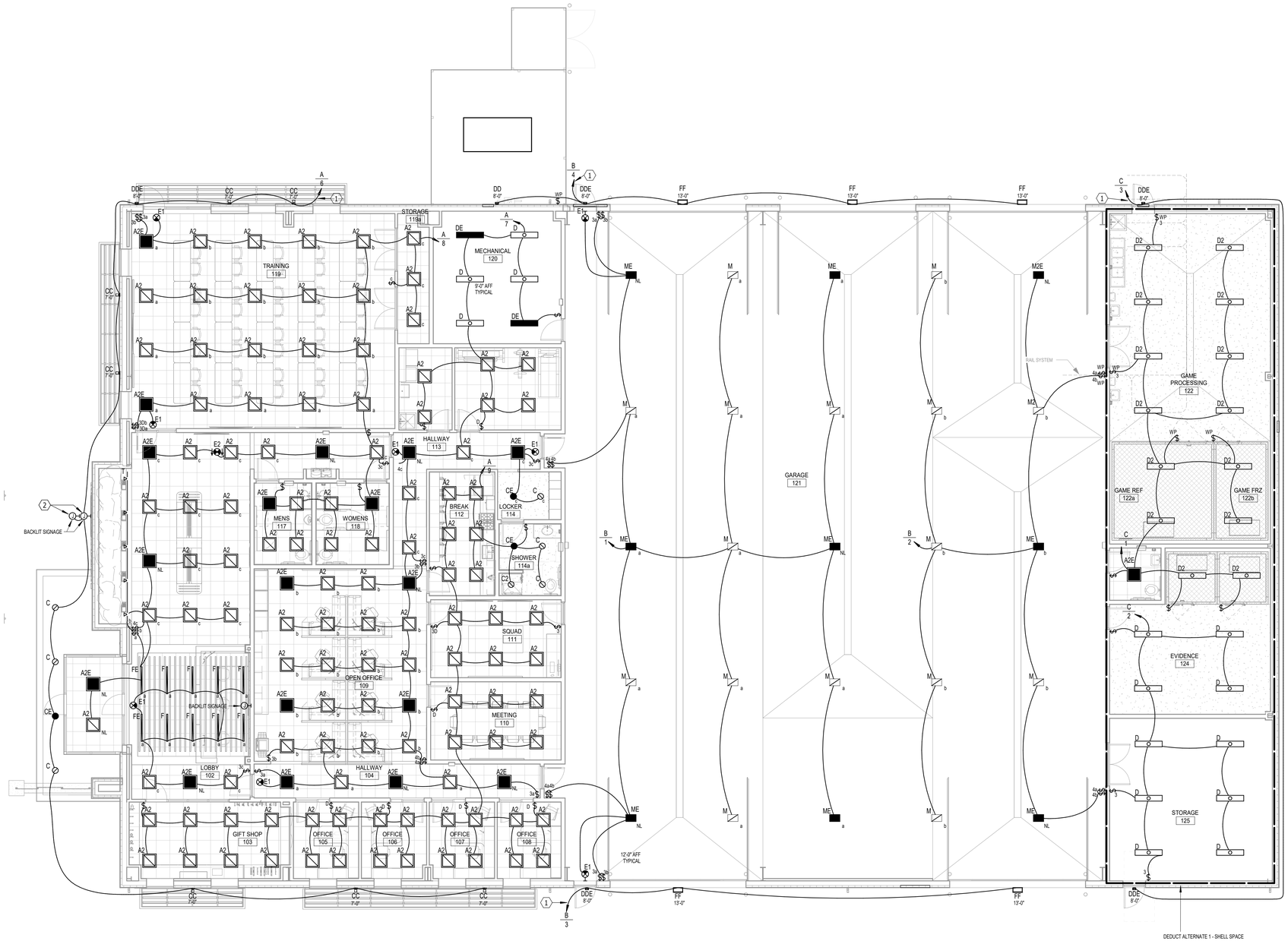
1 CONTROL BUILDING EXTERIOR / SITE LIGHTING VIA TIMECLOCK / PHOTOCELL. SEE LIGHTING CONTROL DIAGRAM.

2 PROVIDE ELECTRICAL CONNECTIONS AND ASSOCIATED SLEEVES THROUGH WALL ASSEMBLY TO ACCOMMODATE BUILDING MOUNTED SIGNAGE. CONFIRM EXACT REQUIREMENTS AND WALL PENETRATION LOCATIONS WITH SIGNAGE SUPPLIER. CONTROL VIA TIMECLOCK/PHOTOCELL.

GENERAL SHEET NOTES

A. LIGHTING FIXTURES DENOTED "NL" INDICATE 24/7 NIGHTLIGHT OPERATION FOR SECURITY CONSIDERATIONS. SHADED FIXTURES ARE EMERGENCY LIGHTING FIXTURES WITH INTEGRAL BATTERY BACKUP FOR LIFE SAFETY CODE REQUIREMENTS.

B. COORDINATE EXACT INSTALLATION OF LIGHT FIXTURES IN ALL SHARED MECHANICAL / STORAGE ROOMS TO ACCOMMODATE MECHANICAL EQUIPMENT. SHIFT AS NECESSARY.



N

FIRST FLOOR PLAN - LIGHTING

SCALE 0 4 8 12 16

11/2/2026 10:56:30 AM

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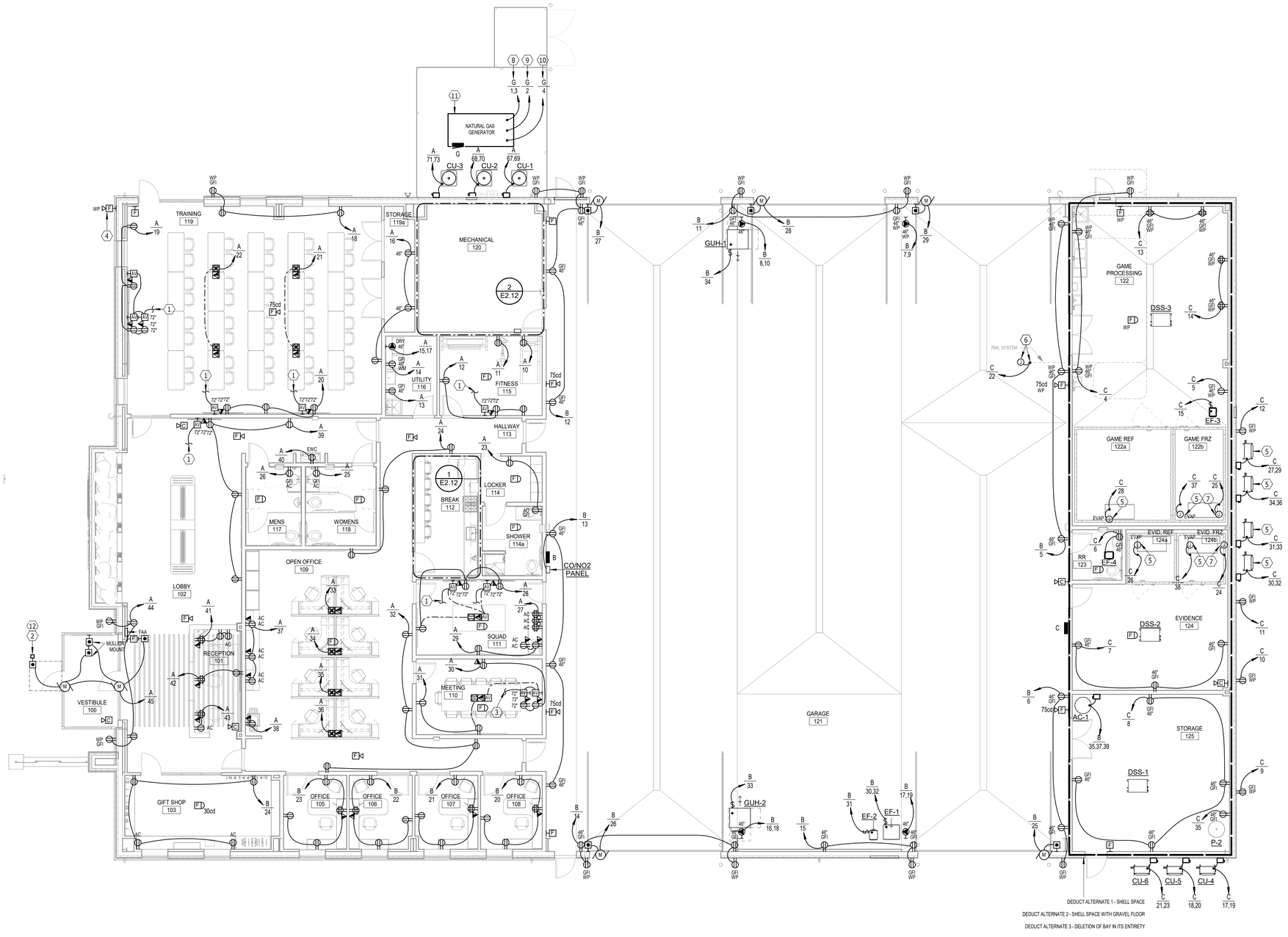
Sheet Title:

FIRST FLOOR PLAN - LIGHTING

Sheet No.:

E2.10



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FIRST FLOOR PLAN - POWER & SIGNAL

SCALE 0 4 8 12 16

ELECTRICAL NOTES

1. PROVIDE 1.25" CONDUIT FROM AV JUNCTION BOX UP TO ACCESSIBLE CEILING SPACE TO ACCOMMODATE AV CABLING. PROVIDE HDMI CABLING AND OUTLET PLATES AT EACH LOCATION.
2. POST PROVIDED BY ELECTRICAL CONTRACTOR. SEE DETAIL.
3. PROVIDE 1.25" CONDUIT RACEWAYS FROM FLOOR AV OUTLET TO ACCESSIBLE CEILING SPACE.
4. CO-LOCATE WEATHERPROOF FIRE ALARM NOTIFICATION DEVICE WITH FIRE DEPARTMENT CONNECTION (FDC).
5. PROVIDE A COMPLETE ELECTRICAL INSTALLATION FOR THE SUPPLIER-PROVIDED WALK-IN COOLERS AND FREEZERS. COORDINATE EQUIPMENT LOCATIONS, CONNECTION POINTS, ELECTRICAL LOADS, DISCONNECTS, CONTROLS, AND ACCESSORIES WITH THE EQUIPMENT SUPPLIER.
6. PROVIDE ELECTRICAL CONNECTIONS FOR MOTORIZED HOIST IN ACCORDANCE WITH EQUIPMENT INSTALLATION INSTRUCTIONS. BOX SHALL BE FLUSH MOUNT AT SUPPORT LOCATION.
7. PROVIDE RAYCHEM (OR EQUAL) HEAT TRACE SYSTEM TO MECHANICAL EQUIPMENT. COORDINATE HEAT TRACE LENGTH WITH MECHANICAL CONTRACTOR, SYSTEM TO INCLUDE ICE MELT SELF-REGULATING 120V HEAT CABLE (GM-1X), POWER CONNECTION KIT (FTC-P), SPLICE/TEE KIT (FTC-HST), 40DEGREE FARENHEIT SET POINT ADJUSTABLE THERMOSTAT (AMC-F5). SIZE, ROUTE, AND INSTALL PER MANUFACTURER'S RECOMMENDATIONS.
8. PROVIDE ENCLOSURE HEATER EQUAL TO BERKO #HUHAA SERIES, 208V, 1-PHASE, 3KW, 14.5 FLA WITH INTEGRAL DISCONNECTING MEANS AND THERMOSTAT.
9. PROVIDE ELECTRICAL CONNECTIONS TO BATTERY CHARGER, 120V, 20A.
10. PROVIDE ELECTRICAL CONNECTIONS TO BLOCK HEATER, 120V, 20A.
11. PROVIDE GENERATOR WITH OUTDOOR ENCLOSURE. SEE POWER RISER DIAGRAM AND GENERATOR/ATS SPECIFICATIONS. INCLUDE BATTERY BACKUP LIGHTING FIXTURE AT CONTROLLER.
12. COORDINATE FINAL LOCATION OF POST AND AUTOMATIC DOOR OPERATOR PUSH BUTTON WITH ARCHITECTURAL PLANS. LOCATE OUTSIDE THE REQUIRED ADA DOOR MANEUVERING CLEARANCE. VERIFY LOCATION WITH ARCHITECT PRIOR TO INSTALLATION.

GENERAL SHEET NOTES

A. RECEPTACLES SHALL BE TAMPER RESISTANT IN ACCORDANCE WITH THE NEC AND LOCAL CODE REQUIREMENTS. AT A MINIMUM, TAMPER RESISTANCE RECEPTACLES SHALL BE PROVIDED IN ALL PUBLIC AREAS.

B. PROVIDE ROUGH-IN ONLY FOR TELECOMMUNICATIONS SYSTEM INCLUDING EMPTY 3/4-INCH RACEWAY STUBUPS WITH BUSHINGS TO ACCESSIBLE CEILING SPACES AND BACKBOXES WHERE SHOWN ON DRAWING WITH BLANK FACEPLATES. TELECOMMUNICATIONS CABLING, OUTLETS, AND HEADEND EQUIPMENT INCLUDING RACK SHALL BE OWNER PROVIDED.

C. SECURITY CAMERA SYSTEM SHALL BE PROVIDED BY OWNER AND/OR SECURITY SYSTEM VENDOR.

D. COORDINATE QUANTITY AND LOCATION OF FIRE SMOKE DAMPERS WITH MECHANICAL CONTRACTOR. PROVIDE ELECTRICAL CONNECTIONS, INITIATION DEVICES ETC. AS REQUIRED.

E. PROVIDE GFI CIRCUIT BREAKERS AS REQUIRED BY THE NEC AND LOCAL CODE REQUIREMENTS. GFI CIRCUIT BREAKERS ALLOWED IN LIEU OF GFI RECEPTACLES.

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REVISION:

No.: 25494-1	Date: 11-02-2026
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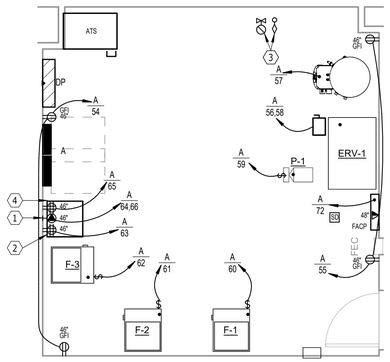
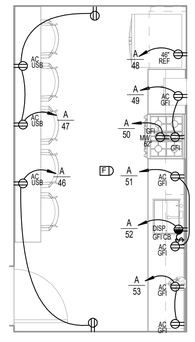
Sheet Title: FIRST FLOOR PLAN - POWER & SIGNAL

Sheet No.: E2.11

11/2/2026 10:56:35 AM



2 E2.12 MECHANICAL 120 - ELECTRICAL
SCALE 0 2 4 6 8



1 E2.12 BREAK 112 - ELECTRICAL
SCALE 0 2 4 6 8

ELECTRICAL NOTES

1 UPS OUTLET, 30A/2P TWIST LOCK.
2 RACK PROVIDED BY ELECTRICAL CONTRACTOR.
3 VERIFY QUANTITY OF FLOW AND TAMPER SWITCHES WITH FIRE SPRINKLER CONTRACTOR. COORDINATE LOCATION OF INDICATOR VALVE.
4 COORDINATE DATA RACK INSTALLATION WITH MECHANICAL EQUIPMENT, SHIFT AS NECESSARY.

GENERAL SHEET NOTES

A. RECEPTACLES SHALL BE TAMPER RESISTANT IN ACCORDANCE WITH THE NEC AND LOCAL CODE REQUIREMENTS. AT A MINIMUM, TAMPER RESISTANCE RECEPTACLES SHALL BE PROVIDED IN ALL PUBLIC AREAS.

B. PROVIDE ROUGH-IN ONLY FOR TELECOMMUNICATIONS SYSTEM INCLUDING EMPTY 3/4-INCH RACEWAY STUBUPS WITH BUSHINGS TO ACCESSIBLE CEILING SPACES AND BACKBOXES WHERE SHOWN ON DRAWING WITH BLANK FACEPLATES. TELECOMMUNICATIONS CABLING, OUTLETS, AND HEADEND EQUIPMENT INCLUDING RACK SHALL BE OWNER PROVIDED.

C. SECURITY CAMERA SYSTEM SHALL BE PROVIDED BY OWNER AND/OR SECURITY SYSTEM VENDOR.

D. COORDINATE QUANTITY AND LOCATION OF FIRE SMOKE DAMPERS WITH MECHANICAL CONTRACTOR. PROVIDE ELECTRICAL CONNECTIONS, INITIATION DEVICES ETC. AS REQUIRED.

E. PROVIDE GFI CIRCUIT BREAKERS AS REQUIRED BY THE NEC AND LOCAL CODE REQUIREMENTS. GFI CIRCUIT BREAKERS ALLOWED IN LIEU OF GFI RECEPTACLES.

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Sheet Title:
ENLARGED PLANS - ELECTRICAL

Sheet No.:
E2.12

11/2/2026 10:56:37 AM

FEEDER SCHEDULE

MARK (AMPS)	4-WIRE FEEDER SETS	PH	GND	C	3-WIRE FEEDER SETS	PH	GND	C	"K" RATED 4-WIRE FEEDER SETS	PH	N	GND	C	MARK (AMPS)
15	1	14	14	0.75	1	14	14	0.75	1	14	12	14	0.75	15
20	1	12	12	0.75	1	12	12	0.75	1	12	10	12	0.75	20
25	1	10	10	0.75	1	10	10	0.75	1	10	8	10	0.75	25
30	1	10	10	0.75	1	10	10	0.75	1	10	8	10	0.75	30
35	1	8	10	0.75	1	8	10	0.75	1	8	6	10	0.75	35
40	1	8	10	0.75	1	8	10	0.75	1	8	4	10	1.00	40
45	1	6	10	1.00	1	6	10	0.75	1	6	4	10	1.00	45
50	1	6	10	1.00	1	6	10	0.75	1	6	3	10	1.00	50
60	1	6	10	1.00	1	6	10	0.75	1	6	3	10	1.00	60
70	1	4	8	1.25	1	4	8	1.00	1	4	1/0	8	1.25	70
80	1	4	8	1.25	1	4	8	1.00	1	4	1/0	8	1.25	80
90	1	3	8	1.25	1	3	8	1.25	1	3	2/0	8	1.25	90
100	1	3	8	1.25	1	3	8	1.25	1	3	2/0	8	1.50	100
110	1	2	6	1.25	1	2	6	1.25	1	2	3/0	6	1.50	110
125	1	1	6	1.50	1	1	6	1.25	1	1	4/0	6	2.00	125
150	1	1/0	6	2.00	1	1/0	6	1.50	1	1/0	300	6	2.00	150
175	1	2/0	6	2.00	1	2/0	6	2.00	1	2/0	350	6	2.00	175
200	1	3/0	6	2.00	1	3/0	6	2.00	1	3/0	500	6	2.50	200
225	1	4/0	4	2.50	1	4/0	4	2.00	1	4/0	2-3/0	4	2.50	225
250	1	250	4	2.50	1	250	4	2.50	1	250	2-4/0	4	2.50	250
300	1	350	4	3.00	1	350	4	2.50	1	350	2-300	4	3.00	300
350	1	500	3	3.00	1	500	3	3.00	1	500	2-400	3	3.50	350
400	2	3/0	3	2.00	2	3/0	3	2.00	2	3/0	500	3	2.50	400
450	2	4/0	2	2.50	2	4/0	2	2.00	2	4/0	2-3/0	2	2.50	450
500	2	250	2	2.50	2	250	2	2.50	2	250	2-4/0	2	2.50	500
600	2	350	1	3.00	2	350	1	2.50	2	350	2-350	1	3.00	600
700	2	500	1/0	3.00	2	500	1/0	3.00	2	500	2-400	1/0	3.50	700
800	3	300	1/0	2.50	3	300	1/0	2.50	3	300	2-4/0	1/0	3.00	800
900	3	350	2/0	3.00	3	350	2/0	2.50	3	350	2-300	2/0	3.00	900
1000	3	400	2/0	3.00	3	400	2/0	2.50	3	400	2-350	2/0	3.00	1000
1200	4	350	3/0	3.00	4	350	3/0	2.50	4	350	2-300	3/0	3.00	1200
1600	5	400	4/0	3.00	5	400	4/0	2.50	5	400	2-350	4/0	3.00	1600
2000	6	400	250	3.00	6	400	250	3.00	6	400	2-350	250	3.50	2000
2500	7	500	350	3.50	7	500	350	3.00	7	500	2-400	350	3.50	2500
3000	8	500	400	3.50	8	500	400	3.00	8	500	2-400	400	4.00	3000
4000	11	500	500	3.50	11	500	500	3.00	11	500	2-400	500	4.00	3000
5000	14	500	700	3.50	14	500	700	3.00	14	700	2-400	700	4.00	3000

MOTOR & APPLIANCE FEEDER SCHEDULE (100 Amps & Less)

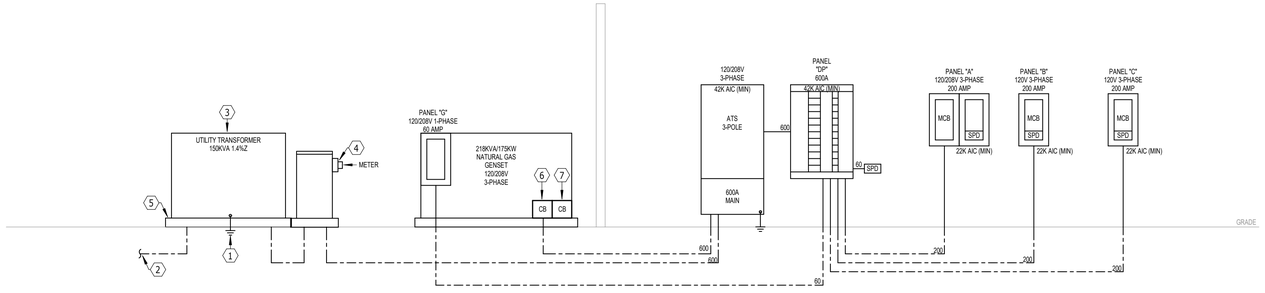
MARK (AMPS)	MOTOR LOAD (HP) 480V	208V	4-WIRE FEEDER PH	GND	C	3-WIRE FEEDER PH	GND	C	MARK (AMPS)
20	7.5 & LESS	3 & LESS	12	12	0.75	12	12	0.75	20
25	10	- -	10	10	0.75	10	10	0.75	25
30	15	- -	10	10	0.75	10	10	0.75	30
35	- -	5	8	10	0.75	8	10	0.75	35
40	15	- -	8	10	0.75	8	10	0.75	40
45	- -	- -	6	10	1.00	6	10	0.75	45
50	- -	7.5	6	10	1.00	6	10	0.75	50
60	20	10	6	10	1.00	6	10	0.75	60
70	25	- -	4	8	1.25	4	8	1.00	70
80	30	- -	4	8	1.25	4	8	1.00	80
90	40	15	3	8	1.25	3	8	1.25	90
100	50	20	3	8	1.25	3	8	1.25	100

NOTES:

1. FEEDERS SHALL BE 4-WIRE, UNLESS DENOTED WITH:
   "-3W" WHICH SHALL BE 3-WIRE (3W)
   "-IG" WHICH SHALL BE 4-WIRE PLUS INSULATED GROUND AND EQUIPMENT GROUND.
   "-K" WHICH SHALL BE 4-WIRE WITH OVERSIZED NEUTRAL.
2. SERVICE ENTRANCE CONDUCTORS SHALL NOT BE PROVIDED WITH GROUND CONDUCTOR.
3. ALL FEEDERS SHALL HAVE EQUIPMENT GROUND CONDUCTOR.
4. NEUTRAL SHALL BE SAME SIZE AS PHASE CONDUCTOR, UNLESS OTHERWISE NOTED.
5. CONDUCTOR SIZES FOR FEEDERS OVER 40A ARE BASED ON TERMINATIONS TO EQUIPMENT LISTED FOR 75°C, INCREASE FEEDER SIZES AS REQUIRED FOR TERMINATIONS TO EQUIPMENT NOT LISTED FOR 75°C.
6. RACEWAY AND CONDUCTOR SIZING IS BASED ON THE USE OF THHN/THWN COPPER CONDUCTORS AND EMT CONDUIT. MODIFY RACEWAY AND CONDUCTOR SIZES AS REQUIRED FOR THE USE OF OTHER RACEWAY AND CONDUCTOR TYPES.
7. SEE SPECIFICATIONS FOR ALLOWABLE CONDUCTOR MATERIAL, INSULATION AND RACEWAY TYPES. WHERE ALUMINUM CONDUCTORS ARE ALLOWED THE AMPACITY RATING OF THE SERVICE OR FEEDER SHALL BE EQUAL TO OR GREATER THAN THE CALCULATED AMPACITY RATING OF THE COPPER CONDUCTORS SHOWN IN THIS SCHEDULE.
8. NOT ALL FEEDER SIZES SHOWN IN THIS SCHEDULE ARE USED IN THIS PROJECT.

ELECTRICAL NOTES

1. GROUND PER NEC, LOCAL CODE REQUIREMENTS, AND SPECIFICATIONS.
2. PRIMARY BY UTILITY.
3. TRANSFORMER BY UTILITY, PAD BY ELECTRICAL CONTRACTOR, COORDINATE REQUIREMENTS WITH UTILITY, INCLUDE ANY AND ALL ADDITIONAL POWER UTILITY FEES.
4. METER PROVIDED BY UTILITY, COORDINATE EXACT REQUIREMENTS WITH POWER UTILITY COMPANY.
5. FIELD VERIFY FAULT CURRENT RATING FOR SUPPLIED EQUIPMENT, COORDINATE RATINGS OF ALL EQUIPMENT RELATIVE TO FINDINGS.
6. PROVIDE 600A/3P, 100% RATED, ELECTRONIC TRIP (ICCB-LSI) CIRCUIT BREAKER TO SERVE BUILDING.
7. PROVIDE 600A/3P LOAD BANK CIRCUIT BREAKER (THERMAL) FOR GENERATOR EXERCISING CONSIDERATIONS.



POWER RISER DIAGRAM

NO SCALE

ELECTRICAL SYMBOL LEGEND

HT AFF	SYMBOL	DESCRIPTION
AS NOTED		SURFACE LIGHT (TYPE DENOTED)
AS NOTED		WALL MOUNTED FLOODLIGHT (TYPE DENOTED)
		RECESSED LIGHT (TYPE DENOTED)
PER SCHED		POLE MOUNTED LIGHT (TYPE DENOTED)
PER SCHED		POLE MOUNTED FLOODLIGHT (TYPE DENOTED)
		SURFACE LIGHT (TYPE DENOTED)
		SUSPENDED OR PENDANT LIGHT (TYPE DENOTED)
		RECESSED LIGHT (TYPE DENOTED)
		STRIP LIGHT (TYPE DENOTED)
AS NOTED		TRACK AND TRACK LIGHT (TYPES DENOTED)
86"		EMERGENCY BATTERY LIGHT (TYPE DENOTED)
		EXIT SIGN (TYPE DENOTED)
AS NOTED		LIGHT FIXTURE ON (EM) LIFE SAFETY BRANCH
AS NOTED		LIGHT FIXTURE ON (EM) CRITICAL BRANCH
AS NOTED		LIGHT FIXTURE ON EMERGENCY CIRCUIT
AS NOTED		LIGHT FIXTURE WITH EMERGENCY BALLAST
		LIGHT ON CORD REEL (TYPE DENOTED)
AS NOTED		LIGHTING CHANNEL WIRE (TYPE DENOTED)
46"		SINGLE POLE SW.
46"		2 POLE SINGLE THROW SW.
46"		3-WAY SW.
46"		4-WAY SW.
46"		KEYED SW.
46"		SW. W/PILOT
46"		DIMMER SWITCH
46"		OCCUPANCY SENSOR SWITCH
46"		COMBINATION OCCUPANCY SENSOR & DIMMER SW.
46"		LOW VOLTAGE SWITCH
46"		LOW VOLTAGE DIMMER SWITCH
46"		TIMER SWITCH
46"		MOTOR HORSEPOWER RATED SWITCH
18"		SINGLE RECEPT.
18"		DUPLEX RECEPT.
18"		USB DUPLEX RECEPT. SEE SPECS
18"		SPLIT DUPLEX RECEPT.
18"		DUPLEX RECEPT. ON EMERGENCY CIRCUIT
18"		FOURPLEX RECEPT.
18"		FOURPLEX RECEPT. ON EMERGENCY CIRCUIT
18"		DUPLEX RECEPT, ISOLATED GROUND.
18"		FOURPLEX RECEPT, ISOLATED GROUND.
46"		DEAD FRONT GFCI DEVICE
AS NOTED		SPECIAL RECEPT. OR CONN. (SEE SCHEDULE)
		JUNCTION BOX
		DUPLEX FLOOR RECEPT.
		FOURPLEX FLOOR RECEPT.
		DUPLEX CEILING RECEPT.
		FOURPLEX CEILING RECEPT.

HT AFF	SYMBOL	DESCRIPTION
AS NOTED		RECEPT ON CORD DROP (DUPLEX SHOWN)
AS NOTED		RECEPT ON CORD REEL (DUPLEX SHOWN)
AS NOTED		MULTIOUTLET ASSEMBLY (TYPE DENOTED)
AS NOTED		MULTIOUTLET ASSEMBLY (TYPE DENOTED)
94"		CLOCK (TYPE DENOTED)
		POWER POLE (OPEN OFFICE STYLE)
		CIRCUIT BREAKER PANEL
		POWER OR DISTRIBUTION PANEL
		SPECIAL CABINET (TYPE DENOTED)
		TRANSFORMER (TYPE DENOTED)
		MOTOR (SEE SCHEDULE)
		MANUAL MTR. STR. (W/OVERLOADS)
		MAG. MOTOR STARTER OR CONTACTOR
		COMB. MOTOR STARTER (NON-FUSED)
		COMB. MOTOR STARTER (FUSED)
		SAFETY DISC. SW. (NON-FUSED)
		SAFETY DISC. SW. (FUSED)
AS NOTED		BUS DUCT WITH PLUG UN DISCONNECT (FUSED)
	VFD	VARIABLE FREQUENCY DRIVE
	R	RELAY
	OS	OCCUPANCY SENSOR (TYPE DENOTED)
	PP	OCCUPANCY SENSOR POWER PACK
	DS	DAYLIGHT SENSOR (TYPE DENOTED)
AS NOTED		PHOTOCELL
46"		TIME CONTROL SWITCH (TIME SWITCH)
46"	H	HUMIDISTAT
46"	T	THERMOSTAT
PER SCHED		WALL HEATER (TYPE DENOTED)
PER SCHED	D1	HAND OR HAIR DRYER (TYPE DENOTED)
18"		TELEPHONE OUTLET (TYPE DENOTED)
46"	W	WALL TELEPHONE OUTLET (TYPE DENOTED)
18"		TELECOM OUTLET (TYPE DENOTED)
		WIRELESS ACCESS POINT
46"	IC	INTERCOM OUTLET LOCATION
18"	TV	TELEVISION OUTLET
18"	AV	A/V OUTLET. SEE SPCIFICATIONS.
18"		MULTIPLE SERVICE OUTLET (TYPE DENOTED)
		FLOOR BOX, TWO DEVICES (TYPE DENOTED)
		FLOOR BOX, FOUR DEVICES (TYPE DENOTED)
18"	D	DICTATION OUTLET LOCATION
46"	W	WALL DICTATION OUTLET LOCATION
86"	B	BELL
86"	BZ	BUZZER
86"	CH	CHIME
46"		PUSH BUTTON
86"	S	SPEAKER (WALL OR CEILING MT.)
86"	S	HORN TYPE SPEAKER
46"	V	VOLUME CONTROL
18"	M	MICROPHONE OUTLET
18"	A	AUXILIARY OUTLET

HT AFF	SYMBOL	DESCRIPTION
		ANTENNA
	PP	POWER PACK
	RD	REMOTE DRIVER
86"	110cd	FIRE ALARM HORN W/STROBE (CANDELAS)
86"	110cd	FIRE ALARM SPEAKER W/STROBE (CANDELAS)
86"	110cd	FIRE ALARM STROBE (CANDELAS)
46"	F	F.A. PULLSTATION
		BEAM TYPE SMOKE DETECTORS
46"	FA ANNUN	FIRE ALARM REMOTE ANNUNCIATOR
		SMOKE DETECTOR (TYPE DENOTED)
	CO	CARBON MONIXIDE
	H	HEAT DETECTOR
	DS	DUCT SMOKE DETECTOR (TYPE DENOTED)
	FS	FIRE/SMOKE DAMPER
	RI	REMOTE INDICATOR/TEST SWITCH
	DH	F.A. DOOR HOLDER
	FS	SPRINKLER FLOW SWITCH
	VS	SPRINKLER VALVE TAMPER SWITCH
	DR	DOOR RELEASE
	DP	DOOR POSITION SWITCH
46"	CR	CARD READER
46"	KP	KEYPAD
	MD	MOTION DETECTOR (TYPE DENOTED)
	EL	ELECTROMAGNETIC LOCK
		ADA PUSHBUTTON SWITCH
46"		NURSE CALL MASTER STATION
46"		NURSE CALL EMERG. STATION
46"		NURSE CALL CODE BLUE EMERG. STATION
46"		NURSE CALL DUTY STATION
46"		NURSE CALL PATIENT STATION
46"		NURSE CALL STAFF STATION
46"		NURSE CALL BED STATION. SINGLE
46"		NURSE CALL BED STATION. DOUBLE.
86"		NURSE CALL DOME LIGHT
	NCC	NURSE CALL EQUIPMENT CABINET
46"	NC ANNUN	NURSE CALL ANNUNCIATOR PANEL
AS NOTED		CAMERA
		CONDUIT CONCEALED IN WALL OR OVERHEAD
		CONDUIT EXPOSED
		CONDUIT TRANSITION UP
		CONDUIT TRANSITION DOWN
		CONDUIT STUBBED OUT
		CONDUIT CONCEALED, "E" INDICATES EMERGENCY
		CONDUIT EXPOSED, "E" INDICATES EMERGENCY
	OHE	OVERHEAD ELECTRIC
		BRANCH CIRCUIT HOME RUN
		CABLE TRAY (TYPE DENOTED)
		CONDUIT SLEEVE (SIZE DENOTED)
	1	KEYED NOTE (SEE SCHEDULE)
		HATCHED SYMBOL INDICATES REMOVED

ALL DISTANCES ARE TO CENTER OF DEVICE OR EQUIPMENT UNLESS OTHERWISE NOTED.

ELECTRICAL ABBREVIATIONS LIST

1P	1 POLE (2P, 3P, 4P, ETC.)	DC	DROP CORD	HD	HAND DRYER	N.C.	NORMALLY CLOSED	SURF	SURFACE MOUNTED
		DCP	DOMESTIC WATER CIRCULATING PUMP	HP	HORSEPOWER	NEC	NATIONAL ELECTRICAL CODE	SW	SWITCH
A	AMPERE	DEPT	DEPARTMENT	HPF	HIGH POWER FACTOR	NEMA	NATIONAL ELECTRICAL MANUFACTURER'S ASSOCIATION	SWBD	SWITCHBOARD
AC	ABOVE COUNTER - (3" ABOVE BACKSPLASH OR COUNTERTOP)	DET	DETAIL	HT	HEIGHT			SYM	SYMMETRICAL
		DIA	DIAMETER	HTG	HEATING			SYS	SYSTEM
ACLG	ABOVE CEILING	DISC	DISCONNECT	HTR	HEATER	NFDS	NON-FUSED SAFETY DISCONNECT SWITCH	TEL	TELEPHONE
ADO	AUTOMATIC DOOR OPENER	DIST	DISTRIBUTION	HV	HIGH VOLTAGE			TEL/DATA	TELEPHONE/DATA
AF	AMP FRAME	DN	DOWN	HVAC	HEATING, VENTILATING AND AIR CONDITIONING	NIC	NOT IN CONTRACT	TERM	TERMINAL
AFF	ABOVE FINISHED FLOOR	DPR	DAMPER	HWP	HYDRONIC WATER PUMP	NL	NIGHT LIGHT (ON 24/7)	TL	TWIST LOCK
AFG	ABOVE FINISHED GRADE	DS	SAFETY DISCONNECT SWITCH			N.O.	NORMALLY OPEN	TR	TAMPER RESISTANT
AFI	ARC FAULT CIRCUIT INTERRUPTER	DT	DOUBLE THROW	IC	INTERRUPTING CAPACITY	NPF	NORMAL POWER FACTOR	T-STAT	THERMOSTAT
AHU	AIR HANDLING UNIT	DWG	DRAWING	IG	ISOLATED GROUND	NTS	NOT TO SCALE	TTC	TELEPHONE TERMINAL CABINET
AL	ALUMINUM	EC	ELECTRICAL CONTRACTOR	IMC	INTERMEDIATE METAL CONDUIT	OH	OVERHEAD	TV	TELEVISION
ALT	ALTERNATE	ELEC	ELECTRIC, ELECTRICAL	INCAND	INCANDESCENT	OL	OVERLOADS	TVTC	TELEVISION TERMINAL CABINET
AMP	AMPERE	ELEV	ELEVATOR	IR	INFRARED			TYP	TYPICAL
AMPL	AMPLIFIER	EM	EMERGENCY	IW	INTERLOCK WITH	PA	PUBLIC ADDRESS		
ANNUN	ANNUNCIATOR	EMS	ENERGY MANAGEMENT SYSTEM			PB	PULL BOX OR PUSHBUTTON		
APPROX	APPROXIMATELY	EMT	ELECTRICAL METALLIC TUBING	J-BOX	JUNCTION BOX	PE	PNEUMATIC ELECTRIC	UC	UNDER COUNTER
AQ-STAT	AQUASTAT	EP	ELECTRIC PNEUMATIC			PED	PEDESTAL	UE	UNDERGROUND ELECTRICAL
ARCH	ARCHITECT, ARCHITECTURAL	EQUIP	EQUIPMENT	KV	KILOVOLT	PF	POWER FACTOR	UG	UNDERGROUND
AS	AMP SWITCH	EWC	ELECTRIC WATER COOLER COORDINATE RCPT LOCATION WITH MECHANICAL CONTRACTOR	KVA	KILOVOLT-AMPERE	PH	PHASE	UH	UNIT HEATER
AT	AMP TRIP			KVAR	KILOVOLT-AMPERE REACTIVE	PIV	POST INDICATING VALVE	UT	UNDERGROUND TELEPHONE
ATS	AUTOMATIC TRANSFER SWITCH	EXIST	EXISTING	KW	KILOWATT	PNL	PANEL	UTIL	UTILITY
AUTO	AUTOMATIC	EXH	EXHAUST	KWH	KILOWATT HOUR	PP	POWER POLE	UV	UNIT VENTILATOR OR ULTRAVIOLET
AUX	AUXILIARY	EXP	EXPLOSION PROOF	KS	KNEE SPACE	PR	PAIR		
AV	AUDIO VISUAL					PRI	PRIMARY		
AWG	AMERICAN WIRE GAUGE	FA	FIRE ALARM	LOC	LOCATE OR LOCATION	PROJ	PROJECTION	V	VOLT
		FABP	FIRE ALARM BOOSTER POWER SUPPLY PANEL	LT	LIGHT	PRV	POWER ROOF VENTILATOR	VA	VOLT-AMPERES
BATT	BATTERY	FACP	FIRE ALARM CONTROL PANEL	LTG	LIGHTING	PT	POTENTIAL TRANSFORMER	VDT	VIDEO DISPLAY TERMINAL
BD	BOARD	FCU	FAN COIL UNIT	LTNG	LIGHTNING	PVC	POLYVINYL CHLORIDE (CONDUIT)	VERT	VERTICAL
BLDG	BUILDING	FIXT	FIXTURE	LV	LOW VOLTAGE	PWR	POWER	VFD	VARIABLE FREQUENCY DRIVE
BMS	BUILDING MANAGEMENT SYSTEM	FLR	FLOOR	MAX	MAXIMUM	QUAN	QUANTITY	VOL	VOLUME
		FLUOR	FLUORESCENT	MAG S	MAGNETIC STARTER	RC	RETRACTABLE CORD REEL	W	WATT
C	CONDUIT	FU	FUSE	MC	MECHANICAL CONTRACTOR	RCPT	RECEPTACLE	W	WITH
CAB	CABINET	FUDS	FUSED SAFETY DISCONNECT SWITCH	MCB	MAIN CIRCUIT BREAKER	REQD	REQUIRED	WG	WIRE GUARD
CAT	CATALOG			MCC	MOTOR CONTROL CENTER	RM	ROOM	WH	WATER HEATER
CATV	CABLE TELEVISION			MDC	MAIN DISTRIBUTION CENTER	RSC	RIGID STEEL CONDUIT	W/O	WITHOUT
CB	CIRCUIT BREAKER	GA	GAUGE	MDP	MAIN DISTRIBUTION PANEL	RTU	ROOF TOP UNIT	WP	WEATHERPROOF
CCTV	CLOSED CIRCUIT TELEVISION	GAL	GALLON	MFR	MANUFACTURER			XFMR	TRANSFORMER
CKT	CIRCUIT	GALV	GALVANIZED	MFS	MAIN FUSED DISCONNECT SWITCH	SC	SURFACE CONDUIT	XFR	TRANSFER
CLG	CEILING	GC	GENERAL CONTRACTOR			SEC	SECONDARY		
COMB	COMBINATION	GD	GARBAGE DISPOSAL	MH	MANHOLE	SHT	SHEET		
CMPR	COMPRESSOR	GEN	GENERATOR	MIC	MICROPHONE	SIM	SIMILAR		
CONN	CONNECTION	GFI	GROUND FAULT CIRCUIT INTERRUPTER	MIN	MINIMUM	S/N	SOLID NEUTRAL		
CONST	CONSTRUCTION	GFP	GROUND FAULT PROTECTOR	MISC	MISCELLANEOUS	SPEC	SPECIFICATION	∠	ANGLE
CONT	CONTINUATION OR CONTINUOUS	GND	GROUND	MLO	MAIN LUGS ONLY	SPKR	SPEAKER	@	AT
CONTR	CONTRACTOR	GRS	GALVANIZED RIGID STEEL (CONDUIT)	MMS	MANUAL MOTOR STARTER	SP	SPARE	△	DELTA
CONV	CONVECTOR	GYP BD	GYPSUM BOARD	MOA	MULTIOUTLET ASSEMBLY	SR	SURFACE RACEWAY	'	FEET
CP	CIRCULATING PUMP	HOA	HANDS-OFF-AUTOMATIC SWITCH	MSP	MOTOR STARTER PANELBOARD	SS	STAINLESS STEEL	"	INCHES
CRT	CATHODE-RAY TUBE	HORIZ	HORIZONTAL	MSBD	MAIN SWITCHBOARD	SSW	SELECTOR SWITCH	#	NUMBER
CT	CURRENT TRANSFORMER			MT	MOUNT	S/S	STOP/START PUSHBUTTONS	Ø	PHASE
CTR	CENTER			MT.C	EMPTY CONDUIT	STA	STATION	C	CENTER LINE
CU	COPPER			MTS	MANUAL TRANSFER SWITCH	STD	STANDARD	P	PLATE
				MTR	MOTOR, MOTORIZED				

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REVISION:

No.: 25494-1 Date: 11-02-2026

Drawn: JEB Checked: JAR

Project Manager: GS

Project Status: CONSTRUCTION SET

Sheet Title: ELECTRICAL SYMBOLS & ABBREVIATIONS

Sheet No.: E3.10

11/2/2026 10:56:42 AM

PANELBOARD: A

LOCATION: MECHANICAL 120 **VOLTAGE:** 208Y/120 V. 3 ø 4 W.
MOUNTING: SURFACE NEMA 1 **A.I.C. RATING:** 22,000 AMPS SYMMETRICAL
MAIN DEVICE: 200 A MAIN CB **SPECIAL:**
BUS AMPS: 200 AMPS

LOAD DESCRIPTION	BKR	POLES	CKT	A		B		C		CKT	POLES	BKR	LOAD DESCRIPTION
LITES PARKING	20 A	2	1	0.6	0.6					2	2	20 A	LITES PARKING
--	--	--	3			0.6	0.6			4	--	--	--
			5					0.0	6	1	20 A	LITES EXTERIOR
LITES CORR/OPEN OFFICE	20 A	1	7	2.3	2.6					8	1	20 A	LITES TRAIN/LOBBY
LITES RR/OFFICES	20 A	1	9			2.3	0.2			10	1	20 A	RCPT FITNESS 115
RCPT FITNESS 115	20 A	1	11					0.2	0.5	12	1	20 A	RCPT FITNESS 115
RCPT UTILITY 116	20 A	1	13	0.2	1.2					14	1	20 A	RCPT UTILITY 116 WM*
RCPT UTILITY DRY*	30 A	2	15			2.3	0.5			16	1	20 A	RCPT TRAINING 119
--	--	--	17					2.3	0.5	18	1	20 A	RCPT TRAINING 119
RCPT TRAINING 119	20 A	1	19	0.7	0.5					20	1	20 A	RCPT TRAINING 119
RCPT TRAINING 119	20 A	1	21			0.8	0.8			22	1	20 A	RCPT TRAINING 119
RCPT LOCKER 114	20 A	1	23					0.4	0.5	24	1	20 A	RCPT HALLWAY 113
RCPT WOMEN 118	20 A	1	25	0.2	0.2					26	1	20 A	RCPT MENS 117
RCPT SQUAD 111	20 A	1	27			0.5	0.9			28	1	20 A	RCPT SQUAD 111
RCPT SQUAD 111	20 A	1	29					0.5	0.5	30	1	20 A	RCPT MEETING 110
RCPT MEETING 110	20 A	1	31	0.7	0.7					32	1	20 A	RCPT OPEN OFF. 109
RCPT OPEN OFF. 109	20 A	1	33			0.4	0.4			34	1	20 A	RCPT OPEN OFF. 109
RCPT OPEN OFF. 109	20 A	1	35					0.4	0.4	36	1	20 A	RCPT OPEN OFF. 109
RCPT OPEN OFF. 109	20 A	1	37	0.5	0.2					38	1	20 A	RCPT OPEN OFF. 109
RCPT LOBBY 102	20 A	1	39			0.7	0.5			40	1	20 A	RCPT EWC*
RCPT RECEP. 101	20 A	1	41					0.5	0.5	42	1	20 A	RCPT RECEP. 101
RCPT RECEP. 101	20 A	1	43	0.4	0.7					44	1	20 A	RCPT LOBBY 102
VEST. 100 DOORS	20 A	1	45			0.2	0.4			46	1	20 A	RCPT BREAK 112
RCPT BREAK 112	20 A	1	47					0.5	0.8	48	1	20 A	RCPT BREAK REF*
RCPT BREAK 112	20 A	1	49	0.2	0.8					50	1	20 A	RCPT BRREAK 112 MW.
RCPT BREAK 112	20 A	1	51			0.4	0.2			52	1	20 A	RCPT BREAK 112 DISP*
RCPT BREAK 112	20 A	1	53					0.4	0.4	54	1	20 A	RCPT MECH 120
RCPT MECH 120	20 A	1	55	0.4	1.2					56	2	15 A	ERV-1
WHTR-1	20 A	1	57			0.6	1.2			58	--	--	--
P-1	20 A	1	59					0.6	1.2	60	1	20 A	F-1
F-2	20 A	1	61	1.2	1.2					62	1	20 A	F-3
DATA RACK	20 A	1	63			0.4	0.0			64	2	30 A	DATA RACK
DATA RACK	20 A	1	65					0.4	0.0	66	--	--	--
CU-1	50 A	2	67	3.6	3.6					68	2	50 A	CU-2
--	--	--	69			3.6	3.6			70	--	--	--
CU-3	50 A	2	71					3.6	0.0	72	1	20 A	FIRE ALARM PANEL
--	--	--	73	3.6	0.0					74	1	20 A	Spare
HEAT TRACE	20 A	1	75			1.8	1.8			76	1	20 A	HEAT TRACE
HEAT TRACE	20 A	1	77					1.8	0.0	78	1	20 A	Spare
HEAT TRACE	20 A	1	79	1.8	0.0					80	3	60 A	SPD
Spare	20 A	1	81			0.0	0.0			82	--	--	--
Spare	20 A	1	83					0.0	0.0	84	--	--	--
	TOTAL LOAD:			29 kVA		25 kVA		17 kVA					
	TOTAL AMPS:			251 A		219 A		138 A					

LOAD CLASSIFICATION	CONNECTED	DEMAND	ESTIMATED	PANEL TOTALS	
Lighting	15 VA	125.00%	19 VA		
RCPT	21863 VA	72.87%	15931 VA	**CONNECTED LOAD:**	70243 VA
MOTORS	29338 VA	100.00%	29338 VA	**ESTIMATED DEMAND:**	66803 VA
LITES	9266 VA	125.00%	11583 VA	**CONNECTED CURRENT:**	195 A
HEAT	7200 VA	100.00%	7200 VA	**EST. DEMAND CURRENT:**	185 A

NOTES:
* = GFI CIRCUIT BREAKER.

PANELBOARD: B

LOCATION: GARAGE 121 **VOLTAGE:** 208Y/120 V. 3 ø 4 W.
MOUNTING: SURFACE NEMA 1 **A.I.C. RATING:** 22,000 AMPS SYMMETRICAL
MAIN DEVICE: 200 A MAIN CB **SPECIAL:**
BUS AMPS: 200 AMPS

LOAD DESCRIPTION	BKR	POLES	CKT	A		B		C		CKT	POLES	BKR	LOAD DESCRIPTION
LITES GARAGE	20 A	1	1	0.0	0.0					2	1	20 A	LITES GARAGE
LITES SOUTH	20 A	1	3			0.1	0.0			4	1	20 A	LITES NORTH
RCPT GARAGE 121	20 A	1	5					0.5	0.5	6	1	20 A	RCPT GARAGE 121
RCPT GARAGE 121	50 A	2	7	3.1	3.1					8	2	50 A	RCPT GARAGE 121
--	--	--	9			3.1	3.1			10	--	--	--
RCPT GARAGE 121	20 A	1	11					0.7	0.7	12	1	20 A	RCPT GARAGE 1210
RCPT GARAGE 121	20 A	1	13	0.5	0.7					14	1	20 A	RCPT GARAGE 121
RCPT GARAGE 121	20 A	1	15			0.5	3.1			16	2	50 A	RCPT GARAGE 121
RCPT GARAGE 121	50 A	2	17					3.1	3.1	18	--	--	--
--	--	--	19	3.1	0.9					20	1	20 A	RCPT OFFICE 108
RCPT OFFICE 107	20 A	1	21			0.9	0.9			22	1	20 A	RCPT OFFICE 106
RCPT OFFICE 105	20 A	1	23					0.9	0.2	24	1	20 A	RCPT GIFTSHOP 103
GARAGE 121 OHD*	20 A	1	25	0.8	0.8					26	1	20 A	GARAGE 121 OHD*
GARAGE 121 OHD*	20 A	1	27			0.8	0.8			28	1	20 A	GARAGE 121 OHD*
GARAGE 121 OHD*	20 A	1	29					0.8	1.0	30	2	25 A	EF-1
EF-2	15 A	1	31	0.3	1.0					32	--	--	--
GUH-2	15 A	1	33			0.3	0.2			34	1	15 A	GUH-1
AC-1	35 A	3	35					2.5	0.0	36	1	20 A	Spare
--	--	--	37	2.5	0.0					38	1	20 A	Spare
--	--	--	39			2.5	0.0			40	1	20 A	Spare
Spare	20 A	1	41					0.0	0.0	42	1	20 A	Spare
Spare	20 A	1	43	0.0	0.0					44	1	20 A	Spare
Spare	20 A	1	45			0.0	0.0			46	1	20 A	Spare
Spare	20 A	1	47					0.0	0.0	48	1	20 A	Spare
Spare	20 A	1	49	0.0	0.0					50	3	60 A	SPD
Spare	20 A	1	51			0.0	0.0			52	--	--	--
Spare	20 A	1	53					0.0	0.0	54	--	--	--
	TOTAL LOAD:			17 kVA		16 kVA		14 kVA					
	TOTAL AMPS:			142 A		138 A		115 A					

LOAD CLASSIFICATION	CONNECTED	DEMAND	ESTIMATED	PANEL TOTALS	
Lighting	54 VA	125.00%	68 VA		
Other	0 VA	0.00%	0 VA	**CONNECTED LOAD:**	46676 VA
RCPT	32524 VA	65.37%	21262 VA	**ESTIMATED DEMAND:**	35481 VA
MOTORS	14501 VA	100.00%	14501 VA	**CONNECTED CURRENT:**	130 A
				EST. DEMAND CURRENT:	98 A

NOTES:
* = GFI CIRCUIT BREAKER.

PANELBOARD: C

LOCATION: GARAGE 121 **VOLTAGE:** 208Y/120 V. 3 ø 4 W.
MOUNTING: SURFACE NEMA 1 **A.I.C. RATING:** 22,000 AMPS SYMMETRICAL
MAIN DEVICE: 200 A MAIN CB **SPECIAL:**
BUS AMPS: 200 AMPS

LOAD DESCRIPTION	BKR	POLES	CKT	A		B		C		CKT	POLES	BKR	LOAD DESCRIPTION
LITES PROCESSING	20 A	1	1	1.2	0.9					2	1	20 A	LITES STORAGE
LITES EXTERIOR	20 A	1	3			0.0	0.5			4	1	20 A	RCPT GAME PROC. 122
RCPT GAME PROC. 122	20 A	1	5					0.2	0.2	6	1	20 A	RCPT RR 123
RCPT EVIDENCE 124	20 A	1	7	0.5	0.2					8	1	20 A	RCPT STORAGE 125
RCPT EXTERIOR	20 A	1	9			0.2	0.2			10	1	20 A	RCPT EXTERIOR
RCPT EXTERIOR	20 A	1	11					0.2	0.2	12	1	20 A	RCPT EXTERIOR
RCPT GAME PROC. 122	20 A	1	13	0.4	0.4					14	1	20 A	RCPT GAME PROC. 122
EF-3	15 A	1	15			0.2	0.0			16	1	20 A	Spare
CU-4	15 A	2	17					1.2	1.2	18	2	15 A	CU-5
--	--	--	19	1.2	1.2					20	--	--	--
CU-6	20 A	2	21			1.6	1.4			22	1	20 A	HOIST
--	--	--	23					1.6	1.8	24	1	20 A	HEAT TRACE EVID. FRZ.
HEAT TRACE GAME FRZ.	20 A	1	25	1.8	1.8					26	1	20 A	EVID REF. EVAP
GAME REF COND.	35 A	2	27			3.3	1.8			28	1	20 A	GAME REF EVAP
--	--	--	29					3.3	2.0	30	2	20 A	EVID. REF. COND.
EVID. FRZ. COND.	20 A	2	31	2.0	2.0					32	--	--	--
--	--	--	33			2.0	1.9			34	2	20 A	GAME REF. COND.
P-2	20 A	1	35					1.2	1.9	36	--	--	--
GAME FRZ. EVAP	20 A	1	37	1.8	1.8					38	1	20 A	EVID. FRZ. EVAP
Spare	20 A	1	39			0.0	0.0			40	1	20 A	Spare
Spare	20 A	1	41					0.0	0.0	42	1	20 A	Spare
Spare	20 A	1	43	0.0	0.0					44	1	20 A	Spare
Spare	20 A	1	45			0.0	0.0			46	1	20 A	Spare
Spare	20 A	1	47					0.0	0.0	48	1	20 A	Spare
Spare	20 A	1	49	0.0	0.0					50	3	60 A	SPD
Spare	20 A	1	51			0.0	0.0			52	--	--	--
Spare	20 A	1	53					0.0	0.0	54	--	--	--
	TOTAL LOAD:			17 kVA		13 kVA		15 kVA					
	TOTAL AMPS:			140 A		107 A		124 A					

LOAD CLASSIFICATION	CONNECTED	DEMAND	ESTIMATED	PANEL TOTALS	
Other	0 VA	0.00%	0 VA		
RCPT	4236 VA	100.00%	4236 VA	**CONNECTED LOAD:**	44005 VA
MOTORS	35236 VA	100.00%	35236 VA	**ESTIMATED DEMAND:**	44435 VA
LITES	2025 VA	125.00%	2531 VA	**CONNECTED CURRENT:**	122 A
HEAT	3600 VA	100.00%	3600 VA	**EST. DEMAND CURRENT:**	123 A

NOTES:

PANELBOARD: G

LOCATION: **VOLTAGE:** 120/208/1PH V. 1 ø 3 W.
MOUNTING: RECESSED NEMA1 **A.I.C. RATING:** 10,000 AMPS SYMMETRICAL
MAIN DEVICE: 100 A MAIN CB **SPECIAL:**
BUS AMPS: 60 AMPS

LOAD DESCRIPTION	BKR	POLES	CKT	A		C		CKT	POLES	BKR	LOAD DESCRIPTION
GEN HEATER	20 A	2	1	0.0	0.0			2	1	20 A	BATTERY CHARGER
--	--	--	3			0.0	0.0	4	1	20 A	BLOCK HEATER
Spare	20 A	1	5	0.0	0.0			6	1	20 A	Spare
Spare	20 A	1	7			0.0	0.0	8	1	20 A	Spare
Spare	20 A	1	9	0.0	0.0			10	1	20 A	Spare
Spare	20 A	1	11			0.0	0.0	12	1	20 A	Spare
	TOTAL LOAD:			0 kVA		0 kVA					
	TOTAL AMPS:			0 A		0 A					

LOAD CLASSIFICATION	CONNECTED	DEMAND	ESTIMATED	PANEL TOTALS	
HEAT	0 VA	0.00%	0 VA		
				CONNECTED LOAD:	0 VA
				ESTIMATED DEMAND:	0 VA
				CONNECTED CURRENT:	0 A
				EST. DEMAND CURRENT:	0 A

NOTES:

DISTRIBUTION PANEL: DP

LOCATION: MECHANICAL 120 **VOLTAGE:** 208Y/120V.3Ø4W.
MAIN DEVICE: 600 AMCB **AIC RATING:** 42,000 AMPS SYMMETRICAL
BUS AMPS: 600 AMPS **SPECIAL:**

MAIN DEVICE

CB SIZE	POLES	SPECIAL	DESCRIPTION/NAMEPLATE

SECTION NO. 1

CKT	CB SIZE	Poles	Load	DESCRIPTION/NAMEPLATE	NOTES
1	200 A	3	70243 VA	PANEL "A"	
2	200 A	3	46676 VA	PANEL "B"	
3	200 A	3	44005 VA	PANEL "C"	
4	60 A	2	0 VA	PANEL "G"	
5	100 A	3	0 VA	PREPARED SPACE	
6	100 A	3	0 VA	PREPARED SPACE	
7	100 A	3	0 VA	PREPARED SPACE	
8	100 A	3	0 VA	PREPARED SPACE	
9					
10					
11					
12	60 A	3	0 VA	SPD	

LOAD SUMMARY

	DISTRIBUTION LOAD	CONN. LOAD
	DP	160545 VA

LOAD CLASSIFICATION	CONNECTED	DEMAND	ESTIMATED	PANEL TOTALS	
Lighting	69 VA	125.00%	86 VA		
Other	0 VA	0.00%	0 VA		
MOTORS	79075 VA	100.00%	79075 VA		
RCPT	58093 VA	58.61%	34047 VA		
LITES	11269 VA	125.00%	14086 VA	**CONN. LOAD:**	160545 VA
SPEC	4576 VA	100.00%	4576 VA	**EST. DEMAND LOAD:**	139772 VA
HEAT	10756 VA	100.00%	10756 VA	**CONN. CURRENT:**	446 A
				EST. DEMAND...	388 A

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REVISION:

No.: 25494-1 Date: 11-02-2026
Drawn: JEB Checked: JAR
Project Manager: GS
Project Status: CONSTRUCTION SET

Sheet Title:
ELECTRICAL SCHEDULES

Sheet No.:
E3.11

11/2/2026 10:56:46 AM

MECHANICAL EQUIPMENT CONNECTION SCHEDULE

ACEI PROJECT #: 126019

	DESCRIPTION	KW	HP	FLA	MCA	MOCP	VOLTS	PH	NOTES
	ERV:1 - ENERGY RECOVERY VENTILATOR	-	-	(2) 3.4	7.7	15A/2P	208	1	4
	WHTR-1: GAS WATER HEATER	-	-	5	-	20A/1P	120	1	1
	P-1: PUMP	-	0.19	-	-	15A/1P	120	1	1
	P-2: SUMP PUMP	-	1/2	9.8	12.3	20A/1P	120	1	6
	CU-1: CONDENSING UNIT	-	-	28	35	50A/2P	208	1	2
	CU-2: CONDENSING UNIT	-	-	28	35	50A/2P	208	1	2
	CU-3: CONDENSING UNIT	-	-	28	35	50A/2P	208	1	2
	CU-4: CONDENSING UNIT	-	-	12	15	15A/2P	208	1	2
	DSS1: DUCTLESS SPLIT SYSTEM	-	-	2	3	-	-	-	5
	CU-5: CONDENSING UNIT	-	-	12	15	15A/2P	208	1	2
	DSS2: DUCTLESS SPLIT SYSTEM	-	-	2	3	-	-	-	5
	CU-6: CONDENSING UNIT	-	-	15.2	19	20A/2P	208	1	2
	DSS3: DUCTLESS SPLIT SYSTEM	-	-	2	3.0	-	-	-	5
	F-1: FURNACE	-	3/4	8.2	10.3	20A/1P	120	1	1
	F-2: FURNACE	-	3/4	8.2	10.3	20A/1P	120	1	1
	F-3: FURNACE	-	3/4	8.2	10.3	20A/1P	120	1	1
	GUH-1: GAS UNIT HEATER	-	1/4	4.6	5.8	15A/1P	120	1	4
	GUH-2: GAS UNIT HEATER	-	1/4	4.6	5.8	15A/1P	120	1	4
	EF-1: EXHAUST FAN	-	2	12.5	15.6	25A/2P	208	1	4,6
	EF-2: EXHAUST FAN	-	0.17	2.8	3.5	15A/1P	120	1	4
	EF-3: EXHAUST FAN	-	FRAC	1.5	1.9	15A/1P	120	1	4
	EF-4: EXHAUST FAN	-	FRAC	0.6	0.7	15A/1P	120	1	4
	AC-1: AIR COMPRESSOR	-	5	17.5	21	35A/3P	208	3	3

NOTES:

1. PROVIDE MOTOR-RATED SWITCH. CONTROL BY MECHANICAL CONTRACTOR.
2. PROVIDE NEMA 3R FUSED DISCONNECT SWITCH AT UNIT. CONTROL BY MECHANICAL CONTRACTOR.
3. PROVIDE NEMA 1 NON-FUSED DISCONNECT SWITCH AT UNIT. CONTROL BY MECHANICAL CONTRACTOR.
4. PROVIDE SINGLE POINT CONNECTION. DISCONNECTING MEANS AND CONTROL BY MECHANICAL CONTRACTOR.
5. UMBILICAL FEED FROM ASSOCIATED CONDENSING UNIT, PROVIDE LOCAL DISCONNECTING MEANS AS REQUIRED.
6. PROVIDE 46" RECEPTACLE AT EQUIPMENT LOATION. CONNECT TO PUMP CONTROL PANEL. PROVIDE CONNECTIONS FROM CONTROL PANEL TO PUMP IN ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION INSTRUCTIONS.

LIGHTING FIXTURE SCHEDULE

Project No: ACEI 126019

TYPE	MFR.	NUMBER	LAMPS	VOLTS	WATTS	DESCRIPTION	APPROVED MFRS	NOTES
A2	METALUX	2CGTS-L3C3 - MID	LED/35K	120	30	LED, 2'X2' RECESSED FLAT PANEL, ACRYLIC DIFFUSER APPROXIMATELY 3700 LUMENS. 0-10V, 10% DIMMING. SELECTABLE CCT & LUMENS.	COLUMBIA DAYBRITE WILLIAMS LITHONIA	
A2E	METALUX	2CGTS-L3C3 - MID-EL14W	LED/35K	120	30	SAME AS TYPE A2 EXCEPT INTEGRAL BATTERY BACK-UP FOR EGRESS PATH LIGHTING REQUIREMENTS.	COLUMBIA DAYBRITE WILLIAMS LITHONIA	
C	PORTFOLIO	LD6B30D010-EU6B30508035-6LBW1H	LED/35K	120	28	6" LED DOWNLIGHT. APPROXIMATELY 3000 LUMENS. 0-10V, 10% DIMMING. SEMI-SPECULAR CLEAR, SELF-FLANGED REFLECTOR WITH WIDE DISTRIBUTION.	PRESCOLITE LIGHTOLIER WILLIAMS LITHONIA	
CE	PORTFOLIO	LD6B30D010-EU6B30508035-6LBW1H-EMBOD	LED/35K	120	28	SAME AS TYPE C EXCEPT INTEGRAL BATTERY BACK-UP FOR EGRESS PATH LIGHTING REQUIREMENTS.	PRESCOLITE LIGHTOLIER WILLIAMS LITHONIA	
D	METALUX	4NLW4040C	LED/40K	120	38	4' LENSED LED WRAP. POLYCARBONATE LEND AND ENDS DECORATIVE END CAPS. APPROXIMATELY 4600 LUMENS. FROSTED ACRYLIC LENS.	COLUMBIA DAYBRITE WILLIAMS LITHONIA	
DE	METALUX	4NLW4040C-EL14W	LED/40K	120	38	SAME AS TYPE D EXCEPT INTEGRAL BATTERY BACK-UP FOR EGRESS PATH LIGHTING REQUIREMENTS.	COLUMBIA DAYBRITE WILLIAMS LITHONIA	
D2	METALUX	4VT3-SL3C3-G-UNV	LED/40K	120	50	4' VAPORTITE LED SELECTABLE . 4000-6000 LUMENS. GENREAL DISTRIBUTION FROSTED ACRYLIC LENS.	COLUMBIA DAYBRITE WILLIAMS LITHONIA	
E1	SURE-LITES	TPX71R	INCLUDED	120	-	LED EXIT LIGHT, SINGLE STENCIL FACE, RED LETTERS, BLACK HOUSING WITH BRUSHED ALUMINUM FACE, SELF-TESTING/SELF-DIAGNOSTIC ELECTRONICS, BATTERY, DIRECTIONAL ARROWS AND MOUNTING AS INDICATED.	DUAL-LITE EMRGI-LITE WILLIAMS LITHONIA	
E2	SURE-LITES	TPX72R	INCLUDED	120	-	SAME AS TYPE "E1" EXCEPT DOUBLE-FACE.	DUAL-LITE EMRGI-LITE WILLIAMS LITHONIA	
F	CORELITE	SQ2-F-0U-074D-835-1-D-STD-B-AC48-JB-4	LED/35K	120	30	2" SUSPENEDED LINEAR LED. 750 LUMENS PER FOOT. 0-10V DIMMING.BLACK FINISH		
FE	CORELITE	SQ2-F-0U-074D-835-1-D-STD-B10-B-AC48-JB-4	LED/35K	120	30	SAME AS TYPE F EXCEPT REMOTE BATTERY BACK-UP FOR EGRESS PATH LIGHTING REQUIREMENTS.		
M	METALUX	SPHB-12-SE-M-UNV-L840-CD	LED/35K	120	67	1'X2' LED HIGH BAY. 0-10V DIMMING. 12000 LUMENS. WHITE FINISH.	PRESCOLITE LIGHTOLIER WILLIAMS LITHONIA	
ME	METALUX	SPHB-12-SE-M-UNV-L840-EL20WHV-CD	LED/35K	120	67	SAME AS TYPE M EXCEPT WITH REMOTE MOUNT 40W EMERGENCY DRIVER.	PRESCOLITE LIGHTOLIER WILLIAMS LITHONIA	
M2	METALUX	VT4S-12-DF-UNV-L840-CD-1-WL	LED/35K	120	67	1'X2' LED HIGH BAY. 0-10V DIMMING. 12000 LUMENS. WHITE FINISH. WET LOCATION RATED	PRESCOLITE LIGHTOLIER WILLIAMS LITHONIA	
AA2	BEACON	VP-2-320L-145-4K7-3-208-A-BLT	LED/30K	208	145	SINGLE-HEAD PARKING LOT POLE LIGHT, INCLUDE 25FT POLE ON 3FT CONCRETE BASE, VIBRATION DAMPENERS, MIN 21,000 LUMEN, BLACK FINISH, TYPE 2 DIST.	PRESCOLITE LIGHTOLIER WILLIAMS LITHONIA	
CC	ALCON LIGHTING	11234-RGBM-36-BK	LED/30K	120	20	36" UP/DOWN LIGHTING. ALUMINUM HOUSING WITH TEMPERED GLASS LENS. 2200 LUMENS. PROGRAM TO BE RED. WET LOCATION RATED.	PRESCOLITE LIGHTOLIER WILLIAMS LITHONIA	
DD	EXO LIGHTING	SG1-40-3K7-FT-UNV-BLT	LED/30K	120	38	DIE CAST ALUMINUM EXTERIOR ACCENT WALL PACK. 4000 LUMENS. BLACK FINISH.	PRESCOLITE LIGHTOLIER WILLIAMS LITHONIA	
DDE	EXO LIGHTING	SG1-40-3K7-FT-UNV-BLT-EH	LED/30K	120	38	DIE CAST ALUMINUM EXTERIOR ACCENT WALL PACK. 4000 LUMENS. BLACK FINISH. WITH HEATED BATTERY PACK FOR EMERGENCY EGRESS PATHWAY LIGHTING.	PRESCOLITE LIGHTOLIER WILLIAMS LITHONIA	
FF	INVUE	ENC-SA1-F-730-U-T3-BK	LED/30K	120	70	16" CURVED WALL PACK. 7900 LUMENS. TYPE 3 DISTRIBUTION. BLACK FINISH.	PRESCOLITE LIGHTOLIER WILLIAMS LITHONIA	

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REVISION:

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Project Manager: GS	
Project Status: CONSTRUCTION SET	

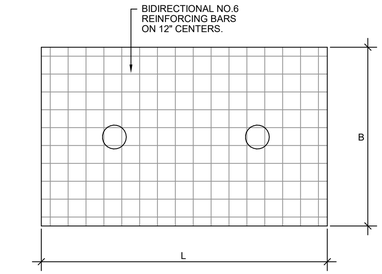
Sheet Title:

ELECTRICAL SCHEDULES

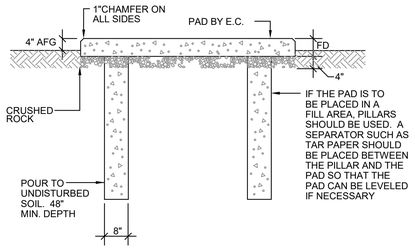
Sheet No.:

E3.12

11/2/2026 10:56:47 AM



PLAN VIEW



SECTION VIEW

L = LENGTH OF GENERATOR ENCLOSURE PLUS 12" (6" ON EACH END)

B = WIDTH OF GENERATOR ENCLOSURE PLUS 12" (6" ON EACH END)

FD SHALL BE CALCULATED BY:

$$FD = \frac{W}{D \times B \times L}$$

FD = FOUNDATION DEPTH IN FEET.

W = TOTAL WET WEIGHT OF GENERATOR SET, FUEL TANKS AND ENCLOSURE IN POUNDS.

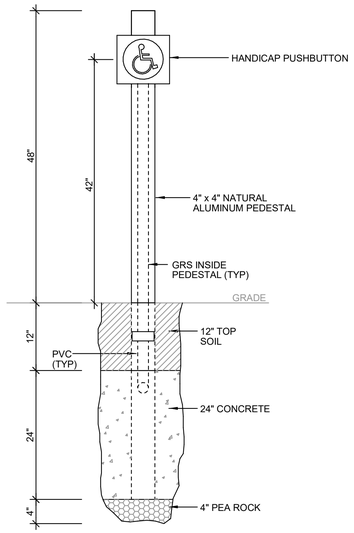
D = DENSITY OF CONCRETE IN POUNDS PER CUBIC FOOT. NOTE: USE 150 FOR ENGLISH UNIT.

B = FOUNDATION WIDTH IN FEET.

L = FOUNDATION LENGTH IN FEET.

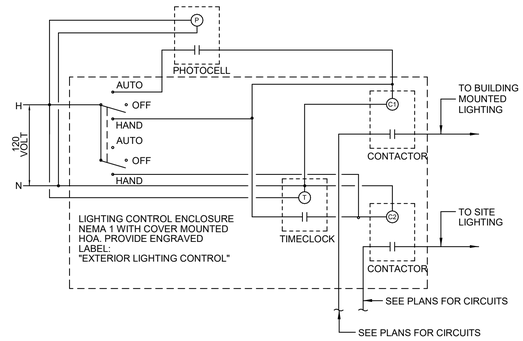
GENERATOR PAD DETAIL

NO SCALE



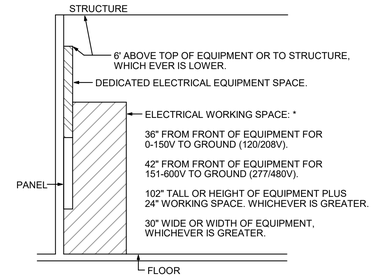
HANDICAP PUSHBUTTON PEDESTAL DETAIL

NO SCALE



EXTERIOR LIGHTING CONTROL DIAGRAM

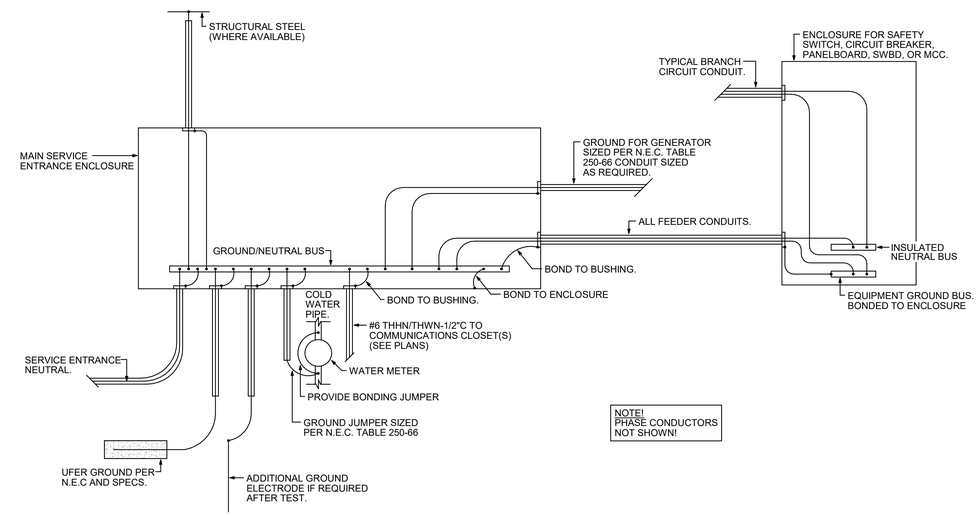
NO SCALE



ELECTRICAL WORKING SPACE

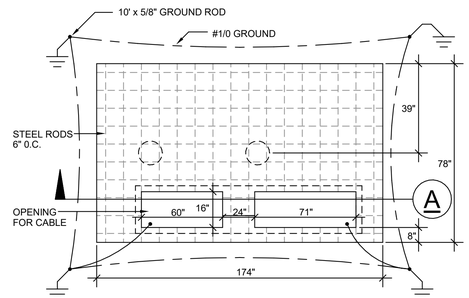
NO SCALE

* VERIFY WITH LOCAL CODE REQUIREMENTS, SPECIFICATIONS, AND NATIONAL ELECTRICAL CODE.



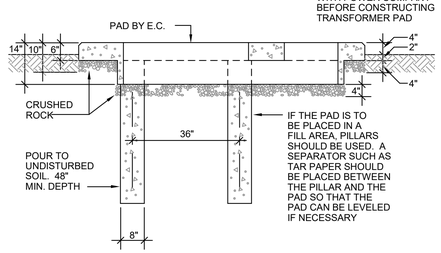
BUILDING SERVICE ENTRANCE GROUNDING DETAIL

NO SCALE



PLAN VIEW

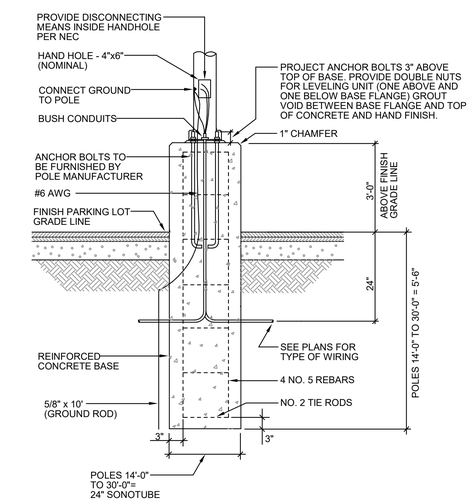
VERIFY ALL DIMENSIONS AND CONSTRUCTION REQUIREMENTS WITH POWER COMPANY BEFORE CONSTRUCTING TRANSFORMER PAD



A SECTION VIEW

TRANSFORMER PAD DETAIL

NO SCALE



TYPE "AA" FIXTURE POLE BASE DETAIL

NO SCALE

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Stamp: I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly licensed Engineer under the laws of the State of Wyoming

Signature: Jeffrey A. Rerken
Reg. No.: 22053
Date: 11/02/2026

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REVISION:

No.: 25494-1 | Date: 11-02-2026
Drawn: JEB | Checked: JAR
Project Manager: GS
Project Status: CONSTRUCTION SET

Sheet Title: ELECTRICAL DETAILS

Sheet No.: E3.13

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