

**1 FIRST FLOOR CODE PLAN**  
1/8" = 1'-0"

**CODE ANALYSIS:**

**APPLICABLE CODES:**  
WISCONSIN COMMERCIAL BUILDING CODE 2018 - EFFECTIVE MAY 1, 2018 (BASED ON 2015 INTERNATIONAL BUILDING CODE WITH WISCONSIN AMENDMENTS - SPS 381 & 382)  
2018 INTERNATIONAL ENERGY CONSERVATION CODE WITH WISCONSIN AMENDMENTS (SPS 383)  
2015 INTERNATIONAL MECHANICAL CODE WITH WISCONSIN AMENDMENTS (SPS 384)  
2015 INTERNATIONAL FUEL GAS CODE WITH WISCONSIN AMENDMENTS (SPS 385)  
2009 WISCONSIN PLUMBING CODE - SPS 381-387  
WISCONSIN STATE ELECTRICAL CODE - SPS 316

**BUILDING USE AND OCCUPANCY CLASSIFICATION:**  
GROUP A3 (RECREATION / COMMUNITY HALL)

**CONSTRUCTION TYPE:**  
TYPE V5 - FULL BUILDING SPRINKLERED

**WORK AREA:**  
PROJECT WORK AREA = FIRST FLOOR = 6,306 SF

**RATED CONSTRUCTION:**  
PRIMARY STRUCTURAL FRAME: 0 HR  
BEARING WALLS: 0 HR  
FLOOR CONSTRUCTION: 0 HR  
ROOF CONSTRUCTION: 0 HR

**OCCUPANT LOAD:**  
FIRST FLOOR:  
A3 OCCUPANCY = 329 OCCUPANTS (INTERIOR)  
121 OCCUPANTS (EXTERIOR)

TOTAL: 450 OCCUPANTS

**MEANS OF EGRESS:**

SECTION 1006.3.1 - OTHER EGRESS COMPONENTS WIDTH 7' PER OCCUPANT FOR OTHER EGRESS  
FIRST FLOOR COMPONENTS = 2' x 329 = 660' REQUIRED;  
108' PROVIDED

SECTION 1010.1.1  
DOOR WIDTH = 32" MIN WIDTH  
DOOR WIDTH PROVIDED = 32" MIN

SECTION 1010.1.2.1  
DOORS MUST SWING IN THE DIRECTION OF TRAVEL FOR OCCUPANT LOAD OF 50 OR MORE.

SECTION 1010.1.10 - PANIC HARDWARE  
DOORS SERVING ROOMS WITH AN OCCUPANT LOAD OF 50 OR MORE IF PROVIDED WITH A LOCK AND LATCH SHALL BE PROVIDED WITH PANIC HARDWARE; PANIC HARDWARE

SECTION 1006.3.1 - TWO MEANS OF EGRESS ALLOWED FOR OCCUPANT LOAD OF 1-500.

SECTION 1017.2 - EXIT ACCESS TRAVEL DISTANCE  
OCCUPANCY B = 300 FT W/ SPRINKLER  
ACTUAL TRAVEL DISTANCE = 54' (FIRST FLOOR)

SECTION 906 - PORTABLE FIRE EXTINGUISHERS  
LOW HAZARD OCCUPANCY = MAXIMUM TRAVEL DIST OF 75' TO EACH EXTINGUISHER

**PLUMBING FIXTURES:**  
FIRST FLOOR  
A3 OCCUPANCY (BANQUET HALL USE)  
450 OCCUPANTS  
WATER CLOSETS: 1 PER 75  
REQUIRED: 6 WC PROVIDED: 5 WC AND 2 URINALS (UP TO HALF WC CAN BE URINALS)  
LAVATORIES: 1 PER 200  
REQUIRED: 3 LAVS PROVIDED: 5 LAVS  
DRINKING FOUNTAIN: 1 PROVIDED  
SERVICE SINK: 1 PROVIDED

--- 1 HOUR RATED

No.	Description	Date
1	Review Set	Date 2

CITY OF MADISON

DOOR CREEK PARK SHELTER

MADISON, WI 53703  
CODE PLAN

CONSTRUCTION DOCUMENTS  
Project number: MSN-20-01  
Date: 10/31/2022

A002



AERIAL VIEW FROM NORTHWEST



AERIAL VIEW FROM SOUTHWEST



AERIAL VIEW FROM NORTH



VIEW FROM NORTHEAST



VIEW FROM SOUTHEAST



ENTRANCE VIEW FROM NORTHWEST



VIEW FROM WEST



VIEW FROM SOUTH

No.	Description	Date
1	Review Set	Date 2

CITY OF MADISON

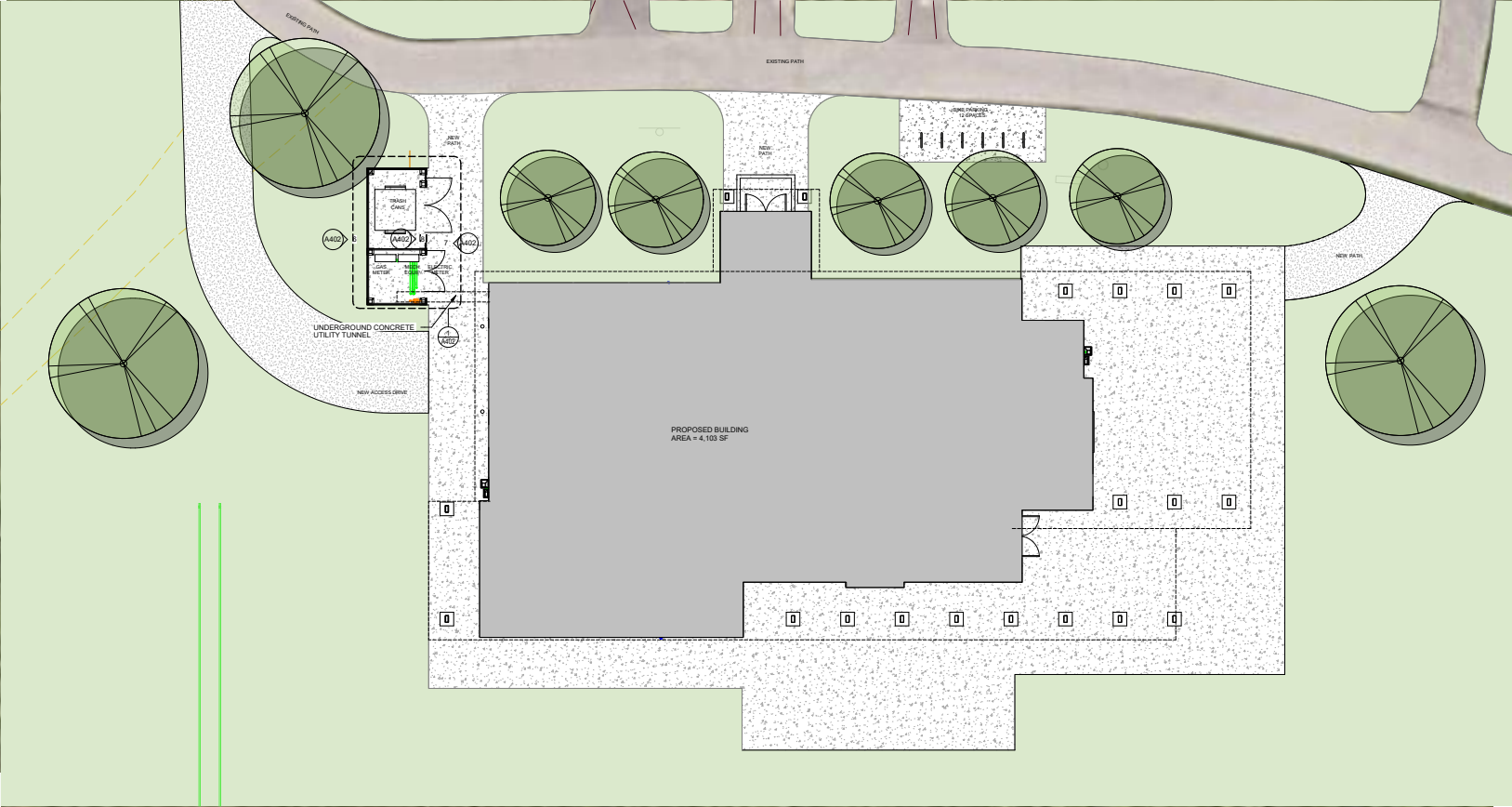
DOOR CREEK PARK SHELTER

MADISON, WI 53703

EXTERIOR VIEWS

CONSTRUCTION DOCUMENTS  
Project number MSN-20-01  
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A003



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CITY OF MADISON

DOOR CREEK PARK SHELTER

MADISON, WI 53703









ENLARGED ARCHITECTURAL SITE PLAN

CONSTRUCTION DOCUMENTS  
 Project number MSN-20-01  
 Date 10/31/2022








A011

**LEGEND - PLAN SYMBOLS**

**CALLOUTS**

-  BUILDING SECTION SYMBOL, 1/A101 INDICATES DETAIL 1 CAN BE FOUND ON SHEET A101
-  WALL SECTION SYMBOL, 1/A101 INDICATES DETAIL 1 CAN BE FOUND ON SHEET A101
-  SECTION DETAIL SYMBOL, 1/A101 INDICATES DETAIL 1 CAN BE FOUND ON SHEET A101
-  PLAN DETAIL OR ENLARGED PLAN SYMBOL, 1/A101 INDICATES DETAIL 1 CAN BE FOUND ON SHEET A101
-  EXTERIOR ELEVATION SYMBOL, 1/A101 INDICATES DETAIL 1 CAN BE FOUND ON SHEET A101
-  INTERIOR ELEVATION SYMBOL, 1/A101 INDICATES DETAIL 1 CAN BE FOUND ON SHEET A101
-  VERTICAL OR SPOT ELEVATION
-  FIRE EXTINGUISHER - SURFACE MOUNT

**IDENTIFICATION**

-  NEW CONSTRUCTION GRID LINE IDENTIFICATION
-  WALL TYPE IDENTIFICATION
-  KEYED NOTE IDENTIFICATION
-  WINDOW IDENTIFICATION
-  REVISION IDENTIFICATION
-  DOOR IDENTIFICATION
-  ROOM NAME, NUMBER, AND SF AREA



**KEYED NOTES**

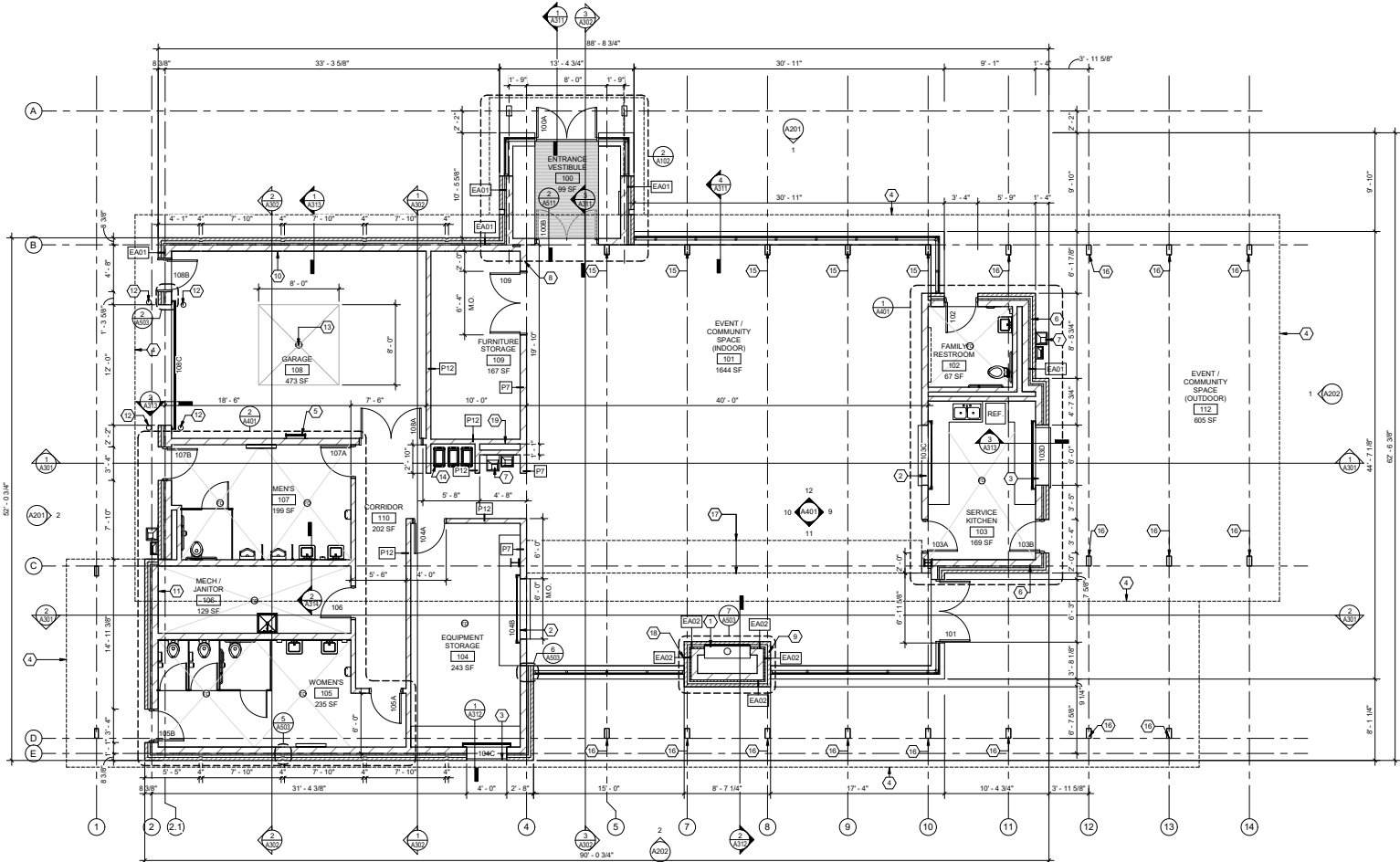
1	GAS FIREPLACE INSERT SURROUNDED BY NATURAL STONE HEARTH
2	COILING COUNTER TOP
3	INSULATED COILING COUNTER DOOR
4	LINEOF ROOF EDGE ABOVE
5	WALL MOUNTED ATIC ACCESS LADDER
6	BRICK MASONRY OVER CMU WALL ASSEMBLY - BRICK 2
7	ELECTRIC WATER COOLER AND BOTTLE FILLING STATION (EWC)
8	LIGHTING CONTROLS - SEE ELECTRICAL DRAWINGS
9	FIREPLACE CONTROLS - SEE ELECTRICAL DRAWINGS
10	ELECTRICAL PANELS LOCATION - SEE ELECTRICAL DRAWINGS
11	WATER METER LOCATION - SEE PLUMBING DRAWINGS
12	HEAVY DUTY BOLT DOWN BOLTS
13	FLOOR DRAIN, SLOPE CONCRETE SLAB TO DRAIN 1/4" PER FOOT MAX. (2%) - SEE PLUMBING DRAWINGS
14	TRASH AND RECYCLING, OF-3
15	PAINTED STRUCTURAL COLUMNS, PT 4
16	PAINTED STEEL COLLARS - PT 4B
17	LINE OF SOFFIT ABOVE
18	ACCESS PANEL FOR GAS PIPE MAINTENANCE
19	ACCESS PANEL, SEE PLUMBING

**FLOOR PLAN GENERAL NOTES:**

- FIELD VERIFY ALL DIMENSIONS, BRING ANY DISCREPANCIES TO THE ATTENTION OF THE ARCHITECT / ENGINEER FOR FINAL DECISION.
- SEE SHEET A001 FOR PARTITION TYPES.
- SEE SHEET A001 FOR DOOR SCHEDULE AND WINDOW TYPES AND DETAILS.
- SEE SHEET A111 FOR REFLECTED CEILING PLAN.
- SEE SHEET A121 FOR FINISH PLAN AND SCHEDULES.
- INTERIOR DIMENSIONS ON FLOOR PLAN ARE BASED ON FACE OF FINISH WALL TO FINISHED WALL (NOMINAL).
- EXTERIOR DIMENSIONS ARE BASED TO OUTSIDE FACE OF CMU (NOMINAL).
- ALL INTERIOR PARTITIONS TYPES TO BE P12 UNO.

**ARO EBERLE ARCHITECTS**

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Suite 400, Madison, WI AroEberle.com  
53703



No.	Review Set	Description	Date
1			
2			
3			
4			

**CITY OF MADISON**

**DOOR CREEK PARK SHELTER**

MADISON, WI 53703

**FLOOR PLAN**

CONSTRUCTION DOCUMENTS  
Project number: MSN-20-01  
Date: 10/31/2022

**A101**

**FIRST FLOOR PLAN**  
3/16" = 1'-0"

**HVAC ABBREVIATIONS**

F DEGREE FAHRENHEIT	H HUMIDIFIER	START STARTER
AC AIR COMPRESSOR	HC HEATING COIL	TEMP TEMPERATURE CONTROL PANEL
ACC AIR COOLED CONDENSER	HD HEAD	TEMP TEMPERATURE
ACCU AIR COOLED CONDENSING UNIT	HF HEAT FAN	TR TRANSFER GRILLE
ACU AIR CONDITIONING UNIT	HG HOT GAS	TS TP SPEED
AD ACCESS DOOR	HGB HOT GAS BYPASS	TSP TOTAL STATIC PRESSURE
ADP ABOVE FINISHED FLOOR	H-H-A HAND-OFF AUTO	TURB TURBILATORS
AHU AIR HANDLING UNIT	HP HORSEPOWER	TYP TYPICAL
AL ALUMINUM	HPC HIGH PRESSURE CONDENSATE	UCD UNDERCUT DOOR
ALT ALTERNATE	HPS HIGH PRESSURE STEAM	UH UNIT HEATER
AMB AMBIENT	HR HOUR	UM UNIT MANUFACTURER
AMS AIR MEASURING STATION	HVAC HEATING, VENTILATING, AIR CONDITIONING	UN LESS OTHERWISE NOTED
APD AIR PRESSURE DROP	HW HOT WATER	UV UNIT VENTILATOR
APRX APPROXIMATE	HT HOT WATER COIL	UL ULTRA ULTRAM
ARCH ARCHITECT / ARCHITECTURAL	HWR HEATING HOT WATER RETURN	UVL VARIABLE AIR VOLUME
AWT AIRSIDE WATER TEMPERATURE	HWS HEATING HOT WATER SUPPLY	VELOCITY VARIABLE-FREQUENCY DRIVE
B BOILER	HZ HEAT EXCHANGER	VF VERY IN FIELD
BN BETWEEN	HEZ HEZT	W WATTS
BC BOOSTER COIL	IW IN ACCORDANCE WITH	WI WITH
BDD BACKDRAFT DAMPER	ID INSIDE DAMPER	WIN WITHIN
BHP BRAKE HORSEPOWER	IEC INDIRECT EVAPORATIVE COOLING	WINO WINDOW AIR CONDITIONER
BTU BRITISH THERMAL UNIT	N INCHES	WAC WALL ACCESS PANEL
BTU/H BTU PER HOUR	N/IN INCHES WATER COLUMN	WAP WALL ACCESS PANEL
C CONVECTOR	RH RH	WC WATER COLUMN
CAP CEILING ACCESS PANEL	RF RADIANT HEATER	WG WATER GAUGE
CAP CAPACITY	RL RADIANT	WPC WATER PRESSURE DROP
CAV CONSTANT AIR VOLUME	L LOUVER	
CB CHILLED BEAM	LAT LEADING AIR TEMPERATURE	
CC COILING COIL	LB POUND	
CD CEILING DIFFUSER	LD LINEAR SLOT DIFFUSER	
CEF CEILING EXHAUST FAN	LF LINEAR FEET	
CFM CUBIC FEET PER HOUR	LPC LOW PRESSURE CONDENSATE	
CFM CUBIC FEET PER MINUTE	LPS LOW PRESSURE STEAM	
CPR CONSTANT FLOW REGULATOR	LRA LOCKED ROTOR AMPS	
CKTS CIRCUITS	LWT LEADING WATER TEMPERATURE	
CML CONCRETE MASONRY UNIT	M MAGNETIC	
CMC COMBINATION MAGNETIC	MAN MANUAL	
COND CONDENSATE	MAU MAKE-UP AIR UNIT	
CONN CONNECTION	MBS THOUSAND BTU PER HOUR	
CONT CONTINUATION	MC MECHANICAL CONTRACTOR	
CONTR CONTRACTOR	MD MINIMUM CIRCUIT AMPACITY	
COP COEFFICIENT OF PERFORMANCE	MERV MINIMUM EFFICIENCY REPORTING VALUE	
CPU CENTRAL PROCESSING UNIT	MFC MOTOR CONTROL CENTER	
CR CONDENSER WATER RETURN	MFR MANUFACTURER	
CS CONDENSER WATER SUPPLY	MFR MAXIMUM FUSE SIZE	
CUT CUBIC FEET	MIN MINIMUM	
CU IN CUBIC INCHES	MOD MOTOR OPERATED DAMPER	
CHU CABINET UNIT HEATER	MOD MINIMUM OVERCURRENT PROTECTION	
CHW CHILLED WATER RETURN	MOP MEDIUM PRESSURE CONDENSATE	
CWS CHILLED WATER SUPPLY	MPS MEDIUM PRESSURE STEAM	
D DOWNFLOWER	MU MAKE-UP WATER	
DAP DUCT ACCESS PANEL	MV MANUAL VOLUME DAMPER	
DB DBT BULB	NC NORMALLY CLOSED	
DB DECIBEL	NC NOISE COEFFICIENT	
DDC DIRECT DIGITAL CONTROLS	NFA NATIONAL FIRE PROTECTION ASSOC	
DDC DIRECT EVAPORATIVE COOLING	NG NATURAL GAS	
DG DOOR GRILLE	NO NORMALLY OPEN	
DIA DIAMETER	NO NUMBER	
DISCH DISCHARGE	NSN NET POSITIVE SUCTION HEAD	
DIV DIVISION	OA OUTSIDE AIR	
DIV 21 FIRE PROTECTION WORK	OD OUTSIDE DIAMETER	
DIV 22 PLUMBING WORK	OP OVERHAUL PROTECTION	
DIV 23 HVAC WORK	OP OVERLOAD PROTECTION	
DIV 26 ELECTRICAL WORK	ORHIT OPERATING HEIGHT	
DN DOWN	OPNG OPENING	
DP DIFFERENTIAL PRESSURE	OS CODE	
DR DRAIN	P PUMP	
DS DUCT SILENCER	PC PLUMBING CONTRACTOR	
EA EXHAUST AIR	PC PLUMBING CONDENSATE	
EAT ENTERING AIR TEMPERATURE	PD PRESSURE DROP	
EBB ELECTRIC BASE BOARD	PH PHASE	
EC ELECTRICAL CONTRACTOR	POC POINT OF CONNECTION	
ECH EACH	PRESS PRESSURE	
EDB ELECTRIC DUCT HEATER	PRV POWER ROOF VENTILATOR	
EER ENERGY EFFICIENCY RATIO	PRV PRESSURE REDUCING VALVE	
EF EXHAUST FAN	PRV PRESSURE RELIEF VALVE	
EFF EFFICIENCY	PSI POUNDS PER SQUARE INCH	
EG EXHAUST GRILLE	PSG POUNDS PER SQUARE GAGE	
EG ETHERING GLAZED	PTAC PACKAGED TERMINAL AIR CONDITION UNIT	
EL ELEVATION	PVC POLYVINYLCHLORIDE	
ELEC ELECTRICAL	QTY QUANTITY	
ENTH ENTHALPY	RA RETURN AIR	
EQUIP EQUIPMENT	RB REHEAT COIL	
ESP EXTERNAL STATIC PRESSURE	REB REFRIGERANT DISCHARGE PIPING	
ET EXPANSION TANK	REB RETURN EXHAUST FAN	
EU ENTERING UNIT HEATER	REQ REQUIRED	
EWAP EVAPORATIVE	RF RETURN GRILLE	
DWH ELECTRIC WALL HEATER	RL RELATIVE HUMIDITY	
EWT ENTERING WATER TEMPERATURE	RL REFRIGERANT LIQUID LINE	
EXST EXISTING	RL RUNNING LOAD AMPS	
F FILTER OR FINANCE	RS RESOLUTIONS PER MINUTE	
FA FACE AREA	RS REFRIGERANT SUCTION PIPING	
FCU FAN COIL UNIT	RTU ROOFTOP UNIT	
FD FIRE DAMPER	SA SUPPLY AIR	
FLA FULL LOAD AMPS	SAT SATURATED	
FLEX FLEXIBLE	SB SECURITY BARRIER	
FOR FUEL OIL RETURN	SFM CFM STANDARD CONDITIONS	
FOB FUEL OIL SUPPLY	SEC SECURITY GRILLE	
FOD FUEL OIL VENT	SEC SEASONAL ENERGY EFFICIENCY RATIO	
FRN FEET PER MINUTE	SER SUPPLY FAN	
FS FLOW SWITCH	SD COMBINATION SMOKE/FIRE DAMPER	
FT FEET	SG SUPPLY GRILLE	
FTR FINED TUBE RADIATION	SP STATIC PRESSURE	
FV FACE VELOCITY	SPC SPECIFICATION	
GA GAUGE	SQ FT SQUARE FEET	
GAL GALLON	SS STAINLESS STEEL	
GBD GRAVITY BACKDRAFT DAMPER	SST SATURATED SUCTION TEMPERATURE	
GC GENERAL CONTRACTOR		
GS GALLONS PER MINUTE		
GPM		

**PIPING SYMBOL SCHEDULE**

	GLOBE VALVE - NON RISING STEM
	GLOBE VALVE, ANGLE
	GLOBE VALVE
	BUTTERFLY VALVE
	BALL VALVE
	BALANCE VALVE, CALIBRATED
	CHECK VALVE
	UNDERCUT DOOR
	UNIT HEATER
	UNIT MANUFACTURER
	UNIT MANUFACTURER, UNLESS OTHERWISE NOTED
	UNIT VENTILATOR
	ULTRA ULTRAM
	VARIABLE AIR VOLUME
	VARIABLE-FREQUENCY DRIVE
	CONTROL VALVE, 2-WAY - MODULATING
	CONTROL VALVE, 3-WAY - MODULATING
	PRESSURE REDUCING VALVE
	RELIEF OR SAFETY VALVE
	RISING STEM GATE VALVE
	AIR VENT, MANUAL
	STRAINER
	PRESSURE/TEMPERATURE PLUG
	EMERGENCY SHUT-OFF VALVE
	FLEXIBLE CONNECTOR
	PIPE GUIDE
	PIPE ANCHOR
	TEE, TOP TAKEOFF
	TEE, BOTTOM TAKEOFF
	ELBOW, UP
	ELBOW, DOWN
	PIPE RISE(R) OR DROP(D) IN DIRECTION OF FLOW
	PIPE CAP
	PIPE UNION
	PRESSURE GAUGE WITH 1/4" PIPING AND GAUGE COCKS
	THERMOMETER
	PRESSURE, DIFFERENTIAL PRESSURE SENSOR
	POINT OF CONNECTION - NEW / DEMO
	CONSTANT FLOW REGULATOR
	DRAIN PIPING
	HEATING WATER SUPPLY PIPING
	HEATING WATER RETURN PIPING
	CHILLED WATER SUPPLY PIPING
	CHILLED WATER RETURN PIPING
	CONDENSER WATER SUPPLY PIPING
	CONDENSER WATER RETURN PIPING
	HIGH PRESSURE STEAM PIPING
	HIGH PRESSURE STEAM CONDENSATE PIPING
	LOW PRESSURE STEAM PIPING
	LOW PRESSURE STEAM CONDENSATE PIPING
	GAS PIPING
	REFRIGERANT DISCHARGE PIPING
	REFRIGERANT SUCTION PIPING
	REFRIGERANT LIQUID PIPING
	REFRIGERANT HOT GAS PIPING
	FUEL OIL SUPPLY PIPING
	FUEL OIL RETURN PIPING
	FUEL OIL VENT PIPING
	PUMPED CONDENSATE PIPING
	MAKE-UP WATER PIPING
	PIPING AND PIPE EQUIPMENT TO BE REMOVED
	VENTURI FLOW METER
	FLOW DIRECTION
	CAP CONNECTION
	STEAM TRAP

**DUCTWORK SYMBOL SCHEDULE**

	MANUAL VOLUME DAMPER (MVD)
	DUCT ACCESS PANEL (DAP)
	ELBOW WITH HIGH EFFICIENCY TURNING VANES
	FLEXIBLE DUCT CONNECTION
	ROUND DUCT
	SUPPLY/OUTSIDE AIR DUCT
	RETURN DUCT
	EXHAUST RELIEF AIR DUCT
	RISE (R) OR DROP (D) IN DIRECTION OF FLOW
	MOTORIZED CONTROL DAMPER WITH ACCESS DOOR
	GRAVITY BACKDRAFT DAMPER WITH ACCESS DOOR
	RECTANGULAR-TO-ROUND TRANSITION
	DUCT CAP
	EQUIPMENT TAG
<p>EXAMPLE: CD-1 TAG SIZE CFM</p>	GRILLE, REGISTER, OR DIFFUSER TAG
	CONTROL THERMOSTAT, HUMIDISTAT
	SENSOR, TEMPERATURE, HUMIDITY, OCCUPANCY
	DUCT STATIC PRESSURE SENSOR
	SMOKE DETECTOR
	MOTOR CONTROL
	FIRE DAMPER (1 1/2 HR) UON
	SMOKE DAMPER
	COMBINATION FIRE-SMOKE DAMPER
	DUCT MOUNTED TEMPERATURE SENSOR
	OVAL SIZES
	DUCT MOUNTED SECURITY BARRIER
	AIRFLOW DIRECTION
	1" UNDER CUT DOOR (BY DIV 8)
	STARTER
	DUCTWORK WITH ACOUSTICAL LINING

**SHEET INDEX - MECHANICAL**

M000 MECHANICAL COVER SHEET
M001 MECHANICAL SCHEDULES
M100 MECHANICAL FIRST FLOOR PLAN
M101 MECHANICAL MEZZANINE PLAN
M200 MECHANICAL DETAILS

**CITY OF MADISON**

**DOOR CREEK PARK SHELTER**

MADISON, WI 53703

**MECHANICAL COVER SHEET**

CONSTRUCTION DOCUMENTS	
Project number	MSN-20-01
Date	10/31/2022

**M000**

DIFFUSERS, REGISTERS, AND GRILLES									
TAG	SERVICE	CFM/RANGE	NECK SIZE (IN)	FACE SIZE (IN)	FACE TYPE	PATTERN	MATERIAL	MOUNTING SURFACE	REMARKS
S-1	SUPPLY AIR	0-125	6	12x12	PLAQUE	4-WAY	ALUMINUM	CEILING	ALL
S-2	SUPPLY AIR	0-250	N/A	12x6	LOUVERED	HORIZONTAL	ALUMINUM	DUCT	ALL
S-3	SUPPLY AIR	0-600	N/A	24x18	LOUVERED	HORIZONTAL	ALUMINUM	DUCT	ALL
S-4	SUPPLY AIR	0-200	N/A	12x6	LOUVERED	HORIZONTAL	ALUMINUM	DUCT	ALL
R-1	RETURN AIR	0-125	6	12x12	PERFORATED	-	ALUMINUM	CEILING	ALL
R-2	RETURN AIR	400-700	18x14	20x16	LOUVERED	HORIZONTAL	ALUMINUM	WALL	ALL
E-1	EXHAUST AIR	0-125	6	12x12	PERFORATED	-	ALUMINUM	CEILING	ALL
E-1	SUPPLY AIR	50-250	8	12x12	PERFORATED	-	ALUMINUM	CEILING	ALL
E-2	EXHAUST AIR	0-250	N/A	12x6	LOUVERED	HORIZONTAL	ALUMINUM	DUCT	ALL
E-3	EXHAUST AIR	0-250	N/A	12x10	LOUVERED	HORIZONTAL	ALUMINUM	DUCT	ALL

**REMARKS:**

- ALL GRILLES AND DIFFUSERS SHALL NOT EXCEED NOISE CRITERIA NC-25 AND A MAXIMUM OF 0.1 INCH WG STATIC PRESSURE DROP.
- BORDER TYPES SHALL BE COMPATIBLE WITH CEILING TYPES WHERE AIR DEVICE IS LOCATED. REFER TO ARCHITECTURAL PLANS AND ALL OTHER TRADES.
- SEE PLANS FOR LOCATION AND AIR QUANTITIES OF EACH DEVICE.
- REFER TO SPECIFICATIONS FOR ACCEPTABLE MODEL AND ADDITIONAL REQUIREMENTS.
- EACH SUPPLY, RETURN, EXHAUST DEVICE TO HAVE A DAMPER IN EACH BRANCH TAKE-OFF. PRIOR APPROVAL BY ENGINEER TO USE OPPOSED BLADE DAMPER (OBD) IN AIR DEVICE.
- BASED ON TITUS PRODUCTS. REFER TO MANUFACTURER FOR SIZING REQUIREMENTS.
- ALL SUPPLY DIFFUSERS LOCATED IN SOLID CEILINGS SHALL HAVE INCLUDED BALANCING DAMPER OPERABLE FROM THE FACE OF THE AIR TERMINAL. SEE FLOOR PLANS FOR DETAILS.

FAN SCHEDULE																									
MARK	LOCATION	SERVICE	DESCRIPTION MODEL #	FAN DATA				FAN PERFORMANCE				ELECTRICAL													
				DRIVE TYPE	FAN TYPE AT 30°C	OUTLET VELOCITY (FPM)	CFM	STATIC P (IN WG)	PPM	HP	VOLTS	PHASE	FLA	60	125	250	500	1000	2000	4000	8000	Leq	dBa	ONES	NOTES
E-1	SERVICE KITCHEN	SERVICE KITCHEN FAMILY RESTROOM	GREENHEX G-66-D	DIRECT	B	510	320	0.37	1300	1/25	115	1	N/A	67	68	64	57	53	52	50	44	61	50	58	1.3
E-2	MEZZANINE	AHU RELIEF	GREENHEX SD-16-M4-VG	DIRECT	B	1000	4000	0.75	1435	2	208	3	6.5	68	79	71	69	70	69	68	67	78	64	14.6	1.2
E-1	MEZZANINE	AHU INTAKE	GREENHEX SD-16-M4-VG	DIRECT	B	1000	4000	0.75	1435	2	208	3	6.5	68	79	71	69	70	69	68	67	78	64	14.6	1.2

**NOTES:**

- UNIT TO BE PROVIDED WITH LOCAL DISCONNECT SWITCH. BAS CONTRACTOR RESPONSIBLE FOR CONNECTION OF UNIT TO BAS.
- UNIT TO BE INTERLOCKED WITH ECONOMIZER OPERATION OF AHU'S WHEN UNITS ARE IN 100% OUTSIDE AIR OPERATION.
- UNIT TO BE INTERLOCKED WITH OPERATION OF AHU-1 AND AHU-2.

LOUVER SCHEDULE											
PLAN MARK (L-1)	LOCATION	SERVICE	TYPE	AIRFLOW (CFM)	MIN. FREE AREA (SQ. FT.)	MAX. PRESS. DROP (IN. W.C.)	MAX. FACE VELOCITY (FPM)	WIDTH (IN.)	HEIGHT (IN.)	DEPTH (IN.)	REMARKS
L-1	WEST WALL	FRESH AIR INTAKE	STATIONARY	4000	6.3	0.06	620	60	30	6	ALL
L-2	WEST WALL	EXHAUST AIR	STATIONARY	4000	6.3	0.06	620	60	30	6	ALL
L-2	SOUTH EAST WALL	SERVICE KITCHEN & FAMILY RESTROOM EXHAUST	STATIONARY	325	0.6	0.04	570	16	16	6	ALL

**REMARKS:**

- 800 UNIT IS GREENHEX ESD 635

ELECTRIC UNIT HEATER SCHEDULE												
PLAN MARK	LOCATION	MANUFACTURER	MODEL	MOUNTING STYLE	PHYSICAL SIZE (IN.)	CAPACITY (MBH)	FLOW (CFM)	SIZE (RW)	VOLT.	PHASE	dBa	NOTES
EUH-1	VESTIBULE	REZNOR	EMC-2	WALL	28L x 28H x 10D	6625	250	2	208/240	1	51	ALL
EUH-2	FAMILY RESTROOM	REZNOR	EMC-2	CEILING MOUNTED	28L x 28H x 10D	6625	250	2	208/240	1	51	ALL
EUH-3	GARAGE	REZNOR	EGW-2	CEILING HUNG	12L x 12.5H x 10.5D	5118	300	1.5	208/240	1	51	ALL

**REMARKS:**

- PROVIDE UNIT WITH INTEGRAL DISCONNECT AND INTEGRAL THERMOSTAT.
- REFERENCE ARCHITECTURAL DRAWINGS FOR ALL COLOR FINISH SELECTIONS.
- COORDINATE WITH ELECTRICAL CONTRACTOR FOR LOCATION AND ELECTRICAL REQUIREMENTS.

ENERGY RECOVERY VENTILATOR SCHEDULE	
PLAN MARK	ERV-1
LOCATION	MEZZANINE
TYPE	STATIC PLATE
MEDIA TYPE	
APPROX. UNIT OPERATING WEIGHT (LBS)	934
SUPPLY AIRFLOW (CFM)	2000
EXHAUST AIRFLOW (CFM)	2000
D.A.T. DB (WB) (F)	56/7.5
R.A.T. DB (WB) (F)	75/18.5
L.A.T. DB (WB) (F)	80.5/48.8
SENSIBLE EFFECTIVENESS (%)	72.5
TOTAL EFFECTIVENESS (%)	53.3
MOISTURE REMOVED (GRAINS/LB)	12.4
DESIGN A.P.D. (IN. W.C.)	0.4
SUPPLY AIRFLOW (CFM)	2000
EXHAUST AIRFLOW (CFM)	2000
D.A.T. DB (WB) (F)	-10/-11
R.A.T. DB (WB) (F)	49/48.4
L.A.T. DB (WB) (F)	48.5/35.8
SENSIBLE EFFECTIVENESS (%)	72.5
TOTAL EFFECTIVENESS (%)	72
MOISTURE REMOVED (GRAINS/LB)	-13.2
DESIGN A.P.D. (IN. W.C.)	0.4
AIRFLOW (CFM)	2000
EXT. STATIC PRESSURE (IN. W.C.)	0.4
BRAKE HORSEPOWER (HP)	0.75
HORSEPOWER (HP)	2
AIRFLOW (CFM)	2000
EXT. STATIC PRESSURE (IN. W.C.)	0.4
BRAKE HORSEPOWER (HP)	0.71
HORSEPOWER (HP)	2
VOLTS / PHASE / HERTZ	120 / 1 / 60
UNIT FLA	40
UNIT MCA	45
UNIT MOCF (AMPS)	60

**REMARKS:**

**REMARKS:**

- UNIT TO BE PROVIDED WITH MOTORIZED DAMPERS IN BOTH AIRSTREAMS
- UNIT TO BE PROVIDED WITH LOCAL DISCONNECT SWITCH
- UNIT BASED ON RENEWABLE HE-EXJMH-S11V-DIANT-L
- UNIT TO BE PROVIDED WITH MERV 8 FILTERS PER MANUFACTURER RECOMMENDATION
- UNIT TO BE CONNECTED TO BAS SYSTEM
- UNIT TO BE PROVIDED WITH RENEWABLE PREMIUM CONTROLS OR MANUFACTURER EQUIVALENT

No.	Description	Date

**CITY OF MADISON**

**DOOR CREEK PARK SHELTER**

MADISON, WI 53703

**MECHANICAL SCHEDULES**

CONSTRUCTION DOCUMENTS  
 Project number: MSN-20-01  
 Date: 10/31/2022

**M001**

AIR HANDLING UNIT SCHEDULE																												
MARK	LOCATION	SERIES	MANUFACTURER	MODEL NO	SUPPLY FAN				OUTSIDE AIR CFM	HEAT PUMP COOLING					ELECTRIC HEATER KIT	WEIGHT		NOTES										
					QTY	DESIGN TOTAL CFM	TOTAL SP.	FAN RPM		FAN HP	FILTERS	NORMAL HIGH	EXT. (DBWB)	INT. (LAT) (DBWB)		COL. FACE VELOCITY (FPM)	REFRIGERANT TYPE		ROWS	FIR	MODEL NO	CAPACITY (MBH)	VOLT	PH	MCA	MOP	VOLT	PH
AHU-1	MEZZANINE	ENTIRE SHELTER	DAIKIN	D161P2C14	1	2000	0.8	N/A	1	SEE NOTE 13 BELOW	MERV 14	60.0	79.7/86.8	36.5/34.3	48	R-410A	-	-	HS3C208	85	240	1	8	15	208	1	168	ALL
AHU-2	MEZZANINE	ENTIRE SHELTER	DAIKIN	D161P2C14	1	2000	0.8	N/A	1	SEE NOTE 13 BELOW	MERV 14	60.0	79.7/86.8	36.5/34.3	48	R-410A	-	-	HS3C208	85	240	1	8	15	208	1	168	ALL

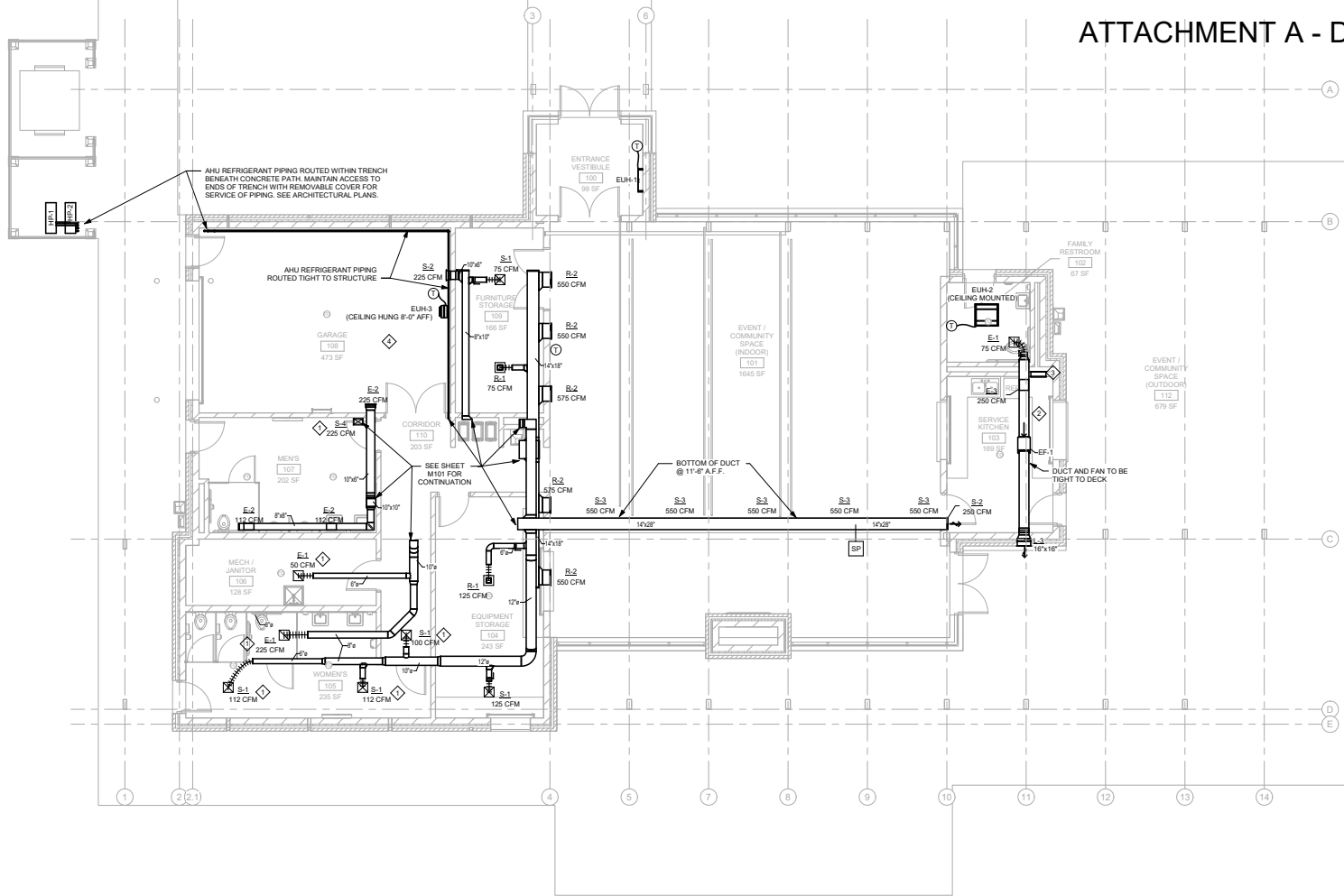
**NOTES:**

- EQ TO PROVIDE SMOKE DETECTOR FOR SUPPLY AIR. MC SHALL LOCATE AND INSTALL THE SMOKE DETECTOR IN THE SUPPLY DUCTWORK AS NOTED ON PLANS. SMOKE DETECTOR SHALL SHUT DOWN UNIT AND SEND SIGNAL TO BAS AND FIRE ALARM SYSTEM. COORDINATE WITH ELECTRICAL CONTRACTOR.
- MAX FACE VELOCITY ON COOLING COIL SHALL BE NO GREATER THAN 500 FPM. AHU SUPPLIER TO PROVIDE DOCUMENTATION THAT MOISTURE CARRY OVER OUT OF THE COOLING COIL WILL NOT OCCUR BASED ON THE SCHEDULED VELOCITIES.
- PROVIDE UNIT WITH ELECTRICAL SERVICE / CONVENIENCE OUTLET.
- CEILING MOUNTED SUPPLY FAN SHALL INCLUDE A FACTORY INSTALLED POINT-TO-POINT WIRE WITHIN THE CONTROL COMPARTMENT FOR CFM SETPOINT. THE FACTORY PROVIDED TERMINAL BLOCK SHALL INCLUDE A JUMPER WIRE THAT CAN BE REMOVED WHEN WIRED TO FLED PROVIDED 1-0 VCC CONTROL SIGNAL.
- PROVIDE AHU WITH SPR. BLOW-AIR-CONDITION UNIT PER AHU MANUFACTURER'S RECOMMENDATION.
- ALL ASSOCIATED AHU GRAPHICS TO BE UPDATED TO EXISTING BAS.
- PROVIDE MODULATING SUPPLY FAN FOR SYSTEM BALANCING.
- PROVIDE 4" MERV 13 FILTER IN ADDITION TO A 2" MERV 8 FILTER (DIRTY FILTER PRESSURE DROP ACCOUNTED FOR IN ESP).
- PROVIDE A STAINLESS STEEL DRAIN PAN FOR COOLING COIL.
- UNIT MANUFACTURER TO PROVIDE DISCONNECT FOR SUPPLY FAN INSIDE THE AHU HOUSING.
- PROVIDE 4" MERV 13 FILTER IN ADDITION TO A 2" MERV 8 FILTER (DIRTY FILTER PRESSURE DROP ACCOUNTED FOR IN ESP).
- MC RESPONSIBLE TO VERIFY THAT FINAL INSTALLATION LOCATION AND ORIENTATION OF UNIT PROVIDES SUFFICIENT SPACE TO THE ACCESS DOORS OF THE UNIT.
- THE MINIMUM AND MAXIMUM OUTSIDE AIR REQUIREMENTS FOR AHU IN ECONOMIZER AND NON-ECONOMIZER MODE WILL BE SPECIFIED IN SPECIFICATION 21.09.93 SEQUENCE OF OPERATION.

HEAT PUMP SCHEDULE												
PLAN MARK (ACCJ-)	LOCATION	SERIES	MANUFACTURER	MODEL NO	COOLING OPERATION		HEATING OPERATION		MAX PIPE LENGTH (FT.)	COMPRESSOR TYPE	NUMBER OF COMPRESSORS	REMARKS
					CAPACITY (MBH)	AMBIENT TEMP. (F)	CAPACITY (MBH)	AMBIENT TEMP. (F)				
HP-1	FENCED AREA AT NORTHWEST CORNER	AHU-1	DAIKIN	DZ17VSA618A	54	0 - 115	54	-10 - 70	100	INVERTER / SWING	1	8.3
HP-2	FENCED AREA AT NORTHWEST CORNER	AHU-1	DAIKIN	DZ17VSA618A	54	0 - 115	54	-10 - 70	100	INVERTER / SWING	1	8.3

**REMARKS:**

- ALL UNITS SHALL HAVE LOW AMBIENT CONTROLS DOWN TO -10 DEGREES F.
- UNITS BASED ON DAIKIN FIT SERIES
- LOCATE UNIT IN FENCED AREA AT NORTHWEST CORNER OF BUILDING. MAINTAIN ALL MANUFACTURER RECOMMENDED CLEARANCES AROUND UNIT.
- REFRIGERANT PIPING TO BE ROUTED IN CONDUIT BENEATH CONCRETE WALKWAY. SEE ARCHITECTURAL PLANS FOR DETAILS.



NORTH  
**1 MECHANICAL FIRST FLOOR PLAN**  
3/16" = 1'-0"

- KEYED NOTES:**
- ◇ ALL GRILLES, REGISTERS, AND DIFFUSERS THAT ARE LOCATED IN AN AREA WITH SOLID CEILINGS ARE TO HAVE BUILT IN VOLUME BALANCING DAMPERS ACCESSIBLE FROM THE DEVICE FACE.
  - ◇ EXPOSED DUCTWORK AND INLINE EXHAUST FAN TO BE PAINTED. REFERENCE ARCHITECTURAL DRAWINGS FOR COLOR FINISH SELECTIONS.
  - ◇ 12x8 TRANSFER GRILLE MOUNTED 9'-0" AFF TO VENTILATE PLUMBING CHASE.
  - ◇ GARAGE SPACE IS 1 HOUR FIRE RATED. SEAL ALL PENETRATIONS THROUGH FIRE WALL WITH APPROVED FIRE BARRIER CAULK.

No.	Description	Date

CITY OF MADISON

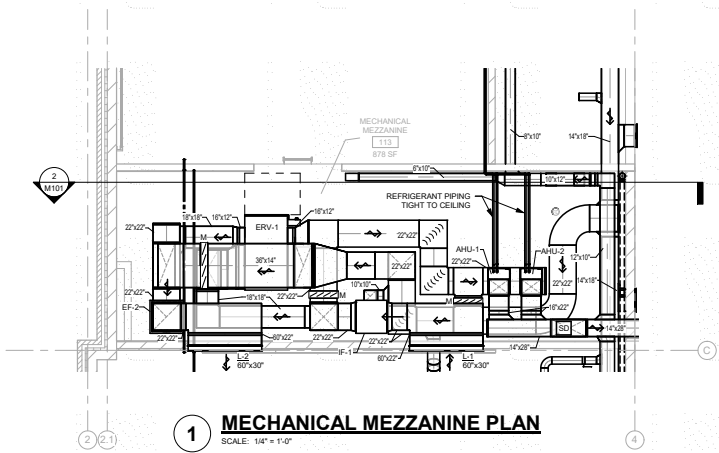
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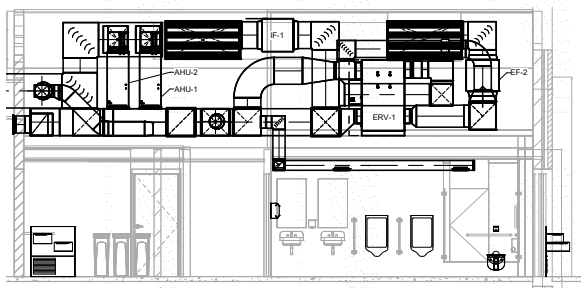
**MECHANICAL FIRST FLOOR PLAN**

CONSTRUCTION DOCUMENTS  
Project number: MSN-20-01  
Date: 10/31/2022

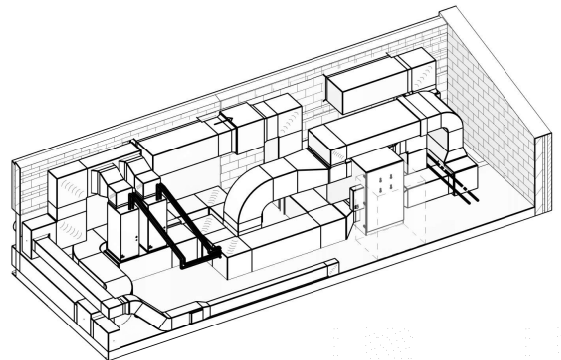
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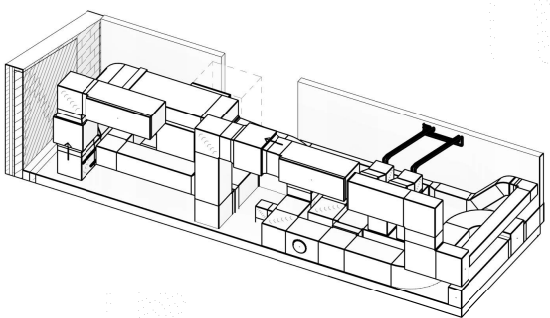
**1 MECHANICAL MEZZANINE PLAN**  
SCALE: 1/4" = 1'-0"



**2 SECTION - MEZZANINE SOUTH**  
SCALE: 1/4" = 1'-0"



**3 MECHANICAL MEZZANINE ISOMETRIC 1**  
SCALE:



**4 MECHANICAL MEZZANINE ISOMETRIC 2**  
SCALE:

No.	Description	Date

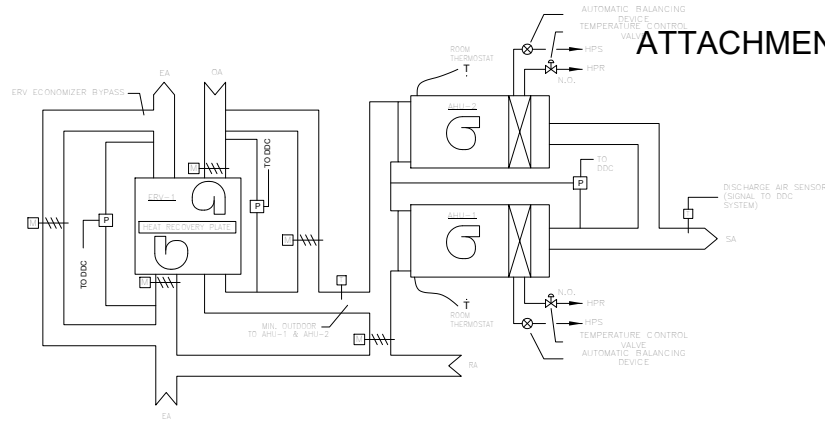
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MECHANICAL MEZZANINE PLAN





**AHU WITH HEAT PUMP AND ENERGY RECOVERY CONTROL SEQUENCE:**  
 OCCUPIED AND UNOCCUPIED MODES SHALL BE DEFINED BY THE DDC SYSTEM. DURING OCCUPIED MODE, THE HEAT PUMP FAN AND ENERGY RECOVERY FANS SHALL RUN CONTINUOUS. DURING UNOCCUPIED MODE, THE ENERGY RECOVERY UNIT SHUTS DOWN AND THE HEAT PUMP FAN AND HEAT PUMP SHALL CYCLE ON A CALL FOR HEATING OR COOLING. SPACE TEMPERATURE SHALL BE BETWEEN 70 & 75 DEGREES F. (ADJ) (OCCUPIED) & BETWEEN 60 & 80 DEGREES F. (ADJ) (UNOCCUPIED.) ALL DAMPERS ARE PROVIDED BY THE UNIT MANUFACTURER.

THE HEAT PUMP AND ENERGY RECOVERY UNIT TO HAVE PACKAGED OPERATING AND SAFETY AUTOMATIC CONTROL FURNISHED BY THE UNIT MANUFACTURER. UNIT TO HAVE AUTOMATIC CONTROL TO SWITCH FROM HEATING TO COOLING MODES. FLOW SWITCHES ARE FURNISHED WITH THE HEAT PUMP AND ARE FACTORY WIRED.

WALL MOUNTED THERMOSTAT (BY CONTROLS CONTRACTOR) SHALL CONTROL HEAT PUMP TO MAINTAIN SPACE TEMPERATURE SET POINTS (ADJUSTABLE). THE HEAT PUMP SHALL HAVE INDEPENDENT SET POINTS CONTROLLED BY THE DDC SYSTEM.

CONTROL VALVE SHALL OPEN TO PROVIDE WATER FLOW THROUGH THE HEAT PUMP WHEN THE SYSTEM IS IN OPERATION. CONSTANT FLOW TO BE CONTROLLED BY AUTOMATIC BALANCING VALVE.

HEAT PUMP TO HAVE FACTORY INSTALLED FAULT ALARMS. PROVIDE A SIGNAL TO THE DDC SYSTEM.

ECONOMIZER: UTILIZE OUTSIDE AIR IN COMBINATION WITH RETURN AIR TO MINIMIZE ENERGY REQUIRED FOR COOLING AND DEHUMIDIFYING AS MONITORED BY THE DDC SYSTEM OUTSIDE AIR TEMPERATURE SENSOR AND THE ROOM TEMPERATURE. UNDER NORMAL OPERATION, THE RELIEF AIR DAMPER TO BE FULLY CLOSED, THE RETURN AIR DAMPER TO BE OPEN AND THE OUTSIDE AIR DAMPER TO BE OPEN AT ITS MINIMUM OUTDOOR AIR POSITION. WHEN THE OUTSIDE AIR TEMPERATURE DROPS BELOW 55° (ADJ), MODULATE THE OUTSIDE AIR AND RETURN AIR DAMPERS TO MAINTAIN SPACE TEMPERATURE AND THE RELIEF AIR DAMPER SHALL OPEN.

IN A FIRE ALARM CONDITION ALL EQUIPMENT SHALL BE DEENERGIZED AND DAMPERS SHALL BE FULLY CLOSED.

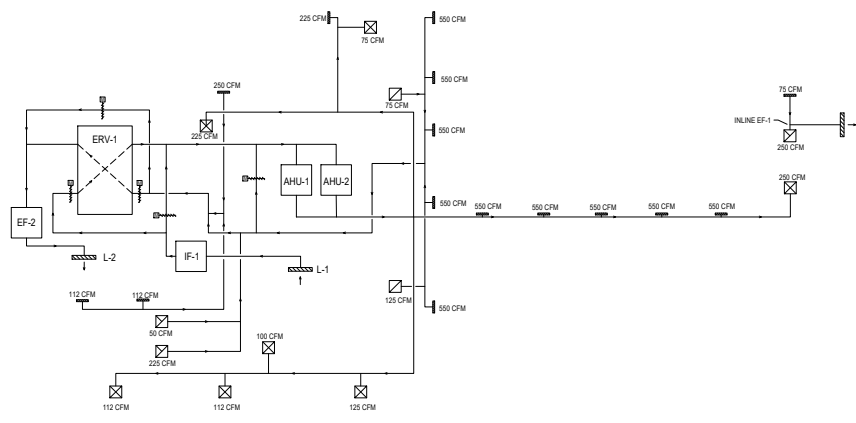
FAN STATUS: DURING OCCUPIED MODE, INITIATE ALARM THROUGH THE DDC USER INTERFACE IF FAN FAILS TO MAINTAIN A MINIMUM FLOW WHEN ENERGIZED.

IN THE ENERGY RECOVERY UNIT, FACTORY MOUNTED TEMPERATURE SENSOR ON THE DISCHARGE AIR SHALL VARY THE WHEEL SPEED IN ORDER TO MAINTAIN REQUIRED DISCHARGE AIR TEMPERATURE.

PROVIDE ENERGY RECOVERY UNIT WITH FACTORY SUPPLIED, FIELD INSTALLED FROST CONTROL VALVE.

ENERGY RECOVERY UNIT TO BE ENABLED BY PARALLEL RELAYS FROM EACH AHU/STAT

**1 CONTROL SEQUENCE - AHU WITH HEAT PUMP AND ENERGY RECOVERY UNIT**  
 SCALE: 1/8" = 1'-0"



**2 ONE LINE AIRFLOW DIAGRAM**  
 SCALE: 1/8" = 1'-0"

No.	Description	Date

CITY OF MADISON  
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 MADISON, WI 53703  
 MECHANICAL DETAILS



# ATTACHMENT A - DOOR CREEK PARK SHELTER



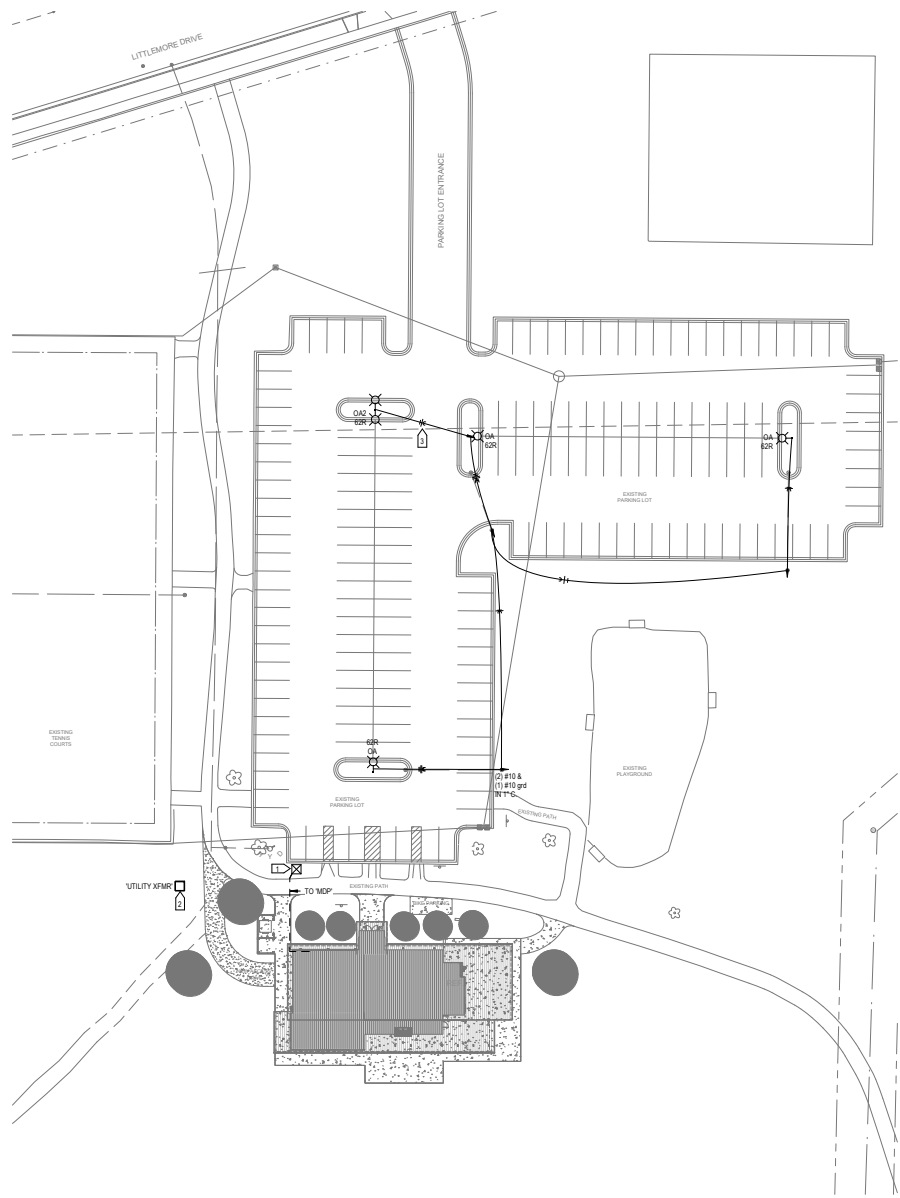
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- GENERAL NOTES:**
1. ALL ELECTRICAL INSTALLMENT IN A PARKING LOT AND DRIVEWAY SHALL BE UNDERGROUND EXCEPT FOR LIGHT FIXTURES.
  2. UNDERGROUND ELECTRICAL LINES SHALL MAINTAIN ADEQUATE SEPARATION FROM OTHER UNDERGROUND UTILITIES. FIELD COORDINATE UNDERGROUND ELECTRICAL LINES WITH OTHER TRADES.
  3. REFER TO DETAIL 3E700 FOR POLE HEIGHT DETAIL.
  4. REFER TO DETAIL 4E700 FOR POLE BASE DETAIL.

- REFERENCE NOTES:** <E>
1. A 20"x12"x12" QUARTZ UNDERGROUND ENCLOSURE OR EQUIVALENT SHALL BE INSTALLED FOR POTENTIAL FUTURE ELECTRIC VEHICLE CHARGING STATION. (2) 2" CONDUITS SHALL BE RUN FROM QUARTZ BOX AND TERMINATE AT MEP PANEL.
  2. MAINTAIN A MINIMUM SEPARATION OF 6" BETWEEN UTILITY XFMTR AND ACCESS DRIVE PAVEMENT. FINAL LOCATION OF UTILITY XFMTR SHALL BE COORDINATED WITH UTILITY COMPANY.
  3. PARKING LOT LIGHTING CIRCUITS SHALL UTILIZE EXISTING UNDERGROUND RACEWAYS IN PARKING LOT. FIELD VERIFY EXISTENCE OF EXISTING RACEWAY FOR FIXTURE '04Z' AND CONFIRM CIRCUIT PATH WITH ARCHITECT.



No.	Description	Date
1	Review Set	Date 2

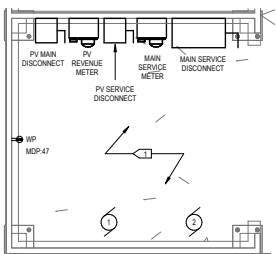
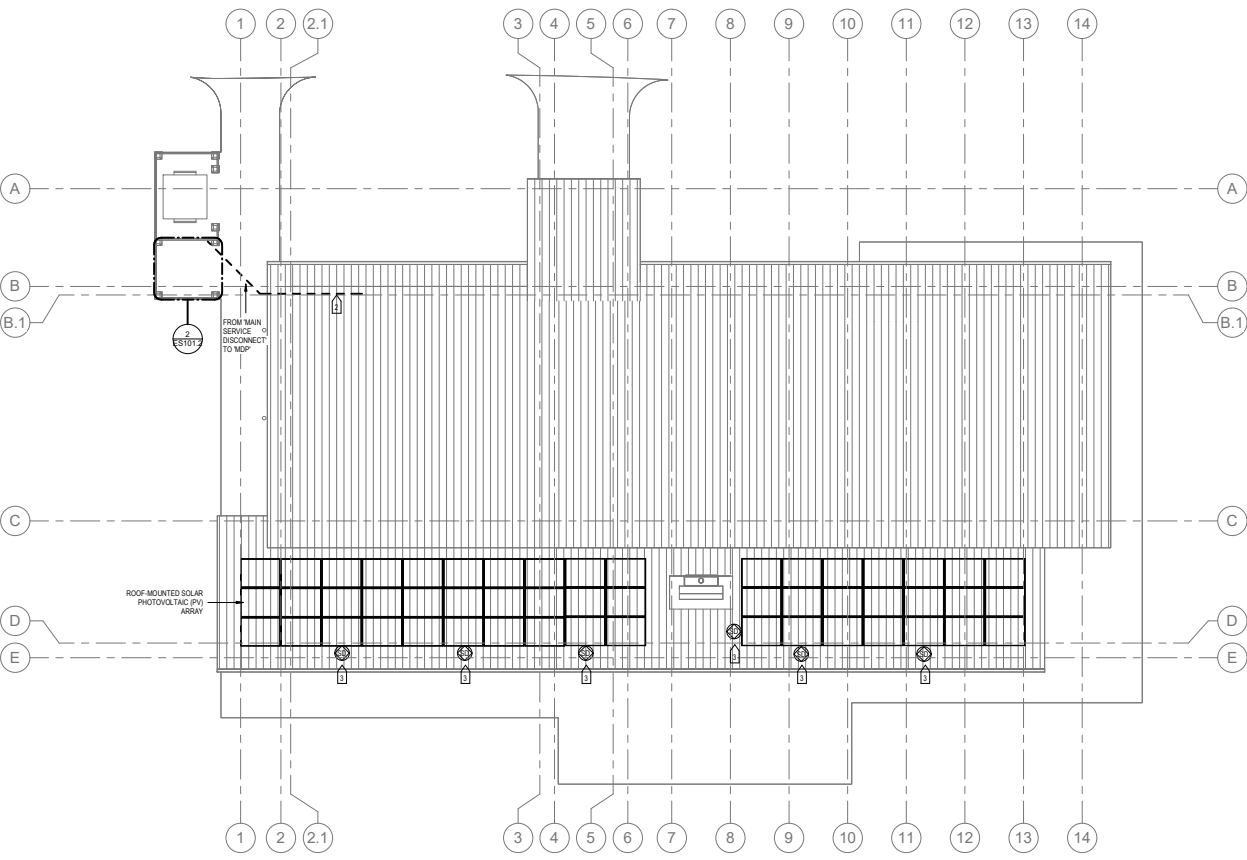
CITY OF MADISON  
  
DOOR CREEK PARK SHELTER  
  
MADISON, WI 53703  
OVERALL SITE PLAN - ELECTRICAL

CONSTRUCTION DOCUMENTS  
Project number: MSN-20-01  
Date: 10/31/2022

ES101.1

**1 OVERALL SITE PLAN - ELECTRICAL**  
1" = 30'-0"

- REFERENCE NOTES:** ◀
1. METER CENTER ENCLOSURE SHALL BE ACCESSIBLE FOR UTILITY COMPANY AND FIRST RESPONDERS.
  2. SERVICE ENTRANCE CONDUCTOR RACEWAY INDICATED BY DASHED LINE SHALL BE SCHEDULE 80 RIGID PVC BURED 2" UNDERGROUND PER NEC REQUIREMENTS. REFER TO DETAIL 61670 FOR TRENCH DETAIL.
  3. PROVIDE LABELING FOR EACH DC STRING DISCONNECT SWITCH AS REQUIRED BY THE NATIONAL ELECTRICAL CODE ARTICLE 690: FIELD COORDINATE FINAL LOCATION OF DISCONNECT SWITCH.



**2 EXTERIOR ENCLOSURE**  
1/2" = 1'-0"

**1 ENLARGED SITE PLAN - ELECTRICAL**  
1/8" = 1'-0"

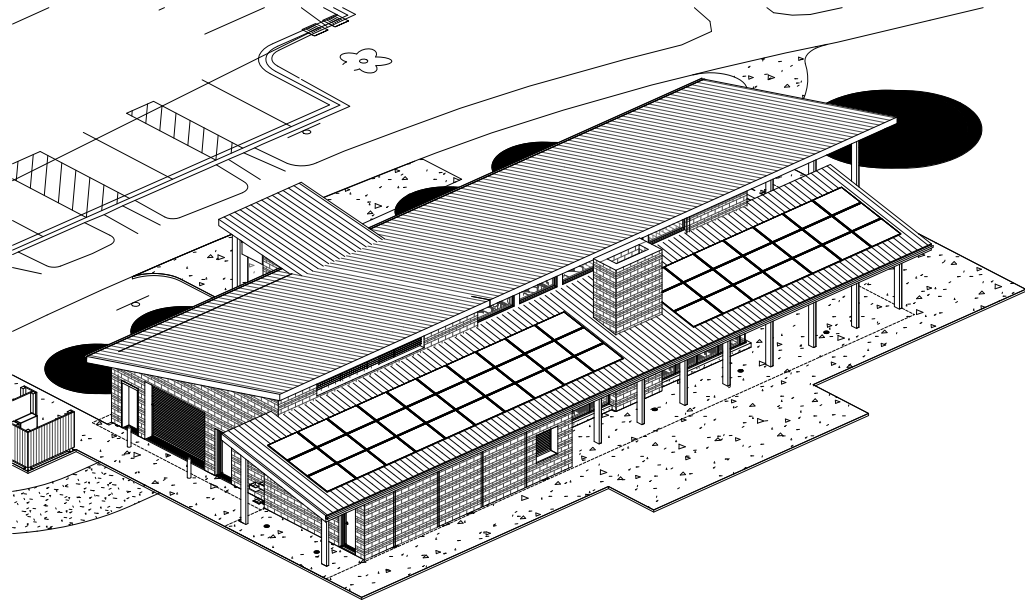
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CITY OF MADISON

DOOR CREEK PARK SHELTER

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ENLARGED SITE PLAN - ELECTRICAL



1 3D SITE PLAN - SOLAR

No.	Description	Date
1	Review Set	Date 2

CITY OF MADISON

DOOR CREEK PARK SHELTER

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3D SITE PLAN - SOLAR

CONSTRUCTION DOCUMENTS  
 Project number MSN-20-01  
 Date 10/31/2022

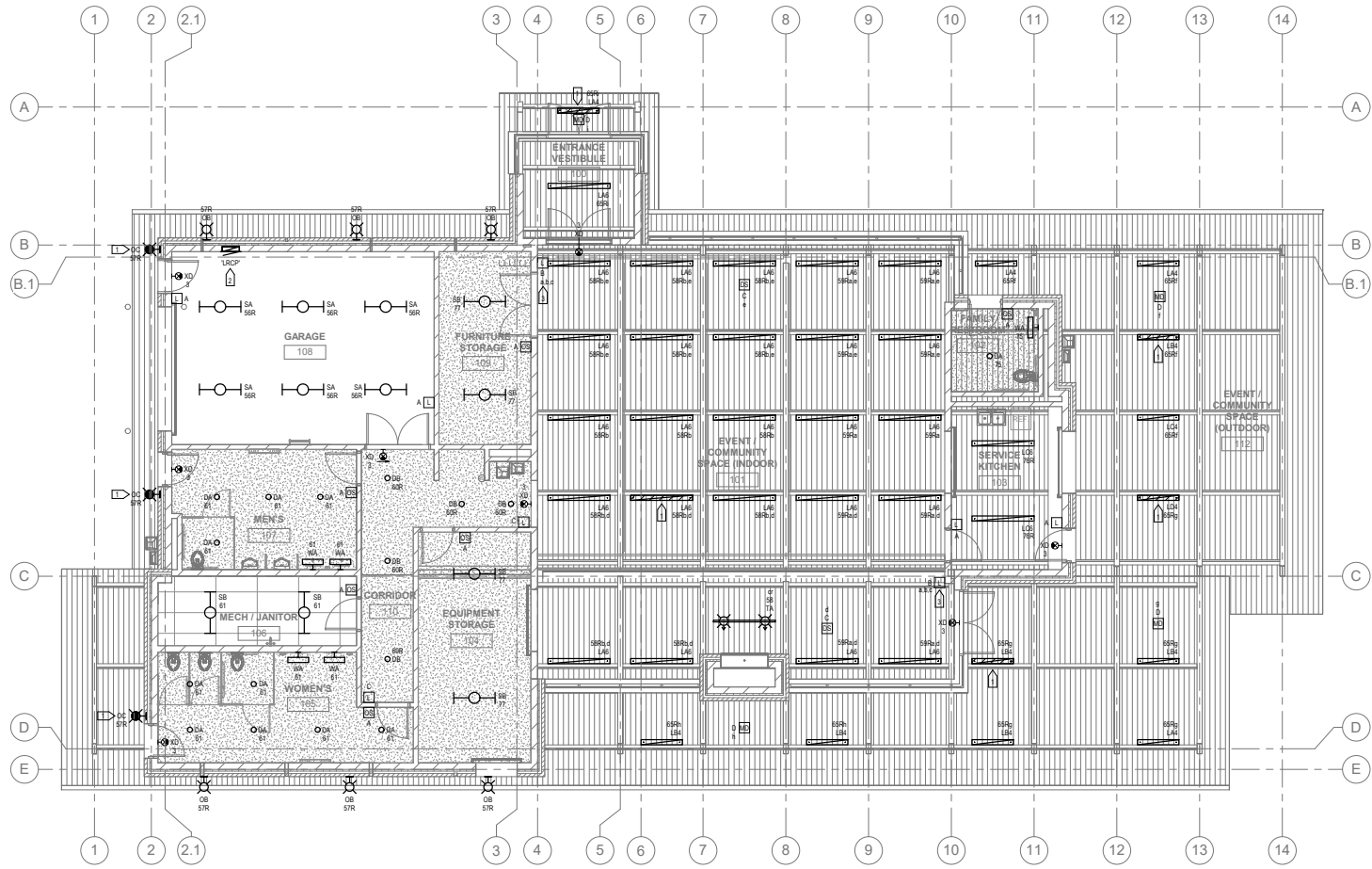
ES101.3

- REFERENCE NOTES:**
1. FIXTURE SHALL HAVE BATTERY BACKUP FOR EMERGENCY EGRESS LIGHTING.
  2. "LRCP" SHALL BE A LEVITON GREENMAX RELAY CONTROL PANEL OR APPROVED EQUIVALENT. LRCP SHALL INCLUDE A MINIMUM OF 16 RELAYS AND 96 LOW VOLTAGE INCHES. INCLUDE FACTORY AUTHORIZED STARTUP SERVICE AND ENGAGE OWNER 30 DAYS PRIOR TO SUBSTANTIAL COMPLETION FOR PROGRAMMING, ZONE CONFIGURATIONS, SCHEDULES, AND ZONE ASSIGNMENTS. INCLUDE TESTING AND PROGRAMMING ADJUSTMENTS AT SUBSTANTIAL COMPLETION AND A MINIMUM OF 4 HOURS ON SITE TRAINING WITH OWNER AND MAINTENANCE STAFF.
  3. LOW VOLTAGE SWITCH STATION SHALL HAVE SEPARATE DAYLIGHT SENSOR MANUAL OVERRIDE SWITCH.

- GENERAL NOTES:**
1. ALL SWITCH BANKS WITH (2) OR MORE SWITCHES SHALL BE PROVIDED WITH CLEAR PLASTIC TYPED LABELS INDICATING SWITCH FUNCTION. VERIFY DESIGNATIONS WITH OWNER PRIOR TO INSTALLATION.
  2. ALL LINEAR LIGHT FIXTURES SHALL BE SURFACE MOUNTED TO EXPOSED WOOD STRUCTURE AND ADJACENT STRUCTURAL BEAMS. CONFIRM FINAL MOUNTING HEIGHTS WITH OWNER.
  3. CONTRACTOR SHALL COORDINATE MOUNTING HEIGHTS OF ALL LIGHT FIXTURES WITH ARCHITECT.
  4. CONTRACTOR SHALL CONFIRM ALL CONDUIT LOCATIONS WITH ARCHITECT TO CONCEAL RACEWAYS.

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**1 FIRST FLOOR PLAN - LIGHTING**  
 3/16" = 1'-0"

No.	Description	Date
1	Review Set	Date 2

**CITY OF MADISON**

**DOOR CREEK PARK SHELTER**

MADISON, WI 53703

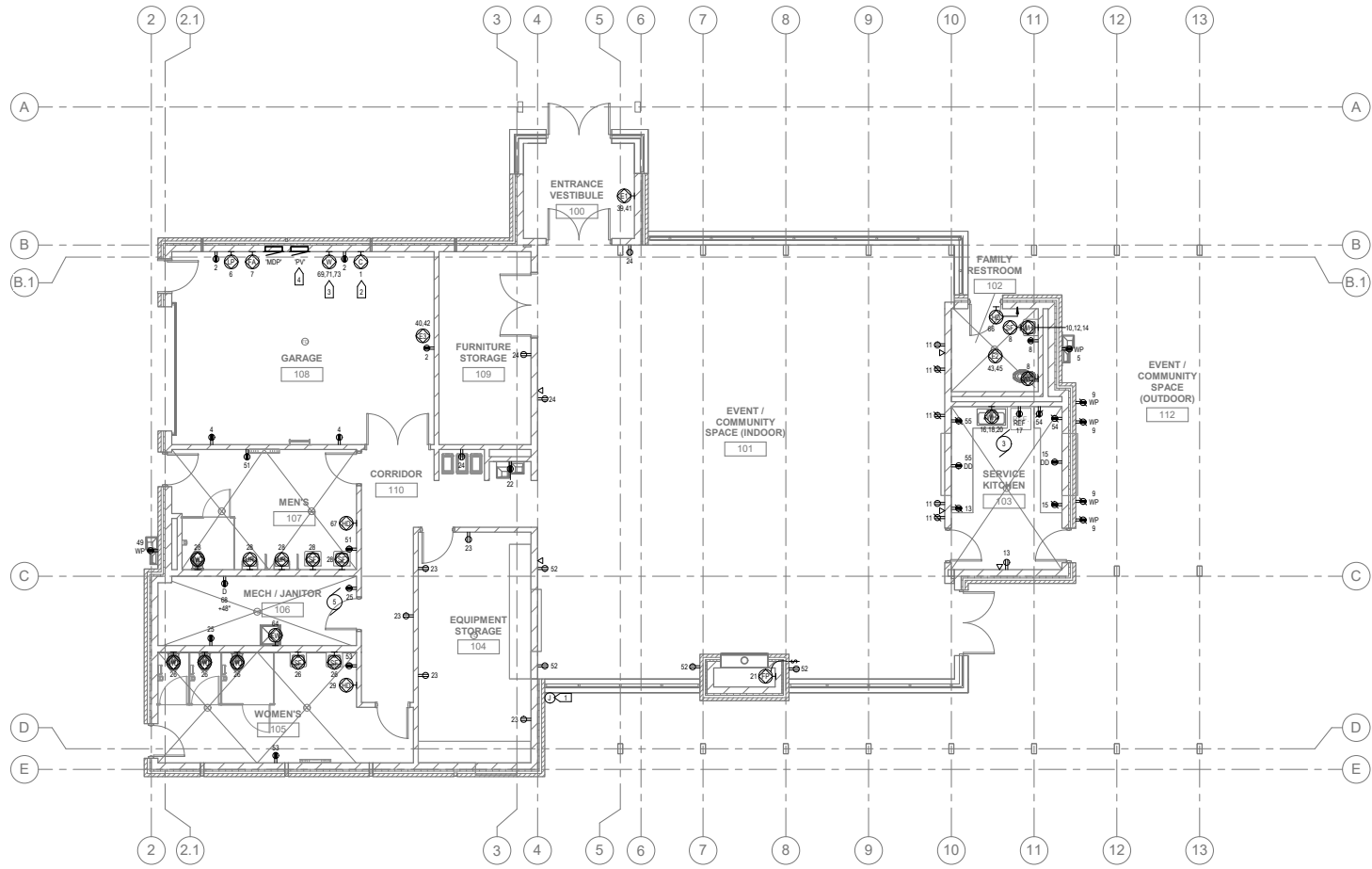
**FIRST FLOOR PLAN - LIGHTING**

CONSTRUCTION DOCUMENTS  
 Project number: MSN-20-01  
 Date: 10/31/2022

**EL101**

- REFERENCE NOTES:**
1. A 18"x18"x4" WEATHERPROOF ELECTRICAL JUNCTION BOX SHALL BE INSTALLED AT ABOVE FINISHED ROOF FOR SOLAR PV DC WIRING TO INVERTERS ON MEZZANINE.
  2. FINAL LOCATION OF COMPRESSOR POWER SHALL BE COORDINATED WITH ARCHITECT AND OWNER.
  3. FINAL LOCATION OF WELDING MACHINE POWER SHALL BE COORDINATED WITH ARCHITECT AND OWNER.
  4. PROVIDE ALL PV LABELING AS REQUIRED BY THE NATIONAL ELECTRICAL CODE ARTICLE 690.

- GENERAL NOTES:**
1. CONTRACTOR SHALL VERIFY ALL ELECTRICAL LOADS WITH ARCHITECT.
  2. CONTRACTOR SHALL VERIFY ALL ELECTRICAL LOADS WITH ARCHITECT.
  3. CIRCUIT NUMBERS ARE FOR LOADING INFORMATION ONLY. CIRCUIT TO NEXT AVAILABLE CIRCUIT IN PANEL.
  4. CIRCUIT ALL NORMAL BRANCH CIRCUITS TO PANEL MDP UNLESS OTHERWISE NOTED.
  5. ABOVE COUNTER RECEPTACLES SHALL BE CIRCUITED AS TO NOT EXCEED (2) DUPLEX RECEPTACLES PER CIRCUIT.
  6. CONTRACTOR SHALL CONFIRM ALL CONDUIT LOCATIONS WITH ARCHITECT TO CONCEAL RACKWAYS.
  7. LOW VOLTAGE LOCATIONS ARE ROUGH-IN ONLY. DATA ROUGH-INS SHALL BE SINGLE GANG RING, 4" SQUARE, DEEP BOX AND 1" RACKWAY TO ACCESSIBLE CEILING.



**1 FIRST FLOOR PLAN - POWER & TECHNOLOGY**  
3/16" = 1'-0"

No.	Description	Date
1	Review Set	Date 2

**CITY OF MADISON**

**DOOR CREEK PARK SHELTER**

MADISON, WI 53703

**FIRST FLOOR PLAN - POWER & TECHNOLOGY**

**CONSTRUCTION DOCUMENTS**  
Project number: MSN-20-01  
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**EPT101**

REFERENCE NOTES:  
 1. CONFIRM FINAL LOCATION OF FIRE ALARM ANNUNCIATOR PANEL WITH OWNER AND LOCAL FIRE DEPARTMENT.

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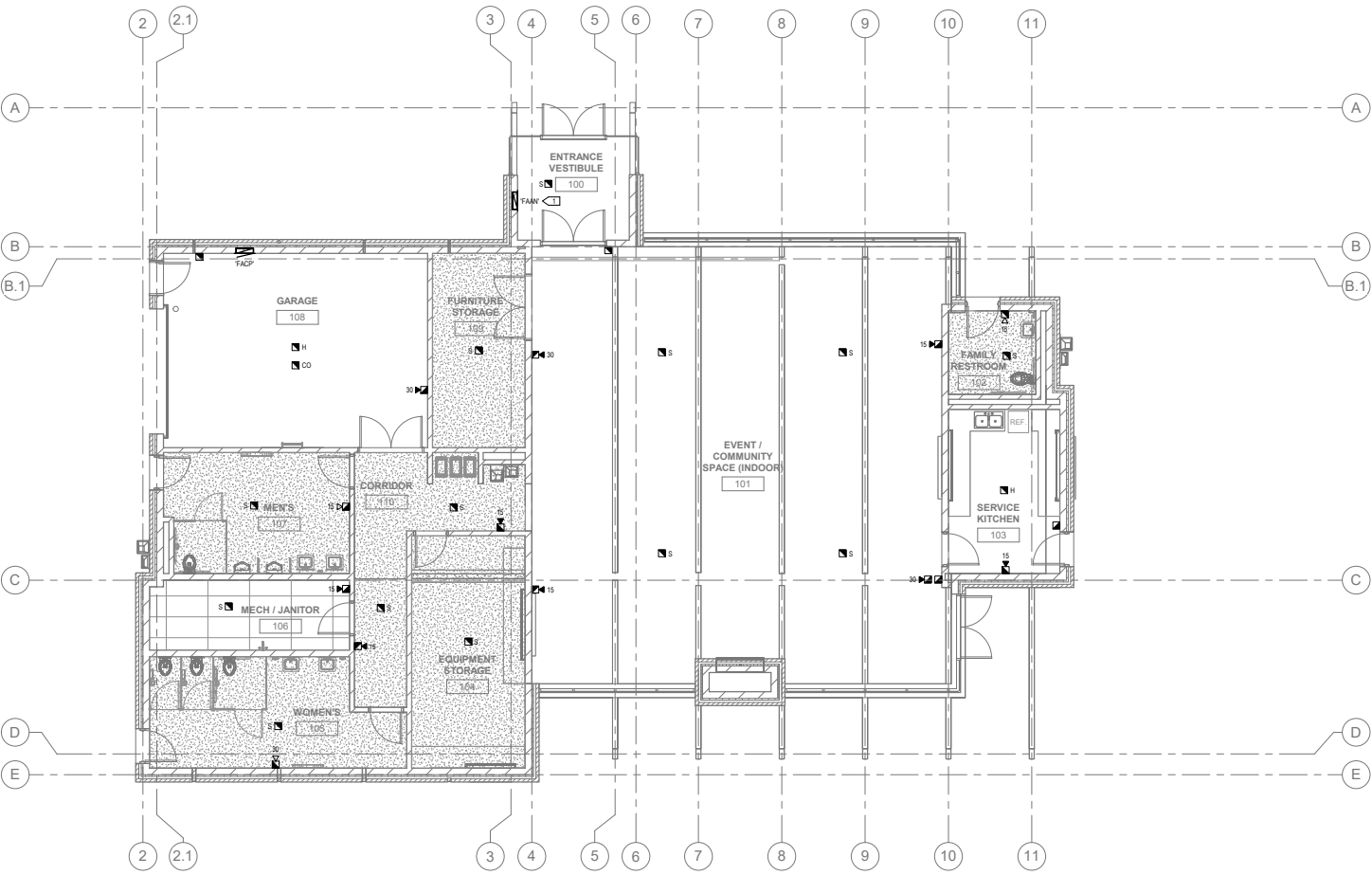
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MECHANICAL ELECTRICAL PLUMBING

**rtm**  
 engineering consultants



**1** FIRST FLOOR PLAN - SYSTEMS  
 3/16" = 1'-0"

No.	Description	Date
1	Review Set	Date 2

CITY OF MADISON

DOOR CREEK PARK SHELTER

MADISON, WI 53703  
 FIRST FLOOR PLAN - SYSTEMS

CONSTRUCTION DOCUMENTS  
 Project number: MSN-20-01  
 Date: 10/31/2022

EY101



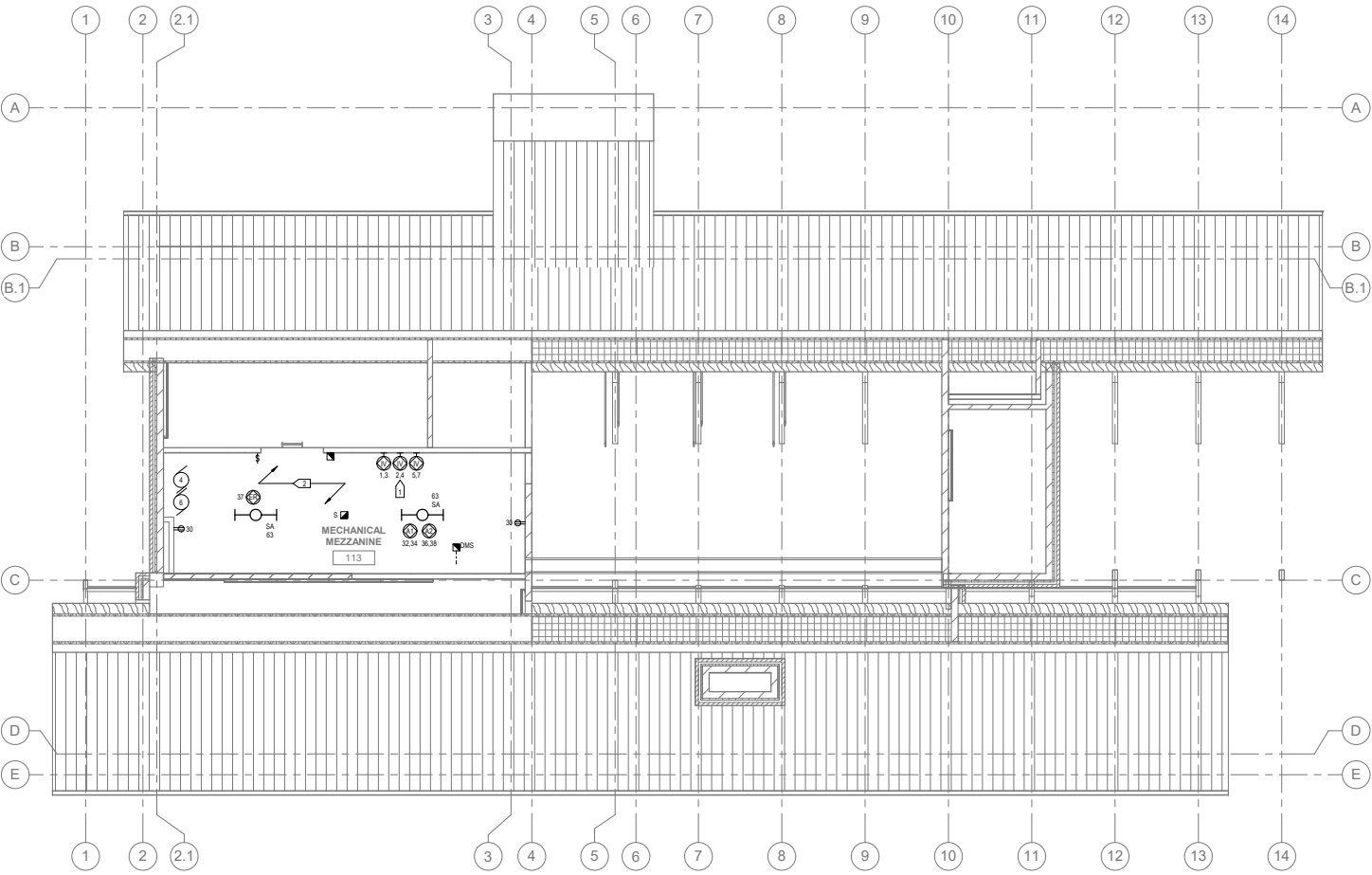


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REFERENCE NOTES: <math>\square</math>  
 1. ALL INVERTERS SHALL BE SUNNY BOY 7.0-US MODEL OR APPROVED EQUAL. CONFIRM FINAL LOCATION OF INVERTERS WITH ARCHITECT.  
 2. FINAL LOCATION OF LIGHT FIXTURES SHALL BE LOCATED BASED ON FINAL MECHANICAL LAYOUTS AND CONFIRMED WITH ARCHITECT.



No.	Description	Date
1	Review Set	Date 2

CITY OF MADISON

DOOR CREEK PARK SHELTER

MADISON, WI 53703

MECHANICAL MEZZANINE - ELECTRICAL

1 MECHANICAL MEZZANINE - ELECTRICAL  
 3/16" = 1'-0"

CONSTRUCTION DOCUMENTS  
 Project number: MSN-20-01  
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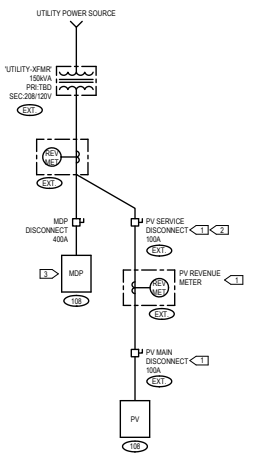
**ONE LINE DIAGRAM LEGEND:**



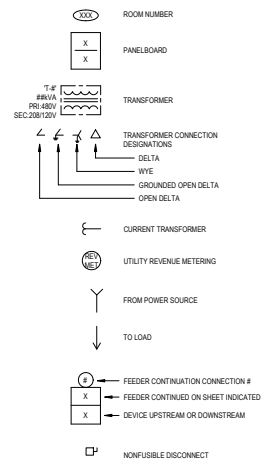
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**ONELINE DIAGRAM**

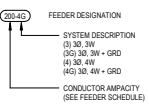


**GENERAL NOTES:**

1. THE FEEDER SCHEDULES TO THE RIGHT ARE SCHEDULES OF TYPICAL FEEDERS AND SOME SIZES MAY NOT BE UTILIZED.
2. ALL CONDUCTOR CAPACITIES ARE BASED ON TABLE 310-16 OF THE NEC FOR COPPER CONDUCTOR TYPE THW/THWN.
3. ALL C.D. RATINGS SHOWN FOR BIDDING PURPOSES ONLY. CONTRACTOR SHALL COMPLETE OVERCURRENT PROTECTIVE DEVICE COORDINATION STUDY PRIOR TO ORDERING EQUIPMENT. REFER TO SPECIFICATION SECTION 20-07.13.
4. FEEDER SIZES SHOWN ON THE RISER DIAGRAM INDICATE FEEDER AMPACITIES AND DO NOT NECESSARILY CORRESPOND TO SHORT CIRCUIT BREAKER AMPACITIES. CERTAIN FEEDERS MAY BE SIZED FOR THE DERATION FACTORS REQUIRED BY CODE AND/OR ARE OVERSIZED FOR VOLTAGE DROP.
5. ELECTRICAL INFORMATION SHOWN ON ONELINE DIAGRAM SHALL BE UPDATED UPON MECHANICAL AND ELECTRICAL LOAD SELECTION.
6. ALL DISCONNECTS SHOWN SHALL HAVE NEMA 3R RATED ENCLOSURES.

**REFERENCED NOTES:**

1. CONTRACTOR SHALL VERIFY INTERCONNECTION REQUIREMENTS WITH UTILITY BEFORE INSTALLATION.
2. NEMA PV SYSTEM DISCONNECTING MEANS SHALL BE "READILY ACCESSIBLE" FOR FIRST RESPONDERS TO SHUT DOWN THE PV ARRAY. CONTRACTOR SHALL VERIFY LOCATION WITH ARCHITECT BEFORE INSTALLATION.
3. REFER TO DETAIL 2E700 FOR BUILDING ELECTRICAL SERVICE GROUNDING DETAIL.



**FEEDER LEGEND:**

1. ALL ITEMS INDICATED BY A DARK SOLID LINE ARE NEW.
2. ALL ITEMS INDICATED BY A LIGHT SOLID LINE ARE EXISTING TO REMAIN.
3. ALL ITEMS INDICATED BY A DASHED-DOT-DASH LINE ARE EXISTING TO BE REMOVED.
4. ALL ITEMS INDICATED BY DASH-SHORT-DASH LINE INDICATE FUTURE EQUIPMENT AND WORK.
5. ALL ITEMS INDICATED BY A LIGHT DASHED LINE INDICATE FUTURE EQUIPMENT AND WORK.
6. ALL ITEMS INDICATED BY A DARK DASHED LINE INDICATE TEMPORARY EQUIPMENT AND WORK.

FEEDER SCHEDULE		
Capacity (Amps)	Single Phase Two Wire w/ Ground	Single Phase Three Wire w/ Ground
30	2 # 12 & 1 # 12 GRD, 3W-C	3 # 12 & 1 # 12 GRD, 3W-C
40	2 # 10 & 1 # 10 GRD, 3W-C	3 # 10 & 1 # 10 GRD, 3W-C
40	2 # 8 & 1 # 10 GRD, 1" C	3 # 8 & 1 # 10 GRD, 1" C
50	2 # 8 & 1 # 10 GRD, 1" C	3 # 8 & 1 # 10 GRD, 1" C
60	2 # 8 & 1 # 10 GRD, 1" C	3 # 8 & 1 # 10 GRD, 1" C
70	2 # 8 & 1 # 8 GRD, 1" C	3 # 8 & 1 # 8 GRD, 1" C
80	2 # 8 & 1 # 8 GRD, 1" C	3 # 8 & 1 # 8 GRD, 1" C
90	2 # 8 & 1 # 8 GRD, 1" C	3 # 8 & 1 # 8 GRD, 1" C
100	2 # 8 & 1 # 8 GRD, 1" C	3 # 8 & 1 # 8 GRD, 1" C
125	2 # 1 & 1 # 8 GRD, 1" C	3 # 1 & 1 # 8 GRD, 1" C
150	2 # 10 & 1 # 8 GRD, 1" C	3 # 10 & 1 # 8 GRD, 1" C
175	2 # 20 & 1 # 8 GRD, 2" C	3 # 20 & 1 # 8 GRD, 2" C
200	2 # 30 & 1 # 8 GRD, 2" C	3 # 30 & 1 # 8 GRD, 2" C
225	2 # 40 & 1 # 8 GRD, 2" C	3 # 40 & 1 # 8 GRD, 2" C
250	2 # 50NCM & 1 # 8 GRD, 2" C	3 # 50NCM & 1 # 8 GRD, 2" C
250	2 # 50NCM & 1 # 8 GRD, 3" C	3 # 50NCM & 1 # 8 GRD, 3" C
300	2 # 50NCM & 1 # 8 GRD, 3" C	3 # 50NCM & 1 # 8 GRD, 3" C
350	2 # 50NCM & 1 # 8 GRD, 3" C	3 # 50NCM & 1 # 8 GRD, 3" C
400	2 # 50NCM & 1 # 8 GRD, 3" C	3 # 50NCM & 1 # 8 GRD, 3" C
450	2 # 50NCM & 1 # 8 GRD, 3" C	3 # 50NCM & 1 # 8 GRD, 3" C
500	2 # 50NCM & 1 # 8 GRD, 3" C	3 # 50NCM & 1 # 8 GRD, 3" C
600	2 # 50NCM & 1 # 10 GRD, 3" C	3 # 50NCM & 1 # 10 GRD, 3" C
800	2 # 50NCM & 1 # 10 GRD, 3" C	3 # 50NCM & 1 # 10 GRD, 3" C
1000	2 # 50NCM & 1 # 10 GRD, 3" C	3 # 50NCM & 1 # 10 GRD, 3" C

Table based on the NEC  
EMT conduit & THHN Copper Conductors

FEEDER SCHEDULE		
Capacity (Amps)	Three Phase Three Wire w/ Ground	Three Phase Four Wire w/ Ground
COPPER CONDUCTORS		
30	3 # 12 & 1 # 12 GRD, 3W-C	4 # 12 & 1 # 12 GRD, 3W-C
40	3 # 10 & 1 # 10 GRD, 3W-C	4 # 10 & 1 # 10 GRD, 1" C
50	3 # 8 & 1 # 10 GRD, 1" C	4 # 8 & 1 # 10 GRD, 1" C
60	3 # 8 & 1 # 10 GRD, 1" C	4 # 8 & 1 # 10 GRD, 1" C
70	3 # 8 & 1 # 8 GRD, 1" C	4 # 8 & 1 # 8 GRD, 1" C
80	3 # 8 & 1 # 8 GRD, 1" C	4 # 8 & 1 # 8 GRD, 1" C
90	3 # 8 & 1 # 8 GRD, 1" C	4 # 8 & 1 # 8 GRD, 1" C
100	3 # 8 & 1 # 8 GRD, 1" C	4 # 8 & 1 # 8 GRD, 1" C
ALUMINUM CONDUCTORS		
100	3 # 1 & 1 # 8 GRD, 1" C	4 # 1 & 1 # 8 GRD, 1" C
150	3 # 20 & 1 # 8 GRD, 2" C	4 # 20 & 1 # 8 GRD, 2" C
175	3 # 30 & 1 # 8 GRD, 2" C	4 # 30 & 1 # 8 GRD, 2" C
200	3 # 50NCM & 1 # 8 GRD, 2" C	4 # 50NCM & 1 # 8 GRD, 2" C
250	3 # 50NCM & 1 # 8 GRD, 2" C	4 # 50NCM & 1 # 8 GRD, 2" C
250	3 # 50NCM & 1 # 8 GRD, 3" C	4 # 50NCM & 1 # 8 GRD, 3" C
300	3 # 50NCM & 1 # 8 GRD, 3" C	4 # 50NCM & 1 # 8 GRD, 3" C
350	3 # 50NCM & 1 # 8 GRD, 3" C	4 # 50NCM & 1 # 8 GRD, 3" C
400	3 # 50NCM & 1 # 8 GRD, 3" C	4 # 50NCM & 1 # 8 GRD, 3" C
450	3 # 50NCM & 1 # 8 GRD, 3" C	4 # 50NCM & 1 # 8 GRD, 3" C
500	3 # 50NCM & 1 # 8 GRD, 3" C	4 # 50NCM & 1 # 8 GRD, 3" C
600	3 # 50NCM & 1 # 10 GRD, 3" C	4 # 50NCM & 1 # 10 GRD, 3" C
800	3 # 50NCM & 1 # 10 GRD, 3" C	4 # 50NCM & 1 # 10 GRD, 3" C
1000	3 # 50NCM & 1 # 10 GRD, 3" C	4 # 50NCM & 1 # 10 GRD, 3" C

Table based on the NEC  
EMT conduit & THHN Conductors

No.	Review Set	Description	Date

**CITY OF MADISON**

**DOOR CREEK PARK SHELTER**

MADISON, WI 53703

**ONELINE DIAGRAM**

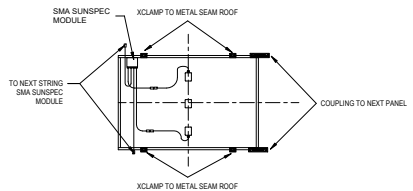
**CONSTRUCTION DOCUMENTS**

Project number: MSN-20-01  
Date: 10/31/2022

**E500**

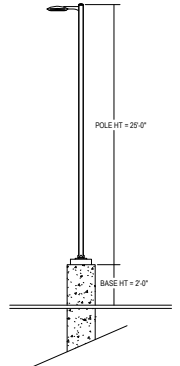




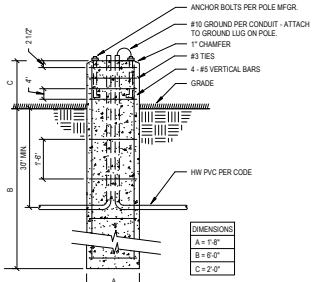


- DETAIL NOTES:**
1. SOLAR POWERKIT-400 PHOTOVOLTAIC MODULES SHALL BE INTEGRATED WITH METALX STANDING SEAM MOUNTING SYSTEM OR APPROVED EQUAL.
  2. SMA SUNSPEC: RAPID SHUT DOWN DEVICE TO BE INSTALLED BY CONTRACTOR.
  3. INSTALLATION SHALL COMPLY WITH REQUIREMENTS OF PV MODULE MANUFACTURER INSTALLATION INSTRUCTIONS.

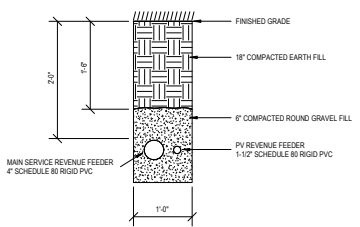
**6 PHOTOVOLTAIC MODULE DETAIL**  
NOT TO SCALE



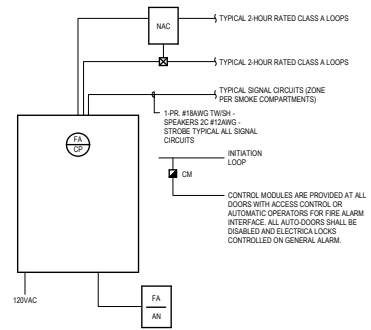
**3 POLE HEIGHT DETAIL**  
NOT TO SCALE



**4 POLE BASE DETAIL**  
NOT TO SCALE

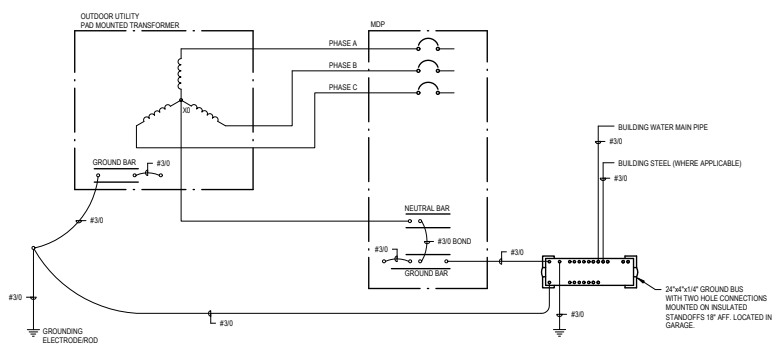


**5 TRENCH DETAIL**  
NOT TO SCALE



- GENERAL NOTES:**
1. ALL FIRE ALARM CONDUIT SHALL BE RED IN COLOR BY THE FACTORY. JUNCTION BOXES SHALL BE DYED RED BY THE FACTORY OR FIELD PAINTED RED.
  2. ALL NOTIFICATION APPLIANCE CIRCUIT (NAC) PANELS SHALL BE WIRED WITH A CLASS A LOOP.
  3. PROVIDE AND INSTALL A 20 AMP, 120V LIFE SAFETY CIRCUIT TO EACH NAC PANEL, TAP, AND FAN AT A MINIMUM. PROVIDE ADDITIONAL 20 AMP, 120V CIRCUITS IF REQUIRED BY THE MANUFACTURER. ALL CIRCUIT BREAKERS SHALL BE PROVIDED WITH A CIRCUIT BREAKER LOCK.
  4. NOTIFICATION APPLIANCE CIRCUIT (NAC) PANELS MAY BE NECESSARY TO POWER ALL DEVICES. UNITS SHOWN ON PLAN ARE ESTIMATED AND SHALL BE CONFIRMED PRIOR TO FIRE ALARM SYSTEM ROUGH-IN.

**1 FIRE ALARM RISER DIAGRAM**  
NOT TO SCALE



**2 BUILDING ELECTRICAL SERVICE GROUNDING SYSTEM DETAIL**  
NOT TO SCALE

No.	Description	Date
1	Review Set	

CITY OF MADISON

DOOR CREEK PARK SHELTER

MADISON, WI 53703

ELECTRICAL DETAILS

PLUMBING SYMBOL SCHEDULE		
	AFF	ABOVE FINISHED FLOOR
	AP	ACCESS PANEL
	ANB	ACID NEUTRALIZATION BASIN
	BFB RBP P	BACKFLOW PREVENTER
		BALL VALVE
	BT	BATHTUB
		BUTTERFLY VALVE
		CALIBRATED BALANCE VALVE, INLINE FLOW SIGHT INDICATOR & CHECK VALVE
		CAP EXISTING PIPE
		CHECK VALVE
	CP	CIRCULATING PUMP
	CO/WCO	CLEANOUT OR WALL CLEANOUT (AS NOTED)
	CLVTR	CLEARWATER VENT THRU ROOF
	WCL	COMBINATION WATER CLOSET LAVATORY
	DD	DECK DRAIN
		DETAIL AND ISOMETRIC REFERENCE
	DN	DOWN
	DSN	DOWNSPOUT NOZZLE
		DRAINAGE/WATER FIXTURE UNIT TAG
	DBT	DRAINBACK TANK
	DTR	DRAIN TILE RECEIVER
	DF	DRINKING FOUNTAIN
	EW	ELECTRIC WATER COOLER
	EEW	EMERGENCY EYE WASH
	EEWS	EMERGENCY EYE WASH SHOWER
		EQUIPMENT / FIXTURE DEMOLITION
	EXIST	EXISTING
	ET	EXPANSION TANK
	FFE=100.00	FINISHED FLOOR ELEVATION
	FCO	FLOOR CLEANOUT
	FD	FLOOR DRAIN
	FS	FLOOR SINK
	FFD	FLUSHING FLOOR DRAIN
	FSEC	FOOD SERVICE EQUIPMENT CONTRACTOR (DIVISION 11)
		FOOD SERVICE EQUIPMENT TAG
	HS	HAND SINK
	HB/WH	HOSE BIB OR WALL HYDRANT (AS NOTED)
	HD	HUB DRAIN
	HPT	HYDRO PNEUMATIC TANK
	IW	INDIRECT WASTE

NOTE: ALL SYMBOLS MAY NOT BE USED FOR THIS PROJECT

PLUMBING SYMBOL SCHEDULE		
	IE=000.00	INVERT ELEVATION OF SEWER OR DRAIN
	LT	LAUNDRY TRAY
	LAV	LAVATORY
	LI	LINT INTERCEPTOR
	MB	MOP BASIN
		NATURAL GAS SHUT-OFF VALVE
		NEW PIPE CONNECTION TO EXISTING
		PIPE CAP
	PC	PLUMBING (DIVISION 22) CONTRACTOR
	PRV	PRESSURE REDUCING VALVE
	RV	RELIEF VENT
		RISING STEM GATE VALVE
	RD/O	ROOF DRAIN / OVERFLOW DRAIN
	SE	SEWAGE EJECTOR
	SH	SHOWER
	S	SINK
	SV	STACK VENT
	ST	STORAGE TANK
	COND	STORM / CLEARWATER CONDUCTOR
	SP	SUMP PUMP
	TMV	TEMPERATURE MIXING VALVE
	TT	TEMPERING TANK
	TD	TRENCH DRAIN
	TYP	TYPICAL
	UR	URINAL
	VS	VENT STACK
	VTR	VENT THRU ROOF
	AWC	WASHING MACHINE WALL BOX
	WS	WASTE STACK
	WC	WATER CLOSET
	WHA	WATER HAMMER ARRESTOR
	EW	WATER HEATER ELECTRIC
	GWH	WATER HEATER GAS
	HWX	WATER HEATER STEAM
		WATER MAIN VALVE AND BOX
	WS	WATER SOFTENER

NOTE: ALL SYMBOLS MAY NOT BE USED FOR THIS PROJECT

PLUMBING PIPE TYPES SCHEDULE			
EXISTING	NEW		
-149°-----	-149°-----	140°	140° HOT WATER
-149°-----	-149°-----	140°	140° HOT WATER RETURN
CLV	CLV	CLV	CLEAR WATER VENT ABOVE FLOOR
CLW	CLW	CLW	CLEAR WATER WASTE ABOVE FLOOR
CSW	CSW	CSW	COLD SOFT WATER PIPING
	CW	CW	COLD WATER
A	A	A	COMPRESSED AIR
-----	-----	DEMO	DEMOLITION
BT	BT	DT	DRAIN TILE
D	D	D	DRAIN PIPING
			FOR NON DESIGNATED BELOW SLAB PIPING
GW	GW	GW	GREASE WASTE
		HW	HOT WATER
		HWR	HOT WATER RETURN
G	G	G	NATURAL GAS
NP	NP	NP	NON-POTABLE WATER
PD	PD	PD	PUMP DISCHARGE EFFLUENT / SANITARY
PD	PD	PD	PUMP DISCHARGE STORM / CLEAR WATER
		STM	STORM DRAIN ABOVE FLOOR
		V	VENT PIPE ABOVE FLOOR
		W	WASTE / SANITARY DRAIN ABOVE FLOOR

NOTE: ALL PIPE TYPES MAY NOT BE USED FOR THIS PROJECT

PLUMBING PROJECT NOTES		
THE GENERAL CONDITIONS AND SUPPLEMENTAL GENERAL CONDITIONS ISSUED BY THE OWNER SHALL GOVERN WHERE APPLICABLE.		
THIS CONTRACTOR SHALL THOROUGHLY FAMILIARIZE THEMSELVES WITH THE PLANS AND SHALL VERIFY EXISTING SITE CONDITIONS AT THE JOB SITE BEFORE SUBMITTING BID. FAILURE TO RECOGNIZE WORK REQUIRED SHALL BE AT THE EXPENSE OF THIS CONTRACTOR. NO CONSIDERATION SHALL BE GIVEN FOR ADDITIONAL COMPENSATION AFTER LETTING OF BIDS.		
CONTRACTOR TO MAKE ALL NECESSARY TAPS, AS CALLED FOR ON THE DRAWINGS.		
THIS CONTRACTOR SHALL REMOVE ALL DEBRIS ON A REGULAR BASIS AND UPON COMPLETION OF THE JOB AND CLEAN ALL FIXTURES.		
COVER ALL HOT AND COLD LINES. PIPING COVERING SHALL BE 3-1/2 LB. DENSITY FIBERGLASS WITH MOLDED FITTINGS AND BUTT JOINTS AND VAPOR BARRIER. WATER PIPING INSULATION SHALL BE INSTALLED PER 2012 IECC SEC. C404.3.		
IT SHALL BE THE RESPONSIBILITY OF THIS CONTRACTOR TO START UP, ADJUST AND CHECK FOR PROPER OPERATION ALL EQUIPMENT INSTALLED UNDER HIS CONTRACT.		
THIS CONTRACTOR SHALL ALLOW IN HIS INITIAL BID THE COST OF SERVICE ON ALL EQUIPMENT INSTALLED UNDER HIS CONTRACT FOR A PERIOD OF ONE (1) YEAR FROM THE DATE OF FINAL ACCEPTANCE OF THE WORK.		
ALL WATER PIPING SHALL BE TESTED WITH WATER UNDER PRESSURE OF 100 PSI FOR 10 MINUTES, AND MADE TIGHT AT THIS PRESSURE.		
ALL SOIL, WASTE, AND VENT PIPING SHALL BE SUBJECT TO A HYDROSTATIC TEST OF NOT LESS THAN 10 FEET OF WATER COLUMN FOR 15 MINUTES BEFORE INSPECTION STARTS AND PROVEN TEST.		
BEFORE TURNING PLUMBING SYSTEM OVER TO THE OWNER, CHLORINATE ALL DOMESTIC WATER PIPING FOR A PERIOD OF 24 HOURS. AFTER CHLORINATION HAS BEEN COMPLETED, FLUSH ALL PIPING UNTIL WATER RUNS CLEAR AND IS RESIDUAL CHLORINE FREE.		
ALL BELOW GROUND WASTE & VENT PIPING SHALL BE SCHEDULE 40 PVC. THE MINIMUM DIAMETER FOR UNDERGROUND WASTE PIPING IS FOUR (4) INCHES. THE MINIMUM DIAMETER FOR ALL UNDERGROUND VENT PIPING IS TWO (2) INCHES. ALL ABOVE GROUND WASTE AND VENT PIPING SHALL BE SCHEDULE 40 PVC. PVC IN PLENUM CEILINGS SHALL UTILIZE PLENUM WRAP MEETING THE 2550 REQUIREMENTS.		
THE PLUMBING SYSTEM SHALL BE INSTALLED IN CONFORMANCE WITH THE STATE OF WISCONSIN ADMINISTRATIVE CODE, CHAPTER #SPS-381 THRU SPS-385.		



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No.	Description	Date

CITY OF MADISON

DOOR CREEK PARK SHELTER

MADISON, WI 53703

PLUMBING COVER SHEET

CONSTRUCTION DOCUMENTS	
Project number	MSN-20-01
Date	10/31/2022

P000

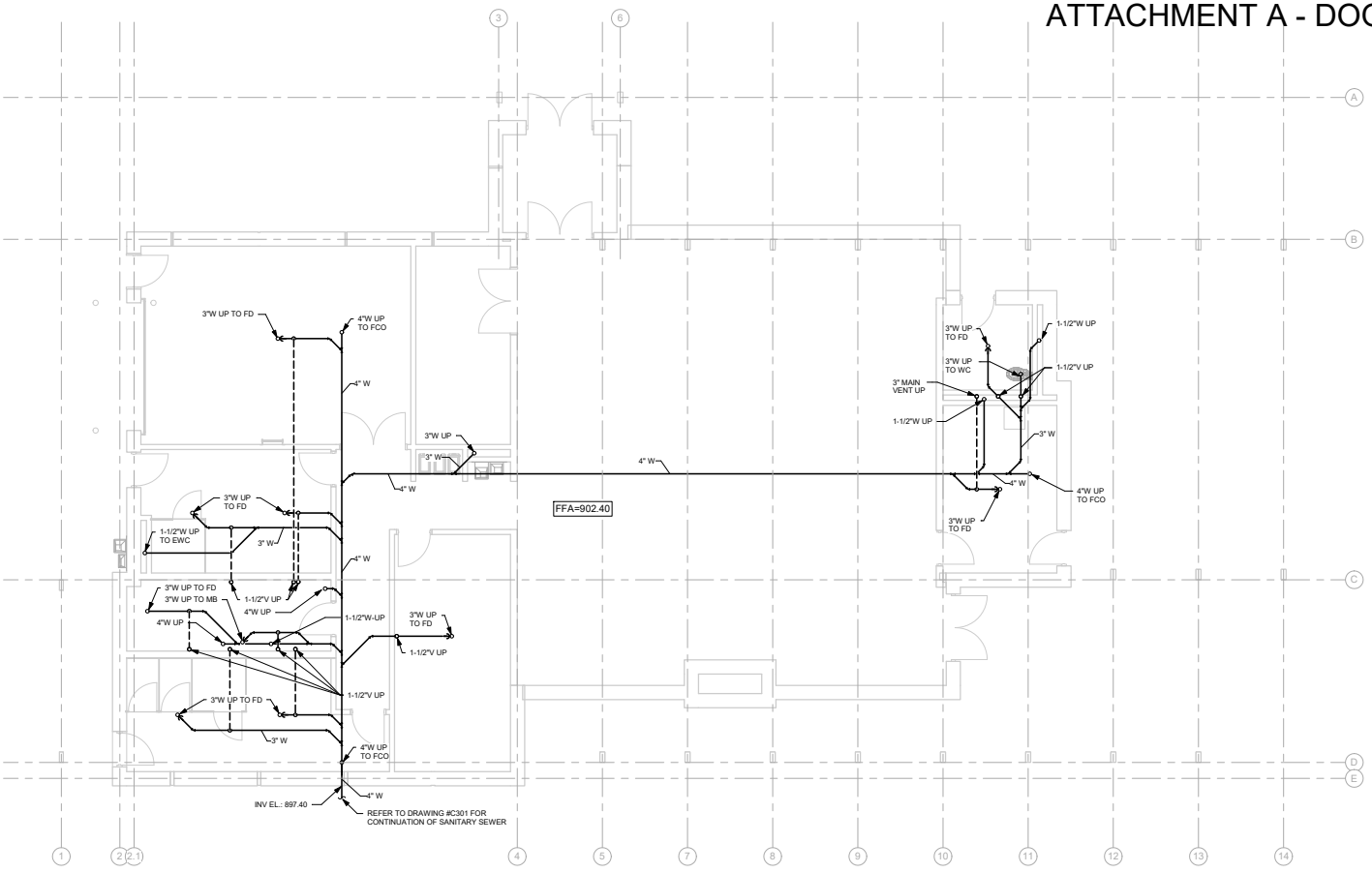
PLUMBING DRAWING NOTES	
1.	CONTRACTOR SHALL INSTALL ALL PLUMBING SYSTEM IN COMPLIANCE WITH STATE OF WISCONSIN CODE SECTIONS SPS CHAPTERS #381 TO #384.
2.	CONTRACTOR SHALL PROVIDE CLEANOUTS IN SANITARY PIPING AT A MAXIMUM OF 100 FEET APART FOR ALL STRAIGHT PIPE RUNS. AT EVERY CHANGE OF DIRECTION, AT THE BEGINNING OF THE SYSTEM, AND IN COMPLIANCE WITH WISCONSIN CODE SECTION SPS 382.35 - CLEANOUTS.
3.	CONTRACTOR SHALL COMPLY WITH WISCONSIN CODE SECTION SPS 382.33(3) - EACH PLUMBING FIXTURE, EACH COMPARTMENT OF A PLUMBING FIXTURE AND EACH FLOOR DRAIN SHALL BE SEPARATELY TRAPPED BY A WATER SEAL TRAP, EXCEPT AS PROVIDED IN PAR. (a) OR OTHERWISE PERMITTED BY THIS CHAPTER. A FIXTURE SHALL NOT BE DOUBLE TRAPPED.
4.	CONTRACTOR SHALL COMPLY WITH WISCONSIN CODE SECTION SPS 382.40(8)(M) - NEW OR REPAIRED COMBINATION WATER SERVICES OR COMBINATION PRIVATE WATER MAINS SHALL BE FLUSHED AND DISINFECTED PRIOR TO BE IN ACCORDANCE WITH NFPA 24.
5.	CONTRACTOR SHALL COMPLY WITH WISCONSIN CODE SECTION SPS 382.32(5) - DIRECT FIXTURE DRAIN CONNECTION EXCEPT AS PROVIDED IN SECTION SPS 382.33, ALL PLUMBING FIXTURES AND APPLIANCES DISCHARGING WASTES SHALL CONNECT DIRECTLY TO A DRAIN SYSTEM.
6.	CONTRACTOR SHALL COMPLY WITH WISCONSIN CODE SECTION SPS 382.40(5)(d)5e - THE DISCHARGE PIPE SHALL BE INSTALLED TO DRAIN BY GRAVITY FLOW TO A FLOOR DRAIN OR TO A RECEPTOR IN ACCORDANCE WITH SPS 382.33(8). THE OUTLET OF THE DISCHARGE PIPE SHALL TERMINATE WITHIN 6" OVER THE FLOOR OR RECEPTOR, BUT NOT LESS THAN A DISTANCE EQUAL TO TWICE THE DIAMETER OF THE OUTLET PIPE. THE OUTLET OF THE DISCHARGE PIPE MAY NOT BE THREADED.
7.	CONTRACTOR SHALL INSTALL OF PIPE HANGERS AND SUPPORTS IN COMPLIANCE WITH WISCONSIN CODE SECTION SPS 382.60.

PLUMBING NOTES	
1.	ALL ITEMS SHALL BE NEW UNLESS OTHERWISE NOTED.
2.	THE WORD "PROVIDE" SHALL MEAN FURNISH AND INSTALL UNLESS NOTED OTHERWISE.
3.	SAW CUT EXISTING FLOOR AND WALL CONSTRUCTION AS REQUIRED IN ORDER TO ACCOMMODATE WASTE AND VENT PIPING. PATCH ALL WORK TO MATCH EXISTING CONSTRUCTION.
4.	PROVIDE AIR GAPS FOR INDIRECT DRAINS AS REQUIRED BY CODE. AIR GAP SHALL BE TWO (2) TIMES THE DIAMETER OF THE INDIRECT DRAIN.
5.	COORDINATE ROUTING OF ALL PIPING SYSTEMS TO AVOID DUCTWORK, ELECTRICAL CONDUIT, BEAMS AND OTHER STRUCTURAL MEMBERS. PROVIDE GROUTING/CAULKING WHERE FIXTURES MEET WALLS, FLOORS, ETC.
7.	PROVIDE FIRE RATED PIPE SLEEVE OR FIRE CAULKING ON ALL PIPE PENETRATIONS THROUGH FIRE RATED WALLS/FLOORS.
8.	PLUMBING CONTRACTOR TO VERIFY ALL EXISTING WASTE, VENT, WATER SUPPLY PIPING WHERE CONNECTIONS ARE TO BE MADE PRIOR TO BID. VERIFY EXACT SIZE, LOCATION, INVERT, CONDITION AND REQUIREMENTS IN FIELD. REPORT ANY MAJOR DISCREPANCIES TO OWNER IMMEDIATELY.

SHEET INDEX - PLUMBING

- P000 PLUMBING COVER SHEET
- P001 PLUMBING SCHEDULES
- P100 PLUMBING UNDERFLOOR PLAN - DWV
- P101 PLUMBING FIRST FLOOR PLAN - DWV
- P102 PLUMBING ROOF PLAN - DWV
- P110 PLUMBING UNDERFLOOR PLAN - WATER
- P111 PLUMBING FIRST FLOOR PLAN - WATER
- P200 PLUMBING RISER DIAGRAMS
- P300 PLUMBING DETAILS





NORTH  
**1 UNDERFLOOR PLUMBING PLAN - DWV**  
 3/16" = 1'-0"

No.	Description	Date

CITY OF MADISON

DOOR CREEK PARK  
 SHELTER

MADISON, WI 53703  
**PLUMBING**  
 UNDERFLOOR PLAN  
 - DWV

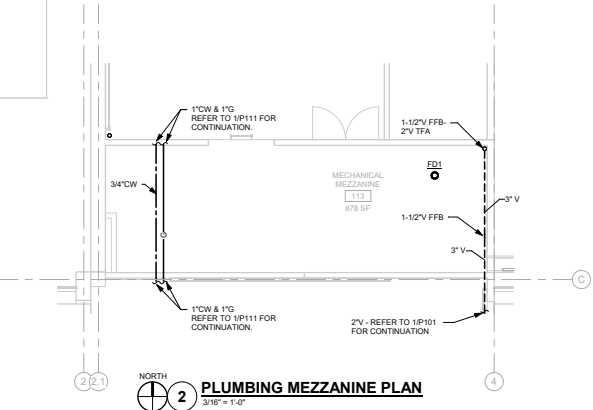
CONSTRUCTION DOCUMENTS  
 Project number MSN-20-01  
 Date 10/31/2022

P100





**FIRST FLOOR PLUMBING PLAN - DWV**  
 3/16" = 1'-0"



**PLUMBING MEZZANINE PLAN**  
 3/16" = 1'-0"

No.	Description	Date

CITY OF MADISON

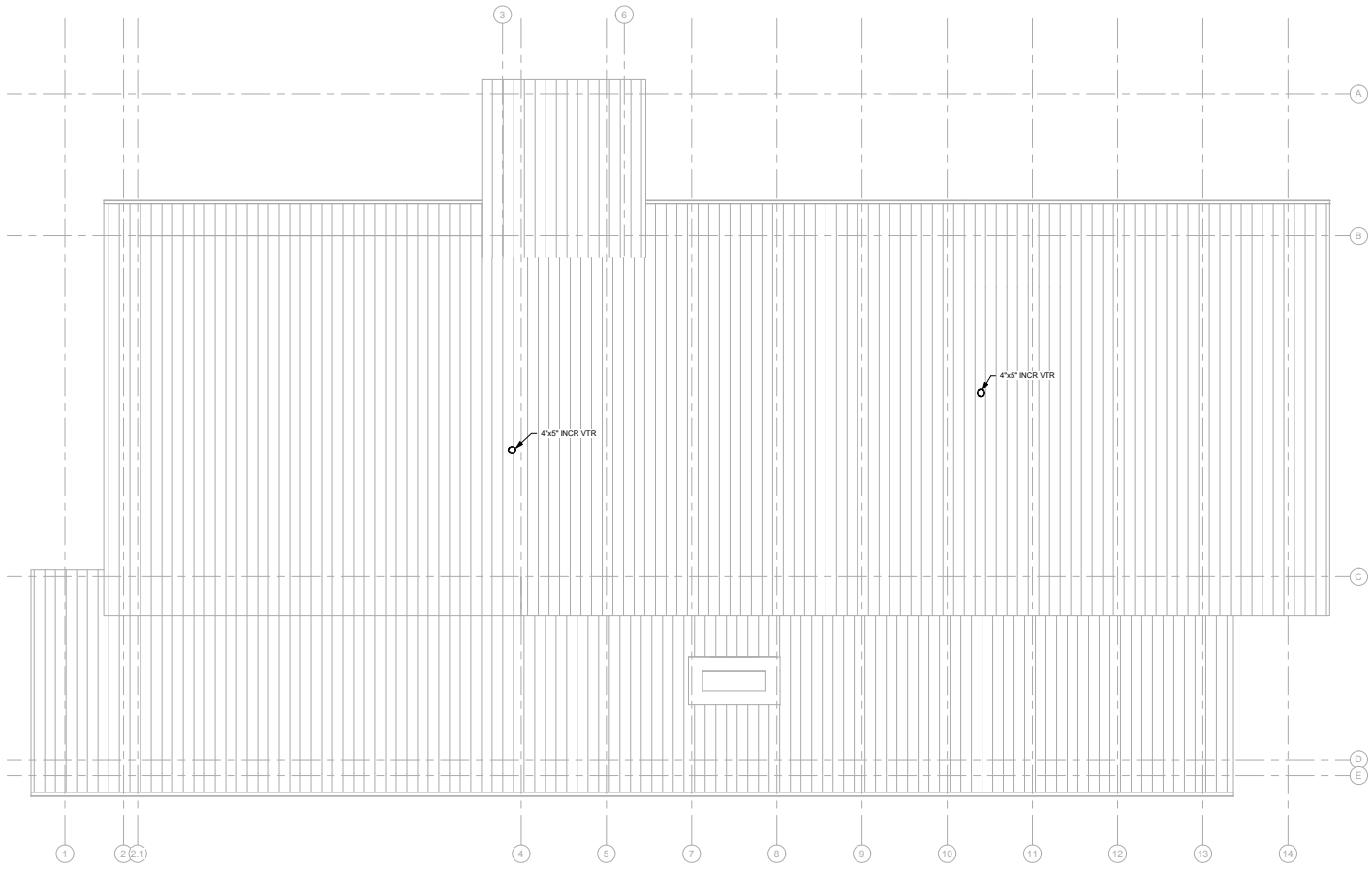
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PLUMBING FIRST FLOOR PLAN - DWV

CONSTRUCTION DOCUMENTS  
 Project number: MSN-20-01  
 Date: 10/31/2022

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No.	Description	Date

CITY OF MADISON

DOOR CREEK PARK SHELTER

MADISON, WI 53703  
PLUMBING ROOF PLAN - DWG

NOTE:  
ROOF STORM DRAINAGE IS A GUTTER - DOWNSPOUT SYSTEM. REFER TO ARCHITECTURAL AND CIVIL DRAWINGS FOR ADDITIONAL INFORMATION.

NORTH  
 1 PLUMBING ROOF PLAN - DWG  
3/16" = 1'-0"

# ATTACHMENT A - DOOR CREEK



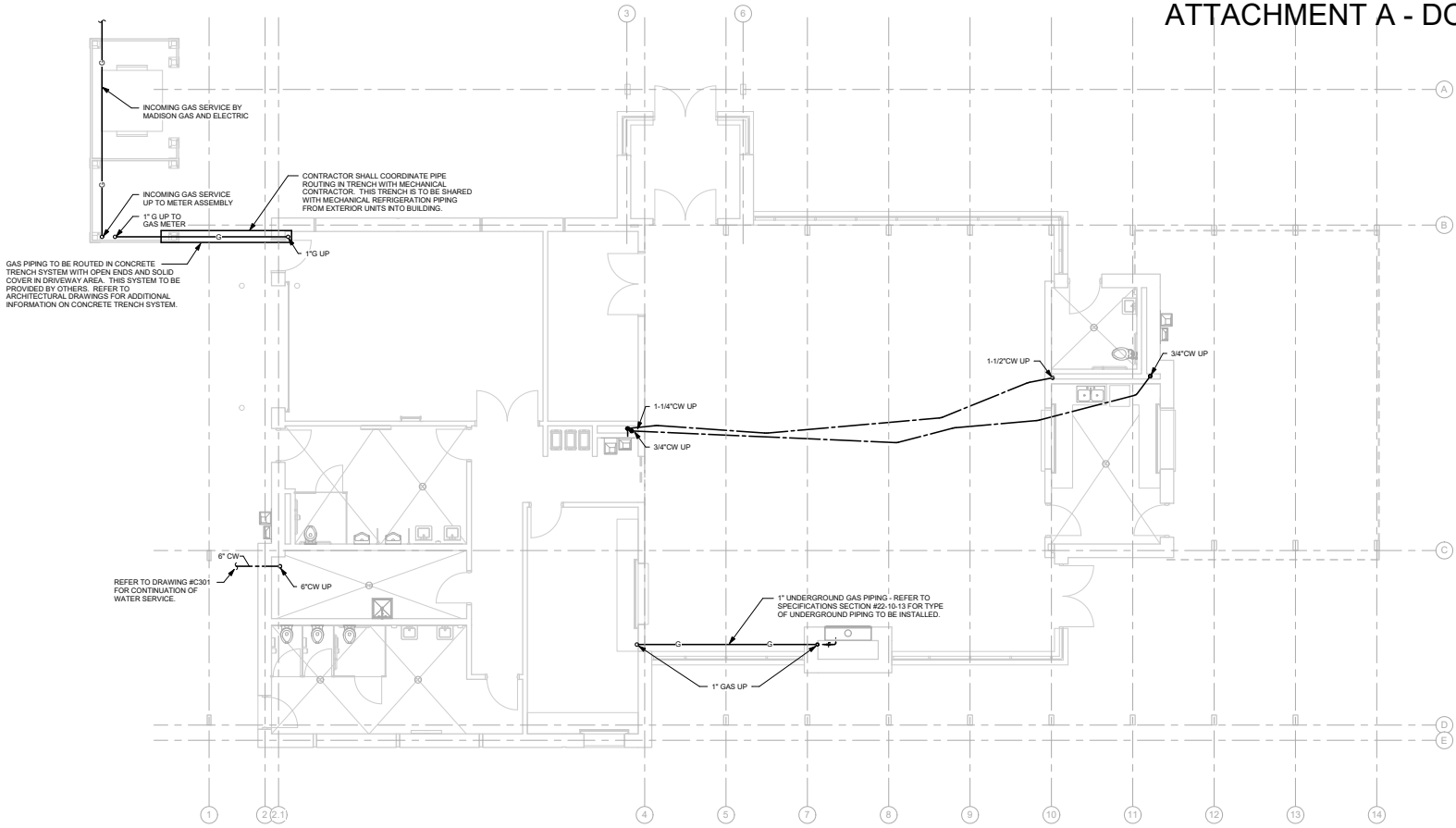
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NORTH  
 1  
**PLUMBING UNDERFLOOR PLAN - WATER**  
 3/16" = 1'-0"

No.	Description	Date

CITY OF MADISON

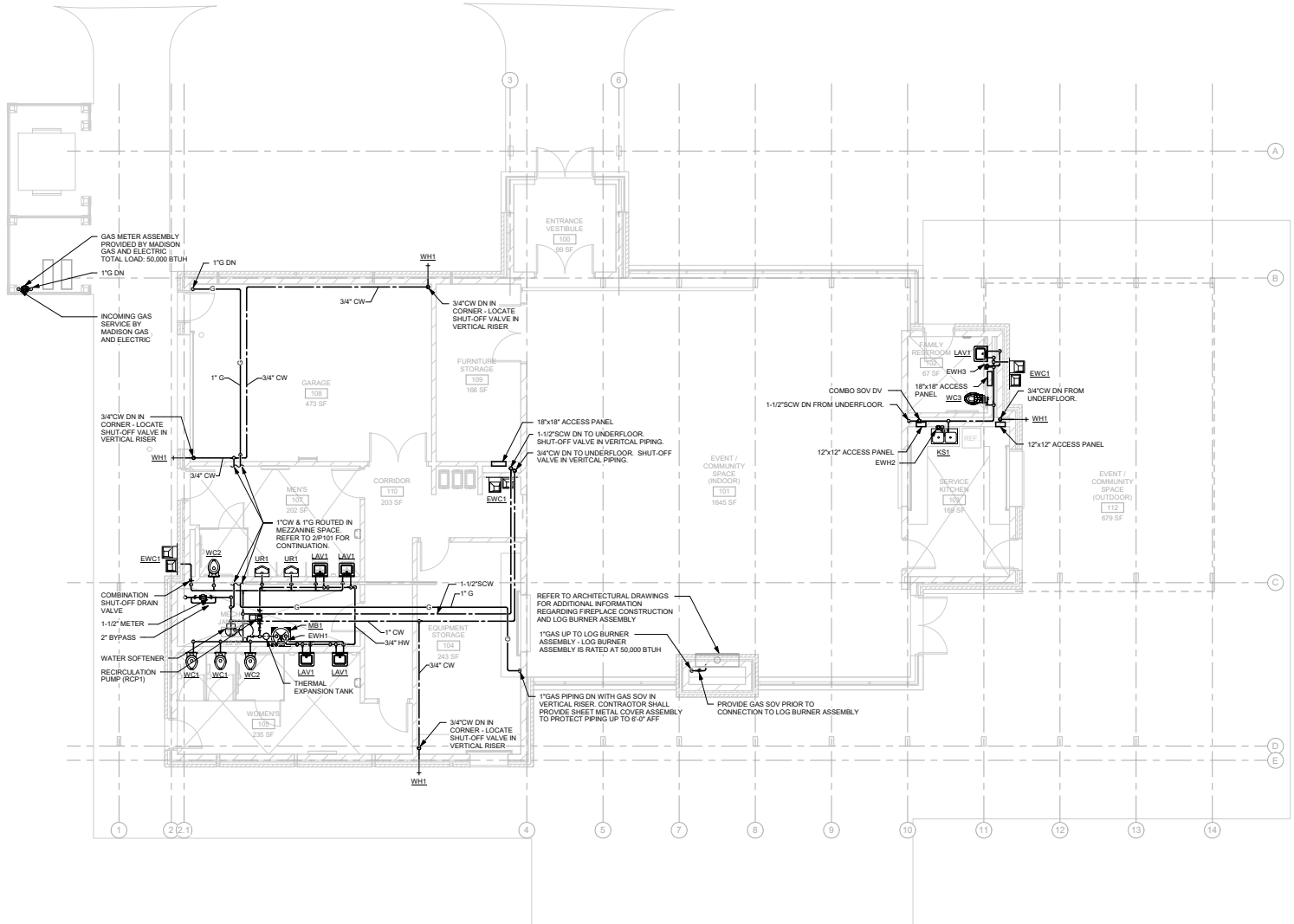
DOOR CREEK PARK SHELTER

MADISON, WI 53703

PLUMBING UNDERFLOOR PLAN - WATER

CONSTRUCTION DOCUMENTS  
 Project number MSN-20-01  
 Date 10/31/2022

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No.	Description	Date

CITY OF MADISON

DOOR CREEK PARK SHELTER

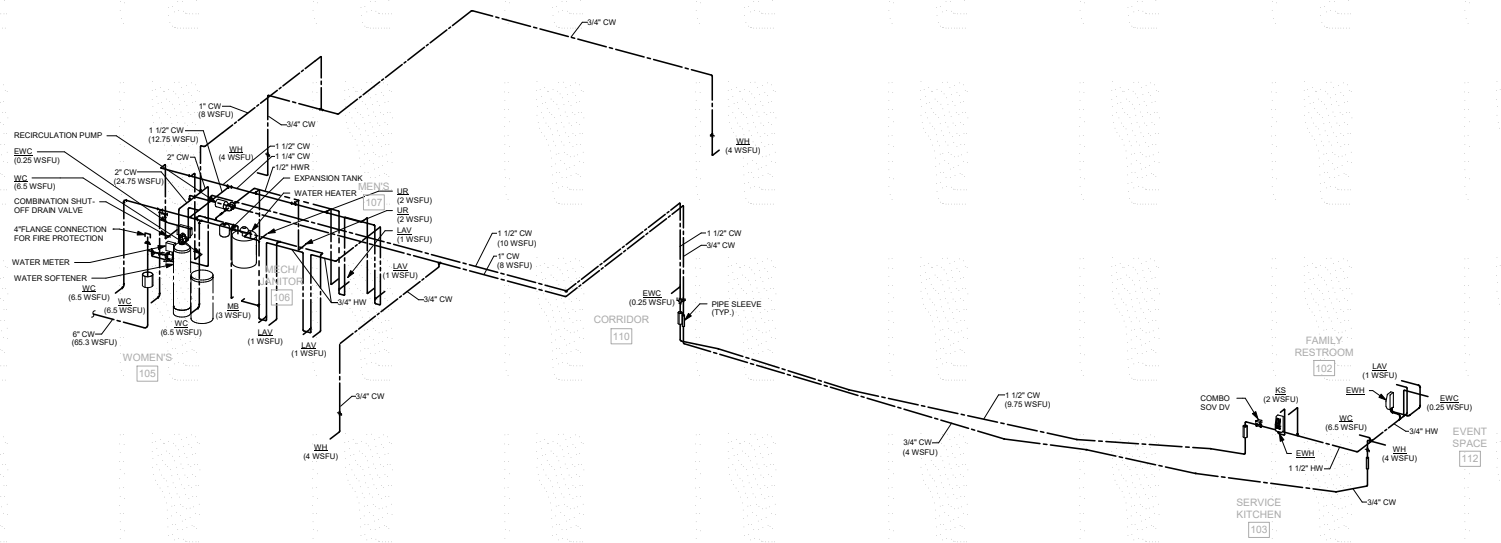
MADISON, WI 53703

PLUMBING FIRST FLOOR PLAN - WATER

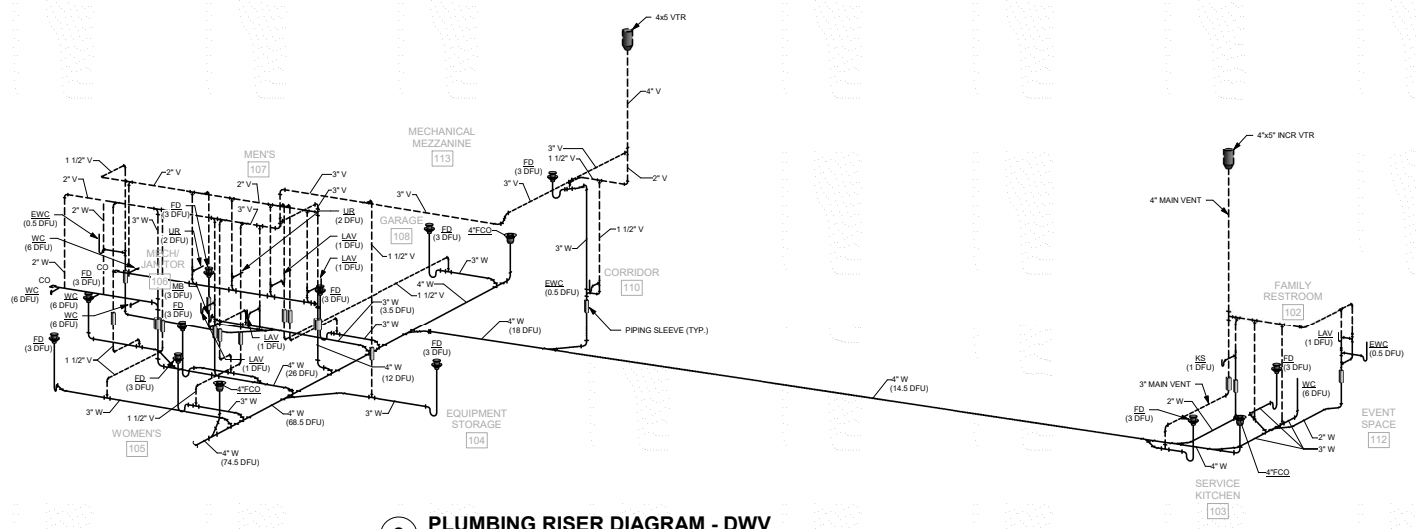
CONSTRUCTION DOCUMENTS  
Project number: MSN-20-01  
Date: 10/31/2022

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NORTH  
1 PLUMBING FIRST FLOOR PLAN - WATER  
3/16" = 1'-0"



**1 PLUMBING RISER DIAGRAM - DOMESTIC WATER**  
 SCALE: NONE



**2 PLUMBING RISER DIAGRAM - DWV**  
 SCALE: NONE

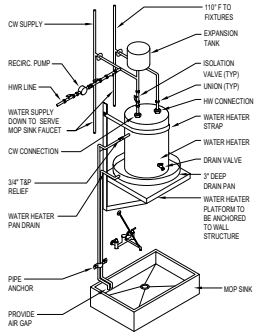
No.	Description	Date

CITY OF MADISON

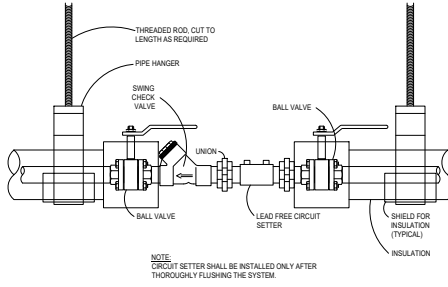
DOOR CREEK PARK SHELTER

MADISON, WI 53703

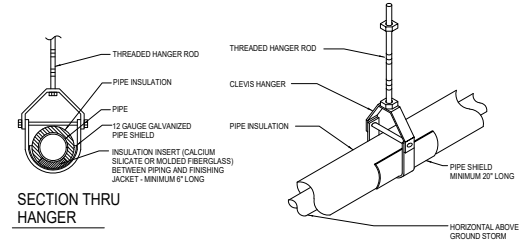
PLUMBING RISER DIAGRAMS



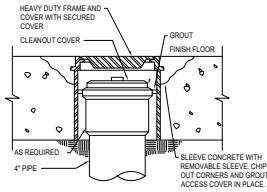
**1 WATER HEATER DETAIL**  
SCALE: NONE



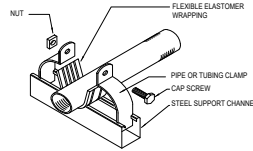
**2 HOT WATER RETURN DETAIL**  
SCALE: NONE



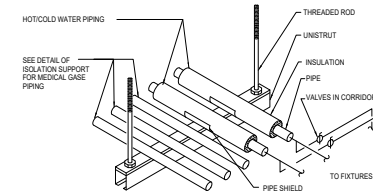
**3 INSULATED PIPE SUPPORT DETAIL**  
SCALE: NONE



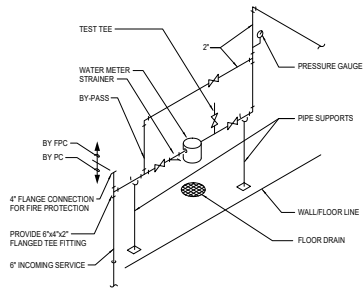
**4 INTERIOR CLEANOUT DETAIL**  
SCALE: NONE



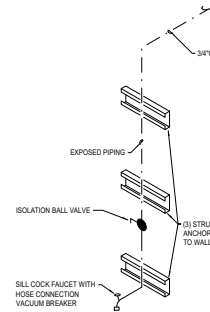
**5 ISOLATION SUPPORT DETAIL**  
SCALE: NONE



**6 PIPE SUPPORT DETAIL**  
SCALE: NONE



**7 WATER METER DETAIL**  
SCALE: NONE



**8 HOSE BIBB DETAIL**  
SCALE: NONE

No.	Description	Date

CITY OF MADISON

DOOR CREEK PARK SHELTER

MADISON, WI 53703

PLUMBING DETAILS