

COOLER / FREEZER REPLACEMENT

MDOC / ALGER CORRECTIONAL FACILITY

INDUSTRIAL PARK DRIVE, WETMORE, MI 49895

FILE NO. MDOC 472/25256.JBB

U.P. ENGINEERS & ARCHITECTS, INC.

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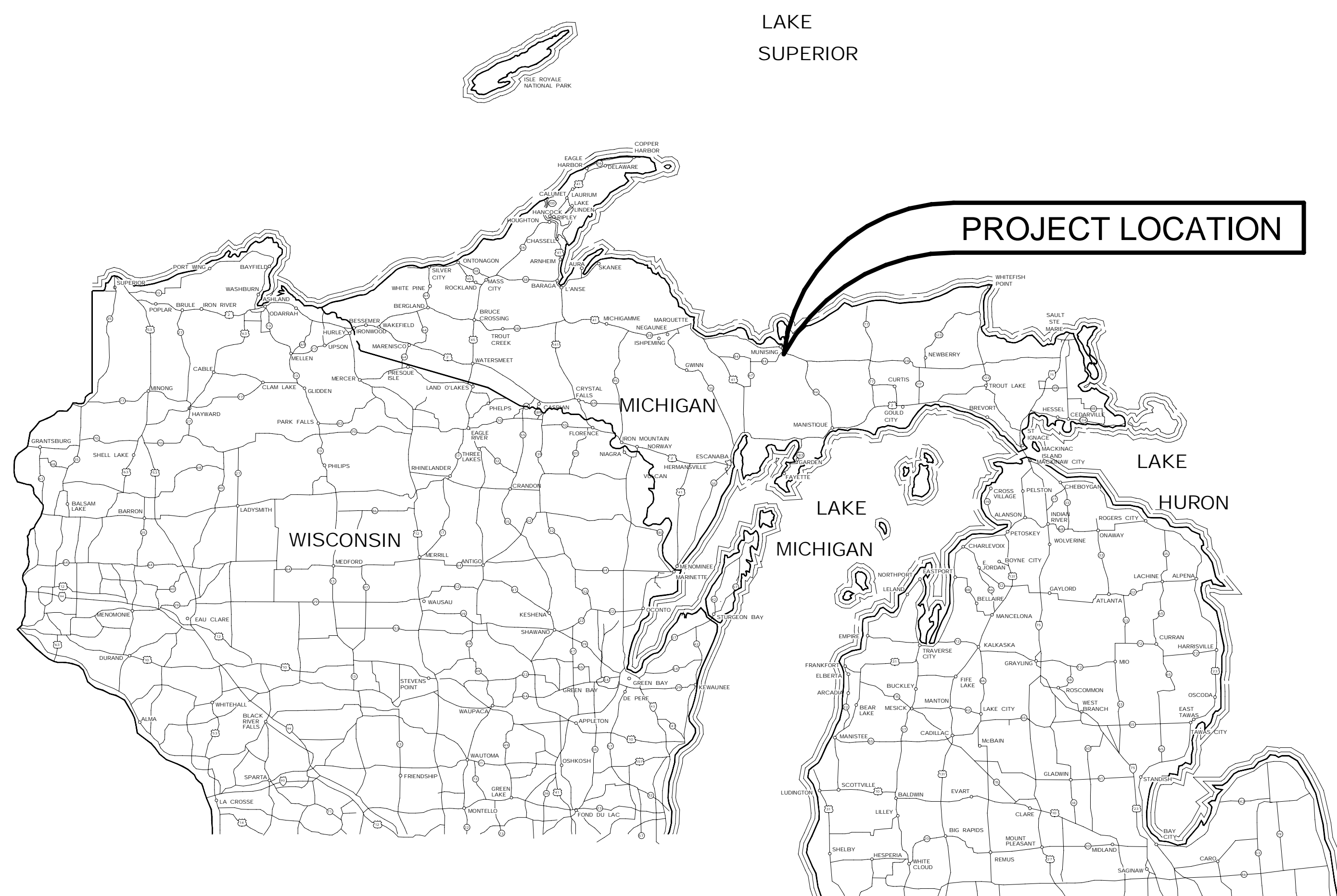
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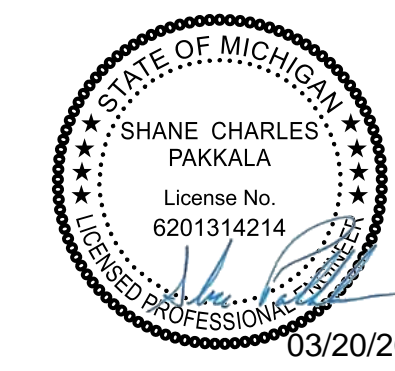
PROJECT VICINITY MAP

BUILDING CODE REVIEW	
ZONING:	INDUSTRIAL
2021 MICHIGAN REHABILITATION CODE FOR EXISTING BUILDINGS	
2021 MICHIGAN BUILDING CODE & MICHIGAN BARRIER FREE	
2021 MICHIGAN MECHANICAL CODE	
2021 MICHIGAN PLUMBING CODE	
2021 MICHIGAN ENERGY CODE	
2023 NATIONAL ELECTRICAL CODE	
2023 MICHIGAN ELECTRICAL CODE, PART 8	
USE GROUP:	WAREHOUSE BLDG. 500 = S-1, MODERATE-HAZARD STORAGE
CONSTRUCTION TYPE:	II-B. UNPROTECTED, NON-COMBUSTIBLE
FIRE PROTECTION:	AUTOMATIC SPRINKLER SYSTEM THROUGHOUT, FIRE ALARM ACTIVATED BY SPRINKLER
TOTAL ALLOWABLE AREA:	70,000 ALLOWABLE
SQUARE FOOTAGE OF NEW CONSTRUCTION:	N/A (REPLACE EXISTING EQUIPMENT)
COOLER:	561 SQ. FT.
FREEZER:	561 SQ. FT.
PROJECT DESCRIPTION:	REMOVE AND REPLACE EXISTING WALK-IN COOLER / FREEZER COMBINATION AND PROVIDE SEPARATE COOLER AND SEPARATE FREEZER WITH REMOTE REFRIGERATION CONDENSING. PROVIDE NEW LED LIGHTING IN COOLER & FREEZER. MAINTAIN EXISTING FLOOR DRAINS. PROVIDE NEW QUARRY TILE AS NEEDED.

SHEET INDEX	
NUMBER	SHEET NAME
G001	COVER SHEET
A100	DEMOLITION FLOOR PLAN
A101	OVERALL PROPOSED FLOOR PLAN
A102	ENLARGED COOLER/FREEZER PLAN & DETAILS
A103	DETAILS
A104	PHOTOS
MP001	MECHANICAL & PLUMBING ABBREVIATIONS, SYMBOLS, & NOTES
MP100	OVERALL MECHANICAL PLAN
MP101	MECHANICAL & PLUMBING PLANS
MP102	MECHANICAL & PLUMBING RCP
MP501	MECHANICAL AND PLUMBING SCHEDULES & DETAILS
E001	ELECTRICAL SPECIFICATIONS
E002	ELECTRICAL ABBREVIATIONS
E100	OVERALL ELECTRICAL PLAN
E101	ELECTRICAL POWER PLANS
E102	ELECTRICAL LIGHTING PLANS



PROJECT LOCATION



03/20/2026

FILE NO.: 472/25256.JBB
ACCOUNTING TEMPLATES:



STATE OF MICHIGAN
DEPARTMENT OF TECHNOLOGY, MANAGEMENT AND BUDGET
STATE FACILITIES ADMINISTRATION
DESIGN AND CONSTRUCTION DIVISION
ADAM P. LACH, RA, DIRECTOR

COOLER / FREEZER REPLACEMENT
FILE NO.: 472/25256.JBB
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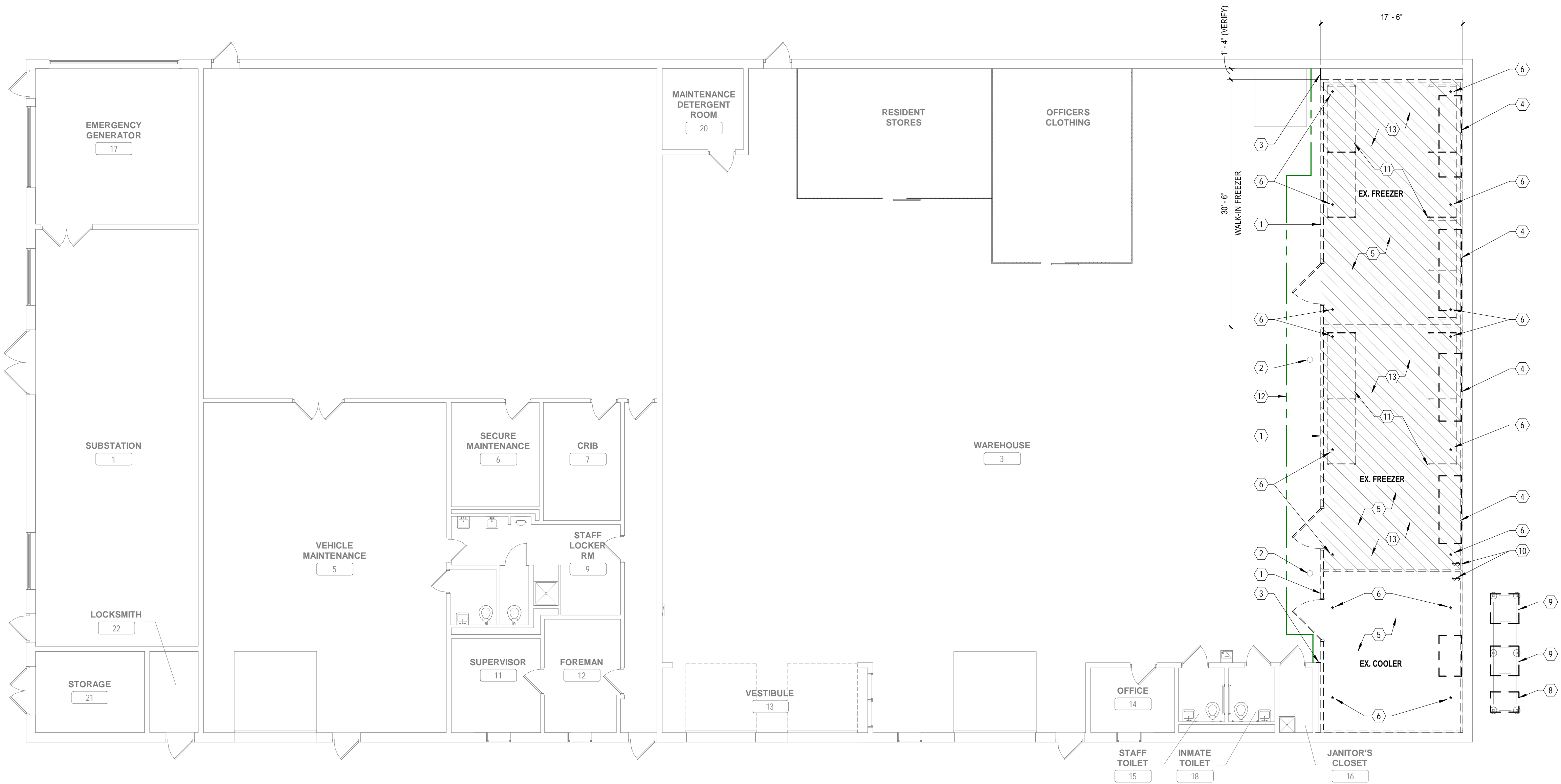
COOLER / FREEZER REPLACEMENT
MDOC / ALGER CORRECTIONAL FACILITY
PROJECT NO: M12-06112
DESIGNED BY: RMA
DRAWN BY: RMA
CHECKED: SCP
APPROVED: SCP

COVER SHEET
G001



- DEMOLITION FLOOR PLAN KEYNOTES**
- 1 REMOVE EXISTING COOLER / FREEZER UNITS AND ALL APPURTENANCES. PREPARE FLOOR SURFACE FOR NEW WALK-IN COOLER AND FREEZER UNIT. SALVAGE ANY LOOSE FLOOR TILE DURING DEMOLITION FOR RE-USE.
 - 2 EXISTING FLOOR DRAIN TO REMAIN.
 - 3 REMOVE EXISTING COOLER / FREEZER WALL SHROUD AND PREPARE SURFACE FOR NEW COOLER / FREEZER ENCLOSURE.
 - 4 REMOVE EXISTING CEILING MOUNTED COOLER / FREEZER EVAPORATOR UNITS.
 - 5 REMOVE EXISTING LIGHT FIXTURES IN COOLER / FREEZER.
 - 6 REMOVE EXISTING DRY SPRINKLER PENDANTS IN COOLER AND FREEZER.
 - 7 EXISTING DOOR SHALL BE TEMPORARILY CLOSED WHILE THE TEMPORARY DUST BARRIER IS IN PLACE.
 - 8 REMOVE AND DISPOSE OF EXISTING REFRIGERATION COMPRESSOR, PIPING, CONTROLS, AND ALL APPURTENANCES.
 - 9 REMOVE AND DISPOSE OF EXISTING FREEZER COMPRESSOR, PIPING, CONTROLS, AND ALL APPURTENANCES.
 - 10 REMOVE AND DISPOSE OF EXISTING COOLER "SOL" & "FAN" SWITCHES (LOCATED ON TOP OF THE EXISTING COOLER/FREEZER UNITS).
 - 11 COORDINATE SALVAGE OF EXISTING SHELVING WITH MDOC.
 - 12 DASHED LINE INDICATES EXTENT OF TEMPORARY ENCLOSED STRUCTURE FOR DUST CONTROL BY PROVIDING A ZIPWALL DUST BARRIER, OR APPROVED EQUAL. ONCE THE TEMPORARY DUST BARRIER IS INSTALLED, IT SHALL REMAIN INTACT AND WORK SHALL BE CONTINUOUS FROM DEMOLITION THROUGH INSTALLATION.
 - 13 REMOVE AND SALVAGE EXISTING FLOOR TILE FOR REUSE. REMOVE EXISTING FREEZER SUB-FLOOR, INSULATION, VAPOR BARRIER, AND SAND BED FOUND UNDER EXISTING COOLER / FREEZER. PREPARE SURFACE FOR NEW WALK-IN FREEZER WITH FLOOR. REFER TO PROPOSED PLANS FOR NEW WALK-IN FREEZER SIZE.

- GENERAL DEMOLITION NOTES**
- 1. PER SECTION 608 OF THE CLEAN AIR ACT (CAA), THE ENVIRONMENTAL PROTECTION AGENCY (EPA) HAS ESTABLISHED REGULATIONS THAT ARE RELEVANT TO THE DISPOSAL OF REFRIGERATION AND A/C EQUIPMENT.
 - 2. THE CONTRACTOR SHALL PROVIDE CERTIFIED TECHNICIAN(S) THAT DISPOSE OF EQUIPMENT THAT COULD RELEASE OZONE DEPLETING REFRIGERANTS INTO THE ATMOSPHERE.
 - 3. THE CONTRACTOR SHALL RECOVER AND SEND REFRIGERANT TO AN EPA-CERTIFIED RECLAIMER AND SHALL PROVIDE THE OWNER & ARCHITECT WITH A MANIFEST FOR DISPOSAL OF REFRIGERATION EQUIPMENT THAT ARE DISMANTLED ON-SITE.
 - 4. THE CONTRACTOR SHALL SALVAGE ALL EXISTING FLOOR TILE THAT IS IN GOOD CONDITION FOR RE-USE. COORDINATE SALVAGE WITH MDOC.
 - 5. THE CONTRACTOR SHALL COORDINATE WITH MDOC FOR THE REMOVAL AND SALVAGE OF EXISTING SHELVING AND RACKING IN THE EXISTING WALK-IN COOLER / FREEZER.



A1 OVERALL DEMOLITION FLOOR PLAN - WAREHOUSE BLDG 500
1/8" = 1'-0"

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MDOC / ALGER CORRECTIONAL FACILITY	RMA
PROJECT NO: M12-06112	DRAWN BY: RMA
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	APPROVED: SCP

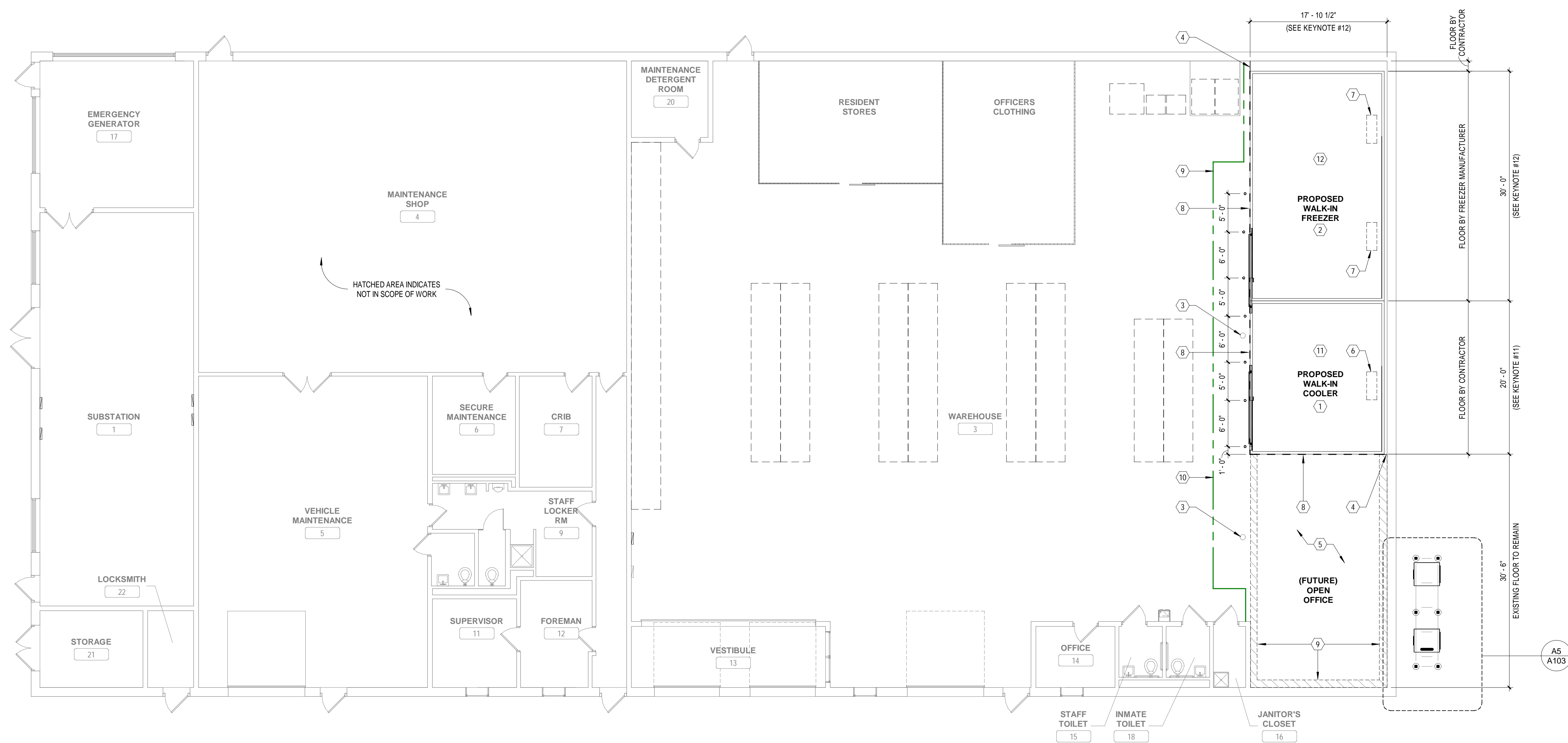
DEMOLITION FLOOR PLAN

A100



PROPOSED FLOOR PLAN KEYNOTES

- 1. PROPOSED WALK-IN COOLER (20' - 0" LONG x 17' - 6" WIDE x 10' - 0" HIGH):
 - 20' - 0" x 17' - 6" W x 10' - 0" H WALK-IN COOLER (FLOORLESS - INSTALL ON EXISTING QUARRY TILE FLOOR).
 - 26-GA CORROSION RESISTANT STUCCO EMBOSSED COATED STEEL - INTERIOR WALL, EXTERIOR WALL, INTERIOR CEILING.
 - 26-GA SMOOTH GALVANIZED - CEILING TOPSIDE, FLOOR BOTTOMSIDE.
 - 1" VINYL FLOOR SEALER (COOLER).
 - 72" x 84" MANUAL SINGLE SLIDING WALK-IN COOLER DOOR (SLIDE LEFT TO OPEN).
 - ROUTE (INSULATED) CONDENSATE LINES DIRECTLY FROM COOLER / FREEZER EVAPORATORS THROUGH CEILING OR WALL DOWN TO EXISTING CONDENSATE DRAIN & PROVIDE AIR GAP AS REQUIRED.
 - MODULARM 75LC HIGH / LOW DIGITAL ALARM AND LIGHT MANAGEMENT SYSTEM (INSTALLED IN COOLER DOOR PANEL).
 - LED VAPOR PROOF ALL TEMPERATURE INTEGRATED LIGHT FIXTURES (COOLER & FREEZER).
 - DIGITAL THERMOMETER (COOLER & FREEZER).
 - VINYL STRIP CURTAIN (COOLER).
- 2. PROPOSED WALK-IN FREEZER (30' - 0" LONG x 17' - 6" WIDE x 10' - 0" HIGH):
 - 30' - 0" x 17' - 6" W x 10' - 0" H WALK-IN FREEZER (w/ INSULATED FLOOR).
 - 26-GA CORROSION RESISTANT STUCCO EMBOSSED COATED STEEL - INTERIOR WALL, EXTERIOR WALL, INTERIOR CEILING.
 - 26-GA SMOOTH GALVANIZED - CEILING TOPSIDE, FLOOR BOTTOMSIDE.
 - 100 SMOOTH ALUMINUM - INTERIOR FLOOR (FREEZER).
 - 66" x 84" MANUAL SINGLE SLIDING FREEZER DOOR (SLIDE RIGHT TO OPEN).
 - ROUTE (INSULATED) CONDENSATE LINES DIRECTLY FROM COOLER / FREEZER EVAPORATORS THROUGH CEILING OR WALL DOWN TO EXISTING CONDENSATE DRAIN & PROVIDE AIR GAP AS REQUIRED.
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 - VINYL STRIP CURTAIN (COOLER).
- 3. EXISTING COOLER / FREEZER FLOOR DRAIN TIED INTO EXISTING BUILDING DRAIN SYSTEM TO REMAIN.
- 4. PROVIDE NEW CLOSURE PANELS AT SIDES OF COOLER / FREEZER.
- 5. EXISTING QUARRY TILE FLOOR FINISH TO REMAIN. PLACE SALVAGED TILE AS NEEDED. CLEAN FLOORS AFTER COOLER / FREEZER INSTALLATION.
- 6. PROPOSED CEILING MOUNTED EVAPORATOR UNIT (COOLER), FOR R448A / R449A HERMETIC CONDENSING UNITS, 13,600 BTU @ SUCTION TEMP +25°F, 10°F T.D., (2) FANS, 115V / 60 / 1-PH.
- 7. PROPOSED CEILING MOUNTED LOW TEMP EVAPORATOR COIL (FREEZER), FOR R-448A / R449A HERMETIC CONDENSING UNITS, 7600 BTU @ SUCTION TEMP -20°F, 10°F T.D., 90°F AMBIENT, (2) FANS, ELECTRIC DEFROST, 208-230V / 60 / 1-PH.
- 8. PLACE SALVAGED TILE AND PROVIDE NEW MATCHING QUARRY TILE AS NEEDED AT PERIMETER OF COOLER / FREEZER (AS REQ'D), MATCH EXISTING COLOR.
- 9. CLEAN EXISTING FLOOR AND WALLS AT AREA WHERE EXISTING WALK-IN COOLER WAS REMOVED. PROVIDE TOUCH-UP PAINT AS REQUIRED. REPLACE ANY BROKEN FLOOR TILES WITH NEW TILE (COLOR TO MATCH EXISTING).
- 10. DASHED LINE INDICATES EXTENT OF TEMPORARY ENCLOSED STRUCTURE FOR DUST CONTROL BY PROVIDING A ZIPWALL DUST BARRIER, OR APPROVED EQUAL. ONCE THE TEMPORARY DUST BARRIER IS INSTALLED, IT SHALL REMAIN INTACT AND WORK SHALL BE CONTINUOUS FROM DEMOLITION THROUGH INSTALLATION.
- 11. PROPOSED POURED SEAMLESS SEALED CONCRETE FINISH ON PROPOSED 5" CONC. FLOOR WITH 3" RIGID INSULATION ON EXISTING 6" CONC. SUB-FLOOR. COORDINATE INSTALLATION OF (FLOORLESS) WALK-IN COOLER WITH MANUFACTURER.
- 12. PROPOSED RECESSED WALK-IN FREEZER FLOOR (BY MANUFACTURER) ON EXISTING 6" CONCRETE SUB-FLOOR. COORDINATE INSTALLATION OF INSULATED FREEZER FLOOR SYSTEM WITH FREEZER MANUFACTURER. CONTRACTOR SHALL CLEAN EXISTING CONC. SUBFLOOR PRIOR TO WALK-IN FREEZER FLOOR INSTALLATION. REFER TO DETAILS B1 & C1 ON SHEET A102.



A3 PROPOSED FLOOR PLAN - WAREHOUSE BLDG 500
1/8" = 1'-0"



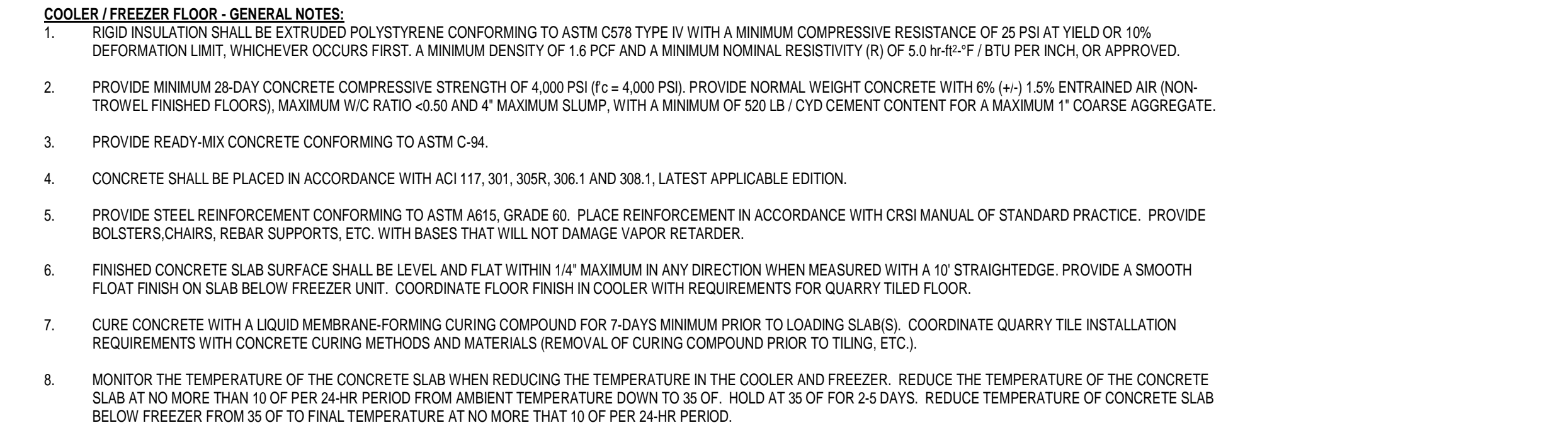
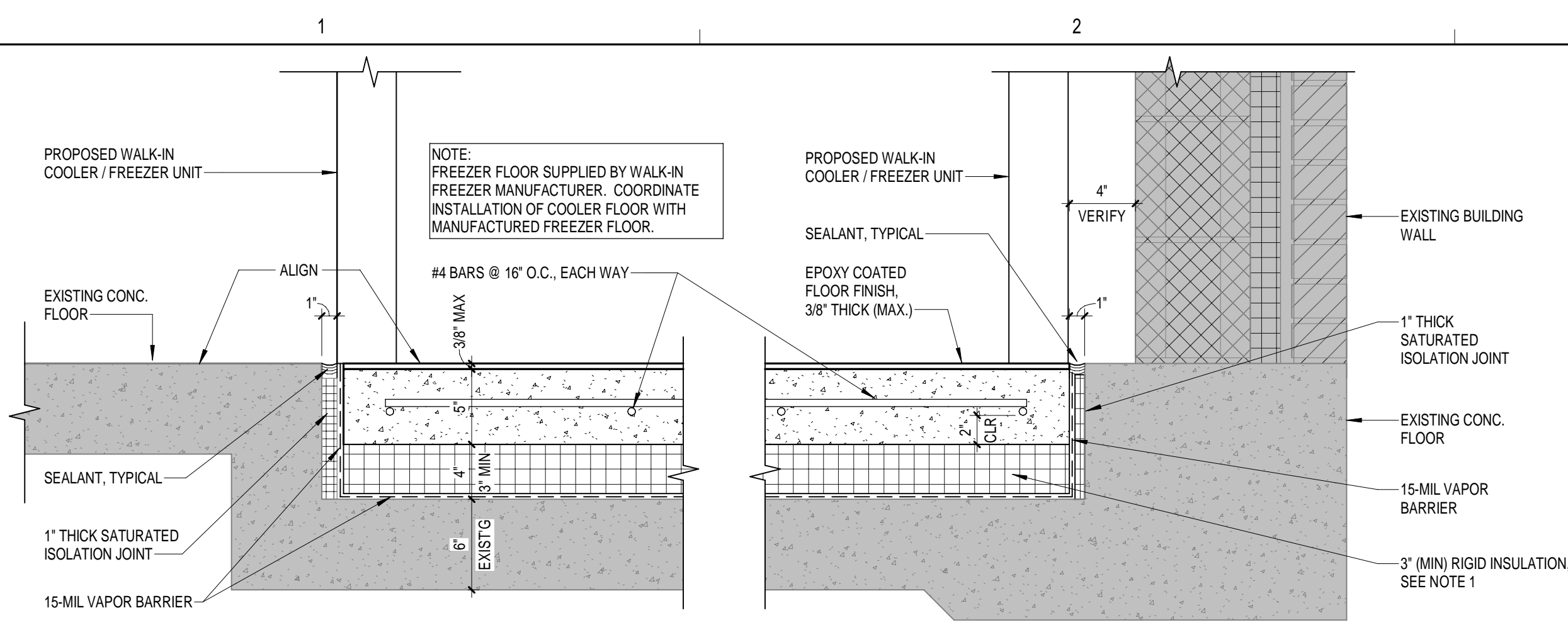
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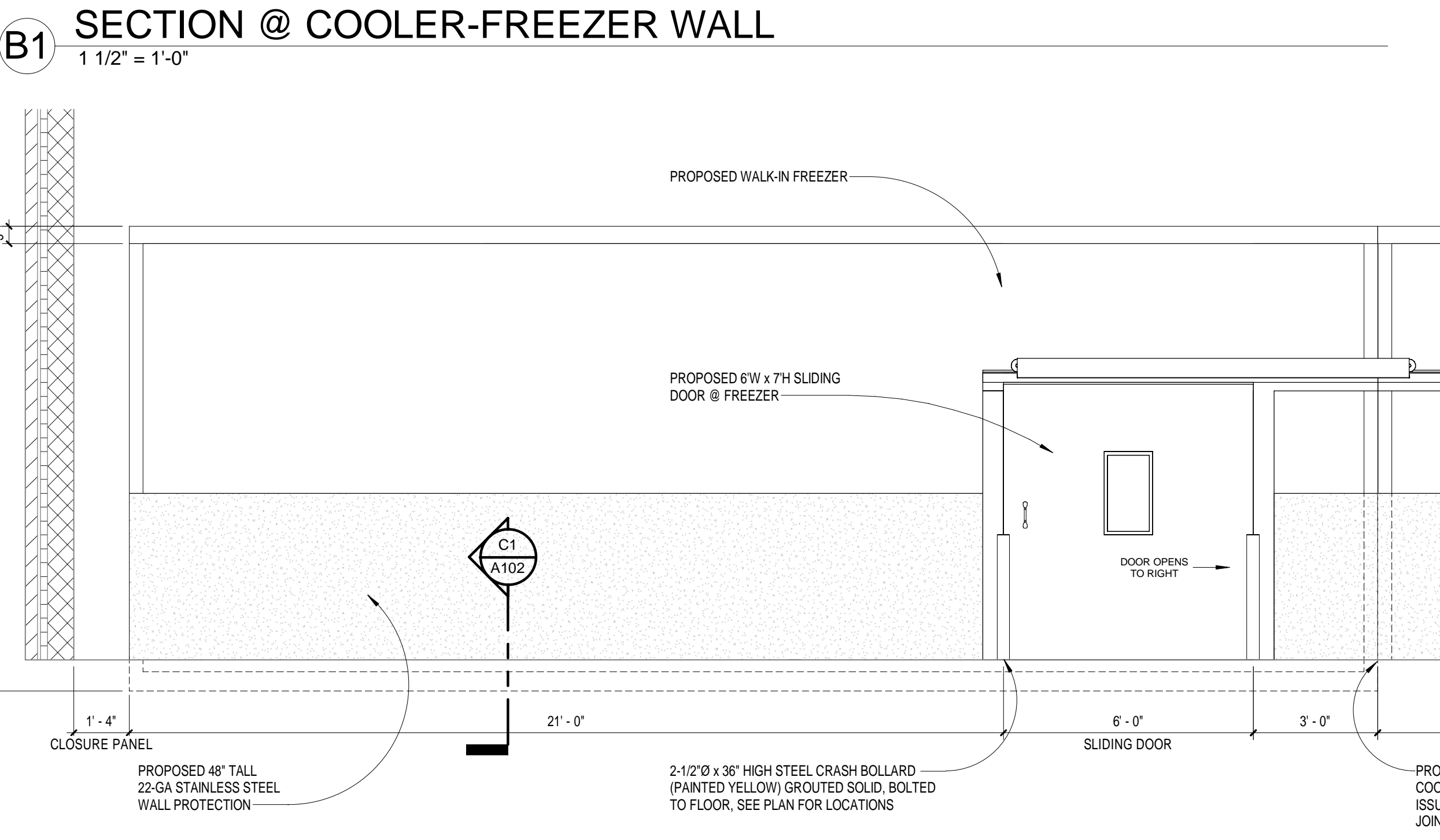
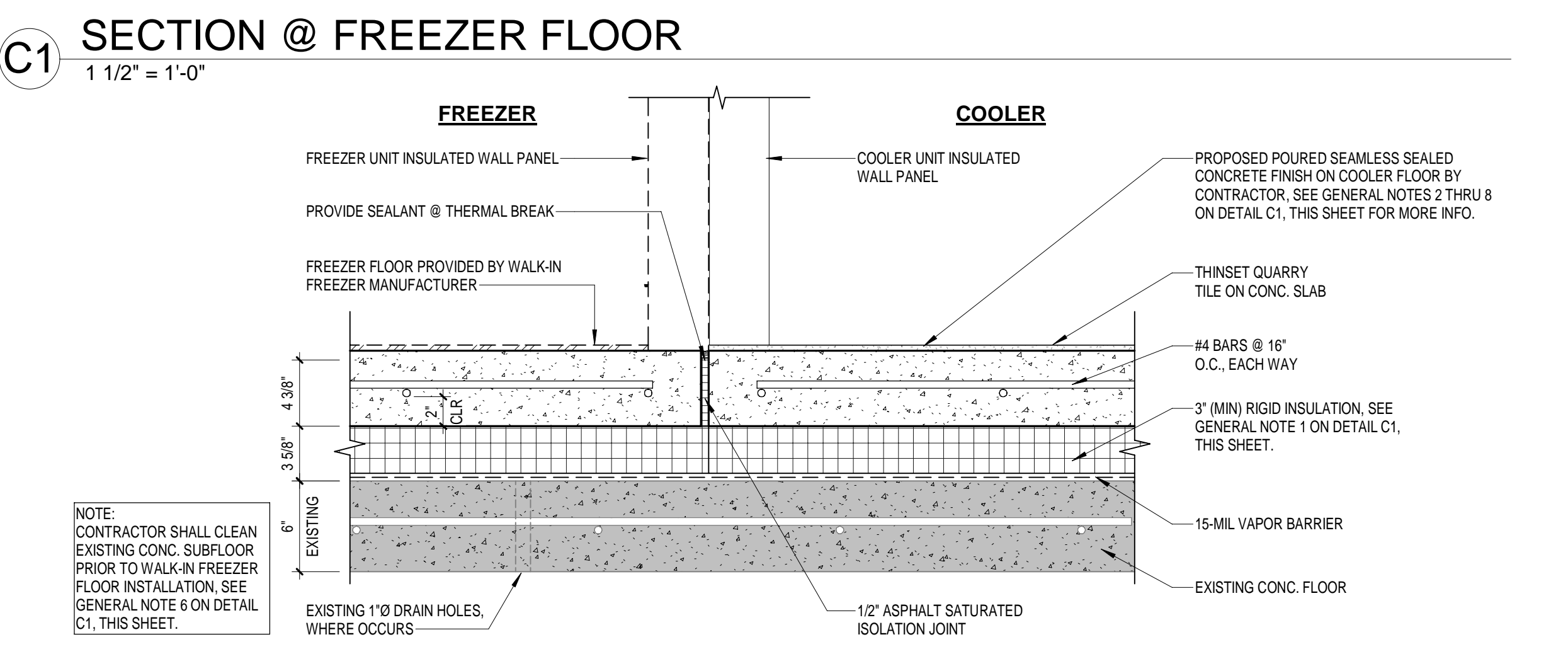
COOLER / FREEZER REPLACEMENT	DESIGNED BY:
MDOC / ALGER CORRECTIONAL FACILITY	RWA
PROJECT NO: M12-06112	KPS/RMA
DRAWN BY:	SCP
CHECKED:	SCP
APPROVED:	SCP

OVERALL PROPOSED FLOOR PLAN
A101





- WALK-IN COOLER CONDENSING UNIT: LOCATED OUTSIDE**
- (1) MODEL # M5MC030MC
 - 3-HP UNIT
 - 208-230 / 60 / 3-PHASE
 - R-454C
 - OUTDOOR UNIT SCROLL ELECTRONIC CONTROLLER
 - MEDIUM TEMP 35°F
 - 26,911 BTUH SYSTEM CAPACITY
 - MOUNTED TIMER
 - SIZED FOR 90°F TEMPERATURE AT CONDENSER
 - CONNECTIONS - LIQUID: 0.5" SUCTION: 0.875"
 - HEATED / INSULATED RECEIVER
- WALK-IN COOLER EVAPORATOR UNIT: LOCATED ON TOP OF UNIT**
- (1) MODEL # E1MCK270A-MA
 - 115 / 60 / 1-PHASE
 - R-454C
 - R-454C AIR DEFROST A2L MITIGATION LOW PROFILE
 - LogTemp CONTROLLER
 - MEDIUM TEMP 35°F
 - 27,000 BTUH EVAPORATOR CAPACITY
 - FAN AMPS: 2.4
- WALK-IN COOLER / FREEZER FINISHES:**
- 26-GA CORROSION RESISTANT STUCCO EMBOSSED COATED STEEL (INTERIOR WALL, EXTERIOR WALL, INTERIOR CEILING)
 - 26-GA SMOOTH GALVANIZED (CEILING TOPSIDE, FLOOR BOTTOMSIDE)
 - 100 SMOOTH ALUMINUM - INTERIOR FLOOR
 - 1" VINYL FLOOR SEALER (1) COOLER (35.0°F)
 - 48" HIGH ALUMINUM DIAMOND TREADPLATE STANDARD WALL PROTECTION w/ COUNTERSUNK HOLES AND SCREWS



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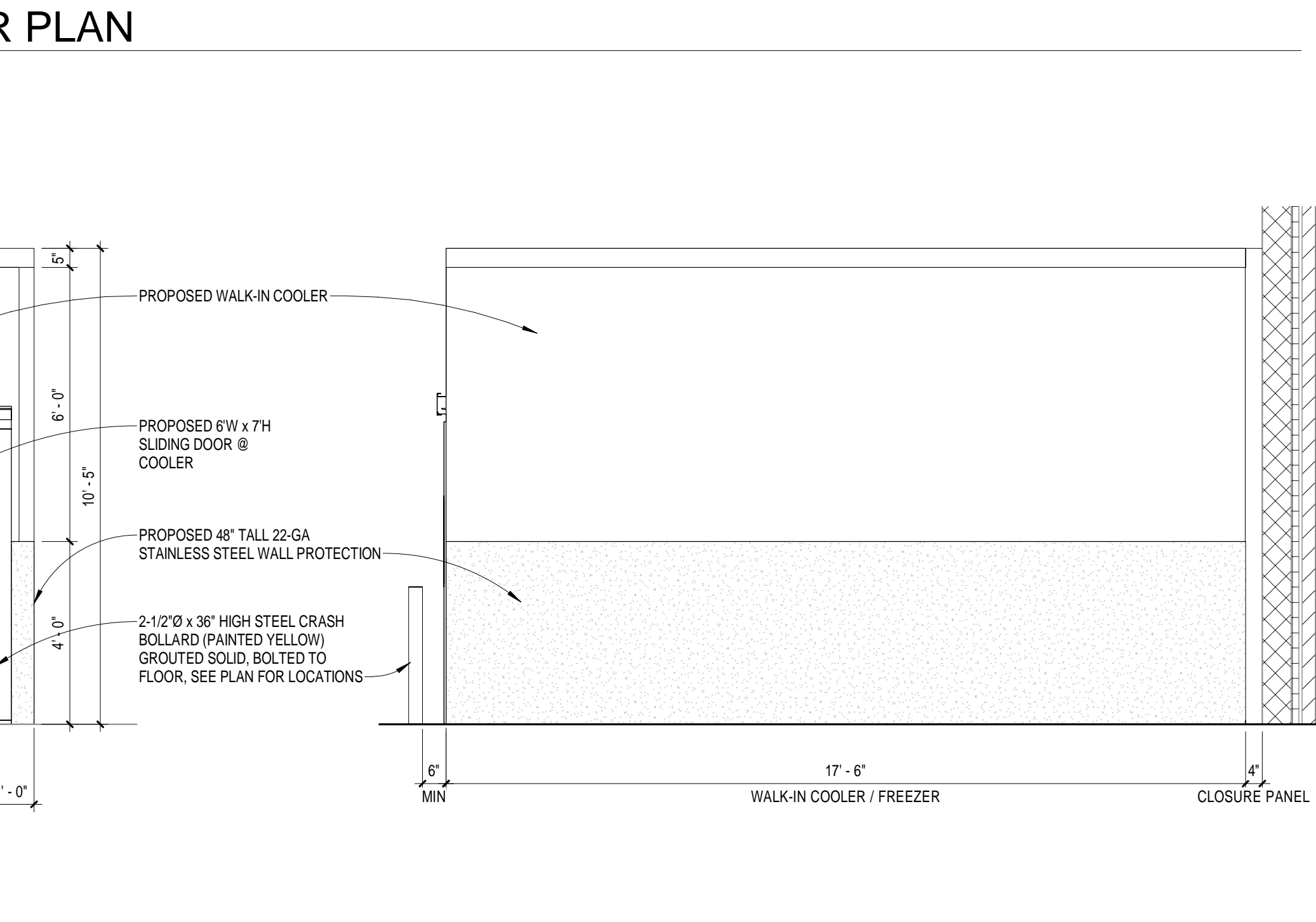
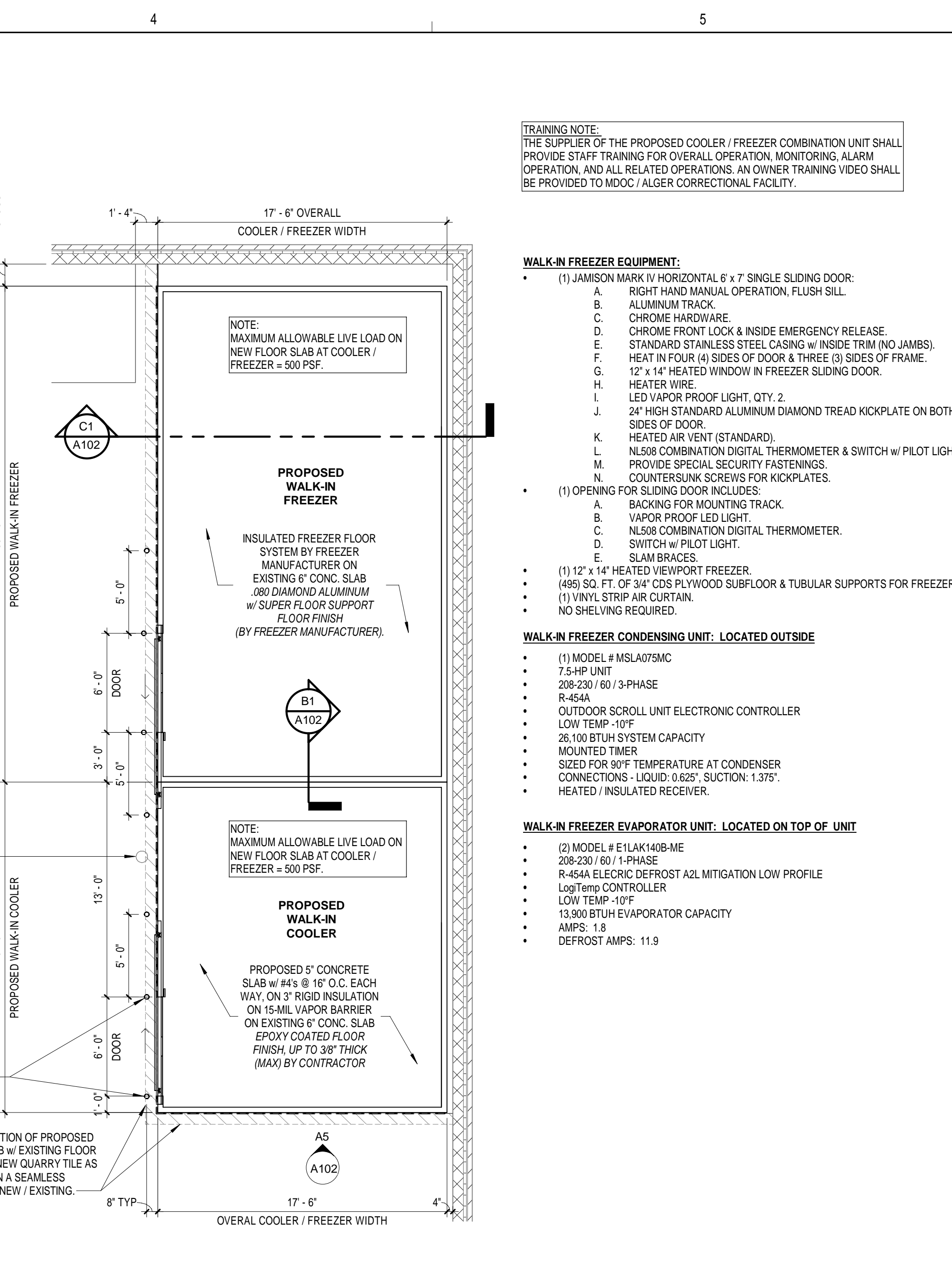
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 - 27,000 BTUH EVAPORATOR CAPACITY
 - FAN AMPS: 2.4
- WALK-IN COOLER / FREEZER FINISHES:**
- 26-GA CORROSION RESISTANT STUCCO EMBOSSED COATED STEEL (INTERIOR WALL, EXTERIOR WALL, INTERIOR CEILING)
 - 26-GA SMOOTH GALVANIZED (CEILING TOPSIDE, FLOOR BOTTOMSIDE)
 - 100 SMOOTH ALUMINUM - INTERIOR FLOOR
 - 1" VINYL FLOOR SEALER (1) COOLER (35.0°F)
 - 48" HIGH ALUMINUM DIAMOND TREADPLATE STANDARD WALL PROTECTION w/ COUNTERSUNK HOLES AND SCREWS



TRAINING NOTE:
THE SUPPLIER OF THE PROPOSED COOLER / FREEZER COMBINATION UNIT SHALL PROVIDE STAFF TRAINING FOR OVERALL OPERATION, MONITORING, ALARM OPERATION, AND ALL RELATED OPERATIONS. AN OWNER TRAINING VIDEO SHALL BE PROVIDED TO MDOC / ALGER CORRECTONAL FACILITY.

COOLER / FREEZER REPLACEMENT
FILE NO.: 472/25256.JBB

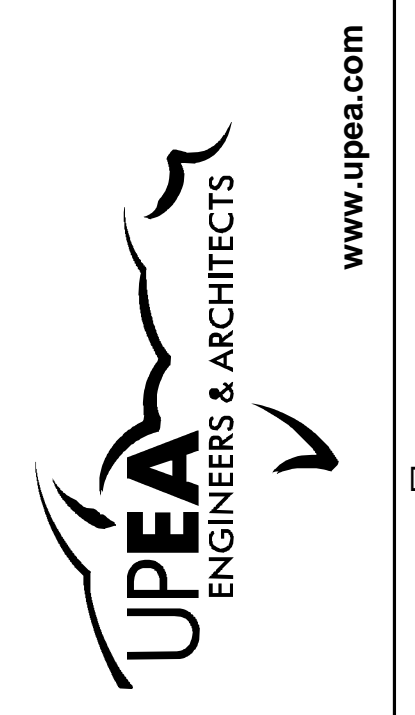
MDOC / ALGER CORRECTONAL FACILITY
INDUSTRIAL PARK DRIVE, WETMORE, MI 49895

ISSUED FOR:	50% OWNER REVIEW	12/24/2025
	100% OWNER REVIEW	02/27/2026
	LARA REVIEW	02/27/2026
	BIDDING	03/20/2026

COOLER / FREEZER REPLACEMENT	PROJECT NO.: M12-06112	DESIGNED BY: RWA
MDOC / ALGER CORRECTONAL FACILITY		DRAWN BY: RWA
		CHECKED: SCP
		APPROVED: SCP

ENLARGED COOLER/FREEZER PLAN & DETAILS

A102





REMOVE EXISTING WALK-IN COOLER SAFETY SWITCH. PROVIDE NEW HEAVY DUTY SAFETY SWITCH FOR NEW WALK-IN COOLER.

B1 PHOTO 06
12" = 1'-0"



REMOVE TWO (2) EXISTING WALK-IN FREEZER SAFETY SWITCHES. PROVIDE ONE (1) NEW HEAVY DUTY SAFETY SWITCH FOR NEW WALK-IN FREEZER.

B3 PHOTO 05
12" = 1'-0"



REMOVE EXISTING PIPING FOR COOLER CONDENSING UNIT. ROUTE PROPOSED CONDUIT THROUGH EXISTING WALL PENETRATION.

REMOVE EXISTING DISCONNECT SWITCH

REMOVE EXISTING COOLER CONDENSING UNIT

EXISTING 2-1/2" x 2-1/2" TUBE STEEL SUPPORT FRAME TO REMAIN. PROVIDE NEW FRAME ABOVE WITH METAL ROOF, SLOPED AWAY FROM BUILDING.

REMOVE EXISTING PIPING FOR FREEZER CONDENSING UNIT. ROUTE PROPOSED CONDUIT THROUGH EXISTING WALL PENETRATION.

REMOVE TWO (2) EXISTING FREEZER CONDENSING UNITS

EXISTING CHAIN-LINK FENCE TO REMAIN

EXISTING CHAIN-LINK FENCE TO REMAIN

B4 PHOTO 04
12" = 1'-0"



REMOVE EXISTING FREEZER WALL SHROUD AND PREPARE SURFACE FOR NEW COOLER / FREEZER ENCLOSURE.

REMOVE EXISTING WALK-IN FREEZER

MAINTAIN EXISTING GAP BETWEEN EXISTING WASHING MACHINE AND PROPOSED WALK-IN FREEZER

EXISTING FLOOR DRAIN TO REMAIN

A1 PHOTO 03
12" = 1'-0"



REMOVE EXISTING WALK-IN COOLER & FREEZER

EXISTING FLOOR DRAIN TO REMAIN

REMOVE EXISTING CRASH BOLARDS, PATCH & GRIND CONCRETE FLOOR SMOOTH

A3 PHOTO 02
NO SCALE



REMOVE EXISTING WALK-IN COOLER UNIT

REMOVE EXISTING COOLER / FREEZER WALL SHROUD AND PREPARE SURFACE FOR NEW COOLER / FREEZER ENCLOSURE.

EXISTING DOOR TO REMAIN.

EXISTING FLOOR DRAIN TO REMAIN.

REMOVE EXISTING WALK-IN FREEZER UNIT AND PREPARE SURFACE FOR NEW WALK-IN COOLER

REMOVE & REPLACE ANY BROKEN OR MISSING FLOOR TILE UPON INSTALLATION OF NEW COOLER / FREEZER COMBO UNIT.

A4 PHOTO 01
NO SCALE



COOLER / FREEZER REPLACEMENT
FILE NO.: 472/25256-JBB
MDOC / ALGER CORRECTIONAL FACILITY
INDUSTRIAL PARK DRIVE, WETMORE, MI 49895

ISSUED FOR:	DATE:
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COOLER / FREEZER REPLACEMENT	DESIGNED BY:
MDOC / ALGER CORRECTIONAL FACILITY	RWA
PROJECT NO: M12-06112	RWA
DESIGNED BY:	SCP
DRAWN BY:	SCP
CHECKED:	SCP
APPROVED:	SCP

PHOTOS

A104

MECHANICAL\PLUMBING ABBREVIATIONS, SYMBOLS AND NOTES

ABBREVIATIONS

AAV	AIR ADMITTANCE VALVE	JAN	JANITOR
ACCU	AIR COOLED CONDENSING UNIT	JC	JANITOR'S CLOSET
AFF	ABOVE FINISHED FLOOR	JS	JANITOR'S SINK
AHU	AIR HANDLING UNIT		
AI	ANALOG INPUT	KW	KILOWATT
AO	ANALOG OUTPUT		
APD	AIR PRESSURE DROP	LAT	LEAVING AIR TEMPERATURE
AS	AIR SEPERATOR	LAV	LAVATORY
		LBS	POUNDS
B	BOILER	LHWR	LOW TEMPERATURE HOT WATER RETURN
BB	BASEBOARD	LHWS	LOW TEMPERATURE HOT WATER SUPPLY
BC	BOOSTER COIL	LIQ	LIQUID (REFRIGERATION)
BDD	BACKDRAFT DAMPER	LV	LOUVER
BFG	BELOW FINISHED GRADE	LP	PROPANE GAS (LIQUID)
BFP	BACKFLOW PREVENTER	LWT	LEAVING WATER TEMPERATURE
BHP	BRAKE HORSE POWER		
BOD	BOTTOM OF DUCT	M	METER
BOP	BOTTOM OF PIPE	MAU	MAKE-UP AIR HANDLING UNIT
BT	BATH TUB	MAX	MAXIMUM
BTU	BRITISH THERMAL UNITS	MB	MOP BASIN
BTUH	BRITISH THERMAL UNITS PER HOUR	MBH	BRITISH THERMAL UNITS (1000)
		MBTUH	BRITISH THERMAL UNITS (1000)
CA	CONVECTOR	MC	MECHANICAL CONTRACTOR
CA	COMPRESSED AIR	MCA	MINIMUM CIRCUIT AMPACITY
CB	CATCH BASIN	MD	MOTORIZED DAMPER
CC	COOLING COIL	MECH	MECHANICAL
CCF	100 CUBIC FEET	MIN	MINIMUM
CD	CEILING DIFFUSER	MOC	MAXIMUM OVER CURRENT PROTECTION
CF	CUBIC FEET		
CFH	CUBIC FEET PER HOUR	N2O	NITROUS OXIDE
CFM	CUBIC FEET PER MINUTE	NC	NORMALLY CLOSED
CFP	CLEAN OUT FERRULE AND PLUG	NC	NOT INCLUDED OR NOT IN CONTRACT
CH	CHILLER	NIT	NITROGEN
CI	CAST IRON	NO	NORMALLY OPEN
CHWR	CHILLED WATER RETURN		
CHWS	CHILLED WATER SUPPLY	OA	OUTDOOR AIR
CO	CLEAN OUT	OAI	OUTDOOR AIR INTAKE
CO	CARBON MONOXIDE	OC	ON CENTER
COND	CONDENSATE	OD	OVERFLOW DRAIN
CO2	CARBON DIOXIDE	ODP	OPEN DRIP PROOF
COOL	COOLING TOWER	OXY	OXYGEN
CJ	CONDENSING UNIT		
CU FT	CUBIC FOOT	P	PUMP
CUH	CABINET UNIT HEATER	PC	PLUMBING CONTRACTOR
CW	COLD WATER	PD	PNEUMATIC OPERATED DAMPER
CWR	CONDENSER WATER RETURN	PVI	POST INDICATING VALVE
CWS	CONDENSER WATER SUPPLY	PRV	PRESSURE REDUCING VALVE
		PT	PRESSURE TEMPERATURE PLUG
DB	DIFFUSER	PTAC	PACKAGED TERMINAL AIR COND. UNIT
DB	DRY BULB	PVAC	PROCESS VACUUM
DEG F	DEGREE FAHRENHEIT		
DF	DRINKING FOUNTAIN	R	REGISTER
DI	DIGITAL INPUT	RA	RETURN AIR
DI	DIGITAL OUTPUT	RD	ROOF DRAIN
DN	DOWN	RET	RETURN
DO	DRAIN, WASTE AND VENT	RF	RETURN FAN
DVV		RG	RETURN AIR GRILLE
		RPZ	REDUCED PRESSURE ZONE BACKFLOW PREVENTER
EA	EACH	RR	RETURN REGISTER
EAT	ENTERING AIR TEMPERATURE	RTU	ROOF TOP UNIT
EC	ELECTRICAL CONTRACTOR		
EF	EXHAUST FAN	S	SINK
EG	EXHAUST AIR GRILLE	SA	SUPPLY AIR
ELEV	ELEVATION	SAD	SUPPLY AIR DIFFUSER
ER	EXHAUST AIR REGISTER	SAF	SUPPLY AIR FAN
EUH	ELECTRIC UNIT HEATER	SAN	SANITARY SEWER
EWC	ELECTRIC WATER COOLER	SD	SMOKE DETECTOR
EW	ELECTRIC WATER HEATER	SG	SUPPLY AIR GRILLE
EWT	ENTERING WATER TEMPERATURE	SH	SHOWER HEAD
EX	EXISTING	SHC	STEAM HEATING COIL
EXH	EXHAUST	SR	SUPPLY REGISTER
		SS	STAINLESS STEEL
F	FURNACE	ST	STORM
FAI	FRESH AIR INTAKE	STM	STEAM
FBO	FURNISHED BY OTHERS	SUCT	SUCTION (REFRIGERATION)
FC	FAN COIL		
FD	FLOOR DRAIN	TCC	TEMPERATURE CONTROL CONTRACTOR
FD	FIRE DAMPER	TC	TEMPERATURE CONTROL DAMPER
FIN	FIN TUBE RADIATION	TCP	TEMPERATURE CONTROL PANEL
FLG	FLANGE	TD	TRANSFER DUCT
FP	FIRE PROTECTION	TG	TRANSFER AIR GRILLE
FFM	FEET PER MINUTE	TOG	TOP OF GRILLE
FT	FOOT OR FEET	TT	THERMOSTATIC TRAP
F&T	FLOAT AND THERMOSTATIC TRAP	TYP	TYPICAL
		UG	UNDERGROUND
G	GAS (NATURAL)	UH	UNIT HEATER
GAL	GALLON	UV	UNIT VENTILATOR
GC	GENERAL CONTRACTOR		
GPH	GALLONS PER HOUR	V	VENT
GPM	GALLONS PER MINUTE	VAC	VACUUM
GT	GREASE TRAP	VAV	VARIABLE AIR VOLUME BOX
		VD	VOLUME DAMPER
H	HYDROGEN	VFD	VARIABLE FREQUENCY DRIVE
HB	HOSE BIBB	VS	VENT STACK (SANITARY)
HC	HEATING COIL	VTR	VENT THRU ROOF (SANITARY)
HCO	HORIZONTAL CLEANOUT	VUV	VERTICAL UNIT VENTILATOR
HP	HORSE POWER		
HTR	HEATER	W	WASTE
HVAC	HEATING, VENTILATING & AIR COND	WB	WET BULB
HW	HOT WATER	WC	WATER CLOSET
HWC	HOT WATER RECIRCULATING	WO	WITHOUT
HWR	HOT WATER RETURN	WH	WATER HEATER
HWS	HOT WATER SUPPLY	WHP	WATER SOURCE HEAT PUMP
HX	HEAT EXCHANGER		
		INVERT ELEVATION	
IE	INVERT ELEVATION	INCH OR INCHES	
IF	INLINE FAN	IRON PIPE	
IN	INCH OR INCHES	INVERT	
IP	IRON PIPE	INSTANTANEOUS WATER HEATER	
INV	INVERT		
IWH	INSTANTANEOUS WATER HEATER		

NOTE:
NOT ALL ABBREVIATIONS AND/OR SYMBOLS ARE USED IN THIS SET OF DOCUMENTS.

SYMBOL LEGEND

	SUPPLY AIR DIFFUSER		PIPE BREAK
	LINEAR DIFFUSER		PIPE DOWN
	RETURN OR EXHAUST AIR GRILLE		PIPE UP
	EXHAUST FAN - ROOF		CLEAN OUT
	FRESH AIR INTAKE HOOD - ROOF		GAS METER
	RELIEF AIR HOOD - ROOF		UNION
	SUPPLY REGISTER		HOSE BIBB
	RETURN OR EXHAUST REGISTER		FLOW DETECTOR / SWITCH
	SQUARE TO ROUND TRANSITION		VALVE WITH TAMPER SWITCH
	VOLUME CONTROL DAMPER		ELECTRIC BELL
	FIRE DAMPER (RATING DETERMINED BY WALL TYPE)		SIDEWALL SPRINKLER HEAD
	SMOKE DAMPER		CONCEALED SPRINKLER HEAD
	COMBINATION FIRE/SMOKE DAMPER		PENDANT SPRINKLER HEAD
	CEILING RADIATION DAMPER		UPRIGHT SPRINKLER HEAD
	MOTORIZED DAMPER		SIAMESE CONNECTION
	DUCT SMOKE DETECTOR		BARE FIN TUBE ELEMENT
	THERMOSTAT - 48" A.F.F.		FIN TUBE ELEMENT WITH COVER
	HUMIDISTAT - 48" A.F.F.		EXTERNALLY INSULATED DUCTWORK
	AIR FLOW		INTERNALLY LINED DUCTWORK
	TEMPERATURE SENSOR		
	HUMIDITY SENSOR		
	PRESSURE SENSOR		
	SUPPLY AIR DUCT UP		
	SUPPLY AIR DUCT DOWN		
	RETURN AIR DUCT UP		
	RETURN AIR DUCT DOWN		
	EXHAUST AIR DUCT UP		
	EXHAUST AIR DUCT DOWN		
	BALL VALVE		
	BUTTERFLY VALVE		
	CIRCUIT SETTER		
	CHECK VALVE		
	GATE VALVE		
	GLOBE VALVE		
	GAS VALVE OR PLUG VALVE		
	2-WAY CONTROL VALVE		
	3-WAY CONTROL VALVE		
	PRESSURE RELIEF VALVE		
	BALANCE VALVE		
	INLINE PUMP		
	REDUCED PRESSURE PRINCIPLE BACK FLOW PREVENTER STRAINER		
	WATER HAMMER ARRESTOR		
	CAP		
	PIPING 90		
	PIPING 'T'		
	HUMIDIFIER		
	METER		
	CONNECTION TO EXISTING		

	24x14 SA	SUPPLY AIR DUCT - EXISTING
	24x14 SA	SUPPLY AIR DUCT - DEMO
	24x14 SA	SUPPLY AIR DUCT - NEW
	24x14 RA	RETURN AIR DUCT - EXISTING
	24x14 RA	RETURN AIR DUCT - DEMO
	24x14 RA	RETURN AIR DUCT - NEW
	24x14 OA	OUTSIDE AIR DUCT - EXISTING
	24x14 OA	OUTSIDE AIR DUCT - DEMO
	24x14 OA	OUTSIDE AIR DUCT - NEW
	24x14 EA	EXHAUST AIR DUCT - EXISTING
	24x14 EA	EXHAUST AIR DUCT - DEMO
	24x14 EA	EXHAUST AIR DUCT - NEW
	HWS	HYDRONIC HOT WATER SUPPLY - EXISTING
	HWS	HYDRONIC HOT WATER SUPPLY - DEMO
	HWS	HYDRONIC HOT WATER SUPPLY - NEW
	HWR	HYDRONIC HOT WATER RETURN - EXISTING
	HWR	HYDRONIC HOT WATER RETURN - DEMO
	HWR	HYDRONIC HOT WATER RETURN - NEW
	FP	FIRE PROTECTION - EXISTING
	FP	FIRE PROTECTION - DEMO
	FP	FIRE PROTECTION - NEW
	CDS	CONDENSOR WATER SUPPLY
	CDS	CONDENSOR WATER SUPPLY - DEMO
	CDS	CONDENSOR WATER SUPPLY - EXIST
	CDR	CONDENSOR WATER RETURN
	CDR	CONDENSOR WATER RETURN - DEMO
	CDR	CONDENSOR WATER RETURN - EXIST
	CHWS	CHILLED WATER SUPPLY
	CHWS	CHILLED WATER SUPPLY - DEMO
	CHWS	CHILLED WATER SUPPLY - EXIST
	CHWR	CHILLED WATER RETURN
	CHWR	CHILLED WATER RETURN - DEMO
	CHWR	CHILLED WATER RETURN - EXIST
	AIR	COMPRESSED AIR - EXISTING
	AIR	COMPRESSED AIR - DEMO
	AIR	COMPRESSED AIR - NEW
	STM	STEAM - EXISTING
	STM	STEAM - DEMO
	STM	STEAM - NEW
	C	CONDENSATE - EXISTING
	C	CONDENSATE - DEMO
	C	CONDENSATE - NEW

MECHANICAL\PLUMBING GENERAL NOTES

- THESE DRAWINGS ARE DIAGRAMMATIC IN CHARACTER AND DO NOT NECESSARILY INDICATE EVERY OFFSET, VALVE, FITTING ETC. REQUIRED. CONTRACTOR IS RESPONSIBLE FOR FIELD ROUTING ALL DUCTWORK AND PIPING AT NO ADDITIONAL COST.
- CONTRACTOR SHALL SECURE AND PAY FOR ANY AND ALL PERMITS AND INSPECTION FEES APPLICABLE TO WORK, AND PAY FOR ALL STATE AND FEDERAL TAXES IMPOSED.
- VERIFY ALL LAYOUTS, DIMENSIONS, CLEARANCES, AND METHODS WITH EQUIPMENT SUPPLIERS AND ALL TRADES. COORDINATE WITH OWNER FOR REQUIREMENTS PERTAINING TO ALL OWNER FURNISHED EQUIPMENT.
- CONTRACTORS SHALL COORDINATE WITH ALL OTHER TRADES FOR INSTALLATION OF ALL MATERIALS AND EQUIPMENT. CONTRACTORS SHALL FIELD VERIFY ANY EXISTING CONDITIONS. PREPARE COORDINATION DRAWINGS AT A MINIMUM OF 1/2"=1'-0" SCALE WHERE ACCURATE COORDINATION IS REQUIRED. CONTRACTOR SHALL BE RESPONSIBLE FOR PROJECT COORDINATION WITH OTHER TRADES AND SUPERVISION OF THEIR OWN SUB-CONTRACTORS.
- PIPING PASSING THROUGH CORRIDORS, TUNNELS, CHASES, ETC. SHALL BE CONSIDERED FOR PROPER DRAINAGE. COORDINATE WITH THE OTHER TRADES TO AVOID CONFLICT. THE ORDER OF PRIORITY FOR ALL PIPING, DUCTWORK AND CONDUITS SHALL BE INSTALLED AS FOLLOWS WITH THE HIGHEST PRIORITY LISTED FIRST.
 - PLUMBING DRAIN LINES
 - CONDENSATE LINES
 - DUCTWORK
 - FIRE PROTECTION
 - HOT AND COLD WATER PIPING
 - ELECTRICAL CONDUIT
- CONTRACTORS ARE RESPONSIBLE FOR REMOVAL AND REPLACEMENT OF CEILING TILES AND CEILING GRID "T" BARS IN ASSOCIATION WITH THEIR WORK.
- PROVIDE ALL ROOF AND SIDE WALL MOUNTED EQUIPMENT SUPPORTS, CURBS, PENETRATIONS, FLASHING AND SEALING, MAKE OPENINGS WEATHER TIGHT. IT IS THE RESPONSIBILITY OF THIS CONTRACTOR TO COORDINATE ALL EQUIPMENT BUILDING OPENINGS WITH THE GENERAL CONTRACTOR.
- PLANS AND SPECIFICATIONS ARE INTENDED TO CONFORM TO GOVERNING CODES AND STANDARDS. IF NON-COMFORMITIES ARE DISCOVERED WHILE BIDDING, OR PERFORMING THE WORK IMPLIED, BRING THE SAME TO THE ATTENTION OF THE ARCHITECT/ENGINEER FOR CLARIFICATION IN WRITING PRIOR TO SUBMITTING BID OR PROCEEDING WITH WORK. NON-COMFORMITIES OF CODE COMPLIANCE WORK INSTALLED AND CORRECTIONS REQUIRED WITHOUT CONSULTATION AND WRITTEN RESPONSE OF SAME BY THE ENGINEER WILL BE THE CONTRACTORS FINANCIAL RESPONSIBILITY.
- CONTRACTOR SHALL MAKE ARRANGEMENTS FOR SERVICE INSTALLATION WITH, AND THE OWNER SHALL PAY ALL SERVICE FEES AND CHARGES, INCLUDING METERS, REQUIRED BY UTILITY COMPANIES FOR NEW GAS, WATER, AND SEWER SERVICES. CONTRACTOR SHALL SECURE AND PAY FOR ANY AND ALL PERMITS AND INSPECTION FEES.
- INSTALLATION SHALL BE IN ACCORDANCE WITH THE 2015 MICHIGAN MECHANICAL CODE, 2015 PLUMBING CODE, MICHIGAN PART 8 & 2014 NATIONAL ELECTRICAL CODES, OR LATEST ADOPTED EDITION, ALL LOCAL CODES AND AUTHORITIES HAVING JURISDICTION.
- REFER TO ARCHITECTURAL SHEETS FOR FLOOR PLANS AND SECTIONS AS REQUIRED TO DETERMINE ROUTING REQUIREMENTS AND POTENTIAL CONFLICTS.
- MANUFACTURERS MODEL NUMBERS LISTED ON DRAWINGS ARE BASIS FOR DESIGN. CONTRACTOR MAY SUBMIT AN "APPROVED EQUAL" FOR REVIEW BY THE ARCHITECT/ENGINEER. DESIGNATION OF AN "APPROVED EQUAL" IS OF THE ENGINEER'S DISCRETION.
- IF EQUIPMENT OTHER THAN AS SPECIFIED IN THESE BID DOCUMENTS IS PROVIDED, THE CONTRACTOR FURNISHING THE EQUIPMENT IS RESPONSIBLE FOR THE COORDINATION AND IMPACT OF ANY REDESIGN AND INSTALLATION COSTS, INCLUDING BUT NOT LIMITED TO: STRUCTURE, FOUNDATIONS, ENVIRONMENTAL, UTILITIES, PIPING, DUCTWORK, WIRING, DEVICES, ETC. REDESIGN SHALL BE SUBJECT TO THE APPROVAL OF THE OWNER, ARCHITECT & ENGINEER.
- MATERIALS, VALVES, EQUIPMENT AND FIXTURES SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURERS' RECOMMENDATIONS. CONNECTIONS TO FIXTURES, DEVICES AND EQUIPMENT SHALL BE VERIFIED WITH MANUFACTURER'S CERTIFIED DRAWINGS.
- FINAL LOCATION OF ALL CEILING DIFFUSERS, REGISTERS, GRILLES, LIGHT FIXTURES, SPRINKLER HEADS, DEVICES, ETC. SHALL BE INSTALLED PER REFLECTED CEILING PLAN AND LOCATED CONSISTENT WITH CEILING AS INSTALLED.
- PROVIDE DIELECTRIC UNIONS/CONNECTIONS AT ALL JUNCTIONS OF DISSIMILAR METALS.
- INSTALL PIPING TO ALLOW FOR EXPANSION AND CONTRACTION WITHOUT STRESSING PIPE, JOINTS, OR CONNECTED EQUIPMENT.
- PROVIDE ALL VALVING FOR THE PROPER SECTIONALIZING, ZONING AND OPERATION OF PIPING SYSTEMS. PROVIDE ACCESS PANELS AS REQUIRED FOR ACCESS TO VALVES.
- ALL INSULATION AND JACKETS SHALL HAVE 25 OR LESS FLAME SPREAD, 50 OR LESS SMOKE DEVELOPED RATING.
- PENETRATIONS OF FLOOR/CEILING ASSEMBLIES AND ASSEMBLIES REQUIRED TO HAVE A FIRE-RESISTANCE RATING SHALL BE PROTECTED IN ACCORDANCE WITH THE INTERNATIONAL BUILDING CODE. PROVIDE FIRE STOPPING WHERE PIPING OR DUCTWORK PENETRATE THE RATED ASSEMBLIES. REFER TO ARCHITECTURAL PLANS FOR LOCATION OF FIRE/SMOKE RATED ASSEMBLIES.
- PROVIDE PIPE TAPE MARKERS AND EQUIPMENT TAGS, WHITE ON BLACK, CONFORMING TO ANSI AND ASME A13.1 STANDARDS. MINIMUM INFORMATION FOR EQUIPMENT SHALL BE EQUIPMENT NAME AND NUMBER SCREWED OR RIVETED WHENEVER POSSIBLE. MINIMUM IDENTITY OF PIPING CONVEYING GAS OR FLUID WITH FLOW DIRECTION ARROWS AROUND ENTIRE DIAMETER COVERING BOTH ENDS OF PIPE LABEL. INTERVAL OF LABEL SPACING SHALL NOT EXCEED 25 FEET. LABELS ARE NOT REQUIRED FOR GUESTROOM TOILET EXHAUST FANS, PTAC UNITS, WALL HEATERS AND SIMILAR UNITS IN PUBLIC SPACES.
- SUBMIT FOR REVIEW CERTIFIED EQUIPMENT AND FIXTURE DRAWINGS AND/OR SUBMITTALS TO THE ARCHITECT/ENGINEER FOR APPROVAL OF MAJOR EQUIPMENT SUCH AS PLUMBING FIXTURES, AIR HANDLING UNITS, GRILLES AND REGISTERS, FANS, WATER HEATERS, CONTROLS, ETC. ARCHITECT/ENGINEER REVIEW OF SHOP DRAWINGS, PRODUCT DATA OR SAMPLES DOES NOT RELIEVE THE CONTRACTOR FROM COMPLYING WITH REQUIREMENTS OF THE CONTRACT DOCUMENTS.
- PROVIDE OPERATION AND MAINTENANCE MANUAL PRIOR TO PROJECT COMPLETION. THE MANUAL SHALL CONSIST OF: AT A MINIMUM, REVIEWED EQUIPMENT DRAWINGS AND/OR SUBMITTALS WITH COLOR SAMPLES (IF APPLICABLE), AND OPERATING & MAINTENANCE MANUALS. THE MANUAL SHALL ALSO CONTAIN INSPECTION AND TESTING REPORTS, COPY OF OWNERS TRAINING ATTENDANCE SHEET, M.S.D.S. INFORMATION FOR MATERIALS LEFT ON THE PROJECT LOCATION, AS-BUILT DRAWINGS MARKED IN RED, CONTROLS DIAGRAMS, PREVENTIVE MAINTENANCE CHECKLIST, PARTS LISTS AND PRODUCT WARRANTY INFORMATION. PROVIDE EMERGENCY CONTACT LIST FOR ALL CONTRACTORS AND THEIR SUBCONTRACTORS WITH A BRIEF DESCRIPTION OF THE DISCIPLINE OF RESPONSIBILITY. INCLUDE IN EACH MANUAL CONTRACTORS GUARANTEES OF MATERIAL AND WORKMANSHIP A MINIMUM OF ONE YEAR, AND EQUIPMENT WARRANTIES BEGINNING FROM DATE OF OWNER ACCEPTANCE.
- AT PROJECT COMPLETION AND PRIOR TO FINAL OWNER ACCEPTANCE PROVIDE OWNER INSTRUCTION FOR ALL EQUIPMENT AND SYSTEMS OPERATION AND MAINTENANCE.
- GUARANTEE ALL MATERIALS AND WORKMANSHIP FOR A PERIOD OF ONE YEAR AFTER OWNER ACCEPTANCE OF THE ENTIRE PROJECT.

COOLER / FREEZER REPLACEMENT
FILE NO.: 472/25256.JBB
MDOC / ALGER CORRECTIONAL FACILITY
INDUSTRIAL PARK DRIVE, WETMORE, MI 49895

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PROJECT NO:	M12-06112
DESIGNED BY:	RWA
DRAWN BY:	RWA
CHECKED:	SCP
APPROVED:	SCP

MECHANICAL & PLUMBING ABBREVIATIONS, SYMBOLS, & NOTES

MP001



1

2

3

4

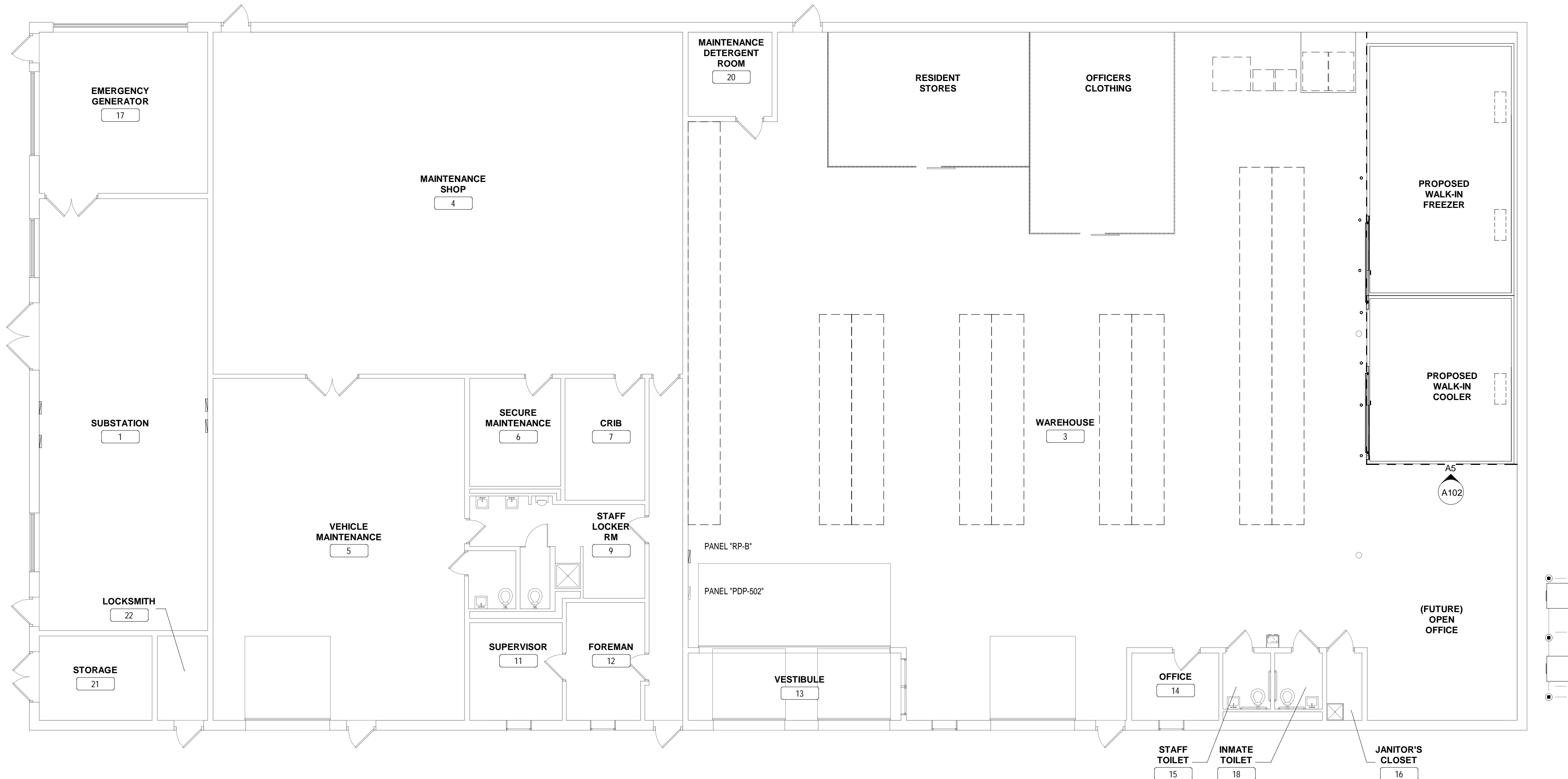
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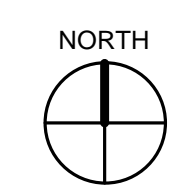
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A



1 OVERALL MECHANICAL FLOOR PLAN - WAREHOUSE BLDG 500
 1/8" = 1'-0"



COOLER / FREEZER REPLACEMENT
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MDOC / ALGER CORRECTIONAL FACILITY	RWA
PROJECT NO: M12-06112	DRAWN BY: RWA
	CHECKED: SCP
	APPROVED: SCP

OVERALL MECHANICAL PLAN

MP100

- DEMOLITION MECHANICAL KEYNOTES**
- ① REMOVE EXISTING COOLER CONDENSING UNIT, PIPING, CONTROLS, WIRING, AND ALL APPURTENANCES.
 - ② REMOVE EXISTING FREEZER CONDENSING UNIT, PIPING, CONTROLS, WIRING, AND ALL APPURTENANCES.
 - ③ REMOVE EXISTING EVAPORATION COIL AND WALK-IN COOLER.
 - ④ REMOVE EXISTING EVAPORATION COIL AND WALK-IN FREEZER.
 - ⑤ REMOVE EXISTING CONDENSATE PIPING FROM FORMER WALK-IN FREEZER.
 - ⑥ EXISTING 1" CONDENSATE ROUTED TO EXISTING SANITARY PIPING TO REMAIN.

- PROPOSED MECHANICAL KEYNOTES**
- ① INDOOR WALK-IN COOLER WITH REMOTE PRE-CHARGED CONDENSING UNITS (LOCATED OUTSIDE), INSTALLED BY REFRIGERANT CONTRACTOR. CONTRACTOR SHALL COORDINATE EXACT REQUIREMENTS WITH EQUIPMENT SUPPLIER. PROVIDE REFRIGERANT LINES TO REMOTE CONDENSERS AND INSTALL ALL ITEMS INCLUDED.
 - ② INDOOR WALK-IN FREEZER WITH REMOTE PRE-CHARGED CONDENSING UNITS (LOCATED OUTSIDE), INSTALLED BY REFRIGERANT CONTRACTOR. CONTRACTOR SHALL COORDINATE EXACT REQUIREMENTS WITH EQUIPMENT SUPPLIER. PROVIDE REFRIGERANT LINES TO REMOTE CONDENSERS AND INSTALL ALL ITEMS INCLUDED.
 - ③ REMOTE PRE-CHARGED STEEL FRAME MOUNTED CONDENSING UNIT FOR COOLER, INSTALLED BY REFRIGERANT CONTRACTOR. DO NOT OBSTRUCT AIRFLOW OF EQUIPMENT.
 - ④ REMOTE PRE-CHARGED STEEL FRAME MOUNTED CONDENSING UNIT FOR FREEZER, INSTALLED BY REFRIGERANT CONTRACTOR. DO NOT OBSTRUCT AIRFLOW OF EQUIPMENT.
 - ⑤ PROPOSED 1" CONDENSATE DRAIN PIPING FROM COOLER / FREEZER.
 - ⑥ EXISTING 1" CONDENSATE ROUTED TO EXISTING SANITARY PIPING.
 - ⑦ EXISTING FLOOR DRAIN TO REMAIN.
 - ⑧ ROUTE PROPOSED CONDUIT / PIPING THROUGH EXISTING WALL AT EXISTING WALL PENETRATIONS. INSULATE ALL VOIDS, ALL PENETRATIONS SHALL BE PATCHED AND SEALED WATERTIGHT.

- CONTRACTOR'S NOTE:**
- CONTRACTOR SHALL RECOGNIZE AND DISPOSE OF REFRIGERANTS AND ALL ASSOCIATED EQUIPMENT ACCORDING TO THE REGULATIONS OF SECTION 608 OF THE CLEAN AIR ACT (CAA) SET FORTH BY THE EPA.
 - CONTRACTOR SHALL FOLLOW ALL CERTIFICATION REQUIREMENTS FOR INDIVIDUALS REMOVING REFRIGERANT FROM EQUIPMENT IS BEING PREPPED FOR DISPOSAL.
 - CONTRACTOR SHALL OBTAIN A CHAIN OF CUSTODY DISPOSAL MANIFEST FOR DTMB DOCUMENTATION OF PROPER DISPOSAL.

A2 DEMOLITION MECHANICAL PLAN
1/4" = 1'-0"

A4 PROPOSED MECHANICAL PLAN
1/4" = 1'-0"

COOLER / FREEZER REPLACEMENT
FILE NO.: 472/25256.JBB
MDOC / ALGER CORRECTIONAL FACILITY
INDUSTRIAL PARK DRIVE, WETMORE, MI 49895

ISSUED FOR:	DATE:
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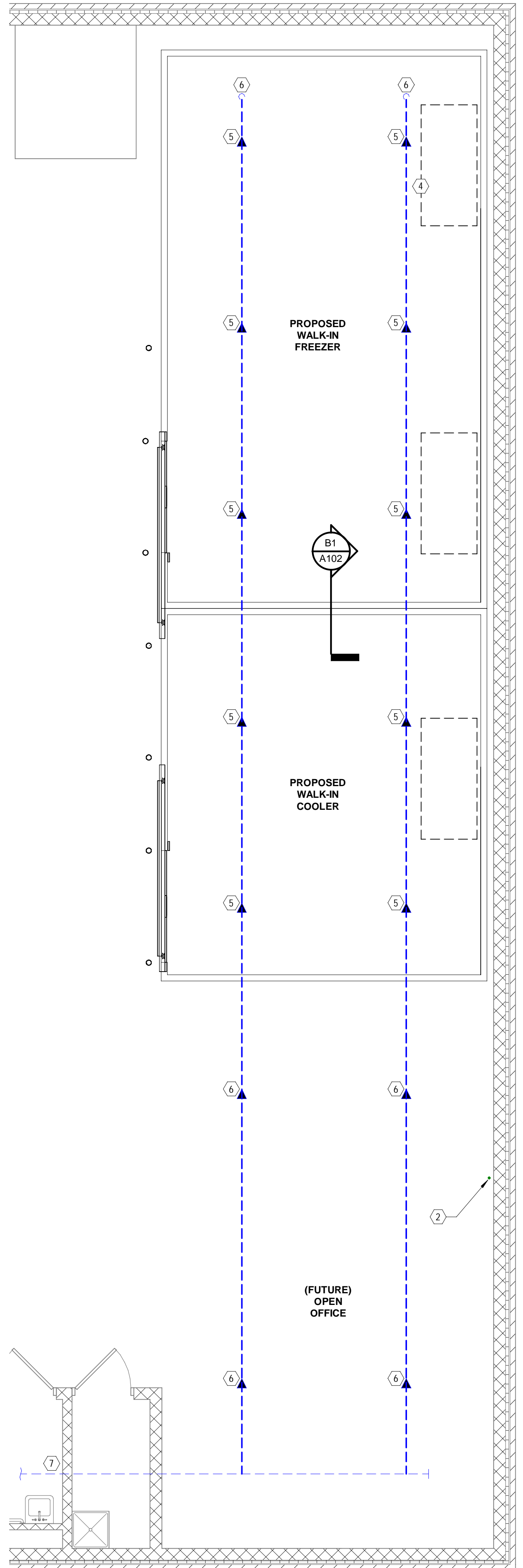
COOLER / FREEZER REPLACEMENT	DESIGNED BY:
MDOC / ALGER CORRECTIONAL FACILITY	RWA
PROJECT NO: M12-06112	RWA
DRAWN BY:	SCP
CHECKED:	SCP
APPROVED:	SCP

MECHANICAL & PLUMBING PLANS

MP101



- PROPOSED MECHANICAL KEYNOTES**
- ① INSTALL DRAIN PER MANUFACTURER'S RECOMMENDATIONS.
 - ② INSTALL 1" CONDENSATE LINES FROM EVAPORATOR UNITS TO EXISTING FIRST FLOOR INDIRECT HUB DRAIN.
 - ③ PROPOSED EVAPORATOR UNIT IN NEW COOLER.
 - ④ PROPOSED EVAPORATOR UNIT IN NEW FREEZER.
 - ⑤ PROVIDE DRY SPRINKLER PENDANT AT COOLER / FREEZER. PROVIDE BOOT, INSULATION, & SEALANT AROUND PIPE AT WALL PENETRATION. TIE INTO WET PIPE FIRE SUPPRESSION SYSTEM.
 - ⑥ EXTEND EXISTING WET PIPE FIRE SUPPRESSION PIPING & PROVIDE NEW SPRINKLER HEADS AT FUTURE OFFICE AREA (FUTURE OFFICE AREA NOT IN SCOPE OF WORK).
 - ⑦ EXISTING WET PIPE FIRE SUPPRESSION SYSTEM TO REMAIN.



A4 MECHANICAL PROPOSED RCP
1/4" = 1'-0"

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MECHANICAL & PLUMBING RCP

MP102



PIPING INSULATION SCHEDULE			
SYSTEM TYPE	TYPE	PIPE SIZE	INSULATION THICKNESS
PLUMBING			
DOMESTIC HOT WATER SUPPLY AND RECIRCULATION	P-5	1-1/4" AND SMALLER 1-1/2" AND LARGER	1" 1-1/2"
DOMESTIC COLD WATER	P-5	1-1/4" AND SMALLER 1-1/2" AND LARGER	1/2" 1"
COOLING			
CONDENSATE PIPING FROM COOLING COILS	P-5	ALL SIZES	1/2"
REFRIGERANT SUCTION	P-5	ALL SIZES	1/2"

PIPING INSULATION TYPES	
TYPE	DESCRIPTION
P-5	ASTM C534, TYPE I, FLEXIBLE, CLOSED CELL ELASTOMERIC INSULATION, TUBULAR, OPERATING TEMPERATURE RANGE: MINUS 70 TO 180 DEG F.

MSMD030MC CONDENSING UNIT SCHEDULE (COOLER)							
GENERAL							
REFRIGERANT	VOLTAGE	COMPRESSOR TYPE	COMPRESSOR MODEL	HP	AWEF	LISTINGS	
R-448A / R-449A	208-230 / 60 / 3	SCROLL	ZS21KAE-TF5	3	5.61	UL / CUL	
BTUH CAPACITY (AT SATURATED SUCTION TEMPERATURE (SST) AND 90° AMBIENT AT CONDENSER)							
-30	-20	-10	20	25	30	35	45
-	-	-	25,324	27,826	30,467	33,250	36,092
BTUH CAPACITY (AT SATURATED SUCTION TEMPERATURE (SST) AND 100° AMBIENT AT CONDENSER)							
-30	-20	-10	20	25	30	35	45
-	-	-	23,298	25,600	28,030	30,590	36,092
DIMENSIONAL DATA							
OVERALL (TO NEAREST INCH)							
L	W	H	WT (lbs)	BASE SIZE	BASE / HOOD		
30	31	26	250	M3	031M		
INSTALLATION							
CONNECTIONS							
REFRIGERANT	RECEIVER TANK (lbs) 90% / 90°F	LIQUID	SUCTION	ESTIMATED TOTAL HEAT REJECTION (BTUH)			
R-448A / R-449A	15.2	1/2	7/8	37,134			
ELECTRICAL							
MCA	MOP	COMP VOLTS	COMP PHASE	COMP HZ	COMP RLA	COMP LRA	OTHER LOAD DATA
31	35	208-230	3	60	13.7	93	
FAN PHASE	FAN HZ	FAN FLA	FAN HP	FAN QUANTITY	MAX EVAP FAN AMPS	MAX EVAP DEF HEATER AMPS	VOLTS PHASE 1
1	60	1.6	1/4	1	12	25.0	AMPS 0.5

MSLA100ME CONDENSING UNIT SCHEDULE (FREEZER)							
GENERAL							
REFRIGERANT	VOLTAGE	COMPRESSOR TYPE	COMPRESSOR MODEL	HP	AWEF	LISTINGS	
R-454A	480 / 60 / 3	SCROLL	YF26KAE-TFD	01	3.15	UL / CUL	
BTUH CAPACITY (AT SATURATED SUCTION TEMPERATURE (SST) AND 90° AMBIENT AT CONDENSER)							
-30	-20	-10	20	25	30	35	45
27,802	35,420	44,436	-	-	-	-	-
BTUH CAPACITY (AT SATURATED SUCTION TEMPERATURE (SST) AND 100° AMBIENT AT CONDENSER)							
-30	-20	-10	20	25	30	35	45
23,910	31,524	39,548	-	-	-	-	-
DIMENSIONAL DATA							
OVERALL (TO NEAREST INCH)							
L	W	H	WT (lbs)	BASE SIZE	BASE / HOOD		
64	44	40	540	M6	062M		
INSTALLATION							
CONNECTIONS							
REFRIGERANT	RECEIVER TANK (lbs) 90% / 90°F	LIQUID	SUCTION	ESTIMATED TOTAL HEAT REJECTION (BTUH)			
R-454A	46.0	7/8	1 5/8	59,116			
ELECTRICAL							
MCA	MOP	COMP VOLTS	COMP PHASE	COMP HZ	COMP RLA	COMP LRA	OTHER LOAD DATA
34.7	45	480	3	60	17.9	125	
FAN PHASE	FAN HZ	FAN FLA	FAN HP	FAN QUANTITY	MAX EVAP FAN AMPS	MAX EVAP DEF HEATER AMPS	VOLTS PHASE 1
1	60	2.9	1/3	2	6	15.0	AMPS 0.5

E1MCK270A-MA EVAPORATOR UNIT SCHEDULE (COOLER)							
GENERAL							
REFRIGERANT	VOLTAGE	EVAPORATOR MODEL	DEFROST SCHEME	CONTROLLER	AWEF	LISTINGS	
R-454C	115 / 60 / 1	KLP427MA-S1E	AIR	LogTemp™	9	UL / CUL	
BTUH CAPACITY (AT SATURATED SUCTION TEMPERATURE (SST) WITH 10° TD)							
-30	-20	-10	20	25	30	35	45
-	-	-	-	27,000	27,433	27,865	28,733
DIMENSIONAL DATA							
OVERALL (INCHES)							
L	W	H	WT (lbs)	LIQUID	SUCTION	REFRIGERANT TYPE	
78.25	16.5	17.25	135	1/2	1 1/8	R-448A / R-449A	
ELECTRICAL							
EVAPORATOR ELECTRICAL DATA				EXPANSION VALVE		DISTRIBUTOR NOZZLE / ORIFICE	
FAN QUANTITY	FAN AMPS	DEFROST AMPS		TXV / EEV		PART #	TYPE
		1 PHASE	3 PHASE	PART #	MODEL #		
4	4.0	N/A	N/A	19-14658	SER-6	-	-

E1LAK160B-ME EVAPORATOR UNIT SCHEDULE (FREEZER)							
GENERAL							
REFRIGERANT	VOLTAGE	EVAPORATOR MODEL	DEFROST SCHEME	CONTROLLER	AWEF	LISTINGS	
R-454C	208-230 / 60 / 1	KLP316LE-S2E	ELECTRIC	LogTemp™	4.15	UL / CUL	
BTUH CAPACITY (AT SATURATED SUCTION TEMPERATURE (SST) WITH 10° TD)							
-30	-20	-10	20	25	30	35	45
14,900	16,200	16,808	-	-	-	-	-
DIMENSIONAL DATA							
OVERALL (INCHES)							
L	W	H	WT (lbs)	LIQUID	SUCTION	REFRIGERANT TYPE	
62.25	16.5	17.25	115	3/8	1 1/8	R-454A	
ELECTRICAL							
EVAPORATOR ELECTRICAL DATA				EXPANSION VALVE		DISTRIBUTOR NOZZLE / ORIFICE	
FAN QUANTITY	FAN AMPS	DEFROST AMPS		TXV / EEV		PART #	TYPE
		1 PHASE	3 PHASE	PART #	MODEL #		
3	1.8	11.9	N/A	19-14658	SER-6	-	-



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MDOC / ALGER CORRECTIONAL FACILITY	RWA
PROJECT NO: M12-06112	RWA
	SCP
	SCP

MECHANICAL AND PLUMBING SCHEDULES & DETAILS

MP501

ELECTRICAL SPECIFICATIONS

- IT SHALL BE THE ELECTRICAL CONTRACTOR'S RESPONSIBILITY TO NOTIFY OTHER CONTRACTORS TO ARRANGE CLEARANCES AND ACCESS OPENINGS FOR ALL LARGE ELECTRICAL EQUIPMENT.
- THE ELECTRICAL INSTALLATION SHALL COMPLY WITH RULES AND REGULATIONS OF THE LATEST EDITION OF THE OCCUPATIONAL SAFETY AND HEALTH ACT, NATIONAL ELECTRICAL CODE, STATE ELECTRICAL CODE, LOCAL MUNICIPAL CODE AND ANY OTHER BOARD HAVING JURISDICTION OVER THE ELECTRICAL INSTALLATION.
- THE ELECTRICAL CONTRACTOR SHALL NOT ASSUME THAT ANY DRAWING OR SPECIFICATION FORMING A PART OF THE CONTRACT DOCUMENTS AUTHORIZES THE VIOLATION OF ANY CODE, REGULATION OR STANDARD. WHERE CONFLICTS ARISE, IT SHALL BE DEEMED THAT THE CONTRACTOR HAS ESTIMATED THE COST OF ALL WORK TO BE COMPLETED IN ACCORD WITH THE PREVAILING CODE.
- THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS FOR ELECTRICAL WORK AND SHALL PAY ALL REQUIRED FEES AND SALES OR USE TAX AND FINES AS APPLICABLE TO THIS BRANCH OF WORK.
- UPON COMPLETION OF THE WORK, THE CONTRACTOR SHALL DELIVER TO THE OWNER WITHOUT COST ALL REQUIRED CERTIFICATES OF INSPECTION AND APPROVAL.
- GROUND ALL EQUIPMENT INCLUDING CONDUIT, RECEPTACLES, LIGHTING, MOTORS, PIPING AS PER ARTICLE 250 OF THE NATIONAL ELECTRICAL CODE, AND AS SHOWN ON THESE DRAWINGS.
- PROVIDE ONLY MATERIALS THAT ARE NEW OF THE TYPE AND QUALITY SPECIFIED, WHERE UNDERWRITERS LABORATORIES HAVE ESTABLISHED STANDARDS FOR SUCH MATERIALS, PROVIDE ONLY MATERIALS BEARING THE U.L. LABEL.
- ARCHITECTURAL DRAWINGS SHOWING DIMENSIONS FOR ELECTRICAL DEVICES TAKE PRECEDENCE OVER THE ELECTRICAL DRAWINGS.
- SYSTEMS SHALL BE FREE FROM SHORTS AND GROUNDS. TEST FOR MECHANICAL AND ELECTRICAL DEFECTS. VERIFY CORRECT CONNECTION OF HOT, NEUTRAL AND GROUND CONDUCTORS. ALL CONDUCTORS SHALL BE COLOR CODED AND LABELED WITH ZONE IDENTIFICATION FOR THE CASE OF LIGHTING.
- UPON COMPLETION OF THE WORK, THOROUGHLY CLEAN ALL DEVICES AND EQUIPMENT.
- ALL TELECOM AND DATA CABLE SHALL BE INSTALLED BY OWNER. TV CABLE SHALL BE BY CONTRACTOR.
- ALL PIPING SHALL BE SUPPORTED PER CURRENT ELECTRICAL CODE.
- THE CONTRACTOR SHALL COORDINATE WITH OWNER AND ARCHITECT WHERE COLOR OPTIONS ARE AVAILABLE FOR EXPOSED EQUIPMENT.
- ALL EXPOSED CONDUIT SHALL BE APPROVED BY OWNER AND ENGINEER PRIOR TO INSTALLATION.
- ALL SWITCHED RECEPTACLES WILL BE THE BOTTOM RECEPTACLE OF THE DUPLEX.
- FIRE ALARM SYSTEM WITH EGRESS LOCATIONS SHALL BE COORDINATED.

ELECTRICAL:

GENERAL:

- A. WORK INCLUDED: PROVIDE ALL LABOR AND MATERIAL TO INSTALL COMPLETE AND PROPER ELECTRICAL SYSTEM AS SHOWN ON THE DRAWINGS AND AS SPECIFIED HEREIN, INCLUDING BUT NOT NECESSARILY LIMITED TO:
- BRANCH CIRCUIT WIRING, FOR LIGHTING, RECEPTACLES, FIRE ALARM, MECHANICAL AND MOTORS;
 - HANGERS, ANCHORS, SLEEVES, CHASES, SUPPORTS FOR FIXTURES, AND OTHER ELECTRICAL MATERIALS AND EQUIPMENT IN ASSOCIATION THEREWITH;
 - LIGHTING FIXTURES AND LAMPS, WALL SWITCHES, RECEPTACLES AND SIMILAR ITEMS;
 - MOTORS, STARTERS AND CONTROLS DISCONNECTS FOR MOTORS PROVIDED UNDER THE CONTRACT.
 - WIRING TO AND CONNECTION OF THE LIGHTING FIXTURES, SWITCHES, RECEPTACLES, AND OTHER ITEMS AS INDICATED ON THE PLANS.
 - BRANCH CIRCUIT PANELBOARDS FOR LIGHTING, RECEPTACLES AND EQUIPMENT.

- B. RELATED WORK: DOCUMENTS AFFECTING WORK OF THIS SECTION INCLUDE, BUT ARE NOT NECESSARILY LIMITED TO, GENERAL CONDITIONS, SUPPLEMENTAL REQUIREMENTS AND SECTION IN DIVISION 1 OF THESE SPECIFICATIONS.

QUALITY ASSURANCE:

- A. USE ADEQUATE NUMBERS OF SKILLED WORKMEN WHO ARE THOROUGHLY TRAINED AND EXPERIENCED IN THE NECESSARY CRAFTS AND WHO ARE COMPLETELY FAMILIAR WITH THE SPECIFIED REQUIREMENTS AND THE METHODS NEEDED FOR PROPER PERFORMANCE OF THE WORK OF THIS SECTION.
- B. CODES AND STANDARDS: IN ADDITION TO COMPLYING WITH ALL PERTINENT CODES AND REGULATIONS, COMPLY WITH:
- NATIONAL ELECTRICAL CODE, LATEST EDITION;
 - LOCAL UTILITY COMPANY REGULATIONS;
 - LOCAL, COUNTY AND STATE ELECTRICAL CODES.

GROUNDING SYSTEM:

- A. ALL EQUIPMENT INCLUDING CONDUIT SYSTEM, MOTORS, RECEPTACLES AND OTHER APPARATUS SHALL BE GROUNDED BY CONDUIT AND CONDUCTOR AS PER ARTICLE 250 OF THE NATIONAL ELECTRICAL CODE, AND AS SHOWN ON THE DRAWINGS.

PRODUCTS:

GENERAL

- A. PROVIDE ONLY MATERIALS THAT ARE NEW, OF THE TYPE AND QUALITY SPECIFIED, WHERE UNDERWRITERS' LABORATORIES, INC. HAVE ESTABLISHED STANDARDS FOR SUCH MATERIALS, PROVIDE ONLY MATERIALS BEARING THE U.L. LABEL.

DISTRIBUTION SYSTEM:

A. IDENTIFICATION:

- IDENTIFY ALL PANELBOARDS, CABINETS, SAFETY SWITCHES AND OTHER APPARATUS USED FOR OPERATION AND CONTROL OF CIRCUITS, APPLIANCES AND EQUIPMENT.

B. WIRING DEVICES:

- PROVIDE TAMPERPROOF SPEC GRADE DUPLEX RECEPTACLES OF 2-POLE, 3-WIRE, GROUNDING TYPE, AND 20 AMP, 120 VAC AND GROUNDED AND SHALL BE LEVITON OR APPROVED EQUAL.
- PROVIDE TAMPERPROOF GROUND FAULT CIRCUIT INTERRUPTER RECEPTACLES AS INDICATED ON THE DRAWINGS. GFCI RECEPTACLES SHALL BE 20A, 120VAC AND SHALL BE LEVITON OR EQUAL, COLOR BY ARCHITECT.
- SPECIAL RECEPTACLES SHALL BE AS LISTED ON THE DRAWINGS AND AS REQUIRED BY CODE.
- ALL LIGHT SWITCHES SHALL BE 20 AMP, 277 VAC, LEVITON SINGLE POLE AND LEVITON 3-WAY OR APPROVED EQUAL OR AS INDICATED ON THE DRAWINGS, COLOR BY ARCHITECT.
- COVERPLATES FOR SWITCHES AND RECEPTACLES SHALL BE PHELONIC PLASTIC, COLOR BY ARCHITECT.
- ALL RECEPTACLES SHALL BE MOUNTED AT 18" AFF TO BOTTOM OF RECEPTACLE UNLESS NOTES OTHERWISE. ALL LIGHT SWITCHES SHALL BE MOUNTED AT 48" UNLESS NOTED OTHERWISE. J-BOXES FOR TELEPHONES AND EQUIPMENT SHALL BE MOUNTED AT 48" UNLESS NOTED OTHERWISE. VERIFY EXACT LOCATION WITH ARCHITECT.

C. WIRING RACEWAYS AND FITTINGS:

- ALL CONCEALED WIRING SHALL BE MC CABLE, #12 OR #12 COPPER MIN., AND SHALL BE INSTALLED AS PER THE NATIONAL ELECTRICAL CODE. ALL EXPOSED WIRING EXCEPT THAT WHICH IS RUNNING THROUGH FRAMING MEMBERS SHALL BE IN EMT CONDUIT AND SECURELY FASTENED TO THE SURFACE. UNDERGROUND WIRING TO BE IN RIGID PVC CONDUIT.
- ALL OUTLETS, JUNCTION BOXES AND SWITCH BOXES SHALL BE SHEET METAL WITH SCREWED ON COVERS OF SIZE AND SHAPE TO ACCOMMODATE WIRES WITHOUT CROWDING AND TO SUIT THE LOCATION. ALL DEVICE BOXES SHALL BE MINIMUM 4" SQUARE BY 1-1/2" DEEP, EXCEPT 2" X 4" BOXES MAY BE USED WHERE ONLY ONE CABLE, ENTERS A BOX. ALL LIGHTING FIXTURE BOXES SHALL BE 4" SQUARE OR OCTAGONAL BY 1-1/2" DEEP. ALL TELEPHONE OUTLETS SHALL BE 4-1/16" SQUARE BY 2-1/8" DEEP. ALL BOXES SHALL BE PROVIDED WITH SUITABLE BOX EXTENSIONS AND/OR PLASTIC RINGS AS REQUIRED, THROUGH THE WALL BOXES OR BACK MOUNTED DEVICES ARE NOT PERMITTED. ALL OUTLET BOXES THAT ARE EXPOSED SHALL BE STEEL.

D. LIGHTING FIXTURES:

- GENERAL: ALL LIGHTING FIXTURES SHALL BE COMPLETE WITH ALL REQUIRED SUSPENSION ACCESSORIES, CANOPIES, CASTINGS, SOCKET HOLDERS, REFLECTORS, LAMPS AND OTHER ITEMS AND SHALL BE COMPLETELY WIRED AND ASSEMBLED AS INDICATED ON THE DRAWINGS. ALL FIXTURES SHALL BE AS SHOWN ON THE LIGHTING FIXTURE SCHEDULE ON THE DRAWINGS.

PREPARATION:

A. COORDINATE:

- COORDINATE AS NECESSARY WITH OTHER TRADES TO ASSURE PROPER AND ADEQUATE PROVISION IN THE WORK OF THOSE TRADES FOR INTERFACE WITH WORK OF THIS SECTION.
- COORDINATE THE INSTALLATION OF ELECTRICAL ITEMS WITH THE SCHEDULE FOR WORK OF OTHER TRADES TO PREVENT UNNECESSARY DELAYS IN THE TOTAL WORK.
- WHERE LIGHTING FIXTURES AND OTHER ELECTRICAL ITEMS ARE SHOWN IN CONFLICT WITH LOCATIONS OF STRUCTURAL MEMBERS AND MECHANICAL OR OTHER EQUIPMENT, PROVIDE REQUIRED SUPPORTS AND WIRING TO CLEAR THE ENCROACHMENT.
- ARCHITECTURAL DRAWINGS SHOWING ELECTRICAL DEVICES AND DIMENSIONS FOR ELECTRICAL DEVICES TAKE PRECEDENCE OVER THE ELECTRICAL DRAWINGS.

- B. DATA INDICATED ON THE DRAWINGS AND IN THESE SPECIFICATIONS ARE AS EXACT AS COULD BE SECURED, BUT THEIR ABSOLUTE ACCURACY IS NOT WARRANTED. THE EXACT LOCATIONS, DISTANCES, LEVELS AND OTHER CONDITIONS WILL BE GOVERNED BY ACTUAL CONSTRUCTION AND THE DRAWINGS AND SPECIFICATIONS SHOULD BE USED ONLY FOR GUIDANCE IN SUCH REGARD. USE THE DRAWINGS AND THESE SPECIFICATIONS FOR GUIDANCE AND SECURE THE ARCHITECT'S APPROVAL FOR ALL CHANGES IN LOCATION.

- D. WHERE OUTLETS ARE NOT SPECIFICALLY LOCATED ON THE DRAWINGS, LOCATE AS DETERMINED IN THE FIELD BY THE ARCHITECT. WHERE OUTLETS ARE INSTALLED WITHOUT SUCH SPECIFIC DIRECTION, RELOCATE AS DIRECTED BY THE ARCHITECT AT NO ADDITIONAL COST TO THE OWNER. ADJACENT OUTLETS TO BE SEPARATED AT LEAST 16" APART ON OPPOSITE SIDES OF ADJACENT STUDS.

- E. VERIFY ALL MEASUREMENTS AT THE BUILDING. NO EXTRA COMPENSATION WILL BE ALLOWED BECAUSE OF DIFFERENCES BETWEEN WORK SHOWN ON THE DRAWINGS AND ACTUAL MEASUREMENTS AT THE SITE OF CONSTRUCTION.

INSTALLATION OF RACEWAYS:

A. INSTALLATION:

- KEEP ALL CABLE/CONDUIT AT LEAST 6" AWAY FROM THE COVERING ON HOT WATER PIPES.
 - KEEP ENDS OF CONDUIT CLOSED AND CLEAN OF FOREIGN DEBRIS WITH APPROVED CONDUIT SEALS DURING CONSTRUCTION. USE CONDUIT UNIONS WHERE JOINTS ARE REQUIRED. DO NOT USE RUNNING THREADS.
- B. PROVIDE NECESSARY SLEEVES AND CHASES WHERE CONDUITS PASS THROUGH FLOORS AND WALLS, PROVIDE OTHER NECESSARY OPENINGS AND SPACES, ARRANGING FOR IN PROPER TIME TO PREVENT UNNECESSARY CUTTING IN CONNECTION WITH THE WORK. PERFORM CUTTING AND PATCHING IN ACCORDANCE WITH THE PROVISIONS FOR THE ORIGINAL WORK. GROUT/CAULK AROUND ALL PENETRATIONS.

C. WHERE CONDUIT IS EXPOSED, RUN PARALLEL TO OR AT RIGHT ANGLES TO LINES OF THE BUILDING.

- MAKE BENDS WITH STANDARD CONDUIT ELBOWS OR CONDUIT BENT TO NOT LESS THAN THE SAME RADIUS.
- MAKE BEND FREES FROM DENTS AND FLATTENING.

D. SECURELY AND RIGIDLY SUPPORT CABLE, CONDUITS AND BOXES THROUGHOUT THE WORK.

INSTALLATION OF LIGHTING FIXTURES:

A. GENERAL: INSTALL ALL LIGHTING FIXTURES COMPLETE AND READY FOR SERVICE, IN ACCORDANCE WITH THE FIXTURE SCHEDULE ON THE DRAWINGS.

- CONDUCTORS IN WIRING CHANNELS OF FIXTURES MOUNTED IN ROWS SHALL BE THE SAME SIZE AS THE CIRCUIT WIRING SUPPLYING THE ROWS.
- INSTALL ALL LINEAR FIXTURES STRAIGHT AND TRUE WITH REFERENCE TO ADJACENT WALLS.
- INSTALL ALL LIGHTING FIXTURES, SO THAT THE WEIGHT OF THE FIXTURE IS SUPPORTED DIRECTLY BY A SOUND AND SAFE STRUCTURAL MEMBER OF THE BUILDING, USING ADEQUATE NUMBER AND TYPE OF FASTENERS TO ENSURE A SAFE INSTALLATION.

B. LAMPING: PROVIDE ALL LAMPS AS SHOWN ON THE FIXTURE SCHEDULE AND AS REQUIRED FOR A COMPLETE OPERATING LIGHTING SYSTEM.

TEST REQUIREMENTS:

A. TESTING:

- ALL SYSTEMS SHALL TEST FREE FROM SHORT CIRCUITS AND GROUNDS, SHALL BE FREE FROM MECHANICAL AND ELECTRICAL DEFECTS, AND SHALL SHOW AN INSULATION RESISTANCE BETWEEN PHASE CONDUCTORS AND GROUND OF NOT LESS THAN THAT REQUIRED BY THE NATIONAL ELECTRICAL CODE.
 - TEST ALL CIRCUITS FOR PROPER NEUTRAL CONNECTIONS.
 - IF VOLTAGE AND REGULATION ARE NOT WITHIN ACCEPTABLE LIMITS, ARRANGE WITH THE SERVICE UTILITY FOR PROPER VOLTAGE.
- B. WHEN MATERIAL AND/OR WORKMANSHIP IS FOUND NOT TO COMPLY WITH THE SPECIFIED REQUIREMENTS, WITHIN THREE DAYS AFTER RECEIPT OF NOTICE OF SUCH NON-COMPLIANCE REMOVE THE NON-COMPLYING ITEMS FROM THE JOB SITE AND REPLACE THEM WITH ITEMS COMPLYING WITH THE SPECIFIED REQUIREMENTS, ALL AT NO ADDITIONAL COST TO THE OWNER.

PROJECT COMPLETION:

- A. UPON COMPLETION OF THE WORK OF THIS SECTION, THOROUGHLY CLEAN ALL EXPOSED PORTIONS OF THE ELECTRICAL INSTALLATION, REMOVING ALL TRACES OF SOIL, LABELS, GREASE, OIL AND OTHER FOREIGN MATERIAL AND USING ONLY THE TYPE OF CLEANER RECOMMENDED BY THE MANUFACTURER OF THE ITEM BEING CLEANED.

SFU STRUCTURED WIRING REQUIREMENTS:

ELECTRICAL CONTRACTOR THIRD-PARTY BUILDER AGREE TO PROVIDE STRUCTURED WIRING ("SW") FOR USE AT EACH HOME WITHIN THE PROPERTY IN ACCORDANCE WITH THE FOLLOWING SPECIFICATIONS:

DESIGNATE A CENTRAL WIRING LOCATION INSIDE EACH HOME (E.G., CLOSET), AND INSTALL A CENTRAL WIRING PANEL ("CWP") OR A DUAL-GANG BOX WITH A SINGLE-GANG REDUCED MUD RING.

INSTALL A STANDARD 110V AC GROUNDED ELECTRICAL OUTLET WITHIN 3 FEET OF, AND WITHIN THE SAME ROOM AS THE CENTRAL WIRING LOCATION OR CWP.

INSTALL 2 CAT5E (OR BETTER) 4-PAIR WIRE BETWEEN THE CENTRAL WIRING LOCATION OR CWP AND EACH MULTIMEDIA OUTLET. ALL MULTIMEDIA OUTLETS SHOULD BE LOCATED WITHIN 3 FEET OF, AND WITHIN THE SAME ROOM AS, A STANDARD 110V AC NON-SWITCHED AND GROUNDED ELECTRICAL OUTLET.

ALL CAT5E (OR BETTER) 4-PAIR WIRING MUST BE INSTALLED IN A STAR (HUB AND SPOKE) TOPOLOGY WITH HOME RUN CABLES.

TERMINATE THE IN-HOME CAT5E (OR BETTER) AT THE CENTRAL WIRING LOCATION OR CWP ON AN RJ45 CAT5E (OR BETTER) DATA MODULE.

INSTALL A 1-INCH (INTERIOR DIAMETER) ELECTRICAL NONMETALLIC TUBING (ENT) CONDUIT, A.K.A. "SMURF TUBING" (SMOOTH-WALLED OR CORRUGATED) WITH PULL STRING, FROM CENTRAL WIRING LOCATION OR CWP INSIDE THE HOME TO AN OUTSIDE LOCATION WITHIN 4 FEET OF THE POWER METER.

IN LIEU OF INSTALLING ENT, IT IS ALSO ACCEPTABLE TO INSTALL A 1-INCH (INTERIOR DIAMETER) ELECTRICAL METALLIC TUBING (EMT) CONDUIT WITH PULL STRING, OR A 1-INCH (INTERIOR DIAMETER POLYVINYL CHLORIDE (PVC) CONDUIT WITH PULL STRING, FROM CENTRAL WIRING LOCATION OR CWP INSIDE THE HOME TO AN OUTSIDE LOCATION WITHIN 4 FEET OF THE POWER METER.

- PLACE THE CONDUIT VIA THE MOST DIRECT AND SHORTEST ROUTE.
- PLACE THE CONDUIT USING SWEEPING BENDS, WITH NO MORE THAN FOUR 90 DEGREE BENDS.
- MAXIMUM TOTAL BENDS BETWEEN PULL POINTS: 360 DEGREES
- ATTACH CONDUIT TO STUDS AT LEAST EVERY 3 FEET, WITHIN 3 FEET OF ANY ENCLOSURE, AND BEFORE AND AFTER EACH BEND.
- A PULL STRING IS REQUIRED.

COOLER / FREEZER REPLACEMENT

FILE NO.: 761/25134JBB

MDOC / ALGER CORRECTIONAL FACILITY

INDUSTRIAL PARK DRIVE, WETMORE, MI 49895

DATE:

12/24/2025
02/06/2026
02/27/2026
02/27/2026
03/20/2026

ISSUED FOR:

50% OWNER REVIEW
90% OWNER REVIEW
100% OWNER REVIEW
LARA REVIEW
BIDDING

COOLER / FREEZER REPLACEMENT
MDOC / ALGER CORRECTIONAL FACILITY

PROJECT NO: M12-06112

DESIGNED BY: AJM
DRAWN BY: KPS
CHECKED: SCP
APPROVED: SCP

ELECTRICAL
SPECIFICATIONS

E001



ELECTRICAL ABBREVIATIONS, SYMBOLS AND NOTES

ELECTRICAL SYMBOLS LEGEND

NOTE:
SOME SYMBOLS SHOWN MAY
NOT APPLY TO THIS PROJECT

RECEPTACLE SYMBOLS

- LISTED TAMPER RESISTANT DUPLEX RECEPTACLE
- LISTED TAMPER RESISTANT FLOOR RECEPTACLE (GFI WHERE REQUIRED)
- LISTED TAMPER RESISTANT QUAD RECEPTACLE (GFI WHERE REQUIRED)
- LISTED TAMPER RESISTANT GROUND FAULT INTERRUPTING RECEPTACLE
- LISTED TAMPER RESISTANT COUNTER TOP RECEPTACLE GFI
- LISTED TAMPER RESISTANT WEATHER-PROOF GFI RECEPTACLE WITH COVER
- LISTED TAMPER RESISTANT SPLIT-WIRED RECEPTACLE
- LISTED TAMPER RESISTANT SINGLE RECEPTACLE
- LISTED TAMPER RESISTANT ISOLATED GROUND RECEPTACLE
- SPECIALTY RECEPTACLE
- LISTED TAMPER RESISTANT POLE RECEPTACLE

MISCELLANEOUS SYMBOLS

- DISCONNECT
- FUSED DISCONNECT
- STARTER DISCONNECT
- CONNECTION TO EQUIPMENT - THREE PHASE
- CONNECTION TO EQUIPMENT - SINGLE PHASE
- CONNECTION TO MOTOR
- THERMOSTAT
- TRANSFORMER
- GROUND
- ELECTRIC METER
- FUSED SWITCH
- CIRCUIT BREAKER WITH SIZE AS NOTED
- AUTOMATIC TRANSFER SWITCH (ATS)
- PANEL - SURFACE MOUNT
- PANEL - RECESSED

TELEPHONE, DATA & COMM. SYMBOLS

- DATA OUTLET
- DATA OUTLET - FLOOR MOUNTED
- WIRELESS ACCESS POINT (WAP)
- SPEAKER - WALL MOUNTED
- SPEAKER - CEILING MOUNTED
- CLOCK
- COAXIAL OUTLET (TELEVISION CABLE JACK)
- JUNCTION BOX - WALL MOUNTED
- JUNCTION BOX - CEILING MOUNTED
- PUSH BUTTON DOOR OPENER

SECURITY SYMBOLS

- RADIO FREQUENCY IDENTIFICATION (RFID) READER
- KEY PAD
- MOTION SENSOR
- SECURITY CAMERA
- DOOR CONTACT
- GLASS BREAK DETECTOR

LIGHTING SYMBOLS

- 2x2 LED TROFFER
- 2x4 LED TROFFER
- EMERGENCY WALL MOUNT
- EXIT/EMERGENCY (DIRECTIONAL ARROWS AS INDICATED ON PLANS)
- UNDER CABINET LED LIGHT
- RECESSED LED CAN OR CANLESS
- SURFACE LED CAN OR CANLESS
- SURFACE FLUORESCENT OR LED
- WALL MOUNT LED OR LED LAMP
- LINEAR PENDANT OR SUSPENDED LED
- PENDANT OR SUSPENDED LED
- UPLIGHT LED
- LED TAPE/STRIP
- TRACK AND LED TRACK HEADS
- LED POLE LIGHTING

SWITCH SYMBOLS

- SWITCH - SINGLE POLE
- SWITCH - THREE WAY
- SWITCH - FOUR WAY
- SWITCH - SINGLE POLE/OCCUPANCY SENSOR
- SWITCH - SINGLE POLE, KEYED
- SWITCH - SINGLE POLE, DIMMER
- SWITCH - SINGLE POLE, TIMER
- SWITCH - SINGLE POLE, PILOT
- SWITCH - SINGLE POLE, NIGHT LIGHT
- SWITCH - TIME CLOCK
- SWITCH - PUSH BUTTON
- OCCUPANCY SENSOR PASSIVE & INFRARED (WALL MOUNTED)
- OCCUPANCY SENSOR PASSIVE & INFRARED (CEILING MOUNTED)
- PHOTO CELL

FIRE SAFETY AND ALARM SYMBOLS

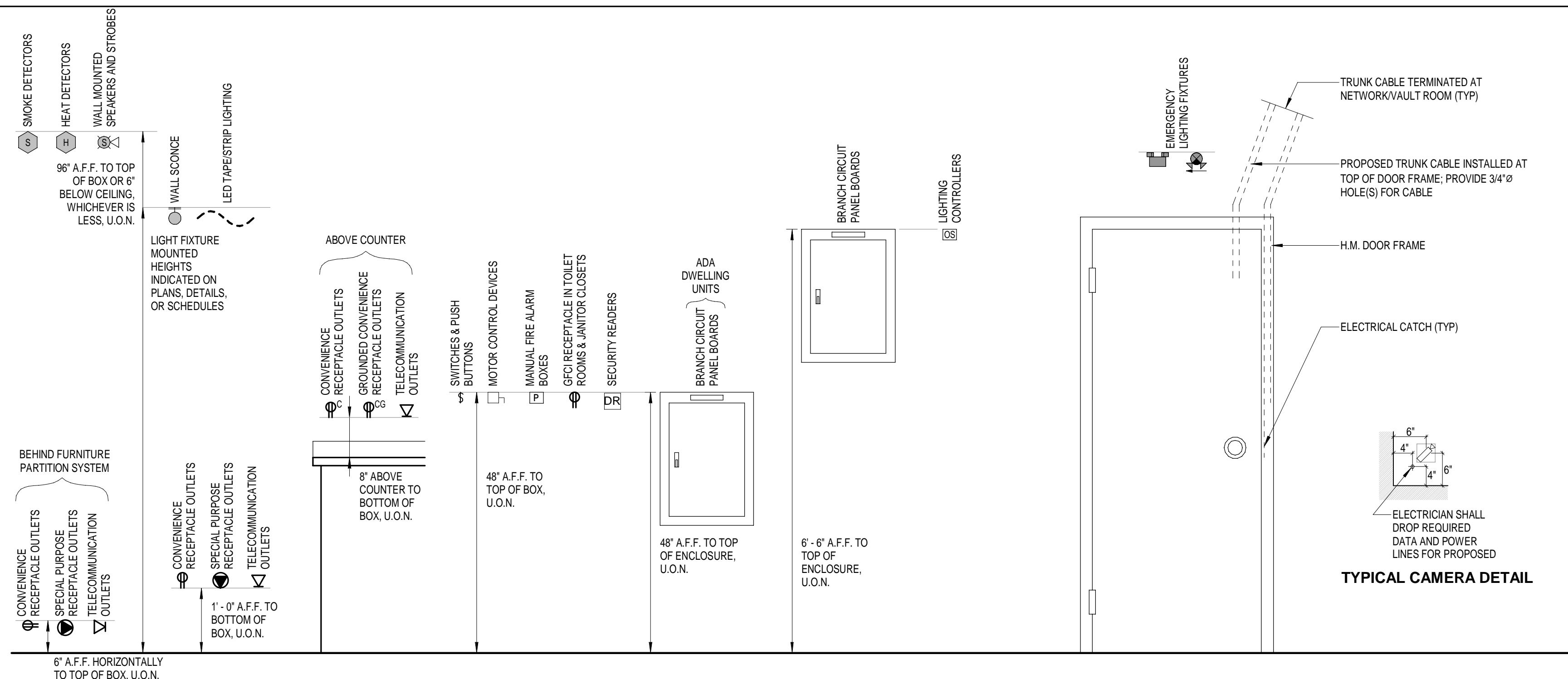
- FIRE ALARM CONTROL PANEL
- FIRE ALARM ANNUNCIATOR PANEL
- FIRE ALARM BOOSTER PANEL
- SMOKE DETECTOR
- HEAT DETECTOR
- HEAT/CARBON MONOXIDE DETECTOR
- CARBON MONOXIDE DETECTOR
- SMOKE/CARBON MONOXIDE DETECTOR
- DUCT SMOKE DETECTOR
- FIRE ALARM HORN/STROBE (WALL MOUNTED)
- FIRE ALARM HORN/STROBE (CEILING MOUNTED)
- FIRE ALARM STROBE
- FIRE ALARM SPEAKER/STROBE (WALL MOUNTED)
- FIRE ALARM SPEAKER/STROBE (CEILING MOUNTED)
- FIRE ALARM SPEAKER
- MANUAL PULL STATION
- FLOW SWITCH
- TAMPER SWITCH
- MAGNETIC DOOR HOLD OPEN
- EMERGENCY TELEPHONE

ELECTRICAL ABBREVIATIONS LIST

A	AMPERES	GRD	GROUND	P	POLE
AER	ARC ENERGY REDUCTION RATING	G/GFCI	GROUND FAULT CIRCUIT INTERRUPTER	PB	PUSHBUTTON STATION
AF	AMPERES FRAME (BREAKER RATING)	GFP	GROUND FAULT PROTECTION	PH/φ	PHASE
AFCI	ARC FAULT CIRCUIT INTERRUPTER	HOA	HAND-OFF-AUTO	PT	POTENTIAL TRANSFORMER
A.F.F.	ABOVE FINISHED FLOOR	HP	HORSE POWER	PDP	POWER DISTRIBUTION PANEL
AIC	AMPS INTERRUPTING CAPACITY	HV	HIGH VOLTAGE	RECPT	RECEPTACLE
AL	AUDIENCE LEFT	HZ	HERTZ	RDP	RECEPTACLE DISTRIBUTION PANEL
ALCR	AUTOMATIC LOAD CONTROL RELAY	IG	ISOLATED GROUND	RP	RECEPTACLE PANEL
AR	AUDIENCE RIGHT	JB	JUNCTION BOX	RSC	RIGID STEEL CONDUIT
AT	AMPERES TRIP (BREAKER SETTING)	KA	THOUSAND AMP	SCCR	SHORT CIRCUIT CURRENT RATING
ATS	AUTOMATIC TRANSFER SWITCH	KV	KILOVOLT	SCHED	SCHEDULE
AUX	AUXILIARY	KVA	KILOVOLT - AMPERES	SPD	SURGE PROTECTION DEVICE
BCELT	BRANCH CIRCUIT EMERGENCY LIGHTING TRANSFER SWITCH	KW	KILOWATT	ST	SHUNT TRIP
BKR	BREAKER	KWH	KILOWATT HOURS	SW	SWITCH
BPS	BOLTED PRESSURE SWITCH	LA	LIGHTING ARRESTOR	SWBD	SWITCHBOARD
C	CONDUIT	LP	LIGHTING PANEL	SWGR	SWITCHGEAR
CB	CIRCUIT BREAKER	LDP	LIGHTING DISTRIBUTION PANEL	TB	TERMINAL BOX
CFCI	CONTRACTOR FURNISHED, CONTRACTOR INSTALLED	LTR	LISTED TAMPER RESISTANT	TCOM	TELECOMMUNICATIONS
CKT	CIRCUIT	MAX	MAXIMUM	TR	TELEPHONE RESISTANT
CT	CURRENT TRANSFORMER	MCA	MINIMUM CIRCUIT AMPACITY	TTB	TELEPHONE TERMINAL BACKBOARD
DEMO	DEMOLITION	MCB	MAIN CIRCUIT BREAKER	TYP	TYPICAL
DIM	DIMENSION	MCC	MOTOR CONTROL CENTER	U.O.N.	UNLESS OTHERWISE NOTED
DISC	DISCONNECT	MCP	MAIN DISTRIBUTION PANEL	US	UPSTAGE
DP	DISTRIBUTION PANEL	MECH	MECHANICAL	V	VOLTS
DS	DOWNSTAGE	MIN	MINIMUM	W	WIRE OR WATTS
DWG	DRAWING	MISC.	MISCELLANEOUS	WAP	WIRELESS ACCESS POINT
EBCU	EMERGENCY BATTERY UNIT	MLO	MAIN LUGS ONLY	WG	WIRE GUARD
EC	ELECTRICAL CONTRACTOR	MOP	MAXIMUM OVERCURRENT PROTECTION	WP	WEATHERPROOF
ECM	ELECTRONICALLY COMMUTATED MOTOR	MTD	MOUNTED	WR	WEATHER RESISTANT
ELEC	ELECTRICAL	MTG	MOUNTING	XFMR	TRANSFORMER
EM	EMERGENCY	MTR	MOTOR	XP	EXPLOSION PROOF
EMT	ELECTRICAL METALLIC TUBING	N	NEUTRAL	(E)	EXISTING
EO	ELECTRICALLY OPERATED	NC	NORMALLY CLOSED	(R)	RELOCATED
EPO	EMERGENCY POWER OFF	NEC	NATIONAL ELECTRICAL CODE		
EWV	ELECTRIC WATER COOLER	NF	NON-FUSIBLE		
EXT	EXTERIOR	NIC	NOT IN CONTRACT		
EXST	EXISTING	NL	NIGHT LIGHT		
FA	FIRE ALARM	NO	NORMALLY OPEN		
FLA	FULL LOAD AMPS	NTS	NOT TO SCALE		
FLR	FLOOR	OC	ON CENTER		
FOH	FRONT OF HOUSE	OFCI	OWNER FURNISHED, CONTRACTOR INSTALLED		
FSEC	FOOD SERVICE EQUIPMENT CONTRACTOR				
FUSE	FUSE				

STANDARD MOUNTING HEIGHTS & DETAILS

NOTE:
VERIFY HEIGHTS SHOWN COMPLY WITH LOCAL BUILDING CODE. REFER TO 'A' SHEETS FOR COUNTERTOP HEIGHTS.



STANDARD METHODS OF NOTATION

- AAA## MECHANICAL EQUIPMENT TAG (SEE MECHANICAL & PLUMBING PLANS)
- AA ELECTRICAL LIGHT FIXTURE TAG
- #A ELECTRICAL CIRCUIT TAG
- ## FOOD SERVICE EQUIPMENT TAG
- ## PROPOSED KEYED NOTE (NUMBER)
- AA DEMOLITION KEYED NOTE (LETTER)
- SECTION/DETAIL NUMBER
- SHEET ON WHICH SECTION IS DRAWN
- AREA OF ENLARGEMENT
- SECTION/DETAIL NUMBER
- SHEET ON WHICH SECTION IS DRAWN
- MATCH LINE
- AREA NOT IN SCOPE OF WORK (SCALE CHANGES PER PROJECT)
- HEAVY LINE WEIGHT INDICATES NEW WORK
- DARK GRAY LINE WEIGHT INDICATES REFERENCED/EXISTING INFORMATION
- HEAVY DASHED LINE INDICATES DEMOLITION LINE
- THIN GRAY LINE INDICATES CEILING GRID
- EXAMPLE OF PROPOSED FIXTURES
- EXAMPLE OF EXISTING FIXTURES
- EXAMPLE OF DEMOLISHED FIXTURES

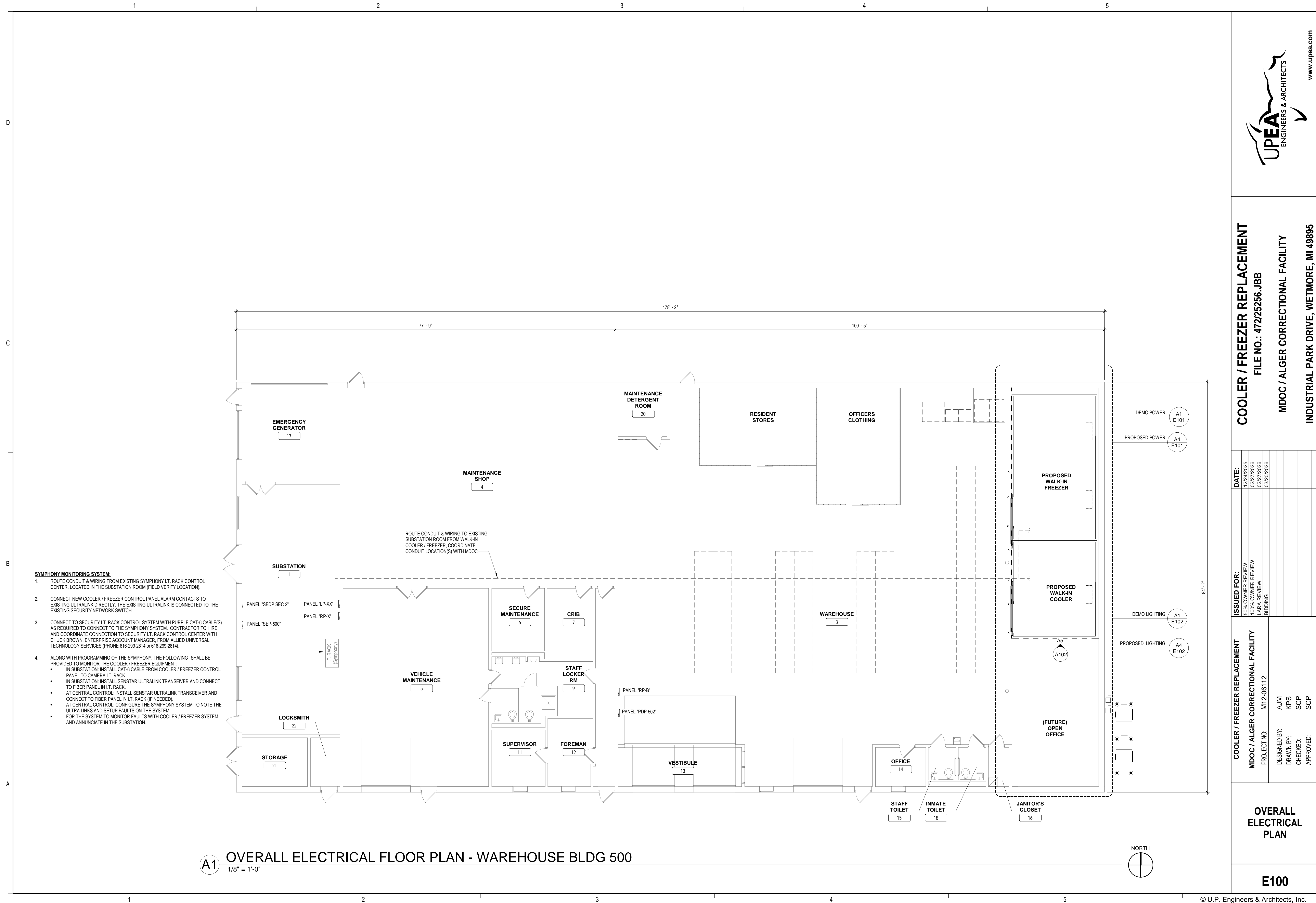
COOLER / FREEZER REPLACEMENT
 FILE NO.: 472/25256.JBB
 MDOC / ALGER CORRECTIONAL FACILITY
 INDUSTRIAL PARK DRIVE, WETMORE, MI 49895

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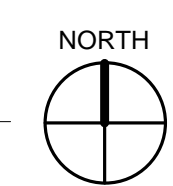
COOLER / FREEZER REPLACEMENT
 MDOC / ALGER CORRECTIONAL FACILITY
 PROJECT NO: M12-06112
 DESIGNED BY: AJM
 DRAWN BY: KPS
 CHECKED: SCP
 APPROVED: SCP

ELECTRICAL ABBREVIATIONS

E002



A1 OVERALL ELECTRICAL FLOOR PLAN - WAREHOUSE BLDG 500
1/8" = 1'-0"



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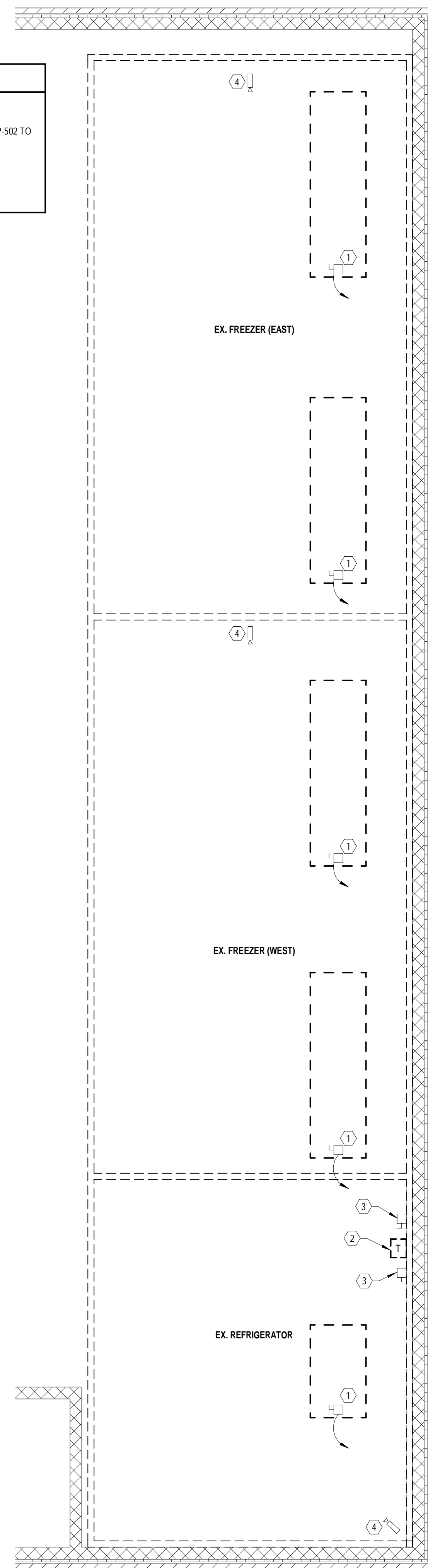
PROJECT NO.	DESIGNED BY:
M12-06112	AJM
	KPS
CHECKED:	APPROVED:
SCP	SCP

OVERALL ELECTRICAL PLAN

E100

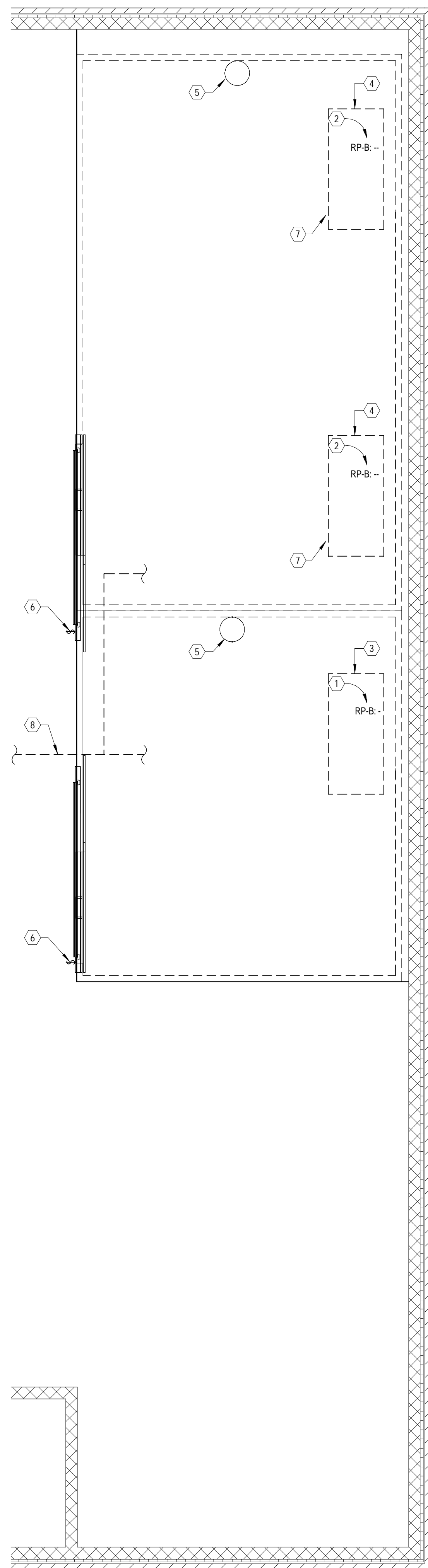


DEMOLITION ELECTRICAL POWER KEYNOTES	
1	REMOVE EXISTING POWER CONNECTION AND EXISTING CONDENSING UNIT BEING REMOVED.
2	REMOVE EXISTING STEPDOWN TRANSFORMER. EXISTING BRANCH CIRCUITRY FROM PANEL PDP-502 TO REMAIN AND BE REUSED TO FEED NEW OUTDOOR CONDENSING UNITS.
3	EXISTING COOLER REFRIGERANT AND FAN SWITCHES TO BE REMOVED.
4	EXISTING SECURITY CAMERA TO BE REMOVED AND REINSTALLED AT NEW LOCATON SHOWN.



A1 ELECTRICAL DEMO POWER PLAN
1/4" = 1'-0"

PROPOSED ELECTRICAL POWER KEYNOTES	
1	PROVIDE ELECTRICAL CONNECTION TO PROPOSED COOLER EVAPORATOR UNIT FROM EXISTING PANEL RP-B.
2	PROVIDE ELECTRICAL CONNECTION TO PROPOSED FREEZER EVAPORATOR UNIT FROM EXISTING PANEL RP-B.
3	PROVIDE ELECTRICAL CONDUIT FROM EXISTING DISCONNECT SWITCH TO PROPOSED COOLER CONDENSING UNIT.
4	PROVIDE ELECTRICAL CONDUIT FROM EXISTING DISCONNECT SWITCH TO PROPOSED FREEZER CONDENSING UNIT.
5	REINSTALL EXISTING SECURITY CAMERA.
6	PROVIDE POWER WIRING TO NEW COOLER/FREEZER LIGHT FIXTURES AND PILOT LIGHT SWITCH.
7	PROVIDE POWER WIRING TO NEW HEAT TRACE/FREEZER DEFROST
8	PROVIDE SURFACE MOUNTED EMT CONDUIT ALONG CEILING TO CONNECT COOLER / FREEZER MONITORING POINTS TO I.T. RACK LOCATED IN THE EXSTING SUBSTATION ROOM OF THE WAREHOUSE BUILDING.



A4 ELECTRICAL PROPOSED POWER PLAN
1/4" = 1'-0"

EXISTING PANEL (RP-B)										
VOLTAGE: 120 / 208			MOUNTING: SURFACE							
AMPERAGE: 225 A			MODEL: EXISTING							
PHASE: 3			SERVICE / FEEDER: 3" C							
WIRE: UNKNOWN			MAIN: UNKNOWN							
BRKR NO.	LOAD DESCRIPTION	BRKR SIZE	BRKR POLES	CKT LOAD	PHASE	CKT LOAD	BRKR POLES	BRKR SIZE	LOAD DESCRIPTION	BRKR NO.
1	-	20	1	-	A	-	-	1	-	2
3	-	20	1	-	B	-	-	1	-	4
5	-	20	1	-	C	-	-	1	-	6
7	-	20	1	-	A	-	-	1	-	8
9	-	20	1	-	B	-	-	1	-	10
11	-	20	1	-	C	-	-	1	-	12
13	-	20	1	-	A	-	-	1	-	14
15	-	20	1	-	B	-	-	1	-	16
17	-	20	1	-	C	-	-	1	-	18
19	-	20	1	-	A	-	-	1	-	20
21	-	20	1	-	B	-	-	1	-	22
23	EF-1	20	1	-	C	-	-	1	-	24
25	SPARE	20	1	-	A	-	-	1	-	26
27	DRYER	20	2	-	B	-	-	1	-	28
29	-	20	1	-	C	-	-	1	-	30
31	WASHER	20	2	-	A	-	-	2	-	32
33	-	-	-	-	B	-	-	-	-	34
35	WASHER	20	2	-	C	-	-	1	-	36
37	-	-	-	-	A	-	-	1	-	38
39	DROP PLUGS	20	1	-	B	-	-	-	-	40
41	DROP PLUGS	20	1	-	C	-	-	1	-	42

EXISTING PANEL (PDP-502)										
VOLTAGE: 480 / 277V			MOUNTING: SURFACE							
AMPERAGE: 225 A			MODEL: SQUARE D I-LINE							
PHASE: 3			SERVICE / FEEDER: 3" C							
WIRE: 4			MAIN: MCB							
BRKR NO.	LOAD DESCRIPTION	BRKR SIZE	BRKR POLES	CKT LOAD	PHASE	CKT LOAD	BRKR POLES	BRKR SIZE	LOAD DESCRIPTION	BRKR NO.
1	-	-	-	-	A	20,600	-	-	-	2
3	SPARE	20	3	-	B	20,600	3	45	LP-5A	4
5	-	-	-	-	C	20,600	-	-	-	6
7	-	-	-	2,850	A	20,600	-	-	-	8
9	WEST COMPRESSOR	45	3	2,850	B	20,600	3	45	RP-B	10
11	-	-	-	192	C	20,600	-	-	-	12
13	-	-	-	-	A	-	-	-	-	14
15	EAST COMPRESSOR	45	3	-	B	-	3	30	BALER	16
17	-	-	-	-	C	-	-	-	-	18
19	-	-	-	-	A	-	-	-	-	20
21	REFRIGERATOR COMPRESSOR	20	3	-	B	-	3	20	SPARE	22
23	-	-	-	-	C	-	-	-	-	24
25	-	-	-	-	A	-	-	-	-	26
27	ECUH-1	15	3	-	B	-	3	15	SPARE	28
29	-	-	-	-	C	-	-	-	-	30
31	-	-	-	-	A	2,600	-	-	-	32
33	SPARE	15	3	-	B	2,600	3	15	WASHER	34
35	-	-	-	-	C	2,600	-	-	-	36
37	-	-	-	-	A	-	-	-	-	38
39	SPACE	-	-	-	B	-	-	-	SPACE	40
41	-	-	-	-	C	-	-	-	-	42



COOLER / FREEZER REPLACEMENT
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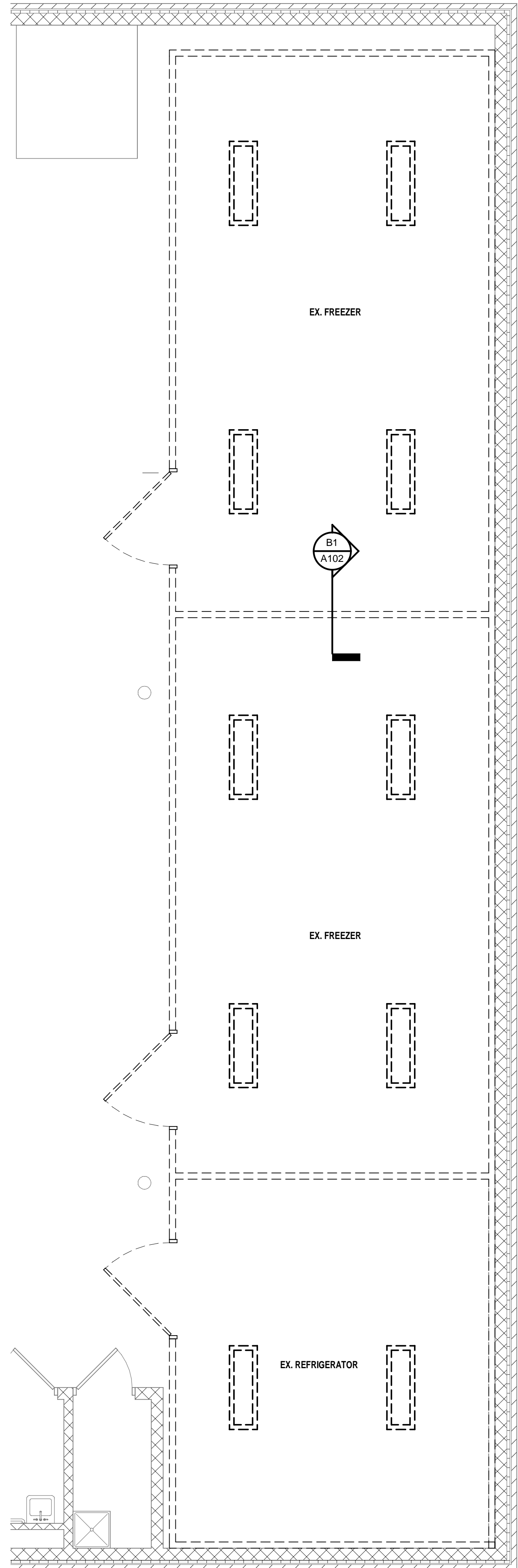
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	KPS
CHECKED:	APPROVED:
SCP	SCP

ELECTRICAL POWER PLANS

E101

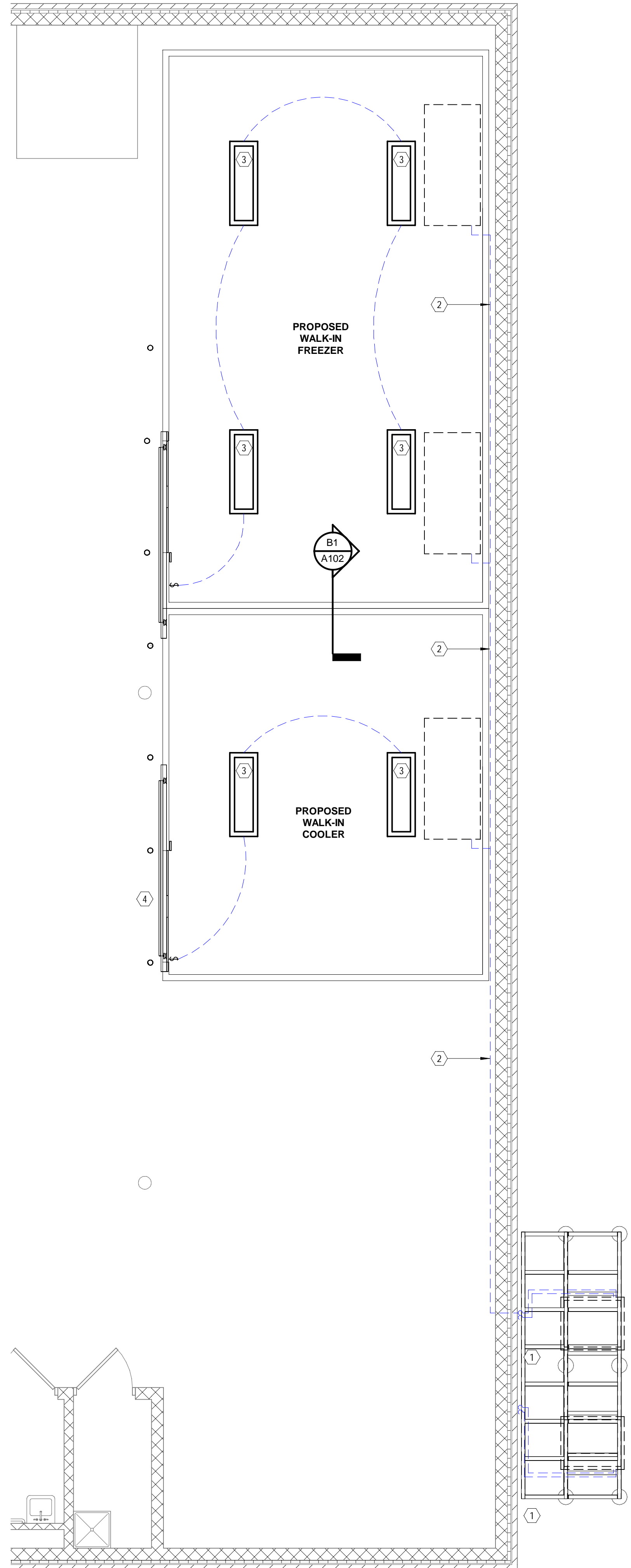
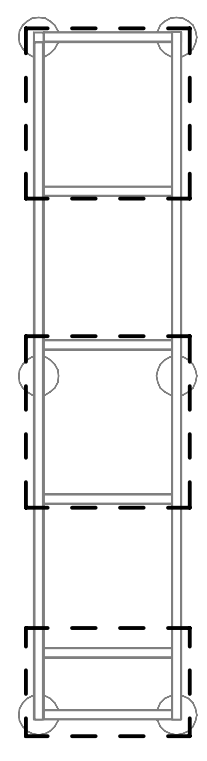
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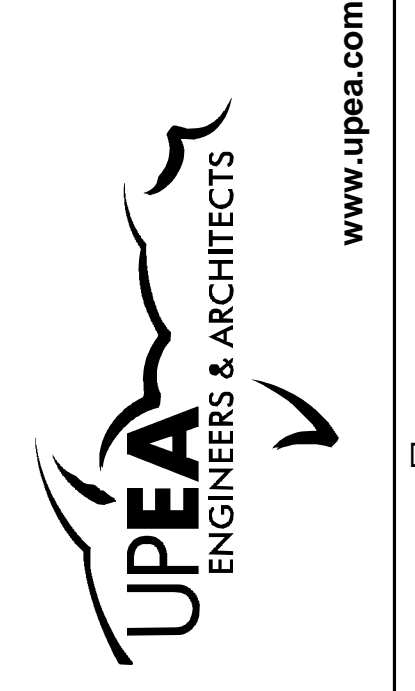
A1 ELECTRICAL LIGHTING DEMOLITION PLAN
1/4" = 1'-0"

PROPOSED ELECTRICAL LIGHTING KEYNOTES	
①	DISCONNECT SWITCH FOR SINGLE POINT CONNECTION TO CONDENSING UNIT, FUSE PER UNIT NAME PLATE.
②	CONTRACTOR TO INSTALL CONTROL WIRING BETWEEN THE EVAPORATOR COIL AND THE CONDENSING UNIT.
③	PROPOSED 48" LED VAPOR PROOF ALL TEMPERATURE LIGHT FIXTURES (TWO PER UNIT), PROVIDED BY EQUIPMENT SUPPLIER, INSTALLED BY CONTRACTOR.
④	MODULARM 75LC HIGH / LOW DIGITAL ALARM AND LIGHT MANAGEMENT SYSTEM (INSTALLED IN COOLER DOOR PANEL).

DEMOLITION ELECTRICAL LIGHTING KEYNOTES	
①	REMOVE EXISTING SINGLE POINT CONNECTION TO EXISTING CONDENSING UNIT'S DISCONNECT SWITCH.



A4 ELECTRICAL LIGHTING PROPOSED PLAN
1/4" = 1'-0"



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	CHECKED: SCP
	APPROVED: SCP

ELECTRICAL LIGHTING PLANS

E102