

# REPLACE ICE BUILDERS BUILDING #13

## Jefferson City, Missouri

OWNER: STATE OF MISSOURI  
MICHAEL L. PARSON,  
GOVERNOR

PROJECT  
MANAGEMENT: OFFICE OF ADMINISTRATION  
DIVISION OF FACILITIES MANAGEMENT,  
DESIGN AND CONSTRUCTION



DESIGNER: Horner & Shifrin

PROJECT NUMBER: C2009-01

SITE NUMBER: 7029  
FACILITY NUMBER: 9327029018

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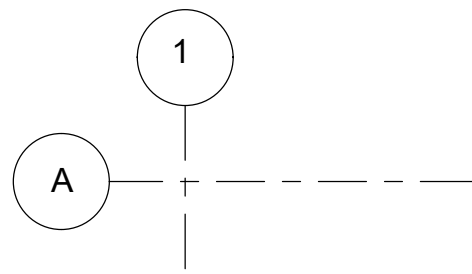
STRUCTURAL:  
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SHEET NUMBER:

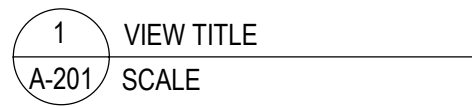
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09/02/2022

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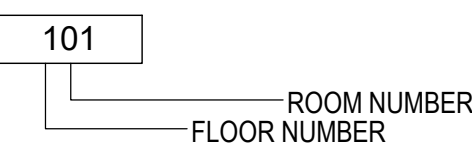
GRID LINES



VIEW TITLE



NORTH ARROW



ROOM NUMBER TAG



KEYNOTE TAG

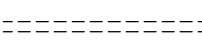


REVISION CLOUD AND DELTA

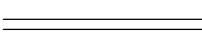
ARCHITECTURAL SYMBOLS LEGEND:



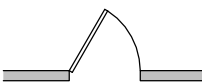
EXISTING PARTITION TO REMAIN



EXISTING PARTITION TO BE REMOVED



NEW PARTITION



EXISTING DOOR, FRAME, AND HARDWARE TO REMAIN



EXISTING DOOR, FRAME, AND HARDWARE TO BE REMOVED



NEW OR RELOCATED DOOR, FRAME, AND HARDWARE

ABBREVIATIONS

A

ACT	ACOUSTICAL CEILING TILE
ADA	AMERICANS WITH DISABILITIES ACT
ADJ	ADJUSTABLE
AFF	ABOVE FINISHED FLOOR
ALT	ALTERNATE
ALUM	ALUMINUM
APPROX	APPROXIMATE(LY)
ARCH	ARCHITECT(URAL)

B

BD	BOARD
BLDG	BUILDING
BLKG	BLOCKING

C

C/L	CENTERLINE
CFCI	CONTRACTOR FURNISHED, CONTRACTOR INSTALLED
CHAR	CHARACTOR
CJ	CONTROL JOINT
CLG	CEILING
CLR	CLEAR
CONC	CONCRETE
CONT	CONTINUE, CONTINUOUS
CORR	CORRIDOR
CPU	COMPUTER
CT	CERAMIC TILE

D

DIA	DIAMETER
DIM	DIMENSION(S)
DIST	DISTANCE
DVI	DIGITAL VISUAL INTERFACE

E

EA	EACH
EJ	EXPANSION JOINT
ELEC	ELECTRIC(AL)
ELEV	ELEVATION
EQ	EQUAL
EQUIP	EQUIPMENT
ETC	ET CETERA (AND SO FORTH)
EXIST	EXISTING
EXP	EXPANSION
EXT	EXTERIOR

F

FD	FLOOR DRAIN
FE	FIRE EXTINGUISHER
FEC	FIRE EXTINGUISHER CABINET
FIN	FINISH(ED)
FIN FLR	FINISHED FLOOR
FLR	FLOOR
FLUOR	FLUORESCENT
FOF	FACE OF FINISH
FRT	FIRE-RETARDANT TREATED

G

GA	GAUGE
GALV	GALVANIZED
GC	GENERAL CONTRACTOR
GYP BD	GYPSUM BOARD

H

HC	HOLLOW CORE
HCP	HANDICAP(PED)
HDMI	HIGH-DEFINITION MULTIMEDIA INTERFACE
HDW	HARDWARE
HM	HOLLOW METAL
HOR	HORIZONTAL
HR	HOUR
HT	HEIGHT

I

IBC	INTERNATIONAL BUILDING CODE
INCL	INCLUDE(D)
INSUL	INSULATION
INT	INTERIOR

J

JT	JOINT
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L

LAM	LAMINATE
LBS	POUNDS
LF	LINEAR FOOT (FEET)

M

MANUF	MANUFACTURER
MAX	MAXIMUM
MECH	MECHANICAL
MEP	MECHANICAL, ELECTRICAL, AND PLUMBING
MEPFP	MECHANICAL, ELECTRICAL, PLUMBING, AND FIRE PROTECTION
MIN	MINIMUM
MISC	MISCELLANEOUS
MTL	METAL

N

NIC	NOT IN CONTRACT
NTS	NOT TO SCALE

O

OC	ON CENTER
OFCI	OWNER FURNISHED, CONTRACTOR INSTALLED
OFOI	OWNER FURNISHED, OWNER INSTALLED
OH	OPPOSITE HAND
OPG	OPENING
OPP	OPPOSITE

P

PLAM	PLASTIC LAMINATE
PSF	POUNDS PER SQUARE FOOT (FEET)
PT	PAINT(ED)
PTN	PARTITION
PWD	PLYWOOD

Q

QTY	QUANTITY
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R

RB	RESILIENT BASE
REF	REFERENCE
REINF	REINFORCE(D)
REQ	REQUIRED
REV	REVISION

S

SC	SOLID CORE
SCHED	SCHEDULE
SF	SQUARE FOOT (FEET)
SIM	SIMILAR
SPEC	SPECIFICATION
SQ	SQUARE
SQ FT	SQUARE FOOT (FEET)
STL	STEEL
SUSP	SUSPEND(ED)
SYM	SYMMETRICAL

T

TEMP	TEMPERED
TFCI	TENANT(CLIENT) FURNISHED, CONTRACTOR INSTALLED
TFTI	TENANT (CLIENT) FURNISHED, TENANT (CLIENT) INSTALLED
TOS	TOP OF STRUCTURE
TOW	TOP OF WALL
TYP	TYPICAL

U

UL	UNDERWRITERS LABORATORIES, INC
UNO	UNLESS NOTED OTHERWISE

V

VERT	VERTICAL
VIF	VERIFY IN FIELD
VWC	VINYL WALL COVERING

W

W/	WITH
W/O	WITHOUT
WC	WATER CLOSET
WD	WOOD

CEILING RESTRAINT REQUIREMENTS FOR SEISMIC DESIGN CATEGORY D, E, & F:

ALL SUSPENDED CEILING SYSTEMS ARE TO BE INSTALLED PER IBC REQUIREMENTS, CISCA GUIDELINES FOR SEISMIC ZONES 3 & 4, AND ASCE SECTION 7 REQUIREMENTS.

BASIC CONNECTIONS, PERIMETER, AND LATERAL SPLAY BRACING: SUSPENDED CEILINGS GREATER THAN 144 SF SHALL BE BRACED IN ACCORDANCE WITH THE FOLLOWING:

1. MINIMUM INTERSECTION STRENGTH LIMITS @ MAIN TEE/CROSS TEE IS 180 LBS.
2. PROVIDE MIN. 12 GA VERTICAL HANGER WIRE AT 4'-0" OC MIN.
3. CONNECTION DEVICE FROM VERTICAL WIRE TO STRUCTURE ABOVE MUST SUSTAIN MIN 100 LBS.
4. MAIN TEE CLASSIFICATION TO BE HEAVY DUTY.
5. 1 IN 6 MAX. PLUMB OF VERTICAL HANGER WIRES REQUIRED.
6. PROVIDE PERIMETER VERTICAL HANGER WIRES NOT MORE THAN 8" FROM WALL.
7. MINIMUM CLEARANCE FROM GRID END TO WALL IS 3/4".
8. PERIMETER CLOSURE (MOLDING) WIDTH MIN 2"
9. PROVIDE GRID CONNECTION TO PERIMETER ATTACHED ON TWO ADJACENT WALLS.
10. TIE PERIMETER TEE ENDS TOGETHER.
11. PROVIDE HORIZONTAL RESTRAINT (SPLAY WIRES OR RIGID BRACING) WITHIN 2" OF INTERSECTION AND SPLAYED 90 DEGREES APART AT 45 DEGREE ANGLES.
12. PROVIDE COMPRESSION POSTS (STRUTS) AT 12" OC IN BOTH DIRECTIONS, STARTING 6' FROM WALL.
13. SPLAY BRACING CONNECTION STRENGTH TO BE MIN 200 LBS OR THE DESIGN LOAD, WHICHEVER IS GREATER.
14. PARTITIONS ARE TO BE BRACED INDEPENDENT OF CEILING SPLAY BRACING.
15. IN ADDITION TO REQUIREMENTS NOTED ABOVE, FOR SUSPENDED CEILINGS GREATER THAN 2500 SF PROVIDE A SEISMIC SEPARATION JOINT OR FULL HEIGHT PARTITION DIVIDING CEILINGS INTO AREAS LESS THAN 2,500 SF.
16. PROVIDE RIGID BRACING FOR CEILING PLANE ELEVATION CHANGES.

LIGHT FIXTURE ATTACHMENT:

1. MECHANICALLY ATTACH ALL LIGHT FIXTURES TO CEILING GRID. ATTACHMENTS MUST SUPPORT 100% OF LIGHT FIXTURE WEIGHT.
2. SURFACE-MOUNTED FIXTURES DO NOT REQUIRE ATTACHMENT TO GRID.
3. SUPPORT PENDANT-HUNG FIXTURES DIRECTLY FROM STRUCTURE WITH 9-GAUGE WIRE OR APPROVED ALTERNATE.
4. FOR RIGID LAY-IN OR CAN LIGHT FIXTURES WEIGHING LESS THAN 10 LBS PROVIDE (1) WIRE TO STRUCTURE (MAY BE SLACK). FOR RIGID LAY-IN OR CAN LIGHT FIXTURES WEIGHING FROM 10 TO 56 LBS PROVIDE (2) VERTICAL SUPPORT WIRES (MUST BE SLACK). FOR LIGHT FIXTURES GREATER THAN 56 LBS PROVIDE DIRECT AND INDEPENDENT SUPPORT FROM THE BUILDING STRUCTURE.

LIGHT FIXTURE SUPPLEMENTARY HANGER WIRES:

1. PROVIDE INTERMEDIATE DUTY MAIN TEES WITH CROSS TEE RATING BELOW 16 LBS/LF.
2. PROVIDE HEAVY DUTY MAIN TEES WITH CROSS TEE RATING BELOW 16 LBS/LF.
3. ATTACH MIN. 12-GAUGE HANGER WIRES TO THE SUPPORTING CROSS TEE WITHIN (3) THREE INCHES OF THE CORNER OF EACH LIGHT FIXTURE.

SERVICE APPLICATIONS:

1. ALL MECHANICAL AIR TERMINALS MUST BE POSITIVELY ATTACHED TO THE CEILING GRID. FOR TERMINALS WEIGHING FROM 20 TO 56 LBS PROVIDE (2) VERTICAL SUPPORT WIRES (MAY BE SLACK.) FOR TERMINALS WEIGHING GREATER THAN 56 LBS PROVIDE DIRECT AND INDEPENDENT SUPPORT FROM THE BUILDING STRUCTURE.
2. SPRINKLER HEADS AND OTHER PENETRATIONS REQUIRE A MIN 2" DIAMETER OPENING OR A SWING JOINT.
3. CABLE TRAYS AND ELECTRICAL CONDUIT MUST BE INDEPENDENTLY SUPPORTED AND BRACED.

DEFINITION OF TERMS:

1. THE WORD "CLIENT" AS USED IN THESE DOCUMENTS REFERS TO THE ENTITY WHO HAS CONTRACTED THE ARCHITECT TO PERFORM PROFESSIONAL SERVICES ON THIS PROJECT.
2. THE WORD "PROJECT" AS USED IN THESE DOCUMENTS REFERS TO THE SCOPE OF WORK DESCRIBED IN THESE DOCUMENTS.
3. THE WORDS "CONTRACTOR", "GENERAL CONTRACTOR", AND "GC" AS USED IN THESE DOCUMENTS REFER TO THE GENERAL CONTRACTOR SELECTED BY THE CLIENT TO PERFORM THE WORK DESCRIBED IN THESE DOCUMENTS. ALL NOTES IN THESE DOCUMENTS INSTRUCT THE GENERAL CONTRACTOR.
4. THE WORD "ARCHITECT" AS USED IN THESE DOCUMENTS REFERS TO THE ARCHITECT OF RECORD FOR THIS PROJECT, ARCTURIS.
5. THE WORDS "CONSTRUCTION TEAM" REFER TO ALL PARTIES INVOLVED IN THE CONSTRUCTION PHASE, INCLUDING BUT NOT LIMITED TO: THE CLIENT AND THEIR CONSULTANTS, THE GENERAL CONTRACTOR AND ALL SUBCONTRACTORS, THE ENGINEERS AND THE ARCHITECT.
6. THE WORD "ALIGN" AS USED IN THESE DOCUMENTS SUPERSEDES ANY DIMENSIONAL INFORMATION INDICATED. IF DISCREPANCIES OCCUR, NOTIFY ARCHITECT IMMEDIATELY.
7. THE WORD "PROVIDE" AS USED IN THESE DOCUMENTS MEANS FURNISH AND INSTALL.
8. THE WORDS "NOT IN CONTRACT" AND "NIC" AS USED IN THESE DOCUMENTS REFER TO WORK OR EQUIPMENT PROVIDED OUTSIDE THE CONTRACT SCOPE REPRESENTED IN THESE DOCUMENTS. THE CONTRACTOR SHALL COORDINATE HIS WORK WITH ALL PARTIES FURNISHING AND/OR INSTALLING NIC ITEMS AND COOPERATE TO AFFECT THE IMPLEMENTATION OF SUCH WORK OR INSTALLATION.
9. THE WORD "CLEAR" AS USED IN THESE DOCUMENTS SHALL MEAN THAT THE CONDITION IS NOT ADJUSTABLE WITHOUT THE APPROVAL OF THE ARCHITECT. CLEAR DIMENSIONS ARE TYPICALLY TO FINISH FACE OF MAJOR SURFACE. COORDINATE REQUIREMENTS FOR CONVECTORS (BASE BOARD HEATERS) OR OTHER PROTRUSIONS WITH ARCHITECT.
10. THE WORD "MAXIMUM" AS USED IN THESE DOCUMENTS SHALL MEAN THE CONDITION IS SLIGHTLY ADJUSTABLE BUT MAY NOT VARY TO A DIMENSION OR QUANTITY GREATER THAN THAT SHOWN WITHOUT APPROVAL OF THE ARCHITECT.
11. THE WORD "MINIMUM" AS USED IN THESE DOCUMENTS SHALL MEAN THE CONDITION IS SLIGHTLY ADJUSTABLE BUT MAY NOT VARY TO A DIMENSION OR QUANTITY LESS THAN THAT SHOWN WITHOUT APPROVAL OF THE ARCHITECT.
12. THE WORD "TYPICAL" AS USED IN THESE DOCUMENTS SHALL MEAN THE CONDITION OR DIMENSION IS THE SAME OR REPRESENTATIVE FOR SIMILAR CONDITIONS THROUGHOUT.
13. THE SYMBOL "+/-" AS USED IN THESE DOCUMENTS SHALL MEAN THE DIMENSION OR QUANTITY IS ADJUSTABLE TO ACCOMMODATE ACTUAL CONDITIONS. IF ACTUAL DIMENSION VARIES BY MORE THAN 1" FROM DIMENSION NOTED AS "+/-", INFORM ARCHITECT BEFORE PROCEEDING.

STATE OF MISSOURI  
MICHAEL L. PARSON,  
GOVERNOR

ARCHITECT OF RECORD:

WILLIAM W. DECKER  
MO #A-2009022674



STATE CERTIFICATE OF AUTHORITY: MO 00246198

PROFESSIONAL SEAL



401 S. 18TH ST., STE. 400 SAINT LOUIS, MO 63103-2296  
314-531-4321 • FAX 314-531-6966 • WWW.HORNERSHIFRIN.COM  
DISCIPLINE: PROFESSIONAL ENGINEERING  
CERTIFICATE OF AUTHORITY: 000169  
EXPIRATION DATE: DECEMBER 31, 2022

ARCTURIS

701 MARKET STREET, SUITE 1300  
SAINT LOUIS, MO 63101  
314.206.7100

OFFICE OF  
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DEPARTMENT  
OF CORRECTIONS

REPLACE ICE BUILDERS  
BUILDING #13

JEFFERSON CITY  
CORRECTIONAL CENTER

JEFFERSON CITY, MO

PROJECT # C2009-01  
SITE # 7029  
FACILITY # 9327029018

REVISION: \_\_\_\_\_  
DATE: \_\_\_\_\_  
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DATE: \_\_\_\_\_

ISSUE DATE: 09/02/22

CAD DWG FILE: \_\_\_\_\_  
DRAWN BY: WD  
CHECKED BY: MR  
DESIGNED BY: WD

SHEET TITLE:

SYMBOLS AND  
ABBREVIATIONS

SHEET NUMBER:

A-001

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09/02/22



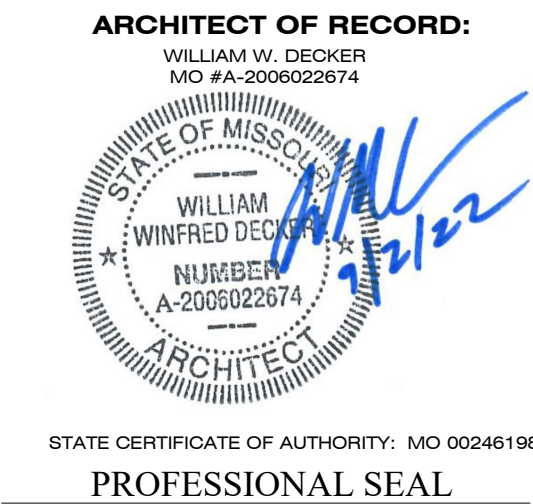
GENERAL NOTES: ARCHITECTURAL

- WHERE WORK OR EQUIPMENT IS INDICATED AS 'NOT IN CONTRACT (NIC)' IN THE DOCUMENTS, SUCH WORK OR EQUIPMENT SHALL BE PROVIDED OUTSIDE THE CONTRACT SCOPE REPRESENTED IN THESE DOCUMENT. THE CONTRACTOR SHALL COORDINATE THEIR WORK WITH NIC ITEMS AND COOPERATE TO AFFECT THE IMPLEMENTATION OF SUCH WORK OR INSTALLATION.
- DETAILS NOT SHOWN ARE TO BE SIMILAR IN CHARACTER TO THOSE DRAWN. WHERE SPECIFIC DIMENSIONS, DETAILS OR DESIGN INTENT CANNOT BE DETERMINED THE CONTRACTOR IS TO OBTAIN CLARIFICATION FROM THE ARCHITECT BEFORE PROCEEDING WITH THE WORK.
- DO NOT SCALE DRAWINGS. DIMENSIONS GOVERN. LARGE SCALE DETAILS GOVERN OVER SMALL SCALE.
- WHERE EXISTING WALLS, PARTITIONS, COLUMNS, FLOORS, BULKHEADS, SURFACES, OR FINISHES ARE REMOVED OR PARTIALLY DEMOLISHED, EACH TRADE IS RESPONSIBLE FOR PATCHING OR REFINISHING OF EXISTING CONSTRUCTION REQUIRED BY THAT TRADE'S WORK ON THE PROJECT. THIS WORK MUST BE DONE IN A MANNER WHICH WILL ACCEPT NEW FINISHES.
- ALL NEW / MODIFIED GYPSUM BOARD ASSEMBLIES (WALLS & CEILINGS) TO RECEIVE A LEVEL FOUR (4) DRYWALL FINISH PRIOR TO APPLICATION OF PAINT TO SURFACE TO AVOID PAINT FLASHING. WALL FINISH LEVEL BASED ON GA-214-17 "RECOMMENDED LEVELS OF GYPSUM BOARD FINISH." REFER TO PARTITION TYPES FOR ADDITIONAL INFORMATION.
- ALL MATERIALS USED IN FIRE-RATED ASSEMBLIES SHALL BE APPROVED BY UL OTHER RECOGNIZED STANDARD FOR USE IN SUCH ASSEMBLIES.
- ALL FIRESTOP SYSTEMS TO MEET UL TESTED SYSTEMS. SYSTEMS MUST BE SUBMITTED TO AND APPROVED BY ARCHITECT PRIOR TO INSTALLATION. GC IS TO KEEP A COPY OF ALL APPROVED SYSTEMS ON SITE FOR DURATION OF PROJECT. ALL INSTALLED SYSTEMS MUST BE LABELED AND DOCUMENTED. DOCUMENTATION IS TO BE SUBMITTED TO OWNER AND ARCHITECT UPON COMPLETION OF THE PROJECT.
- PROVIDE THROUGH PENETRATION FIRESTOP SYSTEMS FOR ALL ITEMS PENETRATING FIRE-RATED ASSEMBLIES. PENETRATIONS TO BE DESIGNED, TESTED, AND FIRE-RESISTANCE RATED TO RESIST FOR A PRESCRIBED PERIOD OF TIME THE SPREAD OF FIRE THROUGH PENETRATIONS. PROVIDE UL-LISTED ASSEMBLIES AS REQUIRED.
- PREPARE EXISTING FLOOR SLABS FOR INSTALLATION OF SPECIFIED FLOOR FINISHES. PREPARE EXISTING FLOOR SLABS TO BE SMOOTH AND LEVEL BEFORE INSTALLATION OF FINISH FLOOR MATERIALS, WITH MAXIMUM DEVIATION OF 1/4" IN 10'-0". NO FLOOR PREPARATION ALLOWANCES WILL BE ACCEPTED. GC AND SUBCONTRACTORS TO VISUALLY INSPECT EXISTING FLOOR SLAB CONDITIONS TO ENSURE PROPER FLOOR PREPARATION IS INCLUDED IN PROPOSAL.
- ALL BUILDING ACCESSIBILITY IS DESIGNED AND SHALL BE IN ACCORDANCE WITH IBC, ANSI 117.1 AND ADAAG, WHICHEVER STANDARD PROVIDES THE GREATEST DEGREE OF ACCESSIBILITY FOR ANY GIVEN BUILDING ELEMENT.
- FOR ALL DOORS HANDLES, PULLS, LATCHES, LOCKS, AND OTHER OPERATING DEVICES ON ACCESSIBLE DOORS SHALL HAVE A SHAPE THAT IS EASY TO GRASP WITH ONE HAND AND DOES NOT REQUIRE TIGHT GRASPING, TIGHT PINCHING, OR TWISTING OF THE WRIST TO OPERATE. LEVER OPERATED MECHANISMS, PUSH-TYPE MECHANISMS, AND U-SHAPED HANDLES ARE ACCEPTABLE DESIGNS. WHEN SLIDING DOORS ARE FULLY OPEN, OPERATING HARDWARE SHALL BE EXPOSED AND USABLE FROM BOTH SIDES. HARDWARE REQUIRED FOR ACCESSIBLE DOOR PASSAGE SHALL BE MOUNTED NO HIGHER THAN 48" AFF.
- COORDINATE QUANTITY AND LOCATION OF ALL ELECTRICAL CONNECTIONS REQUIRED FOR ALL EQUIPMENT. REFER TO EQUIPMENT LEGEND FOR ADDITIONAL ELECTRICAL AND COMMUNICATIONS REQUIREMENTS AT EQUIPMENT LOCATIONS.
- TO PREVENT GALVANIC ACTION BETWEEN DISSIMILAR METALS, WHERE DISSIMILAR METALS COME INTO CONTACT WITH EACH OTHER, WHERE METALS COME INTO CONTACT WITH WOOD, CONCRETE OR MASONRY, WHERE RUNOFF FROM A METAL SURFACE FLOWS OVER A DISSIMILAR METAL, OR WHERE NON-PASSIVE METAL FASTENERS PENETRATE DISSIMILAR METALS, BREAK THE CONTACT BETWEEN MATERIALS WITH A HEAVY WATERPROOF PAPER OR FELT, A HEAVY COAT OF BITUMINOUS COATING OR AN ELASTOMERIC FILM UNLESS OTHER SEPARATOR IS INDICATED IN THE CONTRACT DOCUMENTS.
- STEEL EXPOSED TO WATER AND/OR EXTERIOR WEATHER CONDITIONS IS TO BE GALVANIZED UNLESS INDICATED OTHERWISE. WHERE CUTTING, FASTENING, ANCHORAGE OR CONNECTION CONDITIONS RESULT IN BREAKS IN THE GALVANIZING COATING, RESTORE COATING OR APPLY ADDITIONAL COMPATIBLE PROTECTIVE COATING TO MAINTAIN INTEGRITY OF PROTECTION.
- SHEET METAL FLASHING SHALL BE OF APPROPRIATE THICKNESS AND SIZES, AND DETAILED, CONFIGURED AND INSTALLED SO AS TO ALLOW FOR ACCEPTABLE THERMAL MOVEMENTS WITHOUT VISIBLE DISTORTIONS, LEAKS OR FAILURES OF THE FLASHING SYSTEM'S ABILITY TO PERFORM AS REQUIRED BY THE CONTRACT DOCUMENTS.
- GC TO REVIEW AND COORDINATE ALL DESIGN/BUILD COMPONENTS WITH ARCHITECT, INCLUDING BUT LIMITED TO QUANTITIES, TYPES, AND LOCATIONS OF ELEMENTS.
- REFER TO DESIGN/BUILD MEPFP NOTES AND DESIGN/BUILD ELECTRICAL, MECHANICAL, PLUMBING, AND FIRE PROTECTION DOCUMENTATION FOR ADDITIONAL INFORMATION.
- HAZARDOUS MATERIALS: CLIENT ACCEPTS SOLE RESPONSIBILITY FOR COMPLIANCE WITH ALL FEDERAL, STATE, AND LOCAL LAWS RELATING TO THE ENVIRONMENT, INCLUDING BUT NOT LIMITED TO THE NATIONAL EMISSIONS STANDARDS FOR HAZARDOUS AIR POLLUTANTS AND THE OCCUPATIONAL SAFETY AND HEALTH ACT. THE ARCHITECT AND ARCHITECT'S CONSULTANTS SHALL HAVE NO RESPONSIBILITY FOR THE DISCOVERY, PRESENCE, HANDLING, REMOVAL, OR DISPOSAL OF OR EXPOSURE OF PERSONS TO HAZARDOUS MATERIALS IN ANY FORM AT THE PROJECT SITE, INCLUDING BUT NOT LIMITED TO ASBESTOS, ASBESTOS PRODUCTS, POLYCHLORINATED BIPHENYL (PCB) OR OTHER TOXIC SUBSTANCES.

DELEGATED DESIGN SCOPE

- APPLICABLE TO THE FOLLOWING ITEMS:
  - RAILINGS
  - FLOOR TRENCH INFILL (CONCRETE & REINFORCING)
  - STRUCTURAL REALTED ITEMS
- THE CONTRACTOR SHALL CAREFULLY STUDY AND COMPARE VARIOUS CONTRACT DOCUMENTS RELATIVE TO EACH PORTION OF THE WORK AS WELL AS THE INFORMATION FURNISHED BY THE OWNER, SHALL TAKE FIELD MEASUREMENTS OF ANY EXISTING CONDITIONS RELATED TO THAT PORTION OF WORK, AND SHALL OBSERVE ANY CONDITIONS AT THE SITE AFFECTING THE WORK. THE CONTRACTOR SHALL PROMPTLY REPORT TO THE ARCHITECT ANY ERRORS, INCONSISTENCIES, OR OMISSIONS DISCOVERED BY OR MADE KNOWN TO THE CONTRACTOR AS A RFI.
- THE CONTRACTOR SHALL NOT BE REQUIRED TO PROVIDE PROFESSIONAL SERVICES THAT CONSTITUTE THE PRACTICE OF ARCHITECTURE OR ENGINEERINGS UNLESS SUCH SERVICES ARE SPECIFICALLY REQUIRED BY THE CONTRACT DOCUMENTS FOR A PORTION OF THE WORK OR UNLESS THE CONTRACTOR NEEDS TO PROVIDE SUCH SERVICES IN ORDER TO CARRY OUT THE CONTRACTOR'S RESPONSIBILITIES FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES.
- DESIGN DELEGATION - IF THE CONTRACT DOCUMENTS SPECIFY THAT CONSTRUCTOR IS RESPONSIBLE FOR THE DESIGN OF A PARTICULAR SYSTEM OR COMPONENT TO BE INCORPORATED INTO THE PROJECT, THEN THE CONTRACT DOCUMENTS SHALL SPECIFY ALL REQUIRED PERFORMANCE AND DESIGN CRITERIA. AS REQUIRED BY THE LAW, CONSTRUCTOR SHALL PROCURE DESIGN SERVICES AND CERTIFICATIONS NECESSARY TO SATISFACTORILY COMPLETE THE WORK FROM A LICENSED DESIGN PROFESSIONAL IN APPLICABLE JURISDICTION. THE SIGNATURE AND SEAL OF THE CONSTRUCTORS DESIGN PROFESSIONAL SHALL APPEAR ON ALL DRAWINGS, CALCULATIONS, SPECIFICATIONS, CERTIFICATIONS, SHOP DRAWINGS, AND OTHER SUBMITTALS RELATED TO THE WORK DESIGNED OR CERTIFIED BY THE CONSTRUCTOR'S DESIGN PROFESSIONAL.

STATE OF MISSOURI  
MICHAEL L. PARSON,  
GOVERNOR



**HORNER  
SHIFRIN**

401 S. 18TH ST., STE. 400 SAINT LOUIS, MO 63103-2296  
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CHECKED BY: \_\_\_\_\_ MR  
DESIGNED BY: \_\_\_\_\_ WD

SHEET TITLE:

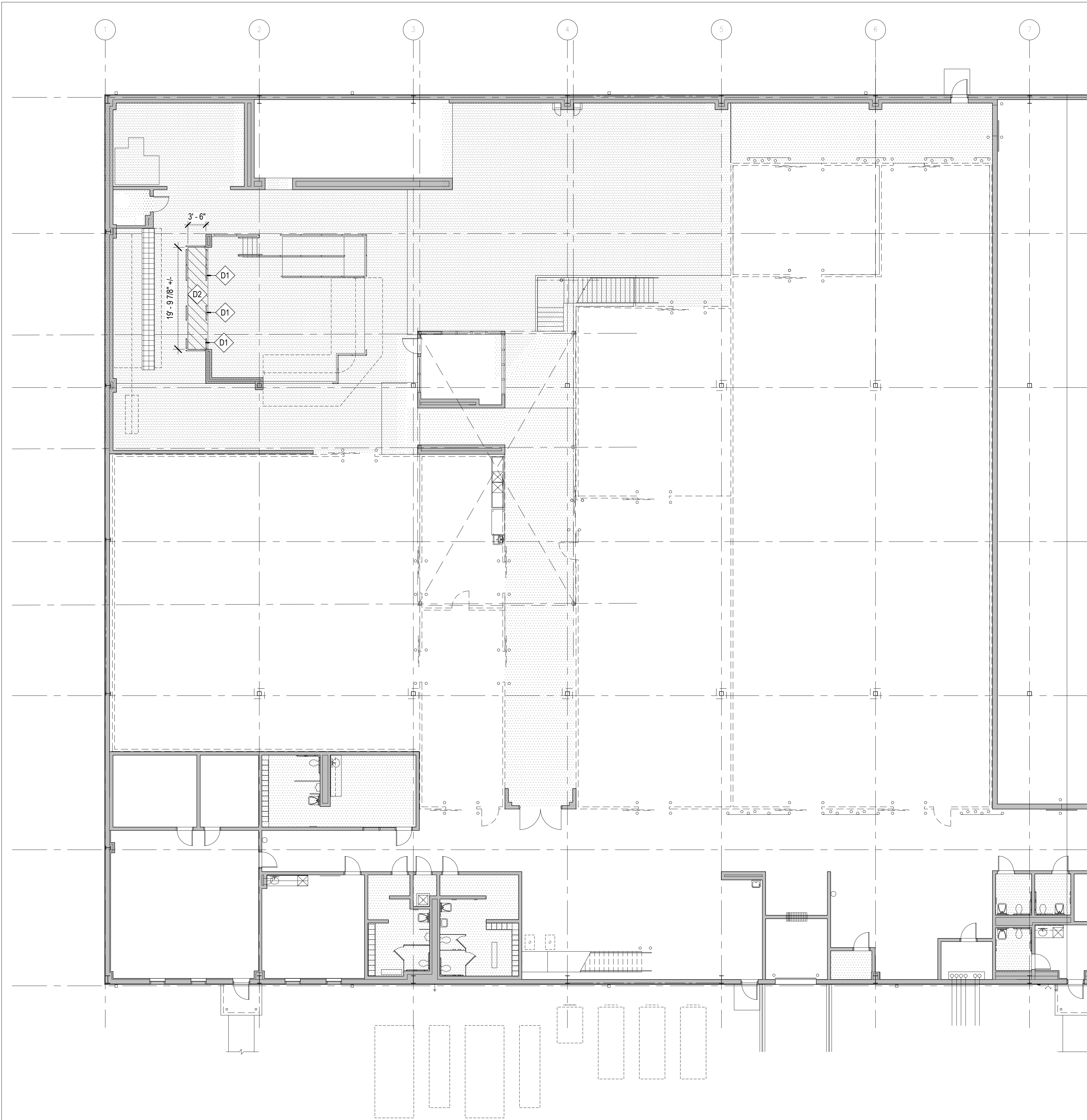
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NOTES

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A-002

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09/02/22





GENERAL NOTES: DEMOLITION

1. AREA OF DEMOLITION SHOWN IS APPROXIMATE. DIMENSIONS ARE FOR REFERENCE ONLY. EXACT LOCATION AND EXTENT OF DEMOLITION TO BE COORDIANATED WITH FIELD CONDITIONS AND MEP DEMOLITION SCOPE OF WORK.
2. PROVIDE TEMPORARY BARRICADES AND OTHER FORMS OF PROTECTION AS REQUIRED TO PROTECT OWNER'S AND CLIENT'S PERSONNEL AND GENERAL PUBLIC FROM INJURY DUE TO SELECTIVE DEMOLITION WORK.
3. ERECT AND MAINTAIN DUST-PROOF PARTITIONS AND CLOSURES AS REQUIRED TO PREVENT SPREAD OF DUST OR FUMES TO OCCUPIED PORTIONS OF THE BUILDING. PROTECT MECHANICAL SYSTEM AS REQUIRED. TEMPORARY PARTITIONS TO SEPARATE AREAS TO REMAIN IN OPERATION FROM AREAS WHERE DEMO/NEW WORK IS INDICATED.
4. CONDUCT SELECTIVE DEMOLITION OPERATIONS AND DEBRIS REMOVAL IN A MANNER TO ENSURE MINIMUM INTERFERENCE WITH ROADS, STREETS, WALKS, AND OTHER ADJACENT OCCUPIED OR USED FACILITIES.
5. PROVIDE BYPASS CONNECTIONS AS NECESSARY TO MAINTAIN CONTINUITY OF SERVICE TO OCCUPIED AREAS OF THE BUILDING.
6. REVIEW/COORDINATE SCHEDULE OF WORK TO BE DEMOLISHED WITH BUILDING MANAGEMENT TO LIMIT INTERRUPTIONS OF OWNER-OCCUPIED SPACES.
7. MAINTAIN FIRE PROTECTION SERVICES DURING SELECTIVE DEMOLITION. EXISTING FIRE SPRINKLER HEADS TO REMAIN. PROTECT DURING DEMOLITION AND REINSTALLATION OF NEW CEILING.
8. COVER AND PROTECT EQUIPMENT AND FIXTURES INDICATED "TO REMAIN" FROM SOILAGE OR DAMAGE.
9. PERFORM SELECTIVE DEMOLITION WORK IN A SYSTEMATIC MANNER.
10. NO ITEMS TO BE SALVAGED - GENERAL CONTRACTOR TO DISCARD ALL ITEMS; OWNER HAS 1ST RIGHT OF REFUSAL PRIOR TO DISCARDING OF EQUIPMENT.
11. PREPARE EXISTING SLAB TO RECEIVE NEW FLOORING, INCLUDING REMOVAL OR SEALING OF ANY REMAINING EXISTING ADHESIVE AS REQUIRED.
12. LIMITED ASBESTOS SURVEY WAS COMPLETED - NO MATERIAL WAS FOUND.
13. 30-DAY NOTICE IS REQUIRED PRIOR TO REMOVAL OF ANY EQUIPMENT.

D#

KEYED NOTES - DEMOLITION

- D1 DEMO / REMOVE EXISTING RAILING  
D2 DEMO / REMOVE STEEL EDGE ANGLE. SAWCUT CONCRETE AND REMOVE AREA INDICATED, EXTEND BELOW PIT FLOOR

STATE OF MISSOURI  
MICHAEL L. PARSON,  
GOVERNOR

ARCHITECT OF RECORD:  
WILLIAM W. DECKER  
M.O. #A-2006022674  
STATE OF MISSOURI  
WILLIAM W. DECKER  
NUMBER  
A-2006022674  
ARCHITECT  
STATE CERTIFICATE OF AUTHORITY: MO 00246198  
PROFESSIONAL SEAL

HORNER  
SHIFRIN  
401 S. 18TH ST., STE. 400 SAINT LOUIS, MO 63103-2296  
314-531-4321 • FAX 314-531-6966 • WWW.HORNERSHIFRIN.COM  
DISCIPLINE: PROFESSIONAL ENGINEERING  
CERTIFICATE OF AUTHORITY: 000169  
EXPIRATION DATE: DECEMBER 31, 2022

ARCTURIS  
701 MARKET STREET, SUITE 1300  
SAINT LOUIS, MO 63101  
314.206.7100

OFFICE OF  
ADMINISTRATION  
DIVISION OF FACILITIES  
MANAGEMENT,  
DESIGN AND  
CONSTRUCTION

DEPARTMENT  
OF CORRECTIONS

REPLACE ICE BUILDERS  
BUILDING #13

JEFFERSON CITY  
CORRECTIONAL CENTER

JEFFERSON CITY, MO

PROJECT # C2009-01  
SITE # 7029  
FACILITY # 9327029018

REVISION: \_\_\_\_\_  
DATE: \_\_\_\_\_  
REVISION: \_\_\_\_\_  
DATE: \_\_\_\_\_  
REVISION: \_\_\_\_\_  
DATE: \_\_\_\_\_  
ISSUE DATE: 09/02/22

CAD DWG FILE: \_\_\_\_\_  
DRAWN BY: WD  
CHECKED BY: MR  
DESIGNED BY: WD

SHEET TITLE:

DEMOLITION  
PLAN - FIRST  
FLOOR

SHEET NUMBER:

D-201

4 OF 25 SHEETS  
09/02/22





4 REFLECTED CEILING PLAN - FIRST FLOOR  
D-401 3/32" = 1'-0"

GENERAL NOTES: DEMOLITION

1. AREA OF DEMOLITION SHOWN IS APPROXIMATE, DIMENSIONS ARE FOR REFERENCE ONLY. EXACT LOCATION AND EXTENT OF DEMOLITION TO BE COORDIANATED WITH FIELD CONDITIONS AND MEP DEMOLITION SCOPE OF WORK.
2. PROVIDE TEMPORARY BARRICADES AND OTHER FORMS OF PROTECTION AS REQUIRED TO PROTECT OWNER'S AND CLIENT'S PERSONNEL AND GENERAL PUBLIC FROM INJURY DUE TO SELECTIVE DEMOLITION WORK.
3. ERECT AND MAINTAIN DUST-PROOF PARTITIONS AND CLOSURES AS REQUIRED TO PREVENT SPREAD OF DUST OR FUMES TO OCCUPIED PORTIONS OF THE BUILDING. PROTECT MECHANICAL SYSTEM AS REQUIRED. TEMPORARY PARTITIONS TO SEPARATE AREAS TO REMAIN IN OPERATION FROM AREAS WHERE DEMONEW WORK IS INDICATED.
4. CONDUCT SELECTIVE DEMOLITION OPERATIONS AND DEBRIS REMOVAL IN A MANNER TO ENSURE MINIMUM INTERFERENCE WITH ROADS, STREETS, WALKS, AND OTHER ADJACENT OCCUPIED OR USED FACILITIES.
5. PROVIDE BYPASS CONNECTIONS AS NECESSARY TO MAINTAIN CONTINUITY OF SERVICE TO OCCUPIED AREAS OF THE BUILDING.
6. REVIEW/COORDINATE SCHEDULE OF WORK TO BE DEMOLISHED WITH BUILDING MANAGEMENT TO LIMIT INTERRUPTIONS OF OWNER-OCCUPIED SPACES.
7. MAINTAIN FIRE PROTECTION SERVICES DURING SELECTIVE DEMOLITION. EXISTING FIRE SPRINKLER HEADS TO REMAIN, PROTECT DURING DEMOLITION AND REINSTALLATION OF NEW CEILING.
8. COVER AND PROTECT EQUIPMENT AND FIXTURES INDICATED "TO REMAIN" FROM SOILAGE OR DAMAGE.
9. PERFORM SELECTIVE DEMOLITION WORK IN A SYSTEMATIC MANNER.
10. NO ITEMS TO BE SALVAGED - GENERAL CONTRACTOR TO DISCARD ALL ITEMS; OWNER HAS 1ST RIGHT OF REFUSAL PRIOR TO DISCARDING OF EQUIPMENT.
11. PREPARE EXISTING SLAB TO RECEIVE NEW FLOORING, INCLUDING REMOVAL OR SEALING OF ANY REMAINING EXISTING ADHESIVE AS REQUIRED.
12. LIMITED ASBESTOS SURVEY WAS COMPLETED - NO MATERIAL WAS FOUND.
13. 30-DAY NOTICE IS REQUIRED PRIOR TO REMOVAL OF ANY EQUIPMENT.

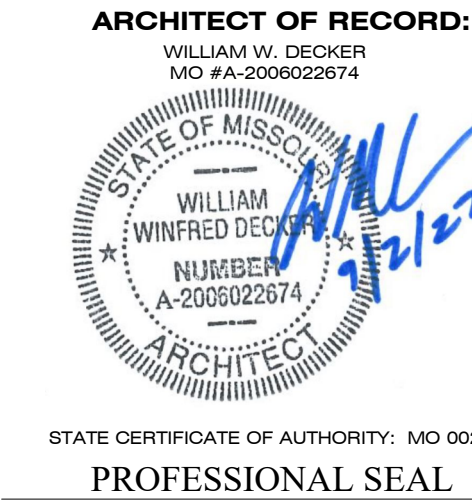
GENERAL NOTES: REFLECTED CEILING PLAN

1. REVIEW CEILING LAYOUT AS SHOWN AND NOTIFY ARCHITECT OF ANY CONFLICTS WITH STRUCTURAL, ELECTRICAL, MECHANICAL, PIPE WORK, FIRE PROTECTION SYSTEMS, ETC. BEFORE PROCEEDING WITH CONSTRUCTION.
2. CONTROL JOINTS IN GYP BD CEILING: PROVIDE CONTROL JOINTS ACCORDING TO ASTM C 840 AND IN SPECIFIC LOCATIONS APPROVED BY ARCHITECT FOR VISUAL EFFECT.
3. UNO ALL GYP BD CEILINGS TO BE MOISTURE RESISTANT.
4. IDENTIFY AND COORDINATE LOCATIONS FOR ALL CEILING ELEMENTS INCLUDING LIGHTING, MECHANICAL DIFFUSERS, RETURN AIR GRILLES, FIRE PROTECTION DEVICES, ACCESS PANELS, EXIT SIGNS, AUDIOVISUAL EQUIPMENT, SECURITY DEVICES, ETC. WITH ARCHITECT BEFORE INSTALLATION.
5. NOTIFY ARCHITECT OF ANY REQUIREMENTS FOR ACCESS PANELS NOT SHOWN ON DOCUMENTS BEFORE PROCEEDING WITH CONSTRUCTION.
6. CLEAN AND/OR REPAIR AND RELAMP ALL EXISTING LIGHT FIXTURES TO REMAIN AS NEEDED TO PERFORM AS NEW.
7. LIGHTING LOCATIONS SHOWN ON PLAN ARE APPROXIMATE, CONTRACTOR TO FIELD VERIFY ALL CONDITIONS. LIGHTS TO BE REINSTALLED AT EXISTING LOCATION

KEYED NOTES - DEMOLITION

- D#
- D4 DEMO / REMOVE PORTION OF EXISTING PLASTER CEILING AS INDICATED BY HATCH. HATCH INDICATES APPROXIMATE AREA OF WORK - COORD EXTEND OF LOCATIONS W/ FIELD CONDITIONS AND MECHANICAL DRAWINGS. REMOVE LIGHTING, ACCESS PANELS & OTHER CEILING MOUNTED ITEMS WHERE PLASTER CEILING IS SCHEDULED TO BE DEMO'D. ITEMS TO BE REINSTALLED IN SAME LOCATION
- D5 PATCH / REPAIR / INSTALL NEW PLASTER CEILING WHERE DEMOLITION OCCURRED. FEATHER EDGES TO ALIGN / BLEND WITH EXISTING PLASTER. PAINT PLASTER CEILING (NEW & EXISTING)
- D6 NEW CONDUIT ROUTING - SEE ELECTRICAL DRAWINGS. REMOVE EXISTING CEILING AS REQUIRED FOR ELECTRICAL WORK & REINSTALL CEILING IN-KIND. PATCH/PAINT/REPAIR SURFACES AS NEEDED TO RESTORE TO MATHC EXIST CONDITIONS

STATE OF MISSOURI  
MICHAEL L. PARSON,  
GOVERNOR



ARCTURIS  
701 MARKET STREET, SUITE 1300  
SAINT LOUIS, MO 63101  
314.206.7100

OFFICE OF  
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DEPARTMENT  
OF CORRECTIONS

REPLACE ICE BUILDERS  
BUILDING #13

JEFFERSON CITY  
CORRECTIONAL CENTER

JEFFERSON CITY, MO

PROJECT # C2009-01  
SITE # 7029  
FACILITY # 9327029018

REVISION:  
DATE:  
REVISION:  
DATE:  
REVISION:  
DATE:  
ISSUE DATE: 07/06/22

CAD DWG FILE:  
DRAWN BY: WD  
CHECKED BY: MR  
DESIGNED BY: WD

SHEET TITLE:

DEMOLITION  
REFLECTED  
CEILING PLAN -  
FIRST FLOOR  
SHEET NUMBER:

D-401

5 OF 25 SHEETS  
07/06/22





**21**  
**A-101** FLOOR PLAN - FIRST FLOOR  
1" = 20'-0"

**GENERAL NOTES: FLOOR PLANS**

1. SEE ENGINEERING AND FOOD SERVICE DRAWINGS FOR ADDITIONAL INFORMATION.
2. PATCH / REPAIR ALL SURFACES AFFECTED BY DEMOLITION.
3. PROVIDE THOROUGH CLEANING OF ALL AREAS IN SCOPE OF WORK AFTER COMPLETION OF DEMOLITION AND PRIOR TO START OF NEW WORK AND INSTALLATION OF NEW EQUIPMENT.
4. PREPARE ALL SURFACES TO RECEIVE NEW FINISHES PER MANUFACTURER'S RECOMMENDATIONS AND INSTALLATION INSTRUCTIONS.



**KEYED NOTES - ARCHITECTURAL**

- A1** NEW 1-1/2" DIA STEEL PIPE RAILINGS (42" HIGH); PAINT. DELEGATED DESIGN
- A6** NEW CONDUIT ROUTING - SEE ELECTRICAL DRAWINGS. REMOVE EXISTING CEILING AS REQUIRED FOR ELECTRICAL WORK & REINSTALL CEILING IN-KIND. PATCH/PAINT/REPAIR SURFACES AS NEEDED TO RESTORE TO MATHC EXIST CONDITIONS

STATE OF MISSOURI  
MICHAEL L. PARSON,  
GOVERNOR

**ARCHITECT OF RECORD:**

WILLIAM W. DECKER  
MO #A-2006022674



STATE CERTIFICATE OF AUTHORITY: MO 00246198

**PROFESSIONAL SEAL**



401 S. 18TH ST., STE. 400 SAINT LOUIS, MO 63103-2296  
314-531-4321 • FAX 314-531-6966 • WWW.HORNERSHIFRIN.COM  
DISCIPLINE: PROFESSIONAL ENGINEERING  
CERTIFICATE OF AUTHORITY: 000169  
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**ARCTURIS**

701 MARKET STREET, SUITE 1300  
SAINT LOUIS, MO 63101  
314.206.7100

**OFFICE OF  
ADMINISTRATION  
DIVISION OF FACILITIES  
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**DEPARTMENT  
OF CORRECTIONS**

REPLACE ICE BUILDERS  
BUILDING #13

JEFFERSON CITY  
CORRECTIONAL CENTER

JEFFERSON CITY, MO

PROJECT # C2009-01  
SITE # 7029  
FACILITY # 9327029018

REVISION: \_\_\_\_\_  
DATE: \_\_\_\_\_  
REVISION: \_\_\_\_\_  
DATE: \_\_\_\_\_  
REVISION: \_\_\_\_\_  
DATE: \_\_\_\_\_

ISSUE DATE: 09/02/22

CAD DWG FILE: \_\_\_\_\_  
DRAWN BY: WD  
CHECKED BY: MR  
DESIGNED BY: WD

SHEET TITLE:

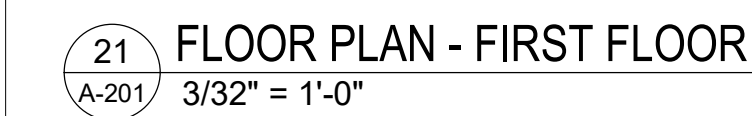
**COMPOSITE  
FIRST FLOOR  
PLAN**

SHEET NUMBER:

**A-101**

6 OF 25 SHEETS  
09/02/22



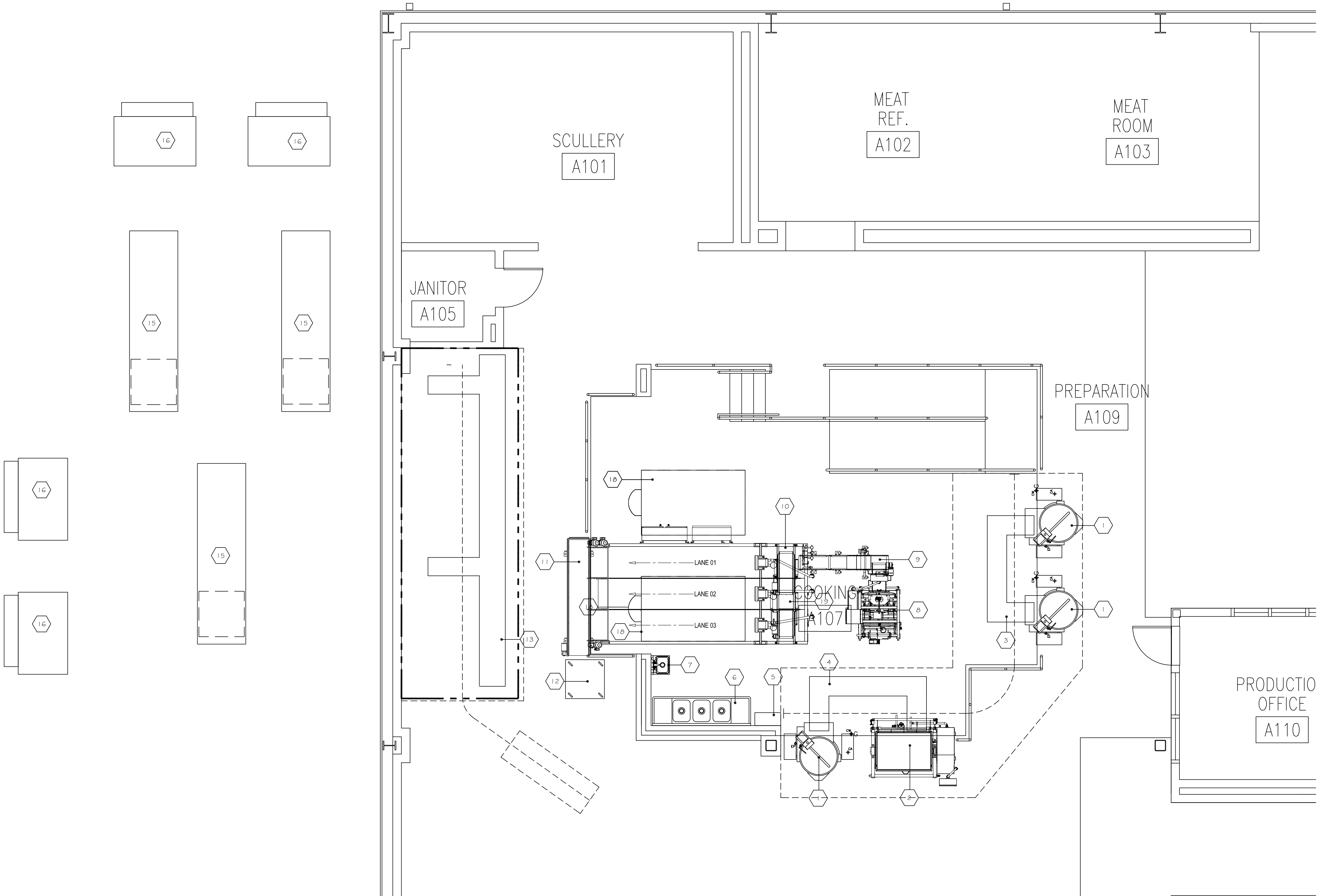


- 25 GUARD RAIL  
A-201 1" = 1'-0"

7 OF 25 SHEETS  
07/06/22



EQUIPMENT SCHEDULE				
ITEM NO.	QTY.	DESCRIPTION	BASE BID	ALTERNATE 1
1	3	KETTLES	EXISTING TO REMAIN	
2	1	KETTLE	EXISTING TO REMAIN	
3	1	TRENCH DRAIN	EXISTING TO REMAIN	
4	1	TRENCH DRAIN	EXISTING TO REMAIN	
5	1	HOOD CONTROL PANEL	EXISTING TO REMAIN	
6	1	THREE COMPARTMENT SINK	EXISTING TO REMAIN	
7	1	HAND SINK	EXISTING TO REMAIN	
8	1	PUMP/FILL STATION	EXISTING TO REMAIN	
9	1	LIFT CONVEYOR	NEW	
10	1	LINEAR CHILLER	NEW - 16'-0" LONG 3 LANE LINEAR CHILLER	
11	1	TAKE OFF CONVEYOR	NEW - 9'-0" LONG	
12	1	PRODUCT CART	EXISTING BY OWNER	
13	1	TRENCH DRAIN	EXISTING TO REMAIN	
14	2	COOK TANKS		NEW - 200 GALLON UNITS
15	3	REFRIGERATION SYSTEM - LINEAR CHILLER	NEW - 22 H.P. UNITS	
16	4	REFRIGERATION SYSTEM - COOK TANKS	NEW - 1.5 H.P. UNITS (2) PER COOK TANK	
17	0	SPARE NUMBER		
18	2	TUMBLE CHILLERS	REMOVED BY G.C. AS PART OF BASE BID	
19	1	INDEXING CONVEYOR	NEW	



FOODSERVICE EQUIPMENT FLOOR PLAN - BASE BID  
SCALE: 1/4" = 1'-0"

STATE OF MISSOURI  
MICHAEL L. PARSON,  
GOVERNOR

ENGINEER OF RECORD:



401 S. 18TH ST., STE. 400 SAINT LOUIS, MO 63103-2298  
314-531-4321 • FAX 314-531-6986 • WWW.HORNERSHIFRIN.COM  
DISCIPLINE: PROFESSIONAL ENGINEERING  
CERTIFICATE OF AUTHORITY: 000159  
EXPIRATION DATE: DECEMBER 31, 2022

ARCTURIS

701 MARKET STREET, SUITE 1300  
SAINT LOUIS, MO 63101  
314.206.7100



DENNIS G. GLORE, INC.  
Food Facilities Consultants  
P.O. Box 200  
Eureka, MO 63025  
Phone: (636) 938-7887 Fax: (636) 938-6590

OFFICE OF ADMINISTRATION  
DIVISION OF FACILITIES  
MANAGEMENT,  
DESIGN AND CONSTRUCTION

DEPARTMENT OF  
CORRECTIONS

REPLACE ICE BUILDERS  
BUILDING #13

JEFFERSON CITY  
CORRECTIONAL CENTER

JEFFERSON CITY, MO

PROJECT # C2009-01

SITE # 7029

FACILITY # 9327029018

REVISION: \_\_\_\_\_  
DATE: \_\_\_\_\_  
REVISION: \_\_\_\_\_  
DATE: \_\_\_\_\_  
REVISION: \_\_\_\_\_  
DATE: \_\_\_\_\_

ISSUE DATE: 09/02/2022

CAD DWG FILE: \_\_\_\_\_  
DRAWN BY: MDG  
CHECKED BY: MDG  
DESIGNED BY: MDG

SHEET TITLE:

FOODSERVICE  
EQUIPMENT FLOOR  
PLAN - BASE BID

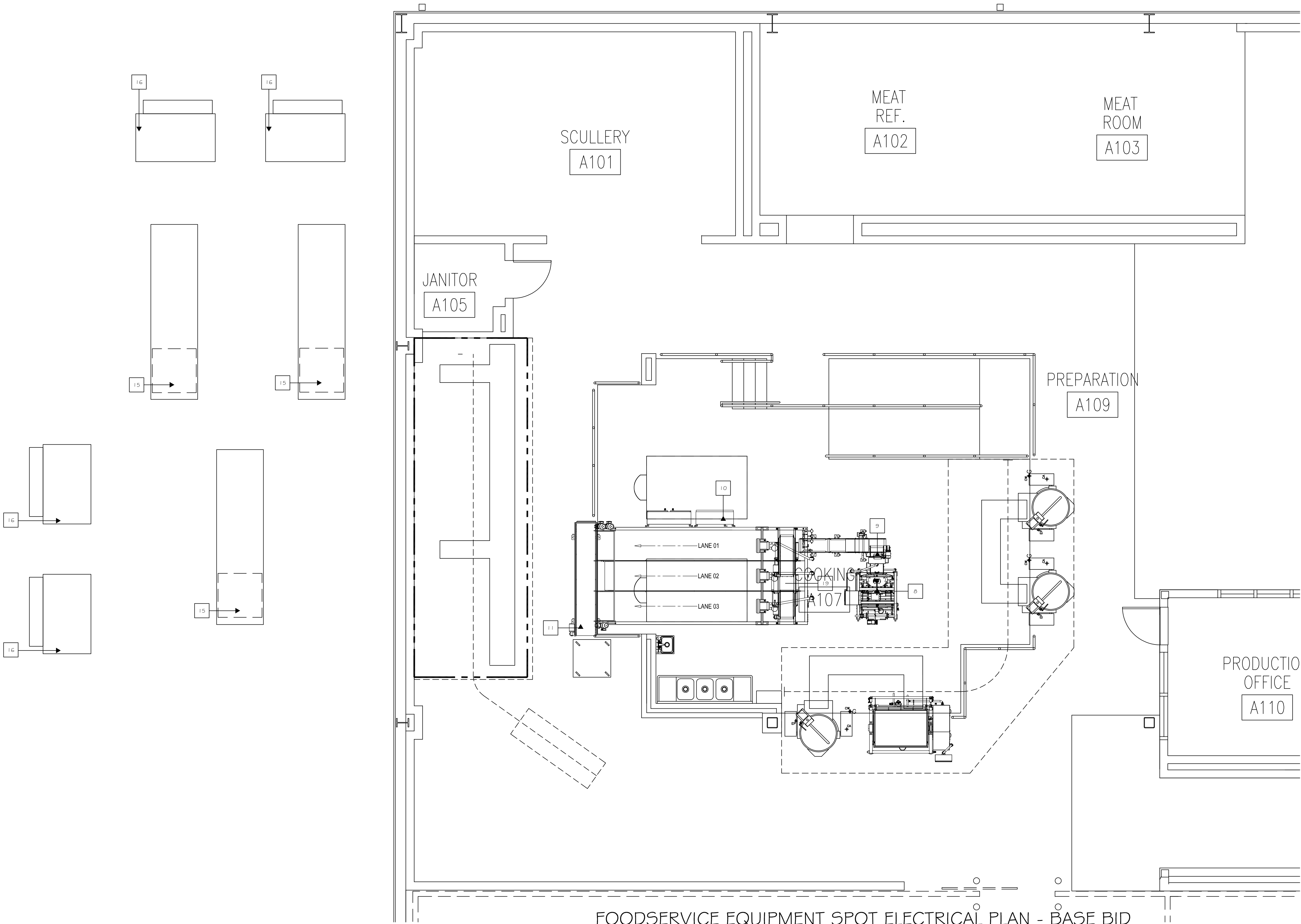
SHEET NUMBER:

Q-FP-01

8 OF 25 SHEETS  
09/02/20222



ELECTRICAL SCHEDULE									
CONN. NO.	VOLTAGE	PHASE	AMPS LOAD	K.W. LOAD	CONN. TYPE	HGT. A.F.F.	COMMENTS		
8	208	3	16		S.R.	D.F.A.	EXISTING LOCKING RECP. TO BE RE-USED		
9	480	3	9				POWERED THRU ITEM #10 LINEAR CHILLER, E.C. TO MAKE INNER CONNECTIONS AS REQUIRED		
10	480	3	14.5		S.C.	D.F.A.			
11	480	3					POWERED THRU ITEM #10 LINEAR CHILLER, E.C. TO MAKE INNER CONNECTIONS AS REQUIRED		
14	480	3	4		S.C.	D.F.A.			
15	480	3	42.3		J.B.	1'-0"	ELECT. CONTR. SHALL PROVIDE J-BOX AND DISCONNECT SWITCH AND CONNECT TO CONDENSING UNITS - VERIFY LOCATION		
16	480	3	34.7		J.B.	1'-0"	ELECT. CONTR. SHALL PROVIDE J-BOX AND DISCONNECT SWITCH AND CONNECT TO CONDENSING UNITS - VERIFY LOCATION		
19	480	3					POWERED THRU ITEM #10 LINEAR CHILLER, E.C. TO MAKE INNER CONNECTIONS AS REQUIRED		



FOODSERVICE EQUIPMENT SPOT ELECTRICAL PLAN - BASE BID  
SCALE: 1/4" = 1'-0"

STATE OF MISSOURI  
MICHAEL L. PARSON,  
GOVERNOR

ENGINEER OF RECORD:



401 S. 18TH ST., STE. 400 SAINT LOUIS, MO 63103-2226  
314-531-4321 • FAX 314-531-6986 • WWW.HORNERSHIFRIN.COM  
DISCIPLINE: PROFESSIONAL ENGINEERING  
CERTIFICATE OF AUTHORITY: 000159  
EXPIRATION DATE: DECEMBER 31, 2022

ARCTURIS

701 MARKET STREET, SUITE 1300  
SAINT LOUIS, MO 63101  
314.206.7100



DENNIS G. GLORE, INC.  
Food Facilities Consultants  
P.O. Box 200  
Eureka, MO 63025  
Phone: (636) 938-7887 Fax: (636) 938-6590

OFFICE OF ADMINISTRATION  
DIVISION OF FACILITIES  
MANAGEMENT,  
DESIGN AND CONSTRUCTION

DEPARTMENT OF  
CORRECTIONS

REPLACE ICE BUILDERS  
BUILDING #13

JEFFERSON CITY  
CORRECTIONAL CENTER

JEFFERSON CITY, MO

PROJECT # C2009-01

SITE # 7029

FACILITY # 9327029018

REVISION: \_\_\_\_\_  
DATE: \_\_\_\_\_  
REVISION: \_\_\_\_\_  
DATE: \_\_\_\_\_  
REVISION: \_\_\_\_\_  
DATE: \_\_\_\_\_  
ISSUE DATE: 09/02/2022

CAD DWG FILE: \_\_\_\_\_  
DRAWN BY: MDG  
CHECKED BY: MDG  
DESIGNED BY: MDG

SHEET TITLE:

FOODSERVICE  
EQUIPMENT SPOT  
ELEC. - BASE BID

SHEET NUMBER:

Q-FP-02

9 OF 25 SHEETS  
09/02/2022



STEAM SCHEDULE									
CONN. NO.	STEAM SUPPLY	COND. RETURN	LBS/MR				CONN. TYPE	HGT. A.F.F.	COMMENTS
SS14	1"	1"	856				S.C.	D.F.A.	PLBG. CONTR. SHALL RE-USE EXISTING IF POSSIBLE
CR14							S.C.	D.F.A.	PLBG. CONTR. SHALL RE-USE EXISTING IF POSSIBLE

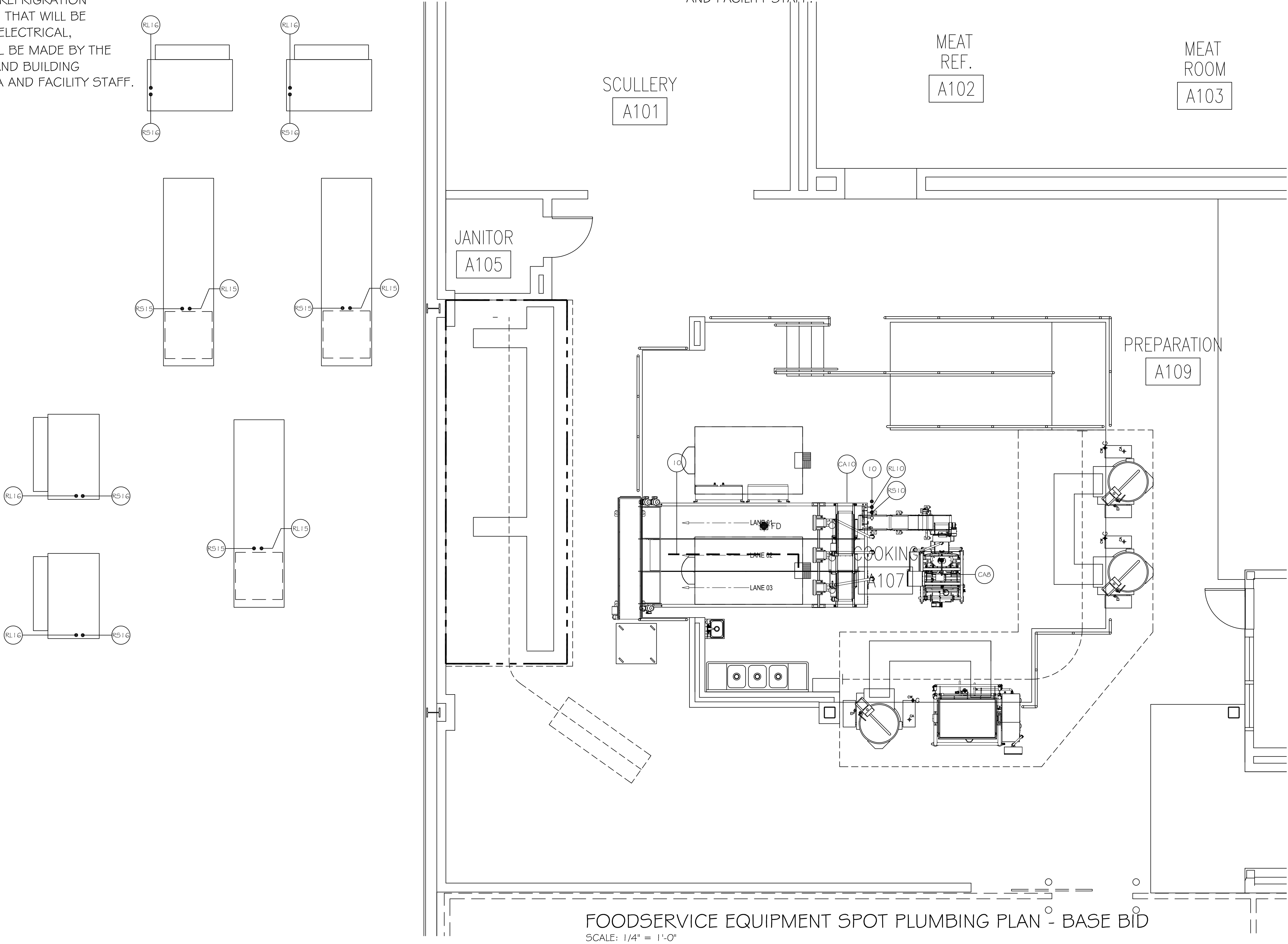
REFRIGERATION SCHEDULE									
CONN. NO.	RL LIQUID	RS SUCTION	TOTAL MAX BTU/H				CONN. TYPE	HGT. A.F.F.	COMMENTS
RL10	7/8"		570,000				S.C.		
RS10		1-3/8"					S.C.		
RL14	5/8"		230,000				S.C.		
RS14		1-3/8"					S.C.		
RL15	7/8"		133,600				S.C.		
RS15		1-5/8"					S.C.		
RL16	1-1/8"		178,962				S.C.		
RS16		2-1/8"					S.C.		

NOTE:  
THE CONTRACTOR SHALL PROVIDE AND INSTALL THE REFRIGRATION LINE SETS AND ALL THE COMPONENTS OF THE SAME, THAT WILL BE REQUIRED TO MAKE THE UNITS OPERATIONAL. FINAL ELECTRICAL, PLUMBING, STEAM, AND/OR AIR CONNECTIONS SHALL BE MADE BY THE APPROPRIATE TRADES IN THE FIELD. LINE SET RUNS AND BUILDING PENETRATIONS SHALL BE COORDINATED WITH THE CA AND FACILITY STAFF.

PLUMBING SCHEDULE									
CONN. NO.	HOT WATER	COLD WATER	DIRECT WASTE	IN-DIRECT WASTE	GAS SIZE	GAS MBTU/S	CONN. TYPE	HGT. A.F.F.	COMMENTS
10		1"		2-1/2"			F.S.	D.F.A.	PLBG. CONTR. SHALL BRANCH FROM DR. ON EQUIP. TO EXISTING FLOOR SINK
14	3/4"						S.O.	D.F.A.	PLBG. CONTR. SHALL RE-USE EXISTING IF POSSIBLE
		3/4"					S.O.	D.F.A.	PLBG. CONTR. SHALL RE-USE EXISTING IF POSSIBLE
				2"			F.S.	D.F.A.	PLBG. CONTR. SHALL BRANCH FROM DR. ON EQUIP. TO EXISTING FLOOR SINK

COMPRESSED AIR SCHEDULE									
CONN. NO.	SIZE	CFM	PSI				CONN. TYPE	HGT. A.F.F.	COMMENTS
CA8	1/2"	30	90						RE-USE EXISTING SUPPLY AND CONNECTIONS
CA10	1/4"	5	90						
CA14	1/4"	10	90						RE-USE EXISTING SUPPLY AND CONNECTIONS
CA19	5/32"	1	90						SUPPLIED FROM ITEM #10 LINEAR CHILLER. CONTR. TO MAKE INNER-CONNECTIONS

NOTE:  
AS PART OF THE BASE BID THE CONTRACTOR SHALL PROVIDE AND INSTALL THE REFRIGERATION LINE SETS FOR THE NEW COOK TANKS AND ALL THE COMPONENTS OF THE SAME, THAT WILL BE REQUIRED TO MAKE THE UNITS OPERATIONAL. LINES SETS SHALL BE RUN TO THE INTERIOR OF THE BUILDING AND CAPPED. FINAL ELECTRICAL, PLUMBING, STEAM, AND/OR AIR CONNECTIONS SHALL BE MADE BY THE APPROPRIATE TRADES IN THE FIELD AS PART OF ALTERNATE I LINE SET RUNS AND BUILDING PENETRATIONS SHALL BE COORDINATED WITH THE CA AND FACILITY STAFF.



FOODSERVICE EQUIPMENT SPOT PLUMBING PLAN - BASE BID  
SCALE: 1/4" = 1'-0"

STATE OF MISSOURI  
MICHAEL L. PARSON,  
GOVERNOR

ENGINEER OF RECORD:



401 S. 18TH ST. STE. 400 SAINT LOUIS, MO 63103-2286  
314-531-4321 • FAX 314-531-6886 • WWW.HORNERSHIFRIN.COM  
DISCIPLINE: PROFESSIONAL ENGINEERING  
CERTIFICATE OF AUTHORITY: 000159  
EXPIRATION DATE: DECEMBER 31, 2022

ARCTURIS

701 MARKET STREET, SUITE 1300  
SAINT LOUIS, MO 63101  
314.206.7100



DENNIS G. GLORE, INC.  
Food Facilities Consultants  
P.O. Box 200  
Eureka, MO 63025  
Phone: (636) 936-7887 Fax: (636) 936-6290

OFFICE OF ADMINISTRATION  
DIVISION OF FACILITIES  
MANAGEMENT,  
DESIGN AND CONSTRUCTION

DEPARTMENT OF  
CORRECTIONS

REPLACE ICE BUILDERS  
BUILDING #13

JEFFERSON CITY  
CORRECTIONAL CENTER

JEFFERSON CITY, MO

PROJECT # C2009-01  
SITE # 7029  
FACILITY # 9327029018

REVISION: \_\_\_\_\_  
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DATE: \_\_\_\_\_  
ISSUE DATE: 09/02/2022

CAD DWG FILE: \_\_\_\_\_  
DRAWN BY: MDG  
CHECKED BY: MDG  
DESIGNED BY: MDG

SHEET TITLE:  
FOODSERVICE  
EQUIPMENT SPOT  
PLBG.. - BASE BID

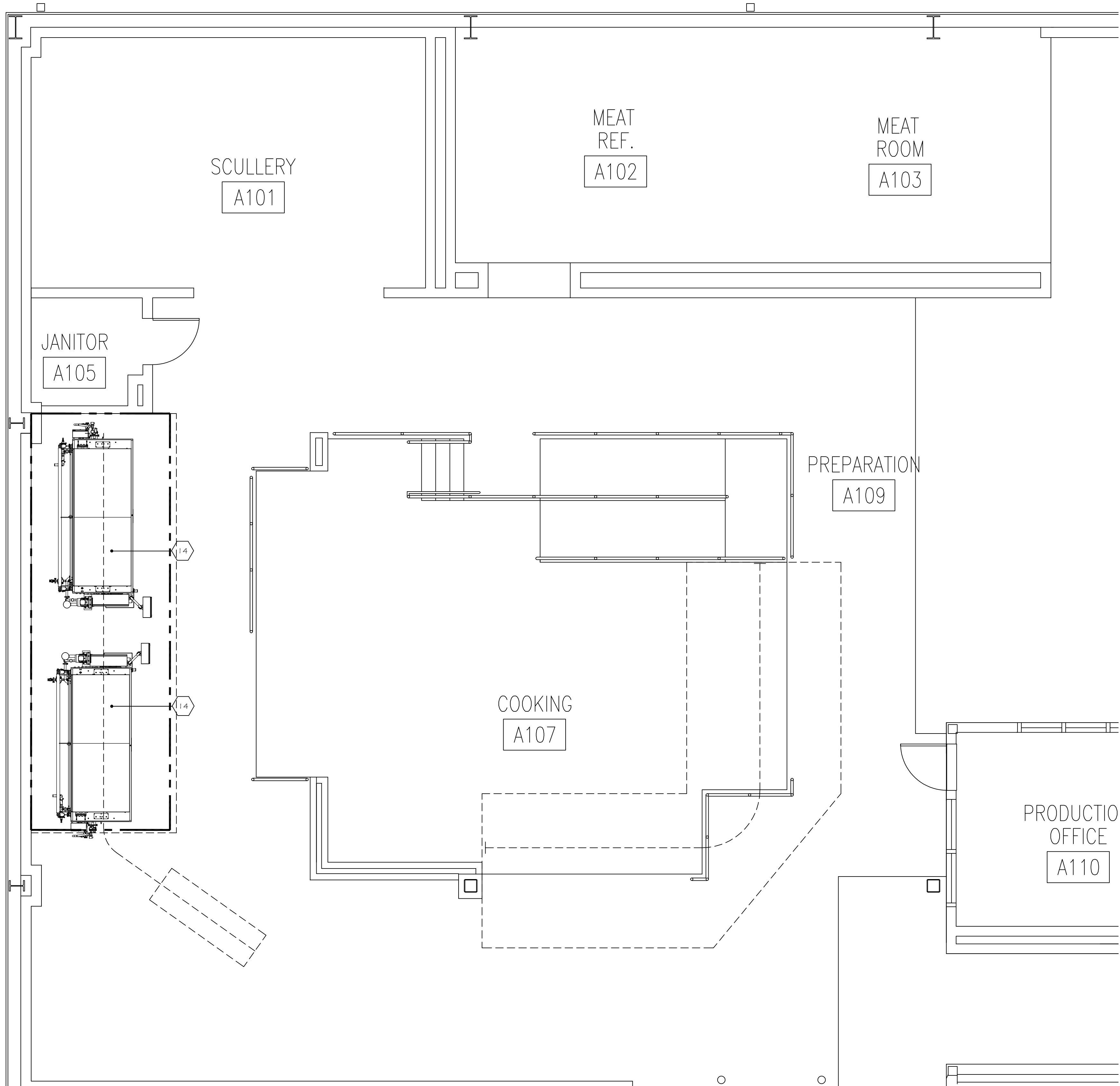
SHEET NUMBER:

Q-FP-03

10 OF 25 SHEETS  
09/02/2022



EQUIPMENT SCHEDULE				
ITEM NO.	QTY.	DESCRIPTION	BASE BID	ALTERNATE 1
1	3	KETTLES	EXISTING TO REMAIN	
2	1	KETTLE	EXISTING TO REMAIN	
3	1	TRENCH DRAIN	EXISTING TO REMAIN	
4	1	TRENCH DRAIN	EXISTING TO REMAIN	
5	1	HOOD CONTROL PANEL	EXISTING TO REMAIN	
6	1	THREE COMPARTMENT SINK	EXISTING TO REMAIN	
7	1	HAND SINK	EXISTING TO REMAIN	
8	1	PUMP/FILL STATION	EXISTING TO REMAIN	
9	1	LIFT CONVEYOR	NEW	
10	1	LINEAR CHILLER	NEW - 16'-0" LONG 3 LANE LINEAR CHILLER	
11	1	TAKE OFF CONVEYOR	NEW - 9'-0" LONG	
12	1	PRODUCT CART	EXISTING BY OWNER	
13	1	TRENCH DRAIN	EXISTING TO REMAIN	
14	2	COOK TANKS		NEW - 200 GALLON UNITS
15	3	REFRIGERATION SYSTEM - LINEAR CHILLER	NEW - 22 H.P. UNITS	
16	4	REFRIGERATION SYSTEM - COOK TANKS	NEW - 15 H.P. UNITS (2) PER COOK TANK	
17	0	SPARE NUMBER		
18	2	TUMBLE CHILLERS	REMOVED BY G.C. AS PART OF BASE BID	
19	1	INDEXING CONVEYOR	NEW	



FOODSERVICE EQUIPMENT FLOOR PLAN - ALTERNATE 1  
SCALE: 1/4" = 1'-0"

STATE OF MISSOURI  
MICHAEL L. PARSON,  
GOVERNOR

ENGINEER OF RECORD:



401 S. 18TH ST., STE. 400 SAINT LOUIS, MO 63103-2288  
314-631-4321 • FAX 314-631-6966 • WWW.HORNERSHIFRIN.COM  
DISCIPLINE: PROFESSIONAL ENGINEERING  
CERTIFICATE OF AUTHORITY: 000159  
EXPIRATION DATE: DECEMBER 31, 2022

ARCTURIS

701 MARKET STREET, SUITE 1300  
SAINT LOUIS, MO 63101  
314.206.7100



OFFICE OF ADMINISTRATION  
DIVISION OF FACILITIES  
MANAGEMENT,  
DESIGN AND CONSTRUCTION

DEPARTMENT OF  
CORRECTIONS

REPLACE ICE BUILDERS  
BUILDING #13

JEFFERSON CITY  
CORRECTIONAL CENTER

JEFFERSON CITY, MO

PROJECT # C2009-01  
SITE # 7027  
FACILITY # 9327029018

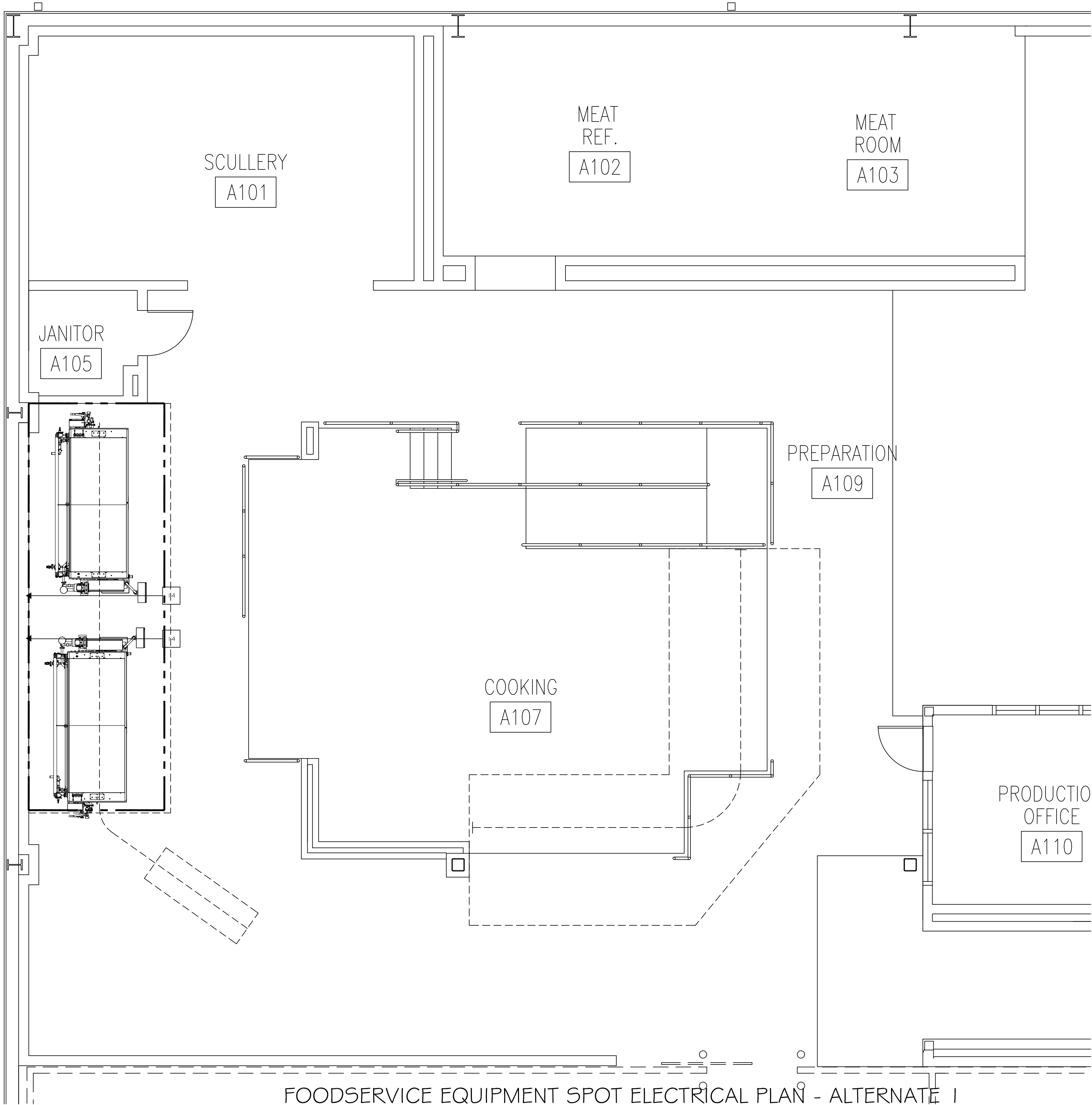
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REVISION: \_\_\_\_\_  
DATE: \_\_\_\_\_  
ISSUE DATE: 09/02/2022

CAD DWG FILE: \_\_\_\_\_  
DRAWN BY: MDG  
CHECKED BY: MDG  
DESIGNED BY: MDG

SHEET TITLE:  
FOODSERVICE  
EQUIPMENT FLOOR  
PLAN - ALT. 1

SHEET NUMBER:  
Q-FP-04  
11 OF 25 SHEETS  
09/02/2022

ELECTRICAL SCHEDULE							
CONN. NO.	VOLTAGE	PHASE	AMPS LOAD	K.W. LOAD	CONN. TYPE	HGT. A.F.F.	COMMENTS
8	208	3	16		S.R.	D.F.A.	EXISTING LOCKING RECP. TO BE RE-USED
9	480	3	3				POWERED THRU ITEM #10 LINEAR CHILLER, E.C. TO MAKE INNER CONNECTIONS AS REQUIRED
10	480	3	14.5		S.C.	D.F.A.	
11	480	3					POWERED THRU ITEM #10 LINEAR CHILLER, E.C. TO MAKE INNER CONNECTIONS AS REQUIRED
14	480	3	4		S.C.	D.F.A.	
15	480	3	42.3		J.B.	1'-0"	ELECT. CONTR. SHALL PROVIDE J-BOX AND DISCONNECT SWITCH AND CONNECT TO CONDENSING UNITS - VERIFY LOCATION
16	480	3	34.7		J.B.	1'-0"	ELECT. CONTR. SHALL PROVIDE J-BOX AND DISCONNECT SWITCH AND CONNECT TO CONDENSING UNITS - VERIFY LOCATION
19	480	3					POWERED THRU ITEM #10 LINEAR CHILLER, E.C. TO MAKE INNER CONNECTIONS AS REQUIRED



FOODSERVICE EQUIPMENT SPOT ELECTRICAL PLAN - ALTERNATE 1  
SCALE: 1/4" = 1'-0"

STATE OF MISSOURI  
MICHAEL L. PARSON,  
GOVERNOR

ENGINEER OF RECORD:



401 S. 18TH ST., STE. 400 SAINT LOUIS, MO 63103-2296  
314-531-4321 • FAX 314-531-6966 • WWW.HORNERSHIFRIN.COM  
DISCIPLINE: PROFESSIONAL ENGINEERING  
CERTIFICATE OF AUTHORITY: 000159  
EXPIRATION DATE: DECEMBER 31, 2022

ARCTURIS

701 MARKET STREET, SUITE 1300  
SAINT LOUIS, MO 63101  
314.206.7100



DENNIS G. GLORE, INC.  
Food Facilities Consultants  
P.O. Box 200  
Eureka, MO 63025  
Phone: (636) 936-7867 Fax: (636) 936-6590

OFFICE OF ADMINISTRATION  
DIVISION OF FACILITIES  
MANAGEMENT,  
DESIGN AND CONSTRUCTION

DEPARTMENT OF  
CORRECTIONS

REPLACE ICE BUILDERS  
BUILDING #13

JEFFERSON CITY  
CORRECTIONAL CENTER

JEFFERSON CITY, MO

PROJECT # C2009-01  
SITE # 7029

FACILITY # 9327029018

REVISION: \_\_\_\_\_  
DATE: \_\_\_\_\_  
REVISION: \_\_\_\_\_  
DATE: \_\_\_\_\_  
REVISION: \_\_\_\_\_  
DATE: \_\_\_\_\_  
ISSUE DATE: 09/02/2022

CAD DWG FILE: \_\_\_\_\_  
DRAWN BY: MDG  
CHECKED BY: MDG  
DESIGNED BY: MDG

SHEET TITLE:

FOODSERVICE  
EQUIPMENT SPOT  
ELEC. - ALT. 1

SHEET NUMBER:

Q-FP-05

12 OF 25 SHEETS  
09/02/2022



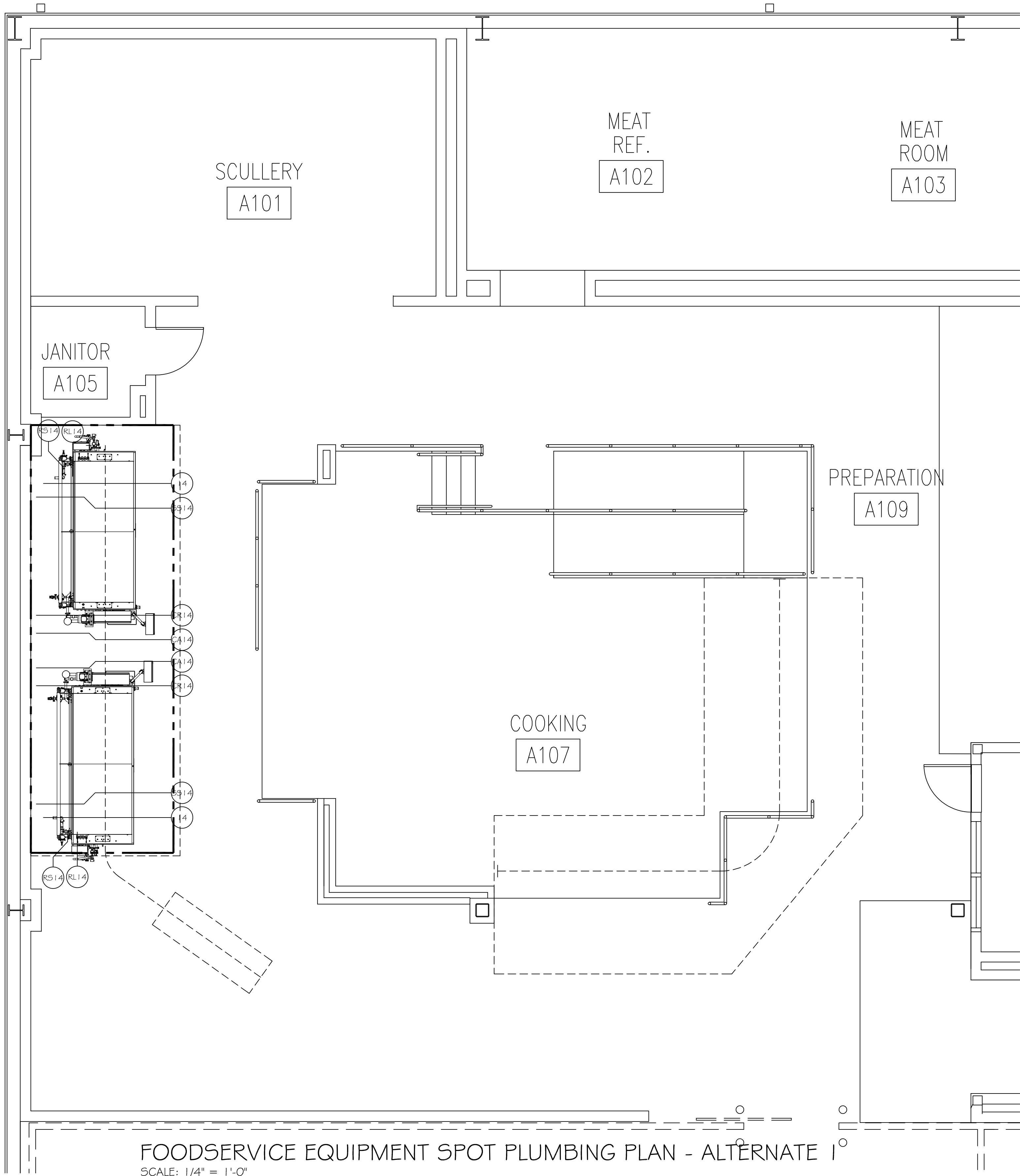
STEAM SCHEDULE									
CONN. NO.	STEAM SUPPLY	COND. RETURN	LB5/HR				CONN. TYPE	HGT. A.F.F.	COMMENTS
RS14	1"		858				S.C.	D.F.A.	PLBG. CONTR. SHALL RE-USE EXISTING IF POSSIBLE
CR14		1"	858				S.C.	D.F.A.	PLBG. CONTR. SHALL RE-USE EXISTING IF POSSIBLE

REFRIGERATION SCHEDULE									
CONN. NO.	RL LIQUID	RS SUCTION	TOTAL MAX BTU/H				CONN. TYPE	HGT. A.F.F.	COMMENTS
RL10	7/8"		570,000				S.C.		
RS10		1-3/8"					S.C.		
RL14	5/8"		230,000				S.C.		
RS14		1-3/8"					S.C.		
RL15	7/8"		133,600				S.C.		
RS15		1-5/8"					S.C.		
RL16	1-1/8"		178,962				S.C.		
RS16		2-1/8"					S.C.		

NOTE:  
THE CONTRACTOR SHALL PROVIDE AND INSTALL THE REFRIGRATION LINE SETS AND ALL THE COMPONENTS OF THE SAME, THAT WILL BE REQUIRED TO MAKE THE UNITS OPERATIONAL. FINAL ELECTRICAL, PLUMBING, STEAM, AND/OR AIR CONNECTIONS SHALL BE MADE BY THE APPROPRIATE TRADES IN THE FIELD. LINE SET RUNS AND BUILDING PENETRATIONS SHALL BE COORDINATED WITH THE CA AND FACILITY STAFF.

PLUMBING SCHEDULE											
CONN. NO.	HOT WATER	COLD WATER	DIRECT WASTE	IN-DIRECT WASTE	GAS SIZE	GAS MBTU/S	CONN. TYPE	HGT. A.F.F.	COMMENTS		
10		1"		2-1/2"			S.O.	D.F.A.	PLBG. CONTR. SHALL BRANCH FROM DR. ON EQUIP. TO EXISTING FLOOR SINK.		
14	3/4"						S.O.	D.F.A.	PLBG. CONTR. SHALL RE-USE EXISTING IF POSSIBLE		
		3/4"					S.O.	D.F.A.	PLBG. CONTR. SHALL RE-USE EXISTING IF POSSIBLE		
				2"			F.S.		PLBG. CONTR. SHALL BRANCH FROM DR. ON EQUIP. TO EXISTING FLOOR SINK.		

COMPRESSED AIR SCHEDULE									
CONN. NO.	SIZE	GPM	PSI				CONN. TYPE	HGT. A.F.F.	COMMENTS
CA9	1/2"	30	90						RE-USE EXISTING SUPPLY AND CONNECTIONS
CA10	1/4"	5	90						
CA14	1/4"	10	90						RE-USE EXISTING SUPPLY AND CONNECTIONS
CA19	5/32"	1	90						SUPPLIED FROM ITEM #10 LINEAR CHILLER. CONTR. TO MAKE INNER-CONNECTIONS



FOODSERVICE EQUIPMENT SPOT PLUMBING PLAN - ALTERNATE 1  
SCALE: 1/4" = 1'-0"

STATE OF MISSOURI  
MICHAEL L. PARSON,  
GOVERNOR

ENGINEER OF RECORD:



401 S. 18TH ST., STE. 400 SAINT LOUIS, MO 63103-2298  
314-531-4321 • FAX 314-531-6986 • WWW.HORNERSHIFRIN.COM  
DISCIPLINE: PROFESSIONAL ENGINEERING  
CERTIFICATE OF AUTHORITY: 000158  
EXPIRATION DATE: DECEMBER 31, 2022

ARCTURIS

701 MARKET STREET, SUITE 1300  
SAINT LOUIS, MO 63101  
314.206.7100



DENNIS G. GLORE, INC.  
Food Facilities Consultants  
P.O. Box 200  
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Phone: (636) 938-7887 Fax: (636) 938-6590

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REPLACE ICE BUILDERS  
BUILDING #13

JEFFERSON CITY  
CORRECTIONAL CENTER

JEFFERSON CITY, MO

PROJECT # C2009-01  
SITE # 7029  
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ISSUE DATE: 09/02/2022

CAD DWG FILE: \_\_\_\_\_  
DRAWN BY: MDG  
CHECKED BY: MDG  
DESIGNED BY: MDG

SHEET TITLE:

FOODSERVICE  
EQUIPMENT SPOT  
PLBG.. - ALT. 1

SHEET NUMBER:

Q-FP-06

13 OF 25 SHEETS  
09/02/2022

GENERAL SYMBOLS

	THERMOSTAT	
	THERMOSTAT (INSULATED SUB-BASE)	
	THERMOSTAT (WITH GUARD)	
	THERMOSTAT (NIGHT)	
	NITROGEN DIOXIDE SENSOR	
	CARBON MONOXIDE SENSOR	
	CARBON DIOXIDE SENSOR	
	HAND-AUTO CONTROL	
	HUMIDSTAT	
	SENSOR (T = TEMPERATURE H = HUMIDITY)	
	REFRIGERANT LEAK DETECTION	
	TYPE OF SERVICE SCHEDULE DEVICE NO	S = SUPPLY R = RETURN E = EXHAUST T = TRANSFER
	AIR QUANTITY IN CFM	
	KEYED NOTE (NEW CONSTRUCTION OR DEMOLITION)	
	REVISION	
	INTERFACE, EXISTING TO NEW	
	SECTION NUMBER	
	SHEET WHERE LOCATED	
	EQUIPMENT DESIGNATION	
	UNIT NUMBER	
	DUCT SIZE, FIRST FIGURE IS SIDE SHOWN (ACTUAL SIZE INDICATED)	
	SPIRAL FLAT - OVAL DUCT SIZE, FIRST FIGURE IS SIDE SHOWN (ACTUAL SIZE INDICATED)	
	ACCESS PANEL, TOP OR SIDE	
	FLEXIBLE DUCT CONNECTION	
	CHANGE OF ELEVATION - RISE (R) OR DROP (D)	
	TURNING VANES	
	EXISTING EQUIPMENT OR DUCTWORK SHOWN LIGHT DASHED LINETYPE INDICATES EXISTING ITEMS TO BE REMOVED	
	MOTORIZED DAMPER	
	GRAVITY BACK DRAFT	
	MANUAL VOLUME DAMPER	
	FIRE DAMPER	
	SMOKE DAMPER	
	FIRE/SMOKE DAMPER	
	VENTURI AIR VALVE	
	FLEXIBLE DUCT	
	SUPPLY AIR SECTION UP	
	RETURN AIR SECTION UP	
	EXHAUST AIR SECTION UP	
	OUTSIDE AIR SECTION UP	
	SUPPLY AIR DOWN OR AWAY	
	RETURN AIR DOWN OR AWAY	
	EXHAUST AIR DOWN OR AWAY	
	OUTSIDE AIR DOWN OR AWAY	
	SUPPLY AIR FLOW ARROW	
	RETURN OR EXHAUST AIR FLOW ARROW	
	SUPPLY DIFFUSER, REGISTER OR GRILLE AS SCHEDULED	
	RETURN OR EXHAUST GRILLE OR REGISTER AS SCHEDULED	
	SLOT DIFFUSER AS SCHEDULED	
	SIDEWALL GRILLE OR REGISTER AS SCHEDULED	
	ARROWS INDICATE DIRECTION OF AIR DISCHARGE. IF NO ARROWS ARE SHOWN ON PLAN, DEFAULT IS 2-WAY HORIZONTAL FOR SLOT DIFFUSERS, 4-WAY HORIZONTAL FOR SQUARE DIFFUSERS.	

PIPING SYMBOLS

	COMPRESSED AIR
	CHILLED/HOT WATER RETURN
	CHILLED/HOT WATER SUPPLY
	CHEMICAL FEED
	GLYCOL RETURN
	GLYCOL SUPPLY
	CONDENSER WATER RETURN
	CONDENSER WATER SUPPLY
	CHILLED WATER RETURN
	CHILLED WATER SUPPLY
	CONDENSATE DRAIN
	REFRIGERANT LIQUID
	REFRIGERANT SUCTION
	REFRIGERANT VENT
	REFRIGERANT HOT GAS
	HEATING WATER RETURN
	HEATING WATER SUPPLY
	HIGH PRESSURE CONDENSATE RETURN
	HIGH PRESSURE STEAM SUPPLY
	LOW PRESSURE CONDENSATE RETURN
	LOW PRESSURE STEAM SUPPLY
	MAKE-UP WATER (NON-POTABLE)
	PUMPED CONDENSATE
	DOMESTIC COLD WATER
	DOMESTIC HOT WATER
	FUEL OIL RETURN
	FUEL OIL SUPPLY
	NATURAL GAS
	LIQUEFIED PRETROLEUM

PIPELINE EQUIPMENT

	BALL VALVE
	BLOWDOWN VALVE
	BUTTERFLY VALVE
	CHECK VALVE
	GATE VALVE
	GLOBE VALVE
	PRESSURE REGULATING VALVE
	RELIEF VALVE (TEMP/PRESS)
	STOP CHECK VALVE
	PRESSURE TEST VALVE
	SOLENOID VALVE
	TWO-WAY CONTROL VALVE
	THREE-WAY CONTROL VALVE
	TRIPLE DUTY/MULTIPURPOSE VALVE
	FLOW CONTROL VALVE
	LUBRICATED PLUG COCK
	IN-LINE PUMP
	STRAINER
	STRAINER WITH BLOWDOWN
	UNION
	FLANGE
	ECCENTRIC REDUCER/INCREASER
	CONCENTRIC REDUCER/INCREASER
	AIR VENT (M-MANUAL, A-AUTO)
	THERMOMETER W/THERMAL WELL
	PRESSURE GAUGE W/GAUGE COCK
	CAP
	CALIBRATED PLUG VALVE/CIRCUIT SETTER
	FLEXIBLE PIPE COUPLING
	GAUGE COCK
	THERMOSTATIC EXPANSION VALVE
	SIGHT GLASS

PIPELINE EQUIPMENT

	ELBOW DOWN
	ELBOW UP
	TEE DOWN
	TEE UP
	EXPANSION JOINT
	PIPE ANCHOR
	PIPE GUIDE
	PITCH DOWN IN DIRECTION OF ARROW
	PRESSURE/TEMPERATURE TEST PORT
	FLOW ARROW
	EXISTING TO BE REMOVED
	WATER METER (FLOW TOTALIZING TYPE)
	STEAM TRAP: IB = INVERTED BUCKET FT = FLOAT & THERMOSTATIC TD = THERMODYNAMIC DISK
	FLOW OR TEMPERATURE SWITCH

EQUIPMENT ABBREVIATIONS

AC	AIR CURTAIN
ACC	AIR COOLED CONDENSER
ACU	AIR CONDITIONING UNIT
AF	AIR FILTER
AHU	AIR HANDLING UNIT
AP	ACCESS PANEL
AS	AUTOMATIC SPRINKLER
AV	AUTOMATIC VENT
B	BOILER
BFP	BACKFLOW PREVENTER
C	CHILLER
CAV	CONSTANT AIR VOLUME
CC	COOLING COIL
CFP	CHEMICAL FEED PUMP
CO	CLEANOUT
CP	CONDENSER WATER PUMP
CRP	CONDENSATE RETURN PUMP
CRU	COMPUTER ROOM AIR CONDITIONING UNIT
CT	COOLING TOWER
CTF	COOLING TOWER FILTER
CU	CONDENSING UNIT
CUH	CABINET UNIT HEATER
CAVAV	CONSTANT VOLUME AIR VALVE
CWP	CHILLED WATER PUMP
DCV	DUCT COIL
DFH	DEAERATING FEEDWATER HEATER
DG	DOOR GRILLE
DP	DIFFERENTIAL PRESSURE SWITCH
DPT	DIFFERENTIAL PRESSURE TRANSMITTER
EF	EXHAUST FAN
EG	EXHAUST GRILLE
EJ	EXPANSION JOINT
ER	EXHAUST REGISTER
ERH	ELECTRIC RADIANT HEATER
ET	EXPANSION TANK
EVC	EVAPORATIVE COOLER
FC	FLEXIBLE DUCT CONNECTION
FCU	FAN COIL UNIT
FD	FIRE DAMPER
FLDR	FLOOR DRAIN
FS	FLOW SWITCH
FSD	COMBINATION FIRE/SMOKE DAMPER
FT	FLASH TANK
FTR	FIN-TUBE RADIATION
FTU	FAN TERMINAL UNIT
FVAV	FAN POWERED VARIABLE AIR VOLUME BOX
FVI	FLOOR VACUUM INLET
GP	GLYCOL PUMP
H	HUMIDIFIER
HC	HEATING COIL
HEV	HOSE END VALVE
HPU	HEAT PUMP UNIT
HRP	HEAT RECOVERY LOOP PUMP
HRU	HEAT RECOVERY UNIT
HWP	HEATING WATER PUMP
HX	HEAT EXCHANGER
L	LOUVER
LD	LINEAR DIFFUSER
MAU	MAKE-UP AIR UNIT
MCC	MOTOR CONTROL CENTER
MD	MOTORIZED DAMPER
MV	MANUAL VENT
OBD	OPPOSED BLADE DAMPER
PA	PIPE ANCHOR
PAC	PACKAGED AIR CONDITIONING UNIT
PBD	PARALLEL BLADE DAMPER
PCWP	PRIMARY CHILLED WATER PUMP
PG	PIPE GUIDE
PHC	PREHEAT COIL
PHWP	PRIMARY HEATING WATER PUMP
PHX	PLATE HEAT EXCHANGER
PI	PRESSURE INDICATOR
PIV	POST INDICATOR VALVE
PRV	PRESSURE REDUCING VALVE
PS	PRESSURE SWITCH
RF	RETURN FAN
RG	RETURN GRILLE
RR	RETURN REGISTER
RTU	ROOFTOP UNIT
SAC	SURGICAL AIR COMPRESSOR
SCBA	SELF CONTAINED BREATHING APPARATUS
SCD	SMOKE CONTROL DAMPER
SCWP	SECONDARY CHILLED WATER PUMP
SD	SMOKE DAMPER
SF	SUPPLY FAN
SG	SUPPLY GRILLE
SHWP	SECONDARY HEATING WATER PUMP
SMS	SNOW MELTING SYSTEM
SR	SUPPLY REGISTER
ST	STERILIZER
SVV	SAFETY VALVE VENT
TG	TRANSFER GRILLE
TMV	THERMOSTATIC MIXING VALVE
TRC	TERMINAL REHEAT COIL
UH	UNIT HEATER
VAV	VARIABLE AIR VOLUME BOX
VD	MANUAL VOLUME DAMPER
VE	VIBRATION ELIMINATOR

GENERAL ABBREVIATIONS

A	AIR
ACC	ACCESSORIES
AFF	ABOVE FINISHED FLOOR
AI	ANALOG SIGNAL INPUT
AO	ANALOG SIGNAL OUTPUT
APD	AIR PRESSURE DROP
APLV	APPLICATION PART LOAD VALUE
ARCH	ARCHITECTURE / ARCHITECT
AUX	AUXILIARY
AVG	AVERAGE
BDD	BACK DRAFT DAMPER
BFC	BELOW FINISHED CEILING
BHP	BRAKE HORSEPOWER
BI	BINARY SIGNAL INPUT
BM	BEAM
BO	BINARY SIGNAL OUTPUT
BOB	BOTTOM OF BEAM
BOD	BOTTOM OF DUCT
BOF	BOTTOM OF FOOTING
BOP	BOTTOM OF PIPE
BOT	BOTTOM
BS	BEAM SPACE
BTUH	BRITISH THERMAL UNITS PER HOUR
CAP	CAPACITY
CAV	CONSTANT AIR VOLUME
CCD	CONTROLLED CLOSURE DEVICE
CFM	CUBIC FEET PER MINUTE
CI	CAST IRON
CL	CENTERLINE
CLG	COOLING DUCT (COLD DUCT)
CONC	CONCRETE
COND	CONDENSATE
CONN	CONNECTION
COIRR	CORRIDOR
CV	CONTROL VALVE
DB	DRY BULB
DBA	A-WEIGHTED DECIBELS
DEFL	DEFLECTION
DEG	DEGREES
DEG F	DEGREES FAHRENHEIT
DIA	DIAMETER
DIM	DIMENSION
DISCH	DISCHARGE
DIV	DIVISION
DN	DOWN
DTL	DETAIL
DWG(S)	DRAWING(S)
EA	EXHAUST AIR OR EACH (PER CONTEXT)
EAT	ENTERING AIR TEMPERATURE
EC	ELECTRIC CONTRACTOR
EER	ENERGY EFFICIENT RATIO
EFF	EFFICIENCY
ELEC	ELECTRIC
ELEV	ELEVATION
EQ	EQUAL
ESP	EXTERNAL STATIC PRESSURE
EWB	ENTERING AIR WET BULB TEMPERATURE
EWT	ENTERING WATER TEMPERATURE
EXH	EXHAUST
EXIST	EXISTING
EXIST, EX	EXISTING
FDC	FIRE DEPARTMENT CONNECTION
FIN	FINISHED
FLR	FLOOR
FP	FIRE PROTECTION CONTRACTOR
CPM	FEET PER MINUTE
FT	FEET
FT-HD	HEAD IN FEET
GA	GAUGE
GAL	GALLONS
GALV	GALVANIZED
GC	GENERAL CONTRACTOR
GP	GALLONS PER MINUTE
H	HEIGHT
HS	HEAD
HORIZ	HORIZONTAL
HP	HORSEPOWER
HR	HOOR
HTG	HEATING DUCT (HOT DECK)
HVAC	HEATING, VENTILATION AND AIR CONDITION
HW	HOT WATER
HZ	HERTZ
IE	INVERT ELEVATION
IN	INCH/INCHES
INDIC	INDICATOR
ISP	INTERNAL STATIC PRESSURE
JS	JOIST SPACE
KEC	KITCHEN EQUIPMENT CONTRACTOR
KW	KILOWATTS
L	LENGTH
LAT	LEAVING AIR TEMPERATURE
LB(S)	POUND(S)

GENERAL ABBREVIATIONS

LF	LINEAR FEET
LS	LIGHT SPACE
LVL	LEVEL
LWT	LEAVING WATER TEMPERATURE
MAN	MANUAL
MAX	MAXIMUM
MBH	THOUSANDS BRITISH THERMAL UNITS PER HOUR
MC	MECHANICAL CONTRACTOR
MECH	MECHANICAL
MFR	MANUFACTURER
MIN	MINIMUM
MTL	METAL
NC	NORMALLY CLOSED OR NOISE CRITERIA (PER CONTEXT)
NIC	NOT IN CONTRACT
NO	NORMALLY OPEN OR NUMBER (PER CONTEXT)
NOM	NOMINAL
NPLV	NON-STANDARD PART LOAD VALUE
NPS	NOMINAL PIPE SIZE
NPSH	NET POSITIVE SUCTION HEAD
NTS	NOT TO SCALE
OA	OUTSIDE AIR
OC	ON CENTER
OD	OUTSIDE DIAMETER
OCFI	OWNER FURNISHED / CONTRACTOR INSTALLED
OFOI	OWNER FURNISHED / OWNER INSTALLED
OT	OIL TRAP
PC	PLUMBING CONTRACTOR
PD	PRESSURE DROP
PENT	PENTHOUSE
PH	PHASE
PNEU	PNEUMATIC
PPH	POUNDS PER HOUR
PRESS	PRESSURE
PRV	PRESSURE REGULATING VALVE
PSI	POUNDS PER SQUARE INCH
PSIA	PSI ABSOLUTE
PSIG	POUNDS PER SQUARE INCH GAUGE
QTY	QUANTITY
RA	RETURN AIR
RAD	RADIATED
RH	RELATIVE HUMIDITY
RM	ROOM
RPM	REVOLUTIONS PER MINUTE
SA	SUPPLY AIR
SAN	SANITARY
SEC'N	SECTION
SENS	SENSIBLE
SF	SQUARE FOOT
SH	SENSIBLE HEAT
SHT	SHEET
SOL	SOLENOID
SP	STATIC PRESSURE
SPD	STATIC PRESSURE DIFFERENTIAL
SPT	STATIC PRESSURE TRANSMITTER
SQ	SQUARE
SST	STAINLESS STEEL
STL	STEEL
STM	STEAM
SW	SOFTENED WATER
T&P	TEMPERATURE AND PRESSURE
TC	TEMPERATURE CONTROL
TD	THERMODYNAMIC
TDH	TOTAL DYNAMIC HEAD
TEMP	TEMPERATURE
TOF	TOP OF FOOTING
TOS	TOP OF SLAB
TOT	TOTAL
TSP	TOTAL STATIC PRESSURE
TYP	TYPICAL
UC	UNDER CUT DOOR
UG	UNDERGROUND
UNO	UNLESS NOTED OTHERWISE
V	VOLTS
VAC	VACUUM
VB	VACUUM BREAKER
VD	VOLUME DAMPER (MANUAL)
VE	VIBRATION ELIMINATOR OR ISOLATOR
VEL	VELOCITY
VERT	VERTICAL
VOL	VOLUME
VRF	VARIABLE REFRIGERANT FLOW
VTR	VENT THRU ROOF
W	WATT OR WIDTH (PER CONTEXT)
W/	WITH
W/O	WITHOUT
WB	WET BULB
WC	WATER COLUMN
WG	WATER GAUGE
WPD	WATER PRESSURE DIFFERENTIAL
WT	WEIGHT

STATE OF MISSOURI  
MICHAEL L. PARSON,  
GOVERNOR



PROFESSIONAL SEAL  
ENGINEER OF RECORD:

**HORNER SHIFRIN**  
401 S. 18TH ST., STE. 400 SAINT LOUIS, MO 63103-2296  
314-531-4321 • FAX 314-531-6966 • WWW.HORNERSHIFRIN.COM  
DISCIPLINE: PROFESSIONAL ENGINEERING  
CERTIFICATE OF AUTHORITY: 000169  
EXPIRATION DATE: DECEMBER 31, 2022

**ARCTURIS**  
701 MARKET STREET, SUITE 1300  
SAINT LOUIS, MO 63101  
314.206.7100

OFFICE OF  
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OF CORRECTIONS

REPLACE ICE BUILDERS  
BUILDING #13

JEFFERSON CITY  
CORRECTIONAL CENTER

JEFFERSON CITY, MO

PROJECT # C2009-01  
SITE # 7029  
FACILITY # 9327029018

REVISION: \_\_\_\_\_  
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DATE: \_\_\_\_\_  
REVISION: \_\_\_\_\_  
DATE: \_\_\_\_\_  
ISSUE DATE: 09/02/2022

CAD DWG FILE: \_\_\_\_\_  
DRAWN BY: DEL  
CHECKED BY: CEW  
DESIGNED BY: DEL

SHEET TITLE:

SYMBOLS AND  
ABBREVIATIONS

SHEET NUMBER:

M-001

14 OF 25 SHEETS  
09/02/2022





PROFESSIONAL SEAL  
ENGINEER OF RECORD:

**HORNER  
SHIFRIN**

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314-531-4321 • FAX 314-531-6966 • WWW.HORNERSHIFRIN.COM  
DISCIPLINE: PROFESSIONAL ENGINEERING  
CERTIFICATE OF AUTHORITY: 000169  
EXPIRATION DATE: DECEMBER 31, 2022

**ARCTURIS**

701 MARKET STREET, SUITE 1300  
SAINT LOUIS, MO 63101  
314.206.7100

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ADMINISTRATION  
DIVISION OF FACILITIES  
MANAGEMENT,  
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DEPARTMENT  
OF CORRECTIONS

REPLACE ICE BUILDERS  
BUILDING #13

JEFFERSON CITY  
CORRECTIONAL CENTER

JEFFERSON CITY, MO

PROJECT # C2009-01  
SITE # 7029  
FACILITY # 9327029018

REVISION:  
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CAD DWG FILE:  
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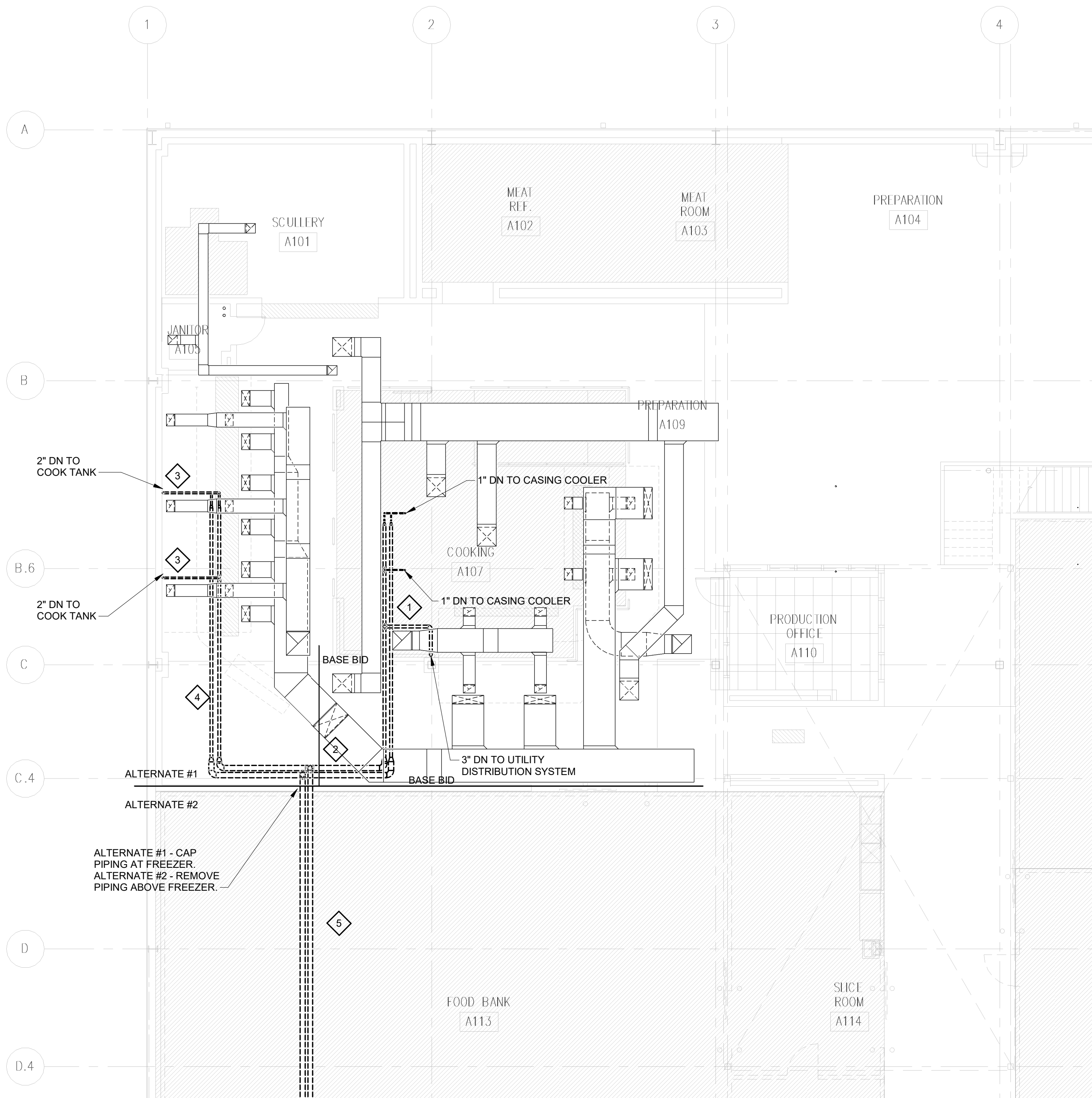
SHEET TITLE:

**MECHANICAL  
DEMOLITION  
PLAN**

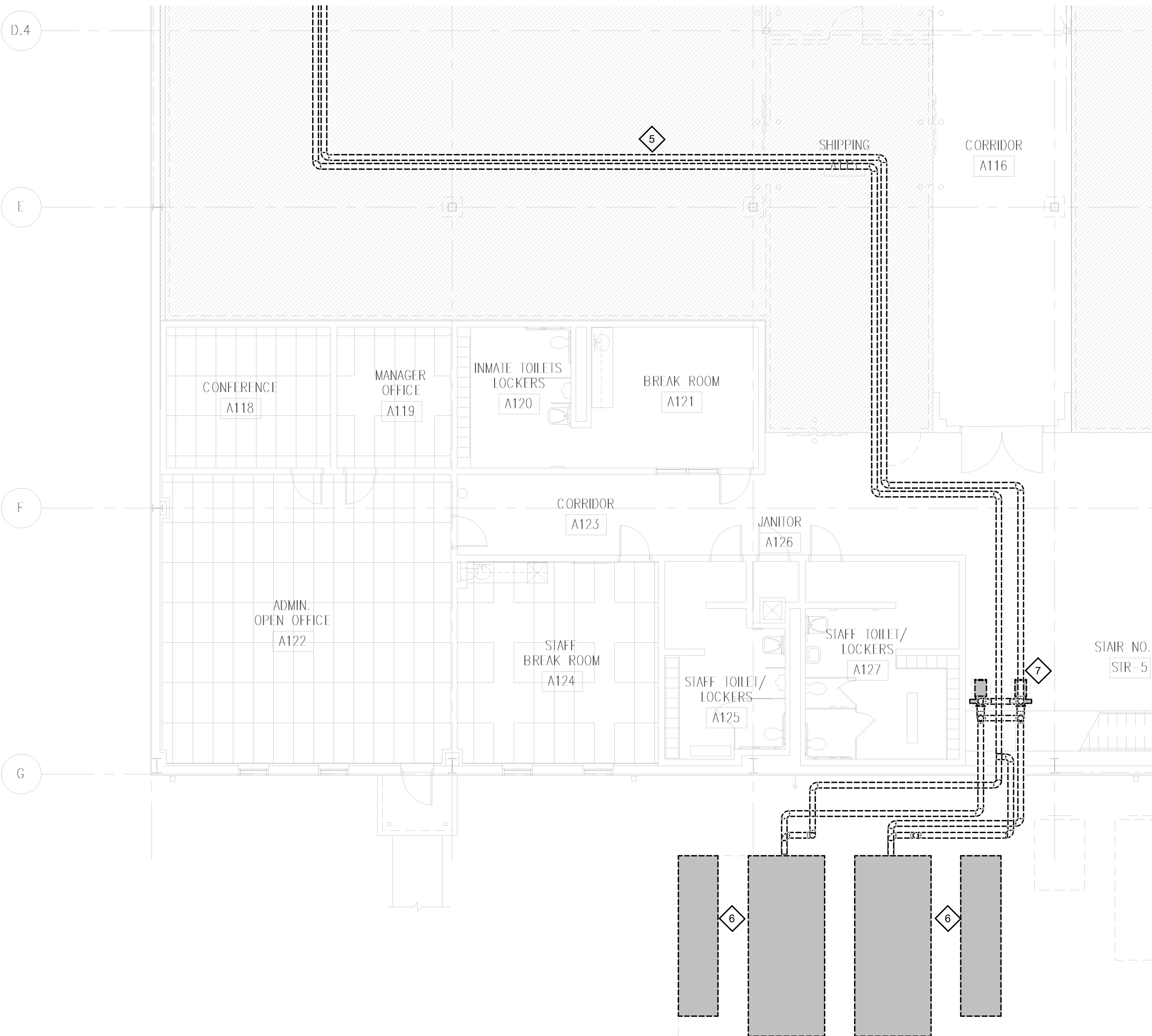
SHEET NUMBER:

**M-101**

15 OF 25 SHEETS  
09/02/2022



**1** MECHANICAL FLOOR PLAN NORTH - DEMOLITION  
1/8" = 1'-0"



**2** MECHANICAL FLOOR PLAN SOUTH- DEMOLITION ALTERNATE #2  
1/8" = 1'-0"

**SHEET DEMO KEYED NOTES BASE BID**

- 1 REMOVE EXISTING CHILLED WATER PIPING IN CEILING AND DOWN TO EQUIPMENT. REMOVE ALL ASSOCIATED HANGERS, BRACKETS, SUPPORTS, ETC.
- 2 PROVIDE BYPASS PIPING AND BALANCING VALVE BETWEEN SUPPLY AND RETURN PIPING AT THIS LOCATION. BALANCE TO SUM OF EXISTING FLOW THROUGH THE EXISTING BRANCH.

**SHEET DEMO KEYED NOTES - ALTERNATE #1**

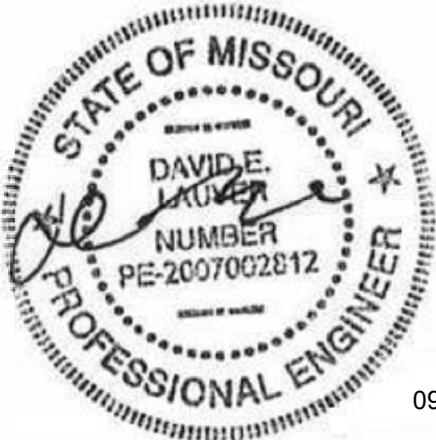
- 3 REMOVE EXISTING STEAM AND CONDENSATE PIPING FROM EXISTING TANK AS REQUIRED FOR REMOVAL. RECONNECT TO NEW TANK. MODIFY PIPING AS REQUIRED TO ACCOMMODATE NEW CONNECTION LOCATIONS.
- 4 REMOVE EXISTING CHILLED WATER PIPING IN CEILING AND DOWN TO EQUIPMENT. REMOVE ALL ASSOCIATED HANGERS, BRACKETS, SUPPORTS, ETC.

**SHEET DEMO KEYED NOTES - ALTERNATE #2**

- 5 REMOVE EXISTING CHILLED WATER PIPING AND ALL ASSOCIATED HANGERS, BRACKETS, SUPPORTS, ETC.
- 6 REMOVE EXISTING ICE BUILDER AND ASSOCIATED CONDENSING UNIT. REMOVE ALL ASSOCIATED PIPING AND CONTROLS. PAD AND SHED SHALL REMAIN.
- 7 REMOVE EXISTING CHILLED WATER PUMPS. REMOVE ALL ASSOCIATED CONTROLS AND PIPING. REMOVE DOMESTIC WATER MAKEUP WATER PIPING BACK TO MAIN AND CAP.

**PRE-DEMOLITION TESTING AND BALANCING:**

**IF ALTERNATE #1 IS NOT ACCEPTED, PRIOR TO DEMOLITION OF ANY EQUIPMENT, MEASURE GYLCOL WATER FLOW THROUGH ALL EXISTING PIECES OF KITCHEN EQUIPMENT. RECORD FLOW AND USE FOR REBALANCING OF SYSTEM AFTER DEMOLITION OF PIPING AND EQUIPMENT AS PART OF BASE BID.**



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SHEET TITLE:

MECHANICAL  
NEW WORK

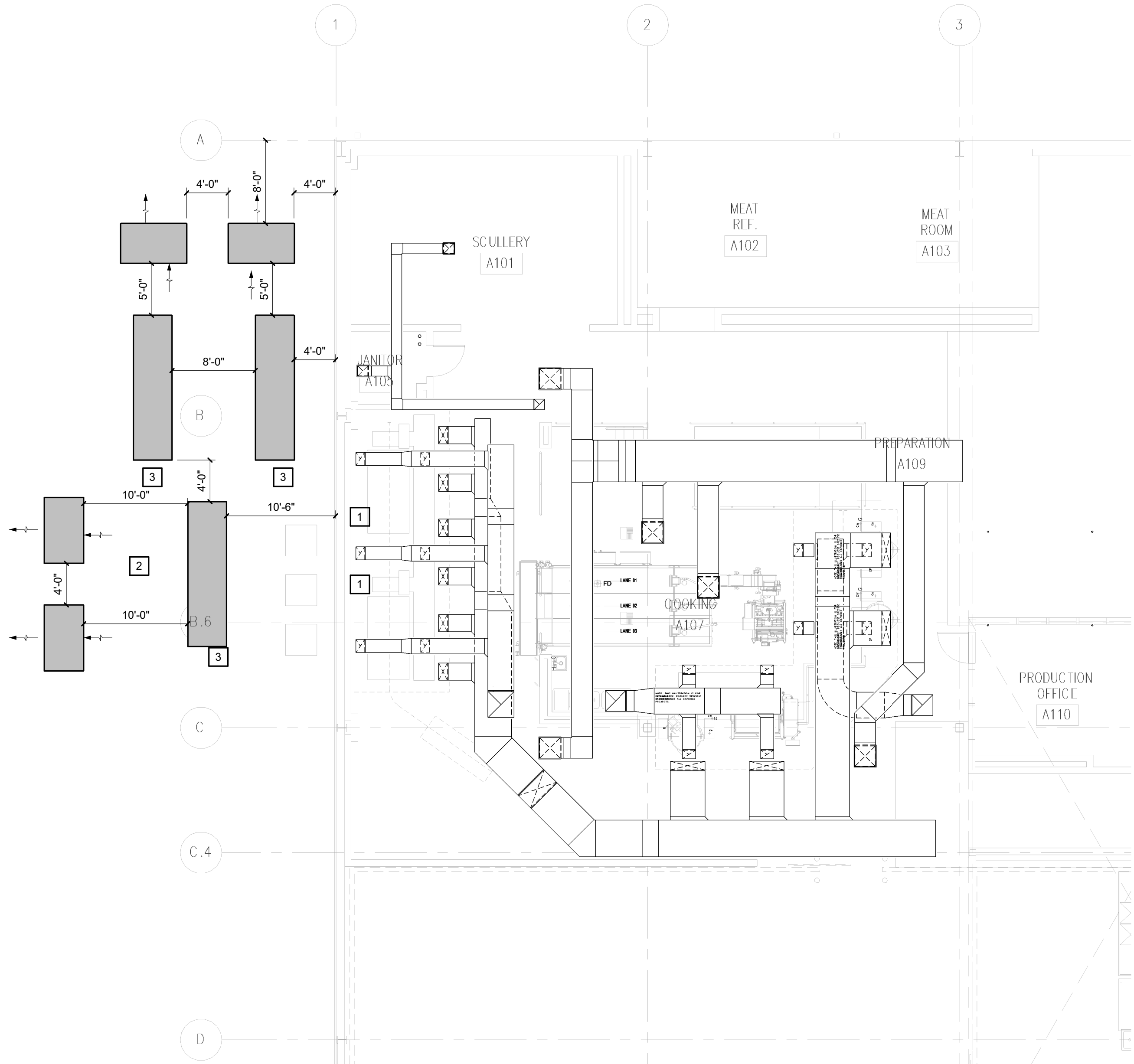
SHEET NUMBER:

M-201

16 OF 25 SHEETS  
09/02/2022

# SHEET KEYED NOTES

- 1 RECONNECT STEAM AND CONDENSATE PIPING TO NEW TANK. MODIFY EXISTING PIPING AS REQUIRED TO MAKE NEW CONNECTIONS. - ALTERNATE #1
- 2 LOCATIONS OF NEW CONDENSING UNITS FOR FOOD SERVICE EQUIPMENT. REFER TO FOOD SERVICE EQUIPMENT DRAWINGS FOR CONNECTION REQUIREMENTS. REFER TO STRUCTURAL DRAWINGS FOR PAD AND BOLLARD REQUIREMENTS.
- 3 ORIENT SO COMPRESSORS ARE ON THIS END OF UNIT.



1ST FLOOR MECHANICAL WORK

1/8" = 1'-0"



GENERAL NOTES:

1. BECAUSE OF THE LIMITED SPACE AVAILABLE TO INSTALL ALL OF THE PLUMBING WORK, COORDINATION BETWEEN OTHER TRADES IS OF THE UTMOST IMPORTANCE.
2. DRAWINGS INDICATE THE GENERAL LOCATION AND ARRANGEMENT OF FIXTURES, EQUIPMENT AND PIPING SYSTEMS. LOCATION AND ARRANGEMENT OF PIPING LAYOUT TAKE INTO ACCOUNT MANY DESIGN CONSIDERATIONS. SO FAR AS PRACTICAL, INSTALL PIPING AS INDICATED. THIS CONTRACTOR SHALL REPORT, IN WRITING, ANY DISCREPANCIES WHICH PREVENT THE INSTALLATION OF WORK AS SHOWN.
3. THIS CONTRACTOR SHALL VISIT THE PROJECT SITE, AND VERIFY LOCATIONS, ELEVATIONS AND SIZES OF ALL UTILITIES AT SITE PRIOR TO PROCEEDING WITH WORK. EXISTING SYSTEMS AND STRUCTURE SHALL BE INVESTIGATED FOR BEST POSSIBLE ROUTING OF PLUMBING PIPING.
4. THESE PLANS ARE DIAGRAMMATIC IN NATURE SINCE THE ONLY AVAILABLE INFORMATION HAS BEEN OBTAINED FROM EXISTING PLANS, SPECIFICATIONS, AND FIELD SURVEYS. THE EXACT LOCATION OF PIPING, FIXTURES, AND EQUIPMENT MAY DEViate FROM THE LOCATION INDICATED ON THESE DRAWINGS. EXTREME ACCURACY IS NOT GUARANTEED. THIS CONTRACTOR SHALL BE PREPARED TO MAKE ALTERATIONS TO NEW AND/OR EXISTING SERVICES TO FIT JOB CONDITIONS. THIS CONTRACTOR SHALL FURNISH A COMPLETE AND CODE COMPLYING SYSTEM.
5. IF THIS CONTRACTOR DOES NOT CLEARLY UNDERSTAND THESE PLANS OR IS NOT COMPLETELY SURE OF THEIR MEANING, HE/SHE SHOULD OBTAIN THE ENGINEERS WRITTEN EXPLANATION AND/OR INTERPRETATION PRIOR TO SUBMITTING BIDS. SINCE THIS CONTRACTOR WILL BE HELD RIGIDLY TO THE INTERPRETATION OF THE ENGINEER.
6. CUTTING, REMOVING AND PATCHING OF EXISTING FLOOR(S), WALL(S), ROOF ETC., FOR PLUMBING AND FIRE PROTECTION PIPING INSTALLATION SHALL BE BY THIS CONTRACTOR. EXCAVATION, REMOVAL, AND BACKFILL FOR PLUMBING PIPING INSTALLATION BELOW GRADE SHALL BE BY THIS CONTRACTOR.
7. IT IS THE RESPONSIBILITY OF THIS CONTRACTOR TO REPAIR THE EXISTING SURFACES TO REMAIN WHERE THEIR WORK HAS BEEN COMPLETED. REPAIR SHALL INCLUDE, BUT NOT LIMITED TO, ANY EXISTING WALL, CEILING OR FLOOR THAT IS SCHEDULED TO REMAIN. REPAIR, PAINTING OR PATCHING SHALL BE COMPLETED BY AN APPROPRIATE CONTRACTOR QUALIFIED FOR THIS TYPE OF WORK.
8. THE OWNER SHALL MAINTAIN ALL SALVAGE RIGHTS OF FIXTURES, EQUIPMENT AND MATERIALS REMOVED. HOWEVER ALL FIXTURES, EQUIPMENT AND MATERIALS NOT CLAIMED BY THE OWNER SHALL BE REMOVED FROM THE PREMISES AND PROPERLY DISPOSED OF BY THE DEMOLITION CONTRACTOR.

PLUMBING

SS	SANITARY PIPING
SD	STORM DRAIN
OD	OVERFLOW DRAIN
V	VENT (V)
CW	DOMESTIC COLD WATER (DCW)
HW	DOMESTIC HOT WATER (DHW)
HWR	DOMESTIC HOT WATER RETURN (DHWR)
D	INDIRECT DRAIN OR CONDENSATE
TW	TEMPERED WATER
TWR	TEMPERED WATER RECIRCULATING
NP	NON POTABLE WATER
MPC	MEDIUM PRESSURE CONDENSATE
MPS	MEDIUM PRESSURE STEAM
CA	COMPRESSED AIR

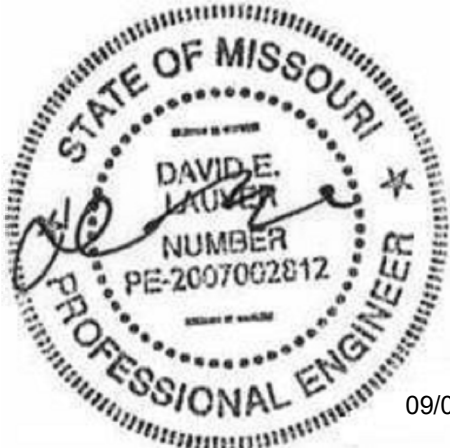
SYMBOLS

Shut off valve symbol	SHUT OFF VALVE
Strainer symbol	STRAINER
Balancing valve symbol	BALANCING VALVE (CIRCUIT SETTER)
Flow control valve symbol	FLOW CONTROL VALVE
Pressure gauge and cock symbol	PRESSURE GAUGE AND COCK
Pressure reducing valve symbol	PRESSURE REDUCING VALVE
Pressure regulator symbol	PRESSURE REGULATOR
Temp & pressure relief valve symbol	TEMP & PRESSURE RELIEF VALVE
Check valve symbol	CHECK VALVE
Reducer symbol	REDUCER
Thermometer symbol	THERMOMETER
Flow arrow / direction symbol	FLOW ARROW / DIRECTION
Union (dielectric) symbol	UNION (DIELECTRIC)
Backflow preventer symbol	BACKFLOW PREVENTER
Connection to existing symbol	CONNECTION TO EXISTING
Indicates plumbing riser symbol	INDICATES PLUMBING RISER
Revision delta symbol	REVISION DELTA
Equipment number symbol	EQUIPMENT NUMBER
Keyed note symbol	KEYED NOTE
Keyed note demolition symbol	KEYED NOTE DEMOLITION

ABBREVIATIONS

ADA	PHYSICALLY CHALLENGED
AFF	ABOVE FINISHED FLOOR
AP	ACCESS PANEL
BOT	BOTTOM
CL	CENTERLINE
CI	CAST IRON
CO	CLEANOUT
CV	CHECK VALVE
DCW	DOMESTIC COLD WATER
DHW	DOMESTIC HOT WATER
DHWR	DOMESTIC HOT WATER RETURN
DN	DOWN
ELEV	ELEVATION
EQ	EQUAL
EXIST, EX	EXISTING
FCO	FLOOR CLEANOUT
FD	FLOOR DRAIN
FIN	FINISHED
FL	FLOOR / FIRE LINE
FS	FLOOR SINK
FT	FEET
GAL	GALLON
GPM	GALLONS PER MINUTE
H	HEIGHT
HW	HOT WATER
HWR	HOT WATER RETURN
IE	INVERT ELEVATION
IN	INCH/INCHES
INV	INVERT
L	LENGTH
LVL	LEVEL
MAX	MAXIMUM
MIN	MINIMUM
NC	NORMALLY CLOSED
NIC	NOT IN CONTRACT
NTS	NOT TO SCALE
PRESS	PRESSURE
PRV	PRESSURE REDUCING VALVE
PSI	PSI ABSOLUTE
QTY	QUANTITY
RPBP	REDUCED PRESSURE BACKFLOW PREVENTER
RPM	REVOLUTIONS PER MINUTE
SA	SHOCK ABSORBER
SAN	SANITARY
TEMP	TEMPERATURE
TOT	TOTAL
TPC	TOP OFPIER CAP
TW	TEMPERED WATER
TYP	TYPICAL
V	VENT
VOL	VOLUME
VTR	VENT THRU ROOF
W/O	WITH / WITHOUT
W	WASTE

STATE OF MISSOURI  
MICHAEL L. PARSON,  
GOVERNOR



PROFESSIONAL SEAL  
ENGINEER OF RECORD:



401 S. 18TH ST., STE. 400 SAINT LOUIS, MO 63103-2296  
314-531-4321 • FAX 314-531-6966 • WWW.HORNERSHIFRIN.COM  
DISCIPLINE: PROFESSIONAL ENGINEERING  
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ARCTURIS

701 MARKET STREET, SUITE 1300  
SAINT LOUIS, MO 63101  
314.206.7100

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REPLACE ICE BUILDERS  
BUILDING #13

JEFFERSON CITY  
CORRECTIONAL CENTER

JEFFERSON CITY, MO

PROJECT # C2009-01  
SITE # 7029  
FACILITY # 9327029018

REVISION: \_\_\_\_\_  
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DESIGNED BY: GJW

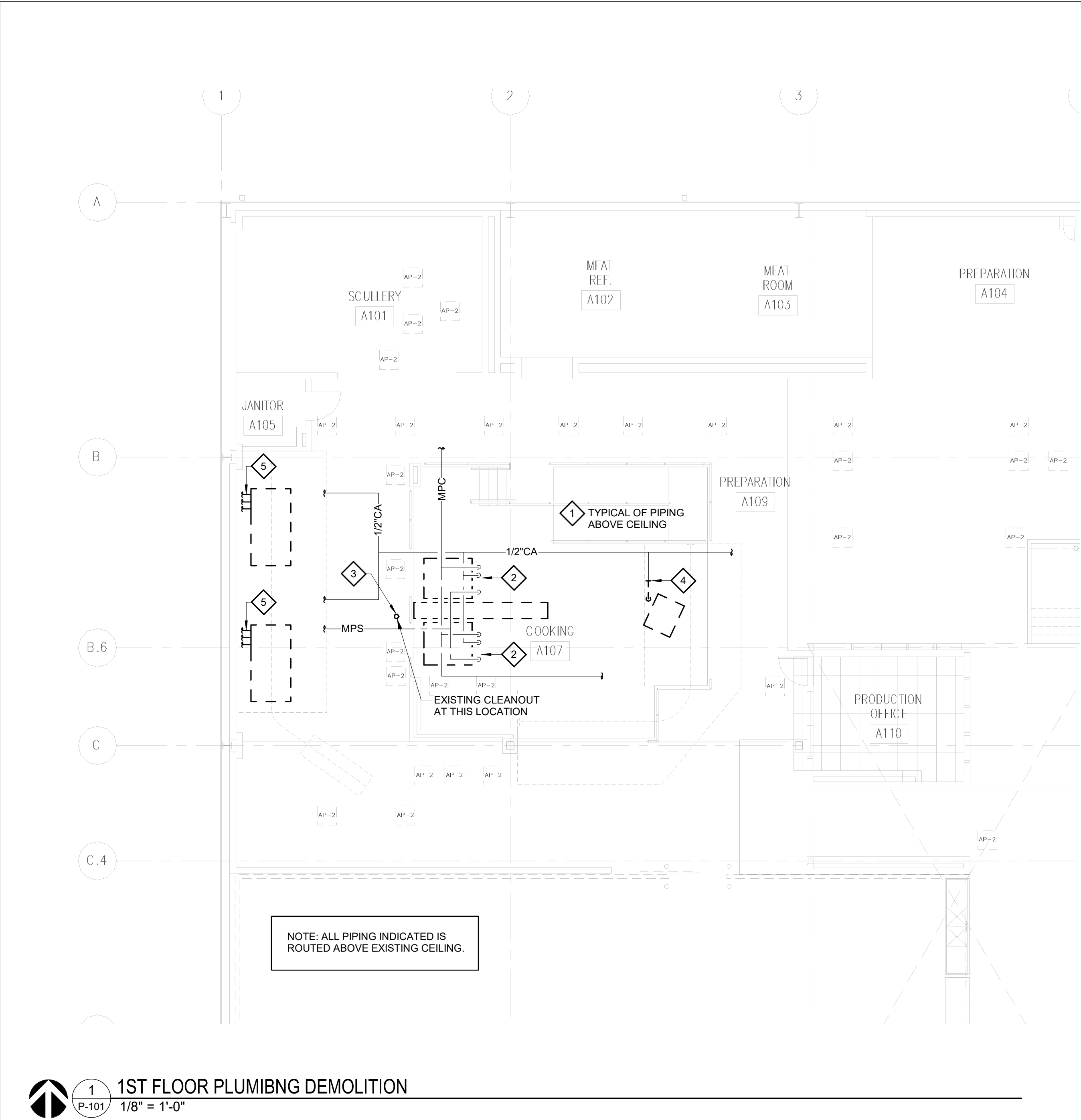
SHEET TITLE:

PLUMBING  
SYMBOLS &  
ABBREVIATIONS

SHEET NUMBER:

P-001

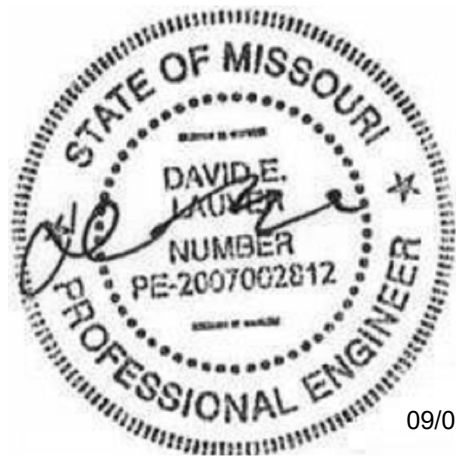
17 OF 25 SHEETS  
09/02/2022



- #
- 1 REMOVE PIPING DROPS AND PIPING ABOVE CEILING BACK TO MAINS. CONNECT AT NEW EQUIPMENT AS REQUIRED. SEE NEW WORK PLAN FOR RECONNECTION.
- 2 DISCONNECT EXISTING DOMESTIC COLD WATER, STEAM, AND COMPRESSED AIR FROM EXISTING EQUIPMENT. SEE NEW WORK PLAN FOR RECONNECTION. REMOVE ALL PIPING NOT REUSED BACK TO MAIN AND CAP AIRTIGHT.
- 3 REMOVE EXISTING CLEANOUT AND RELOCATE PER NEW WORK PLAN TO ACCOMMODATE NEW EQUIPMENT DIMENSIONS. EXACT ROUTING OF EXISTING SANITARY PIPING BELOW GRADE IS UNKNOWN. THIS CONTRACTOR SHALL VERIFY ROUTING AND RELOCATE CLEANOUT AS REQUIRED TO PROPERLY SERVICE SANITARY PIPING SYSTEM.
- 4 REMOVE COMPRESSED AIR PIPING BACK TO THIS LOCATION AND TEMPORARILY CAP. SEE NEW WORK PLAN FOR CONNECTION AND REROUTING TO NEW BAGGER LOCATION.

- #
- 5 DISCONNECT EXISTING DOMESTIC HOT AND COLD WATER AND COMPRESSED AIR FROM EXISTING EQUIPMENT. SEE NEW WORK PLAN FOR RECONNECTION.

STATE OF MISSOURI  
MICHAEL L. PARSON,  
GOVERNOR



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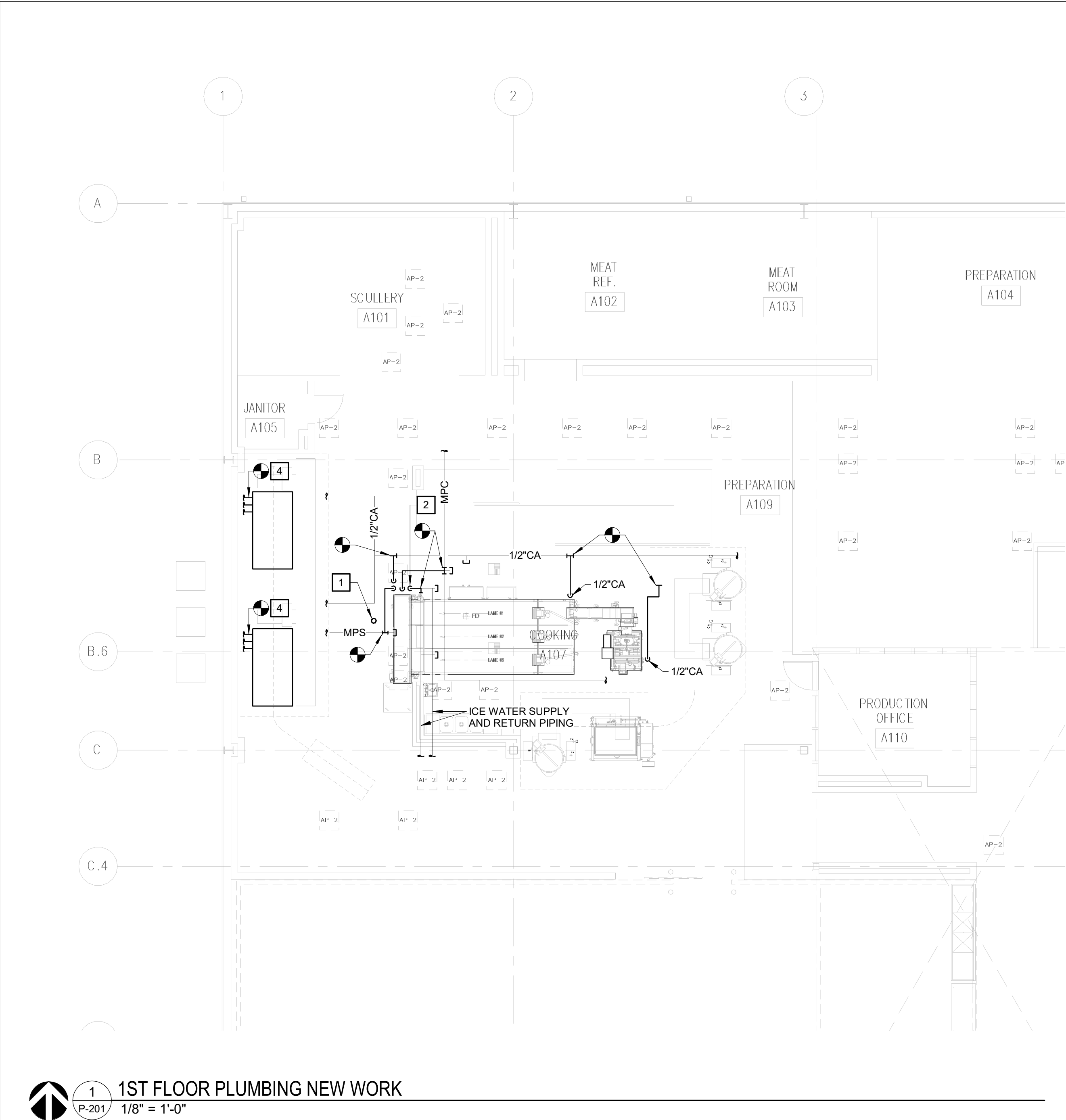
PLUMBING PLAN  
- DEMOLITION

SHEET NUMBER:

P-101

18 OF 25 SHEETS  
09/02/2022





- #P201 KEYED NOTES
- 1

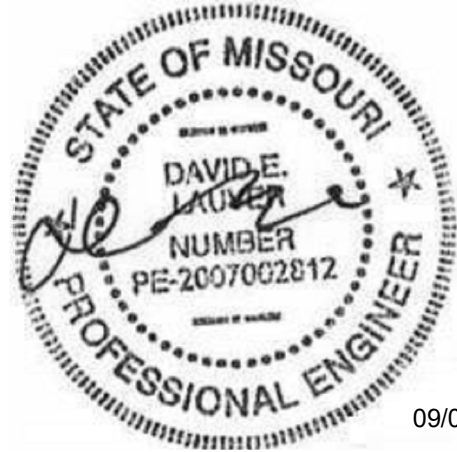
REINSTALL EXISTING CLEAN OUT AT NEW LOCATION. EXACT LOCATION MAY VARY DEPENDING ON EXISTING ROUTING OF SANITARY PIPING BELOW GRADE.
- 2

RECONNECT EXISTING DOMESTIC COLD WATER, AND COMPRESSED AIR PIPING TO NEW EQUIPMENT AT THIS LOCATION.

- #P201 KEYED NOTES ALTERNATE #1
- 4

RECONNECT EXISTING UTILITIES AT NEW EQUIPMENT.

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SHEET TITLE:

PLUMBING PLAN  
- NEW WORK

SHEET NUMBER:

P-201

19 OF 25 SHEETS  
09/02/2022

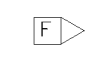





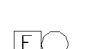

















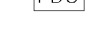


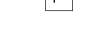








# ELECTRICAL LEGEND

NOT ALL SYMBOLS AND ABBREVIATIONS ARE USED

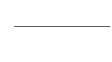




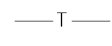






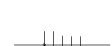


## LIGHT FIXTURES

	2x4 FLUORESCENT FIXTURE
	A = FIXTURE TYPE
	1 = CIRCUIT NUMBER
	b = SWITCH LEG
	LIGHT FIXTURE ON EMERGENCY
	LIGHT FIXTURE WITH NIGHTLIGHT
	2x2 FLUORESCENT FIXTURE
	1x4 FLUORESCENT FIXTURE
	6"x4" FLUORESCENT FIXTURE
	WALL MOUNTED FLOURESCENT
	STRIP FLUORESCENT FIXTURE
	TRACK LIGHTING
	1x1 FLUORESCENT FIXTURE
	DOWNLIGHT FIXTURE
	DOWNLIGHT FIXTURE ON EMERGENCY
	WALL WASH FIXTURE
	WALL MOUNTED FIXTURE
	GROUND MOUNTED FLOOD LIGHT
	WALL MOUNTED FLOOD LIGHT
	POLE LIGHT FIXTURE
	BOLLARD
	BOLLARD ON EMERGENCY
	EXIT SIGN (ON EMERGENCY) WITH DIRECTIONAL ARROW
	WALL MOUNTED EXIT SIGN
	EMERGENCY LIGHT PACK W/ BATTERY (96" A.F.F.)
	EMERGENCY LIGHT (96" A.F.F.)




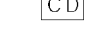



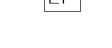

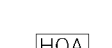
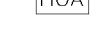











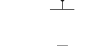



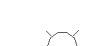











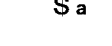
## FIRE ALARM

	COMBINATION AUDIBLE VISUAL FIRE ALARM (90" A.F.F. MINIMUM 8" BELOW CEILING)
	A = 110 cd
	B = 75 cd
	C = 15/75 cd
	FIRE ALARM HORN (90" A.F.F.)
	FIRE ALARM BELL 1" BELOW CEILING
	CH = CHIME
	G = GONG
	VISUAL FIRE ALARM (90" A.F.F. MINIMUM 6" BELOW CEILING)
	A = 110 cd
	B = 75 cd
	C = 15/75 cd
	CEILING MOUNTED COMBINATION AUDIBLE VISUAL FIRE ALARM
	D = 95 cd
	E = 60 cd
	F = 30 cd
	CEILING MOUNTED VISUAL FIRE ALARM
	D = 95 cd
	E = 60 cd
	F = 30 cd
	FIRE ALARM CONTROL PANEL
	FIRE ALARM ANNUNCIATOR (60" A.F.F.)
	DIGITAL COMMUNICATOR
	DOOR HOLDER
	MANUAL PULL STATION (48" A.F.F.)
	DUCT DETECTOR
	DUCT DETECTOR TEST SWITCH
	HEAT DETECTOR
	SMOKE DETECTOR
	FIRE SUPPRESSION ALARM
	FIREMANS TELEPHONE OUTLET
	FIRE ALARM FLOW SWITCH
	FIRE ALARM TAMPER SWITCH
	FIRE ALARM MONITOR MODULE
	FIRE ALARM CONTROL MODULE
	POST INDICATING VALVE



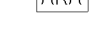




## CONDUIT

	CONDUIT EXPOSED
	CONDUIT CONCEALED IN FLOOR/BELOW SLAB/BELOW GRADE
	CONDUIT CONCEALED IN WALL OR CEILING
	TELEPHONE CONDUIT
	TELEVISION CONDUIT
	CONDUIT DOWN
	CONDUIT UP
	CONDUIT SLEEVE INSULATED BUSHING EACH END
	WIRE IN CONDUIT LEFT TO RIGHT
	1 GROUND, 1 NEUTRAL, 3 HOTS
	HOME RUN
	A = PANEL A
	1,3,5 = CIRCUITS 1,3,5
	CABLE TRAY
	FEEDER A



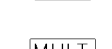


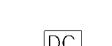
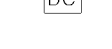



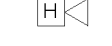


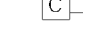

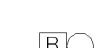







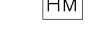


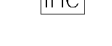





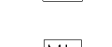
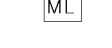
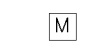


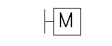


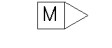





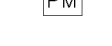


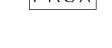






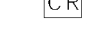

## SWITCHES & SENSORS

	AIR FLOW SWITCH
	AQUASTAT
	CARBON DIOXIDE/MONOXIDE DETECTOR
	WALL MOUNTED CARBON DIOXIDE/MONOXIDE DETECTOR
	ELECTRIC/PNEUMATIC SWITCH
	FIRESTAT
	HAND/OFF AUTOMATIC SELECTOR SWITCH
	HUMIDISTAT
	IRRIGATION CONTROL
	LIMIT SWITCH
	LINE VOLTAGE THERMOSTAT (54" A.F.F.)
	MEDICAL GAS ALARM
	OCCUPANCY SENSOR SINGLE DIRECTION
	OCCUPANCY SENSOR DUAL DIRECTION
	OCCUPANCY SENSOR WALL MOUNTED
	OCCUPANCY SENSOR POWER PACK
	PHOTOCELL
	PILOT LIGHT: LETTER INDICATES COLOR
	B = BLUE
	G = GREEN
	R = RED
	POST INDICATOR VALVE
	PRESSURE SWITCH
	REFRIGERATOR ALARMS
	SOLENOID VALVE
	TOGGLE SWITCH SINGLE POLE (48" A.F.F.)
	a = SWITCH CONTROL (LOWER CASE LETTERS)
	3 = THREE WAY SWITCH
	4 = FOUR WAY SWITCH
	D = DIMMER SWITCH
	K = KEYED OPERATION SWITCH
	OC = OCCUPANCY SENSOR SWITCH WITH OFF/AUTO OVERRIDE
	VS = VACANCY SENSOR SWITCH
	WP = WEATHERPROOF SWITCH
	LOW VOLTAGE SWITCH (48" A.F.F.)
	SWITCH WITH PILOT LIGHT ON WHEN SWITCH IS ON (48" A.F.F.)
	TIMER SWITCH (48" A.F.F.)
	MANUAL MOTOR STARTER
	DATA LINE SWITCH (48" A.F.F.)










## COMMUNICATIONS & SECURITY

	ACCESS CONTROL HEAD-END
	AREA OF RESCUE ANNUNCIATOR
	AREA OF RESCUE ASSISTANCE PUSH BUTTON
	CAMERA
	CAMERA POWER SUPPLY
	CEILING MOUNTED CAMERA
	WALL MOUNTED CAMERA

## COMMUNICATIONS & SECURITY

	CCTV HEAD-END
	CCTV MONITOR
	CCTV MULTIPLEXER
	COMPUTER
	DIGITAL COMMUNICATOR
	DIGITAL VIDEO RECORDER
	DOOR ALARM ANNUNCIATOR
	ALARM HORN
	BUZZER
	CHIME
	DOOR CONTACT
	DOORBELL
	ELECTRIC DOOR OPENER
	ELECTRIC DOOR STRIKE
	GLASS BREAKAGE DETECTOR - WALL MOUNTED
	GLASS BREAKAGE DETECTOR - CEILING MOUNTED
	HANGING MICROPHONE
	INTERCOM
	INTERCOM HEAD-END CABINET
	INTERCOM MASTER
	INTERCOM SLAVE
	KEYPAD
	MAGNETIC CONTACT
	MAGNETIC LOCK
	MICROPHONE OUTLET
	MICROPHONE OUTLET IN FLOOR
	MICROPHONE OUTLET WALL MOUNTED
	MICROPHONE - OBSERVATION ROOM
	MOTION DETECTOR - WALL MOUNTED
	MOTION DETECTOR - CEILING MOUNTED
	PERSONAL ALARM ANNUNCIATOR
	PERSONAL ALARM PUSH BUTTON
	PHYSIOLOGICAL MONITOR
	PROGRAM BELL SYSTEM
	PROXIMITY READER ACCESS CONTROL
	PUBLIC ADDRESS SYSTEM
	PUSH BUTTON - ONE BUTTON
	PUSH BUTTON - MUSHROOMHEAD
	PUSH BUTTON - EMERGENCY CALL
	SECURITY CARD READER
	SECURITY CONTROL PANEL
	SERVER CABINET
	SOUND EQUIPMENT CABINET
	SPEAKER - CEILING MOUNTED
	SPEAKER - OBSERVATION ROOM
	SPEAKER - SURFACE MOUNTED
	SPEAKER - WALL MOUNTED
	DATA OUTLET (18" A.F.F.) W/ 1" CONDUIT TO ABOVE ACCESSIBLE CEILING
	c = 6" ABOVE COUNTER BACKSPLASH
	W = MOUNT 48" A.F.F.
	2 = NUMBER EQUALS TOTAL NUMBER OF PORTS
	DATA OUTLET IN FLOOR
	SURFACE RACEWAY DATA OUTLET 3' ON CENTER
	TELEPHONE OUTLET (18" A.F.F.) W/ 1" CONDUIT TO ABOVE ACCESSIBLE CEILING
	c = 6" ABOVE COUNTER BACKSPLASH
	W = MOUNT 48" A.F.F.
	2 = NUMBER EQUALS TOTAL NUMBER OF PORTS
	TELEPHONE OUTLET IN FLOOR

## COMMUNICATIONS & SECURITY

	TELEPHONE/DATA OUTLET (18" A.F.F.) W/ 1" CONDUIT TO ABOVE ACCESSIBLE CEILING
	c = 6" ABOVE COUNTER BACKSPLASH
	2 = NUMBER EQUALS TOTAL NUMBER OF PORTS
	TELEPHONE/DATA OUTLET IN FLOOR
	TELEPHONE BOARD 3/4" FIRERATED PLYWOOD
	TELEVISION OUTLET (88" A.F.F.)
	TEMPERATURE SENSOR
	VIDEO CASSETTE RECORDER
	VOLUME CONTROL (48" A.F.F.)

## EQUIPMENT & DEVICES

	ANTENNA
	ANTENNA - TELEMETRY
	BAY BOX LIGHTING
	BAY BOX POWER
	CEILING FAN
	ANALOG CLOCK 2 = DUAL FACE
	DIGITAL CLOCK 2 = DUAL FACE
	TIME ELAPSE CLOCK & CONTROLLER
	DIMMER CONTROL BOX
	ELECTRIC METER
	GENERATOR
	GENERATOR ANNUNCIATOR
	GROUND JACK
	HAND DRYER
	MASTER CLOCK
	MOTOR W/ DESIGNATION
	MOTORIZED DAMPER
	PANELBOARD - WALL MOUNTED
	PANELBOARD - FLUSH MOUNTED
	DISTRIBUTION PANELBOARD
	TRANSFORMER
	AUTOMATIC TRANSFER SWITCH
	MANUAL TRANSFER SWITCH
	DISCONNECT SWITCH
	COMBINATION STARTER
	MOTOR STARTER
	UTILITY POLE
	PULL BOX
	HAND HOLE
	PROGRAM BELL
	TIME CLOCK
	TRANSIENT VOLTAGE SURGE SUPPRESSOR
	UNINTERRUPTIBLE POWER SOURCE
	VARIABLE SPEED DRIVE
	WATER HEATER
	WEATHER HEAD
	UNIT HEATER - CEILING MOUNTED
	UNIT HEATER - WALL MOUNTED

	SIMPLEX RECEPTACLE (18" A.F.F.)
	SIMPLEX RECEPTACLE IN FLOOR
	SIMPLEX RECEPTACLE EMERGENCY (18" A.F.F.)
	SIMPLEX RECEPTACLE EMERGENCY IN FLOOR
	DUPLEX RECEPTACLE (18" A.F.F.)
	6" ABOVE COUNTER BACKSPLASH
	GFI = GROUND FAULT INTERRUPTER
	SURFACE RACEWAY DUPLEX OUTLET 3' ON CENTER

	AMMETER
	AMMETER PHASE SELECTOR SWITCH
	CUSTOMER METER
	DEMAND METER
	FREQUENCY METER
	GROUND DETECTOR
	MULTIMETER
	POWER FACTOR METER
	TOTALIZING WATT HOUR METER
	VARMETER
	VOLTMETER
	VOLT-AMMETER
	VOLTMETER PHASE SELECTOR SWITCH
	WATHOUR METER
	WATTMETER





PROFESSIONAL SEAL  
ENGINEER OF RECORD:



401 S. 18TH ST., STE. 400 SAINT LOUIS, MO 63103-2296  
314-531-4321 • FAX 314-531-6966 • WWW.HORNERSHIFRIN.COM  
DISCIPLINE: PROFESSIONAL ENGINEERING  
CERTIFICATE OF AUTHORITY: 000159  
EXPIRATION DATE: DECEMBER 31, 2022

# ARCTURIS

701 MARKET STREET, SUITE 1300  
SAINT LOUIS, MO 63101  
314.206.7100

OFFICE OF  
ADMINISTRATION  
DIVISION OF FACILITIES  
MANAGEMENT,  
DESIGN AND  
CONSTRUCTION

DEPARTMENT  
OF CORRECTIONS

REPLACE ICE BUILDERS  
BUILDING #13

JEFFERSON CITY  
CORRECTIONAL CENTER

JEFFERSON CITY, MO

PROJECT # C2009-01  
SITE # 7029  
FACILITY # 9327029018

REVISION: \_\_\_\_\_  
DATE: \_\_\_\_\_  
REVISION: \_\_\_\_\_  
DATE: \_\_\_\_\_  
REVISION: \_\_\_\_\_  
DATE: \_\_\_\_\_  
ISSUE DATE: 09/02/2022

CAD DWG FILE: \_\_\_\_\_  
DRAWN BY: TJA  
CHECKED BY: KSS  
DESIGNED BY: KSS

SHEET TITLE:

FIRST FLOOR PLAN  
- ELECTRICAL  
DEMOLITION

SHEET NUMBER:

# E-101

21 OF 25 SHEETS  
09/02/2022

## KEYED NOTES

- 1 DISCONNECT CHILLED WATER PUMPS. REMOVE STARTERS, CONDUCTORS, AND CONDUIT BACK TO SOURCE (ALTERNATE #1).
- 2 DISCONNECT CHILLER AND CONDENSER. REMOVE DISCONNECT, CONDUCTORS, AND CONDUIT BACK TO SOURCE (ALTERNATE #1).
- 3 DISCONNECT COOK TANK. REMOVE DISCONNECTS (ALTERNATE #1).
- 4 DISCONNECT TUMBLE CHILLER AND LOADING CONVEYOR. REMOVE CONDUIT AND CONDUCTOR BACK TO SOURCE.
- 5 DISCONNECT LOADING CONVEYOR. REMOVE CONDUCTOR BACK TO SOURCE.



 **1** FIRST FLOOR PLAN - ELECTRICAL DEMOLITION BASE BID  
E-101 1/16" = 1'-0"



PROFESSIONAL SEAL  
ENGINEER OF RECORD:



401 S. 18TH ST., STE. 400 SAINT LOUIS, MO 63103-2296  
314-531-4321 • FAX 314-531-6966 • WWW.HORNERSHIFRIN.COM  
DISCIPLINE: PROFESSIONAL ENGINEERING  
CERTIFICATE OF AUTHORITY: 0001569  
EXPIRATION DATE: DECEMBER 31, 2022

ARCTURIS  
701 MARKET STREET, SUITE 1300  
SAINT LOUIS, MO. 63101  
314.206.7100

OFFICE OF  
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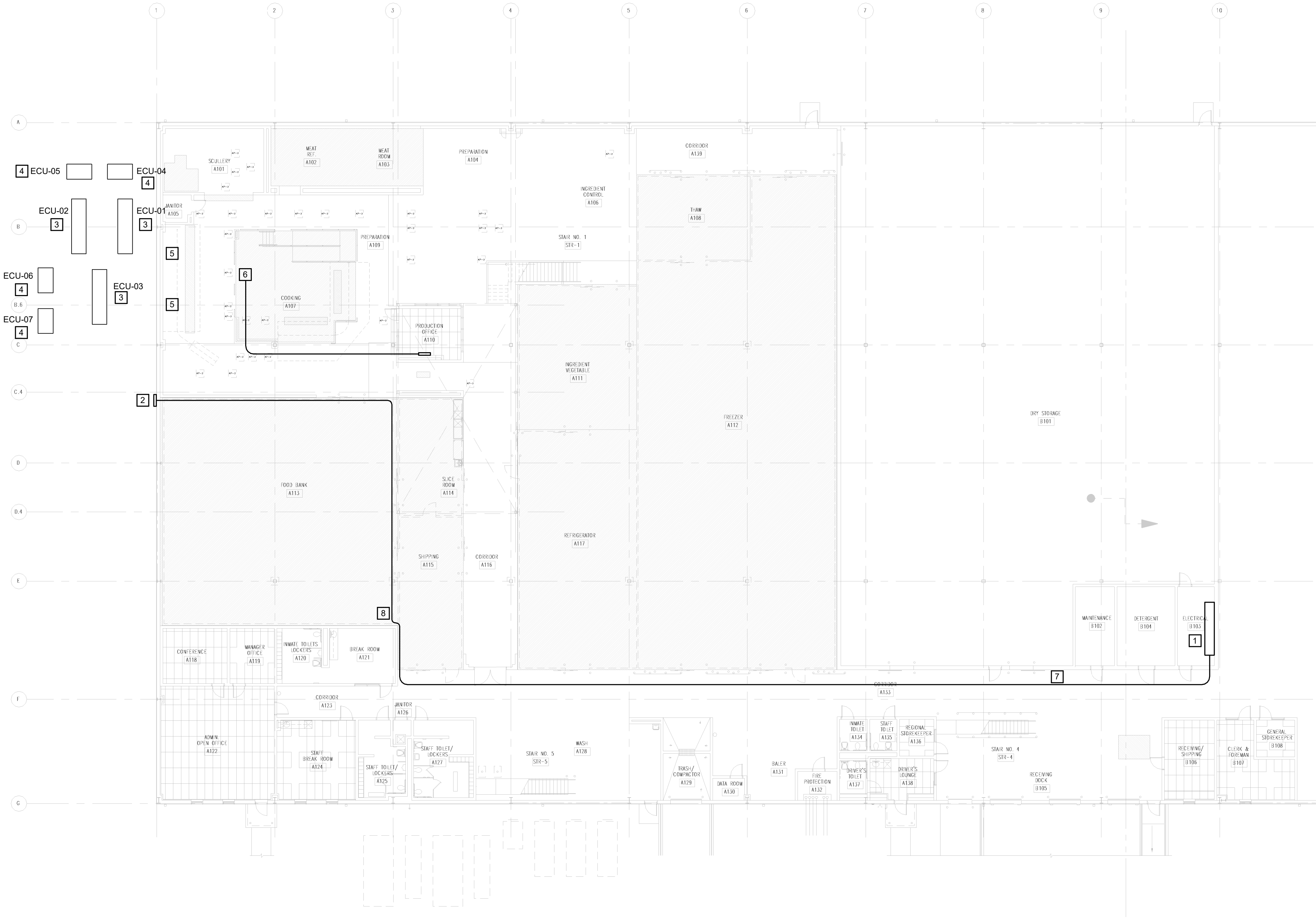
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DRAWN BY: TJA  
CHECKED BY: KSS  
DESIGNED BY: KSS


SHEET TITLE:  
FIRST FLOOR PLAN  
- ELECTRICAL NEW  
WORK

SHEET NUMBER:

E-201

22 OF 25 SHEETS  
09/02/2022



 **1**  
E-201 FIRST FLOOR PLAN - ELECTRICAL NEW WORK BASE BID  
1/16" = 1'-0"



DESIGN CRITERIA:		
BUILDING CODE	INTERNATIONAL BUILDING CODE, 2015 EDITION (IBC 2015) INTERNATIONAL EXISTING BUILDING CODE, 2015 EDITION (IBC 2015)	
STRUCTURAL STEEL	AISC SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS, EDITION (AISC 360-10) AISC SEISMIC PROVISIONS FOR STRUCTURAL STEEL 2010 EDITION (AISC 341-10)	
BUILDINGS,		
CONCRETE	ACI BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE, 2014 EDITION (ACI 318-14)	
DESIGN LOADS:		
BUILDING OCCUPANCY CATEGORY	=	INSTITUTIONAL
RISK CATEGORY	=	III
DEAD		
FLOOR (GENERAL)	=	10 PSF
TYPICAL MECHANICAL UNIT	=	592 PSF
FLOOR LIVE LOAD		
TYPICAL	=	40 PSF
SNOW LOAD		
GROUND SNOW LOAD, Pg	=	20 PSF
SNOW EXPOSURE FACTOR, Ce	=	1.0
SNOW LOAD IMPORTANCE FACTOR, Is	=	1.10
THERMAL FACTOR, Ct	=	1.20
WIND		
BASIC WIND SPEED (3 SECOND GUST)	=	120 MPH
WIND IMPORTANCE FACTOR	=	1.0
WIND EXPOSURE CATEGORY	=	C
EARTHQUAKE		
SEISMIC IMPORTANCE FACTOR	=	1.25
MAPPED SPECTRAL RESPONSE ACCELERATION		
SHORT PERIOD, Ss	=	0.209
1-SEC PERIOD, S1	=	0.108
SITE CLASS	=	ASSUMED "D"
SPECTRAL RESPONSE COEFFICIENT		
SHORT PERIOD, Sds	=	0.222
1-SEC PERIOD, Sd1	=	0.171
SEISMIC DESIGN CATEGORY	=	C

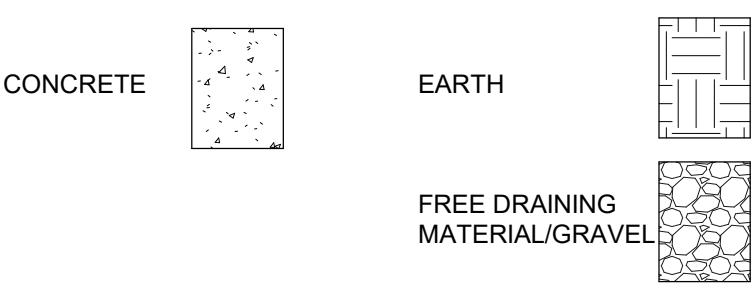
SYMBOLS

ELEVATION DESIGNATION

WELDED WIRE REINFORCING

FOOTING OR GRADE BEAM

TOP OF STEEL ELEVATION  
CENTERED - BEAM LEVEL (110'-0")  
AT END - ELEV AT END  
+ OR -, RELATIVE TO ADJACENT MEMBER (+2 1/2')



REBAR TENSION DEVELOPMENT & LAP SPICE LENGTHS NORMAL WEIGHT CONCRETE					
f <sub>c</sub> = 4500 psi					
BAR SIZE	LAP CLASS	UNCOATED BARS			
		TOP BARS		OTHER BARS	
		CASE 1	CASE 2	CASE 1	CASE 2
#3	A	18	27	14	21
	B	23	35	18	27
#4	A	24	35	18	28
	B	31	46	24	35
#5	A	30	45	23	34
	B	38	57	30	45

NOTES:

- "TOP BARS" ARE HORIZ BARS PLACED WITH MORE THAN 12" OF CONCRETE PLACED BELOW THE BARS.
- "OTHER BARS" ARE HORIZ BARS PLACED WITHIN THE BOTTOM 12" OF A CONCRETE MEMBER
- "CATEGORY 1" BARS HAVE A CLEAR SPACING BETWEEN BARS OF NOT LESS THAN 2x THE BAR DIAMETER, AND A CLEAR COVER OF NOT LESS THAN 1x THE BAR DIAMETER
- "CATEGORY 2" BARS HAVE A CLEAR SPACING BETWEEN BARS THAT IS LESS THAN 2x THE BAR DIAMETER, AND A CLEAR COVER OF NOT LESS THAN 1x THE BAR DIAMETER FOR LAP SPICE LENGTHS FOR A CONCRETE STRENGTH, f<sub>c</sub>, NOT SHOWN, USE THE TABLE FOR f<sub>c</sub> THAT IS LOWER.
- USE "CLASS B" LAP SPICE UNLESS NOTED OTHERWISE ON THE DRAWINGS
- VERTICAL WALL BARS LAP SPICE LENGTHS SHALL BE BASED ON "OTHER BARS" CATEGORY

DIVISION 1 - GENERAL REQUIREMENTS

- 1.1 A. CONSTRUCTION MEANS AND METHODS  
CONTRACTOR AGREES THAT CONTRACTOR SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF THE WORK, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS; AND THAT CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD OWNER AND STRUCTURAL ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF THE WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF OWNER OR STRUCTURAL ENGINEER.
- B. THE CONTRACT DOCUMENTS REPRESENT THE FINISHED STRUCTURE. THEY DO NOT INCLUDE THE METHOD OF CONSTRUCTION. CONTRACTOR SHALL PROVIDE ALL MEASURES NECESSARY TO PROTECT THE STRUCTURE DURING CONSTRUCTION. SUCH MEASURES SHALL INCLUDE, BUT NOT BE LIMITED TO: BRACING, SHORING FOR LOADS DUE TO CONSTRUCTION EQUIPMENT, TEMPORARY STRUCTURES, AND PARTIALLY COMPLETED WORK. OBSERVATION VISITS TO THE SITE BY STRUCTURAL ENGINEER SHALL NOT INCLUDE INSPECTION OF THE ABOVE ITEMS.
- C. HORNER & SHIFRIN SHALL NOT HAVE CONTROL OVER OR CHARGE OF AND SHALL NOT BE RESPONSIBLE IN ANY WAY FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, OR PROCEDURES, OR FOR SAFETY OR SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH ANY CONSTRUCTION ACTIVITIES, SINCE THESE ARE SOLELY CONTRACTOR'S RESPONSIBILITY UNDER THE CONTRACT.
- D. HORNER & SHIFRIN SHALL NOT BE RESPONSIBLE FOR CONTRACTOR'S SCHEDULE OR FAILURES TO CARRY OUT ANY CONSTRUCTION ACTIVITIES IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. HORNER & SHIFRIN SHALL NOT HAVE CONTROL OVER OR CHARGE OF ACTIONS OF CONTRACTOR, SUBCONTRACTOR, OR ANY OF THEIR AGENTS, OR EMPLOYEES, OR ANY OTHER PERSONS PERFORMING PORTIONS OF ANY CONSTRUCTION ACTIVITIES.
- E. THE STRUCTURE IS STABLE ONLY IN ITS COMPLETED FORM. TEMPORARY SUPPORTS REQUIRED FOR STABILITY OF THE STRUCTURE DURING ALL INTERMEDIATE STAGES OF CONSTRUCTION SHALL BE DESIGNED AND PROVIDED BY CONTRACTOR.
- 1.2 A. SUBMITTALS  
SUBMITTALS PREPARED BY SUBCONTRACTORS SHALL BE REVIEWED BY CONTRACTOR PRIOR TO SUBMITTING TO ENGINEER.
- B. REPRODUCTION OF THE CONTRACT DOCUMENTS FOR SHOP DRAWINGS IS NOT PERMITTED. ELECTRONIC DRAWING FILES WILL NOT BE PROVIDED TO CONTRACTOR.
- C. CONTRACTOR SHALL VERIFY THE STRUCTURALLY SUPPORTED EQUIPMENT WEIGHTS, OPENING SIZES, AND LOCATIONS INDICATED ON THE STRUCTURAL DRAWINGS WITH DOCUMENTS FROM OTHER DISCIPLINES AND NOTIFY ENGINEER OF ANY DISCREPANCIES.
- D. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS SHOWING SIZE, METHOD OF ANCHORAGE, WEIGHT, OPENINGS, AND LOCATIONS OF EQUIPMENT NOT INDICATED ON THE STRUCTURAL DRAWINGS PRIOR TO ORDERING FOR REVIEW BY STRUCTURAL ENGINEER TO DETERMINE ADEQUACY OF THE STRUCTURE.
- E. ALL SUBMITTALS REVIEWED BY STRUCTURAL ENGINEER ARE REVIEWED FOR GENERAL CONFORMANCE WITH THE DESIGN CODES OF THE PROJECT AND GENERAL COMPLY WITH THE INFORMATION INCLUDED IN THE CONTRACT DOCUMENTS. ANY ACTION INDICATED IS SUBJECT TO THE REQUIREMENTS OF THE CONTRACT DOCUMENTS. CONTRACTOR IS RESPONSIBLE FOR CORRELATING AND CONFIRMING DIMENSIONS AT THE JOB SITE, CHOICE OF FABRICATION PROCESSES AND TECHNIQUES OF CONSTRUCTION, AND COORDINATION OF THE WORK WITH THAT OF OTHER TRADES.
- F. THE CONTRACTOR SHALL REVIEW AND APPROVE THE SHOP DRAWINGS PRIOR TO SUBMITTING THEM FOR REVIEW BY THE ENGINEER.
1. THE CONTRACTOR SHALL ALLOW A MINIMUM OF 10 WORKING DAYS FOR REVIEW PRIOR TO FABRICATION.
- 1.3 A. QUALITY REQUIREMENTS  
REFERENCE TO STANDARD SPECIFICATIONS OR CODES OF ANY TECHNICAL SOCIETY, ORGANIZATION, OR ASSOCIATION OR TO CODES OF LOCAL OR STATE AUTHORITIES, SHALL MEAN THE STANDARDS IN EFFECT AS OF DATE OF THE CONTRACT DOCUMENTS, UNLESS OTHERWISE NOTED.
- B. CONTRACT DOCUMENTS SHALL GOVERN IN THE EVENT OF A CONFLICT WITH STANDARD SPECIFICATIONS OR CODES OF ANY TECHNICAL SOCIETY, ORGANIZATION, OR ASSOCIATION.
- C. NO PROVISION OF ANY REFERENCED STANDARD SPECIFICATION OR CODE, WHETHER OR NOT SPECIFICALLY INCORPORATED BY REFERENCE IN THE CONTRACT DOCUMENTS, SHALL BE EFFECTIVE TO CHANGE THE DUTIES AND RESPONSIBILITIES OF OWNER, ARCHITECT, STRUCTURAL ENGINEER, CONTRACTOR, OR ANY OF THEIR CONSULTANTS, AGENTS, OR EMPLOYEES FROM THOSE SET FORTH IN THE CONTRACT DOCUMENTS, NOR SHALL IT BE EFFECTIVE TO ASSIGN TO STRUCTURAL ENGINEER OR ANY OF STRUCTURAL ENGINEER'S CONSULTANTS, AGENTS, OR EMPLOYEES ANY DUTY OR AUTHORITY TO SUPERVISE OR DIRECT THE FURNISHING OR PERFORMANCE OF THE WORK OR ANY DUTY OR AUTHORITY TO UNDERTAKE RESPONSIBILITIES CONTRARY TO THE PROVISIONS OF THE CONTRACT DOCUMENTS.
- D. CONTRACTOR SHALL COORDINATE STRUCTURAL DOCUMENTS WITH OTHER PORTIONS OF THE CONTRACT DOCUMENTS. REPORT ANY DISCREPANCY OR OMISSION TO ENGINEER.
- E. CONTRACTOR SHALL VERIFY DIMENSIONS AND CONDITIONS AT THE JOB SITE. ANY DISCREPANCIES BETWEEN THE CONDITIONS FOUND AND THOSE INDICATED IN THE CONTRACT DOCUMENTS SHALL BE BROUGHT TO THE ATTENTION OF ENGINEER PRIOR TO PROCEEDING WITH THE WORK.
- F. SEE DOCUMENTS BY OTHER DISCIPLINES FOR FLOOR, WALL, AND ROOF OPENINGS, TRENCHES, PITS, PIPE SLEEVES, EQUIPMENT PADS, METAL PAN STAIRS, MISCELLANEOUS IRON, ETC.
- G. DETAILS LABELED "TYPICAL" ON THE STRUCTURAL DRAWINGS APPLY TO ALL SITUATIONS OCCURRING ON PROJECT THAT ARE THE SAME OR SIMILAR TO THOSE LOCATIONS SPECIFICALLY INDICATED. WHERE A DETAIL IS NOT INDICATED, THE DETAIL SHALL BE THE SAME AS FOR OTHER SIMILAR CONDITIONS.
- 1.4 A. STRUCTURAL TESTING AND SPECIAL INSPECTIONS  
STRUCTURAL INSPECTIONS SHALL BE IN ACCORDANCE WITH CHAPTER 17 OF THE BUILDING CODE.
- B. SPECIAL INSPECTION REPORTS SHALL BE FURNISHED TO BUILDING OFFICIAL, OWNER, ARCHITECT, STRUCTURAL ENGINEER, AND CONTRACTOR. DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF CONTRACTOR, AND IF NOT CORRECTED, SHALL BE REPORTED TO BUILDING OFFICIAL, OWNER, ARCHITECT, AND STRUCTURAL ENGINEER.
- C. THE SPECIAL INSPECTOR SHALL SUBMIT A FINAL REPORT STATING THAT THE STRUCTURAL WORK WAS, TO THE BEST OF THE SPECIAL INSPECTOR'S KNOWLEDGE, PERFORMED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
- D. THE FOLLOWING TYPES OF WORK REQUIRE SPECIAL INSPECTIONS: SEE TABLE BELOW FOR SPECIFIC TESTING REQUIREMENTS.
1. CONCRETE CONSTRUCTION

DIVISION 2 - FOUNDATIONS

- 2.1 A. GENERAL  
FOUNDATION DESIGN FOR PROTOTYPE IS BASED UPON AN ASSUMED ALLOWABLE BEARING CAPACITY OF 1,500 PSF. SITE CONDITIONS TO BE VERIFIED BY A SITE SPECIFIC GEOTECHNICAL REPORT. STRUCTURAL ENGINEER IS NOT RESPONSIBLE FOR SUBSURFACE CONDITIONS ENCOUNTERED IN THE FIELD THAT ARE DIFFERENT FROM THOSE ASSUMED IN DESIGN.
- B. OWNER'S GEOTECHNICAL REPRESENTATIVE SHALL CERTIFY THE BEARING MEDIUM.
- C. EXCAVATIONS SHALL BE KEPT FREE OF LOOSE MATERIAL AND STANDING WATER.
- D. ANY REQUIRED FILL SHALL BE CLEAN GRANULAR MATERIAL COMPACTED TO AT LEAST 95% MAX DENSITY PER ASTM D-1557.

DIVISION 3 - CONCRETE

3.1 REINFORCING:

- A. GENERAL
- REINFORCING STEEL SHALL BE ASTM A615, GRADE 60, DEFORMED BARS, UNLESS NOTED OTHERWISE. WELDING OF ASTM A615, GRADE 60 REINFORCING IS NOT ALLOWED.
  - REINFORCING STEEL TO BE WELDED SHALL BE ASTM A706, DEFORMED BARS.
  - EPOXY-COATED REINFORCING STEEL SHALL BE ASTM A775.
  - WELDED WIRE FABRIC SHALL BE ASTM A185 AND SHALL BE CONTACT LAP SPICED TWO FULL WIRE SPACES.
  - ALL REINFORCING BARS SHALL BE DETAILED, FABRICATED, SUPPORTED, AND PLACED IN ACCORDANCE WITH ACI 315 "DETAILS AND DETAILING OF CONCRETE REINFORCEMENT" AND CRSI'S "MANUAL OF STANDARD PRACTICE".
  - REINFORCING, INCLUDING DOWELS, SHALL BE SECURELY TIED AND CAST WITH THE LOWER MEMBER. PLACING REINFORCING AFTER CONCRETE HAS BEEN PLACED IS NOT PERMITTED.
  - FIELD BENDING OF REINFORCING PARTIALLY EMBEDDED IN CONCRETE IS NOT ALLOWED UNLESS SPECIFICALLY NOTED IN THE STRUCTURAL DOCUMENTS OR APPROVED BY STRUCTURAL ENGINEER.
  - PROVIDE DOWELS FROM FOUNDATION THE SAME GRADE, SIZE, AND NUMBER AS VERTICAL WALL OR COLUMN REINFORCING, UNLESS NOTED OTHERWISE.
  - PROVIDE CORNER BARS TO MATCH HORIZONTAL REINFORCING AT CORNERS AND INTERSECTIONS.
  - ADHESIVE FOR REINFORCING DOWELS INTO EXISTING CONCRETE SHALL BE HILTI HIT-HY 200 OR APPROVED EQUAL. MINIMUM EMBEDMENT SHALL BE AS FOLLOWS, UNLESS NOTED OTHERWISE.
  - ADHESIVE ANCHOR EMBEDMENT DEPTH INTO SOLID BASE MATERIAL SHALL BE AS FOLLOWS, UNLESS NOTED OTHERWISE:
    - #3 BAR : 8" EMBEDMENT
    - #4 BAR : 6" EMBEDMENT
    - #5 BAR : 8" EMBEDMENT
    - #6 BAR : 10" EMBEDMENT
  - MECHANICAL COUPLERS SHALL BE UNI-AXIAL TYPE CAPABLE OF DEVELOPING 125% OF THE SPECIFIED YIELD STRENGTH OF THE BARS IN TENSION.
  - ALL REINFORCING SHALL BE CONTACT LAP SPICED OR DOWELED AS FOLLOWS:
    - #3 BARS -- 28" #4 BARS -- 37"
    - #5 BARS -- 47" #6 BARS -- 56"
- B. SLABS
- ALL SLABS ON GRADE TO HAVE 6X6-W2.9XW2.9 WWF CENTERED IN MIDDLE 1/4 OF SLAB, UNLESS NOTED OTHERWISE.
  - PROVIDE SLAB BOLSTERS, HIGH CHAIRS, AND #5 SUPPORT BARS AS NECESSARY TO MAINTAIN PROPER PLACEMENT OF REINFORCING.
  - PROVIDE 2-#5 TOP X 5'-0" DIAGONALS AT CORNERS OF OPENINGS AND RE-ENTRANT CORNERS, UNLESS NOTED OTHERWISE.
- 3.2 CAST-IN-PLACE CONCRETE:
- A. REINFORCED CONCRETE SHALL BE NORMAL WEIGHT AND HAVE A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 4,500 PSI.
- B. ALL CONCRETE TO HAVE THE FOLLOWING UNIT WEIGHTS (+/- 3 PCF):
- NORMAL WEIGHT CONCRETE: PLASTIC = 145 PCF
- C. ALL CONCRETE EXPOSED TO FREEZING AND THAWING AND DEICER CHEMICALS SHALL HAVE 6% (+1%/-1.5%) AIR ENTRAINMENT. DO NOT AIR ENTRAIN CONCRETE TO BE TROWEL FINISHED.
- D. PROVIDE CONCRETE COVER FOR REINFORCING AS FOLLOWS:
- CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH.....3"
  - CONCRETE EXPOSED TO EARTH OR WEATHER.....2"
- E. PROVIDE CONSTRUCTION OR CONTROL JOINTS IN SLAB-ON-GRADE AS INDICATED IN THE STRUCTURAL DRAWINGS. IF JOINT PATTERN IS NOT INDICATED, PROVIDE JOINTS AT 15 FEET (+/-) IN BOTH DIRECTIONS AND LOCATED TO CONFORM TO BAY SPACING WHEREVER POSSIBLE (AT COLUMN CENTERLINES, HALF BAYS, THIRD BAYS, ETC.).
- F. INTERFACE OF CONSTRUCTION JOINTS SHALL BE ROUGHENED TO A FULL AMPLITUDE OF 1/4" SURFACE OF CONSTRUCTION JOINTS SHALL BE CLEAN AND FREE OF LAITANCE. IMMEDIATELY BEFORE NEW CONCRETE IS PLACED, CONSTRUCTION JOINTS SHALL BE WETTED AND STANDING WATER REMOVED.
- G. SEE ARCHITECTURAL DRAWINGS FOR WATERSTOPS.
- H. PROVIDE COMPRESSIBLE FILLER AND SEALANT IN SLAB-ON-GRADE AND WALL AND COLUMN INTERFACES THAT ARE NOT DOWELED TOGETHER.
- I. CONDUIT AND PIPES EMBEDDED IN SLABS SHALL BE NO LARGER IN OUTSIDE DIMENSION THAN 1/3 THE OVERALL MEMBER THICKNESS OR 2" MAXIMUM, AND SHALL BE PLACED NO CLOSER THAN 3 DIAMETERS OR WIDTHS ON CENTER.
- J. SLAB ON GRADE TO BE 4" THICK UNDERLAIN BY 6 MIL VAPOR BARRIER ON 6" THICK, 3/4" MINUS CRUSHED LIMESTONE GRANULAR FILL, TO MINIMUM 95% MODIFIED PROCTOR DENSITY, UNLESS NOTED OTHERWISE.
- K. PROVIDE 4" HIGH CONCRETE HOUSEKEEPING PADS UNDER EQUIPMENT. PADS SHALL EXTEND BEYOND EQUIPMENT 6" NOMINAL ON ALL SIDES. APPLY BONDING AGENT TO EXISTING CONCRETE SLAB PRIOR TO PLACING HOUSEKEEPING PAD. SEE DOCUMENTS FROM OTHER DISCIPLINES FOR EQUIPMENT LOCATIONS.

DIVISION 5 - METALS

5.1 STRUCTURAL STEEL:

- A. GENERAL
- STRUCTURAL STEEL SHALL BE FABRICATED AND ERECTED IN ACCORDANCE WITH THE ANSII/ASCE 360 "SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS"
  - MATERIALS SHALL CONFORM TO THE FOLLOWING, UNLESS NOTED OTHERWISE.
    - ANCHOR RODS ASTM F 1554, GRADE 36 WITH A36 WASHERS AND HEAVY HEX NUTS
    - THREADED ROD ASTM A36
    - ELECTRODES MATCHING STRENGTH, 70 KSI MIN.
- B. ANCHORS TO CONCRETE AND MASONRY
- ANCHORS SHALL BE ADHESIVE ANCHORS, UNLESS NOTED OTHERWISE.
  - EXPANSION ANCHORS SHALL BE HILTI KWIK BOLT TZ ANCHORS OR APPROVED EQUAL. ANCHORS SHALL BE PLAIN, UNCOATED EXCEPT PROVIDE STAINLESS STEEL ANCHORS WHERE SUPPORTED ITEM IS GALVANIZED.
  - ADHESIVE ANCHORS SHALL BE HILTI HIT-HY ADHESIVE ANCHORS OR APPROVED EQUAL. USE HIT-HY 200 MAX ADHESIVE WHEN ANCHORING INTO SOLID BASE MATERIAL. USE HIT HY 200 ADHESIVE PLUS A SCREEN TUBE WHEN ANCHORING TO OR THROUGH HOLLOW BASE MATERIAL. ANCHORS SHALL BE PLAIN, UNCOATED EXCEPT PROVIDE GALVANIZED ANCHORS WHERE SUPPORTED ITEM IS GALVANIZED.
  - WHEN INSTALLING ANCHORS, DO NOT CUT EXISTING REINFORCING. INSTALL ANCHORS TO ACCOMMODATE THE STANDARD HOLE SIZE IN STEEL.
  - ADHESIVE ANCHOR EMBEDMENT DEPTH INTO SOLID BASE MATERIAL SHALL BE AS FOLLOWS, UNLESS NOTED OTHERWISE:
    - 3/8" DIAM. : 3-3/8" EMBEDMENT
    - 1/2" DIAM. : 4-1/2" EMBEDMENT
    - 5/8" DIAM. : 5-5/8" EMBEDMENT
    - 3/4" DIAM. : 6-3/4" EMBEDMENT

## SPECIAL INSPECTION TABLES

### STATEMENT OF STRUCTURAL SPECIAL INSPECTIONS

<b>GENERAL</b> THE OWNER WILL ENGAGE AND EMPLOY A QUALIFIED SPECIAL INSPECTION AGENCY TO CONDUCT SPECIAL INSPECTIONS OF STRUCTURAL WORK AS REQUIRED BY CHAPTER 17 OF THE 2015 INTERNATIONAL BUILDING CODE AND AS DELINEATED BELOW. AGENCIES THAT ARE CONSIDERED QUALIFIED AND ACCEPTABLE TO ACT AS SPECIAL INSPECTORS WILL BE THOSE ACCEPTABLE TO THE BUILDING OFFICIAL OF THE JURISDICTION THAT GRANTS THE BUILDING PERMIT AN THE OWNER.
<b>SPECIAL INSPECTIONS REPORT REQUIREMENTS</b> SPECIAL INSPECTORS SHALL KEEP RECORDS OF INSPECTIONS THE SPECIAL INSPECTOR SHALL FURNISH INSPECTION REPORTS TO THE BUILDING OFFICIAL, OWNER, ARCHITECT, STRUCTURAL ENGINEER, AND CONTRACTOR. REPORTS SHALL INDICATE THAT THE STRUCTURAL WORK INSPECTED WAS DONE IN CONFORMANCE TO APPROVED CONTRACT DOCUMENTS. DISCREPANCIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE CONTRACTOR FOR CORRECTION. IF THE DISCREPANCIES ARE NOT CORRECTED, THE DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE BUILDING OFFICIAL, OWNER, ARCHITECT, AND STRUCTURAL ENGINEER PRIOR TO THE COMPLETION OF THAT PHASE OF WORK. A FINAL REPORT OF INSPECTIONS DOCUMENTING REQUIRED SPECIAL INSPECTIONS SHALL BE SUBMITTED AT A POINT IN TIME AGREED UPON BY THE OWNER AND THE BUILDING OFFICIAL PRIOR TO THE START OF WORK.
<b>REQUIRED SPECIAL INSPECTIONS</b> THE FOLLOWING TYPES OF STRUCTURAL WORK REQUIRE SPECIAL INSPECTIONS. REFER TO INDIVIDUAL SPECIFICATIONS SECTIONS FOR SPECIFIC TESTING AND INSPECTING REQUIREMENTS. CONTINUOUS INSPECTION IS THE FULL-TIME OBSERVATION OF WORK BY A QUALIFIED SPECIAL INSPECTOR WHO IS PRESENT IN THE AREA WHERE THE WORK IS BEING PERFORMED. PERIODIC SPECIAL INSPECTION IS THE PART-TIME OR INTERMITTENT OBSERVATION OF WORK BY A QUALIFIED SPECIAL INSPECTOR WHO IS PRESENT IN THE AREA WHERE THE WORK HAS BEEN OR IS BEING PERFORMED AND AT THE COMPLETION OF THE WORK.

SPECIAL INSPECTION ITEM	TYPE OF INSPECTION		REMARKS
	CONTINUOUS	PERIODIC	
1. INSPECTION STEEL REINFORCEMENT, INCLUDING SIZE, QUANTITY, PLACEMENT AND CLEARANCES. VERIFY THAT APPROVED SHOP DRAWINGS WERE UTILIZED.		X	
2. INSPECTION OF ANCHOR RODS, HEADED BOLTS, HEADED STUDS, SHEAR STUD SHEAR REINFORCING AND OTHER EMBEDDED ITEMS INCLUDING SIZE, GRADE, LENGTH LOCATION AND CLEARANCES PRIOR TO AND DURING PLACEMENT OF CONCRETE.	X		
3. INSPECTION VAPOR RETARDER FOR TYPE, THICKNESS, LAPS AND PATCHES OF ALL VOIDS			
4. INSPECTION FORMWORK FOR SHAPE, LOCATION, DIMENSIONS AND CLEARANCES		X	
5. VERIFICATION OF USE OF SPECIFIED DESIGN MIXTURE.		X	
6. TESTING OF SLUMP, AIR CONTENT, AND TEMPERATURE OF CONCRETE IS SAMPLED TO FABRICATE SPECIMENS FOR STRENGTH TESTS.	X		
7. INSPECTION OF CONCRETE PLACEMENT, INCLUDING CONVEYING, DEPOSITING AND APPLICATION TECHNIQUES.	X		
8. INSPECTION OR CURING PROCEDURES AND MAINTENANCE OF CURING TEMPERATURES.		X	
9. INSPECTION OF EXPANSION/EPOXIED ANCHORS INSTALLED IN HARDENED CONCRETE.	X		
10. VERIFICATION OF CONCRETE STRENGTH BEFORE REMOVAL OF SHORES AND FORMS FROM BEAMS AND SLABS.		X	

SPECIAL INSPECTION ITEM	TYPE OF INSPECTION		REMARKS
	CONTINUOUS	PERIODIC	
1. USE OF PROPER ANCHOR SYSTEM AND MANUFACTURER.		X	
2. REVIEW OF INSTALLER'S QUALIFICATIONS INCLUDING CERTIFICATION BY ANCHOR MANUFACTURER.		X	
3. ANCHOR INSTALLATION PROCESS AS NOTED IN GENERAL NOTES.		X	
4. VERIFICATION OF SUPPORTING MATERIALS CONDITION.		X	
5. PROOF TESTING AS OUTLINED IN GENERAL NOTES.			
* REMARK NOTES: 1. INSPECTOR SHALL BE FAMILIAR WITH ANCHOR MANUFACTURER'S WRITTEN INSTALLATION PROCEDURE AND ESR REPORT. 2. REFER TO MANUFACTURER'S ESR FOR TYPE OR INSPECTION PERIODIC VS. CONTINUOUS.			

ABBREVIATIONS:			
AISC	AMERICAN INSTITUTE OF STEEL	FC	28 DAY CONCRETE COMPRESSIVE STRENGTH
BO	BOTTOM OF	FTG	FOOTING
CJ	CONTROL JOINT	K	KIPS (1000 LBS)
CONST JT	CONSTRUCTION JOINT	LBS	POUNDS
CONT	CONTINUOUS	LD	DEVELOPMENT LENGTH
DA	DIAMETER	MAX	MAXIMUM
EF	EACH FACE	NTS	NOT TO SCALE
EJ	EXPANSION JOINT	NWT	NORMAL WEIGHT CONCRETE
ELEV	ELEVATION	OC	ON CENTER
EQ	EQUAL	PCF	POUNDS PER CUBIC FOOT
EW	EACH WAY	PLF	POUNDS PER LINEAR FOOT

STATE OF MISSOURI  
MICHAEL L. PARSON,  
GOVERNOR



ENGINEER OF RECORD: CHAD L. BRENTON



401 S. 18TH ST., STE. 400 SAINT LOUIS, MO 63103-2296  
314-531-4321 • FAX 314-531-6966 • WWW.HORNERSHIFRIN.COM  
DISCIPLINE: PROFESSIONAL ENGINEERING  
CERTIFICATE OF AUTHORITY: 000169  
EXPIRATION DATE: DECEMBER 31, 2022

# ARCTURIS

701 MARKET STREET, SUITE 1300  
SAINT LOUIS, MO 63101  
314.206.7100

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REPLACE ICE BUILDERS  
BUILDING #13

JEFFERSON CITY  
CORRECTIONAL CENTER

JEFFERSON CITY, MO

PROJECT # C2009-01

SITE # 7029

FACILITY # 9327029018

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ISSUE DATE: 09/02/2022

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CHECKED BY: CLB

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SHEET TITLE:

## GENERAL STRUCTURAL NOTES

SHEET NUMBER:

# S-001

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09/02/2022





ENGINEER OF RECORD: CHAD L. BRENTON



401 S. 18TH ST., STE. 400 SAINT LOUIS, MO 63103-2296  
314-531-4321 • FAX 314-531-6966 • WWW.HORNERSHIFRIN.COM  
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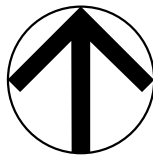
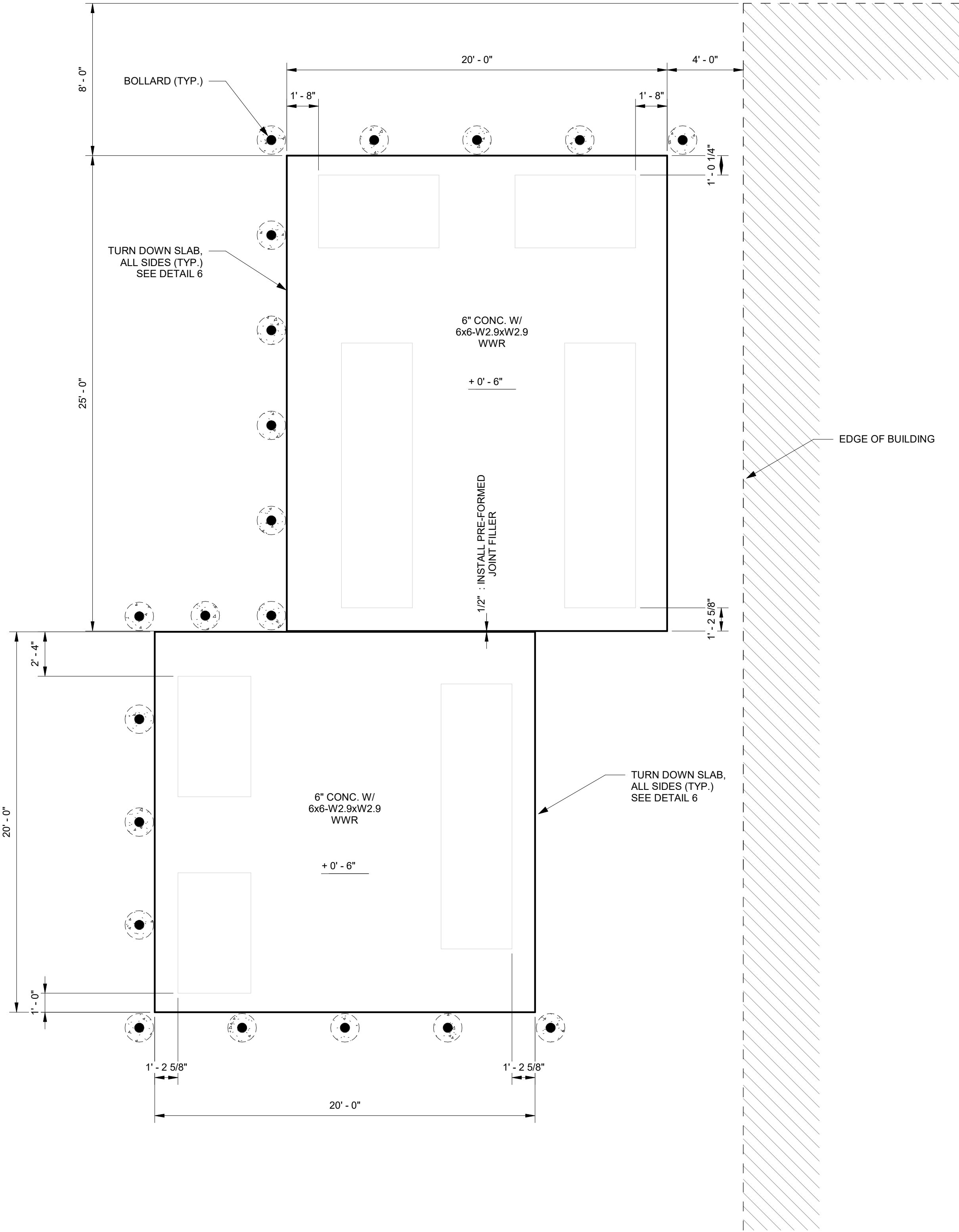
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EQUIPMENT PAD  
LAYOUT

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S-101

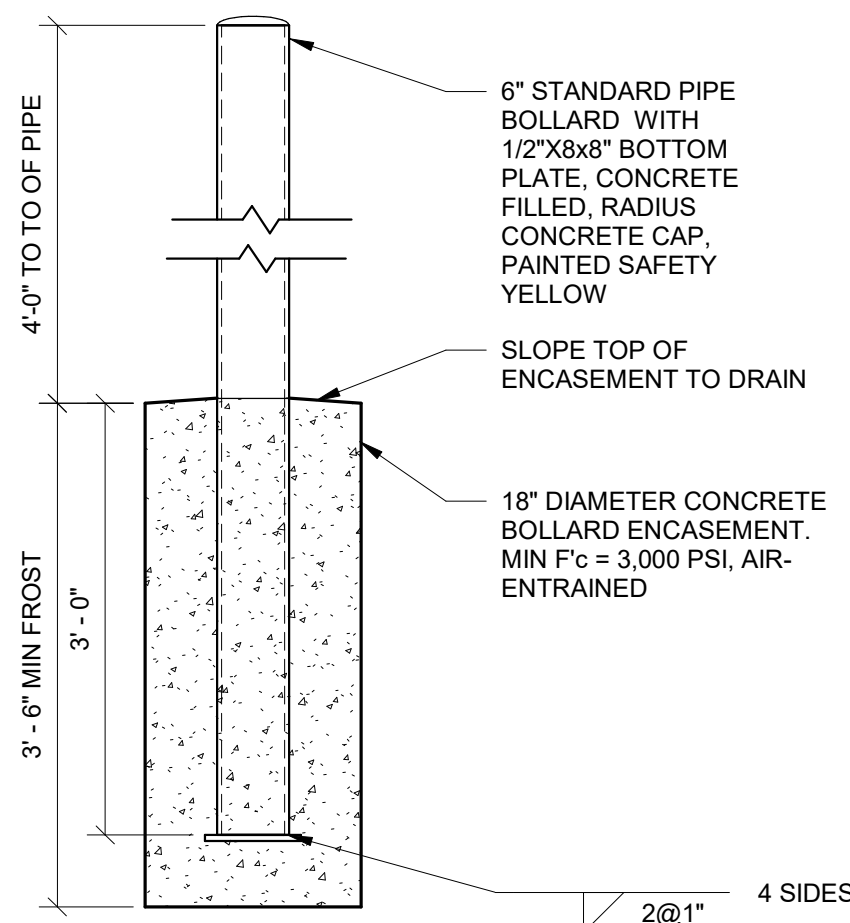
24 OF 25 SHEETS  
09/02/2022

- NOTES:
1. REFERENCE M-SHEETS FOR ADDITIONAL INFORMATION
  2. PROVIDE BOLLARDS AT ALL CORNERS, AT MAXIMUM 6'-0" O.C., AND APPROX. 2' OFF OF BUILDING. COORDINATE EXACT LOCATIONS WITH MECHANICAL EQUIPMENT ACCESS REQUIREMENTS

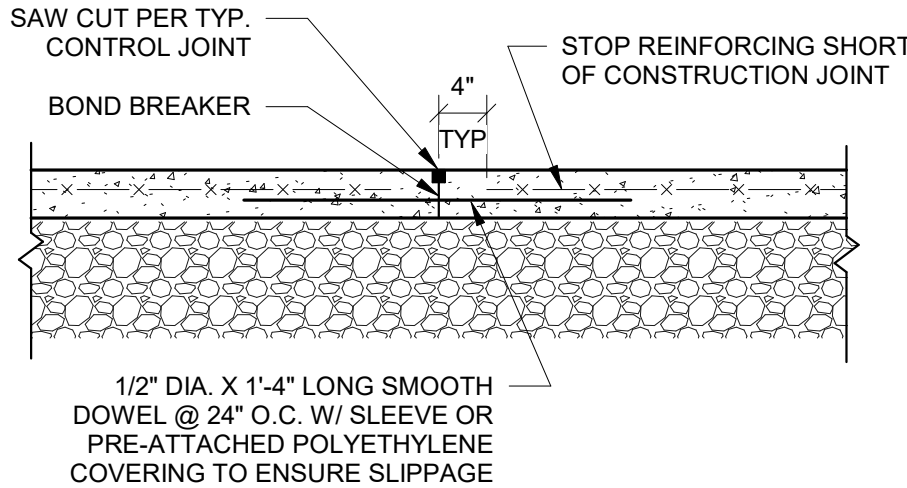


1 FOUNDATION PLAN  
S-101 1/4" = 1'-0"

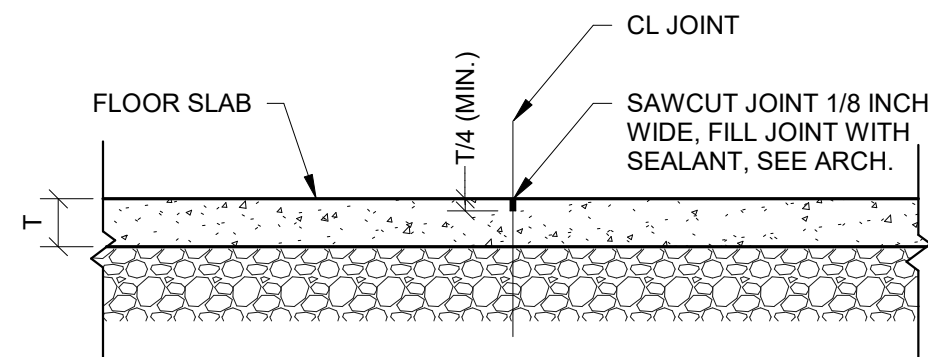




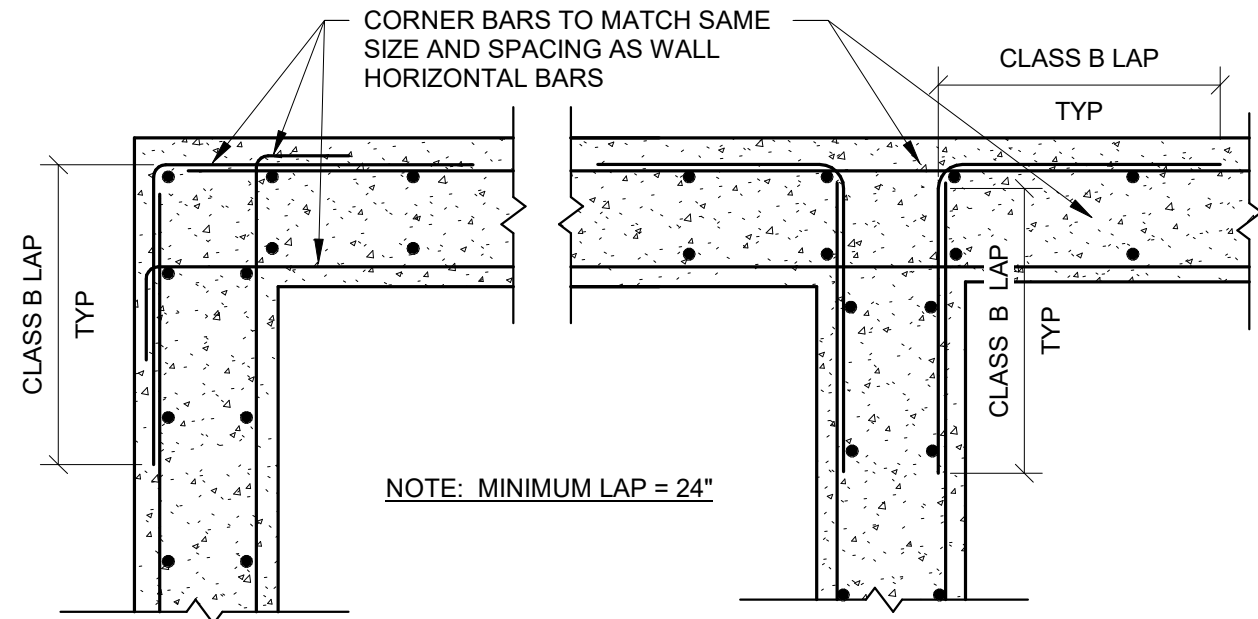
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S-201 TYP BOLLARD DETAIL  
3/4" = 1'-0"



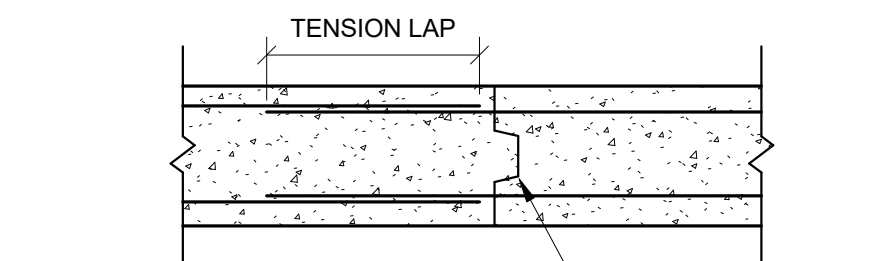
2  
S-201 TYP. SLAB CONSTRUCTION JOINT  
3/4" = 1'-0"



3  
S-201 TYP. SLAB CONTROL JOINT  
3/4" = 1'-0"

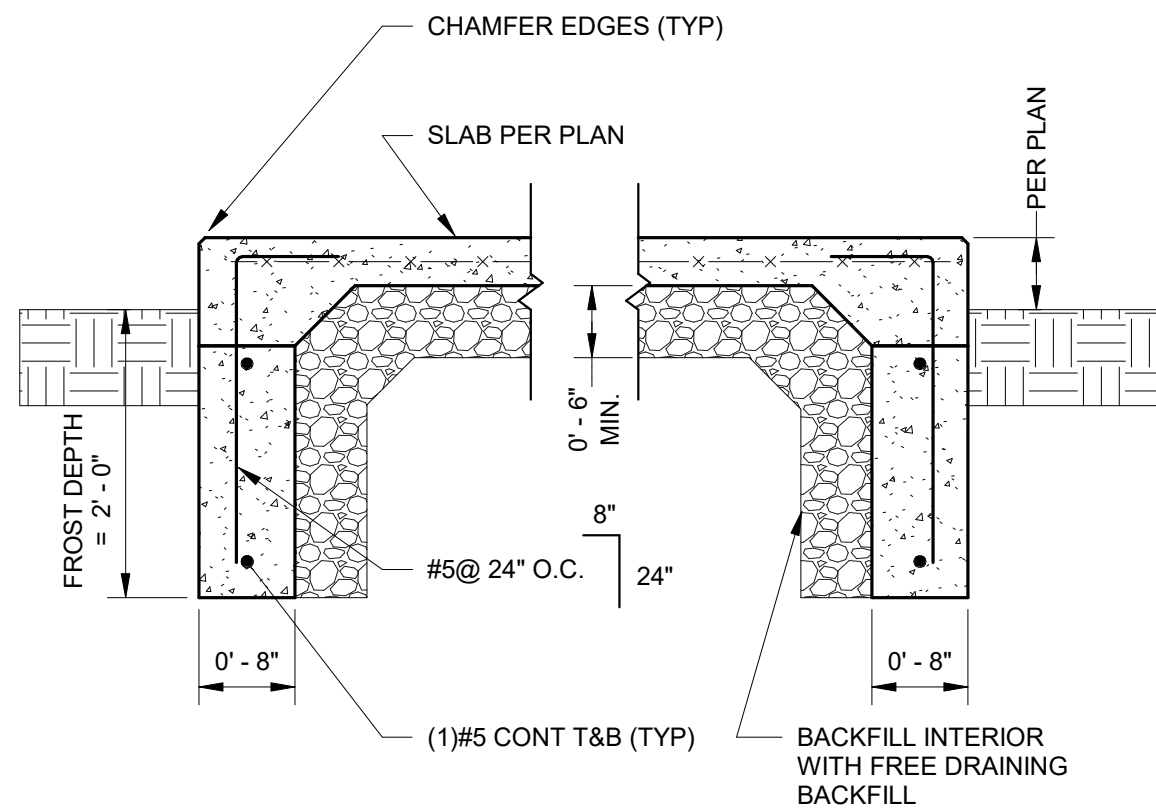


4  
S-201 TYP CORNERS AND INTERSECTIONS AT WALLS/GRADE BEAMS  
3/4" = 1'-0"

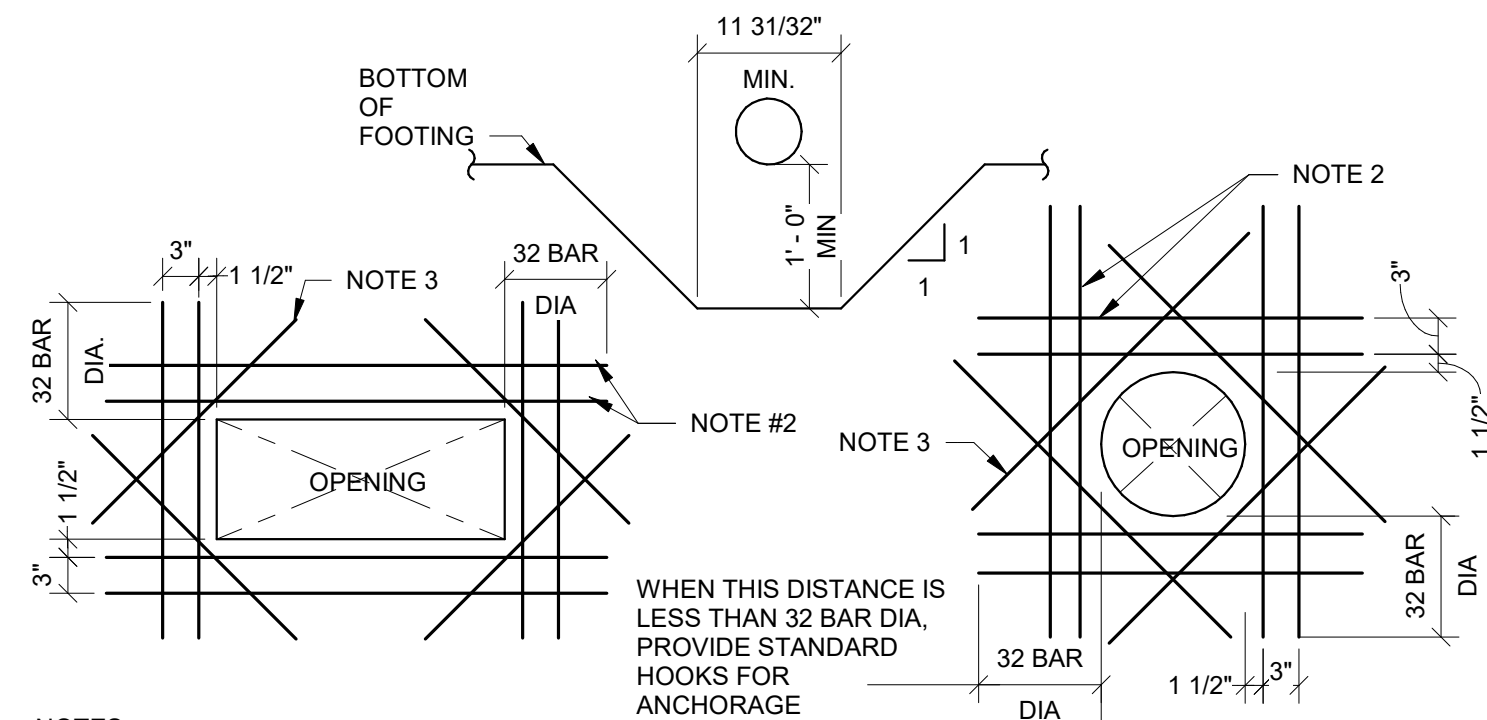


- NOTES:
- SUBMIT PROPOSED WALL JOINT LOCATIONS FOR APPROVAL PRIOR TO POURING WALL. CONSTRUCTION JOINTS SHALL BE SPACED NO CLOSER THAN 5'-0" FROM CORNERS AND/OR PIERS.
  - WHERE WALL SPANS HORIZONTALLY TO SUPPORT VERTICAL OR LATERAL LOADS, JOINTS SHALL BE LOCATED IN MIDDLE THIRD OF WALL SPANS, UNLESS NOTED OTHERWISE. REFER TO PLANS FOR LOCATIONS WHERE WALLS ARE SO DESIGNED.
  - REFER TO GENERAL NOTES FOR WALL REINFORCING SPLICE CRITERIA. (CLASS B LAP SPLICE ALLOWED BUT NOT REQUIRED AT CONSTRUCTION JOINT.)
  - LOCATE VERTICAL CONTROL JOINTS ACCORDING TO THE FOLLOWING CRITERIA:
    - WHERE SHOWN ON ARCHITECTURAL OR STRUCTURAL DRAWINGS.
    - AT 30'-0" MAXIMUM SPACING ALONG CONTINUOUS LENGTH OF WALL.
    - WITHIN 10'-0" OF CORNERS, NO CLOSER THAN 5'-0" FROM CORNERS AND/OR PIERS.
    - AT ABRUPT CHANGES IN WALL THICKNESS OR HEIGHT.
    - DO NOT LOCATE VERTICAL JOINTS IN WALLS THAT SPAN HORIZ TO RESIST LATERAL LOADS.

5  
S-201 TYP CONSTRUCTION JOINT IN FOUNDATION WALLS/GRADE BEAMS  
3/4" = 1'-0"



6  
S-201 TYP SLAB TURNDOWN  
3/4" = 1'-0"



7  
S-201 TYP ADDITIONAL REINF AT OPENINGS IN CONCRETE WALLS OR GRADE BEAMS  
3/4" = 1'-0"

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