GENERAL NOTES

ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS SET FORTH BY IBC 2018 EDITION AND SHALL CONFORM TO ALL OTHER APPLICABLE MUNICIPAL, STATE, AND FEDERAL REGULATIONS INCLUDING THE ILLINOIS ACCESSIBILITY CODE (2018) AND THE AMERICANS WITH DISABILITIES ACT.

A. GENERAL NOTES

1. ALL CONTRACTORS ARE REQUIRED TO VISIT THE SITE AND BE KNOWLEDGEABLE REGARDING EXISTING CONDITIONS AND THEIR EFFECT ON THE PROPOSED WORK. CONTRACTORS SHALL VERIFY AND BE RESPONSIBLE FOR, ANY CONDITIONS REQUIRING MODIFICATION BEFORE PROCEEDING WITH THE PROJECT.
2. NOTIFY THE OWNER'S REPRESENTATIVE A MINIMUM OF 72 HOURS PRIOR TO THE INTERRUPTION OF ANY UTILITY.
3. PROTECT AND KEEP IN SERVICE ACTIVE UNDERGROUND UTILITIES, PIPES, OR CONDUITS, WHETHER INDICATED ON THE DRAWINGS OR NOT, UNLESS SPECIFICALLY CALLED FOR TO BE REMOVED, RELOCATED, OR DISCONNECTED AND ABANDONED.
4. CONTRACTORS AND SUBCONTRACTORS SHALL COORDINATE THEIR WORK WITH THAT OF OTHER TRADES.
5. NO WORK WILL BE PERMITTED TO BE INSTALLED WITHOUT RECEIPT AND SUBSEQUENT REVIEW OF FULL AND COMPLETE SUBMITTALS BY THE ARCHITECT/ENGINEER.
6. DO NOT SCALE DRAWINGS, DIMENSIONS INDICATED TAKE PRECEDENCE OVER SCALE.
7. VERIFY ALL DIMENSIONS AND ELEVATIONS IN THE FIELD. WHERE DISCREPANCIES ARE FOUND BETWEEN DIMENSIONS OR ELEVATIONS SHOWN AND ACTUAL FIELD CONDITIONS, NOTIFY ARCHITECT/ENGINEER.
8. WHERE CONFLICTS MAY EXIST BETWEEN THE REQUIREMENTS OF PORTIONS OF THE CONTRACT DOCUMENTS, THE GREATER QUANTITY, HIGHER QUALITY OR MORE STRINGENT REQUIREMENT SHALL GOVERN. THEREFORE, BY EXECUTING A CONTRACT FOR CONSTRUCTION, THE CONTRACTOR AGREES THAT, IF IT RAISED NO QUESTIONS REGARDING SUCH CONFLICTS DURING THE BIDDING PROCESS, AND IN THE ABSENCE OF A CLARIFYING ADDENDUM ISSUED DURING THE BIDDING PROCESS, IT HAS VOLUNTEERED TO COMPLY WITH THE MORE EXPENSIVE REQUIREMENT AS PART OF ITS BASE BID AND IS NOT ENTITLED TO ANY ADDITIONAL COMPENSATION TO RESOLVE THE CONFLICT.
9. THE CONTRACT DOCUMENTS REQUIRE THE CONTRACTOR TO FURNISH AND INSTALL COMPLETE PRODUCTS, SYSTEMS AND SERVICES. BY EXECUTING A CONTRACT FOR CONSTRUCTION, THE CONTRACTOR AGREES THAT THE DRAWINGS SET FORTH THE DESIGN INTENT AND, THEREFORE, MAY NOT EXPRESSLY DEPICT EVERY LENGTH, SEGMENT, PIECE, PART, COMPONENT OR UNIT OF A PRODUCT, SYSTEM OR SERVICE. THE CONTRACTOR FURTHER AGREES THAT, AS PART OF ITS BID, IT MUST FURNISH AND INSTALL EVERY LENGTH, SEGMENT, PIECE, PART, COMPONENT OR UNIT OF A PRODUCT, SYSTEM OR SERVICE AND, CONSEQUENTLY, THE CONTRACTOR IS NOT ENTITLED TO ANY ADDITIONAL COMPENSATION FOR ANY LENGTH, SEGMENT, PIECE, PART COMPONENT OR UNIT OF A PRODUCT, SYSTEM OR SERVICE BECAUSE IT IS NOT EXPRESSLY DEPICTED HEREIN.

B: MISCELLANEOUS AND DEMOLITION NOTES

1. COORDINATE PENETRATIONS AND/OR SLEEVES REQUIRED IN WALLS, FLOORS, CEILINGS OR ROOFS FOR MECHANICAL AND ELECTRICAL WORK REQUIRED BY ARCHITECTURAL, MECHANICAL, ELECTRICAL, AND PLUMBING DRAWINGS.
2. SEAL WITH UL APPROVED MATERIALS PENETRATIONS OF DUCTWORK, CONDUIT AND PIPES THROUGH FIRE-RATED ASSEMBLIES, TO MAINTAIN THE RATING INTEGRITY OF THOSE ASSEMBLIES. PROVIDE FIRE DAMPERS AS INDICATED ON THE DRAWINGS.
3. SEAL WITH ACOUSTICAL SEALANT PENETRATIONS OF DUCTWORK, CONDUIT AND PIPES THROUGH NON-RATED FLOORS, FULL-HEIGHT WALLS/PARTITIONS, ACOUSTICALLY INSULATED WALLS/PARTITIONS, AND SOUND-RATED WALLS/PARTITIONS, TO MAINTAIN THE ACOUSTICAL INTEGRITY OF THOSE ASSEMBLIES.
4. APPLY APPROPRIATE & COMPATIBLE SEALANT MATERIALS AS REQUIRED TO SEPARATE DISSIMILAR METALS, FILL GAPS IN EXISTING ASSEMBLIES OR WHERE NEW AND EXISTING ASSEMBLIES MEET OR WHERE OTHERWISE REQUIRED BY THE SPECIFICATIONS.
5. BRING ANY UNFORESEEN OR CONFLICTING CONDITIONS TO THE IMMEDIATE ATTENTION OF THE ARCHITECT/ENGINEER BEFORE PROCEEDING WITH THE WORK.
6. REPAIR, PATCH, OR REPLACE FINISH MATERIALS OR VISIBLE ASSEMBLIES THAT ARE SOILED, CUT OR DAMAGED IN ANY FASHION DURING THE COURSE OF THE WORK. PERFORM PATCHING SUCH THAT EDGES BLEND INTO CONTIGUOUS SURFACES SMOOTHLY, MATCHING TEXTURE AND COLOR OF ADJACENT SURFACES.

C: BIDDING NOTES

1. CONTRACTOR TO PROVIDE A $20,000 ALLOWANCE IN HIS/HER BID FOR UNFORESEEN/MISCELLANEOUS CONDITIONS. WHEN FIGURING THE ALLOWANCE IN THE BID, CONTRACTOR IS TO INCLUDE ALL NECESSARY OVERHEAD AND PROFIT. THIS ALLOWANCE IS NOT FOR THE CONTRACTOR'S BENEFIT, AND IS ONLY AUTHORIZED TO CHARGE AGAINST THE ALLOWANCE WHEN DIRECTED AND APPROVED BY JOLIET JUNIOR COLLEGE. THE CONTRACTOR WILL BE ALLOWED TO INVOICE FOR MATERIAL AND RAW LABOR COST ONLY.

STANDARD ABBREVIATIONS

@	AT
A B	ANCHOR BOLT
ABR	ABRASIVE
ACP	ACOUSTICAL CEILING PANEL
ACT	ACOUSTICAL CEILING TILE
AFF	ABOVE FINISH FLOOR
AFG	ABOVE FINISH GRADE
ACOU	ACOUSTIC
ADD'N	ADDITION
ADD'L	ADDITIONAL
ADJ	ADJACENT OR ADJUSTABLE
AL	ALUMINUM
ALT	ALTERNATE
ANCHR	ANCHOR
AP	ACCESS PANEL
APPROX	APPROXIMATE
ASPH	ASPHALT
AUTO	AUTOMATIC
AVG	AVERAGE
BSMT	BASEMENT
B/	BOTTOM OF
BD	BOARD
BET	BETWEEN
BIT	BITUMINOUS
BLDG	BUILDING
BLKG	BLOCKING (WOOD)
BM	BEAM
B.M.	BENCH MARK
BRG	BEARING
BRKT	BRACKET
BRK	BRICK
BT STL PL	BENT STEEL PLATE
CJ	CONSTRUCTION OR CONTRACTION JOINT
CAB	CABINET
CEM PL-(1)	CEMENT PLASTER (TYPE)
CT PAV-(1)	CERAMIC PAVER TILE (TYPE)
CIP	CAST-IN-PLACE
CLG	CEILING
CLR	CLEAR
C.O.	CLEAN-OUT
CMU	CONCRETE MASONRY UNIT
COL	COLUMN
COMB	COMBINATION
COMP	COMPRESSIBLE OR COMPACTED
CONC	CONCRETE
CONC OPNG	CONCRETE OPENING
COND	CONDITION
CONT	CONTINUOUS
CONTR	CONTRACT(OR)
CPT-(1)	CARPET (TYPE)
CT-(1)	CERAMIC TILE (TYPE)
CTR	COUNTER
CTR SK	COUNTER SINK
CTRS	CENTER(S)
CUH	CABINET UNIT HEATER
CUV	CABINET UNIT VENTILATOR
DIA	DIAMETER
DIM	DIMENSION
DN	DOWN
DO	DOOR OPENING
DR	DOOR
DWGS	DRAWINGS
DTL	DETAIL
DWL'S	DOWELS
EA	EACH
EJ	EXPANSION JOINT
EL	ELEVATION
ELEC	ELECTRIC/ELECTRICAL
ELEC CONTR	ELECTRICAL CONTRACTOR
ELEV	ELEVATOR OR ELEVATION
EMBED	EMBEDMENT
EMER	EMERGENCY
EP	EPOXY
EQ	EQUAL
EW	EACH WAY
EWC	ELECTRIC WATER COOLER
EWH	ELECTRIC WATER HEATER
EXIST	EXISTING
EXP	EXPANSION
EXP CONST	EXPOSED CONSTRUCTION
FD	FLOOR DRAIN
FDN	FOUNDATION
FNDN	FOUNDATION
FE	FIRE EXTINGUISHER
FEC	FIRE EXTINGUISHER CABINET
FHC	FIRE HOSE CABINET
FIN	FINISH
FLR	FLOOR
FRT	FIRE RETARDANT TREATED
FUR CHN'L	FURRING CHANNEL
FTG	FOOTING
GA	GAUGE
GALV	GALVANIZED
GEN CONTR	GENERAL CONTRACTOR
GC	GENERAL CONTRACTOR
GL	GLASS
GYP BD-(1)	GYPSUM WALL BOARD (TYPE)
GYP PL-(1)	GYPSUM PLASTER (TYPE)
H	HIGH
HD	HEAVY DUTY OR HARD
HDNR	HARDENER
HD WD-(1)	HARD WOOD (TYPE)
HDWR	HARDWARE
HT	HEIGHT
HM	HOLLOW METAL
HP	HIGH POINT
HORIZ	HORIZONTAL
HTG	HEATING
HVAC	HEATING/VENTILATING/AIR CONDITIONING
IN	INCH
ID	INSIDE DIAMETER
INCL	INCLUDE/INCLUDING/INCLUDED
INSUL	INSULATION/INSULATING/INSULATED
JT	JOINT
KD	KNOCK DOWN
L	LONG
LAM	LAMINATE/LAMINATING/LAMINATED
LAV	LAVATORY
LH	LEFT HAND
LP	LOW POINT
LT WT	LIGHTWEIGHT
LL	LIVE LOAD
LLH	LONG LEG HORIZONTAL
LLV	LONG LEG VERTICAL
LVR	LOUVER
MO	MASONRY OPENING
MT	METAL THRESHOLD
MAS	MASONRY
MATL	MATERIAL
MAX	MAXIMUM
MB (16)	MARKERBOARD (LENGTH IN FEET)
MECH	MECHANICAL
MECH CONTR	MECHANICAL CONTRACTOR
MFR	MANUFACTURER
MIN	MINIMUM OR MINUTE(S)
MISC	MISCELLANEOUS
MSB	MOP SERVICE BASIN (SINK)
MT(D)	MOUNT(ED)
MTL	METAL
NIC	NOT IN CONTRACT
NC	NEW CONNECTION
NOM	NOMINAL
NTS	NOT TO SCALE
NO	NUMBER
OA	OVERALL OR OUTSIDE AIR
OC	ON CENTER
OD	OUTSIDE DIAMETER
OF	OUTSIDE FACE OR OPPOSITE FACE
OPNG	OPENING
OPP	OPPOSITE OR OPPOSITE HAND
PSF	POUNDS PER SQUARE FOOT
PS	POUNDS PER SQUARE INCH
PT	PRESSURE TREATED OR PAINT
PTN	PARTITION
PVMT	PAVEMENT
PC	PIECE
PL	PLATE
PLAM	PLASTIC LAMINATE(D)
PL	PLASTER
PLB'G	PLUMBING
PLB'G CONTR	PLUMBING CONTRACTOR
PLYWD	PLYWOOD
PNT	PAINT
PO	PRECAST (CONCRETE) OPENING
PVC	POLYVINYL CHLORIDE
PL-(1)	GYPSUM PLASTER (TYPE)
R	RISER
R OR RAD	RADIUS
RD	ROOF DRAIN
RO	ROUGH OPENING
RF (1)	RUBBER FLOORING (TYPE)
RH	RIGHT HAND
REF	REFERENCE
REINF	REINFORCE/REINFORCING/REINFORCED
REQ'D	REQUIRED
RM	ROOM
SF	SQUARE FOOT
SI	SQUARE INCH
SK	SINK
SS	STAINLESS STEEL
SSK	SERVICE SINK
SQ	SQUARE
SCHED	SCHEDULE
SEAL/HDNR	SEALER/HARDENER
SEC	SECTION
SHT	SHEET
SIM	SIMILAR
SOG	SLAB ON GRADE
SPEC(S)	SPECIFICATION(S)
SPC'G	SPACING
SPK'R	SPEAKER
STD	STANDARD
STD WT	STANDARD WEIGHT
STL	STEEL
STRUCT	STRUCTURE OR STRUCTURAL
SUSP	SUSPEND(ED)
SYM	SYMMETRICAL
T	TREAD
T&G	TONGUE AND GROOVE
T/BEAM	TOP OF
T/BEAM	TOP OF BEAM
T/C	TOP OF CURB
T/FNDN	TOP OF FOUNDATION
T/STL	TOP OF STEEL
T/WALL	TOP OF WALL
TB (4)	TACKBOARD (LENGTH IN FEET)
T/MAS	TOP OF MASONRY
TYP	TYPICAL
UD	(WINDOW) UNIT DIMENSION
UNO	UNLESS NOTED OTHERWISE
VBC	VINYL BASE COVED
VBS	VINYL BASE STRAIGHT
VCT	VINYL COMPOSITION TILE
VEN PL (1)	VENEER PLASTER (TYPE)
VERT	VERTICAL
W	WIDE OR WIDTH
W/	WITH
W/O	WITHOUT
WCG	WALL CORNER GUARD
WD	WOOD
WDW	WINDOW
WT	WEIGHT
WP	WATER PROOF
WWF	WELDED WIRE FABRIC
WSB	WALL SERVICE BASIN

THE MATERIALS, ABBREVIATIONS, AND DRAFTING SYMBOLS LEGEND ARE EACH AN ALL INCLUSIVE MASTER LIST USED BY THIS FIRM. THE INCLUSION OF THESE LEGENDS INTO THESE DOCUMENTS DOES NOT IMPLY THAT ALL THE SYMBOLS OR MATERIALS INCLUDED IN THESE LEGENDS ARE INCORPORATED INTO THIS PROJECT. ABBREVIATIONS MAY APPEAR WITH PERIODS OR OTHER PUNCTUATION SEPARATING CHARACTERS ON THE DRAWINGS; THE MEANING REMAINS THE SAME.

DRAFTING SYMBOLS AND MATERIALS LEGEND

- DETAIL NUMBER / DRAWING NUMBER — 8 / A12.24
- DETAIL NUMBER / DRAWING NUMBER — 23 / A7.19
- DETAIL NUMBER / DRAWING NUMBER — 2, 6, A9.16, 5, 3
- DETAIL NUMBER / DRAWING NUMBER — 1 / A6.05
- COLUMN NO. — 26
- REFERENCE LINE NO. — 26
- LOCATION ELEVATION — T/1ST FLR. 100'-0"
- ROOM NUMBER — 204
- DOOR NO. NEW — 203.2
- DOOR NO. EXISTING — 203.1X
- NOMINAL THICKNESS / CONSTRUCTION TYPE / SPECIAL CONDITION — M8b
- KEYNOTE IDENTIFICATION — 7.531
- WINDOW TYPE IDENTIFICATION — X
- TOILET ACCESSORY IDENTIFICATION — A
- SPOT ELEVATION — T/1ST. FLR. 100'-0"
- CONCRETE
- BRICK MASONRY IN PLAN
- CONCRETE MASONRY IN PLAN (RUNNING BOND)
- CONCRETE MASONRY IN PLAN (STACK BOND)
- STONE MASONRY IN PLAN
- RAKED JOINT IN PLAN / CTRL./EXP. JOINT IN PLAN
- BRICK MASONRY IN SECTION DETAIL
- CONCRETE MASONRY IN SECTION DETAIL
- STONE MASONRY IN SECTION DETAIL
- STEEL IN SECTION DETAIL
- DISCONTINUOUS ROUGH WOOD BLOCKING IN SECTION
- CONTINUOUS ROUGH WOOD FRAMING/BLOCKING IN SECTION
- FINISHED WOOD IN SECTION DETAIL
- RIGID BOARD INSULATION
- RIGID BOARD INSULATION (ROOFING)
- BATT INSULATION
- GYPSUM BOARD
- ACOUSTICAL CEILING PANEL
- BITUMINOUS CONCRETE (ASPHALT) PAVING IN SECTION
- AGGREGATE BALLAST, FILL OR BACKFILL IN SECTION
- UNDISTURBED EARTH
- EARTH BACKFILL

JOLIET JUNIOR COLLEGE — 1901

PROJECT — **BLACK BOX THEATRE AHU AND PIPE INSULATION**
1215 HOUBOLT ROAD
JOLIET, IL 60431

OWNER — **JOLIET JUNIOR COLLEGE**
1215 HOUBOLT ROAD
JOLIET, IL 60431

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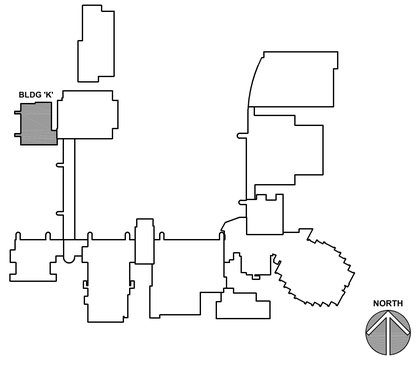

INDEX OF DRAWINGS

APPLICABLE CODES

2018 INTERNATIONAL BUILDING CODE
2018 INTERNATIONAL MECHANICAL CODE
2018 INTERNATIONAL FUEL AND GAS CODE
2018 INTERNATIONAL EXISTING BUILDING CODE
2018 INTERNATIONAL FIRE CODE
2020 NATIONAL ELECTRICAL CODE
LOCAL AMENDMENTS TO THE ABOVE CODES

2014 ILLINOIS PLUMBING CODE
2018 ILLINOIS ENERGY CONSERVATION CODE (2018 INTERNATIONAL ENERGY CONSERVATION CODE W/STATE AMENDMENTS)
2018 ILLINOIS ACCESSIBILITY CODE

SEALS & CERTIFICATIONS

I HAVE PREPARED, OR CAUSED TO BE PREPARED UNDER MY DIRECT SUPERVISION, THE ATTACHED PLANS AND SPECIFICATIONS AND STATE THAT TO THE BEST OF MY KNOWLEDGE AND BELIEF, AND TO THE EXTENT OF MY CONTRACTUAL OBLIGATION, THEY ARE IN COMPLIANCE WITH IBC 2018 EDITION, THE ENVIRONMENTAL BARRIERS ACT AND THE ILLINOIS ACCESSIBILITY CODE.

KLUBER, INC. ILLINOIS PROFESSIONAL DESIGN FIRM LICENSE #184-001284

ARCHITECT'S SEAL — LICENSED ARCHITECT — CLAYTON D. HALDEMAN — 001-015007 — STATE OF ILLINOIS
expires 11-30-2026
signature
AUGUST 12, 2025
date
"G" SERIES, "A" SERIES

STRUCTURAL ENGINEER'S SEAL — LICENSED STRUCTURAL ENGINEER — JEFFREY M. BRUNS — 081-006044 — STATE OF ILLINOIS
expires 11-30-20 26
signature
AUGUST 12, 2025
date
"G" SERIES, "S" SERIES

MECHANICAL ENGINEER'S SEAL — LICENSED PROFESSIONAL ENGINEER — DONALD D. WARE, JR. — 062-052082 — STATE OF ILLINOIS
expires 11-30-2025
signature
AUGUST 12, 2025
date
"G" SERIES, "M" SERIES, "F" SERIES

ELECTRICAL ENGINEER'S SEAL — LICENSED PROFESSIONAL ENGINEER — MICHAEL T. KLUBER — 062-047325 — STATE OF ILLINOIS
expires 11-30-2025
signature
AUGUST 12, 2025
date
"G" SERIES, "E" SERIES

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BLACK BOX THEATRE AHU AND PIPE INSULATION
JOLIET JUNIOR COLLEGE
1215 HOUBOLT ROAD
JOLIET, ILLINOIS 60431

ISSUED
08/13/25 BID & PERMIT DOCUMENTS

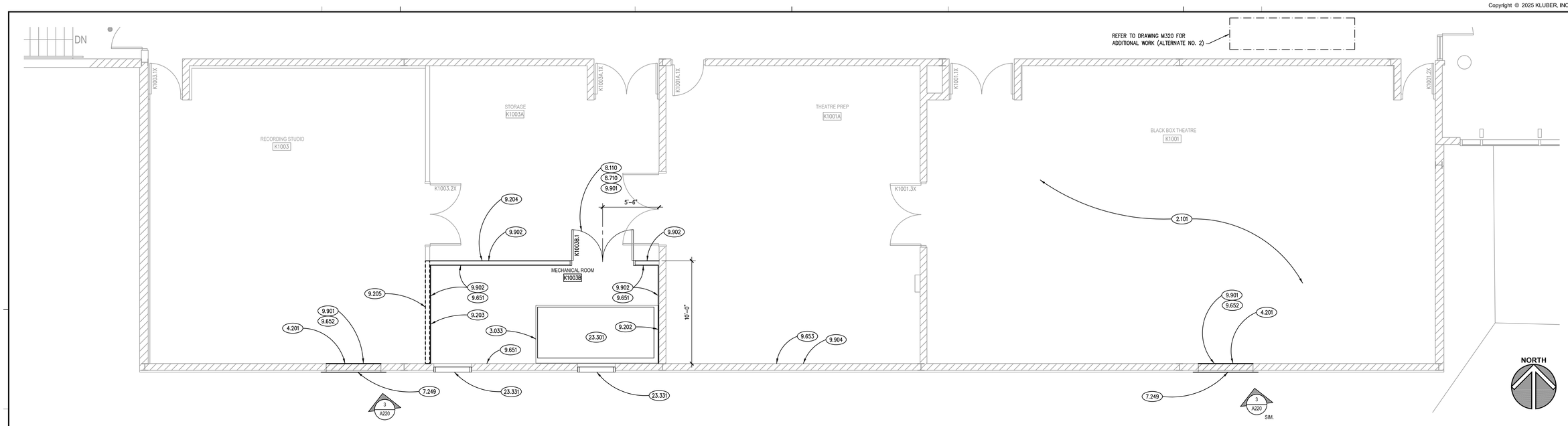
JOB NO. 24-292-1574
DRAWN BWG
CHECKED DDW
APPROVED DDW

SHEET TITLE
COVER SHEET, GENERAL NOTES, SYMBOLS AND DRAWING INDEX

SHEET NUMBER
G100

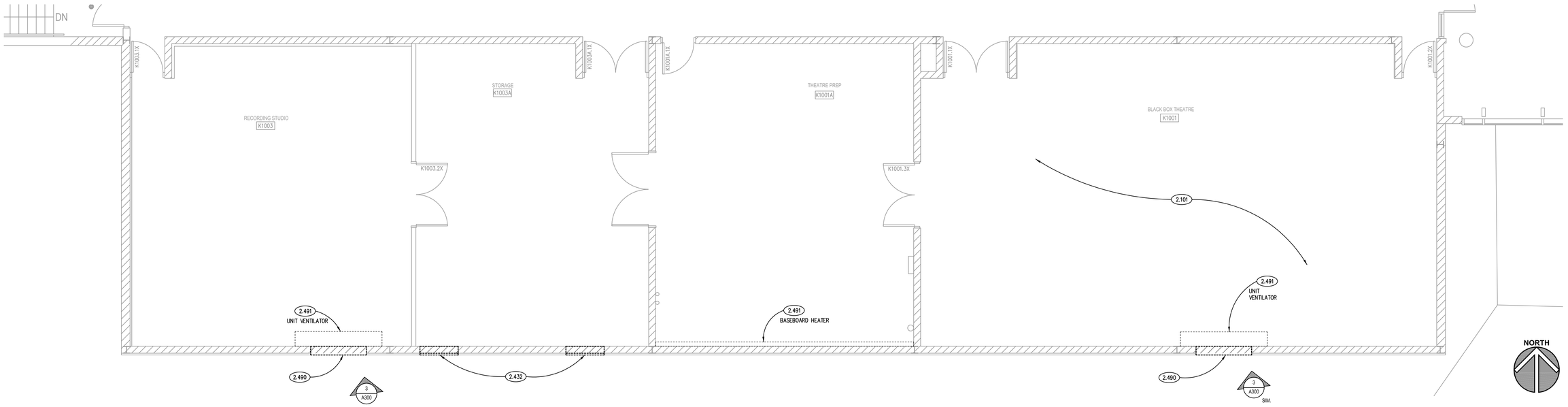
NOTE: SCALES DEPICTED ON THIS DRAWING ARE NOT CORRECT UNLESS PLOTTED SHEET SIZE IS 30 X 42 INCHES.

P:\1574 - JJC - Black Box Theater Cooling Unit Replacement\30_Design\Dwgs\DD-CD\01_Gen\1574D0100.dwg 8/7/2025 2:07:15 PM BWG



SECOND FLOOR NEW WORK PLAN (1)

SCALE: 1/4" = 1'-0"



SECOND FLOOR DEMOLITION PLAN (2)

SCALE: 1/4" = 1'-0"

KEYNOTES

KEYNOTES ARE TYPICALLY NOT DUPLICATED WITHIN A GIVEN DETAIL. AN UN-KEYNOTED ITEM IN A DETAIL IS THE SAME AS A KEYNOTED ITEM HAVING THE SAME APPEARANCE WITHIN THE SAME DETAIL.

2.101 PROTECT EXISTING INTERIOR SPECIALTY TO REMAIN: OVERHEAD PIPE GRID AND LIGHTING AND OTHER EQUIPMENT AND COMPONENTS MOUNTED THERETO.

2.432 REMOVE EXISTING EXTERIOR WALL CONSTRUCTION: MASONRY CAVITY WALL.

2.490 REMOVE EXISTING MECHANICAL SYSTEM COMPONENT: WALL LOUVER AND WALL SLEEVE; REFER TO MECHANICAL DRAWINGS FOR ADDITIONAL INFORMATION.

2.491 REMOVE EXISTING MECHANICAL SYSTEM COMPONENT: AS INDICATED; REFER TO MECHANICAL DRAWINGS FOR ADDITIONAL INFORMATION.

3.033 CAST-IN-PLACE CONCRETE: HOUSEKEEPING PAD; SIZE TO ACCOMMODATE EQUIPMENT; REFER TO STRUCTURAL DRAWING FOR ADDITIONAL INFORMATION.

4.201 MASONRY WALL ASSEMBLY: INFILL EXISTING OPENING WITH 8" (NOM.) CONCRETE BLOCK, WITH INTEGRAL WATER REPELLANT.

7.249 EXTERIOR INSULATION AND FINISH SYSTEM ASSEMBLY: INFILL EXISTING OPENING; 2" EPS INSULATION; DRAINAGE PLANE BEHIND INSULATION; MATCH EXISTING EIFS FINISH TEXTURE, COLOR AND V-GROOVE PATTERN; BLEND HEAD, SILL AND JAMBS INTO EXISTING ADJACENT EIFS SURFACES; CLEAN SURROUNDING EIFS SURFACES TO BLEND INFILL SURFACE TO EXISTING; REFER TO SPECIFICATIONS.

8.110 SOUND-RATED STEEL DOOR FRAME: REFER TO SPECIFICATIONS; FABRICATE DOOR WITH MANUFACTURERS' ACOUSTICAL CORE MATERIAL; PACK FRAME CAVITY WITH SOUND-ATTENUATING INSULATION; PROVIDE DOORS WITH MANUFACTURER'S ACOUSTICAL ASTRAGAL.

8.710 DOOR HARDWARE: BUTT HINGES; STOREROOM FUNCTION LOCKSET ON RHR (ACTIVE) LEAF; FLUSH BOLTS ON INACTIVE LEAF; CLOSER WITH CUSHION STOP FUNCTION AND HOLD-OPEN FUNCTION ON ACTIVE LEAF; PERIMETER ACOUSTICAL SEALS AND AUTOMATIC DOOR BOTTOMS FOR BOTH LEAVES; FLAT PLATE THRESHOLD.

9.202 GYPSUM BOARD ASSEMBLY: ACOUSTIC FUR-OUT; 5/8" GYPSUM BOARD OVER SPECIFIED 1/8" THK. ACOUSTICAL SHIELDING SHEET MEMBRANE OVER 1/2" RESILIENT CHANNELS ATTACHED HORIZONTALLY AT 16" O.C. TO EXISTING CONCRETE MASONRY, WITH PROJECTING LEG TURNED UP; ENTIRE ASSEMBLY CONTINUOUS FROM FLOOR SLAB TO UNDERSIDE OF FLOOR DECK ABOVE; SEAL PERIMETER AND AROUND PENETRATIONS WITH SPECIFIED ACOUSTICAL SEALANT.

9.203 GYPSUM BOARD ASSEMBLY: ACOUSTIC FUR-OUT; 5/8" GYPSUM BOARD OVER SPECIFIED 1/8" THK. ACOUSTICAL SHIELDING SHEET MEMBRANE OVER 1/2" RESILIENT CHANNELS ATTACHED HORIZONTALLY AT 16" O.C. THROUGH EXISTING GYPSUM BOARD INTO METAL STUDS, WITH PROJECTING LEG TURNED UP; ENTIRE ASSEMBLY CONTINUOUS FROM FLOOR SLAB TO UNDERSIDE OF FLOOR DECK ABOVE; SEAL PERIMETER AND AROUND PENETRATIONS WITH SPECIFIED ACOUSTICAL SEALANT.

9.204 GYPSUM BOARD ASSEMBLY: ACOUSTICALLY IMPROVED WALL ASSEMBLY; CONTINUOUS FROM FLOOR TO UNDERSIDE OF FLOOR DECK ABOVE; 3-5/8" STEEL STUDS AT 16" O.C. WITH 3" SOUND-ATTENUATING INSULATION BETWEEN STUDS; SPECIFIED 1/8" THK. ACOUSTICAL SHIELDING SHEET MEMBRANE ON ROOM K1003B SIDE OVER STUDS; 1/2" RESILIENT CHANNELS ON ROOM K1003A SIDE MOUNTED HORIZONTALLY AT 16" O.C. ACROSS STUDS, WITH PROJECTING LEG TURNED UP; ONE LAYER OF 5/8" GYPSUM BOARD ATTACHED TO RESILIENT CHANNELS ON K1003A SIDE AND TO STUDS OVER ACOUSTICAL SHIELDING ON K1003B SIDE; SEAL PERIMETER OF WALL AND AROUND PENETRATIONS WITH SPECIFIED ACOUSTICAL SEALANT.

9.205 GYPSUM BOARD ASSEMBLY: CONSTRUCT STUDS AND GYPSUM BOARD (BOTH SIDES OF STUDS) FROM TOP OF EXISTING 11' HIGH STEEL-STUD-FRAMED GYPSUM BOARD-CLAD WALL TO UNDERSIDE OF FLOOR DECK ABOVE.

9.651 RESILIENT BASE: APPLY TO ENTIRE LENGTH OF WALL.

9.652 RESILIENT BASE: APPLY TO INFILL AREA BEHIND REMOVED UNIT VENTILATOR.

9.653 RESILIENT BASE: APPLY TO INFILL AREA BEHIND REMOVED BASEBOARD HEATER.

9.901 BLOCK FILL AND PAINT CONCRETE MASONRY LEFT EXPOSED TO VIEW AFTER REMOVAL OF UNIT VENTILATOR; MATCH SURROUNDING BLACK WALL COLOR AND SHEEN.

9.902 PRIME AND PAINT ENTIRE WALL SURFACE.

9.904 PAINT CONCRETE MASONRY LEFT EXPOSED TO VIEW AFTER REMOVAL OF BASEBOARD HEATER; MATCH SURROUNDING BLACK WALL COLOR AND SHEEN.

23.301 MECHANICAL EQUIPMENT: REFER TO MECHANICAL DRAWINGS.

23.331 MECHANICAL DUCT ACCESSORY: WALL LOUVER; REFER TO MECHANICAL DRAWINGS.

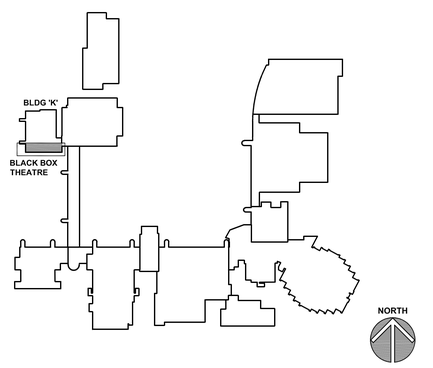
SOUTH ELEVATION DETAIL PHOTO (3)

SCALE: NONE

GENERAL NOTES

1. REFER TO DRAWING G100 FOR PROJECT GENERAL NOTES.
2. UNLESS NOTED OTHERWISE, WHERE EXISTING FLOOR, WALL AND CEILING SURFACES ARE SCHEDULED TO RECEIVE FINISHES, DEMOLISH EXISTING FINISH MATERIALS (EXCEPT PROPERLY ADHERED PAINT) AND SALVAGE SURFACE-MOUNTED ITEMS; PROPERLY PREPARE SURFACES TO RECEIVE NEW FINISHES; REINSTALL SURFACE-MOUNTED ITEMS AT NEW LOCATIONS DETERMINED BY OWNER UNLESS SPECIFIC LOCATIONS ARE INDICATED ON DRAWINGS.
4. STORE SALVAGED ITEMS AS DIRECTED BY OWNER.
5. PROTECT SALVAGED ITEMS FROM DAMAGE UNTIL INCORPORATED INTO THE WORK OR UNTIL MOVED TO OWNER'S PERMANENT STORAGE.
6. ADDITIONAL DEMOLITION/ RECONSTRUCTION AND REMOVAL/REPLACEMENT OF ARCHITECTURAL AND STRUCTURAL ELEMENTS IS REQUIRED TO COMPLETE THE WORK OF THIS PROJECT. COORDINATE WITH ARCHITECTURAL, MECHANICAL, FIRE PROTECTION AND ELECTRICAL DRAWINGS, AND PROVIDE DEMOLITION/RECONSTRUCTION AND REMOVAL/REPLACEMENT OF ARCHITECTURAL AND STRUCTURAL ELEMENTS AS REQUIRED TO COMPLETE THE WORK SHOWN ON THOSE DRAWINGS.
7. IN METAL STUD/GYPSUM BOARD PARTITIONS AND WALLS, PROVIDE 2X FIRE RETARDANT TREATED WOOD BLOCKING FOR WALL-MOUNTED ITEMS REQUIRING MECHANICAL ANCHORAGE.
8. ADDITIONAL DEMOLITION/ RECONSTRUCTION AND REMOVAL/REPLACEMENT OF ARCHITECTURAL AND STRUCTURAL ELEMENTS IS REQUIRED TO COMPLETE THE WORK OF THIS PROJECT. COORDINATE WITH ARCHITECTURAL, MECHANICAL, FIRE PROTECTION AND ELECTRICAL DRAWINGS, AND PROVIDE DEMOLITION/RECONSTRUCTION AND REMOVAL/REPLACEMENT OF ARCHITECTURAL AND STRUCTURAL ELEMENTS AS REQUIRED TO COMPLETE THE WORK SHOWN ON THOSE DRAWINGS.
9. EXISTING THIRD FLOOR DECK IS APPROXIMATELY 14'-6" ABOVE EXISTING SECOND FLOOR.

KEY PLAN



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BLACK BOX THEATRE AHU AND PIPE INSULATION

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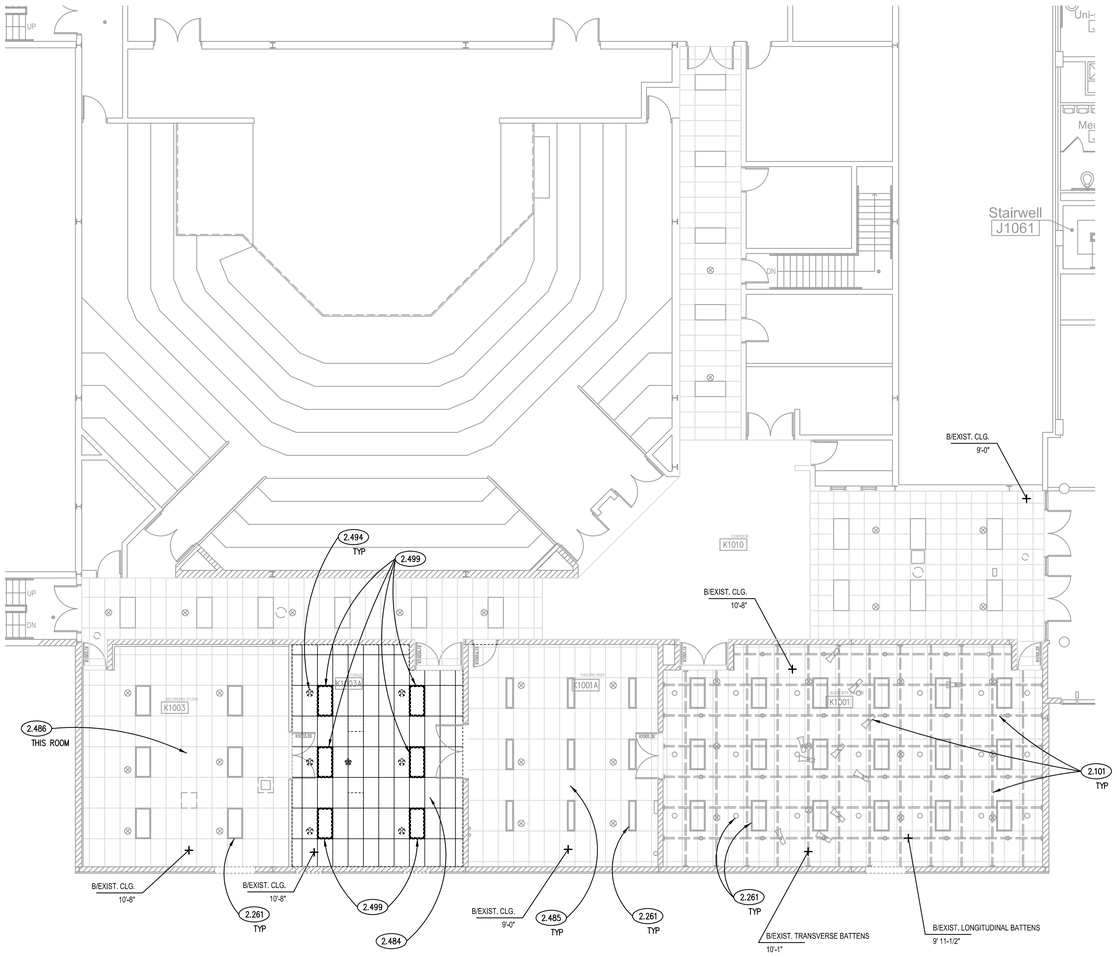
ISSUED
06/12/25 BID & PERMIT DOCUMENTS

JOB NO. 24-292-1574
DRAWN CDH
CHECKED CDH
APPROVED CDH

SHEET TITLE
SECOND FLOOR ARCHITECTURAL PLANS

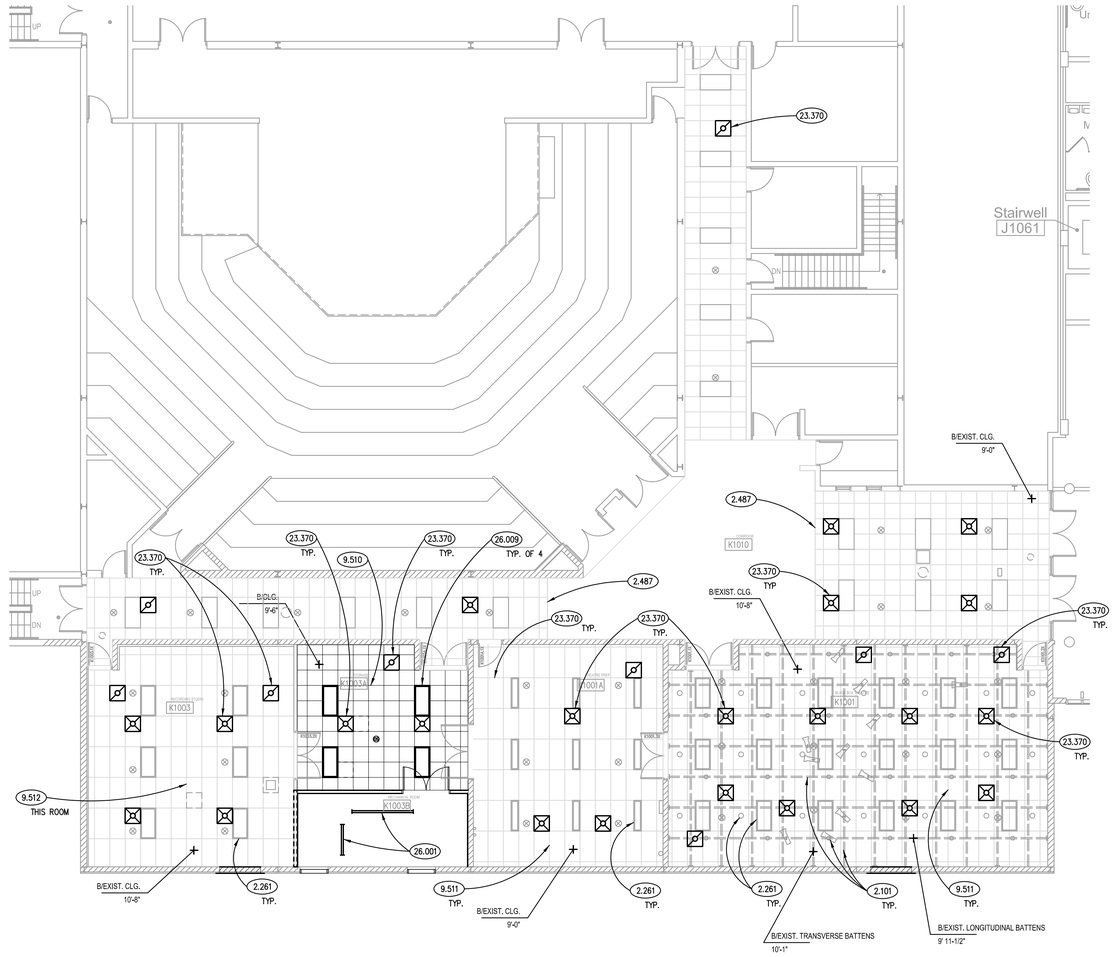
SHEET NUMBER
A320

NOTE: SCALES DEPICTED ON THIS DRAWING ARE NOT CORRECT UNLESS PLOTTED SHEET SIZE IS 30 X 42 INCHES.



FIRST FLOOR REFLECTED CEILING DEMOLITION PLAN (2)

SCALE: 1/8" = 1'-0"



FIRST FLOOR NEW WORK REFLECTED CEILING PLAN (1)

SCALE: 1/8" = 1'-0"

KEYNOTES

KEYNOTES ARE TYPICALLY NOT DUPLICATED WITHIN A GIVEN DETAIL. AN UN-KEYNOTED ITEM IN A DETAIL IS THE SAME AS A KEYNOTED ITEM HAVING THE SAME APPEARANCE WITHIN THE SAME DETAIL.

2.101 PROTECT EXISTING INTERIOR SPECIALTY TO REMAIN: OVERHEAD PIPE GRID AND LIGHTING AND OTHER EQUIPMENT AND COMPONENTS MOUNTED THERETO.
2.261 PROTECT EXISTING LIGHT FIXTURE TO REMAIN; PROVIDE TEMPORARY SUPPORT AS REQUIRED TO PERMIT PERFORMANCE OF WORK DEPICTED ON MECHANICAL DRAWINGS; PERMANENTLY RE-SUPPORT FIXTURE INDEPENDENTLY FROM EXISTING CEILING AFTER COMPLETION OF MECHANICAL WORK.
2.484 REMOVE EXISTING INTERIOR CEILING FINISH: ACOUSTICAL PANELS AND SUSPENDED GRID.
2.485 TEMPORARILY REMOVE EXISTING INTERIOR CEILING FINISH: ACOUSTICAL PANELS AND GRID; AS REQUIRED TO PERFORM WORK DEPICTED ON MECHANICAL DRAWINGS; STORE AND PROTECT PANELS AND GRID COMPONENTS.
2.486 TEMPORARILY REMOVE EXISTING INTERIOR CEILING FINISH: ACOUSTICAL PANELS AND GRID; AS REQUIRED TO PERFORM WORK DEPICTED ON MECHANICAL AND ARCHITECTURAL DRAWINGS; STORE AND PROTECT PANELS AND GRID COMPONENTS.
2.487 ALTERNATE NO. 2 – TEMPORARILY REMOVE EXISTING INTERIOR CEILING FINISH: ACOUSTICAL PANELS AND GRID; AS REQUIRED TO PERFORM WORK DEPICTED ON MECHANICAL DRAWINGS; STORE AND PROTECT PANELS AND GRID COMPONENTS.
2.494 REMOVE EXISTING FIRE PROTECTION SYSTEM COMPONENT: SPRINKLER HEAD; REFER TO FIRE PROTECTION DRAWINGS FOR ADDITIONAL INFORMATION.
2.499 TEMPORARILY REMOVE EXISTING LIGHT FIXTURE; PROTECT AND SAVE FOR RE-USE; REFER TO ARCHITECTURAL NEW WORK PLANS AND ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION.

9.510 ACOUSTICAL CEILING PANELS AND GRID.
9.511 REINSTALL SALVAGED ACOUSTICAL PANELS AND GRID COMPONENTS AFTER COMPLETION OF MECHANICAL WORK; REPLACE PANELS AND GRID COMPONENTS DAMAGED DURING DEMOLITION OR CONSTRUCTION OPERATIONS WITH NEW ELEMENTS MATCHING EXISTING.
9.512 REINSTALL SALVAGED ACOUSTICAL PANELS AND GRID COMPONENTS AFTER COMPLETION OF MECHANICAL AND ARCHITECTURAL WORK; REPLACE PANELS AND GRID COMPONENTS DAMAGED DURING DEMOLITION OR CONSTRUCTION OPERATIONS WITH NEW ELEMENTS MATCHING EXISTING.

23.370 MECHANICAL DIFFUSER/GRILLE: REFER TO MECHANICAL DRAWINGS.

26.001 LIGHT FIXTURE: REFER TO ELECTRICAL DRAWINGS.
26.009 REINSTALL EXISTING LIGHT FIXTURE: REFER TO ELECTRICAL DRAWINGS.

GENERAL NOTES

1. REFER TO DRAWING G100 FOR PROJECT GENERAL NOTES.
2. UNLESS NOTED OTHERWISE, WHERE EXISTING FLOOR, WALL AND CEILING SURFACES ARE SCHEDULED TO RECEIVE FINISHES, DEMOLISH EXISTING FINISH MATERIALS (EXCEPT PROPERLY ADHERED PAINT) AND SALVAGE SURFACE-MOUNTED ITEMS; PROPERLY PREPARE SURFACES TO RECEIVE NEW FINISHES; REINSTALL SURFACE-MOUNTED ITEMS AT NEW LOCATIONS DETERMINED BY OWNER UNLESS SPECIFIC LOCATIONS ARE INDICATED ON DRAWINGS.
4. STORE SALVAGED ITEMS AS DIRECTED BY OWNER.
5. PROTECT SALVAGED ITEMS FROM DAMAGE UNTIL INCORPORATED INTO THE WORK OR UNTIL MOVED TO OWNER'S PERMANENT STORAGE.
6. ADDITIONAL DEMOLITION/ RECONSTRUCTION AND REMOVAL/REPLACEMENT OF ARCHITECTURAL AND STRUCTURAL ELEMENTS IS REQUIRED TO COMPLETE THE WORK OF THIS PROJECT. COORDINATE WITH ARCHITECTURAL, MECHANICAL, FIRE PROTECTION AND ELECTRICAL DRAWINGS, AND PROVIDE DEMOLITION/RECONSTRUCTION AND REMOVAL/REPLACEMENT OF ARCHITECTURAL AND STRUCTURAL ELEMENTS AS REQUIRED TO COMPLETE THE WORK SHOWN ON THOSE DRAWINGS.
7. IN METAL STUD/GYPSUM BOARD PARTITIONS AND WALLS, PROVIDE 2X FIRE RETARDANT TREATED WOOD BLOCKING FOR WALL-MOUNTED ITEMS REQUIRING MECHANICAL ANCHORAGE.
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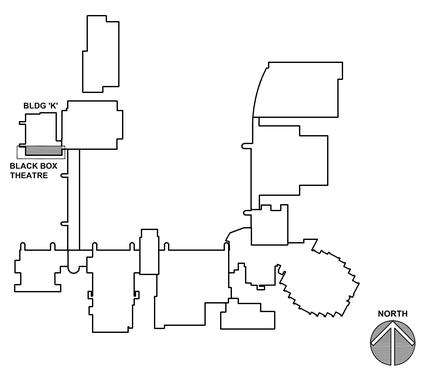
9. EXISTING THIRD FLOOR DECK IS APPROXIMATELY 14'-6" ABOVE EXISTING SECOND FLOOR.

KEY PLAN



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SECOND FLOOR ARCHITECTURAL REFLECTED CEILING PLANS

SHEET NUMBER
A420

NOTE: SCALES DEPICTED ON THIS DRAWING ARE NOT CORRECT UNLESS PLOTTED SHEET SIZE IS 30 X 42 INCHES.

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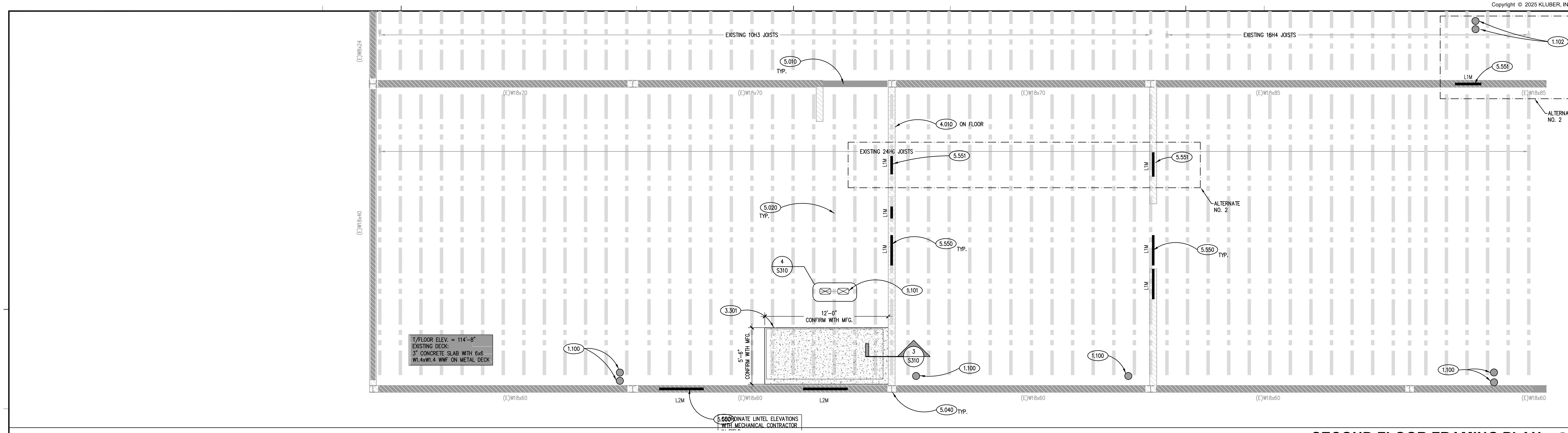


SECOND FLOOR FRAMING PLAN (1)

SCALE: 1/4" = 1'-0"

GENERAL NOTES

1. CONTRACTOR SHALL COORDINATE ALL DIMENSIONS AND ELEVATIONS WITH ARCHITECTURAL, M.E.P., AND VENDOR PREPARED SHOP DRAWINGS AND EXISTING CONDITIONS. SEE ARCHITECTURAL DRAWINGS FOR WORKPOINTS.

2. HORIZONTAL RUNS OF CABLING, CONDUIT, PIPING OR ANY SUCH M.E.P. ITEMS ARE NOT TO BE PLACED WITHIN THE CROSS-SECTION OF THE SLABS/DECKS. ALL SUCH ITEMS ARE TO BE INSTALLED BELOW THE SLAB/DECK WITH INDUSTRY STANDARD, ENGINEERED APPROVED SYSTEMS. THE CONTRACTOR DURING HIS BID SHALL ASSUME THAT HE NEEDS TO PROVIDE AND ENGINEER ALL SUPPLEMENTAL FRAMING ELEMENTS TO SPAN TO THE STRUCTURAL ELEMENTS THEREBY BY-PASSING THE SLABS/DECKS. ALL SUCH SYSTEMS ARE SUBJECT TO THE REVIEW OF ENGINEER OF RECORD. SEE REQUIREMENTS FOR HANGING COMPONENTS DIRECTLY FROM ROOF DECKS ON SHEET S320.

3. ALL ARCHITECTURAL AND M.E.P. EQUIPMENT EITHER HUNG OR BEARING UPON FRAMING FOLLOWING INDUSTRY STANDARD, ENGINEERED APPROVED SYSTEMS. THE INDIVIDUAL TRADE CONTRACTOR IS TO PROVIDE ALL SUPPLEMENTAL FRAMING AS REQUIRED TO PROPERLY SUPPORT TO THE MAIN STRUCTURAL ELEMENTS.

4. REFER TO DRAWING G100 FOR PROJECT GENERAL NOTES.

5. REFER TO ARCHITECTURAL DRAWINGS FOR ALL FINISHES (I.E. FLOOR , WALL, CEILING, ETC.)

6. DO NOT CUT THROUGH MASONRY BOND BEAMS OR ANY OTHER STRUCTURAL ELEMENT WHEN INSTALLING OPENINGS REQUIRED FOR ALL DUCTWORK, PIPING, CONDUITS OR OTHER WORK. COORDINATE WITH THE STRUCTURAL DRAWINGS AND MASON CONTRACTOR FOR ALL BOND BEAM AND STRUCTURAL ELEMENT LOCATIONS. CONTRACTOR CUTTING THROUGH OR OTHERWISE DAMAGING THESE ELEMENTS WILL BE RESPONSIBLE FOR ALL ASSOCIATED ENGINEERING FEES AND SUBSEQUENT RETROFIT REINFORCING DEEMED NECESSARY TO REINSTATE THE CONTINUITY AND INTEGRITY OF THE DAMAGED ELEMENTS.

7. THE STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH ALL CONTRACT DRAWINGS, VENDOR DRAWINGS AND THE SPECIFICATIONS. THE CONTRACTOR SHALL VERIFY THE REQUIREMENTS OF OTHER TRADES FOR LOCATIONS OF SLEEVES, CHASES, HANGERS, INSERTS, ANCHORS, HOLES AND OTHER ITEMS TO BE PLACED OR SET IN THE STRUCTURAL WORK.

8. THE STRUCTURAL DRAWINGS REPRESENT THE FINISHED STRUCTURE. THE CONTRACTOR SHALL PROVIDE ALL TEMPORARY GUYING AND BRACING REQUIRED TO ERECT AND HOLD THE STRUCTURE IN ALIGNMENT UNTIL ALL STRUCTURAL WORK AND CONNECTIONS HAVE BEEN COMPLETED. THE INVESTIGATION, DESIGN, SAFETY, ADEQUACY AND INSPECTION OF SUCH GUYING/BRACING IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

9. DRAWINGS INDICATE GENERAL AND TYPICAL DETAILS OF CONSTRUCTION. WHERE CONDITIONS ARE NOT SPECIFICALLY TAGGED OR SHOWN, SIMILAR DETAILS OF CONSTRUCTION SHALL BE USED, SUBJECT TO THE APPROVAL OF THE ENGINEER.

10. TRADE CONTRACTORS TO COORDINATE WITH M.E.P. DRAWINGS FOR ALL REQUIRED PIPE SLEEVES, HANGERS, CAST-IN / RECESSED COMPONENTS AND INSERTS FOR M.E.P. EQUIPMENT AT SLABS AND WALLS.

STEEL FRAMING NOTES

S1. ALL STRUCTURAL STEEL SHALL CONFORM TO THE LATEST EDITIONS OF AISC'S "STEEL CONSTRUCTION MANUAL" AND "CODE OF STANDARD PRACTICE FOR STEEL BUILDING AND BRIDGES".

S2. ALL WELDING SHALL BE IN ACCORDANCE WITH AWS D1.1 USING E70XX ELECTRODES. UNLESS OTHERWISE NOTED, PROVIDE CONT. MIN. SIZED FILLET WELDS PER AISC REQUIREMENTS.

S3. THE STEEL FABRICATOR AND ERECTOR ARE TO DEVELOP AND IMPLEMENT A QUALITY CONTROL PROGRAM AS SPECIFIED IN AISC 360-10, CHAPTER N. THE STEEL FABRICATOR AND ERECTOR ARE TO PERFORM QUALITY CONTROL INSPECTIONS OF THE STEEL AT THE FABRICATION PLANT AND AT THE PROJECT SITE. REFER TO AISC 360-10, TABLES N5.4-1, N5.4-2, N5.4-3, N5.6-1, N5.6-2, N5.6-3 AND N6.1 FOR MINIMUM INSPECTION REQUIREMENTS.

S4. STRUCTURAL STEEL ERECTION TO COMPLY WITH OSHA REQUIREMENTS.

S5. STEEL PROPERTIES:

A. ANGLES, PLATES = A36 (Fy = 36 KSI)
B. WELDING ELECTRODES = E70XX

S6. FINISH REQUIREMENTS:

A. TYPICAL CLEANING = SSPC-SP2 OR SSPC-SP3
B. PAINT = FABRICATOR'S STANDARD. SEE SPECIFICATIONS FOR ADDITIONAL PAINTING REQUIREMENTS.

S7. PENETRATIONS THROUGH THE FRAMING REQUIRE SUPPLEMENTAL FRAMING AS DETAILED ON SHEET S320. CONTRACTOR TO COORDINATE SIZE, LOCATIONS AND QUANTITIES WITH THE FULL SET OF DOCUMENTS AVAILABLE AT THE TIME OF BIDDING.

S8. REQUIREMENTS FOR HANGING ARCH. AND M.E.P. COMPONENTS FROM METAL ROOF DECK:

A. PIPING THAT WILL CONTAIN LIQUIDS (INCLUDES STORM PIPING) IS NOT PERMITTED TO BE HUNG FROM METAL ROOF DECK.
B. MAXIMUM PERMITTED LOAD AT EACH HANGER = 30 LBS.
C. SPACING OF HANGERS TO BE A MINIMUM OF 2'-0" O.C. IN ALL DIRECTIONS.
D. ALL EQUIPMENT, UNITS, ETC. IS NOT PERMITTED TO BE HUNG FROM METAL ROOF DECK.
E. M.E.P. AND ARCHITECTURAL COMPONENTS WHICH DO NOT ADHERE TO THE REQUIREMENTS LISTED ABOVE ARE NOT PERMITTED TO BE HUNG FROM THE METAL ROOF DECK. CONTRACTOR IS TO PROVIDE SUPPLEMENTAL FRAMING SYSTEM (ENGINEERED BY OTHERS) WHICH IS TO SPAN BETWEEN AND CONNECT TO STRUCTURAL ROOF FRAMING MEMBERS.

S 9. ANY JOIST BRIDGING THAT IS REMOVED TO FACILITATE THE INSTALLATION OF M.E.P. ITEMS SHALL BE REPLACED BY THE TRADE CONTRACTOR WHICH REMOVED THE BRIDGING.

S10 CONTRACTOR SHALL NOT CUT OR MODIFY ANY PORTION OF THE JOIST IN FIELD WITHOUT THE WRITTEN APPROVAL FROM THE JOIST MANUFACTURER AND THE ENGINEER OF RECORD. THIS INCLUDES BUT NOT LIMITED TO WEB MEMBERS,CHORD MEMBERS, JOIST SEATS, ETC.

CODE AND LOADING

A. DESIGN REQUIREMENTS AND STRUCTURAL LOADS ARE TO BE IN ACCORDANCE WITH THE 2018 INTERNATIONAL BUILDING CODE AND ANY CITY/VILLAGE AMENDMENTS.

B. LOADING CRITERIA:

1. OCCUPANCY GROUP: B

C. OCCUPANCY CATEGORY: IIB

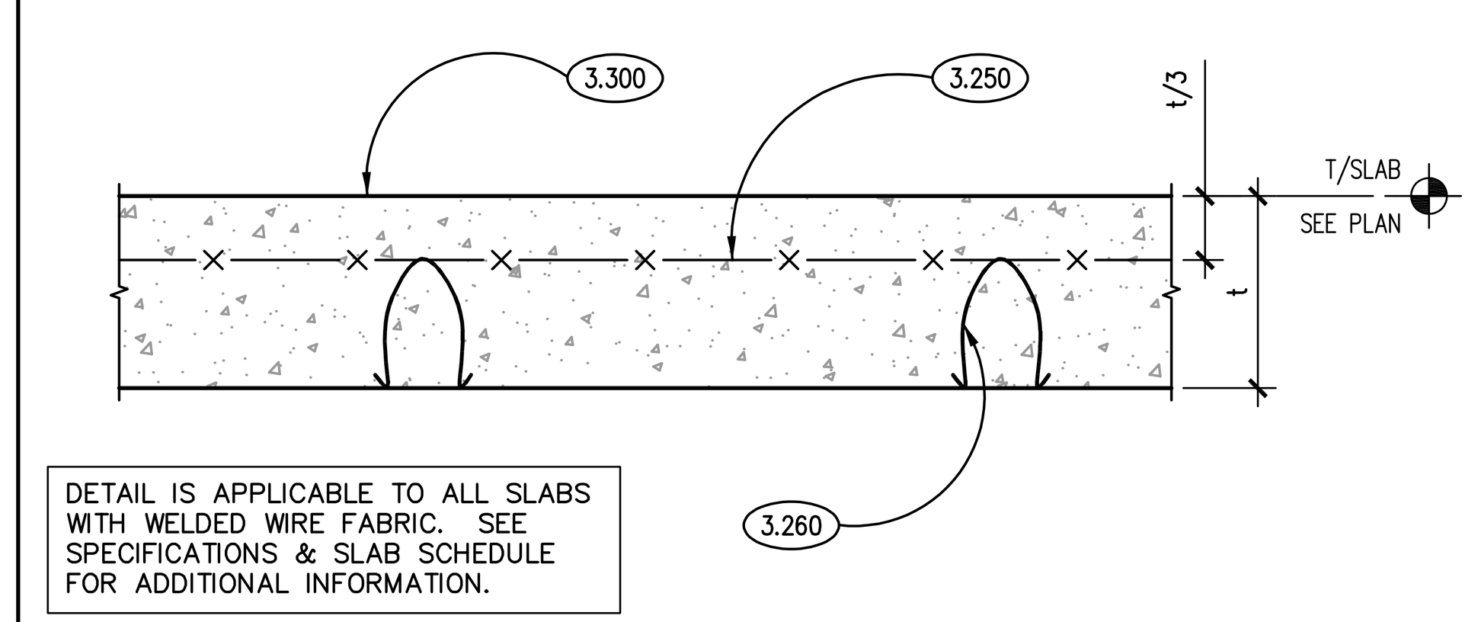
2. FLOOR LIVE LOADS:(NOT IMPACTED BY PROPOSED RENOVATIONS)
   a. SECOND FLOOR (MECHANICAL ROOM) = 40 PSF

5. STRUCTURALLY SUPPORTED EQUIPMENT:
   d. AHU-1 = 2250 LBS

SLAB SCHEDULE

MARK	THICK (t)	CONCRETE STRENGTH (f'c)	CONCRETE TYPE (NW or LW)	REINFORCING STEEL	GENERAL LOCATIONS	MVRA
SLAB S1	4"	4,000 PSI	NW	WWF–6x6 W2.1xW2.1	HOUSEKEEPING PAD	NO

NOTES:
1. SEE PROJECT SPECIFICATIONS FOR DETAILED MIX DESIGNS.
6. ALL WWF REINFORCING TO BE IN FLAT SHEETS ONLY. PLACEMENT (I.E. SUPPORT SPACING, LAP SPLICE LENGTHS, ETC.) TO BE IN ACCORDANCE WITH THE STRUCTURAL WELDED WIRE REINFORCEMENT MANUAL OF STANDARD PRACTICE; (WWR-500); WIRE REINFORCEMENT INSTITUTE; LATEST EDITION.
7. ALL REINFORCING STEEL TO BE SUPPORTED AS REQUIRED TO MAINTAIN THE DETAILED POSITIONS NOTED ON THE CONTRACT DOCUMENTS DURING PLACEMENT OF THE CONCRETE.
8. REINFORCING BARS SHALL BE ASTM A615 GRADE 60, DEFORMED. ALL WWF SHALL BE ASTM A185, SMOOTH.
9. NORMAL WEIGHT CONCRETE (NW) SHALL HAVE A MAXIMUM DENSITY OF 145 PCF.



TYPICAL SLAB DETAIL (2)

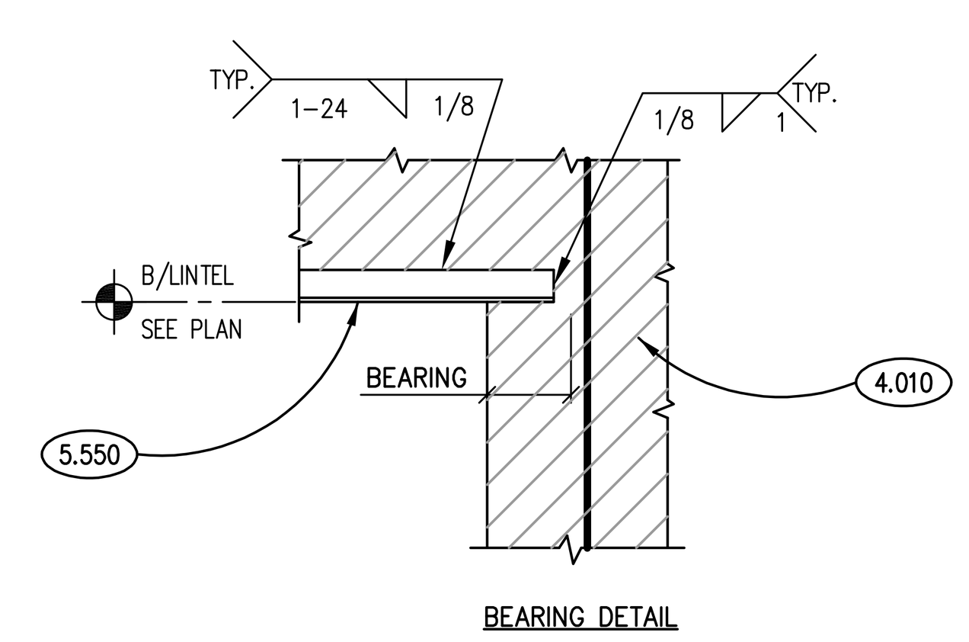
SCALE: N.T.S.

LINTEL SCHEDULE

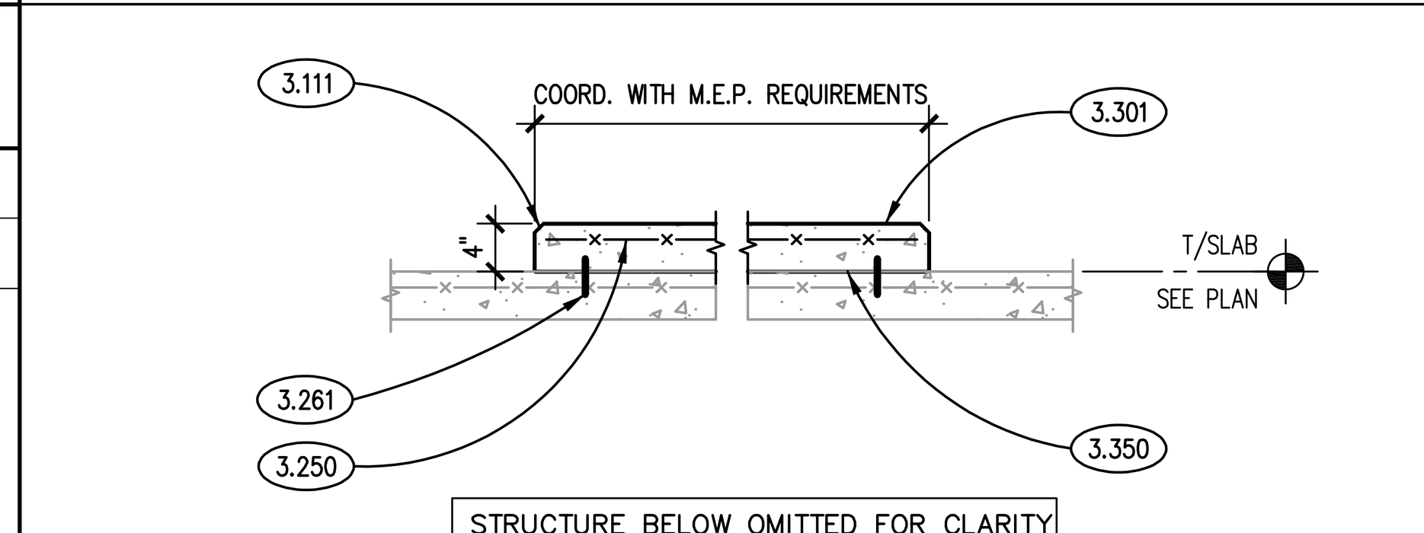
MARK	ELEMENT SIZE	5/16" PLATE WIDTH	5/16" PLATE DETAIL	LINTEL TYPE	END BEARING	SPECIAL COMMENTS
L1 / L1M	(2)–L3 1/2x3 1/2x5/16	N.A.	N.A.	⊥	4"	PAINTED
L2 / L2M	(2)–L3 1/2x3 1/2x5/16	N.A.	N.A.	⊥	4"	GALVANIZED

NOTES:
1. SEE PLAN FOR LINTEL LOCATIONS. LINTELS WITH "M" DENOTES LINTEL REQUIRED FOR M.E.P. ITEMS. M.E.P. CONTRACTORS TO PROVIDE M.O. TO STEEL CONTRACTOR.
2. MATERIAL PROPERTIES:
   a. ANGLES=ASTM A36
   d. EXTERIOR=PRIME PAINTED
   f. WELDING ELECTRODES=E70xx
3. BEARING CONDITIONS:
   a. SEE TYPICAL DETAILS BELOW.
   b. ELEMENTS ADJACENT TO STRUCTURAL MEMBERS (BEAMS, COLUMNS, LINTELS, ETC.) ARE TO CONNECT DIRECTLY TO THESE MEMBERS.
4. SEE MINIMUM LINTEL SIZE TABLE BELOW FOR ANY WALL OPENING/RECESS NOT SPECIFICALLY NOTED ON PLAN. ALL PENETRATIONS RESULTING FROM ARCHITECTURAL, M.E.P. AND TRADE DRAWINGS REQUIRE A LINTEL. COORDINATE ALL REQUIREMENTS WITH THE FULL SET OF DOCUMENTS. FOR WALL THICKNESS GREATER THAN TABULATED, COMBINE LINTELS AS REQUIRED TO OBTAIN DESIRED WALL THICKNESS. FOR EXAMPLE, 16" WALL REQUIRES (2) LINTELS FROM THE 8" WALL SCHEDULE.

DETAILS:

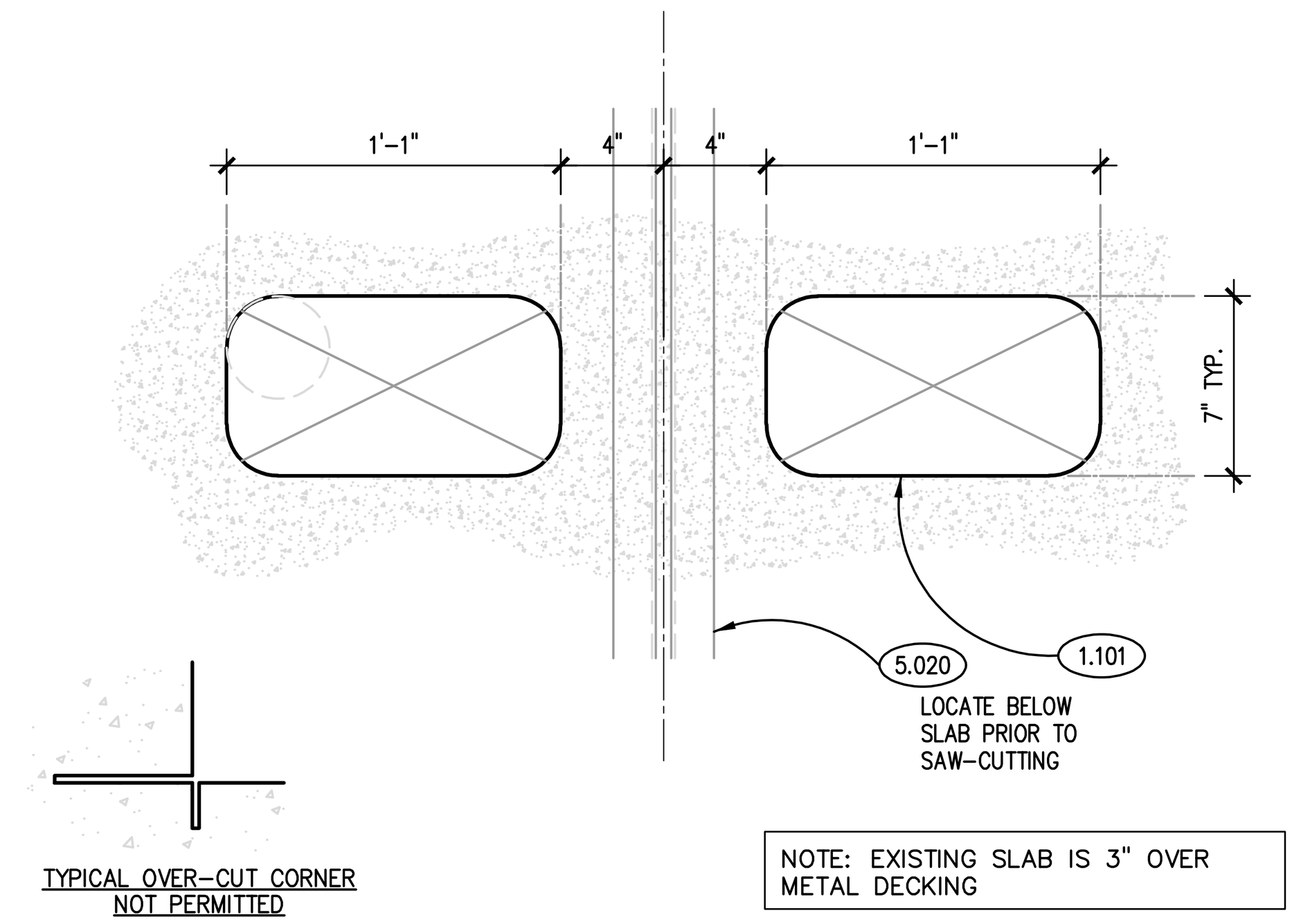


BEARING DETAIL



TYPICAL HOUSEKEEPING PAD DETAIL (3)

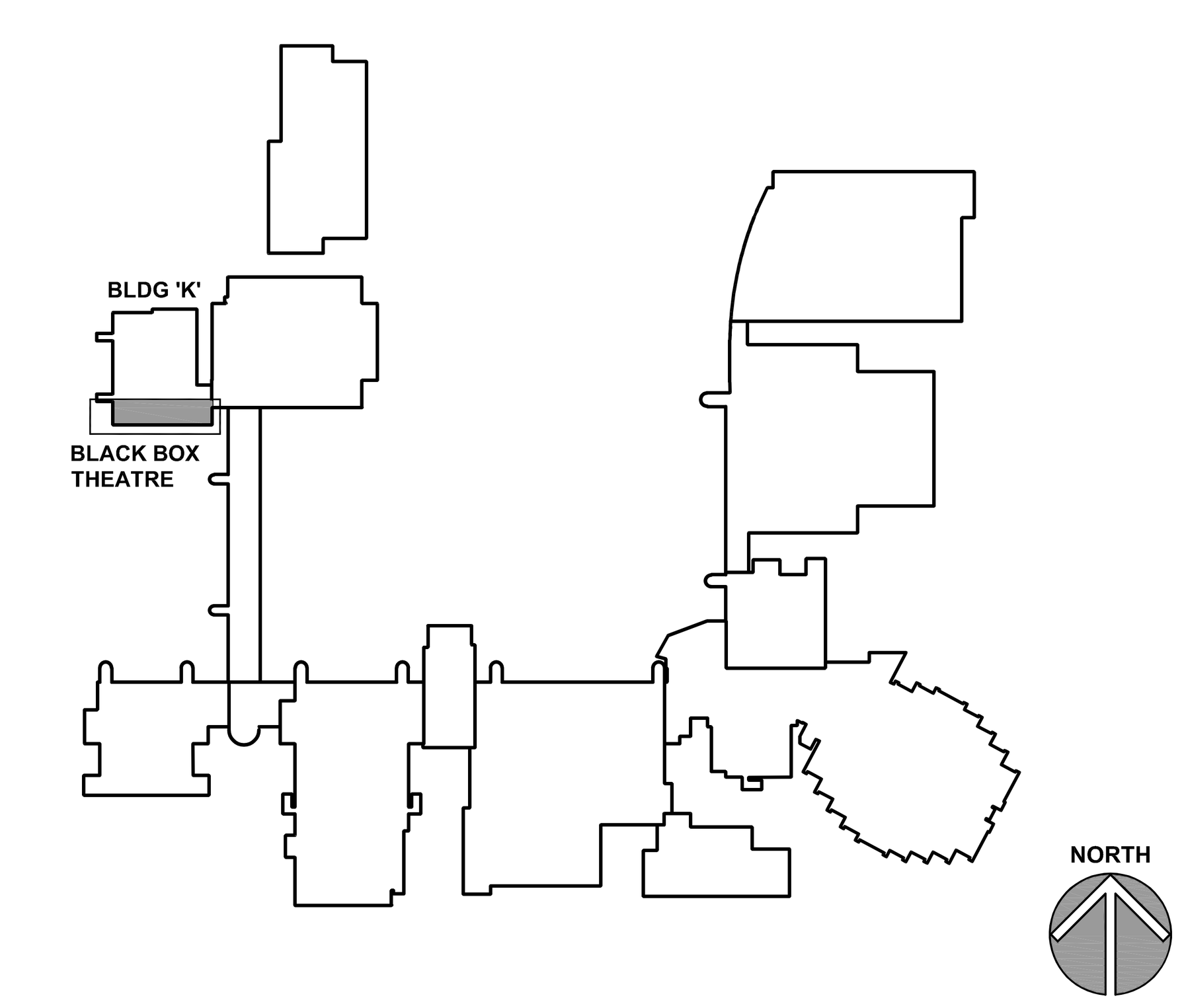
SCALE: N.T.S.



FLOOR PENETRATION DETAIL (4)

SCALE: N.T.S.

KEY PLAN



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1.100 CONTRACTOR TO INFILL FLOOR PENETRATIONS WITH CONCRETE AFTER DEMOLITION OF EXISTING PIPING; REFER TO MECHANICAL FOR LOCATIONS. APPLY 14GA PLATE TO UNDERSIDE OF DECK; OVERSIZE PLATE TO COVER ENTIRE PENETRATION; UTILIZE CONCRETE SCREWS AROUND EDGES TO HOLD IN PLACE FOLLOWING MINIMUM EDGE DISTANCES AS REQUIRED AND FILL PENETRATION WITH CONCRETE FROM ABOVE.
1.101 CONTRACTOR TO SAWCUT AND REMOVE PORTION OF EXISTING CONCRETE WALL AS REQUIRED TO INSTALL NEW WORK. SEE TYPICAL DETAIL ON DRAWINGS. ROUNDED CORES SHALL BE USED AT CORNERS TO CREATE SMOOTH TRANSITION; OVERCUTTING AT CORNERS IS NOT PERMITTED.

1.102 ALTERNATE NO. 2 – CONTRACTOR TO INFILL FLOOR PENETRATIONS WITH CONCRETE AFTER DEMOLITION OF EXISTING PIPING; REFER TO MECHANICAL FOR EXACT LOCATIONS. APPLY 14GA PLATE TO UNDERSIDE OF DECK; OVERSIZE PLATE TO COVER ENTIRE PENETRATION; UTILIZE CONCRETE SCREWS AROUND EDGES TO HOLD IN PLACE FOLLOWING MINIMUM EDGE DISTANCES AS REQUIRED AND FILL PENETRATION WITH CONCRETE FROM ABOVE.

3.111 CONCRETE FORMING AND ACCESSORIES: CONTINUOUS 3/4" CHAMFER U.N.O.
3.250 CONCRETE REINFORCING: WWF REFER TO SLAB CALLOUT ON PLAN. PROVIDE WWF–6X6 W2.1 X W2.1 IN FLAT SHEETS U.N.O. PROVIDE PROPER SUPPORT AS REQUIRED TO MAINTAIN PLACEMENT AT NOTED ELEVATION. "PULL UP" METHOD DURING SLAB PLACEMENT NOT ACCEPTABLE. DISCONTINUE AT CONTRACTION AND CONSTRUCTION JOINTS.
3.260 CONCRETE REINFORCING: REINFORCING STEEL SUPPORT ELEMENT.
3.261 CONCRETE REINFORCING: #4 DOWEL X 0'–4" @ 2'–0" O.C. U.N.O. ANCHOR INTO EXISTING SLAB USING HILTI HY–150 INJECTION ADHESIVE. EMBEDMENT TO BE 2" U.N.O.
3.300 CAST–IN–PLACE CONCRETE: INTERIOR SLAB–ON–GRADE. REFER TO PLAN, SCHEDULE AND SPECIFICATIONS FOR THICKNESS, REINFORCING, MIX TYPE AND FINISH.
3.301 CAST–IN–PLACE CONCRETE: EQUIPMENT PAD. REFER TO SPECIFICATIONS FOR THICKNESS, REINFORCING, MIX TYPE AND FINISH. COORDINATE SIZE, LOCATION AND QUANTITY WITH M.E.P. DRAWINGS AND MANUFACTURER REQUIREMENTS. REFER TO TYPICAL DETAIL ON CONTRACT DOCUMENTS.
3.350 CAST–IN–PLACE CONCRETE ACCESSORY: BONDING AGENT. ROUGHEN BASE SLAB AS REQUIRED.

4.010 EXISTING MASONRY WALL.

5.010 METAL FABRICATION: EXISTING STEEL BEAM.
5.020 METAL FABRICATION: EXISTING STEEL JOIST.
5.040 METAL FABRICATION: EXISTING STEEL COLUMN.
5.550 METAL FABRICATION: STEEL LINTEL. REFER TO PLANS, SCHEDULES AND DETAILS.
5.551 ALTERNATE NO. 2 – METAL FABRICATION: STEEL LINTEL. REFER TO PLANS, SCHEDULES AND DETAILS.

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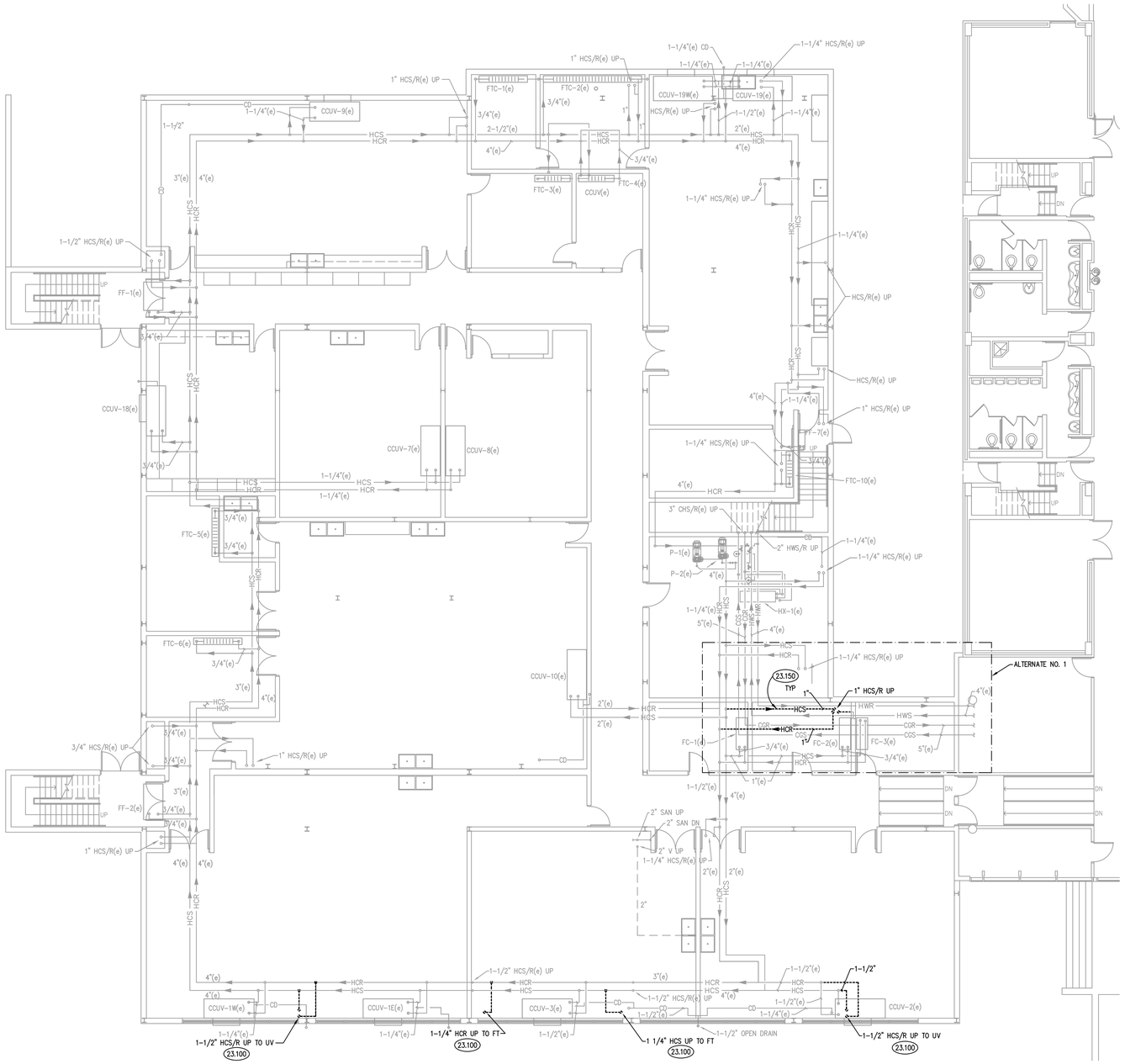
SECOND FLOOR FRAMING PLAN

SHEET NUMBER

S310

NOTE: SCALES DEPICTED ON THIS DRAWING ARE NOT CORRECT UNLESS PLOTTED SHEET SIZE IS 30 X 42 INCHES.



GROUND FLOOR MECHANICAL DEMOLITION PLAN

SCALE: 1/8" = 1'-0"

1

KEYNOTES

KEYNOTES ARE TYPICALLY NOT DUPLICATED WITHIN A GIVEN DETAIL. AN UN-KEYNOTED ITEM IN A DETAIL IS THE SAME AS A KEYNOTED ITEM HAVING THE SAME APPEARANCE WITHIN THE SAME DETAIL.

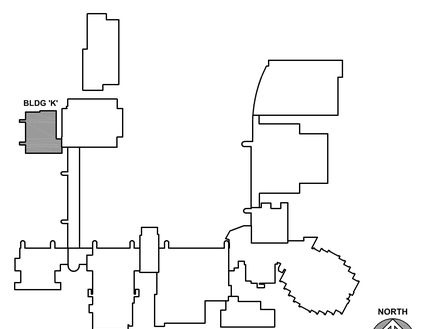
23.100 REMOVE HCS/HCR & CONDENSATE PIPING FOR REMOVED EQUIPMENT ON FLOOR ABOVE. REMOVE PIPING BACK TO MAIN AS SHOWN. PROVIDE PERMANENT AND INSULATED CAP ON PIPE. REFER TO STRUCTURAL DRAWINGS FOR PATCHING OF FLOOR OPENINGS.

23.150 ALTERNATE NO. 1 – REMOVE HCS/HCR & CONDENSATE PIPING FOR REMOVED EQUIPMENT ON FLOOR ABOVE. REMOVE PIPING BACK TO MAIN AS SHOWN. PROVIDE PERMANENT AND INSULATED CAP ON PIPE. REFER TO STRUCTURAL DRAWINGS FOR PATCHING OF FLOOR OPENINGS.

GENERAL NOTES

1. REFER TO DRAWING G100 FOR PROJECT GENERAL NOTES.
2. PIPING, DUCTWORK AND RACEWAYS ARE SHOWN DIAGRAMMATICALLY AND DO NOT SHOW ALL REQUIRED FITTINGS, OFFSETS, DROPS AND RISES. PROVIDE ALL MATERIAL AND LABOR FOR A COMPLETE AND WORKING SYSTEM. COORDINATE WITH OTHER TRADES FOR SPACE AVAILABLE AND RELATIVE LOCATIONS OF EQUIPMENT, PIPING, DUCTWORK, ETC.
3. FIELD VERIFY EXISTING PIPING, DUCTWORK AND RACEWAYS INDICATED ON THESE PLANS FOR EXACT LOCATIONS, QUANTITY AND SIZES.
4. TEMPORARILY REMOVE EXISTING ACOUSTICAL CEILING PANELS AND GRID ELEMENTS AS NECESSARY TO PERMIT PERFORMANCE OF THE MECHANICAL WORK DEPICTED. STORE AND PROTECT TEMPORARILY-REMOVED ITEMS UNTIL PROJECT IS READY FOR REINSTALLATION. REINSTALL SALVAGED PANELS AND GRID ELEMENTS ONCE MECHANICAL WORK IS COMPLETE. PROVIDE NEW PANELS AND GRID ELEMENTS MATCHING EXISTING TO REPLACE PANELS OR GRID ELEMENTS DAMAGED DURING SALVAGE, DEMOLITION OR CONSTRUCTION OPERATIONS.
5. PROVIDE TAPES AND MASTICS USED TO SEAL DUCTWORK LISTED AND LABELED IN ACCORDANCE WITH UL 181A AND MARKED ACCORDINGLY. PROVIDE TAPES AND MASTICS COMPLIANT WITH UL 181B AND MARKED ACCORDINGLY TO SEAL FLEXIBLE DUCTS AND AIR CONNECTORS.
6. PROVIDE THERMOSTATIC CONTROLS OF EQUIPMENT HAVING A 5° F DEADBAND.
7. GENERALLY, SMALL DIAMETER PIPE RUNS FROM DRIPS, CONDENSATE PANS AND OTHER SERVICES ARE NOT SHOWN BUT MUST BE PROVIDED. CONFIGURE CONDENSATE DRAINS WITH FITTINGS AND/OR UNIONS TO PERMIT CLEARING OF BLOCKAGES AND PERFORMANCE OF MAINTENANCE WITHOUT CUTTING OF THE LINES.
8. SPACE ALLOCATION, COORDINATION WITH ELECTRICAL, ARCHITECTURAL & OTHER MECHANICAL COMPONENTS HAVE BEEN MADE WITH RESPECT TO EQUIPMENT SCHEDULED ON THESE DRAWINGS AND IN THE SPECIFICATIONS OF THE FIRST NAMED MANUFACTURER ONLY. OTHER MANUFACTURERS ARE ACCEPTABLE PROVIDED THEY MEET PERFORMANCE REQUIREMENTS AND AFOREMENTIONED COORDINATION.
9. DO NOT CUT THROUGH THE STRUCTURAL ELEMENTS WHEN INSTALLING OPENINGS REQUIRED FOR DUCTWORK, PIPING, CONDUITS OR OTHER WORK. COORDINATE WITH STRUCTURAL DRAWINGS AND MASON CONTRACTOR FOR BOND BEAM AND STRUCTURAL ELEMENT LOCATIONS. CONTRACTOR CUTTING THROUGH OR OTHERWISE DAMAGING THESE ELEMENTS WILL BE RESPONSIBLE FOR ALL ASSOCIATED ENGINEERING FEES AND SUBSEQUENT RETRO-FIT/REINFORCING DEEMED NECESSARY TO REINSTATE THE CONTINUITY OF THE DISRUPTED ELEMENTS.

KEY PLAN



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ISSUED
08/12/25 BID & PERMIT DOCUMENTS

JOB NO.	24-292-1574
DRAWN	BWG
CHECKED	DDW
APPROVED	BWG

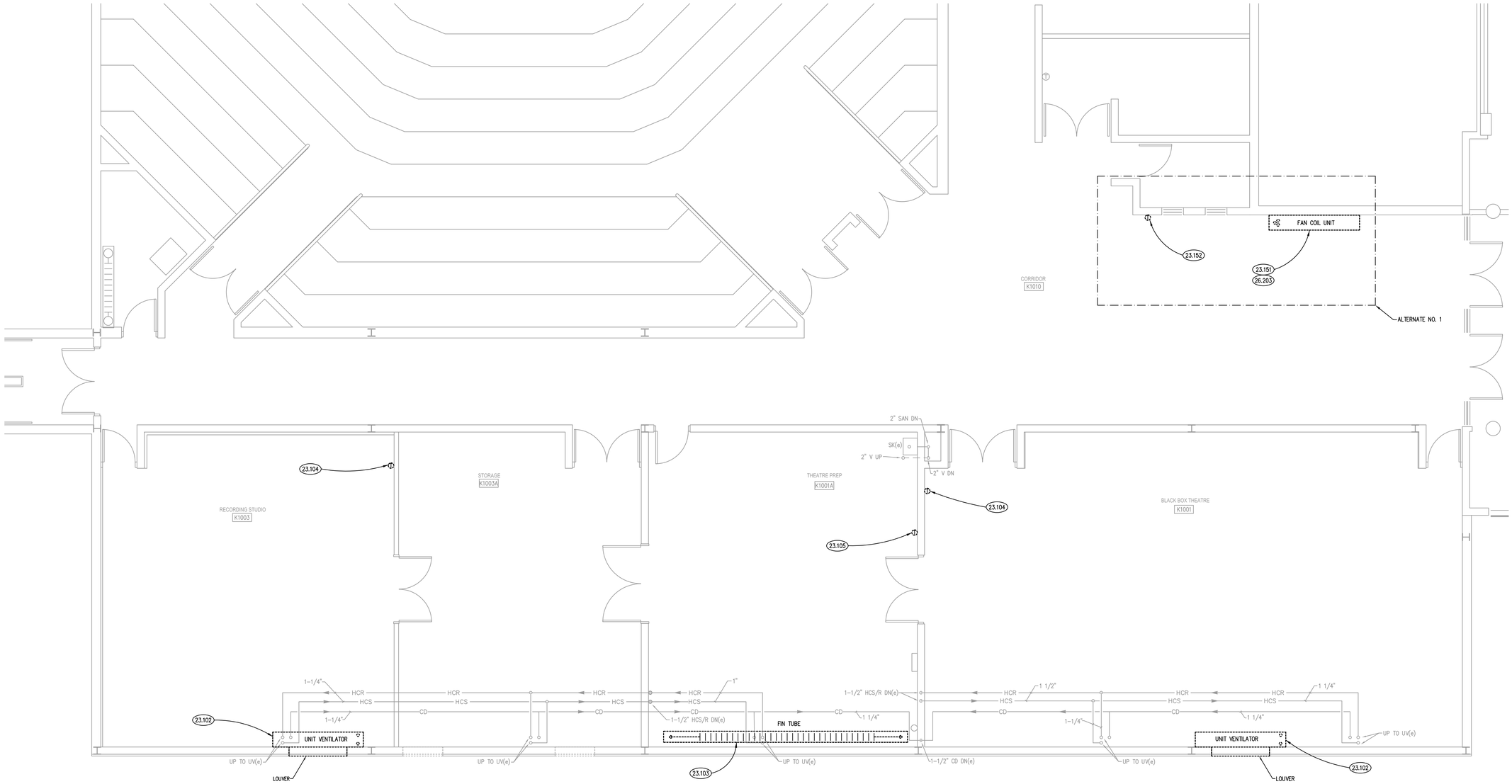
SHEET TITLE

GROUND FLOOR MECHANICAL DEMOLITION PLAN

SHEET NUMBER

M210

NOTE: SCALES DEPICTED ON THIS DRAWING ARE NOT CORRECT UNLESS PLOTTED SHEET SIZE IS 30 X 42 INCHES.



SECOND FLOOR MECHANICAL DEMOLITION PLAN

SCALE: 1/4" = 1'-0"

1

GENERAL NOTES

1. REFER TO DRAWING G100 FOR PROJECT GENERAL NOTES.
2. PIPING, DUCTWORK AND RACEWAYS ARE SHOWN DIAGRAMMATICALLY AND DO NOT SHOW ALL REQUIRED FITTINGS, OFFSETS, DROPS AND RISES. PROVIDE ALL MATERIAL AND LABOR FOR A COMPLETE AND WORKING SYSTEM. COORDINATE WITH OTHER TRADES FOR SPACE AVAILABLE AND RELATIVE LOCATIONS OF EQUIPMENT, PIPING, DUCTWORK, ETC.
3. FIELD VERIFY EXISTING PIPING, DUCTWORK AND RACEWAYS INDICATED ON THESE PLANS FOR EXACT LOCATIONS, QUANTITY AND SIZES.
4. TEMPORARILY REMOVE EXISTING ACOUSTICAL CEILING PANELS AND GRID ELEMENTS AS NECESSARY TO PERMIT PERFORMANCE OF THE MECHANICAL WORK DEPICTED. STORE AND PROTECT TEMPORARILY-REMOVED ITEMS UNTIL PROJECT IS READY FOR REINSTALLATION. REINSTALL SALVAGED PANELS AND GRID ELEMENTS ONCE MECHANICAL WORK IS COMPLETE. PROVIDE NEW PANELS AND GRID ELEMENTS MATCHING EXISTING TO REPLACE PANELS OR GRID ELEMENTS DAMAGED DURING SALVAGE, DEMOLITION OR CONSTRUCTION OPERATIONS.
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6. PROVIDE THERMOSTATIC CONTROLS OF EQUIPMENT HAVING A 5° F DEADBAND.
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8. SPACE ALLOCATION, COORDINATION WITH ELECTRICAL, ARCHITECTURAL & OTHER MECHANICAL COMPONENTS HAVE BEEN MADE WITH RESPECT TO EQUIPMENT SCHEDULED ON THESE DRAWINGS AND IN THE SPECIFICATIONS OF THE FIRST NAMED MANUFACTURER ONLY. OTHER MANUFACTURERS ARE ACCEPTABLE PROVIDED THEY MEET PERFORMANCE REQUIREMENTS AND AFOREMENTIONED COORDINATION.
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KEYNOTES

KEYNOTES ARE TYPICALLY NOT DUPLICATED WITHIN A GIVEN DETAIL. AN UN-KEYNOTED ITEM IN A DETAIL IS THE SAME AS A KEYNOTED ITEM HAVING THE SAME APPEARANCE WITHIN THE SAME DETAIL.

23.102 REMOVE UNIT VENTILATOR AND ASSOCIATED WALL LOUVER. REMOVE HCS/HCR AND CONDENSATE PIPING BACK TO MAIN. REFER TO ARCHITECTURAL DRAWINGS FOR PATCHING OF WALL AND STRUCTURAL DRAWINGS FOR PATCHING OF FLOOR OPENINGS.

23.103 REMOVE FIN TUBE AND ASSOCIATED PIPING & SPECIALITIES BACK TO MAIN. REFER TO STRUCTURAL DRAWINGS FOR PATCHING OF FLOOR OPENINGS.

23.104 REMOVE THERMOSTAT AND ALL ASSOCIATED CONTROL WIRING FOR UNIT VENTILATOR BEING REMOVED. REMOVE ALL CONTROL SEQUENCES AND GRAPHICS FROM EXISTING BUILDING AUTOMATION SYSTEM.

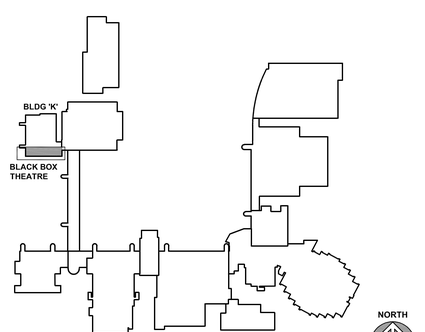
23.105 REMOVE PNEUMATIC THERMOSTAT FOR FIN TUBE. REMOVE ALL ASSOCIATED PNEUMATIC TUBING BACK TO NEXT ACTIVE MAIN AND CAP.

23.151 ALTERNATE NO. 1 – REMOVE UNIT VENTILATOR. REMOVE HCS/HCR AND CONDENSATE PIPING BACK TO MAIN. REFER TO STRUCTURAL DRAWINGS FOR PATCHING OF FLOOR OPENINGS.

23.152 ALTERNATE NO. 1 – REMOVE THERMOSTAT AND ALL ASSOCIATED CONTROL WIRING FOR UNIT VENTILATOR BEING REMOVED. REMOVE ALL CONTROL SEQUENCES AND GRAPHICS FROM EXISTING BUILDING AUTOMATION SYSTEM.

26.203 ALTERNATE NO. 1 – DEMOLISH ELECTRICAL CONNECTION FOR FAN COIL UNIT BEING REMOVED.

KEY PLAN



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08/12/25 BID & PERMIT DOCUMENTS

JOB NO.	24-292-1574
DRAWN	BWG
CHECKED	DDW
APPROVED	BWG

SHEET TITLE

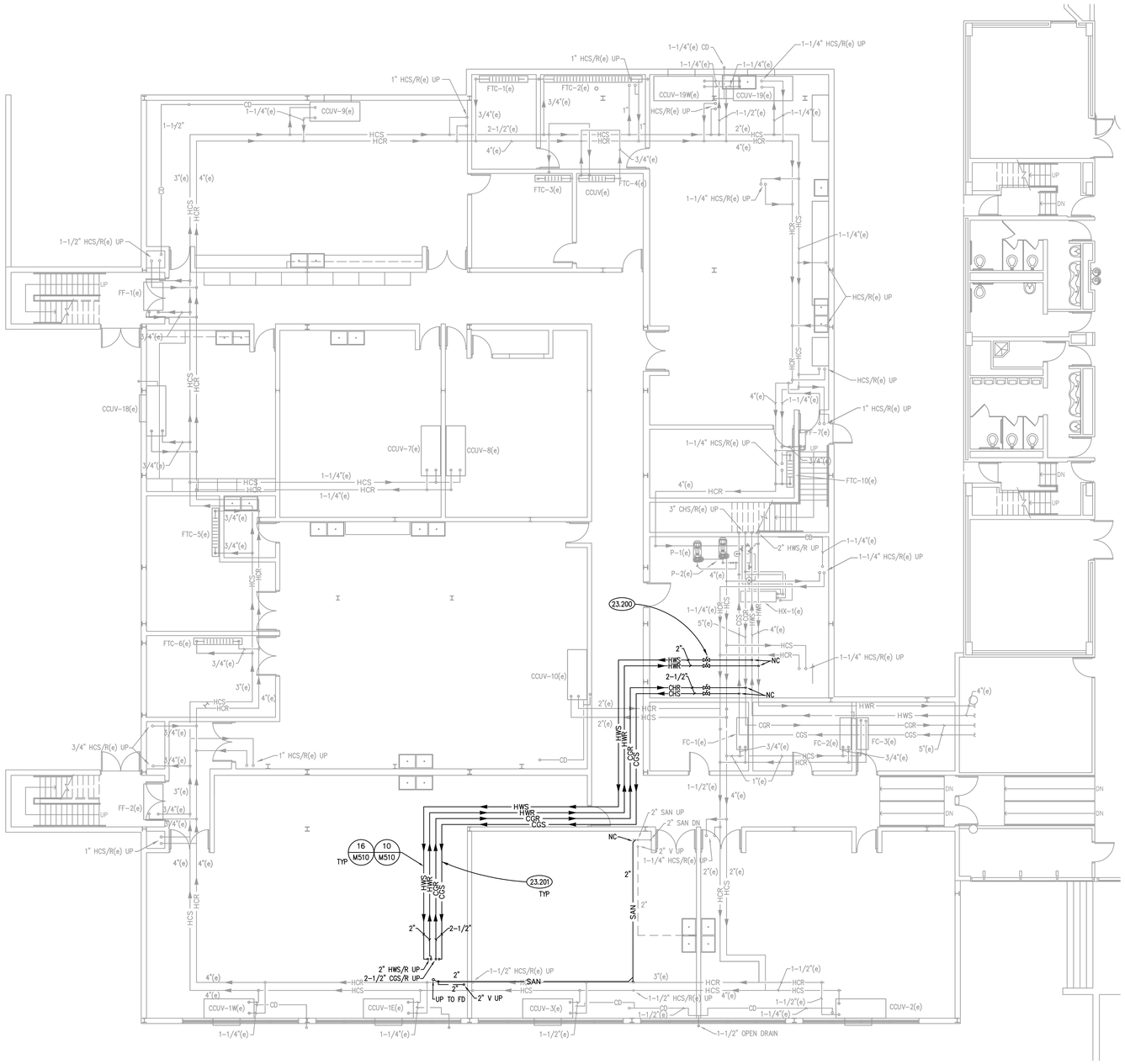
SECOND FLOOR MECHANICAL DEMOLITION PLAN

SHEET NUMBER

M220

NOTE: SCALES DEPICTED ON THIS DRAWING ARE NOT CORRECT UNLESS PLOTTED SHEET SIZE IS 30 X 42 INCHES.

P:\1574 - JJC - Black Box Theater Cooling Unit Replacement\3D_Design\Dwgs\DD-CD\3D_Mech1574M0220.dwg, 8/7/2025 3:22:23 PM, BWG



GROUND FLOOR MECHANICAL PLAN

SCALE: 1/8" = 1'-0"

1

KEYNOTES

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23.200 PROVIDE NEW CONNECTION TO EXISTING HOT WATER AND CHILLED WATER PIPING AS SHOWN. PROVIDE ISOLATION VALVE AT EACH TAKE-OFF.

23.201 EXISTING CHILLED WATER SYSTEM CONTAINS 30% ETHYLENE GLYCOL. PROVIDE SUFFICIENT GLYCOL FOR NEW CHILLED WATER PIPING. COORDINATE WITH OWNER FOR FILLING SYSTEM.

GENERAL NOTES

1. REFER TO DRAWING G100 FOR PROJECT GENERAL NOTES.
2. PIPING, DUCTWORK AND RACEWAYS ARE SHOWN DIAGRAMMATICALLY AND DO NOT SHOW ALL REQUIRED FITTINGS, OFFSETS, DROPS AND RISES. PROVIDE ALL MATERIAL AND LABOR FOR A COMPLETE AND WORKING SYSTEM. COORDINATE WITH OTHER TRADES FOR SPACE AVAILABLE AND RELATIVE LOCATIONS OF EQUIPMENT, PIPING, DUCTWORK, ETC.
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6. PROVIDE THERMOSTATIC CONTROLS OF EQUIPMENT HAVING A 5° F DEADBAND.
7. GENERALLY, SMALL DIAMETER PIPE RUNS FROM DRIPS, CONDENSATE PANS AND OTHER SERVICES ARE NOT SHOWN BUT MUST BE PROVIDED. CONFIGURE CONDENSATE DRAINS WITH FITTINGS AND/OR UNIONS TO PERMIT CLEARING OF BLOCKAGES AND PERFORMANCE OF MAINTENANCE WITHOUT CUTTING OF THE LINES.
8. SPACE ALLOCATION, COORDINATION WITH ELECTRICAL, ARCHITECTURAL & OTHER MECHANICAL COMPONENTS HAVE BEEN MADE WITH RESPECT TO EQUIPMENT SCHEDULED ON THESE DRAWINGS AND IN THE SPECIFICATIONS OF THE FIRST NAMED MANUFACTURER ONLY. OTHER MANUFACTURERS ARE ACCEPTABLE PROVIDED THEY MEET PERFORMANCE REQUIREMENTS AND AFOREMENTIONED COORDINATION.
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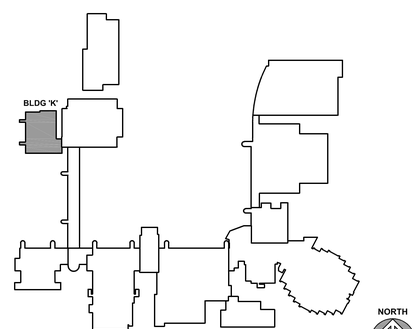
KEY PLAN



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JOB NO.	24-292-1574
DRAWN	BWG
CHECKED	DDW
APPROVED	BWG

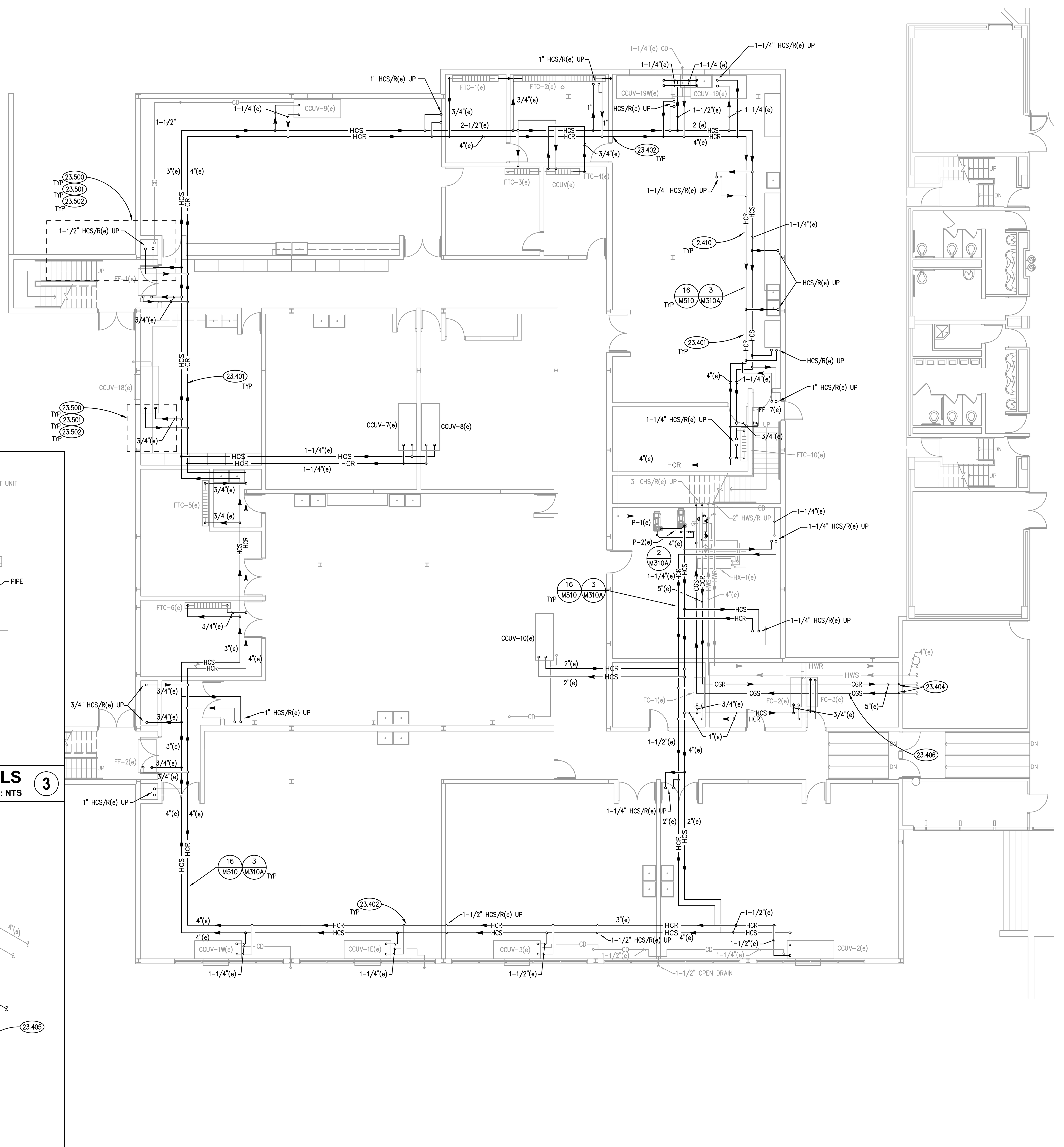
SHEET TITLE

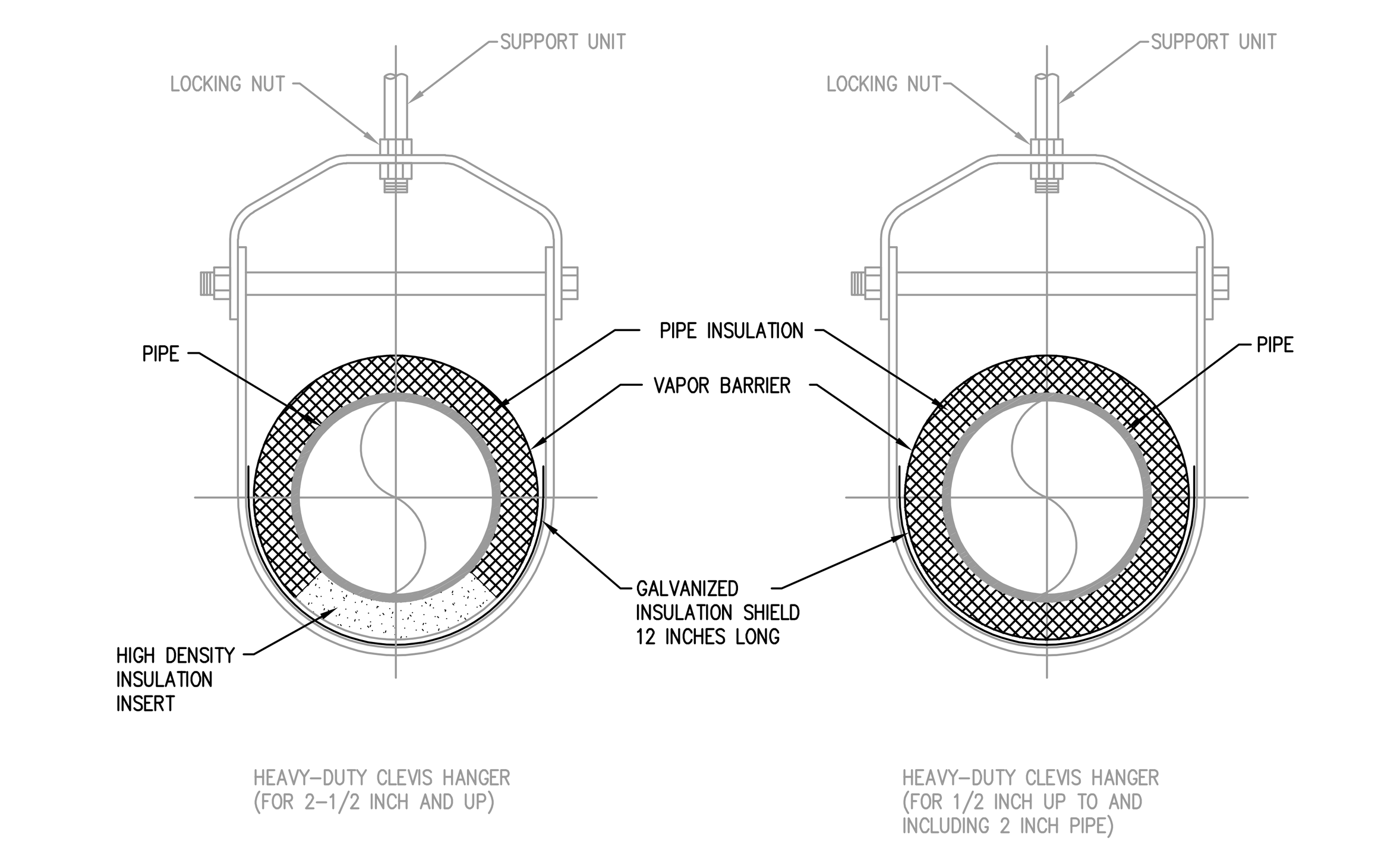
GROUND FLOOR MECHANICAL PLAN

SHEET NUMBER

M310

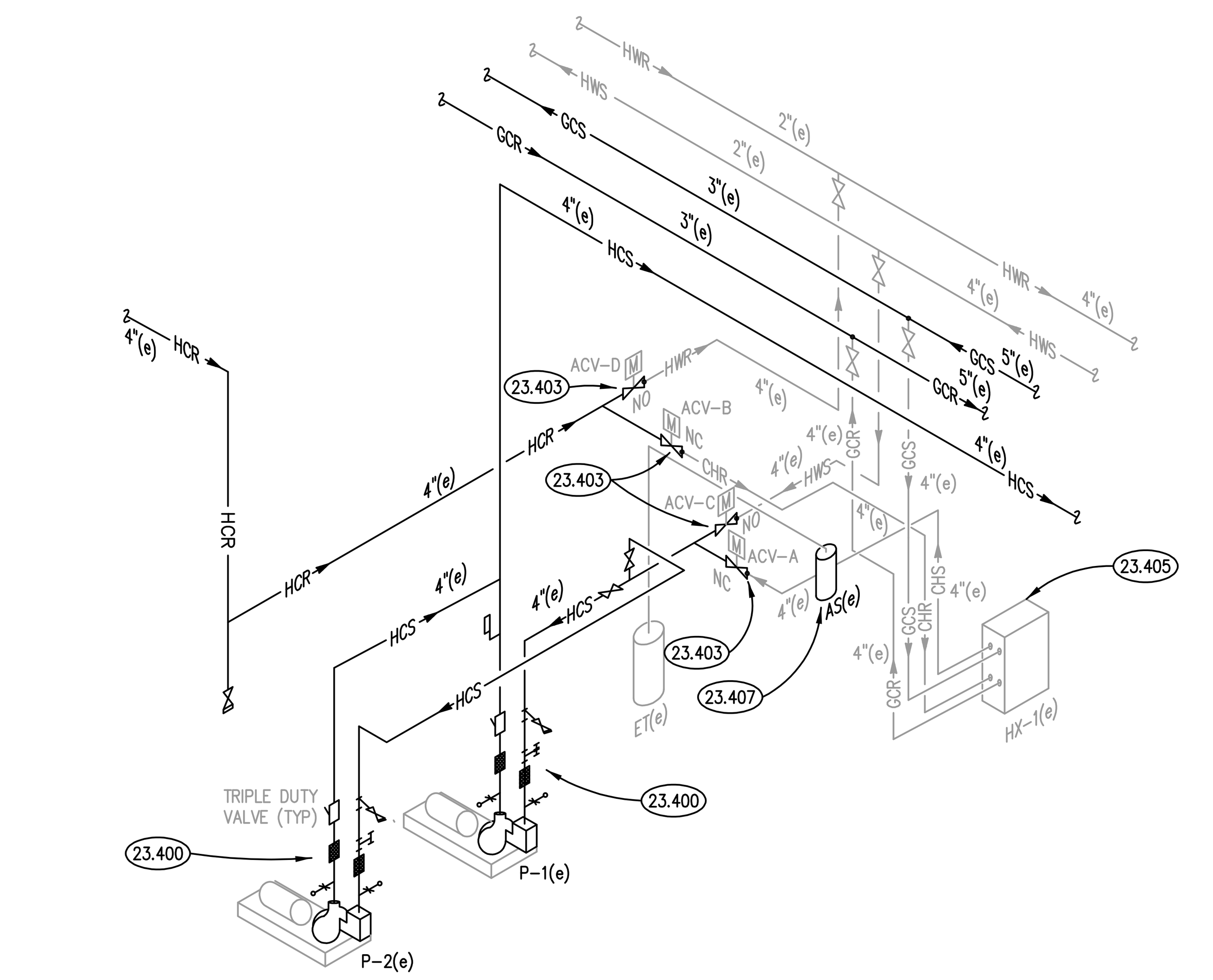
NOTE: SCALES DEPICTED ON THIS DRAWING ARE NOT CORRECT UNLESS PLOTTED SHEET SIZE IS 30 X 42 INCHES.





INSULATION THROUGH PIPE HANGER DETAILS (3)

SCALE: NTS



PIPING DIAGRAM (2)

SCALE: NTS

GROUND FLOOR MECHANICAL PLAN - ALTERNATE NO. 2 & 3 (1)

SCALE: 1/8" = 1'-0"

KEYNOTES

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2.410 ALTERNATE NO. 2 – TEMPORARILY REMOVE EXISTING ACOUSTICAL CEILING TILES AND GRID MEMBERS AS REQUIRED TO PERMIT REMOVAL OR INSTALLATION OF MECHANICAL PIPING INSULATION ON HCS/R MAINS; PROTECT, STORE AND SAVE FOR RE-USE EXISTING TILES AND GRID MEMBERS; REINSTALL SAME AFTER MECHANICAL WORK IS COMPLETE; PROVIDE NEW TILE AND GRID MEMBERS MATCHING EXISTING TO REPLACE TILE AND GRID MEMBERS DAMAGED DURING REMOVAL, STORAGE OR RE-INSTALLATION OPERATIONS.

23.400 ALTERNATE NO. 2 – REMOVE INSULATION IN ITS ENTIRELY. PROVIDE NEW INSULATION FOR PUMP BODY, PIPING & ALL ASSOCIATED SPECIALITIES.
23.401 ALTERNATE NO. 2 – REMOVE INSULATION IN ITS ENTIRELY. PROVIDE NEW INSULATION FOR HCS/R PIPING MAINS, FITTINGS, AND VALVES.
23.402 ALTERNATE NO. 2 – PROVIDE INSULATION THROUGH ALL WALL PENETRATIONS.
23.403 ALTERNATE NO. 2 – PROVIDE INSULATION ON EXISTING UNINSULATED VALVE BODIES AND FLANGES.
23.404 ALTERNATE NO. 2 – REMOVE AND PROVIDE NEW INSULATION FROM THIS POINT.
23.405 ALTERNATE NO. 2 – EXISTING PIPE INSULATION AROUND PLATE HEAT EXCHANGER TO REMAIN. PROVIDE PIPE IDENTIFICATION AND FLOW ARROWS.
23.406 ALTERNATE NO. 2 – REMOVE INSULATION IN ITS ENTIRELY. PROVIDE NEW INSULATION FOR CGS/R PIPING MAINS, FITTINGS, AND VALVES.
23.407 ALTERNATE NO. 2 – PROVIDE INSULATION ON AIR SEPARATOR.

23.500 ALTERNATE NO. 3: TEMPORARILY REMOVE EXISTING ACOUSTICAL CEILING TILES AND GRID MEMBERS AS REQUIRED TO PERMIT REMOVAL OR INSTALLATION OF MECHANICAL PIPING INSULATION ON HCS/R PIPING TO TERMINAL UNITS AND BRANCHES UP TO FLOOR ABOVE; PROTECT, STORE AND SAVE FOR RE-USE EXISTING TILES AND GRID MEMBERS; REINSTALL SAME AFTER MECHANICAL WORK IS COMPLETE; PROVIDE NEW TILE AND GRID MEMBERS MATCHING EXISTING TO REPLACE TILE AND GRID MEMBERS DAMAGED DURING REMOVAL, STORAGE OR RE-INSTALLATION OPERATIONS.
23.501 ALTERNATE NO. 3: REMOVE INSULATION IN ITS ENTIRELY. PROVIDE NEW INSULATION FOR PIPING, FITTINGS, AND VALVES FROM HCS/R MAINS TO TERMINAL UNITS AND BRANCHES UP TO DECK.
23.502 ALTERNATE NO. 3: PROVIDE INSULATION THROUGH ALL WALL PENETRATIONS.

GENERAL NOTES

1. REFER TO DRAWING G100 FOR PROJECT GENERAL NOTES.
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6. PROVIDE THERMOSTATIC CONTROLS OF EQUIPMENT HAVING A 5° F DEADBAND.
7. GENERALLY, SMALL DIAMETER PIPE RUNS FROM DRIPS, CONDENSATE PANS AND OTHER SERVICES ARE NOT SHOWN BUT MUST BE PROVIDED. CONFIGURE CONDENSATE DRAINS WITH FITTINGS AND/OR UNIONS TO PERMIT CLEARING OF BLOCKAGES AND PERFORMANCE OF MAINTENANCE WITHOUT CUTTING OF THE LINES.
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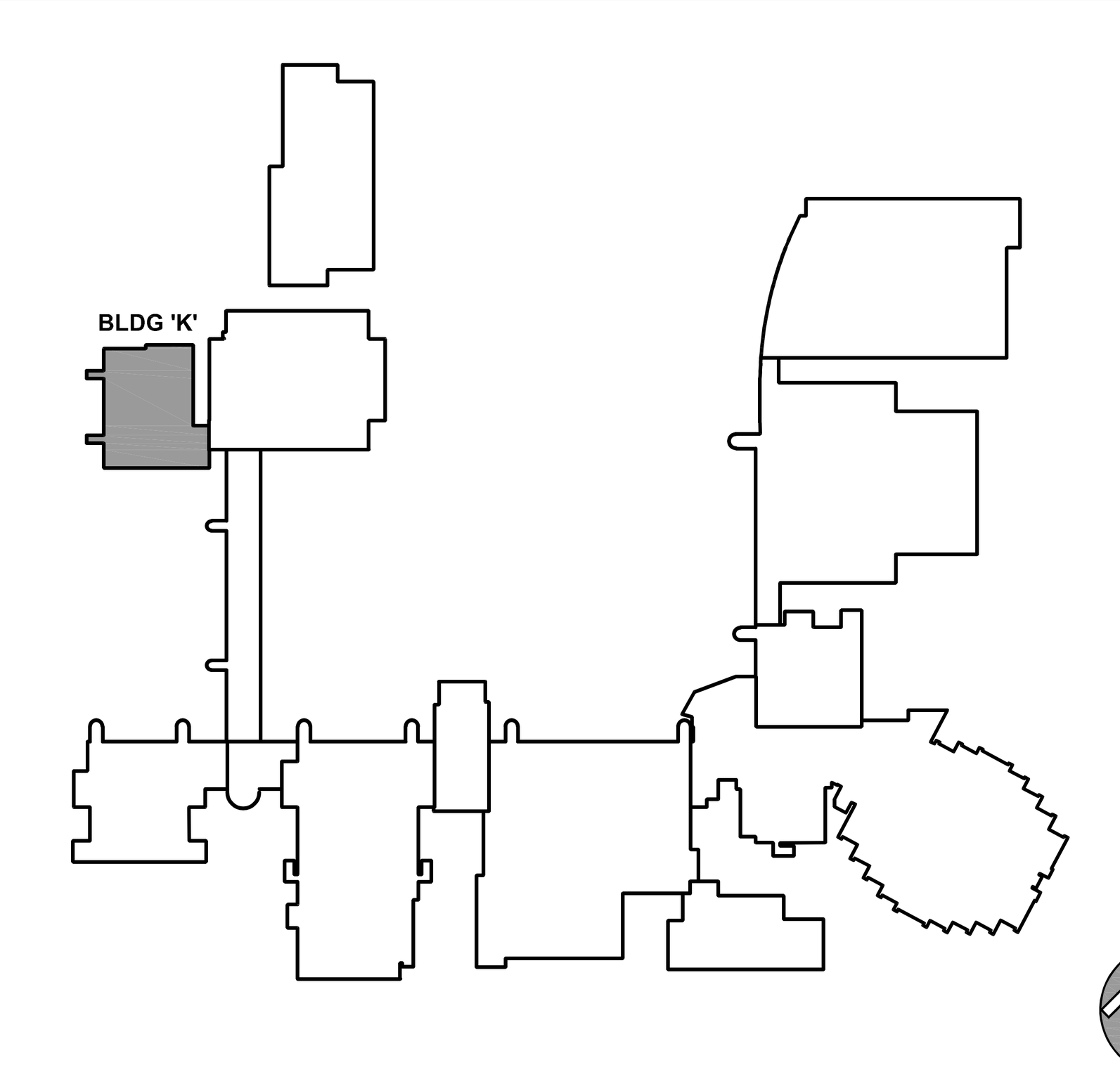
KEY PLAN



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SHEET TITLE

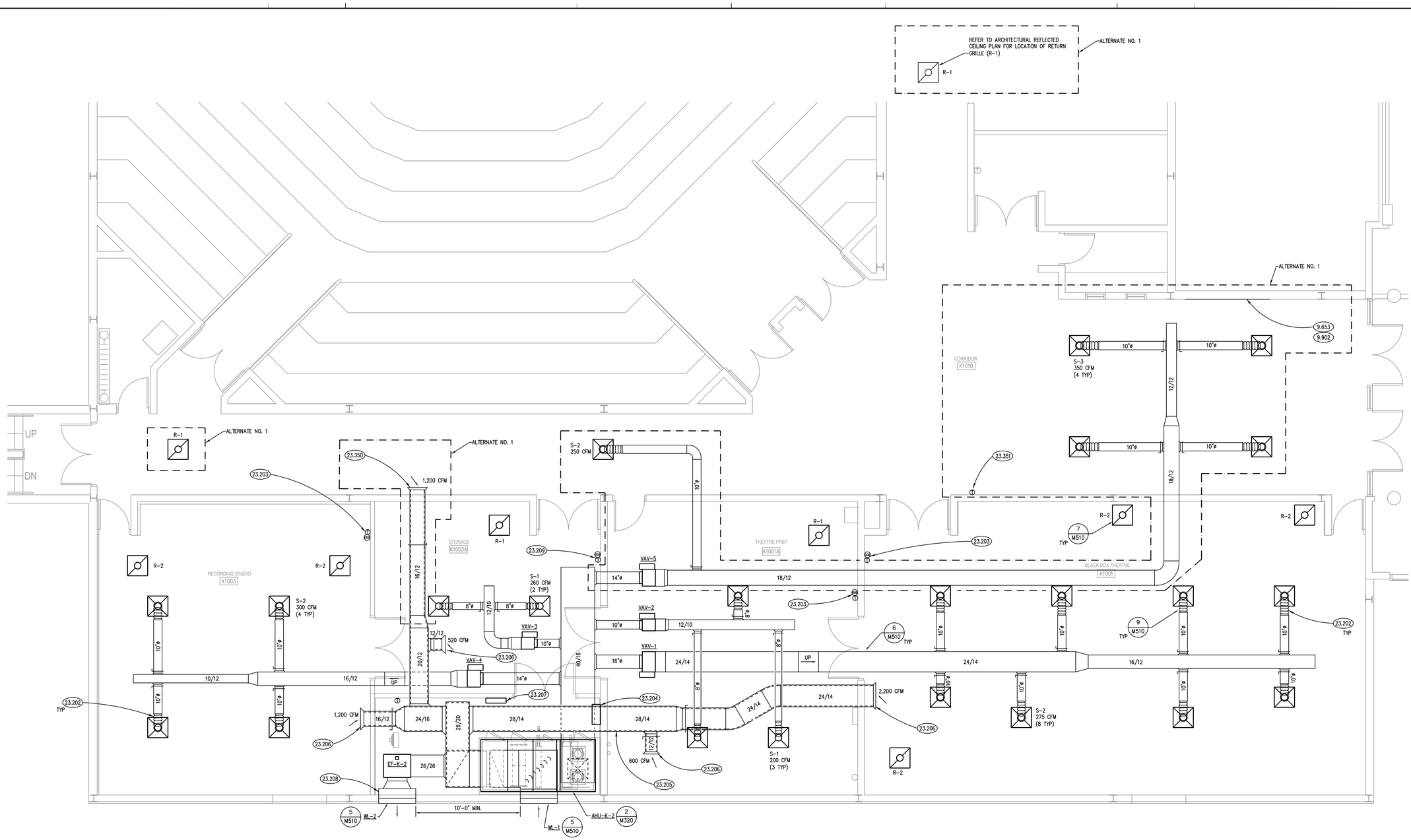
GROUND FLOOR MECHANICAL PLAN - ALTERNATE NO. 2 & 3

SHEET NUMBER

M310A

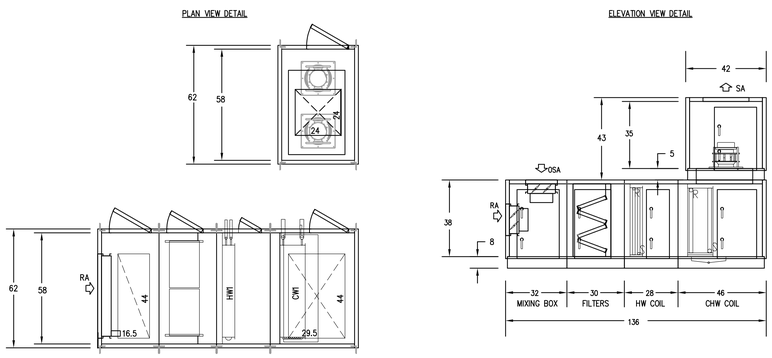
NOTE: SCALES DEPICTED ON THIS DRAWING ARE NOT CORRECT UNLESS PLOTTED SHEET SIZE IS 30 X 42 INCHES.

P:\1574 - JJC - Black Box Theater Cooling Unit Replacement\30_Design\Dwgs\DD-CD\30_Mech\1574M310A.dwg, 8/7/2025 3:37:05 PM, BWG



SECOND FLOOR VENTILATION PLAN (1)

SCALE: 1/4" = 1'-0"



AIR HANDLING UNIT (AHU-K-2) DETAIL (2)

SCALE: NTS

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7. GENERALLY, SMALL DIAMETER PIPE RUNS FROM DRIPS, CONDENSATE PANS AND OTHER SERVICES ARE NOT SHOWN BUT MUST BE PROVIDED. CONFIGURE CONDENSATE DRAINS WITH FITTINGS AND/OR UNIONS TO PERMIT CLEARING OF BLOCKAGES AND PERFORMANCE OF MAINTENANCE WITHOUT CUTTING OF THE LINES.
8. SPACE ALLOCATION, COORDINATION WITH ELECTRICAL, ARCHITECTURAL & OTHER MECHANICAL COMPONENTS HAVE BEEN MADE WITH RESPECT TO EQUIPMENT SCHEDULED ON THESE DRAWINGS AND IN THE SPECIFICATIONS OF THE FIRST NAMED MANUFACTURER ONLY. OTHER MANUFACTURERS ARE ACCEPTABLE PROVIDED THEY MEET PERFORMANCE REQUIREMENTS AND AFOREMENTIONED COORDINATION.
9. DO NOT CUT THROUGH THE STRUCTURAL ELEMENTS WHEN INSTALLING OPENINGS REQUIRED FOR DUCTWORK, PIPING, CONDUITS OR OTHER WORK. COORDINATE WITH STRUCTURAL DRAWINGS AND MASON CONTRACTOR FOR BOND BEAM AND STRUCTURAL ELEMENT LOCATIONS. CONTRACTOR CUTTING THROUGH OR OTHERWISE DAMAGING THESE ELEMENTS WILL BE RESPONSIBLE FOR ALL ASSOCIATED ENGINEERING FEES AND SUBSEQUENT RETRO-FIT/REINFORCING DEEMED NECESSARY TO REINSTATE THE CONTINUITY OF THE DISRUPTED ELEMENTS.

KEYNOTES

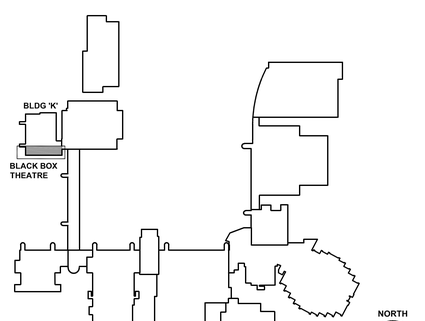
KEYNOTES ARE TYPICALLY NOT DUPLICATED WITHIN A GIVEN DETAIL. AN UN-KEYNOTED ITEM IN A DETAIL IS THE SAME AS A KEYNOTED ITEM HAVING THE SAME APPEARANCE WITHIN THE SAME DETAIL.

9.653 ALTERNATE NO. 1 – RESILIENT BASE: APPLY TO INFILL AREA BEHIND REMOVED UNIT VENTILATOR.
9.902 ALTERNATE NO. 1 – PAINT CONCRETE MASONRY LEFT EXPOSED TO VIEW AFTER REMOVAL OF UNIT VENTILATOR; MATCH SURROUNDING BLUE WALL COLOR AND SHEEN.

23.202 PROVIDE ACOUSTIC FLEX DUCT FOR ALL FLEXIBLE DUCTS IN THIS ROOM. REFER TO SPECIFICATIONS.
23.203 PROVIDE NEW COMBINATION THERMOSTAT/CO2 SENSOR FOR VAV BOX. THERMOSTAT COLOR SHALL BE BLACK. COORDINATE WITH OWNER FOR EXACT LOCATION.
23.204 PROPOSED LOCATION OF AIR HANDLING UNIT ELECTRICAL PANEL. CONFIRM FINAL LOCATION WITH OWNER.
23.205 PROVIDE DUCT MOUNTED TIGHT TO BOTTOM OF JOIST.
23.206 PROVIDE RETURN DUCT TAKEOFF WITH BALANCING DAMPER. PROVIDE FLARED AND SCREENED OPENING ON END OF DUCT. BALANCE TO AIRFLOW AS SHOWN.
23.207 PROVIDE NEW DDC CONTROLLER FOR AHU. PROVIDE GRAPHICS AND INTERFACE INTO CAMPUS BUILDING AUTOMATION SYSTEM. COORDINATE EXACT LOCATION WITH OWNER.
23.208 PROVIDE INSULATED PLENUM BOX OVER WALL LOUVER. PROVIDE CONNECTION BETWEEN EXHAUST FAN AND PLENUM BOX AS SHOWN.
23.209 PROVIDE NEW COMBINATION THERMOSTAT/CO2 SENSOR FOR VAV BOX. THERMOSTAT COLOR SHALL BE WHITE. COORDINATE WITH OWNER FOR EXACT LOCATION.

23.350 ALTERNATE NO. 1 – PROVIDE RETURN DUCT TAKEOFF WITH BALANCING DAMPER. PROVIDE FLARED AND SCREENED OPENING ON END OF DUCT. BALANCE TO AIRFLOW AS SHOWN.
23.351 ALTERNATE NO. 1 – PROVIDE NEW THERMOSTAT FOR VAV BOX. COORDINATE WITH OWNER FOR EXACT LOCATION. THERMOSTAT SHALL MATCH EXISTING CAMPUS STANDARD FOR PUBLIC CORRIDORS

KEY PLAN



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BLACK BOX THEATRE AHU AND PIPE INSULATION

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1215 HOUBOLT ROAD
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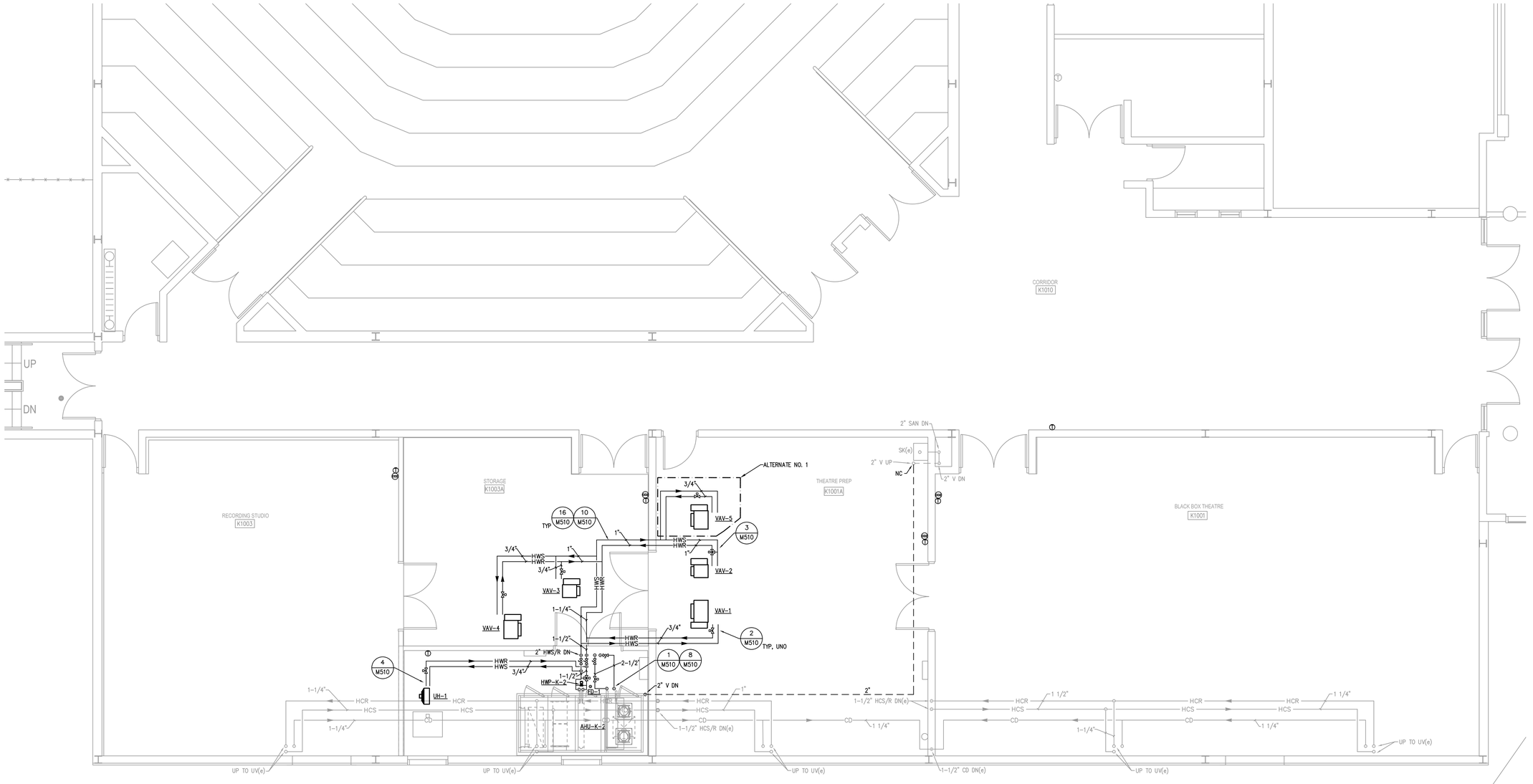
ISSUED
08/12/25 BID & PERMIT DOCUMENTS

JOB NO.	24-292-1574
DRAWN	BWG
CHECKED	DDW
APPROVED	BWG

SHEET TITLE
SECOND FLOOR VENTILATION PLAN

SHEET NUMBER
M320

NOTE: SCALES DEPICTED ON THIS DRAWING ARE NOT CORRECT UNLESS PLOTTED SHEET SIZE IS 30 X 42 INCHES.



SECOND FLOOR HEATING PLAN (1)

SCALE: 1/4" = 1'-0"

GENERAL NOTES

1. REFER TO DRAWING G100 FOR PROJECT GENERAL NOTES.
2. PIPING, DUCTWORK AND RACEWAYS ARE SHOWN DIAGRAMMATICALLY AND DO NOT SHOW ALL REQUIRED FITTINGS, OFFSETS, DROPS AND RISES. PROVIDE ALL MATERIAL AND LABOR FOR A COMPLETE AND WORKING SYSTEM. COORDINATE WITH OTHER TRADES FOR SPACE AVAILABLE AND RELATIVE LOCATIONS OF EQUIPMENT, PIPING, DUCTWORK, ETC.
3. FIELD VERIFY EXISTING PIPING, DUCTWORK AND RACEWAYS INDICATED ON THESE PLANS FOR EXACT LOCATIONS, QUANTITY AND SIZES.
4. TEMPORARILY REMOVE EXISTING ACOUSTICAL CEILING PANELS AND GRID ELEMENTS AS NECESSARY TO PERMIT PERFORMANCE OF THE MECHANICAL WORK DEPICTED. STORE AND PROTECT TEMPORARILY-REMOVED ITEMS UNTIL PROJECT IS READY FOR REINSTALLATION. REINSTALL SALVAGED PANELS AND GRID ELEMENTS ONCE MECHANICAL WORK IS COMPLETE. PROVIDE NEW PANELS AND GRID ELEMENTS MATCHING EXISTING TO REPLACE PANELS OR GRID ELEMENTS DAMAGED DURING SALVAGE, DEMOLITION OR CONSTRUCTION OPERATIONS.
5. PROVIDE TAPES AND MASTICS USED TO SEAL DUCTWORK LISTED AND LABELED IN ACCORDANCE WITH UL 181A AND MARKED ACCORDINGLY. PROVIDE TAPES AND MASTICS COMPLIANT WITH UL 181B AND MARKED ACCORDINGLY TO SEAL FLEXIBLE DUCTS AND AIR CONNECTORS.
6. PROVIDE THERMOSTATIC CONTROLS OF EQUIPMENT HAVING A 5° F DEADBAND.
7. GENERALLY, SMALL DIAMETER PIPE RUNS FROM DRIPS, CONDENSATE PANS AND OTHER SERVICES ARE NOT SHOWN BUT MUST BE PROVIDED. CONFIGURE CONDENSATE DRAINS WITH FITTINGS AND/OR UNIONS TO PERMIT CLEARING OF BLOCKAGES AND PERFORMANCE OF MAINTENANCE WITHOUT CUTTING OF THE LINES.
8. SPACE ALLOCATION, COORDINATION WITH ELECTRICAL, ARCHITECTURAL & OTHER MECHANICAL COMPONENTS HAVE BEEN MADE WITH RESPECT TO EQUIPMENT SCHEDULED ON THESE DRAWINGS AND IN THE SPECIFICATIONS OF THE FIRST NAMED MANUFACTURER ONLY. OTHER MANUFACTURERS ARE ACCEPTABLE PROVIDED THEY MEET PERFORMANCE REQUIREMENTS AND AFOREMENTIONED COORDINATION.
9. DO NOT CUT THROUGH THE STRUCTURAL ELEMENTS WHEN INSTALLING OPENINGS REQUIRED FOR DUCTWORK, PIPING, CONDUITS OR OTHER WORK. COORDINATE WITH STRUCTURAL DRAWINGS AND MASON CONTRACTOR FOR BOND BEAM AND STRUCTURAL ELEMENT LOCATIONS. CONTRACTOR CUTTING THROUGH OR OTHERWISE DAMAGING THESE ELEMENTS WILL BE RESPONSIBLE FOR ALL ASSOCIATED ENGINEERING FEES AND SUBSEQUENT RETRO-FIT/REINFORCING DEEMED NECESSARY TO REINSTATE THE CONTINUITY OF THE DISRUPTED ELEMENTS.

KEYNOTES

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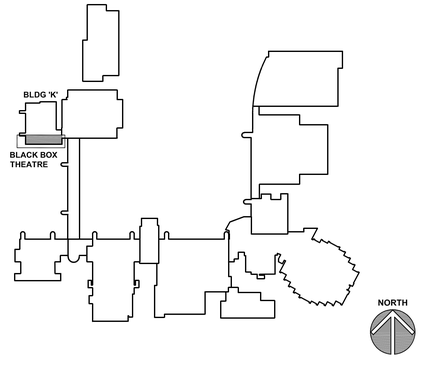
KEY PLAN



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ISSUED
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08/13/25

JOB NO.	24-292-1574
DRAWN	BWG
CHECKED	DDW
APPROVED	BWG

SHEET TITLE

SECOND FLOOR PIPING PLAN

SHEET NUMBER

M321

NOTE: SCALES DEPICTED ON THIS DRAWING ARE NOT CORRECT UNLESS PLOTTED SHEET SIZE IS 30 X 42 INCHES.

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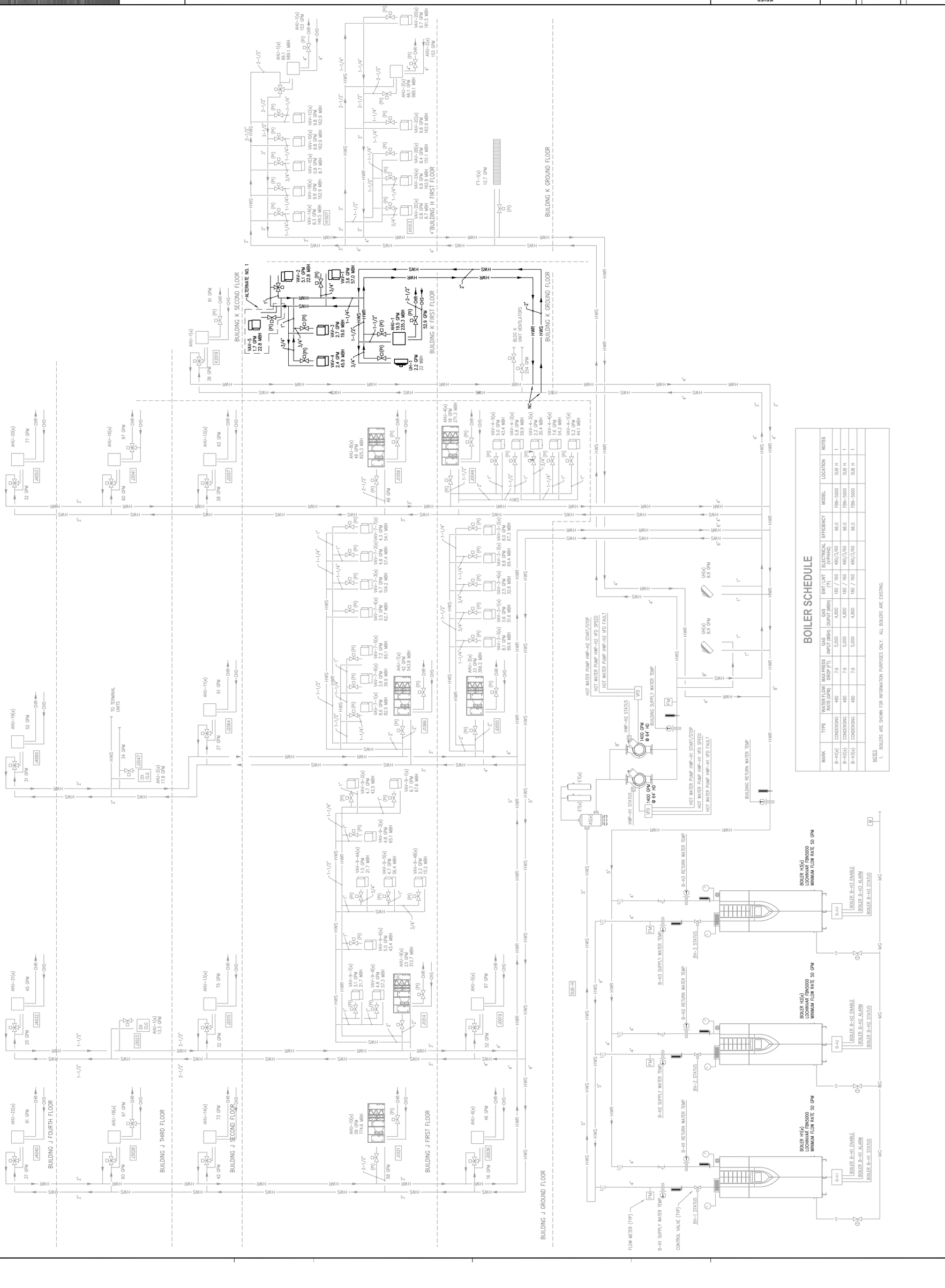
JOB NO.	24-292-1574
DRAWN	KJD
CHECKED	BWG
APPROVED	DDW

SHEET TITLE: PIPING SCHEMATIC

SHEET NUMBER: M410

NOTE: SCALES DEPICTED ON THIS DRAWING ARE NOT CORRECT UNLESS PLOTTED SHEET SIZE IS 30 X 42 INCHES.

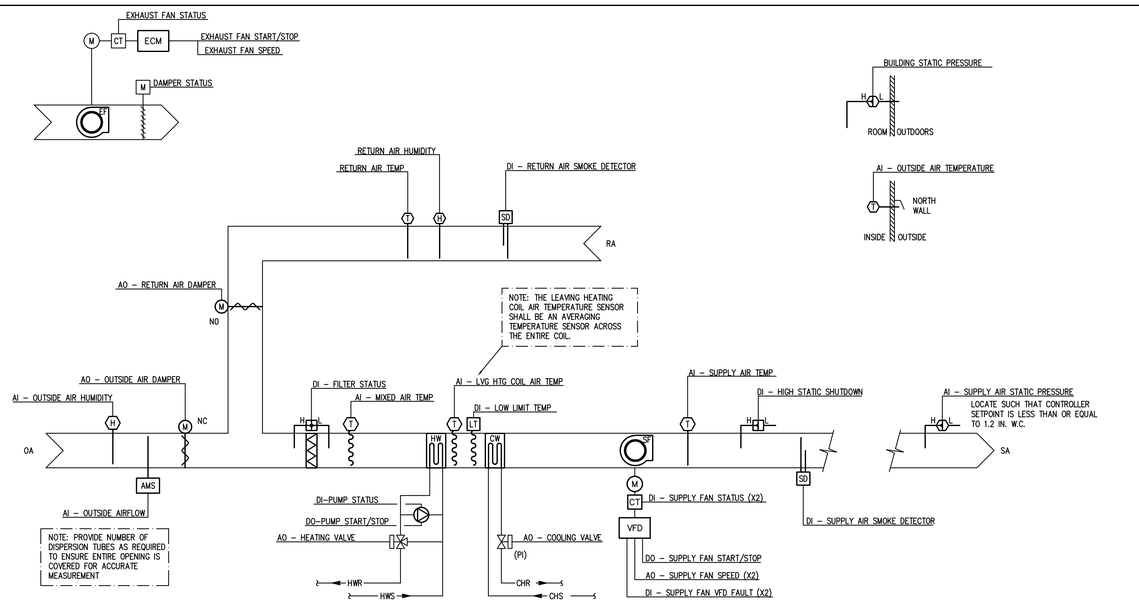


BOILER SCHEDULE

MARK	TYPE	WATER FLOW RATE (GPM)	MAX PRESS DROP (FT)	GAS INPUT (MBH)	GAS OUPUT (MBH)	EWT / LWT (°F)	ELECTRICAL (V/PH/HZ)	EFFICIENCY	MODEL	LOCATION	NOTES
B-H1(e)	CONDENSING	480	7.6	5,000	4,800	180 / 160	480/3/60	96.0	FBN-5000	SUB H	1
B-H2(e)	CONDENSING	480	7.6	5,000	4,800	180 / 160	480/3/60	96.0	FBN-5000	SUB H	1
B-H3(e)	CONDENSING	480	7.6	5,000	4,800	180 / 160	480/3/60	96.0	FBN-5000	SUB H	1

NOTES
1. BOILERS ARE SHOWN FOR INFORMATION PURPOSES ONLY. ALL BOILERS ARE EXISTING.

AHU-K-2 TEMPERATURE CONTROL SCHEMATIC



NOTES:

1. COMPONENTS AND INTERCONNECTIONS SHOWN ARE SCHEMATIC ONLY.
2. CONTRACTOR IS RESPONSIBLE FOR PROVIDING COMPONENTS, SENSORS, RELAYS, ETC, TO ENSURE A COMPLETE OPERATING SYSTEM.
3. SMOKE DETECTORS TO BE SUPPLIED AND INSTALLED BY THE ELECTRICAL CONTRACTOR.
4. NEW AIR HANDLING UNIT CONTROLLER SHALL BE BACNET IP PROTOCOL.

POINTS LIST

AIR HANDLING UNIT (AHU–K–2)	HARDWARE				SOFTWARE			
	AI	AO	DI	DO	SCHED	TREND	ALARM	GRAPHIC
OCCUPIED/UNOCCUPIED MODE			X		X			X
SUPPLY FAN START/STOP				X	X			
SUPPLY FAN STATUS (X2)			X				X	X
SUPPLY FAN SPEED (X2)		X				X		X
OUTSIDE AIR TEMPERATURE (EXISTING GLOBAL POINT)	X					X		X
SUPPLY AIR TEMPERATURE	X					X		X
SUPPLY AIR TEMPERATURE SETPOINT		X				X		X
RETURN AIR TEMPERATURE	X					X		X
MIXED AIR TEMPERATURE	X					X		X
LEAVING HEATING COIL AIR TEMPERATURE	X					X		X
OUTSIDE AIR HUMIDITY	X					X		X
RETURN AIR HUMIDITY	X					X		X
LOW LIMIT TEMPERATURE			X				X	X
OUTSIDE AIR DAMPER		X				X	X	X
OUTSIDE AIR AIRFLOW MEASUREMENT	X					X		X
OUTSIDE AIR AIRFLOW SETPOINT		X				X		X
RETURN AIR DAMPER		X				X	X	X
HOT WATER COIL CONTROL VALVE		X				X		X
HOT WATER COIL CONTROL VALVE POSITION FEEDBACK	X					X	X	X
CHILLED WATER COIL CONTROL VALVE		X				X		X
CHILLED WATER COIL CONTROL VALVE POSITION FEEDBACK	X					X	X	X
FILTER STATUS			X				X	X
RETURN AIR SMOKE DETECTOR STATUS			X				X	X
SUPPLY AIR SMOKE DETECTOR STATUS			X				X	X
HWP PUMP STATUS			X					
HWP PUMP START/STOP				X			X	X
ECONOMIZER STATUS			X				X	X
ECONOMIZER FAULT DETECTION ALARM			X				X	X
DUCT STATIC PRESSURE	X					X		X
DUCT STATIC PRESSURE SETPOINT	X					X		X
HIGH STATIC PRESSURE SHUTDOWN			X				X	X
BUILDING STATIC PRESSURE	X					X		X
BUILDING STATIC PRESSURE SETPOINT		X				X		X
EXHAUST FAN START/STOP				X				X
EXHAUST FAN STATUS			X				X	X
EXHAUST FAN SPEED		X				X		X
EXHAUST DAMPER				X				X

NOTES:

1. HEATING CONTROL VALVE SHALL HAVE SPRING RETURN ACTUATORS TO FAIL OPEN DURING LOSS OF POWER.
2. OUTSIDE AIR DAMPERS SHALL HAVE SPRING RETURN ACTUATORS TO FAIL IN CLOSED POSITION DURING LOSS OF POWER.

SEQUENCE OF OPERATIONS

AIR HANDLING UNIT (AHU–K–2): VARIABLE AIR VOLUME

THE OCCUPIED/UNOCCUPIED MODE SCHEDULING SHALL BE MADE AT THE BUILDING AUTOMATION SYSTEM. PROVISIONS SHALL BE MADE FOR MANUAL SHUTDOWN OF EQUIPMENT. ALL SETPOINTS SHALL BE ADJUSTABLE. UNOCCUPIED SPACE TEMPERATURE SETPOINTS SHALL BE 80°F COOLING AND 60°F HEATING (ADJ.).

SUPPLY FAN – THE SUPPLY FAN SHALL RUN CONTINUOUSLY DURING OCCUPIED MODE AND INTERMITTENTLY DURING UNOCCUPIED MODE. THE SUPPLY FAN VARIABLE FREQUENCY DRIVES SHALL MODULATE THE SPEED OF THE FAN TO MAINTAIN THE DUCT STATIC PRESSURE SETPOINT. IF AIRFLOW IS NOT DETECTED WITHIN TWO MINUTES AFTER A START COMMAND THE FAN MOTOR SHALL BE DE–ENERGIZED AND AN AUDIBLE ALARM SHALL BE ACTIVATED. IF A HIGH STATIC PRESSURE IS SENSED IN THE SUPPLY AIR THE SUPPLY FAN SHALL BE DE–ENERGIZED AND SIGNAL AN ALARM CONDITION. IF ANY ONE OF THE SUPPLY FAN STATUS POINTS SHOWS THE SUPPLY FAN OFF AND THE FAN IS COMMANDED ON, AN ALARM SHALL BE GENERATED IN THE BAS.

STATIC PRESSURE/SUPPLY AIR TEMPERATURE RESET – THE SUPPLY FAN VFDS SHALL MODULATE THE FANS TO MAINTAIN A DUCT STATIC PRESSURE SETPOINT. THE BAS SHALL CONTROL SUPPLY FAN SPEED TO MAINTAIN A CRITICAL STATIC PRESSURE SETPOINT. UPON FAILURE OF COMMUNICATION THE AHUs SHALL OPERATE ON THEIR OWN STATIC PRESSURE CONTROL IN STAND ALONE MODE. THE SETPOINT SHALL RESET TO OPTIMIZE FAN SPEED AS FOLLOWS:

1. THE BUILDING AUTOMATION SYSTEM SHALL MONITOR THE DAMPER POSITION OF ALL VAV TERMINAL UNITS AND DETERMINE THE CRITICAL ZONE (CZ), WHICH IS THE VAV TERMINAL UNIT THAT IS WIDEST OPEN.
2. WHEN THE CZ IS MORE THAN 95% OPEN, THE SUPPLY FAN DISCHARGE STATIC PRESSURE SETPOINT SHALL BE RESET DOWNWARD 10% OF THE PREVIOUS SETPOINT A FREQUENCY OF 10 MINUTES UNTIL THE CZ IS MORE THAN 97% OPEN OR THE STATIC PRESSURE SETPOINT HAS RESET DOWNWARD TO THE SYSTEM MINIMUM SETTING.
3. IF THE OUTSIDE AIR IS BELOW 55°F AND THE CZ IS LESS THAN 95% OPEN AND THE STATIC PRESSURE SETPOINT IS AT THE MINIMUM SETTING, THE DISCHARGE AIR TEMPERATURE SETPOINT SHALL BE RESET UPWARD IN INCREMENTS OF 0.5° F AT A FREQUENCY OF 10 MINUTES AND THE STATIC PRESSURE SETPOINT HELD CONSTANT UNTIL THE CZ IS MORE THAN 97% OPEN OR THE DISCHARGE AIR TEMPERATURE IS RESET TO IT'S MAXIMUM SETTING OF 10° F (ADJ) ABOVE THE DISCHARGE AIR TEMPERATURE SETPOINT.
4. THE REVERSE CONTROL SEQUENCE SHALL OCCUR WHEN THE CZ IS 98% OPEN UNTIL THE DISCHARGE AIR TEMPERATURE AND STATIC TEMPERATURE SETPOINTS ARE A THEIR DESIGN SETPOINT.

SMOKE DETECTORS – UPON DETECTION OF SMOKE THE FANS SHALL BE DE–ENERGIZED, CLOSE OUTSIDE AIR DAMPER, AND SIGNAL ALARM LOCALLY AND AT FIRE ALARM PANEL.

OA/RA DAMPERS – AN AIRFLOW MEASURING STATION/DAMPER SENSOR SHALL MODULATE THE OUTSIDE AIR DAMPERS TO MAINTAIN THE MINIMUM OUTSIDE AIR CFM SETPOINT. IN UNOCCUPIED MODE THE OUTSIDE AIR DAMPER SHALL BE FULLY CLOSED. THE OUTSIDE AIR DAMPER SHALL REMAIN CLOSED AND RETURN AIR DAMPER OPEN DURING OPTIMIZED START.

ECONOMIZER – AN ECONOMIZER SHALL MODULATE THE RETURN/OA DAMPERS BASED ON DIFFERENTIAL ENTHALPY OF THE RETURN AIR AND THE OUTSIDE AIR TO MAINTAIN A MIXED AIR TEMPERATURE OF 55 DEGREES F. THE ECONOMIZER SHALL HAVE FAULT AND DETECTION DIAGNOSTICS (FDD). THE FDD SHALL ALARM WITH ANY OF THE FOLLOWING FAULTS: 1: AIR TEMPERATURE SENSOR FAILURE/FAULT 2: NOT ECONOMIZING WHEN THE UNIT SHOULD BE ECONOMIZING 3: ECONOMIZING WHEN THE UNIT SHOULD NOT BE ECONOMIZING 4: DAMPER NOT MODULATING 5:EXCESS OUTDOOR AIR.

COOLING MODE – THE COOLING COIL CONTROL VALVE SHALL MODULATE TO MAINTAIN A SUPPLY AIR TEMPERATURE OF 55°F (ADJ.).

HEATING MODE – THE HOT WATER COIL CONTROL VALVE SHALL MODULATE AS REQUIRED TO MAINTAIN THE DISCHARGE AIR TEMPERATURE SETPOINT (ADJ.). THE HOT WATER CONTROL VALVE POSITION SHALL BE DETERMINED BY BOTH THE LEAVING HEATING COIL TEMPERATURE AND THE SUPPLY AIR TEMPERATURE.

HWP–X, PUMP CONTROL – THE PUMP SHALL RUN CONTINUOUSLY WHEN THE OUTSIDE AIR IS BELOW 40°F (ADJ.). ABOVE 40°F OUTSIDE AIR TO THE PUMP SHALL BE OFF.

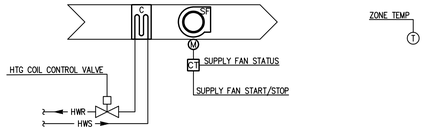
DEMAND CONTROLLED VENTILATION – THE OUTSIDE AIRFLOW SETPOINT SHALL BE RESET BASED ON THE SPACE CO2 CONCENTRATIONS. THE BUILDING AUTOMATION SYSTEM SHALL MONITOR THE SPACE CO2 CONCENTRATIONS FOR THE VAV BOXES WITH CO2 SENSORS. THE OUTSIDE AIR FLOW (CFM) SHALL BE AT ITS MINIMUM SETPOINT IF ALL THE SPACE CO2 CONCENTRATIONS ARE AT 450 PPM (ADJ.) OR BELOW. IF ANY OF THE SPACE CO2 CONCENTRATIONS ARE AT 800 PPM OR ABOVE, THE OUTSIDE AIR DAMPER SHALL BE AT ITS MAXIMUM OUTSIDE AIRFLOW (CFM) SETPOINT. THE OUTSIDE AIR FLOW SETPOINT SHALL RESET PROPORTIONALLY BETWEEN ITS MINIMUM AND MAXIMUM OUTSIDE AIRFLOW SETTING FOR CO2 CONCENTRATIONS BETWEEN THE MINIMUM AND MAXIMUM SETPOINTS.

OPTIMIZED START – THE AHU SHALL BEGIN A MORNING WARM–UP/COOL DOWN AS CALCULATED BY THE BAS FOR ALL THE SPACES TO BE AT THE OCCUPIED TEMPERATURE PRIOR TO THE START OF OCCUPIED MODE. THE BUILDING AUTOMATION SYSTEM SHALL AVERAGE ALL THE ZONE SENSORS IN ORDER TO CALCULATE THE TIME MORNING COOL DOWN SHALL BEGIN. THE VAV BOXES SHALL OPEN FULLY AND THE AIR HANDLING UNIT SUPPLY FAN SHALL ENERGIZE. THE AIR HANDLING UNIT CONTROL VALVES SHALL MODULATE AS REQUIRED TO MAINTAIN A SUPPLY AIR TEMPERATURE SETPOINT OF 55°F (ADJ.) COOLING OR 90°F (ADJ.) HEATING. AFTER SPACE TEMPERATURE REACHES THE OCCUPIED SETPOINT THE AHU SHALL OPERATE IN OCCUPIED MODE. THE OUTSIDE AIR DAMPER SHALL REMAIN CLOSED AND EXHAUST FAN SHALL REMAIN OFF DURING OPTIMIZED START.

BUILDING STATIC PRESSURE CONTROL – THE EXHAUST FAN SHALL BE ENABLED WHEN THE BUILDING IS IN OCCUPIED MODE. THE EXHAUST FAN VARIABLE FREQUENCY DRIVE SHALL MODULATE THE SPEED OF THE FAN AS REQUIRED TO MAINTAIN A POSITIVE PRESSURE OF 0.05" W.G. IN THE SPACE.

UNOCCUPIED MODE – THE BUILDING AUTOMATION SYSTEM SHALL TRACK THE ZONE TEMPERATURES OF ALL THE VAV BOXES. IF ONE OF THE ZONE TEMPERATURES IS OUTSIDE OF THEIR UNOCCUPIED SETPOINT RANGE, THE AHU FAN SHALL START. THE UNIT SHALL OPERATE IN HEATING OR COOLING AS REQUIRED TO MAINTAIN THE UNOCCUPIED SPACE TEMPERATURE SETPOINT. THE OUTSIDE AIR DAMPER SHALL REMAIN CLOSED DURING UNOCCUPIED MODE. THE EXHAUST FAN SHALL BE DISABLED DURING UNOCCUPIED MODE.

UNIT HEATER CONTROL SCHEMATIC



SEQUENCE OF OPERATIONS

UNIT HEATERS (UH–1)

THE UNIT HEATER SHALL MAINTAIN AN OCCUPIED/UNOCCUPIED SPACE TEMPERATURE SETPOINT OF 65/60 DEGREES F (ADJ.).

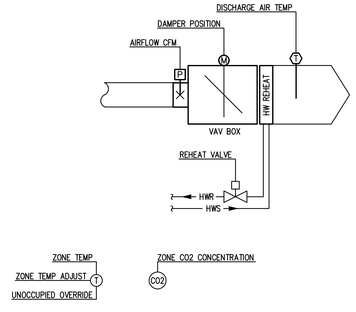
IF THE SPACE TEMPERATURE DROPS BELOW THE SPACE TEMPERATURE SETPOINT, THE UNIT HEATER AND ASSOCIATED HEATING CONTROL VALVE SHALL BE ENABLED. THE HEATING CONTROL VALVE SHALL MODULATE AS REQUIRED TO MAINTAIN THE SPACE TEMPERATURE SETPOINT. THE SUPPLY FAN SHALL OPERATE IN CONJUNCTION WITH THE CONTROL VALVE. IF THE CONTROL VALVE BECOMES FULLY CLOSED, THE FAN SHALL BE DISABLED.

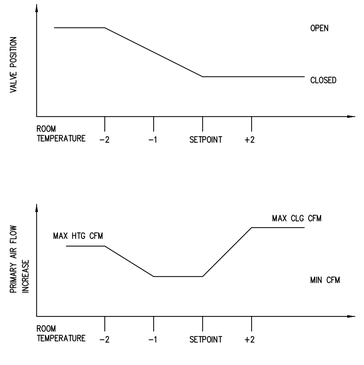
IF THE SPACE TEMPERATURE DROPS 10 DEGREES F BELOW SETPOINT THE HEATING CONTROL VALVE SHALL OPEN FULLY AND AN ALARM SHALL BE GENERATED AT THE BAS.

POINTS LIST

UNIT HEATER (UH–1)	HARDWARE				SOFTWARE			
	AI	AO	DI	DO	SCHED	TREND	ALARM	GRAPHIC
FAN START/STOP				X		X		X
SPACE TEMPERATURE	X					X	X	X
SPACE TEMPERATURE SETPOINT		X				X		X
UNIT HEATER STATUS			X			X	X	X
UNIT HEATER HOT WATER CONTROL VALVE		X				X	X	X
HOT WATER CONTROL VALVE POSITION FEEDBACK	X					X	X	X

VARIABLE AIR VOLUME BOX CONTROL SCHEMATIC





MODULATE PRIMARY VALVE FULLY OPEN WHEN ROOM AIR TEMPERATURE IS 2 DEGREES ABOVE SETPOINT.
MODULATE PRIMARY AIR VALVE AND HEATING VALVE AS REQUIRED TO MAINTAIN 95 DEGRESS F DISHARGE AIR TEMPERATURE.

NOTES:

1) SEE VENTILATION FLOOR PLANS FOR EQUIPMENT LAYOUT AND CONTROL CABINET LOCATIONS.
2) SPACE TEMPERATURE/CO2 SENSORS SHALL BE BLACK IN COLOR FOR THE FOLLOWNG ROOMS: K1001, K1001A, K1003

SEQUENCE OF OPERATIONS

PRESSURE INDEPENDENT AIR TERMINAL SHALL MAINTAIN ZONE TEMPERATURE HEAT/COOL SETPOINTS OF 72/75 DEGREES F (ADJ) AND UNOCCUPIED COOL/HEAT SETPOINTS OF 80/65 DEGREES F. ALL SETPOINTS SHALL BE ADJUSTABLE.

OCCUPIED MODE:
COOLING – WHEN THE AHU SUPPLY TEMPERATURE IS 60°F (ADJ.) AND BELOW (AHU IS IN COOLING MODE) THE TERMINAL UNIT DAMPER SHALL MODULATE TO MAINTAIN THE ZONE COOLING TEMPERATURE SETPOINT BY MODULATING SUPPLY AIR FLOW. WHEN THE ZONE TEMPERATURE IS ABOVE SETPOINT THE DAMPER SHALL MODULATE TO THE MAXIMUM COOLING CFM POSITION. WHEN THE ZONE TEMPERATURE IS BELOW SETPOINT THE DAMPER SHALL MODULATE TO THE MINIMUM CFM POSITION. IF THE AHU SUPPLY TEMPERATURE IS GREATER THAN 60°F (ADJ.) AND THE ZONE IS CALLING FOR COOLING, THE TERMINAL UNIT DAMPER SHALL REMAIN AT ITS MINIMUM POSITION.

HEATING – WHEN THE TERMINAL UNIT DAMPER HAS REACHED THE MINIMUM CFM POSITION AND THE ZONE TEMPERATURE IS BELOW SETPOINT THE VALVE SHALL MODULATE OPEN TO PROVIDE A DISCHARGE AIR TEMPERATURE OF 90°F (ADJ.). IF THE ZONE CONTINUES TO REMAIN BELOW SETPOINT THE TERMINAL UNIT DAMPER SHALL MODULATE OPEN TO THE HEATING MAXIMUM CFM. THE VALVE SHALL MODULATE IN UNISON WITH THE DAMPER TO MAINTAIN A 90° F DISCHARGE AIR TEMPERATURE. AS THE ZONE TEMPERATURE INCREASES THE DAMPER AND VALVE SHALL REACT IN A REVERSE MANNER.

UNOCCUPIED MODE:
THE TERMINAL UNIT DAMPER AND REHEAT SHALL OPERATE AS DESCRIBED ABOVE WHEN THE ASSOCIATED AIR HANDLING UNIT IS ENERGIZED. THE UNIT SHALL OPERATE TO MAINTAIN THE UNOCCUPIED HEATING/COOLING SETPOINTS.

ZONE THERMOSTAT SHALL HAVE PLUS/MINUS 2° F TEMPERATURE SETPOINT ADJUSTMENT OF THE SETPOINT SET AT THE BAS AND TIMED UNOCCUPIED OVERRIDE BUTTON.

DEMAND CONTROLLED VENTILATION (FOR ZONES WITH CO2 DETECTION): THE SPACE SHALL MONITOR CO2 CONCENTRATIONS. WHEN SPACE CO2 LEVELS EXCEED THE SETPOINT OF 800 PPM (ADJ.), INCREASE PRIMARY AIRFLOW UNTIL LEVELS DROP BELOW SETPOINT. THE TERMINAL UNIT REHEAT CONTROL VALVE SHALL BE ENABLED AS REQUIRED TO PREVENT OVERCOOLING OF THE SPACE.

POINTS LIST

VARIABLE AIR VOLUME BOX	HARDWARE				SOFTWARE			
	AI	AO	DI	DO	SCHED	TREND	ALARM	GRAPHIC
DISCHARGE AIR TEMPERATURE	X					X		X
ZONE AIR TEMPERATURE	X					X		X
ZONE TEMPERATURE ADJUSTMENT	X					X		X
HEATING SETPOINT		X						X
COOLING SETPOINT		X						X
DAMPER POSITION		X						X
AIRFLOW CFM	X					X		X
MINIMUM AIRFLOW SETPOINT		X						X
MAXIMUM COOLING AIRFLOW SETPOINT		X						X
MAXIMUM HEATING AIRFLOW SETPOINT		X						X
ZONE HIGH TEMPERATURE ALARM			X				X	X
ZONE LOW TEMPERATURE ALARM			X				X	X
REHEAT COIL 2–WAY VALVE		X				X		X
HOT WATER COIL VALVE POSITION FEEDBACK	X					X	X	X
UNOCCUPIED MODE OVERRIDE			X					X
ZONE CO2 LEVEL	X					X		X
ZONE CO2 SETPOINT (HIGH / LOW)		X						X

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JOLIET, ILLINOIS 60431

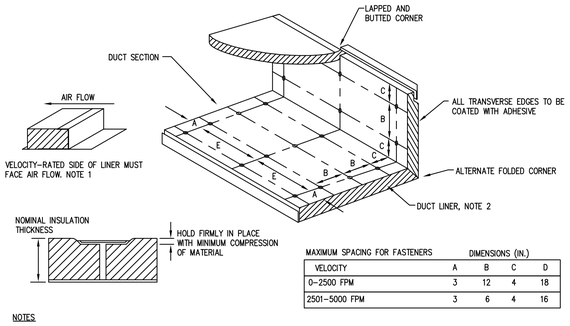
ISSUED
08/12/25 BID & PERMIT DOCUMENTS

JOB NO. 24-292-1574
DRAWN KJD
CHECKED BWG
APPROVED DDW

SHEET TITLE
TEMPERATURE CONTROLS

SHEET NUMBER
M411

NOTE: SCALES DEPICTED ON THIS DRAWING ARE NOT CORRECT UNLESS PLOTTED SHEET SIZE IS 30 X 42 INCHES.

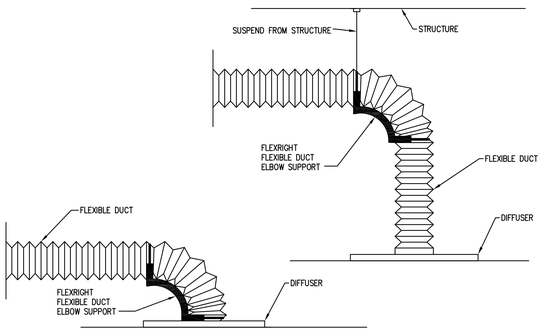


MAXIMUM SPACING FOR FASTENERS	DIMENSIONS (IN.)			
VELOCITY	A	B	C	D
0-2500 FPM	3	12	4	18
2501-5000 FPM	3	6	4	16

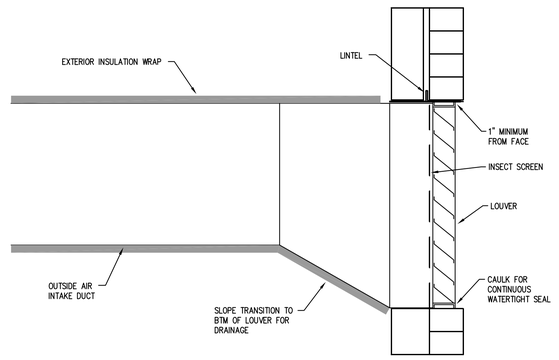
NOTES

1. WHEN VELOCITY EXCEEDS 4000FPM; USE METAL NOSING ON EVERY LEADING EDGE. NOSING MAY BE FORMED ON DUCT OR BE CHANNEL OR ZEE ATTACHED BY SCREWS, RIVETS, OR WELDS. A METAL NOSING SHALL ALSO BE ATTACHED AT THE FAN DISCHARGE AND AT ANY POINT WHERE LINED DUCT IS PRECEDED BY UNLINED DUCT.
2. LINER ADHERED TO THE DUCT WITH 90% MIN. AREA COVERAGE OF ADHESIVE. ADHESIVE SHALL CONFORM TO ASTM C916.

DUCT LINER DETAILS (13)
SCALE: NTS



FLEXIBLE DUCT SUPPORT DETAILS (9)
SCALE: NTS

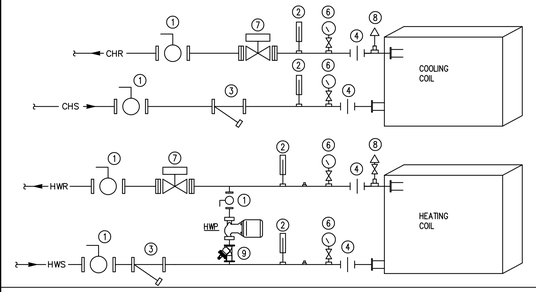


WALL LOUVER DETAIL (5)
SCALE: NTS

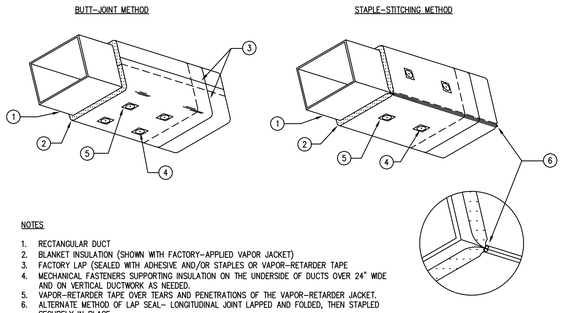
ITEM	DESCRIPTION
1	BALL VALVE
2	THERMOMETER
3	STRAINER
4	UNION
5	NOT USED
6	PRESSURE GAGE
7	TWO WAY PRESSURE INDEPENDENT CONTROL VALVE
8	MANUAL AIR VENT
9	TRIPLE DUTY VALVE

NOTES:

1. SEPARATE PIPING SPECIALITIES ARE SHOWN. MODULAR COMPONENTS ARE ACCEPTABLE.
2. HOT WATER COIL RECIRC. PIPING = 1-1/2"



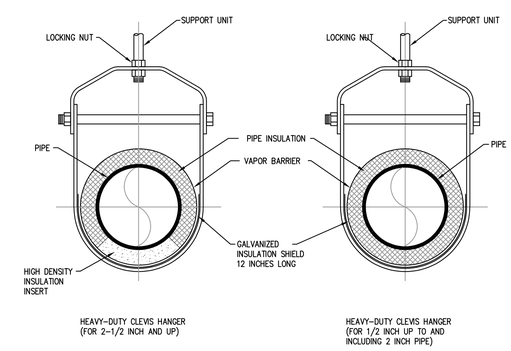
AHU COIL PIPING DETAIL (1)
SCALE: NTS



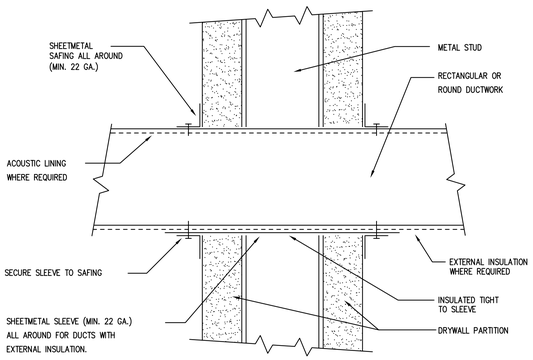
NOTES

1. RECTANGULAR DUCT
2. BLANKET INSULATION (SHOWN WITH FACTORY-APPLIED VAPOR JACKET)
3. FACTORY LAP (SEALED WITH ADHESIVE AND/OR STAPLES OR VAPOR-RETARDER TAPE
4. MECHANICAL FASTENERS SUPPORTING INSULATION ON THE UNDERSIDE OF DUCTS OVER 24" WIDE AND ON VERTICAL DUCTWORK AS NEEDED.
5. VAPOR-RETARDER TAPE OVER TEARS AND PENETRATIONS OF THE VAPOR-RETARDER JACKET.
6. ALTERNATE METHOD OF LAP SEAL- LONGITUDINAL JOINT LAPPED AND FOLDED, THEN STAPLED SECURELY IN PLACE

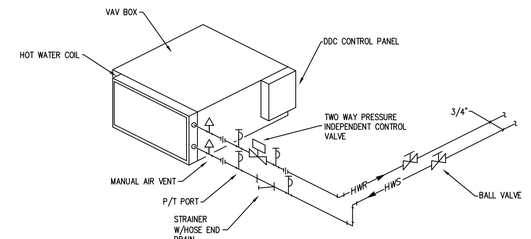
DUCT BLANKET INSULATION DETAILS (14)
SCALE: NTS



PIPE HANGER DETAILS (10)
SCALE: NTS



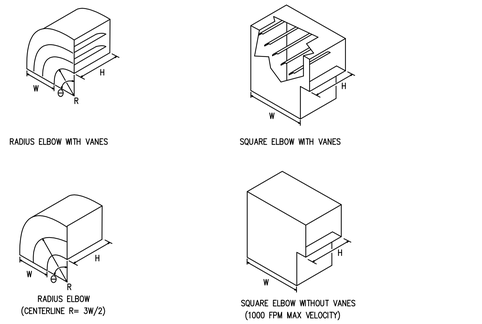
DUCT PENETRATION THRU NON-FIRE RATED WALL (6)
SCALE: NTS



NOTES:

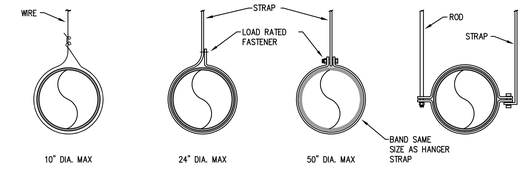
1. PIPING TO ALL REHEAT COILS SHALL BE MINIMUM 3/4" UNLESS OTHERWISE NOTED.
2. SEPARATE PIPING SPECIALTIES ARE SHOWN. MODULAR COMPONENTS ARE ACCEPTABLE.

REHEAT COIL PIPING DETAIL (PICV) (2)
SCALE: NTS

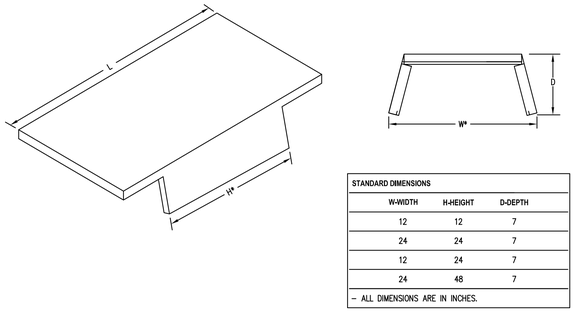


DUCT ELBOW DETAILS (15)
SCALE: NTS

MINIMUM HANGER SIZE FOR ROUND DUCTWORK			
DUCTWORK DIAMETER (INCHES)	12' MAXIMUM SPACING		
	WIRE	ROD	STRAP
UP TO 10	(1) 12 GAGE	1/4"	1" X 22 GAGE
11 - 18	(2) 12 GAGE	1/4"	1" X 22 GAGE
19 - 24	(2) 10 GAGE	1/4"	1" X 22 GAGE
25 - 36	(2) 8 GAGE	3/8"	1" X 20 GAGE
37 - 50	-	(2) 3/8"	(2) 1" X 20 GAGE
51 - 60	-	(2) 3/8"	(2) 1" X 18 GAGE



ROUND DUCTWORK HANGER DETAILS (11)
SCALE: NTS

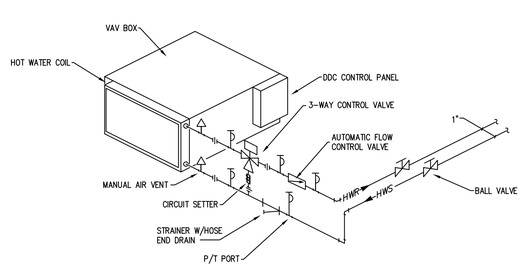


STANDARD DIMENSIONS		
W-WIDTH	H-HEIGHT	D-DEPTH
12	12	7
24	24	7
12	24	7
24	48	7

- ALL DIMENSIONS ARE IN INCHES.

* ACTUAL WIDTH & HEIGHT TYPICALLY ¼ INCH LESS NOMINAL DIMENSIONS.

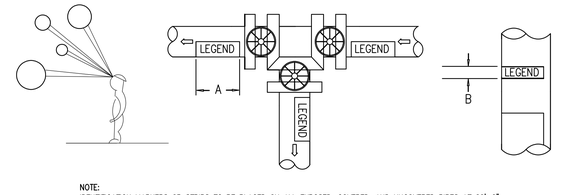
RETURN AIR CANOPY DETAIL (7)
SCALE: NTS



NOTES:

1. SEPARATE PIPING SPECIALTIES ARE SHOWN. MODULAR COMPONENTS ARE ACCEPTABLE.

REHEAT COIL PIPING DETAIL (3-WAY VALVE) (3)
SCALE: NTS



NOTE:
IDENTIFICATION MARKERS OR STRIPS TO BE PLACED ON ALL EXPOSED, COVERED, AND UNCOVERED PIPES AT 20'-0" INTERVALS OR FRACTION THEREOF THROUGHOUT PIPING SYSTEM AND AT ALL VALVES, BRANCHES, CHANGE IN DIRECTION OF FLOW AND ON BOTH SIDES OF WALLS, CEILINGS, OR FLOORS WHERE PIPES PASS THROUGH SAME. ARROWS OF SAME COLORS AS IDENTIFICATION MARKERS SHALL ALSO BE PLACED ON PIPES POINTING AWAY FROM MARKER INDICATING DIRECTION OF FLOW.

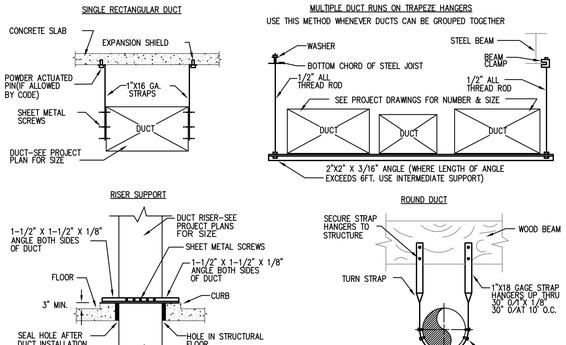
SIZE OF LEGEND LETTERS

OUTSIDE DIAMETER OF PIPE OR COVERING	LENGTH OF COLOR FIELD (A)	SIZE OF LETTERS (B)
INCHES	INCHES	INCHES
3/4" TO 1-1/4"	8"	1/2"
1-1/2" TO 2"	8"	3/4"
2-1/2" TO 6"	12"	1-1/4"
8" TO 10"	24"	2-1/2"
OVER 10"	32"	3-1/2"

INDENTIFICATION LABEL

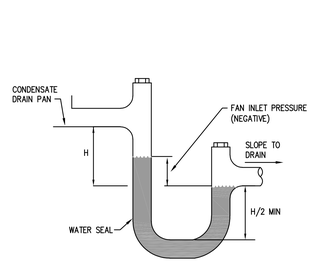
SERVICE	BACKGROUND OR COLOR BAND	IDENTIFICATION MARKER
HEATING SUPPLY	YELLOW	BLACK
HEATING RETURN	YELLOW	BLACK
CHILLED WATER SUPPLY	GREEN	WHITE
CHILLED WATER RETURN	GREEN	WHITE
DUAL TEMP SUPPLY	GREEN	WHITE
DUAL TEMP RETURN	GREEN	WHITE
GLYCOL WATER SUPPLY	ORANGE	BLACK
GLYCOL WATER RETURN	ORANGE	BLACK

PIPE IDENTIFICATION DETAILS (16)
SCALE: NTS



NOTE: DUCTS SHALL BE SUPPORTED AT NOT LESS THAN 10FT O.C.

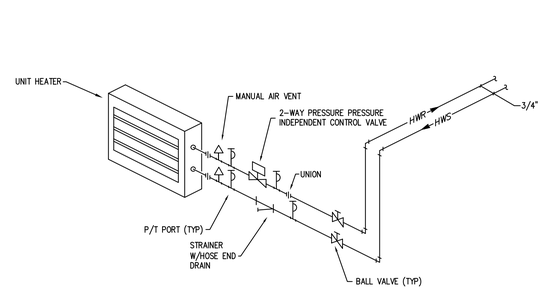
LOW PRESSURE DUCT SUPPORT DETAILS (<2" WG) (12)
SCALE: NTS



DRAW-THRU TRAPS

H = FAN INLET PRESSURE (IN. W.C.) + 1 IN.

COOLING COIL CONDENSATE TRAP DETAILS (8)
SCALE: NTS



NOTES:

1. PIPING TO UNIT HEATER SHALL BE MINIMUM 3/4" UNLESS OTHERWISE NOTED.
2. SEPARATE PIPING SPECIALTIES ARE SHOWN. MODULAR COMPONENTS ARE ACCEPTABLE.

UNIT HEATER PIPING DETAIL (4)
SCALE: NTS

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1215 HOUBOLT ROAD
JOLIET, ILLINOIS 60431

ISSUED	
BID & PERMIT DOCUMENTS	08/12/25

JOB NO.	24-292-1574
DRAWN	BWG
CHECKED	BWG
APPROVED	DDW

SHEET TITLE

MECHANICAL DETAILS

SHEET NUMBER

M510

NOTE: SCALES DEPICTED ON THIS DRAWING ARE NOT CORRECT UNLESS PLOTTED SHEET SIZE IS 30 X 42 INCHES.

AIR HANDLING UNIT SCHEDULE

MARK	AIR FLOW (CFM)	MINIMUM OA (CFM)	COOLING								HEATING				SUPPLY FAN (HP)	EXTERNAL STATIC PRESS (IN WG)	ELECTRICAL		MODEL	NOTES
			OA TEMP (db / wb °F)	ENT AIR TEMP (db / wb °F)	LVG AIR TEMP (db / wb °F)	EWT / LWT (°F)	SENS CAP (MBH)	TOTAL CAP (MBH)	WATER FLOW RATE (GPM)	WATER PRES DROP (FT)	TOTAL CAP (MBH)	EWT / LWT (°F)	EAT / LAT (°F)	WATER FLOW RATE (GPM)	WATER PRESS DROP (FT)			V/PH/HZ	FLA		
AHU-K-2	5,750	450-2,000	91.4 / 75.5	80.8 / 67.4	53.4 / 53.4	45.0 / 55.0	169.9	240.8	52.9	7.39	235.3	140.0 / 115.6	44.9 / 80.9	19.5	6.81	2 ❷ 5.0	2.0	460/3/60	11	TEMTROL	1, 2, 3, 4

NOTES:
1. MODEL BASED ON TEMPTROL BY NORTEK.
2. PROVIDE WITH 8-INCH BASE RAIL.
3. PROVIDE WITH DISCONNECT SWITCH.
4. COOLING COIL BASED ON 30% ETHYLENE GLYCOL.

VARIABLE AIR VOLUME BOX SCHEDULE

MARK	AIR FLOW (CFM)	MIN AIR FLOW (CFM)	INLET SIZE (IN)	REHEAT COIL							ROWS / FINS PER INCH	MODEL	NOTES
				AIR FLOW (CFM)	MAX APD (IN WG)	EAT / LAT (°F)	WATER (GPM)	EWT/LWT (°F)	MAX WPD (FT)	CAPACITY (MBH)			
VAV-1	2,200	725	16	1,500	0.39	55.0 / 90.0	3.6	140 / 107.9	0.22	57.0	3 / 10	DESV	1, 2, 3
VAV-2	600	200	10	600	0.13	55.0 / 90.0	5.1	140 / 130.9	1.61	22.8	2 / 10	DESV	1, 2
VAV-3	520	165	10	520	0.10	55.0 / 89.2	2.7	140 / 125.5	0.49	19.3	2 / 10	DESV	1, 2
VAV-4	1,200	400	14	1,200	0.19	55.0 / 90.0	2.4	140 / 102.0	0.26	45.9	3 / 10	DESV	1, 2, 3
VAV-5	1,650	400	14	600	0.21	55.0 / 90.0	1.7	140 / 112.9	0.19	22.8	2 / 10	DESV	1, 2, 4

NOTES:
1. MODEL BASED ON TITUS.
2. MAXIMUM AIR PRESSURE DROP BASED ON MAXIMUM SCHEDULED CFM.
3. PROVIDE WITH PREMIUM, HINGED CAMLOCK ACCESS DOORS ON BOTTOM OF VAV BOX.
4. ITEM ASSOCIATED WITH ALTERNATE NO. 1.

PRESSURE INDEPENDENT CONTROL VALVE SCHEDULE

TAG	SIZE (IN)	VALVE FLOW RATE (GPM)	MIN FLOW RATE (GPM @ 5 PSIG)	MAX FLOW RATE (GPM)	MAX FLOW VARIATION (%)	MIN DELTA P ACROSS VALVE (PSIG)	CLOSE OFF PRESSURE (PSIG)	BODY PRESSURE RATING (PSIG)	FAIL (LAST, OPEN CLOSED)	VALVE MATERIALS			CONNECTION TYPE	NOTES
										BODY	INTERNALS	SEALS		
CHCV-1	2	43.7	–	55	5	4.4	250	200	LAST	DUCTILE IRON	COPPER / 304 SS	EDPM	MALE NPT	1, 2, 3, 4
HWCV-1	1-1/2	19.5	–	33	5	4.4	250	200	–	DUCTILE IRON	COPPER / 304 SS	EDPM	MALE NPT	1, 2, 3
VAV-1	1/2	3.6	–	5.0	5	5.0	232	200	LAST	BRASS	BRASS / 304 SS	EDPM	MALE NPT	1, 2, 3, 4
VAV-3	1/2	2.7	–	5.0	5	5.0	232	200	LAST	BRASS	BRASS / 304 SS	EDPM	MALE NPT	1, 2, 3, 4
VAV-4	1/2	2.4	–	5.0	5	5.0	232	200	LAST	BRASS	BRASS / 304 SS	EDPM	MALE NPT	1, 2, 3, 4
VAV-5	1/2	1.7	–	5.0	5	5.0	232	200	LAST	BRASS	BRASS / 304 SS	EDPM	MALE NPT	1, 2, 3, 4, 5
UH-1	1/2	2.2	–	5.0	5	5.0	232	200	OPEN	BRASS	BRASS / 304 SS	EDPM	MALE NPT	1, 2, 3, 4

NOTES
1. DESIGN BASIS: DANFOSS AB-QM.
2. VALVE SHALL HAVE LINEAR FLOW CHARACTERISTIC, FIELD ADJUSTABLE FLOW RATE AND MODULATING ACTUATOR.
3. PROVIDE WITH UNION, BALL VALVE AND STRAINER (@20 MESH).
4. PROVIDE WITH PRESSURE AND TEMPERATURE MEASUREMENT PORTS.
5. ITEM ASSOCIATED WITH ALTERNATE NO. 1.

FAN SCHEDULE

MARK	AIR FLOW RATE (CFM)	EXTERNAL S.P. (IN WG)	DRIVE TYPE	DISCHARGE	ROTATION	MOTOR (HP)	ELECTRICAL (V/PH/HZ)	FAN ENERGY INDEX (FEI)	AREA SERVED	LOCATION	MODEL	NOTES
EF-2	4,500	0.65	DIRECT/ECM	SIDE	–	2.0	460/3/60	1.12	AHU-1	K1003B	SQN-D VF	1, 2

NOTES:
1. MODEL BASED ON LOREN COOK.
2. PROVIDE WITH MOTORIZED DAMPER, SIDE DISCHARGE AND EXTERNAL SIGNAL SPEED CONTROL.

WALL LOUVER SCHEDULE

MARK	AIR FLOW RATE (CFM)	SIZE W x H (IN x IN)	VELOCITY (FPM)	PRESSURE DROP (IN WG)	APPLICATION	SERVED BY	LOCATION	MODEL	NOTES
WL-1	4,550	44 x 44	600	0.06	INTAKE	AHU-1	K1003B	ELF6375DX	1, 2, 3
WL-2	4,550	44 x 44	600	0.05	EXHAUST	EF-1	K1003B	ELF6375DX	1, 2, 3

NOTES
1. MODEL BASED ON RUSKIN.
2. PROVIDE WITH INSECT SCREEN FOR INTAKE APPLICATION AND BIRD SCREEN FOR EXHAUST APPLICATIONS.
3. COLOR = BONE WHITE.

PUMP SCHEDULE

MARK	WATER FLOW RATE (GPM)	HEAD (FT)	TYPE	MOTOR POWER (HP)	ELECTRICAL (V/PH/HZ)	MOTOR SPEED (RPM)	SERVICE	MODEL	NOTES
HWP-2	7	10	INLINE	1/6	115/1/60	1,725	AHU-1	SERIES-HV	1

NOTES
1. MODEL BASED ON BELL & GOSSETT.

DIFFUSERS, REGISTERS AND GRILLES SCHEDULE

MARK	MODEL	SIZE	NECK	DAMPER	MATERIAL	REMARKS
S-1	OMNI	24 / 24	8"ø	OBD	ST	1
S-2	OMNI	24 / 24	10"ø	OBD	ST	1, 3
S-3	OMNI	24 / 24	10"ø	OBD	ST	1
R-1	50F	24 / 24	22 / 22	–	AL	1, 2
R-2	50F	24 / 24	22 / 22	–	AL	1, 2, 3

NOTES:
1. MODEL BASED ON TITUS.
2. PROVIDE WITH RETURN AIR CANOPY (RCP).
3. COLOR = BLACK.

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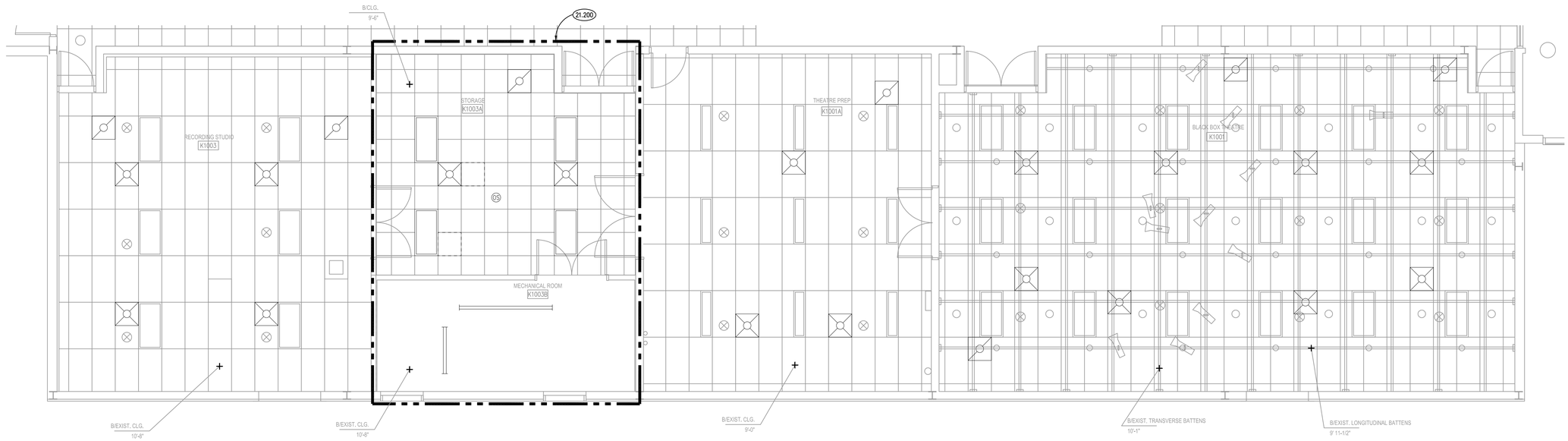
JOB NO. 24-292-1574
DRAWN BWG
CHECKED BWG
APPROVED DDW

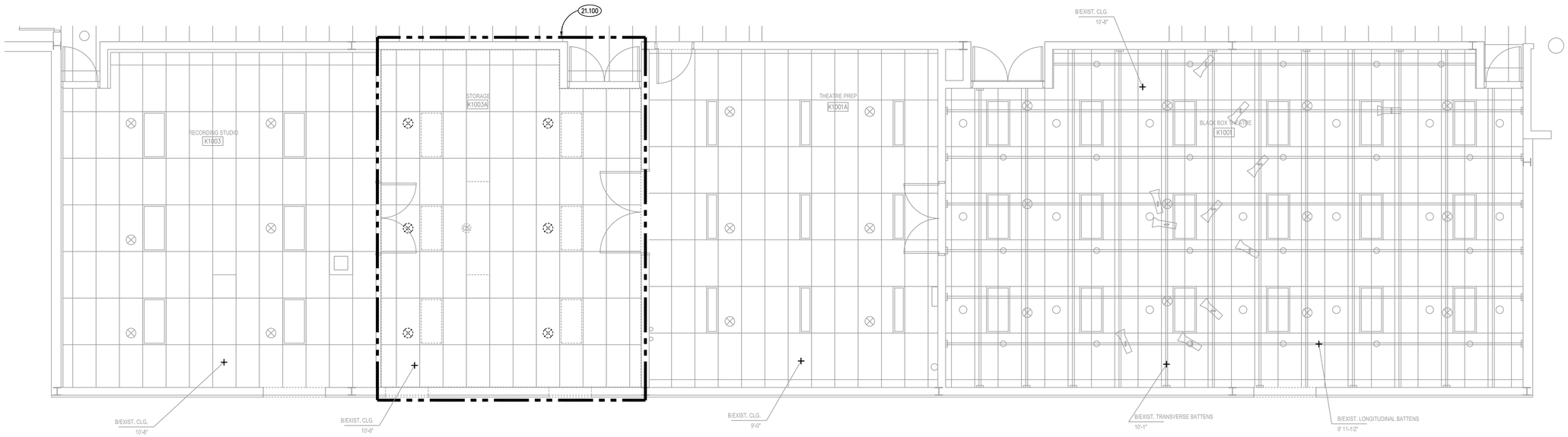
SHEET TITLE
MECHANICAL SCHEDULES & DETAILS

SHEET NUMBER
M610



SECOND FLOOR FIRE PROTECTION PLAN (2)

SCALE: 1/4" = 1'-0"



SECOND FLOOR FIRE PROTECTION DEMOLITION PLAN (1)

SCALE: 1/4" = 1'-0"

CEILING SYMBOL LEGEND

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
	GYPSUM BOARD		MECHANICAL DIFFUSER: SUPPLY
			MECHANICAL DIFFUSER: RETURN
	ACOUSTICAL CEILING TILE: 2' X 2'		MECHANICAL DIFFUSER: EXHAUST
			LIGHT FIXTURE: 1' X 4'
	ACOUSTICAL CEILING TILE: 2' X 4'		LIGHT FIXTURE: 2' X 2'
			DOWN LIGHT FIXTURE

GENERAL NOTES

1. REFER TO DRAWING G100 FOR PROJECT GENERAL NOTES.
2. SPRINKLER SYSTEM SHOWN ARE CONCEPT DRAWINGS AND ARE SCHEMATIC FOR BIDDING PURPOSES ONLY. CONCEPT DRAWINGS ARE INTENDED TO ILLUSTRATE THE SCOPE OF WORK. THE CONTRACTOR SHALL VERIFY ALL INFORMATION CONTAINED ON THESE DRAWINGS.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN AND INSTALLATION OF THE SPRINKLER SYSTEM. THE DESIGN SHALL BE ACCOMPLISHED UNDER THE DIRECT SUPERVISION OF A LICENSED PROFESSIONAL ENGINEER OR NICET LEVEL III/IV. SHOP DRAWINGS AND HYDRAULIC CALCULATIONS SHALL BEAR THE LICENSED PROFESSIONAL'S STAMP.
4. FIRE PROTECTION SYSTEM SHALL BE DESIGNED AND INSTALLED IN ACCORDANCE WITH NFPA 13.
5. PIPING 2 INCHES AND SMALLER SHALL BE SCHEDULE 40 BLACK STEEL PIPING WITH THREADED COUPLINGS AND FITTINGS. PIPING 2-1/2" AND LARGER SHALL BE SCHEDULE 10 BLACK STEEL PIPING WITH ROLL-GROOVED FITTINGS AND COUPLINGS.
6. HYDRAULIC CALCULATIONS FOR; LIGHT HAZARD – 0.10 GPM/SF OVER 1500 SQUARE FEET; ORDINARY HAZARD – GROUP 1, 0.15 GPM/SF OVER 1500 SQUARE FEET; ORDINARY HAZARD – GROUP 2, 0.20 GPM/SF OVER 1500 SQUARE FEET.
7. ALL SPRINKLER HEADS IN LAY-IIN CEILING TILES SHALL BE CENTERED ON 2'x2' END AREA OF TILE.
8. THE CONTRACTOR SHALL COORDINATE HIS WORK WITH ALL TRADES.
9. DO NOT CUT THROUGH STRUCTURAL ELEMENTS WHEN INSTALLING OPENINGS REQUIRED FOR ALL PIPING, CONDUITS OR OTHER WORK. CONTRACTOR CUTTING THROUGH OR OTHERWISE DAMAGING THESE ELEMENTS WILL BE RESPONSIBLE FOR ALL ASSOCIATED ENGINEERING FEES AND SUBSEQUENT RETRO-FIT/REINFORCING DEEMED NECESSARY TO REINSTATE THE CONTINUITY OF THE DAMAGED ELEMENTS.
10. OBTAIN AND PAY ALL COSTS FOR PERMITS, LICENSES, CERTIFICATE FILING AND INSPECTIONS BY AUTHORITIES HAVING JURISDICTION.

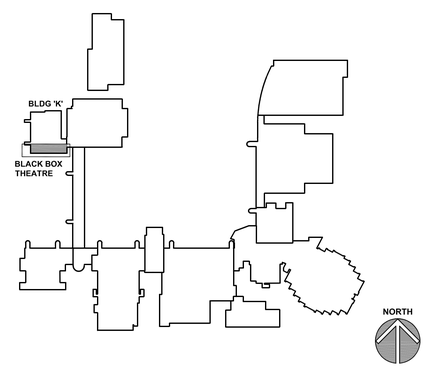
KEYNOTES

KEYNOTES ARE TYPICALLY NOT DUPLICATED WITHIN A GIVEN DETAIL. AN UN-KEYNOTED ITEM IN A DETAIL IS THE SAME AS A KEYNOTED ITEM HAVING THE SAME APPEARANCE WITHIN THE SAME DETAIL.

21.100 REMOVE SPRINKLER HEADS AND PIPING AS REQUIRED FOR MODIFICATIONS IN OUTLINED AREA SHOWN. REFER TO NEW WORK PLAN. PROVIDE PERMANENT CAP ON BRANCH TAKE-OFF'S NOT TO BE REUSED.

21.200 PROVIDE NEW SPRINKLER HEADS, MATERIALS, AND LABOR TO PROVIDE FIRE PROTECTION OF OUTLINED AREA TO ACCOMMODATE NEW CEILING AND ROOM CONFIGURATIONS.

KEY PLAN



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BLACK BOX THEATRE AHU AND PIPE INSULATION

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1215 HOUBOLT ROAD
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ISSUED
08/13/25 BID & PERMIT DOCUMENTS

JOB NO. 24-292-1574
DRAWN BWG
CHECKED DDW
APPROVED BWG

SHEET TITLE

SECOND FLOOR FIRE PROTECTION PLANS

SHEET NUMBER

F320

NOTE: SCALES DEPICTED ON THIS DRAWING ARE NOT CORRECT UNLESS PLOTTED SHEET SIZE IS 30 X 42 INCHES.

ABBREVIATIONS

SYMBOL	DESCRIPTION
A	
A	AMPS
AC	ABOVE COUNTER
AF	AMPERE FRAME/AMPERE FUSE
AFF	ABOVE FINISHED FLOOR
AHU	AIR HANDLING UNIT
AIC	AMPERE INTERRUPTING CURRENT
AT	AMPERE TRIP
ATS	AUTOMATIC TRANSFER SWITCH
AWG	AMERICAN WIRE GAGE
B	
BKR	BREAKER
BOL	BUILT–IN OVERLOAD
BWE	BAKED WHITE ENAMEL
BTU	BRITISH THERMAL UNIT
C	
C	CONDUIT
CATV	CABLE TELEVISION SYSTEM
C/B	CIRCUIT BREAKER
CCTV	CLOSED CIRCUIT TELEVISION
CKT	CIRCUIT
CU	COPPER
D	
DPDT	DOUBLE–POLE, DOUBLE–THROW
DPST	DOUBLE–POLE, SINGLE–THROW
DS	DOWNSPOUT
E	
EBH	ELECTRIC BASEBOARD HEATER
EC, E.C.	ELECTRICAL CONTRACTOR
ECH	ELECTRIC CABINET HEATER
EF	EXHAUST FAN
EM	EMERGENCY
EMT	ELECTRICAL METALLIC TUBING
EWC	ELECTRIC WATER COOLER
EWH	ELECTRIC WATER HEATER
F	
F	FUSED
FAAP	FIRE ALARM ANNUNCIATOR PANEL
FACP	FIRE ALARM CONTROL PANEL
FC	FUSE CLIP SIZE
FPB	FAN POWERED BOX
FBO	FURNISHED BY OTHERS
FLA	FULL LOAD AMPS
FLR	FLOOR
FPC	FIRE PROTECTION CONTRACTOR
FS	FLOAT SWITCH
FVNR	FULL–VOLTAGE, NON–REVERSING
G	
GC	GENERAL CONTRACTOR
GFI	GROUND FAULT CIRCUIT INTERRUPTER
GRD	GROUND
GRS	GALVANIZED RIGID STEEL
H	
HOA	HAND–OFF–AUTOMATIC
HP	HORSEPOWER
HPS	HIGH PRESSURE SODIUM
HVAC	HEATING AND VENTILATING CONTRACTOR
HWGC	HEAVY WALL GALVANIZED CONDUIT

SYMBOL	DESCRIPTION
I	
IDF	INTERMEDIATE DISTRIBUTION FRAME
IG	ISOLATED GROUND
INC	INCANDESCENT
INT	INTEGRAL
IR	IN ROOM
IU	IN UNIT
J	
JB	JUNCTION BOX
K	
Kcmil	1000 CIRCULAR MILS
KV	KILOVOLT
KVA	KILOVOLT–AMPS
KVAR	KILOVOLT–AMPS REACTIVE
KW	KILOWATT
KWH	KILOWATT–HOUR
L	
LP	LOW PRESSURE
LV	LOW–VOLTAGE
LVT	LOW–VOLTAGE THERMOSTAT
M	
MAG	MAGNETIC MOTOR STARTER
MAN	MANUAL MOTOR STARTER W/THERMAL OVERLOAD PROTECTION
MC	MECHANICAL CONTRACTOR
MCA	MAXIMUM CURRENT AMPACITY
MCB	MAIN CIRCUIT BREAKER
MCC	MOTOR CONTROL CENTER
MD	MOTORIZED DAMPER
MDF	MAIN DISTRIBUTION FRAME
MDP	MAIN DISTRIBUTION PANEL
MFR	MANUFACTURER
MH	METAL HALIDE
MLO	MAIN LUG ONLY
MNS	MASS NOTIFICATION SYSTEM
MOCP	MINIMUM OVERCURRENT PROTECTION
MS	MANUAL SWITCH
MSBD	MAIN SWITCH BOARD
MTD	MOUNTED
MUA	MAKE–UP AIR UNIT
N	
N/A	NOT APPLICABLE
N.C.	NORMALLY CLOSED
NF	NON–FUSED
N.I.C.	NOT IN CONTRACT
NL	NIGHT LIGHT
N.O.	NORMALLY OPEN
N.T.S., NTS	NOT TO SCALE
NU	NEAR UNIT
O	
O.H.	OVERHEAD
OU	ON UNIT
OCPD	OVERCURRENT PROTECTION DEVICE

SYMBOL	DESCRIPTION
P	
PB	PUSH BUTTON
PC	PLUMBING CONTRACTOR
PDU	POWER DISTRIBUTION UNIT
PH	PHASE
PNL	PANEL
PROVIDE	FURNISHED, INSTALLED, WIRED AND CONNECTED COMPLETE BY CONTRACTOR
PVC	POLYVINYL CONDUIT
PW	PRE–WIRED
Q	
QTY.	QUANTITY
R	
REQ'D	REQUIRED
RTU	ROOF TOP UNIT
S	
SC	SEPARATE CIRCUIT
SD	SMOKE DETECTOR
SF	SQUARE FEET
SPDT	SINGLE–POLE, DOUBLE–THROW
SPST	SINGLE–POLE, SINGLE–THROW
SS	STAINLESS STEEL
SW	SWITCH
SWBD	SWITCHBOARD
T	
T	THERMOSTAT
TELE	TELEPHONE
TC	TIME CLOCK
TCP	TEMPERATURE CONTROL PANEL
TS	TOGGLE SWITCH
TTB	TELEPHONE TERMINAL BOARD
TTC	TELEPHONE TERMINAL CABINET
TWU	THRU WALL AIR CONDITIONING UNIT
TYP.	TYPICAL
U	
UG	UNDERGROUND
UH	UNIT HEATER
UL	UNDERWRITERS LABORATORIES, INC.
U.N.O.	UNLESS NOTED OTHERWISE
UM	UNIT MANUFACTURER
UPS	UNINTERRUPTIBLE POWER SUPPLY
V	
V	VOLT
VA	VOLT–AMPERES
VAC	VOLT ALTERNATING CURRENT
VAV	VARIABLE AIR VOLUME
VFD	VARIABLE FREQUENCY DRIVE
W	
W	WATT
W/	WITH
W/O	WITHOUT
WG	WIRE GUARD
WP	WEATHER PROOF
X	
X	EXISTING EQUIPMENT
XFMR	TRANSFORMER
XP	EXPLOSION–PROOF

THIS IS A MASTER LEGEND AND NOT ALL SYMBOLS, ABBREVIATIONS, ETC., ARE NECESSARILY USED IN THIS PROJECT.

ELECTRICAL SYMBOLS LIST

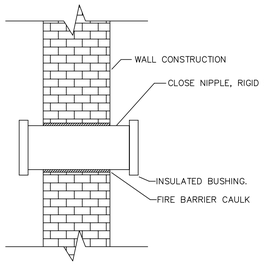
SYMBOL CEILING	SYMBOL WALL	SYMBOL FLOOR	DESCRIPTION
			2X4 RECESSED TROFFER FIXTURE TYPE. SEE LIGHTING FIXTURE SCHEDULE. SHADING=NIGHT LIGHT
○			DOWN LIGHT FIXTURE TYPE. SEE LIGHTING FIXTURE SCHEDULE.
	^{a}		SINGLE POLE TOGGLE SWITCH. 15A OR 20A AS REQUIRED. 120/277V a=SWITCHING CONTROL, P=PILOT LIGHT, K=KEYED SW., LV=LOW VOLTAGE
	$_{3}$		3–WAY TOGGLE SWITCH. 15A OR 20A AS REQUIRED. 120/277V 3D=3 WAY DIMMER
			DUPLEX RECEPTACLE. 20A 125V 2P 3W GRD. NEMA5–20R. @18"AFF D=DEDICATED CIRCUIT. 'I' =MTD. @48"AFF, OR @6" ABOVE COUNTER.
			DOUBLE DUPLEX RECEPTACLE. @18"AFF 20A 125V 2P 3W GRD. NEMA5–20R. PO=POP UP RECEPTACLE
			COMMUNICATIONS OUTLET @18"AFF. REFER TO COMMUNICATION OUTLET DETAIL. B = BLANK JACK, AV= AUDIO/VISUAL JACK, MIC= MICROPHONE JACK. ▽ = 6" ABOVE COUNTER, AUX = AUX. CONNECT. PO=POP UP LOW VOLTAGE SECTION. PD=PEDESTAL MOUNTED
		TS	JUNCTION BOX TS = TOMBSTONE TYPE
			WIRING IN CONDUIT CONCEALED ABOVE CEILING, IN WALL AND UNDER FLOOR OR UNDERGROUND.
			SPEAKER, FLUSH MOUNTED. PROVIDE METAL BACK BOX IN CEILING AT EACH LOCATION INDICATED ON THE PLANS. FURNISHED UNDER ALLOWANCE, INSTALLED BY E.C.
			BRANCH CIRCUIT WIRING IN CONDUIT HOMERUN TO PANEL. ONE ARROW PER HOMERUN. SLASHES INDICATE NUMBER OF CONDUCTORS.
			INDICATES GROUND CONDUCTOR.
			INDICATES ISOLATED GROUND CONDUCTOR.
	V		FIRE ALARM HORN/STROBE COMBINATION. @80"AFF NUMBER INDICATES CANDELA LEVEL (110cd UNLESS NOTED OTHERWISE)
HP	HP	HP	MOTOR. HP= HORSE–POWER RATING.
			PANEL 240V & BELOW.
			PANEL ABOVE 240V.

MOUNTING HEIGHT

FIRE ALARM PULL STATION	48"
STROBES	80"
FIRE ALARM BELLS(EXTERIOR)	12'–0"
FACP & FAAP	48"
TV SIGNS(BOTTOM)	80"
TV OUTLET	18"
INTERCOM	48"
PHOTOCELL	12'–0"
RECEPTACLE(CENTERLINE)	18"
RECEPTACLE(EXTERIOR)	24"
RECEPTACLE(WAREHOUSE)	30"
TELEPHONE OUTLET(PUBLIC)	54"
TELEPHONE OUTLET	18"
SWITCH	48"
SAFETY SWITCHES	48"
PANELS(TOP)	72"
CLOCK(CENTERLINE)	96"
VIDEO OUTLET	96"

MISCELLANEOUS

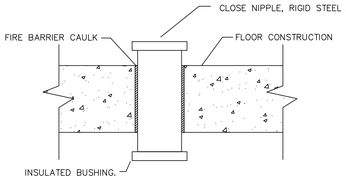
RTU 1	HVAC EQUIPMENT IDENTIFICATION
6.01	KEYNOTE IDENTIFICATION
1 DETAIL NUMBER E7.1 DRAWING NUMBER	DETAIL IDENTIFICATION



TYPICAL WALL PENETRATION

NOTES:
1. NEATLY CORE ALL MASONRY AND BLOCK WALLS.
2. RIGIDLY SUPPORT ALL RACEWAYS.
3. PROVIDE FIRE BARRIER CAULK AT FLOOR, CORRIDOR AND FIRE SEPARATION WALLS.

TYP. WALL PENETRATION DETAIL 3
SCALE: N.T.S.



TYPICAL FLOOR PENETRATION

NOTES:
1. NEATLY CORE ALL MASONRY AND BLOCK WALLS.
2. RIGIDLY SUPPORT ALL RACEWAYS.
3. PROVIDE FIRE BARRIER CAULK AT FLOOR, CORRIDOR AND FIRE SEPARATION WALLS.

TYP. FLOOR PENETRATION DETAIL 2
SCALE: N.T.S.

INTERIOR LUMINAIRE SCHEDULE

TYPE	SPECIFICATIONS	DESCRIPTION	MFGR.	CATALOG NUMBER	VOLTAGE	WATTAGE	FINISH	MOUNTING	NOTE
A1	4000K, 45W MAX, 0-10V DIMMING, 5000LM NOMINAL	4' LED STRIP LIGHT	LITHONIA LIGHTING	CSS L48 ALO3 MVOLT 40K 80 CRI	UNV (120-277)	41	WHITE	SUSPENDED	
			COLUMBIA LIGHTING	CSL4-A-LSCS					
			DAYBRITE	SDS-4-2448L-8CST-UNV-DIM					
A2	4000K, 85W MAX, 0-10V DIMMING, 10000LM NOMINAL	8' LED STRIP LIGHT	LITHONIA LIGHTING	CLX L96 10000 SEF FDL 277V GZ10 40K 80CRI BGTD WH	UNV (120-277)	81	WHITE	SUSPENDED	1
			COLUMBIA LIGHTING	MPS8-40HL-FW-EDU-DTS					
			DAYBRITE	FSS8110L840-277V-DIM-ER100					

Notes:
1. PROVIDE UL 924 RELAY FOR LUMINAIRE

HVAC/PLUMBING EQUIPMENT SCHEDULE

NO.	DESCRIPTION	FLA	KW	HP	VOL	PH	CCT NO.	DISC. FURN BY	STARTER TYPE	STARTER BY	CIRCUIT WIRING	NOTE
AHU-K-2	AIR HANDLING UNIT	8	-	-	480	3	1P-1-1	UNIT	ECM	MFR	3#12,#12G,3/4"C	1
EF-K-2	EXHAUST FAN	3.4	-	2	480	3	1P-1-5	UNIT	ECM	MFR	3#12,#12G,3/4"C	2
HWP-K-2	HOT WATER PUMP	-	-	1/6	120	1	1L-1A-27	E.C.	NEMA 00	E.C.	2#12,#12G,3/4"C	
UH-1	HOT WATER UNIT HEATER	-	-	F	120	1	1L-1A-29	E.C.	UNIT	MFR	2#12,#12G,3/4"C	

NOTES:
1. PROVIDE ELECTRICAL CONNECTION TO AHU CONTROL PANEL (REMOTE ON WALL)
2. PROVIDED WITH MOTORIZED BACKDRAFT DAMPER WIRED BY THIS CONTRACTOR.

1P-1 (EXISTING) KINNEY SWITCHBOARD W/ WESTINGHOUSE FDP UNITS		225 AMPERE, 277/480 VOLT, 3 PHASE, 4 WIRE, WYE, FUSIBLE SWITCH STYLE SWITCHBOARD, NEMA1 ENCLOSURE					
CKT	FUSE	DESCRIPTION	FRAME	A	B	C	TOTAL
1	**EX.**	**SPARE**	30/3	0	0	0	0
2	EX	PHASE PROTECTION RELAY	30/3	E	E	E	0
3	EX	PUMP-1	30/3	3878	3878	3878	11634
4	EX	NEW AC COND.	30/3				0
5	**EX.**	**SPARE**	30/3				0
6	EX	PUMP-2	30/3	3878	3878	3878	0
NOTES:		CONNECTED VA:		3878	3878	3878	11634
DEMO		CONNECTED AMPS:		14	14	14	14

1P-1 (REMODELED) KINNEY SWITCHBOARD W/ WESTINGHOUSE FDP UNITS		225 AMPERE, 277/480 VOLT, 3 PHASE, 4 WIRE, WYE, FUSIBLE SWITCH STYLE SWITCHBOARD, NEMA1 ENCLOSURE					
CKT	FUSE	DESCRIPTION	FRAME	A	B	C	TOTAL
1	**15/3**	**AHU-1 (BLACKBOX)**	30/3	2216	2216	2216	6648
2	EX	PHASE PROTECTION RELAY	30/3	E	E	E	0
3	EX	PUMP-1	30/3	3878	3878	3878	11634
4	EX	NEW AC COND.	30/3	E	E	E	0
5	**15/3**	**EF-1 (BLACKBOX)**	30/3	942	942	942	2826
6	EX	PUMP-2	30/3	3878	3878	3878	0
NOTES:		NEW CONNECTED VA:		6094	6094	6094	18282
NEW		NEW CONNECTED AMPS:		22	22	22	22
		NEW DEMAND VA:					18282
		NEW DEMAND AMPS:					22

PANEL : 1L-1A (EXISTING) — **100 AMPERE MAIN LUG ONLY**

CKT. NO.	BRKR	DESCRIPTION	PHASE A	PHASE B	PHASE C	DESCRIPTION	BRKR	CKT. NO.
1	1P20	R-ROOM 127	1000 800			R-ROOM 118	1P20	2
3	1P20	R-ROOM 127		1000 800		R-ROOM 118	1P20	4
5	1P20	R-ROOM 127			1000 800	R-ROOM 118	1P20	6
7	1P20	R-ROOM 128	1000 800			R-ROOM 118	1P20	8
9	1P20	R-ROOM 128		1000 800		R-ROOM 118	1P20	10
11	1P20	R-ROOM 128			1000 800	R-ROOM 118	1P20	12
13	1P20	R-ROOM 118	1000 600			R-ROOM 118	1P20	14
15	1P20	R-ROOM 118-126		1000 600		R-ROOM 116	1P20	16
17	1P20	R-ROOM 126			1000	R-ROOM 116	1P20	18
19	1P20	R-ROOM 126	600 800			TRACK LITES K0003	1P20	20
21	1P20	R-ROOM-126		600 800		TRACK LITES K0005	1P20	22
23	1P20	R-ROOM 126			600 800	TRACK LITES K0003	1P20	24
25	1P20	R-ROOM-126	250 800			MICROWAVE STROBE	1P20	26
27	-	-				-	-	28
29	-	-				-	-	30

		NOTES:			
TOTAL PHASE A:	7650		MOUNTING:	SURFACE	VOLTAGE (LN): 120
TOTAL PHASE B:	6600		RATING:	10000	VOLTAGE (LL): 208
TOTAL PHASE C:	6000		ENCLOSURE:	NEMA 1	PHASE: 3
DEMAND VA:	20250		FED FROM:		WIRE: 4
DEMAND AMPS:	56.21		FEEDER SIZE:	EXISTING TO REMAIN	
			LOCATION:	MECH ROOM K0015	

PANEL : 1L-1A (REMODELED) — **100 AMPERE MAIN LUG ONLY**

CKT. NO.	BRKR	DESCRIPTION	PHASE A	PHASE B	PHASE C	DESCRIPTION	BRKR	CKT. NO.
1	1P20	R-ROOM 127	1000 800			R-ROOM 118	1P20	2
3	1P20	R-ROOM 127		1000 800		R-ROOM 118	1P20	4
5	1P20	R-ROOM 127			1000 800	R-ROOM 118	1P20	6
7	1P20	R-ROOM 128	1000 800			R-ROOM 118	1P20	8
9	1P20	R-ROOM 128		1000 800		R-ROOM 118	1P20	10
11	1P20	R-ROOM 128			1000 800	R-ROOM 118	1P20	12
13	1P20	R-ROOM 118	1000 600			R-ROOM 118	1P20	14
15	1P20	R-ROOM 118-126		1000 600		R-ROOM 116	1P20	16
17	1P20	R-ROOM 126			1000	R-ROOM 116	1P20	18
19	1P20	R-ROOM 126	600 800			TRACK LITES K0003	1P20	20
21	1P20	R-ROOM-126		600 800		TRACK LITES K0005	1P20	22
23	1P20	R-ROOM 126			600 800	TRACK LITES K0003	1P20	24
25	1P20	R-ROOM-126	250 800			MICROWAVE STROBE	1P20	26
27	**1P20**	**HWP-1**		360 528		**REC - MECH RM K1003B**	**1P20**	28
29	**1P20**	**UH-1**			500 528	**BAS PANEL/AIR BALANCE KIT**	**1P20**	30

		NOTES:			
TOTAL PHASE A:	7650	**NEW BRANCH CIRCUIT WITH**	MOUNTING:	SURFACE	VOLTAGE (LN): 120
TOTAL PHASE B:	7488	**NEW BREAKER**	RATING:	10000	VOLTAGE (LL): 208
TOTAL PHASE C:	7028		ENCLOSURE:	NEMA 1	PHASE: 3
DEMAND VA:	22166		FED FROM:		WIRE: 4
DEMAND AMPS:	61.53		FEEDER SIZE:	EXISTING TO REMAIN	
			LOCATION:	MECH ROOM K0015	

SCHEDULES 1
SCALE: N.T.S.

NOTE: SCALES DEPICTED ON THIS DRAWING ARE NOT CORRECT UNLESS PLOTTED SHEET SIZE IS 30 X 42 INCHES.

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JOB NO. 24-292-1574
DRAWN ATR
CHECKED MTK
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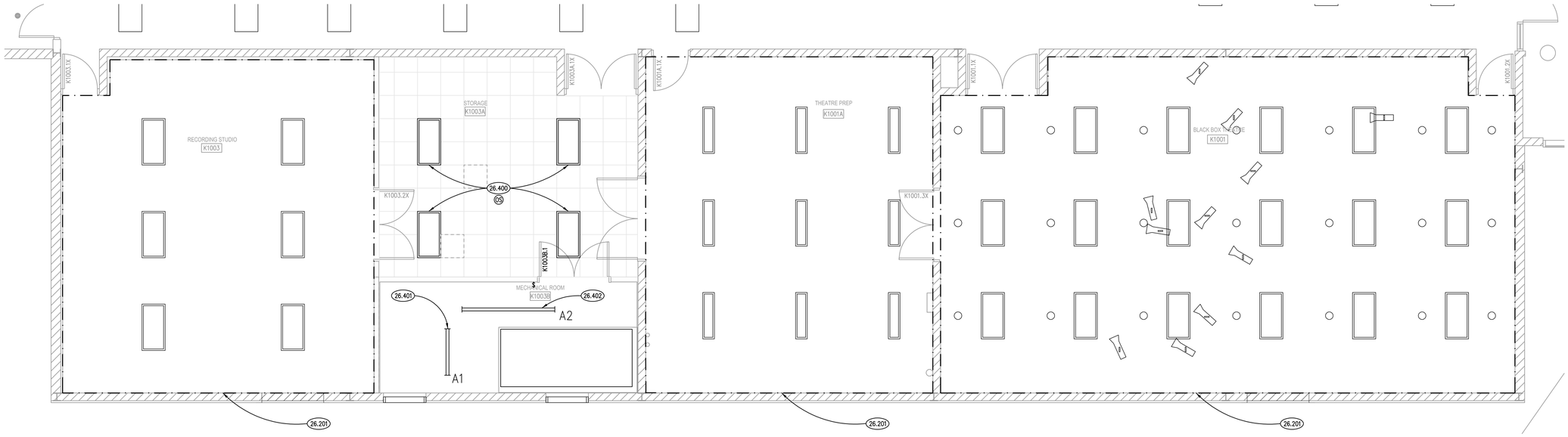
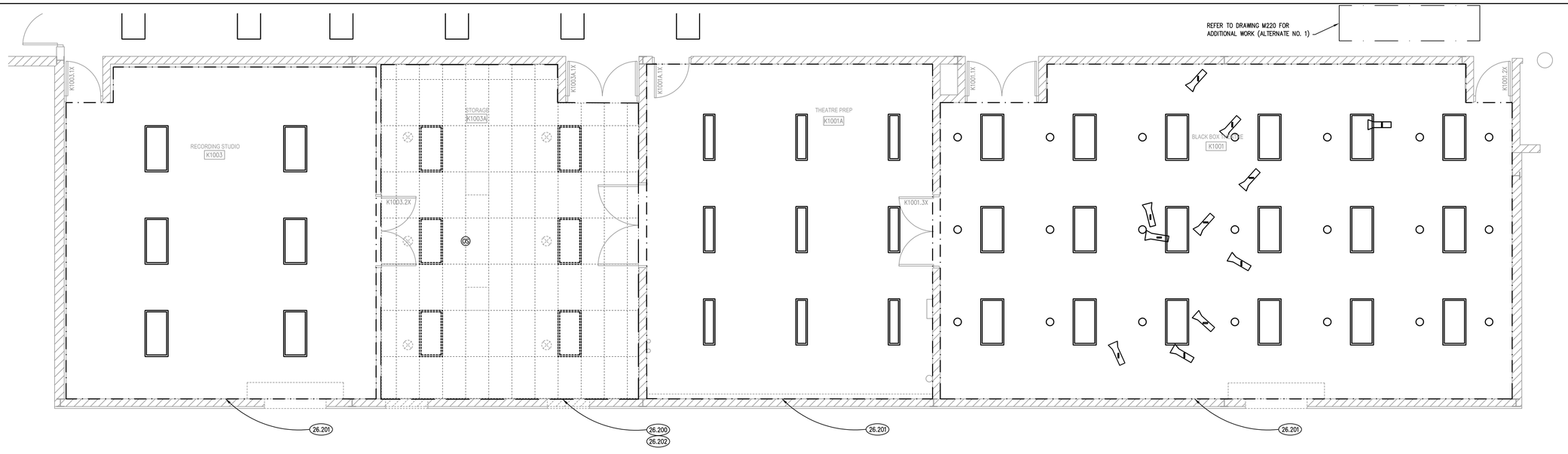
SHEET TITLE
ELECTRICAL SYMBOLS LIST, ABBREVIATIONS, SCHEDULES, & DETAILS

SHEET NUMBER
E000



PARTIAL SECOND FLOOR LIGHTING PLAN (3)

SCALE: 1/4" = 1'-0"



PARTIAL SECOND FLOOR LIGHTING DEMOLITION PLAN (2)

SCALE: 1/4" = 1'-0"

KEYNOTES

KEYNOTES ARE TYPICALLY NOT DUPLICATED WITHIN A GIVEN DETAIL. AN UN-KEYNOTED ITEM IN A DETAIL IS THE SAME AS A KEYNOTED ITEM HAVING THE SAME APPEARANCE WITHIN THE SAME DETAIL.

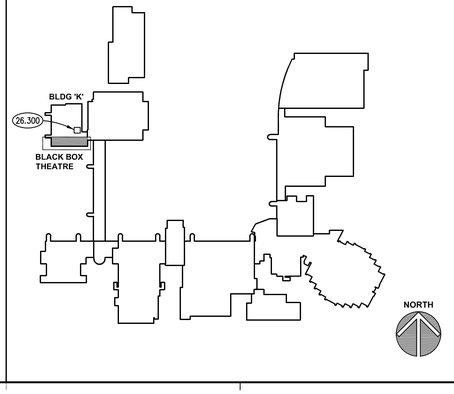
26.200 DISCONNECT AND PROTECT EXISTING 2'X4' LUMINAIRES IN THIS AREA. SALVAGE QTY. (4) LUMINAIRES FOR RE-USE. TURN OVER (2) TO OWNER'S ATTIC STOCK.
26.201 TEMPORARILY DISCONNECT, REMOVE AND, PROTECT EXISTING LUMINAIRES AND OTHER ELECTRICAL DEVICES AS NECESSARY FOR CONSTRUCTION OPERATIONS. COORDINATE REQUIREMENTS WITH MECHANICAL CONTRACTOR TO ACCOMMODATE INSTALLATION OF MECHANICAL SYSTEM. RE-INSTALL FIXTURES UPON COMPLETION OF MECHANICAL INSTALLATION TO ENSURE A COMPLETE AND OPERATIONAL SYSTEM.
26.202 DISCONNECT AND PROTECT EXISTING OCCUPANCY SENSORS, SPEAKERS AND ANY OTHER ELECTRICAL DEVICES IN CEILING AREA BEING REMOVED. RELOCATE AND REINSTALL IN NEW CEILING GRID. EXTEND ALL WIRING AS REQUIRED FOR NEW CEILING ELEVATION.

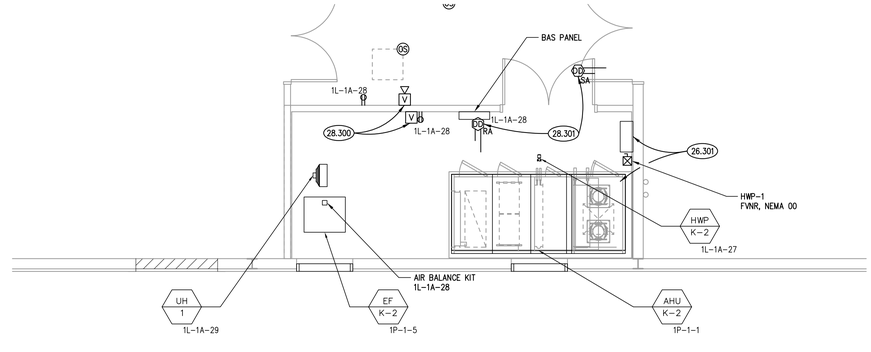
26.300 PANELBOARDS 1P-1 AND 1L-1A ARE LOCATED ON LOWER LEVEL IN MECHANICAL ROOM K0015. NOMINALLY 25' NORTH OF BLACK BOX THEATRE.
26.301 PROVIDE BRANCH CIRCUITRY TO AIR HANDLING UNIT REMOTE CONTROL PANEL. COORDINATE ALL FIELD WIRING REQUIREMENTS WITH MANUFACTURER'S SHOP DRAWINGS.

26.400 RE-INSTALL EXISTING 2'X4' LED LUMINAIRE IN NEW CEILING. EXTEND BRANCH CIRCUITRY AS NECESSARY TO LUMINAIRE. RE-USE EXISTING SWITCHING.
26.401 PROVIDE NEW LED STRIP LUMINAIRE. REFER TO LIGHTING FIXTURE SCHEDULE, SHEET E000. COORDINATE FINAL INSTALLATION LOCATION IN FIELD WITH DUCT WORK, PIPING, ETC. TO BE INSTALLED. EXTEND EXISTING STORAGE ROOM BRANCH CIRCUITRY TO MECHANICAL ROOM LUMINAIRES AS REQUIRED FOR A COMPLETE AND OPERATIONAL SYSTEM.
26.402 PROVIDE NEW LED STRIP LUMINAIRE. REFER TO LIGHTING FIXTURE SCHEDULE, SHEET E000. COORDINATE FINAL INSTALLATION LOCATION IN FIELD WITH DUCT WORK, PIPING, ETC. TO BE INSTALLED. LOCATE AND EXTEND EXISTING EMERGENCY LIGHTING BRANCH CIRCUIT FROM ADJACENT CORRIDOR TO NEW LUMINAIRE AS REQUIRED FOR A COMPLETE AND OPERATIONAL SYSTEM. PROVIDE UL 924 RELAY TO BYPASS LOCAL SWITCH.

28.300 PROVIDE NEW FIRE ALARM NOTIFICATION APPLIANCE. LOCATE AND EXTEND EXISTING NOTIFICATION APPLIANCE CIRCUIT TO NEW DEVICES.
28.301 PROVIDE NEW DUCT MOUNTED SMOKE DETECTOR. LOCATE AND EXTEND EXISTING SIGNALLING LINE CIRCUITRY TO NEW DEVICES AS REQUIRED.

KEY PLAN





PARTIAL SECOND FLOOR POWER PLAN (1)

SCALE: 1/4" = 1'-0"

NOTE: SCALES DEPICTED ON THIS DRAWING ARE NOT CORRECT UNLESS PLOTTED SHEET SIZE IS 30 X 42 INCHES.

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BLACK BOX THEATRE AHU AND PIPE INSULATION

JOLIET JUNIOR COLLEGE
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JOLIET, ILLINOIS 60431

ISSUED
08/12/25 BID & PERMIT DOCUMENTS

JOB NO.	24-292-1574
DRAWN	ATR
CHECKED	MTK
APPROVED	MTK

SHEET TITLE

SECOND FLOOR ELECTRICAL POWER & LIGHTING PLANS

SHEET NUMBER

E320

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