INDEX OF DRAWINGS

ME320 SECOND FLOOR MECHANICAL AND ELECTRICAL PLAN

APPLICABLE CODES

2018 INTERNATIONAL EXISTING BUILDING CODE

2018 INTERNATIONAL ENERGY CONSERVATION CODE

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

G100 COVER SHEET, GENERAL NOTES, SYMBOLS, &

ME350 ROOF MECHANICAL AND ELECTRICAL PLAN

ME410 PARTIAL FLOOR PLANS & SCHEDULES

2018 INTERNATIONAL BUILDING CODE

JOB NO. 23-292-1493 DRAWN CHECKED APPROVED SHEET TITLE

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

SHEET NUMBER

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

GENERAL NOTES

ELECTRIC WATER HEATER

EXPOSED CONSTRUCTION

FIRE EXTINGUISHER CABINET

FIRE RETARDANT TREATED

EXPANSION

FLOOR DRAIN

FOUNDATION

FOUNDATION

FLOOR

FOOTING

GALVANIZED

HARDENER

HOLLOW METAL

INSIDE DIAMETER

KNOCK DOWN

LAVATORY

LEFT HAND

LOW POINT

LIGHTWEIGHT

LIVE LOAD

MAXIMUM

MECHANICAL

MOUNT(ED)

METAL

NOMINAL

NUMBER

OPENING

ON CENTER

MANUFACTURER

NOT IN CONTRACT

OUTSIDE DIAMETER

NOT TO SCALE

LONG LEG HORIZONTAL

LONG LEG VERTICAL

MASONRY OPENING

METAL THRESHOLD

HORIZONTAL

GAUGE

FIRE EXTINGUISHER

FIRE HOSE CABINET

FURRING CHANNEL

GENERAL CONTRACTOR

GENERAL CONTRACTOR

GYPSUM WALL BOARD (TYPE)

HEATING/VENTILATING/AIR CONDITIONING

INCLUDE / INCLUDING / INCLUDED

INSULATION/INSULATING/INSULATED

LAMINATE /LAMINATING /LAMINATED

MARKERBOARD (LENGTH IN FEET)

MECHANICAL CONTRACTOR

MINIMUM OR MINUTE(S)

MOP SERVICE BASIN (SINK)

OVERALL OR OUTSIDE AIR

OUTSIDE FACE OR OPPOSITE FACE

OPPOSITE OR OPPOSITE HAND

PRESSURE TREATED OR PAINT

POUNDS PER SQUARE FOOT

POUNDS PER SQUARE INCH

GYPSUM PLASTER (TYPE)

HEAVY DUTY OR HARD

HARD WOOD (TYPE)

A. GENERAL NOTES

- 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. 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
- 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

ANCHOR BOLT

ACOUSTICAL CEILING PANEL

ADJACENT OR ADJUSTABLE

ACOUSTICAL CEILING TILE

ABOVE FINISH FLOOR

ABOVE FINISH GRADE

ABRASIVE

ACOUSTIC

ADDITION

ADDITIONAL

ALUMINUM

ALTERNATE

ACCESS PANE

APPROXIMATE

ANCHOR

ASPHALT

AUTOMATIC

AVERAGE

BASEMENT

BOARD

BETWEEN

BUILDING

BEARING

BRACKET

CLEAR

CLEAN-OUT

COMBINATION

CONCRETE OPENING

CERAMIC TILE (TYPE)

CABINET UNIT HEATER

CABINET UNIT VENTILATOR

CONCRETE

CONDITION

COUNTER

CENTER(S)

DIMENSION

DOOR OPENING

EXPANSION JOINT

ELECTRIC/ELECTRICAL

ELECTRICAL CONTRACTOR

ELEVATOR OR ELEVATION

ELECTRIC WATER COOLER

ELEVATION

EMBEDMENT

EMERGENCY

EACH WAY

EPOXY

EQUAL

DOWN

DOOR

DETAIL

DOWELS

EACH

DRAWINGS

CONTINUOUS

CONTRACT(OR)

CARPET (TYPE)

COUNTER SINK

BITUMINOUS

BLOCKING (WOOD)

BENT STEEL PLATE

CAST-IN-PLACE

CEMENT PLASTER (TYPE)

CONCRETE MASONRY UNIT

COMPRESSIBLE OR COMPACTED

CERAMIC PAVER TILE (TYPE)

CONSTRUCTION OR CONTRACTION JOINT

BENCH MARK

BOTTOM OF

ADD'N

APPROX

CAB

COMP

CONC

CONT

CONTR

CPT-(1

CTR SK

DWGS

DWL'S

ELEC

ELEV

EMBED

EMER

EW

ELEC CONTR

CONC OPNO

CEM PL-(1)

CT PAV-(1

(2018) AND THE AMERICANS WITH DISABILITIES ACT.

- VERIFY ALL DIMENSIONS AND ELEVATIONS IN THE FIELD. WHERE DISCREPANCIES ARE FOUND BETWEEN DIMENSIONS OR ELEVATIONS SHOWN AND ACTUAL FIELD CONDITIONS, NOTIFY ARCHITECT/ENGINEER.
- 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 COMPONENT OR UNIT OF A PRODUCT, SYSTEM OR SERVICE. THE CONTRACTOR FURTHER AGREES THAT, AS PART O 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.

EXIST

EXP

FDN

FNDN

FRT

GALV

FUR CHN'L

GEN CONTR

GYP BD-(1)

GYP PL-(1)

HD WD-(1)

HDNR

INCL

INSUL

MAX

MB (16)

MECH CONTR

MECH

NOM

NTS

OC

OD

OPNG

EXP CONST

- B: MISCELLANEOUS AND DEMOLITION NOTES
- COORDINATE PENETRATIONS AND/OR SLEEVES REQUIRED IN WALLS, FLOORS, CEILINGS OR ROOFS FOR MECHANICAL AND ELECTRICAL WORK REQUIRED BY ARCHITECTURAL, MECHANICAL, AND ELECTRICAL
- 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
- APPLY APPROPRIATE & COMPATIBLE SEALANT MATERIALS AS REQUIRED TO SEPARATE DISSIMILAR METALS, FILL GAPS IN EXISTING ASSEMBLIES OR WHERE NEW AND EXISTING ASSEMBLIES MEET OR
- BRING ANY UNFORESEEN OR CONFLICTING CONDITIONS TO THE IMMEDIATE ATTENTION OF THE ARCHITECT/ENGINEER BEFORE PROCEEDING WITH THE WORK.

| 5 | YME | IOIIE |
|---|-------|---------------------|
| 7 | 30LS/ | JOLIE JUNIOR COLLEG |
| | AND | 190 |

PROJECT BUILDING 'J' SERVER ROOM CRAC

> REPLACEMENT JOLIET JUNIOR COLLEGE 1215 HOUBOLT ROAD

JOLIET, IL 60431

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

ARCHITECT/ ENGINEER

KLUBER ARCHITECTS + ENGINEERS 41 W BENTON ST.

AURORA, IL 60506 TEL 630-406-1213 FAX 630-406-9472 www.kluberinc.com

BID DOCUMENTS

REQUIRED CODE COMPLIANCE INFORMATION

REQUIRED PLAN COVER SHEET UNDER 2018 INTERNATIONAL CODES STATE OF ILLINOIS ACCESSIBILITY CODE, AND THE STATE OF ILLINOIS PLUMBING CODE

CODE REVIEW DATA

GENERAL STATEMENT OF OVERALL PROJECT SCOPE AND INTENT

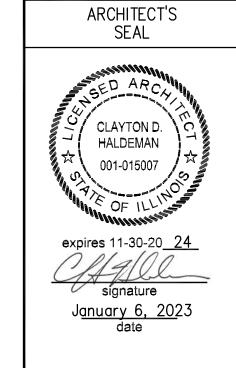
PROJECT CONSISTS OF A PARTIAL EXTERIOR RE-ROOFING TO AN EXISTING MULTI-STORY SCHOOL BUILDING. BUILDING COMPONENTS AND SYSTEMS MODIFIED OR REPLACED AS PART OF THE WORK OF THIS PROJECT HAVE BEEN BROUGHT UP TO MEET THE REQUIREMENTS OF THE APPLICABLE CURRENT CODES THE AREAS ALTERED ARE ROOFING SECTIONS OF BUILDING CLASSIFIED AS GROUP E

- A. USE AND OCCUPANCY GROUP(S) CLASSIFICATION: E B. TYPE OF CONSTRUCTION: IIB
- C. SQUARE FOOTAGE OF BUILDING: NOT APPLICABLE; RENOVATED ROOF AREA SQUARE FOOTAGE IS 15,645. ALLOWABLE SQUARE FOOTAGE: NOT APPLICABLE; NO CHANGE OF USE.
- FULLY SPRINKLERED; ALARMED
- D. OCCUPANT LOAD BASED ON INTERNATIONAL BUILDING CODE: NO CHANGE
- E. OCCUPANT LOAD BASED ON ILLINOIS PLUMBING CODE: NO CHANGE
- F. DESIGNED LIVE LOADS: NOT APPLICABLE; THIS IS AN EXISTING BUILDING, TO WHICH NO MODIFICATIONS ARE BEING MADE TO STRUCTURAL COMPONENTS.
- G. THE DESIGN PROFESSIONALS IN RESPONSIBLE CHARGE ARE IDENTIFIED IN THE SEALS AND CERTIFICATES AREA, BELOW.

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



"G" SERIES

"ME" SERIES

MECHANICAL ENGINEER'S DONALD D. WARE, JR. 062-052082 expires 11-30-20<u>23</u> Joseph O Www. A<u>PRIL 27, 202</u>3

"G" SERIES "ME" SERIES ELECTRICAL ENGINEER'S SEAL MICHAEL T KLUBER 062-047325 expires 11-30-20<u>23</u> Machan Klaby A<u>PRIL 27, 202</u>3

"G" SERIES

WHERE OTHERWISE REQUIRED BY THE SPECIFICATIONS.

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

S DRAWING NUMBER A6.05

100'-0" **ELEVATION**

A12.24

--\-A7.19 /

G

204 NUMBER 203.2 DOOR NO. NEW DOOR NO. EXISTING 203.1X NOMINAL THICKNESS -

DETAIL NUMBER-

DRAWING NUMBER —

DETAIL NUMBER-

DRAWING NUMBER —

DETAIL NUMBER -DRAWING NUMBER -

DETAIL NUMBER -

COLUMN NO

reference line no.

CONSTRUCTION TYPE SPECIAL CONDITION KEYNOTE 7.531 IDENTIFICATION

WINDOW TYPE

IDENTIFICATION

TOILET ACCESSORY

IDENTIFICATION

ELEVATION

STANDARD ABBREVIATIONS PAVEMENT **PIECE** PLATE

RADIUS

ROOF DRAIN

RIGHT HAND

REFERENCE

REQUIRED

SQUARE FOOT

SQUARE INCH

SERVICE SINK

SCHEDULE

SECTION

SHEET

SIMILAR

SPACING

SPEAKER

STEEL

STANDARD

SUSPEND(ED)

SYMMETRICAL

TOP OF BEAM

TOP OF CURB

TOP OF STEEL

TOP OF WALL

TOP OF MASONRY

VINYL BASE COVED

VERTICAL

WITHOUT

WINDOW

WATER PROOF

WEIGHT

WIDE OR WIDTH

VINYL BASE STRAIGHT

VINYL COMPOSITION TILE

VENEER PLASTER (TYPE)

WALL CORNER GUARD

WELDED WIRE FABRIC

WALL SERVICE BASIN

TOP OF

STAINLESS STEE

SEALER/HARDENER

SLAB ON GRADE

SPECIFICATION(S)

STANDARD WEIGHT

TONGUE AND GROOVE

TOP OF FOUNDATION

TACKBOARD (LENGTH IN FEET)

(WINDOW) UNIT DIMENSION

UNLESS NOTED OTHERWISE

STRUCTURE OR STRUCTURAL

ROOM

ROUGH OPENING

RUBBER FLOORING (TYPE)

REINFORCE/REINFORCING/REINFORCED

R OR RAD

REINF

SCHED

SPK'R

STD WT

SYM

T/BEAM

VCT

VERT

VEN PL (1)

SEAL/HDNR

PLASTIC LAMINATE(D) PLASTER **PLUMBING** PLUMBING CONTRACTOR **PLYWOOD**

CONCRETE BRICK MASONRY IN PRECAST (CONCRETE) OPENING POLYVINYL CHLORIDE GYPSUM PLASTER (TYPE)

CONCRETE MASONRY IN PLAN (RUNNING BOND)

MASONRY IN PLAN (STACK BOND) STONE MASONRY II

RAKED JOINT IN

CTRL./EXP. JOINT BRICK MASONRY I SECTION DETAIL

CONCRETE MASONRY IN SECTION DETAIL

STONE MASONRY I SECTION DETAIL STEEL IN SECTION

DISCONTINUOUS

ROUGH WOOD BLOCKING IN **CONTINUOUS** ROUGH WOOD IN SECTION

FRAMING/BLOCKING FINISHED WOOD IN SECTION DETAIL

RIGID BOARD INSULATION

RIGID BOARD INSULATION (ROOFING)

GYPSUM BOARD

BATT INSULATION

ACOUSTICAL

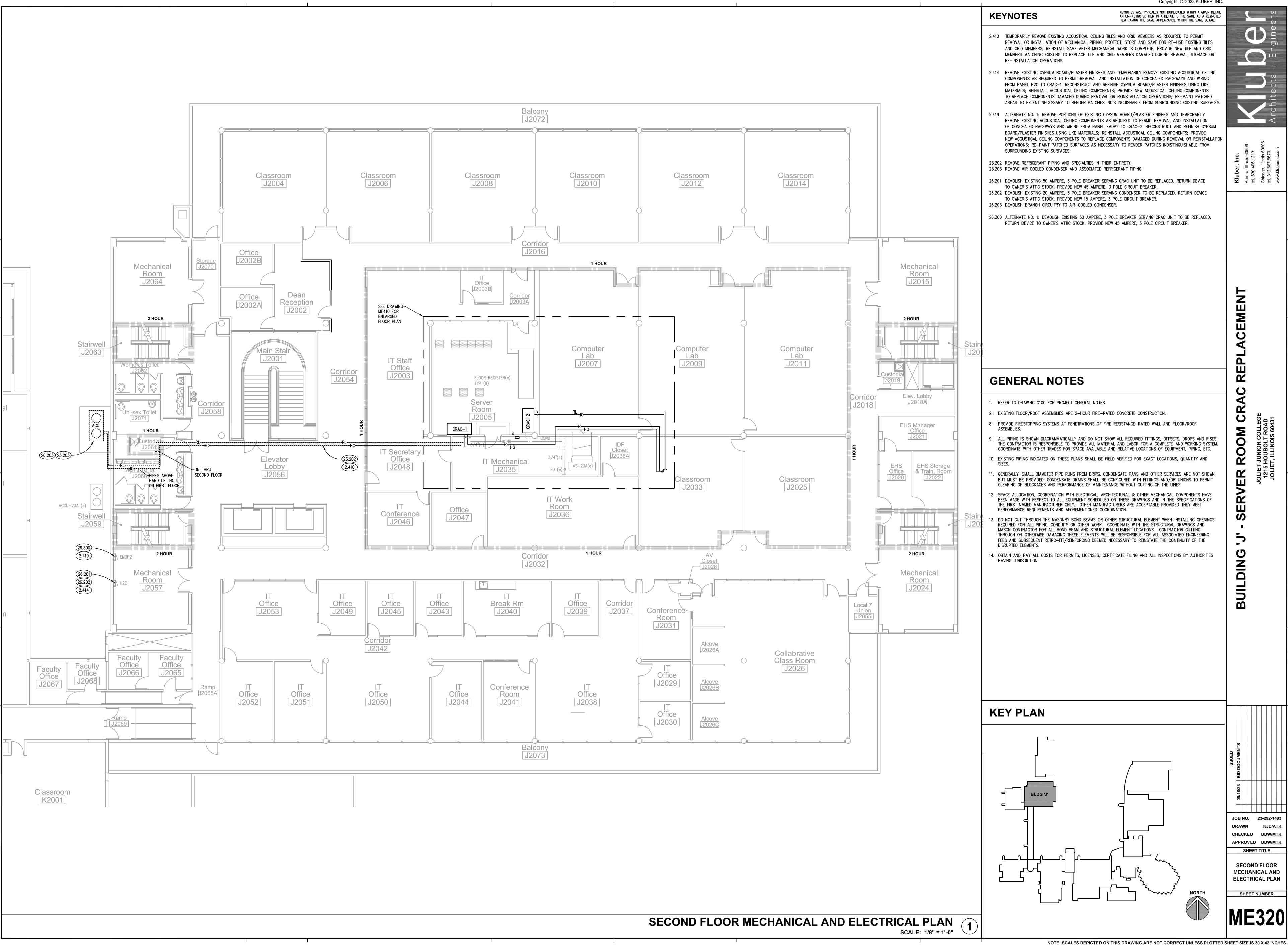
CEILING PANEL BITUMINOUS CONCRETE (ASPHALT) PAVING IN SECTION AGGREGATE

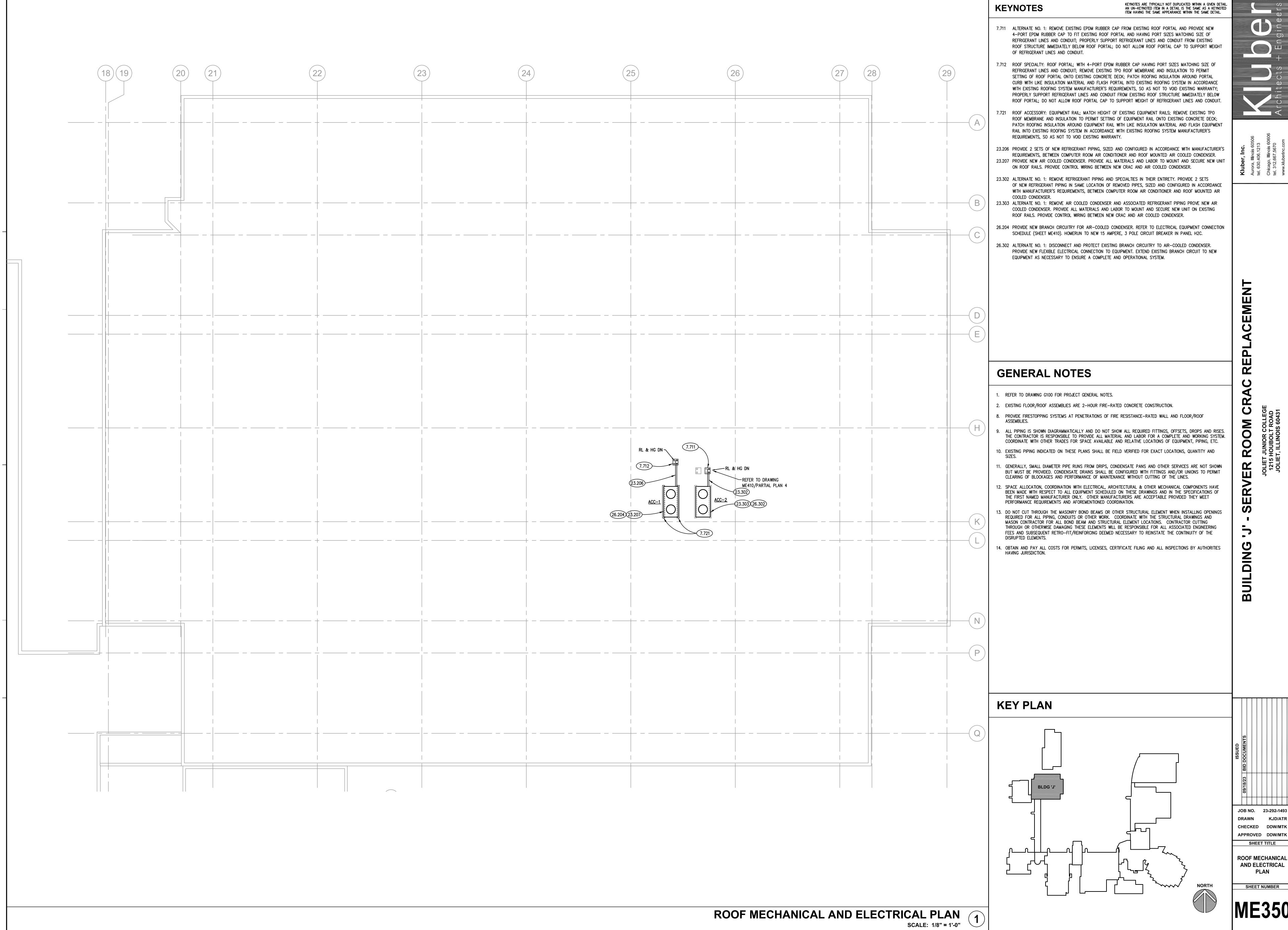
> BALLAST, FILL OR BACKFILL IN SECTION UNDISTURBED

EARTH BACKFILL

"ME" SERIES

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.





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

ME410/PARTIAL PLAN 2

PARTIAL SECOND FLOOR MECHANICAL PLAN

INDISTINGUISHABLE FROM SURROUNDING EXISTING CEILING AREA.

DURING REMOVAL, STORAGE OR RE-INSTALLATION OPERATIONS.

PLENUM BETWEEN CRAC AND CEILING PLENUM.

REQUIRED FOR INSTALLATION OF NEW CRAC UNIT.

23.202 REMOVE REFRIGERANT PIPING AND SPECIALTIES IN THEIR ENTIRETY.

REINSTALL SUPPLY AIR PLENUM BETWEEN CRAC AND CEILING PLENUM.

WATER SUPPLY AS REQUIRED FOR INSTALLATION OF NEW CRAC UNIT.

2.409 REMOVE PORTIONS OF EXISTING GYPSUM BOARD/PLASTER CEILING AS REQUIRED TO PERMIT REMOVAL OF

2.410 TEMPORARILY REMOVE EXISTING ACOUSTICAL CEILING TILES AND GRID MEMBERS AS REQUIRED TO PERMIT

REMOVAL OR INSTALLATION OF MECHANICAL PIPING; 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

2.411 REMOVE PORTION OF EXISTING GYPSUM BOARD PLASTER WALL CONSTRUCTION AS REQUIRED TO PERMIT REMOVAL

SURFACES TO MATCH EXISTING PLANE AND SURFACE TEXTURE; RE-PAINT WALL SURFACES TO EXTENT NECESSARY

REQUIRED TO PERMIT REMOVAL AND REPLACEMENT OF MECHANICAL PIPING; 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

2.417 ALTERNATE NO. 1: REMOVE PORTION OF EXISTING GYPSUM BOARD PLASTER WALL CONSTRUCTION AS REQUIRED

23.200 RECLAIM REFRIGERANT FROM SPLIT SYSTEM CRAC BEING REMOVED. DISPOSE OF IN ACCORDANCE WITH EPA

23.201 PROVIDE ALL MATERIAL AND LABOR TO RECONFIGURE CONDENSATE PIPE AND HUMIDIFIER WATER SUPPLY AS

23.204 REMOVE EXISTING JCI METASYS DX CONTROLLER. PROVIDE ALL MATERIAL AND LABOR FOR NEW CONTROLLER.

23.205 REMOVE ROOM MONITORING THERMOSTAT. PROVIDE NEW THERMOSTAT AND INTERFACE INTO NEW CONTROLLER. 23.206 PROVIDE 2 SETS OF NEW REFRIGERANT PIPING, SIZED AND CONFIGURED IN ACCORDANCE WITH MANUFACTURER'S REQUIREMENTS, BETWEEN COMPUTER ROOM AIR CONDITIONER AND ROOF MOUNTED AIR COOLED CONDENSER.

ACCORDANCE WITH EPA AND REGULATORY REQUIREMENTS. DISCONNECT AND PROTECT SUPPLY AIR PLENUM BETWEEN CRAC TO CEILING PLENUM. PROVIDE TEMPORARY CAP ON HUMIDIFIER WATER SUPPLY AND CONDENSATE PIPE. REMOVE CRAC UNIT AND FLOOR STAND. PROVIDE NEW CRAC UNIT AND FLOOR STAND IN SAME LOCATION.

OF NEW REFRIGERANT PIPING IN SAME LOCATION OF REMOVED PIPES, SIZED AND CONFIGURED IN ACCORDANCE

WITH MANUFACTURER'S REQUIREMENTS, BETWEEN COMPUTER ROOM AIR CONDITIONER AND ROOF MOUNTED AIR

23.301 ALTERNATE NO. 1: PROVIDE ALL MATERIAL AND LABOR TO RECONFIGURE CONDENSATE PIPE AND HUMIDIFIER

23.302 ALTERNATE NO. 1: REMOVE REFRIGERANT PIPING AND SPECIALTIES IN THEIR ENTIRETY. PROVIDE 2 SETS

23.304 ALTERNATE NO. 1: PROVIDE COMMUNICATION CONNECTION BETWEEN CRAC-1 AND CRAC-2 INTERFACE NEW

26.200 DEMOLISH EXISTING ELECTRICAL CONNECTION TO COMPUTER ROOM AIR CONDITIONING(CRAC) UNIT TO BE

FOR CRAC UNIT. REFER TO ELECTRICAL EQUIPMENT CONNECTION SCHEDULE (SHEET ME410).

REPLACED. ABANDON EXISTING BRANCH CIRCUITRY IN PLACE. PROVIDE NEW BRANCH CIRCUITRY FOR CRAC

UNIT TO BE REPLACED. ABANDON EXISTING BRANCH CIRCUITRY IN PLACE. PROVIDE NEW BRANCH CIRCUITRY

CRAC-2 STATUS AND ALARM POINTS INTO NEW CONTROLLER PROVIDED UNDER BASE BID.

UNIT. REFER TO ELECTRICAL EQUIPMENT CONNECTION SCHEDULE (SHEET ME410).

23.300 ALTERNATE NO. 1: RECLAIM REFRIGERANT FROM SPLIT SYSTEM CRAC BEING REMOVED. DISPOSE OF IN

TO PERMIT REMOVAL AND REPLACEMENT OF MECHANICAL PIPING; RECONSTRUCT WALL USING LIKE MATERIALS,

EXTENT NECESSARY TO RENDER PATCHED AREA INDISTINGUISHABLE FROM SURROUNDING EXISTING WALL AREAS.

AND REGULATORY REQUIREMENTS. DISCONNECT AND PROTECT SUPPLY AIR PLENUM BETWEEN CRAC TO CEILING

PLENUM. PROVIDE TEMPORARY CAP ON HUMIDIFIER WATER SUPPLY AND CONDENSATE PIPE. REMOVE CRAC UNIT AND FLOOR STAND. PROVIDE NEW CRAC UNIT AND FLOOR STAND IN SAME LOCATION. REINSTALL SUPPLY AIR

PROVIDE CONNECTION TO CAMPUS BUILDING AUTOMATION SYSTEM. EXISTING AHU-23 AND CRAC POINTS/GRAPHICS SHALL BE INSTALLED ON NEW CONTROLLER. INTERFACE NEW CRAC-1 STATUS AND ALARM POINTS TO NEW

FINISH WALL SURFACES TO MATCH EXISTING PLANE AND SURFACE TEXTURE; RE-PAINT WALL SURFACES TO

AND REPLACEMENT OF MECHANICAL PIPING; RECONSTRUCT WALL USING LIKE MATERIALS, FINISH WALL

TO RENDER PATCHED AREA INDISTINGUISHABLE FROM SURROUNDING EXISTING WALL AREAS.

2.416 ALTERNATE NO. 1: TEMPORARILY REMOVE EXISTING ACOUSTICAL CEILING TILES AND GRID MEMBERS AS

KEYNOTES

RE-INSTALLATION OPERATIONS.

RO

JOB NO. 23-292-1493 SHEET TITLE

PARTIAL FLOOR PLANS & SCHEDULES

EXISTING JCI METASYS DX CONTROLLER POINTS LIST

| | HARD | WARE | SOFTWARE | | | | | |
|----|------------------|---------------|-----------------------------------------------|---------------------------------------|----------------------|----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| Al | AO | DI | DO | SCHED | TREND | ALARM | GRAPHIC | |
| X | | | | | Χ | | Х | |
| X | | | | | | Χ | Х | |
| Х | | | | | Χ | Χ | Х | |
| X | | | | | Х | Х | Х | |
| Х | | | | | X | | Х | |
| | | Χ | | | X | | Х | |
| | | Χ | | | X | | Х | |
| | | Χ | | | | X | Х | |
| | | Χ | | | | X | Х | |
| | | Χ | | | | X | Х | |
| | | | Χ | | | | | |
| | | | Χ | | | | | |
| | | | Χ | | | | | |
| | | | Χ | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | X X X X | AI AO X X X X | AI AO DI X X X X X X X X X X X X X X X X X X | X X X X X X X X X X X X X X X X X X X | AI AO DI DO SCHED X | AI AO DI DO SCHED TREND X | AI AO DI DO SCHED TREND ALARM X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X | |

BUILDING AUTOMATION SYSTEM POINTS LIST

DIGITAL CONSTANT - CRAC OCC (CRAC-2)

| CRAC-1 | | HARD | WARE | - | SOFTWARE | | | | |
|-------------------------------|----|------|------|----|----------|-------|-------|---------|--|
| | Al | AO | DI | DO | SCHED | TREND | ALARM | GRAPHIC | |
| SYSTEM STATUS | | | Χ | | | | | Х | |
| SUPPLY FAN STATUS | | | Χ | | | | Χ | Х | |
| COOLING STATUS | | | Χ | | | | Χ | Х | |
| AIR COOLED CONDENSER STATUS | | | Χ | | | | Χ | Х | |
| SPACE TEMPERATURE SETPOINT | | Χ | | | | | | Х | |
| SPACE TEMPERATURE | Х | | | | | Χ | | Х | |
| SPACE HUMIDITY | Х | | | | | Χ | | Х | |
| SPACE HIGH TEMPERATURE ALARM | | | Χ | | | | Χ | Х | |
| SPACE LOW TEMPERATURE ALARM | | | Χ | | | | Χ | Х | |
| FILTER STATUS | | | Χ | | | | Χ | Х | |
| CONDENSATE PAN ALARM | | | Χ | | | | Χ | Х | |
| UNDERFLOOR WATER SENSOR ALARM | | | Χ | | | | Χ | Х | |
| SMOKE DETECTOR | | | Χ | | | | Χ | Х | |

I. INTERFACE UNIT CONTROLLER INTO BUILDING AUTOMATION SYSTEM FOR MONITORING AND MANAGEMENT.

| BUILDING AUTOMATION SY | /STEI | M P | Oll | NTS | S LIS | T | | | |
|-------------------------------|-------|------|------|----------|----------|-------|-------|---------|--|
| CRAC-2 - ALTERNATE NO. 1 | | HARD | WARE | <u>-</u> | SOFTWARE | | | | |
| | Al | AO | DI | DO | SCHED | TREND | ALARM | GRAPHIC | |
| SYSTEM STATUS | | | Χ | | | | | Х | |
| SUPPLY FAN STATUS | | | Χ | | | | Х | Х | |
| COOLING STATUS | | | Χ | | | | Х | Х | |
| AIR COOLED CONDENSER STATUS | | | Χ | | | | Χ | Х | |
| FILTER STATUS | | | Χ | | | | Χ | Х | |
| CONDENSATE PAN ALARM | | | Χ | | | | Χ | Х | |
| UNDERFLOOR WATER SENSOR ALARM | | | Χ | | | | Χ | Х | |
| SMOKE DETECTOR | | | Χ | | | | Χ | Х | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

CONNECT CONTROLLERS OF CRAC-1 AND CRAC-2 TOGETHER FOR PARALLEL CONTROL OF SPACE.

2. INTERFACE UNIT CONTROLLERS INTO BUILDING AUTOMATION SYSTEM FOR MONITORING AND MANAGEMENT.

RL & HG UP — RL & HG DN -ME410/PARTIAL PLAN 3 STORAGE J3034 REFER TO DRAWING ME410/PARTIAL PLAN 1 RL & HG DN — PARTIAL THIRD FLOOR MECHANICAL PLAN
SCALE: 1/4" = 1'-0"

> AIR-COOLED CONDENSER SCHEDULE NO. OF AMBIENT REFRIGERANT ELECTRICAL MODEL V/PH/HZ OAT (°F) SERVED TYPE 460/3/60 MCS056E8 CRAC-1 R407C 2.8 R407C 460/3/60 2.8

| | COMPUTER ROOM A/C SCHEDULE | | | | | | | | | | | | | | | | | | |
|--------|----------------------------|--------------|--------------|-------|-------|-------|---------------------|------------------|----------------------|----------------------|-------------|--------------------------------------------------|---------|------------|----------|------|---------|--------|-------|
| MARK | | ENT AIR TEMP | | | | | COIL ROWS/ | REHEAT | | FILTER TYPE | SUPPLY | | | COMPRESSOR | | ė. | MODEL | AREA | |
| | (CFM) | (db / wb °F) | (db / wb °F) | TYPE | (MBH) | (MBH) | FACE VEL (IN WG) | CAPACITY (KW) | TYPE/CAP (LBS/HR) | EFFICIENCY (MERV) | FAN (HP) | STATIC PRESS (IN WG) | TYPE | (NO.) | V/PH/HZ | FLA | | SERVED | NOTES |
| CDAC 1 | F200 | 75.0 / 61.1 | 55.0 / 52.7 | D4070 | 107 | 101 | 3 / 1182 | () | 11 | (2111) | | | DICITAL | | 460/3/60 | 77.4 | DCOZEAD | 12005 | 1 |
| CRAC-1 | 5200 | 75.0 / 61.1 | 55.6 / 52.7 | R407C | 107 | 121 | J / 1102 | - | II | ō | 3.75 | 0.2 | DIGITAL | 2 | 400/3/60 | 33.4 | DS035AD | J2005 | l |
| CRAC-2 | 5200 | 75.0 / 61.1 | 55.8 / 52.7 | R407C | 107 | 121 | 3 / 1182 | _ | 11 | 8 | 3.75 | 0.2 | DIGITAL | 2 | 460/3/60 | 33.4 | DS035AD | J2005 | 1, 2 |

MODEL BASED ON LIEBERT. 2. ITEM ASSOCIATED WITH ALTERNATE 1.

| | ELECTRICAL EQUIPMENT CONNECTION SCHEDULE | | | | | | | | | | | | |
|--------|------------------------------------------|------|-------|----|-----|----|-------------|------|-----|---------------|--------------------|------|--|
| NO. | DESCRIPTION | | IZVAZ | HP | VOI | пЦ | CRCT NO. | MC | СР | DISC. FURN | CIRCUIT WIRING | NOTE | |
| NO. | DESCRIPTION | FLA | IV. | | VOL | РП | CRCT NO. | POLE | AMP | BY | CIRCUIT WIRING | NOTE | |
| CRAC-1 | COMPUTER ROOM AIR CONDITIONING UNIT | 33.4 | - | - | 480 | 3 | H2C-1/3/5 | 3P, | 45A | UNIT | 3#8,#10G,3/4"C | 1 | |
| ACC-1 | AIR COOLED CONDENSER | 2.8 | - | - | 480 | 3 | H2C-2/4/6 | 3P, | 15A | UNIT | 3#12,#12G,3/4"C | 1 | |
| CRAC-2 | COMPUTER ROOM AIR CONDITIONING UNIT | 33.4 | - | _ | 480 | 3 | EMDP2-1/3/5 | 3P, | 45A | UNIT | 3#8,#10G,3/4"C | 1,2 | |
| ACC-2 | AIR COOLED CONDENSER | 2.8 | _ | _ | 480 | 3 | EMDP2-2/4/6 | 3P, | 15A | UNIT | EXISTING TO REMAIN | 1,2 | |
| NOTES: | | | | | | | | | | | | | |

DISRUPTED ELEMENTS. 1. SINGLE POINT WIRING CONNECTION. HAVING JURISDICTION. 2. ITEM ASSOCIATED WITH ALTERNATE NO. 1.

MODEL BASED ON LIEBERT. 2. ITEM ASSOCIATED WITH ALTERNATE 1.

23.206 2.417 ∕− RL & HG DN - REFER TO DRAWING REFER TO DRAWING -RL & HG DN — ME410/PARTIAL PLAN 2 RL UP & HG -REFER TO DRAWING ME350 2.416

26.200 23.200

23.202

23.205

CRAC-2

PARTIAL FOURTH FLOOR PLAN

(3) SCALE: 1/4" = 1'-0"

-23.300 23.304 26.301

AS-23A(e)

GENERAL NOTES

- 2. EXISTING FLOOR/ROOF ASSEMBLIES ARE 2-HOUR FIRE-RATED CONCRETE CONSTRUCTION.
- 8. PROVIDE FIRESTOPPING SYSTEMS AT PENETRATIONS OF FIRE RESISTANCE-RATED WALL AND FLOOR/ROOF
- THE CONTRACTOR IS RESPONSIBLE TO PROVIDE ALL MATERIAL AND LABOR FOR A COMPLETE AND WORKING SYSTEM. COORDINATE WITH OTHER TRADES FOR SPACE AVAILABLE AND RELATIVE LOCATIONS OF EQUIPMENT, PIPING, ETC.
- 10. EXISTING PIPING INDICATED ON THESE PLANS SHALL BE FIELD VERIFIED FOR EXACT LOCATIONS, QUANTITY AND
- 13. DO NOT CUT THROUGH THE MASONRY BOND BEAMS OR OTHER STRUCTURAL ELEMENT WHEN INSTALLING OPENINGS REQUIRED FOR ALL 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

- 11. GENERALLY, SMALL DIAMETER PIPE RUNS FROM DRIPS, CONDENSATE PANS AND OTHER SERVICES ARE NOT SHOWN BUT MUST BE PROVIDED. CONDENSATE DRAINS SHALL BE CONFIGURED WITH FITTINGS AND/OR UNIONS TO PERMIT
- 12. SPACE ALLOCATION, COORDINATION WITH ELECTRICAL, ARCHITECTURAL & OTHER MECHANICAL COMPONENTS HAVE BEEN MADE WITH RESPECT TO ALL EQUIPMENT SCHEDULED ON THESE DRAWINGS AND IN THE SPECIFICATIONS OF THE FIRST NAMED MANUFACTURER ONLY. OTHER MANUFACTURERS ARE ACCEPTABLE PROVIDED THEY MEET
- FEES AND SUBSEQUENT RETRO-FIT/REINFORCING DEEMED NECESSARY TO REINSTATE THE CONTINUITY OF THE

- 1. REFER TO DRAWING G100 FOR PROJECT GENERAL NOTES.
- 9. ALL PIPING IS SHOWN DIAGRAMMATICALLY AND DO NOT SHOW ALL REQUIRED FITTINGS, OFFSETS, DROPS AND RISES.
- CLEARING OF BLOCKAGES AND PERFORMANCE OF MAINTENANCE WITHOUT CUTTING OF THE LINES.
- PERFORMANCE REQUIREMENTS AND AFOREMENTIONED COORDINATION.
- 14. OBTAIN AND PAY ALL COSTS FOR PERMITS, LICENSES, CERTIFICATE FILING AND ALL INSPECTIONS BY AUTHORITIES

26.301 ALTERNATE NO. 1: DEMOLISH EXISTING ELECTRICAL CONNECTION TO COMPUTER ROOM AIR CONDITIONING(CRAC)

DRAWN KJD/ATR CHECKED DDW/MTK APPROVED DDW/MTK

SHEET NUMBER

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