

ADDENDUM No.: 2

**Project Name and No.:** MU Project #CP221943, BSA Project #14110010

University Physicians Medical Building – 3rd Floor Renovation

At the University of Missouri Columbia, MO

Date Issued: 28 April 2023

**Description:** REVISED DRAWINGS FOR DOCUMENT CLARIFICATION

Incorporate modifications as follows:

#### **ARCHITECTURAL**

1. SHEET G200 - CODE SUMMARY & LIFE SAFETY PLAN

TITLE BLOCK:

- a. Revised issue date of ADDENDUM #1 to 04/25/2023.
- 2. SHEFT A000 GENERAL NOTES AND ABBREVATIONS

#### **GENERAL DEMOLITION NOTES:**

a. Added note to remove existing flooring and base in all areas scheduled to receive new flooring.

#### **ELECTRICAL**

1. SHFFT F000 - FLFCTRICAL SYMBOLS & ABBREVIATIONS:

#### **TELECOMMUNICATIONS:**

a. Updated note to refer to the low voltage responsibility matrix as shown on E500 for scope responsibilities.

#### NURSE CALL SYSTEMS:

a. Updated note to refer to the low voltage responsibility matrix as shown on E500 for scope responsibilities.

#### **ACCESS CONTROL SYSTEMS:**

a. Updated note to refer to the low voltage responsibility matrix as shown on E500 for scope responsibilities.

This clarification and/or change is intended to supplement and/or modify the contract documents; however, the information presented is presumed to be relatively minor in nature, not requiring a modification of the contract amount or time of completion. Contractor must advise if this assessment is in error in order that the specified procedure for modifying the contract can be implemented. If a response is necessary, please respond within two weeks.



Attachments: SHEETS G200, A000, AND E000

Issued By: Enku Assefa / BSA LifeStructures

Copies:

This clarification and/or change is intended to supplement and/or modify the contract documents; however, the information presented is presumed to be relatively minor in nature, not requiring a modification of the contract amount or time of completion. Contractor must advise if this assessment is in error in order that the specified procedure for modifying the contract can be implemented. If a response is necessary, please respond within two weeks.



ELEC. EQUIP.

STORAGE 0106D

WORKSTATION 0106E

OFFICE OFFICE 0107A

TELECOM

OFFICE 0104

SUPPLY 0202

CONFERENCE ROOM 0102J

1 THIRD FLOOR PLAN
1/16" = 1'-0"

REST. ACC. CORR. \ C0100

UP-----

ALTERNATE #1 - BASEMENT LIFE SAFETY

2 PLAN 1/16" = 1'-0"

E0003

PASSAGE

MECH. 0200

OFFICE 0102A

OFFICE OFFICE OFFICE 0102B

OCCUPANCY TYPE: BUSINESS								
	NUMBER REQUIRED							
1ST: 19,000 SQFT/150 = 127 OCCUPANT LOAD		3RD FLOOR						
WATER CLOSETS	1 PER 25 FOR THE FIRST 50 AND 1 PER 50 FOR THE REMAINDER EXCEEDING 50	4						
LAVATORIES	1 PER 40 FOR THE FIRST 80 AND 1 PER 80 FOR THE REMAINDER EXCEEDING 80	3						
DRINKING FOUNTAINS	1 PER 100	2						
DRINKING FOUNTAINS SERVICE SINK	1 SERVICE SINK	2						

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INT	(TABLE 2902.1)		CODE SUMMARY	
ST 50 AND 1 PER R EXCEEDING 50 ST 80 AND 1 PER 80 EXCEEDING 80	NUMBER REQUIRED  3RD FLOOR  4		PROJECT INFORMATION: NAME: ADDRESS: PROJECT DESCRIPTION:	UPMB 3RD FLOOR RENOVAT 1020 HITT ST. COLUMBIA, MO 65212 INTERIOR RENOVATION OF T FLOOR OF UPMB, EXISTING I 19,000 SF. FULL RENOVATION OF APPR 6,419 SF. EXTENSIVE MODIFICATIONS APPROXIMATELY 601 SF. APPROXIMATELY 37% OF TH
	2		OWNER:	BE RENOVATED.  UNIVERSITY OF MISSOURI - I PHYSICIANS MEDICAL BUILD CURATORS OF THE UNIVERS
	'			MISSOURI

OR RENOVATION OVATION OF THE 3RD MB, EXISTING FLOOR IS TION OF APPROXIMATELY DDIFICATIONS OF ELY 37% OF THE FLOOR WILL F MISSOURI - UNIVERSITY

EDICAL BUILDING, FOR THE THE UNIVERSITY OF BSA LIFESTRUCTURES 12645 OLIVE BLVD. SUITE 227

CREVE COEUR, MO 63141 CONTACT: ENKU ASSEFA 913-748-8813, EXT 6017 EASSEFA@BSALIFESTRUCTURES.COM

DESIGN PROFESSIONAL: ARCHITECT:

ADDRESS:

**CODE INFORMATION:** 2021 INTERNATIONAL BUILDING CODE
2021 INTERNATIONAL EXISTING BUILDING CODE (FOR LEVEL 1 LEVEL 2 ALTERATIONS ONLY WITH PREAPPROVAL FROM AHJ)

2021 INTERNATIONAL PLUMBING CODE 2021 INTERNATIONAL MECHANICAL CODE 2021 INTERNATIONAL FIRE CODE

2017 ICC A117.1 ACCESSIBLE NAD USABLE BUILDINGS AND 2020 NATIONAL ELECTRIC CODE/ NFPA 70 2019 NFPA 110 STANDARD FOR EMERGENCY AND STANDBY

POWER SYSTEMS 2012 NFPA 101 LIFE SAFETY CODE 2012 NFPA 99 STANDARD FOR HEALTH CARE FACILITIES 2018 NFPA 90A INSTALLATION OF AIR CONDITIONING NAD

VENTILATING SYSTEMS 2017 NFPA 75 STANDARD FOR THE FIRE PROTECTION OF INFORMATION TECHNOLOGY EQUIPMENT 2019 NFPA 72 NATIONAL FIRE ALARM CODE 2019 NFPA 51B STANDARD FOR FIRE PREVENTION DURING

WELDING, CUTTING, AND OTHER HOT WORK 2019 NFPA 13 INSTALLATION OF FIRE SPRINKLER SYSTEMS 2019 ASHRAE 62.1 VENTILATION FOR ACCEPTABLE INDOOR AIR (VENTILATION RATES FOR SPACES NOT FOUND IN ASHRAE STANDARD 170 OR THE HIGHER OF THE TWO AIR CHANGE RATES PERSCRIBED IN BOTH)

2019 ASHRAE 90.1 ENERGY STANDARD FOR BUILDINGS 2017 ASHRAE 170 VENTILATION OF HEALTH CARE FACILITIES

2016 ASME A17.1 - SAFETY CODE FOR ELEVATORS AND **ESCALATORS** 2010 AMERICANS WITH DISABILITIES ACT - STANDARDS FOR

ACCESSIBLE DESIGN 2018 FACILITIES GUIDELINES INSTITUTE

OCCUPANCY:

CONSTRUCTION TYPE: UNLIMITED(19,000 SF EXISTING) ALLOWABLE AREA: ALLOWABLE STORIES: 12 STORIES(4 STORIES EXISTING) ALLOWABLE HEIGHT: 180 ft(52 ft EXISTING) COMMON PATH OF EGREES TRAVEL:

100 FT B OCCUPANCY EXIT ACCESS TRAVEL DISTANCE: 300 FT B OCCUPANCY STAIRWAYS = 38 INCHES OTHER = 25 INCHES

CORRIDORS: MINIMUM WIDTH: DEAD END: FIRE EXTINGUISHERS: MAXIMUM TRAVEL DISTANCE:

<u>LIFE-SAFETY FEATURES:</u>
SPRINKLER SYSTEM THROUGH-OUT SMOKE DETECTORS & FIRE ALARM SYSTEM EMERGENCY LIGHTS- INVERTER BACKUP EXIT LIGHTS- INVERTER BACKUP

RE RESISTANCE RATING REQUIREMENTS: 2 HOURS - EXISTING STRUCTURAL FRAME: FLOOR CONSTRUCTION: 2 HOURS - EXISTING ROOF CONSTRUCTION: 0 HOURS - EXISTING

2 HOURS - EXISTING

2 HOURS - EXISTING

<u>DEFERRED SUBMITTALS REQUIRED</u>:
FIRE ALARM & FIRE SPRINKLER

**BUILDING RISK CATEGORY: II** 

SHAFT ENCLOSURE: STAIR CONSTRUCTION:

LIFE-SAFETY SYMBOLS LEGEND

XX)_ <del>_</del>	COLUMN LINE
ROOM — 000	ROOM NAME DESIGNATION ROOM NUMBER DESIGNATION
#)	PLAN NOTE DESIGNATION
EXIT -	EXIT SYMBOL
⟨FEX⟩ <del>-</del>	FIRE EXTINGUISHER
⟨FEC⟩ <del>-</del>	FIRE EXTINGUISHER CABINET

WALL RATINGS 1-HOUR RATED FIRE - (1HR)

2-HOUR RATED FIRE - (2HR)

KEYNOTE LEGEND REFER TO A000 FOR GENERAL NOTES

SPECIAL INSPECTIONS								
CHECK IF REQUIRED	INSPECTION TASK	CONTINUOUS	PERIODIC	STANDARD	NOTES/COMMENTS			
$\boxtimes$	PENETRATION FIRESTOPS		$\boxtimes$	ASTM E2174	TESTING TO BE CONDUCTED BY AN APPROVED AGENCY			
	INSTALLATION OF MECHANICAL AND ELECTRICAL EQUIPMENT, INCLUDING DUCT WORK, PIPING SYSTEMS, AND THEIR STRUCTURAL SUPPORTS, WHERE AUTOMATIC FIRE SPRINKLER SYSTEMS ARE INSTALLED.		$\boxtimes$	IBC 2021 1705.13.6				





ph 314.754.6306 fx 314.754.4452

Missouri State Certificate of Authority #F00518223

MEP ENGINEERING: Introba Inc. 6 S Old Orchard Ave St. Louis, MO 63119 ph 314.918.8383 www.introba.com



A Custom Engineering Company 🔬 LIGHTING ENGINEERING: Timberlake Engineering 912 Old Highway 63 South

Columbia, MO 65201 ph 573.875.4365 ext 209 www.customengr.com Missouri State Certificate of Authority #000239



MU PROJECT NO. - CP221943

**UNIVERSITY PHYSICIANS MEDICAL BUILDING - 3RD FLOOR RENOVATION** 

1020 Hitt St. Columbia, MO 65212

**BID SET** 

DATE DESCRIPTION 04/28/2023 ADDENDUM #2 04/25/2023 ADDENDUM #1

I hereby certify these drawings and/or specifications have been prepared by me, or under my supervision. I further certify that to the best of my knowledge these drawings and/or specifications are as required by and in compliance with the Building Codes of



CODE SUMMARY & LIFE SAFETY PLAN

- THIS SHEET SHALL BE PRINTED IN COLOR -

03 APRIL 2023 BSALS PROJECT NO. G200

#### **GENERAL DEMOLITION NOTES** ALL ITEMS SHOWN IN A BOLD DASHED LINE AND NOT OTHERWISE CALLED OUT, INDICATE EXISTING ITEMS OR WALLS TO BE DEMOLISHED. REMOVE SUCH ITEMS TOTALLY AND COMPLETELY. REMOVE ALL EXISTING WALL MOUNTED ITEMS WITHIN THE PROJECT LIMIT AREA WHICH ARE NOT NOTED TO REMAIN. DISPOSE OF THESE ITEMS AFTER INSPECTION BY THE OWNER DETERMINES THEY ARE NOT TO BE SALVAGED. IF ITEMS ARE REMOVED FROM WALLS THAT ARE TO REMAIN, PATCH WALLS AS REQUIRED TO RECEIVE NEW FINISHES AND/OR SURFACES. REFER TO MECHANICAL, ELECTRICAL AND PLUMBING DRAWINGS AND SPECIFICATIONS FOR ANY ADDITIONAL DEMOLITION INFORMATION. REMOVE EXISTING CEILING FINISHES, INCLUDING BULKHEADS, AS APPLICABLE IN ALL AREAS WITHIN THE PROJECT LIMITS THAT ARE SCHEDULED TO RECEIVE NEW CEILINGS. REMOVE DRYWALL AS REQUIRED FOR NEW ELECTRICAL AND DATA BOXES PER MEP. MAINTAIN ALL EXISTING FIREPROOFING. AS REQUIRED BY MEP. TEMPORARY EXISTING CEILNIG REMOVAL MAY OCCUR. COORDINATE AND MINIMZE EXTENT WITH SCOPE OF MEP DRAWINGS. ALL CEILINGS EXISTING CONDITIONS TO BE MAINTAINED. PATCH/PAINT GYP. BD. CEILINGS AS REQUIRED. REPLACE DAMAGED TILES & GRID AS REQUIRED. PROTECT ALL LIGHT FIXTURES AND DIFFUSERS. PROVIDE FIRESTOPPING INFILL OF HOLES AND OPENINGS LEFT AFTER DEMOLITION TO MAINTAIN FIRE RATINGS AND INTEGRITY OF FLOOR-CEILING ASSEMBLIES. ALL THROUGH SLAB PENTRATIONS TO BE FIRESTOPPED FROM ABOVE. REMOVE EXISTING FLOORING AND BASE IN ALL AREAS SCHEDULED TO RECEIVE NEW FLOORING. REFER TO INTERIOR FINISH DRAWINGS **GENERAL DIMENSION NOTES** ALL DIMENSIONS ARE TO FACE OF GYPSUM BOARD, FACE OF MASONRY OR CONCRETE, OR TO FACE OF EXISTING WALL FINISH UNLESS NOTED OTHERWISE. INSTALL CONTROL JOINTS IN GYPSUM BOARD WALLS, CEILINGS AND BULKHEADS AS INDICATED ON THE DIMENSION PLANS, REFLECTED CEILING PLANS, INTERIOR ELEVATIONS AND AS INDICATED IN THE SPECIFICATIONS. CONSULT ARCHITECT FOR LOCATIONS IF NOT INDICATED. THE DIMENSION PLANS ARE INTENDED TO SHOW DIMENSIONS, WALL RATINGS, WALL TYPES AND DOOR AND WINDOW LOCATIONS PROVIDE 18" MINIMUM ADA REQUIRED CLEARANCE ADJACENT TO STRIKE OF DOOR ON SWING SIDE OF DOOR. PROVIDE 12" MINIMUM ON OPPOSITE SIDE OF DOOR. REFER TO MECHANICAL, PLUMBING AND ELECTRICAL DRAWINGS FOR SIZES AND LOCATIONS OF EQUIPMENT PADS. COORDINATE WALL TO DECK OR ROOF STRUCTURE ABOVE. FRAMES, AND JAMBS. REFER TO STRUCTURAL DRAWINGS FOR MASONRY REINFORCEMENT

#### SLAB CONSTRUCTION WITH MECHANICAL AND STRUCTURAL. WALLS NOT FULLY EXTENDED TO DECK OR ROOF ABOVE SHALL BE DIAGONALLY BRACED AT 10'-0" MAXIMUM ON CENTER FROM TOP OF PROVIDE FULL HEIGHT STRUCTURAL STUDS TO THE STRUCTURE ABOVE AT ALL CORNERS, AT DOOR AND BORROWED LIGHT ALL INTERIOR WALLS SHALL BE TYPE 'B3.1' UNLESS NOTED OTHERWISE. ALL COLUMN SURROUNDS SHALL BE WALL TYPE 'A2.1' UNLESS NOTED OTHERWISE. INSTALL CONTROL JOINTS IN GYPSUM BOARD WALLS, CEILINGS AND BULKHEADS AS INDICATED ON THE DIMENSION, REFLECTED CEILING PLANS, INTERIOR ELEVATIONS AND PER SPECIFICATION ALL STUDS SHALL BE AT 16" O.C. UNLESS NOTED OTHERWISE. ALL SHAFT WALL STUDS SHALL BE AT 24" O.C. UNLESS NOTED UNLESS NOTED OTHERWISE, PROVIDE WATER RESISTANT GYPSUM BOARD AT ALL WALLS COMMON TO WATER CLOSETS, URINALS, LAVATORIES, SINKS AND SHAFTS. WHERE RATED WALLS ARE INDICATED. ENTIRE WALL ASSEMBLY SHALL BE CONTINUOUS AS SHOWN OR IMPLIED ON THE CONTRACT DOCUMENTS. WHERE PENETRATIONS THROUGH RATED WALL PARTITIONS ARE REMOVED, PATCH AND REPAIR SUCH WALLS TO MAINTAIN THE RATING. REFER TO MECHANICAL, PLUMBING AND ELECTRICAL DRAWINGS FOR FURTHER COORDINATION. SMOKE AND FIRE RATED WALLS SHALL BE CONTINUOUS THROUGH AND ABOVE DOOR AND WINDOW OPENINGS. FURNISH AND INSTALL FIRE STOP SEALANT WHERE GYPSUM WALL BOARD MEETS FIREPROOFING ON COLUMNS, BEAMS, AND METAL DECK AT FIRE RATED PARTITIONS. WHERE GYPSUM BOARD COLUMN SURROUNDS ARE ADJACENT TO CASEWORK, THE DEPTH OF THE COLUMN SURROUND SHALL EXTEND 1" BEYOND FACE OF CASEWORK OR EDGE OF COUNTERTOP. VERIFY FINAL LOCATION OF PUSH PADS, CARD READERS AND TOUCHLESS ACTUATORS WITH OWNER BEFORE INSTALLATION. PROVIDE WOOD BLOCKING AT WALL STUDS TO SUPPORT GRAB BARS, HANDRAILS, DOOR STOPS AND TOILET PARTITIONS.

# GENERAL ARCHITECTURAL NOTES

- REFER TO THE EQUIPMENT SCHEDULE ON SHEET A143 FOR EQUIPMENT INFORMATION. COORDINATE BLOCKING AND MECHANICAL, ELECTRICAL AND PLUMBING CONNECTIONS AS
- VERIFY WITH OWNER REQUIREMENTS FOR ALL EQUIPMENT (MOUNTING HEIGHTS, LOCATIONS AND SIZES) INCLUDING ALL OWNER FURNISHED OWNER INSTALLED ITEMS.
- INSTALL STEEL BACKING, 20 GAUGE, AT ANY WALL HUNG ITEMS EXCEEDING 20 POUNDS. REFER TO THE DIMENSION PLAN FOR ADDITIONAL INFORMATION
- REGARDING WALL AND OPENING CONSTRUCTION. REFER TO MECHANICAL, ELECTRICAL AND PLUMBING PLANS FOR
- ADDITIONAL INFORMATION. VERIFY EXISTING CONDITIONS PRIOR TO ANY FABRICATION OR
- CONSTRUCTION. IF EXISTING CONDITIONS ARE DIFFERENT THAN SHOWN, NOTIFY ARCHITECT/ENGINEER IMMEDIATELY. LOOSE FURNITURE, SHOWN HALFTONE & DASHED, IS SHOWN IS FOR REFERENCE PURPOSES ONLY AND IS OWNER FURNISHED AND INSTALLED.

# **GENERAL FRAME ELEVATION NOTES**

- FRAME TYPES: HM = HOLLOW METAL, SF = STOREFRONT, CW = CURTAIN WALL, AG = ALL GLASS, SSF = SPECIALTY STOREFRONT, FS
- = FIRE-RATED STOREFRONT. REFER TO DIVISION 08 IN THE PROJECT MANUAL FOR ALL FRAME PANEL TYPE DESIGNATIONS. ALL HOLLOW METAL SYSTEMS TO BE 2" TALL (FACE FRAME) x 5 1/4"
- DEEP UNITS U.N.O. SEE SHEET A500 FOR DETAIL SETS FRAME MANUFACTURER TO VERIFY IN FIELD ACTUAL CONDITIONS PRIOR TO FRAME MANUFACTURE AND INSTALLATION. MULLION LOCATIONS ARE INDICATED TO THE CENTERLINE OF THE

ALL FRAME ELEVATIONS ARE SHOWN AS SEEN FROM THE PUBLIC

MULLION U.N.O.

APPROACH SIDE OF FRAME

# GENERAL REFLECTED CEILING NOTES

- ALL LAY-IN ACOUSTICAL CEILINGS SHALL BE INSTALLED AT 8'-0" ABOVE FINISH FLOOR, UNLESS INDICATED OTHERWISE. ALL LAY-IN ACOUSTICAL TILE SHALL BE TYPE ACT1, UNLESS OTHERWISE INDICATED.
- ALL GYPSUM BOARD BULKHEADS SHALL BE INSTALLED AT 7'-10" ABOVE FINISH FLOOR, UNLESS NOTED OTHERWISE. REFER TO A800 FOR TYPICAL BULKHEAD DETAIL. REFER TO A800 FOR TYPICAL CUBICAL CURTAIN TRACK DETAIL. INSTALL CONTROL JOINTS IN GYPSUM BOARD WALLS, CEILINGS AND BULKHEADS AS INDICATED ON THE DIMENSION PLANS, REFLECTED CEILING PLANS, INTERIOR ELEVATIONS AND AS INDICATED IN THE SPECIFICATIONS.
- FIRE RATED WALLS SHALL EXTEND FROM FLOOR TO STRUCTURE ALL CEILINGS SHALL BE CENTERED WITHIN THE ROOM UNLESS INDICATED OTHERWISE ALL LIGHTING FIXTURES, MECHANICAL DIFFUSERS AND GRILLES, ET CETERA ARE SHOWN ON REFLECTED CEILING PLANS FOR REFERENCE ONLY. REFER TO MECHANICAL, ELECTRICAL AND PLUMBING DRAWINGS.

#### GENERAL INTERIOR ELEVATION NOTES

- REFER TO FLOOR PLANS AND THE EQUIPMENT SCHEDULE FOR EQUIPMENT. COORDINATE CONNECTIONS. REFER TO MECHANICAL, ELECTRICAL AND PLUMBING DRAWINGS FOR ADDITIONAL INFORMATION. REFER TO PLUMBING DRAWINGS FOR LAVATORIES AND SINK TYPES.
- ALL DIMENSIONS ARE TAKEN TO THE FACE OF FINISHED MATERIAL UNLESS OTHERWISE INDICATED. FIELD VERIFY ALL DIMENSIONS PRIOR TO FABRICATION OF CABINETRY. CONSTRUCT GYPSUM BOARD BULKHEADS ABOVE UPPER CABINETRY
- TO BE 1" DEEPER AND LONGER THAN CABINETRY BELOW UNLESS INDICATED OTHERWISE. COORDINATE ALL WALL DEVICES TO AVOID CONFLICT WITH CASEWORK AND COUNTERTOPS. COORDINATE SUPPORT BRACKET LOCATIONS WITH UNDER COUNTER
- ALL BASE CABINETS SHALL BE 2'-0" DEEP UNLESS NOTED OTHERWISE. ALL CASEWORK SHALL BE FINISHED IN PLASTIC LAMINATE UNLESS NOTED OTHERWISE. PROVIDE 1" MINIMUM FILLER PANELS AT ALL LOCATIONS WHERE CABINETRY ABUTS A WALL. PROVIDE A 4" HIGH INTEGRAL BACK SPLASH ON ALL COUNTERS WITH

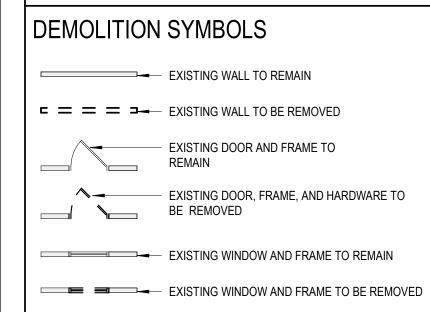
EQUIPMENT INDICATED ELSEWHERE IN CONTRACT DOCUMENTS.

- RECESSED SINKS. INSTALL SIDE/END SPLASHES WHERE THESE COUNTERS ABUT A WALL. PROVIDE ADJUSTABLE SHELVING WITHIN ALL WALL AND BASE CABINETRY AS SHOWN BY DASHED LINE. BOTTOM OF UPPER CABINETS TO BE FINISHED TO MATCH VERTICAL
- PROVIDE 12" CLEAR INTERIOR DIMENSION ON ALL UPPER WALL CABINETS UNLESS NOTED OTHERWISE. ALL CABINET/CASEWORK PULLS TO BE U-SHAPED WIRE PULLS, 4"

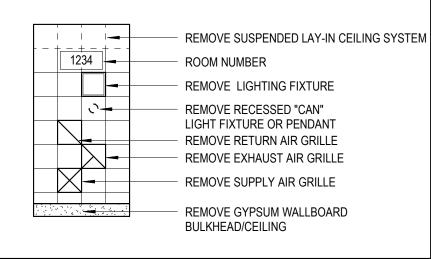
CENTERS, UNLESS NOTED OTHERWISE.

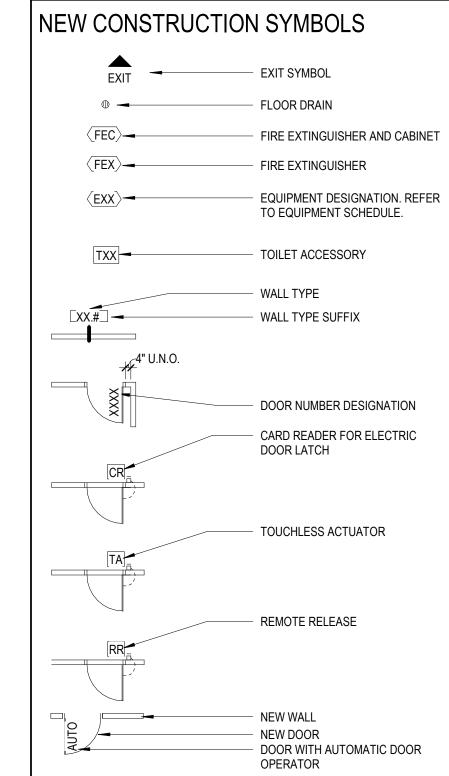
#### ARCHITECTURAL SYMBOLS LEGEND GENERAL SYMBOLS ----( XX )<del>-</del>-— COLUMN LINE SECTION INDICATOR /----AREA OF DETAIL INDICATOR DETAIL DETAIL NUMBER `----SIMILAR SHEET NUMBER - ELEVATION TAG

# ROOM NAME DESIGNATION ROOM NUMBER DESIGNATION PLAN NOTE DESIGNATION



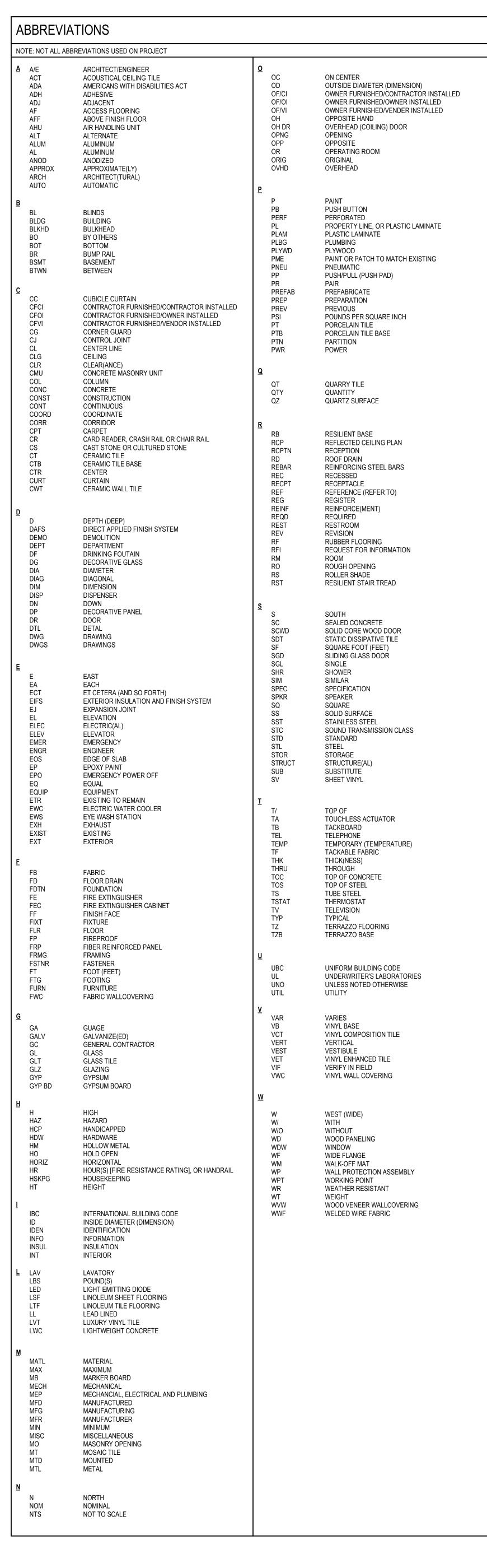
## DEMO CEILING SYMBOLS





#### **CEILING SYMBOLS** SUSPENDED LAY-IN CEILING SYSTEM -ROOM NUMBER ACOUSTICAL CEILING TILE - TYPE ACT - 1 +9' - 0"\_\_\_ CEILING HEIGHT ABOVE FINISH FLOOR 0+ RECESSED "CAN" LIGHT FIXTURE OR PENDANT CEILING MOUNTED EXIT LIGHT - CUBICLE CURTAIN TRACK AND CURTAIN 2'x4' LIGHTING FIXTURE 2'x2' LIGHTING FIXTURE 1'x4' LIGHTING FIXTURE RETURN AIR GRILLE EXHAUST AIR GRILLE SUPPLY AIR GRILLE GYPSUM CONTROL JOINT ACCESS PANEL

GYPSUM WALLBOARD BULKHEAD/CEILING





Creve Coeur, MO 63141 ph 314.754.6306 fx 314.754.4452 Missouri State Certificate of Authority #F00518223



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LIGHTING ENGINEERING



MU PROJECT NO. - CP221943

**UNIVERSITY PHYSICIANS MEDICAL BUILDING - 3RD FLOOR RENOVATION** 

1020 Hitt St. Columbia, MO 65212

**BID SET** 

DATE 1 04/28/2023 ADDENDUM #2

DESCRIPTION

I hereby certify these drawings and/or specifications have been prepared by me, or under my supervision. I further certify that to the best of my knowledge these drawings and/or specifications are as required by and in compliance with the Building Codes of the University of Missouri.



**GENERAL NOTES AND ABBREVIATIONS** 

03 APRIL 2023 BSALS PROJECT NO.

#### ELECTRICAL GENERAL NOTES

- MAKE ALL INSTALLATIONS IN ACCORDANCE WITH THE [AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES (ADAAG)] AND/OR ARCHITECTURAL BARRIERS ACT (ABA). MOUNTING HEIGHTS INDICATED WITHIN PLANS AND SCHEDULES ARE DIMENSIONED TO THE CENTER LINE OF THE DEVICE, EQUIPMENT, LUMINAIRE, ETC. UNLESS OTHERWISE
- COORDINATE EXACT EQUIPMENT LOCATIONS WITH OTHER TRADES. EQUIPMENT LOCATIONS SHOWN ON ELECTRICAL PLANS ARE DIAGRAMMATICAL ONLY AND MIGHT NOT
- CIRCUIT IDENTIFICATION NUMBERS BESIDE ELECTRICAL DEVICES AND CONNECTION POINTS ON PLANS CORRESPOND TO AN OVERCURRENT DEVICE IN THE DESIGNATED PANELBOARD. NOTE ALL CIRCUIT NUMBER CHANGES MADE IN THE FIELD AT EACH ELECTRICAL DEVICE AND CONNECTION POINT. ALSO CORRECT THE DIRECTORIES AND DEVICE MARKINGS AT PANELBOARDS, SWITCHBOARDS AND SWITCHGEAR TO ACCURATELY REFLECT THE AS-BUILT CONDITIONS.
- INSTALL EMERGENCY AND EXIT LUMINAIRE WIRING IN A SEPARATE RACEWAY FROM THAT OF ANY NORMAL POWER DEVICE.
- CONCEAL ALL CONDUIT IN WALLS, PARTITIONS, ABOVE CEILINGS, AND IN FLOOR SLABS, ETC. UNLESS OTHERWISE INDICATED ON THE PLANS OR IN THE SPECIFICATIONS. CONDUIT ROUTED IN MECHANICAL ROOMS, ELECTRICAL ROOMS, AND STORAGE ROOMS WITHOUT CEILINGS MAY BE ROUTED EXPOSED.
- COORDINATE VERTICAL CONDUIT ROUTING TO WALL MOUNTED DEVICES TO ENSURE DEVICES LOCATED WITHIN AN 18-INCH HORIZONTAL DIMENSION WILL BE CENTER-ALIGNED
- CONCEAL ELECTRICAL CONNECTIONS FOR ELECTRIC WATER COOLERS (EWC) BEHIND WATER COOLER ACCESS PLATE OR DIRECTLY BELOW AND CENTERED ON WALL.
- FIELD COORDINATE ALL ELECTRICAL AND TELECOMMUNICATIONS EQUIPMENT MOUNTING LOCATIONS TO AVOID ENCROACHMENT OF OPERATION AND ACCESS TO EQUIPMENT FROM OTHER TRADES. COORDINATE THE APPROPRIATE MOUNTING LOCATION WITH THE AFFECTED DISCIPLINES WHEN EQUIPMENT IS SPECIFIED TO BE MOUNTED ONTO THE SURFACE OF ANOTHER DISCIPLINE'S EQUIPMENT.
- REPAIR ALL OPENINGS MADE IN EXISTING WALLS, PARTITIONS, ETC TO ACCOMMODATE WORK OF THIS DISCIPLINE TO MATCH THE SURROUNDING CONDITIONS, USING WORKERS QUALIFIED IN THE APPROPRIATE TRADE. APPROPRIATELY GROUT OR SEAL ALL CONDUITS THROUGH WALLS.
- ALL MATERIALS USED TO SEAL PENETRATIONS OF FIRE RATED WALLS AND FLOORS MUST HAVE BEEN TESTED AND CERTIFIED AS A SYSTEM PER ASTM E814 STANDARDS FOR FIRE TESTS OF THROUGH-PENETRATION FIRESTOPS.
- INSTALL A PERMANENT DIRECTORY ACCORDING TO THE NATIONAL ELECTRICAL CODE, ARTICLE 230 AT EACH SERVICE ENTRANCE AND POWER SOURCE.
- PERFORM ALL WELDING ACCORDING TO AMERICAN WELDING SOCIETY STANDARDS. FURNISH CERTIFICATES QUALIFYING EACH WELDER TO THE ARCHITECT OR ENGINEER PRIOR TO START OF WORK. THE ARCHITECT OR ENGINEER RESERVES THE RIGHT TO REQUIRE QUALIFYING DEMONSTRATION, AT NO ADDITIONAL EXPENSE, OF ANY WELDERS
- REPLACE OR REINSTALL ALL PORTIONS OF THE BUILDING (CEILING TILES, WALLS, ETC) REMOVED TO ACCOMMODATE THE INSTALLATION OF ANY ELECTRICAL DEVICE, EQUIPMENT, ETC., USING WORKERS QUALIFIED IN THE APPROPRIATE TRADE.
- COORDINATE LUMINAIRE LOCATIONS SUCH THAT LUMINAIRES RUN PARALLEL TO THE FACE OF THE EQUIPMENT AND OVER AISLES BETWEEN EQUIPMENT IN ALL MECHANICAL AND ELECTRICAL EQUIPMENT AREAS. INSTALL AT PROPER LOCATIONS AND HEIGHTS TO PROPERLY ILLUMINATE ALL GAGES, PANELS, ELECTRICAL EQUIPMENT, CONTROLS, VALVES, ETC. CHAIN HANGING, STEM HANGING, CHANNEL HANGING, ETC. ARE ACCEPTABLE METHODS.

#### GENERAL DEMOLITION NOTES

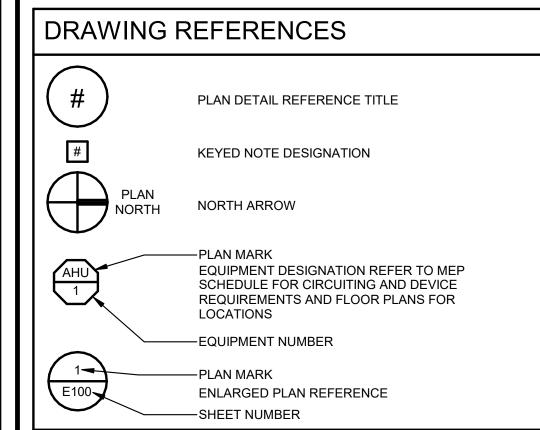
- REMOVE. CAP AND RELOCATE EQUIPMENT, OUTLETS, CONDUIT, WIRE, ETC., AS SHOWN AND SPECIFIED ON DRAWINGS. AND AS MAY BECOME NECESSARY BECAUSE OF EXISTING FIELD CONDITIONS. VISIBLY EXAMINE ALL EXISTING WALLS DESIGNATED FOR REMOVAL TO DETERMINE THE CONDUIT AND THE WIRING THAT WILL REQUIRE CAPPING AND REMOVAL, WHETHER OR NOT SUCH CONDITIONS ARE INDICATED ON THE DRAWINGS. FAILURE TO VISIT THE SITE AND TO TAKE ALL EXISTING CONDITIONS INTO ACCOUNT WILL NOT ALLOW FOR CHANGES TO THE SCOPE OF WORK.
- MAINTAIN CIRCUIT CONTINUITY TO ALL EXISTING FIXTURES, EQUIPMENT, OUTLETS, ETC., TO REMAIN IN USE WHETHER NOTED ON THE PLANS OR NOT. FIELD VERIFY EXISTING ITEMS TO REMAIN IN USE. RECONNECT RACEWAYS AND WIRING FOR EXISTING CIRCUITS WHICH MUST BE RE-ROUTED OR WHICH ARE PARTIALLY ABANDONED TO POWER THE REMAINING OUTLETS ON THE CIRCUIT.
- REMOVE ALL UNUSED WIRING AND CABLES BACK TO THEIR SOURCE. REMOVE ALL UNUSED CONDUIT THAT IS EXPOSED OR ABOVE ACCESSIBLE CEILINGS WHICH IS AFFECTED BY OR IS IN THE AREA OF THE DEMOLITION WORK. COORDINATE WITH MU
- PROJECT MANAGER ON ITEMS TO BE REMOVED. THE INTENTION OF THE ELECTRICAL DEMOLITION DRAWINGS IS TO DISCONNECT AND REMOVE ALL ELECTRICAL WORK MADE VOID BY THE SCOPE OF THE CONSTRUCTION AND
- DISCONNECT AND REMOVE ALL EXISTING ELECTRICAL EQUIPMENT, DEVICES, ASSOCIATED RACEWAYS, SUPPORTING HARDWARE, AND WIRING. WHICH HAVE BEEN MADE OBSOLETE BY THE WORK OR IS SHOWN DASHED ON THE ELECTRICAL DEMOLITION DRAWINGS, UNLESS OTHERWISE NOTED. ALTHOUGH AN ATTEMPT HAS BEEN MADE TO INDICATE ALL OF THIS WORK, TOTAL ACCURACY IS NOT GUARANTEED. VISIBLY EXAMINE ALL AREAS AND WALLS AND CEILINGS SCHEDULED FOR REMOVAL TO DETERMINE EXISTING ELECTRICAL ITEMS TO REMAIN.

ALTERATION. FIELD VERIFY EXACT MATERIAL QUANTITIES REQUIRED TO BE REMOVED.

- WHERE ELECTRICAL EQUIPMENT, CONDUIT, BOXES, AND SUPPORTING HARDWARE ARE REMOVED, PATCH AND FINISH THE SURFACE AS REQUIRED TO MATCH THE EXISTING, USING WORKERS QUALIFIED IN THE APPROPRIATE TRADE.
- WHERE BURIED CONDUITS EXTENDING OUT OF A CONCRETE SLAB BECOME ABANDONED, CUT AND GRIND THE CONDUITS OFF FLUSH WITH TOP OF SLAB AND PLUG WITH NON-SHRINK WATERPROOF GROUT FILL.
- TAKE ALL REMOVED MATERIALS FROM THE PROJECT SITE, EXCEPT FOR THOSE TO BE RELOCATED, STORED, OR TURNED OVER TO THE OWNER.
- ACCEPTANCE OF CONTRACT MEANS INSTALLER ACCEPTS EXISTING CONDITIONS.
- COORDINATE ALL DEMOLITION WORK WITH ALL OTHER TRADES.

STATE, AND LOCAL LAWS. RE3FER TO FRONT END DOCUMENTS.

- PROVIDE A BLANK COVER OVER THE OUTLET WHERE A FLUSH DEVICE IS BEING REMOVED
- FROM FLOORS AND WALLS THAT ARE TO REMAIN. MATCH THE COLOR AND MATERIAL TO THE EXISTING REMAINING COVERS IN THE ROOM OR SPACE.
- LEGALLY DISPOSE OF HAZARDOUS MATERIALS AND BALLASTS OR OTHER EQUIPMENT CONTAINING PCBS AND LAMPS CONTAINING MERCURY. COMPLY WITH ALL FEDERAL.
- UPON COMPLETION OF CONSTRUCTION, PROVDE RED-LINE PANEL SCHEDULE DEPICTING THE ACTUAL CIRCUITS MODIFIED OR ADDED AS PART OF THIS PROJECT TO UMHC. PROVIDE NEW TYPED PANELBOARD DIRECTORY CARDS WITHIN EACH PANEL ENCLOSURE FOR ALL PANELS MODIFIED AS PART OF THIS PROJECT. FOR NEW LOADS, DESCRIBE THE SPECIFIC LOAD TYPE AND LOCATION IN THE CIRCUIT DESCRIPTION FIELD IN THE DIRECTORY CARDS GIVEN TO UMHC. FOR EXISTING TO REMAIN LOADS, TRANSPOSE THE ACTUAL CIRCUIT DESCRIPTION INFORMATION PROVIDED ON THE EXISITING PANELBOARD DIRECTORY CARD. DO NOT USE "EXISTING LOAD" VERBIAGE IN THE CIRCUIT DESCRIPTION. WHERE ALL LOADDS ARE DEMOLISHED FROM A CIRCUIT. CONTRACTOR TO MOVE CIRCUIT BREAKER HANDLE TO THE OFF POSITION AND INDICATE POLE POSITION AS "SPARE" IN



#### **ABBREVIATIONS**

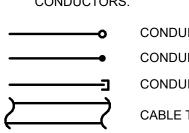
- : ELECTRIC WATER COOLER GENERAL CONTRACTOR
- TYP. : TYPICAL

- EXISTING TO REMAIN OR NEW WORK BY OTHERS (LIGHT, SOLID LINE) NEW WORK BY THIS CONTRACTOR
- EXISTING TO BE REMOVED BY THIS CONTRACTOR (DARK, DASHED LINE, DEMOLITION PLANS)

#### NEW WORK BY THIS CONTRACTOR TO BE INSTALLED UNDERGROUND, OR BELOW FLOOR (DARK, LONG DASHED LINE)

#### WIRING PLANS

- PROVIDE WIRING REQUIRED BY THE CIRCUITING AND SWITCHING REQUIREMENTS FOR THE PARTICULAR CIRCUITS INVOLVED. TYPICAL 120V HOMERUNS SHALL CONSIST OF #12 AWG CONDUCTORS IN 3/4" CONDUIT MINIMUM UNLESS INDICATED OTHERWISE. NO SHARED NEUTRALS SHALL BE ALLOWED. A MAXIMUM OF NINE CURRENT-CARRYING CONDUCTORS ARE ALLOWED IN A RACEWAY, NEUTRAL CONDUCTORS ARE ALSO CONSIDERED CURRENT-CARRYING CONDUCTORS. FOR CIRCUITS EXCEEDING 75'-0" IN LENGTH, PROVIDE THE NEXT LARGER WIRE SIZE FOR THE CIRCUIT AMPACITY.
- WHERE NUMBER OF CURRENT-CARRYING CONDUCTORS IN A RACEWAY EXCEEDS THREE, THE ALLOWABLE AMPACITY OF EACH CONDUCTOR SHALL BE REDUCED AS SHOWN IN THE ADJUSTMENT FACTOR TABLE IN THE NATIONAL ELECTRIC CODE. LOAD DIVERSITY FACTORS SHALL NOT BE USED IN SIZING CONDUCTORS. NEUTRAL CONDUCTORS SHALL BE COUNTED AS CURRENT-CARRYING

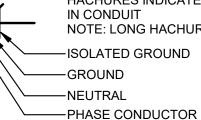


CONDUIT TURNING DOWN CONDUIT CAPPED FOR FUTURE.

CABLE TRAY: TYPE AS NOTED

HOMERUN TO PANEL OR DESTINATION NOTED

HACHURES INDICATE NUMBER OF CONDUCTORS NOTE: LONG HACHURE - NEUTRAL CONDUCTOR -ISOLATED GROUND



# MAGNETIC STARTER WITH DISCONNECT UNFUSED DISCONNECT SWITCH FUSED DISCONNECT SWITCH MOTOR CONTROL CENTER SWITCHBOARD PANELBOARD (SURFACE) PANELBOARD (FLUSH) PIPE WITH ELECTRIC HEAT TRACING **ELECTRIC HEATING EQUIPMENT** TRANSFORMER UNINTERRUPTIBLE POWER SUPPLY SYSTEM **HANDHOLE MANHOLE** ELECTRICAL SERVICE METER VARIABLE FREQUENCY DRIVE WIRING DEVICES, RECEPTACLES - MISC. TYPICAL MOUNTING HEIGHT: +18" A.F.F. SUBSCRIPT LEGEND: ABOVE COUNTER: MOUNT +6" ABOVE BACKSPLASH OR WORK CEILING: MOUNT FLUSH WITHIN CEILING TILE OR GYPSUM COMPUTER RECEPTACLE: PROVIDE LABEL TO READ:

MOTOR: SEE EQUIPMENT DATA SCHEDULE FOR

POWER EQUIPMENT

MAGNETIC STARTER

- SWITCHED: PROVIDE ONE OUTLET CONTROLLED BY TOGGLE
- UNDER COUNTER: WITHIN CABINETRY OR CASEWORK. FF: FURNITURE FEED: COORDINATE WITH FURNITURE INSTALLER FOR ALL

# CONNECTION REQUIREMENTS.

- MANUAL MOTOR STARTER WITH PILOT LIGHT (+48" A.F.F.)
- POWER POLE

### JUNCTION AND PULL BOXES

- SHADING INDICATES EMERGENCY POWER
- PER N.E.C. REQUIREMENTS.
- JUNCTION BOX: WALL MOUNTED. SIZE PER N.E.C.
- PULL BOX

# PUBLIC ADDRESS SYSTEMS

RESPONSIBILITIES: REFER TO RESPONSIBILITY MATRIX ON SHEET E500.

- SPEAKER: WALL MOUNTED 7'-0" OR AS NOTED.
- FLUSH VOLUME CONTROL: +48" A.F.F.

# LUMINAIRES

- REFER TO LUMINAIRE SCHEDULE FOR LUMINAIRE DESCRIPTIONS
- "NL" INDICATES UNSWITCHED LUMINAIRE
  - "SE" DESIGNATION INDICATES LUMINAIRE IS SWITCHED DURING NORMAL OPERATION, BUT UPON LOSS OF POWER, LUMINAIRE REVERTS TO 100% OUTPUT VIA BATTERY BALLAST, REGARDLESS OF THE ON/OFF STATUS OF THE LOCAL LIGHTING CONTROL DEVICE. EXTEND AN UNSWITCHED PORTION OF THE LIGHTING CIRCUIT SERVING AREA, AHEAD OF ALL LIGHTING
- CONTACTORS, TO THIS DEVICE. SHADING LEGEND (APPLICABLE TO LUMAINAIRE DESIGNATION KEY:
- LUMINAIRE SYMBOLS): NO SHADING: NORMAL POWER
- HALF-SHADING: LIFE SAFETY OR BATTERY BACKUP

A: LUMINAIRE TYPE

1: CIRCUIT NUMBER

a: CONTROLLING SWITCH

FULL-SHADING: CRITICAL POWER

### SWITCHES AND LIGHTING CONTROL DEVICES

- TYPICAL MOUNTING HEIGHT: 48" A.F.F. TO CENTER U.O.N.
- WHERE TWO OR MORE SWITCHES ARE SHOWN ADJACENT TO EACH OTHER, PROVIDE A COMMON GANG BOX WITH A SINGLE, SEAMLESS FACEPLATE.
- 2: TWO-POLE SWITCH
- 3: THREE-WAY SWITCH 4: FOUR-WAY SWITCH
- K: KEY SWITCH
- D: DIMMER COORDINATE REQUIREMENTS FOR LUMINAIRE COMPATIBILITY P: PILOT LIGHT SWITCH
- C: MOMENTARY CONTACT SWITCH LV : LOW VOLTAGE CONTROL MASTER STATION L: LOW VOLTAGE LOCAL SINGLE/PUSH BUTTON STATION
- A LOWERCASE SUBSCRIPT INDICATES THE SWITCHLEG THE DEVICE CONTROLS.
- REFER TO SPECIFICATION SECTION 26 09 23 FOR ADDITIONAL INFORMATION.
- SWITCH TYPE AS INDICATED BY SUBSCRIPT CEILING OCCUPANCY DETECTOR: INFRARED SENSOR TYPE.
- CEILING OCCUPANCY DETECTOR: ULTRASONIC TYPE.
- CEILING OCCUPANCY DETECTOR: DUAL TECHNOLOGY TYPE. WALL MOUNTED SINGLE SWITCH OCCUPANCY SENSOR [PIR][ULTRASONIC][DUAL
- TECHNOLOGY] TYPE WALL MOUNTED DUAL SWITCH OCCUPANCY SENSOR [PIR][ULTRASONIC][DUAL
- CEILING PHOTOCELL
- DIGITAL TIMER

# TELECOMMUNICATIONS

RESPONSIBILITIES: REFER TO RESPONSIBILITY MATRIX ON SHEET E500. TYPICAL MOUNTING HEIGHT: +18" A.F.F. UNLESS OTHERWISE NOTED. PROVIDE OR 4 11/16" SQUARE BOX WITH SINGLE GANG PLASTER RING (VERTICAL).

- ALL TELECOMMUNICATION CONDUIT SHALL BE A MINIMUM OF 1-1/4" IN DIAMETER STUBBED TO ACCESSIBLE CORRIDOR CEILING SPACE, UNLESS OTHERWISE NOTED.
- ALL TELECOMMUNICATION CABLE SHALL BE OWNER PROVIDED WITH A PLENUM RATED JACKET. ALL CABLES RUN EXPOSED IN STRUCTURE ABOVE OR ABOVE CEILINGS SHALL BE SUPPORTED BY J-HOOKS AT EVERY 5'-0" TO NEAREST CABLE
- TRAYS. PROVIDE INSULATED BUSHINGS ON ALL RACEWAYS. ALL DATA CABLES SHALL BE CAT 6A, YELLOW IN COLOR, AND TERMINATED BY OWNER.
- REFER TO LOW VOLTAGE RESPONSIBILITY MATRIX ON E500 FOR MORE INFORMATION. SUBSCRIPT LEGEND:
- ABOVE COUNTER MOUNT +6" ABOVE BACKSPLASH OR WORK SURFACE WITH BOX ORIENTED HORIZONTALLY. CEILING MOUNTED - MOUNT FLUSH WITHIN CEILING TILE OR GYPSUM
- WALL PHONE MOUNT +48" A.F.F. OR 6" ABOVE WORK SURFACE. PROVIDE
- MOUNTING LUGS FOR TELEPHONE. WAP: WIRELESS ACCESS POINT DATA OUTLET - INSTALL ONE (1) OWNER FURNISHED CAT 6A CABLE AND 10-'0" OF SLACK CABLE COILED ABOVE
- ACCESSIBLE CEILING FROM TELECOM ROOM. WIRELESS ACCESS POINTS ARE OWNER FURNISHED, OWNER INSTALLED. QUANTITY OF OWNER FURNISHED CAT 6A CABLES TO BE INSTALLED BY CONTRACTOR. WHEN NOT INDICATED, THREE (3) CABLES SHALL BE ASSUMED. CABLES SHALL ORIGINATE FROM TELECOMMUNICATION.
- A SLASH BETWEEN TWO SUBSCRIPTS INDICATES MULTIPLE PARAMETERS (EXAMPLE: A/3 DENOTES ABOVE COUNTER MOUNTING, 3 CABLES.)
- TELECOMMUNICATION OUTLET: PROVIDE CONDUIT FOR WIRING STUBBED TO THE ACCESSIBLE CEILING SPACE WITH BUSHING. PROVIDE 4 POSITION FACEPLATE AND A TOTAL OF (3) ACTIVE JACKS UNLESS OTHERWISE NOTED.
- EXISTING TELECOMMUNICATION OUTLET TO REMAIN

# NURSE CALL SYSTEMS

- SPONSIBILITIES: REFER TO RESPONSIBILITY MATRIX ON SHEET E500. REFER TO ARCHITECTURAL ELEVATIONS FOR EXACT MOUNTING HEIGHTS AND LOCATIONS. WHERE ELEVATIONS DO NOT SPECIFY, MOUNT DEVICES AS
- PROVIDE RECESSED ROUGH-IN COMPONENTS CONSISTING OF 4" x 4" x 3.5" DOUBLE GANG BOX WITH SINGLE GANG MUD RING AND ONE (1) 1" CONDUIT STUBBED TO ABOVE CEILING SPACE WITH BUSHING. PROVIDE J-HOOK SUPPORTS ABOVE CEILING BETWEEN DEVICE, CORRIDOR FIRE RATED PATHWAY, AND CABLE
- REFER TO LOW VOLTAGE RESPONSIBILITY MATRIX ON SHEET E500 FOR MORE INFORMATION.
- EMERGENCY PULL CORD STATION: +48" A.F.F. AT TOILETS, +78" AT SHOWER STATIONS. CORD LENGTH SHALL EXTEND
- EMERGENCY PUSHBUTTON STATION: +48" A.F.F. U.O.N.
- NURSE CALL MASTER STATION: 3 GANG, NON-GANGABLE, 3.5" DEEP BOX

WALL MOUNTED DOME LIGHT: MOUNT ABOVE DOOR JAMB,

CENTERED BETWEEN TOP OF DOOR FRAME AND CEILING

# ACCESS CONTROL SYSTEMS

REQUEST TO EXIT, TOUCHLESS ACTUATOR: WALL MOUNT AT +48" A.F.F.

# I FIRE ALARM SYSTEMS

- REFER TO SPECIFICATIONS SECTION 283111 FOR ADDITIONAL INFORMATION
- PERTAINING TO THE FIRE ALARM SYSTEM. SIGNALING LINE CIRCUITS SHALL BE ROUTED IN A CLASS B CONFIGURATION.

PUSHBUTTON: +48" A.F.F. OR AS NOTED

- NOTIFICATION APPLIANCE CIRCUITS SHALL BE ROUTED IN A CLASS B FIRE ALARM CIRCUITS SHALL BE ROUTED IN CONDUIT WHERE INACCESSIBLE.
- WHERE ROUTED ABOVE ACCESSIBLE CEILINGS, FIRE ALARM CIRCUITS SHALL CONSIST OF PLENUM RATED CABLE SUPPORTED EVERY 4'-0" BETWEEN DEVICES. FOR VISUAL DEVICES, THE '#' WITHIN THE SYMBOL CORRESPONDS TO THE CANDELA RATING OF THE DEVICE: 1=15cd, 3=30cd, 5=75cd, 7=110cd.

WALL MOUNTED NOTIFICATION DEVICES SHALL BE MOUNTED WITH THE TOP OF

THE DEVICE +90" A.F.F. OR 6" BELOW THE CEILING, WHICHEVER IS LOWER.

- FIRE ALARM MANUAL STATION: +48" A.F.F. TO CENTER LINE
- F WALL MOUNTED SPEAKER WALL MOUNTED SPEAKER WITH STROBE
- WALL MOUNTED STROBE
- E# CEILING MOUNTED SPEAKER WITH STROBE CEILING MOUNTED WITH STROBE
- CEILING MOUNTED SPEAKER
- HEAT DETECTOR : FIXED TEMPERATURE
- HEAT DETECTOR: RATE OF RISE
- SMOKE DETECTOR: PHOTOELECTRIC TYPE.
- DS DUCT MOUNTED SMOKE DETECTOR: PHOTOELECTRIC TYPE
- SPRINKLER SYSTEM WATER FLOW SWITCH SPRINKLER SYSTEM TAMPER (SUPERVISORY) SWITCH
- SPRINKLER SYSTEM ELECTRICAL SOLENOID VALVE EXTINGUISHING SYSTEM PRESSURE SWITCH
- SINGLE STATION SMOKE DETECTOR WITH SOUNDER BASE FIRE ALARM ELECTROMAGNETIC DOOR HOLDER

CONTACT IN KITCHEN EXTINGUISHING SYSTEM PANEL FOR

- CONNECTION INTO FIRE ALARM SYSTEM END OF LINE RESISTOR
- ADDRESSABLE CONTROL RELAY
- ADDRESSABLE MONITOR MODULE
- SMOKE DAMPER



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Architectural Registration Number - 2003010309



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Timberlake Engineering

912 Old Highway 63 South

MU PROJECT NO. - CP221943

**Health Care** 

**UNIVERSITY PHYSICIANS MEDICAL BUILDING - 3RD FLOOR RENOVATION** 

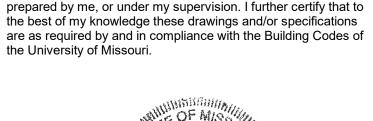
1020 Hitt St. Columbia, MO 65212

**BID SET** 

1 04/28/2023 ADDENDUM #2

MARK DATE

DESCRIPTION



I hereby certify these drawings and/or specifications have been

CHRISTOPHER ALAN PHILIPF

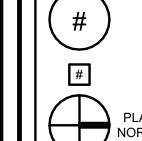
**ELECTRICAL SYMBOLS & ABBREVIATIONS** 

INTROBA PROJECT NO.

E000

03 APRIL, 2023



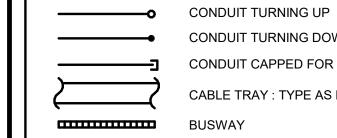


A.F.F : ABOVE FINISHED FLOOR : ELECTRICAL CONTRACTOR : EXISTING RELOCATED : EXISTING TO REMAIN

GND : GROUND

U.O.N.: UNLESS OTHERWISE NOTED LINE TYPE LEGEND

(DARK, SOLID LINE)



A SLASH BETWEEN TWO SUBSCRIPTS INDICATES MULTIPLE PARAMETERS (EXAMPLE: A/3 DENOTES ABOVE COUNTER MOUNTING, CIRCUIT 3). SHADING INDICATES EMERGENCY POWER SPECIAL PURPOSE OUTLET AS NOTED SINGLE RECEPTACLE OUTLET DUPLEX RECEPTACLE OUTLET DUPLEX RECEPTACLE OUTLET: GROUND FAULT TYPE DUPLEX RECEPTACLE OUTLET: INTELLIGENTLY CONTROLLED DOUBLE DUPLEX RECEPTACLE OUTLET DUPLEX RECEPTACLE OUTLET: TAMPER PROOF FLOOR BOX: SYMBOL DESIGNATES TYPE OF SERVICE FLOOR BOX: ROUGH IN ONLY WITH BLANK COVER COMBINATION DUPLEX RECEPTACLE AND TV OUTLET (SEE TV SYMBOL UNDER "DISTRIBUTED TELEVISION"). ELECTRICAL CONNECTION: CEILING MOUNTED ELECTRICAL CONNECTION: WALL MOUNTED

SPEAKER: CEILING

JUNCTION BOX: CEILING OR FLOOR MOUNTED. SIZE

REQUIREMENTS.