

CODE DATA:

APPLICABLE CODES: ALL WORK UNDER THIS CONTRACT SHALL COMPLY WITH THE PROVISIONS OF THE SPECIFICATIONS AND DRAWINGS, AND SHALL SATISFY ALL APPLICABLE CODES, ORDINANCES AND REGULATIONS OF ALL GOVERNING BODIES INVOLVED. ALL PERMITS AND LICENSES NECESSARY FOR THE PROPER EXECUTION OF THE WORK SHALL BE SECURED AND PAID FOR BY THE CONTRACTOR INVOLVED. APPLICABLE CODES INCLUDE, BUT ARE NOT LIMITED TO THE FOLLOWING:

BUILDING CODE ELECTRICAL CODE MECHANICAL CODE

2018 International Building Code 2017 NATIONAL ELECTRICAL CODE 2018 INTERNATIONAL MECHANICAL CODE

PLUMBING CODE FIRE PROTECTION ACCESSIBILITY 2010 AMERICANS WITH DISABILITIES ACT . DESIGN GUIDELINES

2018 INTERNATIONAL PLUMBING CODE 2018 INTERNATIONAL FIRE CODE . NFPA 13

TYPE V-B NON-COMBUSTIBLE (SPRINKLED)

OCCUPANCY TYPE:

CONSTRUCTION TYPE:

B - BUISNESS

OCCUPANT LOAD:

BUILDING GROSS AREA: EXISTING= 11,204 SF

OFFICE SPACE | OCCUPANT LOAD: OFFICE SPACE | = 1,692 SF/150 = 12 OCC

OFFICE SPACE | EXIT CALCULATION: OCC. LOAD | 2 = | REQ'D. EXIT

PROVIDED= | EXITS EXIT WIDTH: 12 OCCUPANTS X .2 = 2.4 INCHESPROVIDED = 34 INCHES

PLUMBING FIXTURE CALCS:

RESTROOM FIXTURES (Table 2902.1) Required - 1 per 25 for the first 50 and 1 per 50 for the remainder exceeding 50.

Restroom Fixtrues Required | 12 occ = | water closets Provided I water closets

> Drinking fountain and mop sink are not required for occupant loads under 15

DAVIDL ESKOV NUMBER

> **ADA Compliance** Certification

To best of my professional knowledge, the facility as indicated is in compliance with the Americans with Disabilities Act, including the current ADA Title III Design Guidelines.

David Eskov

PERMIT

JULY 19, 2024 Revisions

DRAWING INDEX

ARCHITECTURAL:

A1.0 FLOOR PLAN, WALL TYPE, AND DOOR SCHEDULE A2.0 ENLARGED RESTROOM, RESTROOM RCP, AND INTERIOR ELEVATIONS

MP1.0 MECHANICAL AND PLUMBING FLOOR PLAN E0.0 ELECTRICAL SPECIFICATIONS E1.0 ELECTRICAL PLAN



REMODELING NOTES:

NO ADDITIONAL COST TO THE OWNER.

MAINTAIN EXISTING EXITS, EXIT ACCESS AND PROVIDE APPROPRIATE FIRE PREVENTION PROCEDURES DURING CONSTRUCTION.

AT NO COST TO OWNER. VERIFY LOCATIONS OF EXISTING UTILITY SERVICE CONNECTIONS AND MAKE ALL CONNECTIONS REQUIRED. LOCATIONS OF EXISTING UTILITIES INDICATED IN THE DRAWINGS ARE APPROXIMATE, ARE BASED ON INFORMATION PROVIDED. PROVIDE CONNECTIONS AS REQUIRED BY ACTUAL UTILITY CONNECTION POINTS AT

PROTECT EXISTING CONSTRUCTION FROM DAMAGE AND REPAIR DAMAGE DUE TO CONSTRUCTION OPERATIONS

PROVIDE ALL CUTTING AND PATCHING OF EXISTING CONSTRUCTION TO ACCOMMODATE NEW CONSTRUCTION

WORK ALIGN NEW FINISHES WITH EXISTING FINISHES EXCEPT AS OTHERWISE INDICATED.

BOTH SIDES

HOLLOW METAL DOOR

PATCH ALL EXISTING WALL PENETRATIONS AND REFINISH TO MATCH ADJACENT SURFACES TYPICALLY.

PHASE CONSTRUCTION AT PARKING AREAS SO THAT ADEQUATE PARKING WILL BE AVAILABLE AT ALL TIMES.

REFER TO OTHER SHEETS IN THIS SET FOR ADDITIONAL DEMOLITION REQUIREMENTS, WHICH SHALL BE BY THE CONTRACTOR UNLESS SPECIFICALLY NOTED OTHERWISE.

REMOVE UNUSED UTILITIES NOT REUSED, CAPPED BELOW FINAL FINISH SURFACES.

REMOVE ALL EXISTING ELEMENTS WHICH CONFLICT WITH THE NEW WORK, WHETHER OR NOT SHOWN ON THE DRAWINGS.

DEMOLITION PLAN SHOWS APPROXIMATE LAYOUT OF EXISTING BUILDING AND IS NOT INTENDED TO REPRESENT "AS-BUILT" CONDITIONS. VISIT SITE AND OTHERWISE BECOME FAMILIAR WITH ACTUAL CONDITIONS WHEN BIDDING THE WORK

WALLS, PARTITIONS, DOORS, FRAMES, AND OTHER ITEMS TO BE REMOVED ARE SHOWN DASHED. SERVICES WITHIN WALLS AND PARTITIONS SHALL ALSO BE REMOVED. EDGES OF WALLS SHOWN TO REMAIN SHALL BE CLEANLY CUT TO ACCEPT NEW CONSTRUCTION. REPAIR AND PATCH EXISTING WALLS SHOWN TO REMAIN WHERE INTERSECTING WALLS, DOORS, FRAMES, ETC. ARE SHOWN TO BE REMOVED AND WHERE EXISTING CONSTRUCTION WILL NOW BE EXPOSED IN THE NEW CONSTRUCTION.

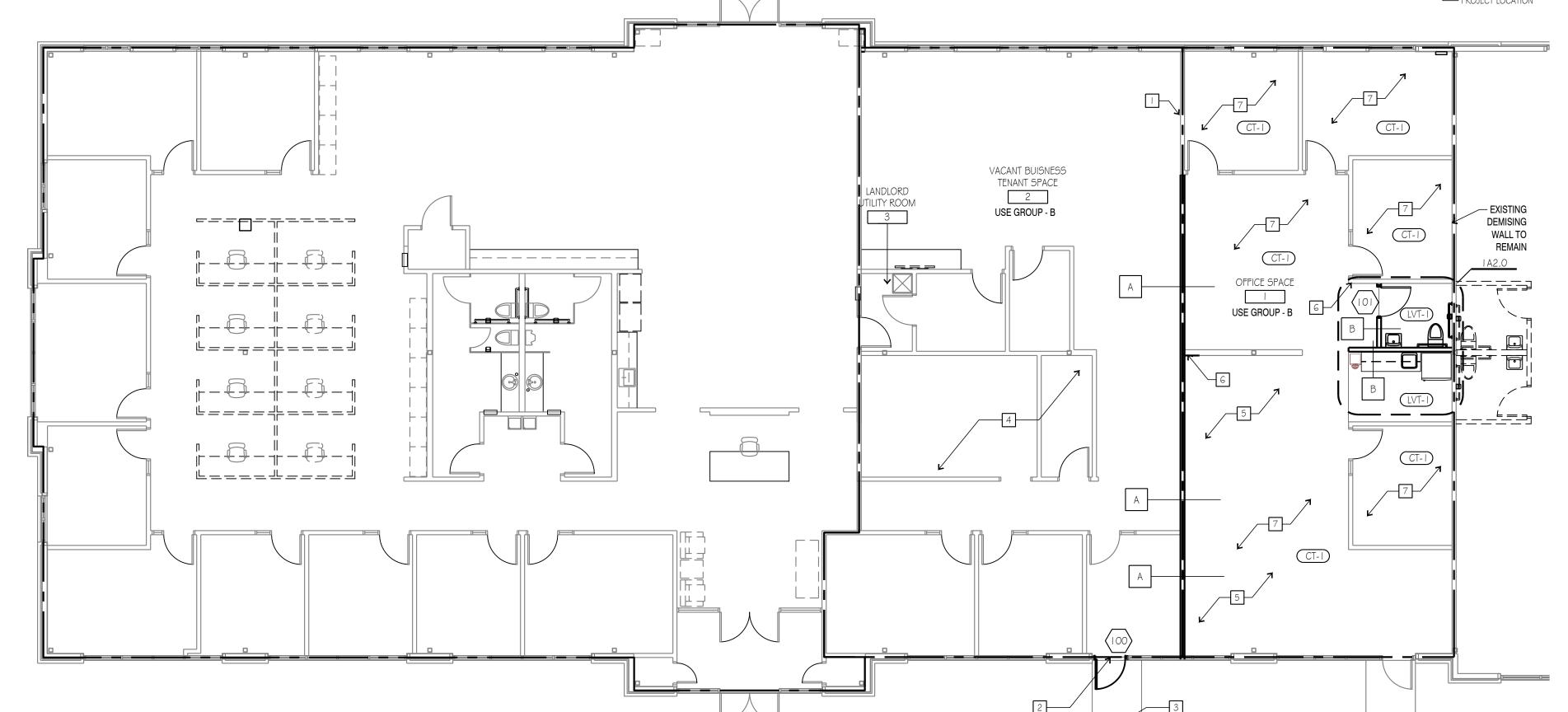
PROVIDE TEMPORARY WEATHER PROTECTION AND SECURITY DEVICES DURING INTERVAL BETWEEN DEMOLITION AND REMOVAL OF EXISTING CONSTRUCTION ON EXTERIOR SURFACES AND INSTALLATION OF NEW CONSTRUCTION TO ENSURE THAT NO WATER LEAKAGE OR DAMAGE OCCURS TO STRUCTURE OR INTERIOR AREAS OF EXISTING BUILDING

FLOOR PLAN KEYNOTES

- | EXTEND EXISTING WALLS TO DECK PER WALL TYPE
- MODIFY EXISTING STOREFRONT AS REQUIRED TO ACCOMMODATE NEW STOREFRONT DOOR
- 3 NEW 5' WIDE SIDEWALK, 4" CONCRETE OVER 4" DRAINAGE FILL. MAX 2% CROSS SLOPE AND SLOPE 5' OUT FROM DOOR. PROVIDE (2) 12" L #4 DOWELS ANCHORED INTO EXISTING FOOTING A MIN OF 5"
- 4 VACANT TENANT SPACE, FINAL BUILD OUT DRAWINGS UNDER SEPARATE PERMIT BY TENANT
- 5 INFILL CEILING AND RELOCATE LIGHTS AS REQUIRED TO MATCH EXISTING CEILING LAYOUT AFTER REMOVAL OF OFFICE WALLS
- PATCH WALL AS REQUIRED TO MATCH EXISTING CONDITIONS, TYP
- 7 INSTALL NEW CARPET, 4" RUBBER BASE, AND PAINT ALL WALLS THIS SPACE ONLY. COORDINATE FINISHES W/

NOTE: MODIFY EXISTING CEILING AS REQUIRED TO ACCOMMODATE NEW WALL, REINSTALL CEILING ON

TENANT SPACE 1 SIDE.



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Architect. Field verification of

actual elements, conditions, and

dimensions is required.

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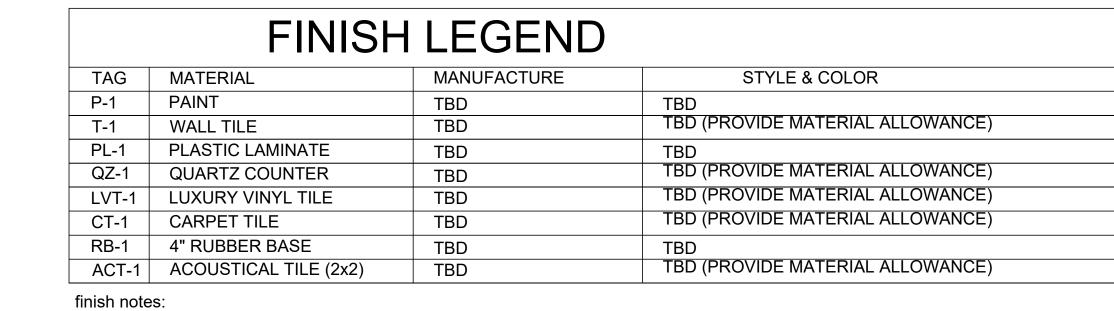
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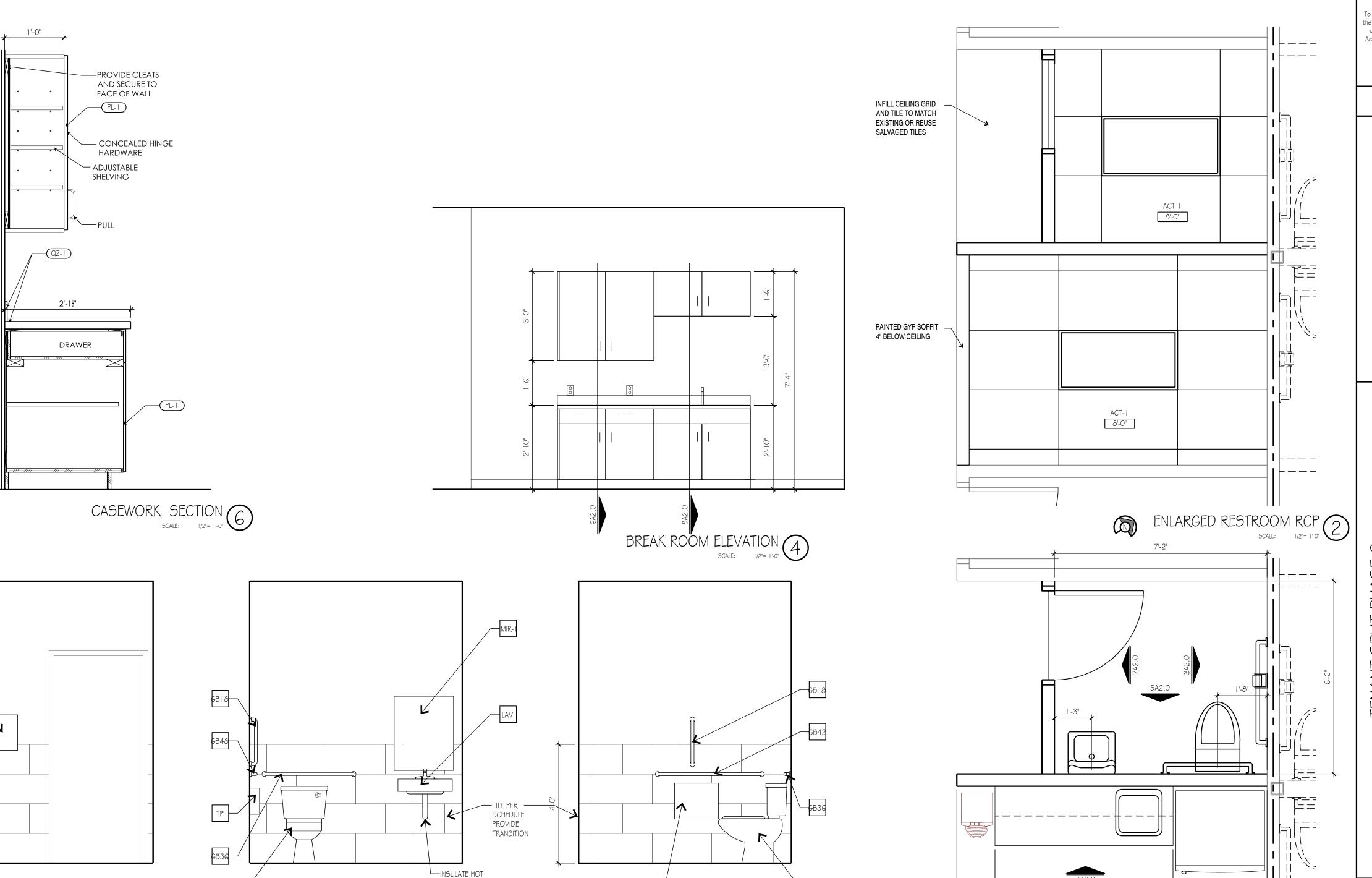
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FLOOR PLAN, WALL TYPE, AND DOOR SCHEDULE



- All surfaces shall be cleaned and conditioned to receive new finish as required by finish product manufacturer. Surfaces shall be smooth, free from depressions,
- All patterned flooring shall be centered in both directions and generated from center of
- room outward toward partitions, unless otherwise noted.
- All walls shall receive a level 4 finish.
- Install base at all casework where exposed unless noted otherwise.
- Paint to be eggshell on walls typ. Use epoxy paint in wet areas (utiltiy rooms, restrooms, etc)
- semi-gloss enamel at metal doors/frames, flat at exposed ceilings, ductworks, etc.
- verify existing floor RH prior to purchasing flooring materials and verify meets manufacture required remove adhesive/old finish and prep floor for polished concrete, typ

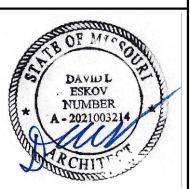


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David Eskov

PERMIT JULY 19, 2024

Revisions

SPLIT

ENLARGED RESTROOM, & INTERIOR **ELEVATIONS**

-PROVIDE CLEATS

AND SECURE TO

RE: WALL TYPE —

`—PLYWOOD

—CONCEALED HINGE HARDWARE

= = = = =

CASEWORK SECTION SCALE: 1/2"= 1'-0"

 $2'-1\frac{1}{2}''$

FACE OF WALL

RE: WALL

PROVIDE **BLOCKING IN** WALL AS NEEDED FOR CABINETRY,

RESTROOM ACCESSORY SCHEDULE

GRAB BAR, 36" LONG, PROVIDE BLOCKING

GRAB BAR, 42" LONG, PROVIDE BLOCKING

DIMENSIONS ARE TO FACE OF FINISH

LAVATORY TO BE INSTALLED PRIOR TO PARTITIONS.

REFER TO AGII \$ AG21 FOR WALL AND DOOR TYPES

REQUIRED FOR SUPPORT.

ERTICAL GRAB BAR, 18" HIGH, PROVIDE BLOCKING

NEW MIRROR - BOBRICK B-2902436 WELDED FRAME MIRROR (24" X 36")

AVATORY, RE: MEP COORDINATE MOUNTING SUPPORTS W/ MANUFACTURE

OILET TISSUE DISPENSER - BOBRICK B-2888 CLASSIC SERIES

INSTALL BLOCKING IN WALLS FOR GRAB BARS, PARTITIONS, ACCESSORIES AS

REFER TO SHEET A003 FOR CLEAR FLOOR SPACE INFORMATION AND FIXTURE MOUNTING HEIGHTS, E.G. GRAB BARS, TOILET FIXTURES, AND ACCESSORIES.

TOWEL DISPENSER: BOBRICK B-3699 SURFACE MOUNTED PAPER TOWEL DISPENSER / WASTE RECEPTACLE

PROVIDE COAT HOOKS ON THE INSIDE OF ALL PARTITION DOORS

NO DESCRIPTION

WATER SUPPLY \$

DRAIN LINES

GENERAL DEMOLITION NOTES:

1. DO NOT REMOVE STRUCTURAL MEMBERS UNLESS NOTED OTHERWISE.

2. PROTECT ALL ELEMENTS OF EXISTING CONSTRUCTION WHICH ARE TO REMAIN.

3. PERFORM ALL DEMOLITION WORK IN ACCORDANCE WITH THE LANDLORD'S CRITERIA. COORDINATE DEMOLITION WITH LANDLORD'S REPRESENTATIVE AND CONTACT LANDLORD IN ADVANCE OF ANY WORK INVOLVING CONNECTION TO LANDLORD'S BUILDING SYSTEMS OR REQUIRING TEMPORARY SHUT DOWN OF UTILITIES.

4. REMOVE UNUSED UTILITIES NOT REUSED, CAPPED BELOW FINAL CONSTRUCTION. FINISH SURFACES.

5. MAINTAIN SAFE EXITING AND FIRE SAFETY DURING ALL DEMOLITION AND CONSTRUCTION OPERATIONS.

6. REMOVE ALL EXISTING EQUIPMENT NOT REUSED. COORDINATE WITH OWNER FOR SALVAGE REQUIREMENTS.

7. WHERE INDICATED REMOVE EXISTING PARTITIONS, CEILINGS, SOFFITS AND ASSOCIATED FRAMING AND BRACING BACK TO STRUCTURE. PROTECT EXISTING STRUCTURAL ELEMENTS NECESSARY FOR THE BUILDING SHELL

8. REMOVE ALL EXISTING FLOORING TO SUBFLOOR U.N.O., PREPARE TO RECEIVE NEW FINISH

9. DISPOSE OF ALL DEMOLITION DEBRIS LEGALLY.

10. CONTRACTOR SHALL DESIGN AND PROVIDE SHORING TO SAFELY SUPPORT EXISTING CONSTRUCTION TO REMAIN DURING DEMOLITION OPERATIONS.

11. SAFETY DURING DEMOLITION OPERATIONS SHALL BE THE CONTRACTOR'S SOLE RESPONSIBILITY.

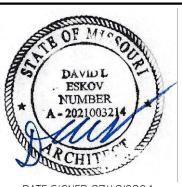
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13. WALLS, PARTITIONS, DOORS, FRAMES, AND OTHER ITEMS TO BE REMOVED ARE SHOWN DASHED. SERVICES WITHIN WALLS AND PARTITIONS SHALL ALSO BE REMOVED. EDGES OF WALLS SHOWN TO REMAIN SHALL BE SAWCUT OR CLEANLY TOOTHED TO ACCEPT NEW CONSTRUCTION. REPAIR AND PATCH EXISTING WALLS SHOWN TO REMAIN WHERE INTERSECTING WALLS, DOORS, FRAMES, ETC. ARE SHOWN TO BE REMOVED AND WHERE EXISTING CONSTRUCTION WILL NOW BE EXPOSED IN THE NEW

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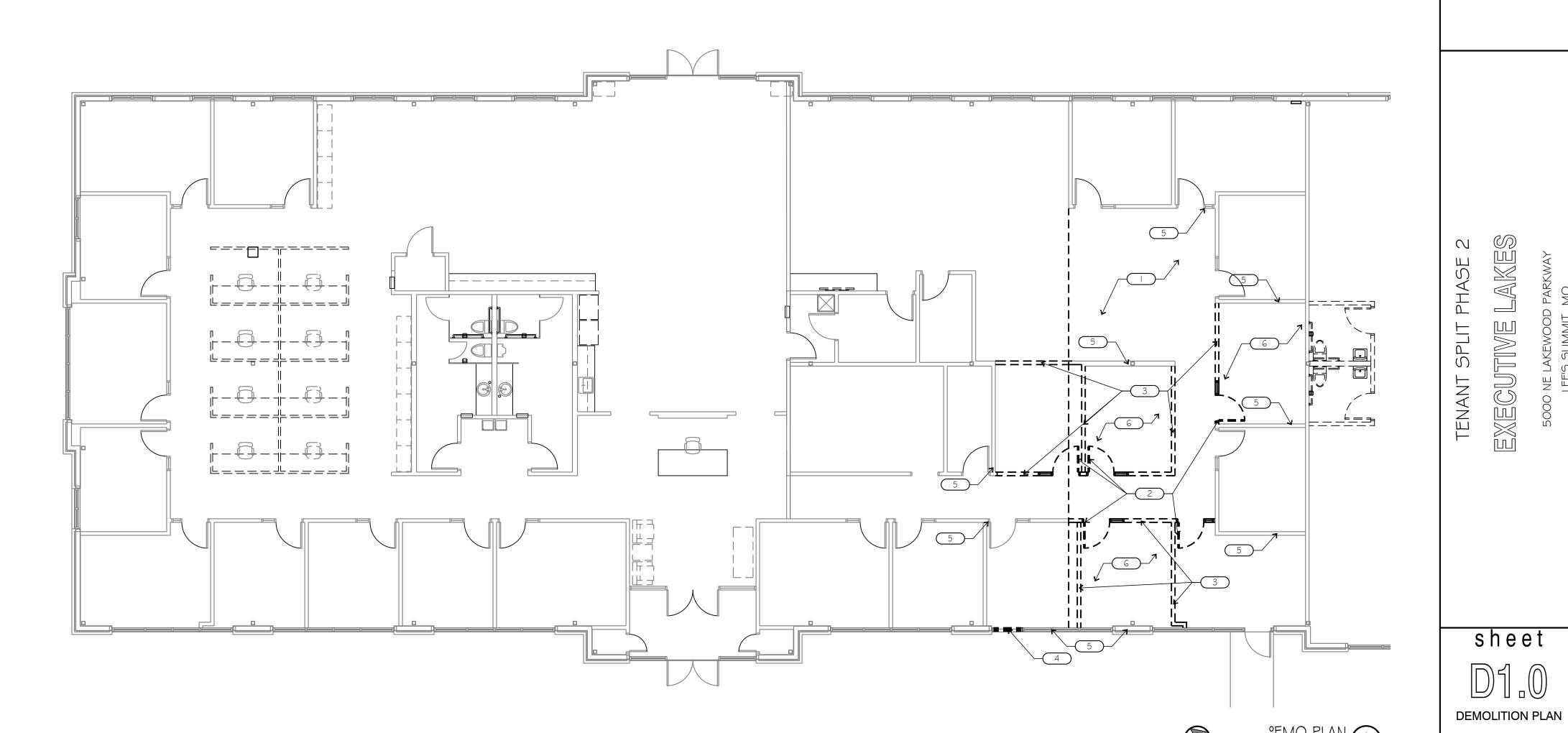
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David Eskov

PERMIT JULY 19, 2024

Revisions

sheet



DEMO PLAN KEYNOTES

REMOVE EXISTING FLOOR FINISH, PREP FOR NEW CARPET, TYP

2 REMOVE EXISTING DOOR & FRAME, SALVAGE AS REQUIRED FOR

REMOVE EXISTING WALL AS REQUIRED TO ACCOMMODATE NEW WORK, PATCH WALL TO REMAIN, RELOCATE LIGHT SWITCHES, OUTLETS, POWER, ETC AS REQUIRED

REMOVE PORTION OF EXISTING STOREFRONT TO ACCOMMODATE NEW DOOR

5 EXISTING TO REMAIN

© REMOVE EXISTING CEILING AND LIGHTS, THIS ROOM, SALVAGE AND REUSE IF POSSIBLE.

ELECTRICAL SPECIFICATIONS

- 1. GENERAL PROVISIONS:
- A. PROVIDE ALL LABOR, MATERIALS, EQUIPMENT, NECESSARY FOR THE COMPLETE INSTALLATION OF THE
- B. OBTAIN ALL PERMITS, FEES, LICENSES, INSPECTIONS, AND CERTIFICATES OF COMPLIANCE OR APPROVAL AS REQUIRED BY THE AUTHORITIES.
- C. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE LATEST APPROVED EDITION OF THE NATIONAL ELECTRIC CODE (NEC), AND ALL APPLICABLE LAWS, CODES AND REGULATIONS OF THE GOVERNMENTAL BODIES HAVING JURISDICTION OVER THE SITE.
- D. ALL TESTING REQUIRED BY AUTHORITIES SHALL BE CONSIDERED PART OF THIS WORK.
- E. DURING CONSTRUCTION, ALL FIXTURES, EQUIPMENT, CONDUIT, ETC. SHALL BE COVERED, PLUGGED, OR CAPPED AS REQUIRED TO KEEP CLEAN AND UNDAMAGED. ALL DAMAGED ITEMS SHALL BE RESTORED TO ORIGINAL CONDITION OR REPLACED. ALL PROTECTIVE COVERING SHALL BE REMOVED BEFORE FINAL
- F. PROVIDE ALL NECESSARY CUTTING AND PATCHING OF WALLS, FLOORS, CEILINGS, AND ROOFS AS NECESSARY. PATCH AROUND ALL OPENINGS SHALL MATCH ADJACENT AREA. COORDINATE ALL ROOFING WORK WITH OWNER OR RESPONSIBLE PARTY, SO THAT THE EXISTING ROOFING WARRANTY
- G. CONTRACTOR SHALL GUARANTEE ALL WORK AND MATERIALS AGAINST DEFECTS FOR A PERIOD OF ONE YEAR FROM FINAL ACCEPTANCE.
- H. CONTRACTOR SHALL PROVIDE ACCESS PANELS WHERE NECESSARY FOR CONCEALED ELECTRICAL COMPONENTS.
- 2. OPERATION AND MAINTENANCE MANUALS:
- A. DURING THE COURSE OF CONSTRUCTION, COLLECT AND COMPILE OPERATING INSTRUCTIONS, WIRING DIAGRAMS, CATALOG CUTS, LUBRICATION AND PREVENTIVE MAINTENANCE INSTRUCTIONS, PARTS LISTS ETC. FOR ALL EQUIPMENT FURNISHED UNDER THIS CONTRACT.
- B. ALL LITERATURE AND INSTRUCTIONS SHIPPED WITH THE EQUIPMENT SHALL BE SAVED FOR INCLUSION IN THE OPERATION AND MAINTENANCE MANUALS.
- C. ALL LITERATURE LISTED ABOVE AND ALL PAPERS LISTING WARRANTIES, ETC. SHALL BE COLLATED AND LABELED WITH THE PROJECT NAME, ADDRESS, ARCHITECT, ENGINEER, CONTRACTORS, ETC CONTRACTORS, ETC. DOCUMENTS SHALL BE COMPILED AND BOUND IN DIGITAL FILE OR 3 RING BINDER.

3. MANUFACTURERS:

- A. MANUFACTURERS, MODEL NUMBERS, ETC. INDICATED OR SCHEDULED ON THE DRAWINGS SHALL BE INTERPRETED AS HAVING ESTABLISHED A STANDARD OF QUALITY AND SHALL NOT BE CONSTRUED AS LIMITING COMPETITION. ARTICLES, FIXTURES, ETC. OF EQUAL QUALITY BY MANUFACTURERS SHALL BE ACCEPTABLE, SUBJECT TO STRUCTURAL AND ELECTRICAL CONSTRAINTS OF THE PROJECT DESIGN, UNLESS NOTED OTHERWISE
- 4. TESTING, AND BALANCING:
- A. ALL CIRCUITS SHALL BE TESTED FOR CONTINUITY, SHORTS, AND GROUNDS BEFORE CONNECTING TO THE PROPER PHASE AS DESIGNED TO BALANCE THE LOADING BETWEEN PHASES.
- B. POWER AND LIGHTING PANELS SHALL BE PROPERLY PHASED TO DISTRIBUTE THE LOAD AND SHALL BE CONNECTED AND ADJUSTED TO OPERATE AS SPECIFIED.
- C. ALL MOTORS AND SIMILAR EQUIPMENT SHALL BE CHECKED FOR PROPER PHASE ROTATION AND OPERATION.
- A. CONDUIT INSIDE THE BUILDING SHALL BE METALLIC TUBING (EMT), BEARING THE UL LABEL, WITH COMPRESSION TYPE FITTINGS OR SCREW SET FITTINGS.
- B. CONDUIT EXPOSED TO THE WEATHER, INSTALLED UNDERGROUND, IN CONCRETE, OR USED FOR SERVICE ENTRANCE SHALL BE STANDARD RIGID CONDUIT (GALVANIZED) WITH THREADED FITTINGS.
- C. UNDERGROUND CONDUIT MAY BE POLYVINYL CHLORIDE WITH A DEFLECTION TEMPERATURE, UNDER LOAD AT 264 PSI, OF 78 DEGREES C, AND A TENSILE STRENGTH OF 5,200 PSI. JOINTS SHALL BE FLUSH SOLVENT WELDED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS. CONDUIT SHALL BE EQUAL TO CARL ON POWER AND COMMUNICATIONS DUCT TYPE DB (DIRECT BURIAL). CONDUIT AND FITTINGS SHALL BE PRODUCED BY THE SAME MANUFACTURER.
- D. FLEXIBLE METAL CONDUIT SHALL ONLY BE USED FOR CONNECTIONS TO MOTORS, TRANSFORMERS, AND LIGHT FIXTURES. MAXIMUM LENGTH SHALL BE 6'-0".
- A. WIRES SHALL BE CONTINUOUS WITHOUT SPLICES OR TAPS IN CONDUIT RUNS. ALL SPLICES SHALL BE MADE IN JUNCTION, PULL, OR OUTLET BOXES. ALL WIRE SHALL BE INSTALLED IN CONDUIT, WIREWAYS, OR OTHER PROTECTIVE COVER SANCTIONED BY CODES.
- B. CONDUCTORS FOR LIGHTING AND POWER SHALL BE COPPER, MINIMUM NO. 12 A.W.G., 600 VOLT.
- C. NO. 10 GAUGE AND SMALLER CONDUCTORS SHALL BE TYPE THWN (WET LOCATIONS) OR THHN (DRY LOCATIONS), SOLID CONDUCTOR, UNLESS OTHERWISE INDICATED.
- D. NO. 8 GAUGE AND LARGER CONDUCTORS SHALL BE TYPE THWN (WET LOCATIONS) OR THHN (DRY LOCATIONS), STRANDED, UNLESS OTHERWISE INDICATED.
- E. SERVICE ENTRANCE AND PANEL FEEDER CONDUCTORS, NO. 3 GAUGE AND LARGER SHALL BE TYPE XHHW-2 (WET LOCATIONS) OR THHN (DRY LOCATIONS), STRANDED COPPER, UNLESS OTHERWISE INDICATED.
- F. ALUMINUM SERVICE WIRE MAY BE USED FOR SERVICE ENTRANCE CONDUCTORS AND/OR PANEL FEEDERS ONLY. ALL OTHER WIRING SHALL BE COPPER CONDUCTORS AS HEREINBEFORE SPECIFIED.
- G. ALUMINUM CONDUCTORS SHALL BE TYPE 'XHHW-2', ALCAN, "STABILOY" TYPE ALLOY CONDUCTORS UTILIZING "AA-8030" ALUMINUM ALLOY. CONDUCTORS SHALL BE UL LISTED.
- H. ALL ALUMINUM CONDUCTORS SHALL BE TERMINATED IN CONNECTIONS OR LUGS WHICH ARE DUAL RATED (AL7CU OR AL9CU) AND ARE LISTED BY UL FOR USE WITH ALUMINUM OR COPPER CONDUCTORS AND
- A. MC CABLE SHALL CONSIST OF INTERLOCK ARMORED CABLE MADE OF THREE OR FOUR TYPE THHN SOLID (#8 AWG AND LARGER MAY BE STRANDED) COPPER CONDUCTORS RATED 90°C FOR DRY LOCATIONS, WITH NYLON OR EQUIVALENT UL LISTED JACKET, PER UL STANDARD 83 THE THREE CONDUCTORS SHALL BE TWISTED TOGETHER WITH THE COPPER GROUNDING CONDUCTOR, SUITABLE FILLERS, AND WRAPPED IN BINDER TAPE. THE ASSEMBLY SHALL BE ARMORED WITH SPIRALLY WRAPPED INTERLOCKED ARMOR OF ALUMINUM OR GALVANIZED

SHALL BE SIZED TO ACCEPT ALUMINUM CONDUCTORS OF THE AMPACITY SPECIFIED.

- B. CABLES SHALL BE TESTED IN ACCORDANCE WITH UL STANDARD 1569 FOR TYPE MC CABLE AND RATED AT 600 VOLTS, 90 DEG. C FOR DRY LOCATIONS AND 75 DEG. C FOR WET LOCATIONS.
- A. WALL SWITCHES SHALL BE SPECIFICATION GRADE, QUIET TYPE, FLUSH TOGGLE SWITCH, RATED
- FOR 20 AMPS, WITH THERMOPLASTIC COVER PLATES.
- 1) SINGLE POLE: HUBBELL #CS1221-X, OR EQUAL 2) THREE WAY: HUBBELL #CS1223-X, OR EQUAL 3) AS SPECIFIED ON PLANS
- B. RECEPTACLES SHALL BE SPECIFICATION GRADE, DUPLEX, GROUNDING, THREE-WIRE TYPE, RATED FOR 20 AMPS, WITH THERMOPLASTIC COVER PLATES. HUBBELL #CR5352-X, OR EQUAL.
- C. GROUND FAULT INTERRUPTER RECEPTACLES (GFI) SHALL BE HUBBELL #GF20-XL. DEVICE COVER PLATES SHALL BE AS HEREINBEFORE SPECIFIED
- D. ISOLATED GROUND RECEPTACLES (IG) SHALL BE HUBBELL #CR5352IG, ORANGE COLOR. DEVICE COVER PLATES SHALL BE AS HEREINBEFORE SPECIFIED.
- E. RECEPTACLES OUTSIDE BUILDING AND WHERE NOTED AS WEATHERPROOF, SHALL BE LISTED "WEATHER-RESISTANT' HUBBEL #GFTR20-X OR EQUAL AND SHALL BE INSTALLED IN A WEATHERPROOF ENCLOSURE WHICH SHALL BE INTERMATIC #WP1010MXD OR #WP1010HMXD DIECAST METAL WEATHERPROOF RECEPTACLE COVER. COVER SHALL BE WEATHER PROOF RATED WHILE IN USE.
- F. VERIFY DEVICES AND DEVICE COVERPLATES COLOR AND STYLE WITH ARCHITECT.
- 9. BOXES:
- A. HOT DIPPED GALVANIZED STEEL BOXES. PROVIDE TYPE TO SUIT CONDITIONS FOR INSTALLATION.
- B. ALL BOXES SHALL BE FLUSH MOUNTED. UNLESS INDICATED OTHERWISE

ELECTRICAL SPECIFICATIONS (CONTINUED)

10. PANELBOARDS:

- A. FURNISH AND INSTALL CIRCUIT BREAKER PANELBOARDS AS SHOWN ON THE DRAWINGS. PANELBOARDS SHALL BE LISTED BY UL AND SO LABELED. AND SHALL BE FULLY RATED FOR THE VOLTAGE AND CURRENT CAPACITY INDICATED ON THE PANEL SCHEDULE. PANELBOARDS SHALL BE EQUAL TO SQUARE D TYPE NQ OR NF WITH BOLT IN TYPE BREAKERS. PANELBOARD LUGS SHALL BE RATED AT 75°C.
- 1) CIRCUIT BREAKER INTERRUPTING CAPACITIES SHALL MEET OR EXCEED THE AVAILABLE RMS SYMMETRICAL FAULT CURRENTS INDICATED AND AS REQUIRED TO MEET OR EXCEED THE AVAILABLE FAULT CURRENT FROM LOCAL UTILITY.
- B. CIRCUIT BREAKERS SHALL MEET APPLICABLE PORTIONS OF UL STANDARD 489 AND NEMA AB-L. CIRCUIT BREAKERS SHALL BE BOLT-ON, GROUP MOUNTED, AMBIENT MAGNETIC, WITH COMMON TRIP, UL RATED TO CARRY 80% OF NAMEPLATE RATING CONTINUOUSLY IN FREE AIR AT 40° C. CIRCUIT BREAKERS SHALL BE TRIP INDICATING AND FULLY INTERCHANGEABLE WITHOUT DISTURBING ADJACENT UNITS. WIRE ERMINALS SHALL BE RATED 75 DEGREES C. THE OPERATING MECHANISM SHALL BE TRIP-FREE SO THAT CONTACTS CANNOT BE HELD CLOSED AGAINST ANY ABNORMAL OVERCURRENT OR SHORT CIRCUIT
- a) BREAKERS SHALL MEET APPLICABLE NEMA AND/OR UL SPECIFICATIONS.
- C. PANELBOARD BOXES SHALL BE GALVANIZED SHEET STEEL WITH AMPLE WIRING GUTTER SPACE IN ACCORDANCE WITH NEC. FRONTS SHALL BE OF SHEET STEEL PAINTED LIGHT GREY OVER A SUITABLE RUST INHIBITOR PRIMER. PANELBOARDS SHALL BE EQUIPPED WITH ONE PIECE DOOR, CYLINDER TUMBLER TYPE LOCK, DIRECTORY CARD-HOLDER AND QUARTER-TURN ADJUSTABLE TRIM CLAMPS.
- D. PANELBOARD INTERIORS SHALL CONSIST OF REINFORCED GALVANIZED SHEET STEEL FRAMES WITH ALUMINUM BUS BARS AND CIRCUIT BREAKERS. PROPERLY SUPPORTED TO PREVENT VIBRATIONS AND BREAKAGE IN HANDLING. BUS BARS SHALL BE SEQUENCE PHASED. PANELBOARD SHALL HAVE A FULL SIZED SOLID
- E. BUS BAR BRACING SHALL BE UL LISTED AS INDICATED ON DRAWINGS. ADDITIONAL BRACING SHALL BE PROVIDED AS REQUIRED TO MEET OR EXCEED INDICATED AVAILABLE FAULT
- F. DIRECTORY CARDS SHALL BE COMPLETELY FILLED IN BY TYPEWRITER, LISTING CIRCUIT NUMBERS AND LOAD SERVED, INCLUDING EXISTING CIRCUITS. CIRCUIT BREAKERS SHALL BE IDENTIFIED BY CIRCUIT NUMBER LABELS AS HEREINBEFORE SPECIFIED.

- A. DISCONNECTS SHALL BE EXTERNALLY OPERATED, QUICK-MAKE, QUICK-BREAK, SAFETY, WITH PROVISIONS FOR PAD LOCKING. FUSED AND NON-FUSED DISCONNECT SWITCHES SHALL BE PROVIDED AS INDICATED.
- B. INDOOR SWITCHES SHALL BE NEMA I AND OUTDOOR SWITCHES SHALL BE NEMA 3R, UNLESS INDICATED OTHERWISE.

12. FUSES:

- A. FUSES PROTECTING CIRCUIT BREAKER PANELS SHALL BE CURRENT LIMITING U.L. CLASS RK-1 FUSES WITH 200,000 AMPERES RMS SYM INTERRUPTING CAPACITY. FUSING ELEMENTS SHALL BE SILVER FOR RATINGS ABOVE 60 AMPERES.
- B. ALL OTHER FUSES SHALL BE U.L. CLASS RK-5, DUAL-ELEMENT WITH A MINIMUM TIME-DELAY OF 10 SECONDS AT 500% RATING. FUSES SHALL HAVE CURRENT-LIMITING SHORT-CIRCUIT LINKS AND 200,000 AMPERES RMS SYM INTERRUPTING CAPACITY. FUSING ELEMENTS SHALL BE COPPER.

13. LIGHT FIXTURES:

- A. WHERE LIGHT FIXTURES ARE MOUNTED IN A LAY-IN CEILING, PROVIDE A MINIMUM OF 2 SUPPORT WIRES. ATTACHED DIRECTLY BETWEEN EACH LIGHT FIXTURE AND THE BUILDING STRUCTURE. SUPPORT WIRES SHALL BE A MINIMUM OF 12 GAUGE GALVANIZED STEEL WIRE, SOFT ANNEALED.
- B FIXTURES ARE REQUIRED AT ALL LIGHTING OUTLETS SHOWN ON THE DRAWINGS. APPROVED LIGHTING FIXTURE WIRE IS REQUIRED IN ALL FIXTURES AND FIXTURE RACEWAYS. WEATHERPROOF WIRING IS REQUIRED FOR EXTERIOR FIXTURES. ALL PARTS OF FIXTURES AND WIRING SHALL BE IN ACCORDANCE
- C. ALL FIXTURES SHALL CARRY UL AND ETL LABELS.
- A. PROVIDE, SET, AND PROPERLY LOCATE PIPE SLEEVES AS REQUIRED FOR THIS WORK.
- B. INTERIOR PARTITIONS: 16 GAGE GALVANIZED STEEL, PACK BETWEEN CONDUIT AND SLEEVE WITH FIRE SAFING AND CAULK AT EACH END WITH FIRE RESISTANT SEALANT.
- C. ROOF: PROSET OR EQUAL, MANUFACTURED PVC SCHEDULE 40 PIPE SLEEVE WITH WEATHERPROOF SEAL. COORDINATE WITH ROOFING CONTRACTOR AND FLASH AS REQUIRED TO MAINTAIN ROOF WARRANTY.
- A. GROUND ALL ELECTRICAL APPARATUS IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE (NEC) 250, AND ANY LOCAL REQUIREMENTS. INSURE CONTINUOUS BOND WHERE FLEXIBLE CONDUIT IS USED.
- PROVIDE BONDING JUMPER INSIDE ALL FLEXIBLE CONDUIT B. BOND METAL PIPING SYSTEMS IN COMPLIANCE WITH NEC 250.4(A)(4).

16. REMODELING WORK:

- A. DEMOLITION: DISCONNECT, DEMOLISH AND REMOVE ABANDONED ELECTRICAL MATERIALS AND EQUIPMENT INDICATED TO BE REMOVED AND NOT INDICATED TO BE SALVAGED OR REMAIN.
- B. EQUIPMENT TO BE SALVAGED:
- 1) DISCONNECT AND REMOVE EXISTING ELECTRICAL EQUIPMENT INDICATED TO BE REMOVED AND SALVAGED. DELIVER EQUIPMENT TO THE LOCATION DESIGNATED BY THE OWNER FOR STORAGE
- 2) ALL MATERIALS AND EQUIPMENT DESIGNATED TO BE REUSED OR RELOCATED SHALL BE CAREFULLY REMOVED AND STORED UNTIL NEEDED FOR REMODELING WORK. ALL ITEMS SHALL BE RESTORED TO "LIKE NEW" CONDITION WITH RUST OR CORROSION REMOVED, SURFACE PAINT TOUCHED UP OR REPAINTED AS REQUIRED TO MATCH NEW CONSTRUCTION, AND THOROUGHLY CLEANED AND INSPECTED. ANY ITEMS WHICH BECOME DAMAGED BEYOND REPAIR AS A RESULT OF CONSTRUCTION OR DEMOLITION ACTIVITY SHALL BE REPLACED WITH NEW MATERIAL EQUIVALENT IN EVERY RESPECT.
- C. DISPOSAL AND CLEANUP: REMOVE FROM THE SITE AND LEGALLY DISPOSE OF DEMOLISHED MATERIALS AND EQUIPMENT NOT INDICATED TO BE SALVAGED.
- D. PROTECT ADJACENT MATERIALS INDICATED TO REMAIN. INSTALL AND MAINTAIN DUST AND NOISE BARRIERS TO KEEP DIRT, DUST, AND NOISE FROM BEING TRANSMITTED TO ADJACENT AREAS. REMOVE PROTECTION AND BARRIERS AFTER REMODELING OPERATIONS ARE COMPLETE.
- E. PROVIDE ALL ALTERATIONS AND REWORK INDICATED AND/OR REQUIRED FOR THE PROPER INSTALLATION AND OPERATION OF ALL EXISTING ELECTRICAL SYSTEMS, INTEGRATING THE NEW AND EXISTING AREAS. LOCATE, IDENTIFY, AND PROTECT ELECTRICAL SERVICES PASSING THROUGH REMODELING AREA AND SERVING OTHER AREAS OUTSIDE THE REMODELING LIMITS. MAINTAIN SERVICES TO AREAS OUTSIDE REMODELING LIMITS. WHEN SERVICES MUST BE INTERRUPTED, INSTALL TEMPORARY SERVICES FOR
- 1) ABANDONED CONDUIT SHALL HAVE WIRE REMOVED AND SHALL BE CAPPED. ABANDONED OUTLETS IN WALLS OR PARTITIONS SHALL HAVE DEVICES AND WIRE REMOVED, AND SHALL BE COVERED.
- 2) WHERE EXISTING CONDUITS TERMINATE AT AN EXISTING OUTLET IN A WALL, CEILING, OR FLOOR TO BE REMOVED, DISCONNECT AND REMOVE DEVICE AND WIRE FROM CONDUIT. CONDUIT SHALL BE CUT BACK AND CAPPED (BELOW THE FLOOR OR ABOVE THE CEILING) SO NOT TO CREATE AN OBSTRUCTION. PATCH FLOOR TO MATCH EXISTING.
- 3) WHERE EXISTING CIRCUITS EXTEND BEYOND THE OUTLET IN THE EXISTING WALL, CEILING, OR FLOOR TO BE REMOVED, FURNISH AND INSTALL NEW CONDUIT AND WIRE TO EITHER REPOUTE THE CIRCUIT OR FEED THE REMAINING OUTLET(S) FROM ANOTHER ELECTRICAL SOURCE, BUT IN SUCH A MANNER AS NOT TO REVISE THE CIRCUIT. ALL REROUTED CONDUIT SHALL BE APPROVED BY THE
- 4) WHERE EXISTING OUTLETS IN A WALL, CEILING, OR FLOOR TO BE REMOVED ARE ESSENTIAL TO MAINTAIN OPERATION OF OTHER REMAINING OUTLETS, RELOCATE THE OUTLET TO A NEW CONVENIENT LOCATION. EXISTING WIRING DEVICES SHALL NOT BE REUSED, UNLESS OTHERWISE INDICATED.
- 5) WHERE LIGHTING FIXTURES ARE INDICATED TO BE DEMOLISHED, REMOVE ALL WIRE AND MODIFY THE EXISTING CONDUIT (IF APPLICABLE) FOR THE NEW LIGHTING. ALL UNUSED CONDUIT SHALL BE
- 6) WHERE A TELEPHONE CIRCUIT EXTENDS BEYOND AN OUTLET IN AN EXISTING WALL, CEILING, OR FLOOR TO BE REMOVED. PROVIDE NECESSARY EMPTY CONDUIT AND NOTIFY THE OWNER WHO WILL REQUEST THE OWNER TO ARRANGE WITH THE TELEPHONE COMPANY FOR NEW WIRING TO OUTLETS THAT
- 7) WHERE EXISTING CONDUIT AND WIRE RUNS ARE LOCATED IN OR ATTACHED TO AN EXISTING WALL, CEILING OR FLOOR TO BE REMOVED, THEY SHALL BE REROUTED IN EITHER NEW OR EXISTING CONSTRUCTION TO MAINTAIN CONTINUITY OF CIRCUITS UNLESS OTHERWISE INDICATED. 8) CONDUIT SHALL BE CONCEALED WITHIN THE EXISTING BUILDING CONSTRUCTION WHEREVER
- 9) EXISTING WIRE SHALL BE DISCONNECTED AND REMOVED WHEREVER EXISTING CIRCUITS ARE
- 17. BOXES IN FIRE RATED ASSEMBLIES:
- A. OUTLET BOXES THAT DO NOT EXCEED 16 SQUARE INCHES AND INSTALLED IN FIRE RATED WALLS SHALL NOT BE INSTALLED CLOSER THAN 24" HORIZONTAL INCHES TO OTHER OUTLET BOXES.
- B. IF BOXES MUST BE INSTALLED WITHIN 24" OF EACH OTHER THAN BOTH OUTLET BOXES SHALL BE PROTECTED WITH LISTED PUTTY PADS, 3M FIRE BARRIER MOLDABLE PUTTY + OR EQUAL.

ELECTRICAL SYMBOLS LIST

CIRCUITING & NOTES

- +46" SPECIAL MOUNTING HEIGHT FOR ASSOCIATED DEVICE (CENTERLINE OF DEVICE)
- GROUND FAULT CIRCUIT INTERRUPTER DEVICE
- EXISTING DEVICE TO REMAIN
- RELOCATE EXISTING LIGHT FIXTURE TO NEW CEILING GRID
- (X) ELECTRICAL FLOOR PLAN NOTE WITH DESIGNATION
- CONDUIT CONCEALED WHERE POSSIBLE OR AS NOTED, ARROWS INDICATE HOME RUN TO PANEL. CIRCUIT NUMBERS INDICATED
- #12 WIRE IN CONDUIT, UNLESS NOTED OTHERWISE ON DRAWINGS OR SPECIFICATION
- GROUNDING CONDUCTOR, #12 WIRE UNLESS NOTED OTHERWISE ON DRAWINGS OR SPECIFICATION

LIGHTING

- EMERGENCY TWIN HEAD LIGHT FIXTURE
- EXIT LIGHT WITH DIRECTIONAL ARROWS INDICATED
- RECESSED OR SURFACE MOUNTED FIXTURE WITH TYPE DESIGNATION

POWER DEVICES

- DUPLEX RECEPTACLE, BOTTOM OF BOX AT 16" AFF, UNLESS NOTED OTHERWISE
- DEVICE MOUNTED ABOVE COUNTER AND/OR SPLASH GUARD
- PANEL BOARD, TOP OF BOX 6'-0" AFF
- JUNCTION BOX
- NON-FUSED DISCONNECT SWITCH FUSED DISCONNECT SWITCH
- MOTOR WITH DESIGNATION

CONTROLS

S SINGLE POLE WALL SWITCH, TOP OF BOX AT 48" AFF

OCCUPANCY SENSORS

WALL MOUNTED DUAL-TECHNOLOGY OCCUPANCY SENSOR, ACUITY SENSORSWITCH #WSX-PDT-SA OR EQUAL, TOP OF BOX AT 48" AFF. SENSORS SHALL BE PROGRAMMED FOR MANUAL-ON OPERATION.

COMMUNICATIONS

DATA/TELEPHONE OUTLET WITH MINIMUM 3/4" CONDUIT STUBBED UP TO ABOVE ACCESSIBLE CEILING, BOTTOM OF BOX AT 16", UNLESS NOTED OTHERWISE. PROVIDE WITH PULL STRING

FIRE ALARM

DD DUCT MOUNT SMOKE DETECTOR

ELECTRICAL GENERAL NOTES

- COORDINATE ALL WORK WITH OTHER TRADES AND EXISTING CONDITIONS AS REQUIRED TO PROPERLY INSTALL ALL SYSTEMS AS INTENDED, WITHIN THE CONFINES OF THE SPACES AVAILABLE, AND WITHOUT
- 2. IT IS THE ELECTRICAL CONTRACTORS RESPONSIBILITY TO PROPERLY BALANCE ALL BRANCH CIRCUITS BETWEEN THE PHASES OF THE SYSTEM REGARDLESS OF CIRCUITING INDICATED.
- 3. ALL EXPOSED RACEWAYS SHALL BE EMT CONDUIT, MC CABLE IS NOT PERMITTED IN EXPOSED AREAS.
- 4. ELECTRICAL CONTRACTOR SHALL REMOVE ALL EXISTING ELECTRICAL EQUIPMENT, FIXTURES, SYSTEMS, CONDUIT AND WIRE, ETC. NOT BEING REUSED. DO NOT JUST ABANDON.
- 5. ELECTRICAL CONTRACTOR TO COORDINATE MANUFACTURER ELECTRICAL REQUIREMENTS FOR HVAC EQUIPMENT BEING FURNISHED WITH MECHANICAL CONTRACTOR PRIOR TO ROUGH-IN. EQUIPMENT DISCONNECTS TO BE PROVIDED BY ELECTRICAL CONTRACTOR UNLESS NOTED OTHERWISE IN MECHANICAL
- ALL ELECTRICAL DEVICES ARE EXISTING AND TO REMAIN UNLESS NOTED OTHERWISE OR CONFLICT WITH NEW CONSTRUCTION. MAINTAIN PROPER OPERATION OF ALL EXISTING ELECTRICAL.
- 7. ALL MATERIALS EXPOSED WITHIN PLENUMS SHALL BE NONCOMBUSTIBLE OR SHALL HAVE A FLAME SPREAD INDEX OF NOT MORE THAN 25 AND A SMOKE-DEVELOPED INDEX OF NOT MORE THAN 50 WHEN TESTED IN ACCORDANCE WITH ASTM E 84.
- 8. EACH BRANCH CIRCUIT SHALL HAVE A DEDICATED NEUTRAL PER NEC 210.4.
- 9. PLANS INDICATE MINIMUM WIRE SIZES PER NEC. ALL BRANCH CIRCUITS SHALL BE SIZED TO ALLOW FOR A MAXIMUM OF 3% VOLTAGE DROP. ALL FEEDERS SHALL BE SIZED TO ALLOW FOR A MAXIMUM OF 2% VOLTAGE DROP. ELECTRICAL CONTRACTOR SHALL VERIFY WIRING INDICATED IS SUFFICIENT AND INCREASE CONDUCTOR SIZE AS REQUIRED BASED OFF ACTUAL INSTALLED LENGTH OF CONDUCTORS.
- 10. WHEREVER POSSIBLE, CONDUIT SHALL BE RUN CONCEALED WITHIN WALLS, CEILINGS, SOFFITS, ETC. SURFACE MOUNTED CONDUIT IN FINISHED SPACES MUST BE APPROVED BY THE ENGINEER OR ARCHITECT PRIOR TO INSTALLATION. EXTERIOR CONDUIT SHALL NOT BE RUN EXPOSED IN PUBLICLY VISIBLE AREAS WITHOUT APPROVAL OF THE ARCHITECT OR ENGINEER.

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JULY 24, 2024

Revisions

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BC PROJECT #: 24543

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MISSOURI

PE COA #2009003629



ELECTRICAL LIGHTING PLAN
SCALE: 1/8" = 1'-0"

sheet

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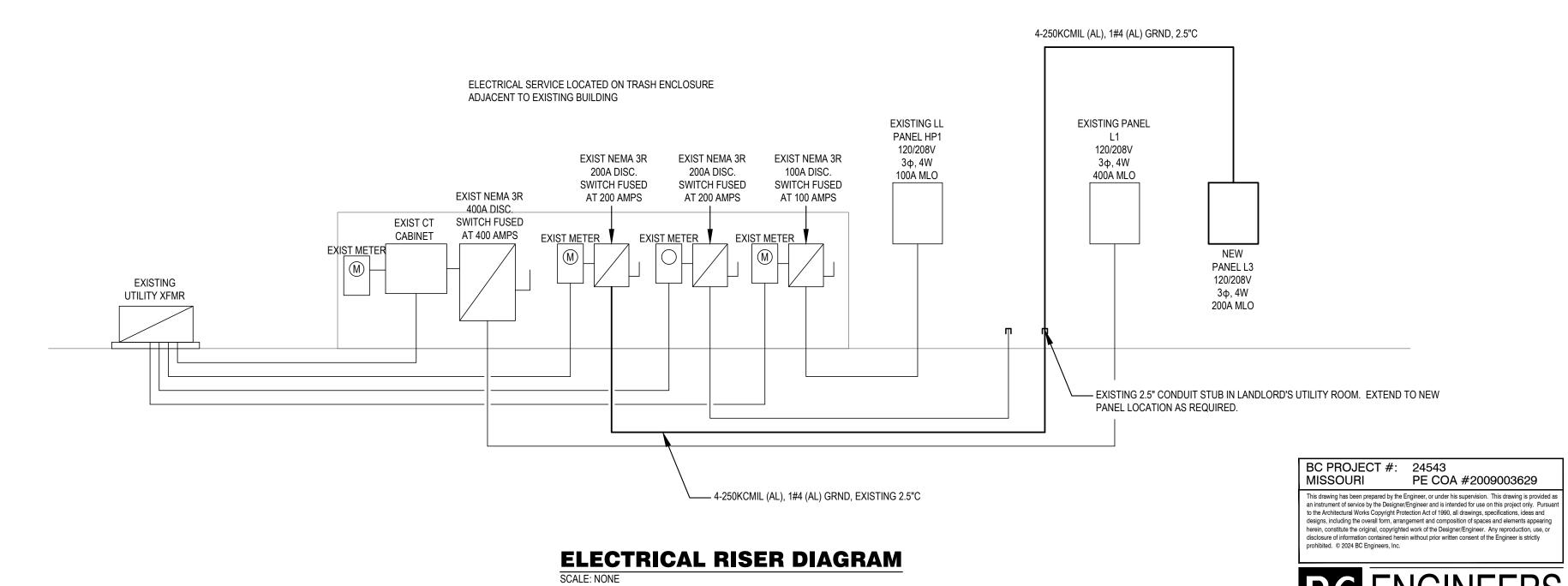
E	EXIST PANEL: L1	VOLTS:	120	0/208V	PH:	3Ø	WIRE:	4W	LOCATION:		OFFICE			MOUNTING: SURFACE	
	BUS: 400A	MAIN:	400A	MLO										FEEDER: SEE RISER DIAGRAM	
CKT	DESCRIPTION	AMPS	POLE	WIRE	ØA	ØB	ØC	ØA	ØB	ØC	WIRE	POLE	AMPS	DESCRIPTION	CKT
1															NO 2
3	SPARE	50	3									3	50	SPARE	4
5	OI / W.E.													OI / II IL	6
7								3,360							8
9	SPARE	50	3					0,000	3,360		8	3	35	EXIST RTU-4	10
11	- OF THE								0,000	3,360			00	EXIST NTO 4	12
13	SPARE	20	1					990		0,000	12	1	20	LIGHTING	14
15	SPARE	20	1					330	1,056		12	1	20	LIGHTING	16
17	SPARE	20	1						1,000	180	12	1	20	REC - RESTROOM	18
19	SPARE	20	1							100	12	1	20	SPARE	20
21	SPARE	20	1									1	20	SPARE	22
23	SPARE	20	1									1	20	SPARE	24
25	SPARE	20	1									1	20	SPARE	26
27	SPARE	20	1									1	20	SPARE	28
29	SPARE	20	1									1	20	SPARE	30
31	SPARE	20	1									1	20	SPARE	32
33	SPARE	20	1									1	20	SPARE	34
35	SPARE	20	1									1	20	SPARE	36
37	SPARE	20										1	20	SPARE	38
39		20	1												40
	SPARE		1									1	20	SPARE	
41	SPARE	20	1				000	TION 2				'	20	SPARE	42
43	SPARE	20	1				SEC	I ION 2				1	20	SPARE	44
	SPARE	20										1	20	SPARE	46
45 47	SPARE	20	1									1	20	SPARE	48
49	SPARE	20	1									1	20	SPARE	50
51	SPARE	20	1										20		52
												1		SPARE	
53	SPARE SPARE	20	1	40	700			540			40	1	20	SPARE	54
55	EXIST OFFICE RECEPTACLES	20	1	12	720	4.000		540	4.440		12	1	20	EXIST OFFICE RECEPTACLES	56
57	EXIST OFFICE RECEPTACLES	20	1	12		1,080	000		1,440	4 000	12	1	20	OFFICE RECEPTACLES	58
59	RECEPTS - KITCHENETTE	20	1	12	4.000		360	400		1,080	12	1	20	OFFICE RECEPTACLES	60
61	REFRIGERATOR [GF]	20	1	12	1,200	000		180			12	1	20	RECEPT - WATER DISPENSER [GF]	62
63	EXIST RTU RECEPTACLE	20	1	12		360	2.500					2	35	SPARE	64
65	WATER HEATER HWH	30	1	10			2,500								66
67	SPARE	20	1									1	20	SPARE	68
69	SPARE	20	1									1	20	SPARE	70
71	SPARE	20	1									1	20	SPARE	72
73	SPARE	20	1									1	20	SPARE	74
75	SPARE	20	1									1	20	SPARE	76
77	SPARE	20	1									1	20	SPARE	78
79	SPARE	20	1									1	20	SPARE	80
81	SPARE	20	1									1	20	SPARE	82
83	SPARE	20	1									1	20	SPARE	84
NOTES:					1,920	1,440	2,860	5,070	5,856	4,620	-				
יסבו סבר	CI BRKR 5mA				6,9	90	7,	296	7,4	180	1		TOTAL C	ONNECTED LOAD: 21,76	6 VA

DEMAND AMPS @ 208 VOLT / 3Ø:

63.57 A

r	PANEL: L3	VOLTS:	120	0/208V	PH: 3Ø WIRE: 4W LOCATION:				•	IENANI	OPEN OFF	ICE	MOUNTING: SURFACE			
	BUS: 225A	MAIN:	200A	MLO	IC:	10	,000	RMS SYM A	AMPS					FEEDER: SEE RISER DIAGRAM		
СКТ	DESCRIPTION	AMPS	POLE	WIRE	ØA	ØB	ØC	ØA	ØB	ØC	WIRE	POLE	AMPS	DESCRIPTION	(
1					4,800			2,250			8	2	35	WATER HEATER		
3	RTU 3	50	3	6		4,800			2,250							
5				,			4,800					1	20	SPARE		
7	LIGHTING	20	1	12	192							1	20	SPARE		
9	LIGHTING	20	1	12		288			768		12	1	20	LIGHTING		
11	LIGHTING	20	1	12			1,104			576	12	1	20	LIGHTING		
13	COVE LIGHTING	20	1	12	146							1	20	SPARE		
15	SPARE	20	1						180		12	1	20	TV RECEPTACLES		
17	FLOOR BOX	20	1	12			1,000			1,000	12	1	20	FLOOR BOX		
19	SPARE	20	1					720			12	1	20	IT ROOM		
21	SPARE	20	1						720		12	1	20	IT ROOM		
23	OFFICE RECEPTACLES	20	1	12			720			180	12	1	20	CUBE RECEPTACLE		
25	SPARE	20	1									1	20	SPARE		
27	SPARE	20	1						180		12	1	20	OFFICE RECEPTACLE		
29	SPARE	20	1									1	20	SPARE		
31	OFFICE RECEPTACLES	20	1	12	900			540			12	1	20	OFFICE RECEPTACLES		
33	RTU RECEPTACLE	20	1	12		180						1	20	SPARE		
35	SPARE	20	1									1	20	SPARE		
37	SPARE	20	1									1	20	SPARE		
39	SPARE	20	1									1	20	SPARE		
41	SPARE	20	1									1	20	SPARE		
IOTES:					6,038	5,268	7,624	3,510	4,098	1,756						
					9,	548	9,	366	9,	380			TOTAL C	ONNECTED LOAD: 28	,294 V	

		LIG	HT FIX	TURE SCHEDULE	
MARK N0.	MANUFACTURER & CATALOG NUMBER	VOLTS WATTS	LIGHT SOURCE	DESCRIPTION	EQUIVALENT MANUFACTURERS
₩	DUAL-LITE EVC-U-R-W	120 3	INCL	COMBINATION EMERGENCY/EXIT LIGHT WITH LED LAMPS, RED LETTERS ON WHITE BACKGROUND, TWIN LED EMERGENCY LIGHT HEADS, UNIVERSAL MOUNT, BATTERY BACKUP	SURE-LITES LITHONIA OR EQUAL



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7/23/2024

OF MISS

DARINT.
SEIDEL

NUMBER
PE-2009030047

PERMIT JULY 24, 2024

Revisions

TENANT SPLIT PHASE 2 EXECUTIVE LAKES

sheet

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ELECTRICAL PANEL SCHEDULES

F LOCATE IDENTIFY AND PROTECT MECHANICAL SERVICES PASSING THROUGH REMODELING AREA AND

F. REMOVE ALL PIPING TO BE DEMOLISHED BACK TO PIPE MAIN OR EDGE OF PROJECT AREA, AND CAP

G. PIPING AND DUCTS EMBEDDED IN FLOORS, WALLS, AND CEILINGS MAY REMAIN IF SUCH MATERIALS DO

ARCHITECT. REMOVE MATERIALS ABOVE ACCESSIBLE CEILINGS. DRAIN AND CAP PIPING AND DUCTS

H. PIPE AND DUCT SHALL BE CONCEALED WITH NEW OR EXISTING CONSTRUCTION WHENEVER POSSIBLE,

REMODELING LIMITS. WHERE MECHANICAL SERVICES ARE LOCATED IN A WALL, ETC. TO BE

NOTED. PATCH FLOOR TO MATCH EXISTING.

UNLESS INDICATED OTHERWISE.

SERVING OTHER AREAS OUTSIDE THE REMODELING LIMITS. MAINTAIN SERVICES TO AREAS OUTSIDE

DEMOLISHED, REROUTE PIPING TO NEW OR EXISTING CONSTRUCTION TO MAINTAIN CONTINUITY OF THE

SYSTEM. WHEN SERVICES MUST BE INTERRUPTED, INSTALL TEMPORARY SERVICES FOR AFFECTED AREAS

NOT INTERFERE WITH NEW INSTALLATIONS. PIPING AND DUCTS TO REMAIN SHALL BE APPROVED BY THE

ALLOWED TO REMAIN ABOVE CEILING OR BELOW FLOOR, CONCEALED FROM VIEW, EXCEPT AS OTHERWISE

David Eskov

7/26/24

PERMIT

Revisions

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SPLIT

JULY 25, 2024

A. PROVIDE ALL LABOR, MATERIALS, EQUIPMENT, NECESSARY FOR THE COMPLETE INSTALLATION OF THE PLUMBING AND MECHANICAL SYSTEMS OUTLINED B. OBTAIN ALL PERMITS, FEES, LICENSES, INSPECTIONS, AND CERTIFICATES OF COMPLIANCE OR APPROVAL AS REQUIRED BY THE AUTHORITIES. C. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE LAWS. CODES AND REGULATIONS OF THE GOVERNMENTAL BODIES HAVING JURISDICTION OVER THE SITE.

1. GENERAL PROVISIONS:

D. ALL TESTING REQUIRED BY AUTHORITIES SHALL BE CONSIDERED PART OF THIS WORK. E. DURING CONSTRUCTION, ALL FIXTURES, EQUIPMENT, PIPE, DUCT, ETC. SHALL BE COVERED, PLUGGED, OR CAPPED AS REQUIRED TO KEEP CLEAN AND UNDAMAGED. ALL DAMAGED ITEMS SHALL BE RESTORED TO ORIGINAL CONDITION OR REPLACED. ALL PROTECTIVE COVERING SHALL BE REMOVED BEFORE FINAL

F PROVIDE ALL NECESSARY CUTTING AND PATCHING OF WALLS FLOORS CEILINGS AND ROOFS AS NECESSARY. PATCH AROUND ALL OPENINGS SHALL MATCH ADJACENT AREA. COORDINATE ALL ROOFING WORK WITH OWNER OR RESPONSIBLE PARTY, SO THAT THE EXISTING ROOFING WARRANTY WILL BE

G. CONTRACTOR SHALL GUARANTEE ALL WORK AND MATERIALS AGAINST DEFECTS FOR A PERIOD OF ONE YEAR FROM FINAL ACCEPTANCE 2. OPERATION AND MAINTENANCE MANUALS:

A. DURING THE COURSE OF CONSTRUCTION, COLLECT AND COMPILE OPERATING INSTRUCTIONS, WIRING DIAGRAMS, CATALOG CUTS, LUBRICATION AND PREVENTIVE MAINTENANCE INSTRUCTIONS, PARTS LISTS, ETC. FOR ALL EQUIPMENT FURNISHED UNDER THIS CONTRACT. B. ALL LITERATURE AND INSTRUCTIONS SHIPPED WITH THE EQUIPMENT SHALL BE SAVED FOR INCLUSION

IN THE OPERATION AND MAINTENANCE MANUALS. C. ALL LITERATURE LISTED ABOVE AND ALL PAPERS LISTING WARRANTIES, ETC. SHALL BE BOUND IN A 3-RING BINDER AND LABELED WITH THE PROJECT NAME, ADDRESS, ARCHITECT, ENGINEER, CONTRACTORS, ETC.

A. MANUFACTURERS, MODEL NUMBERS, ETC. INDICATED OR SCHEDULED ON THE DRAWINGS SHALL BE INTERPRETED AS HAVING ESTABLISHED A STANDARD OF QUALITY AND SHALL NOT BE CONSTRUED AS LIMITING COMPETITION. ARTICLES, FIXTURES, ETC. OF EQUAL QUALITY BY MANUFACTURERS SHALL BE ACCEPTABLE, SUBJECT TO STRUCTURAL AND ELECTRICAL CONSTRAINTS OF THE PROJECT DESIGN. UNLESS NOTED OTHERWISE

4. MOTORS: A. PROVIDE THERMAL OVERLOAD PROTECTION FOR EACH MOTOR PROVIDED BY THIS WORK. 5. TESTING, BALANCING, AND CLEANING

A. ALL PIPING SHALL BE TESTED FOR LEAKS BEFORE BEING CONCEALED IN WALL CONSTRUCTION OR COVERED WITH INSULATION. B. SEWER AND VENT PIPING SHALL BE HYDROSTATICALLY TESTED WITH NO LESS THAN 10 FEET OF HEAD

FOR A PERIOD OF NOT LESS THAN 15 MINUTES, PER THE LOCAL PLUMBING CODE, WITH NO LEAKS. C. DOMESTIC WATER PIPING SHALL BE HYDROSTATICALLY TESTED AT A PRESSURE OF NOT LESS THAN 1-1/2 TIMES THE OPERATING PRESSURE, BUT NOT LESS THAN 60 PSI, FOR A PERIOD OF NOT LESS THAN 2 HOURS WITH NO LEAKS

D. NATURAL GAS PIPING SHALL BE PNEUMATICALLY TESTED AT A PRESSURE OF NOT LESS THAN 1-1/2 TIMES THE OPERATING PRESSURE, BUT NOT LESS THAN 50 PSI, FOR A PERIOD OF NOT LESS THAN 2 HOURS, WITH NO LEAKS.

E. DUCTWORK AND PIPING SHALL BE BALANCED BY QUALIFIED BALANCING PERSONNEL WHO HAVE PREVIOUS EXPERIENCE WITH BALANCING PROCEDURES 1) BALANCING SHALL INCLUDE THE BALANCING OF THE EQUIPMENT AND AIR DISTRIBUTION SYSTEMS

TO PROVIDE DESIGN QUANTITIES INDICATED AND VERIFICATION OF PERFORMANCE OF ALL EQUIPMENT AND AUTOMATIC CONTROLS. 2) WITH IN 30 DAYS OF THE COMPLETION OF THE TESTING AND BALANCING WORK, SUBMIT THE TEST AND BALANCING REPORT BEARING THE SIGNATURE OF THE TEST AND BALANCE ENGINEER. THE REPORTS SHALL BE CERTIFIED PROOF THAT THE SYSTEMS HAVE BEEN TESTED, ADJUSTED, AND BALANCED IN ACCORDANCE WITH THE REFERENCED STANDARDS; ARE AN ACCURATE REPRESENTATION OF HOW THE SYSTEMS HAVE BEEN INSTALLED AND ARE OPERATING. REPORTS SHALL BE BOUND IN A VINYL BINDER AND THE BINDER LABELED OR MAY BE AN ELECTRONIC PDF SUBMITTAL.

6. PLUMBING: A. PROVIDE AN APPROVED WATER HAMMER ARRESTOR FOR EACH PLUMBING FIXTURE SUPPLY AS REQUIRED BY FIXTURE MANUFACTURER.

B. ALL EXPOSED WASTE PIPE SHALL BE CHROME PLATED BRASS PIPE, NO FERROUS PIPE C. PROVIDE CLEANOUTS AT EACH CHANGE OF DIRECTION AND AT 100 FOOT INTERVALS IN STRAIGHT RUNS. D. PROVIDE ACCESS PANELS FOR ALL CONCEALED VALVES AND TRAPS. F CLEANOUTS:

1) VINYL TILE FLOOR: JR SMITH #4140, OR EQUAL. 2) QUARRY TILE FLOOR: JR SMITH #4200, OR EQUAL 3) CARPETED FLOOR: JR SMITH #4020-Y, OR EQUAL 4) UNFINISHED FLOOR: JR SMITH #4020, OR EQUAL

5) WALL: JR SMITH #4472, OR EQUAL, 24" ABOVE THE FLOOR. F. PROVIDE DIELECTRIC UNIONS WITH APPROPRIATE END CONNECTIONS TO MATCH THE PIPE SYSTEM IN WHICH INSTALLED (SCREWED, SOLDERED, OR FLANGED). PROVIDE DIELECTRIC UNIONS ON ALL PIPING CONNECTIONS TO HOT WATER HEATERS AND EXPANSION TANKS.

G. WATER HEATERS: 1) EVERY WATER HEATER SHALL HAVE AN APPROVED MEANS INSTALLED ON THE COLD WATER SUPPLY LINE ABOVE THE EQUIPMENT TO PREVENT SIPHONING OF A STORAGE WATER HEATER OR TANK.

2) BOTTOM FED WATER HEATERS AND TANKS CONNECT TO WATER HEATERS SHALL HAVE A VACCUM RELIEF VALVE INSTALLED, ANSI Z21.22. 3) STORAGE HEATERS OPERATING ABOVE ATMOSPHERIC PRESSURE SHALL HAVE AN APPROVED PRESSURE RELIEF VALVE AND/OR TEMPERATURE RELIEF VALVE.

H. ALL SEWER PIPING LOCATED INSIDE THE BUILDING SHALL BE INSTALLED WITH THE FOLLOWING SLOPES. 1) INSTALL 2-1/2" AND SMALLER PIPE AT 1/4" PER FOOT FALI 2) INSTALL 3" AND LARGER PIPE AT 1/8" PER FOOT FALL.

A. DOMESTIC COLD AND HOT WATER (ABOVE GROUND)

 TYPE L HARD DRAWN COPPER TÜBING. ASTM B-88. a) WROUGHT COPPER SOLDERED FITTINGS, ASTM B75 ALLOY C12200. ANSI B16.22. MSS SP-104. b) MECHANICAL PRESS COPPER FITTINGS FOR USE IN PLUMBING OR MECHANICAL APPLICATIONS. ASME B16.2 ASME B16.51, or ASME B16.18. MECHANICAL PRESS COPPER FITTINGS SHALL CONFORM TO IAPMO PS-117 OF

2) PEX, HIGH-DENSITY CROSS-LINKED POLYETHYLENE TUBING SHALL BE MANUFACTURED TO THE REQUIREMENTS OF ASTM F876 AND MEET THE STANDARD GRADE HYDROSTATIC PRESSURE RATINGS FROM PLASTIC PIPE INSTITUTE IN ACCORDANCE WITH TR-4/03. (MUST BE INSTALLED PER THE MANUFACTURERS REQUIREMENTS FOR PLENUM USE)

a) PEX-A AND PEX-B MEETING ANSI/NSF61 AND ANSI/NSF372 STANDARDS FOR POTABLE WATER SAFETY AND LEAD-FREE STANDARDS AND MUST BE MARKED WITH "PW-G", "NSF-61-G" OR OTHER NSF-APPROVED MARKING, ASTM F2023 FOR USE WITH CHLORINATED WATER. (MUST BE INSTALLED PER THE MANUFACTURERS REQUIREMENTS FOR PLENUM USE)

b) PEX MECHANICAL, CRIMP/INSERT OR EXPANSION FITTINGS INSTALLED IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS. PIPE SIZES GIVEN ON THE DRAWINGS ARE NOMINAL COPPER PIPE SIZE, INCREASE PEX PIPING SIZE TO EQUAL OR EXCEED COPPER PIPE INSIDE DIAMETER FOR SUPPLY MAINS. (MUST BE INSTALLED PER THE MANUFACTURERS REQUIREMENTS FOR PLENUM USE)

a) TO BE INSTALLED ON THE FIXTURE SUPPLY TO EACH PLUMBING FIXTURE. b) TO BE INSTALLED ON THE WATER SUPPLY SIDE TO EACH APPLIANCE OR MECHANICAL EQUIPMENT.

1. GATE VALVE: JOMAR T/S-301G OR EQUAL. LEAD-FREE NSF 61, ANSI B1.20.1. 2. GLOBE VALVE: JOMAR TGG OR EQUAL.

3. BALL VALVE: JOMAR JP100PxP OR EQUAL COMPACT LEAD FREE BRASS BALL VALVE. UL842, CSA 3371-12 & 3371-92, FM, CALIFORNIA CODE AB1953, NSF61 ANNEX G APPROVED. 4. BALL VALVE: JOMAR T-100NE OR EQUAL. UL842, FM, CSA, NSF 61-8, MSS SP-110

B. LEAD CONTENT OF WATER SUPPLY PIPE AND FITTINGS: 1) PIPE AND PIPE FITTINGS, INCLUDING VALVES AND FAUCETS, UTILIZED IN THE WATER SUPPLY SYSTEM SHALL NOT HAVE MORE THAN 8% LEAD

2) PIPE, PIPE FITTINGS, JOINTS, VALVES, FAUCETS, AND FIXTURE FITINGS UTILIZED TO SUPPLY WATER FOR DRINKING OR COOKING PURPOSES SHALL COMPLY WITH NSF 372 AND SHALL HAVE A WEIGHTED AVERAGE LEAD CONTENT OF 0.25% OR LESS.

(UNDERGROUND, INTERIOR TO THE BUILDING ABS PIPE AND FITTINGS: ABS PIPE AND FITTINGS SHALL COMPLY WITH NSF 14. "PLASTICS PIPING SYSTEMS COMPONENTS AND RELATED MATERIALS." FOR PLASTIC PIPING COMPONENTS, INCLUDE MARKING WITH "NSF-DWV" FOR PLASTIC DRAIN, WASTE, AND VENT PIPING AND "NSF-SEWER" FOR PLASTIC SEWER PIPING. SOLID-WALL ABS PIPE: ASTM D 2661, SCHEDULE 40. ABS SOCKET FITTINGS: ASTM D 2661, MADE TO ASTM D 3311, DRAIN, WASTE, AND VENT PATTERNS.

PVC PIPE AND FITTINGS: PVC PIPE AND FITTINGS SHALL COMPLY WITH NSF 14, "PLASTICS PIPING SYSTEMS COMPONENTS AND RELATED MATERIALS," FOR PLASTIC PIPING COMPONENTS. INCLUDE MARKING WITH "NSF-DWV" FOR PLASTIC DRAIN, WASTE, AND VENT PIPING AND "NSF-SEWER" FOR PLASTIC SEWER PIPING. SOLID-WALL PVC PIPE: ASTM D 2665, DRAIN, WASTE, AND VENT. PVC SOCKET FITTINGS: ASTM D 2665, MADE TO ASTM D 3311, DRAIN, WASTE, AND VENT PATTERNS AND TO FIT SCHEDULE 40 PIPE. ADHESIVE PRIMER: ASTM F 656. SOLVENT CEMENT: ASTM D 2564.

HUBLESS CAST IRON SOIL PIPE AND FITTINGS: HUBLESS CAST IRON PIPE AND FITTINGS SHALL BE MANUFACTURED FROM GRAY CAST IRON AND SHALL

CONFORM TO ASTM A 888 AND CISPI STANDARD 301. HUBLESS COUPLINGS SHALL CONFORM TO CISPI STANDARD 310 AND BE CERTIFIED BY NSF® HUB AND SPIGOT CAST IRON SOIL PIPE AND FITTINGS: HUB AND SPIGOT CAST IRON PIPE AND FITTINGS SHALL BE MANUFACTURED FROM GRAY CAST IRON AND SHALL CONFORM TO ASTM A 74.

(ABOVE GROUND, INTERIOR TO THE BUILDING).
ABS PIPE AND FITTINGS: ABS PIPE AND FITTINGS SHALL COMPLY WITH NSF 14, "PLASTICS PIPING SYSTEMS COMPONENTS AND RELATED MATERIALS," FOR PLASTIC PIPING COMPONENTS. INCLUDE MARKING WITH "NSF-DWV" FOR PLASTIC DRAIN, WASTE, AND VENT PIPING AND "NSF-SEWER" FOR PLASTIC SEWER PIPING. SOLID-WALL ABS PIPE: ASTM D 2661, SCHEDULE 40. CELLULAR-CORE ABS PIPE: ASTM F 628, SCHEDULE 40.ABS SOCKET FITTINGS: ASTM D 2661, MADE TO ASTM D 3311, DRAIN, WASTE, AND VENT PATTERNS. SOLVENT CEMENT: ASTM D 2235. (NOT FOR USE IN A RETURN AIR PLENUM)

PVC PIPE AND FITTINGS: PVC PIPE AND FITTINGS SHALL COMPLY WITH NSF 14, "PLASTICS PIPING SYSTEMS COMPONENTS AND RELATED MATERIALS," FOR PLASTIC PIPING COMPONENTS. INCLUDE MARKING WITH "NSF-DWV" FOR PLASTIC DRAIN. WASTE. AND VENT PIPING AND "NSF-SEWER" FOR PLASTIC SEWER PIPING. SOLID-WALL PVC PIPE: ASTM D 2665, DRAIN, CELLULAR-CORE PVC PIPE: ASTM F 891, SCHEDULE 40. WASTE, AND VENT. PVC SOCKET FITTINGS: ASTM D 2665, MADE TO ASTM D 3311, DRAIN, WASTE, AND VENT PATTERNS AND TO FIT SCHEDULE 40 PIPE. ADHESIVE PRIMER: ASTM F 656. SOLVENT CEMENT: ASTM D 2564.

HUBLESS CAST IRON SOIL PIPE AND FITTINGS: HUBLESS CAST IRON PIPE AND FITTINGS SHALL BE MANUFACTURED FROM GRAY CAST IRON AND SHALL CONFORM TO ASTM A 888 AND CISPI STANDARD 301. HUBLESS COUPLINGS SHALL CONFORM TO CISPI STANDARD 310 AND BE CERTIFIED BY NSF® INTERNATIONAL. 4) HUB AND SPIGOT CAST IRON SOIL PIPE AND FITTINGS: HUB AND SPIGOT CAST IRON PIPE AND FITTINGS SHALL BE MANUFACTURED FROM GRAY CAST IRON AND SHALL CONFORM TO ASTM A 74.

E. CONDENSATE DRAINS & INDIRECT WASTE (ABOVEGROUND). 1) POLYVINYLCHLORIDE (PVC) DWV PIPE, SCHEDULE 40, SOLVENT JOINT (INDIRECT WASTE).

F. NATURAL GAS. 1) BLACK STEEL PIPE, SCHEDULE 40, ASTM A53,

a) PIPE 3" AND SMALLER; 150 LB. MALLEABLE IRON, THREADED FITTINGS. b) PIPE 4" AND SMALLER; VIEGA MEGAPRESS G FOR WATER AND GAS. CSA LC4, TSSA/ASME B31

FOR USE WITH ASTM A53 SCHEDULE 40 BLACK IRON PIPE. c) PIPE 2-1/2" AND LARGER, WELDED.

d) PLUG VALVE: ROCKWELL NORDSTROM FIGURE NO. 142 OR 143. e) BALL VALVE: JOMAR T-100NE. APPROVALS- UL842, FM, CSA, NSF 61-8, MSS SP-110

2) GAS PIPING PAINTING: a) ALL BLACK STEEL GAS PIPING LOCATED EXTERIOR TO THE BUILDING SHALL BE PRIMED AND PAINTED TO EITHER MATCH ADJACENT EXTERIOR WHERE LOCATED ON OR NEAR EXTERIOR WALL AND PAINTED SAFETY YELLOW WHERE

LOCATED ON THE ROOF. G. ALL PIPE HANGERS AND SUPPORTS SHALL BE STANDARD PRODUCTS OF GRINNELL, FEE AND MASON, OR

ELCEN. HANGER SPACING SHALL BE IN ACCORDANCE WITH MSS-SP-69. 1) PROVIDE, SET, AND PROPERLY LOCATE PIPE SLEEVES AS REQUIRED FOR THIS WORK. ALL SLEEVES

SHALL BE OF SUFFICIENT SIZE TO PERMIT PIPE MOVEMENT DUE TO EXPANSION AND CONTRACTION AND TO ACCOMMODATE PIPE INSULATION.

2) INTERIOR PARTITIONS: 16 GAGE GALVANIZED STEEL, PACK BETWEEN PIPE AND SLEEVE WITH FIRE

SAFING AND CAULK AT EACH END WITH FIRE RESISTANT SEALANT. 3) ROOF: PROSET OR EQUAL, MANUFACTURED PVC SCHEDULE 40 PIPE SLEEVE WITH WATERPROOF SEAL. COORDINATE WITH ROOFING CONTRACTOR AND FLASH AS REQUIRED TO MAINTAIN ROOF WARRANTY

4) PROTECTION AGAINST CONTACT: METALLIC PIPING, EXCEPT FOR CAST IRON, DUCTILE IRON AND GALVANIZED STEEL SHALL NOT BE PLACED IN DIRECT CONTACT WITH STEEL FRAMING MEMBERS, CONCRETE, OR CINDER WALLS

MECHANICAL AND PLUMBING SPECIFICATIONS (CONTINUED)

AND FLOORS OR OTHER MASONRY. METALLIC PIPING SHALL NOT BE PLACED IN DIRECT CONTACT WITH CORROSIVE SOIL. SHEATHING USED TO PREVENT DIRECT CONTACT SHALL HAVE A THICKNESS OF GREATER THAN .008: AND THE

SHEATHING SHALL BE MADE OF PLASTIC. ANY PIPE THAT PASSES THROUGH A FOUNDATION WALL OR FOOTING SHALL RE PROVIDED WITH A RELIEVING ARCH. OR A PIPE SLEEVE SHALL BE BUILT INTO THE FOUNDATION WALL. THE SLEEVE SHALL BE TWO SIZES GREATER THAN THE PIPE PASSING THOUGH THE WALL OR FOOTING. 5) PLUMBING VENTS: FLASH ROOF VENT INTO ROOFING SYSTEM AS REQUIRED BY THE ROOFING CONTRACTOR TO MAINTAIN EXISTING ROOF WARRANTY. ALL PLUMBING VENT TERMINALS SHALL

TERMINATE A MINIMUM OF 12" ABOVE ROOF OR EQUAL TO HEIGHT OF PARAPET, WHICHEVER IS GREATER.

8. WATER HEATERS A. COMMERCIAL, LIGHT-DUTY, STORAGE, ELECTRIC, DOMESTIC-WATER HEATERS:

. STANDARD: UL 174 2. STORAGE-TANK CONSTRUCTION: STEEL, VERTICAL ARRANGEMENT.

a. PRESSURE RATING. 130 PSIG.
b. INTERIOR FINISH: COMPLY WITH NSF 61 AND NSF 372 BARRIER MATERIALS FOR POTABLE-WATER TANK LININGS, INCLUDING EXTENDING LINING MATERIAL INTO TAPPINGS.

3. FACTORY-INSTALLED, STORAGE-TANK APPURTENANCES: a. ANODE ROD: REPLACEABLE MAGNESIUM.
b. DIP TUBE: REQUIRED UNLESS COLD-WATER INLET IS NEAR BOTTOM OF TANK.

I. PROVIDE CHROME PLATED ESCUTCHEONS ON ALL PIPE ENTERING FINISHED AREAS.

c. DRAIN VALVE: CORROSION-RESISTANT METAL WITH HOSE-END CONNECTION. d. INSULATION: COMPLY WITH ASHRAE/IES 90.1

e. JACKET: STEEL WITH ENAMELED FINISH OR HIGH-IMPACT COMPOSITE MATERIAL. f. HEAT-TRAP FITTINGS: INLET TYPE IN COLD-WATER INLET AND OUTLET TYPE IN HOT-WATER OUTLET. g. HEATING ELEMENTS: ELECTRIC, SCREW-IN IMMERSION TYPE. h. TEMPERATURE CONTROL: ADJUSTABLE THERMOSTAT.

SAFETY CONTROL: HIGH-TEMPERATURE-LIMIT CUTOFF DEVICE OR SYSTEM. RELIEF VALVE: ASME RATED AND STAMPED FOR COMBINATION TEMPERATURE-AND-PRESSURE RELIEF VALVES. INCLUDE RELIEVING CAPACITY AT LEAST AS GREAT AS HEAT INPUT, AND INCLUDE PRESSURE SETTING LESS THAN WORKING-PRESSURE RATING OF DOMESTIC-WATER HEATER. SELECT RELIEF VALVE WITH SENSING ELEMENT THAT EXTENDS INTO STORAGE TANK

B DOMESTIC-WATER EXPANSION TANKS: 1. DESCRIPTION: STEEL. PRESSURE-RATED TANK CONSTRUCTED WITH WELDED JOINTS AND FACTORY-INSTALLED, BUTYL-RUBBER DIAPHRAGM. INCLUDE AIR PRECHARGE TO MINIMUM

SYSTEM-OPERATING PRESSURE AT TANK. 2. CONSTRUCTION: a. TAPPINGS: FACTORY-FABRICATED STEEL, WELDED TO TANK BEFORE TESTING AND LABELING. INCLUDE ASME B1.20.1 PIPE THREAD. b. INTERIOR FINISH: COMPLY WITH NSF 61 AND NSF 372 BARRIER MATERIALS FOR POTABLE-WATER

TANK LININGS, INCLUDING EXTENDING FINISH INTO AND THROUGH TANK FITTINGS AND OUTLETS.

c. AIR-CHARGING VALVE: FACTORY INSTALLED. 3. CAPACITY AND CHARACTERISTICS: a. WORKING-PRESSURE RATING: 150 PSIG .

AS SPECIFIED BELOW.

(1) ROUND SUPPLY DUCT

9. INSULATION AND DUCT LINING: A. ALL INSULATIONS AND ACCESSORIES SHALL HAVE A FIRE HAZARD CLASSIFICATION WITH A FLAME SPREAD RATING OF NOT OVER 25, A FUEL CONTRIBUTION RATING OF NOT OVER 50, AND A SMOKE

EVELOPED RATING OF NOT OVER 50, IN ACCORDANCE WITH NFPA. B. PIPE INSULATION - ABOVE GRADE 1) THE PIPING INSULATION USED SHALL HAVE A THERMAL CONDUCTIVITY OF 0.27 Btu PER in/hr*sqft*F° OR LESS. 2) FIBERGLASS INSULATION WITH FACTORY APPLIED VAPOR BARRIER, ASJ JACKET, FACTORY APPLIED

PRESSURE SEALING LONGITUDE LAP JOINT, NO STAPLES, ZESTON PREMOLDED PVC FITTING COVERS. INSTALLATION SHALL BE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

3) FLEXIBLE CLOSED CELL ELASTOMERIC THERMAL INSULATION, UNSLIT OR PRESLIT WITH PRESSURE

SENSITIVE ADHESIVE SYSTEM FOR CLOSURE AND VAPOR SEALING, EQUAL TO ARMSTRONG AP ARMAFLEX OR ARMAFLEX 2000. 4) FOR NON CIRCULATING SYSTEMS, THE FIRST 8 FEET OF INLET AND OUTLET PIPING BETWEEN THE TANK AND THE HEAT TRAP (INCLUDING THE HEAT TRAP) MUST BE INSULATED. 5) FOR CIRCULATING SYSTEMS, ALL HOT WATER PIPING IN THE CIRCULATION LOOP MUST BE INSULATED

6) INSULATION SCHEDULE a) DOMESTIC COLD WATER 1" FOR PIPING UP TO 1-1/4"Ø, & 1-1/2" FOR PIPING 1-1/2"Ø AND LARGER b) DOMESTIC HOT WATER

C. EQUIPMENT INSULATION: 1) FLEXIBLE FIBERGLASS: GLASS FIBER INSULATION, ASTM C 553, TYPE 1, CLASS B-4, SEMI-RIGID BOARD, WITH FACTORY LAMINATED KRAFT ALUMINUM FOIL (ALL SERVICE JACKET), VAPOR BARRIER, OWENS/CORNING PIPE AND TANK INSULATION.

D. DUCTWORK: THERMAL INSULATION. DUCT COVERING: 3/4 LB/CF, FIBERGLASS BLANKET WITH FACTORY APPLIED VAPOR BARRIER AND FACING, THICKNESS AS SCHEDULED, INSTALLATION IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS. a) DUCT COVERING SCHEDULE: MINIMUM R-6

A. ALL DUCTWORK, UNLESS OTHERWISE INDICATED, SHALL BE FABRICATED FROM GALVANIZED SHEET STEEL COMPLYING WITH ASTM A 653, LOCKFORMING QUALITY, WITH G 90 ZINC COATING IN ACCORDANCE WITH ASTM A 924: AND MILL PHOSPHATIZED FOR EXPOSED LOCATIONS.

B. WHERE DIJCTWORK IS INDICATED TO BE EXPOSED TO VIEW IN OCCUPIED SPACES, PROVIDE MATERIALS WHICH ARE FREE FROM VISUAL IMPERFECTIONS INCLUDING PITTING, SEAM MARKS, ROLLER MARKS, STAINS AND DISCOLORATIONS, AND OTHER IMPERFECTIONS, INCLUDING THOSE WHICH WOULD IMPAIR

C. DUCTWORK, METAL GAUGES, REINFORCING, ETC. SHALL BE CONSTRUCTED IN ACCORDANCE WITH SMACNA "HVAC DUCT CONSTRUCTION STANDARDS." LATEST EDITION FOR A 2 INCH WATER GAUGE STATIC a) ELBOWS, UNLESS INDICATED OTHERWISE SHALL BE CONSTRUCTED WITH CENTERLINE RADIUS OF

NOT LESS THAN 1.5 DUCT WIDTH OR SQUARE ELBOW WITH DOUBLE WALL STREAMLINE VANES. b) RETURN AIR ACOUSTICAL ELBOWS AND SOUND BOOTS SHALL BE A SQUARE ELBOW WITH NO TURNING VANES. c) SLOPES FOR TRANSITIONS OR OTHER CHANGES IN DIMENSIONS SHALL BE MINIMUM 1 TO 3. 2) ROUND AND OVAL SPIRAL SEAM DUCT:

a) PROVIDE RADIUS TYPE FITTINGS FABRICATED OF MULTIPLE SECTIONS WITH MAXIMUM 15 DEGREE CHANGE OF DIRECTION PER SECTION. UNL USE 45 DEGREE LATERALS FOR BRANCH TAKEOFF CONNECTIONS. WHERE 90 DEGREE BRANCHES ARE INDICATED PROVIDE CONICAL TYPE TEES.

b) SLOPES FOR TRANSITIONS OR OTHER CHANGES IN DIMENSIONS SHALL BE MINIMUM 1 TO 3. c) AS AN OPTION, PROVIDE FACTORY-FABRICATED DUCT AND FITTINGS, IN LIEU OF SHOP-FABRICATED DUCT AND FITTINGS. (1) ELBOWS: ONE PIECE CONSTRUCTION FOR 90 DEGREES AND 45 DEGREE ELBOW 14" AND SMALLER. PROVIDE MULTIPLE GORE CONSTRUCTION FOR LARGER DIAMETERS WITH

STANDING SEAM CIRCUMFERENTIAL JOINT (2) DIVIDED FLOW FITTINGS: 90 DEGREE TEES, CONSTRUCTED WITH SADDLE TAP SPOT WELDED AND BONDED TO DUCT FITTING BODY. d) ROUND LONGITUDINAL SEAM DUCT. USE FOR RIGID METAL DUCT ON LEAVING SIDE OF DUCT IN CONCEALED LOCATIONS FOR EXTENSION TO FLEX FOR DIFFUSERS, UNLESS OTHERWISE

D. DUCT SIZES SHOWN ON THE DRAWINGS ARE SHEETMETAL SIZES, ALLOWANCE FOR DUCT LINER HAS BEEN

MADE WHERE APPLICABLE. E INSTALLATION OF METAL DUCTWORK 1) GENERAL: ASSEMBLE AND INSTALL DUCTWORK IN ACCORDANCE WITH RECOGNIZED INDUSTRY

PRACTICES WHICH WILL ACHIEVE AIR-TIGHT SYSTEMS (MAXIMUM 5% LEAKAGE), WITH NO OBJECTIONABLE NOISE, AND CAPABLE OF PERFORMING INDICATED SERVICE. INSTALL EACH RUN WITH MINIMUM NUMBER OF JOINTS. ALIGN DUCTWORK ACCURATELY WITH INTERNAL SURFACES SMOOTH. SUPPORT DUCTS RIGIDLY WITH SUITABLE STRAPS, BRACES, HANGERS AND ANCHORS IN ACCORDANCE WITH SMACNA "HVAC DUCT CONSTRUCTION STANDARDS" LATEST EDITION. DUC HANGERS SHALL BE OF THE TYPE WHICH WILL HOLD DUCTS TRUE-TO-SHAPE AND TO PREVENT

BUCKLING. SUPPORT VERTICAL DUCTS AT EVERY FLOOR.

2) AUXILIARY STEEL: PROVIDE AUXILIARY STEEL AS REQUIRED TO ADEQUATELY SUPPORT DUCTWORK. 3) ROUTING: LOCATE DUCTWORK RUNS, EXCEPT AS OTHERWISE INDICATED, VERTICALLY AND HORIZONTALLY AND AVOID DIAGONAL RUNS WHEREVER POSSIBLE. LOCATE RUNS AS INDICATED BY DIAGRAMS. DETAILS AND NOTATIONS OR. IF NOT OTHERWISE INDICATED. RUN DUCTWORK IN SHORTEST ROUTE WHICH DOES NOT OBSTRUCT USABLE SPACE OR BLOCK ACCESS FOR SERVICING BUILDING AND ITS EQUIPMENT. HOLD DUCTS CLOSE TO WALLS, OVERHEAD CONSTRUCTION, COLUMNS, AND OTHER STRUCTURAL AND PERMANENT ENCLOSURE ELEMENTS OF BUILDING. WHEREVER POSSIBLE IN FINISHED AND OCCUPIED SPACES, CONCEAL DUCTWORK FROM VIEW, BY LOCATING IN MECHANICAL SHAFTS, HOLLOW WALL CONSTRUCTION OR ABOVE SUSPENDED CEILINGS. DO NOT ENCASE HORIZONTAL RUNS IN SOLID PARTITIONS. EXCEPT AS SPECIFICALLY SHOWN. COORDINATE LAYOUT WITH SUSPENDED CEILING AND LIGHTING LAYOUTS AND SIMILAR FINISHED WORK. 4) DO NOT ROUTE DUCTWORK THROUGH ELECTRICAL EQUIPMENT SPACES AND ENCLOSURES, UNLESS

5) PENETRATIONS: a) WHERE DUCTS PASS THROUGH INTERIOR PARTITIONS OR EXTERIOR WALLS, AND ARE EXPOSED TO VIEW, CONCEAL SPACE BETWEEN OPENING AND DUCT OR DUCT INSULATION WITH SHEET METAL FLANGES OF SAME GAGE AS DUCT. OVERLAP OPENING ON 4 SIDES BY AT LEAST 1-1/2". FASTEN TO DUCT AND WALL.

b) WHERE DUCTS PASS THROUGH FIRE-RATED FLOORS, WALLS, OR PARTITIONS, PROVIDE FIRESTOPPING BETWEEN DUCT AND WALL. 6) COORDINATION: COORDINATE DUCT INSTALLATIONS WITH INSTALLATION OF ACCESSORIES

DAMPERS, COIL FRAMES, EQUIPMENT, CONTROLS, AND OTHER ASSOCIATED WORK OF THE DUCTWORK 7) INSTALLATION: INSTALL METAL DUCTWORK IN ACCORDANCE WITH SMACNA "HVAC DUCT CONSTRUCTION STANDARDS", LATEST EDITION.

F. EQUIPMENT CONNECTIONS: 1) CONNECT METAL DUCTWORK TO EQUIPMENT AS INDICATED, PROVIDE FLEXIBLE CONNECTION FOR EACH DUCTWORK CONNECTION TO EQUIPMENT MOUNTED ON VIBRATION ISOLATORS, AND/OR EQUIPMENT CONTAINING ROTATING MACHINERY. PROVIDE ACCESS DOORS AS REQUIRED.

G. SEAL ALL CONCEALED DUCTWORK JOINTS WITH NON-HARDENING, NON-MIGRATING MASTIC SEALANT, AS RECOMMENDED FOR SEALING SEAMS AND JOINTS IN DUCTWORK. OIL BASE CAULKING AND GLAZING COMPOUNDS SHALL NOT BE ACCEPTABLE. DUCTS SHALL BE SEALED TO THE CLASS LEVEL LISTED BELOW. 1) UNCONDITIONED SPACES CLASS B CLASS A CLASS C CLASS B 2) CONDITIONED SPACES (PLENUM) CLASS C CLASS B CLASS B CLASS C

SUPPLY < 2" W.C. SUPPLY > 2" W.C. EXHAUST/DRYER RETURN

A. ATCO #086 (R-6), OR EQUAL. B. FACTORY APPLIED INSULATION AND VAPOR BARRIER.

12. EXHAUST FANS:

A. CENTRIFUGAL CEILING EXHAUSTERS SHALL BE ELECTRICALLY POWERED CENTRIFUGAL TYPE FAN SUITABLE FOR MOUNTING IN THE CEILING WITH A PERFORATED OFF-WHITE METAL GRILLE WITH A THUMBSCREW ATTACHMENT FOR EASY ACCESS TO FAN HOUSING. UNIT SHALL CONSIST OF A GALVANIZED STEEL HOUSING LINED WITH ACOUSTICAL INSULATION AND SHALL INCLUDE AN INTEGRAL BACKDRAFT DAMPER ON FAN DISCHARGE. MOTOR SHALL BE A PERMANENT SPLIT-CAPACITOR TYPE MOTOR. PERMANENTLY LUBRICATED, WITH THERMAL OVERLOAD PROTECTION. PROVIDE DISCONNECT SWITCH OR OTHER MEANS

OF DISCONNECT AT MOTOR IN FAN HOUSING. 13 REMODELING WORKS A. DEMOLITION: DISCONNECT, DEMOLISH, AND REMOVE ABANDONED MECHANICAL MATERIALS AND EQUIPMENT INDICATED TO BE REMOVED AND NOT INDICATED TO BE SALVAGED OR REMAIN.

B. EQUIPMENT TO BE SALVAGED: 1) DISCONNECT AND REMOVE, EXISTING MECHANICAL EQUIPMENT INDICATED TO BE REMOVED AND SALVAGED. DELIVER EQUIPMENT TO THE LOCATION DESIGNATED BY THE OWNER FOR STORAGE. 2) ALL MATERIALS AND EQUIPMENT DESIGNATED TO BE REUSED OR RELOCATED SHALL BE CAREFULLY REMOVED, AND STORED UNTIL NEEDED FOR REMODELING WORK. ALL ITEMS SHALL BE RESTORED TO "LIKE NEW" CONDITION WITH RUST OR CORROSION REMOVED, SURFACE PAINT TOUCHED UP OR

REPAINTED AS REQUIRED TO MATCH NEW CONSTRUCTION, AND THOROUGHLY CLEANED AND INSPECTED.

ANY ITEMS WHICH BECOME DAMAGED BEYOND REPAIR AS A RESULT OF CONSTRUCTION OR DEMOLITION

PROTECTION AND BARRIERS AFTER REMODELING OPERATIONS ARE COMPLETE.

ACTIVITY SHALL BE REPLACED WITH NEW MATERIAL EQUIVALENT IN EVERY RESPECT. C. DISPOSAL AND CLEANUP: REMOVE FROM THE SITE AND LEGALLY DISPOSE OF DEMOLISHED MATERIALS AND QUIPMENT NOT INDICATED TO BE SALVAGED. D. PROTECT ADJACENT MATERIALS INDICATED TO REMAIN. INSTALL AND MAINTAIN DUST AND NOISE BARRIERS TO KEEP DIRT, DUST, AND NOISE FROM BEING TRANSMITTED TO ADJACENT AREAS. REMOVE

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disclosure of information contained herein without prior written consent of the Engineer is strictly prohibited. © 2024 BC Engineers, Inc. PLUMBING 5720 Reeder Shawnee, KS 66203 (913)262-1772 **SPECIFICATIONS**

PLUMBING SYMBOLS

SOIL AND WASTE PIPING ABOVE FLOOR/GRADE SANITARY VENT PIPING ABOVE GRADE — y — — SANITARY VENT PIPING BELOW GRADE —— – DOMESTIC COLD WATER PIPING —— – — DOMESTIC HOT WATER PIPING DOMESTIC HOT WATER RECIRCULATION PIPING —— G —— PIPING TURNING DOWN TEE TOP CONNECTION **---**|**---**-UNION BACKFLOW PREVENTER - \times 22 \times -FD ⊘ FLOOR DRAIN FCO 🔘 FLOOR CLEAN OUT WALL CLEAN OUT GRADE CLEAN OUT CONNECT TO EXISTING

INVERT ELEVATION OF PIPE

DIAGRAM

PLUMBING PLAN NOTES:

- 1) CONNECT WASTE TO EXISTING 4" SANITARY SEWER AS REQUIRED. VERIFY EXACT LOCATION AND ELEVATION PRIOR TO INSTALLATION OF ANY PIPING.
- LOCATION OF 3" VTR. VERIFY 10' CLEARANCE FROM ALL OUTDOOR AIR INTAKES. SEAL PENETRATION
- CUT EXISTING ROOF AND FLASH INTO ROOF AS REQUIRED. ALL ROOFING WORK SHALL BE PERFORMED BY BUILDING OWNER'S ROOFING CONTRACTOR (AT THIS CONTRACTOR'S EXPENSE) TO MAINTAIN EXISTING ROOF WARRANTY. VERIFY APPROVED ROOFING CONTRACTOR WITH BUILDING OWNER PRIOR TO PERFORMING WORK.
- 4 NO WORK TO OCCUR IN THIS AREA. 5 PROVIDE RELIEF DRAIN FROM WATER HEATER TO HUB DRAIN WITH INDIRECT DRAIN.

7/26/24

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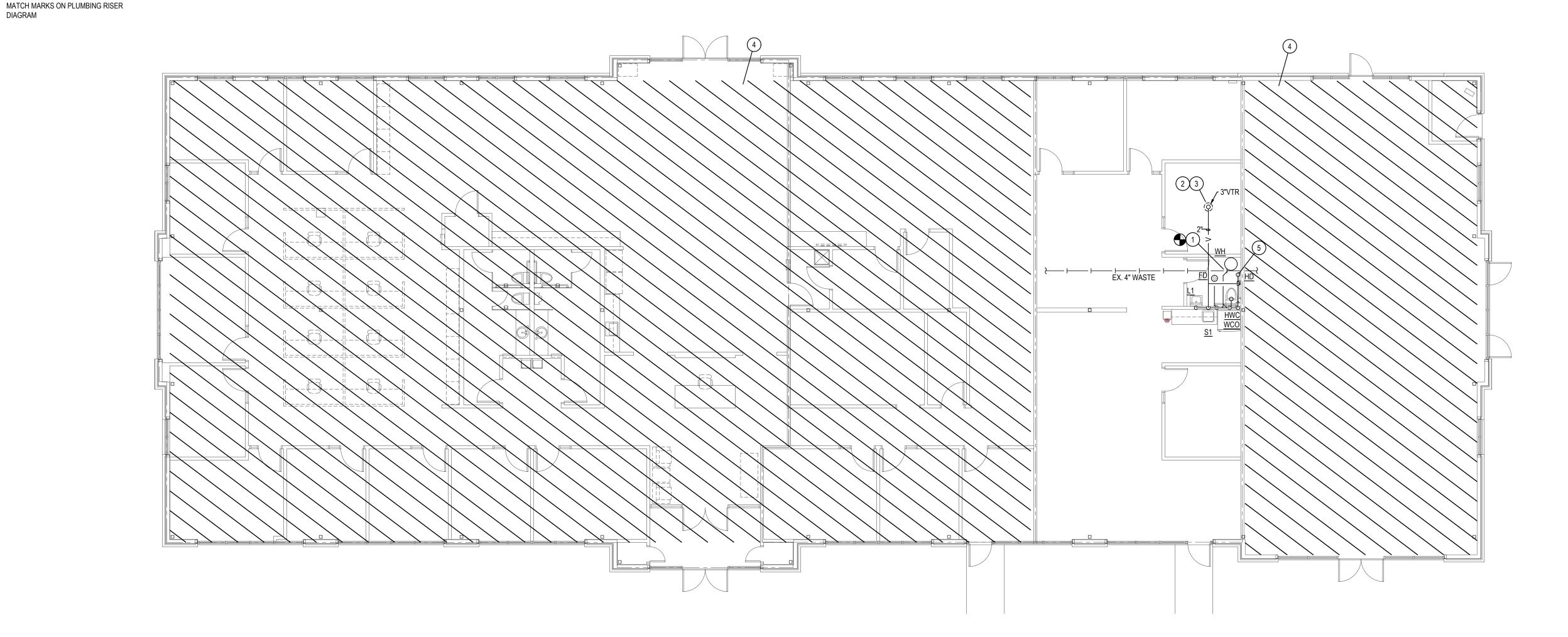
PERMIT JULY 25, 2024

AKE

EXECUTIVE

sheet

Revisions



PLUMBING WASTE AND VENT FLOOR PLAN

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

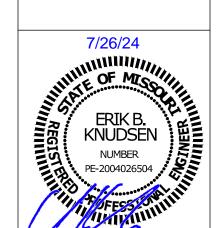
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PLUMBING PLAN NOTES:

- CONNECT 3/4" CW TO EXISTING DOMESTIC CW WITH SHUT OFF VALVE. VERIFY EXACT LOCATION AND SIZE OF
- EXISTING WATER LINE PRIOR TO INSTALLATION OF ANY PIPING.
- COORDINATE WITH GAS COMPANY FOR INSTALLATION OF A METER WITH CAPACITY FOR 150 CFH @ 7"W.C.. ROUTE PIPING UP INSIDE THE MECHANICAL ROOM AND PENETRATE ONTO ROOF SIMILAR TO EXISTING. ALL CONCEALED JOINTS ARE TO BE WELDED OR USE FITTINGS APPROVED FOR CONCEALED USE. VERIFY ALL EQUIPMENT GAS CAPACITIES AND OPERATING PRESSURES PRIOR TO INSTALLATION OF ANY PIPING. SEAL WALL PENETRATION WEATHER TIGHT.
- 3 GAS PIPING ON ROOF. SUPPORT AS REQUIRED AND AS DETAILED.
- CUT EXISTING ROOF AND FLASH INTO ROOF AS REQUIRED. ALL ROOFING WORK SHALL BE PERFORMED BY BUILDING OWNER'S ROOFING CONTRACTOR (AT THIS CONTRACTOR'S EXPENSE) TO MAINTAIN EXISTING ROOF WARRANTY. VERIFY APPROVED ROOFING CONTRACTOR WITH BUILDING OWNER PRIOR TO PERFORMING WORK.
- 5 SEPARATE BRANCH PIPING FROM GAS PIPING MAIN AND CAP MAIN AS REQUIRED.
- (6) NO WORK TO OCCUR IN THIS AREA.
- CONNECT TO EXISTING GAS PIPING AS REQUIRED.
- SUPPORT WATER HEATER FROM STRUCTURE ABOVE CEILING AS REQUIRED. SEE RISER DIAGRAM FOR WATER HEATER PIPING DIAGRAM. REFER TO MANUFACTURER'S INSTRUCTIONS FOR EXACT REQUIREMENTS. PROVIDE THERMAL EXPANSION TANK. INSTALL HIGH ENOUGH TO ALLOW T&P AND DRAIN PAN TO DRAIN INTO HUB DRAIN IN CEILING.



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EXECUTIVE LAKEWOOD PARKWAY

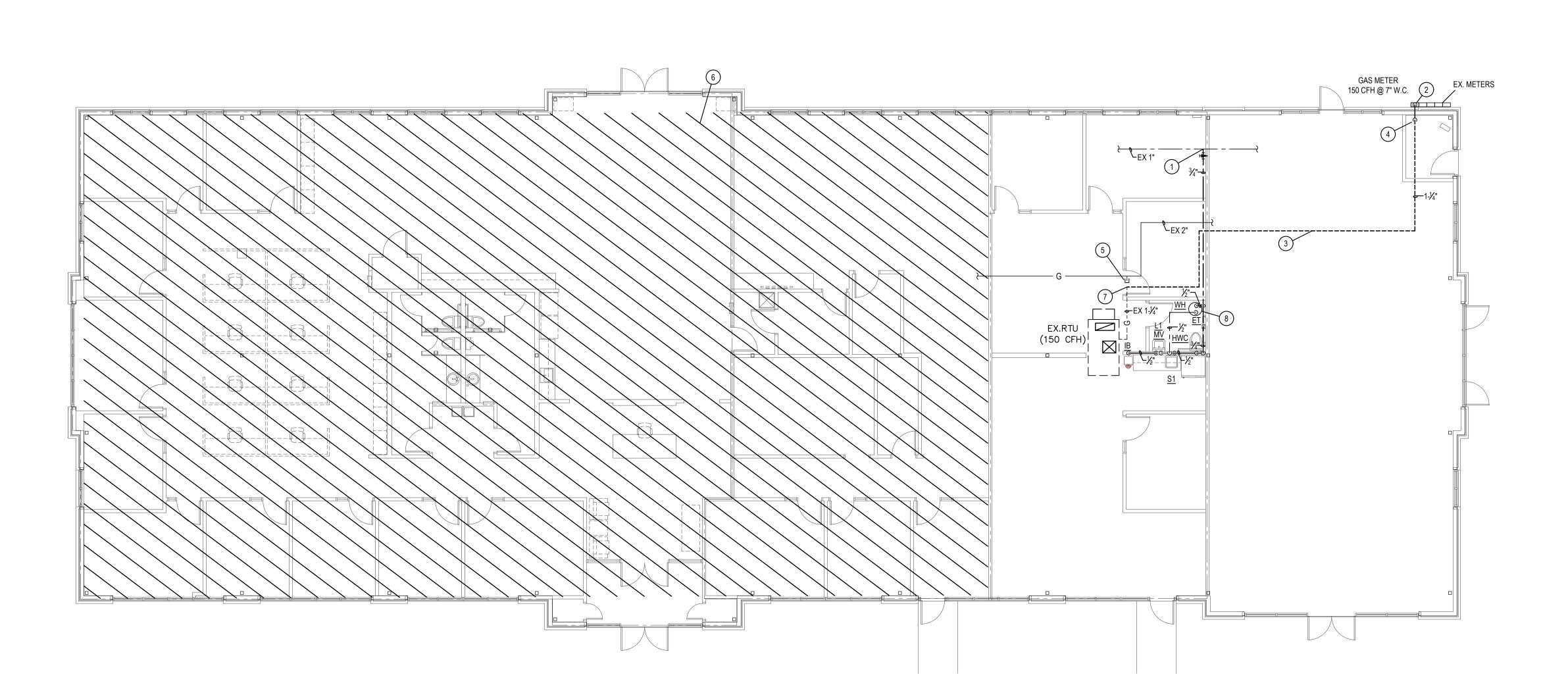
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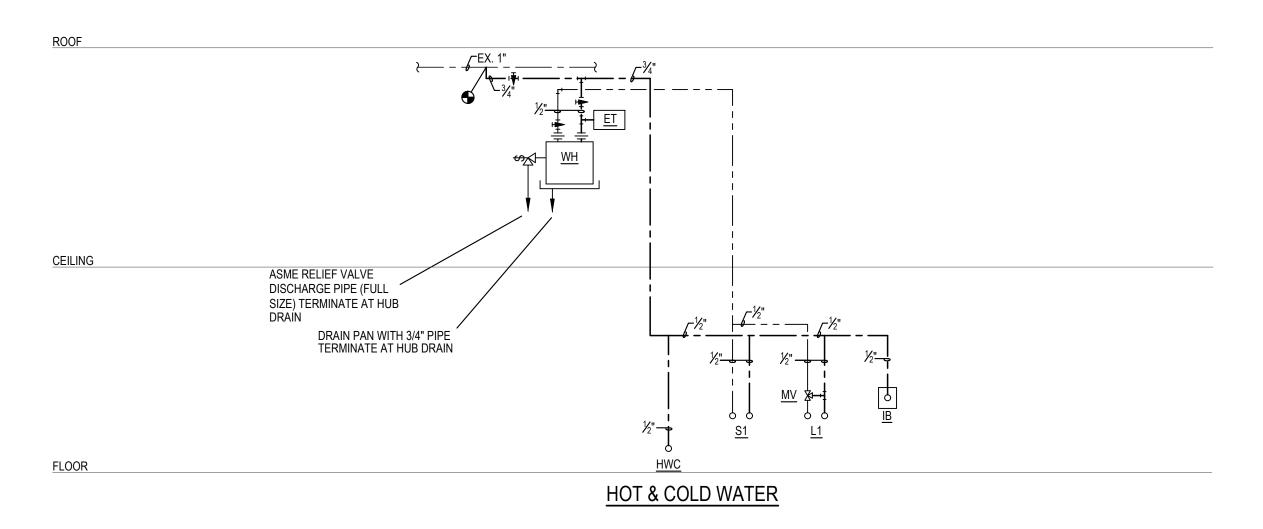


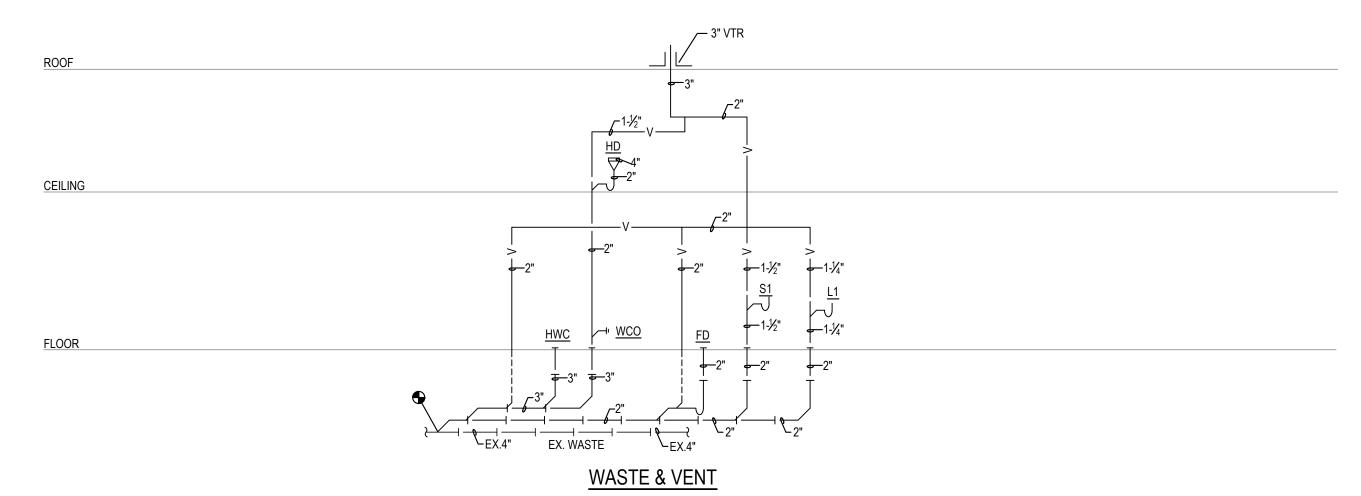




PLUMBING WATER AND GAS FLOOR PLAN

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





PLUMBING RISER DIAGRAMS

PLUMBING FIXTURE SCHEDULE:

- HANDICAP WATER CLOSET: TOTO, #CST744SL, "DRAKE CLOSE COUPLED TOILET", 1.6 GALLON FLUSH, 16-1/2" HIGH ELONGATED BOWL, FLOOR MOUNTED, FLOOR OUTLET, TANK TYPE, VITREOUS CHINA, SIPHON-JET ACTION, #SC534 OPEN FRONT SEAT WITH CHECK HINGE AND LESS COVER, CHROME PLATED ANGLE STOP AND RISER. HANDLE ON
- HANDICAP LAVATORY, WALL HUNG: TOTO #LT307, 20"x 18", VITREOUS CHINA, FRONT OVERFLOW, DELTA #501 FAUCET WITH SINGLE METAL LEVER FAUCET, OFFSET GRID ELBOW DRAIN AND 1-1/4" TAILPIECE, CHROME PLATED CAST BRASS P-TRAP WITH CLEANOUT (MOUNTED PARALLEL WITH WALL), CHROME PLATED LOOSE KEY ANGLE STOPS AND RISERS, FLOOR MOUNTED CONCEALED ARM LAVATORY SUPPORT, INSULATE EXPOSED DRAIN, WATER SUPPLIES, AND VALVES WITH PROWRAP SEAMLESS MOLDED CLOSED CELL VINYL INSULATION.
- FLOOR DRAIN: SIOUX CHIEF, #842, PVC FLOOR DRAIN WITH ADJUSTABLE TOP AND CAST BRASS STRAINER.
- SINK: ELKAY, #LRAD-2222, 19"x16"x 6-1/2" DEEP BOWL,21-3/8"x 21-3/8" CUT-OUT, ADA COMPLIANT, SINGLE COMPARTMENT, SELF-RIMMING STAINLESS STEEL SINK WITH SATIN FINISH AND SOUND DAMPENING UNDERCOATING, #LK-1000CR FAUCET, SWING SPOUT, AERATOR, SINGLE LEVER HANDLE, CHROME PLATED CAST BRASS P-TRAP WITH CLEANOUT, CHROME PLATED ANGLE STOPS AND RISERS.
- WATER HEATER: AO SMITH #DEL-10, 10 GALLON STORAGE, 120 VOLT, 2500 WATT ELEMENT, ASME TEMPERATURE AND
- MIXING VALVE: WATTS, #LFUSG-B, THERMOSTATIC CONTROLLED MIXING VALVE, LEAD FREE BRONZE BODY, LOCKED TEMPERATURE ADJUSTMENT CAP (VANDAL RESISTANT), COPPER ENCAPSULATED THERMOSTAT ASSEMBLY WITH BRASS SHUTTLE, STAINLESSSTEEL SPRINGS, INTEGRAL CHECK VALVES ON HOT AND COLD INLETS. (SET TO 110°F).
- HOT WATER EXPANSION TANK: AMTROL, #ST-5, 2 GALLON EXPANSION TANK WITH DIAPHRAGM.
- ICE BOX. SIOUX CHIEF, #696-G1000. ICE BOX WITH 1/2" INLET, CONNECTION AND 1/4-TURN SHUT-OFF VALVE.
- HUB DRAIN: SIOUX CHIEF, #832, PVC WASTE DRAIN, TRAP SEAL.

PL	LUMBIN	G FIXT					ON 2018 IPC)		
PLUMBING FIXTURE	QUANTITY	CW WSFU	CW WSFU TOTAL	HW WSFU	HW WSFU TOTAL	COMBINED WSFU	COMBINED WSFU TOTAL	DFU	DFU TOTAL
WATER CLOSET (FLUSH TANK)	1	5	5	0	0	5	5	4	4
LAVATORY	1	1.5	1.5	1.5	1.5	2.0	2.0	1.0	1.0
SINK	1	3.0	3.0	3	3	4	4	2.0	2.0
FLOOR DRAIN	1	0.0	0.0	0.0	0.0	0.0	0.0	2.0	2.0
HUB DRAIN	1	0.0	0.0	0.0	0.0	0.0	0.0	2.0	2.0
WATER COOLER SUPPLY BOX	1	0.5	0.5	0.0	0.0	0.5	0.5	0.0	0.0
TOTAL			10.0		4.5		11.5		11.0

PIPE HANG	ER SCHEDUL	E
PIPE MATERIAL	MAXIMUM HANGER SPACING	HANGER ROD DIAMETER
ABS (All sizes)	4'	3/8"
PVC (All Sizes)	4'	3/8"
CPVC, 1 inch and smaller	3'	1/2"
CPVC, 1—1/4 inches and larger	4'	1/2"
Cast Iron (All Sizes)	5'	5/8"
Cast Iron (All Sizes) with 10 foot length of pipe	10'	5/8"
Copper Tube, 1—1/4 inches and smaller	6'	1/2"
Copper Tube, 1-1/2 inches and larger	10'	1/2"
Steel, 3 inches and smaller	12'	1/2"
Steel, 4 inches and larger	12'	5/8"
Pex, 1" and below without support channel	32"	3/8"
Pex, 1—1/4" and above without support channel	48"	3/8"
Pex ¾" and below with support channel	6'	3/8"
Pex 1" and above with support channel	8'	3/8"

PLUMBING FIXTURE BR	ANCH PIPING	SCHEDU	LE	
FIXTURE	WAST	E VENT	CW	HW
WATER CLOSET (TANK TYPE)	3"	2"	1/2"	
LAVATORY	1-1/4	" 1-1/4"	1/2"	1/2"
SINK	1-1/2	" 1-1/2"	1/2"	1/2"
FLOOR DRAIN	2"	2"		
HUB DRAIN	2"	1-1/2"		
SUPPLY BOX			1/2"	

NOTE: INDIVIDUAL VENTS FOR FIXTURES ON PLANS AND RISER DIAGRAMS HAVE BEEN INCREASED WHERE HORIZONTAL VENT LENGTH IS IN EXCESS OF THE MAXIMUM DISTANCE INDICATED BY THE CODE.

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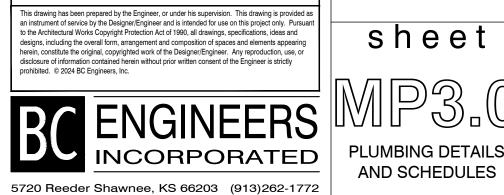


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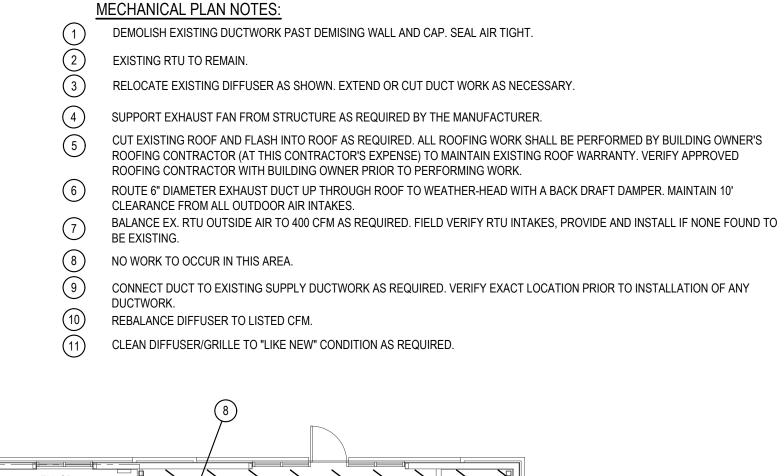
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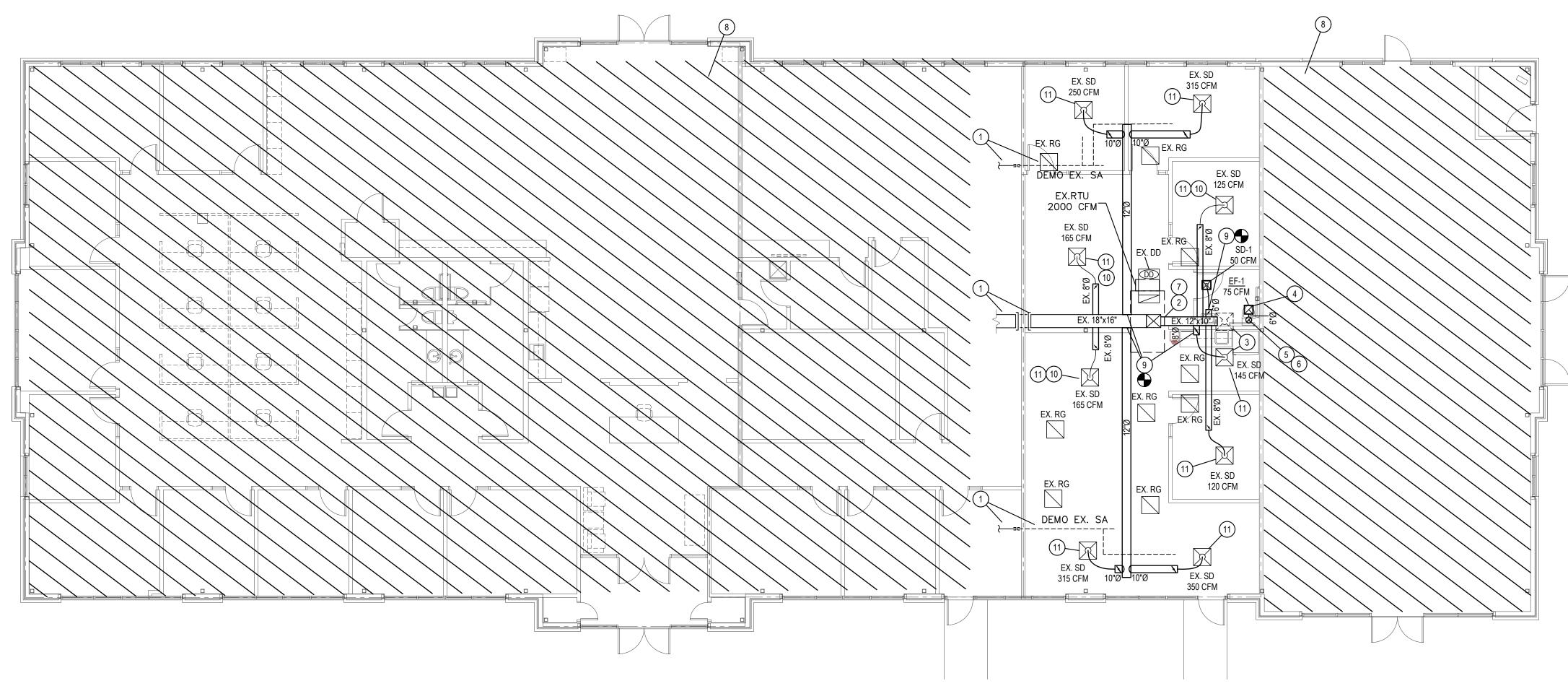
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MECHANICAL FLOOR PLAN





MECHANICAL SYMBOLS

NEW SUPPLY DIFFUSER

NEW RETURN AIR GRILLE

DUCT-MOUNTED SMOKE DETECTOR

SIZE OF RECTANGULAR DUCT

FLEXIBLE CONNECTION TO FAN

TRANSITION IN DUCT SIZE

MANUAL VOLUME DAMPER

MANUAL VOLUME DAMPER

SPLITTER DAMPER WITH HORIZONTAL REGULATOR

SUPPLY AIR DUCT UP/DOWN

RETURN AIR DUCT UP/DOWN

EXHAUST AIR DUCT UP/DOWN

IN DIRECTION OF FLOW

EXIST'G DUCT TO REMAIN

SIZE OF EXISTING DUCT

CONNECT TO EXISTING

EXIST'G DUCT TO BE REMOVED

EXISTING FLEXIBLE DUCTWORK

EXISTING SUPPLY DIFFUSER

CHANGE IN ELEVATION UP (UP) DOWN (DN)

SCHEDULED MECHANICAL EQUIPMENT

FIRE DAMPER

MOTORIZED CONTROL DAMPER

ELBOW WITH TURNING VANES

FLOOR PLAN NOTE DESIGNATION

EXHAUST GRILLE/FAN

SIZE OF ROUND DUCT

FLEXIBLE DUCTWORK

SUPPLY AIR

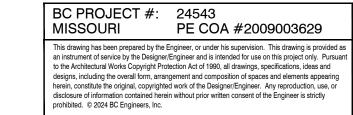
RETURN AIR

S.A.

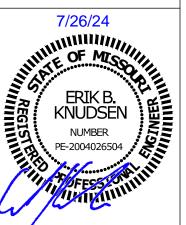
→ UP -

NEW DUCTWORK









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TOTAL CALCULATIONS, SCHEDULES

ALL EXISTING HVAC UNITS SHOULD HAVE A PREVENTATIVE MAINTENANCE CHECK-UP TO INCLUDE THE FOLLOWING CRITERIA

1. CHANGE ALL FILTERS.

2. CLEAN ALL CONDENSATE DRAIN PANS AND FLUSH ALL CONDENSATE DRAIN LINES.

CLEAN ALL EVAPORATOR AND CONDENSER COILS WITH A NON-ACID CLEANER.
 CHECK REFRIGERANT CHARGE (GUAGES OR RETURN/SUPPLY TEMPERATURE VARIANCE).

5. PROVIDE COMPLETE LUBRICATION OF ALL SHAFTS AND BEARINGS THAT HAVE LUBRICATION ZERKS.

THE REPLACEMENT OF ALL BELTS, HOSES AND FABRIC/RUBBER COATED ITEMS THAT ARE SUBJECT TO WEAR.
 CHECK AMPS OF THE INDOOR, OUTDOOR MOTORS, AND COMPRESSORS

CHECK AMPS OF THE INDOOR, OUTDOOR MOTORS, AND COMPRESSORS
 TURN UNIT POWER OFF - TIGHTEN ALL ELECTRICAL CONNECTIONS, CONTACTORS, ETC.

8. TURN UNIT POWER OFF - TIGHTEN ALL ELECTRICAL CONNECTIONS, CONTACTORS, ETC.

9. EXAMINE AND REPAIR ALL ELECTRICAL WIRING, CONTROLS, STARTERS, RELAYS, CAPACITORS AND LIKE ITEMS THAT TEND TO DETERIORATE OVER TIME OR BECOME

NON-OPERATIONAL. THIS INCLUDES SMOKE DETECTORS.

10. GREASE ALL FITTINGS

11. CHECK DUCTWORK CONNECTIONS AND REPAIR AS NEEDED.

11. OFFICE DOCTWORK CONNECTIONS AND REPAIR AS NEEDED.

12. NOTIFY GENERAL CONTRACTOR OF ANY REQUIRED PARTS OR REPAIRS NOT INCLUDED IN THIS LIST. ALL UNITS SHALL BE FUNCTIONING AND COOLING PROPERLY AT

COMPLETION OF JOB.

13. CHECK THE ECONOMIZER FOR PROPER FUNCTION AND CORRECT OPERATION OF THE SYSTEM WHEN A CALL FOR COOLING

 CHECK THE ECONOMIZER FOR PROPER FUNCTION AND CORRECT OPERATION OF THE SYSTEM WHEN A CALL FOR COOLING COMES FROM THE THERMOSTAT. REPAIR AND ADJUST AS NEEDED.

14. VERIFY ANY WORK REQUIRED BY THE LANDLORD PRIOR TO BID.

VERIFY ANY WORK REQUIRED BY THE LANDLORD PRIOR TO BID.
 ALL FINDINGS AND VALUES TO BE NOTED AND PROVIDED TO TENANT'S CONSTRUCTION MANAGER & OR TENANT'S MAINTENANCE DIRECTOR.

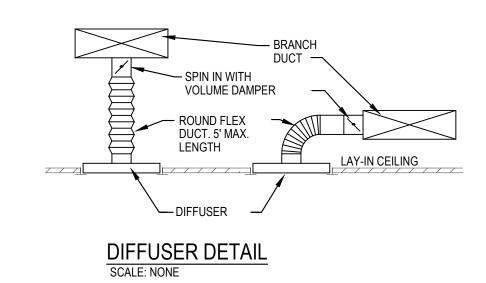
	DIFFUSER SCHEDULE											
MARK	MFGR	MODEL	BORDER TYPE	NECK SIZE	FACE SIZE	FINISH	DAMPER	ACCESSORIES	NOTES			
SD-1	TITUS	PAS/3	3	6"Ø	12"x12"	WHITE	-		-			

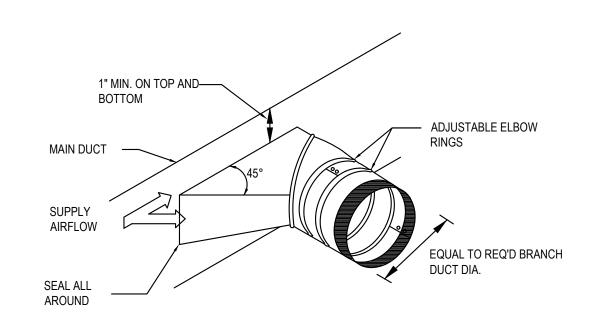
				EXHAU	ST FAN	SCHEDU	LE			
				EXTERNAL						
MARK	MFGR	MODEL	CFM	STATIC P. IN. WG.	RPM	VOLT/Ø/HZ	PWR	FAN TYPE	CONTROLS	NOTES
EF-1	СООК	GC-128	75	0.1	750	120/1/60	29 W	CEILING EXH.	SWITCH	1

NOTES: 1. PROVIDE CEILING GRILLE, INTEGRAL BACK DRAFT DAMPER, VARI-SPEED CONTROLLER (NEAR FAN AND ABOVE CEILING), FACTORY MEANS OF DISCONNECT AND WEATHER

2018 IMC

		OUTDOOR	AIR CALCU	LATIO	VS				
UNIT	Area (sqft)	OCCUPANCY CLASSIFICATION	Occupant Density #/1000 sqft	People outdoor airflow rate in breathing zone, (Rp) cfm/person	Area outdoor airflow rate in breathing zone, (Ra) cfm/sqft	Exhaust airflow rate cfm/sqft	Breathing zone outdoor airflow (Vbz)	Zone air distribution effectivene ss (Ez)	Zone outdoor airflow (cfm)
	426	Office spaces	5	5	0.06		36	0.8	45
	75	Break Room	25	5	0.06		14	0.8	17
	68	Toilet rooms public	0	0	0	50/70	0	0.8	0
	1036	Martial Arts	10	20	0.06		269	0.8	337
_	-							Total	399





BRANCH DUCT TAKEOFF DETAIL SCALE: NONE

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