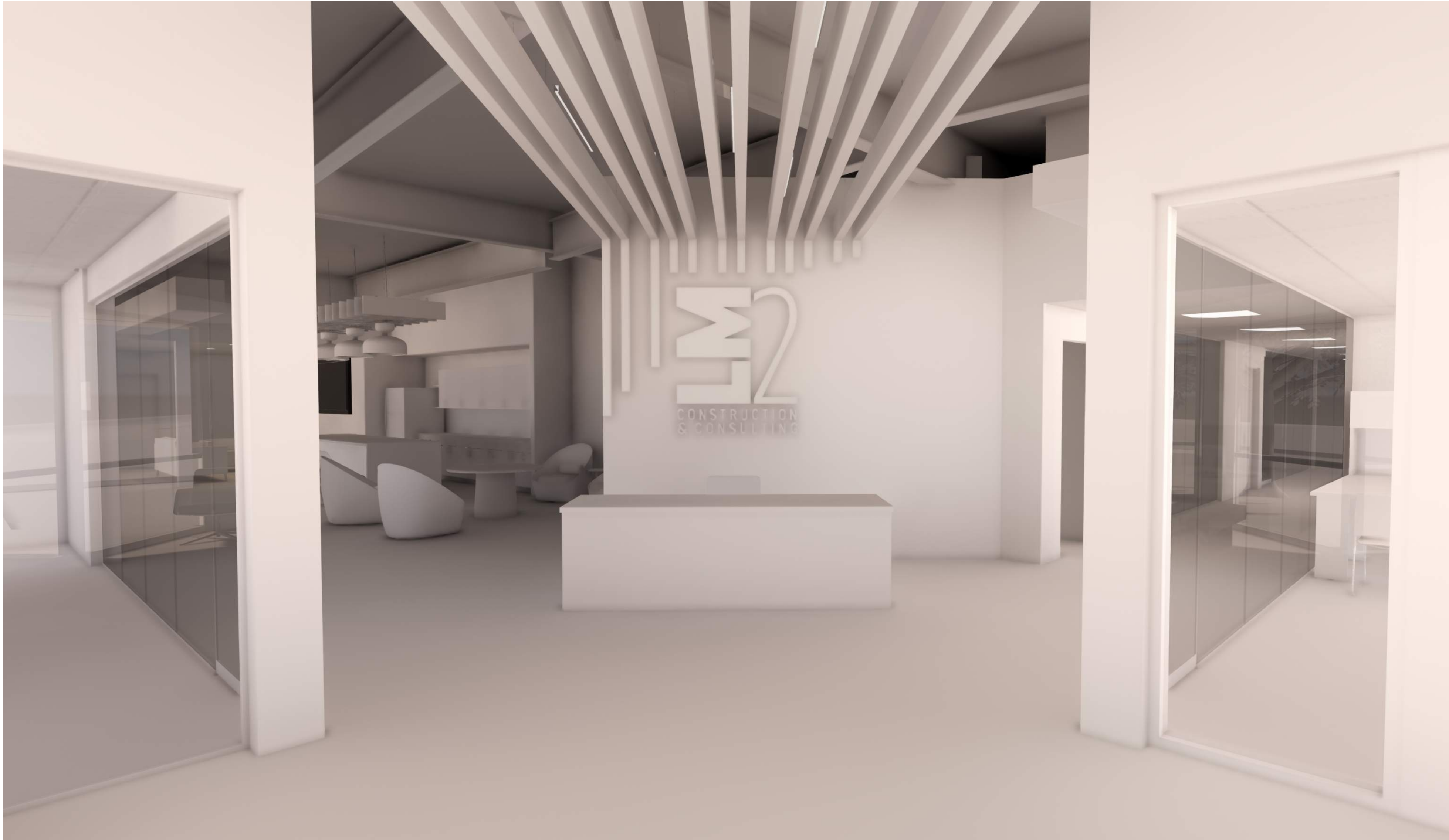


LM2 OFFICE RENOVATION

100% CONSTRUCTION DOCUMENTS

INTERIOR PERSPECTIVE:



DRAWING LIST	
1 - GENERAL	
G0.01	CODE REVIEW
G0.02	ACCESSIBILITY DIAGRAMS
ECA.01	ENERGY CODE ANALYSIS
ECA.02	ENERGY CODE NOTES
ECA.03	ENERGY CODE NOTES
3 - ARCHITECTURE	
D1.01	DEMO PLAN
A1.01	DIMENSION PLAN
A1.02	KEYNOTE PLAN
A2.01	ELEVATIONS
A3.01	WALL SECTIONS & DETAILS
A3.02	WALL SECTIONS & DETAILS
A4.01	INTERIOR ELEVATIONS
A4.02	INTERIOR ELEVATIONS
A5.01	REFLECTED CEILING PLAN
A6.01	DOOR SCHEDULE & WINDOW DETAILS
A7.01	INTERIOR SCHEDULES
A7.02	FINISH PLAN
A7.03	FF&E PLAN
A7.04	INTERIOR DETAILS
A7.05	INTERIOR DETAILS
4 - STRUCTURAL	
S0.01	GENERAL NOTES
S1.01	FOUNDATION PLAN
S2.01	SECTIONS
5 - MECHANICAL, PLUMBING & ELECTRICAL	
MEP0.01	COVER SHEET
MEP1.01	SPECIFICATIONS
MEP1.02	SPECIFICATIONS
MEP2.01	SITE PLAN
M0.01	FLOOR PLAN - MECHANICAL DEMOLITION
M1.01	FLOOR PLAN - HVAC
M2.01	MECHANICAL SCHEDULES
M3.01	MECHANICAL DETAILS
P0.01	FLOOR PLAN - PLUMBING DEMOLITION
P1.01	FLOOR PLAN - PLUMBING
P2.01	PLUMBING SCHEDULES & DETAILS
E0.01	FLOOR PLAN - ELECTRICAL DEMOLITION
E1.01	FLOOR PLAN - LIGHTING
E2.01	FLOOR PLAN - POWER
E3.01	FLOOR PLAN - SPECIAL SYSTEMS
E4.01	ELECTRICAL RISER DIAGRAM & SCHEDULES
E5.01	ELECTRICAL SCHEDULES & DETAILS



Missouri Certificate of Authority
#2003011262

Structural Engineer:
Bob D. Campbell & Co.
Missouri Certificate of Authority
#000442
4338 Belleview Ave.
Kansas City, MO 64111
816.531.4144

MEP Engineer:
PKMR Engineers
Missouri Certificate of Authority
#E-2002020886
13300 W. 98th Street
Lenexa, KS 66215
913.492.2400

JOB NUMBER 23011

LM2 OFFICE RENOVATION

9000 OLD SANTE FE ROAD
KANSAS CITY, MO 64138



Dalyn Novak - Architect
MO # 2011006178

ISSUE DATE 04/17/2024
No. Description Date

WSKF, Inc. © 2024

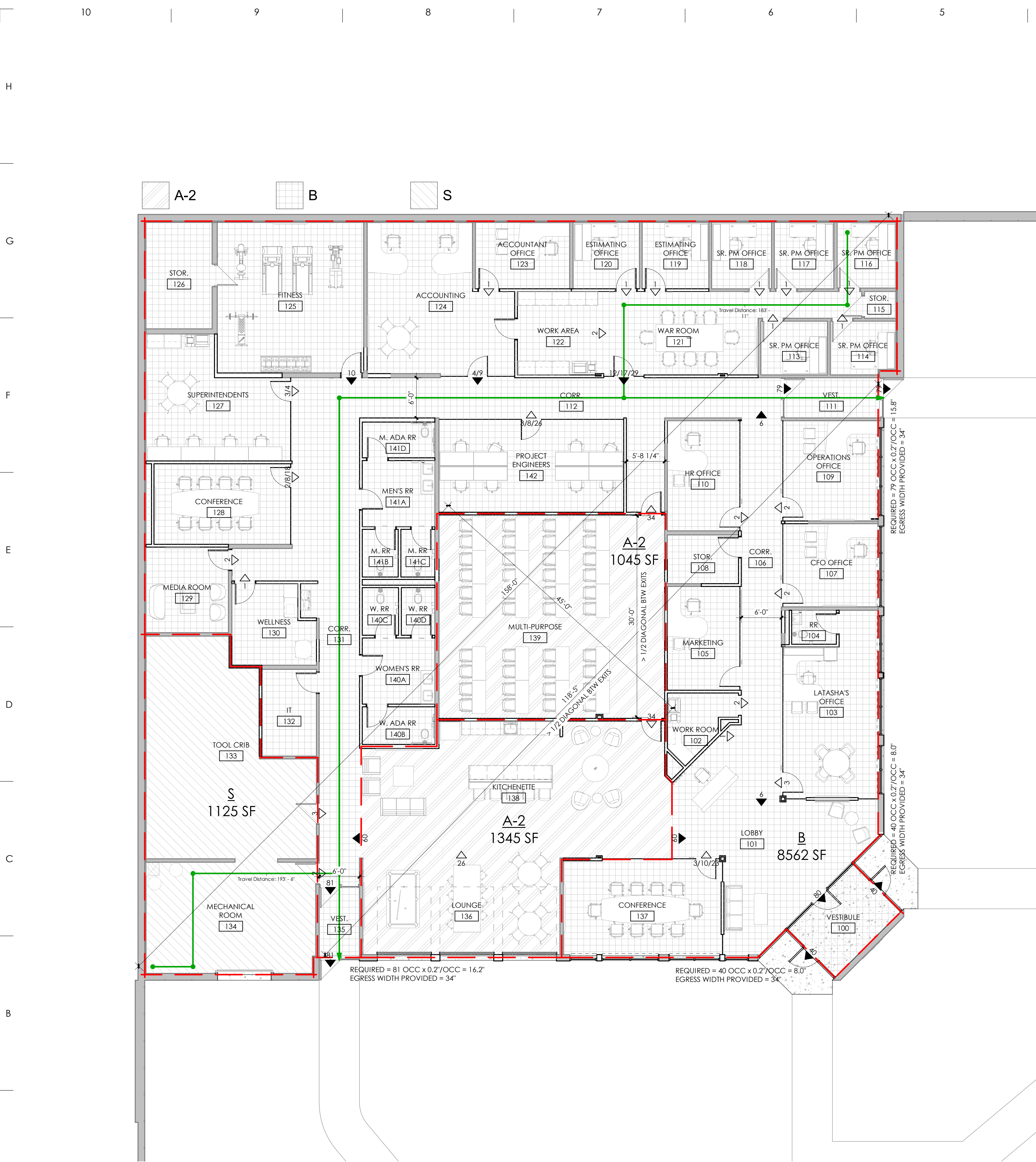
COVER

G0.00

I HEREBY CERTIFY THAT THE DOCUMENTS INTENDED TO BE AUTHENTICATED BY MY SEAL ARE LIMITED TO THE COVER AND THOSE SHEETS LISTED UNDER THE ARCHITECTURAL HEADER OF THE DRAWING LIST. I HEREBY DISCLAIM RESPONSIBILITY FOR ALL OTHER PLANS, SPECIFICATIONS, ESTIMATES, REPORTS, OR OTHER DOCUMENTS OR INSTRUMENTS RELATING TO OR INTENDED TO BE USED FOR ANY PART OF PARTS OF THE ARCHITECTURAL OR ENGINEERING PROJECT.

Dalyn Novak
Dalyn Novak - Architect
MO # 2011006178

04/17/24
DATE



A10 01 FIRST FLOOR
1/8" = 1'-0"

ADOPTED CODES

KANSAS CITY, MO

2018 INTERNATIONAL BUILDING CODE
2017 NATIONAL ELECTRICAL CODE
2018 INTERNATIONAL FUEL GAS CODE
2018 INTERNATIONAL MECHANICAL CODE
2018 UNIFORM PLUMBING CODE
2018 INTERNATIONAL EXISTING BUILDING CODE
2018 NFPA 101 LIFE SAFETY
2018 INTERNATIONAL FIRE CODE
2021 INTERNATIONAL ENERGY CONSERVATION CODE
2009 ANSI A117.1

CODE REVIEW INFORMATION

2018 IBC

CHAPTER 3 - OCCUPANCY CLASSIFICATION AND USE

303 - ASSEMBLY GROUP A-3
304 - BUSINESS GROUP B
311 - STORAGE GROUP S-2

CHAPTER 5 - GENERAL BUILDING HEIGHTS AND AREAS

503 - GENERAL BUILDING HEIGHT AND AREA LIMITATIONS
504 - BUILDING HEIGHT AND NUMBER OF STORIES

506 - BUILDING AREA

506.2 - ALLOWABLE AREA DETERMINATION

BUILDING AREA (PER TABLE 506.2)
A-2 (II-B) ALLOWABLE 9500 SF
B (II-B) ALLOWABLE 23000 SF
S-2 (II-B) ALLOWABLE 26000 SF

506.2.2 MIXED-OCCUPANCY ONE STORY BUILDINGS

EQUATION S-2

$A_a = [A_1 + (N_S \times I_f)] \times S_a$
 $A_a = [9500 + (9500 \times .75) \times 1]$
 $A_a = 16,625 \text{ SF}$

ACTUAL AREA - 12,075 SF

A_a = ALLOWABLE AREA SF

A_1 = APPLICABLE (NS, S1, S13R, S13D) TABULAR

ALLOWABLE AREA FACTOR PER 506.2

NS = NONSPRINKLERED TABULAR ALLOWABLE AREA

FACTOR PER 506.2

I_f = AREA FACTOR FRONTAGE INCREASE

S_a = STORIES ABOVE GRADE PLANE

506.3 FRONTAGE INCREASE

MIN PERIMETER ON PUBLIC WAY $\geq 25\%$

EQUATION S-5

$I_f = [F / (P - 0.25)] W / 30$

$I_f = [456 / (456 - 25)] 30 / 30$

$I_f = .75$

I_f = FRONTAGE AREA FACTOR INCREASE

F = BUILDING PERIMETER ON PUBLIC WAY > 20 FT

P = PERIMETER OF BLDG

W = WIDTH OF PUBLIC WAY PER 506.3.2

508 - MIXED USE AND OCCUPANCY

508.3 - MIXED USE AND OCCUPANCY

NON SEPARATED OCCUPANCIES

GROUP A-2 MOST RESTRICTIVE

CHAPTER 6 - TYPE OF CONSTRUCTION

601 - GENERAL

FIRE RESISTANCE REQUIREMENTS - II-B (TABLE 601)

STRUCTURAL FRAME 0 HR

EXTERIOR BEARING WALLS 0 HR

INTERIOR BEARING WALLS 0 HR

INTERIOR NON-BEARING WALLS 0 HR

FLOOR CONSTRUCTION 0 HR

ROOF CONSTRUCTION 0 HR

CHAPTER 8 - INTERIOR FINISHES

FINISH REQUIREMENTS BY OCCUPANCY (TABLE 803.13)

NONSPRINKLERED A-2 B S-2

EXIT STAIRWAY & PASSAGEWAY A A B

CORRIDORS A B B

ROOMS & ENCLOSED SPACES B C C

CHAPTER 9 - FIRE PROTECTION AND LIFE SAFETY SYSTEMS

903 - AUTOMATIC SPRINKLER SYSTEMS

BUILDING IS NON-SPRINKLERED

906 - PORTABLE FIRE EXTINGUISHERS

MAX TRAVEL DISTANCE 75 FT

CHAPTER 10 - MEANS OF EGRESS

1004 - OCCUPANT LOAD

SEE PLAN FOR ROOM OCCUPANCIES

1004.8 CONCENTRATED BUSINESS USE AREAS

OCCUPANT LOAD SHALL BE ACTUAL OCC LOAD NOT

$\leq 50 \text{ SF/OCCUPANT}$

1005 - MEANS OF EGRESS SIZING

TOTAL EGRESS WIDTH PROVIDED

SEE CODE PLAN FOR WIDTHS AT EACH EXIT

1006 - NUMBER OF EXITS AND EXIT ACCESS DOORWAYS

TOTAL EXITS PROVIDED (PER TABLE 1006.3.2)

REQUIRED 2

PROVIDED 3

MAX COMMON PATH OF EGRESS TRAVEL

W/O SPRINKLER A-2 B/S-2

OCC LOAD ≤ 30 - 75 FT 100 FT

OCC LOAD ≥ 30 - 75 FT 75 FT

1017 - EXIT ACCESS TRAVEL DISTANCE

MAX TRAVEL DISTANCE (PER TABLE 1017.2)

W/O SPRINKLER

REQUIRED 200 FT

PROVIDED 194 FT

1020 - CORRIDORS

CORRIDOR WIDTH (PER TABLE 1020.2)

REQUIRED 44"

PROVIDED MIN 68"

CHAPTER 29 - PLUMBING SYSTEMS

2902 - MINIMUM PLUMBING FACILITIES
FIXTURE REQUIREMENTS (TABLE 2902.1)

A-2 OCC = 155

B = 80

S-2 = 5 OCC

TOTAL = 240

WATER CLOSETS REQUIRED

A-2 OCC = 155 OCC / 2 = 78 OCC

MEN = 1/125 = 78/125 = .62 WC

WOMEN = 1/65 = 78/65 = 1.2 WC

B OCC = 80 OCC / 2 = 40 OCC

MEN = 1/25 = 40/25 = 1.6 WC

WOMEN = 1/25 = 40/25 = 1.6 WC

S-2 OCC = 5 OCC / 2 = 3 OCC

MEN = 3/100 = 78/125 = .03 WC

WOMEN = 3/100 = 78/65 = .03 WC

TOTAL

MEN = 2.25 WC

WOMEN = 2.83 WC

WATER CLOSETS PROVIDED

MEN = 3 WC

WOMEN = 3+1 WC

LAVATORIES REQUIRED

A-2 OCC = 155 OCC / 2 = 78 OCC

MEN = 1/200 = 78/200 = .39 LAV

WOMEN = 1/200 = 78/200 = .39 LAV

B OCC = 80 OCC / 2 = 40 OCC

MEN = 1/40 = 40/40 = 1 LAV

WOMEN = 1/40 = 40/40 = 1 LAV

S-2 OCC = 5 OCC / 2 = 3 OCC

MEN = 1/100 = 3/100 = .03 LAV

WOMEN = 1/100 = 3/100 = .03 LAV

TOTAL

MEN = 1.69 WC

WOMEN = 1.69 WC

LAVATORIES PROVIDED

MEN = 17 LAV

WOMEN = 17+1 LAV

DRINKING FOUNTAINS REQUIRED

A-2 OCC = 155 OCC

= 155/500 = .31 DF

B OCC = 80 OCC

= 80/100 = .8 DF

S-2 OCC = 5 OCC

= 5/1000 = .005 DF

TOTAL = 1.12 DF

DRINKING FOUNTAINS PROVIDED

TOTAL = 2 DF

SERVICE SINK REQUIRED

ALL OCC = 1 SERVICE SINK

SERVICE SINK PROVIDED

TOTAL = 1 SERVICE SINK

LEGEND

▲ ← DIRECTION OF TRAVEL

15 ← COMBINED OCCUPANCY LOAD

▲ ← DIRECTION OF TRAVEL

15 ← ROOM OCCUPANCY LOAD

F.E. FIRE EXTINGUISHER & BRACKET

F.E.C. FIRE EXTINGUISHER & CABINET



Missouri Certificate of Authority
#2003011262

Structural Engineer:

Bob D. Campbell & Co.

Missouri Certificate of Authority

#000442

4338 Bellevue Ave.

Kansas City, MO 64111

816.531.4144

MEP Engineer:

PKMR Engineers

Missouri Certificate of Authority

#E-2002020886

13300 W. 98th Street

Lenexa, KS 66215

913.492.2400

JOB NUMBER 23011

LM2 OFFICE RENOVATION

9000 OLD SANTE FE ROAD
KANSAS CITY, MO 64138



04/17/24

Dalyn Novak - Architect

MO # 2011006178

ISSUE DATE 04/17/2024

No Description Date

4/17/2024 10:49:24 AM C:\Users\JamesLukacovic\Desktop\23011_LM2 Office Renovation_CENTRAL V22_JLukacovic@wskfarch.com.rvt

H
G
F
E
D
C
B
A

10

9

8

7

6

5

4

3

2

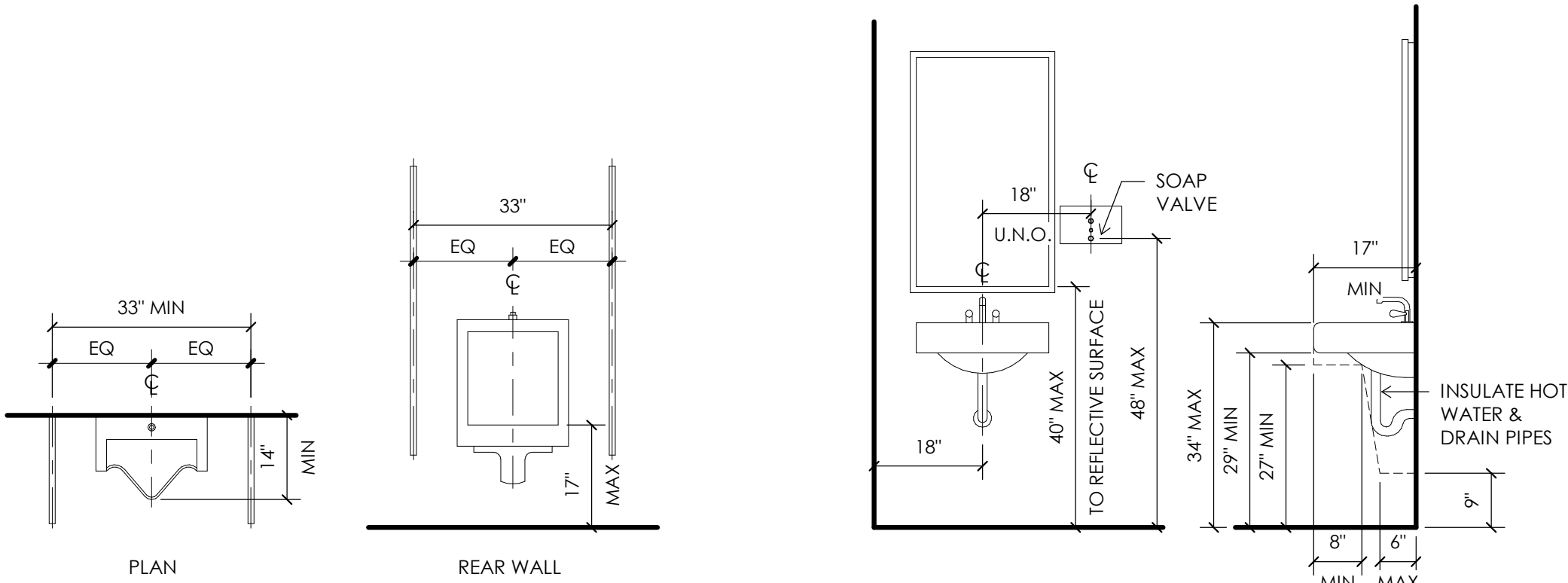
1



Missouri Certificate of Authority
#2003011262

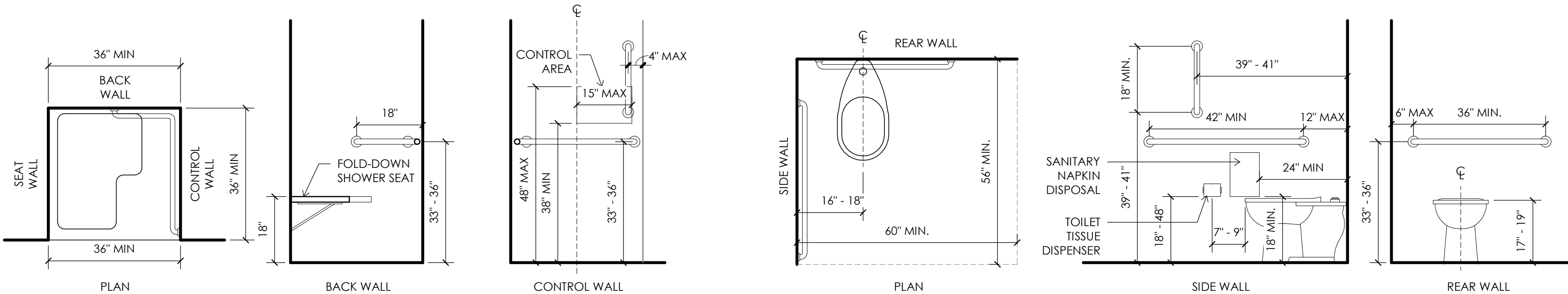
Structural Engineer:
Bob D. Campbell & Co.
Missouri Certificate of Authority
#000442
4338 Belleview Ave.
Kansas City, MO 64111
816.531.4144

MEP Engineer:
PKMR Engineers
Missouri Certificate of Authority
#E-2002020886
13300 W. 98th Street
Lenexa, KS 66215
913.492.2400



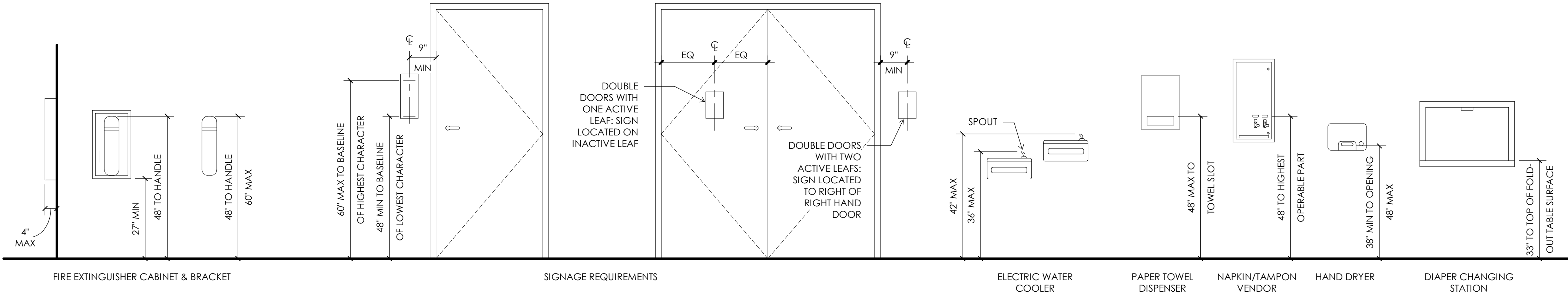
URINAL CLEARANCES
ALL DIMENSIONS ARE TO FINISH FACE OF WALL, **NOT** STUD

LAVATORY CLEARANCES
ALL DIMENSIONS ARE TO FINISH FACE OF WALL, **NOT** STUD



TRANSFER TYPE SHOWER COMPARTMENT
ALL DIMENSIONS ARE TO FINISH FACE OF WALL, **NOT** STUD

WATER CLOSET CLEARANCES
ALL DIMENSIONS ARE TO FINISH FACE OF WALL, **NOT** STUD



ACCESSIBILITY
A10
1/2" = 1'-0"

JOB NUMBER 23011

LM2 OFFICE RENOVATION

9000 OLD SANTE FE ROAD
KANSAS CITY, MO 64138

110 Armour Road North Kansas City, Missouri 64116 Tel: 816.300.4101 Fax 816.300.4102



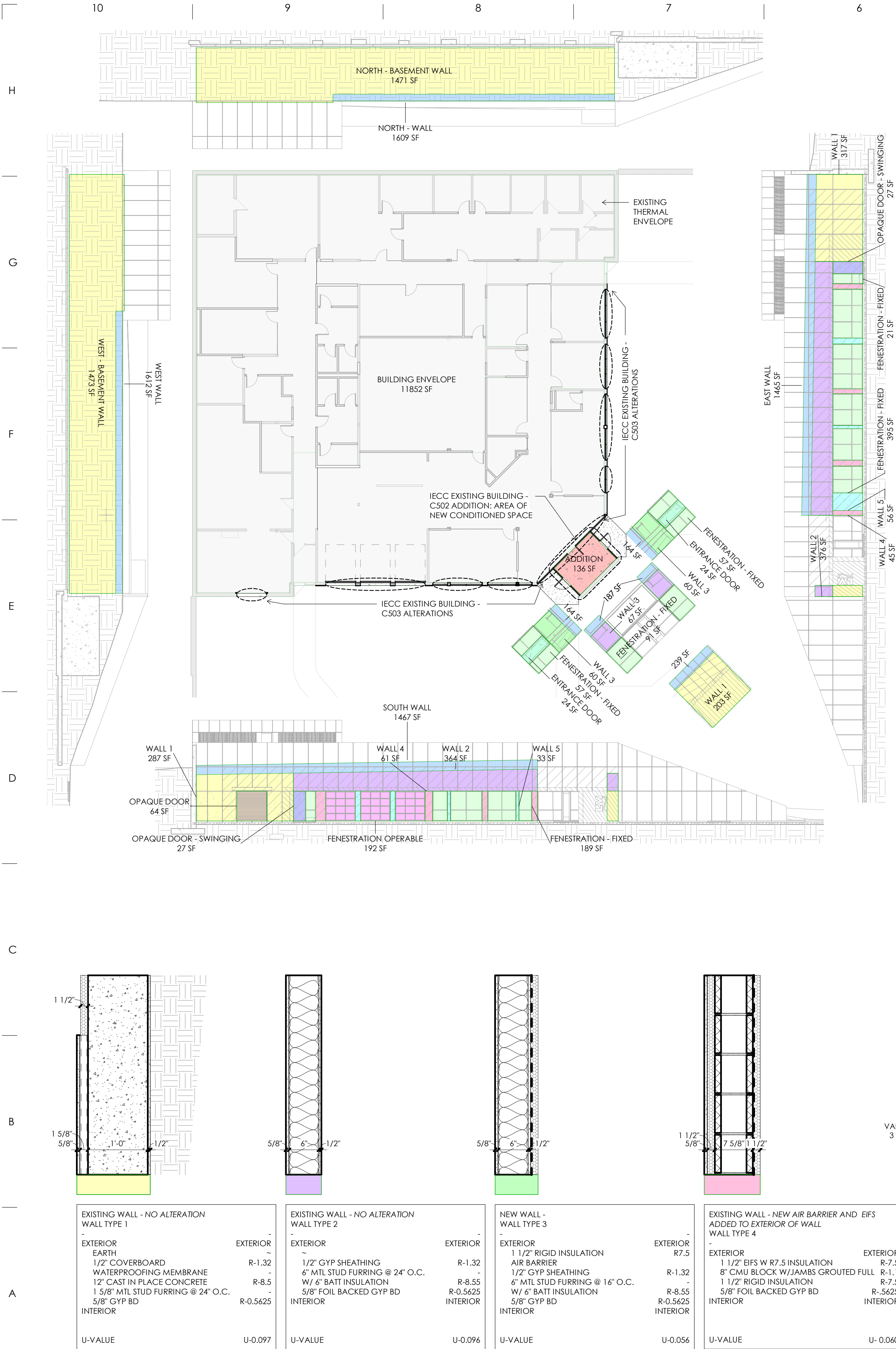
04/17/24

Dalyn Novak - Architect MO # 2011006178	
ISSUE DATE	04/17/2024
No	Description
	Date

WSKF, Inc. © 2024

ACCESSIBILITY
DIAGRAMS

G0.02



ENERGY CODE NARRATIVE

THIS IS A RENOVATION OF AN EXISTING BUILDING; PER CHAPTER 5 OF THE IECC THIS BUILDING HAS BOTH ADDITION AND ALTERATION COMPONENTS

THIS BUILDING WILL BE FOLLOWING THE PRESCRIPTIVE COMPLIANCE PATH AS OUTLINED IN **C5** AND **C401.2.1**

THERMAL ENVELOPE CERTIFICATE - SEE COMCHECK ON THIS PAGE - FULL PDF COPY WILL ALSO BE SUBMITTED

THE SCOPE OF WORK THAT IMPACTS THE THERMAL ENVELOPE OF THE BUILDING ARE AS FOLLOWS

C502 ADDITIONS:
AN EXISTING COVERED SPACE IS BEING ENCLOSED FOR THE NEW VESTIBULE. THIS RESULTS IN AN ADDITION OF ~136 SF OF CONDITIONED SPACE TO THE BUILDING

PER C502.2 THE ADDITION IS EXCEPTED FROM APPLYING WITH SECTION C502 OF THE CODE BECAUSE THE PROPOSED UA (0.100) IS NOT > 110% OF THE TARGET UA (0.110)

THE BUILDING WILL COMPLY WITH THE PROVISIONS OF **C503** FOR ALTERATIONS (BELOW)

C503 ALTERATIONS:
EXISTING HOLLOW METAL WINDOWS AND SINGLE WYTHE CMU WALLS BELOW THE EXISTING OPENINGS ARE BEING REMOVED AND ARE REPLACED BY FULL HEIGHT STOREFRONT AND 3 GLAZED OVERHEAD SECTIONAL DOORS

AN EXISTING HOLLOW METAL SERVICE DOOR IS BEING REMOVED AND REPLACED BY A NEW LARGER COILING OVERHEAD DOOR

THERE WILL BE SOME INFILL OF MTL STUD WALLS BETWEEN THE OPENINGS AND ALL NEW METAL STUD WALLS AND REMAINING EXISTING CMU WALLS WILL BE COVERED WITH EIFS

PER C503
NEW BUILDING ENVELOPE ASSEMBLIES THAT ARE PART OF THE ALTERATIONS SHALL COMPLY WITH **C402.1-C402.5** AS FOLLOWS:

C402.1 - GENERAL
C402.1.3 INSULATION COMPONENT R VALUE
C402.1.4 ASSEMBLY U/C/F - FACTOR
SEE WALL ASSEMBLIES ON THIS PAGE

C402.2 - SPECIFIC BUILDING THERMAL ENVELOPE INSULATIONS REQUIREMENTS
C402.2.1 - ROOF ASSEMBLY
N/A - ROOF WILL NOT BE ALTERED
C402.2.2 - ABOVE GRADE WALLS
SEE WALL ASSEMBLIES ON THIS PAGE
C402.2.3 - FLOORS
N/A
C402.2.4 - SLAB ON GRADE
SEE **C402.1.3**

C402.3 - ROOF SOLAR REFLECTANCE AND THERMAL EMITANCE
THE ROOF WILL NOT BE ALTERED BY THIS WORK

C402.4 - FENESTRATION
C402.4.1 - MAX AREA
THR MAX AREA OF FENESTRATION WILL BE 29% OF THE ABOVE GRADE WALLS. THIS PERCENTAGE IS HIGH BECAUSE THIS IS AN EARTH CONTACT BUILDING AND HALF OF THE WALLS ARE BELOW GRADE AND ARE NOT USED IN THE CALCULATION. IF FENESTRATION IS CALCULATED AS A PERCENTAGE OF TOTAL BUILDING ENVELOPE WALL AREA IT IS WELL WITHIN THE REQUIREMENT - SEE CALCULATIONS BELOW

C402.5 - AIR LEAKAGE - THERMAL ENVELOPE
C402.5.1 - AIR BARRIERS
AS THIS IS AN ALTERATION TO AN EXISTING BUILDING THERE WILL NOT BE A CONTINUOUS AIR BARRIER. NEW ASSEMBLIES WILL COMPLY WITH **C402.5.1.3**
C402.5.2 - DWELLING/SLEEPING UNITS
N/A
C402.5.3 - THERMAL ENVELOPE TESTING
AS THIS IS AN ALTERATION TO A VERY SMALL PERCENTAGE OF THE EXISTING BUILDING ENVELOPE IT MAY NOT BE POSSIBLE TO DO ANY MEANINGFUL TESTS OF THE THERMAL ENVELOPE. SEE **C402.5.4**
C402.5.4 - AIR LEAKAGE OF FENESTRATION
PER EXCEPTION 1 THIS PROJECT IS EXCEPTED BECAUSE FENESTRATION WILL BE FIELD FABRICATED
C402.5.5 - ROOMS W/ FUEL APPLIANCES
N/A
C402.5.6 - DOORS/ACCESS TO SHAFT SPACES
N/A
C402.5.7 - AIR INTAKES
RE-MEP SHEETS
C402.5.8 - N/A NO LOADING DOCKS IN THE PROJECT
C402.5.9 - A NEW VESTIBULE IS BEING CREATED UNDER THE SCOPE OF THIS PROJECT
C402.5.10 - N/A NO RECESSED LIGHTING WILL BE PROVIDED IN THE THERMAL ENVELOPE
C402.5.11 - INTERLOCKING
DUE TO THE REUSE OF EXISTING MECHANICAL SYSTEMS IT IS NOT POSSIBLE TO RETROFIT INTERLOCK CONTROLS.

FENESTRATION CALCULATIONS EXISTING ELEVATIONS
E - 185SF + 21SF / 1237SF
S - 173SF + 21SF / 1238SF
SE - 209SF / 363SF

EXISTING FENESTRATION = 185+21+173+21+209=609SF
EXISTING ABOVE GRADE ENVELOPE=1237+1238+363=2838SF
609SF/2838SF = 21.5%

FENESTRATION/ELEVATION AREA
N - 0SF / 1610SF
E - 395SF + 21SF / 1465SF
S - 189SF + 192SF + 21SF / 1467SF
W - 0SF / 1610SF
SE - 91 / 187SF + 239SF
VESTIBULE NE - 80SF / 164SF
VESTIBULE SW - 80SF / 164SF

FENESTRATION SF = 395+21+189+192+21+80+80+91=1,069SF
ABOVE GRADE ENVELOPE SF=1465+1467+164+167+164 + 239 = **3,689SF**
TOTAL ENVELOPE SF=1610+1610+1465+1467+164+187+164+ 239 = **9,906SF**

1,069SF/3,689SF = **29%** OF ABOVE GRADE WALLS
1,069SF/6,906SF = **15.5%** OF BUILDING ENVELOPE

COMcheck Software Version COMcheckWeb Envelope Compliance Certificate									
Project Information		2021 IECC LM2 Office Renovation - Alterations Kansas City, Missouri Attention 29%							
Energy Code:	2021 IECC								
Project Title:	LM2 Office Renovation - Alterations								
Location:	Kansas City, Missouri								
Project Type:	Alterations								
Envelope Compliance Path:	29%								
Construction Site:	On-Site	Design/Contractor:							
Building Area		Floor Area							
1-Office: Residential	2-Office: Residential	15007 143							
Envelope Assemblies		R-Value	Core	U-Factor	SHGC	Factor	Max. Allowed		
Floor Assemblies		Core	U-Factor	SHGC	Factor	Max. Allowed			
Floor Assemblies		Core	U-Factor	SHGC	Factor	Max. Allowed			
Floor Assemblies		Core	U-Factor	SHGC	Factor	Max. Allowed			
Floor Assemblies		Core	U-Factor	SHGC	Factor	Max. Allowed			
Floor Assemblies		Core	U-Factor	SHGC	Factor	Max. Allowed			
Floor Assemblies		Core	U-Factor	SHGC	Factor	Max. Allowed			
Floor Assemblies		Core	U-Factor	SHGC	Factor	Max. Allowed			
Floor Assemblies		Core	U-Factor	SHGC	Factor	Max. Allowed			
Floor Assemblies		Core	U-Factor	SHGC	Factor	Max. Allowed			
Floor Assemblies		Core	U-Factor	SHGC	Factor	Max. Allowed			
Floor Assemblies		Core	U-Factor	SHGC	Factor	Max. Allowed			
Floor Assemblies		Core	U-Factor	SHGC	Factor	Max. Allowed			
Floor Assemblies		Core	U-Factor	SHGC	Factor	Max. Allowed			
Floor Assemblies		Core	U-Factor	SHGC	Factor	Max. Allowed			
Floor Assemblies		Core	U-Factor	SHGC	Factor	Max. Allowed			
Floor Assemblies		Core	U-Factor	SHGC	Factor	Max. Allowed			
Floor Assemblies		Core	U-Factor	SHGC	Factor	Max. Allowed			
Floor Assemblies		Core	U-Factor	SHGC	Factor	Max. Allowed			
Floor Assemblies		Core	U-Factor	SHGC	Factor	Max. Allowed			
Floor Assemblies		Core	U-Factor	SHGC	Factor	Max. Allowed			
Floor Assemblies		Core	U-Factor	SHGC	Factor	Max. Allowed			
Floor Assemblies		Core	U-Factor	SHGC	Factor	Max. Allowed			
Floor Assemblies		Core	U-Factor	SHGC	Factor	Max. Allowed			
Floor Assemblies		Core	U-Factor	SHGC	Factor	Max. Allowed			
Floor Assemblies		Core	U-Factor	SHGC	Factor	Max. Allowed			
Floor Assemblies		Core	U-Factor	SHGC	Factor	Max. Allowed			
Floor Assemblies		Core	U-Factor	SHGC	Factor	Max. Allowed			
Floor Assemblies		Core	U-Factor	SHGC	Factor	Max. Allowed			
Floor Assemblies		Core	U-Factor	SHGC	Factor	Max. Allowed			
Floor Assemblies		Core	U-Factor	SHGC	Factor	Max. Allowed			
Floor Assemblies		Core	U-Factor	SHGC	Factor	Max. Allowed			
Floor Assemblies		Core	U-Factor	SHGC	Factor	Max. Allowed			
Floor Assemblies		Core	U-Factor	SHGC	Factor	Max. Allowed			
Floor Assemblies		Core	U-Factor	SHGC	Factor	Max. Allowed			
Floor Assemblies		Core	U-Factor	SHGC	Factor	Max. Allowed			
Floor Assemblies		Core	U-Factor	SHGC	Factor	Max. Allowed			
Floor Assemblies		Core	U-Factor	SHGC	Factor	Max. Allowed			
Floor Assemblies		Core	U-Factor	SHGC	Factor	Max. Allowed			
Floor Assemblies		Core	U-Factor	SHGC	Factor	Max. Allowed			
Floor Assemblies		Core	U-Factor	SHGC	Factor	Max. Allowed			
Floor Assemblies		Core	U-Factor	SHGC	Factor	Max. Allowed			
Floor Assemblies		Core	U-Factor	SHGC	Factor	Max. Allowed			
Floor Assemblies		Core	U-Factor	SHGC	Factor	Max. Allowed			
Floor Assemblies		Core	U-Factor	SHGC	Factor	Max. Allowed			
Floor Assemblies		Core	U-Factor	SHGC	Factor	Max. Allowed			
Floor Assemblies		Core	U-Factor	SHGC	Factor	Max. Allowed			
Floor Assemblies		Core	U-Factor	SHGC	Factor	Max. Allowed			
Floor Assemblies		Core	U-Factor	SHGC	Factor	Max. Allowed			
Floor Assemblies		Core	U-Factor	SHGC	Factor	Max. Allowed			
Floor Assemblies		Core	U-Factor	SHGC	Factor	Max. Allowed			
Floor Assemblies		Core	U-Factor	SHGC	Factor	Max. Allowed			
Floor Assemblies		Core	U-Factor	SHGC	Factor	Max. Allowed			
Floor Assemblies		Core	U-Factor	SHGC	Factor	Max. Allowed			
Floor Assemblies		Core	U-Factor	SHGC	Factor	Max. Allowed			
Floor Assemblies		Core	U-Factor	SHGC	Factor	Max. Allowed			
Floor Assemblies		Core	U-Factor	SHGC	Factor	Max. Allowed			
Floor Assemblies		Core	U-Factor	SHGC	Factor	Max. Allowed			
Floor Assemblies		Core	U-Factor	SHGC	Factor	Max. Allowed			
Floor Assemblies		Core	U-Factor	SHGC	Factor	Max. Allowed			
Floor Assemblies		Core	U-Factor	SHGC	Factor	Max. Allowed			
Floor Assemblies		Core	U-Factor	SHGC	Factor	Max. Allowed			
Floor Assemblies		Core	U-Factor	SHGC	Factor	Max. Allowed			
Floor Assemblies		Core	U-Factor	SHGC	Factor	Max. Allowed			
Floor Assemblies		Core	U-Factor	SHGC	Factor	Max. Allowed			
Floor Assemblies		Core	U-Factor	SHGC	Factor	Max. Allowed			
Floor Assemblies		Core	U-Factor	SHGC	Factor	Max. Allowed			
Floor Assemblies		Core	U-Factor	SHGC	Factor	Max. Allowed			
Floor Assemblies		Core	U-Factor	SHGC	Factor	Max. Allowed			
Floor Assemblies		Core	U-Factor	SHGC	Factor	Max. Allowed			
Floor Assemblies		Core	U-Factor	SHGC	Factor	Max. Allowed			
Floor Assemblies		Core	U-Factor	SHGC	Factor	Max. Allowed			
Floor Assemblies		Core	U-Factor	SHGC	Factor	Max. Allowed			
Floor Assemblies		Core	U-Factor	SHGC	Factor	Max. Allowed			
Floor Assemblies		Core	U-Factor	SHGC	Factor	Max. Allowed			
Floor Assemblies		Core	U-Factor	SHGC	Factor	Max. Allowed			
Floor Assemblies		Core	U-Factor	SHGC	Factor	Max. Allowed			
Floor Assemblies		Core	U-Factor	SHGC	Factor	Max. Allowed			
Floor Assemblies</									

H

G

F

E

D

C

B

A

L

MECHANICAL COMMISSIONING NOTES

GENERAL COMMISSIONING NOTES:
THE BUILDING OPERATIONS AND MAINTENANCE DOCUMENTS SHALL BE PROVIDED TO THE OWNER AND SHALL CONSIST OF MANUFACTURERS' INFORMATION, SPECIFICATIONS AND RECOMMENDATIONS; PROGRAMMING PROCEDURES AND DATA POINTS; NARRATIVES; AND OTHER MEANS OF ILLUSTRATING TO THE OWNER HOW THE BUILDING, EQUIPMENT AND SYSTEMS ARE INTENDED TO BE INSTALLED, MAINTAINED AND OPERATED. REQUIRED REGULAR MAINTENANCE ACTIONS FOR EQUIPMENT AND SYSTEMS SHALL BE CLEARLY STATED ON A READILY VISIBLE LABEL. THE LABEL SHALL INCLUDE THE TITLE OR PUBLICATION NUMBER FOR THE OPERATION AND MAINTENANCE MANUAL FOR THAT PARTICULAR MODEL AND TYPE OF PRODUCT.

PRIOR TO THE FINAL MECHANICAL AND PLUMBING INSPECTIONS, AN APPROVED AGENCY SHALL PROVIDE EVIDENCE OF MECHANICAL SYSTEMS COMMISSIONING AND COMPLETION IN ACCORDANCE WITH THE PROVISIONS OF IECC 2021 C408.2.

COPIES OF ALL DOCUMENTATION SHALL BE GIVEN TO THE OWNER OR OWNER'S AUTHORIZED AGENT AND MADE AVAILABLE TO THE CODE OFFICIAL UPON REQUEST.

- A COMMISSIONING PLAN SHALL BE DEVELOPED IN ACCORDANCE WITH C408.2.1 BY AN APPROVED AGENCY AND SHALL INCLUDE THE FOLLOWING ITEMS:
- A NARRATIVE DESCRIPTION OF THE ACTIVITIES THAT WILL BE ACCOMPLISHED DURING EACH PHASE OF COMMISSIONING, INCLUDING THE PERSONNEL INTENDED TO ACCOMPLISH EACH OF THE ACTIVITIES.
 - A LISTING OF THE SPECIFIC EQUIPMENT, APPLIANCES OR SYSTEMS TO BE TESTED AND A DESCRIPTION OF THE TESTS TO BE PERFORMED.
 - FUNCTIONS TO BE TESTED INCLUDING, BUT NOT LIMITED TO, CALIBRATIONS AND ECONOMICIZER CONTROLS.
 - CONDITIONS UNDER WHICH THE TEST WILL BE PERFORMED. TESTING SHALL AFFIRM WINTER AND SUMMER DESIGN CONDITIONS AND FULL OUTSIDE AIR CONDITIONS.
 - MEASURABLE CRITERIA FOR PERFORMANCE.

SYSTEMS ADJUSTING AND BALANCING
HVAC SYSTEMS SHALL BE BALANCED IN ACCORDANCE WITH GENERALLY ACCEPTED ENGINEERING STANDARDS. AIR AND WATER FLOW RATES SHALL BE MEASURED AND ADJUSTED TO DELIVER FINAL FLOW RATES WITHIN THE TOLERANCES PROVIDED IN THE PRODUCT SPECIFICATIONS. TEST AND BALANCE ACTIVITIES SHALL INCLUDE AIR SYSTEM AND HYDRONIC SYSTEM BALANCING.

AIR SYSTEMS BALANCING
EACH SUPPLY AIR OUTLET AND ZONE TERMINAL DEVICE SHALL BE EQUIPPED WITH MEANS FOR AIR BALANCING IN ACCORDANCE WITH THE REQUIREMENTS OF CHAPTER 6 OF THE INTERNATIONAL MECHANICAL CODE. AIR SYSTEMS SHALL BE BALANCED IN A MANNER TO FIRST MINIMIZE THROTTLING LOSSES THEN, FOR FANS WITH SYSTEM POWER OF GREATER THAN 1 HP (0.746 KW), FAN SPEED SHALL BE ADJUSTED TO MEET DESIGN FLOW CONDITIONS. FANS WITH FAN MOTORS OF 1 HP (0.74 KW) OR LESS ARE NOT REQUIRED TO BE PROVIDED WITH A MEANS FOR AIR BALANCING.

- FUNCTIONAL PERFORMANCE TESTING.**
FUNCTIONAL PERFORMANCE TESTING SHALL BE CONDUCTED AS OUTLINED BELOW:
1. EQUIPMENT FUNCTIONAL PERFORMANCE TESTING SHALL DEMONSTRATE THE INSTALLATION AND OPERATION OF COMPONENTS, SYSTEMS AND SYSTEM-TO-SYSTEM INTERFACING RELATIONSHIPS IN ACCORDANCE WITH APPROVED PLANS AND SPECIFICATIONS SUCH THAT OPERATION, FUNCTION AND MAINTENANCE SERVICEABILITY FOR EACH OF THE COMMISSIONED SYSTEMS ARE CONFIRMED. TESTING SHALL INCLUDE ALL MODES AND SEQUENCE OF OPERATION, INCLUDING UNDER FULL-LOAD, PART-LOAD AND THE FOLLOWING EMERGENCY CONDITIONS:
 - A. ALL MODES AS DESCRIBED IN THE SEQUENCE OF OPERATION.
 - B. REDUNDANT OR AUTOMATIC BACK-UP MODE.
 - C. PERFORMANCE OF ALARMS.
 - D. MODE OF OPERATION UPON A LOSS OF POWER AND RESTORATION OF POWER.
 - E. EXCEPTION: UNITARY OR PACKAGED HVAC EQUIPMENT LISTED IN THE TABLES IN SECTION C403.3.2 THAT DO NOT REQUIRE SUPPLY AIR ECONOMICIZERS.

CONTROLS
HVAC AND SERVICE WATER-HEATING CONTROL SYSTEMS SHALL BE TESTED TO DOCUMENT THAT CONTROL DEVICES, COMPONENTS, EQUIPMENT AND SYSTEMS ARE CALIBRATED AND ADJUSTED AND OPERATE IN ACCORDANCE WITH APPROVED PLANS AND SPECIFICATIONS. SEQUENCES OF OPERATION SHALL BE FUNCTIONALLY TESTED TO DOCUMENT THEY OPERATE IN ACCORDANCE WITH APPROVED PLANS AND SPECIFICATIONS.

ECONOMICIZERS
AIR ECONOMICIZERS SHALL UNDERGO A FUNCTIONAL TEST TO DETERMINE THAT THEY OPERATE IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.

- PRELIMINARY MECHANICAL COMMISSIONING REPORT**
A PRELIMINARY REPORT OF COMMISSIONING TEST PROCEDURES AND RESULTS SHALL BE COMPLETED AND CERTIFIED BY AN APPROVED AGENCY AND PROVIDED TO THE BUILDING OWNER OR OWNER'S AUTHORIZED AGENT. THE REPORT SHALL BE ORGANIZED WITH MECHANICAL AND SERVICE HOT WATER FINDINGS IN SEPARATE SECTIONS TO ALLOW INDEPENDENT REVIEW. THE REPORT SHALL BE IDENTIFIED AS "PRELIMINARY COMMISSIONING REPORT," SHALL INCLUDE THE COMPLETED COMMISSIONING COMPLIANCE CHECKLIST BELOW, AND SHALL IDENTIFY:
1. IDENTIFICATION OF DEFICIENCIES FOUND DURING TESTING REQUIRED BY THIS SECTION THAT HAVE NOT BEEN CORRECTED AT THE TIME OF REPORT PREPARATION.
 2. DEFERRED TESTS THAT CANNOT BE PERFORMED AT THE TIME OF REPORT PREPARATION BECAUSE OF CLIMATIC CONDITIONS.
 3. CLIMATIC CONDITIONS REQUIRED FOR PERFORMANCE OF THE DEFERRED TESTS.
 4. RESULTS OF FUNCTIONAL PERFORMANCE TESTS.
 5. FUNCTIONAL PERFORMANCE TEST PROCEDURES USED DURING THE COMMISSIONING PROCESS, INCLUDING MEASURABLE CRITERIA FOR TEST ACCEPTANCE.
- BUILDINGS, OR PORTIONS THEREOF, SHALL NOT BE CONSIDERED AS ACCEPTABLE FOR A FINAL INSPECTION PURSUANT TO SECTION C105.2.6 UNTIL THE CODE OFFICIAL HAS RECEIVED THE PRELIMINARY COMMISSIONING REPORT FROM THE BUILDING OWNER OR OWNER'S AUTHORIZED AGENT.

- FINAL MECHANICAL COMMISSIONING REPORT**
THE DOCUMENTS DESCRIBED BELOW SHALL BE PROVIDED TO THE OWNER OR OWNER'S AUTHORIZED AGENT WITHIN 90 DAYS OF THE DATE OF RECEIPT OF THE CERTIFICATE OF OCCUPANCY.
1. A WRITTEN REPORT DESCRIBING THE ACTIVITIES AND MEASUREMENTS COMPLETED WHILE BALANCING HVAC SYSTEMS.
 2. A REPORT OF TEST PROCEDURES AND RESULTS IDENTIFIED AS "FINAL COMMISSIONING REPORT" SHALL BE DELIVERED TO THE BUILDING OWNER OR OWNER'S AUTHORIZED AGENT. THE REPORT SHALL BE ORGANIZED WITH MECHANICAL SYSTEM AND SERVICE HOT WATER SYSTEM FINDINGS IN SEPARATE SECTIONS TO ALLOW INDEPENDENT REVIEW. THE REPORT SHALL INCLUDE THE FOLLOWING:
 - A. RESULTS OF FUNCTIONAL PERFORMANCE TESTS.
 - B. DISPOSITION OF DEFICIENCIES FOUND DURING TESTING, INCLUDING DETAILS OF CORRECTIVE MEASURES USED OR PROPOSED.
 - C. FUNCTIONAL PERFORMANCE TEST PROCEDURES USED DURING THE COMMISSIONING PROCESS INCLUDING MEASURABLE CRITERIA FOR TEST ACCEPTANCE, PROVIDED HEREIN FOR REPEATABILITY.

ELECTRICAL COMMISSIONING NOTES

FUNCTIONAL TESTING OF LIGHTING CONTROLS
PRIOR TO PASSING FINAL INSPECTION, AN APPROVED AGENCY SHALL PROVIDE EVIDENCE THAT THE LIGHTING CONTROL SYSTEMS HAVE BEEN TESTED TO ENSURE THAT CONTROL HARDWARE AND SOFTWARE ARE CALIBRATED, ADJUSTED, PROGRAMMED AND IN PROPER WORKING CONDITION IN ACCORDANCE WITH THE CONSTRUCTION DOCUMENTS AND MANUFACTURER'S INSTRUCTIONS. FUNCTIONAL TESTING SHALL BE PERFORMED FOR EACH APPLICABLE CONTROL TYPE IN ACCORDANCE WITH THE SPECIFICATIONS AND REQUIREMENTS BELOW.

- OCCUPANT SENSOR CONTROLS**
WHERE OCCUPANT SENSOR CONTROLS ARE PROVIDED, THE FOLLOWING PROCEDURES SHALL BE PERFORMED:
1. CERTIFY THAT THE OCCUPANT SENSOR HAS BEEN LOCATED AND AIMED IN ACCORDANCE WITH MANUFACTURER RECOMMENDATIONS.
 2. FOR PROJECTS WITH SEVEN OR FEWER OCCUPANT SENSORS, EACH SENSOR SHALL BE TESTED.
 3. FOR PROJECTS WITH MORE THAN SEVEN OCCUPANT SENSORS, TESTING SHALL BE DONE FOR EACH UNIQUE COMBINATION OF SENSOR TYPE AND SPACE GEOMETRY. WHERE MULTIPLES OF EACH UNIQUE COMBINATION OF SENSOR TYPE AND SPACE GEOMETRY ARE PROVIDED, NOT LESS THAN 10 PERCENT AND IN NO CASE FEWER THAN ONE, OF EACH COMBINATION SHALL BE TESTED UNLESS THE CODE OFFICIAL OR DESIGN PROFESSIONAL REQUIRES A HIGHER PERCENTAGE TO BE TESTED. WHERE 30 PERCENT OR MORE OF THE TESTED CONTROLS FAIL, ALL REMAINING IDENTICAL COMBINATIONS SHALL BE TESTED.

- FOR OCCUPANT SENSOR CONTROLS TO BE TESTED PER ITEM 3 ABOVE, VERIFY THE FOLLOWING:
- A. WHERE OCCUPANT SENSOR CONTROLS INCLUDE STATUS INDICATORS, VERIFY CORRECT OPERATION.
 - B. THE CONTROLLED LIGHTS TURN OFF OR DOWN TO THE PERMITTED LEVEL WITHIN THE REQUIRED TIME.
 - C. FOR AUTO-ON OCCUPANT SENSOR CONTROLS, THE LIGHTS TURN ON TO THE PERMITTED LEVEL WHEN AN OCCUPANT ENTERS THE SPACE.
 - D. FOR MANUAL-ON OCCUPANT SENSOR CONTROLS, THE LIGHTS TURN ON ONLY WHEN MANUALLY ACTIVATED.
 - E. THE LIGHTS ARE NOT INCORRECTLY TURNED ON BY MOVEMENT IN ADJACENT AREAS OR BY HVAC OPERATION.

- TIME-SWITCH CONTROLS**
WHERE TIME-SWITCH CONTROLS ARE PROVIDED, THE FOLLOWING PROCEDURES SHALL BE PERFORMED:
1. CONFIRM THAT THE TIME-SWITCH CONTROL IS PROGRAMMED WITH ACCURATE WEEKDAY, WEEKEND AND HOLIDAY SCHEDULES.
 2. PROVIDE DOCUMENTATION TO THE OWNER OF TIME-SWITCH CONTROLS PROGRAMMING INCLUDING WEEKDAY, WEEKEND, HOLIDAY SCHEDULES, AND SET-UP AND PREFERENCE PROGRAM SETTINGS.
 3. VERIFY THE CORRECT TIME AND DATE IN THE TIME SWITCH.
 4. VERIFY THAT ANY BATTERY BACK-UP IS INSTALLED AND ENERGIZED.
 5. VERIFY THAT THE OVERRIDE TIME LIMIT IS SET TO NOT MORE THAN 2 HOURS.
 6. SIMULATE OCCUPIED CONDITION. VERIFY AND DOCUMENT THE FOLLOWING:
 - A. ALL LIGHTS CAN BE TURNED ON AND OFF BY THEIR RESPECTIVE AREA CONTROL SWITCH.
 - B. THE SWITCH ONLY OPERATES LIGHTING IN THE ENCLOSED SPACE IN WHICH THE SWITCH IS LOCATED.
 7. SIMULATE UNOCCUPIED CONDITION. VERIFY AND DOCUMENT THE FOLLOWING:
 - A. NONEXEMPT LIGHTING TURNS OFF.
 - B. MANUAL OVERRIDE SWITCH ALLOWS ONLY THE LIGHTS IN THE ENCLOSED SPACE WHERE THE OVERRIDE SWITCH IS LOCATED TO TURN ON OR REMAIN ON UNTIL THE NEXT SCHEDULED SHUTOFF OCCURS.
 8. ADDITIONAL TESTING AS SPECIFIED.

- DAYLIGHT RESPONSIVE CONTROLS**
WHERE DAYLIGHT RESPONSIVE CONTROLS ARE PROVIDED, THE FOLLOWING SHALL BE VERIFIED:
1. CONTROL DEVICES HAVE BEEN PROPERLY LOCATED, FIELD CALIBRATED AND SET FOR ACCURATE SETPOINTS AND THRESHOLD LIGHT LEVELS.
 2. DAYLIGHT CONTROLLED LIGHTING LOADS ADJUST TO LIGHT LEVEL SETPOINTS IN RESPONSE TO AVAILABLE DAYLIGHT.
 3. THE CALIBRATION ADJUSTMENT EQUIPMENT IS LOCATED FOR READY ACCESS ONLY BY AUTHORIZED PERSONNEL.

- LIGHTING CONTROL MANUALS**
AN OPERATING AND MAINTENANCE MANUAL SHALL BE PROVIDED TO THE BUILDING OWNER OR OWNER'S AUTHORIZED AGENT WITHIN 90 DAYS OF THE RECEIPT OF THE CERTIFICATE OF OCCUPANCY. IT SHALL INCLUDE THE FOLLOWING:
1. NAME AND ADDRESS OF NOT LESS THAN ONE SERVICE AGENCY FOR INSTALLED EQUIPMENT.
 2. A NARRATIVE OF HOW EACH SYSTEM IS INTENDED TO OPERATE, INCLUDING RECOMMENDED SETPOINTS.
 3. SUBMITTAL DATA INDICATING ALL SELECTED OPTIONS FOR EACH PIECE OF LIGHTING EQUIPMENT AND LIGHTING CONTROLS.
 4. OPERATION AND MAINTENANCE MANUALS FOR EACH PIECE OF LIGHTING EQUIPMENT. REQUIRED ROUTINE MAINTENANCE ACTIONS, CLEANING AND RECOMMENDED RELAMPING SHALL BE CLEARLY IDENTIFIED.
 5. A SCHEDULE FOR INSPECTING AND RECALIBRATING ALL LIGHTING CONTROLS.

- LIGHTING CONTROL TESTING REPORT**
A REPORT OF TEST RESULTS SHALL BE PROVIDED TO THE BUILDING OWNER OR OWNER'S AUTHORIZED AGENT WITHIN 90 DAYS OF THE RECEIPT OF THE CERTIFICATE OF OCCUPANCY. IT SHALL INCLUDE THE FOLLOWING:
1. RESULTS OF FUNCTIONAL PERFORMANCE TESTS.
 2. DISPOSITION OF DEFICIENCIES FOUND DURING TESTING, INCLUDING DETAILS OF CORRECTIVE MEASURES USED OR PROPOSED.

COMMISSIONING CHECKLIST	
PROJECT NAME: <i>Name</i>	
ADDRESS: <i>Project Address</i>	
COMMISSIONING AUTHORITY: <i>AHJ</i>	
COMMISSIONING PLAN (SECT C408.2.1)	
COMPLETED	TASK
<input type="checkbox"/>	COMMISSIONING PLAN WAS USED DURING CONSTRUCTION AND INCLUDES ALL ITEMS REQUIRED BY SECTION C408.2.1
<input type="checkbox"/>	SYSTEMS ADJUSTING AND BALANCING HAS BEEN COMPLETED.
<input type="checkbox"/>	HVAC EQUIPMENT FUNCTIONAL TESTING HAS BEEN EXECUTED. IF APPLICABLE, DEFERRED AND FOLLOW-UP TESTING IS SCHEDULED TO BE PROVIDED ON: _____
<input type="checkbox"/>	HVAC CONTROLS FUNCTIONAL TESTING HAS BEEN EXECUTED. IF APPLICABLE, DEFERRED AND FOLLOW-UP TESTING IS SCHEDULED TO BE PROVIDED ON: _____
<input type="checkbox"/>	ECONOMICIZER FUNCTIONAL TESTING HAS BEEN EXECUTED. IF APPLICABLE, DEFERRED AND FOLLOW-UP TESTING IS SCHEDULED TO BE PROVIDED ON: _____
<input type="checkbox"/>	LIGHTING CONTROLS FUNCTIONAL TESTING HAS BEEN EXECUTED. IF APPLICABLE, DEFERRED AND FOLLOW-UP TESTING IS SCHEDULED TO BE PROVIDED ON: _____
<input type="checkbox"/>	SERVICE WATER HEATING SYSTEM FUNCTIONAL TESTING HAS BEEN EXECUTED. IF APPLICABLE, DEFERRED AND FOLLOW-UP TESTING IS SCHEDULED TO BE PROVIDED ON: _____
<input type="checkbox"/>	MANUAL, RECORD DOCUMENTS AND TRAINING HAVE BEEN COMPLETED OR SCHEDULED.
<input type="checkbox"/>	PRELIMINARY COMMISSIONING REPORT SUBMITTED TO OWNER AND INCLUDES ALL ITEMS REQUIRED BY SECTION C408.2.
I HEREBY CERTIFY THAT THE COMMISSIONING PROVIDER HAS PROVIDED ME WITH EVIDENCE OF MECHANICAL, SERVICE WATER HEATING AND LIGHTING SYSTEMS COMMISSIONING IN ACCORDANCE WITH THE 2021 IECC.	
SIGNATURE OF BUILDING OWNER OR OWNER'S REPRESENTATIVE: _____ DATE: _____	

IECC 2021 NOTES

- 1 LIGHTING COMPLIANCE WITH IECC 2021 FOR THIS BUILDING ALTERATION IS REQUIRED PER CS03.5. THE INTERIOR LIGHTING LOAD COMPLES WITH SECTION C405.3.2:
- TOTAL ALLOWABLE WATTAGE = 7685
 - TOTAL PROPOSED WATTAGE = 6683
 - % PASSING = 13%



Missouri Certificate of Authority
#2003011262

Structural Engineer:
Bob D. Campbell & Co.
Missouri Certificate of Authority
#000442
4338 Bellevue Ave.
Kansas City, MO 64111
816.531.4144

MEP Engineer:
PKMVR Engineers
Missouri Certificate of Authority
#E-2002020886
13300 W. 96th Street
Lenexa, KS 66215
913.492.2400

JOB NUMBER 23011

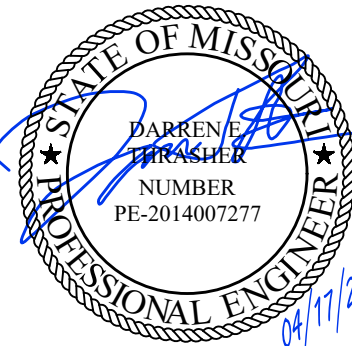
LM2 OFFICE RENOVATION

9000 OLD SANTE FE ROAD
KANSAS CITY, MO 64138

110 Armour Road North Kansas City, Missouri 64114 Tel: 816.300.4101



Kevin J. Zimmerman - Engineer
MO# PE-2017029408



Darren E. Thiesher - Engineer
MO# PE-2014007217

Dalyn Novak - Architect
MO # 2011006178

PERMIT SET
MO # 2011006178

ISSUE DATE	04/17/2024	
No.	Description	Date



PEARSON KENT MCKINLEY RAAF ENGINEERS LLC
13300 W 96TH STREET
LENEXA, KS 66215
913.492.2400
WWW.PKMRVRS.COM
MO State Certificate of Authority #E-2002020886

ENERGY CODE
NOTES

ECA.02

24.027



COMcheck Software Version COMcheckWeb

Interior Lighting Compliance Certificate

Project Information

Energy Code: 2021 IECC
Project Title: 24.027 LM2
Project Type: Alteration

Construction Site: 9000 Old Santa Fe Road
Kansas City, Missouri 64138
Owner/Agent:
Designer/Contractor: PKMR Engineers
13300 W 98th St.
Lenexa, Kansas 66215
913-492-2400

Allowed Interior Lighting Power

A Area Category	B Floor Area (ft ²)	C Allowed Watts / ft ²	D Allowed Watts
1-Office	12008	0.64	7685
		Total Allowed Watts =	7685

Proposed Interior Lighting Power

A Fixture ID : Description / Lamp / Wattage Per Lamp / Ballast	B Lamps/ Fixture	C # of Fixture	D Fixture Watt.	E (C X D)
Office (12008 sq.ft.)				
LED: A: 2x4: Other:	1	4	34	137
LED: A1: 2x2: Other:	1	116	30	3422
LED: B: 6" Downlight: Other:	1	54	14	745
LED: B1: 6" Downlight: Other:	1	22	19	420
LED: C: Decorative Pendant: Other:	1	4	12	48
LED: D/D1: Decorative Linear: Other:	1	2	48	96
LED: F/F1: Linear: Other:	1	14	42	588
LED: G/G1: Linear: Other:	1	13	27	348
LED: G: Linear: Other:	1	3	34	100
LED: G: Linear: Other:	1	4	100	400
LED: G: Linear: Other:	1	2	189	378
Total Proposed Watts =				6683

Interior Lighting PASSES

Interior Lighting Compliance Statement

Compliance Statement: The proposed interior lighting alteration project represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed interior lighting systems have been designed to meet the 2021 IECC requirements in COMcheck Version COMcheckWeb and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

Trenton Turner - Staff Engineer
Signature: *Trenton Turner*
Date: 4/02/2024

Project Title: 24.027 LM2
Data filename: Report date: 04/02/24
Page 1 of 6

Section # & Req ID	Rough-In Electrical Inspection	Complies?	Comments/Assumptions
C405.2.3.1 [EL22]1	Spaces required to have light-reduction controls have a manual control that allows the occupant to reduce the connected lighting load in a reasonably uniform illumination pattern >= 50 percent.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
C405.2.1.1 [EL18]1	Occupancy sensors installed in classrooms/lecture/training rooms, conference/meeting/multipurpose rooms, copy/print rooms, lounges/breakrooms, enclosed offices, open plan office areas, restrooms, storage rooms, locker rooms, corridors, warehouse storage areas, and other spaces <= 300 sq ft that are enclosed by floor-to-ceiling height partitions. Reference section language C405.2.1.2 for control function in warehouses and section C405.2.1.3 for open plan office spaces.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met. Location on plans/spec: E1.01
C405.2.1.2 [EL19]1	Occupancy sensors control function in warehouses: In warehouses, the lighting in aislesways and open areas is controlled with occupant sensors that automatically reduce lighting power by 50% or more within 20 minutes of when the areas are unoccupied. The occupant sensors control lighting in each aisleway independently and do not control lighting beyond the aisleway being controlled by the sensor. Lights not turned off by occupant sensors is done so by time-switch.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Exception: Requirement does not apply.
C405.2.1.3 [EL20]1	Occupant sensor control function in open plan office areas: Occupant sensor controls in open office spaces >= 300 sq ft, have controls 1) configured so that general lighting can be controlled separately in control zones with floor areas <= 600 sq ft within the space, 2) general lighting in each zone permitted to turn on upon occupancy in control zone, 3) automatically turn off general lighting in all control zones within 20 minutes after all occupants have left the space, 4) are configured so that general lighting power in each control zone is reduced by >= 80% of the full zone general lighting power within 20 minutes of all occupants leaving that control zone.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Exception: Requirement does not apply.
C405.2.2.1 [EL21]2	Each area not served by occupancy sensors (per C405.2.1.1) have time-switch controls and functions detailed in sections C405.2.2.1.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Exception: Luminaires requiring specific controls in accordance with C405.2.4.

1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3)
Project Title: 24.027 LM2
Data filename: Report date: 04/02/24
Page 4 of 6



COMcheck Software Version COMcheckWeb

Exterior Lighting Compliance Certificate

Project Information

Energy Code: 2021 IECC
Project Title: 24.027 LM2
Project Type: Alteration
Exterior Lighting Zone: 2 (Residential mixed use area (LZ2))

Construction Site: 9000 Old Santa Fe Road
Kansas City, Missouri 64138
Owner/Agent:
Designer/Contractor: PKMR Engineers
13300 W 98th St.
Lenexa, Kansas 66215
913-492-2400

Allowed Exterior Lighting Power

A Area/Surface Category	B Quantity	C Allowed Watts /	D Tradable Wattage	E Allowed Watts (B X C)
Entry canopy	164 ft ²	0.25	Yes	41
Parking area	27786 ft ²	0.04	Yes	1111
		Total Tradable Watts (a) =	1152	
		Total Allowed Watts =	1152	
		Total Allowed Supplemental Watts (b) =	400	

(a) Wattage tradeoffs are only allowed between tradable areas/surfaces.
(b) A supplemental allowance equal to 400 watts may be applied toward compliance of both non-tradable and tradable areas/surfaces.

Proposed Exterior Lighting Power

A Fixture ID : Description / Lamp / Wattage Per Lamp / Ballast	B Lamps/ Fixture	C # of Fixture	D Fixture Watt.	E (C X D)
Entry canopy (164 ft²): Tradable Wattage				
LED: B2: Downlight: Other:	1	6	14	83
Parking area (27786 ft²): Tradable Wattage				
LED: S1/S2: Pole Fixture: Other:	1	6	124	744
Total Tradable Proposed Watts =				827

Exterior Lighting PASSES

Exterior Lighting Compliance Statement

Compliance Statement: The proposed exterior lighting alteration project represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed exterior lighting systems have been designed to meet the 2021 IECC requirements in COMcheck Version COMcheckWeb and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

Trenton Turner - Staff Engineer
Signature: *Trenton Turner*
Date: 4/02/2024

Project Title: 24.027 LM2
Data filename: Report date: 04/02/24
Page 2 of 6

Section # & Req ID	Rough-In Electrical Inspection	Complies?	Comments/Assumptions
C405.2.4.1 [EL27]1	Daylight zones provided with individual controls that control the lights independent of general area lighting. See code section C405.2.3 Daylight-responsive controls for applicable spaces. C405.2.3.1 Daylight responsive control function and section C405.2.3.2 Sidelit zone.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Exception: Requirement does not apply.
C405.2.5 [EL27]1	Additional interior lighting power allowed for special functions per the approved lighting plans and is automatically controlled and separated from general lighting.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
C405.2.7 [EL28]1	Automatic lighting controls for exterior lighting installed. Controls will be daylight controlled, set based on business operation time-of-day, or reduce connected lighting > 30%.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
C405.7 [EL28]2	Low-voltage dry-type distribution electric transformers meet the minimum efficiency requirements of Table C405.6.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Exception: Requirement does not apply.
C405.8 [EL27]2	Electric motors meet the minimum efficiency requirements of Tables C405.7(1) through C405.7(4). Efficiency verified through certification under an approved certification program or the equipment efficiency ratings shall be provided by motor manufacturer (where certification programs do not exist).	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
C405.9.1, C405.9.2 [EL28]2	Escalators and moving walks comply with ASME A17.1/CSA B44 and have automatic controls configured to reduce speed to the minimum permitted speed in accordance with ASME A17.1/CSA B44 or applicable local code when not conveying passengers.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Exception: Requirement does not apply.
C405.10 [EL29]2	Total voltage drop across the combination of feeders and branch circuits <= 5%.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
C405.1.1 [EL30]2	At least 90% of dwelling unit permanently installed lighting shall have lamp efficacy >= 65 lm/W or luminaires with efficacy >= 45 lm/W or comply with C405.2.4 or C405.3.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Exception: Requirement does not apply.
C405.11, C405.11.1 [EL31]2	50% of 15/20 amp receptacles installed in enclosed offices, conference rooms, copy rooms, break rooms, classrooms and workstations and > 25% of branch circuit feeders for modular furniture will have automatic receptacle control in accordance with C405.11.1.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met. Location on plans/spec: E2.01

Additional Comments/Assumptions:

1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3)
Project Title: 24.027 LM2
Data filename: Report date: 04/02/24
Page 5 of 6



COMcheck Software Version COMcheckWeb

Inspection Checklist

Energy Code: 2021 IECC

Requirements: 100.0% were addressed directly in the COMcheck software

Text in the "Comments/Assumptions" column is provided by the user in the COMcheck Requirements screen. For each requirement, the user certifies that a code requirement will be met and how that is documented, or that an exception is being claimed. Where compliance is itemized in a separate table, a reference to that table is provided.

Section # & Req ID	Plan Review	Complies?	Comments/Assumptions
C103.2 [PR4]1	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the interior lighting and electrical systems and equipment and document where exceptions to the standard are claimed. Information provided should include interior lighting power calculations, wattage of bulbs and ballasts, transformers and control devices.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
C103.2 [PR8]1	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the exterior lighting and electrical systems and equipment and document where exceptions to the standard are claimed. Information provided should include exterior lighting power calculations, wattage of bulbs and ballasts, transformers and control devices.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.

Additional Comments/Assumptions:

1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3)
Project Title: 24.027 LM2
Data filename: Report date: 04/02/24
Page 3 of 6

Section # & Req ID	Final Inspection	Complies?	Comments/Assumptions
C303.3, C408.2.5.2 [F117]3	Furnished O&M instructions for systems and equipment to the building owner or designated representative.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
C405.5.1 [F119]1	Exterior lighting power is consistent with what is shown on the approved lighting plans, demonstrating proposed watts are less than or equal to allowed watts.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	See the Exterior Lighting fixture schedule for values.
C408.1.1 [F157]1	Building operations and maintenance documents will be provided to the owner. Documents will cover manufacturers' information, specifications, programming procedures and means of illustrating to owner how building, equipment and systems are intended to be installed, maintained, and operated.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
C408.2.5 [F116]3	Furnished as-built drawings for electric power systems within 90 days of system acceptance.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
C408.3 [F133]1	Lighting systems have been tested to ensure proper calibration, adjustment, programming, and operation.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.

Additional Comments/Assumptions:

1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3)
Project Title: 24.027 LM2
Data filename: Report date: 04/02/24
Page 6 of 6



Missouri Certificate of Authority
#2003011262

Structural Engineer:
Bob D. Campbell & Co.
Missouri Certificate of Authority
#000442
4338 Bellevue Ave.
Kansas City, MO 64111
816.531.4144

MEP Engineer:
PKMR Engineers
Missouri Certificate of Authority
#E-2002020886
13300 W. 98th Street
Lenexa, KS 66215
913.492.2400

JOB NUMBER 23011

LM2 OFFICE RENOVATION

9000 OLD SANTE FE ROAD
KANSAS CITY, MO 64138

110 Armour Road North Kansas City, Missouri 64116 Tel: 816.300.4101



Kevin J. Zimmerman - Engineer
MO# PE-2017029408



Darren E. Thieser - Engineer
MO# PE-2014007277

Dalyn Novak - Architect
MO # 2011006178

PERMIT SET	ISSUE DATE	04/17/2024
No	Description	Date

WSKF, Inc. © 2023



PEARSON KENT MCKINLEY RAAF ENGINEERS LLC
13300 W 98TH STREET
LENEXA, KS 66215
913.492.2400
WWW.PKMRNG.COM
MO State Certificate of Authority #E-2002020886

ENERGY CODE
NOTES

ECA.03

1. THIS DRAWING REPRESENTS THE GENERAL SCOPE OF CONTRACTOR REQUIRED DEMOLITION FOR THE REFERENCED AREA. REFER TO NEW CONSTRUCTION DRAWINGS FOR REQUIRED WORK THAT MAY NOT BE REPRESENTED IN THIS DRAWING.
2. CONTRACTOR TO REVIEW ALL EXISTING CONDITIONS AND ADVISE ARCHITECT/ENGINEER OF ALL DESIGN DOCUMENT DISCREPANCIES.
3. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL DIMENSIONS AND EXISTING CONDITIONS. ANY DISCREPANCIES WHICH WILL PREVENT THE ACCOMPLISHMENT OF INTENT SHOWN ON DRAWINGS SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ARCHITECT.
4. WHERE A CONDITION IS NOTED "TYPICAL" (TYP.), IT IS UNDERSTOOD THAT ALL SIMILAR CONDITIONS BE CONSTRUCTED OF THE SAME MATERIALS AND/OR DIMENSIONS.
5. ALL DISCREPANCIES ARE TO FACE OF STUD, FACE OF CMU, FACE OF CONCRETE FOUNDATION WALL, OR CENTER OF STL. STRUCTURE, UNLESS NOTED OTHERWISE.
6. DAMAGE TO WALLS, FLOORS, & CEILINGS NOT MARKED FOR DEMO. SHALL BE REPAIRED.

----- WALLS/ELEMENTS TO BE REMOVED

===== WALLS/ELEMENTS TO REMAIN

- 1 DOOR, FRAME, AND HARDWARE TO BE REMOVED IN THEIR ENTIRETY
- 2 PORTION OF WALL TO BE REMOVED IN ITS ENTIRETY, REFER TO FLOOR PLAN FOR EXTENTS
- 3 REMOVE CASEWORK IN ITS ENTIRETY
- 4 REMOVE PLUMBING FIXTURE(S) IN THEIR ENTIRETY, RE: PLUMBING DEMO PLANS
- 5 REMOVE EXISTING PRECAST PLANTING BED, PATCH AND SMOOTH EXPOSED FACE. PREP TO RECEIVE NEW FINISH RE: EXTERIOR ELEVATIONS
- 6 REMOVE EXISTING HM WINDOWS & CMU WALL DIRECTLY BELOW; SOLID GROUTED CMU JAMBS TO REMAIN IN PLACE
- 7 REMOVE EXISTING SIDEWALK TO EXTENTS NECESSARY FOR NEW FOUNDATIONS; RE: STRUCTURAL
- 8 REINFORCE AND REMOVE EXISTING PRECAST WALL; RE: STRUCTURAL
- 9 REMOVE EXTERIOR SOFFIT, FRAMING TO REMAIN; REPAIR AND REPLACE FRAMING AS REQUIRED
- 10 DEMO MOVABLE PARTITION, TRACKS, AND SOFFIT
- 11 DEMO STRUCTURAL SURROUND; EXISTING STRUCTURE TO REMAIN IN PLACE
- 12 REMOVE ALL EXISTING CEILINGS IN THEIR ENTIRETY; RE: MEP DRAWINGS FOR SCOPE OF CEILING DEMO WORK
- 13 SELECTIVE DEMOLITION OF EXISTING DUCTWORK; RE: MEP DEMO PLANS FOR MORE DETAIL
- 14 REMOVE EXISTING EXTERIOR SOFFIT LOUVERS

LM2 OFFICE RENOVATION

9900 OLD SANTE FE ROAD
KANSAS CITY, MO 64138

110 Armour Road North Kansas City, Missouri 64116 Tel: 816.300.4101 Fax: 816.300.4102

LM2 OFFICE RENOVATION

9000 OLD SAN I E FE ROAD
KANSAS CITY, MO 64138



Dalyn Novak - Architect
MO # 2011006178

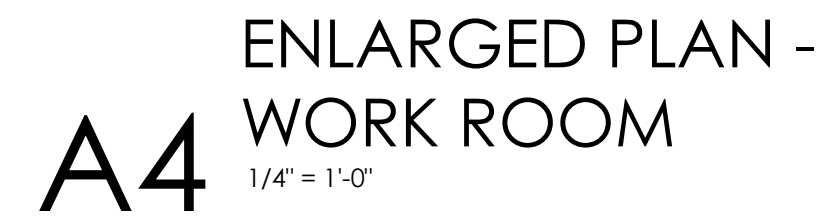
ISSUE DATE	04/17/2024
No Description	Date

WSKF, Inc. © 2024

DEMO PLAN

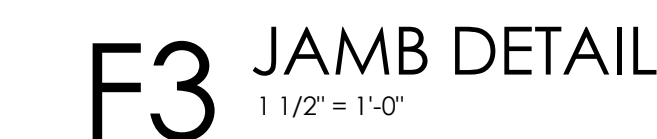
D1.01

A10 DEMOLITION PLAN

71.01



A10



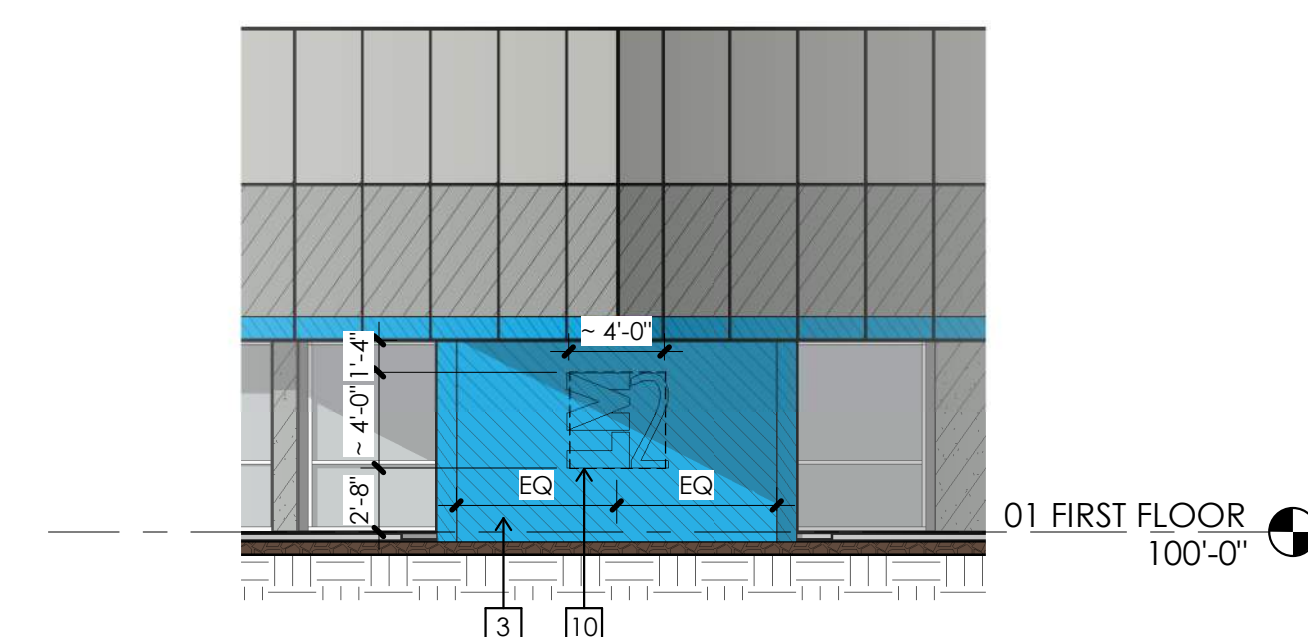
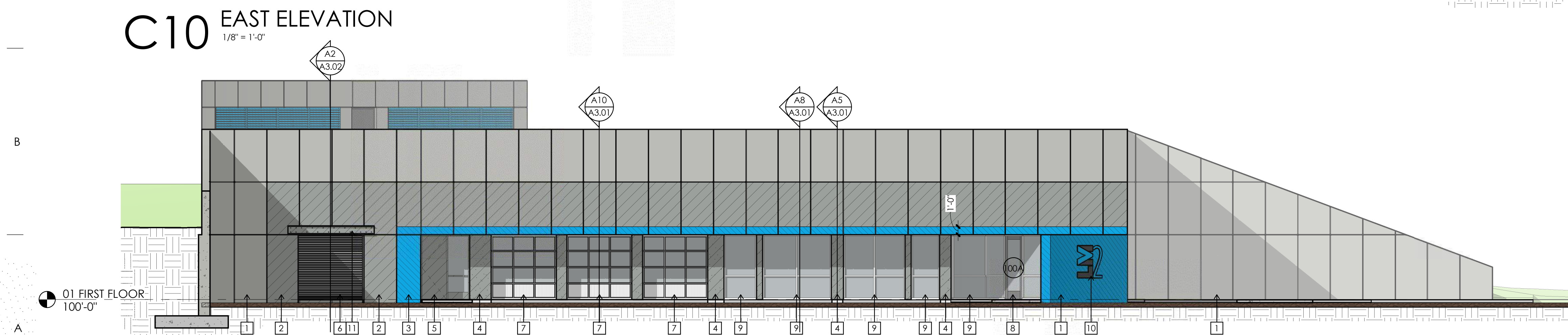
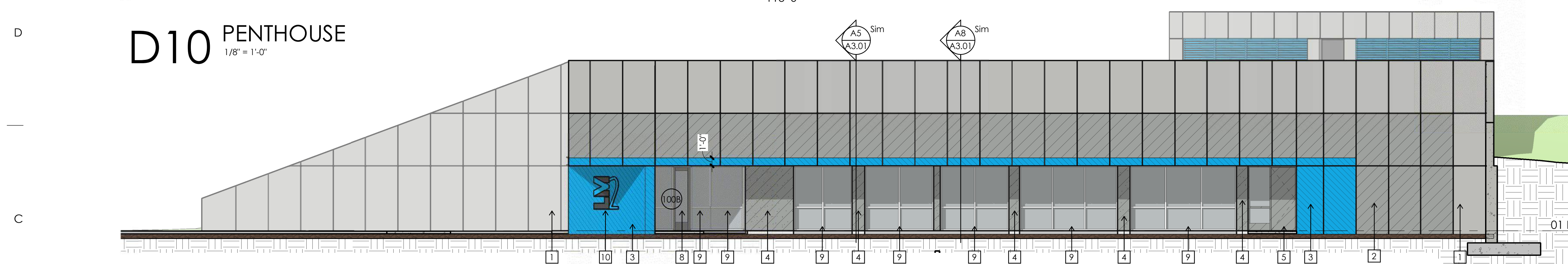
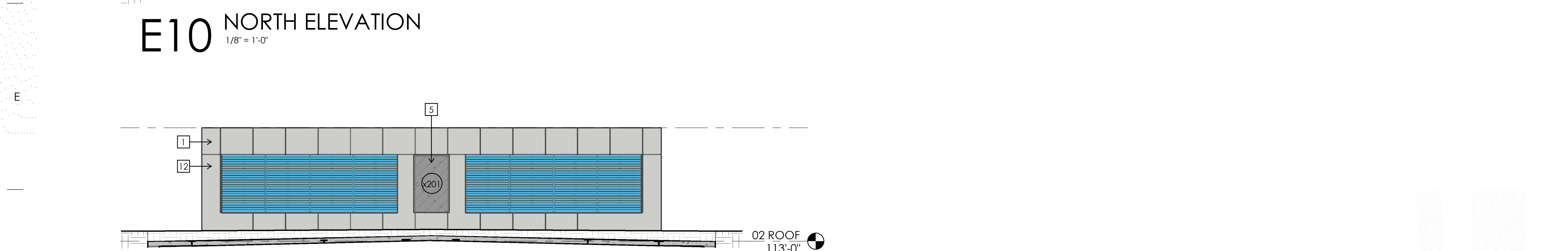
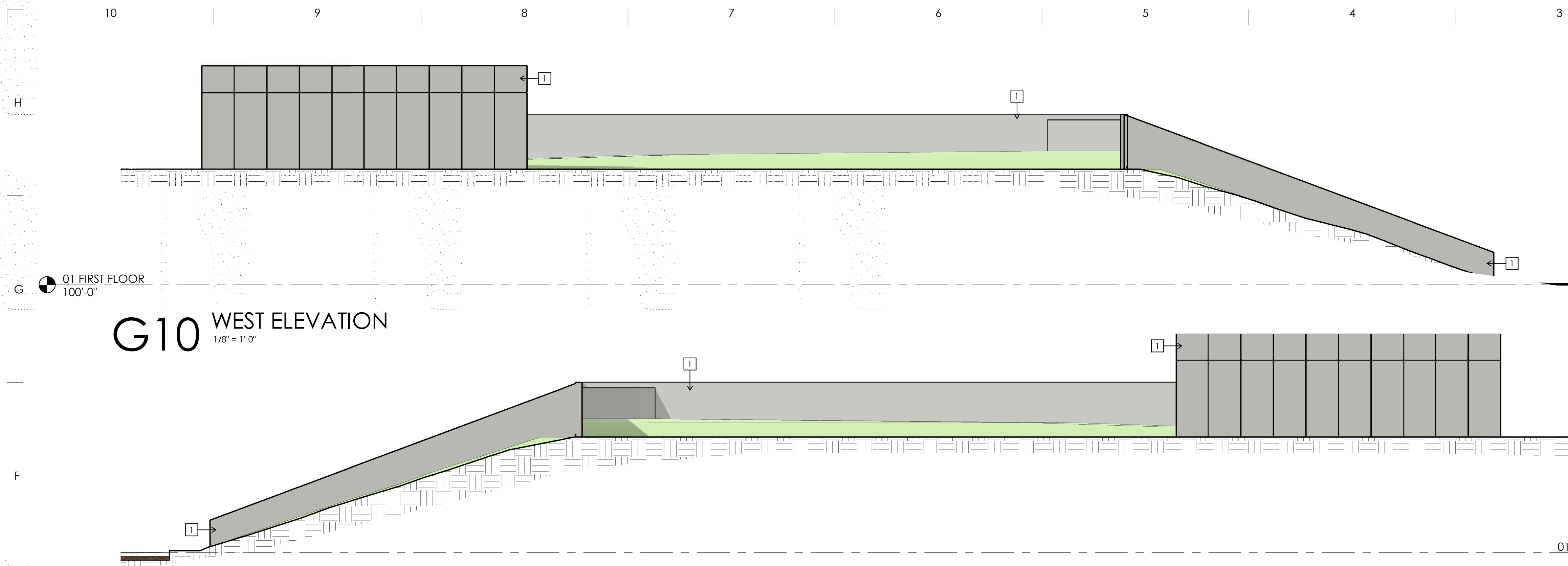
9000 OLD SANTE FE ROAD
KANSAS CITY, MO 64138



WSKF, Inc. © 2024

KEYNOTE PLAN

A1.02



GENERAL NOTES:

1. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL DIMENSIONS AND EXISTING CONDITIONS. ANY DISCREPANCIES WHICH WILL PREVENT THE ACCOMPLISHMENT OF INTENT SHOWN ON DRAWINGS SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ARCHITECT.
2. WHERE A CONDITION IS NOTED 'TYPICAL' (TYP.), IT IS UNDERSTOOD THAT ALL SIMILAR CONDITIONS BE CONSTRUCTED OF THE SAME MATERIALS AND/OR DIMENSIONS.

ELEVATION NOTES:

- 1 EXISTING PRECAST CONCRETE WALLS: **FIELD PAINT COLOR: SHERWIN WILLIAMS - SW7558 GRAY CLOUDS**
- 2 EXISTING PRECAST CONCRETE WALLS: **DARK ACCENT PAINT COLOR: SHERWIN WILLIAMS - SW7660 EARL GRAY**
- 3 EXISTING PRECAST CONCRETE WALLS: **BRIGHT ACCENT PAINT COLOR: LM2 SIGNATURE BLUE**
- 4 NEW EIFS FINISH: BASIS OF DESIGN: STUCCO TO CORP - STUCCOFORM CI, SANDBLAST TEXTURE, COLOR TO MATCH **DARK ACCENT PAINT COLOR**
- 5 EXISTING HM DOOR & FRAME TO REMAIN; PAINT TO MATCH **DARK ACCENT PAINT COLOR**
- 6 NEW PREFINISHED COILING OVERHEAD DOOR, COLOR TO MATCH **DARK ACCENT PAINT COLOR**; RE: SCHEDULE ON A6.01
- 7 NEW GLASS & ALUMINUM OVERHEAD SECTIONAL DOOR, CLEAR ANODIZED ALUMINUM FINISH; BASIS OF DESIGN: CLOPAY 904 - RE: SCHEDULE ON A6.01
- 8 NEW STOREFRONT ENTRANCE; RE: SCHEDULE ON A6.01
- 9 NEW THERMALLY BROKEN STOREFRONT, CLEAR ANODIZED ALUMINUM FINISH
- 10 NEW SIGNAGE
- 11 NEW STL CHANNEL HEADER; RE: STRUCTURAL



Missouri Certificate of Authority
#2003011262

Structural Engineer:
Bob D. Campbell & Co.
Missouri Certificate of Authority
#000442
4338 Belleview Ave.
Kansas City, MO 64111
816.531.4144

MEP Engineer:
PKMR Engineers
Missouri Certificate of Authority
#E-2002020886
13300 W. 98th Street
Lenexa, KS 66215
913.492.2400

JOB NUMBER 23011

LM2 OFFICE RENOVATION

9000 OLD SANTE FE ROAD
KANSAS CITY, MO 64138

110 Armour Road North Kansas City, Missouri 64116 Tel. 816.300.4101 Fax 816.300.4102



Dalyn Novak - Architect
MO # 2011006178

ISSUE DATE	04/17/2024
No Description	Date

WSKF, Inc. © 2024

ELEVATIONS

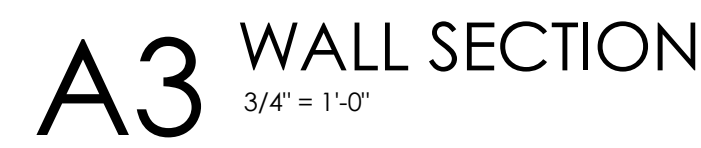
A2.01

110 Armour Road North Kansas City, Missouri 64116 Tel. 816.300.4101 Fax 816.300.4102

[illegible]

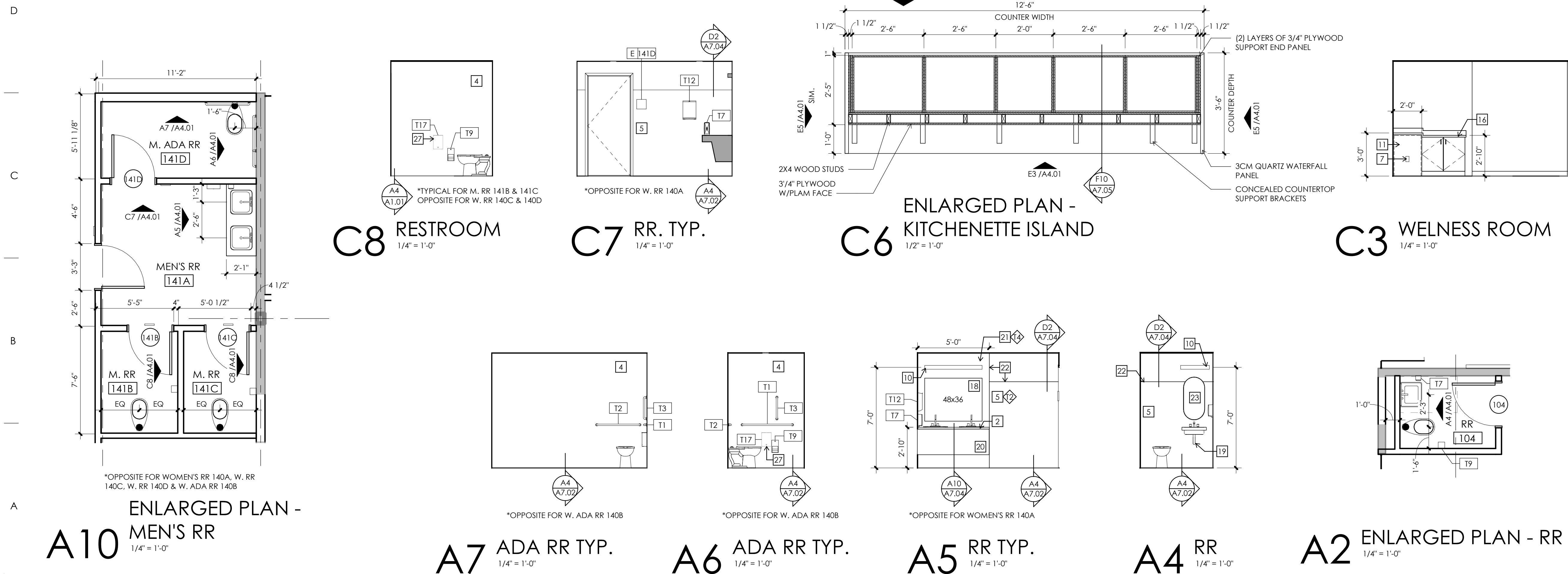
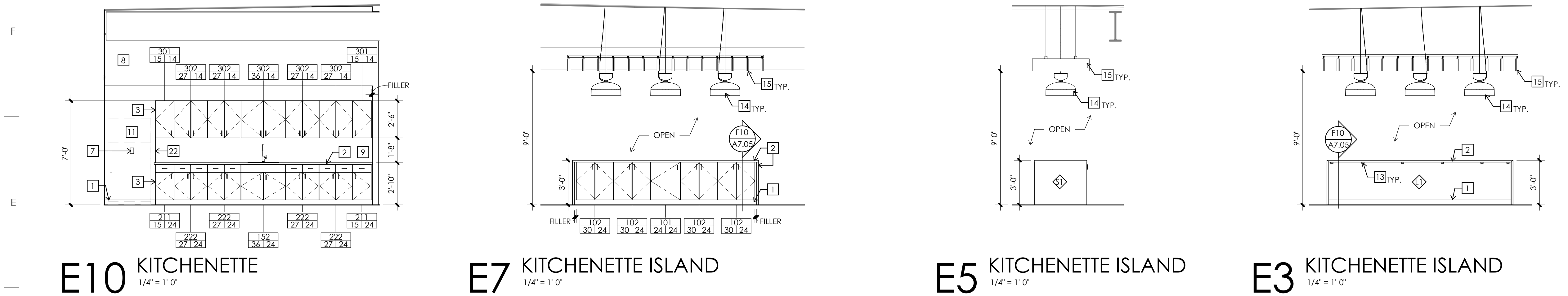
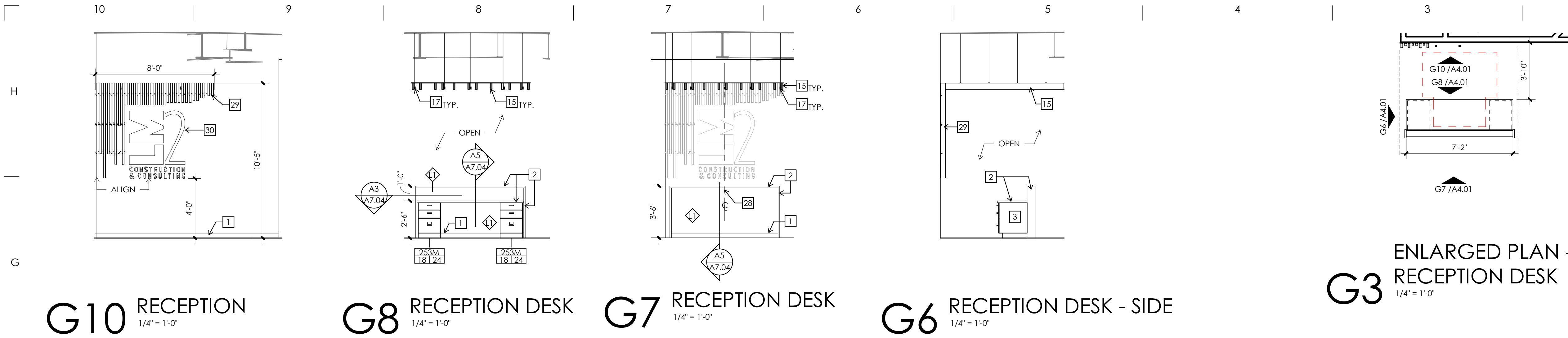
A3.01

A3.01





4/17/2024 10:48:13 AM
C:\Users\jameslukacovic\Desktop\Local\23011_LM2 Office Renovation_CENTRALV22_jlukacovic@wskfarch.com.rvt



- GENERAL NOTES:**
- FOR ITEMS LABELED [T#] REFER TO SPEC SECTION 102800 - TOILET, BATH, AND LAUNDRY ACCESSORIES.
 - FOR ITEMS LABELED [A#] REFER TO FINISH SCHEDULE ON A7.01.
 - ALL DIMENSIONS ON INTERIOR ELEVATIONS ARE FROM FINISHED SURFACES.
 - OFOI = OWNER FURNISHED, OWNER INSTALLED.
 - OFCI = OWNER FURNISHED, CONTRACTOR INSTALLED.
 - REFER TO CASEWORK SCHEDULE ON A7.01 AND CASEWORK TAG, SEE BELOW.
- ELEVATION NOTES:**
- WALL BASE PER FINISH SCHEDULE
 - COUNTERTOP PER FINISH SCHEDULE
 - FINISHED END OF CASEWORK
 - FULL HEIGHT WALL TILE; RE: C3/A7.04
 - TILE WAINSCOT; RE: C3/A7.04
 - DATA; RE: MEP
 - OUTLET; RE: MEP
 - GYP. BD. SOFFIT; PAINT PER FINISH SCHEDULE ON A7.01
 - TILE BACKSPLASH PER FINISH SCHEDULE ON A7.01
 - VANITY LIGHT; RE: MEP
 - APPLIANCE/EQUIPMENT; RE: FFE PLAN ON A7.03
 - MONITOR & MOUNTING BRACKET BY OWNER. CONTRACTOR TO PROVIDE 36"X36" IN WALL SOLID BACKING; RE: TV MOUNTING GUIDE ON A7.04
 - CONCEALED COUNTERTOP SUPPORT BRACKET, NOTCH FINISH FACE OF WALL AROUND BRACKETS
 - DECORATIVE PENDANT LIGHTING; RE: MEP
 - SUSPENDED ACOUSTIC FELT BAFFLE; RE: RCP
 - COUNTERTOP & BACKSPLASH PER FINISH SCHEDULE
 - SUSPENDED LINEAR LIGHTING; RE: MEP
 - FRAMELESS MIRROR
 - INSULATED PIPE WRAP COVER; RE: MEP
 - APRON W/ADA VANITY BRACKET
 - FULL HEIGHT DECORATIVE WALL TILE; RE: C3/A7.04
 - METAL TILE EDGE TRIM, T54
 - 18"X36" KOHLER ESSENTIAL CAPSULE VANITY MIRROR
 - POLYCARBONATE PANEL EACH SIDE OF STUDS, FLUTES OF PANELS TO RUN HORIZONTALLY
 - WALL FRAMING IS VISIBLE THROUGH POLYCARBONATE PANELS, SPACE EQUALLY. PLUMB AND TRUE FRAMING IS REQUIRED
 - INTERMEDIATE REVEAL, RE: E7/A7.04
 - ONLY LOCATED AT WOMEN'S RESTROOMS
 - DESK CENTERED ON CEILING ELEMENT
 - ACOUSTIC FELT PANELS; RE: F3/A7.05 FOR PATTERN
 - EXISTING LM2 SIGN, RELOCATED FROM PREVIOUS OFFICE SPACE



Structural Engineer:
Bob D. Campbell & Co.
Missouri Certificate of Authority
#000442
4338 Belleview Ave.
Kansas City, MO 64111
816.531.4144

MEP Engineer:
PKMR Engineers
Missouri Certificate of Authority
#E-2002020886
13300 W. 98th Street
Lenexa, KS 66215
913.492.2400

JOB NUMBER 23011

LM2 OFFICE RENOVATION

9000 OLD SANTE FE ROAD
KANSAS CITY, MO 64138



Dalyn Novak - Architect
MO # 2011006178

ISSUE DATE 04/17/2024
No. Description Date

WSKF, Inc. © 2024

INTERIOR
ELEVATIONS

A4.01

4/17/2024 10:48:15 AM
C:\Users\JamesLukacovic\Desktop\Revit Local\23011_LM2 Office Renovation_CENTRALV22_JLukacovic@wskfarch.com.rvt

H
G
F
E
D
C
B
A

10

9

8

7

6

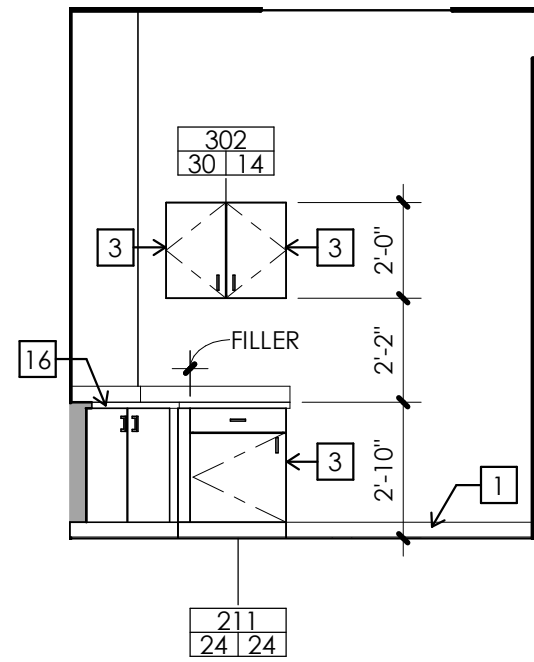
5

4

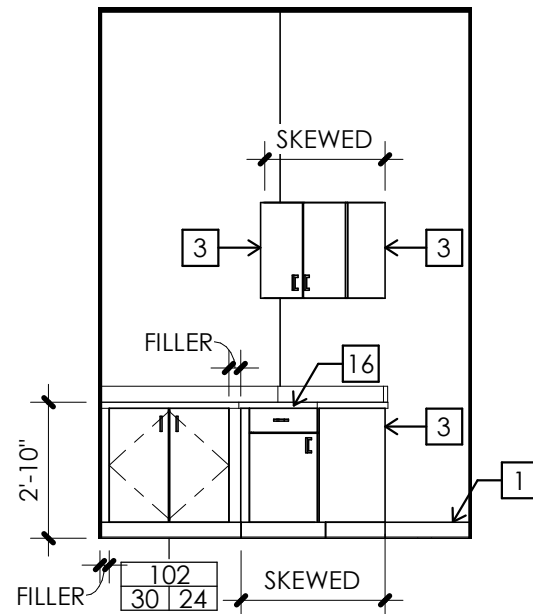
3

2

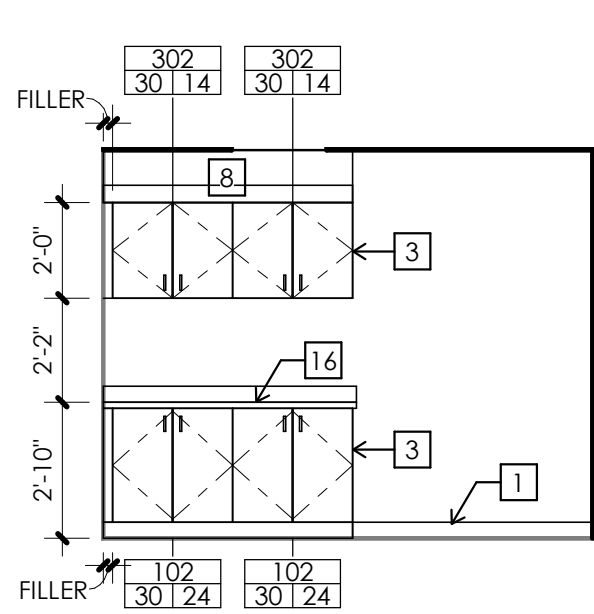
1



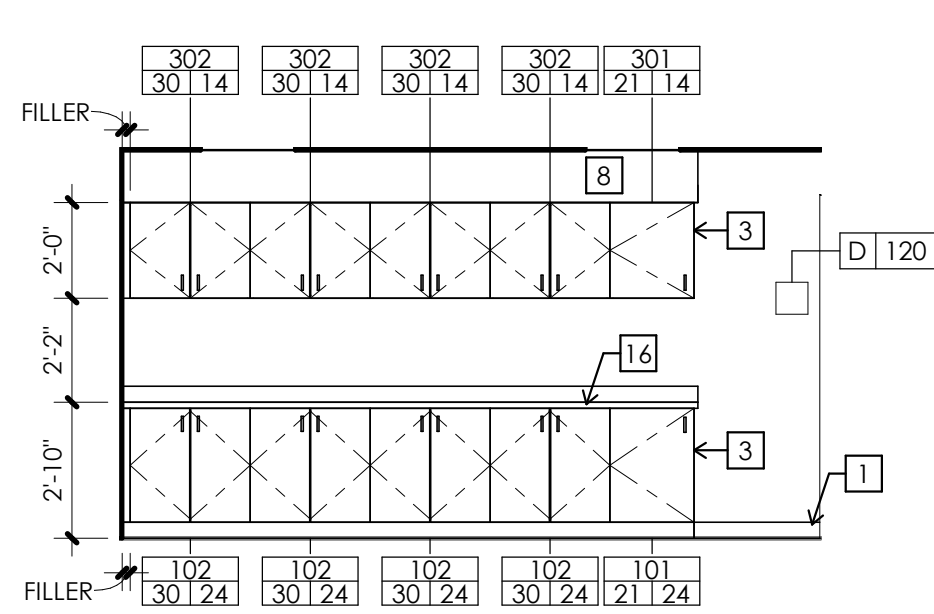
C9 WORKROOM 102
1/4" = 1'-0"



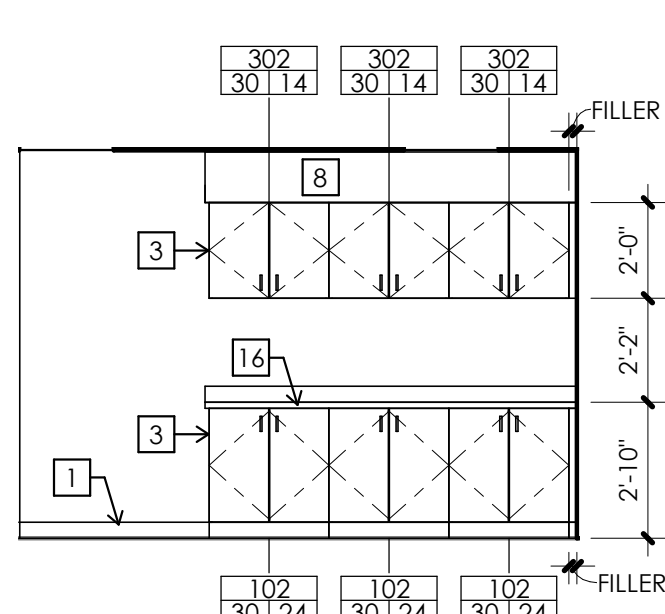
C7 WORKROOM 102
1/4" = 1'-0"



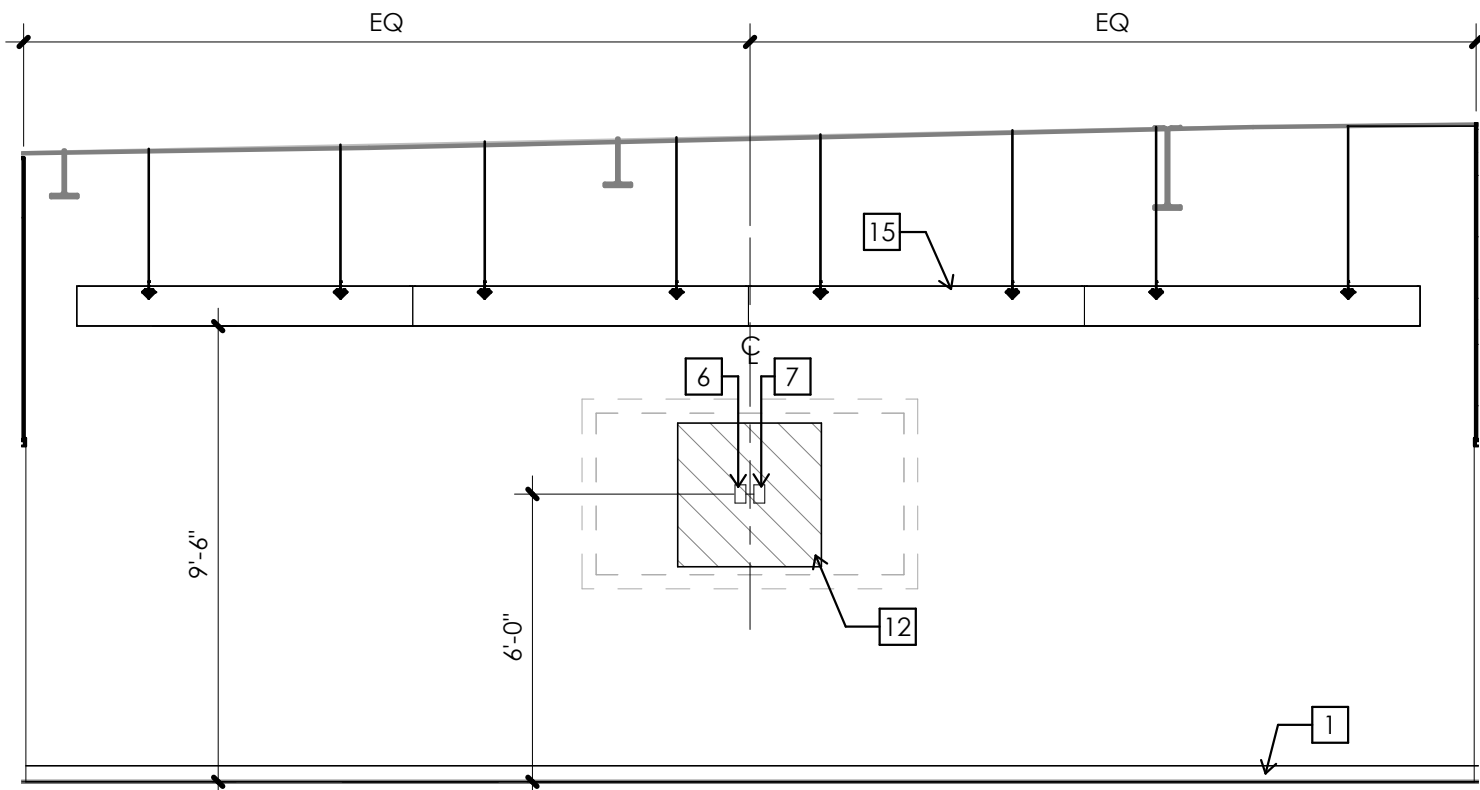
C6 SUPERINTENDENTS
1/4" = 1'-0"



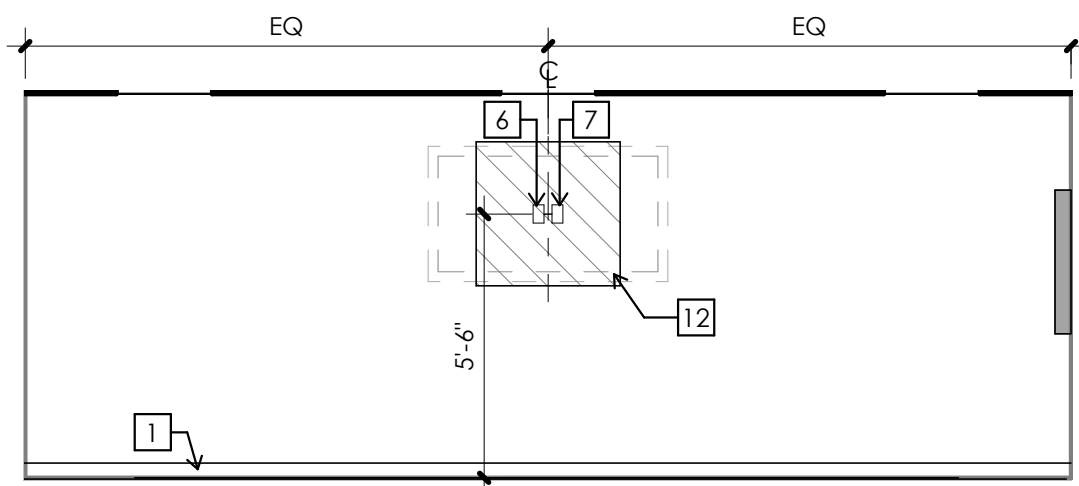
C5 WORK AREA
1/4" = 1'-0"



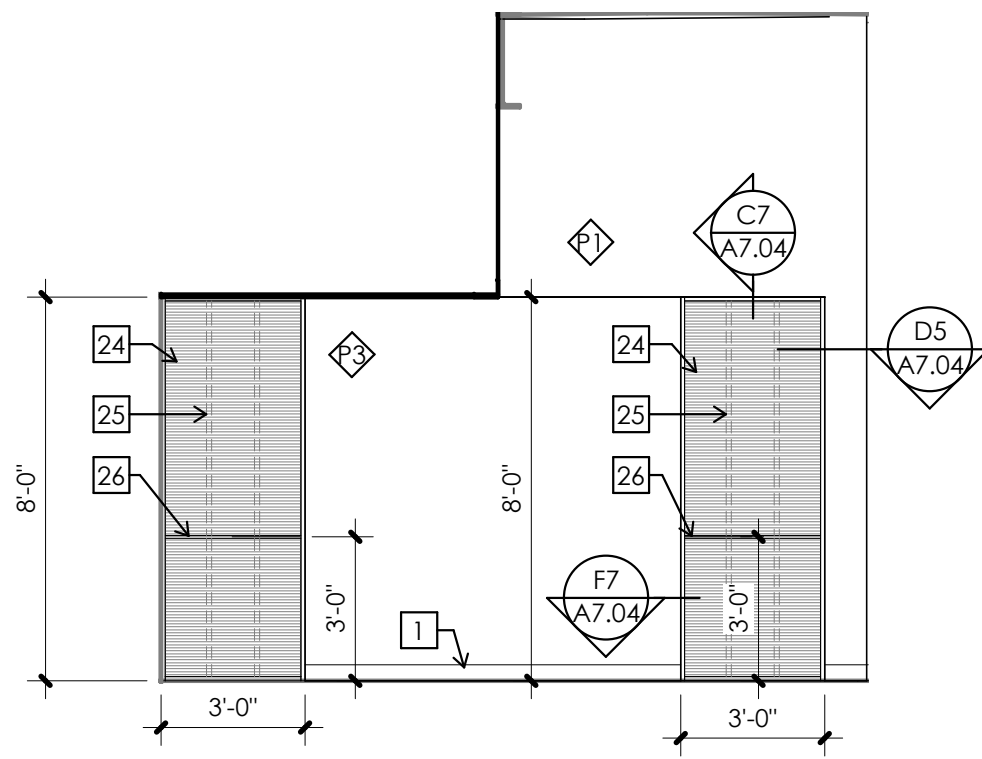
C3 WORK AREA
1/4" = 1'-0"



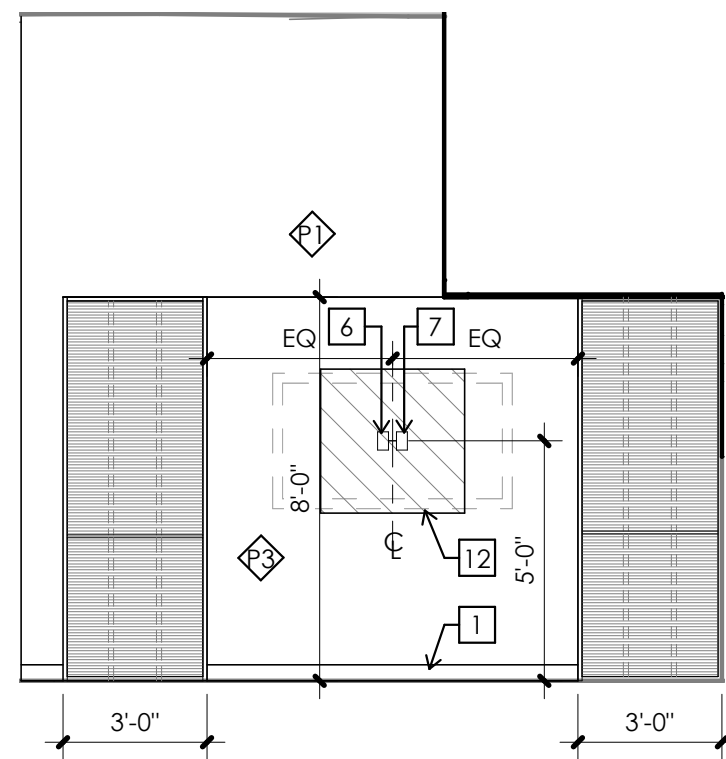
A10 MULTI PURPOSE
1/4" = 1'-0"



A7 FITNESS
1/4" = 1'-0"



A5 LOBBY
1/4" = 1'-0"



A3 LOBBY
1/4" = 1'-0"

GENERAL NOTES:

- FOR ITEMS LABELED [F#] REFER TO SPEC SECTION 102800 - TOILET, BATH, AND LAUNDRY ACCESSORIES.
- FOR ITEMS LABELED [D#] REFER TO FINISH SCHEDULE ON A7.01.
- ALL DIMENSIONS ON INTERIOR ELEVATIONS ARE FROM FINISHED SURFACES.
- OFOI = OWNER FURNISHED, OWNER INSTALLED.
- OFCI = OWNER FURNISHED, CONTRACTOR INSTALLED.
- REFER TO CASEWORK SCHEDULE ON A7.01 AND CASEWORK TAG, SEE BELOW.

STANDARD AWI NUMBER
CASEWORK DEPTH
CASEWORK WIDTH

- "FILE" INDICATES DRAWER TO BE SIZED & OUTFITTED FOR HANGING FILES
- "L" INDICATES CABINET DOOR/DRAWER TO BE LOCKED

ELEVATION NOTES:

- WALL BASE PER FINISH SCHEDULE
- COUNTERTOP PER FINISH SCHEDULE
- FINISHED END OF CASEWORK
- FULL HEIGHT WALL TILE; RE: C3/A7.04
- TILE WAINSCOT; RE: C3/A7.04
- DATA; RE: MEP
- OUTLET; RE: MEP
- GYP. BD. SOFFIT; PAINT PER FINISH SCHEDULE ON A7.01
- TILE BACKSPLASH PER FINISH SCHEDULE ON A7.01
- VANITY LIGHT; RE: MEP
- APPLIANCE/EQUIPMENT; RE: FFE PLAN ON A7.03
- MONITOR & MOUNTING BRACKET BY OWNER. CONTRACTOR TO PROVIDE 36"X36" IN WALL SOLID BACKING; RE: TV MOUNTING GUIDE ON A7.04
- CONCEALED COUNTERTOP SUPPORT BRACKET, NOTCH FINISH FACE OF WALL AROUND BRACKETS
- DECORATIVE PENDANT LIGHTING; RE: MEP
- SUSPENDED ACOUSTIC FELT BAFFLE; RE: RCP
- COUNTERTOP & BACKSPLASH PER FINISH SCHEDULE
- SUSPENDED LINEAR LIGHTING; RE: MEP
- FRAMELESS MIRROR
- INSULATED PIPE WRAP COVER; RE: MEP
- APRON W/ADA VANITY BRACKET
- FULL HEIGHT DECORATIVE WALL TILE; RE: C3/A7.04
- METAL TILE EDGE TRIM, TS4
- 18"X36" KOHLER ESSENTIAL CAPSULE VANITY MIRROR
- POLYCARBONATE PANEL EACH SIDE OF STUDS, FLUTES OF PANELS TO RUN HORIZONTALLY
- WALL FRAMING IS VISIBLE THROUGH POLYCARBONATE PANELS, SPACE EQUALLY, PLUMB AND TRUE FRAMING IS REQUIRED
- INTERMEDIATE REVEAL; RE: E7/A7.04
- ONLY LOCATED AT WOMEN'S RESTROOMS
- DESK CENTERED ON CEILING ELEMENT
- ACOUSTIC FELT PANELS; RE: F3/A7.05 FOR PATTERN
- EXISTING LM2 SIGN, RELOCATED FROM PREVIOUS OFFICE SPACE



Structural Engineer:
Bob D. Campbell & Co.
Missouri Certificate of Authority
#000442
4338 Belleview Ave.
Kansas City, MO 64111
816.531.4144

MEP Engineer:
PKMR Engineers
Missouri Certificate of Authority
#E-2002020886
13300 W. 98th Street
Lenexa, KS 66215
913.492.2400

JOB NUMBER 23011

LM2 OFFICE RENOVATION

9000 OLD SANTE FE ROAD
KANSAS CITY, MO 64138



Dalyn Novak - Architect
MO # 2011006178

ISSUE DATE 04/17/2024
No. Description Date

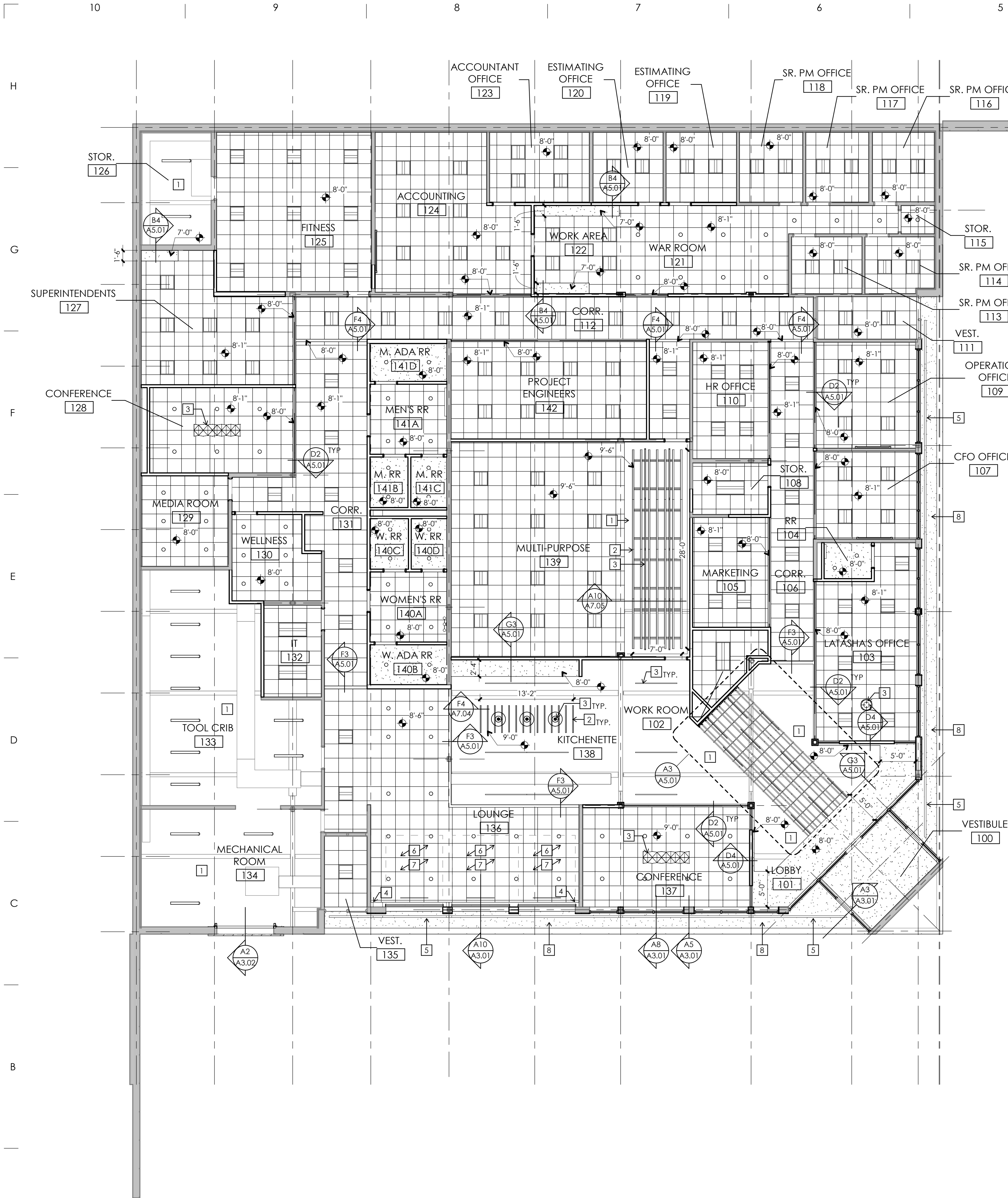
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65
66
67
68
69
70
71
72
73
74
75
76
77
78
79
80
81
82
83
84
85
86
87
88
89
90
91
92
93
94
95
96
97
98
99
100
101
102
103
104
105
106
107
108
109
110
111
112
113
114
115
116
117
118
119
120
121
122
123
124
125
126
127
128
129
130
131
132
133
134
135
136
137
138
139
140
141
142
143
144
145
146
147
148
149
150
151
152
153
154
155
156
157
158
159
160
161
162
163
164
165
166
167
168
169
170
171
172
173
174
175
176
177
178
179
180
181
182
183
184
185
186
187
188
189
190
191
192
193
194
195
196
197
198
199
200
201
202
203
204
205
206
207
208
209
210
211
212
213
214
215
216
217
218
219
220
221
222
223
224
225
226
227
228
229
230
231
232
233
234
235
236
237
238
239
240
241
242
243
244
245
246
247
248
249
250
251
252
253
254
255
256
257
258
259
260
261
262
263
264
265
266
267
268
269
270
271
272
273
274
275
276
277
278
279
280
281
282
283
284
285
286
287
288
289
290
291
292
293
294
295
296
297
298
299
300
301
302
303
304
305
306
307
308
309
310
311
312
313
314
315
316
317
318
319
320
321
322
323
324
325
326
327
328
329
330
331
332
333
334
335
336
337
338
339
340
341
342
343
344
345
346
347
348
349
350
351
352
353
354
355
356
357
358
359
360
361
362
363
364
365
366
367
368
369
370
371
372
373
374
375
376
377
378
379
380
381
382
383
384
385
386
387
388
389
390
391
392
393
394
395
396
397
398
399
400
401
402
403
404
405
406
407
408
409
410
411
412
413
414
415
416
417
418
419
420
421
422
423
424
425
426
427
428
429
430
431
432
433
434
435
436
437
438
439
440
441
442
443
444
445
446
447
448
449
450
451
452
453
454
455
456
457
458
459
460
461
462
463
464
465
466
467
468
469
470
471
472
473
474
475
476
477
478
479
480
481
482
483
484
485
486
487
488
489
490
491
492
493
494
495
496
497
498
499
500
501
502
503
504
505
506
507
508
509
510
511
512
513
514
515
516
517
518
519
520
521
522
523
524
525
526
527
528
529
530
531
532
533
534
535
536
537
538
539
540
541
542
543
544
545
546
547
548
549
550
551
552
553
554
555
556
557
558
559
560
561
562
563
564
565
566
567
568
569
570
571
572
573
574
575
576
577
578
579
580
581
582
583
584
585
586
587
588
589
590
591
592
593
594
595
596
597
598
599
600
601
602
603
604
605
606
607
608
609
610
611
612
613
614
615
616
617
618
619
620
621
622
623
624
625
626
627
628
629
630
631
632
633
634
635
636
637
638
639
640
641
642
643
644
645
646
647
648
649
650
651
652
653
654
655
656
657
658
659
660
661
662
663
664
665
666
667
668
669
670
671
672
673
674
675
676
677
678
679
680
681
682
683
684
685
686
687
688
689
690
691
692
693
694
695
696
697
698
699
700
701
702
703
704
705
706
707
708
709
710
711
712
713
714
715
716
717
718
719
720
721
722
723
724
725
726
727
728
729
730
731
732
733
734
735
736
737
738
739
740
741
742
743
744
745
746
747
748
749
750
751
752
753
754
755
756
757
758
759
760
761
762
763
764
765
766
767
768
769
770
771
772
773
774
775
776
777
778
779
780
781
782
783
784
785
786
787
788
789
790
791
792
793
794
795
796
797
798
799
800
801
802
803
804
805
806
807
808
809
810
811
812
813
814
815
816
817
818
819
820
821
822
823
824
825
826
827
828
829
830
831
832
833
834
835
836
837
838
839
840
841
842
843
844
845
846
847
848
849
850
851
852
853
854
855
856
857
858
859
860
861
862
863
864
865
866
867
868
869
870
871
872
873
874
875
876
877
878
879
880
881
882
883
884
885
886
887
888
889
890
891
892
893
894
895
896
897
898
899
900
901
902
903
904
905
906
907
908
909
910
911
912
913
914
915
916
917
918
919
920
921
922
923
924
925
926
927
928
929
930
931
932
933
934
935
936
937
938
939
940
941
942
943
944
945
946
947
948
949
950
951
952
953
954
955
956
957
958
959
960
961
962
963
964
965
966
967
968
969
970
971
972
973
974
975
976
977
978
979
980
981
982
983
984
985
986
987
988
989
990
991
992
993
994
995
996
997
998
999
1000

WSKF, Inc. © 2024

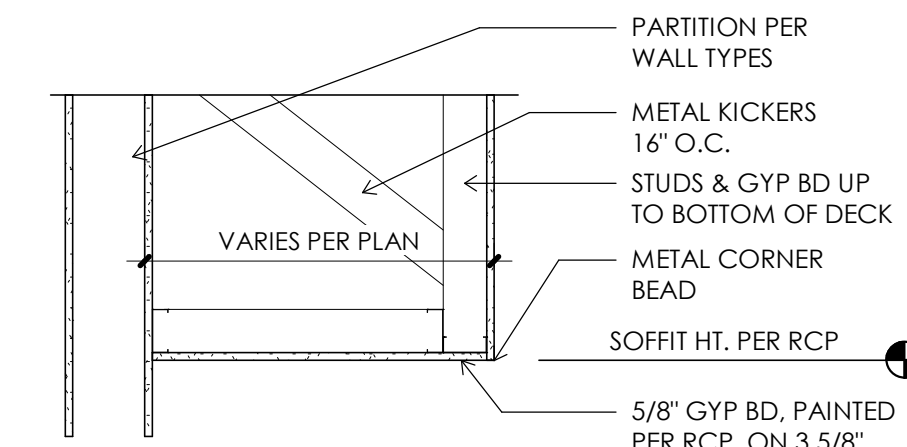
INTERIOR
ELEVATIONS

A4.02

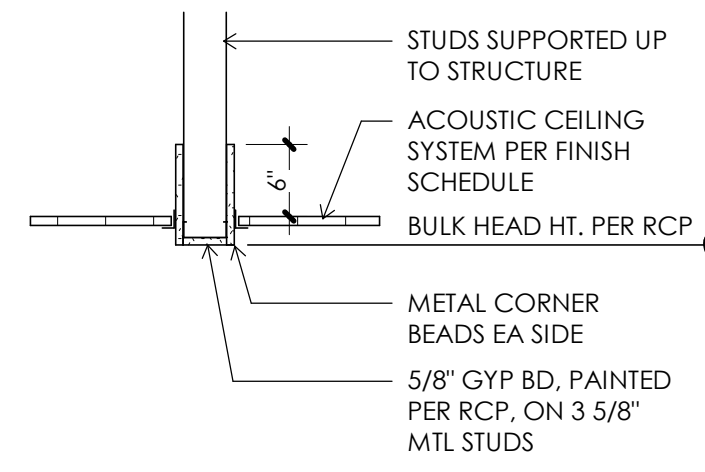
4/17/2024 10:48:21 AM
C:\Users\jameslukacovic\Desktop\local\23011_LM2 Office Renovation_CENTRALV22_jlukacovic@wskfarch.com.rvt



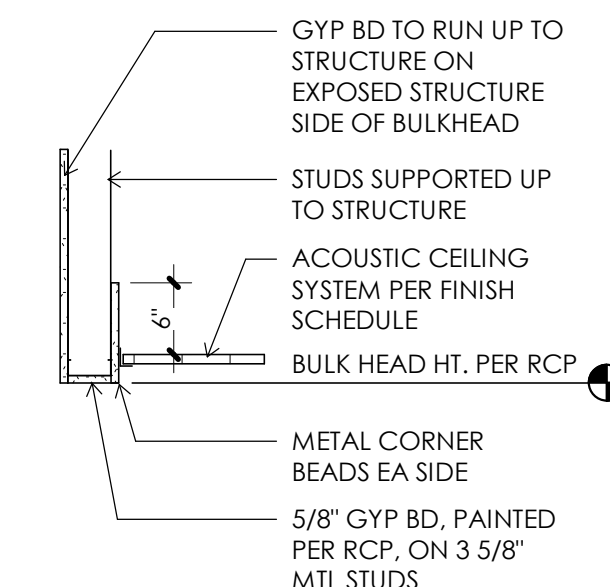
REFLECTED CEILING
A10
1/8" = 1'-0"



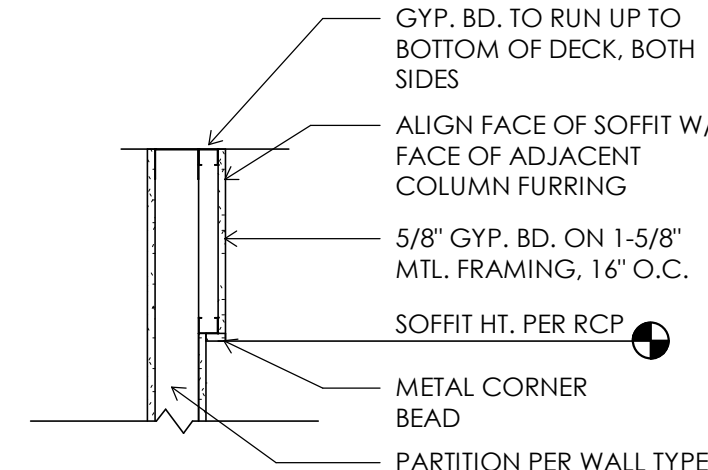
SOFFIT @ EXPOSED
G3
3/4" = 1'-0"



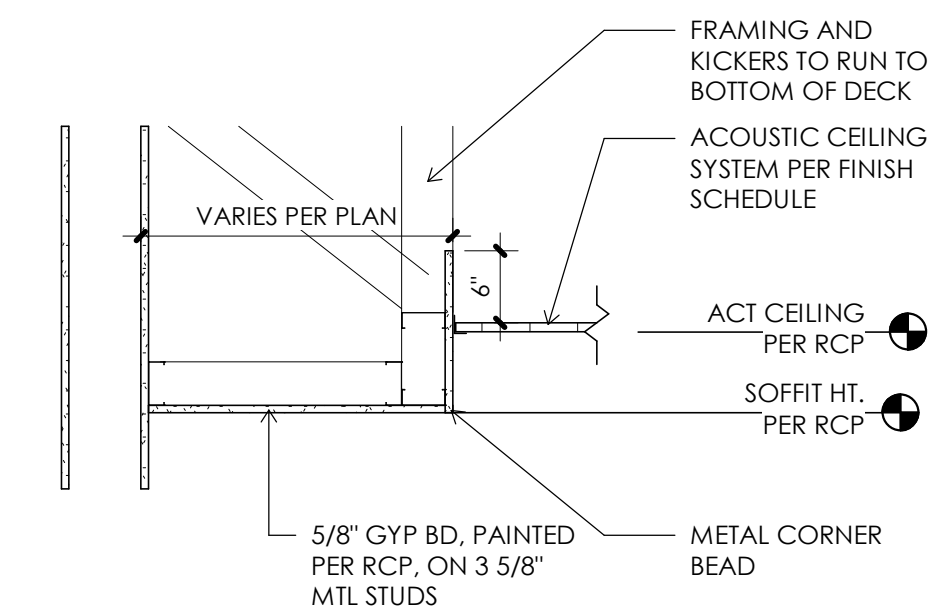
F4 BULKHEAD DETAIL
3/4" = 1'-0"



F3 BULKHEAD DETAIL
3/4" = 1'-0"



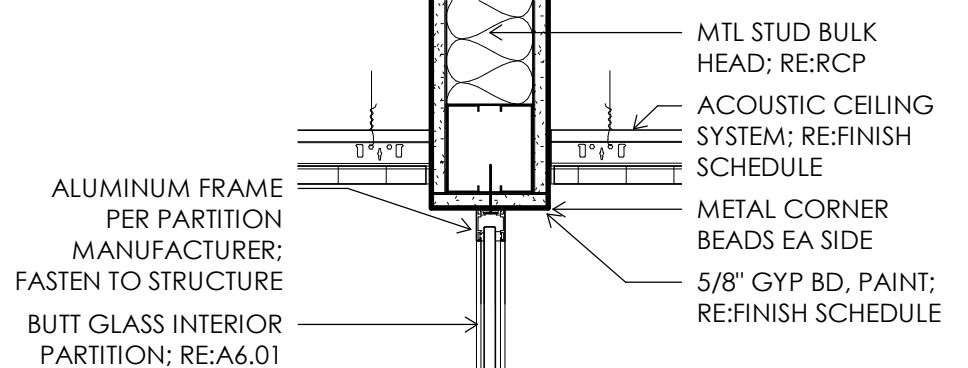
D4 LOBBY SOFFIT DETAIL
3/4" = 1'-0"



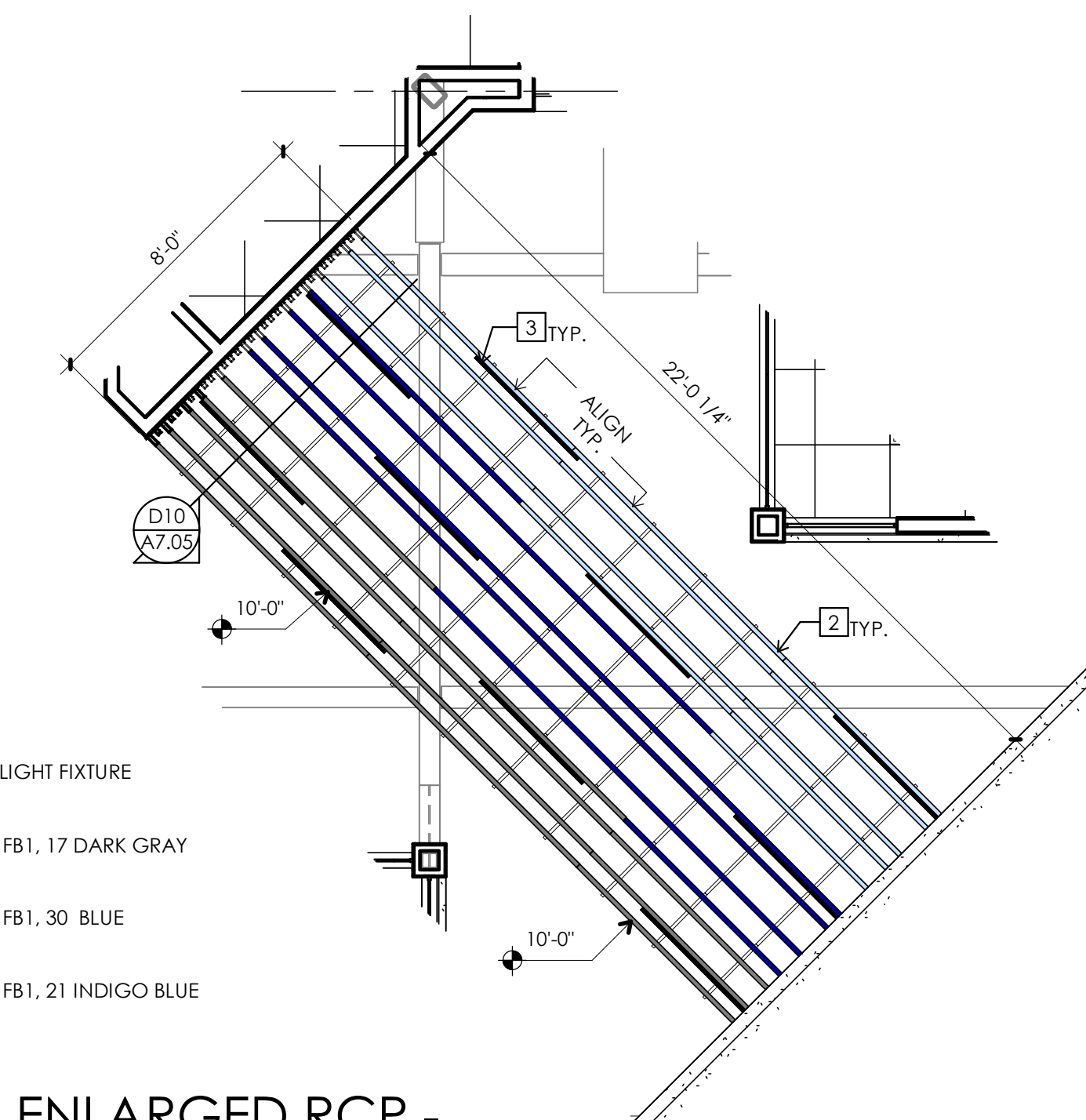
B4 SOFFIT DETAIL
3/4" = 1'-0"

- LEGEND
- SUSPENDED LIGHT FIXTURE
 - FELT BAFFLE; FB1, 17 DARK GRAY
 - FELT BAFFLE; FB1, 30 BLUE
 - FELT BAFFLE; FB1, 21 INDIGO BLUE

ENLARGED RCP -
A3
1/4" = 1'-0"



INTERIOR STOREFRONT
D2
1 1/2" = 1'-0"



GENERAL NOTES:

- ALL ACOUSTICAL CEILING TILES AND GRID TO BE INSTALLED @ 8'-0" A.F.F., U.N.O.
- ALL GYP. BD. CEILINGS TO BE INSTALLED @ 8'-0" A.F.F., U.N.O.
- RUN FRAMING FOR SOFFIT UP TO STRUCTURE W/ KICKERS @ 24" O.C. U.N.O.
- REFER TO ELECTRICAL FOR LIGHT FIXTURE TYPES AND NOTES.
- REFER TO MECHANICAL FOR SUPPLY AND RETURN REGISTER LOCATIONS.
- PROVIDE ACCESS PANEL(S) TO MEP EQUIPMENT (VALVES, VAV FILTERS, ETC.) AS NEEDED. SIZE PANEL AS NEEDED FOR ACCESS AND CONFIRM FINAL LOCATION WITH ARCHITECT.

RCP NOTES:

- EXPOSED STRUCTURE; PAINT ALL STRUCTURE, DECKING, DUCTWORK AND PIPING PER FINISH SCHEDULE
- DECORATIVE ACOUSTIC CEILING SYSTEM, REFER TO FINISH SCHEDULE
- SUSPENDED LIGHT FIXTURE, REFER TO ELEC. DWGS.
- HOLD EDGE OF CEILING AWAY FROM WALL; COORDINATE CLEARANCE W/ OVERHEAD DOOR TRACKS
- REPLACE EXISTING LINEAR SOFFIT VENT
- NO CEILING SUSPENSION CABLES ACROSS OHD OPENING, ADD ADDITIONAL FRAMING AS REQUIRED
- ROUTE WIRING FOR LIGHTING UNDERNEATH OHD TRACK TO AVOID CONFLICT WITH PATH OF TRAVEL
- NEW CEMENT BOARD SOFFIT W/ DIRECT APPLIED EIFS FINISH; BASIS OF DESIGN: STO CORP - STOQUICK FINISH SYSTEM FOR SOFFITS, SANDBLAST TEXTURE, COLOR TO MATCH BRIGHT ACCENT PAINT COLOR

LEGEND:

- PAINTED GYP. BD CEILING PER FINISH LEGEND
- ACOUSTIC CEILING GRID & TILE (ACT1) PER FINISH LEGEND



Structural Engineer:
Bob D. Campbell & Co.
Missouri Certificate of Authority
#000442
4338 Bellevue Ave.
Kansas City, MO 64111
816.531.4144

MEP Engineer:
PKMR Engineers
Missouri Certificate of Authority
#E-2002020886
13300 W. 98th Street
Lenexa, KS 66215
913.492.2400

JOB NUMBER 23011

LM2 OFFICE RENOVATION

9000 OLD SANTE FE ROAD
KANSAS CITY, MO 64138

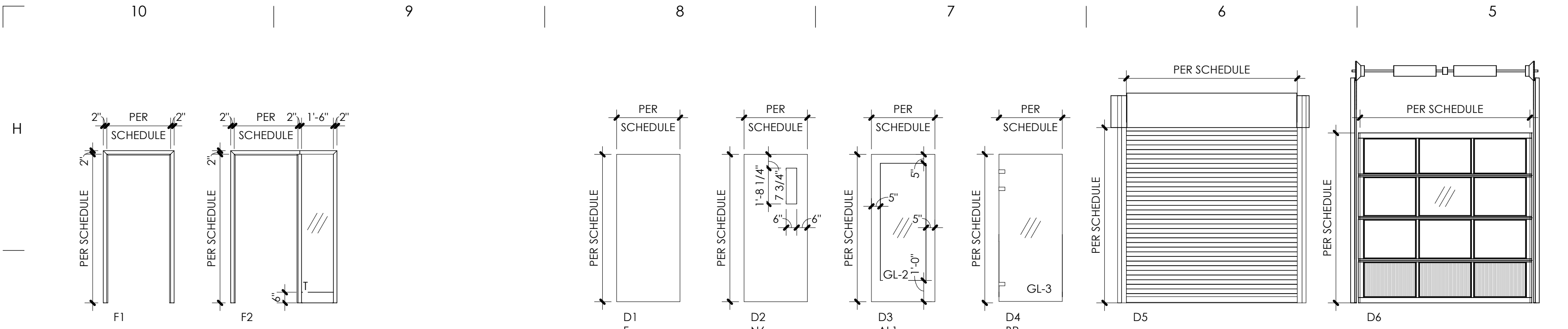


Dalyn Novak - Architect
MO # 2011006178
ISSUE DATE 04/17/2024
No. Description Date

WSKF, Inc. © 2024

REFLECTED
CEILING PLAN
A5.01

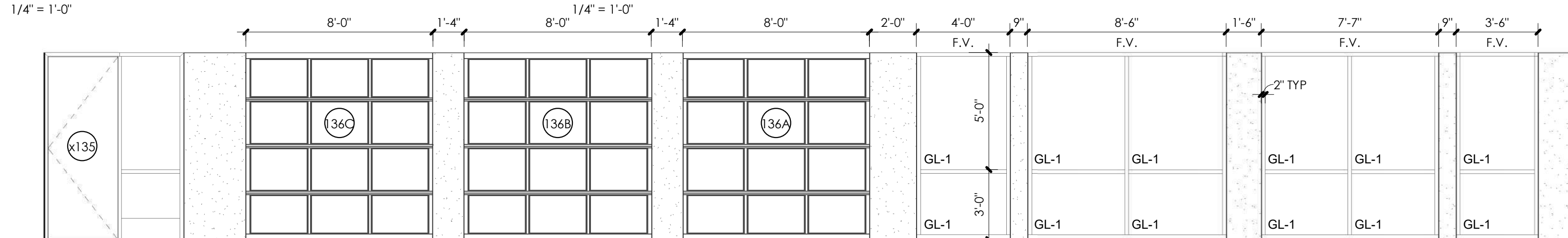
4/17/2024 10:48:26 AM C:\Users\jameslukacovic\Desktop\Revit Local\2021_LM2 Office Renovation_CENTRALV22_jlukacovic@wskfarch.com.rvt



FRAME TYPES

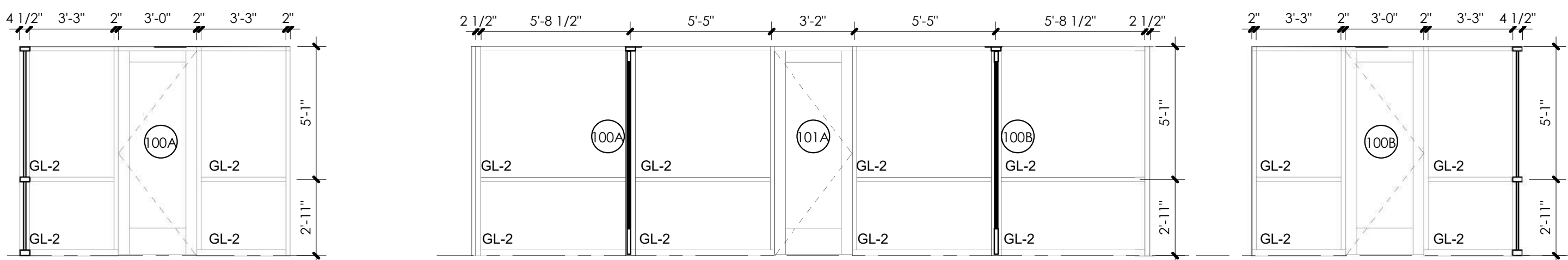
1/4" = 1'-0"

DOOR TYPES



F10 SOUTH STOREFRONT

1/4" = 1'-0"



GLAZING NOTES:
1. PROVIDE SAFETY GLASS IN ALL LOCATIONS WHERE REQUIRED BY APPLICABLE CODES **IBC 2406.4**
A. DOORS
B. ADJACENT TO DOORS
C. CERTIAN WINDOWS
D. GUARDS AND RAILINGS
E. AREAS W/ WET SURFACES
F. ADJACENT TO STAIRWAYS/RAMPS
G. ADJACENT TO BOTTOM STAIRWAY LANDING

GLAZING TYPES; RESPECIFICATIONS FOR FULL GLAZING SCHEDULE
GL-1 - 1" INSULATED GLASS, SOLARBAN 60 GRAY, LOW E
GL-2 - 1" IGU TEMPERED GLASS
GL-3 - 1/2" MONOLITHIC TEMPERED GLASS
- GL-3 TO RECIEVE CUSTOM PRINTED WINDOW FILM;
RE: FINISH LEGEND

D10 SW VESTIBULE

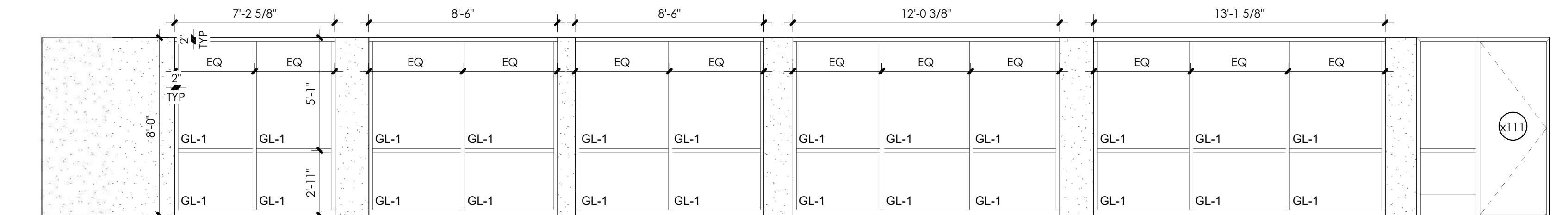
1/4" = 1'-0"

D9 SE VESTIBULE

1/4" = 1'-0"

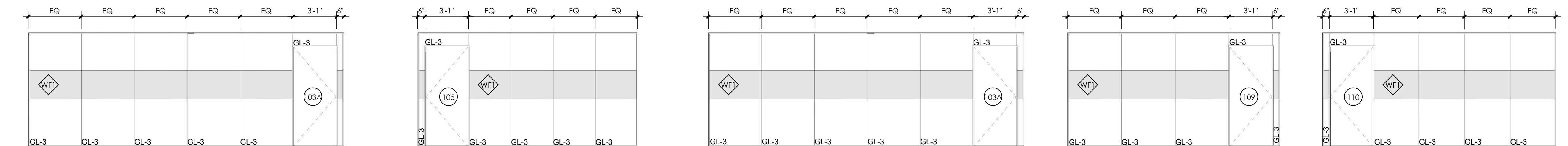
D8 NE VESTIBULE

1/4" = 1'-0"



C10 EAST STOREFRONT

1/4" = 1'-0"



B10 SF103

1/4" = 1'-0"

B8 SF105

1/4" = 1'-0"

B6 SF107

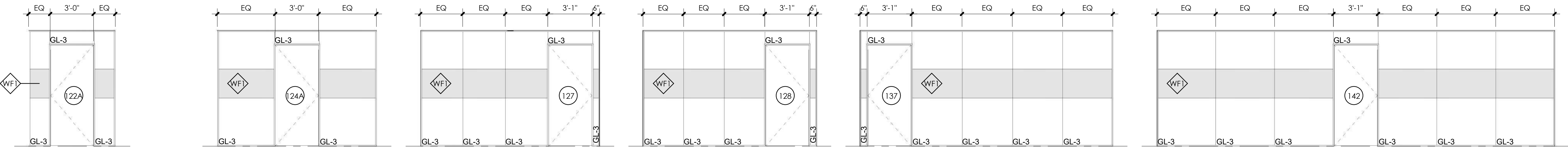
1/4" = 1'-0"

B4 SF109

1/4" = 1'-0"

B3 SF110

1/4" = 1'-0"



A10 SF122

1/4" = 1'-0"

A9 SF124

1/4" = 1'-0"

A8 SF127

1/4" = 1'-0"

A7 SF128

1/4" = 1'-0"

A5 SF137

1/4" = 1'-0"

A4 SF142

1/4" = 1'-0"

INTERIOR STOREFRONT NOTES:
1. ALUM. FRAMED SYSTEM W/ BUTT GLAZING.
2. SYSTEM TO BE CRL FALLBROOK INTERIOR PARTITION SYSTEM, CLEAR SATIN ANOD. ALUM.

DOOR SCHEDULE											
DOOR INFORMATION						FRAME INFORMATION					REMARKS
NO.	WIDTH	HEIGHT	TYPE	MATERIAL	FIRE RATING	TYPE	MATERIAL	HEAD	JAMB	THRESHOLD	
Existing											
x111	3'-0"	7'-10"	D1	HM	-	F2	HM	-	-	-	
x112	3'-0"	6'-10"	D3	HM	-	F2	HM	G3/A1.02	F3/A1.02		
x113	3'-0"	7'-0"	D1	SCWD	-	F1	HM	G3/A1.02	F3/A1.02		
x114	3'-0"	7'-0"	D1	SCWD	-	F1	HM	G3/A1.02	F3/A1.02		
x115	3'-0"	7'-0"	D1	SCWD	-	F1	HM	G3/A1.02	F3/A1.02		
x116	3'-0"	7'-0"	D1	SCWD	-	F1	HM	G3/A1.02	F3/A1.02		
x117	3'-0"	7'-0"	D1	SCWD	-	F1	HM	G3/A1.02	F3/A1.02		
x118	3'-0"	7'-0"	D1	SCWD	-	F1	HM	G3/A1.02	F3/A1.02		
x126	3'-0"	7'-0"	D1	HM	3 HR / A-LABEL	F1	HM	G3/A1.02	F3/A1.02		
x131	3'-0"	6'-10"	D3	HM	-	F2	HM	G3/A1.02	F3/A1.02		
x133	3'-0"	7'-0"	D2	SCWD	20 MIN	F1	HM	G3/A1.02	F3/A1.02		
x134	3'-0"	7'-0"	D2	SCWD	20 MIN	F1	HM	G3/A1.02	F3/A1.02		
x135	3'-0"	7'-10"	D1	HM	-	F2	HM	-	-	-	
x201	4'-0"	7'-0"	D1	HM	-	F1	HM	-	-	-	
New Construction											
100A	3'-0"	7'-10"	D3	ALUM	-	-	ALUM	G4/A3.02	-	E4/A3.02	
100B	3'-0"	7'-10"	D3	ALUM	-	-	ALUM	G4/A3.02	-	E4/A3.02	
101A	3'-0"	7'-10"	D3	ALUM	-	-	ALUM	G4/A3.02	-	E4/A3.02	
103A	3'-0"	7'-0"	D4	GLASS	-	-	ALUM				
104	3'-0"	7'-0"	D1	SCWD	-	F1	HM	G3/A1.02	F3/A1.02		
105	3'-0"	7'-0"	D4	GLASS	-	-	ALUM				
107	3'-0"	7'-11"	D4	GLASS	-	-	ALUM				
108	3'-0"	7'-0"	D1	SCWD	-	F1	HM	G3/A1.02	F3/A1.02		
109	3'-0"	7'-0"	D4	GLASS	-	-	ALUM				
110	3'-0"	7'-0"	D4	GLASS	-	-	ALUM				
119	3'-0"	7'-0"	D1	SCWD	-	F1	HM	G3/A1.02	F3/A1.02		
120	3'-0"	7'-0"	D1	SCWD	-	F1	HM	G3/A1.02	F3/A1.02		
122A	3'-0"	7'-0"	D4	GLASS	-	-	ALUM				
123	3'-0"	7'-0"	D1	SCWD	-	F1	HM	G3/A1.02	F3/A1.02		
124A	3'-0"	7'-0"	D4	GLASS	-	-	ALUM				
124B	3'-0"	7'-0"	D1	SCWD	-	F1	HM	G3/A1.02	F3/A1.02		
125	3'-0"	7'-0"	D1	SCWD	-	F1	HM	G3/A1.02	F3/A1.02		
127	3'-0"	7'-0"	D4	GLASS	-	-	ALUM				
128	3'-0"	7'-0"	D4	GLASS	-	-	ALUM				
129	3'-0"	7'-0"	D1	SCWD	-	F1	HM	G3/A1.02	F3/A1.02		
130	3'-0"	7'-0"	D1	SCWD	-	F1	HM	G3/A1.02	F3/A1.02		
132	3'-0"	7'-0"	D1	HM	-	F1	HM	G3/A1.02	F3/A1.02		
134A	8'-0"	8'-0"	D5	STL	-	-	-	C8/A3.02	E10/A3.02	G10/A3.02	
136A	8'-0"	8'-0"	D6	ALUM	-	-	-	C8/A3.02	A10/A3.02	C10/A3.02	
136B	8'-0"	8'-0"	D6	ALUM	-	-	-	C8/A3.02	A10/A3.02	C10/A3.02	
136C	8'-0"	8'-0"	D6	ALUM	-	-	-	C8/A3.02	A10/A3.02	C10/A3.02	
137	3'-0"	7'-0"	D4	GLASS	-	-	ALUM				
139A	3'-0"	7'-0"	D1	SCWD	-	F1	HM	G3/A1.02	F3/A1.02		
139B	3'-0"	7'-0"	D1	SCWD	-	F1	HM	G3/A1.02	F3/A1.02		
140A	3'-0"	7'-0"	D1	SCWD	-	F1	HM	G3/A1.02	F3/A1.02		
140B	3'-0"	7'-0"	D1	SCWD	-	F1	HM	G3/A1.02	F3/A1.02		
140C	3'-0"	7'-0"	D1	SCWD	-	F1	HM	G3/A1.02	F3/A1.02		
140D	3'-0"	7'-0"	D1	SCWD	-	F1	HM	G3/A1.02	F3/A1.02		
141A	3'-0"	7'-0"	D1	SCWD	-	F1	HM	G3/A1.02	F3/A1.02		
141B	3'-0"	7'-0"	D1	SCWD	-	F1	HM	G3/A1.02	F3/A1.02		
141C	3'-0"	7'-0"	D1	SCWD	-	F1	HM	G3/A1.02	F3/A1.02		
141D	3'-0"	7'-0"	D1	SCWD	-	F1	HM	G3/A1.02	F3/A1.02		
142	3'-0"	7'-0"	D4	GLASS	-	-	ALUM				
DOOR SCHEDULE GENERAL NOTES:											
• WOOD AND HOLLOW METAL DOORS TO BE 1 3/4" THICK U.N.O.											
DOOR SCHEDULE KEY NOTES:											



Missouri Certificate of Authority
#2003011262

Structural Engineer:
Bob D. Campbell & Co.
Missouri Certificate of Authority
#000442
4338 Belleview Ave.
Kansas City, MO 64111
816.531.4144

MEP Engineer:
PKMR Engineers
Missouri Certificate of Authority
#E-2002020886
13300 W. 98th Street
Lenexa, KS 66215
913.492.2400

JOB NUMBER 23011

LM2 OFFICE RENOVATION

9000 OLD SANTE FE ROAD
KANSAS CITY, MO 64138



Dalyn Novak - Architect
MO # 2011006178

ISSUE DATE 04/17/2024
No. Description Date

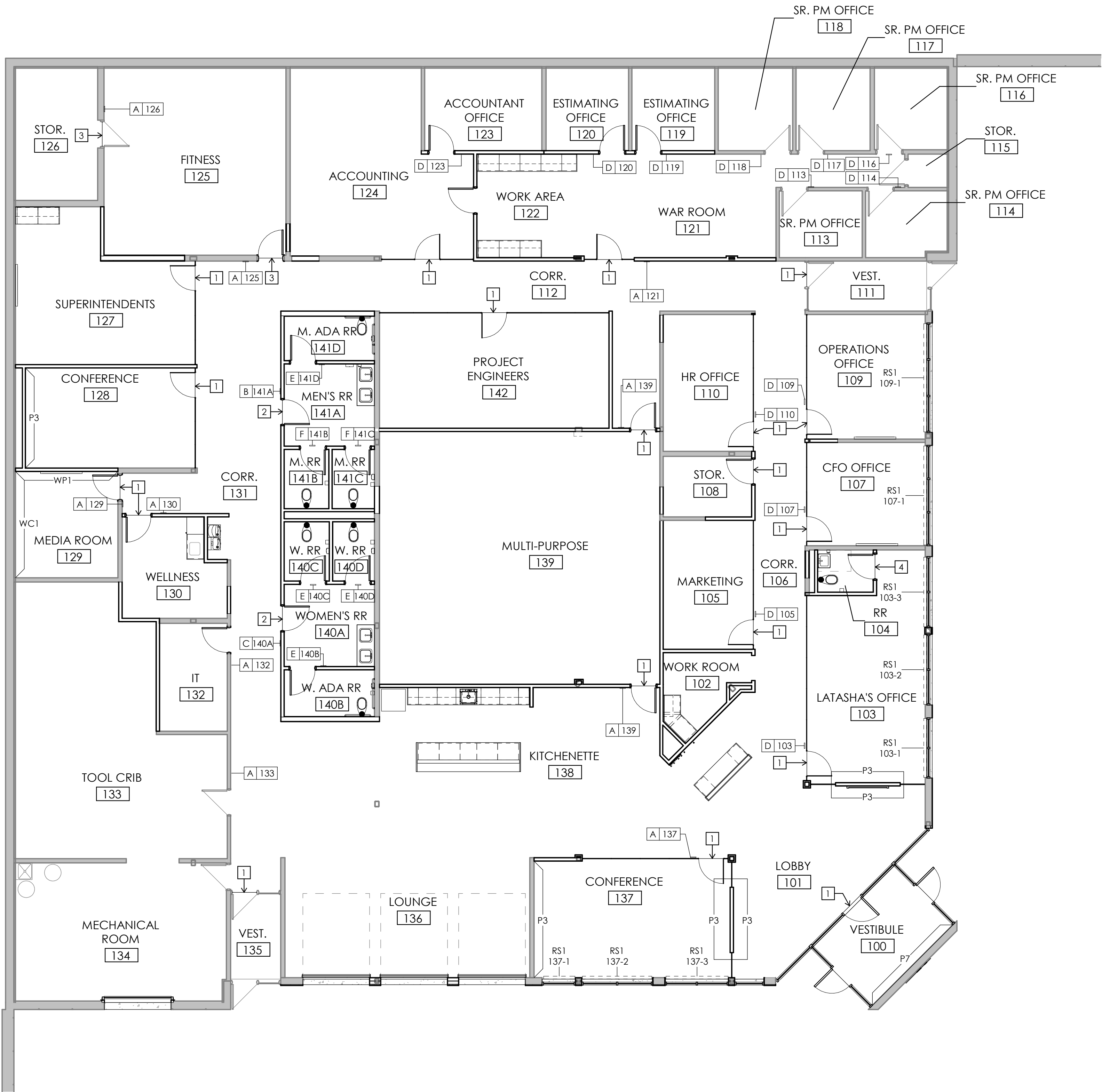
WSKF, Inc. © 2024

DOOR SCHEDULE & WINDOW DETAILS
A6.01

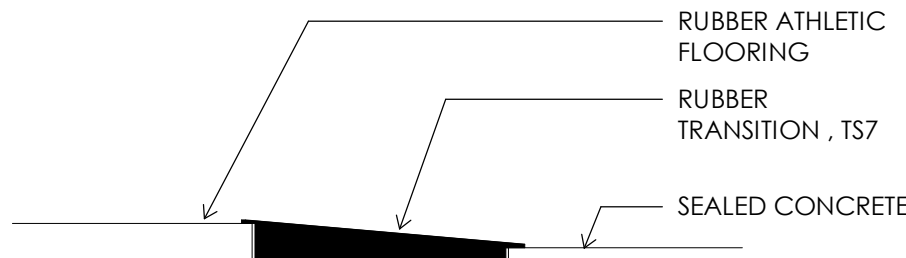
4/17/2024 10:48:32 AM
C:\Users\jameslukacovic\Desktop\Revit\local\23011_LM2 Office Renovation_CENTRALV22_jlukacovic@wskfarch.com.rvt

H
G
F
E
D
C
B
A

A10 FINISH PLAN
1/8" = 1'-0"

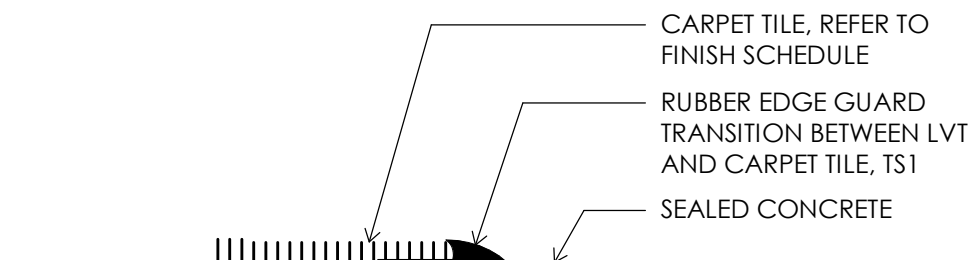


G4



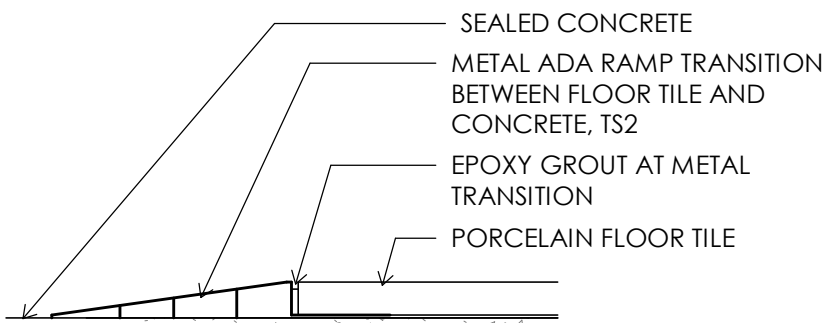
RUBBER ATHLETIC FLOORING TO CONCRETE
6" = 1'-0"

F4



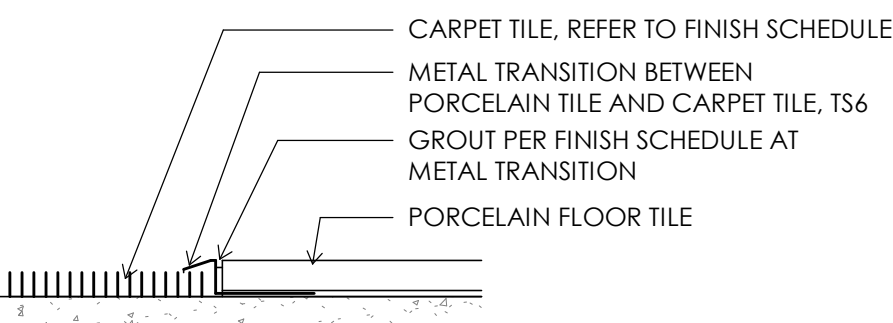
CARPET TO CONCRETE TRANSITION
6" = 1'-0"

D4



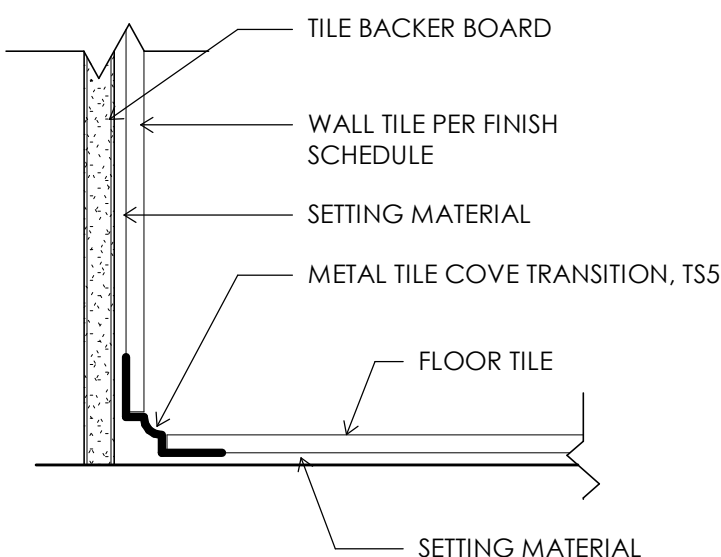
TILE TO CONCRETE TRANSITION
6" = 1'-0"

B4



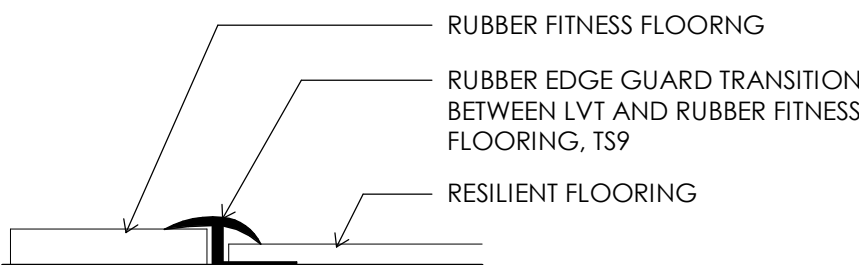
CARPET TO TILE TRANSITION
6" = 1'-0"

A4



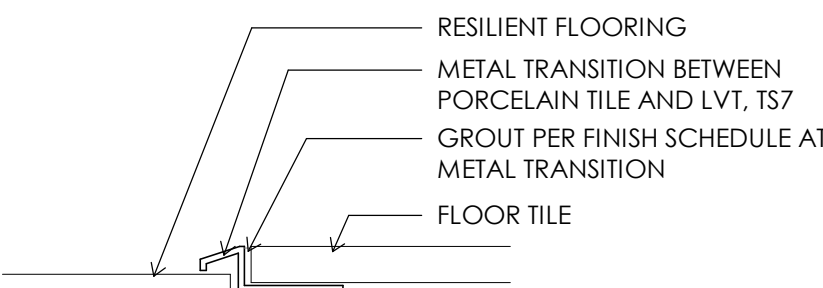
WALL TO FLOOR TILE COVE TRIM
3" = 1'-0"

A2



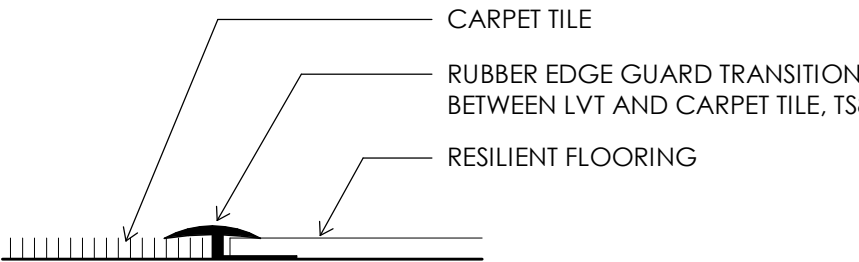
LVT TO RUBBER FITNESS FLOORING - ALT. #1
6" = 1'-0"

C2



TILE TO LVT - ALT. #1
6" = 1'-0"

D2



CARPET TO LVT - ALT. #1
6" = 1'-0"

FINISH PLAN GENERAL NOTES:

- CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL DIMENSIONS AND EXISTING CONDITIONS. ANY DISCREPANCIES WHICH WILL PREVENT THE ACCOMPLISHMENT OF INTENT SHOWN ON DRAWINGS SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ARCHITECT.
- WHERE A CONDITION IS NOTED 'TYPICAL' (TYP.), IT IS UNDERSTOOD THAT ALL SIMILAR CONDITIONS BE CONSTRUCTED OF THE SAME MATERIALS AND/OR DIMENSIONS.
- REFER TO ROOM FINISH SCHEDULES ON A7.01 FOR INTERIOR FINISH INFORMATION.
- REFER TO SIGNAGE SCHEDULE ON A7.04 FOR INTERIOR WALL MOUNTED ADA SIGNAGE AND LOCATIONS.

FINISH PLAN NOTES:

- TRANSITION BETWEEN CARPET TILE & CONCRETE
- TRANSITION BETWEEN PORCELAIN TILE & CONCRETE
- TRANSITION BETWEEN RUBBER FITNESS FLOORING & CONCRETE
- TRANSITION BETWEEN CARPET TILE & PORCELAIN TILE
- ALT. #1 - TRANSITION BETWEEN LVT & PORCELAIN TILE
- ALT. #1 - TRANSITION BETWEEN CARPET TILE & LVT
- ALT. #1 - TRANSITION BETWEEN LVT & RUBBER FITNESS FLOORING
- ALT. #1 - TRANSITION BETWEEN LVT & CONCRETE

FINISH PLAN LEGEND:

- A 100 SIGNAGE: RE: SIGNAGE SCHEDULE ON A7.01
- FLOOR POWER; RE: MEP
- WALL FINISH/ ACCENT PAINT: REFER TO FINISH LEGEND & INTERIOR ELEVATIONS FOR KEY FINISH MATERIAL
- RS1 101-1 ROLLER SHADE AT WINDOW REFER TO SCHEDULE ON A7.01



Missouri Certificate of Authority
#2003011262

Structural Engineer:
Bob D. Campbell & Co.
Missouri Certificate of Authority
#000442
4338 Belleview Ave.
Kansas City, MO 64111
816.531.4144

MEP Engineer:
PKMR Engineers
Missouri Certificate of Authority
#E-2002020886
13300 W. 98th Street
Lenexa, KS 66215
913.492.2400

JOB NUMBER 23011

LM2 OFFICE RENOVATION

9000 OLD SANTE FE ROAD
KANSAS CITY, MO 64138



Dalyn Novak - Architect
MO # 2011006178

ISSUE DATE 04/17/2024
No. Description Date

RUBBER FITNESS FLOORING

RUBBER EDGE GUARD TRANSITION BETWEEN LVT AND RUBBER FITNESS FLOORING, TS9

RESILIENT FLOORING

WSKF, Inc. © 2024

FINISH PLAN

A7.02



A10 FF&E PLAN
1/8" = 1'-0"

GENERAL NOTES:

A. ALL ITEMS ARE OWNER FURNISHED; OWNER INSTALLED

KEYED NOTES:

1. PROVIDE IN-WALL BLOCKING
2. RE: MEP FOR CONNECTION REQUIREMENTS

FFE SCHEDULE:

TAG	DESCRIPTION	NOTES
E1	COPY MACHINE	2
E2	MICROWAVE	2
E3	TV/MONITOR & BRACKET	1, 2
E4	REFRIGERATOR	2
E5	UNDER COUNTER REFRIGERATOR	2
E6	FURNITURE	
E7	COFFEE MAKER	2
E8	FITNESS EQUIPMENT	2



MEP Engineer:
PKMR Engineers
Missouri Certificate of Authority
#E-2002020886
13300 W. 98th Street
Lenexa, KS 66215
913.492.2400

JOB NUMBER 23011

LM2 OFFICE RENOVATION

9000 OLD SANTE FE ROAD
KANSAS CITY, MO 64138

110 Armour Road North Kansas City, Missouri 64116 Tel. 816.300.4101 Fax 816.300.4102



04/17/24

Dalyn Novak - Architect
MO # 2011006178

ISSUE DATE	04/17/2024
No Description	Date

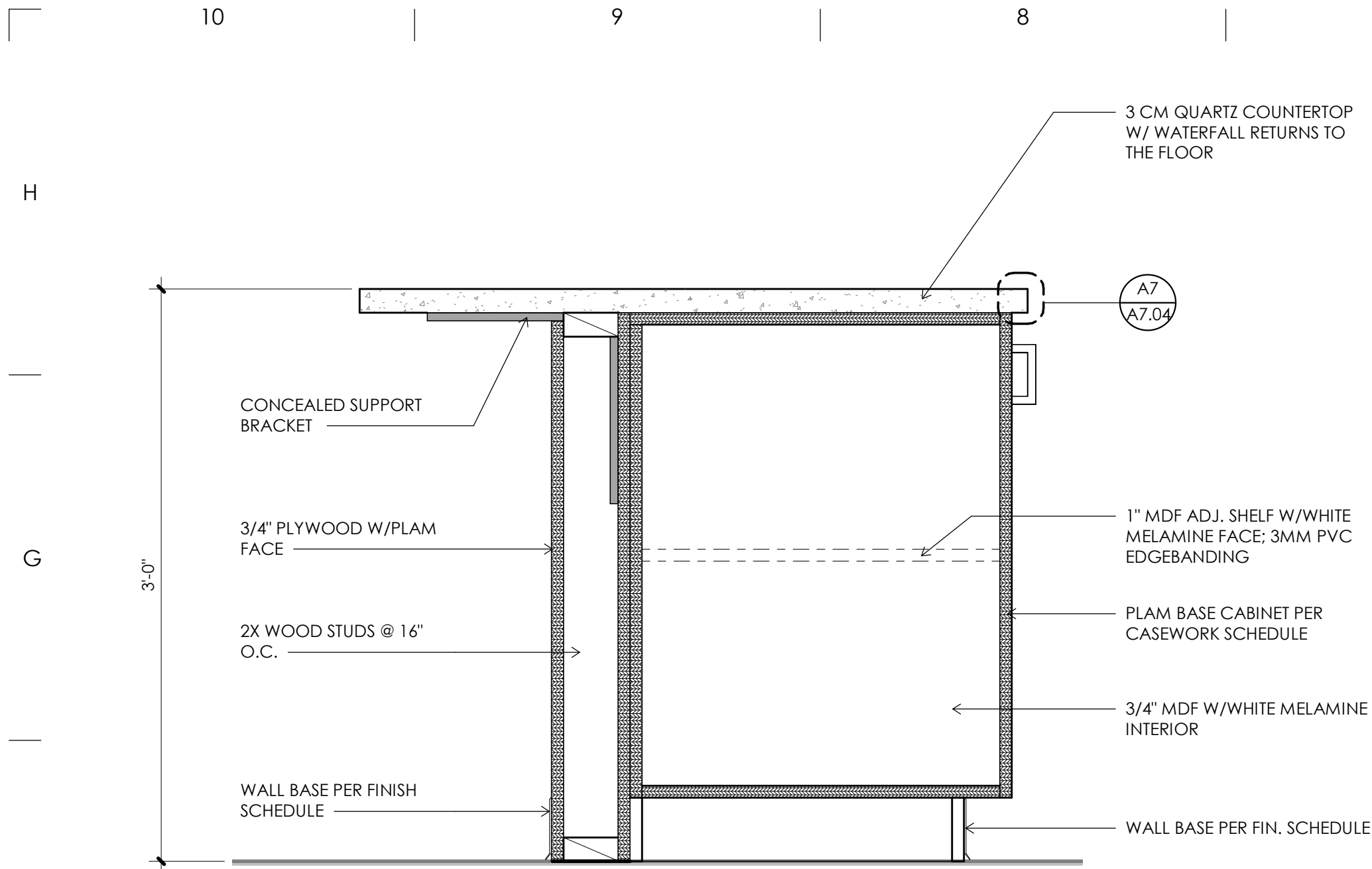
WSKF, Inc. © 2024

FF&E PLAN

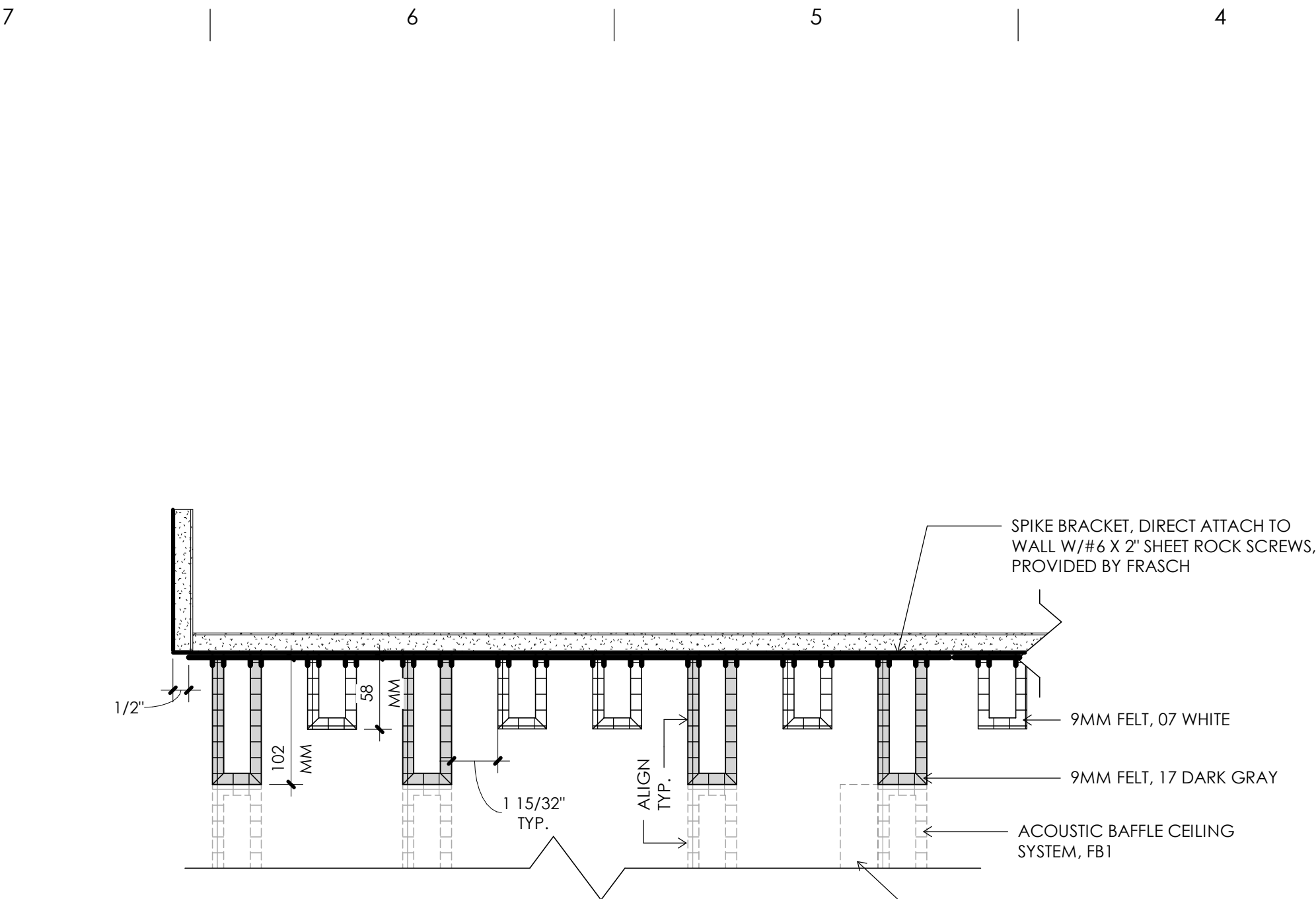
A7.03

4/17/2024 10:48:40 AM
C:\Users\JamesLukacovic\Desktop\Revit_Local\2301_LM2-Office-Renovation_CENTRALV22_jlukacovic@wskfarch.com.vr

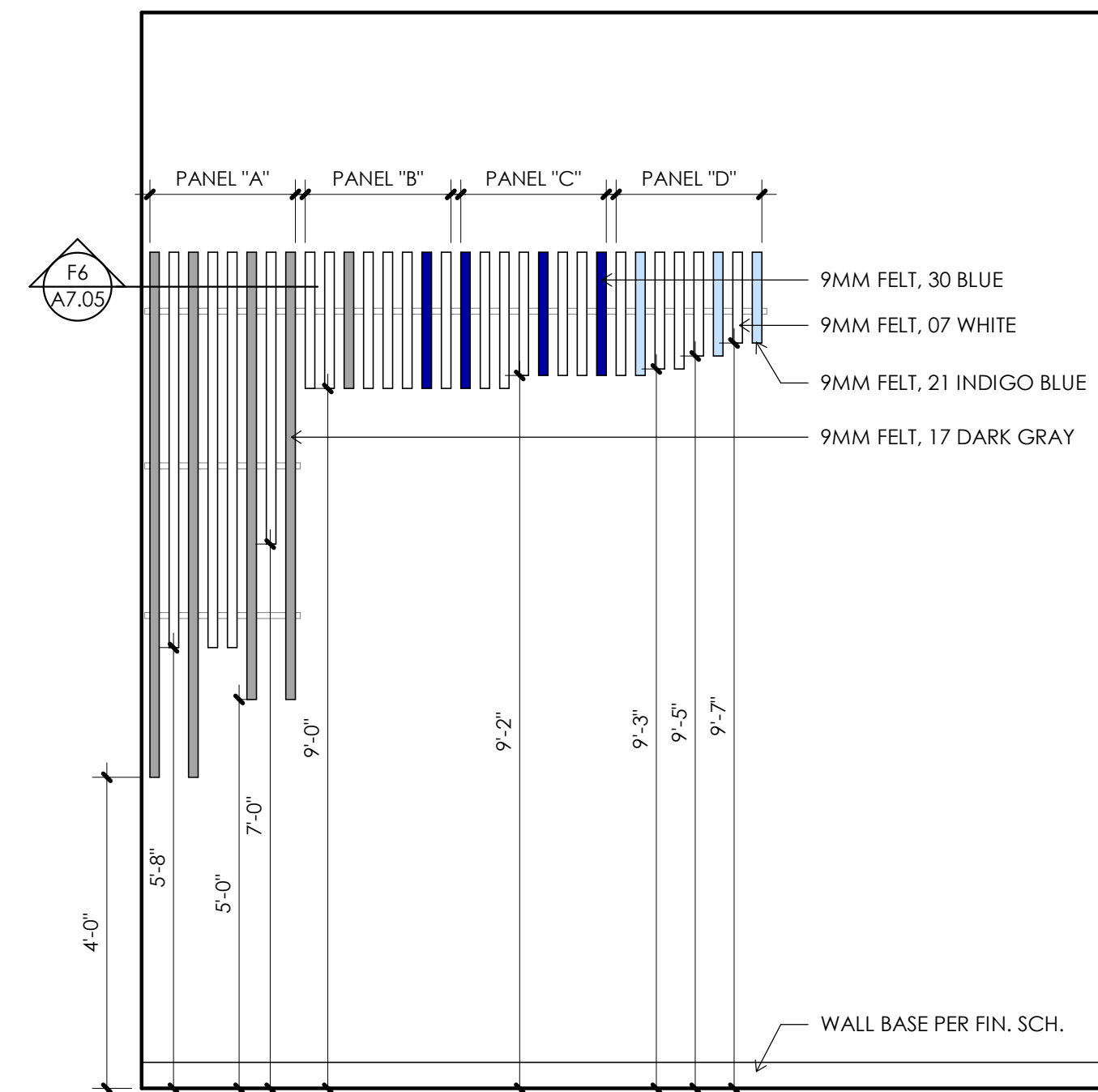
4/17/2024 10:48:41 AM
C:\Users\jameslukacovic\Desktop\Revit Local\23011_LM2 Office Renovation_CENTRALV22_jlukacovic@wskfarch.com.rvt



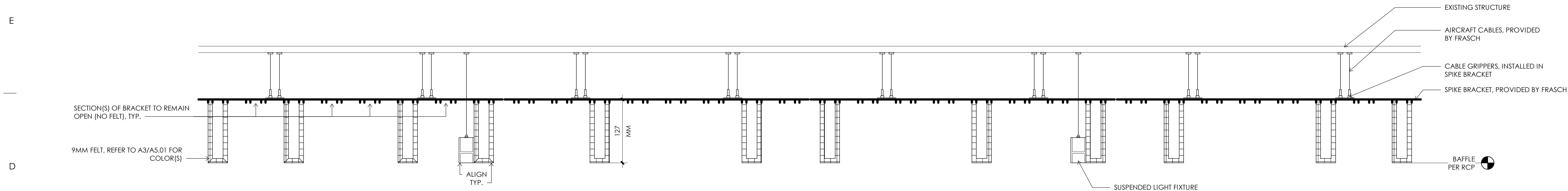
F10 KITCHENETTE ISLAND SECTION
1 1/2" = 1'-0"



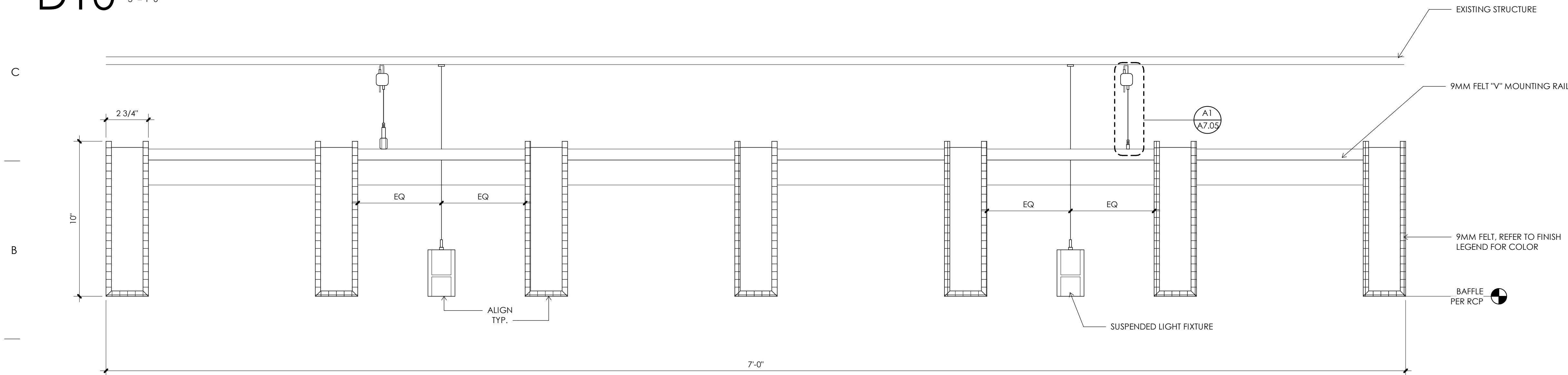
F6 ACOUSTIC FELT WALL PANEL - SECTION
3" = 1'-0"



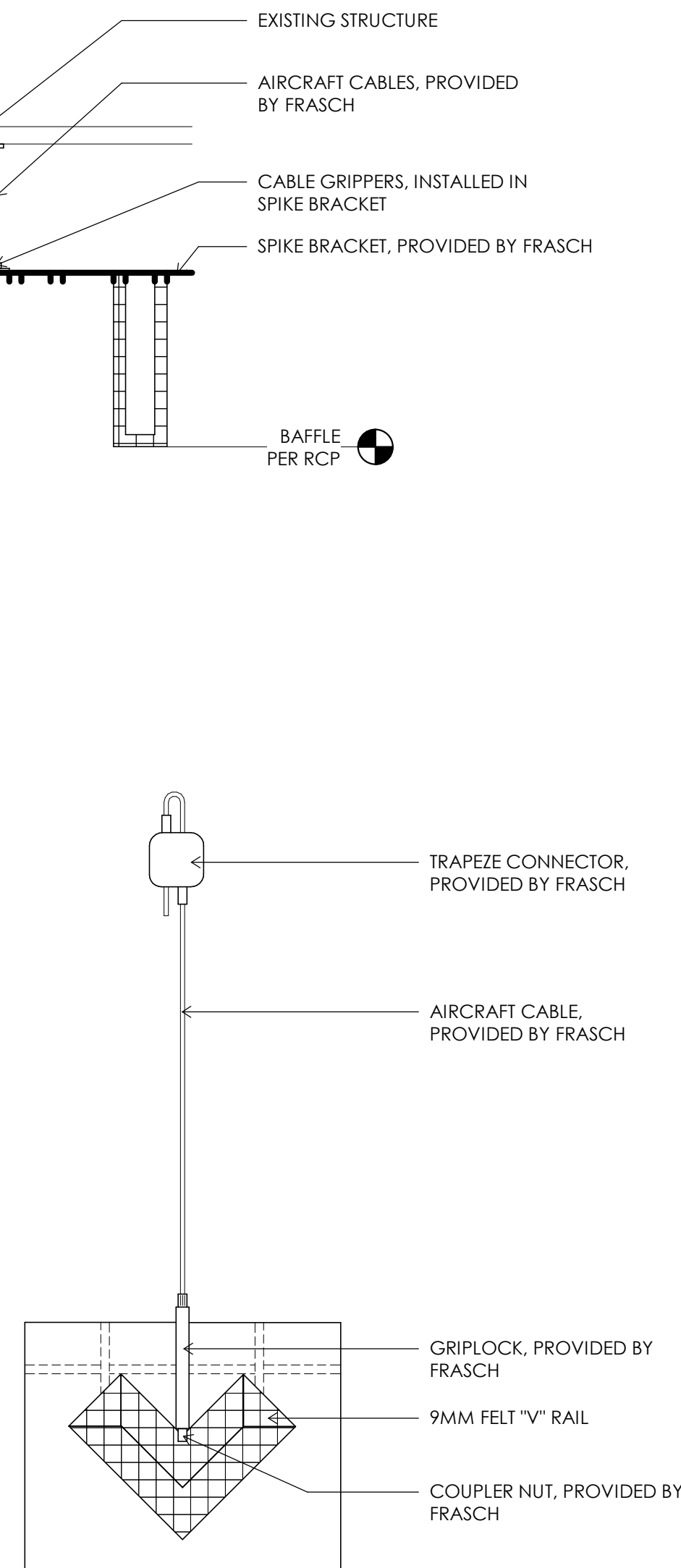
F2 ACOUSTIC FELT WALL PANELS
1/2" = 1'-0"



D10 LOBBY FELT BAFFLE SYSTEM
3" = 1'-0"



A10 MULTI-PURPOSE FELT BAFFLE SYSTEM
3" = 1'-0"



A1 MULTI-PURPOSE FELT BAFFLE SYSTEM HARDWARE
6" = 1'-0"



Structural Engineer:
Bob D. Campbell & Co.
Missouri Certificate of Authority
#000442
4338 Belleview Ave.
Kansas City, MO 64111
816.531.4144

MEP Engineer:
PKMR Engineers
Missouri Certificate of Authority
#E-2002020886
13300 W. 98th Street
Lenexa, KS 66215
913.492.2400

JOB NUMBER 23011

LM2 OFFICE RENOVATION

9000 OLD SANTE FE ROAD
KANSAS CITY, MO 64138

110 Armour Road North Kansas City, Missouri 64116 Tel: 816.300.4101 Fax: 816.300.4102



Dalyn Novak - Architect
MO # 2011006178

ISSUE DATE 04/17/2024
No. Description Date

WSKF, Inc. © 2024

INTERIOR
DETAILS

A7.05

GENERAL NOTES - STRUCTURAL

1. General Information

- A. The contractor shall verify dimensions and conditions before construction and notify the engineer of any discrepancies, inconsistencies, or difficulties affecting the work before proceeding.
- B. The contractor shall coordinate all disciplines, verifying size and location of all openings, whether shown on structural drawings or not, as called for on architectural, mechanical, or electrical drawings. In the case of work in an existing building the contractor shall scan existing structure to locate all rebar in the area of the new core/opening using ground penetrating radar and notify the engineer of record for review prior to concreting/casting. Conflicts, inconsistencies, or other difficulties affecting structural work shall be called to the architect or engineer's attention for direction before proceeding.
- C. All design and construction work for this project shall conform to the requirements of the following governing design codes:
1. International Building Code (IBC 2018) and referenced standards as amended by the city of Kansas City, MO
 2. Minimum Design Loads for Buildings and Other Structures (ASCE7-16)
 3. Specification for Structural Steel Buildings (AISC 360-16)
Member Design Basis is Allowable Stress Design (ASD)
Connection Design Basis is Allowable Stress Design (ASD)
 4. Structural Welding Code (AWS D1.4/D1.4M - 2017)
 5. Building Code Requirements for Structural Concrete (ACI 318-14)
 6. Building Code Requirements for Masonry Structures (TMS 402-16)
 7. North American Specification for the Design of Cold-Formed Steel Structural Members (AISI S100-16)
 8. National Design Specification (NDS) for Wood Constriction with 2018 Supplements (ANSI/APWC NDS-2018)
 9. Special Design Provisions for Wind and Seismic (AWC SDPWS-2015)
- D. These drawings are for this specific project and no other use is authorized.

2. Structural Load Design Criteria

- A. Floor Live = 50 psf (offices), 80 psf (corridors above first floor), 100 psf (lobbies and first-floor corridors)
- B. Roof Live = 20 psf
- C. Snow: Pg = 20psf, Pf =14psf, Is = 1.0, Ce = 1.0, Ct = 1.0, Drift per ASCE/SEI 7
- D. Lateral Loads:
1. Wind:
 - V = 109 mph, Exposure B
 - Occupancy [Risk] Category II, Iw=1.0 GCpi=+/-0.18
 - Design wind pressures to be used for the design of exterior component and cladding materials on the designated zones of wall and roof surfaces shall be per section 30.7 and Table 30.7-2 of ASCE/SEI 7. Tabulated pressures shall be multiplied by effective area reduction factors, exposure adjustment factors, and topographic factors where applicable
 2. Seismic:
 - Ss = 0.098, S1 = 0.069
 - Occupancy [Risk] Category II, Ie=1.0,
 - Site Classification D, Sds = 0.104; Sd1 = 0.111
 - Seismic Design Category B
- E. This project is designed to resist the most critical effects resulting from the load combinations of section 1605.3 of the International Building Code.

3. Concrete

- A. All concrete for foundations (walls, grade beams, footings and piers) shall develop minimum ultimate compressive design strength of 3500 psi in 28 days, but not less than 500 pounds of cement shall be used per cubic yard of concrete regardless of strengths obtained, not over 6 gallons of water per 100 pounds of cement and not over 4 inches of slump.
- B. All concrete for interior flatwork shall develop minimum ultimate compressive design strength of 4000 psi in 28 days, but not less than 540 pounds of cement shall be used per cubic yard of concrete regardless of strengths obtained, not over 5.40 gallons of water per 100 pounds of cement and not over 4 inches of slump. Concrete mix shop drawing shall contain testing data proving concrete design mix shrinkage is less than 0.034% at 28 days when tested according to ASTM C157 (air drying method only).
- C. All concrete for exterior flatwork shall have a minimum design compressive strength of 4500 psi in 28 days, with not less than 560 pounds of cement per cubic yard of concrete, not over 5 gallons of water per 100 pounds of cement, with 6% +/- 1% air entrainment, and a maximum of 4 inches of slump.
- D. The preceding minimum mix requirements may have water-reducing admixtures conforming to ASTM C494 added to the mix at manufacturer's dosage rates for improved workability.
- E. The preceding minimum mix requirements may have up to 15% maximum of the cement content replaced with an approved ASTM C618 Class C fly ash, provided the total minimum cementitious content is not reduced.
- F. All interior concrete slabs on grade shall be placed over 15 mil, Class A Vapor Barrier per ASTM E1745 with less than 0.01 perms, tested after mandatory conditioning. All joints shall be lapped and sealed per manufacturer's recommendations. All penetrations, as well as damaged vapor barrier material shall also be sealed per manufacturer's recommendation prior to concrete placement. Install barrier per manufacturer's recommended details at all discontinuous edges (at interior columns, exterior edge of slab, etc.) to ensure terms of warranty are followed. The vapor barrier shall be placed over free-draining granular material as prescribed by the project soils report.
- G. All concrete is reinforced concrete unless specifically called out as unreinforced. Reinforce all concrete not otherwise shown with same steel as in similar sections or areas. Any details not shown shall be detailed per ACI 315 and meet requirements of ACI 318, current editions.
- H. Control joints in dirt formed slab to be as shown on plans. Where not shown, limit controlled areas to not more than 144 square feet, or 12 feet on any side. Slab panel side ratio shall not exceed 1:12 to 1.
- I. Contractor shall verify that all concrete inserts, reinforcing and embedded items are correctly located and rigidly secured prior to concrete placement.
- J. Construction joints in beams, slabs, and grade beams shall occur at midspan (middle third) unless noted otherwise. Provide 2 x 4 horizontal keys at construction joints for shear transfer.
- K. No aluminum items shall be embedded in any concrete.

4. Reinforcing Steel

- A. All reinforcing steel shall conform to the requirements of ASTM A615 or A706 grade 60 steel. Welded plain wire fabric shall be supplied in sheets and conform to the requirements of ASTM A185.
- B. Clear coverage of concrete over reinforcing steel shall be as follows:
1. Concrete placed against earth: 3"
 2. Formed concrete against earth: 2"
 3. Slabs: 1"
 5. Other: 2"
- C. All coverage shall be nominal bar diameter minimum.
- C. All dowels shall be the same size and spacing as adjoining main bars (splice lap 48 bar diameters or 24" minimum unless noted otherwise).
- D. At corners of all walls, beams, and grade beams supply corner bars (minimum 2'-0" in each direction or 48 bar diameters) in outside face of wall, matching size and spacing of horizontal bars. Where there are no vertical bars in outside face of wall, supply 3 - #4 vertical support bars for corner bars.
- E. Bars marked continuous and all vertical steel shall be lapped 48 bar diameters (2'-0" minimum) at splices and embedments, unless shown otherwise. Splice top bars near midspan and splice bottom bars over supports, unless noted otherwise.
- F. At all holes in concrete walls and slabs, add 2 - #5 bars (opening dimension plus 96 diameters long) at each of four sides and add 2 - #5 x 5'-0" diagonally at each of four corners of hole. Openings in 8" thick walls are reinforced similar, but with 1 - # 5 instead of 2 - #5, respectively.
- G. Unless otherwise covered on architectural plans or specifications, vertical control joints in concrete wall shall be spaced at a maximum of 20'-0" on center and coordinated with the architect. Every other horizontal wall reinforcing bar shall be discontinuous at control joints except heavy top and bottom bars unless noted otherwise. Provide base seal waterproof style number 772 (by Greenstreak Inc. or approved equal) on dirt face side of wall at all walls below grade.
- H. Accessories shall be as specified in latest edition of the ACI Detailing Handbook and the concrete Reinforcing Steel Institute Design Handbook. Maximum accessory spacing shall be 4'-0" on center, and all accessories on exposed surfaces are to have plastic coated feet.
- I. All slabs and stairs not shown otherwise shall be 6" thick with #4 bars at 12" on center each way. All exterior porches and stoops not otherwise detailed may be constructed in any standard manner, solid or hollow, but must be reinforced with #4 bars at 12" on center each way minimum. Porches shall be doweled to adjacent walls or grade beams with #4 bars at 12" on center, hooked or embedded 48 diameters into both members. Slope porches 1/8" per foot for drainage unless noted otherwise.
- J. Allow 1/2 ton of reinforcing bars #4 or larger to be used as directed in the field for special conditions by the engineer of record (labor for placing same to be included).

5. Structural Steel

- A. All structural steel beams and columns shall be ASTM A992, grade 50 steel and all miscellaneous steel shall be ASTM A36 grade steel (except at moment connections where plates shall be ASTM A572, grade 50). Hollow Structural Sections (HSS) shall be ASTM A500, grade C. Fabrication and erection shall be in accordance with AISC 303 "Code of Standard Practices for Steel Buildings and Bridges" in the referenced edition of the AISC Steel Construction Manual.
- B. All welding shall conform to the recommendations of the AWS.
- C. All exterior steel and connections, and brick relief angles shall be hot-dip galvanized.
- D. All bolts not otherwise specified shall be 3/4" diameter high strength (ASTM A325-N). All bolts shall be fully pretensioned. All beam connections shall be designed per the AISC Manual of Steel Construction "Framed Beam Connections" for the indicated reactions or at least 0.4 x beam total shear capacity, Vn/Omega, shown in the maximum total uniform load tables, whichever is greater; and, shall account for eccentricity when the bolt line is more than 2" from the center of the support. All connections must be two bolt minimum. Additional connection elements may not be specifically shown in the conceptual details in this set but may be required by the final connection design, such as stiffener plates, doubler plates, supplement/reinforcing plates or other connection material. Connection design and shop drawing preparation shall be completed under the direct supervision of a professional engineer licensed in the state the project is located and shop drawings and connection calculations shall bear his/her seal.
- E. All anchor bolts shall be 3/4" diameter, ASTM F1554, Grade 36 unless noted otherwise. Plate washers of minimum size and thickness for the given anchor diameter in Table 14-2 of the AISC Steel Construction Manual shall be provided at every column anchor bolt. Plate washers shall have a standard size hole for the anchor bolt. All braced frames, plate washers shall be welded all around to the column base plate with 3/16" fillet weld.
- F. Loose lintels for support of masonry veneer over all openings up to 8'-0" wide in new and existing masonry walls not otherwise noted shall be one L 6x3 1/2x5/16 (LLV) with 8" bearing at each end. All exterior lintels shall be hot-dip galvanized.
- G. Allow 1.0 tons of miscellaneous structural steel to be used as directed in the field for special conditions by the engineer of record. Cost for shop drawings, fabrication, delivery, detailing, and erection to be included.

6. Post-installed Anchors

- A. Post-installed anchors shall be used only where specified on the drawings unless approved in writing by the engineer of record. See drawings for anchor diameter, spacing and embedment. Performance values of the anchors shall be obtained for specified products using appropriate design procedures and/or standards as required by the governing building code. Anchors installed in concrete shall have an ICC-ES Evaluation Service Report. Special inspection is required for all post installed anchors. The contractor shall coordinate an on-site meeting with the post installed anchor manufacturer field representative to educate the construction team on the anchor installation guidelines and requirements.
- B. Mechanical anchors used in cracked and uncracked concrete shall have been tested and qualified for use in accordance with ACI 308.2 and ICC-ES AC108. All anchors shall be installed per the anchor manufacturer's written instructions.
- C. Adhesive anchors used in cracked and uncracked concrete shall have been tested and qualified for use in accordance with ICC-ES AC308. All anchors shall be installed per the anchor manufacturer's written instructions.
- D. Mechanical anchors used in solid grouted masonry shall have been tested and qualified for use in accordance with ICC-ES AC01. All anchors shall be installed per the anchor manufacturer's written instructions.
- E. Adhesive anchors used in solid grouted masonry shall have been tested and qualified for use in accordance with ICC-ES AC58. All anchors shall be installed per the anchor manufacturer's written instructions.
- F. Anchors used in hollow concrete masonry shall have been tested and qualified in accordance with ICC-ES AC106 or ICC-ES AC58 as appropriate. All anchors shall be installed per the anchor manufacturer's written instructions with appropriate screen tubes used for adhesives.

7. Foundations

- A. All new footings are designed to bear on engineered fill or undisturbed soil capable of safely sustaining 1,500 psf.
- B. All foundation excavations shall be inspected by a qualified soil engineer, approved by the architect and/or structural engineer, prior to placement of steel or concrete. This inspection shall be at the owner's expense.
- C. All concrete in the structural portion retaining the backfill shall have attained its design strength prior to being backfilled.
- D. Moisture content in soils beneath building locations should not be allowed to change after footing excavations and after grading for slabs on grade are completed. If subgrade materials become desiccated or softened by water or other conditions, recompact materials to the density and water content specified for engineered fill. Do not place concrete on frozen ground.

8. Cold-Formed Metal Framing

- A. All cold-formed structural studs, track, and bridging shall be of the type, size, gage, and spacing as shown on the drawings, minimum.
- B. All materials shall be 33,000 psi minimum yield, except studs of 16 gage or heavier shall have a minimum yield of 50,000 psi.
- C. All properties, fabrication, and erection shall be in accordance with latest editions of the AISI "Specifications for the Design of Cold-Formed Structural Members."
- D. All framing components shall be cut squarely or at an angle to fit squarely against abutting members. Splicing of axially loaded members is not permitted. Members shall be held firmly in place until properly fastened. Attachments of similar components shall be by welding, screw attachment, or bolting. Wire tying of components is not permitted.
- E. Tracks shall be securely anchored to floor and overhead members. Special anchorage requirements required for wind bracing shall be as shown on the plans.
- F. Prior to fabrication and/or erection, the contractor shall submit shop drawings complete with detail of erection, fabrication, attachments, anchorages, lintels, etc., for review by the architect/engineer.

9. Shop Drawings and Deferred Submittals

- A. Bob D. Campbell and Company, Inc. will review the General Contractor's (GC) shop drawings and related submittals (as indicated below) with respect to the ability of the detailed work, when complete, to be a properly functioning integral element of the overall structural system designed by Bob D. Campbell and Company, Inc.
- B. Deferred submittals shall be submitted to the architect of record for review who shall forward to the building official for review and approval. Design calculations for deferred submittals shall be submitted at the same time as the shop drawings for review. Design calculations shall be prepared and sealed by a Professional Engineer licensed in the state of the project. The deferred submittal items shall not be installed until the deferred submittal documents have been approved by the building official.
- C. Prior to submittal of a shop drawing or any related material to Bob D. Campbell and Company, Inc., the GC shall:
1. Review each submission for conformance with the means, methods, techniques, sequences and operations of construction and safety precautions and programs incidental thereto, all of which are the sole responsibility of the GC.
 2. Review and approve each submission.
 3. Stamp each submission as approved.
- D. Bob D. Campbell and Company, Inc. shall assume that no submission comprises a variation unless the GC advises Bob D. Campbell and Company, Inc. with written documentation.
- E. Bob D. Campbell and Company, Inc. shall review shop drawings and related materials with comments provided that each submission has met the above requirements. Bob D. Campbell and Company, Inc. shall return without comment unrequired material or submissions without GC approval stamp.
- F. Required shop drawings and related material (if any) are indicated below. Should Bob D. Campbell and Company, Inc. require more than ten (10) working days to perform the review, Bob D. Campbell and Company, Inc. shall so notify the GC.
1. Concrete mix designs and material certificates including admixtures and compounds applied to the concrete after placement.
 2. Reinforcing steel shop drawings including erection drawings and bending details. Bar list will not be reviewed for correct quantities.
 3. Grout mix designs (for CMU).
 4. Structural steel shop drawings including erection drawings and piece details. Include joist, decking and connector submittals. Include miscellaneous framing specified on the structural drawings, but do not submit framing specified on non-structural drawings for Bob D. Campbell and Company, Inc. review.
 5. Deferred Submittal: Cold-formed metal framing
 6. Miscellaneous anchors shown on the structural drawings.

10. Statement of Structural Special Inspections

- A. The structural design for this project is based on completion of special inspections during construction in accordance with section 1704 of the International Building Code. The owner shall employ one or more qualified special inspectors to provide the required special inspections.
- B. The special inspector shall furnish inspection reports to the building official, owner, architect and structural engineer, and any other designated person.
- C. All discrepancies shall be brought to the immediate attention of the contractor for correction, then, if uncorrected, to the proper design authority, building official and structural engineer.
- D. The special inspector shall submit a final signed report stating that the work requiring special inspection was, to the best of the inspector's knowledge, in conformance with the approved plans and specifications and the applicable workmanship provisions of the building code.
- E. The following inspections and tests are required with the frequency (continuous or periodic) as defined within the referenced section or standard listed below. The General Contractor shall provide notification to the inspector when items requiring inspection are ready to be inspected and provide access for those inspections.
1. Shop Fabrication – structural steel per Section 1704.2.5 unless AISC certified shop
 2. Steel Construction per Section 1705.2 and the quality assurance requirements of AISC 341 Chapter J (as referenced by AISC 360)
 3. Concrete Construction per Section 1705.3 and Table 1705.3
 - a. Reinforcing Steel Placement
 - b. Cast in Place Anchors
 - c. Post Installed Anchors
 - d. Design Mix Verification
 - e. Concrete Sampling and Testing
 - f. Concrete Placement
 - g. Concrete Curing
 4. Verification of Soils per Table 1705.6

11. Copyright and Disclaimer

- A. All drawings in the structural set (S-series drawings) are the copyrighted work of Bob D. Campbell and Company, Inc. These drawings may not be photographed, traced, or copies in any manner without the written permission of Bob D. Campbell and Company, Inc. Exception: Original drawings may be printed for distribution to the owner, architect, and general contractor for coordination, bidding, and construction. Subcontractors may not reproduce these drawings for any purpose or in any manner.
- B. I, Christopher W. Boos, P.E., registered engineer and a representative of Bob D. Campbell and Company, Inc., do hereby accept professional responsibility as required by the professional registration laws of this state for the structural design drawings consisting of S-series drawings. I hereby disclaim responsibility for all other drawings in the construction document package, they being the responsibility of other design professionals whose seals and signed statements may appear elsewhere in the construction document package.

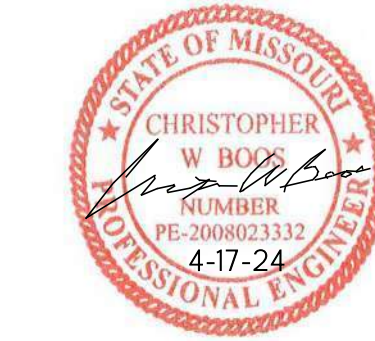


Structural Engineer
Bob D. Campbell & Co.
State Certificate of Authority
#0000000000
4338 Bellevue Ave
Kansas City, MO 64111
816.531.4144

MEP Engineer
PKMR Engineers
State Certificate of Authority
#0000000000
13300 W 98th Street
Lenexa, KS 66215
913.492.2400

LM2 OFFICE RENOVATION

9000 OLD SANTE FE ROAD
KANSAS CITY, MO 64138

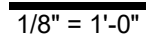
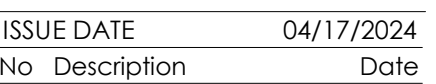


ISSUE DATE	04/17/2024
No. Description	Date

WSKF, Inc. © 2023

GENERAL
NOTES

\$0.01

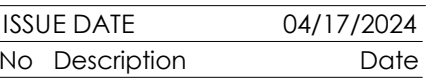


NOTES:

1. REFER TO GENERAL NOTES ON SHEET S0.01.
2. VERIFY ALL DIMENSIONS & ELEVATIONS w/ ARCHITECTURAL DRAWINGS.
3. FIELD VERIFY EXISTING CONDITIONS, INCLUDING DIMENSIONS & ELEVATIONS.



TYPICAL: DRILL & EPOXY DOWEL
EACH END OF NEW GRADE BEAMS
TO EXISTING FOUNDATION w/ (3) #5
HORIZONTAL BARS TOP & BOTTOM
w/ 6" EMBEDMENT USING HILTI HIT-
HY 200



GENERAL MECHANICAL/ELECTRICAL SPECIFICATIONS

GENERAL MECHANICAL, ELECTRICAL AND PLUMBING REQUIREMENTS

1. **APPLICABILITY**
- A. These general requirements apply to all divisions (22, 23, 26). Refer to individual divisions as included for specific information regarding each trade or scope of work.
2. **GENERAL REQUIREMENTS**
- A. Furnish & install all labor & materials required for complete, functioning, mechanical & plumbing systems w/ all associated equipment & apparatus as shown on plans.
- B. Obtain & pay for all permits required for execution of this work & shall make arrangements for modifications to water, gas & sewer connections to building as required.
- C. All materials shall be new & shall bare UL label where applicable.
- D. Visit site & observe conditions under which work will be done. Any discrepancies shall be called to architect's attention. No subsequent allowance will be made in contract for any error or negligence on contractor's part.
- E. Final acceptance of work shall be subject to condition that all systems, equipment, apparatus & appliances operate satisfactorily as designed & intended. Work shall include required adjustment of systems & control equipment installed under these specifications.
- F. Warrant to owner quality of materials, equipment, workmanship & operation of equipment provided under these specifications for one year from & after completion of building & acceptance of mechanical systems by owner.
- G. All materials installed in plenums shall be noncombustible or have flame/smoke index of no more than 25/50 in accordance w/ ASTM e 84.
- H. Requirements under Division one & general & supplementary conditions of these specifications shall be part of this section. Contractor shall become thoroughly acquainted w/ its contents as to requirements that affect this Division of work required under this section includes material, equipment, appliances, transportation, service & labor required to complete entire system as required by drawings & specifications.
- I. The specifications & drawings for project are complementary, & portions of work described in one, shall be provided as if described in both. In event of discrepancies, notify engineer & request clarification prior to proceeding w/ work involved.
3. **EXTENT OF CONTRACT WORK**
- A. Provide MEP systems indicated on drawings, specified or reasonably implied. In addition to specific equipment called out in plans and specifications, provide every device, component, programming, interlocking and accessory necessary for proper operation and completion of totally functional MEP systems.
- B. In case of an inconsistency between the Drawings and Specifications or within either document, the better quality or the greater quantity of work shall be provided in accordance with the Architect or Engineer's interpretation.
- C. In no case will claims for "Extra Work" be allowed for work about which Contractor could have been informed before bids were taken.
- D. Contractor shall become familiar with equipment provided by other contractors that require plumbing connections and controls.
- E. Electrical work required to install and control plumbing equipment, which is not shown on plans or specified under Division 26, shall be included in Contractor's base bid proposal.
- F. All automatic temperature control devices shall be mounted as indicated in automatic temperature control section of specifications.
- G. The cost of larger wiring, conduit, control and protective devices resulting from installation of equipment which was not used for basis of design as outlined in specifications shall be paid for by the supplying Contractor at no cost to Owner or Architect/Engineer.
- H. Contractor shall be responsible for providing supervision to other trade Contractors to insure that required connections, interlocking and interconnection of MEP equipment is made to attain intended control sequences and system operation.
- I. Contractor shall obtain complete MEP data on shop drawings and shall list this data on an approved form that shall be presented on request, to other trade Contractors. Data shall be complete with wiring diagrams received to date and shall contain necessary data on electrical components of plumbing equipment such as HP, voltage, amperes, watts, locked rotor current to allow other trade Contractors to order support or other equipment coordinated as required in this contract.
4. **DEFINITIONS**
- A. Whenever used in these specifications or drawings, following terms shall have indicated meanings:
- B. Furnish: term "Furnish" is used to mean "supply & deliver to project site. Ready for unloading, unpacking, assembly. Installation is similar operations.
- C. Install: term "Install" is used to describe operations at project site including actual "unloading, unpacking, Assembly, Erection, Placing, Anchoring, Applying, working to dimension. Finishing, curing, protecting, cleaning, & similar operations."
- D. Provide: term "Provide" means "to Furnish & Install. Complete & ready for intended use." furnished by owner or furnished by others: Item will be furnished by owner or others. It is to be installed & connected under requirements of this Division, complete & ready for operation, including items incidental to work including services necessary for proper installation & operation. Installation shall be included under guarantee required by this Division.
- E. Engineer: where referenced in this Division, "Engineer" is engineer of record & design professional for work under this Division, & is consultant to, & an authorized representative of, architect. As defined in general &/or supplementary conditions. When used in this Division. It means increased involvement by, & obligations to, engineer, in addition to involvement by, & obligations to, "Architect".
- F. AHJ: local code &/or inspection agency (authority) having jurisdiction over work.
- G. The terms "Approved equal", "Equivalent", Or "Equal" are used synonymously & shall mean "accepted by or acceptable to engineer as equivalent to item or manufacturer specified".
- H. The term "approved" shall mean labeled, listed. Or both. By nationally recognized testing laboratory (e.g. UL, ETL, CSA), & acceptable to AHJ over this project.
5. **PREBID SITE VISIT**
- A. Prior to submitting bid. Visit site of proposed work & become fully informed as to conditions under which work is to be done. Failure to do so will not be considered sufficient justification to request or obtain extra compensation over & above contract price.
6. **MATERIAL & WORKMANSHIP**
- A. Provide new material, equipment, & apparatus under this contract unless otherwise stated herein. Of best quality normally used for purpose in good commercial practice & free from defects. Model numbers listed in specifications or shown on drawings are not necessarily intended to designate required trim, written descriptions of trim govern model numbers.
- B. Pipe, fittings, specialties & valves shall be manufactured in USA. Work performed under this contract shall provide neat & "workmanlike" appearance when completed to satisfaction of architect & engineer. Workmanship shall be finest possible by experienced mechanics. Installations shall comply w/ applicable codes & laws. Complete installation shall function as designed & intended w/ respect to efficiency, capacity, noise level, etc. Abnormal noise caused by piping equipment, piping, ducts, air devices & equipments in rotating components will not be acceptable. In general materials & equipment shall be of commercial specification grade in quality. Light duty & residential equipment is not acceptable.
- C. Remove from premises waste material present from work, including cartons, crating, paper, stickers, &/or excavation material not used.
- D. Clean equipment installed under this contract to present neat & clean installation at completion.
- E. Repair or replace public & private property damaged as result of work performed under this contract to satisfaction of authorities & regulations having jurisdiction.
7. **COORDINATION**
- A. Coordinating work w/ other trades so various components of systems will be installed at proper time will fit available space & will allow proper service access for maintenance. Components which are installed without regard to above shall be relocated at no additional cost to owner.
- B. Obtain equipment submittal information for all pieces of equipment to be connected to from other trades that clearly indicates all connection requirements, locations, sizes, and similar requirements. Obtain this information in ample time to coordinate other trade submittals and equipment coordination. Where requirements differ from that on plans or differs from provisions made in the work, immediately notify the architect/engineer. Do not proceed with work that is incompatible with equipment provided.
- C. Unless otherwise indicated, general contractor will provide chases & openings in building construction required for installation of systems specified herein. Contractor shall furnish general contractor w/ information where chases & openings are required.
- D. Keep informed as to work of other trades engaged in construction of project & execute work in manner as to not interfere w/ or delay work of other trades. Figured dimensions shall be taken in preference to scale dimensions.
- E. Contractor shall take his own measurements at building, as variations may occur. Contractor will be held responsible for errors that could have been avoided by proper checking & inspection.

- F. Provide materials w/ trim that will properly fit types of ceiling, wall, or floor finishes actually installed. Model numbers listed in specifications or shown on drawings are not intended to designate required trim.
- G. Coordinate construction operations included in different sections of the specifications to ensure efficient and orderly installation of each part of the work. Coordinate construction operations, included in different sections, that depend on each other for proper installation, connection, and operation.
- H. Each contractor shall coordinate its construction operations with those of other contractors and entities to ensure efficient and orderly installation of each part of the work. Each contractor shall coordinate its operations with operations, included in different sections, that depend on each other for proper installation, connection, and operation.
- I. Schedule construction operations in sequence required to obtain the best results where installation of one part of the work depends on installation of other components, before or after its own installation.
- J. Coordinate installation of different components with other contractors to ensure maximum accessibility for required maintenance, service, and repair.
- K. Make adequate provisions to accommodate items scheduled for later installation.
- L. Where availability of space is limited, coordinate installation of different components to ensure maximum performance and accessibility for required maintenance, service, and repair of all components, including mechanical and electrical.
- M. Prepare coordination drawings if limited space availability necessitates maximum utilization of space for efficient installation of different components or if coordination is required for installation of products and materials fabricated by separate entities. Content: project-specific information, drawn accurately to scale. Do not base coordination drawings on reproductions of the contract documents or standard printed data. Include the following information, as applicable:
- 1) Indicate functional and spatial relationships of components of architectural, structural, civil, mechanical, and electrical systems.
 - 2) Indicate required installation sequences.
 - 3) Indicate dimensions shown on the contract drawings and make specific note of dimensions that appear to be in conflict with submitted equipment and minimum clearance requirements. Provide alternate sketches to architect for resolution of such conflicts. Minor dimension changes and difficult installations will not be considered changes to the contract.
- N. Meetings: conduct project coordination meetings at regular intervals. Project coordination meetings are in addition to specific meetings held for other purposes, such as progress meetings and preinstallation conferences.
- 1) Attendees: each contractor, subcontractor, supplier, and other entity concerned with current progress or involved in planning, coordination, or performance of future activities shall be represented at these meetings. All participants at the conference shall be familiar with project and authorized to conclude matters relating to the work. Notify architect of meeting.
 - 2) Agenda: review and correct or approve minutes of the previous coordination meeting. Review other items of significance that could affect progress.
 - 3) Combined contractor's construction schedule: review progress since the last coordination meeting. Determine whether each contractor is on time, ahead or behind schedule, in relation to construction schedule. Discuss whether schedule revisions are required to ensure that current and subsequent activities will be completed within the contract time. Discuss impact of various contractor schedules upon other contractors and how to remedy impacts.
 - 4) Review present and future needs of each contractor present
- O. After shop drawings have been reviewed and approved by all parties, transmit a set of submittals to each other trade (eg Plumbing, Mechanical, Electrical, Controls, etc) that will interface with installation. Each other contractor shall review the submittal for coordination and return a stamped submittal indicating they have reviewed the submittal for coordination purposes.
8. **ARCHITECTURAL VERIFICATION AND RELATED DOCUMENTS**
- A. Contractor shall consult all Architectural Drawings and specifications in their entirety incorporating and certifying all millwork, furniture, and equipment rough-in including utility characteristics such as voltage, phase, amperage, pipe sizes, duct sizes, including height, location and orientation. Shop drawings incorporating these requirements should be submitted to the Architect for approval prior to installation or rough in.
9. **ORDINANCES & CODES**
- A. Work performed under this contract shall. At minimum, be in conformance w/ applicable national, state & local codes having jurisdiction.
- B. Installation work performed under this contract shall be in strict compliance w/ current applicable codes adopted by local AHJ including any amendments & standards as set forth by National Fire Protection Association (NFPA), Underwriters Laboratories (UL), Occupational Safety & Health Administration (OSHA), American Society of Mechanical Engineers (ASME), American Society of Heating, Refrigeration, & Air Conditioning Engineers (ASHRAE), American National Standards Institute (ANSI), American Society of Testing Materials (ASTM) & other national standards & codes where applicable.
- C. Where contract documents exceed requirements of referenced codes. Standards, etc., contract documents shall take precedence.
- D. Procure & pay for permits & licenses required for accomplishment of work herein described. Where required, obtain. Pay for & furnish certificates of inspection to owner. Contractor will be held responsible for violations of law.
10. **STANDARDS**
- A. Drawings and specifications indicate minimum construction standard. Should any work indicated be sub standard to any ordinances, laws, codes, rules or regulations bearing on work, Contractor shall promptly notify Architect/Engineer in writing before proceeding with work so that necessary changes can be made. However, if the Contractor proceeds with work knowing it to be contrary to any ordinances, laws, rules, and regulations, Contractor shall thereby have assumed full responsibility for and shall bear all costs required to correct non complying work.
11. **PROTECTION OF EQUIPMENT & MATERIALS**
- A. Store & protect from damage equipment & materials delivered to job site. Cover as required to protect from dirt & damage. Plug or cap open ends of ductwork & piping systems while stored & installed during construction when not in use to prevent entrance of debris into systems. Equipment & material that has been damaged by construction activities will be rejected, & contractor is obligated to furnish new equipment & material of like kind. Keep premises broom clean from foreign material created during work performed under this contract. Piping, equipment, etc. Shall have neat & clean appearance at completion.
12. **SUBSTITUTIONS**
- A. The base bid shall include only products from manufacturers specifically named in drawings & specifications. No substitution will be considered prior to receipt of bids unless written request for approval to bid has been received by engineer at least ten calendar days prior to date for receipt of bids. Request shall include name of material or equipment for substitution & complete description of proposed substitute including drawings, cuts, performance & test data & other information for evaluation. Statement setting forth changes in other materials, equipment or other work that incorporation of substitute would require shall be included.
- B. The intent of these specifications is to allow ample opportunity for Contractor to use his ingenuity and abilities to perform the work to his and the Owner's best advantage, and to permit maximum competition in bidding on standards of materials and equipment required.
- C. Material and equipment installed under this contract shall be first class quality, new, unused and without damage.
- D. In general, these specifications identify required materials and equipment by naming one or more manufacturer's brand, model, catalog number and/or other identification. The first named manufacturer or product is used as the basis for design; other manufacturers named must furnish products consistent with specifications of first named product as determined by Engineer. Base bid proposal shall be based only on materials and equipment by manufacturers named, except as hereinafter provided.
- E. Where materials or equipment are described but not named, provided required items of first quality, adequate in every respect for intended use. Such items shall be submitted to Architect/Engineer for review prior to procurement.
- F. Materials and equipment proposed for substitutions shall be equal to or superior to that specified in construction, efficiency, utility, aesthetic design, and color as determined by Architect/Engineer whose decision shall be final and without further recourse. Physical size of substitute brand shall be no larger than space provided including allowances for access for installation and maintenance. Requests must be accompanied by complete descriptive and technical data including manufacturer's name, model and catalog number, photographs or cuts, physical dimensions, operating characteristics and any other information needed for comparison.
- G. The burden of proof of merit of proposed substitute is upon proposer. Engineer's decision of approval or disapproval to bid of proposed substitute shall be final. Terms "approved", "approved equal", & "equal" refer to approval by engineer as an acceptable alternate bid. No substitutions will be considered that are not bid as an alternate.
- H. No material substitutions shall be considered for approval after to award of contract. Coordinate & verify w/ other trades whether or not substituted equipment can be installed as shown on construction drawings without modification to associated systems or architectural or engineering design.

- Include additional costs for architectural & engineering design fees in bid if drawing modifications are required because of substituted equipment.
13. **SHOP DRAWINGS**
- A. Equipment to be furnished under this contract, items requiring coordination between contractors & sheet metal ductwork fabrication drawings. Before submitting shop drawings verify equipment submitted is mutually compatible & suitable for intended use & will fit available space & allow ample room for maintenance. Engineer's checking & subsequent approval of such shop drawings will not relieve contractor from responsibility for errors in dimensions, details, size of members, quantities, omissions of components or fittings; coordination of electrical requirements; or for coordinating items w/ actual building conditions. Proceed w/ procurement & installation of equipment only after receiving approved shop drawings relative to each item.
- B. Submittal data shall be neatly organized, identified & indexed. Each item or model number shall be clearly marked & accessories indicated. Label catalog data w/ equipment identification acronym or number as used on drawings & include performance curves, capacities, sizes, materials, finishes, wiring diagrams & deviations from specified equipment or materials. Mark out inapplicable items. Shop drawings will be returned without review if above mentioned requirements are not met.
- C. Requirements shall be met electronically & submitted as pdf in files less than 10mb.
- D. Contractor's stamp, which shall certify that stamped drawings have been checked by contractor, comply w/ drawings & specifications, & have been coordinated w/ other trades.
- E. Transmit submittals as early as required to support project schedule. Allow for two weeks a/e review time, plus duplication of this time for resubmittals, if required. Transmit submittals as soon as possible after notice to proceed & before construction starts. Engineer's submittal reviews will not relieve contractor from responsibility for errors in dimensions, details, size of members, or quantities; or for omitting components or fittings; or for not coordinating items w/ actual building conditions.
- F. Final copies shall be furnished to owner as part of O&M documents in hard & electronic formats.
14. **OPERATION & MAINTENANCE INSTRUCTIONS**
- A. Collect & compile complete brochure of equipment furnished & installed on this project. Include operational & maintenance instructions, manufacturer's catalog sheets, wiring diagrams, parts lists, approved shop drawings, test & balance reports, & descriptive literature as furnished by equipment manufacturer. Include an inside cover sheet that lists project name, date, owner, architect, consulting engineer, general contractor, sub-contractor, & an index of contents. Submit three copies of literature bound in 3-ring binders w/ index & tabs separating equipment types to architect at termination of work. Final approval of plumbing systems will be withheld until manual is received & deemed complete by architect & engineer. Provide "as-built" drawings (see Division 1 & general conditions).
- B. These requirements may shall also be provided to the owner in a well organized pdf electronic submission & delivered on a DVD or USB thumbdrive.
15. **TRAINING**
- A. Provide factory trained & authorized representative to train owner's designated personnel on operation & maintenance of equipment provided for this project. Provide training to include but not be limited to an overview of system &/or equipment as it relates to facility as whole; operation & maintenance procedures & schedules related to startup & shutdown, troubleshooting, servicing, preventive maintenance & appropriate operator intervention; & review of data included in operation & maintenance manuals. Submit certification letter to architect stating that owner's designated representative has been trained as specified herein. Letter shall include date, time, attendees & subject of training. Contractor & owner's representative shall sign certification letter indicating agreement that training has been provided. Schedule owner training w/ at least 7 days' advance notice.
16. **SPARE PARTS**
- A. Furnish to owner, w/ receipt one set of spare filters of each type required for each unit. In addition to spare set of filters, install new filters prior to testing, adjusting, & balancing work & before turning system over to owner.
- B. Furnish one complete set of belts for each fan.
17. **EQUIPMENT LABELS:**
- A. Material and thickness: multilayer, multicolor, plastic labels for mechanical engraving, 1/16 inch thick, and having predrilled holes for attachment hardware. Black letters on white background.
- B. Minimum label size: length and width vary for required label content, but not less than 2-1/2 by 3/4 inch.
- C. Minimum letter size: 1/4" for names of units if viewing distance is less than 24 inches, 1/2" for viewing distances up to 72" & proportionately larger lettering for greater viewing distances. Include secondary lettering two-thirds to three-fourths the size of principal lettering.
18. **WARRANTIES**
- A. Warrant each system & each element thereof against all defects due to faulty workmanship design or material for period of 12 months from date of substantial completion unless specific items are noted to carry longer warranty in construction documents or manufacturer's standard warranty exceeds 12 months. Remedy all defects, occurring within warranty period(s) stated in general conditions & Division 1. Warranties shall include labor & material. Make repairs or replacements without any additional costs to owner. Perform remedial work promptly, upon written notice from engineer or owner.
- B. At time of substantial completion, deliver to owner all warranties in writing & properly executed including term limits for warranties extending beyond one year period. Each warranty instrument being addressed to owner & stating commencement date & term.
19. **CUTTING & PATCHING**
- A. Perform cutting of walls, floors, ceilings, etc. As required to install work under this section. Obtain permission from architect prior to cutting. Do not cut or disturb structural members without prior approval from architect. Cut holes as small as possible. General contractor shall patch walls, floors, etc. As required by work under this section. Patching shall match original material & construction. Repair & refresh areas disturbed by work to condition of adjoining surfaces in manner satisfactory to architect.
20. **EXCAVATION AND BACKFILL**
- A. Perform necessary excavation to receive work. Provide necessary sheathing, shoring, cribbing, tarpaulins, etc. For this operation, and remove it at completion of work. Perform excavation in accordance with appropriate section of these specifications, and in compliance with osha safety standards.
- B. Excavate trenches of sufficient width to allow ample working space, and no deeper than necessary for installation work.
- C. Conduct excavations so no walls or footings are disturbed or injured. Backfill excavations made under or adjacent to footing with selected earth or sand and tamp to compaction required by architect, engineer. Mechanically tamp backfill under concrete and pavings in six inch layers to 95% standard density, reference Division 2.
- D. Backfill trenches and excavations to required heights with allowance made for settlement. Tamp fill material thoroughly and moistened as required for specified compaction density. Dispose of excess earth, rubble and debris as directed by architect.
- E. When available, refer to test hole information on architectural or civil drawings or specifications for types of soil to be encountered in excavations.
21. **ROUGH-IN**
- A. Coordinate rough-in w/ general construction & other trades. Conceal piping & conduit rough-in except in unfinished areas & where otherwise shown.
22. **STRUCTURAL STEEL**
- A. Structural steel used for support of equipment, ductwork & piping shall be new, clean, & conform to ASTM a-36. Support mechanical components from building structure. Do not support mechanical components from ceilings, other mechanical or electrical components, & other non-structural elements.
23. **ACCESS DOORS**
- A. Provide access doors in ceilings, walls, etc. Where indicated or required for access or maintenance to concealed valves & equipment installed under this section. Provide concealed hinges, screwdriver-type lock, anchor straps, manufactured by Milcor, Zurn, Titus, or equal. Obtain architect's approval of type, size. Location & color before ordering.
24. **PENETRATIONS**
- A. Seal mechanical floor, exterior wall & roof penetrations watertight & weathertight. Seal around mechanical penetrations w/ 3M CP-25 fire barrier caulk (thickness as required & recommended by manufacturer) to maintain resistance rating of fire-rated assemblies. Provide prefabricated roof curbs manufactured by Custom Curb, Pate, Thyburt or approved equal. Provide roof curb w/ factory installed wood nailer, welded, 18 gauge galvanized steel shell, base plate & flashing, 1-1/2" thick, 3 pound rigid insulation, fully tapered 3-inch raised cant, cover of weather-resistant, weather-proof material & pipe collar of weather-resistant material w/ stainless steel pipe clamps. Make roof penetrations by authorized roofing contractor when required.
25. **MOTORS & STARTERS**
- A. Provide motors & starting equipment where not furnished w/ equipment package. Motors shall have copper windings, class b insulation, & standard squirrel cage w/ starting torque characteristics suitable for equipment served. Motors for air handling equipment shall be selected for quiet operation. Each motor shall be

- checked for proper rotation after electrical connection has been completed. Provide dripproof enclosure for locations protected from weather & not in air stream of fan; & totally enclosed fan cooled enclosure for motors exposed to weather. Motors shall be manufactured by Century, GE, Westinghouse, or approved equal. Provide every motor, except fractional horsepower single phase motors w/ an approved type of "built-in" thermal overload protection, w/ motor starter. Each starter shall be provided w/ overload heaters sized to motor rating, & every three phase motor starter shall have overload heaters in each phase. Ambient compensated heaters shall be installed wherever necessary. Unless noted otherwise, motor starters shall be furnished by Division 22/23 contractor for installation & connection by Division 26 contractor. Starters shall be Allen-Bradley, Clark, Furnas, Square D, or approved equal.
26. **ELECTRICAL WIRING**
- A. Line voltage wiring shall be provided by Division 26. Line voltage control & interlock wiring for mechanical systems shall also be provided by Division 26 contractor. Low voltage control wiring shall be provided by Division 22/23 contractor. Furnish wiring diagrams to Division 26 contractor as required for proper equipment hookup. Coordinate w/ Division 26 contractor actual wire sizing amps for submitted mechanical equipment to ensure proper installation.
27. **DISCONNECT SWITCHES**
- A. Provide heavy-duty horsepower rated safety switches rated in accordance with NEMA enclosed switch standard KS 1_1969 and I98 standard.
- B. Each piece of electrical equipment shall be provided with a disconnecting means.
- C. Equivalents by: GE, Eaton, Siemens, Square D.
28. **REFRIGERANT & OIL**
- A. Provide full refrigerant & oil charge in refrigeration systems. Maintain for full term of warranty.
29. **EQUIPMENT FURNISHED BY OTHERS**
- A. Provide necessary equipment & accessories that are not provided by equipment supplier or owner to complete installation of cooking equipment, washing equipment, etc., furnished by others, in locations as indicated on drawings &/or described in general notes to this contractor. Equipment & accessories not provided by equipment supplier may include flues, vents, intakes, associated w/ roof jacks & caps to outdoors, dampers, In-line fans, roof fans, control interlocks, etc. As required for proper operation of complete system in accordance w/ manufacturer's instructions. Contractor shall be responsible for correct rough-in dimensions, & shall verify same w/ architect &/or equipment supplier prior to service installations.
30. **SETTING, ADJUSTMENT AND EQUIPMENT SUPPORTS**
- A. Work shall include mounting, alignment and adjustment of systems and equipment. Set equipment level on adequate foundation and provide proper anchor bolts and isolation as shown, specified or required by manufacturers in installation instructions. Level, shim and grout equipment bases as recommended by manufacturer. Mount motors, align and adjust drive shafts and belts according to manufacturer's instructions.
- B. Equipment failures resulting from improper installation or field alignment shall be repaired or replaced by Contractor at no cost to Owner.
- C. Floor or pad mounted equipment shall not be held in place solely by its own dead weight. Include anchor fastening in all cases.
- D. Provide floor or slab mounted equipment with 3, 1/2" high concrete bases unless specified otherwise. Individual concrete pad shall be no less than 4" wider and 4" longer than equipment, and shall extend no less than 2" from each side of equipment.
- E. Provide each piece of equipment or apparatus suspended from ceiling or mounted above floor level with suitable structural support, platform or carrier in accordance with best recognized practice. Verify that structural members of buildings are adequate to support equipment and unless otherwise indicated on plans or specified, arrange for their inclusion and attachment to building structure. Provide hangers with vibration isolators.
- F. Submit details of hangers, platforms and supports together with total weights of mounted equipment to Architect/Engineer for review before proceeding with fabrication or installation.
31. **MISCELLANEOUS REMODELING WORK**
- A. Remove all unused equipment, ductwork, piping & associated supports. Cap ductwork & piping at mains & seal air & water tight. Provide items of HVAC systems modification required because of building remodeling, as noted on drawings or necessary for proper operation. Match existing materials & construction techniques when modifying existing systems unless specified otherwise. Coordinate additional requirements w/ general contractor & architect. Seal airtight existing ductwork required to be abandoned in place or not in use at termination of work. Cap & seal weathertight existing roof curbs & roof openings to be abandoned in place as result of equipment removal. Clean & rebalance existing ductwork, diffusers, registers, & grilles intended for reuse as required or as indicated on drawings. Clean & refurbish existing HVAC equipment intended for reuse as required for proper operation including replacement of filters, belts, motors, remote controls, & safety interlocks.
32. **BUILDING OPERATION**
- A. Comply w/ schedule of operations as outlined in architectural portions of this specification. Building shall be in continuous operation. Accomplish work requiring interruption of building operation at time when building is not in operation, & only w/ written approval of building owner &/or tenant. Coordinate interruption of building operation w/ owner &/or tenant minimum of seven days in advance of work.
- B. The following Work shall be performed at night or weekend other than holiday weekends as directed and coordinated with the Owner: All tie-in, cut-over and modifications to the existing electrical system and other existing system requiring tie-ins or modifications shall be arranged and scheduled with the Owner to be done at a time as to maintain continuity of the service and not interfere with normal building operations.
33. **VIBRATION ISOLATION**
- A. Provide vibration isolation equipment & materials by single manufacturer. Amber booth, kinetics noise control, mason industries, inc., vibration isolator co., inc., & vibration mounting & controls. Genloc isolators by weight distribution to produce uniform deflection. Isolators shall operate in linear portion of their load versus deflection curves. Spring isolators shall have 50 percent excess capacity without becoming coil bound. Coast vibration isolators w/ factory-applied paint. Coast vibration isolators exposed to weather & corrosion w/ factory-applied protection. Install & adjust isolators in accordance w/ manufacturers instructions.
34. **FIRE BARRIERS**
- A. General: for penetrations through fire-resistance-rated constructions, including both empty openings and openings containing penetrating items, provide through-penetration firestop systems that are produced and installed to resist spread of fire according to requirements indicated, resist passage of smoke and other gasses, and maintain original fire-resistance rating of construction penetrated.
- B.

END OF GENERAL MEP REQUIREMENTS



Missouri Certificate of Authority
#2003011262

Structural Engineer:
Bob D. Campbell & Co.
Missouri Certificate of Authority
#000442
4338 Bellevue Ave.
Kansas City, MO 64111
816.531.4144

MEP Engineer:
PKMR Engineers
Missouri Certificate of Authority
#E-2002020886
13300 W. 96th Street
Lenexa, KS 66215
913.492.2400

JOB NUMBER 23011

LM2 OFFICE RENOVATION

9000 OLD SANTE FE ROAD
KANSAS CITY, MO 64138

110 Armour Road North Kansas City, Missouri 64116 Tel: 816.300.4101



Kevin J. Zimmerman - Engineer
MO# PE-2017029408



Darren E. Thresher - Engineer
MO# PE-2014007277

Dalyn Novok - Architect
MO # 2011006187

PERMIT SET		
ISSUE DATE	04/17/2024	
No.	Description	Date

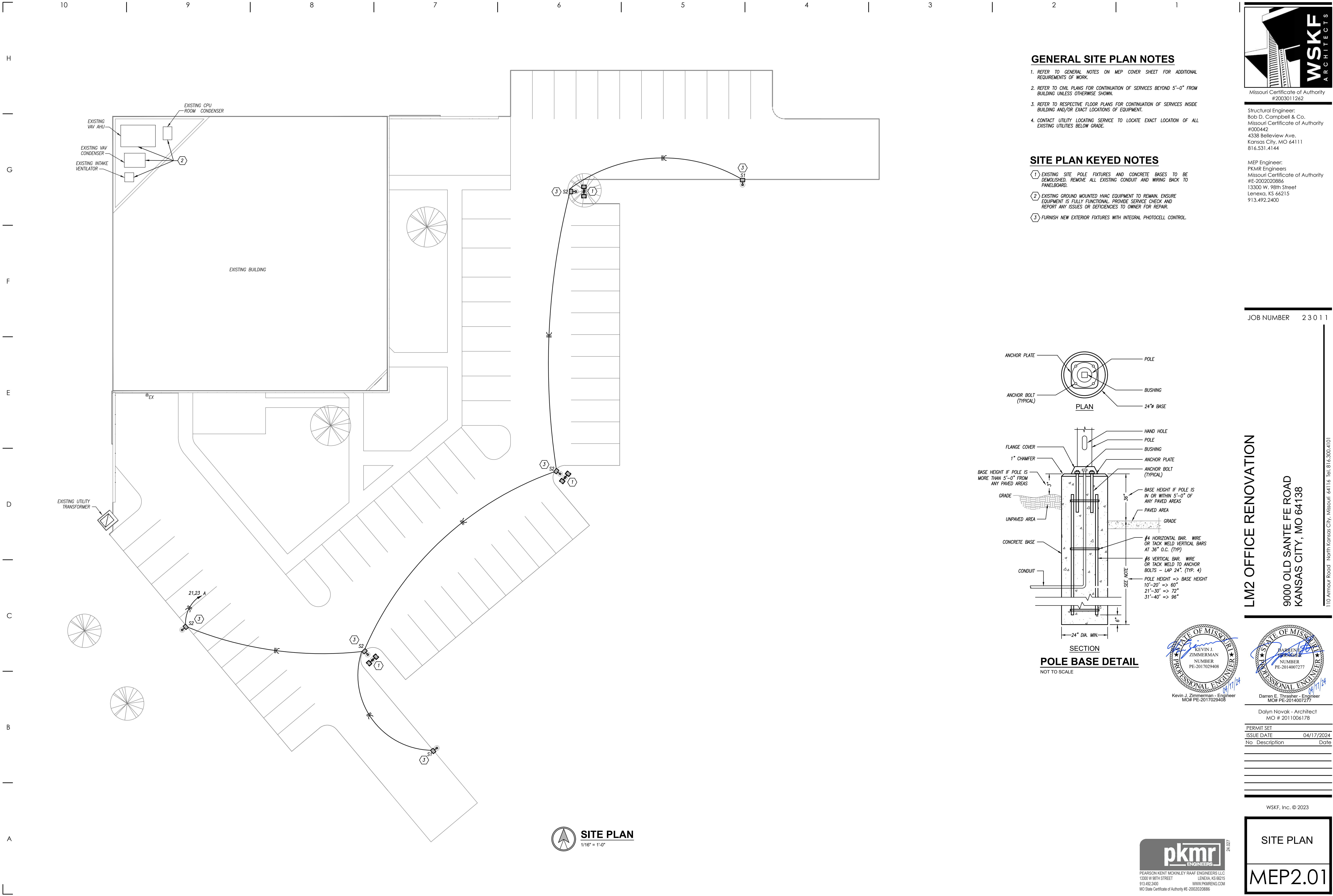
WSKF, Inc. © 2023

SPECIFICATIONS

MEP1.01



PEARSON KENT MCKINLEY RAAF ENGINEERS LLC
13300 W 96TH STREET
LENEXA, KS 66215
913.492.2400
WWW.PKMRNG.COM
MO State Certificate of Authority #E-2002020886



PE Engineer:
KMR Engineers
Missouri Certificate of Authority
E-2002020886
8300 W. 98th Street
Lenexa, KS 66215
3.492.2400

OB NUMBER 23011

THE FUTURE OF THE FUTURE

3000 OLD SAN JEFFE ROAD
KANSAS CITY, MO 64138

110 MILLBURN ROAD NORTH KANSAS CITY, MISSOURI 64116 TEL. 516.300.4110



Kevin J. Zimmerman - Engineer
MO# BE 2013020408

Dalyn Novak - Architect
MO # 2011006178

DATE	04/17/2024
Description	Date

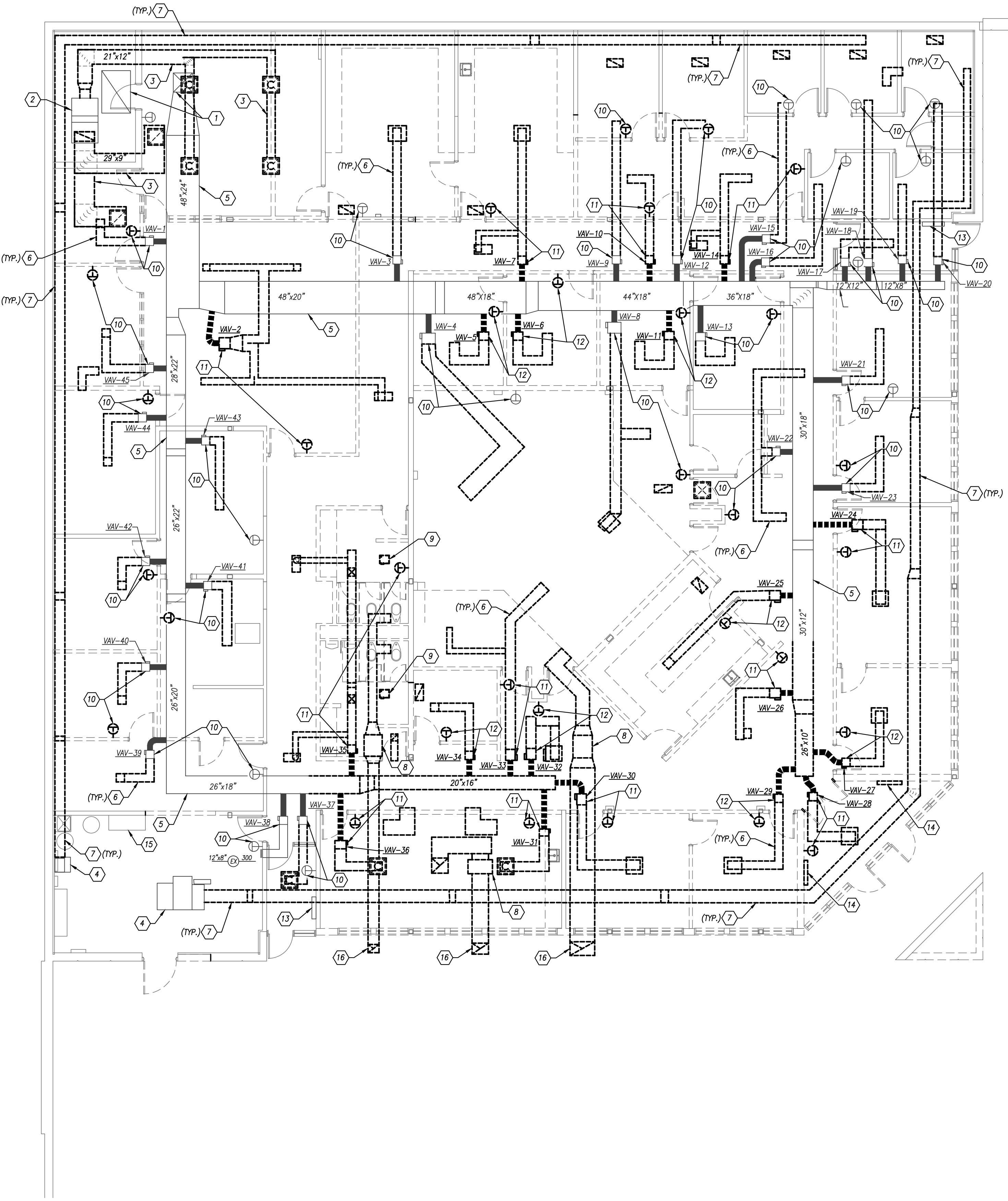
SKF, Inc. © 2023

FLOOR PLAN MECHANICAL DEMOLITION

M0.01

1. REFER TO GENERAL DEMOLITION NOTES ON MEP COVER SHEET FOR ADDITIONAL REQUIREMENTS OF WORK.

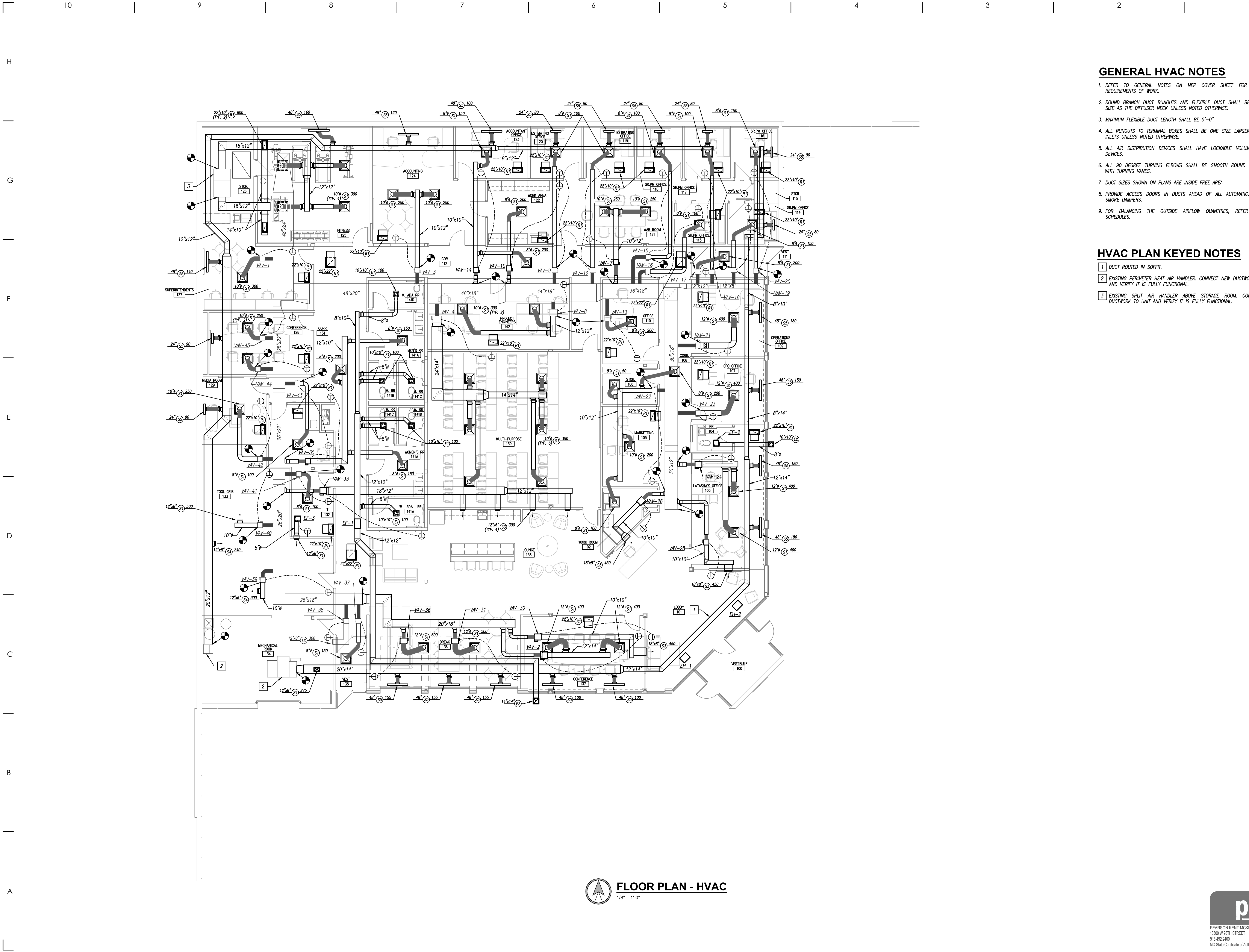
- 1) SUPPLY AND RETURN MAIN DUCTS UP TO EXISTING GROUND MOUNTED VAV AIR HANDLER ABOVE. EXISTING VAV AIR HANDLER AND ASSOCIATED CONDENSER SHALL REMAIN TO BE REUSED. VERIFY EQUIPMENT IS FULLY FUNCTIONAL.
- 2) EXISTING FAN COIL UNIT ABOVE STORAGE ROOM AND ASSOCIATED CONDENSER LOCATED ON GRADE ABOVE SHALL REMAIN TO BE REUSED. VERIFY EQUIPMENT IS FULLY FUNCTIONAL.
- 3) REMOVE EXISTING DUCT BOARD AND DIFFUSERS CONNECTED TO EXISTING FAN COIL UNIT. REPLACE WITH NEW METAL DUCT AND NEW DIFFUSERS. REFER TO NEW WORK PLAN.
- 4) EXISTING AIR HANDLERS USED FOR PERIMETER HEATING SHALL REMAIN TO BE REUSED. VERIFY AIR HANDLERS ARE FULLY FUNCTIONAL.
- 5) EXISTING METAL DUCT MAINS SHALL REMAIN TO BE REUSED EXCEPT WHERE SHOWN OTHERWISE. INSPECT DUCTWORK TO VERIFY THAT DUCT HAS LINER INSIDE AND THAT LINER IS FULLY INTACT AND IS NOT OBSTRUCTING AIRFLOW.
- 6) REMOVE ALL EXISTING DUCT BOARD AND DIFFUSERS DOWNSTREAM OF EXISTING VAV BOXES.
- 7) REMOVE ALL DUCT BOARD AND DIFFUSERS CONNECTED TO PERIMETER HEATING AIR HANDLING UNITS. REPLACE WITH NEW METAL DUCT AND NEW DIFFUSERS. REFER TO NEW WORK PLAN.
- 8) REMOVE EXISTING INLINE EXHAUST FAN AND ASSOCIATED DUCTWORK.
- 9) REMOVE EXISTING CABINET EXHAUST FAN AND ASSOCIATED DUCTWORK.
- 10) EXISTING VAV BOXES TO REMAIN TO BE REUSED EXCEPT WHERE NOTED OTHERWISE. ASSOCIATED PNEUMATIC THERMOSTATS SHALL BE LEFT IN PLACE EXCEPT WHERE LOCATED AT A DISCHARGED WALL, IN WHICH CASE THE THERMOSTAT SHOULD BE REMOVED AND REINSTALLED IN NEW LOCATION AS SHOWN ON NEW WORK PLANS. VERIFY EXISTING VAV BOXES AND THERMOSTATS ARE FULLY FUNCTIONAL.
- 11) SALVAGE EXISTING VAV BOX AND ASSOCIATED PNEUMATIC THERMOSTAT TO BE RELOCATED AS SHOWN ON NEW WORK PLAN. VERIFY EXISTING VAV BOX AND THERMOSTAT ARE FULLY FUNCTIONAL.
- 12) REMOVE AND SALVAGE EXISTING VAV BOX AND ASSOCIATED PNEUMATIC THERMOSTAT. RELINQUISH TO OWNER FOR FUTURE REUSE OR PARTS REPLACEMENT.
- 13) EXISTING ELECTRIC HEATER TO REMAIN.
- 14) REMOVE EXISTING ELECTRIC HEATER.
- 15) EXISTING AIR COMPRESSOR FOR PNEUMATIC CONTROL SYSTEM SHALL REMAIN. VERIFY AIR COMPRESSOR AND PNEUMATIC CONTROL SYSTEM ARE FULLY FUNCTIONAL.
- 16) REMOVE EXISTING EXHAUST GRILLES MOUNTED IN OVERHANG.



FLOOR PLAN - MECHANICAL DEMOLITION



PEARSON KENT MCKINLEY RAAF ENGINEERS LLC
13300 W 98TH STREET LENEXA, KS 66215
913.492.2400 WWW.PKMRENG.COM
MO State Certificate of Authority #E-2002020886



GENERAL HVAC NOTES

1. REFER TO GENERAL NOTES ON MEP COVER SHEET FOR ADDITIONAL REQUIREMENTS OF WORK.
2. ROUND BRANCH DUCT RUNOUTS AND FLEXIBLE DUCT SHALL BE THE SAME SIZE AS THE DIFFUSER NECK UNLESS NOTED OTHERWISE.
3. MAXIMUM FLEXIBLE DUCT LENGTH SHALL BE 5'-0".
4. ALL RUNOUTS TO TERMINAL BOXES SHALL BE ONE SIZE LARGER THAN BOX INLETS UNLESS NOTED OTHERWISE.
5. ALL AIR DISTRIBUTION DEVICES SHALL HAVE LOCKABLE VOLUME CONTROL DEVICES.
6. ALL 90 DEGREE TURNING ELBOWS SHALL BE SMOOTH ROUND OR SQUARE WITH TURNING VANES.
7. DUCT SIZES SHOWN ON PLANS ARE INSIDE FREE AREA.
8. PROVIDE ACCESS DOORS IN DUCTS AHEAD OF ALL AUTOMATIC, FIRE, AND SMOKE DAMPERS.
9. FOR BALANCING THE OUTSIDE AIRFLOW QUANTITIES, REFER TO HVAC SCHEDULES.

HVAC PLAN KEYED NOTES

- 1 DUCT ROUTED IN SOFFIT.
- 2 EXISTING PERIMETER HEAT AIR HANDLER. CONNECT NEW DUCTWORK TO UNIT AND VERIFY IT IS FULLY FUNCTIONAL.
- 3 EXISTING SPLIT AIR HANDLER ABOVE STORAGE ROOM. CONNECT NEW DUCTWORK TO UNIT AND VERIFY IT IS FULLY FUNCTIONAL.



Missouri Certificate of Authority
#2003011262
Structural Engineer:
Bob D. Campbell & Co.
Missouri Certificate of Authority
#000442
4338 Bellevue Ave.
Kansas City, MO 64111
816.531.4144

MEP Engineer:
PKMR Engineers
Missouri Certificate of Authority
#E-2002020886
13300 W. 96th Street
Lenexa, KS 66215
913.492.2400

JOB NUMBER 23011

LM2 OFFICE RENOVATION

9000 OLD SANTE FE ROAD
KANSAS CITY, MO 64138



Kevin J. Zimmerman - Engineer
MOW PE-2017029408

Dalyn Novak - Architect
MO # 2011006178

PERMIT SET	
ISSUE DATE	04/17/2024
No. Description	Date

WSKF, Inc. © 2023



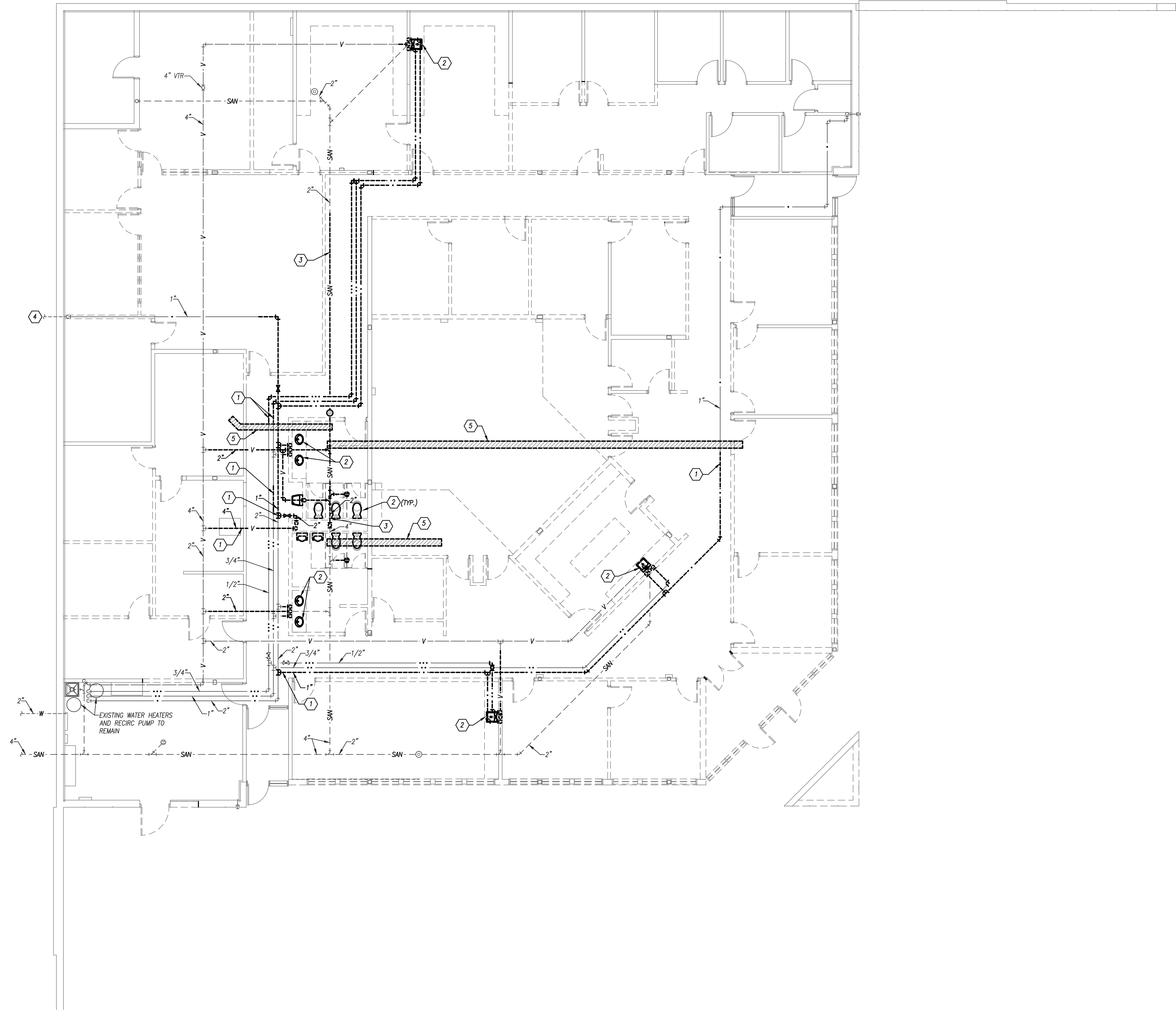
PEARSON KENT MCKINLEY RAAF ENGINEERS LLC
LENEXA, KS 66215
913.492.2400
WWW.PKMRNG.COM
MO State Certificate of Authority #E-2002020886

FLOOR PLAN
-HVAC

M1.01

FLOOR PLAN - HVAC
1/8" = 1'-0"

PEARSON KENT MCKINLEY RAAF ENGINEERS LLC
13300 W 98TH STREET LENEXA, KS 66215
913.492.2400 WWW.PKMRENG.COM
MO State Certificate of Authority #E-2002020886



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

GENERAL DEMOLITION NOTES

1. REFER TO GENERAL DEMOLITION NOTES ON MEP COVER SHEET FOR ADDITIONAL REQUIREMENTS OF WORK.

DEMOLITION PLAN KEYED NOTES

- ① REMOVE PIPING AS SHOWN. REFER TO NEW WORK PLAN FOR NEW PIPE ROUTING AND SIZES.
- ② REMOVE EXISTING PLUMBING FIXTURE. REMOVE ASSOCIATED DOMESTIC WATER AND VENT PIPING BACK TO MAINS AND CAP. REMOVE ASSOCIATED SANITARY PIPE TO BELOW GRADE AND CAP.
- ③ SAW CUT FLOOR TO REMOVE EXISTING 2" SANITARY PIPE AS SHOWN TO BE REPLACED WITH 4" SANITARY PIPE. REFER TO NEW WORK PLANS.
- ④ EXISTING DOMESTIC COLD WATER LINE TO YARD HYDRANT.
- ⑤ SAW CUT FLOOR TO INSTALL NEW SANITARY PIPING BELOW SLAB.



Missouri Certificate of Authority
#2003011262

Structural Engineer:
Bob D. Campbell & Co.
Missouri Certificate of Authority
#000442
4338 Bellevue Ave.
Kansas City, MO 64111
816.531.4144

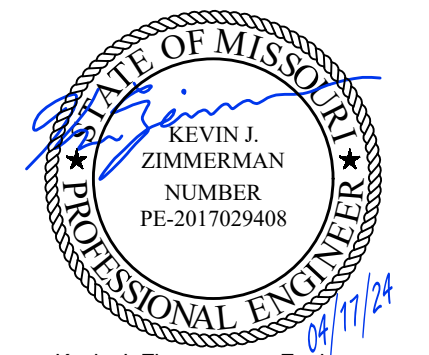
MEP Engineer:
PKMR Engineers
Missouri Certificate of Authority
#E-2002020886
13300 W. 96th Street
Lenexa, KS 66215
913.492.2400

JOB NUMBER 23011

LM2 OFFICE RENOVATION

**9000 OLD SANTE FE ROAD
KANSAS CITY, MO 64138**

110 Armour Road North Kansas City, Missouri 64116 Tel: 816.500.4101



Kevin J. Zimmerman - Engineer
MO# PE-2017029408

Dalyn Novak - Architect
MO # 2011006178

PERMIT SET	
ISSUE DATE	04/17/2024
No. Description	Date

WSKF, Inc. © 2023



PEARSON KENT MCKINLEY RAAF ENGINEERS LLC
13300 W 96TH STREET
LENEXA, KS 66215
913.492.2400
WWW.PKMRNG.COM
MO State Certificate of Authority #E-2002020886

24.027

**FLOOR PLAN
- PLUMBING
DEMOLITION**

P0.01



FLOOR PLAN - PLUMBING
1/8" = 1'-0"

GENERAL PLUMBING NOTES

1. REFER TO GENERAL NOTES ON MEP COVER SHEET FOR ADDITIONAL REQUIREMENTS OF WORK.
2. SAW CUT FLOOR FOR THE INSTALLATION OF NEW SANITARY PIPING. REFER TO PLUMBING PLANS SHOWING NEW WORK.
3. REFER TO PLUMBING FIXTURE / DRAIN SCHEDULES FOR PIPING SIZES FOR INDIVIDUAL CONNECTIONS TO FIXTURES AND RISERS NOT SHOWN ON PLANS.
4. NO SANITARY OR VENT PIPING BELOW GRADE SHALL BE LESS THAN 2".
5. NO DOMESTIC WATER PIPING SHALL BE SMALLER THAN 3/4" UNLESS NOTED OTHERWISE.
6. ALL VENT PIPING SHOWN IS DIAGRAMMATIC. USE APPROPRIATE FITTINGS FOR VENT PIPING BELOW FLOOD RIM OF FIXTURE.
7. NOT ALL INTERIOR CLEANOUTS ARE SHOWN FOR DRAWING CLARITY. CONTRACTOR SHALL INSTALL ALL CODE-REQUIRED CLEANOUTS (RE: GENERAL NOTES ON COVER SHEET). COORDINATE EXACT LOCATIONS OF CLEANOUTS WITH ARCHITECT.
8. ALL FLOOR DRAIN TRAPS SHALL BE PROTECTED BY TRAP SEALS LISTED FOR PROPOSED USE.

PLUMBING PLAN KEYED NOTES

- ① ROUTE DOMESTIC HOT WATER PIPE DOWN IN WALL TO WITHIN 6" OF LAVATORY DOMESTIC HOT WATER CONNECTIONS, THEN BACK UP.
- ② DOMESTIC COLD WATER PIPE DOWN TO SERVE FUTURE COFFEE MAKER. VERIFY LOCATION WITH ARCHITECT.
- ③ 2" DOMESTIC COLD WATER PIPE DOWN TO SERVE WATER CLOSETS.
- ④ 3/4" DOMESTIC COLD WATER, 2" SANITARY, AND 2" VENT PIPE SERVING SINK AND WATER COOLER. 1/2" DHW PIPE SERVING SINK.
- ⑤ 1-1/2" DOMESTIC COLD WATER PIPE DOWN TO SERVE WATER CLOSET AND LAVATORY.



Missouri Certificate of Authority
#2003011262

Structural Engineer:
Bob D. Campbell & Co.
Missouri Certificate of Authority
#000442
4338 Belleview Ave.
Kansas City, MO 64111
816.531.4144

MEP Engineer:
PKMR Engineers
Missouri Certificate of Authority
#E-2002020886
13300 W. 96th Street
Lenexa, KS 66215
913.492.2400

JOB NUMBER 23011

LM2 OFFICE RENOVATION

9000 OLD SANTE FE ROAD
KANSAS CITY, MO 64138

110 Armour Road North Kansas City, Missouri 64116 Tel: 816.500.4101



Kevin J. Zimmerman - Engineer
MOW PE-2017029408

Dalyn Novak - Architect
MO # 2011006178

PERMIT SET	
ISSUE DATE	04/17/2024
No. Description	Date

WSKF, Inc. © 2023



PEARSON KENT MCKINLEY RAAF ENGINEERS LLC
13300 W 96TH STREET
LENEXA, KS 66215
913.492.2400
WWW.PKMRNG.COM
MO State Certificate of Authority PE-2002020886

**FLOOR PLAN
-PLUMBING**

P.101

H

G

F

E

D

C

B

A

PIPING MATERIAL & INSULATION SCHEDULE

PIPING				ACCEPTABLE FITTINGS	FIELD TEST PRESSURE/TIME	ALLOWABLE IN PLENUMS	INSULATION	
SYSTEM	SIZE	TYPE/SCHED	MATERIAL				TYPE	THICKNESS
DOMESTIC COLD WATER	1/2"-2-1/2"	L	COPPER	SOLDER, PRO-PRESS	130 PSI - 1/2HR	YES	FIBERGLASS W/ ASJ	1/2"
DOMESTIC HOT WATER & HW RETURN	1/2"-1-1/4"	L	COPPER	SOLDER, PRO-PRESS	130 PSI - 1/2HR	YES	FIBERGLASS W/ ASJ	1"
DOMESTIC HOT WATER & HW RETURN	1-1/2"-2-1/2"	L	COPPER	SOLDER, PRO-PRESS	130 PSI - 1/2HR	YES	FIBERGLASS W/ ASJ	1-1/2"
DOM. HOT & COLD BELOW GRADE	1/2"-1-1/4"	K	COPPER	CONTINUOUS TUBING, BRAZED	130 PSI - 1/2HR	YES	ELASTOMERIC	1" (HOT ONLY)
SOIL & WASTE ABOVE GRADE	1-1/2"-6"	NO HUB / SERVICE WT.	CAST IRON	NO HUB	10 FT - 1/2HR	YES	-----	----
SOIL & WASTE ABOVE GRADE	2"-8"	SCH. 40	PVC	SOLVENT JOINED	10 FT - 1/2HR	NO	-----	----
SOIL & WASTE BELOW GRADE	2"-8"	SCH. 40	PVC	SOLVENT JOINED	10 FT - 1/2HR	NO	-----	----
DRINKING FOUNT. DRAIN	ALL	-----	-----	-----	-----	YES	ELASTOMERIC	1/2"

NOTES

1. ALL PIPING AND MATERIALS IN PLENUMS MUST MEET ASTM E84 FLAME/SMOKE RATING OF 25/50.
2. ALL INSULATION THICKNESSES SHALL MEET ADOPTED IECC AND ASHRAE 90.1 - 2016 REQUIREMENTS AT A MINIMUM.
3. REFER TO SPECIFICATIONS FOR MORE DETAILED INFORMATION.
4. WELDED PIPING IS REQUIRED FOR GAS PIPING WHEN: A) PIPING IS AT OR OVER 2PSI; B) WHEN PIPING OF ANY PRESSURE IS ROUTED THROUGH CONCEALED SPACES.
5. BELOW GRADE SANITARY EXTERIOR TO THE BUILDING IN JCWW DISTRICT SHALL MEET JCWW STANDARDS FOR MATERIALS, INSTALLATIONS AND JOINING/COUPLING. COORD INSPECTION WITH JCWW PRIOR TO COVERING.

PLUMBING FIXTURE SCHEDULE

MARK	FIXTURE MODEL	FIXTURE DESCRIPTION	FITTINGS MODEL	FITTINGS AND TRIM	REMARKS	PLUMBING FIXTURE PIPE SIZES			
						WASTE	VENT	DCW	DHW
L-1	AMERICAN STANDARD 0475.028 "AQUALYN"	ADA-COMPLIANT, COUNTER TOP-MOUNTED LAVATORY. 16" OVAL, WHITE VITREOUS CHINA, SELF-RIMMING BASIN WITH FAUCET HOLES ON 4" CENTERS. REFER TO ARCHITECTURAL DRAWINGS FOR MOUNTING HEIGHT.	TOTO TEL105	AUTOMATIC FAUCET, HANDS FREE OPERATION. 0.5 GPM ECOPOWER SELF GENERATING POWER SYSTEM. PROVIDE WITH COVER PLATE FOR SEAMLESS INSTALLATION. PROVIDE THERMOSTATIC MIXER INSTALLED BELOW SINK.	1,2,7	2"	2"	1/2"	1/2"
L-2	AMERICAN STANDARD 0355.012	WALL-HUNG LAVATORY. 20"x18" WHITE VITREOUS CHINA BOWL WITH 4" BACK FOR USE WITH CONCEALED ARM HANGER. FAUCET HOLES COORDINATED WITH FAUCET AND TRIM. PROVIDE CONCEALED ARM CARRIER.	TOTO TEL105	AUTOMATIC FAUCET, HANDS FREE OPERATION. 0.5 GPM ECOPOWER SELF GENERATING POWER SYSTEM. PROVIDE WITH COVER PLATE FOR SEAMLESS INSTALLATION. PROVIDE THERMOSTATIC MIXER INSTALLED BELOW SINK.	1,2,3,4,5	2"	1-1/2"	1/2"	1/2"
S-1	ELKAY LRAD221965	22"x19-1/2"x6-1/2" SINGLE COMPARTMENT STAINLESS STEEL SINK. SELF-RIMMING WITH 1-3/4 IN. RADIUS COVED CORNERS. SEAMLESS #18 GAUGE, TYPE 304 STAINLESS STEEL WITH SATIN FINISH. FULLY UNDERCOATED. FAUCET HOLES COORDINATED WITH FAUCET AND TRIM. MINIMUM 27" CABINET SIZE REQUIRED	CHICAGO 895-317E35ABCP	DECK-MOUNTED FAUCET WITH 3-1/2" RIGID/SWINGING GOOSENECK FAUCET, 4" METAL LEVER HANDLES, 1.5 GPM AERATOR OUTLET AND QUATURN OPERATING CARTRIDGE. POLISHED CHROME FINISH. PROVIDE BASKET STRAINER.	2,3,5,8	2"	2"	1/2"	1/2"
EW-1	HALSEY-TAYLOR HTHB-HACBLS5-WF	ADA-COMPLIANT, DUAL-HEIGHT, BARRIER-FREE, ELECTRIC WATER COOLER. PROVIDES 8.0 GPM OF 50°F WATER AT 90°F AMBIENT. ADA-COMPLIANT FRONT AND SIDE PUSHBARS. LEAD FREE. INTEGRAL FILTER. MOUNT WITH MIN. 27" KNEE CLEARANCE AND SPOUT AT NO MORE THAN 36" A.F.F.	HALSEY-TAYLOR HTHB-HACDBLWF	BOTTLE FILLER SHALL INCLUDE ELECTRONIC SENSOR FOR NO-TOUCH ACTIVATION WITH AUTOMATIC 20-SECOND SHUT-OFF. SHALL PROVIDE 1.1 GPM LAMINAR FLOW. ANTI-MICROBIAL PROTECTED PLASTIC COMPONENTS.	4	2"	2"	1/2"	
WC-1	AMERICAN STANDARD MADERA 3043.001 CHURCH 9500C	ADA-COMPLANT, 1.28 GALLON, FLOOR-MOUNTED FLUSH VALVE WATER CLOSET. TOP SPUD AND FLAT BOLT COVERS. WHITE VITREOUS CHINA ELONGATED BOWL. 16-1/2" HIGH. WHITE, SOLID PLASTIC, OPEN-FRONT SEAT FOR ELONGATED BOWL. INTEGRAL BUMBERS. EXTERNALCHECK HINGES WITH STAINLESS STEEL POSTS.	TOTO TET1LN32	EXPOSED WATER CLOSET FLUSH VALVE. CHROME-PLATED, HANDS FREE OPERATION. ECOPOWER SELF GENERATING POWER SYSTEM. 1" I.P.S. SCREWDRIVER BACK-CHECK ANGLE STOP WITH PROTECTIVE CAP. ADJUSTABLE TAILPIECE. 1.28 GPF, VACUUM BREAKER FLUSH CONNECTION AND SPUD COUPLING FOR 1-1/2" TOP SPUD. PROVIDE WALL AND SPUD FLANGES. COORDINATE ROUGH IN HEIGHT WITH MANUFACTURER'S RECOMMENDATION.	6	4"	2"	1-1/4"	----
WC-2	AMERICAN STANDARD MADERA 2234.001 CHURCH 9500C	1.28 GALLON, FLOOR-MOUNTED FLUSH VALVE WATER CLOSET. TOP SPUD AND FLAT BOLT COVERS. WHITE VITREOUS CHINA ELONGATED BOWL. 15" HIGH. WHITE, SOLID PLASTIC, OPEN-FRONT SEAT FOR ELONGATED BOWL. INTEGRAL BUMBERS. EXTERNALCHECK HINGES WITH STAINLESS STEEL POSTS.	TOTO TET1LN32	EXPOSED WATER CLOSET FLUSH VALVE. CHROME-PLATED, HANDS FREE OPERATION. ECOPOWER SELF GENERATING POWER SYSTEM. 1" I.P.S. SCREWDRIVER BACK-CHECK ANGLE STOP WITH PROTECTIVE CAP. ADJUSTABLE TAILPIECE. 1.28 GPF, VACUUM BREAKER FLUSH CONNECTION AND SPUD COUPLING FOR 1-1/2" TOP SPUD. PROVIDE WALL AND SPUD FLANGES. COORDINATE ROUGH IN HEIGHT WITH MANUFACTURER'S RECOMMENDATION.	6	4"	2"	1-1/4"	----
BB-1	GUY GREY BIM875	ICE MAKER BACK BOX. PROVIDE WITH STOP VALVE.	----	----	----	----	----	1/2"	----

REMARKS:

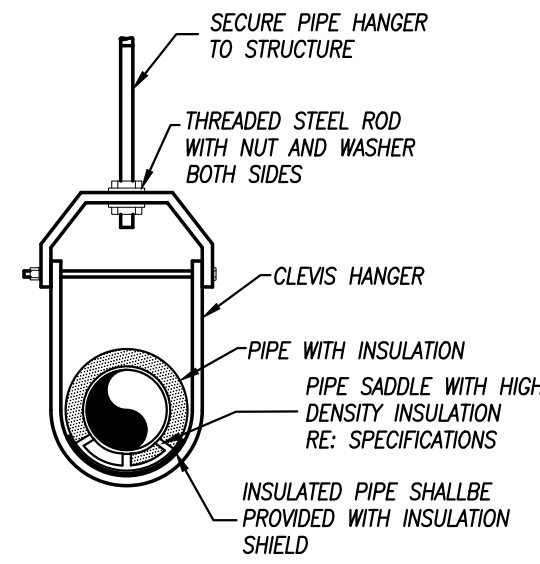
1. PROVIDE CHROME-PLATED BRASS TAILPIECE AND GRID DRAIN.
2. PROVIDE CHROME-PLATED BRASS P-TRAP.
3. PROVIDE LOOSE KEY STOPS AND FLEXIBLE RISERS.
4. PROVIDE CONCEALED ARM TYPE CARRIER WITH SQUARE, TUBULAR STEEL UP-RIGHTS AND BLOCK TYPE BASES.
5. INSULATE EXPOSED TAILPIECE, P-TRAP, AND WATER RISERS. REFER TO SPECIFICATIONS FOR INSULATION METHODS.
6. PROVIDE FLUSH VALVE HANDLE ON WIDE SIDE OF STALL.
7. PROVIDE HANDLE STOPS AND FLEXIBLE RISERS.
8. PROVIDE CHROME-PLATED BRASS TAILPIECE AND BASKET STRAINER.

GENERAL NOTES (APPLICABLE TO ALL FIXTURES):

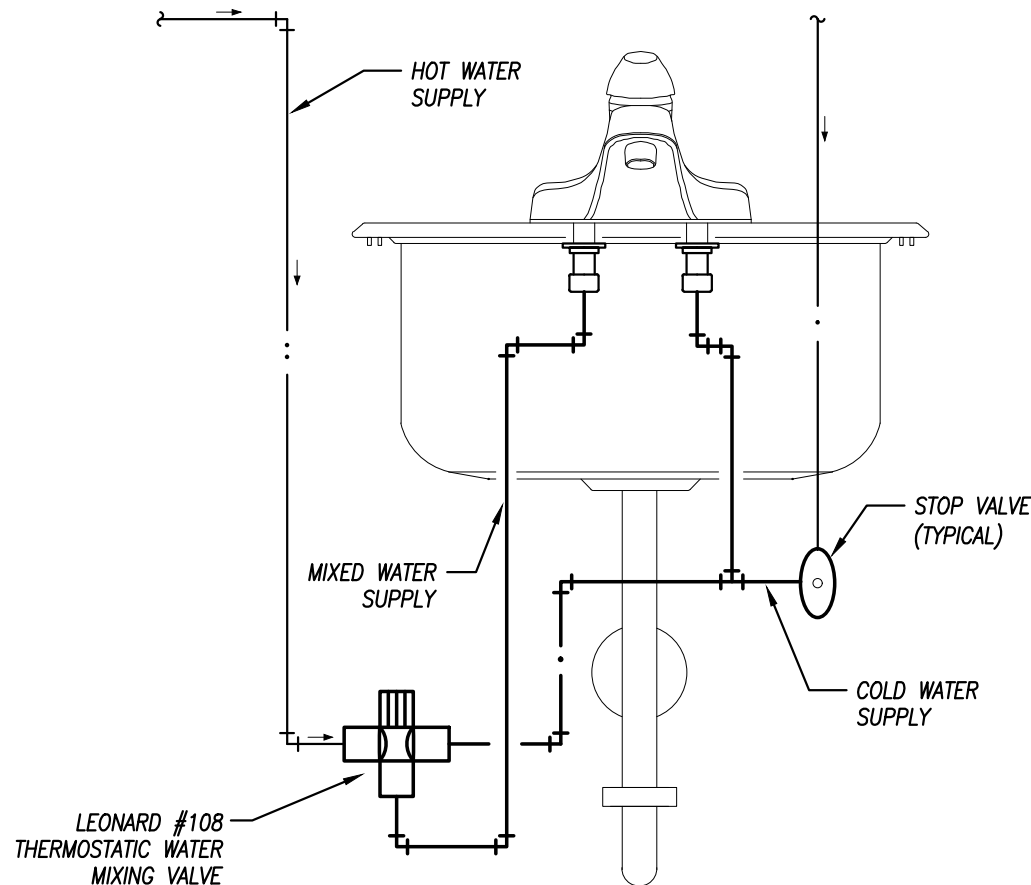
- 1) ALL PUBLIC LAVATORIES AND SINKS SHALL BE PROVIDED WITH ANTI-SCALD ASSE 1070 LISTED VALVE ON HOT WATER SUPPLY.
- 2) FIXTURE CONNECTION SIZES SHOWN IN SCHEDULE ARE CONNECTION SIZE AT FIXTURE ON PLANS.
- 3) COORDINATE FIXTURE REQUIREMENTS SCHEDULED ABOVE WITH OTHER TRADES. VERIFY CABINET SIZES, COUNTERTOP MATERIALS, WALL THICKNESSES, ETC ARE APPROPRIATE FOR SPECIFIED FIXTURES PRIOR TO ORDERING.

FLOOR DRAIN SCHEDULE

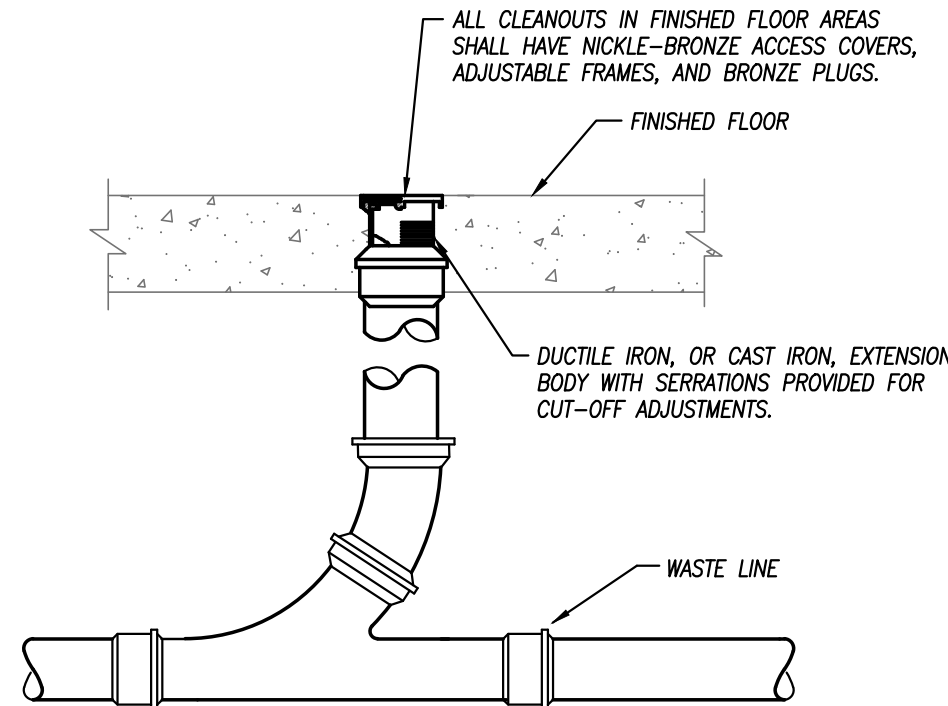
PLAN MARK	MANUFACTURER	MODEL NUMBER	SERVICE	TOP/GRATE SIZE	WASTE SIZE	REMARKS
FD-1	WADE	1100	FLOOR DRAIN	6"Ø	2"	1
REMARKS: 1. PROVIDE WITH NICKEL BRONZE TOP.						



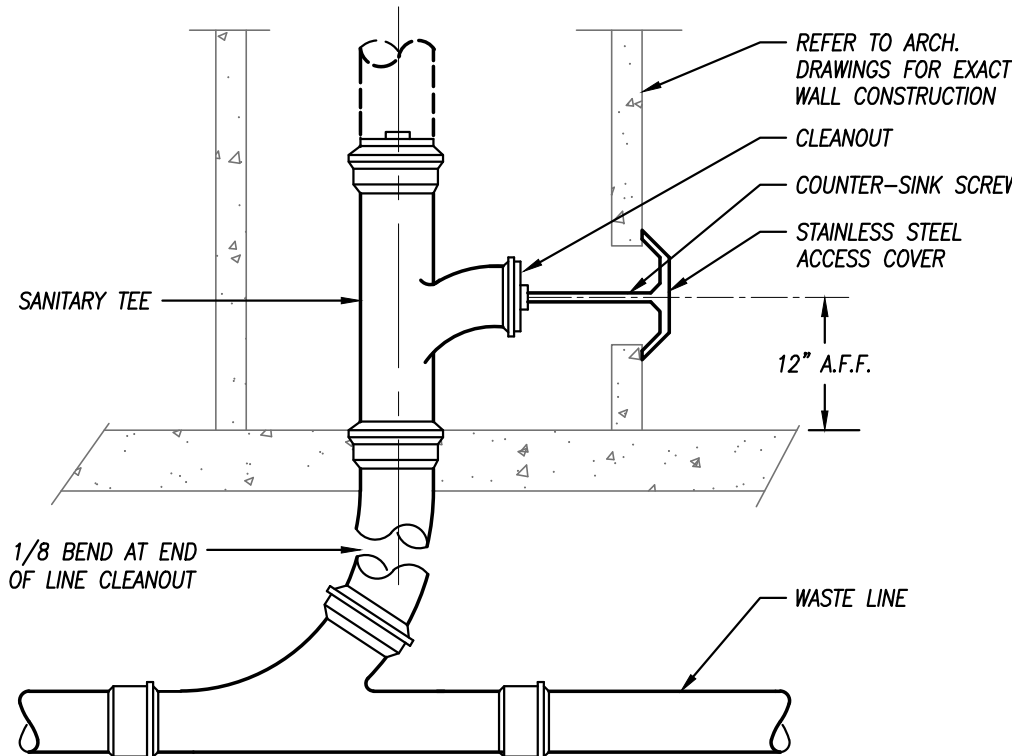
PIPE HANGER DETAIL
NOT TO SCALE



HAND WASHING SINK/LAVATORY
TEMPERED WATER SCHEMATIC
NOT TO SCALE



FLOOR CLEANOUT DETAIL
NOT TO SCALE



WALL CLEANOUT DETAIL
NOT TO SCALE



Missouri Certificate of Authority
#2003011262

Structural Engineer:
Bob D. Campbell & Co.
Missouri Certificate of Authority
#000442
4338 Bellevue Ave.
Kansas City, MO 64111
816.531.4144

MEP Engineer:
PKMR Engineers
Missouri Certificate of Authority
#E-2002020886
13300 W. 96th Street
Lenexa, KS 66215
913.492.2400

JOB NUMBER 23011

LM2 OFFICE RENOVATION

9000 OLD SANTE FE ROAD
KANSAS CITY, MO 64138

110 Armour Road North Kansas City, Missouri 64116 Tel: 816.300.4101



Kevin J. Zimmerman - Engineer
MO# PE-2017029408

Dalyn Novak - Architect
MO # 2011006178

PERMIT SET	
ISSUE DATE	04/17/2024
No. Description	Date

WSKF, Inc. © 2023



FLOOR PLAN - ELECTRICAL DEMOLITION

1/8" = 1'-0"

GENERAL DEMOLITION NOTES

1. REFER TO GENERAL DEMOLITION NOTES ON MEP COVER SHEET FOR ADDITIONAL REQUIREMENTS OF WORK.

DEMOLITION PLAN KEYED NOTES

- EXISTING PLUG MOLD TO BE REMOVED.
- DEMOLISH AND REMOVE ALL EXISTING LIGHT FIXTURES LOCATED IN THE BUILDING. MAINTAIN ALL CIRCUITING FOR CONNECTION TO NEW LIGHT FIXTURES. REFER TO NEW WORK PLANS FOR MORE INFORMATION.
- DEMOLISH AND REMOVE EXISTING DEVICE.
- REMOVE ALL RECEPTACLE CIRCUITING NOT BEING USED BACK TO CIRCUIT BREAKER. REFER TO NEW WORK PLANS FOR MORE INFORMATION.
- REMOVE AND DEMOLISH ELECTRICAL CONNECTION AND ALL WIRING TO MECHANICAL EQUIPMENT BEING DEMOLISHED.
- EXISTING WALL HEATER TO REMAIN. DISCONNECT ELECTRICAL CONNECTION DURING CONSTRUCTION. SEE NEW WORK PLAN FOR MORE INFORMATION.

EXISTING CONDUITS BELOW GRADE:

EXISTING BRANCH CIRCUIT WIRING MAY BE RUN BELOW GRADE WHERE HOMERUNS BELOW GRADE CAN NOT BE MAINTAINED DUE TO THE DEMOLITION OF THE WALL WHERE THE CONDUIT STUBS UP FROM BELOW GRADE. THE CIRCUIT SHALL BE MAINTAINED WITH A NEW HOMERUN OVERHEAD BACK TO THE ORIGINAL SOURCE. REMOVE EXISTING CONDUCTORS NO LONGER BEING USED.



Missouri Certificate of Authority
#2003011262

Structural Engineer:
Bob D. Campbell & Co.
Missouri Certificate of Authority
#000442
4338 Bellevue Ave.
Kansas City, MO 64111
816.531.4144

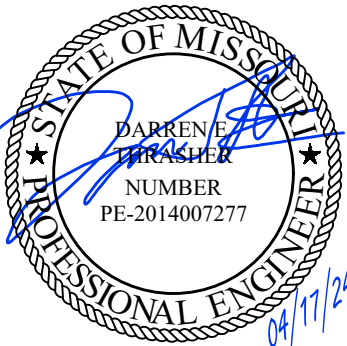
MEP Engineer:
PKMR Engineers
Missouri Certificate of Authority
#E-2002020886
13300 W. 96th Street
Lenexa, KS 66215
913.492.2400

JOB NUMBER 23011

LM2 OFFICE RENOVATION

9000 OLD SANTE FE ROAD
KANSAS CITY, MO 64138

110 Armour Road North Kansas City, Missouri 64116 Tel: 816.300.4101



Darren E. Thrasher - Engineer
MOR PE-2014007277

Dalyn Novak - Architect
MO # 2011006178

PERMIT SET	
ISSUE DATE	04/17/2024
No. Description	Date

WSKF, Inc. © 2023



PEARSON KENT MCKINLEY RAAF ENGINEERS LLC
13300 W 96TH STREET
LENEXA, KS 66215
913.492.2400
WWW.PKMRENG.COM
MO State Certificate of Authority #E-2002020886

24.027

FLOOR PLAN
-ELECTRICAL
DEMOLITION

E0.01

H

G

F

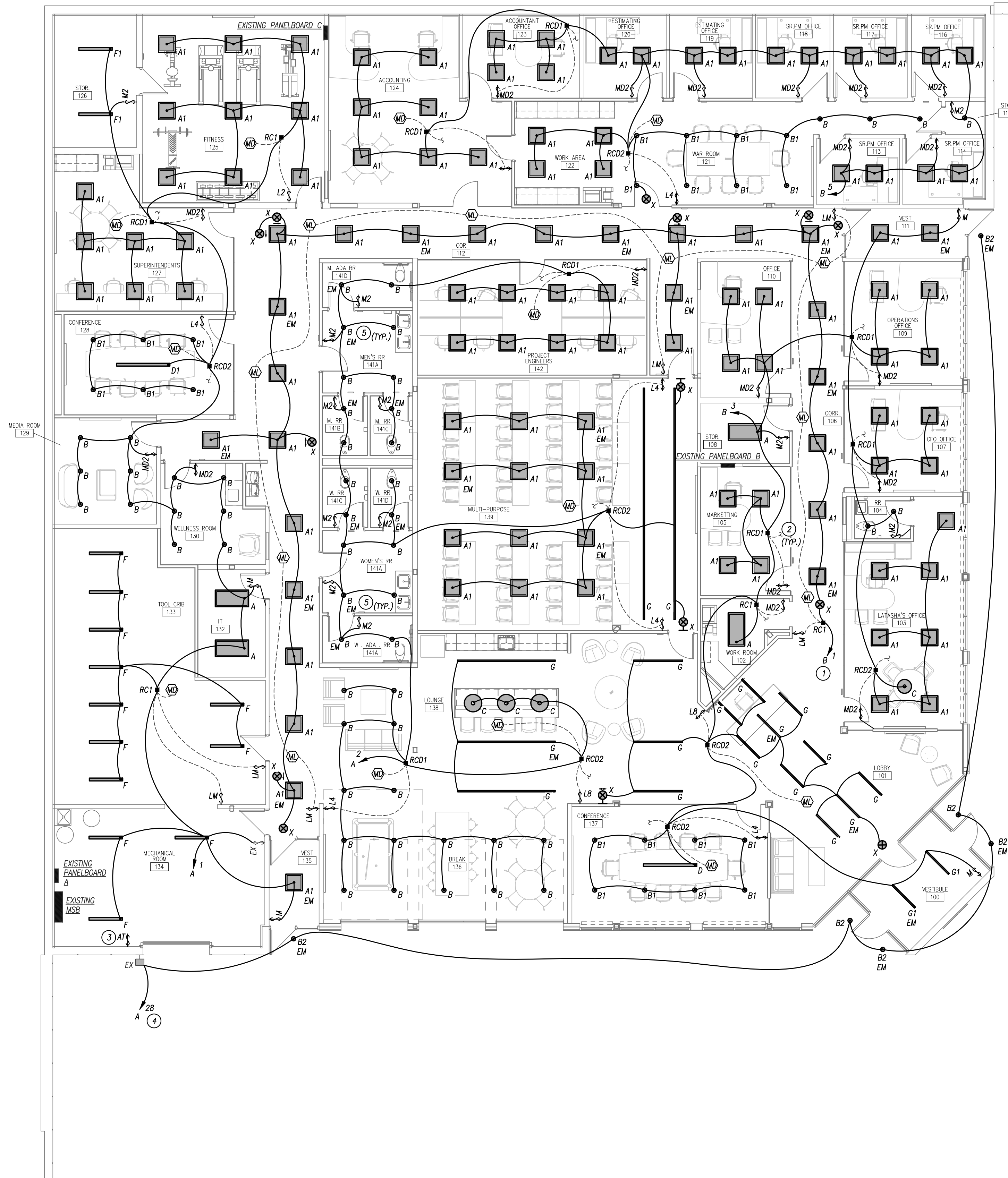
E

D

C

B

A



FLOOR PLAN - LIGHTING
1/8" = 1'-0"

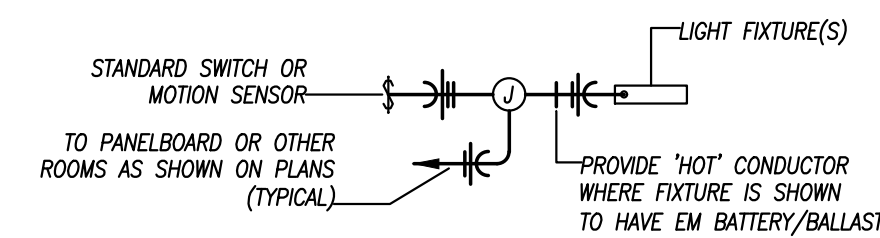
IECC 2021 NOTES

1. LIGHTING COMPLIANCE WITH IECC 2021 FOR THIS BUILDING ALTERATION IS REQUIRED PER CS03.5. THE INTERIOR LIGHTING LOAD COMPLIES WITH SECTION 0405.1.2:
- TOTAL ALLOWABLE WATTAGE = 7685
 - TOTAL PROPOSED WATTAGE = 6683
 - % PASSING = 13%

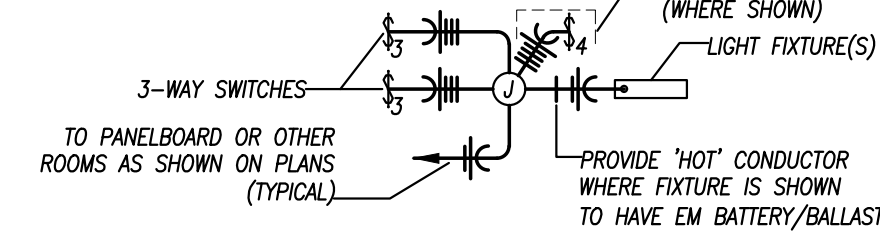
TYPICAL WIRING OF CONTROLS AND LIGHT FIXTURES

THE WIRING AND/OR TIC MARKS SHOWN BELOW ARE NOT SHOWN ON PLANS FOR CLARITY. PROVIDE WIRING FROM JUNCTION BOX(ES) TO SWITCHES/CONTROLLERS AND LIGHTS AS SHOWN BELOW FOR EACH ROOM/AREA.

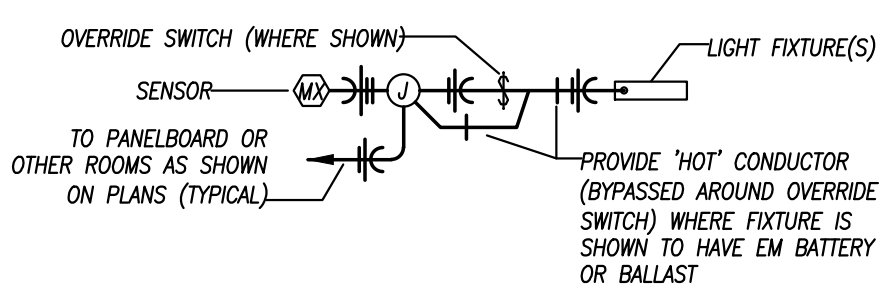
LINE VOLTAGE STANDARD WALL SWITCHES



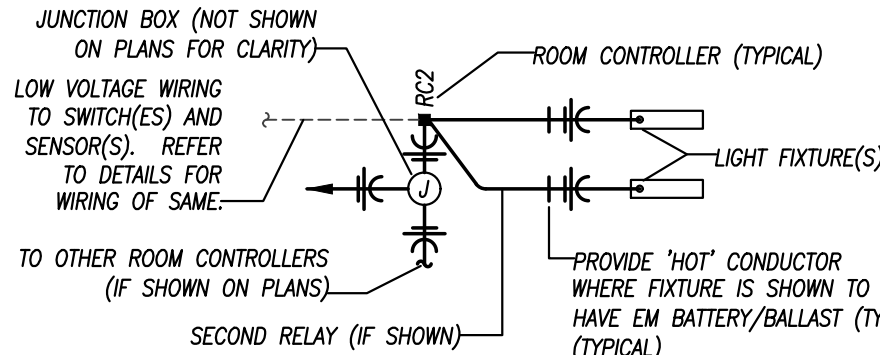
3-WAY WALL SWITCHES



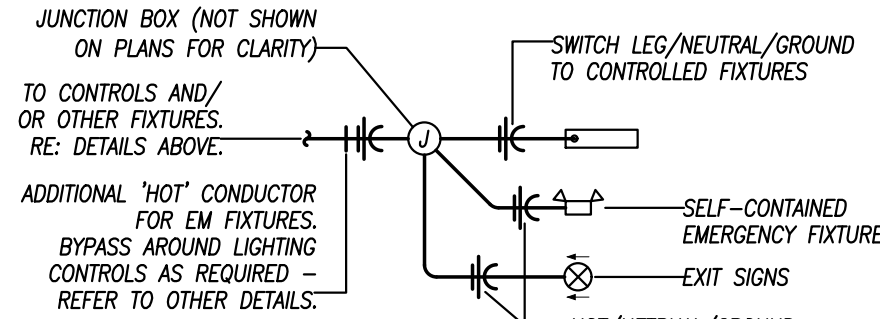
LINE VOLTAGE CEILING SENSORS



ROOM CONTROLLERS / POWER PACKS



EMERGENCY FIXTURES / EXIT LIGHTS



GENERAL LIGHTING NOTES

1. REFER TO GENERAL NOTES ON MEP COVER SHEET FOR ADDITIONAL REQUIREMENTS OF WORK.
2. LIGHT FIXTURES INDICATED AS EMERGENCY FIXTURES ARE TO FUNCTION AS NIGHT LIGHTS UNLESS SPECIFICALLY SHOWN SWITCHED.
3. ALL CIRCUITING SHOWN ON THIS PLAN IS DIAGRAMMATIC.
 - 3.1. ALL FIXTURES SHALL BE FED FROM JUNCTION BOXES WITH LIGHT FIXTURE WHIPS (<6'). DASHY-CHAINING OF FIXTURES IS NOT ALLOWED.
 - 3.2. SWITCH BOX LOCATIONS SHALL BE WIRED SO THAT A NEUTRAL WIRE IS AVAILABLE AT THE SWITCH BOX LOCATION, EITHER IN THE BOX OR AVAILABLE TO BE ADDED VIA RACEWAY OR AN ACCESSIBLE WALL CAVITY.
 - 3.3. WALL SWITCHES FOR SEPARATE LOAD TYPES (EM/NORMAL, 120/277V, ETC.) SHALL NOT BE IN A SINGLE BOX.
 - 3.4. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

LIGHTING PLAN KEYED NOTES

- ① CONNECT TO LIGHTING CIRCUIT DESIGNATED. CONTRACTOR MAY RE-USE EXISTING HOMERUN WHERE POSSIBLE AND IN GOOD CONDITION.
- ② EXTEND TO PLUG LOAD CONTROLLER IN THE SPACE. REFER TO SHEET E2.01 FOR MORE INFORMATION.
- ③ PROVIDE ASTRONOMICAL TIME CLOCK FOR CONTROL OF EXTERIOR FIXTURES. COORDINATE EXACT LOCATION WITH ARCHITECT.
- ④ ROUTE CIRCUIT THROUGH TIME CLOCK LOCATED IN MECHANICAL ROOM 134, THEN HOMERUN.
- ⑤ PROVIDE AND LOCATE REMOTE EMERGENCY LIGHTING TEST SWITCH FOR RESTROOM EMERGENCY LIGHTING IN IT ROOM.



FLOOR PLAN - SPECIAL SYSTEMS
1/8" = 1'-0"

GEN. SPECIAL SYSTEMS NOTES

1. REFER TO GENERAL NOTES ON MEP COVER SHEET FOR ADDITIONAL REQUIREMENTS OF WORK.
2. EXACT MECHANICAL EQUIPMENT LOCATIONS MAY NOT BE SHOWN FOR CLARITY. COORDINATE EXACT LOCATIONS OF ALL MECHANICAL EQUIPMENT, DUCT DETECTORS, ETC. WITH MECHANICAL DRAWINGS AND CONTRACTOR.

SPECIAL SYSTEMS KEYED NOTES

- 1 1-1/4" CONDUIT FOR DATA CABLING AND HDMI CABLE. ROUTE CONDUIT FROM FLOORBOX, OVER TO WALL WITH MONITOR AND UP THE WALL TO MONITOR LOCATION.
- 2 PROVIDE RECESSED MULTI-SERVICE WALL BOX FOR DATA/POWER FOR TELEVISION ON WALL AS SHOWN ON THE POWER PLAN AND DETAILED ON SHEET E5.01. PROVIDE COVER WITH GROMMETED OPENING ON BOX.
- 3 ONE (1) 1" CONDUIT WITH PULLSTRING. CONCEAL IN CABINETRY FROM DEVICE OVER TO WALL AND ABOVE TO ACCESSIBLE CEILING LOCATION.
- 4 1" CONDUIT FOR DATA CONNECTION. ROUTE CONDUIT UP FROM WALL BOX TO ABOVE CEILING.
- 5 PROVIDE JUNCTION BOX FOR HDMI CONNECTION AND ROUTING. 1-1/4" CONDUIT FROM JBOX ROUTED TO TELEVISION WALL BOX LOCATION.



Missouri Certificate of Authority
#2003011262

Structural Engineer:
Bob D. Campbell & Co.
Missouri Certificate of Authority
#000442
4338 Belleview Ave.
Kansas City, MO 64111
816.531.4144

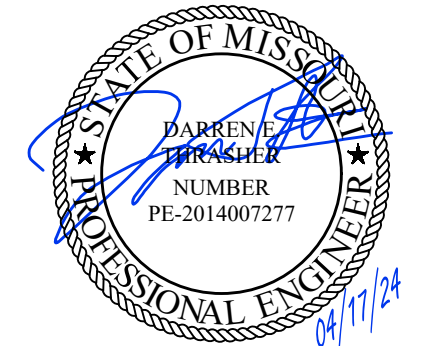
MEP Engineer:
PKMR Engineers
Missouri Certificate of Authority
#E-2002020886
13300 W. 96th Street
Lenexa, KS 66215
913.492.2400

JOB NUMBER 23011

LM2 OFFICE RENOVATION

9000 OLD SANTE FE ROAD
KANSAS CITY, MO 64138

110 Armour Road North Kansas City, Missouri 64116 Tel: 816.300.4101



Darren E. Thrasher - Engineer
MOR PE-2014007277

Dalyn Novak - Architect
MO # 2011006178

PERMIT SET	
ISSUE DATE	04/17/2024
No. Description	Date

WSKF, Inc. © 2023



PEARSON KENT MCKINLEY RAAF ENGINEERS LLC
13300 W 96TH STREET
LENEXA, KS 66215
913.492.2400
WWW.PKMRNG.COM
MO State Certificate of Authority #E-2002020886

**FLOOR PLAN
-SPECIAL
SYSTEMS
E3.01**

REMARKS:
1. EXISTING SQUARE D PANELBOARD



1. ALL BREAKERS IN EXISTING PANELBOARDS ARE EXISTING TO REMAIN UNLESS INDICATED OTHERWISE ON THE PANELBOARD SCHEDULES.
2. EXISTING BREAKERS, CIRCUITS, AND LOADS ARE SHOWN LIGHT. NEW LOADS, BREAKERS, AND CIRCUITS ARE SHOWN DARK.
3. EXISTING LOAD VALUES ARE ASSUMED AND/OR BASED ON EXISTING DRAWINGS.
4. AVAILABILITY OF CIRCUITS IN EXISTING PANELBOARDS IS BASED ON FIELD OBSERVATION AND EXISTING CIRCUIT DIRECTORIES. CONTRACTOR SHALL FIELD VERIFY ACTUAL CONDITIONS AND PROVIDE WORK ACCORDING TO INTENTION OF CONTRACT DOCUMENTS. ACTUAL CIRCUITS AVAILABLE DUE TO DEVIATION FROM ACTUAL ARE REQUIRED TO REMAIN, AND PANELBOARD AVAILABILITY MAY BE DIFFERENT THAN INDICATED.
5. FAULT CURRENT RATINGS AND/OR TYPES OF NEW BREAKERS IN EXISTING PANELBOARDS SHALL MATCH THE TYPE AND AIC RATING OF THE EXISTING BREAKERS IN ORDER TO MAINTAIN THE FAULT CURRENT RATING OF THE PANELBOARD.
6. PROVIDE NEW TYPED CIRCUIT DIRECTORIES FOR ALL PANELBOARDS WITH UPDATED CIRCUIT INFORMATION AS SHOWN AND/OR FIELD-VERIFIED.

H

G

F

E

D

C

B

A



Missouri Certificate of Authority
#2003011262

Structural Engineer:
Bob D. Campbell & Co.
Missouri Certificate of Authority
#000442
4338 Bellevue Ave.
Kansas City, MO 64111
816.531.4144

MEP Engineer:
PKMR Engineers
Missouri Certificate of Authority
#E-2002020886
13300 W. 96th Street
Lenexa, KS 66215
913.492.2400

JOB NUMBER 23011

LM2 OFFICE RENOVATION

9000 OLD SANTE FE ROAD
KANSAS CITY, MO 64138

110 Armour Road North Kansas City, Missouri 64116 Tel: 816.300.4101



Darren E. Thresher - Architect
MO # 2011006178

PERMIT SET
ISSUE DATE 04/17/2024
No. Description Date

WSKF, Inc. © 2023

ELECTRICAL
SCHEDULES &
DETAILS
E5.01

LIGHT FIXTURE SCHEDULE

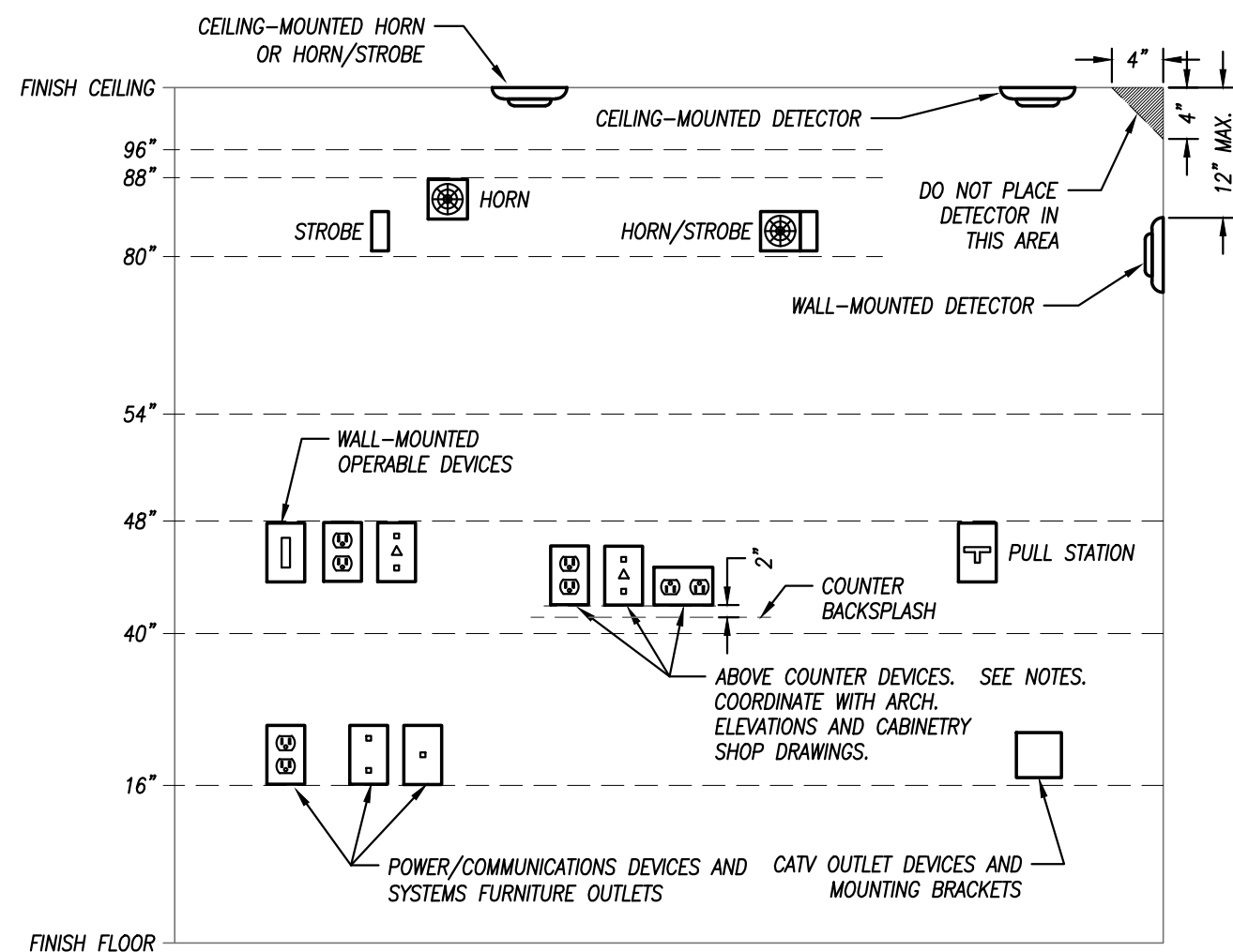
FIXTURE TYPE	MANUFACTURER	CATALOG NUMBER	DESCRIPTION	LED MODULE / DRIVER							REMARKS
				ID	WATTS	LUMENS	CRI	CCT	DIMMING	VOLTAGE	
A	WILLIAMS	AT1 SERIES	2'x4' RECESSED "FLOATING LENS" ARCHITECTURAL LED TROFFER. MATTE WHITE PAINT HOUSING WITH DIFFUSE MATTE ACRYLIC CENTER LENS. GRID MOUNTING.	L40	34.2	4035	80	3500K	0-10V	120	1,2
A1	WILLIAMS	AT1 SERIES	SAME AS FIXTURE "A" BUT 2x2 AND DIFFERENT LUMEN MODULE.	L30	29.5	3028	80	3500K	0-10V	120	1
B	WILLIAMS	6DR SERIES	6" ROUND RECESSED DOWNLIGHT. DIE-FORMED STEEL PAN WITH FINNED, EXTRUDED ALUMINUM PASSIVE HEAT SINK. FLUSH, SELF-FLANGED, SEMI-SPECULAR LOW IREDESCENT FINISH ALUMINUM REFLECTOR WITH MEDIUM BEAM ANGLE/DISTRIBUTION AND OPTIONAL "D" LENS OVER DIODES.	L15	13.8	1385	80	3500K	0-10V	120	1,2
B1	WILLIAMS	6DR SERIES	SAME AS FIXTURE "B" BUT DIFFERENT LUMEN MODULE.	L20	19.1	1837	80	3500K	0-10V	120	1
B2	WILLIAMS	6DR SERIES	6" ROUND RECESSED DOWNLIGHT. DIE-FORMED STEEL PAN WITH FINNED, EXTRUDED ALUMINUM PASSIVE HEAT SINK. SEMI-SPECULAR LOW IREDESCENT FINISH ALUMINUM REFLECTOR WITH WIDE BEAM ANGLE/DISTRIBUTION AND FLUSH LENS. UL-LISTED WET LOCATION UNDER COVERED CEILING.	L15	13.8	1385	70	3000K	NO	120	1,2
C	BEGA	STUDIO LINE	DECORATIVE SHIELDED SUSPENDED PENDANT FIXTURE. WHITE EXTERIOR HOUSING WITH MATTE ALUMINUM INTERIOR. COORDINATE SUSPENSION LENGTH WITH ARCHITECT.	-	12	1008	80	3500K	0-10V	120	1
D	LUMINART	RIGHELLO	DECORATIVE PENDANT LIKE LINEAR FIXTURE WITH DOWNLIGHT FLOOD. DARK GREY WOOL FINISH. COORDINATE SUSPENSION LENGTH WITH ARCHITECT.	L125	48	7600	80	3500K	0-10V	120	1
D1	LUMINART	RIGHELLO	SAME AS FIXTURE "D" BUT WITH TURQUOISE FINISH.	L125	48	7600	80	3500K	0-10V	120	1
F	WILLIAMS	SERIES 75S	4'-0" LONG COMMERCIAL-GRADE STRIP FIXTURE WITH SQUARE LENS. CHAIN MOUNT FROM CEILING AT 8'-6" A.F.F. WHITE FINISH.	L65	42	6500	80	3500K	NO	120	1,2
F1	WILLIAMS	SERIES 75S	4'-0" LONG COMMERCIAL-GRADE STRIP FIXTURE WITH SQUARE LENS. SURFACE MOUNT. WHITE FINISH.	L65	42	6500	80	3500K	NO	120	1
G	WILLIAMS	LLM SERIES	2'-5/8" WIDE LINEAR PENDANT-MOUNTED FIXTURE - REFER TO PLANS FOR FIXTURE LENGTH. SQUARE ACRYLIC LENS. AIRCRAFT CABLE SUSPENSION - COORDINATE EXACT LENGTH WITH ARCHITECT. BLACK FINISH.	L10	6.7	1010	80	3500K	0-10V	120	1,2,3
G1	WILLIAMS	LLM SERIES	SAME AS FIXTURE "G" BUT SURFACE MOUNTED.	L10	6.7	1010	80	3500K	0-10V	120	1,2,3
S1	MCGRAW-EDISON	GALLEON LED GLEON SERIES	POLE-MOUNTED AREA LIGHT. LOW-PROFILE, ONE-PIECE DIE-CAST ALUMINUM HOUSING. LIGHT SQUARE LED ARRAYS - REFER TO LAMP DESCRIPTION FOR QUANTITY. IES TYPE III DISTRIBUTION. DIE CAST ALUMINUM MOUNTING ARM. PROVIDE WITH 25" HIGH, SQUARE STRAIGHT STEEL POLE. FURNISH WITH PHOTOCELL OPTION. POWDER COAT FINISH DARK BRONZE - COORDINATE EXACT COLOR WITH ARCHITECT AND OWNER.	SA38	124	17,450	70	3000K	NO	208	1
S2	MCGRAW-EDISON	GALLEON LED GLEON SERIES	SAME AS FIXTURE "S1" BUT LUMEN MODULE AND IES TYPE IV DISTRIBUTION.	SA38	124	17324	70	3000K	NO	208	1
X	DUAL-LITE	LE SERIES	RECESSED EDGE-LIT EXIT SIGN. FURNISH WITH ALL NECESSARY ROUGH-IN AND MOUNTING HARDWARE. EXTRUDED ALUMINUM HOUSING WITH SATIN ALUMINUM FINISH. WATER-CLEAR, MOLDED ACRYLIC EXIT PLAQUE. RED LETTERS WITH CLEAR BACKGROUND. CEILING OR WALL MOUNTED WITH PRINTED CHEVRON DIRECTIONAL ARROWS AS INDICATED ON PLANS.	-	-	-	-	-	-	120	1

REMARKS:

- FURNISH WITH AND INSTALL ALL NECESSARY HARDWARE AND MOUNTING BRACKETS.
- WHERE FIXTURE IS LABELED "EM", PROVIDE WITH IOTA ILB-CP10 (10W CONSTANT POWER EMERGENCY BATTERY PACK) OR APPROVED EQUAL.
- LUMENS AND WATTAGE VALUES LISTED ARE PER FOOT.

GENERAL NOTES (APPLICABLE TO ALL FIXTURES):

- EQUALS ARE ACCEPTABLE ON ALL LIGHT FIXTURES UNLESS SPECIFICALLY NOTED OTHERWISE. REFER TO SPECIFICATIONS FOR APPROVED EQUAL FIXTURE MANUFACTURERS.
- ALL DRIVERS ARE INTEGRAL TO FIXTURE UNLESS NOTED OTHERWISE. REFER TO SPECIFICATIONS FOR ADDITIONAL FIXTURE/DRIVER/BALLAST REQUIREMENTS.
- ALL FIXTURES WITH PAINTED METAL PARTS SHALL BE PAINTED AFTER FABRICATION.
- LUMENS LISTED FOR LED FIXTURES ARE GENERALLY DELIVERED LUMENS UNLESS NOTED OTHERWISE.
- ALL EXTERIOR LED FIXTURES ARE FULL CUTOFF UNLESS NOTED OTHERWISE.



GENERAL NOTES:

- MOUNTING HEIGHTS SHOWN IN THIS DETAIL ARE TYPICAL UNLESS OTHERWISE NOTED ON THE PLANS.
- SEE ARCHITECTURAL ELEVATIONS FOR SPECIAL CONDITIONS. NOTIFY ARCHITECT IMMEDIATELY OF ANY CONFLICTS.
- ALL INSTALLATIONS SHALL COMPLY WITH ADA.

VISUAL FIRE ALARM NOTIFICATION DEVICES (STROBE)
LOCATE DEVICE SO THAT THE TOP OF UNIT IS NOT MORE THAN 80" AND 96" A.F.F. (NFPA) OR 6" BELOW CEILING, WHICHEVER IS LOWER (ADA 2010).

AUDIBLE FIRE ALARM NOTIFICATION DEVICES (HORN)
LOCATE DEVICE SO THAT THE TOP OF UNIT IS NOT MORE THAN 48" A.F.F. (ADA 2010) AND NOT LESS THAN 42" A.F.F. (NFPA).

FIRE ALARM ACTIVATION DEVICES (PULL STATION)
LOCATE FRONT-APPROACH DEVICES SO THAT THE HIGHEST OPERABLE PORTION OF THE DEVICE IS NOT MORE THAN 48" A.F.F. (ADA 2010) AND NOT LESS THAN 42" A.F.F. (NFPA).

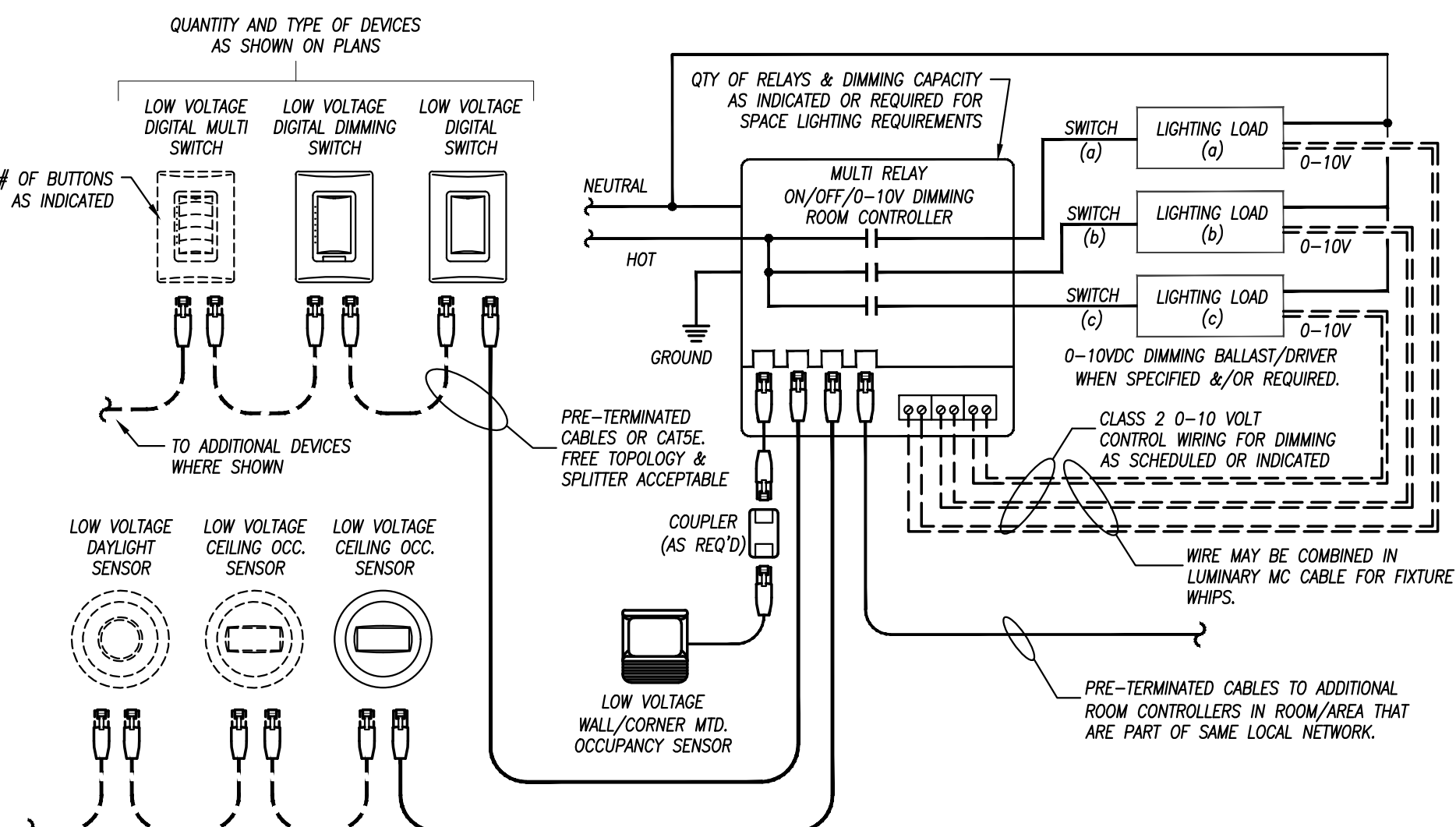
POWER/COMMUNICATION DEVICES:
OUTLETS SHALL BE LOCATED AT 16" A.F.F. TO THE BOTTOM OF THE BOX. ABOVE COUNTER DEVICES SHALL BE LOCATED AT 2" ABOVE THE BACKPLASH OF THE COUNTER TO THE BOTTOM OF THE DEVICES. VERIFY WITH ARCHITECTURAL DETAILS.

WALL-MOUNTED OPERABLE DEVICES:
OPERABLE DEVICES SHALL BE LOCATED AT 48" A.F.F. TO THE TOP OF THE OPERABLE PORTION OF THE DEVICE.

WALL-MOUNTED OPERABLE DEVICES INCLUDE, BUT ARE NOT LIMITED TO THE FOLLOWING:
LIGHT SWITCHES, DIMMERS, CONTROLS, ETC.
PUSH BUTTONS
NURSE/PATIENT CALL DEVICES (INCLUDING THOSE FOR STAFF USE)
OTHER CONTROL OR "CALL" DEVICES

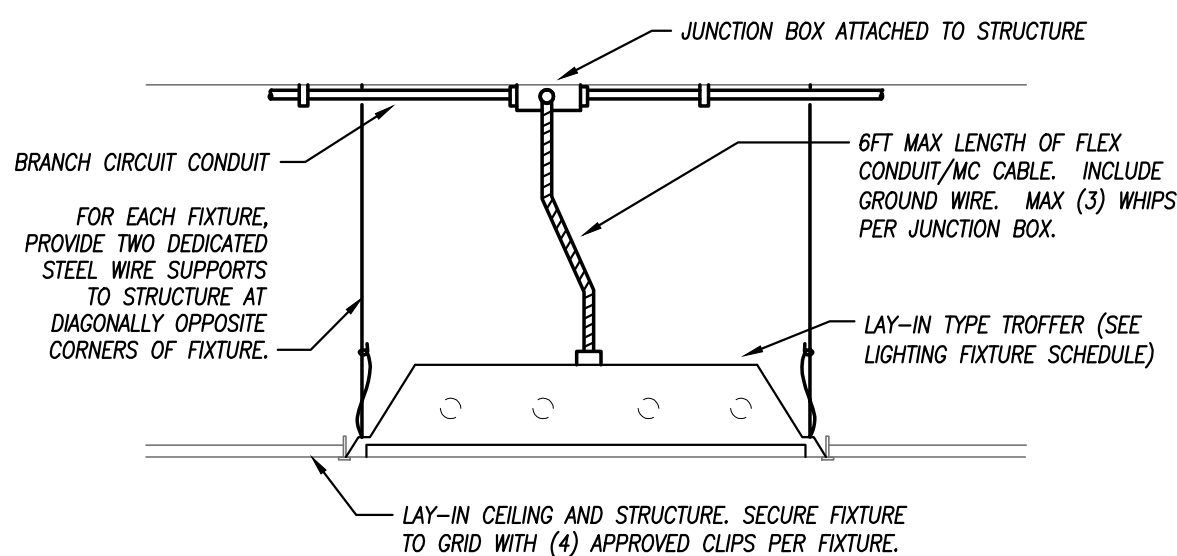
MOUNTING HEIGHTS FOR WALL-MOUNTED DEVICES

NOT TO SCALE



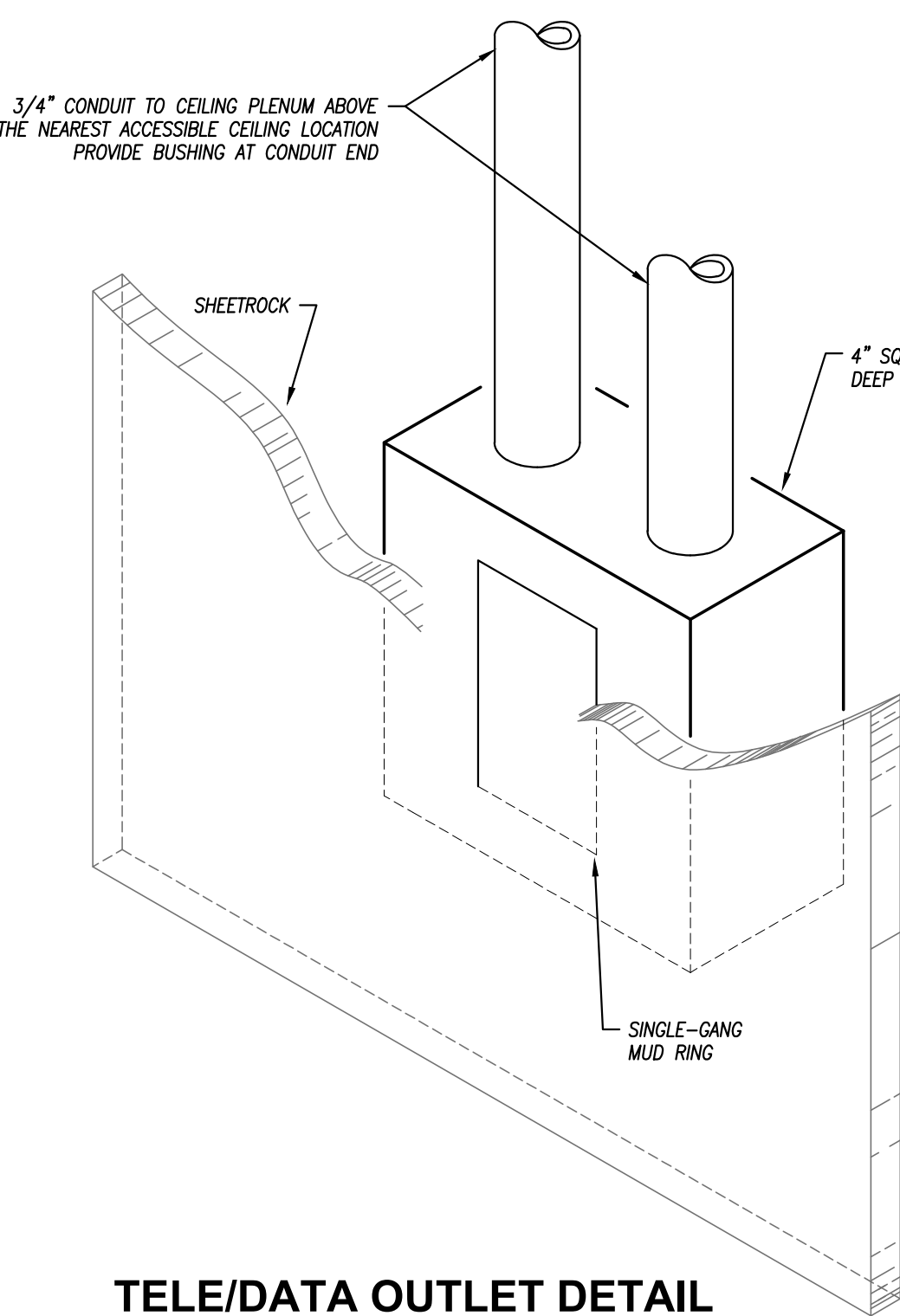
TYPICAL ROOM CONTROLLER SCHEMATIC WIRING DIAGRAM

NOT TO SCALE



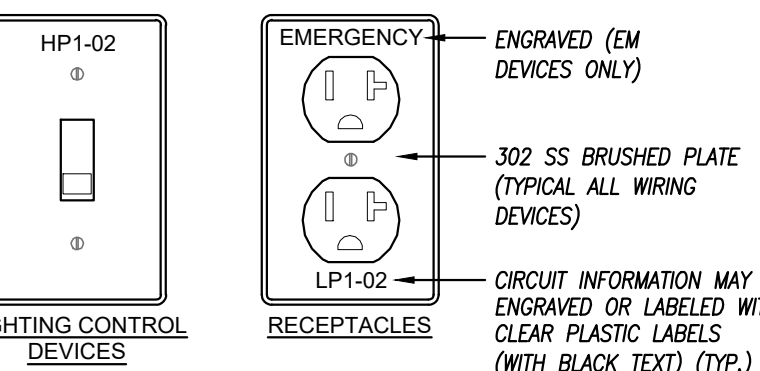
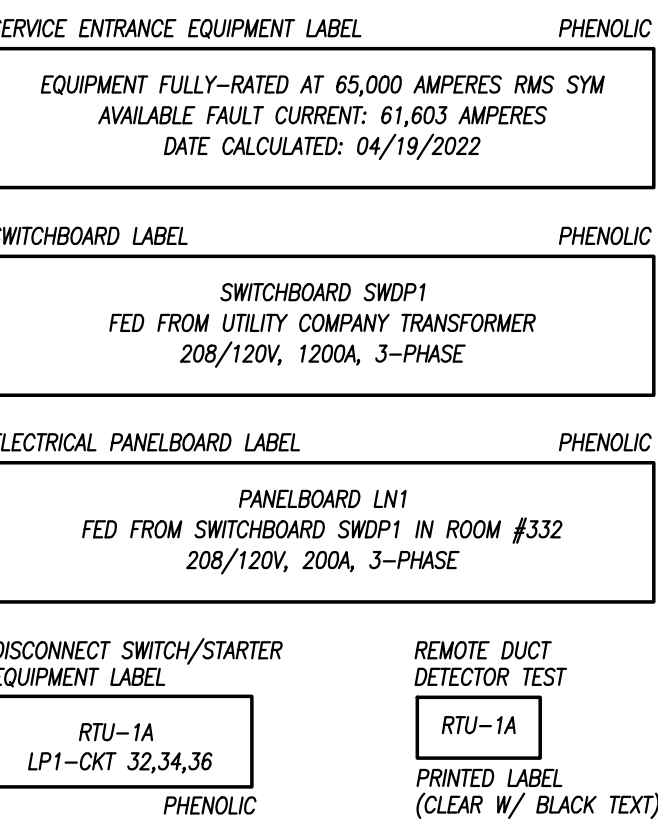
TYPICAL TROFFER SUPPORT AND WIRING

NOT TO SCALE



TELE/DATA OUTLET DETAIL

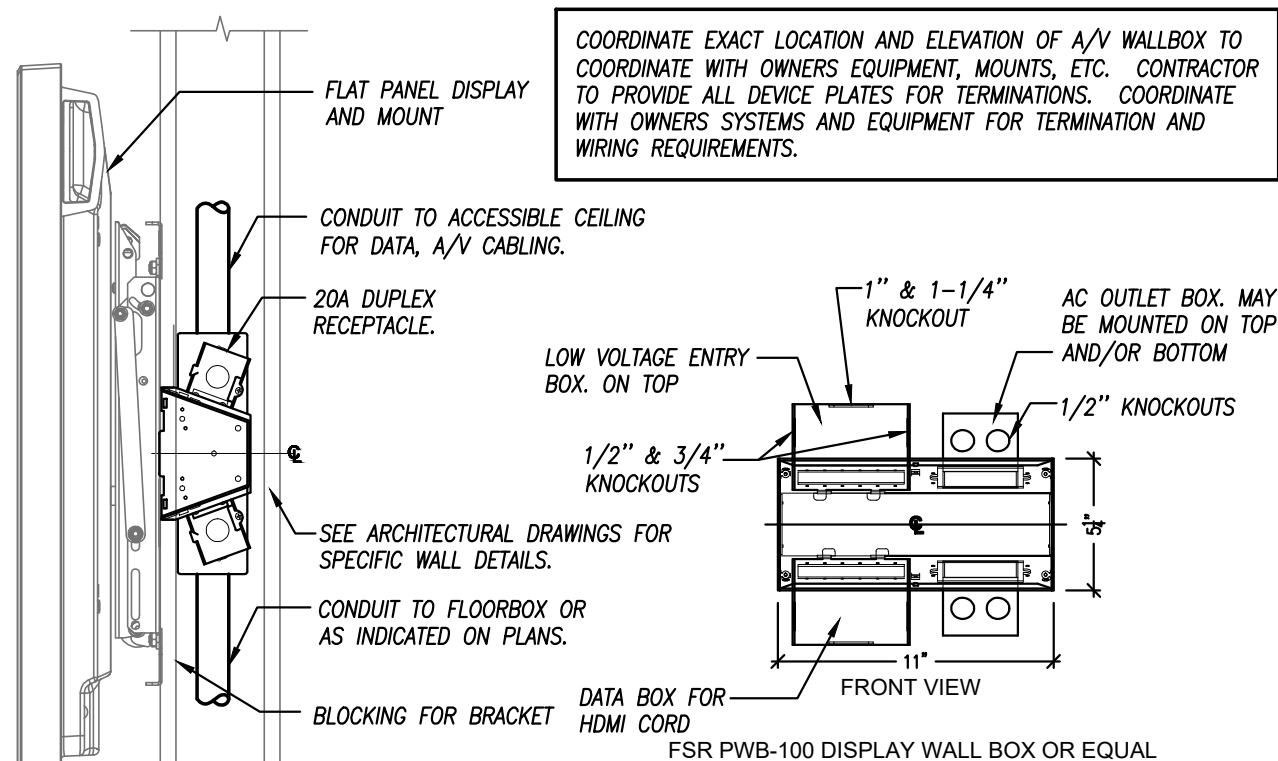
NOT TO SCALE



GENERAL LABELING NOTES:
1. REFER TO PLANS/SPECS FOR ADDITIONAL REQUIREMENTS, INCLUDING:
A) DEVICE AND LABEL COLORS.
B) LABELING REQUIREMENTS FOR OTHER ITEMS NOT SHOWN HERE.
2. CIRCUIT NUMBERS/INFORMATION SHOWN ON THIS DETAIL ARE FOR EXAMPLE ONLY. REFER TO FLOOR PLANS / PANELBOARD SCHEDULES FOR EXACT INFORMATION TO BE ON LABELS.

LABELING DETAIL

NOT TO SCALE



FLAT PANEL DISPLAY WALL BOX INFRASTRUCTURE DETAIL

NOT TO SCALE



PEARSON KENT MCKINLEY RAAF ENGINEERS LLC
13300 W 96TH STREET
913.492.2400
WWW.PKMRNG.COM
MO State Certificate of Authority PE-2002020886