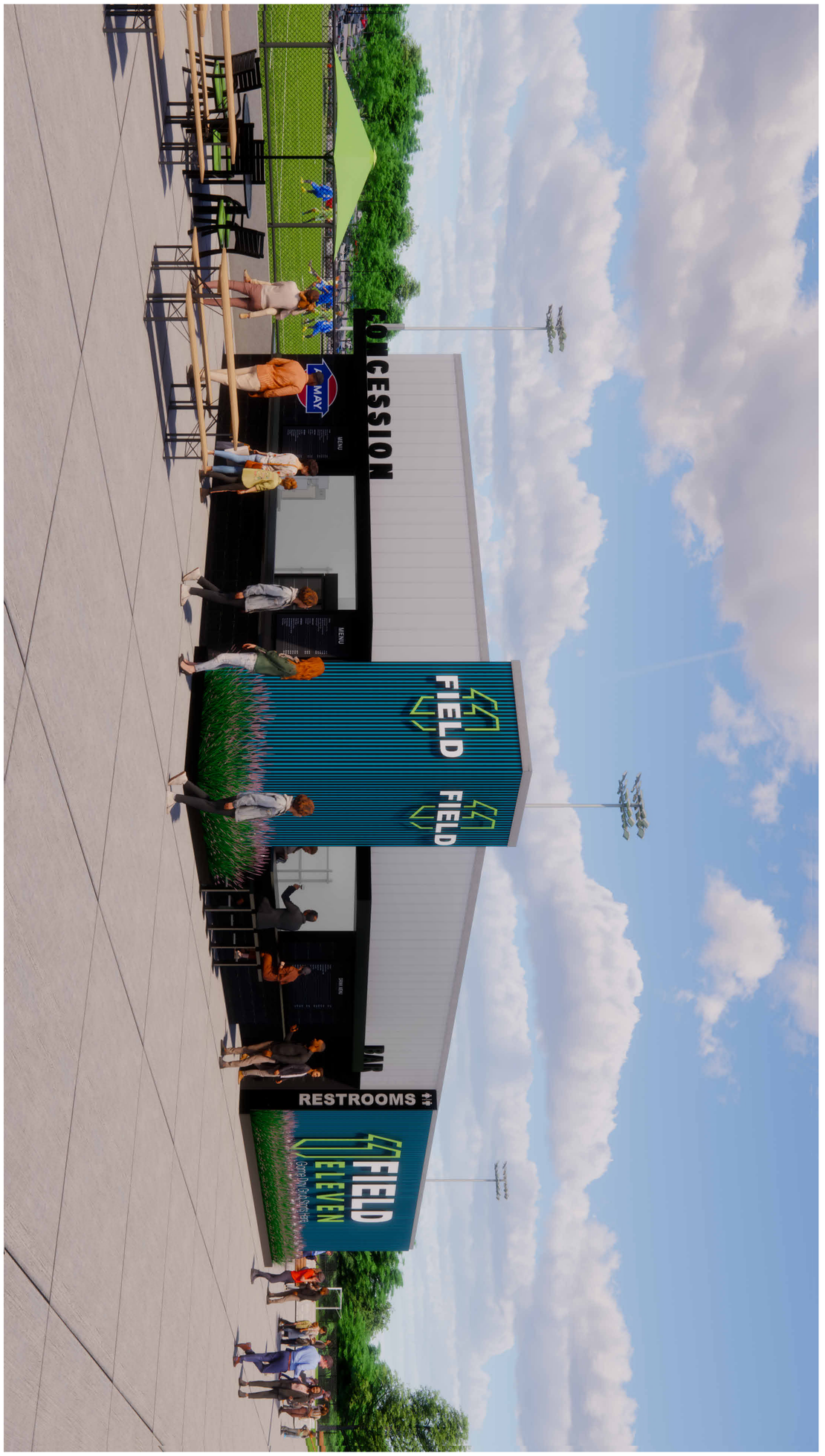
RENDERING FOR CONCEPTUAL REFERENCE ONLY; IMAGE MAY NOT REFLECT LATEST DESIGN. REFERENCE ELEVATIONS AND SCHEDULES FOR FINISHES.



DRAWING INDEX

PROJECT TEAM

ARCHITECT
FINKLE + WILLIAMS ARCHITECTURE
[redacted]
Lenexa, Kansas 66219
PH: 913.498.1550

STRUCTURAL
BSE Structural Engineers
11320 W. 79th St.
Lenexa, KS 66214
PH: 913.492.7400

MECHANICAL
DESIGN / BUILD BY CONTRACTOR

PLUMBING
PKMR
13300 W. 98th St.
Lenexa, KS 66215
PH: 913.492.2400

ELECTRICAL
PKMR
13300 W. 98th St.
Lenexa, KS 66215
PH: 913.492.2400

FINKLE + WILLIAMS
ARCHITECTURE

PARAGON STAR RR-CONCESSIONS

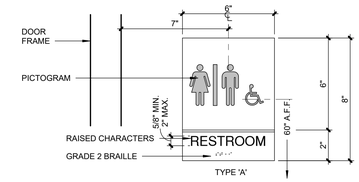
PROJECT ADDRESS	PROJECT NUMBER	RELEASE DATE	ISSUED FOR	CURRENT REVISION
1401 NW River Rd Lee's Summit, MO 64081	19050.04b	12.08.2025	PERMIT	

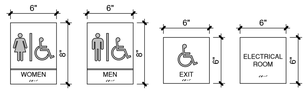
ACCESSIBLE SIGNAGE REQUIREMENTS

PERMANENT ROOMS AND SPACES

SEE SCHEDULE BELOW FOR INTERIOR SIGNAGE LOCATIONS:

SIGNS WHICH DESIGNATE PERMANENT ROOMS AND SPACES SHALL COMPLY WITH ADAAG SECTIONS 4.30.1, 4.30.4, 4.30.5, 4.30.6





1. TACTILE & BRAILE CHARACTERS
   a. CHARACTERS SHALL BE RAISED MINIMUM 1/32"
   b. CHARATERS SHALL BE ACCOMPANIED BY GRADE 2 BRAILLE
2. TYPESTYLES
   a. CHARACTERS SHALL BE UPPER CASE & SANS SERIF OR SERIF TYPESTYLE
   b. CHARACTERS SHALL BE A MINIMUM OF 5/8" HIGH AND MAXIMUM 2" HIGH
3. PICTOGRAMS (SYMBOLS)
   a. PICTOGRAMS SHALL BE ACCOMPANIED BY THE EQUIVALENT VERBAL DESCRIPTION PLACED DIRECTLY BELOW THE PICTORGRAM AS INDICATED.
   b. THE BORDER DIMENSION OF THE PICTORGRAM SHALL BE 6" MIN. IN HEIGHT
4. MATERIAL AND FINISH
   a. CHARACTERS AND BACKGROUND SHALL BE EGGSHELL, MATTE OR OTHER NON-GLARE FINISH AS RECOMMENDED BY THE SIGN MANUFACTURER.
   b. BACKGROUND SHALL CONSIST OF 1/4" ACRYLIC, COLOR TO MATCH **SW 7068 "GRIZZLE GREY"**
   c. CHARACTERS AND SYMBOLS SHALL BE WHITE
5. MOUNTING LOCATION AND HEIGHT
   a. MOUNT AT 60" ABOVE FINISH FLOOR TO THE CENTER OF SIGN
   b. MOUNT ON WALL ADJACENT TO THE LATCH SIDE OF THE DOOR
   c. IF NO WALL SPACE EXISTS ON THE LATCH SIDE OF THE DOOR, INCLUDING DOUBLE LEAF DOORS, MOUNT ON THE NEAREST ADJACENT WALL
6. FIRE SPRINKLER ROOM
   a. INCLUDE 4" HIGH VINYL WHITE LETTERS W/ MIN. 0.5" STROKE READING "SPRINKLER ROOM" APPLIED TO EXTERIOR SIDE OF DOOR, AS REQUIERD BY LOCAL FIRE DEPT.

DIRECTIONAL INFORMATION

OTHER SIGNS WHICH PROVIDE DIRECTION TO OR INFORMATION ABOUT FUNCTIONAL SPACES OF THE BUILDING SHALL COMPLY WITH ADAAG SECTIONS: 4.30.1, 4.30.2, 3.30.3, 4.30.5

DRAWING SYMBOLS LEGEND

EXISTING CONSTRUCTION TO REMAIN

EXISTING CONSTRUCTION TO BE DEMOLISHED

NEW CONSTRUCTION

XX — WALL TYPE DESIGNATION -
REFERENCE FLOOR PLAN(S) FOR LOCATIONS.
REFERENCE DRAWING *A0.02* FOR CONSTRUCTION REQUIREMENTS.

X / X — ROOM NAME AND NUMBER -
REFERENCE FLOOR PLAN(S) FOR LOCATIONS.
REFERENCE FINISH SCHEDULE FOR FINISHES.

XX — DOOR AND FRAME DESIGNATION -
REFERENCE FLOOR PLAN(S) FOR LOCATIONS.
REFERENCE DOOR AND FRAME SCHEDULE FOR REQUIREMENTS.

ELEVATION SYMBOL

X1 / X2 — REFERENCE ELEVATION; REFERENCE SHEET

SECTION SYMBOL

X1 / X2 — REFERENCE SECTION; REFERENCE SHEET

ENLARGED DETAIL / ENLARGED PLAN SYMBOL

X1 / X2 — REFERENCE DETAIL; REFERENCE SHEET

INTERIOR ELEVATION SYMBOL

X1/X2 — REFERENCE ELEVATION; REFERENCE SHEET

FINISH DESIGNATION SYMBOL

XX-1 / XX-1 — WALL FINISH DESIGNATION; BASE FINISH DESIGNATION; LIMITS OF WALL AND BASE FINISHES

REFERENCE FLOOR PLAN(S) FOR LOCATIONS.
REFERENCE FINISH SCHEDULE FOR DESCRIPTIONS.

XX-# — FLOOR FINISH DESIGNATION -
REFERENCE FLOOR PLAN(S) FOR LOCATIONS.
REFERENCE FINISH SCHEDULE FOR DESCRIPTIONS.

X — REVISION NOTE

XX — CONSTRUCTION NOTE

— DEMOLITION NOTE

? — RESTROOM ACCESSORY DESIGNATION -
REFERENCE SHEET **A8.01** FOR LEGEND

CJ — GYPSUM BOARD CONTROL JOINT -
REFERENCE FLOOR PLAN(S) FOR LOCATIONS.
REFERENCE DETAIL **X/XX** FOR CONSTRUCTION REQUIREMENTS.

FE — WALL MOUNTED FIRE EXTINGUISHER BY LARSEN'S MANUFACTURING COMPANY, WWW.LARSENMFG.COM, MODEL MP10 W/B2 MOUNTING BRACKET, REFERENCE FLOOR PLAN(S) FOR LOCATIONS. MOUNT SO CENTERLINE OF EXTINGUISHER IS 46" A.F.F.

GENERAL NOTES

1. ALL CONSTRUCTION SHALL CONFORM TO THE MINIMUM STANDARDS OF THE APPLICABLE CODE INDICATED IN THE BUILDING SUMMARY COLUMN AND ALL LOCAL CODES PRESENTLY IN EFFECT UNLESS MORE STRINGENT REQUIREMENTS ARE INDICATED.
2. ALL NEW CONSTRUCTION SHALL COMPLY W/THE AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES (ADAAG) AND CHAPTER 11 OF THE INTERNATIONAL BUILDING CODE (INCLUDES ICC A117.1 PER IBC)
3. THE GENERAL CONTRACTOR AND SUBCONTRACTORS SHALL OBTAIN AND PAY FOR ALL REQUIRED PERMITS, LICENSES, AND ALL UTILITY CHARGES, AND ARRANGE FOR ALL REQUIRED INSPECTIONS.
4. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING BUILDING & SITE UTILITIES BETWEEN CIVIL & MEP DRAWINGS. THE CONTRACTOR SHALL ALSO CONTACT ALL APPLICABLE UTILITY COMPANIES & PROVIDE CONDUIT & OTHER FACILITIES AS REQUIRED.
5. THE GENERAL CONTRACTOR AND ALL SUBCONTRACTORS SHALL VERIFY ALL DIMENSIONS & CONDITIONS ON THE JOB SITE PRIOR TO THE BIDDING OF THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL NOTIFY THE ARCHITECT IMMEDIATELY OF ANY DISCREPANCIES.

   IN CASES OF DISCREPANCY CONCERNING DIMENSIONS, QUANTITIES AND LOCATION, THE CONTRACTOR SHALL, IN WRITING, CALL TO THE ATTENTION OF THE ARCHITECT ANY DISCREPANCIES BETWEEN SPECIFICATIONS, PLANS, DETAILS OR SCHEDULES. THE ARCHITECT WILL THEN INFORM THE CONTRACTOR, IN WRITING, WHICH DOCUMENT TAKES PRECEDENCE. THERE SHALL BE NO ADJUSTMENT TO THE COST OR TIME OF THE WORK RESULTING FROM CLARIFICATION OF SUCH DISCREPANCIES.
6. DIMENSIONS ON DRAWINGS ARE SHOWN TO FINISHED FACE OF WALLS AND PARTITIONS OF EXISTING OR NEW CONSTRUCTION UNLESS OTHERWISE NOTED. CEILING HEIGHT DIMENSIONS AND ALL OTHER VERTICAL DIMENSIONS ARE TO THE FINISHED FLOOR SURFACE UNLESS OTHERWISE NOTED.
7. CONTRACTOR TO FOLLOW ALL PRODUCT MANUFACTURER INSTALLATION REQUIREMENTS FOR ALL BUILDING PRODUCTS. IN THE EVENT OF A CONFLICT BETWEEN INFORMATION SHOWN ON THE CONTRACT DOCUMENTS AND PRODUCT MANUFACTURER INSTALLATION REQUIREMENTS, PRODUCT MANUFACTURER INSTALLATION REQUIREMENTS SHALL GOVERN. CONTRACTOR SHALL NOTIFY ARCHITECT OF ANY CONFLICTS BETWEEN PRODUCT MANUFACTURER INSTALLATION REQUIREMENTS AND THE CONTRACT DOCUMENTS PRIOR TO INSTALLATION.
8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SUBMITTING SHOP DRAWINGS, PRODUCT DATA, OR SAMPLES FOR CASEWORK, FINISHES, DOORS, FRAMES, HARDWARE, MECHANICAL, ELECTRICAL, AND PLUMBING FIXTURES, AND OTHER ITEMS REQUIRING ARCHITECT'S REVIEW FOR CONFORMANCE WITH THE CONTRACT DOCUMENTS, AND FOR ALL ITEMS WHICH ALLOWED CONTRACTOR OPTIONS. PRIOR TO FORWARDING TO THE ARCHITECT FOR REVIEW. THESE SUBMITTALS MUST BE REVIEWED BY THE CONTRACTOR 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 CONTRACTOR. THE CONTRACTOR SHALL AFFIX A STAMP TO SUBMITTAL INDICATING HIS REVIEW. SUBMITTALS FORWARDED WITHOUT A STAMP WILL BE RETURNED. ALL SUBMITTALS MUST BE REVIEWED BY THE ARCHITECT PRIOR TO CONSTRUCTION.
9. CONTRACTOR SHALL GUARANTEE ALL WORK AGAINST FAULT OF ANY MATERIAL OR WORKMANSHIP FOR A PERIOD OF NOT LESS THAN ONE YEAR AFTER COMPLETION OR ACCEPTANCE. FAULTY WORK SHALL BE REPLACED OR REPAIRED AS REQUIRED AT NO COST TO THE OWNER.
10. CONTRACTOR SHALL COORDINATE WITH OWNER ALL ITEMS TO BE SALVAGED PRIOR TO SUBMISSION OF BIDS AND START OF CONSTRUCTION. OWNER SHALL HAVE SALVAGE RIGHTS TO RETAIN ALL REMOVED ITEMS.
11. ALL CHANGES PROPOSED DURING CONSTRUCTION WHICH RESULT IN A CHANGE TO THE CONTRACT TIME AND/OR SUM SHALL BE SUBMITTED TO THE ARCHITECT IN WRITING AND APPROVED BY THE ARCHITECT AND OWNER BEFORE SUCH WORK SHALL COMMENCE.
12. CONTRACTOR SHALL COORDINATE CLEAR OPENINGS FOR ALL APPLIANCES PRIOR TO CONSTRUCTION OF CASEWORK.
13. CONTRACTOR SHALL FURNISH AND INSTALL CONCEALED FIRE-RETARDANT TREATED WOOD BLOCKING BEHIND ALL CABINETS, TOILET ACCESSORIES, PLUMBING FIXTURES, AND OTHER WALL MOUNTED ITEMS AS REQUIRED FOR ADEQUATE SUPPORT.
14. CONTRACTOR SHALL COORDINATE ALL LOCK AND LATCH SETS AND FINAL KEYING WITH OWNER. DOUBLE KEYED LOCKS ARE NOT PERMITTED ON ANY REQUIRED OR MARKED EXIT. MATCH EXISTING KEYING SYSTEM IF ONE IS EXISTING.
15. ALL DOOR HARDWARE ON EXIT DOORS SHALL BE READILY OPERABLE FROM THE EGRESS SIDE WITHOUT THE USE OF A KEY, SPECIAL KNOWLEDGE, OR EFFORT.
16. CONTRACTOR SHALL PREPARE ALL NEW AND EXISTING SURFACES SCHEDULED TO RECEIVE NEW FINISHES IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS FOR THE SUBSTRATE & FINISH BEING APPLIED.
17. CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTION OF ALL EXISTING CONSTRUCTION INDICATED TO REMAIN AND SHALL REPAIR AND/OR REPLACE ALL AREAS AND/OR MATERIALS DAMAGED DURING CONSTRUCTION AT A MINIMUM TO THE CONDITION WHICH EXISTED PRIOR TO CONSTRUCTION.
18. CONTRACTOR SHALL COORDINATE FINAL QUANTITY AND LOCATIONS OF FIRE EXTINGUISHERS WITH THE FIRE DEPARTMENT AND/OR BUILDING DEPARTMENT. SEE SYMBOLS LEGEND FOR TYPE OF EXTINGUISHER.
19. ALL CONSTRUCTION MATERIALS EXPOSED WITHIN PLENUMS SHALL BE NON-COMBUSTIBLE OR SHALL HAVE A MAXIMUM FLAME SPREAD RATING OF 25 AND MAXIMUM SMOKE DEVELOPED RATING OF 50.
20. ALL PIPING, LOW VOLTAGE WIRE AND CABLE, OPTICAL FIBER, PNEUMATIC TUBING, AND ALL DUCT AND DUCT COVERINGS, LININGS AND CONNECTORS INSTALLED WITHIN PLENUMS MUST BE RATED FOR PLENUM USE.
21. TENANT SHALL BE RESPONSIBLE FOR COORDINATION AND INSTALLATION OF VOICE AND DATA CABLING AND EQUIPMENT.
22. IF THE CONTRACTOR FAILS TO SUBMIT A MATERIAL FOR APPROVAL, THE MATERIAL MAY BE REQUIRED TO BE REMOVED BY THE CONTRACTOR EITHER BY DIRECTION OF THE OWNER OR ARCHITECT.
23. ALL HIGH-PILED STORAGE SHALL COMPLY WITH THE APPLICABLE REQUIREMENTS OF THE APPLICABLE EDITION OF THE INTERNATIONAL FIRE CODE.
24. THE CONTRACTOR IS TO PROVIDE AS BUILT DRAWINGS IN HARD COPY & AN ELECTRONIC AUTOCAD FILE TO THE OWNER AT THE CONCLUSION OF THE PROJECT.
25. INSTALL ELASTOMERIC JOINT SEALER AROUND ALL PIPES, DUCTWORK, & STRUCTURE PASSING THRU INTERIOR NON-RATED CONCRETE AND MASONRY WALLS, GYPSUM BOARD PARTITIONS, AND CONCRETE FLOOR/ROOF SLABS. FOR FIRE RATED INTERIOR CONCRETE AND MASONRY WALLS, GYPSUM BOARD PARTITIONS, AND CONCRETE FLOOR/ROOF SLABS SEAL ALL PIPES, DUCTWORK, AND STRUCTURE. INSTALL FIRESTOP MATERIALS IN ALL GAPS PRIOR TO SEALANT APPLICATION. INSTALL SEALER ACCORDING TO MANUFACTURER'S WRITTEN INSTRUCTIONS.

PROFESSIONAL SERVICES DISCLAIMER

THIS DISCLAMER SERVES NOTICE OF ACCEPTANCE OF RESPONSIBILITY AND DISCLAIMER OF RESPONSIBILITY AS TO THE CONTRACT DOCUMENTS PREPARED FOR PROJECT NUMBER:

19050.04b, PARAGON STAR RR-CONCESSIONS BY FINKLE + WILLIAMS, INC.

THE UNDERSIGNED ARCHITECT, AND FINKLE + WILLIAMS, INC., ARE RESPONSIBLE FOR PREPARATION OF ONLY THE NOTED CONSTRUCTION DRAWINGS BELOW:

NO.	TITLE	DATE
A0.00	COVER SHEET	12/08/2025
A0.01	LEGENDS & GENERAL NOTES	12/08/2025
A0.02	ADA DETAILS	12/08/2025
A0.20	ARCHITECTURAL SITE PLAN & DETAILS	12/08/2025
A1.00	FLOOR PLAN	12/08/2025
A1.50	ROOF PLAN & RCP	12/08/2025
A2.00	EXTERIOR ELEVATIONS	12/08/2025
A3.00	WALL AND BUILDING SECTIONS	12/08/2025
A3.50	DETAILS	12/08/2025
A4.00	INTERIOR ELEVATIONS	12/08/2025
A8.00	DOOR AND FINISH SCHEDULE	12/08/2025
A9.00	EQUIPMENT PLAN	12/08/2025

THE UNDERSIGNED ARCHITECT AND FINKLE + WILLIAMS DISCLAIM RESPONSIBILITY FOR ALL OTHER CONSTRUCTION DOCUMENTS, AND ANY OTHER SPECIFICATIONS, REPORTS, ESTIMATES, SHOP DRAWINGS, ETC. RELATING TO OR INTENDED TO BE USED FOR ANY PART OF THE ARCHITECTURAL OR ENGINEERING PROJECT, INCLUDING ANY GEOTECHNICAL ENGINEERING SERVICES, OR ENVIRONMENTAL REPORTS.

THIS NOTICE IS EXECUTED BY THE UNDERSIGNED AND AUTHENTICATED BY THE ARCHITECTURAL SEAL OF THE PERSON PREPARING THIS NOTICE.

ARCHITECT: DAVID A. WILLIAMS

BUILDING SUMMARY

GENERAL BUILDING INFORMATION

PROJECT NAME: PARAGON STAR RR-CONCESSIONS
ADDRESS: 1401 NW River Rd
Lee's Summit, MO 64081
PROPOSED USE: BUSINESS (B) OCCUPANCY

APPLICABLE CODES

INTERNATIONAL BUILDING CODE (IBC)	2018 EDITION
INTERNATIONAL MECHANICAL CODE (IMC)	2018 EDITION
INTERNATIONAL PLUMBING CODE (IPC)	2018 EDITION
NATIONAL ELECTRIC CODE (NEC)	2017 EDITION
INTERNATIONAL FIRE CODE (IFC)	2018 EDITION
INTERNATIONAL FUEL GAS CODE (IFGC	2018 EDITION
INTERNATIONAL ENERGY CONSERVATION CODE (IECC)	2018 EDITION
NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) LIFE SAFETY CODE 101	2018 EDITION
DEPT OF JUSTICE ADA STANDARDS FOR ACCESSIBLE DESIGN	2010 EDITION

IBC CH. 3 - USE & OCCUPANCY CLASSIFICATION

OCCUPANCY CLASSIFICATION: Group (B) - BUSINESS

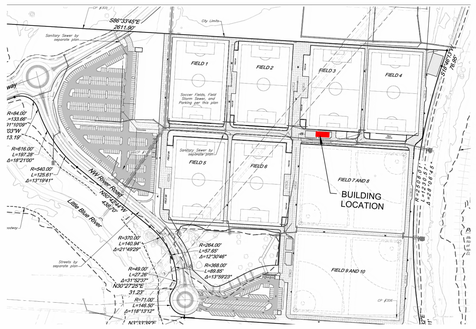
IBC CH. 5 - GENERAL BUILDING HEIGHT & AREA

CONSTRUCTION TYPE: TYPE V-B, NON-SPRINKLERED

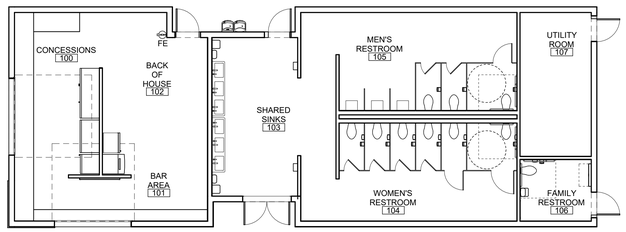
BASIC ALLOWABLE FLOOR AREA: 5,500 S.F.
PROPOSED AREA: 1,952 S.F.

BASIC ALLOWABLE HEIGHT: 1 STORY, 40 FT
PROPOSED HEIGHT: 1 STORY, 13 FT

KEY SITE PLAN



LIFE SAFETY PLAN



PARAGON STAR RR-CONCESSIONS

1401 NW River Rd
Lee's Summit, MO 64081

Project No.: 19050.04b
Date: 12.08.2025
Issued For: PERMIT

REVISIONS

No.	Date	Description
1	2/17/26	Permit Revisions

REGISTRATION

STATE OF MISSOURI
DAVID ALAN WILLIAMS
NUMBER A-5548
12/31/2026
REGISTERED ARCHITECT

PROJECT TEAM

ARCHITECT	FINKLE+WILLIAMS ARCHITECTURE
STRUCTURAL	BSE
PLUMBING	PKMR
MECHANICAL	CONTRACTOR
ELECTRICAL	PKMR

FINKLE + WILLIAMS
ARCHITECTURE
8787 RENNER BLVD., SUITE 100
LENEXA, KANSAS 66219
913.488.1550
www.finklewilliams.com

SHEET TITLE

LEGENDS & GENERAL NOTES

SHEET NUMBER

A0.01

2/17/2026 11:49:56 AM | PARAGON STAR RR-CONCESSIONS

ACCESSIBILITY STANDARDS SUMMARY

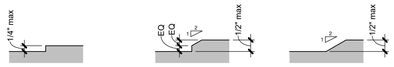
GENERAL NOTES

1. ALL NEW CONSTRUCTION SHALL COMPLY W/THE AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES (ADAAG) AND CHAPTER 11 OF THE INTERNATIONAL BUILDING CODE (INCLUDES ICC A117.1 PER IBC)
2. NOT ALL CONDITIONS ARE IDENTIFIED ON ACCESSIBILITY SHEETS AND DO NOT REMOVE RESPONSIBILITY TO COMPLY WITH ALL APPLICABLE CODE REQUIREMENTS.
3. NOT ALL CONDITIONS OF THE ACCESSIBILITY SHEETS MAY APPLY TO THIS PROJECT, REFER TO THE DRAWINGS FOR CONDITIONS WHICH MAY APPLY AND COORDINATE DIMENSIONS TO MEET REQUIREMENTS.
4. IF ANY DISCREPANCY IS DISCOVERED BETWEEN ARCHITECTURAL DIMENSIONS AND DIMENSIONS ON THE ACCESSIBILITY SHEETS, IMMEDIATELY NOTIFY THE ARCHITECT FOR CLARIFICATION. CONSTRUCTION NOT MEETING ACCESSIBILITY REQUIREMENTS WILL BE CORRECTED/REPLACED AT THE CONTRACTORS' EXPENSE.
5. REFER TO CIVIL DRAWINGS FOR SITE ACCESSIBILITY STANDARDS AND DETAILS. NOTIFY ARCHITECT OF ANY DISCREPANCIES WITH ARCHITECTURAL REFERENCE DETAILS.
6. DIMENSIONS ARE SHOWN FOR ADULT FACILITIES, DIMENSIONS MAY VARY FOR FACILITIES FOR CHILDREN.

CHAPTER 3: BUILDING BLOCKS

303 CHANGES IN LEVEL

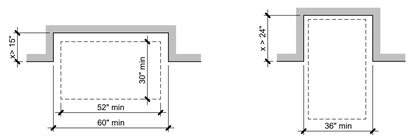
CHANGES IN LEVEL UP TO 1/4": REQUIRES NO EDGE TREATMENT (VERTICAL EDGE PERMITTED). CHANGES IN LEVEL 1/4" TO 1/2": EDGE SHALL BE BEVELED WITH A SLOPE NO GREATER THAN 1:2. CHANGES IN LEVEL GREATER THAN 1/2": REQUIRES CURB RAMP, RAMP, ELEVATOR, OR PLATFORM LIFT.



VERTICAL CHANGE IN LEVEL | BEVELED CHANGES IN LEVEL

305 CLEAR FLOOR SPACE

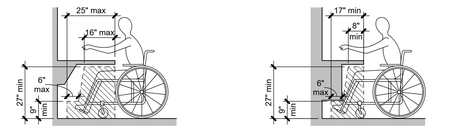
IF CLEAR FLOOR SPACE IS IN AN ALCOVE OR OTHERWISE CONFINED ON ALL OR PART OF THREE SIDES, ADDITIONAL MANEUVERING CLEARANCES SHALL BE PROVIDED



MANEUVERING CLEARANCE IN ALCOVE - PARALLEL APPROACH | MANEUVERING CLEARANCE IN ALCOVE - FORWARD APPROACH

306 KNEE AND TOE CLEARANCE

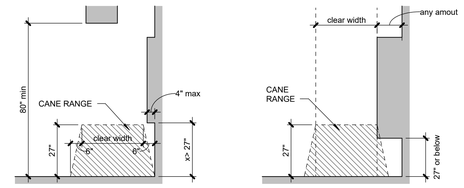
WHERE SPACE BENEATH AN ELEMENT IS INCLUDED AS PART OF THE CLEAR FLOOR SPACE, CLEARANCE AT A ELEMENT, OR A TURNING SPACE, THE SPACE SHALL COMPLY WITH ALL KNEE AND TOE CLEARANCE REQUIREMENTS. ADDITIONAL SPACE SHALL NOT BE PROHIBITED BENEATH AN ELEMENT BUT SHALL NOT BE CONSIDERED AS PART OF THE CLEAR FLOOR OR GROUND SPACE OR TURNING SPACE



MAXIMUM DEPTH FOR KNEE AND TOE CLEARANCE | MINIMUM DEPTH FOR KNEE AND TOE CLEARANCE

307 PROTRUDING OBJECTS

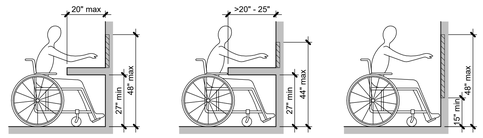
OBJECTS WITH LEADING EDGES MORE THAN 27 INCHES AND NOT MORE THAN 80 INCHES ABOVE THE FINISH FLOOR OR GROUND SHALL PROTRUDE 4 INCHES MAXIMUM HORIZONTALLY INTO THE CIRCULATION PATH



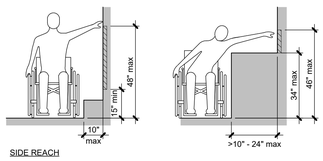
LIMITS OF PROTRUDING OBJECTS | OBJECTS IN DETECTABLE RANGE

308 REACH RANGES

WHERE A HIGH FORWARD REACH IS OVER AN OBSTRUCTION, THE CLEAR FLOOR SPACE COMPLYING WITH KNEE AND TOE CLEARANCE REQUIREMENTS SHALL EXTEND BENEATH THE ELEMENT FOR A DISTANCE NOT LESS THAN THE REQUIRED REACH DEPTH OVER THE OBSTRUCTION.



FORWARD REACH

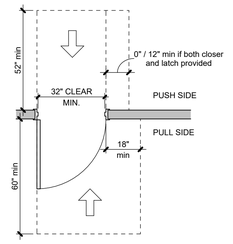


SIDE REACH

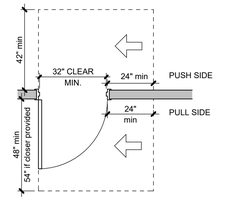
CHAPTER 4: ACCESSIBLE ROUTES

404 DOORS, DOORWAYS AND GATES

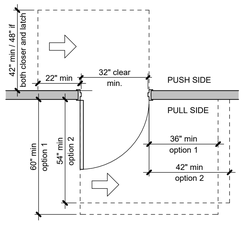
DOORWAYS SHALL HAVE A CLEAR OPENING WIDTH OF 32 INCHES MINIMUM AND REQUIRED MANEUVERING CLEARANCES. CLEAR OPENING WIDTH OF DOORWAYS WITH SWINGING DOORS SHALL BE MEASURED BETWEEN THE FACE OF DOOR AND STOP, WITH THE DOOR OPEN 90 DEGREES. OPENINGS MORE THAN 24 INCHES IN DEPTH AT DOORS AND DOORWAYS WITHOUT DOORS SHALL PROVIDE A CLEAR OPENING WIDTH OF 36 INCHES MINIMUM.



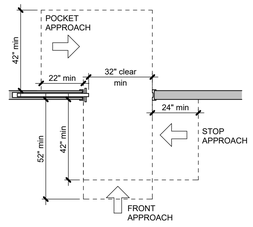
MANUAL SWINGING DOORS - FRONT APPROACH



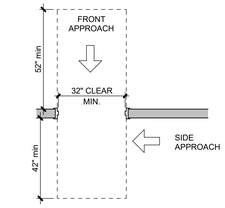
MANUAL SWINGING DOORS - LATCH APPROACH



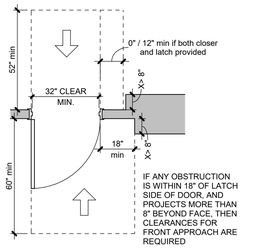
MANUAL SWINGING DOORS - HINGE APPROACH



SLIDING AND FOLDING DOORS



DOORWAYS WITHOUT DOORS OR GATES

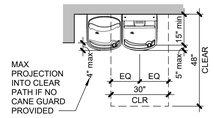


RECESSED DOORS

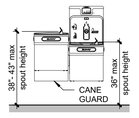
CHAPTER 6: PLUMBING ELEMENTS AND FACILITIES

602 DRINKING FOUNTAINS AND BOTTLE FILLING STATIONS

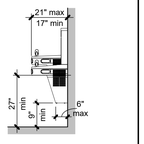
NO FEWER THAN TWO DRINKING FOUNTAINS SHALL BE PROVIDED. ONE DRINKING FOUNTAIN SHALL COMPLY WITH LOW SPOUT HEIGHT REQUIREMENTS AND ONE WITH HIGH SPOUT REQUIREMENTS.



DRINKING FOUNTAIN WITH BOTTLE FILLER

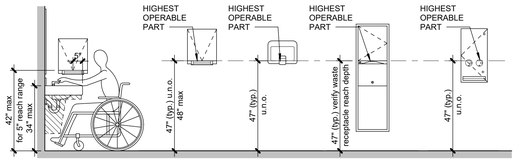


DRINKING FOUNTAIN FRONT VIEW



DRINKING FOUNTAIN SIDE VIEW

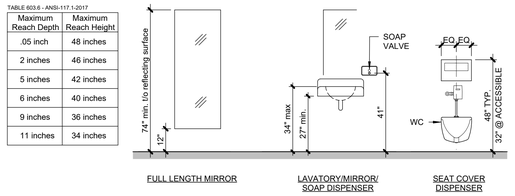
603 TOILET AND BATHING ROOMS - REACH RANGES



REACH DEPTH FOR TOWEL DISPENSERS AND HAND DRYERS | TOWEL DISPENSER | HAND DRYER | TOWEL DISPENSER/ WASTE RECEPTACLE | SANITARY NAPKIN DISPENSER

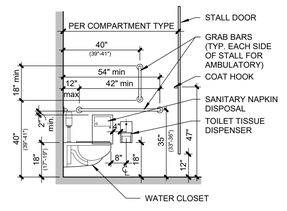
TABLE 603.6 - ANSI-117.1-2017

Maximum Reach Depth	Maximum Reach Height
.05 inch	48 inches
2 inches	46 inches
5 inches	42 inches
6 inches	40 inches
9 inches	36 inches
11 inches	34 inches

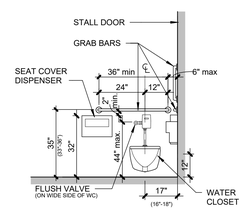


FULL LENGTH MIRROR | LAVATORY/MIRROR/ SOAP DISPENSER | SEAT COVER DISPENSER

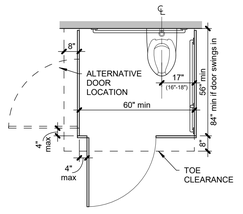
604 WATER CLOSETS AND TOILET COMPARTMENTS



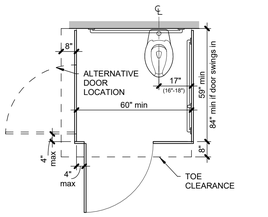
ACCESSIBLE TOILET COMPARTMENT- SIDE VIEW



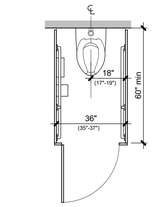
ACCESSIBLE TOILET COMPARTMENT- FRONT VIEW



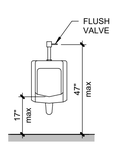
ACCESSIBLE WALL HUNG WATER CLOSET COMPARTMENT



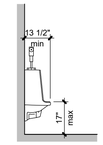
ACCESSIBLE FLOOR MOUNTED WATER CLOSET COMPARTMENT



ACCESSIBLE AMBULATORY COMPARTMENT



ACCESSIBLE URINAL FRONT VIEW



ACCESSIBLE URINAL SIDE VIEW

PARAGON STAR RR-CONCESSIONS

1401 NW River Rd
Lee's Summit, MO 64081

Project No.: 19050.04b
Date: 12.08.2025
Issued For: PERMIT

REVISIONS

No.	Date	Description

REGISTRATION

STATE OF MISSOURI · REGISTERED ARCHITECT · DAVID ALAN WILLIAMS NUMBER A-5540 · 10/10/2025

PROJECT TEAM

ARCHITECT	FINKLE+WILLIAMS ARCHITECTURE
STRUCTURAL	BSE
PLUMBING	PKMR
MECHANICAL	CONTRACTOR
ELECTRICAL	PKMR

FINKLE + WILLIAMS
ARCHITECTURE
8787 RENNER BLVD., SUITE 100
LENEXA, KANSAS 66219
913.488.1550
www.finklewilliams.com

SHEET TITLE

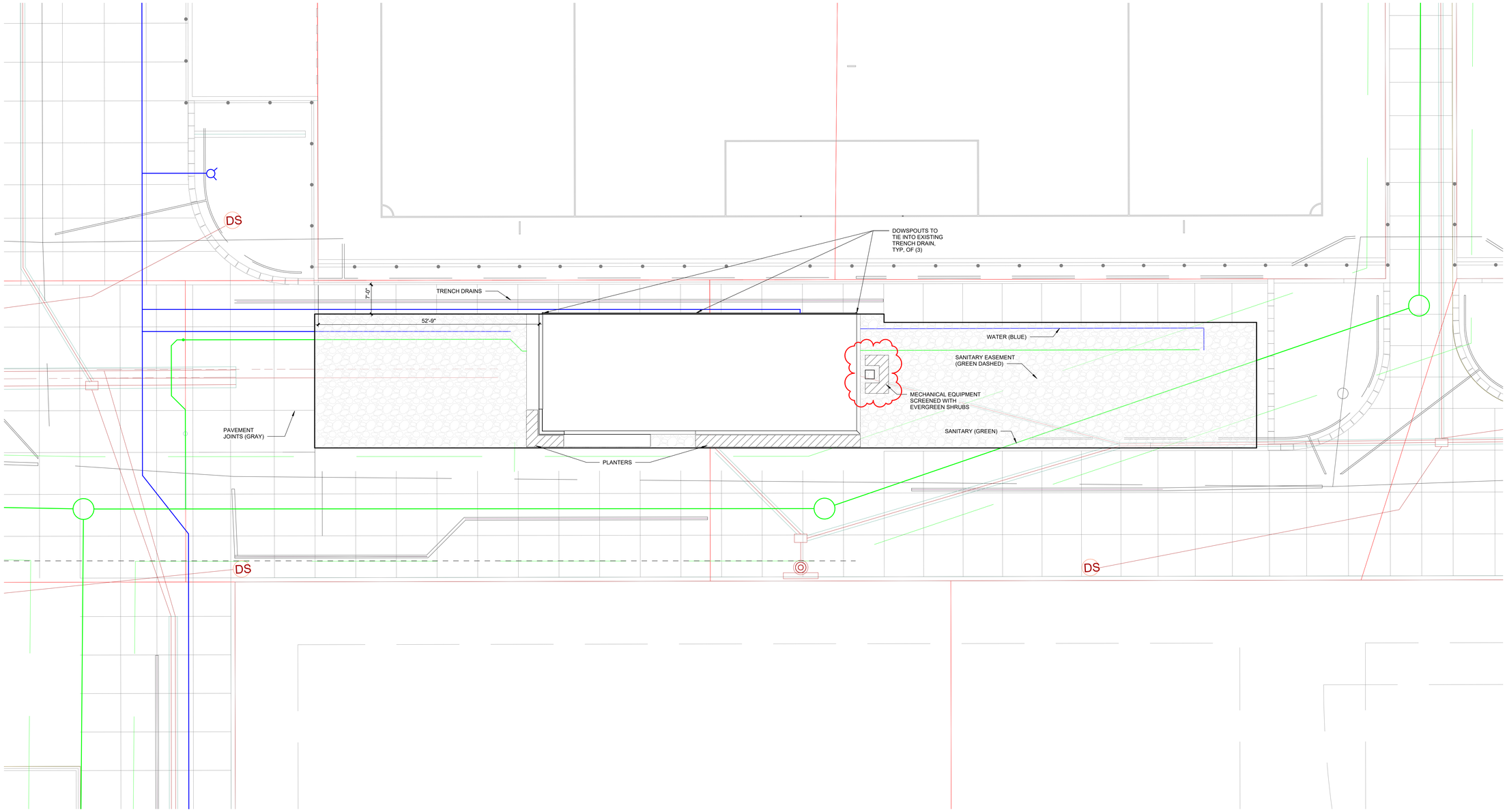
ADA DETAILS

SHEET NUMBER

A0.02

SITE PLAN GENERAL NOTES

1. CONTROL JOINT SEALANT FOR CONCRETE PAVING AND BETWEEN BUILDING AND PAVING TO BE GRAY COLOR TO MATCH CONCRETE.



2 SITE PLAN
A0.20 SCALE : 1" = 10'-0"

2/17/2026 11:50:12 AM | PARAGON STAR RR-CONCESSIONS

PARAGON STAR
RR-CONCESSIONS

1401 NW River Rd
Lee's Summit, MO 64081

Project No.: 19050.04b
Date: 12.08.2025
Issued For: PERMIT

REVISIONS

No.	Date	Description
1	2/17/26	Permit Revisions

REGISTRATION

STATE OF MISSOURI
DAVID ALAN WILLIAMS
NUMBER A-5548
REGISTERED ARCHITECT

PROJECT TEAM

ARCHITECT	FINKLE+WILLIAMS ARCHITECTURE
STRUCTURAL	BSE
PLUMBING	PKMR
MECHANICAL	CONTRACTOR
ELECTRICAL	PKMR

FINKLE + WILLIAMS
ARCHITECTURE
8787 RENNER BLVD., SUITE 100
LENEXA, KANSAS 66219
913.498.1550
www.finklewilliams.com

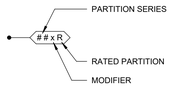
SHEET TITLE

ARCHITECTURAL SITE PLAN & DETAILS

SHEET NUMBER

A0.20

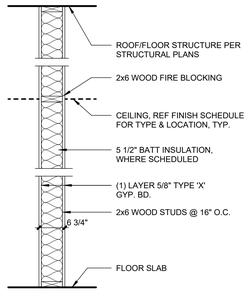
PARTITION LEGEND



PARTITION SERIES	
01 - 39	METAL STUD WALLS
40 - 79	MASONRY WALLS
80 - 99	WOOD STUD WALLS

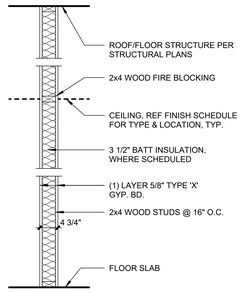
MODIFIER	
a	SOUND BATT INSULATION FULL DEPTH OF STUD
b	MOLD & WATER RESISTANT GYP. BD.
c	INSULATION AND MOLD & WATER RESISTANT GYP. BD.
d-z	VARIES, SEE PARTITION SCHEDULE COMMENTS

RATING	
R	FIRE RATED, SEE SCHEDULE FOR ADDITIONAL INFO.



91

Type	Batt Insulation	Mold & Water Resist GWB	Fire Rating	Comments
91c	Yes	Yes		



81

Type	Batt Insulation	Mold & Water Resist GWB	Fire Rating	Comments
81b	No	Yes		
81c	Yes	Yes		

ACCESSORY LEGEND

ALL ACCESSORIES SHALL BE STAINLESS STEEL UNLESS NOTED OTHERWISE.
ALL ACCESSORIES SHALL BE DESIGNED TO MEET ADA STANDARDS.

1. PAPER TOWEL DISPENSER SURFACE MOUNT - BY OWNER
2. WASTE RECEPTACLE - BY OWNER
3. LIQUID SOAP DISPENSER - COUNTER TOP - BY OWNER
3A. LIQUID SOAP DISPENSER - WALL MOUNT - BY OWNER
4. UNFRAMED MIRROR - BY OWNER
5. GRAB BAR (LOCATE AS SHOWN IN ACCESSORY MOUNTING HEIGHTS) - BY CONTRACTOR
6. SANITARY NAPKIN DISPOSAL, SURFACE WALL MOUNT - BY OWNER
7. HI / LO ADA ACCESSIBLE DRINKING FOUNTAIN REF. MEP - BY CONTRACTOR
8. FLOOR MOUNTED OVERHEAD BRACED STAINLESS STEEL TOILET PARTITIONS - BY CONTRACTOR TYP. DOORS: 2'-6" MIN., ADA DOORS: 3'-0"
9. TOILET PAPER DISPENSER - BY OWNER
10. HAND DRYER - BY OWNER, CONTRACTOR TO PROVIDE ROUGH-IN FOR HARD-WIRED CONNECTION

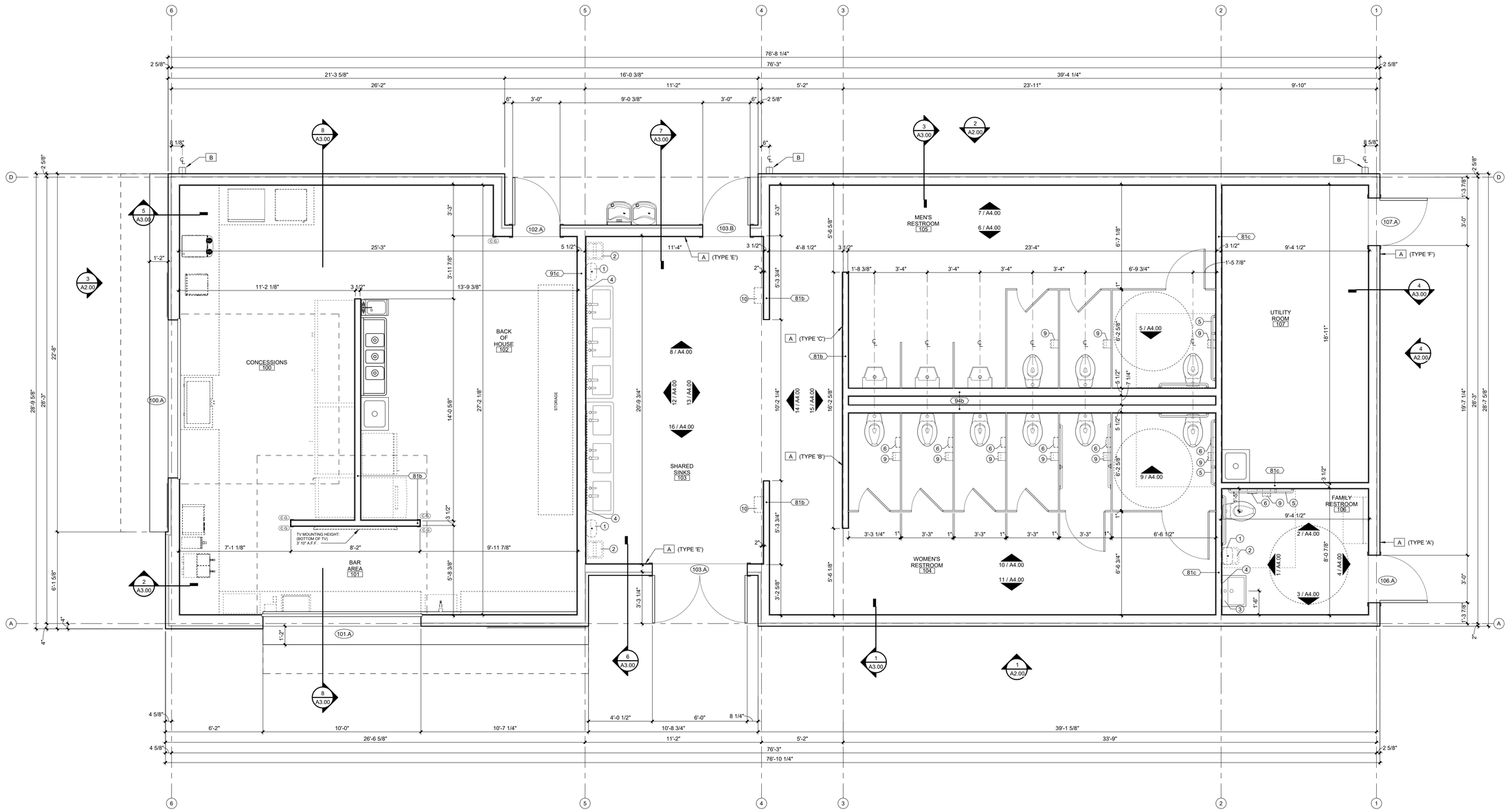
CONSTRUCTION GENERAL NOTES

1. PROVIDE TERMITE CONTROL UNDER NEW FLOOR SLABS.
2. ALL SWITCHES, RECEPTACLES, PHONE/DATA, AND CONTROLS ARE TO BE GRAY COLOR WITH STAINLESS STEEL COVER PLATES.

PLAN NOTE LEGEND

A. SEE SHEET A0.01 FOR INTERIOR SIGNAGE TYPES

B. METAL DOWNSPOUT, TIE INTO TRENCH DRAIN BELOW SLAB



1	1ST FLOOR PLAN
A1.00	SCALE : 3/8" = 1'-0"

12/10/2025 5:31:13 PM | PARAGON STAR RR-CONCESSIONS

PARAGON STAR
RR-CONCESSIONS

1401 NW River Rd
Lee's Summit, MO 64081

Project No.: 19050.04b
Date: 12.08.2025
Issued For: PERMIT

REVISIONS

No.	Date	Description

REGISTRATION

PROJECT TEAM

ARCHITECT	FINKLE+WILLIAMS ARCHITECTURE
STRUCTURAL	BSE
PLUMBING	PKMR
MECHANICAL	CONTRACTOR
ELECTRICAL	PKMR

FINKLE + WILLIAMS
ARCHITECTURE
8787 RENNER BLVD., SUITE 100
LENEXA, KANSAS 66219
913.488.1550
www.finklewilliams.com

SHEET TITLE

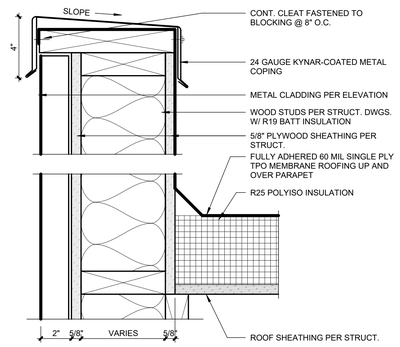
FLOOR PLAN

SHEET NUMBER

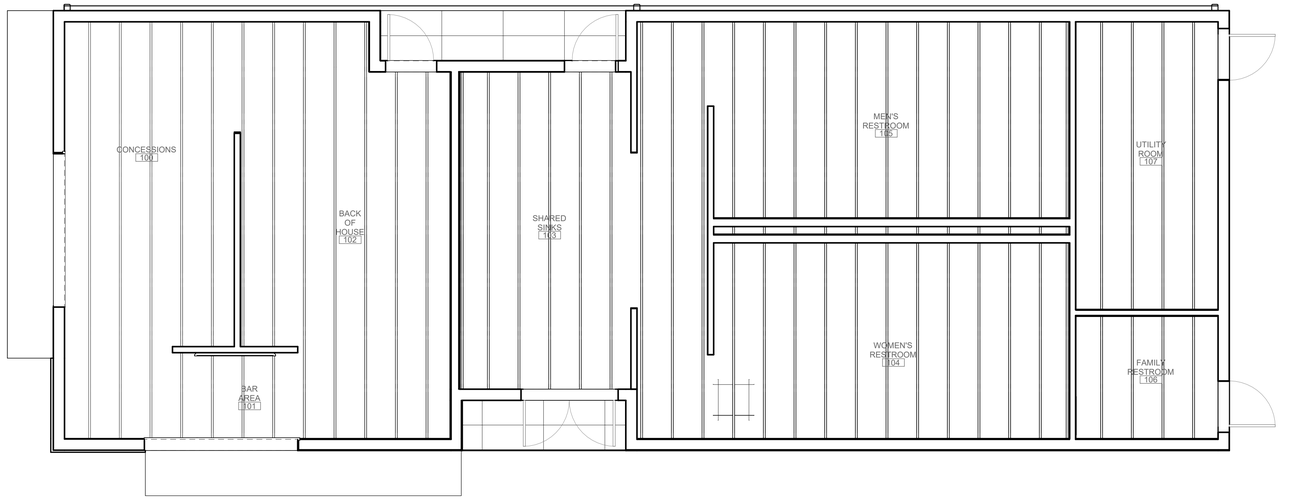
A1.00

ROOF PLAN GENERAL NOTES

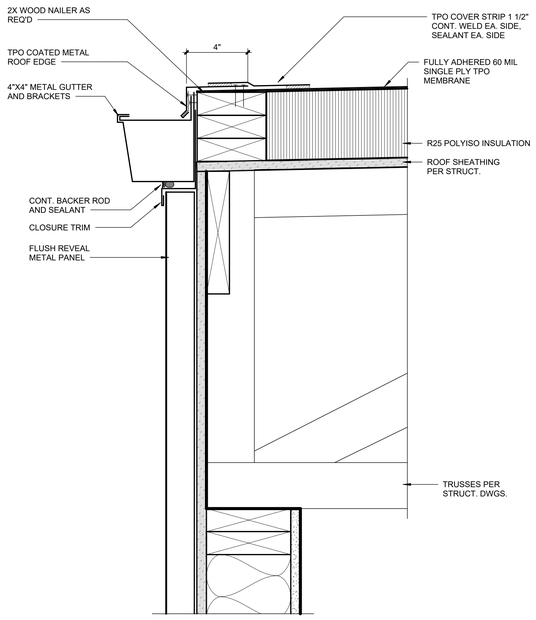
1. THE SINGLE PLY ROOF SHALL BE TPO, 60 MIL, WHITE MEMBRANE, RHINOBOND FASTENED, W/A 20 YEAR NO DOLLAR LIMIT MANUFACTURER'S WARRANTY.
2. ROOF DRAINS ARE TO BE COLLECTED UNDERGROUND AND CONTINUED PER CIVIL ENGINEERING PLANS.
3. SEE SHEET A1.51 FOR TYPICAL ROOF DETAILS.
4. SEE PLUMBING AND MECHANICAL PLANS FOR ROOF TOP EQUIPMENT AND PENETRATION LOCATIONS.



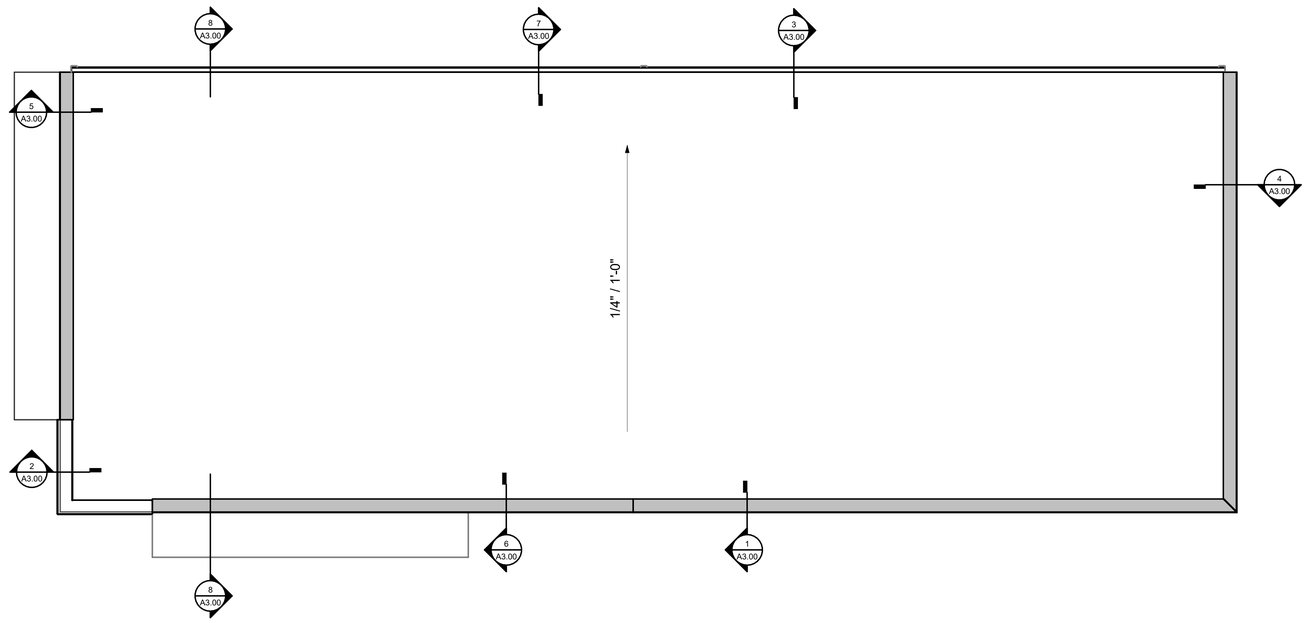
4 ROOF DETAIL PARAPET
A1.50 SCALE : 3" = 1'-0"



2 REFLECTED CEILING PLAN
A1.50 SCALE : 1/4" = 1'-0"



3 ROOF DETAIL
A1.50 SCALE : 3" = 1'-0"



1 ROOF PLAN
A1.50 SCALE : 1/4" = 1'-0"

12/10/2025 5:31:14 PM | PARAGON STAR RR-CONCESSIONS

PARAGON STAR
RR-CONCESSIONS

1401 NW River Rd
Lee's Summit, MO 64081

Project No.: 19050.04b
Date: 12.08.2025
Issued For: PERMIT

REVISIONS

No.	Date	Description

REGISTRATION

STATE OF MISSOURI
DAVID ALAN WILLIAMS
NUMBER A-5548
REGISTERED ARCHITECT

PROJECT TEAM

ARCHITECT	FINKLE+WILLIAMS ARCHITECTURE
STRUCTURAL	BSE
PLUMBING	PKMR
MECHANICAL	CONTRACTOR
ELECTRICAL	PKMR

FINKLE + WILLIAMS
ARCHITECTURE
8787 RENNER BLVD., SUITE 100
LENEXA, KANSAS 66219
913.488.1550
www.finklewilliams.com

SHEET TITLE

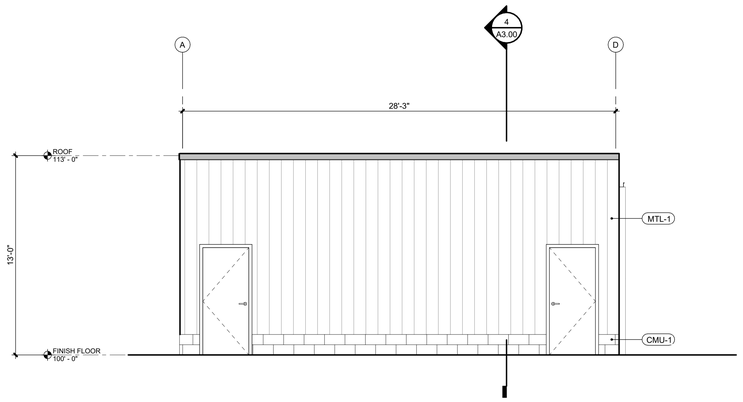
ROOF PLAN & RCP

SHEET NUMBER

A1.50

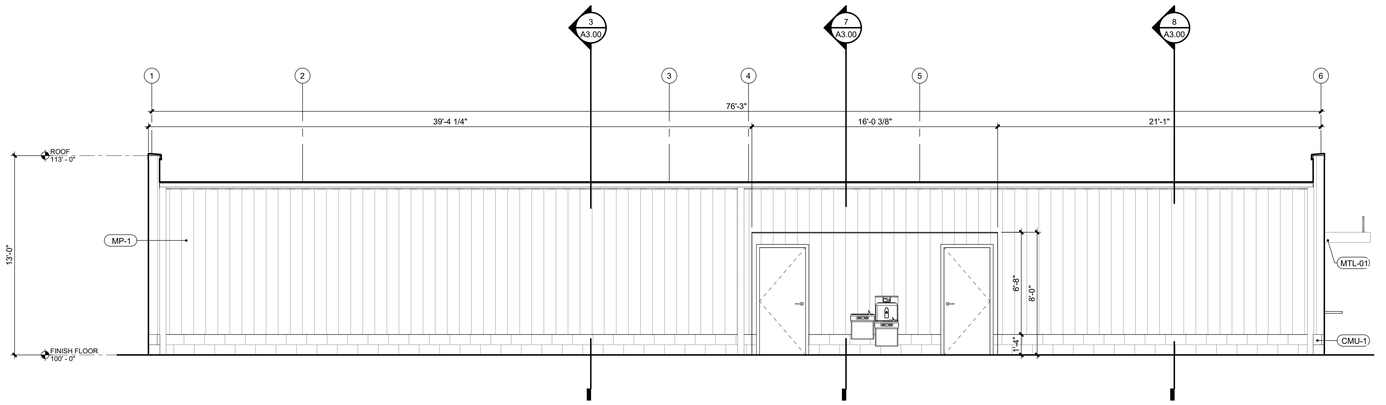
EXTERIOR MATERIAL LEGEND

MP-1	FLUSH SEAM METAL PANEL; BASIS OF DESIGN: PAC-CLAD, COLOR: GRAY
MP-2	VERTICAL EXPOSED FASTENER CORRUGATED METAL PANEL, COLOR: TEAL (PARAGON BRAND COLOR)
MTL-1	PRE-FABRICATED METAL AWNING, COLOR: BLACK
CMU-1	CMU BLOCK, PAINTED BLACK



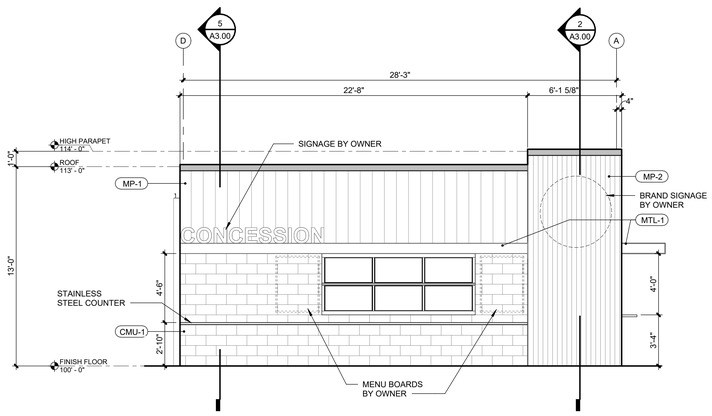
4 EAST ELEVATION

A2.00 SCALE : 1/4" = 1'-0"



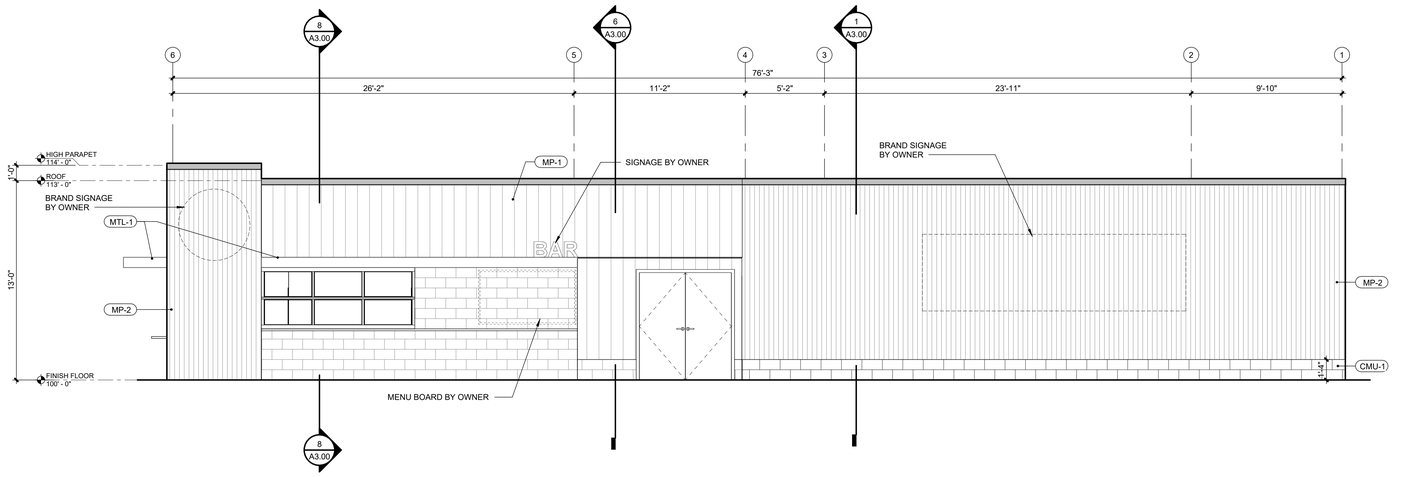
2 NORTH ELEVATION

A2.00 SCALE : 1/4" = 1'-0"



3 WEST ELEVATION

A2.00 SCALE : 1/4" = 1'-0"



1 SOUTH ELEVATION

A2.00 SCALE : 1/4" = 1'-0"

12/10/2025 5:31:15 PM | PARAGON STAR RR-CONCESSIONS

PARAGON STAR
RR-CONCESSIONS

1401 NW River Rd
Lee's Summit, MO 64081

Project No.: 19050.04b
Date: 12.08.2025
Issued For: PERMIT

REVISIONS

No.	Date	Description

REGISTRATION

STATE OF MISSOURI
DAVID ALAN WILLIAMS
NUMBER A-5548
REGISTERED ARCHITECT

PROJECT TEAM

ARCHITECT	FINKLE+WILLIAMS ARCHITECTURE
STRUCTURAL	BSE
PLUMBING	PKMR
MECHANICAL	CONTRACTOR
ELECTRICAL	PKMR

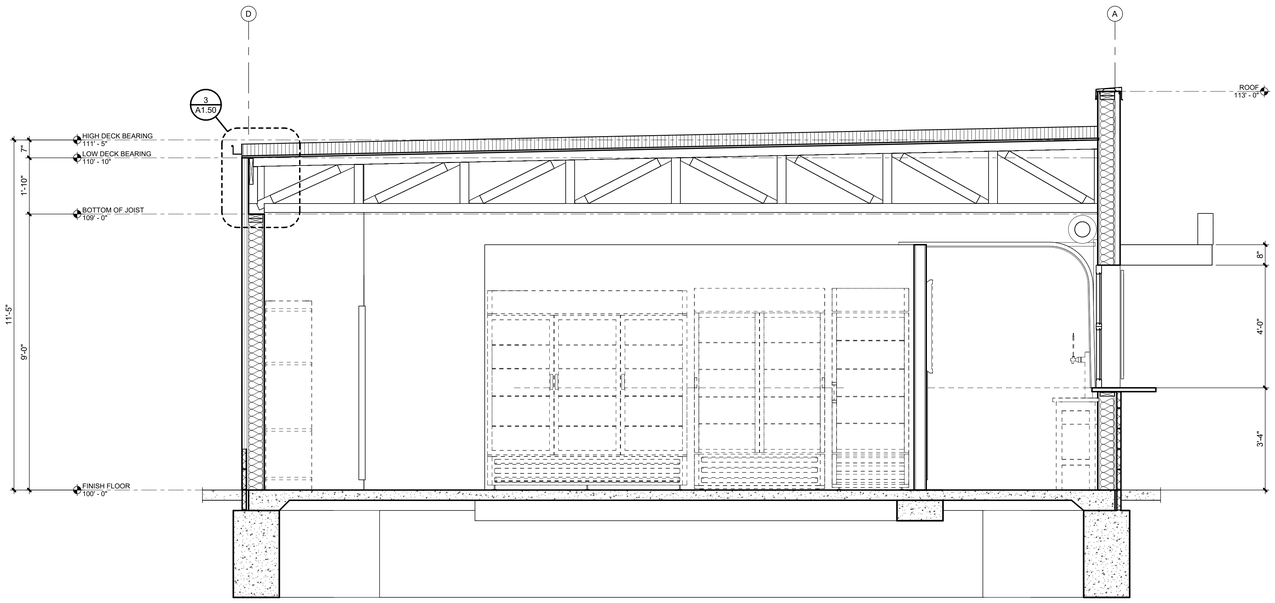
FINKLE + WILLIAMS
ARCHITECTURE
8787 RENNER BLVD., SUITE 100
LENEXA, KANSAS 66219
913.498.1550
www.finklewilliams.com

SHEET TITLE

EXTERIOR ELEVATIONS

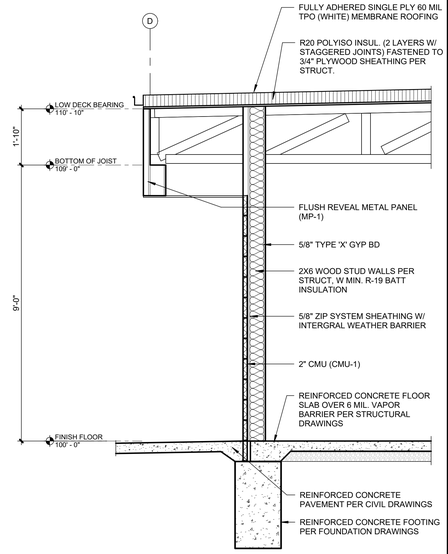
SHEET NUMBER

A2.00



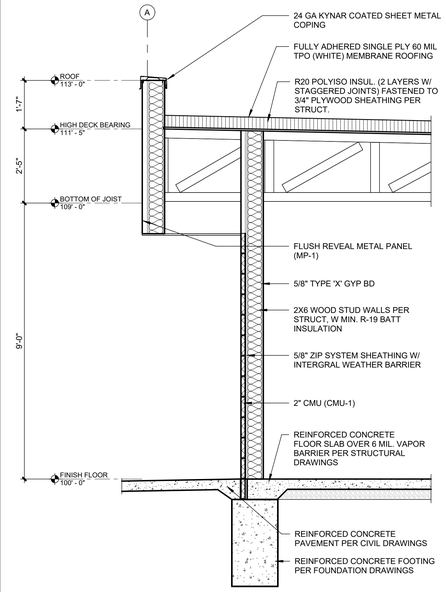
8 BUILDING SECTION

A3.00 SCALE : 1/2" = 1'-0"



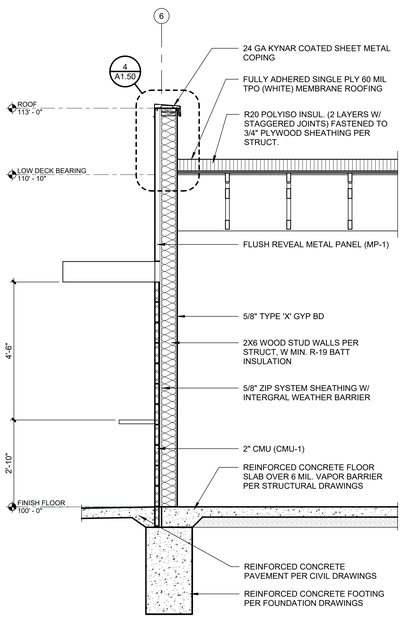
7 WALL SECTION

A3.00 SCALE : 1/2" = 1'-0"



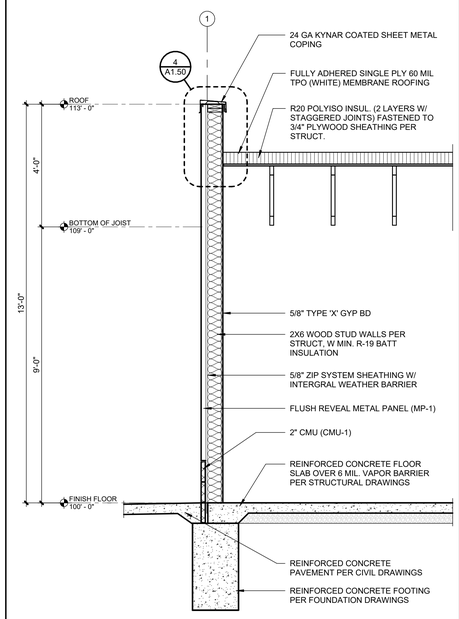
6 WALL SECTION

A3.00 SCALE : 1/2" = 1'-0"



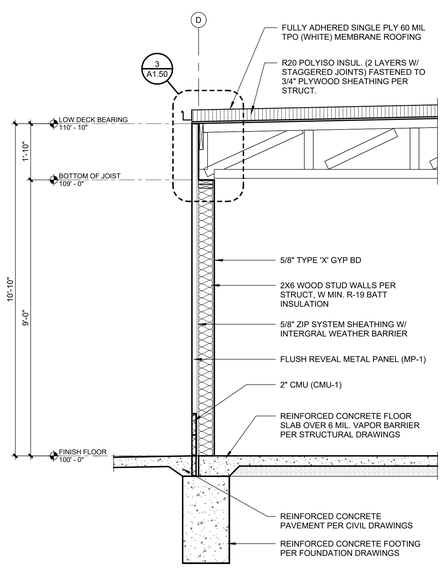
5 Section 6

A3.00 SCALE : 1/2" = 1'-0"



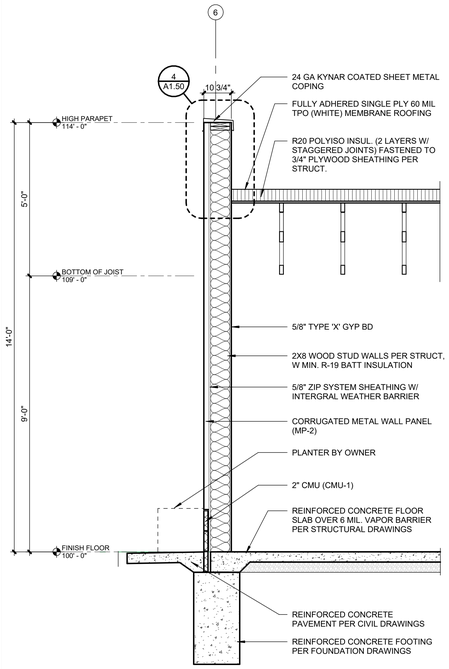
4 Section 5

A3.00 SCALE : 1/2" = 1'-0"



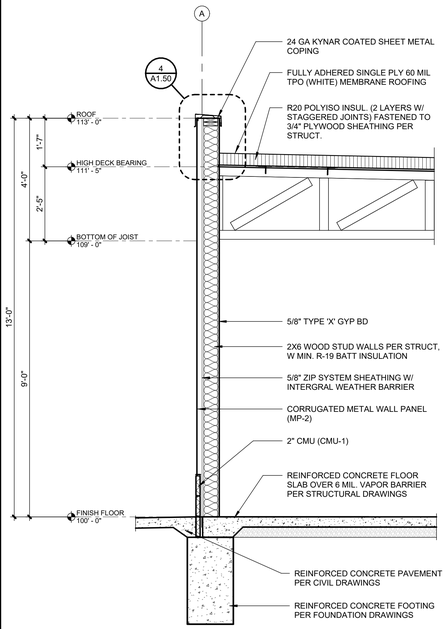
3 Section 3

A3.00 SCALE : 1/2" = 1'-0"



2 WALL SECTION

A3.00 SCALE : 1/2" = 1'-0"



1 WALL SECTION

A3.00 SCALE : 1/2" = 1'-0"

12/10/2025 5:31:17 PM | PARAGON STAR RR-CONCESSIONS

PARAGON STAR
RR-CONCESSIONS

1401 NW River Rd
Lee's Summit, MO 64081

Project No.:	19050.04b
Date:	12.08.2025
Issued For:	PERMIT

REVISIONS

No.	Date	Description

REGISTRATION

STATE OF MISSOURI
DAVID ALAN WILLIAMS
NUMBER A-5548
REGISTERED ARCHITECT

PROJECT TEAM

ARCHITECT	FINKLE+WILLIAMS ARCHITECTURE
STRUCTURAL	BSE
PLUMBING	PKMR
MECHANICAL	CONTRACTOR
ELECTRICAL	PKMR

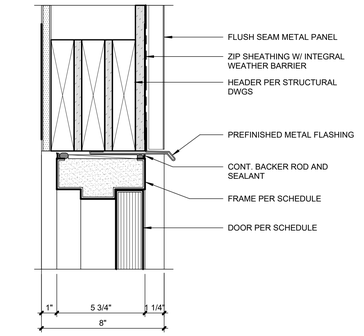
FINKLE + WILLIAMS
ARCHITECTURE
8787 RENNER BLVD., SUITE 100
LENEXA, KANSAS 66219
913.498.1550
www.finklewilliams.com

SHEET TITLE

WALL AND BUILDING SECTIONS

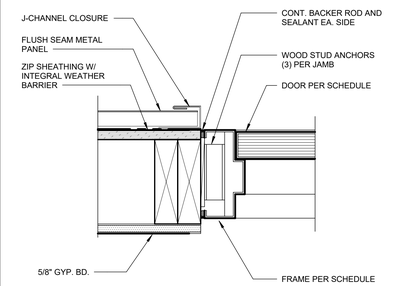
SHEET NUMBER

A3.00



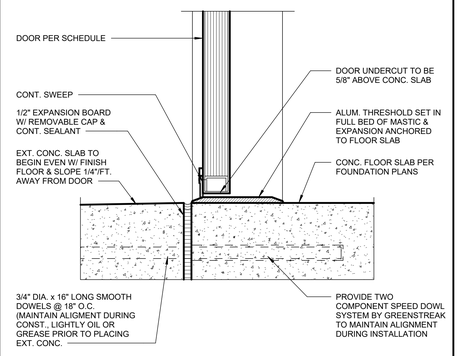
3 DOOR HEAD DETAIL

A3.50 SCALE : 3" = 1'-0"



2 DOOR JAMB DETAIL

A3.50 SCALE : 3" = 1'-0"



1 SILL DETAIL

A3.50 SCALE : 3" = 1'-0"

12/10/2025 5:31:18 PM | PARAGON STAR RR-CONCESSIONS

PARAGON STAR
RR-CONCESSIONS

1401 NW River Rd
Lee's Summit, MO 64081

Project No.: 19050.04b
Date: 12.08.2025
Issued For: PERMIT

REVISIONS

No.	Date	Description

REGISTRATION

STATE OF MISSOURI
DAVID ALAN WILLIAMS
NUMBER A-5548
REGISTERED ARCHITECT

PROJECT TEAM

ARCHITECT	FINKLE+WILLIAMS ARCHITECTURE
STRUCTURAL	BSE
PLUMBING	PKMR
MECHANICAL	CONTRACTOR
ELECTRICAL	PKMR

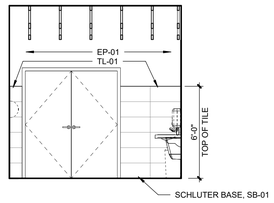
FINKLE + WILLIAMS
ARCHITECTURE
8787 RENNER BLVD., SUITE 100
LENEXA, KANSAS 66219
913.498.1550
www.finklewilliams.com

SHEET TITLE

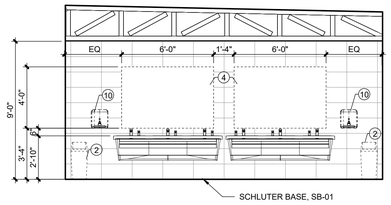
DETAILS

SHEET NUMBER

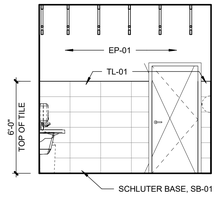
A3.50



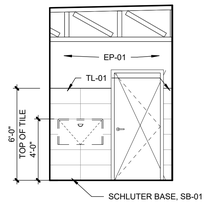
16 RR ENTRY ELEVATION - S
A4.00 SCALE : 1/4" = 1'-0"



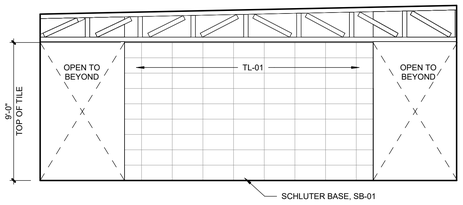
12 RR ENTRY ELEVATION - W
A4.00 SCALE : 1/4" = 1'-0"



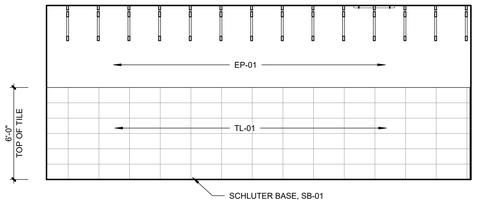
8 RR ENTRY ELEVATION - N
A4.00 SCALE : 1/4" = 1'-0"



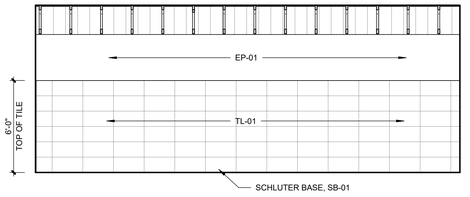
4 SINGLE RR ELEVATION - E
A4.00 SCALE : 1/4" = 1'-0"



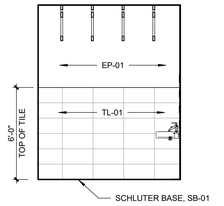
15 RR WALL ELEVATION - E
A4.00 SCALE : 1/4" = 1'-0"



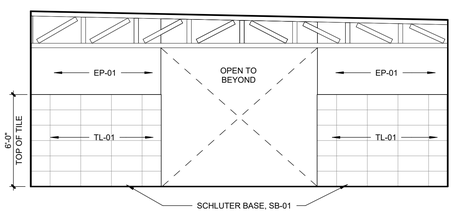
11 WOMENS RR ELEVATION - S
A4.00 SCALE : 1/4" = 1'-0"



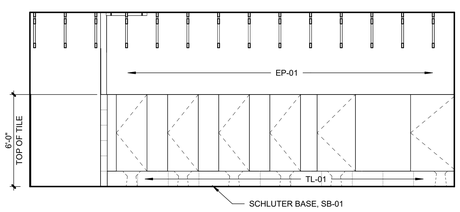
7 MENS RR ELEVATION - N
A4.00 SCALE : 1/4" = 1'-0"



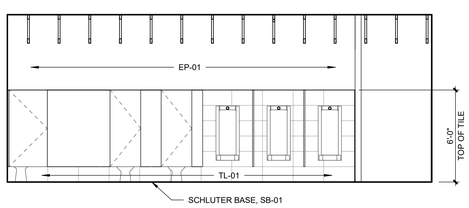
3 SINGLE RR ELEVATION - S
A4.00 SCALE : 1/4" = 1'-0"



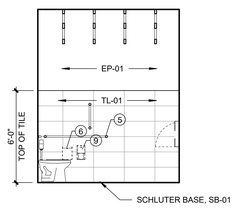
14 RR WALL ELEVATION - W
A4.00 SCALE : 1/4" = 1'-0"



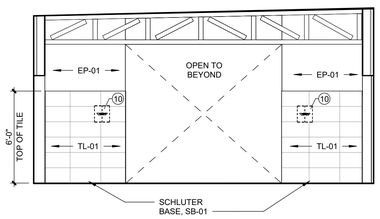
10 WOMENS RR ELEVATION - N
A4.00 SCALE : 1/4" = 1'-0"



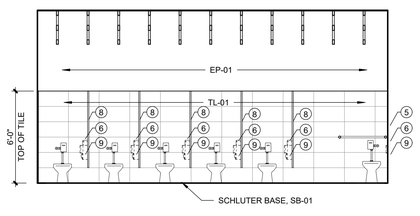
6 MENS RR ELEVATION - S
A4.00 SCALE : 1/4" = 1'-0"



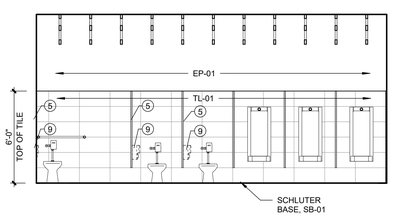
2 SINGLE RR ELEVATION - N
A4.00 SCALE : 1/4" = 1'-0"



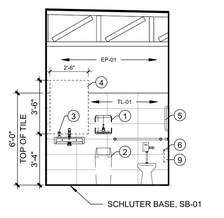
13 RR ENTRY ELEVATION - E
A4.00 SCALE : 1/4" = 1'-0"



9 WOMENS RR TOILET - N
A4.00 SCALE : 1/4" = 1'-0"



5 MENS RR TOILET - S
A4.00 SCALE : 1/4" = 1'-0"



1 SINGLE RR ELEVATION - W
A4.00 SCALE : 1/4" = 1'-0"

12/10/2025 5:31:21 PM | PARAGON STAR RR-CONCESSIONS

PARAGON STAR
RR-CONCESSIONS

1401 NW River Rd
Lee's Summit, MO 64081

Project No.: 19050.04b
Date: 12.08.2025
Issued For: PERMIT

REVISIONS

No.	Date	Description

REGISTRATION

STATE OF MISSOURI
DAVID ALAN WILLIAMS
NUMBER A-5548
REGISTERED ARCHITECT

PROJECT TEAM

ARCHITECT	FINKLE+WILLIAMS ARCHITECTURE
STRUCTURAL	BSE
PLUMBING	PKMR
MECHANICAL	CONTRACTOR
ELECTRICAL	PKMR

FINKLE + WILLIAMS
ARCHITECTURE
8787 RENNER BLVD., SUITE 100
LENEXA, KANSAS 66219
913.498.1550
www.finklewilliams.com

SHEET TITLE

INTERIOR ELEVATIONS

SHEET NUMBER

A4.00

ROOM FINISH LEGEND

KEY	MATERIAL	MFR	PATTERN/STYLE	FINISH/COLOR	SIZE	REMARKS	CONTACT
FLOOR FINISHES							
SC-01	SEALED CONCRETE						
BASE FINISHES							
RB-01	RESILIENT BASE						
SB-01	SCHLUTER BASE	SCHLUTER SYSTEMS	DILEX-AHKA				
WD-01	WOOD BASE						
WALL FINISHES							
EP-01	EPOXY PAINT						
FRP-01	WALL COVERING						
TL-01	TILE						
CEILING FINISHES							
EXP-01	EXPOSED TO STRUCTURE			PAINT BLACK			
MISCELLANEOUS FINISHES							
CG	CORNER GUARD						

GENERAL FINISH NOTES

1. COORDINATE ALL FINAL FINISH SELECTIONS WITH OWNER PRIOR TO ORDERING MATERIALS.
2. ROOM FINISH SCHEDULE IS FOR GENERAL COORDINATION OF FINISHES. REFERENCE ROOM FINISH PLANS, INTERIOR ELEVATIONS AND REFLECTED CEILING PLANS FOR COORDINATION OF ALL FINAL FINISHES.
3. WHERE MULTIPLE FINISHES ARE INDICATED ON ANY SURFACE REFER TO THE DRAWINGS FOR EXTENT OF EACH FINISH.
4. STOP WALL / CEILING PAINT COLORS AND FINISH MATERIAL CHANGES AT INSIDE CORNERS, UNLESS NOTED OTHERWISE.
5. WHERE NO BASE IS INDICATED (-) CONTINUE WALL FINISH TO FLOOR.
6. ALL EXPOSED DUCTWORK, MECHANICAL GRILLES, ELECTRICAL CONDUIT, PLUMBING SUPPLY, WASTE OR VENTING AND ALL OTHER PIPING SHALL BE PAINTED TO MATCH ADJACENT WALL OR CEILING FINISH, UNLESS NOTED OTHERWISE.
7. TILE INDICATED ON WALLS IS TO BE FULL HEIGHT, UNLESS NOTED OTHERWISE.
8. UNFINISHED EXPOSED TILE EDGES TO RECEIVE STAINLESS STEEL OR ALUMINUM TRIM EQUAL TO SCHLUTER, FINISH: ***[TO BE SELECTED BY ARCHITECT FROM STANDARD OPTIONS]***. AT CORNERS, ***[QUADEC]***. AT TOP EDGES, SCHIENE / JOLLY.
9. PAINT ALL HOLLOW METAL DOORS AND FRAMES W/ 2 COATS OF SEMI-GLOSS, ACRYLIC LATEX PAINT TO MATCH ADJACENT WALL, U.N.O.
10. DOOR FRAME FINISH TRANSITIONS SHALL BE AT THE INSIDE CORNER OF THE STOP ON THE DOOR SIDE.
11. DUAL FINISH DOORS SHALL HAVE MATCHING FRONT FACE AND STRIKE EDGE AND MATCHING BACK FACE AND HINGE EDGE.

ROOM FINISH SCHEDULE

ROOM NO.	ROOM NAME	FLOOR	BASE	WALLS N	WALLS E	WALLS S	WALLS W	CEILING	REMARKS
100	CONCESSIONS	SC-01	RB-01	FRP-01	FRP-01	FRP-01	FRP-01	EXP-01	
101	BAR AREA	SC-01	RB-01	FRP-01	FRP-01	FRP-01	FRP-01	EXP-01	
102	BACK OF HOUSE	SC-01	RB-01	FRP-01	FRP-01	FRP-01	FRP-01	EXP-01	
103	SHARED SINKS	SC-01	TL-01	TL-01 / EP-01	TL-01 / EP-01	TL-01 / EP-01	TL-01 / EP-01	EXP-01	
104	WOMEN'S RESTROOM	SC-01	TL-01	TL-01 / EP-01	TL-01 / EP-01	TL-01 / EP-01	TL-01 / EP-01	EXP-01	
105	MEN'S RESTROOM	SC-01	TL-01	TL-01 / EP-01	TL-01 / EP-01	TL-01 / EP-01	TL-01 / EP-01	EXP-01	
106	FAMILY RESTROOM	SC-01	TL-01	TL-01 / EP-01	TL-01 / EP-01	TL-01 / EP-01	TL-01 / EP-01	EXP-01	
107	UTILITY ROOM	SC-01	RB-01	FRP-01	FRP-01	FRP-01	FRP-01	EXP-01	

SCHEDULE REMARKS

(1) ALL WALL FINISHES TO 9'-0" U.N.O. ON INTERIOR ELEVATIONS

DOOR AND FRAME SCHEDULE

NO.	DOOR SIZE W.	H.	Th.	DOOR TYPE	DOOR MAT.	FRAME TYPE	FRAME MAT.	RATING	DETAILS JAMB	HEAD	SILL	HARDWARE	REMARKS
100.A	10' - 0"	4' - 0"	-	O1	AL			-		11/A3.50	10/A3.50		
101.A	10' - 0"	4' - 0"	-	O1	AL			-		11/A3.50	9/A3.50		
102.A	3' - 0"	7' - 0"	1 3/4"	H1	HM	H1	HM	-	2/A3.50	3/A3.50	1/A3.50		
103.A	6' - 0"	7' - 0"	1 3/4"	H2	HM	H1	HM	-	2/A3.50	3/A3.50	1/A3.50		
103.B	3' - 0"	7' - 0"	1 3/4"	H1	HM	H1	HM	-	2/A3.50	3/A3.50	1/A3.50		
106.A	3' - 0"	7' - 0"	1 3/4"	H1	HM	H1	HM	-	2/A3.50	3/A3.50	1/A3.50		
107.A	3' - 0"	7' - 0"	1 3/4"	H1	HM	H1	HM	-	2/A3.50	3/A3.50	1/A3.50		

DOOR TYPES

ALL HOLLOW METAL DOORS TO BE FACTORY PRIMED. PAINT TO BE SPRAYED

EXT. DOOR TO BE GRADE III EXTRA HEAVY DUTY, MODEL 4 INSUL., MIN. 16 GA. GALV. STL. (FINISH W/ 2 COATS SEMI-GLOSS ACRYLIC LATEX PAINT)

H1

PAIR: EXT. DOOR TO BE GRADE III EXTRA HEAVY DUTY, MODEL 4 INSUL., MIN. 16 GA. GALV. STL. (FINISH W/ 2 COATS SEMI-GLOSS ACRYLIC LATEX PAINT)

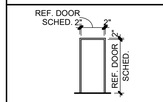
H2

INSULATED OVERHEAD DOOR CLOPAY 3220 SECTIONAL DOOR, 20 GA. STEEL EXTERIOR; 27 GA. STEEL INTERIOR; INSULATED R9.1; POWDER COAT FINISH; TORSION SPRINGS FOR 50,000 CYCLES

O1

FRAME TYPES

ALL HOLLOW METAL FRAMES TO BE FACTORY PRIMED. PAINT TO BE SPRAYED

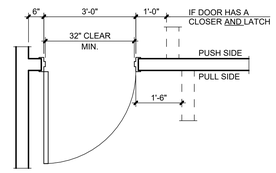


14 GA. GALV. WELDED HOLLOW METAL FRAMES, FINISH TO BE SPRAYED W/ 2 COATS SEMI-GLOSS ACRYLIC LATEX PAINT

H1

DOOR LOCATION PLAN

FOR ALL DOORS NOT LOCATED ON PLAN



MATERIAL LEGEND

GL	-	GLASS
HM	-	HOLLOW METAL
WD	-	WOOD
STL	-	STEEL
AL	-	ALUMINUM
MFR	-	PER MANUFACTURER
POLY	-	POLYETHYLENE
P	-	POLYCARBONATE

HARDWARE SETS

SEE SPECIFICATIONS FOR DETAILED HARDWARE INFORMATION.

GENERAL NOTES:

1. ALL HARDWARE SHALL COMPLY WITH APPLICABLE REQUIREMENTS OF THE AMERICANS WITH DISABILITIES ACT (ADA).
2. ALL DOOR HARDWARE SHALL BE FINISH US26D OR EQUIVALENT.
3. ALL LATCHSETS AND LOCKSETS SHALL BE EQUIPPED WITH LEVER TYPE OPERATING TRIM W/ THE "CLUTCH" FEATURE.
4. ALL CLOSERS SHALL BE LOCATED ON ROOMS SIDES OF DOORS.
5. CONTRACTOR'S HARDWARE CONSULTANT SHALL BE RESPONSIBLE FOR DETERMINING APPROPRIATE HARDWARE FUNCTION AND OPTIONS.
6. CONTRACTOR SHALL COORDINATE FINAL KEYING WITH OWNER.

(EL) EXTERIOR LOCKSETS

SET # EL.1 (EXTERIOR SINGLE W/ LOCK)
- HINGES
- LOCKSET
- CLOSER
- THRESHOLD
- WEATHERSTRIP
- BOTTOM SWEEP
- DRIP CAP
- LATCH GUARD
- STORM CHAIN

SET # EL.2 (EXTERIOR PAIR W/ LOCK, CLOSERS, & MANUAL FLUSHBOLTS)
- HINGES
- LOCKSET
- FLUSHBOLTS
- ASTRAGAL
- CLOSERS
- THRESHOLD
- WEATHERSTRIP
- BOTTOM SWEEP
- DRIP CAP
- LATCH GUARD
- STORM CHAIN

PARAGON STAR
RR-CONCESSIONS

1401 NW River Rd
Lee's Summit, MO 64081

Project No.: 19050.04b
Date: 12.08.2025
Issued For: PERMIT

REVISIONS

No.	Date	Description

REGISTRATION

STATE OF MISSOURI
DAVID ALAN WILLIAMS
NUMBER A-5548
REGISTERED ARCHITECT

PROJECT TEAM

ARCHITECT	FINKLE+WILLIAMS ARCHITECTURE
STRUCTURAL	BSE
PLUMBING	PKMR
MECHANICAL	CONTRACTOR
ELECTRICAL	PKMR

FINKLE + WILLIAMS
ARCHITECTURE
8787 RENNER BLVD., SUITE 100
LENEXA, KANSAS 66219
913.488.1550
www.finklewilliams.com

SHEET TITLE

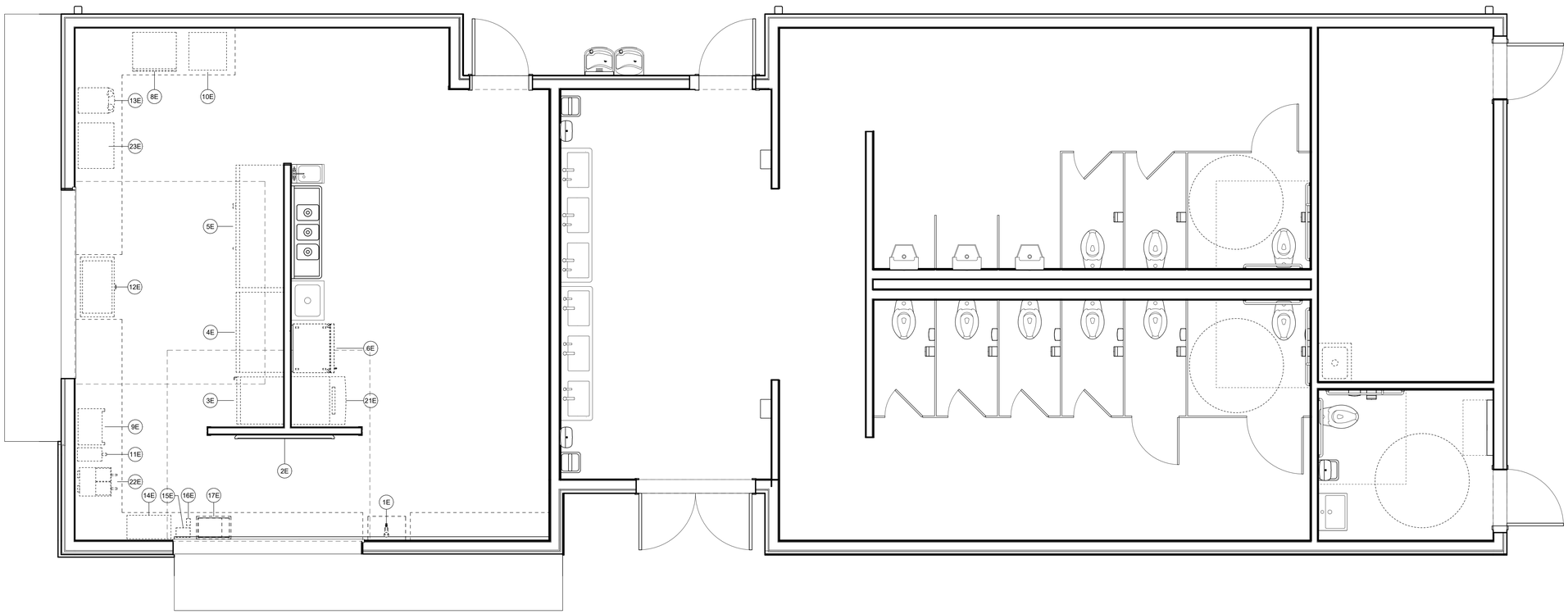
DOOR AND FINISH SCHEDULE

SHEET NUMBER

A8.00

EQUIPMENT SCHEDULE

TAG	QTY	CATEGORY	MANUFACTURER	MODEL	COMMENT
1E	1	KEGERATOR	PERLICK	HP24TO-4	
2E	1	75" TV	TOSHIBA	C350 SERIES	
3E	1	SINGLE DOOR MERCHANDISER	COCA-COLA	IMBERA G319 C02	
4E	1	2 DOOR MERCHANDISER	AVANTCO	GDC-49-HC	
5E	1	3 DOOR MERCHANDISER	AVANTCO	GDC-69-HC	
6E	1	FRIDGE	LG	LRDCS2603S	
7E	3	STAINLESS STEEL TABLE	REGENCY		
8E	1	AIR FRYER	ACP EXPRESSCHEF	4i MXP22TLT	
9E	1	HOT DOG ROLLER	AVANTCO	RG1830NS	
10E	1	PRETZEL WARMER	CARNIVAL KING	HZW-18D2	
11E	1	NACHO CHEESE DISPENSER	CARNIVAL KING	CD225	
12E	1	MINI MELTS FREEZER			
13E	1	SLUSHIE MACHINE	BUNN	58000.0015	
14E	1	BIB RACK	MULTIPLEX	28"W x 16"D x 37"H	
15E	2	CARBONATER SHELF	OWNER SPEC.	OWNER SPEC.	
16E	1	SODA GUN	OWNER SPEC.	WBM-10620	
17E	1	DROP IN ICE WELL	OWNER SPEC.	22"W x 15"D x 14.25"H	
21E	1	ICE MACHINE	AVANTCO	KMC-H-530-A	
22E	1	COFFEE MAKER			
23E	1	SNOWIE MACHINE	SNOWIE	SNOWIE CUBE PRO	



1 EQUIPMENT PLAN
A9.00 SCALE : 3/8" = 1'-0"

12/10/2025 5:31:23 PM | PARAGON STAR RR-CONCESSIONS

PARAGON STAR
RR-CONCESSIONS

1401 NW River Rd
Lee's Summit, MO 64081

Project No.: 19050.04b
Date: 12.08.2025
Issued For: PERMIT

REVISIONS

No.	Date	Description

REGISTRATION

STATE OF MISSOURI
DAVID ALAN WILLIAMS
NUMBER A-5548
REGISTERED ARCHITECT

PROJECT TEAM

ARCHITECT	FINKLE+WILLIAMS ARCHITECTURE
STRUCTURAL	BSE
PLUMBING	PKMR
MECHANICAL	CONTRACTOR
ELECTRICAL	PKMR

FINKLE + WILLIAMS
ARCHITECTURE
8787 RENNER BLVD., SUITE 100
LENEXA, KANSAS 66219
913.498.1550
www.finklewilliams.com

SHEET TITLE

EQUIPMENT PLAN

SHEET NUMBER

A9.00

Governing Building Code: 2018 IBC

Design Specifications:
- ASCE 7-16
- ACI 318-14
- AISC 360-16
- ANSI/AWC NDS - 2018

Design Loads:

Roof Loads:
- Top Chord Dead Load: 15 psf
- Top Chord Live Load: 20 psf
- Bottom Chord Dead Load: 10 psf
- Bottom Chord Live Load: 10 psf

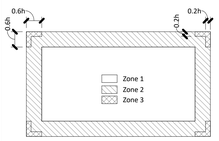
Wind Loads:
- Risk Category: II
- Vult: 109 mph
- Exposure: C
- Kzt: 1.0

Snow Loads:
- Pg & Pf, min: 20 psf
- Pf (Flat): 14 psf
- Ce: 1.0
- Is: 1.0
- Ct: 1.0
- Drift Load: Per Plan

Seismic Loads:
- Ie: 1.0
- Ss: 0.099 g
- S1: 0.068 g
- Site Class: D
- Sds: 0.105 g
- Sd1: 0.109 g
- Seismic Design Category: B
- Seismic Force- Resisting System: L.F.S.W.
- Design Base Shear: CsW
- Cs: 0.0162
- R: 6.5
- Analysis Procedure Used: E.L.F.P.

Design Loading Notes:

1. See components and cladding table for design wind pressures.
2. See net uplift diagram for roof framing due to wind pressures.
3. Roof dead load shown includes a collateral load of 2.5 psf.
4. BCLL shall not apply to accessible trusses & shall be non-concurrent w/ TCLL



COMPONENTS & CLADDING WIND PRESSURES

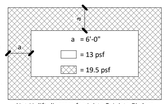
Zone	Effective Wind Area (sq ft)	Max. +VE Pressure (psf)	Max. -VE Pressure (psf)
1 - Roof Interior	10	16.0	-40.1
1 - Roof Interior	20	16.0	-37.5
1 - Roof Interior	50	16.0	-34.0
1 - Roof Interior	≥ 100	16.0	-31.3
2 - Roof Edge	10	16.0	-52.9
2 - Roof Edge	20	16.0	-49.5
2 - Roof Edge	50	16.0	-45.0
2 - Roof Edge	≥ 100	16.0	-41.6
3 - Roof Corner	10	16.0	-72.1
3 - Roof Corner	20	16.0	-65.3
3 - Roof Corner	50	16.0	-56.3
3 - Roof Corner	≥ 100	16.0	-49.5
4 - Wall Interior	10	23.0	-25.0
4 - Wall Interior	20	22.0	-23.9
4 - Wall Interior	50	20.7	-22.6
4 - Wall Interior	≥ 100	19.7	-21.6
5 - Wall Edge	10	23.0	-30.7
5 - Wall Edge	20	22.0	-28.7
5 - Wall Edge	50	20.7	-26.0
5 - Wall Edge	≥ 100	19.7	-23.9

Components & Cladding Wind Zone Diagram

1. The components & cladding (C&C) wind pressures shown assume a mean roof height of 11'-6" above finished floor elevation. All components shall be designed to resist the provided pressures, which shall be clearly defined on all shop drawings. Refer to wind zone diagram for zone locations. Plus and minus signs signify pressures acting toward and away from surfaces, respectively.

2. The components & cladding wind zone diagram is generalized to show all possible conditions. The diagram shape may not match the specific layout for this project.

3. Internal Pressure Coefficient = ±0.18



Net Uplift diagram for Joists & Joists Girders
(Pressures shown are service level.)(0.6DL - 0.6WL)

General:
1. The structural systems shown on these documents have been designed for the final, in place usage of the structure based on the intended occupancy and code requirements. While general constructability has been considered, the structural systems have not been designed to accommodate specific construction means and methods that might be utilized by the Contractor.

2. The Contractor shall field verify all existing dimensions prior to fabrication.

3. The Contractor shall notify the Engineer of any observed discrepancies in dimensions, detailing, or other items as shown on the plans or specified prior to proceeding with work relating to said discrepancies.

4. The Contractor shall not alter or modify work shown on the structural drawings without receiving written approval from the Engineer.

5. The Contractor shall be responsible for supplying shop drawings for wood joists & trusses, anchor tie-down system, structural steel, reinforcing steel, and concrete mix designs. Shop drawings must be reviewed 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 Contractor, and shall be stamped "approved" by the Contractor prior to submittal. Shop drawings submitted without the Contractor's stamped approval will be returned rejected. All shop drawings shall be reviewed by the Structural Engineer prior to construction.

6. See architectural, mechanical, and electrical drawings for other pertinent information related to the structural work and coordinate as required. These structural drawings are intended to be included in a complete set of construction documents, including but not limited to, architectural drawings, civil drawings, and mechanical/electrical/plumbing drawings. Contractor shall verify coordination of these drawings with contents of above drawing sets specified and only proceed with bidding and construction after such has taken place.

7. The building and the independent structural components shown in these documents are not structurally stable until all connections, framing, shear walls, diaphragms, permanent bracing, metal decking, interior and exterior concrete slabs on grade, and exterior or interior load-bearing walls are complete and have achieved their design strength. Contractor is solely responsible for maintaining structural stability during erection and construction. Temporary bracing systems shall remain in place until all structural work is complete.

8. The Contractor is responsible for verifying all existing dimensions and conditions of the existing building and reporting discrepancies from the assumed conditions shown on the structural drawings to the engineer of record prior to fabrication and erection of any member.

9.) The Contractor shall coordinate the roof drainage system with the architect as required to ensure that no more than 3 1/2" of water can accumulate before entering an overflow drainage system.

Structural Engineer Site Observations:

1. The contract structural drawings & specifications represent the finished structure, and, except where specifically shown, do not indicate the method or means of construction. The Contractor shall supervise and direct the work and shall be solely responsible for all construction means, methods, procedures, techniques, and sequence.

2. The engineer shall not have control nor charge of and shall not be responsible for, construction means, methods, techniques, sequences, or procedures, for safety precautions & programs in connection with the work, for the acts or omission of the Contractor, subcontractor, or any other persons performing any of the work, or for the failure of any of them to carry out the work in accordance with the contract documents.

3. Periodic site observation by field representatives of the EOR. is solely for the purpose of determining if the work of the Contractor is proceeding in general accordance with the structural contract documents. This limited site observation should not be construed as exhaustive or continuous to check the quality or quantity of work, but rather periodic in an effort to guard the client against defects or deficiencies in the work of the Contractor.

Slab On Grade:

1. Welded wire fabric shall be supplied in sheets only. Rolls will not be permitted. (As required on construction documents.)

2. Welded wire fabric shall be supported on chairs or blocks prior to concrete placement. Mesh shall not be hooked and pulled up during concrete placement. (As required on construction documents.)

3. Welded wire fabric shall have end and edge laps of one full mesh plus 2" between cross wires. Wire all laps securely together.

4. Welded wire fabric shall conform to ASTM A185.

5. Floor finish requirements: Slab-on-grade shall be finished to overall floor flatness, overall floor levelness, local floor flatness, and local floor levelness requirements as defined by the owner. Coordinate requirements as required with G.C. prior to slab-on-grade placement. Floor finish requirements to be determined in accordance with ASTM E 1155.

Foundations:

1. Foundations for this project have been designed in accordance with requirements set forth in a geotechnical report prepared by Terracon Consultantsm Inc., July 27, 2016, Terracon Project No. 02165149. Continuous and individual footings have been designed for an assumed allowable soil bearing value of 1,500 psf, respectively. The Contractor shall refer to the Geotechnical Report for all requirements and recommendations pertinent to this project.

2. Anchor rods shall conform to ASTM F1554 Gr. 36 and shall be located by means of a template. Provide a nut above and below template to assure proper vertical alignment.

3. All foundations shall be square and level.

4. Grout shall be dry and stiff to prevent shrinkage, with a minimum compressive strength of 4000 psi. Grout below column base plates. Thoroughly compact grout beneath base plate.

Concrete and Reinforcing Steel:

1. Concrete mix designs shall meet the following requirements:

Location	Minimum Compressive Strength (psi)	Max. Aggregate Size	Max. Water/Cement Ratio	Slump (in.)	Air Entrainment (%)
Interior Slabs	4000	3/4"	0.50	4 ± 1	0
Exterior Slabs	3500	3/4"	0.48	4 ± 1	6 ± 1
Interior Foundations	3000	1"	0.50	4 ± 1	0
Perimeter Foundations	3000	1"	0.50	4 ± 1	6 ± 1

2. Fly ash shall not be used unless approved in writing by the Engineer. Fly ash, if approved, shall conform to ASTM C618 and ACI 232.2R-96. Fly ash shall be limited to types C & F & shall not exceed 15% of the total cement mass. Water-Soluble chloride ion content shall be limited to 0.15% mass of cementitious material.

3. The use of admixtures to increase the slump shall not be used unless approved in writing by the Engineer.

4. All concrete is reinforced unless specifically called out as unreinforced. Reinforce all concrete not otherwise shown with same steel as in similar sections or areas.

5. Construction joints in grade beams shall be at midspan unless noted otherwise. Reinforcing steel shall be continuous through construction joints unless noted otherwise.

6. No aluminum items shall be embedded in any concrete or placed in contact with concrete.

7. Reinforcing bars shall conform to ASTM A615 or A706, Grade 60.

8. Concrete coverage of reinforcement shall have the following clear distances unless noted otherwise on the drawings:

Cast against earth: 3"

Formed concrete exposed to earth or weather: 2"

Not exposed to earth or weather: 1" Slabs, 1 1/2" Beams and columns

9. Embedded and all reinforcing bars marked continuous shall be embedded to develop the full tensile capacity of the bar. Laps shall be Class B tension laps unless specified otherwise on the drawings. Unless shown otherwise, splice top bars near midspan and splice bottom bars over supports.

10. Supply corner bars 4'-0" long (min. 2'-0" in each direction) in outside face of wall at corners of all walls and grade beams, matching size and spacing of horizontal bars. Where there are no vertical bars in outside face of wall, supply three (3)-#4 vertical support bars for corner bars.

11. All bars are to be supported in forms and spaced with wire bar supports per ACI "Manual of Standard Practice for Detailing Concrete Structures" (latest edition). Bars shall be securely wired per the latest edition of CRSI's "Recommended Practice for Placing Reinforcing Bars." Accessories for exposed concrete shall be plastic or shall have plastic-tipped feet.

12. Concrete placed during cold weather shall conform to the requirements of ACI 306R-88. Cold weather is defined as a period when, for more than 3 successive days, the mean daily temperature drops below 40°F.

13. Concrete placed during hot weather shall conform to the requirements of ACI 305R-91. Hot weather is defined as that combination of air temperature, concrete temperature, relative humidity and wind speed that will cause a rate of evaporation of 0.2 lb/sq.ft./hr. or more as defined by Figure 2.1.5 of ACI 305R-91.

14. Do not add water to concrete during delivery, at Project Site, or during placement, unless approved by the Engineer.

15. Provide 3/4" chamfer on all exposed corners unless noted otherwise on architectural or structural construction documents.

16. All cold joints shall be roughened and cleaned unless noted otherwise.

Post-Installed Anchors:

1. Post-Installed anchors shall only be used where specified in the construction documents.

2. The Contractor shall obtain written approval from the engineer prior to installing post-installed anchors for mis-placed anchors.

3. Care shall be taken with placing post-installed anchors to avoid damaging existing reinforcement.

4. The holes shall be drilled and cleaned in accordance with the manufacturers specifications.

5. Post-installed anchors shall meet ACI Appendix D criteria. The following are acceptable post-installed anchors:

All adhesive anchoring systems referred to in these drawings shall be one of the following:
a. Hilti HIT HY 200 V3 [ESR 4868]
b. Dewalt AC200+ [ESR 4027]
c. Simpson Strong-Tie SET-3G [ESR 4057]
d. Or Approved Equivalent

All screw anchors referred to in these drawings shall be one of the following:
a. Hilti KH-EZ [ESR 3027]
b. Dewalt Power-Bolt+ [ESR 3260]
c. Simpson Strong-Tie Titen HD [ESR 1056]
d. Or Approved Equivalent

Additional components referred to in these drawings shall be one of the following:
a. Simpson HB [ESR 3096]
b. Simpson SDS Screw [ESR 2236]
c. Simpson A34/35 Clip [ESR 3096]
d. Simpson ATR Rod [ESR 2320]
e. Simpson Take-Up Device ATUD [ESR 2320]
f. Simpson Ratcheting Take-Up Device RTUD [ESR 2320]
g. Or Approved Equivalent

Structural Steel:

1. All structural steel shall conform to the following:

Structural Steel Wide Flanges:	ASTM A992
Miscellaneous Steel:	ASTM A36
Structural Tubing:	ASTM A500, Grade C (Fy = 50 ksi)
Steel Pipe:	ASTM A53, Type E or S, Grade B

2. Bolts shall be as follows:

Connection Bolts:	ASTM A325
Anchor Rods:	ASTM F1554, Grade 36
Shear Studs:	ASTM A108, Grade 1015 through 1020

3. Welding shall conform to the latest publication of applicable codes set forth by the American Welding Society. Welding electrodes shall be E70XX.

4. All exterior steel exposed to weather shall be hot-dipped galvanized &/or painted per Architect unless noted other wise.

5. All steel stairs shall be designed by the steel stair manufacturer in compliance with the governing building code to meet 100 psf design live load.

Rough Carpentry:

1. All roof, floor and wall sheathing shall be APA rated, with exterior glue. Roof sheathing shall have a panel identification index of 24/16. Floor sheathing shall have an identification index of 48/24.

2. Blocking shall be provided at all sheathing diaphragm boundaries, corners, or changes in inclination whether shown in details or not to provide a nailing surface at the panel edges.

3. Plywood sheathing shall be attached to framing members as described below unless noted otherwise on plan. Refer to shear wall schedule for required wall sheathing & nailing:

Locations	Plywood Thickness (in.)	Tongue & Groove	Nail Size	Nail Type	Min. Penetration into Support (in.)	Nail Spacing @ Panel Edges	Nail Spacing @ Interior Support	Nail Spacing @ Diaphragm Boundary	Blocked
Roof - Flat	3/4"	Yes	10d	Wire	1 1/2"	6"	12"	6"	No
Walls	7/16"	No	8d	Wire	1 3/8"	6"	12"	6"	Yes

3. All dimension lumber used in load-bearing walls, floor joists, exterior lintels, interior lintels, all bearing and jamb studs, columns and beams, shall have the following minimum design values (U.N.O.):

DIMENSIONAL		LVL		GLULAM		PSL	
Fb:	900 psi	Fb:	2600 psi	Fb:	2600 psi	Fb:	2900 psi
Fv:	180 psi	Fv:	285 psi	Fv:	750 psi	Fv:	290 psi
Fc (Perp):	625 psi	Fc (Perp):	750 psi	Fc (Perp):	740 psi	Fc (Perp):	750 psi
E:	1,600,000 psi	E:	2,000,000 psi	E:	1,900,000 psi	E:	2,000,000 psi

These values are based on allowable stresses provided in the NDS (2018) and do not include adjustment Factors.

The following species and commercial grades of dimensional lumber conform to the above minimum design values:

Douglas Fir - Larch: No. 2
Southern pine: No. 2, or approved equal
Spruce-Pine-Fir: No. 2, or approved equal

4. All dimension lumber used for non-load bearing walls shall have the following minimum design values:

Fb: 675 psi
Fv: 70 psi
Fc (perp): 425 psi
E: 1,200,000 psi

These values are based on allowable stresses provided in the NDS (2018) and do not include adjustment factors.

5. A.C.Q. lumber shall be used in all locations where lumber is exposed to weather, moisture, or is in contact with concrete.

6. For studs, sill plates or top plates damaged on one side G.C to provide one Simpson CTS218 strap at each stud, sill plate or top plate. Studs, sill plates or top plates damaged past the extends noted above are to receive on Simpson CTS218 strap each side of the damaged member. G.C to provide Simpson Stud shoe as required for allowable MEP pipe diameters.

7. Framing to be installed square and level. Out of square or level/ plumb framing shall be removed and re-built at G.C.'s / subcontractors expense.

8. Rough framing to be inspected prior to installation and framing members are to be selected in good condition; straight, un-cracked, not split, not bowed, and clear of any mold/ rot. Mold or rotten pieces shall not be used for construction. Unfit framing material to be used as blocking or bracing (stud grade lumber, refer to ANSI/ AWC ND5). G.C. to confirm with special inspector prior to construction for questionable lumber, provide Engineer with report.

9. G.C. to provide all required blocking as required. Refer to architectural and MEP drawings for required locations. Blocking to be provided for; bath accessories, grab bars, door stops, mill work, mirrors, soap and paper dispensers, vanities, etc.

10. Connections and fasteners for preservative-treated and fire-treated wood shall be hot-dipped zinc-coated galvanized steel, stainless steel, silicon bronze, or copper. Contact EOR for substations as required.

11. Shear wall anchor bolts and hold down hardware must be secured in place prior to foundation inspection.

12. All diaphragm and shear wall nailing shall utilize "common" nails with full heads unless otherwise approved.

13. Wood &/or gypsum sheathing shall be attached to framing members at shear walls as noted on plans and schedules, or in the architectural drawings.

14. Coordinate all expansion joints in wall sheathing with architectural drawings & finish provider. Joints are to occur at wall plates and solid blocking to allow for sheathing attachment on each side.

Prefabricated Wood Trusses:

1. Roof trusses shall be factory-manufactured wood trusses using steel connector plates. Trusses shall be designed for the loads shown on the construction drawings. Truss manufacturers shall provide design calculations, shop drawings and erection drawings for review by the Engineer prior to construction. Contractor shall install all blocking, load transfer assemblies, hangers, accessories, etc. as recommended by the truss manufacturer, the Truss Plate Institute, or these construction drawings.

2. Floor joists shall be factory-manufactured Open Web Series joists (Truss-Joist or approved equal) or pre-engineered I-shape series joists (Truss-Joist or approved equal). Joist manufacturers shall provide design calculations, shop drawings and erection drawings for review by the Engineer prior to construction. Joist designations are indicated on the floor framing plan. Contractor shall install all blocking, load transfer assemblies, hangers, accessories, etc. as recommended by the joist manufacturer.

3. Roof and floor trusses shall be designed by a Professional Engineer for design loads indicated on these drawings. All calculations and shop drawings shall bear the seal of a Professional Engineer registered in the state in which the trusses or joists are to be used.

4. All trusses and floor joist shall be designed for the following deflection criteria:
Total Load: L/240
Live Load: L/360

5. Truss designer shall be responsible for all connections of truss system to support structure.

Delegated Design:

Types of Work	Submittal Document	
Prefabricated Roof Trusses	Shop Drawings	Calculations
MEP Equipment Seismic Anchorage	Shop Drawings	Calculations

1. The submittals shown for this project are deferred submittals that should be sealed by a professional engineer in the state of issuance and submitted to the E.O.R. for review to the building department. Before submitting.

Special Inspector:

1. The following items require special inspection in accordance with the building code.
a. Concrete design mix
b. Placing of concrete & reinforcing steel
c. Bolts & anchors embedded in concrete
d. Concrete formwork
e. Structural steel fabrication
f. Structural steel bolting & welding
g. Post installed anchors in masonry
h. In-situ soils, excavations, filling & compaction

2. The Contractor shall request special inspection of the items listed above prior to those items becoming inaccessible & unobservable due to progression of the work.

3. The Special Inspector shall be a qualified person who shall demonstrate competence, to the satisfaction of the building official, for inspection of the particular type of construction or operation requiring special inspection.

4. The Special Inspector shall observe the work assigned for conformance with the approved design drawings and specifications.

5. The Special Inspector shall furnish inspection reports to the Building Official, the Engineer and Architect of record, and other designated persons. All discrepancies shall be brought to the immediate attention of the Contractor for correction, then if uncorrected, to the proper design authority and to the Building Official.

6. The Special Inspector shall submit a final signed report stating whether 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 governing building codes.

Earthwork:

1. The Inspector must verify that the preparation of the natural ground and the placement of engineered fill is performed in accordance with the GEOTECHNICAL engineer's recommendations as stated in the GEOTECHNICAL report.

2. The Inspector must monitor the placement of all fill to determine whether the type of material, moisture content, and degree of compaction are within the recommended limits contained in the GEOTECHNICAL report. Proceed with subsequent earthwork only after test results for previously completed work comply with recommended limits contained in the GEOTECHNICAL report.

3. All Subgrade supporting footings and slabs must be inspected immediately prior to the placement of reinforced concrete.

4. Paved and building slab areas shall be tested at Subgrade and at each compacted fill and backfill layer, at least once for every 2000 sq. ft. or less of paved or building slab areas, but in no case fewer than 3 tests.

5. Foundation wall backfill shall be tested at each compacted initial and final backfill layer, at least once for each 100 ft. or less of wall length, but no fewer than 2 tests.

6. Trench backfill shall be tested at each compacted initial and final backfill layer, at least once for each 150 ft. or less of trench length, but no fewer than 2 tests.

7. Test compaction of soils-in-place in accordance with ASTM D 1556, ASTM D 2167, ASTM D 2937, and ASTM D 6938, as applicable.

8. Test Reporting: Test results must be reported to BSE and the general contractor in writing within 24 hours after testing, via fax. Reports must contain the project name, the date of the test and the location of the test.

Concrete:

1. Strength test cylinders shall be prepared for each day's pour of each concrete mix and at a minimum frequency of every 50 cu. yd. on all concrete placed. Conform to ASTM C39.

2. Four (4) test cylinders are to be made and cured on site for the first 24 hours. Test one of the specimens at 7 days and two at 28 days. Hold the fourth specimen in reserve for later testing if needed.

3. Slump, air content and temperature tests shall be conducted at a minimum when strength specimens are made and at any other times as specified by the Engineer.

4. Perform slump tests on a representative concrete sample at the point of discharge. Perform additional tests when concrete consistency seems to have changed. The maximum allowable field slump is 5 inches. Conform to ASTM C143.

5. Perform air content tests on all concrete specified to be air-entrained. Conform to ASTM C231.

6. Perform a temperature test every hour when air temperature is 40°F and below, or when air temperature is 80°F and above. Conform to ASTM C 1064.

7. Prior to the closing of forms or the delivery of concrete to the job site, the inspector shall verify that the reinforcing steel is in conformance with the city-approved plans, specifications and shop drawings. The inspector shall confirm that the reinforcing steel is of the correct size and grade and ensure that the proper spacing, clearances, splice lengths and embedded items have been provided. All reinforcing steel shall be in place prior to the placement of concrete and be secured against displacement.

8. The Inspector shall verify that the bolt size, location and embedment length of all anchor bolts are in conformance with the city-approved plans, specifications and shop drawings.

9. Anchor rods 3/4"Ø or smaller may be floated in place following concrete placement, provided that anchor bolts are worked easily by hand into the fresh concrete to allow for full contact with the shank of the bolt. Bolts shall be placed by means of a template and shall be worked into concrete in vertical alignment.

10. Test Reporting: Test results must be reported to BSE and the General Contractor in writing within 24 hours after testing, via fax or email. Reports of compressive strength tests must contain the project name, the date of concrete placement, the location of concrete placement within the structure and the concrete mix design being used.

Structural Wood:

1. Special inspections of structural wood framing to be performed in accordance with section 1705.11.2 of the referenced IBC.

2. Periodic special inspection is required for nailing, bolting, anchoring, and other fastening of components with the wind force resisting system, including wood shear walls, wood diaphragms, drag struts, braces, shear panels, and hold-downs.

Required Special Inspections and Tests of Concrete Construction Per IBC Table 1705.3

Type	Continuous Special Inspection	Periodic Special Inspection	Referenced Standard
1. Inspect reinforcement, including prestressing tendons, and verify placement.	-	X	ACI 318 Chp. 20, 25.2, 25.3, 26.6.1.-26.6.3.
2. Reinforcing bar welding: a. Verify weldability of reinforcing bars other than ASTM A706 b. Inspect single-pass fillet welds, maximum 5/16"; and c. Inspect all other welds.	- - X	X X -	AWS D1.4 ACI 318: 26.6.4
3. Inspect anchors cast in concrete.	-	X	ACI 318: 17.8.2
4. Inspect anchors post-installed in hardened concrete members a. Adhesive anchors installed in horizontally or upwardly inclined orientations to resist sustained tension loads. b. Mechanical anchor and adhesive anchors not defined in 4.a.	X -	- X	ACI 318: 17.8.2.4 ACI 318: 17.8.2.
5. Verify use of required design mix.	-	X	ACI 318: Chp. 19, 26.4.3, 26.4.4
6. Prior to concrete placement, fabricate specimens for strength tests, perform slump and air content tests, and determine the temperature of the concrete.	X	-	ASTM C172 ASTM C31 ACI 318: 26.4, 26.12
7. Inspect concrete and shotcrete placement for proper application techniques.	X	-	ACI 318: 26.5
8. Verify maintenance of specified curing temperatures and techniques.	-	X	ACI 318: 26.5.3-26.5.5
9. Inspect prestressed concrete for: a. Application of prestressing forces; and b. Grouting of bonded prestressing tendons.	X X	- -	ACI 318: 26.10
10. Inspect erection of precast concrete members.	-	X	ACI 318: Chp. 26.8
11. Verify in-situ concrete strength, prior to stressing of tendons in post-tensioned concrete and prior to removal of shores and forms from beams and structural slabs.	-	X	ACI 318: 26.11.2
12. Inspect framework for shape, location and dimensions of the concrete member being formed.	-	X	ACI 318: 26.11.1.2(B)

a. Where applicable, see also Section 1705.12, Special inspections for seismic resistance.
b. Specific requirements for special inspection shall be included in the research report for the anchor issued by an approved source in accordance with 17.8.2 in ACI 318, or other qualification procedures. Where specific requirements are not provided, special inspection requirements shall be specified by the registered design professional and shall be approved by the building official prior to the commencement of the work.

Required Special Inspections and Tests of Soils Per IBC Table 1705.6

Type	Continuous Special Inspection	Periodic Special Inspection
1. Verify materials below shallow foundations are adequate to achieve the design bearing capacity.	-	X
2. Verify excavations are extended to proper depth and have reached proper material.	-	X
3. Perform classification and testing of compacted fill materials.	-	X
4. Verify use of proper materials, densities and lift thicknesses during placement and compaction of compacted fill.	X	-
5. Prior to placement of compacted fill, inspect subgrade and verify that site has been prepared properly.	-	X

Required Special Inspections and Tests of Cast-In-Place Deep Foundation Elements Per IBC Table 1705.8

Type	Continuous Special Inspection	Periodic Special Inspection
1. Inspect drilling operations and maintain complete and accurate records for each element.	X	-
2. Verify placement locations and plumbness, confirm element diameters, bell diameters (if applicable), lengths, embedment into bedrock (if applicable) and adequate end-bearing strata capacity. Record concrete or grout volumes.	X	-
3. For concrete elements, perform tests and additional special inspections in accordance with Section 1705.3.	-	-

Required Quality Control Inspections (GCI) & Quality Assurance Inspections (QAI) of Steel Construction Per AISC 360, Specification Chapter M & N

Type	Frequency of Inspections	Referenced Standard
1. The fabricator's QCI shall inspect the following as a minimum, as applicable: a. Shop welding, high strength bolting and details in accordance with AISC 360, Section N5. b. Shop cut and finished surfaces in accordance with AISC 360, section M2. c. Shop heating for straightening, cambering and curving in accordance with AISC 360, Section M2.1. d. Tolerances for shop fabrication in accordance withthe Code of Standard Practice, Section 6.	Per AISC Per AISC Per AISC Per AISC	AISC 360 Chp. M & N TABLE N5.4-1 TABLE N5.4-2 TABLE N5.4-3 TABLE N5.6-1 TABLE N5.6-2 TABLE N5.6-3 TABLE N6.1 Code of Standard Practice Sec. 6
2. The erector's QCI shall inspect the following as a minimum, as applicable: a. Field welding, high strength bolting and details in accordance with AISC 360, Section N5. b. Steel deck and headed steel stud anchor placement and attachment in accordance with AISC 360, Section N6. c. Field cut surfaces in accordance with AISC 360, Section M2.2. d. Field heating for straightening in accordance with AISC 360, Section M2.1. e. Tolerances for field erection in accordance with the Code of Standard Practice, Section 7.13.	Per AISC Per AISC Per AISC Per AISC Per AISC	AISC 360 Chp. M&N TABLE N5.4-1 TABLE N5.4-2 TABLE N5.4-3 TABLE N5.6-1 TABLE N5.6-2 TABLE N5.6-3 TABLE N6.1 Code of Standard Practice Sec. 6
3. QAI shall be performed by others. All required inspection and non-destructive testing, as applicable, shall be in accordance with AISC 360	Per AISC & IBC	AISC 360 Chp. M&N

Required Special Inspections of Wood Construction per IBC 1705.5, 1705.11.1 & 1705.12.2

Material/Activity	Service	Y/N	Extent
1. Verify fabrication/quality control at fabrication plant for prefabricated wood structural elements and assemblies.	Shop and Field inspection	N	Periodic
2. For high load diaphrams, verification of grade and thickness of structural panel sheathing.	Shop and Field inspection	Y	Periodic
3. For high load diaphrams, verification of nominal size of framing members at adjoining panel edges nail or staple diameter and length, number of fastener lines, and spacing between fasteners in each line and at edge margins agrees with contract documents.	Field Inspection	Y	Periodic
4. Inspection of field gluing operations of elements of lateral force resisting system.	Field Inspection	N	Periodic
5. Inspection of nailing, bolting, anchoring, and other fastening of components within the lateral force resisting system, including wood shear walls, wood diaphrams, drag struts, braces, shear panels, and holdowns (where fastener spacing is 4" on center or less)	Field Inspection	Y	Periodic

Note: Additional inspection may be required for the wind/seismic force resisting systems per IBC 1706 & 1707.

ABBREVIATIONS LIST

&	AND
@	AT
°	DEGREES
=	EQUALS
'	FEET
>	GREATER THAN
≥	GREATER THAN OR EQUAL TO
"	INCHES
<	LESS THAN
≤	LESS THAN OR EQUAL TO
-	MINUS, NEGATIVE
+	PLUS
±	PLUS OR MINUS
A.F.F	ABOVE FINISHED FLOOR
ALT.	ALTERNATE
ARCH.	ARCHITECT
BLDG.	BUILDING
BM.	BEAM
B.O.S.	BOTTOM OF STEEL
BOTT.	BOTTOM
C.J.	CONTROL/CONSTRUCTION JOINT
CL	CENTER LINE
C.M.U.	CONCRETE MASONRY UNIT
CLG.	CEILING
CLR.	CLEAR
COL.	COLUMN
CONC.	CONCRETE
CONT.	CONTINUOUS
COORD.	COORDINATE
CTR.	CENTER
DIA.	DIAMETER
DN.	DOWN
DWG.	DRAWING
E.J.	EXPANSION JOINT
E.O.R.	ENGINEER OF RECORD
EA.	EACH
EL.	ELEVATION
ELEV.	ELEVATION
ENG.	ENGINEER
EQ.	EQUAL
EQUIP.	EQUIPMENT
ETC.	ET CETERA
EXIST.	EXISTING
EXT.	EXTERIOR
F.A.	FACE
F.B.E.	FOOTING BEARING ELEVATION
F.F.E.	FINISHED FLOOR ELEVATION
F.S.	FAR SIDE
FT.	FOOT/FEET
FTG.	FOOTING/FOUNDATION
G.C.	GENERAL CONTRACTOR
GALV.	GALVANIZED
GYP.	GYPSUM
HORIZ.	HORIZONTAL
IN	INCHES
J.B.E.	JOIST BEARING ELEVATION
JT.	JOINT
KSI	KIPS PER SQUARE INCH
K	KIPS
L.F.	LINEAR FEET
LB.	POUND
LLH	LONG LEG HORIZONTAL
LLV	LONG LEG VERTICAL
M.B.M.	METAL BUILDING MANUFACTURER
M.E.P.	MECHANICAL ELECTRICAL PLUMBING
MAX.	MAXIMUM
MIN.	MINIMUM
MISC.	MISCELLANEOUS
N.A.	NOT APPLICABLE
N.S.	NEAR SIDE
N.T.S.	NOT TO SCALE
Ø	DIAMETER
P.E.M.B.	PRE-ENGINEERED METAL BUILDING
PL.	PLATE
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
R	RADIUS
REINF.	REINFORCED
REQ'D.	REQUIRED
SF	SQUARE FEET
SIM.	SIMILAR
SPA.	SPACING
SPEC.	SPECIFICATION
SQ.	SQUARE
T.O.C.	TOP OF CONCRETE
T.O.F.	TOP OF FOOTING
T.O.S.	TOP OF STEEL
T.O.W.	TOP OF WALL
THRU.	THROUGH
TYP.	TYPICAL
U.N.O.	UNLESS NOTED OTHERWISE
VERT.	VERTICAL
W.W.F.	WELDED WIRE FABRIC
WT.	WEIGHT
W/	WITH
W/O	WITHOUT

SHEET LIST

MATERIALS LEGEND

ALUMINUM
CONCRETE
EARTH
GRAVEL
GROUT
GYPSUM
INSULATION - RIGID
MASONRY - BRICK
MASONRY - CMU
PLYWOOD
STEEL
TILT / PRE-CAST

SYMBOLS LEGEND

DETAIL
01 — DRAWING NUMBER
S1.0 — SHEET NUMBER
TYP. — AREA OF DETAIL

ELEVATION
01 — DRAWING NUMBER
S1.0 — SHEET NUMBER
TYP.

SECTION
01 — DRAWING NUMBER
S1.0 — SHEET NUMBER
TYP.

W16x26@12in¾ — BEAM DESIGNATION
CAMBER OF BEAM IN INCHES
SHEAR STUD COUNT
BEAM TYPE & SIZE

HSS 4x4x5/16 — COLUMN DESIGNATION
COLUMN SIZE
COLUMN TYPE

F1 — FOOTING DESIGNATION
F.B.E.=696.50 — FOOTING MARK
BEARING ELEVATION

P1 — PIER DESIGNATION
TOP=696.50 — FOOTING MARK
TOP OF PIER ELEVATION

8.8 — COLUMN GRID
GRID DESIGNATION

MOMENT CONNECTION

N — NORTH ARROW

1 — REVISION DESIGNATION

<###'-##"> — JOIST BEARING ELEVATION

SLAB THICKNESS TRANSITION

PARAGON STAR RR-CONCESSIONS

1401 NW River Rd
Lee's Summit, MO 64081

Project No.: 19050.04b
Date: 12.08.2025
Issued For: PERMIT

REVISIONS

No.	Date	Description

PROJECT TEAM

ARCHITECT	FINKLE+WILLIAMS ARCHITECTURE
CIVIL	GBA
LANDSCAPE	LAND3 STUDIO
FOUNDATIONS	BSE ENGINEERS
STRUCTURAL	BSE ENGINEERS
PLUMBING	HENDERSON ENGINEERS
MECHANICAL	HENDERSON ENGINEERS
ELECTRICAL	HENDERSON ENGINEERS
FIRE PROTECTION	HENDERSON ENGINEERS
CONTRACTOR	FOGEL-ANDERSON

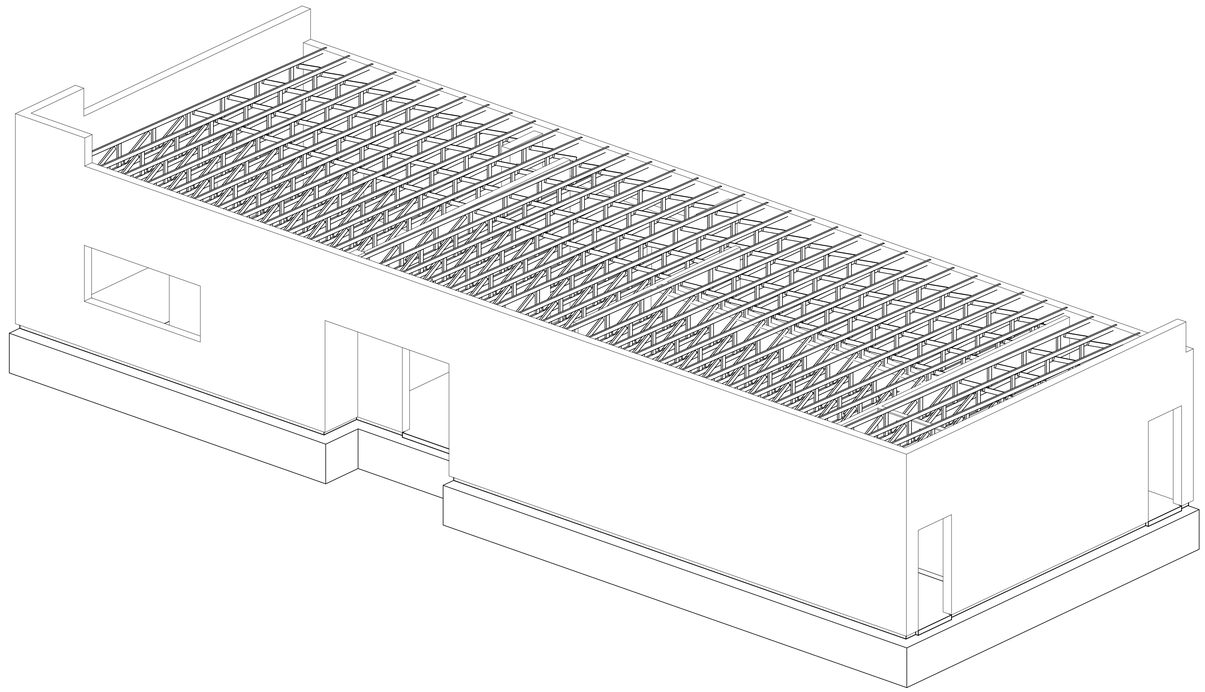
REGISTRATION

STATE OF MISSOURI
TRAVIS A. JENNINGS
NUMBER PE-2023011045
12/08/2025

BSE STRUCTURAL ENGINEERS
11320 West 79th Street
Lenexa, Kansas 66214
Phone 913.492.7400
www.BSEstructural.com
Project Number 25-290

SHEET TITLE

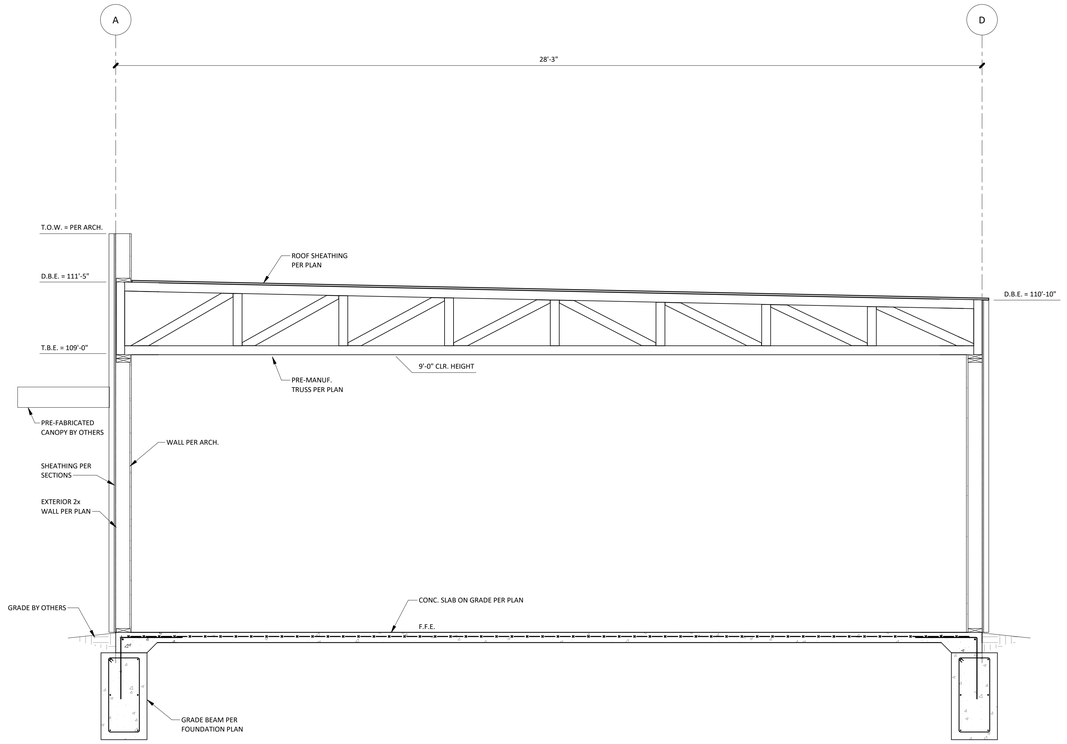
GEN



NOTES:

1.) ISOMETRIC VIEWS ARE SHOWN FOR SCHEMATIC PURPOSES ONLY. ACTUAL CONSTRUCTION TO MATCH CONSTRUCTION DOCUMENTS. REFERENCE ARCHITECTURAL, MECHANICAL, CIVIL, & STRUCTURAL DOCUMENTS.

ISOMETRIC | 01
S0.1



NOTES:

1.) BUILDING SECTIONS ARE SHOWN FOR SCHEMATIC PURPOSES ONLY. ACTUAL CONSTRUCTION TO MATCH CONSTRUCTION DOCUMENTS. REFERENCE ARCHITECTURAL, MECHANICAL, CIVIL, & STRUCTURAL DOCUMENTS.

BUILDING SECTION | 02
1/2" = 1'-0" | S0.1

12/8/2025 10:33:08 AM | PARAGON STAR RR-CONCESSIONS

PARAGON STAR
RR-CONCESSIONS

1401 NW River Rd
Lee's Summit, MO 64081

Project No.: 19050.04b
Date: 12.08.2025
Issued For: PERMIT

REVISIONS

No.	Date	Description

REGISTRATION

STATE OF MISSOURI
TRAVIS A. JENNINGS
NUMBER PE-2023011045
12/08/2025
PROFESSIONAL ENGINEER

PROJECT TEAM

ARCHITECT	FINKLE+WILLIAMS ARCHITECTURE
CIVIL	GBA
LANDSCAPE	LAND3 STUDIO
FOUNDATIONS	BSE ENGINEERS
STRUCTURAL	BSE ENGINEERS
PLUMBING	HENDERSON ENGINEERS
MECHANICAL	HENDERSON ENGINEERS
ELECTRICAL	HENDERSON ENGINEERS
FIRE PROTECTION	HENDERSON ENGINEERS
CONTRACTOR	FOGEL-ANDERSON

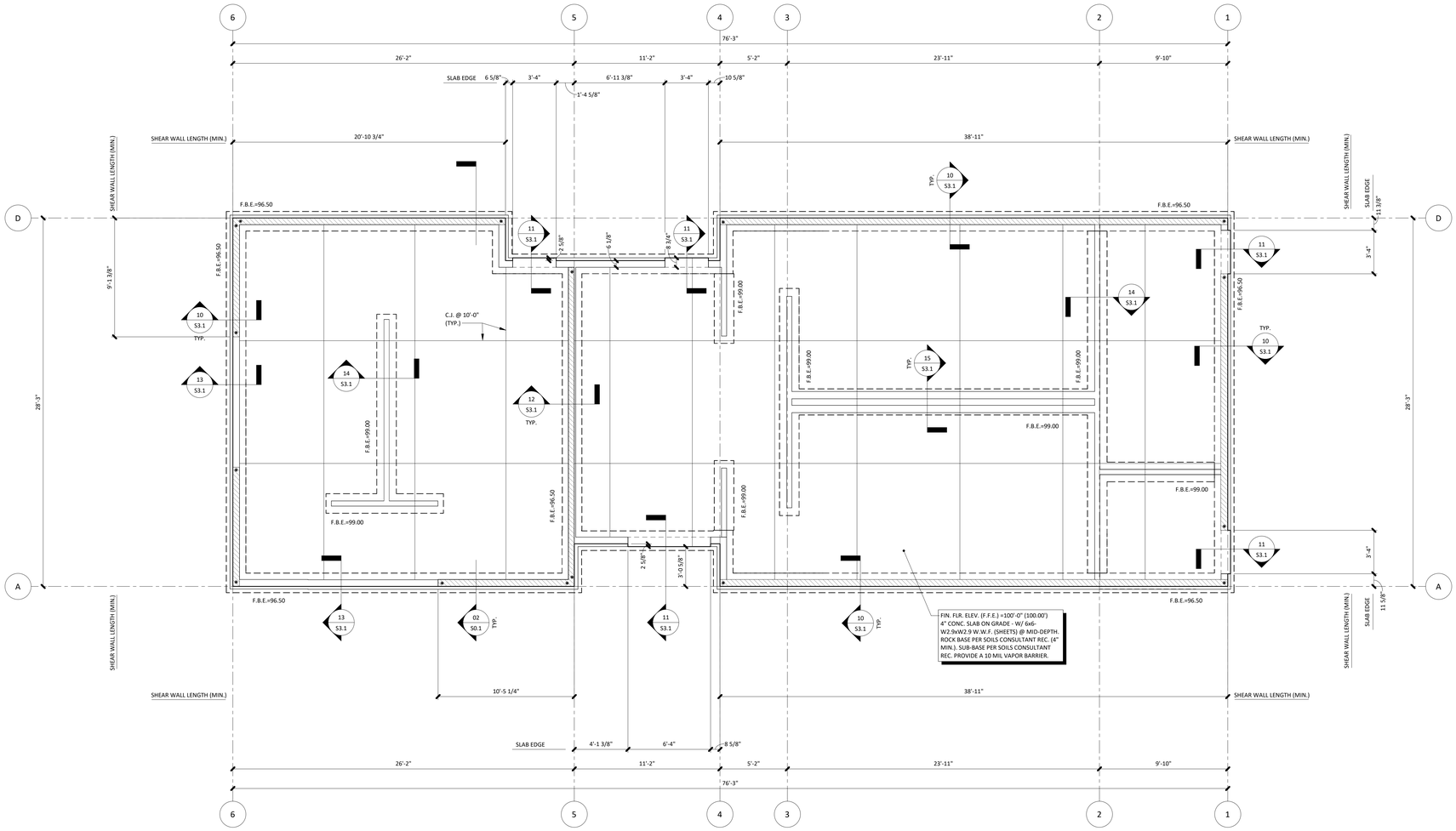
BSE STRUCTURAL ENGINEERS
11320 West 79th Street
Lenexa, Kansas 66214
Phone 913.492.7400
www.BSEstructural.com
Project Number 25-290

SHEET TITLE

ISOMETRIC

SHEET NUMBER

S0.1



NOTES:

1.) SEE DRAWING S0.0 FOR GENERAL NOTES, SYMBOLS LEGEND, MATERIALS LEGEND, & ABBREVIATION LIST.

2.) REFERENCE DRAWING S3.1 FOR TYPICAL FOUNDATION DETAILS INCLUDING ANCHOR ROD DETAILS, FOOTING STEP DETAILS, CONTROL JOINT & CONSTRUCTION JOINT DETAILS, REINF. LAP LENGTH TABLE, ETC.

3.) SEE DRAWING S0.1 FOR ISOMETRIC VIEW & FULL BUILDING SECTIONS.

4.) REFER TO GEOTECHNICAL REPORT FOR BEHIND WALL DRAINAGE RECOMMENDATIONS. COORD. W/ CIVIL AS REQ'D. REFER TO ARCHITECTURAL DRAWINGS FOR FOUNDATION WATERPROOFING & INSULATION REQUIREMENTS.

5.) ● INDICATES HOLD DOWN LOCATION - REFER TO TYP. DETAILS.

FOUNDATION PLAN 01
1/4" = 1'-0" S1.1

N

12/8/2025 10:33:09 AM | PARAGON STAR RR-CONCESSIONS

PARAGON STAR
RR-CONCESSIONS

1401 NW River Rd
Lee's Summit, MO 64081

Project No.: 19050.04b
Date: 12.08.2025
Issued For: PERMIT

REVISIONS

No.	Date	Description

REGISTRATION

STATE OF MISSOURI
TRAVIS A. JENNINGS
NUMBER PE-2023011045
12/08/2025
PROFESSIONAL ENGINEER

PROJECT TEAM

ARCHITECT	FINKLE+WILLIAMS ARCHITECTURE
CIVIL	GBA
LANDSCAPE	LAND3 STUDIO
FOUNDATIONS	BSE ENGINEERS
STRUCTURAL	BSE ENGINEERS
PLUMBING	HENDERSON ENGINEERS
MECHANICAL	HENDERSON ENGINEERS
ELECTRICAL	HENDERSON ENGINEERS
FIRE PROTECTION	HENDERSON ENGINEERS
CONTRACTOR	FOGEL-ANDERSON

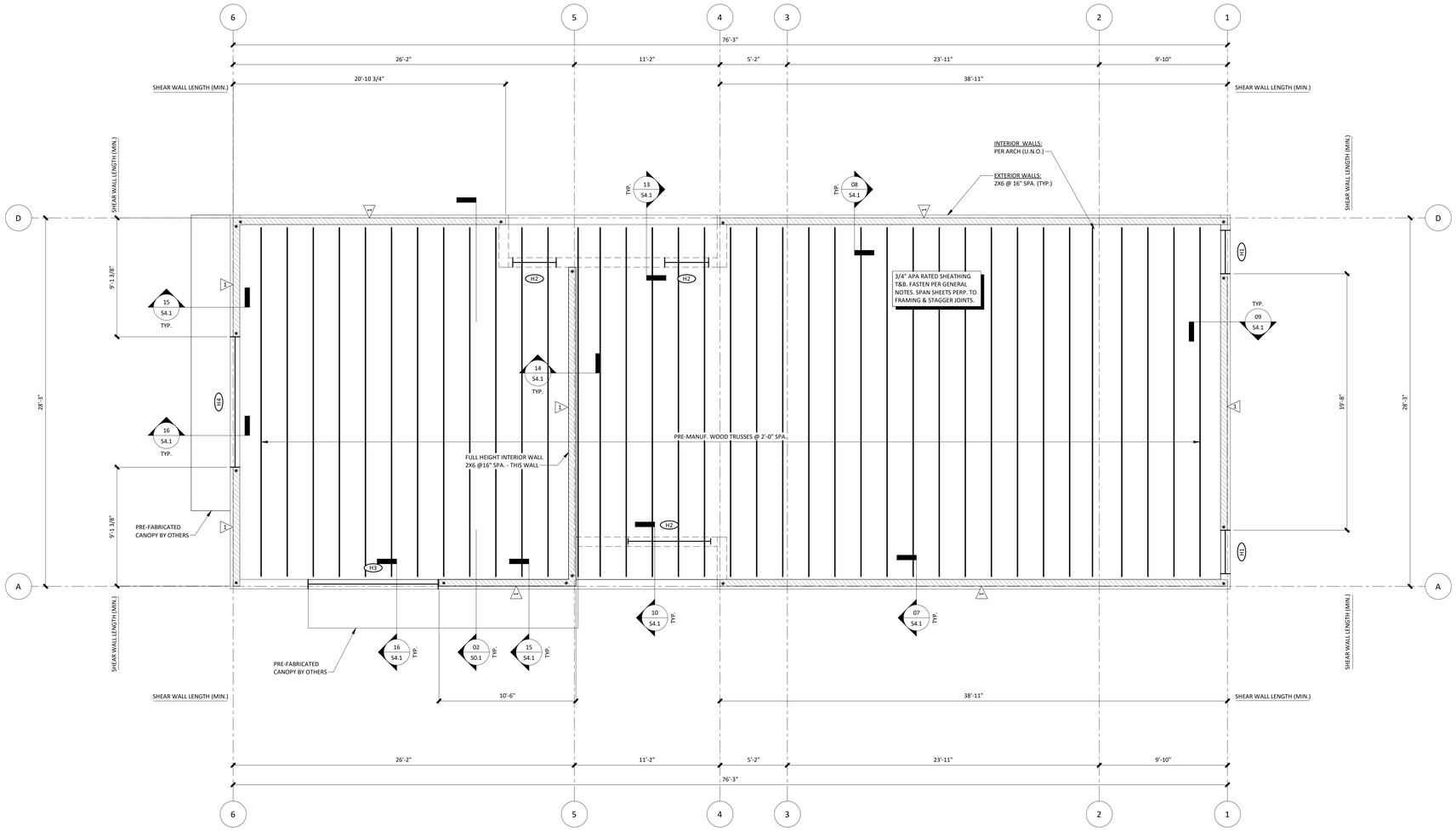
BSE STRUCTURAL ENGINEERS
11320 West 79th Street
Lenexa, Kansas 66214
Phone 913.492.7400
www.BSEstructural.com
Project Number 25-290

SHEET TITLE

FOUNDATION PLAN

SHEET NUMBER

S1.1

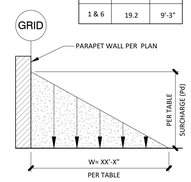


SHEAR WALL SCHEDULE					
SHEAR WALL MARK	SHEATHING MATERIAL	PANEL EDGE BLOCKING	FASTENING	HOLD DOWN AT FOUNDATION	SILL PLATE ANCHORS
1	7/16" APA RATED SHEATHING (1) SIDE	BLOCKED	8d NAILS @ 6" SPA. PERIMETER & 12" SPA. FIELD	(1) SIMPSON HDU2-SDS2.5 W/ 5/8"Ø THREADED ROD - EMBED 10" MIN. W/ (2)2x POST	PER DETAILS

HEADER/BEAM SCHEDULE			
MARK	SIZE	BEARING STUDS	KING STUDS
H1	(3) 2x6 W/ 1/2" PLYWOOD SPACERS	(2) 2x6	(1)2x6
H2	(3) 2x8 W/ 1/2" PLYWOOD SPACERS	(2) 2x6	(1)2x6
H3	(1) 5 1/4" x 9 1/2" 2.0E PSL	(2) 2x6	(1)2x6
H4	(3) 2x10 W/ 1/2" PLYWOOD SPACERS	(2) 2x6	(1)2x6

NOTE:
1.) UPSET HEADERS AS REQ'D. & PROVIDE SIMPSON HANGER
2.) BEARING STUDS REQUIRED AT EACH END OF HEADER PER HEADER SCHEDULE

DRIFT LOADING		
GRID	Pd(PSF)	W(FT)
A	19.2	4'-10"
1 & 6	19.2	9'-3"



*SNOW DRIFT LOADS SHALL BE SUPERIMPOSED ONTO THE FLAT ROOF SNOW LOADS

SNOW DRIFT DIAGRAM

3/8" = 1'-0"

NOTES:

1.) SEE DRAWING S0.0 FOR GENERAL NOTES, SYMBOLS LEGEND, MATERIALS LEGEND, & ABBREVIATION LIST.

2.) REFERENCE DRAWING S4.1 FOR TYPICAL FRAMING DETAILS.

3.) SEE DRAWING S0.1 FOR ISOMETRIC VIEW & FULL BUILDING SECTIONS.

4.) REFERENCE ARCHITECTURAL DRAWINGS TO VERIFY SIZE & LOCATIONS OF ALL ROOF & WALL OPENINGS.

5.) (B) = DENOTES HEADER REFER TO SCHEDULE & TYP. DETAILS.

6.) (S) = DENOTES SHEAR WALL SCHEDULE REFER TO SCHEDULE & TYP. DETAILS -SEE FOUNDATION PLAN HOLD DOWNS FOR EXTENTS OF SHEAR WALL BOUNDARIES.

7.) ★ INDICATES HOLD DOWN LOCATION - REFER TO TYP. DETAILS. IF NO HOLD DOWNS PRESENT, REFER TO PLAN SIMENSIONS FOR SHEAR WALL BOUNDARY LOCATIONS.

2ND FLOOR FRAMING PLAN | 01

1/4" = 1'-0" S2.2

N

12/8/2025 10:33:09 AM | PARAGON STAR RR-CONCESSIONS

PARAGON STAR
RR-CONCESSIONS

1401 NW River Rd
Lee's Summit, MO 64081

Project No.:	19050.04b
Date:	12.08.2025
Issued For:	PERMIT

REVISIONS

No.	Date	Description

REGISTRATION

STATE OF MISSOURI
TRAVIS A. JENNINGS
NUMBER PE-2023011045
12/08/2025
PROFESSIONAL ENGINEER

PROJECT TEAM

ARCHITECT	FINKLE+WILLIAMS ARCHITECTURE
CIVIL	GBA
LANDSCAPE	LAND3 STUDIO
FOUNDATIONS	BSE ENGINEERS
STRUCTURAL	BSE ENGINEERS
PLUMBING	HENDERSON ENGINEERS
MECHANICAL	HENDERSON ENGINEERS
ELECTRICAL	HENDERSON ENGINEERS
FIRE PROTECTION	HENDERSON ENGINEERS
CONTRACTOR	FOGEL-ANDERSON

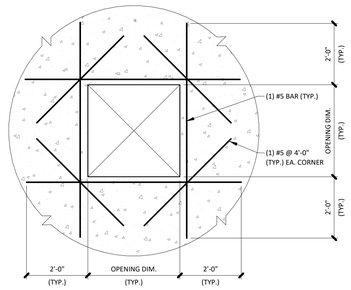
BSE STRUCTURAL ENGINEERS
11320 West 79th Street
Lenexa, Kansas 66214
Phone 913.492.7400
www.BSEstructural.com
Project Number 25-290

SHEET TITLE

ROOF FRAMING PLAN

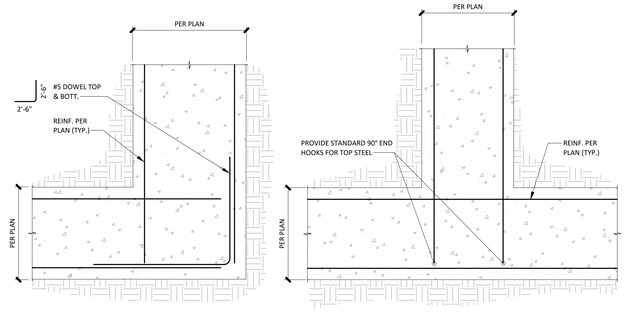
SHEET NUMBER

S2.2



TYP. SLAB OPENING DETAIL | 01

1/2" = 1'-0" | S3.1

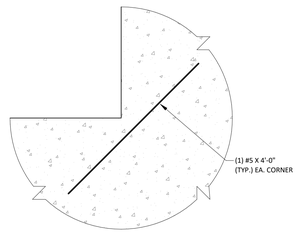


NOTE:
GRADE BEAMS SHALL BE POURED MONOLITHICALLY AROUND CORNERS.

NOTE:
GRADE BEAMS SHALL BE POURED MONOLITHICALLY AT INTERSECTIONS.

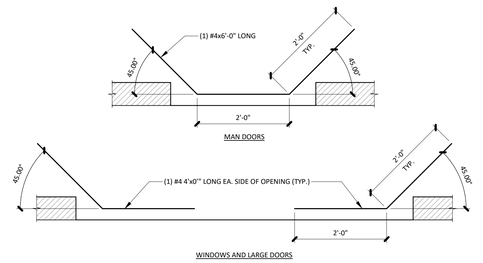
TYP. GRADE BEAM DETAILS | 02

3/4" = 1'-0" | S3.1



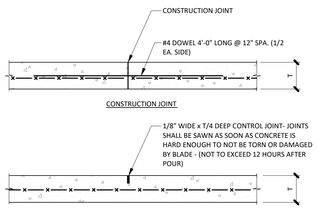
TYP. RE-ENTRANT CORNER REINF. DETAIL | 03

3/4" = 1'-0" | S3.1



TYP. SLAB REINF. @ DOOR DETAIL | 04

3/4" = 1'-0" | S3.1



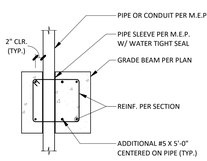
TYP. CONTROL & CONST. JOINT DETAIL | 05

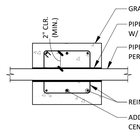
3/4" = 1'-0" | S3.1

STANDARD HOOK TABLE	
BAR SIZE	HOOK
#4	8 in.
#5	10 in.
#6	12 in.
#7	14 in.
#8	16 in.

STANDARD 90° HOOK TABLE | 06

12" = 1'-0" | S3.1

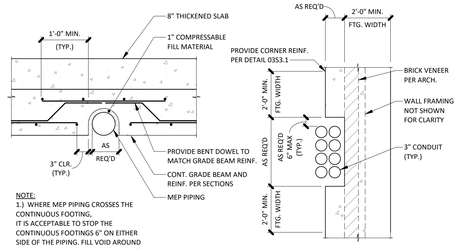




NOTE:

CENTER BAR IN GRADE BEAM ALLOWED TO BE MOVED TO PROVIDE 2" CLEAR BY PIPING. ADD #6 ON OPPOSITE SIDE OF PIPING EXTENDING 3'-0" EACH SIDE OF PIPE.

COORDINATE LOCATION OF PIPING WITH M.E.P. ACCEPTABLE TO TURN PIPE IN THE MIDDLE THIRD OF GRADE BEAM AND EXIT THROUGH THE SIDE OF THE GRADE BEAM. ADDITIONAL #6 BAR SHOWN ONLY REQUIRED WHEN PIPING PASSES THROUGH TOP OR BOTTOM OF GRADE BEAM.



NOTE:
1.) WHERE MEP PIPING CROSSES THE CONTINUOUS FOOTING, IT IS ACCEPTABLE TO STOP THE CONTINUOUS FOOTINGS 6" ON EITHER SIDE OF THE PIPING. FILL VOID AROUND PIPING AS REQUIRED AND TOP WITH 8" THICKENED SLAB AS SHOWN

TYPICAL GRADE BEAM PENETRATION DETAILS | 07

3/4" = 1'-0" | S3.1

TENSION LAP SPLICE LENGTHS (in) GRADE 60 UNCOATED BARS f'c=4000 psi					
BAR SIZE	LAP CLASS	TOP BARS		OTHER BARS	
		CASE 1	CASE 2	CASE 1	CASE 2
#3	A	19	28	15	22
	B	24	36	19	28
#4	A	25	37	19	29
	B	32	48	25	37
#5	A	31	47	24	36
	B	40	60	31	47
#6	A	37	56	29	43
	B	48	72	37	56
#7	A	54	81	42	63
	B	70	106	54	81
#8	A	62	93	48	72
	B	80	121	62	93
#9	A	70	105	54	81
	B	91	136	70	105
#10	A	79	118	61	91
	B	102	153	79	118
#11	A	87	131	67	101
	B	113	170	87	131

NOTES:

1. TABULATED VALUES ARE BASED ON GRADE 60 REINFORCING BARS AND NORMAL-WEIGHT CONCRETE.

2. TENSION DEVELOPMENT LENGTHS AND TENSION LAP SPLICE LENGTHS ARE BASED ON ACI 318, SECTIONS 12.2.2 AND 12.15, RESPECTIVELY.

3. TABULATED VALUES FOR BEAMS OR COLUMNS ARE BASED ON TRANSVERSE REINFORCEMENT AND CONCRETE COVER MEETING MINIMUM CODE REQUIREMENTS. LENGTHS ARE IN INCHES.

4. CASES 1 AND 2, WHICH DEPEND ON THE TYPE OF STRUCTURAL ELEMENT, CONCRETE COVER, AND THE CENTER-TO-CENTER SPACING OF THE BARS ARE DEFINED AS:

BEAMS OR COLUMNS:
CASE 1: COVER AT LEAST (1) BAR DIAMETER AND C.-C. SPACING AT LEAST (2) BAR DIAMETERS

CASE 2: COVER LESS THAN (1) BAR DIAMETER AND C.-C. SPACING LESS THAN (2) BAR DIAMETERS

ALL OTHERS:
CASE 1: COVER AT LEAST (1) BAR DIAMETER AND C.-C. SPACING AT LEAST (3) BAR DIAMETERS

CASE 2: COVER LESS THAN (1) BAR DIAMETER AND C.-C. SPACING LESS THAN (3) BAR DIAMETERS

5. LAP CLASS A VALUES ARE THE REQUIRED TENSION DEVELOPMENT LENGTHS, ld; LAP SPLICE LENGTHS ARE MULTIPLES OF TENSION DEVELOPMENT LENGTHS; CLASS A - 1.0ld AND CLASS B = 1.3ld (ACI 318, SECTION 12.15.1)

6. LAP CLASS B SHALL BE USED FOR ALL CASES UNLESS APPROVED BY E.O.R

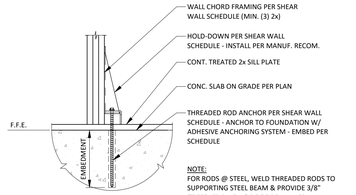
7. TOP BARS ARE HORIZONTAL BARS WITH MORE THAN 12 INCHES OF CONCRETE CAST BELOW THE BARS.

8.) LENGTHS SHOWN ARE FOR UNCOATED BARS. LENGTHS SHOWN SHALL BE MULTIPLIED BY 1.2 FOR ALL EXPOXY COATED BARS (ACI 318 SECTION 12.2.4)

9.) WHEN BARS OF DIFFERENT SIZES ARE LAP SPLICED, THE SPLICE LENGTH FOR THE LARGER BAR SHALL BE USED.

LAP SPLICE LENGTHS f'c=4000 psi | 08

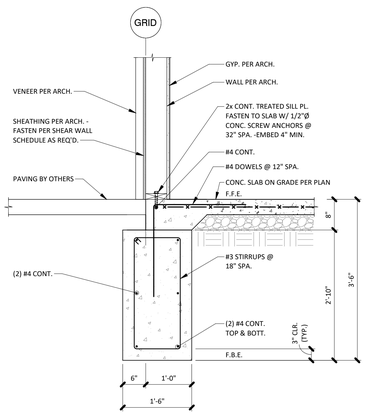
1/2" = 1'-0" | S3.1



NOTE:
FOR RODS @ STEEL, WELD THREADED RODS TO SUPPORTING STEEL BEAM & PROVIDE 3/8" STIFFENER PL. EA. SIDE OF BEAM WEB.

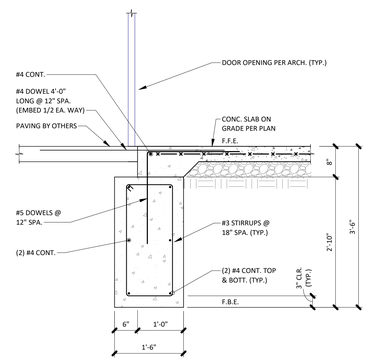
TYP. HOLD-DOWN DETAIL | 09

3/4" = 1'-0" | S3.1



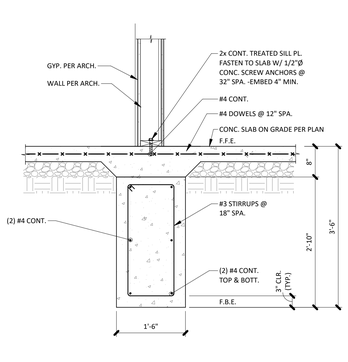
SECTION | 10

3/4" = 1'-0" | S3.1



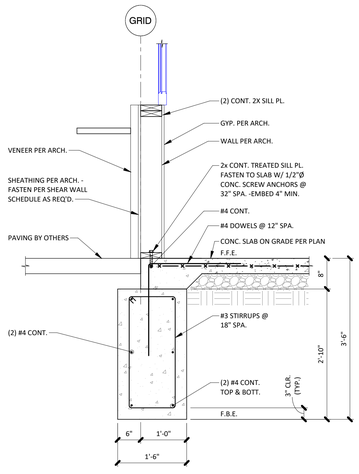
SECTION | 11

3/4" = 1'-0" | S3.1



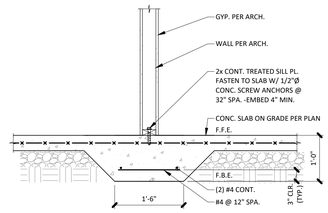
SECTION | 12

3/4" = 1'-0" | S3.1



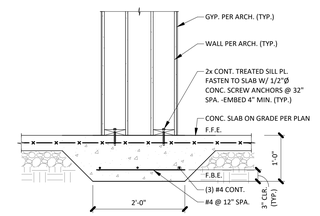
SECTION | 13

3/4" = 1'-0" | S3.1



SECTION | 14

3/4" = 1'-0" | S3.1



SECTION | 15

3/4" = 1'-0" | S3.1

PARAGON STAR RR-CONCESSIONS

1401 NW River Rd
Lee's Summit, MO 64081

Project No.:	19050.04b
Date:	12.08.2025
Issued For:	PERMIT

REVISIONS

No.	Date	Description

REGISTRATION

STATE OF MISSOURI
TRAVIS A. JENNINGS
NUMBER PE-2023011045
12/08/2025
PROFESSIONAL ENGINEER

PROJECT TEAM

ARCHITECT	FINKLE+WILLIAMS ARCHITECTURE
CIVIL	GBA
LANDSCAPE	LAND3 STUDIO
FOUNDATIONS	BSE ENGINEERS
STRUCTURAL	BSE ENGINEERS
PLUMBING	HENDERSON ENGINEERS
MECHANICAL	HENDERSON ENGINEERS
ELECTRICAL	HENDERSON ENGINEERS
FIRE PROTECTION	HENDERSON ENGINEERS
CONTRACTOR	FOGEL-ANDERSON

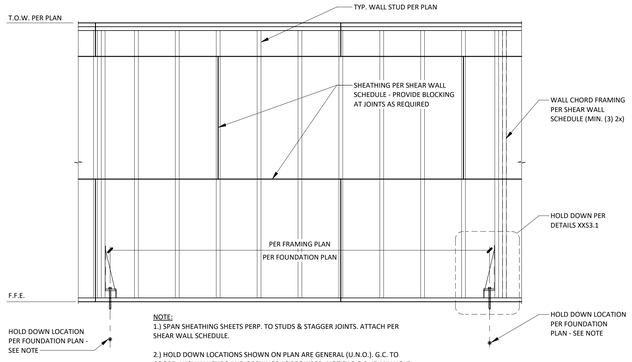
BSE STRUCTURAL ENGINEERS
11320 West 79th Street
Lenexa, Kansas 66214
Phone 913.492.7400
www.BSEstructural.com
Project Number 25-290

SHEET TITLE

TYPICAL FOUNDATION DETAILS

SHEET NUMBER

S3.1

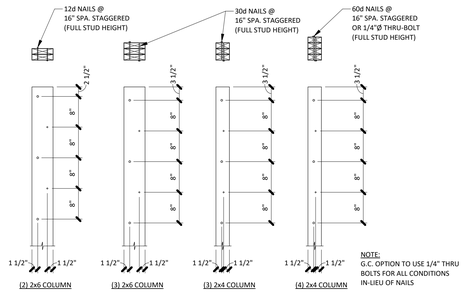


NOTE:
1.) SPAN SHEATHING SHEETS PERP. TO STUDS & STAGGER JOINTS. ATTACH PER SHEAR WALL SCHEDULE.

2.) HOLD DOWN LOCATIONS SHOWN ON PLAN ARE GENERAL (U.N.O.). G.C. TO COORD. W/ WALL ENDS AND OPENINGS AS REQUIRED. NOTIFY E.O.R. IF ANY HOLD DOWNS ARE TO BE MOVED MORE THAN 1'-6" FROM LOCATIONS SHOWN.

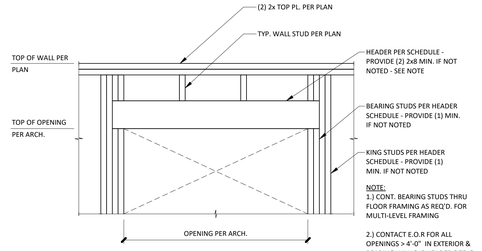
3.) 3.) IF REQUIRED NAIL SPACING IS 3" OR LESS, PROVIDE (2) 2X (OR (1) 3X) STUD AT SPECIFIED SPACING. STAGGER NAILING AT ADJOINING PANELS.

TYP. SHEAR WALL ELEVATION DETAIL | 01
1/2" = 1'-0" | S4.1



NOTE:
G.C. OPTION TO USE 1/4" THRU BOLTS FOR ALL CONDITIONS IN-LIEU OF NAILS

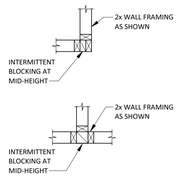
TYP. BUILT UP COLUMN DETAIL | 02
3/4" = 1'-0" | S4.1



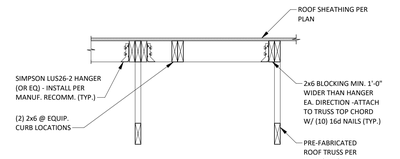
NOTE:
1.) CONT. BEARING STUDS THRU FLOOR FRAMING AS REQ'D. FOR MULTI-LEVEL FRAMING

2.) CONTACT E.O.R FOR ALL OPENINGS > 4'-0" IN EXTERIOR & BEARING WALLS IF HEADER SIZE IS NOT SHOWN.

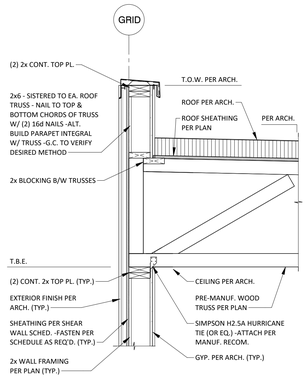
TYP. HEADER/WALL OPENING DETAIL | 03
3/4" = 1'-0" | S4.1



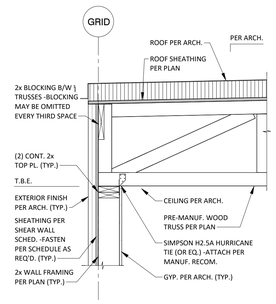
TYP. STUD WALL INTERSECT DETAIL | 04
3/4" = 1'-0" | S4.1



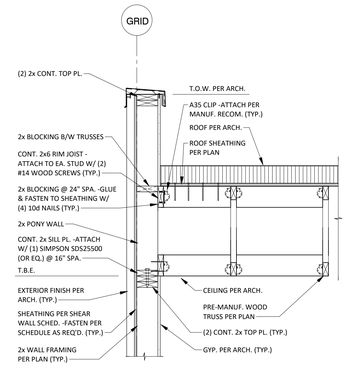
ROOF OPENING SUPPORT DETAIL | 05
3/4" = 1'-0" | S4.1



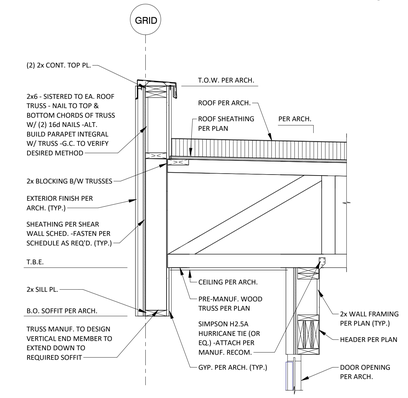
SECTION | 07
3/4" = 1'-0" | S4.1



SECTION | 08
3/4" = 1'-0" | S4.1



SECTION | 09
3/4" = 1'-0" | S4.1



SECTION | 10
3/4" = 1'-0" | S4.1

FASTENING SCHEDULE PER IBC 2015, TABLE 2304.10.1		
DESCRIPTION OF BUILDING ELEMENTS	NUMBER AND TYPE OF FASTENER	SPACING AND LOCATION
BRIDGING OR BLOCKING BETWEEN DIMENSIONAL JOISTS OR RAFTERS	2-8d COMMON (2 1/2" x 0.131"); OR 2-10d BOX (3"x0.128"); OR 2-3" x 0.131" NAILS	EACH END, TOENAIL
	2-16d COMMON (3 1/2" x 0.162"); OR 3-3" x 0.131" NAILS	END NAIL
FLAT BLOCKING TO TRUSS AND WEB FILLER	16d COMMON (3 1/2" x 0.162") @ 6" O.C. 3" x 0.131" NAILS @ 6" O.C.	FACE NAIL
RAFTER OR ROOF TRUSS TO TOP PLATE (SEE SECTION IBC 2015, 2308.7.5, TABLE 2308.7.5)	3-10d COMMON (3" x 0.148"); OR 3-16d BOX (3 1/2" x 0.135"); OR 4-10d BOX (3" x 0.128"); OR 4-3" x 0.131" NAILS	TOENAIL
BRIDGING, BLOCKING, & MEMBER - TO - MEMBER FOR PRE-FABRICATED JOIST, RAFTER OR TRUSS	PER FABRICATOR	PER FABRICATOR
STUD TO STUD AND ABUTTING STUDS AT INTERSECTING WALL CORNERS	16d COMMON (3 1/2" x 0.162"); OR	16" O.C. FACE NAIL
	16d BOX (3 1/2" x 0.135"); OR	12" O.C. FACE NAIL
	3" x 0.131" NAILS	12" O.C. FACE NAIL
BUILT-UP HEADER (2" TO 2" HEADER)	16d COMMON (3 1/2" x 0.162"); OR	16" O.C. EA. EDGE, FACE NAIL
	16d BOX (3 1/2" x 0.135")	12" O.C. EA. EDGE, FACE NAIL
BUILT-UP GIRDERS AND BEAMS, 2" LUMBER LAYERS	20d COMMON (4" x 0.192")	32" O.C. FACE NAIL AT TOP AND BOTTOM STAGGERED ON OPPOSITE SIDES
	10d BOX (3" x 0.128"); OR 3" x 0.131" NAILS	24" O.C. FACE NAIL AT TOP AND BOTTOM STAGGERED ON OPPOSITE SIDES
	AND: 2-20d COMMON (4" x 0.192"); OR 3-10d BOX (3" x 0.128"); OR 3-3" x 0.131" NAILS	ENDS AND AT EACH SPLICE, FACE NAIL
CONTINUOUS HEADER TO STUD	4-8d COMMON (2 1/2" x 0.131"); OR 4-10d BOX (3" x 0.128")	TOENAIL
HEADER TO KING STUD	4-8d COMMON (2 1/2" x 0.131"); OR 4-10d BOX (3" x 0.128")	TOENAIL
BOTTOM PLATE TO JOIST, RIM JOISTS, BAND JOIST OR BLOCKING (NOT AT SHEAR WALL PANELS)	16d COMMON (3 1/2" x 0.162")' OR	16" O.C. FACE NAIL
	16d BOX (3 1/2" x 0.135"); OR 3" x 0.131" NAILS	12" O.C. FACE NAIL
STUD TO TOP OR BOTTOM PLATE	2-16d COMMON (3 1/2" x 0.162"); OR 3-10d BOX (3" x 0.128"); OR 3-3" x 0.131" NAILS	END NAIL
TOP PLATE TO TOP PLATE	16d COMMON (3 1/2" x 0.162")	16" O.C. FACE NAIL
	10d BOX (3" x 0.128"); OR 3" x 0.131" NAILS	12" O.C. FACE NAIL
TOP PLATES, LAPS AT CORNERS AND INTERSECTIONS	2-16d COMMON (3 1/2" x 0.162"); OR 3-10d BOX (3" x 0.128"); OR 3-3" x 0.131" NAILS	FACE NAIL
TOP PLATE SPLICE	PER TYP. DETAILS	FACE NAIL
RIM JOISTS, BAND JOISTS, OR BLOCKING TO TOP PLATE, SILL OR OTHER FRAMING BELOW	8d COMMON (2 1/2" x 0.131"); OR 10d BOX (3" x 0.128"); OR 3" x 0.131" NAILS	6" O.C., TOENAIL
LEDGER STRIP SUPPORTING JOISTS OR RAFTERS	3-16" COMMON (3 1/2" x 0.162"); OR 4-10d BOX (3" x 0.128"); OR 4-3" x 0.131" NAILS	EACH STUD, FACE NAIL

NOTES:
1.) CONNECTIONS SHOWN ARE THE MINIMUM REQUIREMENTS FOR THE CONDITIONS LISTED. THESE CONNECTIONS DO NOT SUPERCEDE THE CONNECTIONS SHOWN WITHIN THE PROJECT DETAILS.

2.) CONTACT THE ENGINEER OF RECORD REGARDING CONNECTIONS NOT SHOWN WITHIN THIS SCHEDULE OR THE PROJECT DETAILS.

3.) ALL ALTERNATE CONNECTIONS ARE TO BE REVIEWED & APPROVED BY THE ENGINEER OF RECORD PRIOR TO CONSTRUCTION.

4.) CONNECTIONS SHOWN ARE THE MOST COMMON. REFER TO IBC 2015, TABLE 2304.10.1 FOR ADDITIONAL CONNECTION INFORMATION.

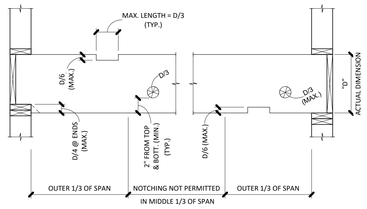
TYP. FASTENING SCHEDULE | 06
3/4" = 1'-0" | S4.1

MAX JOIST NOTCH SIZES			
JOIST SIZE	MAX. HOLE	MAX. NOTCH DEPTH	MAX. END NOTCH
2x4	NONE	NONE	NONE
2x6	1 1/2"	7/8"	1 3/8"
2x8	2 3/8"	1 1/4"	1 7/8"
2x10	3"	1 1 /2"	2 3/8"
2x12	3 3/4"	1 7/8"	2 7/8"

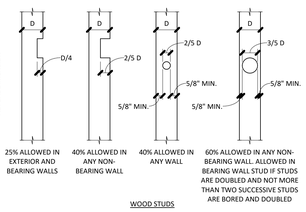
NOTE:
1.) BORED HOLES & NOTCHES FOR JOIST & STUDS SHALL NOT OCCUR AT THE SAME SECTION OF THE MEMBER.

2.) LARGER BORED HOLES & NOTCHES FOR JOIST & STUDS SHALL NOT BE USED UNLESS APPROVED BY THE E.O.R

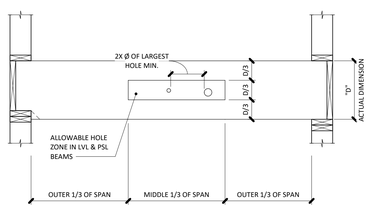
3.) BUILT UP STUD PACKS CONSISTING OF MORE THAN (2) STUDS SHALL NOT BE BORED OR NOTCHED UNLESS APPROVED BY THE E.O.R.



WOOD FLOOR JOISTS



WOOD STUDS



LVL BEAMS

LVL & PSL HOLE SIZES	
BEAM DEPTH	MAX. ROUND HOLE SIZE
4 3/8"	1"
5 1/2"	1 3/4"
7 1/4"-20"	2"

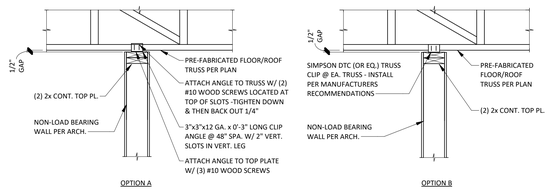
NOTE:
1.) HOLES ONLY ALLOWED FOR HEADERS AND BEAMS WITH UNIFORM LOADS.

2.) ONLY ROUND HOLES ARE PERMITTED.

3.) HOLED ARE NOT PERMITTED IN CANTILEVER SPANS.

4.) NOTCHES ARE NOT PERMITTED.

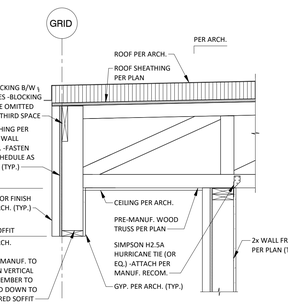
ALLOWABLE WOOD NOTCHES & PENETRATIONS | 12
3/4" = 1'-0" | S4.1



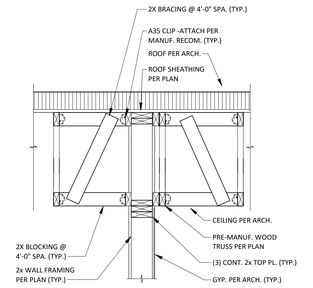
OPTION A

OPTION B

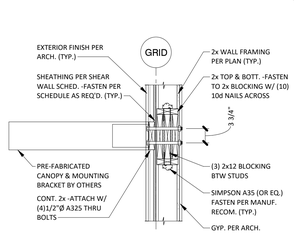
TYP. PARTITION SLIP CONNECTION | 11
3/4" = 1'-0" | S4.1



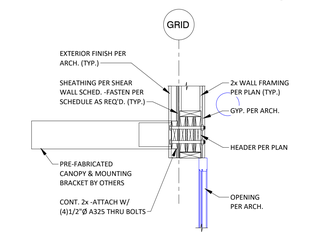
SECTION | 13
3/4" = 1'-0" | S4.1



SECTION | 14
3/4" = 1'-0" | S4.1



SECTION | 15
3/4" = 1'-0" | S4.1



SECTION | 16
3/4" = 1'-0" | S4.1

PARAGON STAR RR-CONCESSIONS

1401 NW River Rd
Lee's Summit, MO 64081

Project No.:	19050.04b
Date:	12.08.2025
Issued For:	PERMIT

REVISIONS

No.	Date	Description

REGISTRATION

STATE OF MISSOURI
TRAVIS A. JENNINGS
NUMBER PE-2023011045
12/08/2025
PROFESSIONAL ENGINEER

PROJECT TEAM

ARCHITECT	FINKLE+WILLIAMS ARCHITECTURE
CIVIL	GBA
LANDSCAPE	LAND3 STUDIO
FOUNDATIONS	BSE ENGINEERS
STRUCTURAL	BSE ENGINEERS
PLUMBING	HENDERSON ENGINEERS
MECHANICAL	HENDERSON ENGINEERS
ELECTRICAL	HENDERSON ENGINEERS
FIRE PROTECTION	HENDERSON ENGINEERS
CONTRACTOR	FOGEL-ANDERSON

BSE STRUCTURAL ENGINEERS
11320 West 79th Street
Lenexa, Kansas 66214
Phone 913.492.7400
www.BSEstructural.com
Project Number 25-290

SHEET TITLE

TYPICAL FRAMING DETAILS

SHEET NUMBER

S4.1

ELECTRICAL SYMBOL LEGEND

SOME SYMBOLS AND ABBREVIATIONS ON THIS LEGEND MAY NOT BE USED

CIRCUITING

- HOME RUN (2)#12W, (1)#12G UNLESS NOTED OTHERWISE
- INDICATES 2 PHASE, 1 N, AND 1 GND CONDUCTORS
- HOME RUN. SECOND SYMBOL INDICATES SHARED CIRCUIT.
- HOME RUN. SECOND SYMBOL DENOTES #10 CONDUCTORS.

UTILITIES

- OHE — OVERHEAD ELECTRICAL FEEDER AND/OR CONDUITS
- UGC — UNDERGROUND ELECTRICAL FEEDER AND/OR CONDUITS
- TELE — ABOVE-GRADE TELECOMMUNICATIONS CONDUIT(S)
- TELE — TELECOMMUNICATIONS CONDUIT(S) BELOW GRADE

LIGHTING

- GRID-MOUNTED TROFFER LIGHT FIXTURE
- EMERGENCY/EGRESS LIGHT FIXTURE
- CRITICAL / STANDBY LIGHT FIXTURE
- STRIP LIGHT FIXTURE
- SURFACE/RECESSED LIGHT FIXTURE
- WALL-MOUNTED LIGHT FIXTURE
- POLE-MOUNTED LIGHT FIXTURE
- EXIT LIGHT (WALL / CEILING MOUNTED)
- BATTERY-OPERATED EMERGENCY LIGHT (WALL-MTD)
- BATTERY-OPERATED EMERGENCY LIGHT (CEILING-MTD)
- COMBINATION WALL-MOUNTED EXIT LIGHT / BATTERY-OPERATED EMERGENCY LIGHT
- $ LIGHT SWITCH - SINGLE POLE
- $3 LIGHT SWITCH - 3-WAY
- $4 LIGHT SWITCH - 4-WAY
- $K LIGHT SWITCH - KEY
- $D LIGHT SWITCH - DIMMER
- $PL LIGHT SWITCH - WITH PILOT LIGHT
- $M WALL-MOUNTED MOTION SENSOR.
- WALL (CORNER) - MOUNTED MOTION SENSOR.
- CEILING-MOUNTED MOTION SENSOR.
- SB SWITCHBANK. REFER TO PLANS / DETAILS.
- $DL1 LOW-VOLTAGE DATALINE SWITCH - RE: DETAILS.
- RCS-1 REMOTE CONTROL SWITCH AS SCHEDULED.
- TC TIMECLOCK. REFER TO PLANS / DETAILS.

POWER DEVICES

- DUPLEX RECEPTACLE
- LINE THROUGH DEVICE INDICATES ABOVE COUNTER
- SWITCHED RECEPTACLE - RE: SPECS
- QUAD-PLEX RECEPTACLE
- 5-20R SIMPLEX RECEPTACLE W/ NEMA CONFIG AS NOTED
- 14-50R MULTI-POLE RECEPTACLE W/ NEMA CONFIG AS NOTED
- CEILING-MOUNTED RECEPTACLE
- RECEPTACLE/DEVICE MOUNTED IN "TOMBSTONE"
- JUNCTION BOX
- FIRE-RATED POKE-THRU - POWER ONLY
- POKE-THRU WITH DATA JACKS
- POKE-THRU WITH POWER AND DATA
- FB SINGLE GANG FLOOR BOX (2,3,4 GANG SIMILAR)
- DIVIDED (HIGH/LOW VOLTAGE) POWER POLE
- PLUG MOLD / WIRE MOLD AS SPECIFIED.
- PUSH BUTTON

EQUIPMENT

- DISCONNECT SWITCH. RE: PLANS FOR INFORMATION.
- MAGNETIC MOTOR STARTER
- COMBINATION DISCONNECT SWITCH / MOTOR STARTER
- TOGGLE-TYPE DISCONNECT SWITCH. WHERE USED FOR MOTORS, PROVIDE W/ THERMAL PROTECTION.
- SURFACE-MOUNTED PANELBOARD
- RECESSED PANELBOARD
- DISTRIBUTION PANELBOARD
- SWITCHBOARD. FEEDER/MAIN CIRCUIT BREAKER SECTION AND DISTRIBUTION SECTION.

TELEPHONE/DATA

- TELEPHONE JACK LOCATION (SINGLE-GANG BOX W/ (1)3/4" C. TO ABOVE ACCESSIBLE CEILING)
- LINE THROUGH DEVICE INDICATES ABOVE COUNTER
- DATA JACK LOCATION (DOUBLE-GANG BOX W/ (2)3/4" CONDUITS TO ABOVE ACCESSIBLE CEILING)
- TEL/DATA JACK LOCATION (DOUBLE-GANG BOX W/ (2)3/4" C. TO ABOVE ACCESSIBLE CEILING)
- 1V PHONE OUTLET WITH NUMBER OF PHONE JACKS AS INDICATED - RE: DETAILS FOR ADDITIONAL INFORMATION.
- 1D DATA OUTLET WITH NUMBER OF DATA JACKS AS INDICATED - REFER TO DETAILS FOR ADDITIONAL INFORMATION.
- 1D/1V TEL/DATA OUTLET WITH NUMBER OF PHONE AND DATA JACKS AS INDICATED - REFER TO DETAILS.
- WIRELESS INTERNET TRANSMITTER.

SECURITY

- CCTV CAMERA
- CR CARD READER
- KP SECURITY KEYPAD
- ML MAG LOCK

GENERAL SYMBOLS

- INDICATES CONNECT TO EXISTING
- XXX EQUIPMENT TAG. REFER TO CONNECTIONS SCHEDULE(S) FOR ELECTRICAL CONNECTIONS AND LOAD INFORMATION FOR EQUIPMENT (KITCHEN, SHOP, ETC.)

PLUMBING SYMBOL LEGEND

SOME SYMBOLS AND ABBREVIATIONS ON THIS LEGEND MAY NOT BE USED

PLUMBING PIPING

- DOMESTIC COLD WATER
- DOMESTIC HOT WATER
- RECIRCULATING DOMESTIC HOT WATER
- SAN WASTE ABOVE GRADE OR FLOOR
- SAN WASTE BELOW GRADE OR FLOOR
- V PLUMBING VENT
- W WATER SERVICE
- ST STORM DRAIN ABOVE GRADE OR FLOOR
- ST STORM DRAIN BELOW GRADE OR FLOOR
- STO STORM OVERFLOW ABOVE GRADE OR FLOOR
- STO STORM OVERFLOW BELOW GRADE OR FLOOR
- SCW SOFT COLD WATER
- SHW SOFT HOT WATER
- SRW SOFT RECIRCULATING HOT WATER
- RO REVERSE OSMOSIS WATER
- DI DE-IONIZED WATER
- G NATURAL GAS
- LP PROPANE
- NP NON-POTABLE WATER
- CA COMPRESSED AIR
- ACID ACID WASTE
- ACID ACID VENT
- PD PUMPED DISCHARGE (FROM SUMP PUMPS / EJECTORS)

GENERAL SYMBOLS

- INDICATES CONNECT TO EXISTING
- EL ? INDICATES ELEVATION
- 1 / #1 PLUMBING RISER CALLOUT (TYPE/RISER NO.) (W&V = WASTE AND VENT, WAT = DOMESTIC WATER)
- XXX EQUIPMENT TAG. REFER TO CONNECTIONS SCHEDULE(S) FOR ELECTRICAL CONNECTIONS AND LOAD INFORMATION FOR EQUIPMENT (KITCHEN, SHOP, ETC.)

PIPING SYMBOLS

- SHUTOFF VALVE
- SHUTOFF VALVE IN RISER
- BALANCING VALVE
- PIPING ELBOW UP
- PIPING ELBOW DOWN
- PIPING TEE
- PIPING ELBOW
- PIPING TEE UP
- PIPING TEE DOWN
- INCREASER/REDUCER
- UNION
- CAP
- PIPE FLEX
- 3-WAY VALVE
- CHECK VALVE
- Y-STRAINER
- IN-LINE (BASKET) STRAINER
- AUTOMATIC 3-WAY CONTROL VALVE
- AUTOMATIC 3-WAY CONTROL VALVE
- SOLENOID VALVE

PIPING SPECIALTIES

- PRESSURE AND TEMPERATURE GAUGE (WITH COCK)
- THERMOMETER
- PRESSURE REDUCING VALVE
- RELIEF VALVE
- WATER HAMMER ARRESTOR

PIPING FIXTURES / EQUIPMENT

- HOSE BIBB
- WALL HYDRANT
- CLEANOUTS
- RPZ REDUCED PRESSURE BACKFLOW PREVENTER
- DCPB DOUBLE CHECK BACKFLOW PREVENTER
- WC-1 PLUMBING FIXTURE AND CALLOUT
- FLOOR DRAIN, AREA DRAIN, OR FLOOR SINK
- ROOF DRAIN OR OVERFLOW ROOF DRAIN

220000 - PLUMBING SPECIFICATIONS

SECTION 220000 / 230000 - GENERAL REQUIREMENTS

A. ALL WORK SHALL BE IN ACCORDANCE W/ LATEST EDITION OF INTERNATIONAL BUILDING, MECHANICAL & PLUMBING CODES, CODES AS ADOPTED BY CITY, COUNTY, STATE & ALL OTHER APPLICABLE CODES.
B. FURNISH & INSTALL ALL LABOR & MATERIALS REQUIRED FOR COMPLETE, FUNCTIONING, PLUMBING SYSTEMS W/ ALL ASSOCIATED EQUIPMENT & APPARATUS AS SHOWN ON PLANS. "PROVIDE" MEANS TO FURNISH & INSTALL.
C. OBTAIN & PAY FOR ALL PERMITS REQUIRED FOR EXECUTION OF THIS WORK & SHALL MAKE ARRANGEMENTS FOR CONNECTIONS TO WATER, GAS & SEWER CONNECTIONS TO BUILDING AS REQUIRED.
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 WALL 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 MATERIAL, 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. ROOF PENETRATIONS - MADE BY AUTHORIZED ROOFING CONTRACTOR WHEN REQUIRED.

SECTION 220000 - PLUMBING

1. PIPING
A. WATER PIPING - ALL WATER PIPING SHALL BE 95-5 TIN-ANTIMONY JOINED TYPE L COPPER INSULATE W/ FIBERGLASS W/ ASJ & PVC COVERS. THINCKNESS IN ACCORDANCE W/ ASHRAE 90.1.
B. WASTE & VENT PIPING - CI BELL & SPIGOT OR HUBLESS CI W/ NEOPRENE GASKET FITTINGS W/ STAINLESS STEEL BANDS. SCHED 40 PVC W/ SOLVENT WELDS MAY BE USED WHERE ALLOWED BY LOCAL CODE. PVC NOT ALLOWED IN PLENUMS.

2. VALVES
2.1. EQUIVALENT VALVES LISTED ON CURRENT COMPARISON CHARTS OF SPECIFIED VALVE MANUFACTURERS BY MILWAUKEE, STOCKHAM, POWELL, RED-WHITE, CRANE, APPOLO, MUELLER, MUESSCO, WATTS, HAYS, ROCKWELL-NORDSTROM.
2.2. BALL VALVES - 2" & UNDER - BRONZE FULL PORT W/ TEFLOW SEATS, BRONZE BALL & INSULATED HANDLE.
2.3. CHECK VALVES - 3" AND SMALLER SCREWED OR SOLDER BRONZE CHECK VALVE, 200 PSI-WOG 125 PSI-WSP. TEFLON OR BRONZE DISC & SEAT RING.

3. FIXTURES - SEE SCHEDULES
A. FIXTURES: AMERICAN STANDARD, KOHLER, CRANE, ZURN, TOTO
B. STAINLESS STEEL FIXTURES: ELKAY, JUST, MOEN COMMERCIAL
C. FITTINGS & SUPPORTS: JOSAM, SMITH, WADE, ZURN, OR JONESPEC.
D. TRIM BY MOEN, DELTA, ELJER, KOHLET, AMERICAN STAARD, CRANE, SLOAN.
E. DRAINS BY WADE, ZURN, WOODFORD, SMITH, JOSAM.

4. EQUIPMENT - SEE SCHEDULES
A. WATER HEATER - STATE, RHEEM, NATIONAL, A.O. SMITH. PORCELAIN GLASS LINED WATER HEATER TANK. COLD WATER INLET DROP TUBE. MAGNESIUM ANODE RODS. U.L. SEAL, 160 PSI, FACTORY TEMPERATURE & PRESSURE RELIEF VALVE. H.S.F. CONSTRUCTION. 1 YR WARRANTY.
B. GREASE INTERCEPTOR - HYDROMECHANICAL POLYETHYLENE INTERCEPTOR WITH WATER/GAS TIGHT SEAL AND COVER. PROVIDE WITH BUILT IN FLOW CONTROL DEVICE.

5. EXECUTION
A. PROVIDE UNIONS OR FLANGED JOINTS IN EACH PIPE LINE PRECEDING CONNECTIONS TO EQUIPMENT TO ALLOW REMOVAL FOR REPAIR OR REPLACEMENT. PROVIDE ALL SCREWED & CONTROL VALVES W/ UNIONS ADJACENT TO EACH CONNECTION. PROVIDE SCREWED END VALVES W/ UNION ADJACENT TO VALVE UNLESS VALVE CAN BE OTHERWISE EASILY REMOVED FROM LINE.
B. AFTER PIPING IS IN PLACE TEST LINES TO INSURE NO LEAKS.
C. ALL PIPING & EQUIPMENT SHALL BE SUPPORTED PROPERLY FROM STRUCTURE.
D. ESCUTCHEONS - PROVIDE NICKEL-BRASS OR CHROME PLATED ON ALL EXPOSED PIPES WHEN PASSING THRU WALL OR CEILING OF FINISHED ROOMS.
E. VERIFY FLOOR MATERIALS USED FROM ARCHITECTURAL PLANS & PROVIDE PROPER CLEANOUT TOPS. WHERE THEY OCCUR IN CARPET, QUARRY TILE, VINYL TILE OR CERAMIC TILE.
F. PROVIDE WATER HAMMER ARRESTORS FOR ALL PLUMBING BANKS W/ FIXTURES UTILIZING FLUSH VALVES IN ANY CAPACITY. LOCATE ARRESTER BETWEEN LAST TWO FIXTURES SERVED ON BRANCH LINE.

SECTION 230000 - MECHANICAL

1. HVAC SCOPE IS DESIGN BUILD BY THE CONTRACTOR AND WILL BE SUBMITTED AS A DELEGATED DESGIN.

260000 - ELECTRICAL SPECIFICATIONS

SECTION 260000 - ELECTRICAL REQUIREMENTS

GENERAL REQUIREMENTS
A. ALL WORK SHALL BE IN ACCORDANCE W/ LATEST EDITION OF INTERNATIONAL BUILDING CODE, NATIONAL ELECTRICAL CODE, NFPA, CODES AS ADOPTED BY CITY, COUNTY, STATE & ALL OTHER APPLICABLE CODES
B. ALL MATERIALS & EQUIPMENT SHALL BE NEW & SHALL BEAR U.L. LABEL WHERE APPLICABLE. PROVIDE WATERPROOF EQUIPMENT ENCLOSURES WHERE REQUIRED.
C. OBTAIN & PAY FOR ALL PERMITS REQUIRED FOR EXECUTION OF THIS WORK & SHALL MAKE ARRANGEMENTS FOR MODIFICATIONS TO ELECTRICAL CONNECTIONS TO BUILDING AS REQUIRED.
D. CONTRACTOR SHALL PROVIDE ALL LABOR & MATERIALS REQUIRED TO HAVE COMPLETE FUNCTIONING ELECTRICAL LIGHTING & POWER SYSTEMS TOGETHER W/ ALL ASSOCIATED EQUIPMENT & APPARATUS AS SHOWN ON PLANS.
E. WHERE AN ELECTRICAL DEVICE IS REQUIRED BY CODE BUT NOT SHOWN, IT SHALL BE PROVIDED AS THOUGH FULLY SHOWN & SPECIFIED.
F. CONTRACTOR SHALL 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 THIS CONNECTION FOR ANY ERROR OR NEGLIGENCE ON CONTRACTOR'S PART.
G. 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.
H. 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
I. 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.

SECTION 261000 - CONDUIT & CONDUCTORS

A. FOLLOW CIRCUITING SHOWN ON PLANS. USE NO CONDUIT SMALLER THAN 1/2" & NO CONDUCTORS SMALLER THAN #12 GA. UNLESS NOTED OTHERWISE
B. WIRE SHALL BE IN NON-FLEXIBLE METALLIC CONDUIT (EMT, IMC OR RMC) FOR ALL CIRCUITS AND FEEDERS GREATER THAN 30A. LIGHT SWITCH RISERS, KITCHEN CIRCUITS & HOME RUNS.
C. MC CABLE ACCEPTABLE FOR BRANCH CONVENIENCE CIRCUITS AND LIGHTING CIRCUITS. DO NOT DAISY CHAIN LIGHT FIXTURES.
D. CONDUIT INSTALLED BELOW GRADE SHALL BE SCHEDULE 80 PVC HEAVY WALL PLASTIC CONDUIT MEETING NEMA STANDARDS & UL LISTED FOR UNDERGROUND & EXPOSED USE. PROVIDE GRS RAD10 BENDS & RISERS AS CONDUITS RISE ABOVE GRADE OR ABOVE FLOOR SLAB.
E. PROVIDE INTERLOCKING SPACERS FOR MULTIPLE RUNS OF UG CONDUITS IN SAME TRENCH.
F. LIGHTING & RECEPTACLE CIRCUIT CONDUCTORS SHALL BE COPPER THWN/THHN 600 VOLT, 75 DEG C. COLOR CODED AS DESCRIBED UNDER APPLICABLE CODES. NO ROMEX, PLASTIC FLEX TUBING ETC PERMITTED. LIGHT FIXTURE WIRE INSULATION SHALL HAVE TEMP RATING NOT LESS THAN INDIVIDUAL FIXTURE MANUF RECOMMENDED RATING
G. CIRCUITS W/ NO. 8 OR LARGER CONDUCTORS. MOTOR CIRCUITS, POWER & FEEDER CIRCUITS & BUILDING SERVICE FEEDERS SHALL BE COPPER THWN/THHN 600 VOLT, 75 DEG C.
H. PIPE SLEEVES, HANGERS & SUPPORTS SHALL BE FURNISHED & SET & CONTRACTOR SHALL BE RESPONSIBLE FOR PROPER & PERMANENT LOCATIONS.

SECTION 262000 - GROUNDING

A. SUPPLEMENT GROUNDED NEUTRAL OF SECONDARY DISTRIBUTION SYSTEM W/ EQUIPMENT GROUNDING SYSTEM, INSTALLED SO THAT METALLIC STRUCTURES, ENCLOSURES, RACEWAYS, JUNCTION BOXES, OUTLET BOXES, CABINETS, MACHINE FRAMES, PORTABLE EQUIPMENT & OTHER CONDUCTIVE ITEMS OPERATE CONTINUOUSLY AT GROUND POTENTIAL & PROVIDE LOW IMPEDANCE PATH FOR GROUND FAULT CURRENTS.
B. SYSTEM SHALL COMPLY W/ NATIONAL ELECTRICAL CODE, DRAWINGS & AS SPECIFIED
C. PROVIDE EQUIPMENT GROUND BUS IN BASE OF LOW VOLTAGE, SWITCHGEAR BRAZED OR OTHERWISE ADEQUATELY CONNECTED BY AN APPROVED METHOD TO GROUND RODS.
D. PROVIDE IN CONDUIT GREEN INSULATED COPPER GROUND CONDUCTOR TO MAIN METALLIC WATER SERVICE ENTRANCE & CONNECT BY MEANS OF ADEQUATE GROUND CLAMPS.
E. EQUIPMENT GROUNDING CONDUCTORS FOR BRANCH CIRCUIT HOME RUNS SHOWN ON DRAWINGS SHALL INDICATE AN INDIVIDUAL & SEPARATE GROUND CONDUCTOR FOR THAT BRANCH CIRCUIT WHICH SHALL BE TERMINATED AT BRANCH CIRCUIT PANELBOARD, SWITCHBOARD, OR OTHER DISTRIBUTION EQUIPMENT.
F. PROVIDE LOW VOLTAGE DISTRIBUTION SYSTEM W/ SEPARATE GREEN INSULATED EQUIPMENT GROUNDING CONDUCTOR FOR EACH SINGLE OR THREE-PHASE FEEDER. SINGLE PHASE 120 VOLT BRANCH CIRCUITS FOR LIGHTING & POWER SHALL CONSIST OF PHASE & NEUTRAL CONDUCTORS & GREEN GROUND CONDUCTOR INSTALLED IN COMMON CONDUIT WHICH SHALL SERVE AS GROUNDING CONDUCTOR.
G. GROUNDING CONDUCTORS SHALL BE AS SHOWN ON PLANS OR IF NOT SPECIFICALLY SHOWN SHALL BE NO SMALLER THAN THAT REQUIRED BY NEC.

SECTION 263000 - ELECTRICAL EQUIPMENT

A. JUNCTION BOXES & OUTLET BOXES SHALL BE GALVANIZED KNOCKOUT TYPE. LIGHTING FIXTURE BOXES IN CEILINGS SHALL NOT BE LESS THAN 4" OCTAGONAL KNOCKOUT TYPE. OUTLETS SHALL BE INSTALLED IN LOCATIONS SHOWN ON DRAWINGS EXCEPT OUTLETS MAY BE MOVED 4 FEET IN EITHER DIRECTION IF SO DIRECTED, WITHOUT ADDITIONAL COST. BOXES SHALL BE FLUSH MOUNTED ON WALLS FOR CONCEALED WORK. GANGABLE BOXES SHALL BE USED IN ALL GYPBOARD SURFACES.

PANELBOARDS
A. BRANCH CIRCUIT 208/240V PANELS SHALL BE CAPACITY SHOWN W/ TIN PLATED COPPER BUSSING & BRACED FOR MINIMUM OF 10,000A A/C OR AS OTHERWISE NOTED OR REQUIRED (SERIES RATED ACCEPTABLE). BOLT ON CIRCUIT BREAKERS. 480V PANELS SAME EXCEPT 14,000A A/C MIN. MINIMUM 20" WIDE W/ GALV STEEL ENCLOSURE W/ HINGED DOOR & KEYED LOCK. COORD TRIM WITH HOUSEKEEPING PADS. PANELS TO BE RECESSED WHENEVER POSSIBLE.
B. EQUIVALENT BY SQUARE D, SIEMENS, CUTLER HAMMER, OR GE.

SECTION 265000 - ELECTRICAL IDENTIFICATION

A. MANUFACTURED LABELS FOR EACH PANELBOARD & TRANSFORMER. TYPEWRITTEN PANEL SCHEDULES MOUNTED IN PANELS
B. PRINTED TAPE STYLE LABEL FOR EACH RECEPTACLE INDICATING PANEL & CIRCUIT #.
C. MANUFACTURED LABELS FOR ALL DISCONNECT SWITCHES INDICATING EQUIPMENT SERVED.
D. BRANCH CIRCUITS - IDENTIFY EACH CIRCUIT W/ WIRE MARKERS WHEN ENCLOSURE LABEL AND WIRE COLORS DO NOT PROVIDE ENOUGH INFORMATION TO IDENTIFY EACH CIRCUIT WITHOUT TRACING. FEEDERS & BRANCH CIRCUIT HOME RUNS W/ WIRE MARKER W/ PANEL & CKT #. BOX COVERS ABOVE LAY-IN CEILINGS NEATLY MARKED W/ INDELIBLE MARKER.

SECTION 264000 - WIRING DEVICES

A. CONVENIENCE OUTLETS - SPEC GRADE 20 AMP DUPLEX W/ GROUND & SS WALL PLATES. OTHER OUTLETS SHALL BE VERIFIED W/ EQUIPMENT SUPPLIERS FOR PROPER NEMA CONFIGURATIONS. PROVIDE GFCI RATED DEVICES WHERE INDICATED AND AS REQ PER CODE.
B. LIGHT SWITCHES - SPEC GRADE 20 AMP TOGGLE SWITCHES W/ SS WALL PLATES.
C. COLOR OF DEVICES AS DIRECTED BY ARCHITECT.
D. EQUIVALENT DEVICES BY LEVITON, BRYANT, HUBBEL, WATTSTOPPER, LITHONIA, SENSOR SWITCH.

EXECUTION

A. ALL OUTLETS, BAR MOUNTED W/ BOTTOM AT 18" ABFF & SWITCHES W/ BOTTOM AT 44" ABOVE FINISHED FLOOR UNLESS NOTED OTHERWISE ON PLANS. REFER TO ARCH FOR OTHER REQUIRED ELEVATIONS AND CABINETRY COORDINATION.

SECTION 265000 - LUMINAIRES, LAMPS & BALLASTS

LUMINAIRES
A. PROVIDE LIGHTING FIXTURES W/ LAMPS & ACCESSORIES REQD FOR HANGING, COORD MOUNTING OF LIGHTING FIXTURES W/ ARCHITECT & G/C. ADDITIONAL FIXTURE SUPPORTS SHALL BE PROVIDED BY E/C. SUPPORTS SHALL COMPLY W/ LATEST EDITION OF NEC. PROVIDE LIGHTING FIXTURE SECURING CLIPS AS REQUIRED. CONSULT ARCH PLANS FOR CEILING TYPES & PROVIDE SURFACE & RECESSED LIGHTING FIXTURES W/ APPROPRIATE MOUNTING COMPONENTS & ACCESSORIES.
B. REFER TO LIGHTING FIXTURE SCHEDULE PLANS FOR FIXTURE TYPES.
C. EQUIVALENT LUMINAIRES BY HUBBELL, INFINITY, LITHONIA, WILLIAMS, COLUMBIA, EXITRONICS, LITEALARM, EXIDE.

LAMPS
A. REFER TO LIGHTING FIXTURE SCHEDULE FOR FIXTURE TYPES.
B. EQUIVALENT LAMPS AND MODULES BY PHILLIPS, GE, OSRAM/SYVANIA, CREE
C. LED FIXTURES - PROVIDE NECESSARY LAMP, DRIVER AND FIXTURE COMPLIANT WITH UL 8750, ANSI/NEMA STANDARDS C78.377, IESNA STANDARDS.
D. LED DRIVERS SHALL BE INTEGRAL TO THE FIXTURE UNLESS OTHERWISE SHOWN OR SPECIFIED.

GENERAL PLUMBING NOTES

1. COMPLETE INSTALLATION SHALL BE IN ACCORDANCE WITH THE LATEST ADOPTED VERSION OF THE INTERNATIONAL PLUMBING CODE, LOCAL AND STATE CODES, AND REQUIREMENTS OF THE AHJ.
2. NO PIPING SHALL BE INSTALLED WHERE IT WILL SUBJECT TO FREEZING TEMPERATURES. PIPING IN EXTERIOR WALLS SHALL BE INSTALLED ON THE WARM SIDE OF BUILDING INSULATION. INSULATED AND THE CHASE SHALL BE VENTILATED WITH GRILLES ALLOWING INDOOR AMBIENT CONDITIONS TO CIRCULATE THROUGH THE CHASE.
3. PROVIDE CLEANOUTS IN THE FOLLOWING LOCATIONS:
   A. IN ALL HORIZONTAL DRAINS (WITHIN THE BUILDING) NOT MORE THAN 100 FEET APART.
   B. IN BUILDING SEWERS LOCATED NO MORE THAN 100 FEET APART MEASURED FROM THE UPSTREAM ENTRANCE OF THE CLEANOUT.
   C. EACH CHANGE OF DIRECTION OF THE BUILDING DRAIN OR HORIZONTAL WASTE OR SOIL LINES GREATER THAN 45 DEGREES. WHERE MORE THAN ONE CHANGE OF DIRECTION OCCURS IN A RUN OF PIPING, ONLY ONE CLEANOUT SHALL BE REQUIRED FOR EACH 40 FEET OF DEVELOPED LENGTH OF THE DRAINAGE PIPING.
   D. AT THE BASE OF EACH WASTE OR SOIL STACK.
   E. NEAR THE JUNCTION OF THE BUILDING DRAIN AND BUILDING SEWER.
4. CONTRACTOR SHALL SCOPE AND VERIFY SIZE, LOCATION, AND DEPTH OF EXISTING SANITARY PIPING PRIOR TO BEGINNING WORK. NOTIFY ENGINEER IMMEDIATELY IF LAYOUT SHOWN ON PLANS WILL NOT WORK DUE TO VERIFIED FIELD CONDITIONS.

GENERAL MECHANICAL NOTES

1. MECHANICAL SYSTEM IS DESIGN BUILD BY THE CONTRACTOR AND WILL BE ISSUED AS A DEFERRED SUBMITTAL.

GENERAL NOTES

1. SOME ROOM NAMES MAY NOT BE SHOWN FOR PURPOSE OF CLARIFYING PLAN. REFER TO ARCHITECTURAL PLANS FOR REFERENCE TO ROOM NAMES NOT SHOWN.
2. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO MAINTAIN AND KEEP AT THE JOB SITE, AN UP TO DATE SET OF "RECORD DRAWINGS" SHOWING ALL CHANGES FROM THE ORIGINAL PLANS. THE CONTRACTOR SHALL DELIVER THE "RECORD DRAWINGS" TO THE ENGINEER AT THE CONCLUSION OF THE PROJECT ELECTRONICALLY.
3. THESE DRAWINGS ARE DIAGRAMMATIC. THE CONTRACTOR SHALL VERIFY ALL CONDITIONS (NEW AND EXISTING), DIMENSIONS, AND CLEARANCES PRIOR TO THE COMMENCEMENT OF WORK AND SHALL INCLUDE ALL COSTS, EQUIPMENT, MATERIAL, ACCESSORIES, ETC. REQUIRED FOR A FULLY COMPLETE, FUNCTIONAL AND CODE COMPLIANT INSTALLATION.
4. FINAL LOCATIONS OF ALL DEVICES, LIGHT FIXTURES, EQUIPMENT ETC SHALL BE INDICATED ON THE ARCHITECTURAL DRAWINGS. ALL DIMENSIONAL INFORMATION SHALL BE OBTAINED FROM ARCHITECTURAL PLANS. NO DIMENSIONAL INFORMATION SHALL BE OBTAINED FROM MEP DRAWINGS.
5. THE CONTRACTOR SHALL OBTAIN ALL REQUIRED PERMITS, APPROVALS, LICENSES, ETC. AS NEEDED FOR THE COMPLETE INSTALLATION AND PROJECT. THE CONTRACTOR SHALL COORDINATE WITH THE OWNER FOR ALL FEES AND DATA NEEDED FOR THIS.

GENERAL ELECTRICAL NOTES

1. COMPLETE INSTALLATION SHALL BE IN ACCORDANCE WITH THE LATEST ADOPTED VERSION OF THE NATIONAL ELECTRICAL CODE, LOCAL AND STATE CODES, AND REQUIREMENTS OF THE AHJ.
2. COORDINATE LOCATIONS OF RECEPTACLES, SWITCHES, ETC. WITH ARCHITECTURAL CASEWORK AND ELEVATIONS.
3. REFER TO MOUNTING HEIGHTS DETAIL FOR MOUNTING HEIGHTS OF ALL DEVICES NOT INDICATED OTHERWISE.
4. PROVIDE ALL EMPTY CONDUITS WITH PULL STRINGS AND BUSHED ENDS.
5. CONTRACTOR SHALL CONCEAL ALL CONDUIT, FITTINGS, AND DEVICES FROM VIEW WHERE REASONABLY POSSIBLE.
6. ALL CONDUCTOR SIZES INDICATED ON DRAWINGS ARE FOR COPPER CONDUCTORS UNLESS SPECIFICALLY NOTED OTHERWISE. ALUMINUM CONDUCTORS MAY BE USED ONLY UNDER THE FOLLOWING CONDITIONS:
   - CONTRACTOR SHALL INCLUDE A DEDUCT ALTERNATE FOR USE OF SAME WITH BIDS, FOR OWNER ACCEPTANCE.
   - AL CONDUCTORS MAY ONLY BE USED ON FEEDERS 100A OR GREATER - NO EXCEPTIONS.
   - ALUMINUM CABLING SHALL BE COMPACTED ALUMINUM (STABILOY).
   - PROVIDE COMPRESSION TYPE ONE-HOLE OR TWO-HOLE LUG TERMINATIONS.
   - PROVIDE ANTI-OXIDANT COMPOUND AT TERMINATIONS.
   - CABLE TERMINATIONS SHALL BE MARKED "ALCU".
   - FINAL SIZES OF CONDUCTORS TO BE CONFIRMED BY ENGINEER.
   - ALUMINUM SERVICE CONDUCTORS MUST HAVE "AA-8000" SERIES LABELING ON CABLE JACKETS PER EVERGY REQUIREMENTS - NO EXCEPTIONS.

ENGINEER RESERVES FINAL RIGHT TO ACCEPT/DENY USE OF ALUMINUM CONDUCTORS FOR PART OR ALL OF PROJECT.

COORDINATION NOTES

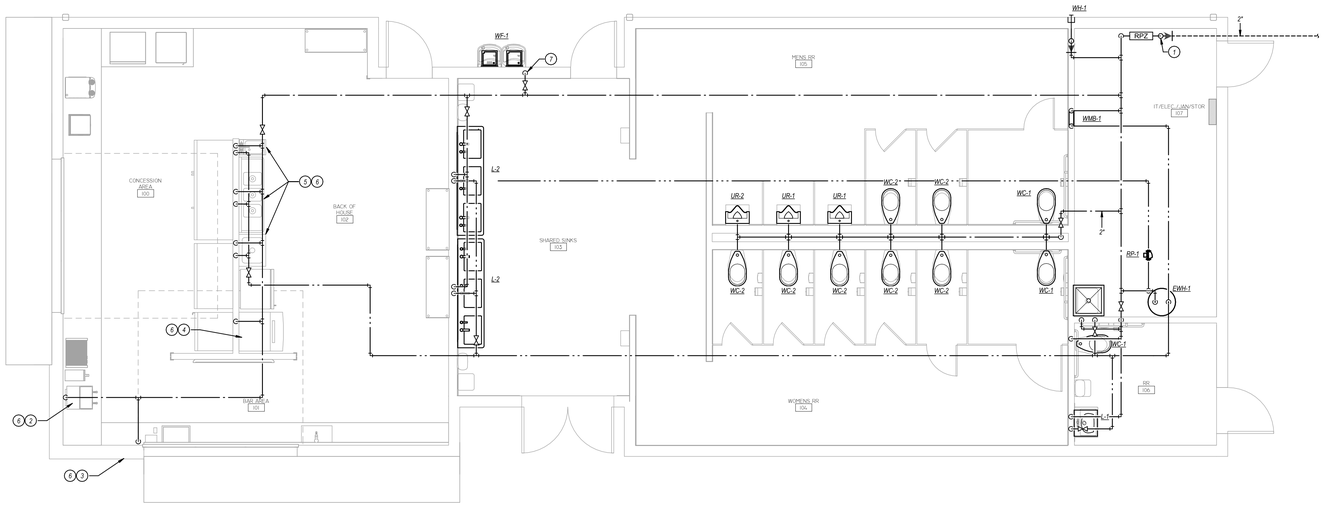
1. COORDINATE REQUIREMENTS FOR INSTALLATION OF SYSTEMS AND EQUIPMENT WITH ALL OTHER TRADES.
2. THE CONTRACTOR SHALL COORDINATE THE ROUTING AND PATH OF ALL SYSTEMS, CONDUITS, PIPES, DUCTS, ETC WITH THE POSITION AND LAYOUT OF THE STRUCTURE. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING NECESSARY OFFSETS, TURNS, RISES AND DROPS FOR SYSTEMS AND COMPONENTS AS NEEDED TO INSTALL THE MEP SYSTEMS TO CLEAR STRUCTURE, CEILINGS, ETC AND OTHER SYSTEMS IN POTENTIAL CONFLICT WITH ROUTING.
3. COORDINATE WORK WITH OTHER TRADES TO INSTALL SYSTEMS ABOVE CEILING HEIGHTS INDICATED ON ARCHITECTURAL PLANS.
4. CHECK SPACE REQUIREMENTS WITH OTHER TRADES AND STRUCTURE/CONSTRUCTION TO INSURE THAT ALL MATERIALS AND EQUIPMENT CAN BE INSTALLED IN THE SPACE ALLOTTED INCLUDING FINISHED SUSPENDED CEILINGS AND OTHER SPACES, CHASES, ETC WITHIN THE BUILDING. MAKE MODIFICATIONS THERETO AS REQUIRED AND APPROVED.
5. TRANSMIT TO OTHER TRADES ALL INFORMATION REQUIRED FOR WORK TO BE PROVIDED UNDER THEIR RESPECTIVE SECTIONS IN AMPLE TIME FOR INSTALLATION.
6. WHEREVER WORK INTERCONNECTS WITH WORK OF OTHER TRADES, COORDINATE WITH THOSE TRADES TO INSURE THAT ALL SUBCONTRACTORS HAVE THE INFORMATION NECESSARY SO THAT THEY MAY PROPERLY INSTALL ALL CONNECTIONS AND EQUIPMENT. IDENTIFY ALL ITEMS OF WORK THAT REQUIRE ACCESS SO THAT THE CEILING TRADE WILL KNOW WHERE TO INSTALL ACCESS DOORS AND PANELS.
7. COORDINATE, PROJECT AND SCHEDULE WORK WITH OTHER TRADES IN ACCORDANCE WITH THE CONSTRUCTION SEQUENCE.
8. DRAWINGS SHOW THE GENERAL RUNS OF CONDUITS, PIPING AND DUCTWORK AND APPROXIMATE LOCATION OF OUTLETS. ANY SIGNIFICANT CHANGES IN LOCATION OF ITEMS NECESSARY IN ORDER TO MEET FIELD CONDITIONS SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ARCHITECT/ENGINEER AND RECEIVE HIS APPROVAL BEFORE SUCH ALTERATIONS AR

GENERAL PLUMBING NOTES

1. *REFER TO GENERAL NOTES ON MEP COVER SHEET FOR ADDITIONAL REQUIREMENTS OF WORK.*
2. *REFER TO PLUMBING FIXTURE / DRAIN SCHEDULES FOR PIPING SIZES FOR INDIVIDUAL CONNECTIONS TO FIXTURES AND RISERS NOT SHOWN ON PLANS.*
3. *NO SANITARY OR VENT PIPING BELOW GRADE SHALL BE LESS THAN 2".*
4. *NO DOMESTIC WATER PIPING SHALL BE SMALLER THAN 3/4" UNLESS NOTED OTHERWISE.*
5. *ALL VENT PIPING SHOWN IS DIAGRAMMATIC. USE APPROPRIATE FITTINGS FOR VENT PIPING BELOW FLOOD RIM OF FIXTURE.*
6. *NOT ALL 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.*
7. ALL FLOOR DRAIN TRAPS SHALL BE PROTECTED BY ONE OF THE FOLLOWING METHODS, TO BE INSTALLED AT CONTRACTOR'S DISCRETION AND IN COMPLIANCE WITH ADOPTED VERSION OF PLUMBING CODE AND/OR AHJ.
   - 7.1. PROVIDE TRAP SEALS LISTED FOR PROPOSED USE.
   - 7.2. PROVIDE TRAP PRIMERS. 1/2" TRAP PRIMER PIPING TO NEAREST TRAP PRIMER VALVE. PIPING SHALL BE TYPE "K" SOFT COPPER SEAMLESS WITH NO JOINTS FROM VALVE TO DRAIN.

1 NOTES - DOMESTIC WATER

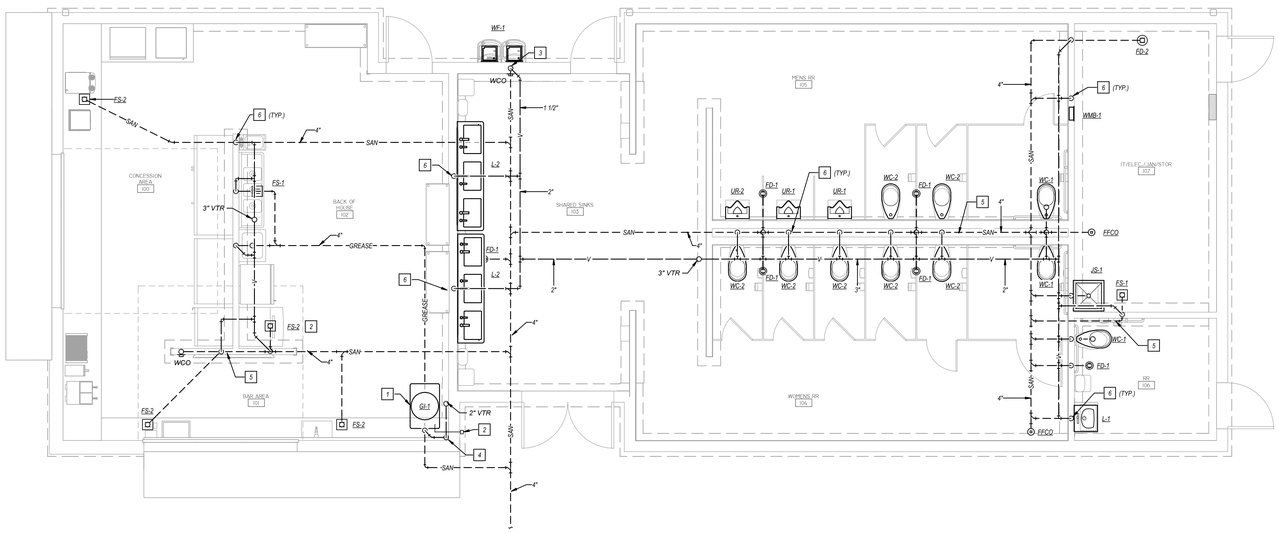
1. *2" DOMESTIC WATER SERVICE AND RPZ BACKFLOW PREVENTER. PROVIDE COMPRESSED AIR FITTING AND DRAIN AT RISER FOR SYSTEM DRAIN DOWN AND WINTERIZING.*
2. *PROVIDE 1/2" DCW TO OWNER PROVIDED COFFEE MAKER. PROVIDE BACKFLOW PREVENTER OR DUAL CHECK VALVE PRIOR TO EQUIPMENT CONNECTION. PIPING SHALL BE EXPOSED AND PROVIDED WITH PVC JACKETING TO PROJECT PIPING.*
3. *PROVIDE 3/4" DCW TO OWNER PROVIDED BIB. PROVIDE BACKFLOW PREVENTER PRIOR TO EQUIPMENT CONNECTION. PIPING SHALL BE EXPOSED AND PROVIDED WITH PVC JACKETING TO PROJECT PIPING.*
4. *PROVIDE 3/4" DCW TO OWNER PROVIDED ICE MAKER. PROVIDE BACKFLOW PREVENTER PRIOR TO EQUIPMENT CONNECTION.*
5. *PROVIDE DCW AND DHW TO OWNER PROVIDED SINK.*
6. *COORDINATE ALL FINAL CONNECTION SIZES AND LOCATIONS WITH OWNER PROVIDED EQUIPMENT PRIOR TO INSTALLATION.*
7. *INSTALL DCW TO WF-1 IN WALL MOUNTED FREEZE-RESISTANCE VALVE CABINETS.*



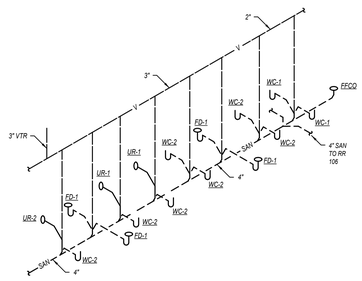
DOMESTIC WATER PLAN
SCALE: 1/4" = 1'-0"

2 NOTES - WASTE & VENT

1. *INSTALL GREASE INTERCEPTOR BELOW SLAB.*
2. *PROVIDE GREASE PUMP OUT PORT AT EXTERIOR WALL.*
3. *INSTALL WATER FOUNTAIN TRAP WITHIN BUILDING TO PREVENT FREEZING.*
4. *ROUTE EXPOSED VENT UP IN CORNER OF ROOM. COORDINATE PENETRATION IN COUNTER AND OFFSET UP THROUGH ROOF.*
5. *ROUTE SANITARY LINE BELOW GRADE BEAM.*
6. *ROUTE SANITARY/VENT LINE THROUGH GRADE BEAM. REFER TO STRUCTURAL PLANS FOR SLEEVE REQUIREMENTS.*



WASTE & VENT PLAN
SCALE: 1/4" = 1'-0"



MENS RR 105 & WOMENS RR 104 RISER DIAGRAM
NOT TO SCALE

PARAGON STAR
RR-CONCESSIONS

1401 NW River Rd
Lee's Summit, MO 64081

Project No.: 19050.04b
Date: 12.08.2025
Issued For: PERMIT

REVISIONS

No.	Date	Description

REGISTRATION

STATE OF MISSOURI
ANDREA PERATT
NUMBER PE-2021000132
PROFESSIONAL ENGINEER
12/8/25

Andrea Peratt - Engineer
MO# PE-2021000132

PROJECT TEAM

ARCHITECT	FINKLE+WILLIAMS ARCHITECTURE
CIVIL	CIVIL CONSULTANT
LANDSCAPE	LANDSCAPE
STRUCTURAL	STRUCTURAL
PLUMBING	PLUMBING
MECHANICAL	MECHANICAL
ELECTRICAL	ELECTRICAL
FIRE PROTECTION	FIRE PROTECTION
CONTRACTOR	GC

pkmr ENGINEERS
PEARSON KENT MCKINLEY RAAF ENGINEERS, LLC
13300 W 96TH STREET LENEXA, KS 66215
913.402.2400 WWW.PKMRENG.COM
MO State Certificate of Authority #E-2002020886

SHEET TITLE

PLUMBING PLAN

SHEET NUMBER

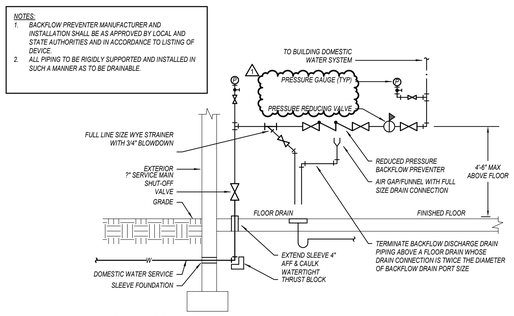
P1.01

PLUMBING FIXTURE SCHEDULE

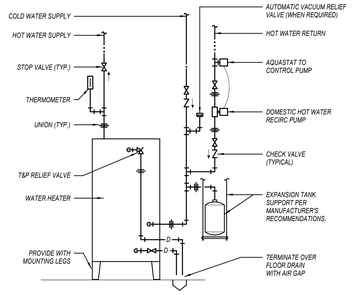
MARK	FIXTURE MANUFACTURER	FIXTURE MODEL	FIXTURE DESCRIPTION	FITTINGS MANUFACTURER	FITTINGS MODEL	FITTINGS DESCRIPTION	REMARKS	CONNECTION SIZES DHW	DCW	WASTE	VENT
JS-1	*FIAT*	*MSB*	*JANITOR'S SINK. 24"x24"x10" WHITE, ONE-PIECE MOLDED STONE MOP BASIN. UNIT SHALL BE ONE HOMOGENOUS PIECE. STAINLESS STEEL INTEGRAL DRAIN BODY WITH CAULKED CONNECTION FOR 3" PIPE. PROVIDE WITH STAINLESS STEEL WALL GUARDS.*	*CHICAGO FAUCET / FIAT*	*897-CP / 689C, 830AA*	*C.P. SERVICE SINK FITTING WITH VACUUM BREAKER, 3/4" HOSE THREAD ON SPOUT, ADJUSTABLE WALL BRACE, PAIL HOOK, AND 1/2" FLANGED FEMALE ADJUSTABLE ARMS WITH INTEGRAL STOPS. CAULK BETWEEN WALL AND FLANGE WITH GE SILICONE SEALANT. 3" C.I. "P" TRAP. / PROVIDE HOSE AND BRACKET, MOP HANGER, AND HOSE RACK.*		*3/4"*	*3/4"*	*3"*	*2"*
L-1	*SLOAN*	*81000*	*ADA-COMPLIANT WALL-HUNG LAVATORY. 30"x23" SOLID SURFACE LAVATORY. FAUCET HOLES COORDINATED WITH FAUCET AND TRIM. PROVIDE CONCEALED ARM CARRIER. MOUNT TOP OF RIM AT 34" A.F.F. COORDINATE WITH ARCHITECT FOR SOLID SURFACE FINISH.*	*SLOAN*	*EFX 200 ESD 500 EHD 510*	*SINGLE HOLE DOUBLE INFRARED SENSOR ACTIVATED ELECTRONIC HANDWASHING FAUCET W/ BATTERY BACK-UP AND LINE PURGE MODE FOR HOT/COLD WATER SUPPLIES. 0.5GPM SOLENOID VALVE HOUSED IN REMOVABLE CARRIER. SOLENOID CARRIER W/ STRAINER, ABOVE-DECK SERVICE. PROVIDE WITH ASSE 1070 THERMOSTATIC MIXER. PROVIDE BATTERY POWERED DECK MOUNTED SOAP DISPENSER. PROVIDE DECK MOUNTED HAND DRYER WITH 120V PLUG ADAPTER.*	*1,2,3,4,5*	*1/2"*	*1/2"*	*2"*	*1 1/4"*
L-2	*SLOAN*	*83000*	*ADA-COMPLIANT, WALL MOUNTED, SOLID SURFACE, 3 STATION LAVATORY. PROVIDE CONCEALED ARM CARRIER. MOUNT TOP OF RIM AT 34" A.F.F. COORDINATE WITH ARCHITECT FOR SOLID SURFACE FINISH.*	*SLOAN*	*EFX 200 ESD 500 EHD 510*	*(3) SINGLE HOLE DOUBLE INFRARED SENSOR ACTIVATED ELECTRONIC HANDWASHING FAUCET W/ BATTERY BACK-UP AND LINE PURGE MODE FOR HOT/COLD WATER SUPPLIES. 0.5GPM SOLENOID VALVE HOUSED IN REMOVABLE CARRIER. SOLENOID CARRIER W/ STRAINER, ABOVE-DECK SERVICE. PROVIDE WITH ASSE 1070 THERMOSTATIC MIXER. (3) PROVIDE BATTERY POWERED DECK MOUNTED SOAP DISPENSER. (3) PROVIDE DECK MOUNTED HAND DRYER WITH 120V PLUG ADAPTER.*		*1/2"*	*1/2"*	*1 1/2"*	*1 1/4"*
UR-1	*AMERICAN STANDARD*	*6590.001*	*WALL-HUNG URINAL. WHITE VITREOUS CHINA. 3/4" TOP SPUD. 0.5 GALLON SIPHON JET FLUSHING ACTION. MOUNT FIXTURE RIM AT 24" A.F.F. PROVIDE FLOOR-MOUNTED, HEAVY-DUTY TUBULAR STEEL UPRIGHTS. ADJUSTABLE CARRIER, PLATED HANGER, AND ALL OTHER REQUIRED MOUNTING HARDWARE.*	*SLOAN*	*ROYAL 186-0.5*	*EXPOSED URINAL FLUSH VALVE. CHROME-PLATED, METAL OSCILLATING NON-HOLD-OPEN HANDLE. 3/4" I.P.S. SCREWDRIVER BACK-CHECK ANGLE STOP WITH PROTECTIVE CAP. ADJUSTABLE TAILPIECE. 0.5 GPF. VACUUM BREAKER FLUSH CONNECTION AND SPUD COUPLING FOR 3/4" TOP SPUD. PROVIDE WALL AND SPUD FLANGES. MAXIMUM HANDLE HEIGHT PER ADA STANDARDS.*	---		3/4"	2"	*1 1/2"*
UR-2	*AMERICAN STANDARD*	*6590.001*	*ADA-COMPLIANT WALL-HUNG URINAL. WHITE VITREOUS CHINA. 3/4" TOP SPUD. 0.5 GALLON SIPHON JET FLUSHING ACTION. MOUNT FIXTURE RIM AT 17" A.F.F. PROVIDE FLOOR-MOUNTED, HEAVY-DUTY TUBULAR STEEL UPRIGHTS. ADJUSTABLE CARRIER, PLATED HANGER, AND ALL OTHER REQUIRED MOUNTING HARDWARE.*	*SLOAN*	*ROYAL 186-0.5*	*EXPOSED URINAL FLUSH VALVE. CHROME-PLATED, METAL OSCILLATING NON-HOLD-OPEN HANDLE. 3/4" I.P.S. SCREWDRIVER BACK-CHECK ANGLE STOP WITH PROTECTIVE CAP. ADJUSTABLE TAILPIECE. 0.5 GPF. VACUUM BREAKER FLUSH CONNECTION AND SPUD COUPLING FOR 3/4" TOP SPUD. PROVIDE WALL AND SPUD FLANGES. MAXIMUM HANDLE HEIGHT PER ADA STANDARDS.*	---		3/4"	2"	*1 1/2"*
WC-1	*AMERICAN STANDARD* *CHURCH*	*MADERA 2234.001* *9500C*	*ADA-COMPLIANT, 1.28 GALLON, FLOOR-MOUNTED FLUSH VALVE WATER CLOSET. TOP SPUD AND FLAT BOLT COVERS. WHITE VITREOUS CHINA ELONGATED BOWL, 15-1/2" HIGH. WHITE. SOLID PLASTIC, OPEN-FRONT SEAT FOR ELONGATED BOWL, INTEGRAL BUMPERS. EXTERNAL/CHECK HINGES WITH STAINLESS STEEL POSTS.*	*SLOAN*	*ROYAL 111-1.28*	*EXPOSED WATER CLOSET FLUSH VALVE. CHROME-PLATED, METAL OSCILLATING NON-HOLD-OPEN HANDLE. 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. HANDLE HEIGHT PER MANUFACTURER'S RECOMMENDATIONS AND IN ACCORDANCE WITH ADA GUIDELINES.*	6		1 1/4"	4"	2"
WC-2	*AMERICAN STANDARD* *CHURCH*	*MADERA 2234.001* *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 BUMPERS. EXTERNAL/CHECK HINGES WITH STAINLESS STEEL POSTS.*	*SLOAN*	*ROYAL 111-1.28*	*EXPOSED WATER CLOSET FLUSH VALVE. CHROME-PLATED, METAL OSCILLATING NON-HOLD-OPEN HANDLE. 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. HANDLE HEIGHT PER MANUFACTURER'S RECOMMENDATIONS AND IN ACCORDANCE WITH ADA GUIDELINES.*	6		1 1/4"	4"	2"
WF-1	*HAWS*	*1119FRP*	*WALL MOUNTED, DUAL HEIGHT ADA-COMPLIANT, VANDAL AND FREEZE RESISTANT, BARRIER-FREE. HEAVY DUTY DRINKING FOUNTAIN. STEEL CONSTRUCTION WITH 18GA STAINLESS BOWL AND BOTTLE FILLER. PROVIDE WITH CARRIER FOR WALL MOUNTING AND FREEZE-RESISTANCE VALVE MOUNTED IN CABINETS. MOUNT TRAP INSIDE OF BUILDING.*	---	---	---	*4*		1/2"	2"	*1 1/4"*
WH-1	*WATTS*	*HY-725*	*CONCEALED, NON-FREEZE WALL HYDRANT WITH INTEGRAL VACUUM BREAKER. 3/4" HOSE CONNECTION. LOCKING, STAINLESS STEEL BOX.*				---		3/4"		
WMB-1	*GUY GRAY*	*B200*	*GALVANIZED STEEL WASHING MACHINE OUTLET BOX.*				---	3/4"	3/4"	2"	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.*

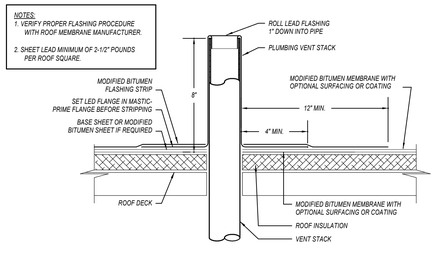
GENERAL NOTES (APPLICABLE TO ALL FIXTURES):
1. *ALL LAVATORIES AND SINKS USED FOR HAND WASHING SHALL BE PROVIDED WITH AN ANTI-SCALD, TEMPERATURE MIXING VALVE ON THE HOT WATER SUPPLY - REFER TO DETAIL.*
2. *FIXTURE CONNECTION SIZES SHOWN IN SCHEDULE ARE CONNECTION SIZE AT FIXTURE ON PLANS.*
3. *COORDINATE FIXTURE REQUIREMENTS SCHEDULED ABOVE WITH OTHER TRADES. VERIFY CABINET SIZES, COUNTERTOP MATERIALS, WALL THICKNESSES, ETC ARE APPROPRIATE FOR SPECIFIED FIXTURES PRIOR TO ORDERING.*



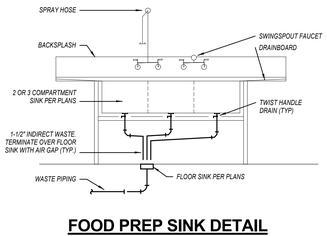
WATER SERVICE
REDUCED PRESSURE BACKFLOW PREVENTER DETAIL
NOT TO SCALE



ELECTRIC WATER HEATER
NOT TO SCALE



VENT STACK
NOT TO SCALE



FOOD PREP SINK DETAIL
NOT TO SCALE

PIPING MATERIAL AND INSULATION SCHEDULE

SYSTEM	PIPING SIZE	PIPING MATERIAL	PIPING TYPE/SCHED	ACCEPTABLE FITTINGS	FIELD TEST PRESSURE/TIME	ALLOWABLE IN PLENUMS	INSULATION TYPE	INSULATION THICKNESS
DOMESTIC COLD WATER	*1/2" - 2-1/2"*	*Copper*	*L*	*SOLDER, PRO-PRESS*	*130 PSI - 1/2 HR*	*YES*	*FIBERGLASS W/ASJ*	*1/2"*
DOMESTIC HOT WATER & HW RETURN	*1/2"-1-1/4"*	*Copper*	*L*	*SOLDER, PRO-PRESS*	*130 PSI - 1/2 HR*	*YES*	*FIBERGLASS W/ASJ*	*1"*
GREASE WASTE BELOW GRADE	*2"-8"*	*ABS*	*Schedule 40*	*SOLVENT JOINED*	*10 FT - 1/2 HR*	*N/A*	---	---
SANITARY WASTE BELOW GRADE	*2"-8"*	*PVC*	*Schedule 40*	*SOLVENT JOINED*	*10 FT - 1/2 HR*	*N/A*	---	---
VENT ABOVE GRADE	*1-1/2"-4"*	*PVC*	*Schedule 40*	*SOLVENT JOINED*	*10 FT - 1/2 HR*	*NO*	---	---
VENT BELOW GRADE	*1-1/4"-2"*	*PVC*	*Schedule 40*	*SOLVENT JOINED*	*10 FT - 1/2 HR*	*N/A*	---	---
DOMESTIC WATER SERVICE BELOW GRADE	*1"-3"*	*Copper*	*K*	*CONTINUOUS TUBING, BRAZED*	*130 PSI - 1/2 HR*	*N/A*	---	---

REMARKS:
1. *ALL PIPING AND MATERIALS IN PLENUMS MUST MEET ASTM E84 FLAME/SMOKE RATING OF 25/50.*
2. *ALL INSULATION THICKNESSES SHALL MEET OR SURPASS THE REQUIREMENTS OF BOTH THE CURRENT ADOPTED VERSION OF THE ENERGY CODE AND DIRECTLY PREDATING VERSION OF ASHRAE 90.1.*
3. *REFER TO SPECIFICATIONS FOR MORE DETAILED INFORMATION.*

GREASE INTERCEPTOR SCHEDULE

MARK	INTERCEPTOR MANUFACTURER	INTERCEPTOR MODEL	INTERCEPTOR SERVICE	CAPACITIES MAX. GPM	CAPACITIES GREASE (LBS)	CAPACITIES LIQUID (U.S. GAL.)	CONNECTION SIZES WASTE	CONNECTION SIZES VENT	REMARKS
GI-1	*SCHIER*	*GB2*	*FOOD GREASE*	*35.0*	*130*	*20*	*4"*	*4"*	*1,2,3,4*

REMARKS:
1. *PROVIDE WITH FIELD ADJUSTABLE RISERS AS REQUIRED TO EXTEND COVER/GRATE TO FINISHED FLOOR.*
2. *PROVIDE WITH BUILT-IN FLOW CONTROL, AND TEST CAPS WITH 3 OUTLET OPTIONS.*
3. *PROVIDE WITH PUMPOUT PORT KIT WITH 3" CAM LOCK AND ADAPTER.*
4. *FLOOR MOUNTED BELOW SINK.*

WATER HEATER SCHEDULE - ELECTRIC

MARK	MANUFACTURER	MODEL	DESCRIPTION	TANK VOLUME (U.S. GAL.)	HEATING ELEMENT(S) QTY	HEATING ELEMENT(S) WATTAGE (W)	RECOVERY RATE (GPH)	RECOVERY RISE (°F)	ELECTRICAL VOLTAGE (V)	ELECTRICAL PH	REMARKS
EWH-1	*A.O. SMITH*	*ECS-50*	*SHORT*	*50.00*	*2*	*5,000*	*21*	*100*	*208*	*1*	*1,2*

REMARKS:
1. *GLASS-LINED TANK.*
2. *ELECTRIC ELEMENTS SHALL BE NON-SIMULTANEOUS OPERATION.*

FLOOR DRAIN SCHEDULE

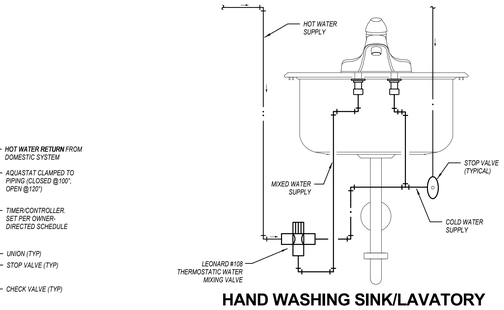
MARK	MANUFACTURER	MODEL	SERVICE	TOP/GRATE SIZE	WASTE SIZE	REMARKS
FD-1	*WATTS*	*FD-100A-6-3*	*FLOOR DRAIN*	*6"*	*3"*	*1*
FD-2	*WATTS*	*FD-100A-8-4*	*FLOOR DRAIN*	*8"*	*4"*	*1*
FS-1	*WATTS*	*FS-714*	*FLOOR SINK*	*8"*	*4"*	*2,3*
FS-2	*WATTS*	*FS-712*	*FLOOR SINK*	*8"*	*2"*	*2,3*

REMARKS:
1. *PROVIDE WITH NICKEL BRONZE TOP.*
2. *PROVIDE WITH ARC COATING ON DRAIN AND GRATE.*
3. *PROVIDE WITH 1/2 GRATE.*
4. *PROVIDE WITHOUT GRATE.*

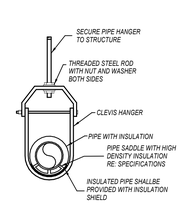
DOMESTIC RECIRCULATION PUMP SCHEDULE

MARK	MANUFACTURER	MODEL	GPM	HEAD (FT. W.C.)	PUMP HP	MAX. RPM	ELECTRICAL VOLTAGE (V)	ELECTRICAL PH	REMARKS
RP-1	*BELL & GOSSETT*	*NBF-22*	*0*		*50W*	*3540*	*120*	*1*	*1,2,3*

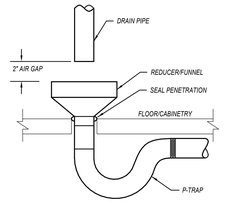
REMARKS:
1. *ALL BRONZE CONSTRUCTION.*
2. *PROVIDE WITH MOTOR RATED DISCONNECT, AQUASTAT AND TIMER FOR OPERATION OF PUMP.*
3. *MOUNT PUMP AND ACCESSORIES NEAR WATER HEATER AND NO HIGHER THAN 6' AFF.*



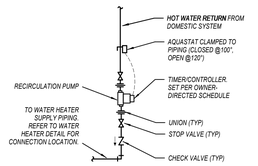
HAND WASHING SINK/LAVATORY TEMPERED WATER SCHEMATIC
NOT TO SCALE



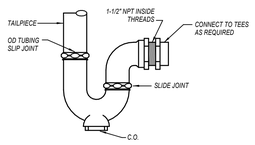
PIPE HANGER DETAIL
NOT TO SCALE



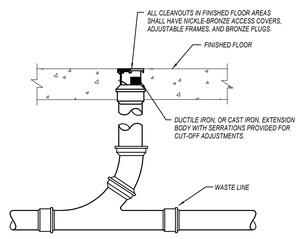
AIR GAP DETAIL
NOT TO SCALE



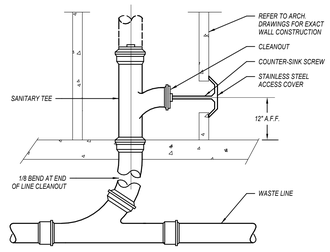
RECIRCULATING PUMP DETAIL
NOT TO SCALE



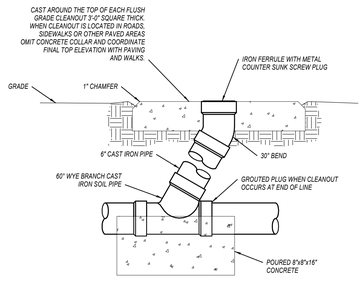
P-TRAP DETAIL
NOT TO SCALE



FLOOR CLEANOUT DETAIL
NOT TO SCALE



WALL CLEANOUT DETAIL
NOT TO SCALE



FLUSH GRADE CLEANOUT DETAIL
NOT TO SCALE

PARAGON STAR RR-CONCESSIONS

1401 NW River Rd
Lee's Summit, MO 64081

Project No.:	19050.04b
Date:	12.08.2025
Issued For:	PERMIT

REVISIONS

No.	Date	Description
1	1/8/26	CITY COMMENTS

REGISTRATION

Andrea Peratt - Engineer
MO# PE-2021000132

PROJECT TEAM

ARCHITECT	FINKLE+WILLIAMS ARCHITECTURE
CIVIL	CIVIL CONSULTANT
LANDSCAPE	LANDSCAPE
STRUCTURAL	STRUCTURAL
PLUMBING	PLUMBING
MECHANICAL	MECHANICAL
ELECTRICAL	ELECTRICAL
FIRE PROTECTION	FIRE PROTECTION
CONTRACTOR	GC

25261

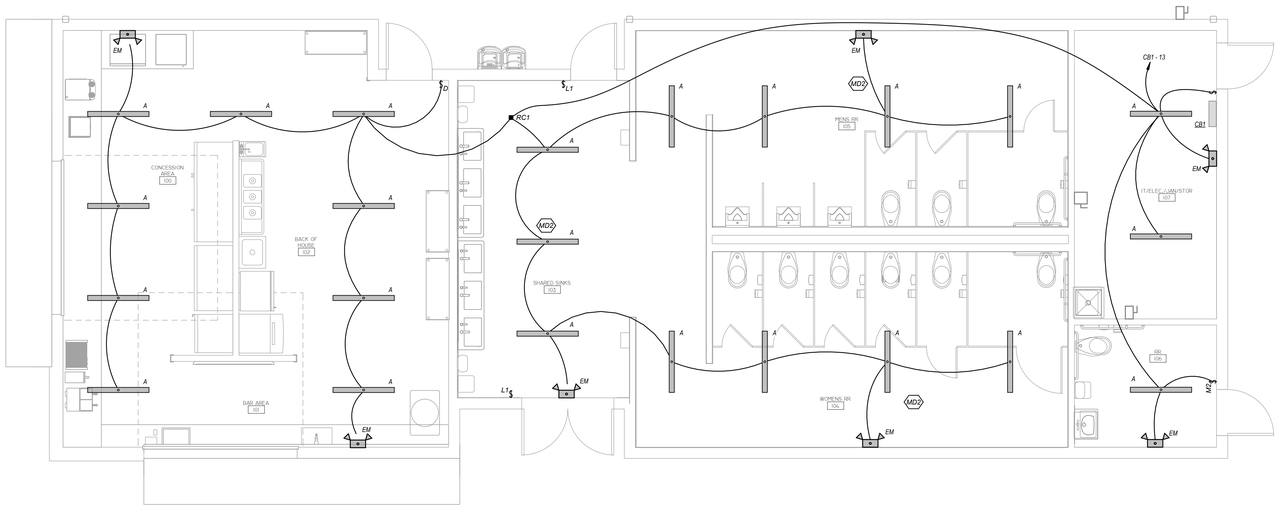
PEARSON KENT MCKINLEY RAAF ENGINEERS, LLC
13300 W 86TH STREET LENEXA, KS 66215
913.492.2400 WWW.PKMRENG.COM
MO State Certificate of Authority #E-2002020886

SHEET TITLE

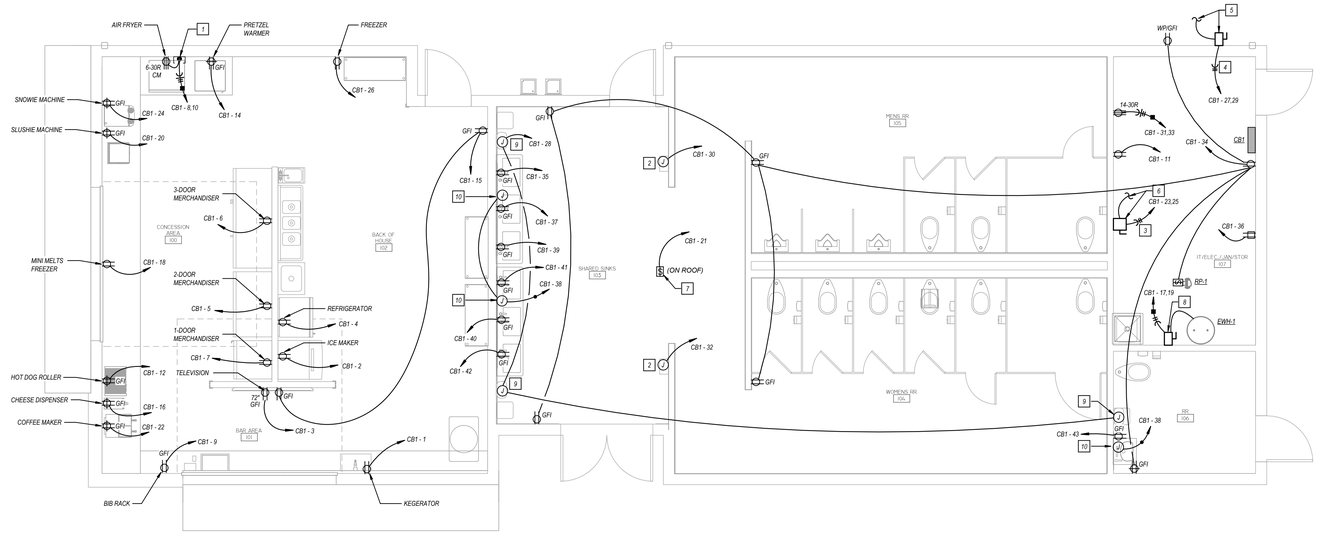
PLUMBING SCHEDULES & DETAILS

SHEET NUMBER

P2.01



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



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

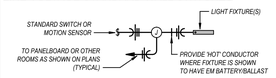
GENERAL LIGHTING NOTES

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.*

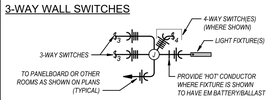
TYPICAL WIRING OF CONTROLS AND LIGHT FIXTURES

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

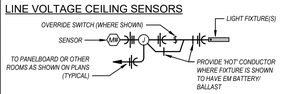
LINE VOLTAGE STANDARD WALL SWITCHES



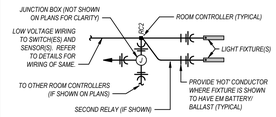
3-WAY WALL SWITCHES



LINE VOLTAGE CEILING SENSORS



ROOM CONTROLLERS / POWER PACKS



GENERAL POWER NOTES

1. *REFER TO GENERAL NOTES ON MEP COVER SHEET FOR ADDITIONAL REQUIREMENTS OF WORK.*
2. *COORDINATE EXACT NEMA CONFIGURATIONS OF RECEPTACLES SERVING EQUIPMENT WITH EXACT EQUIPMENT BEING FURNISHED.*
3. *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.*
4. *COORDINATE EXACT LOCATIONS OF SMOKE DETECTORS WITH CEILING FANS, HVAC DIFFUSERS, SPRINKLER HEADS, ETC. PER NFPA REQUIREMENTS.*

KEYED NOTES - POWER

1. *SPECIAL PURPOSE GROUND FAULT CIRCUIT INTERRUPTER FOR 30A/2P 208V CIRCUIT. LITTELFUSE SHOCK BLOCK GFCI OR EQUAL.*
2. *POWER CONNECTION TO HAND DRYER. PROVIDE LOCKABLE BREAKER. COORDINATE MOUNTING HEIGHT WITH ARCHITECT PRIOR TO ROUGH-IN.*
3. *(2) #3, #8G, 1" CONDUIT.*
4. *(2) #6, #10G, 3/4" CONDUIT.*
5. *CONNECT TO EXTERIOR HEAT PUMP. PROVIDE 60A/2P/NEMA 3R HEAVY DUTY DISCONNECT SWITCH. MECHANICAL SYSTEM IS PROVIDED, DESIGN-BUILD, BY THE MECHANICAL CONTRACTOR. HEAT PUMP POWER REQUIREMENTS AND LOCATION IS ASSUMED. COORDINATE ALL REQUIREMENTS WITH MECHANICAL CONTRACTOR/PROVIDER.*
6. *CONNECT TO INTERIOR AIR HANDLER SINGLE POINT CONNECTION. PROVIDE 100A/2P/NEMA 1 HEAVY DUTY DISCONNECT SWITCH. MECHANICAL SYSTEM IS PROVIDED, DESIGN-BUILD, BY THE MECHANICAL CONTRACTOR. AIR HANDLER POWER REQUIREMENTS AND LOCATION IS ASSUMED. COORDINATE ALL REQUIREMENTS WITH MECHANICAL CONTRACTOR/PROVIDER.*
7. *POWER CONNECTION TO ROOF MOUNTED EXHAUST FAN. MOUNT TOGGLE DISCONNECT UNDER FAN SHROUD. MECHANICAL SYSTEM IS PROVIDED, DESIGN-BUILD, BY THE MECHANICAL CONTRACTOR. POWER REQUIREMENTS AND LOCATION IS ASSUMED. COORDINATE ALL REQUIREMENTS WITH MECHANICAL CONTRACTOR/PROVIDER.*
8. *30A/2P/NEMA 1 HEAVY DUTY DISCONNECT SWITCH.*
9. *POWER CONNECTION TO PAPER TOWEL DISPENSER. PROVIDE LOCKABLE BREAKER. COORDINATE MOUNTING HEIGHT WITH ARCHITECT PRIOR TO ROUGH-IN.*
10. *POWER CONNECTION TO HARDWIRED FAUCET.*

PARAGON STAR
RR-CONCESSIONS

1401 NW River Rd
Lee's Summit, MO 64081

Project No.: 19050.04b
Date: 12.08.2025
Issued For: PERMIT

REVISIONS

No.	Date	Description

REGISTRATION

STATE OF MISSOURI
DARREN E. THRASHER
NUMBER PE-2014007277
PROFESSIONAL ENGINEER
12/9/25
Darren E. Thrasher - Engineer
MO# PE-2014007277

PROJECT TEAM

ARCHITECT	FINKLE+WILLIAMS ARCHITECTURE
CIVIL	CIVIL CONSULTANT
LANDSCAPE	LANDSCAPE
STRUCTURAL	STRUCTURAL
PLUMBING	PLUMBING
MECHANICAL	MECHANICAL
ELECTRICAL	ELECTRICAL
FIRE PROTECTION	FIRE PROTECTION
CONTRACTOR	GC

pkmr ENGINEERS
PEARSON KENT MCKINLEY RAAF ENGINEERS, LLC
13300 W 96TH STREET LENEXA, KS 66215
913.402.2400 WWW.PKMRENG.COM
MO State Certificate of Authority #E-2002020886
25.301

SHEET TITLE

ELECTRICAL PLAN

SHEET NUMBER

E1.01

12/8/2025 11:54:08 AM | PARAGON STAR RR-CONCESSIONS

LIGHTING CONTROLS

REFER TO SCHEDULES FOR SPECIFIC INFORMATION ON DEVICES. UNLESS NOTED OTHERWISE, WHERE "#" IS USED BELOW IT REFERS TO THE DEVICE IDENTITY IN THE RESPECTIVE SCHEDULE.

STANDARD SENSORS/CONTROLLERS

- $_{MS}$ *WALL-MOUNTED SENSOR*
- $_{MR\#}$ *WALL-MOUNTED SENSOR - DUAL-RELAY*
- $_{LM\#}$ *LOW VOLTAGE MOMENTARY SWITCH (# INDICATES NO. OF BUTTONS)*
- *CORNER-MOUNTED (ON CEILING) MOTION SENSOR*
- *CORNER-MOUNTED (ON WALL) MOTION SENSOR*
- *CEILING-MOUNTED MOTION SENSOR*
- *CEILING-MOUNTED MOTION SENSOR FOR HALLWAYS*
- *CEILING-MOUNTED MOTION SENSOR FOR HIGH CEILINGS*
- *CEILING-MOUNTED MOTION SENSOR FOR AISLES*
- *CEILING-MOUNTED MOTION SENSOR FOR ENDS OF AISLES*
- *DAYLIGHT SENSOR*

DIGITAL LIGHTING MANAGEMENT SENSORS/CONTROLLERS

- $_{MD\#}$ *DIGITAL WALL-MOUNTED SENSOR*
- $_{MDR\#}$ *DIGITAL WALL-MOUNTED SENSOR - DUAL-RELAY*
- *DIGITAL CORNER-MOUNTED (ON CEILING) MOTION SENSOR*
- *DIGITAL CORNER-MOUNTED (ON WALL) MOTION SENSOR*
- *DIGITAL CEILING-MOUNTED MOTION SENSOR*
- *DIGITAL CEILING-MOUNTED MOTION SENSOR FOR HALLWAYS*
- *DIGITAL DAYLIGHT SENSOR*
- $_{L\#}$ *DIGITAL ON/OFF SWITCH (# INDICATES NO. OF BUTTONS)*
- $_{LD\#}$ *DIGITAL DIMMING SWITCH (# INDICATES NO. OF BUTTONS)*
- ■ *RC#* *DIGITAL ON/OFF ROOM CONTROLLER*
- ■ *RD#* *DIGITAL DIMMING ROOM CONTROLLER*

TIME-BASED CONTROLS

- $_{TS}$ *DIGITAL TIME SWITCH*
- $_{AT}$ *ASTRONOMICAL TIME CLOCK*

LIGHTING CONTROL PANEL SYSTEMS

- $_{S\#}$ *LIGHTING CONTROL PANEL SWITCH*
- LCP-X *LIGHTING CONTROL PANEL*

TRAINING AND PROGRAMMING

OWNER TRAINING:

- *PROVIDE FACTORY REPRESENTATIVE TRAINING TO OWNER FOR EACH LIGHTING CONTROL SYSTEM UTILIZED, INCLUDING PROGRAMMING FOR SCHEDULING AND OPERATION OF EACH ROOM PER OWNER DIRECTION.*
- *PROVIDE RECORD OF TIME DELAY SETTINGS ON ALL SENSOR DEVICES FOR OWNER USE.*

SENSOR ADJUSTMENTS AND SETTINGS:

- *SYSTEMS SHALL BE SET/PROGRAMMED TO OPERATE TYPICALLY IN MANUAL ON/AUTO OFF MODE.*
  1. *SET WALL MOUNTED MOTION SENSOR TO MANUAL ON MODE.*
  2. *SET POWER PACKS AND ROOM CONTROLLERS CONTROLLED BY MOTION SENSORS TO MANUAL ON AND CONTROL WITH MOMENTARY WALL SWITCH.*
- *PROVIDE FINAL SETTINGS/ADJUSTMENTS PER OWNER'S DIRECTION.*

CONTROLS SEQUENCES

WALL-MOUNTED LINE VOLTAGE SENSORS:

- *TURN ON LIGHTS IN ROOM/AREA UPON BUTTON ON SENSOR BEING ACTIVATED BY OCCUPANT.*
- *TURN OFF LIGHTS AFTER NO MOTION IS DETECTED AND DELAY EXPIRES.*

RESTROOM:

- *MANUAL ON/OFF CONTROL OF LIGHTING VIA LOCAL SWITCHES.*
- *TURN OFF LIGHTS AFTER NO MOTION IS DETECTED BY CEILING SENSOR AND DELAY EXPIRES.*

SINGLE-SECTION PANELBOARD SCHEDULE

PANEL DESIGNATION: **CB1**

MOUNTING: *SURFACE*
LOCATION: *ITELEC/JANITOR 107*

MAIN LUG AMPS: *225*
MAIN BREAKER: *225*
VOLTAGE: *208/120*
PHASE/WIRE: *3Ø, 4W*
SCCR RATING (AIC): *10,000*

	DESCRIPTION	PHASE A	PHASE B	PHASE C	C/B TRIP	C/B POLE	CIRCUIT #		C/B POLE	C/B TRIP	PHASE A	PHASE B	PHASE C	DESCRIPTION	
	RCPT: KEGERATOR	*325*			*20*	*1*	1	2	*1*	*20*	*1128*			*RCPT: ICE MAKER*	G
	RCPT: BAR DISPLAY		*360*		*20*	*1*	3	4	*1*	*20*		*350*		*RCPT: REFRIGERATOR*	G
G	*RCPT: 2-DOOR MERCHANDISER*			*690*	*20*	*1*	5	6	*1*	*20*			*624*	*RCPT: 3-DOOR MERCHANDISER*	G
G	*RCPT: 1-DOOR MERCHANDISER*	*624*			*20*	*1*	7	8	*2*	*30*	*2850*			*AIR FRYER*	
	RCPT: BIB RACK		*500*		*20*	*1*	9	10				*2850*			
	RCPT: WASHER			*1500*	*20*	*1*	11	12	*1*	*20*			*910*	*RCPT: HOT DOG ROLLER*	
	LTS: INTERIOR	*934*			*20*	*1*	13	14	*1*	*20*	*500*			*RCPT: PRETZEL WARMER*	
	RCPT: 311,313		*360*		*20*	*1*	15	16	*1*	*20*		*225*		*RCPT: NACHO CHEESE*	
	WATER HEATER			*2500*	*30*	*2*	17	18	*1*	*20*			*500*	*RCPT: MINI MELTS FRZR*	G
		2500					19	20	*1*	*20*	*1440*			*RCPT: SLUSHE*	
	EXHAUST FAN		*1176*		*20*	*1*	21	22	*1*	*20*		*1000*		*RCPT: COFFEE MAKER*	
	AIR HANDLER			*9880*	*100*	*2*	23	24	*1*	*20*			*1440*	*RCPT: SNOWIE MACH*	
		9880					25	26	*1*	*20*	*1000*			*RCPT: FREEZER*	G
	HEAT PUMP		*2486*		*50*	*2*	27	28	*1*	*20*		*900*		*PAPER TOWEL DISP.*	
				2486			29	30	*1*	*20*			*1500*	*HAND DRYER 1*	
	DRYER	*2700*			*30*	*2*	31	32	*1*	*20*	*1500*			*HAND DRYER 2*	
			2700				33	34	*1*	*20*		*1260*		*RCPT: 1,3,9,273,274*	
	LAV HAND DRYER 1			*1000*	*20*	*1*	35	36	*1*	*20*			*360*	*RCPT: IT*	
	LAV HAND DRYER 2	*1000*			*20*	*1*	37	38	*1*	*20*	*500*			*HARD WIRED FAUCETS*	G
	LAV HAND DRYER 3		*1000*		*20*	*1*	39	40	*1*	*20*		*1000*		*LAV HAND DRYER 5*	
	LAV HAND DRYER 4			*1000*	*20*	*1*	41	42	*1*	*20*			*1000*	*LAV HAND DRYER 6*	
	LAV HAND DRYER 7	*1000*			*20*	*1*	43	44	*1*	*20*	-			*SPARE*	
	SPARE		-		*20*	*1*	45	46	*1*	*20*		-		*SPARE*	
	SPARE			-	*20*	*1*	47	48	*1*	*20*			-	*SPARE*	
	-	-			-	*1*	49	50	*1*	-	-			-	
			-		-	*1*	51	52	*1*	-		-		-	
	-			-	-	*1*	53	54	*1*	-	-			-	
	-	-			-	*1*	55	56	*1*	-		-		-	
	-		-		-	*1*	57	58	*1*	-			-	-	
	-			-	-	*1*	59	60	*1*	-	-	-	-	-	
	TOTALS	*18963*	*8582*	*19056*							*8918*	*7585*	*6534*	TOTALS	

PANELBOARD SIZING LOAD

LOAD DESCRIPTION	CONNECTED	DEMAND	CODE MIN. (VA)
LIGHTS	*934*	*1.25*	*1,168*
RECEPTACLES	*3,840*	*10KVA + 50% REST*	*3,840*
MOTORS	*1,176*	*1.35 x LARGEST + 50A OF REST*	*1,470*
AIR CONDITIONING	*0*	*1.00*	*0*
SPACE HEATING	*0*	*0.00*	*0*
HEAT PUMP	*24,732*	*1.00*	*24,732*
CONTINUOUS	*5,000*	*1.25*	*6,250*
NON-CONTINUOUS	*16,800*	*1.00*	*16,800*
MISC. LOADS 1	*0*	*1.00*	*0*
		SIZING LOAD:	65,411
		SIZING LOAD (AMPS):	182

CONNECTED PHASE LOADS

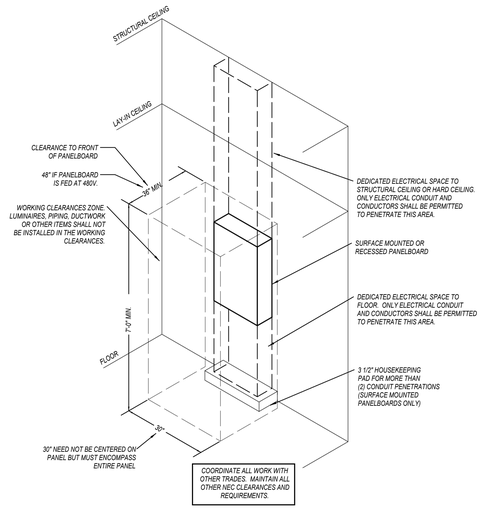
PHASE	VA	AMPS
A	*27,881*	*232.2*
B	*16,167*	*134.6*
C	*25,590*	*213.1*
TOTALS	69,638	193.3

REMARKS:

1. *EATON POW-R-LINE 1X OR EQUAL*
2. *VERIFY A/C RATING WITH EXISTING EQUIPMENT.*

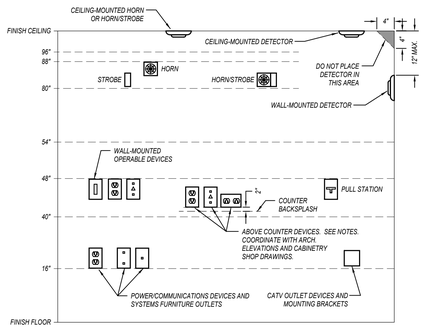
PANELBOARD BREAKER KEYED NOTES

G *FURNISH GFCI-PROTECTED BREAKER*



TYPICAL PANELBOARD INSTALLATION DETAIL

NOT TO SCALE



GENERAL NOTES:

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

VISUAL FIRE ALARM NOTIFICATION DEVICES (STROBE)
LOCATE DEVICE SO THE BOTTOM OF THE DEVICE IS BETWEEN 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 90" A.F.F. AND NOT LESS THAN 6" BELOW CEILING (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).

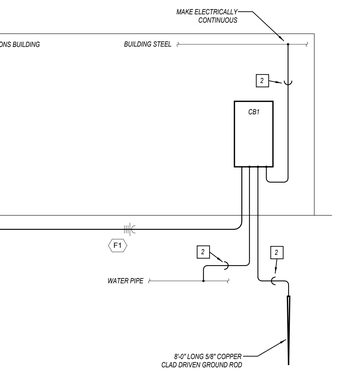
POWER/COMMUNICATION DEVICES:
OUTLETS SHALL BE LOCATED AT 16" A.F.F. TO THE BOTTOM OF THE BOX. ABOVE COUNTER DEVICES SHALL BE LOCATED AT 7" ABOVE THE BACKSPLASH OF THE COUNTER TO THE BOTTOM OF THE DEVICES. VERIFY WITH ARCHITECTURAL DETAILS.

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 (INLUDING THOSE FOR STAFF USE)*
- *OTHER CONTROL OR "CALL" DEVICES*

MOUNTING HEIGHTS FOR WALL-MOUNTED DEVICES

NOT TO SCALE



ELECTRICAL RISER DIAGRAM

NOT TO SCALE

RISER DIAGRAM KEYED NOTES

1 *PROVIDE NEW 200A/3P BREAKER IN NEMA 3R ENCLOSURE TO SERVE NEW PANELBOARD. TAP BUS IN EXISTING PANELBOARD P2. MAINTAIN ALL REQUIRED NEC CLEARANCES.*

2 *#2 AWG GROUNDING ELECTRODE CONDUCTOR IN 3/4" CONDUIT.*

EQUIPMENT FEEDER SCHEDULE

FEEDER NO.	EQUIPMENT	LOAD (AMPS)	FEEDER SETS	FEEDER # OF WIRES	FEEDER SIZE	FEEDER GROUND	FEEDER MATERIAL	CONDUIT SIZE
F1	*PANELBOARD CB1*	*181.6*	*1*	*4*	#4/0	#4	COPPER	*2-1/2"*

LIGHT FIXTURE SCHEDULE

FIXTURE TYPE	MANUFACTURER	CATALOG NUMBER	DESCRIPTION	LED MODULE / DRIVER ID	WATTS	LUMENS	CRI	CCT	DIMMING	VOLTAGE	REMARKS
A	*WILLIAMS*	*SLF SERIES*	*4'-0" LONG x 5-7/8" WIDE x 5-1/16" HIGH LENSED SURFACE-MOUNTED FIXTURE. STEEL HOUSING WITH ROUNDED FROSTED, HIGH IMPACT ACRYLIC LENS. WHITE POWDER COAT FINISH.*	*L52*	*37.2*	*5100*	*80*	*3000K*	*NO*	*120*	*1*
C	*LUMARK*	*CROSSTOUR XTOR SERIES*	*LOW-PROFILE EXTERIOR WALL-MOUNTED FIXTURE. ONE-PIECE, DIE-CAST ALUMINUM HOUSING. IMPACT-RESISTANT, TEMPERED GLASS LENS. FORWARD THROW OPTICS. POWDER COAT FINISH DARK BRONZE - COORDINATE WITH ARCHITECT/BUILDING OWNER. UL LISTED WET LOCATION. FURNISH WITH OPTIONAL PHOTOCELL FOR ON/OFF CONTROL OF LIGHT FIXTURE.*	*3B-Y*	*26*	*2,575*	*70*	*3000K*	*NO*	*120*	*1*
EM	*DUAL-LITE*	*EV SERIES*	*LOW-PROFILE EMERGENCY LIGHTING UNIT. FLAME-RATED, UV-STABLE THERMOPLASTIC HOUSING. TWO (2) SEMI-RECESSED, ADJUSTABLE "EYEBALL" HEADS WITH GLASS LENS. WHITE FINISH. MAINTENANCE-FREE BATTERY FOR 90 MINUTE OPERATION OF LAMPS. INTEGRAL TEST SWITCH AND AC-ON INDICATOR.*	*TWO (2) 1.1 WATT 1W LED LED.*	-	-	-	-	*120*	*1*

REMARKS:

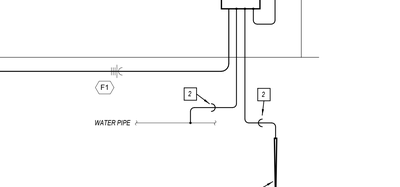
1. *FURNISH WITH AND INSTALL ALL NECESSARY HARDWARE AND MOUNTING BRACKETS.*

GENERAL NOTES (APPLICABLE TO ALL FIXTURES):

1) *EQUALS ARE ACCEPTABLE ON ALL LIGHT FIXTURES UNLESS SPECIFICALLY NOTED OTHERWISE. REFER TO SPECIFICATIONS FOR APPROVED EQUAL FIXTURE MANUFACTURERS.*
2) *ALL DRIVERS ARE INTEGRAL TO FIXTURE UNLESS NOTED OTHERWISE. REFER TO SPECIFICATIONS FOR ADDITIONAL FIXTURE/DRIVER/BALLAST REQUIREMENTS.*
3) *ALL FIXTURES WITH PAINTED METAL PARTS SHALL BE PAINTED AFTER FABRICATION.*
4) *LUMENS LISTED FOR LED FIXTURES ARE GENERALLY DELIVERED LUMENS UNLESS NOTED OTHERWISE.*
5) *ALL EXTERIOR LED FIXTURES ARE FULL CUTOFF UNLESS NOTED OTHERWISE.*
6) *ALL FIXTURES IN FOOD PREPARATION OR SERVING AREAS SHALL BE FURNISHED WITH SHATTER-RESISTANT LAMPS UNLESS LENSED.*

EMERGENCY LIGHTING FIXTURES DETAIL

NOT TO SCALE



TYPICAL TROFFER SUPPORT AND WIRING

NOT TO SCALE

LIGHTING CONTROL DEVICE SCHEDULE

MARK	MANUFACTURER	MODEL	DESCRIPTION	VOLTAGE
CEILING SENSORS				
MD2	*WATTSTOPPER*	*LMDC-100*	*DIGITAL DUAL-TECHNOLOGY CEILING SENSOR. 24V OPERATION WITH CAT5 CONNECTION.*	*24 V*
SWITCHES				
L#	*WATTSTOPPER*	*LMSW-100 SERIES*	*DIGITAL DECORA PUSHBUTTON SWITCH WITH LED PILOT LIGHT. CAT5 CONNECTION TO CONTROLLER. # REFERS TO QUANTITY OF BUTTONS ON FACE.*	*24 V*
WALL SENSORS				
.M2	*WATTSTOPPER*	*DSW-100*	*DUAL-TECHNOLOGY WALL SENSOR. LINE VOLTAGE.*	*120 V*

SERVICE ENTRANCE EQUIPMENT LABEL — *PHENOLIC*

EQUIPMENT FULLY-RATED AT 65,000 AMPERES RMS SYM
AVAILABLE FAULT CURRENT: 61,603 AMPERES
DATE CALCULATED: 04/19/2022

SWITCHBOARD LABEL — *PHENOLIC*

SWITCHBOARD SWDP1
FED FROM UTILITY COMPANY TRANSFORMER
208/120V, 1200A, 3-PHASE

ELECTRICAL PANELBOARD LABEL — *PHENOLIC*

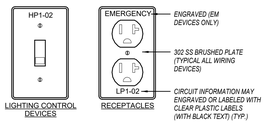
PANELBOARD LH1
FED FROM SWITCHBOARD SWDP1 IN ROOM #332
208/120V, 200A, 3-PHASE

DISCONNECT SWITCH/STARTER EQUIPMENT LABEL

RTU-1A
LP1-CKT 32,34,36
PHENOLIC

REMOTE DUCT DETECTOR TEST

RTU-1A
PRINTED LABEL (CLEAR W/ BLACK TEXT)

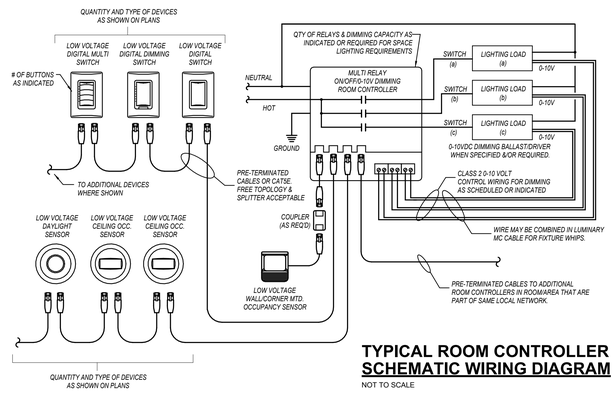


GENERAL LABELING NOTES:

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



TYPICAL ROOM CONTROLLER SCHEMATIC WIRING DIAGRAM

NOT TO SCALE

PARAGON STAR RR-CONCESSIONS

1401 NW River Rd
Lee's Summit, MO 64081

Project No.: 19050.04b
Date: 12.08.2025
Issued For: PERMIT

REVISIONS

No.	Date	Description

REGISTRATION

STATE OF MISSOURI — DARREN E. THRASHER — NUMBER PE-2014007277 — PROFESSIONAL ENGINEER — 12/8/25

Darren E. Thrasher - Engineer
MO# PE-2014007277

PROJECT TEAM

ARCHITECT	FINKLE+WILLIAMS ARCHITECTURE
CIVIL	CIVIL CONSULTANT
LANDSCAPE	LANDSCAPE
STRUCTURAL	STRUCTURAL
PLUMBING	PLUMBING
MECHANICAL	MECHANICAL
ELECTRICAL	ELECTRICAL
FIRE PROTECTION	FIRE PROTECTION
CONTRACTOR	GC

pkmr ENGINEERS
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

SHEET TITLE

ELECTRICAL SCHEDULES & DETAILS

SHEET NUMBER

E2.01

MECHANICAL SPECIFICATIONS

1. GENERAL PROVISIONS:
 1.1. PROVIDE ALL LABOR, MATERIALS, AND EQUIPMENT NECESSARY FOR THE COMPLETE INSTALLATION OF THE MECHANICAL SYSTEMS OUTLINED.
 1.2. OBTAIN ALL PERMITS, FEES, LICENSES, INSPECTIONS, AND CERTIFICATES OF COMPLIANCE OR APPROVAL AS REQUIRED BY THE AUTHORITIES.
 1.3. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE LAWS, CODES AND REGULATIONS OF THE GOVERNMENTAL BODIES HAVING JURISDICTION OVER THE SITE.
 1.4. ALL TESTING REQUIRED BY AUTHORITIES SHALL BE CONSIDERED PART OF THIS WORK.
 1.5. DURING CONSTRUCTION, ALL FIXTURES, EQUIPMENT, PIPE, DUCT, ETC. SHALL BE COVERED, PLUGGED, OR CAPPED AS REQUIRED TO KEEP CLEAN AND UNDAMAGED. ALL DAMAGED ITEMS SHALL BE RESTORED TO ORIGINAL CONDITION OR REPLACED. ALL PROTECTIVE COVERING SHALL BE REMOVED BEFORE FINAL ACCEPTANCE.
 1.6. PROVIDE ALL NECESSARY CUTTING AND PATCHING OF WALLS, FLOORS, CEILINGS, AND ROOFS AS NECESSARY. PATCH AROUND ALL OPENINGS SHALL MATCH ADJACENT AREA. COORDINATE ALL ROOFING WORK WITH OWNER OR RESPONSIBLE PARTY, SO THAT THE EXISTING ROOFING WARRANTY WILL BE MAINTAINED.
 1.7. CONTRACTOR SHALL GUARANTEE ALL WORK AND MATERIALS AGAINST DEFECTS FOR A PERIOD OF ONE YEAR FROM FINAL ACCEPTANCE.

2. OPERATION AND MAINTENANCE MANUALS:
 2.1. DURING THE COURSE OF CONSTRUCTION, COLLECT AND COMPILE OPERATING INSTRUCTIONS, WIRING DIAGRAMS, CATALOG CUTS, LUBRICATION AND PREVENTIVE MAINTENANCE INSTRUCTIONS, PARTS LISTS, ETC. FOR ALL EQUIPMENT FURNISHED UNDER THIS CONTRACT.
 2.2. ALL LITERATURE AND INSTRUCTIONS SHIPPED WITH THE EQUIPMENT SHALL BE SAVED FOR INCLUSION IN THE OPERATION AND MAINTENANCE MANUALS.
 2.3. ALL LITERATURE LISTED ABOVE AND ALL PAPERS LISTING WARRANTIES, ETC. SHALL BE BOUND IN A 3-RING BINDER AND LABELED WITH THE PROJECT NAME, ADDRESS, ARCHITECT, ENGINEER, CONTRACTORS, ETC.

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

4. MOTORS:
 4.1. PROVIDE THERMAL OVERLOAD PROTECTION FOR EACH MOTOR PROVIDED BY THIS WORK.

5. TESTING, BALANCING, AND CLEANING:
 5.1. ALL PIPING SHALL BE TESTED FOR LEAKS BEFORE BEING CONCEALED IN WALL CONSTRUCTION OR COVERED WITH INSULATION.
 5.2. DUCTWORK AND PIPING SHALL BE BALANCED BY QUALIFIED BALANCING PERSONNEL WHO HAVE PREVIOUS EXPERIENCE WITH BALANCING PROCEDURES.

6. PIPING:
 6.1. CONDENSATE DRAINS & INDIRECT WASTE (ABOVEGROUND).
  6.1.1. DWV, WROUGHT COPPER, ANSI B-16.29 (INSIDE BUILDING).
  6.1.2. POLYVINYLCHLORIDE (PVC) DWV PIPE, SCHEDULE 40, SOLVENT JOINT (EXTERIOR OF BUILDING).
 6.2. REFRIGERANT.
  6.2.1. ASTM B 280, TYPE ACR, HARD-DRAWN STRAIGHT LENGTHS, AND SOFT-ANNEALED COILS, SEAMLESS COPPER TUBING.
  6.2.2. WROUGHT COPPER, ANSI B16.22, STREAMLINED PATTERN, FITTINGS. BRAZED JOINTS, AWS A.5.8, CLASSIFICATION BAG-1 (SILVER).
  6.2.3. TUBING SHALL BE FACTORY CLEANED, READY FOR INSTALLATION, AND HAVE ENDS CAPPED TO PROTECT CLEANLINESS OF PIPE INTERIORS PRIOR TO SHIPPING.
  6.2.4. SIZE AND INSTALLATION OF PIPE SHALL BE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
 6.3. ALL PIPE HANGERS AND SUPPORTS SHALL BE STANDARD PRODUCTS OF GRINNELL, FEE AND MASON, OR ELCEN. HANGER SPACING SHALL BE IN ACCORDANCE WITH MSS-SP-69.
 6.4. SLEEVES.
  6.4.1. PROVIDE, SET, AND PROPERLY LOCATE PIPE SLEEVES AS REQUIRED FOR THIS WORK. ALL SLEEVES SHALL BE OF SUFFICIENT SIZE TO PERMIT PIPE MOVEMENT DUE TO EXPANSION AND CONTRACTION AND TO ACCOMMODATE PIPE INSULATION.
  6.4.2. INTERIOR PARTITIONS: 16 GAGE GALVANIZED STEEL, PACK BETWEEN PIPE AND SLEEVE WITH FIRE SAFING AND CAULK AT EACH END WITH FIRE RESISTANT SEALANT.
  6.4.3. ROOF: PROSET OR EQUAL, MANUFACTURED PVC SCHEDULE 40 PIPE SLEEVE WITH WATERPROOF SEAL. COORDINATE WITH ROOFING CONTRACTOR AND FLASH AS REQUIRED TO MAINTAIN ROOF WARRANTY.
  6.4.4. PLUMBING VENTS: FLASH ROOF VENT INTO ROOFING SYSTEM AS REQUIRED BY THE ROOFING CONTRACTOR TO MAINTAIN EXISTING ROOF WARRANTY.
 6.5. PROVIDE CHROME PLATED ESCUTCHEONS ON ALL PIPE ENTERING FINISHED AREAS.

7. INSULATION AND DUCT LINING:
 7.1. ALL INSULATIONS AND ACCESSORIES SHALL HAVE A FIRE HAZARD CLASSIFICATION WITH A MAXIMUM FLAME SPREAD RATING OF 25, A MAXIMUM FUEL CONTRIBUTION RATING OF 50, AND A MAXIMUM SMOKE DEVELOPED RATING OF 50, IN ACCORDANCE WITH NFPA.
 7.2. PIPE INSULATION:
  7.2.1. THE PIPING INSULATION USED SHALL HAVE A THERMAL CONDUCTIVITY OF 0.27 Btu PER in/ft^sqft*°F" OR LESS.
  7.2.2. FIBERGLASS INSULATION WITH FACTORY APPLIED VAPOR BARRIER, ASJ JACKET, FACTORY APPLIED PRESSURE SEALING LONGITUDE LAP JOINT, NO STAPLES, ZESTON PREMOLDED PVC FITTING COVERS. INSTALLATION SHALL BE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
  7.2.3. FLEXIBLE CLOSED CELL ELASTOMERIC THERMAL INSULATION, UNSLIT OR PRESLIT WITH PRESSURE SENSITIVE ADHESIVE SYSTEM FOR CLOSURE AND VAPOR SEALING, EQUAL TO ARMSTRONG AP ARMAFLEX OR ARMAFLEX 2000.
  7.2.4. FOR NON CIRCULATING SYSTEMS, THE FIRST 8 FEET OF INLET AND OUTLET PIPING BETWEEN THE TANK AND THE HEAT TRAP (INCLUDING THE HEAT TRAP) MUST BE INSULATED.
  7.2.5. INSULATION SCHEDULE:
   7.2.5.1. REFRIGERANT SUCTION: 1" FOR PIPING UP TO 1 1/2"Ø, & 1-1/2" FOR PIPING 1-1/2"Ø AND LARGER
   7.2.5.2. CONDENSATE DRAINS INSIDE BUILDING: 1/2"
 7.3. DUCTWORK: ACOUSTICAL INSULATION.
  7.3.1. DUCT LINING: 2 LB/CF, THICKNESS AS SCHEDULED, AIR STREAM SIDE COATED, INSTALL PER SMACNA STANDARDS.
   7.3.1.1. DUCT LINING SCHEDULE:
    7.3.1.1.1. RETURN AIR DUCT: 1/2" THROUGHOUT THE FIRST 10 FEET OF DUCT.
  7.3.2. DUCTWORK: THERMAL INSULATION.
   7.3.2.1. DUCT COVERING: 3/4 LB/CF, FIBERGLASS BLANKET WITH FACTORY APPLIED VAPOR BARRIER AND FACING, THICKNESS AS SCHEDULED, INSTALLATION IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
    7.3.2.1.1. DUCT COVERING SCHEDULE: MINIMUM R-6
     7.3.2.1.1.1. ROUND SUPPLY DUCT 2"
     7.3.2.1.1.2. RETURN AIR DUCT 2"
     7.3.2.1.1.3. OUTDOOR AIR DUCT 2"
  7.3.2.2. DUCT LINING: 2 LB/CF, THICKNESS AS SCHEDULED, AIR STREAM SIDE COATED, INSTALL PER SMACNA STANDARDS.
   7.3.2.2.1. DUCT LINING SCHEDULE: MINIMUM R-6
    7.3.2.2.1.1. ROUND SUPPLY DUCT 1-1/2"
    7.3.2.2.1.2. RETURN AIR DUCT 1-1/2"

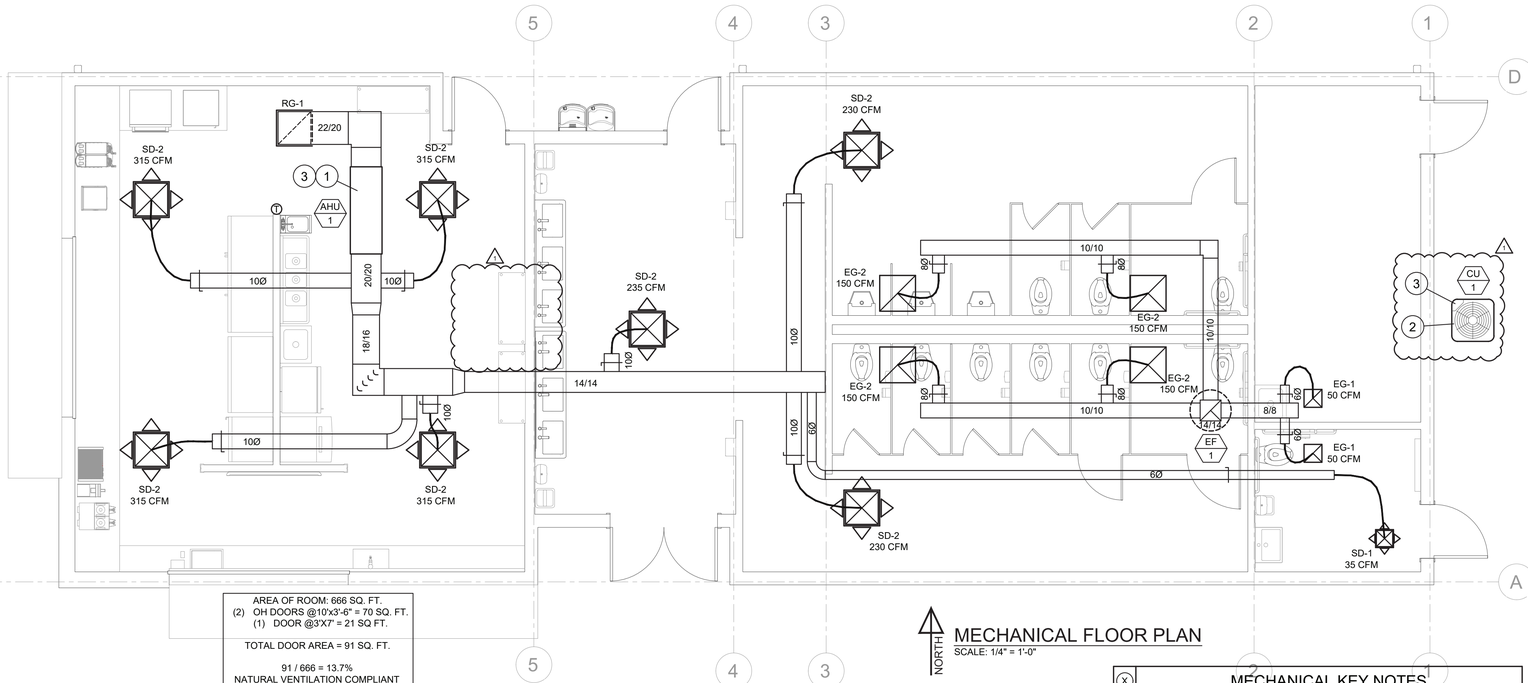
8. DUCTWORK:
 8.1. ALL DUCTWORK, UNLESS OTHERWISE INDICATED, SHALL BE FABRICATED FROM GALVANIZED SHEET STEEL COMPLYING WITH ASTM A 527, LOCKFORMING QUALITY, WITH G 60 ZINC COATING IN ACCORDANCE WITH ASTM A 525; AND MILL PHOSPHATIZED FOR EXPOSED LOCATIONS.
 8.2. DUCTWORK, METAL GAUGES, REINFORCING, ETC. SHALL BE CONSTRUCTED IN ACCORDANCE WITH SMACNA "HVAC DUCT CONSTRUCTION STANDARDS," LATEST EDITION FOR A 2 INCH WATER GAUGE STATIC PRESSURE.
 8.3. ALL FITTINGS SHALL BE CONSTRUCTED IN ACCORDANCE WITH SMACNA "HVAC DUCT CONSTRUCTION STANDARDS," LATEST EDITION.
 8.4. SEAL ALL CONCEALED DUCTWORK JOINTS WITH NON-HARDENING, NON-MIGRATING MASTIC SEALANT, AS RECOMMENDED FOR SEALING SEAMS AND JOINTS IN DUCTWORK. OIL BASE CAULKING AND GLAZING COMPOUNDS SHALL NOT BE ACCEPTABLE. DUCTS SHALL BE SEALED TO THE CLASS LEVEL LISTED BELOW.
  8.4.1. 1) UNCONDITIONED SPACES:
   8.4.1.1. SUPPLY < 2" W.C. - CLASS B
   8.4.1.2. SUPPLY > 2" W.C. - CLASS A
   8.4.1.3. EXHAUST - CLASS C
   8.4.1.4. RETURN - CLASS B
  8.4.2. CONDITIONED SPACES (PLENUM)
   8.4.2.1. SUPPLY < 2" W.C. - CLASS C
   8.4.2.1. SUPPLY > 2" W.C. - CLASS B
   8.4.2.2. EXHAUST - CLASS B
   8.4.2.3. RETURN - CLASS C

9. FLEXIBLE DUCT:
 9.1. ATCO #086 (R-6), OR EQUAL.
 9.2. FACTORY APPLIED INSULATION AND VAPOR BARRIER, 1-1/2" THICK.
 9.3. MAXIMUM LENGTH OF 6'-0".

10. EXHAUST FANS:
 10.1. CENTRIFUGAL TYPE FAN WITH CHARACTERISTICS AND CAPACITY AS SCHEDULED, ELECTRICALLY POWERED, SUITABLE FOR MOUNTING ON ROOF CURB, DIRECT OR BELT DRIVEN, HEAVY GAUGE SPUN-ALUMINUM WEATHERPROOF HOUSINGS OF THE HOODED DOME OR UPBLAST TYPE. PROVIDE PERMANENT SPLIT-CAPACITOR TYPE MOTOR FOR DIRECT DRIVEN FANS, AND CAPACITOR-START, INDUCTION-RUN TYPE MOTOR FOR BELT DRIVEN FANS.

11. AIR HANDLING UNIT AND HEAT PUMP CONDENSING UNIT:
 11.1. AIR HANDLING UNIT SHALL BE FACTORY ASSEMBLED, PRE-WIRED UNIT CONSISTING OF SHEETMETAL CASING, FILTER, SUPPLY FAN, ELECTRIC RESISTANCE HEATER, AND CONTROLS. CAPACITY SHALL BE AS SCHEDULED.
  11.1.1. THE UNIT SHALL BE EQUIPPED WITH THE MANUFACTURER'S STANDARD CONTROLS INCLUDING 24 VOLT CONTROL TRANSFORMER, HIGH TEMPERATURE LIMIT SWITCH, AND FAN TIMED DELAY RELAY.
  11.1.2. RETURN AIR INLET ON UNIT SHALL BE PROVIDED WITH A 1" THROWAWAY TYPE FILTER AND SLIDE IN FRAME, MOUNTED ON THE UNIT.
  11.1.3. FAN SHALL BE A DIRECT DRIVE MULTI-SPEED BLOWER, RESILIENTLY MOUNTED IN THE CASING. MOTOR SHALL BE PROVIDED WITH AUTOMATIC THERMAL OVERLOAD PROTECTION.
  11.1.4. REFRIGERANT COIL: ALUMINUM FINS BONDED TO SEAMLESS COPPER TUBE BY MEANS OF MECHANICAL EXPANSION. AN EQUALIZING TYPE VERTICAL DISTRIBUTOR SHALL ENSURE EACH COIL CIRCUIT RECEIVES THE SAME AMOUNT OF REFRIGERANT.
  11.1.5. ELECTRIC HEAT: ELECTRIC HEATER SHALL BE INSTALLED INTERNAL TO THE AIR HANDLING UNIT. HEATING ELEMENTS SHALL BE CONSTRUCTED OF HEAVY DUTY NICKEL CHROMIUM. EACH HEATER SHALL HAVE AUTOMATICALLY RESET HIGH LIMIT CONTROL OPERATING THROUGH HEATING ELEMENT CONTACTORS. EACH HEATER SHALL BE INDIVIDUALLY FUSED AND SHALL COMPLY WITH ALL NEC REQUIREMENTS. HEATERS SHALL BE UL LISTED.
 11.2. HEAT PUMP CONDENSING UNIT SHALL BE FACTORY-ASSEMBLED AND TESTED AIR-COOLED CONDENSING UNIT, CONSISTING OF COMPRESSOR, CONDENSER COIL, FAN, MOTOR, REVERSING VALVE, SOLID-STATE DEFROST CONTROL UTILIZING THERMISTERS, REFRIGERANT RESERVOIR, OPERATING CONTROLS, ETC. CAPACITY AND ELECTRICAL CHARACTERISTICS SHALL BE AS SCHEDULED.
  11.2.1. HERMETICALLY SEALED COMPRESSOR WITH BUILT-IN OVERLOADS AND VIBRATION ISOLATION. COMPRESSOR MOTOR, SHALL HAVE THERMAL AND CURRENT SENSITIVE OVERLOAD DEVICES, INTERNAL HIGH-PRESSURE PROTECTION, HIGH AND LOW PRESSURE CUTOUT SWITCHES, START CAPACITOR AND RELAY, 2-POLE CONTACTOR, CRANKCASE HEATER, AND TEMPERATURE ACTUATED SWITCH AND TIMER TO PREVENT COMPRESSOR RAPID CYCLE.
  11.2.2. COIL SHALL BE COPPER TUBING WITH ALUMINUM FINS; COMPLETE WITH LIQUID ACCUMULATOR AND LIQUID SUBCOOLER. EXTEND REFRIGERANT PIPING WITH BRASS SERVICE VALVES, FITTINGS, AND GAGE PORTS TO EXTERIOR OF CASING.
  11.2.3. ALUMINUM PROPELLER FAN SHALL BE DIRECT DRIVEN, WITH PERMANENTLY LUBRICATED FAN MOTOR HAVING THERMAL OVERLOAD PROTECTION.
  11.2.4. PROVIDE REVERSING VALVE, SUCTION LINE ACCUMULATOR, DISCHARGE MUFFLER, FLOW CONTROL CHECK VALVE, AND SOLID-STATE DEFROST CONTROL UTILIZING THERMISTERS.

12. CONTROL WIRING:
 12.1. ELECTRICAL WIRING AND WIRING CONNECTIONS REQUIRED FOR THE INSTALLATION OF THE TEMPERATURE CONTROL SYSTEM, SHALL BE PROVIDED BY THIS CONTRACTOR, UNLESS SPECIFICALLY SHOWN ON THE ELECTRICAL DRAWINGS OR SPECIFICATIONS.
 12.2. INSTALL CONTROL WIRING, WITHOUT SPLICES BETWEEN TERMINAL POINTS, COLOR CODED. INSTALL IN NEAT WORKMANLIKE MANNER, SECURELY FASTENED. INSTALL IN ACCORDANCE WITH NATIONAL ELECTRICAL CODE AND THE ELECTRICAL SPECIFICATIONS.
  12.2.1. INSTALL CIRCUITS OVER 25 VOLT WITH COLOR CODED NUMBER 12 WIRE.
  12.2.2. INSTALL CIRCUITS UNDER 25 VOLT WITH COLOR CODED NUMBER 18 WIRE WITH 0.031 INCH HIGH TEMPERATURE 105°F PLASTIC INSULATION ON EACH CONDUCTOR AND PLASTIC SHEATH OVER ALL.
  12.2.3. INSTALL ELECTRONIC CIRCUITS WITH COLOR CODED NUMBER 22 WIRE WITH 0.023 INCH POLYETHYLENE INSULATION ON EACH CONDUCTOR WITH PLASTIC JACKETED COPPER SHIELD OVER ALL.
  12.2.4. INSTALL LOW VOLTAGE CIRCUITS, LOCATED IN CONCRETE SLABS AND MASONRY WALLS, OR EXPOSED IN OCCUPIED AREAS, IN ELECTRIC CONDUIT.
  12.2.5. ALL WIRING IN AREAS USED AS AIR PLENUMS SHALL BE IN ELECTRIC CONDUIT EXCEPT THAT LOW VOLTAGE WIRING MAY BE TEFLON COATED, ALUMINUM SHEATHED CABLE OR OTHER WIRE SPECIFICALLY APPROVED FOR INSTALLATION IN AIR PLENUMS, WHERE ACCEPTABLE BY LOCAL CODES.
  12.2.6. ALL WIRING IN AREAS NOT USED FOR AIR MOVEMENT SHALL BE IN ELECTRIC METALLIC TUBING EXCEPT LOW VOLTAGE WIRING MAY BE IN APPROVED SIGNAL CABLE WHERE ACCEPTED BY LOCAL CODES.



AREA OF ROOM: 666 SQ. FT.
(2) OH DOORS @10'x3'-6" = 70 SQ. FT.
(1) DOOR @3'X7' = 21 SQ FT.

TOTAL DOOR AREA = 91 SQ. FT.

91 / 666 = 13.7%
NATURAL VENTILATION COMPLIANT

NORTH

MECHANICAL FLOOR PLAN
SCALE: 1/4" = 1'-0"

AIR HANDLER SCHEDULE

MARK	MANUFACTURER	MODEL	TONS	MINIMUM OUTDOOR AIR (CFM)	BLOWER DATA			HEATING DATA (ELEC)			ELECTRICAL DATA			ACCESSORIES AND INSTALLATION NOTES
					CFM	E.S.P.	HP	KW INPUT	STAGES	BTU/H OUTPUT	VOLTAGE	MCA	MOCP	
AHU 1	LENNOX	CBK47UHET060	5	0	1990	0.6	1	4.0 (@240V)	1	10,250	208 / 1Ø	28	30	1,2,3,4,5

1. AIR HANDLER AND CONDENSING UNIT SHALL BE OF THE SAME MANUFACTURER.
2. 1" THICK DISPOSABLE FILTER.
3. EXTERNAL STATIC PRESSURE INCLUDES PRESSURE DROP THROUGH ALL COMPONENTS EXTERNAL TO AIR HANDLER.
4. 7-DAY PROGRAMMABLE (HEAT/COOL/AUTO) COMMERCIAL THERMOSTAT.
5. ALL UNIT BREAKER SIZES SHALL BE COORDINATED WITH ELECTRICAL CONTRACTOR.

HEAT PUMP CONDENSING UNIT SCHEDULE

MARK	MANUFACTURER	MODEL	EVAP. COIL MODEL	TONS	EFFICIENCY RATING (SEER)	COOLING DATA			ELECTRICAL DATA			ACCESSORIES AND INSTALLATION NOTES
						TOTAL BTU/H	AMBIENT	EVAP. EAT	VOLTAGE	MCA	MOCP	
CU 1	LENNOX	ML14KP1-060	CBK47UHET060	5	14.0	60,000	95°F	80°F/67°F	208 / 1Ø	22	35	1,2,3,4,5,6

1. TIME DELAY ON COMPRESSOR RE-START. COMPRESSOR LOCK-OUT WITH AMBIENT BELOW 5°F.
2. INDOOR COIL WITH THERMAL EXPANSION VALVE (TXV).
3. CRANKCASE HEATER.
4. CONCRETE OR PRE-MANUFACTURERED POLYOLEFIN PAD.
5. HAIL GUARDS.
6. ALL UNIT BREAKER SIZES SHALL BE COORDINATED WITH ELECTRICAL CONTRACTOR.

GRILL, REGISTER, & DIFFUSER SCHEDULE

MARK	MANUFACTURER	MODEL	FACE SIZE (INCHES)	NECK SIZE (INCHES)	FINISH	NOTES
SD-1	TITUS	TMS/3	12x12	6Ø	WHITE	-
SD-2	TITUS	TMS/3	24x24	10Ø	WHITE	-
RG-1	TITUS	PAR/3	24x24	22x22	WHITE	-
EG-1	TITUS	PAR-AA/3	12x12	6Ø	WHITE	-
EG-2	TITUS	PAR-AA/3	24x24	8Ø	WHITE	-

EXHAUST FAN SCHEDULE

MARK	MANUFACTURER	MODEL	AIRFLOW (CFM)	E.S.P. (" W.C.)	RPM (MAX)	ELECTRICAL DATA			CONTROL METHOD	ACCESSORIES AND INSTALLATION NOTES
						VOLTAGE	WATTS	HP		
EF 1	SOLER & PALAU	SDB-12	700	0.50	1200	120 / 1Ø	-	1/4	CONTINUOUS DURING OPERATIONS	1,2,3

1. BACKDRAFT DAMPER.
2. BIRD SCREEN.
3. 14" TALL PRE-SLOPED ROOF CURB

MECHANICAL SYMBOLS AND LEGEND

ABBR.	SYMBOL	DESCRIPTION
CD		CEILING DIFFUSER (SUPPLY AIR)
RG		RETURN GRILLE
EF		EXHAUST GRILLE
	T	THERMOSTAT (48" AFF)
		DUCTWORK (NEW)
18/12		SIZE OF RECTANGULAR DUCTWORK (WIDTH/HEIGHT, INCHES)
14Ø		SIZE OF ROUND DUCTWORK (DIAMETER, INCHES)
		FLEX DUCTWORK
SA		SUPPLY AIR (POSITIVE PRESSURE)
RA		RETURN AIR (NEGATIVE PRESSURE)
EA		EXHAUST AIR (POSITIVE OR NEGATIVE PRESSURE)
MBD		MANUAL BALANCING DAMPER
	RTU 1	MECHANICAL EQUIPMENT (AS SCHEDULED)
M.C.		MECHANICAL CONTRACTOR

MECHANICAL KEY NOTES

X	
1	SUPPORT UNIT FROM STRUCTURE AS REQUIRED BY MANUFACTURER. PROVIDE VIBRATION ISOLATION AT SUPPORT POINTS. PROVIDE WATERPROOF DRAIN PAN UNDER UNIT WITH CONTACT TO DE-ENERGIZE UNIT WITH PRESENCE OF WATER IN DRAIN PAN.
2	SET UNIT ON CONCRETE OR PRE-MANUFACTURER POLYEFIN PAD. (1)
3	CONNECT REFRIGERANT PIPING TO CONDENSING UNIT & COIL AS REQUIRED PROVIDE REFRIGERANT PIPING FOR CONDENSING UNIT AS REQUIRED BY MANUFACTURER. INSTALL PIPING AS RECOMMENDED BY MANUFACTURER.

MECHANICAL GENERAL NOTES

1	COORDINATE WITH ALL PROJECT CONTRACTORS AND VERIFY EXISTING CONDITIONS FOR PROPER INSTALLATION OF SYSTEMS AS INTENDED.
2	INSTALL SYSTEMS AS REQUIRED TO PROVIDE MANUFACTURER-RECOMMENDED CLEARANCES.
3	FLEXIBLE CONNECTIONS SHALL BE PROVIDED BETWEEN DUCTWORK AND MOTORIZED EQUIPMENT.
4	NO PIPE OR DUCT SHALL BE ROUTED OVER THE TOP OF ELECTRICAL PANELS.
5	ALL MATERIALS EXPOSED WITHIN PLENUMS SHALL BE NONCOMBUSTIBLE OR SHALL HAVE A MAXIMUM FLAME SPREAD INDEX OF 25 AND A MAXIMUM SMOKE-DEVELOPED INDEX OF 50, WHEN TESTED IN ACCORDANCE WITH ASTM E 84.
6	ALL ROOFING WORK SHALL BE PERFORMED BY LANDLORD'S ROOFING CONTRACTOR (AT THIS CONTRACTOR'S EXPENSE) TO MAINTAIN EXISTING ROOF WARRANTY. VERIFY APPROVED ROOFING CONTRACTOR WITH LANDLORD PRIOR TO PERFORMING WORK.

CONCRETE CONSTRUCTION
12600 E. 98TH ST.
KANSAS CITY, MO 64138

MISSOURI PE COA #2016025677
CG Engineering, LLC
1624 N Glen Ellyn
Independence, MO 64056
816-516-9540

PARAGON STAR
CONCESSIONS AND RESTROOMS
1421 NW RIVER RD.
LEE'S SUMMIT, MO

STAMP 2-9-2026
STATE OF MISSOURI
CHRISTOPHER T. GROSS
NUMBER PE-2015038448
REGISTERED PROFESSIONAL ENGINEER

REVISION DATE:
1 HP RELOCATE 02.09.2026

ISSUE DATE:
02 FEBRUARY 2026

M-1