# HOME2 SUITES BY HILTON LEE'S SUMMIT, MO

PRINTS ISSUED

04/17/2024 - CITY SUBMISSION

**REVISIONS:** 

1 05/17/2024 CITY RESPONSE 2 06/14/2024 CITY & BRAND RESPONSE

# I, (David E. Hendrikse), hereby specify pursuant to the governing requirements of the state, that the documents intended to be authenticated by my seal are

limited to:							
G-001	G-201	G-301	A-105	A-202	A-401	A-501	A-702
G-002	G-202	G-302	A-106	A-203	A-402	A-502	A-703
G-003	G-203	G-303	A-107	A-300	A-403	A-503	A-704
G-004	G-204	AS-100	A-120	A-301	A-404	A-504	A-705
G-005	G-205	AS-101	A-121	A-302	A-405	A-600	A-706
G-006	G-206	AS-102	A-122	A-303	A-406	A-601	A-707
G-007	G-207	AS-103	A-123	A-304	A-407	A-602	A-708
G-100	G-208	A-101	A-124	A-305	A-408	A-603	A-710
G-101	G-209	A-102	A-125	A-306	A-410	A-604	A-711
G-102	G-210	A-103	A-200	A-307	A-415	A-700	A-715
G-103	G-300	A-104	A-201	A-400	A-500	A-701	

PROJECT CERTIFICATION

and I hereby disclaim any responsibility for all other plans, specifications, reports or other documents or instruments relating to or intended to be used for any part or parts of the architectural or engineering project or survey.

SEAL

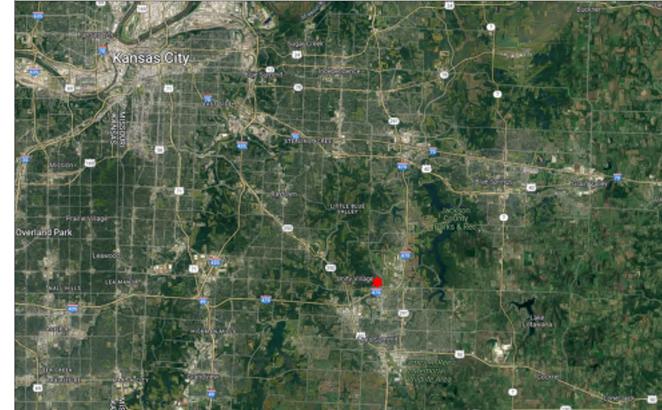


DAVID E. HENDRIKSE, AIA

# **REGIONAL MAP**



**VICINITY MAP** 



**HOME2 SUITES BY HILTON 251 NE ALURA WAY** LEE'S SUMMIT, MISSOURI 64064



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•	04/17/24	G-007	GENERAL INFORMATION					
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VIL UNDER SEPARATE REVIEW, REFERENCE FD
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_		A-715	FINISH TRANSITION DETAILS		

**ARCHITECTURAL** 

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	ELECTRICAL								
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	04/17/24	EL102	LIGHTING PLAN - SECOND & THIRD FLOORS	2	06/14/2024				
-	04/17/24	EL103	LIGHTING PLAN - FOURTH FLOOR	2	06/14/2024				
-	04/17/24	EL401	ENLARGED LIGHTING PLAN - GUEST ROOMS	2	06/14/2024				
-	04/17/24	FS101	FIRE ALARM AND SECURITY PLAN - FIRST FLOOR						
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-	04/17/24	FS103	FIRE ALARM AND SECURITY PLAN - THIRD FLOOR						
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■ 04/17/24 E602 ELECTRICAL SCHEDULES

■ 04/17/24 E603 ELECTRICAL SCHEDULES

■ 04/17/24 E604 ELECTRICAL SCHEDULES

# PROJECT DATA

PROJECT DESIGN INFORMATION						
NEW CONSTRUCTION:						
ZONING:	PMIX - PLANNED MIXED USE DISTRICT					
CODE:						
	2018 INTERNATIONAL BUILDING CODE					
	2018 INTERNATIONAL PLUMBING CODE					
	2018 INTERNATIONAL MECHANICAL CODE					
	2018 INTERNATIONAL FUEL GAS CODE					
	2018 INTERNATIONAL FIRE CODE					
	2017 NATIONAL ELECTRIC CODE					
	2009 ACCESSIBILITY CODE ICC/ANSI 117-1					

LEE'S SUMMIT AMENDMENTS TO ENERGY CODE NFPA 72 & NFPA 13 / 13R OCCUPANCY GROUP: R-1, HOTEL TRANSIENT A-2, UNCONCENTRATED

B, BACK OF HOUSE TYPE OF CONSTRUCTION: **ENERGY CONSERVATION:** WALLS AS PART OF BLDG ENVELOPE R-11 FLOORS AS PART OF BLDG ENVELOPE R-19 ROOFS AS PART OF BLDG ENVELOPE R-19

CEILINGS AS PART OF BLDG ENVELOPE R-30

A-4, SWIMMING POOL

**BUILDING SUMMARY** 

IUMBER: IEIGHT:	1 TOTAL BUII 4 STORIES, 4	
ARE FOOTAGES:	<u>GROSS</u>	<u>NET</u>
FIRST FLOOR	16 402 S F	16.07

SECOND FLOOR 14,828 S.F. 14,529 S.F. 14,828 S.F. 14,529 S.F. THIRD FLOOR FOURTH FLOOR 14,828 S.F. 14,529 S.F.

**107 TOTAL UNITS** 

**UNIT SUMMARY**: ACCESSIBLE UNITS

HI/VI UNITS

(4) UNITS - ACC. KING ONE BEDROOM (2) UNITS - ACC KING STUDIO (1) UNITS - ACC. QUEEN QUEEN STUDIO (2) UNITS - KING STUDIO CONNECTING (1) UNITS - KING ONE BEDROOM

(3) UNITS - QUEEN QUEEN STUDIO

(2) UNITS - QUEEN QUEEN CONNECTING TYPE 'B' UNITS (71) UNITS - KING STUDIO (4) UNITS - KING STUDIO CONNECTING (3) UNITS - KING ONE BEDROOM

(9) UNITS - QUEEN QUEEN STUDIO (1) UNITS - QUEEN QUEEN CONNECTING **TOTAL UNITS** 

SQUARE FOOTAGE KING STUDIO CON. ACC. KING STUDIO KING ONE BED 576 S.F. ACC. KING ONE BED 628 S.F. QUEEN QUEEN STUDIO 474 S.F. QUEEN QUEEN CON. 456 S.F. 422 S.F. ACC. QUEEN QUEEN 600 S.F. 562 S.F.

SITE SUMMARY: REFERENCE CIVIL FOR SITE INFORMATION

# NOTE: SQUARE FOOTAGE

■ 04/17/24 P501 PLUMBING DETAILS ■ 04/17/24 P601 PLUMBING SCHEDULES

2 06/14/2024

<u>-GROSS - COMMON SPACE CALCULATION:</u> OUTSIDE PERIMETER OF STUD (ENTIRE BUILDING) LESS THE TOTAL OF THE GROSS UNIT SQUARE FOOTAGE PER FLOOR. <u>-GROSS - UNIT CALCULATION:</u> CENTERLINE OF PARTY WALL TO OUTSIDE OF EXTERIOR STUD WALL AND/OR OUTSIDE OF CORRIDOR STUD WALL. -NET - PAINT-TO-PAINT AT PERIMETER, TAKEN FROM INSIDE OF DEMISING, EXTERIOR, AND CORRIDOR WALLS.

# PROJECT TEAM

OWNER	
INTRINSIC DEVELO	OPMENT
ADDRESS:	3622 ENDEAVOR AVE., STE. 101
	COLUMBIA, MO 65201
CONTACT:	BRIAN MAENNER
EMAIL:	bpmaenner@intrinsicdevelopment.com
PHONE.	573 881 0280

# **ARCHITECT**

**ROSEMANN & ASSOCIATES, P.C.** 1526 Grand Boulevard Kansas City, MO 64108 CONTACT A.J. DOLPH ajdolph@rosemann.com 816.472.1448 PHONE:

# CONTRACTOR

3622 ENDEAVOR AVE., STE. 101 COLUMBIA, MO 65201

CONTACT: **BRIAN MAENNER** EMAIL: bpmaenner@intrinsicdevelopment.com PHONE: 573.881.0280

# STRUCTURAL ENGINEER

### 1901 PENNSYLVANIA DRIVE COLUMBIA MO 65202 CONTACT: **CELESTE SPICKERT** cspickert@mcclurevision.com PHONE: 573.234.4492

# MECHANICAL, ELECTRICAL, PLUMBING **ENGINEER**

J-SQUARED ENGINEERING 2400 BLUFF CREEK DRIVE, SUITE 101 COLUMBIA, MO 65201

CONTACT: ANDREW WHITE andrew@j-squaredeng.com PHONE: 573.234.4492

# **CIVIL ENGINEER**

**CROCKETT ENGINEERING CONSULTANTS** 1000 W NIFONG BLVD., BLDG 1 COLUMBIA, MO 65203 CONTACT: TIM CROCKETT

### EMAIL: tim@crockettengineering.com PHONE: 573.447.0292

# LANDSCAPE ARCHITECT

CROCKETT ENGINEERING CONSULTANTS							
ADDRESS:	1000 W NIFONG BLVD., BLDG						
	COLUMBIA, MO 65203						
CONTACT:	TIM CROCKETT						
EMAIL:	tim@crockettengineering.com						
PHONE:	573.447.0292						

**PLUMBING** ■ 04/17/24 PS101 SANITARY SEWER PLAN - FIRST FLOOR 2 06/14/2024 ■ 04/17/24 PS102 SANITARY SEWER PLAN - SECOND FLOOR ■ 04/17/24 PS103 SANITARY SEWER PLAN - THIRD FLOOR 2 06/14/2024 ■ 04/17/24 PS104 SANITARY SEWER PLAN - FOURTH FLOOR 2 06/14/2024 ■ 04/17/24 PW101 WATER & GAS PLAN - FIRST FLOOR 2 06/14/2024 ■ 04/17/24 PW102 WATER & GAS PLAN - SECOND FLOOR ■ 04/17/24 PW103 WATER & GAS PLAN - THIRD FLOOR 2 06/14/2024 ■ 04/17/24 PW104 WATER & GAS PLAN - FOURTH FLOOR 2 06/14/2024

2 06/14/2024

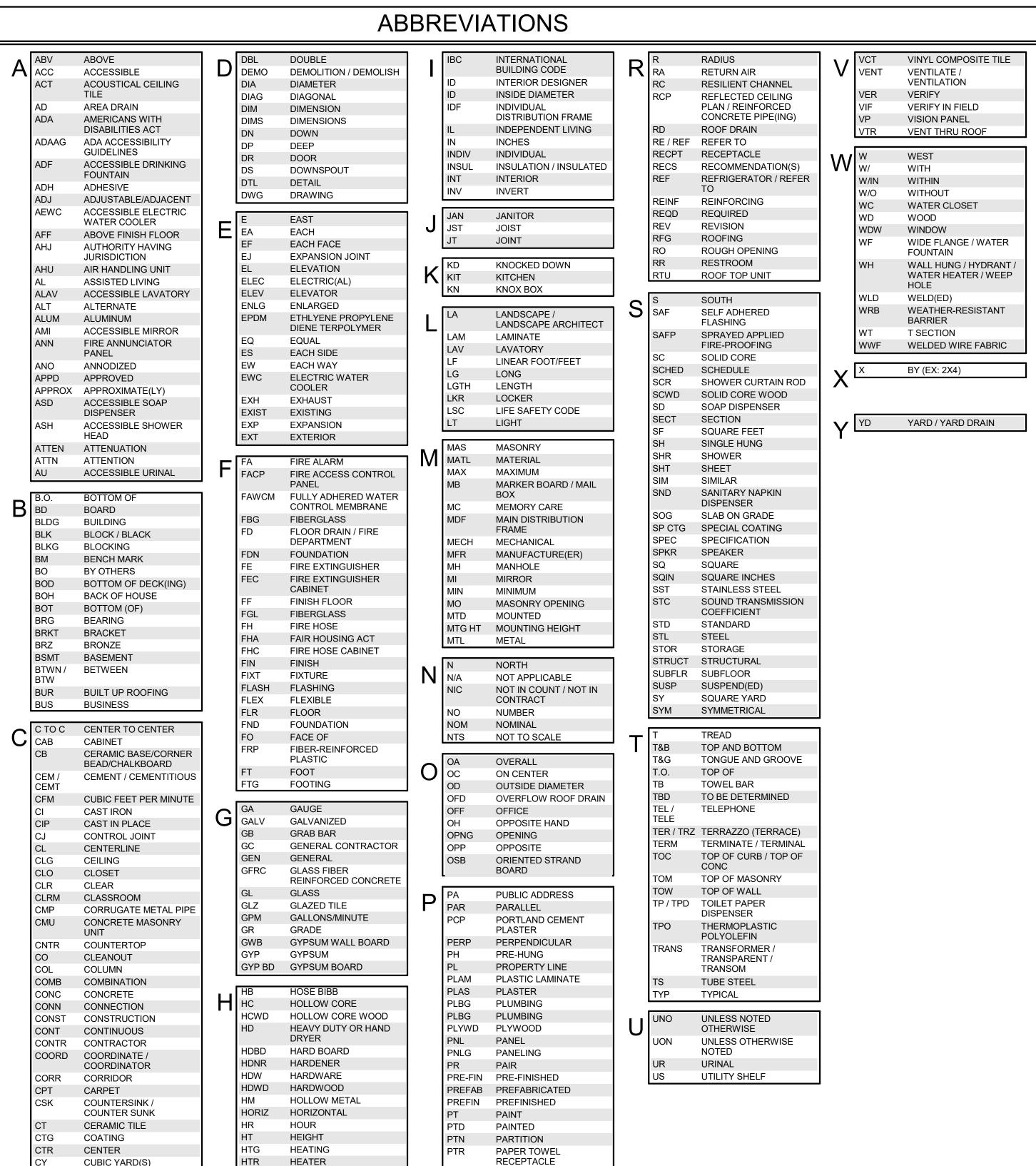
SOLID FILL INDICATES INCLUSION IN ISSUE SHEET ISSUE DATE A-000 SHEET NAME - 10 / 10/ 2024 **■** 10 / 10/ 2024 SHEET NUMBER AND NAME SHEET INDEX LEGEND

CURRENT REVISION NUMBER & REVISION DATE ON SHEET

 $\Box$ SUITE **HOME2** 

SHEET TITLE TITLE SHEET

PROJECT NUMBER: 22023



RECEPTACLE

# MATERIAL LEGEND AND SYMBOLS & Ø ROOM NUMBER MASONRY BLOCK -Room Name 1/2" = 1'-0" AND BELOW ACCESSIBLE UNIT OR TYPE-A UNIT **BRICK - SECTION** HEARING IMPAIRED UNIT CONCRETE VISUALLY IMPAIRED UNIT ABOVE 1-1/2" = 1'-0" 101 DOOR NUMBER STUD WALL WINDOW TYPE **GYPSUM BOARD** WALL TYPE PLYWOOD **ELEVATION KEYNOTE** RIGID INSULATION PLAN KEYNOTE SIMILAR TO WALL **ELEVATION** BATT INSULATION SECTION INDICATED NUMBER WALL SECTION **CUT LINE** STANDING SEAM METAL ROOF SHEET NUMBER **EARTH** SIMILAR TO BUILDING **ELEVATION** SECTION INDICATED NUMBER **BUILDING SECTION** CRUSHED ROCK CUT LINE SHEET NUMBER **ELEVATION** NUMBER CONTINUOUS EXTERIOR ELEVATION LUMBER SHEET NUMBER **NON-CONTINUOUS** LUMBER (SHIM) **ELEVATION** NUMBER

SHEET

NUMBER

ELEVATION

NUMBER

SHEET -

NUMBER

FINISH LUMBER

STEEL OR METAL

# **GENERAL NOTES**

# STANDARDS AND REGULATIONS

- CONTRACTOR SHALL PERFORM ALL WORK IN CONFORMANCE WITH APPLICABLE BUILDING CODES. REGULATIONS, ORDINANCES, UTILITY PROVIDER REQUIREMENTS, AND SIMILAR STANDARDS.
- CONTRACTOR SHALL OBTAIN ALL REQUIRED PERMITS AND SIMILAR RELEASES REQUIRED FOR CONSTRUCTION AND OCCUPANCY. CONTRACTOR SHALL FURNISH ALL COPIES OF SUCH ITEMS TO OWNER AND ARCHITECT WITHIN 10 DAYS OF RECEIPT. IF PERMITS ARE ISSUED SUBJECT TO CERTAIN CONDITIONS OR REVISIONS TO THE WORK OR PERMITS ARE DELAYED FOR ANY REASON, CONTRACTOR SHALL NOTIFY CONTRACTING OFFICER IMMEDIATELY.
- CONTRACTOR SHALL OBTAIN ALL REQUIRED INSPECTIONS OF THE WORK. CONTRACTOR SHALL REGULARLY UPDATE OWNER AND ARCHITECT REGARDING THE STATUS OF THE INSPECTIONS.
- CONTRACTOR SHALL COORDINATE WORK WITH APPLICABLE UTILITY PROVIDERS
- CONTRACTOR SHALL BE FAMILIAR WITH AND WORK SHALL BE IN COMPLIANCE WITH REFERENCED FIRE-RATED ASSEMBLY TESTS AND STANDARDS.

# ADMINISTRATION OF THE WORK

- CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE MEANS, METHODS AND SEQUENCES OF
- CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE SAFETY OF ALL CONSTRUCTION PERSONNEL AND AUTHORIZED VISITORS.
- CONTRACTOR SHALL BECOME FULLY ACQUAINTED WITH THE CONDITIONS RELATED TO THE WORK. ANY KNOWN DISCREPANCIES BETWEEN THE DOCUMENTS AND ACTUAL CONDITIONS SHALL BE REPORTED

TO THE OWNER FOR RESOLUTION PRIOR TO PROCEEDING WITH WORK RELATED TO THE DISCREPANCY.

- CONTRACTOR SHALL REMOVE AND PROPERLY DISPOSE OF ALL CONSTRUCTION AND DEMOLITION DEBRIS. CONTRACTOR SHALL OBTAIN APPROVAL OF OWNER (AND GOVERNING AUTHORITIES, IF APPLICABLE) FOR DETAILS RELATED TO REMOVAL OF TRASH, INCLUDING SUCH ISSUES AS PATH OF
- CONTRACTOR SHALL BECOME FAMILIAR WITH AND COMPLY WITH GOVERNMENT'S PROCEDURES FOR MAINTAINING A SECURE SITE AND BUILDING.
- EACH INSTALLER SHALL EXAMINE SUBSTRATE CONDITION AND/OR SITE CONDITIONS WHICH AFFECT THE QUALITY OF EACH PRODUCT TO BE INSTALLED. IF ANY CONDITIONS EXIST WHICH WILL HAVE A DETRIMENTAL EFFECT ON THE QUALITY OF THE INSTALLATION, THE INSTALLER SHALL IMMEDIATELY NOTIFY THE CONTRACTOR. INSTALLATION SHALL NOT PROCEED UNTIL THE UNSATISFACTORY CONDITIONS ARE CORRECTED. PROCEEDING WITH THE INSTALLATION SHALL SIGNIFY ACCEPTANCE OF THE CONDITIONS.
- CONTRACTOR SHALL MAINTAIN RECORD DRAWINGS ON SITE AT ALL TIMES.
- CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING COORDINATION EFFORTS OF ALL SUBCONTRACTORS.
- CONTRACTOR SHALL NOT CLOSE UP CEILING UNTIL ARCHITECT HAS AN OPPORTUNITY TO INSPECT ALL WORK WHICH WILL BE CONCEALED BY CEILING. CONTRACTOR SHALL NOTIFY ARCHITECT AT LEAST TWENTY-FOUR HOURS PRIOR TO CLOSE-UP.
- . CONTRACTOR SHALL LAY OUT WORK AS SOON AS POSSIBLE. ANY DISCREPANCIES SHALL BE REPORTED TO THE ARCHITECT FOR RESOLUTION PRIOR TO PROCEEDING WITH THE WORK IN QUESTION.

# USE OF CONSTRUCTION DOCUMENTS

- CONTRACTOR SHALL NOT SCALE DRAWINGS. ONLY WRITTEN DIMENSIONS OR KEYED NOTES SHALL BE USED. CONTACT ARCHITECT IF CLARIFICATION OR ADDITIONAL INFORMATION IS REQUIRED.
- DRAWINGS SHALL NOT BE REPRODUCED FOR SUBMITTALS. DRAWINGS OR PORTIONS OF DRAWINGS USED FOR SUBMITTALS WILL BE REJECTED AND RETURNED TO CONTRACTOR.
- DIMENSIONS ARE AS FOLLOWS UNLESS NOTED OTHERWISE:
- B. TO CENTERLINE OF COLUMNS, PARTY WALL, WINDOWS AND DOORS
- C. TO TOP OF STRUCTURAL DECK D. TO BOTTOM OF FINISHED CEILING

# **DEFINITIONS**

INTERIOR ELEVATION

ENLARGED PLAN OR

DETAIL CALLOUT

**ELEVATION MARK** 

ARCHITECT TO VERIFY

SIMILAR TO BUILDING

SECTION INDICATED

- "ALIGN" AS USED IN THESE DOCUMENTS SHALL MEAN TO ACCURATELY LOCATE AND FINISH FACES IN THE SAME PLANE AND/OR TO INSTALL NEW CONSTRUCTION ADJACENT TO EXISTING CONSTRUCTION WITHOUT ANY VISIBLE JOINTS OR SURFACE IRREGULARITIES.
- "CLEAR" AS USED IN THESE DOCUMENTS SHALL MEAN THAT THE CONDITION IS NOT ADJUSTABLE WITHOUT THE APPROVAL OF THE ARCHITECT, CLEAR DIMENSIONS ARE TYPICALLY TO FINISH FACE.
- "MAXIMUM" OR "MAX" AS USED IN THESE DOCUMENTS SHALL MEAN THAT THE CONDITION IS SLIGHTLY ADJUSTABLE BUT MAY NOT VARY TO A DIMENSION OR QUANTITY GREATER THAN THAT SHOWN WITHOUT APPROVAL OF THE ARCHITECT.
- "MINIMUM" OR "MIN." AS USED IN THESE DOCUMENTS SHALL MEAN THAT THE CONDITION IS SLIGHTLY ADJUSTABLE BUT MAY NOT VARY TO A DIMENSION OR QUANTITY LESS THAN THAT SHOWN WITHOUT APPROVAL OF THE ARCHITECT.
- "TYPICAL" OR "TYP" AS USED IN THESE DOCUMENTS SHALL MEAN THAT THE CONDITION OR DIMENSION IS THE SAME OR REPRESENTATIVE FOR SIMILAR CONDITIONS THROUGHOUT.
- "+/-" AS USED IN THESE DOCUMENTS SHALL MEAN THE DIMENSION OR QUANTITY IS SLIGHTLY ADJUSTABLE TO ACCOMMODATE ACTUAL CONDITIONS.

# GENERAL CONSTRUCTION ISSUES

- HATCHED AREAS INDICATE AREA TO BE FURRED DOWN ABOVE FINISHED FLOOR UNLESS NOTED

ALL PLUMBING SUPPLY LINES IN EXTERIOR WALLS TO RECEIVE FULL INSULATION.

- 3. DO NOT ALLOW EXTERIOR SHEATHING TO BE IN CONTACT WITH CONCRETE SURFACE.
- HOLD ALL WOOD TRIM A MINIMUM OF 1/4-INCH ABOVE CONTACT WITH HORIZONTAL CONCRETE SURFACES.

# PASSIVE SUB SLAB DEPRESSURIZATION

EXHAUST TERMINATION LIMITATION AND REQUIREMENTS.

RADON CONTROL SYSTEM

BUILDING CODES.

- PROVIDE UNDERSLAB RADON MITIGATION SYSTEM WITH REQUIRED VENTING.
- DESIGN OF SUB SLAB DEPRESSURIZATION RADON CONTROL SYSTEM WILL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- PROVIDE ELECTRICAL JUNCTION BOX IN ATTIC FOR POSSIBLE FUTURE INSTALLATION OF WARNING DEVICE FOR EACH VERTICAL STACK.
- PROVIDE 15 AMP, 115 VOLT ELECTRIC CIRCUIT AND JUNCTION BOX FOR FUTURE INSTALLATION OF VENT
- ALL CONCRETE SLABS THAT COME IN CONTACT WITH THE GROUND SHALL BE LAID OVER A GAS PERMEABLE MATERIAL MADE UP OF EITHER A MINIMUM 4" THICK UNIFORM OF CLEAN AGGREGATE OR A MINIMUM 4" THICK UNIFORM LAYER OF SAND, OVERLAIN BY A LAYER OR STRIPS OF MANUFACTURED MATTING DESIGNED TO ALLOW THE LATERAL FLOW OF SOIL GASES.
- ALL CONCRETE FLOOR SLABS SHALL BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH LOCAL
- ALL OPENINGS, GAPS, AND JOISTS IN FLOOR AND WALL ASSEMBLIES IN CONTACT WITH SOIL OR GAPS AROUND PIPES, TOILETS, BATHTUBS OR DRAINS PENETRATING THESE ASSEMBLIES SHALL BE FILLED OR CLOSED WITH MATERIALS THAT PROVIDE A PERMANENT AIR-TIGHT SEAL. SEAL LARGE OPENINGS WITH NON-SHRINK MORTAR, GROUTS OR EXPANDING FOAM MATERIALS AND SMALLER GAPS WITH ELASTOMERIC JOINTS SEALANT, AS DEFINED ASTM C920-A7.
- VENT PIPES SHALL BE INSTALLED SO THAT ANY RAINWATER OR CONDENSATION DRAINS DOWNWARD INTO THE GROUND BENEATH THE SLAB OR SOIL - GAS - RETARDER MEMBRANE.
- EXHAUST CLEARANCES MUST CONFORM TO THE CURRENT NATIONAL STANDARD PLUMBING CODE, FOR

PRINTS ISSUED 04/17/2024 - CITY SUBMISSION

**REVISIONS:** 





SHEET TITLE **GENERAL INFORMATION** 

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PROJECT NUMBER: 22023

SHEET NUMBER:

CUBIC YARD(S)

HEATER

**HYDRANT** 

HYD

# KEYNOTE LEGEND (FULL PROJECT)

PTAC UNIT 01.00 DIVISION 01 - GENERAL REQUIREMENTS

**MIRROR** 

- MANUAL BLACK OUT ROLLER SHADE TO EXTEND 6" BEYOND WINDOW OPENING; SHEER ROLLER SHADE TO BE MOUNTED INSIDE WINDOW OPENING
- SHOWER ENCLOSURE W/TEMPERED GLASS DOOR
- PREMANUFACTURED SHOWER PAN ALTERNATE LOCATION OF DOOR FOR CONNECTING ROOMS TO ACCESSIBLE ROOMS--REFER TO OVERALL PLANS FOR
- LOCATION OF ACCESSIBLE ROOMS DEDICATED CIRCUIT FOR DISHWASHER RANGE TOP STYLE MICROWAVE AFFIXED TO WALL
- SWITCH CONTROLLING GARBAGE DISPOSAL GANGED WITH DUPLEX REFER TO HADG FOR ACCESSIBLE ROOM REQUIREMENTS
- DEDICATED CIRCUIT FOR GARBAGE **DISPOSAL**
- FIRE HORN IN STANDARD ROOMS. FIRE HORN/STROBE IN COMMUNICATION
- FEATURES ROOMS
- **TOILET EXHAUST GRILLE** MAKE-UP AIR DIFFUSER
- EXTENT OF SLEEPER SOFA ROOM SIGNAGE
- HARD WIRED THERMOSTAT FOR PTAC. MOUNTED 48" MAX TO TOP OF DEVICE COMMUNICATION BETWEEN THERMOSTAT AND PTAC MAY BE WIRELESS
- EXTEND J-BOX, DEVICE & COVER PLATE FLUSH W/ MILLWORK BACK PANEL
- DOORBELL ON/OF SWITCH (COMMUNICATION FEATURES ROOMS ONLY) SIGNAGE AS REQ'D.
- EDGE OF PTAC ABOVE CARPET TILES MIN. CEILING HEIGHT MUST BE MAINTAINED - REFER TO HOME 2 SUITES
- BY HILTON STANDARDS MANUAL FRAMING SUBCONTRACTOR TO PROVIDE 3/4" F.R.T. PLYWOOD BLOCKING TO RECEIVE ITEM INDICATED - EXTEND FULL LENGTH OF OBJECT
- SWITHES CONTROLLING MECHANICAL SHADES - REFER TO FFE MANUAL OUTLET ABOVE FOR MICROWAVE -
- REFER TO ROOM ELEVATION MOUNT DEVICE HORIZONTALLY--FACE PLATE TO BE WHITE CENTER ARTWORK OVER SOFA
- COUNTERTOP MICROWAVE GRAPHIC ART. REFER TO ACCESSORIES
- LEGEND & CONSTRUCTION PLAN WAP IN 3-GANG BOX MOUNTED VERTICALLY UNDER DESK. MAINTAIN 6" BETWEEN ALL BOXES, TYP ALL GUESTROOMS, COORDINATE WAP LOCATION WITH CASEGOODS TO AVOID CONFLICTS, VISIT
  - CONNECTEDROOM.HILTON.COM FOR **CURRENT WIRELESS INTERNET REQ'S** AND LIST OF APPROVED INTEGRATORS EACH CABLE MUST HOMERUN BETWEEN THE GUESTROOM AND THE IDF ON EACH
- CONNECTEDROOM.HILTON.COM FOR CURRENT REQUIREMENTS AND OPTIONS. OPTION WIRED DATA CONNECTION FOR GUEST USE: A) ADD CAT6 RJ-45 CABLE JACK AND PATCH CORD THROUGH DESKTOP GROMMET - OR - B) PATCH CORD FROM WAP PORT THROUGH

DESKTOP GROMMET.

FLOOR, VISIT

- TV CONNECTIONS FOR FREE-TO-GUEST CONTENT: A) NO SMART TV:COAX CABLE BEHIND TV. CAT6 RJ-45 JACK BEHIND TV, RUN IN SMURF TUBE IN WALL TO WAP UNDER DESK. PATCH CORD TO EDGE CONTROLLER FOR CONNECTED ROOM. MIN. 6" CLEARANCE FROM WALL BOXES OR - B) SMART TV-INTERNET PROTOCOL TELEVISION (IPTV); COAX NOT REQ'D. CAT6 RJ-45 JACK BEHIND TV RUN IN SMURF TUBE IN WALL TO WAP UNDER DESK. PATCH CORD TO EDGE CONTROLLER FOR CONNECTED ROOM. CAT6 RJ-45 JACK BEHIND TV IN ONE-BEDROOM TV. MIN. 6" CLEARANCE FROM WALL BOXES, VISIT
- INFORMATION. PROVIDE HINGE STOP AT DOOR HARDWIRED BLACK OUT ROLLER SHADE

HILTONHDTV.COM FOR ADDITIONAL

- WITH NO EXPOSED WIRES PROVIDE OUTLET FOR UNDERCABINET LIGHTING BY OTHERS GYPSUM BOARD SOFFIT FASCIA- REFER
- TO CEILING PLANS EMPLOYEE LOCKERS: PROVIDE QUANTITY OF ACCESSIBLE LOCKERS AS REQUIRED BY ACCESSIBILITY REQUIREMENTS OR LOCAL JURISDICTION'S CODE, WHICHEVER IS MORE STRICT. ACCESSIBLE LOCKER MUST BE LOCATED WHERE THERE IS A CLEAR FLOOR SPACE TO REACH THE
- SHELVES, LOCK, ET ROLLER SHADE - REFER TO FF&E PREPARE & PRIME WALL - REFER TO **HOME 2 INTERIOR SIGNAGE** SPECIFICATION FOR GRAPHIC INSTALLATION

# KEYNOTE LEGEND (FULL PROJECT)

SIGNAGE GRAPHIC, SEE INTERIOR

- SIGNAGE SPECIFICATION PACKAGE BRAND PROMISE SIGN BOOTH, SEE FF&E SPECIFICATIONS A11 A12 ADJUSTABLE MARKET DISPLAY SHELVING
- ELEVATOR AND SURROUND FINISH TO BE BRUSHED STAINLESS STEE STOREFRONT DOORS AND FRAMES TO MATCH EXTERIOR COLOR AND FINISH WALL MOUNTED TELEVISION, COORDINATE BLOCKING AND POWER

KEYNOTE LEGEND (FULL PROJECT)

ACCESSIBLE PASSENGER DROP OFF

AREA W/ ADJACENT CLEAR ACCESS

RAMP UP TO LEVEL OF WALK AT

PASSENGER LOADING ZONES

INFORMATION

SPECIMEN TREE

UPLIGH1

C8

C9

C11

ACCESSIBILITY REQUIREMENTS.

MAXIMUM SLOPE OF RUN 1:12 (1:14

RECOMMENDED), MAXIMUM CROSS

SLOPE OF 1:48 (1:64 RECOMMENDED),

REFER TO THE HADG FOR FURTHER

OPTIONAL FLAGPOLE WITH IN-GROUND

PAVED WALKWAY - SLOPE AWAY FROM

BLDG. (MAX 2% CROSS SLOPE) -

SILICA-BASED AGGREGATE

DECORATIVE NON-SLIP PAVING

LINE OF CANOPY ROOF ABOVE

REINFORCED CONCRETE PAD

FOR LOOSE FURNISHINGS

EXTERIOR GARDEN STORAGE AREA

OUTDOOR LOUNGE - REFER TO FF&E

POOL PATIO - REFER TO FF&E SPEC'S

TRELLIS ABOVE - SEE DETAILS SHEET

ACCESSIBLE ROUTE FROM ACCESSIBLE

PROVIDE A RUNNING SLOPE OF MAXIMUM

1:20 AND A CROSS SLOPE OF MAXIMUM

1:48 (1:64 RECOMMENDED). REFER TO

HADG FOR FURTHER INFORMATION.

ASPHALT OR CONC. PAVING SHALL

FROM BLDG. - COORDINATE SITE

DRAINAGE & DETENTION W/ CIVIL

EXTERIOR FIRE PIT WITH MANUAL

SECURE IN PLACE TO RESIST

LANDSCAPE AREA - REFER TO

**ENGINEER** 

SCREEN

C32

C33

C52

D12

D19

D20

**EXPANSION JOINT** 

**CANOPY COLUMNS** 

ACCESSIBLE DROP OFF

24" X 54" FRC PLANTERS

LIGHT AT TRELLIS

LENGTH OF OBJECT

SHOWER SURROUND

VANITY SHELF

**DISPENSER** 

RECEPTACLE

DISPENSER

**DISPENSER** 

RECESSED IN WALL

SHOWER HEAD

TOILET

EMERGENCY GAS SHUT OFF

CONTROL JOINT

PARTIAL HEIGHT WALL

COMPLY W/ LOCAL REQUIREMENTS

PROVIDE POSITIVE DRAINAGE AWAY

CONTINUOUS CONCRETE CURB - TYP.

LINE FROM BUILDING GAS SERVICE.

LANDSCAPE SHEETS FOR PLANTING

EXTERIOR GAS GRILL. GRILLS REQUIRE

FLUSH CURB ALONG ENTIRE LENGTH OF

PRIMED AND PAINTED TUBE STEEL

REMOTE EMERGENCY SHUT OFF.

TRASH, RECYCLING, AND ASH BIN

PROVIDE POWER FOR PLUG IN STRIP

VANITY MIRROR AND LIGHT FIXTURE

FLOOR DRAIN LOCATION - MAINTAIN

3/4" F.R.T. PLYWOOD BLOCKING TO

ACCESSIBLE COMPLIANT SLOPES TO

FRAMING SUBCONTRACTOR TO PROVIDE

RECEIVE ITEM INDICATED - EXTEND FULL

DOOR STOP HARDWARE REQUIRED TO

FROM HITTING GLASS WHEN FULLY AJAR

KEEP HARDWARE AT BACK OF DOOR

DOUBLE ROLL TOILET TISSUE HOLDER

WALL-MOUNTED SANITARY SEAT COVER

SANITARY NAPKIN DISPOSAL TRASH BIN

FREESTANDING DECORATIVE TRASH

DECORATIVE TOUCHLESS LIQUID SOAP

DECORATIVE FACIAL TISSUE DISPENSER

COAT HOOKS AT BACK OF THE DOOR

MOTION-ACTIVATED PAPER TOWEL

(AT WOMEN'S AND UNISEX)

EMERGENCY REMOTE SHUT-OFF VALVE,

MOVEMENT. FEED WITH UNDERGROUND

PROVIDE APPROPRIATELY SIZED SAFETY

PARKING TO BUILDING ENTRANCE.

SPEC'S FOR LOOSE FURNISHINGS

AISLE - DROP OFF AND ACCESS AISLE

SHALL BE AT THE SAME LEVEL & SHALL

RECOMMENDED) - DRIVE AISLES SHALL

DROP-OFF AREA - REFER TO MATERIA

LEGEND FOR SPECIFIC PAVING OF THIS

AREA. REFER TO THE HADG FOR MORE

INFORMATION REGARDING ACCESSIBLE

ACCESSIBLE CURB RAMP TO MEET ALL

HAVE A SLOPE NOT TO EXCEED 1:48 (1:64

- LOCATION WITH TV MOUNT FIRE EXTINGUISHER CABINET FITNESS ROOM RULES SIGN
- HOUSE PHONE A23 A24 MARKET EQUIPMENT, SEE FOOD SERVICE DRAWINGS
- VISION WINDOW SHELVING, SEE FF&E SPECIFICATIONS A27 AVOID BACKSPLASH ON WALL SINK TO ALLOW FOR MIRROR TO BE INSTALLED AT PROPER HEIGHT
- LEVER REQUIRED ON THE SIDE OF TANK OPPOSITE INSIDE CORNER OF WALL
- HYDRATION STATION A30 PLATE MIRROR
- FIRE DOOR FITNESS EQUIPMENT, SEE FITNESS.HILTON.COM FOR APPROVED
- **VENDORS** COMPLIMENTARY COFFEE, TEA, & WATER STATION
- COMPLIMENTARY PRINT STATION WALL MOUNTED TOWEL STORAGE WITH UNDERCOUNTER LAUNDR PROVIDE
- BLOCKING AS REQUIRED FOR WALL MOUNTED STORAGE. FINISH AT WALL BEYOND
- HYDRATION STATION ACCESSIBLE VANITY UNIT, REFER TO FURNITURE DWGS ACCESSIBLE REMOVABLE TUB/SHOWER SEAT. SHOWER SEAT IS WALL MOUNTED.
- REFER TO ACCESSIBILITY STANDARDS AND HADG FOR REQUIREMENT CLEAR AREA OF SINK/VANITY MUST BE
- **ACCESSIBLE**
- SHOWER HEAD SHOWER DIVERTER VALVE HAND SHOWER. HAND-HELD SHOWER
- UNIT REQUIRED TO HAVE ON/OFF CONTROL WITH NON-POSITIVE SHUT OFF. VANITY MIRROR AND LIGHT FIXTURE
- ON/OFF PRESSURE BALANCING VALVE B14
- BULK AMENITY DISPENSER TOILET
- SHOWER SURROUND LED NIGHT LIGHT INTEGRATED WITH
- EITHER LIGHT SWITCH OR OUTLET BI-PASS SLIDING GLASS DOOR, BRUSHED ALUMINUM FINISH, CLEAR GLASS, WITH

24" BAR PULL HARDWARE

B30 VANITY SHELF

# REFLECTED CEILING PLAN GENERAL NOTES

- 1. SEE MEP SET FOR LOCATIONS OF ALL LIGHT FIXTURES AND MECHANICAL DIFFUSERS.
- 2. COORDINATE ANY DISCREPANCIES WITH MEP AND ARCHITECT PRIOR TO INSTALLATION.
- 3. REFERENCE ALL INTERIORS DRAWINGS FOR COORDINATION.
- 4. ALL CEILINGS TO CONFORM TO 2018 IBC TABLE 803.13. 5. ALL ACT TILES TO BE WHOLE DIMENSIONS AND ARE NOT TO
- BE FIELD CUT, ALL ACT TO BE FIELD CENTERED IN SPACE, U.N.O. OR DIMENSIONED.
- 6. SEE ENLARGED UNIT PLANS (A-400 SERIES) FOR ALL UNIT RCP PLANS EXCEPT WHERE HEIGHTS ARE LISTED ON RCP PLANS IN A-100 SERIES.
- 7. ALL EXPOSED EQUIPMENT (I.E. SPRINKLER HEADS) TO BE ALIGNED AND CENTERED IN GEOMETRY AND PLACED INCONSPICUOUSLY. SPRINKLERS IN COMMON AREAS TO BE RECESSED
- 8. WHERE CEILING HEIGHT IS B.O. FLOOR ASSEMBLY, FINISH TO BE LEVEL FOUR FINISH. ALL UNITS TO HAVE A LEVEL FOUR FINISH AT CEILINGS.
- 9. ALL MECH DUCTS WHICH FEED TO PLENUM SPACE VIA MECH SHAFTS SHALL BE ENCLOSED ON THE BOTTOM ACCORDING TO PROGRESSIVE ENGINEERING REPORT AER-09-038.
- ACCESS TO EQUIPMENT SHALL BE THROUGH ACT WHERE AVAILABLE. WHERE NECESSARY, ACCESS THROUGH GWB CEILING TO USE ACCESS HATCHES. GC TO PROVIDE HATCHES AND HATCH LOCATION DIAGRAM PRIOR TO
- 11. ALL DIMENSIONS FOR CEILINGS ARE TO FINISHED FACE. ALL DIMENSIONS TO WALLS ARE TO F.O. STUD.
- 12. ALL DROPPED SOFFIT FRAMING IN COMMON AREAS SHALL BE OUT OF METAL STUDS. ONE (1) HOUR RATED CEILING THROUGHOUT BUILDING AT UNDERSIDE OF ROOF TRUSSES. AND ARE PART OF THE FIRE RATED FLOOR-CEILING ASSEMBLY
- 13. MISCELLANEOUS SYMBOLS INDICATED ON REFLECTED CEILING PLAN ARE MECHANICAL IN NATURE. REFER TO MEP DRAWING SHEETS FOR FURTHER CLARIFICATION FOR ITEM IDENTIFICATION AND LOCATIONS.

# **ELEVATION GENERAL NOTES**

- 1. ALL EXTERIOR SURFACES TO BE FINISHED UNO, INCLUDING BUT NOT LIMITED TO TRIM, SIDING, GRILLS, VENTS, STACKS,
- 2. CAULK ALL JOINTS AND SEAMS BETWEEN DISSIMILAR MATERIALS FOR WEATHERTIGHT, WATERTIGHT, AIRTIGHT PERFORMANCE.
- 3. ALL FACADE MATERIAL TO WRAP BACK TO INSIDE BUILDING CORNER, UNO.
- 4. ALL SURFACE RUNS GREATER THAN 25'-0" & INTERIOR CORNERS TO RECEIVE CONTROL JOINT; COORDINATE LOCATION WITH ARCH.

# PLAN GENERAL NOTES

- A. ALL NEW WORK TO MEET ALL APPLICABLE BUILDING, PLUMBING MECHANICAL, ELECTRICAL, HANDICAP, AND LIFE SAFETY CODES AND REQUIREMENTS.
- B. ALL WALL DIMENSIONS ARE TO FACE OF STUD, UNLESS NOTED OTHERWISE C. DO NOT SCALE DRAWINGS.
- D. NOTIFY ARCHITECT OF ANY DISCREPANCIES BETWEEN PROJECT DOCUMENTS AND EXISTING CONDITIONS. ANY MODIFICATIONS DUE TO DIMENSIONAL CHANGES SHOULD BE PART OF THE
- PROJECT COST. E. GENERAL CONTRACTOR AND ALL SUBCONTRACTORS SHALL THOROUGHLY FAMILIARIZE THEMSELVES TO ALL SITE SPECIFIC REQUIREMENTS AND EXTENTS OF THE NEW WORK PRIOR TO
- BIDDING. NO CHANGES IN THE CONTRACT WILL BE CONSIDERED FOR INFORMATION DISCERNABLE FROM THE EXISTING CONDITIONS OR THE PROJECT DOCUMENTS. F. CONTRACTORS SHALL BE FAMILIAR AND INCORPORATE ALL
- PROVISIONS AND REQUIREMENTS ESTABLISHED BY CODES APPLICABLE TO THE PROJECT INCLUDING FAIR HOUSING, UFAS, ANSI, & ADAAG
- G. TYPICAL TOP OF FIRST FLOOR SUBFLOOR ELEVATION IS REFERENCED AS 100'-0". CONTRACTOR SHALL VERIFY BUILDING FINISH FLOOR ELEVATION WITH ACTUAL CONDITIONS. COORDINATE ACTUAL GRADE WITH CIVIL DRAWINGS
- H. FULLY ACCESSIBLE UNITS SHALL MEET THE REQUIREMENTS OF 2009 ICC/ANSI A117.1 - TYPE 'A' DWELLING UNITS AND 2010 ADAAG (DOJ). ALL OTHER DWELLING UNITS TO BE TYPE 'B'.
- I. MAIN LEVEL ELEVATION IS T.O. GYPCRETE, OR T.O. CONCRETE SLAB, RESPECTIVELY. LEVELS ABOVE MAIN LEVEL ARE MEASURED TO T.O. SUBFLOOR. K. WHOLE BUILDING TO MEET FAIR HOUSING ACT.

L. ALL PENETRATIONS INTO FIRE-RATED ASSEMBLIES ARE TO BE

- FIRESTOPPED WITH UL APPROVED FIRESTOPPING ASSEMBLIES UL INFORMATION SHALL BE PROVIDED BY TRADE RESPONSIBLE FOR PENETRATION. REFERENCE THE G200 SERIES. M. THROUGH PENETRATIONS NOT LOCATED WITHIN WALL CAVITY
- OR FLOOR/CEILING/ROOF ASSEMBLY SHALL BE REQUIRED TO HAVE FIRE RESISTIVE PENETRATION WITH A T-RATING EQUAL TO OR EXCEEDING THE ASSEMBLY THAT IS PENETRATED.
- N. CONTROL JOINTS IN GWB AT ALL UNIT CORRIDORS SHALL BE LOCATED AT INSIDE CORNER OF PILASTERS AND ACROSS TOP OF DROP SOFFIT AT PILASTERS. AT LOCATIONS WHICH THERE IS A 30' SPAN BETWEEN PILASTERS, A CONTROL JOINT SHALL OCCUR AT THE CENTRAL LOCATION BETWEEN THE TWO PILASTERS ADJACENT TO THE NEAREST DOOR, RUNNING FROM HEAD TO T.O. PARTITION AT CORNER. AT LOCATIONS WHICH THERE IS A 30' SPAN BETWEEN SOFFIT WHERE PILASTER OCCURS, A CONTROL JOINT SHALL OCCUR AT THE INSIDE CORNER OF PILASTER AND SOFFITS. CONTROL JOINTS SHALL OCCUR AT THE CORNERS OF ALL STOREFRONT, RUNNING TO THE T.O. THE PARTITION. GC TO VERIFY WITH ARCHITECT DURING CONSTRUCTION ALL CONTROL JOINT LOCATIONS PRIOR TO INSTALL O. PROVIDE FIREBLOCKING AND DRAFTSTOPPING AS REQUIRED
- AND IN ACCORDANCE WITH 2018 IBC, SECTION 718.
- P. CONTRACTOR TO PROVIDE FIRE BLOCKING AT FIRE SEPARATION PARTITION AT 10' ON CENTER VERTICALLY, TYPICAL CONTRACTOR TO PROVIDE FIRE BLOCKING AT FIRE SEPARATION PARTITION AT ALL BACK-TO-BACK ELECTRICAL OUTLETS.
- Q. ALL INTERIOR WALLS ARE TYPE P1, UNLESS NOTED OTHERWISE. ALL EXTERIOR WALLS ARE TYPE P30, UNLESS NOTED OTHERWISE. SEE SHEET G-101 FOR PARTITION SCHEDULE. R. ALL EXTERIOR MATERIALS TO BE APPLIED PER MANUFACTURER
- RECOMMENDATIONS AND WITH ASSOCIATED PRODUCTS (SUCH AS STAPLES, NAILS, TAPER, SEALANT).
- 03 CONCRETE A. CONCRETE SEALANT TO BE USED ON FIRST FLOOR WHERE RECEIVING RESILIENT VINYL FLOORING.
- B. AT SLAB ON GRADE UNITS, LEVEL CONCRETE SURFACE AT AREAS WHERE VCT FLOORING TO BE INSTALLED.
- 04 MASONRY A. ALL EXTERIOR BRICK TO HAVE WEEP HOLES AT MAX 2' ABOVE
- GRADE B. ALL EXTERIOR BRICK TO EXTEND BELOW GRADE BY 3 COURSES (8") MIN. AND HAVE A BRICK LEDGE
- C. ALL LOCATIONS WITH EXTERIOR BRICK TO BE GROUTED SOLID FROM BELOW GRADE CONDITION TO LOWEST WEEP HOLE.
- 05 METALS
- A. STAIR HANDRAILS, TREADS, STRINGERS TO BE PRE-FINISHED OR PAINTED STEEL B. ALL DOWNSPOUTS TO BE CONNECTED TO UNDERDRAINS,
- SLOPED AWAY FROM BUILDING. C. ALL EXTERIOR METAL TO BE PRE-FINISHED OR PRIMED/PAINTED. COLOR PER ARCH.

06 - WOOD, PLASTICS AND COMPOSITES

- A. ALL COMMON SPACE, UNIT TOILET ROOMS, AND BATHROOMS TO HAVE BLOCKING FOR GRAB BARS. SEE G-302 FOR HEIGHTS AND LOCATIONS. GRAB BARS TO BE INSTALLED IN ALL COMMON SPACE, UNIT TOILET ROOMS, AND BATHROOMS. BLOCKING TO BE PROVIDED FOR ALL SHOWER GRAB BARS AND SEATING AS REQUIRED BY MANUFACTURER.
- B. CONTRACTOR TO COORDINATE BLOCKING AT ALL ADJACENT POCKET DOORS, MEDICINE CABINETS, AND OTHER ELEMENTS
- C. AT ALL IDF, MDF & ELEC ROOMS; INTERIOR FINISH TO BE FIRE-TREATED PLYWOOD PAINTED WHITE ON ALL WALLS D. ALL SHEAR WALL LOCATIONS & EXTENT OF SHEATHING TO BE
- E. ALL EXPOSED CABINET ENDS TO HAVE FINISHED PANELS, INCLUDING BUT NOT LIMITED TO END OF CABINET RUN, ADJACENT TO REFRIGERATOR, LOCATIONS OF VERTICAL OFFSETS.

COORDINATE WITH STRUCTURAL DRAWINGS.

- 07 THERMAL AND MOISTURE PROTECTION
- A. CAULK ALL JOINTS BETWEEN DISSIMILAR MATERIALS FOR WEATHER TIGHT, WATERTIGHT, AIRTIGHT, ETC. PERFORMANCE. B. ALL EXTERIOR WRB TO BE APPLIED, TAPERED AND SEALED PER
- INSTRUCTIONS C. PROVIDE SOUND ATTENUATION INSULATION OVER ALL BATHROOM CEILINGS AND IN BATHROOM WALLS, TYPICAL ALL BATHROOMS
- D. AT EXTERIOR WALLS, CAULK CONTROL JOINTS IN FLOOR SLAB 12" INTO BUILDING TO PREVENT AGAINST WATER INFILTRATION.
- 08 OPENINGS A. DOORS- ELECTRICIAN IS REQUIRED TO COORDINATE WITH DOOR HARDWARE SCHEDULE FOR ALL ELECTRICAL ROUGH IN REQUIREMENTS FOR DOORS, INCLUDING AUTO OPERATORS, MAG HOLD OPENS, ELECTRONIC STRIKES, KEYPADS AND MAG
- B. ALL DOOR HARDWARE SHALL BE COORDINATED W/ OWNER.
- 09 FINISHES
- A. PRIME, PAINT AND SEAL ALL WALLS, COLUMNS AND CEILINGS AS REQUIRED PRIOR TO INSTALLATION OF M/E/P/F/TELEPHONE/SECURITY INSTALLATION.
- B. CONTRACTOR TO COORDINATE ALL WET WALLS WITH ADJACENT RATINGS AND TO ACCOMMODATE PLUMBING FIXTURES. WALLS TO BE ALIGNED.
- C. ALL WALLS TO BE ALIGNED AS INDICATED ON DRAWINGS IF WALL IS MISALIGNED MID-WALL AND WILL AFFECT VISUAL APPEARANCE IN ROOM (I.E. 'JOG' WILL APPEAR) GC TO BRING TO ARCH ATTENTION PRIOR TO FINISHING
- D. FLOOR TRANSITION SHALL OCCUR AT MIDDLE OF WALL WHERE OCCURS IN DOORWAY. PROVIDE VINYL REDUCER STRIP.

# PLAN GENERAL NOTES - (CONT.)

# 10 - SPECIALTIES

- CORNER GUARDS AT COMMON SPACES, PER INTERIORS. PROVIDE VENTILATED WIRE SHELVING AT ALL CLOSETS AND PANTRY UNO. REFERENCE KEYED ENLARGED FLOOR PLAN NOTES ON A400 SHEETS FOR LOCATIONS. DEPTH TO BE COORDINATED WITH ANY LIGHT FIXTURES TO NOT ENCROACH ON IFC
- CLEARANCES. C. TOILET PAPER DISPENSER TO BE INSTALLED PER D1/G-302 AND 2009 ICC ANSI 117.1.
- D. SEE G-301 FOR SIGNAGE REQUIREMENTS. NUMBERING OF UNITS AND ROOMS SHALL BE UPDATED TO MEET AHJ AND OWNER REQUIREMENTS PRIOR TO SIGNAGE

- A. ALL UNITS TO HAVE APPROPRIATE NUMBER OF SMOKE DETECTORS INSTALLED INTERCONNECTED AND HARD-WIRED WITH BATTERY BACKUP PER CODE, INCLUDING ONE (1) IN EACH
- BEDROOM. B. FIRE EXTINGUISHERS SHALL BE LOCATED SO THAT THE MAXIMUM TRAVEL DISTANCE SHALL NOT EXCEED 75 FEET. GENERAL CONTRACTOR TO PROVIDE SEMI-RECESSED TYPE THROUGHOUT WITH RATED CABINET. PROVIDE (1) TYPE "CLASS K" WITHIN 30 FEET OF COMMERCIAL COOKING EQUIPMENT.
- . CONCEALED SPRINKLER HEADS TO BE USED U.N.O. DRY SPRINKLERS TO BE COORDINATED WITH DESIGN-BUILD CONTRACTOR. ALL SPRINKLERS IN BUILDING CAN BE WET. SPRINKLER LOCATIONS AND SPRINKLER EQUIP TO BE COORDINATED W/ ARCH PRIOR TO INSTALL - GC TO PROVIDE LOCATIONS OF HEADS ON RCPS FOR ARCH REVIEW PRIOR TO INSTALL. GC TO COORD FIRE SPRINKLER LINER W/ ALL MEP IN CORRIDOR SPACE TO MAINTAIN CEILING TYPE & HT. PER ARCH

# 22 - PLUMBING

- A. PLUMBING VENT STACKS, FLUES, FRESH AIR INTAKES, ETC. NOT SHOWN FOR CLARITY. SEE MEP DRAWINGS FOR HVAC/ELECTRICAL/PLUMBING REQUIREMENTS/EQUIPMENT/LOCATIONS. GC TO VERIFY
- LOCATIONS OF ALL SIDEWALL VENTS PRIOR TO INSTALL B. PROVIDE FLOOR DRAINS AS INDICATED ON PLUMBING DRAWINGS AND PER APPLICABLE PLUMBING CODE C. DRAINAGE SHALL BE PER 2018 IBC 3201.4 - DRAINAGE WATER
- COLLECTED FROM A ROOF, AWNING, CANOPY OR MARQUEE AND CONDENSATE FROM MECHANICAL EQUIPMENT SHALL NOT FLOW OVER A PUBLIC WALKING SURFACE D. CONTRACTOR TO COORDINATE MECHANICAL DUCT, SPRINKLER,
- PLUMBING, AND ELECTRICAL SUCH THAT CEILING HEIGHTS AND LOCATIONS ARE MAINTAINED PER REFLECTED CEILING PLANS. E. ALL DOWNSPOUTS INTO COURTYARDS AND AT HARDSCAPE TO BE HARDPIPED TO STORM SEWER. GUTTERS/DOWNSPOUTS SHALL NOT FLOW OVER SIDEWALKS OR OTHER HARDSCAPE.

# A. GC TO COORDINATE MECHANICAL PADS FOR ROOFTOP AND GROUND MOUNTED UNITS

# A. SEE ELECTRICAL PLANS FOR ELECTRIC DEVICE LAYOUTS

B. SEE D4/G-300 FOR ELECTRICAL MOUNTING HEIGHT C. PROVIDE EXIT SIGNS AT LOCATIONS AND PER 1007.1, 2018 IBC. - A TACTILE SIGN STATING 'EXIT' AND COMPLYING WITH ICC A117.1 SHALL BE PROVIDED ADJACENT TO EACH DOOR TO AN AREA OF

REFUGE, AN EXTERIOR AREA FOR ASSISTED RESCUE, AN EXIT

- STAIRWAY, AN EXIT RAMP, AN EXIT PASSAGEWAY AND THE EXIT DISCHARGE D. PROVIDE DIMMER CAPABILITY FOR ALL COMMON AREA
- DECORATIVE AND DOWNLIGHTS/SPOTS (CAN LIGHTS). TIMECLOCK AND PHOTOCELL FOR EXTERIOR LIGHTS. MULTIPLE ZONES MAY BE NECESSARY. INSTALL PER MANUFACTURERS RECOMMENDATIONS.
- F. ALL ELECTRICAL AND IDF/MDF ROOMS TO HAVE SOLID BLOCKING TO ACCOMMODATE PANEL ATTACHMENT, BLOCKING TO BE PAINTED TO MATCH WALLS. WALLS TO REMAIN RATED AS INDICATED PER PLAN.
- 6. FIRE PULL STATIONS TO BE PROVIDED PER 2018 IFC AND A.H.J. H. ALL LIGHTING, T-STATS AND OTHER SWITCHES TO BE INSTALLED PER ANSI 117.1, 2010 ADAAG, AND THE FAIR HOUSING ACT. LOCATIONS AND GROUPINGS OF SWITCHES TO BE ACCEPTED BY ARCH PRIOR TO INSTALL.

# ROOF PLAN GENERAL NOTES

- 1. ALL NEW WORK TO MEET ALL APPLICABLE BUILDING, PLUMBING, MECHANICAL, HANDICAP, AND LIFE SAFETY CODES AND REQUIREMENTS.
- 2. THE MINIMUM NET FREE VENTILATING AREA SHALL BE 1/150 OF THE AREA OF THE SPACE VENTILATED. THE OPENINGS SHALL BE COVERED WITH CORROSION-RESISTANT MESH OR OTHER APPROVED MATERIALS WITH OPENINGS NOT MORE THAN 1/2" IN ANY DIRECTION.
- WHERE RIDGE OR GABLE VENTS ARE UTILIZED, ADDITIONAL PROTECTION AGAINST SNOW INFILTRATION SHALL BE PROVIDED BY BALANCING THE AREA OF THE VENTS IN THE RIDGES AND THE EAVES SUCH THAT AT LEAST 1/2 OF THE VENTILATION AREA SHALL BE PROVIDED BY SOFFIT OR EAVE VENTS, WITH THE BALANCE OF THE VENTILATION OPENINGS PROVIDED BY THE GABLE OR RIDGE VENTS.
- ALL FLOOR JOIST BEARING HEIGHTS ARE 8'-1 1/8". ALL ROOF TRUSS BEARING HEIGHTS ARE 8' - 1 1/8". REFERENCE WALL SECTIONS ON A300 SHEETS.

REFERENCE IBC 2012 SECTION 1203.

- 5. 1'-0" ROOF SOFFIT, UNLESS NOTED OTHERWISE, REF: ROOF
- CONTRACTOR TO INSTALL GUTTERS, DOWNSPOUTS AND ALL FLASHING PER APPLICABLE SMACNA GUIDELINES. IF ADDITIONAL DOWNSPOUTS ARE REQUIRED, CONTRACTOR SHALL CONFIRM LOCATIONS WITH ARCHITECT PRIOR TO INSTALLATION.
- MEMBRANE ROOFING SYSTEM ON RIGID INSULATION, ALL ROOF LOCATIONS TYP. U.O.N.
- 8. COLORS T.B.D., COORDINATE WITH ARCHITECT

PRINTS ISSUED

04/17/2024 - CITY SUBMISSION

**REVISIONS:** 







SHEET TITLE PLAN GENERAL NOTES &

PROJECT NUMBER: 22023

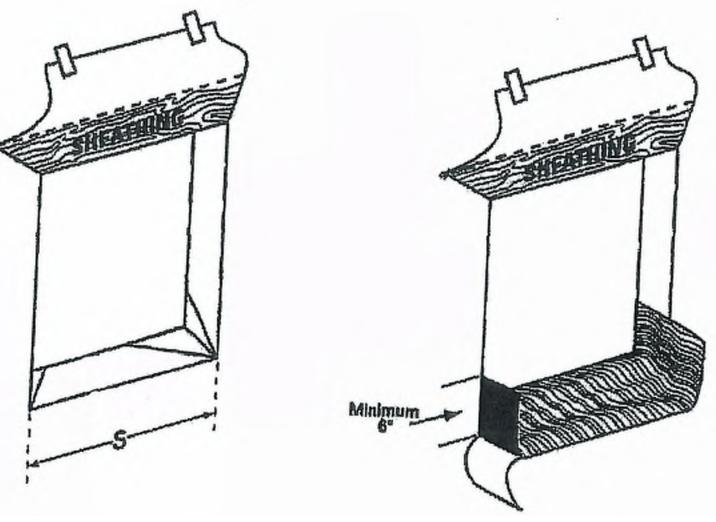
KEYNOTES

 $\Box$ 

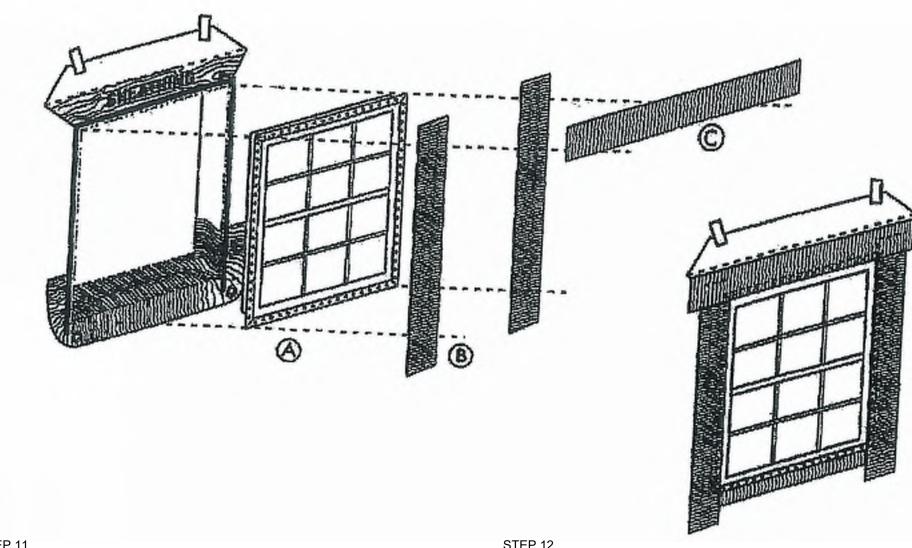
- A. FAN FLEXIBLE FLASHING ONTO WALL FACE AT BOTTOM CORNERS.
- B. PRESS SILL FLASHING FIRMLY TO ENSURE FULL ADHESION. C. FANNED EDGES TO BE SECURED WITH MECHANICAL FASTENERS.

# STEP 9

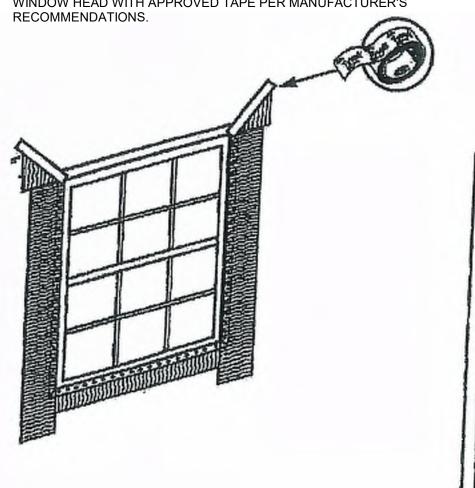
- A. AT WALL OR BACK SIDE OF WINDOW MOUNTING FLANGE, APPLY A CONTINUOUS BEAD OF CAULK ACROSS JAMBS AND
- HEAD BOTTOM SILL FLANGE TO REMAIN UNCAULKED. B. CAULK NOT TO BE APPLIED TO BOTTOM SILL FLANGE.



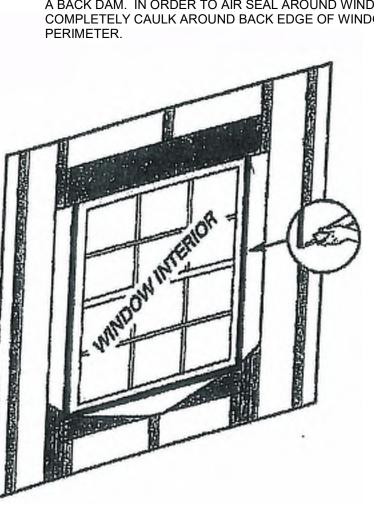
- A. INSTALL WINDOW/DOOR PER MANUFACTURER'S INSTRUCTIONS. (IMAGE A)
- B. CUT TWO PIECES OF FLASHING OR FLEXIBLE FLASHING FOR JAMB FLASHING TO EXTEND 1" ABOVE WINDOW HEAD FLANGE AND BELOW BOTTOM EDGE OF SILL FLASHING. REMOVE RELEASE PAPER AND TIGHTLY PRESS ALONG SIDES OF WINDOW FRAME. (IMAGE B)
- C. CUT A PIECE OF FLASHING OR FLEXIBLE FLASHING FOR HEAD FLASHING, TO EXTEND BEYOND OUTER EDGES OF JAMB FLASHING. REMOVE RELEASE PAPER AND INSTALL COMPLETELY COVERING MOUNTING FLANGE AND ADHERING TO EXPOSED SHEATHING OR FRAMING MEMBERS. (IMAGE C)



- A. FLIP DOWN WEATHER-RESISTIVE BARRIER UPPER FLAP SO THAT IT LAYS FLAT ACROSS HEAD FLASHING.
- B. TAPE ALONG ALL CUTS IN WEATHER-RESISTIVE BARRIER AND ACROSS WINDOW HEAD WITH APPROVED TAPE PER MANUFACTURER'S



CAULK (BACKER ROD, AS NECESSARY) AT REAR OF WINDOW/DOOR FRAME TO SEAL INSIDE OF ROUGH OPENING ACROSS BOTTOM AND A MINIMUM 12" TURN UP AT SIDES TO FORM A BACK DAM. IN ORDER TO AIR SEAL AROUND WINDOW OPENING, COMPLETELY CAULK AROUND BACK EDGE OF WINDOW



HILTON

SUITE

HOME;

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04/17/2024 - CITY SUBMISSION

SHEET TITLE GENERAL INFORMATION

PROJECT NUMBER: 22023

SUMMIT

B

SUITES

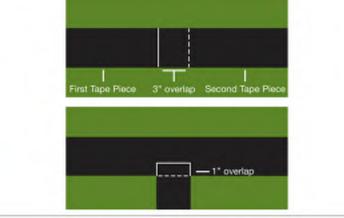
HOME2

Apply ZIP System tape after all ZIP System wall sheathing panels are fully fastened to wall-framing members. Only ZIP System tape should be used to seal the seams of ZIP System panels. Ensure that the panel surface is dry and free of sawdust and dirt prior to taping. ZIP System tape is a contact tape that requires pressure for an adequate seal.

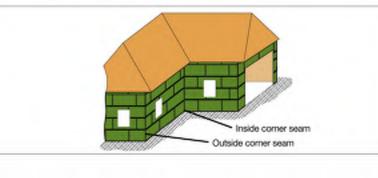
Step 1. Tape all seams using ZIP System tape. Ensure that the tape is centered over the seam within +/- 1/2" to provide adequate coverage and that wrinkles in tape are minimal.

Use the ZIP System tape gun or roller to apply pressure to the tape





Step 3. Tape inside and outside corner seams.



 Fasten the ZIP System wall sheathing sheathing to the wood frame and install ZIP System tape to all wall panel seams, as de-tailed in sections 02 and 03.

2. ZIP System tape may be used as pan flashing if

installed in accordance with flanged window

installation details posted on zipsystem.com.

Other adhesive-based flashing tapes (must meet

ICC-ES Acceptance Criteria for Flashing Materials

(AC148)) may be used as pan flashing if installed

per ASTM 2112-07. Apply the flashing to cover

the bottom of the opening, overhanging onto the

sheathing by at least 2" and extending a minimum

of 6" up each jamb.



 From the interior, apply low-pressure polyurethane foam (for windows) between the rough opening and the window frame. (Caulk sealant compatible with the sill flashing may be used at the sill if the opening between the sill flashing and window is too narrow to allow the use of low-pressure



3. Apply sealant around inside face of mounting flange. Sealant must be gapped at the sill to permit drainage. Install and level window per manufacturer's installation instructions. Verify sealant compatibility with window manufacturer. When using ZIP System tape as pan flashing, butyl, silicone or polyurethane sealants are acceptable. Do not use latex sealants.



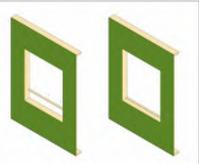
1. Fasten the ZIP System wall



4. Cut two pieces of ZIP System tape or another adhesive-backed flashing tape (must meet ICC-ES Acceptance Criteria for Flashing Materials (AC148)) and apply to each of the window jamb flanges, ensuring the jamb flashings overlap the sill flashing



2. If recommended by the window manufacturer, cut a strip of wood to function as a back dam at the sill. The wood strip should have a length equal to the width of the rough opening and a height and width of at least 1/2". Position the block at the inside edge of the window frame.



and smooth out any wrinkles.

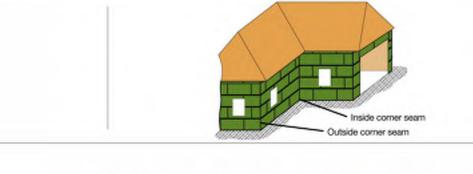
Step 2. Wherever tape splices occur at a horizontal or vertical seam, create an overlapping splice of at least 3".

At T-joints, the tape pieces should overlap by at least 1". Apply moderate pressure onto the surface of the tape to ensure a secure bond between the panel and the tape.

Use the ZIP System tape gun or roller to apply pressure to the tape and smooth out any wrinkles.

Take special care to remove any voids and/or trapped air at splice

areas and T-joints.



5. Cut a length of ZIP System tape or another

overlaps the jamb flashings."

\*DO NOT tape bottom flange.

to seal the flashing to the sheathing.

adhesive-backed flashing tape (must meet ICC-ES

Acceptance Criteria for Flashing Materials (AC148))

and apply to the header, ensuring that the flashing

Once the tape is in place, use the tape gun or roller

# Flanged Windows

polyurethane foam.) When using ZIP System tape, butyl, silicone or polyurethane sealants are acceptable. Do not use latex sealants with ZIP System tape. If using another flashing tape, follow the flashing manufacturer's recommendation in selecting a sealant compatible with that flashing.



# **Brick Mould Windows**

sheathing sheathing to the wood frame and install ZIP System tape to all wall panel seams, as de-tailed in sections 02 and 03.



Once the tape is in place, use the tape gun or roller to seal the flashing to the sheathing.

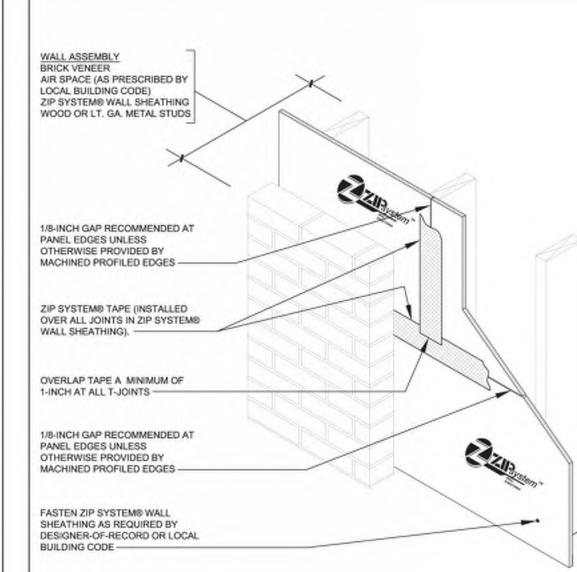


PROJECT NUMBER: 22023 SHEET NUMBER:

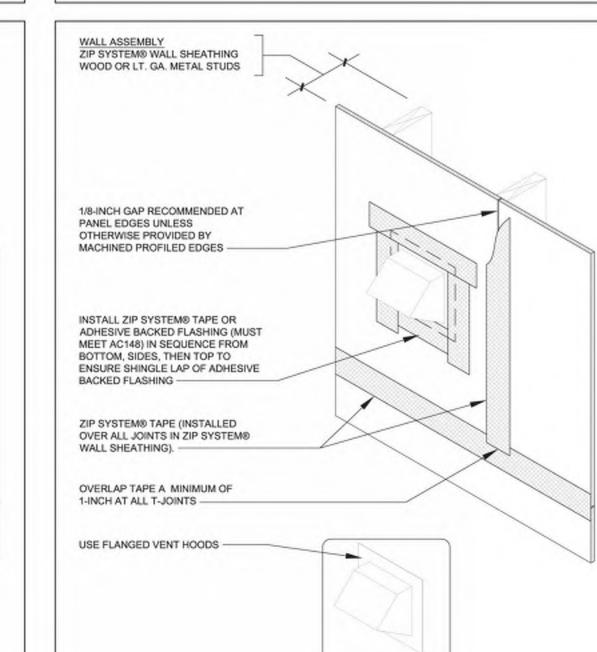
SHEET TITLE

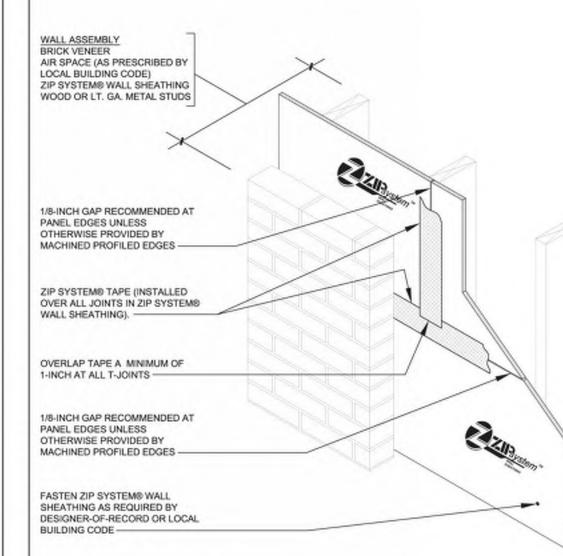
GENERAL INFORMATION

WALL ASSEMBLY VINYL/WOOD/FIBER CEMENT SIDING (INSTALLED IN ACCORDANCE WITH CLADDING MANUFACTURER'S ZIP SYSTEM® WALL SHEATHING WOOD OR LT. GA. METAL STUDS 1/8-INCH GAP RECOMMENDED AT PANEL EDGES UNLESS OTHERWISE PROVIDED BY MACHINED PROFILED EDGES ZIP SYSTEM® TAPE (INSTALLED OVER ALL JOINTS IN ZIP SYSTEM® WALL SHEATHING). OVERLAP TAPE A MINIMUM OF 1-INCH AT ALL T-JOINTS -1/8-INCH GAP RECOMMENDED AT PANEL EDGES UNLESS OTHERWISE PROVIDED BY MACHINED PROFILED EDGES FASTEN ZIP SYSTEM® WALL SHEATHING AS REQUIRED BY DESIGNER-OF-RECORD OR LOCAL BUILDING CODE -



WALL ASSEMBLY ZIP SYSTEMB WALL SHEATHING WOOD OR LT. GA. METAL STUDS PANEL EDGES UNLESS OTHERWISE PROVIDED BY MACHINED PROFILED EDGES -OVER ALL JOINTS IN ZIP SYSTEMS OVERLAP TAPE A MINIMUM OF 1-INCH AT ALL T-JOINTS INSTALL ZIP SYSTEMB TAPE AT ALL DESIGNER-OF-RECORD OR LOCAL BUILDING CODE ZIP SYSTEM® WALL SHEATHING WOOD OR LT. GA. METAL STUDS





6. Install and level window per manufacturer's installation instructions.

compatible with that flashing.

Brick Mould Windows (continued)

of 6" up each jamb.

of the window.

ZIP System tape may be used as pan flashing if installed in accordance with brick mould window

installation details posted on zipsystem.com.

Other adhesive-based flashing tapes (must meet

ICC-ES Acceptance Criteria for Flashing Materials

(AC148)) may be used as pan flashing if installed

per ASTM 2112-07. Apply the flashing to cover

the bottom of the opening, overhanging onto the sheathing by at least 2" and extending a minimum

4. For vertical jambs, cut ZIP System tape or another

adhesive-backed flashing tape (must meet ICC-ES

Acceptance Criteria for Flashing Materials (AC148))

and apply to each of the window jambs. Ensure that they cover the entire inside of the rough opening as

well as overlap onto the sheathing by at least 2".

Flashing shall also extend above the rough opening,

such that it will project 1" beyond the exterior trim

Once the tape is in place, use the tape gun or roller

Apply sealant to jambs and header allowing for drainage at the sill in accordance with window manufacturer's installation instructions. When

using ZIP System tape, use a butyl, polyurethane

or silicone sealant. Do not use latex sealants with

ZIP System tape. When using another flashing

tape, follow the flashing manufac-turer's

recommendations in selecting a sealant

to seal the flashing to the sheathing.

When using ZIP System tape, butyl, silicone or polyurethane sealants are acceptable. Do not use latex sealants with ZIP System tape. If using another flashing tape, follow the flashing manufacturer's recommendation in selecting a sealant compatible with that flashing.

7. Cut a piece of rigid head flashing so that when

installed, it is flush with the edges of the exterior

moulding of the window. Apply a bead of sealant

to the back and bottom surface of the rigid head

flashing. Use sealant recommended by the flashing

8. Secure the rigid head flashing to ZIP System wall

9. Cut a length of ZIP System tape or another

adhesive-backed flashing tape (must meet ICC-ES

Acceptance Criteria for Flashing Materials (AC148))

and apply to the rigid head flashing, ensuring that the adhesive-backed flashing overlaps the jamb

Once the tape is in place, use the tape gun or roller

From the interior, apply low-pressure polyurethane

foam (for windows) between the rough opening and

the window frame. (Caulk sealant compatible with

the sill flashing may be used at the sill if the opening

between the sill flashing and window is too narrow

to allow the use of low-pressure polyurethane foam.)

to seal the flashing to the sheathing.

manufacturer.

THIS SHEET IS PROVIDED FOR REFERENCE ONLY. ALL INSTALLATION TO BE

PER MANUFACTURER

RECOMMENDATION

WALL ASSEMBLY ZIP SYSTEMS WALL SHEATHING WOOD OR LT. GA. METAL STUDS

OVER ALL JOINTS IN ZIP SYSTEMB WALL SHEATHING).

INSTALL ZIP SYSTEM® TAPE AT ALL INTERIOR CORNERS

SHEATHING AS REQUIRED BY DESIGNER-OF-RECORD OR LOCAL BUILDING CODE

ZIP SYSTEM® WALL SHEATHING

WOOD OR LT. GA. METAL STUDS

1/8-INCH GAP RECOMMENDED AT

PANEL EDGES UNLESS

OTHERWISE PROVIDED BY

MACHINED PROFILED EDGES -

INSTALL ZIP SYSTEM® TAPE OR

BOTTOM, SIDES, THEN TOP TO

ZIP SYSTEM® TAPE (INSTALLED

OVERLAP TAPE A MINIMUM OF

1-INCH AT ALL T-JOINTS -

USE FLANGED ELECTRICAL

TO PROVIDE FLANGES FOR

ELECTRICAL BOXES -

BOXES OR MEMBRANE FLASHING

OVER ALL JOINTS IN ZIP SYSTEM®

BACKED FLASHING -

WALL SHEATHING). -

ADHESIVE BACKED FLASHING (MUST

ENSURE SHINGLE LAP OF ADHESIVE

MEET AC148) IN SEQUENCE FROM

1-INCH AT ALL T-JOINTS -





 $\Box$ 

SUITE

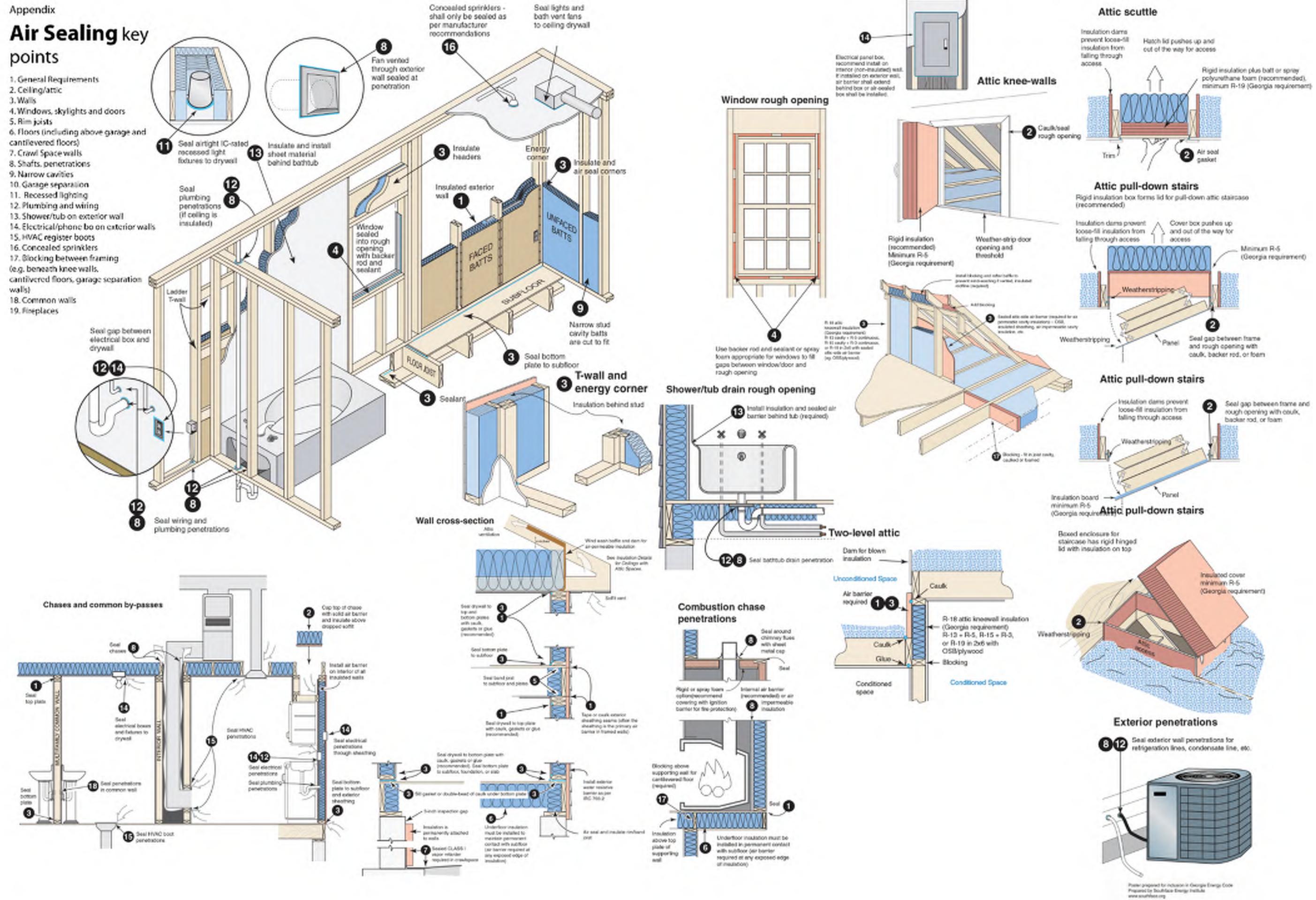
**HOME2** 

SHEET TITLE
GENERAL INFORMATION

PROJECT NUMBER: 22023

SHEET NUMBER:

G-006



Wall Insulation key points

Floor Insulation key points

Poster grapared for inclusion in Georgie Energy Code

Prepared by Southface Evergy trettule

Passing Grade V

transfed inquistion is in complete

contact with air bernior (subfoor)

Insulation-coverage

is complete.

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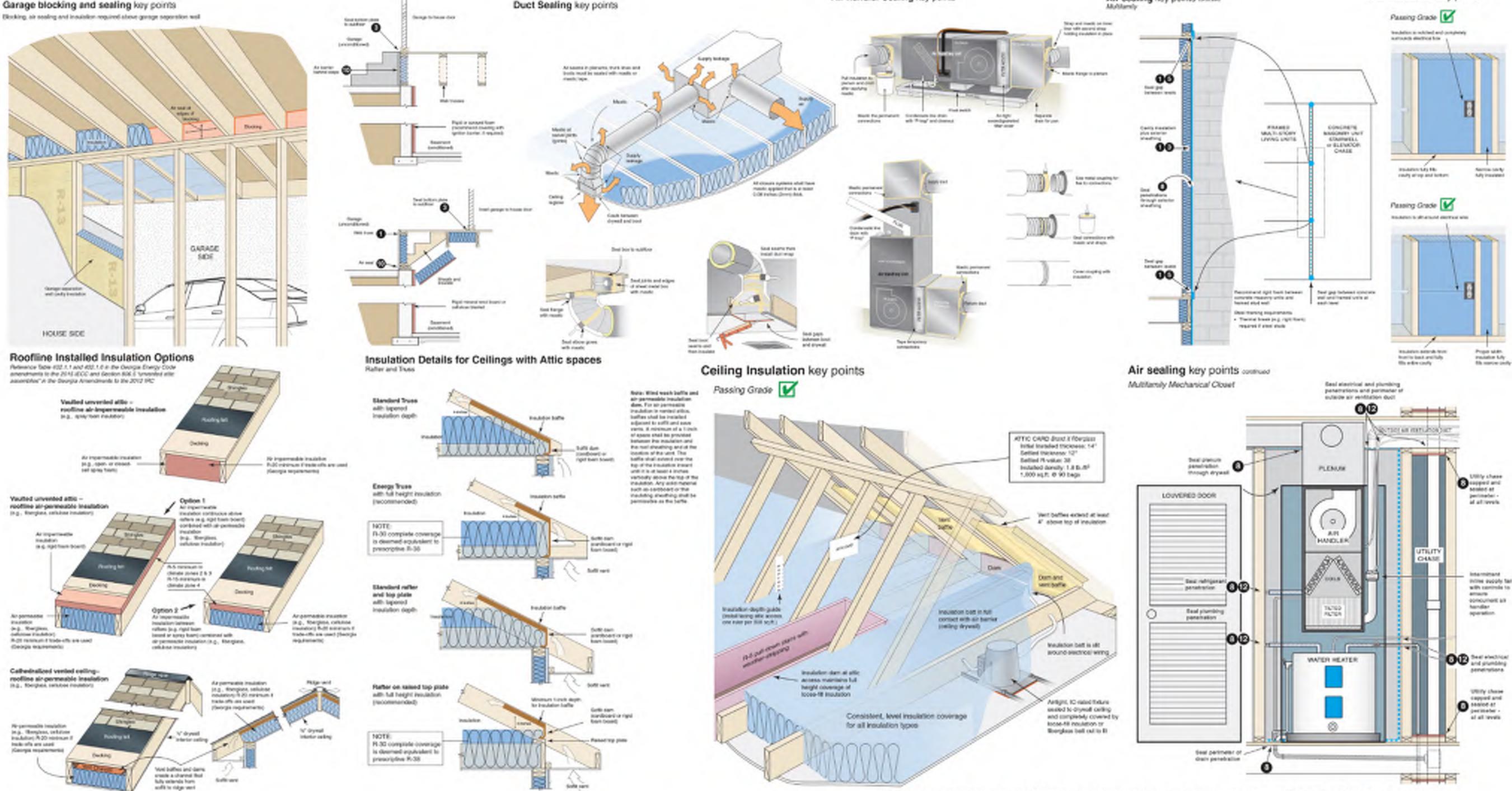
GENERAL INFORMATION

SHEET NUMBER:

SHEET TITLE

Inquistion is elt. around plumbing.

and eiting and securely fastened with minimal compression



Air Handler Sealing key points

Two-criteria affect installed insulation grading: voids/gaps (in which no insulation is present in a portion of the overall insulated surface) and compression/incomplete fill (in which the insulation does not fully fill out or extend to the desired depth). Voids or gaps in the insulation are < 5% of overall component surface area (only occasional and very small gaps)</li>

allowed for Passing Grade) Compression/Incomplete Fill

Wall and ceiling insulation that makes up portions of the building thermal envelope shall be installed to Passing Grade quality.

 Compression/Incomplete Fill for both air permeable insulation (e.g., fiberglass, cellulose) and air impermeable. insulation (e.g., apray polyunethane foam) must be less than 1 inch in depth or less than 30% of the intended depth, whichever is more stringent. The attornable area of compression/incomplete fill must be less than 2% of the overall insulated surface to achieve a Passing Grade.

 Any compression/incomplete fill with a depth greater than the above specifications (up to 1" or 30% of the intended. depth, whichever is more stringent) shall not achieve a Passing Grade.

Additional Wall Insulation Requirements

Air sealing key points controls

genetration

Seal of bond post

pereindent

Sheathing or water-resistive bentan

Multifamily Air-sealing Details

penetrations for the:

plumbing

O O electrical

O gas fort

O PUDDY plenum

O @ refrigerant line

Cap and seal all chases including shases for

Seaf penetrations in mechanical closet including

O . Deal band area at exterior sheathing side and at

OO UL compliant air sealing at drywall finishing for

Real miscettaneous challered penetrations

through building envelope (k.g. refrigerant lines)

this gap at every change in floor level

grouped utility lines and radion wents

outside air sentilation

penetrations through band

BATH CONAUST VENT any wall adjacent to stainwell or elevator. An exall

Mulbbarnily

Seal joints

in wheelthing

on extend sheeting

 All vertical air permeable insulation shall be installed in substantial contact with an air barrier on all six (E) sides. Exception: Unfinished basements, rim/band joint cavity insulation and fireplaces (insulation shall be restrained to stay in

For unfinished basements, air permeable insulation and associated framing in a framed cavity-wall shall be installed less than '\' from the basement wall surface.

Aftic knee wall details - Aftic knee walls shall be insulated to a total R-value of at least R-18 through any combination. of cavity and continuous insulation. Air permeable insulation shall be installed with a fully sealed attic side air barrier. (e.g., OSB with seams cauked, rigid insulation with joints taped, etc.). Aftic knee walls with air impermeable insulation shall not require an additional attic-side air barrier.

Underfloor insulation that makes up portions of the building thermal envelope shall be installed to Passing Grade quality. Two criteria affect installed insulation grading: voidal gaps (in which no insulation is present in a portion of the overall insulated surface) and compression/incomplete fill (in which the insulation does not fully fill out or extend to the desired depth). Yeids/Gaps

Air sealing key points conser

 Voids or gaps in the insulation are minimal for Passing Grade (< 2% of overall component surface area).</li> Compression/Incomplete Fill

- Compression/Incomplete Fill for both air permeable insulation (e.g., fiberglass, cellulose) and air impermeable. insulation (e.g., spray polyunethane foam) must be less than 1 inch in depth or less than 30% of the intended depth, whichever is more stringent. The allowable area of compression/incomplete fill must be less than 10% of the overall insulated surface to achieve a Passing Grade.
- Any compression/incomplete fill with a depth greater than the above specifications (up to 1" or 30% of the intended depth, whichever is more stringent) shall not achieve a Passing Grade.
- Air-permeable underfoor insulation shall be permanently installed against the subfloor decking. Adequate insulation supports (e.g., wire states) for air permeable insulation shall be installed at least every 18-24". Exception: The floor framing-cavity insulation shall be permitted to be in contact with the topside of sheathing or continuous insulation installed on the bottom side of foor framing where combined with insulation that meets or exceeds the minimum wood frame wall R-value and that extends from the bottom to the top of all perimeter floor framing members.

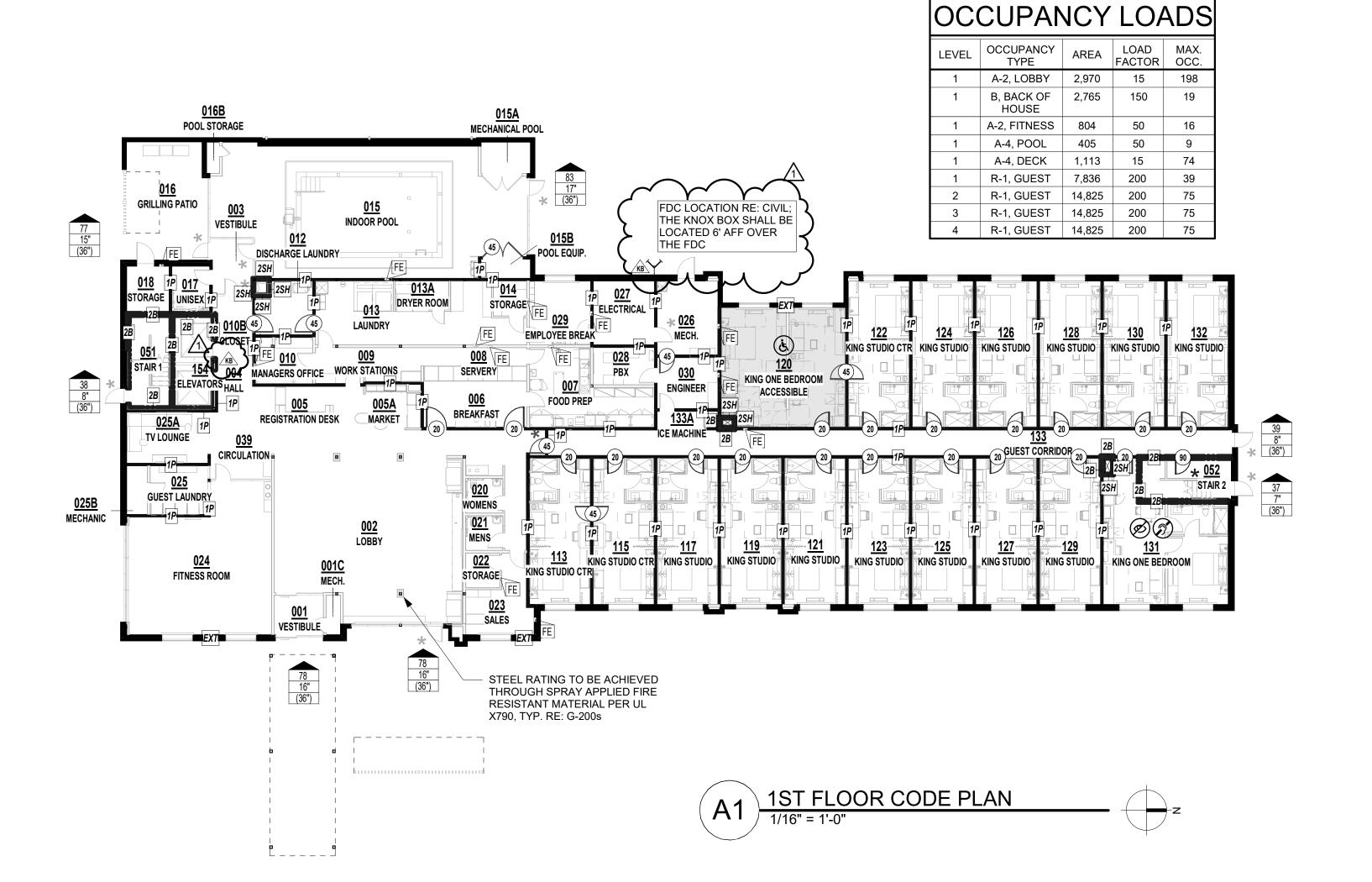
# **CODE PLAN GENERAL NOTES:**

 FIRE EXTINGUISHERS SHALL BE LOCATED SO THAT THE MAXIMUM TRAVEL DISTANCE SHALL NOT EXCEED 75 FEET. GENERAL CONTRACTOR TO PROVIDE SEMI-RECESSED FIRE EXTINGUISHER CABINETS WITH FIRE EXTINGUISHERS THROUGHOUT AT ACCESSIBLE HEIGHT.

TRASH, RECYCLING AND ASH RECEPTACLES MUST BE PROVIDED AT THE MAIN ENTRANCE.

ALL APPLIANCES (EXCEPT MICROWAVES) MUST BE ENERGY STAR RATED.

- 2. SIGNS IDENTIFYING FIRE PROTECTION EQUIPMENT, CONTROLS FOR AIR CONDITIONING SYSTEMS, SPRINKLER RISERS AND VALVES, OR OTHER FIRE DETECTION, SUPPRESSION OR CONTROL ELEMENTS SHALL BE IDENTIFIED FOR THE USE OF THE FIRE DEPARTMENT PER 2018 IBC. SIGNAGE SHALL ALSO MEET 2018 IFC REQUIREMENTS FOR HEIGHT AND LETTERING. GC TO COORDINATE WITH AUTHORITY HAVING JURISDICTION ON ALL SIGNAGE.
- 3. KNOX BOX QUANTITY AND LOCATION TO BE COORDINATED BY THE GENERAL CONTRACTOR WITH AUTHORITY HAVING JURISDICTION.
- 4. ANNUNCIATOR PANEL AND FACP QUANTITY AND LOCATION TO BE COORDINATED BY THE GENERAL CONTRACTOR WITH AUTHORITY HAVING JURISDICTION PRIOR TO INSTALL.
- 5. ALL DIMENSIONS ARE APPROXIMATE ON CODE PLAN. ACTUAL ARCHITECTURAL DIMENSIONS PER ARCHITECTURAL AND STRUCTURAL PLAN.



	CODE REVIEW							
PROJECT NAME: PROJECT LOCATION: CODE:	HOME2 SUITES BY HILTON LEE'S SUMMIT, MO 2018 IBC	CHAPTER SEVEN						
CODE REVIEW COMPLETED BY:	A.J. DOLPH		704 FIRE-RESISTANCE RATING OF STRUCTURAL MEMBERS:	1 HOUR RATED SPRAY APPLIED FIRE RESISTANT MATERIAL				
	ER THREE		705.5 EXTERIOR WALLS FIRE-RESISTANCE RATING:	FIRE SEPARATION DISTANCE > 10'-0" RATED EXPOSURE FROM INSIDE ONLY				
SECTION 302 OCCUPANCY:	R-1, HOTEL TRANSIENT(UNITS) A-2, UNCONCENTRATED (LOBBY A-4, SWIMMING POOL B, BUSINESS (BOH)	)	TABLE 705.8 MAX AREA OF EXTERIOR WALL OPENINGS: 706 FIRE WALLS:	FIRE SEPARATION DISTANCE > 25'-0" UNPROTECTED, NO LIMIT N/A				
			700 FIRE WALLS: 707 FIRE BARRIERS:	2 HOUR RATED				
CHAP	TER FOUR		708 FIRE PARTITIONS:	1 HOUR RATED				
402 COVERED MALL BUILDINGS: 403 HIGH RISE BUILDINGS:	N/A 416 FLAMMABLE FINISHES N/A 417 DRYING ROOMS:	: N/A N/A	709 SMOKE BARRIERS:	1 HOUR-ELEVATOR LOBBY				
404 ATRIUMS: 405 UNDERGROUND BUILDINGS:	N/A 418 ORGANIC COATINGS: N/A 419 LIV/WORK UNITS:	N/A N/A	710 SMOKE PARTITIONS: 711 FLOOR & ROOF ASSEMBLIES:	N/A, NO RATING REQ.D  1 HOUR RATED				
407 GROUP I-2: 408 GROUP I-3:	N/A 421 HYDROGEN FUEL GAS N/A 422 AMBULATORY CARE F		711 VERTICAL OPENINGS:	N/A				
409 MOTION PICTURE PROJECTION: 410 STAGES AND PLATFORMS:	N/A 423 STORM SHELTERS: N/A 424 CHILDREN'S PLAY STR	N/A RUCTURE: N/A	713 SHAFT ENCLOSURES:	2 HOUR RATED				
411 SPECIAL AMUSEMENT BUILDINGS 412 AIRCRAFT RELATED OCCUP:	S:N/A 425 HYPERBARIC FACILITY N/A 426 COMBUSTIBLE DUSTS		714 PENETRATIONS:	MATCH ASSEMBLY RATING				
413 COMBUSTIBLE STORAGE: 414 HAZARDOUS MATERIALS:	N/A 427 MEDICAL GAS SYSTEM N/A 428 HIGHER EDUCATION L		715 FIRE-RESISTANT JOINT SYSTEM:	MATCH ASSEMBLY RATING				
415 GROUPS H-1, H-2, H-3, H-4, H-5: 420 GROUPS I-1, R-1, R-2, R-3, & R-4:	N/A	INITO TO DE	TABLE 716.1(2) OPENING FIRE PROTECTION & RATING:	2 HOUR SHAFT: 90 MINUTE DOOR 1 HOUR FIRE BARRIER: 60 MINUTE DOOR 1 HOUR CORRIDOR: 20 MINUTE DOOR				
420.2 SEPARATION WALLS:  420.3 HORIZONTAL SEPARATION:	WALLS SEPARATING SLEEPING I FIRE PARTITIONS PER SECTION FLOORS SEPARATING SLEEPING	708	717 DUCTS AND AIR TRANSFER OPENINGS:	REQUIRED AT RATED PENETRATIONS, 1.5 HOUR DAMPER RATING				
	HORIZONTAL ASSEMBLY PER SE	CTION 711	SECTION 718 CONCEALED SPACES:	FIREBLOCK & DRAFTSTOP				
420.4 AUTOMATIC SPRINKLER:	13R PER 903.3.1.2 IN GROUP R		CHAP	TER NINE				
CHAP	TER FIVE		903 AUTOMATIC SPRINKLER SYSTEM					
TABLE 504.3 ALLOWABLE HEIGHT IN FEET ABOVE GRADE PLANE:	CONSTRUCTION TYPE VA R: ACTUAL: 48'-8" ALLO	WABLE: 60'-0"		A-2, REQUIRED: NFPA 13 (REQ'D. >5,000 SQFT) B, REQUIRED: NFPA 13				
TEET ADOVE ONADET LANE.	A: ACTUAL: 13'-3" ALLO	WABLE: 70'-0" WABLE: 70'-0"	905 STANDPIPE SYSTEM:	CLASS I REQUIRED				
TABLE 504.4 ALLOWABLE NUMBER OI		WADLE. 70-0		: REQUIRED PER NFPA 10, 75'-0" MAX TRAVEL				
STORIES ABOVE GRADE PLANE:	A-2: ACTUAL: 1 ALLOWAE	BLE: 4 STORIES BLE: 3 STORIES	907 FIRE ALARM & DETECTION SYSTEM:	REQUIRED PER NFPA 72				
		BLE: 3 STORIES BLE: 4 STORIES	909 SMOKE CONTROL SYSTEM:	COMPLY WITH IMC				
TABLE 506.2 ALLOWABLE AREA FACTOR:	R-1: ACTUAL:14,825 ALLOWAE	BLE: 12,000 SQFT	CHAF	PTER TEN				
AREATAGIOR.	A-2: ACTUAL:6,620 ALLOWAE	BLE: 11,500 SQFT BLE: 11,500 SQFT	TABLE 1004.5 MAX FLOOR AREA					
506.2.4 MIXED-OCCUPANCY, MULTISTORY BUILDING:	Aa = [At + (NS x lf)] Aa = [12,000 + (12,000 x 0.75)] Aa = 21,000 SQFT, ALLOWABLE	,	ALLOWANCES PER OCCUPANT:	R-1, 200 GROSS A-2, 15 NET A-4, 50 GROSS-SWIMMING POOL A-4, 15 GROSS-POOL DECK				
506.33. AMOUNT OF INCREASE:	If = [F/P - 0.25]W/30			B, 150 GROSS				
300.33. AWOUNT OF INCREASE.	If = [575/575 - 0.25]30/30 If = 0.75		SECTION 1005 MEANS OF EGRESS SIZING: TABLE 1006.2.1 SPACES WITH ONE	STAIRS 0.2/OCC., W/ SPRINKLER EXCEPTION OTHER EGRESS 0.15/OCC., W/ SPRINKLER EXCP.				
TABLE 508.4 REQUIRED SEPARATION OF OCCUPANCIES:	R - R: 1 HOUR		EXIT OR EXIT ACCESS DOORWAY:	R-1: 10 OCC., 75' MAX. PATH OF EGRESS A: 49 OCC., 75' MAX. PATH OF EGRESS				
OF OCCUPANCIES.	R - A: 1 HOUR R - B: 1 HOUR			B: 49 OCC., 100' MAX. PATH OF EGRESS				
	A - A: 0 HOUR A - B: 1 HOUR		TABLE 1006.3.2 MINIMUM NUMBER OF EXITS PER STORY:	2 EXITS REQ.D W/ OCCUPANT LOAD/STORY 1-500				
	B - B: 0 HOUR		1009.3.3 AREA OF REFUGE:	NOT REQUIRED W/ SPRINKLER EXCEPTION				
TABLE 509 INCIDENTAL USES:	LAUNDRY > 100 SF, 1HR STORAGE > 100 SF, 1HR		1009.3.3 AREA OF REFUGE:	NOT REQUIRED W/ SPRINKLER EXCEPTION				
$C \square \Lambda \Gamma$	PTER SIX		1009.8 TWO-WAY COMMUNICATION: 1011.2 STAIRWAY WIDTH CAPACITY:	REQ'D. AT EACH ELEV. LANDING ABOVE GRADE				
CHAI	TER SIA		1011.12 STAIRWAY WIDTH CAFACITY.	UNOCCUPIED ROOF, ACCESS VIA ROOF HATCH				
TABLE 601 FIRE RESISTANCE REQS. FOR BUILDING ELEMENTS (HOURS):	CONSTRUCTION TYPE VA		1014.2 HANDRAIL HEIGHT:	34" MIN 38" MAX.				
	PRIMARY STRUCUTRAL FRAME: INTERIOR BEARING WALL:	1 HOUR 1 HOUR	1014.6 HANDRAIL EXTENSIONS:	EXTEND HORIZONTALLY 12" BEYOND TOP RISER CONTINUE SLOPE 1 DEPTH TREAD AT BOTTOM				
	EXTERIOR BEARING WALL: NON-BEARING WALL:	1 HOUR 0 HOUR	1014.6 HANDRAIL EXTENSIONS:	EXTEND HORIZONTALLY 12" BEYOND TOP RISER				
	FLOOR CONSTRUCTION: ROOF CONSTRUCTION:	1 HOUR 1 HOUR	1015 GUARDS:	CONTINUE SLOPE 1 DEPTH TREAD AT BOTTOM 42" MIN. HEIGHT, 4" MAX. OPENING				
TABLE 602 FIRE RESISTANCE REQS. FOR EXTERIOR WALLS			TABLE 1017.2 EXIT ACCESS	42 MIIN. HEIGHT, 4 MAX. OPENING				
BASED ON FIRE SEP. DISTANCE:	0 HOUR <30 FEET, 0 >30 FEET		TRAVEL DISTANCE:	R: 250' W/ 13R SPRINKLER A: 250' W/ 13 SPRINKLER B: 300' W/ 13 SPRINKLER				
CODE PLAN	N LEGEND		1019 EXIT ACCESS STAIRWAYS:	2 HOUR RATED PER 713				
100	OCCUPANTS EXITING		TABLE 1020.1 CORRIDOR RATING:	R: 1/2 HOUR RATED W/ 13R SPRINKLER A: NO RATING REQ.D W/ 13 SPRINKLER B: NO RATING REQ.D W/ 13 SPRINKLER				
REQUIRED EXIT WIDTH  EXIT WIDTH PROVIDED BY DESIGN  EXT RATED PARTITION (IBC CH. 6)  NON - RATED PARTITION			1020.1.1 HOISTWAY OPENING PROTECTION:	REQUIRED PER 3006.2				
			TABLE 1020.2 MIN. CORRIDOR WIDTH 1020.4 DEAD ENDS:	: 44" MIN. 20'-0" MAX.				
	PARTITION (IBC 708)			ER ELEVEN				
■1B■■■■ 1 HR RATED E	BARRIER (IBC 707)							
	FIRE OR SMOKE BARRIER (IBC 709		TABLE 1106.1 ACC. PARKING:	S CH. OF IBC, ICC A117.1, ADA, & FAIR HOUSING (107) TOTAL PARKING STALLS, (7) REQ.D ACC.				
2SH 2SH 2 HR RATED S	SHAFT ENCLOSURE (IBC 713)		TABLE 1107.6.1.1 ACCESSIBLE DWELLING & SLEEPING UNITS:	(107) TOTAL UNITS, (7) REQ.D ACC.				

**ROOM NUMBER** 

DOOR RATING

FIRE EXTINGUISHER CABINET

FIRE DEPARTMENT KNOX BOX (DEFER SUBMITTAL FOR LOC.)

FIRE DEPARTMENT CONNECTION

DOOR WITH PANIC HARDWARE

EXIT SIGNAGE; SEE ELECTRICAL

EGRESS DISTANCE OF TRAVELEGRESS DIRECTION OF TRAVEL

(SEE DOOR SCHEDULE)

- EGRESS STARTING POINT

OR SURFACE MTD. AT CONC.

PRINTS ISSUED

04/17/2024 - CITY SUBMISSION

REVISIONS:
1 05/17/2024 CITY RESPONSE

OCIATES P.C.

ARCHITECTURE
INTERIOR DESIGN
ENGINEERING
PLANNING

Grand Boulevard
as City, MO 64108-1404
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DAVID EUGENE
HENDRIKSE
NUMBER
O5/17/2024

 $\Box$ 

HOME

**CHAPTER TWELVE** 

**CHAPTER THIRTY** 

HOISTWAY OPENING PROTECTION: HOISTWAY OPENING PROTECTION REQUIRED

50STC RATING BETWEEN SLEEPING UNITS

SMOKE & DRAFT CONTROL DOOR PER UL 1784

PROVIDED AT EACH ELEVATOR HOISTWAY DOOR

1206 SOUND TRANSMISSION:

3006 ELEVATOR LOBBIES AND

3006.3 HOISTWAY OPENING PROTECTION:

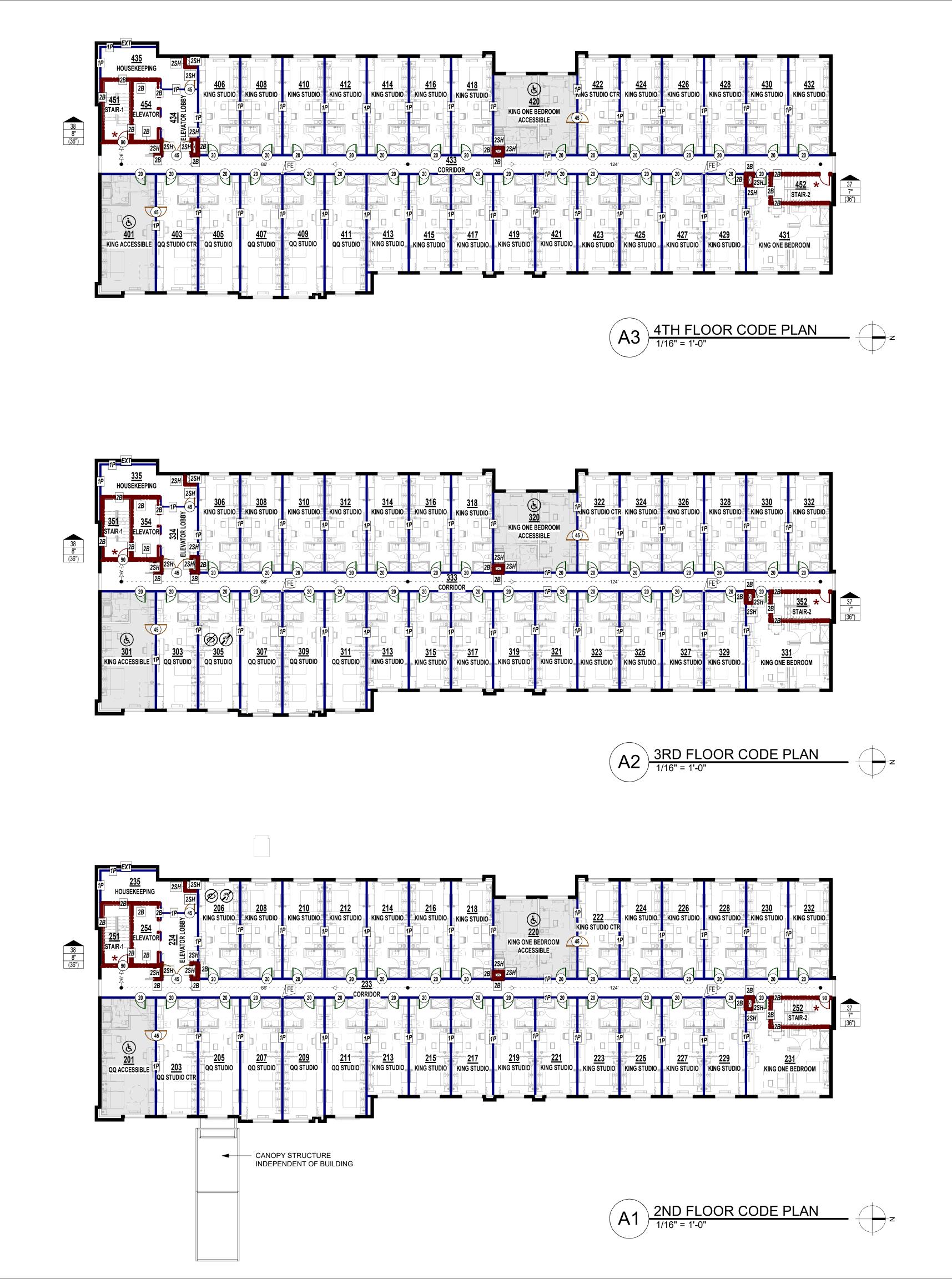
SHEET TITLE

CODE ANALYSIS

PROJECT NUMBER: 22023

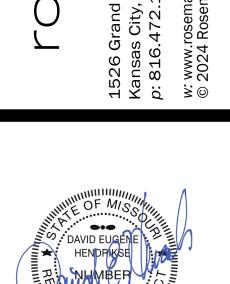
PROJECT NUMBER: 2202
SHEET NUMBER:

G-100



HOME2 SUITES BY HILTON

LEE'S SUMMIT, MO





OSemanr & ASSOCI,

.526 Grand Boulevard .ansas City, MO 64108-1 : 816.472.1448

04/17/2024 - CITY SUBMISSION **REVISIONS:** 

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REFERENCE G-003 FOR GENERAL NOTES

REFERENCE G-100 FOR CODE PLAN LEGEND

SHEET NUMBER: G-101

SHEET TITLE CODE ANALYSIS

PROJECT NUMBER: 22023

# FINISHED SIDE P7 FINISHED SIDE FOR SHEAR W/ STRUCT DWGS. IS REQUIRED. DIRECTLY TO STUDS PER CORRIDOR FOR SHEAR W/ STRUCT DWGS. IS REQUIRED. SHEATHING SHALL ATTACH DIRECTLY TO STUDS PER

# **INTERIOR PARTITION ASSEMBLIES -WOOD - NON RATED**

**NOOD 2X4 STUD - NON-RATED PARTITION - INTERIOR** 

 2x4 WOOD STUDS SPACED 16" O.C. • (1) LAYER 5/8" TYPE 'X' GYPSUM BOARD

a. ATTACH GYPSUM WITH 1-1/4" TYPE 'W' STEEL SCREWS @ 12" O.C.

WOOD 2X6 STUD - NON-RATED PARTITION - INTERIOR • 2x6 WOOD STUDS SPACED 16" O.C.

(1) LAYER 5/8" TYPE 'X' GYPSUM BOARD

a. ATTACH GYPSUM WITH 1-1/4" TYPE 'W' STEEL SCREWS @ 12" O.C.

 WOOD 2X4 STUD - NON-RATED PARTITION - INTERIOR SOUND DAMPENING
 (1) LAYER 5/8" TYPE 'X' GYPSUM BOARD 2x4 WOOD STUDS SPACED 16" O.C.

 3 1/2" BATT INSULATION IN STUD CAVITY • (1) LAYER 5/8" TYPE 'X' GYPSUM BOARD

a. ATTACH GYPSUM WITH 1-1/4" TYPE 'W' STEEL SCREWS @ 12" O.C.

 5 1/2" BATT INSULATION IN STUD CAVITY (1) LAYER 5/8" TYPE 'X' GYPSUM BOARD

WOOD 2X4 STUD - NON-RATED FURRING - INTERIOR (1) LAYER 5/8" TYPE 'X' GYPSUM BOARD ON OCCUPIED SIDE

2x6 WOOD STUDS SPACED 16" O.C.

• 2x4 WOOD STUDS SPACED 16" O.C.

a. ATTACH GYPSUM WITH 1-1/4" TYPE 'W' STEEL SCREWS @ 12" O.C.

a. ATTACH GYPSUM WITH 1-1/4" TYPE 'W' STEEL SCREWS @ 12" O.C.

<u> WOOD 2X6 STUD - NON-RATED FURRING - INTERIOR</u> (1) LAYER 5/8" TYPE 'X' GYPSUM BOARD ON OCCUPIED SIDE • 2x6 WOOD STUDS SPACED 16" O.C.

a. ATTACH GYPSUM WITH 1-1/4" TYPE 'W' STEEL SCREWS @ 12" O.C.

# **INTERIOR PARTITION ASSEMBLIES -WOOD - 1 HR RATED**

<u> WOOD 2X4 STUD - 1HR PARTITION - INTERIOF</u> (1) LAYER 5/8" TYPE "X" GYPSUM BOARD

 2x4 WOOD STUDS SPACED 16" O.C. MAX, OR PER STRUCT. DWGS. • 3-1/2" FRICTION FIT UNFACED BATT INSULATION IN STUD CAVITY • (1) LAYER 5/8" TYPE "X" GYPSUM BOARD

a. ASSEMBLY TO COMPLY WITH UL DESIGN U305 (AUG 4, 2023) b. REFER TO UL FOR SCREW PATTERN AND OTHER REQUIREMENTS

WOOD 2X6 STUD - 1HR PARTITION - INTERIOR
 (1) LAYER 5/8" TYPE "X" GYPSUM BOARD

 2x6 WOOD STUDS SPACED 16" O.C. MAX, OR PER STRUCT. DWGS 5-1/2" FRICTION FIT UNFACED BATT INSULATION IN STUD CAVITY

a. ASSEMBLY TO COMPLY WITH UL DESIGN U305 (AUG 4, 2023) b. REFER TO UL FOR SCREW PATTERN AND OTHER REQUIREMENTS

WOOD 2X4 STUD - 1HR PARTITION - INTERIOR SOUND DAMPENING
 (1) LAYER 5/8" TYPE "X" GYPSUM BOARD

• (1) LAYER 5/8" TYPE "X" GYPSUM BOARD

 25 MSG GALVANIZED STEEL RESILIENT CHANNEL, 24" O.C. 2x4 WOOD STUDS SPACED 16" O.C. MAX. OR PER STRUCT. DWGS. 3-1/2" FRICTION FIT UNFACED BATT INSULATION IN STUD CAVITY

VERIFY IF WALL SHEATHING SHEATHING SHALL ATTACH

a. ASSEMBLY TO COMPLY WITH UL DESIGN U305 (AUG 4, 2023)

b. REFER TO UL FOR SCREW PATTERN AND OTHER REQUIREMENTS c. STC SHALL BE 50 OR OVER AT UNIT ASSEMBLIES. MEETING ASTM E90 (STC 51 BASED UPON TESTING NGC 2011071)

d. WHERE PARTITION DIVIDES A CORRIDOR AND UNIT, RESILIENT CHANNEL SHALL BE ON CORRIDOR SIDE OF WALL, GC TO COORDINATE e. WHERE PARTITION IS USED AS A DEMISING WALL AND/OR FOR STRUCTURAL SHEAR, GC TO COORDINATE ADDITIONAL LAYERS OF STRUCTURAL MATERIAL PER STRUCTURAL DRAWINGS. THESE LAYERS TO BE ADDITIVE TO THE ASSEMBLY LISTED ABOVE AND SHALL BE INCORPORATED PER UL 263. WHERE ONLY ONE LAYER IS ADDED FOR STRUCTURAL SHEAR, THIS SHALL BE PLACED ON SIDE OF WALL WHERE ONLY GYPSUM BOARD RESIDES, NOT ON RESILIENT CHANNEL SIDE.

VERIFY IF WALL SHEATHING

WOOD 2X6 STUD - 1HR PARTITION - GUEST ROOM DIVISION & CORRIDORS (1) LAYER 5/8" TYPE "X" GYPSUM BOARD 25 MSG GALVANIZED STEEL RESILIENT CHANNEL, 24" O.C.

 2x6 WOOD STUDS SPACED 16" O.C. MAX. OR PER STRUCT, DWGS. 5-1/2" FRICTION FIT UNFACED BATT INSULATION IN STUD CAVITY (1) LAYER 5/8" TYPE "X" GYPSUM BOARD

(STC 51 BASED UPON TESTING NGC 2011071)

a. ASSEMBLY TO COMPLY WITH UL DESIGN U305 (SEPT 19, 2023) b. REFER TO UL FOR SCREW PATTERN AND OTHER REQUIREMENTS c. STC SHALL BE 50 OR OVER AT UNIT ASSEMBLIES, MEETING ASTM E90

d. WHERE PARTITION DIVIDES A CORRIDOR AND UNIT, RESILIENT CHANNEL SHALL BE ON CORRIDOR SIDE OF WALL, GC TO COORDINATE e. WHERE PARTITION IS USED AS A DEMISING WALL AND/OR FOR STRUCTURAL SHEAR, GC TO COORDINATE ADDITIONAL LAYERS OF STRUCTURAL MATERIAL PER STRUCTURAL DRAWINGS. THESE LAYERS TO BE ADDITIVE TO THE ASSEMBLY LISTED ABOVE AND SHALL BE INCORPORATED PER UL 263. WHERE ONLY ONE LAYER IS ADDED FOR STRUCTURAL SHEAR, THIS SHALL BE PLACED ON SIDE OF WALL WHERE

ONLY GYPSUM BOARD RESIDES, NOT ON RESILIENT CHANNEL SIDE.

# **PARTITION NOTES**

- 1. USE MOISTURE AND MOLD RESISTANT DRYWALL AT ALL WET WALLS. USE CEMENTITIOUS BACKER BOARD IF TILE IS TO BE
- 2. REFER TO G-200 SHEETS FOR SPECIFIC UL DESIGN REQUIREMENTS. 3. ALL FIRE RATED PARTITIONS MUST USE TYPE-'X' / FIRE RATED GYPSUM BOARD IN THICKNESS INDICATED OR NECESSARY TO
- ACHIEVE REQUIRED RATING. 4. PUTTY PADS SHALL BE INSTALLED AT THE FOLLOWING LOCATIONS: UNIT/CORRIDOR SEPARATION PARTITIONS; ALL UNIT
- DEMISING PARTITIONS WHERE MULTIPLE BOXES ARE INSTALLED IN THE SAME STUD CAVITY, INCLUDING BACK-TO-BACK BOXES. REFER TO STRUCTURAL FOR ALL SHEAR AND BEARING WALL LOCATIONS & REQUIREMENTS. 6. ALL WALLS ARE FULL HEIGHT TO THE UNDERSIDE OF FLOOR/ROOF CEILING ASSEMBLY UNLESS NOTED OTHERWISE.

7. ALL STEEL COLUMNS AND STEEL BEAMS REQUIRE 1 HOUR PROTECTION, REFER TO CODE PLANS FOR LOCATION. FIREBLOCKING SHALL BE INSTALLED IN CONCEALED SPACES OF STUD WALL AND PARTITIONS INCLUDING FURRED SPACES VERTICALLY AT THE CEILING AND FLOOR LEVELS AND HORIZONTALLY AT INTERVALS NOT EXCEEDING 10 FEET. USE UL RATED FIRESTOP FOAM, CAULK OR PADS (OR EQUIVALENT UL RATED MATERIAL THAT MAINTAINS THE ASSEMBLY'S RATING PER THE

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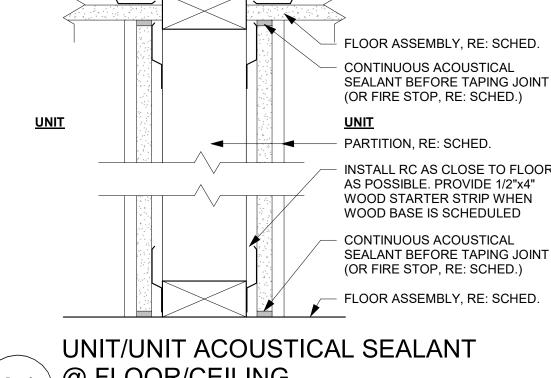
SHEET TITLE PARTITION ASSEMBLIES

SHEET NUMBER:

PROJECT NUMBER: 22023

FLOOR ASSEMBLY, RE: SCHED. CONTINUOUS ACOUSTICAL SEALANT BEFORE TAPING JOINT (OR FIRE STOP, RE: SCHED.) - PARTITION, RE: SCHED. INSTALL RC AS CLOSE TO FLOOR AS POSSIBLE. PROVIDE 1/2"x4" WOOD STARTER STRIP WHEN WOOD BASE IS SCHEDULED CONTINUOUS ACOUSTICAL SEALANT BEFORE TAPING JOINT (OR FIRE STOP, RE: SCHED.) FLOOR ASSEMBLY, RE: SCHED.

ACOUSTIC SEALANT @ FLOOR/CEILING



INSTALL RC AS CLOSE TO FLOOR AS POSSIBLE. PROVIDE 1/2"x4" WOOD STARTER STRIP WHEN WOOD BASE IS SCHEDULED

CONTINUOUS ACOUSTICAL SEALANT BEFORE TAPING JOINT (OR FIRE STOP, RE: SCHED.)

FLOOR ASSEMBLY, RE: SCHED.

@ FLOOR/CEILING

b. REFER TO GA FOR SCREW PATTERN

# FLOOR/CEILING ASSEMBLY-WOOD

TOP OF FLOOR

BOTTOM OF FLOOR

TOP OF FLOOR

BOTTOM OF FLOOR

TOP OF FLOOR

**BOTTOM OF FLOOR** 

**CONCRETE - NON-RATED - SLAB ON GRADE** CONCRETE SLAB ON GRADE PER STRUCT. DWGS.

a. SEE STRUCTURAL FOR REINFORCING AND THICKNESS b. VERIFY SLAB ELEVATIONS WITH CIVIL AND LANDSCAPE

# **WOOD OPEN WEB TRUSS - 1HR**

• 3/4" MIN. PLYWOOD SHEATHING, TYPE 'C/D', SEE ALSO NOTE b. WOOD TRUSSES PER STRUCTURAL, REFER TO UL FOR MIN. REQS UNFACED FIBERGLASS INSULATION COMPLETELY FILLED IN CONCEALED CAVITY TO COMPLY WITH NFPA 13 CONCEALED SPACES.

 25 MSG GALVANIZED RESILIENT CHANNELS, SPACED PER U.L. • (1) LAYER OF 5/8" TYPE 'C' GWB PER UL

a. ASSEMBLY TO COMPLY WITH UL DESIGN L546 (OCT. 3, 2023) STRUCTURAL SHALL SUPERCEDE IF STRUCT SHEATHING IS THICKER OR

> DIFFERENT TYPE THAN LISTED ABOVE. PROVIDE REQ MIN ABOVE. REFER TO UL FOR SCREW PATTERN d. STC TO BE MIN. 50 PER IBC CHAPTER 12, IIC TO BE EQUAL OR GREATER THAN 50 WHEN TESTED UNDER ASTM E 492. (STC 60 BASED UPON TESTING 30160-08-90744-11. IIC 52 BASED UPON TESTING

30160-08-90744-7 ASSUMING VCT FLOOR FINISH.) e. VERIFY GWB AND RESILIENT CHANNEL WITH UL SPECIFIED, TAKE NOTE OF REQUIRED RESILIENT CHANNEL SPACING WITH INSULATION-FILLED

# WOOD 2X10 LUMBER - 1HR - STAIR LANDINGS

 1" GYPCRETE TOPPING 1/4" ACOUSTICAL MAT • MIN 15/32" TYPE 'C/D' SHEATHING OR PER UL SYSTEM, SEE NOTE b. 2X10 WOOD JOISTS SPACED MAX 16" O.C.; REFER TO STRUCTURAL FOR REQUIRED SPACING IF MORE RESTRICTIVE

 CROSS BRIDGING PER UL UNFACED FIBERGLASS INSULATION COMPLETELY FILLED IN CONCEALED CAVITY TO COMPLY WITH NFPA 13 CONCEALED SPACES AND UL 25 MSG GALVANIZED RESILIENT CHANNEL SPACED PER UL.

• (2) LAYERS OF 5/8" TYPE 'C' GWB PER UL

a. RATING FOR 2X10 DIMENSIONAL LUMBER ASSEMBLY: 2018 IBC TABLE 721.1(3) #21-1.1 & AMERICAN WOOD COUNCIL'S DCA 4 (COMPONENT ADDITIVE METHOD FOR CALCULCULATING AND DEMONSTRATING

ASSEMBLY FIRE RESISTANCE) b. STRUCTURAL SHALL SUPERCEDE IF STRUCT SHEATHING IS THICKER OR DIFFERENT TYPE THAN LISTED ABOVE. PROVIDE REQ MIN ABOVE.

# WOOD 2X8 LUMBER - 1HR - CORRIDOR

 1-1/2" GYPCRETE TOPPING • 3/4" SHEATHING MIN, SEE NOTE b.

c. REFER TO IBC TABLE FOR SCREW PATTERN

 2X8 WOOD JOISTS SPACED PER STRUCTURAL UNFACED FIBERGLASS INSULATION COMPLETELY FILLED IN CONCEALED

CAVITY TO COMPLY WITH NFPA 13 CONCEALED SPACES. • (2) LAYERS OF 5/8" TYPE 'X' GWB PER IBC

a. RATING FOR 2X8 DIMENSIONAL LUMBER ASSEMBLY: 2018 IBC TABLE 721.1(3) #21-1.1 & AMERICAN WOOD COUNCIL'S DCA 4 (COMPONENT ADDITIVE METHOD FOR CALCULCULATING AND DEMONSTRATING ASSEMBLY FIRE RESISTANCE)

b. STRUCTURAL SHALL SUPERCEDE IF STRUCT SHEATHING IS THICKER OR DIFFERENT TYPE THAN LISTED ABOVE. PROVIDE REQ MIN ABOVE.

c. REFER TO IBC TABLE FOR SCREW PATTERN

TOP OF FLOOR

BOTTOM OF FLOOR

F8

WOOD 2X6 LUMBER - 1HR - CORRIDOR • 1-1/2" GYPCRETE TOPPING

 3/4" SHEATHING MIN, SEE NOTE b. 2X6 WOOD JOISTS SPACED PER STRUCTURAL UNFACED FIBERGLASS INSULATION COMPLETELY FILLED IN CONCEALED

CAVITY TO COMPLY WITH NFPA 13 CONCEALED SPACES. • (2) LAYERS 5/8" TYPE X GWB. PER IBC

a. RATING FOR 2X6 DIMENSIONAL LUMBER ASSEMBLY: 2018 IBC TABLE 721.1(3) #21-1.1 & AMERICAN WOOD COUNCIL'S DCA 4 (COMPONENT ADDITIVE METHOD FOR CALCULCULATING AND DEMONSTRATING ASSEMBLY FIRE RESISTANCE)

b. STRUCTURAL SHALL SUPERCEDE IF STRUCT SHEATHING IS THICKER OR DIFFERENT TYPE THAN LISTED ABOVE. PROVIDE REQ MIN ABOVE. c. REFER TO IBC TABLE FOR SCREW PATTERN

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SHEET TITLE ASSEMBLIES - FLOOR/CEILING

PROJECT NUMBER: 22023

### KAM INDUSTRIES LTD, DBA CORDECK — Tapmate II-FS-1, II-FS-2; Series KEB.

# (2) Wiremold Co. -- After set inserts.

Single-service after set inserts installed per accompanying installation instructions in 2-1/2 in, diam hole core-drilled through min 3-1/4 in, thick concrete topping to top of cell of any min 3 in, deep cellular steel floor unit specified under Item 3. Specing shall be no more than one insert in each 10 sq ft of floor area in each span with a min center to center spacing of 16 in. If the high potential and low potential raceways of the cellular steel floor unit are separated by a valley filled with concrete, the center to center spacing of the high potential and low potential single-service after set inserts may be reduced to a min of 7-1/2 in. Restrained Assembly Rating is 2 hr or less with internally protected type 436 after set insert with Type M4-, M6- or M8- Series single-service

WIREMOLD CO --- Internally protected Type 436 after set insert with Type M4-, M6- or M8- Series single-service activation fitting.

7. Mineral and Fiber Boards\* — (Optional, not shown). Applied over concrete floor with no restriction on board thickness. When mineral and fiber boards are used, the unrestrained beam rating shall be increased by a minimum of 1/2 hr. See Mineral and Fiber Board (CERZ) category for names of manufacturers.

8. Roof Covering Materials\* — (Optional, not shown)Consisting of materials compatible with insulations described herein which provide Class A, B or C coverings. See Built-Up Roof Covering Materials in Building Materials Directory.

9. Insulating Concrete — (not shown) Optional. Various types of insulating concrete prepared and applied in the thickness indicated: A. Vermiculite Concrete — (not shown) Optional.

1. Blend 6 to 8 cu, ft, of Vermiculite Aggregate\* to 94 lb. Portland Cement and air entraining agent. Min thickness of 2 in, as measured to the top surface of the structural concrete or foamed plastic (Item 10) when it is used. ELASTIZELL CORP OF AMERICA

# SIPLAST INC

# **VERMICULITE PRODUCTS INC**

2. Blend 3.5 cu. ft. of Type NVC Concrete Aggregate\* or Type NVS Vermiculite Aggregate\* coat, 1/8 in. thickness beneath foamed plastic (Item 10) when used, 1 in, min topping thickness. SIPLAST INC

# **VERMICULITE PRODUCTS INC**

Vermiculite concrete may be covered with Roof Covering Materials (Item 8).

B. Cellular Concrete — Roof Topping Mixture\* — concentrate mixed with water and Portland cement per manufacturers specifications. Min. thickness of 2-in, as measured to the top surface of the structural concrete or foamed plastic (Item 10A) when used. Cast dry density and 28 day min. compressive strength of 190 psi as determined with ASTM C495—66. \*AERIX INDUSTRIES — Cast dry density of 37 (+ or -) 3.0 pcf.

CELCORE INC — Type Celcore with cast dry density of 31 (+ or - 3.0) pcf or Type Celcore MF with cast dry density of 29 (+ or - 3.0) pcf.

ELASTIZELL CORP OF AMERICA --- Type II. Mix #1 of cast dry density 39 (+ or -) 3.0 pcf, Mix #2 of cast dry density 40 (+ or -) 3.0 pcf, Mix #3 of cast dry density 47 (+ or -) 3.0 pcf.

C. Cellular Concrete-Roof Topping Mixture\* — Concentrate mixed with water and Portland cement per manufacturers specifications. 28day min. compressive strength of 190 psi as determined with ASTM C495-66. SIPLAST INC --- Mix No. 1 or 2, Cast dry density of 32+3 (Mix No. 1) or 36+3 (Mix No. 2) pcf.

D. Perlite Concrete — 6 cu ft. of Perlite Aggregate\* to 94 lb of Portland Cement and 1-1/2 pt air entraining agent. Min, thickness 2 in, as measured to the top surface of structural concrete or foamed plastic (Item 10A) when it is used. See Perlite Aggregate (CFFX) in Fire Resistance Directory for names of manufacturers.

E. Cellular Concrete — Roof Topping Mixture\* — Foam Concentrate mixed with water, Portland Cement and UL Classified Vermiculite Aggregate per manufacturer's application instructions. Cast dry density of 33 (+ or -) 3.0 pcf and 28-day compressive strength of min 250 psi

as determined in accordance with ASTM C495-86. AERIX INDUSTRIES - Mix No. 3.

# SIPLAST INC - Mix No. 3.

F. Floor Topping Mixture\* — (Optional, not shown) — Approx 4.5 gal of water to 41 lbs of NVS Premix floor topping mixture. Slurry coat 1/8 in thickness beneath foamed plastic (Item 10) when used, 1 in min topping thickness.

Floor Topping Mixture may be covered with Built-Up or Single Membrane Roof Covering.

10. Foamed Plastic\* — (optional — Not Shown) For use only with vermiculite (Item 9A) or cellular (Item 9C) concretes — Rigid polystyrene foamed plastic insulation having slots and/or holes sandwiched between vermiculite concrete slurry which is applied to the normal or lightweight concrete surface and vermiculite concrete topping (Item 9A). SIPLAST INC

# VERMICULITE PRODUCTS INC

10A. Foamed Plastic\* — For use only with cellular concrete. Nominal 24 by 48 in. polystyrene foamed plastic insulation boards having a density of 1.0 + 0.1 pcf encapsulated within cellular concrete topping (Item 9B). Each insulation board shall contain six nominal 3 in. diameter holes oriented in two rows of three holes each with the holes spaced 12 in. OC, transversely and 16 in. OC longitudinally. See Foamed Plastic\* (BRYX) category in Building Materials Directory or Foamed Plastic\* (CCVW) category in Fire Resistance Directory for list of

11. Foamed Plastic\* — (Optional, not shown). Polyisocyanurate roof insulation, applied over concrete floor with no restriction on insulation thickness. When polyisocyanurate insulation is used, the unrestrained beam rating shall be increased by a minimum of 1/2 hr.

12. Metal Lath — (Not Shown) — (Required with Z-146, Z-146T, Z146PC, Z-156, Z-156T and Z-156PC, otherwise optional) - Metal lath may be used to facilitate the spray application of Spray-Applied Fire Resistive Materials on steel bar joist and trusses. The diamond mesh, 3/8 in. expanded steel lath, 1.7 to 3.4 lb per sq yd is secured to both sides of each steel joist with No. 18 SWG galv steel wire at joist web and bottom chord members spaced 15 in, OC max. When used, the metal lath is to be fully covered with Spray-Applied Fire Resistive. See Foamed Plastic (CCVW) category for list of manufacturers.

### \* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.

Last Updated on 2023-05-16

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### Design/System/Construction/Assembly Usage Disclaimer

- · Authorities Having Jurisdiction should be consulted in all cases as to the particular requirements covering the installation and use of UL Certified products, equipment, system, devices, and materials.
- · Authorities Having Jurisdiction should be consulted before construction.
- . Fire resistance assemblies and products are developed by the design submitter and have been investigated by UL for compliance with applicable requirements. The published information cannot always address every construction nuance encountered in the field.
- When field issues arise, it is recommended the first contact for assistance be the technical service staff provided by the product manufacturer noted for the design. Users of fire resistance assemblies are advised to consult the general Guide Information for each product category and each group of assemblies. The Guide Information includes specifics concerning alternate materials and alternate methods of construction.
- Only products which bear UL's Mark are considered Certified.

BXUV - Fire Resistance Ratings - ANSI/UL 263 Certified for United States BXUV7 - Fire Resistance Ratings - CAN/ULC-S101 Certified for Canada See General Information for Fire-resistance Ratings - ANSVUL 263 Certified for United States

Design Criteria and Allowable Variances

See General Information for Fire Resistance Ratings - CAN/ULC-S101 Certified for Canada Design Criteria and Allowable Variances

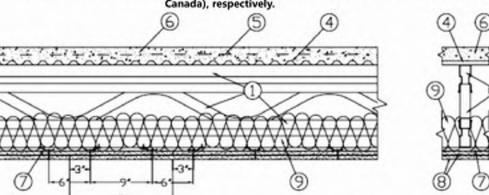
# Design No. G566

February 3, 2022

### Restrained Assembly Rating — 1 and 2 Hr (See item 8) Unrestrained Assembly Rating - 1 and 2 Hr (See item 8) Load Restriction - 98% (See Item 1)

This design was evaluated using a load design method other than the Limit States Design Method (e.g., Working Stress Design Method). For jurisdictions employing the Limit States Design Method, such as Canada, a load restriction factor shall be used — See Guide BXUV or BXUV7

\* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as



. Structural Steel Members\* — (For use with joist spacing up to 24 in, OC max.) - Pre-fabricated steel joist system consisting of coldformed, galvanized steel chord and web sections. Joist top and bottom chords min. 4 in. high by 1-11/16 in. wide by 18 ga. Joist webs min. 1-1/2 in. by 1-1/2 in. by 20 ga. square tube bent and triangulated as shown. Chords and web connected by fillet welds. Overall joist depth min. 12 in. Non-composite joists spaced a max of 24 in. OC with max. tensile strength of 30 ksi, Joist ends placed over and secured to Bearing Seats (Item 2) with two min. #10 by 3/4 in. long screws on each side of Bearing Seats. Allowable loading must be calculated so as to stress the steel trusses to a maximum of 98% of the stress calculated in accordance with the allowable stress design approach outlined in the

### manufacturer's load tables. **EISEN GROUP LLC** — Type Gateway Panel pre-fabricated steel joist system

1A, Structural Steel Members\* — (For use when joist spacing is greater than 24 in. OC up to max. 48 in. OC) - Pre-fabricated steel joist system consisting of cold-formed, galvanized steel chord and web sections. Joist top and bottom chords min, 4 in. high by 1-11/16 in, wide by 18 ga. Joist webs min. 1-1/2 in. by 1-1/2 in. by 20 ga. square tube bent and triangulated as shown. Chords and web connected by fillet welds. Overall joist depth min, 12 in, Non-composite joists spaced a max of 48 in, OC to be designed per SJI specification with max, tensile strength of 30 ksi. Joist ends placed over and secured to Bearing Seats (Item 2) with two min. #10 by 3/4 in. long screws on each side of Bearing Seats. Allowable loading must be calculated so as to stress the steel trusses to a maximum of 98% of the stress calculated in accordance with the allowable stress design approach outlined in the manufacturer's load tables. EISEN GROUP LLC — Type Gateway Panel pre-fabricated steel joist system

2. Bearing Seats\* — (Not Shown) — Galvanized steel tube, min. 1 in. by 2-1/2 in. by 13 ga., oriented vertically and welded to a galvanized steel plate. Bearing seats spaced to match joist spacing and attached to bearing supports by welding or screw attaching the steel plate to the

EISEN GROUP LLC — Type Gateway Panel bearing seat

3. Bracing — (Not Shown - for joist spacing up to 24 in, OC max.) — Galvanized channel-shaped steel sections, min. 1-1/2 in: wide with 1/4 in. flanges, min. 16 ga. Bracing attached to underside of trusses with min. #10 by 3/4 in. long screws through truss bottom chord. Bracing installed in truss cavities by scoring, bending and flattening the ends to form a tab for attachment to truss top and bottom chords. Two pieces of bracing crossed and tabs secured to truss chords with min. #10 by 3/4 in, long screws. Location and spacing of underside and crossed bracing to be specified on truss engineering.

3A. Bracing — (Not Shown - In lieu of Item 3 when the joists are spaced more than 24 in. OC up to max. 48 in. OC) Galvanized channelshaped steel sections, min. 1-1/2 in. wide with 1/2 in. long flanges, min 16 ga. Bracing attached to underside of joists with min. #10 by 3/4 in. long screws through joist bottom chord. Bracing installed in joist cavities by scoring, bending and flattening the ends to form a tab for attachment to joist top and bottom chords. Two pieces of bracing crossed, and tabs secured to joist chords with min. #10 by 3/4 in. long screws, Location and spacing of underside and crossed bracing to be specified on joist engineering.

4. Steel Deck — (For joist spacing up to 24 in. OC max.) - Min 9/16 in. deep, 28 MSG galv corrugated fluted steel deck, mechanically fastened to joists 12 in. OC. The concrete topping thickness shall be measured to the top plane of the steel deck.

4A. Steel Deck — (Used when joist spacing is greater than 24 in. OC up to 48 in. OC max.) - Min. 1 in deep, 26 gauge uncoated or galv. fluted or cellular steel floor units with no span exceeding 48 in. Mechanically fastened to joists 12 in. OC. The concrete topping thickness shall be measured to the top plane of the steel deck.

5. Welded Wire Fabric — (For joist spacing up to 24 in, OC max.) - Min, 6 by 6 in., W1.4 x W1.4.

5A. Welded Wire Fabric — (Used in lieu of Item 5 when joist spacing exceeds 24 in. OC up to 48 in. OC max) - Min. 6 by 6 in., W2.9 x W2.9.

6. Normal or Lightweight Concrete — Normal weight concrete, carbonate or siliceous aggregate, 150 + 3 pcf unit weight, 3000 psi compressive strength. Lightweight concrete, expanded shale, clay or slate aggregate by rotary kiln method, 117 + 3 pcf unit weight, 3000 psi compressive strength. Min. thickness is 2 in. as measured to the top plane of the steel deck.

6A. Floor Topping Mixture\* — (For use as an alternate to Item 6) — Compressive strength to be 3000 psi min. Minimum thickness to be 1 in. as measured from the top plane of the deck, Refer to manufacturer's instructions accompanying the material for specific mix design. MAXXON CORP — Types Maxxon Standard and Maxxon High Strength

6B. Floor Mat Materials\* — (Optional) — Not Shown — Floor mat material loose laid over the crests of the steel deck. Flutes of the steel deck to be filled with Floor Topping Mixture\* prior to the application of the Floor Mat Materials\*. Refer to manufacturer's instructions regarding minimum thickness of floor topping over each floor mat material. MAXXON CORP — Type Encapsulated Sound Mat

Floor Mat Reinforcement — (Optional) - Refer to manufacturer's instructions regarding minimum thickness of floor topping for use with floor mat

Metal Lath — (Optional) — 3/8 in. expanded galvanized steel diamond mesh, 3.4 lbs/sq yd loose laid over the floor mat material.

Fiber Glass Reinforcement — (Optional, Not Shown) - 0.015 in. thick PVC coated non-woven fiberglass mesh, 0.368 lbs/sq yd loose laid over the floor mat

6C. Floor Topping Mixture\* — (For use as an alternate to Item 6 or 6A) — Compressive strength to be 2500 psi min. Minimum thickness to be 1 in. as measured from the top plane of the deck or floor mat material. Refer to manufacturer's instructions accompanying the material for specific mix design. An ethylene vinyl acetate adhesive may be applied to the steel deck prior to the installation of the floor topping mixture at a maximum application rate of 0.025 lbs./ft<sup>2</sup>. \*UNITED STATES GYPSUM CO -- Types LRK, HSLRK, CSD

USG MEXICO S A DE C V - Types LRK, HSLRK, CSD

HACKER INDUSTRIES INC --- Firm-Fill CMD

Floor Mat Materials\* — (Optional) — Floor mat material loose laid over the subfloor. Refer to manufacturer's instructions regarding the minimum thickness of floor topping over each floor mat material. \*\*UNITED STATES GYPSUM CO — Types SAM, LEVELROCK® Brand Sound Reduction Board, LEVELROCK® Brand Floor Underlayment SRM-25

6D. Alternate Floor Topping Mixture\* — Compressive strength to be 3500 psi min. Minimum thickness to be 1 in. as measured from the top plane of the deck or the top plane of the Floor Mat Material\*. Refer to manufacturer's instructions accompanying the material for specific mix design. An ethylene vinyl acetate adhesive may be applied to the steel deck prior to the installation of the floor topping mixture at a maximum application rate of 0.025 lbs./ft<sup>2</sup>.

Floor Mat Materials\* — (Optional) — Floor mat material nom 5/64 in. (2 mm) thick adhered to steel deck with Hacker Floor Primer. Primer to be applied to the surface of the mat prior to the placement of floor-topping mixture. Floor topping thickness a min 1 in. (25 mm) over the HACKER INDUSTRIES INC — Hacker Sound-Mat I

Alternate Floor Mat Materials — (Optional) — Floor mat material nom 1/4 in. (6 mm) thick adhered to steel deck with Hacker Floor Primer. Primer to be applied to the surface of the mat prior to the placement of a min 1-1/4 in. (32 mm) of floor-topping mixture. HACKER INDUSTRIES INC — Hacker Sound-Mat II

Alternate Floor Mat Materials — (Optional) — Floor mat material nom 1/8 in. (3 mm) thick loose laid over the steel deck. Floor topping thickness shall be a min of 1 in. (25 mm). HACKER INDUSTRIES INC — FIRM-FILL SCM 125

Alternate Floor Mat Materials — (Optional) — Floor mat material nom 1/4 in. (6 mm) thick loose laid over the steel deck, Floor topping thickness shall be a min of 1 in (25 mm). HACKER INDUSTRIES INC --- Type FIRM-FILL SCM 250

Alternate Floor Mat Materials — (Optional) — Floor mat material nom 3/8 in. (10 mm) thick loose laid over the steel deck. Floor topping thickness shall be a min of 1-1/4 in. (32 mm). HACKER INDUSTRIES INC --- FIRM-FILL SCM 400

Alternate Floor Mat Materials — (Optional) — Floor mat material nom 3/4 in. (19 mm) thick loose laid over the steel deck. Floor topping thickness shall be a min of 1-1/2 in. (38 mm). HACKER INDUSTRIES INC --- FIRM-FILL SCM 750

# 6E. As an alternate to Items 6-6D:

Vapor Barrier — (Optional) - Commercial asphalt saturated felt, 0.030 in. thick.

ARMSTRONG WORLD INDUSTRIES INC --- Type DFR-8000

ARMSTRONG WORLD INDUSTRIES INC — Type DFR-8000-\$\$

Vapor Barrier — (Optional) - Nom 0.010 in, thick commercial rosin-sized building paper.

Finish Flooring - Floor Topping Mixture\* --- Min 3/4 in. thickness of any Floor Topping Mixture bearing the UL Classification Marking as to Fire · Resistance. See Floor- and Roof-Topping Mixtures (CCOX) category for names of Classified Companies. Refer to the manufacturer's instructions accompanying the material and/or contact the manufacturer's technical support for specific mix design and minimum thickness recommended for use with

Floor Mat Materials\* — (Optional, Not Shown) - Floor mat material loose laid over the subfloor, Refer to manufacturer's instructions regarding the · minimum thickness of floor topping over each floor mat material.

. LOW & BONAR INC — EnkaSonic® by Colbond a member of the Low & Bonar group Types 125, 250, 250 Plus, 400, 400 Plus, 750, and 750 Plus.

Floor Mat Reinforcement --- (Optional) - Refer to manufacturer's instructions regarding minimum thickness of floor topping for use with floor mat

# Metal Lath — (Optional) — Expanded steel diamond mesh, 2.5 lb / sq vd loose laid over floor mat material

Fiberglass Mesh Reinforcement — (Optional) — Coated non-woven glass fiber mesh grid loose laid over floor mat material.

7. Resilient Channels — (When joist spacing exceeds 24 in. OC, additional Supplemental Supports are required, see item 7D) - Resilient channels formed of 25 MSG galv steel, installed perpendicular to the steel joists, (Item 1), spaced 12 in. OC. Channels oriented opposite at base layer and face layer gypsum board butt joints (spaced 6 in, OC) as shown in the above illustration. Channel splices overlapped 4 in. beneath steel joists. Channels secured to each joist with min. #10 by 3/4 in. long screws.

7A. Furring Channels — (Not Shown - When joist spacing exceeds 24 in. OC additional Supplemental Supports are required, see item 7D) — As an alternate to Item 7, hat channels min 25 MSG galv steel, min 2-5/8 in. wide by min 7/8 in. deep, installed perpendicular to the joists . (Item 1), spaced a max of 12 in. OC. Two courses of channel positioned 6 in. OC, 3 in. from each end of wallboard of base layer and face layer. Channel splices overlapped 4 in. beneath steel joists. Channels secured to each joist with No. 18 SWG steel wire double strand saddle ties. Channels tied together with double strand of No. 18 SWG steel wire at each end overlap.

7B. Steel Framing Members\* — For the 1 Hr Rating — (When joist spacing exceeds 24 in. OC additional Supplemental Supports are required, see item 7E) - As an alternate to Item 7, Main runners nom 12 ft long, spaced 48 in. OC. Hanger wires on main runners spaced max 48 in, Ends of main runners at walls to rest on wall angle or channel, Cross tees, nom 4 ft long, installed perpendicular to main runners and spaced 16 in. OC. Additional cross tee required at each gypsum board end joint with butted gypsum board end joint centered between cross tees spaced 8 in, OC. The main runners and cross tees may be riveted or screw-attached to the wall angle or channel to facilitate the celling installation. The steel framing members shall be suspended min 2 in. below bottom of structural steel members. For the 2 Hr Rating — (When joist spacing exceeds 24 in. OC, additional Supplemental Supports are required, see item 7£) - As an alternate to item 7, Main runners nom 12 ft long, spaced 48 in. OC. Hanger wires on main runners spaced max 32 in. Ends of main runners at walls to rest on wall angle or channel. Cross tees, nom 4 ft long, installed perpendicular to main runners and spaced 16 in. OC. Additional cross tee required at each gypsum board end joint with butted end joint centered between cross tees spaced 8 in. OC, The main runners and cross tees may be riveted or screw-attached to the wall angle or channel to facilitate the ceiling installation. The steel framing members shall be suspended min 5 in, below bottom of structural steel members.

7C. Alternate Steel Framing Members\* — For the 1 Hr Rating — (Not Shown - when joist spacing exceeds 24 in. OC additional Supplemental Supports are required, see item 7E) — As an alternate to Item 7. For use in corridors or rooms having a maximum width dimension of 14 ft. Steel framing members consist of grid runners, locking angle wall molding and hanger bars. Locking angle wall molding secured to walls with steel nails or screws spaced max 24 in. OC. Slots of locking angle wall molding parallel with hanger bars to be aligned with tabbed cutouts in bottom edge of hanger bars. Hanger bars spaced max 50 in. OC and suspended with No. 12 AWG steel hanger wires spaced max 48 in. OC. Adjoining lengths of hanger bar to overlap 12 in. and to be secured together and suspended by a shared hanger wire. A min clearance of 1/4 in, shall be maintained between the ends of the hanger bars and the walls. Grid runners cut-to-length and installed perpendicular to hanger bars and spaced max 16 in. OC with additional grid runners installed 8 in. OC at gypsum board end joints. Grid runners parallel with walls to be spaced max 16 in. from wall. Ends of grid runners to rest on and engage slots of locking angle wall molding with a clearance of 3/8 in. to 1/2 in. maintained between each end of the grid runner and the wall. Bulb of grid runner to be captured by tabbed cutouts in bottom edge of hanger bars.

7D. Supplemental Supports — (Must be used with Items 7, and Item 7A when joist spacing is greater than 24 in. OC up to 48 in. OC max.) -Used to provide support for the resilient channels (Item 7) and furring channels (Item 7A). Supports are 3-5/8 in., 16 gauge or larger coldrolled track sections with 2 in, legs, spaced at 12 in. OC. Each track with its legs oriented vertically is placed on top of and perpendicular to the joist's bottom chord and tied to the joist with a double strand of 18 SWG galvanized steel wire. Additional cross furred 4 in., 16 gauge C studs spaced at the mid span of the track to provide connection to Items 7, Item 7A and Item 7C. C-stud running perpendicular to the track screw . attached to the 3-5/8 in, cold rolled track as per Structural steel Member manufacturer's instructions. Resilient Channel (Item 7) and the Furring Channel (Item 7A) attached to the C-stud as specified in Item 7 and Item 7A.

7E. Supplemental Supports — (Must be used with items 7B and 7C when joist spacing is greater than 24 in. OC up to 48 in. OC max.) - Used to provide support for the main runners. Supports are 3-5/8 in., 16 gauge or larger cold-rolled track sections with 2 in. legs spaced at 48 in OC when used with Item 78 for 1 hour rating, at 32 in OC when used with Item 78 for 2 hour rating, and at 48 in OC when used with Item 7C. Each track with its legs oriented vertically is placed on top of and perpendicular to the joist's bottom chord and tied to the joist with a double strand of 18 SWG galvanized steel wire. Steel Framing Member (Item 7B) and (Item 7C) hanger wire main runner connected to the Steel Framing Member (Item 1A) and the track section.

8. Gypsum Board\* — For the 1 hr, rating; One layer of nom 5/8 in thick by 48 in wide boards installed with long dimension parallel to the joists. Attached to the resilient or furring channels (Items 7 and 7A) using 1 in, long type S bugled-head screws. Screws spaced a max of 8 in. OC along butted end-joints and in the field, and 3 in, from side edges of board. For the 2 hour rating; Two layers of nom 5/8 in, thick by 48 in.

wide boards, installed with long dimension parallel to joists. Base layer attached to the resilient or furring channels using 1 in. long Type S bugle-head screws. Screws spaced a max of 12 in. OC along butted end-joints and in the field, and 1-1/2 in. from side edges of board. Face layer attached to the resilient or furring channels using 1-5/8 in. long Type S bugle-head screws spaced 12 in. OC along butted end-joints and 12 in, OC in the field, and 1-1/2 in. and 5-1/2 in, from side edges of board. Screws staggered from base layer screws. Face layer and base layer side joints min. 2-1/2 in. from joist centerline. Face layer side joints offset a minimum 24 in. from base layer side joints. Face layer end joints offset a minimum 15 in. from base layer end joints. CERTAINTEED GYPSUM INC — Type C

### UNITED STATES GYPSUM CO — Type C

### USG BORAL DRYWALL SFZ LLC - Type C

used, gypsum panels installed with long dimension perpendicular to cross tees with side joints centered along main runners and with end joints centered between cross tees spaced 8 in. OC. Prior to installation of the gypsum board sheets, backer strips consisting of nom 7-3/4 in. wide pieces of gypsum board are to be laid atop the cross tee flanges and centered over each butted end joint location. The backer strips are to be secured to the flanges of the cross tees at opposite corners of the backer strip to prevent the backer strips from being uplifted during screw-attachment of the gypsum board sheets. Gypsum board fastened to cross tees with drywall screws spaced 1 in. and 4 in. from the side joints and max 8 in. OC in the field of the board. The butted end joints are to be secured to the backer strip with No. 10 by 1-1/2 in. long Type G laminating screws located 1 in. from each side of the butted end joint and spaced 1 in. and 4 in. from the side joints and max 8 in. OC in the field of the board.

For the 1 Hr Rating — Nom 5/8 in, thick, 48 in, wide gypsum panels. When alternate Steel Framing Members\* (Item 7C) are used, gypsum board sheets installed with long dimension (side joints) perpendicular to the grid runners with the end joints staggered min 4 ft and centered between grid runners which are spaced 8 in, OC. Prior to installation of the gypsum board sheets, backer strips consisting of nom 7-3/4 in, wide by 48 in, long pieces of gypsum board are to be laid atop the grid runner flanges and centered over each butted end joint location. The backer strips are to be secured to the flanges of the grid runners at opposite corners of the backer strip to prevent the backer strips from being uplifted during screw-attachment of the gypsum board sheets. Gypsum board fastened to grid runners with drywall screws spaced 1 in. and 4 in. from the side joints and max 8 in. OC in the field of the board. The butted end joints are to be secured to the backer strip with No. 10 by 1-1/2 in, long Type G laminating screws located 1 in, from each side of the

For the 2 Hr Rating --- Nom 5/8 in. thick, 48 in. wide gypsum panels. When Steel Framing Members (Item 78) are used, base layer installed with long dimension perpendicular to resilient or furring channels (Items 7 and 7A), Gypsum panels secured with 1-1/4 in, long Type S bugle-head screws spaced 12 in. OC in both the field and the perimeter, and 1-1/2 in. from side edges of the board. Face layer installed with long dimension perpendicular to resilient or furring channels with joints offset 24 in. from base layer. Gypsum panels secured with 1-5/8 in. long Type S bugle-head screws spaced 8 in. OC in both the field and the perimeter, and 1-1/2 in. from side edges of the board. At the butt joint 1-1/2 in. long Type G screws to be installed to attach face layer to base layer. Type G screws spaced 8 in, OC and 1-1/2 in, from side edges of the board.

# CERTAINTEED GYPSUM INC — Type C

88. Gypsum Board\* --- For the 1 hr. rating; One layer of nom 5/8 in thick by 48 in wide boards installed with long dimension parallel to the joists. Attached to the resilient or furring channels (Items 7 and 7A) using 1 in. long type S bugled-head screws. Screws spaced a max of 8 in. OC along butted end-joints and in the field, and 3 in. from side edges of board. For the 2 hour rating; Two layers of nom 5/8 in. thick by 48 in. wide boards, installed with long dimension parallel to joists. Base layer attached to the resilient or furring channels (Items 7 and 7A) using 1 in. long Type S bugle-head screws. Screws spaced a max of 12 in. OC along butted end-joints and in the field, and 1-1/2 in. from side edges of board. Face layer attached to the resilient or furring channels using 1-5/8 in. long Type S bugle-head screws spaced 8 in. OC along butted end-joints and 8 in. OC in the field, and 1-1/2 in. and 5-1/2 in. from side edges of board. Screws staggered from base layer screws. Face layer and base layer side joints min. 2-1/2 in. from joist centerline. Face layer side joints offset a minimum 24 in. from base layer side joints. Face layer end joints offset a minimum 15 in, from base layer end joints. UNITED STATES GYPSUM CO --- ULIX

9. Batts and Blankets\* — Glass fiber insulation, nominal 3-1/2 in, thick, bearing the UL Classification Marking for Surface Burning

membrane. See Batts and Blankets (BKNV or BZJZ) Categories for names of Classified companies.

0. Finishing System — (Not Shown) — Vinyl, dry or premixed joint compound, applied in two coats to joints and screw-heads; paper tape, if in. wide, embedded in first layer of compound over all joints. As an alternate, nom 3/32 in. thick veneer plaster may be applied to the entire surface of gypsum wallboard.

# \* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as

Last Updated on 2022-02-03

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8A. Gypsum Board\* — For the 1 Hr Rating — Nom 5/8 in. thick, 48 in. wide gypsum panels. When Steel Framing Members (Item 78) are

butted end joint and spaced 1 in, and 4 in, from the side joints and max 8 in. OC in the field of the board.

CGC INC — Type ULIX

UNITED STATES GYPSUM CO — Type C, ULIX

USG BORAL DRYWALL SFZ LLC --- Type C

Characteristics and/or Fire Resistance. Insulation fitted in the concealed space, draped over the resilient channel/gypsum panel ceiling.

# Canada), respectively.

# $\mathbf{\Omega}$ OME

PRINTS ISSUED

**REVISIONS:** 

04/17/2024 - CITY SUBMISSION

SHEET TITLE

UL ASSEMBLIES - D916 / G566

PROJECT NUMBER: 22023

C&S AIR PRODUCTS - Model RD-521

instructions.

in, Rectangular sizes not to exceed 196 sg in, with a max width of 26 in, Max height of damper shall be 7 in, Aggregate damper openings shall not exceed 98 sg in, per 100 sg ft of ceiling area. Damper installed in accordance with the manufacturers installation instructions provided with the damper. A steel grille (Item 9) not to exceed 144 in.<sup>2</sup> shall be installed in accordance with installation instructions. \*C&S AIR PRODUCTS — Model RD-521-8T

14 in. Aggregate damper openings shall not exceed 162 sq in. per 100 sq ft of ceiling area. Damper installed in accordance with the

openings shall not exceed 128 sq in, per 100 sq ft of ceiling area, Damper installed in accordance with the manufacturers installation instructions provided with the damper. A steel grille (Item 9) shall be installed in accordance with installation instructions. C&S AIR PRODUCTS — Model RD-521-4P, RD-521-NP

C&S AIR PRODUCTS — Model RD-521-90, RD-521-NP90

POTTORFF -- Models CFD-521-90, CFD-521-90NP

4D. Alternate Celling Damper\* — For use with min, 18 in, deep trusses, Max, nom area shall be 349 sq in, Max, overall length and width shall MIAMI TECH INC — Model Series RxCRD, RxCRDS or RxCRPD

4E. Alternate Ceiling Damper\* — Ceiling damper & fan assembly for use with min 18 in. deep trusses. Max nom area shall be 75 sq in. with the length not to exceed 8-9/16 in, and the width not to exceed 8-3/4 in. Max height of damper shall be 9-7/8 in. Aggregate damper openings shall not exceed 38 sq in. per 100 sq ft of ceiling area. Damper shall be installed in combination with one of the fan models described in, and in accordance with, the manufacturers installation instructions provided with the damper. A plastic grille (Item 9) shall be installed in accordance with installation instructions. DELTA ELECTRONICS INC - Models CRD2, GBR-CRD, FTG-CRD

4G. Alternate Celling Damper\* — Ceiling damper & fan assembly for use with min 18 in. deep trusses. Max nom area shall be 75 sq in. with the length not to exceed 9-1/4 in, and the width not to exceed 9-3/4 in, Max height of damper shall be 9-7/8 in, Aggregate damper openings shall not exceed 45 sq in. per 100 sq ft of ceiling area. Damper shall be installed in combination with one of the fan models described in, and in accordance with, the manufacturer's installation instructions provided with the damper. A plastic grille (Item 9) shall be installed in accordance with installation instructions.

manufacturer's installation instructions provided with the damper. A plastic grille (Item 9) shall be installed in accordance with installation

DELTA ELECTRONICS INC -- Model SMT-CRD

PANASONIC CORPORATION, PANASONIC CORPORATION OF NORTH AMERICA — Model PC-RD05C5 4J. Alternate Ceiling Damper\* — Ceiling damper & fan assembly for use with min 18 in. deep trusses. Max nom area shall be 113 sq in. with

ft of ceiling area. Damper shall be installed in combination with one of the fan models described in, and in accordance with, the manufacturer's installation instructions provided with the damper. A plastic grille (Item 9) shall be installed in accordance with installation BROAN-NUTONE L L C - Model RDFUWT

4K. Alternate Ceiling Damper\* — Ceiling damper & fan assembly for use with min 18 in. deep trusses. Max nom area shall be 79 sq in. with ceiling area. Damper shall be installed in combination with one of the fan models described in, and in accordance with, the manufacturer's installation instructions provided with the damper, A metallic grille (Item 9) shall be installed in accordance with installation instructions.

4M. Alternate Ceiling Damper\* — Ceiling damper & fan assembly for use with min 18 in, deep trusses. Max nom area shall be 87 sq in, with the length not to exceed 9 in, and the width not to exceed 9-11/16 in, Aggregate damper openings shall not exceed 44 sq in, per 100 sq ft of

4N. Alternate Celling Damper\* — (Optional, To be used with Air Duct Item 3) — For use with min 18 in, deep trusses, Max nom 21 in, long by 18 in, wide, fabricated from galvanized steel. Plenum box max size nom 21 in, long by 18 in, wide by 14 in, high (inner dimension) fabricated from either galvanized steel or min 1 in. thick Listed Duct Board bearing the UL Listing Marking having a min R-Value of 4.3. Installed in accordance with the instructions provided by the manufacturer. Max damper openings not to exceed 180 sq in. per 100 sq ft of ceiling area.

GREENHECK FAN CORP - Model CRD-1WT

40. Alternate Ceiling Damper\* — (Optional, To be used with Air Duct Item 3) — For use with min 18 in. deep trusses. Max nom 12 in. long manufacturer. Max damper openings not to exceed 72 sq in. per 100 sq ft of ceiling area. .

4P. Alternate Ceiling Damper\* — (Optional, To be used with Air Duct, Item 3) — For use with min 18 in. deep trusses. Max nom 18 in. long by 18 in. wide, fabricated from galvanized steel. Installed in accordance with the instructions provided by the manufacturer. Max damper openings not to exceed 162 sq in. per 100 sq ft of ceiling area.

RUSKIN COMPANY .... Model CFD7T, CFD7T-END-BT, CFD7T-90-BT, CFD7T-ST-BT, CFD7T-SB, CFD7T-R6-DB, or CFD7T-IB6

4Q. Alternate Celling Damper\* — (Optional, To be used with Air Duct, Item 3) — For use with min 18 in, deep trusses, Max 8 in, diameter damper, fabricated from galvanized steel. Installed in accordance with the instructions provided by the manufacturer. Max damper openings not to exceed 25 sq in. per 100 sq ft of ceiling area.

UL Product iQ<sup>®</sup>

Design/System/Construction/Assembly Usage Disclaimer

. Authorities Having Jurisdiction should be consulted in all cases as to the particular requirements covering the installation and use of UL Certified products, equipment, system, devices, and materials.

· Authorities Having Jurisdiction should be consulted before construction. . Fire resistance assemblies and products are developed by the design submitter and have been investigated by UL for compliance with

applicable requirements. The published information cannot always address every construction nuance encountered in the field. When field issues arise, it is recommended the first contact for assistance be the technical service staff provided by the product manufacturer noted for the design. Users of fire resistance assemblies are advised to consult the general Guide Information for each

product category and each group of assemblies. The Guide Information includes specifics concerning alternate materials and alternate methods of construction.

Only products which bear UL's Mark are considered Certified.

BXUV - Fire Resistance Ratings - ANSI/UL 263 Certified for United

BXUV7 - Fire Resistance Ratings - CAN/ULC-S101 Certified for Canada See General Information for Fire-resistance Ratings - ANSI/UL 263 Certified for United States

See General Information for Fire Resistance Ratings - CAN/ULC-S101 Certified for Canada Design Criteria and Allowable Variances

October 03, 2023

Design Criteria and Allowable Variances

Unrestrained Assembly Rating — 1 Hr

Finish Rating — 24 or 25 Min (See Item 5) This design was evaluated using a load design method other than the Limit States Design Method (e.g., Working Stress Design Method). For jurisdictions employing the Limit States Design Method, such as Canada, a load restriction factor shall be used — See Guide BXUV or BXUV7

\* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively

**HOMASOTE CO** — Type 440-32 Mineral and Fiber Board

System No. 3 Subflooring — Min 15/32 in thick wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be perpendicular to the trusses with joints staggered.

Finish Floor — Mineral and Fiber Board\* — Min 1/2 in. thick, supplied in sizes ranging from 3 ft by 4 ft to 8 ft by 12 ft. All joints to be staggered a min of

Vapor Barrier — (Optional) — Nom 0.030 in thick commercial asphalt saturated felt.

Finish Flooring — Floor Topping Mixture\* — Min 1-1/2 in. thickness of floor topping mixture having a min compressive strength of 1000 psi and a cast density of 100 plus or minus 5 pcf. Foam concentrate mixed 40:1 by volume with water and expanded at 100 psi through nozzle. Mixture shall consist of 1.4 cu feet of preformed foam concentrate to 94 lbs Type I Portland cement, 300 lbs of sand with 5-1/2 gal of water.

**ELASTIZELL CORP OF AMERICA** — Type FF

12 in. with adjacent sub-floor joints.

System No. 4 Subflooring - Min 15/32 or 19/32 in, thick wood structural panels, min grade C-D or Sheathing. Face grain of plywood or strength axis of panel to be perpendicular to trusses with joints staggered.

Vapor Barrier --- (Optional) Nom 0.030 in. thick commercial asphalt saturated felt.

Finish Flooring — Floor Topping Mixture\* —Min 3/4 in. thickness of floor topping mixture having a minimum compressive strength of 1500 psi, Refer to manufacturer's instructions accompanying the material for specific mix design.

FORMULATED MATERIALS LLC --- Types FR-25, FR-30, and SiteMix

- HACKER INDUSTRIES INC --- FIRM-FILL SCM 125 -

HACKER INDUSTRIES INC — Type FIRM-FILL SCM 750, Quiet Qurl 65/075

-consist of 6.8 gal of water to 80 lbs of floor topping mixture to 1.9 cu ft of sand.

Vapor Barrier — (Optional) — Nom 0.030 in. thick commercial asphalt saturated felt.

Vapor Barrier — (Optional) — Commercial asphalt saturated felt 0.030 in. thick,

Vapor Barrier — (Optional) — Nom 0.010 in. thick commercial asphalt saturated felt.

to manufacturer's instructions accompanying the material for specific mix design.

3/4 in. or 1 in, thickness of floor topping for 19/32 or 15/32 in, thick wood structural panels respectively.

perpendicular to trusses with joints staggered.

perpendicular to joists with joints staggered.

thickness recommended for use with eligible floor mat(s).

\*UNITED STATES GYPSUM CO --- Types LRK, HSLRK, CSD

USG MEXICO S A DE C V -- Types LRK, HSLRK, CSD

'thickness of floor topping over each floor mat material.

thickness of floor topping over floor mat.

GRASSWORX L L C — SC Types

perpendicular to the trusses with joints staggered.

Alternate Floor Mat Material\* — (Optional) Floor mat material nominal 2 - 9.5 mm thick loose laid over the subfloor. Floor topping thickness shall be a

FORMULATED MATERIALS LLC — Types M1, M2, M3, Elite, Duo, R1, and R2

System No. 5

Subflooring — Min 15/32 in thick wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panel to be perpendicular to trusses with joints staggered.

Floor Mat Materials\* — (Optional) — Floor mat material nom 5/64 in. (2 mm) thick adhered to subfloor with Hacker Floor Primer. Primer to be applied to the surface of the mat prior to the placement of a min 1 in. of floor-topping mixture.

HACKER INDUSTRIES INC — Type Hacker Sound-Mat.

Alternate Floor Mat Materials — (Optional) — Floor mat material nom 1/4 in. (6 mm) thick adhered to subfloor with Hacker Floor Primer, Primer to be applied to the surface of the mat prior to the placement of a min 1-1/4 in. (32 mm) of floor-topping mixture. HACKER INDUSTRIES INC — Type Hacker Sound-Mat II.

Alternate Floor Mat Materials — (Optional) — Floor mat material nom 1/8 in. (3mm) thick loose laid over the subfloor. Floor topping thickness shall be a

Alternate Floor Mat Materials — (Optional) — Floor mat material nom 1/4 in. (6 mm) thick loose laid over the subfloor. Floor topping thickness shall be a . min of 1 in. (25 mm)

HACKER INDUSTRIES INC -- Type FIRM-FILL SCM 250, Quiet Qurl 55/025

Alternate Floor Mat Materials — (Optional) — Floor mat material nom 3/8 in. (10 mm) thick loose laid over the subfloor. Floor topping thickness shall be a min of 1-1/4 in. (32mm) HACKER INDUSTRIES INC --- FIRM-FILL SCM 400, Quiet Qurl 60/040

Alternate Floor Mat Materials — (Optional) — Floor mat material nom 3/4 in. (19 mm) thick loose laid over the subfloor. Floor topping thickness shall be

Metal Lath — (Optional) — For use with 3/8 in. (10 mm) floor mat materials, 3/8 in. expanded steel diamond mesh, 3.4 lbs/sq yd placed over the floor mat

material. Hacker Floor Primer to be applied prior to the placement of the metal lath. When metal lath is used, floor topping thickness a nom 1-1/4 in, over

· Finish Flooring — Floor Topping Mixture\* — Min 3/4 in. thickness of floor topping mixture having a min compressive strength of 1100 psi. Mixture shall

System No. 6

Subflooring — Min 15/32 or 19/32 in, thick wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panel to be

Finish Flooring — Floor Topping Mixture\* — Min 3/4 or 1 in, thickness of floor topping mixture for 19/32 or 15/32 in, thick wood structural panels

respectively, having a min compressive strength of 1000 psi. Refer to manufacturer's instructions accompanying the material for specific mix design.

ARCOSA SPECIALTY MATERIALS --- AccuCrete® Types NexGen, Green, Prime and PrePour, AccuRadiant®, AccuLevei® Types G40, G50 and SD30

ARCOSA SPECIALTY MATERIALS ---- AccuQuiet® Types D13, D-18, D25, DX38, EM.125, EM.125S, EM.250S, EM.250S, EM.375, EM.375S, EM.750, and

Alternate Floor Mat Material\* --- (Optional) --- Floor mat material nominal 2 - 9.5 mm thick loose laid over the subfloor. Floor topping shall be a min of

System No. 7

Subflooring -- 15/32 or 19/32 in thick wood structural panels, min. grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be

Finish Flooring — Floor Topping Mixture\* — Compressive strength to be 2100 psi min. Thickness to be 3/4 in. min for 19/32 in thick wood structural

panels or 1 in, min, for 15/32 in thick wood structural panels. Refer to manufacturer's instructions accompanying the material for specific mix design. Refer to the manufacturer's instructions accompanying the material and/or contact the manufacturer's technical support for specific mix design and minimum

System No. 8

Finish Flooring — Floor Topping Mixture\* — Min 3/4 in. thickness of floor topping mixture having a minimum compressive strength of 1800 psi. Refer

Floor Mat Materials\* — (Optional) — Floor mat material loose laid over the subfloor. Refer to manufacturer's instructions regarding the minimum

UNITED STATES GYPSUM CO — Types SAM, LEVELROCK® Brand Sound Reduction Board, LEVELROCK® Brand Floor Underlayment SRM-25

Subflooring — Min 15/32 in. thick wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be

HACKER INDUSTRIES INC — Firm-Fill Gypsum Concrete, Firm-Fill 2010, Firm-Fill 3310, Firm-Fill 4010, Firm-Fill High Strength, Gyp-Span Radiant

Vapor Barrier — (Optional) - Commercial asphalt saturated felt, 0.030 in. thick.

panel to be perpendicular to trusses with joints staggered.

panel to be perpendicular to trusses with joints staggered.

SIKA DEUTSCHLAND GMBH --- Type SCHONOX AP Rapid Plus

Finish Flooring - Floor Topping Mixture\* — Min 3/4 in. thickness of any Floor Topping Mixture bearing the UL Classification Marking as to Fire Resistance. See Floor- and Roof-Topping Mixtures (CCOX) category for names of Classified Companies. Refer to the manufacturer's instructions accompanying the material and/or contact the manufacturer's technical support for specific mix design and minimum thickness recommended for use with eligible floor mat(s).

Gypsum Board\* — One layer of nom 5/8 in. thick, 4 ft wide gypsum board, installed with long dimension perpendicular to joists. Gypsum board secured

with 1 in. long No. 6 Type W bugle head steel screws spaced 12 in, OC and located a min of 1-1/2 in. from side and end joints. The joints of the gypsum

Gypsum Board\* — (For use when floor mat is used) Two layers of nom 5/8 in, thick, 4 ft wide gypsum board, installed with long dimension perpendicular

to joists on top of the floor mat material. Gypsum board secured to each other with 1 in, long No. 6 Type G bugle head steel screws spaced 12 in, OC and

System No. 10

Subflooring --- Min 15/32 or 19/32 in, thick wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panel to be

Finish Flooring --- Floor Topping Mixture\* --- Min 3/4 or 1 in. thickness of floor topping mixture for 19/32 or 15/32 in. thick wood structural panels respectively, having a min compressive strength of 1000 psi. Refer to manufacturer's instructions accompanying the material for specific mix design.

Alternate Floor Mat Materials\* — (Optional) — Floor mat material Nom. 3/8 in. thick loose laid over the subfloor. Floor topping thickness shall be a

Alternate Floor Mat Materials\* — (Optional) — Floor mat material Nom. 3/4 in. thick loose laid over the subfloor. Floor topping thickness shall be a

Alternate Floor Mat Materials\* — (Optional) — Floor mat material Nom. 1/8 in. thick loose laid over the subfloor. Floor topping thickness shall be a

Alternate Floor Mat Materials\* — (Optional) — Floor mat material Nom, 1/4 in, entangled net core with a compressible fabric attached to the bottom

System No. 11 Subflooring — Min 15/32 or 19/32 in thick wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of

System No. 12

Subflooring — Min 15/32 or 19/32 in, thick wood structural panels, min grade "C-D" or "Sheathing", Face grain of plywood or strength axis of

Finish Flooring - Floor Topping Mixture\* -- Min 1 in. thickness of floor topping mixture having a min compressive strength of 4500 psi.

Floor Mat Materials\* — (Optional) — Nom. 1/4 in, thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 3/4 in,

located a min of 1-1/2 in, from side and end joints. The joints of the gypsum board are to be staggered a minimum of 12 inches in between layers and

Floor Mat Materials\* — (As an alternate to the single layer gypsum board) — Floor mat material loose laid over the subfloor.

board are to be staggered a minimum of 12 inches from the joints of the subfloor.

Vapor Barrier — (Optional) — Nom 0.030 in. thick commercial asphalt saturated felt.

KEENE BUILDING PRODUCTS CO INC — Type Quiet Qurl 55/025 and Quiet Qurl 55/025 N

KEENE BUILDING PRODUCTS CO INC — Type Quiet Qurl 60/040 and Quiet Qurl 60/040 N

KEENE BUILDING PRODUCTS CO INC — Type Quiet Qurl 65/075, Quiet Qurl 65/075 N

KEENE BUILDING PRODUCTS CO INC — Type Quiet Qurl 52/013 and Quiet Qurl 52/013 N

KEENE BUILDING PRODUCTS CO INC - Quiet Qurl 55/025 MT and Quiet Qurl 55/025 N MT

.Refer to manufacturer's instructions accompanying the material for specific mix design.

-loose laid over the subfloor. Floor topping thickness shall be a minimum of 1 in.

DEPENDABLE LLC --- GSL M3.4, GSL K2.6, GSL-CSD, GSL RM, and SKIMFLOW.

GEORGIA-PACIFIC GYPSUM L L C — Type DS

MAXXON CORP — Type Encapsulated Sound Mat

'GEORGIA-PACIFIC GYPSUM L L C - Type DS

perpendicular to trusses with joints staggered

from the joints of the subfloor.

minimum of 3/4 in.

Floor Mat Materials\* — (Optional, Not Shown) - Floor mat material loose laid over the subfloor. Refer to manufacturer's instructions regarding the minimum thickness of floor topping over each floor mat material. LOW & BONAR INC — EnkaSonic® by Colbond a member of the Low & Bonar group Types 125, 250, 250 Plus, 400, 400 Plus, 750, and 750 Plus.

Floor Mat Reinforcement — (Optional) - Refer to manufacturer's instructions regarding minimum thickness of floor topping for use with floor mat reinforcement.

Metal Lath — (Optional) — Expanded steel diamond mesh, 2.5 lb / sq yd loose laid over floor mat material.

Fiberglass Mesh Reinforcement — (Optional) — Coated non-woven glass fiber mesh grid loose laid over floor mat material.

Subflooring — Min 15/32 or 19/32 in, thick wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panel to be perpendicular to trusses with joints staggered.

System No. 13

Vapor Barrier — (Optional) — Nom 0.030 in, thick commercial asphalt saturated felt.

and no closer than 2 in, from panel corners.

Floor Mat Materials\* ---- (Optional) --- Floor mat material loose laid over the subfloor. Refer to manufacturer's instructions regarding the minimum thickness of floor topping over each floor mat material.

GRASSWORX L L C — SC Types Finish Flooring\* — Min 3/4 in. thickness of any Floor Topping Mixture bearing the UL Classification Marking as to Fire Resistance. See Floor- and Roof-Topping Mixtures (CCOX) category for names of Classified Companies. Refer to the manufacturer's instructions accompanying the material and/or contact

the manufacturer's technical support for specific mix design and minimum thickness recommended for use with eligible floor mat(s). Floor Mat Reinforcement — (Optional) - Refer to manufacturer's instructions regarding minimum thickness of floor topping for use with floor mat

Metal Lath — (Optional) — Expanded steel diamond mesh, 2.5 lb / sq yd loose laid over floor mat material.

Fiberglass Mesh Reinforcement — (Optional) — Coated non-woven glass fiber mesh grid loose laid over floor mat material.

Subflooring — Subflooring — Min 23/32 in. thick T&G wood structural panels, min grade "Underlayment" or "Single-Floor". Face grain of plywood or strength axis of panels to be perpendicular to the trusses with end joints staggered.

Finish Floor - Building Units\* — Min 1/2 in. thick magnesium oxide panels installed parallel, perpendicular, or diagonally to trusses with panel edges offset a min of 4 in. between subfloor and magnesium oxide panels. Panels secured to subfloor with construction adhesive and corrosion-resistant fasteners spaced 6 in. OC around panel edges and 12 in. OC in the field of the panel. Fasteners must be placed no closer than 1/2 in. from all panel edges

HUBER ENGINEERED WOODS LLC --- Type 1/2 in. and 5/8 in. Square Edge Exacor® Board, Type ¾ in. T&G Exacor® Board.

2. Trusses — Parallel chord trusses spaced a max of 24 in. OC fabricated from nom 2 by 4 lumber, with lumber oriented vertically or horizontally. Min truss depth is 12 in, when dampers are not used and 18 in, when dampers are used. Truss members secured together with min 0.036 in, thick galv steel plates. Plates have 5/16 in, long teeth projecting perpendicular to the plane of the plate, The teeth are in pairs facing each other (made by the same punch), forming a split tooth type plate. Each tooth has a chisel point on its outside edge with these points being diagonally opposite each other for each pair. The top half of each tooth has a twist for stiffness. The pairs are repeated on approximately 7/8 in. centers with four rows of teeth per inch of plate width.

3. Air Duct\* — (Optional) — Any UL Class 0 or Class 1 flexible air duct installed in accordance with the instructions provided by the damper

4. Ceiling Damper\* — (Optional, To be used with Air Duct Item 3) — For use with min 18 in, deep trusses. Max nom area shall be 324 sq in. Max square size shall be 18 in, by 18 in, Rectangular sizes not to exceed 324 sq in, with a max width of 18 in, Max height of damper shall be

For End Jent Detail

1. Flooring System — The flooring system shall consist of one of the following:

Subflooring — Min 15/32 or 19/32 in, thick wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panel to be perpendicular to trusses with joints staggered.

Afternate Institution Placement

Finish Flooring - Floor Topping Mixture\* — Min 3/4 thickness of floor topping mixture having a minimum compressive strength of 1500 psi. Refer to manufacturer's instructions accompanying the material for specific mix design.

MAXXON CORP — Types Maxxon Standard and Maxxon High Strength

Floor Mat Materials\* — (Optional) — Floor mat material loose laid over the subfloor. Refer to manufacturer's instructions regarding the minimum thickness of floor topping over each floor mat material.

MAXXON CORP --- Type Encapsulated Sound Mat

Floor Mat Reinforcement — (Optional) Refer to manufacturer's instructions regarding minimum thickness of floor topping for use with floor mat

Metal Lath — (Optional) — 3/8 in. expanded galvanized steel diamond mesh, 3.4 lbs/sq yd loose laid over the floor mat material. Fiber Glass Reinforcement - (Optional, Not Shown) - 0.015 in. thick PVC coated non-woven fiberglass mesh, 0.368 lbs/sq yd loose laid over the floor mat

Subflooring — Min 1 by 6 in, T & G lumber fastened diagonally to joists, or min 15/32 in, thick plywood or min 7/16 in, thick oriented strand board (OSB) wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panel to be perpendicular to trusses with joints

Subflooring --- Min 23/32 in thick T&G wood structural panels, min grade "Underlayment" or "Single-Floor". Face grain of plywood or strength axis of panels to be perpendicular to the trusses with end joints staggered 4 ft. Panels secured to trusses with construction adhesive and No. 6d ringed shank nails spaced 12 in. OC along each truss. Staples having equal or greater withdrawal and lateral resistance strength may be substituted for the 6d nails.

Alternate Floor Mat Materials\* — (Optional) - Floor mat material loose laid over the subfloor. Refer to manufacturer's instructions regarding minimum

4A, Alternate Ceiling Damper\* — For use with min 18 in, deep trusses, Max nom area shall be 196 sq in, Max square size shall be 14 in, by 14

POTTORFF --- Model CFD-521-BT.

4B. Alternate Ceiling Damper\* --- (Optional. To be used with Air Duct Item 3) --- For use with min 18 in. deep trusses. Max nom area shall be 256 sq in, with the length not to exceed 24 in. and the width not to exceed 20 in. Max height of damper shall be 17 in, Aggregate damper

POTTORFF - Models CFD-521-IP, CFD-521-NP

4C. Alternate Ceiling Damper\* — For use with min 18 in, deep trusses, Max nom area shall be 144 sq in, with the length not to exceed 14 in. and the width not to exceed 12 in. Max height of damper shall be 17-7/8 in. Aggregate damper openings shall not exceed 74 sq in. per 100 sq ft of ceiling area. Damper installed in accordance with the manufacturers installation instructions provided with the damper. A steel grille (Item 9) shall be installed in accordance with installation instructions.

not exceed 18-11/16 in, by 18-11/16 in, with max, 16 in, by 16 in, register opening, Aggregate damper openings shall not exceed 175 sq in. per 100 sq ft of ceiling area. Damper installed in accordance with the manufacturers installation instructions provided with the damper. An aluminum or steel grille (Item 9) shall be installed in accordance with installation instructions.

4F. Alternate Ceiling Damper\* — For use with min 18 in. deep trusses. Max nom area shall be 324 sq in. Max square size shall be 18 in. by 18 in. Rectangular sizes not to exceed 324 sq in, with a max length of 20 in, and a max width of 22 in. Max height of damper shall be 14 in. Aggregate damper openings shall not exceed 154 sq in, per 100 sq ft of ceiling area, Damper installed in accordance with the manufacturer's Installation instructions provided with the damper. An aluminum or steel grille (Item 9) shall be installed in accordance with installation

UNITED ENERTECH CORP — Type C-S/R-WT or C-S/R-WTP (Max nom area 324 sq. in.) or C-S/R-WTS or C-S/R-WTPS (Max nom area 162 sq. in.)

**DELTA ELECTRONICS INC** — Model SIG-CRD

4H. Alternate Ceiling Damper\* — Ceiling damper & fan assembly for use with min 18 in. deep trusses. Max nom area shall be 131 sq in. with the length not to exceed 11-1/16 in, and the width not to exceed 11-7/8 in. Aggregate damper openings shall not exceed 66 sq in, per 100 sq ft of ceiling area. Damper shall be installed in combination with one of the fan models described in, and in accordance with, thi

41. Alternate Ceiling Damper\* — Ceiling damper & fan assembly for use with min 18 in. deep trusses. Max nom area shall be 103 sq in. with the length not to exceed 10-1/8 in, and the width not to exceed 10-1/8 in. Aggregate damper openings shall not exceed 52 sq in, per 100 sq ft of ceiling area. Damper shall be installed in combination with one of the fan models described in, and in accordance with, the manufacturer's installation instructions provided with the damper. A plastic grille (Item 9) shall be installed in accordance with installation

the length not to exceed 10-1/8 in. and the width not to exceed 11-1/8 in. Aggregate damper openings shall not exceed 57 sq in. per 100 sq

the length not to exceed 10 in. and the width not to exceed 7-15/16 in. Aggregate damper openings shall not exceed 40 sq in. per 100 sq ft of BROAN-NUTONE L.L.C — Models RDJ1 and RDH

4L. Alternate Ceiling Damper\* — Ceiling damper & fan assembly for use with min 18 in, deep trusses. Max nom area shall be 87 sq in, with the length not to exceed 9 in, and the width not to exceed 9-11/16 in. Aggregate damper openings shall not exceed 44 sq in. per 100 sq ft of ceiling area. Damper shall be installed in combination with one of the fan models described in, and in accordance with, the manufacturer's installation instructions provided with the damper. A plastic grille (Item 9) shall be installed in accordance with installation instructions. BROAN-NUTONE L L C --- Model RDMWT

ceiling area. Damper shall be installed in combination with one of the fan models described in, and in accordance with, the manufacturer's installation instructions provided with the damper. A plastic grille (Item 9) shall be installed in accordance with installation instructions. BROAN-NUTONE L L C — Model RDMWT2

by 12 in, wide with an 8 in, diameter damper, fabricated from galvanized steel. Installed in accordance with the instructions provided by the GREENHECK FAN CORP — Model CRD-2WT

RUSKIN COMPANY — Model CFDR7T

0  $\Box$ 2 HOME

> SHEET TITLE UL ASSEMBLIES - L546

PROJECT NUMBER: 22023

4S. Damper\* — (Optional, to be used with Air Duct Item 3) For use with min 18 in. deep trusses. Max nom 12-3/8 in. long by 14-1/2 in. wide, fabricated from galvanized steel. Installed in accordance with the instructions provided by the manufacturer. Max damper openings not to exceed 90 sq in. per 100 sq ft of ceiling area.

GREENHECK FAN CORP — Model CRD-320WT

4T. **Alternate Ceiling Damper\*** — (Optional, to be used with Air Duct Item 3) For use with min 18 in. deep trusses. Max 12 in. diameter damper within max 15 in. by 15 in. register box with max 12 in. by 12 in. register opening fabricated from galvanized steel. Aggregate area of the register opening(s) through the ceiling membrane shall not exceed 72 sq. in. per 100 sq. ft. of ceiling area. Damper assembly installed in accordance with the manufacturer's installation instructions. **RUSKIN COMPANY** — Model CFD7T-SR

4U. Alternate Ceiling Damper\* - (Optional, to be used with Air Duct Item 3) For use with min 18 in. deep trusses. Maximum 20 in. long by 18 in. wide by 2-1/8 in. high, fabricated from galvanized steel. Plenum box maximum size nom. 21 in. long by 18 in. wide by 16 in. high fabricated from either galvanized steel or Classified Air Duct Materials bearing the UL Class 0 or Class 1 rigid air duct material. Installed in accordance with the instructions provided by the manufacturer. Max damper openings not to exceed 180 sq in. per 100 sq ft of ceiling area.

NAILOR INDUSTRIES INC — Types 0755, 0755A, 0756, 0756D, 0757, 0757D, 0757FP, 0757DFP, 0763

**SAFE AIR DOWCO** — 0455, 0455A, 0456, 0456D, 0457, 0457D, 0457-DB, 0457-CB, 0463-FB, 0457-EB, 0463-GB, 0463

4V. Alternate Ceiling Damper\* — (Optional, to be used with Air Duct Item 3) For use with min 18 in. deep trusses. Max nom 10-3/8 in. long by 10-3/8 in, wide, fabricated from galvanized steel. Installed in accordance with the instructions provided by the manufacturer. Max damper openings not to exceed 54 sq in. per 100 sq ft of ceiling area.

GREENHECK FAN CORP --- Model CRD-300WT

Item 7. Not evaluated for use with Items 68, 6C or 6D.

5. **Batts and Blankets\*** — (Optional with Items 7 and 7B; Required with Item 7A) — Glass fiber or mineral wool insulation bearing the UL Classification Marking as to Surface Burning Characteristics and/or Fire Resistance. When the resilient channels (Item 6) or furring channels (Item 6A, 6O) are spaced 16 in. OC, the insulation shall be a max of 3-1/2 in. thick, and shall be secured against the subflooring with staples at 12 in. OC or held suspended in the concealed space with 0.090 in. diam galv steel wires attached to the wood trusses at 12 in. OC. When the resilient channels (Item 6) or furring channels (Item 6A, 6O) are spaced a max of 12 in. OC or when the Steel Framing Members (Item 6B) are used, there is no limit in the overall thickness of insulation, and the insulation can be secured against the subflooring, held suspended in the concealed space or draped over the resilient or furring channels (or Steel Framing Members) and gypsum panel membrane. When **Steel Framing Members** (Item 6C) are used, max 3-1/2 in. thick insulation shall be draped over the furring channels (Item 6Ca) and gypsum board ceiling membrane, and friction-fitted between trusses and Steel Framing Members (Item 6Cd). The finished rating has only been determined when the insulation is secured to the subflooring.

5A. **Fiber, Sprayed\*** — (Dry Dense Packed 100% Borate Formulation) — As an alternate to Item 5 — When used, the resilient channel and gypsum board attachment is modified as specified in Items 6 and 7 and wire mesh (Item 10) shall be attached to the furring channels to facilitate installation of the material. The finished rating when Fiber, Sprayed is used has not been determined. The fiber is applied without water or adhesive at a nominal dry density of 3.5 lb/ft³, in accordance with the application instructions supplied with the product. When Item 5A (Fiber, Sprayed) is used, two layers of gypsum board required as described in Item 7. Not evaluated for use with Items 6B, 6C or 6D. **APPLEGATE GREENFIBER ACQUISITION LLC** — Insulmax & SANCTUARY to be used with dry application only.

.5B. **Fiber, Sprayed\*** — (Loose Fill 100% Borate Formulation) — As an alternate to Items 5 and 5A — The finished rating when Fiber, Sprayed is used has not been determined. The fiber is applied without water or adhesive at a minimum dry density of 0.5 lb/ft<sup>3</sup> and at a max thickness of 3-1/2 in., in accordance with the application instructions supplied with the product. Wire mesh (Item 10) shall be attached to the furring channels to facilitate installation of the material. When Item 5B (Fiber, Sprayed) is used, two layers of gypsum board required as described in

APPLEGATE GREENFIBER ACQUISITION LLC — Insulmax & SANCTUARY to be used with dry application only.

5C. Cavity Insulation - Batts and Blankets\* or Fiber, Sprayed\* — (Required for Item 7C, As described above in Items 5 through 5B) — Min. 3-1/2 in thick with no limit on maximum thickness fitted in the concealed space, draped over the resilient channel (Item 6I)/gypsum board (Item 7C) ceiling membrane.

6. **Resilient Channels** — Resilient channels, formed of 25 MSG thick galv steel, spaced 16 in. OC perpendicular to trusses. When insulation (Items 5, 5A, 5B) is draped over the resilient channel/gypsum board ceiling membrane, the spacing shall be reduced to 12 in. OC. Channels secured to each truss with 1-1/4 in. long Type S bugle head steel screws. Channels overlapped 4 in. at splices. Two channels, spaced 6 in OC,

oriented opposite each gypsum board end joint as shown in the above illustration. Additional channels shall extend 6 in beyond each side edge of board.

6A. Steel Framing Members\* — (Not Shown) — As an alternate to Item 6, furring channels and Steel Framing Members\* as described below.

a. Furring Channels — Formed of No. 25 MSG galv steel, 2-9/16 in, or 2-23/32 in, wide by 7/8 in, deep, spaced 16 in. OC perpendicular to trusses. When batt insulation (Items 5) is draped over the resilient channel/gypsum board ceiling membrane, the resilient channel spacing shall be reduced to 12 in. OC. Channels secured to trusses as described in Item b. Ends of adjoining channels overlapped 6 in, and tied together with double strand of No. 18 SWG galv steel wire near each end of overlap.

b. **Steel Framing Members\*** — Used to attach furring channels (Item a) to trusses (Item 2). Clips spaced 48 in. OC. RSIC-1 and RSIC-1 (2.75) clips secured to alternating trusses with No. 8 x 2-1/2 in. coarse drywall screw through the center grommet. RSIC-Si-X secured with No. 10 x 3-1/2 in. screws. RSIC-V and RSIC-V (2.75) clips secured to alternating trusses with No. 8 x 1-1/2 in. coarse drywall screw through the center hole. Furring channels are friction fitted into clips. RSIC-1, RSIC-Si-X, and RSIC-V clips for use with 2-9/16 in. wide furring channels. RSIC-1 (2.75) and RSIC-V (2.75) clips for use with 2-23/32 in. wide furring channels. Adjoining channels are overlapped as described in Item a. As an alternate, ends of adjoining channels may be overlapped 6 in. and secured together with two self-tapping No. 6 framing screws, min 7/16 in. long at the midpoint of the overlap, with one screw on each flange of the channel. Additional clips required to hold furring channel that supports the gypsum board butt joints, as described in Item 7.

PAC INTERNATIONAL L.L.C — Types RSIC-1, RSIC-V, RSIC-SI-X, RSIC-1 (2.75), RSIC-V (2.75)

6B. **Alternate Steel Framing Members** — (Not Shown) — As an alternate to Items 6 and 6A, main runners, cross tees, cross channels and wall angle as listed below.

a. **Main Runners** — Nom 10 or 12 ft long, 15/16 in. or 1-1/2 in. wide face, spaced 4 ft. OC. Main runners suspended by min 12 SWG galv steel

hanger wires spaced 48 in. OC. Hanger wires to be located adjacent to main runner/cross tee intersections. Hanger wires wrapped and twist-tied on 16d nails driven in to side of trusses at least 5 in. above the bottom face.

b. **Cross Tees or Channels** — Nom 4 ft long cross tees, with 15/16 in. or 1-1/2 in. wide face, or nom 4 ft long cross channels, with 1-1/2 in. wide face, either spaced 16 in. OC, installed perpendicular to the main runners. Additional cross tees or channels used 8 in. from each side of butted gypsum board end joints. The cross tees or channels may be riveted or screw-attached to the wall angle or channel to facilitate the ceiling installation.

c. **Wall Angle or Channel** — Painted or galv steel angle with 1 in. legs or channel with 1 in. legs, 1-9/16 in. deep attached to walls at perimeter of ceiling with fasteners 16 in. OC. To support steel framing member ends and for screw-attachment of the gypsum panel. **CGC INC** — Type DGL or RX.

USG INTERIORS LLC — Type DGL or RX.

6C. Steel Framing Members\* — (Not Shown) — As an alternate to Items 6, 6A and 6B.

a. **Furring Channels** — Hat-shaped furring channels, 7/8 in. deep by 2-5/8 in. wide at the base and 1-1/4 in. wide at the face, formed from No. 25 ga. galv steel, spaced max, 16 in. OC perpendicular to trusses and Cold Rolled Channels (Item 6Cb). Furring channels secured to Cold Rolled Channels at every intersection with a 1/2 in. pan head self-drilling screw through each furring channel leg. Ends of adjoining channels overlapped 4 in. and tied together with two double strand No. 18 SWG galv steel wire ties, one at each end of overlap. Supplemental furring channels at base layer and outer layer gypsum board butt joints are not required. Batts and Blankets draped over furring channels as described in Item 5. Two layers of gypsum board attached to furring channels as described in Item 7.

b. **Cold Rolled Channels** — 1-1/2 in. by 1/2 in., formed from No. 16 ga. galv steel, positioned vertically and parallel to trusses, friction-fitted into the channel caddy on the Steel Framing Members (Item 6Cd). Adjoining lengths of cold rolled channels lapped min. 6 in. and wire-tied together with two double strand 18 SWG galv steel wire ties, one at each end of overlap.

c. **Blocking** — Where truss design does not permit direct, full contact of the hanger bracket, a piece of nominal 2 by 4 in. lumber (blocking), min. 6 in. long to permit full contact of the hanger bracket, to be secured vertically to the side of the truss (Item 2) at the top and bottom of the blocking at each Steel Framing Member (Item 6Cd) location.

d. **Steel Framing Members\*** — Hangers spaced 48 in. OC. max along truss, and secured to the Blocking (Item 6Cc) on alternating trusses with a single 5/16 in. by 2 in. hex head lag bolt or four #6 1-1/4 in. drywall screws through mounting hole(s) on the hanger bracket. The two 1/4 in. long steel teeth on the hanger are embedded in the side of the blocking. Hanger positioned on blocking and leveling bolt height adjusted such that furring channels are flush with bottom of trusses before gypsum board installation. Spring gauge of hanger chosen per manufacturer\'s instructions.

KINETICS NOISE CONTROL INC — Type ICW.

6D. Steel Framing Members\* — (Not Shown) — As an alternate to Items 6, 6A, 6B and 6C.

a. **Furring Channels** — Formed of No. 25 MSG galv steel, 2-3/8 in. wide by 7/8 in. deep, spaced 16 in. OC perpendicular to wood structural members. When insulation, Items 5 or 5A is applied over the furring channel/gypsum panel ceiling membrane, the furring channel spacing shall be reduced to 12 in. OC. Channels secured to trusses as described in Item b. Ends of adjoining channels overlapped 6 in. and tied together with double strand of No. 18 AWG galv steel wire near each end of overlap.

b. **Steel Framing Members\*** — Used to attach furring channels (Item a) to trusses (Item 2). Clips spaced 48 in. OC, and secured to the bottom chord of alternating trusses with two No. 8 x 2-1/2 in. course drywall screws, one through the hole at each end of the clip. When insulation, Items 5 or 5A is applied over the furring channel/gypsum panel ceiling membrane, the clip spacing shall be reduced to 24 in. OC and secured to consecutive trusses. Furring channels are friction fitted into clips. Adjoining channels are overlapped as described in Item a. As an alternate, ends of adjoining channels may be overlapped 6 in. and secured together with two self-tapping No. 6 framing screws, min 7/16 in. long at the midpoint of the overlap, with one screw on each flange of the channel. Additional clips required to hold furring channel that supports the gypsum board butt joints, as described in Item 7. Two layers of gypsum board required as described in Item 7. Not evaluated for use with Item 58. **KINETICS NOISE CONTROL INC** — Type Isomax.

6E. Steel Framing Members\* — (Optional, Not Shown) — Used as an alternate method to attach min. 1/2 in. deep resilient channels (Item 6) to wood trusses (Item 2). Resilient channels are friction fitted into clips, and then clips are secured to the bottom chord of each wood truss with a min. 1-3/4 in. long Type S bugle head steel screw through the center hole of the clip and the resilient channel flange. Adjoining resilient channels are overlapped 4 in. under trusses. The clip flange is opened slightly to accommodate the two overlapped channels. Additional clips required to hold resilient channel that supports the gypsum board butt joints, as described in Item 7.

KEENE BUILDING PRODUCTS CO INC — Type RC Assurance.

6F. **Steel Framing Members** — (Not Shown) — As an alternate to Item 6, furring channels and Steel Framing Members\* as described below: a. **Furring Channels** — Formed of No. 25 MSG galv steel, 2-3/8 in. wide by 7/8 in. deep, spaced 16 in. OC perpendicular to trusses. When batt insulation (Items 5) is draped over the resilient channel/gypsum board ceiling membrane, the resilient channel spacing shall be reduced to 12 in. OC. Channels secured to trusses as described in Item b. Ends of adjoining channels overlapped 6 in. and tied together with double strand of No. 18 SWG galv steel wire near each end of overlap.

b. **Steel Framing Members\*** — Used to attach furring channels (Item a) to trusses (Item 2). Clips spaced 48 in. OC. GenieClips secured to alternating joists with No. 8 x 2-1/2 in. coarse drywall screw through the center grommet. When insulation, Items 5 is applied over the furring channel/gypsum panel ceiling membrane, the clip spacing shall be reduced to 24 in. OC and secured to consecutive trusses. Furring channels are friction fitted into clips. Adjoining channels are overlapped as described in Item a. As an alternate, ends of adjoining channels may be overlapped 6 in. and secured together with two self-tapping No. 6 framing screws, min 7/16 in. long at the midpoint of the overlap, with one screw on each flange of the channel. Additional clips required to hold furring channel that supports the gypsum board butt joints, as described in Item 7. Not evaluated for use with Item 5A or 5B. **PLITEQ INC** — Type GENIECLIP

6G. **Alternate Steel Framing Members\*** — (Not Shown) — As an alternate to items 6-6F, furring channels and Steel Framing Members as described below.

a. **Furring Channels** — Formed of No. 25 MSG galv steel, 2-5/8 in. wide by 7/8 in deep, spaced 16 in OC, perpendicular to trusses. When batt insulation (Items 5) is draped over the resilient channel/gypsum board ceiling membrane, the resilient channel spacing shall be reduced to 12 in. OC. Channels secured to trusses as described in Item b.

b. Steel Framing Members\* — Used to attach furring channels (Item a) to trusses (Item 2). Clips spaced at 48" OC and secured to the bottom of the joists with one 2 in. Coarse Drywall Screw with 1 in. diam washer through the center hole. Furring channels are then friction fitted into clips. Ends of channels are overlapped 6" and tied together with double strand of No. 18 AWG galvanized steel wire Additional clips are required to hold the Gypsum Butt joints as described in item 7B.

STUDCO BUILDING SYSTEMS — RESILMOUNT Sound Isolation Clips - Type A237 or A237R

6H. **Alternate Steel Framing Members\*** — (Not Shown) — As an alternate to items 6-6G, furring channels and Steel Framing Members as described below.

a **Furring Channels** — Formed of No. 25 MSG galvisteel. 2-1/2 in wide by 7/8 in deep spaced 16 in OC perpendicular to trusses. When batternate to items 6-6G, furring channels and Steel Framing Members as

a. Furring Channels — Formed of No. 25 MSG galv steel, 2-1/2 in. wide by 7/8 in deep, spaced 16 in OC, perpendicular to trusses. When batt insulation (Items 5) is draped over the resilient channel/gypsum board ceiling membrane, the resilient channel spacing shall be reduced to 12 in. OC. Channels secured to trusses as described in Item b.

b. **Steel Framing Members\*** — Used to attach furring channels (Item a) to trusses (Item 2). Clips spaced at 48" OC and secured to the bottom of the trusses with one 2-1/2 in. Coarse Drywall Screw with 1 in. diam washer through the center hole. Furring channels are then friction fitted into clips. Ends of channels are overlapped 6" and tied together with double strand of No. 18 AWG galvanized steel wire Additional clips are required to hold the Gypsum Butt joints as described in item 7B.

REGUPOL AMERICA — Type SonusClip

6l. Resilient Channels — For Use With Item 7C - Formed from min 25 MSG galv. steel installed perpendicular to trusses and spaced 16 in. OC. Channels secured to each truss with 1-5/8 in. long Type S bugle head steel screws. Channels overlapped 4 in. at splices. Two channels, spaced 6 in. OC, oriented opposite each gypsum panel end joint. Additional channels shall extend min 6 in. beyond each side edge of panel. Insulation, Item 5C is applied over the resilient channel/gypsum panel ceiling membrane.

6J. Steel Framing Members\* — (Optional, Not Shown) — As an alternate to Item 6.

a. **Furring Channels** — Formed of No. 25 MSG galv steel, nominal 2-1/2 in. wide by 7/8 in. deep, spaced as indicated in Item 6, perpendicular to the trusses. Channels secured to Cold Rolled Channels at every intersection with a 3/4 in. TEK screw through each furring channel leg. Ends of adjoining channels overlapped 12 in. and fastened together with two double strand No. 18 SWG galv steel wire ties, one at each end of overlap, or with two 3/4 in. TEK screws in each leg of the overlap section. Two furring channels used at end joints of gypsum board (Item 7), each extending a min of 6 in. beyond both side edges of the board.

b. **Cold Rolled Channels** — 1-1/2 in. by 1/2 in., formed from No. 16 ga. galv steel, positioned vertically and parallel to trusses, friction-fitted into the channel caddy on the Steel Framing Members (Item 6Jd) and secured with two 3/4 in. TEK screws. Adjoining lengths of cold rolled channels lapped min. 12 in. and secured along bottom legs with four 3/4 in. TEK screws and wire-tied together with two double strand 18 SWG galv steel wire ties, one at each end of overlap.

c. **Blocking** — Where truss design does not permit direct, full contact of the hanger bracket, a piece of nominal 2 by 4 in. lumber (blocking), min. 12 in. long to permit full contact of the hanger bracket, to be secured vertically to the side of the trusses at the top and bottom of the blocking at each Steel Framing Member (Item 6Jd) location with 16d nails or minimum 2-1/2 in. screws.

d. Steel Framing Members\* — Spaced 48 in. OC. max along truss, and secured to the truss on alternating trusses with two, #10 x 2 in. screws through mounting holes on the hanger bracket.

PAC INTERNATIONAL L L C — Type RSIC-SI-CRC EZ Clip

6K, Steel Framing Members\* — (Not Shown) — As an alternate to Item 6.

a, Furring Channels — Formed of No. 25 MSG galv steel, nominal 2-1/2 in. wide by 7/8 in. deep, spaced as indicated in Item 6, perpendicular to trusses and friction fit into Steel Framing Members (Item 6Kc). Ends of adjoining channels overlapped 6 in. and tied together with double strand of No. 18 SWG galv steel wire near each end of overlap or with two TEK screws along each leg of the 6 in. overlap. Two furring channels used at end joints of gypsum board (Item 7). Butt joint channels held in place by strong back channels placed upside down, on top of, and running perpendicular to primary furring channels, extending 6 in. longer than length of gypsum side joint. Strong back channels spaced maximum 48 in. OC. Strong back channels secured to every intersection of primary furring channels with four 7/16 in. pan head screws, two along each of the legs at intersections. Butt joint channels run perpendicular to strong back channels and shall be minimum 6 in. longer than length of joint, secured to strong back channels with 7/16 in. pan head screws, two along each of the legs at intersection with strong back channels.

b. **Blocking** — Where truss design does not permit direct, full contact of the hanger bracket, a piece of nominal 2 by 4 in. lumber (blocking), min. 12 in. long to permit full contact of the hanger bracket, to be secured vertically to the side of the trusses at the top and bottom of the blocking at each Steel Framing Member (Item 6Kc) location with 16d nails or minimum 2-1/2 in. screws.

c. Steel Framing Members\* — Used to attach furring channels (Item 6Ka) to trusses. Clips spaced 48 in. OC and secured along truss webs at each furring channel intersection with min. 3/4 in. long self-drilling #10 x 1-1/2 in. screws through each of the provided hole locations. Furring channels are friction fitted into clips.

PAC INTERNATIONAL L L C — Type RSIC-51-1 Ultra

6L. Steel Framing Members\* — (Optional - Not Shown) — Used to attach resilient channels (Item 6) to trusses (Item 2). Clips spaced 48 in. OC and secured to trusses with one No. 8 x 2-1/2 in. coarse drywall screw through center grommet hole. Channels secured to clips with one #10 x 1/2 in. pan-head self-drilling screw. Ends of adjoining channels overlapped 6 in. and secured together with two #8 15 x 1/2 in. Phillips Modified screws spaced 2-1/2 in. from the center of the overlap, Gypsum board butt joints require additional resilient channels spaced 1-1/2 in. from the butt joint on either side. One edge of the extra channels will extend to an adjacent truss where it is secured with a clip.

KEENE BUILDING PRODUCTS CO INC — Type RC+ Assurance Clip

6M. Steel Framing Members\* — (Optional, Not Shown) — Used as an alternate method to attach resilient channels to structural members. A resilient sound isolation accessory shall be used at each attachment point of the resilient channels and spaced max 24 in. O.C. Channel ends butted and centered under the structural members and attached with one accessory at each end. Additional accessories used to hold resilient channels that support the gypsum board end joints. The accessory envelops the mounting edge of the resilient channel. The accessory and resilient channel are fastened to the structural members with the screws supplied with the accessory and per the accessory manufacturer's installation instructions. Gypsum Board butt joints staggered minimum 24 in, OC and Gypsum Board screws spaced 8 in, OC when used.

PAC INTERNATIONAL L L C — Type RC-1 Boost

6N. **Resilient Channels** — For use with **American Gypsum Co. Type AG-C gypsum board only**. Resilient channels, formed of 25 MSG thick galv steel, spaced 16 in. OC perpendicular to trusses. When insulation (Items 5, 5A, 5B) is applied over the resilient channel/gypsum board ceiling membrane, the spacing may remain at 16 in. OC. Channels secured to each truss with 1-1/4 in. long Type S bugle head steel screws. Channels overlapped 4 in. at splices. Two channels, spaced 6 in OC, oriented opposite each gypsum board end joint as shown in the above illustration. Additional channels shall extend 6 in beyond each side edge of board.

60. Steel Framing Members\* — (Optional, Not Shown, As an alternate to Item 6) — Furring channels and Steel Framing Members as described below:

a. Furring Channels — Formed of No. 25 MSG galv steel. 2-23/32 in, wide by 7/8 in. When there is no insulation installed in the concealed space the furring channels are spaced 24 in. OC max perpendicular to trusses. When insulation (Item 5) is secured to the underside of the subfloor the furring channels are spaced 16 in. OC max. When insulation (Item 5) is applied over the furring channel/gypsum panel ceiling membrane, the furring channels are spaced 12 in. OC max. Channels secured to trusses as described in Item 6Ob. Ends of adjoining channels are overlapped 6 in. and tied together with double strand of No. 18 SWG galv steel wire near each end of overlap. As an alternate, ends of adjoining channels may be overlapped 6 in. and secured together with two self-tapping #6 framing screws, min. 7/16 in. long at the midpoint of the overlap, with one screw on each flange of the channel. Additional clips required to hold furring channel that supports the wallboard butt joints, as described in Item 7.

b. Steel Framing Members\* — Used to attach furring channels (Item 6Oa) to trusses (Item 2), Clips spaced 48 in, OC max with No. 8 x 2-1/2 in, course drywall screw through the center grommet. Furring channels are friction fitted into clips.

\*\* CLARKDIETRICH BUILDING SYSTEMS — Type ClarkDietrich Sound Clips

6P. Steel Framing Members\* — (Optional, Not Shown) — Used as an alternate method to attach resilient channels (items 6 and 6f)\_to structural members. A resilient sound isolation accessory shall be used at each attachment point of the resilient channels and spaced 16 in. O.C. Channel ends butted and centered under the structural members and attached with one accessory at each end. Additional accessories used to hold resilient channels that support the gypsum board end joints. The accessory envelops the mounting edge of the resilient channel. The accessory and resilient channel are fastened to the structural members with the 2in, screws supplied with the accessory and per the accessory manufacturer's installation instructions. Gypsum Board butt joints staggered minimum 24 in, OC and Gypsum Board screws spaced 8 in, OC when used.

PAC INTERNATIONAL L L C — Type RC-1 Boost

6Q. Steel Framing Members\* — (Not Shown) — As an alternate to item 6l, furring channels and Steel Framing Members\* as described below:

a. **Furring Channels** — Formed of No. 25 MSG galv steel, 2-9/16 in. or 2-23/32 in. wide by 7/8 in. deep, spaced 16 in. OC perpendicular to trusses. When batt insulation (Items 5) is draped over the resilient channel/gypsum board ceiling membrane, the resilient channel spacing shall be reduced to 12 in. OC. Channels secured to trusses as described in Item b. Ends of adjoining channels overlapped 6 in. and tied together with double strand of No. 18 SWG galv steel wire near each end of overlap.

b. Steel Framing Members\* — Used to attach furring channels (Item a) to trusses (Item 2). Clips spaced 48 in, OC. RSIC-1 and RSIC-1 (2.75) clips secured to alternating trusses with No. 8 x 2-1/2 in. coarse drywall screw through the center grommet. RSIC-Si-X secured with No. 10 x 3-1/2 in. screws. RSIC-1, and RSIC-Si-X, clips for use with 2-9/16 in, wide furring channels. RSIC-1 (2.75) clips for use with 2-23/32 in, wide furring channels. Adjoining channels are overlapped as described in Item a. As an alternate, ends of adjoining channels may be overlapped 6 in. and secured together with two self-tapping No. 6 framing screws, min 7/16 in, long at the midpoint of the overlap, with one 2in, screw on each flange of the channel. Additional clips required to hold furring channel that supports the gypsum board butt joints, as described in Item 7.

PAC INTERNATIONAL L.L.C.— Types RSiC-1, RSiC-Si-X, RSiC-1 (2.75), RSiC-Si-X.

6R. Steel Framing Members\* — (Optional, Not Shown) — As an alternate to Item 6I.

a. Furring Channels — Formed of No. 25 MSG galv steel, nominal 2-1/2 in. wide by 7/8 in. deep, spaced as indicated in Item 6, perpendicular to the trusses. Channels secured to Cold Rolled Channels at every intersection with a 3/4 in. TEK screw through each furring channel leg. Ends of adjoining channels overlapped 12 in. and fastened together with two double strand No. 18 SWG galv steel wire ties, one at each end of overlap, or with two 3/4 in. TEK screws in each leg of the overlap section. Two furring channels used at end joints of gypsum board (Item 7), each extending a min of 6 in. beyond both side edges of the board.

b. **Cold Rolled Channels** — 1-1/2 in. by 1/2 in., formed from No. 16 ga. galv steel, positioned vertically and parallel to trusses, friction-fitted into the channel caddy on the Steel Framing Members (Item 6Jd) and secured with two 3/4 in. TEK screws. Adjoining lengths of cold rolled channels lapped min. 12 in. and secured along bottom legs with four 3/4 in. TEK screws and wire-tied together with two double strand 18 SWG galv steel wire ties, one at each end of overlap.

c. **Blocking** — Where truss design does not permit direct, full contact of the hanger bracket, a piece of nominal 2 by 4 in, lumber (blocking), min.

12 in, long to permit full contact of the hanger bracket, to be secured vertically to the side of the trusses at the top and bottom of the blocking at

each Steel Framing Member (Item 6Jd) location with 16d nails or minimum 2-1/2 in screws.

d. **Steel Framing Members**\* — Spaced 48 in. OC. max along truss, and secured to the truss on alternating trusses with two, #10 x 2in. screws through mounting holes on the hanger bracket.

PAC INTERNATIONAL L L C — Type RSiC-Si-CRC EZ Clip

65. Steel Framing Members\* — (Not Shown) — As an alternate to Item 6i.

a. **Furring Channels** — Formed of No. 25 MSG galv steel, nominal 2-1/2 in. wide by 7/8 in. deep, spaced as indicated in Item 6, perpendicular to trusses and friction fit into Steel Framing Members (Item 6Kc). Ends of adjoining channels overlapped 6 in. and tied together with double strand of No. 18 SWG galv steel wire near each end of overlap or with two TEK screws along each leg of the 6 in. overlap. Two furring channels used at end joints of gypsum board (Item 7). Butt joint channels held in place by strong back channels placed upside down, on top of, and running perpendicular to primary furring channels, extending 6 in. longer than length of gypsum side joint. Strong back channels spaced maximum 48 in. OC. Strong back channels secured to every intersection of primary furring channels with four 7/16 in. pan head screws, two along each of the legs at intersections. Butt joint channels run perpendicular to strong back channels and shall be minimum 6 in. longer than length of joint, secured to strong back channels with 7/16 in. pan head screws, two along each of the legs at intersection with strong back channels.

b. **Blocking** — Where truss design does not permit direct, full contact of the hanger bracket, a piece of nominal 2 by 4 in. lumber (blocking), min.

12 in. long to permit full contact of the hanger bracket, to be secured vertically to the side of the trusses at the top and bottom of the blocking at each Steel Framing Member (Item 6Kc) location with 16d nails or minimum 2-1/2 in. screws.

c. Steel Framing Members\* — Used to attach furring channels (Item 6Ka) to trusses. Clips spaced 48 in, OC and secured along truss webs at each furring channels interest interest interest interest interest in the secured along truss webs at each furring channels.

c. Steel Framing Members\* — Used to attach furring channels (Item 6Ka) to trusses. Clips spaced 48 in, OC and secured along truss webs at each furring channel intersection with min, 3/4 in. long self-drilling #10 x 2 in, screws through each of the provided hole locations. Furring channels are friction fitted into clips.

PAC INTERNATIONAL L L C --- Type RSIC-S1-1 Ultra

7. **Gypsum Board\*** — Nom 5/8 in. thick, 48 in. wide gypsum board. When resilient channels (Item 6) are used, gypsum board installed with long dimension perpendicular to resilient channels. Gypsum board secured with 1 in. long Type S bugle head screws spaced 12 in. OC and located a min of 1/2 in. from side joints and 3 in. from end joints. End joints secured to both resilient channels as shown in end joint detail. When batt insulation (Item 5) is draped over the resilient channel/gypsum board ceiling membrane, screws spacing shall be 8 in. OC. When **Steel Framing Members\*** (Item 6A, 6F, 6O) are used, gypsum board installed with long dimension perpendicular to furring channels and side joints of sheet located beneath joists. Gypsum board secured to furring channels with 1 in. long Type S bugle head screws spaced 12 in. OC in the field. Butted end joints shall be staggered min 2 ft within the assembly, and occur between the continuous furring channels. At butted end joints, each end of each gypsum board shall be supported by a single length of furring channel equal to the width of the gypsum board plus 6 in. on each end. The two furring channels shall be spaced approximately 3-1/2 in. OC and be attached to underside of the joist with one clip at each end of the channel. Screw spacing along the end joint shall be 8 in. OC.

When S**teel Framing Members** (Item 6J) are used, nom 5/8 in. thick, 4 ft wide gypsum board, installed as described in Item 7. Adjacent butt joints staggered minimum 48 in. OC.

When **Steel Framing Members** (Item 6K) are used, nom 5/8 in. thick, 4 ft wide gypsum board, installed as described in Item 7. Butt joints staggered minimum 24 in. OC.

AMERICAN GYPSUM CO — Type AG-C

CGC INC — Types C, IP-X2, IPC-AR

CERTAINTEED GYPSUM INC — Type LGFC-C/A

PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM — Type C

UNITED STATES GYPSUM CO — Types C, IP-X2, IPC-AR

GEORGIA-PACIFIC GYPSUM L L C --- Types 5, DAPC, TG-C

USG BORAL DRYWALL SFZ LLC — Type C

USG MEXICO S A DE C V — Types C, IP-X2, IPC-AR

7A. **Gypsum Board\*** — Nom 5/8 in. thick, 48 in. wide gypsum board, installed with long dimension perpendicular to resilient channels. Gypsum board secured with 1-1/8 in. long Type S bugle head screws spaced 8 in. OC and located a min of 1/2 in. from side joints and 3 in. from the end joints. End joints secured to both resilient channels as shown in end joint detail. When Item 7A is used, the insulation must be used and must be draped over the resilient channel/gypsum board.

NATIONAL GYPSUM CO --- Types eXP-C, FSW-G, FSW-C, FSK-G, FSK-C

7B. Gypsum Board\* — Nom 5/8 in. thick, 48 in. wide gypsum panels. When resilient channels (Item 6) are used, gypsum panels installed with long dimension perpendicular to resilient channels. Gypsum panels secured with 1 in. long Type S bugle head steel screws spaced 12 in. OC and located a min of 1/2 in, from side joints and 3 in, from the end joints. When insulation (Items 5 or 5A) is applied over the resilient channel/gypsum panel ceiling membrane screw spacing shall be reduced to 8 in. OC. End joints secured to both resilient channels as shown in end joint detail. When Steel Framing Members (Item 6A, 6O) are used, gypsum panels installed with long dimensions perpendicular to furring channels. Panels attached to the furring channels using 1 in, long Type S bugle-head steel screws spaced 8 in, OC along butted end joints and in the field of the panel. Butted end joints shall be staggered min. 2 ft within the assembly, and occur midway between the continuous furring channels. Each end of each gypsum panel shall be supported by a single length of furring channel equal to the width of the gypsum panel plus 6 in. on each end. The two support furring channels shall be spaced approximately 3-1/2 in. OC, and be attached to underside of the truss with one clip at each end of the channel. When Steel Framing Members\* (Item 6B) are used, gypsum panels installed with long dimension perpendicular to cross tees with side joints centered along main runners and end joints centered along cross tees. Panels fastened to cross tees with 1 in, long, Type S bugle-head screws spaced in the field and 8 in, OC along end joints, Panels fastened to main runners with 1 in. long. Type S bugle-head screws spaced midway between cross tees. Screws along sides and ends of panels spaced 3/8 to 1/2 in, from panel edge. End joints of panels shall be staggered with spacing between joints on adjacent panels not less than 4.2 ft OC. When Fiber, Sprayed (Items 5A or 5B) is used, two layers of nom 5/8 in. thick, 4 ft wide gypsum board are installed with long dimensions perpendicular to furring channels. Base layer gypsum board secured with 1 in. long Type S bugle head steel screws spaced 12 in. OC and located a min of 1/2 in. from side joints and 3 in. from the end joints. End joints secured to both resilient channels as shown in end joint detail. Outer layer gypsum board secured with 1-5/8 in. long Type S bugle head steel screws spaced 12 in, OC and located a min of 1/2 in, from side joints and 3 in, from the end joints, Outer layer shall be finished as described in Item 8, When both Steel Framing Members (Item 6A) and Fiber, Sprayed (Items 5A or 5B) are used, furring channels spaced 12 in. OC and two layers of nom 5/8 in. thick, 4 ft wide gypsum board are Installed with long dimension perpendicular to furring channels. Base layer secured to furring channels with nom 1 in, long Type S bugle head screws spaced 8 in. OC along butted end joints and in the field of the board. Butted end joints shall be staggered min. 2 ft within the assembly, and occur midway between the continuous furring channels. Each end of each gypsum board shall be supported by a single length of furring channel equal to the width of the gypsum board plus 6 in. on each end. The two support furring channels shall be spaced approximately 3-1/2 in. OC, and be attached to the underside of the truss with one clip at each end of the channel. Outer layer secured to furring channels using 1-5/8 in, long Type S screws spaced 8 in. OC and 1-1/2 in, from the end joint. Butted end joints to be offset a min, of 8 in, from base layer end joints. Butted side joints of outer layer to be offset min, 18 in, from butted side joints of base layer. When Steel Framing Members (Item 6C) are used, two layers of nom 5/8 in. thick, 4 ft wide gypsum board are installed with long dimensions perpendicular to furring channels (Item 6Ca). Base layer attached to the furring channels using 1 in. long Type S bugle head steel screws spaced 8 in. OC along butted end joints and 12 in. OC in the field of the board. Butted end joints centered on the continuous furring channels. Butted base layer end joints to be offset a min of 16 in. in adjacent courses. Outer layer attached to the furring channels using 1-5/8 in. long Type S bugle head steel screws spaced 8 in. OC at butted end joints and 12 in. OC in the field. Butted end joints centered on the continuous furring channels and offset a min of 16 in, from butted end joints of base layer, Butted side joints of outer layer to be offset min 16 in, from butted side joints of base layer. When Steel Framing Members (Item 6D) are used, two layers of nom 5/8 in. thick, 4 ft wide gypsum board are installed with long dimensions perpendicular to furring channels. Base layer attached to the furring channels using 1 in. long Type S bugle-head steel screws spaced 12 in. OC in the field of the board. Butted end joints shall be staggered min 2 ft. within the assembly, and occur midway between the continuous furring channels. Each end of each gypsum board shall be supported by a single length of furring channel equal to the width of the gypsum board plus 6 in, on each end. The two furring channels shall be spaced approximately 4 in, OC, and be attached to underside of the truss with one Isomax clip at each end of the channel. Screw spacing along the gypsum board butt joint shall be 8 in. OC. Outer layer attached to the furring channels using 1-5/8 in. long Type S bugle-head steel screws spaced 12 in. OC in the field. The end of the outer layer boards at the butt joint shall be attached to the base layer boards with 1-5/8 in, long Type G screws spaced 8 in, OC and 1-1/2 in, from the end joint. Butted end joints to be offset a min of 8 in, from base layer end joints. Butted side joints of outer layer to be offset min 18 in. from butted side joints of base layer. Outer layer shall be finished as described in Item 8. When Steel Framing Members (Item 6F) are used, two layers of nom 5/8 in. thick, 4 ft wide are installed with long dimensions perpendicular to furring channels. Gypsum board secured to furring channels using 1 in, long No. 6 Type S bugle-head steel screws spaced 12 in. OC in the field of the board. Butted end joints shall be staggered minimum 2 ft. within the assembly. Additional furring channels constructed as per Item 6F shall be used to support each end of each gypsum board. These additional furring channels shall be attached to underside of the truss with Genie clips as described in Item 6F. Screw spacing along the gypsum board butt joint shall be 8 in. OC. Outer layer attached to the furring channels using 1-5/8 in. long No. 6 Type S bugle-head steel screws spaced 12 in. OC in the field. The outer layer boards at the butt joint shall be attached to the base layer boards with No. 10, 1-1/2 in, long drywall screws spaced 8 in, OC and 1-1/2 in, from the end joint, Butted end joints to be offset a min of 24 in. from base layer end joints. Butted side joints of outer layer to be offset min 16 in. from butted side joints of base layer. When Steel Framing Members (Item 6G) are used, one layer of nom 5/8 in. thick, 4 ft wide gypsum board is installed with long dimensions perpendicular to furring channels, Gypsum board secured to furring channels with nom 1 in. long Type S bugle-head steel screws spaced 8 in. OC in the field of the board. Gypsum board butted end joints shall be staggered minimum 48 in, and centered over main furring channels. At the gypsum board butt joints, each end of each gypsum board shall be supported by a single length of furring channel equal to the width of the gypsum

board plus 3 in. on each end. The two support furring channels shall be spaced approximately 3 in. in from joint. Screw spacing along the gypsum board butt joint and along both additional channels shall be 8 in. OC. Additional screws shall be placed in the adjacent section of gypsum board into the aforementioned 3 in. extension of the extra butt joint channels as well as into the main channel that runs between.

Butt joint furring channels shall be attached with one RESILMOUNT Sound Isolation Clip at each end of the channel.

When **Steel Framing Members** (Item 6H) are used, one layer of nom 5/8 in. thick, 4 ft wide gypsum board is installed with long dimensions perpendicular to furring channels. Gypsum board secured to furring channels with nom 1 in. long Type S bugle-head steel screws spaced 8 in. OC in the field of the board. Gypsum board butted end joints shall be staggered minimum 48 in. and centered over main furring channels. At the gypsum board butt joints, an additional single length of furring channel shall be installed and be spaced approximately 3 in. from the butt joint (6 in. from the continuous furring channels) to support the floating end of the gypsum board. Each of these shorter sections of furring channel shall extend one truss beyond the width of the gypsum panel and be attached to the adjacent trusses with one Sonus Clip at every truss involved with the butt joint.

CERTAINTEED GYPSUM INC --- Type C

CGC INC — Types C, IP-X2, IPC-AR

CERTAINTEED GYPSUM INC — Type LGFC-C/A

PABCO BUILDING PRODUCTS & L.C., DBA PABCO GYPSUM — Type C

UNITED STATES GYPSUM CO — Types C, IP-X2, IPC-AR

USG BORAL DRYWALL SFZ LLC — Type C

USG MEXICO S A DE C V — Types C, IP-X2, IPC-AR

7C. Gypsum Board\* — (As an alternative to Items 7 and 7B, For use with Items 5C and 6I) — Nom 5/8 in thick, 48 in wide gypsum board, installed and secured as described in Items 7 and 7B but with max screw spacing 8 in. OC. When used with insulation (Batts and Blankets\* or Fiber Sprayed\*) that is installed over the resilient channel/Gypsum Board\* ceiling membrane, the resilient channels may remain at 16 in. OC and not need to be reduced to 12 in. OC.

CGC INC — Type ULIX

UNITED STATES GYPSUM CO — ULIX

7D. **Gypsum Board\*** — (As an alternative to Items 7, 7A, 7B and 7C) — For use when no insulation is used. Nom 5/8 in, thick, 48 in, wide gypsum board, installed as described in item 7 with resilient channels (Item 6) spaced 24 in OC.

AMERICAN GYPSUM CO — Type AG-C

8. **Finishing System** — (Not Shown) — Vinyl, dry or premixed joint compound, applied in two coats to joints and screw-heads. Nom 2 in. wide paper tape embedded in first layer of compound over all joints. As an alternate, nom 3/32 in. thick veneer plaster may be applied to the entire surface of gypsum board.

9. Grille — Grille, installed in accordance with the installation instructions provided with the ceiling damper.

10. Wire Mesh — (Not Shown) — For use with Item 5A and 5B — 1 in. 20 gauge galvanized poultry netting installed between the furring channels and gypsum board. The poultry netting is attached with washers and 1/2 in, wafer head screws, spaced 24 in. OC., to the furring channels. The Fiber, Sprayed (Item 5A or 5B) is installed through cut-openings in the poultry netting, in-between trusses. The cut-openings in the poultry netting shall be staggered at a maximum of 6 ft.

\* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.

Last Updated on 2023-10-03

The appearance of a company's name or product in this database does not in itself assure that products so identified have been manufactured under UL

PRINTS ISSUED

**REVISIONS:** 

04/17/2024 - CITY SUBMISSION

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DAVID EUGENE HENDRIKSE NUMBER

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PROJECT NUMBER: 22023

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Design/System/Construction/Assembly Usage Disclaimer

- · Authorities Having Jurisdiction should be consulted in all cases as to the particular requirements covering the installation and use of UL Certified products, equipment, system, devices, and materials.
- · Authorities Having Jurisdiction should be consulted before construction.
- . Fire resistance assemblies and products are developed by the design submitter and have been investigated by UL for compliance with
- applicable requirements. The published information cannot always address every construction nuance encountered in the field. When field issues arise, it is recommended the first contact for assistance be the technical service staff provided by the product manufacturer noted for the design. Users of fire resistance assemblies are advised to consult the general Guide Information for each product category and each group of assemblies. The Guide Information includes specifics concerning alternate materials and alternate methods of construction.
- Only products which bear UL's Mark are considered Certified.

Design Criteria and Allowable Variances

BXUV - Fire Resistance Ratings - ANSI/UL 263 Certified for United States BXUV7 - Fire Resistance Ratings - CAN/ULC-S101 Certified for Canada See General Information for Fire-resistance Ratings - ANSI/UL 263 Certified for United States

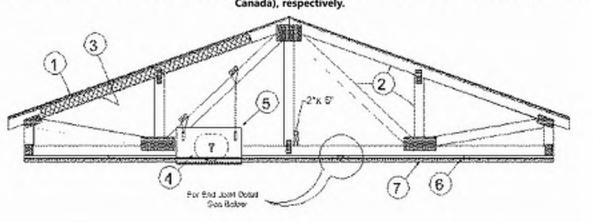
Design Criteria and Allowable Variances See General Information for Fire Resistance Ratings - CAN/ULC-S101 Certified for Canada

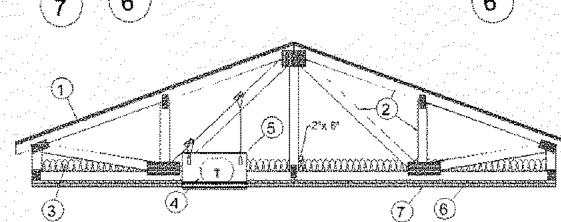
> Design No. **P545** September 8, 2023

Unrestrained Assembly Rating — 1 Hr.

Finish Rating — 24 or 25 Min (See Items 3 and 3A) This design was evaluated using a load design method other than the Limit States Design Method (e.g., Working Stress Design Method). For jurisdictions employing the Limit States Design Method, such as Canada, a load restriction factor shall be used — See Guide BXUV or BXUV7

\* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as





Alternate Insulation Placement

I. Roofing System\* — Any UL Class A, B or C Roofing System (TGFU) or Prepared Roof Covering (TFWZ) acceptable for use over nom 15/32 in. thick wood structural panels, min. grade "C-D" or "Sheathing". Nom 15/32 in. thick wood structural panels secured to trusses with No. 6d ringed shank nails. Nails spaced 12 in. OC along each truss. Staples having equal or greater withdrawal and lateral resistance strength may be substituted for the 6d nails. Construction adhesive is optional.

2. Trusses — Pitch chord trusses, spaced a max of 24 in. OC, fabricated from nom 2 by 4 lumber, with lumber oriented vertically or horizontally. Truss members secured together min.0.0356 in. thick galv steel plates. Plates have 5/16 in. long teeth projecting perpendicular to the plane of the plate. The teeth are in pairs facing each other (made by the same punch), forming a split tooth type plate. Each tooth has a chisel point on its outside edge. These points are diagonally opposite each other for each pair. The top half of each tooth has a twist for stiffness. The pairs are repeated on approximately 7/8 in. centers with four rows of teeth per inch of plate width. Where the truss intersects with the interior face of the exterior walls, the min truss depth shall be 5-1/4 in. and a min. average depth of 18 in.. Where the truss intersects with the interior face of the exterior walls, the min truss depth may be reduced to 3 in. if the batts and blankets (Item 3) are used as shown in the above illustration (Alternate Insulation Placement) and are firmly packed against the intersection of the bottom chords and the plywood sheathing. Min roof slope of 3/12 unless American Gypsum boards are used, in which case there is no minimum slope.

3. Batts and Blankets\* — (Optional) — Glass fiber insulation, secured to the wood structural panels with staples spaced 12 in. OC or to the trusses with 0.090 in, diam galv steel wires spaced 12 in, OC. Any glass fiber insulation bearing the UL Classification Marking as to Surface Burning Characteristics and/or Fire Resistance, having a min density of 0.5 pcf. As an option, the insulation may be fitted in the concealed space, draped over the resilient channel/gypsum wallboard ceiling membrane when resilient channels and gypsum wallboard attachment is modified as specified in Items 6 and 7. The Finish Rating is 24 min, when the insulation is draped over the resilient channels and gypsum board ceiling membrane and 25 min. when it is installed on underside of the plywood deck or when it is omitted. When Type AG-C panels are installed there is no limit on maximum thickness.

When Type TG-C panels are installed the maximum thickness is 3-1/2 in.

3A, Loose Fill Material\* — As an alternate to Item 3 — Loose fill material bearing the UL Classification Marking for Surface Burning Characteristics, having a min density of 0.5 pcf, fitted in the concealed space, draped over the resilient channel/gypsum wallboard ceiling

membrane when resilient channels and gypsum wallboard attachment is modified as specified in Items 6 and 7. The finished rating when this When Type AG-C panels are installed there is no limit on maximum thickness.

When Type TG-C panels are installed the maximum thickness is 3-1/2 in.

3B. Fiber, Sprayed\* — For Use With American Gypsum Type AG-C only. As an alternate to Item 3 (not evaluated for use with Item 6B and 6C) - spray-applied cellulose insulation material, having a min density of 0.5 lb/ft<sup>3</sup>, applied with water, over the resilient channel/gypsum board ceiling membrane when resilient channels and gypsum board attachment is modified as specified in Items 6 and 7. Fiber, Sprayed is applied with moisture in accordance with the application instructions supplied with the product. The finish rating when Fiber Sprayed is used has not been determined. Alternate application method: The fiber is applied without water or adhesive in accordance with the application instructions supplied with a minimum density of 0.5 lb/ft<sup>3</sup> over the resilient channel/gypsum board ceiling membrane when resilient channels and gypsum. board attachment is modified as specified in Items 6 and 7. Alternate application method: The fiber is applied without water or adhesive to a nominal density of 3.5 lb/ft<sup>3</sup> behind netting (Item 11) stapled to the rafters. The netting is stapled at both lower edges of the rafters creating a cavity to accept the cellulose fiber The finished rating when this insulation is used has not been determined. When Type AG-C panels are installed there is no limit on maximum thickness.

When Type TG-C panels are installed the maximum thickness is 3-1/2 in.

APPLEGATE GREENFIBER ACQUISITION LLC — Insulmax and SANCTUARY for use with wet or dry application. INS510LD, INS515LD, and INS541LD are to be used for dry application only.

3C. Foamed Plastic\* — For Use With American Gypsum Type AG-C only. (As an alternate to Item 3, Not Shown) — Spray foam insulation applied directly to the underside of the underside of the roofing system (Item 1). Spray foam insulation installed to a maximum thickness of 10 in. at a nominal 0.5 lb/ft<sup>3</sup> density, while maintaining a minimum 8-1/2 in. clearance between the spray foam insulation and the gypsum board. When spray foam insulation is used, resilient channels (Item 6) shall be installed maximum 12 in. OC, with channels adjacent to butt joints of gypsum board (Item 7) installed at 6 in. OC to allow for maximum 3 in, spacing off ends of the gypsum board joints. Gypsum board to be installed using 1-1/4 in. long Type S screws, spaced maximum 8 in. OC, and butted end joints shall be staggered min. 2 ft within the assembly, and occur midway between the continuous furring channels, If used with a ceiling damper (Items 5 through 5AC) in the concealed space, minimum 1 in, clearance to be maintained between damper housing and spray foam insulation. Limited to resilient channels, Item 6 only, no Item 6 alternates. The finished rating when this insulation is used has not been determined.

3D. Foamed Plastic\* — For Use With American Gypsum Type AG-C only. (As alternate to Item 3 Not Shown) — Spray foam insulation applied directly to the underside of the roofing system. Spray foam insulation installed to a maximum thickness of 10 in, at a nominal 0.5 lb/ft<sup>3</sup> or 2.0 lb/ft<sup>3</sup> density, depending on the product installed. When spray foam insulation is installed, resilient channels (Item 6) shall be installed maximum 12 in, OC, with channels adjacent to butt joints of gypsum board spaced maximum 3 in. away from gypsum butt joints. Gypsum board to be installed using minimum 1-1/4 in. long Type S screws, spaced maximum 8 in, OC, and butted end joints shall be staggered min, 2 ft within the assembly, and occur midway between the continuous furring channels. If used with a ceiling damper (Items 5 through 5AC) in the concealed space, minimum 1 in. clearance to be maintained between damper housing and spray foam insulation. Limited to resilient channels, Item 6 only, no Item 6 alternates.. The finished rating when this insulation is used has not been determined. BASE CORP ..... Enertite® N.M., Enertite® G, FE178®, Spraytite® 178, Spraytite® 81206, Walltite® 200, Walltite® US, Walltite® US-N, and Walltite® HP+

3E. Foamed Plastic\* — For Use With American Gypsum Type AG-C only. (As an alternate to Item 3, Not Shown) — Spray foam insulation applied directly to the underside of the underside of the roofing system. Spray foam insulation installed to a maximum thickness of 17 in. at a nominal 0.5 lb/ft<sup>3</sup> density, while maintaining a minimum 1-1/2 in, clearance between the spray foam insulation and the gypsum board. When spray foam insulation is used, resilient channels (Item 6) shall be installed maximum 12 in. OC, with channels adjacent to butt joints of gypsum board installed at 6 in. OC to allow for maximum 3 in. spacing off ends of the gypsum board joints. Gypsum board to be installed using 1-1/4 in. long Type S screws, spaced maximum 8 in. OC, and butted end joints shall be staggered min. 2 ft within the assembly, and occur midway between the continuous furring channels. If used with a ceiling damper (Items 5 through SAC) in the concealed space, no clearance is necessary between damper housing and spray foam insulation. Limited to resilient channels, Item 6 only, no Item 6 alternates. The finished rating when this insulation is used has not been determined. SES FOAM INC — EasySeal.S, EasySeal ULD

3F. Foamed Plastic\* — (As alternate to Item 3) — Spray foam insulation applied directly to the underside of the underside of the roofing system. Spray foam insulation installed to a maximum thickness of 11 in, at a nominal 1.0 lb/ft<sup>3</sup> - 2.5 lb/ft<sup>3</sup> density, while maintaining a minimum 7 in. clearance between the spray foam insulation and the gypsum board (Item 7). Spray foam insulation is limited for use with minimum 18 in. deep trusses (Item 2). When spray foam insulation is installed, resilient channels (Item 6) shall be installed maximum 12 in, OC, with channels adjacent to butt joints of gypsum board spaced maximum 3 in, away from gypsum butt joints. Gypsum board to be installed using minimum 1-1/4 in, long Type S screws, spaced maximum 8 in, OC, and butted end joints shall be staggered min. 2 ft within the assembly, and occur midway between the continuous furring channels, as illustrated above. If used with a ceiling damper (Items 5 through 5AC) in the concealed space, no clearance is necessary between damper housing and spray foam insulation. Only for use with item 5 not

evaluated for use with alternates to item 5. Only for use with item 6 not evaluated for use with alternates to item 6. CARLISLE SPRAY FOAM INSULATION — Types SealTite Pro Closed Cell (CC), SealTite Pro Open Cell (OC), SealTite Pro OCX, SealTite Pro No Trim 21,

4. Air Duct\* — For use with Ceiling Damper\* - Any Ut Class 0 or Class 1 flexible air duct installed in accordance with the instructions provided by the damper manufacturer.

5. Celling Damper\* — Nom 20 in. long by 18 in. wide by 2-1/8 in. high, fabricated from galvanized steel. Plenum box maximum size nom. 21 in. long by 18 in. wide by 16 in. high fabricated from either galavanized steel or Classified Air Duct Materials bearing the UL Class 0 or Class 1 rigid air duct material. Installed in accordance with the instructions provided by the manufacturer. Max damper openings not to exceed 180 sq in. per 100 sq ft of ceiling area. NAILOR INDUSTRIES INC -- Types 0755, 0755A, 0756, 0756D, 0757D, 0757FP, 0757DFP, 0758, 0759, 0760, 0761, 0762, 0763, CRD5, CRD5D, CRD6,

SAFE AIR DOWCO --- 0455, 0455A, 0456, 0456D, 0457, 0457D, 0457-DB, 0457-CB, 0463-FB, 0457-EB, 0463-GB, 0463

5A. Alternate Ceiling Damper\* — Max plenum box size nom 19 in, long by 19 in, wide and 11-7/8 in, high fabricated from galv steel. Aggregate damper openings shall not exceed 128 sq in. per 100 sq ft of ceiling area. Damper installed in accordance with the manufacturers installation instructions provided with the damper. · AIRE TECHNOLOGIES INC — Models: CRD model 50 w/Boot, CRD model 50EA w/Boot, CRD model 55 w/Boot, CRD model 55 EA w/Boot

**LLOYD INDUSTRIES INC** — Model CRD 50-BT, CRD 50-EA-BT, CRD 55-BT, CRD 55 EA-BT

CRD6D, CRD6FP, CRD6DFP.

58. Alternate Ceiling Damper\* — Max plenum box size nom 13 in. long by 13 in. wide and 11-7/8 in. high fabricated from galv steel. Aggregate damper openings shall not exceed 50 sq in. per 100 sq ft of ceiling area. Damper installed in accordance with the manufacturers' installation instructions provided with the damper. LLOYD INDUSTRIES INC - Model CRD 50-BT-6, CRD 50-EA-BT-6, CRD 55-BT-6, CRD 55 EA-BT-6, CRD50-W X-BT-6

5C. Alternate Ceiling Damper\* — Max size ceiling outlet in plenum box nom 12 in. long by 12 in. wide. Plenum box fabricated from galv steel. Aggregate damper openings shall not exceed 72 sq in. per 100 sq ft of ceiling area. Installed in accordance with the manufacturers installation instructions provided with the damper. AIRE TECHNOLOGIES INC ---- Models: CRD model 50 w/Boot, CRD model 50EA w/Boot, CRD model 55 w/Boot, CRD model 55 EA w/Boot

**LLOYD INDUSTRIES INC** — Model CRD 50-95BT, CRD 50-EA-95BT, CRD 55-95BT, CRD 55 EA-95BT

5D. Alternate Ceiling Damper\* — Max size ceiling outlet in plenum box nom 16 in. long by 16 in. wide. Aggregate damper openings shall not exceed 128 sq in, per 100 sq ft of ceiling area. Damper installed in accordance with the manufacturers installation instructions provided

LLOYD INDUSTRIES INC - Models CRD 50- FGPB-4.2, - 4.2 Ni, -6.0, -6.0 Ni; CRDS0-EA-FGPB-4.2, -4.2 Ni, -6.0, -6.0 Ni

5E. Alternate Ceiling Damper\* — Max plenum box size nom 15 in. long by 15 in. wide and 11-7/8 in. high fabricated from galv steel. Aggregate damper openings shall not exceed 72 sq in. per 100 sq ft of ceiling area. Damper installed in accordance with the manufacturers installation instructions provided with the damper, LLOYD INDUSTRIES INC -- Models 45-CRD-LT-BT and 45-CRD-LTD-BT

5F. Alternate Ceiling Damper\* — Max size ceiling outlet in plenum box nom 10 in; long by 10 in, wide. Plenum box fabricated from galv steel. Aggregate damper openings shall not exceed 50 sq in. per 100 sq ft of celling area. Installed in accordance with the manufacturers installation instructions provided with the damper. LLOYD INDUSTRIES INC ---- Model 45-LTD-95-BT-4

5G. Alternate Ceiling Damper\* — Max plenum box size nom 19 in. long by 15 in. wide and 11-7/8 in. high fabricated from galv steel. . Aggregate damper openings shall not exceed 96 sq in, per 100 sq ft of ceiling area. Damper installed in accordance with the manufacturers installation instructions provided with the damper. \*LLOYD INDUSTRIES INC — Model CRD50-W X-BT

5H. Alternate Ceiling Damper\* --- Max nom area shall be 324 sq in. Max square size shall be 18 in. by 18 in. Rectangular sizes not to exceed . 324 sq in, with a max width of 18 in. Max height of damper shall be 14 in. Aggregate damper openings shall not exceed 162 sq in. per 100 sq ft of ceiling area. Damper installed in accordance with the manufacturers installation instructions provided with the damper. A steel grille (Item 9) shall be installed in accordance with installation instructions.

C&S AIR PRODUCTS — Model RD-521

. POTTORFF --- Model CFD-521

51. Alternate Ceiling Damper\* — Max nom area shall be 196 sq in: Max square size shall be 14 in. by 14 in. Rectangular sizes not to exceed 196 sq in, with a max width of 26 in. Max height of damper shall be 7 in. Aggregate damper openings shall not exceed 98 sq in, per 100 sq ft of ceiling area. Damper installed in accordance with the manufacturers installation instructions provided with the damper. A steel grille (Item 9) not to exceed 144 in 2 shall be installed in accordance with installation instructions. C&S AIR PRODUCTS — Model RD-521-BT

POTTORFF --- Model CFD-521-BT

5J. Alternate Ceiling Damper\* — Max nom area shall be 256 sq in, with the length not to exceed 24 in, and the width not to exceed 20 in. Max height of damper shall be 17 in. Aggregate damper openings shall not exceed 128 sq in. per 100 sq ft of ceiling area. Damper installed in accordance with the manufacturers installation instructions provided with the damper. A steel grille (Item 9) shall be installed in accordance with installation instructions.

POTTORFF --- Models CFD-521-IP, CFD-521-NP

C&S AIR PRODUCTS --- Model RD-521-IP, RD-521-NP

5K. Alternate Ceiling Damper\* — Max nom area shall be 144 sq in, with the length not to exceed 14 in, and the width not to exceed 12 in, Max height of damper shall be 17-7/8 in. Aggregate damper openings shall not exceed 74 sq in. per 100 sq ft of ceiling area. Damper installed in accordance with the manufacturers installation instructions provided with the damper. A steel grille (Item 9) shall be installed in accordance with installation instructions.

C&S AIR PRODUCTS — Model RD-521-90, RD-521-NP90

POTTORFF — Models CFD-521-90, CFD-521-90NP

5L. Alternate Ceiling Damper\* — (Optional) Max nom area shall be 324 sq in. Max square size shall be 18 in. by 18 in. Rectangular sizes not to exceed 324 sq in. with a max width and max length of 18 in. Max round size shall be 18 in. dia. Aggregate damper openings shall not exceed 162 sq in, per 100 sq ft of ceiling area. Damper installed in accordance with the manufacturers installation instructions provided with

RUSKIN COMPANY — Models CFD7T, CFD7T-END-BT, CFD7T-90-BT, CFD7T-ST-BT, CFD7T-SB, CFD7T-R6-DB, CFD7T-IB6, or CFDR7T

5M. Alternate Ceiling Damper\* — Ceiling damper & fan assembly. Max nom area shall be 75 sq in, with the length not to exceed 8-9/16 in. and the width not to exceed 8-3/4 in. Max height of damper shall be 9-7/8 in. Aggregate damper openings shall not exceed 38 sq in. per 100 sq ft of ceiling area. Damper shall be installed in combination with one of the fan models described in, and in accordance with, the manufacturers installation instructions provided with the damper. A plastic grille shall be installed in accordance with installation instructions. DELTA ELECTRONICS INC -- Models CRD2, GBR-CRD, FTG-CRD

5N. Alternate Ceiling Damper\* — Max nom area shall be 324 sq in. Max square size shall be 18 in. by 18 in. Rectangular sizes not to exceed 324 sq in, with a max length of 20 in, and a max width of 22 in. Max height of damper shall be 14 in. Aggregate damper openings shall not exceed 154 sq in. per 100 sq ft of ceiling area. Damper installed in accordance with the manufacturer's installation instructions provided with the damper. An aluminum or steel grille shall be installed in accordance with installation instructions.

\*\*UNITED ENERTECH CORP --- Type C-S/R-WT or C-S/R-WTP (Max nom area 324 sq. in.) or C-S/R-WTS or C-S/R-WTPS (Max nom area 162 sq. in.)

-5O. Alternate Ceiling Damper\* — Ceiling damper & fan assembly. Max nom area shall be 75 sq in, with the length not to exceed 9-1/4 in. and the width not to exceed 9-3/4 in. Max height of damper shall be 9-7/8 in. Aggregate damper openings shall not exceed 45 sq in. per 100 sq ft of ceiling area. Damper shall be installed in combination with one of the fan models described in, and in accordance with, the manufacturer's installation instructions provided with the damper. A plastic grille shall be installed in accordance with installation instructions. DELTA ELECTRONICS INC — Model SIG-CRD

"5P, Alternate Ceiling Damper\* — Ceiling damper & fan assembly, Max nom area shall be 131 sg in, with the length not to exceed 11-1/16 in. and the width not to exceed 11-7/8 in. Aggregate damper openings shall not exceed 66 sq in. per 100 sq ft of ceiling area. Damper shall be installed in combination with one of the fan models described in, and in accordance with, the manufacturer's installation instructions provided with the damper. A plastic grille (Item 9) shall be installed in accordance with installation instructions. DELTA ELECTRONICS INC — Model SMT-CRD

5Q. Alternate Ceiling Damper\* — Ceiling damper & fan assembly. Max nom area shall be 103 sq in. with the length not to exceed 10-1/8 in. and the width not to exceed 10-1/8 in. Aggregate damper openings shall not exceed 52 sq in. per 100 sq ft of ceiling area. Damper shall be nstalled in combination with one of the fan models described in, and in accordance with, the manufacturer's installation instructions provided with the damper, A plastic grille shall be installed in accordance with installation instructions. PANASONIC CORPORATION, PANASONIC CORPORATION OF NORTH AMERICA — Model PC-RD05C5

5R. Alternate Ceiling Damper\* — Ceiling damper & fan assembly. Max nom area shall be 113 sq in, with the length not to exceed 10-1/8 in. and the width not to exceed 11-1/8 in. Aggregate damper openings shall not exceed 57 sq in. per 100 sq ft of ceiling area. Damper shall be installed in combination with one of the fan models described in, and in accordance with, the manufacturer's installation instructions provided with the damper. A plastic grille shall be installed in accordance with installation instructions. BROAN-NUTONE L L C --- Model RDFUWT

5S. Alternate Ceiling Damper\* — Ceiling damper & fan assembly. Max nom area shall be 79 sq in, with the length not to exceed 10 in, and the width not to exceed 7-15/16 in. Aggregate damper openings shall not exceed 40 sg in, per 100 sg ft of ceiling area. Damper shall be . Installed in combination with one of the fan models described in, and in accordance with, the manufacturer's installation instructions provided with the damper. A metallic grille shall be installed in accordance with installation instructions. BROAN-NUTONE L L C --- Models RDI1 and RDH

5T. Alternate Ceiling Damper\* — Max plenum box size nom 19 in, long by 19 in, wide and 11-7/8 in, high fabricated from galv steel. Aggregate damper openings shall not exceed 128 sq in. per 100 sq ft of ceiling area. Damper installed in accordance with the manufacturers installation instructions provided with the damper. METAL-FAB INC — Models MSCD-HC and MRCD-HC

5U. Afternate Ceiling Damper\* --- Ceiling damper & fan assembly. Max nom area shall be 87 sq in. with the length not to exceed 9 in. and the width not to exceed 9-11/16 in. Aggregate damper openings shall not exceed 44 sq in. per 100 sq ft of ceiling area. Damper shall be installed in combination with one of the fan models described in, and in accordance with, the manufacturer's installation instructions provided with the damper. A plastic grille shall be installed in accordance with installation instructions. BROAN-NUTONE L L C — Model RDMWT

5V. Alternate Ceiling Damper\* — Ceiling damper & fan assembly. Max nom area shall be 87 sq in. with the length not to exceed 9 in. and the width not to exceed 9-11/16 in. Aggregate damper openings shall not exceed 44 sq in. per 100 sq ft of ceiling area. Damper shall be installed in combination with one of the fan models described in, and in accordance with, the manufacturer's installation instructions provided with the damper. A plastic grille shall be installed in accordance with installation instructions. BROAN-NUTONE L.L.C — Model RDMWT2

5W. Alternate Ceiling Damper\* — Max nom 21 in, long by 18 in, wide, fabricated from galvanized steel. Plenum box max size nom 21 in. long by 18 in, wide by 14 in, high (inner dimension) fabricated from either galvanized steel or min 1 in, thick Listed Duct Board bearing the UL Listing Marking having a min R-Value of 4.3. Installed in accordance with the instructions provided by the manufacturer. Max damper openings not to exceed 180 sq in. per 100 sq ft of ceiling area. GREENHECK FAN CORP --- Model CRD-1WT

5X. Alternate Celling Damper\* — Max nom 12 in. long by 12 in. wide with an 8 in. diameter damper, fabricated from galvanized steel. Installed in accordance with the instructions provided by the manufacturer, Max damper openings not to exceed 72 sq in. per 100 sq ft of ceiling area. GREENHECK FAN CORP - Model CRD-2WT

5Y. Alternate Ceiling Damper\* — Max 12 in. diameter damper and insulated register box assembly. The maximum size of the register box assembly is nom, 20 in, long by 20 in, wide and 4 in, high fabricated from galvisteel. The aggregate area of the register opening(s) through the ceiling membrane shall not exceed 128 sq in. per 100 sq ft of ceiling area. Damper assembly installed in accordance with the manufacturers installation instructions. AIRE TECHNOLOGIES INC — Model 57IB.

5Z. Alternate Ceiling Damper\* — Max 20 in, long by 16 in, wide by 4 in, high rectangular damper with plenum box assembly. The maximum outer dimensions of the plenum box assembly is 23-1/2 in. long by 19-1/2 in. wide and 17 in. high fabricated from 6pcf, 1-1/2 to 2 in. thick Knauf Air Duct Board M\*. The aggregate area of the register opening(s) through the ceiling membrane shall not exceed 160 sq in. per 100 sq ft ceiling area. Damper assembly installed in accordance with the manufacturers installation instructions. AIRE TECHNOLOGIES INC --- Series 58.

5AA. Alternate Ceiling Damper\* — Max 14 in. long by 14 in. wide and 18 in. high ceiling damper with boot or box assembly, fabricated from galv steel. The aggregate area of the register opening(s) through the ceiling membrane shall not exceed 98 sq in. per 100 sq ft of ceiling area.

Damper assembly installed in accordance with the manufacturers installation instructions. AIRE TECHNOLOGIES INC - Model 51 w/Boot.

5AB. Alternate Ceiling Damper\* — Max nom 11-1/8 in, long by 13-5/8 in, wide, fabricated from galvanized steel. Installed in accordance with the instructions provided by the manufacturer, Max damper openings not to exceed 76 sq in, per 100 sq ft of ceiling area. GREENHECK FAN CORP — Model CRD-310WT

5AC. Alternate Celling Damper\* — Max nom 12-3/8 in. long by 14-1/2 in. wide, fabricated from galvanized steel. Installed in accordance with the instructions provided by the manufacturer. Max damper openings not to exceed 90 sq in. per 100 sq ft of ceiling area. GREENHECK FAN CORP ---- Model CRD-320WT

5AD. Alternate Ceiling Damper\* — Max 12 in. diameter damper within max 15 in. by 15 in. register box with max 12 in. by 12 in. register opening fabricated from galvanized steel. Aggregate area of the register opening(s) through the ceiling membrane shall not exceed 72 sq. in. per 100 sq. ft. of ceiling area. Damper assembly installed in accordance with the manufacturer's installation instructions. RUSKIN COMPANY — Model CFD7T-SR

5AE. Alternate Ceiling Damper\* --- Max 12 in. diameter damper and insulated register box assembly. The maximum size of the register box assembly is nom, 20 in, long by 20 in, wide and 4 in, high fabricated from galv steel. The aggregate area of the register opening(s) through the ceiling membrane shall not exceed 128 sq in. per 100 sq ft of ceiling area. Damper assembly installed in accordance with the manufacturers installation instructions. SOUTHWARK METAL MFG CO -- Model 800 w/Box

5AF. Alternate Ceiling Damper\* — Max 20 in. long by 16 in. wide by 4 in. high rectangular damper with plenum box assembly. The maximum outer dimensions of the plenum box assembly are 23-1/2 in. long by 19-1/2 in. wide and 17 in. high fabricated from 6pcf, 1-1/2 to 2 in, thick Knauf Air Duct Board M\*. The aggregate area of the register opening(s) through the ceiling membrane shall not exceed 160 sq in. per 100 sq ft ceiling area. Damper assembly installed in accordance with the manufacturers installation instructions. SOUTHWARK METAL MFG CO --- CRD w/DB Box

5AG, Alternate Ceiling Damper\* — Max 14 in, long by 14 in, wide and 18 in, high ceiling damper with boot or box assembly, fabricated from galy steel. The aggregate area of the register opening(s) through the ceiling membrane shall not exceed 98 sq in. per 100 sq ft of ceiling area. Damper assembly installed in accordance with the manufacturers installation instructions. SOUTHWARK METAL MFG CO — Model 500 w/Boot, 510 w/Boot, 500 w/Box or 510 w/Box

5AH. Alternate Ceiling Damper\* — Max nom 10-3/8 in. long by 10-3/8 in. wide, fabricated from galvanized steel. Installed in accordance with the Instructions provided by the manufacturer. Max damper openings not to exceed 54 sq in. per 100 sq ft of ceiling area.

GREENHECK FAN CORP - Model CRD-300WT

6. Furring Channels --- Resilient channels formed of 25 MSG galv steel, spaced 16 in. OC, installed perpendicular to trusses. When insulations are installed or draped over the resilient channel/gypsum wallboard ceiling membrane, the spacing shall be as described below. Channels secured to each truss with 1-1/4 in. long Type S steel screws. Channels overlapped 4 in. at splices. Channels oriented opposite at wallboard butt joints (spaced 6 in. OC) as shown in the above illustration.

When Type AG-C panels are attached to the resilient channels, the channels may remain at 16 in. OC. When Type TG-C panels are attached to the resilient channels, the channels are installed at 12 in, OC.

6A. Steel Framing Members\* — (Not Shown) — As an alternate to Item 6, furring channels and Steel Framing Members\* as described below: a. Furring Channels — Formed of No. 25 MSG galv steel, 2-9/16 in. or 2-23/32 in. wide by 7/8 in. deep, spaced 16 in. OC perpendicular to trusses. When batt insulation (Item 3) is draped over the resilient channel/gypsum board ceiling membrane, the resilient channel spacing shall be reduced to 12 in. OC. Channels secured to trusses as described in Item b. Ends of adjoining channels overlapped 6 in. and tied together with double strand of No. 18 SWG galv steel wire near each end of overlap.

b. Steel Framing Members\* — Used to attach furring channels (Item a) to trusses (Item 2). Clips spaced 48 in. OC. RSIC-1 and RSIC-1 (2.75) clips secured to alternating trusses with No. 8 x 2-1/2 in. coarse drywall screw through the center grommet. RSIC-V and RSIC-V (2.75) clips secured to alternating trusses with No. 8 x 1-1/2 in. coarse drywall screw through the center hole. Furring channels are friction fitted into clips. RSIC-1 and RSIC-V clips for use with 2-9/16 in, wide furring channels, RSIC-1 (2.75) and RSIC-V (2.75) clips for use with 2-23/32 in, wide furring channels. Adjoining channels are overlapped as described in Item a. As an alternate, ends of adjoining channels may be overlapped 6 in. and secured together with two self-tapping No. 6 framing screws, min 7/16 in. long at the midpoint of the overlap, with one screw on each flange of the channel. Additional clips required to hold furring channel that supports the gypsum board butt joints, as described in Item 7. . PAC INTERNATIONAL L.L.C ..... Types RSIC-1, RSIC-V, RSIC-1 (2.75), RSIC-V (2.75)

6B, Alternate Steel Framing Members\* — (Not Shown) — Not evaluated with Item 3 (Batts and Blankets), As an alternate to Items 6 or 6A,

furring channels and Steel Framing Members as described below. a. Furring Channels — Formed of No. 25 MSG galv steel, 2-5/8 in. wide by 7/8 in deep, spaced 16 in OC, perpendicular to trusses. Channels

b. Steel Framing Members\* — Used to attach furring channels (Item a) to the wood trusses (Item 2), Clips spaced at 48" OC and secured to the bottom of the trusses with one 2 in. Coarse Drywall Screw with 1 in, diam washer through the center hole. Furring channels are then friction fitted into clips. Ends of channels are overlapped 6" and tied together with double strand of No. 18 AWG galvanized steel wire. Additional clips are required to hold the Gypsum Butt joints as described in Item 7. STUDCO BUILDING SYSTEMS — RESILMOUNT Sound Isolation Clips - Type A237 or A237R

6C. Alternate Steel Framing Members\* — (Not Shown) — Not evaluated with Item 3 (Batts and Blankets). As an alternate to Items 6 through 6B, furring channels and Steel Framing Members as described below. a. Furring Channels — Formed of No. 25 MSG galv steel, 2-1/2 in. wide by 7/8 in deep, spaced 16 in OC, perpendicular to trusses. Channels

b. Steel Framing Members\* — Used to attach furring channels (Item a) to the wood trusses (Item 2). Clips spaced at 48" OC and secured to the bottom of the trusses with one 2-1/2 in. Coarse Drywall Screw with 1 in. diam washer through the center hole. Furring channels are then friction fitted into clips. Ends of channels are overlapped 6" and tied together with double strand of No. 18 AWG galvanized steel wire. Additional clips are required to hold the Gypsum Butt joints as described in Item 7. REGUPOL AMERICA --- Type SonusClip

7. Gypsum Board\* — Nom 5/8 in, thick, 48 in, wide, installed with long dimension perpendicular to resillent channels with 1 in, long Type S screws spaced 12 in, OC and located a min of 1/2 in, from side joints and 3 in, from the end joints. At end joints, two resilient channels are used, extending a min of 6 in. beyond both ends of the joint. When batt and blanket insulation, Item 3, is draped over the resilient channel/gypsum wallboard ceiling membrane, screws shall be installed at 8 in. OC. When Steel Framing Members (Item 6B) are used, one layer of nom 5/8 in. thick, 4 ft wide gypsum board is installed with long dimensions perpendicular to furring channels. Gypsum board secured to furring channels with nom 1 in, long Type S bugle-head steel screws spaced 8 in. OC in the field of the board, Gypsum board butted end joints shall be staggered minimum 48 in, and centered over main furring channels. At the gypsum board butt joints, each end of each gypsum board shall be supported by a single length of furring channel equal to the width of the gypsum board plus 3 in. on each end. The two support furring channels shall be spaced approximately 3 in. in from end joint. Screw spacing along the gypsum board butt joint and along both additional channels shall be 8 in. OC. Additional screws shall be placed in the adjacent section of gypsum board into the aforementioned 3 in. extension of the extra butt joint channels as well as into the main channel that runs between. Butt joint furring channels shall be attached with one RESILMOUNT Sound Isolation Clip at each end of the channel.

When Steel Framing Members (Item 6C) are used, one layer of nom 5/8 in. thick, 4 ft wide gypsum board is installed with long dimensions perpendicular to furring channels. Gypsum board secured to furring channels with nom 1 in, long Type S bugle-head steel screws spaced 8 in, OC in the field of the board. Gypsum board butted end joints shall be staggered minimum 48 in. and centered over main furring channels. At the gypsum board butt joints, an additional single length of furring channel shall be installed and be spaced approximately 3 in. from the butt joint (6 in. from the continuous furring channels) to support the floating end of the gypsum board. Each of these shorter sections of furring channel shall extend one truss beyond the width of the gypsum panel and be attached to the adjacent trusses with one SonusClip at every truss involved with the butt joint.

AMERICAN GYPSUM CO --- Types AG-C

secured to trusses as described in Item b.

GEORGIA-PACIFIC GYPSUM L L C -- Type TG-C

7A. Gypsum Board\* — (As an alternative to Item 7) — For use when no insulation is used. Nom 5/8 in, thick, 48 in, wide gypsum board, installed as described in item 7 with resilient channels (Item 6) spaced 24 in OC.

AMERICAN GYPSUM CO --- Type AG-C

8. Finishing System — (Not Shown) — Vinyl, dry or premixed joint compound, applied in two coats to joints and screw-heads; paper tape, 2 in, wide, embedded in first layer of compound over all joints. As an alternate, nom 3/32 in, thick veneer plaster may be applied to the entire surface of gypsum wallboard.

9. Grille — Installed in accordance with the installation instructions provided with the ceiling damper

10. Discrete Products Installed in Air-handling Spaces\* — Automatic Balancing Valve/Damper — (Not Shown - Optional) — For use with item 5L, Ruskin Company's Model CFD7T damper (CABS), Ceiling damper to be provided with plenum box per damper manufacturer's instructions with side outlet only. Entire assembly to be installed into any UL Class 0 or Class 1 flexible air duct in accordance with the instructions provided by the automatic balancing valve/damper manufacturer. METAL INDUSTRIES INC — Model ABV-4, ABV-5, ABV-6



 $\Box$ 

2

HOME

SHEET TITLE UL ASSEMBLIES - P545

PROJECT NUMBER: 22023

1. Netting — (Not shown) Fibrous, woven netting material fastened to underside of each joist with staples, with side joints overlapped.

12. Netting — (Not shown) - Non-woven polypropylene fabric fastened to underside of each joist with staples, with side joints overlapped. For use with

\* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as

Last Updated on 2023-09-08

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# UL Product **iQ**°



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- · Authorities Having Jurisdiction should be consulted in all cases as to the particular requirements covering the installation and use of UL Certified products, equipment, system, devices, and materials.
- · Authorities Having Jurisdiction should be consulted before construction.
- . Fire resistance assemblies and products are developed by the design submitter and have been investigated by UL for compliance with applicable requirements. The published information cannot always address every construction nuance encountered in the field.
- When field issues arise, it is recommended the first contact for assistance be the technical service staff provided by the product manufacturer noted for the design. Users of fire resistance assemblies are advised to consult the general Guide Information for each product category and each group of assemblies. The Guide Information includes specifics concerning alternate materials and alternate methods of construction.
- Only products which bear UL's Mark are considered Certified.

# BXUV - Fire Resistance Ratings - ANSI/UL 263 Certified for United

BXUV7 - Fire Resistance Ratings - CAN/ULC-S101 Certified for Canada See General Information for Fire-resistance Ratings - ANSI/UL 263 Certified for United States Design Criteria and Allowable Variances

See General Information for Fire Resistance Ratings - CAN/ULC-S101 Certified for Canada Design Criteria and Allowable Variances

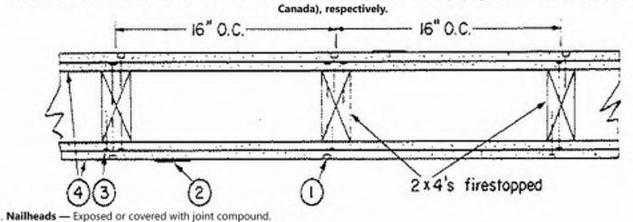
September 19, 2023

Design No. U301

Bearing Wall Rating - 2 Hr. Finish Rating — 66 Min. This design was evaluated using a load design method other than the Limit States Design Method (e.g., Working Stress Design Method). For jurisdictions employing the Limit States Design Method, such as Canada, a load restriction factor shall be used — See

\* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as

**Guide BXUV or BXUV7** 



2. Joints — Exposed joints covered with joint compound and paper tape. Joint compound and paper tape may be omitted when square edge boards are used. As an alternate, nom 3/32 in. thick gypsum veneer plaster may be applied to the entire surface of Classified veneer baseboard with the joints reinforced with paper tape.

3. Nails — 6d cement coated nails 1-7/8 in. long, 0.0915 in. shank diam, 1/4 in. diam heads, and 8d cement coated nails 2-3/8 in. long, 0.113 in. shank diam, 9/32 in. diam heads.

4. Gypsum Board\* — 5/8 in. thick, two layers applied either horizontally or vertically. Inner layer attached to study with the 1-7/8 in. nails spaced 6 in, OC, Outer layer attached to studs over inner layer with the 2-3/8 in, long nails spaced 8 in, OC, Vertical joints located over studs. All joints in face layers staggered with joints in base layers. Joints of each base layer offset with joints of base layer on opposite side. When used in widths other than 48 in., gypsum board to be installed horizontally.

When Steel Framing Members\* (Item 6 or any alternate clips) are used, base layer attached to furring channels with 1 in. long Type S bugle-head steel screws spaced max 24 in. OC; face layer attached with 1-5/8 in. fong Type S bugle-head steel screws spaced max 12 in. OC. AMERICAN GYPSUM CO - Types AGX-1, M-Glass, AG-C, AGX-11, LightRoc

BEIJING NEW BUILDING MATERIALS PUBLIC LTD CO - Type DBX-1

CABOT MANUFACTURING ULC --- Type X, 5/8 Type X, Moisture Resistant Type X, Gypsum Sheathing Type X, Mold & Mildew Resistant Type X and Mold & Mildew Resistant AR Type X, Type Blueglass Exterior Sheathing

CERTAINTEED GYPSUM INC --- Types EGRG, GlasRoc, GlasRoc-2, Type C, Type X-1, Type LWTX

CGC INC — Types AR. C. IP-AR. IP-X1, IP-X2, IPC-AR, SCX, SHX, ULIX, ULX, USGX, WRC, WRX

CERTAINTEED GYPSUM INC — Types LGFC2A, LGFC6A, LGFC-C/A, LGFC-WD, LGLLX, CLLX

GEORGIA-PACIFIC GYPSUM L L C — Types 5, 6, 9. C, DAP, DD, DA, DAPC, DGG, DS, GPFS6. LS, TG-C, Type X, Veneer Plaster Base-Type X, Water Rated-Type X, Sheathing Type-X, Soffit-Type X, GreenGlass Type X, Type LWX, Veneer Plaster Base-Type LWX, Water Rated-Type LWX, Sheathing Type-LWX, Soffit-Type LWX, Type DGLW, Water Rated-Type DGLW, Sheathing Type- DGLW, Soffit-Type DGLW, Type LW2X, Veneer Plaster Base - Type LW2X, Water Rated -Type LW2X, Sheathing - Type LW2X, Soffit - Type LW2X, Type DGL2W, Water Rated - Type DGL2W, Sheathing - Type DGL2W

NATIONAL GYPSUM CO — Types eXP-C, FSK, FSK-C, FSK-G, FSW, FSW-3, FSW-5, FSW-6, FSW-8, FSW-C, FSW-G, FSMR-C, FSL, RSX

NATIONAL GYPSUM CO — Riyadh, Saudi Arabia — Type FR, or WR.

PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM — Types C, PG-2, PG-3, PG-3W, PG-4, PG-5, PG-5W, PG-5WS, PG-9, PG-11, PG-C, PGS-WRS,

PANEL REY S A — Types PRC, PRC2, PRX, RHX, MDX, ETX, GREX, GRIX

SIAM GYPSUM INDUSTRY (SARABURI) CO LTD - Type EX-1

THAI GYPSUM PRODUCTS PCL — Type C or Type X

UNITED STATES GYPSUM CO -- Types AR, C, FRX-G, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SHX, ULIX, ULX, USGX, WRC, WRX

USG BORAL DRYWALL SFZ LLC - Types C, SCX, USGX

USG MEXICO S A DE C V -- Types AR, C, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SHX, ULX, USGX, WRC, WRX

4A. Gypsum Board\* — (As an alternate to Item 4) — Nom 3/4 in. thick, installed as described in Item 4. \*CGC INC — Types AR, IP-AR

UNITED STATES GYPSUM CO - Types AR, IP-AR

USG MEXICO S A DE C V -- Types AR, IP-AR

48. Gypsum Board\* — (As an alternate to Items 4 and 4A) — 5/8 in. thick, 2 ft wide, tongue and groove edge, applied horizontally as the outer layer to one side of the assembly. Secured as described in Item 4. Joint covering (Item 2) not required. CGC INC --- Type SHX

UNITED STATES GYPSUM CO - Type SHX

USG MEXICO S A DE C V — Type SHX

4C. Gypsum Board\* — (As an alternate to Items 4, 4A or 4B — Not Shown) — For Direct Application to Study Only- For use on one or both sides of the wall as the base layer or one or both sides of the wall as the face layer. Nom 5/8 in. thick lead backed gypsum panels with beveled, square or tapered edges, applied vertically. Vertical joints centered over studs and staggered min 1 stud cavity on opposite sides of studs. Wallboard secured to studs with 1-5/8 in. long Type W coarse thread gypsum panel steel screws spaced 8 in. OC at perimeter and in the field when applied as the base layer. When applied as the face layer screw length to be increased to 2-1/2 in. Lead batten strips required behind vertical joints of lead backed gypsum wallboard and optional at remaining stud locations. Lead batten strips, min 1-1/2 in. wide, max 10 ft long with a max thickness of 0.125 in, placed on the face of studs and attached to the stud with two 1 in, long Type S-12 pan head steel screws, F4i one at the top of the strip and one at the bottom of the strip. Lead discs or tabs may be used in lieu of or in addition to the lead batten strips or optional at other locations. Max 3/4 in. diam by max 0.125 in, thick lead discs compression fitted or adhered over steel screw heads or max 1/2 in, by 1-1/4 in, by max 0.125 in, thick lead tabs placed on gypsum boards underneath screw locations prior to the installation of the screws. Lead batten strips to have a purity of 99.9% meeting the Federal specification QQ-L-201f, Grade "C". Fasteners for face layer gypsum panels (Items 4, 4A or 4B) when installed over lead backed board to be min 2-1/2 in. Type S-12 bugle head steel screws spaced as described in Item 4.

RAY-BAR ENGINEERING CORP — Type RB-LBG.

NATIONAL GYPSUM CO --- Type SBWB

4D. Gypsum Board\* — As an Alternate to Item 4 — 5/8 in, thick applied either horizontally or vertically, Inner layers fastened to framing with 1-1/4 in, long Type W coarse thread gypsum panel steel screws spaced a max 8 in, OC, with last screw 1 in, from edge of board. Outer layers fastened to framing with 1-7/8 in. long Type W coarse thread gypsum panel steel screws spaced a max 8 in. OC, with last screw 1 in. from edge of board. When used in widths other than 48 in., gypsum board to be installed horizontally. All joints in face layers staggered with joints in base layers. Joints of each base layer offset with joints of base layer on opposite side. AMERICAN GYPSUM CO — Types AGX-1, M-Glass, AG-C, LightRoc

4E. Gypsum Board\* — (As an alternate to Items 4 through 4D) — 5/8 in. thick, 4 ft, wide, paper surfaced applied vertically and secured as described in Item 4. GEORGIA-PACIFIC GYPSUM L.L.C — Type X ComfortGuard Sound Deadening Gypsum Board

4F. Gypsum Board\* — (As an alternate to Item 4) — Not to be used with Item 6, 6A, 6B or 6C. 5/8 in. thick, 4 ft. wide, paper surfaced, applied vertically and secured as described in Item 4.

4G. Gypsum Board \* — (As an alternate to Items 4 through 4F) — Nominal 5/8 in. thick, 4 ft wide panels, applied vertically and secured as . PABCO BUILDING PRODUCTS L.L.C., DBA PABCO GYPSUM --- Types QuietRock ES

4H. Gypsum Board\* — (As an alternate to Item 4) — Not to be used with item 6, 6A, 6B, or 6C. 5/8 in. thick, 4 ft. wide, paper surfaced, applied vertically or horizontally and secured as described in Item 4. CERTAINTEED GYPSUM INC --- Type SilentFX

4l. Gypsum Board\* — (As an alternate to item 4) — 5/8 in. thick, two layers applied either horizontally or vertically. Inner layer attached to studs with 1-1/4 in. long Type W steel screws spaced 8 in. OC. Outer layer attached to studs over inner layer with 2 in. long Type W steel screws spaced 8 in. OC offset 6 in. from base layer. Vertical joints located over studs. Vertical and horizontal joints between inner and outer layers staggered. Outer layer joints covered with joint tape and compound, screwheads covered with joint compound. As an alternate to the joint compound nom 3/32 in, thick gypsum veneer plaster may be applied to the entire surface of Classified veneer baseboard. Joints reinforced. Wallboard other than 48 in, wide must be applied horizontally. The SoundBreak XP Type X Gypsum Board is not to be used with

"NATIONAL GYPSUM CO --- Types eXP-C, FSK, FSK-G, FSK-G, FSW, FSW-3, FSW-5, FSW-6, FSW-C, FSW-G, FSMR-C, SBWB

4), Gypsum Board\* — (As an alternate to Items 4) — For Direct Application to Studs Only- For use as the base layer or as the face layer, Nom 5/8 in, thick lead backed gypsum panels with beveled, square or tapered edges, applied vertically. Vertical joints centered over studs and istaggered min 1 stud cavity on opposite sides of studs. Wallboard secured to studs with 1-5/8 in, long Type W coarse thread gypsum panel steel screws spaced 8 in. OC at perimeter and in the field when applied as the base layer. When applied as the face layer screw length to be

increased to 2-1/2 in. Lead batten strips required behind vertical joints of lead backed gypsum wallboard and optional at remaining stud locations. Lead batten strips, min 2 in. wide, max 10 ft long with a max thickness of 0.140 in. placed on the face of studs and attached to the stud with two 1 in. long Type S-8 pan head steel screws, one at the top of the strip and one at the bottom of the strip. Lead discs. max 5/16 in. diam by max 0.140 in, thick, compression fitted or adhered over the screw heads, Lead batten strips and discs to have a purity of 99.5% meeting the Federal specification QQ-L-201f, Grades "B, C or D". Fasteners for face layer gypsum panels (Items 4, 4A or 4B) when installed over lead backed board to be min 2-1/2 in. Type S-12 bugle head steel screws spaced as described in Item 4. MAYCO INDUSTRIES INC — "X-Ray Shielded Gypsum"

4K. **Gypsum Board\*** — For use with Item 7 — 5/8 in. thick, two layers applied vertically. Inner layer attached to resilient channels with 1 in. long steel screws spaced 8 in, OC. Outer layer attached to resilient channels over inner layer with 1-5/8 in, long steel screws spaced 8 in, OC. - All joints in face layers staggered with joints in base layers. Joints of each base layer offset with joints of base layer on opposite side. Insulation, Items 8 or 9 is required.

AMERICAN GYPSUM CO — Types AGX-1, M-Glass, AG-C, AGX-11

NATIONAL GYPSUM CO — Types eXP-C, FSK, FSK-C, FSK-G, FSW, FSW-3, FSW-5, FSW-6, FSW-C, FSW-G, FSMR-C, SBWB

4L. Gypsum Board\* — (As an alternate to Items 4) — For Direct Application to Studs Only- For use as the base layer or as the face layer. Nom 5/8 in, thick lead backed gypsum panels with beveled, square or tapered edges, applied vertically. Vertical joints centered over studs and staggered min 1 stud cavity on opposite sides of studs. Wallboard secured to studs with 1-5/8 in. long Type W coarse thread gypsum panel steel screws spaced 8 in. OC at perimeter and in the field when applied as the base layer. When applied as the face layer screw length to be increased to 2-1/2 in. Lead batten strips required behind vertical joints of lead backed gypsum wallboard and optional at remaining stud locations. Lead batten strips, min 2 in, wide, max 8 ft long with a max thickness of 0.14 in, placed on the face of studs and attached to the stud with construction adhesive and two 1 in, long Type S-12 pan head steel screws, one at the top of the strip and one at the bottom of the strip. Lead discs, nominal 3/8 in. diam by max 0.085 in. thick, compression fitted or adhered over the screw heads. Lead batten strips and discs to have a purity of 99.9% meeting the Federal specification QQ-L-201f, Grade "C". Fasteners for face layer gypsum panels (Items 4, 4A or 4B) when installed over lead backed board to be min 2-1/2 in. Type S-12 bugle head steel screws spaced as described in Item 4. RADIATION PROTECTION PRODUCTS INC — Type RPP - Lead Lined Drywall

4M, **Gypsum Board\*** — (As an alternate to Item 4) — 5/8 in. thick, 4 ft. wide, two layers applied vertically with vertical joints centered over studs and staggered one stud cavity on opposite sides of studs. Secured as described in Item 4. CERTAINTEED GYPSUM INC — 5/8" Easi-Lite Type X

4N. Gypsum Board\* — (As an alternate to 5/8 in. Type FSW in Items 4 or 4I) — Nom. 5/16 in. thick gypsum panels applied vertically or horizontally. Two layers of 5/16 in. for every single layer of 5/8 in. gypsum board described in Item 4 or 4I. Horizontal joints on the same side need not be staggered. Inner layer of each double 5/16 in. layer attached with fasteners, as described in item 4 or 4I, spaced 24 in. OC. Outer layer of each double 5/16 in. layer attached per Item 4 or 4I. NATIONAL GYPSUM CO — Type FSW

40. Wall and Partition Facings and Accessories\* — (As an alternate to Items 4 through 4N) — Nominal 5/8 in. thick, 4 ft wide panels, applied vertically and secured as described in Item 4. PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM — Type QuietRock 527

4P. Gypsum Board\* — (As an alternate to Item 4) — 5/8 in. thick, two layers applied either horizontally or vertically. Inner layer attached to studs with 1-1/4 in, long Type W steel screws spaced 10 in, OC with the last two screws 4 and 1 in, from the edges of the board. Outer layer attached to studs over inner layer with 1-7/8 in. long Type W steel screws spaced 10 in. OC offset 5 in, from base layer with the last two screws 4 and 1 in, from the edges of the board. Vertical joints located over studs. Vertical and horizontal joints between inner and outer layers staggered. Outer layer joints covered with joint tape and compound, screwheads covered with joint compound. When used in widths other than 48 in., gypsum panels are to be installed horizontally.

. CERTAINTEED GYPSUM INC — Type LGFC6A, Type LGFC2A, Type LGFC-C/A, Type LGFC-WD, Type LGLLX

4Q. Gypsum Board\* — (As an alternate to Item 4. For use with Item 13) — Any 5/8 in. thick, 4 ft. wide, Gypsum Board UL Classified for Fire Resistance (CKNX) eligible for use in Design Nos. U305 and L501 or G512. Two layers, applied either horizontally or vertically, and screwed to studs with 1-5/8 in, long Type W coarse thread steel screws at 8 in, OC at perimeter and in the field with the last two screws 4 and 3/4 in, from the edges of the board when applied as the base layer. For the face layer, screw length to be increased to 2-1/2 in. All joints in face layers staggered with joints in base layers. When used in widths other than 48 in., gypsum panels are to be installed horizontally.

4R. Gypsum Board\* — As an Alternate to Item 4 — 5/8 in. thick applied either horizontally or vertically. Inner layers fastened to framing with . 1-1/4 in, long Type W coarse thread gypsum panel steel screws spaced a max 8 in, OC, with last screw 1 in, from edge of board. Outer layers fastened to framing with 1-7/8 in, long Type W coarse thread gypsum panel steel screws spaced a max 8 in. OC, with last screw 1 in, from edge of board. When used in widths other than 48 in., gypsum board to be installed horizontally, All joints in face layers staggered with joints in base layers. Joints of each base layer offset with joints of base layer on opposite side.

CERTAINTEED GYPSUM INC — Types EGRG, GlasRoc, GlasRoc-2, Type C, Type X-1, Easi-Lite Type X, SilentFX

4S. Gypsum Board\* — (As an alternate to Item 4. For use with Item 13A) — 5/8 in. thick, two layers applied vertically. Inner layer attached to studs with the 1-7/8 in. nails spaced 6 in. OC. Outer layer attached to studs over inner layer with the 2-3/8 in. long nails spaced 8 in. OC. 'Vertical joints located over studs. All joints in face layers staggered with joints in base layers. Joints of each base layer offset with joints of base layer on opposite side. AMERICAN GYPSUM CO — Types AGX-1

BEIJING NEW BUILDING MATERIALS PUBLIC LTD CO - Type DBX-1

CABOT MANUFACTURING ULC -- "5/8 Type X"

CGC INC — Type SCX

PANEL REY S A --- Type PRX

THAI GYPSUM PRODUCTS PCL — Type X

SIAM GYPSUM INDUSTRY (SARABURI) CO LTD --- Type EX-1

UNITED STATES GYPSUM CO — Type SCX

USG BORAL DRYWALL SFZ LLC — Types SCX

**USG MEXICO S A DE C V** — Type SCX

4T. Gypsum Board\* — (As an alternate to Item 4. For use with Item 13B) — Any 5/8 in, thick, 4 ft. wide, Gypsum Board listed in Item 4 above. Two layers applied vertically with vertical joints centered over studs and staggered one stud cavity on opposite sides of studs. All joints in outer layers staggered with joints in inner layers. Inner layer attached to studs with 1-5/8 in, long Type W coarse thread gypsum panel steel screws spaced 8 in. OC at perimeter and in the field. Outer layer attached to study over inner layer with the 2-1/2 in. long Type W coarse thread gypsum panel steel screws spaced 8 in. OC.

4U. Gypsum Board\* — (As an alternate to Item 4, For use with Item 13C) — Any 5/8 in, thick, 4 ft, wide, Gypsum Board listed in Item 4 above. Two layers applied vertically with vertical joints centered over studs and staggered one stud cavity on opposite sides of studs. All joints in outer layers staggered with joints in inner layers. Inner layer attached to studs with 1-1/4 in. long Type W screws spaced 8 in. OC at perimeter and in the field. Outer layer attached to studs over inner layer with 1-7/8 in. long Type W screws spaced 8 in. OC.

5. Molded Plastic\* — Not Shown, Optional — Solid vinyl siding mechanically secured over the outer layer to framing members in accordance with manufacturer's recommended installation details. ALSIDE, DIV OF ASSOCIATED MATERIALS INC

GENTEK BUILDING PRODUCTS LTD

VYTEC CORP

6. Steel Framing Members\* — (Optional, Not Shown) — Furring channels and Steel Framing Members as described below: A. Furring Channels — Formed of No. 25 MSG galv steel. 2-9/16 in. or 2-23/32 in. wide by 7/8 in. deep, spaced 24 in. OC perpendicular to studs. Channels secured to studs as described in Item b. Ends of adjoining channels are overlapped 6 in. and tied together with double strand of No. 18 SWG galv steel wire near each end of overlap. As an alternate, ends of adjoining channels may be overlapped 6 in. and secured together with two self-tapping #6 framing screws, min. 7/16 in. long at the midpoint of the overlap, with one screw on each flange of the channel. Wallboard attached to furring channels as described in Item 4.

B. Steel Framing Members\* — Used to attach furring channels (Item 6a) to studs. Clips spaced 48 in OC., and secured to studs with No. 8 x 2-1/2 in, coarse drywall screw through the center grommet, Furring channels are friction fitted into clips, RSIC-1 clip for use with 2-9/16 in, wide furring channels. RSIC-1 (2.75) clip for use with 2-23/32 in. wide furring channels. PAC INTERNATIONAL L L C ---- Types RSIC-1, RSIC-1 (2.75)

6A. Steel Framing Members\* — (Optional, Not Shown, As an alternate to Item 6) — Furring channels and Steel Framing Members as described below:

A. Furring Channels — Formed of No. 25 MSG galv steel. Spaced 24 in. OC perpendicular to studs. Channels secured to studs as described in Item b. Ends of adjoining channels overlapped 6 in. and tied together with double strand of No. 18 AWG galvanized steel wire, Gypsum board attached to furring channels as described in Item 4.

B. Steel Framing Members\* — Used to attach furring channels (Item 6Aa) to studs. Clips spaced 48 in. OC., and secured to studs with 2 in. coarse drywall screw with 1 in, diam washer through the center hole. Furring channels are friction fitted into clips. STUDCO BUILDING SYSTEMS — RESILMOUNT Sound Isolation Clips - Type A237R

68. Steel Framing Members\* ---- (Optional, Not Shown, As an alternate to Item 6) — Furring channels and Steel Framing Members as described below

A. Furring Channels — Formed of No. 25 MSG galv steel. Spaced 24 in. OC perpendicular to studs. Channels secured to studs as described in Item 6Bb. Ends of adjoining channels overlapped 6 in. and tied together with double strand of No. 18 AWG galvanized steel wire. Gypsum board attached to furring channels as described in Item 4.

B. Steel Framing Members\* — Used to attach furring channels (Item 6Ba) to studs. Clips spaced 48 in. OC., and secured to studs with 2-1/2 in, coarse drywall screw through the center hole. Furring channels are friction fitted into clips. REGUPOL AMERICA --- Type SonusClip

6C. Steel Framing Members\* — (Optional, Not Shown, As an alternate to Item 6) —Resilient channels and Steel Framing Members as described below: a. Resilient Channels — Formed of No. 25 MSG galv steel, spaced 24 in. OC, and perpendicular to studs. Channels secured to stude as

spaced 2-1/2 in, from the center of the overlap. Gypsum board attached to resilient channels as described in Item 4. b. Steel Framing Members\* — Used to attach resilient channels (Item 6Ca) to studs. Clips spaced 48 in. OC., and secured to studs with No. 8 x 2-1/2 in. coarse drywall screw through the center hole. Resilient channels are secured to clips with one No. 10 x 1/2 in. pan-head self-drilling

described in Item b. Ends of adjoining channels overlapped 6 in, and secured in place with two No. 8 15 x 1/2 in. Philips Modified Truss screws

KEENE BUILDING PRODUCTS CO INC — Type RC+ Assurance Clip

6D. Steel Framing Members\* — (Optional, Not Shown, As an alternate to Item 6) — Used as an alternate method to attach resilient channels to wall studs. A resilient sound isolation accessory shall be used at each attachment point of the resilient channels and spaced max 24 in. O.C. Channel ends butted and centered under the structural members and attached with one accessory at each end. Additional accessories used to hold resilient channels that support the gypsum board end joints. The accessory envelops the mounting edge of the resilient channel. The accessory and resilient channel are fastened to the structural members with the screws supplied with the accessory and per the accessory manufacturer's installation instructions. PAC INTERNATIONAL L.L.C — Type RC-1 Boost

6E Steel Framing Members\* — (Optional, Not Shown, As an alternate to Item 6) — Furring channels and Steel Framing Members as

a Furring Channels — Formed of No. 25 MSG galv steel. 2-23/32 in. wide by 7/8 in. deep, spaced 24 in. OC perpendicular to studs. Channels secured to studs as described in Item b, Ends of adjoining channels are overlapped 6 in, and tied together with double strand of No. 18 SWG galv steel wire near each end of overlap. As an alternate, ends of adjoining channels may be overlapped 6 in, and secured together with two self-tapping #6 framing screws, min. 7/16 in. long at the midpoint of the overlap, with one screw on each flange of the channel. Gypsum board attached to furring channels as described in Item 4.

b Steel Framing Members\* --- Used to attach furring channels (Item 6Ea) to studs. Clips spaced maximum 48 in. OC. Clips secured to studs with No. 8 x 2-1/2 in. coarse drywall screw through the center grommet. Furring channels are friction fitted into clips.

CLARKDIETRICH BUILDING SYSTEMS — Type ClarkDietrich Sound Clip

7. Furring Channel — Optional — Not Shown — For use on one side of the wall with Item 4K — Resilient channels, 25 MSG galv steel, spaced vertically 24 in. OC, flange portion screw attached to one side of studs with 1-1/4 in. long diamond shaped point, double lead Phillips head steel screws. When resilient channels are used, insulation, Item 8 or 9 is required.

8. Batts and Blankets\* — Required for use with resilient channels, Item 7, min. 3 in. thick mineral wool batts, placed to fill interior of wall, attached to the nom 4 in, face of the studs with staples placed 24 in, OC. ROCKWOOL --- Type SAFEnSOUND, min. 1.8 pcf.



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UL ASSEMBLIES - P545 / U301

9A. Fiber, Sprayed\* — (Optional) — As an alternate to Batts and Blankets (Item 8), Required for use with resilient channels, Item 7, Not for use with Item 6, 6A, 6B, or 6C. — Spray applied mineral wool insulation. The fiber is applied with adhesive, at a minimum density of 4.0 pcf, to completely fill the enclosed cavity in accordance with the application instructions supplied with the product. See Fiber, Sprayed (CCAZ).

AMERICAN ROCKWOOL MANUFACTURING, LLC — Type Rockwool Premium Plus

10. Wall and Partition Facings and Accessories\* — (Optional, Not Shown) — Nominal 1/2 in, thick, 4 ft wide panels, for optional use as an additional layer on one or both sides of the assembly. Panels attached in accordance with manufacturer's recommendations. When the QR-500 or QR-510 panel is installed between the wood framing and the Ut. Classified gypsum board, the required Ut. Classified gypsum board layer(s) is/are to be installed as indicated as to fastener type and spacing, except that the required fastener length shall be increased by a minimum of 1/2 in. Not evaluated or intended as a substitute for the required layer(s) of Ut. Classified Gypsum Board.

PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM — Type QuietRock QR-500 or QR-510

11. **Cementitious Backer Units\*** — (Optional Item Not Shown — For Use On Face Of 2 Hr Systems With All Standard Items Required) — 7/16 in., 1/2 in., 5/8 in., 3/4 in. or 1 in. thick, min. 32 in. wide. Applied horizontally or vertically with vertical joints centered over studs. Face layer fastened over gypsum board to studs and runners with cement board screws of adequate length to penetrate stud by a minimum of 3/8 in. for steel framing members, and a minimum of 3/4 in. for wood framing members spaced a max of 8 in. OC.

NATIONAL GYPSUM CO — Type DuraBacker, PermaBase, DuraBacker Plus, or PermaBase Plus

12. **Wall and Partition Facings and Accessories\*** — (Optional, Not Shown) - When the Wall Assembly is used as an External Wall, on the External side of the wall one of the following Wall and Partition and Facing Accessories may be used, refer to items (A) to (C) below.

A. **Non Insulated system with metal channels** — Install moisture barrier over the Gypsum Board Item 4 and Install Acry Metal Channels vertically at a horizontal spacing not greater than 24 inches OC., over the moisture barrier. Acry Metal Channels attached through the moisture barrier and the Gypsum Board to the Wood Studs using fasteners specified by the manufacturer and fasteners spaced max., 24 in.

OC. Install Acrytec Panels on Acry Metal Channels using 1-1/4" long corrosion coated stainless steel screws spaced at a max spacing of 24 inches OC, along with manufacturer's approved adhesive (3M 540 or Tremco Vulcum 116). Adhesive to be applied in a zigzag pattern along every channel. Joint treatment in between panels shall be Tremco illimod 600 pre compressed polyurethane foam sealant.

B. Insulated system with metal channels — Install moisture barrier over the Gypsum Board Item 4. Install galvanized Z girt channels specified by the manufacturer over the moisture barrier and the Gypsum Board Item 4. Z girt channels to be installed horizontally at a max, spacing of 24" OC. Z girt channels attached through the Gypsum Board and the moisture barrier to the wood studs with screws provided by the manufacturer at a max spacing of 24 inches OC. Install mineral wool insulation between the Z girts. Maximum thickness of mineral wool insulation not to exceed 6 in. As per manufacturer's instructions install Acry Metal Channels vertically over the Z girts at a max horizontal spacing of 24 in. OC. Acrytec Panels installed on Acry channel with 1-1/4" long corrosion coated stainless steel screws at a max spacing of 24 in. OC, along with manufacturers approved adhesive (3M 540 or Tremco Vulcum 116). Adhesive to be applied in a zigzag pattern along every channel. Joint treatment in between panels to be Tremco illmod 600 pre compressed polyurethane foam sealant.

C. Non insulated wood strapping system — install moisture barrier over the Gypsum Board Item 4 and install 1" x 3" wood strapping vertically at a horizontal spacing not greater than 24 inches OC., over the moisture barrier. 1" x 3" wood strapping attached through the moisture barrier and the Gypsum Board to the Wood studs using fasteners specified by the manufacturer and fasteners spaced max., 24 in. OC. Acrytec Panels to be installed on the 1" x 3" wood strapping using manufacturers approved stainless steel fasteners spaced at maximum 24 inches OC along with Tremco Vulcum 116 adhesive applied in a zigzag pattern along every wood strap. Joint treatment in between panels to be Tremco illmod 600 pre compressed polyurethane foam sealant.

D. Insulated Wood Strapping System — Install moisture barrier over the Gypsum Board Item 4, Install Extruded Polystyrene Insulation over moisture barrier and the Gypsum Board Item 4, max thickness of insulation not to exceed 4 inches. Install 1" x 3" wood strapping vertically at a horizontal spacing not greater than 24 inches OC. Wood strapping attached through the Insulation, the Gypsum Board and moisture barrier to the Wood Studs using fasteners specified by the manufacturer and fasteners spaced max. 24 in. OC. Acrytec Panels to be installed over the wood strapping using manufacturers approved stainless steel fasteners at a max spacing of 24 in. OC and Tremco Vulcum 116 adhesive applied in a zigzag pattern along every wood strap. Joint treatment in between panels to be Tremco illmod 600 pre compressed polyurethane foam sealant.

ACRYTEC PANEL INDUSTRIES — Nominal 5/8 inch thick Acrytec Panel.

13. **Foamed Plastic\*** — (Optional, Not Shown - For use with Item 4Q) — Spray applied, foamed plastic insulation, at any thickness from partial fill to completely filling stud cavity. **SES FOAM INC** — Nexseal™ 2.0 or Nexseal™ 2.0 LE Spray Foam and Sucraseal Spray Foam. For use in Bearing and Non-Load Bearing Walls.

13A. Foamed Plastic\* — (Optional, Not Shown - For use with Item 4S) — Spray applied, foamed plastic insulation, at any thickness from partial fill to completely filling stud cavity.

HOLCIM SOLUTIONS AND PRODUCTS US, LLC — Types GacoEZSpray F4500, GacoProFill FR6500R, Gaco 052N, GacoOnePass F1850, GacoOnePass Low GWP F1880, and Gaco WallFoam 183M.

13B. Foamed Plastic\* — (Optional, Not Shown - For use with Item 4T) — Spray applied, foamed plastic insulation, at any thickness from partial fill to completely filling stud cavity.

CARLISLE SPRAY FOAM INSULATION — Types SealTite ONE, SealTite Pro Closed Cell (CC), SealTite Pro Open Cell (OC), SealTite Pro OCX, SealTite Pro No

Trim 21, SealTite Pro One Zero, Foamsulate Closed Cell, Foamsulate OCX, Foamsulate 70, and Foamsulate HFO.

13C. Foamed Plastic\* - (Optional, Not Shown – For use with Item 4U) - Spray applied, foamed plastic insulation, at any thickness from partial fill to

completely filling stud cavity.

BASF CORP – Types Enertite® NM, Enertite® G, FE178®, Spraytite® 178, Spraytite® 81206, Walltite® 200, Walltite® US , Walltite® US-N, Walltite® HP+;

14. **Foamed Plastic\*** — (Optional, Not Shown - For use over Gypsum Board, Item 4) - Polyisocyanurate foamed plastic boards, any thickness applied vertically with vertical joints located over studs. May be used with Molded Plastic, Item 5 or any exterior facing, as authorized by the

Authority Having Jurisdiction and installed in accordance with the manufacturer's installation instructions.

HUNTER PANELS, A DIVISION OF CARLISLE CONSTRUCTION MATERIALS, LLC — "Xci NB", "Xci Ply"

CG NH", "Xci Foil NH"

15. **Building Units\*** — (Optional, Not Shown – For use over Gypsum Board, Item 4) Polyisocyanurate composite foamed plastic boards, any thickness, applied vertically with vertical joints located over studs. May be used with Molded Plastic, Item 5 or any exterior facing, as

authorized by the Authority Having Jurisdiction and installed in accordance with the manufacturer's installation instructions.

HUNTER PANELS, A DIVISION OF CARLISLE CONSTRUCTION MATERIALS, LLC — "Xci Class A", "Xci 286", "Xci Foif (Class A)", "Xci CG", "Xci Foif", "Xci

16. **Building Units** – (Optional Item Not Shown – For use over Gypsum Board, Item 4) 1 in., 2 in. or 3 in. thick, 4 ft. wide – Applied vertically or horizontally with vertical joints centered over studs. Fastened to studs and runners with wafer head screws of adequate length to penetrate framing by a minimum of of ¼ in., spaced a max 8 in. o.c.

NATIONAL GYPSUM CO – Type PBCI

Spraytite® Comfort XL and Walltite® XL

# \* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.

Last Updated on 2023-09-19

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# UL Product iQ\*



Design/System/Construction/Assembly Usage Disclaimer

• Authorities Having Jurisdiction should be consulted in all cases as to the particular requirements covering the installation and use of

- UL Certified products, equipment, system, devices, and materials.
- · Authorities Having Jurisdiction should be consulted before construction.
- Fire resistance assemblies and products are developed by the design submitter and have been investigated by UL for compliance with applicable requirements. The published information cannot always address every construction nuance encountered in the field.
- When field issues arise, it is recommended the first contact for assistance be the technical service staff provided by the product
  manufacturer noted for the design. Users of fire resistance assemblies are advised to consult the general Guide Information for each
  product category and each group of assemblies. The Guide Information includes specifics concerning alternate materials and alternate
  methods of construction.
- . Only products which bear UL's Mark are considered Certified.

# BXUV - Fire Resistance Ratings - ANSI/UL 263 Certified for United States BXUV7 - Fire Resistance Ratings - CAN/ULC-S101 Certified for Canada

See General Information for Fire-resistance Ratings - ANSI/UL 263 Certified for United States Design Criteria and Allowable Variances

See General Information for Fire Resistance Ratings - CAN/ULC-S101 Certified for Canada Design Criteria and Allowable Variances

Design No. **U305** 

September 19, 2023

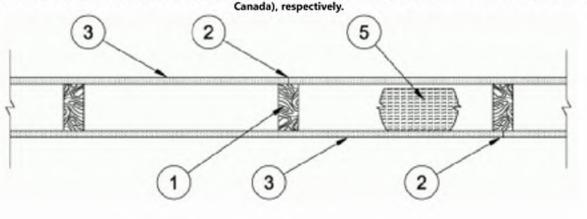
Bearing Wall Rating — 1 Hr Finish Rating — See Items 3, 3A, 3D, 3E, 3F, 3G, 3H, 3J and 3L.

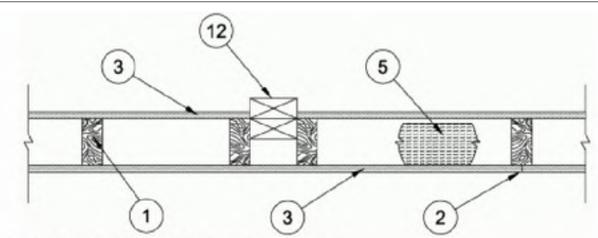
STC Rating - 56 (See Item 9)

This design was evaluated using a load design method other than the Limit States Design Method (e.g., Working Stress Design Method). For jurisdictions employing the Limit States Design Method, such as Canada, a load restriction factor shall be used — See

Guide BXUV or BXUV7

\* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as





1. Wood Studs — Nom 2 by 4 in. spaced 16 in. OC max, effectively firestopped.

Joints and Nail-Heads — Joints covered with joint compound and paper tape. Joint compound and paper tape may be omitted when
square edge boards are used. As an alternate, nom 3/32 in. thick gypsum veneer plaster may be applied to the entire surface of Classified
veneer baseboard with the joints reinforced with paper tape. Nailheads exposed or covered with joint compound.

3. Gypsum Board\* — 5/8 in. thick paper or vinyl surfaced, with beveled, square, or tapered edges, applied either horizontally or vertically. Gypsum panels nailed 7 in. OC with 6d cement coated nails 1-7/8 in. long, 0.0915 in. shank diam and 15/64 in. diam heads. When used in widths other than 48 in., gypsum panels are to be installed horizontally. For an alternate method of attachment of gypsum panels, refer to Items 6 through 6F, Steel Framing Members\*.
When Items 6, 6B, 6C, 6D, 6E, or 6F, Steel Framing Members\*, are used, gypsum panels attached to furring channels with 1 in. long Type S bugle-head

when Item 6A, Steel Framing Members\*, is used, two layers of gypsum panels attached to furring channels. Base layer attached to furring channels with 1 in. long Type S bugle-head steel screws spaced 12 in. OC. Face layer attached to furring channels with 1-5/8 in. long Type S bugle-head steel screws spaced 12 in. OC. All joints in face layers staggered with joints in base layers. One layer of gypsum board attached to opposite side of wood stud without furring

When Item 7, resilient channels are used, 5/8 in. thick, 4 ft wide gypsum panels applied vertically. Screw attached furring channels with 1 in. long, self-drilling, self-tapping Type S or S-12 steel screws spaced 8 in. OC, vertical joints located midway between studs.

AMERICAN GYPSUM CO — Types AGX-1(finish rating 23 min.), M-Glass (finish rating 23 min.), Type AGX-11 (finish rating 26 min), Type AGX-12 (finish rating 22 min), Type LightRoc (finish rating 23 min.) or Type AG-C

BEIJING NEW BUILDING MATERIALS PUBLIC LTD CO — Type DBX-1 (finish rating 24 min)

CABOT MANUFACTURING ULC — Type X (finish rating 22 min), 5/8 Type X, Moisture Resistant Type X, Gypsum Sheathing Type X, Mold & Mildew Resistant AR Type X, Type Blueglass Exterior Sheathing

CERTAINTEED GYPSUM INC — Type C, Type X-1 (finish rating 26 min); Type EGRG or GlasRoc (finish rating 23 min), GlasRoc-2, Type Habito (finish rating 26 min), Type LWTX (finish rating 18 min), Type LGFC6A (finish rating 34 min), Type LGFC2A, Type LGFC-C/A, Type LGFC-WD, Type LGLLX (finish rating 21 min), Type CLLX (finish rating 24 min)

CGC INC — Type AR (finish rating 24 min), Type C (finish rating 24 min), Type IP-AR (finish rating 24 min), Type IPC-AR (finish rating 24

GEORGIA-PACIFIC GYPSUM L L C — Type 5 (finish rating 26 min), Type 6 (finish rating 23 min), Type 9 (finish rating 26 min), Type DGG (finish rating 20 min), Type GPFS1 (finish rating 20 min), Type GPFS6 (finish rating 20 min), Type DS, Type DAP, Type DD (finish rating 20 min), Type DAP, Type DD (finish rating 20 min), Type DAP, Type DD (finish rating 20 min), Type DAP, Type DAP, Type DG, Type DAPC, Type LS (finish rating 23 min), Type X, Veneer Plaster Base - Type X, Water Rated - Type X, Sheathing - Type X, Soffit - Type X, Type LWX (finish rating 22 min), Veneer Plaster Base-Type LWX (finish rating 22 min), Water Rated-Type LWX (finish rating 22 min), Sheathing Type-LWX (finish rating 22 min), Soffit-Type LWX (finish rating 22 min), Type DGLW (finish rating 22 min), Type LWXX (finish rating 22 min), Type LWXX (finish rating 22 min), Type LWXX (finish rating 22 min), Sheathing - Type LWXX (finish rating 22 min), Soffit - Type LWXX (finish rating 22 min), Type DGLZW (finish rating 22 min), Sheathing - Type DGLZW (finish rating 22 min), Sheathing - Type DGLZW (finish rating 22 min), Sheathing - Type DGLZW (finish rating 22 min), Sheathing - Type DGLZW (finish rating 22 min)

NATIONAL GYPSUM CO — Type FSK (finish rating 20 min), Type FSK-G (finish rating 20 min), Type FSW (finish rating 20 min), Type FSW-3 (finish rating 20 min), Type FSW-5 (finish rating 22 min), Type FSW-G (finish rating 20 min), Type FSK-C (finish rating 20 min), Type FSW-C (finish rating 20 min), Type FSM-C, Type FSW-6 (finish rating 20 min), Type FSW-8, Type FSLX (finish rating 21 min), Type FSX (finish rating 26 min).

NATIONAL GYPSUM CO - Riyadh, Saudi Arabia - Type FR, or WR.

PABCO BUILDING PRODUCTS L.L.C., DBA PABCO GYPSUM — Types C, PG-2 (finish rating 20 min), PG-3 (finish rating 20 min), Types PG-3W, PG-5W (finish rating 20 min), Type PG-4 (finish rating 20 min), Type PG-6 (finish rating 23 min), Types PG-3WS, PG-5WS, PGS-WRS (finish rating 20 min), Types PG-5, PG-9 (finish rating 26 min), PG-11 PG-13 (Nails increased to 2 in.), Type PG-C or PGI (finish rating 26 min)

PANEL REY S A — Type ARX, GREX, GRIX, PRX, PRC, PRC2; Types RHX, Guard Rey, MDX, ETX (finish rating 22 min), PRX2 (finish rating 21 min)

SIAM GYPSUM INDUSTRY (SARABURI) CO LTD — Type EX-1 (finish rating 26 min)

THAI GYPSUM PRODUCTS PCL — Type C, Type X (finish rating 26 min)

UNITED STATES GYPSUM CO — Type AR (finish rating 24 min), Type C (finish rating 24 min), Type FRX-G (finish rating 29 min), Type IP-AR (finish rating 24 min), Type IP-AR (finish rating 24 min), Type IP-X2 (finish rating 24 min), Type SHX (finish rating 24 min), Type SHX (finish rating 24 min), Type SGX (finish rating 24 min), Type ULX (finish rating 22 min), Type WRX (finish rating 24 min), Type WRC (finish rating 24 min), Type ULX (finish rating 20 min)

USG BORAL DRYWALL SFZ LLC — Type SGX (finish rating 24 min).

**USG MEXICO S A DE C V** — Type AR (finish rating 24 min), Type C (finish rating 24 min), Type WRX (finish rating 24 min), Type WRX (finish rating 24 min), Type IP-X1 (finish rating 24 min), Type IP-X1 (finish rating 24 min), Type IP-AR (finish rating 24 min), T

3A. **Gypsum Board\*** — (As an alternate to Item 3) — 5/8 in. thick gypsum panels, with beveled, square, or tapered edges, applied either horizontally or vertically. Gypsum panels fastened to framing with 1-1/4 in. long Type W coarse thread gypsum panel steel screws spaced a max 8 in. OC, with last screw 1 in. from edge of board. When used in widths of other than 48 in., gypsum boards are to be installed horizontally.

AMERICAN GYPSUM CO — Types AGX-1 (finish rating 25 min.), M-Glass (finish rating 25 min.), AG-C (finish rating 25 min.), LighttRoc (finish rating 25 min.)

CERTAINTEED GYPSUM INC — Type C, Type X-1 (finish rating 26 min), Type EGRG or GlasRoc, LWTX.

CGC INC — Type AR (finish rating 24 min), Type C (finish rating 24 min), Type IP-AR (finish rating 24 min), Type IP-X1 (finish rating 24 min), Type IP-X2 (finish rating 24 min), Type SCX (finish rating 24 min), Type SHX (finish rating 24 min), Type WRC (finish rating 24 min), Type WRX (finish rating 24 min)

NATIONAL GYPSUM CO — Type FSW (finish rating 24 min)

UNITED STATES GYPSUM CO — Type AR (finish rating 24 min), Type SCX (finish rating 24 min), Type SGX (finish rating 24 min), Type C (finish rating 24 min), Type WRX (finish rating 24 min), Type WRX (finish rating 24 min), Type WRX (finish rating 24 min), Type FRX-G (finish rating 24 min), Type FRX-G (finish rating 24 min), Type IP-AR (finish rating 24 min), Type IP-AR (finish rating 24 min)

USG BORAL DRYWALL SFZ LLC — Types C, SCX, SGX (finish rating 24 min).

USG MEXICO S A DE C V — Type AR (finish rating 24 min), Type C (finish rating 24 min), Type WRX (finish rating 24 min), Type WRX (finish rating 24 min), Type IP-X1 (finish rating 24 min), Type IP-X2 (finish rating 24 min), Type SHX (finish rating 24 min), Type IP-AR (finish rating 24 min), Type IP-AR (finish rating 24 min)

3B. **Gypsum Board\*** — (As an alternate to Item 3) — Nom 3/4 in. thick, installed with 1-7/8 in. long cement coated nails as described in Item 3 or 1-3/8 in. long Type W coarse thread gypsum panel steel screws as described in Item 3A. **CGC INC** — Types AR IP-AR

UNITED STATES GYPSUM CO — Types AR, IP-AR

USG MEXICO S A DE C V — Types AR, IP-AR

3C. **Gypsum Board\*** — (As an alternate to Items 3, 3A and 3B) — 5/8 in. thick, 2 ft wide, tongue and groove edge, applied horizontally to one side of the assembly. Installed with 1-7/8 in. long cement coated nails as described in Item 3 or 1-1/4 in. long Type W coarse thread gypsum panel steel screws as described in Item 3A. Joint covering (Item 2) not required. **CGC INC** — Type SHX

UNITED STATES GYPSUM CO — Type SHX

USG MEXICO S A DE C V — Type SHX

3D. **Gypsum Board\*** — (As an alternate to Items 3, 3A, 3B, or 3C — Not Shown) — For Direct Application to Studs Only- Nom 5/8 in. thick lead backed gypsum panels with beveled, square or tapered edges, applied vertically. Vertical joints centered over studs and staggered min 1 stud cavity on opposite sides of studs. Wallboard secured to studs with 1-5/8 in. long Type W coarse thread gypsum panel steel screws spaced 8 in. OC at perimeter and in the field. Lead batten strips required behind vertical joints of lead backed gypsum wallboard and optional at remaining stud locations. Lead batten strips, min 1-1/2 in. wide, max 10 ft long with a max thickness of 0.125 in. placed on the face of studs and attached to the stud with two 1 in. long Type S-12 pan head steel screws, one at the top of the strip and one at the bottom of the strip. Lead discs or tabs may be used in lieu of or in addition to the lead batten strips or optional at other locations. Max 3/4 in. diam by max 0.125 in. thick lead discs compression fitted or adhered over steel screw heads or max 1/2 in. by 1-1/4 in. by max 0.125 in. thick lead tabs placed on gypsum boards underneath screw locations prior to the installation of the screws. Lead batten strips to have a purity of 99.9% meeting the Federal specification QQ-L-201f, Grade "C". **RAY-BAR ENGINEERING CORP** — Type R8-LBG (finish rating 24 min)

3E. **Gypsum Board\*** — (As an alternate to Items 3, 3A, 3B, 3C, and 3D) — 5/8 in. thick gypsum panels, with square edges, applied either horizontally or vertically. Gypsum panels fastened to framing with 1-1/4 in. long Type W coarse thread gypsum panel steel screws spaced a max 8 in. OC, with last 2 screws 1 and 4 in. from edge of board or nailed 7 in. OC with 6d cement coated nails 1-7/8 in. long, 0.0915 in. shank diam and 15/64 in. diam heads. When used in widths of other than 48 in., gypsum boards are to be installed horizontally. **GEORGIA-PACIFIC GYPSUM L L C** — Type DGG (finish rating 20 min), GreenGlass Type X (finish rating 23 min)

3F. **Gypsum Board\*** — (As an alternate to Items 3, 3A, 3B, 3C, 3D, and 3E) — 5/8 in. glass-mat faced with square edges, applied either horizontally or vertically. Gypsum panels nailed 7 in. OC around the perimeter and in the field with 6d cement coated nails 1-7/8 in. long, 0.0915 in. shank diam and 15/64 in. diam heads. Nails shall be placed 1 inch and 3 inch from horizontal joints and 7 inch OC thereafter. **CGC INC** — Type USGX (finish rating 22 min)

UNITED STATES GYPSUM CO — Type USGX (finish rating 22 min.)

USG BORAL DRYWALL SFZ LLC — , Type USGX (finish rating 22 min.)

USG MEXICO S A DE C V — Type USGX (finish rating 22 min.)

3G. **Gypsum Board\*** — (As an alternate to Items 3 through 3F) — 5/8 in: thick paper surfaced applied vertically. Gypsum panels nailed 7 in. OC with 6d cement coated nails 1-7/8 in. long, 0.0915 in. shank diam and 15/64 in. diam heads. **GEORGIA-PACIFIC GYPSUM L.L.C** — Type X ComfortGuard Sound Deadening Gypsum Board (finish rating 27 min)

3H. **Gypsum Board\*** — (As an alternate to Items 3) — Not to be used with items 6 or 7, 5/8 in. thick paper surfaced applied vertically only. Gypsum panels nailed 7 in. OC with 6d cement coated nails 1-7/8 in. long, 0.0915 in. shank diam and 15/64 in. diam heads.

NATIONAL GYPSUM CO — Type SBWB

31. **Gypsum Board\*** — (As an alternate to Items 3 through 3H, Not Shown) — Nominal 5/8 in, thick, 4 ft wide panels, applied vertically. Panels nailed 7 in. OC with 6d cement coated nails 1-7/8 in, long, 0.0915 in, shank diam and 15/64 in, diam heads. Panel joints covered with paper tape and two layers of joint compound. Nailheads covered with two layers of joint compound.

PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM — Type QuietRock ES (finish rating 20 min)

3J. **Gypsum Board\*** — (As an alternate to Item 3) — 5/8 in. thick paper surfaced applied vertically or horizontally. Gypsum panels secured with 1-1/4 in. Type W coarse thread gypsum panel steel screws spaced a maximum of 12 in. OC. **CERTAINTEED GYPSUM INC** — Type SilentFX

3K. **Gypsum Board\*** — (As an alternate to Item 3) — 5/8 in. thick gypsum panels, with beveled, square, or tapered edges, applied either horizontally or vertically. Gypsum panels fastened to framing with 1-1/4 in. long Type W coarse thread gypsum panel steel screws spaced a maximum 8 in. OC with the last screw 1 in. from the edge of the board. When used in widths other than 48 in., gypsum panels are to be installed horizontally.

NATIONAL GYPSUM CO — Type FSK (finish rating 20 min), Type FSK-G (finish rating 20 min), Type FSW (finish rating 20 min), Type FSW-2 (finish rating 20 min), Type FSW-3 (finish rating 20 min), Type FSW-5 (finish rating 20 min), Type FSW-G (finish rating 20 min), Type FSM-C (finish rating 20 min), Type FSM-C, Type FSW-6 (finish rating 20 min), Type FSW-G (finish rating 24 min).

3L. **Gypsum Board\*** — (As an alternate to Item 3) — For Direct Application to Studs Only — Nom 5/8 in. thick lead backed gypsum panels with beveled, square or tapered edges, applied vertically. Vertical joints centered over studs and staggered min 1 stud cavity on opposite sides of studs. Wallboard secured to studs with 1–5/8 in. long Type W coarse thread gypsum panel steel screws spaced 8 in. OC at perimeter and in the field. Lead batten strips required behind vertical joints of lead backed gypsum wallboard and optional at remaining stud locations. Lead batten strips, min 2 in. wide, max 10 ft long with a max thickness of 0.140 in. placed on the face of studs and attached to the stud with two 1 in. long Type S-8 pan head steel screws, one at the top of the strip and one at the bottom of the strip. Lead discs, max 5/16 in. diam by max 0.140 in. thick, compression fitted or adhered over the screw heads. Lead batten strips to have a purity of 99.5% meeting the Federal specification QQ-L-201f, Grades "8, C or D".

MAYCO INDUSTRIES INC — "X-Ray Shielded Gypsum"

3M. **Gypsum Board\*** — (As an alternate to Items 3) — For Direct Application to Studs Only — For use as the base layer or as the face layer. Nom 5/8 in. thick lead backed gypsum panels with beveled, square or tapered edges, applied vertically. Vertical joints centered over studs and staggered min 1 stud cavity on opposite sides of studs. Wallboard secured to studs with 1-5/8 in. long Type W coarse thread gypsum panel steel screws spaced 8 in. OC at perimeter and in the field when applied as the base layer. When applied as the face layer screw length to be increased to 2-1/2 in. Lead batten strips required behind vertical joints of lead backed gypsum wallboard and optional at remaining stud locations. Lead batten strips, min 2 in. wide, max 8 ft long with a max thickness of 0.14 in. placed on the face of studs and attached to the stud with construction adhesive and two 1 in. long Type S-12 pan head steel screws, one at the top of the strip and one at the bottom of the strip. Lead discs, nominal 3/8 in. diam by max 0.085 in. thick, Compression fitted or adhered over the screw heads, Lead batten strips and discs to have a purity of 99.9% meeting the Federal specification QQ-L-201f, Grade "C". Fasteners for face layer gypsum panels (Items 4, 4A or 4B) when installed over lead backed board to be min 2-1/2 in. Type S-12 bugle head steel screws spaced as described in Item 4. **RADIATION PROTECTION PRODUCTS INC** — Type RPP - Lead Lined Drywali

3N. **Gypsum Board\*** — (As an alternate to Item 3) — 5/8 in. thick, 4 ft. wide, applied horizontally or vertically with vertical joints centered over studs and staggered one stud cavity on opposite sides of studs. Secured as described in Item 3 or 3A. **CERTAINTEED GYPSUM INC** — Easi-Lite Type X (finish rating 24 min), Easi-Lite Type X-2 (finish rating 24 min)

3O. Wall and Partition Facings and Accessories\* — (As an alternate to Item 3, Not Shown) — Nominal 5/8 in. thick, 4 ft wide panels, applied vertically. Panels nailed 7 in. OC with 6d cement coated nails 1-7/8 in. long, 0.0915 in. shank diam and 15/64 in. diam heads. Panel joints covered with paper tape and two layers of joint compound. Nailheads covered with two layers of joint compound.

PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM — Type QuietRock 527 (finish rating 24 min).

3P. **Gypsum Board\*** — (As an alternate to Item 3, Not Shown) — Two layers nom. 5/16 in. thick gypsum panels applied vertically or horizontally. Horizontal edge joints and horizontal butt joints on opposite sides of studs need not be staggered or backed by wood studs. Horizontal joints on the same side between face and base layers need not be staggered. Base layer gypsum panels fastened to studs with 1-1/4 in. long drywall nails spaced 8 in. OC. Face layer gypsum panels fastened to studs with 1-7/8 in. long drywall nails spaced 8 in. OC starting with a 4" stagger.

NATIONAL GYPSUM CO — Type FSW (finish rating 25 min)

3Q. **Gypsum Board\*** — (As an alternate to Item 3) — 5/8 in. thick gypsum panels, with beveled, square, or tapered edges, applied either horizontally or vertically. Gypsum panels fastened to framing with 1-1/4 in. long Type W coarse thread gypsum panel steel screws spaced a maximum 10 in. OC with the last two screws 4 and 1 in. from the edges of the board. When used in widths other than 48 in., gypsum panels are to be installed horizontally. **CERTAINTEED GYPSUM INC** — Type LGFC6A (finish rating 21 min), Type LGFC2A, Type LGFC-C/A, Type LGFC-WD, Type LGLLX

3R. **Gypsum Board\*** — (As an alternate to Item 3. For use with Item 5H) — Any 5/8 in. thick, 4 ft. wide, Gypsum Board listed in Item 3 above. Applied either horizontally or vertically, and screwed to panels with 1-5/8 in. long Type W coarse thread steel screws at 8 in. OC at perimeter

and in the field with the last two screws 4 and 3/4 in, from the edges of the board when applied as the base layer. When used in widths other than 48 in., gypsum panels are to be installed horizontally.

3S. Gypsum Board\* — 3/4 in. thick paper or vinyl surfaced, with beveled, square, or tapered edges, applied either horizontally or vertically.

PABCO BUILDING PRODUCTS L.L.C, DBA PABCO GYPSUM — Type PG-13

3T. Wall and Partition Facings and Accessories\* — (As an alternate to 5/8 in. thick board as outlined in Item 3) — Nominal 1-3/8 in. thick, 4 ft wide panels, applied vertically or horizontally. Fastened with #6 x 2 in. long drywall screws spaced 8 in. OC along the perimeter and 12 in.

PABCO BUILDING PRODUCTS L.L.C, DBA PABCO GYPSUM — Type QuietRock 545

3U. Gypsum Board\* — (As an alternate to Item 3 - For use with Foamed Plastic products, Item 5J) — 5/8 in. thick, 4 ft. wide, applied vertically

with vertical joints centered over studs and staggered one stud cavity on opposite sides of studs. Gypsum panels nailed 7 in. OC with 6d cement coated nails 1-7/8 in. long, 0.0915 in. shank diam and 15/64 in. diam heads.

AMERICAN GYPSUM CO — Types AGX-1

BEIJING NEW BUILDING MATERIALS PUBLIC LTD CO -- Type DBX-1

Gypsum panels secured as described in Item 3 with nail length increased to 2 in.

CABOT MANUFACTURING ULC — Type X

CERTAINTEED GYPSUM INC — Type X

CGC INC — Type SCX

PANEL REY S A — Type ARX, PRX

SIAM GYPSUM INDUSTRY (SARABURI) CO LTD — Type EX-1

THAI GYPSUM PRODUCTS PCL — Type X

UNITED STATES GYPSUM CO — Types SCX and SGX

USG BORAL DRYWALL SFZ LLC — Types SCX and SGX

USG MEXICO S A DE C V — Type SCX

3V. **Gypsum Board\*** — (As an alternate to Item 3. For use with Item 5K) — Any 5/8 in. thick, 4 ft. wide, Gypsum Board listed in Item 3 above. Applied vertically with vertical joints centered over studs and staggered one stud cavity on opposite sides of studs. Gypsum panels secured to studs with 1-5/8 in. long Type W coarse thread gypsum panel steel screws spaced 8 in. OC at perimeter and in the field.

3W. **Gypsum Board\*** — (As an alternate to Item 3. For use with Item 5L) — Any 5/8 in, thick, 4 ft. wide, Gypsum Board listed in Item 3 above. Applied vertically with vertical joints centered over studs and staggered one stud cavity on opposite sides of studs. Gypsum panels secured to studs with 1-1/4 in, long Type W screws spaced 8 in, OC at perimeter and in the field.

4. Steel Corner Fasteners — (Optional) — For use at wall corners. Channel shaped, 2 in long by 1 in. high on the back side with two 1/8 in. wide cleats protruding into the 5/8 in. wide channel, fabricated from 24 gauge galv steel. Fasteners applied only to the end or cut edge (not along tapered edges) of the gypsum board, no greater than 2 in. from corner of gypsum board, max spacing 16 in. OC. Nailed to adjacent stud through tab using one No. 6d cement coated nail per fastener. Corners of wall board shall be nailed to top and bottom plate using No. 6d cement coated nails.

5. Batts and Blankets\* — (Optional — Required when Item 6A is used (RC-1)) — Glass fiber or mineral wool insulation. Placed to completely or partially fill the stud cavities. When Item 6A is used, glass fiber or mineral wool insulation shall be friction-fitted to completely fill the stud cavities.

CERTAINTEED CORP

S P.C.
TECTURE
OR DESIGN

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ARCHITE 1NTERIOR ENGINEI P.C.

s Grand Boulevard
as City, MO 64108-1404
6.472.1448
w.rosemann.com
24 Rosemann & Associates, P.



# ARCHITUM 04/17/2

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SHEET TITLE
UL ASSEMBLIES - U301 / U305

PROJECT NUMBER: 22023

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G-206

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MANSON INSULATION INC

**ROCKWOOL** — Types Acoustical Fire Batts and Type AFB, min. density 1.69 pcf / 27.0 kg/m<sup>3</sup>

ROCKWOOL MALAYSIA SDN BHD --- Type Acoustical Fire Batts

ROCK WOOL MANUFACTURING CO - Delta Board

THERMAFIBER INC --- Type SAFB, SAFB FF

5A. Fiber, Sprayed\* — (Not Shown — Not for use with Item 6) — As an alternate to Batts and Blankets (Item 5) — Spray applied cellulose material. The fiber is applied with water to completely fill the enclosed cavity in accordance with the application instructions supplied with the product with a nominal dry density of 2.7 lb/ft<sup>3</sup>. Alternate Application Method: The fiber is applied without water or adhesive at a nominal dry density of 3.5 lb/ft<sup>3</sup>, in accordance with the application instructions supplied with the product. When Item 6B is used, Fiber, Sprayed shall be . INS735, INS745, INS750LD, INS765LD, INS773LD or SANCTUARY.

Applegate Greenfiber Acquisition LLC --- Insulmax and SANCTUARY for use with wet or dry application, INS515LD and INS541LD are to be used for dry

58. Fiber, Sprayed\* — (Not Shown - Not for use with Item 6) — As an alternate to Batts and Blankets (Item 5) - Spray applied cellulose insulation material. The fiber is applied with water to interior surfaces in accordance with the application instructions supplied with the product. Applied to completely fill the enclosed cavity. Minimum dry density of 4.3 pounds per cubic ft. NU-WOOL CO INC --- Cellulose Insulation

5C. Batts and Blankets\* — Required for use with resilient channels, Item 7, 3 in. thick mineral wool batts, friction-fitted to fill interior of wall. THERMAFIBER INC — Type SAFB, SAFB FF

5D. Glass Fiber Insulation — (As an alternate to Item 5C) — 3 in. thick glass fiber batts bearing the UL Classification Marking as to Surface Burning and/or Fire Resistance, friction-fitted to fill the interior of the walf. See Batts and Blankets (BKNV or 8ZJZ) Categories for names of

5E. Batts and Blankets\* — (Required for use with Wall and Partition Facings and Accessories, Item 3D) — Glass fiber insulation, nom 3-1/2 in. thick, min, density of 0.80 pcf, with a flame spread of 25 or less and a smoke developed of 50 or less, friction-fitted to completely fill the stud cavities. See Batts and Blankets Category (BKNV) for names of manufacturers.

5F. Fiber, Sprayed\* — (Optional, Not Shown — Not for use with Items 6, 6A, 6B, 6C, or 6D) — As an alternate to Batts and Blankets (Item 5) and Item 5A - Spray applied granulated mineral fiber material. The fiber is applied with adhesive, at a minimum density of 4.0 pcf, to completely fill the enclosed cavity in accordance with the application instructions supplied with the product. See Fiber, Sprayed (CCAZ). AMERICAN ROCKWOOL MANUFACTURING, LLC — Type Rockwool Premium Plus

5G. Fiber, Sprayed\* — (Optional, Not Shown — Not for use with Items 6, 6A, 6B, 6C, or 6D). — As an alternate to Batts and Blankets (Item 5) and Item 5A - Brown Colored Spray applied cellulose fiber, The fiber is applied with water to completely fill the enclosed stud cavity in accordance with the application instructions supplied with the product. The minimum dry density shall be 4.30 lbs/ft<sup>3</sup>.

5H. Foamed Plastic\* — (Optional -For use with Item 3R) — Spray applied, foamed plastic insulation, at any thickness from partial fill to SES FOAM INC --- Nexseal™ 2,0 or Nexseal™ 2.0 LE Spray Foam and Sucraseal Spray Foam.

INTERNATIONAL CELLULOSE CORP — Celbar-RL

GWP F1880, and Gaco WallFoam 183M

Spraytite® Comfort XL, and Walltite® XL.

channel. Gypsum board attached to furring channels as described in Item 3.

5J. Foamed Plastic\* — (Optional, Not Shown - For use with Item 3U) — Spray applied, foamed plastic insulation, at any thickness from partial fill to completely filling stud cavity. HOLCIM SOLUTIONS AND PRODUCTS US, LLC — Types GacoEZSpray F4500, GacoProFill FR6500R, Gaco 052N, GacoOnePass F1850, GacoOnePass Low

5K. Foamed Plastic\* — (Optional, Not Shown - For use with Item 3V) — Spray applied, foamed plastic insulation, at any thickness from partial fill to completely filling stud cavity.

Trim 21, SealTite Pro One Zero, Foamsulate Closed Cell, Foamsulate OCX, Foamsulate 70, and Foamsulate HFO. 5L. Foamed Plastic\* - (Optional, Not Shown -- For use with Item 3W) - Spray applied, foamed plastic insulation, at any thickness from partial fill to

BASF CORP - Types Enertite® NM, Enertite® G, FE178®, Spraytite® 178, Spraytite® 81206, Walltite® 200, Walltite® US, Walltite® US-N, Walltite® HP+,

6. Steel Framing Members\* — (Optional, Not Shown) — Furring channels and Steel Framing Members as described below: a. Furring Channels — Formed of No. 25 MSG galv steel. 2-9/16 in. or 2-23/32 in. wide by 7/8 in. deep, spaced 24 in. OC perpendicular to studs. Channels secured to studs as described in Item b. Ends of adjoining channels are overlapped 6 in. and tied together with double strand of No. 18 SWG galv steel wire near each end of overlap. As an alternate, ends of adjoining channels may be overlapped 6 in. and secured together with two self-tapping #6 framing screws, min. 7/16 in. long at the midpoint of the overlap, with one screw on each flange of the

b. Steel Framing Members\* — Used to attach furring channels (Item 6a) to studs. Clips spaced 48 in. OC. RSIC-1 and RSIC-1 (2.75) clips secured to studs with No. 8 x 2-1/2 in, coarse drywall screw through the center grommet, RSIC-V and RSIC-V (2.75) clips secured to studs with No. 8 x 1-1/2 in. coarse drywall screw through the center hole. Furring channels are friction fitted into clips, RSIC-1 and RSIC-V clips for use with 2-9/16 in, wide furring channels. RSIC-1 (2.75) and RSIC-V (2.75) clips for use with 2-23/32 in, wide furring channels. PAC INTERNATIONAL L L C — Types RSIC-1, RSIC-V, RSIC-1 (2.75), RSIC-V (2.75)

6A. Steel Framing Members\* — (Optional, Not Shown) — Furring channels and Steel Framing Members on one side of studs as described

a. Furring Channels — Formed of No. 25 MSG galv steel, spaced 24 in. OC perpendicular to studs. Channels secured to studs as described in Item b. Ends of adjoining channels are overlapped 6 in. and tied together with double strand of No. 18 SWG galv steel wire near each end of overlap, Batts and Blankets placed in stud cavity as described in Item 5. Two layers of gypsum board attached to furring channels as described

b. Steel Framing Members\* — Used to attach furring channels (Item 6Aa) to one side of studs only. Clips spaced 48 in. OC., and secured to studs with two No. 8 x 2-1/2 in. coarse drywall screws, one through the hole at each end of the clip. Furring channels are friction fitted into

KINETICS NOISE CONTROL INC — Type Isomax

68. Steel Framing Members\* — (Optional, Not Shown) — Furring channels and Steel Framing Members as described below. a. Furring Channels — Formed of No. 25 MSG galv steel, 2-3/8 in, wide by 7/8 in, deep, spaced 24 in. OC perpendicular to studs. Channels secured to studs as described in Item b. Ends of adjoining channels are overlapped 6 in, and tied together with double strand of No. 18 SWG galv steel wire near each end of overlap. As an alternate, ends of adjoining channels may be overlapped 6 in. and secured together with two self-tapping #6 framing screws, min. 7/16 in. long at the midpoint of the overlap, with one screw on each flange of the channel. Gypsum board attached to furring channels as described in Item 3.

b. Steel Framing Members\* — Used to attach furring channels (Item 6Ba) to studs. Clips spaced 48 in: OC. Genie clips secured to studs with No. 8 x 1-1/2 in. coarse drywall screw through the center hole. Furring channels are friction fitted into clips. PLITEQ INC --- Type Genie Clip

6C. Steel Framing Members\* — (Optional, Not Shown) — Furring channels and Steel Framing Members as described below: a. Furring Channels — Formed of No. 25 MSG galv steel. Spaced 24 in. OC perpendicular to studs. Channels secured to stude as described in Item b. Ends of adjoining channels overlapped 6 in. and tied together with double strand of No. 18 AWG galvanized steel wire. Gypsum board attached to furring channels as described in Item 3.

b. Steel Framing Members\* — Used to attach furring channels (Item 6Ca) to studs. Clips spaced 48 in. OC., and secured to studs with No. 2 in, coarse drywall screw with 1 in, diam washer through the center hole. Furring channels are friction fitted into clips. STUDCO BUILDING SYSTEMS — RESILMOUNT Sound Isolation Clips - Type A237 or A237R

6D. Steel Framing Members\* — (Optional, Not Shown) — Furring channels and Steel Framing Members as described below: a. Furring Channels — Formed of No. 25 MSG galv steel, spaced 24 in. OC, and perpendicular to studs. Channels secured to studs as described in Item b. Ends of adjoining channels overlapped 6 in. and secured in place with a double strand of No. 18 AWG twisted steel wire. 'Gypsum board attached to furring channels as described in Item 3.

b. Steel Framing Members\* — Used to attach furring channels (Item 6Da) to studs. Clips spaced 48 in. OC., and secured to studs with No. 8 x 2-1/2 in. coarse drywall screw through the center hole. Furring channels are friction fitted into clips. REGUPOL AMERICA — Type SonusClip

6E. Steel Framing Members\* — (Optional, Not Shown) — Resilient channels and Steel Framing Members as described below: a. Resilient Channels — Formed of No. 25 MSG galv steel, spaced 24 in. OC, and perpendicular to studs. Channels secured to studs as described in Item b. Ends of adjoining channels overlapped 6 in. and secured in place with two No. 8 15 x 1/2 in. Philips Modified Truss screws spaced 2-1/2 in, from the center of the overlap, Gypsum board attached to resilient channels as described in Item 3.

b. Steel Framing Members\* — Used to attach resilient channels (Item 6Ea) to studs. Clips spaced 48 in. OC., and secured to studs with No. 8 x 2-1/2 in, coarse drywall screw through the center hole. Resilient channels are secured to clips with one No. 10 x 1/2 in, pan-head self-drilling

KEENE BUILDING PRODUCTS CO INC - Type RC+ Assurance Clip

6F. Steel Framing Members\* — (Optional, Not Shown) — Furning channels and Steel Framing Members as described below: a. Furring Channels -- Formed of No. 25 MSG galv steel. 2-23/32 in. wide by 7/8 in. deep, spaced 24 in. OC perpendicular to studs. Channels secured to studs as described in Item b. Ends of adjoining channels are overlapped 6 in, and tied together with double strand of No. 18 SWG galv steel wire near each end of overlap. As an alternate, ends of adjoining channels may be overlapped 6 in. and secured together with two self-tapping #6 framing screws, min. 7/16 in, long at the midpoint of the overlap, with one screw on each flange of the channel, Gypsum board attached to furring channels as described in Item 3.

b. Steel Framing Members\* — Used to attach furring channels (Item 6Fa) to studs. Clips spaced 48 in. OC. Clips secured to studs with No. 8 x 2-1/2 in. coarse drywall screw through the center grommet. Furring channels are friction fitted into clips. CLARKDIETRICH BUILDING SYSTEMS — Type ClarkDietrich Sound Clip

6G. Steel Framing Members\* — (Optional, Not Shown) — Used as an alternate method to attach resilient channels to wall studs. A resilient sound isolation accessory shall be used at each attachment point of the resilient channels and spaced max 16 in. O.C. Channel ends butted and centered under the structural members and attached with one accessory at each end. Additional accessories used to hold resilient channels that support the gypsum board end joints. The accessory envelops the mounting edge of the resilient channel. The accessory and resilient channel are fastened to the structural members with the screws supplied with the accessory and per the accessory manufacturer's installation instructions. PAC INTERNATIONAL L L C — Type RC-1 Boost

7. Furring Channel — Optional — Not Shown — For use on one side of the wall - Resilient channels, 25 MSG galv steel, spaced vertically 24 in. QC, flange portion screw attached to one side of studs with 1-1/4 in, long diamond shaped point, double lead Phillips head steel screws. When resilient channels are used, insulation, Items 5C or 5D is required.

8. Caulking and Sealants — (Not Shown, Optional) — A bead of acoustical sealant applied around the partition perimeter for sound control.

9. STC Rating — The STC Rating of the wall assembly is 56 when it is constructed as described by Items 1 through 6, except:

A. Item 2, above — Nailheads Shall be covered with joint compound.

B. Item 2, above — Joints As described, shall be covered with fiber tape and joint compound.

C. Item 5, above — Batts and Blankets\* The cavities formed by the studs shall be friction fit with R-19 unfaced fiberglass insulation

batts measuring 6-1/4 in, thick and 15-1/4 in, wide.

D. Item 6, above — Steel Framing Members\* Type RSIC-1 clips shall be used to attach gypsum board to studs on either side of the wall

E. Item 8, above — Caulking and Sealants (Not Shown) A bead of acoustical sealant shall be applied around the partition perimeter for

F. Steel Corner Fasteners (Item 4), Fiber, Sprayed (Items 5A and 5B) and Steel Framing Members (Item 6A), not evaluated as alternatives for obtaining STC rating.

10. Wall and Partition Facings and Accessories\* — (Optional, Not Shown) — Nominal 1/2 in, thick, 4 ft wide panels, for optional use as an additional layer on one or both sides of the assembly. Panels attached in accordance with manufacturer's recommendations. When the

QR-500 or QR-510 panel is installed between the wood framing and the UL Classified gypsum board, the required UL Classified gypsum board layer(s) is/are to be installed as indicated as to fastener type and spacing, except that the required fastener length shall be increased by a minimum of 1/2 in. Not evaluated or intended as a substitute for the required laver(s) of UL Classified Gyosum Board PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM --- Type QuietRock QR-500 and QR-510

11. Cementitious Backer Units\* — (Optional Item Not Shown — For Use On Face Of 1 Hr Systems With All Standard Items Required) - 7/16 in., 1/2 in., 5/8 in., 3/4 in. or 1 in. thick, min. 32 in. wide. Applied vertically or horizontally with vertical joints centered over studs. Fastened to studs and runners with cement board screws of adequate length to penetrate stud by a minimum of 3/8 in. for steel framing members, and a minimum of 3/4 in. for wood framing members spaced a max of 8 in. OC. When 4 ft. wide boards are used, horizontal joints need not be

backed by framing. NATIONAL GYPSUM CO - Type DuraBacker, PermaBase, DuraBacker Plus, or PermaBase Plus

12. Non-Bearing Wall Partition Intersection — (Optional) —Two nominal 2 by 4 in, studs or nominal 2 by 6 in, studs nailed together with two 3 in, long 10d nails spaced a max. 16 in, OC, vertically and fastened to one side of the minimum 2 by 4 in, stud with 3 in, long 10d nails spaced a max. 16 in. OC, vertically, Intersection between partition wood study to be flush with the 2 by 4 in. study. The wall partition wood studs are to be framed by with a second 2 by 4 in. wood stud fastened with 3 in. long 10d nails spaced a max. 16 in. OC. vertically. Maximum one non-bearing wall partition intersection per stud cavity. Non-bearing wall partition stud depth shall be at a minimum equal to the depth of 🦠

13. Mesh Netting — (Not Shown) — Any thin, woven or non-woven fibrous netting material attached with staples to the outer face of one row of studs to facilitate the installation of the sprayed fiber from the opposite row.

14. Mineral and Fiber Board\* — (Optional, Not Shown) — For optional use as an additional layer on one side of wall. Nom 1/2 in. thick, 4 ft wide with long dimension parallel and centered over studs. Attached to framing with 2 in. long Type W steel screws, spaced 12 in. OC. The required UL Classified gypsum board layer(s) is/are to be installed as indicated as to fastener type and spacing, except that the required fastener length shall be increased by a minimum of 1/2 in. Not evaluated or intended as a substitute for the required layer(s) of UL Classified Gypsum Board.

**HOMASOTE CO** — Homasote Type 440-32

14A. Mineral and Fiber Board\* — (Optional, Not Shown) — For use with Items 14B-14E) — For optional use as an additional layer on one side of wall. Nom 1/2 in. thick, 4 ft wide with long dimension parallel and centered over studs. Attached to framing with minimum 1-3/8 in. long ring shanked nails or 1-1/4 in. long Type W steel screws, spaced 12 in. OC along board edges and 24 in. OC in field of board along intermediate framing. Not evaluated or intended as a substitute for the required layer(s) of UL Classified Gypsum Board. HOMASOTE CO — Homasote Type 440-32

14B. Glass Fiber Insulation — (For use with Item 14A) — 3-1/2 in. thick glass fiber batts bearing the UL Classification Marking as to Surface Burning and/or Fire Resistance, placed to fill the interior of the wall. See Batts and Blankets (BKNV or BZJZ) categories for names of Classified

14C. Batts and Blankets\* --- (As an alternate to Item 14B, For use with Item 14A), 3 in. thick mineral wool batts, placed to fill interior of wall, attached to the 3-1/2 in. face of the studs with staples placed 24 in. OC. THERMAFIBER INC --- Type SAFB, SAFB FF

14D. Adhesive — (For use with Item 14A) — Construction grade adhesive applied in vertical, serpentine, nominal 3/8 in. wide beads down the I length of both vertical edges of Mineral and Fiber Board (Item 14A).

14E. Gypsum Board\* — (For use with Item 14A) — 5/8 in. thick, 4 ft wide, applied vertically over Mineral and Fiber Board (Item 14A) with vertical joints located anywhere over stud cavities. Secured to mineral and fiber boards with 1-1/2 in. Type G Screws spaced 8 in. OC along edges of each vertical joint and 12 in. OC in intermediate field of the Mineral and Fiber Board (Item 14A). Secured to outermost studs and · bearing plates with 2 in. long Type S screws spaced 8 in. OC. Gypsum Board joints covered with paper tape and joint compound. Screw heads 🛒 covered with joint compound, Finish Rating 30 Min. - AMERICAN GYPSUM CO --- Type AG-C

CGC INC - Types C, IP-X2, IPC-AR

CERTAINTEED GYPSUM INC --- Type LGFC-C/A

GEORGIA-PACIFIC GYPSUM L L C -- Types 5, DAPC, TG-C

NATIONAL GYPSUM CO — Types FSK-C, FSW-C PABCO BUILDING PRODUCTS L.L.C, DBA PABCO GYPSUM --- Type PG-C PANEL REY S A — Type PRC THAI GYPSUM PRODUCTS PCL — Type C UNITED STATES GYPSUM CO - Types C, IP-X2, IPC-AR . USG BORAL DRYWALL SFZ LLC - Type C USG MEXICO S A DE C V - Types C, IP-X2, IPC-AR 14F. Mineral and Fiber Board — (Optional, Not Shown) — For optional use as an additional layer on one side of wall - Nom 1/2 in. thick, 4 ft wide, square edge fiber boards applied vertically to studs on one side of the wall in between the wood studs and the UL Classified Gypsum Board (Item 3). Fiber boards installed with 1-1/4 in. long, Type W, bugle head, coarse thread gypsum board screws spaced 12 in. OC max, with the last screws spaced 2 in. and 6 in. from edge of board. Gypsum board (Item 3) installed as indicated as to fastener type and spacing, except that the required fastener length shall be increased by a minimum of 1/2 in. Not evaluated or intended as a substitute for the required layer(s) of UL Classified Gypsum Board, BLUE RIDGE FIBERBOARD INC --- SoundStop 14G. Building Units - (Optional Item Not Shown - For use over Gypsum Board, Item 3) 1 in., 2 in. or 3 in. thick, 4 ft. wide - Applied vertically or horizontally with vertical joints centered over studs. Fastened to studs and runners with wafer head screws of adequate length to penetrate framing by a minimum of of ¾ in., spaced a max 8 in. o.c. NATIONAL GYPSUM CO - Type PBCI \* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Last Updated on 2023-09-19 The appearance of a company's name or product in this database does not in itself assure that products so identified have been manufactured under UL.

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SHEET TITLE UL ASSEMBLIES - U305

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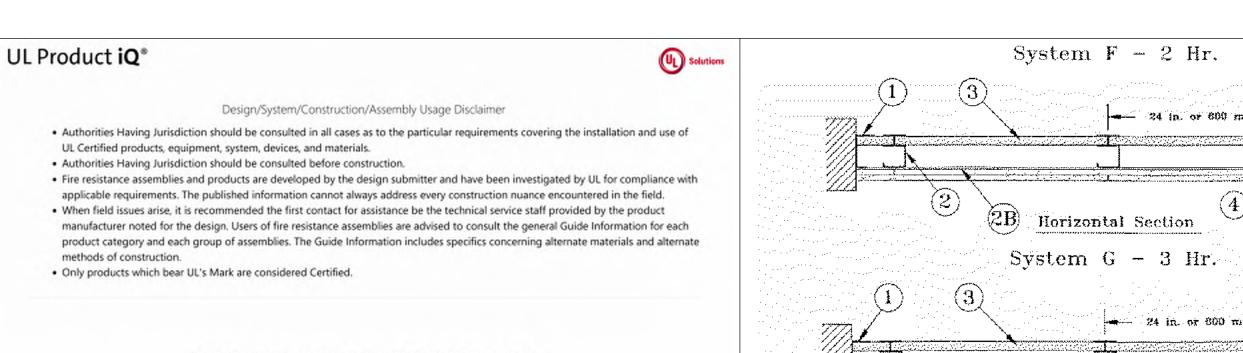
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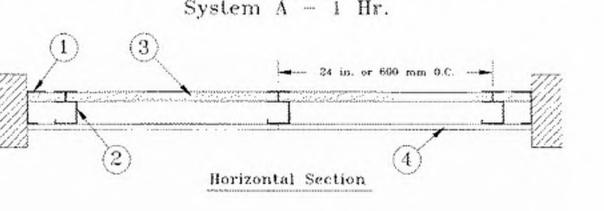
BXUV - Fire Resistance Ratings - ANSI/UL 263 Certified for United States BXUV7 - Fire Resistance Ratings - CAN/ULC-S101 Certified for Canada See General Information for Fire-resistance Ratings - ANSI/UL 263 Certified for United States Design Criteria and Allowable Variances See General Information for Fire Resistance Ratings - CAN/ULC-S101 Certified for Canada

Design Criteria and Allowable Variances

# Design No. **U415**

# February 14, 2022

Nonbearing Wall Ratings — 1, 2, 3 or 4 Hr \* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as



1. Floor, Side and Ceiling Runners --- "J" - shaped runner, min 2-1/2 in. deep (min 4 in. deep when System C is used), with unequal legs of 1 in, and 2 in., fabricated from min 24 MSG (min 20 MSG when Item 4A, 4B, 4C, 4D or 7 are used) galv steel. Runners positioned with short leg toward finished side of wall. Runners attached to structural supports with steel fasteners located not greater than 2 in. from ends and not greater than 24 in, OC. "E" - shaped studs (Item 2A) may be used as side runners in place of "J" - shaped runners.

2. Steel Studs — "C-H" - shaped studs, min 2-1/2 in. deep (min 4 in. deep when System C is used), fabricated from min 25 MSG (min 20 MSG

System I - 4 Hr.

Horizontal Section

when Items 2D, 4A, 4B, 4C, 4D or 7 is used) galv steel. Cut to lengths 3/8 to 1/2 in. less than floor-to-ceiling height and spaced 24 in. or 600 mm OC (max 16 in. OC when Items 4A, 4B, 4C, or 4D are used).

2A. Steel Studs — (Not Shown) — "E" - shaped studs installed back to back in place of "C-H" - shaped studs (Item 2) "E" - shaped studs secured together with steel screws spaced a maximum 12 in. OC. Fabricated from min 25 MSG (min 20 MSG when Item 2D, 4A, 4B or 7 is used) galv steel, min 2-1/2 in, deep (min 4 in, deep when System C is used), with one leg 1 in, long and two legs 3/4 in, long. Shorter legs 1 in, apart to engage gypsum liner panels. Cut to lengths 3/8 to 1/2 in, less than floor to ceiling heights.

2B. Furring Channels — (Optional, Not Shown) — For use with single or double layer systems. Resilient furring channels fabricated from min · 25MSG corrosion protected steel, installed horizontally, and spaced vertically a max 24 in. OC. Flange portion of channel attached to each intersecting "C-H" or "E" stud on side of stud opposite the 1 in. liner panels with 1/2 in. long Type S or S-12 pan-head steel screws. When furring channels are used, wallboard to be installed vertically only. . Not to be used with Type FRX-G gypsum board, lead backed gypsum boards (Items 4A-4D), or cementitious backer units (Item 7).

2C. Furring Channels — For use with System 1 - "Hat" - shaped, 25 MSG galv steel furring channels attached directly over the inner layers of wallboard to each stud with 2 in, long Type S pan head steel screws. Screws alternate from top flange to bottom flange at each stud intersection. Furring channels spaced vertically max 24 in. OC.

2D. Steel Framing Members\* --- (Optional, Not Shown) --- For use with single or double layer systems. Furring channels and Steel Framing Members as described below. Not to be used with Type FRX-G gypsum board, lead backed gypsum boards (Items 4A-4D), or cementitious a. Furring Channels — Formed of No. 25 MSG galv steel, 2-9/16 in, or 2-23/32 in, wide by 7/8 in, deep, spaced max. 24 in. OC perpendicular to studs. Channels secured to studs as described in Item b. Gypsum board installed vertically only and attached to furring channels as

b. Steel Framing Members\* — Used to attach furring channels (Item 2Da) to studs (Item 2 or 2A). Clips spaced max. 24 in. OC., and secured to studs with No. 8 x 1-1/2 in. minimum self-drilling, S-12 steel screw through the center grommet. Furring channels are friction fitted into

2E. Steel Framing Members\* — (Optional, Not Shown) — Furring channels and Steel Framing Members as described below, . Not to be used with Type FRX-G gypsum board, lead backed gypsum boards (Items 4A-4D), or cementitious backer units (Item 7). a. Furring Channels — Formed of No. 25 MSG galv steel. Spaced 24 in. OC perpendicular to studs. Channels secured to studs as described in Item b. Ends of adjoining channels overlapped 6 in, and tied together with double strand of No. 18 AWG galvanized steel wire. Gypsum board attached to furring channels as described in Item 4.

b. Steel Framing Members\* — Used to attach furring channels (Item 2Ea) to studs. Clips spaced 24 in. OC., and secured to studs with 2 in. coarse drywall screw with 1 in. diam washer through the center hole. Furring channels are friction fitted into clips. STUDCO BUILDING SYSTEMS — RESILMOUNT Sound Isolation Clips - Type A237R

2F. Steel Framing Members\* — (Optional, Not Shown) — For use with single or double layer systems. Furring channels and Steel Framing Members as described below. Not to be used with Type FRX-G gypsum board, lead backed gypsum boards (Items 4A-4D), or cementitious

a. Furring Channels — Formed of No. 25 MSG galv steel. 2-3/8 in. wide by 7/8 in. deep, spaced max. 24 in. OC perpendicular to studs. Channels secured to studs as described in Item b. Gypsum board installed vertically only and attached to furring channels as described in Item

b. Steel Framing Members\* — Used to attach furring channels (Item 2Da) to studs (Item 2 or 2A). Clips spaced max. 24 in: OC. GENIECLIPS secured to studs with No. 8 x 1-1/2 in. minimum self-drilling, S-12 steel screw through the center grommet. Furring channels are friction fitted PLITEQ INC — Type GENIECLIP

2G. Steef Framing Members\* — (Optional, Not Shown) — Furring channels and Steel Framing Members as described below. Not to be used with Type FRX-G gypsum board, lead backed gypsum boards (Items 4A-4D), or cementitious backer units (Item 7). a. Furring Channels — Formed of No. 25 MSG galvisteel. Spaced 24 in. OC perpendicular to studs. Channels secured to studs as described in Item 2Gb. Ends of adjoining channels overlapped 6 in. and tied together with double strand of No. 18 AWG galvanized steel wire. Gypsum board attached to furring channels as described in Item 4.

b. Steel Framing Members\* — Used to attach furring channels (Item 2Ga) to studs. Clips spaced 24 in. OC., and secured to studs with No. 8 x

2-1/2 in. coarse drywall screw through the center hole. Furring channels are friction fitted into clips. REGUPOL AMERICA — Type SonusClip

2H. Steel Framing Members\* — (Optional, Not Shown) — Resilient channels and Steel Framing Members as described below. Not to be used with Type FRX-G gypsum board, lead backed gypsum boards (Items 4A-4D), or cementitious backer units (Item 7). a. Resilient Channels — Formed of No. 25 MSG galv steel, spaced 24 in. OC, and perpendicular to studs. Channels secured to studs as described in Item b. Ends of adjoining channels overlapped 6 in. and secured in place with two No. 8 15 x 1/2 in. Philips Modified Truss screws

b. Steel Framing Members\* — Used to attach resilient channels (Item 2Ha) to studs. Clips spaced 48 in. OC., and secured to studs with No. 8 x 2-1/2 in, coarse drywall screw through the center hole. Resilient channels are secured to clips with one No. 10 x 1/2 in, pan-head self-drilling

spaced 2-1/2 in. from the center of the overlap. Gypsum board attached to resilient channels as described in Item 4.

21. Steel Framing Members\* — (Optional, Not Shown) — For use with single or double layer systems. Furring channels and Steel Framing . Members as described below. Not to be used with Type FRX-G gypsum board, lead backed gypsum boards (Items 4A-4D), or cementitious backer units (Item 7).

-a. Furring Channels — Formed of No. 25 MSG galv steel. 2-23/32 in. wide by 7/8 in. deep, spaced max. 24 in. OC perpendicular to studs. Channels secured to studs as described in Item b. Gypsum board installed vertically only and attached to furring channels as described in Item

b. Steel Framing Members\* — Used to attach furring channels (Item 2Ia) to studs (Item 2 or 2A). Clips spaced max. 24 in. OC., and secured to studs with No. 8 x 1-1/2 in. minimum self-drilling, S-12 steel screw through the center grommet. Furring channels are friction fitted into clips. CLARKDIETRICH BUILDING SYSTEMS — Type ClarkDietrich Sound Clip

3. Gypsum Board\* — Gypsum liner panels, nom 1 in. thick, 24 in. or 600 mm (for metric spacing) wide. Panels cut 1 in. less in length than floor to ceiling height. Vertical edges inserted in "H" portion of "C-H" studs or the gap between the two 3/4 in. legs of the "E" studs. Free edge of end panels attached to long leg of vertical "J" - runners with 1-5/8 in, long Type 5 steel screws spaced not greater than 12 in, OC, When wall height exceeds liner panel length, liner panel may be butted to extend to the full height of the wall. Horizontal joints need not be backed by steel framing. In System I, butt joints in liner panels are staggered min 36 in. Butt joints backed with 6 in. by 22 in. strips of 3/4 in. thick gypsum wallboard (Item 4). Wallboard strips centered over butt joints and secured to liner panels with six 1-1/2 in. long Type G steel screws, three screws along the 22 in. dimension at the top and bottom of the strips. CGC INC — Type SLX

UNITED STATES GYPSUM CO — Type SLX

KEENE BUILDING PRODUCTS CO INC -- Type RC+ Assurance Clip

USG BORAL DRYWALL SFZ LLC -- Type SLX

**USG MEXICO S A DE C V** — Type SLX

Gypsum panels, with beveled, square or tapered edges, nom 5/8 in, thick, 48 in, or 1200 mm wide, applied vertically or horizontally, attached to studs with 1 in. long Type S steel screws spaced 12 in, when installed vertically or 8 in OC when installed horizontally. Horizontal joints need not be backed by steel

CGC INC - Types AR, C, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SHX, ULIX, ULX, USGX, WRC, WRX

THE SIAM GYPSUM INDUSTRY (SONGKHLA) CO --- Types C and SCX

UNITED STATES GYPSUM CO --- Types AR, C, FRX-G, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SGX, SHX, ULIX, ULX, WRC, WRX, USGX.

USG BORAL DRYWALL SFZ LLC — Types C, SCX, SGX, USGX

USG MEXICO S A DE C V -- Types AR, C, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SHX, ULX, USGX, WRC, WRX

# System B — 2 Hr

Gypsum panels, with beveled, square or tapered edges, nom 1/2 in. or 5/8 in. thick, 48 in. or 1200 mm wide, applied vertically or horizontally in two layers. Inner or base layer attached to studs with 1 in. long Type \$ steel screws spaced 24 in, OC when installed vertically or 16 in. OC when installed horizontally, screws or 8 in, OC when installed horizontally and staggered 8 in, from base layer screws, Horizontal joints between inner and outer layers staggered a min of 12 in. Horizontal joints need not be backed by steel framing. Vertical joints centered over study and staggered 24 in.

CGC INC — 1/2 in, Type C, IP-X2, IPC-AR or WRC; 5/8 in, Types AR, C, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SHX, ULX, USGX, WRC, WRX

THE SIAM GYPSUM INDUSTRY (SONGKHLA) CO - Types C and SCX

UNITED STATES GYPSUM CO --- 1/2 in, Types C, IP-X2, IPC-AR, or WRC; 5/8 in, Types AR, C, FRX-G, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SGX, SHX, ULIX, ULX,

USG BORAL DRYWALL SFZ LLC - 1/2 in. Type C; 5/8 in. Types C, SCX, SGX, USGX

USG MEXICO S A DE C V --- 1/2 in. Types C, IP-X2, IPC-AR or WRC; 5/8 in. Types AR, C, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SHX, ULX, USGX, WRC, WRX

# System C --- 2 Hr

Gypsum panels, with beveled, square or tapered edges, nom 3/4 in. thick, 48 in. or 1200 mm wide, applied vertically or horizontally, secured with 1-1/4 in. long Type S steel screws spaced 8 in. OC along vertical edges and 12 in. OC in the field when installed vertically or 8 in. OC along the vertical edges and in the field when installed horizontally. Horizontal joints need not be backed by steel framing. Screws along side joints offset 4 in. Requires min 4 in. deep framing per Items 1, 2 and 3. Requires min 3 in, thick mineral wool batts per Item 6.

UNITED STATES GYPSUM CO --- Types IP-X3 or ULTRACODE

USG BORAL DRYWALL SFZ LLC --- Type ULTRACODE

CGC INC — Types IP-X3 or ULTRACODE

USG MEXICO S A DE C V --- Types IP-X3 or ULTRACODE

# System D — 2 Hr

Gypsum panels, with beveled, square or tapered edges, nom 5/8 in. thick, 48 in. or 1200 mm wide, applied vertically or horizontally, attached directly to studs with 1 in, long Type 5 steel screws spaced 24 in, when installed vertically or 16 in, OC when installed horizontally. Horizontal joints need not be backed by steel framing. Requires face layer of 1/2 or 5/8 in, thick cementitious backer units per Item 7 and min 1-1/2 in, thick mineral wool batts per Item

CGC INC — Types AR, C, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SHX, ULX, USGX, WRC, WRX

THE SIAM GYPSUM INDUSTRY (SONGKHLA) CO - Types C and SCX

UNITED STATES GYPSUM CO --- Types AR, C, FRX-G, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SGX, SHX, ULIX, ULX, USGX, WRC, WRX.

USG BORAL DRYWALL SFZ LLC --- Types C, SCX, SGX, USGX

USG MEXICO S A DE C V --- Types AR, C, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SHX, ULX, USGX, WRC, WRX

# System E — 2 Hr

Gypsum panels, with beveled, square or tapered edges, nom 1/2 in. or 5/8 in. thick, 48 in. or 1200 mm wide, applied vertically or horizontally, attached to studs with 1 in. long Type S steel screws spaced 12 in. OC when installed vertically or 8 in. when installed horizontally. Horizontal joints need not be backed

CGC INC — 1/2 in. Types C, IP-X2, IPC-AR; 5/8 in. Types AR, C, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SHX, ULX, USGX, WRC, WRX

THE SIAM GYPSUM INDUSTRY (SONGKHLA) CO — Types C and SCX

UNITED STATES GYPSUM CO — 1/2 in. Types C, IP-X2, IPC-AR; 5/8 in. Types AR, C, FRX-G, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SGX, SHX, ULIX, ULX, USGX.

USG BORAL DRYWALL SFZ LLC — 1/2 in. Type C; 5/8 in. Types C, SCX, SGX, USGX

USG MEXICO S A DE C V -- 1/2 in, Types C, IP-X2, IPC-AR; 5/8 in, Types AR, C, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SHX, ULX, USGX, WRC, WRX

Gypsum panels, with beveled, square or tapered edges, nom 1/2 in. or 5/8 in. thick, 48 in. or 1200 mm wide, applied vertically in two layers. Inner or base layer attached to resilient furring channels (Item 2B) with 1 in. long Type S steel screws spaced 24 in. Outer or face layer attached to resilient furring channels (Item 28) with 1-5/8 in. long Type S steel screws spaced 12 in. OC and staggered 12 in. from base layer screws. Joints between inner and outer

CGC INC --- 1/2 in. Type C, IP-X2, IPC-AR or WRC; 5/8 in. Types AR, C, FRX-G, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SHX, ULX, USGX, WRC, WRX

THE SIAM GYPSUM INDUSTRY (SONGKHLA) CO --- Types C and SCX

UNITED STATES GYPSUM CO --- 1/2 in. Type C, IP-X2, IPC-AR of WRC; 5/8 in. Types AR, C, FRX-G, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SGX, SHX, ULIX, ULX, USGX, WRC. WRX.

USG BORAL DRYWALL SFZ LLC --- 1/2 in, Type C; 5/8 in, Types C, SCX

USG MEXICO S A DE C V — 1/2 in. Types C, IP-X2, IPC-AR or WRC; 5/8 in. Types AR, C, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SHX, ULX, USGX, WRC, WRX

### System G — 3 Hr

Gypsum panels, with beveled, square or tapered edges, nom 5/8 in. thick, 48 in. or 1200 mm wide, applied vertically or horizontally in three layers. Inner or base layer attached to studs with 1 in, long Type S steel screws spaced 24 in, OC when installed vertically or 16 in OC when installed horizontally. Middle layer attached to studs with 1-5/8 in, long Type S steel screws spaced 24 in. when installed vertically or 16 in. OC when installed horizontally, Outer or face layer attached to studs with 2-1/4 in, long Type S steel screws spaced 16 in, when installed vertically or 12 in, OC when installed horizontally. Screws offset 6 in, from layer below. Horizontal joints on adjacent layers staggered a min of 12 in, . Horizontal joints need not be backed by steel framing. Vertical joints centered over studs and staggered 24 in. on adjacent layers.

CGC INC — Types C, IP-X2, IPC-AR, ULIX, WRC

THE SIAM GYPSUM INDUSTRY (SONGKHLA) CO --- Type

UNITED STATES GYPSUM CO - Types C, IP-X2, IPC-AR, ULIX, WRC

USG BORAL DRYWALL SFZ LLC --- Type C

# USG MEXICO S A DE C V — Types C, IP-X2, IPC-AR, WRC

Sypsum panels, with beveled, square or tapered edges, nom 5/8 in. thick, 48 in. or 1200 mm wide, applied vertically or horizontally, two layers over the flange of the "C" section of the studs, one layer over the flange of the "H" section of the studs. Inner or base layer attached to studs with 1 in. long Type S steel screws spaced 24 in. OC when installed vertically or 16 in. OC when installed horizontally. Face layer attached to study with 1-5/8 in. long Type S steel screws spaced 16 in, when installed vertically or 12 in. OC when installed horizontally. Screws offset 6 in, from layer below. Horizontal joints on adjacent layers staggered a min of 12 in. Horizontal joints need not be backed by steel framing. Vertical joints centered over studs and staggered 24 in. on adjacent

System H --- 3 Hr

CGC INC — Types C, IP-X2, IPC-AR, ULIX, WRC

THE SIAM GYPSUM INDUSTRY (SONGKHLA) CO — Type C

UNITED STATES GYPSUM CO - Types C, IP-X2, IPC-AR, ULIX, WRC

**USG BORAL DRYWALL SFZ LLC** — Type C

. **USG MEXICO S A DE C V** — Types C, IP-X2, IPC-AR, WRC

# System 1 - 4 Hr

Gypsum panels, with beyeled, square or tapered edges, nom 3/4 in, thick, 4 ft wide (or 1200 mm for metric spacing) wallboard with square or tapered edges. Total of four layers to be used. First and second (inner) layers applied vertically or horizontally over the steel studs. Horizontal joints need not be backed by steel framing. When applied vertically, joints centered over studs and staggered min 24 in., otherwise all joints staggered min 12 in. First layer secured to studs with 1-1/4 in, long Type S self-drilling, self-tapping bugle-head steel screws spaced 24 in, OC. Second layer secured to studs with 2-1/4 in. long Type S self-drilling, self-tapping bugle-head steel screws spaced 12 in. OC. Third layer applied vertically over the furring channels (Item 2C) with a 1-1/4 in, long Type S self-drilling, self-tapping bugle-head steel screws spaced 12 in, OC. Fourth layer applied vertically or horizontally with 2-1/4 in, long Type S self-drilling, self-tapping bugle-head steel screws spaced 12 in. OC. When applied vertically, joints to be staggered min 24 in. from third layer, otherwise all joints staggered min 12 in.

CGC INC — Types IP-X3 or ULTRACODE

UNITED STATES GYPSUM CO - Types IP-X3 or ULTRACODE

USG BORAL DRYWALL SFZ LLC - Type ULTRACODE

USG MEXICO S A DE C V — Types IP-X3 or ULTRACODE

4A. Gypsum Board\* — (As an alternate to Item 4 Systems A, B, C, D, E, G, H, and I when used as the base layer, For direct attachment only) — Nom 5/8 in. or 3/4 in. thick lead backed gypsum panels with beveled, square or tapered edges, applied vertically. Vertical joints centered over 20 MSG steel studs and staggered min 1 stud cavity on opposite sides of studs. See Items 1, 2, 2A, 2B and 2D. Wallboard secured to studs with 1-1/4 in, long Type S-12 steel screws spaced 8 in. OC at perimeter and 12 in, OC in the field, For Joint Compound see Item 5, To be used with Lead Batten Strips (see Item 9) or Lead Discs or Tabs (see Item 10). RAY-BAR ENGINEERING CORP — Type RB-LBG

4B. Gypsum Board\* — (As an alternate to Item 4 Systems A, B, C, D, E, G, H, and I when used as the base layer, For direct attachment only) — Nominal 5/8 in. thick lead backed gypsum panels with beveled, square or tapered edges, applied vertically. Vertical joints centered over studs and staggered min 1 stud cavity on opposite sides of studs. Wallboard secured to studs with 1-1/4 in. long Type S-12 (or #6 by 1-1/4 in. long bugle head fine driller) steel screws spaced 8 in. OC at perimeter and 12 in. OC in the field. NEW ENGLAND LEAD BURNING CO INC, DBA NELCO — Type Nelco

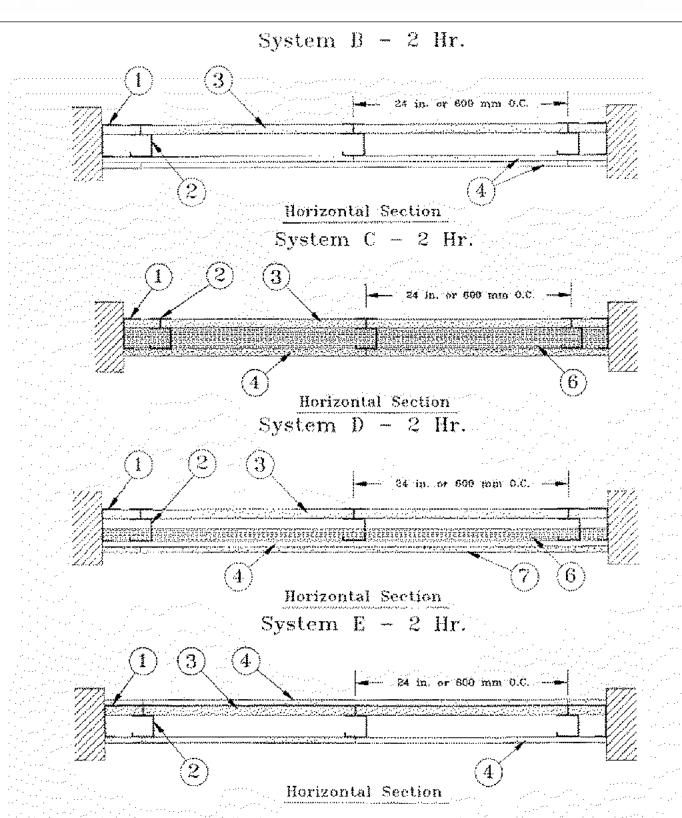
4C. Gypsum Board\* — (As an alternate to Item 4 Systems A, B, C, D, E, G, H, and I when used as the base layer, For direct attachment only) — Nom 5/8 or 3/4 in. thick lead backed gypsum panels with beveled, square or tapered edges, applied vertically. Vertical joints centered over 20 MSG steel studs and staggered min 1 stud cavity on opposite sides of studs. See Items 1, 2, 2A, 2B and 2D. Wallboard secured to studs with 1-1/4 in. long Type S-12 steel screws spaced 8 in. OC at perimeter and 12 in. OC in the field. For Joint Compound see Item 5. To be used with Lead Batten Strips (see Item 9A) or Lead Discs (see Item 10A). Lead batten strips required behind vertical joints of lead backed gypsum wallboard and optional at remaining stud locations. Lead batten strips, min 2 in. wide, max 10 ft long with a max thickness of 0.140 in. placed on the face of studs and attached to the stud with two 1 in. long Type S-8 pan head steel screws, one at the top of the strip and one at the bottom of the strip.

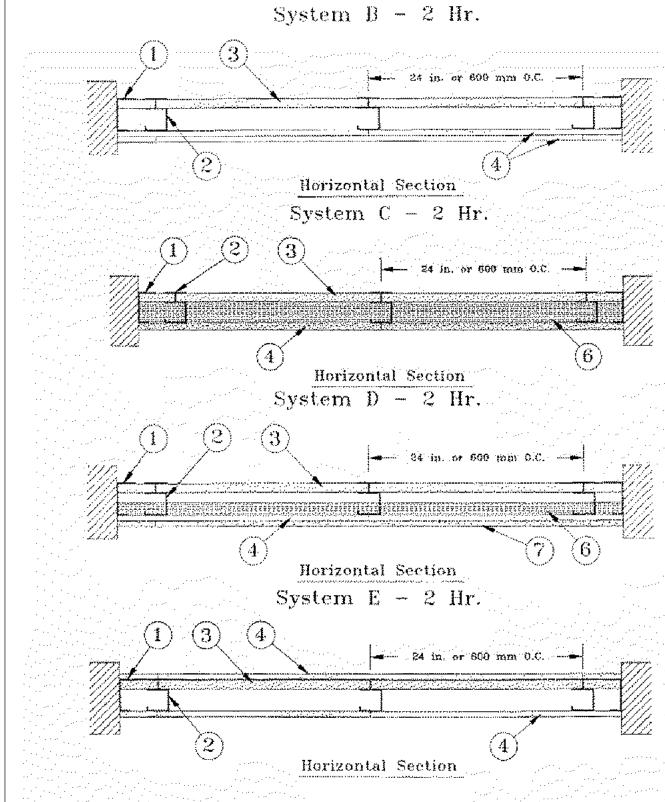
MAYCO INDUSTRIES INC — Type X-Ray Shielded Gypsum

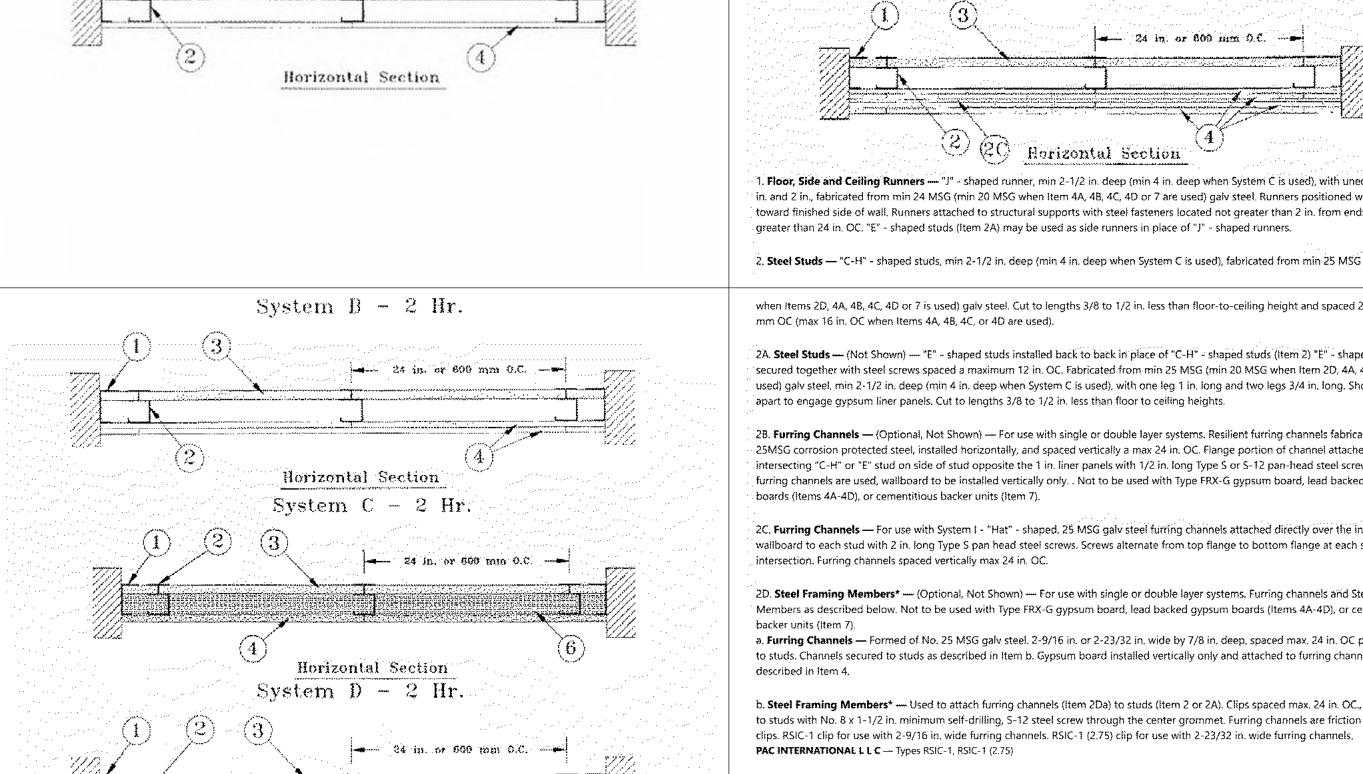
4D. Gypsum Board\* — (As an alternate to Item 4 Systems A, B, C, D, E, G, H, and I when used as the base layer, For direct attachment only) — Nom 5/8 in, thick lead backed gypsum panels with beveled, square or tapered edges, applied vertically. Vertical joints centered over studs and staggered min 1 stud cavity on opposite sides of studs. Wallboard secured to studs with 1-1/4 in. long Type S-12 steel screws gypsum panel steel screws spaced 8 in. OC at perimeter and 12 in. OC in the field. Lead batten strips required behind vertical joints of lead backed gypsum wallboard and optional at remaining stud locations. Lead batten strips, min 2 in, wide, max 8 ft long with a max thickness of 0.14 in, placed on the face of studs and attached to the stud with construction adhesive and two 1 in, long Type S-12 pan head steel screws, one at the top of the strip and one at the bottom of the strip. Lead discs, nominal 3/8 in. diam by max 0.085 in. thick. Compression fitted or adhered over the screw heads. Lead batten strips and discs to have a purity of 99.9% meeting the Federal specification QQ-L-201f, Grade "C". RADIATION PROTECTION PRODUCTS INC --- Type RPP - Lead Lined Drywall

5. Joint Tape and Compound — (Not Shown)

Systems A, B, C, E, F, G, H, I Joints on outer layers of gypsum boards (Item 4 and 4A) covered with paper tape and joint compound. Paper tape and joint compound may be omitted when gypsum boards are supplied with square edges. Exposed screw heads covered with joint compound.







2A. (As an alternate to Item 2) Spray-Applied Fire Resistive Materials\* — Applied by mixing with water and spraying in one or

more coats to the thicknesses shown below, to steel surfaces which are clean and free of dirt, loose scale, and oil. Min average and

min individual density of 17.5 and 16 pcf, respectively, for Type 300TW. Min average and min individual density of 22 and 19 pcf,

2B. (As an alternate to Item 2 and 2A) — Spray-Applied Fire Resistive Materials\* — Prepared by mixing with water according to

3. Metal Lath — (Optional for contour application) — 3.4 lb/sq yd galv or painted expanded steel lath. Lath shall be lapped 1 in, and

\* Indicates such products shall bear the UL or cUL Certification Mark for

jurisdictions employing the UL or cUL Certification (such as Canada), respectively.

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Instructions on each bag of mixture and spray- or trowel-applied to steel surfaces which are free of dirt, oil or scale. Min average density of 17.5 pcf with min individual value of 17.0 pcf. For method of density determination, see Design Information Section,

The min thickness of Spray-Applied Fire Resistive Materials required for various fire resistance ratings is shown in Item 2.

respectively, for Type 400. For method of density determination, see Design Information Section, Sprayed Material. The min thickness of Spray-Applied Fire Resistive Materials required for various fire resistance ratings is shown in Item 2.

BERLIN CO LTD --- Type 400.

GREENTECH ASIA PACIFIC SDN BDH --- Type 400

**ISOLATEK INTERNATIONAL** — Type 300TW or Type 400.

NEWKEM PRODUCTS CORP - Type 400.

ISOLATEK INTERNATIONAL - Type 280.

Service. Always look for the Mark on the product.

**GREENTECH THERMAL INSULATION PRODUCTS MFG CO. L. C.**—Type 400.

tied together with No. 18 SWG galv steel wire spaced vertically 6 in. OC.

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PRINTS ISSUED



UL ASSEMBLIES - U415 / X790

PROJECT NUMBER: 22023

SHEET NUMBER:

6. Batts and Blankets\* — Systems A, B, E, F, G, H, I (Optional) --- Mineral wool or glass fiber batts partially or completely filling stud cavity. Any mineral wool or glass fiber batt mineral bearing the UL

Classification Marking as to Fire Resistance. Systems C & D

Min 3 in. (System C) and min 1-1/2 in. (System D) thick mineral wool batts, friction fitted between the studs and floor and ceiling runners.

ROCKWOOL — Type AFB, min. density 1.8 pcf / 28.8 kg/m<sup>3</sup>

THERMAFIBER INC — Type SAFB, SAFB FF

7. Cementitious Backer Units\* — (System D) — Nom 1/2 or 5/8 in. thick panels, square edge, attached to study over gypsum wallboard with 1-5/8 in. long, Type S-12, corrosion resistant steel screws spaced 8 in. OC and staggered 8 in. from gypsum wall board screws. Joints covered with glass fiber mesh tape. Vertical joints staggered one stud cavity from gypsum wallboard joints. Horizontal joints staggered a min of 12 in. from the gypsum wallboard joints. UNITED STATES GYPSUM CO — Type DCB

8. Laminating Adhesive\* — (Optional, Not Shown) — Used to bond outer layer of Cementitious Backer Units (Item 7) to inner layers of Gypsum Board (Item 4) in System D. ANSI A136.1 Type 1 organic adhesive applied with 1/4 in. square notched trowel. See Adhesives (BYWR) in the Fire Resistance Directory or Adhesives (BJLZ) in the Building Materials Directory for names of Classified companies.

9, Lead Batten Strips — (Not Shown, For Use With Item 4A) — Lead batten strips, min 1-1/2 in, wide, max 10 ft long with a max thickness of 0.125 in. Strips placed on the interior face of studs and attached from the exterior face of the stud with two 1 in. long Type S-12 pan head steel screws, one at the top of the strip and one at the bottom of the strip. Lead batten strips to have a purity of 99.9% meeting the Federal specification QQ-L-201f, Grade "C". Lead batten strips required behind vertical joints of lead backed gypsum wallboard (Item 4A) and optional at remaining stud locations. Required behind vertical joints.

9A. Lead Batten Strips — (Not Shown, for use with Item 4C) — Lead batten strips, 2 in. wide, max 10 ft long with a max thickness of 0.140 in. Strips placed on the face of studs and attached to the stud with two min. 1 in. long min. Type S-8 pan head steel screws, one at the top of the strip and one at the bottom of the strip or with one min, 1 in, long min, Type S-8 pan head steel screw at the top of the strip, Lead batten strips to have a purity of 99.5% meeting the Federal specification QQ-L-201f, Grades "B, C or D".. Lead batten strips required behind vertical joints of lead backed gypsum wallboard (Item 6) and optional at remaining stud locations.

10. Lead Discs or Tabs --- (Not Shown, For Use With Item 4A) --- Used in lieu of or in addition to the lead batten strips (Item 9) or optional at other locations - Max 3/4 in, diam by max 0.125 in, thick lead discs compression fitted or adhered over steel screw heads or max 1/2 in, by 1-1/4 in. by max 0.125 in. thick lead tabs placed on gypsum boards (Item 4A) underneath screw locations prior to the installation of the screws. Lead discs or tabs to have a purity of 99.9% meeting the Federal specification QQ-L-201f, Grade "C".

10A. Lead Discs — (Not Shown, for use with Item 4C) — Max 5/16 in, diam by max 0.140 in. thick lead discs compression fitted or adhered over steel screw heads. Lead discs to have a purity of 99.5% meeting the Federal Specification QQ-L-201f, Grades "B, C or D".

11. Lead Batten Strips — (Not Shown, For Use With Item 4B) — Lead batten strips, 2 in. wide, max 10 ft long with a max thickness of 0.142 in. Strips placed on the face of studs and attached to the stud with two min. 1 in. long min. Type S-8 pan head steel screws, one at the top of the strip and one at the bottom of the strip or with one min. 1 in. long min. Type S-8 pan head steel screw at the top of the strip. Lead batten strips to have a purity of 99.9% meeting the Federal specification QQ-L-201f, Grade "C". Lead batten strips required behind vertical joints of lead backed gypsum wallboard (Item 4B) and optional at remaining stud locations,

12. Lead Tabs — (Not Shown, For Use With Item 4B) — 2 in. wide, 5 in. long with a max thickness of 0.142 in. Tabs friction-fit around front face of stud, the stud folded back flange, and the back face of the stud. Tabs required at each location where a screw (that secures the gypsum boards, Item 4B) will penetrate the steel stud. Lead tabs to have a purity of 99.9% meeting the Federal specification QQ-L-201f, Grade "C". Lead tabs may be held in place with standard adhesive tape if necessary.

# \* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as

Last Updated on 2022-02-14

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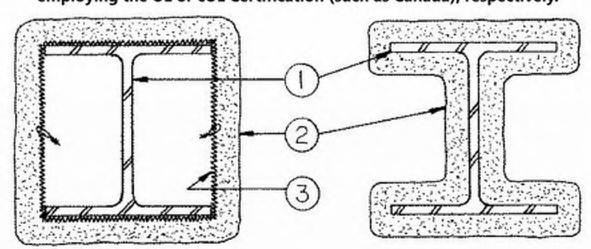
· When field issues arise, it is recommended the first contact for assistance be the technical service staff provided by the product manufacturer noted for the design. Users of fire resistance assemblies are advised to consult the general Guide Information for each product category and each group of assemblies. The Guide Information includes specifics concerning alternate materials and alternate

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BXUV - Fire Resistance Ratings - ANSI/UL 263 Certified for United States BXUV7 - Fire Resistance Ratings - CAN/ULC-S101 Certified for Canada

See General Information for Fire Resistance Ratings - CAN/ULC-S101 Certified for Canada

Design No. X790



13/16 ST 4x4x0.3125 0.34 7/16 ST 4x4x0.375 1-9/16 2-1/8 ST 4x4x0.5 0.72 5/16 \$T20x20x0.75 in 1-1/16 ST20x20x1 in. ST20x20x1.5 in. ST20x20x1,75 in, 11/16 ST32x32x1,25 in.

As an alternate to the table above, the required thickness of Spray-Applied Fire Resistive Materials to be applied to all surfaces of the steel pipes or tubes for all rating periods may be determined from the following equation:

188 (A/P) + 45

h = Spray-Applied Fire Resistive Materials thickness in the range of 5/16 to 4-1/4 in. (rounded up to the nearest 1/16 in.)

R = Fire resistance rating in minutes (60-240 mins.)

A = Cross-sectional area of pipe or tube.

(for column W/D range of 2.51 to 6.68)

.. R = Fire resistance rating period in minutes (60-240 mins.)

reduced to one-half that shown in the table below (for contour application):

D = Heated perimeter of the steel column in inches.

Size In.

W6x16

W10x49

W12x106

W14x233

SP 4x0.237

ST 4x4x0.1875

shown on the table below:

W = Weight of the steel column in lbs per foot.

h = Spray-Applied Fire Resistive Materials thickness in the range of 1/4 to 4-1/2 in. (rounded up to the nearest 1/16 in.)

1-1/2 Hr

1-1/8

15/16

0.18 3/4

The thicknesses contained in the table below are applicable when the Spray-Applied Fire Resistive Materials applied to the column's flange tips are

1-7/16

1-5/16

1-3/16

The min thickness of Spray-Applied Fire Resistive Materials required for various fire resistance ratings of contour sprayed steel pipes or tubes are

A/P 1 Hr 1-1/2 Hr In. 2 Hr

1-1/16

1-7/16

2-1/16

15/16

2-11/16

1-13/16

1-5/16

2-1/16 2-11/16

P = Heated perimeter of steel pipe or tube.

A/P = 0.18 to 0.49.

The A/P ratio of a circular pipe is determined by:

t (d — t)

d = the outer diameter of the pipe (in.)

t = the wall thickness of the pipe (in.)

The A/P ratio of a rectangular tube is determined by:

t (a + b—2t)

a = the outer width of the tube (in.)

b = the outer length of the tube (in.)

t = the wall thickness of the tube (in.)

**BERLIN CO LTD** — Types 300, 300ES, 300N, SB, M-II, TG and M-II/P.

**GREENTECH ASIA PACIFIC SDN BDH** — Types 300, 300ES, 300HS, M-II, or M-II/P

GREENTECH THERMAL INSULATION PRODUCTS MFG CO L L C — Types 300, 300AC, 300HS, 400AC, 3000, M-II, TG, and M-II/P.

ISOLATEK INTERNATIONAL — Type 300, 300AC, 300ES, 300HS, 300N, 400AC, 400ES, SB, 3000, 3000ES, M-II, TG and M-II/P.

**NEWKEM PRODUCTS CORP** — Types 300, 300ES, 300N, SB, M-II, TG and M-II/P

· Authorities Having Jurisdiction should be consulted in all cases as to the particular requirements covering the installation and use of UL Certified products, equipment, system, devices, and materials.

applicable requirements. The published information cannot always address every construction nuance encountered in the field.

methods of construction.

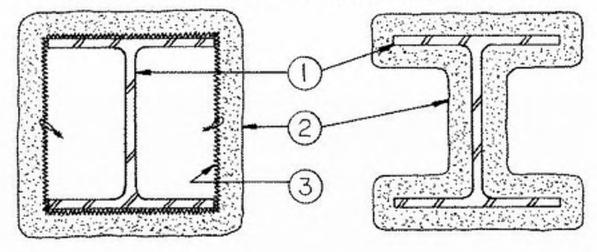
See General Information for Fire-resistance Ratings - ANSI/UL 263 Certified for United States Design Criteria and Allowable Variances

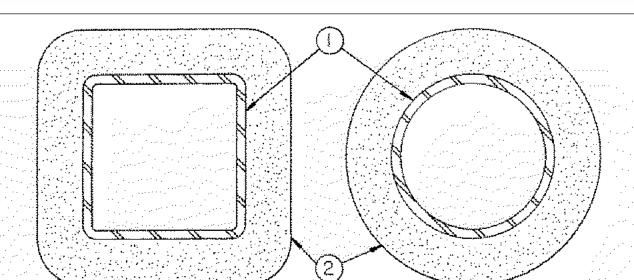
Design Criteria and Allowable Variances

November 25, 2019

# Ratings — 1, 1-1/2, 2, 3 and 4 Hr.

\* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.





1. Steel Column, Steel Pipe or Steel Tube — Wide flange steel column (W) or steel circular pipe (SP) or steel square or rectangular tube (ST), min sizes as shown in the tables below.

2. Spray-Applied Fire Resistive Materials\* — Applied by mixing with water and spraying in one or more coats to the thicknesses shown below, to steel surfaces which are clean and free of dirt, loose scale, and oil. Min average and min individual density of 15 and 14 pcf, for Types 300, 300AC, 300ES, 300HS, 300N, 3000, 3000ES and SB. For Types 400AC and 400ES min average and min individual density of 22 and 19 pcf, respectively. Min avg density of 44 pcf with min indivalue of 40 pcf for Types M-II and TG. Min avg density of 47 pcf, with min individual value of 43 pcf for Type M-II/P. For method of density determination, see Design Information Section,

The min thickness of Spray-Applied Fire Resistive Materials required for various fire resistance ratings of contour sprayed or boxed wide flange columns are shown in the table below:

Column		Min Thkns in.								
Size	W/D	1 Hr	1-1/2 Hr	2 Нг	3 Hr	4 Hr				
W6x9	0.33	15/16	1-1/4	1-9/16	2-1/8	2-11/16				
V6x12	0.43	13/16	1-1/8	1-7/16	2	2-9/16				
V6x16	0.57	11/16	1	1-5/16	1-7/8	2-3/8				
V8x28	0.68	5/8	15/16	1-1/4	1-13/16	2-5/16				
V10x49	0.83	9/16	13/16	1-1/8	1-5/8	2-1/8				
W12x106	1.46	3/8	9/16	13/16	1-1/4	1-11/16				
V14x233	2.52	1/4	3/8	1/2	7/8	1-3/16				
W14x730	6.68	1/4	1/4	1/4	3/8	1/2				

As an alternate to the above table, the required thickness of Spray-Applied Fire Resistive Materials to be applied to all surfaces of the steel columns for all rating periods may be determined from the following equations:

(for column W/D range of 0.33 to 2.51)

 $\Box$ 

HOME;

UL Product iQ® Design/System/Construction/Assembly Usage Disclaimer

· Authorities Having Jurisdiction should be consulted in all cases as to the particular requirements covering the installation and use of UL Certified products, equipment, system, devices, and materials.

 Authorities Having Jurisdiction should be consulted before construction. Fire resistance assemblies and products are developed by the design submitter and have been investigated by UL for compliance with applicable requirements. The published information cannot always address every construction nuance

. When field issues arise, it is recommended the first contact for assistance be the technical service staff provided by the product manufacturer noted for the design. Users of fire resistance assemblies are advised to consult the general Guide Information for each product category and each group of assemblies. The Guide Information includes specifics concerning

. Only products which bear UL's Mark are considered Certified.

BXUV - Fire Resistance Ratings - ANSI/UL 263 Certified for United States BXUV7 - Fire Resistance Ratings - CAN/ULC-S101 Certified for Canada See General Information for Fire-resistance Ratings - ANSI/UL 263 Certified for United States Design Criteria and Allowable Variances

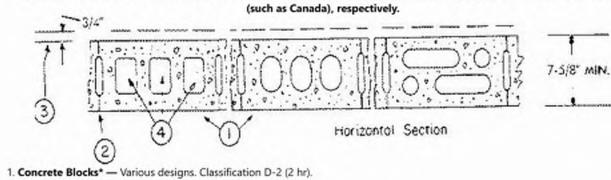
See General Information for Fire Resistance Ratings - CAN/ULC-S101 Certified for Canada

Design No. U905

April 14, 2023

Bearing Wall Rating — 2 HR.

\* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification



sand to 1 part Portland cement (proportioned by volume) and not more than 50 percent hydrated lime (by cement volume). Vertical

wall, plaster or stucco must be applied on the face opposite framing to achieve a max. Classification of 1-1/2 hr. Attached to

4. Loose Masonry Fill — If all core spaces are filled with loose dry expanded slag, expanded clay or shale (Rotary Kiin Process), water

FIRESTONE BUILDING PRODUCTS CO L L C — "Enverge™ CI Foil Exterior Wall Insulation" and "Enverge™ CI Glass Exterior Wall Insulation"

HUNTER PANELS, A DIVISION OF CARLISLE CONSTRUCTION MATERIALS, LLC — Types "Xci-Class A", "Xci Foil (Class A)", "Xci 286"

RMAX, A BUSINESS UNIT OF SIKA CORPORATION — Types "TSX-8500", "ECOMAXci FR", "TSX-8510", "ECOMAX xi FR White", "ECOMAXci",

JOHNS MANVILLE — Type "AP Foil-Faced Foam Sheathing"

5A. Building Units\* — As an alternate to Items 5, min. 1-in thick polyisocyanurate composite foamed plastic insulation boards, nom. 48 by 48 or 96 in.

HUNTER PANELS, A DIVISION OF CARLISLE CONSTRUCTION MATERIALS, LLC — "Xci NB", "Xci Ply"

\* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification

Solutions' Follow - Up Service. Always look for the Mark on the product.

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encountered in the field.

alternate materials and alternate methods of construction.

Design Criteria and Allowable Variances

Nonbearing Wall Rating — 2 HR This design was evaluated using a load design method other than the Limit States Design Method (e.g., Working Stress Design Method). For jurisdictions employing the Limit States Design Method, such as Canada, a load restriction factor shall be used — See Guide BXUV or BXUV7

See Concrete Blocks category for list of eligible manufacturers.

2. Mortar — Blocks laid in full bed of mortar, nom. 3/8 in. thick, of not less than 2-1/4 and not more than 3-1/2 parts of clean sharp

joints staggered.

3. Portland Cement Stucco or Gypsum Plaster — Add 1/2 hr to classification if used. Where combustible members are framed in concrete blocks (Item 1).

repellant vermiculite masonry fill insulation, or silicone treated perlite loose fill insulation add 2 hr to classification.

5. Foamed Plastic\* — (Optional-Not Shown) — 1-1/2 in. thick max, 4 ft wide sheathing attached to concrete blocks (Item 1). ATLAS ROOFING CORP — EnergyShield Pro Wall Insulation, EnergyShield Pro 2 Wall Insulation, EnergyShield CGF Pro, EnergyShield Ply Pro, EnergyShield® CGF, EnergyShield® PanelCast, EnergyShield® and "EnergyShield® XR

DUPONT DE NEMOURS, INC. — Types Thermax Sheathing, Thermax Light Duty Insulation, Thermax Heavy Duty Insulation, Thermax Metal Building Board, Thermax White Finish Insulation, Thermax ci Exterior Insulation, Thermax XARMOR ci Exterior Insulation, Thermax IH Insulation, Thermax Plus Liner Panel, Thermax Heavy Duty Plus (HDP), TUFF-R of Insulation, Thermax Butler Stylwall Insulation Board and Thermax Morton Heavy Duty Insulation Board

"ECOMAXci FR Air Barrier", "Thermasheath-XP", "Thermasheath", "Durasheath"

ATLAS ROOFING CORP --- EnergyShield® Ply

RMAX, A BUSINESS UNIT OF SIKA CORPORATION — "Thermasheath-SI", "ECOBASEci", "ThermaBase-CI", "ECOMAXci FR Ply", "ECOMAXci Ply".

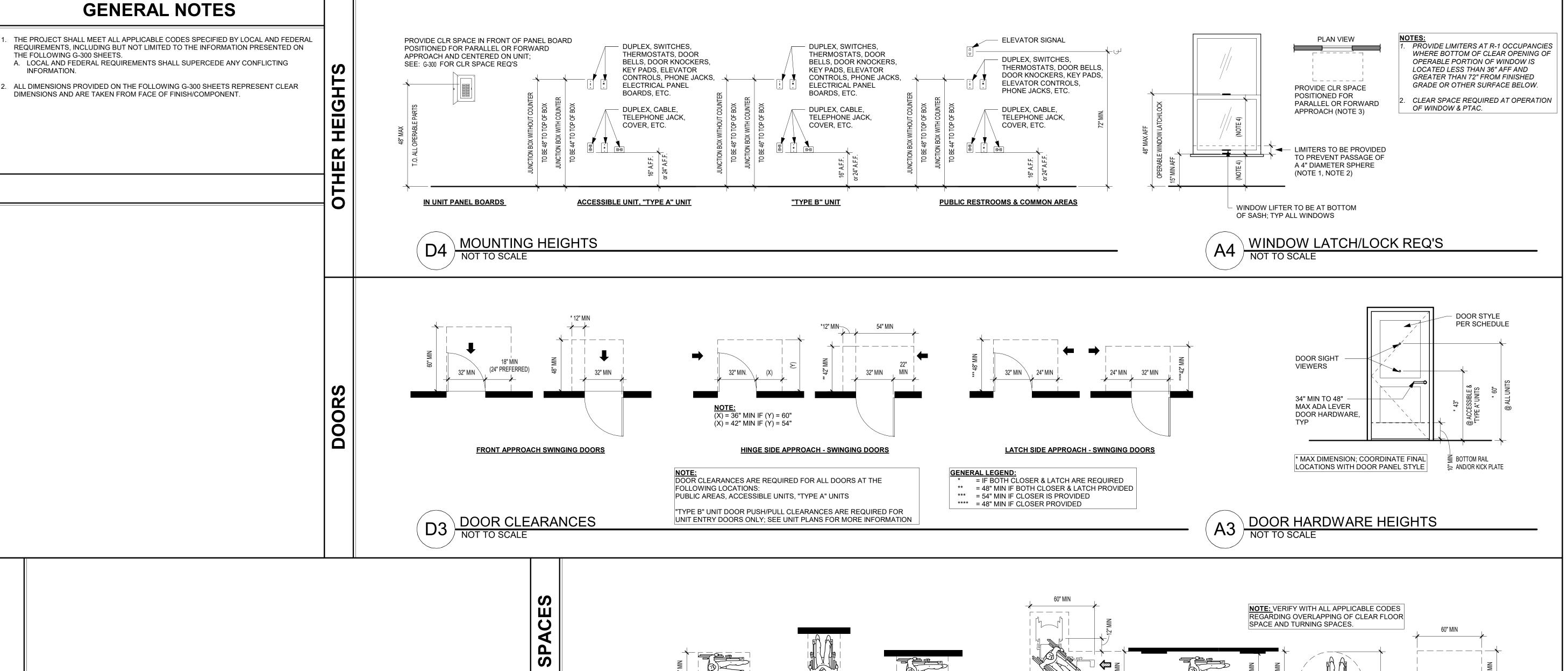
(such as Canada), respectively.

Last Updated on 2023-04-14

The appearance of a company's name or product in this database does not in itself assure that products so identified have been manufactured under UL Solutions' Follow - Up Service. Only those products bearing the UL Mark should be considered to be Certified and covered under UL

04/17/2024 - CITY SUBMISSION

**REVISIONS:** 



30" MIN

FORWARD APPROACH

NOTE: ALL CLEAR SPACES ARE 30"x48" UNLESS SPECIFIED OTHERWISE.

48" MIN

PARALLEL APPROACH

L \_\_ \_ \_ \_ \_

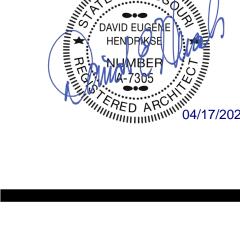
36" MIN 24" MIN

48" MIN

**CLEAR FLOOR SPACE** 



& ASSOC



SUMMIT, MO LEE'S

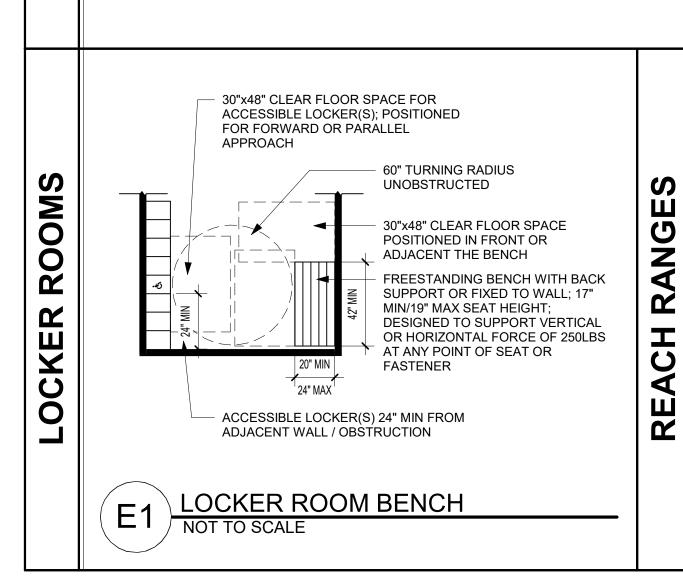
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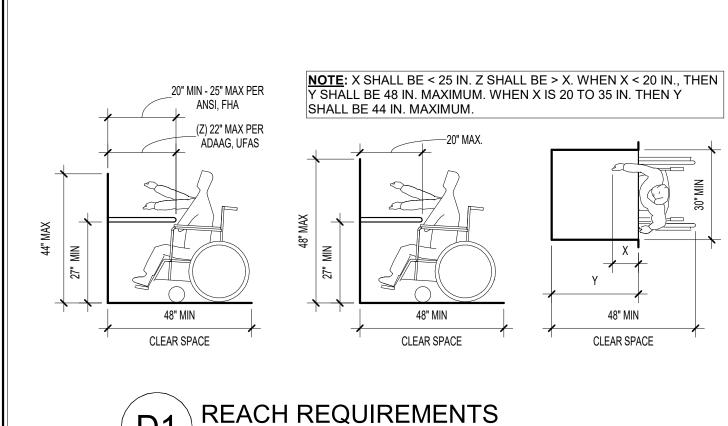
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SHEET TITLE ACCESSIBILITY STANDARDS

PROJECT NUMBER: 22023

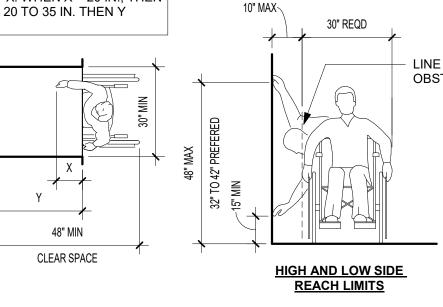
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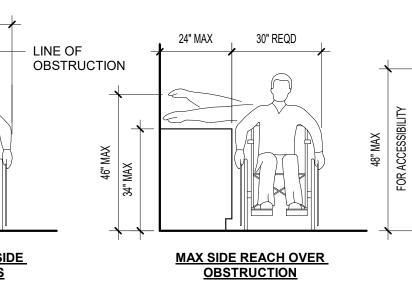


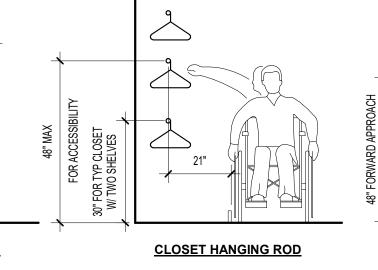
FLOOR

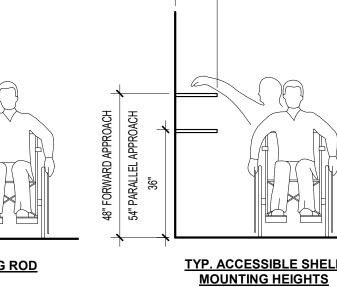
CLEAR



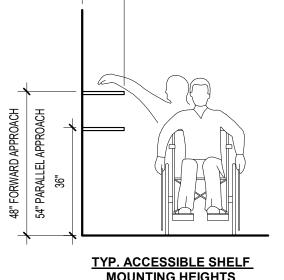
CLEAR FLOOR SPACE

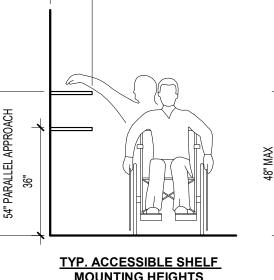






**T-SHAPED SPACE FOR 180° TURNS** 

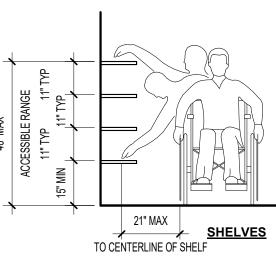




60" MIN

**CIRCULAR** 

WHEELCHAIR TURNING SPACE



36" MIN

**T-TURN REQUIREMENTS** 

04/17/2024 - CITY SUBMISSION

**REVISIONS:** 

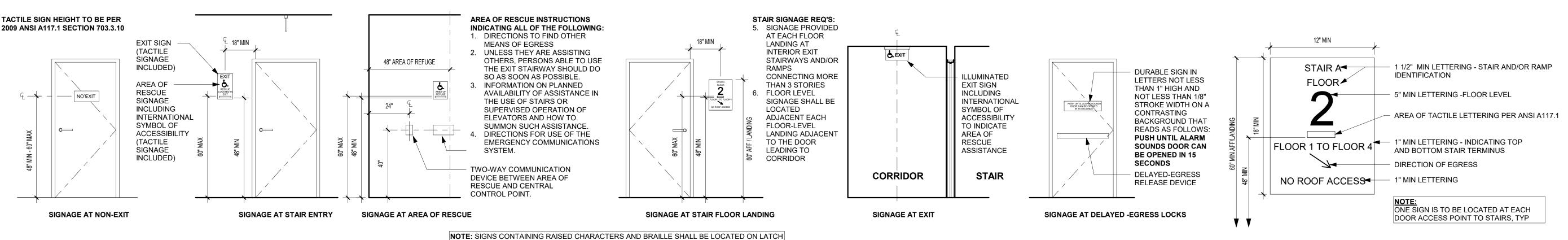
Mar & ASSC

**LEE'S** 

SHEET TITLE ACCESSIBILITY STANDARDS

PROJECT NUMBER: 22023

SHEET NUMBER:



SIDE OF DOOR WITH A 18x18 CLEAR FLOOR SPACE OUTSIDE THE SWING OF THE DOOR **CODE COMPLIANT SIGNAGE** 

EGRESS STAIR SIGNAGE NOT TO SCALE

HANDRAILS SHALL BE @ A

WALKING SURFACE.

CANE DETECTION

1 1/4" - 2" O.D.

TREAD WIDTH-

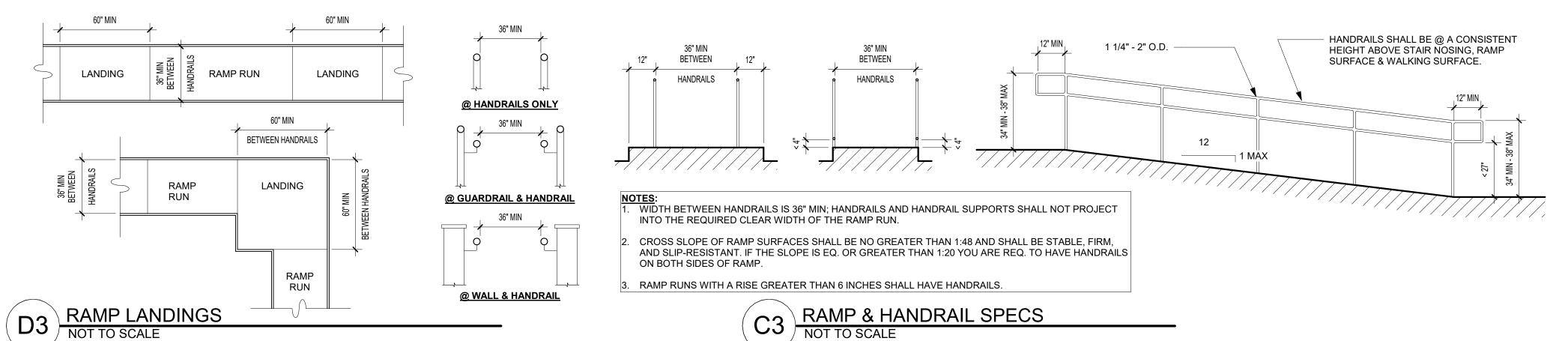
CONSISTENT HEIGHT ABOVE

STAIR NOSING, RAMP SURFACE &

TREAD WIDTH

++

STAIR PROTECTION & HANDRAIL DETAIL



# ADDITIONAL REQUIREMENTS

CARPET MAX PILE HEIGHT SHALL BE 1/2 IN. EXPOSED EDGES OF CARPET SHALL BE FASTENED TO FLOOR SURFACES AND HAVE TRIM ALONG THE ENTIRE LENGTH OF THE EXPOSED EDGE. IF CARPET TILE IS USED ON AN ACCESSIBLE GROUND OF FLOOR SURFACE, IT SHALL HAVE A MAXIMUM COMBINED THICKNESS OF PILE, CUSHION, AND BACKING HEIGHT OF 1/2 IN.

RAMPS	SLOPE	MAX RISE	MAX HORIZONTAL PROJECTION
	1:12 TO <1:16 1:16 TO <1:20	30 IN. 30 IN.	30 FT. 40 FT.
	1:12 TO 1:20 - REQU	IRES A HANDRAIL	

INTERIOR CHARACTER PROPORTION AND COLOR CONTRAST SIGNAGE LETTERS AND NUMBERS ON SIGNS SHALL HAVE A WIDTH-TO-HEIGHT RATIO BETWEEN 3:5 AND 1:1 AND A STROKE WIDTH-TO-HEIGHT RATIO BETWEEN 1:5 AND 1:10. CHARACTERS AND SYMBOLS SHALL CONTRAST WITH THEIR BACKGROUND

AND BE NON-GLARE. CHARACTERS SHALL BE UPPER CASE. CHARACTER HEIGHT MEASURED VERTICALLY FROM THE BASELINE OF THE CHARACTER, SHALL BE 5/8 IN. MINIMUM, AND 2 IN. MAXIMUM, BASED ON THE UPPERCASE LETTER "I". RAISED OR INDENTED CHARACTERS OR SYMBOLS

LETTERS AND NUMBERS ON SIGNS SHALL BE RAISED OR INCISED 1/32 IN. MIN AND SHALL BE SANS SERIF CHARACTERS. RAISED CHARACTERS OR SYMBOLS SHALL BE AT LEAST 5/8 IN HIGH, BUT NO HIGHER THAN 2 IN. INDENTED CHARACTERS OR SYMBOLS SHALL HAVE A STROKE WIDTH OF AT LEAST 1/4 IN. SYMBOLS OR PICTOGRAPHS ON SIGNS SHALL BE RAISED OR INDENTED 1/32 IN MIN

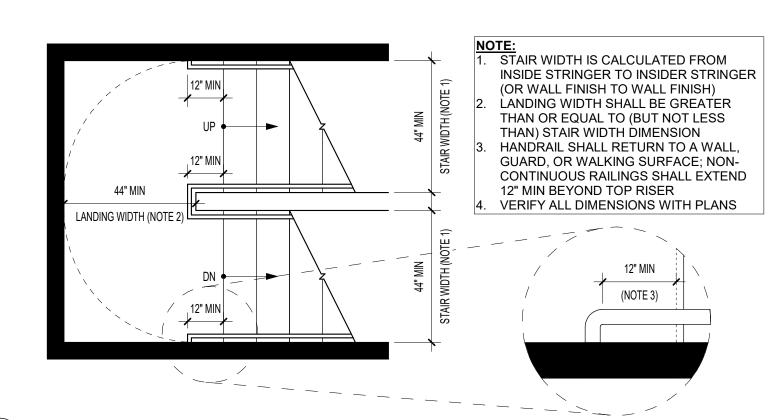
MOUNTING LOCATION AND HEIGHT INTERIOR SIGNAGE SHALL BE LOCATED ALONGSIDE THE DOOR ON THE LATCH SIDE AND SHALL BE MOUNTED AT A HEIGHT OF BETWEEN 54 IN. AND 66 IN. ABOVE THE FINISHED FLOOR PER UFAS AND BETWEEN 48 IN. AND 60 IN. PER ANSI. REFER TO ICC/ANSI A117.1-2009, 703.2.8 FOR MORE REQUIREMENTS ON MOUNTING LOCATION.

> MINIMUM HANDRAIL EXTENSION OF 12 IN. PLUS THE WIDTH OF TREAD IS REQUIRED AT EACH BOTTOM RISER PER, UFAS, ADAAG;

RE: PLANS FOR ADDITIONAL REQUIREMENTS.

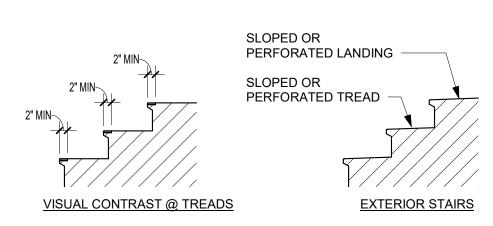
HANDRAIL EXTENSION AT LANDINGS SHALL BE MEASURED FROM RISER TO THE POINT WHERE HANDRAIL TURNS DOWNWARD AND NO LONGER PARALLEL WITH LANDING

(TYPICAL AT STAIRS AND RAMPS)



(GUARDRAIL HEIGHT IN GROUPS R-2 AND R-3 MAY BE 34" TO 38" WHERE TOP SERVES AS A HANDRAIL) 4.375" DIAMETER SPHERE SHALL NOT PASS 6" DIAMETER SPHERE SHALL NOT PASS NOTE: HANDRAIL NOT 4" DIAMETER SPHERE SHOWN FOR CLARITY SHALL NOT PASS





THE LEADING 2" OF TREADS SHALL HAVE VISUAL CONTRAST OF DARK-

TREADS AND LANDINGS SUBJECT TO WET CONDITIONS SHALL BE DESIGNED TO PREVENT ACCUMULATION OF WATER

MATERIAL CHANGES SHALL PROVIDE A FLUSH SURFACE

STAIR RISER AND TREAD REQ NOT TO SCALE

(A) VERTICAL RISER

**IBC HANDRAIL DETAIL** NOT TO SCALE

\_1 1/4" TO 2"

 $\equiv$ 

DAVID EUGENE

SUMMIT

 $\Box$ 

SUITE

HOME

**EGRESS STAIR REQ'S** 11" MIN (NOTE 3)

TREADS & RISERS FOR

ACCESSIBLE STAIRWAYS

1 1/4" MAX (NOTE 2) RADIUS 1/2"

(B) CURVED NOSING

1 1/4" MAX (NOTE 2) BEVELED

(C) BEVELED NOSING

1 1/4" MAX

(NOTE 2)

(D) ANGLED RISER (E) ANGLED RISER

LSC RISER AND TREAD

ON-LIGHT OR LIGHT-ON-DARK FROM THE REMAINDER OF THE TREAD

RAILINGS

AND

**STAIRS** 

SIGNAG

RAMP

PRINTS ISSUED

04/17/2024 - CITY SUBMISSION

REVISIONS:



& ASSOC ASSOC 64108-1404

insas City, MO 64108-1816.472.1448 www.rosemann.com 2024 Rosemann & Associa

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SUITE

HOME

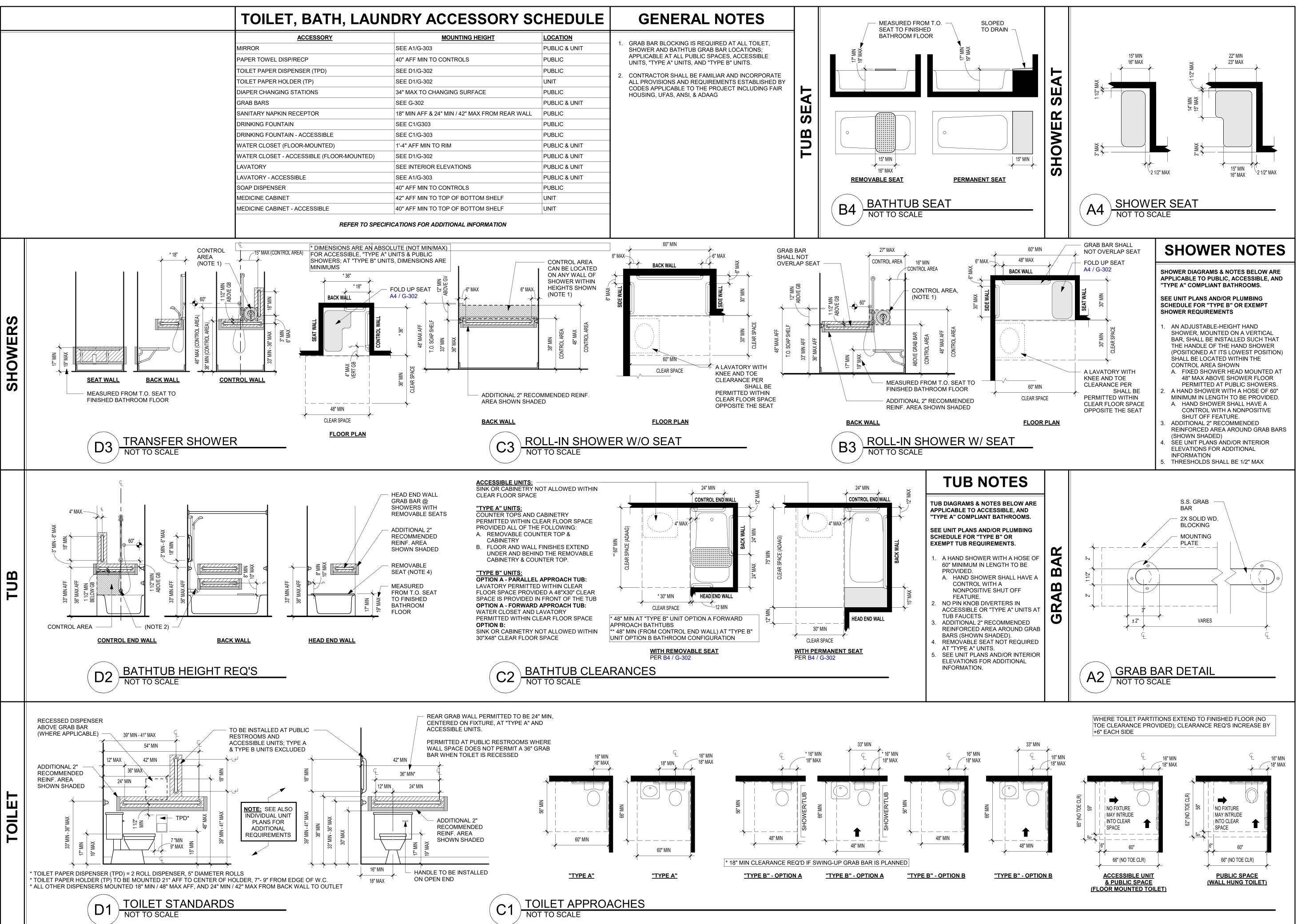
SHEET TITLE

ACCESSIBILITY STANDARDS

PROJECT NUMBER: 22023

SHEET NUMBER:

G-302



4/17/2024 4:45:28 PM

KITCHEN DIAGRAMS AND NOTES APPLICABLE TO PUBLIC

SEE UNIT PLANS AND/OR INTERIOR ELEVATIONS FOR

SINK DEPTH MAX 6 1/2" AND HAVE REAR LOCATED

GARBAGE DISPOSAL SWITCH TO BE LOCATED WITHIN

REACH RANGE; COORDINATE FINAL LOCATION WITH

PROVIDE FINISHED END PANELS EACH SIDE OF SINK

A. WALL BASE, WALL FINISH & FLOOR FINISH TO

B. FLOORING, WALL FINISH, AND WALL BASE TO

CONTINUE TO UNDERSIDE OF SINK

CONTINUE TO UNDERSIDE OF SINK

INSULATE ALL PIPES AND DRAIN EXPOSED BELOW SINK

CABINETRY PERMITTED UNDER SINK AT "TYPE A" UNITS

A. REMOVABLE CABINETRY WITHOUT REPLACING SINK

BACKSPLASH VARIES; COORDINATE WITH DRAWINGS

SEE INDIVIDUAL UNIT PLANS AND INTERIOR ELEVATIONS

"TYPE B" OR EXEMPT KITCHENS

PANEL AND DISHWASHER

FOR SPECIFIC LAYOUTS

PROVIDED ALL THE FOLLOWING:

SPACES, ACCESSIBLE, AND "TYPE A" COMPLIANT KITCHENS

PRINTS ISSUED

04/17/2024 - CITY SUBMISSION

**REVISIONS:** 



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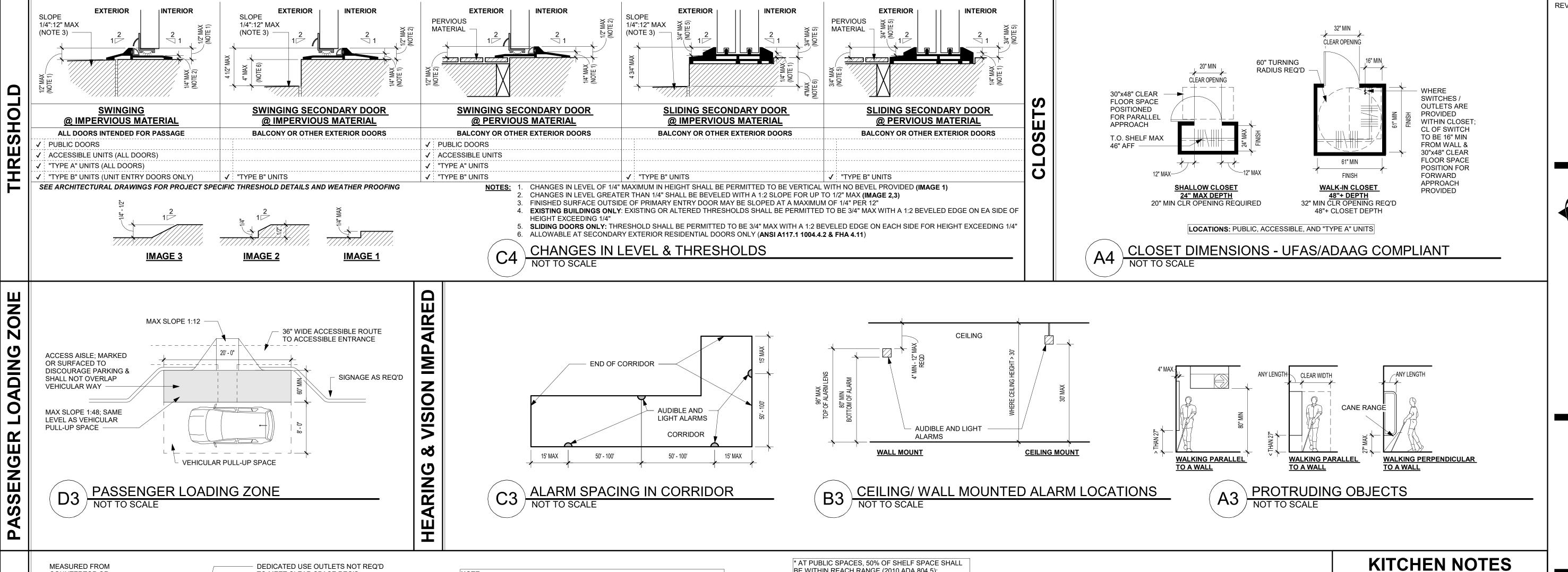
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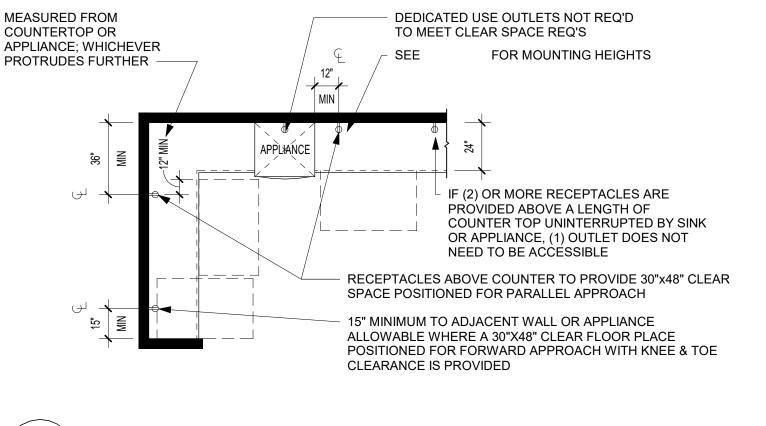
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SHEET TITLE **ACCESSIBILITY STANDARDS** 

PROJECT NUMBER: 22023

SHEET NUMBER:



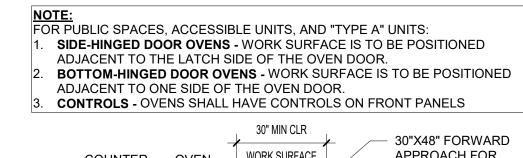


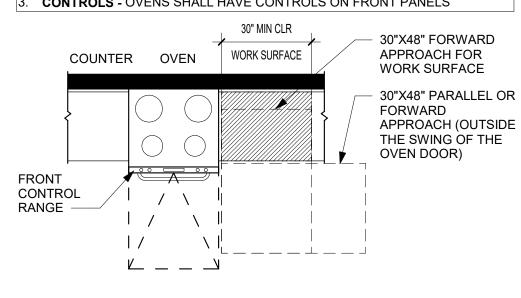
ABOVE COUNTER RECEPTACLES

KITCHEN

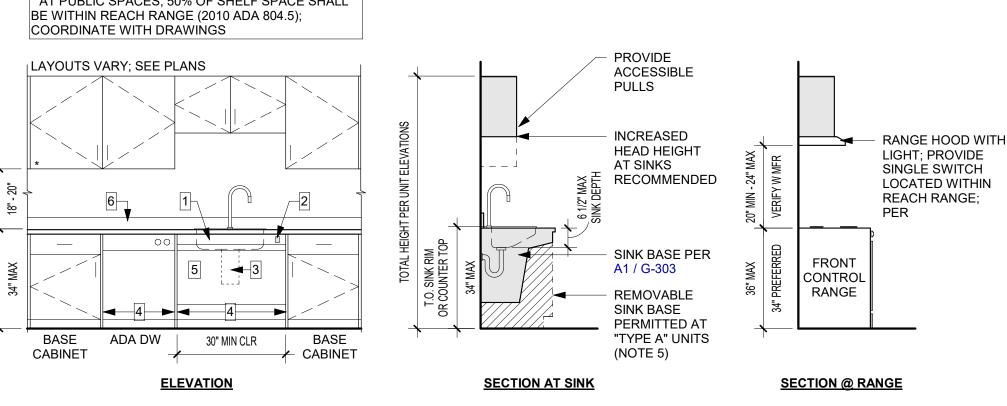
OUNTAIN

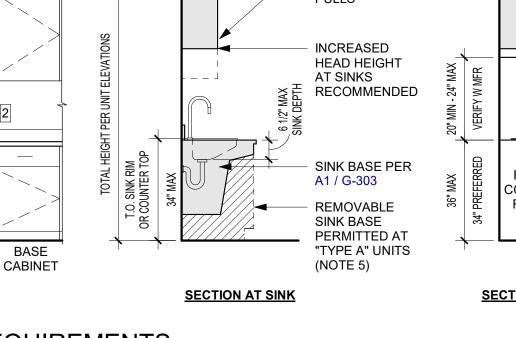
DRINKING

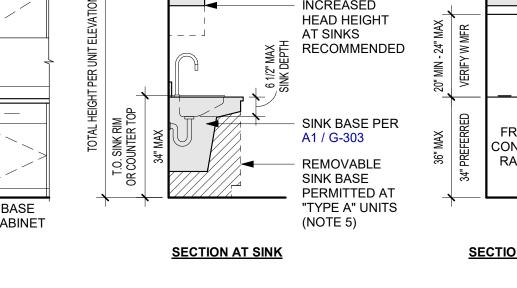




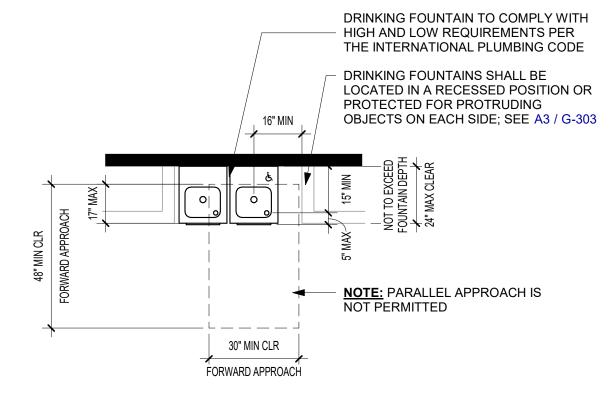




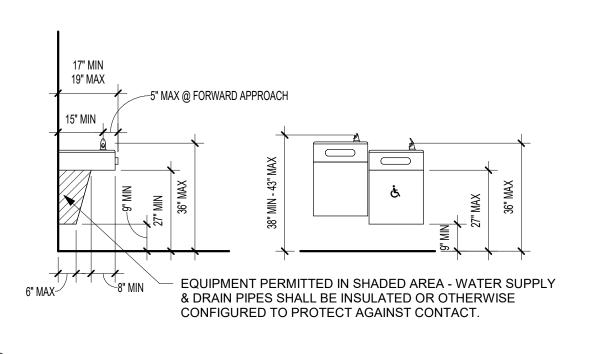




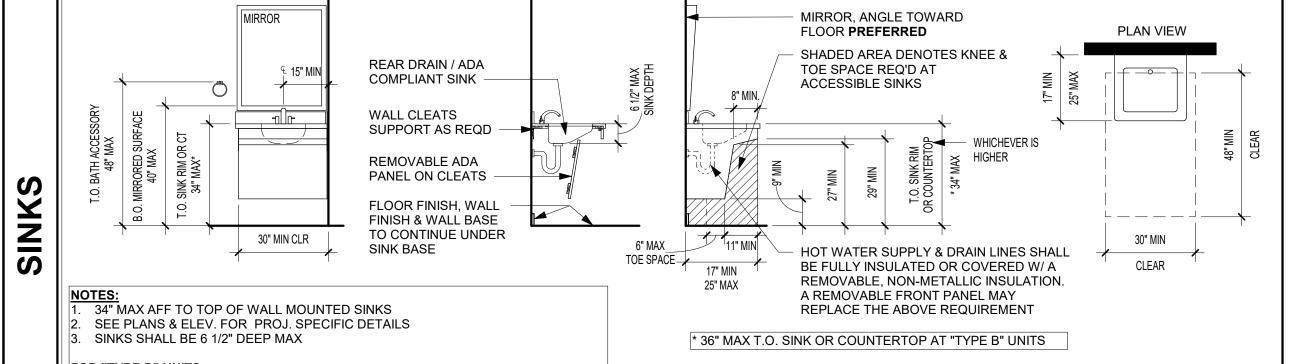
KITCHEN REQUIREMENTS



DRINKING FOUNTAINS CLEAR SPACE REQUIREMENTS



DRINKING FOUNTAIN HEIGHT REQUIREMENTS



FOR "TYPE B" UNITS: PARALLEL APPROACH CENTERED ON SINK PERMITTED WHEN CENTERLINE OF SINK IS 24" MIN FROM ADJACENT WALL IF FORWARD APPROACH IS PROVIDED, CABINETRY ALLOWED UNDER THE LAVATORY PROVIDED: A. CABINETRY CAN BE REMOVED WITHOUT REPLACEMENT OF THE LAVATORY B. FLOOR FINISH EXTENDS UNDER THE CABINETRY

C. WALLS BEHIND AND SURROUNDING THE CABINETRY ARE FINISHED

REQUIREMENTS

LOCATIONS: PUBLIC AREAS, ACCESSIBLE UNITS, "TYPE A" UNITS

SINK KNEE & TOE CLEARANCES & HEIGHT

04/17/2024 - CITY SUBMISSION

SHEET TITLE AMENITIES PLAN

PROJECT NUMBER: 22023

AS-100

**GRILLING PATIO PLAN** 

PLAN 1/4" = 1'-0"

# **KEYNOTE LEGEND**

A23 HOUSE PHONE

ACCESSIBLE PASSENGER DROP OFF AREA W/ ADJACENT CLEAR ACCESS AISLE - DROP OFF AND ACCESS AISLE SHALL BE AT THE SAME LEVEL & SHALL HAVE A SLOPE NOT TO EXCEED 1:48 (1:64 RECOMMENDED) - DRIVE AISLES SHALL RAMP UP TO LEVEL OF WALK AT DROP-OFF AREA - REFER TO MATERIAL LEGEND FOR SPECIFIC PAVING OF THIS AREA. REFER TO THE HADG FOR MORE INFORMATION REGARDING ACCESSIBLE PASSENGER LOADING

ACCESSIBLE CURB RAMP TO MEET ALL ACCESSIBILITY REQUIREMENTS, MAXIMUM SLOPE OF RUN 1:12 (1:14 RECOMMENDED), MAXIMUM CROSS SLOPE OF 1:48 (1:64 RECOMMENDED), REFER TO THE HADG FOR FURTHER INFORMATION

C5 OPTIONAL FLAGPOLE WITH IN-GROUND UPLIGHT

SPECIMEN TREE

PAVED WALKWAY - SLOPE AWAY FROM BLDG. (MAX 2% CROSS SLOPE) - SILICA-BASED AGGREGATE

DECORATIVE NON-SLIP PAVING LINE OF CANOPY ROOF ABOVE

OUTDOOR LOUNGE - REFER TO FF&E SPEC'S FOR LOOSE FURNISHINGS

POOL PATIO - REFER TO FF&E SPEC'S FOR LOOSE FURNISHINGS

C18 TRELLIS ABOVE - SEE DETAILS SHEET A-305

ACCESSIBLE ROUTE FROM ACCESSIBLE PARKING TO BUILDING ENTRANCE. PROVIDE A RUNNING SLOPE OF MAXIMUM 1:20 AND A CROSS SLOPE OF MAXIMUM 1:48 (1:64 RECOMMENDED). REFER TO HADG FOR

FURTHER INFORMATION. ASPHALT OR CONC. PAVING SHALL COMPLY W/ LOCAL REQUIREMENTS - PROVIDE POSITIVE DRAINAGE AWAY FROM BLDG. - COORDINATE SITE DRAINAGE & DETENTION W/ CIVIL ENGINEER

PARTIAL HEIGHT WALL

C28 CONTINUOUS CONCRETE CURB - TYP.

EXTERIOR FIRE PIT WITH MANUAL EMERGENCY REMOTE SHUT-OFF VALVE, SECURE IN PLACE TO RESIST MOVEMENT. FEED WITH UNDERGROUND LINE FROM BUILDING GAS SERVICE. PROVIDE APPROPRIATELY SIZED SAFETY SCREEN

C32 **EXPANSION JOINT** C33

CONTROL JOINT LANDSCAPE AREA - REFER TO LANDSCAPE SHEETS

FOR PLANTING PLAN PRIMED AND PAINTED TUBE STEEL CANOPY

COLUMNS EXTERIOR GAS GRILL. GRILLS REQUIRE REMOTE

EMERGENCY SHUT OFF. FLUSH CURB ALONG ENTIRE LENGTH OF ACCESSIBLE

DROP OFF TRASH, RECYCLING, AND ASH BIN

C48 24" X 54" FRC PLANTERS C51 EMERGENCY GAS SHUT OFF

C52 PROVIDE POWER FOR PLUG IN STRIP LIGHT AT

PRINTS ISSUED

REFERENCE G-003 FOR GENERAL NOTES

04/17/2024 - CITY SUBMISSION

**REVISIONS:** 



LEE'S SUMMIT

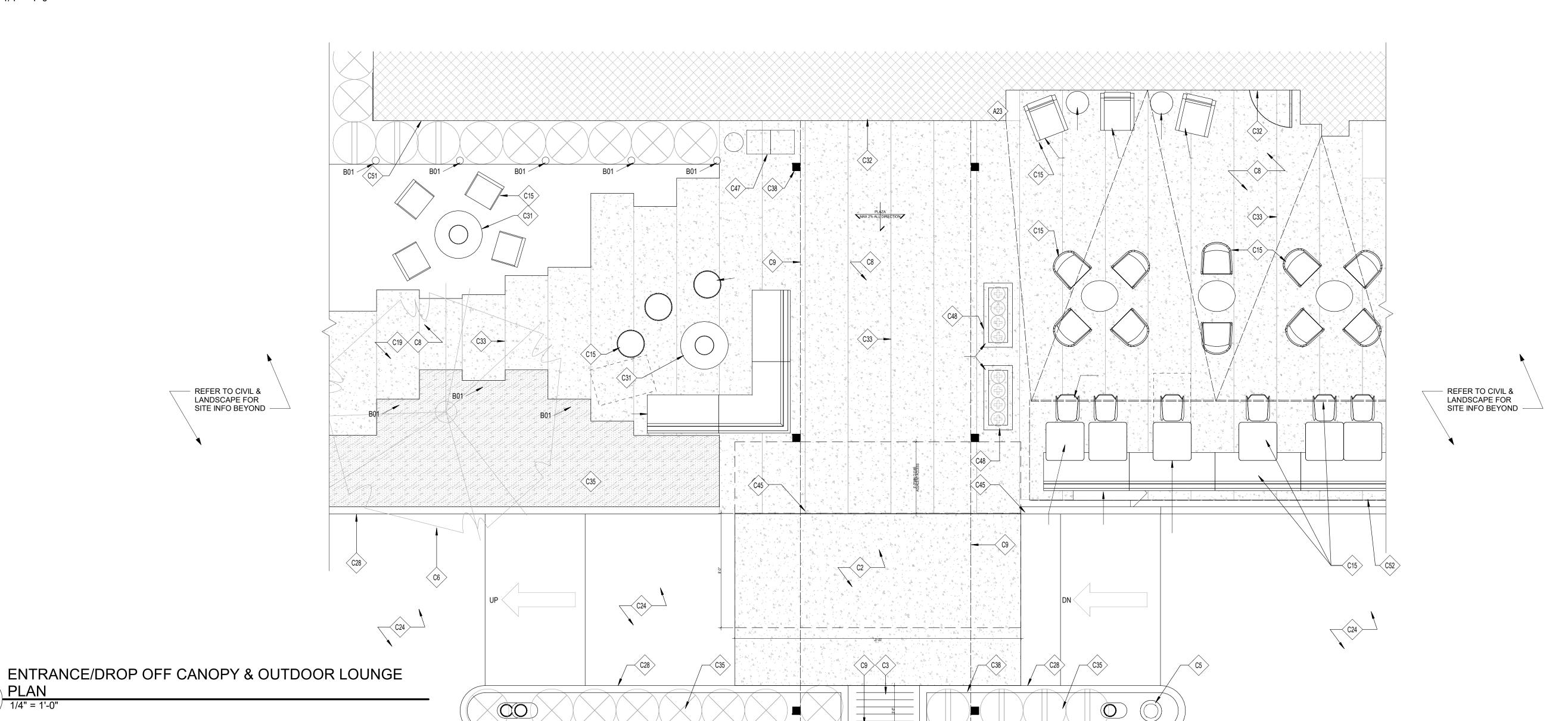
SHEET TITLE ARCHITECTURAL SITE AMENITIES

PROJECT NUMBER: 22023

SHEET NUMBER:

HOME2 SUITES BY HILTON

AS-101

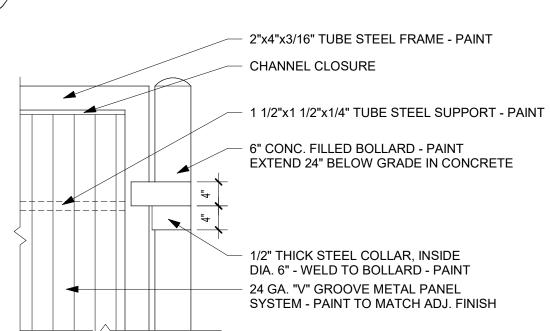


04/17/2024 - CITY SUBMISSION **REVISIONS:** 3 06/27/2024 CHANGE TO TRASH **ENCLOSURE GATE** 

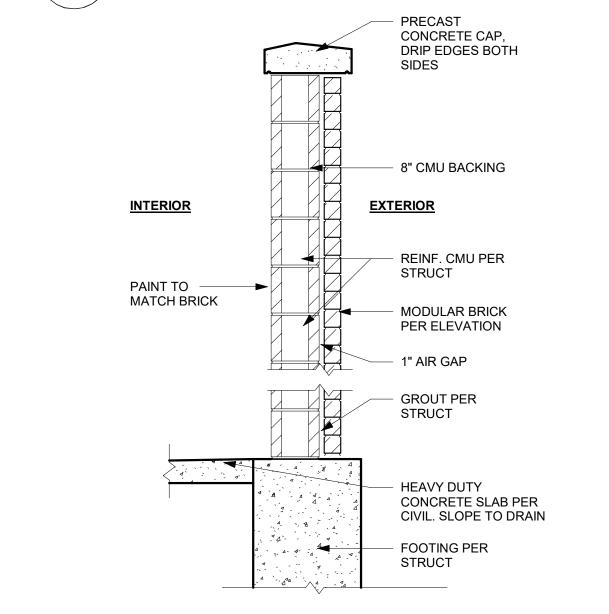
PRINTS ISSUED

2"x4"x3/16" TUBE STEEL FRAME - PAINT 1/2"x4" STEEL HINGE - WELD TO STEEL FRAME - PAINT 6" CONC. FILLED **BOLLARD - PAINT** 24 GAUGE "V" GROOVE METAL PANEL, PAINT TO

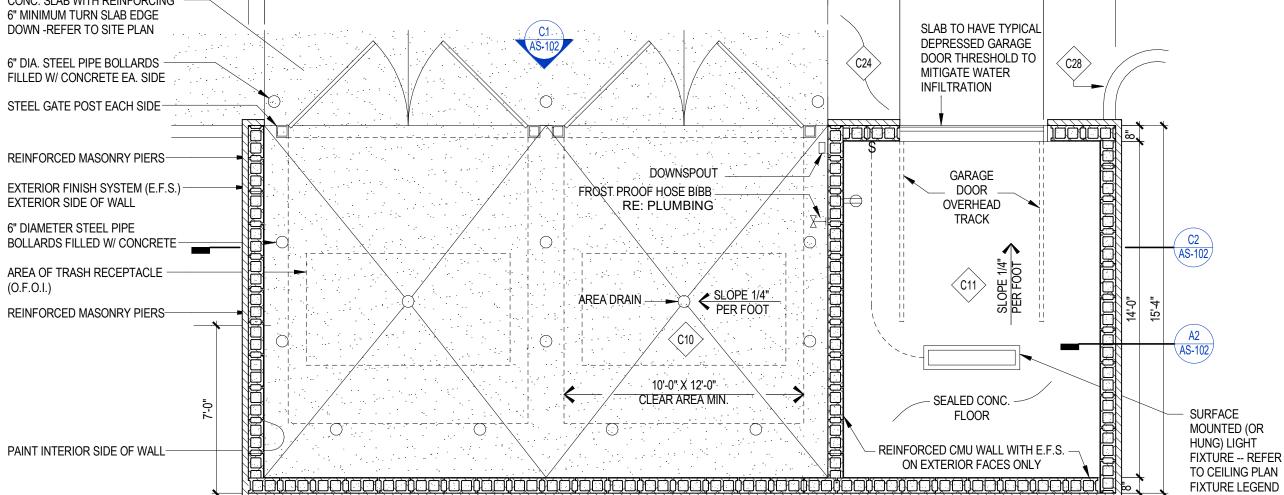
# TRASH GATE CROSS SECTION



# TRASH GATE DETAIL



# A2 SITE - ENCLOSURE - CMU - WALL SECTION



36'-2"

23'-6"

SHEET TITLE ARCHITECTURAL SITE AMENITIES

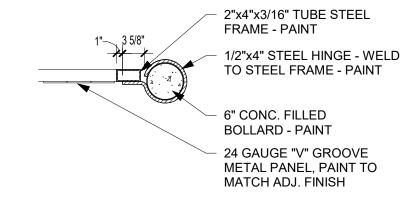
12'-0"

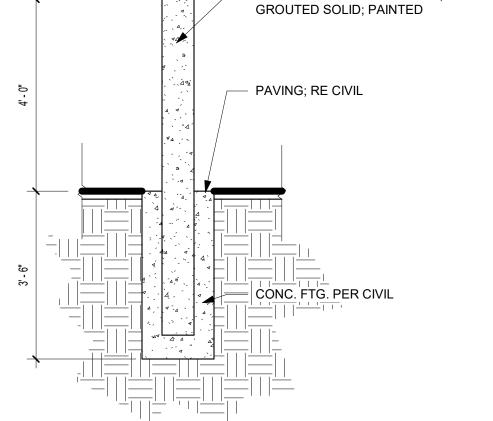
PROJECT NUMBER: 22023

SHEET NUMBER:

 $\Box$ 

**HOME2** 



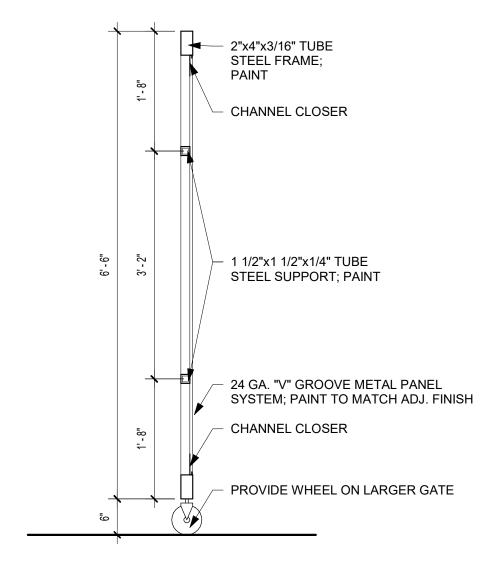


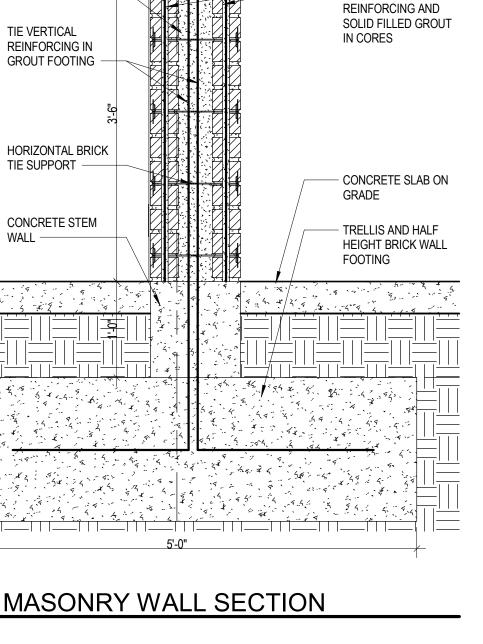
8" ROUND STL PIPE BOLLARD,

# SITE - BOLLARD - STEEL

RE: CIVIL & STRUCT DWG

FOR ADDITIONAL DETAIL





TRELLIS TUBE STEEL

PRE CAST CONCRETE

- STRUCTURAL BRICK

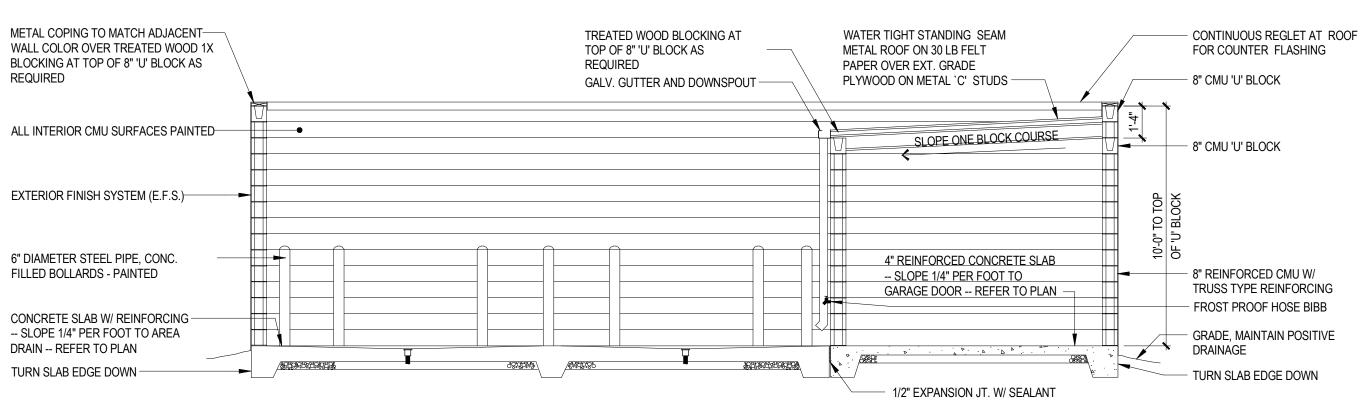
WITH VERTICAL

COLUMN BEYOND

# BRICK MASONRY WALL SECTION

CAVITY BETWEEN **BRICKS FILLED WITH** 

GROUT -



# STORAGE & TRASH ENLOSURE SECTION

TYPICAL SPACING

4x4 CONTINUOUS STEEL ANGLE

WELDED TAB WITH THROUGH BOLT

- 2x4 HORIZONTAL THERMALLY

MODIFIED WOOD OR ACELYTATED

(BEYOND)

WOOD SLAT

- TUBE STEEL BEAM

TUBE STEEL COLUMN

MODIFIED WOOD OR

WELDED TAB WITH THROUGH BOLT - WASHER

ON OPPOSITE SIDE

- 2x7 CONTINUOUS STEEL BEAM

**FIXTURE** 

CONTINUOUS WELDED

PLATE TO SHIELD LIGHT

CONTINUOUS LED

STRIP LIGHT;

NOTCH WOOD

SLATS TO PASS THROUGH

**4X4 CONTINUOUS** 

STEEL ANGLE

- 2X2 WELDED TAB

2X4 VERTICAL

WOOD SLAT

THRU-BOLT

CONTINUOUS

STEEL PLATE

- CONCRETE CURB

STEEL BASEPLATE

ON CONTINOUS

CONCRETE

**FOOTING** 

THERMALY MODIFIED

WELDED TAB WITH

WOOD OR ACELYTATED

WITH THRU-BOLT

- CONTINUOUS

STEEL PLATE (BEYOND)

TRELLIS - SLAT CONNECTIONS

WELDED TAB

WITH THRU-BOLT

2x4 HORIZONTAL

MODIFIED WOOD

OR ACELYTATED

THERMALLY

WOOD SLAT

ALL EXPOSED STEEL

TO BE PAINTED WITH

HIGH PERFORMANCE

L SHAPED -

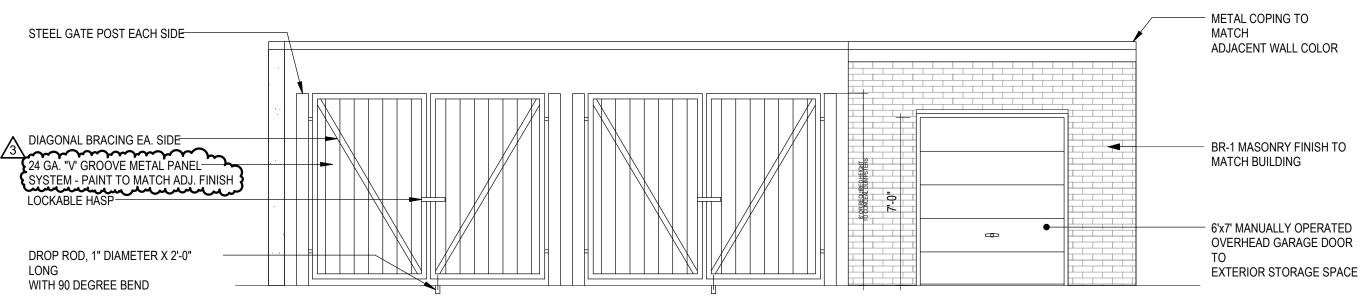
TRELLIS - DETAIL

STEEL MEMBER

COATING AT TRELLIS

2x4 VERTICAL THERMALLY

ACELYTATED WOOD SLAT



STORAGE & TRASH ENLOSURE ELEVATION

STORAGE & TRASH ENLOSURE PLAN

EXTERIOR FINISH TO MATCH FINISH OF MAIN HOTEL / TOWER 4. ADDITIONAL SPACE MAY BE NEEDED FOR RECYCLING. DESIGNER TO COORDINATE REQUIREMENTS WITH LOCAL

3. DUMPSTER ENCLOSURE

VERIFY DRAINAGE

INSPECTOR

5. INTERIOR WALLS AND CEILINGS PAINTED FINISH AT MINIMUM

REQUIREMENTS WITH HEALTH

2. PROVIDE CEILING MOUNTED LIGHT AND DUPLEX OUTLET IN STORAGE

TRASH GATE SECTION

CONC. SLAB WITH REINFORCING 6" MINIMUM TURN SLAB EDGE DOWN -REFER TO SITE PLAN

6" DIA. STEEL PIPE BOLLARDS -FILLED W/ CONCRETE EA. SIDE

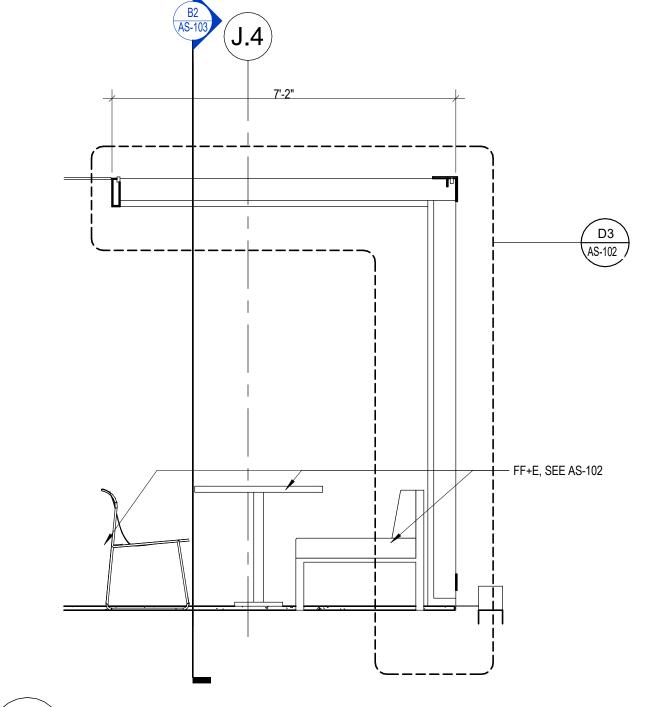
STEEL GATE POST EACH SIDE-REINFORCED MASONRY PIERS-EXTERIOR FINISH SYSTEM (E.F.S.) EXTERIOR SIDE OF WALL 6" DIAMETER STEEL PIPE BOLLARDS FILLED W/ CONCRETE-AREA OF TRASH RECEPTACLE (O.F.O.I.) REINFORCED MASONRY PIERS-

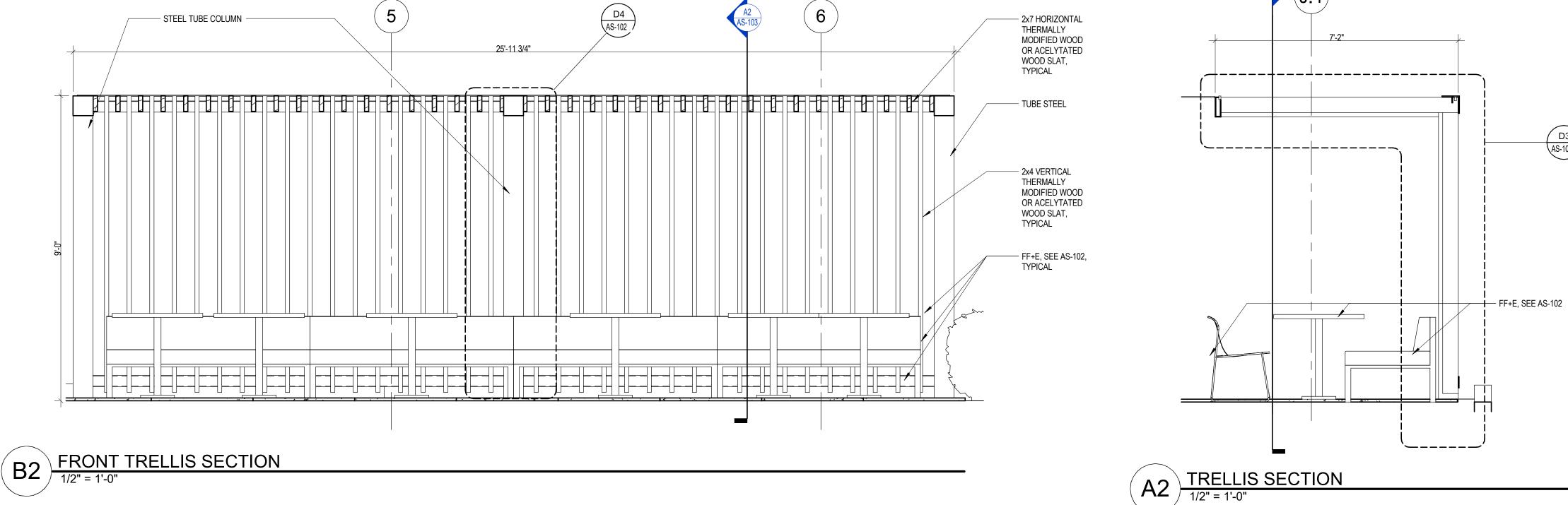
24'-2"

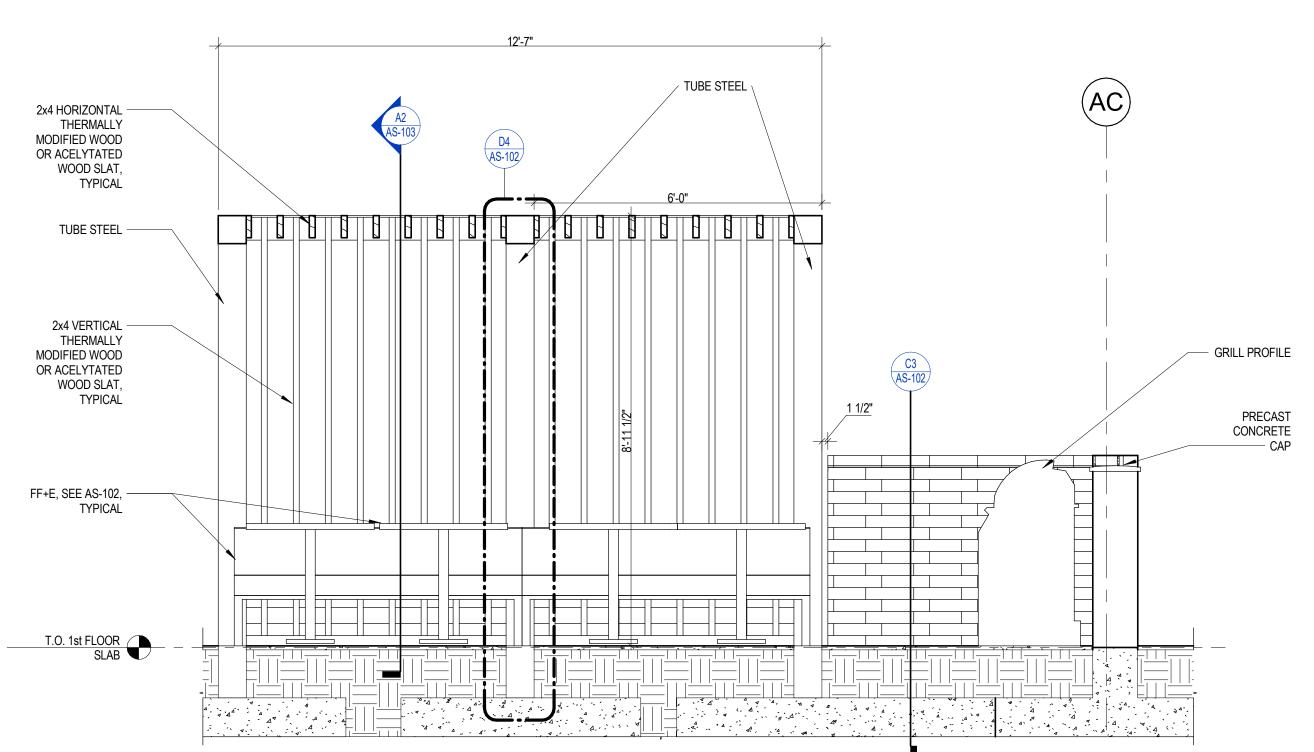
MOUNTED (OR HUNG) LIGHT FIXTURE -- REFER

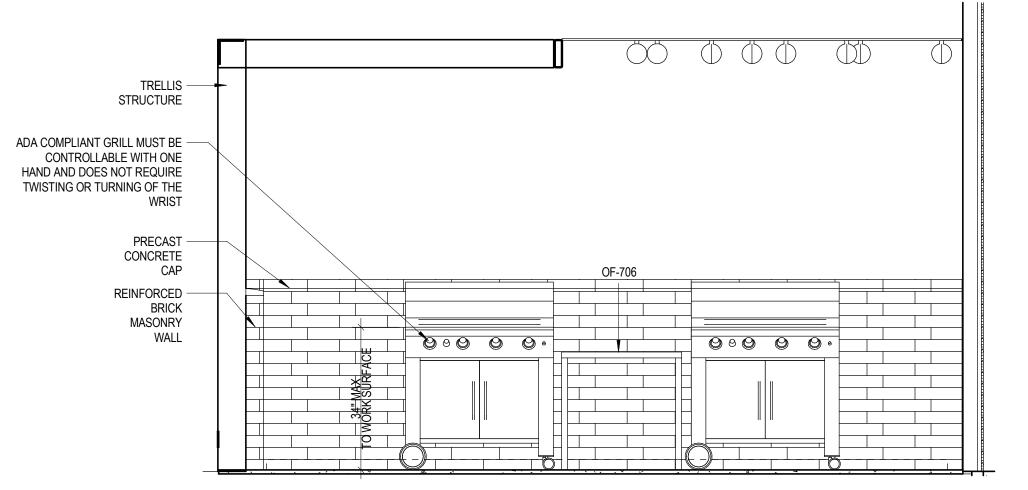
PRINTS ISSUED 04/17/2024 - CITY SUBMISSION

**REVISIONS:** 









PATIO GRILLS ELEVATION

1/2" = 1'-0"

SHEET TITLE ARCHITECTURAL SITE AMENITIES

PROJECT NUMBER: 22023

SHEET NUMBER:

HOME2 SUITES BY HILTON

AS-103

LEE'S SUMMIT

A. DESIGN CRITERIA 1. Design Codes: a. International Building Code: IBC 2018 b. Minimum Design Loads for Buildings and Other Structures: ASCE 7-16 Design Loads: a. Dead Lgads = 20 psf plus mechanical equipment shown on roof plan Main Roof King Size Brick Veneer = 36 psf max allowed Large Format Masonry = 70 psf max allowed EIFS Finish System = 10 psf max allower Walls Within Residential Units = 15 psf (additive to floor load) pd = 36 psf b. Live Loads (reducible per code UNO) ] <del>+ + + + + + - - -</del> Public Rooms = 100 psf (non-reducible) pf = 14 psf Public Corridors = 100 psf= 125 psf (non-reducible) Lightweight Storage Private Rooms and Corridors Serving Them = 40 psf MAIN ROOF SNOW DRIFT AT TYPICAL PARAPET Stairs and Exitways = 100 psfLOAD DIAGRAM Typical Roof = 20 psf = 200 lb concentrated load at any location on handrail or top rail Handrails = 50 plf linear load on top rail c. Roof Snow Load pd = 57 psfGround Snow Load (pg) = 20 psf Flat Roof Snow Load (pr) = 14 psf pf = 14 psf Snow Exposure Factor (C<sub>e</sub>) = 1.0 Snow Load Importance Factor (Is) = 1.0 Thermal Factor (C<sub>t</sub>) = 1.0 Slope Factor (C<sub>s</sub>) = 1.0 MAIN ROOF SNOW DRIFT AT HIGH PARAPET Main Roof Typical Parapet Snow Drift Load (pd) = 36 psf LOAD DIAGRAM Main Roof Typical Parapet Snow Drift width (w) = 17'-3" Main Roof High Parapet Snow Drift Load (pd) = 57 psfMain Roof High Parapet Snow Drift Width (w) = 14'-0" Pool and Entry Canopy Roof Snow Drift Load (Low Roof) (pd) = 46 psf Pool and Entry Canopy Roof Snow Drift width (Low Roof) (w) = 11'-0" Rain on Snow Surcharge d. Wind Load Basic Design Wind Speed, V = 109 mph (3 sec. Gust) ASD Wind Speed, Vasd = 85 mph Risk Category · == || Wind Exposure Internal pressure Coefficient (GCoi) = ±0.18 Components and Cladding (psf): Zone A=10ft<sup>2</sup> A=50 ft<sup>2</sup> A=100 ft<sup>2</sup> +16/-52 +16/-44 +16/-30 +16/-30 +16/-30 +30/-69 +27/-59 +26/-54 GABLE, SAWTOOTH AND MULTISPAN +30/-69 +27/-59 +26/-54 GABLE θ ≤ 7 DEGREES & +30/-33 +27/-30 +26/-28 MONOSLOPE ≤ 3 DEGREES 5 +30/-40 +27/-34 +26/-31 h ≤ 60' & ALT DESIGN h < 90' 1. A is the Effective Wind Area as defined in ASCE 7 Ch. 26. 2. Linear interpolation between tabulated values is permitted 3. Elements with Tributary Area (A<sub>i</sub>) > 700 ft<sup>2</sup> shall be permitted to be designed using provisions for MWFRS. e. Earthquake Load Risk Category Seismic Importance Factor (I<sub>e</sub>) = 1.0 Mapped Spectral Response Acceleration Parameters  $S_S = 0.099g$   $S_1 = 0.068g$ Design Spectral Response Acceleration Parameters  $S_{DS} = 0.086$  $S_{D1} = 0.068$ Soil Site Class: Seismic Design Category Basic Seismic Force Resisting System(s) Wood Walls with Wood Structural Panels (ASCE 7 Table 12.2-1 Line A.15) R = 6.5  $\Omega_0 = 3.0$   $C_s = 0.013$   $C_D = 4.0$ ( $\Omega_0$  reduced to 2.5 per ASCE 7-16 Table 12.2-1 footnote b) Wood Walls with Panels of other Materials (Gypsum) (ASCE 7 Table 12.2-1 Line A.17) R = 2.0  $\Omega_0 = 2.5$   $C_s = 0.043$   $C_0 = 2.0$ Ω<sub>0</sub> Reduced to 2.0 per ASCE 7-16 Table 12.2-1 Footnote b. Design Base Shear, V= C<sub>s</sub> x W = 160 kips Analysis Procedure = Equivalent Lateral Force Procedure (ASCE 7-16 Chapter 12.8) 100 Year 15 min. Rain Intensity (i) = 7.5 in/hr Allowable Deflections Total Load Live/Snow/Wind Load Typical Floor Joists/Trusses L/360 L/480 Roof Joists/Trusses L/240 L/360 Wall Framing (flexible finish) L/360 0.75" Wall Framing (brittle/brick finish) L/600 0.5" Cantilever deflection limits are the more restrictive of 2 x the appropriate L/-limit (e.g. 2L/360 = L/180) or absolute maximum value listed above, measured at the tip of the cantilever U.N.O. 4. Soil Properties: a. Soil properties are based on the project geotechnical report entitled Geotechnical Engineering Report Discovery Park Lot 2, prepared by Olsson on August 08, 2023 (herein known as "Geotechnical Report"). b. Lateral Earth Pressure: Cohesive Material, at Rest (Drained): Cohesive Material, at Rest (Undrained): = 97 pcf Granular Material, at Rest (Drained): = 56 pcf c. Allowable Soil Bearing Pressure = 2,500 psf

# **B. STRUCTURAL ENGINEERING DESIGN NARRATIVE**

McClure Engineering Company (McClure, MEC) is the Structural Engineer of Record (EOR) responsible for the documentation of structural design criteria, strength and stability of the primary vertical and lateral load-carrying systems in their completed form, and conformance of the structural design to the applicable building codes. These drawings produced by McClure convey the structural engineering design for the project, which includes the following components and systems:

a. Shallow concrete foundations. Slabs on grade.

.c. Building Framing:

Load-bearing wood wall and opening framing. Plywood sheathing on dimensional lumber wood floor and roof joists.

 iii. CMU stair and elevator towers d. Structural steel framing identified on the drawings.

e. The lateral force resisting system of the structure consisting of sheathed wood structural walls, wood sheathing diaphragms.

2. The following items are Deferred Submittals. Framing intent and additional requirements for these structural components are provided within these drawings\*:

a. Structural steel connections – see general notes section "Structural Steel".

Wood roof/floor trusses - see general notes section "Wood Framing and Fastening" / see S001 and S002 for applicable design criteria. All premanufactured canopy and awning framing including connections to the structure.

d. Handrails – see S001 "Design Criteria" for applicable loading. \* Reference section "D. Submittal Requirements." Coordinate requirements of these drawings with those of other design consultant drawings and the Project Specifications.

3. The following items are specifically excluded from McClure's design scope as represented on these drawings: a. Requirements for fire rating of assemblies or fire protection of structural members

b. Global stability of soil mass

Any exterior slabs, bollards, curbs, and any enclosures not shown on these drawings.

Interior non-load-bearing walls or furring

Shoring design, formwork design, temporary bracing, and other means and methods items Mechanical screen walls (screen walls shall be supported off of mechanical unit curbs)

# **C. GENERAL NOTES**

pd = 46 psf

+++

I OW ROOF SNOW DRIFT

LOAD DIAGRAM

WALLS h ≤ 60'

& ALT DESIGN h < 90'

pf = 14 psf

1. All construction shall conform to the Design Codes in Section "A. Design Criteria," including all applicable standards and documents

2. Plan and detail notes provided on specific sheets within these drawings supplement information in these General Notes. Always coordinate

the requirements of these notes with what is shown within the drawings. 3. Unless noted specifically on a plan, all plans show framing for the level indicated and walls, openings, posts, columns below that level.

4. Contract Document Coordination:

a. The drawings contained herein are intended to be utilized in conjunction with other design consultant's drawings (architectural, civil, mechanical, etc.). It is the responsibility of the Contractor to coordinate the requirements of the drawings into their shop drawings and

i. Refer to the Project Specifications issued as part of the contract documents for information supplemental to these drawings. Should conflicts between these drawings and the Specifications exist, the Contractor shall bring them to the attention of the

structural engineer for clarification. b. Refer to the architectural, mechanical, electrical, and civil drawings for location and size of block outs, inserts, openings, curbs, bases & pads, and dimensions not shown on these drawings.

c. Refer to the architectural drawings for size and location of doors and window openings, exterior wall assemblies, and floor, wall, and roof finishes. Refer to the mechanical and electrical drawings for additional information including locations of mechanical units,

d. Omissions or conflicts between various elements of the drawings, notes and details shall be brought to the attention of the structural engineer and resolved before proceeding with the work. 5. Use of Drawings in Construction:

a. The Contractor shall verify all dimensions and conditions at the job site before commencing work and shall report any discrepancies to the engineer responsible for the design of that work.

b. Do not use scaled dimensions; use written dimensions or, where no dimension is provided, consult the structural engineer for clarification before proceeding with the work. i. Where member locations are not specifically dimensioned, members are either located on grid lines or are equally spaced between

located members Details and keynotes shown shall be incorporated into the project at all appropriate locations, whether specifically called out or not. McClure may provide the contractor with electronic files for their convenience and use in the preparation of shop drawings. These electronic files are not construction documents; the contractor is not relieved of his/her duty to fully comply with the contract documents, including the need to confirm and coordinate all dimensions and details, take field measurements, verify field conditions, and coordinate

the contractor's work with that of other contractors for the project. 6. Changes During Construction: a. Openings shall not be cut or otherwise made in any structural member unless that opening is specifically shown on these drawings. The

Contractor shall seek approval in writing from the structural engineer for any design incorporating additional openings. b. Support details shown for Architectural, Mechanical, Electrical, and Plumbing equipment as well as elevators is based upon available information from the manufacturer (if any). The Contractor shall coordinate requirements of actual equipment supplied with details and

shall provide any additional framing required. c. The Contractor has the responsibility to notify the structural engineer of any architectural, mechanical, electrical, or plumbing load imposed on the structure that is not documented on the Contract Documents or differs from what is originally shown. Provide

documentation of location, load, size, and anchorage of all undocumented loads in excess of 250 lbs. Construction Sequence and Methods a. These drawings and the related Specifications represent the finished structure and, except where specifically shown, do not indicate the method or means of construction. Loads on the structure during construction shall not exceed the design loads indicated in Section "A.

Design Criteria" as a maximum. The Contractor shall supervise and direct the work and shall be solely responsible for all construction means, methods, procedures, techniques, and sequence. b. The Contractor is responsible for compliance with all applicable job-related safety standards proceeding from governing organizations

(e.g. OSHA). c. It is the responsibility of the Contractor to ensure the stability of the structural elements during construction as a result of means and

sequence by providing shoring, bracing, etc. as required. i. Stability considerations should include all applicable temporary construction and environmental loads per ASCE 37 which may include wind and seismic forces.

Temporary bracing shall remain in place until positive connection is made between the floor/roof diaphragm and the lateral force resisting elements. This is a means and methods item.

. The Contractor may at their discretion employ a Specialty Structural Engineer, licensed in the state where the project is located, for the design of any temporary bracing, lifting, rigging, and shoring. d. The Contractor shall consider the effects of thermal movements due to hot or cold weather construction and the potential for extreme

temperature variations before the structure is complete e. Any foundation wall restrained by a floor is not designed to be backfilled prior to the complete construction of the floor and the lateral bracing elements (shear walls, braced frames, etc.) below it. For backfilling before this time, temporary bracing shall be designed and

f. .. The Contractor is responsible for the protection and repair of any adjacent existing structures, surfaces, and areas which may be damaged as a result of the work.

# D. SUBMITTAL REQUIREMENTS

1 Submittal Procedures:

The Contractor shall provide all submittals in PDF format unless otherwise requested or indicated in the Project Specifications b. All submittals must be reviewed by the Contractor prior to McClure's review. The Contractor is responsible for reviewing each submittal for basic coordination with these drawings and to verify that all the required components of the submittal are incorporated. The submittal must bear the electronic review stamp of the Contractor before McClure will proceed with the review.

Incomplete submittals or submittals not meeting the requirements of this section will not be reviewed. McClure will notify the contractor that the submittal is incomplete or unacceptable and that resubmission is required. Submittals requiring engineering calculations for all or a portion of the work are considered incomplete without the sealed

calculations and will not be reviewed. Shop Drawings shall be original drawings. Submissions incorporating any portion or reproduction of the contract documents will not

Deferred Submittals not meeting the seal requirements of section D.2.b are considered incomplete and will not be reviewed.

Resubmittals with comments from a previous review left unaddressed or without any response will not be reviewed. d. Allow two weeks for review of all submittals unless an agreement for expedited review is made in writing by McClure. e. McClure's submittal review scope of work includes a single submittal review and one review of the revised submittal if required (two reviews total of the same submittal). Time required for more than two reviews of a submittal is considered an additional service and will

be billed hourly. McClure reserves the right to withhold review of a submittal surpassing this allowance until proper billing to the responsible party can be established. Submittals must be returned to the Contractor by McCure bearing a stamp marked "Reviewed No Exception Taken" or "Reviewed With Comments/Exceptions" prior to proceeding with the work. Submittals marked "Reject/Resubmit" must be revised according to the

comments provided prior to commencing with the respective scope of work. Deferred Submittals: a. See Section "B. Structural Engineering Design Narrative" for the list of items considered Deferred Submittals.

Deferred Submittals shall bear the seal of a professional engineer licensed in the state where the project is located. If the project requires a licensed Structural Engineer (S.E.) as the Engineer of Record according to state laws, the same qualification level applies to the engineer sealing the Deferred Submittals.

Deferred Submittal items shall not be installed until the Deferred Submittal documents have been approved by the Building Official.

a. Submittals (product data, test records, shop drawings, and/or calculations) are required for the following:

Submittal Name	Items Required:							
	Product Data	Shop Drawings	Test Records	Engineering Drawings	Engineering Calculations			
Concrete Mix Designs	X		X		-			
2. Concrete Break Reports			X	4				
Concrete Reinforcing Layout		Х	.,					
Concrete Anchor Bolts &     Embedded Plates	X	X		*****	gert e			
Concrete & CMU Anchors     (Post-Installed)	X							
Post-Installed Anchor     Substitutions	X				X			
Post-Installed Connection     Geometry Alteration	X			X	<b>X</b>			
8. Structural Steel Framing	Х	X						
Structural Steel Framing     Connections		Х			X			
10. Steel Floor Deck	Х	Х						
11. Metal Railings & Connections								
12. Metal Ladders & Connections								
13. Fall Arrest Systems								
14. Wood Framing Materials	X							
15. Wood Floor & Roof Trusses incl. Reactions				X	X			
16. Wood Truss Connections to Supporting Structure				X	Х			
17. Specialty Wood Fasteners	Х							
18. Manufactured Wood Shear Panels	X							
19. Masonry Wall Materials	X		X					
20. Masonry Reinforcing		Х						

b. "Product Data" may indicate mill certifications, material data sheets, Evaluation Service Reports (ESRs), etc. See requirements of each material section of the general notes for further information. Where "Engineering Drawings" and/or "Engineering Calculations" are indicated, the submittal must comply with the requirements of

item "2. Deferred Submittals" above. Submittals For Record: a. The following items impact the structural design and therefore must be submitted to the engineer; however, they do not require review.

They will be returned stamped as "Received For Record". Elevator Shop Drawings with Loads to Structure. Mechanical Equipment Shop Drawings with Weight.

# E. CONCRETE

1. Reinforced concrete shall have the following minimum 28 day compressive strengths:

a. Interior slabs on grade, unless noted otherwise 4000 psi normal weight b. Slabs on grade, Foundations and Grade Beams 5000 psi normal weight

All concrete exposed to weather shall have 6% (+- 1%) air entrainment. 3. Submit mix designs for all concrete mixes prior to placement. All submittals shall include the following

a. Batch quantities including admixture dosage rates. b. Strength test results for trial mixes.

Aggregate source(s) and gradation(s).

d. Product data for cement, fly ash and other cementitious materials.

e. Product data for all admixtures. 4. Provide protection for reinforcing bars as follows:

a. Cast-in-place concrete Concrete cast against and permanently exposed to earth: 3" Concrete exposed to earth and weather (formed) #5 and smaller

. #6 and larger Concrete not exposed to weather and not in contact with ground: Slabs and walls

2. Beams and columns 5. Provide construction or control joints in slab on grade as shown on plans. If joint pattern is not shown, provide joints at 10'-0" x 10'-0" and at locations to conform to bay spacing wherever possible (at column centerlines, half bays, third bays, etc.).

6. Interface of all slab and beam construction joints shall be roughened with 1/4" amplitude. Surface of construction joints shall be clean and

free of laitance. Immediately before new concrete is placed, construction joints shall be wetted and standing water removed. Construction joints in walls shall be keyed and placed at locations approved by the Architect and Structural Engineer.

Provide control joints in all retaining walls at 15 ft to 20 ft intervals. 9. Elevator pit walls shall not have control joints as they are part of the lateral system.

Provide PVC waterstops in all below grade construction joints and at other locations as shown. 11. Provide compressible filler and sealant in all slab-on-grade and wall and column interfaces that are not doweled together.

12. All column pockets shall be filled with concrete after column is erected. 13. Sleeves and openings in slabs not shown on structural drawings or outside the parameters of typical sleeve details are not permitted, unless

approved by the Structural Engineer.

.14. Conduit and pipes embedded in slabs, walls, or grade beams shall be no larger in outside dimension than 1/3 the overall member thickness and shall be placed no closer than 3 diameters or widths on center.

15. Conduits and pipes shall not be permitted in concrete pilasters or columns.

16. See "G. Foundations" section 5 for requirements at slab on grade. 17. Bond break material for slip joints shall be 1/8" thick tempered wood particleboard, 1/8" thick high-density plastic elastomeric strips, two

layers of 10mil polyethylene sheeting or equivalent. 18. Provide concrete housekeeping pads under all mechanical, plumbing, fire protection, and electrical equipment per plans. Pads shall extend beyond equipment a nominal 6" on all sides. Provide reinforcing per details.

19. At floor drains, locally slope floor towards drain. See architectural and plumbing drawings for drain locations.

20. Foundation walls shall be temporarily braced until positive attachment is made to floor framing per details. This is a means and methods

# F. REINFORCING FOR CONCRETE

a. All reinforcing steel to be ASTM A615, Grade 60, deformed bars, unless noted otherwise.

Any reinforcing to be welded shall be ASTM A706 and welded with E80 electrodes. Alternatively, ASTM A615 reinforcing may be welded with E90 electrodes and proper preheat according to AWS D1.4.

iii. E70 electrodes are not permitted for welding rebar. b. Welded wire fabric shall be ASTM A185. Welded wire fabric shall be in flat sheets.

c. All reinforcing bars to be detailed and placed in accordance with the ACI "Manual of Standard Practice for Detailing Reinforced Concrete

Structures" specifications. d. All reinforcing, including dowels, shall be securely tied and cast with the lower member. Placing reinforcing after concrete has been

e. Field bending of reinforcing partially embedded in concrete will not be allowed unless specifically noted on the drawings or approved by the Structural Engineer

f. All reinforcing bars shall be contact lap spliced or doweled as follows, unless noted otherwise:

	Devel	opment	Class "	Class "B" Splice Standard 90		Standard 90 deg.		
Bar Size	Top Bar	Other Bar	Top Bar	Other Bar	Embed	Leg Length	Bend Dia.	
#3	17	13	22	17	6	6	2-1/4	
#4	22	17	29	22	6	8	3	
#5	28	22	36	28	8	10	3-3/4	
#6	33	26	43	33	9	12	4-1/2	
#7	49	37	63	49	11	14	5-1/4	
#8	55	43	72	55	12	16	. 6	
#9	63	48	81	63	14	19	9-1/2	
#10	70	54	91	70	15	22	10-3/4	
#11	78	60	101	78	17	24	12	
#14	94	72			29	31	18-1/4	
. #18	125	96			39	41	24	
•••	Tension	Developm	ent and S	plice Lengt	hs for f'c=	4,000psi		
	Devel	opment	Class "	B" Splice	Stand	lard 90 deg	ı. Hook	
Bar Size	Top Bar	Other Bar	Top Bar	Other Bar	Embed	Leg Length	Bend Dia.	
110	40	4.5		40	1 0			

. #14	94	72			29	. 31	18-1/4
#18	125	96			39	41	24
	Tension	Developm	ent and S	plice Lengt	ths for f'c=	4,000psi	
	Devel	opment	Class "	B" Splice	Stand	lard 90 deg	g. Hook
Bar Size	Top Bar	Other Bar	Top Bar	Other Bar	Embed	Leg Length	Bend Dia.
#3	19	15	24	19	6	6	2-1/4
#4	25	19	32	25	7	8	3
#5	31	24	40	31	9	10	3-3/4
#6	37	29	48	37	10	12	4-1/2
#7	54	42	70	54	12	14	5-1/4
#8	62	48	80	62	14	16	6
· #9	70	54	91	70	15	19	9-1/2
· #10	79	61	102	79	17	22	10-3/4
#11	87	67	113	87	19	24	12
#14	105	81			32	- 31	18-1/4
#18	139	. 107		-	43	41	24

uncoated bars assuming center-to-center bar spacing ≥ 3\*d<sub>h</sub> without ties or stirrups or ≥ 2\*d<sub>b</sub> with ties or stirrups, and bar clear cover ≥ 1.0\*d<sub>b</sub> Normal weight concrete as well

as no transverse reinforcing are both assumed. Standard 90 deg. hook embedment lengths are based on bar side cover ≥ 2.5" and bar end cover ≥ 2" without ties around hook. For special seismic considerations, refer to ACI 318 Code Chapter 21.

All tension splices shall be Class "B" splices unless noted otherwise on plans.

g. All welded wire fabric shall be lapped 12" or 48 wire diameters, whichever is greater. Provide (2) #5 x 6'-0" diagonals at all corners of openings and re-entrant corners, unless noted otherwise. Dowels between foundation and walls shall be installed and shall be the same grade, size, and spacing as the vertical wall reinforcing, unless noted otherwise. Provide corner bars to match longitudinal reinforcing in all footings. Provide (2) comer bars at tee intersections.

Provide 500 pounds of miscellaneous straight bar reinforcing (#4 & #5) to be used in field for special conditions. Labor for placing same to be included. Slabs and Slabs-on-Grade

a. All slabs on grade to be reinforced with 6x6 – W2.9xW2.9 welded wire fabric, unless noted otherwise.

a. Provide corner bars in the outside face and at wall intersections to match horizontal wall bars. Use (3) #5 vertical construction rods at

.b. Provide #4 at 12" O.C. each way in each face of walls, unless noted otherwise.

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NOTICE: McClure Engineering Co. is not responsible or liable for any issues, claims, damages, or losses (collectively, "Losses") which arise from failure to follow these Plans, Specifications, and the engineering intent they convey, or for Losses which arise from failure to obtain and/or follow the engineers' or surveyors' guidance with respect to any alleged errors, omissions, inconsistencies, ambiguities, or conflicts contained within the Plans or Specifications. MISSOURI CERTIFICATE OF AUTHORITY NO. E-2006023253

EXPIRES: DECEMBER 31, 2024



SHEET TITLE **GENERAL NOTES** 

SHEET NUMBER:

PROJECT NUMBER: 2023000333

### **G. FOUNDATIONS**

- 1. Foundation design is based on Geotechnical Report prepared by Olsson, dated Aug. 8, 2023. See documents for additional information. The geotechnical report shall be considered part of the construction documents.
- 2. A geotechnical representative shall be retained on site for all construction activity to verify that all proper requirements have been met to meet the design requirements outlined in the geotechnical report. Representative shall be Olsson Engineers or someone familiar with all documents of the geotechnical investigation provided for the project.
- 3. The Contractor shall provide dewatering of excavations from surface water and ground water. Do not place concrete if water is present at base of excavation. Footings
- a. All footings shall bear on suitable subgrade prepared in accordance with the geotechnical report. The underlying soils and the structural fill shall have a minimum safe load bearing capacity of 2,500 psf.
- b. Remove all existing topsoil, pavement, organic materials, and other soil that appears to be unsuitable prior to preparing the footing
- c. If any adverse soil conditions are encountered which extend below footing level such as those listed above, the general contractor shall
- contact the geotechnical engineer immediately for determination of how to remedy the condition before continuation of work. d. No footings shall be placed in water or on frozen ground. All exterior construction shall be carried down to minimum 3'-0" below finished adjacent exterior grade.
- 5. Slab on Grade
- Slabs shall be constructed as shown on the plans. b. A 10mil minimum vapor retarder shall be installed under all slabs on grade in occupied or conditioned spaces per the drawings. See the geotechnical report for additional information regarding the installation of the vapor retarder.
- Provide joints at 30 x slab thickness (+/-) in both directions and located to conform to bay spacing wherever possible (at column
- centerlines, half bays, third bays, etc.). Submit control joint layout for approval by the Structural Engineer. d. Saw cut control joints shall be done late enough to prevent raveling of the cut edges and early enough to prevent racking of the slab
- ahead of the saw blade. e. Plumbing and utilities passing through the slab on grade shall be constructed with flexible fittings to allow for slab movement. The
- expected slab movement for the parking slab shall be considered up to 2" minimum for fittings. f. Concrete slab to be cured according to ACI Standards. Concrete slab cure to be compatible with any sealer, grout, or adhesive that may be used in the floor later.
- g. Locally slope floor towards any floor drains. See architectural and plumbing drawings for drain locations.
- Geotechnical Testing Agency Requirements
- a. If the geotechnical representative on site takes exception to anything in the Geotechnical Report and requires additional field investigation to clarify those exceptions, the cost of such investigation shall be included in the additional fee for field quality control and testing and identified as such. All other exceptions shall be documented and approved by the geotechnical engineer.
- b. The geotechnical representative must have read all documents pertaining to the geotechnical report for the project and have understood and accepted the criteria contained in the report.
- c. The geotechnical representative must understand and be able to make decisions affecting the work for field observations and conditions described in the report during construction. The representative must be capable of advising the owner or contractor for procedures regarding, but not limited to sub-grade preparation, dewatering activities, and other construction considerations.
- See notes on sheets and details for additional information.

# H. POST-INSTALLED ANCHORS TO CONCRETE AND MASONRY

- Post installed anchors shall be expansion, adhesive, or screw anchors as indicated in the details, unless noted otherwise. Only use the anchor type indicated. All anchors on the project of each type must be by the same manufacturer, see below for substitution requirements.
- a. Expansion anchors: Concrete: Hilti Kwik Bolt TZ (ICC-ES ESR1917).
- Simpson Strong-Bolt 2 (ICC-ES ESR3037 DeWalt Power-Stud+ SD2 (ICC-ES ESR2502). ii. Grout-filled Concrete Masonry Hilli Kwik Bolt 3 (ICC-ES ESR1385).
- Simpson Strong-Bolt 2 (UES ER0240) DeWalt Power-Stud+ SD1 (ICC-ES ESR2966).
- b. Adhesive anchors (threaded rods shall be ASTM A193 B7 for all anchors):
  - Concrete: Hilti HIT RE 500-SD (ICC-ES ESR2322) or Hilti HIT-HY 200 (ICC-ES ESR3187). Simpson AT-XP (UES ER263), SET-XP (ICC-ES ESR2508) or ET-HP (ICC-ES ESR3372)
  - DeWalt Pure 110+ (ICC-ES ESR3298), PE1000+ (ICC-ES ESR2583), Pure 50+ (ICC-ES ESR3576), AC 200+ (ICC-ES ESR4027), or AC100+ Gold (ICC-ES ESR2582)
- Solid grouted concrete masonry: Hilli HIT-HY 70 anchor adhesive (ICC-ES ESR3342).
  - Simpson AT-XP (UES ER0281), SET-XP (UES ER0265) or ET-HP (UES ER0241) DeWalt AC100+ Gold (ICC-ES ESR3200)
  - Hollow concrete or multi-wythe clay masonry:
- Hilti HIT-HY 70 with screen tubes (ICC-ES ESR3342). Simpson SET-XP (UES ER0265)
- DeWalt AC100+ Gold with screen tubes (ICC-ES ESR3200)
- c. Screw anchors Concrete:
  - Hilli Kwik HUS EZ (ICC-ES ESR3027)
  - Simpson Titen HD (ICC-ES ESR2713) DeWalt Screw-Bolt+ (ICC-ES ESR2526)
  - Grout-filled concrete masonry:
  - Hilli Kwik HUS EZ (ICC-ES ESR3056) Simpson Titen HD (ICC-ES ESR1056
  - DeWalt Screw-Bolt+ (ICC-ES ESR1678)
- 2. Post-installed anchors shall only be used where specified in the drawings. The Contractor shall obtain approval from the engineer prior to
- using post-installed anchors for missing or misplaced cast-in-place anchors. 3. All personnel installing anchors shall be trained and certified by the anchoring system manufacturer or by ACI. Contractor shall submit current certifications for all personnel. ACI certification required for all personnel installing adhesive anchors in a horizontal or overhead conditions. If a failure occurs at any time during testing or construction, personnel shall be retrained and recertified.
- 4. Installation: a. Do not cut existing reinforcing.
- The hole through the supported steel member shall be 1/16" larger in diameter (1/8" for screw anchors) than the anchor unless noted otherwise. Use plate washers with a standard size hole welded to steel members where oversized holes must be used.
- c. Holes shall be drilled per the manufacturer's written instructions as outlined in the ESR. d. Where applicable, installation shall follow cleaning procedure indicated in the ESR. Holes shall be made with a hammer drill. Use of a
- Special inspection shall be provided for all post installed anchors as required by the building code and/or ICC-ES report. Written special inspection reports shall be submitted to the registered design professional in responsible charge by the special inspector. The reports shall record and report the following as a minimum:
- a. One of every ten anchors installed by each technician in locations listed below shall be randomly tested in direct tension. At least one anchor shall be tested on each day that anchors are installed. Test anchors in the following locations
  - Shear wall hold down anchors. Shear wall sill plate anchors.
  - Anchors supporting dead or live loads in tension.
- Test anchor to twice the allowable tension load as provided in the ESR. Test load shall not exceed 80 percent of the yield strength of the anchor (0.8 x A<sub>se</sub> x f<sub>va</sub>). Post-installed anchors shall not be tested using a torque wrench.
- If any anchor fails quality control testing, all anchors of the same type shall be randomly tested until (10) consecutive anchors pass. Resume normal frequency after this with approval of the engineer. The failed anchor(s) shall be removed and the affected area patched per engineer's direction. Consult the engineer for anchor replacement instructions. The cost for additional work and testing
- required due to anchor failure is the responsibility of the installing contractor. b. Prior to and during installation of anchors, inspection and report shall include: Installer shall have reviewed manufacturer's ESR report and written installation procedures and has been certified by the
- manufacturer or ACI. General concrete or CMU block conditions (cracked or un-cracked, wet or dry, grouted or hollow, etc).
- Whether manufacture's written procedures for preparation of hole were followed. Indicate if hole is wet or dry.
- Whether hole was made with a hammer drill
- Whether manufacture's written procedures for anchor installation were followed. . Embedment depth and concrete or block thickness.
- vii. Anchor diameter, length and type. c. After installing anchors, inspection and report shall include:
- All test locations.
- Anchor size and/or type. Applied load, loading procedure, load increments and rate of loading.
- Mode of failure. Photographs of test equipment and typical failures.
- Substitution requests for products other than those listed above shall be submitted to the engineer with calculations that are prepared and sealed by a registered structural engineer at least two weeks prior to scheduled installations. Calculations shall demonstrate that the substituted product will achieve an equivalent capacity using the appropriate design procedure required by the building code. Product ICC-ES code reports shall be included with the submittal package.

# I. STRUCTURAL STEEL

```
    Materials shall conform to the following, unless noted otherwise.

       Rolled WF shapes
                                     ASTM A992, Fy = 50ksi
       Plates and angles
                                     ASTM A572-50
                                     ASTM A36
       Channels
       HSS: Rectangular
                                     ASTM A500, Grade C
                                    ASTM A500, Grade C
       HSS: Round
                                     ASTM F3125
          All bolts shall be Grade A325 or F1852, UNO
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Bolts designed as "A490" shall be Grade A490 or F2280 ASTM A563 DH or A194 Washers ASTM F436 ASTM F1554 Grade 36, UNO Anchor Bolts

Threaded Rod ASTM A108, Type B Nelson headed shear stud connectors or equal Studs Electrodes Matching weld metal, 70 ksi minimum strength.

b. Finishes Prepare all surfaces that will be exposed in accordance with SSPC SP3. All exterior steel components exposed to view or weather shall be galvanized in accordance with ASTM A123.

All exterior welded connections shall be cold galvanized in accordance with ASTM A780.

- 2. Fabricator: Steel fabricator shall be AISC Certified.
- Structural members shall be detailed, fabricated, and erected in accordance with the latest edition AISC Code of Standard Practice. Structural steel fabrication and erection drawings must be submitted to the engineer for review and approval prior to fabrication. d. Fabricator shall engage a professional engineer registered in the state of the project for the design and detailing of:
- Steel connections. ii. Temporary bracing.
- Connections: a. The contractor has the option to use bolted or welded connections. Any connections not specifically detailed on the drawings shall be designed by a professional structural engineer licensed in the project state and retained by the fabricator. In general, any connections shown on the drawings are schematic and are intended to show only the relative relationship of the connected members.
- b. Structural design calculations for all beam and bracing connections shall be submitted to the engineer prior to fabrication and should include the following (as a minimum):
- All plate dimensions and grades (minimum plate thickness shall be 3/8"). All weld sizes, lengths, pitches and returns.
- Number and type of bolts
- Beam shear connections shall be designed for the actual reactions indicated on the drawings. Connection forces shown on drawings are envelope reactions based on ASD load combinations.
- Connections indicated on the drawings as moment-resisting shall be designed for the moment shown. If moment is not indicated on the drawings, connection shall be designed to develop the full capacity of the member. Columns have not been checked for local effects at connections. Fabricator shall verify if stiffener or web doubler plates are
- required and provide as necessary. Column size may also be increased with approval of the Structural Engineer. Connection loads indicated on the drawings include compensation for Code permitted stress increases and load reductions for connection design
- d. Bolted Connections: Minimum bolt diameter shall be 3/4".
  - Slip critical connections shall be used for bracing members, moment-resisting connections, cantilevers, and as indicated on the drawings. Standard oversized and long-slotted holes are permitted for friction-type connections. All non-slip-critical connections shall be typical bearing type. Oversized or slotted holes are not permitted unless indicated on the
  - The fabricator is responsible for verifying the tensile capacity of axially loaded members with the presence of bolt holes. Increase member size; add plates (etc) as required.
- e. Welded Connections: All fillet welds shall be sized according to AISC minimums, but never less than 3/16" (UNO) All welds shall be performed in accordance with the latest edition of the AWS Structural Welding Code.
- Erection:
- a. All structural steel to be fabricated and erected in accordance with latest AISC specifications.
- It is the responsibility of the contractor to ensure that structure is maintained in a safe, stable configuration at all times. Any shoring required shall be submitted with engineering calculations for approval.
- b. Splicing of steel members not specifically shown on the drawings is prohibited without prior approval from the engineer c. All beams shall be installed with the mill camber up.
- Steel Lintels: Loose lintels for king brick at all openings shall be the following, one angle per 4" wythe of masonry:
- i. L 3-1/2 x 3-1/2 x 5/16 for spans less than 5'-9" ii. L 5 x 3-1/2 x 5/16 for spans between 5'-9" and 7'-11"
- iii. L 6 x 3-1/2 x 5/16 for spans between 8'-0" and 9'-7" iv. L 7 x 4 x 3/8 for spans between 9'-8" and 11'-10" b. King brick lintel sizes are based on 36 psf brick weight with 8'-0" max height of brick above the lintel.
- c. Loose lintels for large format masonry at all openings shall be the following: L 6 x 6 x 3/8 for spans less than 6'-6"
- ii. L 8 x 6 x 1/2 for spans between 6'-6" and 9'-3" d. Large format masonry sizes are based on 70 psf masonry weight with 10'-0" max height of masonry above lintel.
- e. Lintels shall bear 8" minimum each end. Lintels shall be galvanized.
- g. All double angle lintels back-to-back shall be bolted at 32" O.C. maximum spacing, with 5/8" diameter A307 bolts, a minimum of two
- bolts per span.

### MINIMUM DESIGN REACTION SCHEDULE (FOR BEAM REACTIONS NOT SHOWN ON PLANS OR DETAILS) Double Angle of Bolts to Column to Beam Beam W8 12.4 Kips 12.4 Kips W10 13.8 Kips 13.8 Kips W12 23.0 Kips 23.0 Kips W14 26.4 Kips 26.4 Kips W16 39.0 Kips 39.0 Kips W18 53.0 Kips 59.1 Kips W21 63.6 Kips 83.6 Kips W24 74.2 Kips 110.6 Kips W27 7 74.2 Kips 128.6 Kips W30 84.8 Kips 151.3 Kips W33 95.4 Kips 185.0 Kips W36 10 103.0 Kips 205.0 Kips

Note: Unless reactions are noted on plan, beam connections shall be designed for these reactions & provided with these minimum bolt quantities. Fabricator shall provide shop drawings indicating the provided capacity of all typical connections.

- Table assumptions:
- Least web thickness for beam depth series - 3/8" 36 ksi single shear plate or 5/16" 36 ksi double angles - 3/4" dia. A325 bolts with threads included
- Standard size bolt holes
- Beam coped top & bottom
- Distance from end of beam to center of bolt holes = 1 1/2" minimum - Distance from top of coped web to center of first bolt hole = 1 1/4" min.

# J. WOOD FRAMING AND CONNECTIONS

- 1. Install rough carpentry according to the American Institute of Timber Construction Manual. It is the responsibility of the contractor to
- verify all dimensions prior to erection
- a. Sawn lumber Sawn lumber shall be grade stamped and visually graded with maximum 19% moisture content
- All members shall meet strength requirements in NDS "National Design Specification for Wood Construction" Joists, rafters, and nailers with nominal depth 8" or less shall be Southern Pine (SP) or Douglas Fir-Larch (DFL), No. 2 or better,
- iv. Joists, rafters, and nailers with nominal depth greater than 8" shall be Southern Pine (SP) or Douglas Fir-Larch (DFL), No. 1 or
- All members used as columns or beams (including headers) shall be cold of any significant defects (ie. Checking, warping, etc.) at
- the time of erection. vi. All exterior posts shall be Western Red Cedar No. 2 or better.
- vii. Bearing and shear wall studs, and wall plates, shall be Douglas Fir-Larch (DFL), No. 2 or better.
- b. Structural Composite Lumber SCL shall meet material specifications in ASTM D5456
- SCL shall include laminated veneer lumber (LVL), laminated strand lumber (LSL), oriented strand lumber (OSL) and parallel strand
- iii. All SCL materials shall be graded as indicated on the plans. c: Glued-laminated timber (GluLam) shall be manufactured and identified as required in ANSI/AITC A-190.1 and ASTM D3737. GluLam shall be graded as indicated on the plans.
- d. Structural Panels All plywood or oriented strand board (OSB) panels shall meet the strength requirements in Department of Commerce (DOC) PS 1 and PS 2 or ANSI/APA PRP 210.
- All structural panels (walls, floor and roof) shall meet the Structural 1 grading standard.
- e. Connectors and Fasteners i. Metal connectors and associated fasteners used for the applications indicated shall meet the following minimum standards:
  - Untreated Lumber a. Connectors Bolts and Anchor Rods ......ASTM F1554 Gr36
  - ..ASTM F1667 Nails and Staples 2. Sodium Borate (SBX) Pressure Treated Lumber
  - .. ASTM A653 G90 a. Connectors ..ASTM A307 b. Bolts
  - c. Anchor Rods ..ASTM F1554 Gr 55
  - d. Nails and Staples .. ASTM F1667 with A153 Hot Dipped Galvanized 3. All Other Pressure Treated Lumber (e.g. ACQ-C, ACQ-D, CA-B, CBA-A, ACZA) a. Connectors .AISI SS Type 304 or 316
  - ..ASTM A193, GrB7 ...ASTM A193, GrB7 c. Anchor Rods d. Nails and Staples .......ASTM F1667 using AISI Type 304 or 316 Stainless Steel
- Fasteners utilizing dissimilar materials are prohibited. Power driven fasteners shall comply with NES NER-272. Fastener installation whether power driven or otherwise shall be in accordance with the Building Code and the manufacturer's recommendations. In general fastener heads shall be installed nominally flush with the outer ply of the connection. Sheathing and support framing damaged by overdriven fasteners shall be removed and replaced.
- Aluminum fasteners and flashing shall not be in contact with pressure treated lumber. 3. General:
- All light framed wood construction shall be fastened as indicated on the plans. Connections not detailed shall be fastened in accordance with the table below.
- b. Sill plates shall be anchored to the foundation as shown on the drawings. c. Plywood/OSBS wall, floor or roof sheathing shall be fastened per the requirements shown on the drawings.
- d. Splicing of structural members is not permitted under any circumstances. e. All framing in direct contact with water, soil, concrete, masonry, or permanently exposed to weather shall be preservative treated
- lumber in accordance with the AWPA Standard U1 and M4 . All framing indicated to be fire-retardant treated or fire resistive on the drawings (Architectural or Structural) shall comply with AWPA U1
- UCFA, Type A or ICC-ES ESR 2645 and shall have UL FR-S surface burning characteristics.
- g. All wood shall be stored on site and protected from the elements to prevent warping, cupping, bowing, crooking and twisting. Use only material that is straight. All stored wood shall be held off the ground with sacrificial dunnage blocks. h. Wood connectors shall be installed to prevent wood from splitting or otherwise damaging either member.
- All wood denoted as requiring fire-resistive treatment shall be pressure treated according to AWPA Standard requirements. Use 4x4, 4x6 and 6x6 columns as shown on plans. Built-up sections of 2x studs shall not be substituted for timber posts.
- All multi-ply beams, joists and headers shall be fastened together. Fasten sawn lumber members per schedule below. Fasten structural composite lumber per manufacturer's literature.
- 1. Standard cut washers shall be used under bolt heads and nuts bearing against wood, unless noted otherwise per shear wall anchorage m. Wall studs are designed based on being fully braced by sheathing. Design of temporary or permanent blocking or bridging for support
- of construction loads by unsheathed walls is the responsibility of the contractor. n. Wood joists shall bear on the full width of supporting members (stud walls, beams, nailers, etc.) unless noted otherwise o. Subject to compliance with the project requirements, wood connectors, joist hangers, post caps and bases, holdowns, and related
- hardware shall be manufactured by Simpson Strong-Tie Company, Inc. or approved equal. Contractor shall follow the manufacturer's latest recommendations for installation of connectors Other manufacturers may be acceptable. Submit substitution request demonstrating that the proposed hardware has the same or greater capacity for each connection. Allow two weeks for review.
- p. All beams and joists not bearing on supporting members shall be framed with Simpson joist hangers. Use joist hangers per schedule and details. The joist hangers shall be installed using nails or screws supplied by the hanger manufacturer as required for the hanger
- g. Sill plates of all bearing walls on concrete shall be anchored with anchors as shown on the drawings. Sill plate anchors shall be located a maximum of 1'-0" from corners, ends of walls and sill plate splices. Provide (2) anchors minimum in each sill plate segment Refer to plans and details for shear wall anchorage requirements. r. Nailers shall be anchored to steel beams and columns with 1/2" diameter A307 bolts with required washers at a maximum spacing of
- 24" on center (alternate sides), unless noted otherwise. s. Wall studs, jamb studs, and beam support studs shall have adequate vertical blocking installed to transfer all vertical loads to the foundation.
- 4. Wood Floor and Roof Trusses: .a. Provide wood trusses capable of withstanding the design loads within the limits and under the conditions indicated. Truss design shall be in accordance with the Building Code and TPI-1 Nation Design Standard for Metal Plate Connected Wood Truss Construction.
- b. Metal gusset plates shall be designed, manufactured, and approved according to IBCO requirements. c. Wood trusses shall be of sawn lumber with 2x nominal thickness. d. In addition to the loads indicated in section "A. Design Criteria", wood trusses shall be designed for all applicable wind, seismic, and snow (including drift) loads required by Building Code and noted on plans.
- e. Truss design and shop drawing preparation shall be supervised by a registered professional engineer licensed in the state where the project is located. Submittals shall be signed and sealed and include comprehensive truss layout plans and design calculations that indicate species and grades of lumber, design stresses, size and type of connector plates used. f. Fabricator shall determine truss diagonal locations. Truss configurations shown on drawings are diagrammatic only. Bearing points
- manufacturer and contractor shall coordinate all architectural and MEP components with the truss layout and profile. g. The manufacturer shall provide all open web trusses and accessories as shown on the structural and architectural drawings and as required for a complete project. This includes all blocking, bridging, bracing, and drag components required for construction. h. All truss-to-truss connections and truss to supporting member connections shall be designed and detailed by the truss supplier and the

shall coincide with intersections of diagonals and chords. All dimensions shall be determined by the truss manufacturer. The

size and type of connectors included in the sealed shop drawing submittal. Coordinate size, species, and grade of supporting chord and web members with the truss hanger selected. i. All temporary and permanent bracing shall be in accordance with the TPI standards for bracing. The bracing shall be furnished and installed by the Contractor. Do not use ceilings as uplift bracing at truss bottom chord.

Any damage to the trusses shall be brought to the immediate attention of the Structural Engineer and truss supplier. Field repair and

- Girder trusses shown on drawings shall be designed to carry concentrated reactions from supported members. Girder trusses shall not be located directly above openings unless coordinated with the Structural Engineer. k. Wood trusses shall be handled and erected in accordance with TPI HIB-91. Trusses shall be unloaded and stored in bundles in an upright position out of contact with the ground until ready for installation.
- modification of trusses shall not be made with prior written approval from the supplier, except for nominal trimming to correct length where such trimming will not impair the load carrying capacity of the truss 5. Roof trusses shall be designed for the following in addition to any mechanical unit loads shown on plan and mechanical drawings: TC DL = 10 psf TC LL = 20 psf TC SL = 20 psf C&C TC WL =  $\pm 27/-59$  psf MWFRS TC WL =  $\pm 28$  psf
  - BC DL = 10 psf BC LL = N/A C&C BC WL = ±5 psf MWCRS BC WL = ±5 psf End/Parapet C&C WL = +90/-61 psf
- Unbalanced Snow Load: Balanced TC SL = 14psf Drifts per "A. Design Criteria" Ť, HALLANDON PORTO 6. Floor trusses shall be designed for the following loads:
- TC DL = 17 psf typical + additional 15 psf at residential units to account for interior non-structural walls TC LL = 40/100/125 psf
- BC DL = 10 psf (Coordinate LL with Architectural plans and general note section "A. Design Criteria") 7. The allowable deflection is:
- a. Roof Trusses Total Load: Roof Live or Snow Load: L/360 Absolute Maximum:

b. Floor Trusses

Total Load: ii. Live Load:

11L/480 Absolute Maximum:

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04/17/2024 - CITY SUBMISSION

REVISIONS:

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Columbia, MO 65203

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NO. E-2006023253

EXPIRES: DECEMBER 31, 2024

SHEET TITLE

**GENERAL NOTES** 

SHEET NUMBER:

PROJECT NUMBER: 2023000333

				NUME	BER - OR SPACING -	OF FASTENERS RE	QUIRED PER CONI	NECTION			
CONNECTION (2) (3) IN INCHES	NAIL LENGTHS ARE MINIMUM, NOMINAL LENGTHS, IN INCHES. NAIL SHANK DIAMETERS ARE MINIMUM NOMINAL DIAMETERS										
	3-1/2X0.162	3X0.148	3-1/4X0.131	3X0.131	2-1/2X0.131	3-1/4X0.120	3X0.120	2-3/8X0.113	2X0.113	2-1/4X0.105	2-1/4X0.099
EQUIVALENT COMMON NAIL	16d	10d			8d				6d		
				FLOOR FRAMIN	G					•	
JOIST TO BAND JOISTS	3	5	5	5	N/A	6	6	N/A	N/A	N/A	N/A
LEDGER STRIP	3	4	4	4	6	4	4	N/A	N/A	N/A	N/A
JOIST TO SILL OR GIRDER	3	3	3	3	3	4	4	N/A	N/A	N/A	N/A
BLOCKING BETWEEN JOIST OR RAFTER TO TOP PLATE	3	3	3	4	3	4	4	N/A	N/A	N/A	N/A
BRIDGING TO JOIST	N/A	N/A	N/A	N/A	2	3	3	3	4	3	4
RIM JOIST TO TOP PLATE	8" O.C.	6" O.C.	6" O.C.	6" O.C.	6" O.C.	6" O.C.	4" O.C.	6" O.C.	3 O.C.	3" O.C.	3" O.C.
			BU	UILT-UP GIRDERS &	BEAMS						
SPACING ALONG EDGES	24" O.C.	24" O.C.	24" O.C.	24" O.C.	16" O.C.	16" O.C.	16" O.C.	N/A	N/A	N/A	N/A
# AT ENDS & SPLICES	3	3	3	3	4	3	3	N/A	N/A	N/A	N/A
	1		(	CEILING & ROOF FR	AMING						<u>.                                    </u>
CEILING JOISTS TO PLATE	3	4	5	5	5	5	5	6	N/A	N/A	N/A
CEILING JOISTS, LAPS OVER PARTITIONS	3	4	4	4	6	4	4	N/A	N/A	N/A	N/A
CEILING JOISTS TO PARALLEL RAFTER	3	4	4	4	6	4	4	N/A	N/A	N/A	N/A
COLLAR TIE TO RAFTER	3	3	4	4	5	4	4	N/A	N/A	N/A	N/A
JACK FRAFTER TO HIP (TOE-NAILED)	3	3	4	4	5	4	4	N/A	N/A	N/A	N/A
JACK RAFTER TO HIP (FACE-NAILED)	2	3	3	3	3	4	4	N/A	N/A	N/A	N/A
ROOF RAFTER TO PLATE	3	3	3	3	3	4	4	5	5	5	5
ROOF RAFTER TO 2X RIDGE BEAM (DRIVEN THRU BEAM INTO END OF RIDGE)	2	3	3	3		4	4	N/A	N/A	N/A	N/A
ROOF RAFTER TO 2X RIDGE BEAM (TOE-NAIL RAFTER TO BEAM)	2	3	3	3	3	4	4	N/A	N/A	N/A	N/A
				WALL FRAMING	<del></del>						<u> </u>
TOP OR SOLE PLATE TO STUD (END-NAILED)	2	3	3	3	5	4	4	N/A	N/A	N/A	N/A
STUD TO TOP OR SOLE PLATE (TOE-NAILED)	2	3	3	3	5	4	4	5	5	5	5
CAP/TOP PLATE LAPS & INTERSECTIONS (EACH SIDE OF LAP)	2	3	3	3	4	4	4	N/A	N/A	N/A	N/A
DIAGONAL BRACING	2	2	2	2	2	3	3	3	4	4	4
SOLE PLATE TO JOIST OR BLOCKING @ BRACED PANELS (#/16" JOIST SPACE)	2	3	3	4		4	4	N/A	N/A	N/A	N/A
SOLE PLATE TO JOIST OR BLOCKING	16" O.C.	8" O.C.	8" O.C.	8" O.C.	6" O.C.	8" O.C.	8" O.C.	N/A	N/A	N/A	N/A
DOUBLE TOP PLATE	16" O.C.	16" O.C.	12" O.C.	12" O.C.	8" O.C.	12" O.C.	12" O.C.	N/A	N/A	N/A	N/A
DOUBLE STUDS	12" O.C.	12" O.C.	8" O.C.	8" O.C.	6" O.C.	8" O.C.	8" O.C.	N/A	N/A	N/A	N/A
CORNER STUDS	24" O.C.	16" O.C.	16" O.C.	16" O.C.	8" O.C.	12" O.C.	12" O.C.	N/A	N/A	N/A	N/A

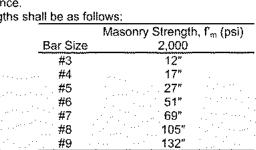
- N/A FASTENER NOT APPLICABLE TO CONNECTION
- 1. THIS FASTENING SCHEDULE APPLIES TO FRAMING MEMBERS HAVING AN ACTUAL THICKNESS OF 1 1/2" (NUMBER "2X" LUMBER)
- 2. FASTENINGS LISTED ABOVE MAY ALSO BE USED FOR OTHER CONNECTIONS THAT ARE NOTE LISTED BUT THAT HAVE THE SAME CONFIGURATION & THE FASTENER QUANTITY/SPACING & FASTENER SIZE (PENNYWIGHT & STYLE, E.G., 8d COMMON, "8-PENNY COMMON NAIL")
- 3. FASTENING SCHEDULE ONLY APPLIES TO BUILDINGS OF CONVENTIONAL WOOD FRAM CONSTRUCTION. CONNECTIONS OF SHEAR WALLS & FLOOR & SHOWN ON THE DRAWINGS.

# K. WOOD SHRINKAGE

- 1. IBC 2304.3.3 requires that architectural, mechanical, electrical, and plumbing systems be designed to accommodate movement due to
- shrinkage. McClure Engineering Co. takes no responsibility for the naturally occurring shrinking that will occur.
- 2. Estimated values are based upon the following moisture content:
- a. At installation (MC) = 19% b. At equilibrium (EMC) = 8%
- 3. The following recommendations are intended to minimize the potential issues associated to wood shrinkage. Implementation and liability are ultimately up to the contractor or design professional responsible for the impacted trade.
- a. Mechanical, Electrical, Plumbing Allow construction gaps in the wood framing to close by delaying installation of MEP as long as possible to allow for additional
- ii. Provide oversized or long slotted holes at pipe penetrations. Holes must be within conformance of typical penetration details.
- Rigid connections shall be adjusted before completion of construction of closing of wall and ceiling assemblies.
- iv. All vertical sheet metal down spouts shall have intermediate slip joints.
- Roof Drains shall utilize adjustable fittings. Fittings must be adjusted at the completion of construction and then as required to maintain proper drainage.
- b. Architectural Considerations Stucco, EIFS and brittle finishes shall have horizontal expansion joints, slip joints with appropriate waterproofing.
- Brick and stone finishes shall have ties that accommodate differential movement. ां।. 🦈 Provide adjustable thresholds or transitions at rigid transitions such as CMU or concrete stair and elevator shafts.
- c. Construction tolerance
- Limit shortening due to nesting by cutting all studs level square and tight against plates. Structural wood panels shall have ½" relief gaps at each floor to limit bulging.
- iii. Floor sheathing shall have 1/8" gaps on all sides during installation to accommodate movement.
- iv. Shear wall hold downs shall be check and retightened immediately prior to sheathing walls.
- 🤍 v. 🦠 Delay gyp topping around concrete and CMU stair or elevator shafts until competition of construction. d. Material storage
- i. Stored materials shall be covered and elevation from the elements.
- ii. Do not allow water to pond on floor sheathing. Provide drain holes if required to allow water to quickly drain if water does temporar-
- e. Post occupancy i. McClure recommends a review of roof drains every 3 months for the first 24 months of occupancy and then annually. Adjust drains as required to maintain watertight integrity.
- ii. McClure recommends review of joints at exterior doors, windows and finish transitions. Waterproof as needed where original joints fail per the architect's recommendations.
- iii. Remedial self-leveling work may be required around concrete or CMU stair and elevator towers to accommodate shrinkage.

# N. CONCRETE MASONRY

- 1. All construction shall comply with applicable provisions of the following latest ACI standards:
- a. ACI 530/ASCE 52/TMS 402 Building Code Requirements for Masonry Structures.
- b. ACI 530.1/ASCE 6/TMS 602- Specifications for Masonry Structures. c. IBC Chapter 21 Masonry
- 2. Concrete block units shall conform to the requirements for Grade N Type 1, load-bearing normal-weight units per ASTM C-90. Use
- Grade S blocks below grade. All below grade block shall be solid grouted.
- 3. Net area compressive strength of masonry, f'<sub>m</sub> = 2,000 psi. 4. Standard units shall have nominal face dimensions of 16 long x 8 inches high & waterproofed x 8 inches wide. The minimum
- compressive strength of the masonry units shall be as follows: Net Area Compressive Strength Of Concrete Masonry Strength Of
  - Masonry (f'<sub>m</sub> psi)
- 5. Mortar for unit masonry shall be proportioned per ASTM C270. The minimum mortar compressive strength is as tollows: a. Type S: 1,800 psi b. Type M: 2,500 psi
- 6. Grout for unit masonry shall be proportioned per ASTM C476. The minimum grout compressive strength is the larger of 2,000 psi or f'm. Maximum coarse aggregate size is 3/8".
- 8. Reinforce all CMU walls with vertical rebar full height, centered in cell as shown on the drawings. Grout reinforced cells solid.
- a. When reinforcing is not specified, provide #5 @ 48" o.c., minimum. 9. All vertical cells to be filled shall have vertical alignment to maintain an unobstructed cell area not less than 2 in. x 3 in.
- All bond beams shall be grouted solid and reinforced.
- a. Provide bent dowels at all wall intersections one per bond beam at corners, and two at tee intersections.
- 11. Provide bond beams at all walls supporting roof and floors.
- 12. Grout jambs solid under all beams and lintels for full height of wall.
- 13. All masonry walls shall have ladder type horizontal joint reinforcement with two 9 gage wires spaced at 16" o.c. vertically, unless noted
- a. All wall intersections shall be reinforced with prefabricated tee or corner units. 14. Use low lift method of grouting. Maximum grout lift = 5'-0". Alternative methods of grouting may be acceptable. Submit method for
- approval two weeks in advance. 15. Masonry reinforcing lap lengths shall be as follows:



1. Development length is based on 2½" masonry cover for all bars. Use bar spacers to maintain cover.

- 16. Brace all masonry walls until floor and roof framing and metal deck are installed.
- a. Design and installation of bracing is the responsibility of the masonry contractor. b. Submit bracing plan for review.
- 17. When grouting is stopped for more than one hour, horizontal construction joints shall be formed by stopping the pour of grout 1-1/2" below the top of the uppermost course.
- 18. Provide control vertical joints in wall every 40 ft. Provide vertical reinforcing in first cell each side of control joint. Do not locate control joint within 2 -0" of end or opening.
- 19. Conduit pipes and sleeves in masonry shall not displace more than 2 percent of the net cross-sectional area and shall be placed no
- closer than 3 diameters or widths on center. 20. The Contractor shall include in his bid an allowance of 300 lbs of reinforcing steel "in place" to be used in the field as the architect or structural engineer may direct.

# P. POWER-ACTUATED FASTENERS (PAFS)

- 1. This section applies to all driven pin installation methods (e.g. powder, pneumatic, electric), regardless of terminology employed.
- 2. All PAFs shall be of the brand, size, and quantity indicated in the sections or details. 3. All PAFs shall be Hilti 0.157"Ø X-U, U.N.O
- 4. PAF length is dependent on installation penetration requirement in base material:
  - a. For concrete: PAFs shall have an embedment of 1-1/2". b. For steel, the required penetration is dependent on the thickness of the steel substrate. The contractor shall select a PAF that satisfies the following requirements:
    - i. For steel 1/2°thickness or less, PAFs must penetrate through the full base steel thickness. ii. For steel thickness greater than 1/2", PAFs must penetrate the steel to a depth of at least 1/2" and the head of the PAF shall be flush with the surface.
  - d. The contractor must consider the thickness of the component attached to the substrate material to ensure adequate penetration or embedment. A PAF that is equal in length to the specified penetration or embedment is inadequate to comply
  - with this requirement.
- 5. Refer to PAF spacing and edge distance general details for minimum spacing and edge distance requirements in all base materials.
- 6. Notify the manufacturer for instructions if PAFs are not driven flush to surface.
- 7. Do not re-drive PAFs if they do not drive completely on the first charge. Remove and replace the PAF in question or contact the manufacturer for specific alternative instructions. 8. PAFs shall not be installed into concrete until the concrete has achieved the minimum compressive strength listed in the concrete

c. For concrete masonry units (CMU): The PAF must penetrate 1" into the substrate.

- requirements of the structural general notes. 9. PAFs shall not be driven into steel that is 3/16" thick or less. Notify McClure for alternate connection options.
- 10. PAFs driven into existing concrete may cause damage. The contractor is responsible for ensuring anchors do not damage existing structure. Notify McClure if alternate anchorage requirements are needed to protect existing concrete. 11. PAFs have limited use in seismic applications. Additional anchorage may be required as indicated in the details. Deferred submittals shall
- fully consider the most restrictive implications of ASCE 7 Section 13.1.4, and the manufacturer's product ESR for use of PAFs to resist seismic loads. 12. PAF installers must be certified by the manufacturer of the PAFs being installed.
- 13. PAFs shall not be substituted without the written approval of McClure prior to fabrication. Requests after installation may incur additional charges for evaluation.

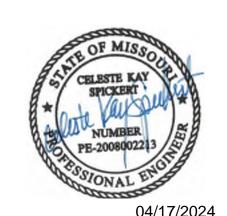
PRINTS ISSUED 04/17/2024 - FOR PERMIT

**REVISIONS:** 

Columbia, MO 65203 P 573-814-1568

McClure Engineering Co. is not responsible or liable for any issues, claims, damages, or losses (collectively, "Losses") which arise from failure to follow these Plans, Specifications, and the engineering intent they convey, or for Losses which arise from failure to obtain and/or follow the engineers' or surveyors' guidance with respect to any alleged errors, omissions, inconsistencies, ambiguities, or conflicts contained within the Plans or Specifications.

MISSOURI CERTIFICATE OF AUTHORITY NO. E-2006023253 EXPIRES: DECEMBER 31, 2024



SHEET TITLE **GENERAL NOTES** 

PROJECT NUMBER: 2023000333

# STRUCTURAL STATEMENT OF SPECIAL INSPECTIONS

Project Name: Home2 Suites By Hilton Address: 251 NE Alura Way, Lee's Summit, MO 64064

1. This Statement of Special Inspections is submitted as a condition for permit issuance in accordance with the Special Inspection and Structural Testing requirements of the Building Code. It includes a schedule of Special Inspection services applicable to this project as well as the name of the Special Inspector to be retained for conducting these inspections an...

2. The Special Inspector shall keep records of all inspections and shall furnish inspection reports to the Building Official and the Registered Design Professional in Responsible Charge. Discovered discrepancies shall be brought to the immediate attention of the Contractor for correction. If such discrepancies are not corrected, the discrepancies shall be

Special Inspection program does not relieve the Contractor of his or her responsibilities. 3. Interim reports shall be submitted to the Building Official and the Registered Design Professional in Responsible...

brought to the attention of the Building Official and the Registered Design Professional in Responsible Charge. The

4. A Final Report of Special Inspections documenting completion of all required Special Inspections, testing and correction of any discrepancies noted in the inspections shall be submitted prior to issuance of a Certificate of Use and...

5. Job site safety and means and methods of construction are solely the responsibility of the Contractor. This Statement

x Wind Resistance

x Masonry Construction - Level 1 x Structural Steel Construction

o Mastic and Intumescent Fire-Resistant Coatings

o Fire-Resistant Penetrations and Joints

of Special Inspections includes the following building systems:

x Fabricators

x Soils x Cast-In-Place Foundations Elements o Driven Deep Foundation Elements x Cast-In-Place Deep Foundation Elements

o Helical Pile Foundations x Concrete Construction

o Masonry Construction - Level 2 o Steel Construction Other than Structural Steel x Wood Construction

o Spray Fire-Resistant Materials o Exterior Insulation and Finish System (EIFS)

o Smoke Control x Seismic Resistance

6. Special Inspection Agency:

Special Inspection Schedule: Fabricators						
Verification And	Applicable To	Freque	ency			
Inspection Task	This Project?	Continuous	Periodic			
Verify fabrication and implementation procedures:		,	•			
a. Steel Construction	X	-	Х			
b. Concrete Construction (including rebar fabrication)	X	-	Х			
c. Masonry Construction	-	-	Х			
d. Wood Construction	X	-	Х			
e. Cold Formed Metal Construction	-	-	Х			
f. Other Construction	-	-	Х			

Special Inspection Schedule: Soils						
Verification And	Applicable To	Frequency				
Inspection Task	This Project?	Continuous	Periodic			
Verify materials below shallow foundations are adequate to achieve the design bearing capacity.	Х	-	Х			
2. Verify excavations are extended to proper depth and have reached proper material.	Х	-	Х			
Perform classification and testing of compacted fill materials.	Х	-	Х			
4. Verify use of proper materials, densities and lift thickness during placement and compaction of compacted fill.	Х	X	-			
5. Prior to placement of compacted fill, observe subgrade and verify that site has been prepared properly.	Х	-	Х			

Special Inspection Schedule: Cast-In-Place Four	ndation Elements		
Verification And	Applicable To	Freque	ncy
Inspection Task	This Project?	Continuous	Periodic
1. Special Inspections and verifications for concrete foundation construction in accordance with the Special Inspection Schedule: Cast-In-Place Concrete for the following foundation elements:			
a. Isolated spread concrete footings.	-	-	X
b. Continuous concrete Grade Beams.	X	-	X
c. Concrete foundation walls.	X	X	-

Verification And	Applicable To	Freque	ency
Inspection Task	This Project?	Continuous	Periodic
Inspect reinforcing steel, including prestressing tendons and placement.	X	-	Х
Inspect reinforcing steel welding in accordance with the Special Inspection Schedule: Steel Construction (other than Item 3).	Х	-	-
3. Inspect anchors cast in concrete where allowable loads have been increased or where strength design is used.	Х	-	Х
4. Inspect anchors post-installed in hardened concrete members.	X	-	Х
5. Verify use of required design mix.	X	-	Х
6. At the time fresh concrete is sampled to fabricate specimens for strength tests, perform slump and air content tests and record the temperature of the concrete.	Х	Х	-
7. Inspect concrete and shotcrete placement for proper application techniques.	Х	Х	-
8. Inspect for maintenance of specified curing temperature and techniques.	X	-	Х
9. Inspection of Prestressed Concrete:			
a. Observe application of prestressing forces.	-	X	_
b. Observe grouting of bonded prestressing tendons in the seismic force resisting system.	-	Х	-
10. Inspect erection of precast concrete members.	-	-	-
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.	-	-	Х
12. Inspect formwork for shape, location, and dimensions of the concrete member being formed.	Х	-	Х

Special Inspection Schedule: Structural Stee	l Construction	,	
Verification And	Applicable To	Freque	ency
Inspection Task	This Project?	Continuous	Periodic
Material verification of high-strength bolts, nuts and washers:			
a. Identification markings to conform to ASTM standards specified in the approved construction documents.	X	-	Х
b. Manufacturer's certificate of compliance required.	X	-	Х
2. Inspection of high-strength bolting:			
a. Snug-tight joints.	X	-	X
b. Pretensioned and slip-critical joints using turn-of-nut with match marking, twist-off bolt, or direct tension indicator methods of installation.	-	-	X
c. Pretensioned and slip-critical joints using turn-of-nut without match marking or calibrated wrench methods of installation.	-	Х	-
3. Material verification of structural steel:			
a. Identification markings to conform to ASTM standards specified in the approved Construction Documents and AISC 360.	Х	-	Х
b. Manufacturer's certified test reports.	X	-	Х
4. Material verification of weld filler materials:			
a. Identification markings to conform to AWS specification in the approved Construction Documents.	X	-	X
b. Manufacturer's certificate of compliance required.	X	-	Х
5. Inspection of welding, structural steel:			
a. Complete and partial penetration groove welds.	X	Х	-
b. Multi-pass fillet welds.	X	X	-
c. Single-pass fillet welds > 5/16".	Χ	Х	-
d. Single-pass fillet welds < 5/16".	X	-	X
6. Inspection of steel frame joint details for compliance with approved Construction Documents:			
a. Details such as bracing and stiffening.	Χ	-	Х
b. Member locations.	Χ	-	Х
c. Application of joint details at each connection.	Χ	-	Х

Special Inspection Schedule: Wood Cor	nstruction		
Verification And	Applicable To	Freque	ency
Inspection Task	This Project?	Continuous	Periodic
Inspection of high-load diaphragms:			1
a. Verify wood structural panel sheathing is of the grade and thickness shown on the Construction Documents.	Х	-	Х
b. Verify nominal size of framing members at adjoining panel edges agrees with the Construction Documents.	Х	-	Х
c. Verify fastener diameter and length, number of fastener lines, the spacing of the fasteners, and the edge margins agree with the Construction Documents.	Х	-	Х
Inspection of metal-plate-connected wood trusses spanning 60 feet or greater:			
a. Verify temporary installation restraint/bracing are installed in accordance with approved truss submittal package.	Х	-	Х
b. Verify permanent individual truss member restraint/bracing are installed in accordance with approved truss submittal package.	Х	-	Х

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Verification And	Applicable To	Frequency		
Inspection Task	This Project?	Continuous	Periodi	
Compliance with required inspection provisions of the Construction     Documents and the approved submittals shall be verified.	Х	-	Х	
2. Verify f'm and f'aac prior to construction except where specifically exempted by the building code.	Х	-	Х	
3. Verify slump flow and VSI as delivered to the site for self-consolidating grout.	Х	Х	-	
4. As masonry construction begins, the following shall be verified to ensure compliance:				
a. Proportions of site-prepared mortar.	X	-	X	
b. Construction of mortar joints.	Χ	-	X	
c. Location of reinforcement, connectors, prestressing tendons, and anchorages.	Χ	-	X	
d. Prestressing technique.	-	-	Х	
e. Grade and size of prestressing tendons and anchorages.	-	-	Х	
5. During construction, the inspection program shall verify:				
a. Size and location of structural elements.	Х	-	X	
b. Type, size, and location of anchors, including other details of anchorage of masonry to structural members, frames, or other construction.	X	-	Х	
c. Specified size, grade, and type of reinforcement, anchor bolts, prestressing tendons, and anchorages.	Х	-	Х	
d. Welding of reinforcing bars.	-	Х	-	
e. Preparation, construction, and protection of masonry during cold weather (temperature < 40°f) or hot weather (temperature > 90°f).	Х	-	Х	
f. Application and measurement of prestressing force.	-	X	-	
6. Prior to grouting, the following shall be verified to ensure compliance:				
a. Grout space is clean.	Χ	-	X	
b. Placement of reinforcement, connectors, prestressing tendons, and anchorages.	Χ	-	X	
c. Proportions of site-prepared grout and prestressing grout for bonded tendons.	Χ	-	X	
d. Construction of mortar joints.	Х	-	Х	
7. Grout placement shall be verified to ensure compliance with Building Code and Construction Document provisions.				
a. Grouting of prestressing bonded tendons.	-	X	-	
8. Preparation of any required grout specimens, mortar specimens, and/or prisms shall be observed.	Х	-	Х	

PRINTS ISSUED

04/17/2024 - CITY SUBMISSION

REVISIONS:

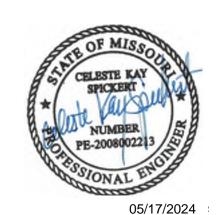
1 05/17/2024 CITY RESPONSE



P 573-814-1568

McClure Engineering Co. is not responsible or liable for any issues, claims, damages, or losses (collectively, "Losses") which arise from failure to follow these Plans, Specifications, and the engineering intent they convey, or for Losses which arise from failure to obtain and/or follow the engineers' or surveyors' guidance with respect to any alleged errors, omissions, inconsistencies, ambiguities, or conflicts contained within the Plans or Specifications. MISSOURI CERTIFICATE OF AUTHORITY NO. E-2006023253

EXPIRES: DECEMBER 31, 2024



# HOME2

SHEET TITLE STRUCTURAL SPECIAL INSPECTIONS

PROJECT NUMBER: 2023000333

				Olli/Top		
Level 4	(2) Sided, Gypsum Wallboard - 5/8" Thick, 6d Nail, 7" Edge Fastening, 24"O.C. Unblocked	(2) 2x6	LSTA15 w/ (12) 0.148"x2-1/2" nails	(1) 2x6	(2) 16d Nails @ 16" o.c.	
Level 3	(2) Sided, Gypsum Wallboard - 5/8" Thick, 6d Nail, 7" Edge Fastening, 24"O.C. Unblocked	(2) 2x6	LSTA30 w/ (22) 0.148"x2-1/2" nails	(1) 2x6	(2) 16d Nails @ 16" o.c.	-
Level 2	(2) Sided, Gypsum Wallboard - 5/8" Thick, 6d Nail, 4" Edge Fastening, 16"O.C. Blocked	(2) 2x6	LSTA30 w/ (22) 0.148"x2-1/2" nails	(1) 2x6	(2) 16d Nails @ 8" o.c.	
Level 1	(2) Sided, Gypsum Wallboard - 2 Ply 5/8" Thick, 6d @9" Base, 8d @ 7" Face, 16" Blocked	(2) 2x6	HTT4 w/ (18) SD #10x1-1/2 & 5/8"Ø Anchor Rod 8" Embedment	(1) 2x6 {	(1) 1/2"Ø x 6" Hilti KH-EZ @ 16" o.c. max.	}
Level 4	(1) Sided, Wood Structural Panels - Sheathing - 15/32" Thick, 10d Nail, 6" Edge fastening Unblocked	(2) 2x6	MST37 w/ (14) 0.162X2 1/2" nails	(1) 2x6	(2) 16d Nails @ 6" o.c.	
Level 3	(1) Sided, Wood Structural Panels - Sheathing - 15/32" Thick, 10d Nail, 4" Edge fastening	(2) 2x6	MST37 w/ (22) 0.162x2-1/2" nails	(1) 2x6	(2) 16d Nails @ 2" o.c.	
Level 2	(1) Sided, Wood Structural Panels - Sheathing - 15/32" Thick, 10d Nail, 3" Edge fastening	(2) 2x6	MST48 w/ (34) 0.162x2-1/2" nails	(1) 2x6	(2) 16d Nails @ 2" o.c.	
Level 1	(1) Sided, Wood Structural Panels - Sheathing - 15/32" Thick, 10d Nail, 3" Edge fastening	(2) 2x6	HTT4 w/ (18) SD #10x1-1/2 & 5/8"Ø Anchor Rod 8" Embedment	(1) 2x6 {	(1) 1/2"Ø x 6" Hilti KH-EZ @ 16" o.c. max.	}
Level 4	(2) Sided, Gypsum Wallboard - 5/8" Thick, 6d Nail, 7" Edge Fastening, 24"O.C. Unblocked	(2) 2x6	LSTA30 w/ (22) 0.148"x2-1/2" nails	(1) 2x6	(2) 16d Nails @ 16" o.c.	
Level 3	(2) Sided, Gypsum Wallboard - 2 Ply 5/8" Thick, 6d @9" Base, 8d @ 7" Face, 16" Blocked	(2) 2x6	MST37 w/ (22) 0.162x2-1/2" nails	(1) 2x6	(2) 16d Nails @ 8" o.c.	
Level 2	(2) Sided, Gypsum Wallboard - 2 Ply 5/8" Thick, 6d @9" Base, 8d @ 7" Face, 16" Blocked	(2) 2x6	MST37 w/ (22) 0.162x2-1/2" nails	(1) 2x6	(2) 16d Nails @ 6" o.c.	
Level 1	(1) Sided, Wood Structural Panels - Sheathing - 15/32" Thick, 10d Nail, 4" Edge fastening	(2) 2x6	HTT5-3/4 w/ (26) 0.162"Øx2-1/2" & 3/4"Ø Anchor Rod 8" Embedment	(1) 2x6 {	(1) 1/2"Ø x 6" Hilti KH-EZ @ 16" o.c. max.	
Level 4	(1) Sided, Wood Structural Panels - Sheathing - 15/32" Thick, 10d Nail, 6" Edge fastening	(2) 2x6	MST37 w/ (22) 0.162x2-1/2" nails	(1) 2x6	(2) 16d Nails @ 8" o.c.	
Level 3	(1) Sided, Wood Structural Panels - Sheathing - 15/32" Thick, 10d Nail, 4" Edge fastening	(2) 2x6	MST48 w/ (34) 0.162x2-1/2" nails	(1) 2x6	(2) 16d Nails @ 6" o.c.	
Level 2	(1) Sided, Wood Structural Panels - Sheathing - 15/32" Thick, 10d Nail, 3" Edge fastening	(2) 2x6	MST60 w/ (46) 0.162x2-1/2" nails	(1) 2x6	(2) 16d Nails @ 4" o.c.	-
Level 1	(1) Sided, Wood Structural Panels - Sheathing - 15/32" Thick, 10d Nail, 3" Edge fastening	(3) 2x6	HHDQ11-SDS2.5 w/ (24) 1/4"Øx2-1/4" SDS screws & 1"Ø Anchor Rod 12" Embedment	(1) 2x6 {	(1) 1/2"Ø x 6" Hilti KH-EZ @ 16" o.c. max.	}
	Level 3 Level 4 Level 3 Level 4 Level 4 Level 4 Level 4 Level 3 Level 3 Level 2 Level 1	Level 4	Level 4	Level 4   Wallboard - 5/8" Thick, 6d Nail, 7" Edge Fastening, 24"O.C. Unblocked	Level 4 Nail, 7" Edge Fastening, 24"O.C. Unblocked  (2) Sided, Gypsum Wallboard - 5/8" Thick, 6d Nail, 7" Edge Fastening, 24"O.C. Unblocked  (2) Sided, Gypsum Wallboard - 5/8" Thick, 6d Nail, 4" Edge Fastening, 16"O.C. Blocked  (2) Sided, Gypsum Wallboard - 5/8" Thick, 6d Nail, 4" Edge Fastening, 16"O.C. Blocked  (2) Sided, Gypsum Wallboard - 5/8" Thick, 6d Nail, 4" Edge Fastening, 16"O.C. Blocked  (2) Sided, Gypsum Wallboard - 2 Ply 5/8" Thick, 6d @@" Base, 8d @ 7" Face, 16" Blocked  (1) Sided, Wood Structural Panels - Sheathing - 15/32" Thick, 10d Nail, 6" Edge fastening Unblocked  (1) Sided, Wood Structural Panels - Sheathing - 15/32" Thick, 10d Nail, 3" Edge fastening 15/32" Thick, 10d Nail, 3" Edge fastening 15/32" Thick, 10d Nail, 3" Edge fastening - 15/32" Thick, 10d Nail, 3" Edge fastening - 15/32" Thick, 10d Nail, 3" Edge fastening - 15/32" Thick, 10d Nail, 3" Edge fastening - 15/32" Thick, 10d Nail, 3" Edge fastening - 15/32" Thick, 10d Nail, 3" Edge fastening - 15/32" Thick, 10d Nail, 3" Edge fastening - 15/32" Thick, 10d Nail, 3" Edge fastening - 15/32" Thick, 10d Nail, 3" Edge fastening - 15/32" Thick, 10d Nail, 3" Edge fastening - 15/32" Thick, 10d Nail, 3" Edge fastening - 15/32" Thick, 10d Nail, 3" Edge fastening - 15/32" Thick, 10d Nail, 3" Edge fastening - 15/32" Thick, 10d Nail, 4" Edge fastening - 15/32" Thick, 10d Nail, 4" Edge fastening - 15/32" Thick, 10d Nail, 4" Edge fastening - 15/32" Thick, 10d Nail, 4" Edge fastening - 15/32" Thick, 10d Nail, 4" Edge fastening - 15/32" Thick, 10d Nail, 4" Edge fastening - 15/32" Thick, 10d Nail, 4" Edge fastening - 15/32" Thick, 10d Nail, 4" Edge fastening - 15/32" Thick, 10d Nail, 4" Edge fastening - 15/32" Thick, 10d Nail, 4" Edge fastening - 15/32" Thick, 10d Nail, 4" Edge fastening - 15/32" Thick, 10d Nail, 4" Edge fastening - 15/32" Thick, 10d Nail, 4" Edge fastening - 15/32" Thick, 10d Nail, 4" Edge fastening - 15/32" Thick, 10d Nail, 3" Edge fastening - 15/32" Thick, 10d Nail, 3" Edge fastening - 15/32" Thick, 10d Nail, 3" Edge fastening - 15/	Cevel 4

WOOD SHEAR WALL SCHEDULE

Hold-Down

Base Connection

Mark Level Sheathing/ Fastener Layout Post

	Level 4	(1) Sided, Wood Structural Panels - Sheathing - 15/32" Thick, 10d Nail, 6" Edge fastening Unblocked	(2) 2x6	MST37 w/ (22) 0.162x2-1/2" nails	(1) 2x6	(2) 16d Nails @ 16" o.c.
	Level 3	(1) Sided, Wood Structural Panels - Sheathing - 15/32" Thick, 10d Nail, 6" Edge fastening	(2) 2x6	MST37 w/ (22) 0.162x2-1/2" nails	(1) 2x6	(2) 16d Nails @ 8" o.c.
SW5	Level 2	(1) Sided, Wood Structural Panels - Sheathing - 15/32" Thick, 10d Nail, 4" Edge fastening	(2) 2x6	MST48 w/ (34) 0.162x2-1/2" nails	(1) 2x6	(2) 16d Nails @ 6" o.c.
	Level 1	(1) Sided, Wood Structural Panels - Sheathing - 15/32" Thick, 10d Nail, 4" Edge fastening	(3) 2x6	HDQ8-SDS3 w/ (20) 1/4"Øx3" SDS screws & 7/8"Ø Anchor Rod 10" Embedment	(1) 2x6	(1) 1/2"Ø x 6" Hilti KH-EZ @ 16" o.c. max.
	Level 4	(1) Sided, Wood Structural Panels - Sheathing - 15/32" Thick, 10d Nail, 6" Edge fastening Unblocked	(2) 2x6	LSTA9 w/ (8) 0.148"x2-1/2" nails	(1) 2x6	(2) 16d Nails @ 16" o.c.
	Level 3	(1) Sided, Wood Structural Panels - Sheathing - 15/32" Thick, 10d Nail, 6" Edge fastening Unblocked	(2) 2x6	LSTA9 w/ (8) 0.148"x2-1/2" nails	(1) 2x6	(2) 16d Nails @ 16" o.c.
SW6	Level 2	(1) Sided, Wood Structural Panels - Sheathing - 15/32" Thick, 10d Nail, 6" Edge fastening Unblocked	(2) 2x6	LSTA9 w/ (8) 0.148"x2-1/2" nails	(1) 2x6	(2) 16d Nails @ 16" o.c.
	Level 1	(1) Sided, Wood Structural Panels - Sheathing - 15/32" Thick, 10d Nail, 6" Edge fastening	(2) 2x6	DTT2Z w/ (8) 1/4"Øx1-1/2" SDS screws & 1/2"Ø Anchor Rod 4" Embedment	(1) 2x6	(1) 1/2"Ø x 6" Hilti KH-EZ @ 32" o.c. max.
	Level 4	(2) Sided, Gypsum Wallboard - 5/8" Thick, 6d Nail, 7" Edge Fastening, 24"O.C. Unblocked	(2) 2x6	LSTA12 w/ (10) 0.148"x2-1/2" nails	(1) 2x6	(2) 16d Nails @ 10" o.c.
CIMZ	Level 3	(2) Sided, Gypsum Wallboard - 5/8" Thick, 6d Nail, 7" Edge Fastening, 16"O.C. Blocked	(2) 2x6	LSTA30 w/ (22) 0.148"x2-1/2" nails	(1) 2x6	(2) 16d Nails @ 4" o.c.
SW7	Level 2	(2) Sided, Gypsum Wallboard - 5/8" Thick, 6d Nail, 4" Edge Fastening, 16"O.C. Blocked	(2) 2x6	MST37 w/ (22) 0.162x2-1/2" nails	(1) 2x6	(2) 16d Nails @ 3" o.c.
	Level 1	(2) Sided, Gypsum Wallboard - 5/8" Thick, 6d Nail, 4" Edge Fastening, 24"O.C. Unblocked	(2) 2x6	HTT4 w/ (18) SD #10x1-1/2 & 5/8"Ø Anchor Rod 6" Embedment	(1) 2x6	(1) 1/2"Ø x 6" Hilti KH-EZ @ 32" o.c. max.

# Note

- 1. See 2/S550 for typical shear wall framing
- 2. All hold down embedded anchors in concrete shall use Hilti HIT-HY 200 V3 Adhesive or Equivalent
- 3. All threaded rods shall be F1554 GR105
- 4. Floor to floor strap ties at top of wall shall match that of the floor above.5. All hold downs and strap ties are Simpson Strong-Tie brand, U.N.O.
- 6. All drag trusses shall be connected to shear walls per detail 4/S530.
- 7. Provide floor to floor strapping on the same side as the OSB sheathing.
- 8. See 3/S550 for shear wall to foundation hold-down detail.9. Minimum spacing of Level 1 KH-EZ bottom plate fasteners = 4"

# HOME2 SUITES BY HILTON

PRINTS ISSUED

REVISIONS:

04/17/2024 - CITY SUBMISSION

1 05/17/2024 CITY RESPONSE

M°CLURE<sup>™</sup>

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MISSOURI CERTIFICATE OF AUTHORITY

NO. E-2006023253

EXPIRES: DECEMBER 31, 2024

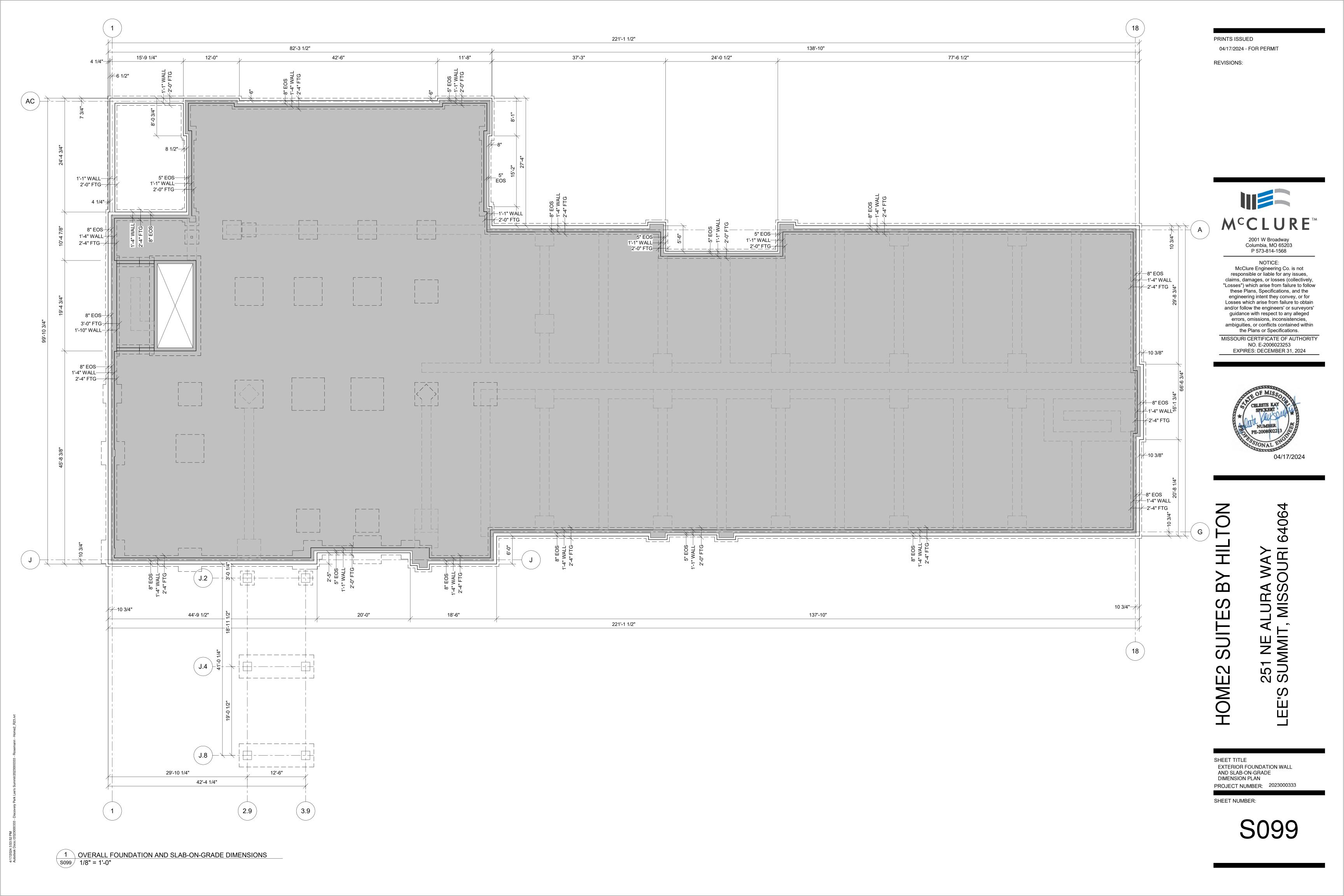
SHEET TITLE SCHEDULES

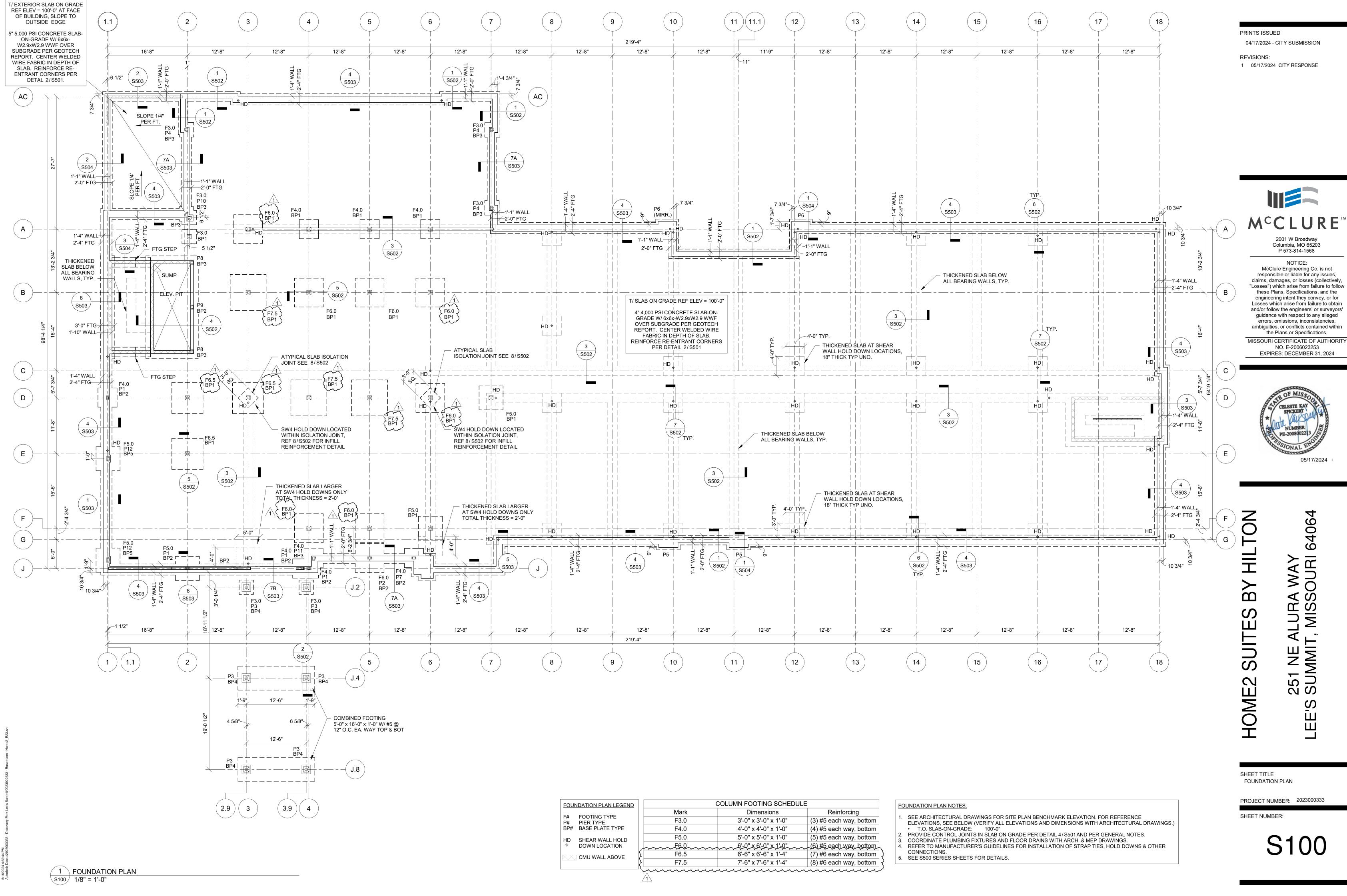
PROJECT NUMBER: 2023000333

SHEET NUMBER:

S005

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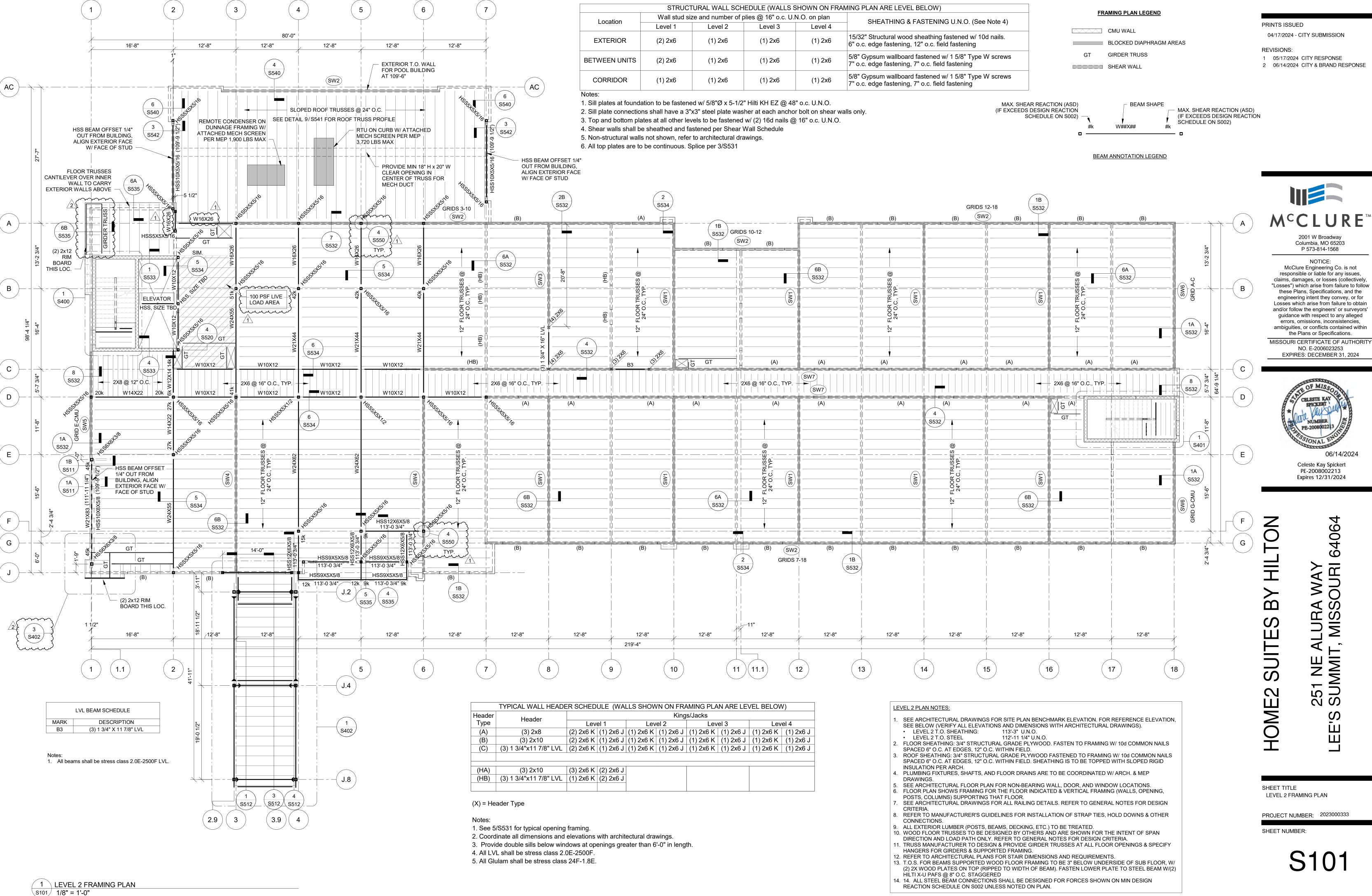


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PROJECT NUMBER: 2023000333



04/17/2024 - CITY SUBMISSION

1 05/17/2024 CITY RESPONSE

Columbia, MO 65203

P 573-814-1568

NO. E-2006023253

CELESTE KA

06/14/2024

Celeste Kay Spickert

PE-2008002213

Expires 12/31/2024

SHEET TITLE

PROJECT NUMBER: 2023000333

STRUCTURAL WALL SCHEDULE (WALLS SHOWN ON FRAMING PLAN ARE LEVEL BELOW)							
Location	Wall stud siz	ze and number of p	olies @ 16" o.c. U.	SHEATHING & FASTENING II N.O. (See Note 4)			
Location	Level 1	Level 2	Level 3	Level 4	SHEATHING & FASTENING U.N.O. (See Note 4)		
EXTERIOR	(2) 2x6	(1) 2x6	(1) 2x6	(1) 2x6	15/32" Structural wood sheathing fastened w/ 10d nails. 6" o.c. edge fastening, 12" o.c. field fastening		
BETWEEN UNITS	(2) 2x6	(1) 2x6	(1) 2x6	(1) 2x6	5/8" Gypsum wallboard fastened w/ 1 5/8" Type W screws 7" o.c. edge fastening, 7" o.c. field fastening		
CORRIDOR	(1) 2x6	(1) 2x6	(1) 2x6	(1) 2x6	5/8" Gypsum wallboard fastened w/ 1 5/8" Type W screws 7" o.c. edge fastening, 7" o.c. field fastening		

12'-8"

12'-8"

12'-8"

- 1. Sill plates at foundation to be fastened w/ 5/8"Ø x 5-1/2" Hilti KH EZ @ 48" o.c. U.N.O.
- 2. Sill plate connections shall have a 3"x3" steel plate washer at each anchor bolt on shear walls only.

12'-8"

- 3. Top and bottom plates at all other levels to be fastened w/ (2) 16d nails @ 16" o.c. U.N.O.
- 4. Shear walls shall be sheathed and fastened per Shear Wall Schedule

- (2) 2x12 RIM

BÓARD THIS LOC.

16'-8"

- 5. Non-structural walls not shown, refer to architectural drawings.
- 6. All top plates are to be continuous. Splice per 3/S531

	TYPICAL WALL HEADER SCHEDULE (WALLS SHOWN ON FRAMING PLAN ARE LEVEL BELOW)								
Header	Header				King	s/Jacks			
Туре	ricadei	Level 1		Level 2		Level 3		Level 4	
(A)	(3) 2x8	(2) 2x6 K	(1) 2x6 J	(1) 2x6 K	(1) 2x6 J	(1) 2x6 K	(1) 2x6 J	(1) 2x6 K	(1) 2x6 J
(B)	(3) 2x10	(2) 2x6 K	(1) 2x6 J	(1) 2x6 K	(1) 2x6 J	(1) 2x6 K	(1) 2x6 J	(1) 2x6 K	(1) 2x6 J
(C)	(3) 1 3/4"x11 7/8" LVL	(2) 2x6 K	(1) 2x6 J	(1) 2x6 K	(1) 2x6 J	(1) 2x6 K	(1) 2x6 J	(1) 2x6 K	(1) 2x6 J
(HA)	(3) 2x10	(3) 2x6 K	(2) 2x6 J						
(HB)	(3) 1 3/4"x11 7/8" LVL	(1) 2x6 K	(2) 2x6 J						

12'-8"

219'-4"

12'-8"

11

12'-8"

12'-8"

13

12

# (X) = Header Type

12'-8"

12'-8"

- 1. See 5/S531 for typical opening framing.
- 2. Coordinate all dimensions and elevations with architectural drawings. 3. Provide double sills below windows at openings greater than 6'-0" in length.
- 4. All LVL shall be stress class 2.0E-2500F.

12'-8"

5. All Glulam shall be stress class 24F-1.8E.

# **LEVEL 3 PLAN NOTES:**

14

12'-8"

15

12'-8"

1. SEE ARCHITECTURAL DRAWINGS FOR SITE PLAN BENCHMARK ELEVATION. FOR REFERENCE ELEVATION,

16

12'-8"

12'-8"

17

12'-8"

FRAMING PLAN LEGEND

BLOCKED DIAPHRAGM AREAS

CMU WALL

- SEE BELOW (VERIFY ALL ELEVATIONS AND DIMENSIONS WITH ARCHITECTURAL DRAWINGS.). LEVEL 3 T.O. SHEATHING:
- 2. FLOOR SHEATHING: 3/4" STRUCTURAL GRADE PLYWOOD. FASTEN TO FRAMING W/ 10d COMMON NAILS SPACED 6" O.C. AT EDGES, 12" O.C. WITHIN FIELD.
- 3. PLUMBING FIXTURES, SHAFTS, AND FLOOR DRAINS ARE TO BE COORDINATED W/ ARCH. & MEP
- 4. SEE ARCHITECTURAL FLOOR PLAN FOR NON-BEARING WALL, DOOR, AND WINDOW LOCATIONS. 5. FLOOR PLAN SHOWS FRAMING FOR THE FLOOR INDICATED & VERTICAL FRAMING (WALLS, OPENING,
- POSTS, COLUMNS) SUPPORTING THAT FLOOR. 6. SEE ARCHITECTURAL DRAWINGS FOR ALL RAILING DETAILS. REFER TO GENERAL NOTES FOR DESIGN
- 7. REFER TO MANUFACTURER'S GUIDELINES FOR INSTALLATION OF STRAP TIES, HOLD DOWNS & OTHER
- 8. ALL EXTERIOR LUMBER (POSTS, BEAMS, DECKING, ETC.) TO BE TREATED.

HANGERS FOR GIRDERS & SUPPORTED FRAMING.

- 9. WOOD FLOOR TRUSSES TO BE DESIGNED BY OTHERS AND ARE SHOWN FOR THE INTENT OF SPAN
- DIRECTION AND LOAD PATH ONLY. REFER TO GENERAL NOTES FOR DESIGN CRITERIA. 10. TRUSS MANUFACTURER TO DESIGN & PROVIDE GIRDER TRUSSES AT ALL FLOOR OPENINGS & SPECIFY
- 11. REFER TO ARCHITECTURAL PLANS FOR STAIR DIMENSIONS AND REQUIREMENTS. REFER TO STRUCTURAL GENERAL NOTES FOR STAIR DESIGN CRITERIA.

# B

SUITES

HOME2

PRINTS ISSUED

04/17/2024 - CITY SUBMISSION

Columbia, MO 65203

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NO. E-2006023253

EXPIRES: DECEMBER 31, 2024

Celeste Kay Spickert

Expires 12/31/2024

P 573-814-1568

SHEET TITLE LEVEL 3 FRAMING PLAN

PROJECT NUMBER: 2023000333

SHEET NUMBER:

1 LEVEL 3 FRAMING PLAN

S102 1/8" = 1'-0"

CMU WALL

BLOCKED DIAPHRAGM AREAS

GIRDER TRUSS SHEAR WALL

PRINTS ISSUED

04/17/2024 - CITY SUBMISSION

**REVISIONS:** 

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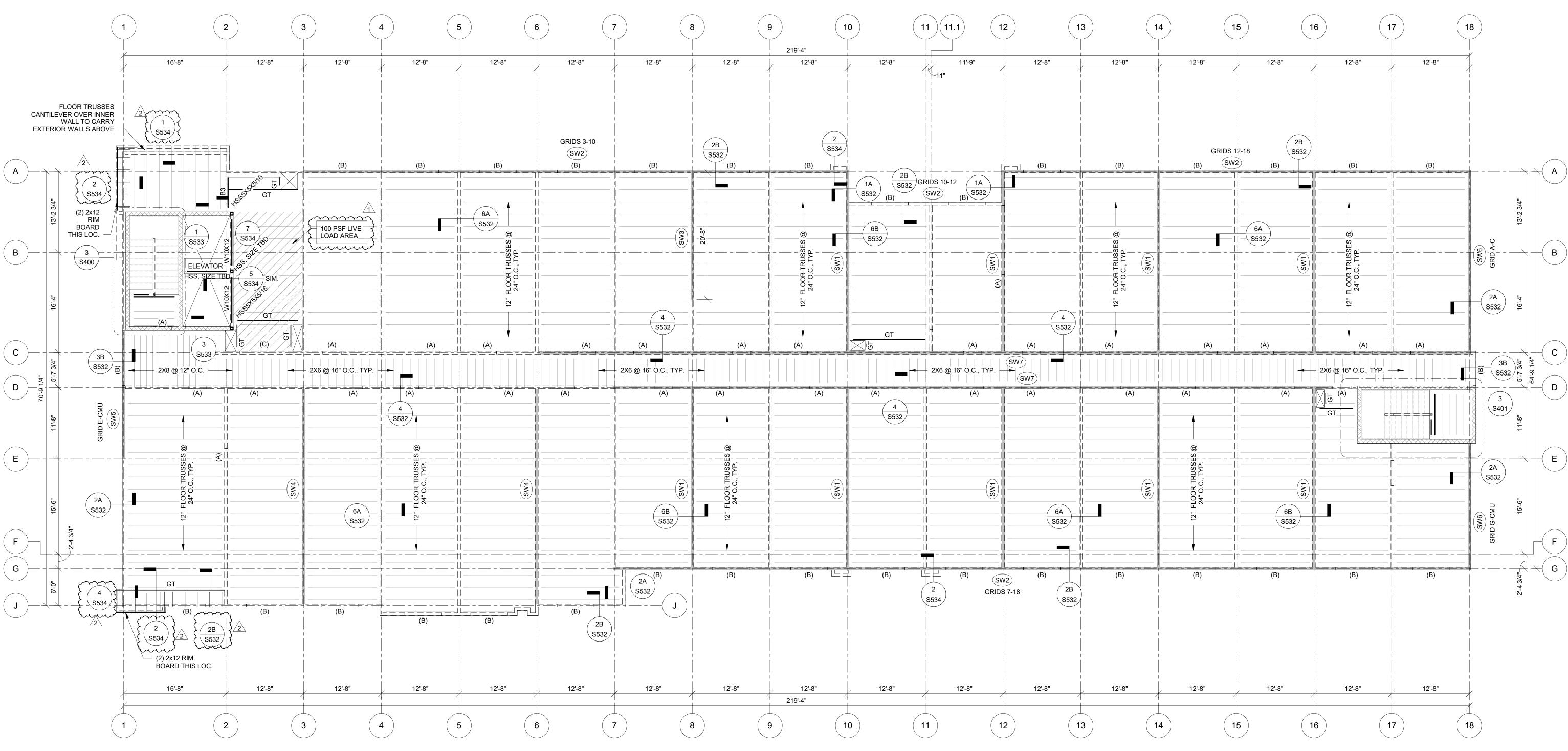
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MISSOURI CERTIFICATE OF AUTHORITY NO. E-2006023253

EXPIRES: DECEMBER 31, 2024

Celeste Kay Spickert PE-2008002213 Expires 12/31/2024

P 573-814-1568



	STRUCTURAL WALL SCHEDULE (WALLS SHOWN ON FRAMING PLAN ARE LEVEL BELOW)								
Location	Wall stud siz	ze and number of <sub>l</sub>	olies @ 16" o.c. U.	SHEATHING & FASTENING U.N.O. (See Note 4)					
	Location	Level 1	Level 2	Level 3	Level 4	STILATITING & LASTENING U.N.O. (See Note 4)			
	EXTERIOR	(2) 2x6	(1) 2x6	(1) 2x6	(1) 2x6	15/32" Structural wood sheathing fastened w/ 10d nails. 6" o.c. edge fastening, 12" o.c. field fastening			
	BETWEEN UNITS	(2) 2x6	(1) 2x6	(1) 2x6 (1) 2x6 (1) 2x6		5/8" Gypsum wallboard fastened w/ 1 5/8" Type W screws 7" o.c. edge fastening, 7" o.c. field fastening			
	CORRIDOR	(1) 2x6	(1) 2x6	(1) 2x6	(1) 2x6	5/8" Gypsum wallboard fastened w/ 1 5/8" Type W screws 7" o.c. edge fastening, 7" o.c. field fastening			

- 1. Sill plates at foundation to be fastened w/ 5/8"Ø x 5-1/2" Hilti KH EZ @ 48" o.c. U.N.O.
- 2. Sill plate connect
- 3. Top and bottom
- 4. Shear walls shall be sheathed and fastened per Shear Wall Schedule 5. Non-structural walls not shown, refer to architectural drawings.
- 6. All top plates are to be continuous. Splice per 3/S531

ections shall have a 3"x3	" steel plate washer at each	า anchor bolt on shear wa	alls only.
n plates at all other level	s to be fastened w/ (2) 16d	nails @ 16" o.c. U.N.O.	

(X) = Header Type

Header

Type

# 1. See 5/S531 for typical opening framing.

(3) 2x10

2. Coordinate all dimensions and elevations with architectural drawings.

(3) 1 3/4"x11 7/8" LVL (1) 2x6 K (2) 2x6 J

(3) 2x6 K (2) 2x6 J

TYPICAL WALL HEADER SCHEDULE (WALLS SHOWN ON FRAMING PLAN ARE LEVEL BELOW)

Level 2

(3) 1 3/4"x11 7/8" LVL | (2) 2x6 K | (1) 2x6 J | (1) 2x6 K | (1) 2x6 J | (1) 2x6 K | (1) 2x6 J | (1) 2x6 K | (1) 2x6 J

| (2) 2x6 K | (1) 2x6 J | (1) 2x6 K | (1) 2x6 J | (1) 2x6 K | (1) 2x6 J | (1) 2x6 K | (1) 2x6 J

| (2) 2x6 K | (1) 2x6 J | (1) 2x6 K | (1) 2x6 J | (1) 2x6 K | (1) 2x6 J | (1) 2x6 K | (1) 2x6 J

- 3. Provide double sills below windows at openings greater than 6'-0" in length. 4. All LVL shall be stress class 2.0E-2500F.
- 5. All Glulam shall be stress class 24F-1.8E.

# **LEVEL 4 PLAN NOTES:**

- 1. SEE ARCHITECTURAL DRAWINGS FOR SITE PLAN BENCHMARK ELEVATION. FOR REFERENCE ELEVATION, SEE BELOW (VERIFY ALL ELEVATIONS AND DIMENSIONS WITH ARCHITECTURAL DRAWINGS.).
- LEVEL 4 T.O. SHEATHING: 133'-9" U.N.O. 2. FLOOR SHEATHING IS TO BE 3/4" STRUCTURAL GRADE PLYWOOD. FASTEN TO FRAMING W/ 10d COMMON
- NAILS SPACED 6" O.C. AT EDGES, 12" O.C. WITHIN FIELD. 3. PLUMBING FIXTURES, SHAFTS, AND FLOOR DRAINS ARE TO BE COORDINATED W/ ARCH. & MEP
- 4. ALL EXTERIOR AND INTERIOR LOAD BEARING WALLS ARE PER WALL SCHEDULE ON SHEET S004. SEE
- ARCHITECTURAL FLOOR PLAN FOR NON-BEARING WALL, DOOR, AND WINDOW LOCATIONS. FLOOR PLAN SHOWS FRAMING FOR THE FLOOR INDICATED & VERTICAL FRAMING (WALLS, OPENING, POSTS, COLUMNS) SUPPORTING THAT FLOOR.
- 6. SEE ARCHITECTURAL DRAWINGS FOR ALL RAILING DETAILS. REFER TO GENERAL NOTES FOR DESIGN
- REFER TO MANUFACTURER'S GUIDELINES FOR INSTALLATION OF STRAP TIES, HOLD DOWNS & OTHER
- CONNECTIONS. 8. ALL EXTERIOR LUMBER (POSTS, BEAMS, DECKING, ETC.) TO BE TREATED.
- 9. WOOD FLOOR TRUSSES TO BE DESIGNED BY OTHERS AND ARE SHOWN FOR THE INTENT OF SPAN DIRECTION AND LOAD PATH ONLY. REFER TO GENERAL NOTES FOR DESIGN CRITERIA.
- 10. TRUSS MANUFACTURER TO DESIGN & PROVIDE GIRDER TRUSSES AT ALL FLOOR OPENINGS & SPECIFY
- HANGERS FOR GIRDERS & SUPPORTED FRAMING. 11. REFER TO ARCHITECTURAL PLANS FOR STAIR DIMENSIONS AND REQUIREMENTS. REFER TO
- STRUCTURAL GENERAL NOTES FOR STAIR DESIGN CRITERIA.

# B SUITES HOME2

SHEET TITLE LEVEL 4 FRAMING PLAN

PROJECT NUMBER: 2023000333

SHEET NUMBER:

1 LEVEL 4 FRAMING PLAN

S103 1/8" = 1'-0"

BLOCKED DIAPHRAGM AREAS

GIRDER TRUSS

□□□□□□ SHEAR WALL

PRINTS ISSUED

04/17/2024 - CITY SUBMISSION

REVISIONS:

2 06/14/2024 CITY & BRAND RESPONSE

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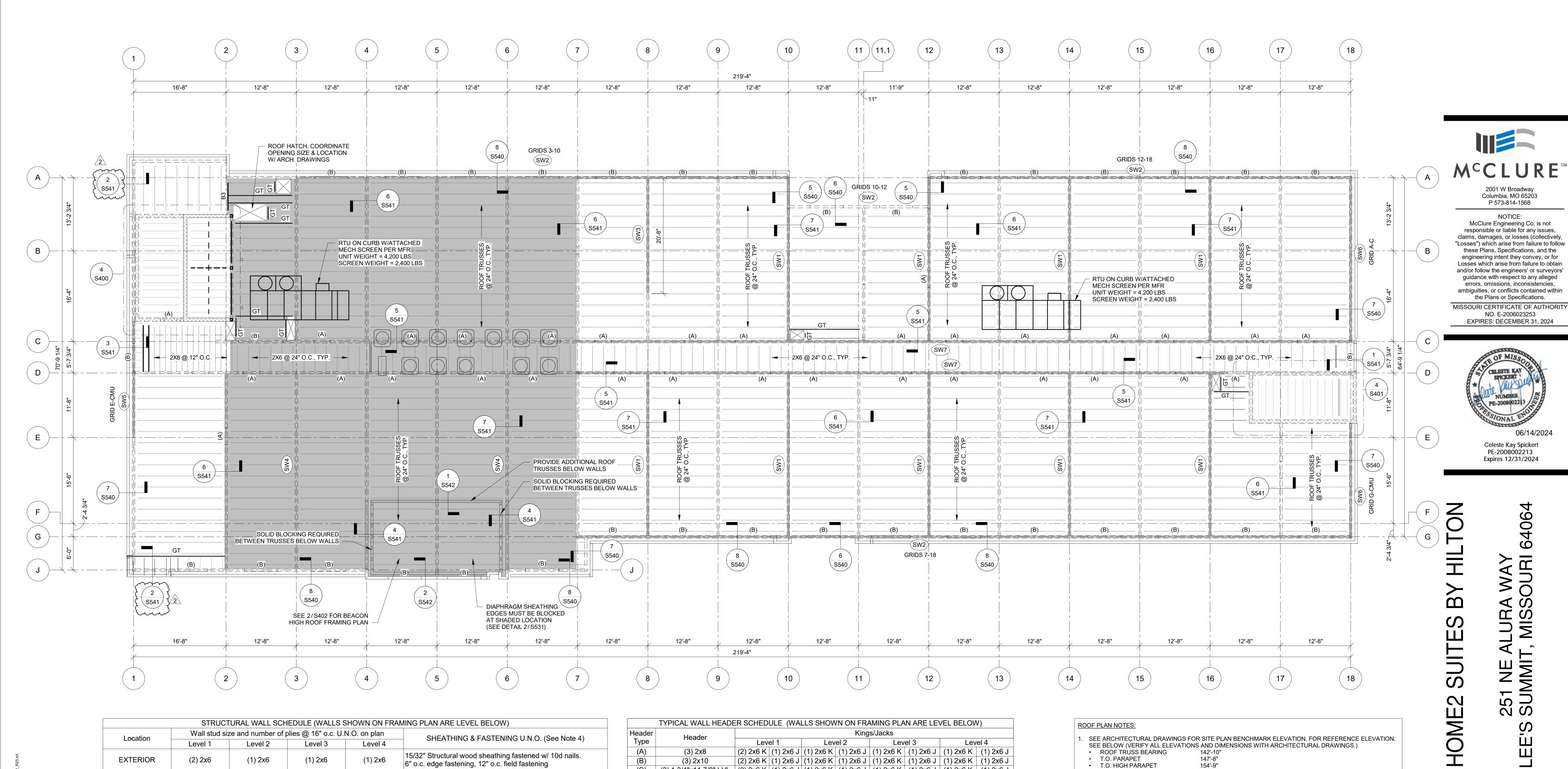
ambiguities, or conflicts contained within

the Plans or Specifications.

NO. E-2006023253

EXPIRES: DECEMBER 31, 2024

Celeste Kay Spickert PE-2008002213 Expires 12/31/2024



STRUCTURAL WALL SCHEDULE (WALLS SHOWN ON FRAMING PLAN ARE LEVEL BELOW)								
Location	Wall stud siz	ze and number of p	plies @ 16" o.c. U.	SHEATHING & FASTENING U.N.O. (See Note 4)				
Location	Level 1 Level 2 Level 3 Level 4				SHEATHING & FASTEINING U.N.O. (See Note 4)			
EXTERIOR	(2) 2x6	(1) 2x6	(1) 2x6	(1) 2x6	15/32" Structural wood sheathing fastened w/ 10d nails. 6" o.c. edge fastening, 12" o.c. field fastening			
BETWEEN UNITS	(2) 2x6	(1) 2x6	(1) 2x6	(1) 2x6	5/8" Gypsum wallboard fastened w/ 1 5/8" Type W screws 7" o.c. edge fastening, 7" o.c. field fastening			
CORRIDOR	(1) 2x6	(1) 2x6	(1) 2x6	(1) 2x6	5/8" Gypsum wallboard fastened w/ 1 5/8" Type W screws 7" o.c. edge fastening, 7" o.c. field fastening			

- 1. Sill plates at foundation to be fastened w/ 5/8"Ø x 5-1/2" Hilti KH EZ @ 48" o.c. U.N.O.
- 2. Sill plate connections shall have a 3"x3" steel plate washer at each anchor bolt on shear walls only.
- 3. Top and bottom plates at all other levels to be fastened w/ (2) 16d nails @ 16" o.c. U.N.O.
- 4. Shear walls shall be sheathed and fastened per Shear Wall Schedule
- 5. Non-structural walls not shown, refer to architectural drawings. 6. All top plates are to be continuous. Splice per 3/S531

# (X) = Header Type

Header

Type

1. See 5/S531 for typical opening framing.

(3) 2x8

(3) 2x10

(HB) | (3) 1 3/4"x11 7/8" LVL | (1) 2x6 K | (2) 2x6 J |

2. Coordinate all dimensions and elevations with architectural drawings. 3. Provide double sills below windows at openings greater than 6'-0" in length.

Level 1

(3) 2x6 K (2) 2x6 J

Kings/Jacks

| (2) 2x6 K | (1) 2x6 J | (1) 2x6 K | (1) 2x6 J | (1) 2x6 K | (1) 2x6 J | (1) 2x6 K | (1) 2x6 J

(2) 2x6 K (1) 2x6 J (1) 2x6 K (1) 2x6 J (1) 2x6 J (1) 2x6 J (1) 2x6 J (1) 2x6 J

Level 2

(3) 1 3/4"x11 7/8" LVL (2) 2x6 K (1) 2x6 J (1) 2x6 K (1) 2x6 J (1) 2x6 K (1) 2x6 J (1) 2x6 K (1) 2x6 J (1) 2x6 K

- 4. All LVL shall be stress class 2.0E-2500F.
- 5. All Glulam shall be stress class 24F-1.8E.

# ROOF PLAN NOTES:

- SEE ARCHITECTURAL DRAWINGS FOR SITE PLAN BENCHMARK ELEVATION. FOR REFERENCE ELEVATION, SEE BELOW (VERIFY ALL ELEVATIONS AND DIMENSIONS WITH ARCHITECTURAL DRAWINGS.)
- ROOF TRUSS BEARING 142'-10"
- T.O. PARAPET 147'-8" T.O. HIGH PARAPET
- ROOF SHEATHING: 3/4" STRUCTURAL GRADE PLYWOOD FASTENED TO FRAMING W/ 10d COMMON NAILS SPACED 6" O.C. AT EDGES, 12" O.C. WITHIN FIELD. SHEATHING IS TO BE TOPPED WITH SLOPED RIGID INSULATION PER ARCH.
- RTU PENETRATIONS TO BE COORDINATED W/ ARCH. & MEP DRAWINGS. 4. PARAPET FRAMING TO BE PART OF THE ROOF TRUSSES (DESIGN PER MANUFACTURER).
- 5. REFER TO MANUFACTURER'S GUIDELINES FOR INSTALLATION OF STRAP TIES, HOLD DOWNS & OTHER CONNECTIONS.
- 6. ALL EXTERIOR LUMBER (POSTS, BEAMS, DECKING, ETC.) TO BE TREATED. WOOD ROOF TRUSSES (DESIGN PER MANUFACTURER) ARE SHOWN FOR THE INTENT OF SPAN
- DIRECTION AND LOAD PATH ONLY. REFER TO GENERAL NOTES FOR DESIGN CRITERIA. TRUSS MANUFACTURER TO DESIGN & PROVIDE GIRDER TRUSSES AT ALL FLOOR OPENINGS & SPECIFY
- HANGERS FOR GIRDERS & SUPPORTED FRAMING. VERIFY SPECIFIED ELEVATOR HOIST BEAM AND SUPPORTING FRAMING W/ ELEVATOR MANUFACTURER. 10. REFER TO MANUFACTURER'S INSTRUCTIONS FOR INSTALLATION OF STRAP TIES, HOLD DOWNS, & OTHER

PROJECT NUMBER: 2023000333

SHEET NUMBER:

ROOF FRAMING PLAN

SHEET TITLE

1 ROOF FRAMING PLAN \S104 \ 1/8" = 1'-0"

8" CMU WALL,

S533

1 S535

S535

S533

REINFORCE PER 1/S520

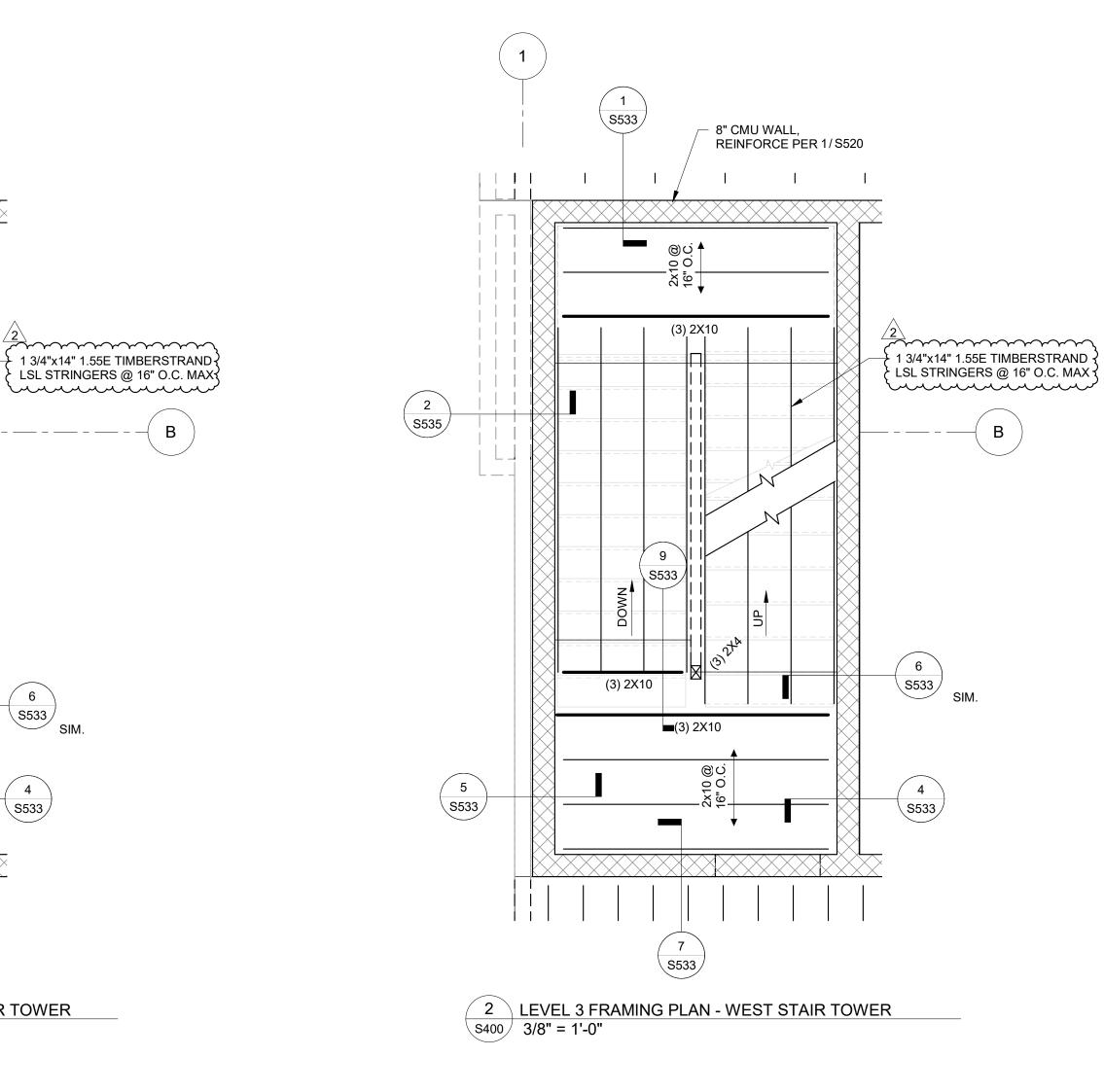
\_l(3) 2X10\_

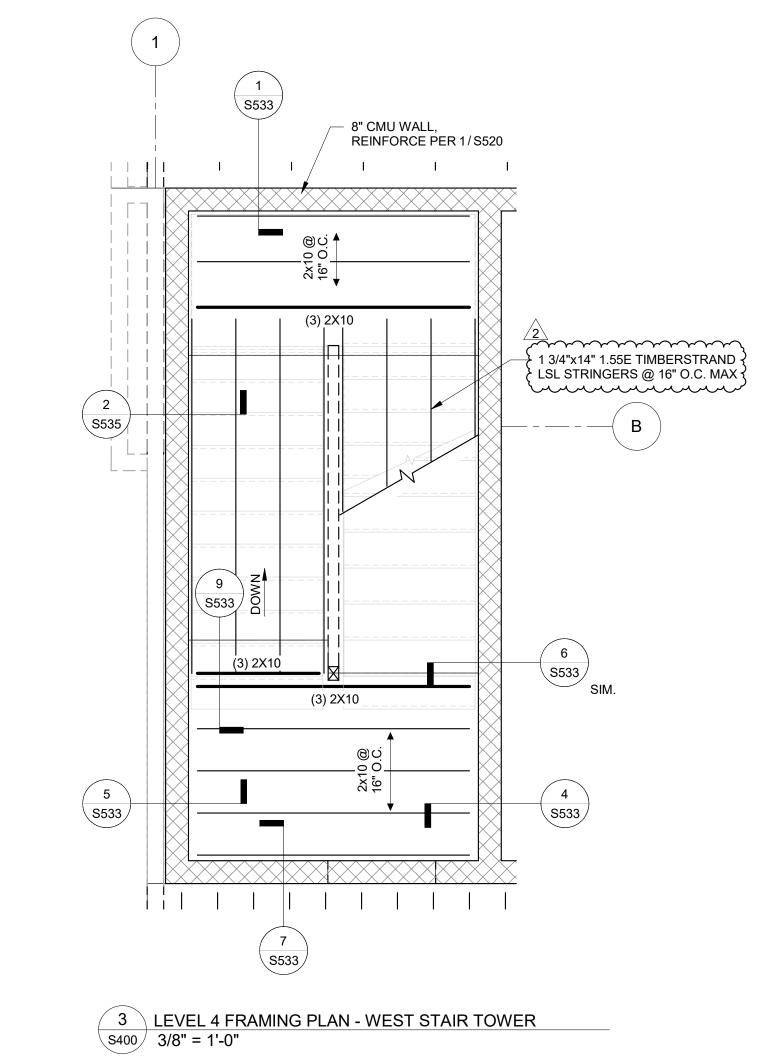
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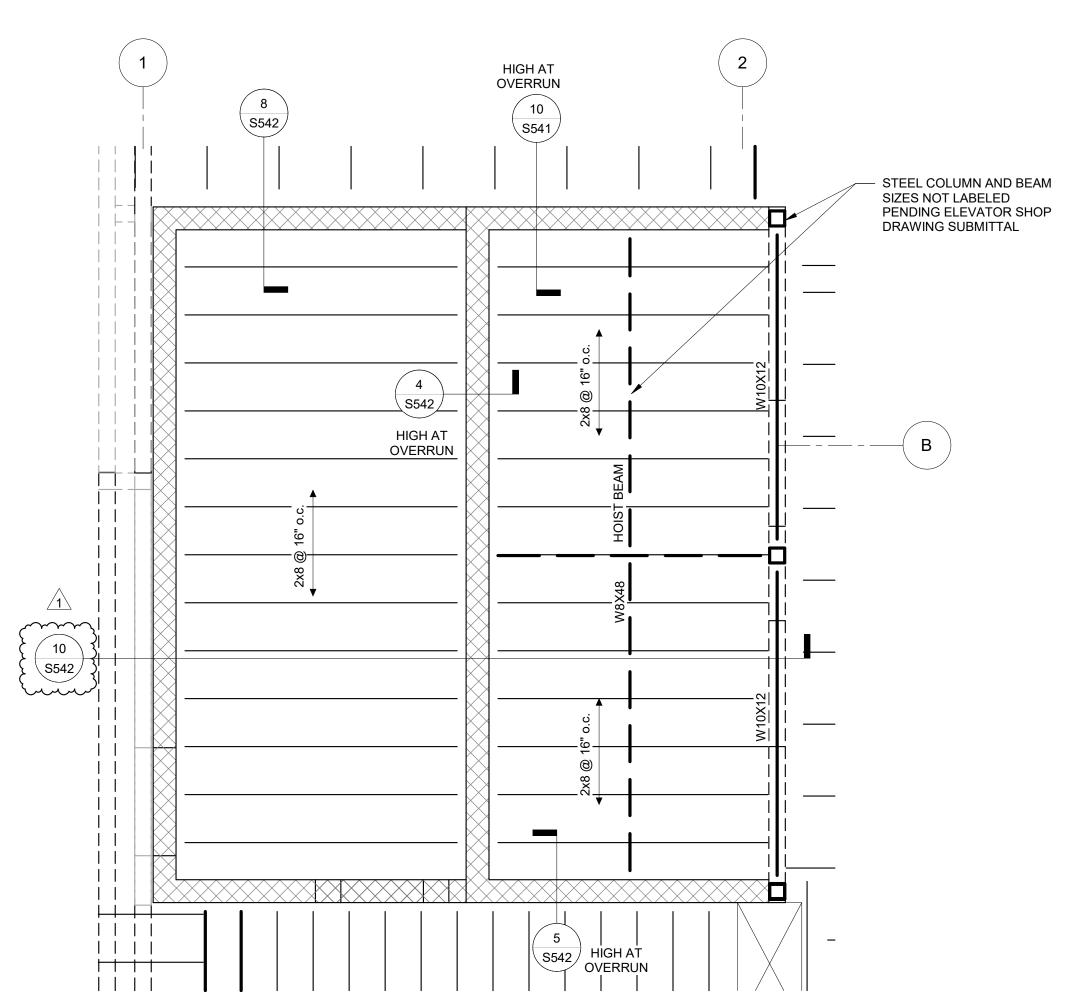
1 LEVEL 2 FRAMING PLAN - WEST STAIR TOWER
3/8" = 1'-0"

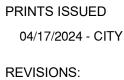
\S533

∖S533*∫* 









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1 05/17/2024 CITY RESPONSE

2 06/14/2024 CITY & BRAND RESPONSE

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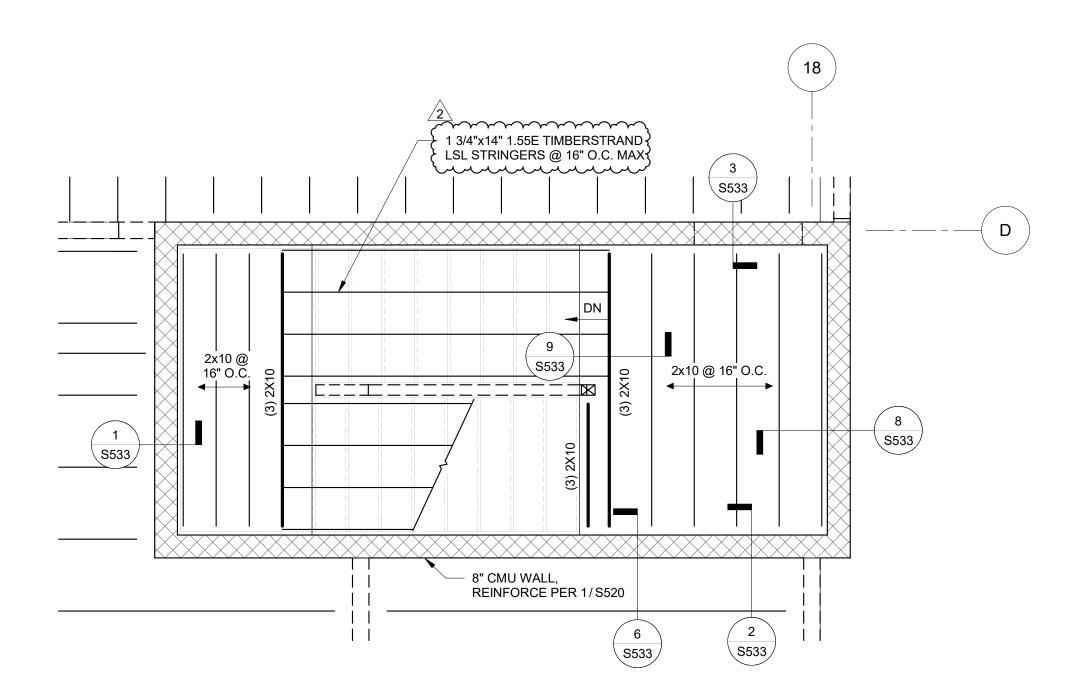
BY HILTON 251 NE ALURA WAY SUMMIT, MISSOURI 64064 SUITES

SHEET TITLE

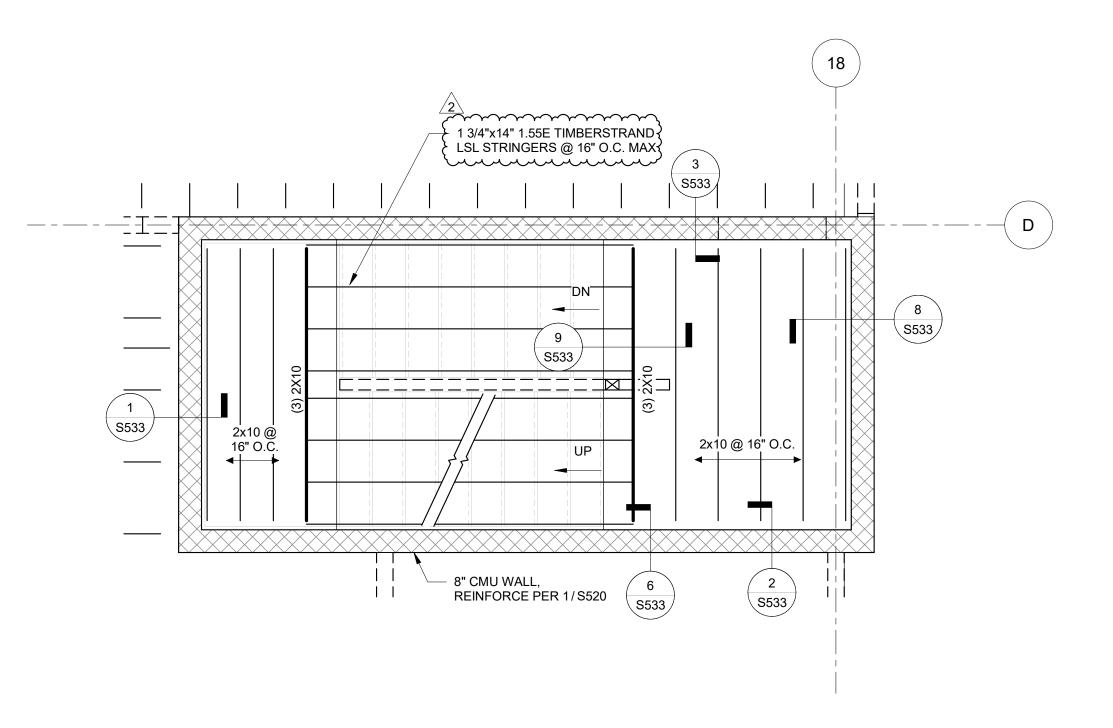
HOME2

**ENLARGED VIEWS** PROJECT NUMBER: 2023000333

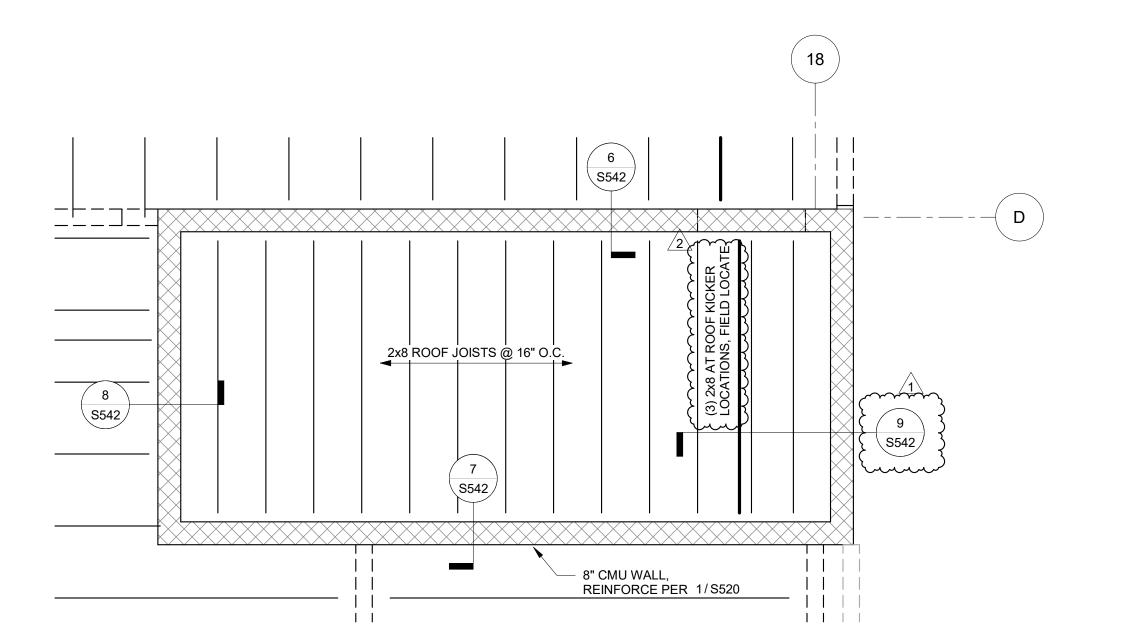
1 LEVEL 2 FRAMING PLAN - EAST STAIR TOWER
3/8" = 1'-0"



3 LEVEL 4 FRAMING PLAN - EAST STAIR TOWER 3/8" = 1'-0"



2 LEVEL 3 FRAMING PLAN - EAST STAIR TOWER
3/8" = 1'-0"



4 ROOF FRAMING PLAN - EAST STAIR TOWER

3/8" = 1'-0"

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SHEET TITLE **ENLARGED VIEWS** 

BY HILTON

SUITES

HOME2

PROJECT NUMBER: 2023000333

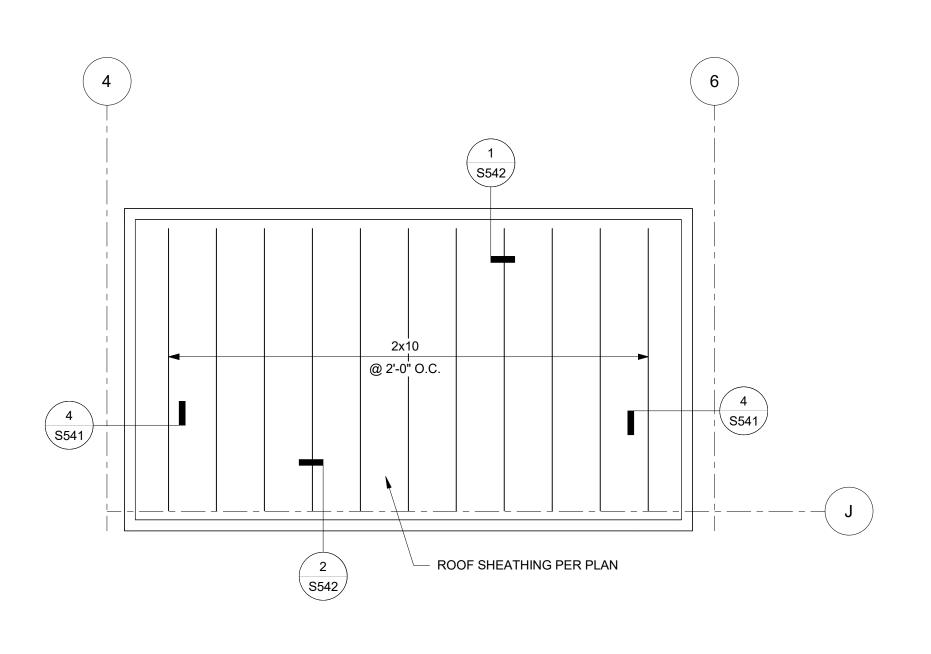
HSS12X6X5/16 (HIGH) HSS10X5X1/4 (LOW)

\_\_\_HSS18X6X1/4

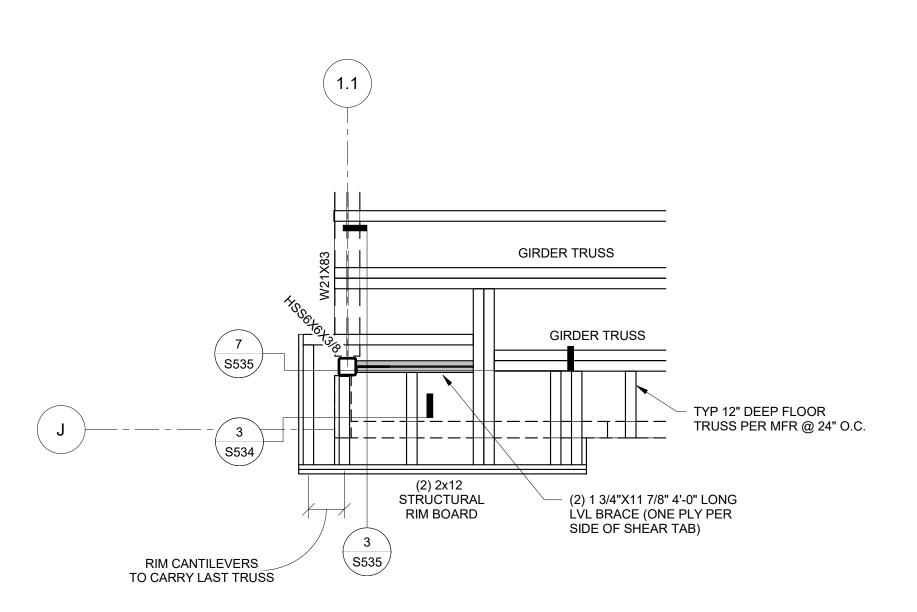
FULL HEIGHT BRICK VERTICAL -JOINT ADJACENT TO OPENING, SEE ARCH. DWGS

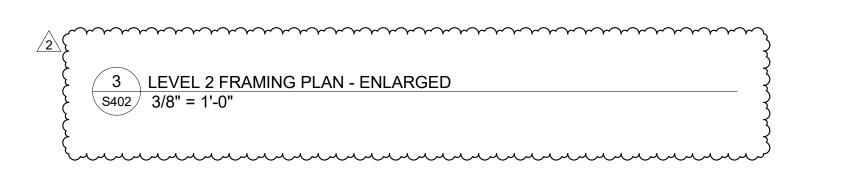
1000S200-68 ROOF JOISTS @ -2'-0" O.C. (TYP LOW CANOPY)

4 5/8"—



2 BEACON ROOF FRAMING PLAN 1/4" = 1'-0"





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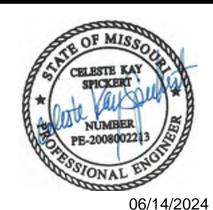
1 05/17/2024 CITY RESPONSE 2 06/14/2024 CITY & BRAND RESPONSE



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SHEET TITLE **ENLARGED VIEWS** 

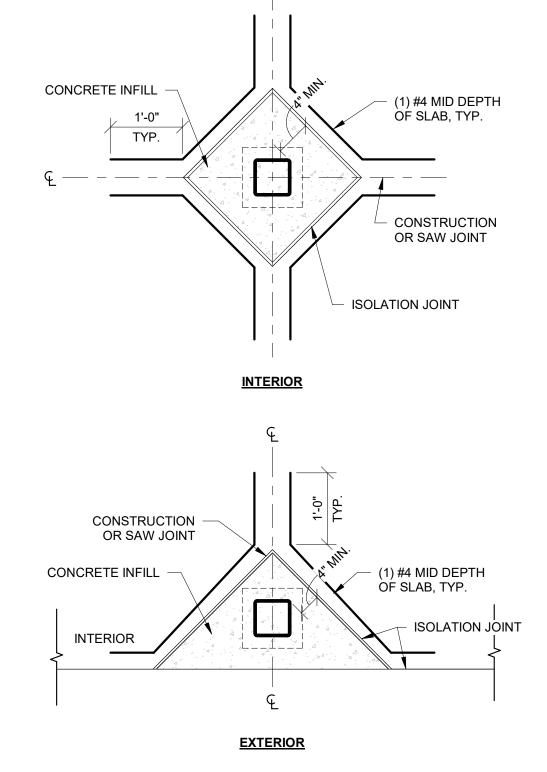
BY HILTON

SUITES

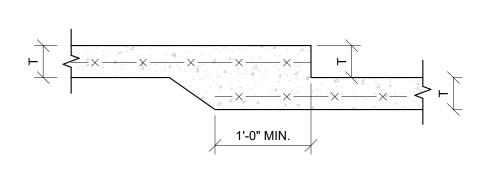
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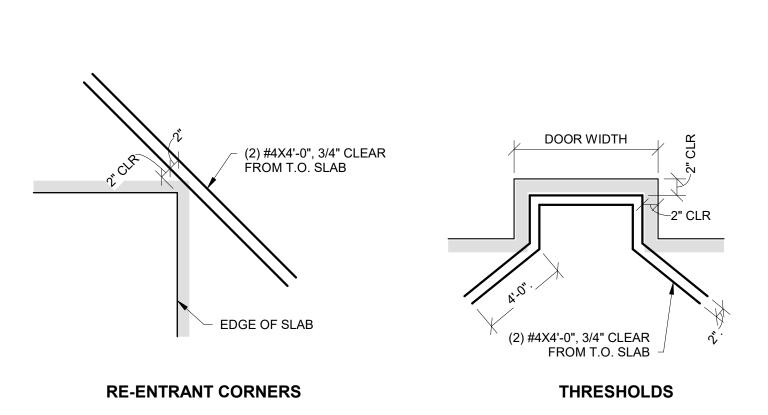












TYPICAL ADDITIONAL REINFORCING IN SLABS 2 AT RE-ENTRANT CORNERS & THRESHOLDS S501 NTS

STRINGER

2'-0"

TYPICAL STAIR STRINGER BASE CONNECTION

NOTE: DO NOT OVERCUT STRINGER

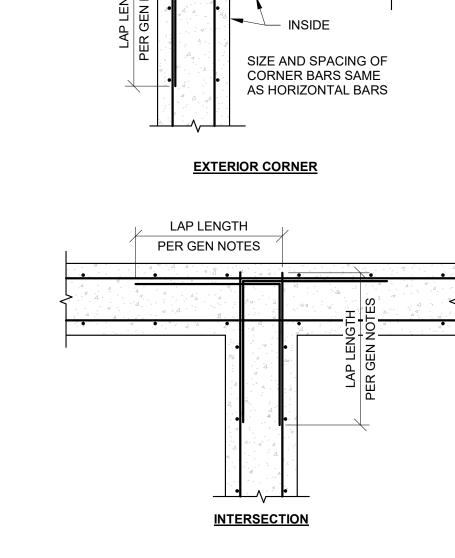
L4X4X3/16 W/ (2) 3/4"Ø THREADED RODS W/ 6"

EMBEDMENT & HILTI HIT-HY 200
EPOXY TO CONCRETE & (2) 3/4"Ø
A307 BOLT THROUGH STRINGER

#4 BARS @ 12" O.C.

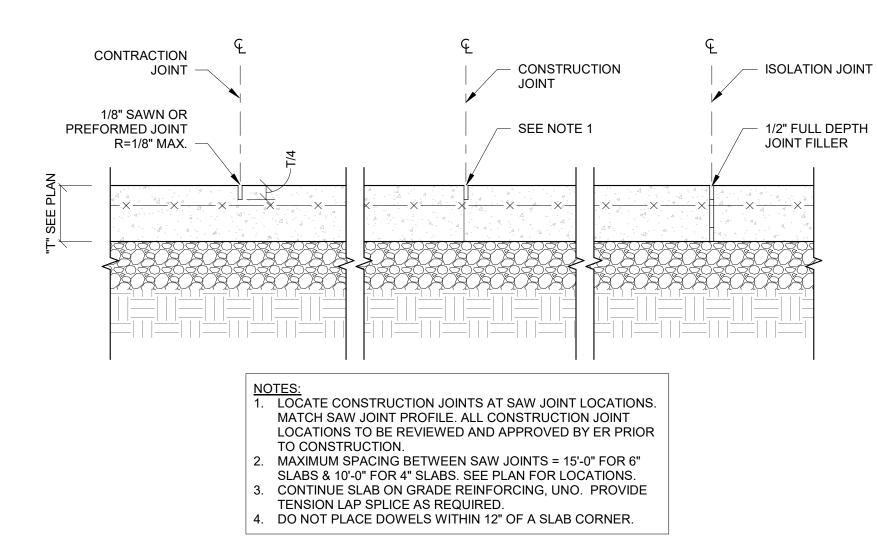
(3) CONT. #5 BARS

6 TO THICKENED SLAB S501 NTS



LAP LENGTH PER GEN NOTES

3 TYPICAL FOUNDATION WALL CORNER BAR DETAILS NTS



4 TYPICAL SLAB ON GRADE JOINTS NTS

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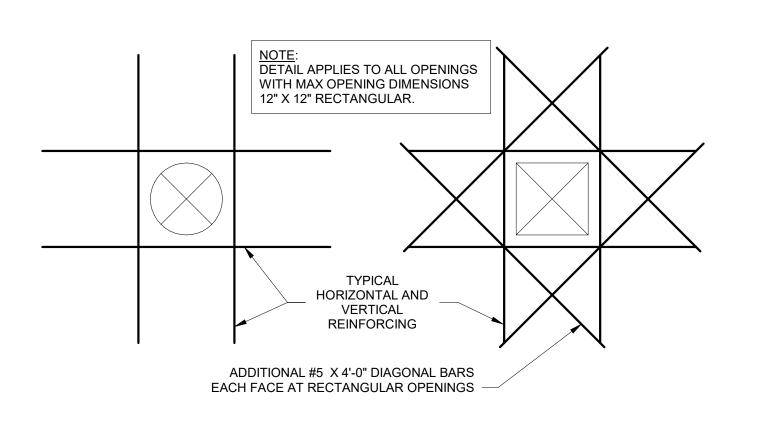
and/or follow the engineers' or surveyors'

HILTON

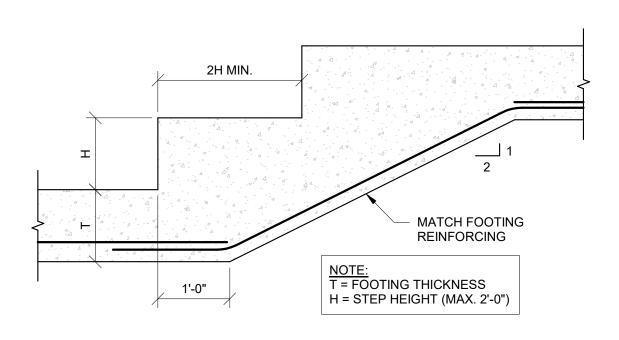
BY

SUITE

HOME2



7 REINFORCING AT FOUNDATION WALL OPENING S501 NTS



8 STEPPED FOOTING DETAIL 3/4" = 1'-0"

SHEET TITLE TYPICAL FOUNDATION DETAILS

PROJECT NUMBER: 2023000333

1 SECTION AT FOUNDATION
S502 1" = 1'-0"

COLUMN PER PLAN

BASE PLATE & ANCHOR BOLTS
PER DETAILS ON SHEET \$510

PAVEMENT PER CIVIL

SEE PLAN

SEE PLAN

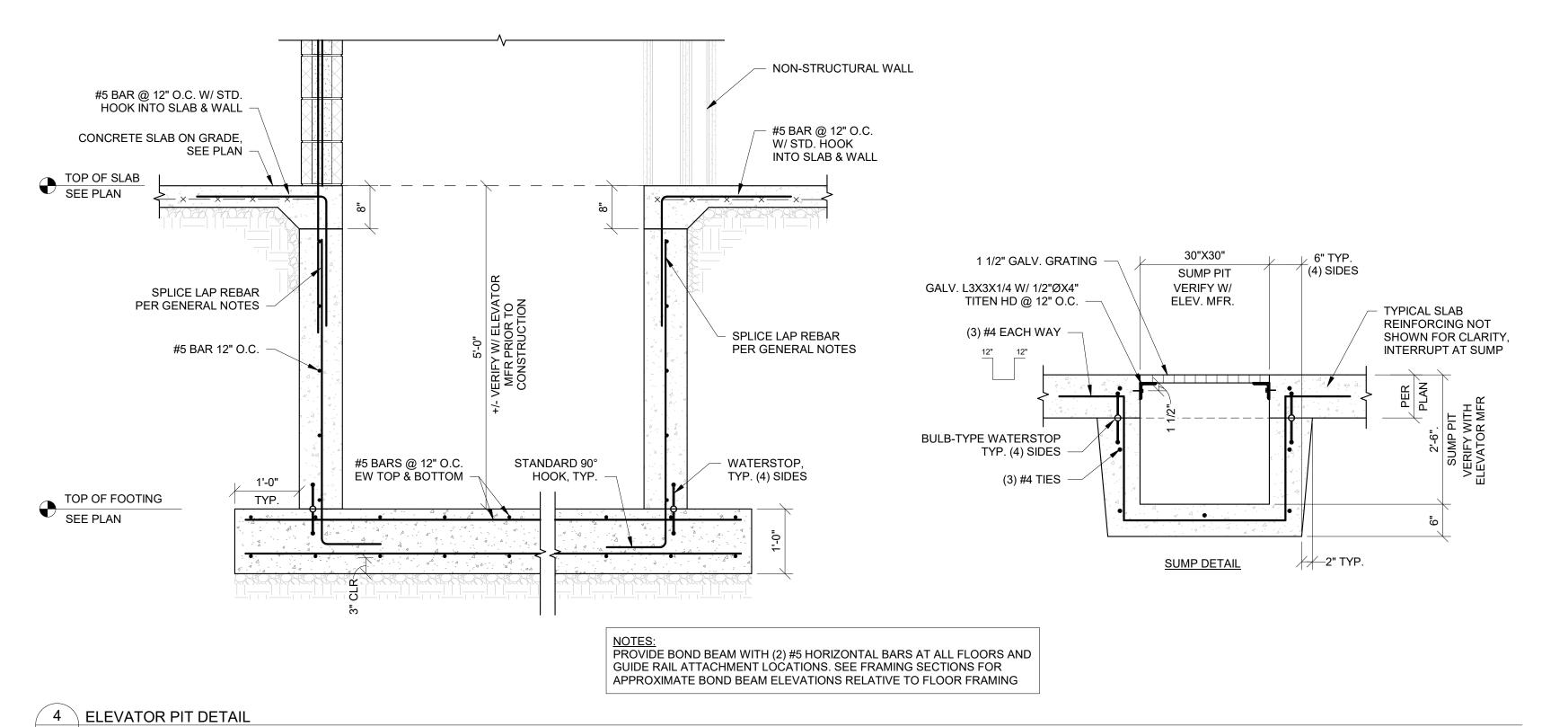
F.F. ELEV.
SEE PLAN

REINFORCING PER
FOOTING SCHEDULE

PER FOUNDATION PLAN

PER FOUNDATION PLAN

2 STEEL COLUMN AT PEDESTAL S502 1" = 1'-0"



SHEAR WALL END POST, HOLD DOWN & ANCHOR PER SHEAR WALL SCHEDULE ADJACENT WOOD WALL, STUD SIZE AND SPACING PER PLAN TYP. SLAB REINFORCING CONT. THICKENED SLAB REINFORCING F.F. ELEV.
SEE PLAN 2'-0" MIN. #5 X 2'-6" @ 12" O.C. DRILL 6" INTO FOUNDATION WALL & EPOXY W/ HILTI HIT-HY-200 UNDER-SLAB VAPOR BARRIER AND SUBGRADE PER GENERAL NOTES PER PLAN - #5 LONGITUDINAL BENT BARS @ 12" O.C., LAP 2'-0" W/ DOWELS AND SLAB REINFORCING - #5 TRANSVERSE BENT BARS @ 12" O.C., LAP 2'-0" W/ SLAB REINFORCING EA. END

SHEAR WALL END POST, HOLD DOWN & ANCHOR PER SHEAR WALL SCHEDULE ADJACENT WOOD WALL, STUD SIZE AND SPACING PER PLAN TYP. SLAB REINFORCING CONT. THICKENED SLAB REINFORCING -THICKENED SLAB AT SHEAR WALL HOLD DOWN LOCATION, SEE PLANS FOR DIMENSIONS UNDER-SLAB VAPOR BARRIER AND SUBGRADE PER GENERAL NOTES PER PLAN #5 BENT BARS @ 12" O.C. EACH WAY, LAP 2'-0" W/ SLAB REINFORCING EACH END —

7 THICKENED SLAB AT SHEAR WALL HOLD DOWN - INTERIOR 3/4" = 1'-0"

1/2"ØX6" LONG HILTIKH-EZ SCREW
ANCHORS 4'-0" O.C. AND 6" FROM
CORNERS AND OPENINGS, AT SHEAR
WALLS SPACING TO BE PER SHEAR
WALL SCHEDULE

#5 BARS @ 1'-6" O.C., LAP 2'-0" W/
SLAB REINFORCING EA. END

(3) #5 BARS CONT.

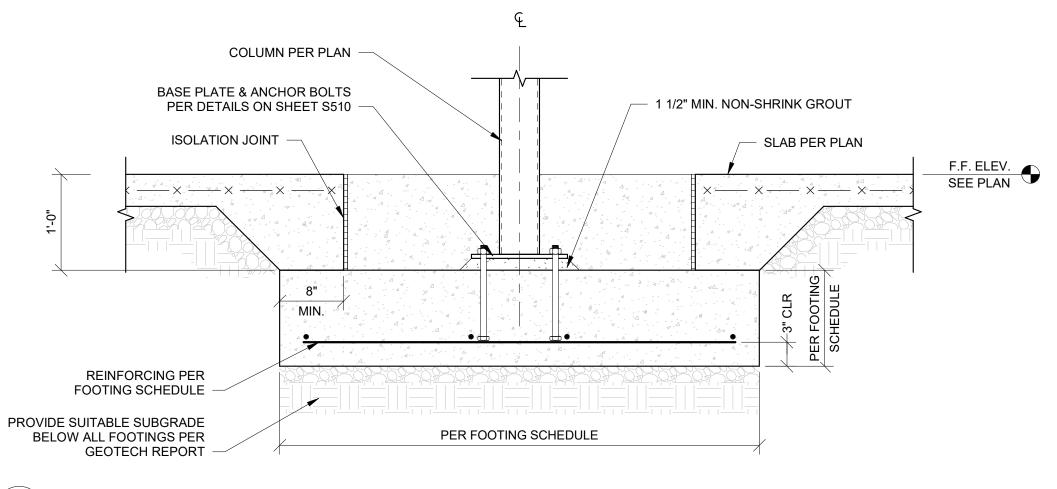
F.F. ELEV
SEE PLAN

1'-0"
2'-0" X CONT.

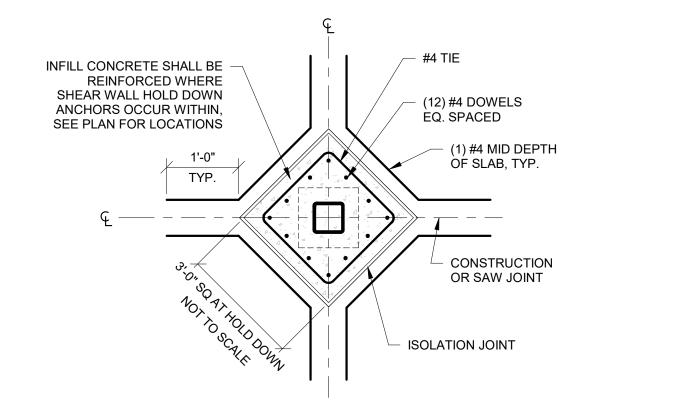
UNDER-SLAB VAPOR
BARRIER AND SUBGRADE
PER GENERAL NOTES

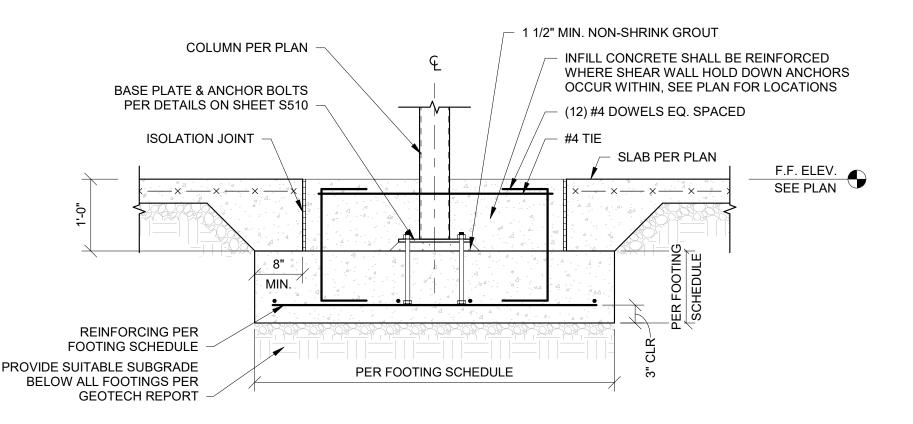
WALL STUD SIZE AND SPACING PER PLAN

3 INTERIOR BEARING WALL AT THICKENED SLAB 5502 1" = 1'-0"



5 TYPICAL INTERIOR COLUMN FOOTING





8 SLAB ON GRADE ISOLATION JOINT AT COLUMN/SHEAR WALL S502 3/4" = 1'-0"

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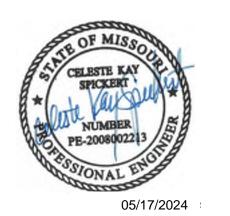
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MISSOURI CERTIFICATE OF AUTHORITY

NO. E-2006023253

EXPIRES: DECEMBER 31, 2024



# NUMBER PE-2008002213 05/17/202

# HOME2 SUITES BY HILTON 251 NE ALURA WAY LEE'S SUMMIT, MISSOURI 64064

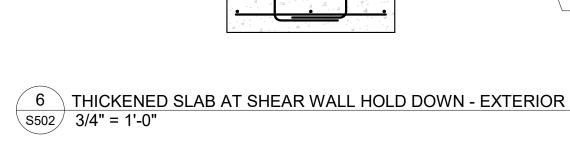
SHEET TITLE FOUNDATION DETAILS

SHEET NUMBER:

PROJECT NUMBER: 2023000333

CEOC

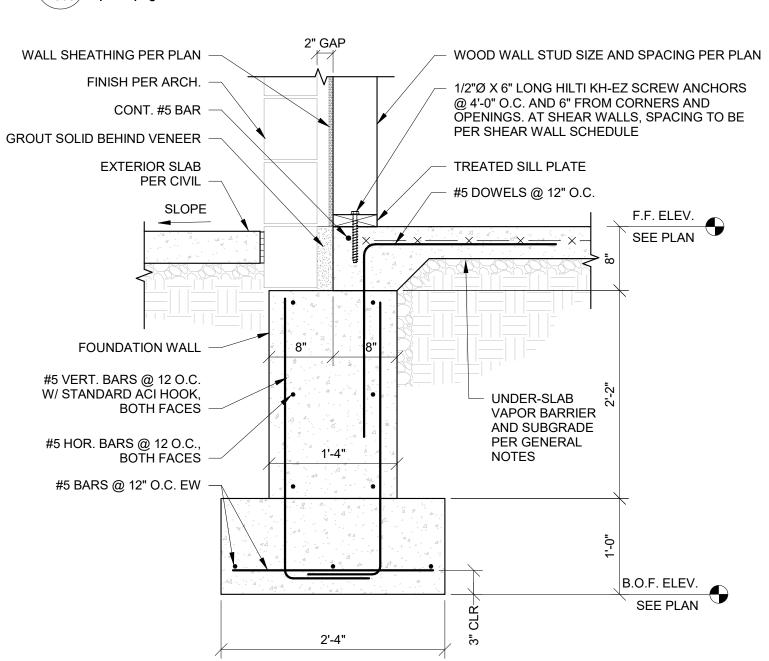
S502



S502 3/4" = 1'-0"

FINISH BEYOND PER ARCH.

CONT. #5 BAR



GLAZING PER ARCH

#5 DOWELS @ 12" O.C.

**UNDER-SLAB** 

VAPOR BARRIER

AND SUBGRADE

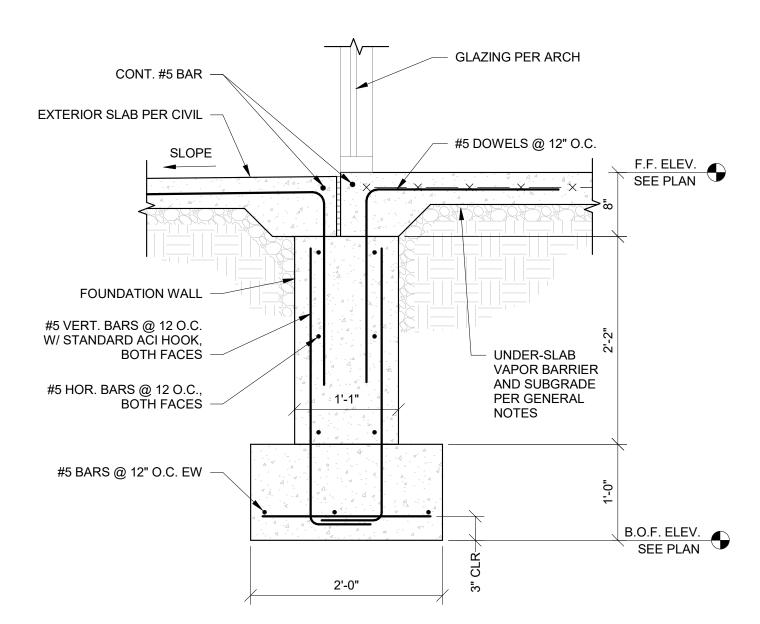
PER GENERAL

NOTES

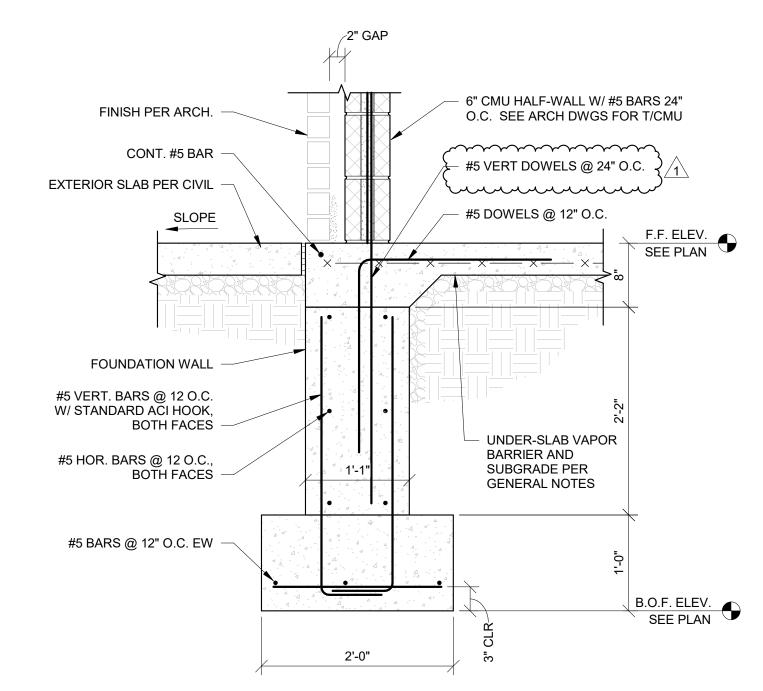
F.F. ELEV.
SEE PLAN

B.O.F. ELEV. SEE PLAN

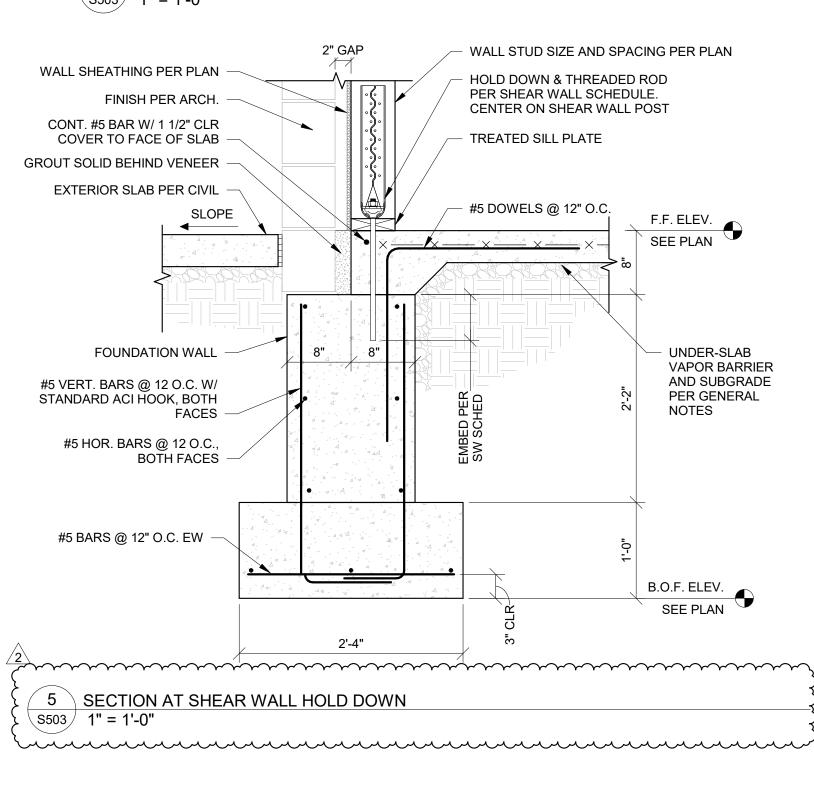
4 TYPICAL SECTION AT EXTERIOR FOUNDATION 1" = 1'-0"

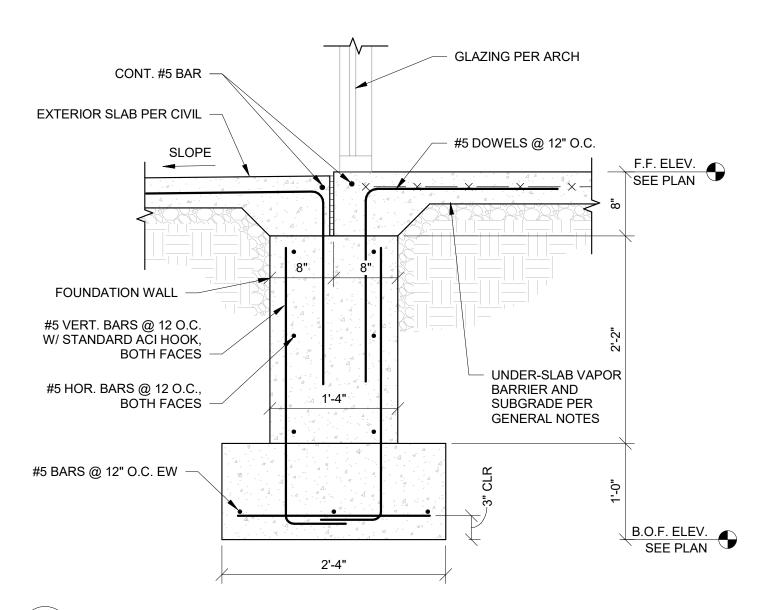


7A FOUNDATION SECTION AT STOREFRONT S503 1" = 1'-0"

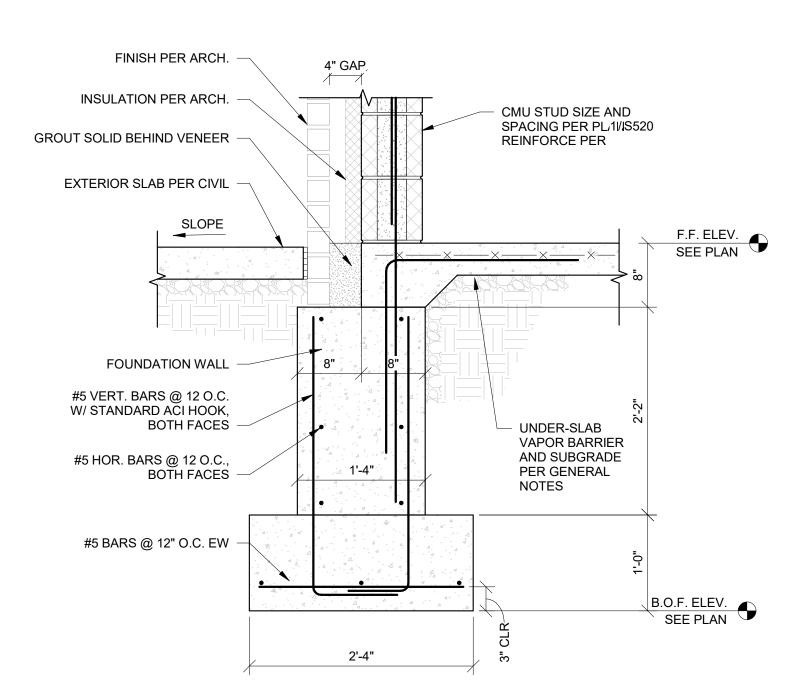


2 SECTION AT EXTERIOR PATIO FOUNDATION WITH CMU HALF-WALL S503 1" = 1'-0"

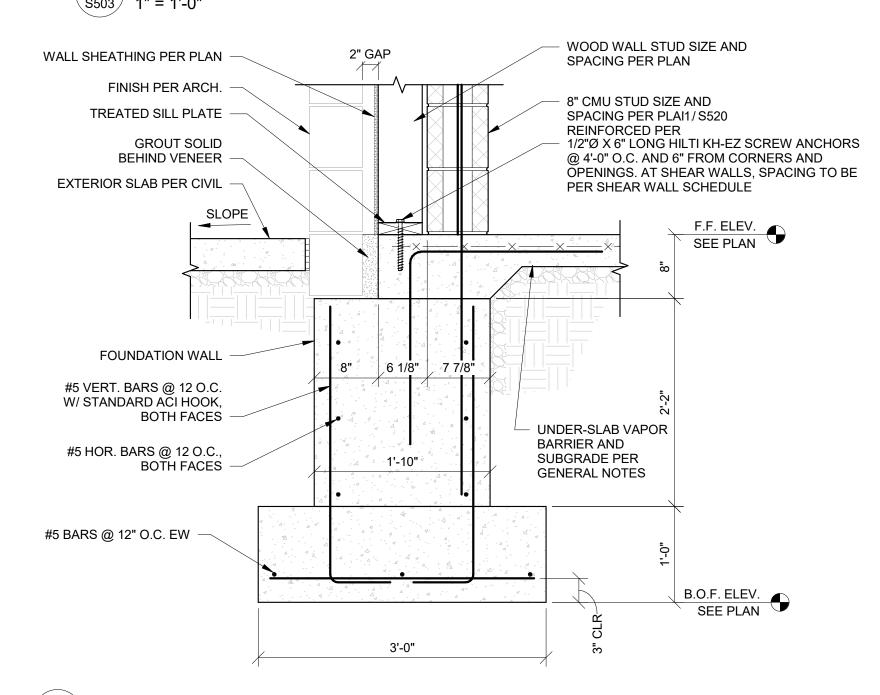




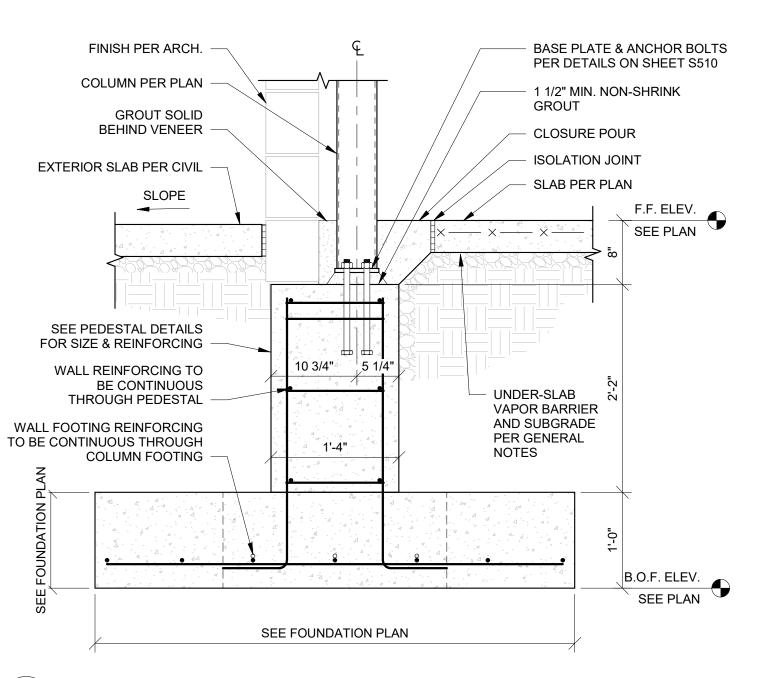
7B FOUNDATION SECTION AT STOREFRONT S503 1" = 1'-0"







6 EXTERIOR FOUNDATION AT WEST STAIR TOWER
1" = 1'-0"



8 SECTION AT COLUMN PEDESTAL S503 1" = 1'-0"

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Columbia, MO 65203

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251 NE ALURA WAY SUMMIT, MISSOURI

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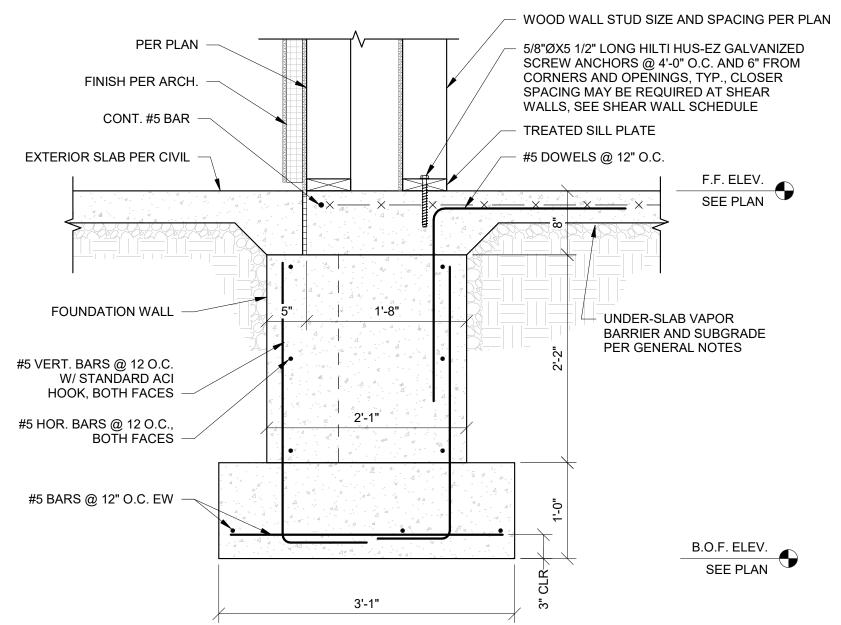
B

SUITES

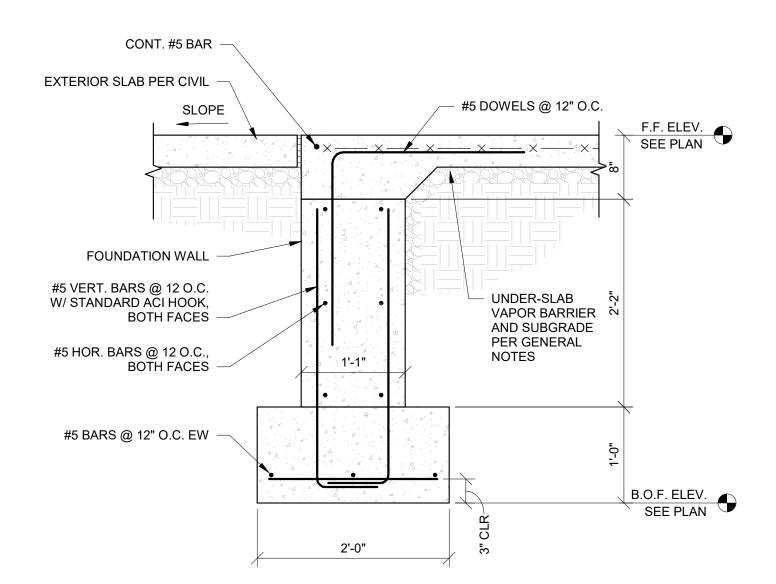
HOME2

SHEET TITLE FOUNDATION DETAILS

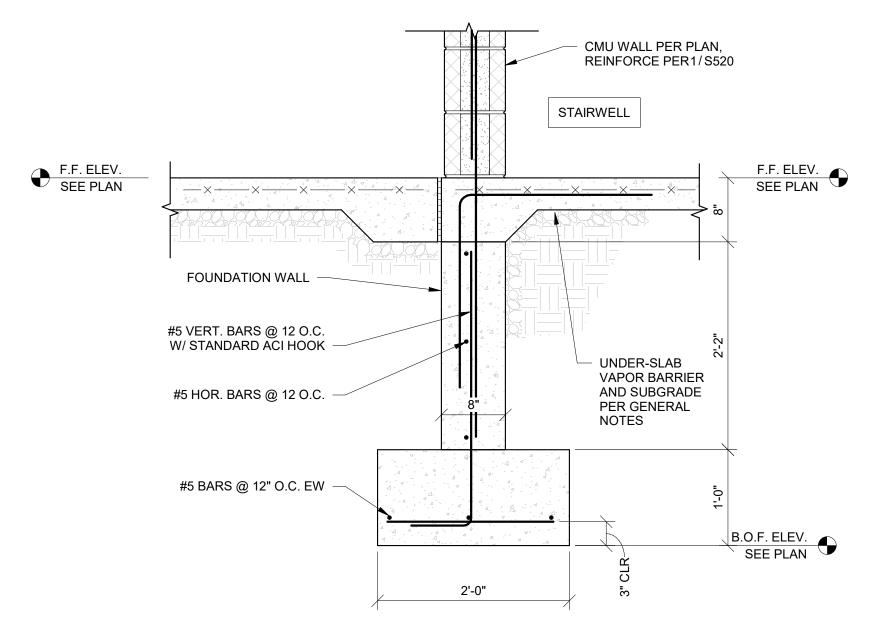
PROJECT NUMBER: 2023000333



1 OVERFRAMED WALL AT FOUNDATION 1" = 1'-0"



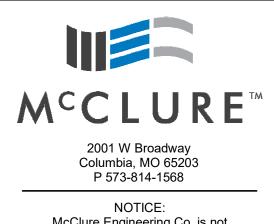
2 SECTION AT EXTERIOR PATIO FOUNDATION 1" = 1'-0"



3 FOUNDATION SECTION AT CMU WALL
1" = 1'-0"

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# BY HILTON

SHEET TITLE FOUNDATION DETAILS

HOME2

PROJECT NUMBER: 2023000333

#4 CLOSED TIES @ 10" O.C.,

- (8) #5 BARS VERTICAL

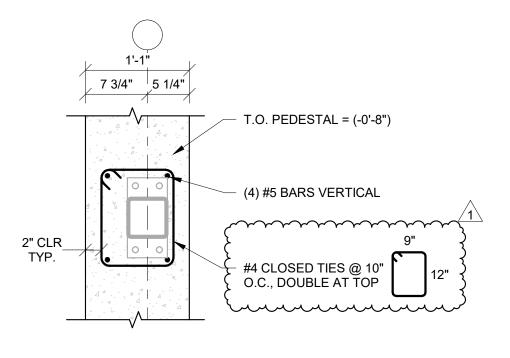
DOUBLE AT TOP

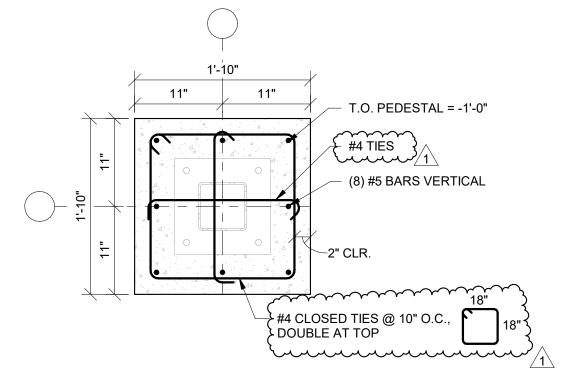
4'-0"

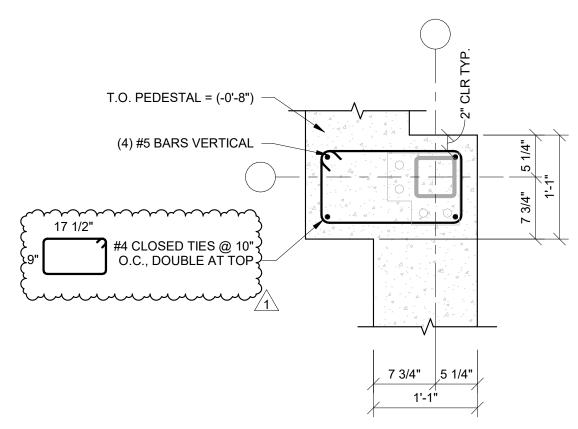
1 PEDESTAL P1 S505 1" = 1'-0"

#4 TIES -

5 PEDESTAL P5 S505 1" = 1'-0"







4 PEDESTAL P4 S505 1" = 1'-0"

8 PEDESTAL P8 S505 1" = 1'-0"

2" CLR\_ TYP.

12 PEDESTAL 12 S505 1" = 1'-0"

1'-6"

(4) #5 BARS VERTICAL

T.O. PEDESTAL = (-0'-8")

#4 CLOSED TIES @ 10" O.C., DOUBLE AT TOP

· Lunion Line

1'-0 1/4"



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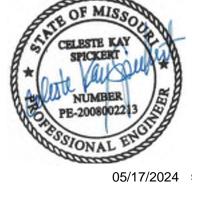
04/17/2024 - CITY SUBMISSION

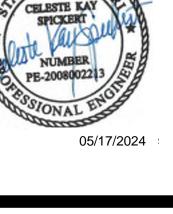
1 05/17/2024 CITY RESPONSE

2001 W Broadway Columbia, MO 65203 P 573-814-1568

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251 NE ALURA WAY SUMMIT, MISSOURI 64064

HILTON

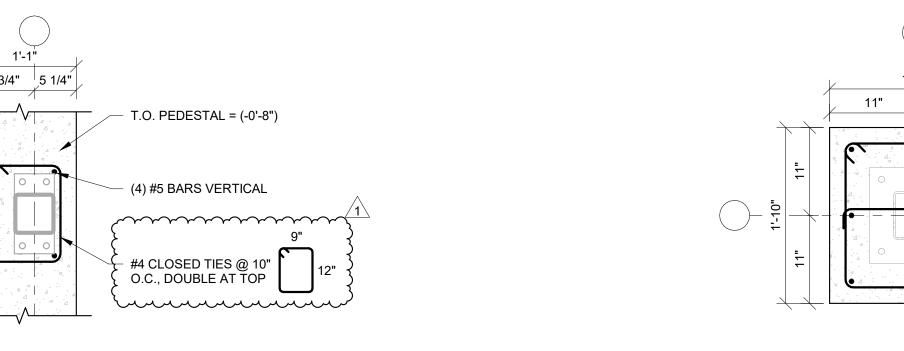
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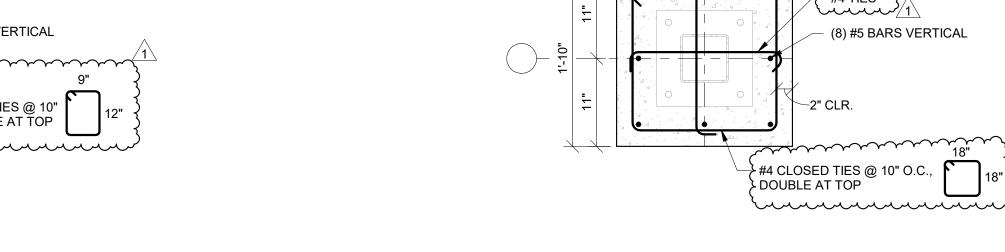
HOME2 SUITES

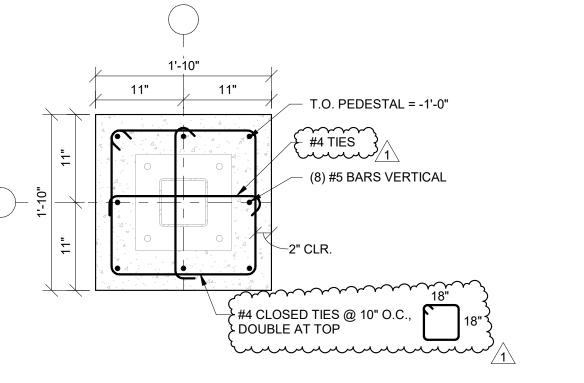
SHEET TITLE

FOUNDATION PEDESTAL DETAILS

PROJECT NUMBER: 2023000333 SHEET NUMBER:

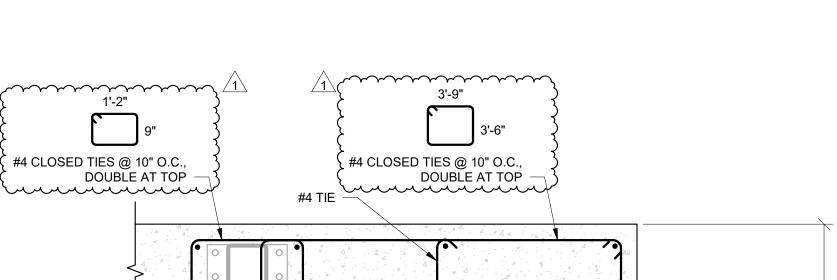


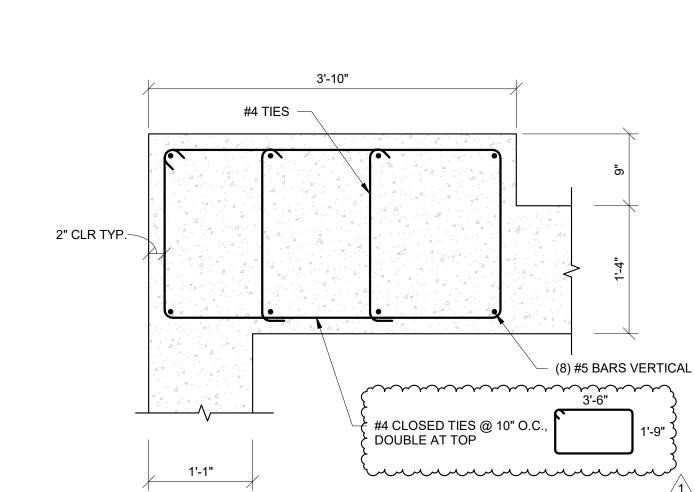


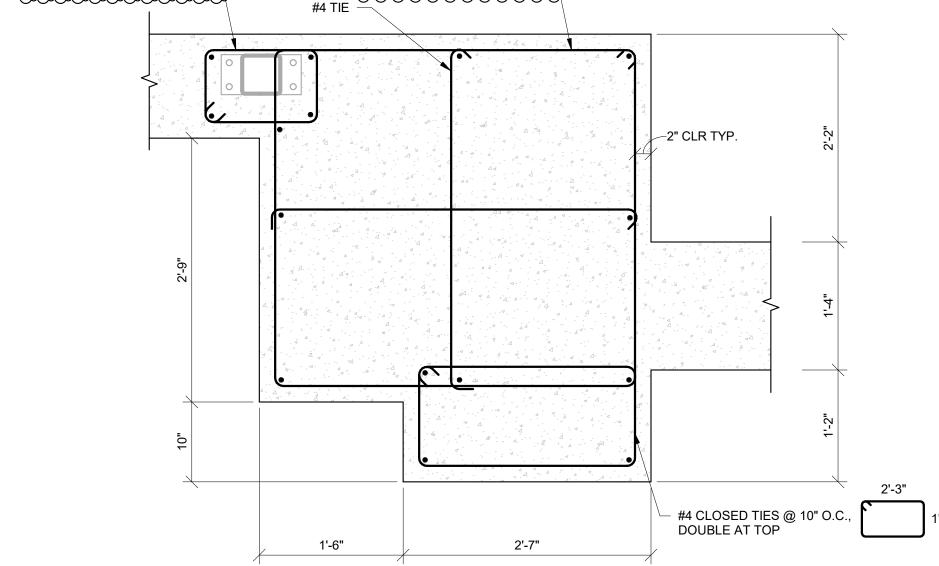


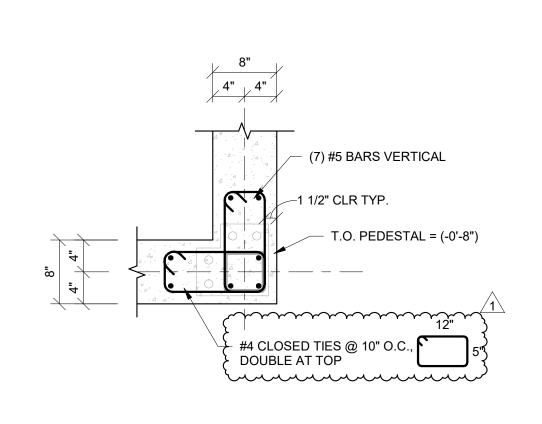




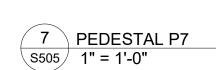


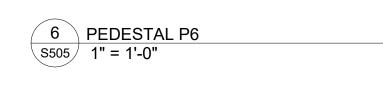


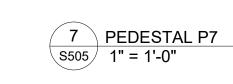


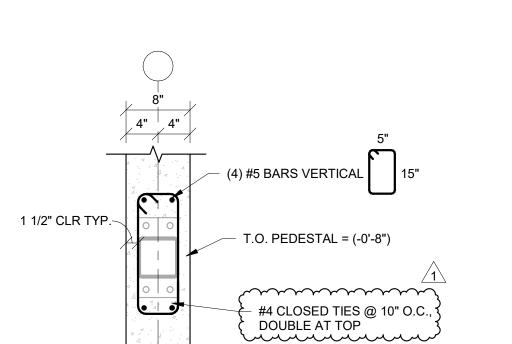




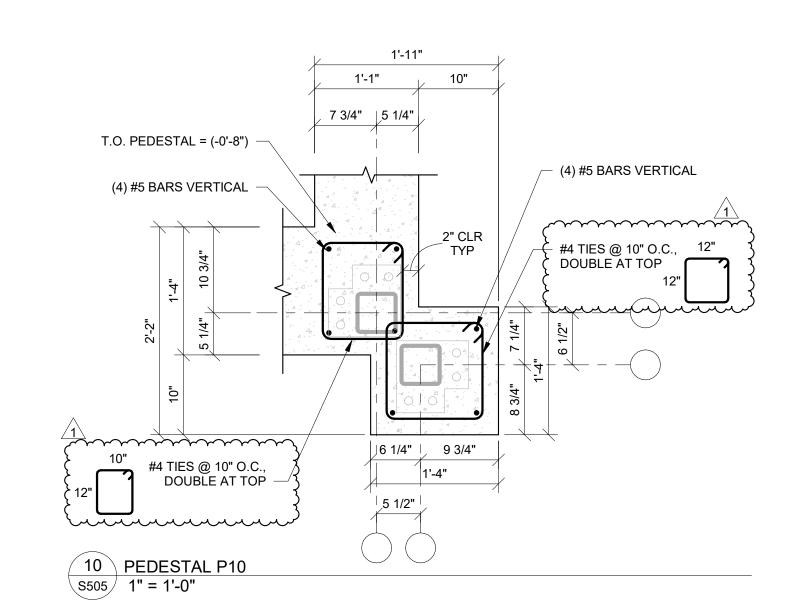


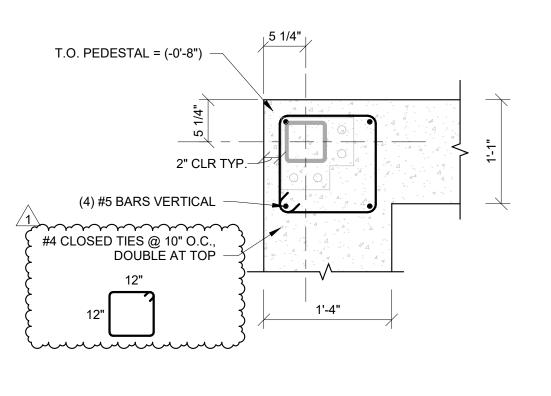




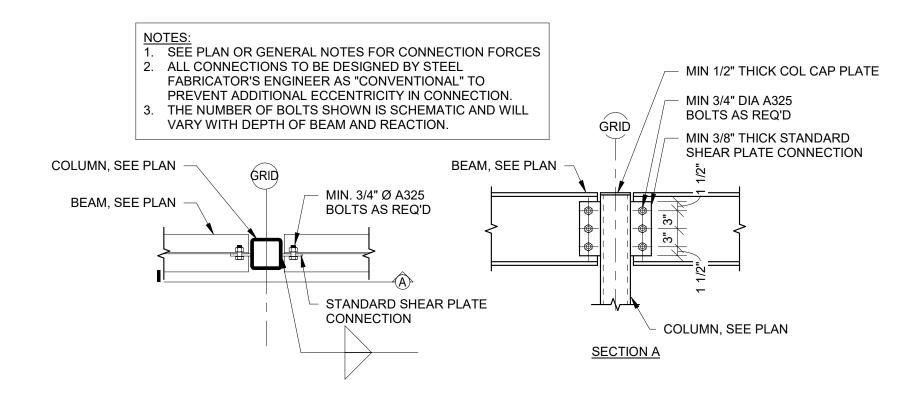








_	11	PEDESTAL P11
(	S505	1" = 1'-0"



1 COLUMN ANCHOR BOLT DETAILS

S510 3/4" = 1'-0"

Ø PER BASE

PLATE DETAIL

POST INSTALL OPTION

ANCHOR BOLT DIAGRAM

TOF OR PEDESTAL

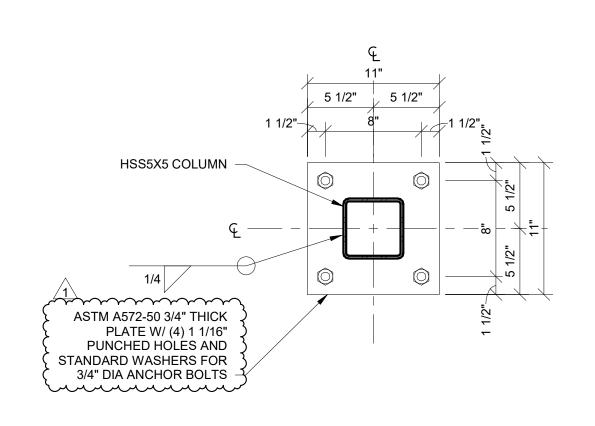
HILTI HY-200

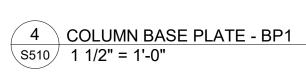
EQUAL

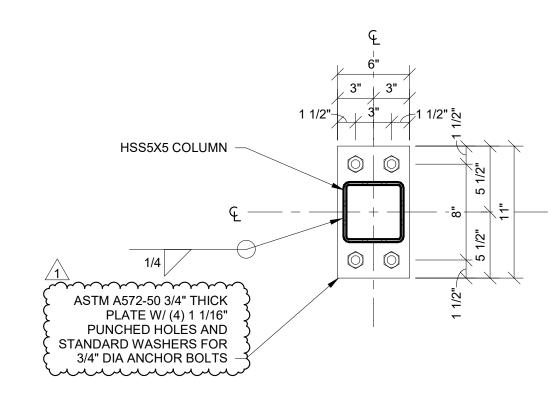
OR APPROVED

2 BEAM TO BEAM CONNECTION 1" = 1'-0"

3 TYPICAL BEAM TO COLUMN SHEAR CONNECTION 3/4" = 1'-0"







GROUT MAY BE BEVELED OR

FORMED BUT SHALL EXTEND A MIN "T" BEYOND FACE OF BASE

PLATE. "T"=1 1/2" FOR ANCHOR

**GROUT PLACEMENT** 

COLUMN BASE PLATE

**GROUT** 

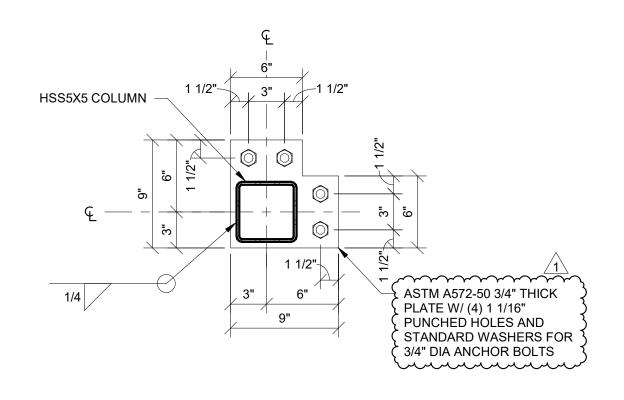
BOLT Ø UP TO 1"

Ø PER BASE /PLATE DETAIL

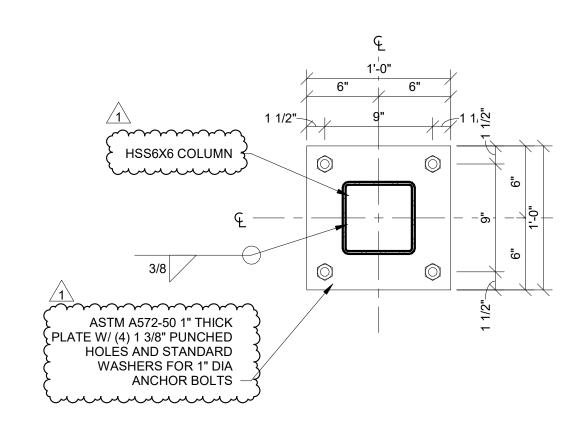
STANDARD INSTALL OPTION ANCHOR BOLT DIAGRAM

TOF OR PEDESTAL

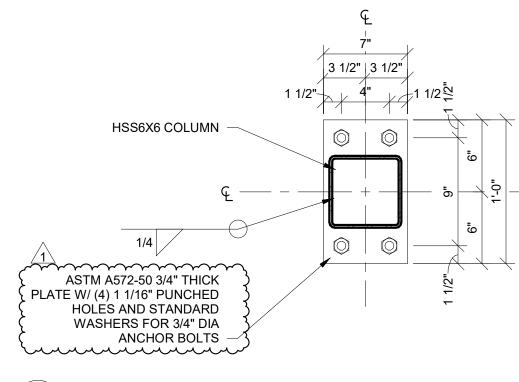
5 COLUMN BASE PLATE - BP2 5510 1 1/2" = 1'-0"



6 COLUMN BASE PLATE - BP3 1 1/2" = 1'-0"



7 COLUMN BASE PLATE - BP4 5510 1 1/2" = 1'-0"



8 COLUMN BASE PLATE - BP5 1 1/2" = 1'-0"

PRINTS ISSUED

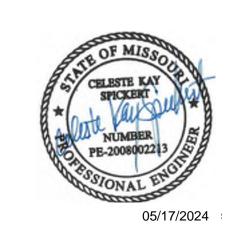
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EXPIRES: DECEMBER 31, 2024



# 251 NE ALURA WAY SUMMIT, MISSOURI 64064 HOME2

HILTON

BY

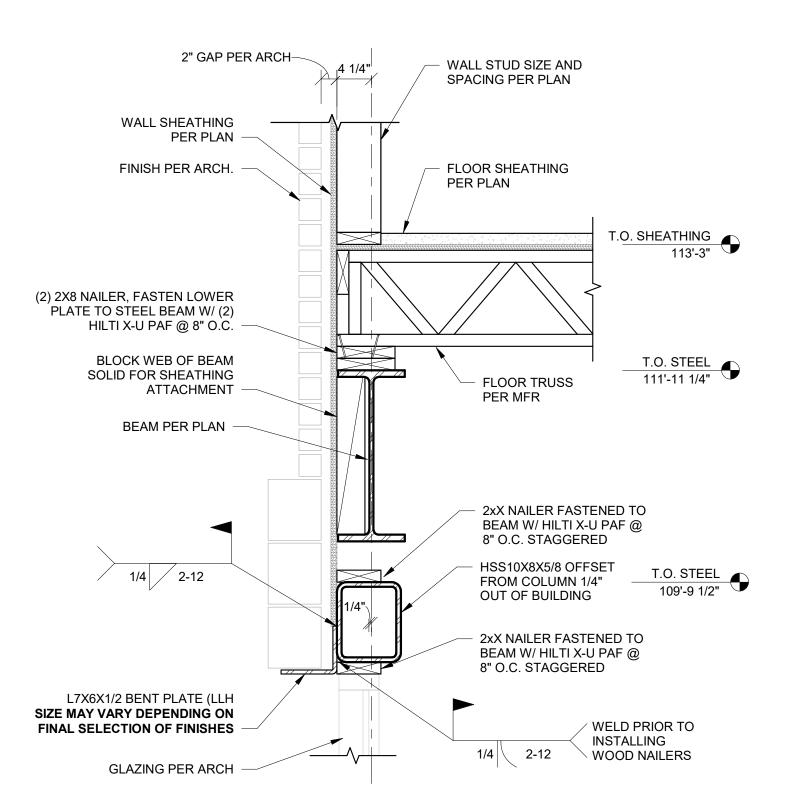
SUITES

SHEET TITLE STEEL DETAILS

PROJECT NUMBER: 2023000333

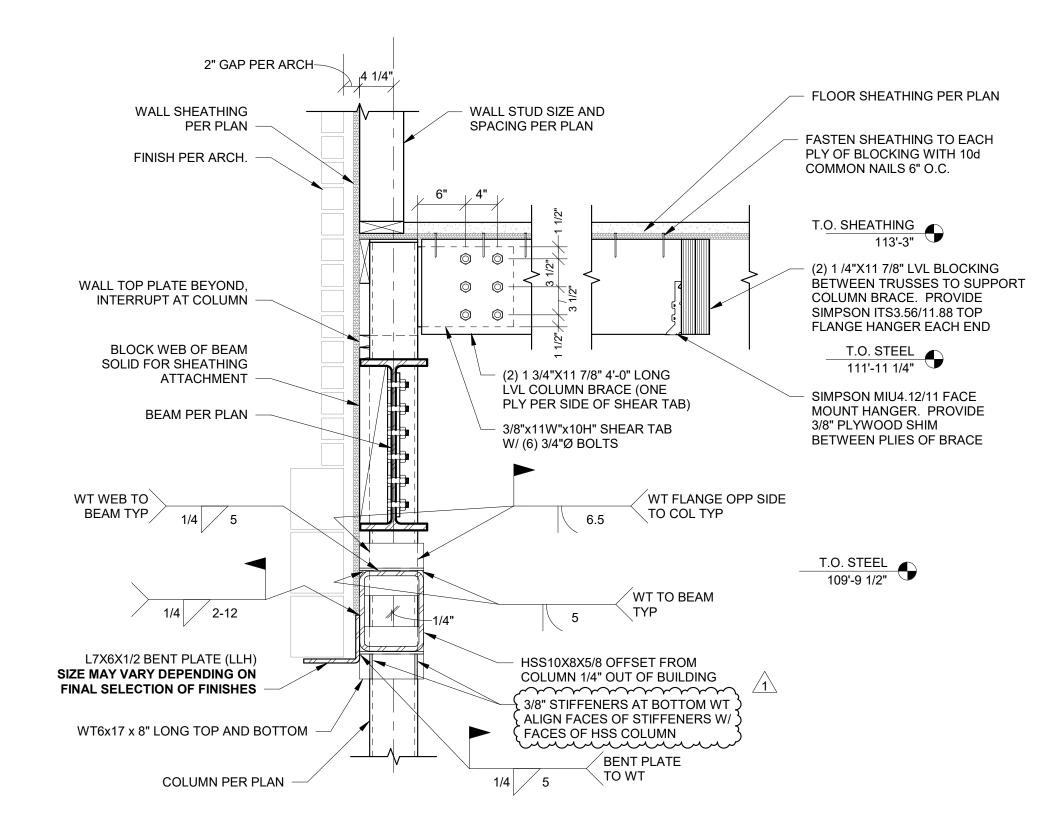
SHEET NUMBER:

S510



1A FLOOR TRUSS BEARING AT BEAM AT EXTERIOR

S511 1" = 1'-0"



1B STEEL COLUMN BRACING AT LEVEL 1
S511 1" = 1'-0"

PRINTS ISSUED

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# 05/17/20

# 251 NE ALURA WAY EE'S SUMMIT, MISSOURI 64064

SHEET TITLE STEEL DETAILS

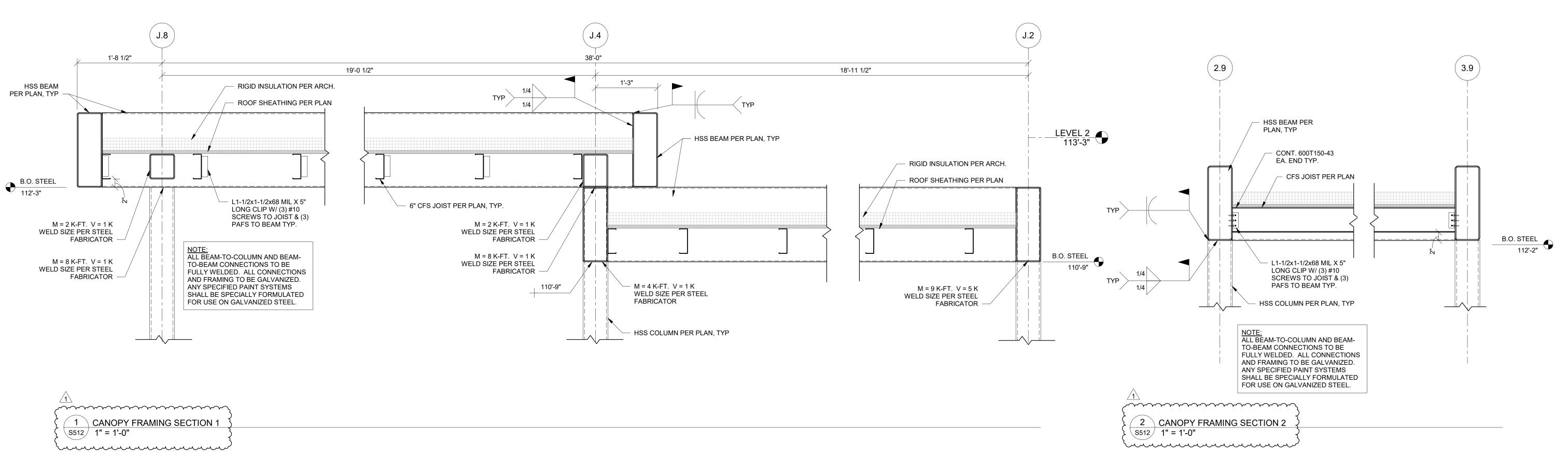
HOME2

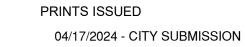
BY HILTON

PROJECT NUMBER: 2023000333

SHEET NUMBER:

S511





REVISIONS:
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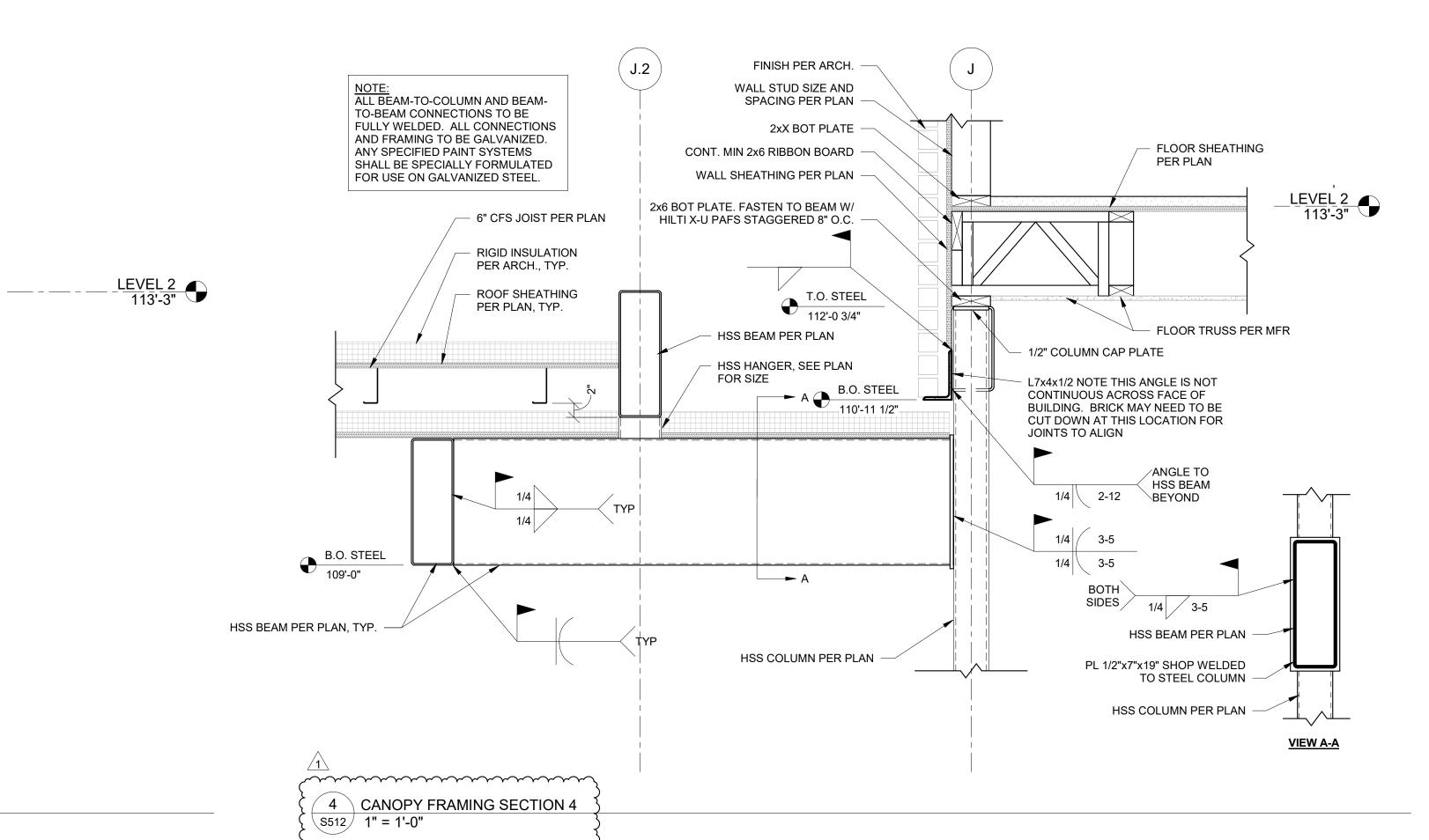
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EXPIRES: DECEMBER 31, 2024





# HOME2 SUITES BY HILTON

SHEET TITLE
ENTRY CANOPY SECTIONS

SHEET NUMBER:

PROJECT NUMBER: 2023000333

S512

5/16/2024 4:32:55 PM Autodesk Docs://2023000333 - Discovery Park Lee's Summit/2023000333 - Rosemann - Home2\_R23.rvt 6" CFS JOIST PER PLAN, TYP.

HSS BEAM, SEE PLAN FOR SIZE

B.O. STEEL 109'-0"

 $\cdots$ 

3 CANOPY FRAMING SECTION 3

S512 1" = 1'-0"

NOTE: ALL BEAM-TO-COLUMN AND BEAM-

FULLY WELDED. ALL CONNECTIONS

SHALL BE SPECIALLY FORMULATED

RIGID INSULATION

- ROOF SHEATHING

PER PLAN, TYP.

PER ARCH., TYP.

10" CFS JOIST PER PLAN -

AND FRAMING TO BE GALVANIZED.

ANY SPECIFIED PAINT SYSTEMS

FOR USE ON GALVANIZED STEEL.

TO-BEAM CONNECTIONS TO BE

FINISH PER ARCH.

WALL STUD SIZE AND

SPACING PER PLAN

CONT. MIN 2x6 RIBBON BOARD

WALL SHEATHING PER PLAN

2x6 BOT PLATE. FASTEN TO BEAM W/HILTI X-U PAFS STAGGERED 8" O.C.

HSS BEAM, SEE

PLAN FOR SIZE

B.O. STEEL

2xX BOT PLATE

T.O. STEEL
112'-0 3/4"

B.O. STEEL

110'-11 1/2"

- FLOOR SHEATHING

- FLOOR TRUSS PER MFR

PER PLAN

HSS BEAM, SEE PLAN FOR SIZE. ALIGN EXTERIOR FACE W/EXTERIOR FACE OF WALL

TO BE CUT DOWN AT THIS LOCATION FOR

(2) 2x6 TOP PLATE. FASTEN UPPER PLY TO

1/4 \\ 2-12 \\ BEYOND

HSS BEAM, SEE PLAN FOR SIZE. ALIGN

2x6 NAILER, FASTEN TO BEAM W/HILTI

X-U PAFS STAGGERED 8" O.C.

EXTERIOR FACE W/EXTERIOR FACE OF WALL

2x6 BOT PLATE, FASTEN TO BEAM W/HILTI X-U PAFS STAGGERED 8" O.C.

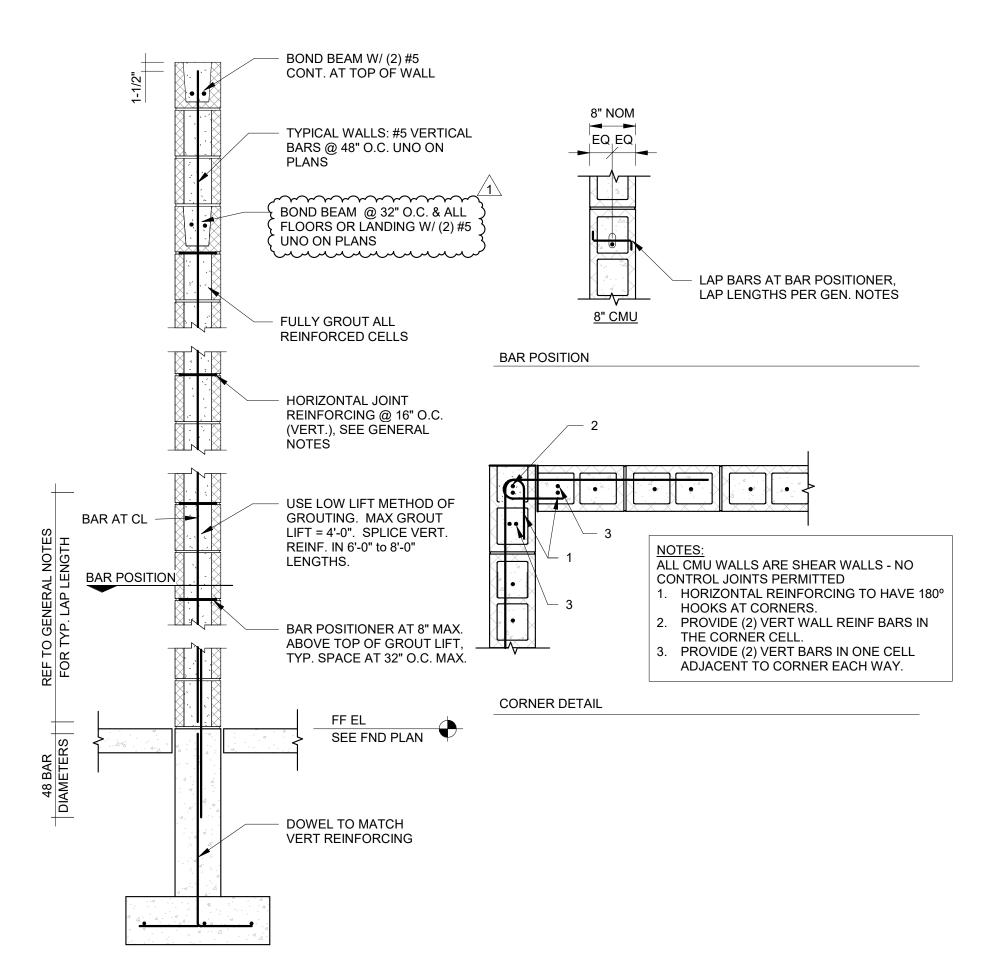
BEAM W/HILTI X-U PAFS STAGGERED 8" O.C.

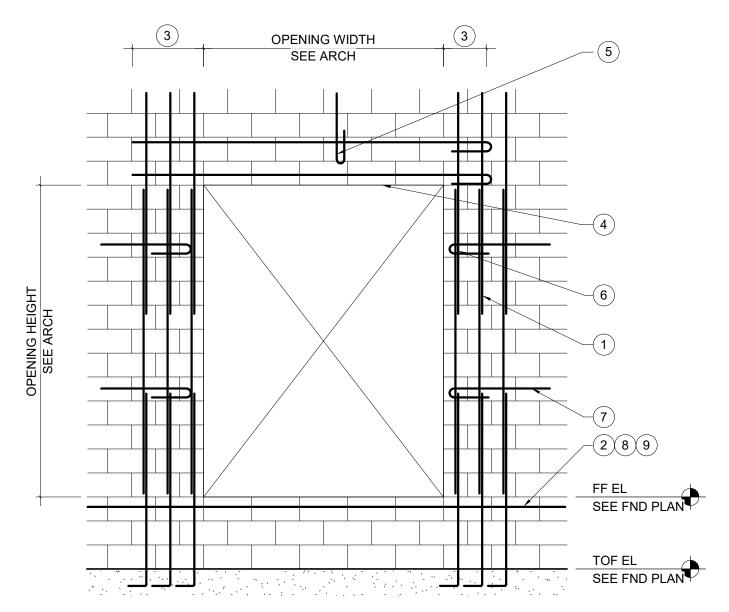
JOINTS TO ALIGN

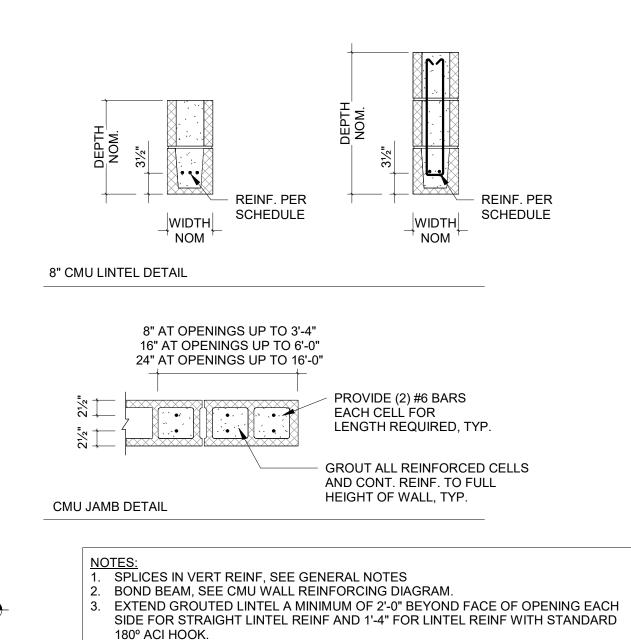
L7x4x1/2 NOTE THIS ANGLE IS NOT CONTINUOUS

ACROSS FACE OF BUILDING. BRICK MAY NEED

ANGLE TO HSS BEAM







USE LINTEL BLOCKS ONLY FOR BOTTOM COURSE OF LINTEL BEAMS OVER

6. ALL VERT BARS AT CMU JAMB TO EXTEND 24" ABOVE OPENING.

9. PROVIDE (2) #5 BAR IN BOND BEAM AT SILL LOCATIONS.

EXPLICIT PERMISSION FROM MEC

5. CONTINUE VERT WALL REINF OVER OPENING. ANCHOR VERT REINF INTO LINTEL BEAM WITH STANDARD 180° ACI HOOK.

7. WHERE HORIZONTAL REINFORCING IS TERMINATED BY OPENING OR CONTROL

PROVIDE 2-#5 AT BOTTOM OF ALL OPENINGS ABOVE FINISH FLOOR. EXTEND MINIMUM OF 2'-0" BEYOND FACE OF OPENING EACH SIDE FOR STRAIGHT REINFORCING AND 1'-4" FOR HOOKED REINFORCING WITH STANDARD 180° ACI

10. DO NOT OVERSIZE OPENINGS AT ELEVATORS DURING CONSTRUCTION WITHOUT

JOINT, PROVIDE STANDARD 180° ACI HOOK WITH VERTICAL WALL REINFORCING IN

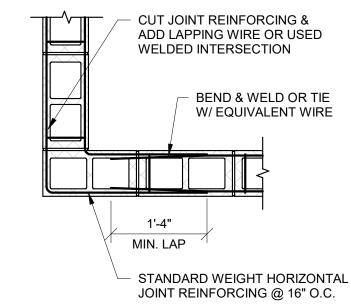
CMU LINTEL SCHEDULE

MARK | WIDTH | DEPTH | REINFORCING | STIRRUPS

ALL 8" 16" (2) #5

OPENING.

THE END CELL.



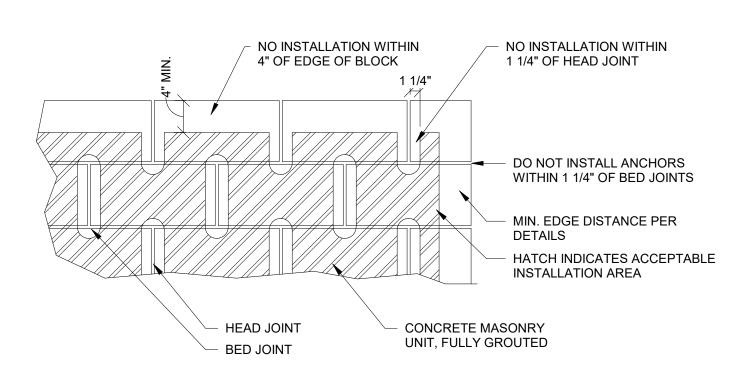
3 JOINT REINFORCING AT INTERSECTION CMU WALLS S520 3/4" = 1'-0"

1 CMU WALL REINFORCING DIAGRAM S520 3/4" = 1'-0"

2 TYPICAL MASONRY OPENING DIAGRAM & SCHEDULE S520 3/4" = 1'-0"

OVERSIZE POCKET SO BEAM CAN BE LIFTED OVER BOLT DURING INSTALLATION PROVIDE HORIZONTAL SLOTTED BOLT HOLE IN BOTTOM FLANGE OF BEAM TO ALLOW FOR THERMAL MOVEMENT OF BEAM DURING CONSTRUCTION CMU PER PLAN -BEAM PER PLAN GROUT BEAM POCKET SOLID (2) #5 FULL HEIGHT BARS AFTER PLACING BEAM WHEN VÉRT. IN ADJACENT BEAM IS NOT AT TOP OF WALL CELLS EACH SIDE (2) #5X6'-0" PL1/2"X5"X1'-0" W/ (2) 1/2"ØX9" ASTM (2) #5 PILASTER BARS LADDER TYPE JOINT F1554 GR 36 HEADED ANCHOR REINFORCING WITHIN 8" BOLTS, EMBED BOLTS IN BOND OF BEARING ELEVATION -BEAM A MINIMUM 6" (2) #5X6'-0" (2) #5 FULL HEIGHT BARS VERT. IN (2) #5 PILASTER BARS ADJACENT CELLS EACH SIDE **ELEVATION** <u>PLAN</u>

4 BEAM CONNECTION TO MASONRY S520 3/4" = 1'-0"



5 \ ACCEPTABLE LOCATIONS FOR ANCHORS IN MASONRY \S520 / 1" = 1'-0" 

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Columbia, MO 65203

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ambiguities, or conflicts contained within

# B HOME2

SHEET TITLE MASONRY DETAILS

PROJECT NUMBER: 2023000333

6 FRAMING AT OPENING - RAISED HEADER

(8) 16d BOX NAILS EACH SIDE OF THE JOINT, TYP.

4'-0" MIN.

**SECTION** 

4'-0" MIN.

**ELEVATION** 

0 0 0 0 0 0

(8) 16d BOX NAILS EACH

SIDE OF THE JOINT, TYP.

WHERE HEADER INTERRUPTS SILL PLATE,

PROVIDE SIMPSON MSTC40 STRAPTIES,

0.148"ØX3 1/4" NAILS EACH, BOTH ŚIDES

HEADER AND TOP PLATE WITH (26)

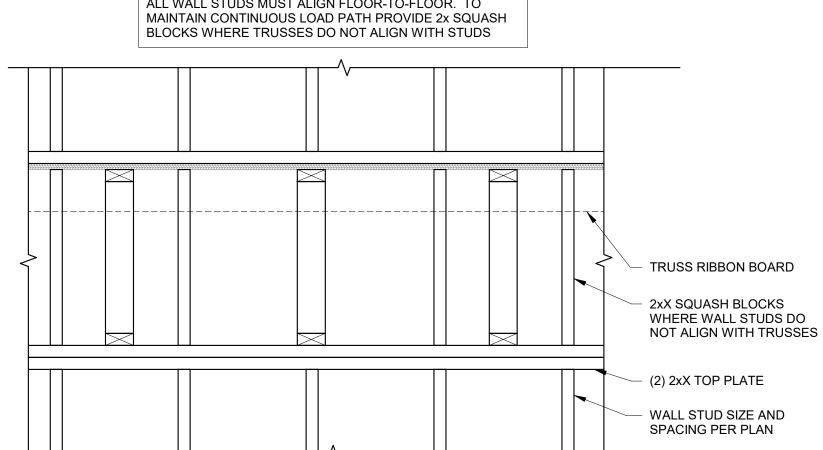
- FASTEN TOP AND BOTTOM OF

- KING STÜDS PER SCHEDULE

HEADER TO KING AND JACK STUDS WITH (2) 16d NAILS EACH END

ONE PER SIDE, FASTEN EACH STRAP TO

4 TYPICAL HEADER CONNECTION AT SHEAR WALLS
NTS NOTE:
ALL WALL STUDS MUST ALIGN FLOOR-TO-FLOOR. TO
MAINTAIN CONTINUOUS LOAD PATH PROVIDE 2x SQUASH BLOCKS WHERE TRUSSES DO NOT ALIGN WITH STUDS





**ELEVATION** 

5 FRAMING AT OPENING

S531 NTS

<u>OPTION 1</u>: I-JOIST BLOCKING PANELS TO

PROVIDE WEB STIFFENERS BELLOW WALL STUDS. ATTACH

TO JOISTS WITH (3) CLINCHED 8d NAILS EACH SIDE

(8) 0.131"x3" NAILS INTO TOP AND

<u>OPTION 2</u>: FIELD FABRICATED BLOCKING PANELS WITH 2X4 FRAMING AS

7/16" OSB NAILED TO WOOD

(8) 0.131"X3" NAILS INTO TOP

MEMBERS WITH 8d NAILS

SPACED AT 3" O.C.

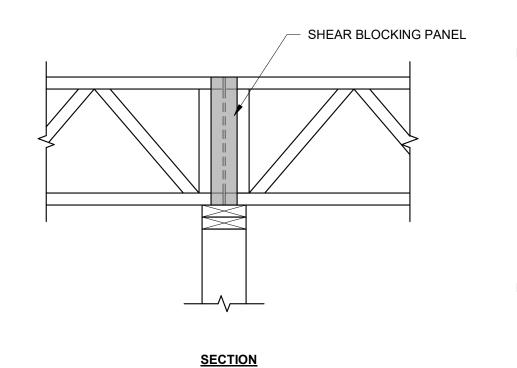
AND BOTTOM PLATES

MATCH DEPTH OF TRUSS. TJI

360 OR EQUIVALENT.

BOTTOM PLATES

SHOWN



FLOOR TRUSSES

3" O.C.

7/16" OSB NAILED TO TRUSS CHORDS AND WEBS W/ 8d NAILS

STANDARD: PRE-ENGINEERED SHEAR TRUSS

COMPONENT SUPPLIED BY

TRUSS MFR. TRUSS MFR. TO DESIGN PANEL FOR DRAG

SCHEDULE. ATTACH WITH (8) 0.131"x3" NAILS INTO TOP AND

1 1/2" LSL SHEAR BLOCKING

PANEL TO MATCH DEPTH OF

www....

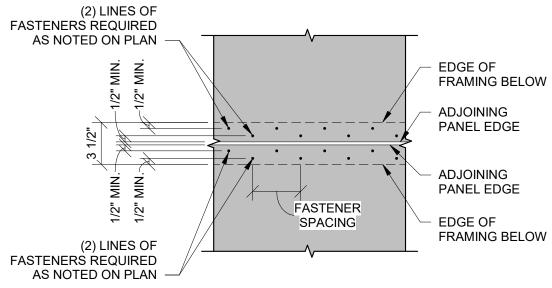
(8) 0.131"x3" NAILS INTO TOP AND

**BOTTOM PLATES** 

**BOTTOM PLATES** 

OPTION 3:

FORCE PER DRAG TRUSS LOAD



9 MULTIPLE LINE DIAPHRAGM EDGE FASTENING NTS

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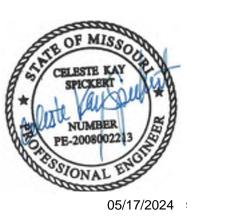
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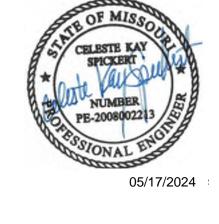
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NO. E-2006023253

EXPIRES: DECEMBER 31, 2024





# HILTON B SUITES 251 NE SUMMI HOME2

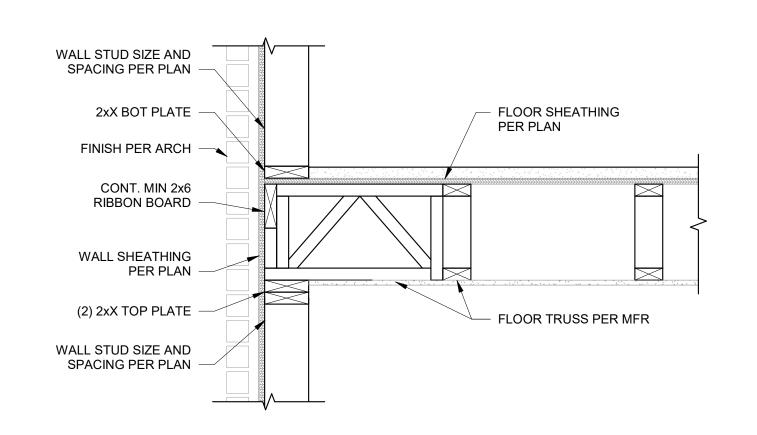
SHEET TITLE TYPICAL WOOD DETAILS

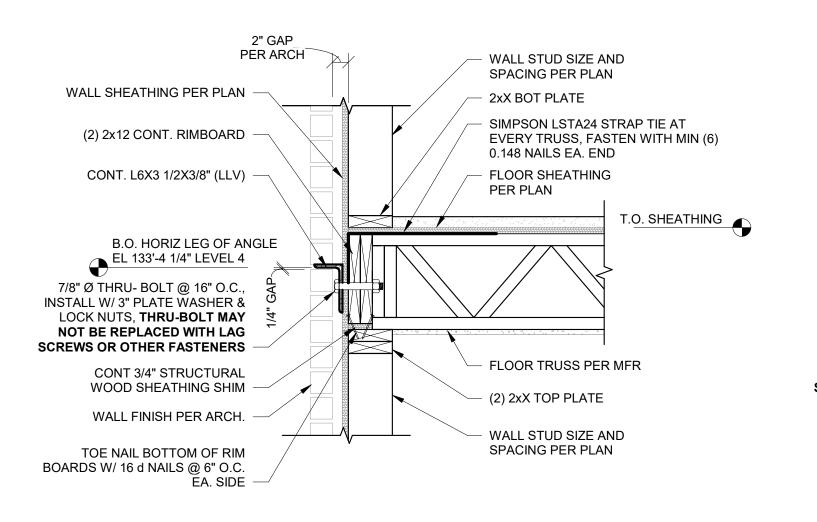
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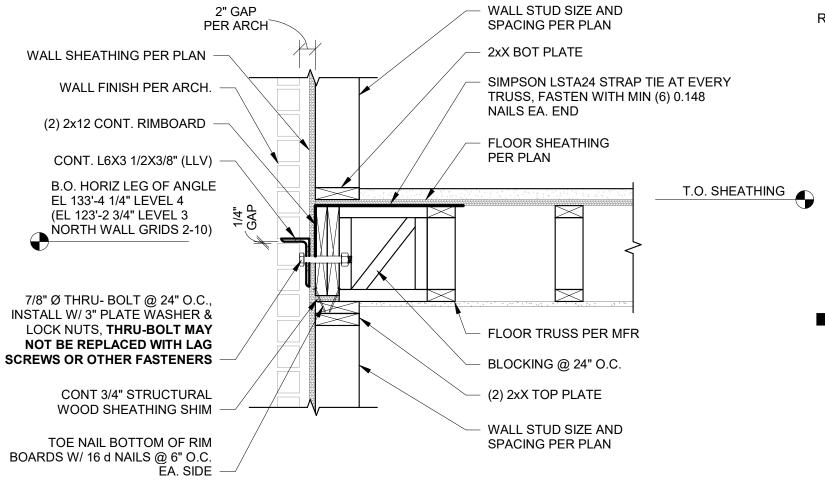
PROJECT NUMBER: 2023000333

S531 1" = 1'-0"

7 TYPICAL WALL FRAMING ELEVATION







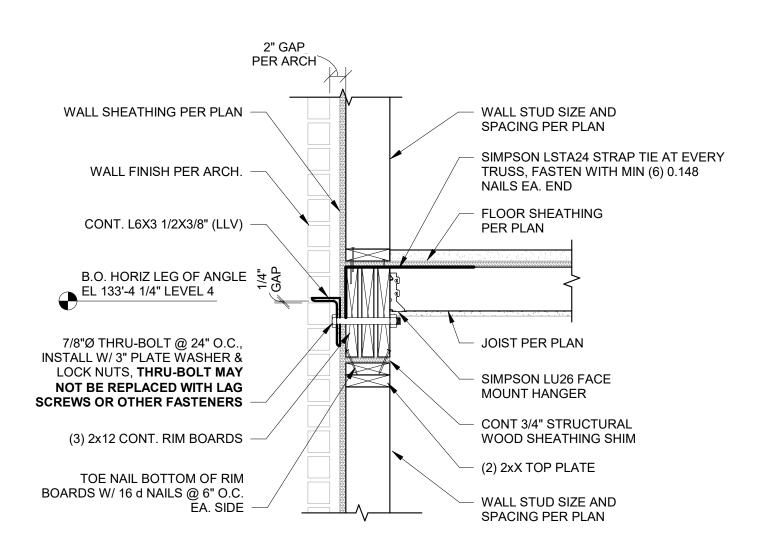
1A FRAMING AT EXTERIOR WALL - OPEN WEB TRUSS BEARING

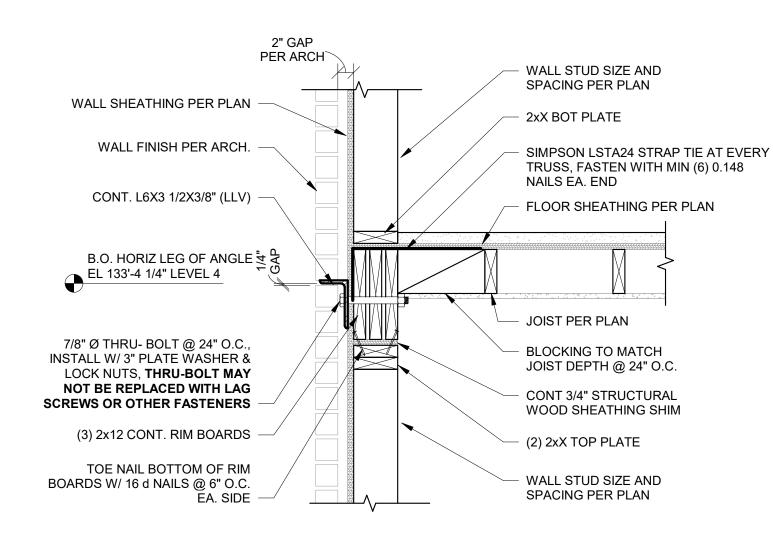
1B FRAMING AT EXTERIOR WALL - OPEN WEB TRUSS PARALLEL S532 1" = 1'-0"

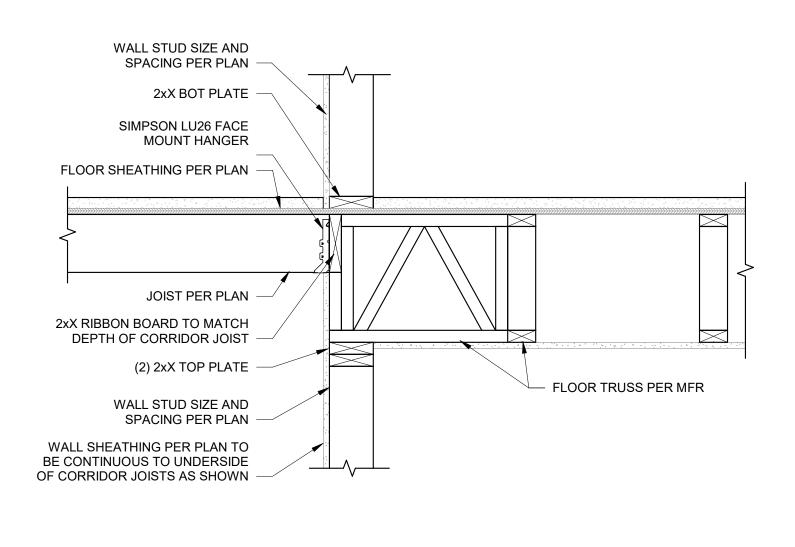
2A FRAMING AT EXTERIOR WALL - OPEN WEB TRUSSES BEARING S532 1" = 1'-0"

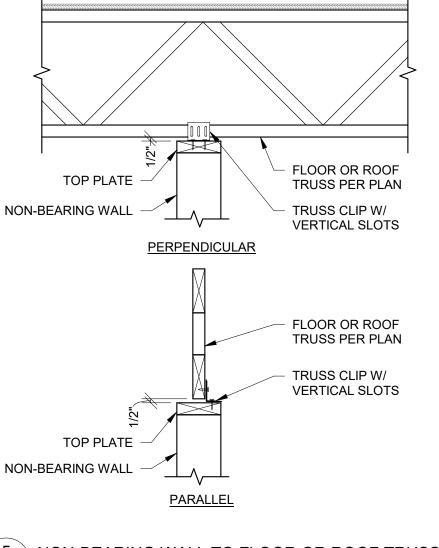
S532 1" = 1'-0"

2B FRAMING AT EXTERIOR WALL - OPEN WEB TRUSSES PARALLEL S532 1" = 1'-0"









4 FRAMING AT CORRIDOR 5 NON-BEARING WALL TO FLOOR OR ROOF TRUSS S532 1" = 1'-0"

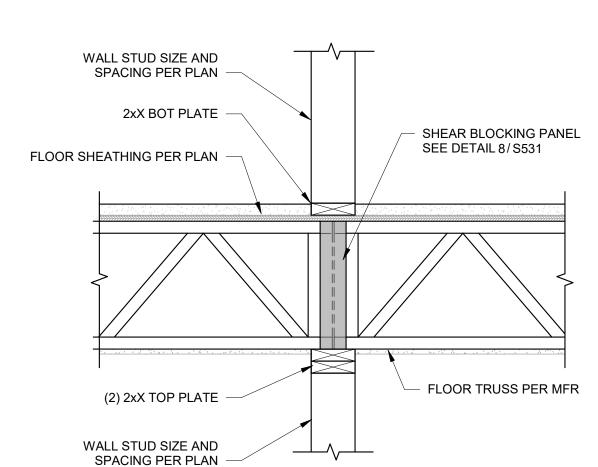
3A FRAMING AT EXTERIOR WALL - 2X JOISTS - BEARING S532 1" = 1'-0"

WALL STUD SIZE AND

FLOOR SHEATHING PER PLAN -

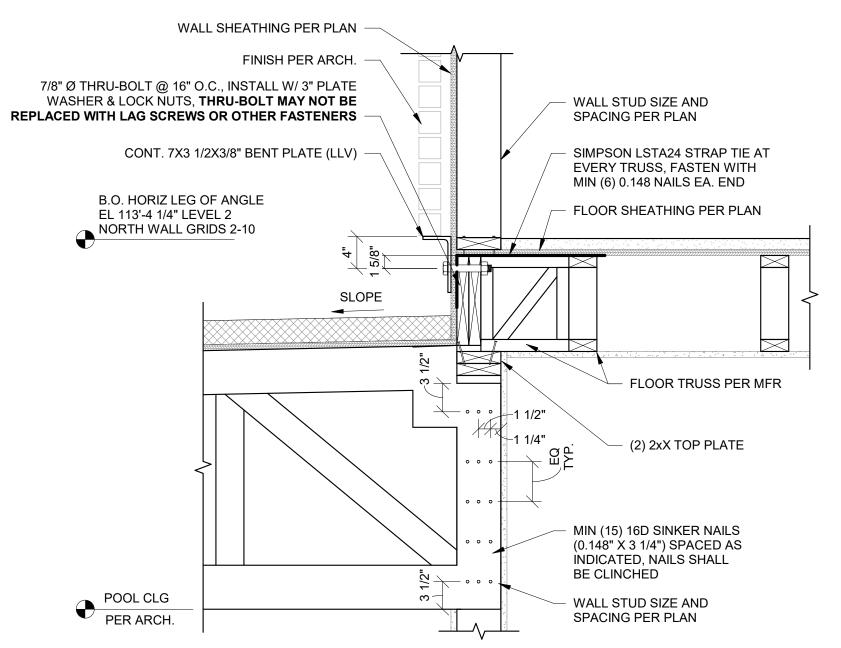
SPACING PER PLAN

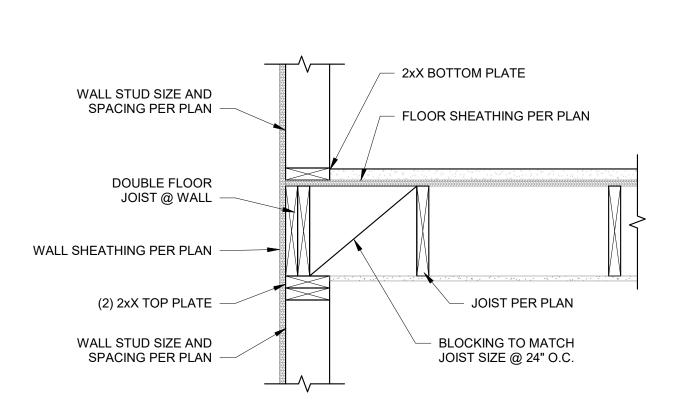
2xX BOT PLATE



3B FRAMING AT EXTERIOR WALL - 2X JOISTS - PARALLEL

S532 1" = 1'-0"





JOIST PARALLEL AT EXTERIOR WALL

BOARD FLOOR TRUSS PER MFR (2) 2xX TOP PLATE 2xX SQUASH BLOCKING WHERE FLOOR TRUSSES DO NOT ALIGN WITH STUDS ABOVE AND BELOW. WALL STUD SIZE AND MATCH WALL STUD SIZE SPACING PER PLAN

CONT MIN 2x6 RIBBON

6A FRAMING AT INTERIOR BEARING WALL (NON-SHEAR) S532 1" = 1'-0"

6B FRAMING AT INTERIOR SHEAR WALL S532 1" = 1'-0"

S532 1" = 1'-0"

S532 1" = 1'-0"

HILTON B A Ñ SUITE 251 NE SUMMI HOME2

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ambiguities, or conflicts contained within

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MISSOURI CERTIFICATE OF AUTHORITY

NO. E-2006023253

EXPIRES: DECEMBER 31, 2024

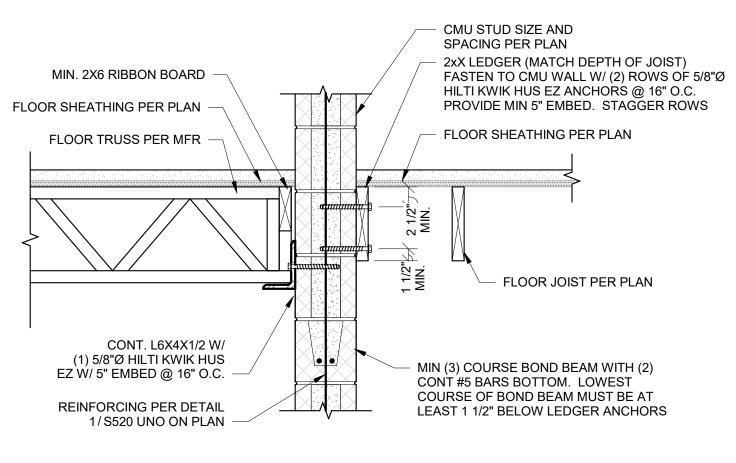
CELESTE KAY

SHEET TITLE FLOOR FRAMING DETAILS

SHEET NUMBER:

PROJECT NUMBER: 2023000333

7 FRAMING AT POOL ROOF

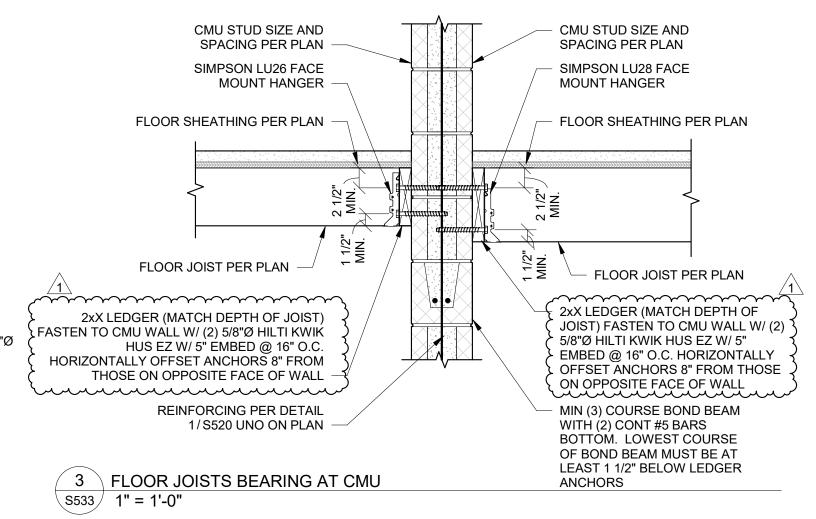


CMU STUD SIZE AND 2X8 LEDGER FASTEN TO CMU WALL SPACING PER PLAN W/(2) ROWS OF 5/8"Ø HILTI KWIK HUS SIMPSON LU26 FACE EZ ANCHORS @ 16" O.C. PROVIDE MOUNT HANGER MIN 5" EMBED. STAGGER ROWS FLOOR SHEATHING PER PLAN FLOOR SHEATHING PER PLAN FLOOR TRUSS PER MFR FLOOR JOIST PER PLAN 2xX LEDGER (MATCH DEPTH OF JOIST) FASTEN TO CMU WALL W/ (2) ROWS OF 5/8"Ø HILTI KWIK HUS EZ ANCHORS @ 16" O.C. REINFORCING PER DETAIL PROVIDE MIN 5" EMBED. STAGGER ROWS 1/S520 UNO ON PLAN MIN (3) COURSE BOND BEAM WITH (2) CONT #5 BARS BOTTOM. LOWEST COURSE OF BOND BEAM MUST BE AT LEAST 1 1/2" BELOW LEDGER ANCHORS 2 \ FLOOR TRUSS PARALLEL AT CMU

INTERRUPT LEDGER

**BEYOND FOR BEAMS** 

FLOOR SHEATHING PER PLAN



FLOOR SHEATHING PER PLAN

2xX LEDGER (MATCH DEPTH OF

5/8"Ø HILTI KWIK HUS EZ W/ 5"

(2) CONT #5 BARS BOTTOM.

MIN (3) COURSE BOND BEAM WITH

LOWEST COURSE OF BOND BEAM

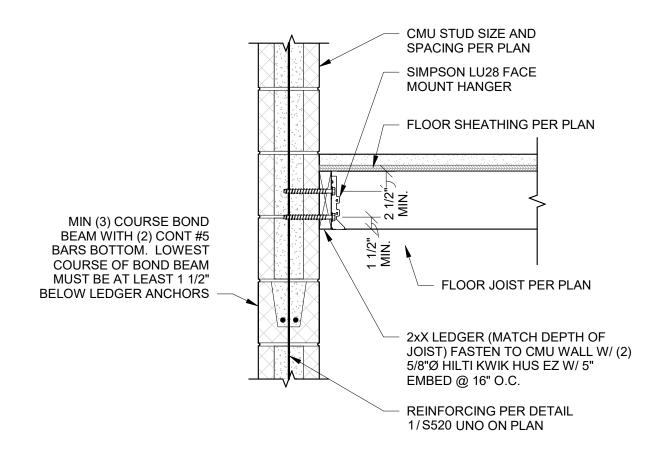
MUST BE AT LEAST 1 1/2" BELOW

EMBED @ 16" O.C.

LEDGER ANCHORS

JOIST) FASTEN TO CMU WALL W/ (2)

FLOOR JOIST PER PLAN



4 \ FLOOR JOIST BEARING AT CMU \S533 \ 1" = 1'-0"

FINISH PER ARCH -

CMU STUD SIZE AND

REINFORCING PER DETAIL

1/S520 UNO ON PLAN

SPACING PER PLAN



PRINTS ISSUED

**REVISIONS:** 

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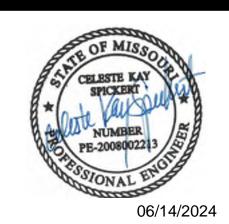
1 05/17/2024 CITY RESPONSE

2 06/14/2024 CITY & BRAND RESPONSE

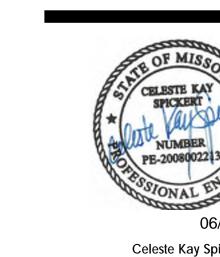
Columbia, MO 65203

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Celeste Kay Spickert PE-2008002213



2xX LEDGER (MATCH DEPTH OF JOIST)

FASTEN TO CMU WALL W/ (2) ROWS OF

5/8"Ø HILTI KWIK HUS EZ ANCHORS @

- FLOOR JOIST PER PLAN

16" O.C. PROVIDE MIN 5" EMBED.

FLOOR SHEATHING PER PLAN

MIN (3) COURSE BOND BEAM

BOTTÒM. LOWEST COURSE

OF BOND BEAM MUST BE AT

LEAST 1 1/2" BELOW LEDGER

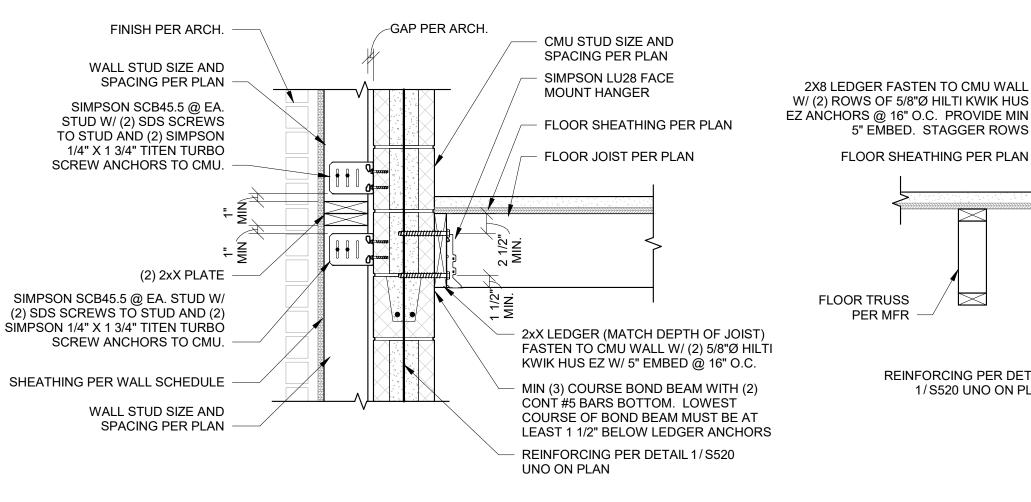
WITH (2) CONT #5 BARS

**ANCHORS** 

STAGGER ROWS

Expires 12/31/2024

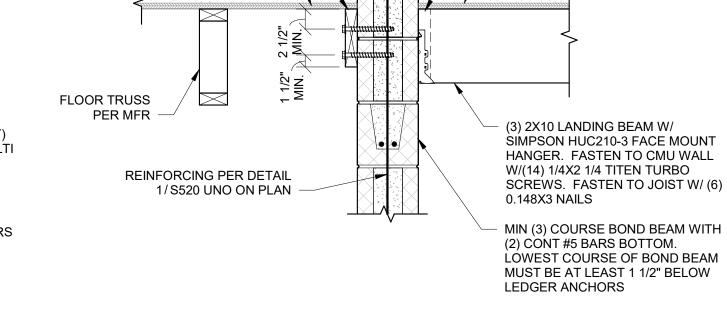
8 FLOOR JOIST PARALLEL AT CMU W/ BRICK S533 1" = 1'-0"



1 FLOOR TRUSS BEARING AT CMU

5 EXTERIOR WALL BYPASS AT CMU - BEARING

\s533 / 1" = 1'-0"



6 STAIR LANDING BEAM ATTACHMENT TO CMU

∖S533 / 1" = 1'-0"

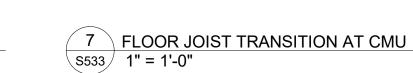
2X8 LEDGER FASTEN TO CMU WALL

5" EMBED. STAGGER ROWS

FLOOR SHEATHING PER PLAN

W/ (2) ROWS OF 5/8"Ø HILTI KWIK HUS

\S533 \ 1" = 1'-0"



CMU STUD SIZE AND

SPACING PER PLAN

SIMPSON LU26 FACE

FLOOR SHEATHING PER PLAN

FLOOR JOIST PER PLAN

2xX LEDGER (MATCH DEPTH OF

5/8"Ø HILTI KWIK HUS EZ W/ 5"

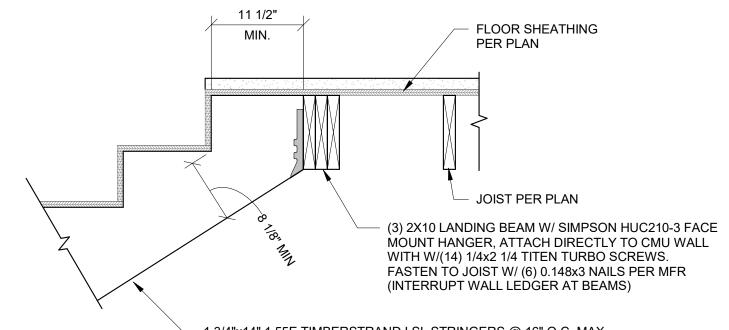
REINFORCING PER DETAIL

1/S520 UNO ON PLAN

EMBED @ 16" O.C., STAGGERED

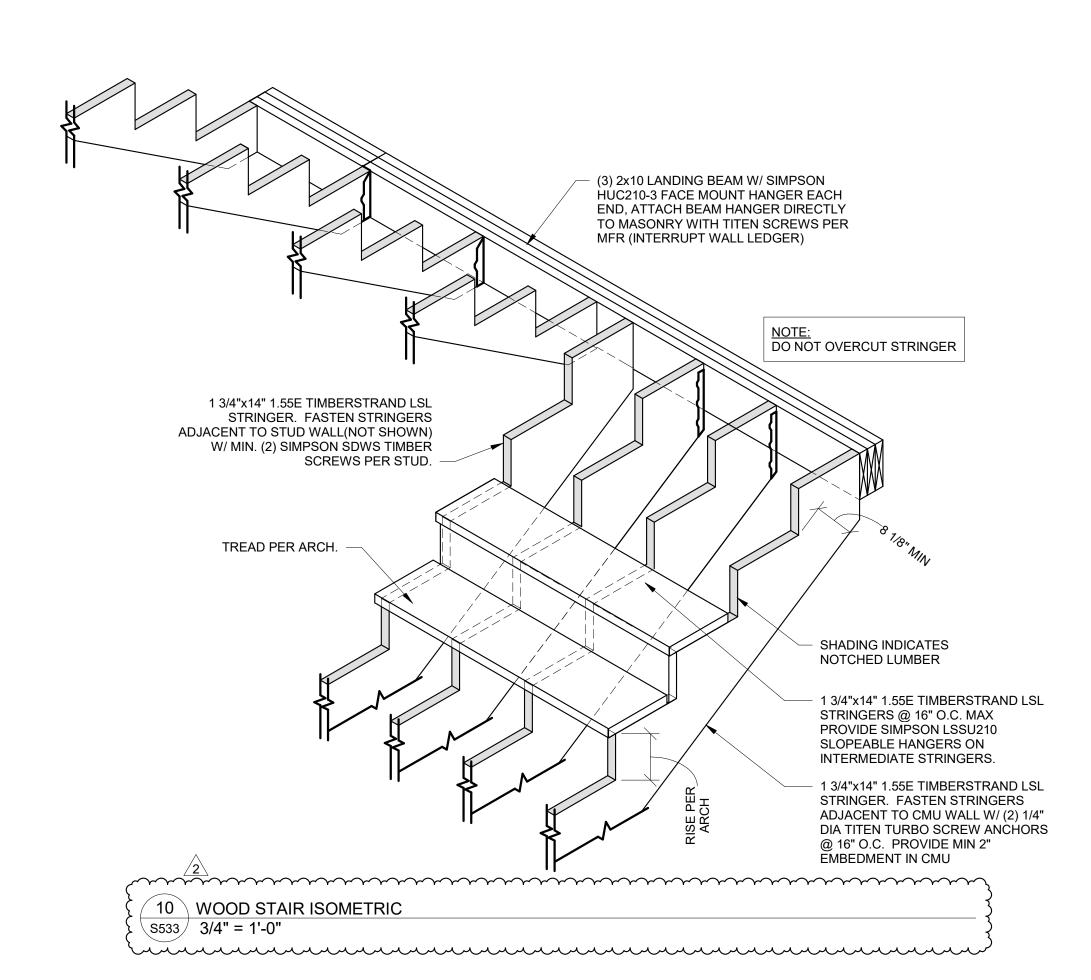
JOIST) FASTEN TO CMU WALL W/ (1)

MOUNT HANGER



1 3/4"x14" 1.55E TIMBERSTRAND LSL STRINGERS @ 16" O.C. MAX PROVIDE SIMPSON LSSU210 SLOPEABLE HANGERS ON INTERMEDIATE STRINGERS. FASTEN STRINGERS ADJACENT TO STUD WALL W/ MIN. (2) SIMPSON SDWS TIMBER SCREWS PER STUD. FASTEN STRINGERS ADJACENT TO CMU WALL W/ (2) 1/4" DIA TITEN TURBO SCREW ANCHORS @ 16" O.C. PROVIDE MIN 2" EMBEDMENT IN CMU

 $\overset{\leftarrow}{ au}$ 9 STRINGER TO LANDING BEAM SECTION S533 / 1" = 1'-0"



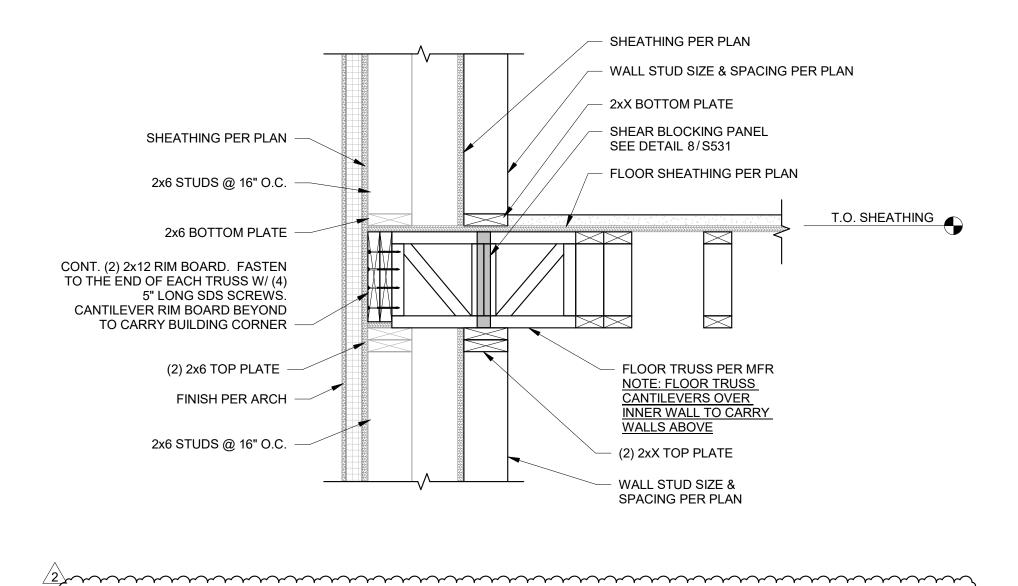
B SUITE HOME2

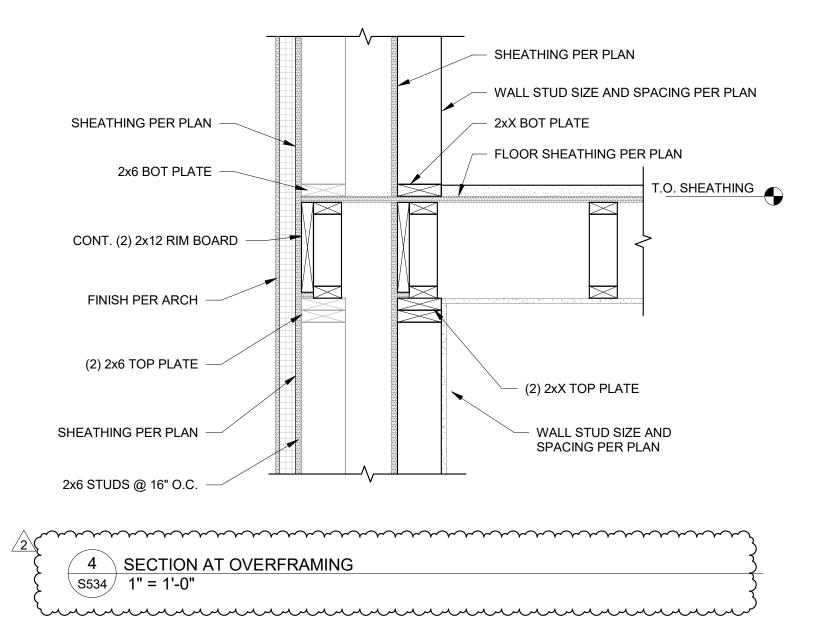
SHEET TITLE FLOOR FRAMING DETAILS

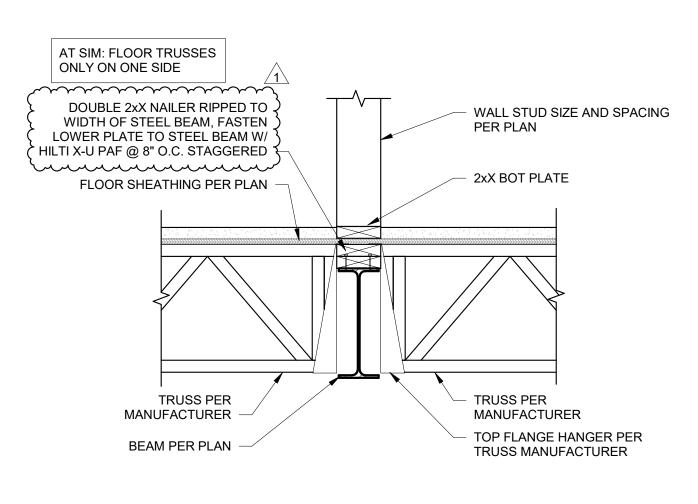
PROJECT NUMBER: 2023000333

1 FRAMING AT EXTERIOR WALL OVERFRAMING - TRUSS W/ RIM BOARD - BEARING

S534 1" = 1'-0"

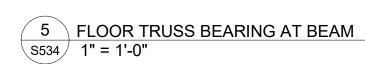


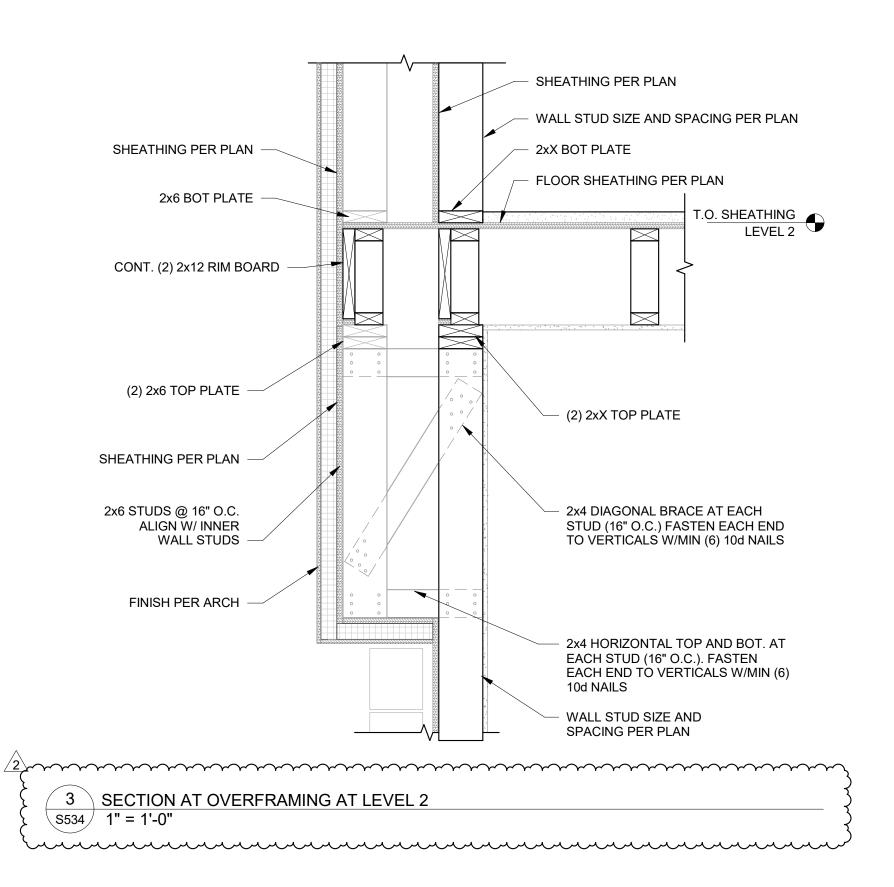


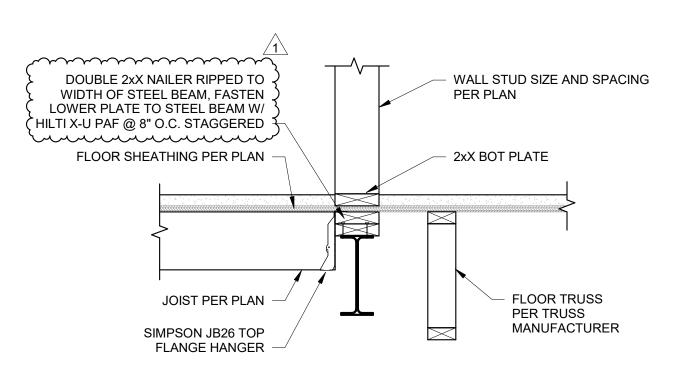


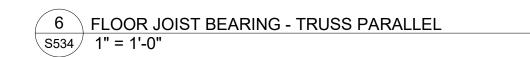
2 FRAMING AT EXTERIOR WALL OVERFRAMING - TRUSS W/ RIM BOARD - PARALLEL

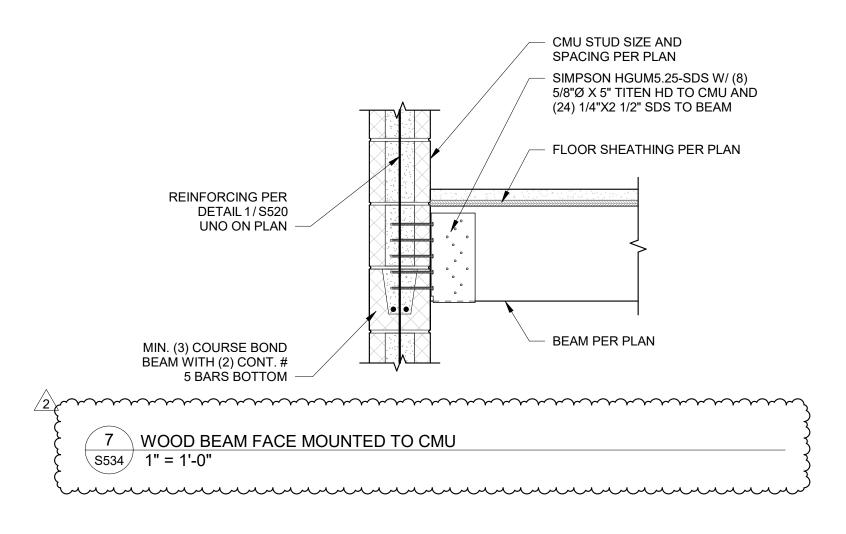
∖s534 / 1" = 1'-0"











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MISSOURI CERTIFICATE OF AUTHORITY
NO. E-2006023253

EXPIRES: DECEMBER 31, 2024



Celeste Kay Spickert PE-2008002213 Expires 12/31/2024

251 NE ALURA WAY SUMMIT, MISSOURI 64064

B

SUITES

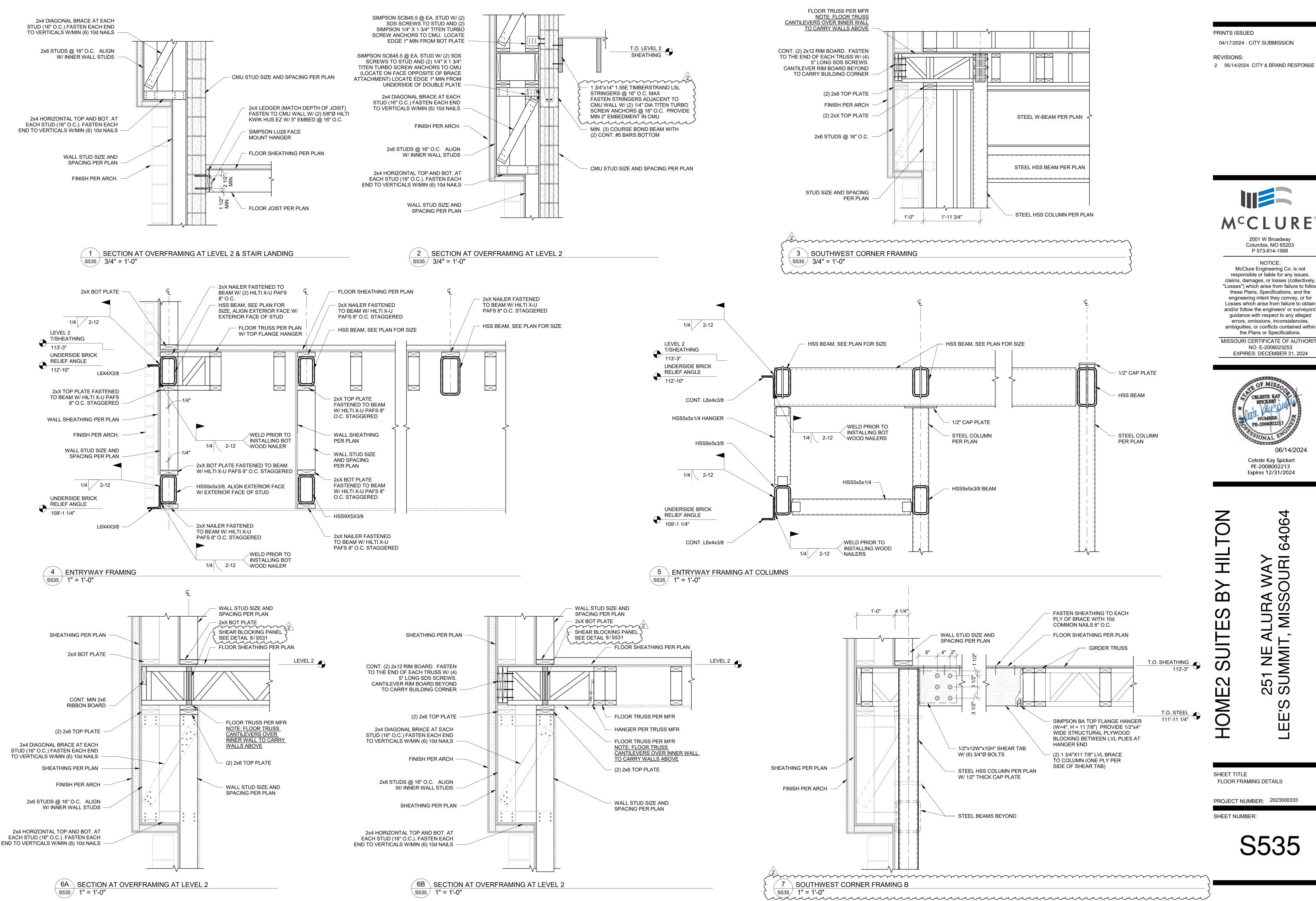
HOME2

SHEET TITLE FLOOR FRAMING DETAILS

SHEET NUMBER:

PROJECT NUMBER: 2023000333

S534



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Celeste Kay Spickert

PE-2008002213 Expires 12/31/2024

251 NE SUMMI

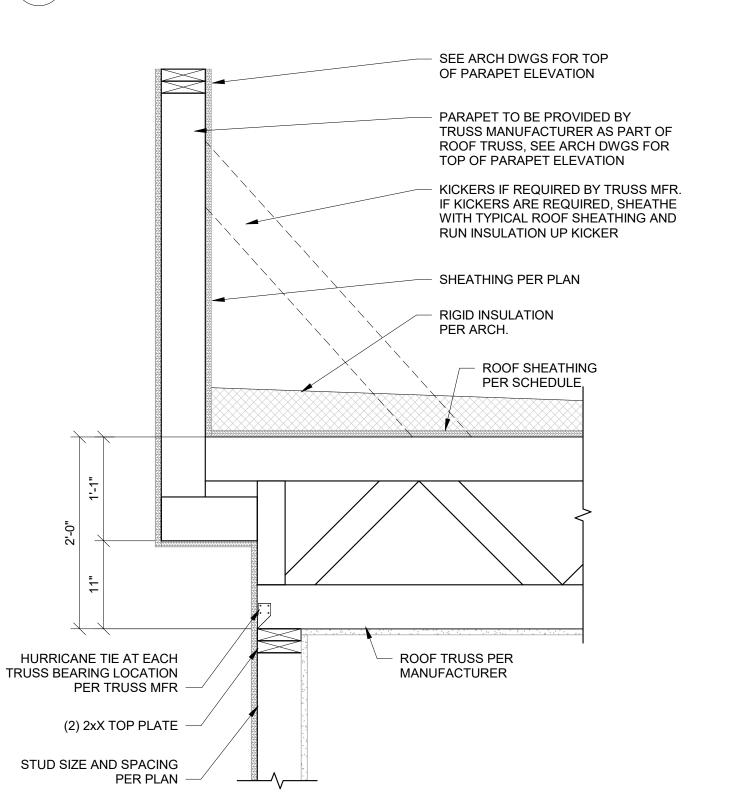
SHEET TITLE FLOOR FRAMING DETAILS

PROJECT NUMBER: 2023000333

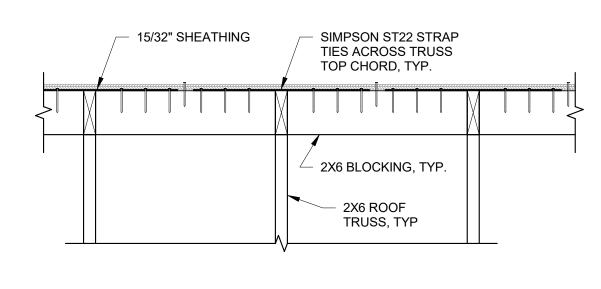
1 TRUSS BLOCKING DETAIL S540 1" = 1'-0"

WALL SHEATHING PER PLAN PARAPET TO BE PROVIDED BY RIGID INSULATION PER ARCH. TRUSS MANUFACTURER AS PART OF ROOF TRUSS, SEE ARCH DWGS FOR TOP OF PARAPET ELEVATION ROOF SHEATHING PER PLAN SLOPE WALL SHEATHING PER PLAN HURRICANE TIE AT EACH TRUSS BEARING LOCATION PER TRUSS MFR CONT. (2) 2xX TOP PLATE ROOF TRUSS PER MANUFACTURER, SEE DETAIL 9/S541 FOR ROOF TRUSS PROFILE DIMENSIONS AND OPENING REQUIREMENTS WALL STUD SIZE AND SPACING PER PLAN

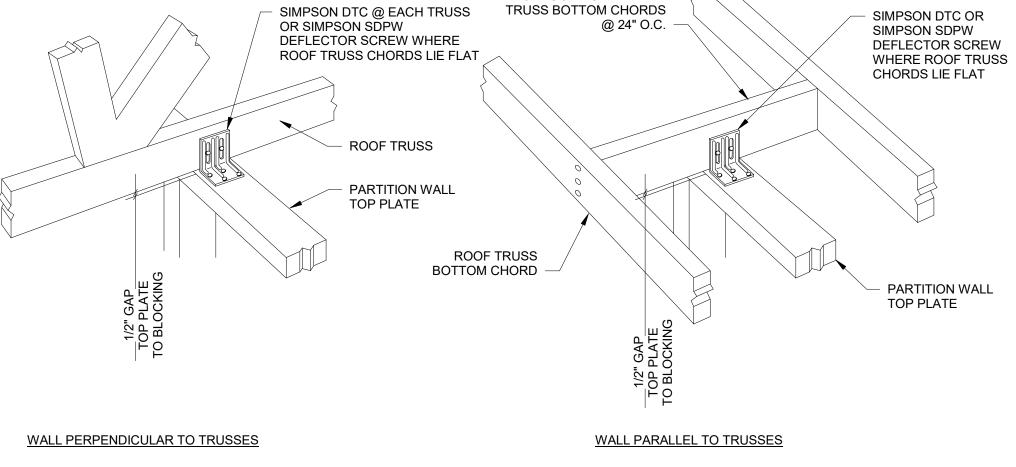
4 ROOF TRUSS BEARING AT EXTERIOR WALL S540 1" = 1'-0"



7 PARAPET BUMP-OUT SECTION AT ROOF TRUSS BEARING \s540/ 1" = 1'-0"



2 BLOCKING S540 1" = 1'-0" BLOCKING BETWEEN TRUSSES



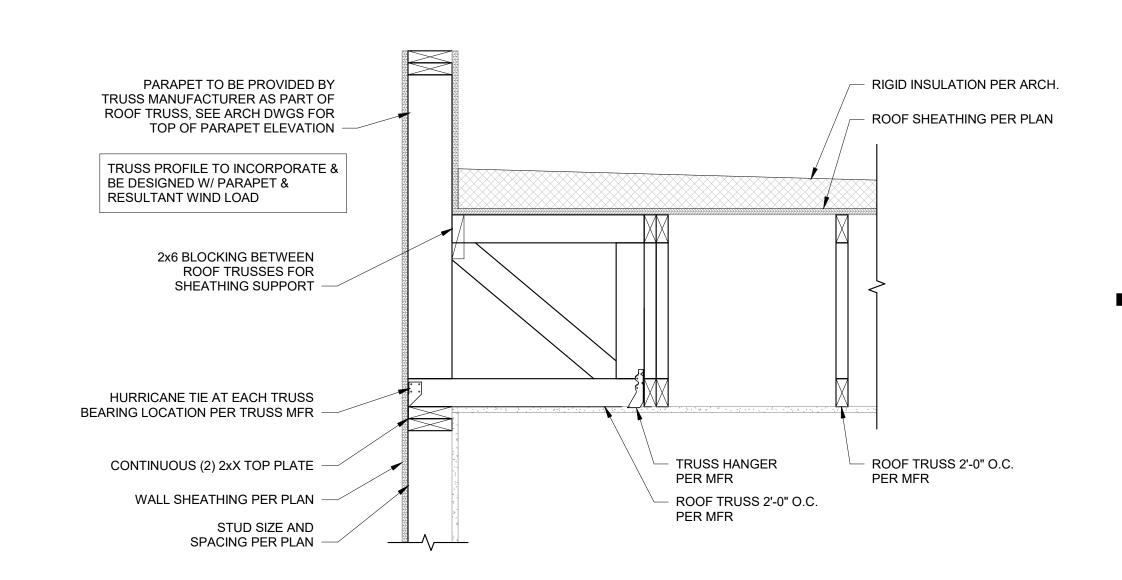
2X6 BLOCKING BETWEEN

3 PARTITION WALL AT ROOF TRUSS S540 1" = 1'-0"

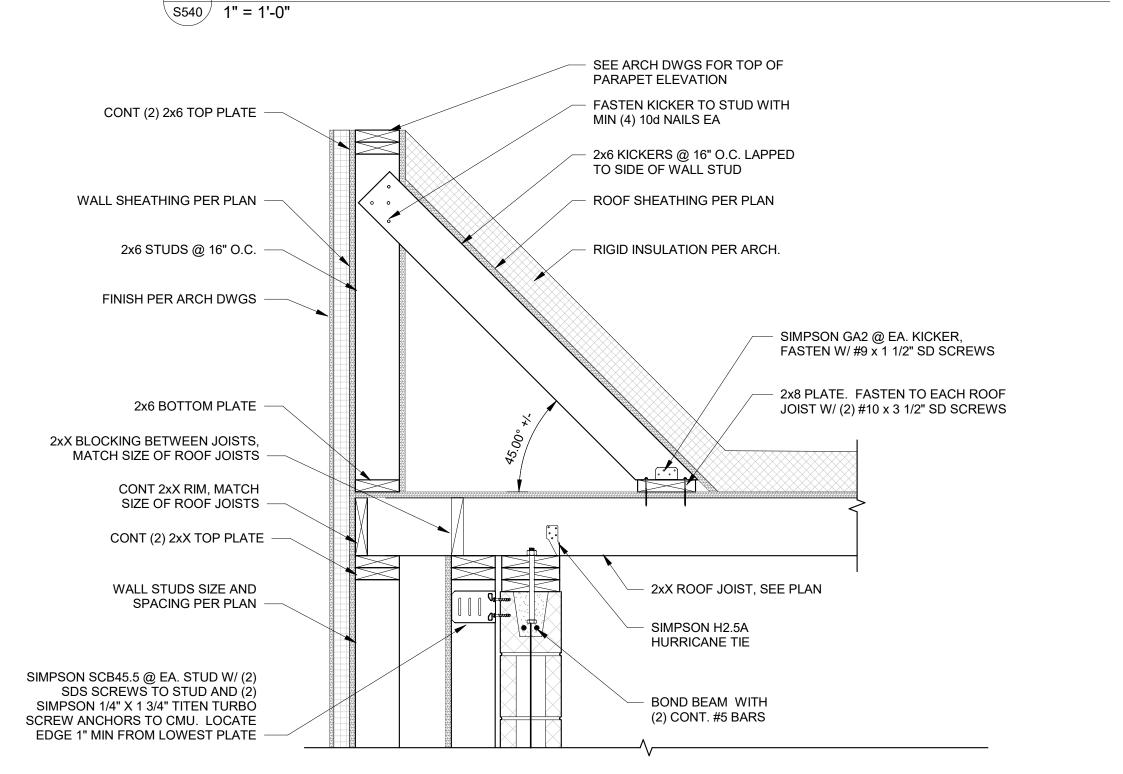
PARAPET TO BE PROVIDED BY RIGID INSULATION PER ARCH. TRUSS MANUFACTURER AS PART OF ROOF TRUSS, SEE ARCH DWGS FOR ROOF SHEATHING PER PLAN TOP OF PARAPET ELEVATION HURRICANE TIE AT EACH TRUSS BEARING LOCATION PER TRUSS MFR -ROOF TRUSS PER MFR CONTINUOUS (2) 2xX TOP PLATE -WALL SHEATHING PER PLAN -WALL STUD SIZE AND SPACING PER PLAN —

5 PARAPET SECTION AT ROOF TRUSS BEARING S540 1" = 1'-0" SEE ARCH DWGS FOR TOP OF PARAPET ELEVATION PARAPET TO BE PROVIDED BY TRUSS MANUFACTURER AS PART OF ROOF TRUSS, SEE ARCH DWGS FOR TOP OF PARAPET ELEVATION KICKERS IF REQUIRED BY TRUSS MFR. IF KICKERS ARE REQUIRED, SHEATHE WITH TYPICAL ROOF SHEATHING AND RUN INSULATION UP KICKER SHEATHING PER PLAN 2x6 BLOCKING BETWEEN TRUSSES FOR SHEATHING SUPPORT RIGID INSULATION PER ARCH. 2x6 BLOCKING 2'-0" O.C. MAX BETWEEN TRUSSES FOR SHEATHING SUPPORT ROOF SHEATHING PER PLAN HURRICANE TIE AT EACH ROOF TRUSSES 2'-0" O.C. TRUSS BEARING LOCATION PER MANUFACTURER PER TRUSS MFR (2) 2xX TOP PLATE STUD SIZE AND SPACING PER

8 PARAPET BUMP-OUT SECTION AT ROOF TRUSS PARALLEL \s540 / 1" = 1'-0"



6 ROOF TRUSS PARALLEL AT EXTERIOR WALL



9 ROOF SECTION AT STAIR TOWER \s540 / 1" = 1'-0" 

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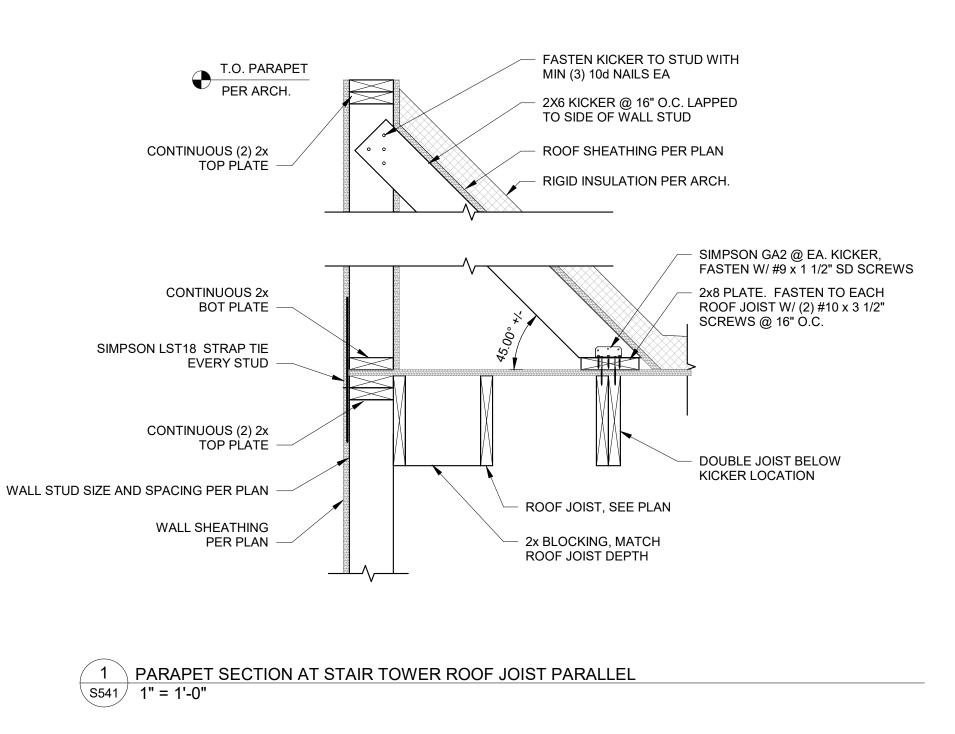
불 BY

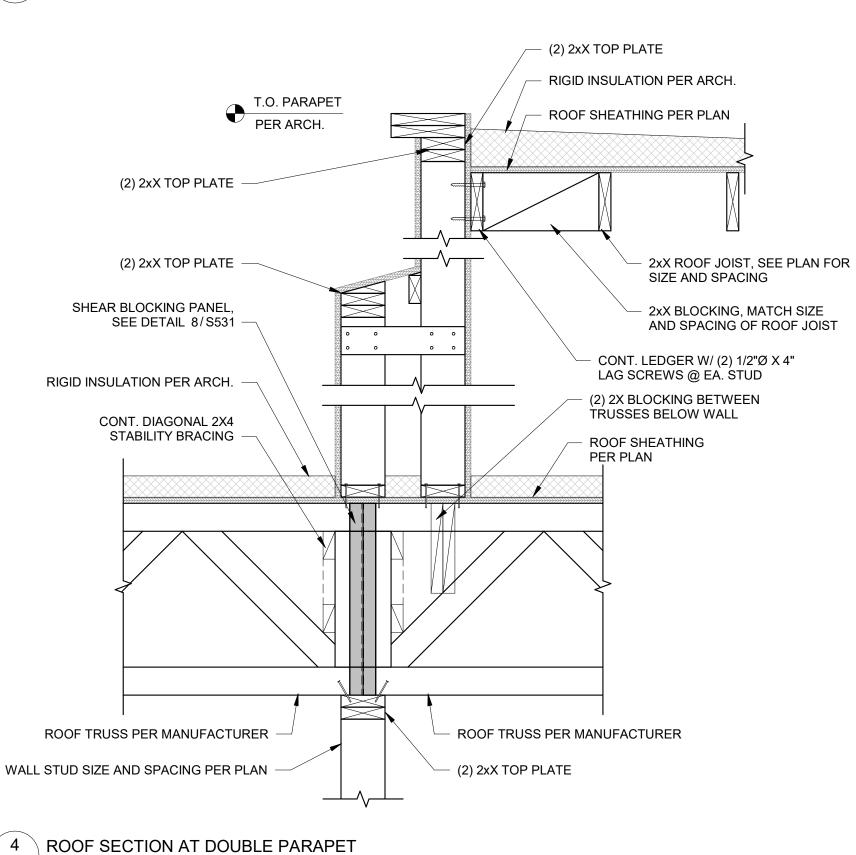
# HOME2

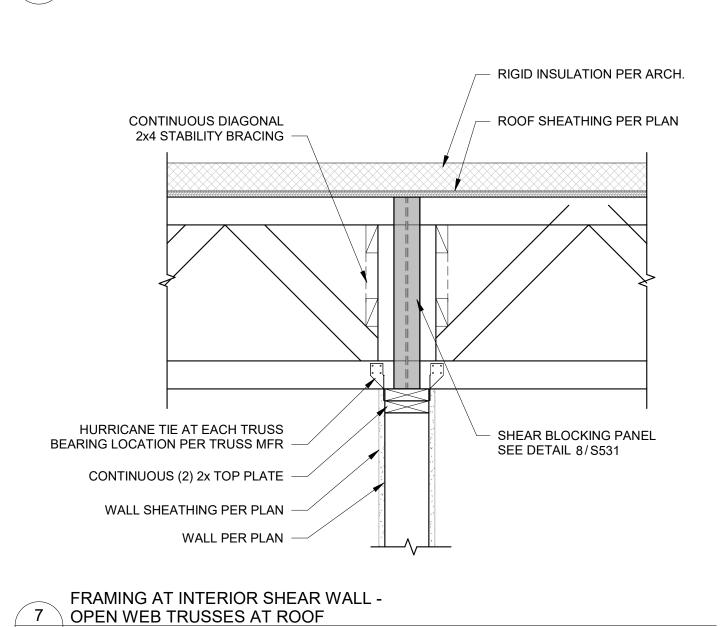
SHEET TITLE **ROOF DETAILS** 

SUITE

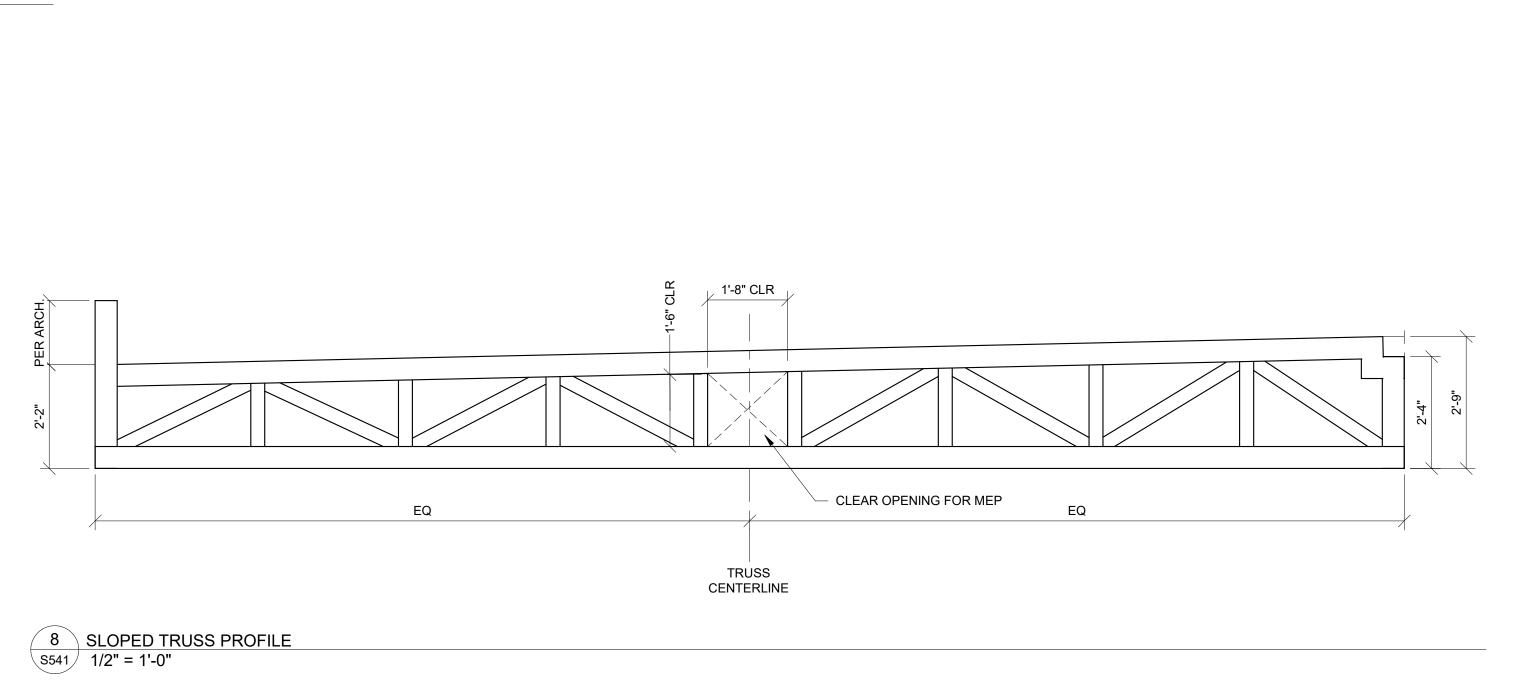
PROJECT NUMBER: 2023000333

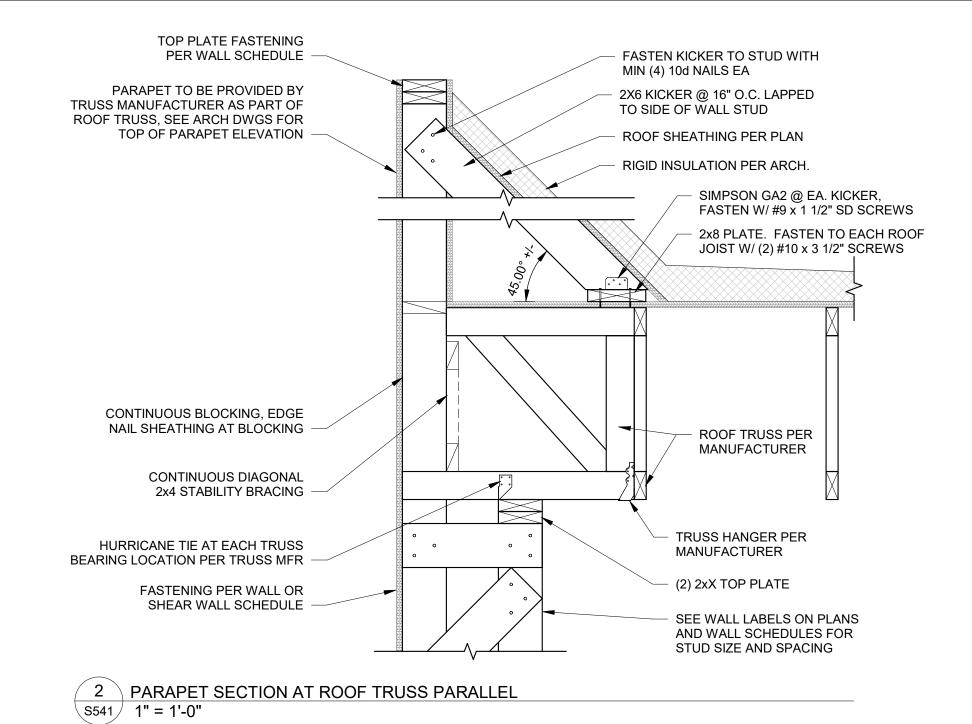


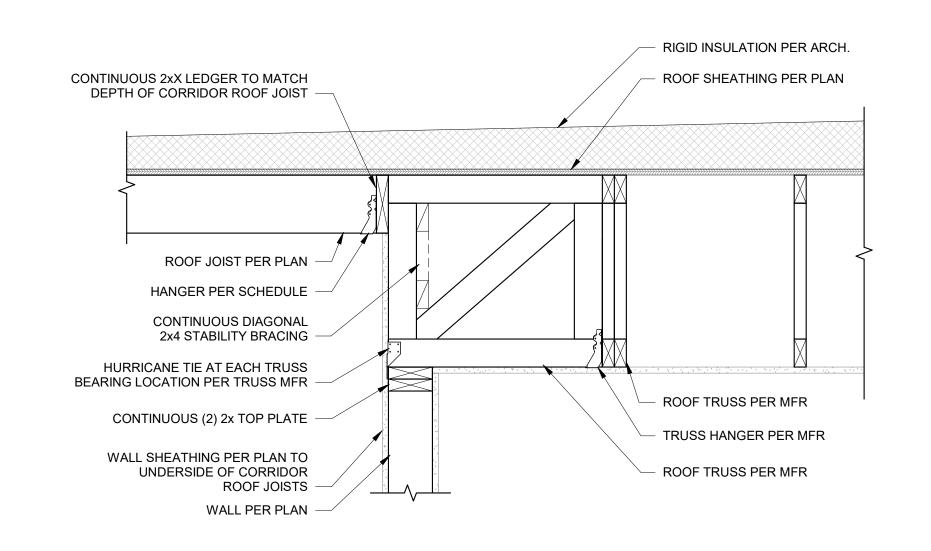




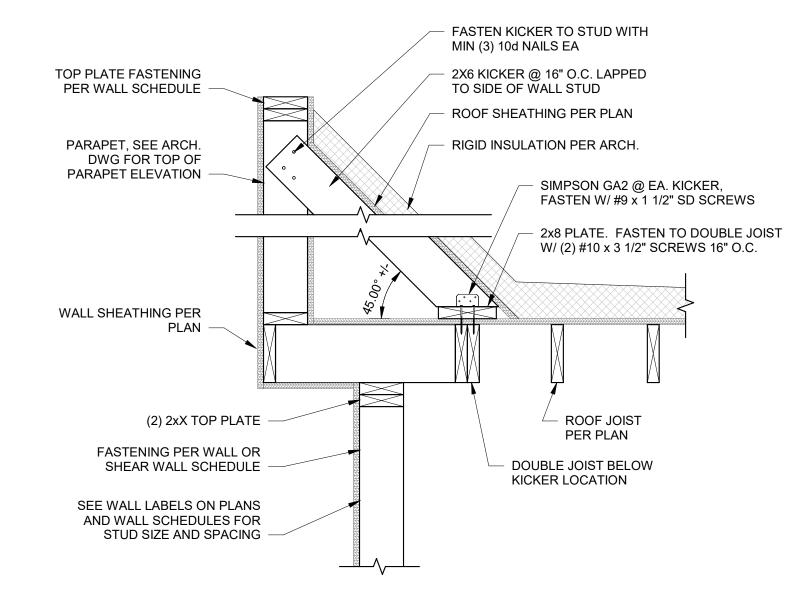
\S541 \ 1" = 1'-0"



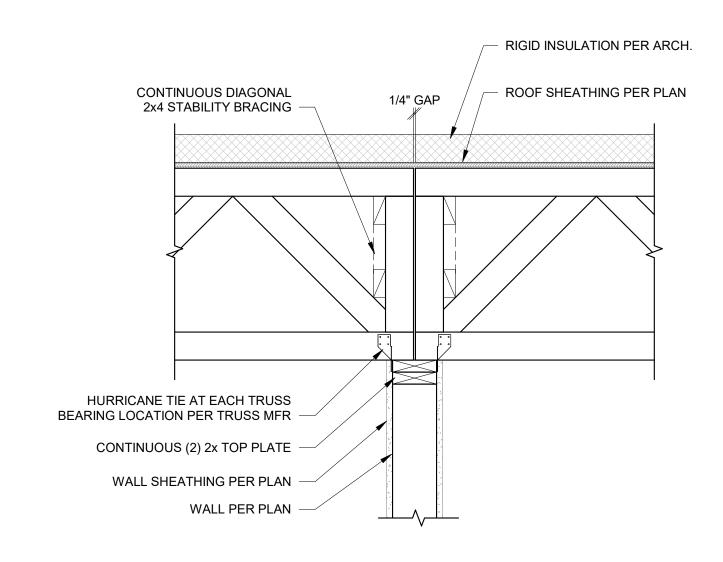








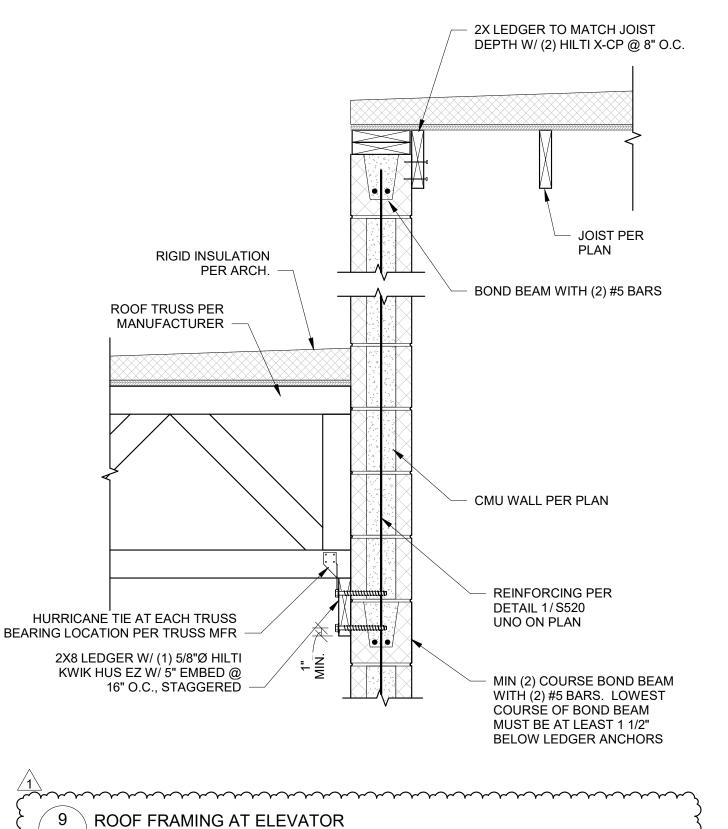




FRAMING AT INTERIOR WALL 
OPEN WEB TRUSSES AT ROOF (NOT AT SHEAR WALL)

1" = 1'-0"

S541/ 1" = 1'-0"



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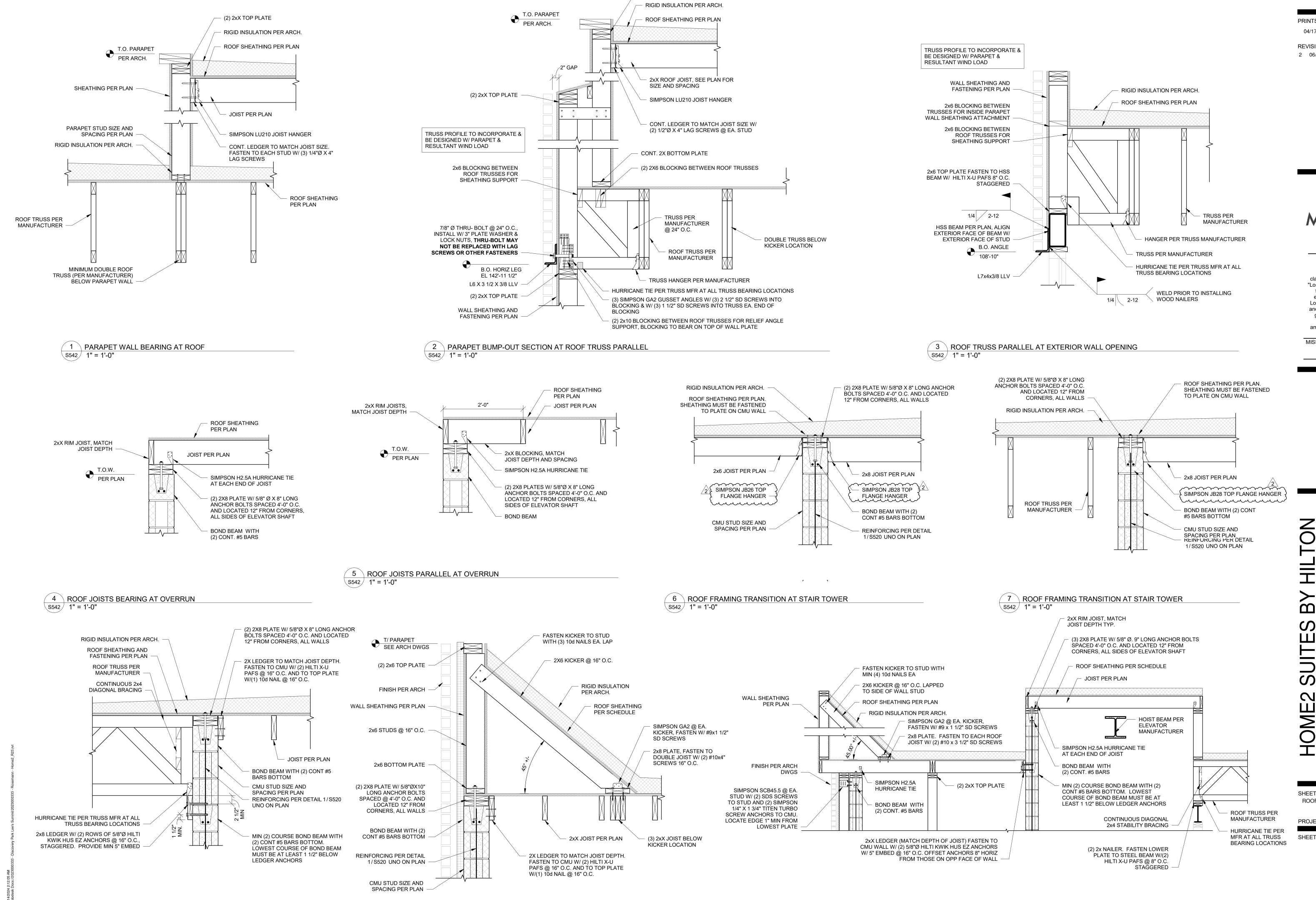
EXPIRES: DECEMBER 31, 2024

# $\equiv$ 251 NE ALURA WAY SUMMIT, MISSOURI B SUITES HOME2

SHEET TITLE **ROOF DETAILS** 

SHEET NUMBER:

PROJECT NUMBER: 2023000333



10 ROOF SECTION AT ELEVATOR & STAIR TOWER

S542 1/2" = 1'-0"

9 SHORT PARAPET SECTION AT 2x ROOF FRAMING

8 ROOF FRAMING AT STAIR

S542 1" = 1'-0"

(2) 2xX TOP PLATE

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NO. E-2006023253

EXPIRES: DECEMBER 31, 2024

CELESTE KA

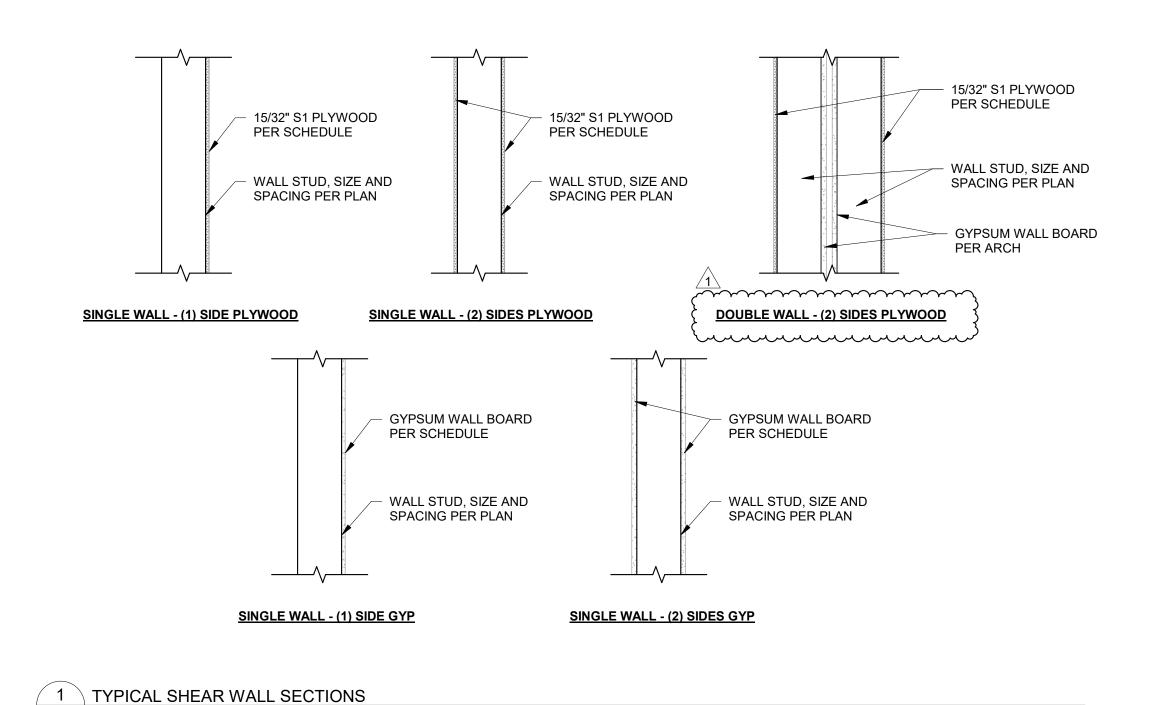
Celeste Kay Spickert PE-2008002213

Expires 12/31/2024

SOMMI % S

SHEET TITLE **ROOF DETAILS** 

PROJECT NUMBER: 2023000333



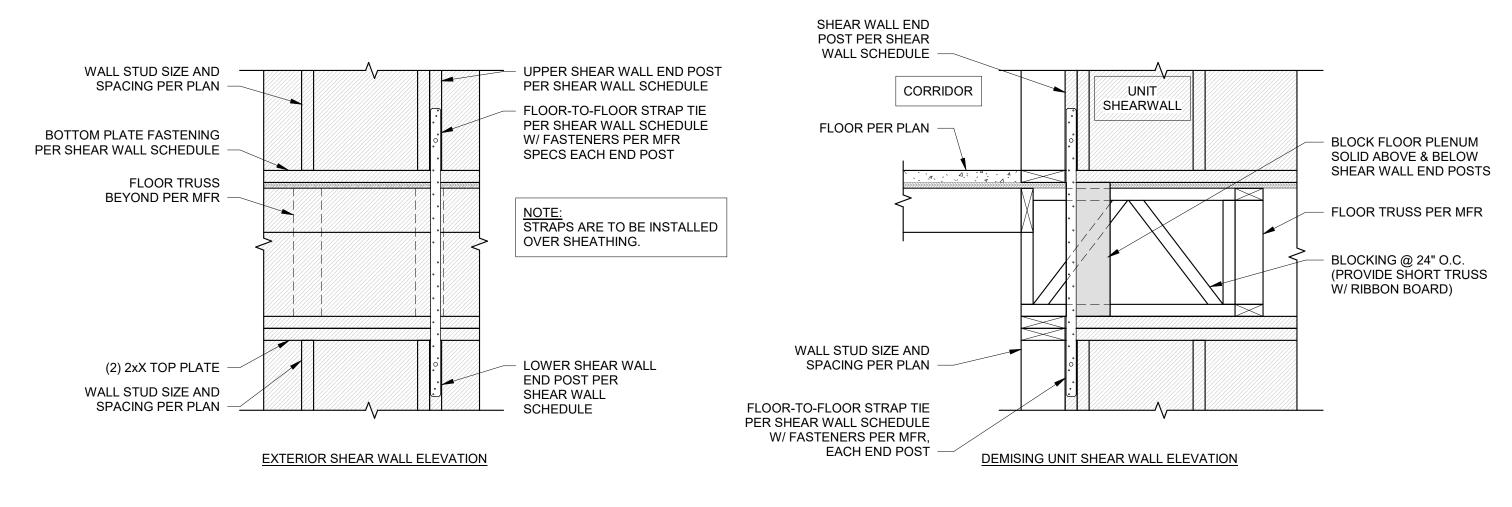
TOP PLATE FASTENING PER VARIES SHEAR WALL SCHEDULE WALL STUD SIZE AND SPACING PER PLAN FIELD NAILING TO BE 12" O.C., U.N.O. SOLID BLOCKING @ ALL HORIZONTAL JOINTS EDGE NAILING PER SHEAR WALL SCHEDULE SHEAR WALL END POST PER SHEAR WALL SCHEDULE HOLD DOWN PER SHEAR WALL SCHEDULE BOT PLATE FASTENING PER SHEAR WALL SCHEDULE SILL PER PLAN

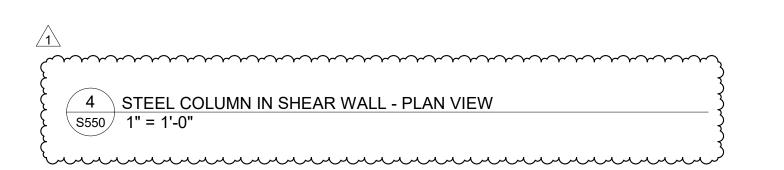
HSS COLUMN, SEE PLAN -

SHEAR WALL SHEATHING AND FASTENING PER SHEAR WALL

SCHEDULE. SHEATHING TO REMAIN CONTINUOUS OVER STEEL COLUMN

2 SHEAR WALL NAILING S550 1/2" = 1'-0"





PROVIDE STUD BOTH SIDES OF

PAFS 8" O.C., STAGGERED

STEEL COLUMN. FASTEN EACH STUD TO FACE OF COLUMN WITH HILTI-XU

2xX WALL STUDS, SIZE
 AND SPACING PER PLAN

3 FLOOR-TO-FLOOR STRAP TIE \$550 1" = 1'-0"

S550 1" = 1'-0"

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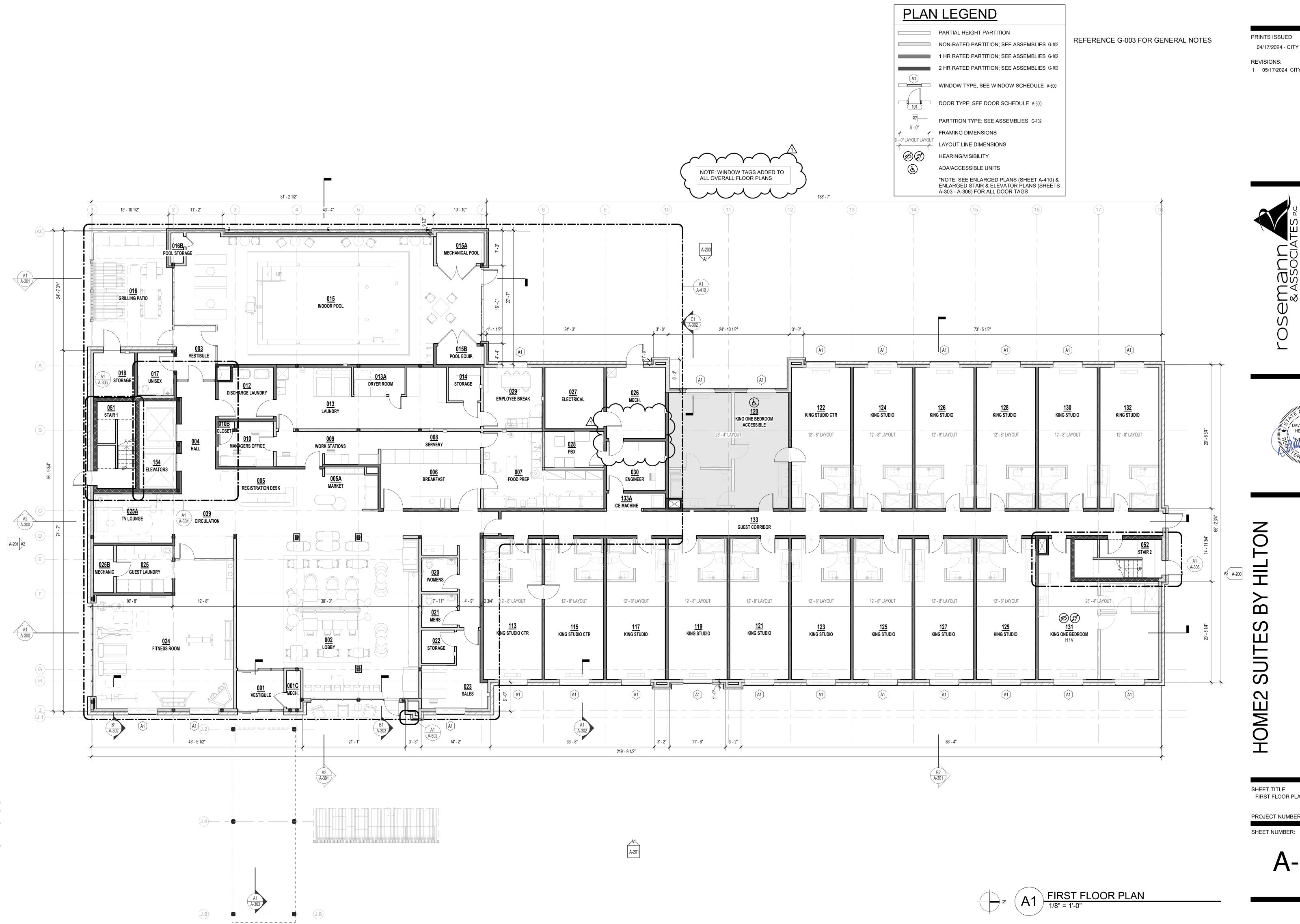
BY HILTON

SUITES

HOME2

SHEET TITLE SHEAR WALL DETAILS

PROJECT NUMBER: 2023000333



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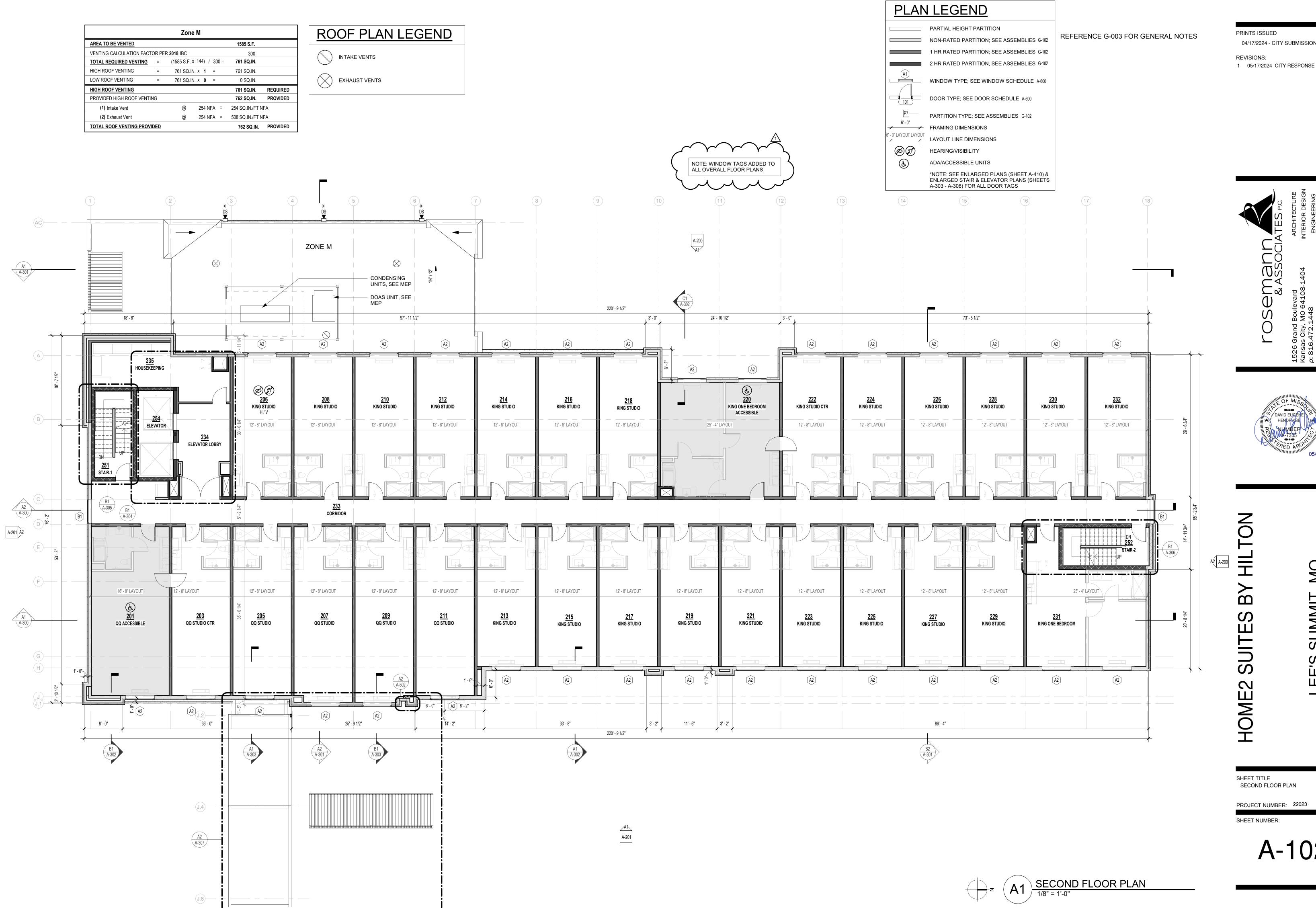
1 05/17/2024 CITY RESPONSE

LEE'S SUMMIT, MO

FIRST FLOOR PLAN

PROJECT NUMBER: 22023

A-101



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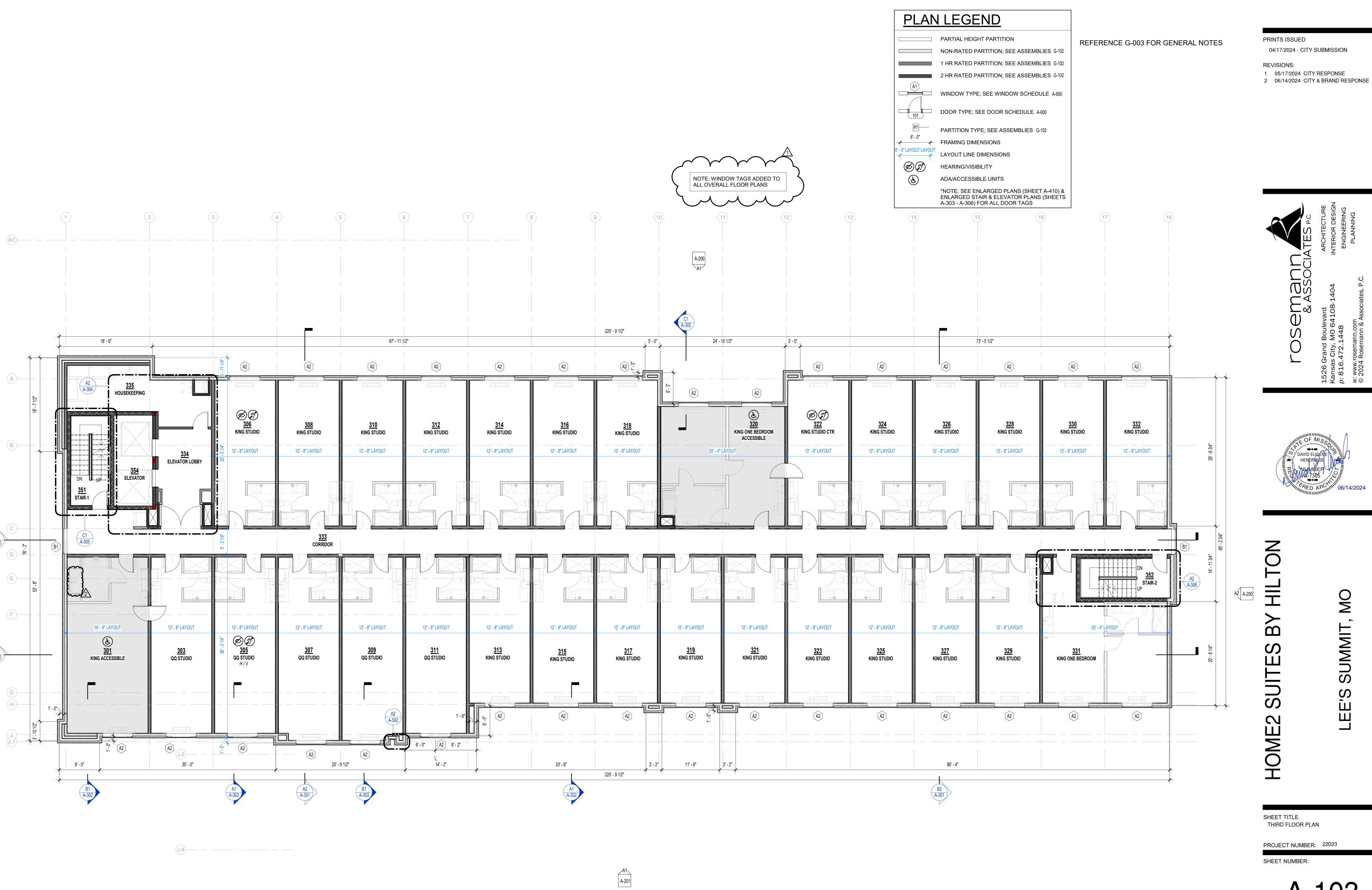
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LEE'S SUMMIT, MO

SHEET TITLE SECOND FLOOR PLAN

PROJECT NUMBER: 22023

A-102



04/17/2024 - CITY SUBMISSION

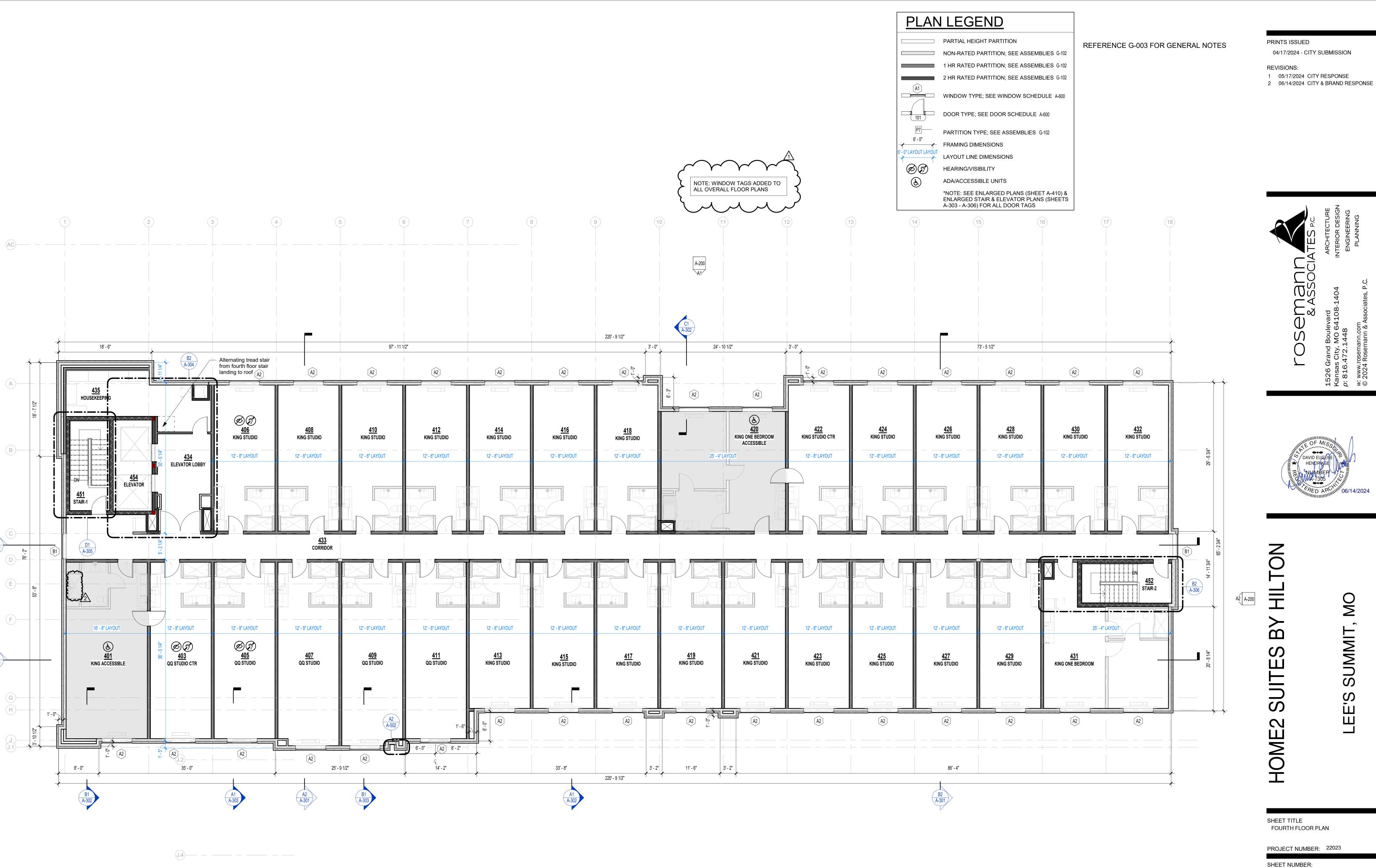
LEE'S SUMMIT, MO

SHEET TITLE THIRD FLOOR PLAN

PROJECT NUMBER: 22023

SHEET NUMBER:

A-201 A2



A-201 A2

OSemanr & ASSOC

04/17/2024 - CITY SUBMISSION

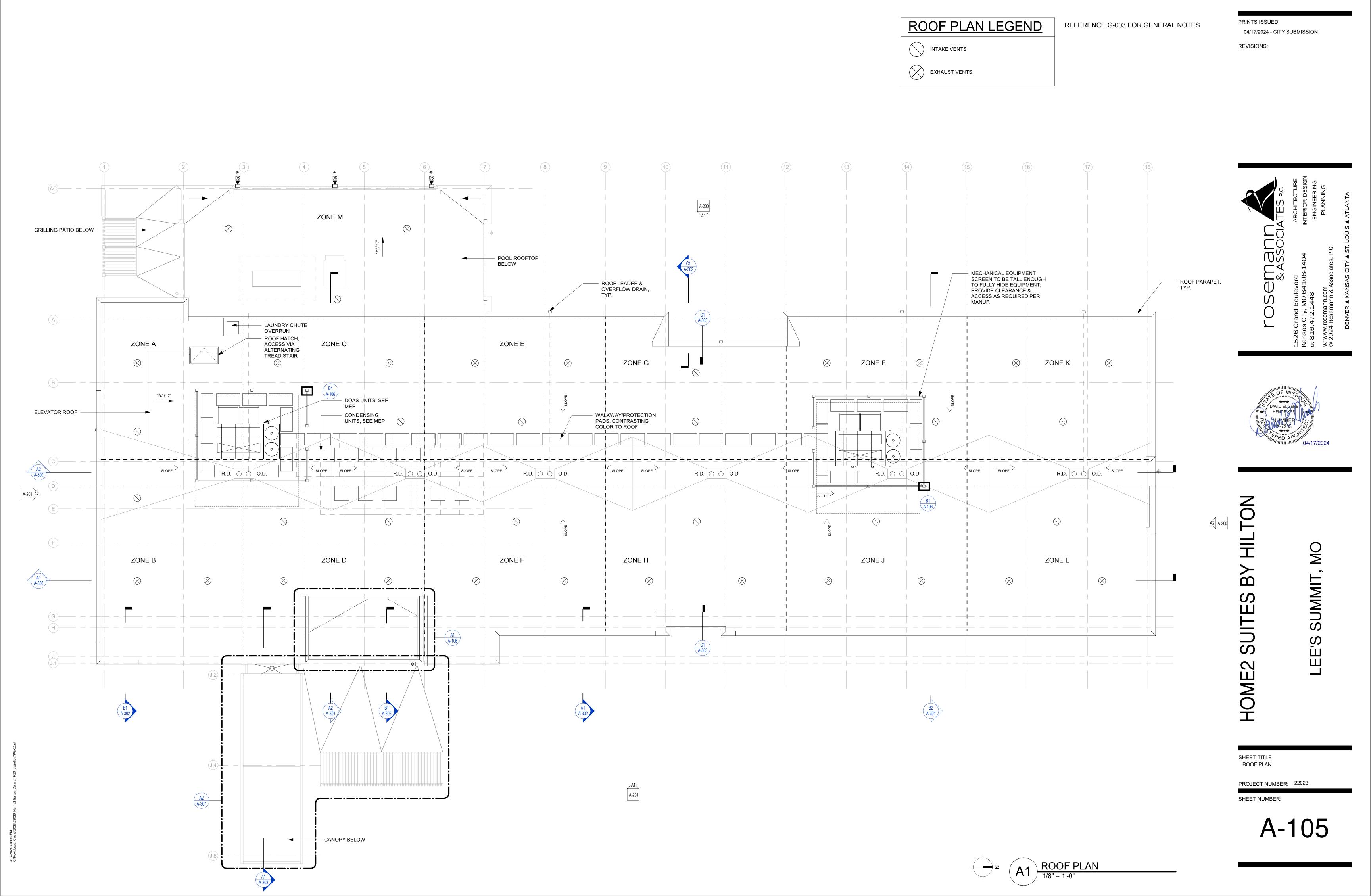
LEE'S SUMMIT, MO

SHEET TITLE FOURTH FLOOR PLAN

PROJECT NUMBER: 22023

A1 FOURTH FLOOR PLAN

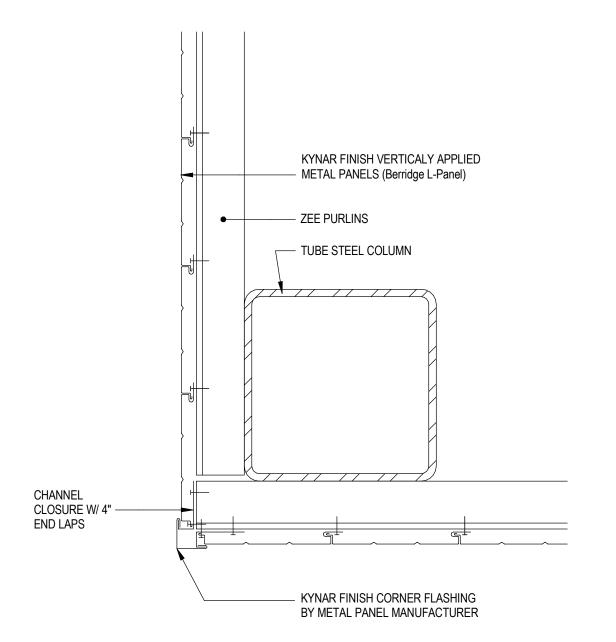
1/8" = 1'-0"



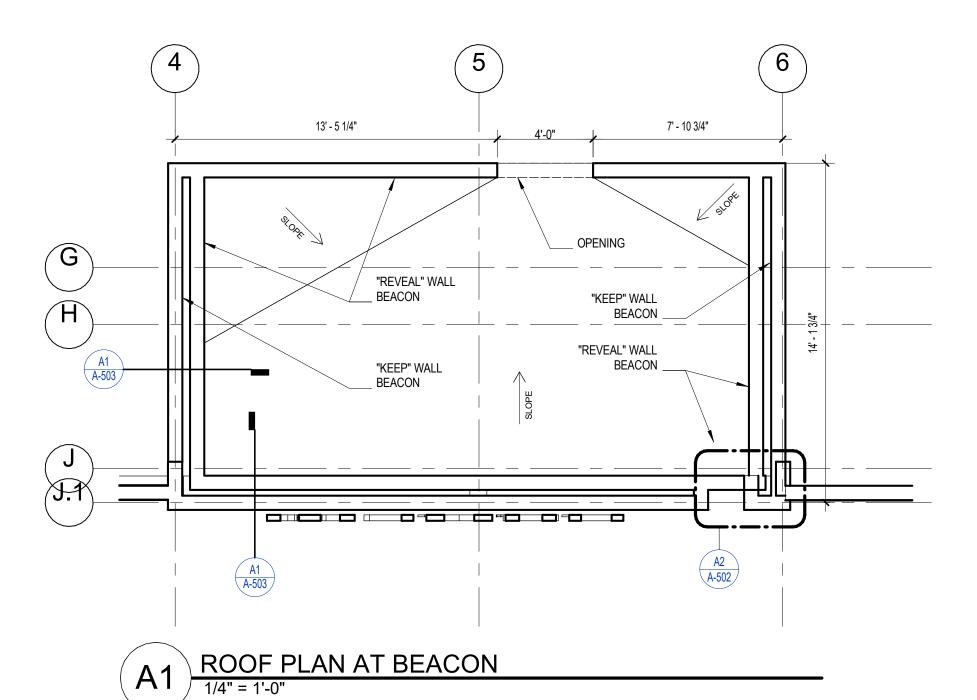
		Zone	C					Zone	e D		
	AREA TO BE VENTED			1143 S.F.		AREA TO BE VENTED				1599 S.F.	
	VENTING CALCULATION FACTOR PEF	R <b>2018</b> IBC		300		VENTING CALCULATION FACT	OR PE	R <b>2018</b> IBC		300	
	TOTAL REQUIRED VENTING =	(1143 S.F.)	( 144) / 300 =	549 SQ.IN.		TOTAL REQUIRED VENTING	=	(1599 S.F. x	( 144) / 300 =	768 SQ.IN.	
	HIGH ROOF VENTING =	549 SQ.IN	l. x 1 =	549 SQ.IN.		HIGH ROOF VENTING	=	768 SQ.IN	l. x 1 =	768 SQ.IN.	
	LOW ROOF VENTING =	549 SQ.IN	l. x <b>0</b> =	0 SQ.IN.		LOW ROOF VENTING	=	768 SQ.IN	1. x 0 =	0 SQ.IN.	
RED	HIGH ROOF VENTING			549 SQ.IN.	REQUIRED	HIGH ROOF VENTING				768 SQ.IN.	REQUIRED
DED	PROVIDED HIGH ROOF VENTING			762 SQ.IN.	PROVIDED	PROVIDED HIGH ROOF VENTII	NG			1016 SQ.IN.	PROVIDED
	(1) Intake Vent	@	254 NFA =	254 SQ.IN./FT N	IFA	(2) Intake Vent		@	254 NFA =	508 SQ.IN./FT N	IFA
	(2) Exhaust Vent	@	254 NFA =	508 SQ.IN./FT N	IFA	(2) Exhaust Vent		@	254 NFA =	508 SQ.IN./FT N	IFA
DED	TOTAL ROOF VENTING PROVIDED			762 SQ.IN.	PROVIDED	TOTAL ROOF VENTING PROVI	<u>DED</u>			1016 SQ.IN.	PROVIDED

Zone E	Zone F	Zone G	Zone H
AREA TO BE VENTED 1143 S.F.	AREA TO BE VENTED 1460 S.F.	AREA TO BE VENTED 982 S.F.	AREA TO BE VENTED 1357 S.F.
VENTING CALCULATION FACTOR PER <b>2018</b> IBC 300	VENTING CALCULATION FACTOR PER <b>2018</b> IBC 300	VENTING CALCULATION FACTOR PER 2018 IBC 300	VENTING CALCULATION FACTOR PER <b>2018</b> IBC 300
<u>TOTAL REQUIRED VENTING</u> = (1143 S.F. x 144) / 300 = <b>549 SQ.IN.</b>	<u>TOTAL REQUIRED VENTING</u> = (1460 S.F. x 144) / 300 = <b>701 SQ.IN.</b>	<u>TOTAL REQUIRED VENTING</u> = (982 S.F. x 144) / 300 = <b>471 SQ.IN</b> .	<u>TOTAL REQUIRED VENTING</u> = (1357 S.F. x 144) / 300 = <b>651 SQ.IN.</b>
HIGH ROOF VENTING = 549 SQ.IN. x 1 = 549 SQ.IN.	HIGH ROOF VENTING = 701 SQ.IN. x 1 = 701 SQ.IN.	HIGH ROOF VENTING = 471 SQ.IN. x 1 = 471 SQ.IN.	HIGH ROOF VENTING = 651 SQ.IN. x 1 = 651 SQ.IN.
LOW ROOF VENTING = 549 SQ.IN. x 0 = 0 SQ.IN.	LOW ROOF VENTING = 701 SQ.IN. x 0 = 0 SQ.IN.	LOW ROOF VENTING = 471 SQ.IN. x 0 = 0 SQ.IN.	LOW ROOF VENTING = 651 SQ.IN. x 0 = 0 SQ.IN.
HIGH ROOF VENTING 549 SQ.IN. REQUIRED	HIGH ROOF VENTING 701 SQ.IN. REQUIRED	HIGH ROOF VENTING 471 SQ.IN. REQUIRED	HIGH ROOF VENTING 651 SQ.IN. REQUIRED
PROVIDED HIGH ROOF VENTING 762 SQ.IN. PROVIDED	PROVIDED HIGH ROOF VENTING 762 SQ.IN. PROVIDED	PROVIDED HIGH ROOF VENTING 508 SQ.IN. PROVIDED	PROVIDED HIGH ROOF VENTING 762 SQ.IN. PROVIDED
(1) Intake Vent @ 254 NFA = 254 SQ.IN./FT NFA	(1) Intake Vent @ 254 NFA = 254 SQ.IN./FT NFA	(1) Intake Vent @ 254 NFA = 254 SQ.IN./FT NFA	(1) Intake Vent @ 254 NFA = 254 SQ.IN./FT NFA
(2) Exhaust Vent @ 254 NFA = 508 SQ.IN./FT NFA	(2) Exhaust Vent @ 254 NFA = 508 SQ.IN./FT NFA	(1) Exhaust Vent @ 254 NFA = 254 SQ.IN./FT NFA	(2) Exhaust Vent @ 254 NFA = 508 SQ.IN./FT NFA
TOTAL ROOF VENTING PROVIDED 762 SQ.IN. PROVIDED	TOTAL ROOF VENTING PROVIDED 762 SQ.IN. PROVIDED	TOTAL ROOF VENTING PROVIDED 508 SQ.IN. PROVIDED	TOTAL ROOF VENTING PROVIDED 762 SQ.IN. PROVIDED

Zone J	Zone K	Zone L	Zone M
AREA TO BE VENTED 1371 S.F.	AREA TO BE VENTED 1163 S.F.	AREA TO BE VENTED 1395 S.F.	AREA TO BE VENTED 1585 S.F.
VENTING CALCULATION FACTOR PER <b>2018</b> IBC 300	VENTING CALCULATION FACTOR PER <b>2018</b> IBC 300	VENTING CALCULATION FACTOR PER 2018 IBC 300	VENTING CALCULATION FACTOR PER <b>2018</b> IBC 300
<u>TOTAL REQUIRED VENTING</u> = (1371 S.F. x 144) / 300 = <b>658 SQ.IN.</b>	<u>TOTAL REQUIRED VENTING</u> = (1163 S.F. x 144) / 300 = <b>558 SQ.IN.</b>	<b>TOTAL REQUIRED VENTING</b> = (1395 S.F. x 144) / 300 = <b>670 SQ.IN.</b>	<u>TOTAL REQUIRED VENTING</u> = (1585 S.F. x 144) / 300 = <b>761 SQ.IN.</b>
HIGH ROOF VENTING = 658 SQ.IN. x 1 = 658 SQ.IN.	HIGH ROOF VENTING = 558 SQ.IN. x 1 = 558 SQ.IN.	HIGH ROOF VENTING = 670 SQ.IN. x 1 = 670 SQ.IN.	HIGH ROOF VENTING = 761 SQ.IN. x 1 = 761 SQ.IN.
LOW ROOF VENTING = 658 SQ.IN. x 0 = 0 SQ.IN.	LOW ROOF VENTING = 558 SQ.IN. x 0 = 0 SQ.IN.	LOW ROOF VENTING = 670 SQ.IN. x 0 = 0 SQ.IN.	LOW ROOF VENTING = 761 SQ.IN. x 0 = 0 SQ.IN.
HIGH ROOF VENTING 658 SQ.IN. REQUIRED	HIGH ROOF VENTING 558 SQ.IN. REQUIRED	HIGH ROOF VENTING 670 SQ.IN. REQUIRED	HIGH ROOF VENTING 761 SQ.IN. REQUIRED
PROVIDED HIGH ROOF VENTING 762 SQ.IN. PROVIDED	PROVIDED HIGH ROOF VENTING 762 SQ.IN. PROVIDED	PROVIDED HIGH ROOF VENTING 762 SQ.IN. PROVIDED	PROVIDED HIGH ROOF VENTING 762 SQ.IN. PROVIDED
(1) Intake Vent @ 254 NFA = 254 SQ.IN./FT NFA	(1) Intake Vent @ 254 NFA = 254 SQ.IN./FT NFA	(1) Intake Vent @ 254 NFA = 254 SQ.IN./FT NFA	(1) Intake Vent @ 254 NFA = 254 SQ.IN./FT NFA
(2) Exhaust Vent @ 254 NFA = 508 SQ.IN./FT NFA	(2) Exhaust Vent @ 254 NFA = 508 SQ.IN./FT NFA	(2) Exhaust Vent @ 254 NFA = 508 SQ.IN./FT NFA	(2) Exhaust Vent @ 254 NFA = 508 SQ.IN./FT NFA
TOTAL ROOF VENTING PROVIDED 762 SQ.IN. PROVIDED	TOTAL ROOF VENTING PROVIDED 762 SQ.IN. PROVIDED	TOTAL ROOF VENTING PROVIDED 762 SQ.IN. PROVIDED	TOTAL ROOF VENTING PROVIDED 762 SQ.IN. PROVIDED







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SUITES BY HILTON

HOME2

LEE'S SUMMIT, I

SHEET TITLE
ROOF VENT CALCULATIONS &
DETAILS

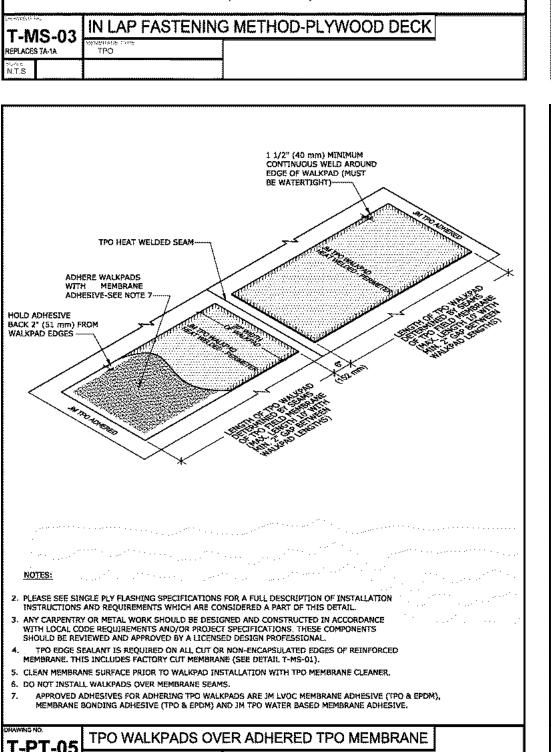
PROJECT NUMBER: 22023
SHEET NUMBER:

A-106

INSULATION / COVER BOARD

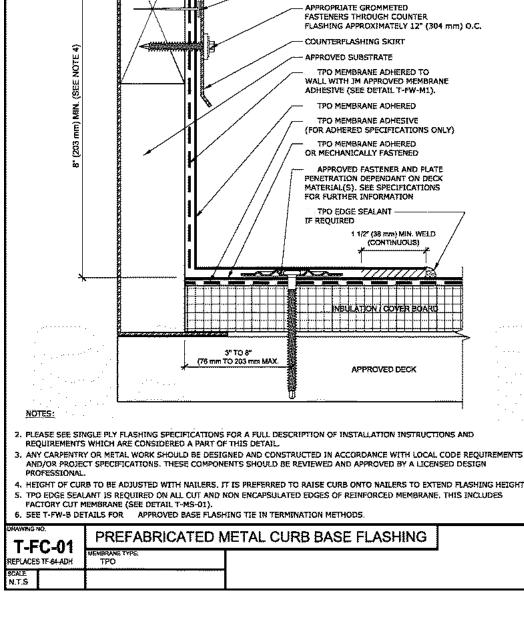
APPROVED FASTENER AND PLATE -

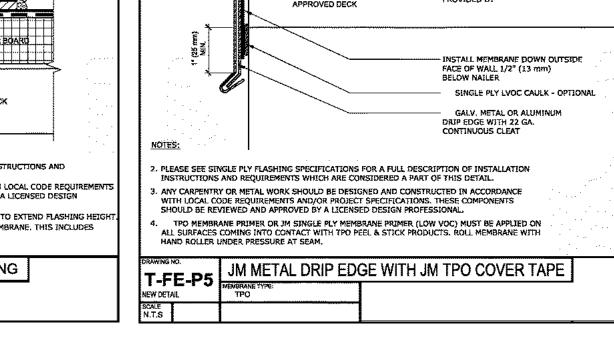
MATERIAL(S), SEE SPECIFICATIONS

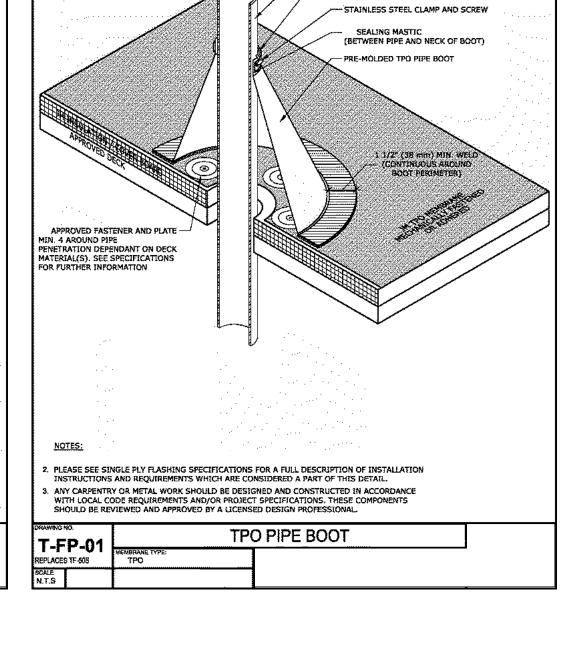


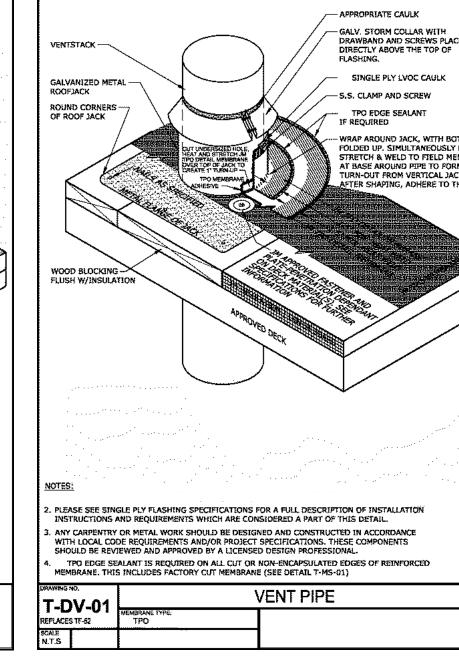
TPO EDGE SEALA IF REQUIRED

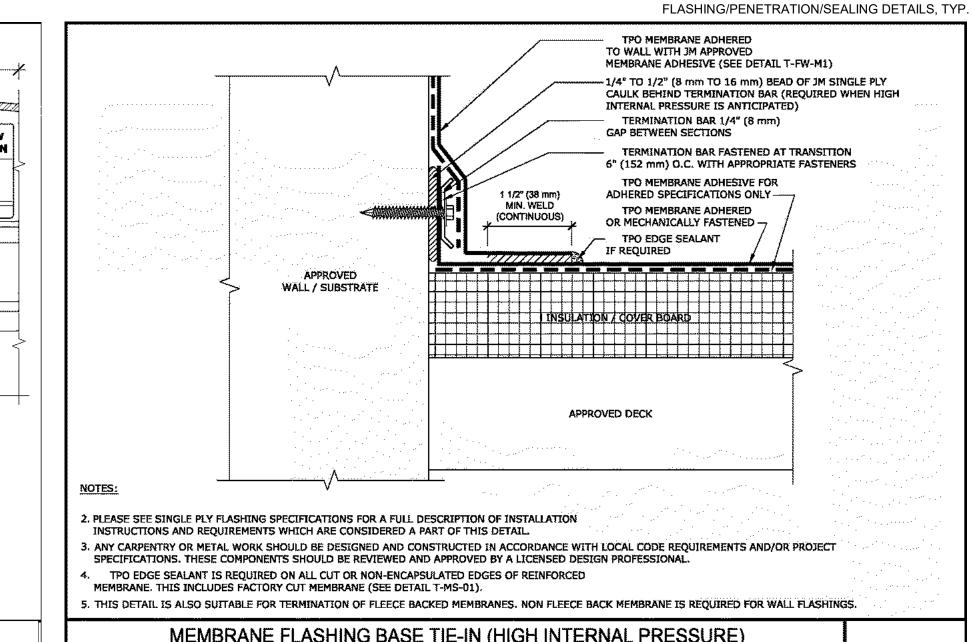
INSULATION / COVER BOARD

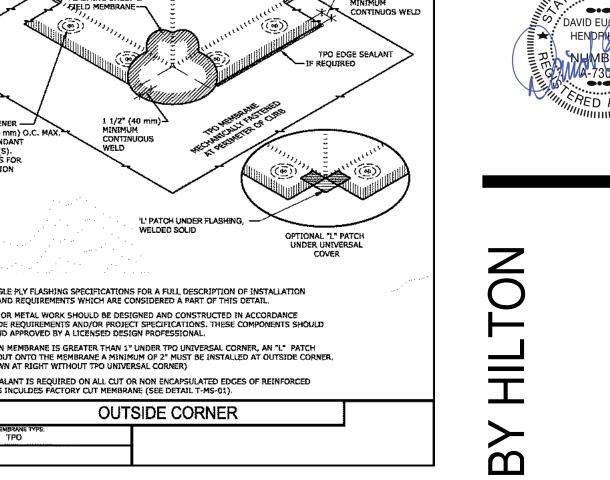


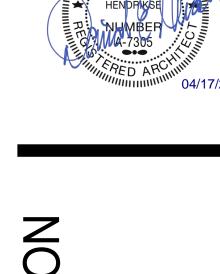


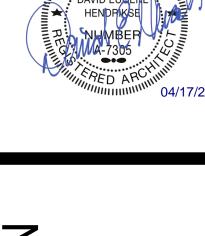










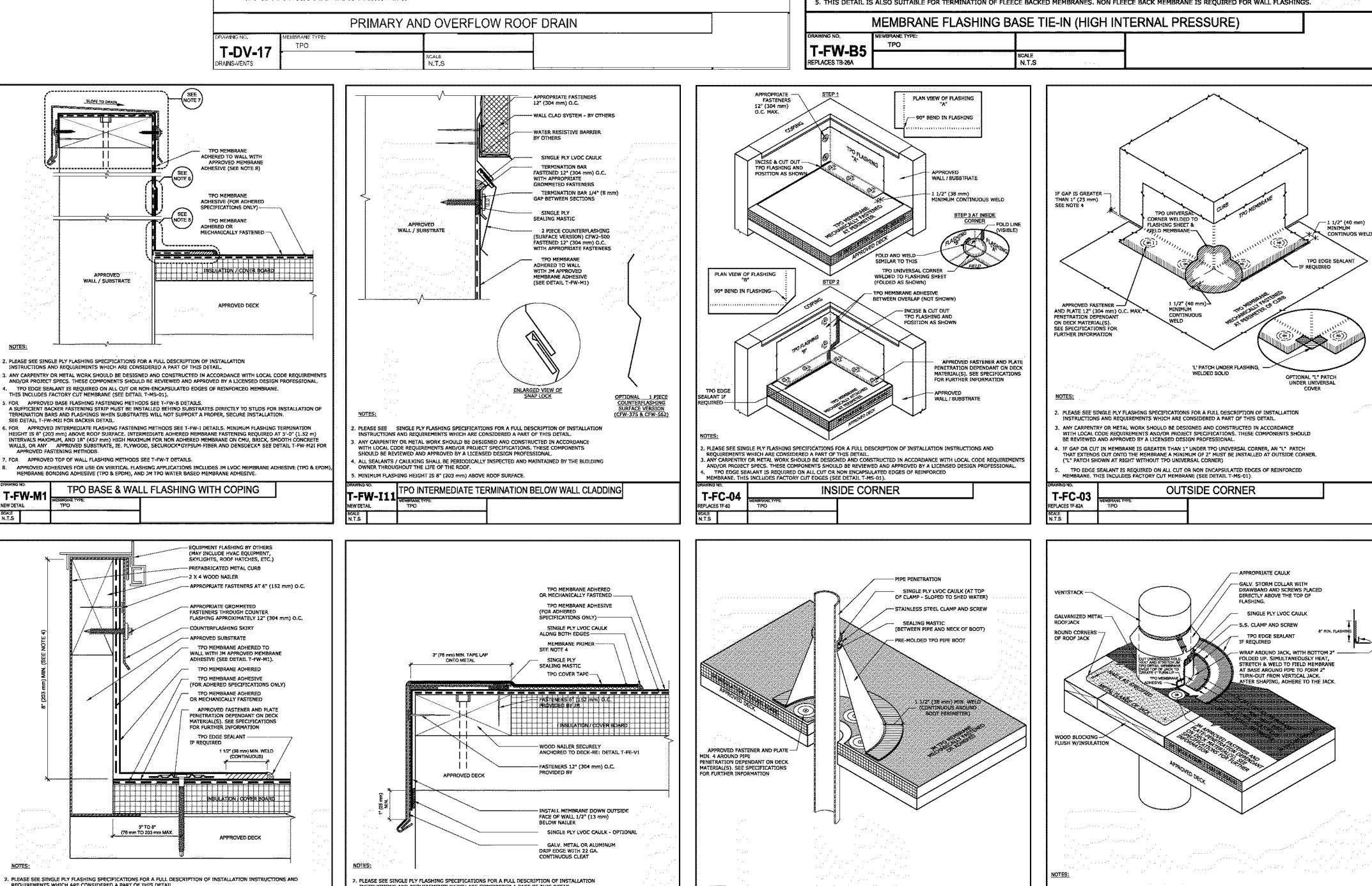


SHEET TITLE ROOFING & FLASHING DETAILS

HOME

PROJECT NUMBER: 22023

SHEET NUMBER:



04/17/2024 - CITY SUBMISSION **REVISIONS:** 

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**NOTE:** DETAILS PROVIDED FOR REFERENCE ONLY. FOLLOW MANUF. RECOMMENDED DETAILS FOR

STRAINER -**ROOF DRAIN** 

DRAIN STRAINER

ROOF DRAIN

1/2" (13 mm) MIN.

DRAINS-VENTS

ADHERED TO WALL WITH

DHESIVE (SEE NOTE 8

TPO MEMBRANE

SPECIFICATIONS ONLY) --TPO MEMBRANE

APPROVED DECK

-EQUIPMENT FLASHING BY OTHERS (MAY INCLUDE HVAC EQUIPMENT, SKYLIGHTS, ROOF HATCHES, ETC.) PREFABRICATED METAL CURB -2 X 4 WOOD NAILER

- APPROPRIATE FASTENERS AT 6" (152 mm) O.C.

WALL / SUBSTRATE

7. FOR \_\_\_ APPROVED TOP OF WALL FLASHING METHODS SEE T-FW-T DETAILS.

2. PLEASE SEE SINGLE PLY FLASHING SPECIFICATIONS FOR A FULL DESCRIPTION OF INSTALLATION INSTRUCTIONS AND REQUIREMENTS WHICH ARE CONSIDERED A PART OF THIS DETAIL.

ANY CARPENTRY OR METAL WORK SHOULD BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH LOCAL CODE REQUIREM AND/OR PROJECT SPECS, THESE COMPONENTS SHOULD BE REVIEWED AND APPROVED BY A LICENSED DESIGN PROFESSIONAL

5. FOR — APPROVED BASE FLASHING FASTENING METHODS SEE Y-FW-B DETAILS.
A SUFFICIENT BACKER FASTENING STRIP MUST BE INSTALLED BEHIND SUBSTRATES DIRECTLY TO STUDS FOR INSTALLATION OF TERMINATION BARS AND FLASHINGS WHEN SUBSTRATES WILL NOT SUPPORT A PROPER, SECURE INSTALLATION.
SEE DETAIL T-FW-M2I FOR BACKER DETAIL.

TPO BASE & WALL FLASHING WITH COPING

TPO EDGE SEALANT IS REQUIRED ON ALL CUT OR NON-ENCAPSULATED EDGES OF REINFORCED MEMBRANE. THIS INCLUDES FACTORY CUT MEMBRANE (SEE DETAIL T-MS-01).

2. PLEASE SEE SINGLE PLY FLASHING SPECIFICATIONS FOR A FULL DESCRIPTION OF INSTALLATION INSTRUCTIONS AND REQUIREMENTS WHICH

24" (610 mm) MIN.

COVER BOARD

AT LEAST THE SAME DIAMETER AS

APPROVED DECK

THE ROOF DRAIN PIPE-TYP. .....

WATER DAM COMPRESSION RING ----

TPO MEMBRANE ADHESIVE

SPECIFICATIONS ONLY) -

TPO MEMBRANE ADHERED

OR MECHANICALLY

3. ANY CARPENTRY OR METAL WORK SHOULD BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH LOCAL CODE REQUIREMENTS AND/OR PROJECT SPECIFICATIONS, THESE COMPONENTS SHOULD BE REVIEWED AND APPROVED BY A LICENSED DESIGN PROFESSIONAL 4. DRAIN AREA MUST BE PROPERLY TAPERED SO THAT THE DRAIN FLASHING IS NOT INSTALLED UNDER TENSION.

APPROVED DECK

CUT HOLE THROUGH MEMBRANE AT

ROOF DRAIN PIPE-TYP.

SEALING MASTIC

- APPROVED FASTENER

LEAST THE SAME DIAMETER AS THE

S. NO SEAMS OR FOLDS UNDER THE COMPRESSION RING.

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1 05/17/2024 CITY RESPONSE 2 06/14/2024 CITY & BRAND RESPONSE

LEE'S SUMMIT, MO

SHEET TITLE FIRST FLOOR REFLECTED

**CEILING PLAN** PROJECT NUMBER: 22023

PRINTS ISSUED

04/17/2024 - CITY SUBMISSION

OSeman & ASSO

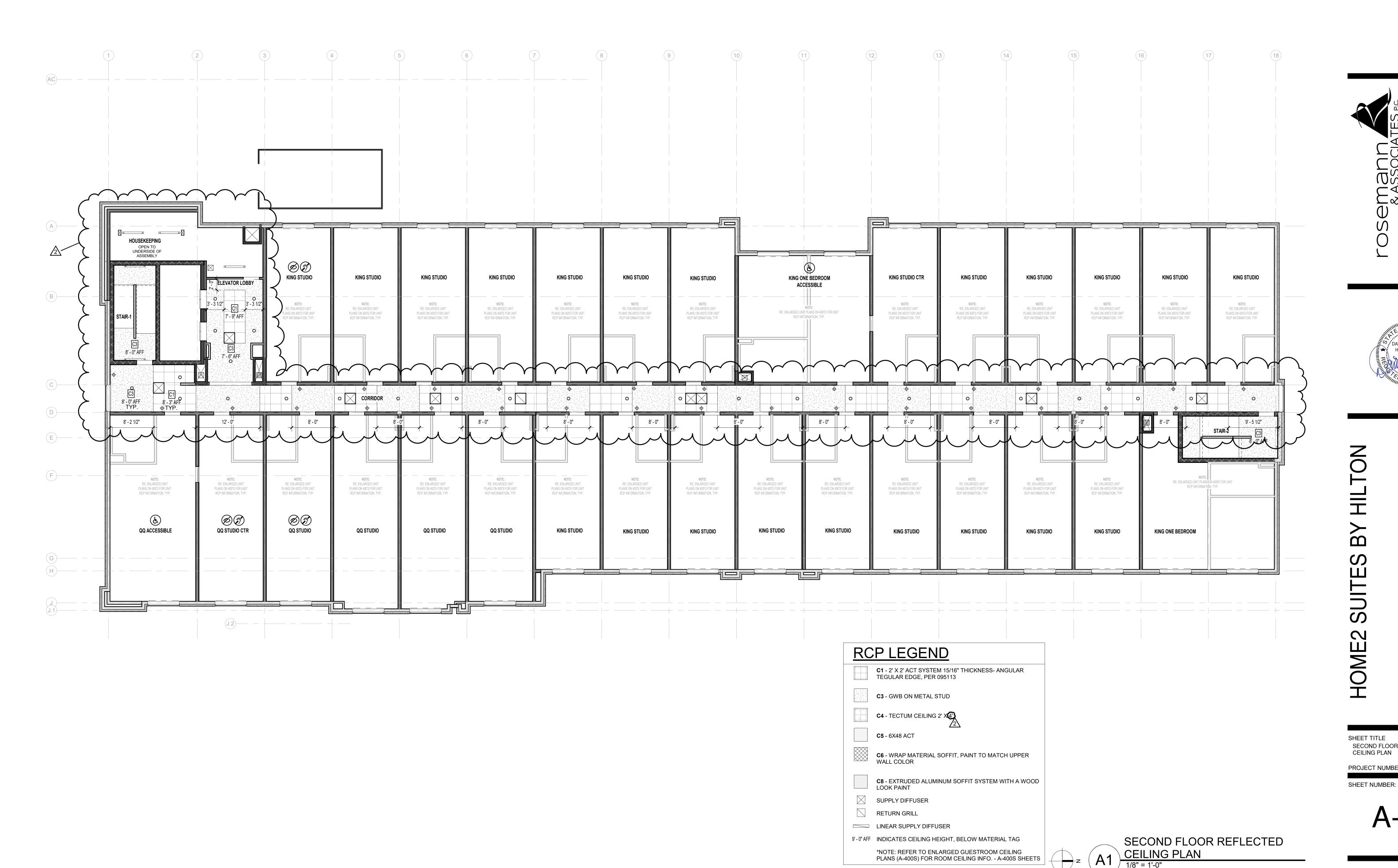
**REVISIONS:** 2 06/14/2024 CITY & BRAND RESPONSE

LEE'S SUMMIT, MO

SHEET TITLE SECOND FLOOR REFLECTED

**CEILING PLAN** 

PROJECT NUMBER: 22023



A-121

CEILING PLAN

04/17/2024 - CITY SUBMISSION **REVISIONS:** 2 06/14/2024 CITY & BRAND RESPONSE

OSemani & ASSOC

LEE'S SUMMIT, MO

SHEET TITLE THIRD FLOOR REFLECTED **CEILING PLAN** 

PROJECT NUMBER: 22023

KING STUDIO

PLANS ON 400'S FOR UNIT

RE: ENLARGED UNIT PLANS ON 400'S FOR UNIT RCP INFORMATION, TYP.

**QQ STUDIO** 

CORRIDOR

ELEVATOR LOBBY

RE: ENLARGED UNIT PLANS ON 400'S FOR UNIT RCP INFORMATION, TYP.

QQ STUDIO

RE: ENLARGED UNIT PLANS ON 400'S FOR UNIT RCP INFORMATION, TYP.

Ø Ø

**QQ STUDIO** 

RE: ENLARGED UNIT PLANS ON 400'S FOR UNIT RCP INFORMATION, TYP.

<u>(F)</u> KING ACCESSIBLE KING STUDIO

RE: ENLARGED UNIT PLANS ON 400'S FOR UNIT

RE: ENLARGED UNIT PLANS ON 400'S FOR UNIT RCP INFORMATION, TYP.

QQ STUDIO

KING STUDIO

RE: ENLARGED UNIT PLANS ON 400'S FOR UNIT

NOTE: RE: ENLARGED UNIT PLANS ON 400'S FOR UNIT RCP INFORMATION, TYP.

QQ STUDIO

KING STUDIO

RE: ENLARGED UNIT PLANS ON 400'S FOR UNIT

NOTE:
RE: ENLARGED UNIT
PLANS ON 400'S FOR UNIT
RCP INFORMATION, TYP.

KING STUDIO

KING STUDIO

RE: ENLARGED UNIT PLANS ON 400'S FOR UNIT

NOTE: RE: ENLARGED UNIT PLANS ON 400'S FOR UNIT RCP INFORMATION, TYP.

KING STUDIO

RE: ENLARGED UNIT PLANS ON 400'S FOR UNIT

NOTE: RE: ENLARGED UNIT PLANS ON 400'S FOR UNIT RCP INFORMATION, TYP.

KING STUDIO

NOTE: RE: ENLARGED UNIT PLANS ON 400'S FOR UNIT RCP INFORMATION, TYP.

KING STUDIO

KING STUDIO CTR

RE: ENLARGED UNIT PLANS ON 400'S FOR UNIT

NOTE: RE: ENLARGED UNIT PLANS ON 400'S FOR UNIT RCP INFORMATION, TYP.

KING STUDIO

RCP LEGEND

C3 - GWB ON METAL STUD

C4 - TECTUM CEILING 2' X

C5 - 6X48 ACT

SUPPLY DIFFUSER

LINEAR SUPPLY DIFFUSER

\*NOTE: REFER TO ENLARGED GUESTROOM CEILING PLANS (A-400S) FOR ROOM CEILING INFO. - A-400S SHEETS

RETURN GRILL

KING ONE BEDROOM **ACCESSIBLE** 

RE: ENLARGED UNIT PLANS ON 400'S FOR UNIT RCP INFORMATION, TYP.

NOTE:
RE: ENLARGED UNIT
PLANS ON 400'S FOR UNIT
RCP INFORMATION, TYP.

KING STUDIO

PLANS (A-400S) FOR ROOM CEILING INFO. - A-400S SHEETS

OSemani & ASSOC

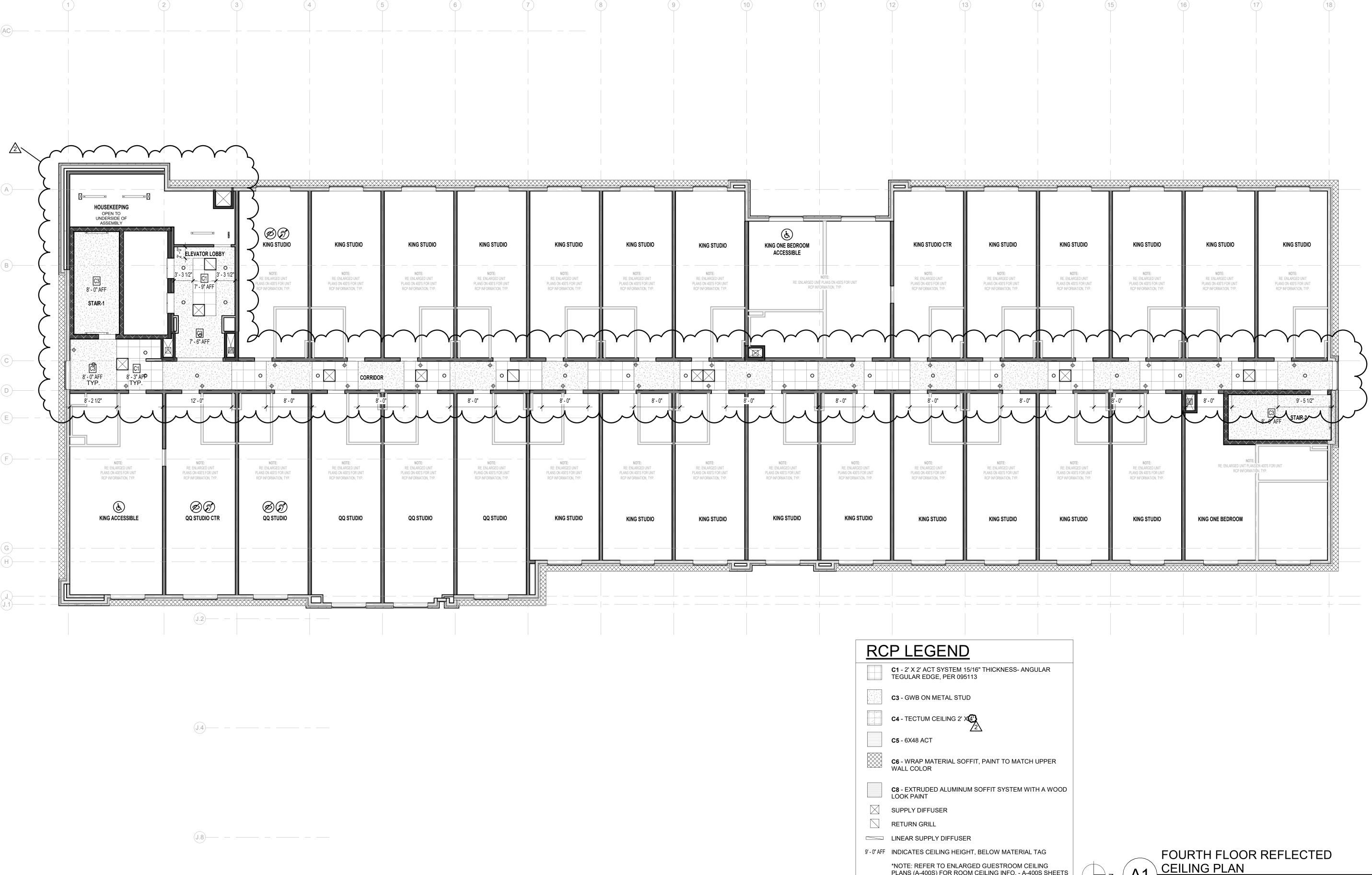
LEE'S SUMMIT, MO

SHEET TITLE FOURTH FLOOR REFLECTED **CEILING PLAN** 

PROJECT NUMBER: 22023

SHEET NUMBER:

A-123



RCP LEGEND **C1** - 2' X 2' ACT SYSTEM 15/16" THICKNESS- ANGULAR TEGULAR EDGE, PER 095113 C3 - GWB ON METAL STUD C4 - TECTUM CEILING 2' X4 C5 - 6X48 ACT **C6** - WRAP MATERIAL SOFFIT, PAINT TO MATCH UPPER WALL COLOR C8 - EXTRUDED ALUMINUM SOFFIT SYSTEM WITH A WOOD LOOK PAINT SUPPLY DIFFUSER RETURN GRILL LINEAR SUPPLY DIFFUSER 9'-0" AFF INDICATES CEILING HEIGHT, BELOW MATERIAL TAG \*NOTE: REFER TO ENLARGED GUESTROOM CEILING PLANS (A-400S) FOR ROOM CEILING INFO. - A-400S SHEETS

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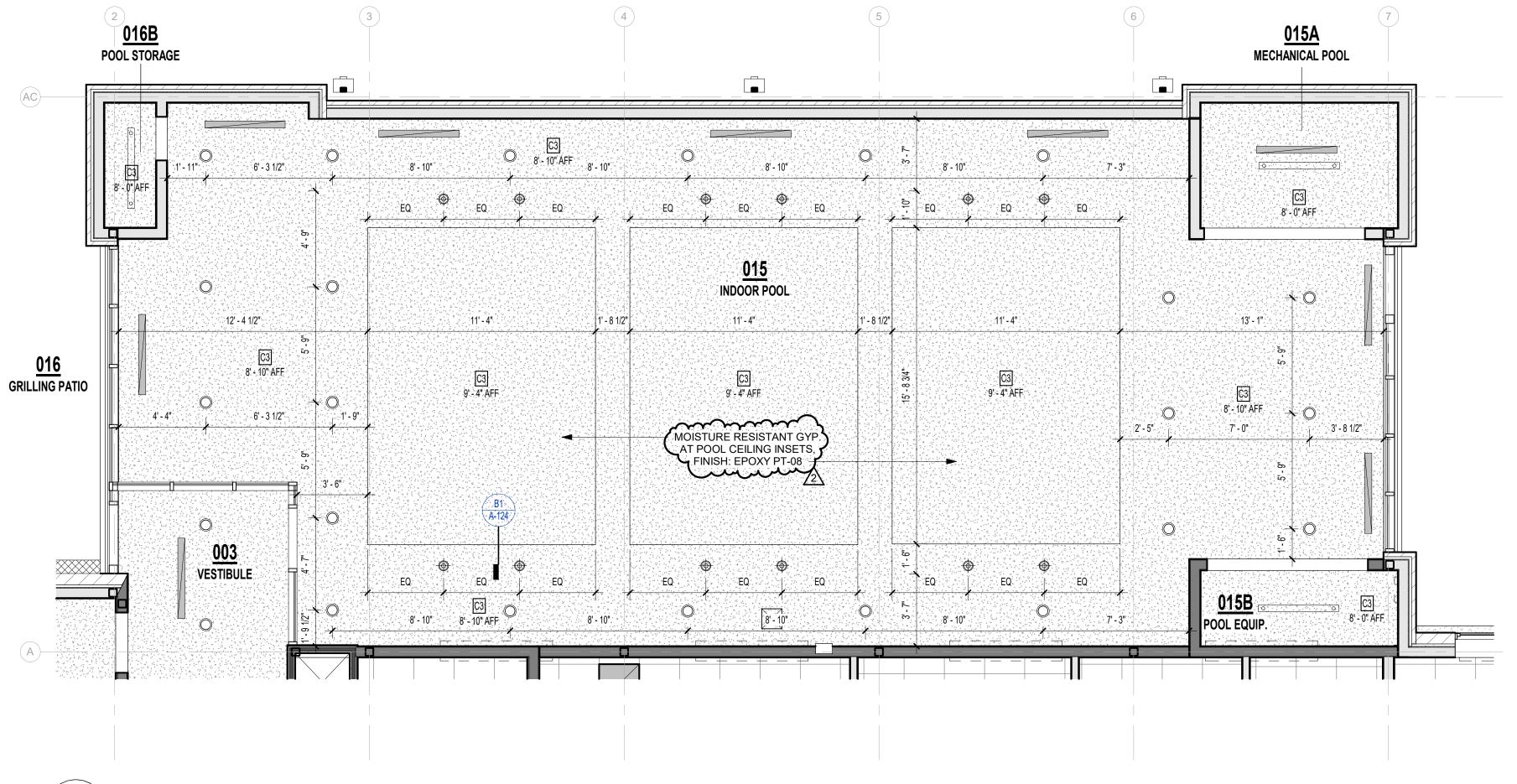
# LEE'S SUMMIT, MO

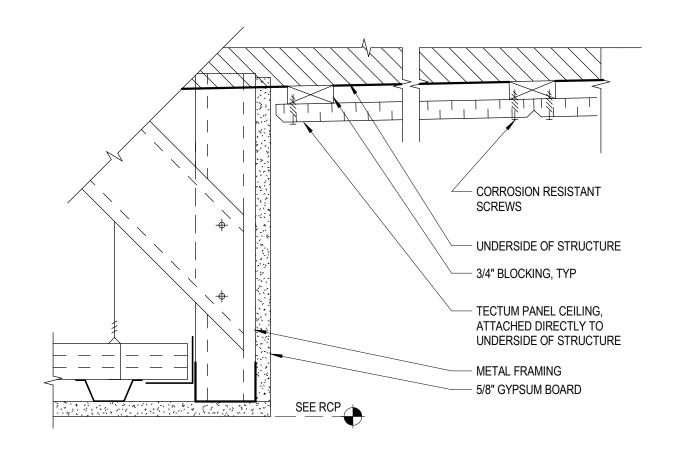
HOME2 SUITES BY HILTON

SHEET TITLE ENLARGED REFLECTED CEILING PLAN - INDOOR POOL

PROJECT NUMBER: 22023

SHEET NUMBER:





ACCENT CEILING IN POOL
3" = 1'-0"

FIRST FLOOR REFLECTED CEILING PLAN

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REVISIONS:

Sand Boulevard ARCHITECTURE Soity, MO 64108-1404 INTERIOR DESIGN



 $\Box$ 

SUITE

**HOME2** 

SHEET TITLE CEILING DETAILS

PROJECT NUMBER: 22023

SHEET NUMBER:

A-125

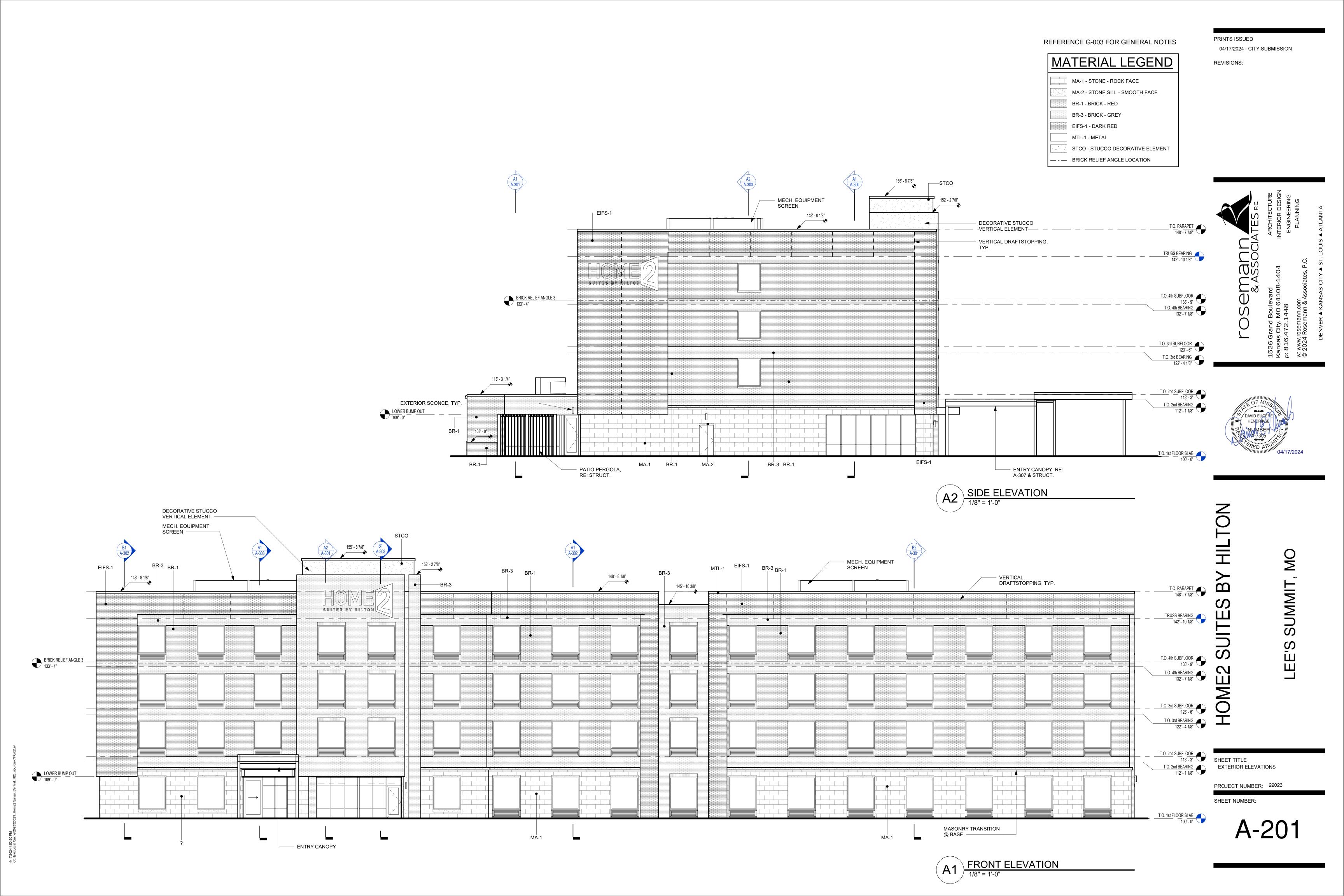
4/17/2024 4:50:45 PM C:\Revit Local Cache\2023\23029\_Home2 Suites\_Central\_R23\_sburdiek7PGKD.nt

A1 REAR ELEVATION

1/8" = 1'-0"

PRINTS ISSUED

REFERENCE G-003 FOR GENERAL NOTES

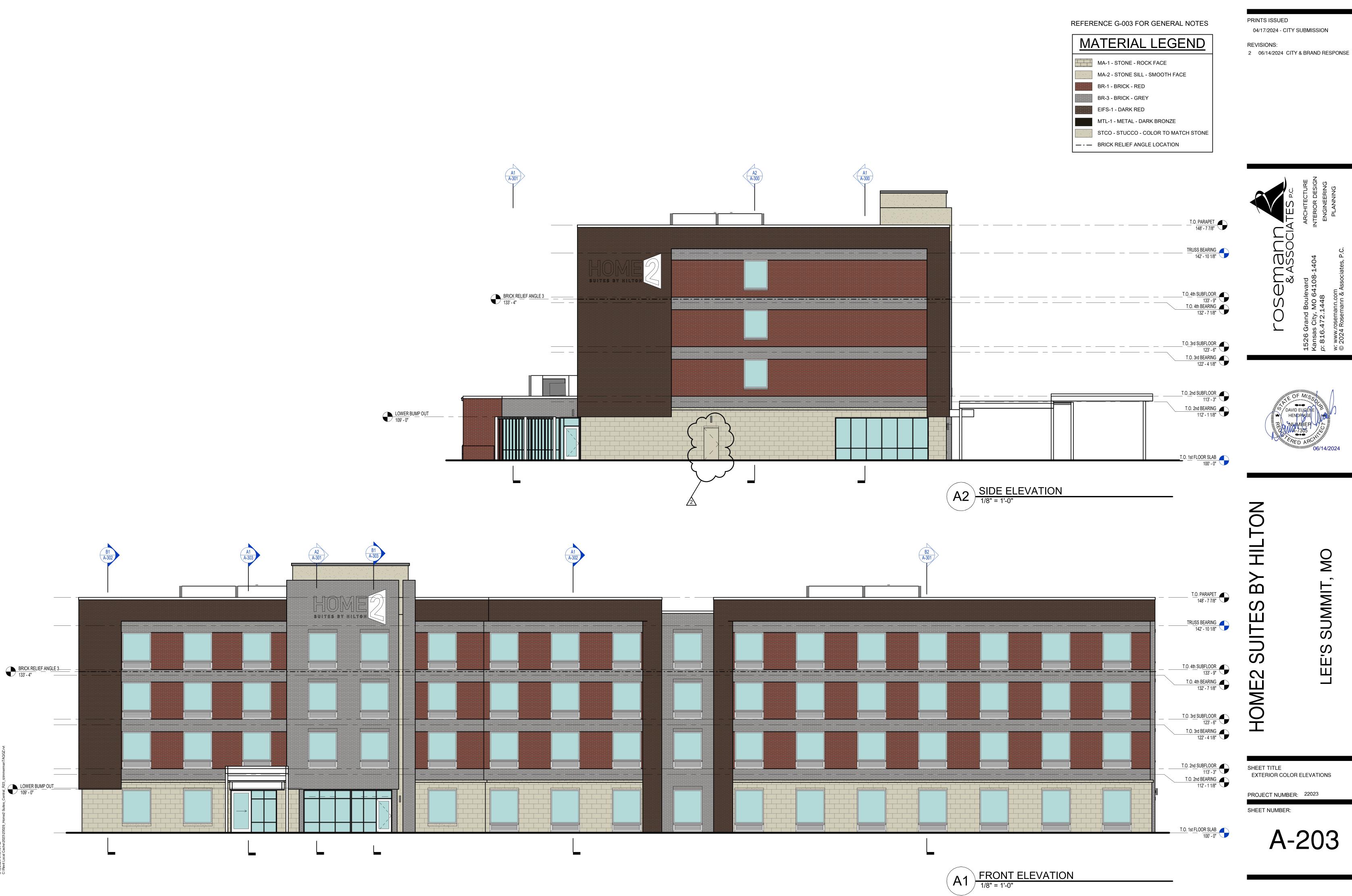


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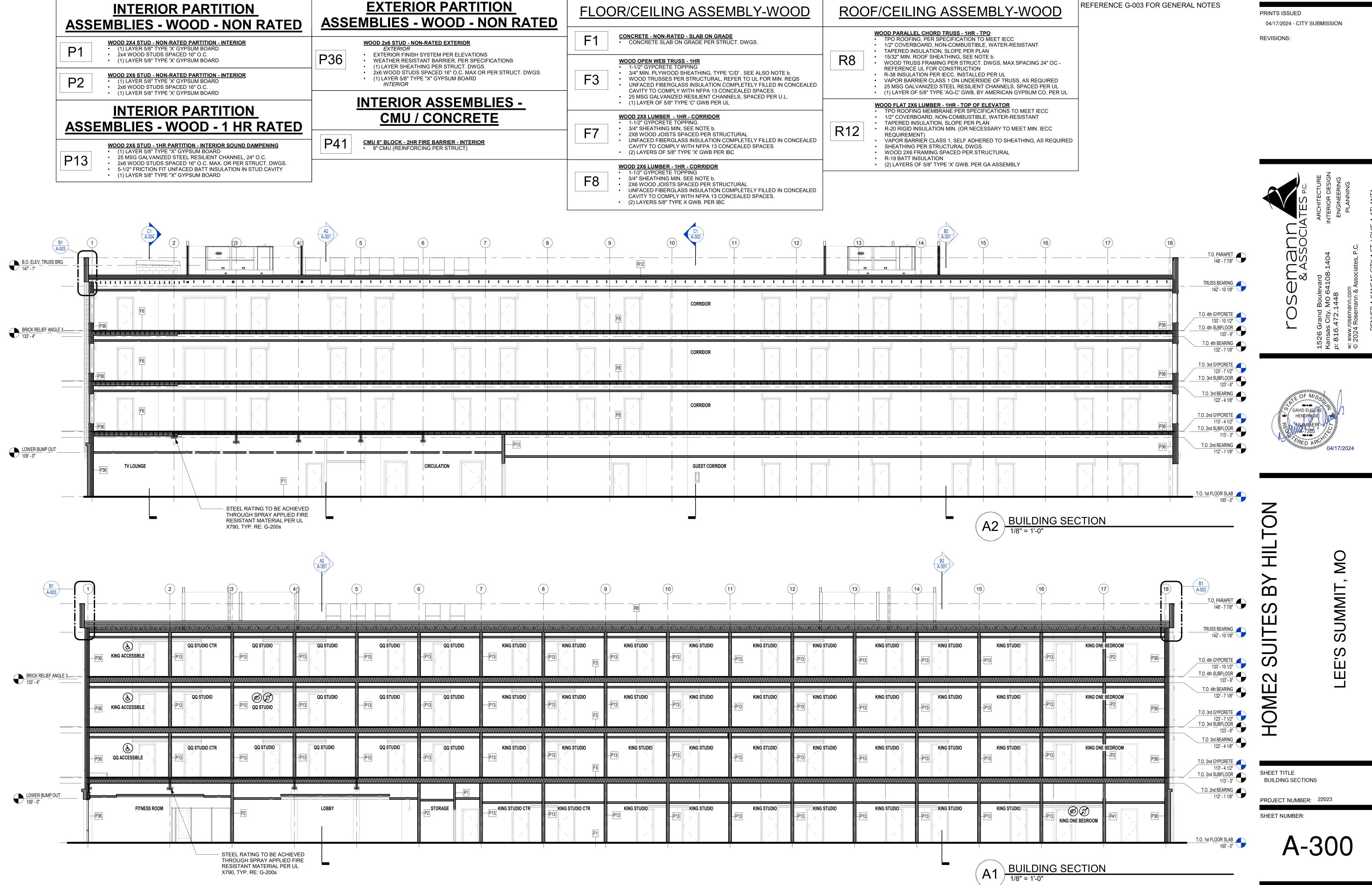
REVISIONS: 2 06/14/2024 CITY & BRAND RESPONSE

EXTERIOR COLOR ELEVATIONS PROJECT NUMBER: 22023



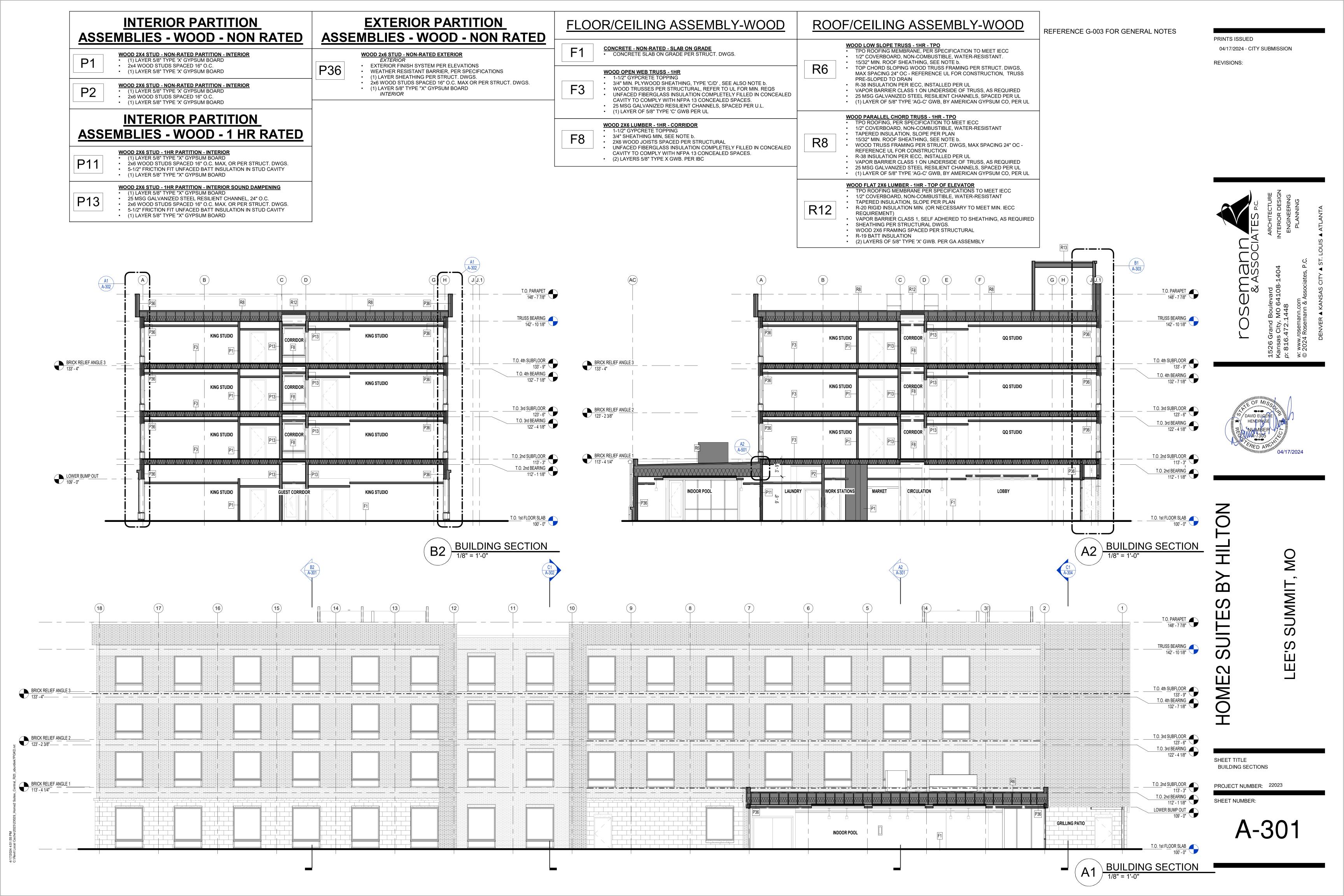
EXTERIOR COLOR ELEVATIONS

LEE'S SUMMIT,



REFERENCE G-003 FOR GENERAL NOTES

PRINTS ISSUED



WOOD 2X6 STUD - NON-RATED PARTITION - INTERIOR
(1) LAYER 5/8" TYPE 'X' GYPSUM BOARD
2x6 WOOD STUDS SPACED 16" O.C.

# **EXTERIOR PARTITION** ASSEMBLIES - WOOD - NON RATED

T.O. PARAPET 148' - 7 7/8"

TRUSS BEARING

T.O. 4th SUBFLOOR 133' - 9"

133' - 4" T.O. 4th BEAKING

132' - 7 1/8"

T.O. 3rd SUBFLOOR 123' - 6"

T.O. 3rd BEARING 122' - 4 1/8" ——BR-3

T.O. 2nd SUBFLOOR 113' - 3"

T.O. 2nd BEARING 112' - 1 1/8"

A3 A-604 LOWER BUMP OUT 109' - 0"

T.O. 1st FLOOR SLAB 100' - 0"

WALL SECTION @ EIFS
3/8" = 1'-0"

BRICK RELIEF ANGLE 3

KING ONE BEDROOM

ACCESSIBLE

<u>(F)</u>

KING ONE BEDROOM

ACCESSIBLE

<u>(</u><u>k</u>) <u>220</u>

KING ONE BEDROOM ACCESSIBLE

KING ONE BEDROOM ACCESSIBLE

WALL SECTION

3/8" = 1'-0"

142' - 10 1/8"

WOOD 2x6 STUD - NON-RATED EXTERIOR EXTERIOR

• (1) LAYER 5/8" TYPE 'X' GYPSUM BOARD

EXTERIOR FINISH SYSTEM PER ELEVATIONS WEATHER RESISTANT BARRIER, PER SPECIFICATIONS

• (1) LAYER SHEATHING PER STRUCT. DWGS. 2x6 WOOD STUDS SPACED 16" O.C. MAX OR PER STRUCT. DWGS. (1) LAYER 5/8" TYPE "X" GYPSUM BOARD

# FLOOR/CEILING ASSEMBLY-WOOD

CONCRETE - NON-RATED - SLAB ON GRADE
 CONCRETE SLAB ON GRADE PER STRUCT. DWGS.

• 1-1/2" GYPCRETE TOPPING

3/4" MIN. PLYWOOD SHEATHING, TYPE 'C/D', SEE ALSO NOTE b.
WOOD TRUSSES PER STRUCTURAL, REFER TO UL FOR MIN. REQS UNFACED FIBERGLASS INSULATION COMPLETELY FILLED IN CONCEALED CAVITY TO COMPLY WITH NFPA 13 CONCEALED SPACES. 25 MSG GALVANIZED RESILIENT CHANNELS, SPACED PER U.L.

• (1) LAYER OF 5/8" TYPE 'C' GWB PER UL

# ROOF/CEILING ASSEMBLY-WOOD

WOOD PARALLEL CHORD TRUSS - 1HR - TPO
 TPO ROOFING, PER SPECIFICATION TO MEET IECC

• 1/2" COVERBOARD, NON-COMBUSTIBLE, WATER-RESISTANT TAPERED INSULATION, SLOPE PER PLAN

• 15/32" MIN. ROOF SHEATHING, SEE NOTE b. WOOD TRUSS FRAMING PER STRUCT. DWGS, MAX SPACING 24" OC -REFERENCE UL FOR CONSTRUCTION

 R-38 INSULATION PER IECC, INSTALLED PER UL VAPOR BARRIER CLASS 1 ON UNDERSIDE OF TRUSS, AS REQUIRED • 25 MSG GALVANIZED STEEL RESILIENT CHANNELS, SPACED PER UL • (1) LAYER OF 5/8" TYPE 'AG-C' GWB, BY AMERICAN GYPSUM CO, PER UL

 WOOD FLAT 2X10 LUMBER - 1HR - TPO
 TPO ROOFING MEMBRANE PER SPECIFICATIONS TO MEET IECC 1/2" COVERBOARD, NON-COMBUSTIBLE, WATER-RESISTANT TAPERED INSULATION, SLOPE PER PLAN

R-20 RIGID INSULATION MIN. (OR NECESSARY TO MEET MIN. IECC REQUIREMENT) VAPOR BARRIER CLASS 1, SELF ADHERED TO SHEATHING, AS REQUIRED

 SHEATHING PER STRUCTURAL DWGS. WOOD 2X10 FRAMING SPACED PER STRUCTURAL R-19 BATT INSULATION

• (2) LAYERS OF 5/8" TYPE 'X' GWB. PER GA ASSEMBLY

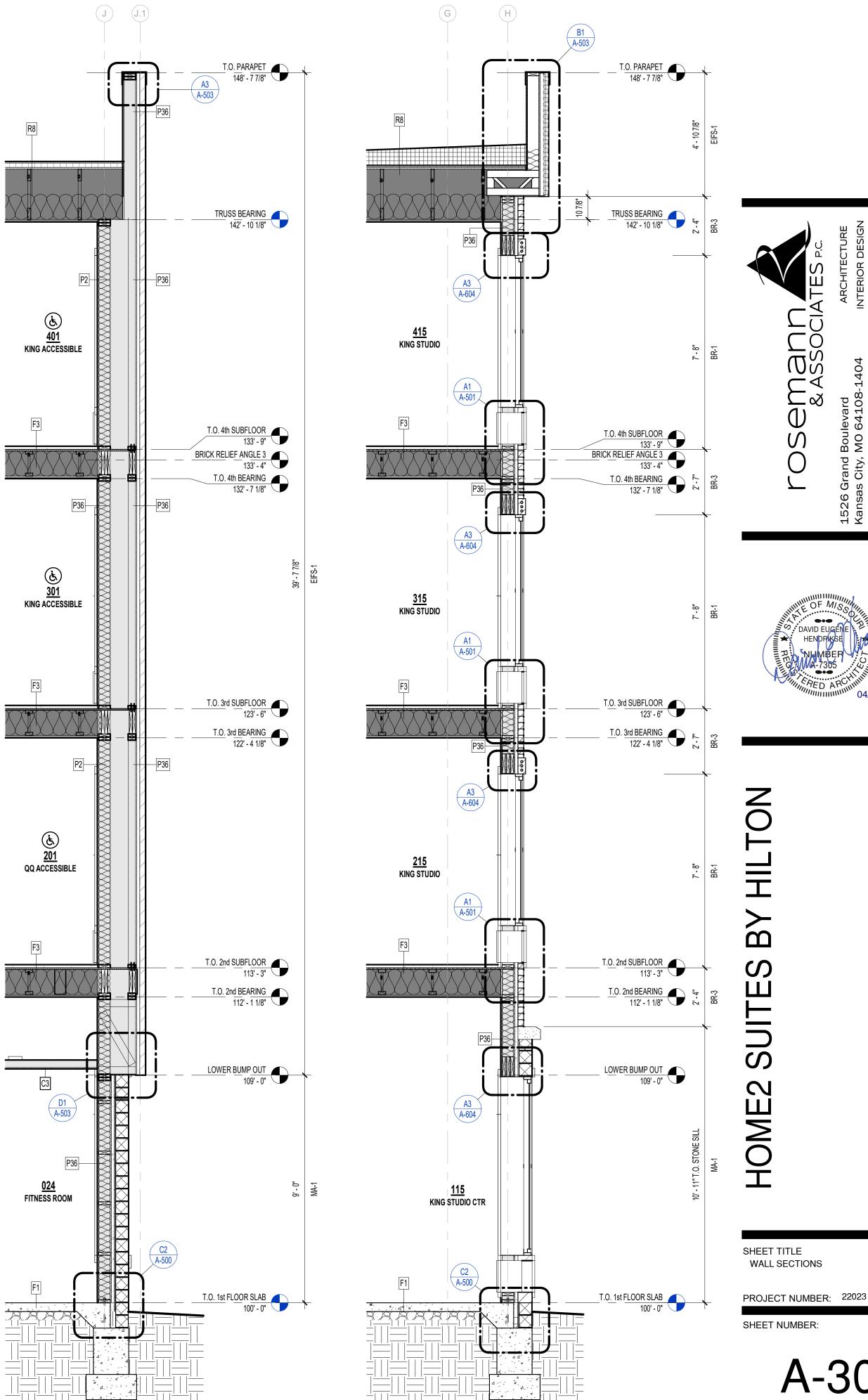
REFERENCE G-003 FOR GENERAL NOTES

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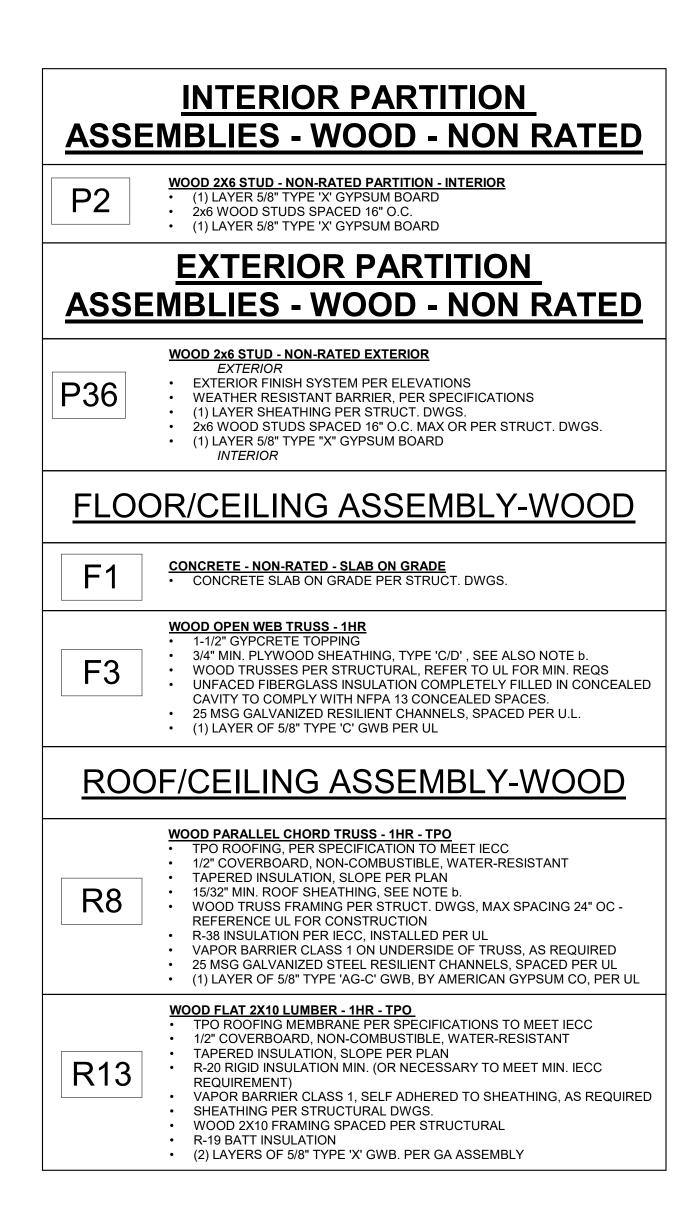
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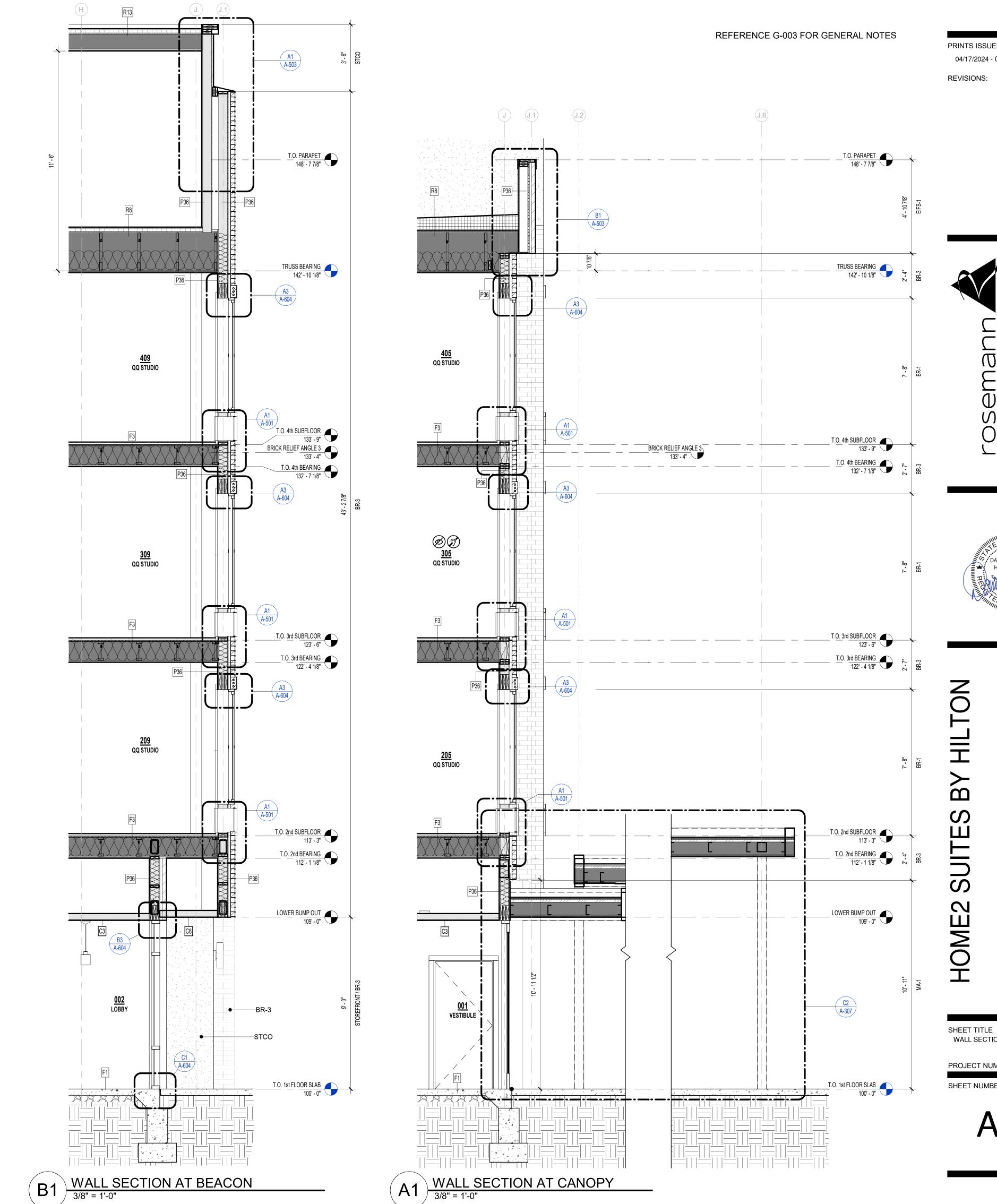
LEE'S SUMMIT

A-302



(A1) WALL SECTION TYPICAL
3/8" = 1'-0"





SHEET NUMBER:

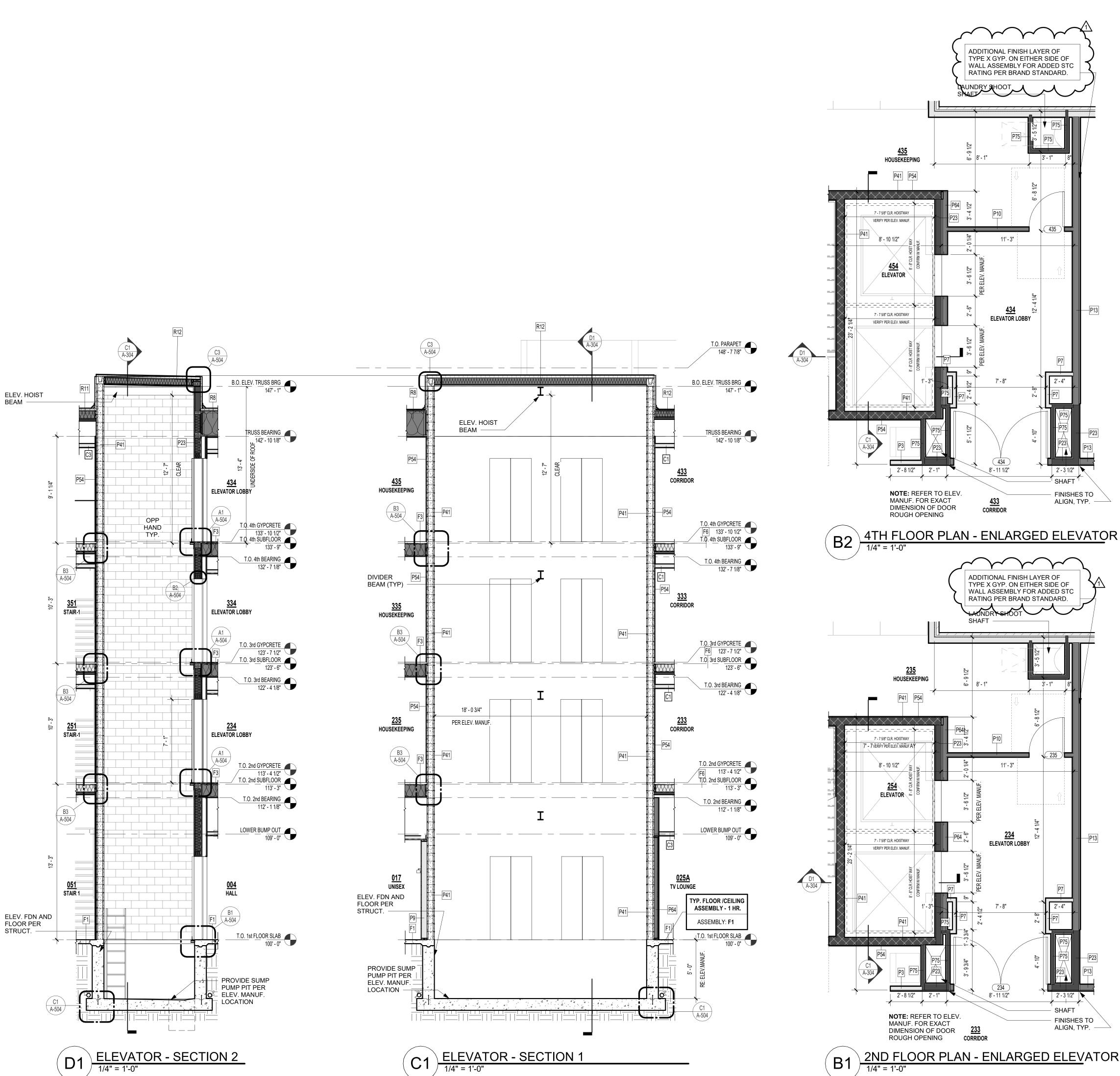
PROJECT NUMBER: 22023

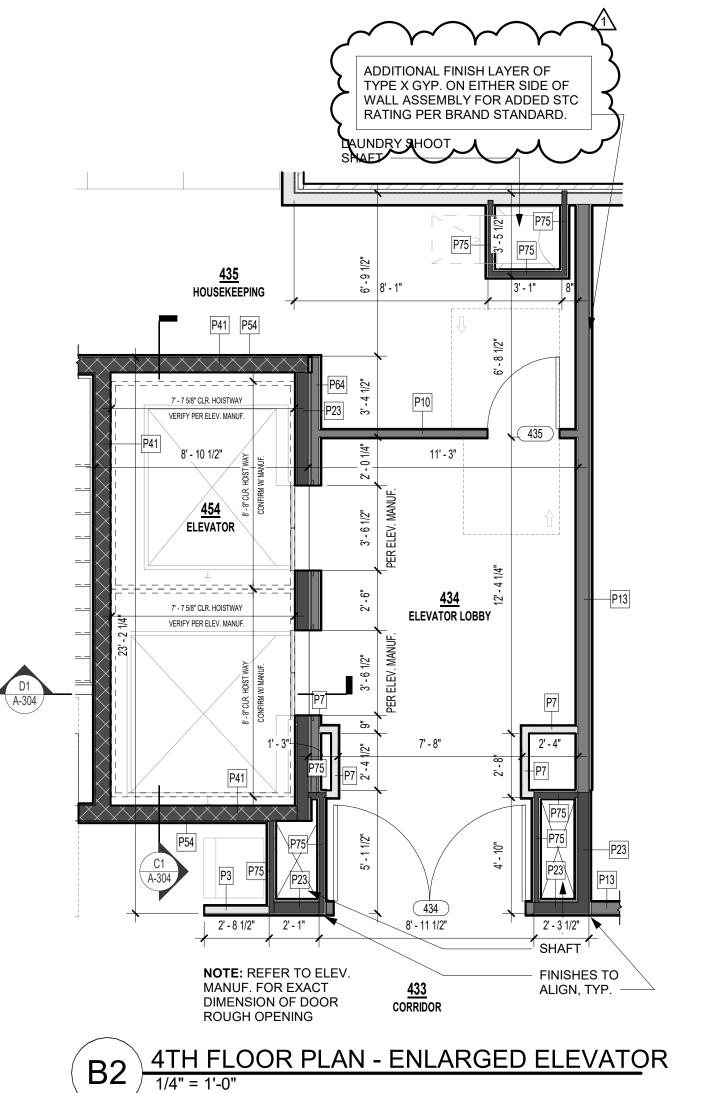
WALL SECTIONS

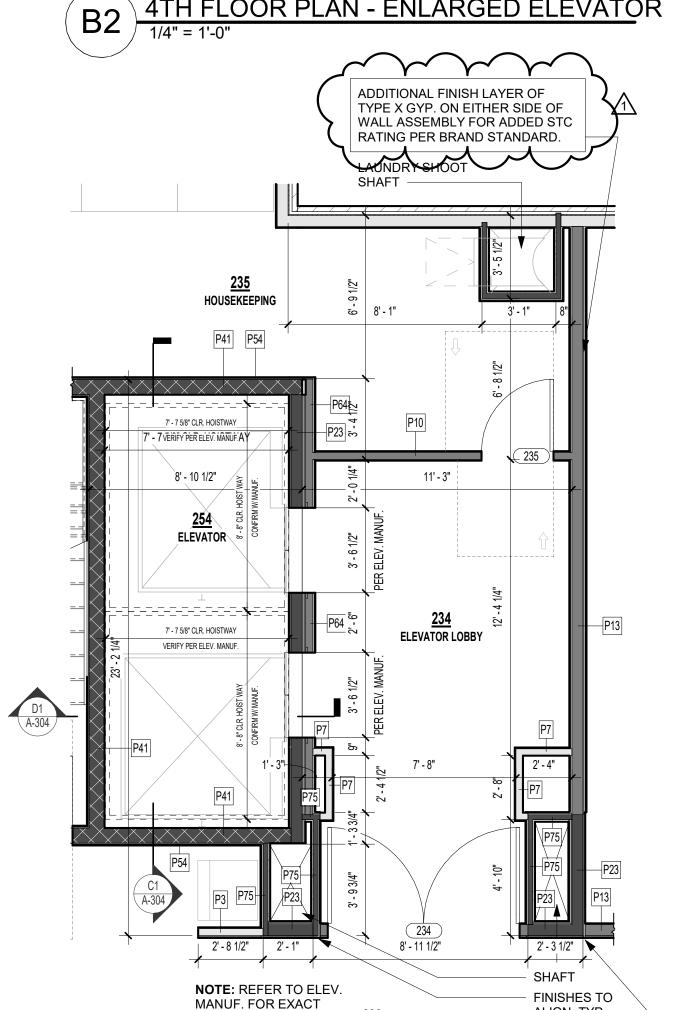
PRINTS ISSUED

04/17/2024 - CITY SUBMISSION

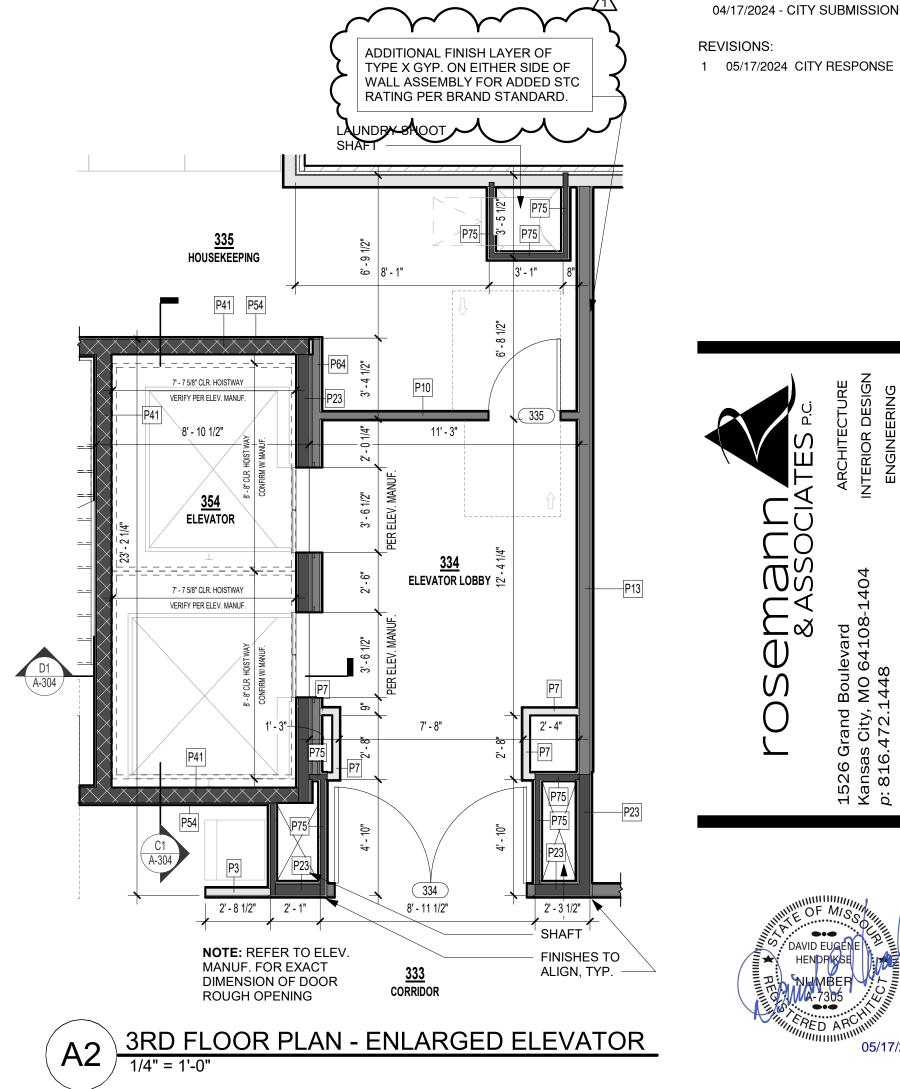
A-303







ALIGN, TYP. -



003 Vestibule

8' - 6 1/2"\

8' - 1"

7' - 7 5/8" CLR. HOISTWAY

VERIFY PER ELEV. MANUF.

7' - 7 5/8" CLR. HOISTWAY

VERIFY PER ELEV. MANUF.

**ELEVATORS** 

8' - 10 1/2" P64

REFERENCE G-003 FOR GENERAL NOTES

PRINTS ISSUED

B SUITES HOME2

<u>012</u>

DISCHARGE LAUNDRY

**REGISTRATION DESK** 

LEE'S

SHEET TITLE **ELEVATOR SECTIONS & DETAILS** 

PROJECT NUMBER: 22023

SHEET NUMBER:

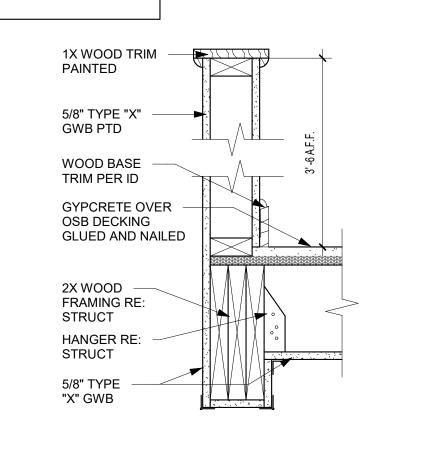
1ST FLOOR PLAN - ENLARGED ELEVATOR
1/4" = 1'-0"

7' - 6"

**NOTE:** REFER TO ELEV. MANUF. FOR EXACT

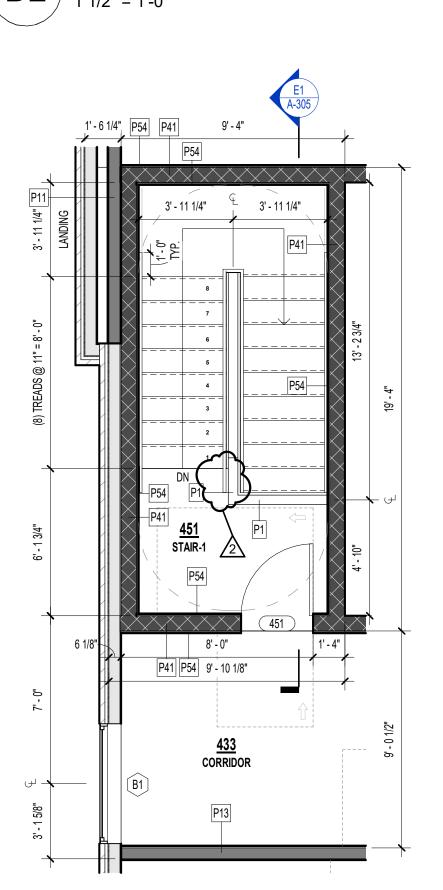
DIMENSION OF DOOR

**ROUGH OPENING** 

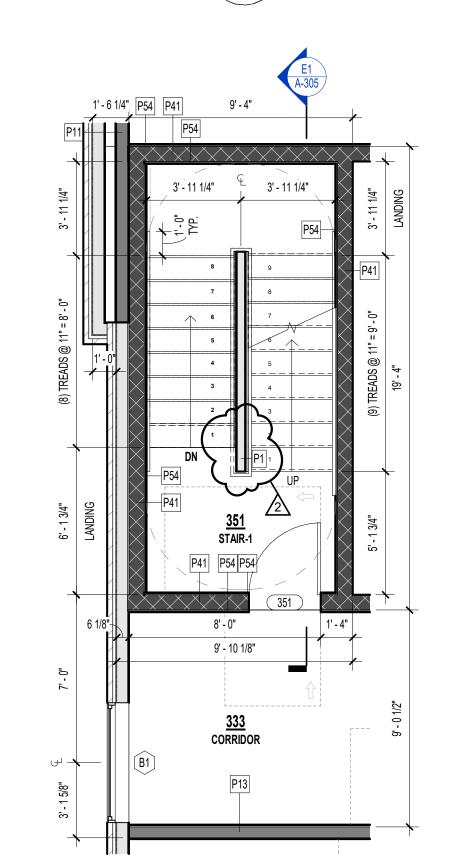


8" CMU (REINFORCING PER STRUCT)





4TH FLOOR PLAN - ENLARGED



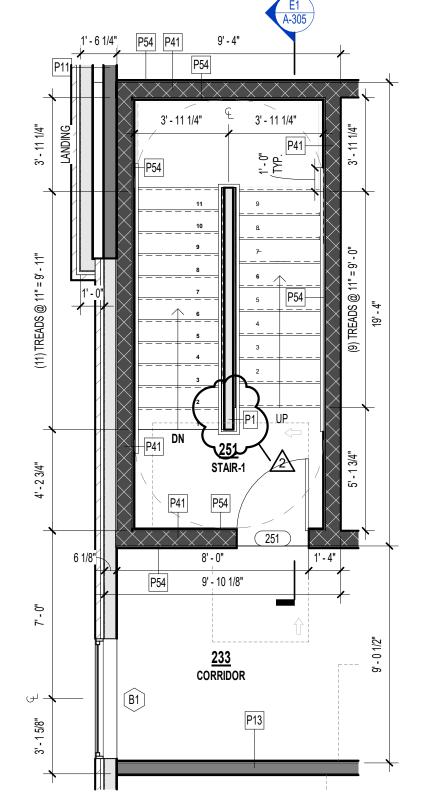
HEADER

RE: STRUCT

5/8" TYPE "X"

GWB; TYP.

3RD FLOOR PLAN - ENLARGED



2ND FLOOR PLAN - ENLARGED

<u>051</u> Stair 1

1ST FLOOR PLAN - ENLARGED

PRINTS ISSUED

04/17/2024 - CITY SUBMISSION

**REVISIONS:** 

2 06/14/2024 CITY & BRAND RESPONSE

DAVID EUGENE

BY HIL

SUITES

**HOME2** 

STAIR #1 SECTION & DETAILS

PROJECT NUMBER: 22023

SHEET NUMBER:

A-305

P54 \_\_\_\_\_\_

WOOD FLAT 2X6 LUMBER - 1HR - TOP OF ELEVATOR TPO ROOFING MEMBRANE PER SPECIFICATIONS TO MEET IECC • 1/2" COVERBOARD, NON-COMBUSTIBLE, WATER-RESISTANT TAPERED INSULATION, SLOPE PER PLAN R-20 RIGID INSULATION MIN. (OR NECESSARY TO MEET MIN. IECC

VAPOR BARRIER CLASS 1, SELF ADHERED TO SHEATHING, AS REQUIRED SHEATHING PER STRUCTURAL DWGS. WOOD 2X6 FRAMING SPACED PER STRUCTURAL

 R-19 BATT INSULATION • (2) LAYERS OF 5/8" TYPE 'X' GWB. PER GA ASSEMBLY

1" GYPCRETE **→** 2X TREAD OVER 3/4" OSB DECKING GLUED 3/4" PLY AND NAILED RISER 5/8" TYPE "X" GYP. BD. 2X WOOD FRAMING RE: STRUCT HEADER RE: STRUCT STAIR -BEYOND 5/8" TYPE "X" GYP. BD. 1/2" TYPE "X" GYP. BD.

STAIR PLATFORM DTL

LANDING AND TREAD

FINISH PER ID

NAILED

STRIPE

NOSING PROJECTION\_

WOOD STAIR AT TOP LANDING
1 1/2" = 1'-0"

2X4 NOSING

3/4" PLY RISER

WOOD TREAD

STRINGER

RE: STRUCT

JOIST HANGER

RE: STRUCT

VISUAL CONTRASTING

**GYPCRETE OVER DECKING GLUED AND** 

STAIR 1 SECTION

1/4" = 1'-0"

<u>025A</u> TV LOUNGE

**ASSEMBLIES - WOOD - NON RATED** 

WEATHER RESISTANT BARRIER, PER SPECIFICATIONS

• 2x6 WOOD STUDS SPACED 16" O.C. MAX OR PER STRUCT, DWGS.

TRUSS BEARING \_\_\_\_

T.O. 4th SUBFLOOR 133' - 9" T.O. 4th BEARING 132' - 7 1/8"

T.O. 3rd SUBFLOOR 123' - 6" T.O. 3rd BEARING 122' - 4 1/8"

T.O. 2nd SUBFLOOR 113' - 3" T.O. 2nd BEARING

GYP. FINISH, TYP.

HOUSEKEEPING

**WOOD 2x6 STUD - NON-RATED EXTERIOR** 

EXTERIOR FINISH SYSTEM PER ELEVATIONS

(1) LAYER SHEATHING PER STRUCT. DWGS.

(1) LAYER 5/8" TYPE "X" GYPSUM BOARD

STAIR 1 1/4" = 1'-0"

FLOOR/CEILING ASSEMBLY-WOOD

CONCRETE - NON-RATED - SLAB ON GRADE
 CONCRETE SLAB ON GRADE PER STRUCT. DWGS.

WOOD 2X8 LUMBER - 1HR - CORRIDOR

• (2) LAYERS OF 5/8" TYPE 'X' GWB PER IBC

WOOD OPEN WEB TRUSS - 1HR
1-1/2" GYPCRETE TOPPING

• 3/4" MIN. PLYWOOD SHEATHING, TYPE 'C/D', SEE ALSO NOTE b. • WOOD TRUSSES PER STRUCTURAL, REFER TO UL FOR MIN. REQS UNFACED FIBERGLASS INSULATION COMPLETELY FILLED IN CONCEALED CAVITY TO COMPLY WITH NFPA 13 CONCEALED SPACES.

 25 MSG GALVANIZED RESILIENT CHANNELS, SPACED PER U.L • (1) LAYER OF 5/8" TYPE 'C' GWB PER UL

• 1-1/2" GYPCRETE TOPPING 3/4" SHEATHING MIN, SEE NOTE b. 2X8 WOOD JOISTS SPACED PER STRUCTURAL UNFACED FIBERGLASS INSULATION COMPLETELY FILLED IN CONCEALED

CAVITY TO COMPLY WITH NFPA 13 CONCEALED SPACES.

### INTERIOR ASSEMBLIES -**ROOF/CEILING ASSEMBLY-WOOD CMU / CONCRETE**

CMU 8" BLOCK - 2HR FIRE BARRIER - INTERIOR 8" CMU (REINFORCING PER STRUCT)

EXTERIOR SHAFT

(1) LAYER 1" SHAFT WALL LINER

INTERIOR SHAFT

2-1/2" C-H STUDS SPACED 24" O.C.

# **EXTERIOR ASSEMBLIES -CMU / CONCRETE**

**INTERIOR PARTITION ASSEMBLIES** 

(METAL-NON-RATED)

**INTERIOR PARTITION ASSEMBLIES** 

(METAL-2 HR RATED)

METAL 2 1/2" C-H STUD - 2HR RATED SHAFT - INTERIOR

(2) LAYERS 5/8" TYPE 'X' GYPSUM BOARD PER UL

• (1) LAYER 5/8" TYPE 'X' GYPSUM BOARD

METAL 1/2" FURRING / HAT CHANNEL - NON-RATED FURRING - INTERIOR

• 1/2" FURRING / HAT CHANNEL, SPACED 16" O.C. (GAUGE DETERMINED BY

CMU 8" BLOCK - NON-RATED - EXTERIOR (AT STAIRS)

EXTERIOR FINISH SYSTEM PER ELEVATIONS - BRICK SHOWN WEATHER RESISTANT BARRIER PER SPECIFICATIONS R VALUE PER IECC AS INDICATED ON DRAWINGS / SPECIFICATIONS (1) LAYER SHEATHING PER STRUCT. DRAWINGS 8" CMU (REINFORCING PER STRUCT)

 RESILIENT CHANNEL (1) LAYER 5/8" TYPE "X" GYPSUM BOARD

 WOOD PARALLEL CHORD TRUSS - 1HR - TPO
 TPO ROOFING, PER SPECIFICATION TO MEET IECC 1/2" COVERBOARD, NON-COMBUSTIBLE, WATER-RESISTANT TAPERED INSULATION, SLOPE PER PLAN 15/32" MIN. ROOF SHEATHING, SEE NOTE b. WOOD TRUSS FRAMING PER STRUCT. DWGS, MAX SPACING 24" OC -

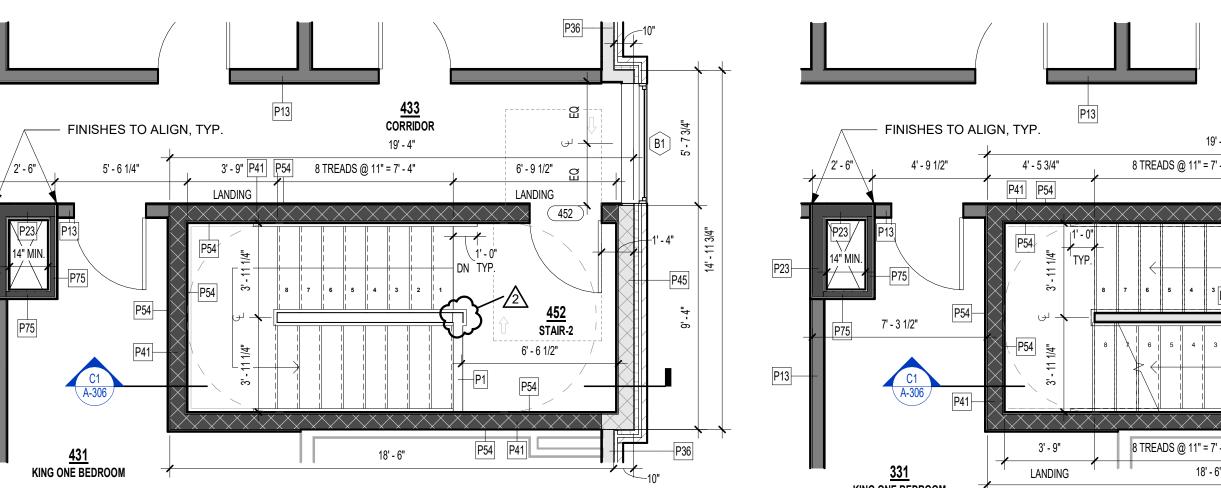
REFERENCE UL FOR CONSTRUCTION R-38 INSULATION PER IECC. INSTALLED PER UL VAPOR BARRIER CLASS 1 ON UNDERSIDE OF TRUSS, AS REQUIRED 25 MSG GALVANIZED STEEL RESILIENT CHANNELS, SPACED PER UL

(1) LAYER OF 5/8" TYPE 'AG-C' GWB, BY AMERICAN GYPSUM CO. PER UL

 WOOD FLAT 2X8 LUMBER - 1HR - TPO
 TPO ROOFING MEMBRANE PER SPECIFICATIONS TO MEET IECC 1/2" COVERBOARD, NON-COMBUSTIBLE, WATER-RESISTANT TAPERED INSULATION, SLOPE PER PLAN R-20 RIGID INSULATION MIN. (OR NECESSARY TO MEET MIN. IECC REQUIREMENT)

 VAPOR BARRIER CLASS 1, SELF ADHERED TO SHEATHING, AS REQUIRED SHEATHING PER STRUCTURAL DWGS. WOOD 2X8 FRAMING SPACED PER STRUCTURAL R-19 BATT INSULATION (2) LAYERS OF 5/8" TYPE 'X' GWB. PER GA ASSEMBLY

ALL HANDRAILS AT DIVIDER WALL TO BE CONTINUOUS. ALL HANDRAIL EXTENSIONS TO COMPLY WITH I.B.C. 1014.6.



4TH FLOOR PLAN - ENLARGED STAIR 2

**INTERIOR PARTITION** 

**ASSEMBLIES - WOOD - NON RATED** 

**INTERIOR PARTITION** 

**ASSEMBLIES - WOOD - 1 HR RATED** 

25 MSG GALVANIZED STEEL RESILIENT CHANNEL, 24" O.C.

**INTERIOR BARRIER ASSEMBLIES -**

**WOOD - 2 HR RATED** 

WOOD 2X6 STUD - 1HR PARTITION - INTERIOR SOUND DAMPENING

• 2x6 WOOD STUDS SPACED 16" O.C. MAX. OR PER STRUCT. DWGS.

5-1/2" FRICTION FIT UNFACED BATT INSULATION IN STUD CAVITY

2x6 WOOD STUDS SPACED 16" O.C. MAX OR PER STRUCT. DWGS.

**WOOD 2X4 STUD - NON-RATED PARTITION - INTERIOR** 

• (1) LAYER 5/8" TYPE 'X' GYPSUM BOARD

• (1) LAYER 5/8" TYPE 'X' GYPSUM BOARD

• (1) LAYER 5/8" TYPE "X" GYPSUM BOARD

(1) LAYER 5/8" TYPE "X" GYPSUM BOARD

WOOD 2X6 STUD - 2HR BARRIER - INTERIOR(2) LAYERS 5/8" TYPE "X" GYPSUM BOARD

• (2) LAYERS 5/8" TYPE "X" GYPSUM BOARD

**WOOD 2x6 STUD - NON-RATED EXTERIOR** 

EXTERIOR FINISH SYSTEM PER ELEVATIONS

(1) LAYER SHEATHING PER STRUCT. DWGS.

25 MSG GALVANIZED RESILIENT CHANNEL, 24" O.C.

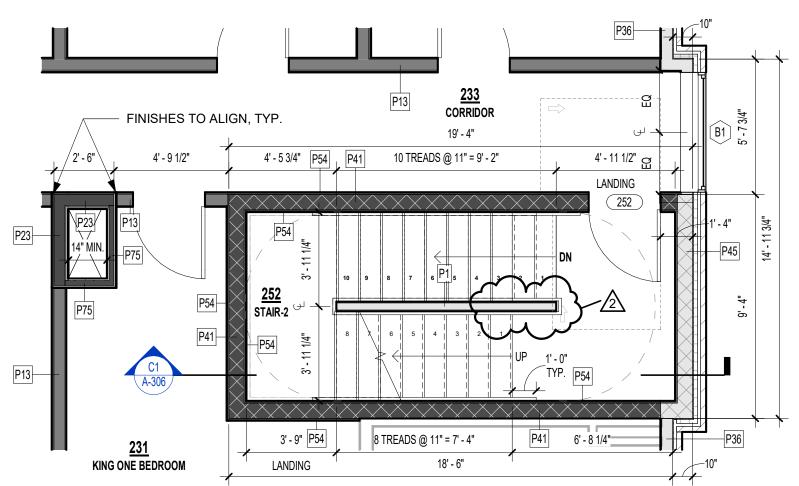
• 5-1/2" FRICTION FIT BATT INSULATION IN STUD CAVITY

**EXTERIOR PARTITION** 

**ASSEMBLIES - WOOD - NON RATED** 

WEATHER RESISTANT BARRIER, PER SPECIFICATIONS

2x4 WOOD STUDS SPACED 16" O.C.



2ND FLOOR PLAN - ENLARGED STAIR 2 1/4" = 1'-0" **B**1

133 GUEST CORRIDOR FINISHES TO ALIGN, TYP.

1ST FLOOR PLAN - ENLARGED

CORRIDOR 19' - 4" 8 TREADS @ 11" = 7' - 4" 331
KING ONE BEDROOM

> 3RD FLOOR PLAN - ENLARGED STAIR 2 1/4" = 1'-0"

131 KING ONE BEDROOM

STAIR 2 1/4" = 1'-0"

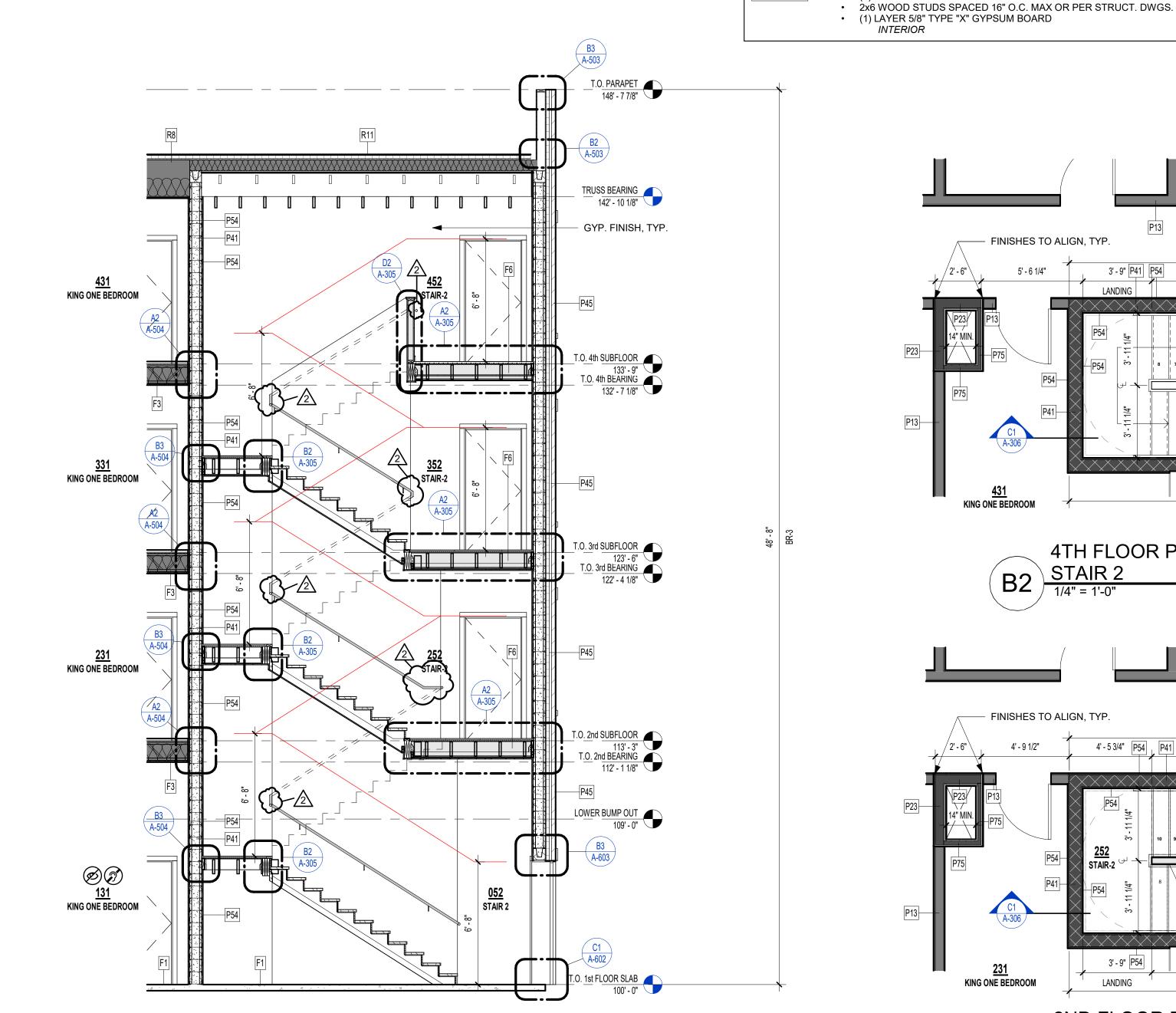
BY HILTON

**HOME2** 

SHEET TITLE STAIR #2 SECTION & DETAILS

PROJECT NUMBER: 22023

A-306



STAIR 2 SECTION

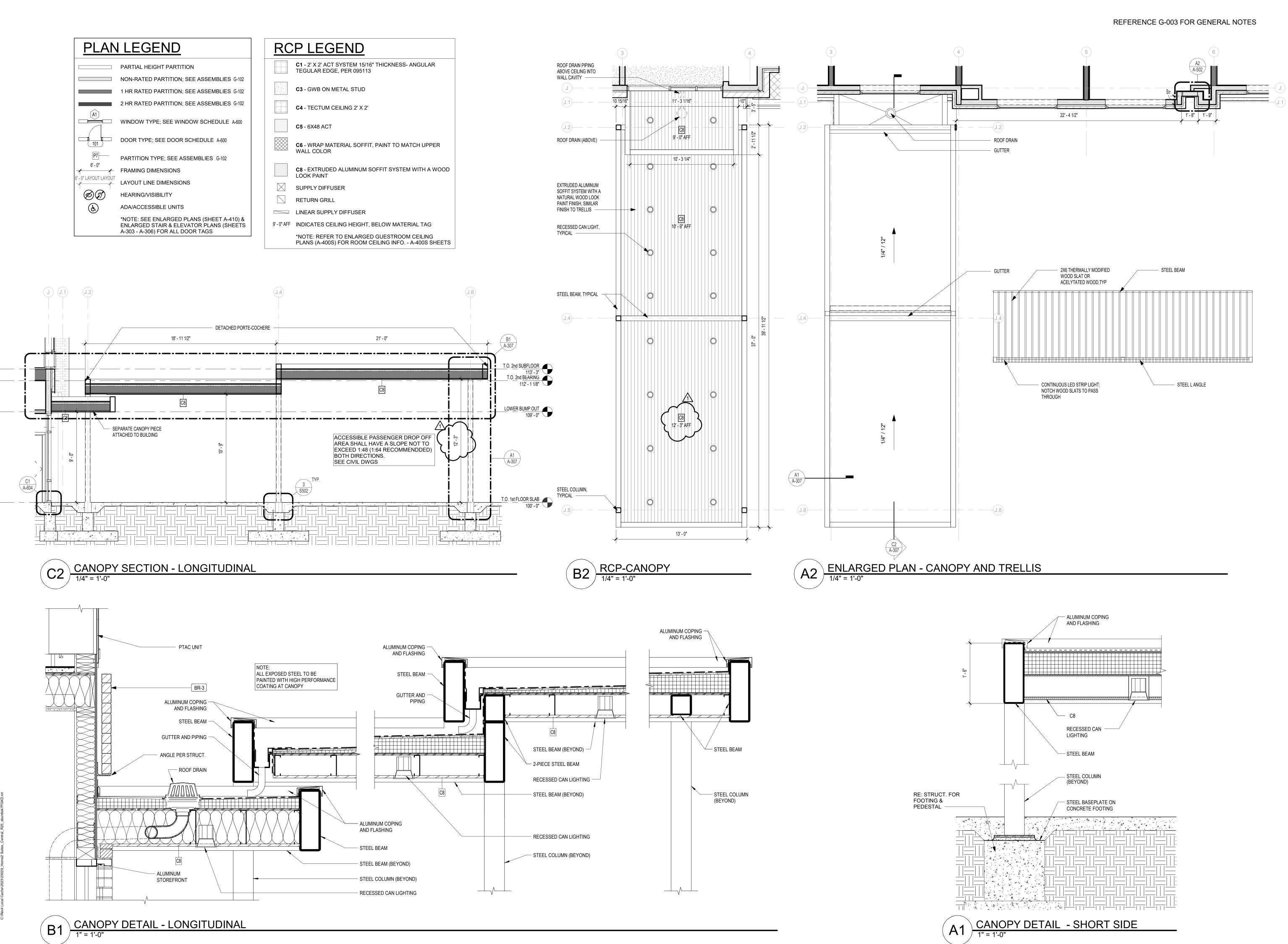
2 06/14/2024 CITY & BRAND RESPONSE

04/17/2024 - CITY SUBMISSION

PRINTS ISSUED

**REVISIONS:** 

SHEET NUMBER:



PRINTS ISSUED 04/17/2024 - CITY SUBMISSION

REVISIONS: 1 05/17/2024 CITY RESPONSE

BY

SUITES

**HOME2** 

SHEET TITLE FRONT CANOPY PLAN / ELEV. SECTION / & DETAILS

PROJECT NUMBER: 22023 SHEET NUMBER:

A-307

emanr & ASSOC

2 06/14/2024 CITY & BRAND RESPONSE

CPT-01 -- CARPET TILE

T-01 -- TILE

C3 - GWB ON METAL STUD

RETURN GRILL

INDICATES CEILING HEIGHT, BELOW MATERIAL TAG

**KEYNOTE LEGEND** 

TO BE MOUNTED INSIDE WINDOW OPENING SHOWER ENCLOSURE W/TEMPERED GLASS DOOR PREMANUFACTURED SHOWER PAN

DEDICATED CIRCUIT FOR DISHWASHER RANGE TOP STYLE MICROWAVE AFFIXED TO WALL

ROOM REQUIREMENTS DEDICATED CIRCUIT FOR GARBAGE DISPOSAL

FIRE HORN IN STANDARD ROOMS. FIRE HORN/STROBE IN COMMUNICATION FEATURES

TOILET EXHAUST GRILLE MAKE-UP AIR DIFFUSER

ROOM SIGNAGE HARD WIRED THERMOSTAT FOR PTAC. MOUNTED 48" MAX TO TOP OF DEVICE. COMMUNICATION BETWEEN THERMOSTAT AND PTAC MAY BE WIRELESS.

EXTEND J-BOX, DEVICE & COVER PLATE FLUSH W/ MILLWORK BACK PANEL

FEATURES ROOMS ONLY) SIGNAGE AS REQ'D. EDGE OF PTAC ABOVE CARPET TILES MIN. CEILING HEIGHT MUST BE MAINTAINED - REFER

TO HOME 2 SUITES BY HILTON STANDARDS MANUAL FRAMING SUBCONTRACTOR TO PROVIDE 3/4" F.R.T. PLYWOOD BLOCKING TO RECEIVE ITEM INDICATED -EXTEND FULL LENGTH OF OBJECT

ELEVATION MOUNT DEVICE HORIZONTALLY--FACE PLATE TO BE WHITE

GRAPHIC ART. REFER TO ACCESSORIES LEGEND & CONSTRUCTION PLAN

WAP IN 3-GANG BOX MOUNTED VERTICALLY UNDER DESK. MAINTAIN 6" BETWEEN ALL BOXES, TYP ALL GUESTROOMS. COORDINATE WAP LOCATION WITH CASEGOODS TO AVOID CONFLICTS. VISIT CONNECTEDROOM.HILTON.COM FOR CURRENT WIRELESS INTERNET REQ'S AND LIST OF APPROVED INTEGRATORS.

EACH CABLE MUST HOMERUN BETWEEN THE GUESTROOM AND THE IDF ON EACH FLOOR. VISIT CONNECTEDROOM.HILTON.COM FOR CURRENT REQUIREMENTS AND OPTIONS.

CAT6 RJ-45 ABOVE THE DESK (36" AFF), RUN IN SMURF TUBE IN THE WALL TO THE WAP UNDER THE

TV CONNECTIONS FOR FREE-TO-GUEST CONTENT: A) NO SMART TV:COAX CABLE BEHIND TV. CAT6 RJ-45 JACK BEHIND TV, RUN IN SMURF TUBE IN WALL TO WAP UNDER DESK. PATCH CORD TO EDGE CONTROLLER FOR CONNECTED ROOM. MIN. 6" CLEARANCE FROM WALL BOXES - OR - B) SMART TV-INTERNET PROTOCOL TELEVISION (IPTV); COAX NOT REQ'D. CAT6 RJ-45 JACK BEHIND TV RÚN IN SMURF TUBE IN WALL TO WAP UNDER DESK. PATCH CORD TO EDGE CONTROLLER FOR CONNECTED ROOM. CAT6 RJ-45 JACK BEHIND TV IN ONE-BEDROOM TV. MIN. 6" CLEARANCE FROM WALL BOXES. VISIT HILTONHDTV.COM FOR ADDITIONAL

**UNIT PLAN LEGEND** 

PARTIAL HEIGHT PARTITION <u>P1</u> WALL (UNLESS NOTED OTHERWISE); SEE PARTITION SCHEDULE FOR ASSEMBLY INFORMATION PT-01 FINISH TAG

101 DOOR TAG ACCESSIBLE ROUTE (36" CLEAR; 32" MIN REQ'D @ DOOR **OPENING PER ANSI A117.1)** 

**UNIT FINISH LEGEND** 

CPT-02 -- CARPET TILE

UNIT RCP LEGEND

9' - 0" AFF

MANUAL BLACK OUT ROLLER SHADE TO EXTEND 6" BEYOND WINDOW OPENING; SHEER ROLLER SHADE

SWITCH CONTROLLING GARBAGE DISPOSAL GANGED WITH DUPLEX - REFER TO HADG FOR ACCESSIBLE

6' - 0 1/2"

A-501

< 32 >< 12 >

1' - 3 1/2"-

\_-·-·4·--

B2 **A-402** B1

18' - 0 1/2"

STAIR 2

19' - 4"

DOORBELL ON/OF SWITCH (COMMUNICATION

OUTLET ABOVE FOR MICROWAVE - REFER TO ROOM

CENTER ARTWORK OVER SOFA

WIRED DATA CONNECTION FOR GUEST USE: PROVIDE

INFORMATION.

PROVIDE HINGE STOP AT DOOR HARDWIRED BLACK OUT ROLLER SHADE WITH NO EXPOSED WIRES

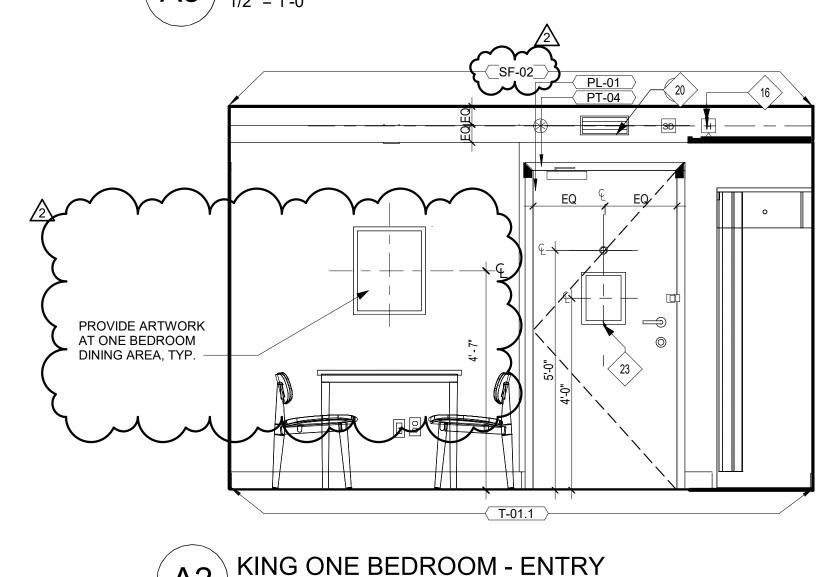
 $\Box$ HOME!

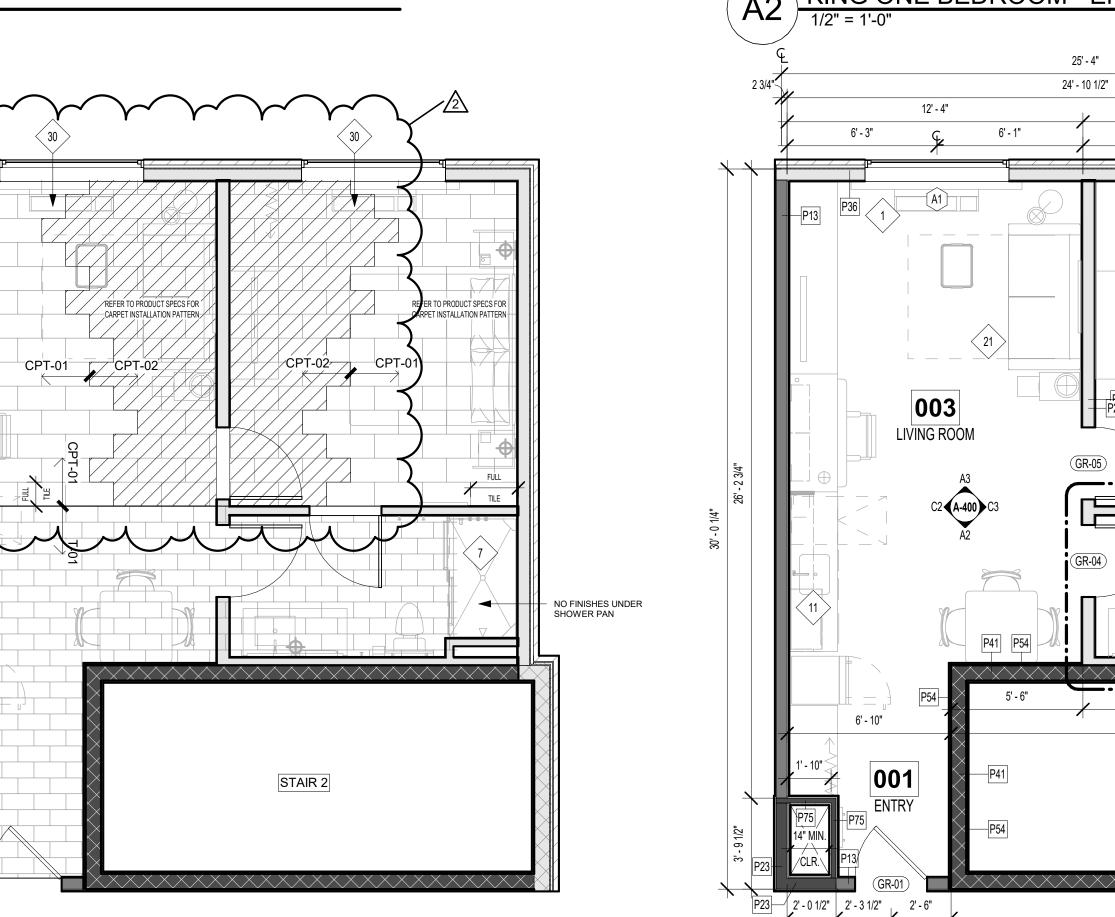
SHEET TITLE KING ONE BEDROOM SUITE

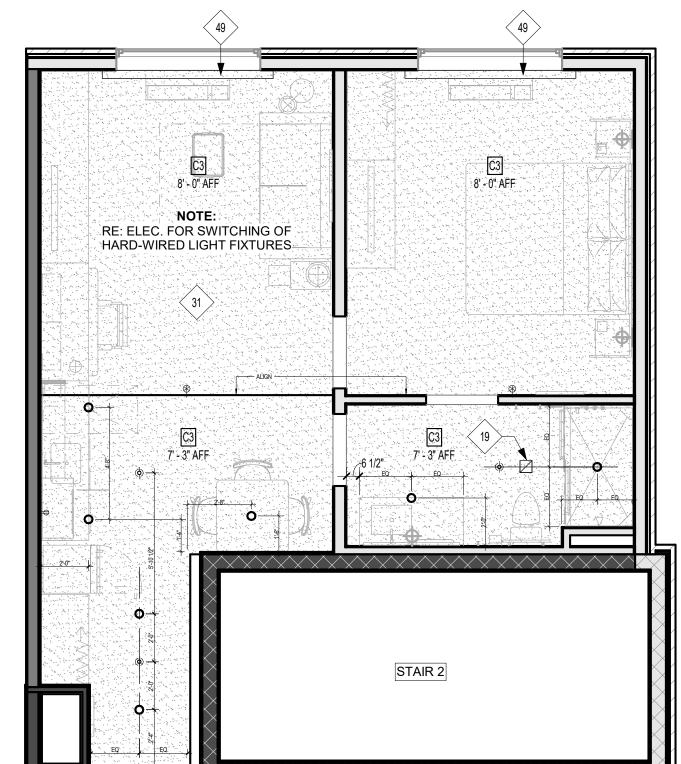
PROJECT NUMBER: 22023 SHEET NUMBER:

4 -(CPT-01.1)

KING ONE BEDROOM - WINDOW NA







KING ONE BEDROOM - WORKING WALL

PT-02

─<u>(T-01.1</u>

ALIGN WALL DEVICES (CT ON SOFFIT) (TYP.)

1/4" = 1'-0"

KING ONE BEDROOM SUITE - RCP

KING ONE BEDROOM SUITE - FLOOR PLAN

√CPT-01.1

KING ONE BEDROOM - HEADBOARD WALL

DEDICATED CIRCUIT FOR DISHWASHER

DUPLEX - REFER TO HADG FOR ACCESSIBLE ROOM

UNIT PLAN LEGEND

FINISH TAG

DOOR TAG

ACCESSIBLE ROUTE

UNIT FINISH LEGEND

CPT-01 -- CARPET TILE

CPT-02 -- CARPET TILE

T-01 -- TILE

**UNIT RCP LEGEND** 

**RETURN GRILL** 

MATERIAL TAG

C3 - GWB ON METAL STUD

INDICATES CEILING HEIGHT, BELOW

**OPENING PER ANSI A117.1)** 

PT-01

101

9' - 0" AFF

REAR DRAIN AT TYPE A

RE: ELEC. FOR SWITCHING OF

HARD-WIRED LIGHT FIXTURES

8' - 0" AFF

PARTIAL HEIGHT PARTITION

SEE PARTITION SCHEDULE FOR ASSEMBLY INFORMATION

(36" CLEAR; 32" MIN REQ'D @ DOOR

P1 WALL (UNLESS NOTED OTHERWISE):

TO TOP OF DEVICE. COMMUNICATION BETWEEN THERMOSTAT AND PTAC MAY BE WIRELESS.

EDGE OF PTAC ABOVE CARPET TILES MIN. CEILING HEIGHT MUST BE MAINTAINED - REFER TO HOME 2 SUITES BY HILTON STANDARDS MANUAL

FULL LENGTH OF OBJECT SWITHES CONTROLLING MECHANICAL SHADES - REFER TO

FFE MANUAL

WAP IN 3-GANG BOX MOUNTED VERTICALLY UNDER DESK. MAINTAIN 6" BETWEEN ALL BOXES, TYP ALL GUESTROOMS. CONFLICTS. VISIT CONNECTEDROOM.HILTON.COM FOR

EACH CABLE MUST HOMERUN BETWEEN THE GUESTROOM AND THE IDF ON EACH FLOOR. VISIT CONNECTEDROOM.HILTON.COM FOR CURRENT

TV CONNECTIONS FOR FREE-TO-GUEST CONTENT: A) NO SMART TV:COAX CABLE BEHIND TV. CAT6 RJ-45 JACK BEHIND TV, RUN IN SMURF TUBE IN WALL TO WAP UNDER DESK. PATCH CORD TO EDGE CONTROLLER FOR CONNECTED ROOM. MIN. 6" CLEARANCE FROM WALL BOXES - OR - B) SMART TV-INTERNET PROTOCOL TELEVISION (IPTV); COAX NOT REQ'D. CAT6 RJ-45 JACK BEHIND TV RUN IN SMURF TUBE IN WALL TO WAP UNDER

DESK. PATCH CORD TO EDGE CONTROLLER FOR CONNECTED ROOM. CAT6 RJ-45 JACK BEHIND TV IN ONE-BEDROOM TV. MIN. 6" CLEARANCE FROM WALL BOXES. VISIT HILTONHDTV.COM FOR ADDITIONAL INFORMATION.

PROVIDE HINGE STOP AT DOOR HARDWIRED BLACK OUT ROLLER SHADE WITH NO EXPOSED

OTHERS

25' - 4" 24' - 10 1/2"

C3 (A-402) B3

BEDROOM

BATHROOM

11' - 3 1/2"

003

LIVING ROOM

C2 (A-401) C3

A-402

5' - 7 1/2"

5' - 8"

REFERENCE A-600 FOR DOOR & WINDOW SCHEDULES **KEYNOTE LEGEND** PREMANUFACTURED SHOWER PAN

SWITCH CONTROLLING GARBAGE DISPOSAL GANGED WITH

DEDICATED CIRCUIT FOR GARBAGE DISPOSAL TOILET EXHAUST GRILLE

EXTENT OF SLEEPER SOFA HARD WIRED THERMOSTAT FOR PTAC. MOUNTED 48" MAX

EXTEND J-BOX, DEVICE & COVER PLATE FLUSH W/ MILLWORK BACK PANEL

FRAMING SUBCONTRACTOR TO PROVIDE 3/4" F.R.T. PLYWOOD BLOCKING TO RECEIVE ITEM INDICATED - EXTEND

CENTER ARTWORK OVER SOFA COUNTERTOP MICROWAVE

GRAPHIC ART. REFER TO ACCESSORIES LEGEND & CONSTRUCTION PLAN

COORDINATE WAP LOCATION WITH CASEGOODS TO AVOID CURRENT WIRELESS INTERNET REQ'S AND LIST OF APPROVED INTEGRATORS.

REQUIREMENTS AND OPTIONS.

RJ-45 ABOVE THE DESK (36" AFF), RUN IN SMURF TUBE IN THE WALL TO THE WAP UNDER THE DESK.

WIRED DATA CONNECTION FOR GUEST USE: PROVIDE CAT6

PROVIDE OUTLET FOR UNDERCABINET LIGHTING BY

PRINTS ISSUED

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2 06/14/2024 CITY & BRAND RESPONSE



# BY HILTON



SUITES

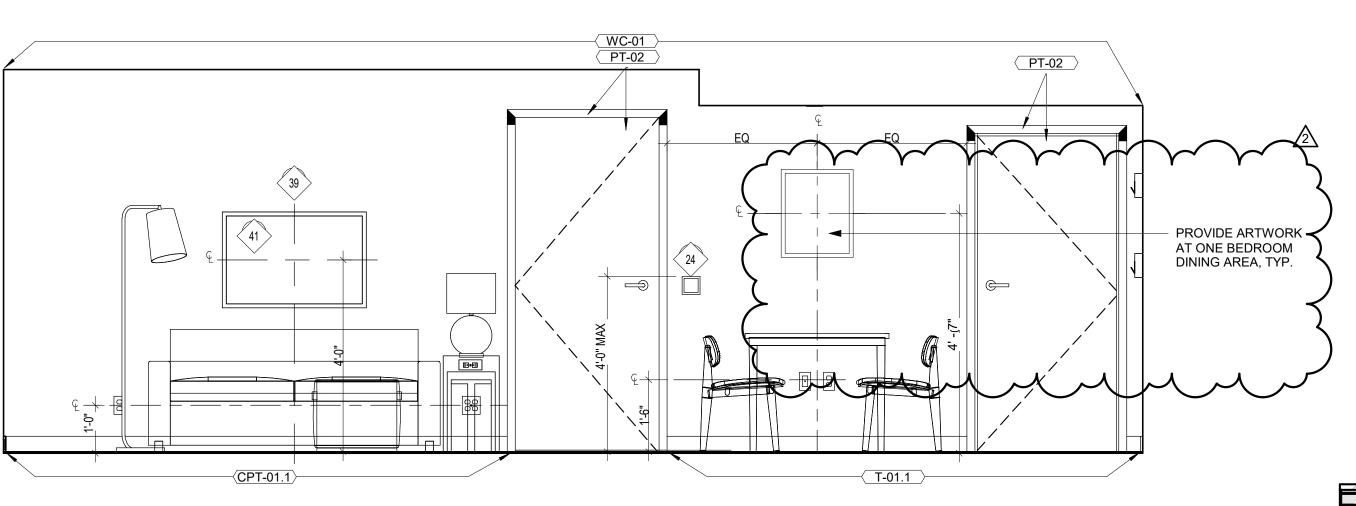
HOME2 SHEET TITLE

KING ONE BEDROOM SUITE ACCESSIBLE PROJECT NUMBER: 22023

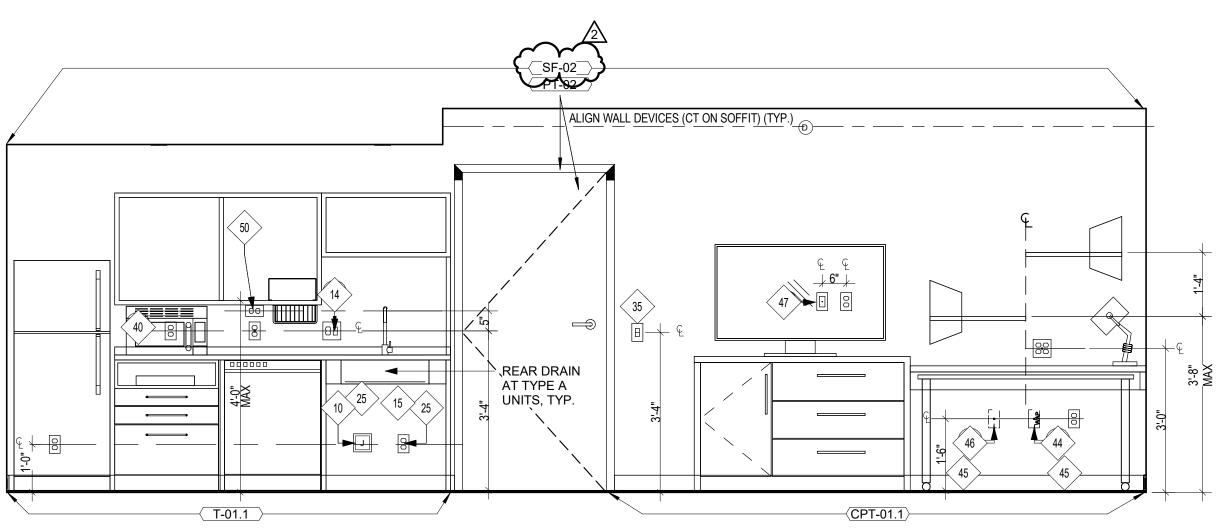
SHEET NUMBER:

A-401

KING ONE BEDROOM SUITE - ACCESSIBLE -FLOOR PLAN 1/4" = 1'-0"



KING ONE BED ACC. - SOFA & DINING



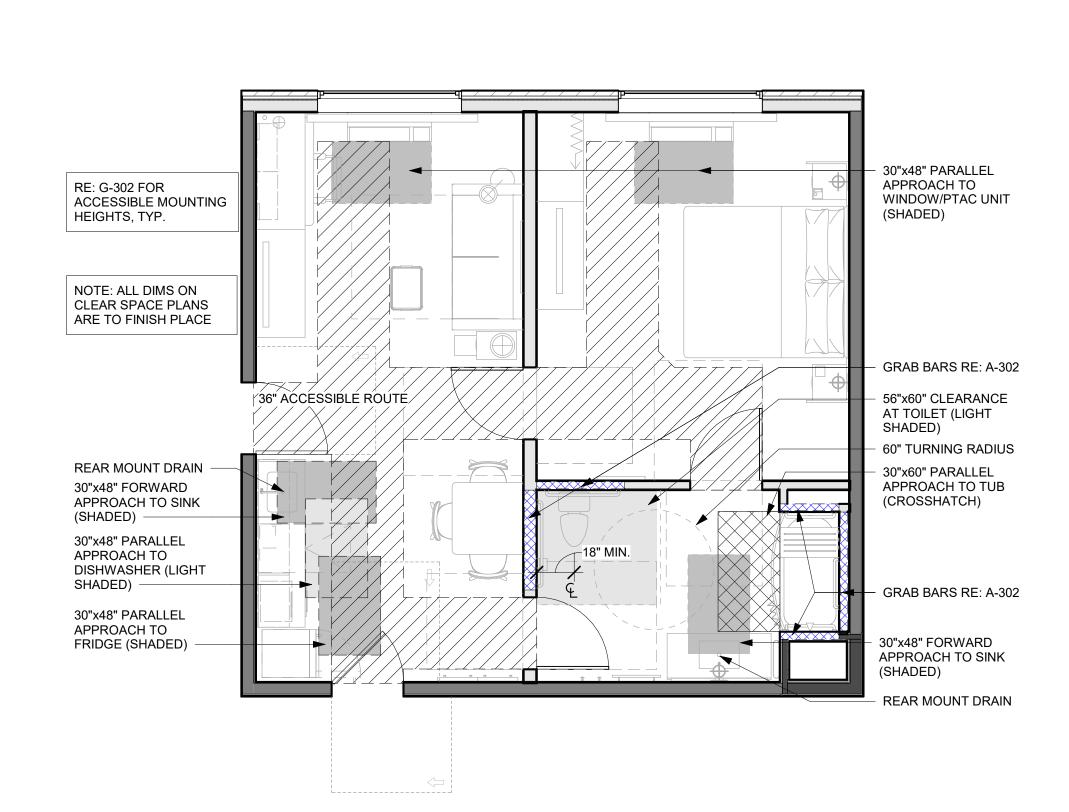
REFER TO PRODUCT SPECS FOR

NO FINISHES UNDER

SHOWER PAN

(C2) KING ONE BED ACC. - WORKING WALL

REFER TO PRODUCT SPE



B2 RCP

8' - 0" AFF

KING ONE BEDROOM SUITE - ACCESSIBLE -

KING ONE BEDROOM SUITE - ACCESSIBLE -

KING ONE BEDROOM SUITE - ACCESSIBLE -

CLEAR SPACE PLAN
1/4" = 1'-0"

MANUAL BLACK OUT ROLLER SHADE TO EXTEND 6" BEYOND WINDOW OPENING; SHEER ROLLER SHADE TO BE MOUNTED INSIDE WINDOW OPENING

FIRE HORN IN STANDARD ROOMS. FIRE HORN/STROBE IN COMMUNICATION FEATURES

MAKE-UP AIR DIFFUSER

4

KING ONE BEDROOM - BEDROOM

WINDOW 1/2" = 1'-0"

**ROOM SIGNAGE** HARD WIRED THERMOSTAT FOR PTAC. MOUNTED 48" MAX TO TOP OF DEVICE. COMMUNICATION BETWEEN

THERMOSTAT AND PTAC MAY BE WIRELESS. 47 TV CONNECTIONS FOR FREE-TO-GUEST CONTENT: A) NO SMART TV:COAX CABLE BEHIND TV. CAT6 RJ-45 JACK BEHIND TV, RUN IN SMURF TUBE IN WALL TO WAP UNDER DESK. PATCH CORD TO EDGE CONTROLLER FOR CONNECTED ROOM. MIN. 6" CLEARANCE FROM WALL BOXES - OR - B) SMART TV-INTERNET PROTOCOL TELEVISION (IPTV); COAX NOT REQ'D. CAT6 RJ-45 JACK BEHIND TV RUN IN SMURF TUBE IN WALL TO WAP UNDER DESK. PATCH CORD TO EDGE CONTROLLER FOR CONNECTED ROOM. CAT6 RJ-45 JACK BEHIND TV IN ONE-BEDROOM TV. MIN. 6" CLEARANCE FROM WALL BOXES. VISIT HILTONHDTV.COM FOR ADDITIONAL

HARDWIRED BLACK OUT ROLLER SHADE WITH NO **EXPOSED WIRES** 

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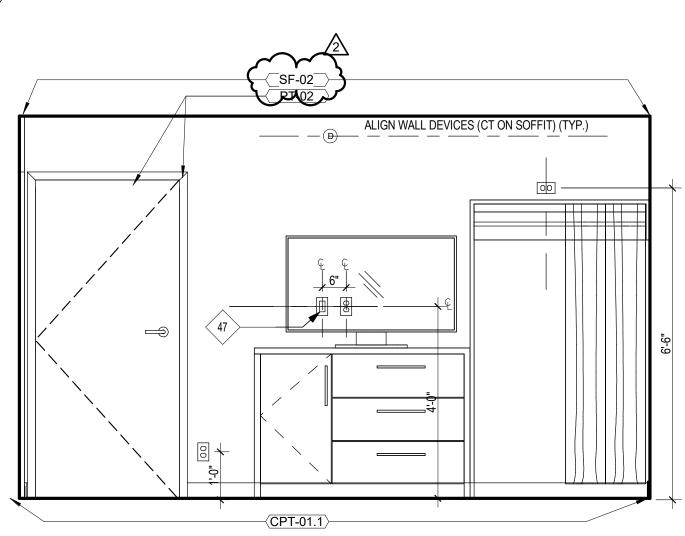
REVISIONS: 2 06/14/2024 CITY & BRAND RESPONSE

# LEE'S SUMMIT

HOME2 SUITES BY HILTON

KING ONE BEDROOM SUITES

KING ONE BED ACC. - HEADBOARD

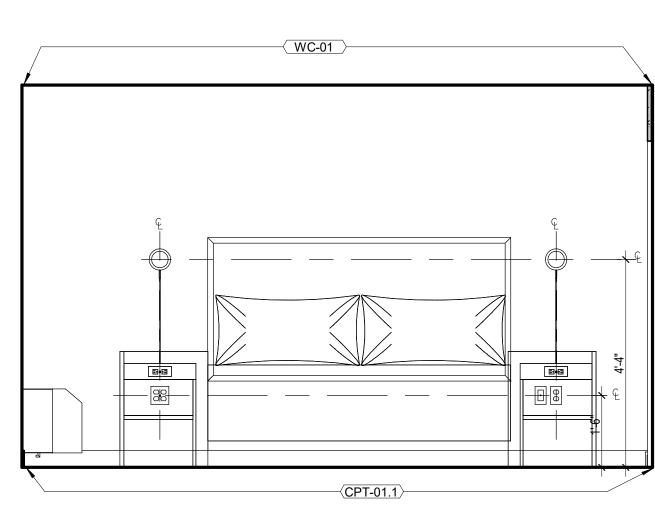


─<u>(WC-01</u>)

—⟨CPT-01.1⟩

KING ONE BEDROOM - BEDROOM STORAGE

1/2" = 1'-0"



HEADBOARD
1/2" = 1'-0"

KING ONE BEDROOM -

KING ONE BEDROOM - BATH ENTRY 1/2" = 1'-0"

—⟨<u>CPT-01.1</u>⟩—

ALIGN WALL DEVICES (CT ON SOFFIT) (TYP.)

ALIGN WALL DEVICES (CT ON SOFIT) (TYP.) **(12)** —⟨<u>CPT-01.1</u>⟩— T-01.1

--(CPT-01.1)-

SF-01

49

ALIGN WALL DEVICES (CT ON SOFFIT) (TYP.)

—⟨CPT-01.1⟩—

49

KING ONE BED ACC. - BEDROOM CLOSET

KING ONE BED ACC. - WINDOW WALL

1/2" = 1'-0"

KING ONE BED ACC. - ENTRY

1/2" = 1'-0"

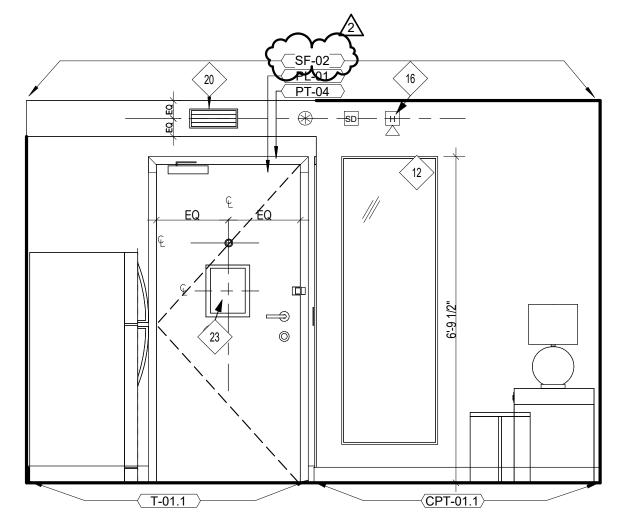
SHEET TITLE **ELEVATIONS** 

PROJECT NUMBER: 22023

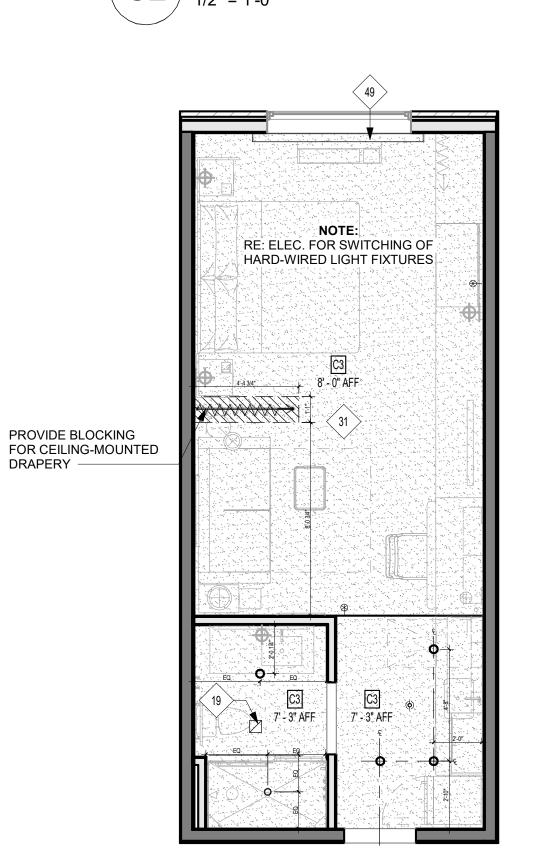
SHEET NUMBER:

A-402

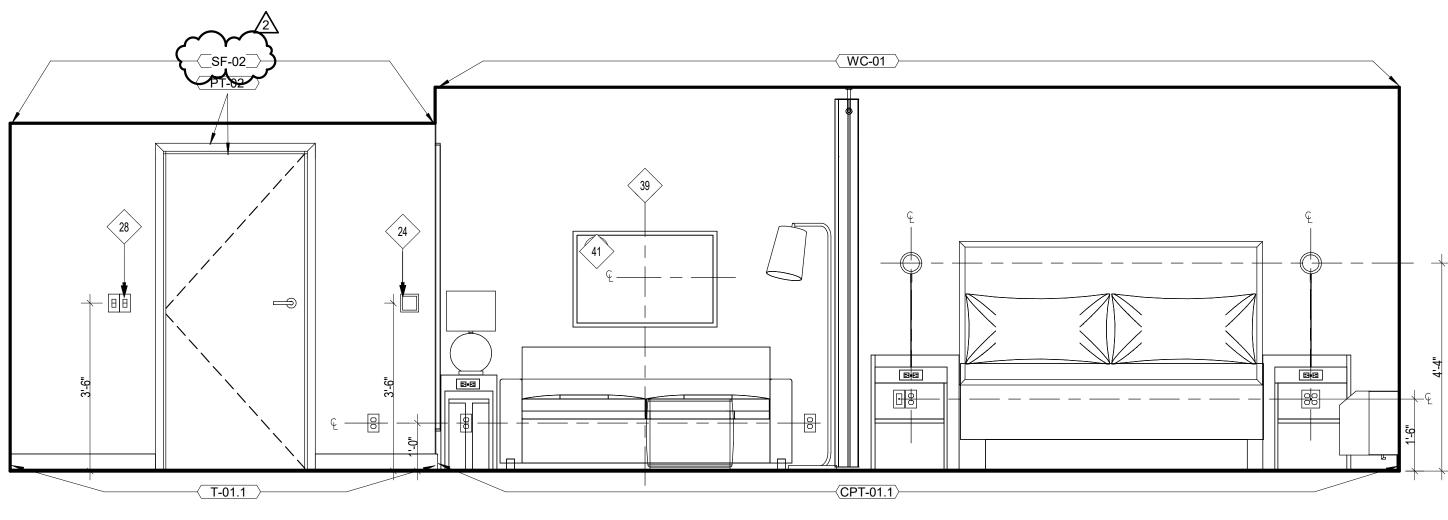
KING STUDIO - WINDOW



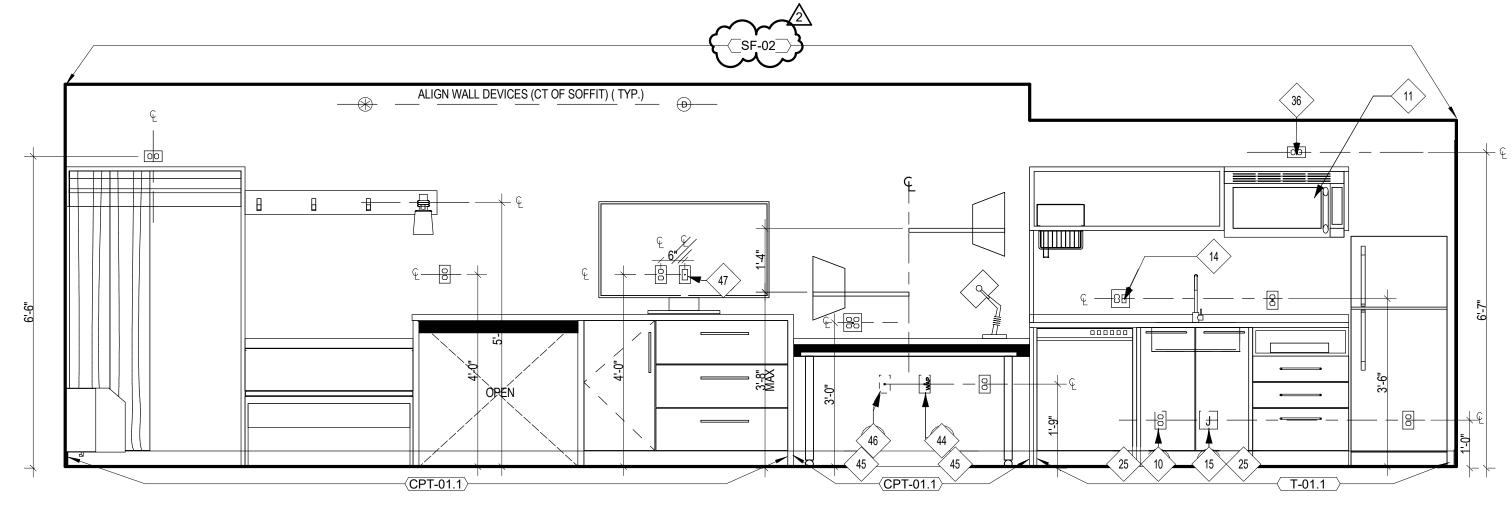
(C2) KING STUDIO - ENTRY



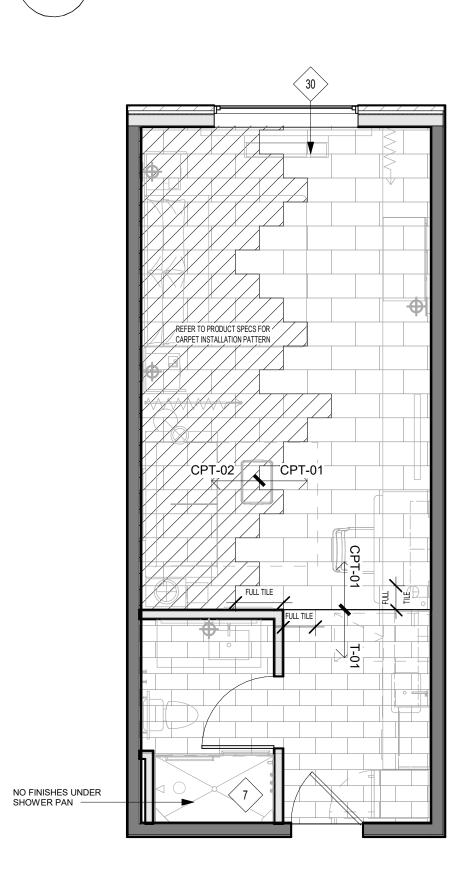
DRAPERY -

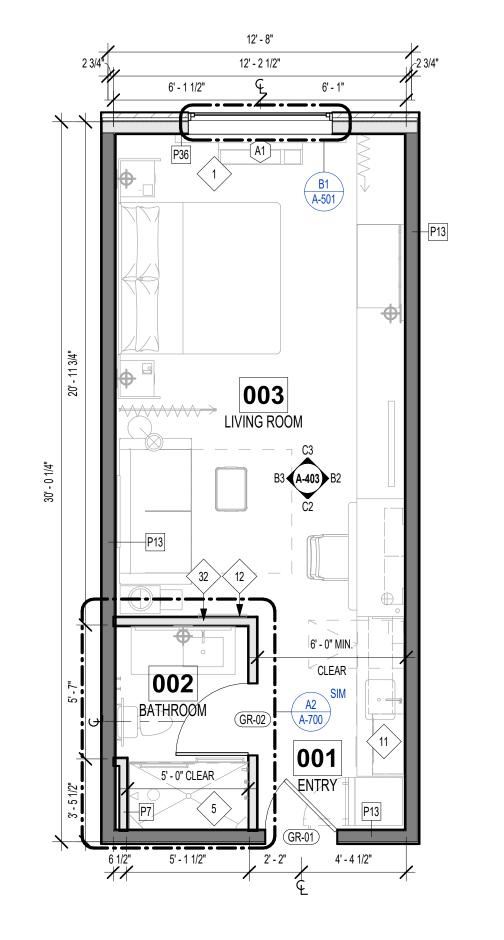


KING STUDIO - HEADBOARD WALL



KING STUDIO - WORKING WALL





REFERENCE G-003 FOR GENERAL NOTES REFERENCE A-600 FOR DOOR & WINDOW SCHEDULES

## **UNIT PLAN LEGEND**

PARTIAL HEIGHT PARTITION <u>P1</u> WALL (UNLESS NOTED OTHERWISE); SEE PARTITION SCHEDULE FOR ASSEMBLY INFORMATION

PT-01 FINISH TAG 101 DOOR TAG

ACCESSIBLE ROUTE (36" CLEAR; 32" MIN REQ'D @ DOOR OPENING PER ANSI A117.1)

# **UNIT FINISH LEGEND**

CPT-01 -- CARPET TILE

CPT-02 -- CARPET TILE

T-01 -- TILE

# **UNIT RCP LEGEND**

C3 - GWB ON METAL STUD

RETURN GRILL

INDICATES CEILING HEIGHT, BELOW MATERIAL TAG

# **KEYNOTE LEGEND**

MANUAL BLACK OUT ROLLER SHADE TO EXTEND 6" BEYOND WINDOW OPENING; SHEER ROLLER SHADE TO BE MOUNTED INSIDE WINDOW OPENING

SHOWER ENCLOSURE W/TEMPERED GLASS DOOR PREMANUFACTURED SHOWER PAN DEDICATED CIRCUIT FOR DISHWASHER

RANGE TOP STYLE MICROWAVE AFFIXED TO WALL SWITCH CONTROLLING GARBAGE DISPOSAL GANGED WITH DUPLEX - REFER TO HADG FOR ACCESSIBLE

ROOM REQUIREMENTS DEDICATED CIRCUIT FOR GARBAGE DISPOSAL FIRE HORN IN STANDARD ROOMS. FIRE

HORN/STROBE IN COMMUNICATION FEATURES

19 TOILET EXHAUST GRILLE MAKE-UP AIR DIFFUSER

**ROOM SIGNAGE** 

23 HARD WIRED THERMOSTAT FOR PTAC. MOUNTED 48" MAX TO TOP OF DEVICE. COMMUNICATION BETWEEN THERMOSTAT AND PTAC MAY BE WIRELESS. EXTEND J-BOX, DEVICE & COVER PLATE FLUSH W/

MILLWORK BACK PANEL

DOORBELL ON/OF SWITCH (COMMUNICATION FEATURES ROOMS ONLY) SIGNAGE AS REQ'D.

EDGE OF PTAC ABOVE CARPET TILES

MIN. CEILING HEIGHT MUST BE MAINTAINED - REFER TO HOME 2 SUITES BY HILTON STANDARDS MANUAL FRAMING SUBCONTRACTOR TO PROVIDE 3/4" F.R.T.

PLYWOOD BLOCKING TO RECEIVE ITEM INDICATED -EXTEND FULL LENGTH OF OBJECT OUTLET ABOVE FOR MICROWAVE - REFER TO ROOM ELEVATION MOUNT DEVICE HORIZONTALLY--FACE

PLATE TO BE WHITE CENTER ARTWORK OVER SOFA

GRAPHIC ART. REFER TO ACCESSORIES LEGEND & CONSTRUCTION PLAN

WAP IN 3-GANG BOX MOUNTED VERTICALLY UNDER DESK. MAINTAIN 6" BETWEEN ALL BOXES, TYP ALL GUESTROOMS. COORDINATE WAP LOCATION WITH CASEGOODS TO AVOID CONFLICTS. VISIT CONNECTEDROOM.HILTON.COM FOR CURRENT WIRELESS INTERNET REQ'S AND LIST OF APPROVED INTEGRATORS.

EACH CABLE MUST HOMERUN BETWEEN THE GUESTROOM AND THE IDF ON EACH FLOOR. VISIT CONNECTEDROOM.HILTON.COM FOR CURRENT REQUIREMENTS AND OPTIONS.

WIRED DATA CONNECTION FOR GUEST USE: PROVIDE CAT6 RJ-45 ABOVE THE DESK (36" AFF), RUN IN SMURF TUBE IN THE WALL TO THE WAP UNDER THE

TV CONNECTIONS FOR FREE-TO-GUEST CONTENT: A) NO SMART TV:COAX CABLE BEHIND TV. CAT6 RJ-45 JACK BEHIND TV, RUN IN SMURF TUBE IN WALL TO WAP UNDER DESK. PATCH CORD TO EDGE CONTROLLER FOR CONNECTED ROOM. MIN. 6" CLEARANCE FROM WALL BOXES - OR - B) SMART TV-INTERNET PROTOCOL TELEVISION (IPTV); COAX NOT REQ'D. CAT6 RJ-45 JACK BEHIND TV RÚN IN SMURF TUBE IN WALL TO WAP UNDER DESK. PATCH CORD TO EDGE CONTROLLER FOR CONNECTED ROOM. CAT6 RJ-45 JACK BEHIND TV IN ONE-BEDROOM TV. MIN. 6" CLEARANCE FROM WALL BOXES. VISIT HILTONHDTV.COM FOR ADDITIONAL INFORMATION.

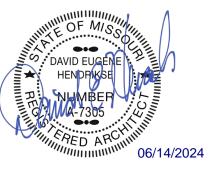
HARDWIRED BLACK OUT ROLLER SHADE WITH NO EXPOSED WIRES

PRINTS ISSUED

04/17/2024 - CITY SUBMISSION

**REVISIONS:** 2 06/14/2024 CITY & BRAND RESPONSE





 $\Box$ 

SHEET TITLE KING STUDIO SUITE

PROJECT NUMBER: 22023

SHEET NUMBER:

KING STUDIO SUITE - FLOOR PLAN

KING STUDIO SUITE - RCP

KING STUDIO SUITE - FINISH PLAN

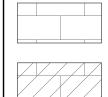
<u>P1</u> WALL (UNLESS NOTED OTHERWISE); SEE PARTITION SCHEDULE FOR 101

ASSEMBLY INFORMATION

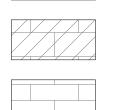
FINISH TAG DOOR TAG

(36" CLEAR; 32" MIN REQ'D @ DOOR OPENING PER ANSI A117.1)

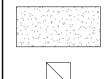
# **UNIT FINISH LEGEND**



CPT-01 -- CARPET TILE



# **UNIT RCP LEGEND**



C3 - GWB ON METAL STUD

**RETURN GRILL** 

### 9' - 0" AFF MATERIAL TAG

SHOWER ENCLOSURE W/TEMPERED GLASS DOOR

TOILET EXHAUST GRILLE

ROOM SIGNAGE HARD WIRED THERMOSTAT FOR PTAC. MOUNTED 48" MAX TO TOP OF DEVICE. COMMUNICATION BETWEEN

THERMOSTAT AND PTAC MAY BE WIRELESS. EXTEND J-BOX, DEVICE & COVER PLATE FLUSH W/

DOORBELL ON/OF SWITCH (COMMUNICATION

EDGE OF PTAC ABOVE CARPET TILES MIN. CEILING HEIGHT MUST BE MAINTAINED - REFER TO HOME 2 SUITES BY HILTON STANDARDS MANUAL FRAMING SUBCONTRACTOR TO PROVIDE 3/4" F.R.T.

EXTEND FULL LENGTH OF OBJECT OUTLET ABOVE FOR MICROWAVE - REFER TO ROOM ELEVATION MOUNT DEVICE HORIZONTALLY--FACE

CONSTRUCTION PLAN

GUESTROOM AND THE IDF ON EACH FLOOR. VISIT CONNECTEDROOM.HILTON.COM FOR CURRENT REQUIREMENTS AND OPTIONS. WIRED DATA CONNECTION FOR GUEST USE: PROVIDE CAT6 RJ-45 ABOVE THE DESK (36" AFF), RUN IN SMURF TUBE IN THE WALL TO THE WAP UNDER THE

EACH CABLE MUST HOMERUN BETWEEN THE

HARDWIRED BLACK OUT ROLLER SHADE WITH NO EXPOSED WIRES

CPT-02 -- CARPET TILE

T-01 -- TILE

INDICATES CEILING HEIGHT, BELOW

# **KEYNOTE LEGEND**

PREMANUFACTURED SHOWER PAN

DEDICATED CIRCUIT FOR DISHWASHER RANGE TOP STYLE MICROWAVE AFFIXED TO WALL

SWITCH CONTROLLING GARBAGE DISPOSAL GANGED WITH DUPLEX - REFER TO HADG FOR ACCESSIBLE ROOM REQUIREMENTS

DEDICATED CIRCUIT FOR GARBAGE DISPOSAL MAKE-UP AIR DIFFUSER

MILLWORK BACK PANEL

FEATURES ROOMS ONLY) SIGNAGE AS REQ'D.

PLYWOOD BLOCKING TO RECEIVE ITEM INDICATED -

PLATE TO BE WHITE

GRAPHIC ART. REFER TO ACCESSORIES LEGEND & WAP IN 3-GANG BOX MOUNTED VERTICALLY UNDER

DESK. MAINTAIN 6" BETWEEN ALL BOXES, TYP ALL GUESTROOMS. COORDINATE WAP LOCATION WITH CASEGOODS TO AVOID CONFLICTS. VISIT CONNECTEDROOM.HILTON.COM FOR CURRENT WIRELESS INTERNET REQ'S AND LIST OF APPROVED INTEGRATORS.

TV CONNECTIONS FOR FREE-TO-GUEST CONTENT: A) NO SMART TV:COAX CABLE BEHIND TV. CAT6 RJ-45 JACK BEHIND TV, RUN IN SMURF TUBE IN WALL TO WAP UNDER DESK. PATCH CORD TO EDGE CONTROLLER FOR CONNECTED ROOM. MIN. 6" CLEARANCE FROM WALL BOXES - OR - B) SMART TV-INTERNET PROTOCOL TELEVISION (IPTV); COAX NOT REQ'D. CAT6 RJ-45 JACK BEHIND TV RÚN IN SMURF TUBE IN WALL TO WAP UNDER DESK. PATCH CORD TO EDGE CONTROLLER FOR CONNECTED ROOM. CAT6 RJ-45 JACK BEHIND TV IN ONE-BEDROOM TV. MIN. 6" CLEARANCE FROM WALL BOXES. VISIT HILTONHDTV.COM FOR ADDITIONAL

INFORMATION.





SHEET TITLE KING STUDIO SUITE -CONNECTOR

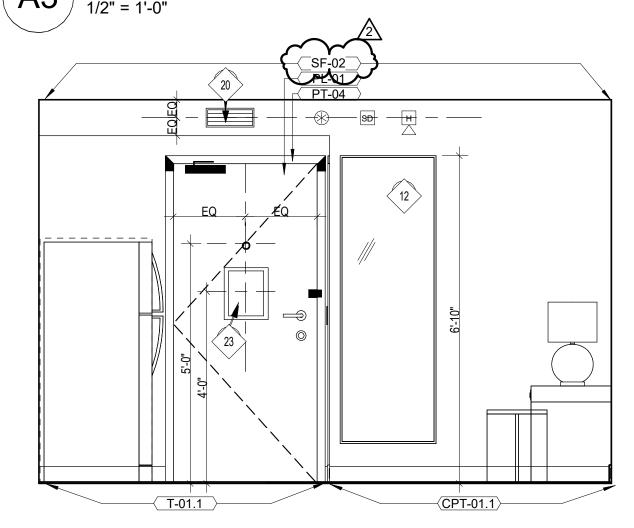
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SHEET NUMBER:

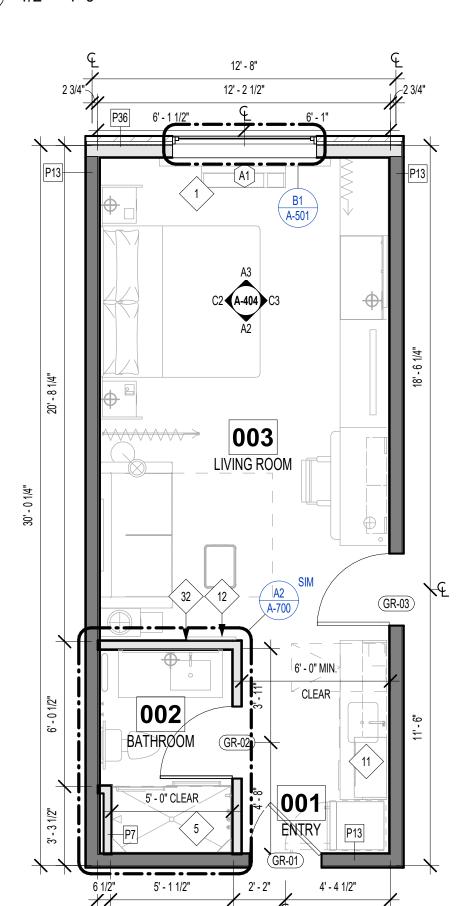
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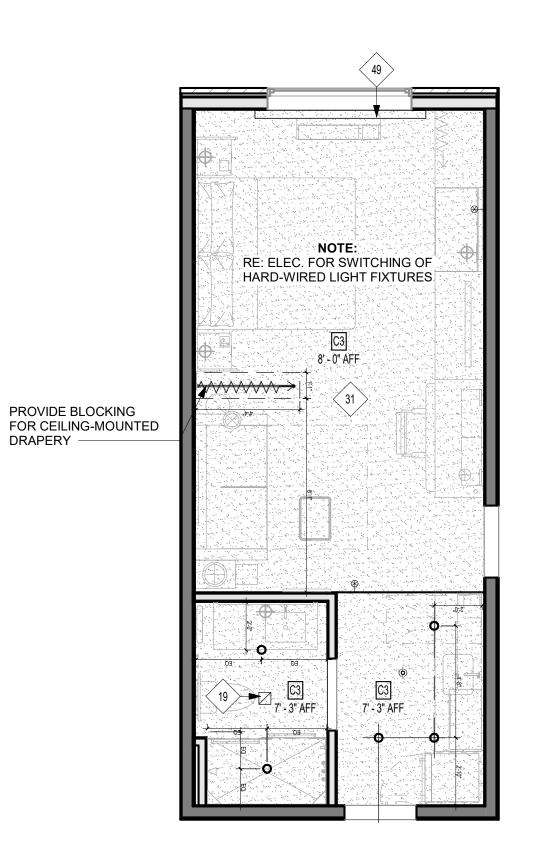
KING STUDIO CONN. - WINDOW

1/2" = 1'-0"



KING STUDIO CONN. - ENTRY





DRAPERY -

C2 KING STUDIO CONN. - HEADBOARD

ALIGN WALL DEVICES (CT OF SOFFIT) ( TYP.)

-(CPT-01.1)

24

KING STUDIO CONN. - WORKING WALL

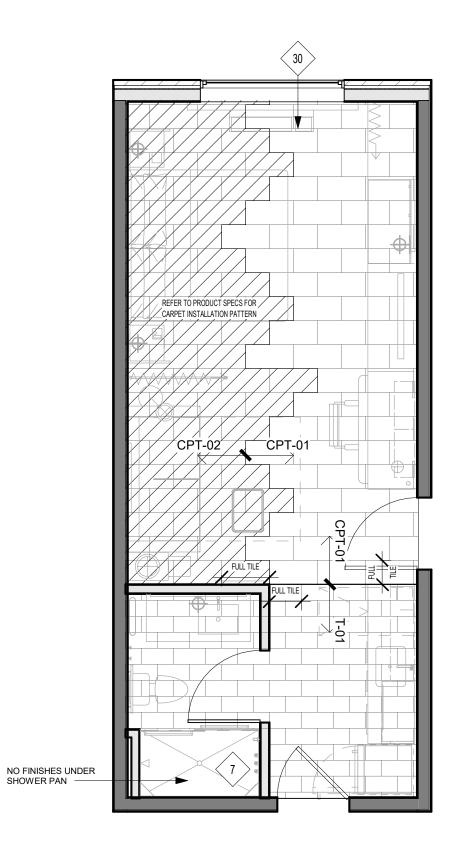
1/2" = 1'-0"

28

PT-02

─( WC-01 )

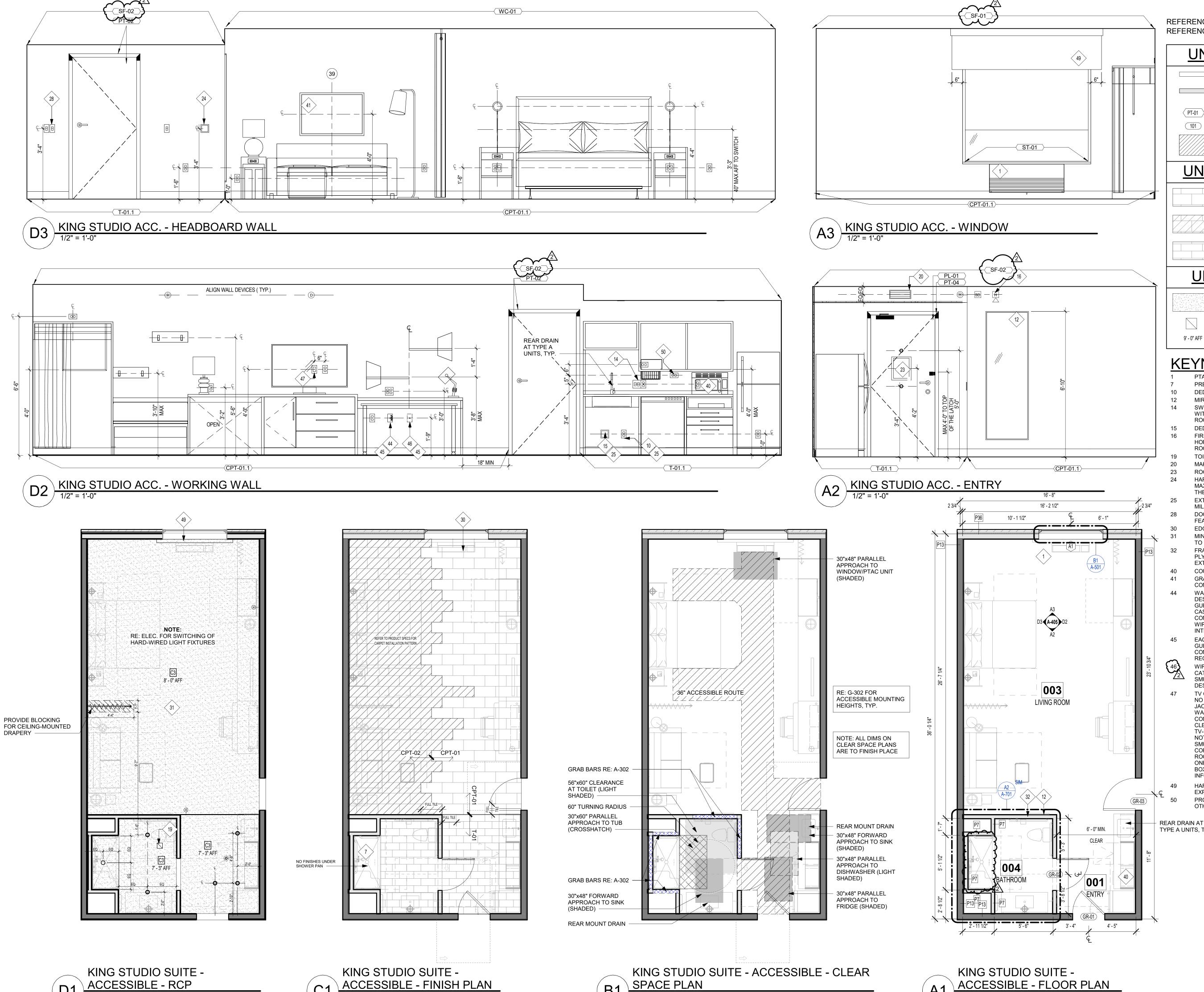
<<u>CPT-01.1</u>>



KING STUDIO SUITE - CONNECTOR - FINISH **PLAN** 

KING STUDIO SUITE - CONNECTOR - FLOOR 1/4" = 1'-0'

KING STUDIO SUITE - CONNECTOR - RCP



REFERENCE G-003 FOR GENERAL NOTES REFERENCE A-600 FOR DOOR & WINDOW SCHEDULES PRINTS ISSUED

**UNIT PLAN LEGEND** 

PARTIAL HEIGHT PARTITION

P1 WALL (UNLESS NOTED OTHERWISE); SEE PARTITION SCHEDULE FOR ASSEMBLY INFORMATION FINISH TAG

DOOR TAG ACCESSIBLE ROUTE (36" CLEAR; 32" MIN REQ'D @ DOOR OPENING PER ANSI A117.1)

# **UNIT FINISH LEGEND**

CPT-01 -- CARPET TILE CPT-02 -- CARPET TILE

T-01 -- TILE

# **UNIT RCP LEGEND**

C3 - GWB ON METAL STUD

RETURN GRILL INDICATES CEILING HEIGHT, BELOW MATERIAL TAG

## **KEYNOTE LEGEND**

PREMANUFACTURED SHOWER PAN DEDICATED CIRCUIT FOR DISHWASHER

SWITCH CONTROLLING GARBAGE DISPOSAL GANGED WITH DUPLEX - REFER TO HADG FOR ACCESSIBLE ROOM REQUIREMENTS

FIRE HORN IN STANDARD ROOMS. FIRE HORN/STROBE IN COMMUNICATION FEATURES

TOILET EXHAUST GRILLE MAKE-UP AIR DIFFUSER

**ROOM SIGNAGE** HARD WIRED THERMOSTAT FOR PTAC. MOUNTED 48" MAX TO TOP OF DEVICE. COMMUNICATION BETWEEN THERMOSTAT AND PTAC MAY BE WIRELESS

EXTEND J-BOX, DEVICE & COVER PLATE FLUSH W/ MILLWORK BACK PANEL DOORBELL ON/OF SWITCH (COMMUNICATION FEATURES ROOMS ONLY) SIGNAGE AS REQ'D. EDGE OF PTAC ABOVE CARPET TILES

MIN. CEILING HEIGHT MUST BE MAINTAINED - REFER TO HOME 2 SUITES BY HILTON STANDARDS MANUAL FRAMING SUBCONTRACTOR TO PROVIDE 3/4" F.R.T. PLYWOOD BLOCKING TO RECEIVE ITEM INDICATED -EXTEND FULL LENGTH OF OBJECT

COUNTERTOP MICROWAVE GRAPHIC ART. REFER TO ACCESSORIES LEGEND & CONSTRUCTION PLAN

WAP IN 3-GANG BOX MOUNTED VERTICALLY UNDER DESK. MAINTAIN 6" BETWEEN ALL BOXES, TYP ALL GUESTROOMS. COORDINATE WAP LOCATION WITH CASEGOODS TO AVOID CONFLICTS. VISIT CONNECTEDROOM.HILTON.COM FOR CURRENT WIRELESS INTERNET REQ'S AND LIST OF APPROVED INTEGRATORS.

EACH CABLE MUST HOMERUN BETWEEN THE GUESTROOM AND THE IDF ON EACH FLOOR. VISIT CONNECTEDROOM.HILTON.COM FOR CURRENT REQUIREMENTS AND OPTIONS. WIRED DATA CONNECTION FOR GUEST USE: PROVIDE CAT6 RJ-45 ABOVE THE DESK (36" AFF), RUN IN SMURF TUBE IN THE WALL TO THE WAP UNDER THE

TV CONNECTIONS FOR FREE-TO-GUEST CONTENT: A) NO SMART TV:COAX CABLE BEHIND TV. CAT6 RJ-45 JACK BEHIND TV, RUN IN SMURF TUBE IN WALL TO WAP UNDER DESK. PATCH CORD TO EDGE CONTROLLER FOR CONNECTED ROOM. MIN. 6" CLEARANCE FROM WALL BOXES - OR - B) SMART TV-INTERNET PROTOCOL TELEVISION (IPTV); COAX NOT REQ'D. CAT6 RJ-45 JACK BEHIND TV RUN IN SMURF TUBE IN WALL TO WAP UNDER DESK. PATCH CORD TO EDGE CONTROLLER FOR CONNECTED ROOM. CAT6 RJ-45 JACK BEHIND TV IN ONE-BEDROOM TV. MIN. 6" CLEARANCE FROM WALL BOXES. VISIT HILTONHDTV.COM FOR ADDITIONAL

HARDWIRED BLACK OUT ROLLER SHADE WITH NO EXPOSED WIRES PROVIDE OUTLET FOR UNDERCABINET LIGHTING BY

REAR DRAIN AT TYPE A UNITS, TYP.

04/17/2024 - CITY SUBMISSION

**REVISIONS:** 

2 06/14/2024 CITY & BRAND RESPONSE

SHEET TITLE KING STUDIO SUITE -ACCESSIBLE

HOME

PROJECT NUMBER: 22023

SHEET NUMBER:

ACCESSIBLE - FINISH PLAN

SPACE PLAN

ACCESSIBLE - FLOOR PLAN

REFERENCE G-003 FOR GENERAL NOTES REFERENCE A-600 FOR DOOR & WINDOW SCHEDULES PRINTS ISSUED

**UNIT PLAN LEGEND** 

PARTIAL HEIGHT PARTITION

P1 WALL (UNLESS NOTED OTHERWISE); SEE PARTITION SCHEDULE FOR ASSEMBLY INFORMATION

ACCESSIBLE ROUTE

(36" CLEAR; 32" MIN REQ'D @ DOOR OPENING PER ANSI A117.1)

FINISH TAG 101 DOOR TAG

**UNIT FINISH LEGEND** 

CPT-01 -- CARPET TILE

CPT-02 -- CARPET TILE

T-01 -- TILE

**RETURN GRILL** 

**UNIT RCP LEGEND** 

C3 - GWB ON METAL STUD

9' - 0" AFF

INDICATES CEILING HEIGHT, BELOW MATERIAL TAG

# **KEYNOTE LEGEND**

MANUAL BLACK OUT ROLLER SHADE TO EXTEND 6" BEYOND WINDOW OPENING; SHEER ROLLER SHADE TO BE MOUNTED INSIDE WINDOW OPENING

SHOWER ENCLOSURE W/TEMPERED GLASS DOOR PREMANUFACTURED SHOWER PAN DEDICATED CIRCUIT FOR DISHWASHER

RANGE TOP STYLE MICROWAVE AFFIXED TO WALL SWITCH CONTROLLING GARBAGE DISPOSAL GANGED WITH DUPLEX - REFER TO HADG FOR ACCESSIBLE

ROOM REQUIREMENTS DEDICATED CIRCUIT FOR GARBAGE DISPOSAL

FIRE HORN IN STANDARD ROOMS. FIRE HORN/STROBE IN COMMUNICATION FEATURES

TOILET EXHAUST GRILLE MAKE-UP AIR DIFFUSER **ROOM SIGNAGE** 

HARD WIRED THERMOSTAT FOR PTAC. MOUNTED 48" MAX TO TOP OF DEVICE. COMMUNICATION BETWEEN THERMOSTAT AND PTAC MAY BE WIRELESS.

EXTEND J-BOX, DEVICE & COVER PLATE FLUSH W/ MILLWORK BACK PANEL

DOORBELL ON/OF SWITCH (COMMUNICATION FEATURES ROOMS ONLY) SIGNAGE AS REQ'D.

EDGE OF PTAC ABOVE CARPET TILES MIN. CEILING HEIGHT MUST BE MAINTAINED - REFER TO HOME 2 SUITES BY HILTON STANDARDS MANUAL FRAMING SUBCONTRACTOR TO PROVIDE 3/4" F.R.T.

EXTEND FULL LENGTH OF OBJECT OUTLET ABOVE FOR MICROWAVE - REFER TO ROOM ELEVATION MOUNT DEVICE HORIZONTALLY--FACE

PLYWOOD BLOCKING TO RECEIVE ITEM INDICATED -

PLATE TO BE WHITE GRAPHIC ART. REFER TO ACCESSORIES LEGEND &

CONSTRUCTION PLAN WAP IN 3-GANG BOX MOUNTED VERTICALLY UNDER DESK. MAINTAIN 6" BETWEEN ALL BOXES, TYP ALL GUESTROOMS. COORDINATE WAP LOCATION WITH CASEGOODS TO AVOID CONFLICTS. VISIT CONNECTEDROOM.HILTON.COM FOR CURRENT WIRELESS INTERNET REQ'S AND LIST OF APPROVED

INTEGRATORS. EACH CABLE MUST HOMERUN BETWEEN THE GUESTROOM AND THE IDF ON EACH FLOOR. VISIT CONNECTEDROOM.HILTON.COM FOR CURRENT REQUIREMENTS AND OPTIONS.



WIRED DATA CONNECTION FOR GUEST USE: PROVIDE CAT6 RJ-45 ABOVE THE DESK (36" AFF), RUN IN SMURF TUBE IN THE WALL TO THE WAP UNDER THE

HARDWIRED BLACK OUT ROLLER SHADE WITH NO EXPOSED WIRES

04/17/2024 - CITY SUBMISSION

**REVISIONS:** 2 06/14/2024 CITY & BRAND RESPONSE

Semann & ASSOCIA

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S

SHEET TITLE QUEEN QUEEN STUDIO SUITE

PROJECT NUMBER: 22023

SHEET NUMBER:

FLOOR PLAN

1/4" = 1'-0'

04/17/2024 - CITY SUBMISSION

2 06/14/2024 CITY & BRAND RESPONSE

PARTIAL HEIGHT PARTITION <u>P1</u> WALL (UNLESS NOTED OTHERWISE); SEE PARTITION SCHEDULE FOR ASSEMBLY INFORMATION

DOOR TAG (36" CLEAR; 32" MIN REQ'D @ DOOR

**UNIT FINISH LEGEND** 

CPT-02 -- CARPET TILE

T-01 -- TILE

**UNIT RCP LEGEND** 

RETURN GRILL

INDICATES CEILING HEIGHT, BELOW MATERIAL TAG

PTAC UNIT

TO BE MOUNTED INSIDE WINDOW OPENING SHOWER ENCLOSURE W/TEMPERED GLASS DOOR PREMANUFACTURED SHOWER PAN

PLANS FOR LOCATION OF ACCESSIBLE ROOMS DEDICATED CIRCUIT FOR DISHWASHER

SWITCH CONTROLLING GARBAGE DISPOSAL GANGED WITH DUPLEX - REFER TO HADG FOR ACCESSIBLE

DEDICATED CIRCUIT FOR GARBAGE DISPOSAL FIRE HORN IN STANDARD ROOMS. FIRE

TOILET EXHAUST GRILLE

ROOM SIGNAGE

MAX TO TOP OF DEVICE. COMMUNICATION BETWEEN THERMOSTAT AND PTAC MAY BE WIRELESS. EXTEND J-BOX, DEVICE & COVER PLATE FLUSH W/

MILLWORK BACK PANEL DOORBELL ON/OF SWITCH (COMMUNICATION FEATURES ROOMS ONLY) SIGNAGE AS REQ'D.

MIN. CEILING HEIGHT MUST BE MAINTAINED - REFER FRAMING SUBCONTRACTOR TO PROVIDE 3/4" F.R.T.

OUTLET ABOVE FOR MICROWAVE - REFER TO ROOM ELEVATION MOUNT DEVICE HORIZONTALLY--FACE PLATE TO BE WHITE

GRAPHIC ART. REFER TO ACCESSORIES LEGEND & CONSTRUCTION PLAN

DESK. MAINTAIN 6" BETWEEN ALL BOXES, TYP ALL GUESTROOMS. COORDINATE WAP LOCATION WITH CASEGOODS TO AVOID CONFLICTS. VISIT CONNECTEDROOM.HILTON.COM FOR CURRENT WIRELESS INTERNET REQ'S AND LIST OF APPROVED

EACH CABLE MUST HOMERUN BETWEEN THE GUESTROOM AND THE IDF ON EACH FLOOR. VISIT CONNECTEDROOM.HILTON.COM FOR CURRENT REQUIREMENTS AND OPTIONS.

WIRED DATA CONNECTION FOR GUEST USE: PROVIDE CAT6 RJ-45 ABOVE THE DESK (36" AFF), RUN IN SMURF TUBE IN THE WALL TO THE WAP UNDER THE

EXPOSED WIRES

PT-01 FINISH TAG

**OPENING PER ANSI A117.1)** 

CPT-01 -- CARPET TILE

C3 - GWB ON METAL STUD

**KEYNOTE LEGEND** 

MANUAL BLACK OUT ROLLER SHADE TO EXTEND 6" BEYOND WINDOW OPENING; SHEER ROLLER SHADE

ALTERNATE LOCATION OF DOOR FOR CONNECTING ROOMS TO ACCESSIBLE ROOMS--REFER TO OVERALL

RANGE TOP STYLE MICROWAVE AFFIXED TO WALL

ROOM REQUIREMENTS

HORN/STROBE IN COMMUNICATION FEATURES

MAKE-UP AIR DIFFUSER

HARD WIRED THERMOSTAT FOR PTAC. MOUNTED 48"

EDGE OF PTAC ABOVE CARPET TILES

TO HOME 2 SUITES BY HILTON STANDARDS MANUAL PLYWOOD BLOCKING TO RECEIVE ITEM INDICATED -EXTEND FULL LENGTH OF OBJECT

WAP IN 3-GANG BOX MOUNTED VERTICALLY UNDER

INTEGRATORS.

TV CONNECTIONS FOR FREE-TO-GUEST CONTENT: A) NO SMART TV:COAX CABLE BEHIND TV. CAT6 RJ-45 JACK BEHIND TV, RUN IN SMURF TUBE IN WALL TO WAP UNDER DESK. PATCH CORD TO EDGE CONTROLLER FOR CONNECTED ROOM. MIN. 6" CLEARANCE FROM WALL BOXES - OR - B) SMART TV-INTERNET PROTOCOL TELEVISION (IPTV); COAX NOT REQ'D. CAT6 RJ-45 JACK BEHIND TV RÚN IN SMURF TUBE IN WALL TO WAP UNDER DESK. PATCH CORD TO EDGE CONTROLLER FOR CONNECTED ROOM. CAT6 RJ-45 JACK BEHIND TV IN ONE-BEDROOM TV. MIN. 6" CLEARANCE FROM WALL BOXES. VISIT HILTONHDTV.COM FOR ADDITIONAL INFORMATION.

HARDWIRED BLACK OUT ROLLER SHADE WITH NO

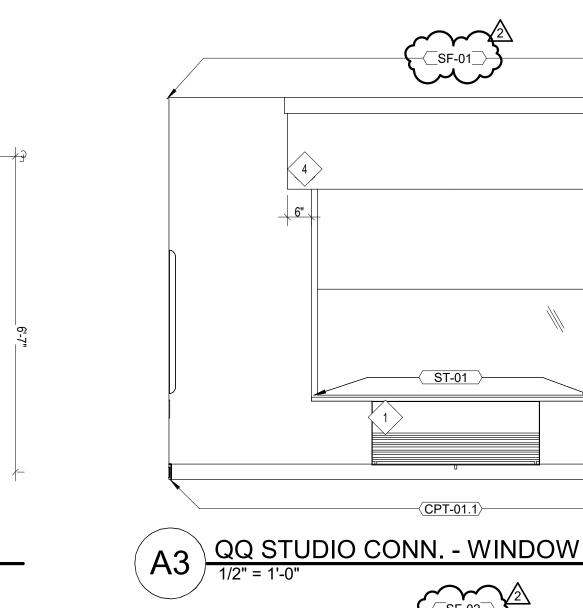


SHEET TITLE QUEEN QUEEN STUDIO SUITE CONNECTOR

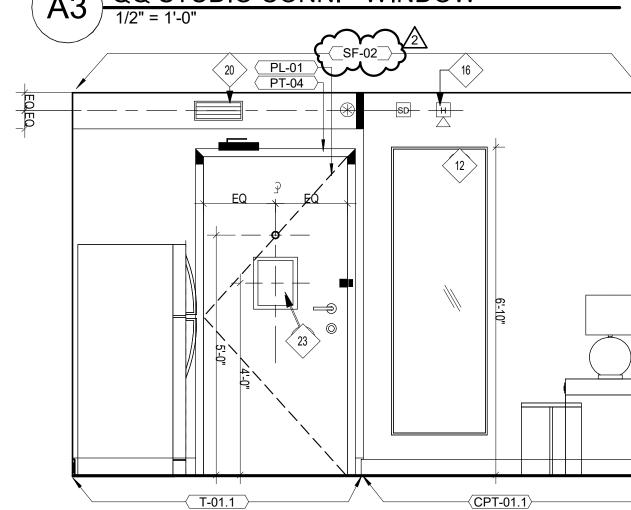
PROJECT NUMBER: 22023

SHEET NUMBER:

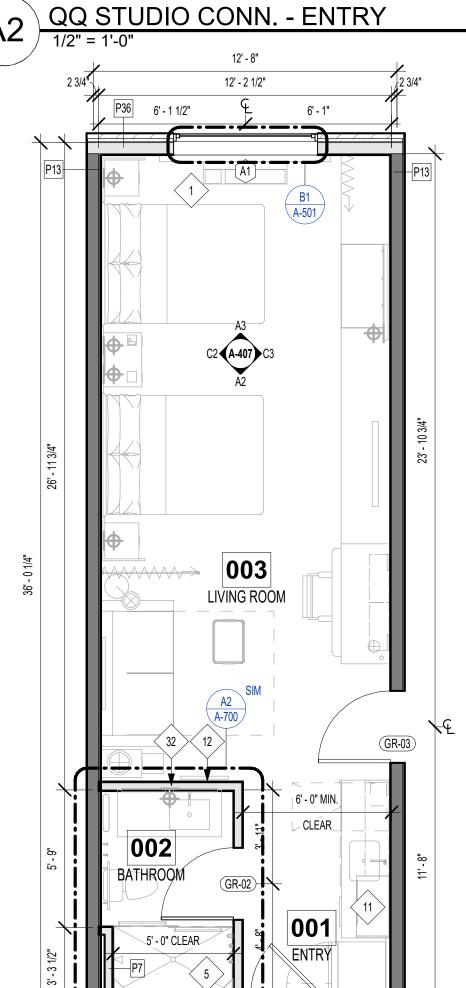
HOME

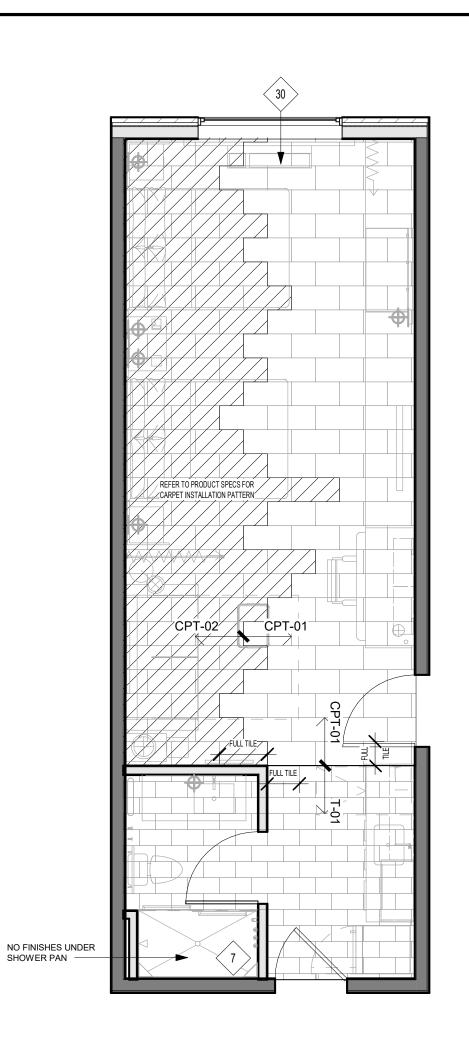


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(CPT-01.1)





QUEEN QUEEN STUDIO SUITE - CONNECTOR

ALIGN WALL DEVICES (CT ON SOFFIT) ( TYP.)

**⟨ WC-01**⟩

QQ STUDIO CONN. - WORKING WALL

√ T-01.1

PROVIDE BLOCKING

DRAPERY

FOR CEILING-MOUNTED

QQ STUDIO CONN. - HEADBOARD

RE: ELEC. FOR SWITCHING OF

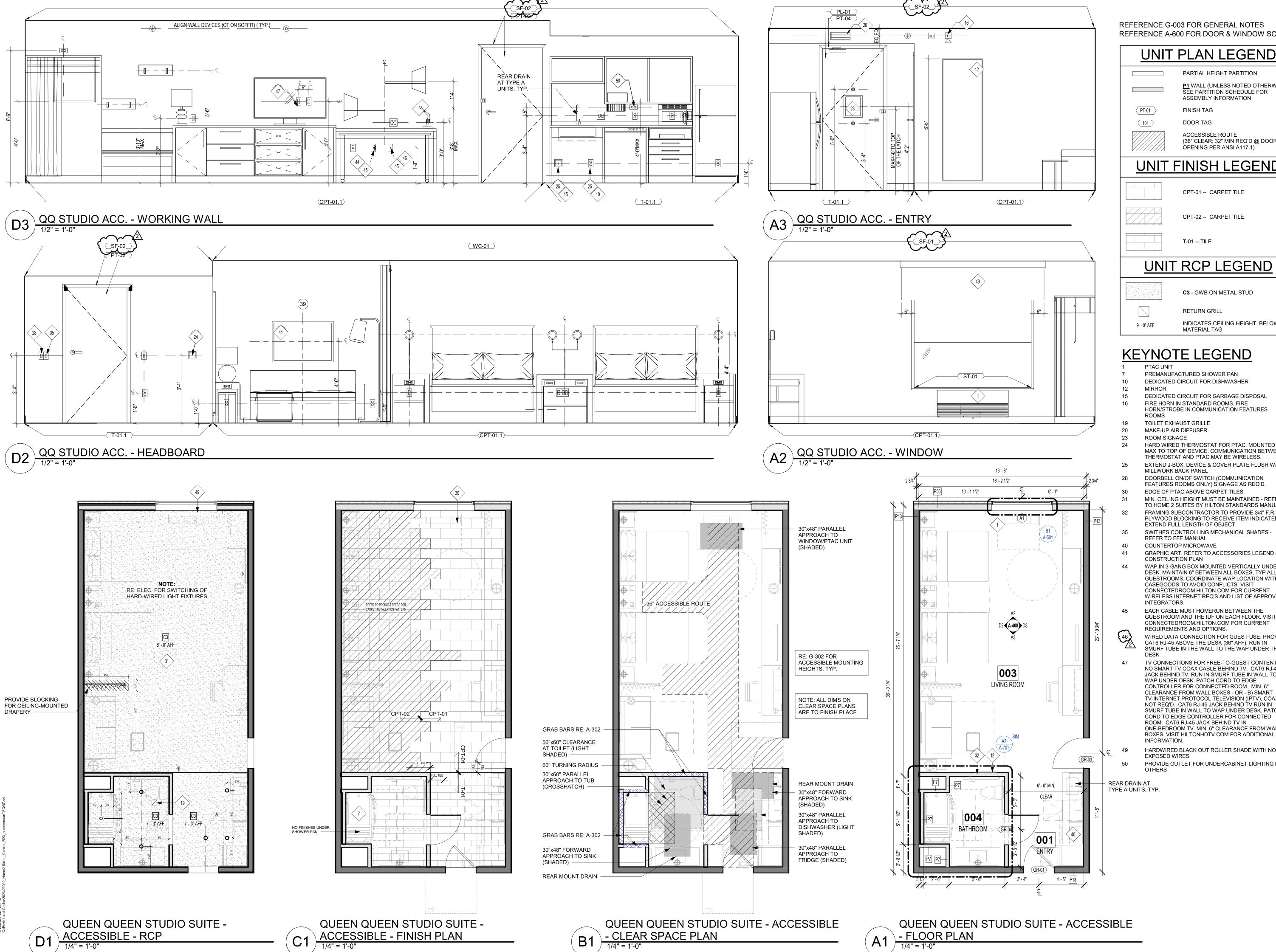
HARD-WIRED LIGHT FIXTURES

8' - 0" AFF

QUEEN QUEEN STUDIO SUITE - CONNECTOR - FINISH PLAN

QUEEN QUEEN STUDIO SUITE - CONNECTOR - FLOOR PLAN

4' - 4 1/2" P13



REFERENCE G-003 FOR GENERAL NOTES REFERENCE A-600 FOR DOOR & WINDOW SCHEDULES PRINTS ISSUED

**REVISIONS:** 

2 06/14/2024 CITY & BRAND RESPONSE

04/17/2024 - CITY SUBMISSION

Semanr & ASSOCI

DAVID EUGENE HENDRIKSE

PARTIAL HEIGHT PARTITION <u>P1</u> WALL (UNLESS NOTED OTHERWISE); SEE PARTITION SCHEDULE FOR ASSEMBLY INFORMATION

FINISH TAG DOOR TAG

ACCESSIBLE ROUTE (36" CLEAR; 32" MIN REQ'D @ DOOR **OPENING PER ANSI A117.1)** 

# **UNIT FINISH LEGEND**

CPT-01 -- CARPET TILE

CPT-02 -- CARPET TILE

# **UNIT RCP LEGEND**

C3 - GWB ON METAL STUD

**RETURN GRILL** 

INDICATES CEILING HEIGHT, BELOW MATERIAL TAG

## **KEYNOTE LEGEND**

PREMANUFACTURED SHOWER PAN DEDICATED CIRCUIT FOR DISHWASHER

DEDICATED CIRCUIT FOR GARBAGE DISPOSAL FIRE HORN IN STANDARD ROOMS. FIRE HORN/STROBE IN COMMUNICATION FEATURES

TOILET EXHAUST GRILLE MAKE-UP AIR DIFFUSER

HARD WIRED THERMOSTAT FOR PTAC. MOUNTED 48" MAX TO TOP OF DEVICE. COMMUNICATION BETWEEN THERMOSTAT AND PTAC MAY BE WIRELESS.

EXTEND J-BOX, DEVICE & COVER PLATE FLUSH W/ MILLWORK BACK PANEL

EDGE OF PTAC ABOVE CARPET TILES TO HOME 2 SUITES BY HILTON STANDARDS MANUAL FRAMING SUBCONTRACTOR TO PROVIDE 3/4" F.R.T. PLYWOOD BLOCKING TO RECEIVE ITEM INDICATED -

EXTEND FULL LENGTH OF OBJECT SWITHES CONTROLLING MECHANICAL SHADES -

REFER TO FFE MANUAL COUNTERTOP MICROWAVE

GRAPHIC ART. REFER TO ACCESSORIES LEGEND & CONSTRUCTION PLAN WAP IN 3-GANG BOX MOUNTED VERTICALLY UNDER

DESK. MAINTAIN 6" BETWEEN ALL BOXES, TYP ALL GUESTROOMS, COORDINATE WAP LOCATION WITH CASEGOODS TO AVOID CONFLICTS. VISIT CONNECTEDROOM.HILTON.COM FOR CURRENT WIRELESS INTERNET REQ'S AND LIST OF APPROVED

EACH CABLE MUST HOMERUN BETWEEN THE GUESTROOM AND THE IDF ON EACH FLOOR. VISIT CONNECTEDROOM.HILTON.COM FOR CURRENT REQUIREMENTS AND OPTIONS. WIRED DATA CONNECTION FOR GUEST USE: PROVIDE

CAT6 RJ-45 ABOVE THE DESK (36" AFF), RUN IN SMURF TUBE IN THE WALL TO THE WAP UNDER THE TV CONNECTIONS FOR FREE-TO-GUEST CONTENT: A)

NO SMART TV:COAX CABLE BEHIND TV. CAT6 RJ-45 JACK BEHIND TV, RUN IN SMURF TUBE IN WALL TO WAP UNDER DESK. PATCH CORD TO EDGE CONTROLLER FOR CONNECTED ROOM. MIN. 6" CLEARANCE FROM WALL BOXES - OR - B) SMART TV-INTERNET PROTOCOL TELEVISION (IPTV); COAX NOT REQ'D. CAT6 RJ-45 JACK BEHIND TV RÚN IN SMURF TUBE IN WALL TO WAP UNDER DESK. PATCH CORD TO EDGE CONTROLLER FOR CONNECTED ROOM. CAT6 RJ-45 JACK BEHIND TV IN ONE-BEDROOM TV. MIN. 6" CLEARANCE FROM WALL BOXES. VISIT HILTONHDTV.COM FOR ADDITIONAL

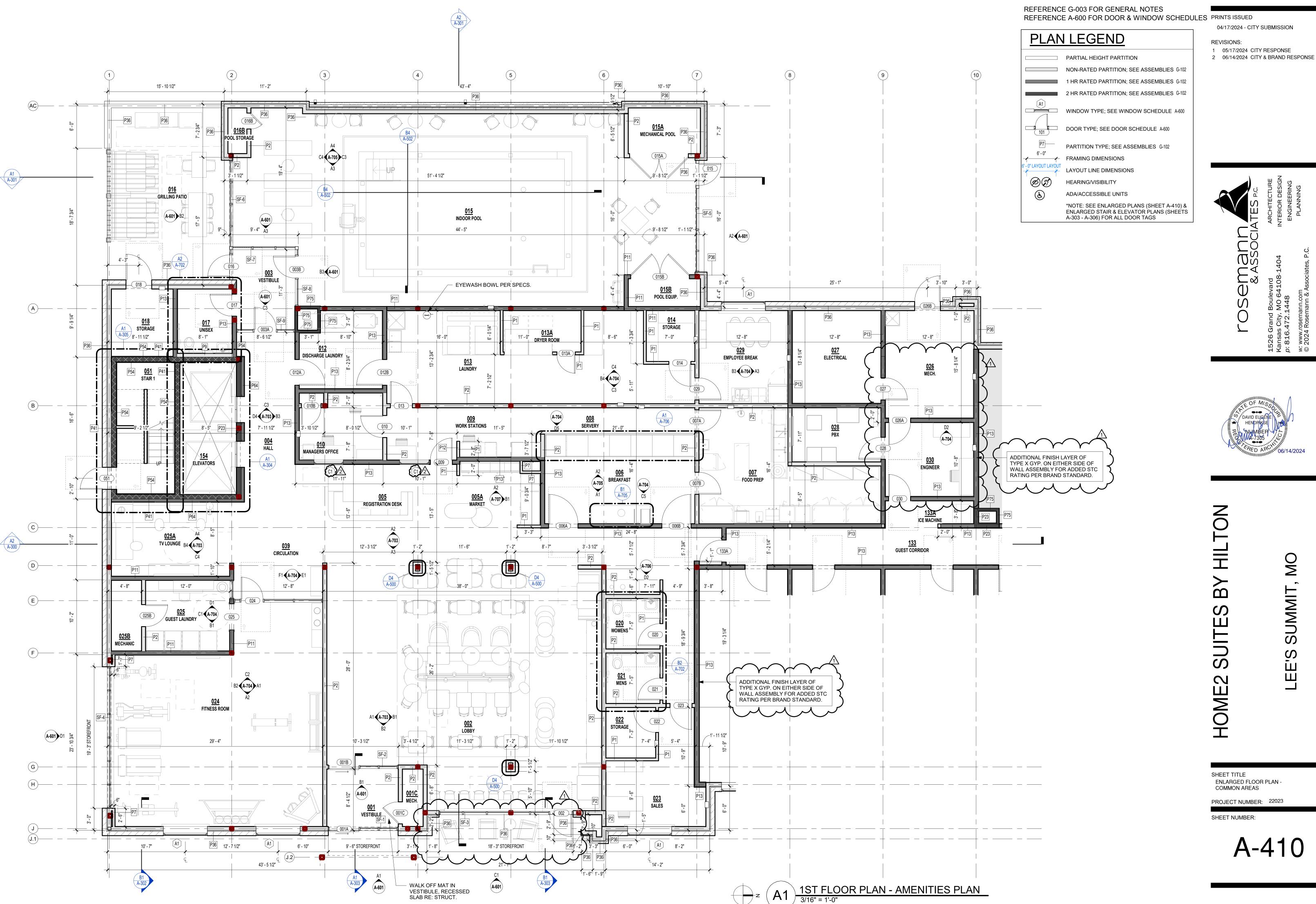
HARDWIRED BLACK OUT ROLLER SHADE WITH NO EXPOSED WIRES PROVIDE OUTLET FOR UNDERCABINET LIGHTING BY

S HOME

> SHEET TITLE QUEEN QUEEN STUDIO SUITE ACCESSIBLE

PROJECT NUMBER: 22023

SHEET NUMBER:



04/17/2024 - CITY SUBMISSION

1 05/17/2024 CITY RESPONSE

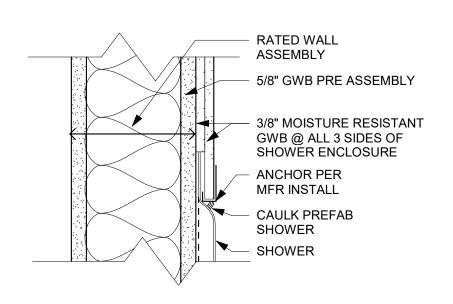
SHEET TITLE ENLARGED FLOOR PLAN -COMMON AREAS

PROJECT NUMBER: 22023

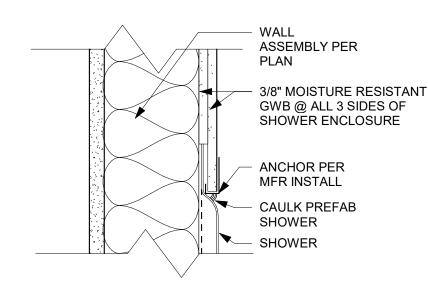
A-410

S.J.J.

# UNIT DETAIL - REF FILLER



## UNIT DETAIL - SHOWER @ RATED C3 WALL @ HEAD/JAMB



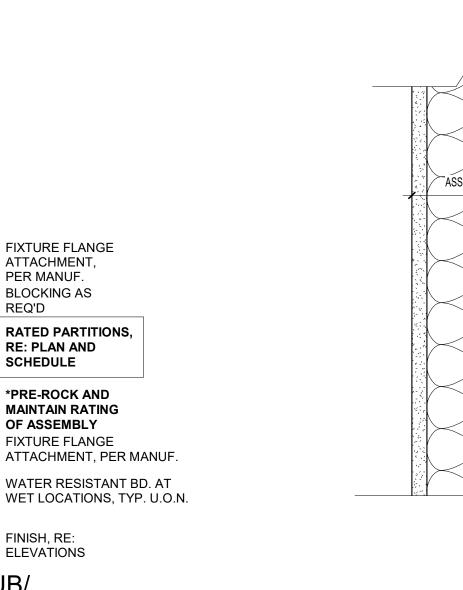
UNIT DETAIL - SHOWER @ NON RATED WALL @ HEAD/JAMB

SHOWER <u>OR</u> TUB, RE: PLAN

FRAMING - RATED WALL TUB/

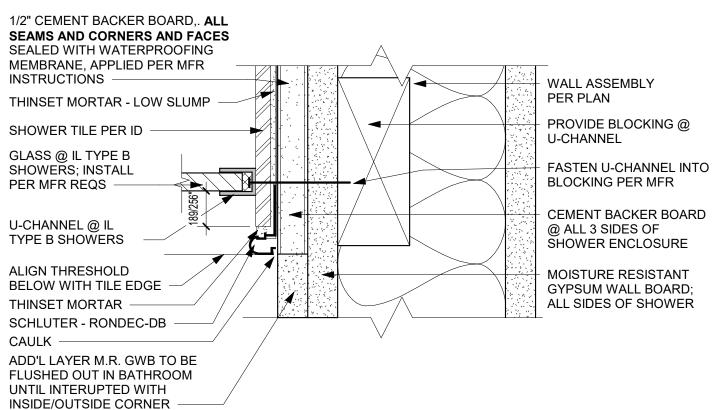
R.O. PER FIX. MANUF

1 1/2" = 1'-0"

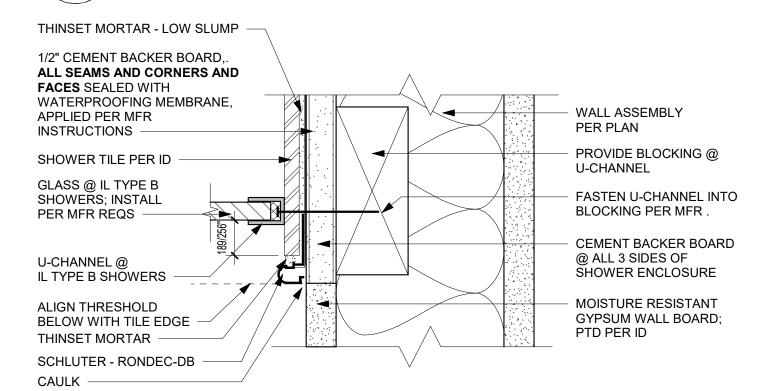


REQ'D

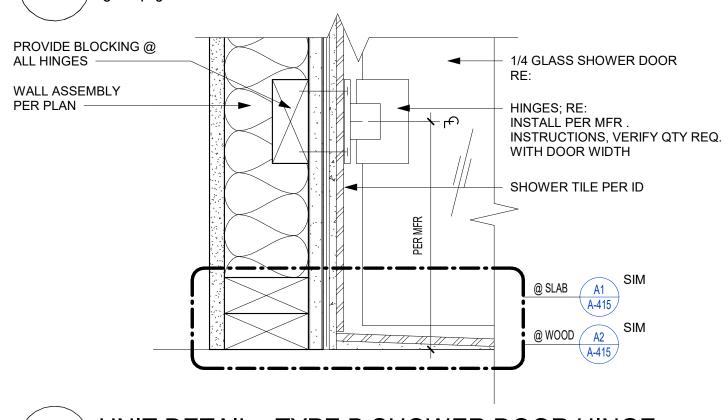
FINISH, RE:



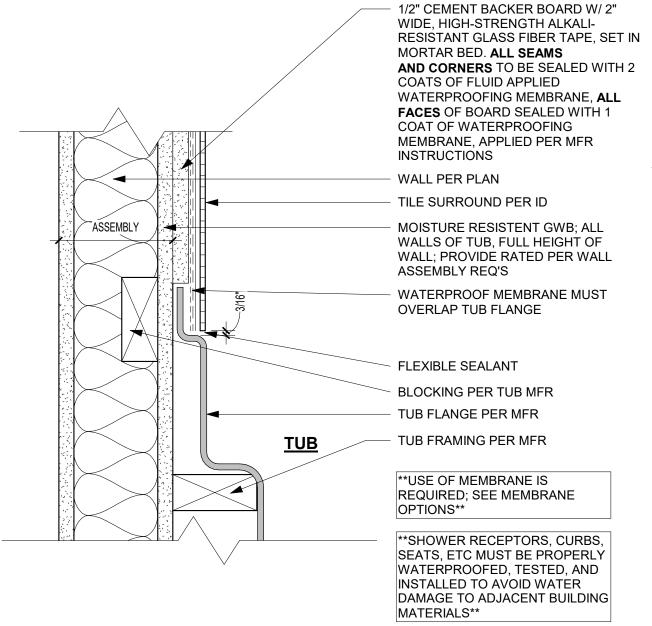
# UNIT DETAIL - TYPE B SHOWER -JAMB DETAIL (RATED WALL)



## UNIT DETAIL - TYPE B SHOWER - JAMB \ DETAIL (NON RATED WALL)



UNIT DETAIL - TYPE B SHOWER DOOR HINGE



**UNIT DETAIL - TUB SURROUND DETAIL** 

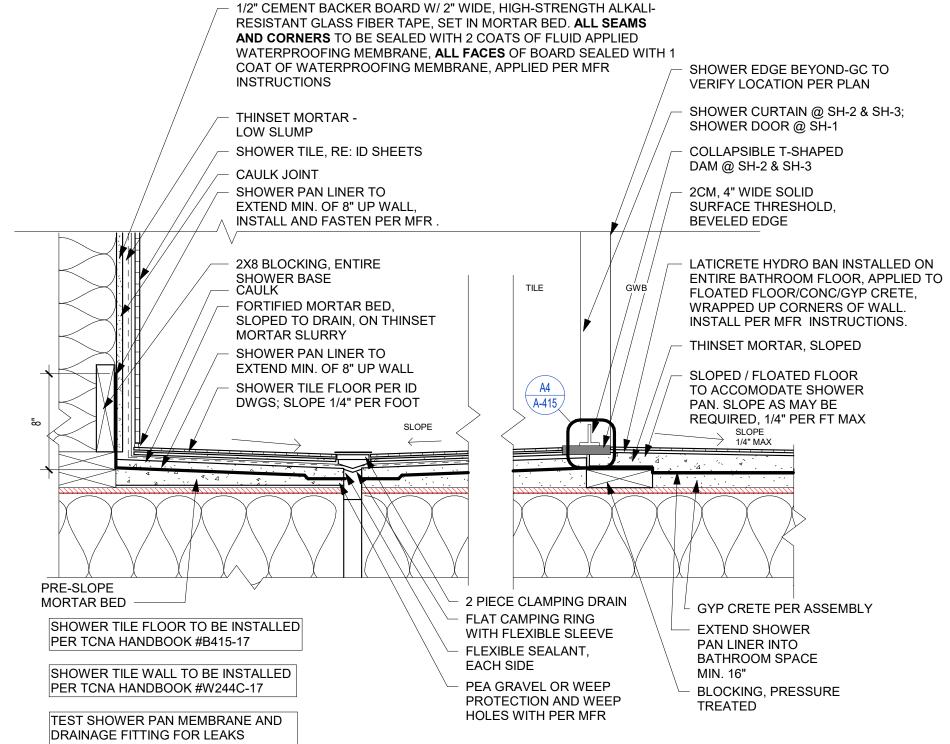
REFERENCE G-003 FOR GENERAL NOTES 1/4" GLASS DOOR POLYCARBONATE SHOWER DOOR SWEEP; B.O.D. CR LAURENCE @ 81/256" SH-1 SHOWER DOORS

B.O.D. CR LAURENCE D631BN; BRUSHED NICKEL ATTACH U-CHANNEL TO FINISH FLOOR PER MFR REQ'S -CONT. BEAD OF SEALANT; EA SIDE COLLAPSIBLE T-SHAPED DAM @ SH-2 & SH-3 INSTALL PER MFR 2CM, 4" WIDE INSTRUCTIONS, SOLID SURFACE THRESHOLD, PROVIDE CONT. BEVELED EDGES, SILICONE BEAD OF TYPE B 1/8" STEP FROM CAULK ON BOTH SIDES TYPE A LIP TO TILE SHOWER **SHOWER SHOWERS SIDE LITE** 

UNIT DETAIL - SHOWER THRESHOLDS

1/4" GLASS SIDE LITE

ALUM. U-CHANNEL -



## UNIT DETAIL - TILE SHOWER @ **WOOD ASSEMBLY**

UNIT DETAIL - TILE SHOWER @

1/2" CEMENT BACKER BOARD W/ 2" WIDE, HIGH-STRENGTH ALKALI-RESISTANT GLASS FIBER TAPE, SET IN MORTAR BED. ALL SEAMS AND CORNERS TO BE SEALED WITH 2 COATS OF FLUID APPLIED WATERPROOFING MEMBRANE, ALL FACES OF BOARD SEALED WITH 1 COAT OF WATERPROOFING MEMBRANE, APPLIED PER MFR INSTRUCTIONS SHOWER EDGE BEYOND-GC TO THINSET MORTAR -**VERIFY LOCATION PER** LOW SLUMP SHOWER TILE, RE: ID SHEETS **CAULK JOINT** SHOWER CURTAIN @ SH-2 & SH-3; SHOWER SHOWER PAN LINER TO DOOR @ SH-1 EXTEND MIN. OF 8" UP WALL, INSTALL AND FASTEN PER MFR COLLAPSIBLE T-SHAPED DAM @ SH-2 & SH-3 2X8 BĽOCKING, ENTIRE SHOWER BASE TILE 2CM, 4" WIDE SOLID FORTIFIED MORTAR BED. SURFACE THRESHOLD, SLOPED TO DRAIN, ON THINSET BEVELED EDGE MORTAR SLURRY LATICRETE HYDRO BAN SHOWER PAN LINER TO INSTALLED ON ENTIRE EXTEND MIN. OF 8" UP WALL BATHROOM FLOOR, APPLIED TO FLOATED FLOOR/CONC/GYP SHOWER TILE FLOOR PER ID CRETE, WRAPPED UP CORNERS DWGS; SLOPE 1/4" PER FOOT OF WALL. INSTALL PER MFR PRE-SLOPE MORTAR INSTRUCTIONS. THINSET MORTAR. **EXTEND SHOWER** PAN LINER INTO BATHROOM SPACE MIN. 18" SLOPED / FLOATED FLOOR TO ACCOMODATE SHOWER PAN. SLOPE AS MAY BE REQUIRED, 1/4" PER FT MAX SHOWER TILE FLOOR TO BE INSTALLED 2 PIECE CLAMPING DRAIN PER TCNA HANDBOOK #B421C-17 TEST SHOWER PAN MEMBRANE AND FLAT CLAMPING RING WITH DRAINAGE FITTING FOR LEAKS FLEXIBLE SLEEVE SHOWER TILE WALL TO BE INSTALLED BEFORE COMMENCING TILEWORK FLEXIBLE SEALANT, EACH SIDE

PEA GRAVEL OR WEEP PROTECTION AND WEEP HOLES WITH PER MFR

 $\Box$ SUITE

SHEET TITLE **UNIT DETAILS** 

PROJECT NUMBER: 22023

SHEET NUMBER:

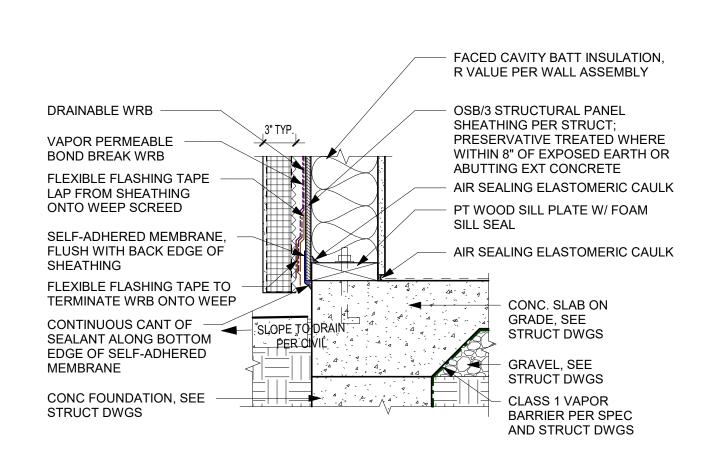
PER TCNA HANDBOOK #W244C-17

PRINTS ISSUED

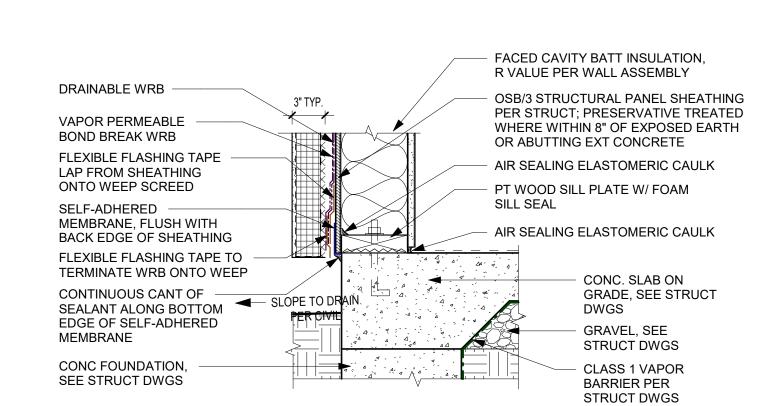
**REVISIONS:** 

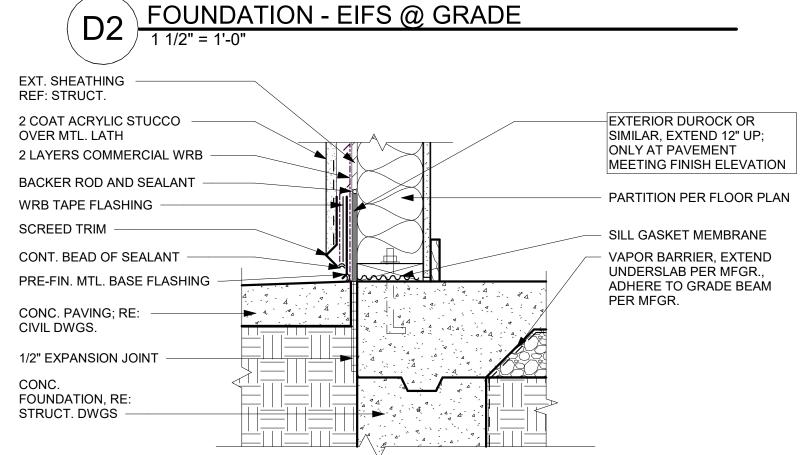
04/17/2024 - CITY SUBMISSION

BEFORE COMMENCING TILEWORK

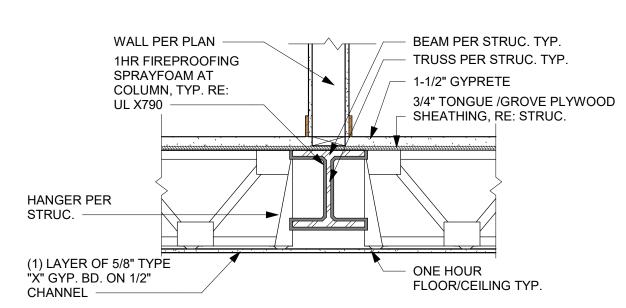


FOUNDATION - EIFS @ HARDSCAPE

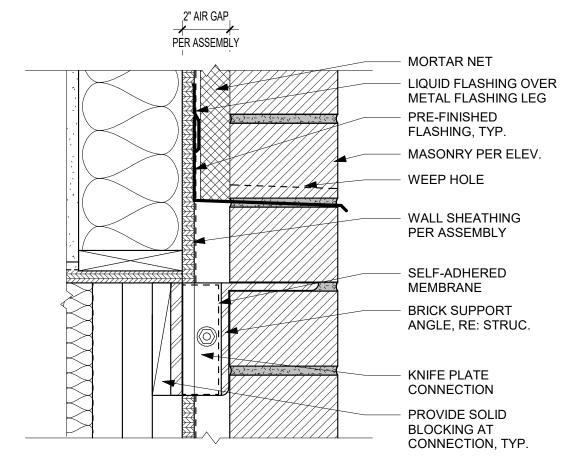




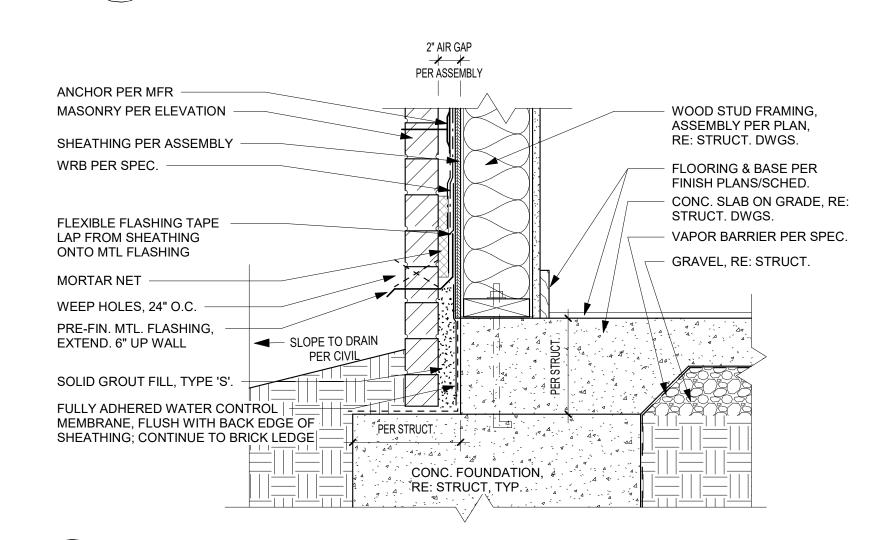


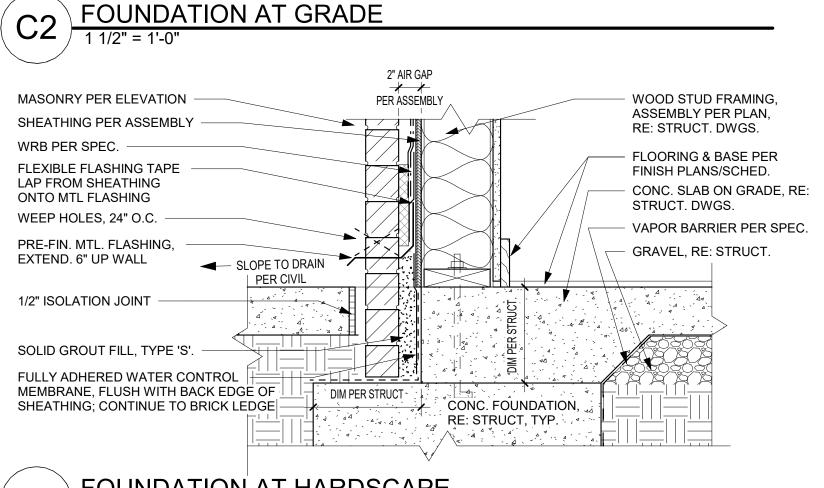


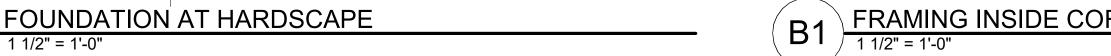


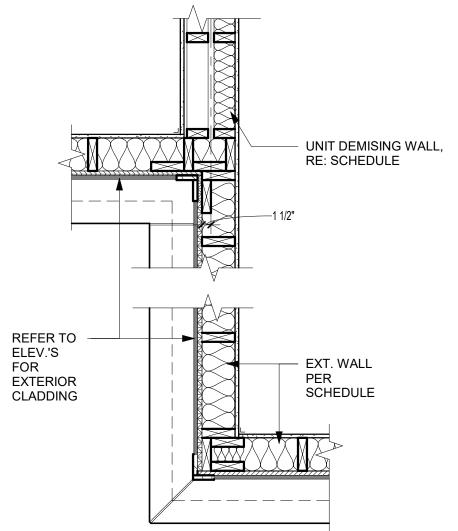


# **BRICK SUPPORT ANGLE**

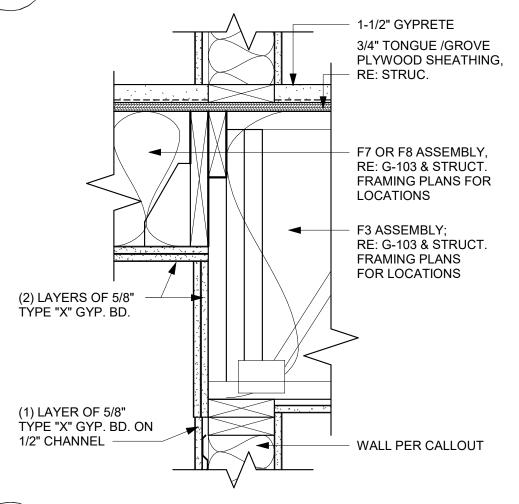




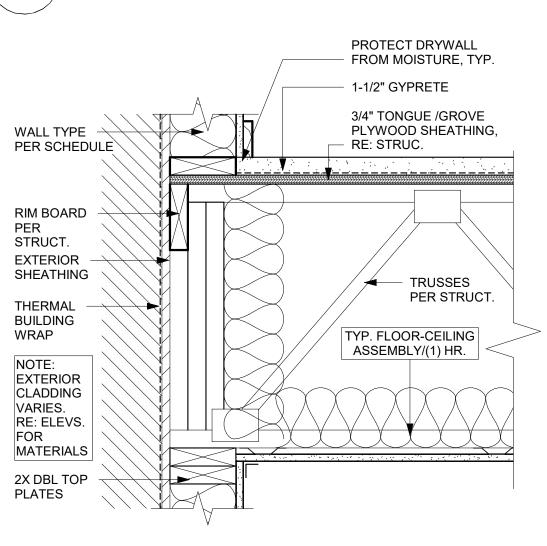




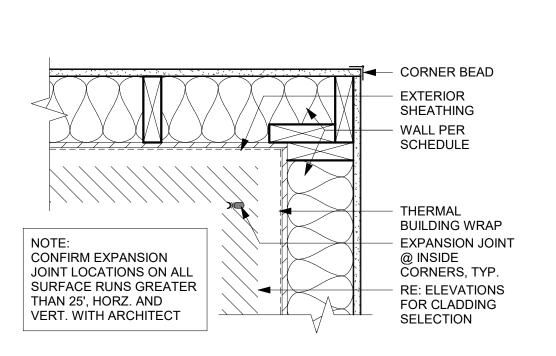
**CORNER FRAMING DETAIL** 



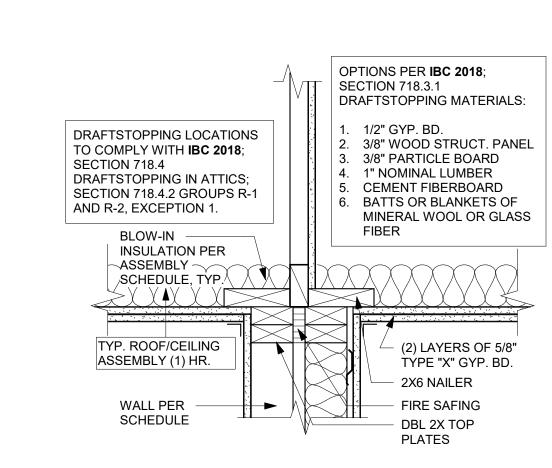
FRAMING UPSET @ CORRIDORS



FRAMING FLOOR/CLG DTL



FRAMING INSIDE CORNER



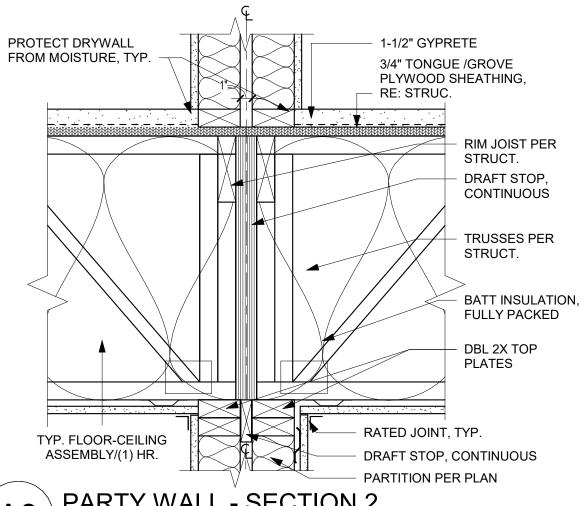
REFERENCE G-003 FOR GENERAL NOTES

PRINTS ISSUED

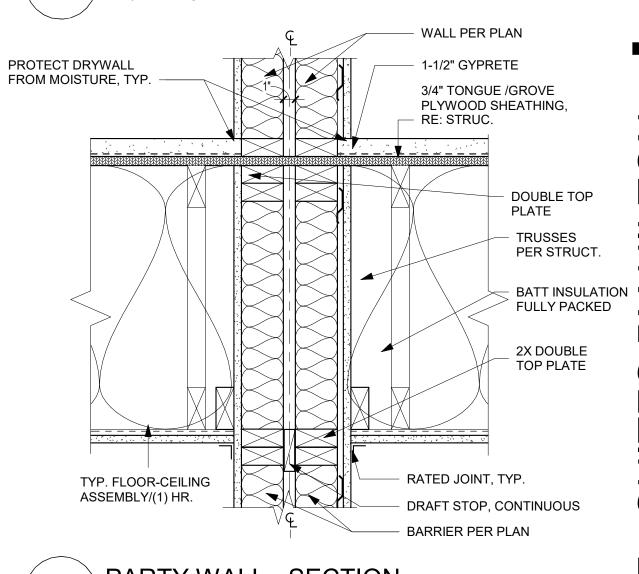
**REVISIONS:** 

04/17/2024 - CITY SUBMISSION

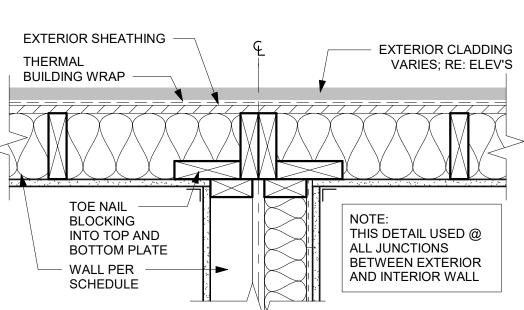
PARTY WALL - DRAFTSTOP 1 1/2" = 1'-0"



PARTY WALL - SECTION 2



**PARTY WALL - SECTION** 



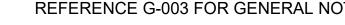
PARTITION WALL FIRE SEPERATION DETAIL

S S HOME

SHEET TITLE **DETAILS** 

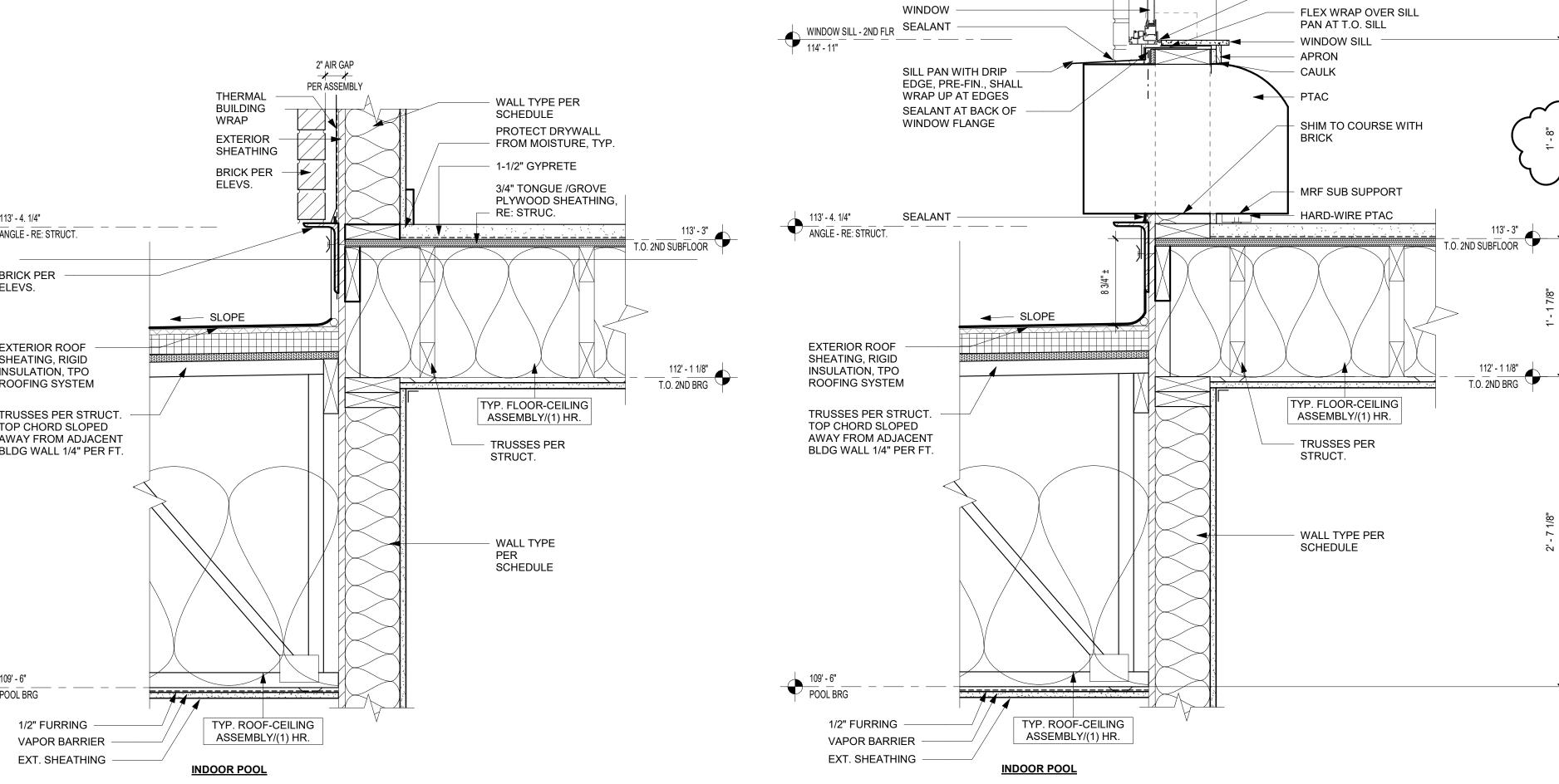
PROJECT NUMBER: 22023 SHEET NUMBER:

CAULKING



PRINTS ISSUED 04/17/2024 - CITY SUBMISSION

**REVISIONS:** 1 05/17/2024 CITY RESPONSE



WINDOW SIZE VARIES, RE:

**ELEVATIONS & SCHEDULE** 

3/4" MOISTURE RESISTANT

MDF. TO MATCH UNIT BASE

1/2" RADIUS ON WINDOW SILL

2X STUD WALL BELOW, DEPTH VIEWING W/ EXTERIOR FINISH

WD. STUD FRAMING PER STRUCT.

SHEATHING PER STRUCT DWGS.

**EXTERIOR FINISH PER ELEVATION** 

**BOTH SIDES** 

WALL PER PLAN

- FLEX TAPE

BED OF SEALANT

ROWLOCK SILL BELOW

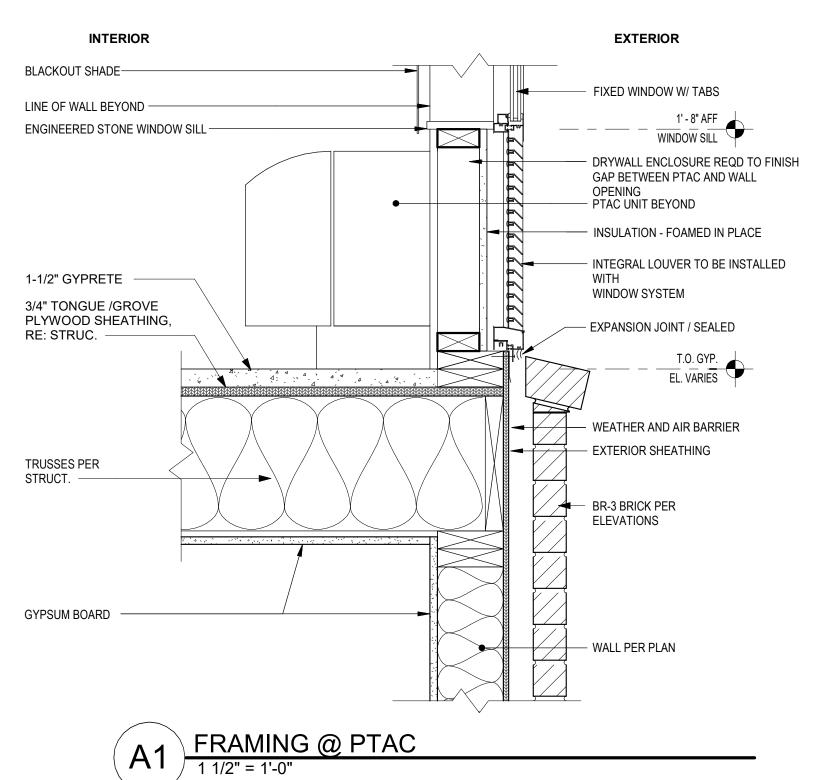
WINDOW PER SCHEDULE

PTAC GRILL PAINTED CUSTOM COLOR TO MATCH FRAME

FLEXIBLE FLASHING

BRICK PER ELEVATION BEYOND -

FRAMING - POOL ROOF DETAIL @ WINDOW

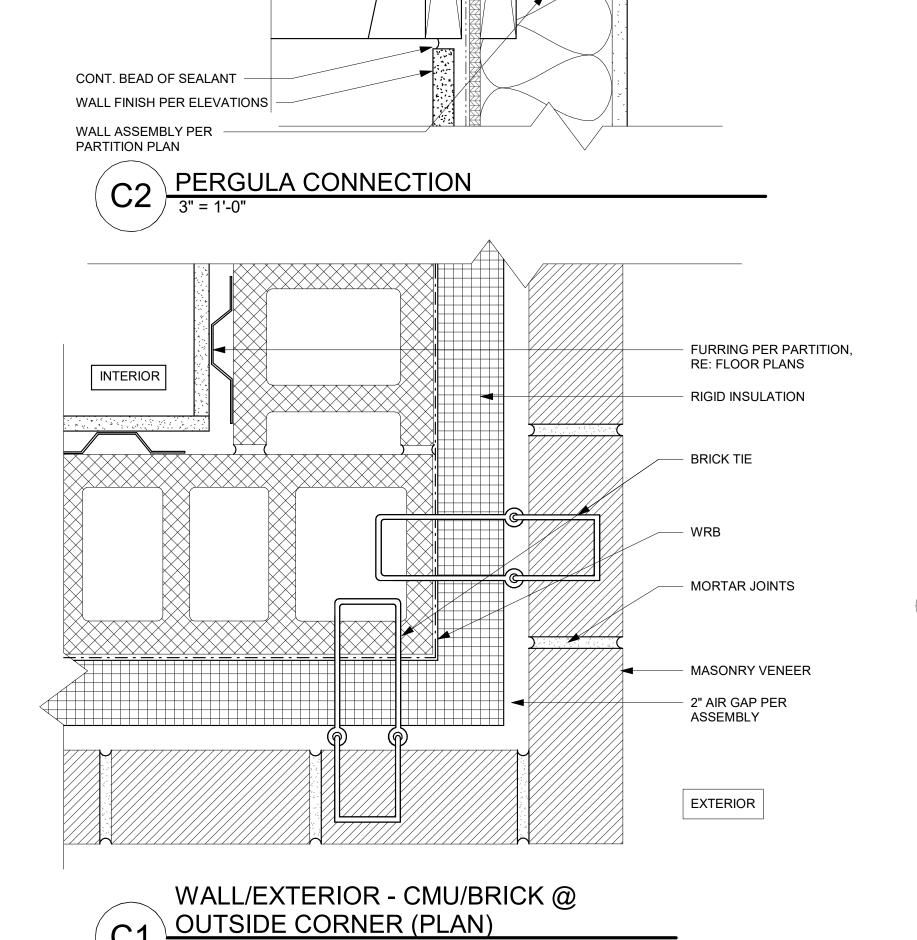


B SUITES **HOME2** 

SHEET TITLE **DETAILS** PROJECT NUMBER: 22023

SHEET NUMBER:

A-501



NOTES:

(2) WD. JOISTS PER

PER STRUCT

PARTITION PLAN

STRUCT. EACH SIDE OF

THE COLUMN, ANCHOR

LEDGER PER STRUCT —

WALL ASSEMBLY PER —

COLUMN BEYOND; RE: STRUCT.
DWGS. PAINTED COLOR PER ARCH

INTERIOR

-ALL EXPOSED WOOD TO BE

PAINTED/STAINED PER SPECIFICATION.

SIMPSON CLIP PER

WD. JOISTS PER

10/

(0////0/

STRUCT.

STRUCT

8' - 6 1/2" @ GRILLING PATIO

11 1/4"

BRICK ABOVE PER

**ELEVATIONS** 

**PURLIN PER** 

STRUCT, DO NOT ATTACH

TO BUILDING

STRUCT

SIMPSON CLIP PER

TAPE FLASHING

J MOLD TRIM

WD. JOISTS AND CLIPS PER STRUCT.

WALL FINISH PER ELEV.

CONT. BEAD OF SEALANT

SELF ADHERING SELF HEALING MEMBRANE AT LEDGER AND BOLT PENETRATION FASTEN PER STRUCT. DWGS. 2x12 LEDGER AND

HANGERS PER

STRUCT. PTD.

**EXTERIOR** 

PRE FINISHED MTL. FLASHING

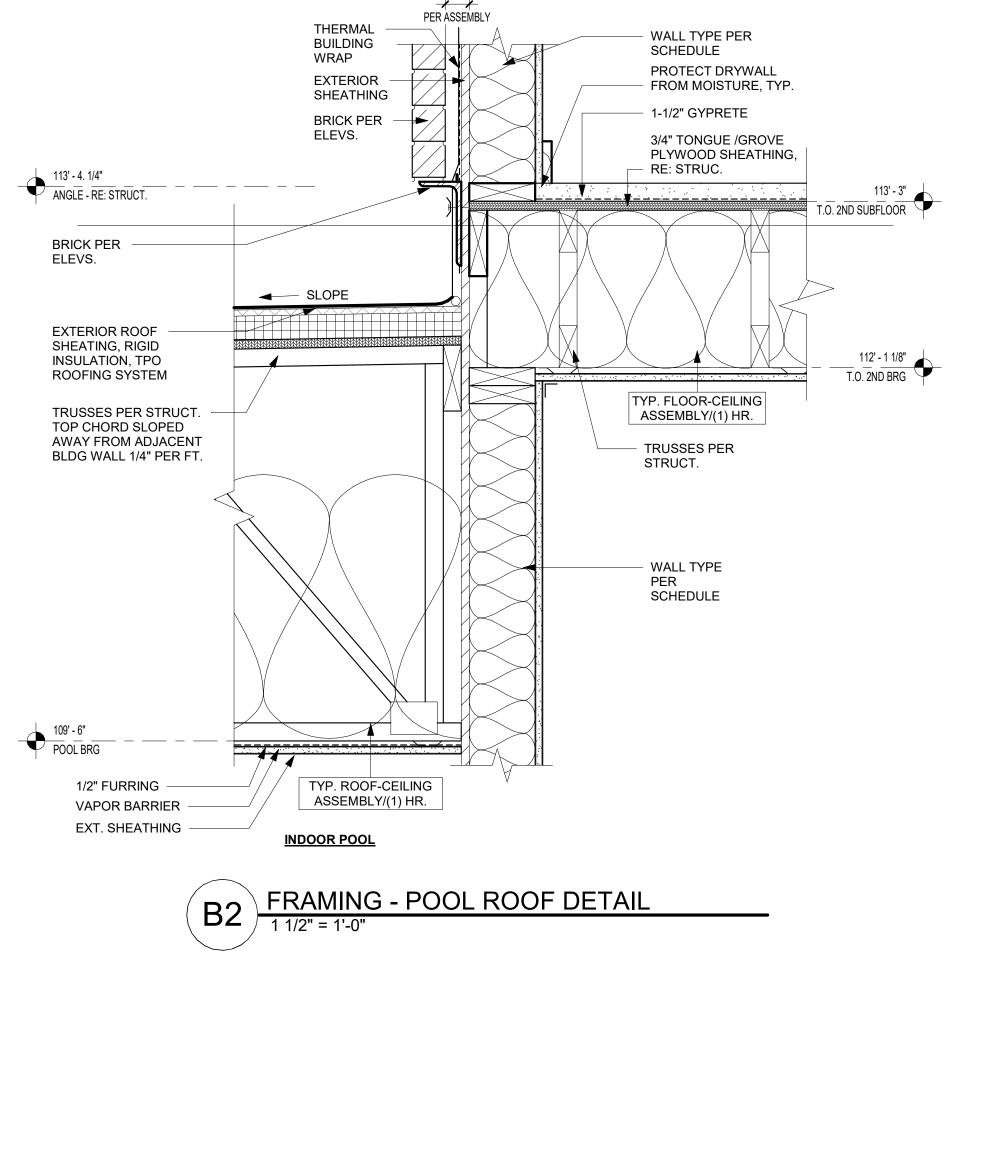
11' - 6 1/2" @ FRONT DROP OFF

PERGULA SECTION

PURLIN PER STRUCT

SIMPSON CLIP EACH

SIDE OF JOIST. PER STRUCT.



PER MFGR.

PTAC ALIGNMENT WITH WINDOW

**VARIES** 

BRICK @ PTAC (PLAN)

**INTERIOR** 

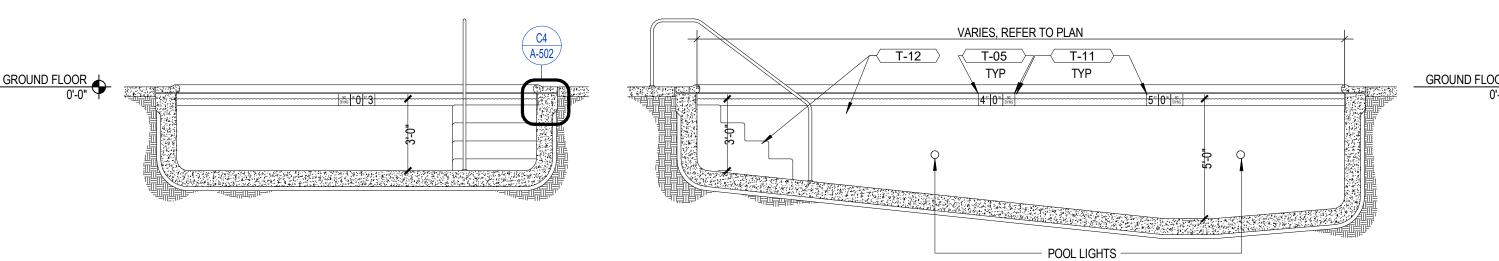
**EXTERIOR** 



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Semani & ASSOC

**REVISIONS:** 



**POOL SECTIONS** 

- CONT. BACKER ROD AND SEALANT OVER PREMOLDED EXPANSION

- CONCRETE DECK INTEGRATED

POOL WALL -DETAIL BY POOL

SUBCONTRACTOR FORMING LAYER

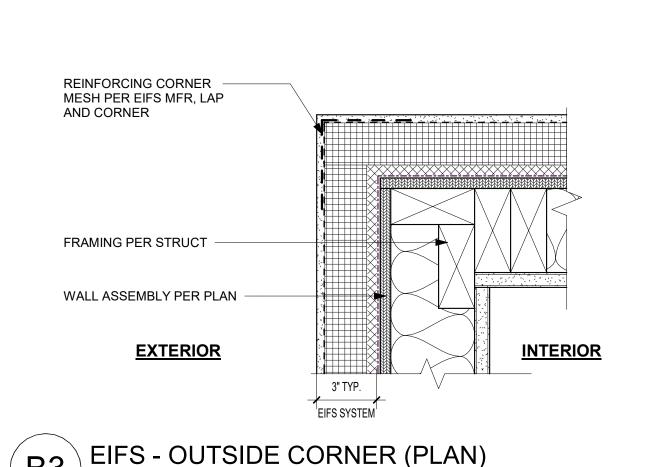
<u>INTERIOR</u>

<u>INTERIOR</u>

**INTERIOR** 

**EIFS - TYPICAL EXPANSION JOINT** 

COLOR AND FINISH



/INSURE FASTENER DEPTH PËR

MFR RECCOMENDATIONS

STUCCO - HORIZONTALCONTROL JOINT

**EXTERIOR** 

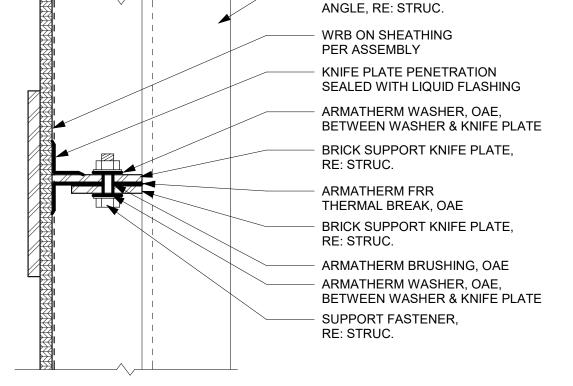
**INTERIOR** 

CONTINUOUS BLOCKING AS

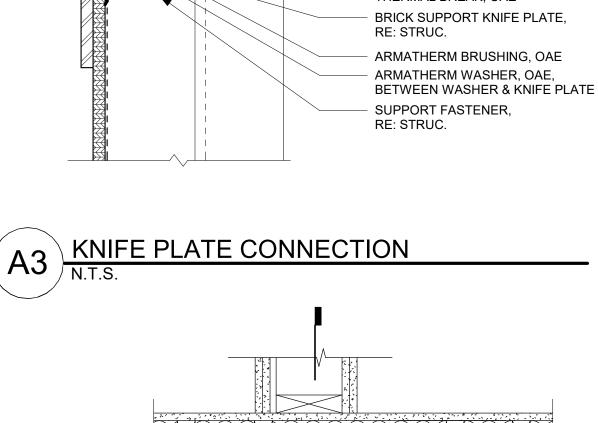
<u>INTERIOR</u>

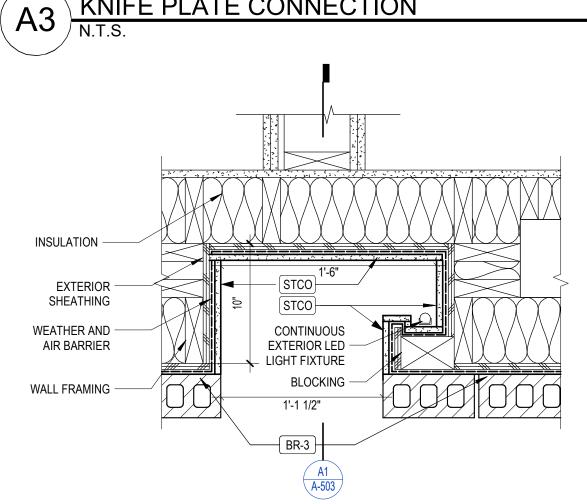
PENETRATION PER MFR

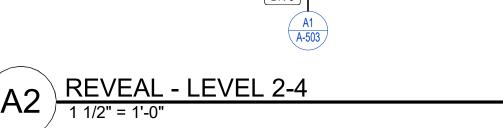
REQUIRED FOR FULL FASTENER

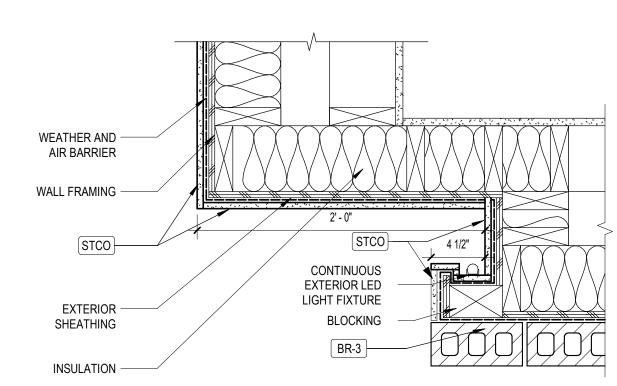


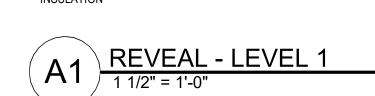
BRICK SUPPORT

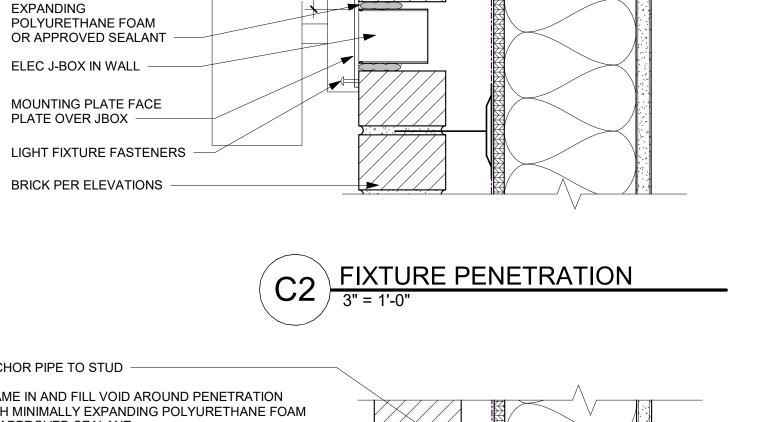












**POOL COPING** 

**EXTERIOR** 

EIFS SYSTEM

BRICK PRECAST COPING, NON-SLIP FINISH

DECORATIVE TILE BORDER -FULL

SEE PLAN FOR PARTITION TYPES

EIFS MFR ADHESIVE SYSTEM

EIFS MFR REINFORCING MESH;

SHALL BE TAKEN TO ENSURE

REINFORCING MESH IS NOT CUT

DURING BASE COAT APPLICATION

SHALL BE CONTINUOUS AND CASE

APPROVED EPS PANELS

EIFS MFR BASE COAT

EIFS MFR FINISH COAT;

BACKER ROD & SEALANT

WRB PER FINISH SYSTEM

WALL FRAMING PER STRUCT FIREBLOCKING AS REQD

OSB/3 STRUCTURAL PANEL

ABUTTING EXT CONCRETE

PRESERVATIVE TREATED WHERE

WITHIN 8" OF EXPOSED EARTH OR

FACED CAVITY BATT INSULATION, R VALUE PER WALL ASSEMBLY

**EXTERIOR** 

SHEATHING PER STRUCT

FLASH WITH FLASHING

(WIDTH PER DESIGN)

EIFS-1

MFR REQ'S -

PRIMER -

QUICKFLASH PER MFR

FRAME IN AND FILL VOID

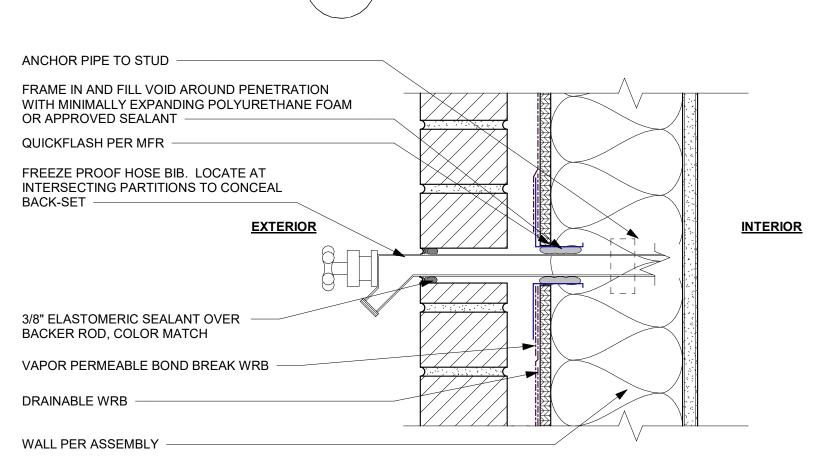
AROUND PENETRATION

WITH MINIMALLY

WHITE PLASTER FINISH

IN FULL MORTAR BED

PERIMETER





CEMENT PLASTER

FURRING LATH DRAINABLE WRB

STUCCO SYSTEM; SELF

VAPOR PERMEABLE BOND BREAK WRB; CONTINUE

PER ELEVATIONS

HORIZONTAL CONTROL JOINT,

EXPENDED FLANGES; FASTEN

PER MFR REQ OR APPLICABLE

ICC-ES EVALUATION REPORT;

PROVIDE BLOCKING AS REQ'D

DISCONTINUE LATH AT CONTROL JOINT; TYP PER

**ASTM C1063** 

IBC 2510, ASTM C926 AND

**EXTERIOR** 

CEMENT PLASTER STUCCO — SYSTEM; SELF FURRING LATH

FILL VOID SPACE SOLID WITH BASE COAT CEMENT PLASTER

12" SELF ADHERED MEMBRANE

AT CORNERS, EXTEND 6" IN

GALV EXTERIOR CORNER

REINFORCEMENT

EACH DIRECTION

DRAINABLE WRB -

BREAK WRB

FRAMING PER STRUCT,

FIREBLOCKING AS REQD

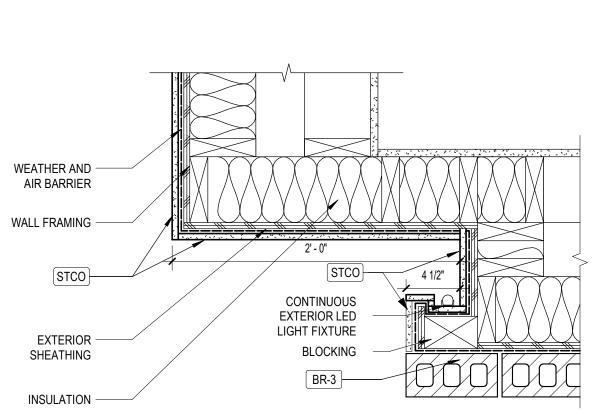
**OSB/3 STRUCTURAL PANEL** 

SHEATHING PER STRUCT

VAPOR PERMEABLE BOND

WALL ASSEMBLY PER PLAN

BEHIND CONTROL JOINT



SHEET NUMBER:

PROJECT NUMBER: 22023

SUMMIT

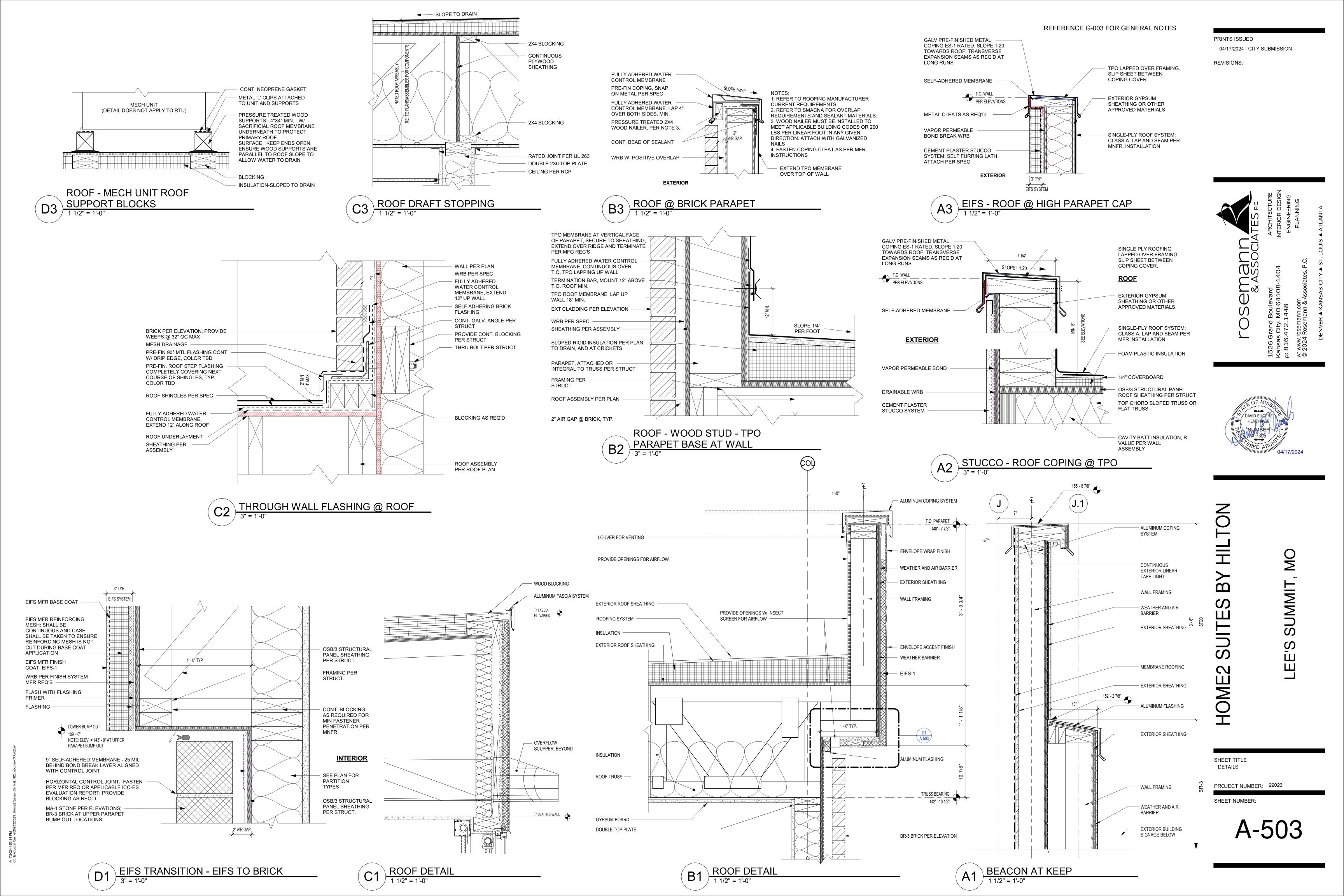
 $\Box$ 

SUITES

HOME2

SHEET TITLE

**DETAILS** 



1-1/2" GYPCRETE

RE: STRUC.

2X8 JOISTS PER STRUCT.

2X NAILER

WALL TYPE PER

1-1/2" GYPCRETE ON 3/4" TONGUE /GROVE PLYWOOD

SHEATHING, RE: STRUC.

2X JOISTS

WALL TYPE PER

PARTITION TAG CALLOUT

TOP REINF. PER

SIMULTANEOUSLY

ELEVATOR JAMB

PER MANUFACTURER

STRUC.

PER STRUCT.

3/4" TONGUE/GROVE PLYWOOD SHEATHING,

PRINTS ISSUED

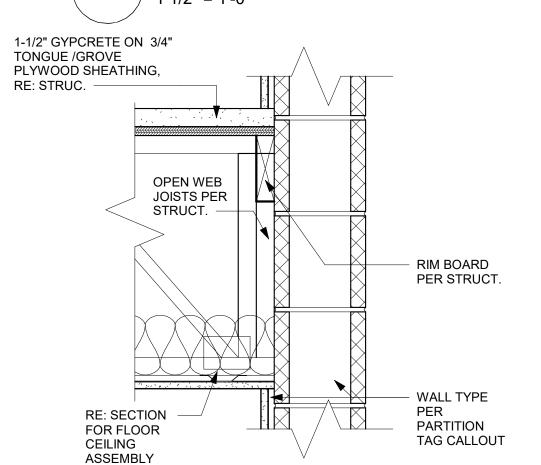
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OSemanr & ASSOC

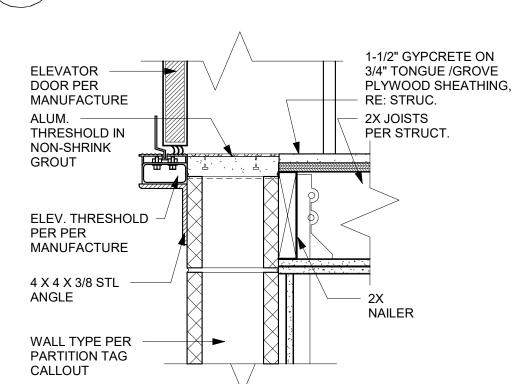
**REVISIONS:** 1-1/2" GYPCRETE 3/4" TONGUE/GROVE PLYWOOD SHEATHING, RE: STRUC. 2X8 JOISTS PER STRUCT. 2X NAILER BOND BEAM PER STRUC. P54 P41 **CORRIDOR** - WALL TYPE(S) PER PARTITION TAG CALLOUT

FRAMING @ CMU - STAIR 1

PARTITION TAG CALLOUT 1-1/2" GYPCRETE ON 3/4" TONGUE /GROVE PLYWOOD SHEATHING, RE: STRUC. OPEN WEB JOISTS PER STRUCT. 2X NAILER RE: SECTION FOR FLOOR CEILING ASSEMBLY

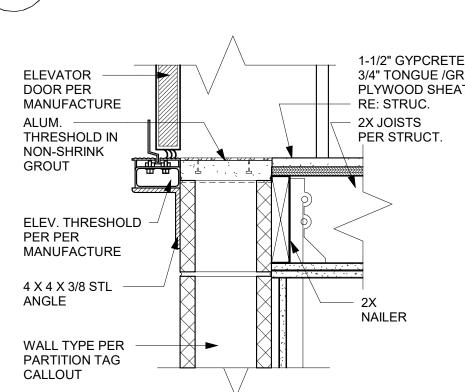


FRAMING @ CMU



**ELEVATOR SHAFT AT** 

A3) FRAMING @ CMU



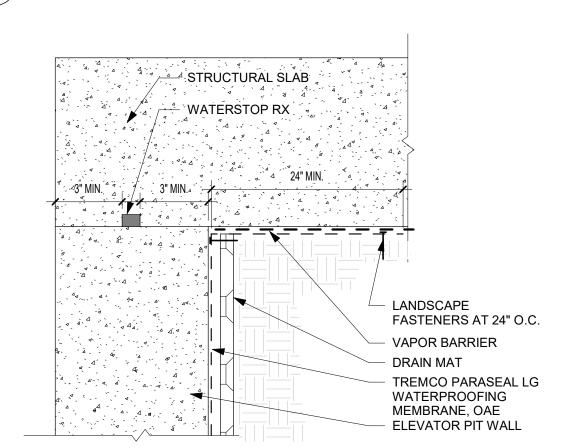
BYSUITE **HOME2** 

> SHEET TITLE **ELEVATOR & CMU DETAILS**

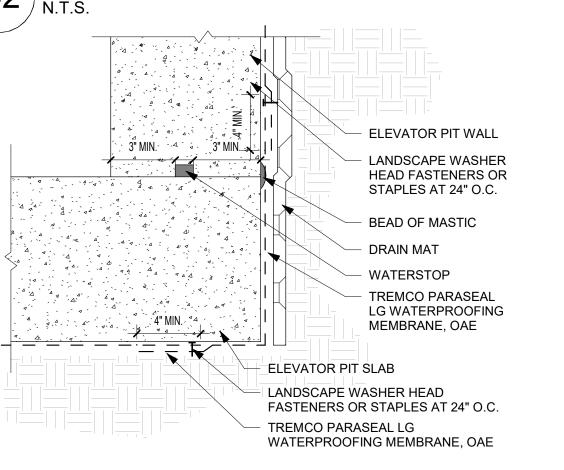
PROJECT NUMBER: 22023 SHEET NUMBER:

UNDERLAYMENT 2" ISO INSULATION CONT BED OF SEALANT FULLY ADHERED WATER CONTROL MEMBRANE PRE-FIN. MTL FLASHING W/ DRIP EDGE, PTD PER ARCH PRE-FINISHED ALUMINUM **GUTTER** REFERENCE STRUCTURE FOR TRUSS SIZE AND TRIM BOARD, PER ELEVATIONS SPACING CONT BED OF SEALANT (1) LAYER WRB STUCCO FINISH ELEVATOR - CMU AT LOW SLOPE ROOF @ GUTTER

STANDING SEAM METAL ROOF



ELEVATOR PIT WALL TO SLAB
N.T.S.



ELEVATOR PIT SLAB TO WALL TRANSITION N.T.S.

**ELEVATOR SHAFT THRESHOLD** 

<u>SHAFT</u>

BOND BEAM PER STRUCT.

WALL TYPE(S) -PER PARTITION TAG CALLOUT

REBAR POSITIONER OR SUPPORT @ 48"O.C.

REINF. CHAIR SUPPORT @ 48" O.C.

B2

**ELEVATOR** 

DOOR PER

ALUM.

GROUT

ANGLE

CONC.

MANUFACTURE

THRESHOLD IN

MANUFACTURE

4 X 4 X 3/8 STL

CONC. SLAB

RE: STRUCT.

ELEVATOR PIT.

RE: STRUCT.

NON-SHRINK

ELEVATOR SHAFT DETAIL
1 1/2" = 1'-0"

ELEVATOR DOOR HEAD DETAIL
1 1/2" = 1'-0"

(B1

THRESHOLD DETAIL
1 1/2" = 1'-0"

PER MFR

PRE-FIN

SC WOOD / SCWD

NOT APPLICABLE

PAINTED SOLID CORE WOOD

PRE-FINISHED

Fire Rating | Access Control | Panic

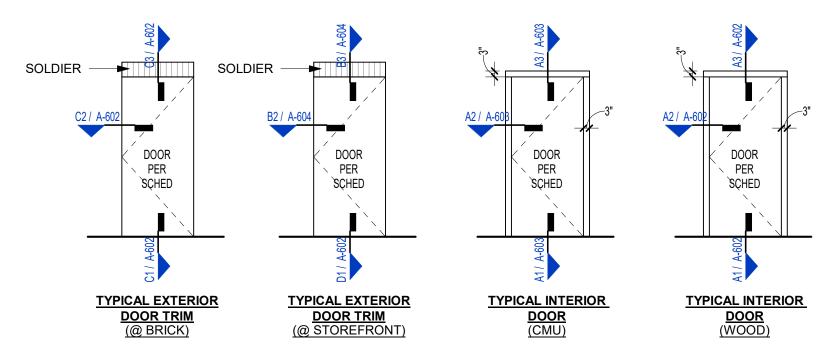
PER MANUFACTURER

WINDOW COMMENTS:								
1.	GLAZING DEEMED TO BE IN A HAZARDOUS LOCATION							
	SHALL BE TEMPERED / SAFETY GLAZING.							

- 2. EACH PANE OF SAFETY GLAZING INSTALLED IN HAZARDOUS LOCATIONS SHALL BE IDENTIFIED BY MFR'S DESIGNATION.
- CONFIRM OPERATION OF SASH LOCKS AT "TYPE A" UNITS WILL BE WITHIN 48" REQUIRED REACH RANGE PER A4 / G-300
- REFER TO CODE SHEET FOR ALL FIRE RATINGS.
- 5. WINDOW LOCATIONS PER PLANS.

WINDOW SCHEDULE										
Type Mark	Location	Width	Height	Comments						
A1	TYP. 1ST FLOOR	6' - 0"	7' - 0 3/4"							
A2	TYP. UPPER FLOOR GUEST ROOMS	6' - 0"	6' - 0"							
B1	UPPER FLOOR CORRIDORS	5' - 0"	6' - 0"							
C1	<varies></varies>	4' - 0"	2' - 6"							

	DOOR SCHEDULE - UNIT DOORS											
Mark	Width	Height	Thickness	Fire Rating (Minutes)	Door Type	Frame Type	Comments	Hardware Group				
GR-01	3' - 0"	6' - 8"	1 3/4"	20	A2	НМ		27				
GR-02	3' - 0"	6' - 8"	1 3/4"		A1	НМ		28				
GR-03	3' - 0"	6' - 8"	1 3/4"	45	A1	НМ	а	29				
GR-04	3' - 0"	6' - 8"	1 3/4"		A1	HM		30				
GR-05	3' - 0"	6' - 8"	1 3/4"		A1	HM		31				

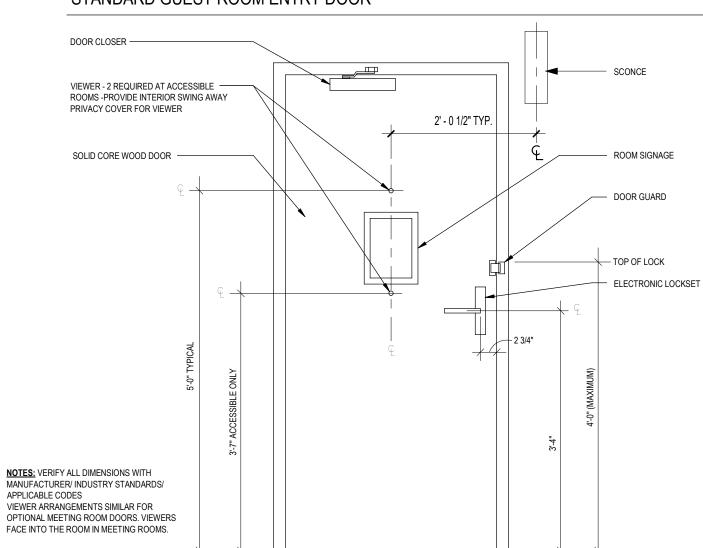


# DOOR TRIM & CASING - TYPICAL

## **DOOR SCHEDULES COMMENTS:**

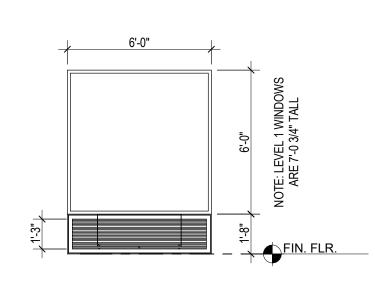
- a. PROVIDE (2) DOORS FOR EACH COMMUNICATING DOOR LOCATION.
- b. SLIDING AUTOMATIC ENTRANCE: BASIS OF DESIGN IS BESAM UNISLIDE OC-S, OVERHEAD CONCEALED FIXED SIDELITE, NARROW STILE SINGLE SLIDE DOOR SYSTEM.
- c. ALUMINUM DOOR WITHIN STOREFRONT FRAME. BASIS OF DESIGN IS KAWNEER 500 WIDE STILE DOORS. DOORS & FRAMES TO BE PAINTED, ALL HARDWARE & TRIM TO BE CLEAR ANODIZED ALUMINUM OR US32D. REFER TO ELEVATIONS.
- d. DOORS ON MAGNETIC HOLD OPENS TO TIED INTO FIRE ALARM SYSTEM AND TO RELEASE
- e. C-SERIES HOLLOW METAL DOOR FRAME WITH NO BACKBENDS.
- f. PROVIDE (1) REMOTE READER AND (1) INTERCOM/BUZZER -- REFER TO HARDWARE SET FOR
- g. EXTERIOR DOOR FINISH TO MATCH ADJACENT WALL COLOR -- SEE EXTERIOR ELEVATIONS.

## STANDARD GUEST ROOM ENTRY DOOR



STANDARD GUEST ROOM ENTRY DOOR

## TYPICAL GUEST ROOM WINDOW



TYP GUEST ROOM WINDOW 1/4" = 1'-0"

SEE ENLARGED PLANS & ENLARGED STAIR & ELEVATOR PLANS FOR ALL DOOR TAGS.

2. BOTTOM RAIL TO BE MINIMUM 10" TO ALLOW FOR A 10" KICK PLATE; TYPICALL ALL DOORS. SEE: A3 / G-300

3. SEE SPECIFICATIONS FOR DOOR HARDWARE SCHEDULE; FINAL HARDWARE SCHEDULE AND FINAL GROUPS TO BE DETERMINED BY DOOR SUB-CONTRACTOR. VERIFY FINAL HARDWARE INSTALLATION WITH CLIENT AND ARCHITECT.

4. DOOR HARDWARE SHALL NOT REQUIRE TIGHT GRASPING, TIGHT PINCHING, OR TWISTING OF THE WRIST TO OPERATE.

5. ALL DOOR HARDWARE TO BE LEVER TYPE HARDWARE,

6. ALL COMMON AREA RATED DOORS TO HAVE SMOKE SEALS (GASKETS), CLOSURES, AND LATCH HARDWARE.

7. UNIT ENTRY DOORS TO HAVE SPRING HINGES & LATCH HARDWARE, TYP UNO.

8. ALL DOORS INTENDED FOR PASSAGE TO HAVE 32" CLEAR WIDTH PER ICC ANSI A117.1

9. ALL EXTERIOR HOLLOW METAL DOORS ARE TO BE PAINTED TO MATCH ADJACENT MASONRY.

**FIBERGLASS** 

3' - 0"

4' - 0"

3' - 0"

3' - 0"

2' - 6"

3' - 0"

3' - 0"

8' - 0"

8' - 0"

2' - 2"

3' - 0"

3' - 0"

3' - 0"

3' - 0"

3' - 0"

3' - 6"

3' - 0"

3' - 0"

3' - 0"

3' - 0"

3' - 0"

**HOLLOW METAL** 

**INSULATED METAL** 

HOLLOW CORE WOOD

7'-0" 2 1 3/4"

6' - 8"

7' - 0"

7' - 0"

6' - 8"

6' - 8"

6' - 8"

6' - 8"

6' - 8"

6' - 8"

6' - 8"

6' - 8"

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6' - 8"

6' - 8"

7' - 0"

7' - 0"

6' - 8"

6' - 8"

6' - 8"

6' - 8"

6' - 8"

8' - 0" | 6' - 8" | 1 3/4" | 45

7'-0"/2 1 3/4"

7' - 0" 2 1 3/4" 6' - 8" 1 3/4"

3' - 6" 6' - 8"

3' - 6" 6' - 8"

3' - 0" 6' - 8"

3' - 0" | 6' - 8"

|3' - 6" |6' - 8"

3' - 0" 6' - 8"

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1 3/4"

1 3/4"

1 3/4"

1 3/4"

1 3/4"

1 3/4"

1 3/4"

1 3/4"

1 3/4" 90

1 3/4" 45

1 3/4"

DOOR SCHEDULE ABBREVIATIONS:

FGL / FBG

**INSUL MTL** 

HC WOOD / HCWD

ALUMINUM

ANODIZED

BLACK

**BRONZE** 

CLEAR

T.O. 1st FLOOR SLAB 001A VESTIBULE

001B LOBBY

003A HALL

001C VESTIBULE

003B VESTIBULE

006A BREAKFAST

006B BREAKFAST

007A FOOD PREP

007B FOOD PREP

009 WORK STATIONS

LAUNDRY

LAUNDRY

015A INDOOR POOL

015B INDOOR POOL

016B INDOOR POOL

UNISEX

WOMENS

STORAGE

025B GUEST LAUNDRY

029 EMPLOYEE BREAK

ENGINEER

133A CIRCULATION

T.O. 2nd SUBFLOOR 234 ELEVATOR LOBBY

251 STAIR-1

252 STAIR-2

351 STAIR-1

352 STAIR-2

Γ.O. 4th SUBFLOOR

T.O. 3rd SUBFLOOR

235 HOUSEKEEPING

334 ELEVATOR LOBBY

434 ELEVATOR LOBBY

435 HOUSEKEEPING

STAIR-1

STAIR-2

HOUSEKEEPING

026A ENGINEER

PBX

052A | STAIR 2

CIRCULATION

GUEST LAUNDRY

MENS

SALES

INDOOR POOL

GRILLING PATIO

GRILLING PATIO

013A LAUNDRY

010B MANAGERS OFFICE

012A DISCHARGE LAUNDRY

012B DISCHARGE LAUNDRY

MANAGERS OFFICE

LOBBY

### REFERENCE G-003 FOR GENERAL NOTES

## DOOR TYPES

SINGLE SWING

FLUSH

**ALUM** 

ALUM

ALUM

**ALUM** 

ALUM

GALV HM

GALV HM

GALV HM

GALV HM

НМ

HM

ALUM

GALV HM

GALV HM

GALV HM

GALV HM

ALUM

HM

НМ

НМ

НМ

ALUM

NOT APPLICABLE

WOOD CLAD

GLAZING

(AC) Hardware Door Type Door Material Door Finish Frame Type Frame Finish

SC WOOD

SC WOOD

SC WOOD

SC WOOD

SC WOOD

SC WOOD

SC WOOD

SC WOOD

SC WOOD

SC WOOD

SC WOOD

GALV HM

GALV HM

GALV HM

GALV HM

SC WOOD

SC WOOD

SC WOOD

SC WOOD

SC WOOD

GALV HM

SC WOOD

SC WOOD

SC WOOD GALV HM

GALV HM

ALUM

SC WOOD

SC WOOD

SC WOOD

SC WOOD

SC WOOD

SC WOOD

SC WOOD

HM

HM

ALUM

A1

A6

A1

A1

Yes/1

Yes

Yes

Yes

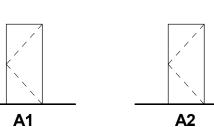
Yes

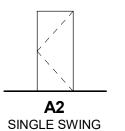
No

Yes

WD CLAD

DOOR OPENING SCHEDULE



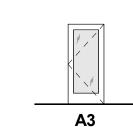


FLUSH

**GUEST ROOM ENTRY** 

J2

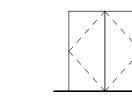
CASED OPENING

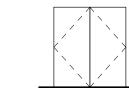


SINGLE SWING

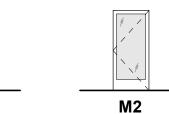
FULL LITE

SINGLE SWING





DOUBLE SWING FLUSH



STOREFRONT

Comments

М3 STOREFRONT

SLIDING AUTOMATIC

Hardware

Group

PRINTS ISSUED

**REVISIONS:** 

04/17/2024 - CITY SUBMISSION

1 05/17/2024 CITY RESPONSE

2 06/14/2024 CITY & BRAND RESPONSE



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S

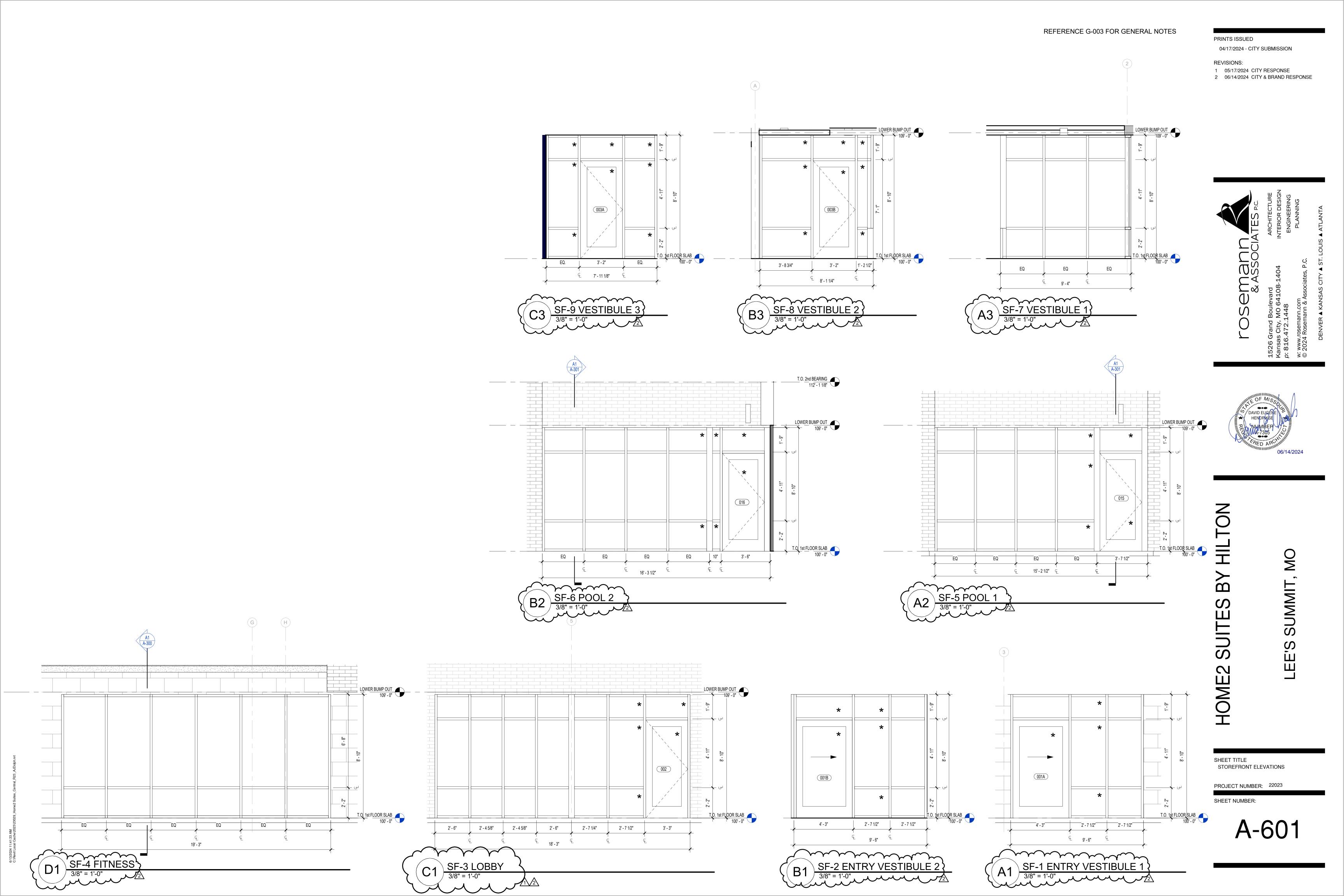
HOME

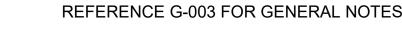
SUMMIT

SHEET TITLE WINDOW / DOOR / FINISH SCHEDULES

PROJECT NUMBER: 22023

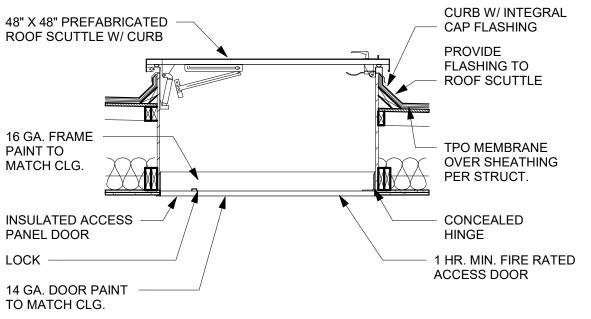
SHEET NUMBER:



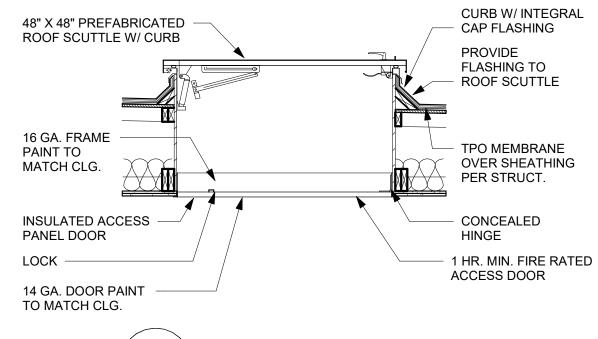


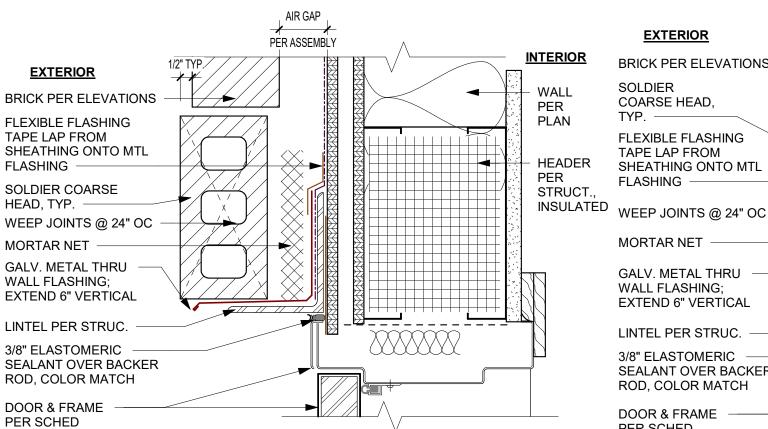
PRINTS ISSUED 04/17/2024 - CITY SUBMISSION

> REVISIONS: 2 06/14/2024 CITY & BRAND RESPONSE



**ROOF SCUTTLE** 





STAINLESS STEEL 24 GA METAL SILL PAN, ONE PIECE

WATER FLOW

4" MIN V.I.F.

MECHANICALLY FASTENED AND SOLDERED WATERTIGHT, SET

FASTENER ON HORIZ. PLANE OF ROUGH OPENING, ALIGN AND SHINGLE PAN WITH BASE FLASHING IN THE DIRECTION OF

SEALANT, BETWEEN THRESHOLD & DOOR FRAME

NOTE: WHEN DOOR PAN IS

INSTALLATION. PRIME

MANUF.

INSTALLED ON CONCRETE, 40

MIL SELF-ADHERED MEMBRANE

CONCRETE PRIOR TO DOOR PAN

IS TO BE INSTALLED OVER THE

SUBSTRATE AS REQUIRED BY

3/8" HEM BACK LEG, NOTCH THRESHOLD

(NOT APPLICABLE TO UTILITY DOORS)

TWO INDIVIDUAL BEADS OF SEALANT

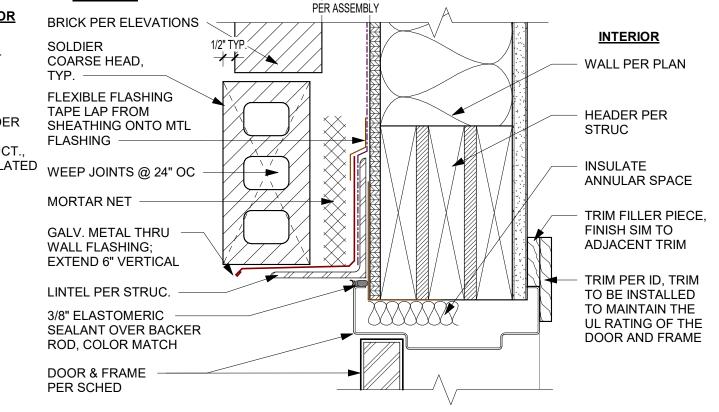
DOOR THRESHOLD, FOR ENTRY DOOR

WITH 1" BRERAKS AT EACH END

ONLY, SHOWN SCHEMATICALLY, PROVIDE SEALANT AT ALL FASTENER

PENETRATIONS THRU PAN

IN FULL BED OF COMPATIBLE SEALANT. SLOPE AT 1%. NO



/

TYPICAL WEEP SCREED SECURE IN

PRIOR RO DOOR INSTALLATION

OPTION #2

PLACE USING SEALANT, TAPE OR OTHER NON-PENETRATING MEANS, REMOVE WIDTH

TEMPORARY SILL PAN PROTECTION OPTIONS

PAN

OPTION #1

FASTEN BEHIND SILL PAN OR

TEMPORARILY ADHERED, DO

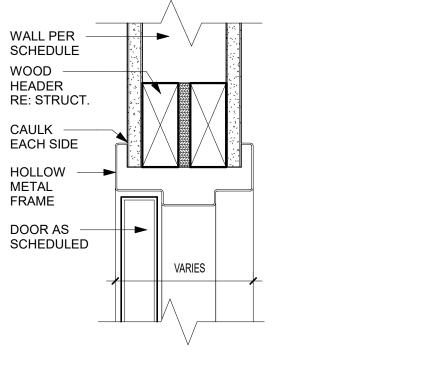
TEMPORARY WOOD THRESHOLD

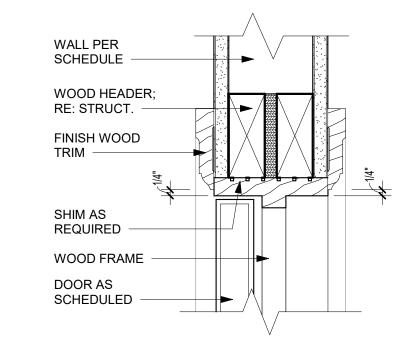
PRIOR TO DOOR INSTALLATION

**DURING CONSTRUCTION, REMOVE** 

CUT KERF FOR BACK LEG OF SILL PAN

NOT FASTEN THRU SILL PAN







emar

EXTERIOR MTL DOOR HEAD- BRICK

YPICAL GRADE SILL PAN





DOOR AS

HOLLOW

METAL

FRAME

ANCHOR

CAULK

**EACH SIDE** 

WALL PER

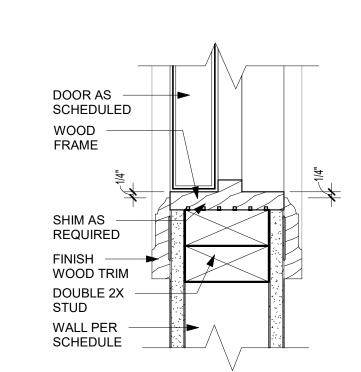
SCHEDULE

DOOR AS

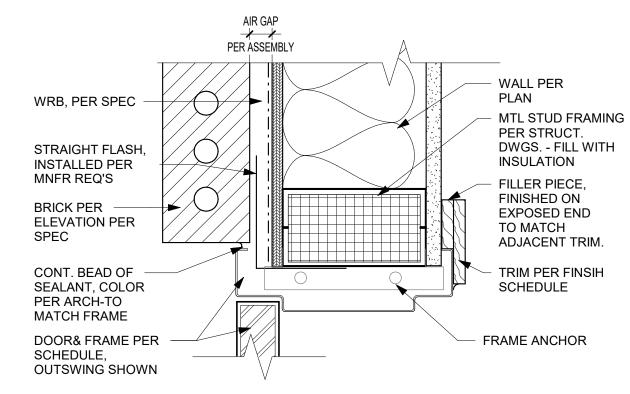
SCHEDULED

SCHEDULED

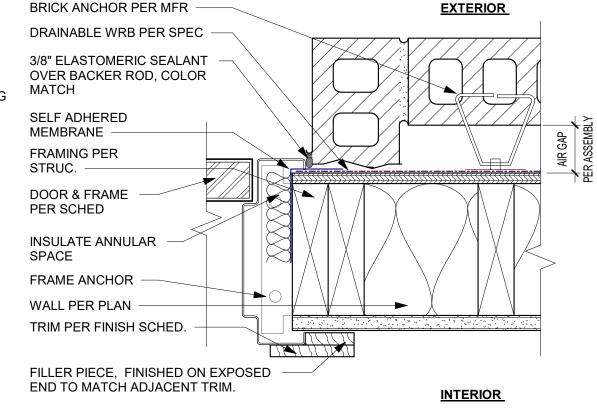
VARIES



INTERIOR DOOR HEAD - WOOD



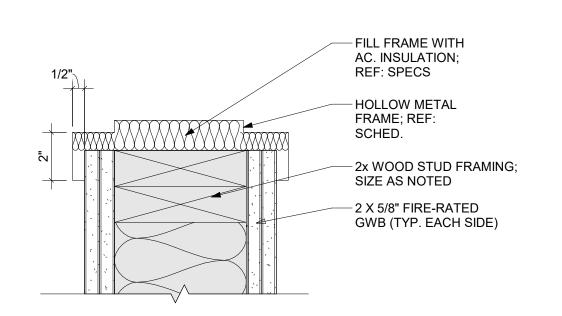
EXTERIOR MTL DOOR JAMB - BRICK

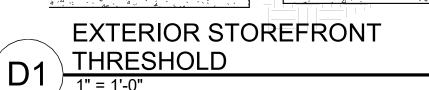


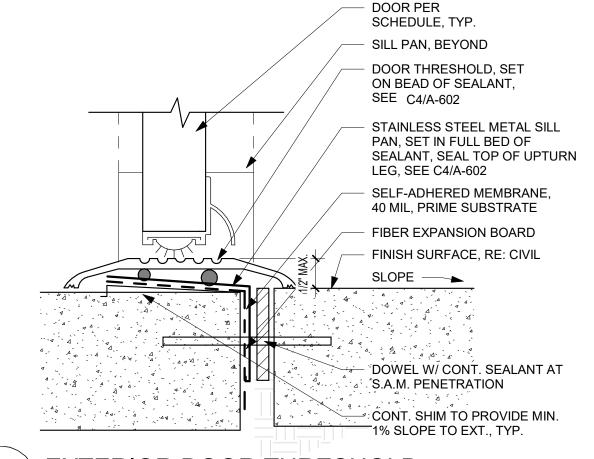
EXTERIOR DOOR JAMB - BRICK

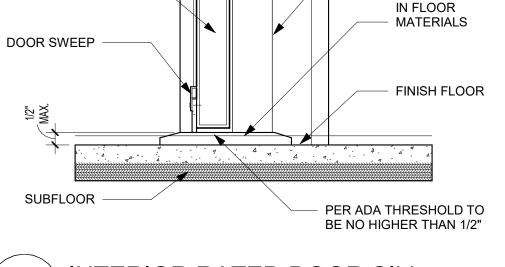


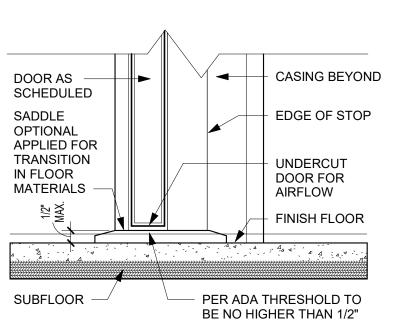












INTERIOR RATED DOOR SILL

**CASING BEYOND** 

EDGE OF STOP

SADDLE REQD.

**ONLY IF TRANSITION** 

SHEET TITLE DOOR DETAILS

 $\Box$ 

S

**HOME2** 

PROJECT NUMBER: 22023

**GUESTROOM ENTRY & CONNECTOR DOOR** 

DOOR PER SCHEDULE, TYP.

SILL PAN VERTICAL LEG, BEYOND

DOOR JAMB, BEYOND

DOOR THRESHOLD,

SEALANT, SEE C4/A-602

METAL SILL PAN, SET IN

FULL BED OF SEALANT,

SLOPE TO DRAIN -

SEAL TOP OF UPTURN LEG,

🚣 SELF-ADHERED MEMBRANE ~40 MIL, PRIME SUBSTRATE

<sup>△</sup> FIBER EXPANSION BOARD

1% SLOPE TO EXT., TYP.

CONT. SHIM TO PROVIDE MIN.

SET ON BEAD OF

SEE C4/A-602

PER CIVIL

EXTERIOR DOOR THRESHOLD

**B**1

INTERIOR DOOR SILI

DOOR

CARPET

FULL SWEEO, TYP.

EACH DOOR (BASE

ADJUSTABLE VINYL

THRESHOLD W/ TILE

TRANSITION STRIPS

DOOR (WHERE APPLICABLE

CARPET TILE

BAFFLED SWEEP

VINYL THRESHOLD

(BASIS OF DESIGN,

PEMKO V2325)

COMPLIANT NON-

TRANSITION STRIP

COMBUSTABLE

TILE (TYP)

ADAAG

THRESHOLD DETAIL AT

THRESHOLD DETAIL AT

GUESTROOM DOOR

**CONNECTING DOOR** 

(BASE OF DESIGN,

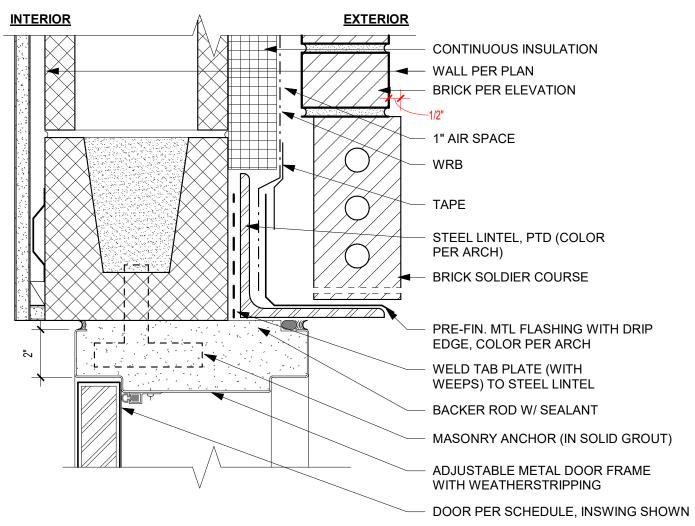
'PEMKO' ADJ232V8

OF DESIGN 'PEKO'

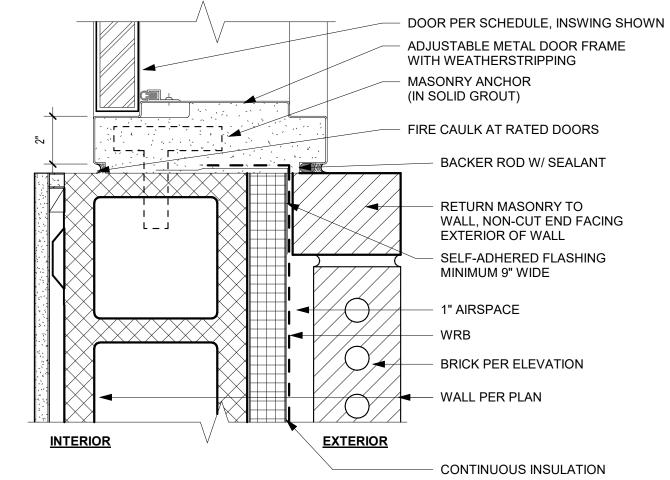
SHEET NUMBER:

PRINTS ISSUED 04/17/2024 - CITY SUBMISSION **REVISIONS:** 

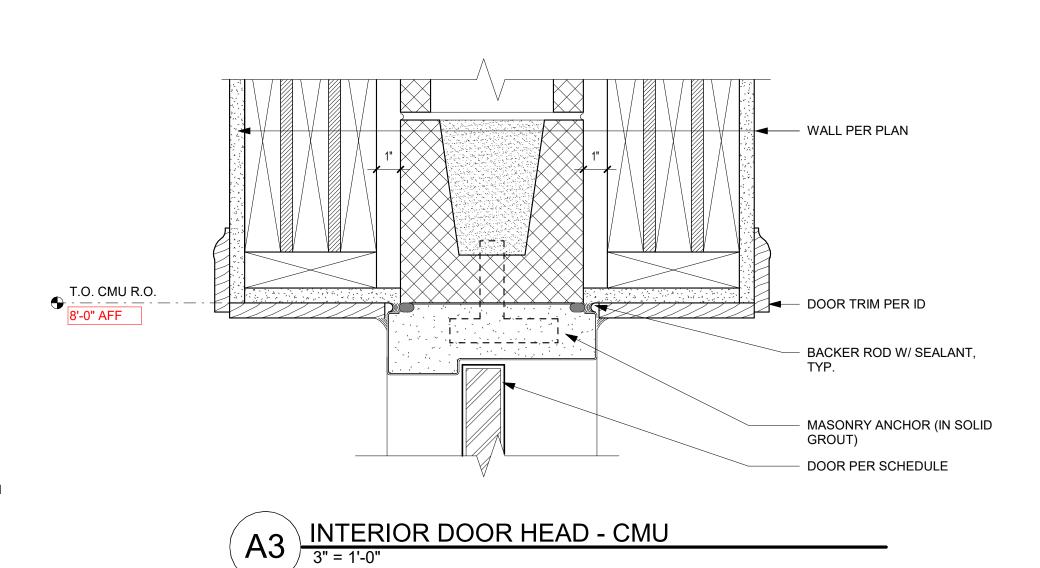
OSemani & ASSOC

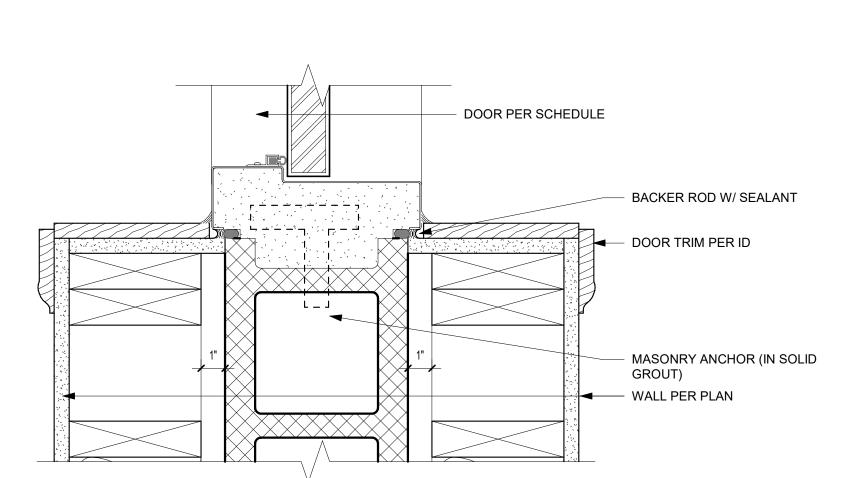


B3 EXTERIOR DOOR HEAD - CMU

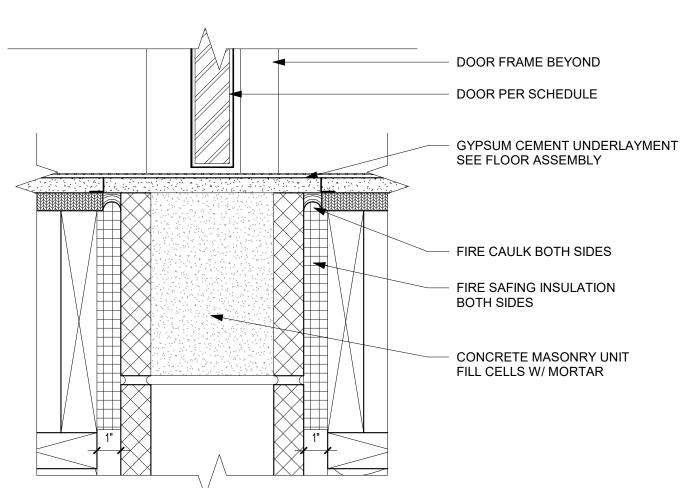


B2 EXTERIOR DOOR JAMB - CMU











HILTON

BY

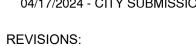
LEE'S SUMMIT, SUITES HOME2

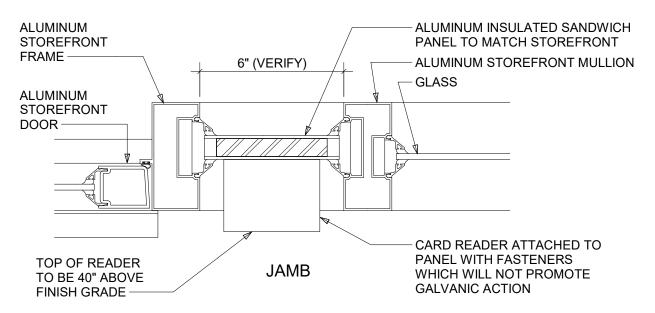
SHEET TITLE DOOR DETAILS PROJECT NUMBER: 22023

SHEET NUMBER:

A-603

PRINTS ISSUED 04/17/2024 - CITY SUBMISSION





CARD READER @ STOREFRONT DOORS

WINDOW/INTERIOR - TRIM @ WINDOW JAMB

**EXTERIOR** 

DIM PER STRUCT

3/4" MOISTURE RESISTANT MDF. TO MATCH UNIT BASE

1/8" EASED EDGES AT ALL

2X STUD WALL BELOW,

DEPTH VIEWING W/ EXTERIOR FINISHES

WD. STUD FRAMING

PER STRUCT. DWGS.

FLEXIBLE FLASHING

SHEATHING PER

STRUCT DWGS.

(2) LAYERS WRB

BED OF SEALANT

EXTERIOR MATERIAL PER ELEV.

SILL FLASHING BEYOND

FLEX TAPE

INTERIOR

**GLAZING PER** 

WDW. SCHED.

RE: SPEC.

BEYOND

ALUM. STOREFRONT

- LINE OF GWB FACE

CONT. SEALANT

- FLOOR FINISH PER

CONC. SLAB PER

STRUCT. DWGS.

ID. DWGS.

CORNERS

ALUMINUM STOREFRONT FRAME SECTIONS SHOWN ARE GENERIC. REFER TO SPECIFIC SYSTEM MANUFACTURERS INSTALLATION SECTIONS AND FRAME DETAILS.

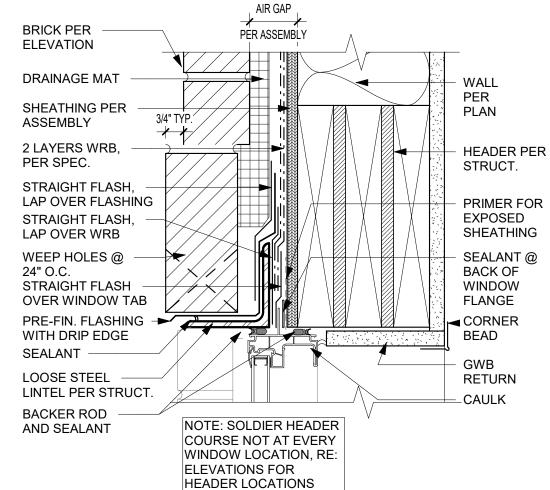
WALL PER BRICK OR STONE PER PLAN **ELEVATION PER SPEC** DRAINAGE MAT **HEADER PER** STRUCT. DWGS. PROVIDE WEEPS @ FLEX WRAP, WRAP 24" O.C. AROUND HEAD, OVER PRIMER FOR SHEATHING GALV. STEEL ANGLE PER STRUCT. DWGS. 2 LAYERS WRB, PER SPEC PRE-FIN. MTL. FLASHING, FINISH TO STRAIGHT FLASH, LAP MATCH STOREFRONT OVER WRB SHIM AS NECESSARY CONT. BEAD OF CORNER BEAD SEALANT BACKER ROD AND CONT. CONT. BEAD OF BEAD OF SEALANT, BOTH CAULK SIDES, COLOR TO MATCH STOREFRONT AND STOREFRONT FRAME **GLAZING PER SPEC'S** 

STOREFRONT HEAD - BRICK

INTERIOR

CONT. BACKER ROD

AND SEALANT



WINDOW HEAD - BRICK



**EXTERIOR** INTERIOR SHEATHING PER WALL PER PLAN ASSEMBLY 2 LAYERS WRB, PER SPEC. STUD FRAMING PER STRAIGHT FLASH STRUCT. DWGS. BRICK PER ELEVATION, PER SPEC. ONLY FINISHED EDGE OF BRICK SHALL BE EXPOSED AT JAMB, TYP. **CAVITY SEAL** CORNER BEAD BACKER ROD AND CONT. BEAD OF SEALANT, COLOR TO MATCH STOREFORNT FRAME, TYP. SHIM AS NECESSARY CONT. BEAD OF CAULK ALUM. STOREFRONT WINDOW SILL BEYOND PER SPEC. PER ID DWGS.

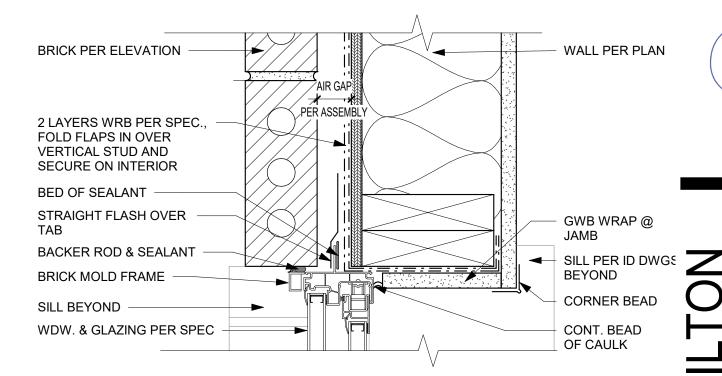
STOREFRONT JAMB - BRICK

BRICK RETURN BEYOND

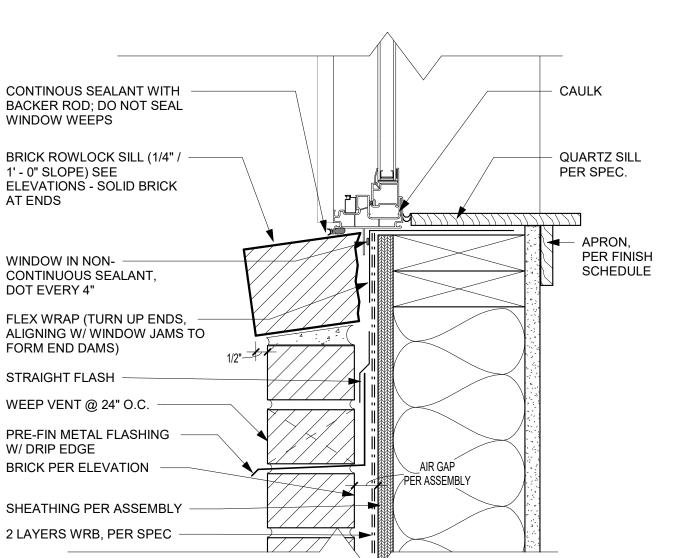
ALUM. STOREFRONT PER

CONTINOUS SEALANT WITH

BACKER ROD; DO NOT SEAL



WINDOW JAMB - BRICK



SHEET TITLE WINDOW DETAILS

 $\Box$ 

SUITE

**HOME2** 

PROJECT NUMBER: 22023

GLAZING, RE: WDW. SCHEDULE LINE OF PARTITION BEYOND MASONRY BEYOND, PER **ELEVATIONS** BASE TRIM PER ID WHEN APPLICABLE ALUM. STOREFRONT FRAME W/THERMAL BREAK BACKER ROD AND CONT. BEAD OF SEALANT PRE-FIN. MTL. PAN W/ END DAM FLASHING SET IN BED OF SEALANT FLASHING OVER BRICK SHIM AS NECESSARY GRADE, RE: CIVIL ROTATED BRICK, +/- 1/2" BELOW TOP OF SLAB CONC. SLAB, RE: CONC. FOUNDATION, RE: STRUCT, TYP. STRUCT. DWGS. CONTINUE BRICK BELOW STOREFRONT

**BRICK PER** 

**ELEVATION** 

PRE-FIN. MTL. PAN W/

END DAM FLASHING SET

IN FULL BED OF SEALANT

BACKER ROD AND CONT.

BEAD OF SEALANT

MEMBRANE, 25 MIL,

EXTEND TO BACK OF

SILL AND 8" UP EACH

**ROUGH OPENING ACROSS** 

SIDE, PRIME SUBSTRATE

SELF ADHERED

BEYOND

STOREFRONT THRESHOLD - HARDSCAPE

CONC. FOUNDATION,

RE: STRUCT, TYP.

QUARTZ SILL WINDOW WEEPS PER SPEC. BRICK ROWLOCK SILL (1/4" / 1' - 0" SLOPE) SEE ELEVATIONS - SOLID BRICK AT ENDS FRAMING PER STRUCT. FLEX WRAP (TURN UP ENDS, ALIGNING W/ WINDOW JAMS TO WALL PER PLAN FORM END DAMS) **BRICK PER ELEVATION** STRAIGHT FLASH WEEP VENT @ 24" O.C. PRE-FIN METAL FLASHING W/ DRIP AIR GAP **EDGE** PER ASSEMBLY 2 LAYERS WRB, PER SPEC. STOREFRONT SILL - BRICK

**EXTERIOR** 

STOREFRONT THRESHOLD - GRADE

WINDOW SILL - BRICK

SHEET NUMBER:

OSemanr & ASSOC

# **KEYNOTE LEGEND**

SHOWER HEAD B10 SHOWER DIVERTER VALVE

B12 VANITY MIRROR AND LIGHT FIXTURE

B13 GFCI OUTLET B14 ON/OFF - PRESSURE BALANCING VALVE

B16 BULK AMENITY DISPENSER SHOWER SURROUND

LED NIGHT LIGHT INTEGRATED WITH EITHER LIGHT SWITCH OR OUTLET BI-PASS SLIDING GLASS DOOR, BRUSHED ALUMINUM FINISH, CLEAR GLASS, WITH 24" BAR PULL HARDWARE

VANITY SHELF

SHOWER HEAD D12 VANITY MIRROR AND LIGHT FIXTURE

D19 TOILET FLOOR DRAIN LOCATION - MAINTAIN ACCESSIBLE COMPLIANT SLOPES TO DRAIN

FRAMING SUBCONTRACTOR TO PROVIDE 3/4" F.R.T. PLYWOOD BLOCKING TO RECEIVE ITEM INDICATED -EXTEND FULL LENGTH OF OBJECT

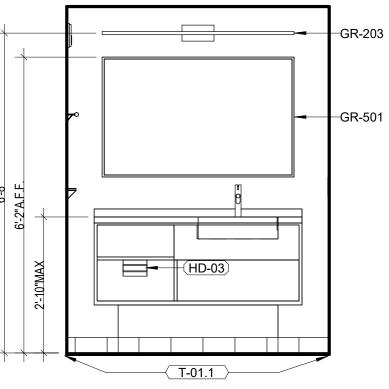
SHOWER SURROUND

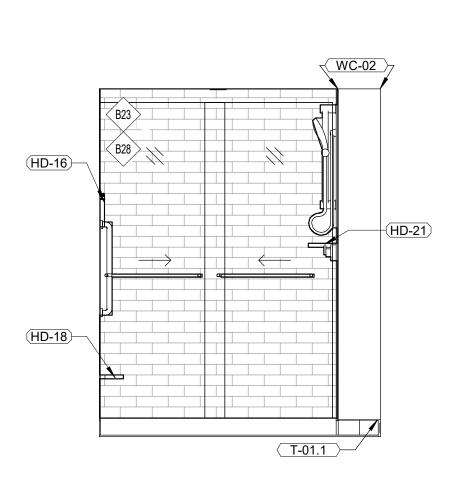
DOOR STOP HARDWARE REQUIRED TO KEEP HARDWARE AT BACK OF DOOR FROM HITTING GLASS WHEN FULLY AJAR

D30 VANITY SHELF

HD-03

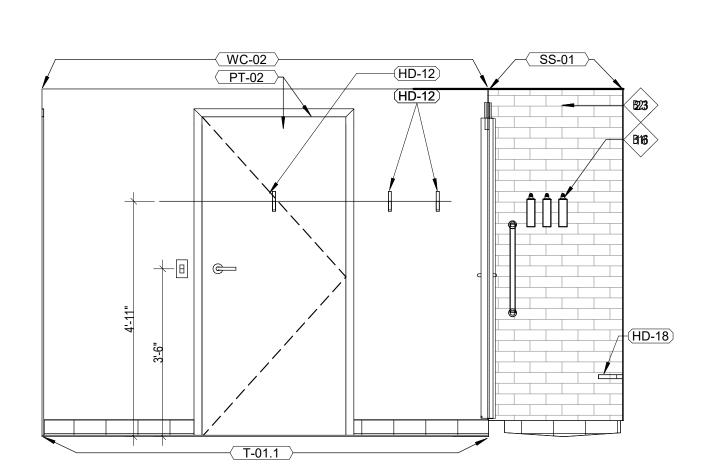
BATHROOM - TYP. GUEST ELEV.



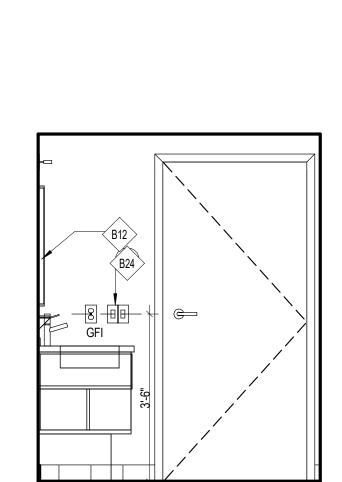


D3 BATHROOM - TYP. GUEST ELEV.

C2 BATHROOM - ONE BEDROOM ELEV.



BATHROOM - ONE BEDROOM ELEV.



∠<u>T-01.1</u>

C3 BATHROOM - TYP. GUEST ELEV.

B28

(HD-18)

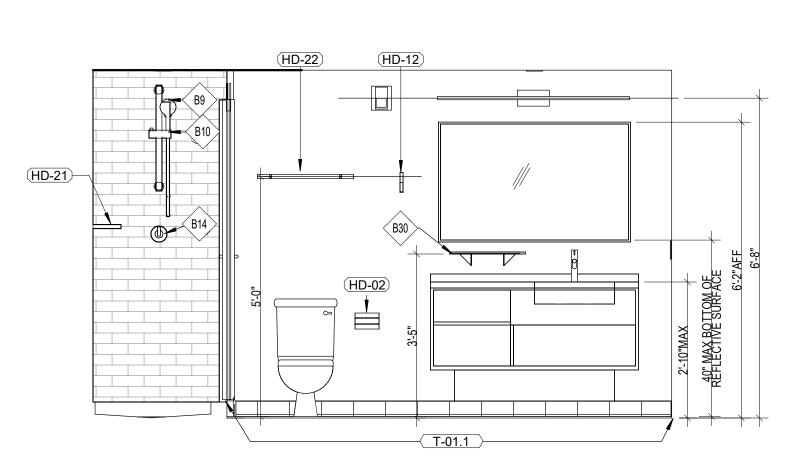
(HD-18)

BATHROOM - ONE BEDROOM ELEV.

(HD-21)—

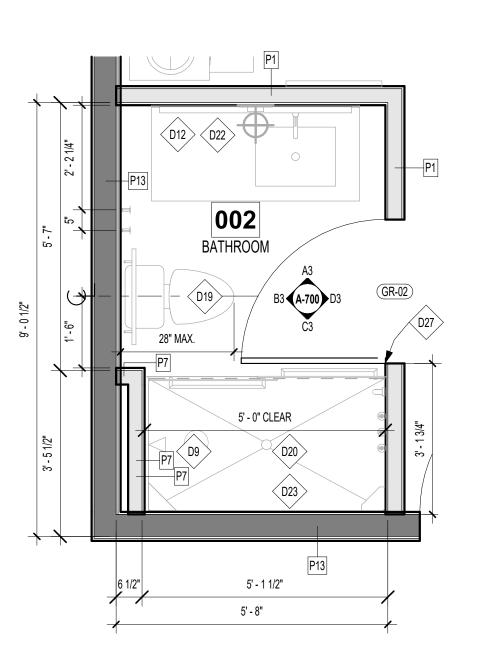
B14

BATHROOM - TYP. GUEST ELEV.

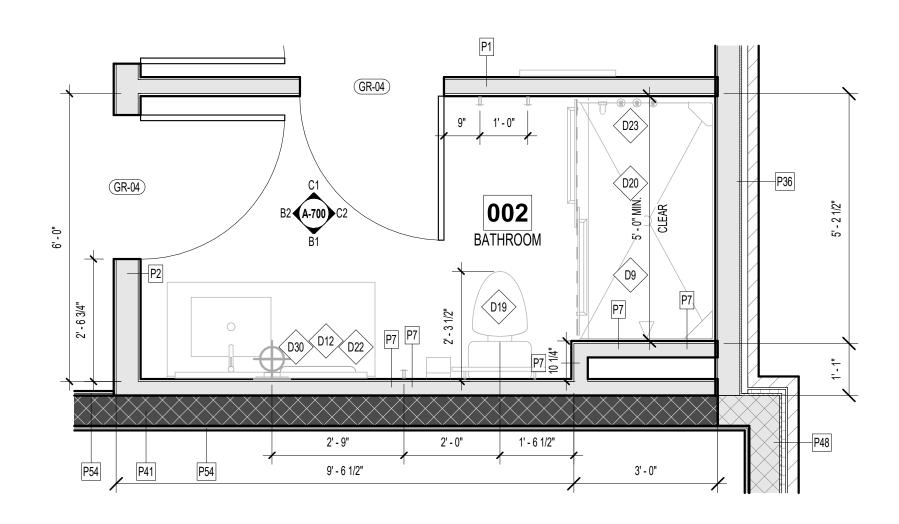


BATHROOM - ONE BEDROOM ELEV.

1/2" = 1'-0"

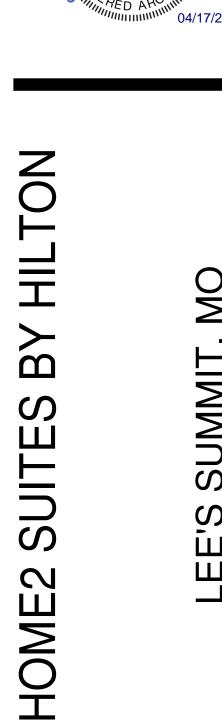


(A2) TYP. STUDIO SUITE ENLARGED RESTROOM



KING ONE BEDROOM ENLARGED RESTROOM

1/2" = 1'-0"



LEE'S SUMMIT, MO

SHEET TITLE
GUESTROOM BATHROOMS

PROJECT NUMBER: 22023

SHEET NUMBER:

A-700

PRINTS ISSUED

REVISIONS:

04/17/2024 - CITY SUBMISSION

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### **KEYNOTE LEGEND**

ACCESSIBLE VANITY UNIT, REFER TO FURNITURE

ACCESSIBLE REMOVABLE TUB/SHOWER SEAT. SHOWER SEAT IS WALL MOUNTED. REFER TO ACCESSIBILITY STANDARDS AND HADG FOR REQUIREMENT

CLEAR AREA OF SINK/VANITY MUST BE ACCESSIBLE

SHOWER HEAD SHOWER DIVERTER VALVE

HAND SHOWER. HAND-HELD SHOWER UNIT REQUIRED TO HAVE ON/OFF CONTROL WITH

NON-POSITIVE SHUT OFF. VANITY MIRROR AND LIGHT FIXTURE

GFCI OUTLET

ON/OFF - PRESSURE BALANCING VALVE B19 TOILET

SHOWER SURROUND

LED NIGHT LIGHT INTEGRATED WITH EITHER LIGHT SWITCH OR OUTLET

B26 SOAP DISPENSERS

BI-PASS SLIDING GLASS DOOR, BRUSHED ALUMINUM FINISH, CLEAR GLASS, WITH 24" BAR PULL HARDWARE

GR-203

BATHROOM - ACC. STUDIO ELEV.

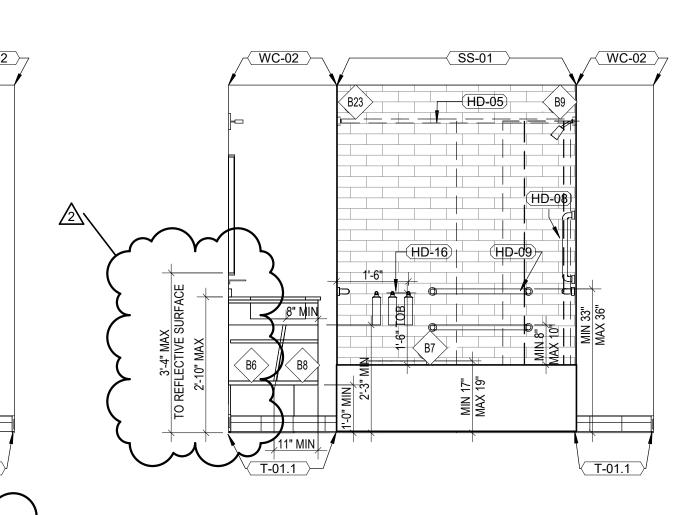
⟨ PT-02 →

--( SS-01 )-

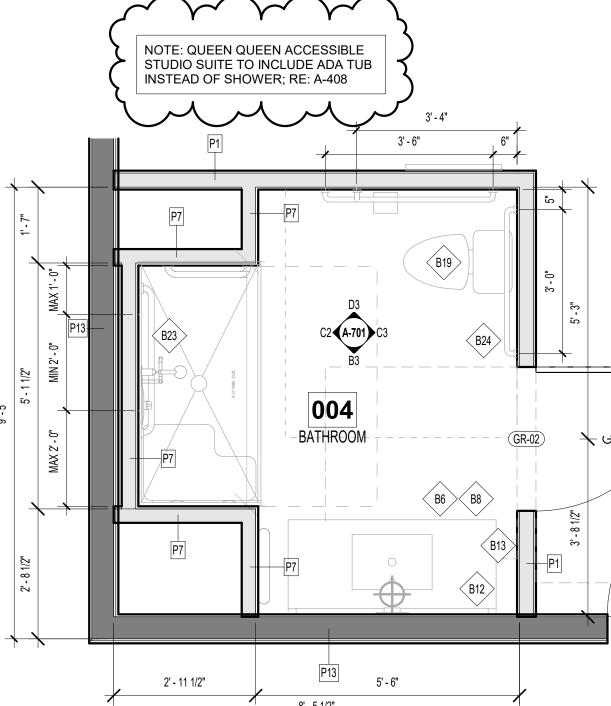
(B26)

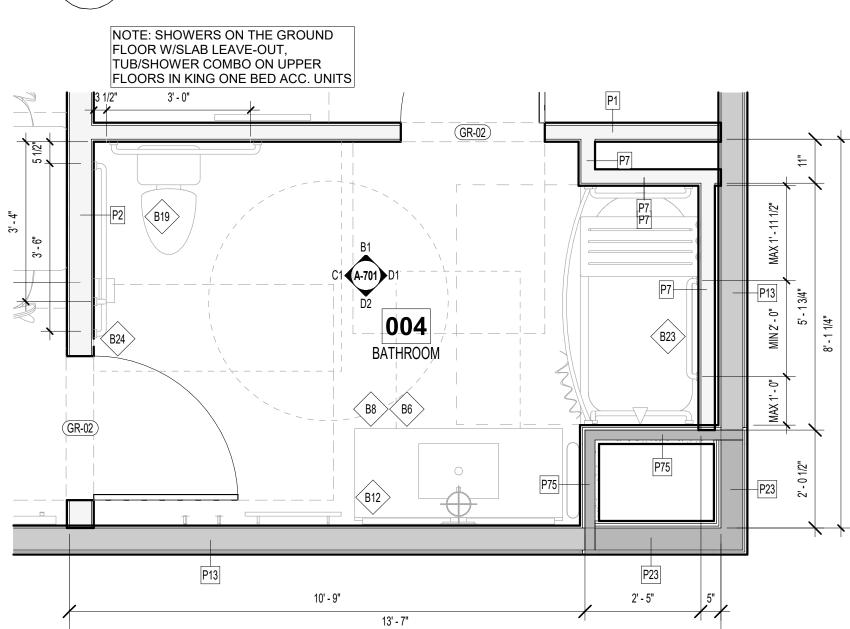
HD-5.1

BATHROOM - ACC. STUDIO ELEV.



BATHROOM - QQ ACC. STUDIO ELEV.





KING ONE BEDROOM ENLARGED RESTROOM - ACCESSIBLE

8' - 5 1/2" TYP. STUDIO SUITE ENLARGED
RESTROOM - ACCESSIBLE
1/2" = 1'-0"

SUITES BY HILTON

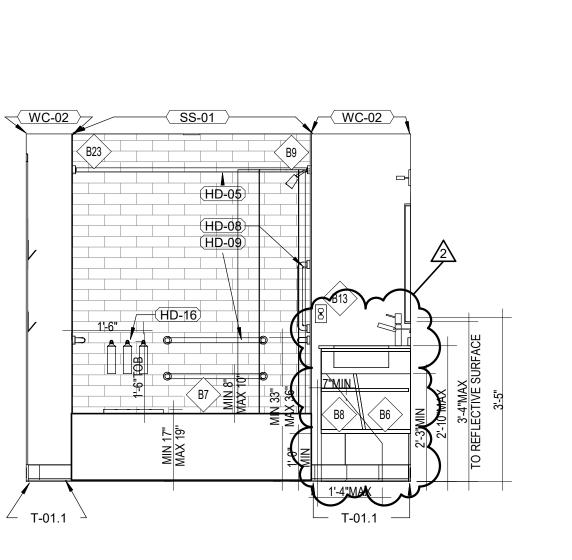
HOME2

LEE'S SUMMIT, MO

SHEET TITLE GUESTROOM BATHROOMS

PROJECT NUMBER: 22023 SHEET NUMBER:

A-701



**₩C-02** 

—( T-01.1

(HD-12)

(HD-22)

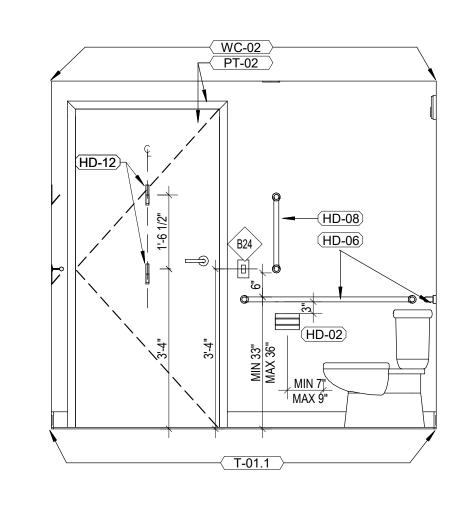
D3 BATHROOM - ACC. STUDIO ELEV.

GR-203 GR-501

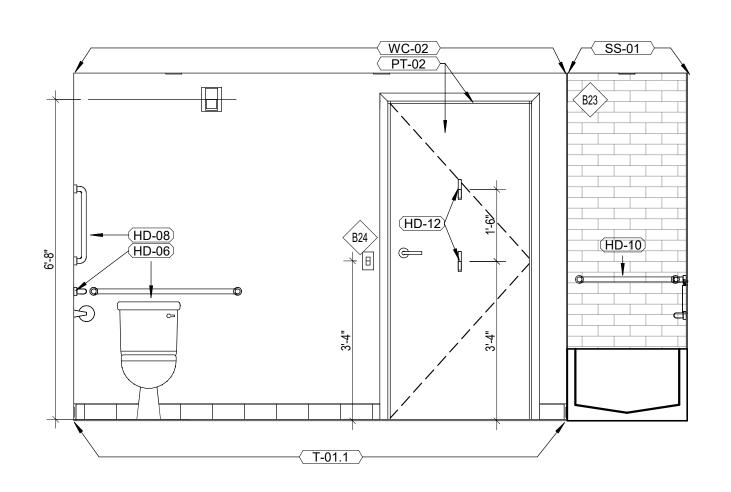
D2 BATHROOM - ACC. ONE BED ELEV.

 $\langle$  B8  $\rangle$  B6  $\rangle$ 

(HD-08)



C2 BATHROOM - KING ACC. STUDIO ELEV.



BATHROOM - ACC. ONE BED ELEV.

1/2" = 1'-0"

BATHROOM - ACC. ONE BED ELEV.

D1 BATHROOM - ACC. ONE BED ELEV.

SPECIFICATION PACKAGE

BRAND PROMISE SIGN ELEVATOR AND SURROUND - FINISH TO BE BRUSHED

STAINLESS STEE

A23 **HOUSE PHONE** 

AVOID BACKSPLASH ON WALL SINK TO ALLOW FOR

LEVER REQUIRED ON THE SIDE OF TANK OPPOSITE INSIDE CORNER OF WALL

FREESTANDING DECORATIVE TRASH RECEPTACLE DECORATIVE TOUCHLESS LIQUID SOAP DISPENSER

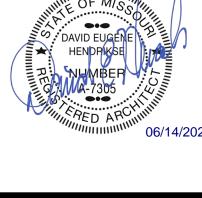
PRINTS ISSUED

REVISIONS:

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SHEET TITLE
PUBLIC RESTROOMS

SHEET NUMBER:

PROJECT NUMBER: 22023

A-702

A1 GUEST ELEVATOR LOBBY
1/4" = 1'-0"

—( PT-04

WC-10

**KEYNOTE LEGEND** 

SIGNAGE GRAPHIC, SEE INTERIOR SIGNAGE

A19 FIRE EXTINGUISHER CABINET

MIRROR TO BE INSTALLED AT PROPER HEIGHT

FIRE DOOR

8' - 6 1/2"

154 ELEVATORS

A2 POOL RESTROOMS ENLARGED PLAN

1/2" = 1'-0"

( WC-10 )

(CPT-10.1)

E4

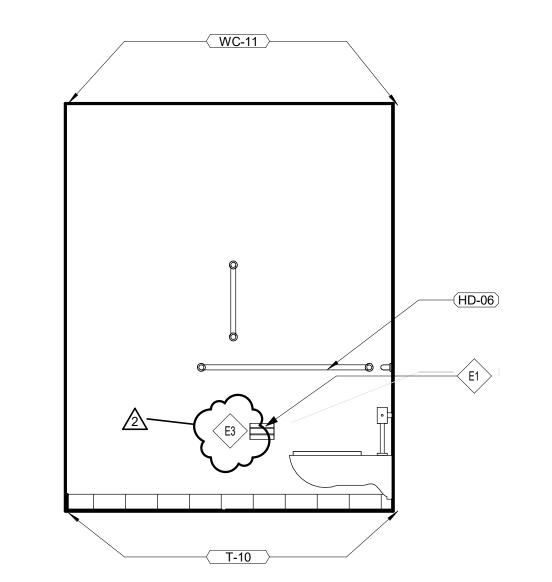
DOUBLE ROLL TOILET TISSUE HOLDER

WALL-MOUNTED SANITARY SEAT COVER DISPENSER SANITARY NAPKIN DISPOSAL TRASH BIN (AT WOMEN'S AND UNISEX)

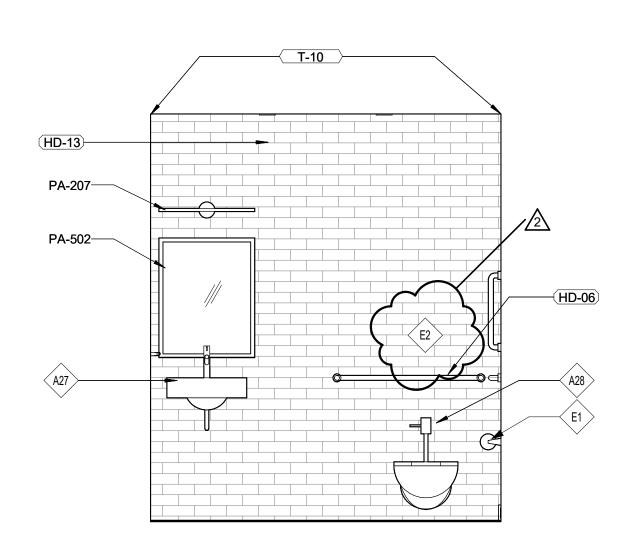
DECORATIVE FACIAL TISSUE DISPENSER RECESSED

MOTION-ACTIVATED PAPER TOWEL DISPENSER

COAT HOOKS AT BACK OF THE DOOR

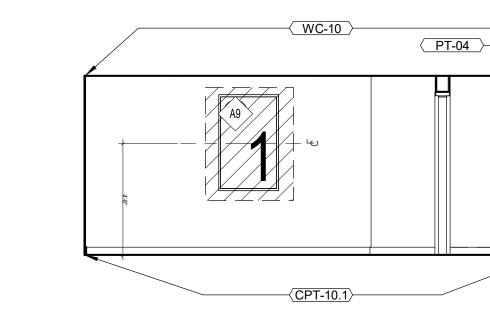


D3 PUBLIC RR ELEV.



D2 PUBLIC RR ELEV.

1/2" = 1'-0"



GUEST ELEVATOR LOBBY
1/4" = 1'-0"

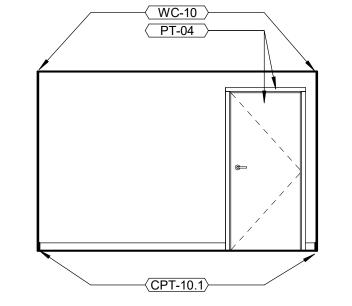
⟨ WC-11 ⟩

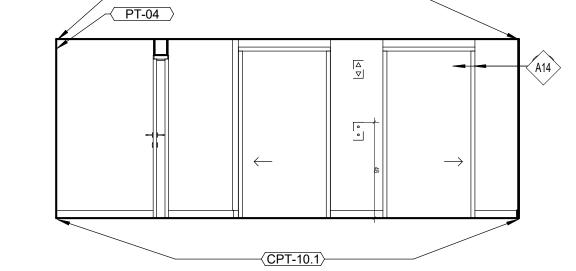
PT-04

C3 PUBLIC RR ELEV.

C2 PUBLIC RR ELEV.

<u>E8</u>





GUEST ELEVATOR LOBBY

1/4" = 1'-0"

4' - 9"

P13

023

020

**WOMENS** 

**021** MENS

B2 PUBLIC RESTROOMS ENLARGED PLAN

1/2" = 1'-0"

GUEST ELEVATOR LOBBY

1/4" = 1'-0"

GUEST CORRIDOR - TYP. ELEV.

LEE'S SUMMIT, MO

PRINTS ISSUED

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OSEMANI

REVISIONS:

**KEYNOTE LEGEND** GYPSUM BOARD SOFFIT FASCIA- REFER TO CEILING

PREPARE & PRIME WALL - REFER TO HOME 2 INTERIOR SIGNAGE SPECIFICATION FOR GRAPHIC

INSTALLATION

SIGNAGE GRAPHIC, SEE INTERIOR SIGNAGE SPECIFICATION PACKAGE

BRAND PROMISE SIGN BOOTH, SEE FF&E SPECIFICATIONS

ADJUSTABLE MARKET DISPLAY SHELVING STOREFRONT DOORS AND FRAMES TO MATCH

EXTERIOR COLOR AND FINISH WALL MOUNTED TELEVISION, COORDINATE BLOCKING AND POWER LOCATION WITH TV MOUNT

HOUSE PHONE

MARKET EQUIPMENT, SEE FOOD SERVICE DRAWINGS A25 VISION WINDOW

COMPLIMENTARY COFFEE, TEA, & WATER STATION

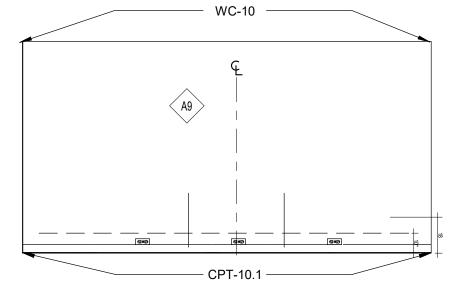
HYDRATION STATION

COMPLIMENTARY PRINT STATION

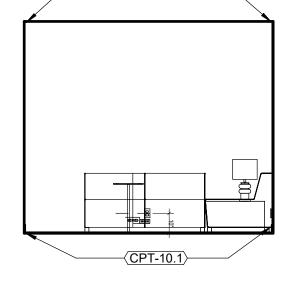




(T-01.1)









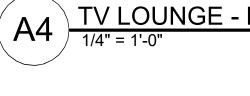


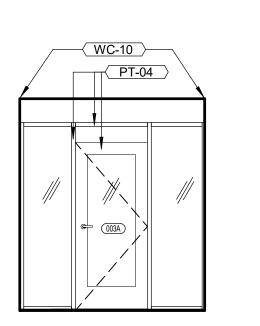
—( WC-10 >

—⟨<u>CPT-10.1</u>⟩-

// A17







( T-01.1 )

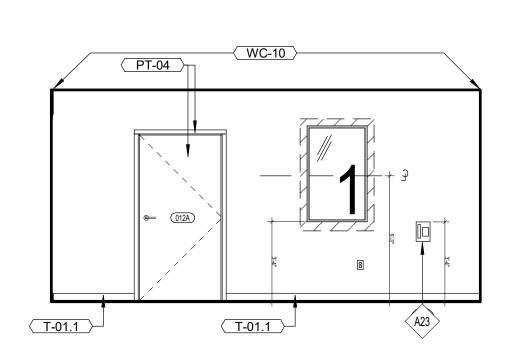
─<u> WC-10</u> >

•

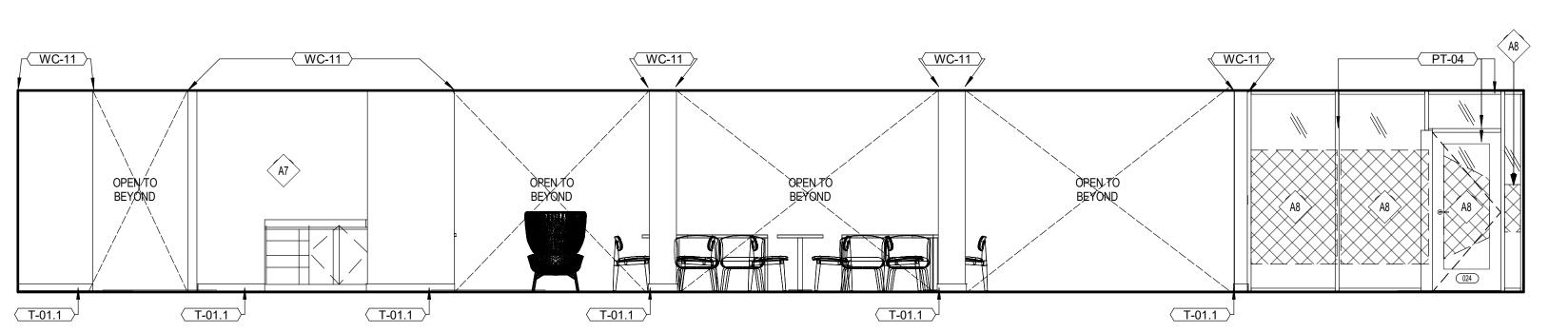
T-01.1

D4 ELEVATOR LOBBY - ELEV.

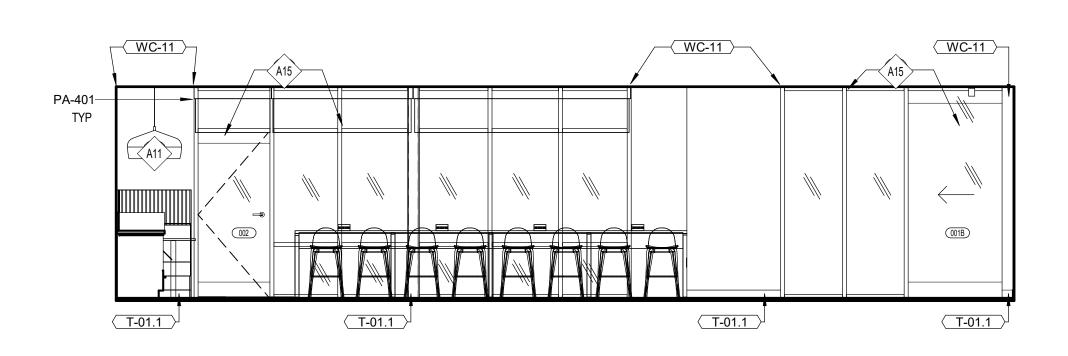


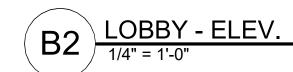


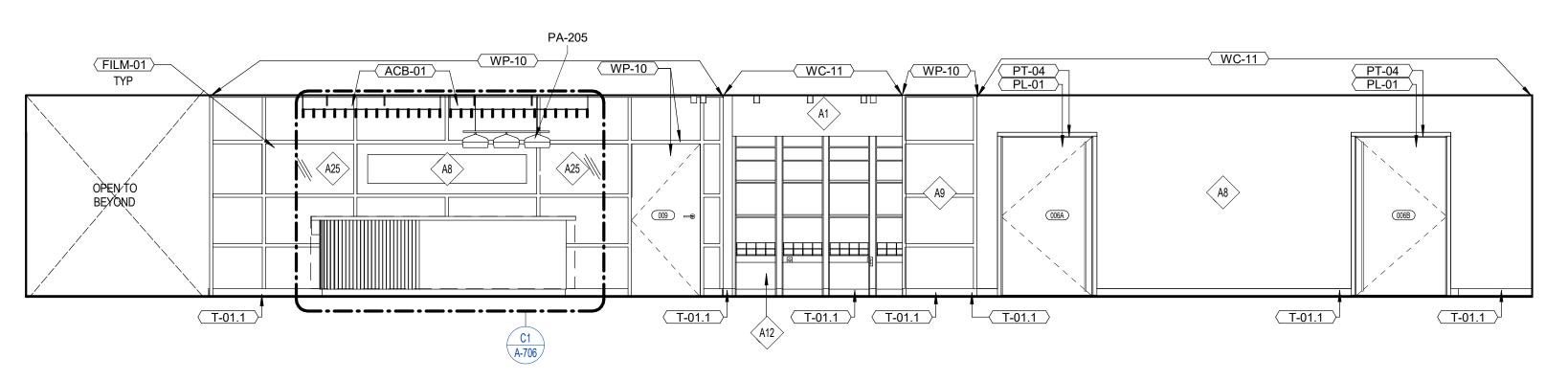
B3 ELEVATOR LOBBY - ELEV.



**REGISTRATION DESK - ELEV.** 





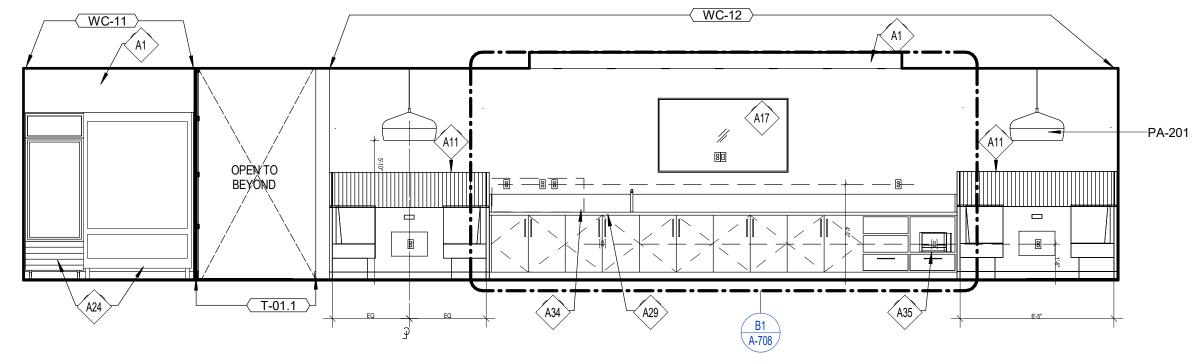


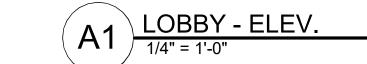
─<u>( WC-15 )</u>

— T-01.1

PA-205









SHEET TITLE INTERIOR ELEVATIONS

PROJECT NUMBER: 22023

SHEET NUMBER:

A-703

LEE'S SUMMIT, MO

B1 LOBBY - ELEV.

A2 A-708

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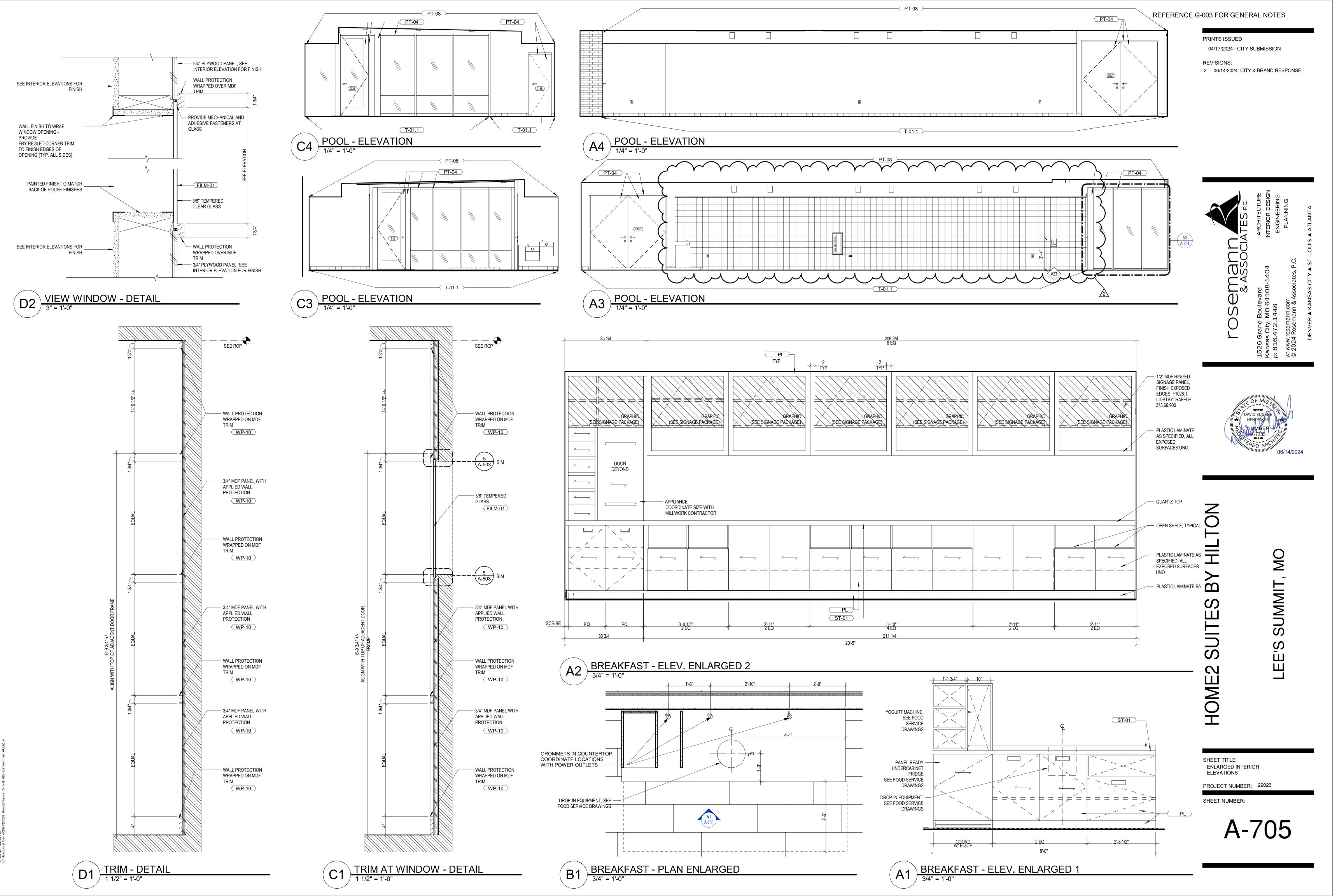
LEE'S SUMMIT, MO

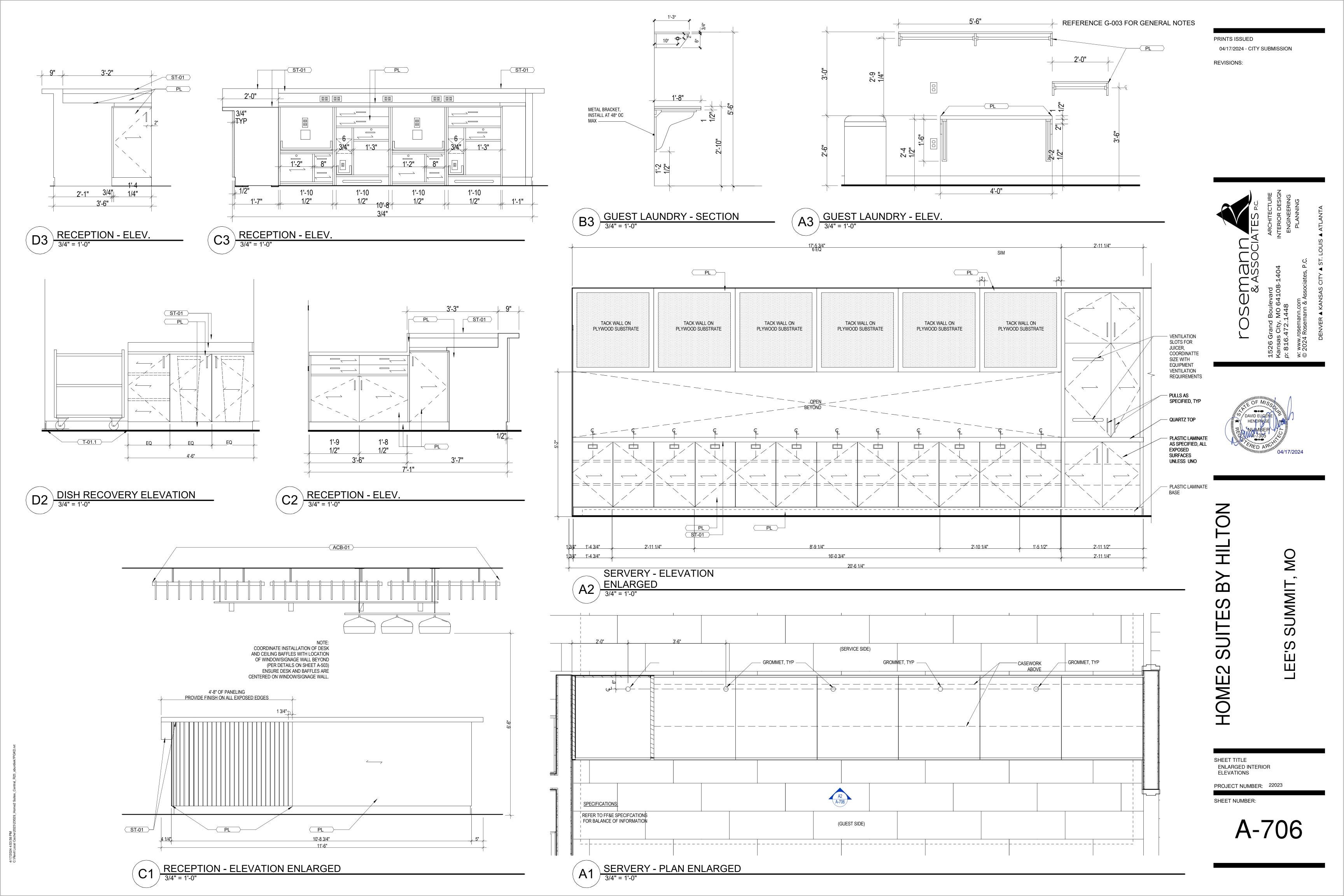
SHEET TITLE INTERIOR ELEVATIONS

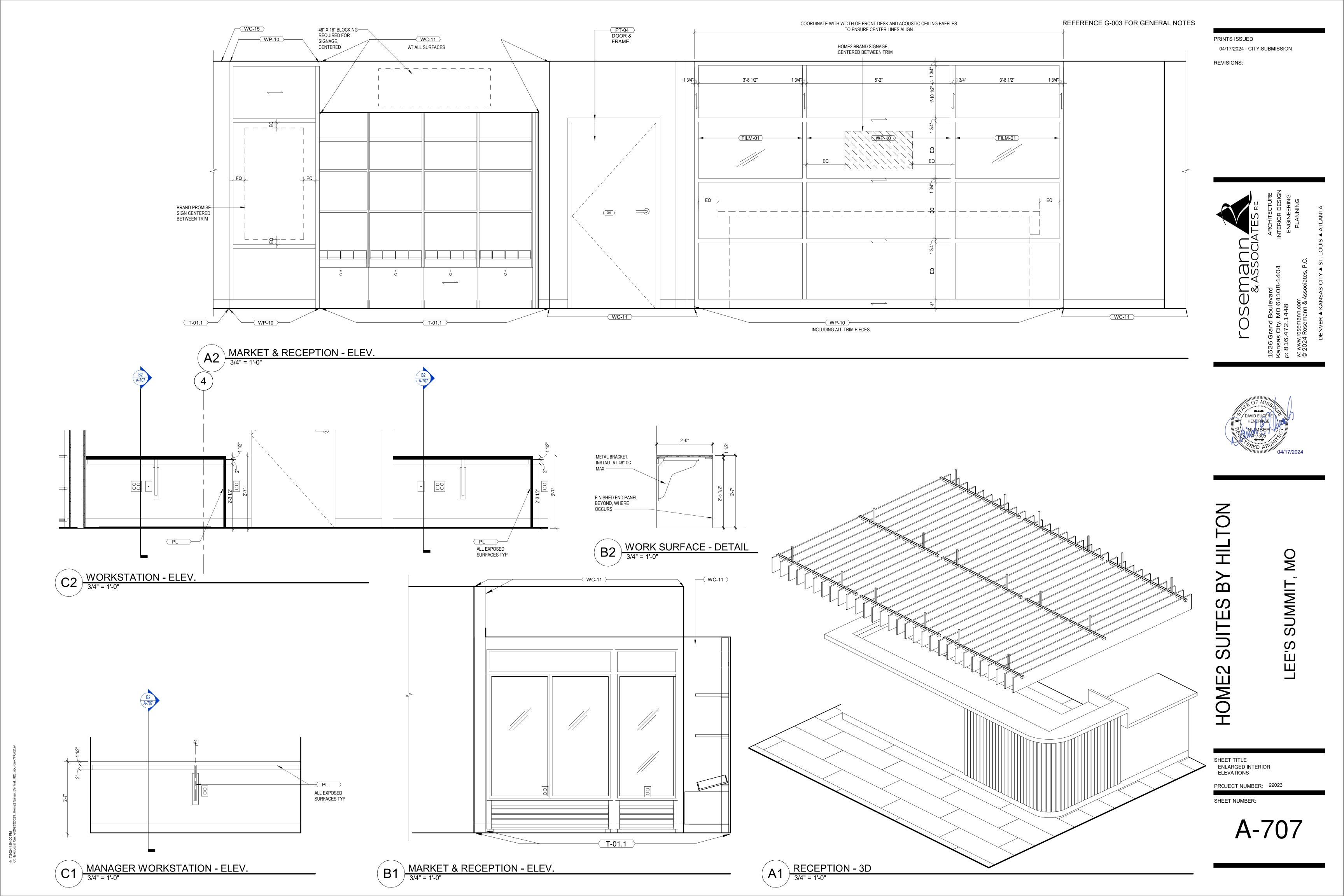
PROJECT NUMBER: 22023

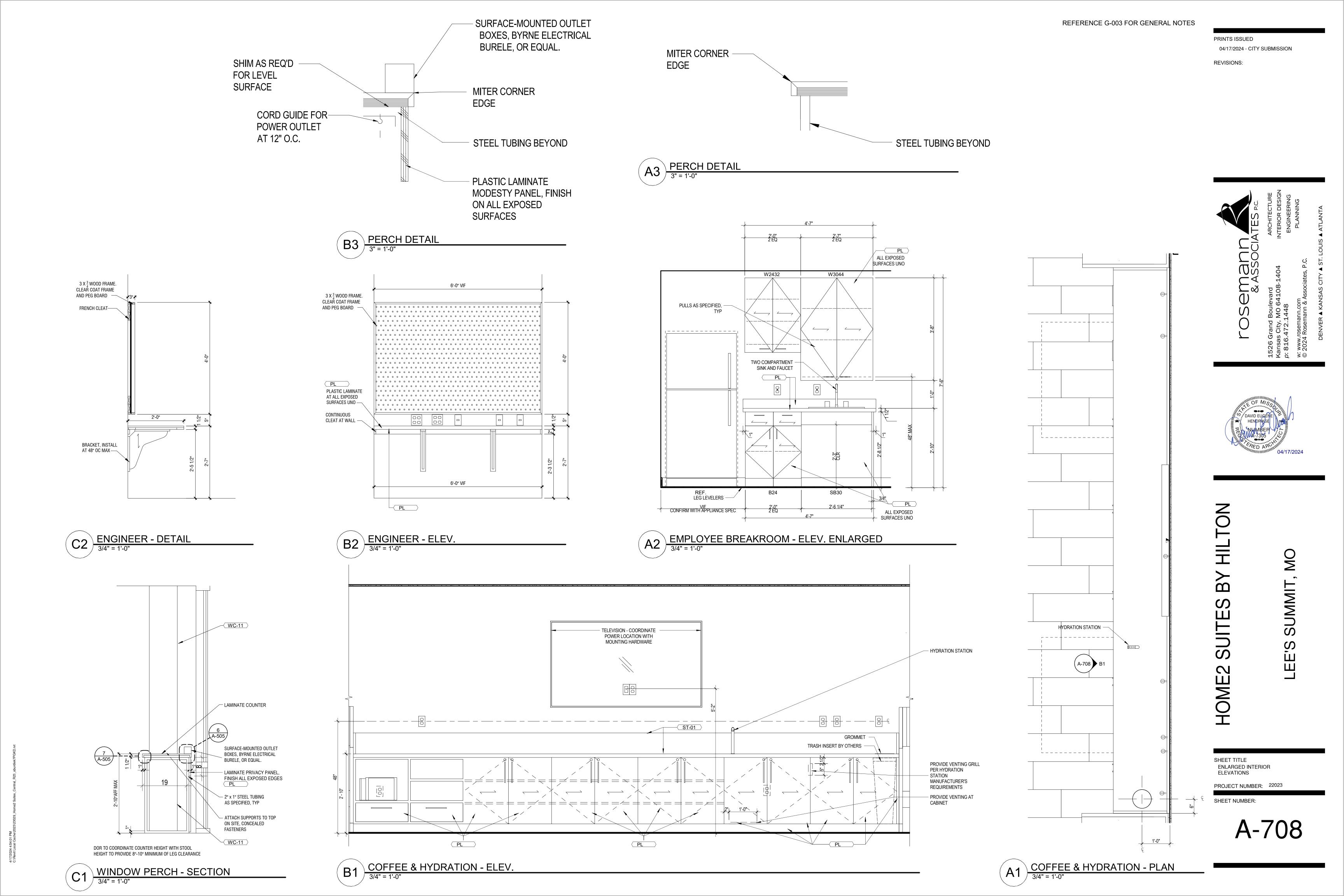
SHEET NUMBER:

A-704





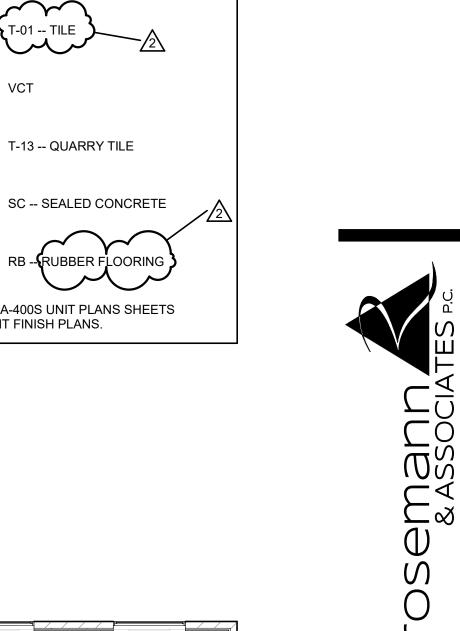


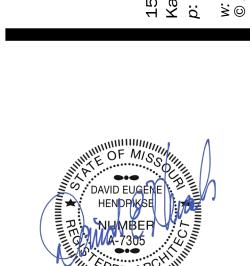


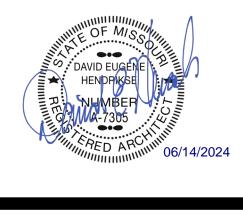
**FINISH LEGEND** 

CPT -- CARPET TILE 24X24

**REVISIONS:** 2 06/14/2024 CITY & BRAND RESPONSE







LEE'S SUMMIT, MO

SHEET TITLE FINISH PLANS-COMMON SPACES

PROJECT NUMBER: 22023

SHEET NUMBER:

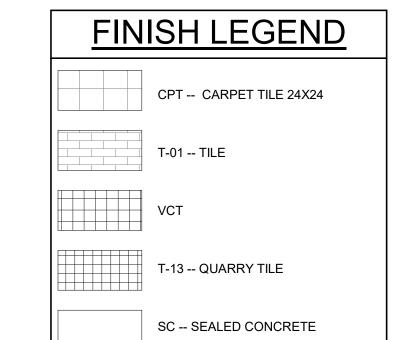
HOME2 SUITES BY HILTON

A-710



A1 FIRST FLOOR PLAN

1/8" = 1'-0"



\*NOTE: SEE A-400S UNIT PLANS SHEETS FOR ALL UNIT FINISH PLANS.

RB -- RUBBER FLOORING

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

LING ACCESSIBLE QQ STUDIO CTR QQ STUDIO

410 KING STUDIO

409 QQ STUDIO

407 QQ STUDIO

412 KING STUDIO

411 QQ STUDIO

414 KING STUDIO

413 KING STUDIO

416 418 KING STUDIO KING STUDIO

415 King Studio

417 KING STUDIO

419 KING STUDIO

KING ONE BEDROOM /

KING STUDIO KING STUDIO

425 King Studio

HOUSEKEEPING-



426 KING STUDIO KING STUDIO

427 KING STUDIO KING STUDIO

430 432 KING STUDIO KING STUDIO

452 STAIR-2

KING ONE BEDROOM

A2 THIRD FLOOR PLAN

1/16" = 1'-0"



HOME2 SUITES BY HILTON

SHEET TITLE FINISH PLANS-COMMON SPACES

PROJECT NUMBER: 22023

SHEET NUMBER:

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

PRINTS ISSUED

REVISIONS:

04/17/2024 - CITY SUBMISSION

2 06/14/2024 CITY & BRAND RESPONSE

OSemani & ASSOC

LEE'S SUMMIT,

PRINTS ISSUED 04/17/2024 - CITY SUBMISSION

**REVISIONS:** 

Semar & ASSC

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SUITE

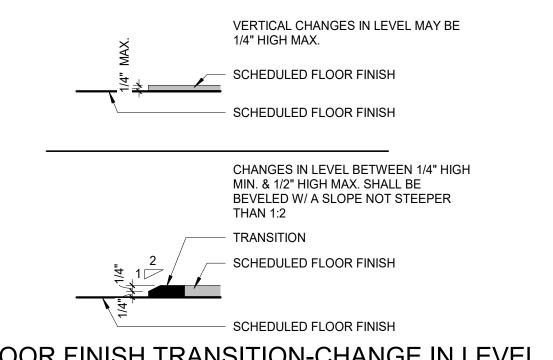
**HOME2** 

SHEET TITLE

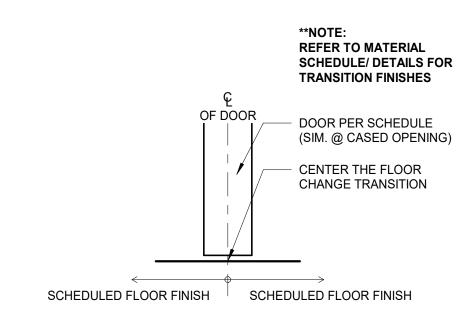
PROJECT NUMBER: 22023

FINISH TRANSITION DETAILS

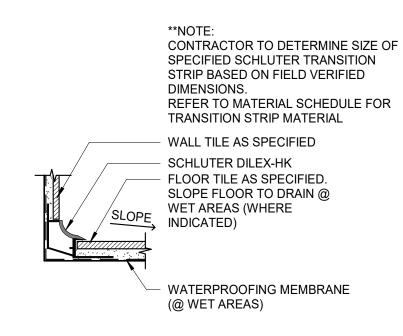
SHEET NUMBER:



D4 FLOOR FINISH TRANSITION-CHANGE IN LEVEL SCALE: 3" = 1'-0"

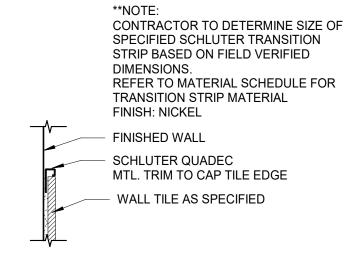


D3 FLOOR FINISH TRANSITION LOCATION
SCALE: 3" = 1'-0"



D2 FLOOR TILE TO WALL TILE TRANSITION

SCALE: 3" = 1'-0"



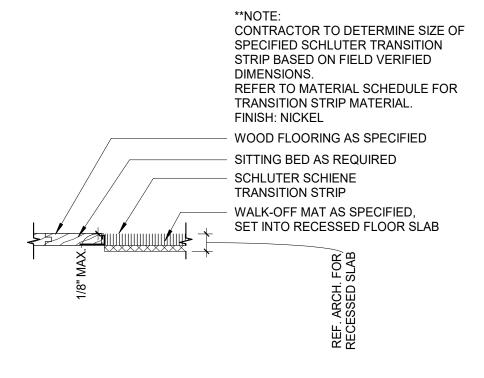
WALL TILE EDGE AT BASE (VERT. & HORIZ.)

SCALE: 3" = 1'-0"

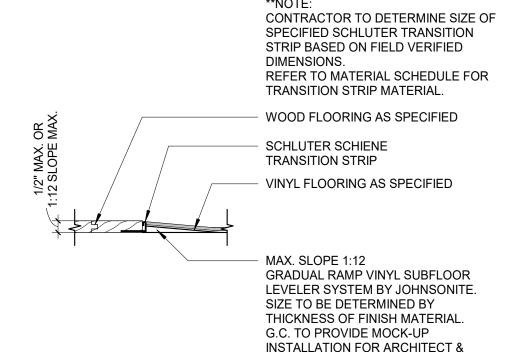
\*\*NOTE: CONTRACTOR TO DETERMINE SIZE OF SPECIFIED JOHNSONITE TRANSITION STRIP BASED ON FIELD VERIFIED



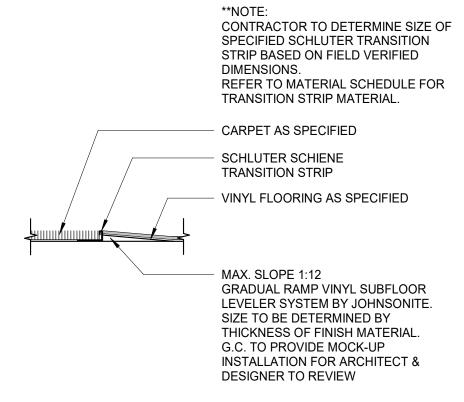
C4 VINYL / CONCRETE TRANSITION SCALE: 3" = 1'-0"



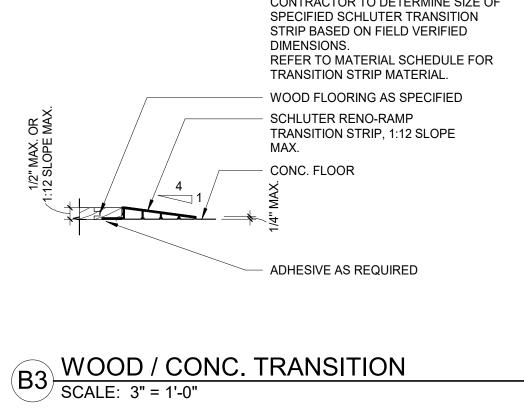
C3 WOOD / WALK-OFF MAT TRANSITION



**WOOD / VINYL TRANSITION** SCALE: 3" = 1'-0"



CARPET / VINYL TRANSITION SCALE: 3" = 1'-0"



\*\*NOTE:

DIMENSIONS.

SCHLUTER DECO

TRANSITION STRIP

TILE FLOOR AS SPECIFIED

SETTING BED AS REQUIRED

TILE FLOOR AS SPECIFIED

B4) TILE/ TILE TRANSITION

SCALE: 3" = 1'-0"

CONTRACTOR TO DETERMINE SIZE OF SPECIFIED SCHLUTER TRANSITION

REFER TO MATERIAL SCHEDULE FOR

STRIP BASED ON FIELD VERIFIED

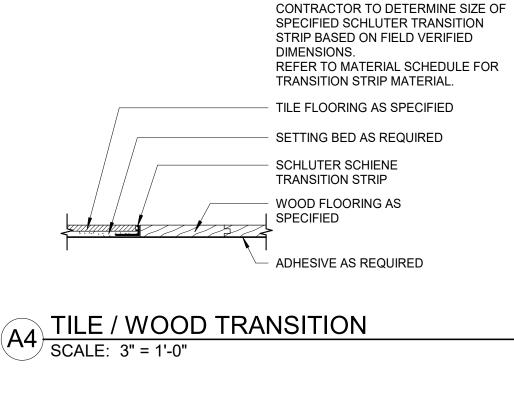
TRANSITION STRIP MATERIAL

\*\*NOTE: CONTRACTOR TO DETERMINE SIZE OF SPECIFIED SCHLUTER TRANSITION BASED ON FIELD-VERIFIED DIMENSIONS. TILE FLOORING AS SPECIFIED SCHLUTER RENO-RAMP TRANSITION STRIP - CONCRETE FLOOR SETTING BED AS REQUIRED

B2 TILE / CONC. TRANSITION SCALE: 3" = 1'-0"

WOOD / CARPET TRANSITION SCALE: 3" = 1'-0"

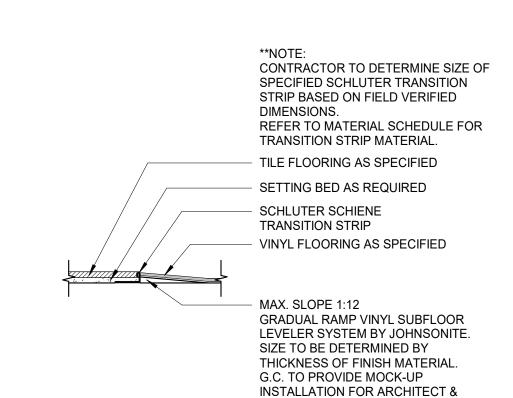
\*\*NOTE: CONTRACTOR TO DETERMINE SIZE OF SPECIFIED SCHLUTER TRANSITION STRIP BASED ON FIELD VERIFIED DIMENSIONS. REFER TO MATERIAL SCHEDULE FOR TRANSITION STRIP MATERIAL. WOOD FLOORING AS SPECIFIED SITTING BED AS REQUIRED SCHLUTER SCHIENE TRANSITION STRIP CARPET AS SPECIFIED MAX. SLOPE 1:12 GRADUAL RAMP VINYL SUBFLOOR LEVELER SYSTEM BY JOHNSONITE. SIZE TO BE DETERMINED BY THICKNESS OF FINISH MATERIAL. G.C. TO PROVIDE MOCK-UP INSTALLATION FOR ARCHITECT & DESIGNER TO REVIEW



\*\*NOTE:

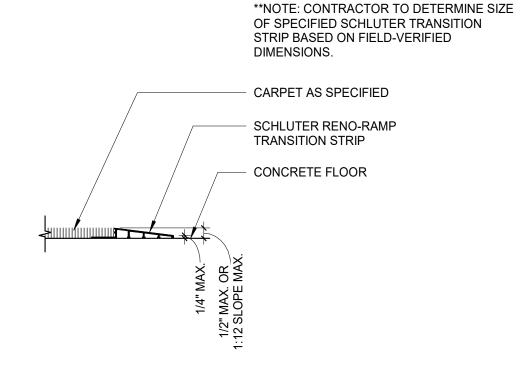
\*\*NOTE: CONTRACTOR TO DETERMINE SIZE OF SPECIFIED SCHLUTER TRANSITION CONTRACTOR TO DETERMINE SIZE OF SPECIFIED SCHLUTER TRANSITION STRIP BASED ON FIELD VERIFIED DIMENSIONS. REFER TO MATERIAL SCHEDULE FOR TRANSITION STRIP MATERIAL TILE FLOORING AS SPECIFIED SETTING BED AS REQUIRED SCHLUTER SCHIENE TRANSITION STRIP CARPET AS SPECIFIED

A3 TILE / CARPET TRANSITION
SCALE: 3" = 1'-0"



DESIGNER TO REVIEW

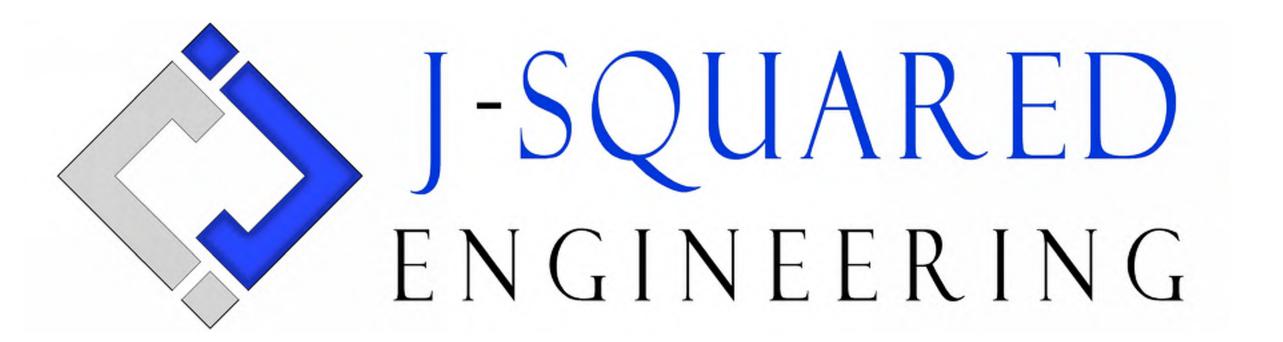
A2 TILE / VINYL TRANSITION
SCALE: 3" = 1'-0"



CARPET / CONC. TRANSITION SCALE: 3" = 1'-0"



INSTALLATION FOR ARCHITECT & DESIGNER TO REVIEW



### MECHANICAL - ELECTRICAL - PLUMBING DESIGN DRAWINGS FOR:

### Home 2 Suites By Hilton

### Village at Discovery Park Lot 2 Lee's Summit, MO

### **GENERAL MEP SPECIFICATIONS**

### 1. GENERA

- 1.1. ALL WORK SHALL BE PERFORMED IN COMPLIANCE WITH LOCALLY ADOPTED CODES AND ORDINANCES.
  1.2. IT IS THE RESPONSIBILITY OF CONTRACTOR TO REVIEW AND UNDERSTAND ALL DRAWINGS AND SPECIFICATIONS IN CONTRACT DOCUMENTS. EACH CONTRACTOR IS RESPONSIBLE FOR ALL WORK ASSOCIATED WITH THEIR TRADE, REGARDLESS OF WHERE WORK IS DEPICTED IN PROJECT DRAWINGS OR SPECIFICATIONS.
- LAYOUT OF SYSTEMS SHOWN ON PLANS ARE APPROXIMATE AND SCHEMATIC IN NATURE. ALL SYSTEMS WILL NEED TO BE FIELD-COORDINATED. CONTRACTOR SHALL INCLUDE THIS COORDINATION IN THEIR SCOPE AND INCLUDE ALL COSTS OF MODIFYING LAYOUT AS REQUIRED IN THEIR BID. PLANS ARE NOT INTENDED TO BE SHOP DRAWINGS FROM WHICH MATERIALS CAN BE ORDERED, FABRICATED, OR INSTALLED WITHOUT ADDITIONAL FIELD MEASUREMENTS AND COORDINATION.
- 1.4. NOT ALL SPECIFIC PIECES AND COMPONENTS OF EACH SYSTEM ARE DETAILED OR OUTLINED ON PLANS. CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL NECESSARY PARTS AND LABOR TO PRODUCE A COMPLETE AND FULLY OPERATIONAL SYSTEM UNLESS STATED OTHERWISE ON PLANS. CONTRACTOR IS TO PROVIDE AND INCLUDE ALL EQUIPMENT AND MATERIAL NEEDED TO COMPLETE WORK ASSOCIATED WITH THEIR BID UNLESS ANY ITEMS ARE SPECIFICALLY NOTED ON PLANS AS PROVIDED BY OTHERS. ALL MATERIALS TO BE NEW, FIRST CLASS, AND INSTALLED PER MANUFACTURER'S PUBLISHED INSTRUCTIONS.
- 1.5. WHERE CONFLICTS EXIST BETWEEN MEP PLANS AND CIVIL, ARCHITECTURAL, OR STRUCTURAL PLANS, NOTIFY MEP ENGINEER OF DISCREPANCIES FOR CLARIFICATION PRIOR TO PERFORMING ANY WORK THAT MAY CONTRADICT INFORMATION ELSEWHERE IN THE PROJECT PLANS.
- 1.6. THESE PLANS ARE NOT TO BE SCALED. SEE ARCHITECTURAL PLANS FOR DIMENSIONS. WHERE THERE IS A CONFLICT BETWEEN ARCHITECTURAL DIMENSIONS AND MEP DIMENSIONS, ARCHITECTURAL SHALL GOVERN.
- 1.7. CONTRACTOR IS TO INCLUDE IN THEIR SCOPE THE COST OF ALL PERMITS, INSPECTIONS, METERING, TAPS, ETC. ASSOCIATED WITH THEIR WORK.
- 1.8. CONTRACTOR IS RESPONSIBLE FOR ALL EXCAVATION, CUTTING, CORING, PATCHING, AND BACKFILL
- REQUIRED TO COMPLETE THEIR WORK, UNLESS NOTED OTHERWISE ON PLANS.

  1.9. SPECIFIC EQUIPMENT MANUFACTURERS AND/OR MODEL NUMBERS LISTED ON PLANS ARE TO ESTABLISH A BASIS-OF-DESIGN FOR QUALITY AND PERFORMANCE, VERIFY THAT SUBSTITUTIONS WILL BE ACCEPTABLE PRIOR TO PURCHASE & INSTALLATION.
- 1.10. NOTIFY ENGINEER OF ANY MAJOR PLAN DISCREPANCIES OR CONFLICTS PRIOR TO PROVIDING BIDS OR
- 1.11. SEE DISCIPLINE SHEETS FOR ADDITIONAL TRADE SPECIFIC SPECIFICATIONS.
- .12. WHERE SHUTDOWN OF ANY EXISTING UTILITY OR SERVICE TO BUILDING IS REQUIRED FOR COMPLETION OF WORK, COORDINATE OUTAGE WITH OWNER AS TO NOT DISRUPT TYPICAL OPERATIONS

### 2. WORKMANSH

- 2.1. SYSTEMS SHALL BE INSTALLED IN A FIRST-CLASS MANNER USING BEST ACCEPTABLE METHODS AND
- 2.2. ALL SYSTEMS SHALL BE INSTALLED PARALLEL OR PERPENDICULAR TO BUILDING ORIENTATION.
  COMPONENTS SHALL BE INSTALLED LEVEL AND PLUMB WITH ATTENTION GIVEN TO OVERALL
- 2.3. CONTRACTOR IS RESPONSIBLE FOR COORDINATING EQUIPMENT LOCATIONS AND SYSTEM ROUTING WITH OTHER TRADES PRIOR TO INSTALLATION.
- 2.4. CONTRACTOR TO GUARANTEE ALL MATERIALS AND WORKMANSHIP FOR A PERIOD OF ONE YEAR FROM THE DATE THE COMPLETED PROJECT IS RELEASED TO THE OWNER, UNLESS NOTED OTHERWISE ON
- 2.5. DURING INSTALLATION OF MATERIALS OR ACTIVITIES IN NEW WORK SCOPE, AVOID DAMAGING EXISTING SURFACES AND EQUIPMENT TO REMAIN. ANY DAMAGE TO EXISTING SURFACES OR EQUIPMENT SHALL BE CORRECTED AT NO COST TO OWNER.

### **DEFERRED SUBMITTAL NOTES**

### 1. FIRE ALARM SYSTEM

- 1.1. FIRE ALARM SYSTEM COMPONENTS SHOWN (IF APPLICABLE) ARE GENERAL AND SCHEMATIC IN NATURE SHOWN FOR APPROXIMATE ROUGH-IN LOCATIONS AND QUANTITIES ONLY. CONTRACTOR TO VERIFY EXACT DEVICE LOCATIONS AND REQUIREMENTS WITH FIRE ALARM SYSTEM DESIGNER OF RECORD PRIOR TO ROUGH-IN
- 1.2. FIRE ALARM CONTRACTOR SHALL PROVIDE DEFERRED SUBMITTAL PACKAGE FOR FIRE ALARM SYSTEM. SUBMITTAL SHALL INCLUDE BATTERY CALCULATIONS, VOLTAGE DROP CALCULATIONS, EQUIPMENT SPECIFICATIONS FOR DEVICES AND PANELS, ETC. DESIGN SHALL BE SEALED BY A QUALIFIED DESIGN PROFESSIONAL LICENSED BY THE STATE.

### 2. FIRE SPRINKLER SYSTEM

- 2.1. WHERE COMBINED FIRE & DOMESTIC WATER SUPPLY LINES ARE SHOWN ON PLANS, INSTALLING CONTRACTOR SHALL VERIFY WITH FIRE SPRINKLER CONTRACTOR THAT INCOMING LINE SIZE IS ADEQUATE FOR FIRE SUPPRESSION SYSTEM.
- FIRE SPRINKLER CONTRACTOR TO PROVIDE DEFERRED SUBMITTAL PACKAGE FOR FIRE SPRINKLER SYSTEM. SUBMITTAL SHALL INCLUDE HYDRAULIC CALCULATIONS AND SPRINKLER SYSTEM DRAWINGS SEALED BY A QUALIFIED DESIGN PROFESSIONAL LICENSED BY THE STATE.

### REFERENCED CODES IN EFFECT

PROJECT HAS BEEN DESIGNED IN COMPLIANCE WITH THE FOLLOWING CODES LISTED BELOW, BUT THIS IS NOT AN EXHAUSTIVE LIST. PROJECT SHALL COMPLY WITH ALL APPLICABLE CODES, STANDARDS, AND LOCAL REQUIREMENTS

- 2018 INTERNATIONAL MECHANICAL C
- 2018 INTERNATIONAL PLUMBING CODE
   3018 INTERNATIONAL FUEL CAS CODE
- 2018 INTERNATIONAL FUEL GAS CODE
   2018 INTERNATIONAL FIRE CODE
- 2018 INTERNATIONAL FIRE CODE2017 NATIONAL ELECTRIC CODE

### FIRE RATED PENETRATION NOTES

- THIS BUILDING CONTAINS FIRE RATED ASSEMBLIES. SEE ARCHITECTURAL PLANS FOR LOCATIONS AND DETAILS.
   A UL-LISTED FIRESTOP SYSTEM SHALL BE INSTALLED AT EACH PENETRATION OF A HORIZONTAL OR VERTICAL RATED ASSEMBLY IN ACCORDANCE WITH ASTM E814 OR UL 1479.
- EACH CONTRACTOR IS RESPONSIBLE FOR PROVIDING PROTECTION FOR THEIR PENETRATIONS THRU RATED ASSEMBLIES.
- GENERAL CONTRACTOR IS RESPONSIBLE FOR PROVIDING AND MAINTAINING A CATALOG OF ALL UL LISTED FIRESTOP ASSEMBLIES, AND KEEPING A PHYSICAL COPY OF DETAILS FOR EACH USED FIRESTOP ASSEMBLY ON SITE FOR REFERENCE.

### **Sheet List Table**

### **Sheet Number Sheet Title**

MEP1 MECHANICAL ELECTRICAL PLUMBING COVER SHEET
MEP2 SITE UTILITIES PLAN
MEP3 SITE LIGHTING PLAN
MEP4 MEP PLAN - ROOF

M101 HVAC PLAN - FIRST FLOOR
M102 HVAC PLAN - SECOND FLOOR
M103 HVAC PLAN - THIRD FLOOR

M104 HVAC PLAN - FOURTH FLOOR
M501 HVAC DETAILS

M601 HVAC SCHEDULES
LISTED EP101 POWER PLAN - FIRST FLOOR

EP102 POWER PLAN - SECOND FLOOR
EP103 POWER PLAN - THIRD FLOOR

EP104 POWER PLAN - FOURTH FLOOR
EP401 ENLARGED POWER PLAN - GUEST ROOMS

EL101 LIGHTING PLAN - FIRST FLOOR

EL102 LIGHTING PLAN - SECOND & THIRD FLOORS

EL103 LIGHTING PLAN - FOURTH FLOOR

EL401 ENLARGED LIGHTING PLAN - GUEST ROOMS
FS101 FIRE ALARM AND SECURITY PLAN - FIRST FLOOR

FS102 FIRE ALARM AND SECURITY PLAN - SECOND FLOOR

FS103 FIRE ALARM AND SECURITY PLAN - THIRD FLOOR
FS104 FIRE ALARM AND SECURITY PLAN - FOURTH FLOOR

ELECTRICAL DETAILS & SCHEDULES

E601 ELECTRICAL SCHEDULES
E602 ELECTRICAL SCHEDULES

E603 ELECTRICAL SCHEDULES
E604 ELECTRICAL SCHEDULES

PS101 SANITARY SEWER PLAN - FIRST FLOOR

**SANITARY SEWER PLAN - SECOND FLOOR** 

PS103 SANITARY SEWER PLAN - THIRD FLOOR
PS104 SANITARY SEWER PLAN - FOURTH FLOOR
PW101 WATER & GAS PLAN - FIRST FLOOR

PW101 WATER & GAS PLAN - FIRST FLOOR
PW102 WATER & GAS PLAN - SECOND FLOOR
PW103 WATER & GAS PLAN - THIRD FLOOR

PW104 WATER & GAS PLAN - FOURTH FLOOR
P501 PLUMBING DETAILS

PLUMBING SCHEDULES

JAMES P. WATSON

NUMBER
PE-2015017071

STONAL ENGINEER

PE-2015017071

James Watson, P.E. April 17, 2024 PE-2015017071 MO Certificate of Authority # 2018029680



2400 Bluff Creek Drive, Suite 101 Columbia, Missouri 65201 573.234.4492

J2 PROJECT No: J21005  J2 DESIGN: ACW  ISSUE TITLE DATE  CITY SUBMISSION 04 / 17 / 2024		
ISSUE TITLE DATE	J2 PROJECT No:	J21005
	J2 DESIGN:	ACW
CITY SUBMISSION 04 / 17 / 2024	ISSUE TITLE	DATE
	CITY SUBMISSION	04 / 17 / 2024

# Suites By Hilton

AHJ APPROVAL STAMP

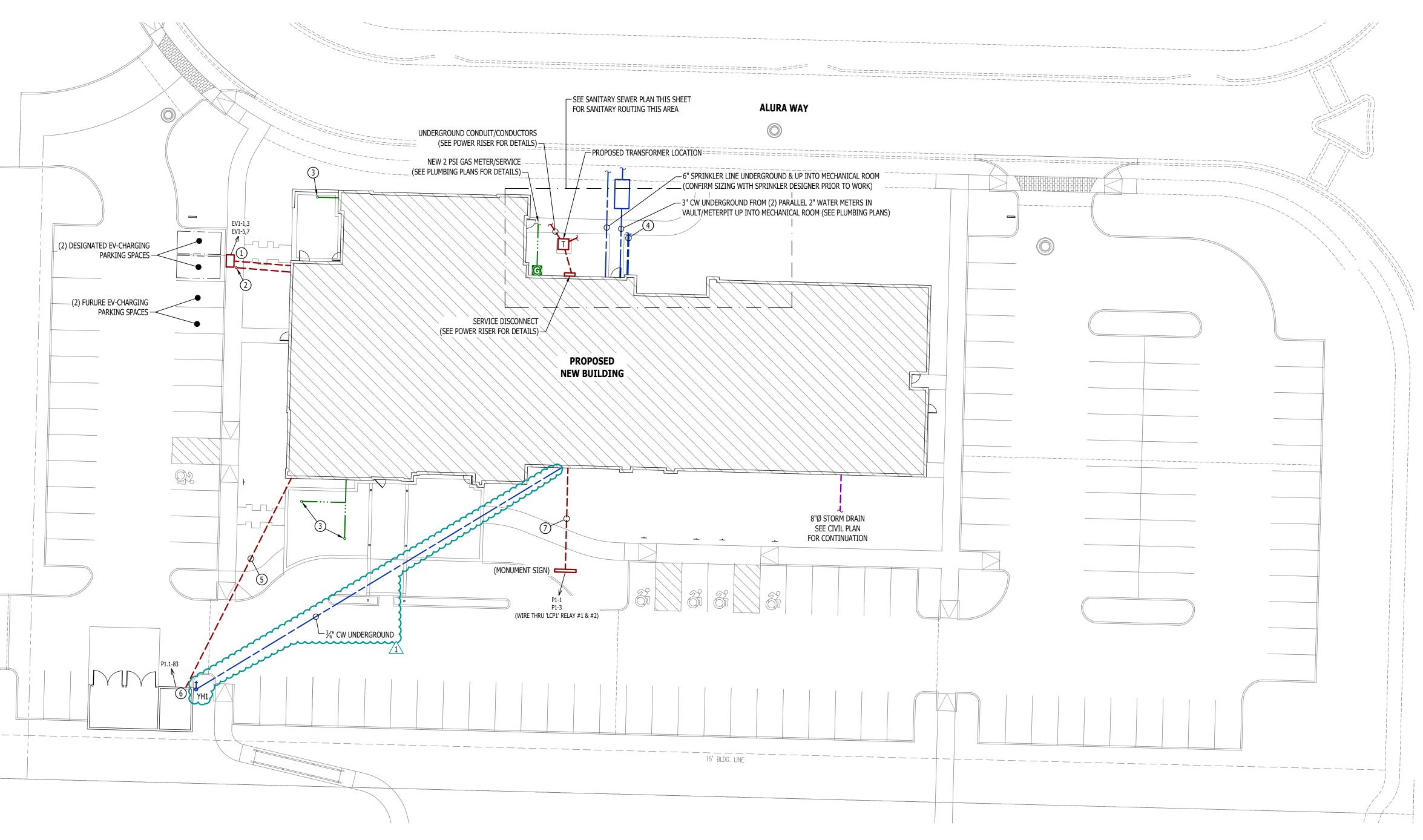
MECHANICAL ELECTRICAL PLUMBING COVER SHEET

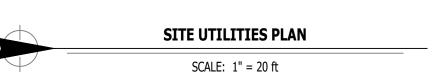
SHEET NUMBER

SITE PLAN SYMBOL LEGEND	SITE UTILITIES PLAN GENERAL NOTES:	SITE UTILITIES PLAN KEY NOTES:
— SANITARY SEWER PIPING	1. REFER TO CIVIL PLANS FOR EXACT UTILITY LOCATIONS, CONNECTIONS, DETAILS, ETC.	1 PROVIDE & INSTALL LEVEL-2, DUAL-STATION, E COORDINATE EXACT LOCATION & REQUIREMEN
————— COLD WATER LINE		2 PROVIDE & INSTALL (2) 3" SPARE CONDUITS (E GREEN-SPACE NEAR EV-CHARGING AREA FOR FU
WATER METER		3 ¾" UNDERGROUND GAS PIPING UP TO GRILL/FI 200kBTU. SEE PLUMBING PLANS FOR DETAILS.
VALVE		(2) 2" SLEEVES BELOW GRADE FROM MECHANIC WITH IRRIGATION CONTRACTOR.
GAS LINE		(5) 1" CONDUIT WITH (2) #10 CU. & (1) #10 CU. EC
GAS METER		6 PROVIDE & INSTALL (1) WEATHERPROOF GFCI F AREA.
TIE INTO EXISTING		7) 1" CONDUIT WITH (4) #10 CU. & (2) #10 CU. EC REQUIREMENTS & DETAILS WITH SIGNAGE SUP
————— ELECTRIC		
> PX-XX CIRCUIT TAG		

## 1 PROVIDE & INSTALL LEVEL-2, DUAL-STATION, EV-CHARGING SYSTEM EQUAL TO JUICEBAR GEN-3 #JB3.0-402; COORDINATE EXACT LOCATION & REQUIREMENTS WITH OWNER. 2 PROVIDE & INSTALL (2) 3" SPARE CONDUITS (EACH WITH PULL-STRING) FROM PANEL 'EV1' LOCATION TO GREEN-SPACE NEAR EV-CHARGING AREA FOR FUTURE USE. 3 ¾" UNDERGROUND GAS PIPING UP TO GRILL/FIREPIT. TOTAL ESTIMATED LOAD AT EACH GRILL/FIREPIT = 200kBTU. SEE PLUMBING PLANS FOR DETAILS. 4 (2) 2" SLEEVES BELOW GRADE FROM MECHANICAL ROOM TO IRRIGATION METER FOR CONTROLS. COORDINATE WITH IRRIGATION CONTRACTOR. 5 1" CONDUIT WITH (2) #10 CU. & (1) #10 CU. EQ. GRD. 6 PROVIDE & INSTALL (1) WEATHERPROOF GFCI RECEPTACLE & (1) 'S1' LIGHT FIXTURE IN ENCLOSED STORAGE

7) 1" CONDUIT WITH (4) #10 CU. & (2) #10 CU. EQ. GRD. FOR (2) MONUMENT SIGN CIRCUITS. COORDINATE EXACT REQUIREMENTS & DETAILS WITH SIGNAGE SUPPLIER/INSTALLER.







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• '	
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ISSUE TITLE	DATE
CITY SUBMISSION	04 / 17 / 2024
REVISION 1 - CITY RESPONSE	05 / 17 / 2024

GREASE INTERCEPTOR

SITE UTILITIES PLAN - SANITARY SEWER

SCALE: 1" = 20 ft

(SEE SANITARY PLANS)

→ SEE CIVIL PLAN
FOR CONTINUATION

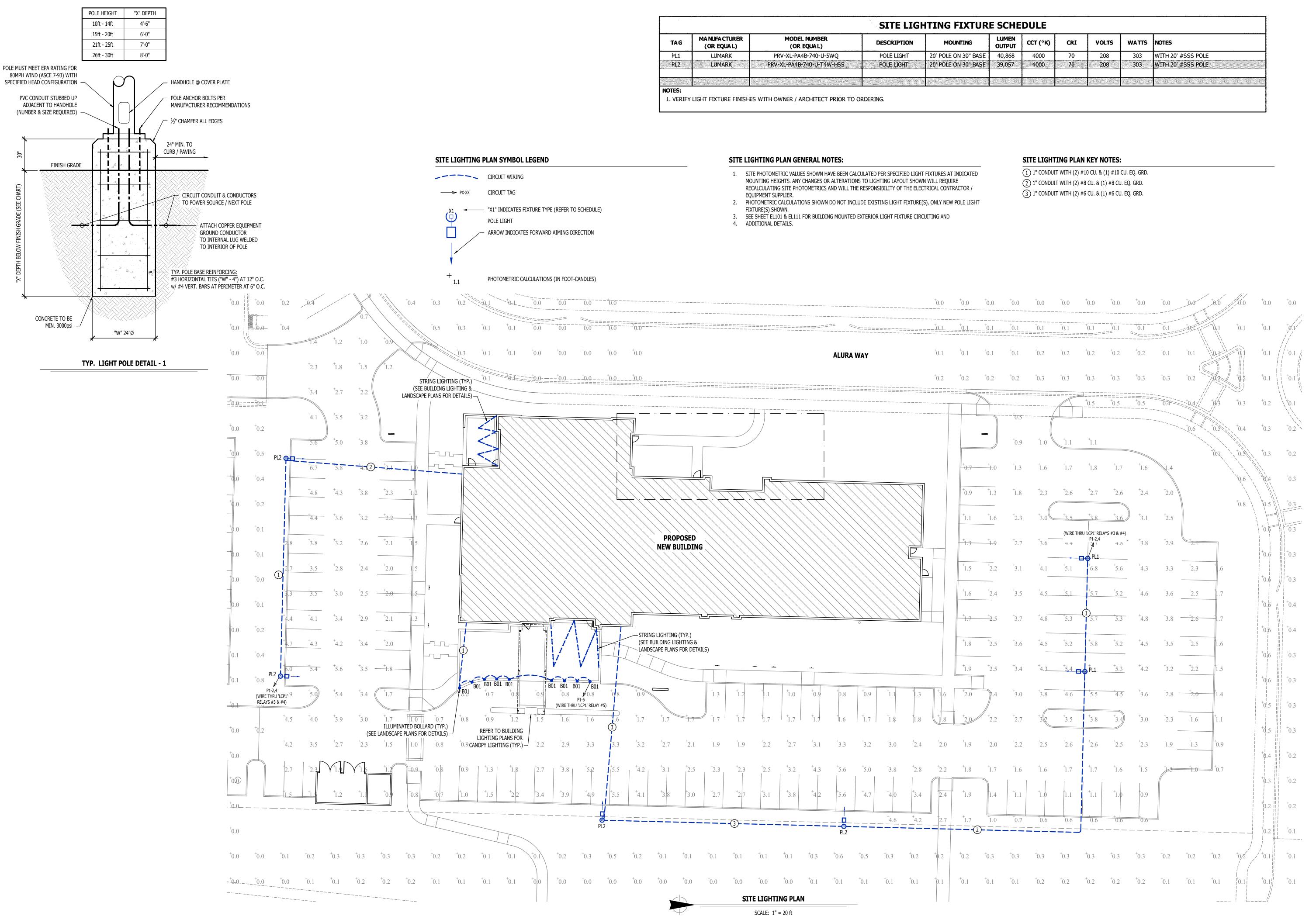
## ites By Hiltor

Home 2 Suites

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SITE UTILITIES PLAN

IEET AU IMPED



JAMES P.
WATSON

NUMBER
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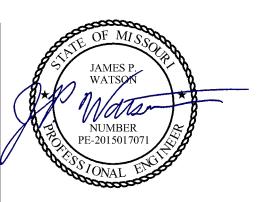
## PLUMBING DESIGN DRAWINGS FOR: Ites By Hiltor

MECHANICAL - ELECTRICAL - PLUMBING DES Home 2 Suites E

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**SITE LIGHTING PLAN** 

SHEET NUMBER



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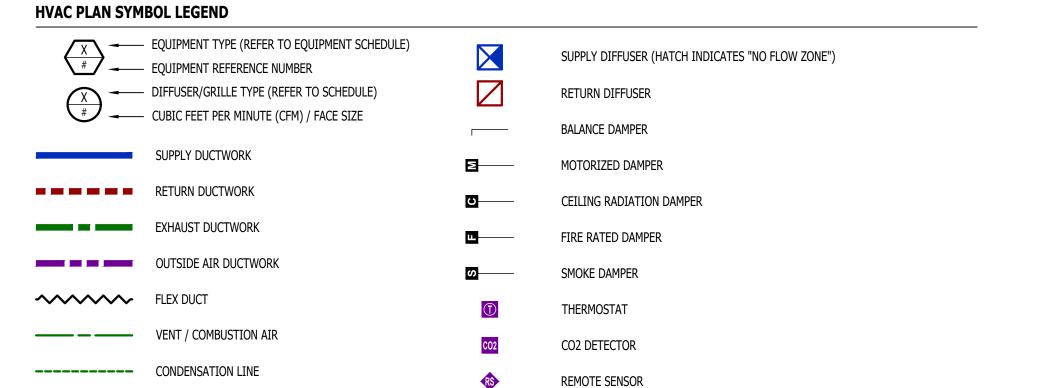
Home 2 Suites By Hi

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SHEET TITLE

MEP PLAN - ROOF

SHEET NUMBER



### **HVAC PLAN GENERAL NOTES:**

1. SEE M500 & M600 SERIES SHEETS FOR ADDITIONAL HVAC NOTES, DETAIL, AND SCHEDULES.

2. ALL DUCTWORK SHALL ROUTE IN SPACE ABOVE FINISHED CEILINGS UNLESS NOTED OTHERWISE.

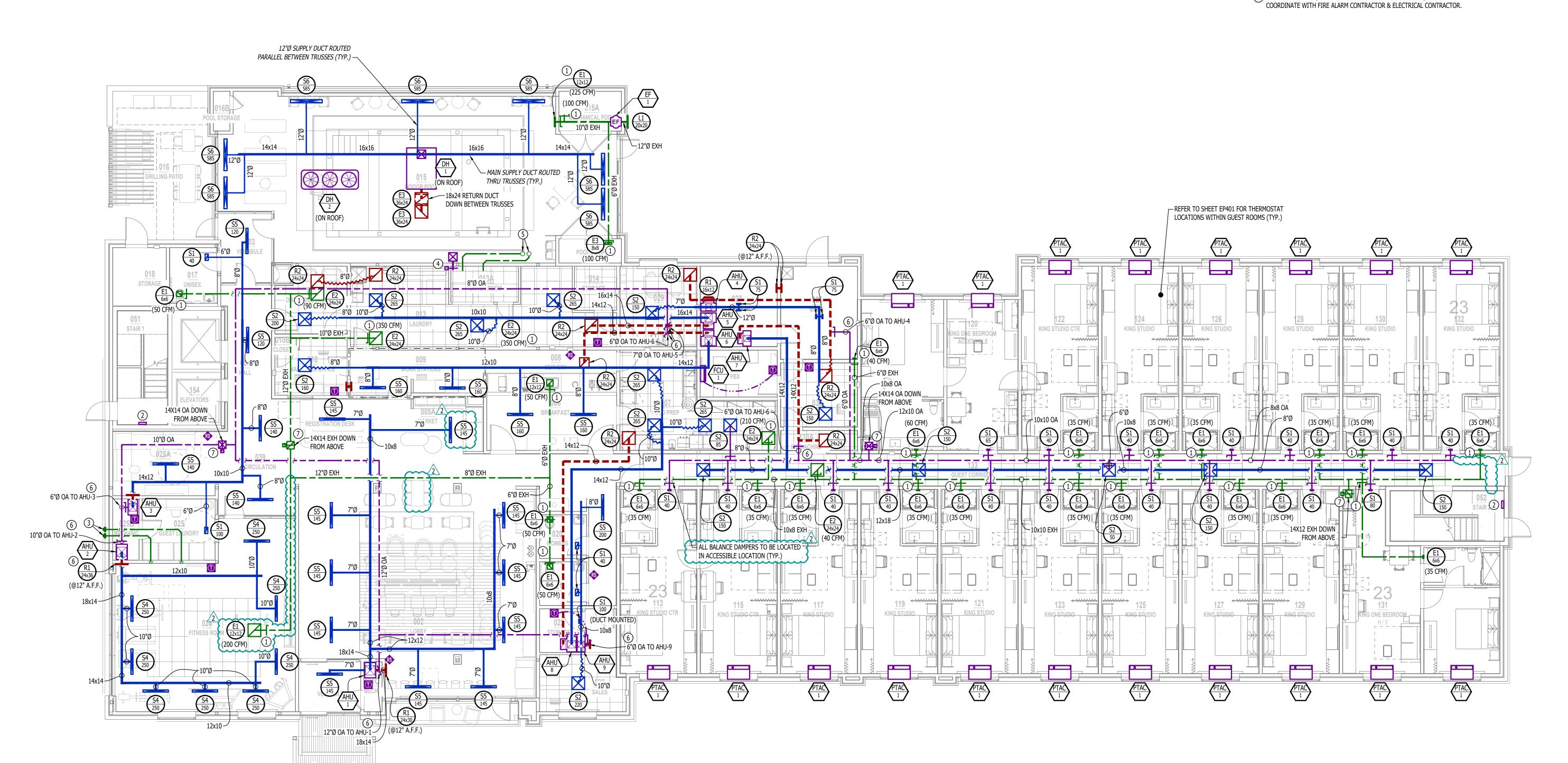
### **HVAC PLAN KEY NOTES:**

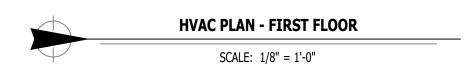
1) BALANCE EXHAUST FLOW TO AMOUNT SHOWN (XXX CFM)

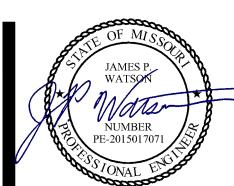
(2) ELECTRIC WALL HEATER PROVIDED & INSTALLED BY ELECTRICIAN.

(3) 4" DRYER EXHAUST FROM GUEST LAUNDRY DRYER TO EXTERIOR; TERMINATE WITH #DWV (COLOR DETERMINED BY ARCHITECT). WRAP DRYER EXHAUST WITH ZERO-CLEARANCE FIREWRAP EQUAL TO FIREMASTER DUCTWRAP OR EQUAL. DRYER EXHAUST SHALL NOT EXCEED 35' IN TOTAL DEVELOPED LENGTH PER IMC 504.8.4.

- (4) 16x16 COMBUSTION AIR DUCT OPEN TO DRYER ROOM; UP THRU ROOF TO GOOSENECK WITH 3/8" HARDWARE CLOTH OVER OPENING; INCLUDE MOTORIZED DAMPER ON OA DUCT INTERLOCKED WITH DRYER(S) - WHEN ANY DRYER IS IN OPERATION, DAMPER SHALL BE OPEN.
- (5) DRYER VENT ROUTED ABOVE CEILING TO TERMINATE UP THRU ROOF WITH GOOSENECK; LOCATE AT LEAST 10' FROM COMBUSTION AIR INTAKE.
- (6) BALANCE OA TO AMOUNT SHOWN IN EQUIPMENT SCHEDULE AT AHU RETURN DUCT CONNECTION.
- (7) COMBINATION FIRE/SMOKE DAMPER AT SHAFT PENETRATION; DAMPER TO CLOSE UPON FIRE ALARM SIGNAL.







James Watson, P.E. June 14, 2024 PE-2015017071 MO Certificate of Authority # 2018029680



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CITY & BRAND RESPONSE	06 / 14 / 2024

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Suites Home

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**HVAC PLAN - FIRST FLOOR** 

**HVAC PLAN SYMBOL LEGEND** EQUIPMENT TYPE (REFER TO EQUIPMENT SCHEDULE) SUPPLY DIFFUSER (HATCH INDICATES "NO FLOW ZONE") # EQUIPMENT REFERENCE NUMBER DIFFUSER/GRILLE TYPE (REFER TO SCHEDULE) RETURN DIFFUSER # CUBIC FEET PER MINUTE (CFM) / FACE SIZE BALANCE DAMPER SUPPLY DUCTWORK MOTORIZED DAMPER RETURN DUCTWORK CEILING RADIATION DAMPER EXHAUST DUCTWORK FIRE RATED DAMPER OUTSIDE AIR DUCTWORK SMOKE DAMPER FLEX DUCT THERMOSTAT 

----- CONDENSATION LINE

CO2 DETECTOR

REMOTE SENSOR

**HVAC PLAN GENERAL NOTES:** 

1. SEE M500 & M600 SERIES SHEETS FOR ADDITIONAL HVAC NOTES, DETAIL, AND SCHEDULES.

**HVAC PLAN KEY NOTES:** 

① OUTSIDE AIR SUPPLY DUCT DOWN FROM DOAS-2 ON ROOF.
DUCT SIZE: 18x16 @ 2ND FLOOR

(2) EXHAUST DUCT DOWN FROM DOAS-2 ON ROOF.

DUCT SIZE: 16x16 @ 2ND FLOOR

(3) OUTSIDE AIR SUPPLY DUCT DOWN FROM DOAS-1 ON ROOF.

DUCT SIZE: 14x14 @ 2ND FLOOR

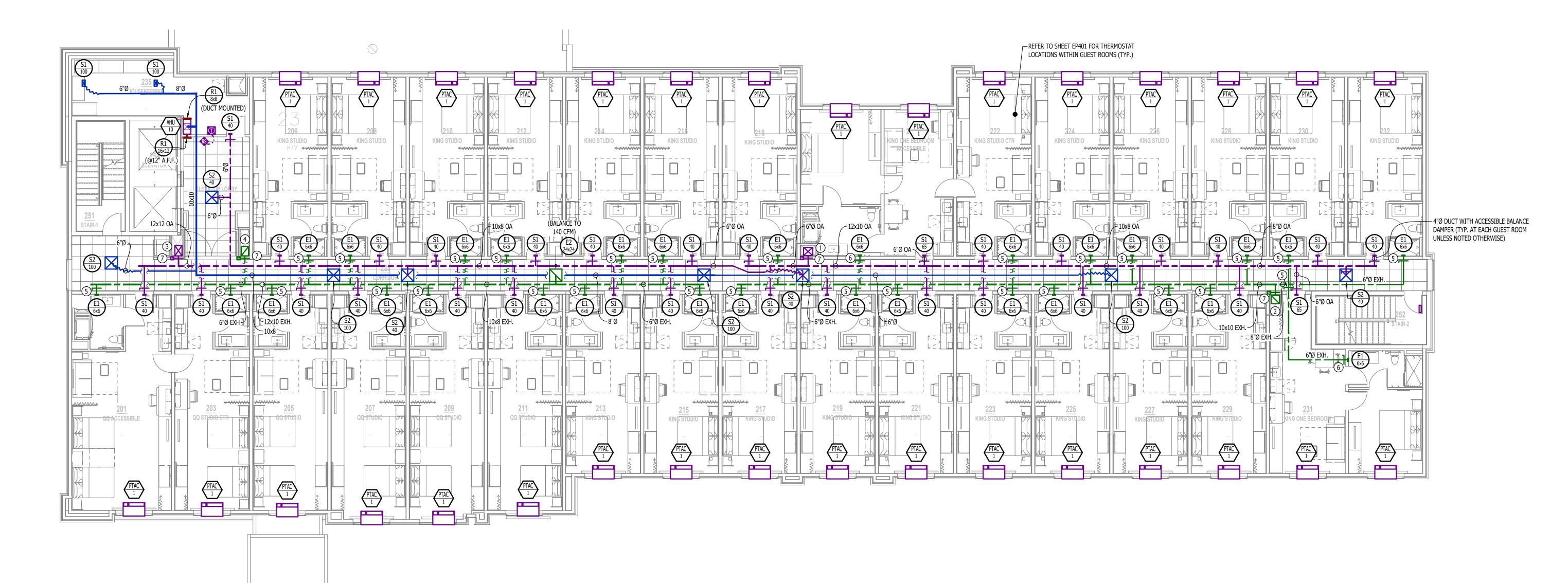
4 EXHAUST DUCT DOWN FROM DOAS-2 ON ROOF. DUCT SIZE: 14x14 @ 2ND FLOOR

(5) BALANCE EXHAUST FLOW TO 35 CFM.

(6) BALANCE EXHAUST FLOW TO 60 CFM.

(7) COMBINATION FIRE/SMOKE DAMPER AT SHAFT PENETRATION; DAMPER TO CLOSE UPON FIRE ALARM SIGNAL.

COORDINATE WITH FIRE ALARM CONTRACTOR & ELECTRICAL CONTRACTOR.



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

JAMES P.
WATSON

NUMBER
PE-2015017071

James Watson, P.E. April 17, 2024
PE-2015017071
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MECHANICAL - ELECTRICAL - PLUMBING HOME 2 Suites

AHJ APPROVAL STAMP

SHEET TITLE

HVAC PLAN - SECOND FLOOR

SHEET NUMBER

**HVAC PLAN SYMBOL LEGEND** EQUIPMENT TYPE (REFER TO EQUIPMENT SCHEDULE) SUPPLY DIFFUSER (HATCH INDICATES "NO FLOW ZONE") # EQUIPMENT REFERENCE NUMBER DIFFUSER/GRILLE TYPE (REFER TO SCHEDULE) RETURN DIFFUSER # CUBIC FEET PER MINUTE (CFM) / FACE SIZE BALANCE DAMPER SUPPLY DUCTWORK MOTORIZED DAMPER RETURN DUCTWORK CEILING RADIATION DAMPER EXHAUST DUCTWORK FIRE RATED DAMPER OUTSIDE AIR DUCTWORK SMOKE DAMPER FLEX DUCT THERMOSTAT

CO2 DETECTOR

REMOTE SENSOR

----- CONDENSATION LINE

**HVAC PLAN GENERAL NOTES:** 

1. SEE M500 & M600 SERIES SHEETS FOR ADDITIONAL HVAC NOTES, DETAIL, AND SCHEDULES.

**HVAC PLAN KEY NOTES:** 

① OUTSIDE AIR SUPPLY DUCT DOWN FROM DOAS-2 ON ROOF.
DUCT SIZE: 24x16 @ 3RD FLOOR

2 EXHAUST DUCT DOWN FROM DOAS-2 ON ROOF.
DUCT SIZE: 22x16 @ 3RD FLOOR

(3) OUTSIDE AIR SUPPLY DUCT DOWN FROM DOAS-1 ON ROOF.

DUCT SIZE: 26x14 @ 3RD FLOOR

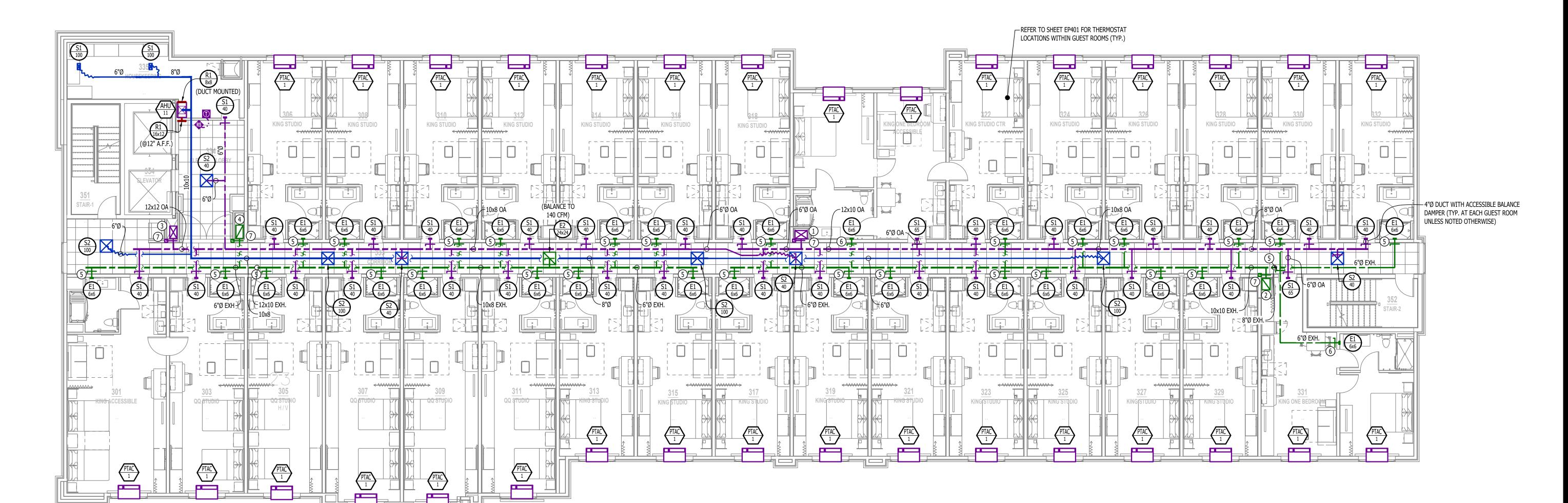
(4) EXHAUST DUCT DOWN FROM DOAS-2 ON ROOF.
DUCT SIZE: 24x14 @ 3RD FLOOR

(5) BALANCE EXHAUST FLOW TO 35 CFM.

(6) BALANCE EXHAUST FLOW TO 60 CFM.

(7) COMBINATION FIRE/SMOKE DAMPER AT SHAFT PENETRATION; DAMPER TO CLOSE UPON FIRE ALARM SIGNAL.

COORDINATE WITH FIRE ALARM CONTRACTOR & ELECTRICAL CONTRACTOR.





JAMES P. WATSON

NUMBER
PE-2015017071

James Watson, P.E. April 17, 2024
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Suites By Hilton

MECHANICAL - ELECTRICAL - PLUMBING HOME 2 Suites

AHJ APPROVAL STAMP

SHEET TITLE

HVAC PLAN - THIRD FLOOR

SHEET NUMBE

### **HVAC PLAN SYMBOL LEGEND** EQUIPMENT TYPE (REFER TO EQUIPMENT SCHEDULE) SUPPLY DIFFUSER (HATCH INDICATES "NO FLOW ZONE") # EQUIPMENT REFERENCE NUMBER DIFFUSER/GRILLE TYPE (REFER TO SCHEDULE) RETURN DIFFUSER CUBIC FEET PER MINUTE (CFM) / FACE SIZE BALANCE DAMPER SUPPLY DUCTWORK RETURN DUCTWORK CEILING RADIATION DAMPER EXHAUST DUCTWORK FIRE RATED DAMPER OUTSIDE AIR DUCTWORK FLEX DUCT THERMOSTAT

CO2 DETECTOR

REMOTE SENSOR

----- CONDENSATION LINE

### **HVAC PLAN GENERAL NOTES:**

1. SEE M500 & M600 SERIES SHEETS FOR ADDITIONAL HVAC NOTES, DETAIL, AND SCHEDULES.

### HVAC PLAN KEY NOTES:

① OUTSIDE AIR SUPPLY DUCT DOWN FROM DOAS-2 ON ROOF.
DUCT SIZE: 26x16 @ 4TH FLOOR

(2) EXHAUST DUCT DOWN FROM DOAS-2 ON ROOF.
DUCT SIZE: 26x16 @ 4TH FLOOR

(3) OUTSIDE AIR SUPPLY DUCT DOWN FROM DOAS-1 ON ROOF.
DUCT SIZE: 32x14 @ 4TH FLOOR

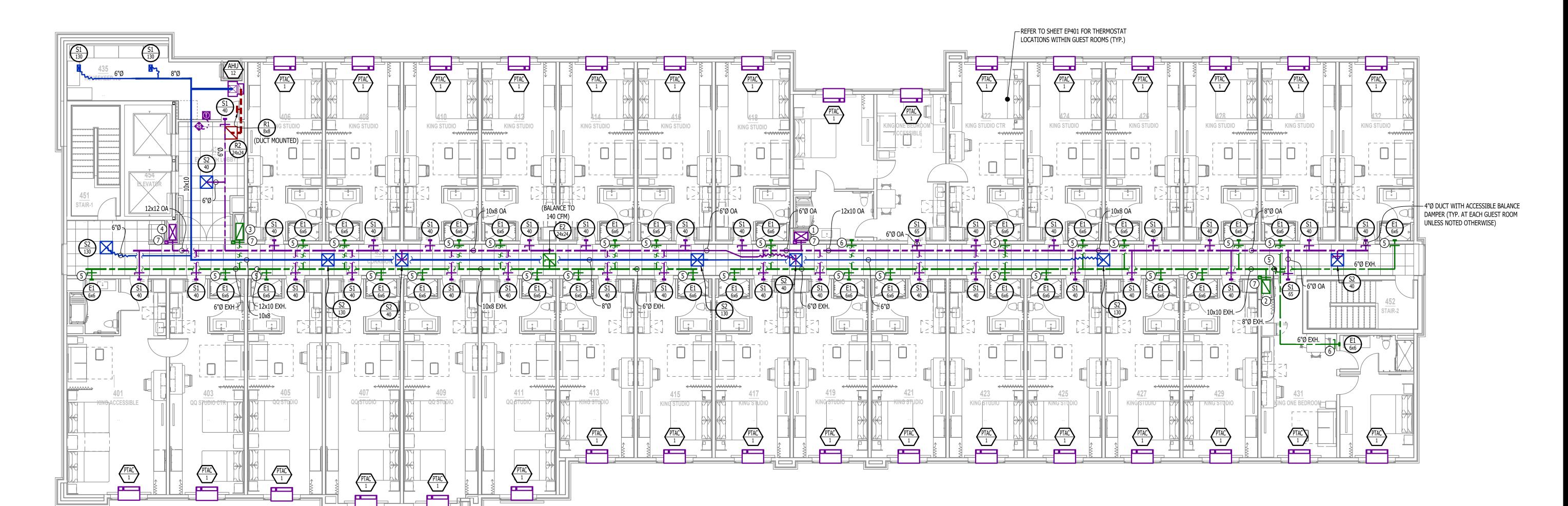
4 EXHAUST DUCT DOWN FROM DOAS-2 ON ROOF.
DUCT SIZE: 30x14 @ 4TH FLOOR

(5) BALANCE EXHAUST FLOW TO 35 CFM.

(6) BALANCE EXHAUST FLOW TO 60 CFM.

(7) COMBINATION FIRE/SMOKE DAMPER AT SHAFT PENETRATION; DAMPER TO CLOSE UPON FIRE ALARM SIGNAL.

COORDINATE WITH FIRE ALARM CONTRACTOR & ELECTRICAL CONTRACTOR.





JAMES P. WATSON

NUMBER
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James Watson, P.E. April 17, 2024
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J2 DESIGN:	ACW
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ISSUE TITLE	DATE
CITY SUBMISSION	04 / 17 / 2024

tes By Hilton

MECHANICAL - ELECTRICAL - PLUMBING HOME 2 Suites

AHJ APPROVAL STAMP

SHFFT TITLE

HVAC PLAN - FOURTH FLOOR

SHEET NUMBER

### **HVAC SPECIFICATIONS**

1.1. REFER TO GENERAL MEP SPECIFICATIONS SECTION FOR ADDITIONAL REQUIREMENTS.

### 2. WORKMANSHIP

- 2.1. COORDINATE WITH ALL OTHER TRADES SO THAT HVAC EQUIPMENT AND DUCT WORK DOES NOT BLOCK REQUIRED ACCESS OR CLEARANCE TO ANY EQUIPMENT, ACCESS PANELS, ELECTRICAL JUNCTION BOXES, ELECTRICAL PANELS, ETC.
- ALL HVAC EQUIPMENT IS TO BE INSTALLED PER MANUFACTURER'S PUBLISHED RECOMMENDATIONS AND/OR INSTALLATION INSTRUCTIONS.
- ALL EQUIPMENT TO BE INSTALLED LEVEL AND PLUMB, PARALLEL OR PERPENDICULAR TO BUILDING ORIENTATION WHERE POSSIBLE.
- ROOFTOP MOUNTED RTU'S SHALL BE INSTALLED ON CURBS PER MANUFACTURER'S INSTRUCTIONS. CURB HEIGHT SHALL PROVIDE A MINIMUM OF 6" BETWEEN EQUIPMENT AND TOP OF ROOF IN ALL LOCATIONS.
- GRADE MOUNTED RTUS, CONDENSING UNITS, AND HEAT PUMPS TO BE INSTALLED ON 4" REINFORCED CONCRETE PAD EXTENDING 4" BEYOND EACH EDGE OF THE EQUIPMENT, OR A MANUFACTURER APPROVED PRE-MANUFACTURED BASE.
- APPROPRIATE ATTENTION SHALL BE GIVEN TO INDOOR AIR QUALITY THROUGHOUT CONSTRUCTION; PROTECT INSIDE OF NEW DUCTWORK & AIR-HANDLING EQUIPMENT FROM DUST, DIRT, DEBRIS, PAINT, MOISTURE, ETC. INSULATION SHALL BE REPLACED IF EXPOSED TO MOISTURE. AN INDEPENDENT, PROFESSIONAL DUCT CLEANING COMPANY SHALL CLEAN ALL NEW DUCTWORK IF EQUIPMENT WAS USED
- DURING CONSTRUCTION, AND EQUIPMENT/COILS SHALL ALSO BE THOROUGHLY CLEANED. FIELD COORDINATE LOCATIONS OF ALL DIFFUSERS, GRILLES, REGISTERS, ETC. WITH LIGHT FIXTURE

- ALL EQUIPMENT SHOWN ON MECHANICAL PLANS SHALL BE PROVIDED & INSTALLED BY MECHANICAL CONTRACTOR UNLESS NOTED OTHERWISE.
- ALL EQUIPMENT MUST PROVIDE PERFORMANCE AS SPECIFIED ON PLANS. WHERE SPECIFIC MANUFACTURERS AND/OR MODELS ARE INDICATED ON PLANS, CONTRACTOR TO PROVIDE MODEL INDICATED OR APPROVED EQUAL. VERIFY SUBSTITUTION APPROVAL PRIOR TO PURCHASE OR INSTALLATION OF EOUIPMENT.
- CONTRACTOR TO SUPPLY SUBMITTALS FOR ALL EQUIPMENT FOR REVIEW BY ARCHITECT AND ENGINEER.
- FORMAL APPROVAL SHALL BE RECEIVED BY CONTRACTOR PRIOR TO EQUIPMENT PURCHASE. CONTRACTOR TO SHARE APPROVED EQUIPMENT SUBMITTALS WITH ANY PERTINENT ELECTRICAL OR PLUMBING REQUIREMENTS WITH RESPECTIVE CONTRACTORS WITHIN TWO WEEKS OF RECEIVING APPROVED SUBMITTALS FROM ARCHITECT/ENGINEER.
- ALL EQUIPMENT SHOWN ON PLANS SHALL BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS WITH ADEQUATE ACCESS AND CLEARANCE FOR SERVICING OR REPLACEMENT.
- ALL HORIZONTAL FURNACES WITH AC COILS SHALL BE EQUIPPED WITH CORROSION RESISTANT DRAIN PAIN. DRAIN PAN TO DISCHARGE TO SANITARY WASTE VIA INDIRECT CONNECTION WITH AIR GAP. DRAIN PAN TO PROVIDE SECONDARY OVERFLOW OR FLOAT SWITCH INTERLOCKED WITH UNIT TO SHUT DOWN UNIT ON HIGH WATER SIGNAL.
- ALL EXTERIOR REFRIGERANT COILS TO BE PROTECTED BY FACTORY EQUIPPED HAIL GUARDS.
- REFRIGERANT PIPING TO BE ACR COPPER OR TYPE L COPPER.

LOCATIONS AND ADJUST AS NECESSARY.

- ALL AIR HANDLING EQUIPMENT SHALL BE EQUIPPED WITH MERV-8 FILTRATION AT RETURN OPENING UNLESS OTHERWISE NOTED.
- ALL AIR FILTERS SHALL BE SIZED FOR A MAXIMUM FACE VELOCITY OF 500FPM.
- PROVIDE & INSTALL ALL EQUIPMENT FLUES/VENTS PER MANUFACTURER'S SPECIFICATIONS.
- TERMINATIONS SHALL BE AT LEAST 10' FROM ANY FRESH AIR INTAKE. 3.12. PROVIDE NEW AIR FILTERS IN ALL EQUIPMENT PRIOR TO TESTING & BALANCING AND BEFORE TURNING OVER SYSTEM(S) TO OWNERSHIP.
- 3.13. IF ANY EXISTING EQUIPMENT IS TO BE REUSED, CLEAN AND INSPECT EQUIPMENT PRIOR TO BEGINNING WORK. VERIFY THAT EQUIPMENT IS IN GOOD WORKING CONDITION, REPORT ANY DEFICIENCIES TO ENGINEER.

### 4. **DUCTWORK**

- DUCTWORK TO BE GALVANIZED STEEL, SEAL CLASS B, CONSTRUCTED PER SMACNA STANDARDS.
- DUCTWORK THICKNESS: 4.2. 4.2.1. 26 GA. MINIMUM UP TO 16" DUCT
- 24 GA. UP TO 20"
- 22 GA. UP TO 24" 4.2.4.
- 20 GA. UP TO 28" 4.2.5. 18 GA. UP TO 36"
- TURNING VANES SHALL BE PROVIDED AND INSTALLED AT ALL 90° BENDS AND TEES. 4.4.
- ALL DUCT DIMENSIONS LISTED ARE TO INTERIOR OF DUCT LINER UNLESS NOTED OTHERWISE ON
- 4.5. BALANCE DAMPERS MUST BE PROVIDED TO ALLOW ADJUSTMENT AT EACH AIR TERMINAL.
- WHERE BRANCH TAKEOFF IS ACCESSIBLE (ABOVE LAY-IN CEILING OR EXPOSED DUCT), BALANCE DAMPER IS TO BE INSTALLED AT TAKEOFF.
- WHERE TAKEOFF IS INACCESSIBLE (IN ATTIC OR SOFFIT), BALANCE DAMPER IS TO BE LOCATED SUCH THAT IT IS ACCESSIBLE FROM FACE OF AIR DEVICE.
- HVAC CONTRACTOR RESPONSIBLE FOR ALL DUCTWORK TRANSITIONS AND FITTINGS AS REQUIRED FOR
- FINAL CONNECTIONS TO HVAC EQUIPMENT. UNLESS NOTED OTHERWISE ON PLANS, FLEXIBLE DUCT CONNECTIONS MAY USED FROM BRANCH DUCTS TO FINAL AIR DEVICES, BUT SHALL NOT EXCEED 8'-0" IN LENGTH. FLEXIBLE DUCT CONNECTORS MUST
- 5. INSULATION

### 5.1. DUCTWORK

- 5.1.1. SEE "TYPICAL DUCT INSULATION DIAGRAM" FOR INSTALLATION SPECIFIC REQUIREMENTS. INTERNAL DUCT LINER TO BE CLOSED CELL ELASTOMERIC.
- EXTERNAL DUCT WRAP TO INCLUDE VAPOR BARRIER. EQUAL TO 'JOHNS MANVILLE MICROLITE' 5.1.3. WITH FSK JACKET.
- REFRIGERANT PIPING SPLIT SYSTEM (SUCTION LINE ONLY) - 1" CLOSED CELL ELASTOMERIC FOAM (EQUAL TO
- VRV/VRF SYSTEMS (BOTH SUCTION AND HOT GAS LINES) 1 ½" EPDM (EQUAL TO 'AEROFLEX AEROCEL AC') WITHIN CONDITIONED SPACES & 2" EDPM (EQUAL TO 'AEROFLEX AEROCEL AC') IN UNCONDITIONED
- SPACES, AND WITH BANDED ALUMINUM SHIELDING IN EXTERIOR SPACES. CONDENSATE PIPING

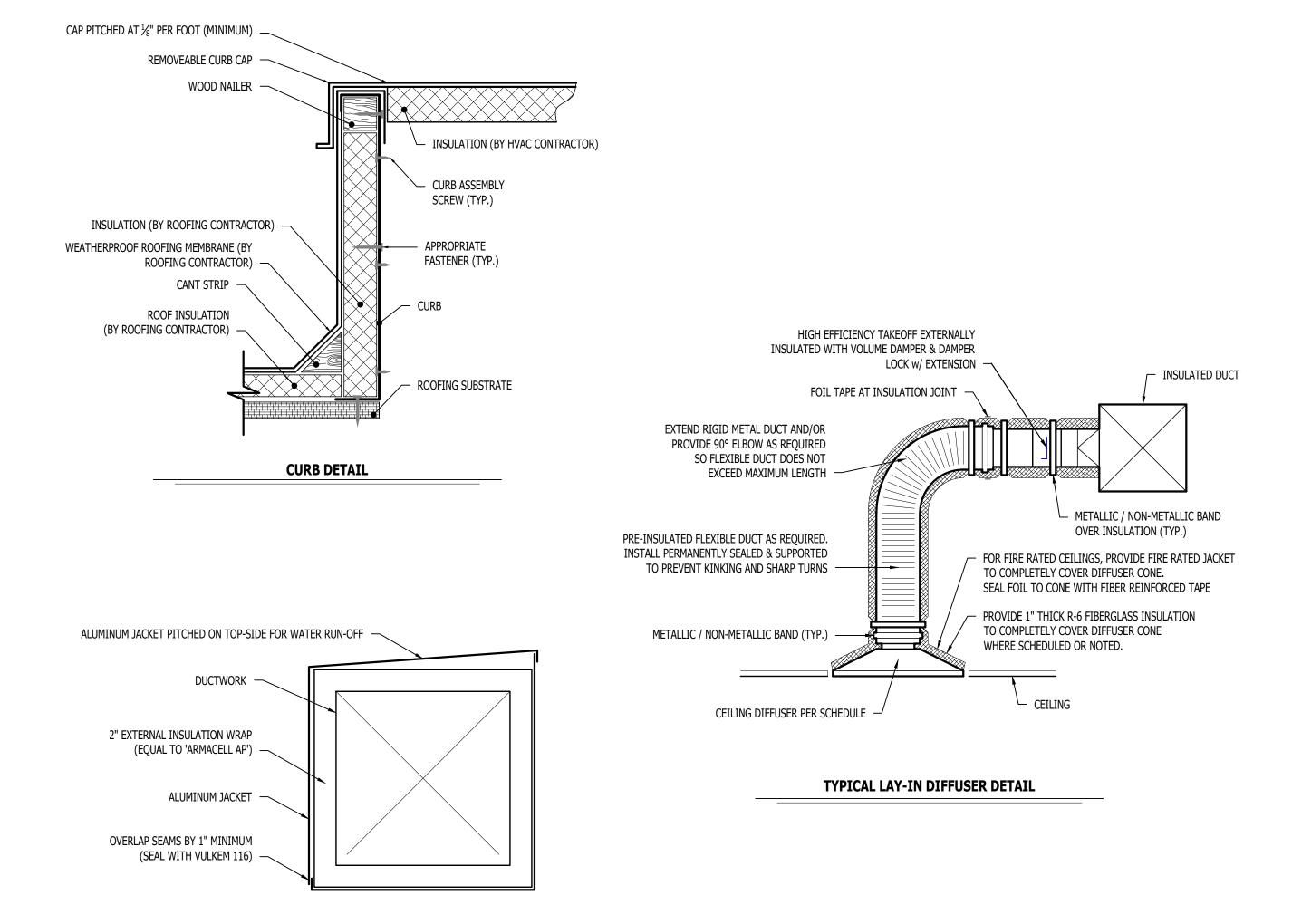
SPLIT SYSTEMS - WHERE CONDENSATE PIPING IS LOCATED IN UNCONDITIONED SPACE, INSULATE

- WITH ½" ELASTOMERIC. NO INSULATION REQUIRED WITHIN CONDITIONED SPACES.
- VRV/VRF INSULATE WITH ½" ELASTOMERIC.

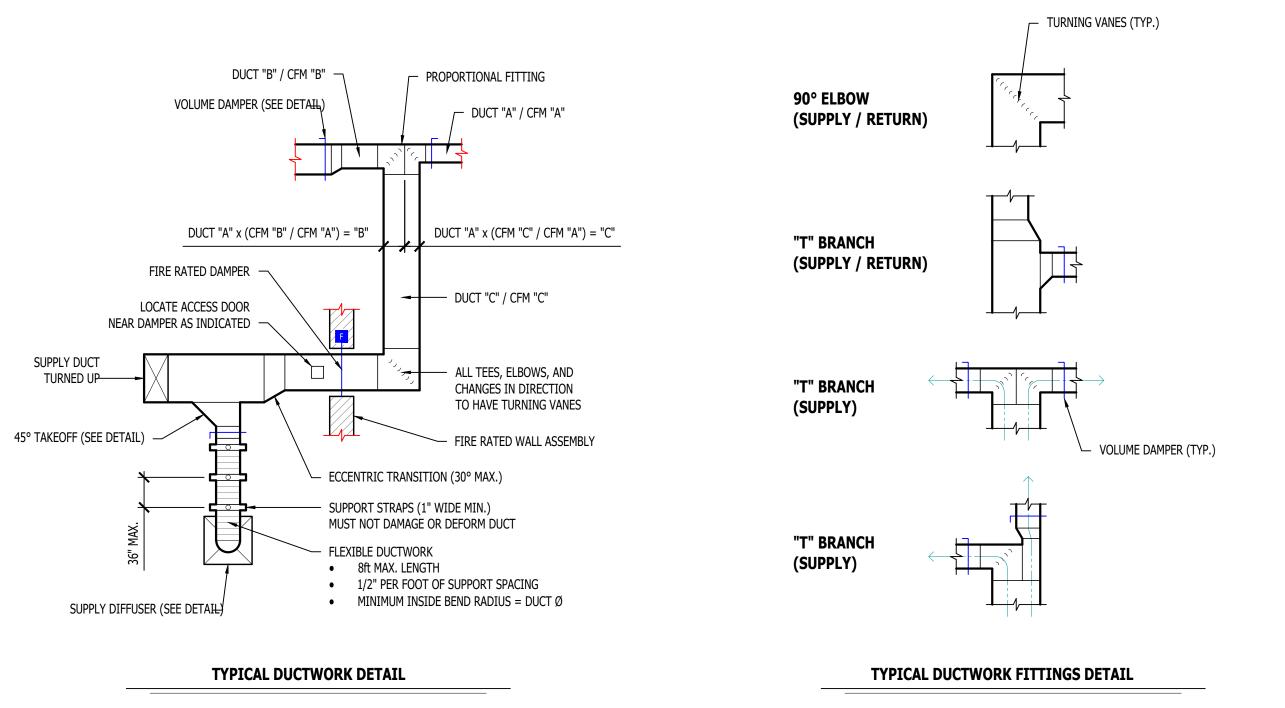
BE SUPPORTED PER PLAN DETAILS.

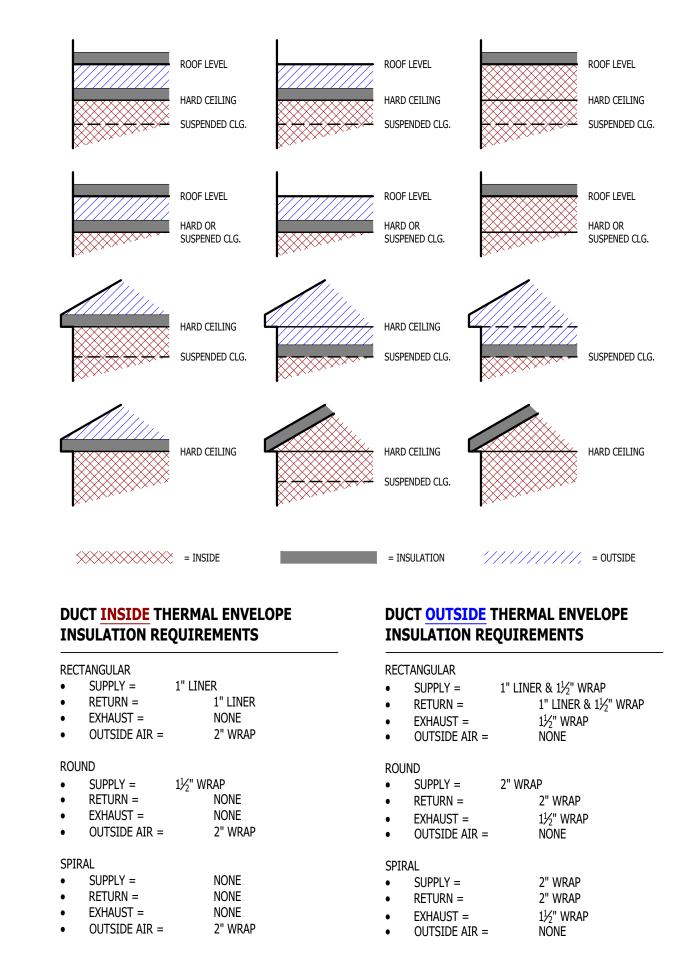
### 6. TESTING AND BALANCING

- 6.1. ALL SYSTEMS MUST BE BALANCED TO WITHIN 10% OF VALUES INDICATED ON PLAN.
- HVAC CONTRACTOR TO PROVIDE WRITTEN BALANCE REPORT INCLUDING FLOW VALUES INDICATED ON PLANS, INITIAL MEASURED FLOW VALUES, AND FINAL MEASURED VALUES.
- 6.3. THIRD PARTY CERTIFIED TEST AND BALANCE NOT REQUIRED UNLESS OTHERWISE NOTED ON PLANS OR WITHIN PROJECT MANUAL.

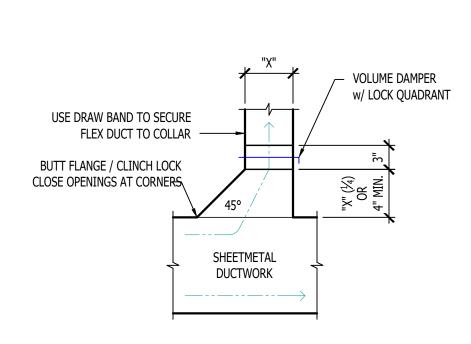


**BUILDING EXTERIOR DUCT SECTION DETAIL** 





TYPICAL BUILDING INTERIOR DUCT INSULATION DIAGRAM



TYPICAL 45° TAKEOFF DETAIL

James Watson, P.E. April 17, 2024 PE-2015017071



2400 Bluff Creek Drive, Suite 101 Columbia, Missouri 65201 573.234.4492 www.j-squaredeng.com

J2 PROJECT No: J21005 J2 DESIGN: ACW ISSUE TITLE DATE CITY SUBMISSION 04 / 17 / 2024

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AHJ APPROVAL STAMP

SHEET TITLE

**HVAC DETAILS** 

SHEET NUMBER

	,											DEDICA	TED OUTS	IDE AIR	SYSTEM (	(DOAS) S	CHEDULI	E										4.					
						AIRFLOW				FIL	TRATION		ENERGY I	RECOVERY				GAS HEATING	1					COOLING					ELECTRICAL		PHYS	CAL	1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -
TAG	( OR EQUAL)	MODEL NUMBER ( OR EQUAL )		SUP	PLY FAN			EXHAUST FAN					EFFECT	TVENESS			OLEDIE.				E.A	.т.	L.A	.T.	SENSIBLE	NET TOTAL		7,000				weren	NOTES
	( OK EQUAL)	( on Equal )	AIRFLOW (CFM)	E.S.P (in. H20)	T.S.P.	HP	A IRFLOW	E.S.P	HP	SIZE	EFFICIENCY	TOTAL COOLING	SENS. COOLING	TOTAL HEATING	SENS. HEATING	CAPACITY	OUTPUT CAPACITY	TURNDOWN	E.D.B. (°F)	L.D.B. (°F)	D.B.	W.B.	D.B.	W.B.	CA PACITY (MBTU)	CAPACITY (kBTU)	EER	VOLTS/PH	MCA	ОСР	(LxWxH)	(LBS)	
				(111. 1120)	(111.1120)		(CIPI)	(111. 1120)				COOLING	(KBTO)	HEATEN	(KDTO)	<del></del>					2	(1)	(1)	(1)	(1010)	(1010)							$\sim$
DOAS-1	TRANE	OADG020F1-DAB10AE00-E3AEE3AE0-21A40B03C-A00C00A00-A00A00000-00AK000000	3020	1.00	2.52	1.69	2770	1.00	1.38	2"	MERV-8 - 30%	92.48	43.08	185.9	140.3	250	203	2 8:1	48.5	110.3	2 81.3	70.3	46.5	46.2	108.8	206.8	14.9	208/3	87	110-3	212x52x70	4172	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 12, 12
DOAS-2	TRANE	OADG020F1-DAB10AE00-G3AEE3AE0-21A40B03C-A00C00A00-A00A000000-00AK00000	3150	1.00	2.61	1.83	2775	1.00	1.39	2"	MERV-8 - 30%	93.3	43.8	188.3	142.6	250	203	8:1	47.4	106.7	81.6	70.5	47.5	47.2	110.6	214.7	15.0	208/3	87	110-3	212x52x70	4172	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 14, 12
																<b></b>																	9

1. HORIZONTAL DISCHARGE / HORIZONTAL RETURN 2. DX 6-ROW COIL; DIGITAL SCROLL FIRST CIRCUIT COMPRESSOR

3. DIRECT DRIVE SUPPLY & EXHAUST FAN MOTORS W/ SHAFT GROUNDING RING & VFD

4. WITH UC600 DISCHARGE AIR CONTROLLER

5. WITH BACNET BUILDING INTERFACE

6. WITH ERC-3625-4M ENERGY RECOVERY WHEEL (ALUMINUM CONSTRUCTION, FROST PROTECTION, WITH VFD)

7. WITH MODULATING OA & RA DAMPERS WITH ECONOMIZER 8. WITH BAROMETRIC RELIEF DAMPERS

9. WITH FACTORY INSTALLED DISCONNECT & HAIL-GUARDS

10. WITH ACTIVE (VFD) HEAD PRESSURE LOW-AMBIENT CONTROL 11 WITH SMOKE DETECTOR IN RETURN AIR DUCT TO SHUT DOWN UNIT AND SEND SIGNAL TO BUILDING FIRE ALARM SYSTEM UPON DETECTION OF SMOKE. IF NO BUILDING FIRE ALARM SYSTEM IS PRESENT, PROVIDE ALARM DEVICE IN OCCUPIED AREA.

12. WITH MERV-13 FILTRATION

				Al	R HAND	LING UN	IT & AC	SCHEDU	LE					
<b>74.</b> C	EQUIPMENT	SIZE	OPTENT TON	TOTAL	E.S.P.	DOAS OA	HEATING	(IA: 80	COOLING DB/67 WB, OA	: 95 DB)		ELECTRICAL		NOTE
TAG	DESCRIPTION	(TONS)	ORIENTATION	A IRFLOW (CFM)	(in. H20)	(CFM)	ELECTRIC (KW)	SENSIBLE (KBTU)	TOTAL (KBTU)	MIN EFF. (SEER2)	VOLTS/PH	MCA	ОСР	NOTES
AHU-1	AIR HANDLING UNIT	4.0	UPFLOW	1600	0.5	345	19	-	-	-	208/1	51, 43	60-2, 45-2	1, 2, 5 /2
AHU-2	AIR HANDLING UNIT	5.0	UPFLOW	2000	0.5	225	19	-	-	-	208/1	51, 43	60-2, 45-2	1, 2, 5
AHU-3	AIR HANDLING UNIT	2.0	UPFLOW	800	0.5	70	10	-	-	-	208/1	51	60-2	1, 2 5
AHU-4	AIR HANDLING UNIT	1.5	UPFLOW	600	0.5	95	8	7	-	-	208/1	44	45-2	1, 2, 5
AHU-5	AIR HANDLING UNIT	2.5	UPFLOW	1000	0.5	110	10	-	-	-	208/1	51	60-2	1, 2, 5
AHU-6	AIR HANDLING UNIT	2.0	UPFLOW	800	0.5	85	10	-	-	-	208/1	51	60-2	1, 2 5
AHU-7	AIR HANDLING UNIT	1.5	UPFLOW	600	0.5	50	8	-	-	<del></del>	208/1	44	45-2	1, 2, 5
AHU-8	AIR HANDLING UNIT	2.0	UPFLOW	800	0.5	7	10	T	7	-	208/1	51	60-2	1, 2, 5
AHU-9	AIR HANDLING UNIT	1.5	UPFLOW	600	0.5	35	8	-	-	-	208/1	44	<del>4</del> 5-2	1, 2 5
AHU-10	AIR HANDLING UNIT	1.5	UPFLOW	600	0.5	,	- 8				208/1	44	45-2	1, 2, 5
AHU-11	AIR HANDLING UNIT	1.5	UPFLOW	600	0.5	-	8		_		208/1	44	<del>4</del> 5-2	1, 2, 5
AHU-12	AIR HANDLING UNIT	2.0	UPFLOW	800	0.5	-	10				208/1	51	60-2	1, 2, 5
CU-1	CONDENSING UNIT	4.0	-	-	Ē	-	7	36.8	48.3	13.4	208/1	24	40	3, 4
CU-2	CONDENSING UNIT	5.0	-	-	-	-	-	41.0	57.0	13.4	208/1	34	60	3, 4
CU-3	CONDENSING UNIT	2.0	=	-	-	-	-	18.2	24.5	13.4	208/1	14	25	3, 4
CU-4	CONDENSING UNIT	1.5	-	-	-	-	-	13.6	18.6	13.4	208/1	12	20	3, 4
CU-5	CONDENSING UNIT	2,5	•	+	ŧ.	-	ř	23,1	32.0	13.4	208/1	16	25	3,4
CU-6	CONDENSING UNIT	2.0	-	-	-	-	-	18.2	24.5	13.4	208/1	14	25	3, 4
CU-7	CONDENSING UNIT	1.5	-	-	7	-	-	13.6	18.6	13.4	208/1	12	20	3, 4
CU-8	CONDENSING UNIT	2.0	-	-	*	-	-	18.2	24.5	13.4	208/1	14	25	3, 4
CU-9	CONDENSING UNIT	1,5	-	-	-	•	,	13.6	18.6	13.4	208/1	12	20	3, 4
CU-10	CONDENSING UNIT	1.5	-	-	-	-	-	13.6	18.6	13.4	208/1	12	20	3, 4
CU-11	CONDENSING UNIT	1,5	7	•	-	-	-	13.6	18.6	13.4	208/1	12	20	3, 4
CU-12	CONDENSING UNIT	2.0	-	-	-	-	-	18.2	24.5	13.4	208/1	14	25	3, 4
											zadominionomes			
											•	1		1

- 1. PROVIDE AND INSTALL 7 DAY PROGRAMABLE THERMOSTAT. COORDINATE EXACT MOUNTING LOCATION WITH OWNER.
- 2. INCLUDE CORROSION RESISTANT DRAIN PAN WITH OVERFLOW SWITCH WIRED TO SHUT DOWN UNIT.
- 3. WITH FACTORY HAIL GUARD.

4. LOW AMBIENT PACKAGE FOR OPERATION TO 0° F.

5. WITH MERV-13 FILTRATION

				PTAC S	SCHEDUI	.E						
	EQUIPMENT DESCRIPTION	MA NUFA CTURER	MODEL NUMBER	TOTAL	HEATING	(IA: 80	COOLING DB/67 WB, OA	: 95 DB)	ı			
TAG		(OR EQUAL)	(OR EQUAL)	A IRFLOW (CFM)	ELECTRIC (KW)	SENSIBLE (KBTU)	TOTAL CAP. (KBTU)	MIN EFF. (EER)	VOLTS/PH	NOTES		
PTAC-1	PACKAGED TERMINAL AC	FRIEDRICH	PD€07K3SG	315 - 255	3.5	6.2	7.2	13.0	208/1	<b>MCA</b> 16	<b>OCP</b> 20-2	1, 2, 3, 4
PTAC-2	PACKAGED TERMINAL AC	FRIEDRICH	PDE09K3SG	355 - 275	3.5	8.0	9.4	12.1	208/1	16	20-2	1, 2, 3, 4

- 1. PROVIDE & INSTALL 2. WITH WALL SLEEVE
- 3. WITH #PXSB23020 UNIT SUBBASE & #PXDS DISCONNECT SWITCH
- 4. WITH ARCHITECTURAL SERIES EXTERIOUR GRILLE (VERIFY STYLE WITH ARCHITECT)

					POO	L DEH	UMID	IFICA	TION	UNIT S	CHEDULE						
			CURRIN		FAN		TEMP / H	HUMIDITY		ELECTRIC	R	410A COOLING		E	LECTRICA	L	
TAG	MA NUFA CTURER	MODEL #	SUPPLY	CFM	E.S.P. (IN)	SPACE TEMP	MAX RH	POOL SQ FT	POOL TEMP	HEAT (kW)	CA PACITY (MBH) NET SENSIBLE	CAPACITY (MBH) TOTAL	WTR RATE (lb / hr)	VOLT	MCA	МОР	NOTES
DH-1	DESERT-AIRE	LC-10C7NEFUMDAED	4100	375	1.5	84	56	500	82	19	-	-	-	208/3	117	125-3	1, 2, 3, 4, 5, 6, 7, 8
DH-2	DESERT-AIRE	RC5S051C3H21900	-	-	-	-	-	-	-	-	71.8	135.0	59.0	208/3	8	15-3	6, 8

- ALL COOLING CAPACITES BASED ON 92°F OUTSIDE AIR TEMPERATURE.
- 2. THE MANUFACTURER SHALL REVIEW ALL CONDITIONS & GUARANTEE A FULLY OPERATIONAL SYSTEM & PROVIDE INDOOR CONDITIONS OF 84°F SPACE TEMP AT A WATER TEMP OF 2 DEGREES COOLER.
- 3. ALL CONTROLS ARE THE RESPONSIBILITY OF THE MANUFACTURER & CONTRACTOR.
- 4. UNIT SHALL HAVE FACTORY ASSISTED START-UP WITH WEB INTERNET CONNECTION. INTERNET CONNECTION REQUIRED AT UNIT.
- 5, UNIT SHALL BE PROVIDED WITH THE FOLLOWING: FACTORY MOUNTED INTEGRAL DISCONNECTS ON OUTDOOR UNITS, REMOTE THERMOSTAT / DEHUMIDISTAT WITH RETURN DUCT MOUNTED SENSORS, ELECTRIC REHEAT FOR HUMIDITY CONTROL, 2" PLEATED FILTERS WITH CLOGGED FILTER SWITCH, SWIMMING POOL PROTECTIVE COATING ON FULL INTERIOR CASING & COILS, AND STAINLESS STEEL HEAT EXCHANGER.
- WITH CURB & ACCESSORIES FOR EXTERIOR (ROOF) MOUNTING CONFIGURATION
- WITH RETURN DUCT SMOKE-DETECTOR INTEGRATED INTO BUILDING FIRE ALARM SYSTEM.
- 8. WITH CURB OR FOUIPMENT RAIL MOUNTED SCREENING SYSTEM WITH SMOOTH PANEL PROFILE. VERFIY PANEL & TRIM COLOR WITH ARCHITECT. 9. WITH MERV-13 FILTRATION

				MIN	I-SPLIT SYSTE	M SCHE	DULE				**************************************	
TAG	EQUIPMENT	SIZE	ORIENTATION	TOTAL AIRFLOW	HEATING (IA:70 DB, OA:17 DB)	(IA: :	COOL 80 DB/67 W	ING 'B, OA: 95 DB)		ELECTRICAI		NOTES
FCU-1	DESCRIPTION	(TONS)	ORLINATION	(CFM)	TOTAL (KBTU)	SENSIBLE (KBTU)	TOTAL (KBTU)	EFFICIENCY (SEER)	VOLTS/PH	мса	ОСР	
FCU-1	FAN-COIL UNIT	2.0	WALL-MOUNT	700	_	~	-		(POW	/ERED THRU	HP-1)	1, 3, 4
HP-1	HEAT PUMP	2.0	STANDARD	-	18.3	18.5	24	21	208/1	14	25-2	2, 5
VOTES:					1				<u>†</u>		1	
1.	WITH WIRED THERM	OSTAT	***************************************	· · · · · · · · · · · · · · · · · · ·								
2.	WITH WIND BAFFLE											

EXHAUST FAN SCHEDULE											
T1.C	FOI PRISENT TVDF	MA NUFA CTURER	MODEL	FL	OW		ELECTRICAL	•	PHYS	ICA L	NOTEC
TAG	EQUIPMENT TYPE	(OR EQUAL)	(OR EQUAL)	CFM	S.P.	VOLT/PH	MCA	ОСР	DIM.	WEIGHT	NOTES
EF-1	IN-LINE EXHAUST FAN	SOLER & PALAU	TD-200S	425	3/8"	120/1	1	20	23x13x11	20 lbs.	1, 2

1. VERIFY AIR DEVICE FINISHES WITH OWNER/ARCHITECT PRIOR TO INSTALLATION

1. WITH BA	CKDRAFT	DAMPER
2. WITH SP	EED CON	<b>FROLLER</b>

3. WITH FIELD INSTALLED CONDENSATE PUMP 4. EQUAL TO MITSUBISHI #PKA-A24KA7 5. EQUAL TO MITSUBISHI #PUZ-A24NHA7

TAG	SERVICE	MA NUFA CTURER (OR EQUAL)	MODEL (OR EQUAL)	SIZE	COLOR / FINISH	NOTES
S1	SUPPLY	PRICE	520	6х6	WHITE	
S2	SUPPLY	PRICE	SPD	24x24	WHITE	Na.
S3	SUPPLY	PRICE	520	12x6	WHITE	Tripe to the series and
S4	SUPPLY	PRICE	SDS-100	48"L (3 SLOT)	WHITE	WITH 'SDB' PLENUM BOX
S5	SUPPLY	PRICE	SDS-100	48"L (2 SLOT)	WHITE	WITH 'SDB' PLENUM BOX
S6	SUPPLY	PRICE	SDS-150	60"L (4 SLOT)	WHITE	WITH 'SDB' PLENUM BOX
E1	EXHAUST	PRICE	530	AS INDICATED	WHITE	
E2	EXHAUST	PRICE	80	AS INDICATED	WHITE	
E3	EXHAUST	PRICE	630	AS INDICATED	WHITE	ALUMINUM
T1	TRANSER	PRICE	STG	AS INDICATED	WHITE	
R1	RETURN	PRICE	530	AS INDICATED	WHITE	
R2	RETURN	PRICE	80	AS INDICATED	WHITE	
R3	RETURN	PRICE	630	AS INDICATED	WHITE	ALUMINUM
L1	EXH / OA	POTTORFF	EFD	AS INDICATED	PRIMED	PAINT TO MATCH EXTERIOR

A IRFLOW (CFM)	NECK SIZE (in)
0 - 120	6"
120 - 210	8"
210 - 325	10"
325 - 470	12"
470 - 640	14"

James Watson, P.E. June 14, 2024 PE-2015017071 MO Certificate of Authority # 2018029680



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J2 PROJECT No:	J21005
J2 DESIGN:	ACW
ISSUE TITLE	DATE
CITY SUBMISSION	04 / 17 / 2024
REVISION 1 - CITY RESPONSE	05 / 17 / 2024
CITY & BRAND RESPONSE	06 / 14 / 2024

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AHJ APPROVAL STAMP

**HVAC SCHEDULES** 

### POWER PLAN SYMBOL LEGEND

	CIRCUIT WIRING	•	DATA / PHONE JACK BOX WITH 1" CONDUIT WITH CAT-6
──> PX-XX	CIRCUIT TAG		(STANDARD @ 18" AFF UNLESS NOTED OTHERWISE) MULTIPLE CAT-6 IN SINGLE BOX IN MULTIPLE
J	JUNCTION BOX		SYMBOLS SHOWN AT THE SAME LOCAITON
XX +42	RECEPTACLE	TV	COAX & CAT-6 HOME RUNS
	- INDICATES MOUNTING HEIGHT TO BOTTOM OF BOX (STANDARD @ 18" AFF UNLESS NOTED OTHERWISE)	•	(SEE BRAND REQUIREMENTS)
	- "WP" = WEATHERPROOF OUTDOOR RECEPTACLE	AP <b>V</b>	WIRELESS ACCESS POINT, CEILING MOUNTED
	"AW" = ABOVE WINDOW RECEPTACLE "AC" = ABOVE CEILING RECEPTACLE "IG" = ISOLATED GROUND	WAP	WIRELESS ACCESS POINT, WALL MOUNTED
<b>P</b>	GFCI DUPLEX CONVENIENCE RECEPTACLE	Φ	FLOOR RECEPTACLE
P	208V RECEPTACLE	•	FLOOR DATA
<del>**</del>	QUADPLEX CONVENIENCE RECEPTACLE	DР	DISCONNECT
<b>P</b>	USB OUTLET WITH USB-A & USB-C CHARGING PORT	ED	FUSED DISCONNECT

### **POWER PLAN GENERAL NOTES:**

- SEE E500 & E600 SERIES SHEETS FOR ADDITIONAL ELECTRICAL NOTES, DETAILS, & SCHEDULES.
   ALL TECHNOLOGY WIRING SYSTEMS MUST BE SUPPLIED & INSTALLED BY A SUPPLIER APPROVED BY HILTON, WHO IS A PANDUIT CERTIFIED INSTALLER (PCI) PARTNER. REFER TO SECTION 2518 OF "HOME2 SUITES BRAND STANDARDS UNITED STATES 2500 DESIGN, CONSTRUCTION & RENOVATION STANDARD" FOR FURTHER INFORMATION.
- VERIFY ALL POWER/DATA LOCATION SHOWN WITH BRAND PRIOR TO ROUGH-IN.
   REFER TO BRAND PROTOTYPE DRAWINGS FOR DIMENSIONED RECEPTACLE LOCATIONS.

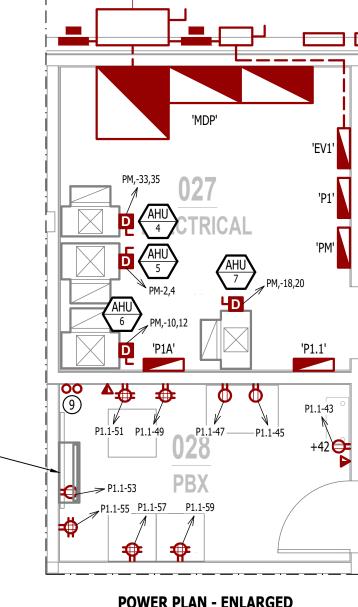
- **POWER PLAN KEY NOTES:**
- STUB OUT, TO FIXTURE MOUNTED OUTLET (BY ELECTRICAL CONTRACTOR). COORDINATE EXACT SPECIFICATIONS & REQUIREMENTS WITH DISPLAY SHOWCASE SUPPLIER/INSTALLER.
- POWER FOR EXTERIOR STRING LIGHTS, COORDINATE EXACT LOCATION & REQUIREMENTS WITH LIGHTING PROVIDER.
- (3) COORDINATE OUTLET LOCATION WITH MEDIA MOUNT (SEE ARCHITECTURAL PLANS).
- 4 FLUSH MOUNTED FLOOR OUTLET BOX WITH BRUSHED ALUMINUM COVER PLATE. COORDINATE LOCATION WITH FITNESS EQUIPMENT SUPPLIER.
- (5) HOUSE PHONE LOCATION.
- 6 PROVIDE DUPLEX OUTLET AT GALLERY WALL FOR CLOCK, COORDINATE EXACT LOCATION WITH ARCHITECTURAL PLANS.
- 7) FLUSH MOUNTED FLOOR OUTLET BOX WITH BRUSHED ALUMINUM COVER PLATE. COORDINATE FLOOR RECEPTACLE LOCATION WITH FURNITURE PLACEMENT.
- 8 POWER, DATA, PHONE, ETC. LOCATED WITHIN MILLWORK OF WELCOME DESK. COORDINATE EXACT LOCATION/REQUIREMENTS WITH WELCOME DESK SUPPLIER/INSTALLER. REFER TO ARCHITECTURAL PLANS FOR ADDITIONAL DETAIL/REQUIREMENTS. PROVIDE CONDUIT BACK TO COMPUTER/COMMUNICATIONS FOR ALL SYSTEMS. POWER RECEPTACLES BELOW THE DESK MUST NOT BE ON A SEPARATE DEDICATED GROUNDED CIRCUIT FROM THE OUTLETS ABOVE THE DESK.
- (9) (2) 3" CONDUIT FROM TELECOMMUNICATION DEMARCATIONS INTO PBX CLOSET.
- (10) COORDINATE LOCATION OF POWER FOR HYDRATION STATION TO BE CONCEALED BY MILLWORK.
- (1) POWER FOR HOUSE TELEPHONE AND/OR EMERGENCY TELEPHONE. THE EMERGENCY TELEPHONE MUST BE MOUNTED 48"/1.2 M MAXIMUM ABOVE THE FINISHED FLOOR. THE TELEPHONE MUST HAVE A RED CASING. THE TELEPHONE MUST ALLOW DIRECT CALLS TO OUTSIDE EMERGENCY RESPONDERS AND TO A LOCATION THAT IS MANNED 24-HOURS A DAY UNLESS THE LOCAL JURISDICTION REQUIRES OTHERWISE. THE TELEPHONE MUST COMPLY WITH BRAND STANDARD 702.01.A EMERGENCY SERVICES.
- 12) PROVIDE COAX & CAT6 HOME-RUNS AT ALL PUBLIC & BACK-OF-HOUSE TELEVISIONS

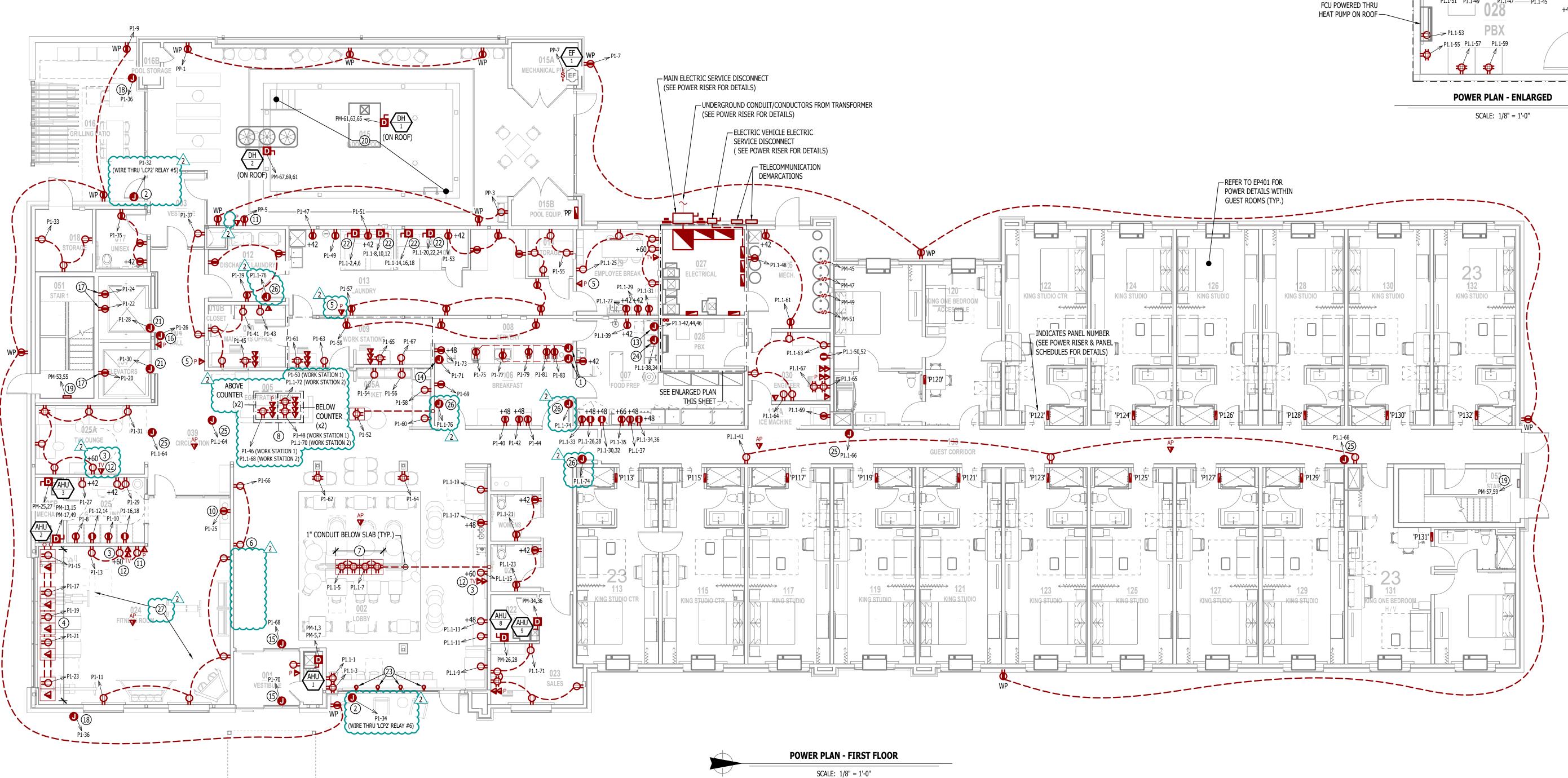
- (13) POWER FOR DISHWAHSER; COORDINATE EXACT DETAILS & REQUIREMENTS WITH EQUIPMENT SUPPLIER/INSTALLER.
- 14) POWER FOR TAPE LIGHTS @ SERVERY DRAWER(S) IN CASEWORK. COORDINATE EXACT LOCATION/REQUIREMENTS WITH CASEWORK SUPPLIER/INSTALLER.
- POWER FOR DOOR OPERATOR; COORDINATE EXACT LOCATION & REQUIREMENTS WITH DOOR HARDWARE
- (16) POWER/DATA/PHONE FOR RATH 2-WAY ELEVATOR COMMUNICATION SYSTEM.
- (17) RECEPTACLE(S) IN ELEVATOR PIT; REFER TO ELEVATOR PIT DETAIL.
- (18) POWER FOR 120V SOLENOID/GAS VALVE. WIRE THRU 'LCP1' RELAY #8. INCLUDE EMERGENCY STOP PUSH-BUTTON EQUAL TO STI-USA #SS2079ES-EN TO OPEN CIRCUIT TO ELECTRICALLY HELD GAS SOLENOID TO TURN OFF GAS SUPPLY TO FIRE-PIT. MOUNT IN OBVIOUS VISIBLE LOCATION. COORDINATE WITH PLUMBING CONTRACTOR
- (19) PROVIDE & INSTALL 3kW ELECTRIC WALL HEATER EQUAL TO QMARK #AWH4404F.
- 20) PROVIDE EQUIPOTENTIAL BONDING OF POOL & DECK AREA PER NEC 680.26. SEE ELECTRICAL DETAILS.
- (21) POWER FOR SMOKE CURTAIN; SEE ARCHITECTURAL DETAILS.

OF LAYOUT IS REQUIRED PRIOR TO APPROVAL/ROUGH-IN.

- 22) POWER FOR WASHER/DRYER; VERIFY EXACT ELECTRICAL REQUIREMENTS WITH BRAND/GC PRIOR TO INSTALLATION.
- 23) EXTEND P1.1-1 & P1.1-3 CIRCUITS TO SUPPLY POWER HUBS (EQUIPMENT PART OF FF&E PACKAGE). REFER TO ARCHITECTURAL PLANS FOR DETAILS.
- (24) POWER FOR DISPOSAL; COORDINATE EXACT DETAILS & REQUIREMENTS WITH EQUIPMENT SUPPLIER/INSTALLER
- 25) POWER FOR FIRE/SMOKE DAMPER ACTIVATION (DAMPER TO CLOSE ON FIRE ALARM SIGNAL) COORDINATE EXACT LOCATION & REQUIREMENTS WITH HVAC CONTRACTOR & FIRE ALARM CONTRACTOR.
- (26) POWER FOR MAGNETIC DOOR HOLDS, DOOR(S) TO CLOSE UPON FIRE DETECTION (COORDINATE EXACT
- LOCATION & REQUIREMENTS WITH DOOR HARDWARE SUPPLIER & FIRE ALARM SYSTEM INSTALLER.

  (27) COORDINATE EXACT POWER & DATA REQUIREMENTS OF ALL FITNESS EQUIPMENT WITH VENDOR. BRAND REVIEW







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CITY & BRAND RESPONSE	06 / 14 / 2024

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SHEET TITLE

POWER PLAN - FIRST FLOOR

SHEET NUMBER

**EP101** 



**POWER PLAN - SECOND FLOOR** 

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

POWER PLAN SYMBOL LEGEND

CIRCUIT WIRING

CIRCUIT TAG

JUNCTION BOX

- INDICATES MOUNTING HEIGHT TO BOTTOM OF BOX

(STANDARD @ 18" AFF UNLESS NOTED OTHERWISE)

"WP" = WEATHERPROOF OUTDOOR RECEPTACLE "AW" = ABOVE WINDOW RECEPTACLE

RECEPTACLE

——> PX-XX

### **POWER PLAN GENERAL NOTES:**

1. SEE E500 & E600 SERIES SHEETS FOR ADDITIONAL ELECTRICAL NOTES, DETAILS, & SCHEDULES.

### **POWER PLAN KEY NOTES:**

- 1 POWER FOR MAG-HOLDS; WIRE THRU FIRE ALARM SYSTEM, COORDINATE WITH DOOR HARDWARE SUPPLIER/INSTALLER.
- 2) POWER/DATA FOR IDF EQUIPMENT; COORDINATE EXACT LOCATION & REQUIREMENTS WITH LOW-VOLTAGE
- (3) (2) 3" CONDUIT (EACH WITH PULL-STRING) FROM PBX ROOM ON MAIN LEVEL TO IDF RACK LOCATION.

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POWER PLAN - SECOND **FLOOR** 

**EP102** 

### POWER PLAN SYMBOL LEGEND

CIRCUIT WIRING ——> PX-XX CIRCUIT TAG JUNCTION BOX RECEPTACLE - INDICATES MOUNTING HEIGHT TO BOTTOM OF BOX (STANDARD @ 18" AFF UNLESS NOTED OTHERWISE) "WP" = WEATHERPROOF OUTDOOR RECEPTACLE "AW" = ABOVE WINDOW RECEPTACLE "AC" = ABOVE CEILING RECEPTACLE "IG" = ISOLATED GROUND GFCI DUPLEX CONVENIENCE RECEPTACLE 208V RECEPTACLE QUADPLEX CONVENIENCE RECEPTACLE USB OUTLET WITH USB-A & USB-C CHARGING PORT DATA / PHONE JACK BOX WITH 1" CONDUIT WITH CAT-6

(STANDARD @ 18" AFF UNLESS NOTED OTHERWISE)

WIRELESS ACCESS POINT, CEILING MOUNTED

WIRELESS ACCESS POINT, WALL MOUNTED

FLOOR RECEPTACLE

FLOOR DATA

DISCONNECT

FUSED DISCONNECT

1. SEE E500 & E600 SERIES SHEETS FOR ADDITIONAL ELECTRICAL NOTES, DETAILS, & SCHEDULES.

### **POWER PLAN KEY NOTES:**

- 1 POWER FOR MAG-HOLDS; WIRE THRU FIRE ALARM SYSTEM, COORDINATE WITH DOOR HARDWARE SUPPLIER/INSTALLER.
- 2 POWER/DATA FOR IDF EQUIPMENT; COORDINATE EXACT LOCATION & REQUIREMENTS WITH LOW-VOLTAGE
- (3) (2) 3" CONDUIT (EACH WITH PULL-STRING) FROM PBX ROOM ON MAIN LEVEL TO IDF RACK LOCATION.
- POWER FOR FIRE/SMOKE DAMPER ACTIVATION (DAMPER TO CLOSE ON FIRE ALARM SIGNAL) COORDINATE EXACT LOCATION & REQUIREMENTS WITH HVAC CONTRACTOR & FIRE ALARM CONTRACTOR.





JAMES P. WATSON

NUMBER
PE-2015017071

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SHEET TITLE

POWER PLAN - THIRD FLOOR

SHEET NUMBER

**EP103** 

### POWER PLAN SYMBOL LEGEND CIRCUIT WIRING ——> PX-XX CIRCUIT TAG JUNCTION BOX RECEPTACLE

INDICATES MOUNTING HEIGHT TO BOTTOM OF BOX (STANDARD @ 18" AFF UNLESS NOTED OTHERWISE) "WP" = WEATHERPROOF OUTDOOR RECEPTACLE "AW" = ABOVE WINDOW RECEPTACLE "AC" = ABOVE CEILING RECEPTACLE "IG" = ISOLATED GROUND

GFCI DUPLEX CONVENIENCE RECEPTACLE 208V RECEPTACLE

QUADPLEX CONVENIENCE RECEPTACLE USB OUTLET WITH USB-A & USB-C CHARGING PORT

DATA / PHONE JACK BOX WITH 1" CONDUIT WITH CAT-6 (STANDARD @ 18" AFF UNLESS NOTED OTHERWISE)

WIRELESS ACCESS POINT, CEILING MOUNTED WIRELESS ACCESS POINT, WALL MOUNTED

FLOOR RECEPTACLE FLOOR DATA DISCONNECT

FUSED DISCONNECT

1. SEE E500 & E600 SERIES SHEETS FOR ADDITIONAL ELECTRICAL NOTES, DETAILS, & SCHEDULES.

### **POWER PLAN KEY NOTES:**

- (1) POWER FOR MAG-HOLDS; WIRE THRU FIRE ALARM SYSTEM, COORDINATE WITH DOOR HARDWARE SUPPLIER/INSTALLER.
- 2 POWER/DATA FOR IDF EQUIPMENT; COORDINATE EXACT LOCATION & REQUIREMENTS WITH LOW-VOLTAGE
- (3) ELEVATOR DISCONNECT(S) LOCATED IN SHAFT ON FOURTH FLOOR; COORDINATE LOCATION & DETAILS WITH ELEVATOR EQUIPMENT SUPPLIER/INSTALLER.
- (4) (2) 3" CONDUIT (EACH WITH PULL-STRING) FROM PBX ROOM ON MAIN LEVEL TO IDF RACK LOCATION.
- (5) POWER FOR EXTERIOR SIGNAGE; COORDINATE EXACT LOCATION & REQUIREMENTS WITH EQUIPMENT SUPPLIER/INSTALLER.
- (6) POWER FOR FIRE/SMOKE DAMPER ACTIVATION (DAMPER TO CLOSE ON FIRE ALARM SIGNAL) COORDINATE EXACT LOCATION & REQUIREMENTS WITH HVAC CONTRACTOR & FIRE ALARM CONTRACTOR.

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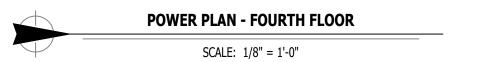
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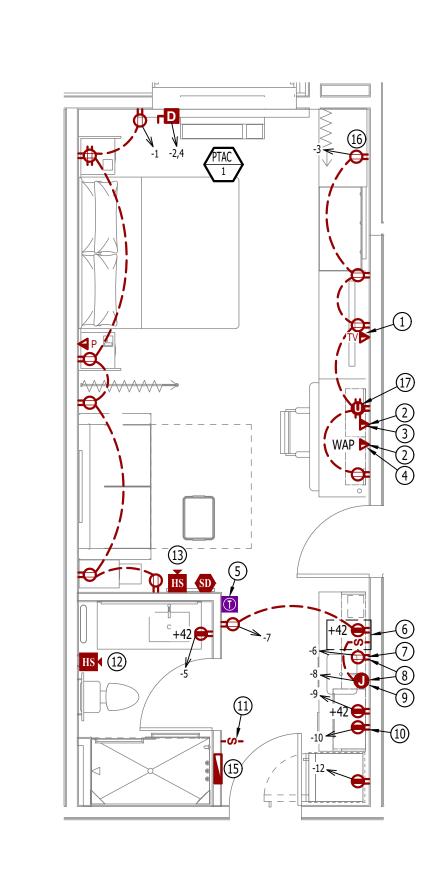
POWER PLAN - FOURTH **FLOOR** 





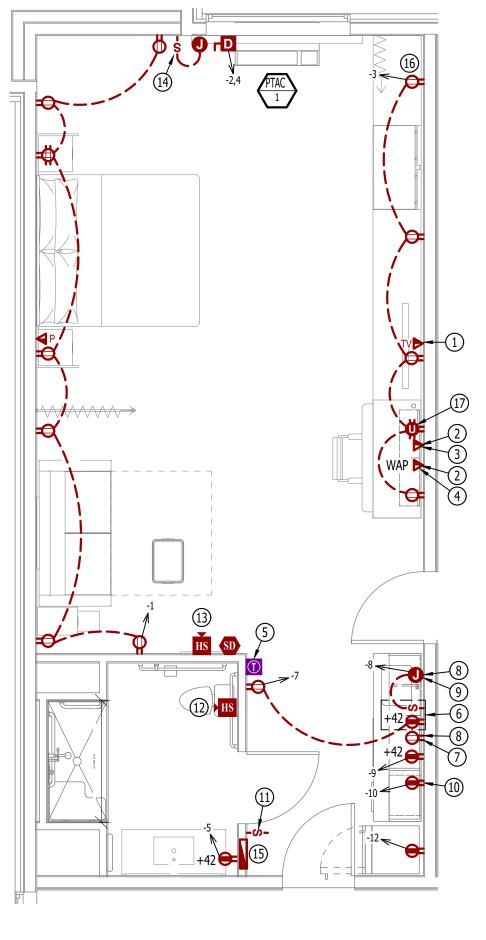
**POWER PLAN - KING STUDIO** 

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



**POWER PLAN - KING STUDIO - CONNECTOR** 

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



**POWER PLAN - KING STUDIO - ACCESSIBLE** 

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

### POWER PLAN SYMBOL LEGEND CIRCUIT WIRING —> PX-XX CIRCUIT TAG JUNCTION BOX RECEPTACLE INDICATES MOUNTING HEIGHT TO BOTTOM OF BOX (STANDARD @ 18" AFF UNLESS NOTED OTHERWISE) ─ "WP" = WEATHERPROOF OUTDOOR RECEPTACLE "AW" = ABOVE WINDOW RECEPTACLE "AC" = ABOVE CEILING RECEPTACLE "IG" = ISOLATED GROUND GFCI DUPLEX CONVENIENCE RECEPTACLE 208V RECEPTACLE QUADPLEX CONVENIENCE RECEPTACLE WITH USB-A & USB-C CHARGING PORT Data / Phone Jack BOX WITH 1" CONDUIT WITH CAT-6 (STANDARD @ 18" AFF UNLESS NOTED OTHERWISE) WIRELESS ACCESS POINT, CEILING MOUNTED WIRELESS ACCESS POINT, WALL MOUNTED FLOOR RECEPTACLE FLOOR DATA DISCONNECT FUSED DISCONNECT ADDRESSABLE SMOKE DETECTOR WITH SOUNDER BASE; (ALARM SIGNAL MAY BE SUPERVISORY)

### **POWER PLAN GENERAL NOTES:**

- SEE E500 & E600 SERIES SHEET FOR ADDITIONAL ELECTRICAL NOTES, DETAILS, & SCHEDULES.
- COMPLETE (1) UNIT OF EACH TYPE & OBTAIN OWNER'S APPROVAL BEFORE PROCEEDING TO OTHERS. DO NOT INSTALL OUTLETS BACK-TO-BACK EVEN IF ASSOCIATED WITH DIFFERENT SYSTEM. OFFSET BOXES TO
- PREVENT SOUND PASS-THRU AT ADJACENT UNIT WALLS.
- 4. COORDINATE LOCATION OF SWITCH & RECEPTACLES IN GUEST ROOM BATHROOMS WITH MIRROR, VANITY BACK-SPLASH, TOWEL HOLDER, ETC.
- COORDINATE ALL ELECTRICAL DEVICE MOUNTING HEIGHTS & LOCATIONS WITH ARCHITECTURAL PLANS. 6. DOORBELL AND FIRE ALARM STROBES ARE ONLY REQUIRED IN HEARING IMPAIRED ROOMS.

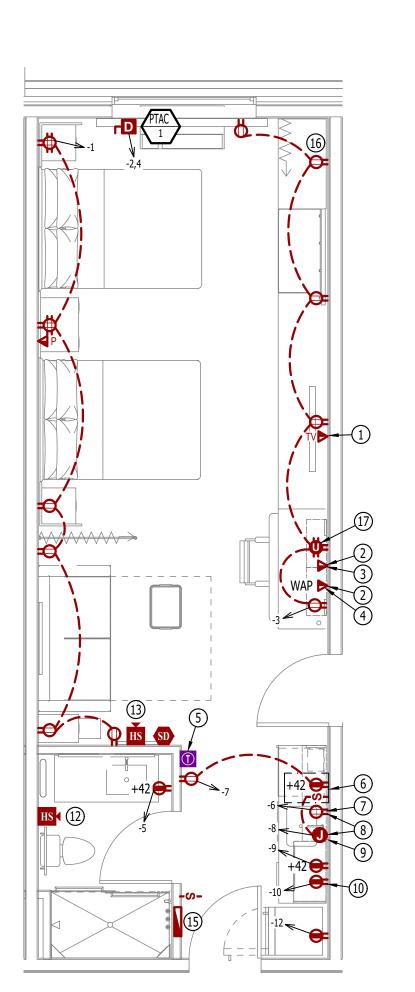
### POWER PLAN KEY NOTES:

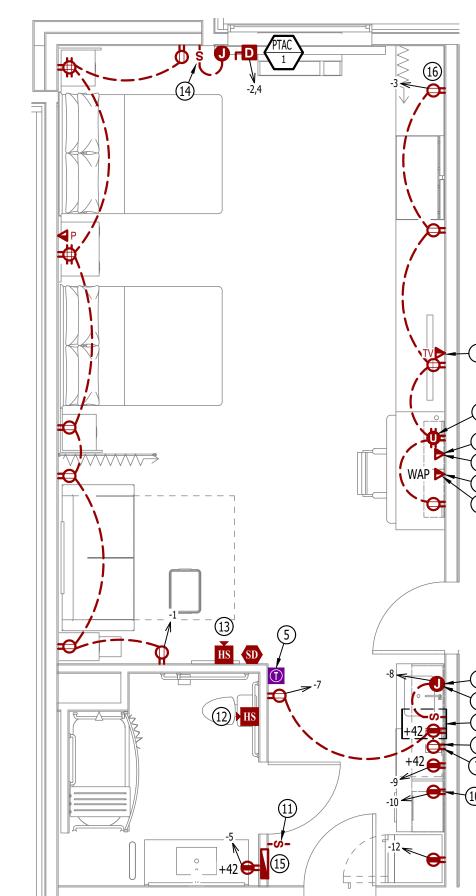
- 1 TV CONNECTIONS FOR FREE-TO-GUEST CONTENT: COAX CABLE BEHIND TV, CAT6 RJ-45 JACK BEHIND TV (RUN IN SMURF TUBE IN WALL TO WAP UNDER DESK), & PATCH CORD TO EDGE CONTROLLER FOR CONNECTED ROOM (MIN. 6" CLEARANCE FROM WALL BOXES). VISIT HILTONHDTV.COM FOR ADDITIONAL INFORMATION.
- (2) EACH CABLE MUST HOMERUN BETWEEN THE GUESTROOM AND THE IDF ON EACH FLOOR. VISIT CONNECTEDROOM.HILTON.COM FOR CURRENT REQUIREMENTS AND OPTIONS.
- ) wired data connection for guest use: cat6 rj-45 cable jack above desk, run in smurf-tube in wall } TO WAP UNDER DESK).
- (4) WAP IN 3-GANG BOX MOUNTED VERTICALLY UNDER DESK. MAINTAIN 6" BETWEEN ALL BOXES, TYP ALL GUESTROOMS. COORDINATE WAP LOCATION WITH CASEGOODS TO AVOID CONFLICTS. VISIT CONNECTEDROOM.HILTON.COM FOR CURRENT WIRELESS INTERNET REQ'S AND LIST OF APPROVED
- (5) WIRED THERMOSTAT FOR PTAC. MOUNTED 48" MAX TO TOP OF DEVICE. COMMUNICATION BETWEEN THERMOSTAT AND PTAC MAY BE WIRELESS.
- 6 SWITCH CONTROLLING GARBAGE DISPOSAL GANGED WITH DUPLEX REFER TO HADG FOR ACCESSIBLE ROOM REQUIREMENTS.
- 7) DEDICATED CIRCUIT FOR DISHWASHER
- (8) EXTEND J-BOX, DEVICE & COVER PLATE FLUSH W/ MILLWORK BACK PANEL.
- (9) DEDICATED CIRCUIT FOR GARBAGE DISPOSAL.

ARCHITECTURAL PLANS FOR LOCATIONS.

- (10) OUTLET FOR MICROWAVE. REFER TO ARCHITECTURAL PLAN ROOM ELEVATIONS FOR MOUNTING HEIGHT. MOUNT DEVICE HORIZONTALLY (EXCEPT IN ACCESSIBLE UNITS); FACE PLATE TO BE WHITE.
- (11) DOORBELL ON/OFF SWITCH (COMMUNICATION FEATURES ROOMS ONLY) SIGNAGE AS REQ'D.
- $\widehat{(12)}$  ADDITIONAL HORN STROBE: LOCATED IN COMMUNICATION FEATURES BATHROOMS ONLY. REFER TO
- (13) FIRE HORN IN STANDARD ROOMS. FIRE HORN/STROBE IN COMMUNICATION FEATURES ROOMS. REFER TO ARCHITECTURAL PLANS FOR LOCATIONS.
- (14) SWITCHES CONTROLLING MECHANICAL SHADES REFER TO FFE MANUAL.
- (15) REFER TO OVERALL ELECTRICAL PLANS FOR PANEL DETAILS ('PXXX').
- (16) RECEPTACLE MOUNTED HORIZONTALLY ABOVE CLOSET.
- (17) QUAD RECEPTACLE WITH A MINIMUM (1) USB RECEPTACLE(S) (EITHER -A OR -C).







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

James Watson, P.E. June 14, 2024

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**ENLARGED POWER PLAN - GUEST ROOMS** 

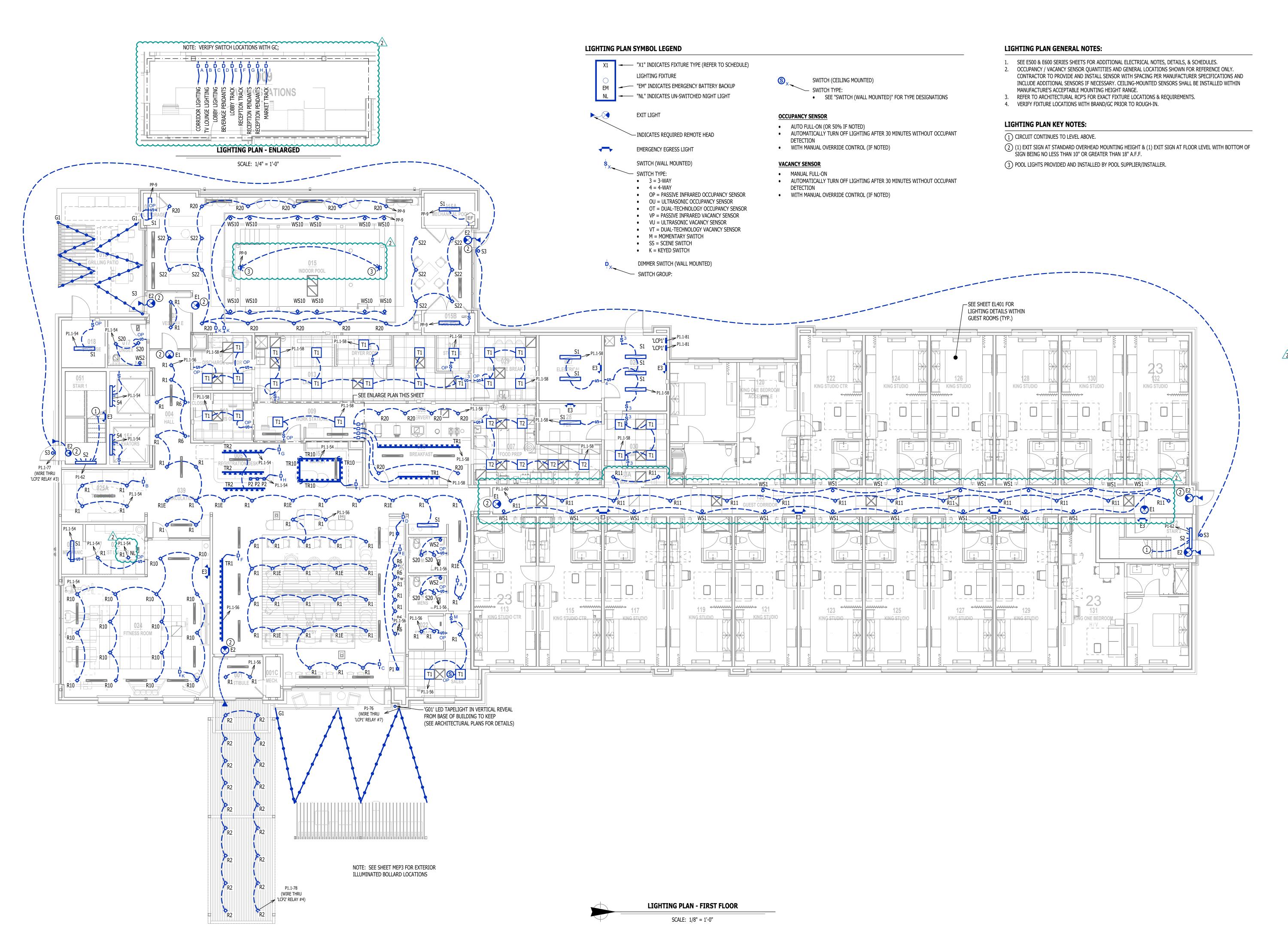
**EP401** 

**POWER PLAN - ONE BEDROOM SUITE** POWER PLAN - ONE BEDROOM SUITE - ACCESSIBLE SCALE: 1/4" = 1'-0" SCALE: 1/4" = 1'-0"

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

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

POWER PLAN - QUEEN QUEEN STUDIO - CONNECTOR



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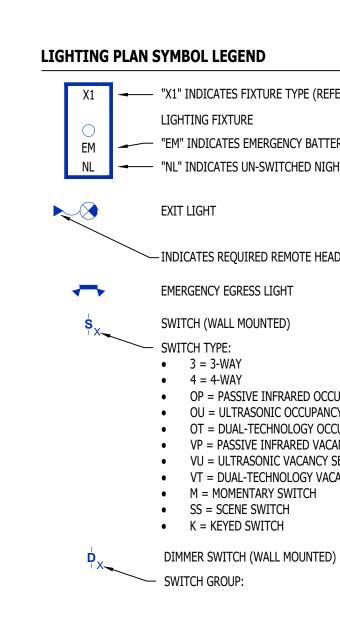
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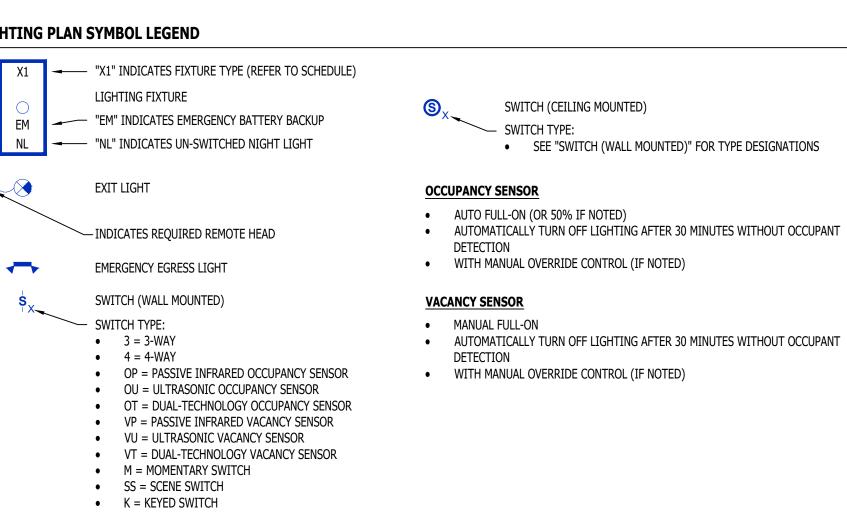
SHEET TITLE

LIGHTING PLAN -FIRST FLOOR

SHEET NUM

**EL101** 





### **LIGHTING PLAN GENERAL NOTES:**

- 1. SEE E500 & E600 SERIES SHEETS FOR ADDITIONAL ELECTRICAL NOTES, DETAILS, & SCHEDULES. 2. OCCUPANCY / VACANCY SENSOR QUANTITIES AND GENERAL LOCATIONS SHOWN FOR REFERENCE ONLY. CONTRACTOR TO PROVIDE AND INSTALL SENSOR WITH SPACING PER MANUFACTURER SPECIFICATIONS AND
- INCLUDE ADDITIONAL SENSORS IF NECESSARY. CEILING-MOUNTED SENSORS SHALL BE INSTALLED WITHIN MANUFACTURE'S ACCEPTABLE MOUNTING HEIGHT RANGE.
- 3. REFER TO ARCHITECTURAL RCP'S FOR EXACT FIXTURE LOCATIONS & REQUIREMENTS. 4. VERIFY FIXTURE LOCATIONS WITH BRAND/GC PRIOR TO ROUGH-IN.

### **LIGHTING PLAN KEY NOTES:**

1) CIRCUIT CONTINUES TO LEVEL ABOVE/BELOW.

(1) EXIT SIGN AT STANDARD OVERHEAD MOUNTING HEIGHT & (1) EXIT SIGN AT FLOOR LEVEL WITH BOTTOM OF

SIGN BEING NO LESS THAN 10" OR GREATER THAN 18" A.F.F.

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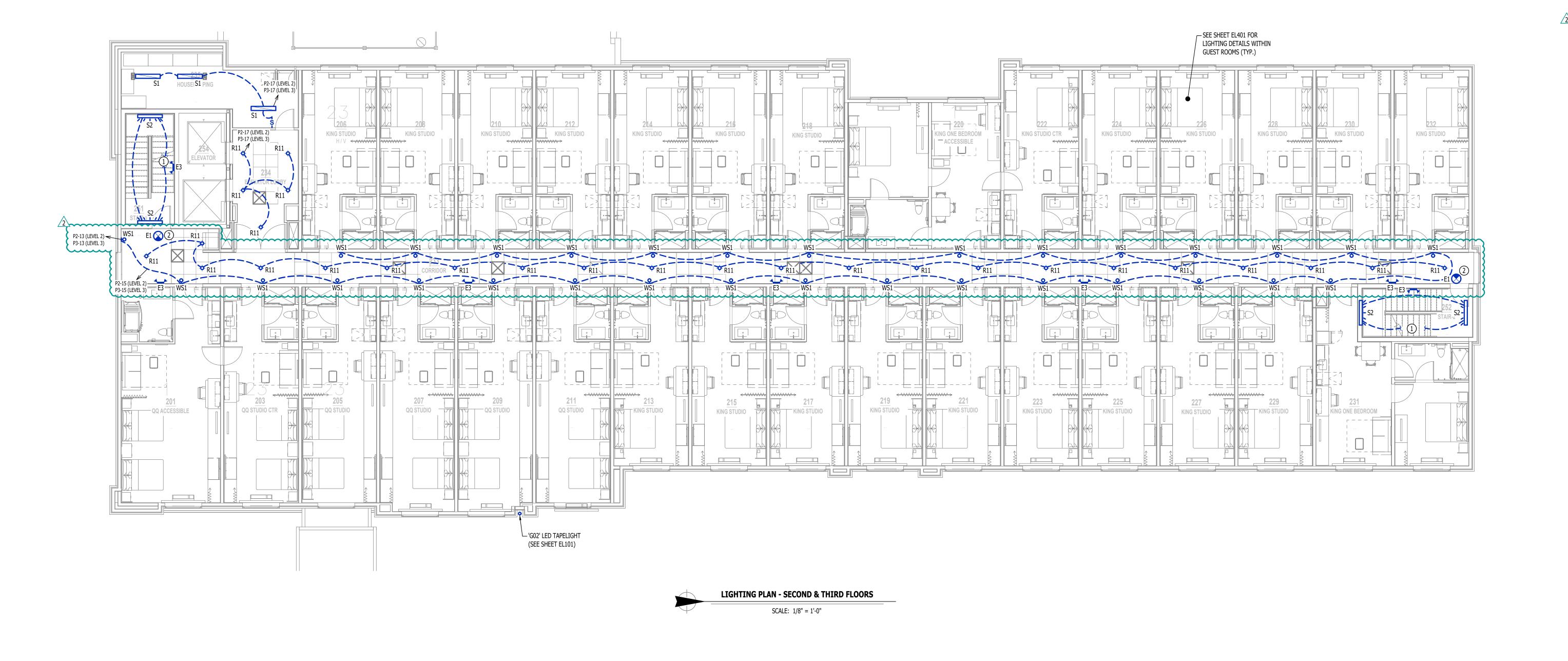
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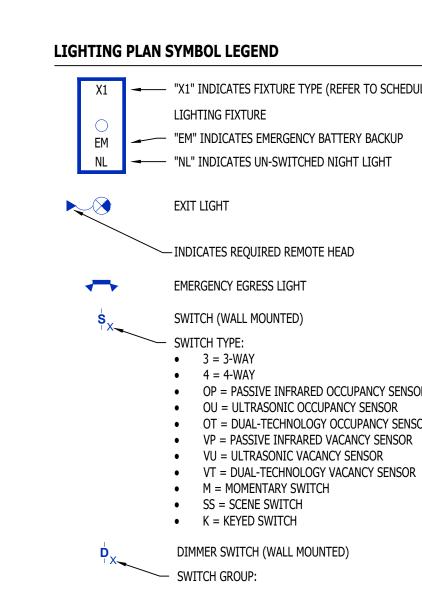
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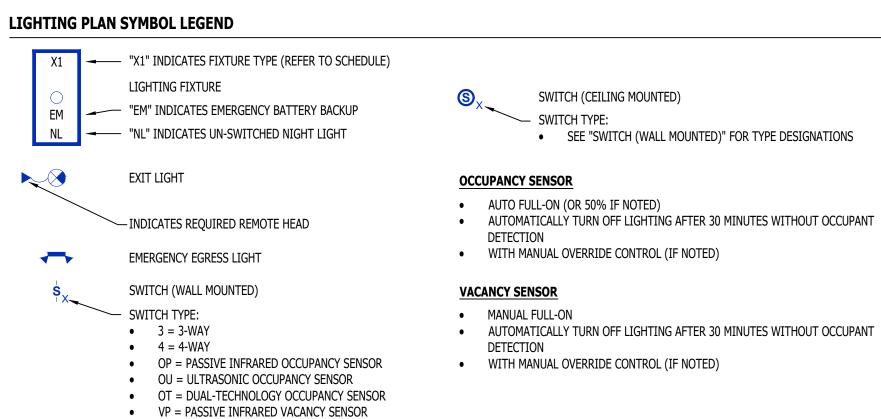
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**LIGHTING PLAN -SECOND & THIRD FLOORS** 







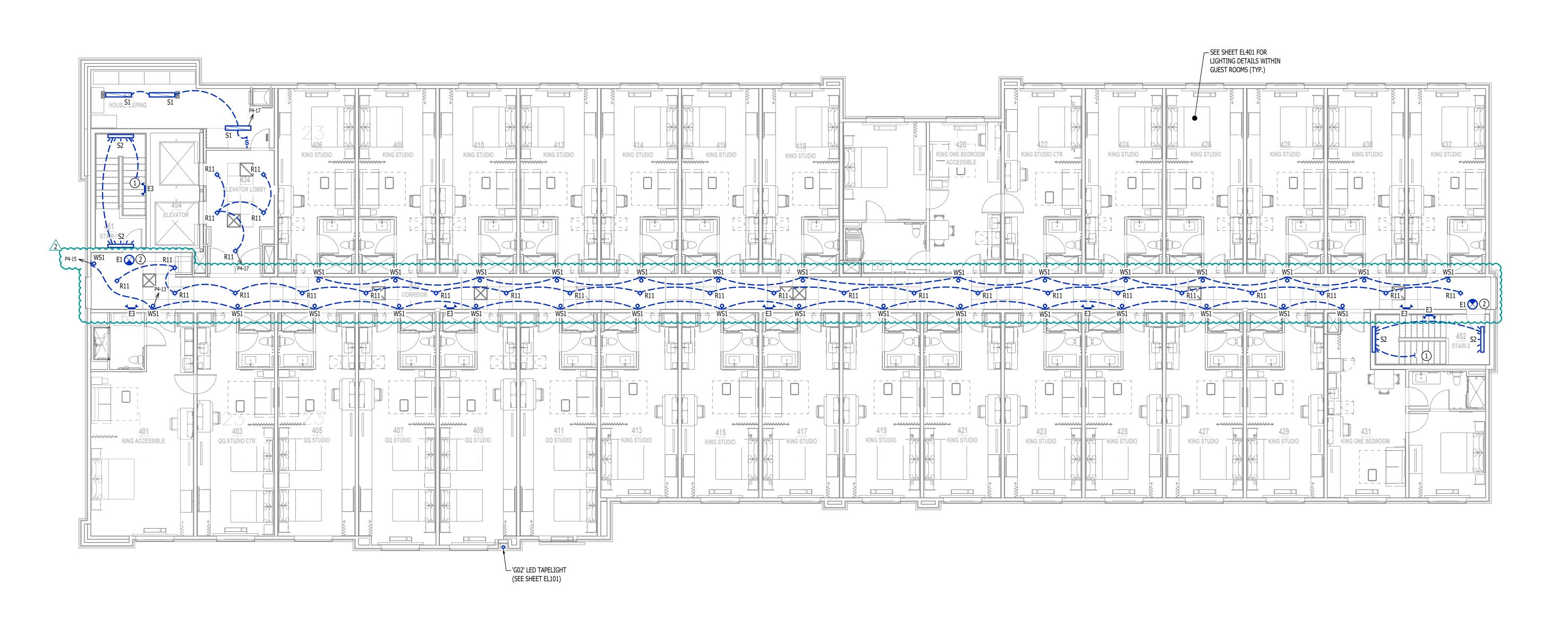
### **LIGHTING PLAN GENERAL NOTES:**

- 1. SEE E500 & E600 SERIES SHEETS FOR ADDITIONAL ELECTRICAL NOTES, DETAILS, & SCHEDULES. 2. OCCUPANCY / VACANCY SENSOR QUANTITIES AND GENERAL LOCATIONS SHOWN FOR REFERENCE ONLY. CONTRACTOR TO PROVIDE AND INSTALL SENSOR WITH SPACING PER MANUFACTURER SPECIFICATIONS AND
- INCLUDE ADDITIONAL SENSORS IF NECESSARY. CEILING-MOUNTED SENSORS SHALL BE INSTALLED WITHIN MANUFACTURE'S ACCEPTABLE MOUNTING HEIGHT RANGE.
- 3. REFER TO ARCHITECTURAL RCP'S FOR EXACT FIXTURE LOCATIONS & REQUIREMENTS.
- 4. VERIFY FIXTURE LOCATIONS WITH BRAND/GC PRIOR TO ROUGH-IN.

### **LIGHTING PLAN KEY NOTES:**

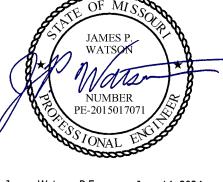
(1) CIRCUIT CONTINUES TO LEVEL BELOW.

(1) EXIT SIGN AT STANDARD OVERHEAD MOUNTING HEIGHT & (1) EXIT SIGN AT FLOOR LEVEL WITH BOTTOM OF SIGN BEING NO LESS THAN 10" OR GREATER THAN 18" A.F.F.



**LIGHTING PLAN - FOURTH FLOOR** 

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



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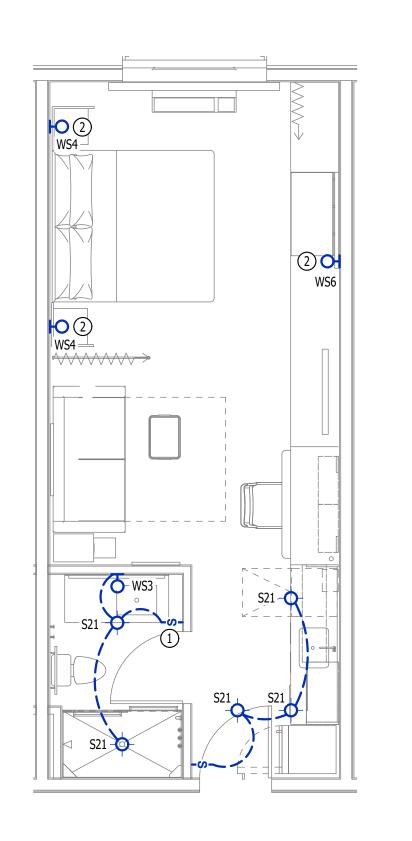
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MECHANICAL - F

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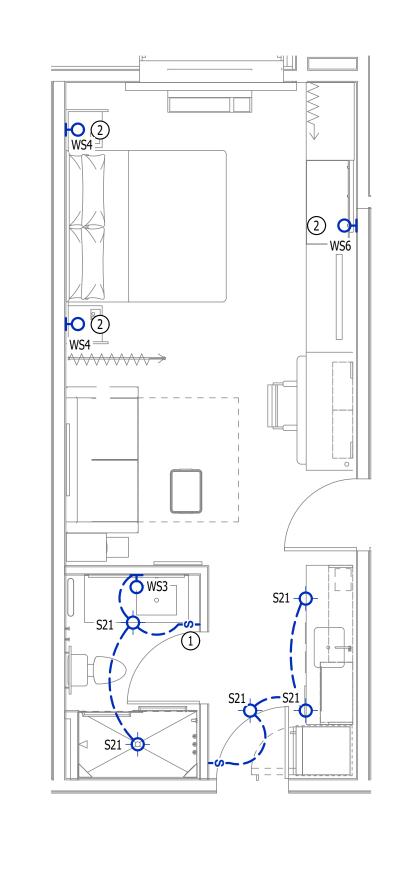
**LIGHTING PLAN -FOURTH FLOOR** 



**LIGHTING PLAN - KING STUDIO** 

S21

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



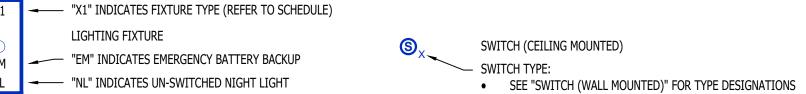
LIGHTING PLAN - KING STUDIO - CONNECTOR

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

\_ WS4 [

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EXIT LIGHT

─ INDICATES REQUIRED REMOTE HEAD

• OP = PASSIVE INFRARED OCCUPANCY SENSOR

 VP = PASSIVE INFRARED VACANCY SENSOR VU = ULTRASONIC VACANCY SENSOR VT = DUAL-TECHNOLOGY VACANCY SENSOR

• OU = ULTRASONIC OCCUPANCY SENSOR OT = DUAL-TECHNOLOGY OCCUPANCY SENSOR

EMERGENCY EGRESS LIGHT

SWITCH (WALL MOUNTED)

M = MOMENTARY SWITCH

DIMMER SWITCH (WALL MOUNTED)

SS = SCENE SWITCH

K = KEYED SWITCH

SWITCH GROUP:

SWITCH TYPE:

• 3 = 3-WAY

4 = 4-WAY

- OCCUPANCY SENSOR AUTO FULL-ON (OR 50% IF NOTED) AUTOMATICALLY TURN OFF LIGHTING AFTER 30 MINUTES WITHOUT OCCUPANT
- WITH MANUAL OVERRIDE CONTROL (IF NOTED)

### **VACANCY SENSOR**

- MANUAL FULL-ON
- AUTOMATICALLY TURN OFF LIGHTING AFTER 30 MINUTES WITHOUT OCCUPANT DETECTION
- WITH MANUAL OVERRIDE CONTROL (IF NOTED)

### **LIGHTING PLAN GENERAL NOTES:**

- 1. SEE E500 & E600 SERIES SHEETS FOR ADDITIONAL ELECTRICAL NOTES, DETAILS, & SCHEDULES. OCCUPANCY / VACANCY SENSOR QUANTITIES AND GENERAL LOCATIONS SHOWN FOR REFERENCE ONLY. CONTRACTOR TO PROVIDE AND INSTALL SENSOR WITH SPACING PER MANUFACTURER SPECIFICATIONS AND INCLUDE ADDITIONAL SENSORS IF NECESSARY. CEILING-MOUNTED SENSORS SHALL BE INSTALLED WITHIN
- MANUFACTURE'S ACCEPTABLE MOUNTING HEIGHT RANGE. REFER TO ARCHITECTURAL RCP'S FOR EXACT FIXTURE LOCATIONS & REQUIREMENTS.
- 4. VERIFY FIXTURE LOCATIONS WITH BRAND/GC PRIOR TO ROUGH-IN.

### **LIGHTING PLAN KEY NOTES:**

1) IN BATHROOM LOCATIONS ONLY, LIGHT SWITCH EQUIPPED WITH NIGHTLIGHT MOUNTED SO TOP OF SWITCH IS 48" MAX A.F.F

2) PLUG IN FIXTURE WITH INTEGRAL ON/OFF SWITCH.

(3) FF&E IN-LINE CLOSET LIGHT SWITCH ATTACHED AT INSIDE CLOSET PANEL TO CONTROL PLUG-IN FIXTURE MOUNTED INSIDE OF CLOSET (ACCESSIBLE UNITS ONLY).



James Watson, P.E. June 14, 2024

MO Certificate of Authority # 2018029680

PE-2015017071

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J2 PROJECT No: J2 DESIGN: ACW ISSUE TITLE DATE CITY SUBMISSION 04 / 17 / 2024

## CITY & BRAND RESPONSE 06 / 14 / 2024

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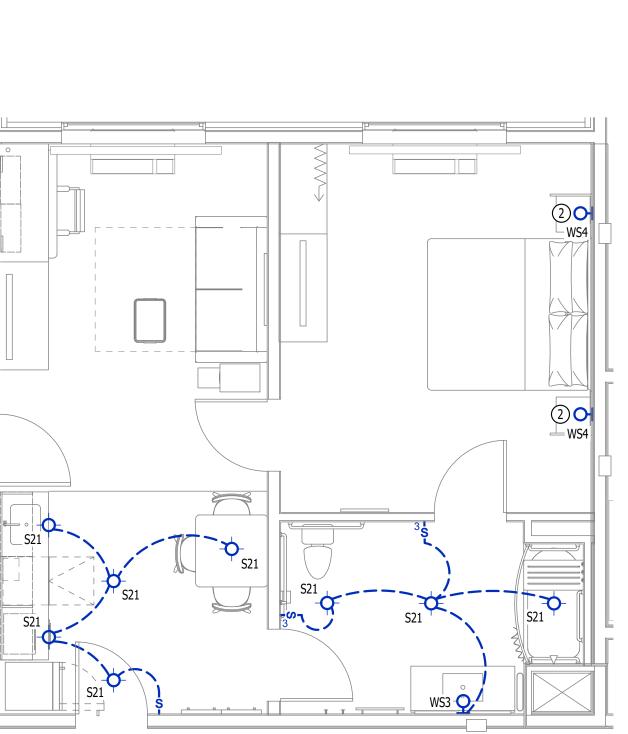
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Home

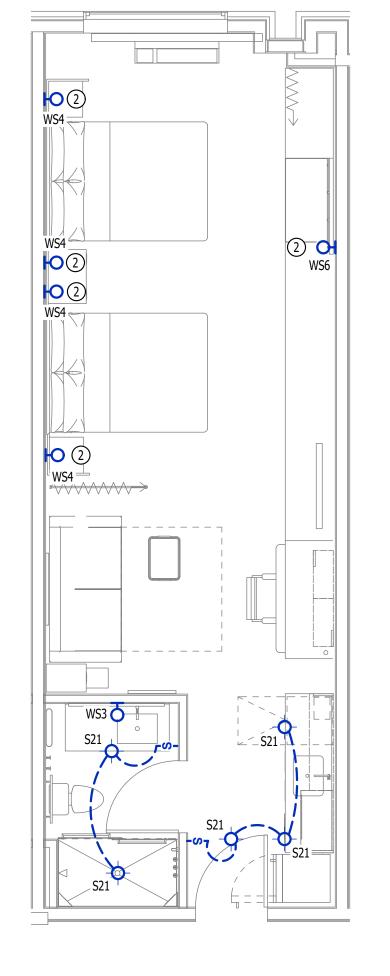
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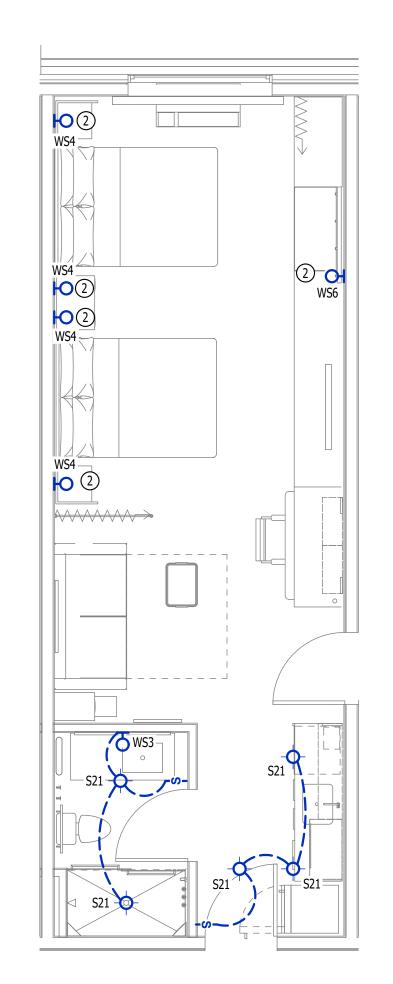
**LIGHTING PLAN - KING STUDIO - ACCESSIBLE** 

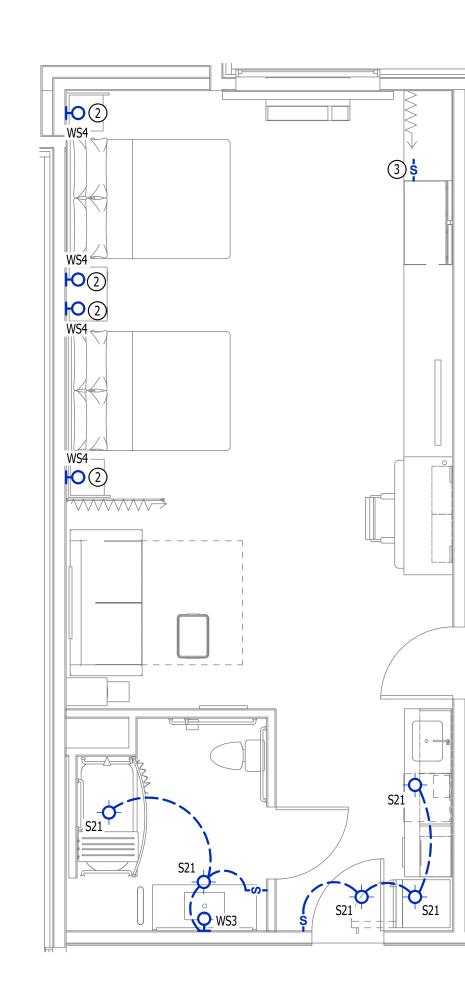
SCALE: 1/4'' = 1'-0''











LIGHTING PLAN - QUEEN QUEEN STUDIO - ACCESSIBLE

LIGHTING PLAN - ONE BEDROOM SUITE

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

\$ 3

LIGHTING PLAN - QUEEN QUEEN STUDIO

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

LIGHTING PLAN - QUEEN QUEEN STUDIO - CONNECTOR

**EL401** 

**ENLARGED LIGHTING PLAN -GUEST ROOMS** 

LIGHTING PLAN - ONE BEDROOM SUITE - ACCESSIBLE SCALE: 1/4" = 1'-0"

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

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

- 1. FIRE ALARM SYSTEM SHALL BE AN ADDRESSABLE SYSTEM THAT IS NONCODED, UL-LISTED, WITH MULTIPLEX
- SIGNAL TRANSMISSION AND HORN/STROBE EVACUATION. 2. EVERY FIRE ALARM SYSTEM COMPONENT SHALL BE UL-LISTED AND UL-CERTIFIED, TESTED BY
- MANUFACTURERS AS A COMPLETE SYSTEM, AND MEET ALL APPLICABLE REQUIREMENTS OF NFPA 72.
- 3. ALL FIRE ALARM WIRING TO BE PLENUM RATED. 4. ALL INITIATING DEVICES INSTALLED IN UNCONDITIONED SPACES SHALL BE CONVENTIONAL DEVICES SUITABLE FOR USE IN EXTREME HIGH AND LOW TEMPERATURES AND HIGH HUMIDITY. SUCH DEVICES SHALL
- BE SUPERVISED BY ADDRESSABLE MONITOR MODULES LOCATED IN CONDITIONED SPACES.
- 5. QUANTITIES, TYPES, AND LOCATIONS OF INITIATING DEVICES AND OUTPUT MODULES FOR INTERCONNECTION WITH FIRE SUPPRESSION MUST BE COORDINATED WITH CONTRACTORS THAT ARE RESPONSIBLE FOR THOSE SYSTEMS.

### FIRE ALARM DEVICE TYPICAL LOCATIONS:

- VERIFY EXACT LOCATIONS WITH LATEST NFPA REQUIREMENTS;
- CEILING MOUNTED SMOKE / HEAT DETECTORS:
- 2.1. MUST BE MOUNTED AT LEAST 36" FROM HVAC GRILLES / DIFFUSERS 2.2. MUST BE LOCATED AT LEAST 4" FROM WALL/CEILING INTERSECTIONS (MEASURED FROM EDGE OF
- WALL MOUNTED SMOKE / HEAT DETECTORS:
- 3.1. MUST BE LOCATED AT LEAST 4" FROM WALL/CEILING INTERSECTIONS (MEASURED FROM EDGE OF
- 3.2. MUST BE LOCATED WITHIN AT LEAST 12" FROM WALL/CEILING INTERSECTION (MEASURED FROM EDGE OF DEVICE)
- MANUAL PULL STATIONS
- 4.1. MUST BE LOCATED WITHIN 5' OF EXTERIOR DOORWAY (MEASURED FROM CENTER OF PULL STATION
- 4.2. MUST BE LOCATED BETWEEN 42" AND 54" A.F.F. (MEASURED FROM FINISH FLOOR TO CENTER OFF
- PULL STATION) MAGNETIC DOOR HOLDER:
- 5.1. MUST BE LOCATED 6" BELOW TOP OF DOOR (MEASURED FROM TOP OF DOOR TO TOP OF DOOR
- 5.2. MUST BE LOCATED DOOR WIDTH MINUS THREE INCHES FROM DOOR (MEASURED FROM NEAREST EDGE OF HOLDER TO NEAREST EDGE OF DOOR).
- FIRE ALARM CONTROL PANEL: 6.1. MUST BE LOCATED AT MAXIMUM OF 72" A.F.F. (MEASURED FROM FINISH FLOOR TO TOP OF FIRE ALARM CONTROL PANEL)
- FIRE ALARM ANNUNCIATOR:
- 7.1. MUST BE LOCATED AT MAXIMUM OF 60" A.F.F. (MEASURED FROM FINISH FLOOR TO TOP OF FIRE ALARM ANNUNCIATOR PANEL)
- 8. WALL MOUNTED STROBE DEVICES (VISUAL ONLY):
- 8.1. MUST BE LOCATED AT 84" A.F.F. (MEASURED FROM FINISH FLOOR TO BOTTOM OF BACK BOX) MUST BE LOCATED AT MOST 24" FROM WALL/CEILING INTERSECTION WITHIN HANDICAP BEDROOMS
- (MEASURED FROM WALL/CEILING INTERSECTION TO BOTTOM OF BACK BOX)
- WALL-MOUNTED HORN / STROBE DEVICES (AUDIBLE & VISUAL): 9.1. MUST BE LOCATED AT 84" A.F.F. (MEASURED FROM FINISH FLOOR TO BOTTOM OF BACK BOX)

### FIRE ALARM PLAN SYMBOL LEGEND

- MANUAL PULL STATION
- MODULE
- OUTPUT MODULE
- SMOKE DETECTOR
- HEAT DETECTOR
- CARBON MONOXIDE DETECTOR
- STROBE CEILING MOUNT
- STROBE WALL MOUNT
- HORN STROBE WALL MOUNT
- HORN STROBE CEILING MOUNT
- SPEAKER STROBE WALL MOUNT
- SPEAKER STROBE CEILING MOUNT
- TAMPER SWITCH

WATER FLOW SWITCH

FIRE ALARM CONTROL PANEL

FIRE ALARM ANNUNCIATOR

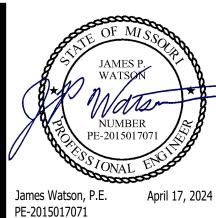
### **SECURITY PLAN SYMBOL LEGEND**

- READER
- MOTION DETECTOR
- ALARM KEYPAD
- DOOR CONTACT

- GLASS BREAK SENSOR
- ELECTRIC STRIKE
- INTERCOM
- DOOR RELEASE
- **DURESS ALARM BUTTON**
- BURGLAR PANEL
- WALL MOUNT CAMERA (ARROW INDICATES VIEW DIRECTION)
- CEILING MOUNT CAMERA (ARROW INDICATES VIEW DIRECTION)







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SHEET TITLE

**FIRE ALARM AND SECURITY PLAN - FIRST FLOOR** 

**FS101** 

- 1. FIRE ALARM SYSTEM SHALL BE AN ADDRESSABLE SYSTEM THAT IS NONCODED, UL-LISTED, WITH MULTIPLEX
- SIGNAL TRANSMISSION AND HORN/STROBE EVACUATION. 2. EVERY FIRE ALARM SYSTEM COMPONENT SHALL BE UL-LISTED AND UL-CERTIFIED, TESTED BY
- MANUFACTURERS AS A COMPLETE SYSTEM, AND MEET ALL APPLICABLE REQUIREMENTS OF NFPA 72.
- 3. ALL FIRE ALARM WIRING TO BE PLENUM RATED.
- 4. ALL INITIATING DEVICES INSTALLED IN UNCONDITIONED SPACES SHALL BE CONVENTIONAL DEVICES SUITABLE FOR USE IN EXTREME HIGH AND LOW TEMPERATURES AND HIGH HUMIDITY. SUCH DEVICES SHALL BE SUPERVISED BY ADDRESSABLE MONITOR MODULES LOCATED IN CONDITIONED SPACES.
- 5. QUANTITIES, TYPES, AND LOCATIONS OF INITIATING DEVICES AND OUTPUT MODULES FOR INTERCONNECTION WITH FIRE SUPPRESSION MUST BE COORDINATED WITH CONTRACTORS THAT ARE RESPONSIBLE FOR THOSE SYSTEMS.
- VERIFY EXACT LOCATIONS WITH LATEST NFPA REQUIREMENTS;

FIRE ALARM DEVICE TYPICAL LOCATIONS:

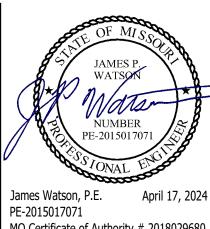
- CEILING MOUNTED SMOKE / HEAT DETECTORS:
- 2.1. MUST BE MOUNTED AT LEAST 36" FROM HVAC GRILLES / DIFFUSERS
- 2.2. MUST BE LOCATED AT LEAST 4" FROM WALL/CEILING INTERSECTIONS (MEASURED FROM EDGE OF
- WALL MOUNTED SMOKE / HEAT DETECTORS:
- 3.1. MUST BE LOCATED AT LEAST 4" FROM WALL/CEILING INTERSECTIONS (MEASURED FROM EDGE OF
- 3.2. MUST BE LOCATED WITHIN AT LEAST 12" FROM WALL/CEILING INTERSECTION (MEASURED FROM EDGE OF DEVICE)
- MANUAL PULL STATIONS 4.1. MUST BE LOCATED WITHIN 5' OF EXTERIOR DOORWAY (MEASURED FROM CENTER OF PULL STATION
- 4.2. MUST BE LOCATED BETWEEN 42" AND 54" A.F.F. (MEASURED FROM FINISH FLOOR TO CENTER OFF
- PULL STATION)
- MAGNETIC DOOR HOLDER: 5.1. MUST BE LOCATED 6" BELOW TOP OF DOOR (MEASURED FROM TOP OF DOOR TO TOP OF DOOR
- 5.2. MUST BE LOCATED DOOR WIDTH MINUS THREE INCHES FROM DOOR (MEASURED FROM NEAREST EDGE OF HOLDER TO NEAREST EDGE OF DOOR).
- FIRE ALARM CONTROL PANEL: 6.1. MUST BE LOCATED AT MAXIMUM OF 72" A.F.F. (MEASURED FROM FINISH FLOOR TO TOP OF FIRE ALARM CONTROL PANEL)
- FIRE ALARM ANNUNCIATOR:
- 7.1. MUST BE LOCATED AT MAXIMUM OF 60" A.F.F. (MEASURED FROM FINISH FLOOR TO TOP OF FIRE ALARM ANNUNCIATOR PANEL)
- 8. WALL MOUNTED STROBE DEVICES (VISUAL ONLY):
- 8.1. MUST BE LOCATED AT 84" A.F.F. (MEASURED FROM FINISH FLOOR TO BOTTOM OF BACK BOX)
- MUST BE LOCATED AT MOST 24" FROM WALL/CEILING INTERSECTION WITHIN HANDICAP BEDROOMS (MEASURED FROM WALL/CEILING INTERSECTION TO BOTTOM OF BACK BOX)
- WALL-MOUNTED HORN / STROBE DEVICES (AUDIBLE & VISUAL): 9.1. MUST BE LOCATED AT 84" A.F.F. (MEASURED FROM FINISH FLOOR TO BOTTOM OF BACK BOX)

### FIRE ALARM PLAN SYMBOL LEGEND

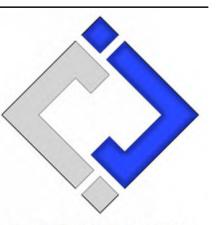
- MANUAL PULL STATION
- MODULE
- OUTPUT MODULE
- SMOKE DETECTOR
- HEAT DETECTOR
- CARBON MONOXIDE DETECTOR
- STROBE CEILING MOUNT
- STROBE WALL MOUNT
- HORN STROBE WALL MOUNT
- HORN STROBE CEILING MOUNT
- SPEAKER STROBE WALL MOUNT
- SPEAKER STROBE CEILING MOUNT
- TAMPER SWITCH
- WATER FLOW SWITCH
- FIRE ALARM CONTROL PANEL
- FIRE ALARM ANNUNCIATOR

### **SECURITY PLAN SYMBOL LEGEND**

- READER
- MOTION DETECTOR
- ALARM KEYPAD
- DOOR CONTACT
- PANIC
- GLASS BREAK SENSOR
- ELECTRIC STRIKE
- INTERCOM
- DOOR RELEASE
- DURESS ALARM BUTTON
- BURGLAR PANEL
- WALL MOUNT CAMERA (ARROW INDICATES VIEW DIRECTION)
- CEILING MOUNT CAMERA (ARROW INDICATES VIEW DIRECTION)



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**FIRE ALARM AND SECURITY PLAN - SECOND FLOOR** 

**FS102** 



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

### FIRE ALARM SYSTEM SPECIFICATIONS

- 1. FIRE ALARM SYSTEM SHALL BE AN ADDRESSABLE SYSTEM THAT IS NONCODED, UL-LISTED, WITH MULTIPLEX SIGNAL TRANSMISSION AND HORN/STROBE EVACUATION.
- 2. EVERY FIRE ALARM SYSTEM COMPONENT SHALL BE UL-LISTED AND UL-CERTIFIED, TESTED BY MANUFACTURERS AS A COMPLETE SYSTEM, AND MEET ALL APPLICABLE REQUIREMENTS OF NFPA 72.
- 3. ALL FIRE ALARM WIRING TO BE PLENUM RATED.
- 4. ALL INITIATING DEVICES INSTALLED IN UNCONDITIONED SPACES SHALL BE CONVENTIONAL DEVICES SUITABLE FOR USE IN EXTREME HIGH AND LOW TEMPERATURES AND HIGH HUMIDITY. SUCH DEVICES SHALL BE SUPERVISED BY ADDRESSABLE MONITOR MODULES LOCATED IN CONDITIONED SPACES.
- 5. QUANTITIES, TYPES, AND LOCATIONS OF INITIATING DEVICES AND OUTPUT MODULES FOR INTERCONNECTION WITH FIRE SUPPRESSION MUST BE COORDINATED WITH CONTRACTORS THAT ARE RESPONSIBLE FOR THOSE SYSTEMS.

### FIRE ALARM DEVICE TYPICAL LOCATIONS:

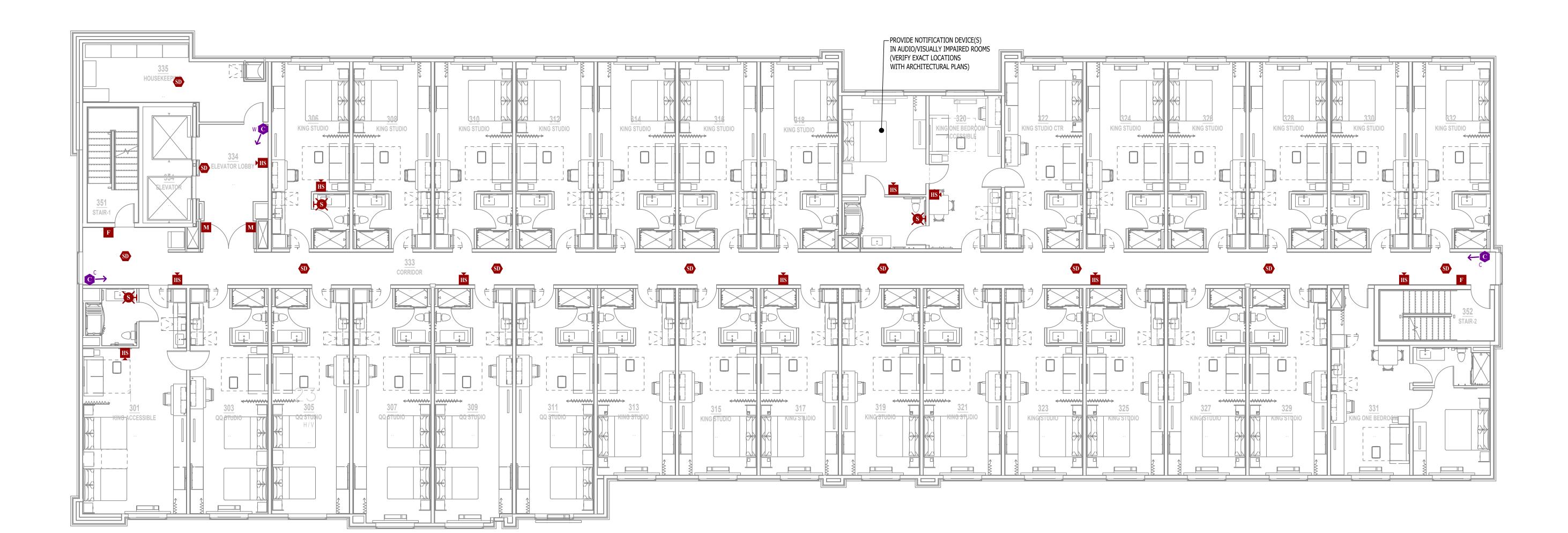
- VERIFY EXACT LOCATIONS WITH LATEST NFPA REQUIREMENTS;
- CEILING MOUNTED SMOKE / HEAT DETECTORS:
- 2.1. MUST BE MOUNTED AT LEAST 36" FROM HVAC GRILLES / DIFFUSERS
- 2.2. MUST BE LOCATED AT LEAST 4" FROM WALL/CEILING INTERSECTIONS (MEASURED FROM EDGE OF
- WALL MOUNTED SMOKE / HEAT DETECTORS:
- 3.1. MUST BE LOCATED AT LEAST 4" FROM WALL/CEILING INTERSECTIONS (MEASURED FROM EDGE OF
- 3.2. MUST BE LOCATED WITHIN AT LEAST 12" FROM WALL/CEILING INTERSECTION (MEASURED FROM EDGE OF DEVICE)
- MANUAL PULL STATIONS
- 4.1. MUST BE LOCATED WITHIN 5' OF EXTERIOR DOORWAY (MEASURED FROM CENTER OF PULL STATION
- 4.2. MUST BE LOCATED BETWEEN 42" AND 54" A.F.F. (MEASURED FROM FINISH FLOOR TO CENTER OFF PULL STATION)
- MAGNETIC DOOR HOLDER:
- 5.1. MUST BE LOCATED 6" BELOW TOP OF DOOR (MEASURED FROM TOP OF DOOR TO TOP OF DOOR
- 5.2. MUST BE LOCATED DOOR WIDTH MINUS THREE INCHES FROM DOOR (MEASURED FROM NEAREST EDGE OF HOLDER TO NEAREST EDGE OF DOOR). FIRE ALARM CONTROL PANEL:
- 6.1. MUST BE LOCATED AT MAXIMUM OF 72" A.F.F. (MEASURED FROM FINISH FLOOR TO TOP OF FIRE ALARM CONTROL PANEL)
- FIRE ALARM ANNUNCIATOR:
- 7.1. MUST BE LOCATED AT MAXIMUM OF 60" A.F.F. (MEASURED FROM FINISH FLOOR TO TOP OF FIRE ALARM ANNUNCIATOR PANEL)
- 8. WALL MOUNTED STROBE DEVICES (VISUAL ONLY):
- 8.1. MUST BE LOCATED AT 84" A.F.F. (MEASURED FROM FINISH FLOOR TO BOTTOM OF BACK BOX) MUST BE LOCATED AT MOST 24" FROM WALL/CEILING INTERSECTION WITHIN HANDICAP BEDROOMS
- (MEASURED FROM WALL/CEILING INTERSECTION TO BOTTOM OF BACK BOX)
- WALL-MOUNTED HORN / STROBE DEVICES (AUDIBLE & VISUAL): 9.1. MUST BE LOCATED AT 84" A.F.F. (MEASURED FROM FINISH FLOOR TO BOTTOM OF BACK BOX)

### FIRE ALARM PLAN SYMBOL LEGEND

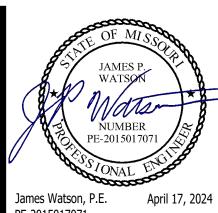
- MANUAL PULL STATION
- MODULE
- OUTPUT MODULE
- SMOKE DETECTOR
- HEAT DETECTOR
- CARBON MONOXIDE DETECTOR
- STROBE CEILING MOUNT
- STROBE WALL MOUNT
- HORN STROBE WALL MOUNT
- HORN STROBE CEILING MOUNT
- SPEAKER STROBE WALL MOUNT
- SPEAKER STROBE CEILING MOUNT
- TAMPER SWITCH
- WATER FLOW SWITCH
- FIRE ALARM CONTROL PANEL
- FIRE ALARM ANNUNCIATOR

### SECURITY PLAN SYMBOL LEGEND

- READER
- MOTION DETECTOR
- ALARM KEYPAD
- DOOR CONTACT
- PANIC
- GLASS BREAK SENSOR ELECTRIC STRIKE
- INTERCOM
- DOOR RELEASE
- DURESS ALARM BUTTON
- BURGLAR PANEL
- WALL MOUNT CAMERA (ARROW INDICATES VIEW DIRECTION)
- CEILING MOUNT CAMERA (ARROW INDICATES VIEW DIRECTION)









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**FIRE ALARM AND SECURITY PLAN - THIRD FLOOR** 

**FS103** 

### FIRE ALARM SYSTEM SPECIFICATIONS

- 1. FIRE ALARM SYSTEM SHALL BE AN ADDRESSABLE SYSTEM THAT IS NONCODED, UL-LISTED, WITH MULTIPLEX SIGNAL TRANSMISSION AND HORN/STROBE EVACUATION.
- 2. EVERY FIRE ALARM SYSTEM COMPONENT SHALL BE UL-LISTED AND UL-CERTIFIED, TESTED BY MANUFACTURERS AS A COMPLETE SYSTEM, AND MEET ALL APPLICABLE REQUIREMENTS OF NFPA 72.
- 3. ALL FIRE ALARM WIRING TO BE PLENUM RATED.
- 4. ALL INITIATING DEVICES INSTALLED IN UNCONDITIONED SPACES SHALL BE CONVENTIONAL DEVICES SUITABLE FOR USE IN EXTREME HIGH AND LOW TEMPERATURES AND HIGH HUMIDITY. SUCH DEVICES SHALL BE SUPERVISED BY ADDRESSABLE MONITOR MODULES LOCATED IN CONDITIONED SPACES.
- 5. QUANTITIES, TYPES, AND LOCATIONS OF INITIATING DEVICES AND OUTPUT MODULES FOR INTERCONNECTION WITH FIRE SUPPRESSION MUST BE COORDINATED WITH CONTRACTORS THAT ARE RESPONSIBLE FOR THOSE SYSTEMS.

### FIRE ALARM DEVICE TYPICAL LOCATIONS:

- VERIFY EXACT LOCATIONS WITH LATEST NFPA REQUIREMENTS;
- CEILING MOUNTED SMOKE / HEAT DETECTORS:
- 2.1. MUST BE MOUNTED AT LEAST 36" FROM HVAC GRILLES / DIFFUSERS
- 2.2. MUST BE LOCATED AT LEAST 4" FROM WALL/CEILING INTERSECTIONS (MEASURED FROM EDGE OF
- WALL MOUNTED SMOKE / HEAT DETECTORS:
- 3.1. MUST BE LOCATED AT LEAST 4" FROM WALL/CEILING INTERSECTIONS (MEASURED FROM EDGE OF
- 3.2. MUST BE LOCATED WITHIN AT LEAST 12" FROM WALL/CEILING INTERSECTION (MEASURED FROM EDGE OF DEVICE)
- MANUAL PULL STATIONS
- 4.1. MUST BE LOCATED WITHIN 5' OF EXTERIOR DOORWAY (MEASURED FROM CENTER OF PULL STATION
- 4.2. MUST BE LOCATED BETWEEN 42" AND 54" A.F.F. (MEASURED FROM FINISH FLOOR TO CENTER OFF
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- 5.1. MUST BE LOCATED 6" BELOW TOP OF DOOR (MEASURED FROM TOP OF DOOR TO TOP OF DOOR
- 5.2. MUST BE LOCATED DOOR WIDTH MINUS THREE INCHES FROM DOOR (MEASURED FROM NEAREST EDGE OF HOLDER TO NEAREST EDGE OF DOOR).
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- FIRE ALARM ANNUNCIATOR:
- 7.1. MUST BE LOCATED AT MAXIMUM OF 60" A.F.F. (MEASURED FROM FINISH FLOOR TO TOP OF FIRE ALARM ANNUNCIATOR PANEL)
- 8. WALL MOUNTED STROBE DEVICES (VISUAL ONLY):
- 8.1. MUST BE LOCATED AT 84" A.F.F. (MEASURED FROM FINISH FLOOR TO BOTTOM OF BACK BOX) MUST BE LOCATED AT MOST 24" FROM WALL/CEILING INTERSECTION WITHIN HANDICAP BEDROOMS
- (MEASURED FROM WALL/CEILING INTERSECTION TO BOTTOM OF BACK BOX)
- WALL-MOUNTED HORN / STROBE DEVICES (AUDIBLE & VISUAL): 9.1. MUST BE LOCATED AT 84" A.F.F. (MEASURED FROM FINISH FLOOR TO BOTTOM OF BACK BOX)

### FIRE ALARM PLAN SYMBOL LEGEND

- MANUAL PULL STATION
- MODULE
- OUTPUT MODULE
- SMOKE DETECTOR
- HEAT DETECTOR
- CARBON MONOXIDE DETECTOR
- STROBE CEILING MOUNT
- STROBE WALL MOUNT
- HORN STROBE WALL MOUNT
- HORN STROBE CEILING MOUNT
- SPEAKER STROBE WALL MOUNT
- SPEAKER STROBE CEILING MOUNT
- TAMPER SWITCH
- WATER FLOW SWITCH
- FIRE ALARM CONTROL PANEL
- FIRE ALARM ANNUNCIATOR

### **SECURITY PLAN SYMBOL LEGEND**

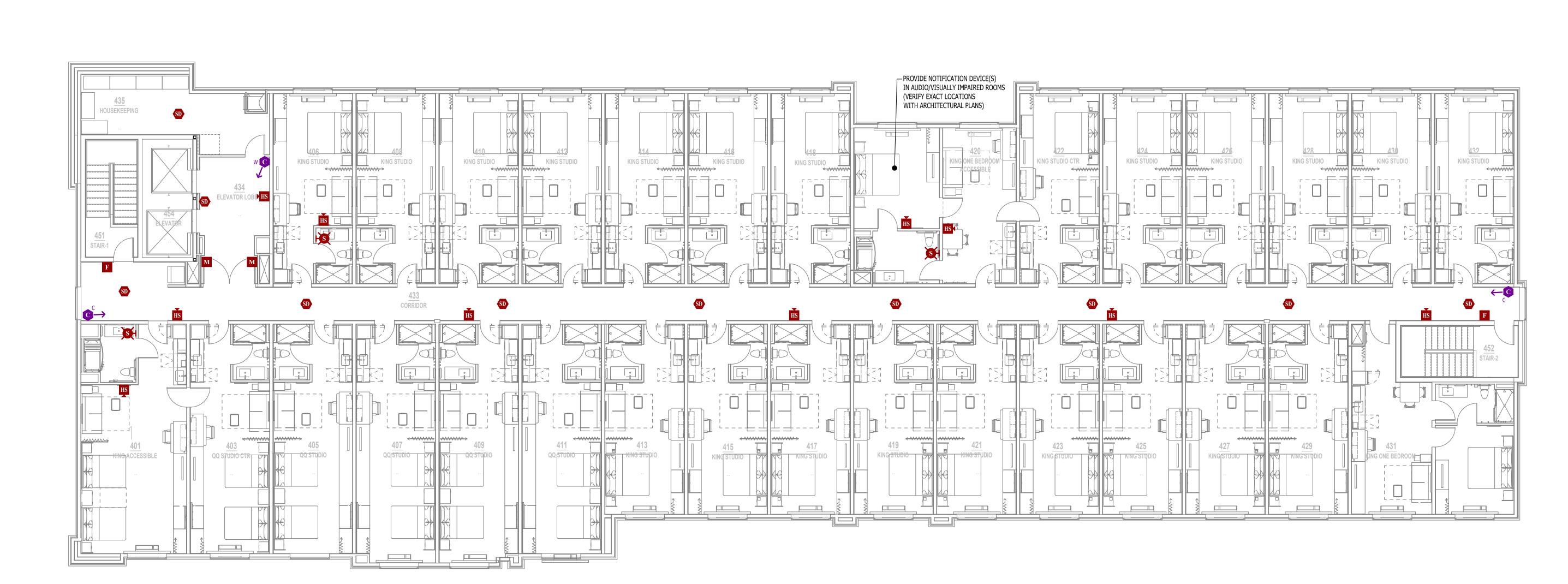
- READER
- MOTION DETECTOR
- ALARM KEYPAD
- DOOR CONTACT
- PANIC
- GLASS BREAK SENSOR

ELECTRIC STRIKE

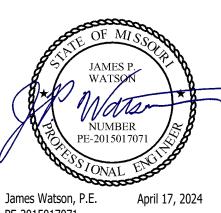
- INTERCOM
- DOOR RELEASE
- DURESS ALARM BUTTON
- WALL MOUNT CAMERA (ARROW INDICATES VIEW DIRECTION)

BURGLAR PANEL

CEILING MOUNT CAMERA (ARROW INDICATES VIEW DIRECTION)







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**FIRE ALARM AND SECURITY PLAN - FOURTH FLOOR** 

**FS104** 

- CONTRACTOR IS RESPONSIBLE TO PROVIDE ALL NECESSARY PIECES AND COMPONENTS TO PROVIDE A
- COMPLETE AND COMPLIANT ELECTRICAL SYSTEM UNLESS OTHERWISE NOTED ON PLANS. THE ENTIRE ELECTRICAL SYSTEM SHALL BE CONTINUOUSLY GROUNDED. EVERY BRANCH CONDUIT
- SHALL INCLUDE A GREEN GROUND CONDUCTOR SIZED PER NEC. ARC-FAULT CIRCUITS SHALL BE RUN WITH A DEDICATED NEUTRAL AS REQUIRED BY MANUFACTURER.
- PROVIDE PERMANENT ARC-FLASH LABEL AFFIXED TO EVERY DISCONNECT AND PANEL. PROVIDE TYPE WRITTEN PANEL SCHEDULE FOR EACH PANEL.

- ALL ELECTRICAL SYSTEM COMPONENTS SHALL BE INSTALLED LEVEL, PLUMB, AND
- PARALLEL/PERPENDICULAR TO BUILDING ORIENTATION WHERE POSSIBLE. ALL ELECTRICAL DEVICES AND LIGHT FIXTURES SHALL BE INSTALLED IN A SAFE, FIRST-CLASS MANNER
- WITH ATTENTION GIVEN TO OVERALL AESTHETICS. CARE SHOULD BE TAKEN TO ALLOW FOR FUTURE REPLACEMENT AND ACCESS FOR SERVICE.

### 3.1. CONDUIT & CONDUCTORS

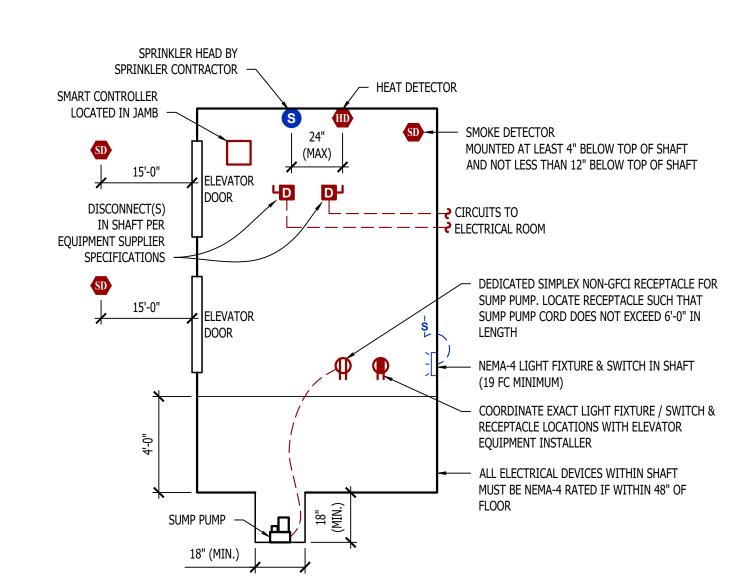
- ALL CONDUCTORS SIZES INDICATED ARE COPPER UNLESS NOTED OTHERWISE ON PLANS.
- 3.1.2. ABOVE GRADE CONDUCTORS SHALL BE TYPE THHN.
- BELOW GRADE CONDUCTORS SHALL BE TYPE XHHW-2. MINIMUM CONDUCTOR SIZE SHALL BE #12 AWG UNLESS NOTED OTHERWISE. 120-VOLT, 20-AMP CIRCUITS WITH CONDUCTOR LENGTHS GREATER THAN 100' SHALL BE #10 AWG MINIMUM. ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR MEASURING ACTUAL CONDUCTOR LENGTH AND
- INCREASING CONDUCTOR SIZE TO COMPENSATE FOR VOLTAGE DROP AS REQUIRED BY NEC. RIGID GALVANIZED OR SCHEDULE 40 PVC CONDUIT SHALL BE USED FOR SERVICE WIRING, BELOW
- GRADE INSTALLATIONS, OR WHERE EXPOSED TO WEATHER. IN APPLICATIONS OTHER THAN THOSE LISTED IN 3.1.4, EMT OR MC CABLE IS ACCEPTABLE. WHERE CONDUCTORS ARE PROTECTED FROM DAMAGE, ENCLOSED IN BUILDING MATERIALS, AND
- CONSTRUCTION IS OF A PERMITTED TYPE, NM CABLE MAY BE USED. FOR CAST-IN-PLACE CONCRETE, TILT-UP WALL CONSTRUCTION, OR PRE-MANUFACTURED WALL SYSTEMS, COORDINATE EXACT LOCATIONS OF ALL DEVICES WITHIN WALLS WITH WALL SUPPLIER. CONDUIT EMBEDDED IN WALLS SHALL BE SCHEDULE 80 PVC OR LFMC, OR OTHER SYSTEM
- APPROVED BY WALL MANUFACTURER. EXPOSED CONDUIT SHALL BE PAINTED TO MATCH ADJACENT SURFACES, VERIFY COLOR WITH ARCHITECT/OWNER.
- 3.2. DEVICES CONTRACTOR TO PROVIDE J-BOXES, COVER PLATES, AND ANY ACCESSORIES REQUIRED TO
- PROVIDE A COMPLETE SYSTEM. SEE ARCHITECTURAL PLANS FOR DEVICE COLORS. DUPLEX RECEPTACLES SHALL BE TAMPER RESISTANT, 20-AMP, EQUAL TO LEVITON #TBR-20.
- 3.2.2. SINGLE POLE TOGGLE WALL SWITCHES SHALL BE EQUAL TO LEVITON CS120-2. THREE-WAY TOGGLE WALL SWITCHES SHALL BE EQUAL TO LEVITON CS320-2. 3.2.3. DIMMER SWITCHES SHALL BE TESTED WITH FIXTURES AND LAMPS FOR COMPATIBILITY. SEE
- LIGHTING PLANS FOR DETAILS. WHERE GFCI PROTECTION IS SHOWN ON PLANS AND UNLESS OTHERWISE NOTED, PROVIDE A LISTED GFCI-PROTECTED RECEPTACLE WHERE THE RECEPTACLE IS ACCESSIBLE ON PLANS. IF THE RECEPTACLE LOCATION IS NOT ACCESSIBLE AS DEFINED BY NEC, PROVIDE GFCI PROTECTION AT
- CIRCUIT BREAKER. DO NOT INSTALL OCCUPANCY/VACANCY SENSORS WITH 48" OF HVAC DIFFUSERS/GRILLES OR SIMILAR OBSTRUCTION THAT MAY AFFECT SENSOR FUNCTIONALITY. ALL SENSORS SHALL BE
- INSTALLED PER MANUFACTURER'S SPECIFICATIONS. ALL APPLICABLE SWITCHES, RECEPTACLES, CONTROLS, ETC. SHALL BE MOUNTED AT
- ADA-ACCESSIBLE HEIGHTS. WIRING DEVICES SHOWN ON PLANS NEXT TO ONE ANOTHER SHALL UTILIZE A SINGLE COVER
- PLATE UNLESS NOTED OTHERWISE. WIRING DEVICES SHOWN BACK-TO-BACK ON EACH SIDE OF A WALL SHALL BE OFFSET TO REDUCE 3.2.8.
- SOUND TRANSMISSION. EACH RECEPTACLE COVER SHALL BE NEATLY AND LEGIBLY LABELED WITH CORRESPONDING PANEL 3.2.9. AND CIRCUIT NUMBER FOR CIRCUIT IDENTIFICATION.

### 4. EMERGENCY LIGHTING

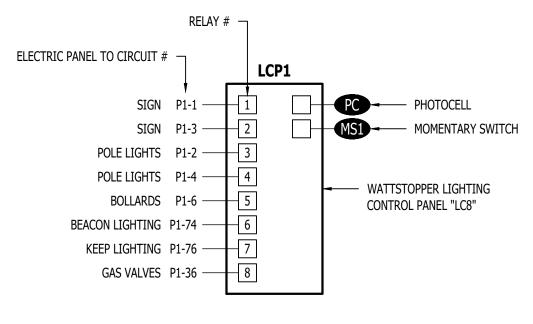
- BRANCH CIRCUIT FEEDING EMERGENCY FIXTURE(S) SHALL BE SAME BRANCH CIRCUIT AS THAT SERVING NORMAL LIGHTING IN SAME AREA AND CONNECTED AHEAD OF ANY LOCAL SWITCHES.
- EMERGENCY LIGHTING SYSTEM SHALL PROVIDE 1FC AVERAGE AND 0.1FC MINIMUM ALONG EGRESS PATHS. ADJUST ANY EMERGENCY FIXTURES AS NECESSARY TO PROVIDE PROPER ILLUMINATION WITHOUT OBSTRUCTION FROM FURNITURE OR OBSTACLES.

### **NOTES:**

- ALL ELECTRICAL CONDUCTORS WITHIN ELEVATOR PIT MUST COMPLY WITH NEC 620.21.
- SUMP PUMP RECEPTACLE, SHAFT / PIT RECEPTACLES, & SHAFT LIGHTING TO ALL BE ON EMERGENCY POWER IF ELEVATOR IS ON EMERGENCY POWER.
- ADDITIONAL SMOKE DETECTOR REQUIRED IN ELEVATOR MACHINE ROOM (IF APPLICABLE).
- 4. IN CASES WHERE ELEVATOR IS NOT SHUNT-TRIP PROTECTED, A LABELED SPRINKLER SHUT-OFF MUST BE LOCATED OUTSIDE THE ELEVATOR HOISTWAY AND/OR EQUIPMENT ROOM.
- PERMANENTLY LABEL ALL CIRCUITS AND FEEDERS. SUMP PUMP DISCHARGE LINE SHALL BE HARD PIPED (NO PVC).



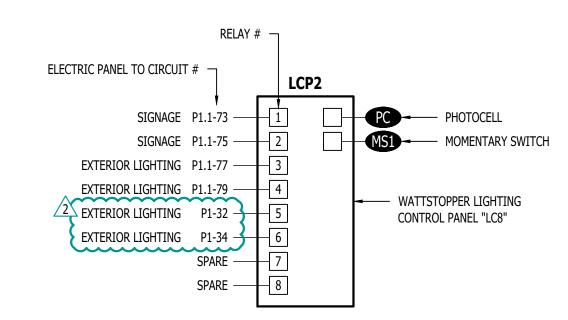
MACHINE - ROOM - LESS ELEVATOR DETAIL



### LIGHTING CONTROL PANEL SCHEDULE

RELAY #	OVERRIDE SWITCH	OPERATIONAL SCHEDULE
1	YES	ON DURING NIGHT HOURS (PHOTOCELL)
2	YES	ON DURING NIGHT HOURS (PHOTOCELL)
3	YES	ON DURING NIGHT HOURS (PHOTOCELL)
4	YES	ON DURING NIGHT HOURS (PHOTOCELL)
5	YES	ON DURING NIGHT HOURS (PHOTOCELL)
6	YES	ON DURING NIGHT HOURS (PHOTOCELL)
7	YES	ON DURING NIGHT HOURS (PHOTOCELL)
8	YES	ON DURING OCCUPIED HOURS

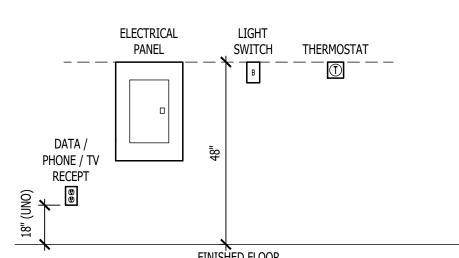
### LIGHTING CONTROL PANEL

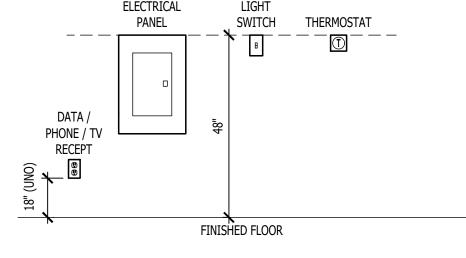


### LIGHTING CONTROL PANEL SCHEDULE

RELAY #	OVERRIDE SWITCH	OPERATIONAL SCHEDULE
1	YES	ON DURING NIGHT HOURS (PHOTOCELL)
2	YES	ON DURING NIGHT HOURS (PHOTOCELL)
3	YES	ON DURING NIGHT HOURS (PHOTOCELL)
A	<u>YES</u>	ON DURING NIGHT HOURS (PHOTOCFLL)
2 5	YES	ON DURING EVENING HOURS (PHOTOCELL + TIMER)
6	YES	ON DURING EVENING HOURS (PHOTOCELL + TIMER)
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Q	_	_

### LIGHTING CONTROL PANEL

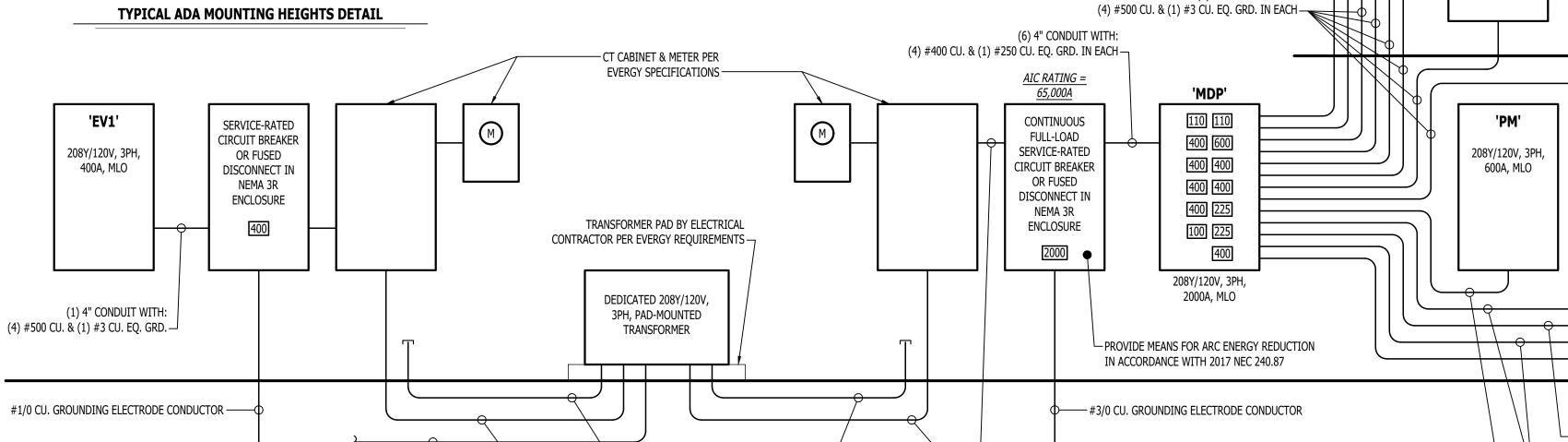




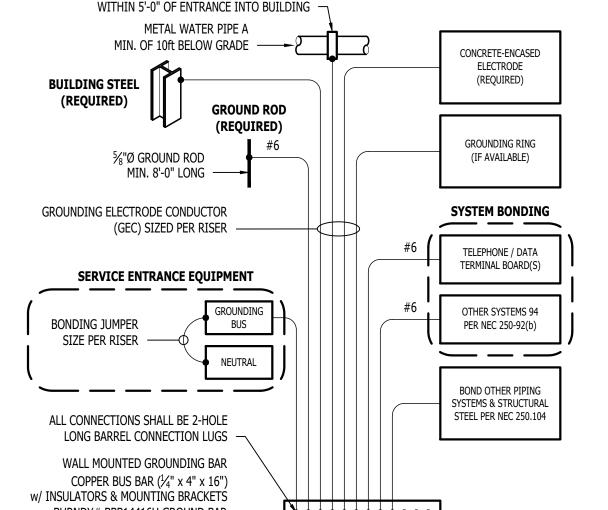
4" PRIMARY CONDUIT WITH PULL-STRING:

(SEE CIVIL PLANS FOR APPROXIMATE ROUTING) -

CONDUCTORS BY UTILITY PROVIDER



POOL AREA EQUIPOTENTIAL BONDING DETAIL



**WATER PIPE** 

### **POWER RISER GENERAL NOTES:**

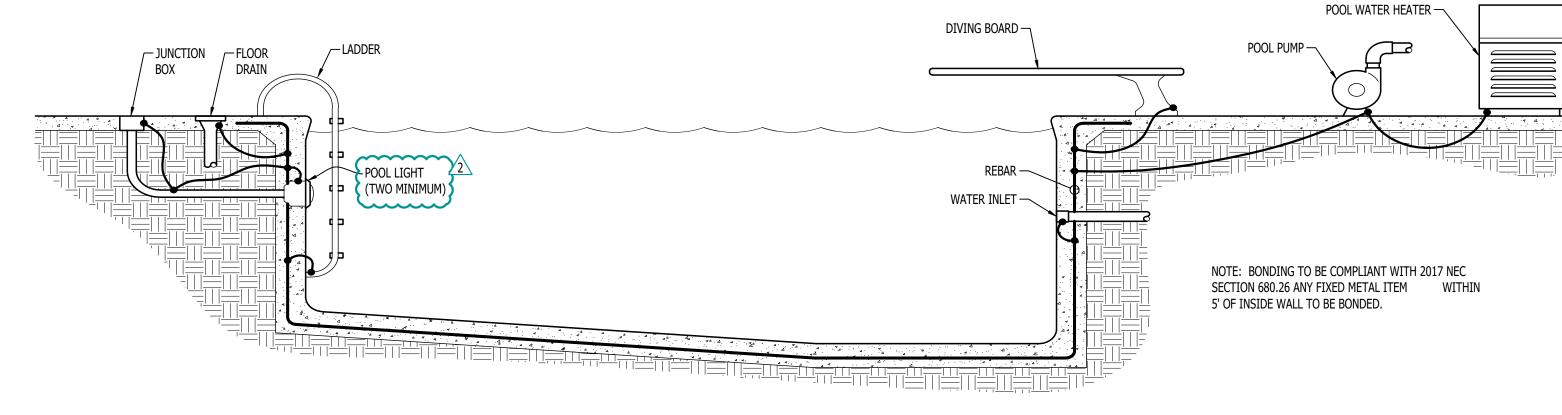
-(1) 4" CONDUIT WITH

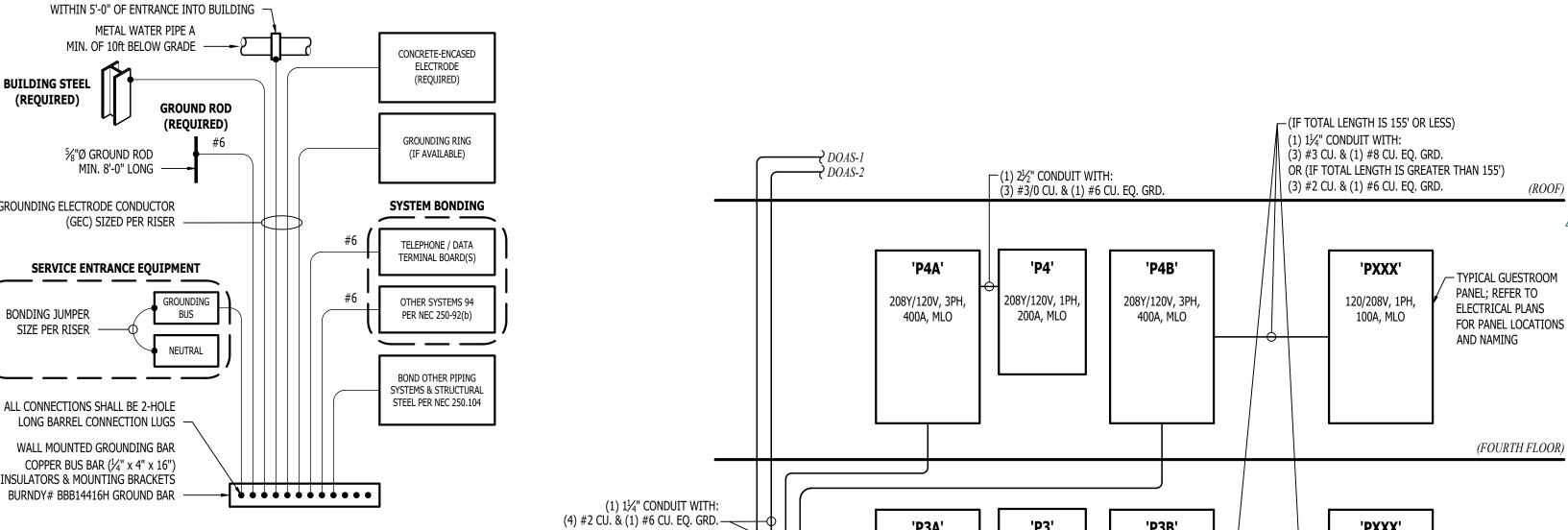
(4) #500 CU. IN EACH

SEE MEP SITE PLAN FOR APPROXIMATE TRANSFORMER & SERVICE ENTRANCE LOCATIONS.

**TYPICAL GROUNDING & BONDING DETAIL** 

- COORDINATE ALL DETAILS OF NEW ELECTRIC SERVICE WITH EVERGY.
- CONTRACTOR SHALL PROVIDE A SHORT-CIRCUIT AND COORDINATION STUDY INCLUDING ARC FAULT ANALYSIS AND EQUIPMENT LABELING ON ALL SERVICE SWITCHBOARDS AND DISTRIBUTION BOARDS.
- 4. AIC-RATINGS ARE BASED ON THE FOLLOWING:
- 750 kVA TRANSFORMER, 100% PF, 5.75% Z.
- THOSE SHOWN ON PLANS.
- ANALYSIS & INCLUDE EQUIPMENT LABELING ON ALL SWITCHBOARDS & DISTRIBUTION PANELS.
- PROVIDE SURGE PROTECTION & LIGHTING ARRESTORS ON EACH MAIN ELECTRICAL SERVICE.
- PROVIDE MEANS FOR ARC-ENERGY REDUCTION ON MAIN ELECTRIC SERVICE PER NEC 240.87.





208Y/120V, 3PH,

'P2'

208Y/120V, 1PH

100A, MLO

(4) #4/0 CU. & (1) #4 CU. EQ. GRD.

(4) #350 CU. & (1) #3 CU. EQ. GRD. IN EACH

-(2) 4" CONDUIT WITH:

(3) #3 CU. & (1) #8 CU. EQ. GRD.

208Y/120V, 3PH

'P2B'

208Y/120V, 3PH

400A, MLO

120/208V, 1PH,

100A, MLO

'PXXX'

120/208V, 1PH,

100A, MLO

208Y/120V, 3PH,

208Y/120V, 3PH,

400A, MLO

1)  $1\frac{1}{4}$ " CONDUIT WITH:

TO DOAS-1 & DOAS-2 ---

(2) 4" CONDUIT WITH:

4.1. TRANSFORMER LOCATED APPROXIMATELY WHERE SHOWN ON PLANS. ELECTRICAL CONTRACTOR TO RECALCULATE REQUIRED AIC-RATINGS IF FIELD CONDITIONS VARY FROM

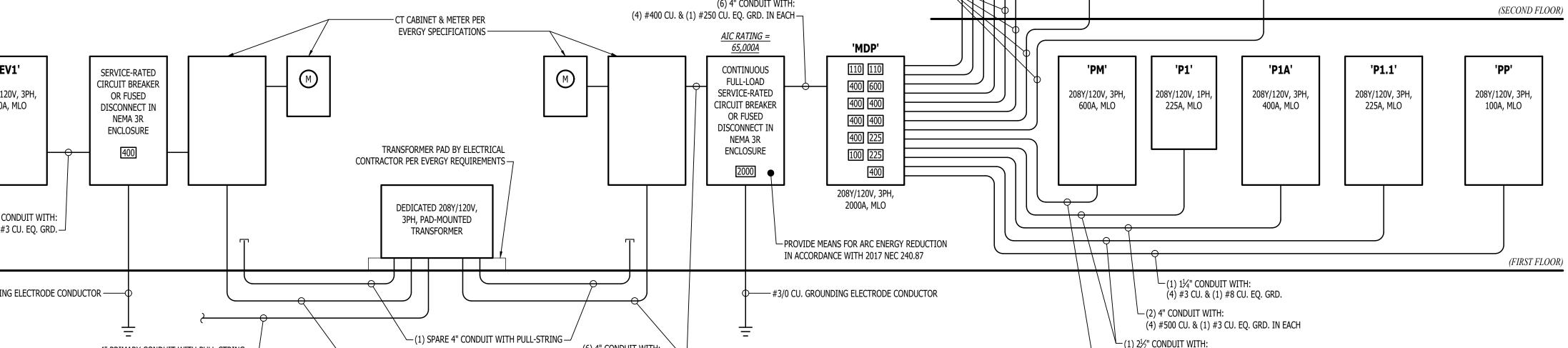
(6) 4" CONDUIT WITH:

(4) #400 CU. IN EACH———

PERMANENTLY LABEL SERVICE DISCONNECTS AS "1 OF 2" & "2 OF 2". ELECTRICAL CONTRACTOR TO PERFORM SHORT CIRCUIT COORDINATION STUDY INCLUDING ARC FAULT

7. ALL DEVICES IN MAIN DISTRIBUTION SHALL BE 100% CONTINUOUSLY RATED.

10. PROVIDE GFI PROTECTION ON MAIN ELECTRICAL SERVICE PER NEC 215.10.



**POWER RISER** 

James Watson, P.E. June 14, 2024 PE-2015017071 MO Certificate of Authority # 2018029680



2400 Bluff Creek Drive, Suite 101 Columbia, Missouri 65201 573.234.4492 www.j-squaredeng.com

J2 PROJECT No: J2 DESIGN: ACW ISSUE TITLE DATE 04 / 17 / 2024 CITY SUBMISSION CITY & BRAND RESPONSE | 06 / 14 / 2024

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(THIRD FLOOR)

Eo

AHJ APPROVAL STAMP

**ELECTRICAL DETAILS &** 

**SCHEDULES** 

SHEET NUMBER

	PANEL SPECIFICATIONS					TOTAL	CONNECTE	D LOAD		TOTAL DIVERS	IFIED LO	DAD
V	DLTAGE: 208Y/120V 3-PH	NEMA RATIN	<b>VG:</b> 1				"A" LOAD:		MPS	PHASE "A" LOAD:		
AMI	PACITY: 2000A MLO	PANEL MOUNTIN	NG: SURFACE			PHASE	"B" LOAD:	4754 A	MPS	PHASE "B" LOAD:	1861	AMPS
AIC-I	RATING: 65kA					PHASE	"C" LOAD:	4359 A	MPS	PHASE "C" LOAD:	1763.5	AMPS
CIRCUIT NUMBER	DESCRIF	TION	BREAKER SIZE	AMPS	PHASE	AMPS	BREAKER SIZE		DE	SCRIPTION		CIRCUIT NUMBER
1	DISTRIBUTION	PANEL 'P1A'	400-3	56 <del>9</del>	Α	133.5	225-3			PANEL 'P1'		2
3			-	571	В	159	-					4
5	-		-	475	С	163	-			-		6
7	DISTRIBUTION	PANEL 'P2A'	400-3	522	Α	174.5	225-3		P	ANEL 'P1.1'		- 8
9	<del>-</del>	·····	-	523	В	162	<u>~</u>		tti varantellere	*	***************************************	10
11	-		-	474	С	167.5	-			7		12
13	DISTRIBUTION		400-3	554	A	7.5	100-3		POC	OL PANEL 'PP'	888981111191119383	14
15	-			539	В	15	-			-		16
17			-	491	C	1	•		333346435333111111			18
19	DISTRIBUTION	PANEL 'P3A	400-3	522	Α	87	110-3			DOAS-1		20
21	-		-	523	В	87	<b>-</b>		011723/2017/2017/201	- 	X4010.W.03374760	22
23				474	C	87						24
25	DISTRIBUTION	Panel 'P38'	400-3	554	A	87	110-3			DOAS-2	ikeren en m	26
27	-		-	539	В	87	-			Min 2		28
29	- DECEDIDATION	DASIFI IDZAI	200.3	491	C	87	-			- ODEN		30
31 33	UJSTRIBUTJUN	PANEL 'P4A'	400-3	<b>522</b> 523	A B					OPEN OPEN	22:11111751111116 <u>8</u>	32 34
35	-		-	474	C C					OPEN		36
37	DISTRIBUTION		400-3	554	A					OPEN		38
39	DISTRIBUTION			539	B					OPEN		40
41				491	C					OPEN		42
43	PANEL '	PM!	600-3	497	A					OPEN		44
45	-	4.104		487	В					OPEN	WW.	46
47				483	C					OPEN		48
NOTES:		rankininano <u>ksiis</u> siinoossiinistiikin		,,,,, <b>,,</b> ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$	emn <i>selej(nis)sis/////</i> //illi			ver//mmmmes(f));	Lancing Markette

### A: PANEL SHALL BE EQUAL TO SQUARE D 'QED-2' SERIES SWITCHBOARD

- B: ELECTRICIAN SHALL VERIFY EXACT EQUIPMENT OVERCURRENT PROTECTION REQUIREMENTS PRIOR TO PURCHASE & INSTALLATION OF EQUIPMENT.
- C: AFTER COMPLETION OF WORK, ELECTRICAN SHALL PROVIDE A TYPE WRITTEN PANEL DIRECTORY IN NEW PANEL
- D: GUESTROOM ELECTRICAL LOADS AND DISTRIBUTION PANEL LOADS HAVE BEEN CALCULATED PER NEC ARTICLE 220

		PC	OL ELECT	RICA	L PAN	IEL 'P	P' SCH	EDULE	
	PANEL SI	PECIFICATIONS						TOTAL CONNECTED LO	DAD
VOLT	FAGE: 120/208V 3-PH	NEMA RA	ATENG: 3R					PHASE "A" LOAD: 7.5	AMPS
AMPA	CTTY: 100A MLO	PANEL MOU	NTING: SURFACE					PHASE "B" LOAD: 15	AMPS
AIC-RA	TING: 10kA					·		PHASE "C" LOAD: 1	AMPS
CIRCUIT NUMBER	DESCRIF	TION	BREAKER SIZE	AMPS	PHASE	AMPS	BREAKER SIZE	DESCRIPTION	CIRCUIT NUMBER
1	POOL DECK F	RECEPTS.	20-1	4.5	Α			OPEN	2
3	POOL DECK F	RECEPTS,	20-1	5	В			OPEN	- 4
5	POOL PH	IONE	20-1	1	С			OPEN	6
7	EXHAUST	FAN	20-1	3	Α			OPEN	- 8
9	LIGHT	NG	20-1	10	В			OPEN	10
11	SPAR	E	20-1		C			OPEN	12
13	SPAR	E	20-1		Α	··-···		OPEN	14
15	SPAR	E	20-1		В			OPEN	16
17	SPAR		20-1		С	************		OPEN	18
19	SPAR		20-1		A			OPEN	20
21	SPAR		20-1	Washing and Washington	В	3153/3116/03/2111162/	2552000550000000520005	OPEN	22
23	SPAR	!!! <u>```</u>	20-1		C			OPEN	24
25	SPAR	*	20-1	6002027020000000	A	97007XX23X110073	nomino (espaniales	OPEN	26
27	SPAR		***************************************		В			<u>OPEN</u>	28
29	SPAR	<u>E</u>	20-1		С			OPEN	30

- A: PANEL SHALL BE EQUAL TO SQUARE D MODEL "QO"
- B: ELECTRICIAN SHALL VERIFY EXACT EQUIPMENT OVERCURRENT PROTECTION REQUIREMENTS PRIOR TO PURCHASE & INSTALLATION OF EQUIPMENT.
- C: AFTER COMPLETION OF WORK, ELECTRICAN SHALL PROVIDE A TYPE WRITTEN PANEL DIRECTORY IN NEW PANEL.

	PANEL SE	PECIFICATIONS				TOTAL	CONNECTED	LOAD	TOTAL DIVERSIFIE	LOAD
V	OLTAGE: 208Y/120V 3-₽H	NEMA RA	TING: 1			PHASE	"A" LOAD:	569 AMPS	PHASE "A" LOAD:	252 AMPS
AM	PACITY: 400A MLO	PANEL MOUN	ting: recessed			PHASE	"B" LOAD:	571 AMPS	PHASE "B" LOAD:	253 AMPS
A IC-	<b>rating:</b> 35ka					PHASE	"C" LOAD:	475 AMPS	PHASE "C" LOAD:	205 AMPS
CIRCUIT NUMBER	DESCRIP	TION	BREAKER SIZE	AMPS	PHASE	AMPS	BREAKER SIZE		DESCRIPTION	CIRCUIT NUMBER
1	GUESTROOM :	113 PANEL	60-2	47	Α	47	60-2	GUE	STROOM 126 PANEL	2
3			-	<del>4</del> 8	В	48	-			4
5	GUESTROOM :		60-2	47	С	47	60-2		STROOM 127 PANEL	6
7	-		-	<del>4</del> 8	Α	48	_		-	8
9	GUESTROOM:	117 PANEL	60-2	47	В	47	60-2	GUE	STROOM128 PANEL	10
11	-			48	С	48			,	12
13	GUESTROOM :	119 PANEL	60-2	47	Α	47	60-2		STROOM 129 PANEL	14
15				48	В	48	*			16
17	GUESTROOM :		60-2	47	С	47	60-2		STROOM 130 PANEL	18
19	-		-	48	A	48	÷		-	20
21	GUESTROOM :		60-2	47	В	47	60-2	······································	STROOM 131 PANEL	22
23	***************************************			48	C_	48	-	~~~		24
25	GUESTROOM :		60-2	47	A	47	60-2		STROOM 132 PANEL	26
27				48	В	48	-			28
29	GUESTROOM :		60-2	47	C		VIII-VIII-I VIII-III-VIII-II	>>1100	OPEN	30
31				48	Α					32
33	GUESTROOM :		60-2	47	В				OPEN	34
35	-		-	48	C				OPEN	36
37	GUESTROOM :	125 PANEL	60-2	47	Α	***************************************			OPEN	38
39				48	В				OPEN	40
41	OPE	N			С				OPEN	42

### A: PANEL SHALL BE EQUAL TO SQUARE D "I-LINE" SERIES

- B: ELECTRICIAN SHALL VERIFY EXACT EQUIPMENT OVERCURRENT PROTECTION REQUIREMENTS PRIOR TO PURCHASE & INSTALLATION OF EQUIPMENT.
- C: AFTER COMPLETION OF WORK, ELECTRICAN SHALL PROVIDE A TYPE WRITTEN PANEL DIRECTORY IN NEW PANEL.
- D: GUESTROOM PANEL & DISTRIBUTION PANEL DIVERSIFIED LOADS HAVE BEEN CALCULATED IN ACCORDANCE WITH NEC 220.84.

PANEL SPECIFICATIONS								TOTAL CONNECTED LO	AD
VOLTAGE: 120/208V 3-PH NEMA RATING: 1							PHASE "A" LOAD: 497	AMPS	
AM	IPACITY: 600A MLO	PANEL MOUNTING:	RECESSED				••	PHASE "B" LOAD: 487	AMPS
AIC-	-RATING: 35kA					······································		PHASE "C" LOAD: 483	AMPS
CIRCUIT JUMBER	DESCRI	PTION	BREAKER SIZE	AMP5	PHASE	AMPS	BREAKER SIZE	DESCRIPTION	CIRCUIT
1	AHU	·1	60-2	41	A	41	60-2	AHU-5	2
3				41	В	41	-		4
5	AHU	·1	45-2	34	С	16	25-2	CU-5	6
7	7		<del>-</del>	34	Α	16		6	8
9	CU-	1	40-2	24	В	41	60-2	AHU-6	10
11	5		7	24	С	41	-	5 110	12
13	AHU	·2	60-2	41	Α	14	25-2	CU-6	14
15				41	В	14		2-	16
17	AHU	·2	45-2	34	С	35	45-2	AHU-7	18
19	7		•	34	Α	35	7		20
21	CU-	2	60-2	34	В	12	20-2	CU-7	22
23	+	<i>~~~</i>	-	34	C	12	-	-	24
25	AHU		60-2	51	A	41	60-2	AHU-8	26
27	i e		-	51	В	41	÷		28
29	CU-	3	25-2	14	С	14	25-2	CU-8	30
31	-			14	A	14	7	Ē.	32
33	AHU		45-2	35	В	35	45-2	AHU-9	34
35	***************************************			35	Ç	35	-	-	36
37	CU-		20-2	12	A	12	20-2	CU-9	38
39				12	В	12	(/////////////////////////////////////		40
41	PBX FCU-1	Darringa alternativa de la compania de la compania de la compania de la compania de la compania de la compania	25-2	14	С			OPEN	42
43	***************************************	E. Validation	20.1	14	A			OPEN OPEN	44
45 <b>47</b>	WATER H	~	20-1	10 <b>10</b>	В	011(65)(773)770971		OPEN OPEN	46
47 49	WATER H	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	20-1 20-1	10	Ç	7,007,000		OPEN OPEN	48 50
51	WATER H WATER H	***************************************	20-1	10	A B				50 52
53	WALL HE	*************************************	20-2	14	С			OPEN OPEN	54
55 55	WALL RE	***************************************	20-2	14	Ā		7.577.11117.57777.557.6	OPEN OPEN	56
57	WALL HE	**************************************	20-2	14	В			OPEN OPEN	58
59	WALLIE		20-2	14	Ċ			OPEN .	60
61	DH-	***************************************	125-3	117	A			OPEN	62
63		-	н.	117	В			OPEN	64
65	-	A17978	+ Eksternenwisserenwissere	117	C	100000000000000000000000000000000000000	11.0	OPEN	66
67	DH-	2	15-3	10	A			OPEN	68
69	-			10	В			OPEN	70
71	7		-	10	C			OPEN	72
73	OPE				Α			OPEN	74
75	OPE				В			OPEN	76
77	OPE				С			OPEN	78
79	OPE	N			Α			OPEN	80
81	OPE				В	1		OPEN	82
83	OPE	N			c			OPEN	84

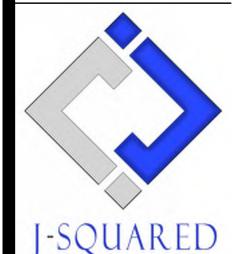
- A: PANEL SHALL BE EQUAL TO SQUARE D MODEL "NQ" B: ELECTRICIAN SHALL VERIFY EXACT EQUIPMENT OVERCURRENT PROTECTION REQUIREMENTS PRIOR TO PURCHASE & INSTALLATION OF EQUIPMENT.
- C: AFTER COMPLETION OF WORK, ELECTRICAN SHALL PROVIDE A TYPE WRITTEN PANEL DIRECTORY IN NEW PANEL.

D: PHASE LOAD CALCULATIONS INCLUDE DIVERSITY OF NON-COINCIDENTAL HVAC EQUIPMENT LOADS (HEATING VERSUS COOLING)

	Pa & 2.504	PRECEITE A TRANS			Ι''''			<b>TAW : AA :</b>	* -
		SPECIFICATIONS	4					TOTAL CONNECTED LO	
	LTAGE: 120/208V 3-PH	NEMA RATING:						PHASE "A" LOAD: 133.5	
	ACITY: 225A MLO	PANEL MOUNTING:	RECESSED					PHASE "B" LOAD: 159	
	ATING: 10kA		I	<u></u>				PHASE "C" LOAD: 163	
CIRCUIT NUMBER	DESCR		BREAKER SIZE	AMPS	PHASE	AMPS	BREAKER SIZE	DESCRIPTION	CIRCUI NUMBER
1	MONUME	NT SIGN	20-1	8	Α	5	20-2	POLE LIGHTS	2
3	MONUME	NT SIGN	20-1	- 8	В	5	-		4
5	ROOFTOP	RECEPTS.	20-1	3	С	5	20-1	ILLUMINATED BOLLARDS	6
7	EXTERIOR	RECEPTS.	20-1	6	Α	8	20-1	GUEST LAUNDRY WASHING MACHINE	8
9	EXTERIOR	RECEPTS.	20-1	6	В	8	20-1	GUEST LAUNDRY WASHING MACHINE	10
11	FITNESS I	RECEPTS.	20-1	- 6	С	20	30-2	GUEST LAUNDRY DRYER	12
13	FITNESS I	RECEPTS.	20-1	4.5	Α	20	-	ь.	14
15	FITNESS E	QUIPMENT	20-1	-5	В	20	30-2	GUEST LAUNDRY DRYER	16
17	FITNESS E	QUIPMENT	20-1	5	С	20	-		18
19	FITNESS E	QUIPMENT	20-1	5	Α	1.5	20-1	ELEVATOR PIT RECEPT.	20
21	FITNESS E	QUIPMENT	20-1	. 5	В	1.5	20-21	ELEVATOR PIT RECEPT.	22
23	FITNESS E	QUIPMENT	20-1	5	С	5	20-1	ELEVATOR PIT SUMP PUMP	24
25	HYDRATIO	N STATION	20-1	3	Α	1	20-1	ELEVATOR COMMUNICATION SYSTEM	26
27	LAUNDRY	RECEPTS.	20-1	3	В	3	20-1	ELEVATOR SMOKE CURTAIN	28
29	LAUNDRY	RECEPTS.	20-1	3	С	3	20-1	ELEVATOR SMOKE CURTAIN	30
31	TV LOUNGE	RECEPTS.	20-1	10.5	Α	5	20-1	EXTERIOR STRING LIGHTS	32
33	EXTERIOR STOR	RAGE RECEPTS.	20-1	4.5	В	5	20-1	EXTERIOR STRING LIGHTS	34
35	RESTROOM	RECEPTS.	20-1	4,5	C	2	20-1	GAS SOLENOID	36
37	ELEVATOR AREA / V		20-1	3	Α		20-1	SPARE	38
39	LAUNDRY		20-1	4.5	В	7	20-1	BREAKFAST WARMING KETTLE	40
41	MANAGER OFF	100000144410001100110011100110011111111	20-1	4.5	С	2	20-1	BREAKFAST YOGURT DISPENSER	42
43	MANAGER C	FFICE MFD	20-1	5	Α	2	20-1	BREAKFAST U/C REFRIGERATOR	44
45	MANAGER OFFI	\$18005.0001111111111111111111111111111111	20-1	3	В	3	20-1	WELCOME DESK RECEPTS.	46
47	LAUNDRY ROO	210200 Water Account WWW.altranoon.	20-1	1.5	С	3	20-1	WELCOME DESK RECEPTS.	48
49	LAUNDRY ROC		20-1	1.5	A	3	20-1	WELCOME DESK RECEPTS.	50
51	LAUNDRY ROC	ersterre dissentant vertras del Misselfe (et sessión de sessión)	20-1	1.5	В	3	20-1	MARKET FLOOR RECEPTS.	52
53	LAUNDRY ROC		20-1	6	C	5	20-1	MARKET COUNTERTOP EQUIPMENT	54
55	LAUNDRY ROC		20-1	6	A	5	20-1	MARKET COUNTERTOP EQUIPMENT	56
57	LAUNDRY ROC		20-1	4.5	В	8	20-1	MARKET VENDING MACHINE	58
59	WORK STATIO	***************************************	20-1	4.5	C	8	20-1	MARKET VENDING MACHINE	60
61	WORK STATIO	***************************************	20-1	3	Ä	3	20-1	LOBBY COLUMN QUAD	62
63	WORK STATI		20-1	1,5	В	3	20-1	LOBBY COLUMN QUAD	64
65	WORK STATI		20-1	3	C	6	20-1	LOBBY RECEPTS.	66
67	WORK STATI		20-1	1,5	A	5	20-1	DOOR OPERATOR	68
69	BREAKFAST WA	1	20-1	5	В	5	20-1	DOOR OPERATOR	70
71	BREAKFAST T		20-1	5	C	1	20-1	FIRE ALARM CONTROL PANEL	70
73	BREAKFAST JU		20-1	6	A	5	20-1	BEACON LIGHTING	74
75	BREAKFAST BREAKFAST		20-1	14	В	5	20-1	KEEP LIGHTING	7 <del>4</del> 76
77	BREAKFAST D			15	C	<b>9</b> //////	40-1	SPARE	78
**************************************		mutananazaanazaanamazasananazaan	20-1	and the second	200000000000000000000000000000000000000				10000000000000000000000000000000000000
79	BREAKFAST WA		20-1	7	A	(0)24/25(((5))3/22		SPARE SDARE	80 92
81	BREAKFAST W		30-1	17	В			SPARE CRAPE	82 84
83	BREAKFAST W	ALLE MAKEK	30-1	17	C			SPARE	84

- A: PANEL SHALL BE EQUAL TO SQUARE D MODEL "QO"
- B: ELECTRICIAN SHALL VERIFY EXACT EQUIPMENT OVERCURRENT PROTECTION REQUIREMENTS PRIOR TO PURCHASE & INSTALLATION OF EQUIPMENT.
- C: AFTER COMPLETION OF WORK, ELECTRICAN SHALL PROVIDE A TYPE WRITTEN PANEL DIRECTORY IN NEW PANEL.

James Watson, P.E. April 17, 2024 PE-2015017071 MO Certificate of Authority # 2018029680



2400 Bluff Creek Drive, Suite 101 Columbia, Missouri 65201

573.234.4492 www.j-squaredeng.com

J2 PROJECT No:	J21005
J2 DESIGN:	ACW
ISSUE TITLE	DATE
CITY SUBMISSION	04 / 17 / 2024

# Suites

AHJ APPROVAL STAMP

**ELECTRICAL SCHEDULES** 

:									
			CTRIC	AL PA	NEL'	P1.1'	SCHE		
	PA NEL S	PECIFICATIONS						TOTAL CONNECTED LO	AD
	OLTAGE: 120/208V 3-PH	NEMA RATING:	1					PHASE "A" LOAD: 182.5	AMPS
AM	PACITY: 225A MLO	PANEL MOUNTING:	RECESSED					PHASE "B" LOAD: 170	AMPS
A IC-	RATING: 35kA							PHASE "C" LOAD: 170.5	AMPS
CIRCUIT NUMBER	DESCRI	PTION	BREAKER SIZE	AMPS	PHASE	AMPS	BREAKER SIZE	DESCRIPTION	CIRCUIT NUMBER
1	LOBBY SEAT	ING QUAD	20-1	3	Α	5	15-3	LAUNDRY WASHER	2
3	LOBBY SEAT	ING QUAD	20-1	3	В	5	-	-	4
5	LOBBY FLOOR	RECEPTS.	20-1	6	С	5	-		6
7	LOBBY FLOOR	RECEPTS.	20-1	6	Α	5	15-3	LAUNDRY WASHER	8
9	HYDRATION AR	EA RECEPTS.	20-1	3	В	5	*	+	10
11	HYDRATION AR	EA RECEPTS.	20-1	3	C	5		e de la companya de la companya de la companya de la companya de la companya de la companya de la companya de	12
13	HYDRATION AR	EA RECEPTS.	20-1	3	Α	5	15-3	LAUNDRY DRYER	14
15	HYDRATION AR		20-1	3	В	5	7	7	16
17	HYDRATION AR		20-1	3	С	5	-		18
19	HYDRATION AR		20-1	3	Α	5	15-3	LAUNDRY DRYER	20
21	RESTROOM		20-1	3	В	5	-	-	22
23	RESTROOM	***************************************	20-1	3	С	5	7		24
25	EMPLOYEE BREAKE		20-1	7.5	A	28	40-2	FOOD PREP OVEN	26
27	EMPLOYEE BRE		20-1	8	В	28		-	28
29	EMPLOYEE BREA		20-1	8	С	28	40-2	FOOD PREP OVEN	30
31	EMPLOYEE BRE		20-1	8	A	28	10 2	Tool Hall over	32
33	FOOD PREP		20-1	5	В	23	30-2	FOOD PREP COFFEE MAKER	34
35	FOOD PR		20-1	12	C	23	- 30 Z	5	36
37	FOOD PREP		20-1	3	A	17	30-2	FOOD PREP DISPOSAL	38
39		RECEPTS.	20-1	3	В	17		7	40
41	CORRIDOR I	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	20-1	4.5	C	29	35-3	FOOD PREP DISHWASHER	42
43	PBX REC	·····	20-1	3	A	29	9,5 5	COO ACT DISTANCES	44
45	PBX REC		20-1	3	В	29		<u>-</u>	46
47	PBX REC		20-1	3	C	8	20-1	WATER SOFTENER	48
49	PBX REC		20-1	3	A	3	20-2	208V RECEPT. (MAINTENANCE)	50
51	PBX REC		20-1	3	Б	3	- 20 2	2007 RECEIT (FABRICA)	52
53	PBX REC		201	3	C	5	20-1	INTERIOR LIGHTING	54
55	PBX REC	nodelmodennohilokomolenikumomomomomomelikumi	20-1	3	A	10	20-1	INTERIOR LIGHTING	56
57	PBX REC		20-1	3	В	8	20-1	INTERIOR LIGHTING	58
59	PBX REC		20-1	3	C	10	20-1	INTERIOR LIGHTING	60
61	MECH ROOM		20-1	3	A	8	20-1	STAIR LIGHTING	62
63	ENGINEER F	V-0-0-0-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-	20-1	6	В	2	20-1	FIRE/SMOKE DAMPERS	64
65	ENGINEER		20-1	3	C	2	20-1	FIRE/SMOKE DAMPERS	66
67	ENGINEER		20-1	3	caledanieniekokoanik/ez	ARTHUR 1/172-2/1719	20-1	WELCOME DESK RECEPTS.	68
69	VENDING M		20-1		A B	3	20-1 20-1	WELCOME DESK RECEPTS.	70
***************************************	**************************************	***************************************		9	C C	3	20-1		***************************************
<b>71</b> 73	SALES RE EXTERIOR		20-1	3	930000000000000000000000000000000000000	ئ 5	20-1 20-1	WELCOME DESK RECEPTS.  MAG-HOLDS	72 74
	***************************************		20-1	3	A D		***************************************		***************************************
<b>75</b> 77	EXTERIOR		20-1	***************************************	В	5	20-1	MAG-HOLDS	76 78
TO 10 TO 10 TO 10 TO 10 TO 10 TO 10 TO 10 TO 10 TO 10 TO 10 TO 10 TO 10 TO 10 TO 10 TO 10 TO 10 TO 10 TO 10 TO	EXTERIOR I		20-1	4 **	C			OPEN OPEN	7/72552000000000000000000000000000000000
79	EXTERIOR PAT		20-1	5	A			OPEN OPEN	80
81 82	LIGHTING CONT	######################################	20-1	3	В			OPEN OPEN	82 84
83 NOTES:	TRASH ENCLOSU	UKE 3 I UKAGE	20-1	3	C			<u>OPEN</u>	84

## A: PANEL SHALL BE EQUAL TO SQUARE D MODEL "QO"

- B: ELECTRICIAN SHALL VERIFY EXACT EQUIPMENT OVERCURRENT PROTECTION REQUIREMENTS PRIOR TO PURCHASE & INSTALLATION OF EQUIPMENT.
- C: AFTER COMPLETION OF WORK, ELECTRICAN SHALL PROVIDE A TYPE WRITTEN PANEL DIRECTORY IN NEW PANEL.

<b></b>		DIST	RIBUT	ION	PANE	L 'P2/	A' SCHI	EDULI				
	PA NEL SI	PECIFICATIONS				TOTAL	CONNECTE	D LOAD		TOTAL DIVERSI	FIED LO	DAD
V	OLTAGE: 208Y/120V 3-PH	NEMA RATING:	1			PHASE	"A" LOAD:	522	AMPS	PHASE "A" LOAD:	203	AMPS
AM	PACITY: 400A MLO	PANEL MOUNTING:	RECESSED			PHASE	"B" LOAD:	523	AMPS	PHASE "B" LOAD:	198	AMPS
AIC-	<b>RATING:</b> 22kA					PHASE	"C" LOAD:	474	AMPS	PHASE "C" LOAD:	134	AMPS
CIRCUIT NUMBER	DESCRIP	PTION	BREAKER SIZE	AMPS	PHASE	AMPS	BREAKER SIZE		í	DESCRIPTION		CIRCUIT NUMBER
1	GUESTROOM :	201 PANEL	60-2	47	Α	47	60-2		GUES.	TROOM 211 PANEL		2
3	•			48	В	48	•					4
5	GUESTROOM 2		60-2	47	С	47	60-2		GUES.	TROOM 212 PANEL		6
7	-		-	48	Α	48	-			-		8
9	GUESTROOM :	203 PANEL	60-2	47	В	47	60-2	~~~	GUES	TROOM 213 PANEL		10
11	-		•	48	С	48	1			-		12
13	GUESTROOM 2	204 PANEL	60-2	47	Α	47	60-2			TROOM 214 PANEL		14
15	7		-	48	В	48	-			-		16
17	GUESTROOM :		60-2	47	С	47	60-2	***************************************	<del>,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,</del>	TROOM 215 PANEL	***************************************	18
19	-	<del></del>	-	48	Α	48	•		····	-		20
21	GUESTROOM 2		60-2	47	В	47	60-2	***************************************		TROOM 216 PANEL		22
23	-		-	48	С	48	-			7		24
25	GUESTROOM :	207 PANEL	60-2	47	Α	69	100-2	T-11112-1-2-1-2-1-2-1-2-1-2-1-2-1-2-1-2-		PANEL 'P2'		26
27			-	48	В	64	•			-		28
29	GUESTROOM :	208 PANEL	60-2	47	С					OPEN		30
31	7		-	48	Α					OPEN		32
33	GUESTROOM :		60-2	47	В		***************************************	***************************************		OPEN		34
35	•			48	C					OPEN		36
37	GUESTROOM :	210 PANEL	60-2	47	Α				,··,	OPEN		38
39	-		-	48	В					OPEN		40
41	OPE	N			С					OPEN		42

## NOTES:

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- B: ELECTRICIAN SHALL VERIFY EXACT EQUIPMENT OVERCURRENT PROTECTION REQUIREMENTS PRIOR TO PURCHASE & INSTALLATION OF EQUIPMENT.
- C: AFTER COMPLETION OF WORK, ELECTRICAN SHALL PROVIDE A TYPE WRITTEN PANEL DIRECTORY IN NEW PANEL.
- D: GUESTROOM PANEL & DISTRIBUTION PANEL DIVERSIFIED LOADS HAVE BEEN CALCULATED IN ACCORDANCE WITH NEC 220.84.

	PA NEL S	PECIFICATIONS						TOTAL CONNECTED L	OAD
VOLTA	GE: 120/208V 1-PH	NEMA RATI	ING: 1					PHASE "A" LOAD: 6	9 AMPS
A MPA C	TY: 100A MLO	PANEL MOUNT	NG: RECESSED	······································				PHA SE "B" LOAD: 6	4 AMPS
A IC- RATI	<b>NG:</b> 10kA								
CIRCUIT NUMBER	DESCRI	PTION	BREAKER SIZE	AMPS	PHASE	AMPS	BREAKER SIZE	DESCRIPTION	CIRCUIT NUMBER
1	CORRIDOR	RECEPTS.	20-1	9	Α	35	45-2	AHU-10	2
3	ICE MAC	CHINE	20-1	8	В	35	,		4
5	HOUSEKEEPIN	G RECEPTS.	20-1	6	Α	12	20-2	CU-10	6
7	IT. Q	UAD	20-1	3	В	12	7	-	8
9	I.T. Q	UAD	20-1	3	Α		20-1	SPARE	10
11	MAG H	DLDS	20-1	3	В		20-1	SPARE	12
13	CORRIDOR	SCONCES	20-1	2	Α		20-1	SPARE	14
15	CORRIDOR DO	DWNLIGHTS	20-1	3	В			OPEN	16
17	Lobby / Laund	RY LIGHTING	20-1	2	Α			OPEN	18
19	FIRE/SMOKE	DAMPERS	20-1		В			OPEN	20
21	FIRE/SMOKE	DAMPERS	20-1		Α			OPEN	22
23	SPAI	RE	20-1		В			OPEN	24

	PA NEL SI	ECIFICATIONS			TOTAL CONNECTED LOAD TOTAL DIVERSIFIED							LOAD	
V	OLTAGE: 208Y/120V 3-PH	NEMA RATING	: 1			PHASE	"A" LOAD:	554	AMPS	PHASE "A" LOAD:	144	AMPS	
AM	IPACITY: 400A MŁO	PANEL MOUNTING	RECESSED			PHASE	"B" LOAD:	539	AMPS	PHASE "B" LOAD:	144	AMPS	
AIC-	- <b>RATING:</b> 22kA			•		PHASE	"C" LOAD:	491	AMPS	PHASE "C" LOAD:	144	AMPS	
CIRCUIT NUMBER	DESCRIP	TION	BREAKER SIZE	AMPS	PHASE	AMPS	BREAKER SIZE		ſ	DESCRIPTION		CIRCUIT NUMBER	
1	GUESTROOM :	217 PANEL	60-2	47	Α	47	60-2		GUES <sup>-</sup>	TROOM 227 PANEL		2	
3	-		-	48	В	<del>4</del> 8	-			-		4	
5	GUESTROOM 2	218 PANEL	60-2	47	С	47	60-2		GUES	TROOM 228 PANEL		6	
7	=		-	48	Α	48	-			7.00		8	
9	GUESTROOM :	219 PANEL	60-2	47	В	47	60-2		GUES <sup>*</sup>	TROOM 229 PANEL		10	
11	-		-	48	C	48	-			•		12	
13	GUESTROOM :	220 PANEL	100-2	63	Α	47	60-2		GUES"	TROOM 230 PANEL		14	
15	-		-	64	В	48	-					16	
17	GUESTROOM :		60-2	47	С	63	100-2		GUES"	TROOM 231 PANEL		18	
19				48	Α	64	•			Ī		20	
21	GUESTROOM :	222 PANEL	60-2	47	В	47	60-2		GUES"	TROOM 232 PANEL		22	
23	•		•	48	C	48	•			-		24	
25	GUESTROOM :	223 PANEL	60-2	47	Α					OPEN		26	
27	•		•	48	В					OPEN		28	
29	GUESTROOM :	224 PANEL	60-2	47	С					OPEN	,	30	
31	-			48	A					OPEN		32	
33	GUESTROOM :	225 PANEL	60-2	47	В					OPEN		34	
35	-			48	С					OPEN		36	
37	GUESTROOM 2		60-2	47	Α					OPEN		38	
39	-		-	48	В					OPEN		40	
41	OPE	V			С					OPEN		42	

## A: PANEL SHALL BE EQUAL TO SQUARE D''I-LINE" SERIES

- B: ELECTRICIAN SHALL VERIFY EXACT EQUIPMENT OVERCURRENT PROTECTION REQUIREMENTS PRIOR TO PURCHASE & INSTALLATION OF EQUIPMENT.
- C: AFTER COMPLETION OF WORK, ELECTRICAN SHALL PROVIDE A TYPE WRITTEN PANEL DIRECTORY IN NEW PANEL.
- D: GUESTROOM PANEL & DISTRIBUTION PANEL DIVERSIFIED LOADS HAVE BEEN CALCULATED IN ACCORDANCE WITH NEC 220.84.

	PA NEL S	PECIFICATIONS						TOTAL CONNECTED	.OAD
VO	DLTAGE: 120/208V 1-PH	NEMA RATIN	G: 1					PHASE "A" LOAD:	71 AMPS
AMP	ACITY: 100A MLO	PANEL MOUNTING	3: RECESSED					PHASE "B" LOAD:	66 AMPS
A IC-F	RATING: 10kA								
CIRCUIT NUMBER	DESCRI	PTION	BREAKER SIZE	AMPS	PHASE	AMPS	BREAKER SIZE	DESCRIPTION	CIRCUIT NUMBER
1	CORRIDOR	RECEPTS.	20-1	9	Α	35	45-2	AHU-11	2
3	ICE MAG	HINE	20-1	8	В	35	-	7	4
5	HOUSEKEEPIN	G RECEPTS.	20-1	6	Α	12	20-2	CU-11	6
7	I.T. Q	JAD	20-1	3	В	12	-	7	- 8
9	I.T. Q	JAD	20-1	3	Α		20-1	SPARE	10
11	MAG H	DLDS	20-1	- 3	В		20-1	SPARE	12
13	CORRIDOR	SCONCES	20-1	2	Α		20-1	SPARE	14
15	CORRIDOR DO	)WNLIGHTS	20-1	3	В			OPEN	16
17	LOBBY / LAUND	RY LIGHTING	20-1	2	Α			OPEN	18
19	FIRE/SMOKE	DAMPERS	20-1	2	В			OPEN	20
21	FIRE/SMOKE	DAMPERS	20-1	2	Α			OPEN	22
23	SPAI	Œ	20-1		В			OPEN	24

## A: PANEL SHALL BE EQUAL TO SQUARE D MODEL "QO"

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JAMES P.
WATSON

NUMBER
PE-2015017071

James Watson, P.E. June 14, 2024 PE-2015017071 MO Certificate of Authority # 2018029680



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	J2 PROJECT No:	J2100
	J2 DESIGN:	AC\
	ISSUE TITLE	DAT
	CITY SUBMISSION	04 / 17 / 202
7	CITY & BRAND RESPONSE	06 / 14 / 202

Suites By Hilt

AHJ APPROVAL STAMP

Home

SHEET TITLE

ELECTRICAL SCHEDULES

SHEET NUMBE

E602

		D:	ISTRIBUT	ION	PANE	L 'P4I	B' SCHE	DULE				
	PANEL SI	PECIFICATIONS				TOTAL	CONNECTE	LOAD	TOTAL DIVERSI	TED LO	DAD	
VOL:	TAGE: 208Y/120V 3-PH	NEMA RA	TING: 1			PHASE	"A" LOAD:	554 AMPS	PHASE "A" LOAD:	144	AMPS	
AMPA	CITY: 400A MLO	PANEL MOUN	TING: RECESSED			PHASE	"B" LOAD:	539 AMPS	PHASE "B" LOAD:	144	AMPS	
AIC-RA	TING: 22kA					PHASE	"C" LOAD:	491 AMPS	PHASE "C" LOAD:	144	AMPS	
CIRCUIT NUMBER	DESCRIF	PTION	BREAKER SIZE	AMPS	PHASE	AMPS	BREAKER SIZE	C	ESCRIPTION		CIRCUIT NUMBER	
1	GUESTROOM -		60-2	47	Α	47	60-2	GUEST	TROOM 427 PANEL		2	
3	-		-	48	В	48	-		-		4	
5	GUESTROOM	418 PANEL	60-2	47	С	47	60-2	GUES1	TROOM 428 PANEL		6	
7	Silver			48	Α	48	-				8	
9	GUESTROOM ·	419 PANEL	60-2	47	₿	47	60-2	GUEST	TROOM 429 PANEL		10	
11	-			48	С	48	5		_		12	
13	GUESTROOM :	420 PANEL	100-2	63	Α	47	60-2	GUEST	GUESTROOM 430 PANEL			
15 -			•	6 <del>4</del>	В	48					16	
17	GUESTROOM ·	421 PANEL	60-2	47	С	63	100-2	GUES7	TROOM 431 PANEL		18	
19	-		-	48	Α	64	-		•		20	
21	GUESTROOM	422 PANEL	60-2	47	B	47	60-2		TROOM 432 PANEL		22	
23	-		-	48	C	48	-		-		24	
25	GUESTROOM	423 PANEL	60-2	47	Α				OPEN		26	
27	•	<u> </u>		48	В				OPEN		28	
29	GUESTROOM	424 PANEL	60-2	47	С				OPEN		30	
31			-	48	A				OPEN		32	
33	GUESTROOM	425 PANEL	60-2	47	В				OPEN		34	
35	-		÷	48	C				OPEN		36	
37	GUESTROOM	426 PANEL	60-2	47	Α				OPEN		38	
39	-		-	48	В				OPEN		40	
41	OPE	N			С				OPEN		42	

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	PANEL S	SPECIFICATIONS						TOTAL CONNECTED LO	AD
V	OLTA GE: 120/208V 1-PH	NEMA RATING	≩ 1					PHASE "A" LOAD: 47	AMPS
AM	PACITY: 100A MLO	PANEL MOUNTING	RECESSED					PHA SE "B" LOAD: 48	AMPS
AIC-	RATING: 10kA								
CIRCUIT NUMBER	DESCRI	PTION	BREAKER SIZE	AMPS	PHASE	AMPS	BREAKER SIZE	DESCRIPTION	CIRCUIT NUMBER
1	RECEPT.	ACLES	15-1	12	Α	16	20-2	PTAC	2
3	RECEPT	ACLES	15-1	9	В	16	-		4
5	BATHROOM	I RECEPT.	20-1	1.5	Α	8	20-1	DISHWASHER	6
7	KITCHENETTE COL	INTER RECEPTS.	20-1	3	В	8	20-1	DISPOSAL	8
9	KITCHENETTE COL	INTER RECEPTS.	20-1	1.5	Α	8	20-1	MICROWAVE	10
11	LIGH	TING	15-1	4	В	8	20-1	REFRIGERATOR	12
13	SPA	RE	15-1		Α			OPEN	14
15	SPA	RE	20-1		В			OPEN	16
17	OP	EN			Α		20-2	PTAC (IF APPLICABLE)	18
19	OPI	-NJ			В				20

- A: PANEL SHALL BE EQUAL TO SQUARE D MODEL "HOMELINE"
- B: ELECTRICIAN SHALL VERIFY EXACT EQUIPMENT OVERCURRENT PROTECTION REQUIREMENTS PRIOR TO PURCHASE & INSTALLATION OF EQUIPMENT.
- C: AFTER COMPLETION OF WORK, ELECTRICAN SHALL PROVIDE A TYPE WRITTEN PANEL DIRECTORY IN NEW PANEL.
- D: CIRCUIT BREAKERS SHOWN IN **BOLD ITALIC FONT** SHALL BE AFCI-PROTECTED.

		DIS	STRIBUT	ION	PANE	L 'P3I	B' SCHE	DULI				
	PANEL SE	PECIFICATIONS				TOTAL	CONNECTE	D LOAD		TOTAL DIVERSI	TED LO	)AD
VOF.	TAGE: 208Y/120V 3-PH	NEMA RATI	NG: 1			PHASE	"A" LOAD:	554	AMPS	PHASE "A" LOAD:	144	AMPS
AMPA	CITY: 400A MLO	PANEL MOUNTI	NG: RECESSED			PHASE	"B" LOAD:	539	AMPS	PHASE "B" LOAD:	144	AMPS
AIC-RA	<b>TING:</b> 22kA					PHASE	"C" LOAD:	491	AMP\$	PHASE "C" LOAD:	144	AMPS
CIRCUIT NUMBER	DESCRIP	TION	BREAKER SIZE	AMPS	PHASE	AMPS	BREAKER SIZE		·	DESCRIPTION		CIRCUIT NUMBER
1	GUESTROOM :	B17 PANEL	60-2	47	A	47	60-2		GUES'	TROOM 327 PANEL		2
3	-		-	<del>4</del> 8	В	48	•			7		4
5	GUESTROOM :	318 PANEL	60-2	47	С	47	60-2		GUES <sup>*</sup>	TROOM 328 PANEL		6
7	-		-	<del>4</del> 8	Α	48	-			-		8
9	GUESTROOM 3	319 PANEL	60-2	47	В	47	60-2			TROOM 329 PANEL		10
11	<u></u>		-	48	C	48	-					12
13	GUESTROOM 3	320 PANEL	100-2	63	Α	47	60-2			TROOM 330 PANEL		14
15 -				64	В	48	÷			7		16
17	GUESTROOM 3	321 PANEL	60-2	47	С	63	100-2			TROOM 331 PANEL		18
19				48	Α	64						20
21	GUESTROOM :	322 PANEL	60-2	47	В	47	60-2	·····	GUES <sup>*</sup>	TROOM 332 PANEL		22
23	-		Ē	48	С	48	-			-		24
25	GUESTROOM :	323 Panel	60-2	47	Α		:			OPEN		26
27	7			48	В					OPEN		28
29	GUESTROOM 3	324 PANEL	60-2	47	С					OPEN		30
31				48	Α					OPEN		32
33	GUESTROOM :		60-2	47	В			···		OPEN	121.11162246224	34
35			5.00	48	С							36
37	GUESTROOM :	326 PANEL	60-2	47	Α				***************************************	OPEN	Sersony diseases	38
39	-			48	В					OPEN		40
41	OPE	<u> </u>			С					OPEN		42

- A: PANEL SHALL BE EQUAL TO SQUARE D "I-LINE" SERIES
- B: ELECTRICIAN SHALL VERIFY EXACT EQUIPMENT OVERCURRENT PROTECTION REQUIREMENTS PRIOR TO PURCHASE & INSTALLATION OF EQUIPMENT.
- C: AFTER COMPLETION OF WORK, ELECTRICAN SHALL PROVIDE A TYPE WRITTEN PANEL DIRECTORY IN NEW PANEL.
- D: GUESTROOM PANEL & DISTRIBUTION PANEL DIVERSIFIED LOADS HAVE BEEN CALCULATED IN ACCORDANCE WITH NEC 220.84.

	PANEL S	PECIFICA TIONS				TOTAL	. CONNECTED	LOAD		TOTAL DIVERSI	FIED LO	AD
V	OLTAGE: 208Y/120V 3-PH	NEMA RATIN	G: 1			PHASE	"A" LOAD:	522	AMPS	PHASE "A" LOAD:	205	AMPS
AM	PACITY: 400A MLO	PANEL MOUNTIN	G: RECESSED			PHASE	"B" LOAD:	523	AMPS	PHASE "B" LOAD:	200	AMPS
A IC-I	<b>RATING:</b> 22kA					PHASE	"C" LOAD:	474	AMPS	PHASE "C" LOAD:	134	AMPS
CIRCUIT NUMBER	DESCRIP	NOTTO	BREAKER SIZE	AMPS	PHASE	AMPS	BREAKER SIZE		D	ESCRIPTION		CIRCUIT NUMBER
1	GUESTROOM :	301 PANEL	60-2	47	А	47	60-2	***************************************	GUES1	ROOM 311 PANEL		2
3			-	48	В	48	-			Tananan		4
5	GUESTROOM :		60-2	47	С	47	60-2	•	GUEST	ROOM 312 PANEL		6
7	-		-	48	Α	48				-		8
9	GUESTROOM :	303 PANEL	60-2	47	В	47	60-2		GUEST	FROOM 313 PANEL		10
11	<u> </u>		-	48	C	48	•					12
13	GUESTROOM :		60-2	47	A	47	60-2			ROOM 314 PANEL		14
15	2		-	48	В	48	•		GUESTROOM 315 PANEL			
17	GUESTROOM :	305 PANEL	60-2	47	С	47	60-2		GUES	ROOM 315 PANEL		18
19	-		-	48	Α	48	-			-		20
21	GUESTROOM :	306 PANEL	60-2	47	В	47	60-2		GUEST	ROOM 316 PANEL		22
23	-		-	48	C	48	-			-		24
25	GUESTROOM :		60-2	47	Α	71	100-2			PANEL 'P3'		26
27	-			48	В	66	•			•		28
29	GUESTROOM :		60-2	47	С					OPEN		30
31	•		•	48	A					OPEN		32
33	GUESTROOM :		60-2	47	В				·····	OPEN		34
35	-	·	•	48	С					OPEN		36
37	GUESTROOM :	310 PANEL	60-2	47	Α				0.000.000.000.000.000.000	OPEN	***************************************	38
39	•			48	В					OPEN		40
41	OPE	N			С					OPEN		42

			PAN	IEL 'E	V1' S	CHE	ULE		
	PANEL S	SPECIFICATIONS						TOTAL CONNECTED LO	AD
V	OLTA GE: 120/208V 3-PH	NEMA RATING:	1					PHASE "A" LOAD: 80	AMPS
AM	PACITY: 400A MLO	PANEL MOUNTING:	SURFACE					PHASE "B" LOAD: 40	AMPS
AIC-	rating: 22ka							PHASE "C" LOAD: 40	AMPS
CIRCUIT NUMBER	DESCR	PTION	BREAKER SIZE	AMPS	PHASE	AMPS	BREAKER SIZE	DESCRIPTION	CIRCUIT NUMBER
1	EXTERIOR EV-CH/	ARGING STATION	50-2	40	Α		50-2	SPARE	2
3	_			40	В		-	3	4
5	EXTERIOR EV-CH/		50-2	40	С		50-2	SPARE	6
7			_	40	Α		F.	Ð	8
9	OP	EN			В			OPEN	10
11	OP	EN			c			OPEN .	12
13	OP	EN			Α			OPEN	14
15	OP	EN			В			OPEN	16

B: ELECTRICIAN SHALL VERIFY EXACT EQUIPMENT OVERCURRENT PROTECTION REQUIREMENTS PRIOR TO PURCHASE & INSTALLATION OF EQUIPMENT.

## NOTES:

27

A: PANEL SHALL BE EQUAL TO SQUARE D MODEL "QO"

OPEN

- B: ELECTRICIAN SHALL VERIFY EXACT EQUIPMENT OVERCURRENT PROTECTION REQUIREMENTS PRIOR TO PURCHASE & INSTALLATION OF EQUIPMENT.
- C: AFTER COMPLETION OF WORK, ELECTRICAN SHALL PROVIDE A TYPE WRITTEN PANEL DIRECTORY IN NEW PANEL.

			CONDUCTORS			EQUIPME	NT GROUND	MINIMUM
AMPACITY	# OF SETS	QUA NITT	Y PER SET	AW	G SIZE	AW	S SIZE	CONDUIT SIZE
	# UF 3E13	3Ø 'WYE'	1Ø OR 3Ø▲	COPPER	ALUMINUM	COPPER	ALUMINUM	(PER SET)
30	1	4	3	10	8	10	8	3/4"
40	1	4	3	- 8	8	8	- 8	1"
45	1	4	3	8	6	8	8	1"
50	1	4	3	8	6	10	8	1"
60	1	4	3	6	4	10	6	i"
70	1	4	3	4	2	8	6	1-1/4"
80	1	4	3	4	2	8	6	1-1/4"
90	1	4	3	3	2	8	6	1-1/4"
100	1	4	3	3	1	8	6	1-1/4"
110	1	4	3	2	1/0	6	4	1-1/4"
125	1,	4	3	1	2/0	6	4	2"
150	1	4	3	1/0	3/0	6	4	2"
175	1	4	3	2/0	4/0	6	4	2"
200	1	4	3	3/0	250	- 6	4	2-1/2"
225	1	4	3	4/0	300	4	2	2-1/2"
250	1	- 4	3	250	350	4	2	3"
300	1	4	3	350	500	4	2	4"
350	1	4	3	400	600	3	1	4"
400	1	4	3	500	750	3	1	4"
500	2	4	3	250	350	2	1/0	4"
600	2	4	3	350	500	1	2/0	4"
800	2	4	3	500	750	1/0	3/0	4"
1000	3	4	3	400	350	2/0	4/0	4"
1200	4	4	3	350	500	3/0	250	4"
1600	5	4	3	400	750	4/0	350	4"
2000	6	4	3	400	750	250	400	4"

- 1. ALL WIRE SIZES SHOWN ARE BASED ON CONDUCTOR TEMPERATURE RATING OF 75°C & AMBIENT TEMPERATURE RATING OF 30°C PER NEC. 2. MAXIMUM ALLOWABLE VOLTAGE DROP FOR FEEDER CONDUCTORS SHALL BE 2%.
- 3. ELECTRICAL CONTRACTOR TO ADJUST CONDUCTOR SIZES FOR LONG CIRCUIT LENGTHS & AMBIENT TEMPERATURES HIGHER THAN 30°C.

	R COMPLETION OF WORK, TROOM PANEL & DISTRIB								
			PAN	{EL 'E	V1' S	CHED	ULE		
		SPECIFICATIONS						TOTAL CONNECTED L	
	OLTA GE: 120/208V 3-PH	NEMA RATII			ļ				0 AMPS
AMPACITY: 400A MLO PANEL MOUNTING: SURFACE								O AMPS	
7	RATING: 22kA				PHASE "C" LOAD: 4	O AMPS			
IRCUIT UMBER	DESCR	IPTION	BREAKER SIZE	AMPS	PHASE	AMPS	BREAKER SIZE	DESCRIPTION	CIRCUIT NUMBER
1	EXTERIOR EV-CH	ARGING STATION	50-2	40	Α		50-2	SPARE	2
3			-	40	В		-		4
5	EXTERIOR EV-CH	ARGING STATION	50-2	40	С		50-2	SPARE	6
7			<u> </u>	40	Α		Đ	5	8
9	OP	EN			В			OPEN	10
11	OP.	EN			С			OPEN	12
13	OPEN				Α			OPEN	14
15	OPEN				В			OPEN	16
17	OPEN				С			OPEN	18
19	OP	EN			Α			OPEN	20
21	OPEN				В			OPEN	22
23	OP.	EN			С			OPEN	24
25	OPEN				A			OPEN	26

	6000000 4346					
<b>AMPACITY</b>	COPPER AWG	19	Ø	3	MINIMUM  CONDUIT SIZE	
	3.2.	120V	277V	208V	480V	CO/DOI! 312
20	12	55'	130'	115'	260'	1/2"
20	10	901	205'	180'	415'	3/4"
30	10	60'	135'	120'	275'	3/4"
טכ	8	95'	220'	190'	<del>44</del> 5'	1"
35	8	80'	190'	165'	380'	1"
35	6	130'	300'	260'	605'	1"
40	8	70'	165'	145'	330'	1"
TU .	6	110'	260'	225'	525'	1"
45	6	100'	235'	200'	470'	11
CT	4	160'	370'	325'	750'	1-1/4"
50	- 6	90'	210'	180'	420'	1-1/4"
Ju	4	145'	335'	290'	675'	1-1/4"
60	6	75'	175'	150'	350'	1-1/4"
	4	120'	280'	240'	560'	1-1/4"
70	4	105'	240'	205'	480'	1-1/4"
//	3	130'	300'	260'	605'	1-1/4"
80	4	55'	210'	180'	420'	1-1/4"
00	3	90'	260'	230'	530'	1-1/4"
	3	100'	235'	200'	470'	1-1/4"
90	2	125'	295'	255'	595'	1-1/4"
100	3	90'	210'	180'	420'	1-1/4"
100	2	115'	265'	230'	535'	1-1/4"

28

OPEN

OPEN

- 1. ALL BRANCH CIRCUIT CONDUCTORS SHALL BE COPPER. ALL WIRE SIZES SHOWN ARE BASED ON CONDUCTOR TEMPERATURE RATING OF 75°C & AMBIENT TEMPERATURE OF 30°C PER NEC.
- 2. DISTANCE SHOWN ABOVE IS LENGTH FROM OVERCURRENT PROTECTION TO DEVICE/EQUIPMENT.
- 3. REFER TO PLAN SHEETS FOR BRANCH CONDUCTOR SIZING LENGTHS GREATER THAN SHOWN ABOVE.
- 4. VOLTAGE DROP CALCULATIONS BASED ON 3% DROP, 80% CIRCUIT LOAD, THHN/THWN INSULATION, 100% POWER FACTOR, BALANCED LOAD, NEGLIGIBLE REACTANCE, & SIX OR LESS CURRENT-CARRYING CONDUCTORS IN RACEWAY.

James Watson, P.E. April 17, 2024 PE-2015017071 MO Certificate of Authority # 2018029680



2400 Bluff Creek Drive, Suite 101 Columbia, Missouri 65201 573.234.4492

J2 PROJECT No:	J21005
J2 DESIGN:	ACW
ISSUE TITLE	DATE
CITY SUBMISSION	04 / 17 / 2024

www.j-squaredeng.com

 $\Box$ **Suites** Hom

AHJ APPROVAL STAMP

SHEET TITLE

**ELECTRICAL SCHEDULES** 

	PANEL S	PECIFICATIONS						TOTAL CONNECTED	LOAD
VOLTAGE: 120/208V 3-PH NEMA RATING: 1								PHASE "A" LOAD: 1	66 AMPS
AMPACITY: 200A MLO PANEL MOUNTING:			G: RECESSED					PHASE "B" LOAD: 1	50 AMPS
A IC-	AIC-RATING: 10kA							PHASE "C" LOAD: 1	15 AMPS
CIRCUIT NUMBER	DESCRI	PTION	BREAKER SIZE	AMPS	PHASE	AMPS	BREAKER SIZE	DESCRIPTION	CIRCUI NUMBER
1	CORRIDOR	RECEPTS.	20-1	9	Α	51	60-2	AHU-12	2
3	ICE MA	CHINE	20-1	- 8	В	51		•	4
5	LAUNDRY F	RECEPTS.	20-1	6	С	14	25-2	CU-12	6
7	I.T. Q	UAD	20-1	3	Α	14	=	<u>-</u>	- 8
9	I.T. Q	UAD	20-1	3	В	2	20-1	FIRE/SMOKE DAMPERS	10
11	MAG H	OLDS	20-1	3	C	2	20-1	FIRE/SMOKE DAMPERS	12
13	ELEVATOR LIG	HTS & MISC.	20-1 ST	3	Α	42	60-3	ELEVATOR DISCONNECT	14
15	SHUNT TR	IP SPACE	ST		В	42	-	•	16
17	ELEVATOR LIG	HTS & MISC.	20-1 ST	3	С	42	-	<del>-</del>	18
19	SHUNT TR	IP SPACE	ST		Α		ST	SHUNT TRIP SPACE	20
21	CORRIDOR	SCONCES	20-1	2	В	42	60-3	ELEVATOR DISCONNECT	22
23	CORRIDOR D	OWNLIGHTS	20-1	3	C	42	5	<del>-</del>	24
25	LOBBY / LAUNC	ORY LIGHTING	20-1	2	Α	42	-	-	26
27	SPA	RE	20-1		В		ST	SHUNT TRIP SPACE	28
29	SPA	RE	20-1		С				30

B: ELECTRICIAN SHALL VERIFY EXACT EQUIPMENT OVERCURRENT PROTECTION REQUIREMENTS PRIOR TO PURCHASE & INSTALLATION OF EQUIPMENT.

C: AFTER COMPLETION OF WORK, ELECTRICAN SHALL PROVIDE A TYPE WRITTEN PANEL DIRECTORY IN NEW PANEL.

	PA NEL SE		TOTAL CONNECTED LOAD TOTAL DIVERSIFIED									
VOLTAGE: 208Y/120V 3-PH NEMA RATING:			: 1			PHASE	"A" LOAD:	522 /	AMPS	PHASE "A" LOAD:	300	AMPS
AMPA	AMPACITY: 400A MLO PANEL MOUNTING					PHASE "B" LOAD:		523 <i>F</i>	AMPS	PHASE "B" LOAD:	284	AMPS
A IC-RA	A IC-RATING: 22kA					PHASE	"C" LOAD:	474 <i>l</i>	AMPS	PHASE "C" LOAD:	24 <del>9</del>	AMPS
CIRCUIT NUMBER	DESCRIPTION  BREAKER AMPS PHASE AMPS BREAKER SIZE DESC		ESCRIPTION		CIRCUIT NUMBER							
1	GUESTROOM 4	101 PANEL	60-2	47	Α	47	60-2		GUEST	ROOM 411 PANEL		2
3			•	48	В	48	-			-		4
5	GUESTROOM 4	102 PANEL	60-2	47	C	47	60-2		GUEST	ROOM 412 PANEL		6
7	-		-	48	Α	48	-			•		8
9	GUESTROOM 4	103 PANEL	60-2	47	В	47	60-2		GUEST	ROOM 413 PANEL		10
11	-		÷	48	С	48	•			-		12
13	GUESTROOM 4		60-2	47	Α	47	60-2		GUEST	ROOM 414 PANEL		14
			-	48	В	48	-			<b>-</b>		16
17	GUESTROOM 4		60-2	47	С	47	60-2			ROOM 415 PANEL		18
19	-		-	48	Α	48	-			-		20
21	GUESTROOM 4	106 PANEL	60-2	47	В	47	60-2		GUEST	ROOM 416 PANEL	20203	22
23	7		-	<del>4</del> 8	C	48				-		24
25	GUESTROOM 4	107 PANEL	60-2	47	Α	166	200-3	aaaetoitioistetaanatestatoo	5051110500000010000	PANEL 'P4'		26
27	-		-	48	В	150	-			-		28
29	GUESTROOM 4	108 PANEL	60-2	47	С	115	NGS (SPORTED VIII GAS PARTI		27/24	-	2074231541227720	30
31	<u> </u>		-	48	Α					OPEN		32
33	GUESTROOM 4		60-2	47	В	200000000000000000000000000000000000000	ROMANNO DE PARA DE LA COMPONIO DE LA COMPONIO DE LA COMPONIO DE LA COMPONIO DE LA COMPONIO DE LA COMPONIO DE L	TELUSCO SOCIONO (18 V 20 20	102/103027632224111	OPEN	1122222333231163	34
35	<u>-</u>			48	C					OPEN		36
37	GUESTROOM 4	110 PANEL	60-2	47	Α	500000000000000000000000000000000000000	27001102231711555333518	2012/02/03/03/03	200000000000000000000000000000000000000	OPEN		38
39	-		-	48	В					OPEN		40
41	OPEN	<u> </u>			С					OPEN		42

B: ELECTRICIAN SHALL VERIFY EXACT EQUIPMENT OVERCURRENT PROTECTION REQUIREMENTS PRIOR TO PURCHASE & INSTALLATION OF EQUIPMENT.

C: AFTER COMPLETION OF WORK, ELECTRICAN SHALL PROVIDE A TYPE WRITTEN PANEL DIRECTORY IN NEW PANEL.

D: GUESTROOM PANEL & DISTRIBUTION PANEL DIVERSIFIED LOADS HAVE BEEN CALCULATED IN ACCORDANCE WITH NEC 220.84.

						1 TOUT PIVELDE COUPAILE	······································						
						LIGHT FIXTURE SCHEDULE							
TAG	DESCRIPTION	LOCATION	DIMENSIONS	OPTICS	MOUNTING	FINISH	DIMMING	CCT (°K)	CRI	LUMEN OUTPUT	VOLTA GE	WATTS	NOTES
B01	EXTERIOR BOLLARD	EXTERIOR WALKWAYS	NOMINAL 42" TALL	TYPE 3 OPTIC	FLUSH CONCRETE BASE	TBD	0-10V; 1% - 100%	3000	80	1000	120	10	
E1	INTERIOR EXIT LIGHT WITH (2) HEADS	EGRESS PATHS	-	-	SURFACE	SEE FF&E SPECS FOR COMPLETE FINISH INFORMATION	7	-	-	-	120	-	
E2	INTERIOR EXIT LIGHT WITH REMOTE HEAD	EGRESS PATHS		-	SURFACE	SEE FF&E SPECS FOR COMPLETE FINISH INFORMATION		<u>.</u>	-	-	120	-	
E3	EMERGENCY EGRESS LIGHT	EGRESS PATHS	-	-	SURFACE	SEE FF&E SPECS FOR COMPLETE FINISH INFORMATION	-	-	-	-	120	-	
G01	EXTERIOR LINEAR STRINGLIGHT	EXTERIOR SEATING	SOCKETS 24" ON CENTER	FROST OR CLEAR LAMP	STRING	TBD	FORWARD PHASE	2700	80	450 / LAMP	120	5 / LAMP	TCP #FST19D4027E26 OR EQUAL
G02	EXTERIOR LINEAR TAPELIGHT	EXTERIOR	NOMINAL 1"x 1"	SEMI-DIFFUSE WHITE LENS	SURFACE / CHANNEL	of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of th	0-10V; 1% - 100%	4000	80	650 / FT	120	7 / FT	WET LOCATION RATED REMOTE 24V POWER SUPPLY
G03	EXTERIOR LINEAR TAPELIGHT	EXTERIOR	NOMINAL 1"x 1"	SEMI-DIFFUSE WHITE LENS	SURFACE / CHANNEL	-	0-10V; 1% - 100%	2700	80	650 / FT	120	7 / FT	WET LOCATION RATED REMOTE 24V POWER SUPPLY
LR01	RECESSED LINEAR	RECESSED LINEAR	NOMINAL 2.5" WIDE	DIFFUSE LENS	RECESSED	COLOR: WHITE, FINISH: MATTE	0-10V; 1% - 100%	3000	90	650 / FT	120	7/FT	
LR02	RECESSED LINEAR	RECESSED LINEAR	NOMINAL 2.5" WIDE	DIFFUSE LENS	RECESSED	COLOR: WHITE, FINISH: MATTE	0-10V; 1% - 100%	3000	90	390 / FT	120	3.2 / FT	
LR03	RECESSED LINEAR	LINEAR TAPE LIGHT	NOMINAL 1"x 1"	DIFFUSE LENS	SURFACE	DIFFUSE: WHITE LENS, FINISH: MATTE	0-10V; 1% - 100%	2700	90	650 / FT	120	7/FT	WITH REMOTE POWER SUPPLY
P1	PENDANT	BEVERAGE AREA	_	-	PENDANT	SEE FF&E SPECS FOR COMPLETE FINISH INFORMATION		-	-	-	120	50 MAX	SEE FF&E SPECS
P2	PENDANT	RECEPTION DESK	÷ .	·	PENDANT	SEE FF&E SPECS FOR COMPLETE FINISH INFORMATION	-	-	-	-	120	50 MAX	SEE FF&E SPECS
R1	2" DOWNLIGHT	GENERAL PUBLIC AREAS	NOMINAL 2.5" APERTURE	NOMINAL 30° OPTIC	RECESSED	WHITE FLANGE, WHITE TRIM, FINISH: MATTE	0-10V; 1% - 100%	2700	90	800	120	10	
R1E	2" DOWNLIGHT (EMERGENCY)	GENERAL PUBLIC AREAS	NOMINAL 2.5" APERTURE	NOMINAL 30° OPTIC	RECESSED	WHITE FLANGE, WHITE TRIM, FINISH: MATTE	0-10V; 1% - 100%	2700	90	800	120	10	WITH EMERGENCY BATTERY BACKUP
R10	4" DOWNLIGHT	FITNESS	NOMINAL 4" APERTURE	WIDE OPTIC	RECESSED	WHITE FLANGE, MATTE SILVER REFLECTOR, FINISH: SATIN	0-10V; 1% - 100%	3000	<del>9</del> 0	1800	120	23	
R11	4" DOWNLIGHT	GUEST CORRIDORS	NOMINAL 4" APERTURE	NARROW OPTIC	RECESSED	WHITE FLANGE, WHITE TRIM, FINISH: MATTE	0-10V; 1% - 100%	2700	90	900	120	13	
R2	2" DOWNLIGHT	EXTERIOR PORTICO	NOMINAL 2.5" APERTURE	NOMINAL 30° OPTIC	RECESSED	BLACK FLANGE, BLACK TRIM, FINISH: MATTE	0-10V; 1% - 100%	2700	90	800	120	10	PROVIDE WET-LABEL LENS
R20	4" DOWNLIGHT	POOL SOFFIT	NOMINAL 4" APERTURE	NARROW OPTIC	RECESSED	WHITE FLANGE, WHITE BAFFLE TRIM, FINISH: MATTE	0-10V; 1% - 100%	3000	90	900	120	14	UL WET LISTED
R6	4" DOWNLIGHT (WALL WASH)	ELEVATOR / DINING SERVICE	NOMINAL 3.5" APERTURE	ASYMMETRIC WALLWASH LENSED OPTIC	RECESSED	WHITE FLANGE, MATT SILVER REFLECTOR, FINISH: MATTE	0-10V; 1% - 100%	2700	90	1800	120	23	
S1	SURFACE MOUNT UTILITY	ELEC/MECH/STORAGE	48"L	ROUND FULL FROST LENS	SURFACE	COLOR: WHITE; FINISH: MATTE	N/A	3000	80	5000	120	33	
S2	SURFACE MOUNT UTILITY	ENCLOSED STAIRWELLS	48"L	ROUND FULL FROST LENS	SURFACE	COLOR: WHITE; CEILING FINISH: MATTE; WALL FINISH: SATIN	***************************************	3000	80	5000	120	50	INTEGRAL OCCUPANCY SENSOR; 10% DIM WHEN UNOCCUPIED, 100% WHEN OCCUPANCY DETECTED
S20	SURFACE DOWNLIGHT	PUBLIC RESTROOMS	NOMINAL 6" DIAMETER, 3/4" TALL, ROUND	WIDE OPTIC	SURFACE	COLOR: WHITE, FINISH: WHITE	0-10V; 1% - 100%	3000	90	600	120	10	SURFACE MOUNT TO RECESSED JUNCTION BOX
521	SURFACE DOWNLIGHT	GUESTROOM BATHROOM	NOMINAL 6" DIAMETER, 3/4" TALL, ROUND	WIDE OPTIC	SURFACE	COLOR: WHITE, FINISH: WHITE	0-10V; 1% - 100%	2700	90	800	120	10	SURFACE MOUNT TO RECESSED JUNCTION BOX
S22	SURFACE DOWNLIGHT	POOL	NOMINAL 5" DIAMETER, 5" TALL	WIDE OPTIC	SURFACE	COLOR: WHITE, FINISH: MATTE	0-10V; 1% - 100%	3000	90	1000	120	10	SURFACE MOUNT TO RECESSED JUNCTION BOX
S3	EXTERIOR WALL SCONCE	REAR ENTRIES / POOL ENTRY	5" ROUND	ROUND FULL FROST LENS	SURFACE	COLOR: WHITE, WALL FINISH: SATIN	INTEGRAL 10% - 100%		80	600	120	10	INTEGRAL OCCUPANCY SENSOR; 10% DIM WHEN UNOCCUPIED, 100% WHEN OCCUPANCY DETECTED
S4	VAPORTIGHT UTILITY	ELEVATOR PIT	48"L	WIDE OPTIC	SURFACE	COLOR: WHITE	÷	4000	80	5000	120	33	UL WET LISTED
T1	2x2 TROFFER	GENERAL BACK OF HOUSE	24"x 24"	FLAT WHITE LENS	RECESSED	COLOR: WHITE; FINISH: WHITE	0-10V; 1% - 100%	3000	80	2000	120	19	UL DAMP LOCATION LISTED, NSF SPLASH ZONE 2
T2	2x2 TROFFER	FOOD PREP	24"× 24"	FLAT WHITE LENS	RECESSED	COLOR: WHITE; FINISH: WHITE	0-10V; 1% - 100%	3000	80	3000	120	30	UL DAMP LOCATION LISTED, NSF SPLASH ZONE 2
TR1	TRACK SYSTEM	LOBBY / BREAKFAST	SEE PLANS FOR LENGTH	-	SURFACE	HITE TRACK AT WHITE CEILINGS; BLACK TRACK AT WOOD SLAT	0-10V; 1% - 100%	-	-	-	120	600 MAX	
TR10	TRACK SYSTEM	MARKET	3" DIAMETER, 5" LONG, ROUND	ADJUSTABLE OPTIC 17° - 53°	SURFACE	SEE FF&E SPECS FOR COMPLETE FINISH INFORMATION	0-10V; 1% - 100%	•	•	-	120	300 MAX	
TR2	TRACK SYSTEM	RECEPTION DESK	SEE PLANS FOR LENGTH	-	SURFACE	SEE FF&E SPECS FOR COMPLETE FINISH INFORMATION	0-10V; 1% - 100%	-	-	-	120	200 MAX	
WS1	WALL SCONCE	GUEST CORRIDORS	4" DEEP (MAX), 10" TALL	DIFFUSE UPLIGHT + DOWNLIGHT	SURFACE	SEE FFRE SPECS FOR COMPLETE FINISH INFORMATION	ELV	2700	90	300	120	10	SATCO LAMPS FROSTED A15 S9151
WS10	WALL SCONCE	POOL	- Scrit	DESIGNATION OF THE OPENING OF	CUDEACE	SEE FF&E SPECS FOR COMPLETE FINISH INFORMATION	-	7000	-	7600	120	20 MAX	
WS2	WALL SCONCE	LOBBY RESTROOMS	36"L	DIFFUSE UPLIGHT + DOWNLIGHT	SURFACE	SEE FF&E SPECS FOR COMPLETE FINISH INFORMATION	ELV	3000	700	3600	120	43	
WS3	WALL SCONCE	GUESTROOM BATHROOM	36"L.	DIFFUSE 3-SIDE LENS	SURFACE	SEE FF&E SPECS FOR COMPLETE FINISH INFORMATION	ELV	3000	90	3600	120	43	
WS4	WALL SCONCE	GUESTROOM NIGHT STAND	**************************************	-	-	SEE FF&E SPECS FOR COMPLETE FINISH INFORMATION	-	<u>-</u>		_	120	20 MAX 20 MAX	
WS5	WALL SCONCE	GUESTROOM COUCH GUESTROOM DESK	-	-	-	SEE FF&E SPECS FOR COMPLETE FINISH INFORMATION	-	<u> </u>	-	-	120		
WS6 WS7	WALL SCONCE WALL SCONCE	DINING AREA		<u> </u>	-	SEE FF&E SPECS FOR COMPLETE FINISH INFORMATION  SEE FF&E SPECS FOR COMPLETE FINISH INFORMATION	_	-		_	120 120	20 MAX 20 MAX	
WS7 WS8	WALL SCONCE WALL SCONCE	DINING PRIVATE BOOTH	- - -	<u> </u>	<del>-</del>	SEE FF&E SPECS FOR COMPLETE FINISH INFORMATION  SEE FF&E SPECS FOR COMPLETE FINISH INFORMATION	-	-	•	<u> </u>		20 MAX	
WS9	WALL SCONCE WALL SCONCE	GUESTROOM DINING TABLE	_			SEE FF&E SPECS FOR COMPLETE FINISH INFORMATION  SEE FF&E SPECS FOR COMPLETE FINISH INFORMATION	- -	_		¶ <i>(c.)   07   07  </i> -	120 120	20 MAX	
W737	WALL SCOICE	GULD I KOUN DINKING I ADEE	-	_		SECTION SPECS FOR COMPLETE PROSPERITORMATION		-	_	<u>-</u>	140	40 MAX	
					<u> </u>								

A: PANEL SHALL BE EQUAL TO SQUARE D "I-LINE" SERIES

- 1. VERIFY LIGHT FIXTURE FINISHES WITH OWNER / ARCHITECT PRIOR TO INSTALLATION.
- 2. LIGHT FIXTURES PROVIDED BY OWNER THRU NATIONAL ACCOUNT AND INSTALLED BY ELECTRICAL CONTRACTOR.
- 3. ALL LIGHT FIXTURE QUANITTIES TO BE VERIFIED BY ELECTRICAL CONTRACTOR PRIOR TO ORDERING. 4. CONTACT JUSTIN HATIFLED (573) 289-0880 (JHATFIELD@LAIWEB.NET) OR PAUL WARNER (314) 531-3500 (PWARNER@LAIWEB.NET) AT LIGHTING ASSOCIATES, INC. FOR NATIONAL ACCOUNT DETAILS.

A: PANEL SHALL BE EQUAL TO SQUARE D MODEL "QO"

PANEL SPECIFICATIONS						TOTAL	. CONNECTED	LOAD		TOTAL DIVERSIFIED LOAD		
VOLTAGE: 208Y/120V 3-PH NEMA RATING: 1						PHASE	"A" LOAD:	522	AMPS	PHASE "A" LOAD:	300	AMPS
AMPACITY: 400A MLO PANEL MOUNTING: RECESSED					PHASE	"B" LOAD:	523	AMPS	PHASE "B" LOAD:	284	AMPS	
A IC-RA	TING: 22kA					PHASE	"C" LOAD:	249 PHASE "C" LOAD: 249			AMPS	
CUIT BER	DESCRIP	TION	BREAKER SIZE	AMPS	PHASE	AMPS	BREAKER SIZE	DESCRIPTION			CIRCUIT NUMBER	
l	GUESTROOM 4	101 PANEL	60-2	47	Α	47	60-2	GUESTROOM 411 PANEL			2	
3			-	48	В	48	-	-			4	
5	GUESTROOM 4	102 PANEL	60-2	47	С	47	60-2	GUESTROOM 412 PANEL				6
7	-		-	48	Α	48		•				- 8
)	GUESTROOM 4	103 PANEL	60-2	47	В	47	60-2	GUESTROOM 413 PANEL				10
1				48	С	48	*				12	
3	GUESTROOM 4	104 PANEL	60-2	47	Α	47	60-2	GUESTROOM 414 PANEL			14	
5 -			-	48	В	48		7				16
7	GUESTROOM 4	105 PANEL	60-2	47	С	47	60-2		GUES <sup>-</sup>	TROOM 415 PANEL		18
9			-	48	Α	48	-			<u>-                                      </u>		20
1	GUESTROOM 4	106 PANEL	60-2	47	В	47	60-2		GUES	TROOM 416 PANEL		22
3	-		-	48	C	48				-		24
5	GUESTROOM 4	107 PANEL	60-2	47	Α	166	200-3			PANEL 'P4'		26
7	-		-	48	В	150	-			-		28
9	GUESTROOM 4		60-2	47	С	115				-		30
1	-		7	48	Α					OPEN		32
3	GUESTROOM 4		60-2	47	В			OPEN			34	
5	Ē		-	48	C					OPEN		36
7	GUESTROOM 4		60-2	47	А					OPEN		38
9	-		-	48	В					OPEN		40
1	OPE	٠ <u></u>			С					OPEN		42

ISSUE TITLE CITY SUBMISSION 04 / 17 / 2024

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J2 PROJECT No:

J2 DESIGN:

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Home

AHJ APPROVAL STAMP

**ELECTRICAL SCHEDULES** 

SANITARY SEWER PIPING

VENT PIPING

STORM DRAIN PIPING

PIPING TURNED DOWN / TURNED UP

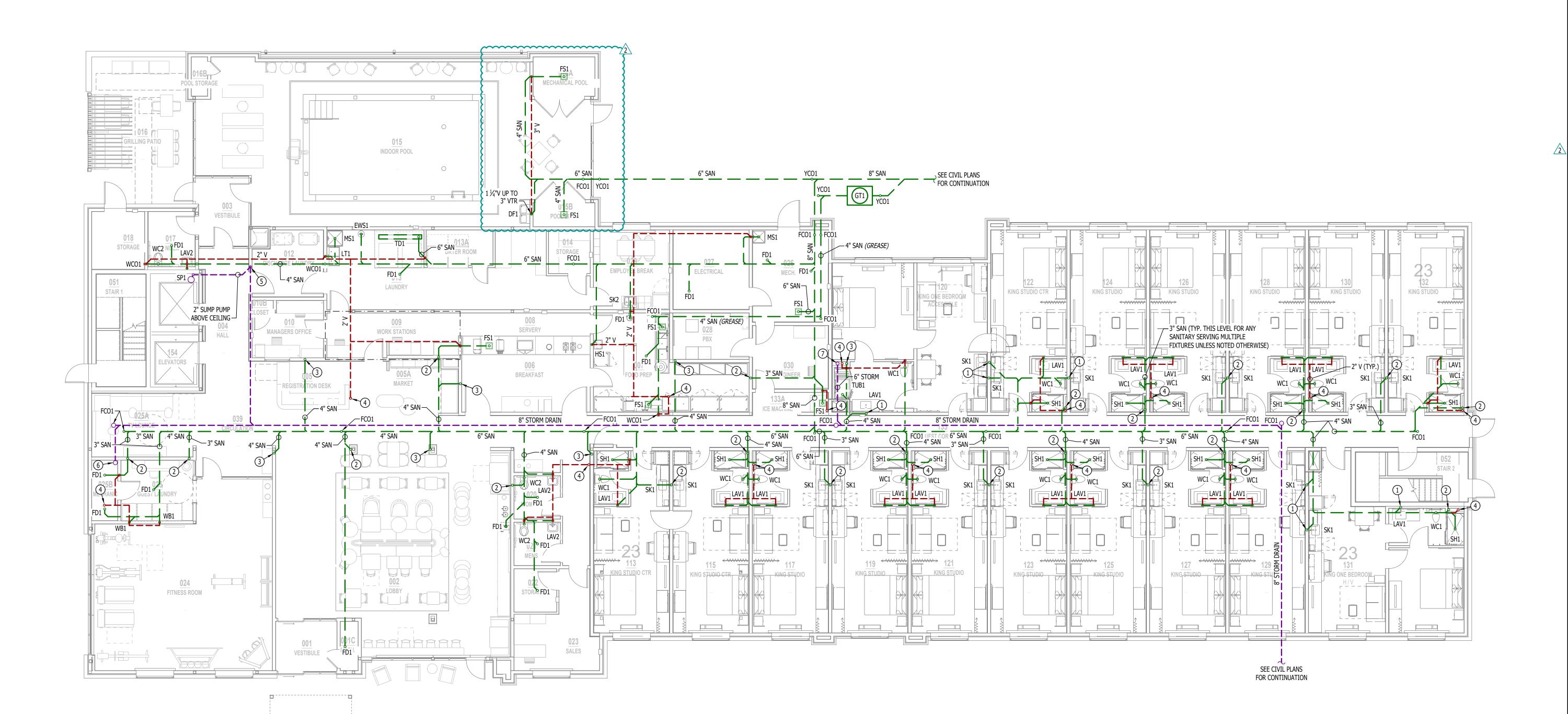
TIE INTO EXISTING

## **SANITARY SEWER PLAN GENERAL NOTES:**

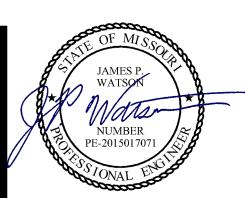
1. SEE SHEET P501 FOR ADDITIONAL PLUMBING NOTES, DETAILS, & SCHEDULES.

## SANITARY SEWER PLAN KEY NOTES:

- (1) 2" SAN DOWN FROM SECOND FLOOR.
- 2) 3" SAN DOWN FROM SECOND FLOOR.
- 3 4" SAN DOWN FROM SECOND FLOOR.
- 4) 2" VENT UP TO SECOND FLOOR
- 5) 2" SUMP PUMP INDIRECT DISCHARGE TO HUB DRAIN ACCESSIBLE ABOVE LAY IN CEILING IN DISCHARGE LAUNDRY
- (6) 8" PRIMARY STORM DRAIN DOWN FROM ROOF.
- (7) 6" PRIMARY STORM DRAIN DOWN FROM ROOF.







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CITY & BRAND RESPONSE	06 / 14 / 2024

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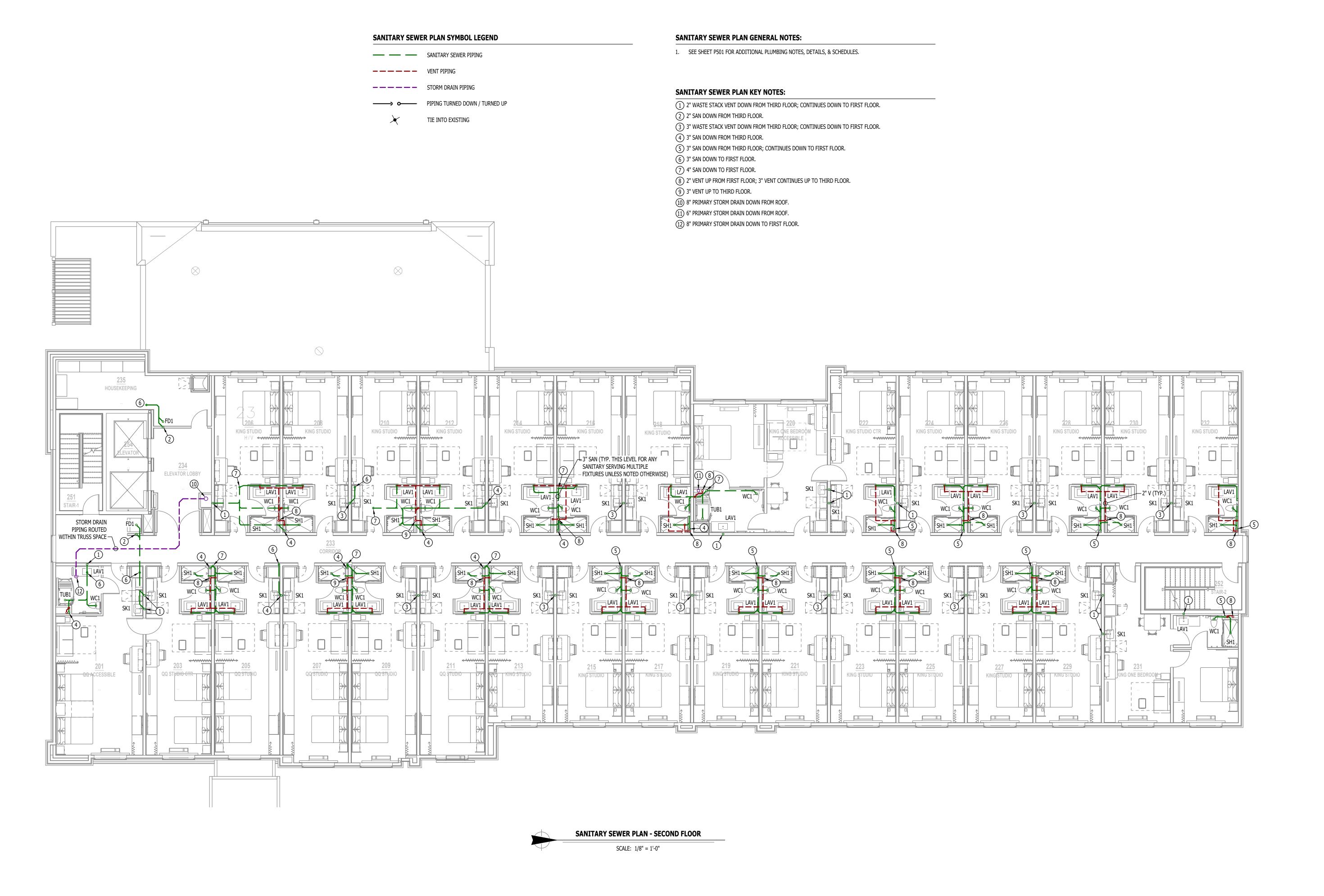
Home 2 Suites

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SHEET TITLE

SANITARY SEWER PLAN
- FIRST FLOOR

SHEET NUMBER



JAMES P. WATSON

NUMBER
PE-2015017071

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AHJ APPROVAL STAMP

SHFFT TITLE

SANITARY SEWER PLAN
- SECOND FLOOR

SHEET NUM

SANITARY SEWER PLAN SYMBOL LEGEND

— — — SANITARY SEWER PIPING

— — — — VENT PIPING

————— STORM DRAIN PIPING

PIPING TURNED DOWN / TURNED UP

TIE INTO EXISTING

## **SANITARY SEWER PLAN GENERAL NOTES:**

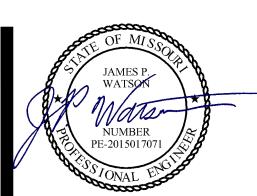
1. SEE SHEET P501 FOR ADDITIONAL PLUMBING NOTES, DETAILS, & SCHEDULES.

## **SANITARY SEWER PLAN KEY NOTES:**

- 1) 2" WASTE STACK VENT DOWN FROM FOURTH FLOOR; CONTINUES DOWN TO SECOND FLOOR.
- 2 2" WASTE STACK VENT DOWN FROM FOURTH FLOOR; 3" CONTINUES DOWN TO SECOND FLOOR.
- 3 3" SAN DOWN FROM FOURTH FLOOR; CONTINUES DOWN TO SECOND FLOOR.
- (4) 3" VENT UP FROM FIRST FLOOR; 3" VENT CONTINUES UP TO THIRD FLOOR.
- (5) 8" PRIMARY STORM DRAIN PIPING DOWN FROM ROOF.
- (6) 6" PRIMARY STORM DRAIN PIPING DOWN FROM ROOF.







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CITY & BRAND RESPONSE	06 / 14 / 2024

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MECHANICAL - ELECTRICAL - PLUMBING I
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SHEET TITLE

SANITARY SEWER PLAN
- THIRD FLOOR

SHEET NUM

— SANITARY SEWER PIPING

---- VENT PIPING

PIPING TURNED DOWN / TURNED UP

TIE INTO EXISTING

**————** STORM DRAIN PIPING

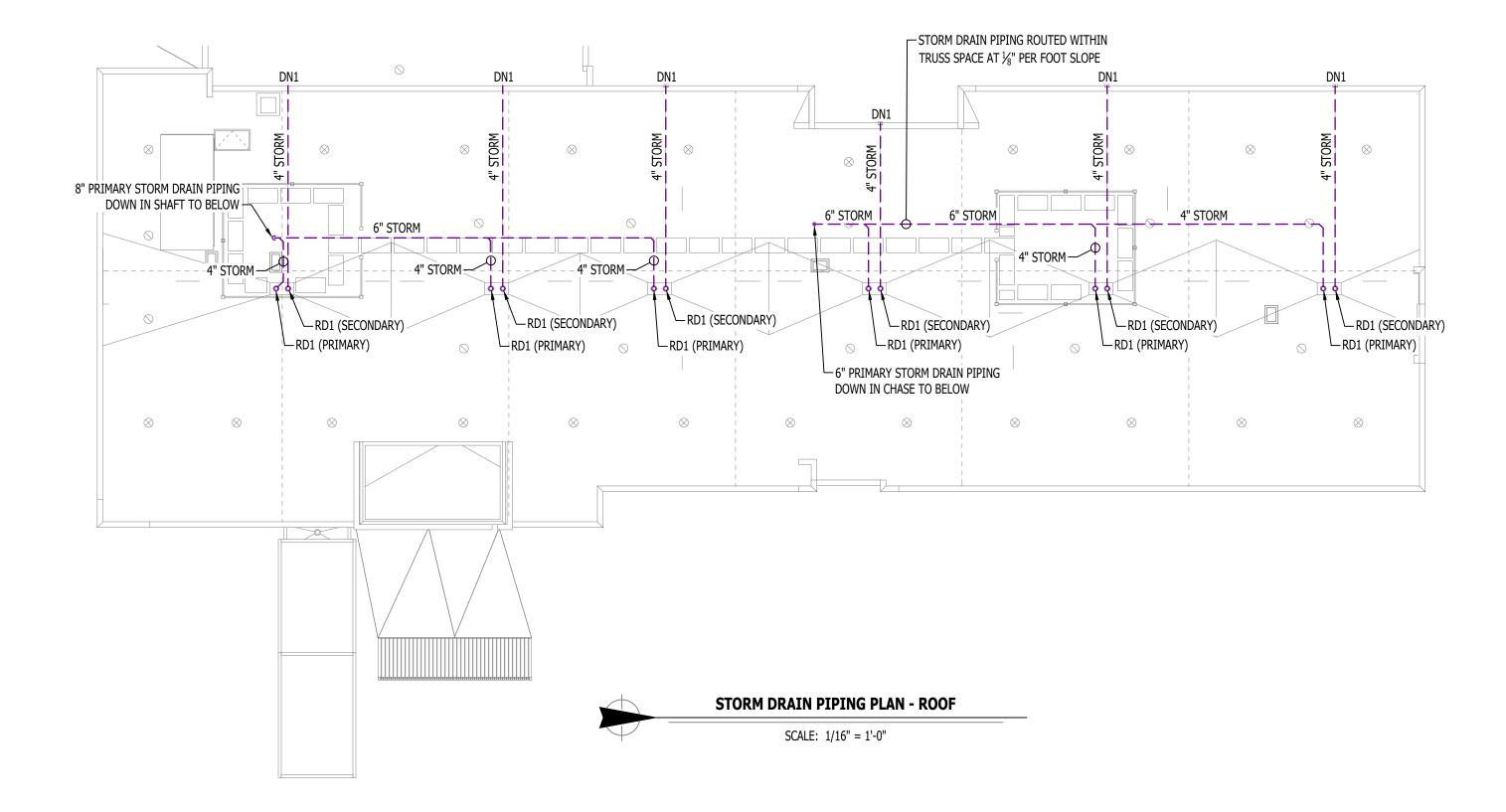
## **SANITARY SEWER PLAN GENERAL NOTES:**

SEE SHEET P501 FOR ADDITIONAL PLUMBING NOTES, DETAILS, & SCHEDULES.
OFFSET VENT PIPING AS NECESSARY TO MAINTAIN 10' SEPARATION (MIN.) BETWEEN VENT LOCATION &

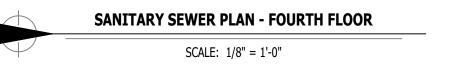
## **SANITARY SEWER PLAN KEY NOTES:**

MECHANICAL FRESH AIR INTAKES.

- (1) 3" SAN DOWN TO THIRD FLOOR.
- 2) 3" VENT UP FROM THIRD FLOOR; CONTINUES UP THRU ROOF TO 3" VTR.
- (3) 2" WASTE STACK VENT DOWN TO THIRD FLOOR.









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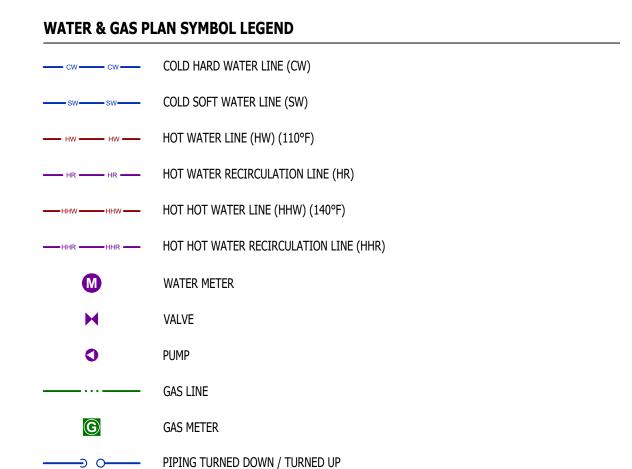
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MECHANICAL - ELECTRICAL - PLUMBING HOME 2 Suites

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SANITARY SEWER PLAN
- FOURTH FLOOR

SHEET NUMBER



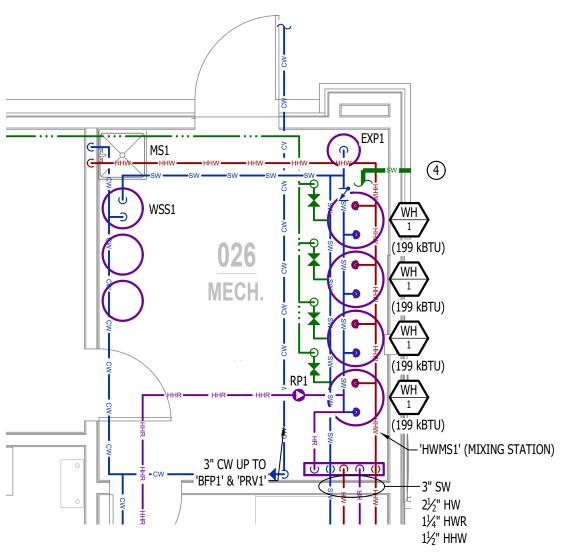
BBQ GRILL

## **WATER & GAS PLAN GENERAL NOTES:**

1. SEE SHEET P501 FOR ADDITIONAL PLUMBING NOTES, DETAILS, & SCHEDULES.

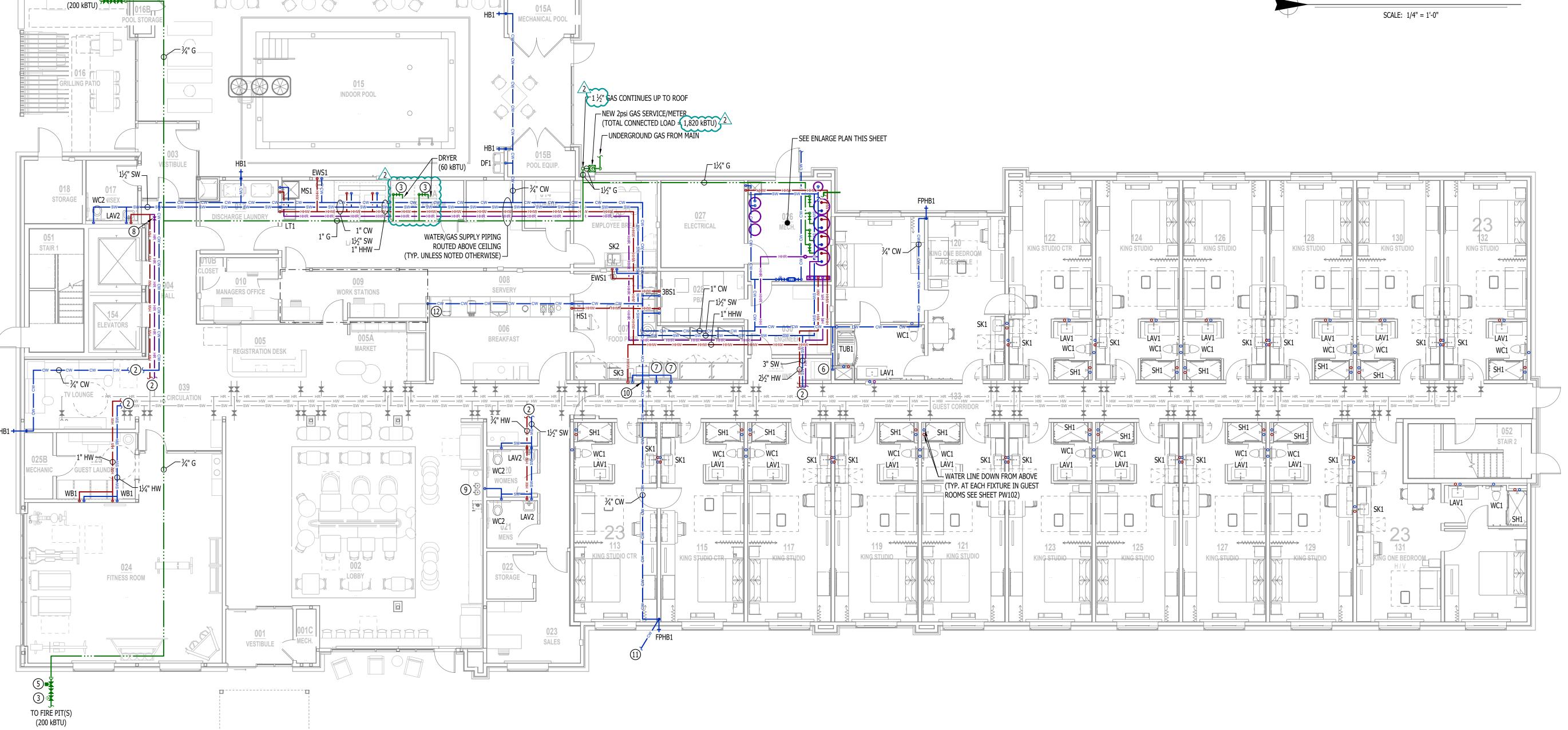
## WATER & GAS PLAN KEY NOTES:

- (1) CW UP TO ICE MAKER ON SECOND THRU FOURTH FLOORS.
- (2) SEE SHEET PW102 FOR CONTINUATION
- (3) 2 PSI TO 11" W.C. VENTLESS REGULATOR AT APPLIANCE CONNECTION.
- (4) WATER HEATER VENT & COMBUSTION AIR TO CONCENTRIC VENT THRU WALL; INSTALL PER MANUFACTURER
- (5) PROVIDE & INSTALL 120V ELECTRICALLY HELD (NORMALLY CLOSED) SOLENOID ON GAS LINE FOR EMERGENCY SHUT-OFF; COORDINATE WITH ELECTRICAL CONTRACTOR.
- 6)  $\frac{1}{2}$ " CW to ICE Maker with 'BFP3' a equipment connection.
- 7) ½" CW TO CONVECTION OVEN WITH 'BFP3' A EQUIPMENT CONNECTION.
- (8) PROVIDE & INSTALL AUTOMATIC FLOW BALANCING VALVE EQUAL TO WATTS #LFIDROSET IN HWR LINE IN ACCESSIBLE LOCATION IN CORRIDOR; SET FLOW TO 0.5 GPM.
- (9) CW STUBBED DOWN TO HYDRATION STATION. COORDINATE EXACT LOCATION & REQUIREMENTS WITH OWNER PRIOR TO ROUGH-IN.
- (10) ½" CW TO COFFEE MAKER WITH 'BFP3' A EQUIPMENT CONNECTION.
- (11) 3/4" CW UNDERGROUND TO YARD HYDRANT AT DUMPSTER ENCLOSURE (SEE SHEET MEP2).
- (12) ½" CW DOWN IN WALL TO 'BFP3' IN CASEWORK FOR JUICE MACHINE CONNECTION. COORDINATE WITH
- CASEWORK SUPPLIER/INSTALLER.

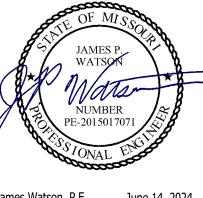












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## CITY & BRAND RESPONSE 06 / 14 / 2024

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**Suites** 2 Home

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**WATER & GAS PLAN -**FIRST FLOOR

——sw——sw—— COLD SOFT WATER LINE

— HW — HW — HOT WATER LINE

— HR — HR — HOT WATER RECIRCULATION LINE

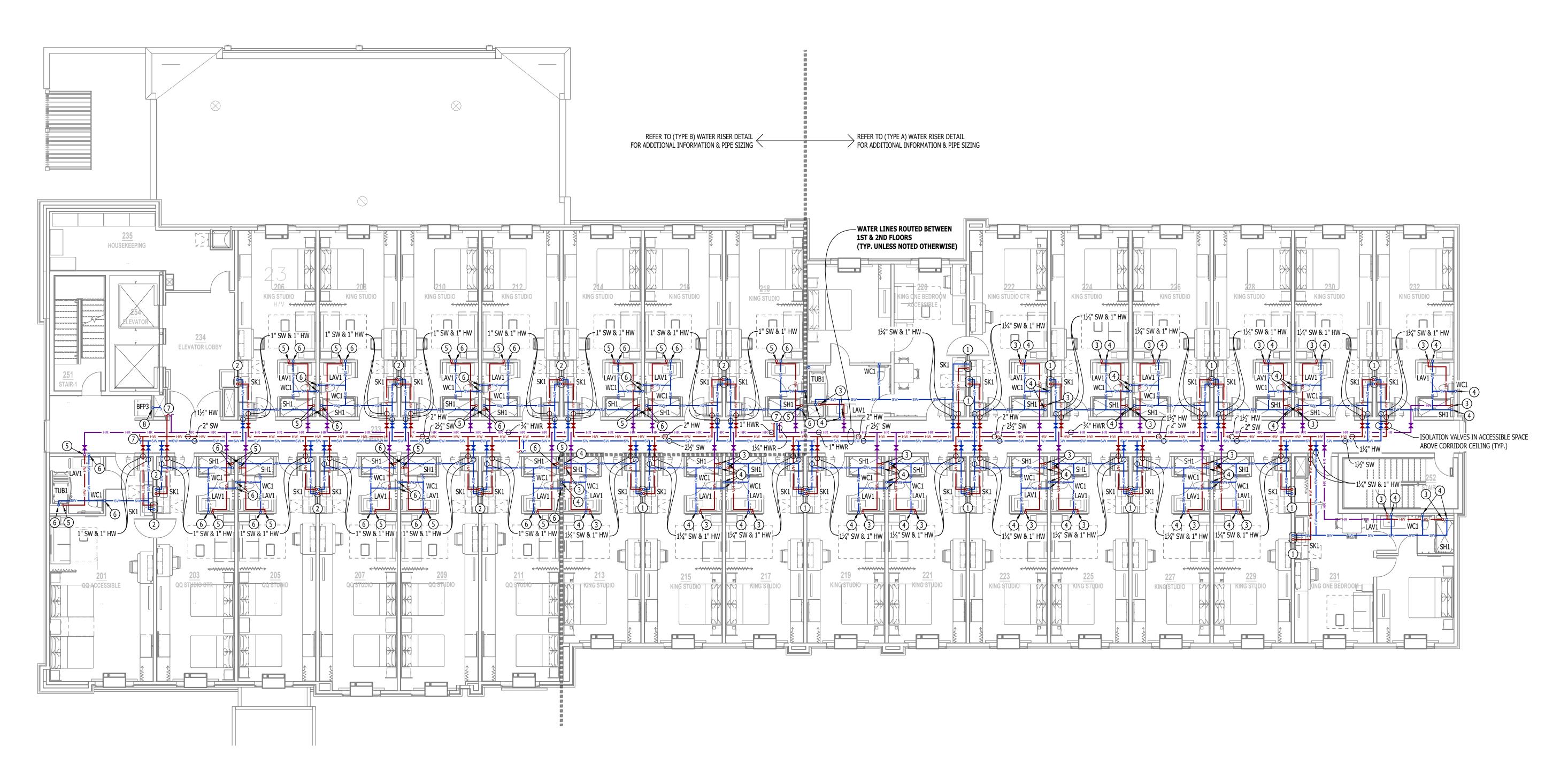
PIPING TURNED DOWN / TURNED UP

**WATER & GAS PLAN GENERAL NOTES:** 

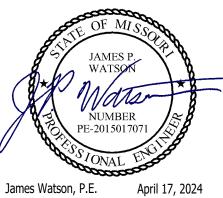
1. SEE SHEET P501 FOR ADDITIONAL PLUMBING NOTES, DETAILS, & SCHEDULES.

## AL NOTES: WATER & GAS PLAN KEY NOTES:

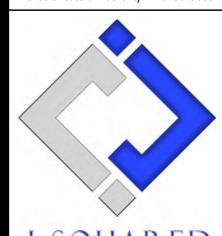
- 1) COLD WATER & HOT WATER DOWN TO SERVE FIXTURE ON FIRST FLOOR & UP TO SERVE FIXTURES ON SECOND THRU FOURTH FLOORS; SEE PW103 FOR CONTINUATION.
- (2) COLD WATER & HOT WATER UP TO SERVE FIXTURES ON SECOND THRU FOURTH FLOORS. SEE PW103 FOR CONTINUATION.
- (3) HOT WATER DOWN FROM ABOVE; SERVES FIXTURES ON FIRST THRU FOURTHS FLOORS
- (4) COLD WATER DOWN TO SERVE FIXTURE ON FIRST FLOOR AND UP TO SERVE FIXTURES ON SECOND THRU FOURTH FLOORS.
- (5) HOT WATER DOWN FROM ABOVE; SERVES FIXTURES ON SECOND THRU FOURTHS FLOORS
- (6) COLD WATER UP TO SERVE FIXTURES ON SECOND THRU FOURTH FLOORS.
- (7) SEE SHEET PW101 FOR CONTINUATION.
- (8) CW CONTINUES UP TO THIRD & FOURTH FLOORS TO SERVE ICE MAKERS ON BOTH LEVELS.







James Watson, P.E. April 17, 2024
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WATER & GAS PLAN -SECOND FLOOR

SHEET NUM

**WATER & GAS PLAN SYMBOL LEGEND** 

——sw——sw—— COLD SOFT WATER LINE

— HW — HW — HOT WATER LINE

HOT WATER RECIRCULATION LINE

PIPING TURNED DOWN / TURNED UP

**WATER & GAS PLAN GENERAL NOTES:** 

1. SEE SHEET P501 FOR ADDITIONAL PLUMBING NOTES, DETAILS, & SCHEDULES.

**WATER & GAS PLAN KEY NOTES:** 

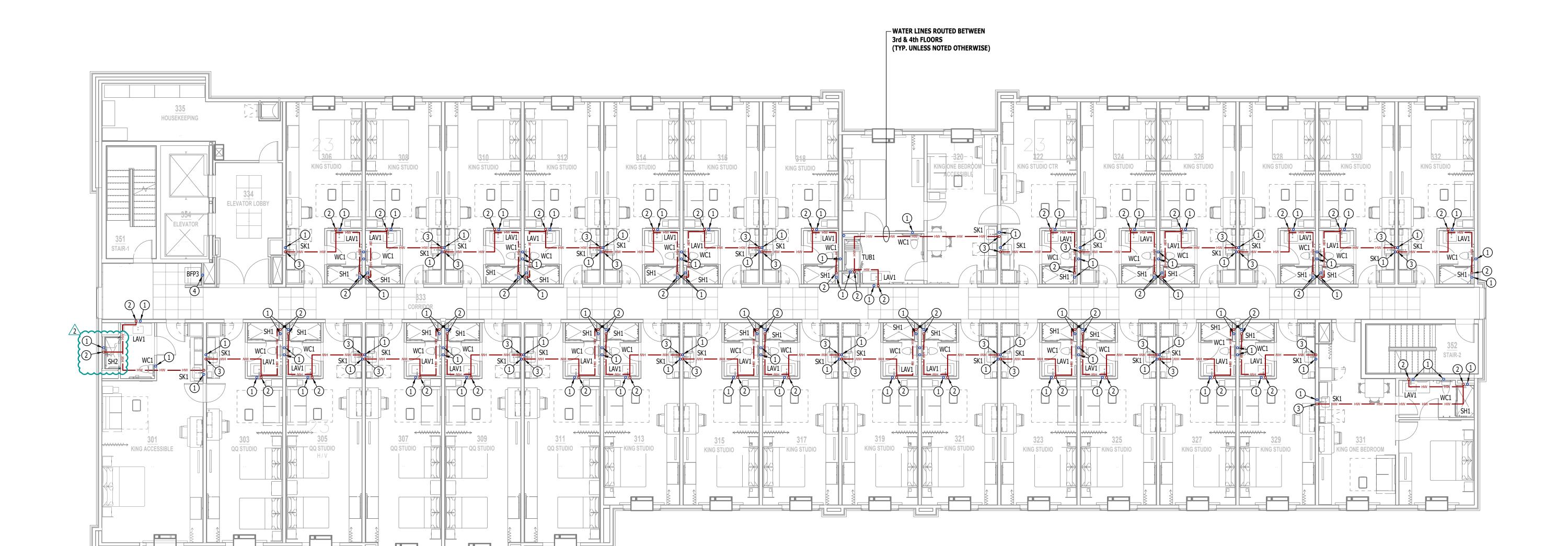
1 CW UP FROM BELOW.

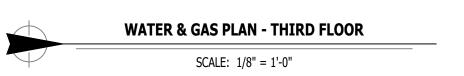
2) HOT WATER TEES UP TO SERVE FIXTURE ON FOURTH FLOOR AND DOWN TO SERVE FIXTURES ON FLOORS BELOW

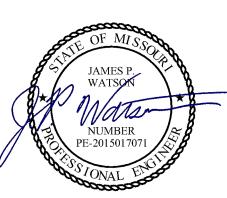
AND CONNECTS IN TO HOT WATER RETURN ON SECOND FLOOR (SEE SHEET PW102)

3 HOT WATER UP FROM BELOW.

(4) CW CONTINUES UP FROM FIRST FLOOR







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SHEET TITLE

WATER & GAS PLAN -THIRD FLOOR

SHEET NUMBER

WATER & GAS PLAN SYMBOL LEGEND

——sw——sw—— COLD SOFT WATER LINE

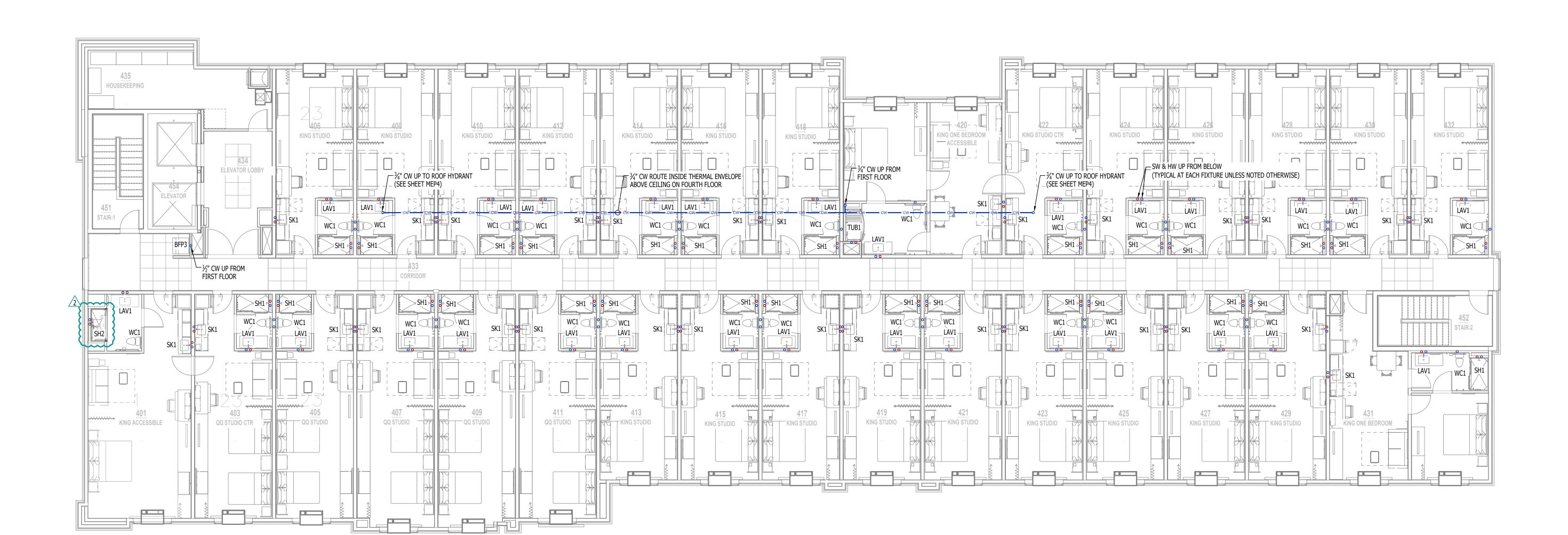
— HR — HR — HOT WATER RECIRCULATION LINE

PIPING TURNED DOWN / TURNED UP

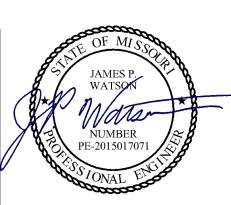
— HW — HW — HOT WATER LINE

WATER & GAS PLAN GENERAL NOTES:

1. SEE SHEET P501 FOR ADDITIONAL PLUMBING NOTES, DETAILS, & SCHEDULES.







James Watson, P.E. June 14, 2024 PE-2015017071 MO Certificate of Authority # 2018029680



ENGINEERING

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	J2 PROJECT No:	J21005
	J2 DESIGN:	ACW
	ISSUE TITLE	DATE
	CITY SUBMISSION	04 / 17 / 2024
	REVISION 1 - CITY RESPONSE	05 / 17 / 2024
2	CITY & BRAND RESPONSE	06 / 14 / 2024

NG DESIGN DRAWINGS FOR:

S By Hilton

MECHANICAL - ELECTRICAL - PLUMBING D
Home 2 Suites

AHJ APPROVAL STAMP

SHEET TI

WATER & GAS PLAN -FOURTH FLOOR

SHEET NUMBER

- 1.1. PLUMBING CONTRACTOR IS RESPONSIBLE TO PROVIDE ALL ESCUTCHEONS, ½ TURN STOPS, P-TRAPS, AND SUPPLY LINES TO PROVIDE A COMPLETE SYSTEM AT EACH FIXTURE INDICATED ON PLANS UNLESS
- 1.2. ALL PLUMBING SYSTEMS SHALL BE INSTALLED LEVEL, PLUMB, AND PARALLEL/PERPENDICULAR TO BUILDING ORIENTATION WHERE POSSIBLE
- COORDINATE ALL PIPING INSTALLATIONS WITH STRUCTURAL GRADE BEAMS, FOOTINGS, COLUMN PIERS, ETC. SLEEVE PIPING THRU STRUCTURAL ELEMENTS AS NECESSARY, VERIFY WITH STRUCTURAL
- 1.4. VERIFY ALL UTILITY CONNECTION POINTS WITH PROPOSED PLUMBING LAYOUTS PRIOR TO BEGINNING
- CLEAN ALL PLUMBING FIXTURES AND CHANGE FAUCET AERATORS AND SINK STRAINERS AT PROJECT COMPLETION PRIOR TO TURNING OVER TO OWNERSHIP.

- 2.1. ALL EQUIPMENT AND/OR FIXTURES MUST MEET OR EXCEED THE PERFORMANCE, FUNCTIONAL INTENT, AND AESTHETICS AS MODELS SPECIFIED ON PLANS. WHERE SPECIFIC MANUFACTURERS AND/OR MODELS ARE INDICATED ON PLANS OR WITHIN SCHEDULES, CONTRACTOR TO PROVIDE MODEL INDICATED OR APPROVED EQUAL. VERIFY SUBSTITUTION APPROVAL PRIOR TO PURCHASE OR INSTALLATION OF EQUIPMENT.
- CONTRACTOR TO SUPPLY SUBMITTALS FOR ALL EQUIPMENT FOR REVIEW BY ARCHITECT AND ENGINEER. FORMAL APPROVAL SHALL BE RECEIVED BY CONTRACTOR PRIOR TO EQUIPMENT PURCHASE.
- CONTRACTOR TO SHARE APPROVED EQUIPMENT SUBMITTALS WITH ANY PERTINENT ELECTRICAL REQUIREMENTS WITH ELECTRICAL CONTRACTORS WITHIN TWO WEEKS OF RECEIVING APPROVED SUBMITTALS FROM ARCHITECT/ENGINEER.

- 3.1. BELOW AND ABOVE GRADE WASTE AND VENT PIPING IN BUILDING TO BE SOLID CORE SCHEDULE 40 PVC LISTED FOR DWV APPLICATIONS.
- NO WASTE OR VENT PIPING INSTALLED BELOW GRADE SHALL BE SMALLER THAN 2".
- MINIMUM SLOPES FOR WASTE PIPING (UNLESS NOTED OTHERWISE ON PLANS):
- 2 ½" OR LESS DIAMETER: ¼" PER FOOT
- 3.3.2. 3" TO 6" DIAMETER:  $\frac{1}{8}$ " PER FOOT
- 8" OR LARGER DIAMETER:  $\frac{1}{16}$ " PER FOOT ACCESSIBLE FULL PIPE SIZE CLEANOUTS SHALL BE PROVIDED & INSTALLED ON BUILDING SANITARY LINES AT LOCATIONS SHOWN ON PLANS, AT INTERVALS OF NO MORE THAN 100', AT EVERY CHANGE IN DIRECTION GREATER THAN 45°, AND AT THE BASE OF EACH WASTE STACK.
- WASTE AND VENT PIPING IN PLENUMS SHALL BE CAST IRON, PLENUM-RATED CPVC, OR PVC WITH AN INSULATION WRAP LISTED FOR USE AS SUCH AN ASSEMBLY.
- ALL VENT PIPE TERMINATIONS SHALL BE LOCATED EITHER 10' HORIZONTALLY OR 3' ABOVE MECHANICAL AIR INTAKE LOCATIONS. TERMINATIONS SHALL NOT BE INSTALLED UNDER ANY OPERABLE BUILDING OPENING OR OPERABLE ADJACENT BUILDING OPENING. CONTRACTOR TO OFFSET VENT PIPING AS NECESSARY TO MEET THESE REQUIREMENTS.

## 4. **DOMESTIC WATER**

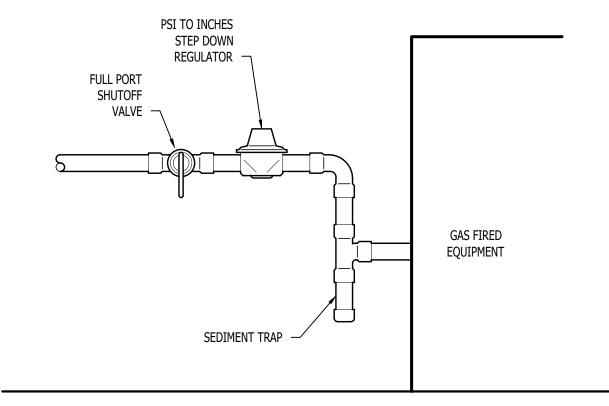
- 4.1. ALL DOMESTIC WATER PIPING TO BE EITHER COPPER OR PEX, SHALL CONFORM TO NSF 61 AND BE LISTED FOR USE IN POTABLE WATER SYSTEMS.
- WHERE PEX PIPING IS USED, IT SHALL BE INCREASED ONE PIPE SIZE FROM WHAT IS INDICATED
- ON PLANS FOR ALL PORTIONS OF DISTRIBUTION SYSTEM. PEX-A MAY BE INSTALLED AT SIZES INDICATED ON PLANS ONLY IF AN ENGINEERED PLAN IS SUBMITTED SHOWING ACCEPTABLE PRESSURE DROPS AND FLUID VELOCITIES, APPROVAL MUST
- BE GRANTED PRIOR TO PURCHASE AND INSTALLATION. COPPER WATER PIPING BELOW GRADE SHALL BE TYPE "K". BELOW GRADE JOINTS SHALL BE SILVER SOLDERED. THERE SHALL BE NO JOINTS IN WATER PIPING LOCATED BENEATH BUILDING
- COPPER WATER PIPING ABOVE GRADE SHALL BE TYPE "L".
- 4.2. PROVIDE WATER HAMMER ARRESTORS AT ALL QUICK-CLOSE VALVES. FIXTURES REQUIRING WATER HAMMER ARRESTORS INCLUDE BUT ARE NOT LIMITED TO FLUSH VALVES, SENSOR FAUCETS, AND WASHING MACHINE BOXES. AIR CHAMBERS SHALL NOT BE PERMITTED.
- ALL DOMESTIC WATER PIPING SHALL BE ROUTED WITHIN BUILDING THERMAL ENVELOPE AND WITHIN WALL CAVITIES, ABOVE FINISHED CEILINGS, OR BELOW SLAB TO REMAIN CONCEALED UNLESS OTHERWISE NOTED. NOTIFY ENGINEER OF ANY NECESSARY ADJUSTMENTS THAT REQUIRE PIPING TO BE
- 4.4. DOMESTIC WATER PIPING INSULATION
- ALL HW PIPING, WHETHER COPPER OR PEX, SHALL BE INSULATED WITH PLENUM RATED CLOSED 4.4.1. CELL ELASTOMERIC INSULATION.
- FOR PIPING LESS THAN  $1\frac{1}{2}$ ", INSULATION THICKNESS TO BE 1".
- FOR PIPING  $1\frac{1}{2}$ " OR GREATER, INSULATION THICKNESS SHALL BE  $1\frac{1}{2}$ ". 4.4.1.2. CW COPPER PIPING TO INSULATED WITH 1/2" PLENUM RATED CLOSED CELL ELASTOMERIC

INSULATION. CW PEX NEED NOT BE INSULATED UNLESS NOTED OTHERWISE ON PLANS.

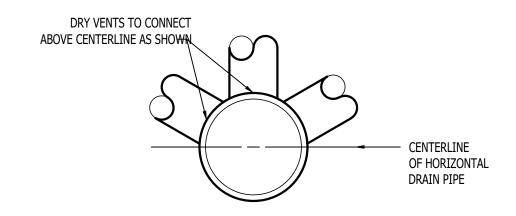
## 5. GAS PIPING

- GAS PIPING SHALL BE INSTALLED LEVEL, PLUMB, AND PARALLEL OR PERPENDICULAR TO BUILDING ORIENTATION WHERE POSSIBLE.
- QUARTER-TURN FULL-PORT SHUTOFF VALVES SHALL BE INCLUDED AT EACH APPLIANCE CONNECTION, AS WELL AS AN IN-LINE REGULATOR FROM DELIVERY PRESSURE TO APPLIANCE OPERATING PRESSURE IF REQUIRED. INCLUDE SEDIMENT TRAPS PER IFGC REQUIREMENTS.
- NATURAL GAS AND LIQUID PROPANE (LP) PIPING TO SHALL BE SCHEDULE 40 BLACK STEEL. PIPE JOINTS SHALL BE THREADED WITH CLASS 150 FITTINGS, OR WELDED. NOTIFY OWNER/GC OF ANY
- NECESSARY HOT-WORK ASSOCIATED WITH WELDED CONNECTIONS. WHERE PIPING IS EXPOSED ON EXTERIOR FACE OF BUILDING, PAINT TO MATCH BUILDING. PAINT
- YELLOW IN ALL OTHER LOCATIONS. ON ROOFTOPS, INSTALL GAS PIPE WITH "ROOFTOP BLOX" PER MANUFACTURER'S INSTRUCTION.

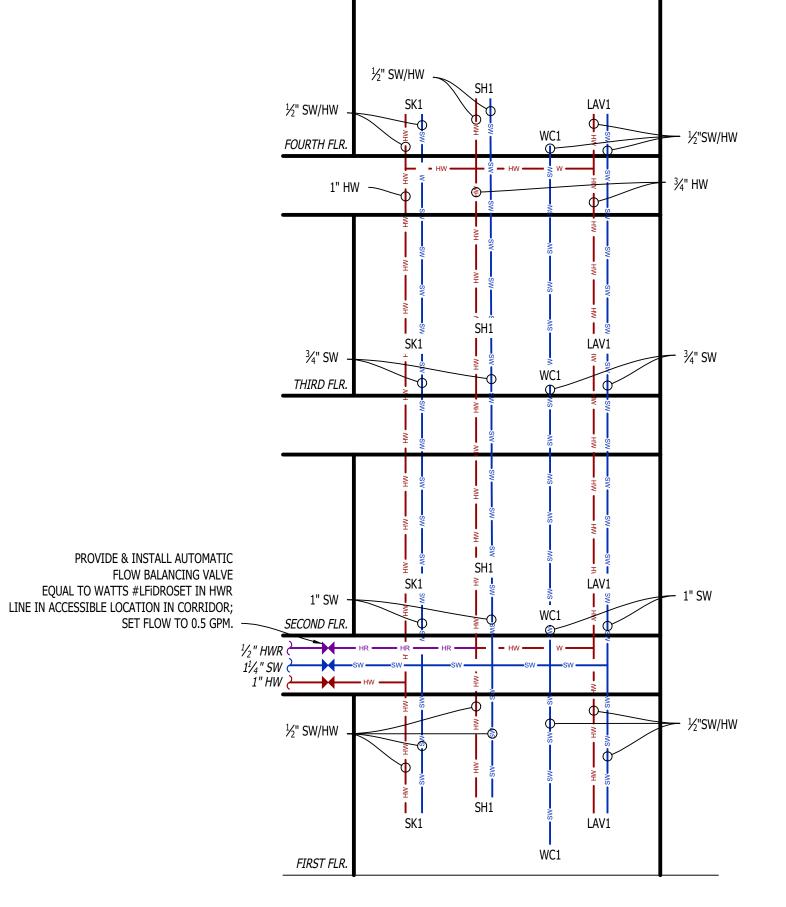
- 6.1. ABOVE AND BELOW GRADE STORM PIPING SHALL BE SOLID CORE SCHEDULE 40 PVC. ALL PRIMARY & SECONDARY STORM DRAIN PIPING & FITTINGS SHALL BE INSULATED WITH
- ½" FIBERGLASS INSULATION WITH ASJ JACKET.
- STORM DRAIN PIPING IN PLENUMS SHALL BE CAST IRON, PLENUM-RATED CPVC, OR PVC WITH AN INSULATION WRAP LISTED FOR USE AS SUCH AN ASSEMBLY.



## GAS EQUIPMENT SUPPLY DETAIL W/ REGULATOR

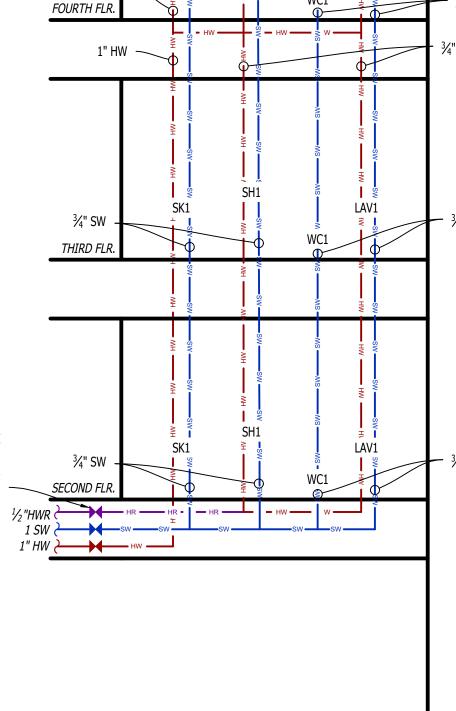


**DRY VENT DETAIL** 



PROVIDE & INSTALL AUTOMATIC FLOW BALANCING VALVE EQUAL TO WATTS #LFIDROSET IN HWR LINE IN ACCESSIBLE LOCATION IN CORRIDOR; SET FLOW TO 0.5 GPM.

♦ TEMPERATURE CONTROL



½" SW/HW

FIRST FLR.

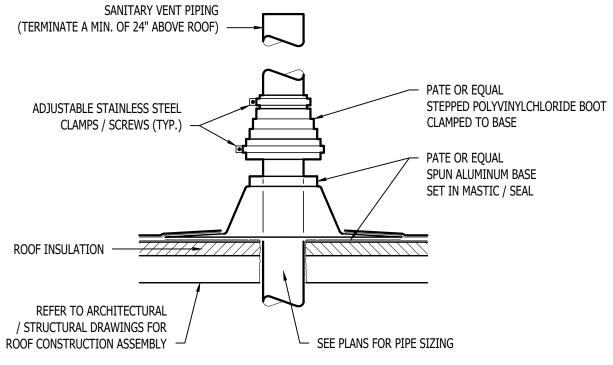
TYPICAL GUEST ROOM WATER RISER DETAIL (TYPE A)

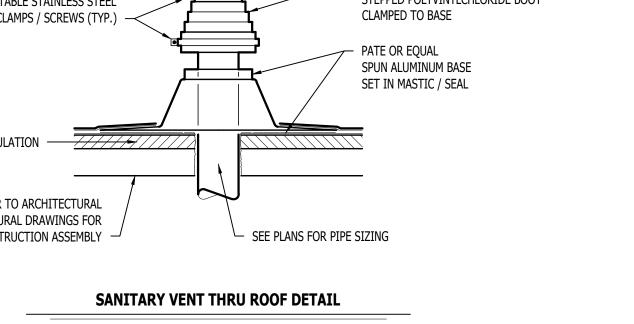
DETAIL LEGEND

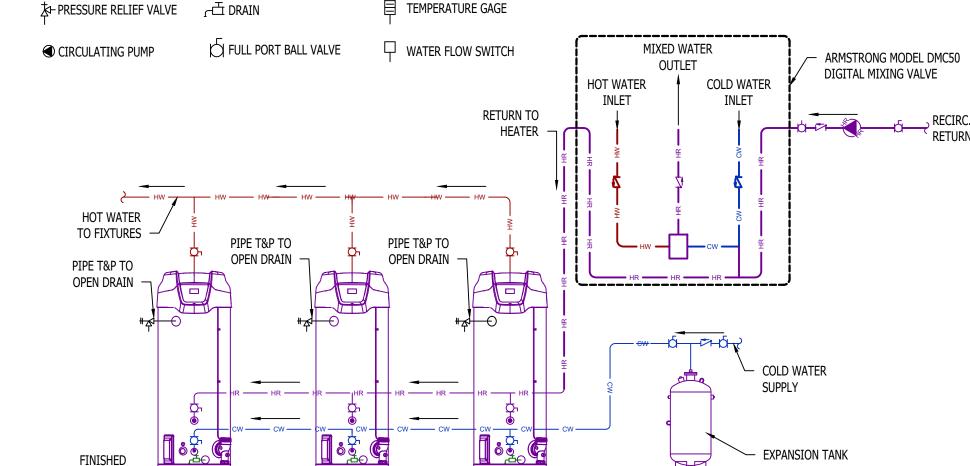
**+** TEMPERATURE &

予 PRESSURE RELIEF VALVE

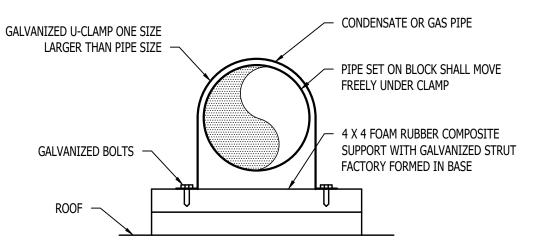
TYPICAL GUEST ROOM WATER RISER DETAIL (TYPE B)





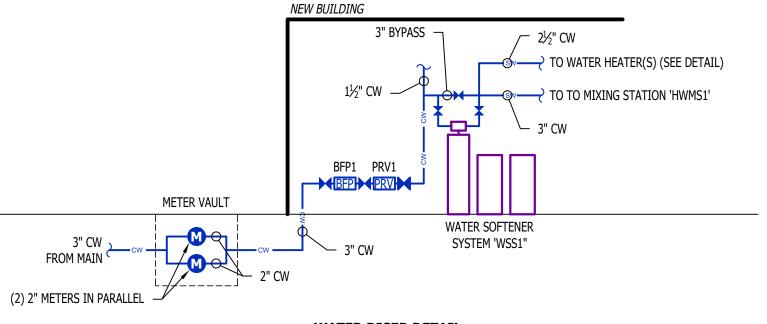


MULTIPLE WATER HEATER PIPING DETAIL WITH **RECIRCULATION AND DIGITAL MIXING VALVE** 



STEEL PIPE NOMINAL SIZE OF PIPE (IN.)	SPACING OF SUPPORTS (FT.)
1/2"	6
3⁄4" OR 1"	8
1 ¼" OR LARGER (HORIZONTAL)	10

INSTALL SUPPORTS ACCORDING TO NATIONAL FUEL GAS CODE 2015 EDITION



PIPE SUPPORT DETAIL

WATER RISER DETAIL

James Watson, P.E. April 17, 2024 PE-2015017071 MO Certificate of Authority # 2018029680

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J2 PROJECT No:	J21005
J2 DESIGN:	ACW
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ISSUE TITLE	DATE
CITY SUBMISSION	04 / 17 / 2024
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SHEET TITLE

PLUMBING DETAILS

SHEET NUMBER

FIXTURE		SANITARY PIPING		SUPPLY PIPING	
ТҮРЕ	TYPICAL ABBREVIATION	WASTE CONNECTION	VENT CONNECTION	COLD WATER CONNECTION	HOT WATER CONNECTION
DRINKING FOUNTAIN	DF	1-1/2"	1-1/4"	1/2"	-
FLOOR DRAIN	FD FD	3"	2"		ı
HAND / HAIR SINK	HS / SK	2"	1-1/4"	1/2"	1/2"
HOSE BIBB	HB	1	-	3/4"	ī
LAVATORY	LAV	1-1/2"	1-1/4"	1/2"	1/2"
MOP SINK	MS	3"	1-1/2"	1/2"	1/2"
ICE MAKER OUTLET BOX	REF	-	-	1/2"	-
SHOWER	SH	3"	1-1/2"	1/2"	1/2"
URINAL	UR	2"	1-1/4"	3/4"	-
WATER CLOSET (FLUSH TANK)	WC	3"	2"	1/2"	-
WATER CLOSET (FLUSH VALVE)	WC	3"	2"	1"	-

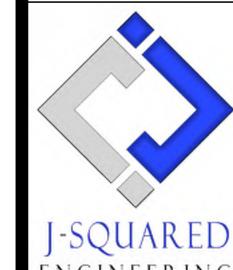
1. SIZES SHOWN ABOVE ARE TYPICAL UNLESS NOTED OTHERWISE ON PLANS

PLUMBING FIXTURE SCHEDULE						
TAG	DESCRIPTION	MA NUFA CTURER (OR EQUAL)	MODEL (OR EQUAL)	NOTES		
3BS1	THREE BASIN SINK			PROVIDED WITH FOOD SERVICE EQUIPMENT PACKAGE; PLUMBING CONTRACTOR TO INSTALL		
BFP1	BACKFLOW PREVENTER	WILKINS	375	RPZ - 3"		
BFP2	BACKFLOW PREVENTER	ZURN	950XLT	2" DOUBLE-CHECK FOR IRRIGATION		
BFP3	BACKFLOW PREVENTER	WATTS	LF9D	ICE MACHINE DUAL CHECK		
DF1	DRINKING FOUNTAIN (HIGH/LOW)	ELKAY	EZSTL8LC			
DN1	DOWNSPOUT NOZZLE	ZURN	Z199			
EWS1	EMERGENCY EYEWASH STATION	GUARDIAN	G1814	WITH G6020 THERMOSTATIC MIXING VALVE		
EXP1	EXPANSION TANK	WATTS	DETA-100			
FCO1	FLOOR CLEANOUT	ZURN	1400			
FD1	FLOOR DRAIN	ZURN	Z415-BZ	WITH Z1072 TRAP SEAL		
FPHB1	FROST PROOF HOSE BIB	WOODFORD	MODEL 67			
FS1	FLOOR SINK	ZURN	FD2370	WITH DOME STRAINER & HALF-GRATE		
GT1	GREASE TRAP	SCHIER	GB-75			
HB1	HOSE BIBB - INTERIOR	WOODFORD	24P - 3/4"	WITH LOCKING KEY		
HD1	HUB DRAIN			WITH Z1072 TRAP SEAL		
HS1	HAND SINK	REGENCY	600HS17			
HWMS1	HOT WATER MIXING STATION	WATTS	INTELLISTATION LFIS200	2.5" WITH 'RP1' RECIRCULATION PUMP		
LAV1	LAVATORY (UNDERMOUNT W/ MANUAL FAUCET)	AMERICAN STANDARD	0614.000	WITH ZURN Z831R1-XL FAUCET, 1/4 TURN STOPS, AND BRAIDED STAINLESS STEEL SUPPLIES		
LAV2	LAVATORY (WALL HUNG W/BATTERY SENSOR FAUCET)	AMERICAN STANDARD	0355.012	WITH ZURN Z6915-XL-L-TMV-1 FAUCET, 1/4 TURN STOPS, BRAIDED STAINLESS STEEL SUPPLIES, AND TRUBRO LAV GUARD 2		
LT1	LAUNDRY TUB	SWAN	MF-2F	24x46 DOUBLE BOWL; WITH ZURN Z81234-XL FAUCET		
MS1	MOP SINK	FIAT	MSB2424	WITH ZURN Z843M1 FAUCET WITH WALL HOOK		
PRV1	PRESSURE REDUCING VALVE	WATTS	LFF127W			
RH1	ROOF HYDRANT	WOODFORD	SRH-MS			
RP1	HOT WATER RECIRCULATION PUMP	GRUNDFOS	MAGNA 1	~16 GPM @ 20' TDH		
SH1	GUESTROOM SHOWER - 60"x 34"	STERLING	72331100-0	VIKRELL SHOWER PAN WITH SHOWER DRAIN, MOEN POSI-TEMP MIXING VALVE & TRIM KIT, WITH COMBINATION SHOWERED/HAND SHOWER WITH SINGLE SOURCE ARM, MAX FLOW 2.5GPM; SLIDE BAR KIT NOT PERMITTED		
SH2	ADA ROLL-IN SHOWER	STERLING	OC-S-63	63"x 39" ROLL-IN SHOWER WITH SEAT, GRAB BARS, MOEN POSI-TEMP MIXING VALVE & TRIM KIT; WITH ADA HAND-HELD SHOWER ASSEMBLY WITH SLIDE BAR (COORDINATE ROUGH-IN OPENING)		
SK1	GUESTROOM SINK - 16.5"x 16.5"x 5"	ELKAY	ECTRUAD151550	WITH TWO HANDLED ZURN Z871C4-XL FAUCET		
SK2	DOUBLE COMPARTMENT SINK (33x22x7)	ELKAY	CR3322	WITH TWO HANDLED ZURN 2871C4-XL FAUCET		
SK3	SINGLE COMPARTMENT SINK - FOOD PREP AREA	-	7.4	PROVIDED WITH FOOD SERVICE EQUIPMENT PACKAGE; PLUMBING CONTRACTOR TO INSTALL		
SP1	SUMP PUMP	ZOELLER	153-0002	120V, 1/2 HP		
TD1	TRENCH DRAIN	JAY R SMITH	SQ-TD-0885	FABRICATED 11-GAUGE 304 STAINLESS STEEL LINT TROUGH WITH LOOSE SET SS LIGHT DUTY BAR GRATE WITH 1" SPACING BETWEEN BARS; REMOVABLE FILTER SCREENS WITH 3/8" PERFORATED HOLES & 4" BOTTOM OUTLET WITH SS MESH COVER DOME BOTTOM STRAINER		
TUB1	ADA TRANSFER TUB - 60"x 30"	STERLING	71240XXX-0	VIKRELL TUB/SHOWER SURROUND WITH SEAT, GRAB BARS, MOEN POSI-TEMP MIXING VALVE & TRIM KIT, HANDHELD-SHOWER ASSEMBLY		
WB1	WASHER BOX	OATEY	38529	WASHER BOX W/ 1/4 TURN VALVES		
WC1	WATER CLOSET - TANK	AMERICAN STANDARD	215AA.004	WITH CHURCH 7200SLEC SEAT AND COVER, STAINLESS BRAIDED SUPPLY, AND 1/4 TURN SHUT-OFF.		
WC2	WATER CLOSET - ADA HEIGHT - BATTERY AUTO FLUSH VALVE	AMERICAN STANDARD	3043.001	WITH ZURN ZER6000AV-IS-WS1-CCP BATTERY FLUSH VALVE (1.6 GPM/FLUSH) AND CHURCH 9500SSCT SELF SUSTAINING SEAT		
WCO1	WALL CLEAN OUT					
WH1	WATER HEATER - GAS	AO SMITH	BTH-199	199kBTU, 100 GALLON, WITH 'EXP1'		
WSS1	WATER SOFTENER SYSTEM	CULLIGAN	CTM-210	TRIPLEX, 3", 155 GPM CONTINOUS, 217 GPM PEAK		
YCO1	YARD CLEAN OUT	ZURN	Z1400			
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- VERIFY NECESSARY FIXTURES MEET ADA REQUIREMENTS WITH ARCHITECT PRIOR TO INSTALLATION.
- 2. VERIFY FIXTURE FINISHES WITH OWNER / ARCHITECT.
- 3. SUBMIT ALL PLUMBING FIXTURES FOR BRAND APPROVAL PRIOR TO PURCHASE & INSTALLATION



James Watson, P.E. June 14, 2024 PE-2015017071 MO Certificate of Authority # 2018029680



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Suites Home

AHJ APPROVAL STAMP

PLUMBING SCHEDULES