DASHWOOD TRAILS

HOUSTON, HARRIS COUNTY, TEXAS

PROJECT INFORMATION

SITE DATA

SITE ZONING:	(SEE CIVIL)
SITE SIZE:	(SEE CIVIL)
SITE DENSITY:	(SEE CIVIL)
NO. OF PARKING SPACES:	(SEE CIVIL)

BUILDING DATA

DWELLING UNITS	LABEL	COMPLIANCE WITH	SQ FT	QTY	SUBTOTAL
1-BR UNIT	FHA	FHA	648	25	16,200 SF
1-BR UNIT	FHA/H/V	FHA/H/V	648	1	648 SF
1-BR UNIT	ADA	ADA	648	2	1,296 SF
2-BR UNIT	FHA	FHA	856	65	55,640 SF
2-BR UNIT	FHA/H/V	FHA/H/V	856	1	856 SF
2-BR UNIT	ADA	ADA	856	2	1,712 SF
3-BR UNIT	FHA	FHA	1,064	1	1,064 SF
3-BR UNIT	ADA	ADA	1,064	1	1,064 SF
DWELLING UNIT AREA:				98	78,480 SF
NON-DWELLING AREA:					25,500 SF
TOTAL BUILDING AREA:					103,980 SF

TOTAL RENTAL UNITS: (98) TOTAL UNITS:
(28) 1-BR UNITS, (68) 2-BR UNITS, (2) 3-BR UNITS

CODES AND REGULATIONS

BLDG. & RELATED CODES:	2021 IBC, 2021 IPC, 2021 IMC, 2021 IECC
ELECT. CODE:	2020 NEC
FIRE CODE:	2021 IFC
ACCESSIBILITY:	ICC A117.1-2017; FAIR HOUSING AT UNITS AND AT COMMON AREAS; ADA 2010 AT UNITS AND PUBLIC USE AREAS & 2012 TEXAS ACCESSIBILITY STANDARDS INCLUDING IBC SECTION 102.2; TAS SECTION 1.1
AGENCY:	TDHCA STATE POLICIES AND GUIDELINES
MISC.:	ALL APPLICABLE FEDERAL, STATE, LOCAL CODES, LAWS AND ORDINANCES

BUILDING CODE DATA

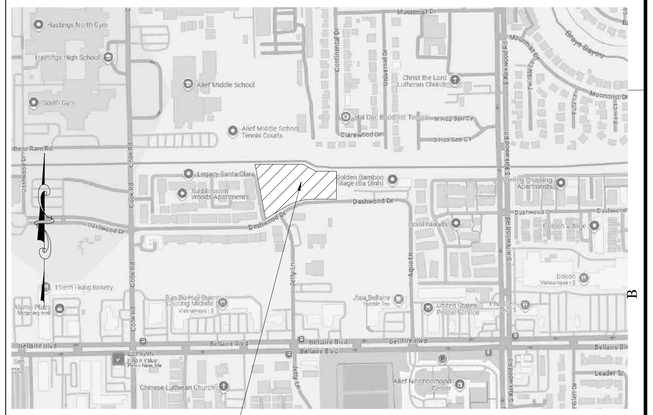
USE GROUP:	R-2 (DWELLING UNITS, CORRIDORS, STAIRS, COMMUNITY ROOM, MAILBOXES AREA, FOYER / WAITING AREA, KITCHENETTE, FITNESS ROOM, LAUNDRY & ELEVATOR); A-3 (OTHER COMMON AREAS); UNSEPARATED MIXED USE
CONSTRUCTION TYPE:	5A (RESIDENTIAL)
EXT. WALL CONSTRUCTION:	1-HR RATED EXTERIOR WALLS
OTHER CONSTRUCTION:	1-HR RATED UNIT SEPARATION WALLS, ROOF/CEILING, FLOOR/CEILING, BEAMS, COLUMNS, CORRIDOR WALLS; 2-HR RATED STAIR SHAFT & ELEVATOR SHAFT; 2-HR RATED FIREWALL; 1 1/2 HR RATED HORIZONTAL EXIT; UNRATED INTERIOR WALLS AND COMMON AREA INTERIOR WALLS.
ALLOW. AREA PER FLOOR AREA:	R-2 = 12,000 SF
AREA ADJUSTMENTS:	FRONTAGE INCREASE R-2 = 12,000(1.00-.25) X 30/30 = 9,000 SF/FLOOR INCREASE = 21,000 SF/ FLOOR TOTAL ALLOWABLE FOR R-2 PER FLOOR AREA
ACTUAL AREA PER FLOOR:	1ST FLOOR = 17,594 SF LEFT SIDE & 8,494 SF RIGHT SIDE OF FIRE WALL; 2ND FLOOR = 17,470 SF LEFT SIDE & 8,494 SF RIGHT SIDE OF FIRE WALL; 3RD FLOOR = 17,470 SF LEFT SIDE & 8,494 SF RIGHT SIDE OF FIRE WALL; 4TH FLOOR = 17,470 SF LEFT SIDE & 8,494 SF RIGHT SIDE OF FIRE WALL
ALLOW. HEIGHT & FLOORS:	R-2 = 60'-0", 4 STORIES
HEIGHT ADJUSTMENTS:	NONE REQUIRED, NONE TAKEN
ACTUAL HEIGHT & FLOORS:	55'-3 1/8", 4 STORIES
SPRINKLER SYSTEM:	NFPA 13R DESIGNED AND INSTALLED BY ACCREDITED FIRE PROTECTION SYSTEM DESIGNER AND INSTALLER. PROTECTION SHALL INCLUDE ALL AREAS AS APPLICABLE BY LOCAL AND STATE CODES. COORDINATE WITH GC/OWNER REGARDING THE INSTALLATION OF THE WET/DRY FIRE SUPPRESSION SYSTEM FOR UNCONDITIONED FREEZE PROTECTION PER 0.0 CODE DATA, PROVIDE FLEXIBLE DRY HEADS AT BALCONIES, PROVIDE FREEZE PROTECTED SOFFITS ON THE TOP FLOOR PER 0.0 CODE DATA INFORMATION. THIS COORDINATION SHOULD BE INCLUDED IN THE BASE BID.

INDEX TO DRAWINGS

Sheet Number	Sheet Name	Sheet Issue Date	Current Revision Date	Current Revision Description
1 - COVER SHEET				
0.0	COVER SHEET	25 OCT 2024	25 OCT 2024	ISSUE SET
2 - CIVIL SHEETS (BY CARLSON CONSULTING ENGINEERS, INC.)				
-	CIVIL SHEETS SUBMITTED UNDER SEPARATE COVER	25 OCT 2024	25 OCT 2024	ISSUE SET
3 - STRUCTURAL SHEETS (BY CROCKETT ENGINEERING CONSULTANTS)				
S100	GENERAL STRUCTURAL DATA	25 OCT 2024	25 OCT 2024	ISSUE SET
S200	FOUNDATION PLAN	25 OCT 2024	25 OCT 2024	ISSUE SET
S201	FOUNDATION PLAN	25 OCT 2024	25 OCT 2024	ISSUE SET
S210	FOUNDATION DETAILS	25 OCT 2024	25 OCT 2024	ISSUE SET
S211	FOUNDATION DETAILS	25 OCT 2024	25 OCT 2024	ISSUE SET
S300	2ND FLOOR FRAMING PLAN	25 OCT 2024	25 OCT 2024	ISSUE SET
S300A	SHEAR WALL PLAN	25 OCT 2024	25 OCT 2024	ISSUE SET
S301	2ND FLOOR FRAMING PLAN	25 OCT 2024	25 OCT 2024	ISSUE SET
S301A	SHEAR WALL PLAN	25 OCT 2024	25 OCT 2024	ISSUE SET
S400	3RD FLOOR FRAMING PLAN	25 OCT 2024	25 OCT 2024	ISSUE SET
S401	3RD FLOOR FRAMING PLAN	25 OCT 2024	25 OCT 2024	ISSUE SET
S500	4TH FLOOR FRAMING PLAN	25 OCT 2024	25 OCT 2024	ISSUE SET
S501	4TH FLOOR FRAMING PLAN	25 OCT 2024	25 OCT 2024	ISSUE SET
S510	FLOOR FRAMING DETAILS	25 OCT 2024	25 OCT 2024	ISSUE SET
S511	FLOOR FRAMING DETAILS	25 OCT 2024	25 OCT 2024	ISSUE SET
S600	ROOF FRAMING PLAN	25 OCT 2024	25 OCT 2024	ISSUE SET
S601	ROOF FRAMING PLAN	25 OCT 2024	25 OCT 2024	ISSUE SET
S610	ROOF FRAMING DETAILS	25 OCT 2024	25 OCT 2024	ISSUE SET
S611	ROOF FRAMING DETAILS	25 OCT 2024	25 OCT 2024	ISSUE SET
S612	ROOF FRAMING DETAILS	25 OCT 2024	25 OCT 2024	ISSUE SET
4 - ARCHITECTURAL SITE				
AS1.0	ARCHITECTURAL SITE PLAN	25 OCT 2024	25 OCT 2024	ISSUE SET
ASD1.0	ARCHITECTURAL SITE DETAILS	25 OCT 2024	25 OCT 2024	ISSUE SET
5 - ARCHITECTURAL				
A1.0	FIRST FLOOR EAST SIDE BUILDING PLAN	25 OCT 2024	25 OCT 2024	ISSUE SET
A1.1	FIRST FLOOR WEST SIDE BUILDING PLAN	25 OCT 2024	25 OCT 2024	ISSUE SET
A1.2	SECOND FLOOR EAST SIDE BUILDING PLAN	25 OCT 2024	25 OCT 2024	ISSUE SET
A1.3	SECOND FLOOR WEST SIDE BUILDING PLAN	25 OCT 2024	25 OCT 2024	ISSUE SET
A1.4	THIRD FLOOR EAST SIDE BUILDING PLAN	25 OCT 2024	25 OCT 2024	ISSUE SET
A1.5	THIRD FLOOR WEST SIDE BUILDING PLAN	25 OCT 2024	25 OCT 2024	ISSUE SET
A1.6	FOURTH FLOOR EAST SIDE BUILDING PLAN	25 OCT 2024	25 OCT 2024	ISSUE SET
A1.7	FOURTH FLOOR WEST SIDE BUILDING PLAN	25 OCT 2024	25 OCT 2024	ISSUE SET
A1.8	1-BR UNIT DIMENSION PLANS, DOOR SCHEDULE, WALL TYPES & NOTES	25 OCT 2024	25 OCT 2024	ISSUE SET
A1.9	2-BR & 3-BR UNIT DIMENSION PLANS	25 OCT 2024	25 OCT 2024	ISSUE SET
A1.10	FIRST FLOOR COMMON AREA DIMENSION PLANS	25 OCT 2024	25 OCT 2024	ISSUE SET
A1.11	SECOND FLOOR COMMON AREA DIMENSION PLANS	25 OCT 2024	25 OCT 2024	ISSUE SET
A1.12	THIRD FLOOR COMMON AREA DIMENSION PLANS	25 OCT 2024	25 OCT 2024	ISSUE SET
A1.13	FOURTH FLOOR COMMON AREA DIMENSION PLANS	25 OCT 2024	25 OCT 2024	ISSUE SET
A1.14	1-BR UNIT ACCESSIBILITY PLANS	25 OCT 2024	25 OCT 2024	ISSUE SET
A1.15	2-BR & 3-BR UNIT ACCESSIBILITY PLANS	25 OCT 2024	25 OCT 2024	ISSUE SET
A1.16	FIRST FLOOR COMMON AREA ACCESSIBILITY PLANS	25 OCT 2024	25 OCT 2024	ISSUE SET
A1.17	SECOND FLOOR COMMON AREA ACCESSIBILITY PLANS	25 OCT 2024	25 OCT 2024	ISSUE SET
A1.18	THIRD & FOURTH FLOOR COMMON AREA ACCESSIBILITY PLANS	25 OCT 2024	25 OCT 2024	ISSUE SET
A2.0	BUILDING LEFT SIDE ROOF PLAN, DETAILS AND NOTES	25 OCT 2024	25 OCT 2024	ISSUE SET
A2.1	BUILDING RIGHT SIDE ROOF PLAN	25 OCT 2024	25 OCT 2024	ISSUE SET
A3.0	EXTERIOR ELEVATIONS	25 OCT 2024	25 OCT 2024	ISSUE SET
A3.1	EXTERIOR ELEVATIONS	25 OCT 2024	25 OCT 2024	ISSUE SET
A3.2	EXTERIOR ELEVATIONS	25 OCT 2024	25 OCT 2024	ISSUE SET
A4.0	WALL SECTIONS	25 OCT 2024	25 OCT 2024	ISSUE SET
A4.1	WALL SECTIONS	25 OCT 2024	25 OCT 2024	ISSUE SET
A4.2	WALL SECTIONS	25 OCT 2024	25 OCT 2024	ISSUE SET
A4.3	ELEVATOR WALL SECTIONS	25 OCT 2024	25 OCT 2024	ISSUE SET
A4.4	FRAMING DETAILS	25 OCT 2024	25 OCT 2024	ISSUE SET
A4.5	FLASHING DETAILS	25 OCT 2024	25 OCT 2024	ISSUE SET
A4.6	STAIR DETAILS	25 OCT 2024	25 OCT 2024	ISSUE SET
A5.0	FIRE RATED ASSEMBLIES	25 OCT 2024	25 OCT 2024	ISSUE SET
A5.1	FIRE RATED ASSEMBLIES	25 OCT 2024	25 OCT 2024	ISSUE SET
A5.2	FIRE RATED ASSEMBLIES	25 OCT 2024	25 OCT 2024	ISSUE SET
A5.3	FIRE RATED ASSEMBLIES	25 OCT 2024	25 OCT 2024	ISSUE SET
A5.4	FIRE RATED ASSEMBLIES	25 OCT 2024	25 OCT 2024	ISSUE SET
A5.5	FIRE RATED ASSEMBLIES	25 OCT 2024	25 OCT 2024	ISSUE SET
A5.6	FIRE RATED ASSEMBLIES	25 OCT 2024	25 OCT 2024	ISSUE SET
A6.0	1-BR UNIT FINISH PLANS, FINISH SCHEDULE & NOTES	25 OCT 2024	25 OCT 2024	ISSUE SET
A6.1	2-BR & 3-BR UNIT FINISH PLANS	25 OCT 2024	25 OCT 2024	ISSUE SET
A6.2	FIRST FLOOR COMMON AREA FINISH PLANS	25 OCT 2024	25 OCT 2024	ISSUE SET
A6.3	SECOND FLOOR COMMON AREA FINISH PLANS	25 OCT 2024	25 OCT 2024	ISSUE SET
A6.4	THIRD & FOURTH FLOOR COMMON AREA FINISH PLANS	25 OCT 2024	25 OCT 2024	ISSUE SET
A7.0	INTERIOR ELEVATIONS NOTES AND DETAILS	25 OCT 2024	25 OCT 2024	ISSUE SET
A7.1	ELECTRICAL MOUNTING HEIGHT ELEVATIONS	25 OCT 2024	25 OCT 2024	ISSUE SET
A7.2	1-BR UNIT INTERIOR ELEVATIONS	25 OCT 2024	25 OCT 2024	ISSUE SET
A7.3	2-BR UNIT INTERIOR ELEVATIONS & INTERIOR SIGNAGE DETAIL	25 OCT 2024	25 OCT 2024	ISSUE SET
A7.4	3-BR UNIT INTERIOR ELEVATIONS	25 OCT 2024	25 OCT 2024	ISSUE SET
A7.5	COMMON AREA INTERIOR ELEVATIONS	25 OCT 2024	25 OCT 2024	ISSUE SET
LS1.0	FIRST & SECOND FLOOR LIFE SAFETY PLANS	25 OCT 2024	25 OCT 2024	ISSUE SET
LS1.1	THIRD & FOURTH FLOOR LIFE SAFETY PLANS	25 OCT 2024	25 OCT 2024	ISSUE SET
6 - MECHANICAL, PLUMBING, ELECTRICAL (BY MALICOAT-WINSLOW ENGINEERS)				
ME1	MEP SITE PLAN	25 OCT 2024	25 OCT 2024	ISSUE SET
ME2	SCHEDULES	25 OCT 2024	25 OCT 2024	ISSUE SET
ME3	DETAILS	25 OCT 2024	25 OCT 2024	ISSUE SET
ME4	IECC CONTROL REQUIRMENTS	25 OCT 2024	25 OCT 2024	ISSUE SET
M1	1ST FLOOR E PLUMBING PLAN	25 OCT 2024	25 OCT 2024	ISSUE SET
M2	1ST FLOOR W PLUMBING PLAN	25 OCT 2024	25 OCT 2024	ISSUE SET
M3	2ND FLOOR E PLUMBING PLAN	25 OCT 2024	25 OCT 2024	ISSUE SET
M4	2ND FLOOR W PLUMBING PLAN	25 OCT 2024	25 OCT 2024	ISSUE SET
M5	3RD FLOOR E PLUMBING PLAN	25 OCT 2024	25 OCT 2024	ISSUE SET
M6	3RD FLOOR W PLUMBING PLAN	25 OCT 2024	25 OCT 2024	ISSUE SET
M7	4TH FLOOR E PLUMBING PLAN	25 OCT 2024	25 OCT 2024	ISSUE SET
M8	4TH FLOOR W PLUMBING PLAN	25 OCT 2024	25 OCT 2024	ISSUE SET
M9	1ST FLOOR E HVAC PLAN	25 OCT 2024	25 OCT 2024	ISSUE SET
M10	1ST FLOOR W HVAC PLAN	25 OCT 2024	25 OCT 2024	ISSUE SET
M11	2ND FLOOR E HVAC PLAN	25 OCT 2024	25 OCT 2024	ISSUE SET
M12	2ND FLOOR W HVAC PLAN	25 OCT 2024	25 OCT 2024	ISSUE SET
M13	3RD FLOOR E HVAC PLAN	25 OCT 2024	25 OCT 2024	ISSUE SET
M14	3RD FLOOR W HVAC PLAN	25 OCT 2024	25 OCT 2024	ISSUE SET
M15	4TH FLOOR E HVAC PLAN	25 OCT 2024	25 OCT 2024	ISSUE SET
M16	4TH FLOOR W HVAC PLAN	25 OCT 2024	25 OCT 2024	ISSUE SET
M17	3BR APT PLUMBING PLANS	25 OCT 2024	25 OCT 2024	ISSUE SET
M18	2-1BR APT PLUMBING PLANS	25 OCT 2024	25 OCT 2024	ISSUE SET
M19	3BR APT HVAC PLANS	25 OCT 2024	25 OCT 2024	ISSUE SET
M20	2-1BR APT HVAC PLANS	25 OCT 2024	25 OCT 2024	ISSUE SET
E1	1ST FLOOR E POWER PLAN	25 OCT 2024	25 OCT 2024	ISSUE SET
E2	1ST FLOOR W POWER PLAN	25 OCT 2024	25 OCT 2024	ISSUE SET
E3	2ND FLOOR E POWER PLAN	25 OCT 2024	25 OCT 2024	ISSUE SET
E4	2ND FLOOR W POWER PLAN	25 OCT 2024	25 OCT 2024	ISSUE SET
E5	3RD FLOOR E POWER PLAN	25 OCT 2024	25 OCT 2024	ISSUE SET
E6	3RD FLOOR W POWER PLAN	25 OCT 2024	25 OCT 2024	ISSUE SET
E7	4TH FLOOR E POWER PLAN	25 OCT 2024	25 OCT 2024	ISSUE SET
E8	4TH FLOOR W POWER PLAN	25 OCT 2024	25 OCT 2024	ISSUE SET
E9	1ST FLOOR E LIGHTING PLAN	25 OCT 2024	25 OCT 2024	ISSUE SET
E10	1ST FLOOR W LIGHTING PLAN	25 OCT 2024	25 OCT 2024	ISSUE SET
E11	2ND FLOOR E LIGHTING PLAN	25 OCT 2024	25 OCT 2024	ISSUE SET
E12	2ND FLOOR W LIGHTING PLAN	25 OCT 2024	25 OCT 2024	ISSUE SET
E13	3RD FLOOR E LIGHTING PLAN	25 OCT 2024	25 OCT 2024	ISSUE SET
E14	3RD FLOOR W LIGHTING PLAN	25 OCT 2024	25 OCT 2024	ISSUE SET
E15	4TH FLOOR E LIGHTING PLAN	25 OCT 2024	25 OCT 2024	ISSUE SET
E16	4TH FLOOR W LIGHTING PLAN	25 OCT 2024	25 OCT 2024	ISSUE SET
E17	3BR APT POWER PLANS	25 OCT 2024	25 OCT 2024	ISSUE SET
E18	2-1BR APT POWER PLANS	25 OCT 2024	25 OCT 2024	ISSUE SET
E19	3BR APT LIGHTING PLANS	25 OCT 2024	25 OCT 2024	ISSUE SET
E20	2-1BR APT LIGHTING PLANS	25 OCT 2024	25 OCT 2024	ISSUE SET
E21	ELECTRICAL RISER DIAGRAM	25 OCT 2024	25 OCT 2024	ISSUE SET
FA1	1ST FLOOR E FIRE ALARM PLAN	25 OCT 2024	25 OCT 2024	ISSUE SET
FA2	1ST FLOOR W FIRE ALARM PLAN	25 OCT 2024	25 OCT 2024	ISSUE SET
FA3	2ND FLOOR E FIRE ALARM PLAN	25 OCT 2024	25 OCT 2024	ISSUE SET
FA4	2ND FLOOR W FIRE ALARM PLAN	25 OCT 2024	25 OCT 2024	ISSUE SET
FA5	3RD FLOOR E FIRE ALARM PLAN	25 OCT 2024	25 OCT 2024	ISSUE SET
FA6	3RD FLOOR W FIRE ALARM PLAN	25 OCT 2024	25 OCT 2024	ISSUE SET
FA7	4TH FLOOR E FIRE ALARM PLAN	25 OCT 2024	25 OCT 2024	ISSUE SET
FA8	4TH FLOOR W FIRE ALARM PLAN	25 OCT 2024	25 OCT 2024	ISSUE SET
FA9	3BR APT FIRE ALARM PLANS	25 OCT 2024	25 OCT 2024	ISSUE SET
FA10	2-1BR APT FIRE ALARM PLANS	25 OCT 2024	25 OCT 2024	ISSUE SET

ARCHITECT'S JOB NO. 4809
TDHCA & PROJECT #24-221

PROJECT LOCATION MAP



12020 DASHWOOD DRIVE
HOUSTON, TEXAS 77072

SIGNATURE AREAS

NOTE: PROJECT CONSTRUCTION MUST BE IN COMPLIANCE WITH ALL APPLICABLE CODES, ORDINANCES, LAWS, AND REGULATIONS AS ENUMERATED ELSEWHERE IN THE PLANS AND SPECIFICATIONS.

ARCHITECT: WALLACE ARCHITECTS, LLC
302 CAMPUSVIEW DRIVE SUITE 208, COLUMBIA, MO 65201
BY: DATE:

OWNER: DASHWOOD TRAILS, LP
3556 S. CULPEPPER CIRCLE, SUITE 4, SPRINGFIELD, MO 65804
BY: DATE:

CONTRACTOR: HAMILTON BUILDERS CONTRACTING, LLC
3556 S. CULPEPPER CIRCLE, SUITE 4, SPRINGFIELD, MO 65804
BY: DATE:

TDHCA REPRESENTATIVE:
221 EAST 11TH STREET, AUSTIN, TX 78701-2410
BY: DATE:

PM: RS DT: TY
PC: RS QC: JG

PLAN SET NO. _____

ISSUE SET

REGISTERED ARCHITECT
MARTIN RANDALL PORTER
#24739
STATE OF TEXAS

25 OCT 2024

MARTIN RANDALL PORTER
ARCHITECT LICENSE #24739

DASHWOOD TRAILS
HOUSTON, HARRIS COUNTY, TEXAS

Wallace ARCHITECTS LLC
Columbia, MO
P 573-256-7200

TEXAS STATE CERTIFICATE OF AUTHORITY: BR 159

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1ST ISSUE
25 OCT 2024

ISSUE/REVISIONS
0 25 OCT 2024 ISSUE SET

SHEET NO. 0.0

JOB NO. 4809

10/31/2024 3:20:34 PM

Dashwood Trails

Houston, Harris County, Texas

GENERAL NOTES

ELEVATION DATUM
SEE ARCHITECTURAL DRAWINGS OR SITE PLAN FOR FINISH FLOOR ELEVATIONS

DESIGN SPECIFICATIONS
2021 INTERNATIONAL BUILDING CODE

EARTHWORK
EARTHWORK OPERATIONS SHALL BE PERFORMED UNDER THE DIRECTION OF A PROFESSIONAL TESTING AGENCY TO ASSURE COMPLIANCE WITH THE RECOMMENDATIONS OF THE SOILS REPORT BY ECS SOUTHWEST, LLP. DATED OCTOBER 17, 2024.

CONCRETE

CONCRETE WORK SHALL CONFORM TO ALL REQUIREMENTS OF THE CURRENT ACI 301, SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS, ACI 318 BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE, ACI 305 SPECIFICATIONS FOR HOT WATER CONCRETE, AND ACI 306 SPECIFICATIONS FOR COLD WEATHER CONCRETE, WITH THE FOLLOWING ADDITIONAL REQUIREMENTS:

1. CONCRETE SHALL DEVELOP THE FOLLOWING 28-DAY MINIMUM COMPRESSIVE STRENGTH:
   - FOUNDATIONS – 3,000 PSI
   - CAST-IN-PLACE WALLS – 3,500 PSI
   - FLOOR SLAB – 4,000 PSI
   - EXTERIOR SLABS, WALLS AND CURBS – 4,000 PSI
2. ALL FOOTINGS SHALL BEAR ON UNDISTURBED SOIL OR ENGINEERED FILL.
3. CHLORIDE- BASED ADMIXTURES ARE PROHIBITED IN ALL REINFORCED CONCRETE.
4. REINFORCING STEEL SHALL CONFORM TO ASTM A615, A616, OR A617, GRADE 60.
5. ALL CONTINUOUS REINFORCING STEEL THAT MEETS AT A CORNER SHALL BE TIED TOGETHER WITH A CORNER BAR THAT HAS SUFFICIENT LAP DISTANCE IN EACH DIRECTION
6. CONTINUOUS REINFORCING BARS LAP LENGTH SHALL BE A MINIMUM OF 48 BAR DIAMETERS UNLESS NOTED OTHERWISE
7. CONCRETE SLUMP SHALL BE A MAXIMUM OF 4" +/- 1" (ASTM C- 143) AS DELIVERED IN THE FIELD. CONTRACTOR MAY USE CHEMICAL ADMIXTURES TO ATTAIN A MAXIMUM SLUMP OF 8" FOR WORKABILITY. NO WATER MAY BE ADDED TO THE CONCRETE MIX ON SITE UNLESS WATER IS WITHHELD AT THE BATCHING FACILITY. IF WATER IS WITHHELD AT THE BATCHING FACILITY IT SHOULD BE REFLECTED ON THE LOAD TICKET. THE TOTAL AMOUNT OF WATER IN THE MIX SHALL NOT EXCEED WHAT IS NOTED ON THE APPROVED MIXED. THIS SHALL BE NOTED IN THE SPECIAL INSPECTOR'S RECORDS.
8. CONCRETE EXPOSED TO WEATHER, VEHICLES, AND/OR DEICING CHEMICALS SHALL BE AIR-ENTRAINED WITH 6% (+/-) 1.5% ENTRAINED AIR BY VOLUME AT POINT OF DISCHARGE. DO NOT ALLOW AIR CONTENT OF TROWELED FINISHED FLOORS TO EXCEED 3%.
9. SUBMIT CONCRETE MIX PROPORTIONS PRIOR TO START OF WORK. DO NOT BEGIN CONCRETE PRODUCTION UNTIL MIXES HAVE BEEN REVIEWED AND ARE ACCEPTABLE TO THE ENGINEER.
10. READY MIX CONCRETE SHALL COMPLY WITH REQUIREMENTS OF ASTM C94.
11. CONCRETE WORK EXECUTION
    - A. CONSTRUCT FORMS TO CORRECT SIZE, SHAPE, ALIGNMENT, ELEVATION AND POSITION; AND TO SUPPORT VERTICAL AND LATERAL LOADS.
    - B. POSITION, SUPPORT, AND SECURE REINFORCEMENT AGAINST DISPLACEMENT. MINIMUM CONCRETE COVER FOR REINFORCEMENT SHALL BE, UNLESS NOTED OTHERWISE ON THE DRAWINGS:
      - CAST AGAINST AND EXPOSED TO EARTH.....3 INCHES
      - EXPOSED TO EARTH OR WEATHER.....2 INCHES
      - NOT EXPOSED TO WEATHER OR IN CONTACT WITH EARTH.....1 ½ INCHES
    - C. PROVIDE CONTROL JOINTS IN SLABS-ON-GRADE AT NOT GREATER THAN 15 FEET ON CENTER IN EACH DIRECTION. SAW CUT CONTROL JOINTS MINIMUM ¼ OF SLAB DEPTH, AS SOON AFTER SLAB FINISHING WITHOUT DISLODGING AGGREGATE.
    - D. STEEL TROWEL FINISH ALL INTERIOR CONCRETE SLABS, BROOM FINISH ALL EXTERIOR CONCRETE SLABS.
    - E. CURE ALL CONCRETE IN COMPLIANCE WITH ACI 301, USING A LIQUID TYPE MEMBRANE, NON-RESIDUAL, CURING COMPOUND COMPLYING WITH ASTM C309. ASSURE COMPATIBILITY WITH FINISH FLOOR COVERING.

POST-INSTALLED ANCHORS

1. ALL POST-INSTALLED ANCHORS SHALL MEET THE REQUIREMENTS OF THE CODE-CITED EDITION OF ACI 318, APPENDIX "D", AND SHALL BE ACCEPTABLE FOR BOTH CRACKED AND UNCRACKED CONCRETE.
2. EXPANSION ANCHORS HAVE BEEN DESIGNED AS HILTI KWIK BOLT TZ ANCHORS, UNLESS NOTED OTHERWISE.
3. ADHESIVE ANCHORS HAVE BEEN DESIGNED TO USE HILTI HIT HY 200 ADHESIVE IN CONCRETE OR SOLID MASONRY, UNLESS NOTED OTHERWISE.
4. EQUIVALENT ANCHORS MAY BE SUBMITTED FOR THE ENGINEER'S APPROVAL. SUBMITTALS ARE THE CONTRACTOR'S RESPONSIBILITY AND MUST INCLUDE EVALUATION REPORTS FROM THE INTERNATIONAL CODE COUNCIL (ICC).
5. EMBEDMENT DEPTH IS DEFINED AS THE DISTANCE FROM THE SURFACE OF THE LOAD-BEARING BASE MATERIAL TO THE DEEPEST PART OF THE ANCHOR AFTER THE ANCHOR HAS BEEN DRIVEN INTO THE HOLE BUT NOT YET EXPANDED.
6. ADHESIVE ANCHORS SHALL BE ACCEPTABLE FOR LONG-TERM LOADING. WHEN BASE MATERIAL TEMPERATURES ARE BELOW 40 DEG F, ONLY NON-EPOXY-BASED ADHESIVES SHALL BE USED.
7. POST-INSTALLED ANCHORS SHALL ONLY BE USED WHERE SPECIFIED ON THE DRAWINGS. THE CONTRACTOR SHALL OBTAIN APPROVAL FROM THE ENGINEER PRIOR TO USING POST-INSTALLED ANCHORS FOR MISSING OR MISPLACED CAST-IN-PLANE ANCHORS. CARE SHALL BE TAKEN TO AVOID CONFLICTS WITH EXISTING REINFORCING BARS. HOLES SHALL BE DRILLED AND CLEANED PER ANCHOR MANUFACTURER'S SPECIFICATIONS.
8. STAINLESS STEEL ANCHORS ARE REQUIRED AT ALL PERMANENTLY EXPOSED WEATHER CONDITIONS.

TIMBER

TIMBER WORK SHALL CONFORM TO ALL REQUIREMENTS OF THE CURRENT ANSI/AWC NATIONAL DESIGN SPECIFICATION (NDS) FOR WOOD CONSTRUCTION WITH 2018 NDS SUPPLEMENT FOR WOOD CONSTRUCTION, WITH THE FOLLOWING SUPPLEMENTAL REQUIREMENTS:

1. FOR COMMON MEMBER SIZES, THE SPECIES AND GRADES SHALL BE AS FOLLOWS, UNLESS NOTED OTHERWISE:
   - A. 2X4 SPF No.1/No.2
   - B. 2X6 SPF No.1/No.2
   - C. 2X8 DF-L No.2
   - D. 2X10 DF-L S.S.
   - E. 2X12 DF-L S.S.

   EQUIVALENT (OR BETTER) GRADES & SPECIES MAY BE SUBMITTED FOR THE ENGINEER'S APPROVAL.
2. SIZES SHOWN FOR LUMBER ARE NOMINAL SIZES.
3. TIMBER EXPOSED TO WEATHER OR GROUND, OR IN CONTACT WITH CONCRETE OR MASONRY SHALL BE PRESSURE-IMPREGNATED BY AN APPROVED PROCESS AND PRESERVATIVE.
4. SPLICING OF JOISTS, STUDS, OR HEADERS IS PROHIBITED EXCEPT AS SHOWN.
5. BOLTS SHALL CONFORM TO ASTM A307. HOLES SHALL BE DRILLED PER SECTION 12.1.3 OF THE 2018 ANSI/AWC NDS FOR WOOD CONSTRUCTION NDS SUPPLEMENT.
6. LAG SCREWS AND WOOD SCREWS SHALL BE INSTALLED PER SECTIONS 12.1.4 & 12.1.5 RESPECTIVELY, OF THE 2018 ANSI/AWC NDS FOR WOOD CONSTRUCTION WITH 2018 NDS SUPPLEMENT.
7. COMMON NAILS SHALL BE USED, UNLESS NOTED OTHERWISE. IN ADDITION, NAILS SHALL BE GALVANIZED, IF EXPOSED TO WEATHER OR MOISTURE. TOE-NAILS SHALL BE DRIVEN PER SECTION 12.1.6.3 OF THE 2018 ANSI/AWC NDS FOR WOOD CONSTRUCTION WITH 2018 NDS SUPPLEMENT.
8. FASTENING SHALL BE PER THE IBC MINIMUM FASTENING SCHEDULE, TABLE 2304.10.1, UNLESS NOTED OTHERWISE.
9. CONNECTIONS/CONNECTORS SHALL BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS.

BRICK LINTELS

1. ALL STEEL LINTELS TO BE A36 STEEL, A992 GRADE 50, OR A500 GRADE B. ALL LINTELS TO BE HOT DIPPED GALVANIZED.

STRUCTURAL STEEL

1. FABRICATION AND ERECTION OF STRUCTURAL STEEL SHALL BE IN ACCORDANCE WITH THE CURRENT EDITION OF THE AISC SPECIFICATIONS FOR STRUCTURAL STEEL BUILDINGS, THE AISC CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES AND CURRENT OSHA STANDARDS.
2. WIDE FLANGE SHAPES SHALL CONFORM TO ASTM A992. STRUCTURAL TUBES SHALL CONFORM TO ASTM A500 GRADE B. ALL OTHER STRUCTURAL STEEL SHALL CONFORM TO ASTM A36.
3. BOLTS, UNLESS OTHERWISE SHOWN, SHALL CONFORM TO ASTM A325-N, SIZE AS PER PLAN.
4. ANCHOR BOLTS, UNLESS OTHERWISE SHOWN, SHALL CONFORM TO ASTM F1554 GRADE 36.
5. SPLICING OF STRUCTURAL STEEL IS PROHIBITED EXCEPT AS DETAILED.
6. ALL STRUCTURAL AND MISCELLANEOUS STEEL ITEMS SHALL RECEIVE ONE COAT OF "IRONCLAD RETARDO RUST INHIBITIVE PAINT 163" (BENJAMIN MOORE) OR APPROVED EQUAL UNLESS OTHERWISE INDICATED IN THE SPECIFICATIONS. ALL STEEL SURFACES EMBEDDED IN CONCRETE SHALL NOT BE PAINTED. PREPARATION OF STEEL SURFACES SHALL MEET THE REQUIREMENTS OF THE STEEL STRUCTURES PAINTING COUNCIL (SSPC-SP1) AND THE REMOVAL OF GREASE AND OIL BY SOLVENT CLEANING (SSPC-SP1) AND THE REMOVAL OF MILL SCALE, RUST, WELD FLUX AND SLAG BY HAND TOOL CLEANING (SSPC-SP2). PRIMER SHALL BE APPLIED AT THE MANUFACTURER'S RECOMMENDED RATE BUT NOT LESS THAN ONE GALLON PER 400 SQ.FT. THEREBY DEPOSITING A DRY FILM THICKNESS OF NOT LESS THAN 1.5 MILS. ANY SCARRED AREAS SHALL BE TOUCHED UP WITH THE SAME PAINT AFTER ERECTION.
7. ALL WELDING SHALL BE DONE BY QUALIFIED WELDERS IN ACCORDANCE WITH THE CURRENT EDITION OF THE AWS STRUCTURAL WELDING CODE. WELDING ELECTRODES SHALL BE E70XX.

PREFABRICATED WOOD TRUSSES

1. FLOOR & ROOF TRUSSES SHALL BE DESIGNED IN ACCORDANCE WITH THE TRUSS PLATE INSTITUTE (TPI) DESIGN SPECIFICATION FOR METAL PLATE CONNECTED WOOD TRUSSES, AND THE ANSI/AWC NATIONAL DESIGN SPECIFICATION (NDS) FOR WOOD CONSTRUCTION.
2. PROVIDE TEMPORARY AND PERMANENT BRACING ON ALL TRUSSES, AS REQUIRED TO PROVIDE MEMBER AND TRUSS STABILITY.
3. FLOOR & ROOF TRUSSES SHALL BE DESIGNED AND CONSTRUCTED FOR A MAXIMUM TOTAL LOAD DEFLECTION OF L/360 AND TO SAFELY SUPPORT THE FOLLOWING LOADS:
   - A. DEAD, LIVE, SNOW, WIND, EARTHQUAKE: SEE PROJECT DESIGN DATA ON COVER SHEET.
   - B. MECHANICAL PIPE LOAD: TRUSSES SHALL BE DESIGNED FOR A CONCENTRATED LOAD OF 250 LBS HUNG ANYWHERE ALONG THE BOTTOM CHORD.
   - C. OVER-FRAMING LOAD: TRUSSES SHALL ALSO BE DESIGNED TO SUPPORT ADDITIONAL OVERBUILD FRAMING, SUCH AS THAT WHICH FORMS VALLEYS AND HIPS ON ROOFS.
   - D. DRIFTED SNOW LOAD: TRUSSES SHALL BE DESIGNED TO SUPPORT DRIFTED SNOW LOADS IN ACCORDANCE WITH THE APPROPRIATE BUILDING CODE.
   - E. IN-PLANE LATERAL LOADS: TRUSSES SHALL BE DESIGNED TO SUPPORT ANY LATERAL LOADS CARRIED AXIALLY IN THE PLANE OF THE TRUSS, AS SHOWN ON THE PLANS.
4. GABLED END TRUSSES SHALL HAVE VERTICAL MEMBERS SPACED AT 16" O.C. MAXIMUM.
5. SUBMITTALS SHALL INCLUDE THE FOLLOWING:
   - A. SHOP DRAWINGS PREPARED UNDER THE SUPERVISION OF, AND SIGNED AND SEALED BY, A PROFESSIONAL ENGINEER REGISTERED IN THE STATE WHERE THE PROJECT IS BUILT. THESE DRAWINGS SHALL INDICATE SPECIES, GRADE, AND SIZES OF LUMBER TO BE USED; PITCH, SPAN, CAMBER, CONFIGURATION, AND SPACING FOR EACH TYPE OF TRUSS REQUIRED; TYPE, SIZE, MATERIAL, FINISH, AND LOCATION OF METAL CONNECTOR PLATES; AND BEARING DETAILS. SHOW TRUSS LAYOUT AND ALL REQUIRED TEMPORARY AND PERMANENT BRACING AFFECTING THE STRUCTURAL CAPACITY OF THE TRUSSES.

PROVIDE COMPLETE ENGINEERING DESIGN CALCULATIONS THAT INCLUDE DESIGN VALUES, DESIGN ANALYSIS INDICATING LOADING, ASSUMED ALLOWABLE STRESSES, STRESS DIAGRAMS, AND CALCULATIONS, AND ANY OTHER INFORMATION NEEDED FOR REVIEW. THE CALCULATIONS SHALL HAVE BEEN SIGNED AND SEALED BY A QUALIFIED PROFESSIONAL ENGINEER WHO IS REGISTERED IN THE STATE WHERE THE PROJECT IS BUILT AND WHO IS RESPONSIBLE FOR PREPARATION OF THE CALCULATIONS.

SPECIAL INSPECTIONS

THE FOLLOWING ITEMS REQUIRE SPECIAL INSPECTION IN ACCORDANCE WITH CHAPTER 17 OF THE INTERNATIONAL BUILDING CODE.

- a. CONCRETE GROUT DESIGN MIX (PERIODIC)
- b. PLACING OF CONCRETE AND REINFORCING STEEL (CONTINUOUS OF CONCRETE SAMPLING / PERIODIC OF REINFORCING)
- c. BOLTS & ANCHORS EMBEDDED IN CONCRETE (PERIODIC)
- d. STRUCTURAL STEEL FABRICATIONS (UNLESS AISC APPROVED) (PERIODIC)
- e. STRUCTURAL STEEL BOLTING & WELDING (PERIODIC)
- f. POST INSTALLED ANCHORS IN CONCRETE (CONTINUOUS)
- g. IN-SITU SOILS, EXCAVATIONS, FILLING & COMPACTION (PERIODIC)
- h. WOOD FRAMING:
  - h.a. SHEAR WALLS; WALL SIZE, CONFIGURATION, BLOCKING, PANEL GRADE, PANEL THICKNESS, AND FASTENING. (PERIODIC)
  - h.b. DIAPHRAGMS (FLOOR AND ROOF SHEATHING); SIZE, CONFIGURATION, BLOCKING, PANEL GRADE, PANEL THICKNESS, AND FASTENING. (PERIODIC)
  - h.c. FRAMING MEMBERS AND DETAILS (PERIODIC)
  - h.d. MATERIAL GRADE (PERIODIC)
  - h.e. CONNECTIONS; HANGERS, HOLD DOWNS, BUILT-UP COLUMNS, BUILT-UP BEAMS (PERIODIC)
  - h.f. PRE-ENGINEERED TRUSSES; FRAMING, CONNECTIONS, BRIDGING (PERIODIC)

THE CONTRACTOR SHALL REQUEST SPECIAL INSPECTION OF THE ITEMS LISTED ABOVE PRIOR TO THOSE ITEMS BECOMING INACCESSIBLE AND UNOBSERVABLE DUE TO PROGRESSION OF THE WORK.

DESIGN DATA

2021 INTERNATIONAL BUILDING CODE / ASCE 7-16

BUILDING OCCUPANCY CATEGORY	II
ROOF LOAD DATA	
LIVE LOAD	20
ASPHALT SHINGLES + FELT	3.5
5/8" OSB ROOF SHEATHING	3.5
PRE-ENGINEERED WOOD TRUSSES @ 2'-0" O.C.	4.5
INSULATION (BLOWN)	1.0
MECHANICAL ALLOWANCE	5.0
5/8" GYP. CEILING	2.5
SOLAR	5.0
TOTAL TO TRUSSES	45 lbs/sq.ft
FLOOR LOAD DATA	
LIVE LOAD (COMMON AREA)	40 (100)
3/4" GYPCRETE & 3/4" SHEATHING	13
MECHANICAL ALLOWANCE	5
5/8" GYP. CEILING	2.5
FLOOR STRUCTURE	4.5
TOTAL TO FLOOR TRUSS	65 (125) lbs/sq.ft
RAIN LOAD DATA	
15 MINUTE RAIN INTENSITY	10.1 in/hr
60 MINUTE RAIN INTENSITY	4.85 in/hr

ROOF SNOW LOAD DATA* (*UNBALANCED & DRIFTING SNOW TO BE DETERMINED IN ADDITION TO UNIFORM LOAD, WHERE APPLICABLE)

p_d =	0 lbs/sq.ft
C_e =	1.0
I_s =	1.0
C_t =	1.0
p_f =	0.00 lbs/sq.ft

WIND DESIGN DATA	
V_{ult} =	136 M.P.H. (3-SECOND GUST)
RISK CATEGORY	II
EXPOSURE	B
INTERNAL PRESSURE COEFFICIENT =	± 0.18
MAXIMUM COMPONENTS & CLADDING WIND	+/-44.75 lbs/sq.ft
EARTHQUAKE DESIGN DATA	
RISK CATEGORY	II
I_E =	1.0
S_S =	0.068
S_1 =	0.039
SITE CLASS	D (DEFAULT)
S_{DS} =	0.072
S_{D1} =	0.062
SEISMIC DESIGN CATEGORY	A
BASIC SEISMIC-FORCE-RESISTING SYSTEM = LIGHT-FRAME (WOOD) WALLS SHEATHED WITH WOOD STRUCTURAL PANELS RATED FOR SHEAR RESISTANCE	
R =	6.5
Ω_0 =	3.0
C_d =	4.0
DESIGN BASE SHEAR	$V = 0.011W$
EQUIVALENT LATERAL FORCE PROCEDURE	
NET ALLOWABLE SOIL BEARING	3,000 lbs/sq.ft**

(**PER GEOTECHNICAL REPORT PREPARED BY ECS SOUTHWEST, LLP DATED OCTOBER 17, 2024)

INDEX OF SHEETS

COVER / GENERAL STRUCTURAL DATA	S100
FOUNDATION PLANS	S200-S201
FOUNDATION DETAILS	S210-S211
FLOOR FRAMING PLANS	S300-S501
FLOOR FRAMING DETAILS	S510-S511
ROOF FRAMING PLANS	S600-S601
ROOF FRAMING DETAILS	S610-S612

REVISIONS:

No.	Date
ISSUE SET	10/25/2024

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY

STATE OF TEXAS – GREGORY L. LINNEMAN – 152698 – LICENSED PROFESSIONAL ENGINEER

10/25/2024

STRUCTURAL ENGINEER:
CROCKETT ENGINEERING CONSULTANTS
1000 W. Nifong Blvd., Bldg. I
Columbia, Missouri 65203
(573) 447-0292
www.crockettengineering.com
Crockett Engineering Consultants, LLC

CLIENT:
WALLACE ARCHITECTS LLC
302 CAMPUS DR. #208
COLUMBIA, MISSOURI

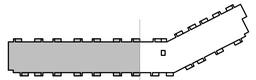
DASHWOOD TRAILS
HOUSTON, HARRIS COUNTY, TEXAS

DRAWING INCLUDES:
GENERAL STRUCTURAL DATA

DESIGNED:	JWV
DRAWN:	ZMP
PROJECT NO.:	240389

SHEET: S100

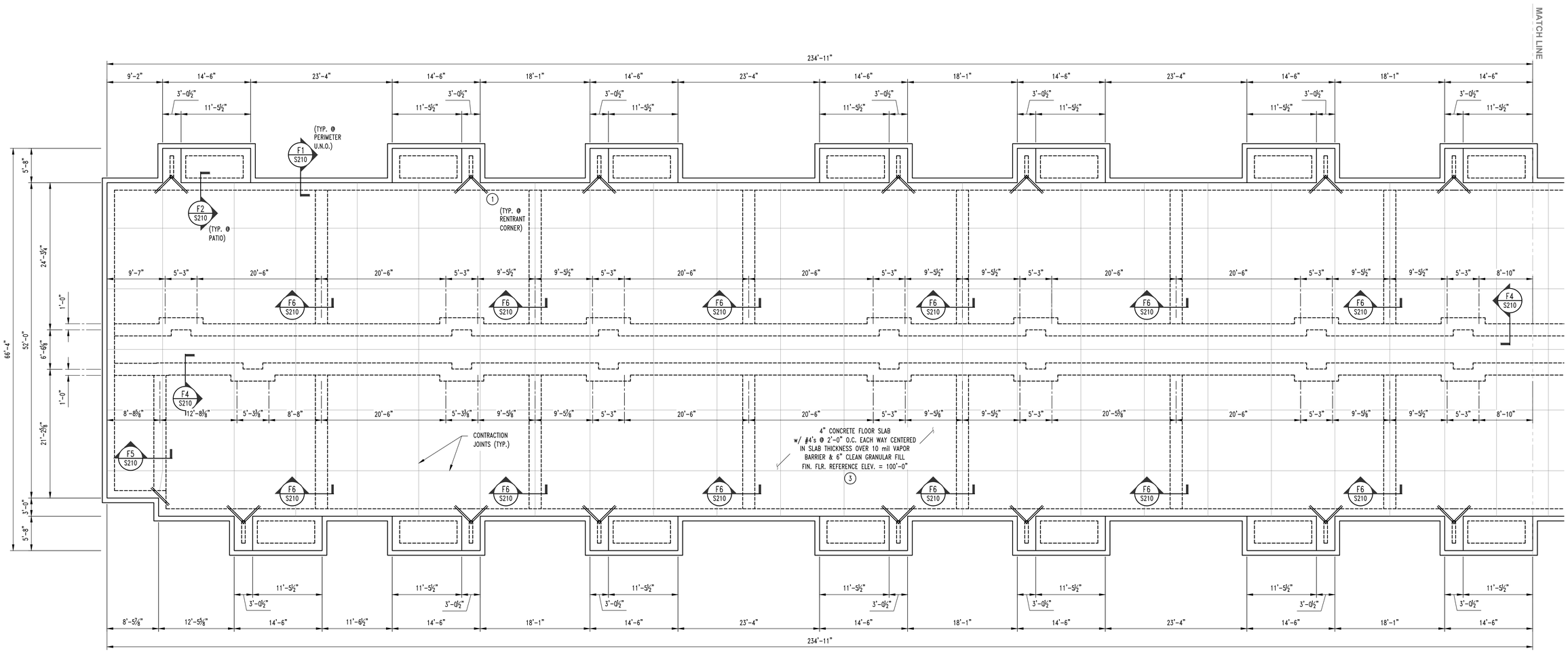
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ALL DIMENSIONS ARE FROM FACE OF FOUNDATION WALL OR FRAMING; EDGE OF SLAB OR TRUSS/RAFTER; OR CENTERLINE OF COLUMN, BEAM, OR JOIST UNLESS NOTED OTHERWISE.



KEY PLAN

FOUNDATION NOTES

1. REENTRANT CORNER BARS, REFER TO TYPICAL CRACK CONTROL REINFORCING DETAIL ON SHEET S210.
2. CONFIRM FINAL SHAFT DIMENSIONS PRIOR TO INSTALLATION OF PIT
3. REFER TO GEOTECH REPORT BY ECS SOUTHWEST, LLP. DATED OCTOBER 17, 2024 FOR ADDITIONAL SUBGRADE REQUIREMENTS TO CONSTRUCT SLAB ON GRADE WITHOUT UTILIZING POST TENSION.



1 S200 **FOUNDATION PLAN**
SCALE: ⅛" = 1'-0"

N PLAN NORTH

REVISIONS:

No.	Date
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GREGORY L. LINNEMAN
152698
LICENSED PROFESSIONAL ENGINEER

10/25/2024

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DASHWOOD TRAILS
HOUSTON, HARRIS COUNTY, TEXAS

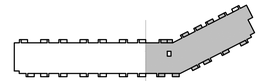
DRAWING INCLUDES:
FOUNDATION PLAN

DESIGNED:	JWV
DRAWN:	ZMP
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SHEET:	S200

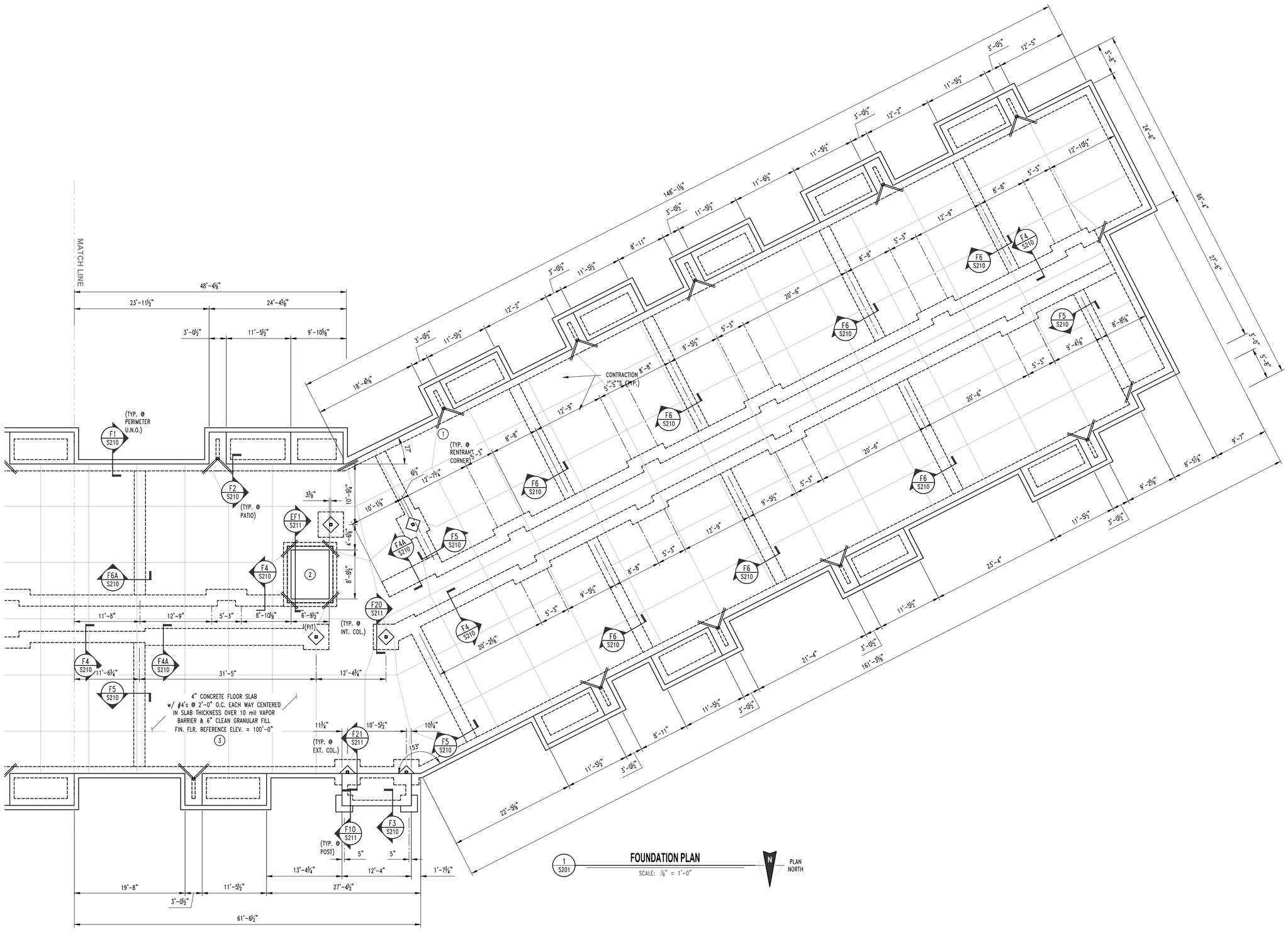
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KEY PLAN



1 S201 FOUNDATION PLAN
SCALE: ⅛" = 1'-0"

PLAN NORTH

REVISIONS:

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152698
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10/25/2024

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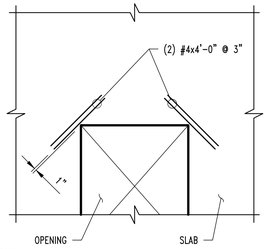
CLIENT:
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COLUMBIA, MISSOURI

DASHWOOD TRAILS
HOUSTON, HARRIS COUNTY, TEXAS

DRAWING INCLUDES:
FOUNDATION PLAN

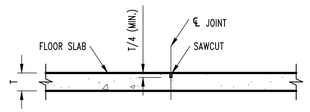
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DRAWN:	ZMP
PROJECT NO.:	240389

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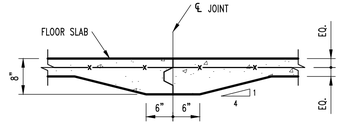


NOTE:
TYPICAL AT ALL REENTRANT CORNERS FOR SLAB-ON-GRADE & STRUCTURAL SLAB. REINFORCING TO BE CENTERED IN SLAB THICKNESS.

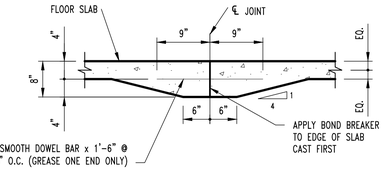
CRACK CONTROL REINFORCING



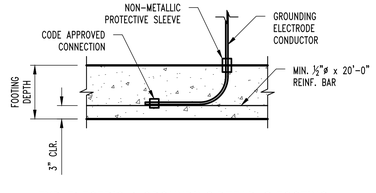
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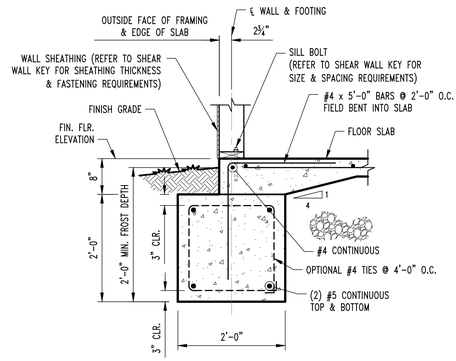
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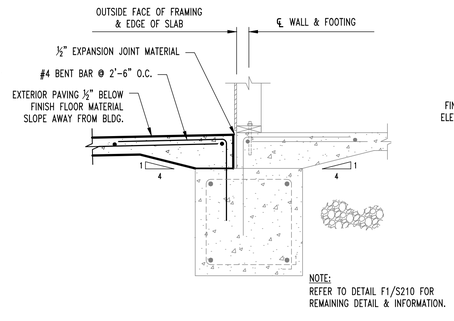
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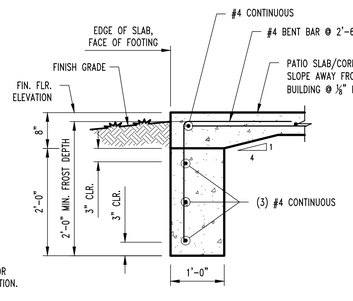
TYP. ELECTRICAL GROUNDING DETAIL @ FOOTING



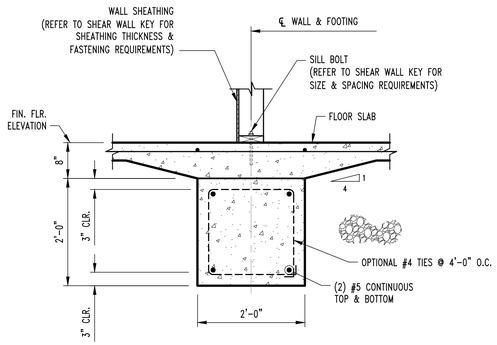
F1 S200–S201 **CONT. FOOTING SECTION**
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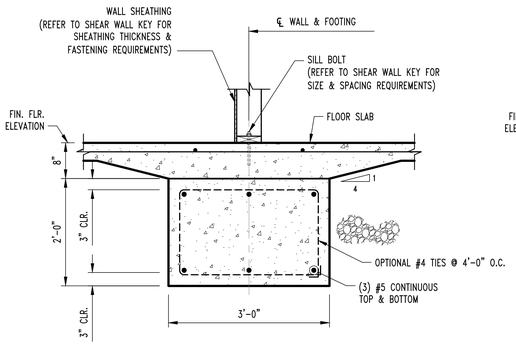
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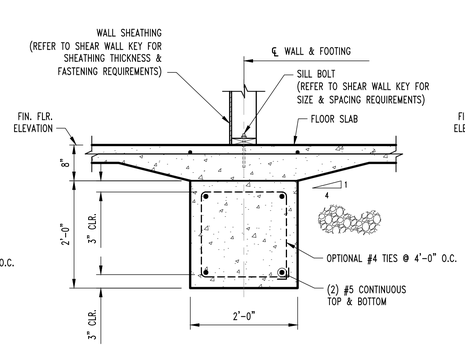
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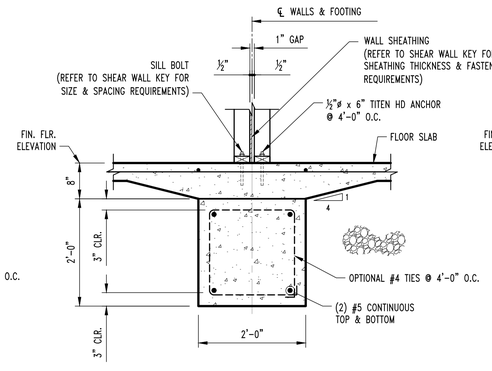
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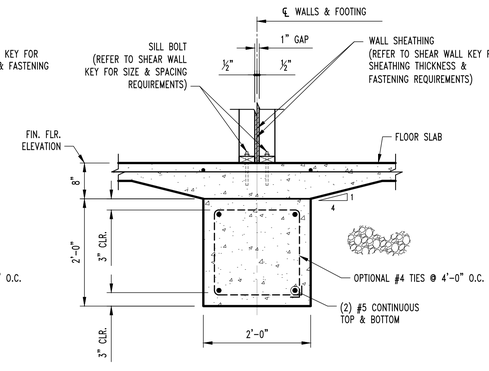
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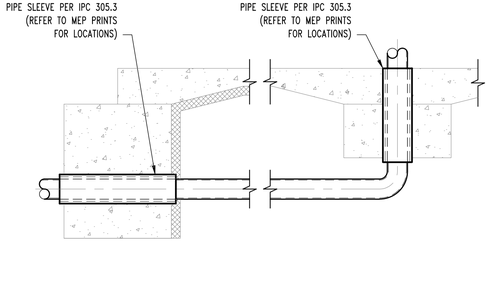
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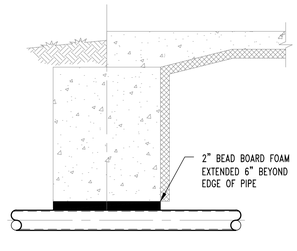


F6 S200–S201 **CONT. INTERIOR FOOTING SECTION**
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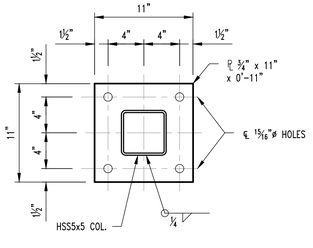


F6A S201 **CONT. INTERIOR FOOTING SECTION**
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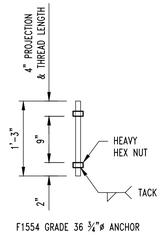




TYP. PLUMBING COORDINATION DETAILS



BASE PLATE (BP-1)



F1554 GRADE 36 ¾"ø ANCHOR

ANCHOR BOLT DETAIL (TYPE A)

REVISIONS:

No.	Date
ISSUE SET	10/25/2024

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STATE OF TEXAS — GREGORY L. LINNEMAN — 152698 — LICENSED PROFESSIONAL ENGINEER

10/25/2024

STRUCTURAL ENGINEER:
CROCKETT ENGINEERING CONSULTANTS
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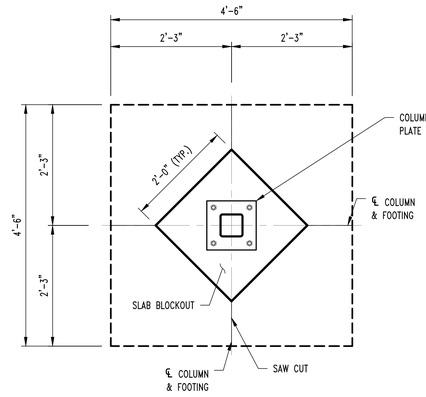
DASHWOOD TRAILS

HOUSTON, HARRIS COUNTY, TEXAS

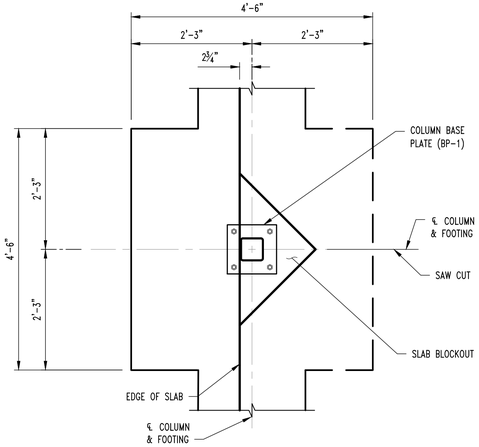
DRAWING INCLUDES:
FOUNDATION DETAILS

DESIGNED:	JWV
DRAWN:	ZMP
PROJECT NO.:	240389

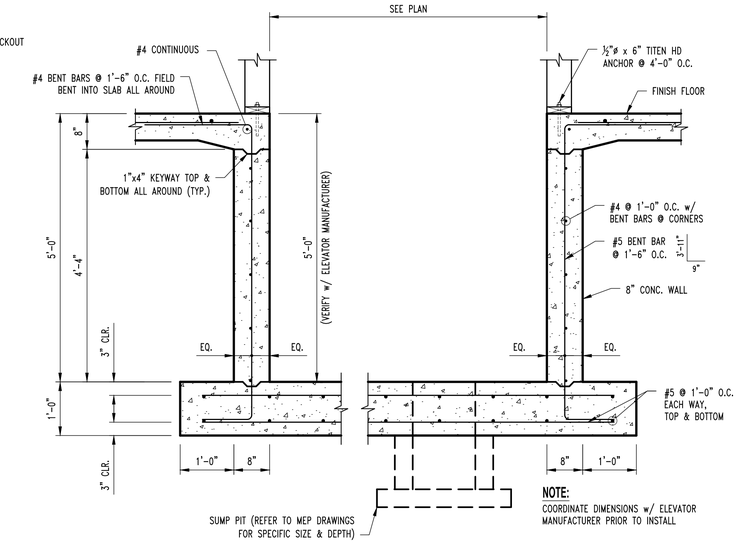
SHEET: S210



PLAN VIEW



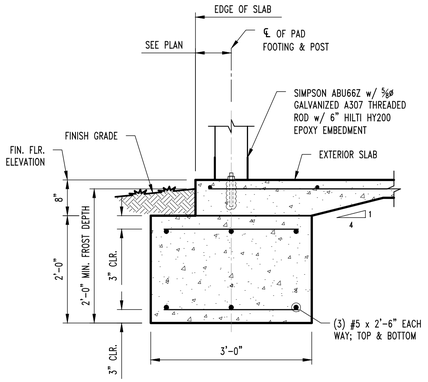
PLAN VIEW



ELEVATOR PIT SECTION

EF1 / S201

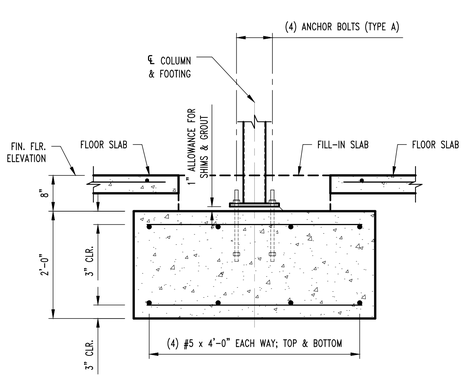
SCALE: ¾" = 1'-0"



PAD FOOTING DETAIL

F10 / S201

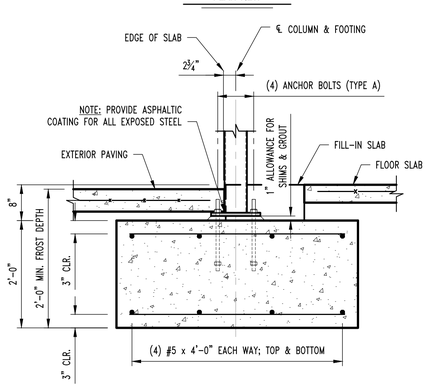
SCALE: ¾" = 1'-0"



COLUMN FOOTING SECTION

F20 / S201

SCALE: ¾" = 1'-0"



COLUMN FOOTING SECTION

F21 / S201

SCALE: ¾" = 1'-0"

REVISIONS:

No.	Date
ISSUE SET	10/25/2024

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10/25/2024

STRUCTURAL ENGINEER:
CROCKETT ENGINEERING CONSULTANTS
1000 W. Nifong Blvd., Bldg. I
Columbia, Missouri 65203
(573) 447-0292
www.crockettengineering.com
Crockett Engineering Consultants, LLC

CLIENT:
WALLACE ARCHITECTS LLC
302 CAMPUS DR. #208
COLUMBIA, MISSOURI

DASHWOOD TRAILS

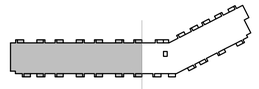
HOUSTON, HARRIS COUNTY, TEXAS

DRAWING INCLUDES:

FOUNDATION DETAILS

DESIGNED:	JWV
DRAWN:	ZMP
PROJECT NO.:	240389
SHEET:	S211

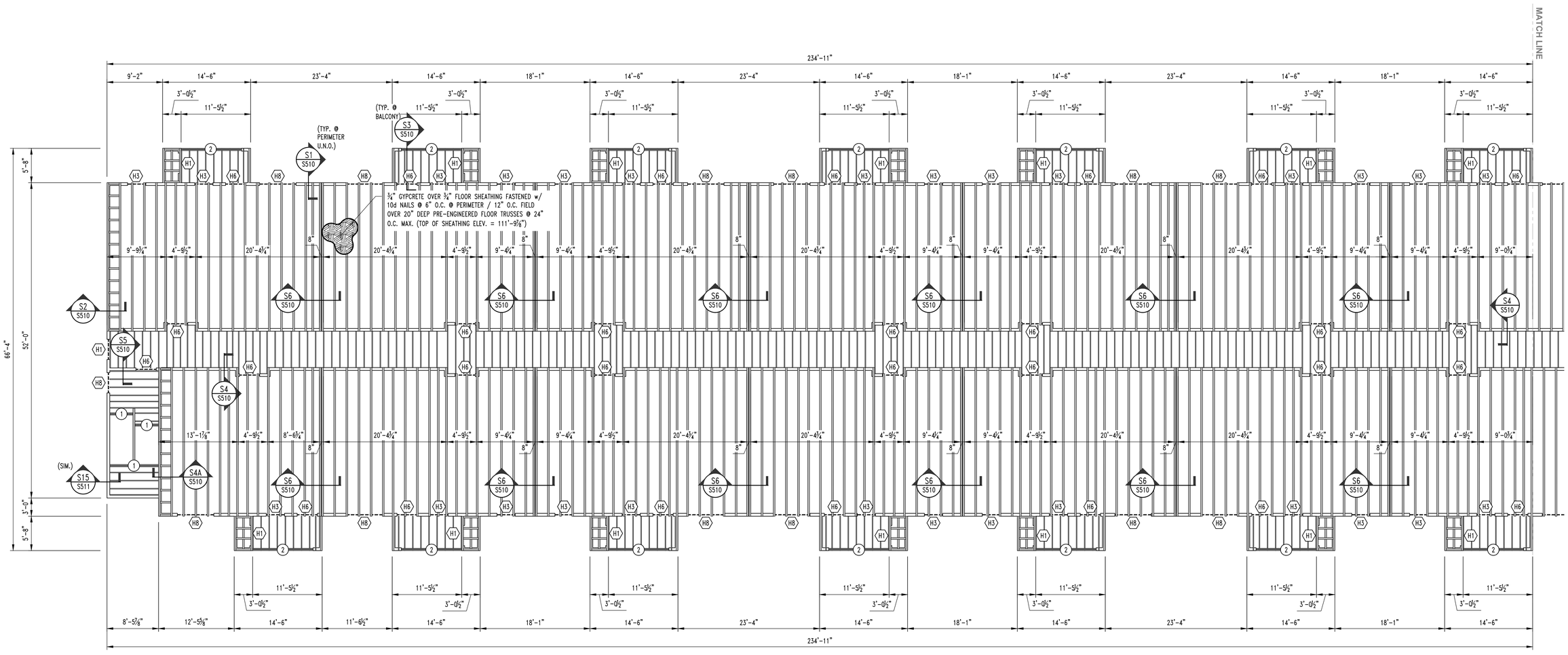
NOTE:
ALL DIMENSIONS ARE FROM FACE OF FOUNDATION WALL OR FRAMING;
EDGE OF SLAB OR TRUSS/RAFTER; OR CENTERLINE
OF COLUMN, BEAM, OR JOIST UNLESS NOTED OTHERWISE.



KEY PLAN

FLOOR FRAMING NOTES

1. (3) DF SEL. STR. 2x10's w/ SIMPSON LUS210-3 HANGER @ EACH END.
2. (3) TREATED SO. PINE No.2 2x10's w/ 2-PLY STUD PACK @ EACH END.
3. GIRDER TRUSS
4. 3-PLY BUILT-UP POST BENEATH GIRDER TRUSS THIS LEVEL TO FLOOR SLAB
   CONNECTIONS ARE AS FOLLOWS:
   FLOOR SLAB: SIMPSON LTP2.
   FLOOR FRAMING STUD ATTACHMENT: SIMPSON MSTC52
   ROOF TRUSS: BY TRUSS MANUFACTURER



1 S300 **2ND FLOOR FRAMING PLAN**
SCALE: ⅛" = 1'-0"

PLAN NORTH

HEADER SCHEDULE

LABEL	HEADER	CRIPPLE/JACK	JAMB/KING
"H1"	2 Ply 2x6 SPF No.1/No.2	Single Ply 2x6 SPF No.1/No.2	2 Ply 2x6 SPF No.1/No.2
"H2"	2 Ply 2x6 SPF No.1/No.2	2 Ply 2x6 SPF No.1/No.2	2 Ply 2x6 SPF No.1/No.2
"H3"	2 Ply 2x6 SPF No.1/No.2	3 Ply 2x6 SPF No.1/No.2	2 Ply 2x6 SPF No.1/No.2
"H4"	2 Ply 2x8 Doug. Fir No.2	Single Ply 2x6 SPF No.1/No.2	2 Ply 2x6 SPF No.1/No.2
"H5"	2 Ply 2x8 Doug. Fir No.2	2 Ply 2x6 SPF No.1/No.2	2 Ply 2x6 SPF No.1/No.2
"H6"	2 Ply 2x8 Doug. Fir No.2	3 Ply 2x6 SPF No.1/No.2	2 Ply 2x6 SPF No.1/No.2
"H7"	2 Ply 2x10 Doug. Fir Sel. Struct.	2 Ply 2x6 SPF No.1/No.2	2 Ply 2x6 SPF No.1/No.2
"H8"	2 Ply 2x10 Doug. Fir Sel. Struct.	4 Ply 2x6 SPF No.1/No.2	2 Ply 2x6 SPF No.1/No.2
"H9"	2 Ply 2x12 Doug. Fir Sel. Struct.	4 Ply 2x6 SPF No.1/No.2	2 Ply 2x6 SPF No.1/No.2
"H10"	2 Ply 2x12 Doug. Fir Sel. Struct.	6 Ply 2x6 SPF No.1/No.2	2 Ply 2x6 SPF No.1/No.2
"H11"	3 Ply 1.75x11.87 MicroLam 2.0E	2 Ply 2x6 SPF No.1/No.2	2 Ply 2x6 SPF No.1/No.2
"H12"	3 Ply 1.75x11.87 MicroLam 2.0E	5 Ply 2x6 SPF No.1/No.2	2 Ply 2x6 SPF No.1/No.2
"H13"	3 Ply 1.75x14 MicroLam 2.0E	3 Ply 2x6 SPF No.1/No.2	2 Ply 2x6 SPF No.1/No.2

REVISIONS:

No.	Date
ISSUE SET	10/25/2024

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STATE OF TEXAS
GREGORY L. LINNEMAN
152698
LICENSED
PROFESSIONAL ENGINEER

10/25/2024

STRUCTURAL ENGINEER:
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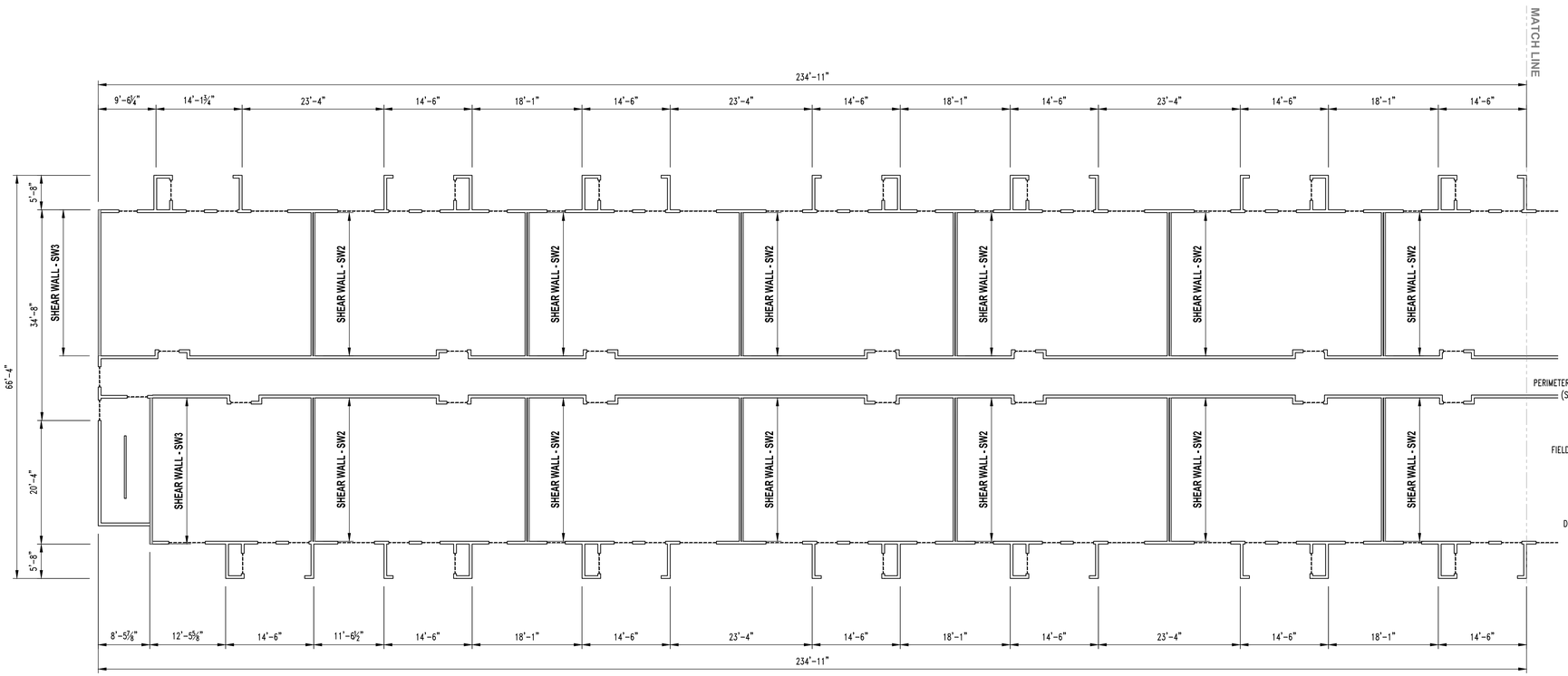
CLIENT:
WALLACE ARCHITECTS LLC
302 CAMPUS DR. #208
COLUMBIA, MISSOURI

DASHWOOD TRAILS
HOUSTON, HARRIS COUNTY, TEXAS

DRAWING INCLUDES:
2ND FLOOR FRAMING PLAN

DESIGNED:	JWV
DRAWN:	ZMP
PROJECT NO.:	240389
SHEET:	S300

NOTE:
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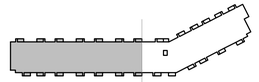


SHEAR WALL PLAN

1 / S300A

SCALE: 3/32" = 1'-0"

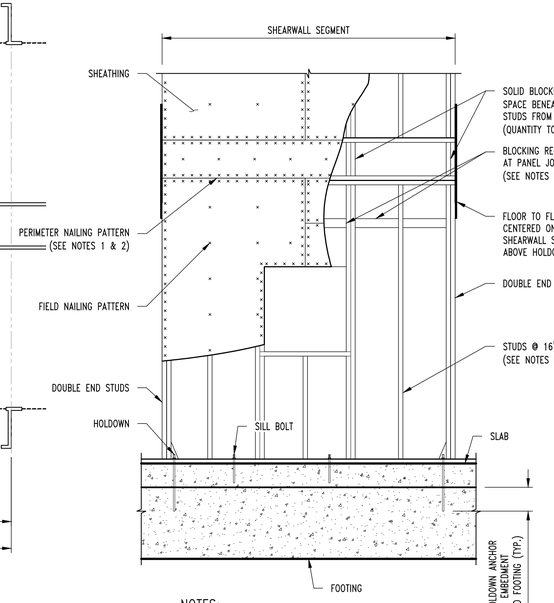
PLAN NORTH



KEY PLAN

SHEAR WALL NOTES

1. ALL SHEATHING TO BE CONTINUOUS, UNBROKEN FOR FULL LENGTH OF DIMENSIONED SHEAR WALL.
2. SHEATHING TO STACK FROM FLOOR TO FLOOR.



NOTES:
1. WHERE TWO SHEETS MEET, BOTH SHEETS SHOULD BE NAILED TO THE SAME FRAMING MEMBER.
2. WHEN SHEATHING NAILS ARE SPACED AT 2" O.C. FOR 8d NAILS OR 3" O.C. FOR 10d NAILS, 3x OR DOUBLE 2x FRAMING MEMBERS ARE REQUIRED WHERE SHEETS MEET. FACE NAIL DOUBLE 2x MEMBERS TOGETHER w/ 16d NAILS @ 2½" O.C. STAGGERED EACH FACE OF STUD.
3. SEE WALL SECTIONS FOR ADDITIONAL INFORMATION.

TYP. MULTI-STORY SHEAR WALL/ BLOCKING DETAIL

SHEAR WALL KEY

SW1 SHEAR WALL

FIRST FLOOR
- 7/16" OSB SHEATHING FASTENED WITH 8D NAILS @ 2" O.C. @ PERIMETER / 12" O.C. FIELD
- 1/2" DIAMETER F1554 GRADE 36 STANDARD "J" BOLTS W/ 7" EMBEDMENT @ 1'-0" O.C.
- REQUIRES SIMPSON HD19 HOLDOWN FASTENED TO 4-PLY STUDS W/ (5) 1" BOLTS W/ 1-1/4" DIAMETER A307 THREADED ROD W/ HEAVY HEX NUT AND 23" TOTAL (15" INTO FOOTING) SIMPSON "AT-3G" EPOXY EMBEDMENT AT EACH END OF THE SHEAR WALL

SECOND FLOOR
- 7/16" OSB SHEATHING FASTENED WITH 8D NAILS @ 3" O.C. @ PERIMETER / 12" O.C. FIELD
- SIMPSON SDWH 4" SCREW FASTENED TO SILL PLATE @ 0'-6" O.C.
- REQUIRES SIMPSON MST72 STRAP TIE FASTENED TO 3-PLY STUDS W/ (54) 16D NAILS AT EACH END OF THE SHEAR WALL

THIRD FLOOR
- 7/16" OSB SHEATHING FASTENED WITH 8D NAILS @ 6" O.C. @ PERIMETER / 12" O.C. FIELD
- SIMPSON SDWH 4" SCREW FASTENED TO SILL PLATE @ 1'-0" O.C.
- REQUIRES SIMPSON MSTC52 STRAP TIE FASTENED TO 3-PLY STUDS W/ (36) 12D NAILS AT EACH END OF THE SHEAR WALL

FOURTH FLOOR
- 7/16" OSB SHEATHING FASTENED WITH 8D NAILS @ 6" O.C. @ PERIMETER / 12" O.C. FIELD
- SIMPSON SDWH 4" SCREW FASTENED TO SILL PLATE @ 2'-0" O.C.
- REQUIRES SIMPSON MSTC40 STRAP TIE FASTENED TO 3-PLY STUDS W/ (20) 12D NAILS AT EACH END OF THE SHEAR WALL

SW2 SHEAR WALL

FIRST FLOOR
- 7/16" OSB SHEATHING FASTENED WITH 8D NAILS @ 3" O.C. @ PERIMETER / 12" O.C. FIELD
- 1/2" DIAMETER F1554 GRADE 36 STANDARD "J" BOLTS W/ 7" EMBEDMENT @ 1'-6" O.C.
- REQUIRES SIMPSON HD12 HOLDOWN FASTENED TO 4-PLY STUDS W/ (4) 1" BOLTS W/ 1" DIAMETER A307 THREADED ROD W/ 20" TOTAL (12" INTO FOOTING) SIMPSON "AT-3G" EPOXY EMBEDMENT AT EACH END OF THE SHEAR WALL

SECOND FLOOR
- 7/16" OSB SHEATHING FASTENED WITH 8D NAILS @ 4" O.C. @ PERIMETER / 12" O.C. FIELD
- SIMPSON SDWH 4" SCREW FASTENED TO SILL PLATE @ 0'-6" O.C.
- REQUIRES SIMPSON MSTC66 STRAP TIE FASTENED TO 3-PLY STUDS W/ (54) 12D NAILS AT EACH END OF THE SHEAR WALL

THIRD FLOOR
- 7/16" OSB SHEATHING FASTENED WITH 8D NAILS @ 6" O.C. @ PERIMETER / 12" O.C. FIELD
- SIMPSON SDWH 4" SCREW FASTENED TO SILL PLATE @ 1'-0" O.C.
- REQUIRES SIMPSON MSTC40 STRAP TIE FASTENED TO 3-PLY STUDS W/ (20) 12D NAILS AT EACH END OF THE SHEAR WALL

FOURTH FLOOR
- 7/16" OSB SHEATHING FASTENED WITH 8D NAILS @ 6" O.C. @ PERIMETER / 12" O.C. FIELD
- SIMPSON SDWH 4" SCREW FASTENED TO SILL PLATE @ 2'-0" O.C.
- REQUIRES SIMPSON MSTC40 STRAP TIE FASTENED TO 3-PLY STUDS W/ (20) 12D NAILS AT EACH END OF THE SHEAR WALL

SW3 SHEAR WALL

FIRST FLOOR
- 7/16" OSB SHEATHING FASTENED WITH 8D NAILS @ 3" O.C. @ PERIMETER / 12" O.C. FIELD
- 1/2" DIAMETER F1554 GRADE 36 STANDARD "J" BOLTS W/ 7" EMBEDMENT @ 1'-6" O.C.
- REQUIRES SIMPSON HDU8-SDS2.5 HOLDOWN FASTENED TO 3-PLY STUDS W/ (20) ⅝"X2½" SDS W/ 7/8" DIAMETER A307 THREADED W/ 20" TOTAL (12" INTO FOOTING) SIMPSON "AT-3G" EPOXY EMBEDMENT AT EACH END OF THE SHEAR WALL

SECOND FLOOR
- 7/16" OSB SHEATHING FASTENED WITH 8D NAILS @ 4" O.C. @ PERIMETER / 12" O.C. FIELD
- SIMPSON SDWH 4" SCREW FASTENED TO SILL PLATE @ 0'-6" O.C.
- REQUIRES SIMPSON MSTC52 STRAP TIE FASTENED TO 3-PLY STUDS W/ (36) 12D NAILS AT EACH END OF THE SHEAR WALL

THIRD FLOOR
- 7/16" OSB SHEATHING FASTENED WITH 8D NAILS @ 6" O.C. @ PERIMETER / 12" O.C. FIELD
- SIMPSON SDWH 4" SCREW FASTENED TO SILL PLATE @ 1'-0" O.C.
- REQUIRES SIMPSON MSTC40 STRAP TIE FASTENED TO 3-PLY STUDS W/ (20) 12D NAILS AT EACH END OF THE SHEAR WALL

FOURTH FLOOR
- 7/16" OSB SHEATHING FASTENED WITH 8D NAILS @ 6" O.C. @ PERIMETER / 12" O.C. FIELD
- SIMPSON SDWH 4" SCREW FASTENED TO SILL PLATE @ 2'-0" O.C.
- REQUIRES SIMPSON MSTC40 STRAP TIE FASTENED TO 3-PLY STUDS W/ (20) 12D NAILS AT EACH END OF THE SHEAR WALL

TYPICAL WALL UNLESS NOTED

FIRST FLOOR
- 7/16" OSB SHEATHING FASTENED WITH 8D NAILS @ 4" O.C. @ PERIMETER / 12" O.C. FIELD
- 1/2" DIAMETER F1554 GRADE 36 STANDARD "J" BOLTS W/ 7" EMBEDMENT @ 1'-6" O.C.
- NO HOLDDOWNS REQUIRED

SECOND FLOOR
- 7/16" OSB SHEATHING FASTENED WITH 8D NAILS @ 4" O.C. @ PERIMETER / 12" O.C. FIELD
- SIMPSON SDWH 4" SCREW FASTENED TO SILL PLATE @ 1'-0" O.C.
- NO STRAP TIES REQUIRED

THIRD FLOOR
- 7/16" OSB SHEATHING FASTENED WITH 8D NAILS @ 6" O.C. @ PERIMETER / 12" O.C. FIELD
- SIMPSON SDWH 4" SCREW FASTENED TO SILL PLATE @ 1'-6" O.C.
- NO STRAP TIES REQUIRED

FOURTH FLOOR
- 7/16" OSB SHEATHING FASTENED WITH 8D NAILS @ 6" O.C. @ PERIMETER / 12" O.C. FIELD
- SIMPSON SDWH 4" SCREW FASTENED TO SILL PLATE @ 2'-0" O.C.
- NO STRAP TIES REQUIRED

REVISIONS:

No.	Date
ISSUE SET	10/25/2024

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY

STATE OF TEXAS — GREGORY L. LINNEMAN — 152698 — LICENSED PROFESSIONAL ENGINEER

10/25/2024

STRUCTURAL ENGINEER:
CROCKETT ENGINEERING CONSULTANTS
1000 W. Nifong Blvd., Bldg. I
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(573) 447-0292
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CLIENT:
WALLACE ARCHITECTS LLC
302 CAMPUS DR. #208
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DASHWOOD TRAILS
HOUSTON, HARRIS COUNTY, TEXAS

DRAWING INCLUDES:
SHEAR WALL PLAN

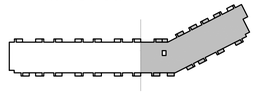
DESIGNED:	JWV
DRAWN:	ZMP
PROJECT NO.:	240389

SHEET:
S300A

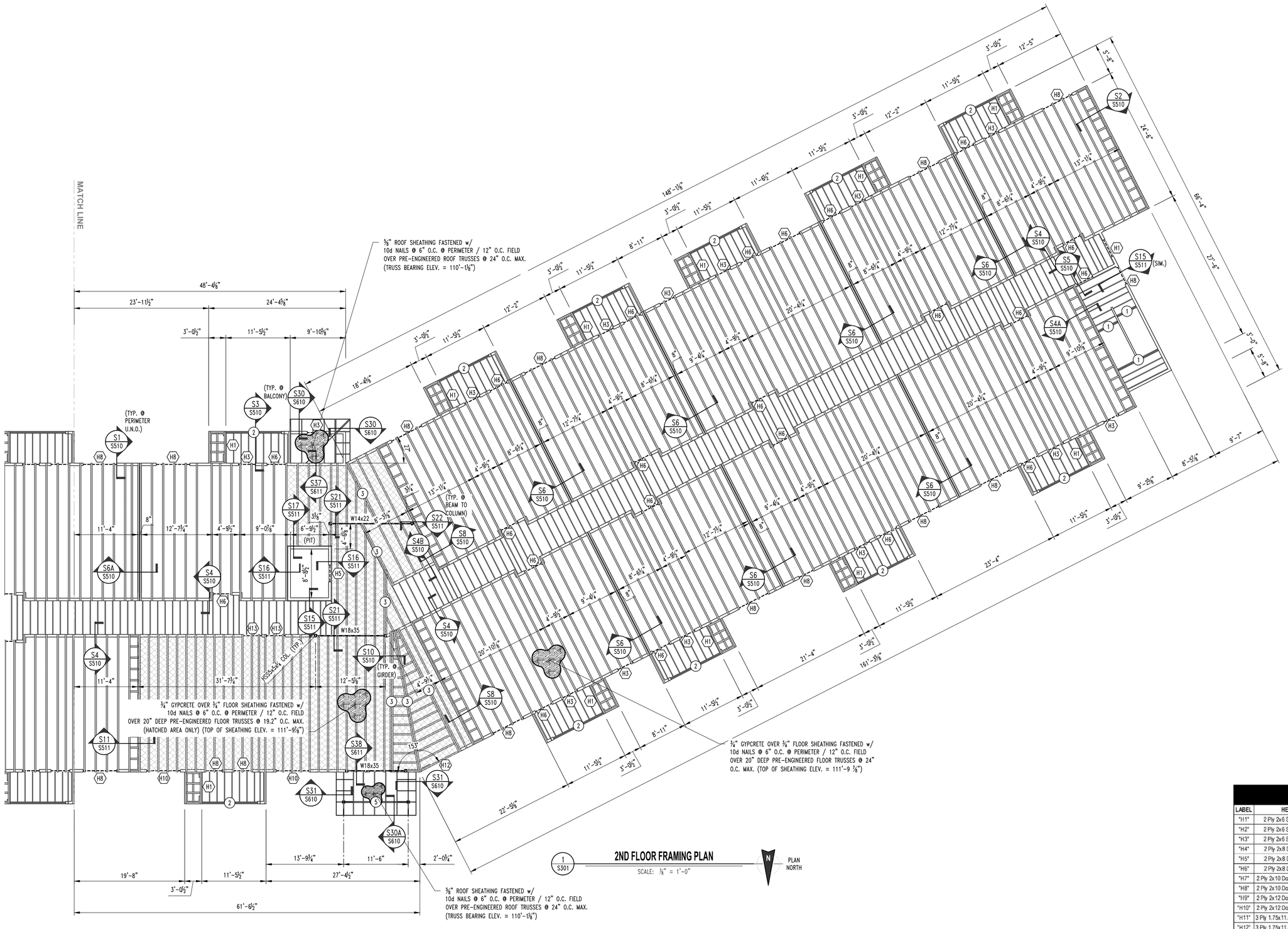
NOTE:
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FLOOR FRAMING NOTES

1. (3) DF SEL. STR. 2x10's w/ SIMPSON LUS210-3 HANGER @ EACH END.
2. (3) TREATED SO. PINE No.2 2x10's w/ 2-PLY STUD PACK @ EACH END.
3. GIRDER TRUSS
4. 3-PLY BUILT-UP POST BENEATH GIRDER TRUSS THIS LEVEL TO FLOOR SLAB
   CONNECTIONS ARE AS FOLLOWS:
   FLOOR SLAB: SIMPSON LTP2.
   FLOOR FRAMING STUD ATTACHMENT: SIMPSON MSTC52
   ROOF TRUSS: BY TRUSS MANUFACTURER
5. (2) TREATED SO. PINE No.2 2x10's w/ LPC6Z TO POST @ EACH END.



KEY PLAN



1 S301 **2ND FLOOR FRAMING PLAN**
SCALE: 1/8" = 1'-0"

PLAN NORTH

HEADER SCHEDULE

LABEL	HEADER	CRIPPLE/JACK	JAMB/KING
"H1"	2 Ply 2x6 SPF No.1/No.2	Single Ply 2x6 SPF No.1/No.2	2 Ply 2x6 SPF No.1/No.2
"H2"	2 Ply 2x6 SPF No.1/No.2	2 Ply 2x6 SPF No.1/No.2	2 Ply 2x6 SPF No.1/No.2
"H3"	2 Ply 2x6 SPF No.1/No.2	3 Ply 2x6 SPF No.1/No.2	2 Ply 2x6 SPF No.1/No.2
"H4"	2 Ply 2x8 Doug. Fir No.2	Single Ply 2x6 SPF No.1/No.2	2 Ply 2x6 SPF No.1/No.2
"H5"	2 Ply 2x8 Doug. Fir No.2	2 Ply 2x6 SPF No.1/No.2	2 Ply 2x6 SPF No.1/No.2
"H6"	2 Ply 2x8 Doug. Fir No.2	3 Ply 2x6 SPF No.1/No.2	2 Ply 2x6 SPF No.1/No.2
"H7"	2 Ply 2x10 Doug. Fir Sel. Struct.	2 Ply 2x6 SPF No.1/No.2	2 Ply 2x6 SPF No.1/No.2
"H8"	2 Ply 2x10 Doug. Fir Sel. Struct.	4 Ply 2x6 SPF No.1/No.2	2 Ply 2x6 SPF No.1/No.2
"H9"	2 Ply 2x12 Doug. Fir Sel. Struct.	4 Ply 2x6 SPF No.1/No.2	2 Ply 2x6 SPF No.1/No.2
"H10"	2 Ply 2x12 Doug. Fir Sel. Struct.	6 Ply 2x6 SPF No.1/No.2	2 Ply 2x6 SPF No.1/No.2
"H11"	3 Ply 1.75x11.87 MicroLam 2.0E	2 Ply 2x6 SPF No.1/No.2	2 Ply 2x6 SPF No.1/No.2
"H12"	3 Ply 1.75x11.87 MicroLam 2.0E	5 Ply 2x6 SPF No.1/No.2	2 Ply 2x6 SPF No.1/No.2
"H13"	3 Ply 1.75x14 MicroLam 2.0E	3 Ply 2x6 SPF No.1/No.2	2 Ply 2x6 SPF No.1/No.2

REVISIONS:

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ISSUE SET	10/25/2024

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STATE OF TEXAS
GREGORY L. LINNEMAN
152698
LICENSED PROFESSIONAL ENGINEER

10/25/2024

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DASHWOOD TRAILS

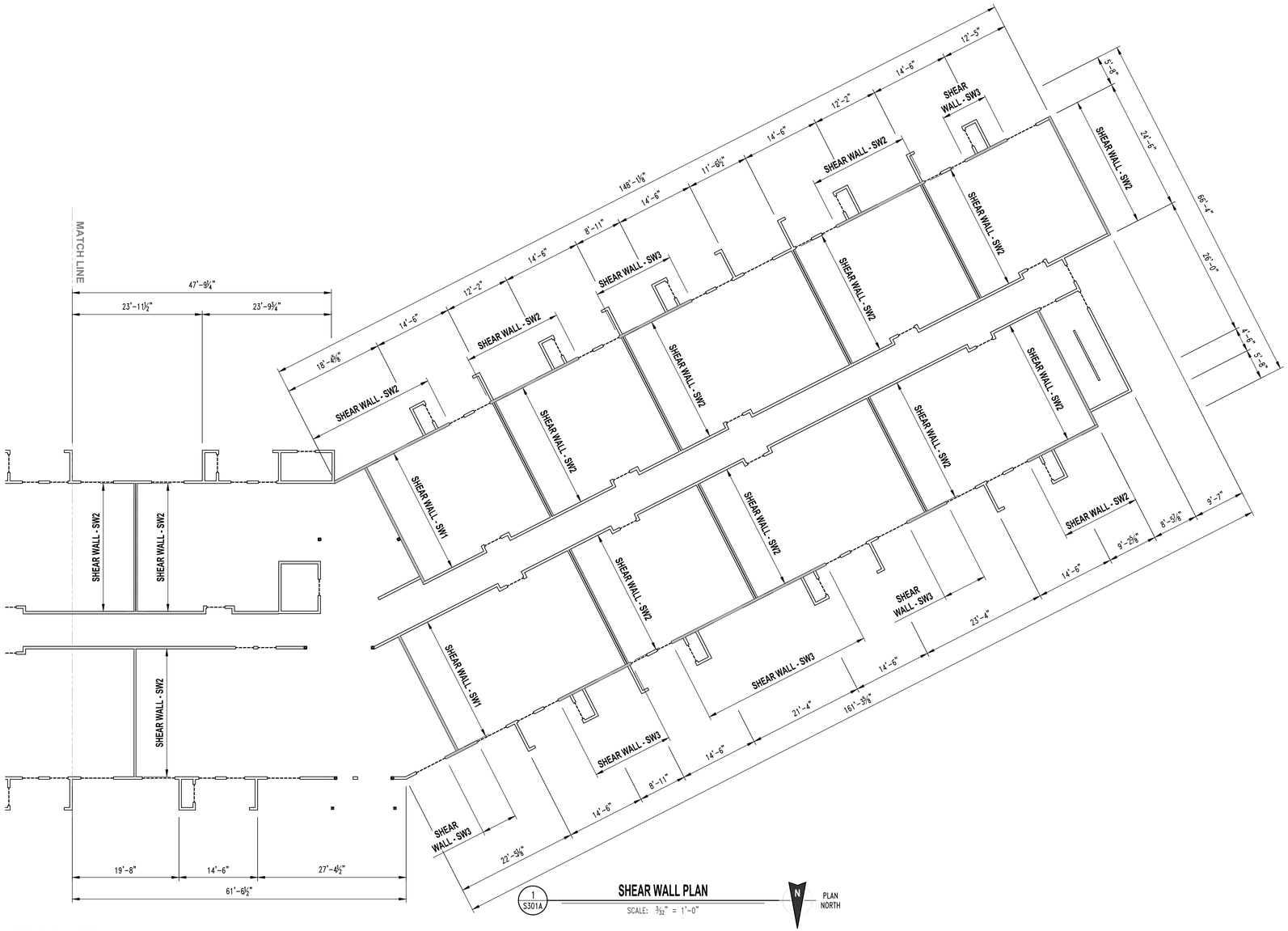
HOUSTON, HARRIS COUNTY, TEXAS

DRAWING INCLUDES:
2ND FLOOR FRAMING PLAN

DESIGNED:	JWV
DRAWN:	ZMP
PROJECT NO.:	240389

SHEET: S301

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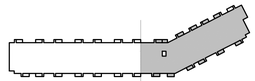


1 S301A **SHEAR WALL PLAN**
SCALE: 3/32" = 1'-0"

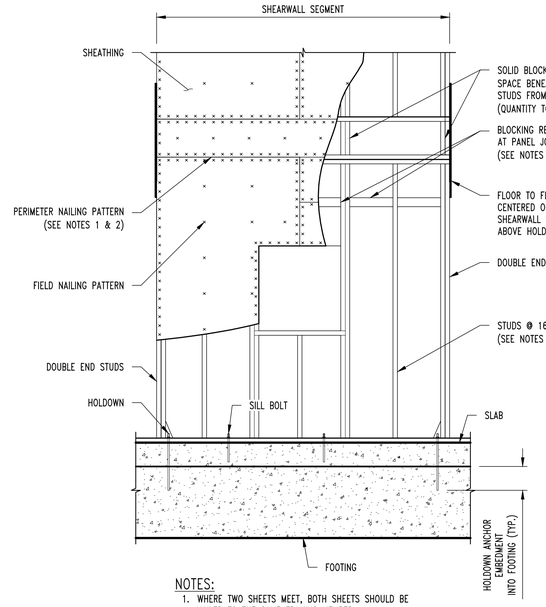
PLAN NORTH

SHEAR WALL NOTES

1. ALL SHEATHING TO BE CONTINUOUS, UNBROKEN FOR FULL LENGTH OF DIMENSIONED SHEAR WALL.
2. SHEATHING TO STACK FROM FLOOR TO FLOOR.



KEY PLAN



NOTES:
1. WHERE TWO SHEETS MEET, BOTH SHEETS SHOULD BE NAILED TO THE SAME FRAMING MEMBER.
2. WHEN SHEATHING NAILS ARE SPACED AT 2" O.C. FOR 8d NAILS OR 3" O.C. FOR 10d NAILS, 3x OR DOUBLE 2x FRAMING MEMBERS ARE REQUIRED WHERE SHEETS MEET. FACE NAIL DOUBLE 2x MEMBERS TOGETHER w/ 16d NAILS @ 2½" O.C. STAGGERED EACH FACE OF STUD.
3. SEE WALL SECTIONS FOR ADDITIONAL INFORMATION.

TYP. MULTI-STORY SHEAR WALL/ BLOCKING DETAIL

SHEAR WALL KEY

SW1 SHEAR WALL
FIRST FLOOR
- 7/16" OSB SHEATHING FASTENED WITH 8D NAILS @ 2" O.C. @ PERIMETER / 12" O.C. FIELD
- 1/2" DIAMETER F1554 GRADE 36 STANDARD "J" BOLTS W/ 7" EMBEDMENT @ 1'-0" O.C.
- REQUIRES SIMPSON HD19 HOLDOWN FASTENED TO 4-PLY STUDS W/ (5) 1" BOLTS W/ 1-1/4" DIAMETER A307 THREADED ROD W/ HEAVY HEX NUT AND 23" TOTAL (15" INTO FOOTING) SIMPSON "AT-3G" EPOXY EMBEDMENT AT EACH END OF THE SHEAR WALL

SECOND FLOOR
- 7/16" OSB SHEATHING FASTENED WITH 8D NAILS @ 3" O.C. @ PERIMETER / 12" O.C. FIELD
- SIMPSON SDWH 4" SCREW FASTENED TO SILL PLATE @ 0'-6" O.C.
- REQUIRES SIMPSON MST72 STRAP TIE FASTENED TO 3-PLY STUDS W/ (54) 16D NAILS AT EACH END OF THE SHEAR WALL

THIRD FLOOR
- 7/16" OSB SHEATHING FASTENED WITH 8D NAILS @ 6" O.C. @ PERIMETER / 12" O.C. FIELD
- SIMPSON SDWH 4" SCREW FASTENED TO SILL PLATE @ 1'-0" O.C.
- REQUIRES SIMPSON MSTC52 STRAP TIE FASTENED TO 3-PLY STUDS W/ (36) 12D NAILS AT EACH END OF THE SHEAR WALL

FOURTH FLOOR
- 7/16" OSB SHEATHING FASTENED WITH 8D NAILS @ 6" O.C. @ PERIMETER / 12" O.C. FIELD
- SIMPSON SDWH 4" SCREW FASTENED TO SILL PLATE @ 2'-0" O.C.
- REQUIRES SIMPSON MSTC40 STRAP TIE FASTENED TO 3-PLY STUDS W/ (20) 12D NAILS AT EACH END OF THE SHEAR WALL

SW2 SHEAR WALL
FIRST FLOOR
- 7/16" OSB SHEATHING FASTENED WITH 8D NAILS @ 3" O.C. @ PERIMETER / 12" O.C. FIELD
- 1/2" DIAMETER F1554 GRADE 36 STANDARD "J" BOLTS W/ 7" EMBEDMENT @ 1'-6" O.C.
- REQUIRES SIMPSON HD12 HOLDOWN FASTENED TO 4-PLY STUDS W/ (4) 1" BOLTS W/ 1" DIAMETER A307 THREADED ROD W/ 20" TOTAL (12" INTO FOOTING) SIMPSON "AT-3G" EPOXY EMBEDMENT AT EACH END OF THE SHEAR WALL

SECOND FLOOR
- 7/16" OSB SHEATHING FASTENED WITH 8D NAILS @ 4" O.C. @ PERIMETER / 12" O.C. FIELD
- SIMPSON SDWH 4" SCREW FASTENED TO SILL PLATE @ 0'-6" O.C.
- REQUIRES SIMPSON MSTC66 STRAP TIE FASTENED TO 3-PLY STUDS W/ (54) 12D NAILS AT EACH END OF THE SHEAR WALL

THIRD FLOOR
- 7/16" OSB SHEATHING FASTENED WITH 8D NAILS @ 6" O.C. @ PERIMETER / 12" O.C. FIELD
- SIMPSON SDWH 4" SCREW FASTENED TO SILL PLATE @ 1'-0" O.C.
- REQUIRES SIMPSON MSTC40 STRAP TIE FASTENED TO 3-PLY STUDS W/ (20) 12D NAILS AT EACH END OF THE SHEAR WALL

FOURTH FLOOR
- 7/16" OSB SHEATHING FASTENED WITH 8D NAILS @ 6" O.C. @ PERIMETER / 12" O.C. FIELD
- SIMPSON SDWH 4" SCREW FASTENED TO SILL PLATE @ 2'-0" O.C.
- REQUIRES SIMPSON MSTC40 STRAP TIE FASTENED TO 3-PLY STUDS W/ (20) 12D NAILS AT EACH END OF THE SHEAR WALL

SW3 SHEAR WALL
FIRST FLOOR
- 7/16" OSB SHEATHING FASTENED WITH 8D NAILS @ 3" O.C. @ PERIMETER / 12" O.C. FIELD
- 1/2" DIAMETER F1554 GRADE 36 STANDARD "J" BOLTS W/ 7" EMBEDMENT @ 1'-6" O.C.
- REQUIRES SIMPSON HDU8-SDS2.5 HOLDOWN FASTENED TO 3-PLY STUDS W/ (20) ¼"X2½" SDS W/ 7/8" DIAMETER A307 THREADED W/ 20" TOTAL (12" INTO FOOTING) SIMPSON "AT-3G" EPOXY EMBEDMENT AT EACH END OF THE SHEAR WALL

SECOND FLOOR
- 7/16" OSB SHEATHING FASTENED WITH 8D NAILS @ 4" O.C. @ PERIMETER / 12" O.C. FIELD
- SIMPSON SDWH 4" SCREW FASTENED TO SILL PLATE @ 0'-6" O.C.
- REQUIRES SIMPSON MSTC52 STRAP TIE FASTENED TO 3-PLY STUDS W/ (36) 12D NAILS AT EACH END OF THE SHEAR WALL

THIRD FLOOR
- 7/16" OSB SHEATHING FASTENED WITH 8D NAILS @ 6" O.C. @ PERIMETER / 12" O.C. FIELD
- SIMPSON SDWH 4" SCREW FASTENED TO SILL PLATE @ 1'-0" O.C.
- REQUIRES SIMPSON MSTC40 STRAP TIE FASTENED TO 3-PLY STUDS W/ (20) 12D NAILS AT EACH END OF THE SHEAR WALL

FOURTH FLOOR
- 7/16" OSB SHEATHING FASTENED WITH 8D NAILS @ 6" O.C. @ PERIMETER / 12" O.C. FIELD
- SIMPSON SDWH 4" SCREW FASTENED TO SILL PLATE @ 2'-0" O.C.
- REQUIRES SIMPSON MSTC40 STRAP TIE FASTENED TO 3-PLY STUDS W/ (20) 12D NAILS AT EACH END OF THE SHEAR WALL

TYPICAL WALL UNLESS NOTED
FIRST FLOOR
- 7/16" OSB SHEATHING FASTENED WITH 8D NAILS @ 4" O.C. @ PERIMETER / 12" O.C. FIELD
- 1/2" DIAMETER F1554 GRADE 36 STANDARD "J" BOLTS W/ 7" EMBEDMENT @ 1'-6" O.C.
- NO HOLDOWNS REQUIRED

SECOND FLOOR
- 7/16" OSB SHEATHING FASTENED WITH 8D NAILS @ 4" O.C. @ PERIMETER / 12" O.C. FIELD
- SIMPSON SDWH 4" SCREW FASTENED TO SILL PLATE @ 1'-0" O.C.
- NO STRAP TIES REQUIRED

THIRD FLOOR
- 7/16" OSB SHEATHING FASTENED WITH 8D NAILS @ 6" O.C. @ PERIMETER / 12" O.C. FIELD
- SIMPSON SDWH 4" SCREW FASTENED TO SILL PLATE @ 1'-6" O.C.
- NO STRAP TIES REQUIRED

FOURTH FLOOR
- 7/16" OSB SHEATHING FASTENED WITH 8D NAILS @ 6" O.C. @ PERIMETER / 12" O.C. FIELD
- SIMPSON SDWH 4" SCREW FASTENED TO SILL PLATE @ 2'-0" O.C.
- NO STRAP TIES REQUIRED

REVISIONS:

No.	Date
ISSUE SET	10/25/2024

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY

STATE OF TEXAS · GREGORY L. LINNEMAN · 152698 · LICENSED PROFESSIONAL ENGINEER

10/25/2024

STRUCTURAL ENGINEER:
CROCKETT ENGINEERING CONSULTANTS
1000 W. Nifong Blvd., Bldg. I
Columbia, Missouri 65203
(573) 447-0292
www.crockettengineering.com
Crockett Engineering Consultants, LLC

CLIENT:
WALLACE ARCHITECTS LLC
302 CAMPUS DR. #208
COLUMBIA, MISSOURI

DASHWOOD TRAILS

HOUSTON, HARRIS COUNTY, TEXAS

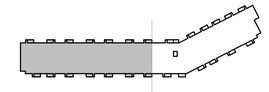
DRAWING INCLUDES:

SHEAR WALL PLAN

DESIGNED:	JWV
DRAWN:	ZMP
PROJECT NO.:	240389

SHEET: S301A

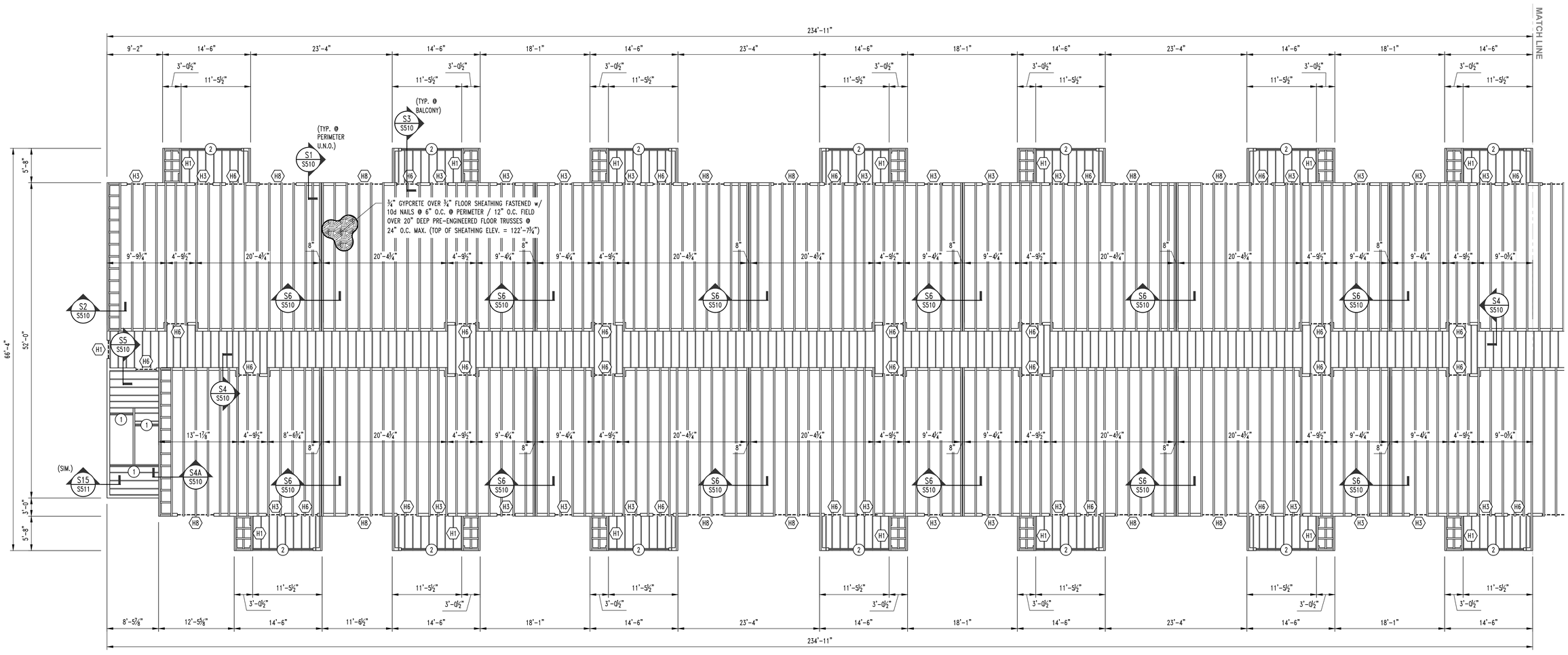
NOTE:
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EDGE OF SLAB OR TRUSS/RAFTER; OR CENTERLINE
OF COLUMN, BEAM, OR JOIST UNLESS NOTED OTHERWISE.



KEY PLAN

FLOOR FRAMING NOTES

1. (3) DF SEL. STR. 2x10's w/ SIMPSON LUS210-3 HANGER @ EACH END.
2. (3) TREATED SO. PINE No.2 2x10's w/ 2-PLY STUD PACK @ EACH END.
3. GIRDER TRUSS
4. 3-PLY BUILT-UP POST BENEATH GIRDER TRUSS THIS LEVEL TO FLOOR SLAB
   CONNECTIONS ARE AS FOLLOWS:
   FLOOR SLAB: SIMPSON LTP2.
   FLOOR FRAMING STUD ATTACHMENT: SIMPSON MSTC52
   ROOF TRUSS: BY TRUSS MANUFACTURER



1 S400 **3RD FLOOR FRAMING PLAN**
SCALE: ⅛" = 1'-0"

PLAN NORTH

HEADER SCHEDULE

LABEL	HEADER	CRIPPLE/JACK	JAMB/KING
"H1"	2 Ply 2x6 SPF No.1/No.2	Single Ply 2x6 SPF No.1/No.2	2 Ply 2x6 SPF No.1/No.2
"H2"	2 Ply 2x6 SPF No.1/No.2	2 Ply 2x6 SPF No.1/No.2	2 Ply 2x6 SPF No.1/No.2
"H3"	2 Ply 2x6 SPF No.1/No.2	3 Ply 2x6 SPF No.1/No.2	2 Ply 2x6 SPF No.1/No.2
"H4"	2 Ply 2x8 Doug. Fir No.2	Single Ply 2x6 SPF No.1/No.2	2 Ply 2x6 SPF No.1/No.2
"H5"	2 Ply 2x8 Doug. Fir No.2	2 Ply 2x6 SPF No.1/No.2	2 Ply 2x6 SPF No.1/No.2
"H6"	2 Ply 2x8 Doug. Fir No.2	3 Ply 2x6 SPF No.1/No.2	2 Ply 2x6 SPF No.1/No.2
"H7"	2 Ply 2x10 Doug. Fir Sel. Struct.	2 Ply 2x6 SPF No.1/No.2	2 Ply 2x6 SPF No.1/No.2
"H8"	2 Ply 2x10 Doug. Fir Sel. Struct.	4 Ply 2x6 SPF No.1/No.2	2 Ply 2x6 SPF No.1/No.2
"H9"	2 Ply 2x12 Doug. Fir Sel. Struct.	4 Ply 2x6 SPF No.1/No.2	2 Ply 2x6 SPF No.1/No.2
"H10"	2 Ply 2x12 Doug. Fir Sel. Struct.	6 Ply 2x6 SPF No.1/No.2	2 Ply 2x6 SPF No.1/No.2
"H11"	3 Ply 1.75x11.87 MicroLam 2.0E	2 Ply 2x6 SPF No.1/No.2	2 Ply 2x6 SPF No.1/No.2
"H12"	3 Ply 1.75x11.87 MicroLam 2.0E	5 Ply 2x6 SPF No.1/No.2	2 Ply 2x6 SPF No.1/No.2
"H13"	3 Ply 1.75x14 MicroLam 2.0E	3 Ply 2x6 SPF No.1/No.2	2 Ply 2x6 SPF No.1/No.2

REVISIONS:

No.	Date
ISSUE SET	10/25/2024

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY

STATE OF TEXAS
GREGORY L. LINNEMAN
152698
LICENSED
PROFESSIONAL ENGINEER

10/25/2024

STRUCTURAL ENGINEER:
CROCKETT ENGINEERING CONSULTANTS
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Crockett Engineering Consultants, LLC

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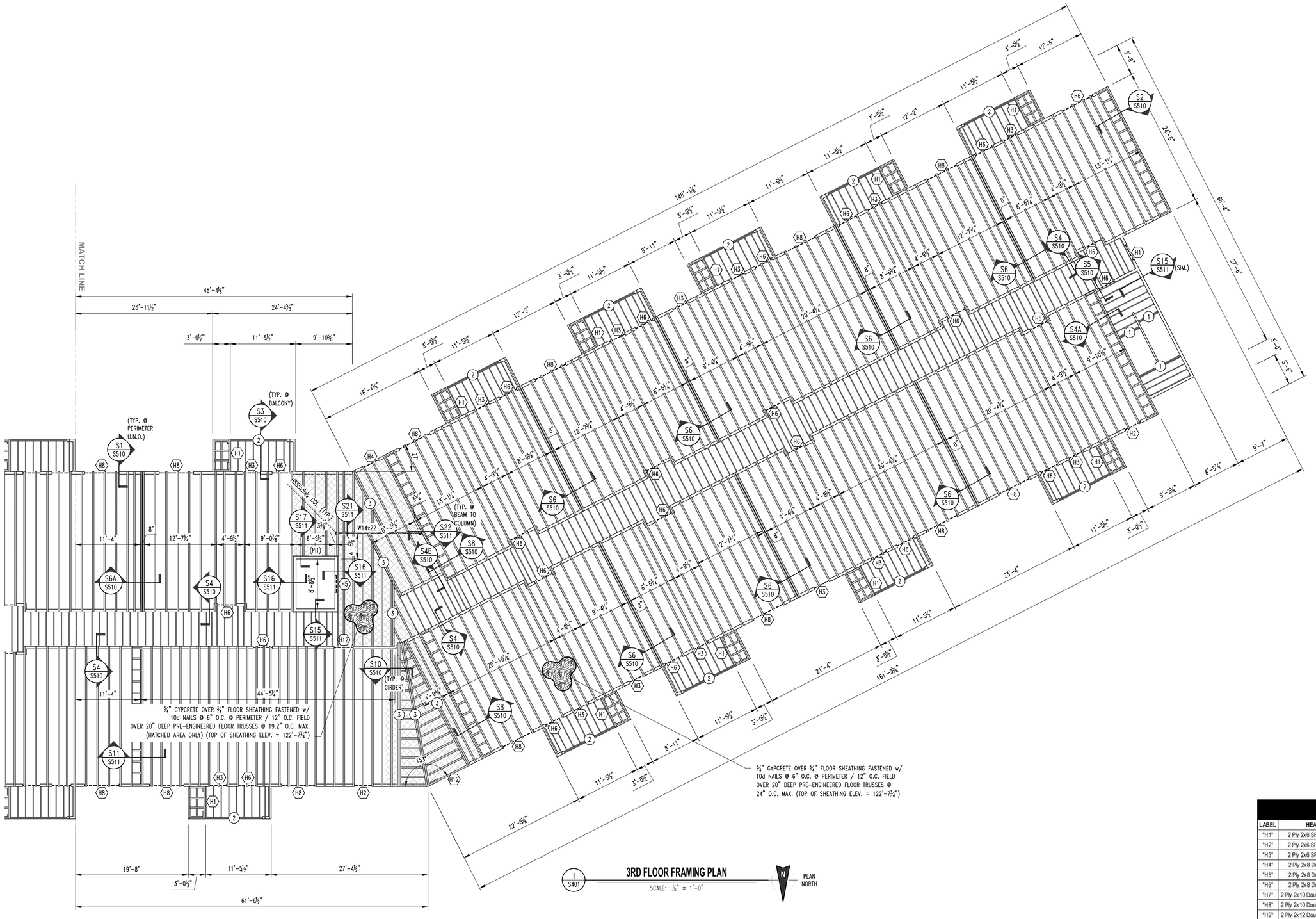
DASHWOOD TRAILS

HOUSTON, HARRIS COUNTY, TEXAS

DRAWING INCLUDES:
3RD FLOOR FRAMING PLAN

DESIGNED:	JWV
DRAWN:	ZMP
PROJECT NO.:	240389
SHEET:	S400

NOTE:
ALL DIMENSIONS ARE FROM FACE OF FOUNDATION WALL OR FRAMING; EDGE OF SLAB OR TRUSS/RAFTER; OR CENTERLINE OF COLUMN, BEAM, OR JOIST UNLESS NOTED OTHERWISE.

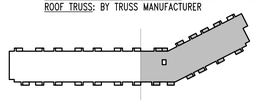


1 S401 **3RD FLOOR FRAMING PLAN**
SCALE: ⅛" = 1'-0"

PLAN NORTH

FLOOR FRAMING NOTES

1. (3) DF SEL. STR. 2x10's w/ SIMPSON LUS210-3 HANGER @ EACH END.
2. (3) TREATED SO. PINE No.2 2x10's w/ 2-PLY STUD PACK @ EACH END.
3. GIRDER TRUSS
4. 3-PLY BUILT-UP POST BENEATH GIRDER TRUSS THIS LEVEL TO FLOOR SLAB
   CONNECTIONS ARE AS FOLLOWS:
   FLOOR SLAB: SIMPSON LTP2.
   FLOOR FRAMING STUD ATTACHMENT: SIMPSON MSTC52
   ROOF TRUSS: BY TRUSS MANUFACTURER



KEY PLAN

HEADER SCHEDULE

LABEL	HEADER	CRIPPLE/JACK	JAMB/KING
"H1"	2 Ply 2x6 SPF No.1/No.2	Single Ply 2x6 SPF No.1/No.2	2 Ply 2x6 SPF No.1/No.2
"H2"	2 Ply 2x6 SPF No.1/No.2	2 Ply 2x6 SPF No.1/No.2	2 Ply 2x6 SPF No.1/No.2
"H3"	2 Ply 2x6 SPF No.1/No.2	3 Ply 2x6 SPF No.1/No.2	2 Ply 2x6 SPF No.1/No.2
"H4"	2 Ply 2x8 Doug. Fir No.2	Single Ply 2x6 SPF No.1/No.2	2 Ply 2x6 SPF No.1/No.2
"H5"	2 Ply 2x8 Doug. Fir No.2	2 Ply 2x6 SPF No.1/No.2	2 Ply 2x6 SPF No.1/No.2
"H6"	2 Ply 2x8 Doug. Fir No.2	3 Ply 2x6 SPF No.1/No.2	2 Ply 2x6 SPF No.1/No.2
"H7"	2 Ply 2x10 Doug. Fir Sel. Struct.	2 Ply 2x6 SPF No.1/No.2	2 Ply 2x6 SPF No.1/No.2
"H8"	2 Ply 2x10 Doug. Fir Sel. Struct.	4 Ply 2x6 SPF No.1/No.2	2 Ply 2x6 SPF No.1/No.2
"H9"	2 Ply 2x12 Doug. Fir Sel. Struct.	4 Ply 2x6 SPF No.1/No.2	2 Ply 2x6 SPF No.1/No.2
"H10"	2 Ply 2x12 Doug. Fir Sel. Struct.	6 Ply 2x6 SPF No.1/No.2	2 Ply 2x6 SPF No.1/No.2
"H11"	3 Ply 1.75x11.87 MicroLam 2.0E	2 Ply 2x6 SPF No.1/No.2	2 Ply 2x6 SPF No.1/No.2
"H12"	3 Ply 1.75x11.87 MicroLam 2.0E	5 Ply 2x6 SPF No.1/No.2	2 Ply 2x6 SPF No.1/No.2
"H13"	3 Ply 1.75x14 MicroLam 2.0E	3 Ply 2x6 SPF No.1/No.2	2 Ply 2x6 SPF No.1/No.2

REVISIONS:

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152698
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10/25/2024

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DASHWOOD TRAILS

HOUSTON, HARRIS COUNTY, TEXAS

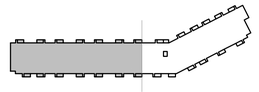
DRAWING INCLUDES:

3RD FLOOR FRAMING PLAN

DESIGNED:	JWV
DRAWN:	ZMP
PROJECT NO.:	240389

SHEET:
S401

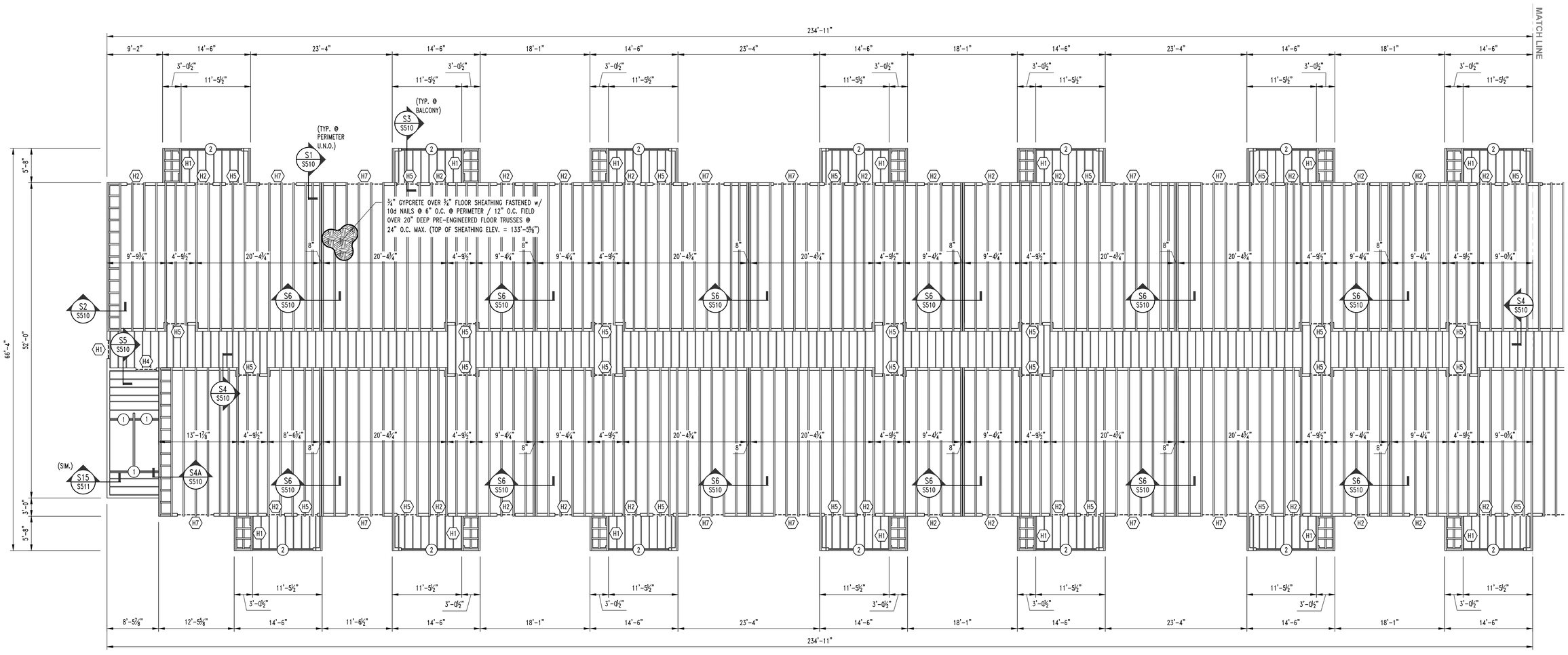
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KEY PLAN

FLOOR FRAMING NOTES

1. (3) DF SEL. STR. 2x10's w/ SIMPSON LUS210-3 HANGER @ EACH END.
2. (3) TREATED SO. PINE No.2 2x10's w/ 2-PLY STUD PACK @ EACH END.
3. GIRDER TRUSS
4. 3-PLY BUILT-UP POST BENEATH GIRDER TRUSS THIS LEVEL TO FLOOR SLAB
   CONNECTIONS ARE AS FOLLOWS:
   FLOOR SLAB: SIMPSON LTP2.
   FLOOR FRAMING STUD ATTACHMENT: SIMPSON MSTC52
   ROOF TRUSS: BY TRUSS MANUFACTURER



1 S500 — 4TH FLOOR FRAMING PLAN

SCALE: ⅛" = 1'-0"

PLAN NORTH

HEADER SCHEDULE

LABEL	HEADER	CRIPPLE/JACK	JAMB/KING
"H1"	2 Ply 2x6 SPF No.1/No.2	Single Ply 2x6 SPF No.1/No.2	2 Ply 2x6 SPF No.1/No.2
"H2"	2 Ply 2x6 SPF No.1/No.2	2 Ply 2x6 SPF No.1/No.2	2 Ply 2x6 SPF No.1/No.2
"H3"	2 Ply 2x6 SPF No.1/No.2	3 Ply 2x6 SPF No.1/No.2	2 Ply 2x6 SPF No.1/No.2
"H4"	2 Ply 2x8 Doug. Fir No.2	Single Ply 2x6 SPF No.1/No.2	2 Ply 2x6 SPF No.1/No.2
"H5"	2 Ply 2x8 Doug. Fir No.2	2 Ply 2x6 SPF No.1/No.2	2 Ply 2x6 SPF No.1/No.2
"H6"	2 Ply 2x8 Doug. Fir No.2	3 Ply 2x6 SPF No.1/No.2	2 Ply 2x6 SPF No.1/No.2
"H7"	2 Ply 2x10 Doug. Fir Sel. Struct.	2 Ply 2x6 SPF No.1/No.2	2 Ply 2x6 SPF No.1/No.2
"H8"	2 Ply 2x10 Doug. Fir Sel. Struct.	4 Ply 2x6 SPF No.1/No.2	2 Ply 2x6 SPF No.1/No.2
"H9"	2 Ply 2x12 Doug. Fir Sel. Struct.	4 Ply 2x6 SPF No.1/No.2	2 Ply 2x6 SPF No.1/No.2
"H10"	2 Ply 2x12 Doug. Fir Sel. Struct.	6 Ply 2x6 SPF No.1/No.2	2 Ply 2x6 SPF No.1/No.2
"H11"	3 Ply 1.75x11.87 MicroLam 2.0E	2 Ply 2x6 SPF No.1/No.2	2 Ply 2x6 SPF No.1/No.2
"H12"	3 Ply 1.75x11.87 MicroLam 2.0E	5 Ply 2x6 SPF No.1/No.2	2 Ply 2x6 SPF No.1/No.2
"H13"	3 Ply 1.75x14 MicroLam 2.0E	3 Ply 2x6 SPF No.1/No.2	2 Ply 2x6 SPF No.1/No.2

REVISIONS:

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STATE OF TEXAS — GREGORY L. LINNEMAN — 152698 — LICENSED PROFESSIONAL ENGINEER

10/25/2024

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DASHWOOD TRAILS

HOUSTON, HARRIS COUNTY, TEXAS

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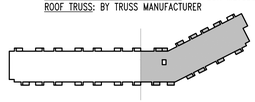
4TH FLOOR FRAMING PLAN

DESIGNED:	JWV
DRAWN:	ZMP
PROJECT NO.:	240389
SHEET:	S500

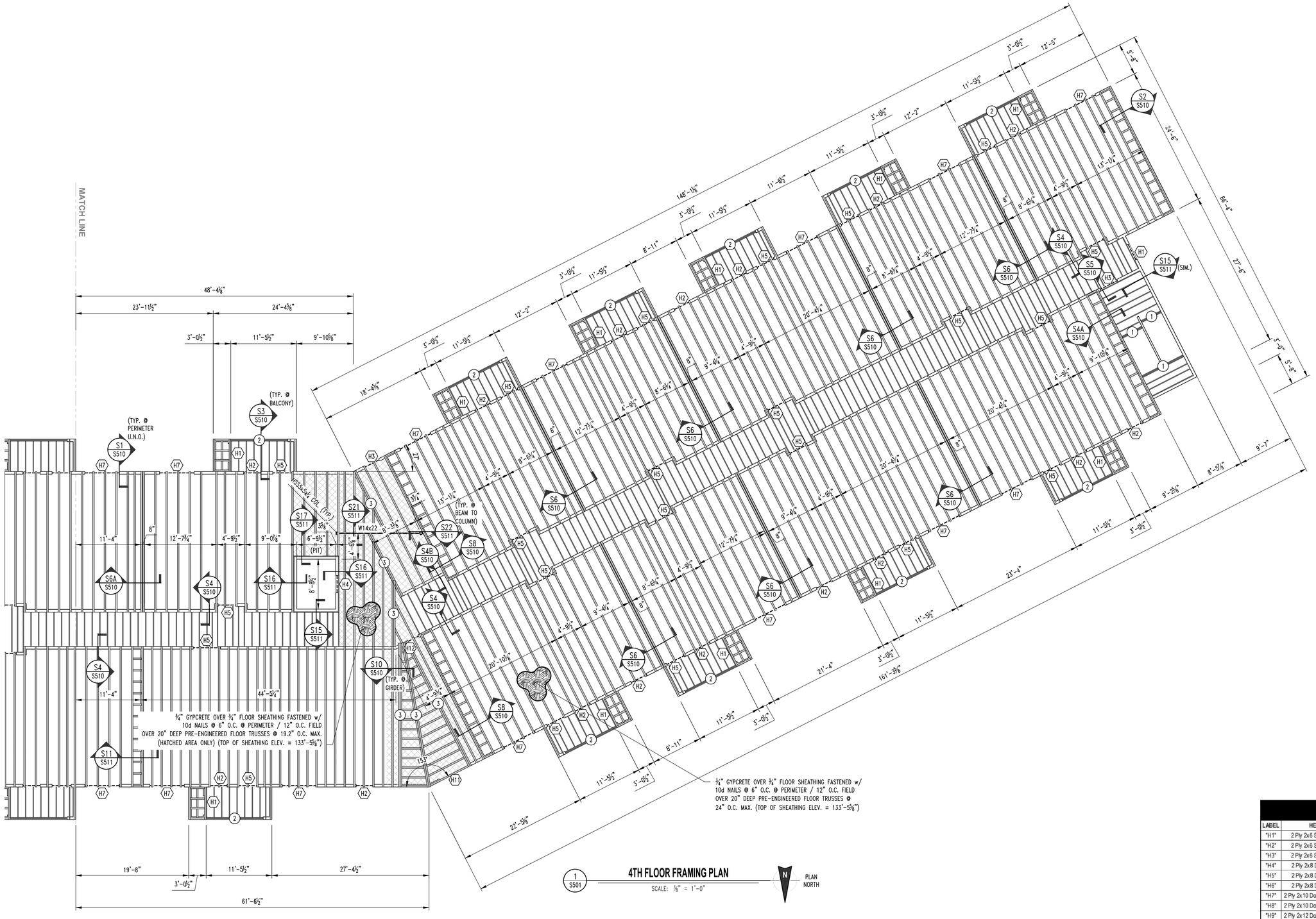
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FLOOR FRAMING NOTES

1. (3) DF SEL. STR. 2x10's w/ SIMPSON LUS210-3 HANGER @ EACH END.
2. (3) TREATED SO. PINE No.2 2x10's w/ 2-PLY STUD PACK @ EACH END.
3. GIRDER TRUSS
4. 3-PLY BUILT-UP POST BENEATH GIRDER TRUSS THIS LEVEL TO FLOOR SLAB
   CONNECTIONS ARE AS FOLLOWS:
   FLOOR SLAB: SIMPSON LTP2.
   FLOOR FRAMING STUD ATTACHMENT: SIMPSON MSTC52
   ROOF TRUSS: BY TRUSS MANUFACTURER



KEY PLAN



1 S501 **4TH FLOOR FRAMING PLAN**
SCALE: ⅛" = 1'-0"
N PLAN NORTH

HEADER SCHEDULE

LABEL	HEADER	CRIPPLE/JACK	JAMB/KING
"H1"	2 Ply 2x6 SPF No.1/No.2	Single Ply 2x6 SPF No.1/No.2	2 Ply 2x6 SPF No.1/No.2
"H2"	2 Ply 2x6 SPF No.1/No.2	2 Ply 2x6 SPF No.1/No.2	2 Ply 2x6 SPF No.1/No.2
"H3"	2 Ply 2x6 SPF No.1/No.2	3 Ply 2x6 SPF No.1/No.2	2 Ply 2x6 SPF No.1/No.2
"H4"	2 Ply 2x8 Doug. Fir No.2	Single Ply 2x6 SPF No.1/No.2	2 Ply 2x6 SPF No.1/No.2
"H5"	2 Ply 2x8 Doug. Fir No.2	2 Ply 2x6 SPF No.1/No.2	2 Ply 2x6 SPF No.1/No.2
"H6"	2 Ply 2x8 Doug. Fir No.2	3 Ply 2x6 SPF No.1/No.2	2 Ply 2x6 SPF No.1/No.2
"H7"	2 Ply 2x10 Doug. Fir Sel. Struct.	2 Ply 2x6 SPF No.1/No.2	2 Ply 2x6 SPF No.1/No.2
"H8"	2 Ply 2x10 Doug. Fir Sel. Struct.	4 Ply 2x6 SPF No.1/No.2	2 Ply 2x6 SPF No.1/No.2
"H9"	2 Ply 2x12 Doug. Fir Sel. Struct.	4 Ply 2x6 SPF No.1/No.2	2 Ply 2x6 SPF No.1/No.2
"H10"	2 Ply 2x12 Doug. Fir Sel. Struct.	6 Ply 2x6 SPF No.1/No.2	2 Ply 2x6 SPF No.1/No.2
"H11"	3 Ply 1.75x11.87 MicroLam 2.0E	2 Ply 2x6 SPF No.1/No.2	2 Ply 2x6 SPF No.1/No.2
"H12"	3 Ply 1.75x11.87 MicroLam 2.0E	5 Ply 2x6 SPF No.1/No.2	2 Ply 2x6 SPF No.1/No.2
"H13"	3 Ply 1.75x14 MicroLam 2.0E	3 Ply 2x6 SPF No.1/No.2	2 Ply 2x6 SPF No.1/No.2

REVISIONS:

No.	Date
ISSUE SET	10/25/2024

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY

STATE OF TEXAS
GREGORY L. LINNEMAN
152698
LICENSED PROFESSIONAL ENGINEER

10/25/2024

STRUCTURAL ENGINEER:
CROCKETT ENGINEERING CONSULTANTS
1000 W. Nifong Blvd., Bldg. I
Columbia, Missouri 65203
(573) 447-0292
www.crockettengineering.com
Crockett Engineering Consultants, LLC

CLIENT:
WALLACE ARCHITECTS LLC
302 CAMPUS DR. #208
COLUMBIA, MISSOURI

DASHWOOD TRAILS

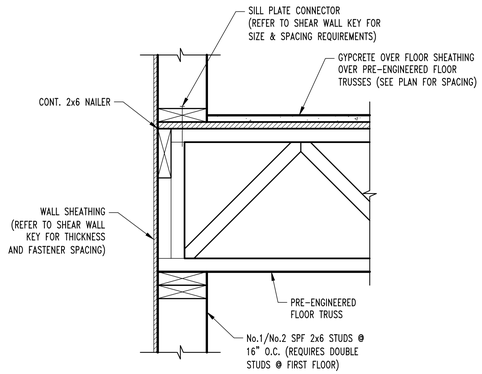
HOUSTON, HARRIS COUNTY, TEXAS

DRAWING INCLUDES:

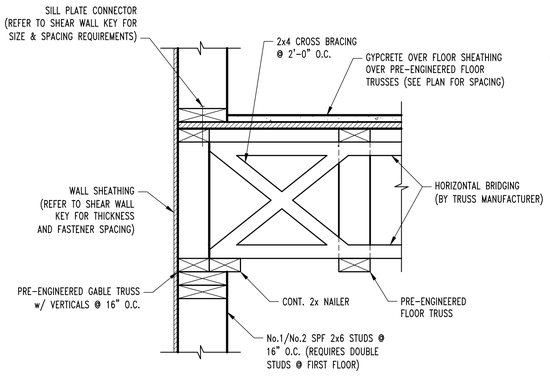
4TH FLOOR FRAMING PLAN

DESIGNED:	JWV
DRAWN:	ZMP
PROJECT NO.:	240389

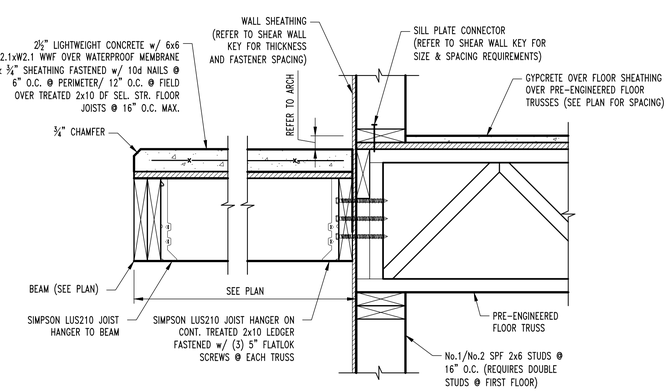
SHEET: S501



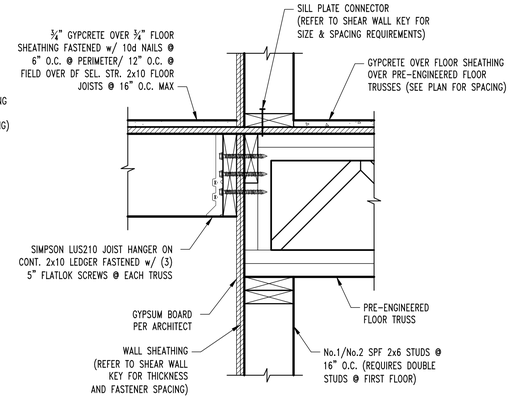
S1 S300-S501 **FRAMING SECTION** SCALE: 1½" = 1'-0"



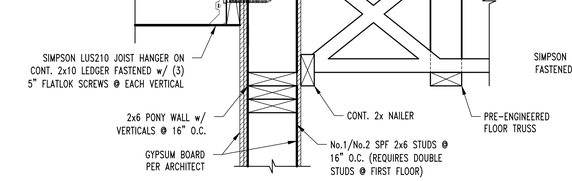
S2 S300-S501 **FRAMING SECTION** SCALE: 1½" = 1'-0"



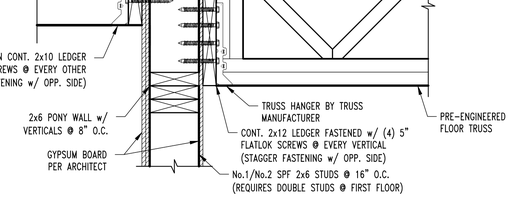
S3 S300-S501 **FRAMING SECTION** SCALE: 1½" = 1'-0"



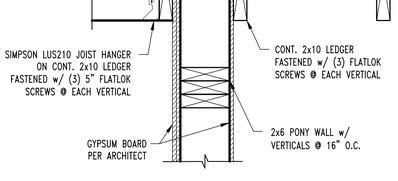
S4 S300-S501 **FRAMING SECTION** SCALE: 1½" = 1'-0"



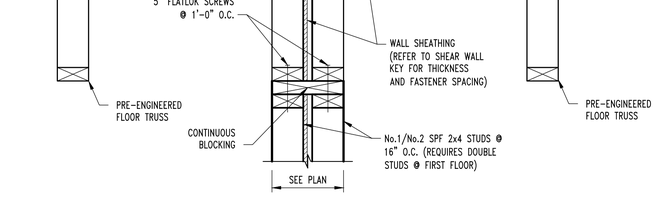
S4A S300-S501 **FRAMING SECTION** SCALE: 1½" = 1'-0"



S4B S301,S401,S501 **FRAMING SECTION** SCALE: 1½" = 1'-0"



S5 S300-S501 **FRAMING SECTION** SCALE: 1½" = 1'-0"



S6 S300-S501 **FRAMING SECTION** SCALE: 1½" = 1'-0"

S6A S301,S401,S501 **FRAMING SECTION** SCALE: 1½" = 1'-0"

S8 S301, S401, S501 **FRAMING SECTION** SCALE: 1½" = 1'-0"

S10 S301, S401, S501 **FRAMING SECTION** SCALE: 1½" = 1'-0"

REVISIONS:

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10/25/2024

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DASHWOOD TRAILS

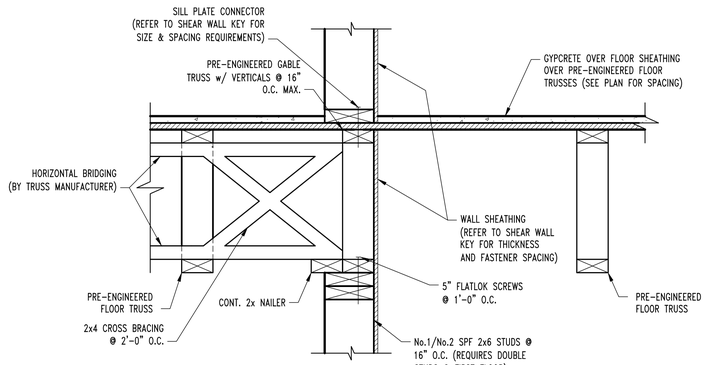
HOUSTON, HARRIS COUNTY, TEXAS

DRAWING INCLUDES:

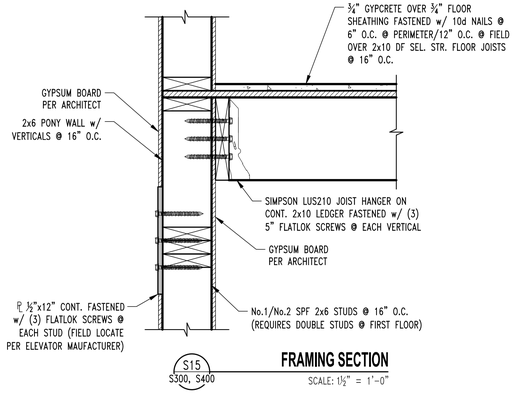
FLOOR FRAMING DETAILS

DESIGNED:	JWV
DRAWN:	ZMP
PROJECT NO.:	240389

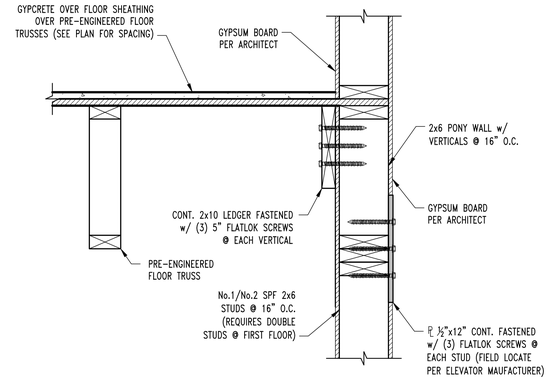
SHEET: S510



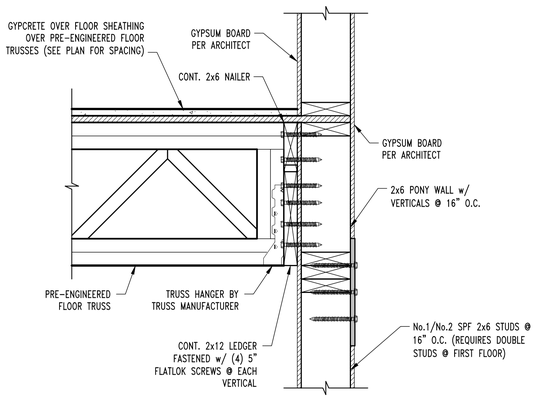
S11 S301,S401,S501 **FRAMING SECTION** SCALE: 1½" = 1'-0"



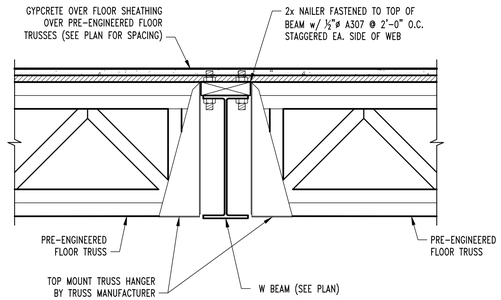
S15 S300, S400 **FRAMING SECTION** SCALE: 1½" = 1'-0"



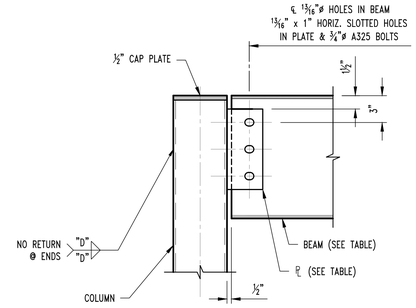
S16 S301,S401,S501 **FRAMING SECTION** SCALE: 1½" = 1'-0"



S17 S301,S401,S501 **FRAMING SECTION** SCALE: 1½" = 1'-0"

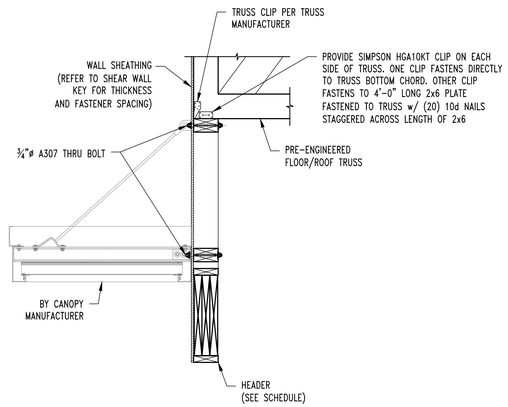


S21 S301,S401,S501 **FRAMING SECTION** SCALE: 1½" = 1'-0"

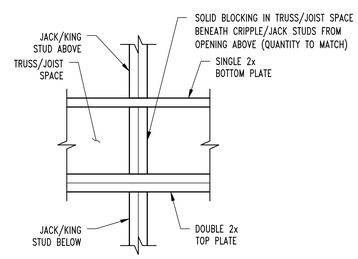


BEAM SIZE	No. OF BOLTS "N"	PLATE SIZE	WELD SIZE "D"
W14	3	5⁄16x4x0'-9"	¼"
W18	5	5⁄16x4x1'-3"	¼"

S22 S301,S401,S501 **TYP. BEAM TO COLUMN SECTION** SCALE: 1½" = 1'-0"



TYP. CANOPY FRAMING SECTION w/o BRICK



TYP. MULTI-STORY BLOCKING DETAIL @ OPENINGS

REVISIONS:

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STATE OF TEXAS · GREGORY L. LINNEMAN · 152698 · LICENSED PROFESSIONAL ENGINEER

10/25/2024

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COLUMBIA, MISSOURI

DASHWOOD TRAILS

HOUSTON, HARRIS COUNTY, TEXAS

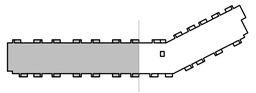
DRAWING INCLUDES:

FLOOR FRAMING DETAILS

DESIGNED:	JWV
DRAWN:	ZMP
PROJECT NO.:	240389

SHEET: S511

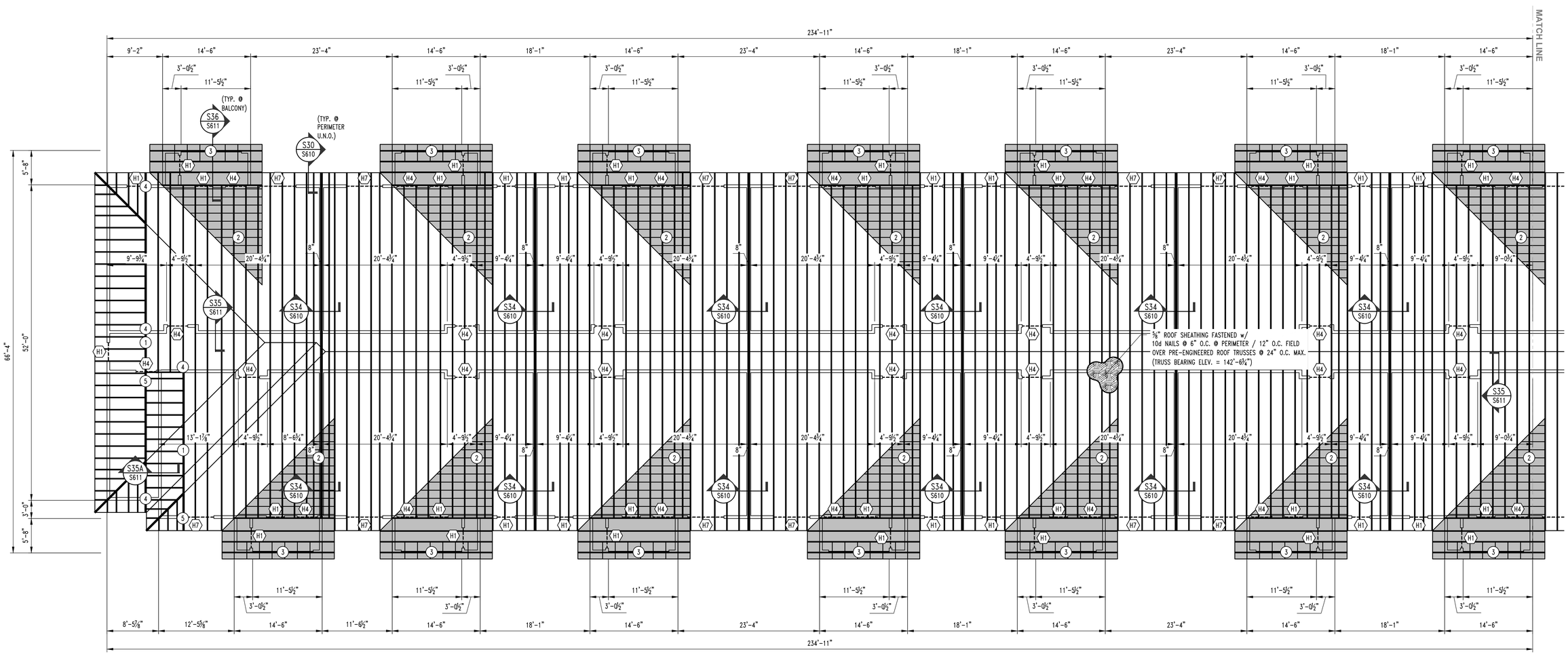
NOTE:
ALL DIMENSIONS ARE FROM FACE OF FOUNDATION WALL OR FRAMING;
EDGE OF SLAB OR TRUSS/RAFTER; OR CENTERLINE
OF COLUMN, BEAM, OR JOIST UNLESS NOTED OTHERWISE.



KEY PLAN

ROOF FRAMING NOTES

1. GIRDER TRUSS
2. FRAME ROOF OVER PRE-ENGINEERED TRUSSES TO CREATE RIDGE, VALLEY, OR HIP AS SHOWN w/ 2x No.2 SPF RAFTERS @ 16" O.C. MAX. OR PRE-ENGINEERED ROOF TRUSSES @ 2'-0" O.C. MAX.
3. (2) TREATED SO. PINE No.2 2x10's w/ 2-PLY STUD PACK @ EACH END.
4. 3-PLY BUILT-UP POST BENEATH GIRDER TRUSS THIS LEVEL TO FLOOR SLAB
   CONNECTIONS ARE AS FOLLOWS:
   FLOOR SLAB: SIMPSON LTTP2.
   FLOOR FRAMING STUD ATTACHMENT: SIMPSON MSTC52
   ROOF TRUSS: BY TRUSS MANUFACTURER
5. GIRDER TO HEADER CONNECTION. REFER TO TYPICAL DETAIL ON SHEET S612.



1 S600 **ROOF FRAMING PLAN**
SCALE: ⅛" = 1'-0"

N PLAN NORTH

HEADER SCHEDULE

LABEL	HEADER	CRIPPLE/JACK	JAMB/KING
"H1"	2 Ply 2x6 SPF No.1/No.2	Single Ply 2x6 SPF No.1/No.2	2 Ply 2x6 SPF No.1/No.2
"H2"	2 Ply 2x6 SPF No.1/No.2	2 Ply 2x6 SPF No.1/No.2	2 Ply 2x6 SPF No.1/No.2
"H3"	2 Ply 2x6 SPF No.1/No.2	3 Ply 2x6 SPF No.1/No.2	2 Ply 2x6 SPF No.1/No.2
"H4"	2 Ply 2x8 Doug. Fir No.2	Single Ply 2x6 SPF No.1/No.2	2 Ply 2x6 SPF No.1/No.2
"H5"	2 Ply 2x8 Doug. Fir No.2	2 Ply 2x6 SPF No.1/No.2	2 Ply 2x6 SPF No.1/No.2
"H6"	2 Ply 2x8 Doug. Fir No.2	3 Ply 2x6 SPF No.1/No.2	2 Ply 2x6 SPF No.1/No.2
"H7"	2 Ply 2x10 Doug. Fir Sel. Struct.	2 Ply 2x6 SPF No.1/No.2	2 Ply 2x6 SPF No.1/No.2
"H8"	2 Ply 2x10 Doug. Fir Sel. Struct.	4 Ply 2x6 SPF No.1/No.2	2 Ply 2x6 SPF No.1/No.2
"H9"	2 Ply 2x12 Doug. Fir Sel. Struct.	4 Ply 2x6 SPF No.1/No.2	2 Ply 2x6 SPF No.1/No.2
"H10"	2 Ply 2x12 Doug. Fir Sel. Struct.	6 Ply 2x6 SPF No.1/No.2	2 Ply 2x6 SPF No.1/No.2
"H11"	3 Ply 1.75x11.87 MicroLam 2.0E	2 Ply 2x6 SPF No.1/No.2	2 Ply 2x6 SPF No.1/No.2
"H12"	3 Ply 1.75x11.87 MicroLam 2.0E	5 Ply 2x6 SPF No.1/No.2	2 Ply 2x6 SPF No.1/No.2
"H13"	3 Ply 1.75x14 MicroLam 2.0E	3 Ply 2x6 SPF No.1/No.2	2 Ply 2x6 SPF No.1/No.2

REVISIONS:

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ISSUE SET	10/25/2024

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STATE OF TEXAS · GREGORY L. LINNEMAN · 152698 · LICENSED PROFESSIONAL ENGINEER

10/25/2024

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COLUMBIA, MISSOURI

DASHWOOD TRAILS

HOUSTON, HARRIS COUNTY, TEXAS

DRAWING INCLUDES:
ROOF FRAMING PLAN

DESIGNED:	JWV
DRAWN:	ZMP
PROJECT NO.:	240389
SHEET:	S600

NOTE:
ALL DIMENSIONS ARE FROM FACE OF FOUNDATION WALL OR FRAMING; EDGE OF SLAB OR TRUSS/RAFTER; OR CENTERLINE OF COLUMN, BEAM, OR JOIST UNLESS NOTED OTHERWISE.

ROOF FRAMING NOTES

1. GIRDER TRUSS
2. FRAME ROOF OVER PRE-ENGINEERED TRUSSES TO CREATE RIDGE, VALLEY, OR HIP AS SHOWN w/ 2x No.2 SPF RAFTERS @ 16" O.C. MAX. OR PRE-ENGINEERED ROOF TRUSSES @ 2'-0" O.C. MAX.
3. (2) TREATED SO. PINE No.2 2x10's w/ 2-PLY STUD PACK @ EACH END.
4. 3-PLY BUILT-UP POST BENEATH GIRDER TRUSS THIS LEVEL TO FLOOR SLAB
   CONNECTIONS ARE AS FOLLOWS:
   FLOOR SLAB: SIMPSON LTTP2.
   FLOOR FRAMING STUD ATTACHMENT: SIMPSON MSTC52
   ROOF TRUSS: BY TRUSS MANUFACTURER
5. GIRDER TO HEADER CONNECTION. REFER TO TYPICAL DETAIL ON SHEET S612.

KEY PLAN

MATCH LINE

(TYP. @ PERIMETER U.N.O.) S30 S610

(TYP. @ BALCONY) S36 S611

S34A S610 · S35 S611 · S33 S610 · S34 S610 · S35A S610

(PIT)

5/8" ROOF SHEATHING FASTENED w/ 10d NAILS @ 6" O.C. @ PERIMETER / 12" O.C. FIELD OVER PRE-ENGINEERED ROOF TRUSSES @ 24" O.C. MAX. (TRUSS BEARING ELEV. = 142'-6¾")

1 S601 **ROOF FRAMING PLAN**
SCALE: ⅛" = 1'-0"

N PLAN NORTH

HEADER SCHEDULE

LABEL	HEADER	CRIPPLE/JACK	JAMB/KING
"H1"	2 Ply 2x6 SPF No.1/No.2	Single Ply 2x6 SPF No.1/No.2	2 Ply 2x6 SPF No.1/No.2
"H2"	2 Ply 2x6 SPF No.1/No.2	2 Ply 2x6 SPF No.1/No.2	2 Ply 2x6 SPF No.1/No.2
"H3"	2 Ply 2x6 SPF No.1/No.2	3 Ply 2x6 SPF No.1/No.2	2 Ply 2x6 SPF No.1/No.2
"H4"	2 Ply 2x8 Doug. Fir No.2	Single Ply 2x6 SPF No.1/No.2	2 Ply 2x6 SPF No.1/No.2
"H5"	2 Ply 2x8 Doug. Fir No.2	2 Ply 2x6 SPF No.1/No.2	2 Ply 2x6 SPF No.1/No.2
"H6"	2 Ply 2x8 Doug. Fir No.2	3 Ply 2x6 SPF No.1/No.2	2 Ply 2x6 SPF No.1/No.2
"H7"	2 Ply 2x10 Doug. Fir Sel. Struct.	2 Ply 2x6 SPF No.1/No.2	2 Ply 2x6 SPF No.1/No.2
"H8"	2 Ply 2x10 Doug. Fir Sel. Struct.	4 Ply 2x6 SPF No.1/No.2	2 Ply 2x6 SPF No.1/No.2
"H9"	2 Ply 2x12 Doug. Fir Sel. Struct.	4 Ply 2x6 SPF No.1/No.2	2 Ply 2x6 SPF No.1/No.2
"H10"	2 Ply 2x12 Doug. Fir Sel. Struct.	6 Ply 2x6 SPF No.1/No.2	2 Ply 2x6 SPF No.1/No.2
"H11"	3 Ply 1.75x11.87 MicroLam 2.0E	2 Ply 2x6 SPF No.1/No.2	2 Ply 2x6 SPF No.1/No.2
"H12"	3 Ply 1.75x11.87 MicroLam 2.0E	5 Ply 2x6 SPF No.1/No.2	2 Ply 2x6 SPF No.1/No.2
"H13"	3 Ply 1.75x14 MicroLam 2.0E	3 Ply 2x6 SPF No.1/No.2	2 Ply 2x6 SPF No.1/No.2

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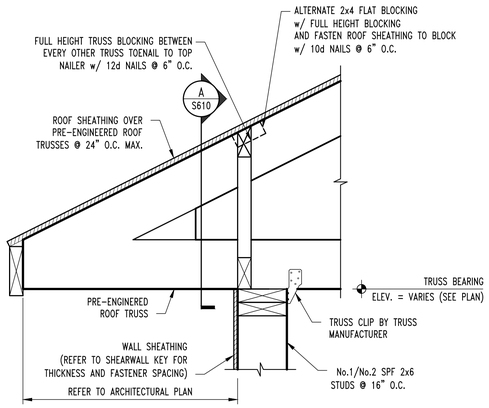
CLIENT:
WALLACE ARCHITECTS LLC
302 CAMPUS DR. #208
COLUMBIA, MISSOURI

DASHWOOD TRAILS
HOUSTON, HARRIS COUNTY, TEXAS

DRAWING INCLUDES:
ROOF FRAMING PLAN

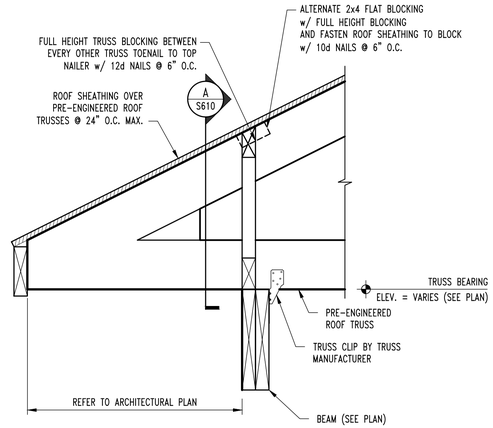
DESIGNED:	JWV
DRAWN:	ZMP
PROJECT NO.:	240389

SHEET: S601



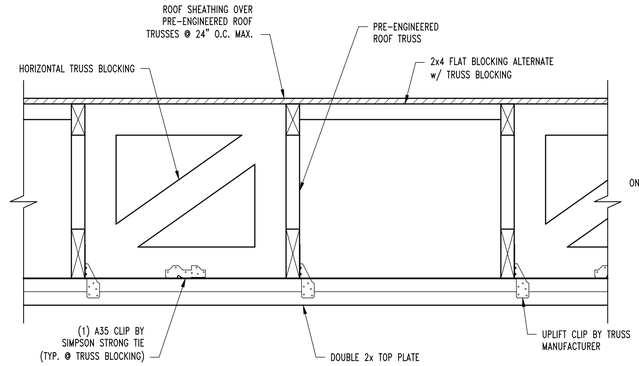
S30 / S300, S600–S601 **TYP. ROOF FRAMING SECTION**

SCALE: 1½" = 1'–0"



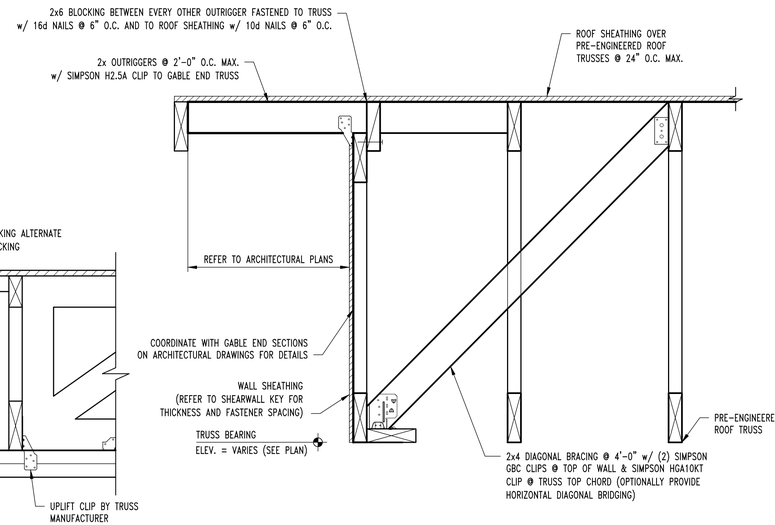
S30A / S301 **TYP. ROOF FRAMING SECTION**

SCALE: 1½" = 1'–0"



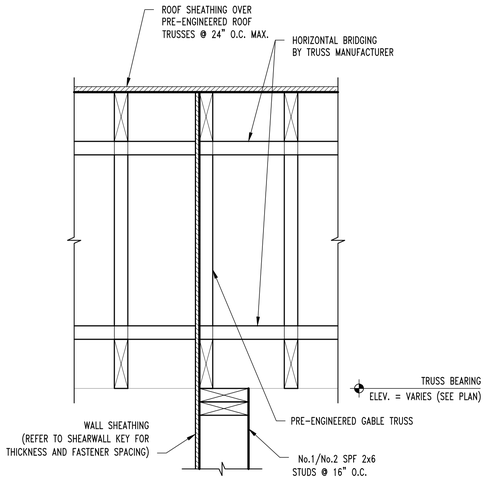
A / S610–S611 **TYP. TRUSS BLOCKING SECTION**

SCALE: 1½" = 1'–0"



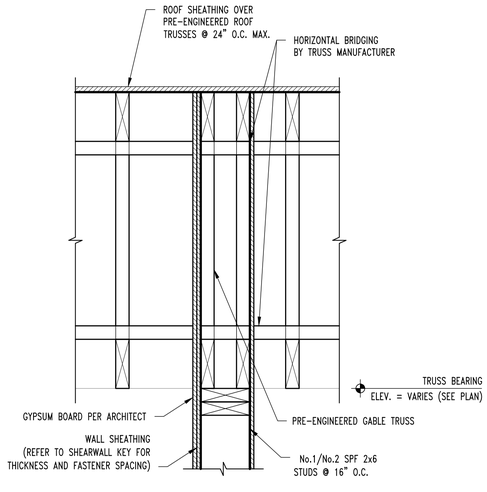
S31 / S301 **ROOF FRAMING SECTION**

SCALE: 1½" = 1'–0"



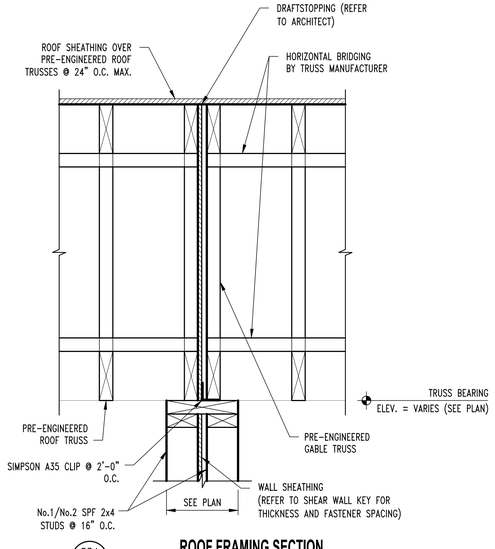
S33 / S601 **ROOF FRAMING SECTION**

SCALE: 1½" = 1'–0"



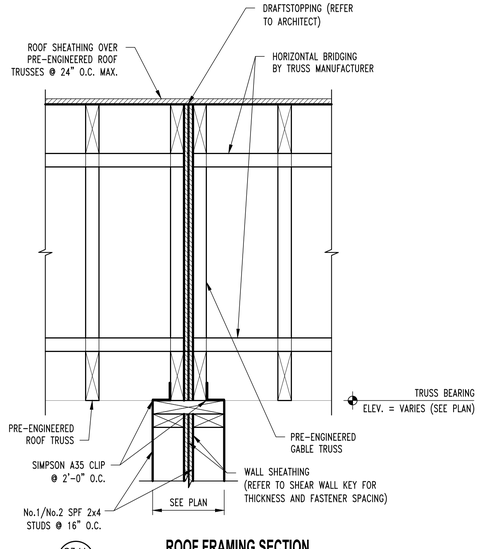
S33A / S601 **ROOF FRAMING SECTION**

SCALE: 1½" = 1'–0"



S34 / S600–S601 **ROOF FRAMING SECTION**

SCALE: 1½" = 1'–0"



S34A / S601 **ROOF FRAMING SECTION**

SCALE: 1½" = 1'–0"

REVISIONS:

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10/25/2024

STRUCTURAL ENGINEER:
CROCKETT ENGINEERING CONSULTANTS
1000 W. Nifong Blvd., Bldg. I
Columbia, Missouri 65203
(573) 447-0292
www.crockettengineering.com
Crockett Engineering Consultants, LLC

CLIENT:
WALLACE ARCHITECTS LLC
302 CAMPUS DR. #208
COLUMBIA, MISSOURI

DASHWOOD TRAILS

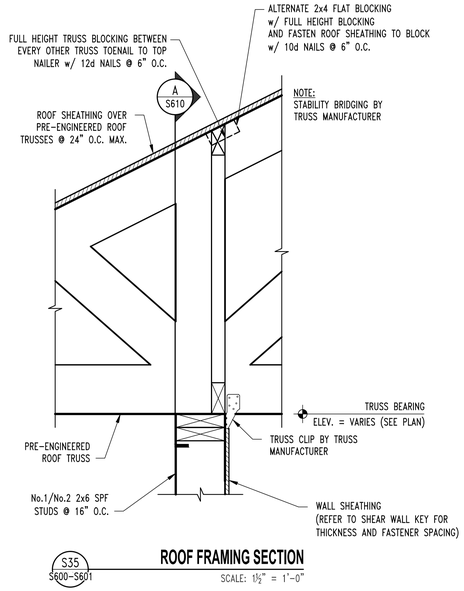
HOUSTON, HARRIS COUNTY, TEXAS

DRAWING INCLUDES:

ROOF FRAMING DETAILS

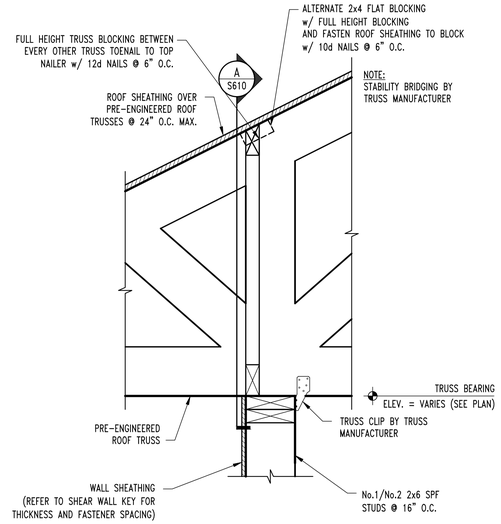
DESIGNED:	JWV
DRAWN:	ZMP
PROJECT NO.:	240389

SHEET: S610



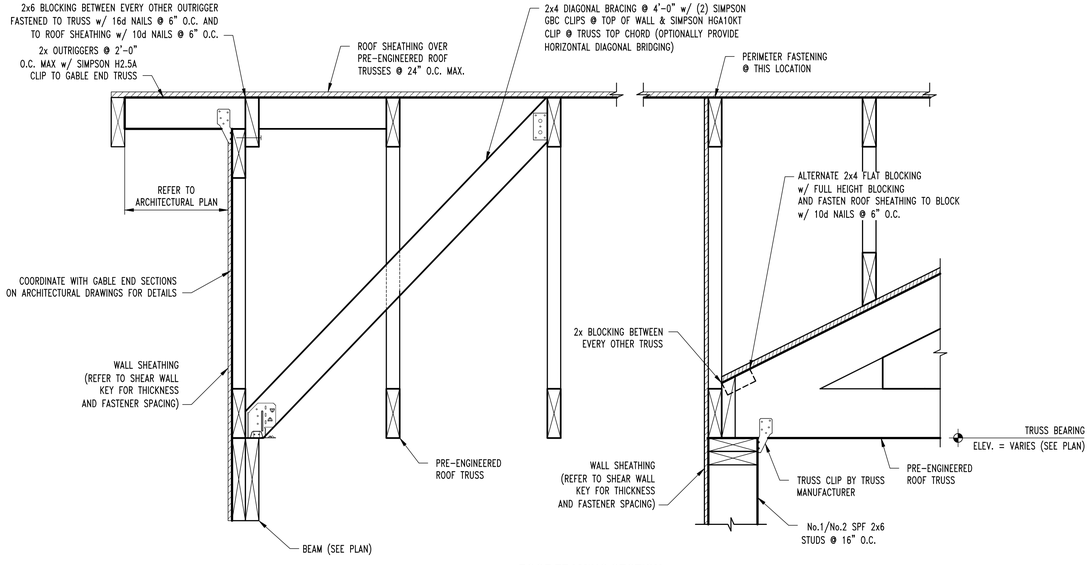
S35 S600-S601 **ROOF FRAMING SECTION**

SCALE: 1½" = 1'-0"



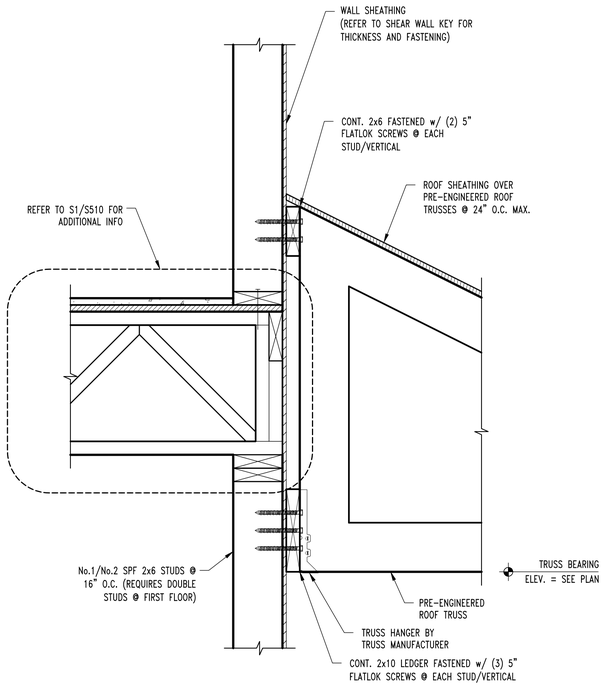
S35A S600-S601 **ROOF FRAMING SECTION**

SCALE: 1½" = 1'-0"



S36 S600-S601 **ROOF FRAMING SECTION**

SCALE: 1½" = 1'-0"



S37 S301 **TYP. LOW ROOF FRAMING SECTION**

SCALE: 1½" = 1'-0"

REVISIONS:

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STATE OF TEXAS GREGORY L. LINNEMAN 152698 LICENSED PROFESSIONAL ENGINEER

10/25/2024

STRUCTURAL ENGINEER:
CROCKETT ENGINEERING CONSULTANTS
1000 W. Nifong Blvd., Bldg. I
Columbia, Missouri 65203
(573) 447-0292
www.crockettengineering.com
Crockett Engineering Consultants, LLC

CLIENT:
WALLACE ARCHITECTS LLC
302 CAMPUS DR. #208
COLUMBIA, MISSOURI

DASHWOOD TRAILS

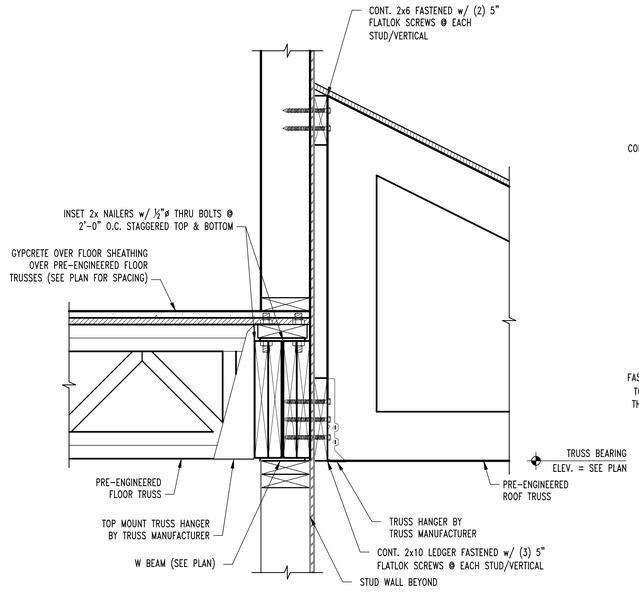
HOUSTON, HARRIS COUNTY, TEXAS

DRAWING INCLUDES:

ROOF FRAMING DETAILS

DESIGNED:	JWV
DRAWN:	ZMP
PROJECT NO.:	240389

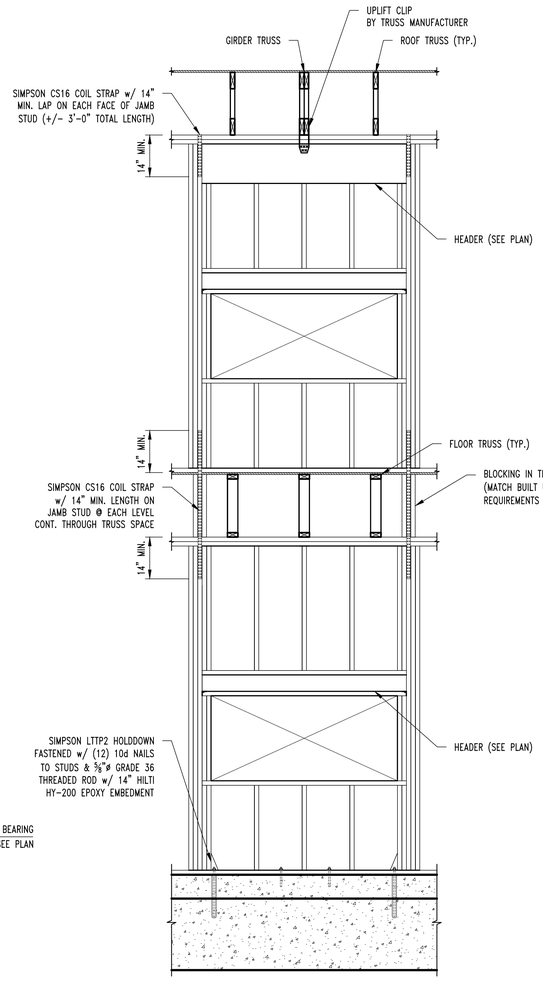
SHEET:
S611



S38
S301

TYP. LOW ROOF FRAMING SECTION

SCALE: 1½" = 1'-0"



TYP. MULTI-STORY GIRDER TO HEADER DETAIL

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STATE OF TEXAS
GREGORY L. LINNEMAN
152698
LICENSED PROFESSIONAL ENGINEER

10/25/2024

STRUCTURAL ENGINEER:
CROCKETT ENGINEERING CONSULTANTS
1000 W. Nifong Blvd., Bldg. I
Columbia, Missouri 65203
(573) 447-0292
www.crockettengineering.com
Crockett Engineering Consultants, LLC

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DASHWOOD TRAILS

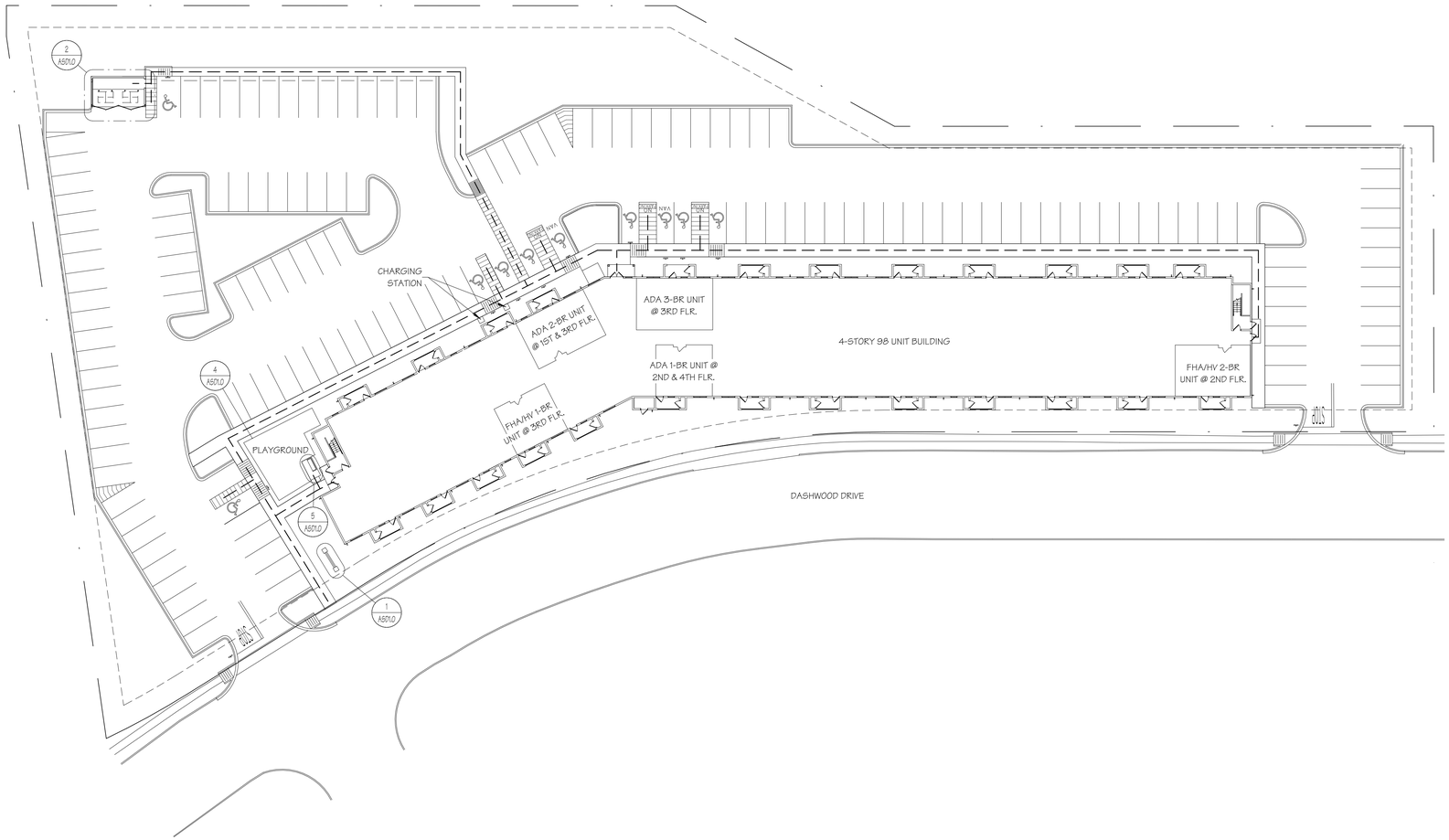
HOUSTON, HARRIS COUNTY, TEXAS

DRAWING INCLUDES:

ROOF FRAMING DETAILS

DESIGNED:	JWV
DRAWN:	ZMP
PROJECT NO.:	240389

SHEET:
S612



1 A91.0 ARCHITECTURAL SITE PLAN

SCALE: 1" = 30'-0"

LEGEND

- ACCESSIBLE ROUTE (36" MIN. WIDTH, 2% CROSS SLOPE MAX, 5% RUNNING SLOPE MAX.)
- UFAS ACCESSIBLE

NOTE: INSTALL HANDRAILS @ ACCESSIBLE ROUTES AND WHERE OTHERWISE NOTED EXCEEDING 5% BUT LESS THAN 8.33%. 5'-0" LANDING REQUIRED AT TOP AND BOTTOM OF RAMP. SEE CIVIL FOR LOCATIONS.

NOTE: APARTMENT NUMBERS ARE TO BE FIELD VERIFIED BY GENERAL CONTRACTOR. ARCHITECT TO BE NOTIFIED OF ANY DISCREPANCY PRIOR TO FINAL PRODUCTION/INSTALLATION.

ACCESSIBILTY NOTES:

1. SIDEWALK ON THE ACCESSIBLE ROUTE SHALL NOT EXCEED 5% (1'-0" IN 20'--0") RUNNING SLOPE WITH A 2% (1'-0" IN 50'-0") CROSS-SLOPE AND SHALL BE 4' WIDE MIN. EXCEPT AS NOTED ON SITE PLAN. PROVIDE STAIRS, RAMPS, CURBS, ETC., AS NOTED AND DETAILED.

2. PARKING AREAS AND ACCESSIBLE SPACES AND ACCESS AISLES SHALL NOT EXCEED A 2% (1'-0" IN 50'-0" SLOPE IN EACH DIRECTION. OTHER PORTIONS OF THE ACCESSIBLE ROUTE SHALL NOT EXCEED A 5% (1'-0" IN 20'-0") LONGITUDINAL SLOPE NOR A 2% (1'-0" IN 50'-0") CROSS-SLOPE.

DASHWOOD TRAILS
HOUSTON, HARRIS COUNTY, TEXAS

REGISTERED ARCHITECT
MARTIN RANDALL PORTER
#24739
STATE OF TEXAS

25 OCT 2024

MARTIN RANDALL PORTER
ARCHITECT LICENSE #24739

Wallace ARCHITECTS LLC
Columbia, MO
P 573-256-7200

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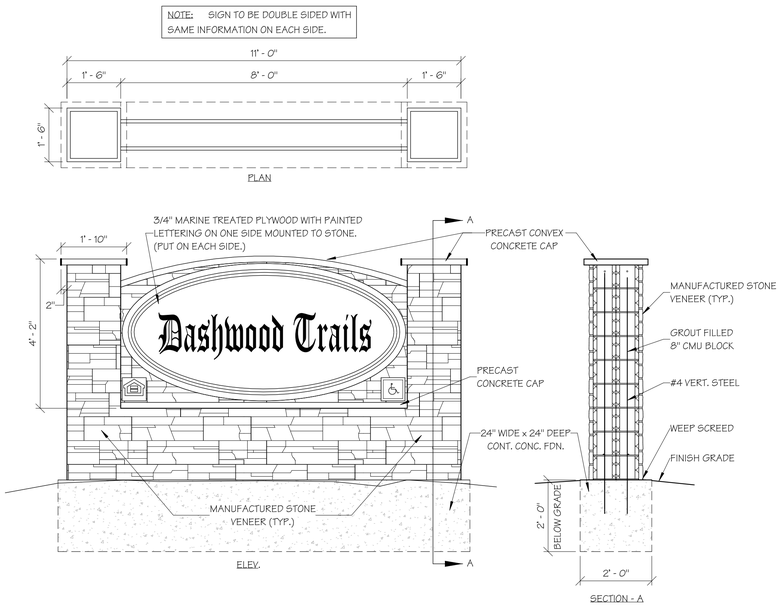
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JOB NO. 4809

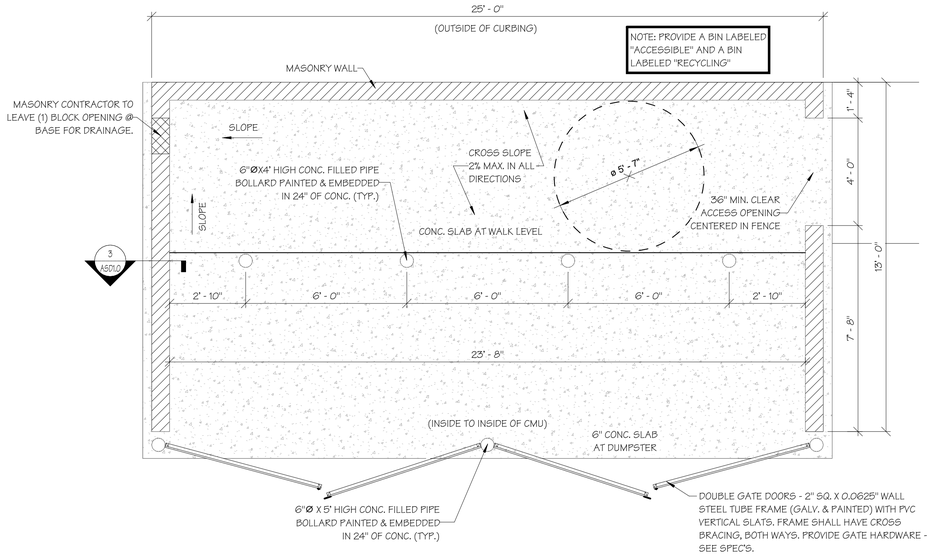
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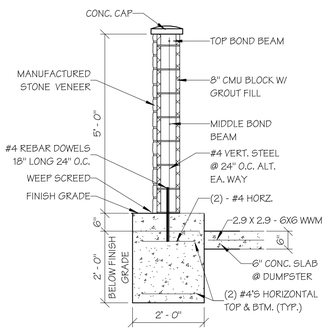
PROJECT MONUMENT SIGN

1 A501.0 SCALE: 1/2" = 1'-0"



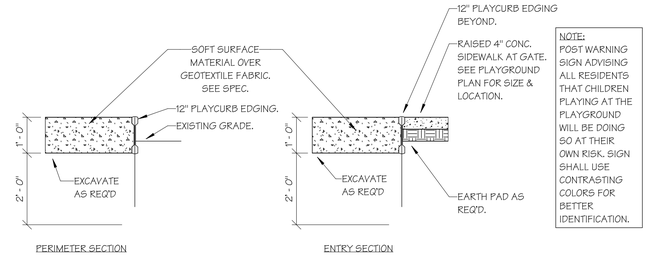
DOUBLE DUMPSTER ENCLOSURE

2 A501.0 SCALE: 3/8" = 1'-0"



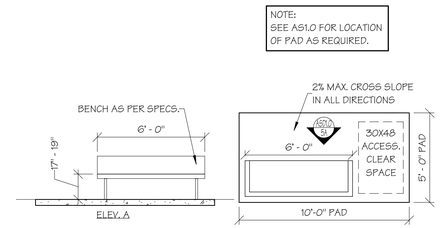
DUMPSTER ENCLOSURE SECTION

3 A501.0 SCALE: 1/2" = 1'-0"



PLAYGROUND ENTRY & EDGING DETAILS

4 A501.0 SCALE: 1/2" = 1'-0"



PARK BENCH AND BENCH PAD

5 A501.0 SCALE: 1/4" = 1'-0"

MARTIN RANDALL PORTER
REGISTERED ARCHITECT
STATE OF TEXAS
#24739
25 OCT 2024
MARTIN RANDALL PORTER
ARCHITECT LICENSE #24739

DASHWOOD TRAILS
HOUSTON, HARRIS COUNTY, TEXAS

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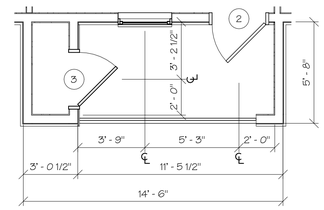
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REGISTERED ARCHITECT
MARTIN RANDALL PORTER
24739
STATE OF TEXAS
25 OCT 2024
MARTIN RANDALL PORTER
ARCHITECT LICENSE #24739

DASHWOOD TRAILS
HOUSTON, HARRIS COUNTY, TEXAS

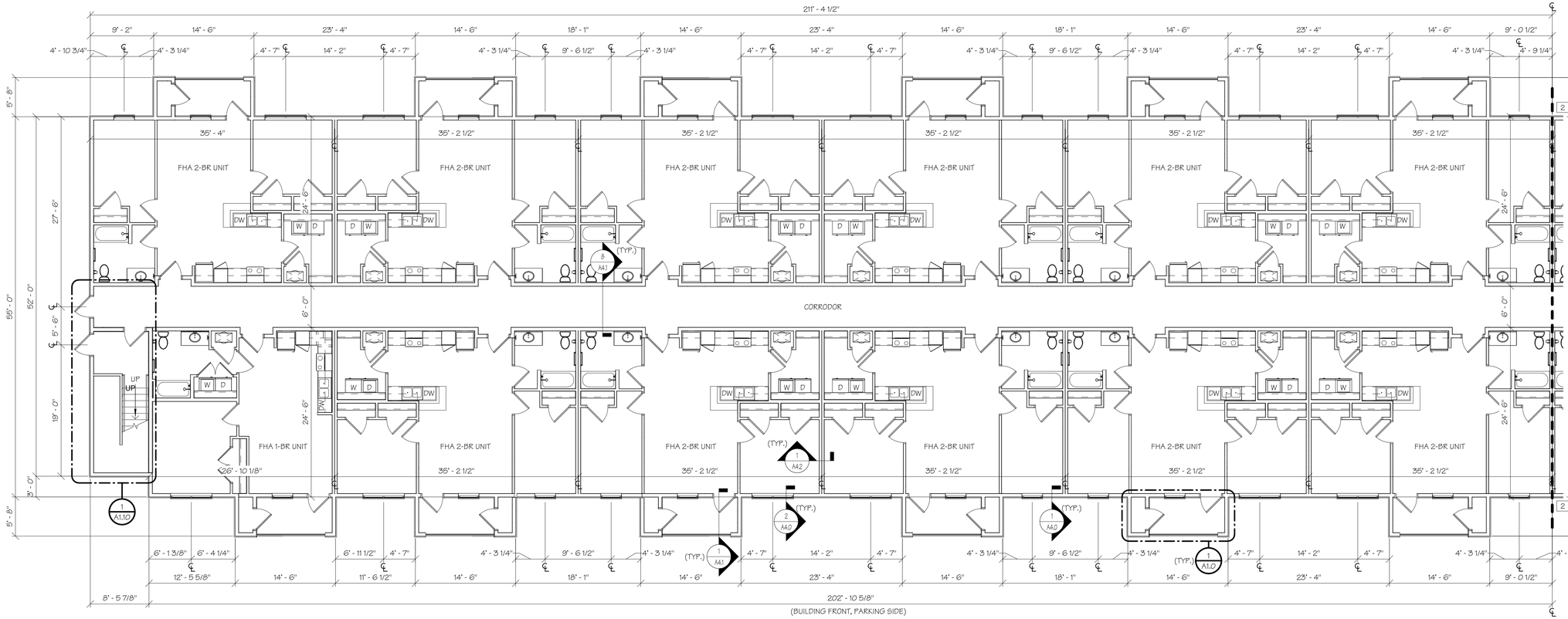
UNIT TYPE LEGEND

FHA	=	FAIR HOUSING ACT
ADA	=	AMERICANS WITH DISABILITIES ACT
H/V	=	HEARING/VISUAL



1-BR & 2-BR PATIO / BALCONY DIMENSION PLAN

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



FIRST FLOOR EAST SIDE BUILDING PLAN

2 / A1.0 SCALE: 1/8" = 1'-0"

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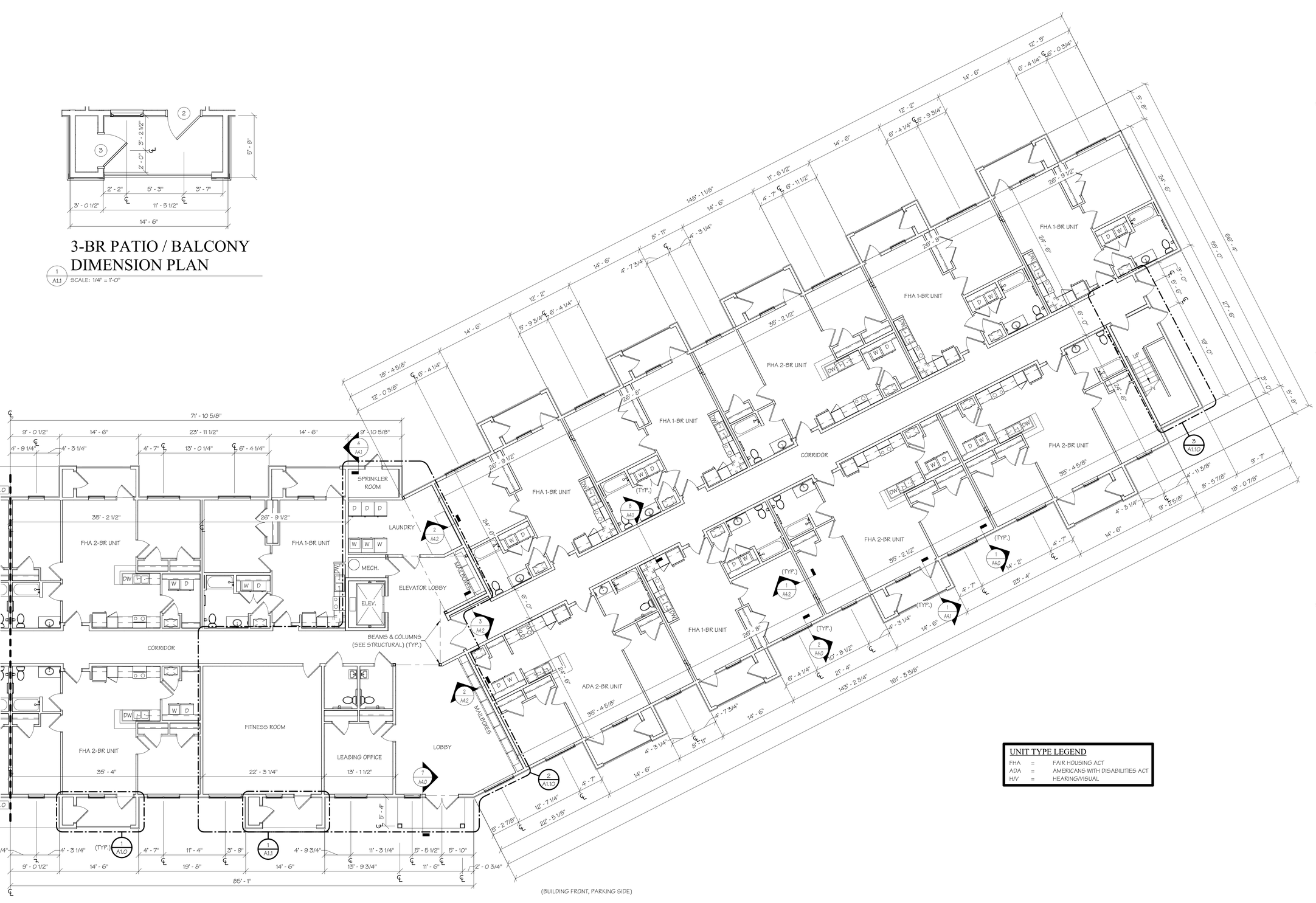
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3-BR PATIO / BALCONY DIMENSION PLAN

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



FIRST FLOOR WEST SIDE BUILDING PLAN

2 / A1.1 SCALE: 1/8" = 1'-0"

UNIT TYPE LEGEND

FHA	=	FAIR HOUSING ACT
ADA	=	AMERICANS WITH DISABILITIES ACT
H/V	=	HEARING/VISUAL

REGISTERED ARCHITECT MARTIN RANDALL PORTER #24739 STATE OF TEXAS

25 OCT 2024

MARTIN RANDALL PORTER
ARCHITECT LICENSE #24739

DASHWOOD TRAILS

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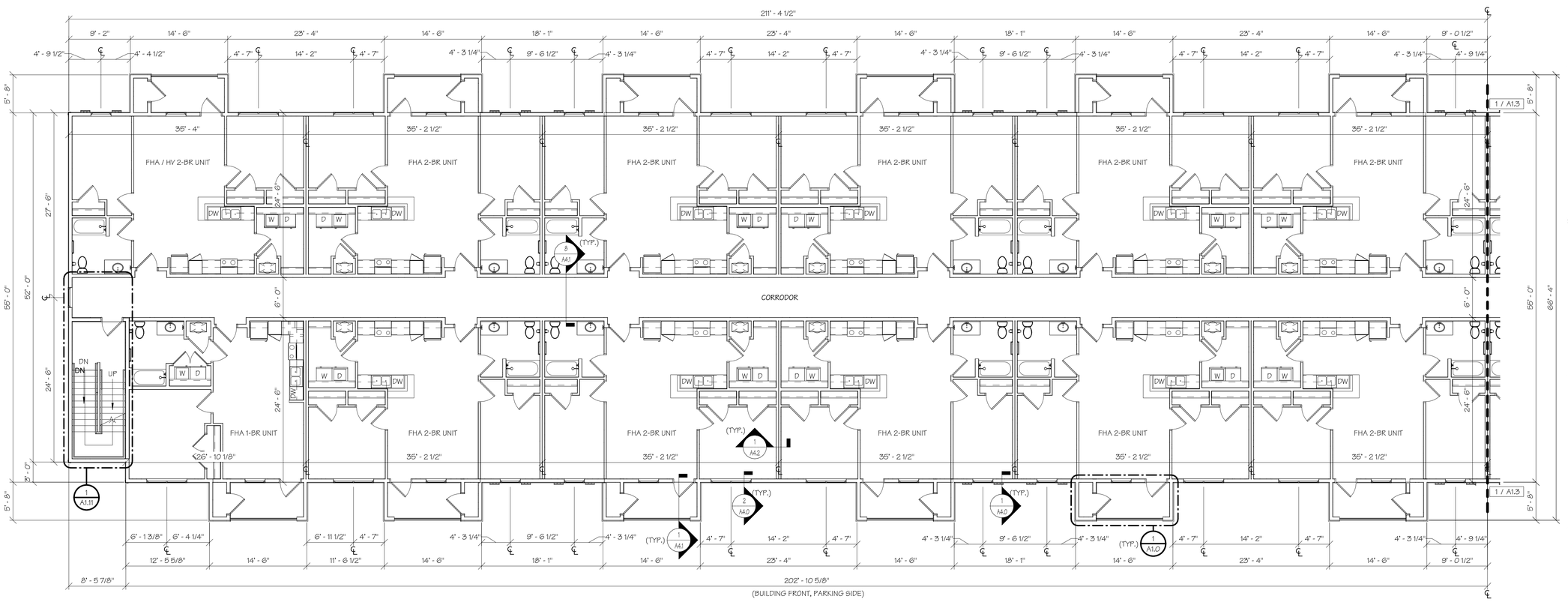
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JOB NO. 4809

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ISSUE SET

UNIT TYPE LEGEND		
FHA	=	FAIR HOUSING ACT
ADA	=	AMERICANS WITH DISABILITIES ACT
H/V	=	HEARING/VISUAL



SECOND FLOOR EAST SIDE BUILDING PLAN

1 / A1.2 SCALE: 1/8" = 1'-0"

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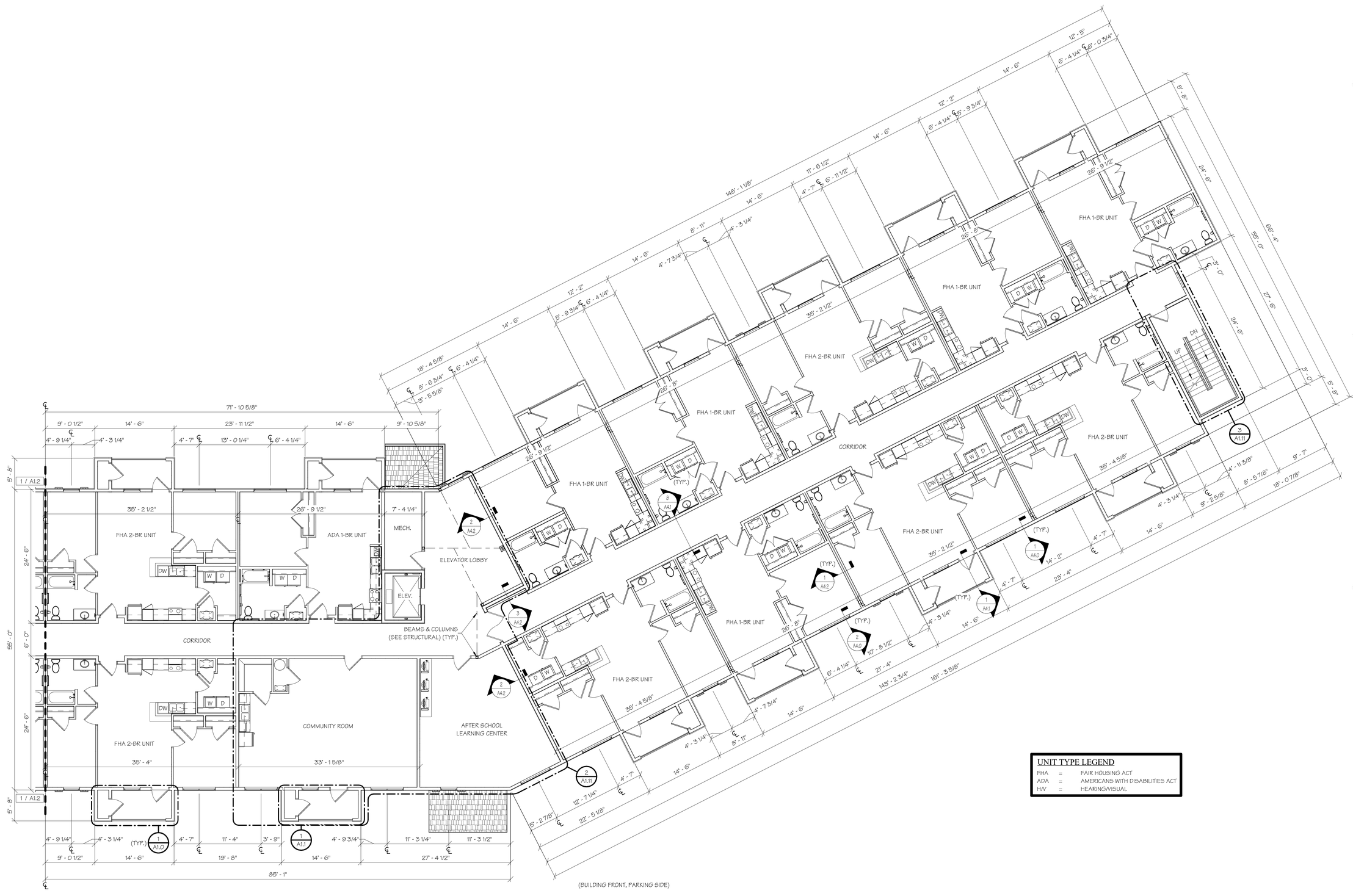
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JOB NO. 4809

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SECOND FLOOR WEST SIDE BUILDING PLAN

1 / A1.3 SCALE: 1/8" = 1'-0"

UNIT TYPE LEGEND

FHA	=	FAIR HOUSING ACT
ADA	=	AMERICANS WITH DISABILITIES ACT
H/V	=	HEARING/VISUAL

REGISTERED ARCHITECT
MARTIN RANDALL PORTER
#24739
STATE OF TEXAS

25 OCT 2024

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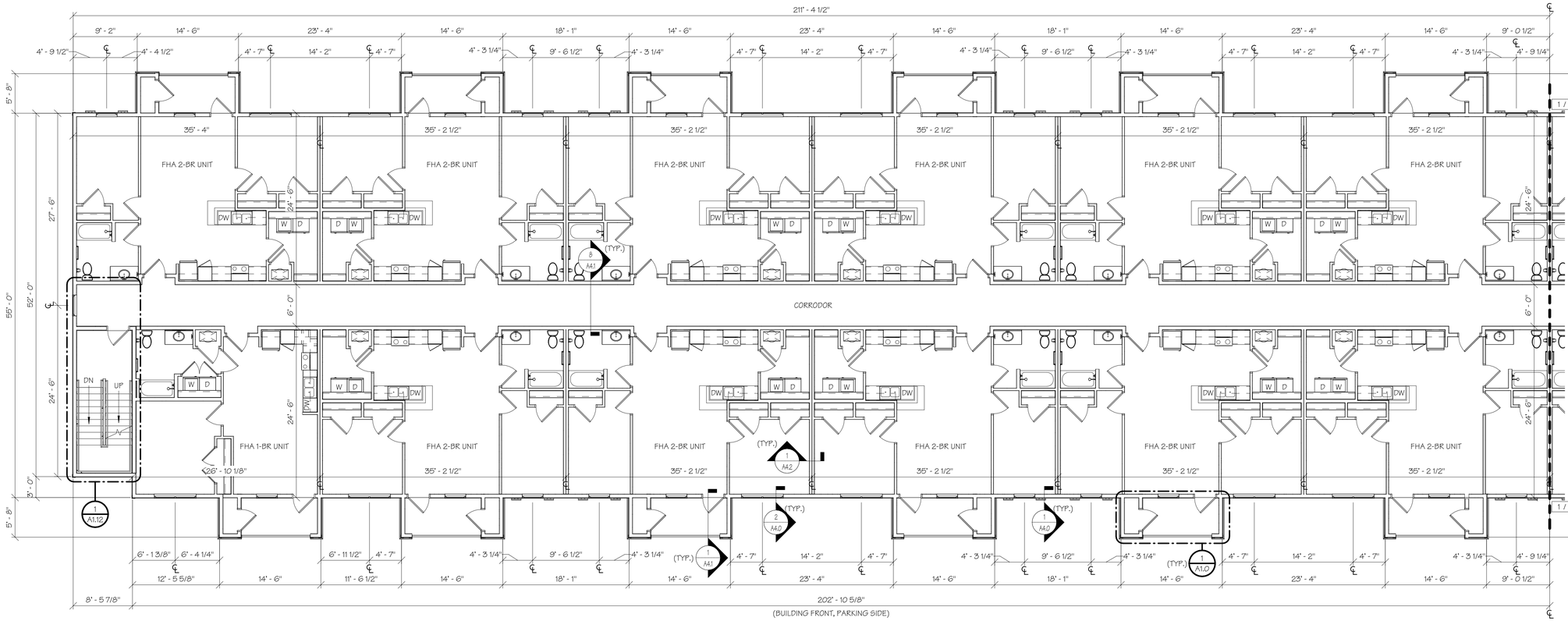
JOB NO. 4809

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UNIT TYPE LEGEND

FHA	=	FAIR HOUSING ACT
ADA	=	AMERICANS WITH DISABILITIES ACT
H/V	=	HEARING/VISUAL



THIRD FLOOR EAST SIDE BUILDING PLAN

1 / A1.4 SCALE: 1/8" = 1'-0"

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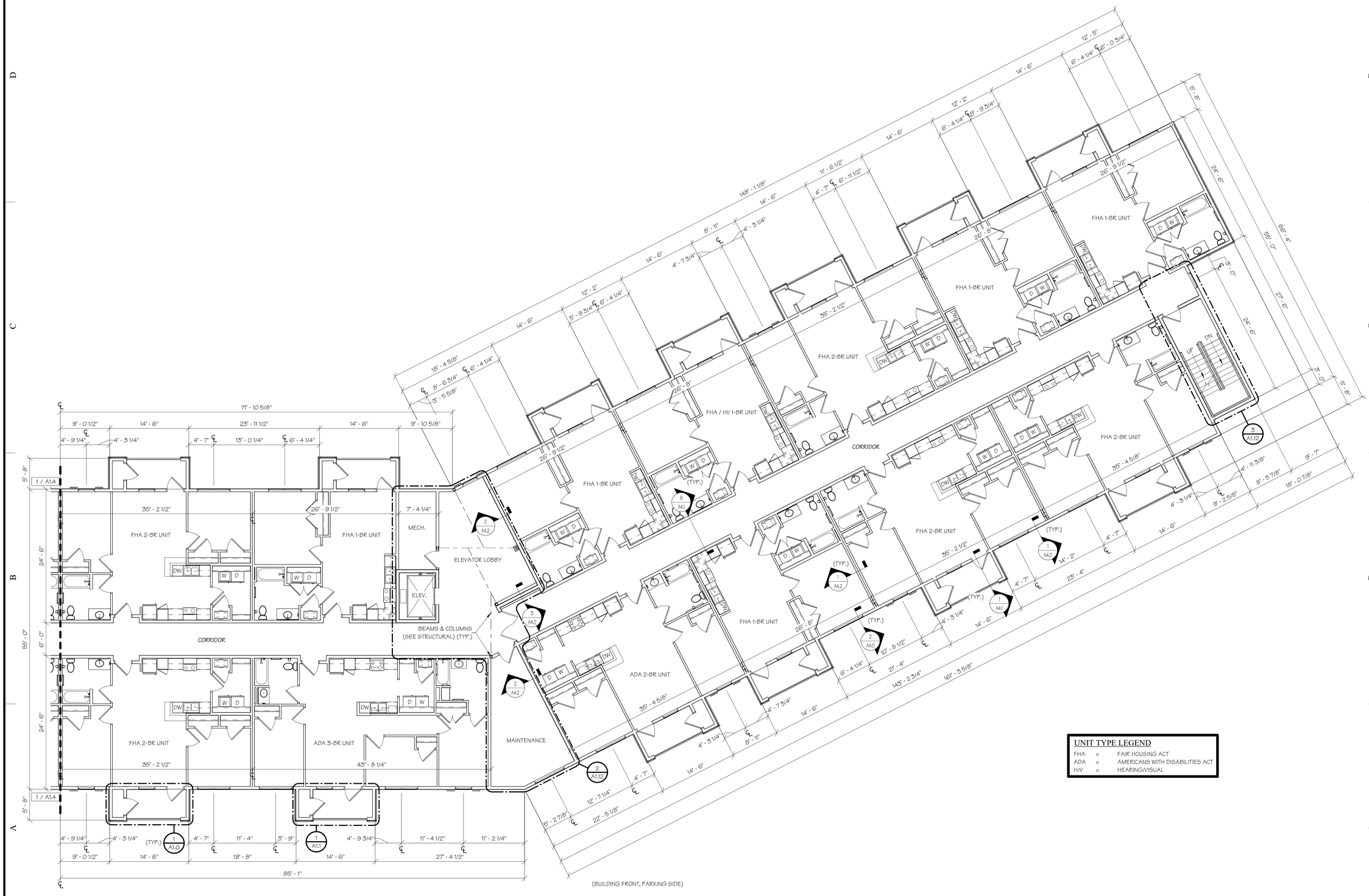
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SHEET NO. A1.4

JOB NO. 4809

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UNIT TYPE LEGEND

FHA	=	FAIR HOUSING ACT
ADA	=	AMERICANS WITH DISABILITIES ACT
H/V	=	HEARING/VISUAL

THIRD FLOOR WEST SIDE BUILDING PLAN

1 / A1.5 SCALE: 1/8" = 1'-0"

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MARTIN RANDALL PORTER
#24739
STATE OF TEXAS

25 OCT 2024

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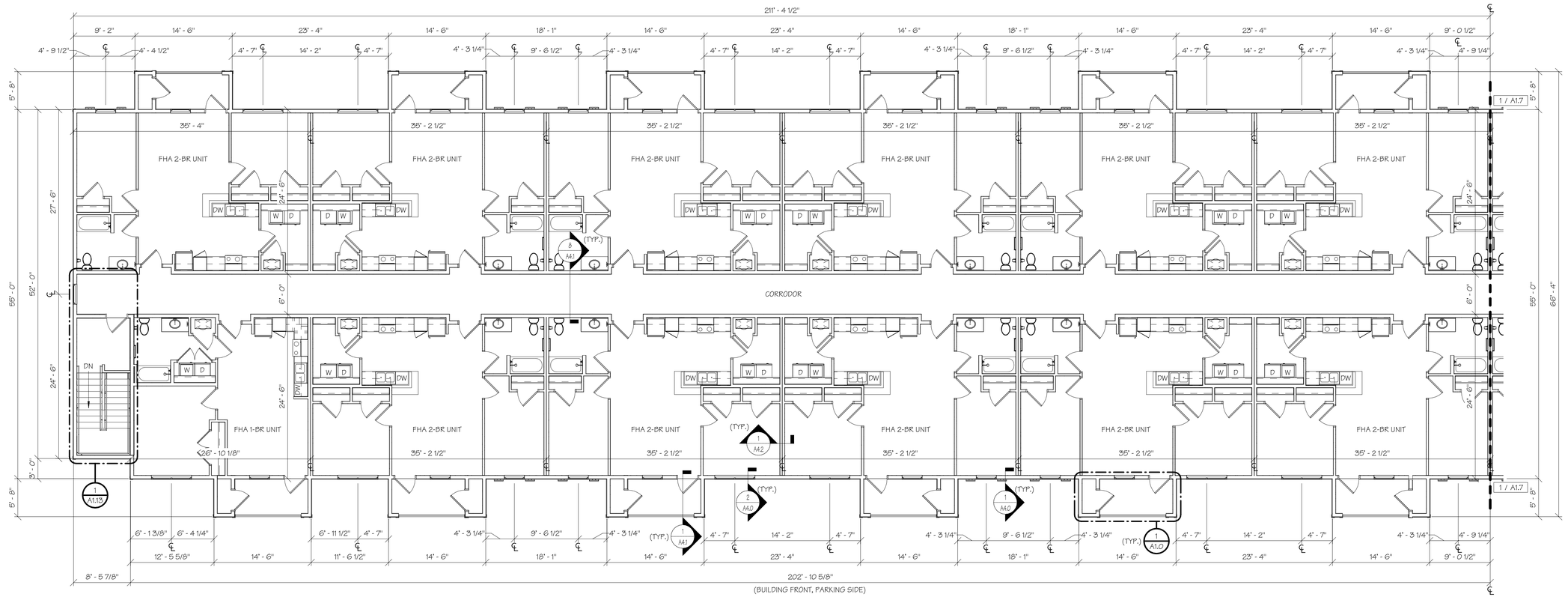
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JOB NO. 4809

ISSUE SET

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UNIT TYPE LEGEND		
FHA	=	FAIR HOUSING ACT
ADA	=	AMERICANS WITH DISABILITIES ACT
H/V	=	HEARING/VISUAL



1 / A1.6 FOURTH FLOOR EAST SIDE BUILDING PLAN

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

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#24739
STATE OF TEXAS

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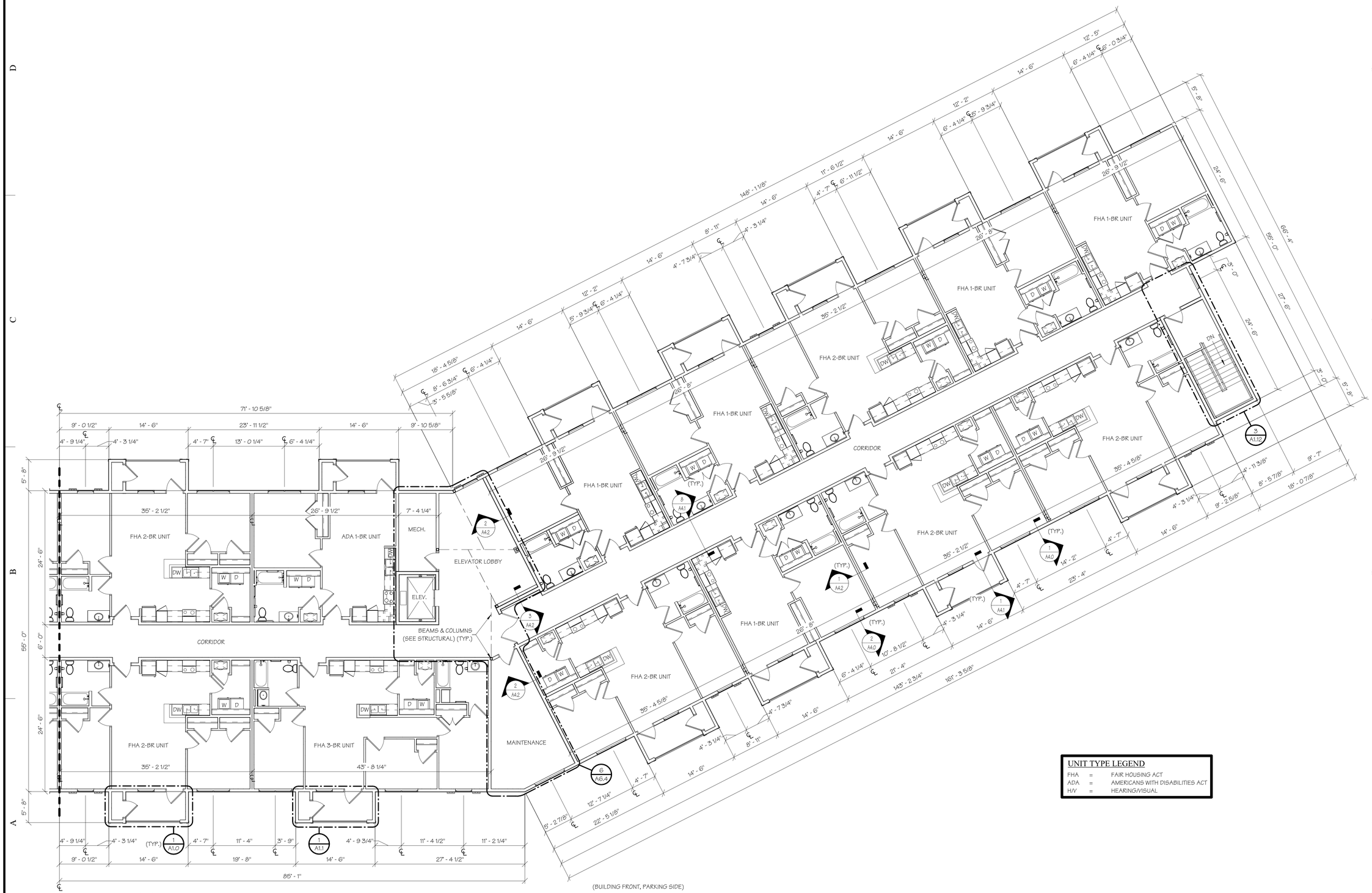
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JOB NO. 4809

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FOURTH FLOOR WEST SIDE BUILDING PLAN

1 / A1.7 SCALE: 1/8" = 1'-0"

UNIT TYPE LEGEND

FHA	=	FAIR HOUSING ACT
ADA	=	AMERICANS WITH DISABILITIES ACT
H/V	=	HEARING/VISUAL

REGISTERED ARCHITECT
MARTIN RANDALL PORTER
#24739
STATE OF TEXAS

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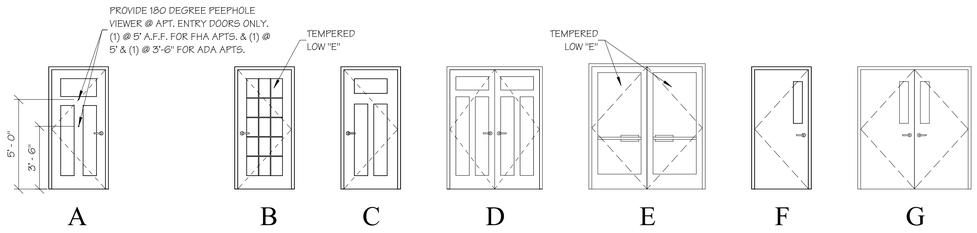
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JOB NO. 4809

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DOOR SCHEDULE - NEW

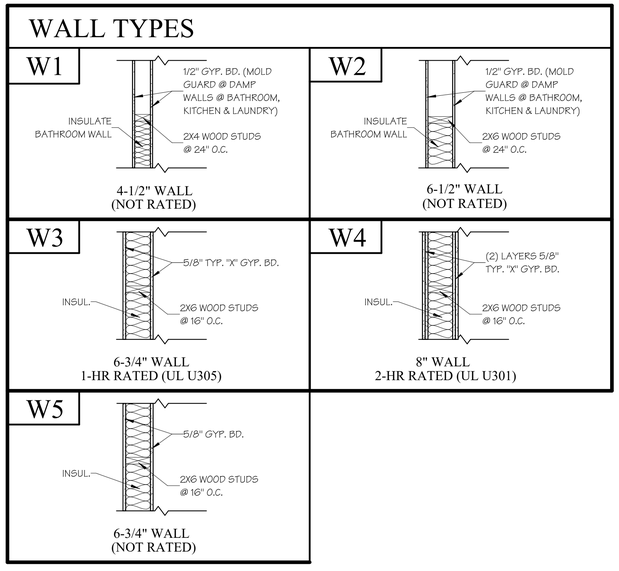
MARK	SIZE	ELEV.	FRAME MTL.	PANEL MATL.	GLAZING	DOOR HARDWARE	COMMENTS
1	3'-0" X 6'-8" X 1 3/4"	A	WD	WD SC	NONE	(SEE SPECS)	3 PANEL W/ PEEPHOLE, 20 MIN. FIRE RATED, SPRING HINGES, SMOKE GASKETS & AUTO SWEEP
2	3'-0" x 6'-8" x 1 3/4"	B	WD	INSUL. FIBERGLASS	TEMPERED, LOW "E"	(SEE SPECS)	FULL LITE, ACC. THRESHOLD & WEATHER STRIPPING
3	3'-0" X 6'-8" X 1 3/4"	C	WD	INSUL. FIBERGLASS	NONE	(SEE SPECS)	3 PANEL, ACC. THRESHOLD, CHAIN KEEPER & SECURITY HINGES @ 1ST FLOOR UNITS ONLY
4	3'-0" x 6'-8" x 1 3/8"	C	WD	WD HC	NONE	(SEE SPECS)	3 PANEL MASONITE
5	2'-8" x 6'-8" x 1 3/8"	C	WD	WD HC	NONE	(SEE SPECS)	3 PANEL MASONITE
6	PR. 2'-6" x 6'-8" x 1 3/8"	D	WD	WD HC	NONE	(SEE SPECS)	3 PANEL MASONITE
7	PR. 2'-0" x 6'-8" x 1 3/8"	D	WD	WD HC	NONE	(SEE SPECS)	3 PANEL MASONITE
8	PR. 3'-0" x 6'-8" x 1 3/4"	E	ALUMINUM	ALUMINUM	TEMPERED, LOW "E"	(SEE SPECS)	STORE FRONT - FULL LITE, CLOSER, PANIC HARDWARE, ACCESSIBLE THRESHOLD, WEATHER STRIPPING, PROXIMITY FOB READER & ACC. PUSH BUTTON
9	3'-0" x 6'-8" x 1 3/4"	B	HOLLOW METAL	WD SC	TEMPERED FIRE-RATED	(SEE SPECS)	FULL LITE, 20 MIN. RATED, SMOKE GASKET & CLOSER
10	3'-0" x 6'-8" x 1 3/4"	C	HOLLOW METAL	WD SC	NONE	(SEE SPECS)	3-PANEL, 20 MIN. RATED, SMOKE GASKET & CLOSER
11	3'-0" x 6'-8" x 1 3/4"	F	HOLLOW METAL	HOLLOW METAL	TEMPERED FIRE-RATED	(SEE SPECS)	FLUSH PANEL, 45 MIN. FIRE RATED, SMOKE GASKET & CLOSER
12	PR. 3'-0" x 6'-8" x 1 3/4"	G	HOLLOW METAL	STEEL	TEMPERED FIRE-RATED	(SEE SPECS)	FLUSH PANEL, 90 MIN. FIRE RATED W/ ELECTRO-MAG HOLD OPEN, PANIC HARDWARE, CLOSER & AUTOMATIC SWEEP
13	3'-0" x 6'-8" x 1 3/4"	F	HOLLOW METAL	STEEL INSUL.	TEMPERED, LOW "E"	(SEE SPECS)	FLUSH PANEL, PANIC HARDWARE, ACCESSIBLE THRESHOLD, WEATHER STRIPPING, CLOSER & PROXIMITY FOB READER @ CORRIDOR EXIT
14	3'-0" x 6'-8" x 1 3/4"	F	HOLLOW METAL	HOLLOW METAL	TEMPERED FIRE-RATED	(SEE SPECS)	FLUSH PANEL, 90 MIN. FIRE RATED, PANIC HARDWARE, SMOKE GASKET & CLOSER





NOTE: WHEN ORIENTATION OF UNIT FLIPS, CONTRACTOR TO MAINTAIN ORIENTATION OF WASHER/DRYER AS WASHER ON LEFT AND DRYER ON RIGHT.

WALL TYPES



GENERAL UNIT NOTES

1) CONTRACTOR SHALL FURNISH & INSTALL 4" BUILDING NUMBERS FOR EACH UNIT AS REQUIRED BY CITY OR LOCAL POSTMASTER.
2) CONTRACTOR SHALL FURNISH ONE MAILBOX PER UNIT, PER OWNER SELECTION (SEE SPECS).
3) CERTIFICATION OF R-49 CEILING INSULATION MUST BE POSTED IN ATTIC.
4) PROVIDE CARPET EDGES AS NECESSARY, DESIGNATED BY "CE" (COLOR SELECTED BY OWNER).
5) COAT AND BEDROOM CLOSETS SHALL HAVE EPOXY-COATED WIRE SHELVING.
6) PRIME & PAINT WALLS BEHIND MILLWORK.
7) SEAL CONCRETE FLOOR TO REDUCE MOISTURE PENETRATION.
8) APPROPRIATELY SIZED BLINDS SHALL BE PROVIDED AND INSTALLED FOR EACH GLAZED OPENING, INCLUDING PAIRED WINDOWS (PROVIDED WITH TWO SETS) AND DOOR GLAZING WHERE HALF LITE OR LARGER.

WALL NOTES

1) DIMENSIONS ARE STUD FACE TO STUD FACE UNLESS NOTED OTHERWISE.
2) PROVIDE SOLID BLOCKING BEHIND GRAB BARS, CURTAIN RODS, SHOWER RODS, SHOWER HEADS, TOWEL BARS, ALL CABINETS, AND ALL SOFFITS.
3) ALL EXTERIOR WALLS FRAMED W/ 2X6'S 16" O.C. AND COVERED W/ (1) LAYER 5/8" GYP. BD. AT INTERIOR.
4) ALL INTERIOR WALLS FRAMED WITH 2X4'S OR 2X6'S (ALL PLUMBING WALLS) 16" O.C. AND COVERED WITH (1) LAYER 1/2" GYP. BD.
5) ALL UNIT SEPARATION WALLS FRAMED WITH 2X4'S 16" O.C. AND COVERED WITH (1) LAYER 5/8" TYPE "X" GYP. BD. (EACH SIDE) PER WALL SECTION.
6) 2 -HR FIRE WALL FRAMED WITH 2X6'S 16" O.C. AND COVERED WITH (2) LAYERS OF 5/8" TYPE "X" GYP. BD. (EACH SIDE) PER WALL SECTION.

DOOR NOTES

1) ALL DOORS TO HAVE LEVER HANDLES.
2) ENTRY DOORS SHALL COMPLY WITH ICC A117.1-2017 ACCESSIBILITY REQUIREMENTS.
3) PROVIDE THRESHOLD AT ALL GROUND FLOOR ENTRY DOORS WICH ARE 1/2" HIGH MAX., 1:2 SLOPE.
4) CONTRACTOR TO PROVIDE & INSTALL DOOR STOPS @ ALL DOORS.
5) SEE SPECS FOR DOOR HARDWARE.
6) CAULK/SEAL ALL EXTERIOR THRESHOLDS.
7) PROVIDE & INSTALL 180 DEGREE PEEPHOLE DOOR VIEWER AT ALL UNIT ENTRY DOORS, (2) AT ADA UNITS
8) SELF-CLOSING FIRE RATED DOORS MUNT BE ON LOWEST SETTING WHILE COMPLYING WITH THE ENFORCED BUILDING CODE
9) PROVIDE DOUBLE DEADBOLT AT UNIT ENTRY DOORS (BOTTOM KEYED AND TOP KEYLESS) TO SATISFY TEXAS "KEYLESS LOCKING DEVICE" REQUIREMENTS.

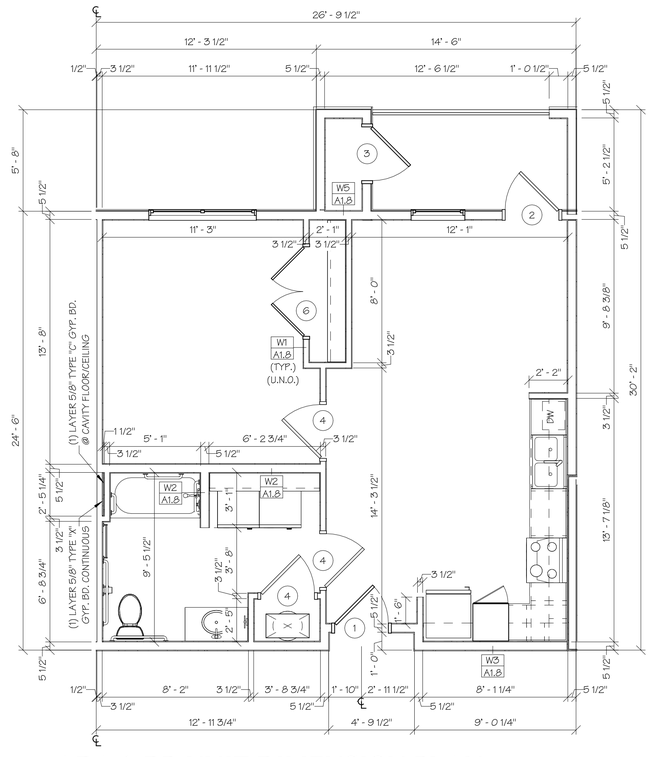
AIR SEALING NOTES:

BEFORE SHEETROCK

- SEAL ALL RIM/BAND JOIST AND INCLUDE AN AIR BARRIER. THE USE OF SPRAY FOAM IS RECOMMENDED.
- SEAL ALL PENETRATIONS IN BOTTOM AND TOP PLATES.
- SEAL SHEETROCK WITH A CONTINUOUS BEAD OF ACOUSTIC SEALANT OR DRYWALL ADHESIVE AT BOTH BOTTOM AND TOP PLATES OF ALL INTERIOR AND EXTERIOR WALLS. THIS SHOULD GO IN-BETWEEN THE PLATE AND DRYWALL TO CREATE A GASKET.
- SPACE BEHIND ALL WALL ELECTRICAL BOXES SHOULD BE INSULATED AND AIR SEALED BEING SURE TO SEAL ELECTRICAL KNOCKOUTS. SPRAY FOAM IS RECOMMENDED FOR THIS APPLICATION.
- SEAL ALL PENETRATION IN HVAC CLOSET.
- SEAL ALL PLENUM TO AHU CONNECTIONS.
- SEAL ALL SEAMS IN DUCTWORK WITH MASTIC.
- TAPE OR CAULK EXTERIOR SHEATHING SEAMS.
- SPRAY FOAM WINDOWS TO FILL GAPS BETWEEN WINDOW/DOOR AND ROUGH OPENING.
- PROVIDE ATTIC KNEEWALL INSULATION WITH SEALED ATTIC-SIDE AIR BARRIER.
- IF ELECTRIC PANEL IS INSTALLED ON EXTERIOR WALL, AN AIR BARRIER SHALL EXTEND BEHIND BOX OR AIR-SEALED BOX SHALL BE INSTALLED.
- INSTALL INSULATION AND SEALED AIR BARRIER BEHIND TUB/SHOWERS ON EXTERIOR WALLS.
- INSTALL WIND WASH BAFFLE AND DAM FOR AIR-PERMEABLE INSULATION.

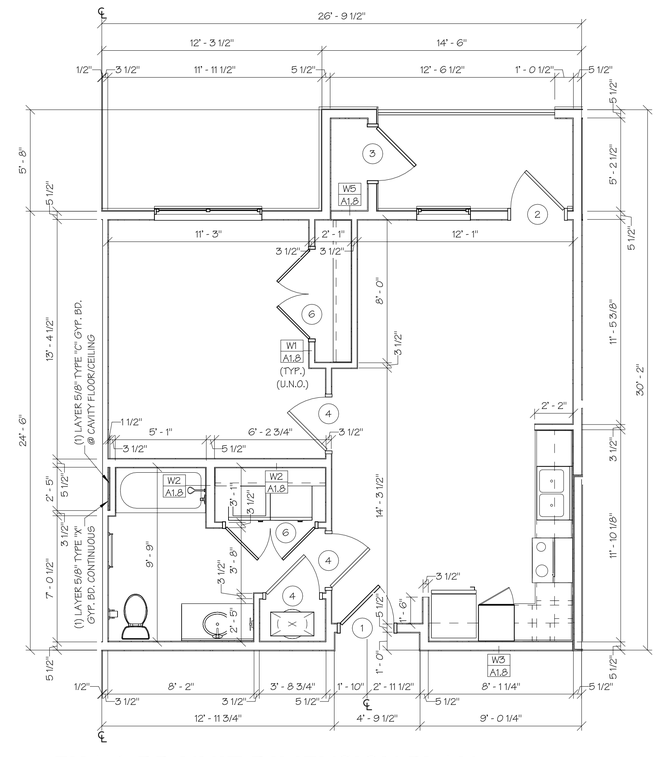
AFTER SHEETROCK

- GAPS AROUND ALL HVAC BOOTS WHERE THEY PENETRATE THE CEILING/SOFFIT DRYWALL SHOULD BE SEALED.
- PLUMBING PENETRATIONS BELOW SINKS, BEHIND SHOWERHEADS, MECHANICAL CLOSET AND BEHIND TOILET WATER LINES SHALL BE SEALED.
- WATER LINES BEHIND REFRIGERATOR SHALL BE SEALED.
- HOLE BEHIND KITCHEN RANGE SHALL BE SEALED.
- GAP AT DRYWALL AROUND WASHER/DRYER BOX SHALL BE SEALED.
- ALL INTERIOR AND EXTERIOR PLUG IN AND SWITCH BOXES SHALL BE SEALED WHERE THE BOX PENETRATES THE SHEETROCK.
- GAPS AROUND CEILING LIGHT BOXES SHALL BE SEALED.
- ATTIC ACCESSES SHALL BE SEALED.
- GAPS UNDER BASEBOARDS SHALL BE CAULKED IF SHEETROCK IS NOT SEALED TO PLATES AS STATED ABOVE.
- GAPS AROUND EXHAUST FANS WHERE THE HOUSING PENETRATES THE SHEET ROCK IS SEALED.
- TUB TO FLOOR CONNECTION SHALL BE SEALED.
- FIREPLACE HOUSINGS SHALL BE SEALED TO FINISHED SURFACE.
- GAPS AROUND ALL KITCHEN VENTS SHALL BE SEALED.
- ALL OTHER HOLES IN THE SHEETROCK SHALL BE SEALED.



1 / A1.8 ADA 1-BR UNIT DIMENSION PLAN

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



3 / A1.8 FHA 1-BR UNIT DIMENSION PLAN

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

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25 OCT 2024

MARTIN RANDALL PORTER
ARCHITECT LICENSE #24739

DASHWOOD TRAILS
HOUSTON, HARRIS COUNTY, TEXAS

Wallace ARCHITECTS LLC
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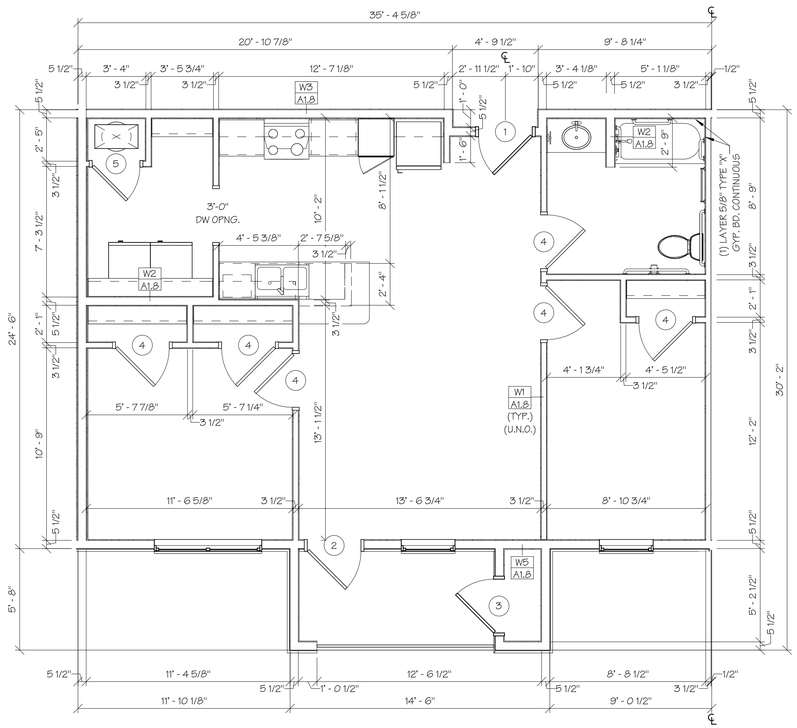
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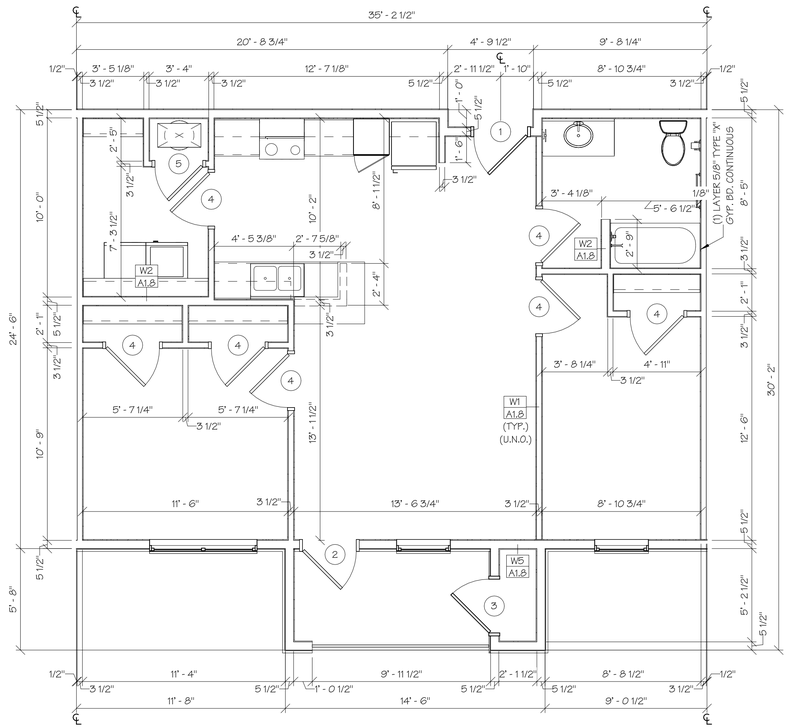
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NOTE: SEE SHEET A1.8 FOR DOOR SCHEDULE, WALL TYPES & NOTES.



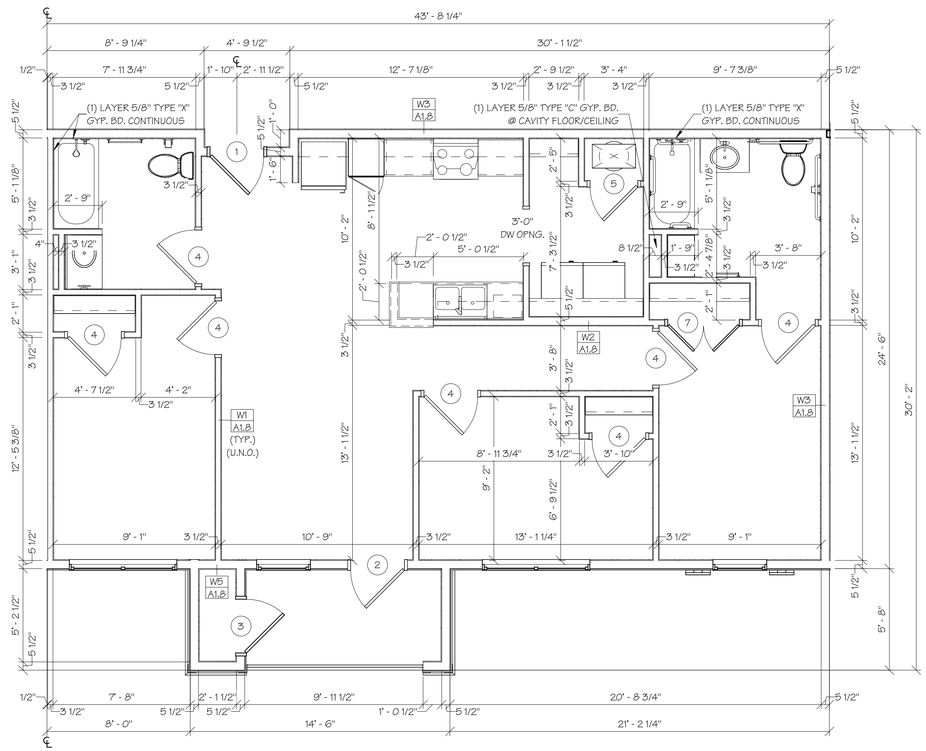
1 A1.9 SCALE: 1/4" = 1'-0"

ADA 2-BR UNIT DIMENSION PLAN



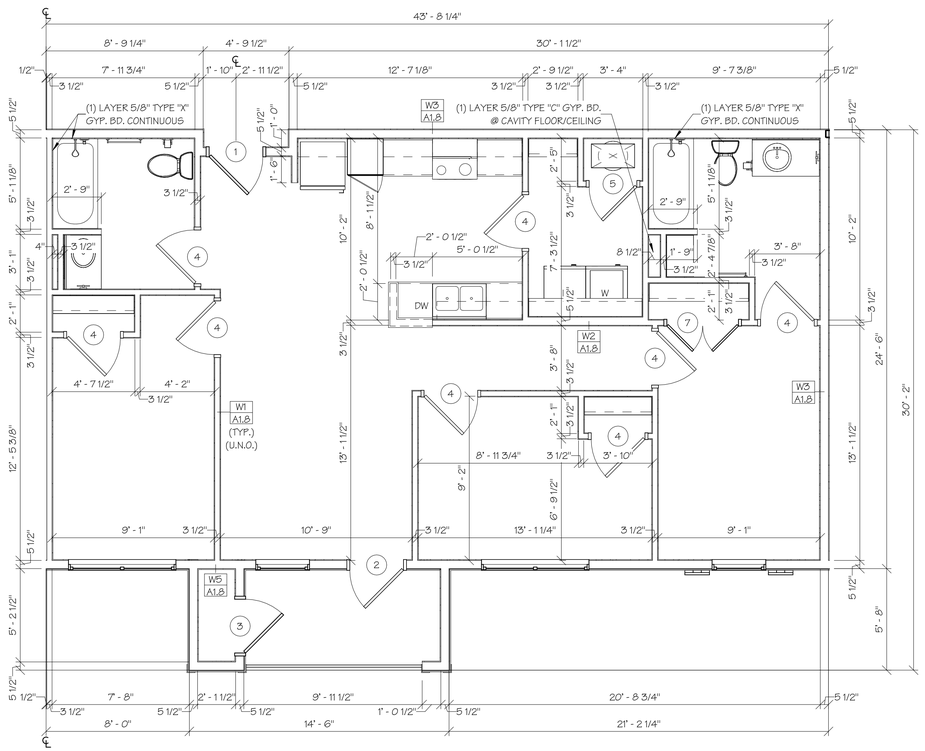
2 A1.9 SCALE: 1/4" = 1'-0"

FHA 2-BR UNIT DIMENSION PLAN



3 A1.9 SCALE: 1/4" = 1'-0"

ADA 3-BR UNIT DIMENSION PLAN



4 A1.9 SCALE: 1/4" = 1'-0"

FHA 3-BR UNIT DIMENSION PLAN

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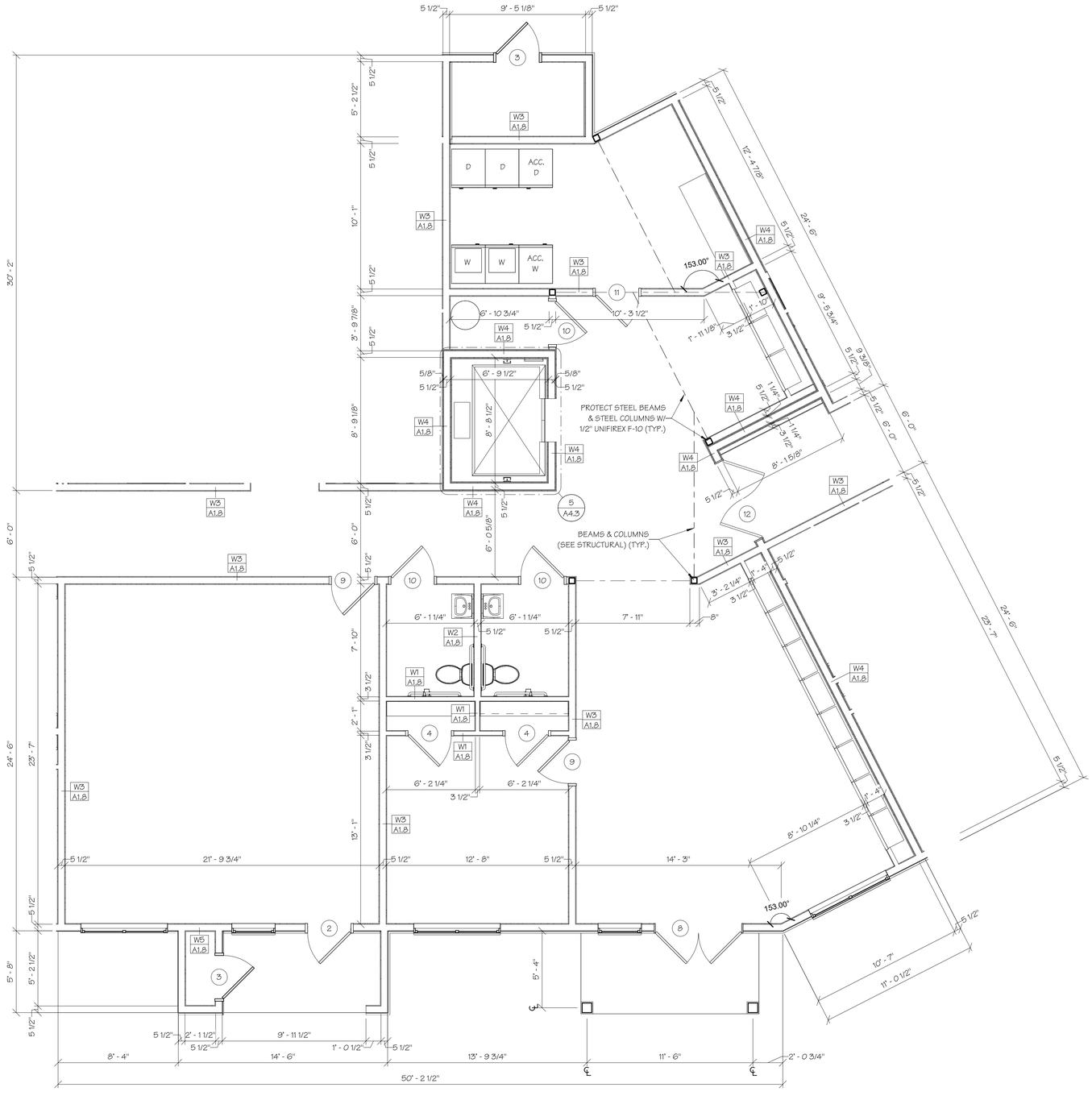
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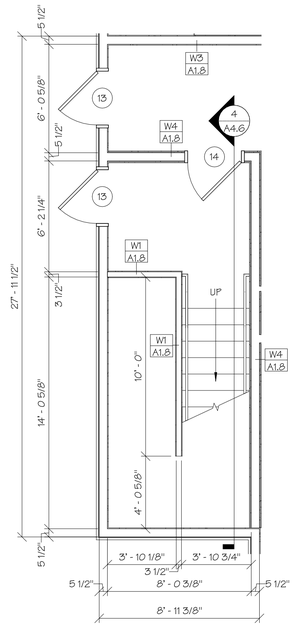
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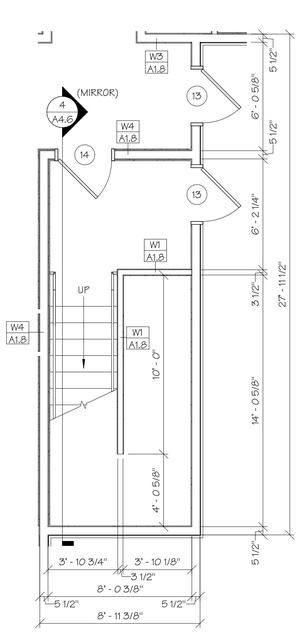


1ST FLR. LEFT SIDE STAIRWELL DIM. PLAN

1 A1.10 SCALE: 1/4" = 1'-0"

1ST FLOOR COMMON AREA DIMENSION PLAN

2 A1.10 SCALE: 1/4" = 1'-0"



1ST FLR. RIGHT SIDE STAIRWELL DIM. PLAN

3 A1.10 SCALE: 1/4" = 1'-0"

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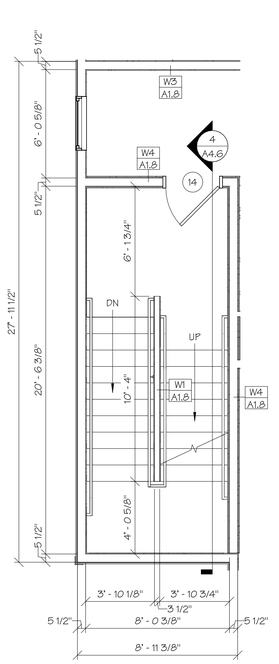
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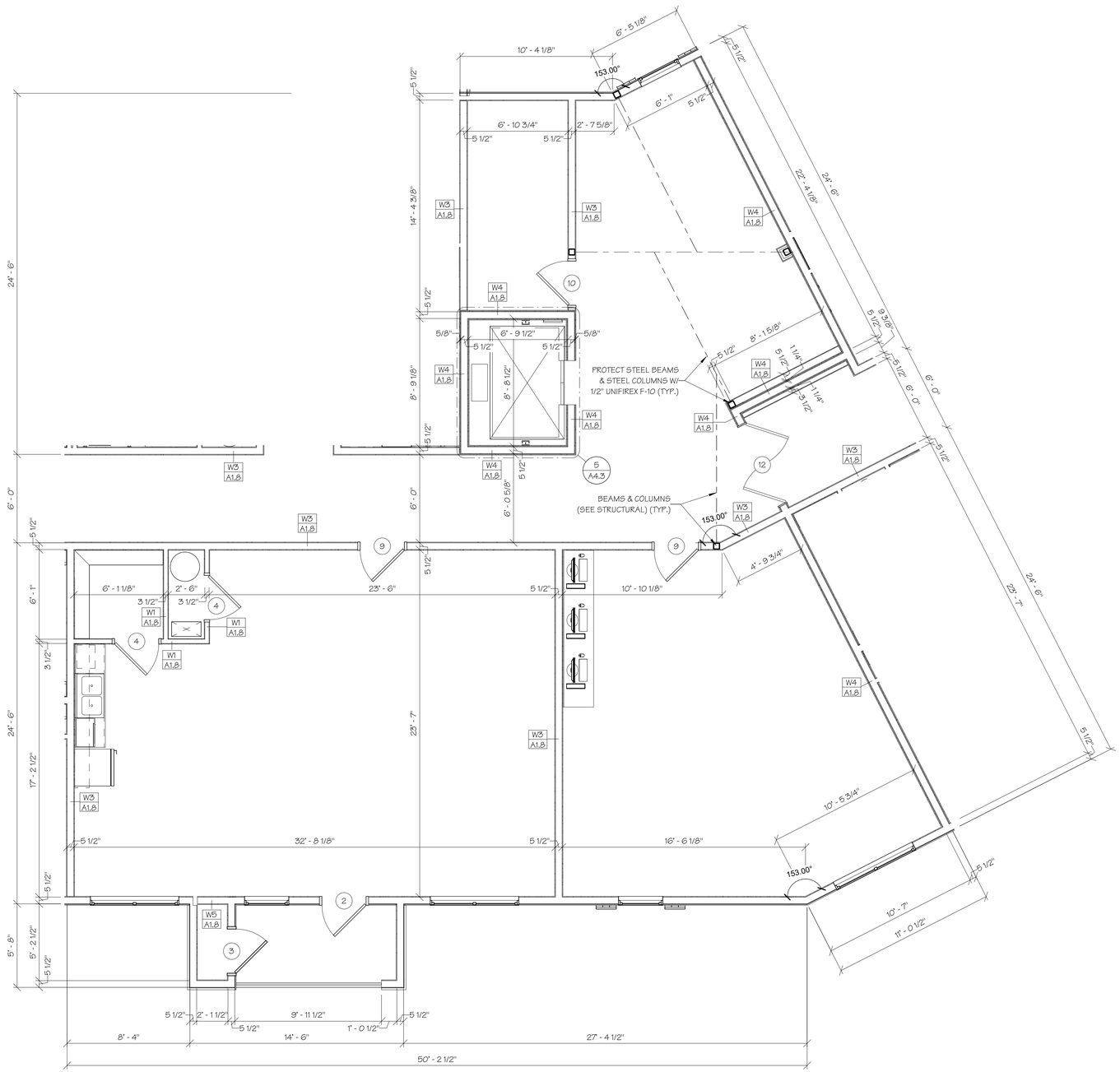
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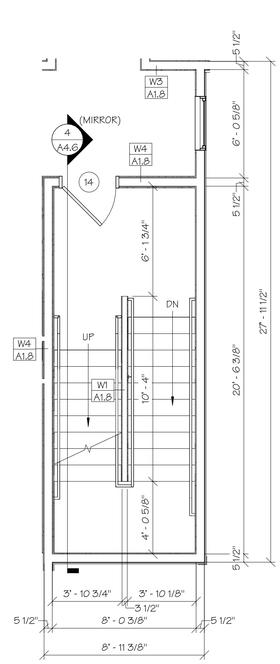
1 A1.11 SCALE: 1/4" = 1'-0"

2ND FLR. LEFT SIDE STAIRWELL DIM. PLAN



2 A1.11 SCALE: 1/4" = 1'-0"

2ND FLOOR COMMON AREA DIMENSION PLAN



3 A1.11 SCALE: 1/4" = 1'-0"

2ND FLR. RIGHT SIDE STAIRWELL DIM. PLAN

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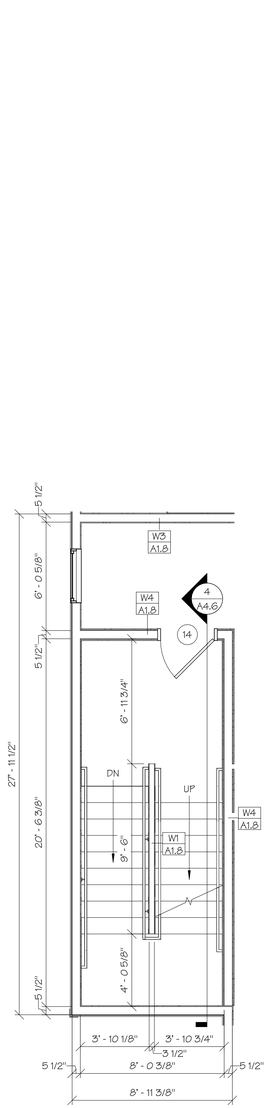
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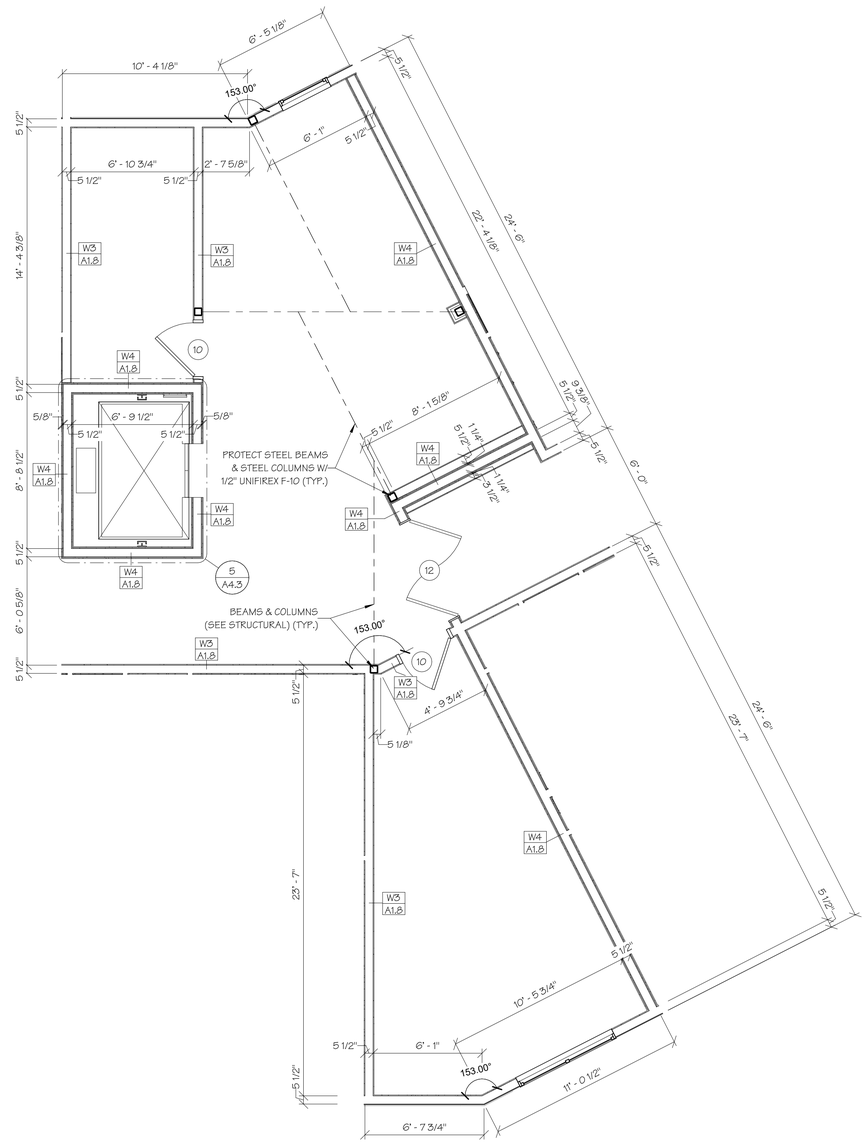
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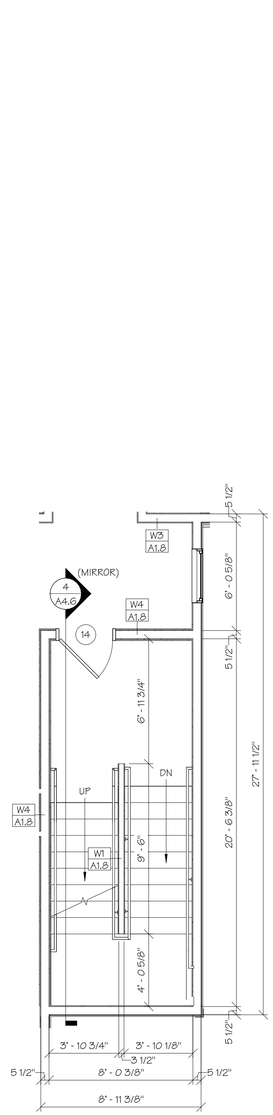
1 A1.12 SCALE: 1/4" = 1'-0"

3RD FLR. LEFT SIDE STAIRWELL DIM. PLAN



2 A1.12 SCALE: 1/4" = 1'-0"

3RD FLOOR COMMON AREA DIMENSION PLAN



3 A1.12 SCALE: 1/4" = 1'-0"

3RD FLR. RIGHT SIDE STAIRWELL DIM.PLAN

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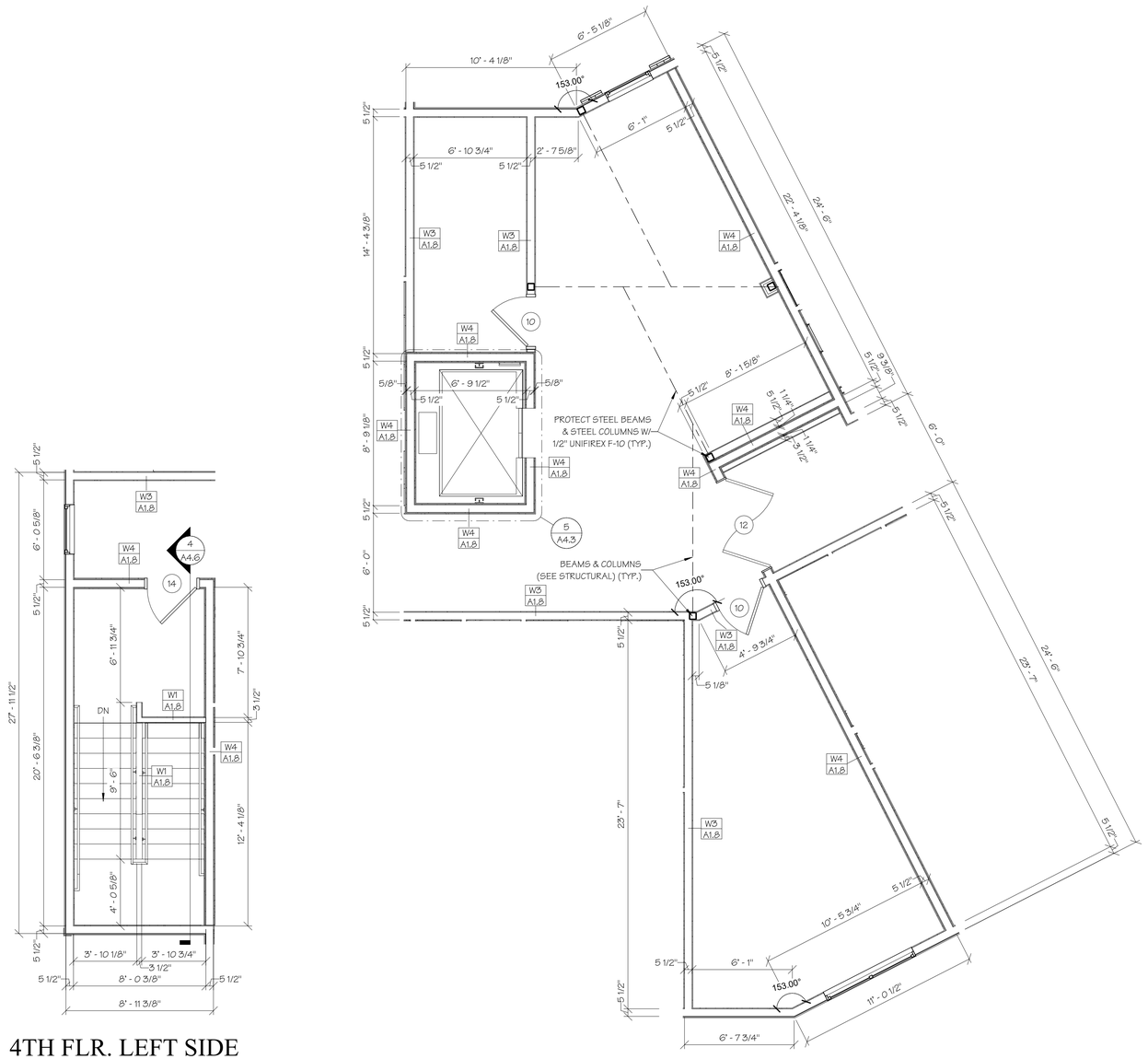
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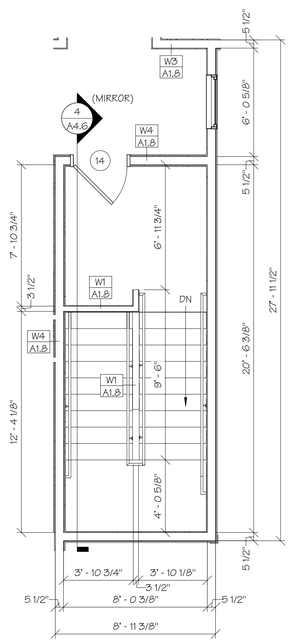


2 4TH FLOOR COMMON AREA DIMENSION PLAN

A1.13 SCALE: 1/4" = 1'-0"

1 4TH FLR. LEFT SIDE STAIRWELL DIM. PLAN

A1.13 SCALE: 1/4" = 1'-0"



3 4TH FLR. RIGHT SIDE STAIRWELL DIM. PLAN

A1.13 SCALE: 1/4" = 1'-0"

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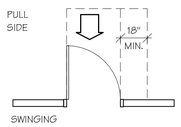
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MANEUVERING CLEARANCES AT DOORS

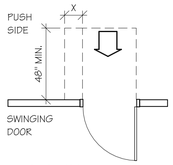
PER ADA

NOTE: WHERE ANY OBSTRUCTION WITHIN 18 INCHES OF THE LATCH SIDE OF A DOORWAY PROJECTS MORE THAN 8 INCHES BEYOND THE FACE OF THE DOOR, MEASURED PERPENDICULAR TO THE FACE OF THE DOOR, MANEUVERING CLEARANCES FOR A FORWARD APPROACH SHALL BE PROVIDED.

NOTE: ALL DIMENSIONS ARE MEASURED FROM OUTSIDE FACE OF GYP. BD.

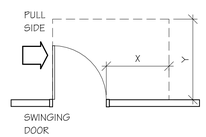


4.13.6 FIG. 25(a)
FRONT APPROACH - PULL SIDE



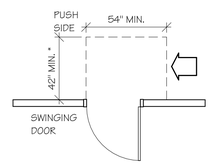
4.13.6 FIG. 25(a)
FRONT APPROACH - PUSH SIDE

NOTE: X = 12" MIN IF DOOR HAS BOTH A CLOSER AND LATCH



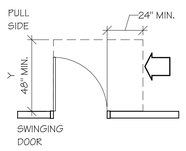
4.13.6 FIG. 25(b)
HINGE APPROACH - PULL SIDE
X = 36" MIN AND Y = 60" MIN

4.13.6 FIG. 25(b)
HINGE APPROACH - PULL SIDE
X = 42" MIN AND Y = 54" MIN



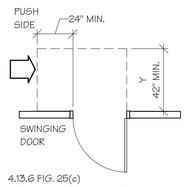
4.13.6 FIG. 25(b)
HINGE APPROACH - PUSH SIDE

* 48" MIN IF BOTH CLOSER AND LATCH PROVIDED.



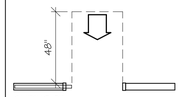
4.13.6 FIG. 25(c)
LATCH APPROACH - PULL SIDE

NOTE: Y = 54" MIN IF DOOR HAS A CLOSER

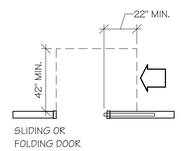


4.13.6 FIG. 25(c)
LATCH APPROACH - PUSH SIDE

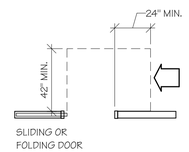
NOTE: Y = 48" MIN IF DOOR HAS A CLOSER



4.13.6 FIG 25(d)
FRONT APPROACH

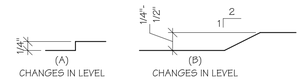


4.13.6 FIG 25(e)
POCKET OR HINGE ("SLIDE SIDE") APPROACH



4.13.6 FIG 25(f)
STOP OR LATCH APPROACH

CHANGES IN LEVEL ON AN ACCESSIBLE ROUTE



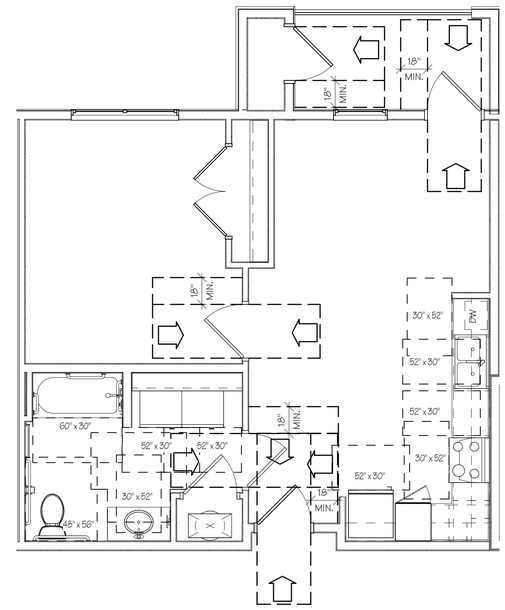
NOTE: STAIRS SHALL NOT BE PART OF AN ACCESSIBLE ROUTE.

ACCESSIBLE UNIT BATH NOTES

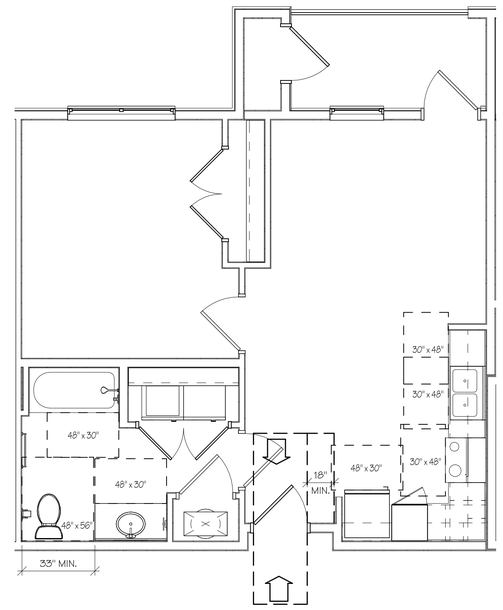
1)	VALVE & SHOWER HEAD SHALL BE ON 2X6 WALL OR WALL @ LAV,. (SEE BATH ELEVATIONS SHEET A7.0)
2)	PROVIDE HAND-HELD SHOWER W/VACUUM BREAKER (IN LIEU OF FIXED SHOWER HEAD), FLEXIBLE HOSE, & 24" SLIDE BAR.
3)	INSTALL GRAB BARS WITH ROUND HEAD SCREWS.
4)	PROVIDE & INSTALL 36" GRAB BAR BEHIND & 42" GRAB BAR BESIDE WATER CLOSET ON WALL @ 34" A.F.F. (SEE BATH ELEVATIONS SHEET A7.0)
5)	BOTTOM OF MIRROR TO REST ON COUNTERTOP BACKSPLASH.
6)	VANITY SINK FAUCET TO BE LEVER TYPE, & EXPOSED PIPING TO BE WRAPPED W/ PIPE WRAP.
7)	EXTEND VINYL FLOORING BENEATH LAV. SPACE.

ACCESSIBLE UNIT KITCHEN NOTES

1)	COUNTER HEIGHT SHALL BE 34" A.F.F. TO TOP OF SINK.
2)	EXTEND VINYL FLOORING BENEATH SINK SPACE AND THE 30" WORKSPACE BESIDE THE RANGE. PROVIDE REMOVABLE FRONT & FLOOR IN LIEU OF SINK BASE.
3)	TOE KICK SPACE @ BOTTOM OF BASE CABINETS SHALL REMAIN 4" MIN. (STANDARD)
4)	ADD SEPARATE WALL SWITCHES FOR RANGE HOOD FAN AND RANGE HOOD LIGHT (SEE ELECTRICAL PLANS)
5)	ADD SWITCHES FOR CONTROL OF LIGHT OVER SINK & GARBAGE DISPOSAL.
6)	TOP OF WALL TELEPHONE OUTLET TO BE 46" MAX. A.F.F.
7)	SWITCHES & OUTLETS IN KITCHEN ABOVE BASE CABINETS SHALL BE 40" A.F.F. TO BOTTOM OF SWITCH PLATE, SO AS NOT INTERFERE WITH WALL CABINET.
8)	INSULATE EXPOSED PIPING BELOW KITCHEN SINK W/ PIPE WRAP.
9)	DISHWASHER HOOKUPS ARE UNDER SINK, ACCESS OPENING IS TO BE MADE THROUGH END PANEL OF SNIK.



1 A1.14 ADA 1-BR UNIT ACCESSIBILITY PLAN
SCALE: 1/4" = 1'-0"



2 A1.14 FHA 1-BR UNIT ACCESSIBILITY PLAN
SCALE: 1/4" = 1'-0"

REGISTERED ARCHITECT
MARTIN RANDALL PORTER
24739
STATE OF TEXAS
25 OCT 2024
MARTIN RANDALL PORTER
ARCHITECT LICENSE #24739

DASHWOOD TRAILS
HOUSTON, HARRIS COUNTY, TEXAS

Wallace ARCHITECTS LLC
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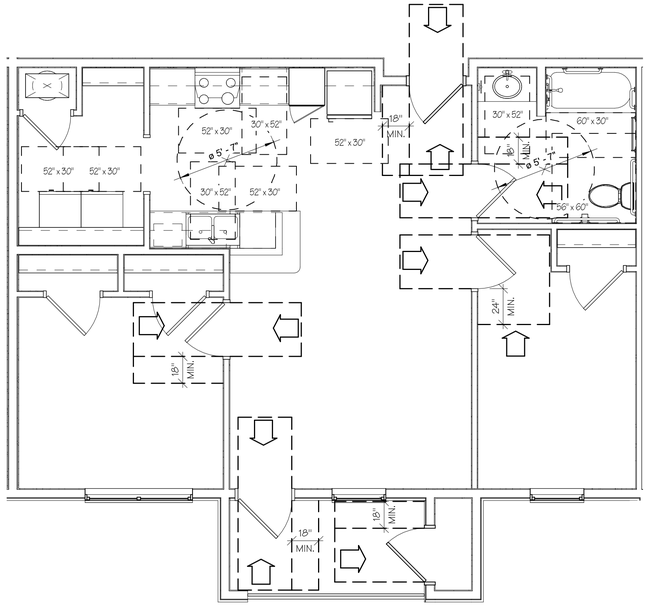
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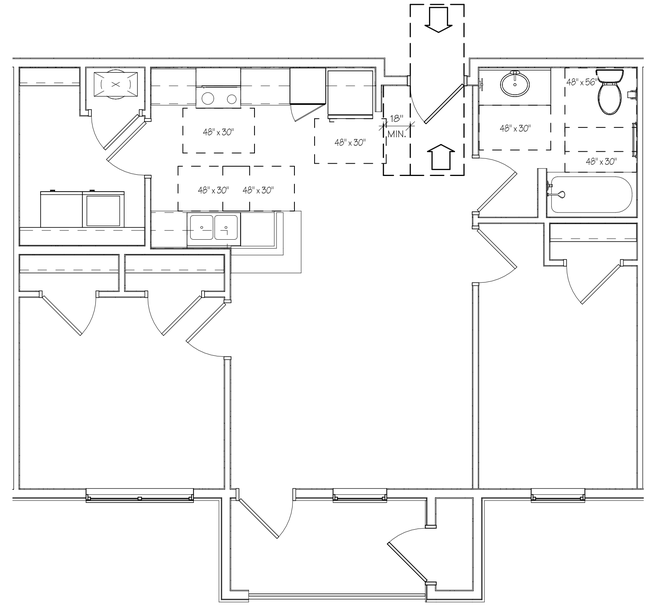
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1 A1.15 ADA 2-BR UNIT ACCESSIBILITY PLAN

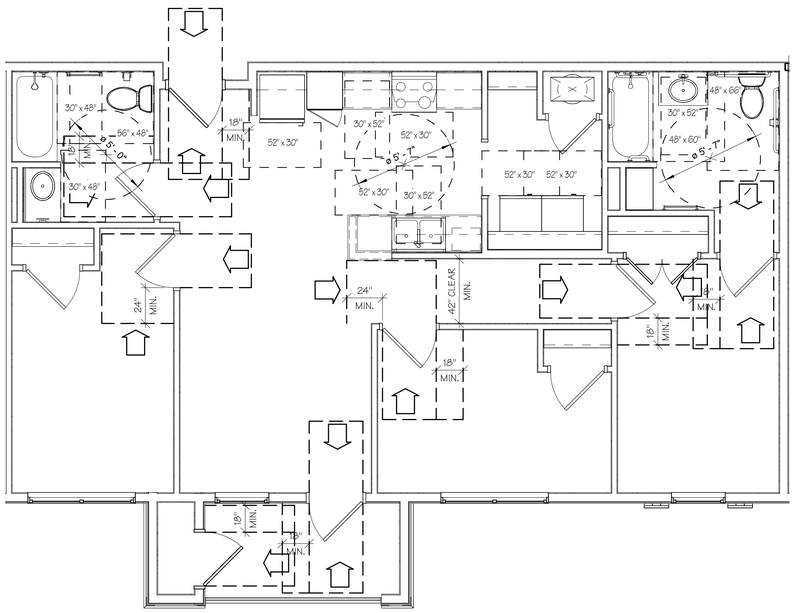
SCALE: 1/4" = 1'-0"



2 A1.15 FHA 2-BR UNIT ACCESSIBILITY PLAN

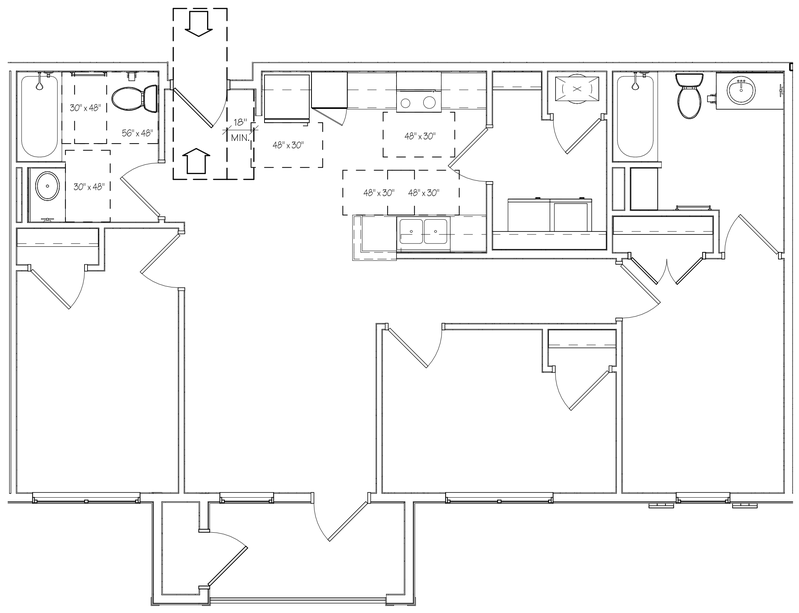
SCALE: 1/4" = 1'-0"

NOTE: SEE SHEET A1.14 FOR MANEUVERING CLEARANCE AT DOOR CHART AND NOTES



3 A1.15 ADA 3-BR UNIT ACCESSIBILITY PLAN

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



4 A1.15 FHA 3-BR UNIT ACCESSIBILITY PLAN

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

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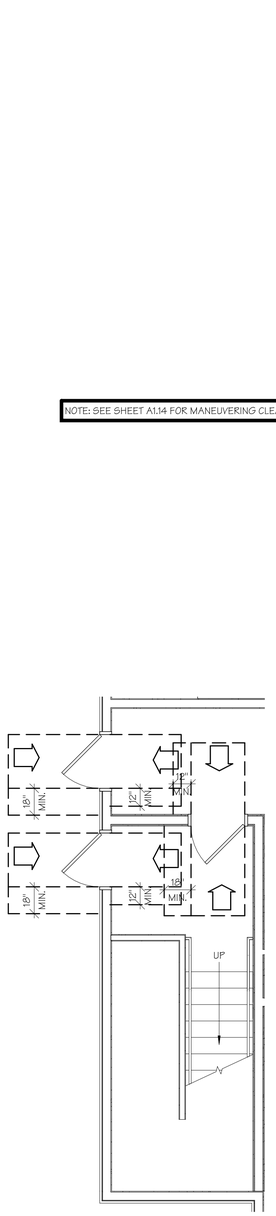
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JOB NO. 4809

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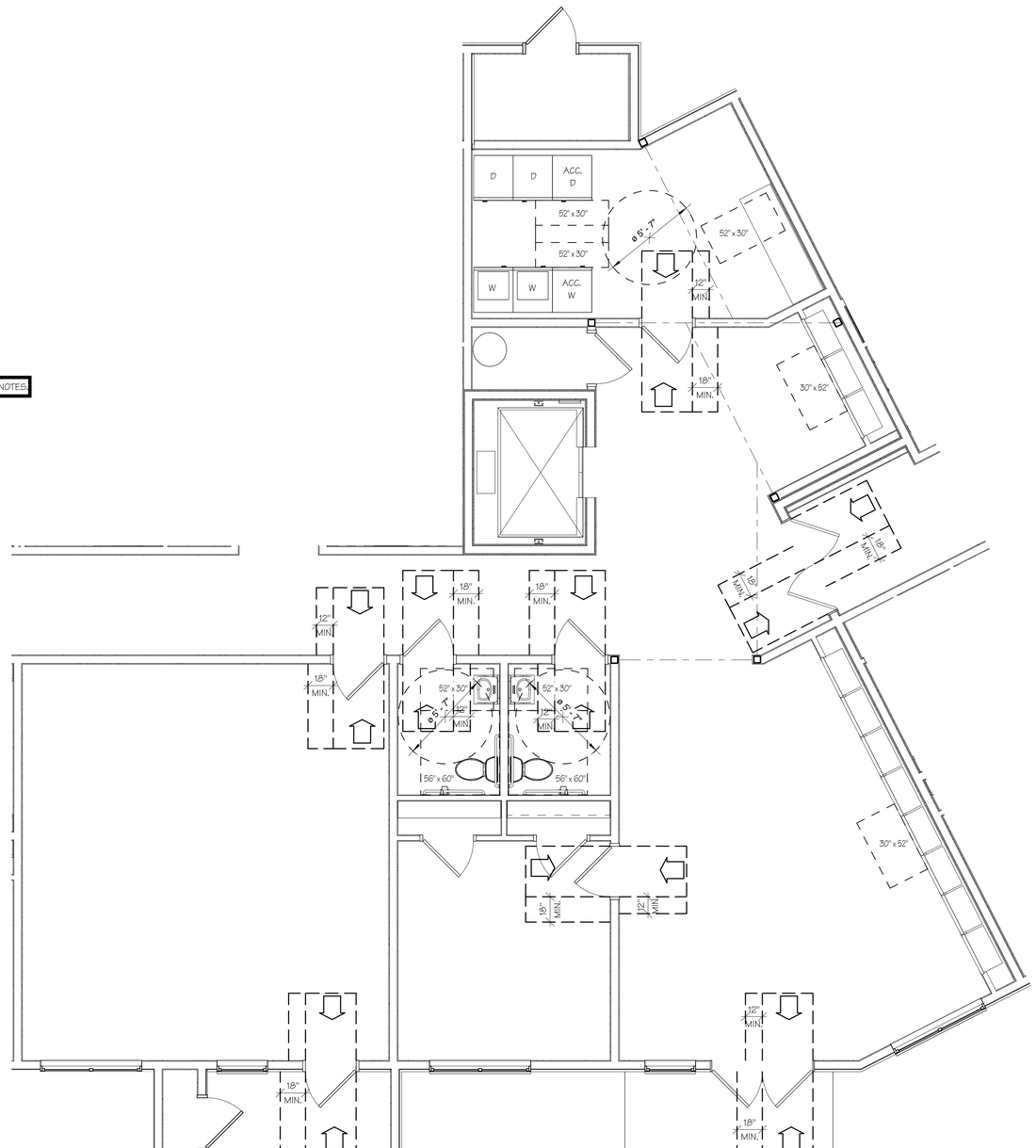
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NOTE: SEE SHEET A1.14 FOR MANEUVERING CLEARANCE AT DOOR CHART AND NOTES.



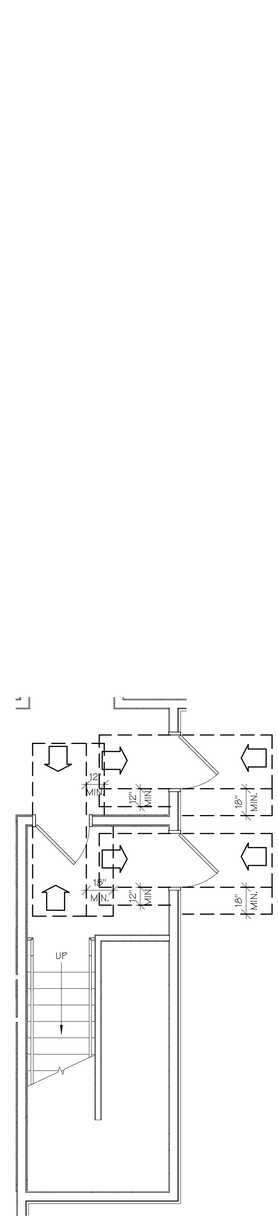
1ST FLR. LEFT SIDE
STAIRWELL ACC. PLAN

1 A1.16 SCALE: 1/4" = 1'-0"



1ST FLOOR COMMON AREA ACCESSIBILITY PLAN

2 A1.16 SCALE: 1/4" = 1'-0"



1ST FLR. RIGHT SIDE
STAIRWELL ACC. PLAN

3 A1.16 SCALE: 1/4" = 1'-0"

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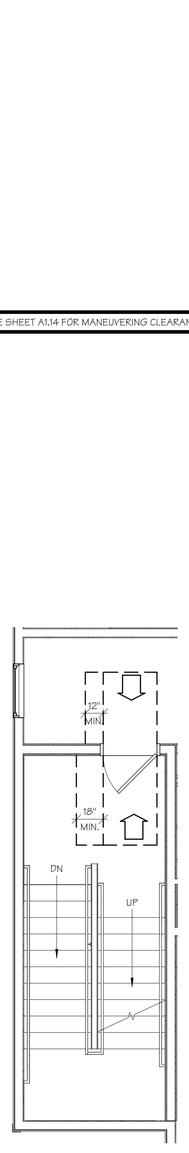
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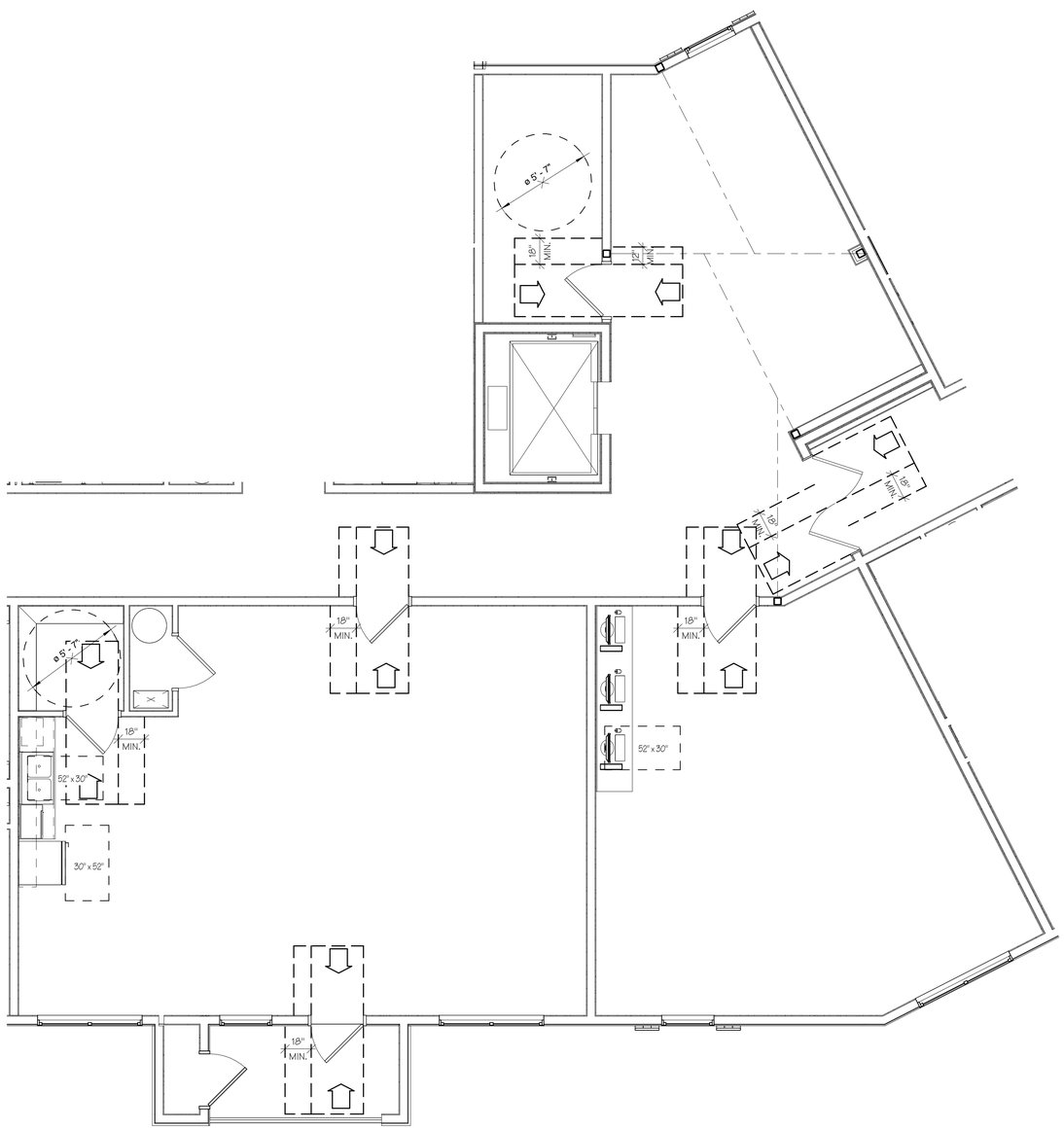
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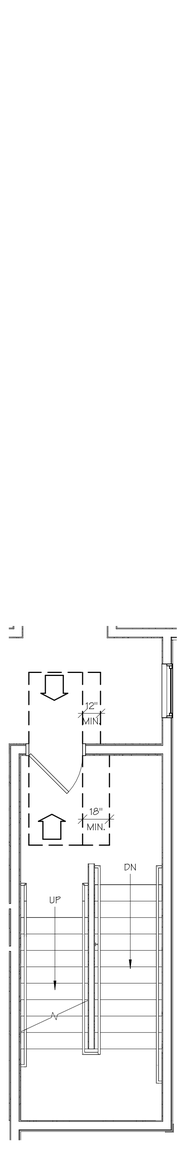
1 A1.17 SCALE: 1/4" = 1'-0"

2ND FLR. LEFT SIDE
STAIRWELL ACC. PLAN



2 A1.17 SCALE: 1/4" = 1'-0"

2ND FLOOR COMMON AREA ACCESSIBILITY PLAN



3 A1.17 SCALE: 1/4" = 1'-0"

2ND FLR. RIGHT SIDE
STAIRWELL ACC. PLAN

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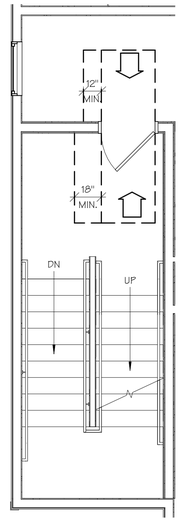
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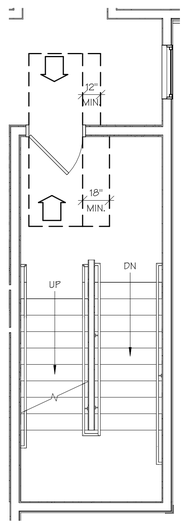
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NOTE: SEE SHEET A1.14 FOR MANEUVERING CLEARANCE AT DOOR CHART AND NOTES.



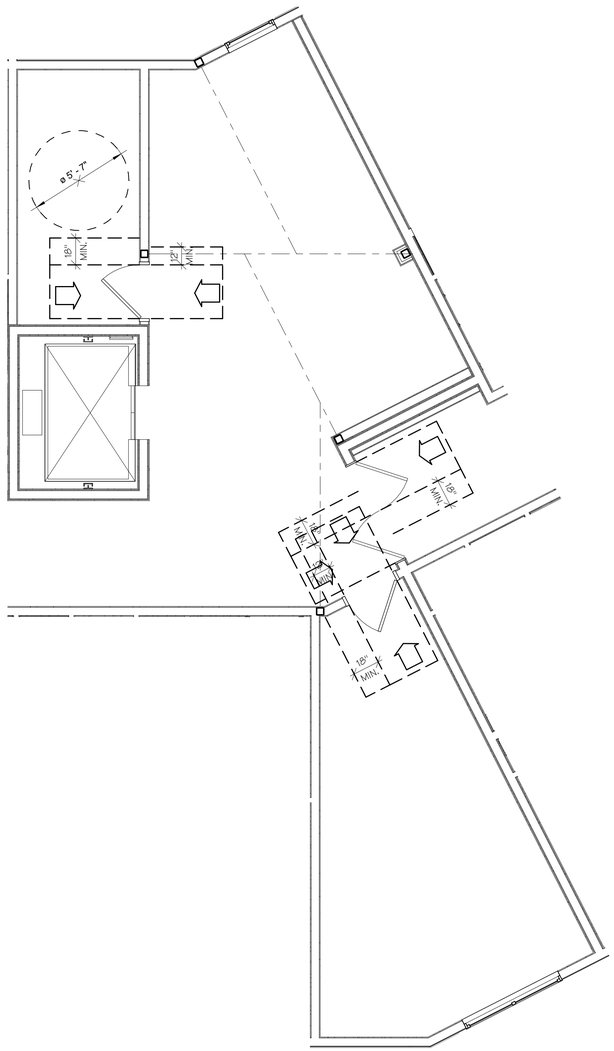
3RD FLR. LEFT SIDE STAIRWELL ACC. PLAN

1 A1.18 SCALE: 1/4" = 1'-0"



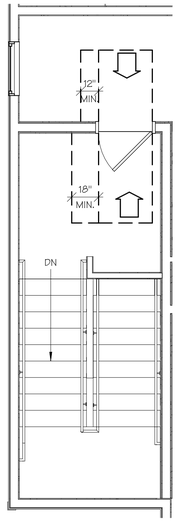
3RD FLR. RIGHT SIDE STAIRWELL ACC.PLAN

2 A1.18 SCALE: 1/4" = 1'-0"



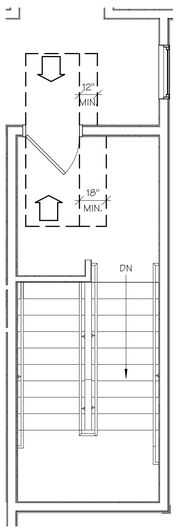
3RD FLOOR COMMON AREA ACCESSIBILITY PLAN

3 A1.18 SCALE: 1/4" = 1'-0"



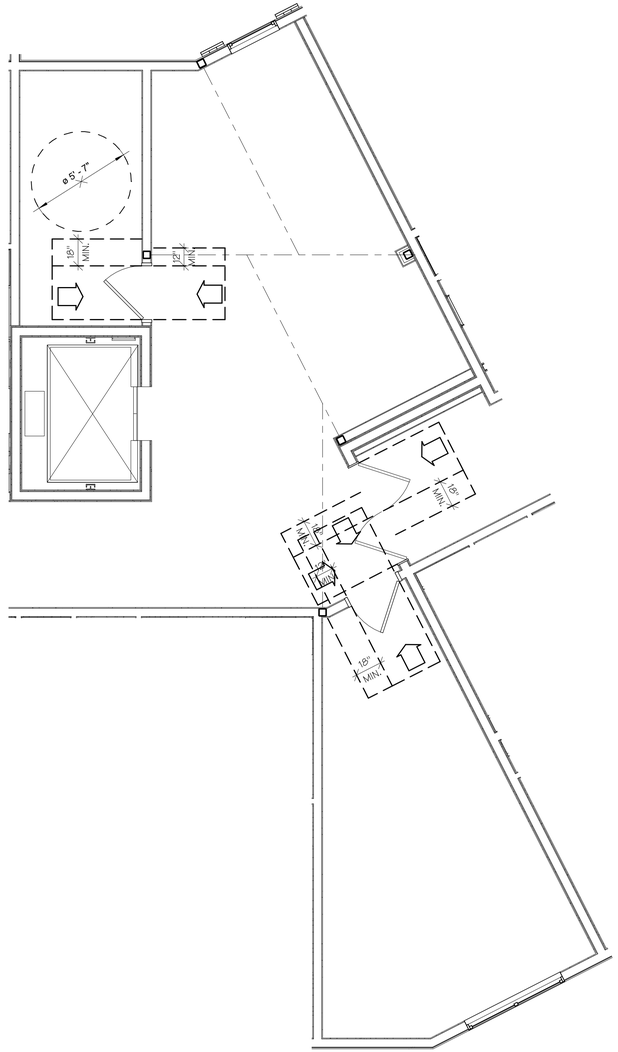
4TH FLR. LEFT SIDE STAIRWELL ACC. PLAN

4 A1.18 SCALE: 1/4" = 1'-0"



4TH FLR. RIGHT SIDE STAIRWELL ACC. PLAN

5 A1.18 SCALE: 1/4" = 1'-0"



4TH FLOOR COMMON AREA ACCESSIBILITY PLAN

6 A1.18 SCALE: 1/4" = 1'-0"

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ATTIC COMPARTMENT VENTILATION

NAME	AREA	TOTAL REQ'D VENT. (SQ. IN.)	SOFFIT VENT (SQ. IN.)	ROOF VENT (SQ. IN.)
DRAFTSTOPPING COMPARTMENT "A"	2016 SF	968	484	484
DRAFTSTOPPING COMPARTMENT "B"	249 SF	120	60	60
DRAFTSTOPPING COMPARTMENT "C"	1013 SF	486	243	243
DRAFTSTOPPING COMPARTMENT "D"	1218 SF	585	292	292
DRAFTSTOPPING COMPARTMENT "E"	1961 SF	941	471	471
DRAFTSTOPPING COMPARTMENT "F"	1218 SF	585	292	292
DRAFTSTOPPING COMPARTMENT "G"	1218 SF	585	292	292
DRAFTSTOPPING COMPARTMENT "H"	1961 SF	941	471	471
DRAFTSTOPPING COMPARTMENT "I"	1218 SF	585	292	292
DRAFTSTOPPING COMPARTMENT "J"	1218 SF	585	292	292
DRAFTSTOPPING COMPARTMENT "K"	980 SF	471	235	235
DRAFTSTOPPING COMPARTMENT "L"	1218 SF	585	292	292
DRAFTSTOPPING COMPARTMENT "M"	1312 SF	630	315	315
DRAFTSTOPPING COMPARTMENT "N"	1826 SF	877	438	438
DRAFTSTOPPING COMPARTMENT "O"	1509 SF	724	362	362
DRAFTSTOPPING COMPARTMENT "P"	1227 SF	589	294	294
DRAFTSTOPPING COMPARTMENT "Q"	939 SF	451	225	225
DRAFTSTOPPING COMPARTMENT "R"	980 SF	471	235	235
DRAFTSTOPPING COMPARTMENT "S"	1218 SF	585	292	292
DRAFTSTOPPING COMPARTMENT "T"	1589 SF	763	381	381
DRAFTSTOPPING COMPARTMENT "U"	1297 SF	623	311	311
DRAFTSTOPPING COMPARTMENT "V"	250 SF	120	60	60

ATTIC DRAFTSTOPPING NOTES

1) DRAFTSTOPPING MATERIALS SHALL NOT BE LESS THAN 1/2" GYPSUM BOARD, 3/8" WOOD STRUCTURAL PANEL, 3/8" PARTICLEBOARD, 1" NOMINAL LUMBER, CEMENT FIBERBOARD, BATTS OR BLANKETS OF MINERAL WOOL OR GLASS FIBER, OR OTHER APPROVED MATERIALS ADEQUATELY SUPPORTED.
2) DRAFTSTOPPING SHALL BE PROVIDED IN ATTICS, OVERHANGS, OR OTHER CONCEALED ROOF SPACES.
3) DRAFTSTOPPING SHALL BE INSTALLED ABOVE, AND IN LINE WITH, SLEEPING UNIT AND DWELLING UNIT SEPARARTION WALS THAT DO NOT EXTEND TO THE UNDERSIDE OF THE ROOF DECKING ABOVE.
4) THE ATTIC SPACE SHALL BE SUBDIVIDED BY DRAFTSTOPS INTO AREAS NOT EXCEEDING 3,000 SF OR ABOVE EVERY TWO DWELLING UNITS, WHICHEVER IS SMALLER.

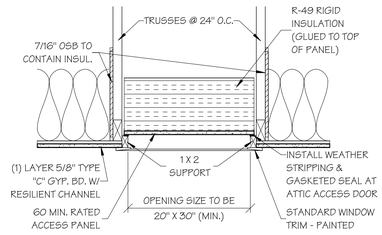
GENERAL ATTIC VENTILATION NOTES

1) TOTAL FREE AREA SHALL EQUAL 1/300 OF ATTIC AREAS W/50% OF VENT AREA WITHIN 3' VERTICAL OF ROOF PEAK AND 50% AT SOFFITS.
2) SPECIFIED RIDGE VENT LENGTHS BASED ON 18 SQ. IN. FREE AREA PER LINEAL FOOT. ADJUST VENT LENGTH AS REQUIRED BASED ON FREE AREA OF SPECIFIC VENTILATOR USED.
3) SPECIFIED VENTILATION POD QUANTITY BASED ON 50 SQ. IN FREE AREA PER POD. ADJUST QUANTITY AS REQUIRED BASED ON FREE AREA OF SPECIFIC VENTILATION POD USED.

SPECIAL INSTRUCTION:
STRUCTURAL DRAWINGS AND SPECIFICATIONS TAKE PRECEDENCE OVER ANY DRAWING, DETAIL OR NOTE SHOWN ON THIS SHEET. CONTRACTORS, SUBCONTRACTORS, AND SUPPLIERS MUST REFERENCE STRUCTURAL DRAWINGS AND/ OR SPECIFICATIONS BEFORE CONSTRUCTING, OR SUPPLYING ANY LOAD-BEARING, OR LOAD-RESISTING ELEMENT SHOWN ON THIS SHEET.

LEGEND

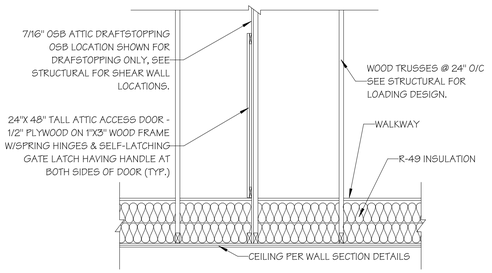
- 24" x 48" DRAFTSTOPPING ACCESS DOOR IN DRAFTSTOPPING PARTITION
- DOWNSPOUT LOCATIONS
- POD VENT
- ATTIC DRAFTSTOPPING
- 2-HR FIREWALL
- ATTIC WALKWAY
- FIRE RETARDANT RATED ROOF SHEATHING INSTALLED 4'-0" ON EACH SIDE OF 2-HR FIREWALL



1 A2.0 ATTIC ACCESS DETAIL
SCALE: 1" = 1'-0"

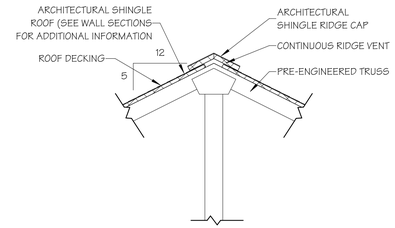


2 A2.0 ATTIC WALKWAY DETAIL
SCALE: 1/2" = 1'-0"

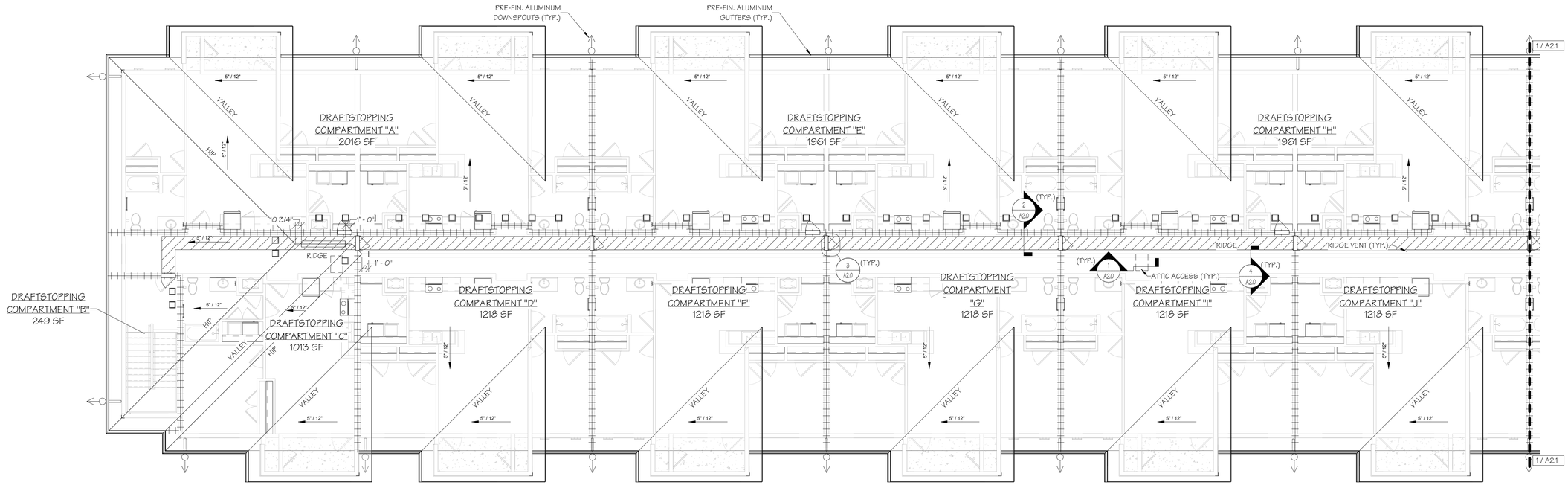


3 A2.0 ATTIC DRAFTSTOP DOOR
SCALE: 1/2" = 1'-0"

NOTE: REFER TO EXTERIOR ELEVATION SHEET FOR ROOF VENTING REQUIREMENT AND PROPOSED LOCATION(S) OF RIDGE VENT MATERIAL



4 A2.0 ROOF VENT DETAIL
SCALE: 3/4" = 1'-0"



5 A2.0 BUILDING LEFT SIDE ROOF PLAN
SCALE: 1/8" = 1'-0"

ISSUE SET

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25 OCT 2024
MARTIN RANDALL PORTER
ARCHITECT LICENSE #24739

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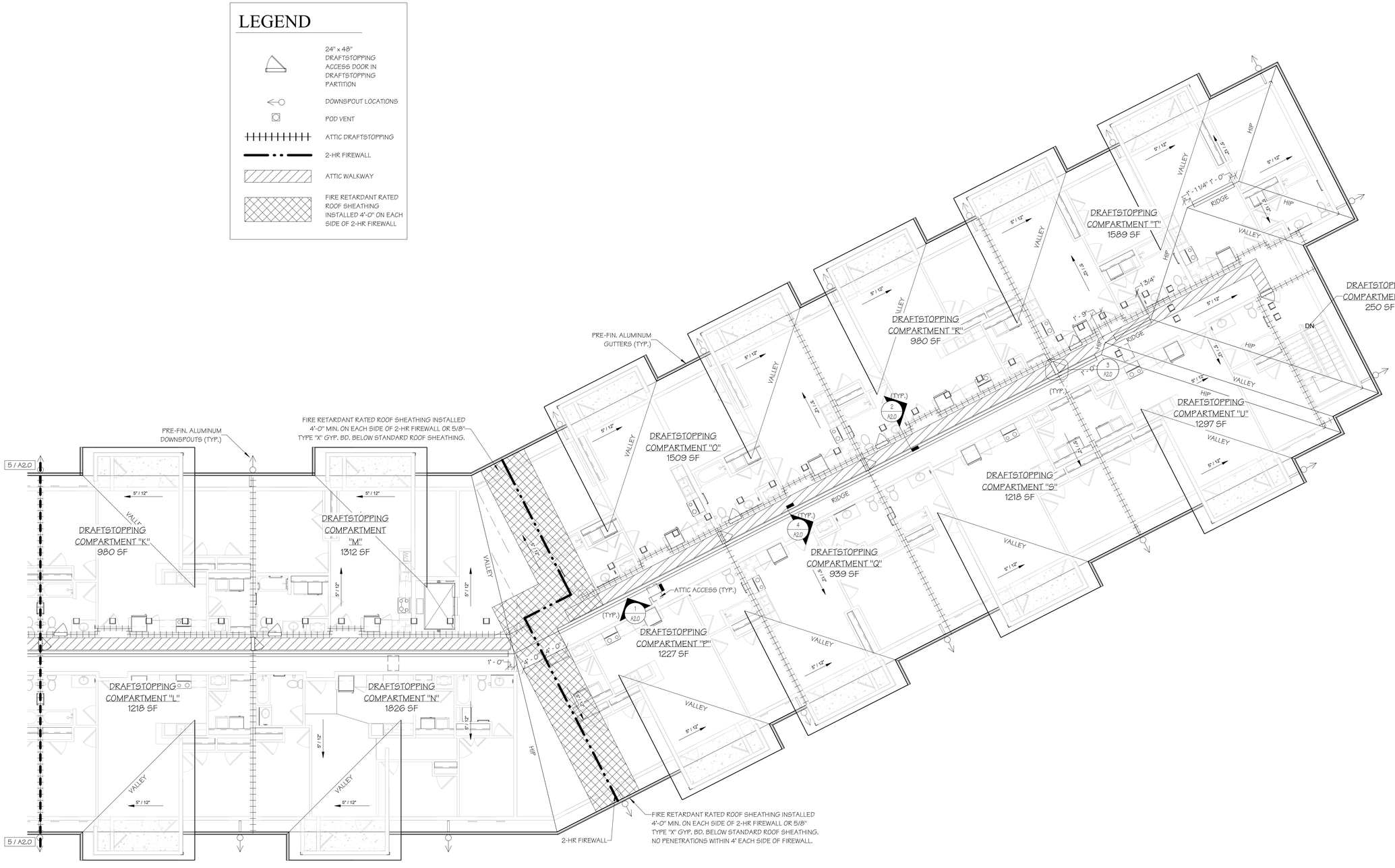
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JOB NO. 4809

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LEGEND

- 24" x 48" DRAFTSTOPPING ACCESS DOOR IN DRAFTSTOPPING PARTITION
- DOWNSPOUT LOCATIONS
- POD VENT
- ATTIC DRAFTSTOPPING
- 2-HR FIREWALL
- ATTIC WALKWAY
- FIRE RETARDANT RATED ROOF SHEATHING INSTALLED 4'-0" ON EACH SIDE OF 2-HR FIREWALL



BUILDING RIGHT SIDE ROOF PLAN

1 / A2.1 SCALE: 1/8" = 1'-0"

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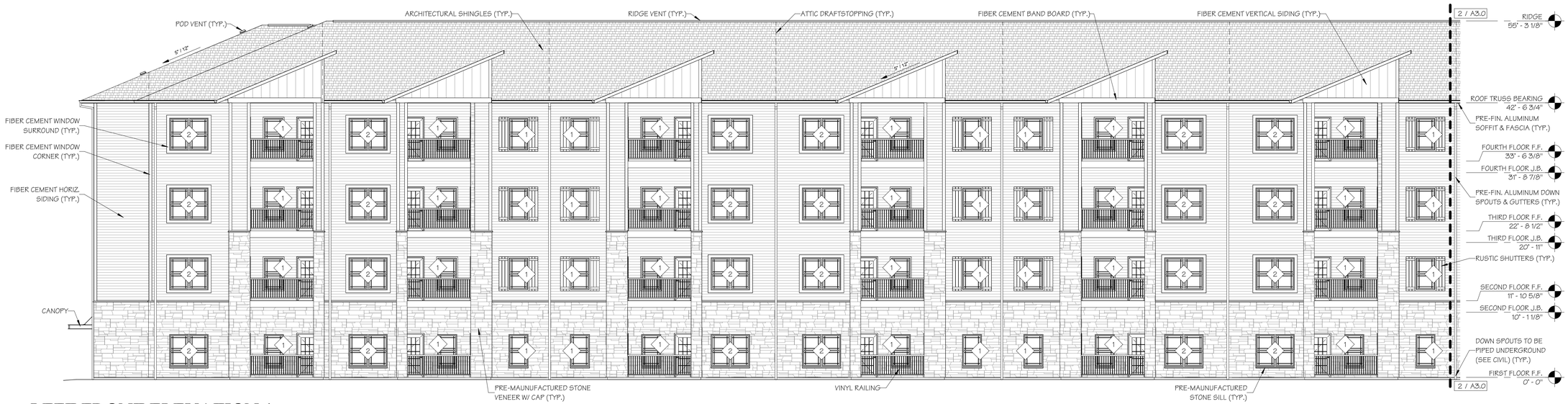
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JOB NO. 4809

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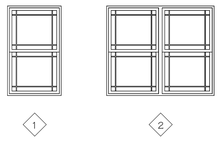
LEFT FRONT ELEVATION 1

1 / A3.0 SCALE: 1/8" = 1'-0"

WINDOW SCHEDULE

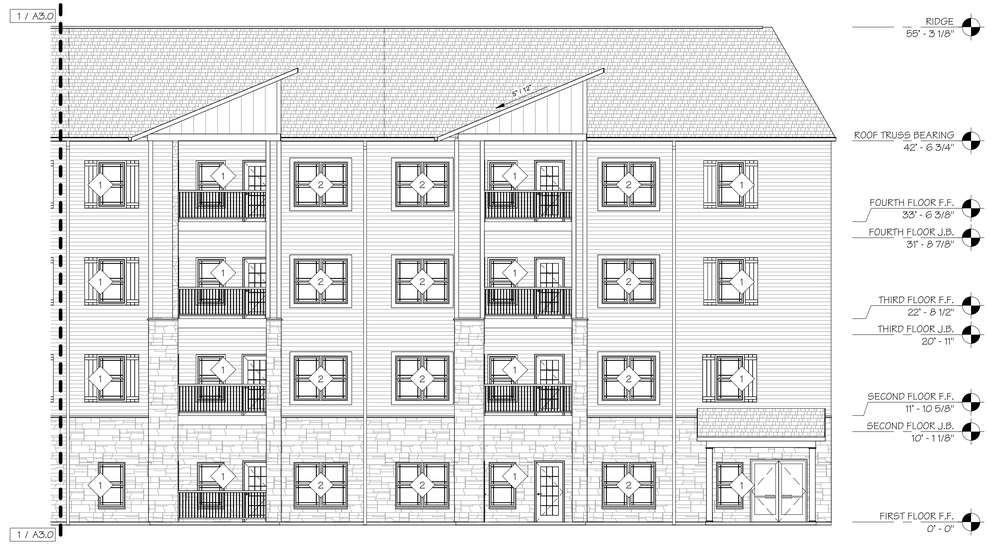
TYPE MARK	UNIT SIZE	GLAZING	HARDWARE	COMMENTS
1	3'-0" x 5'-0"	INSUL. LOW "E"	STANDARD	VINYL SINGLE HUNG W/SCREENS, U-FACTOR = 0.32 MAX., SHGC = 0.23 MAX., W/ PRAIRIE MUNTINS, ENERGY STAR
2	PR. 3'-0" x 5'-0"	INSUL. LOW "E"	STANDARD	VINYL SINGLE HUNG W/SCREENS, U-FACTOR = 0.32 MAX., SHGC = 0.23 MAX., W/ PRAIRIE MUNTINS, ENERGY STAR

WINDOW ELEVATIONS



WINDOW NOTES

1)	CONTRACTOR SHALL CERTIFY THAT BEDROOM WINDOWS INSTALLED PROVIDE EGRESS OPENING OF 5.0 SQ.FT. (MIN.) 5.7 SQ.FT. (MIN.) @ 2ND, 3RD & 4TH FLOORS, CLEAR HEIGHT OF 24" AND IN. CLEAR WIDTH OF 20".
2)	GLAZING WITHIN 24" OF DOORS SHALL BY SAFETY GLASS.
3)	MAX. SILL HGT. @ 36" A.F.F.
4)	INSTALL WINDOW RESTRICTORS FOR 2ND, 3RD & 4TH FLOOR WINDOWS.
5)	REFER TO WALL SECTIONS FOR SPECIFIC STONE OR SIDING DETAILS AROUND WINDOW OPENINGS.
6)	INSTALL BLINDS AT ALL WINDOWS (FULL WIDTH X FULL HEIGHT)



LEFT FRONT ELEVATION 2

2 / A3.0 SCALE: 1/8" = 1'-0"

MARTIN RANDALL PORTER
REGISTERED ARCHITECT
STATE OF TEXAS
24739
25 OCT 2024
MARTIN RANDALL PORTER
ARCHITECT LICENSE #24739

DASHWOOD TRAILS
HOUSTON, HARRIS COUNTY, TEXAS

Wallace ARCHITECTS LLC
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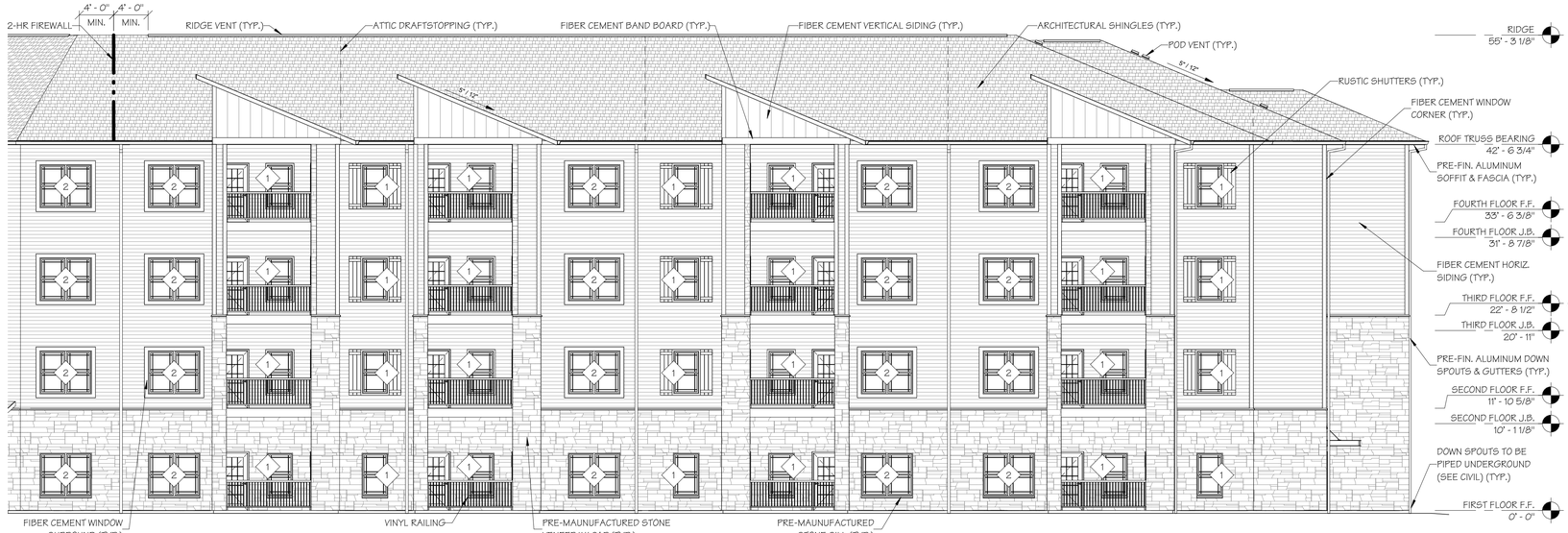
SHEET NO. A3.0

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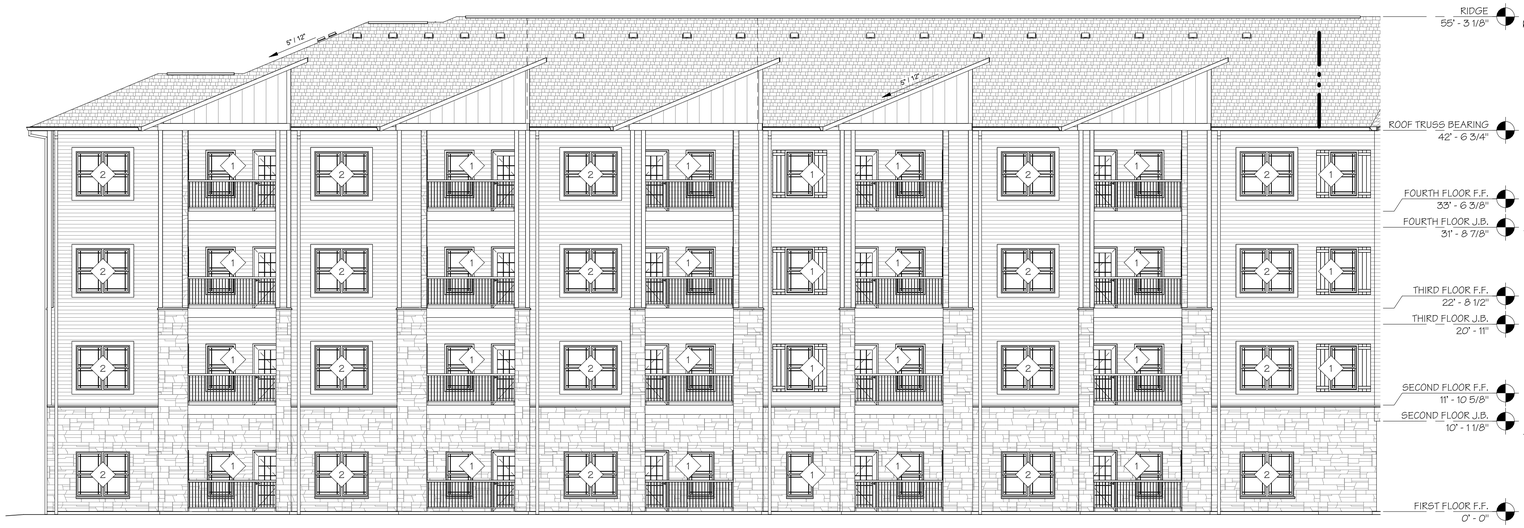
NOTE: SEE SHEET A3.0 FOR WINDOW SCHEDULE & NOTES.



1 A3.1 RIGHT FRONT ELEVATION
SCALE: 1/8" = 1'-0"



2 A3.1 RIGHT SIDE ELEVATION
SCALE: 1/8" = 1'-0"



3 A3.1 LEFT REAR ELEVATION
SCALE: 1/8" = 1'-0"

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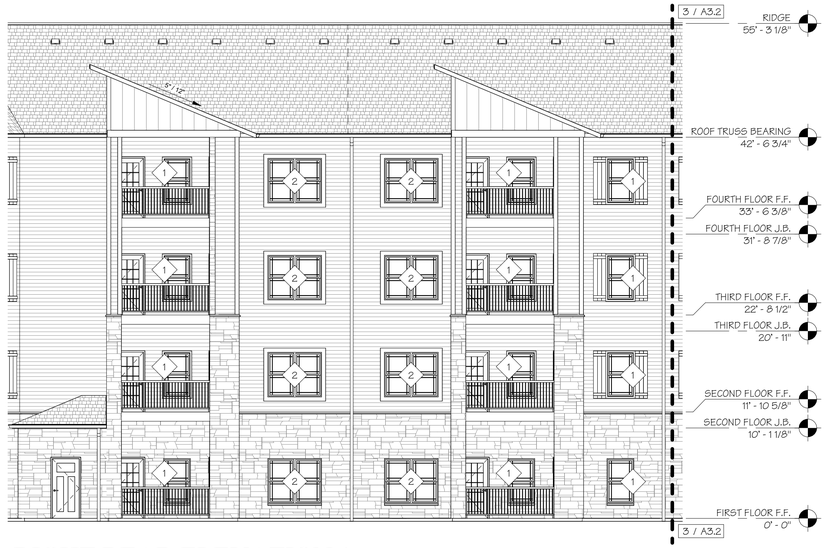
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NOTE: SEE SHEET A3.0 FOR WINDOW SCHEDULE & NOTES.



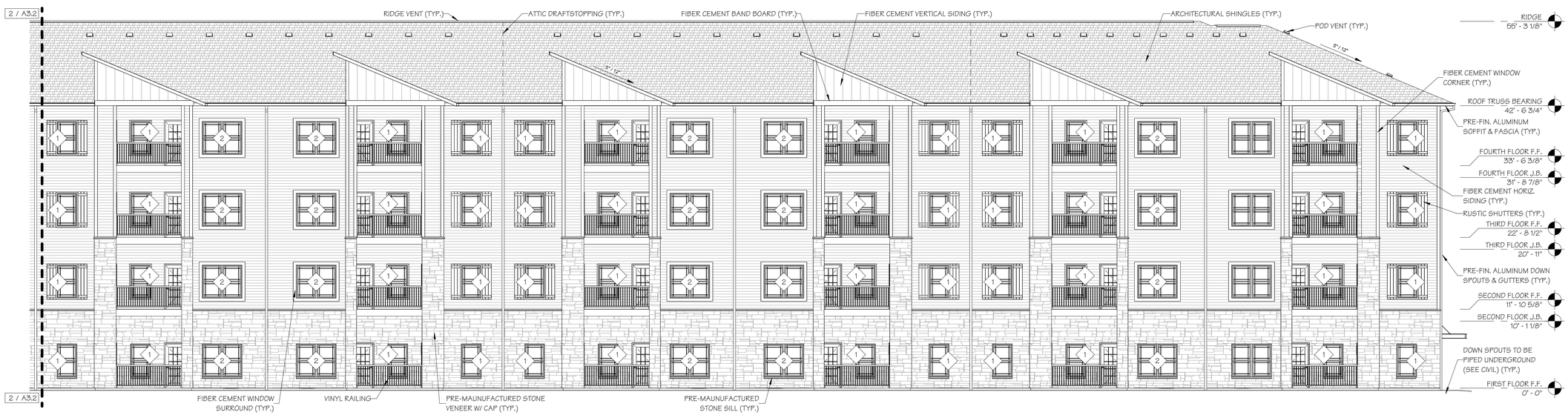
1 A3.2 LEFT SIDE ELEVATION

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



2 A3.2 RIGHT REAR ELEVATION 1

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



3 A3.2 RIGHT REAR ELEVATION 2

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

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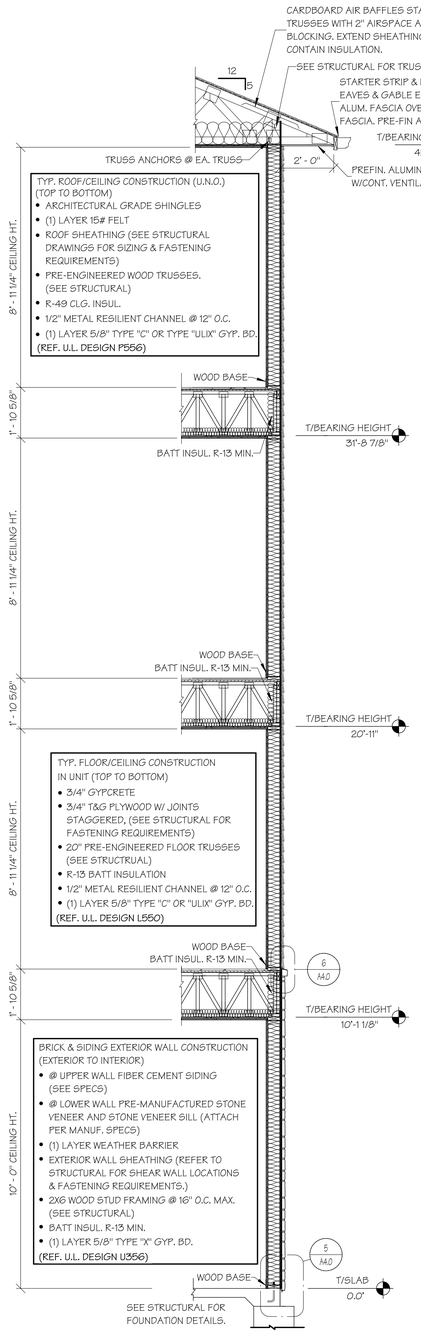
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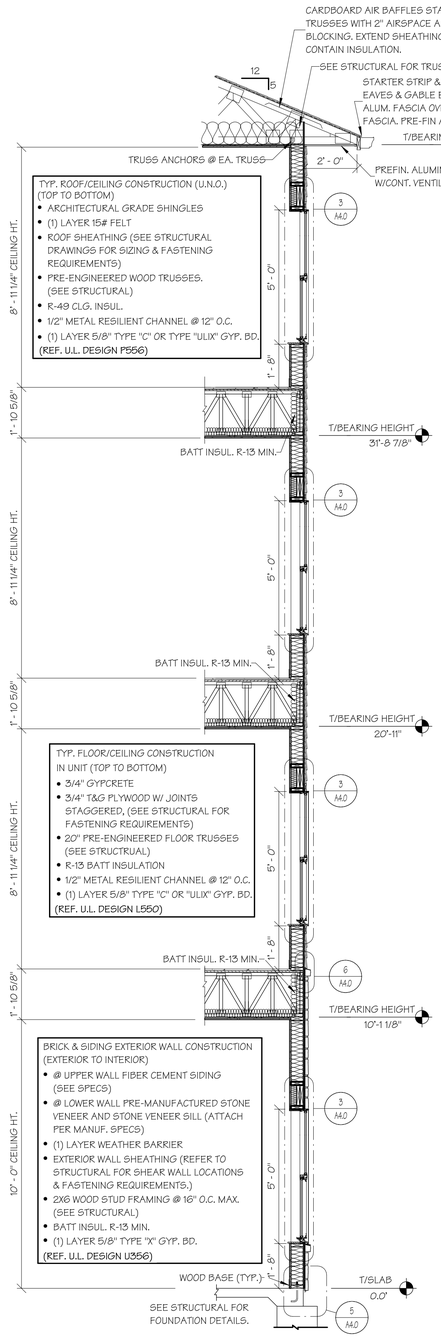
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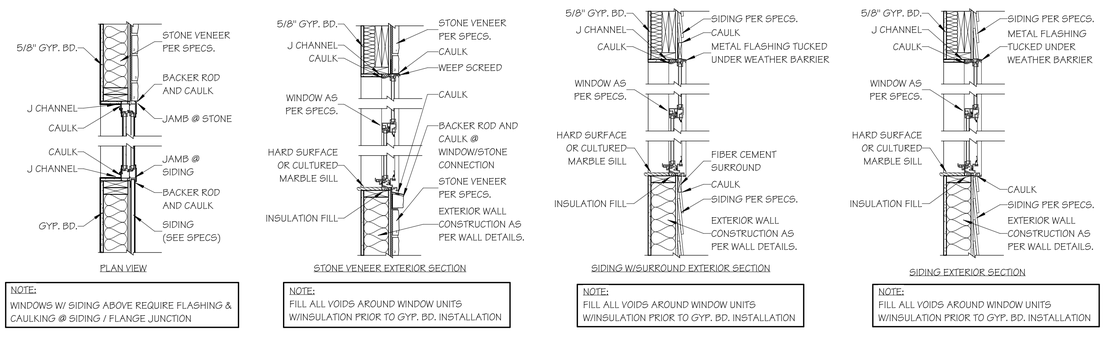
WALL SECTION WITH STONE AND SIDIING

1 / A4.0 SCALE: 3/8" = 1'-0"



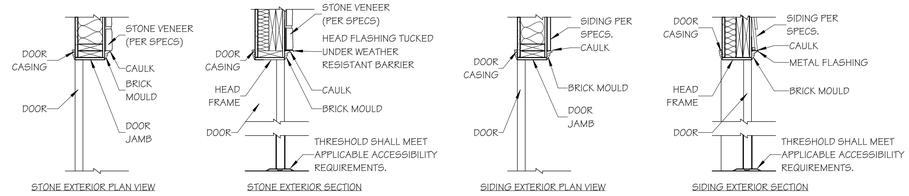
WALL SECTION WITH STONE AND SIDING AND WINDOWS

2 / A4.0 SCALE: 3/8" = 1'-0"



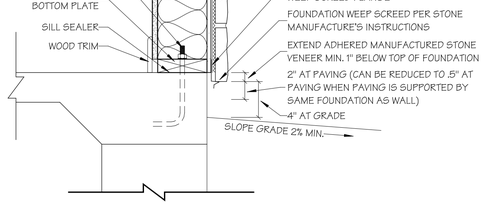
WALL SECTIONS AND DETAILS AT WINDOWS

3 / A4.0 SCALE: 3/4" = 1'-0"



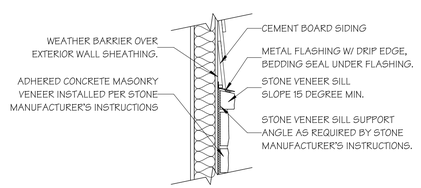
WALL SECTIONS AT DOORS

4 / A4.0 SCALE: 3/4" = 1'-0"



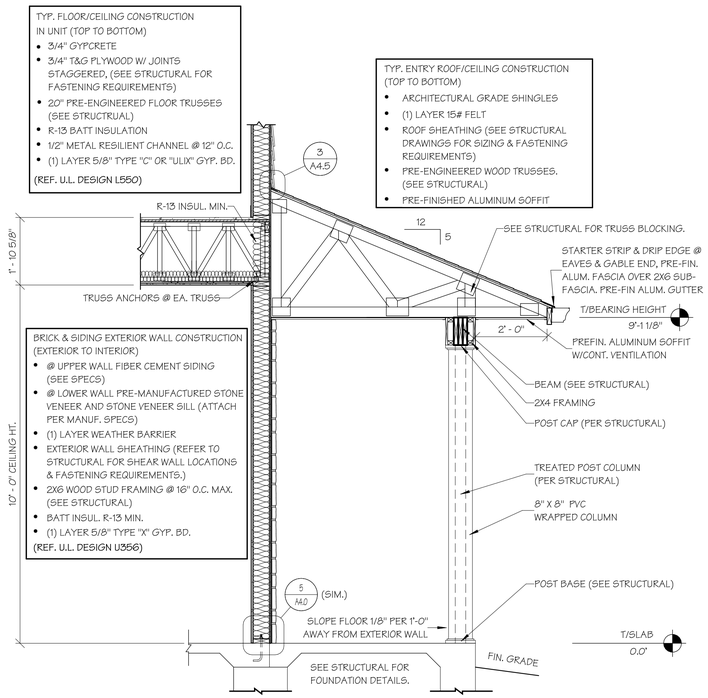
STONE WEEP SCREED DETAIL

5 / A4.0 SCALE: 1 1/2" = 1'-0"



WALL FLASHING DETAIL

6 / A4.0 SCALE: 1" = 1'-0"



WALL SECTION W/STONE @ ENTRY

7 / A4.0 SCALE: 1/2" = 1'-0"

REGISTERED ARCHITECT MARTIN RANDALL PORTER 24739 STATE OF TEXAS

25 OCT 2024

MARTIN RANDALL PORTER
ARCHITECT LICENSE #24739

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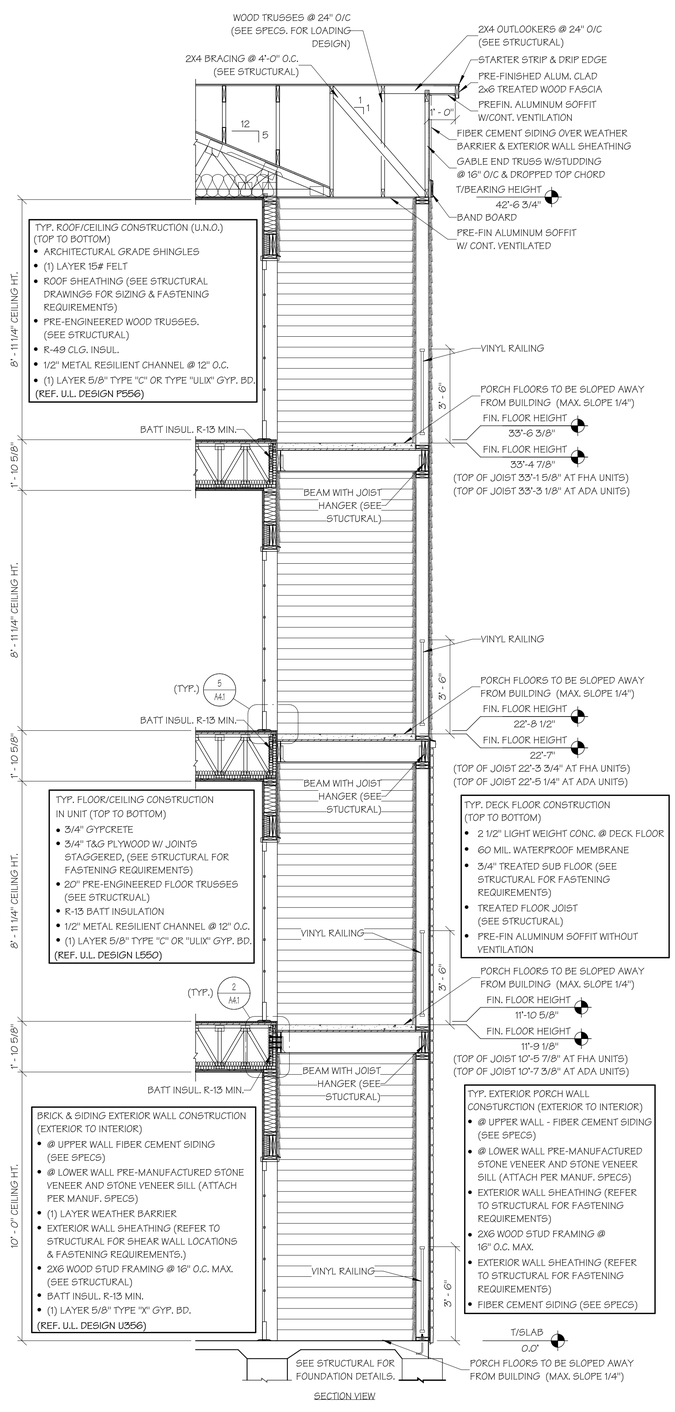
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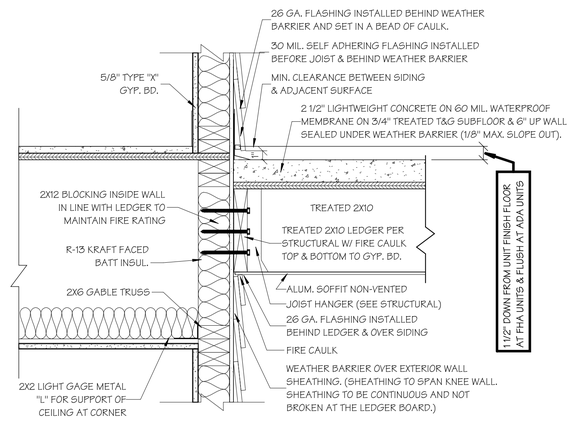
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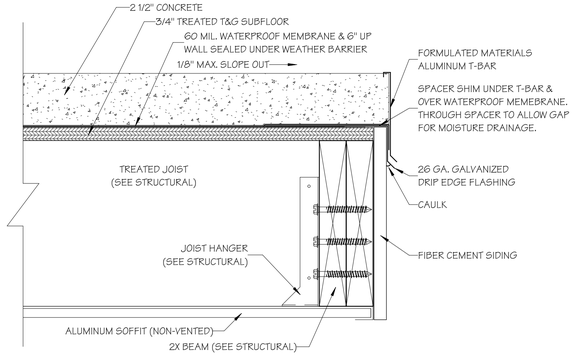
WALL SECTION @ PORCH

1 A4.1 SCALE: 3/8" = 1'-0"



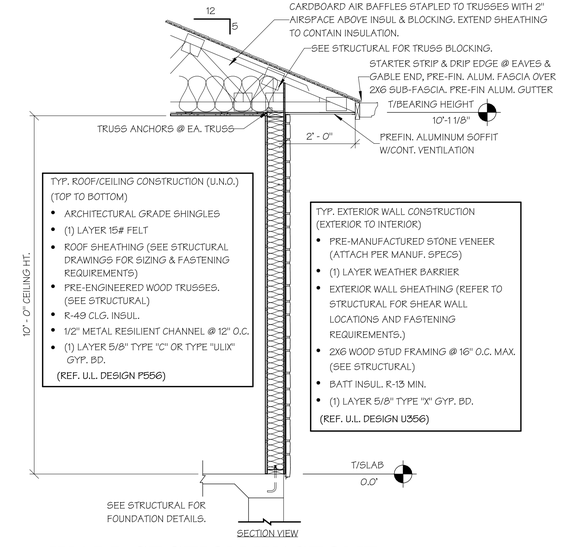
DECK FLASHING DETAIL

2 A4.1 SCALE: 1 1/2" = 1'-0"



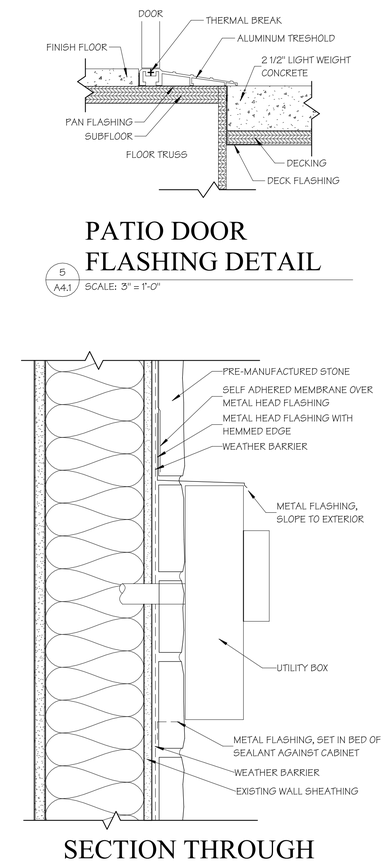
DECK EDGE FLASHING DETAIL

3 A4.1 SCALE: 3" = 1'-0"



WALL SECTION W/ STONE @ SPRINKLER ROOM

4 A4.1 SCALE: 1/2" = 1'-0"

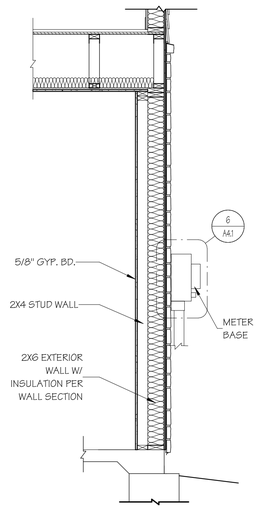


PATIO DOOR FLASHING DETAIL

5 A4.1 SCALE: 3" = 1'-0"

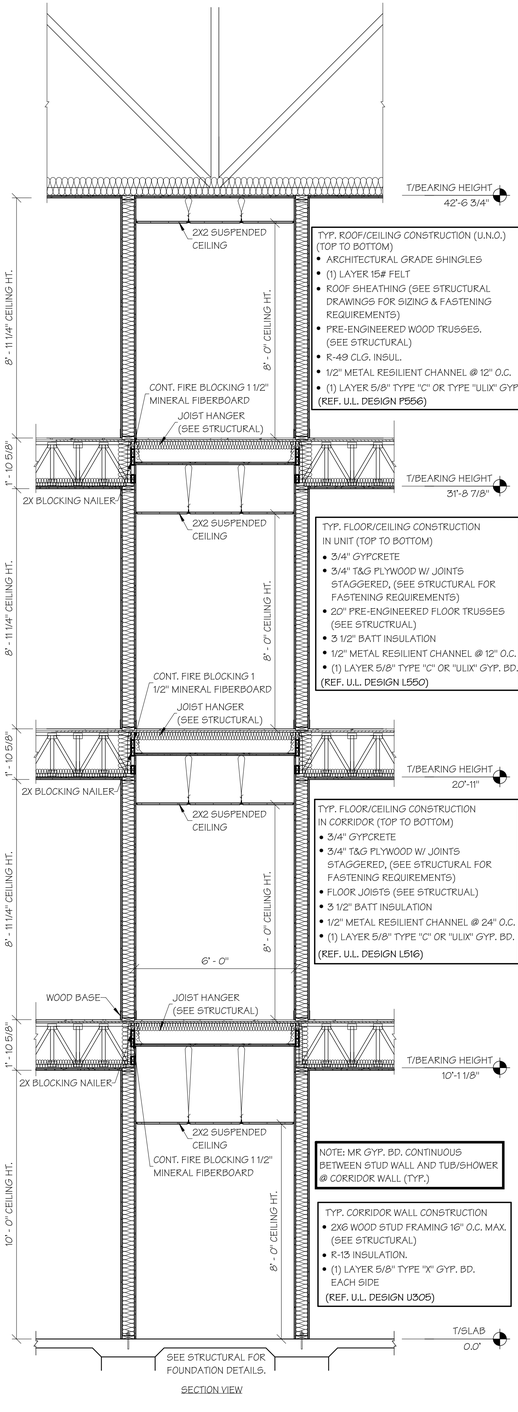
SECTION THROUGH UTILITY BOX

6 A4.1 SCALE: 3" = 1'-0"



FURRED METER WALL

7 A4.1 SCALE: 1/2" = 1'-0"



WALL SECTION @ CORRIDOR

8 A4.1 SCALE: 3/8" = 1'-0"

REGISTERED ARCHITECT
MARTIN RANDALL PORTER
#24739
STATE OF TEXAS
25 OCT 2024

MARTIN RANDALL PORTER
ARCHITECT LICENSE #24739

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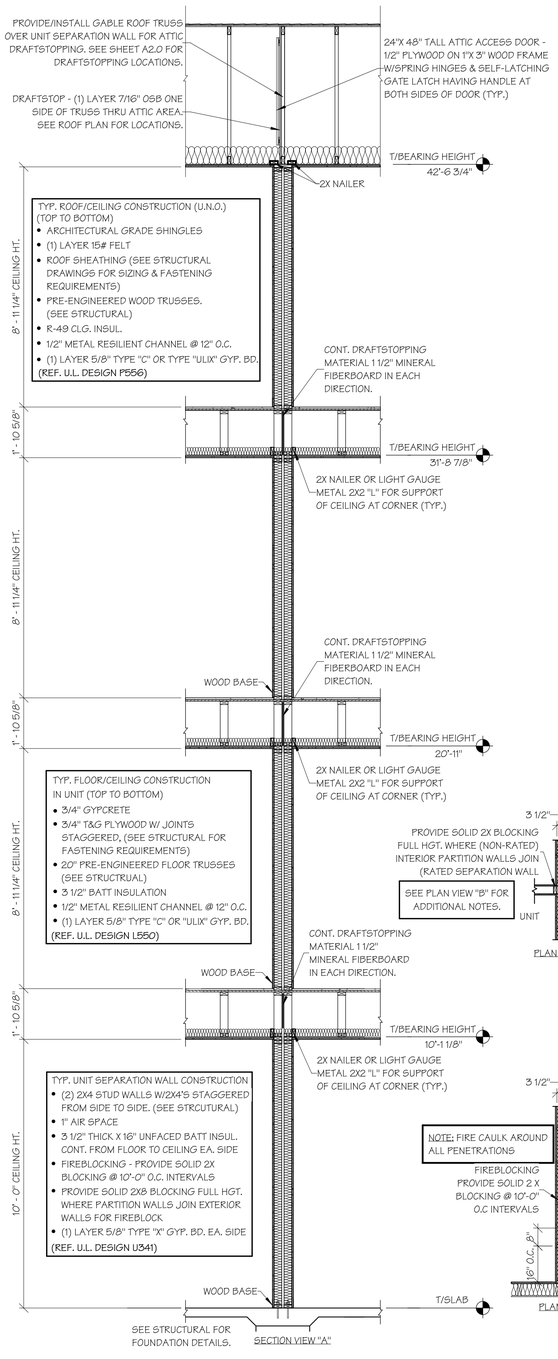
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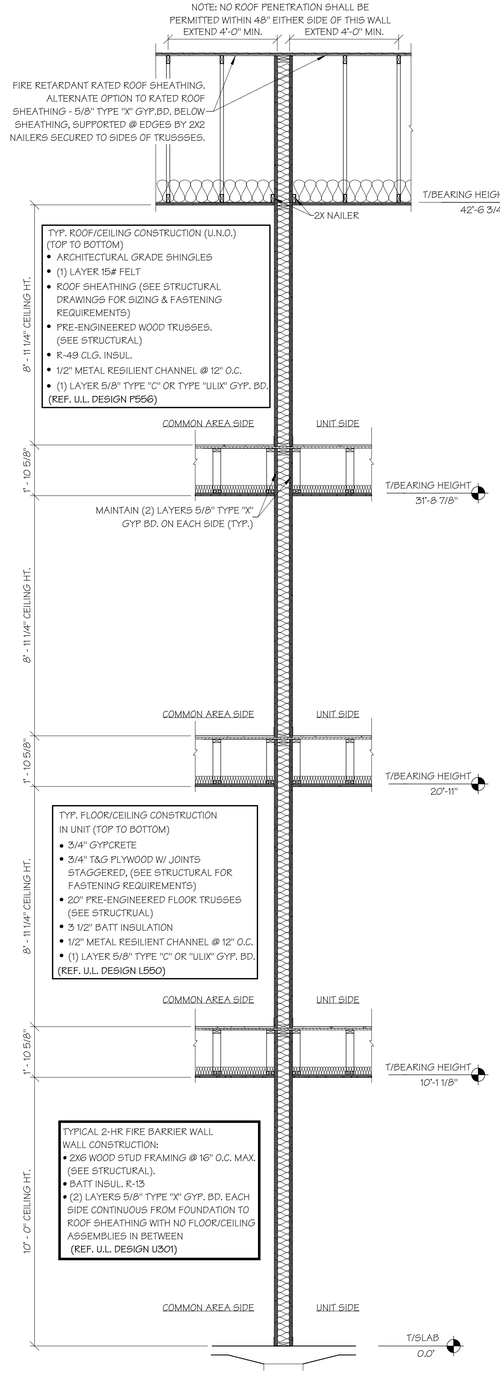
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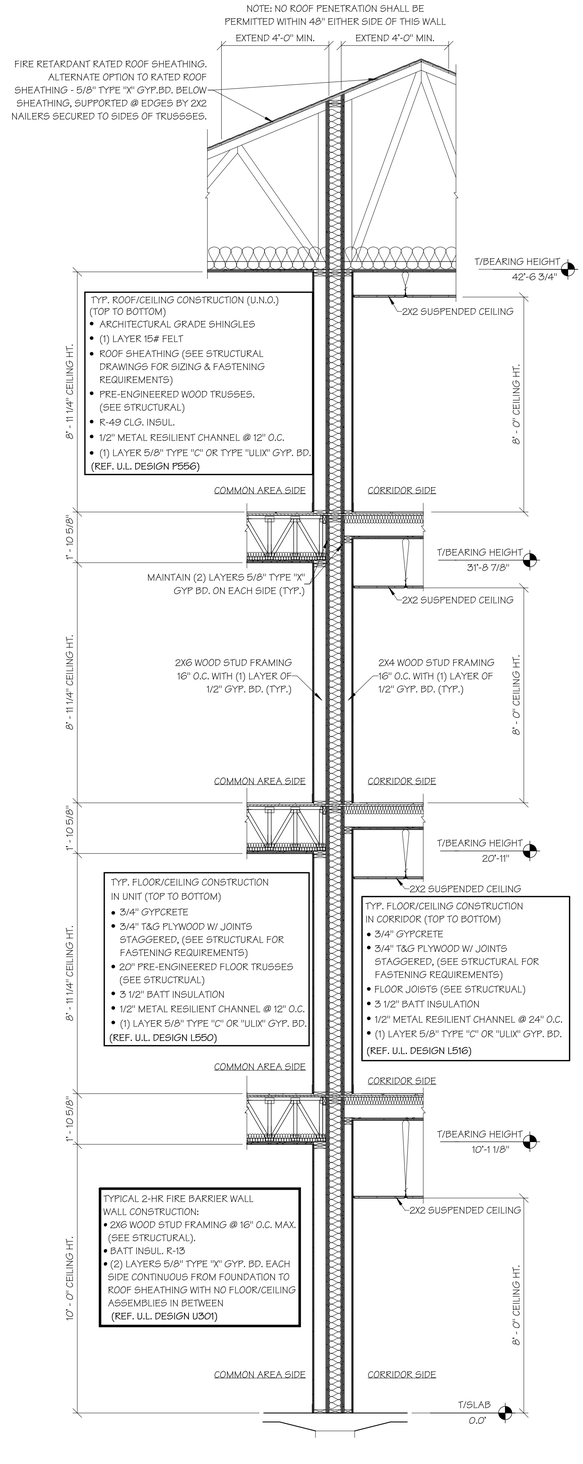
1-HOUR UNIT SEPARATION WALL W/ DRAFTSTOP

1 / A4.2 SCALE: 3/8" = 1'-0"



2-HR FIRE WALL SECTION A

2 / A4.2 SCALE: 3/8" = 1'-0"



2-HR FIRE WALL SECTION B

3 / A4.2 SCALE: 3/8" = 1'-0"

REGISTERED ARCHITECT MARTIN RANDALL PORTER 24139 STATE OF TEXAS
25 OCT 2024
MARTIN RANDALL PORTER
ARCHITECT LICENSE #24739

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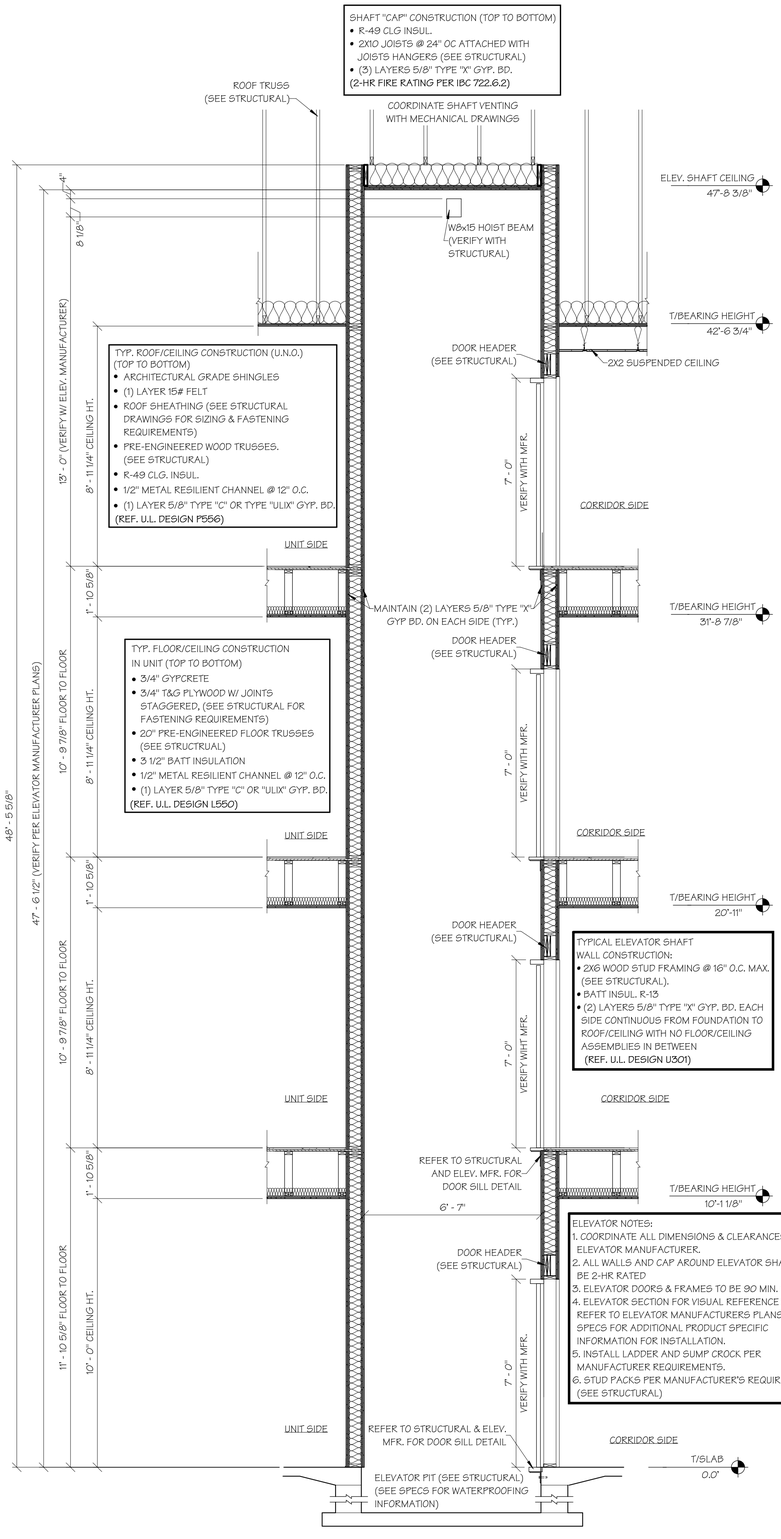
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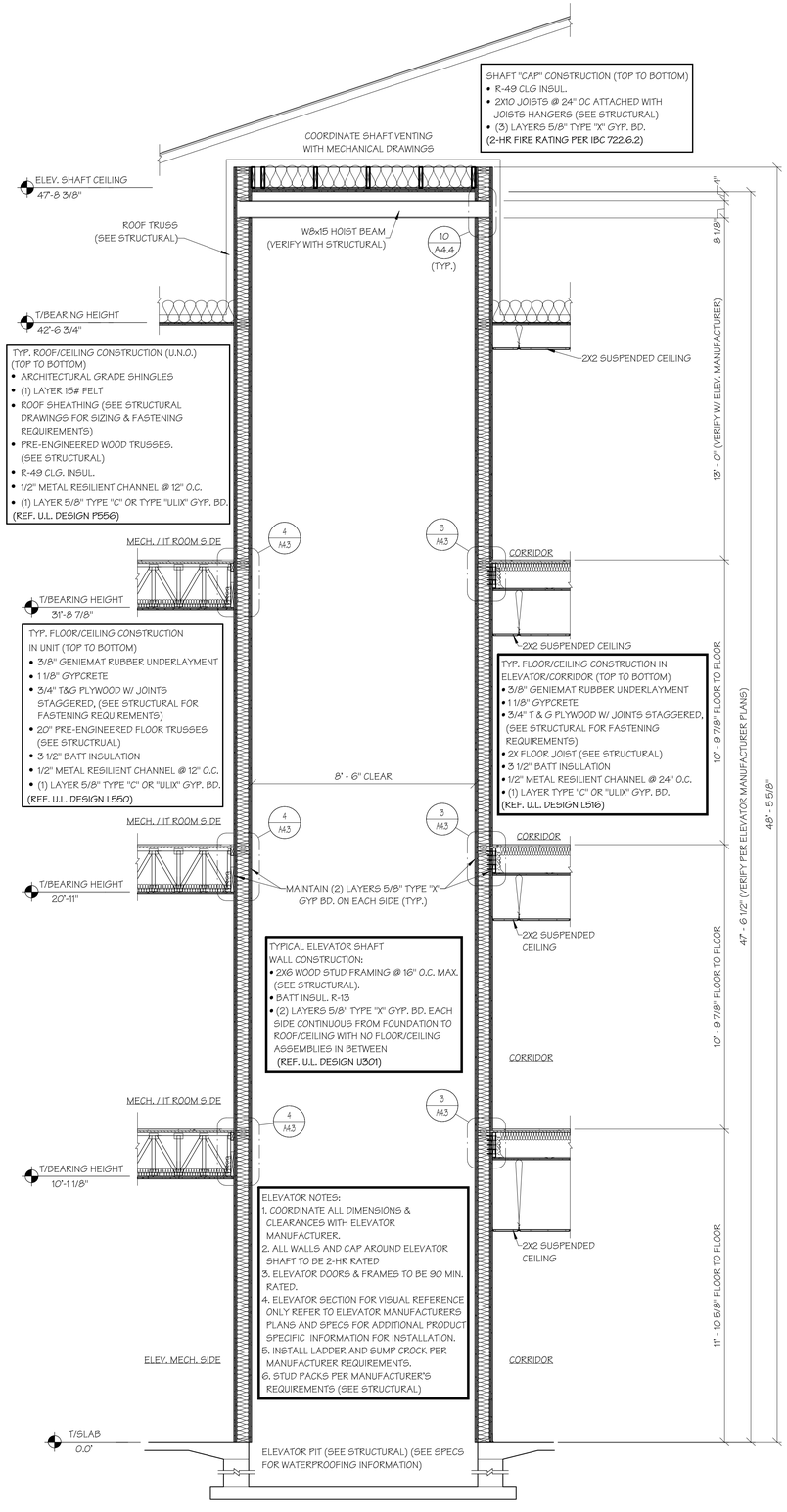
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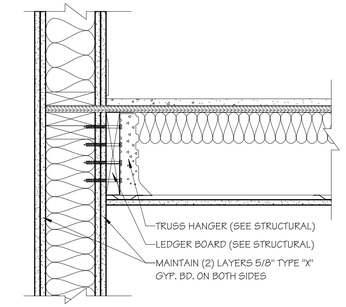
1 A4.3 SCALE: 3/8" = 1'-0"

2-HR ELEVATOR SHAFT SECTION A



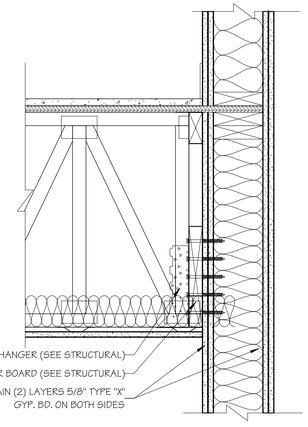
2 A4.3 SCALE: 3/8" = 1'-0"

2-HR ELEVATOR SHAFT SECTION B



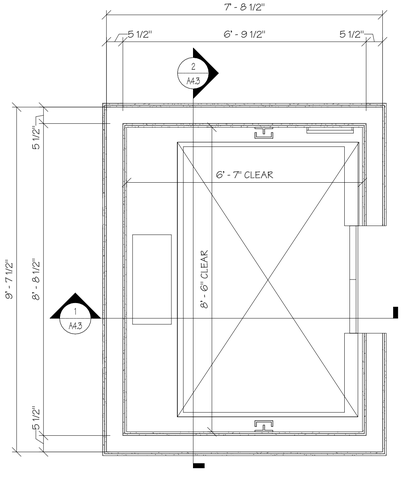
3 A4.3 SCALE: 1 1/2" = 1'-0"

FLOOR JOIST CONNECTION



4 A4.3 SCALE: 1 1/2" = 1'-0"

FLOOR TRUSS CONNECTION



5 A4.3 SCALE: 1/2" = 1'-0"

ELEVATOR SHAFT

REGISTERED ARCHITECT MARTIN RANDALL PORTER #24739 STATE OF TEXAS
25 OCT 2024
MARTIN RANDALL PORTER
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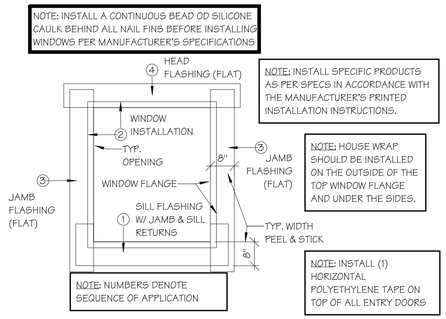
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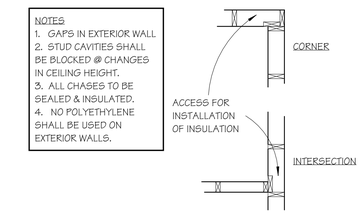
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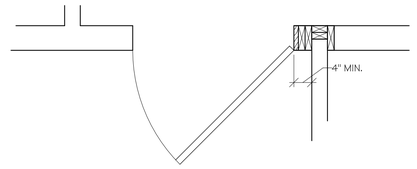
1 A4.4 SCALE: 1/2" = 1'-0"

WINDOW FLASHING



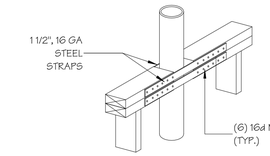
2 A4.4 SCALE: 1/2" = 1'-0"

EXT. WALL / ADVANCED FRAMING DETAIL



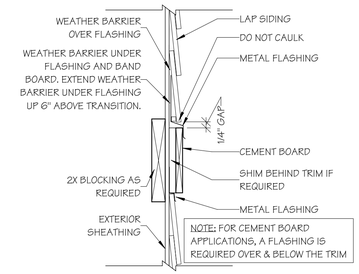
3 A4.4 SCALE: 3/4" = 1'-0"

TYP. DOOR FRAMING DETAIL



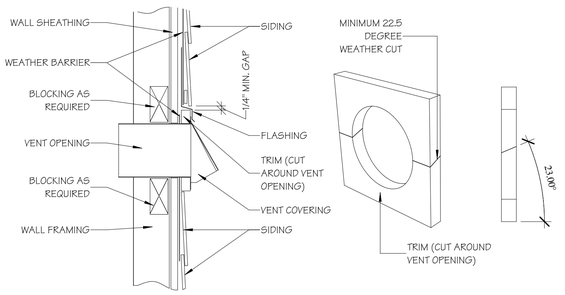
4 A4.4 SCALE: 1" = 1'-0"

PLATE CUT DETAIL



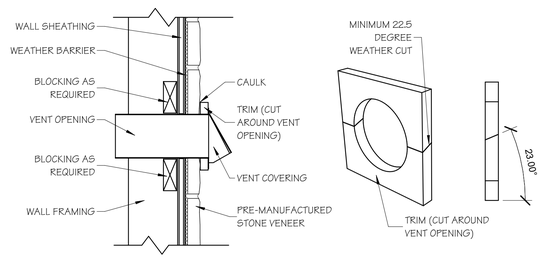
5 A4.4 SCALE: 1 1/2" = 1'-0"

BAND BOARD DETAIL



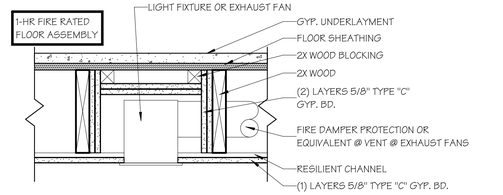
6 A4.4 SCALE: 1/2" = 1'-0"

DRYER VENT IN SIDING DETAIL



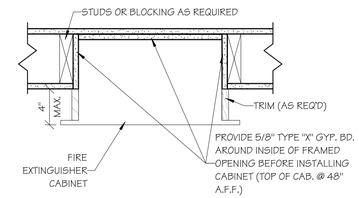
7 A4.4 SCALE: 1 1/2" = 1'-0"

DRYER VENT IN STONE DETAIL



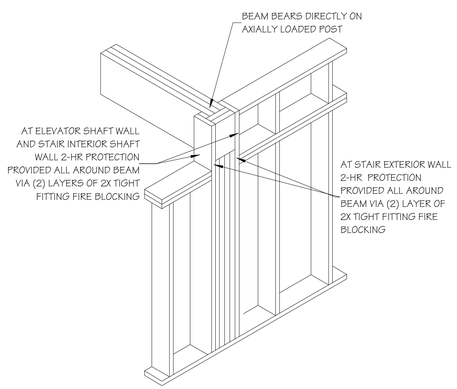
8 A4.4 SCALE: 1 1/2" = 1'-0"

1 HOUR FIRE RATED ENCLOSURE FOR RECESSED FIXTURES



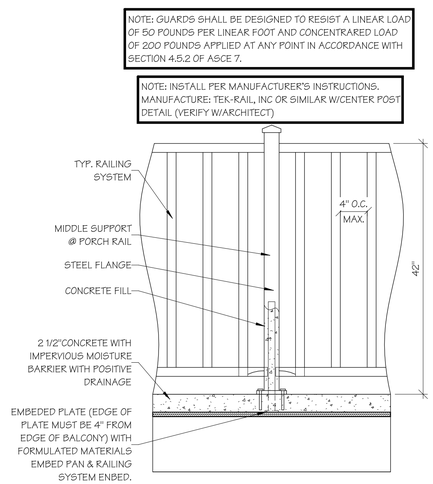
9 A4.4 SCALE: 1 1/2" = 1'-0"

FIRE EXTINGUISHER CABINET DETAIL



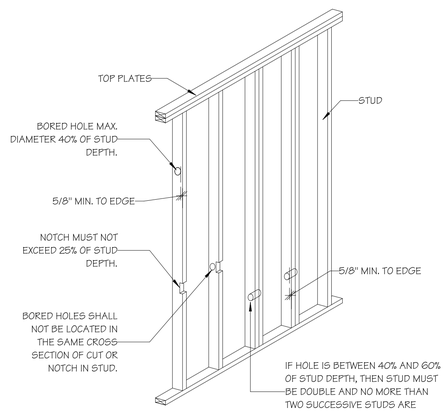
10 A4.4 SCALE: 1/2" = 1'-0"

SHAFT BEAM PENETRATION



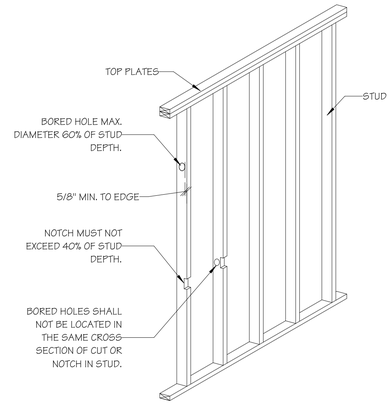
11 A4.4 SCALE: 1" = 1'-0"

CENTER POST RAILING DETAIL



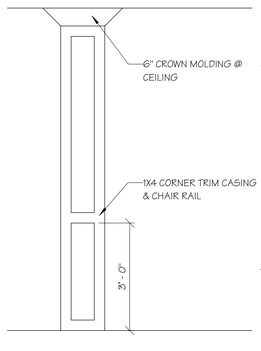
12 A4.4 SCALE: 1/2" = 1'-0"

LOAD BEARING WALL NOTCHING & BORING HOLE DETAILS



13 A4.4 SCALE: 1/2" = 1'-0"

NON-LOAD BEARING WALL NOTCHING & BORING HOLE DETAILS



14 A4.4 SCALE: 1/2" = 1'-0"

COMMON ARE COLUMN DETAIL

REGISTERED ARCHITECT MARTIN RANDALL PORTER #24739 STATE OF TEXAS
25 OCT 2024
MARTIN RANDALL PORTER
ARCHITECT LICENSE #24739

DASHWOOD TRAILS
HOUSTON, HARRIS COUNTY, TEXAS

Wallace ARCHITECTS LLC
Columbia, MO
P 573-256-7200
TEXAS STATE CERTIFICATE OF AUTHORITY: BR 159

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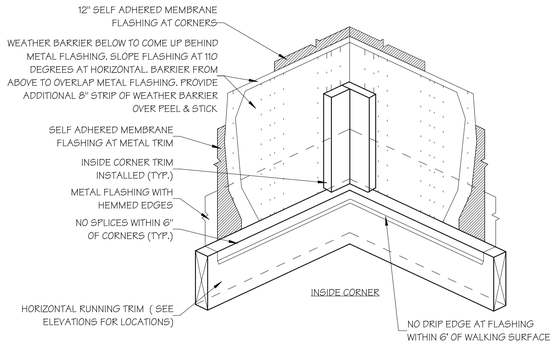
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SHEET NO. A4.4

JOB NO. 4809

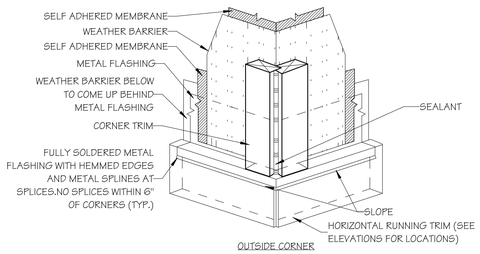
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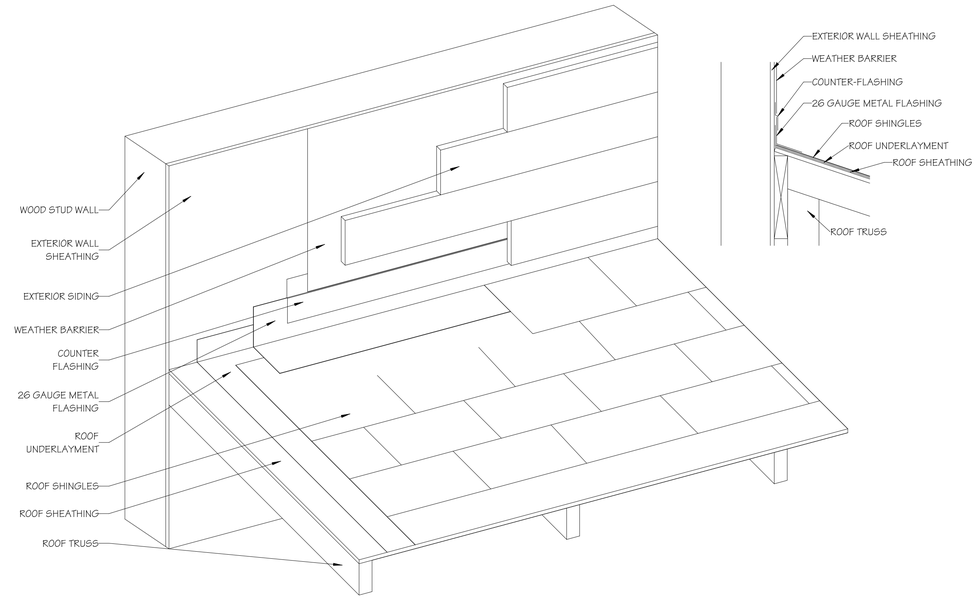
INSIDE CORNER FLASHING AND TRIM @ SIDING

1 / A4.5 SCALE: 1 1/2" = 1'-0"



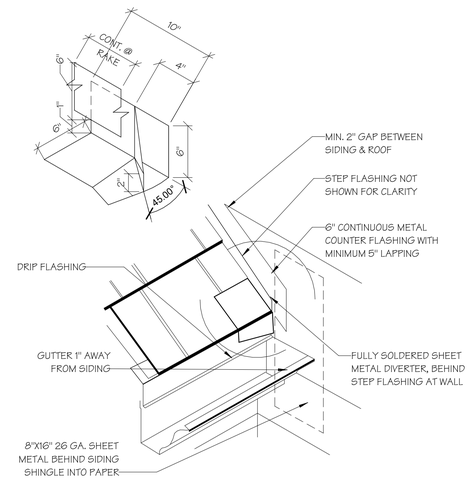
OUTSIDE CORNER FLASHING AND TRIM @ SIDING

2 / A4.5 SCALE: 1 1/2" = 1'-0"



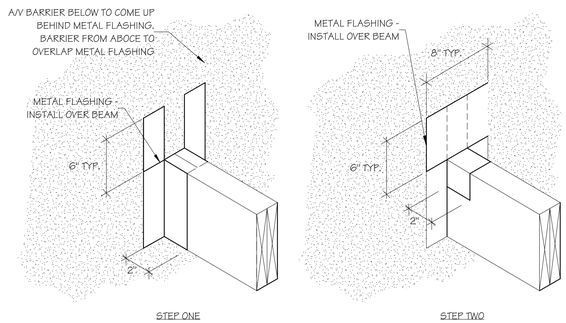
HEADWALL FLASHING DETAIL

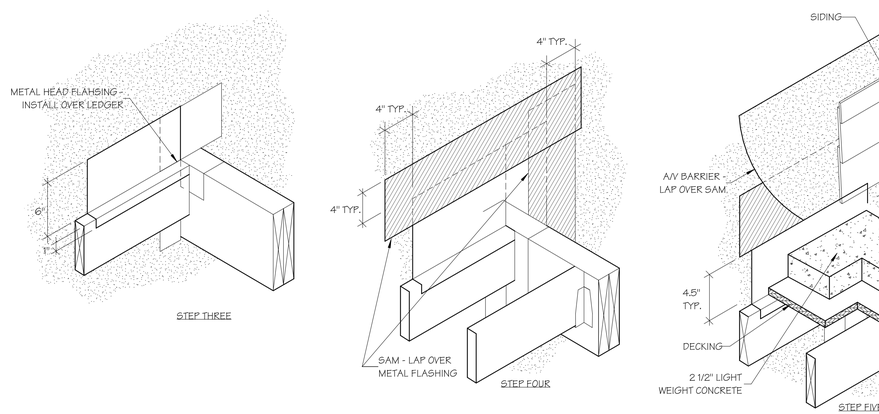
3 / A4.5 SCALE: 1 1/2" = 1'-0"



ROOF DIVERTER FLASHING

4 / A4.5 SCALE: 1 1/2" = 1'-0"





FLASHING AT DECK LEDGER

5 / A4.5 SCALE: 1 1/2" = 1'-0"

MARTIN RANDALL PORTER
ARCHITECT LICENSE #24739

25 OCT 2024

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HOUSTON, HARRIS COUNTY, TEXAS

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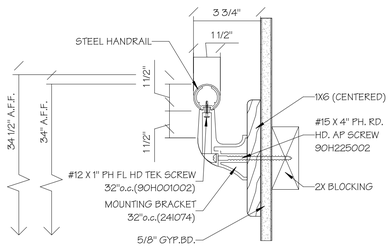
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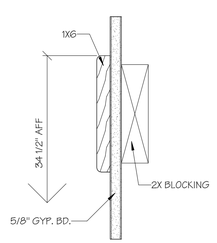
STAIR NOTES

1)	DIMENSIONS ARE FROM FACE OF GYP., NOSE OF TREAD AND END OF HANDRAIL U.N.O.
2)	LEFT SIDE STAIRS ARE REVERSED FROM RIGHT SIDE STAIRS.
3)	SEE BUILDING PLANS FOR ORIENTATION OF STAIRS.
4)	1 1/2" DIAMETER STEEL HANDRAILS ARE MOUNTED SO THAT THE TOP OF HANDRAIL IS 34" A.F.F. ON BOTH SIDES OF STAIR FLIGHTS.
5)	HANDRAILS AT BOTTOM & INTERMEDIATE LANDINGS OF STAIR FLIGHTS SHALL EXTEND 23" BEYOND THE NOSE OF THE BOTTOM...
6)	HANDRAILS AT TOP OF STAIR FLIGHTS SHALL EXTEND 12" BEYOND THE NOSE AT THE TOP LANDING.
7)	CENTER HANDRAILS SHALL WRAP AROUND AS SHOWN.
8)	MAINTAIN UNIFORM STAIR RISER HEIGHT WITHIN 3/8" BETWEEN LANDINGS. ADJUST THE TOP AND BOTTOM RISERS ACCORDING TO FINISH FLOOR HEIGHT AS NEEDED.
9)	PROVIDE SIGNAGE AT EACH FLOOR.



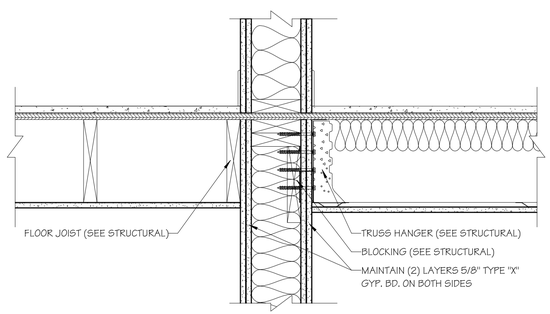
1 A4.6 HANDRAIL DETAIL

SCALE: 3" = 1'-0"



2 A4.6 WOOD CHAIR RAIL

SCALE: 3" = 1'-0"



3 A4.6 STAIR LANDING CONNECTION1

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

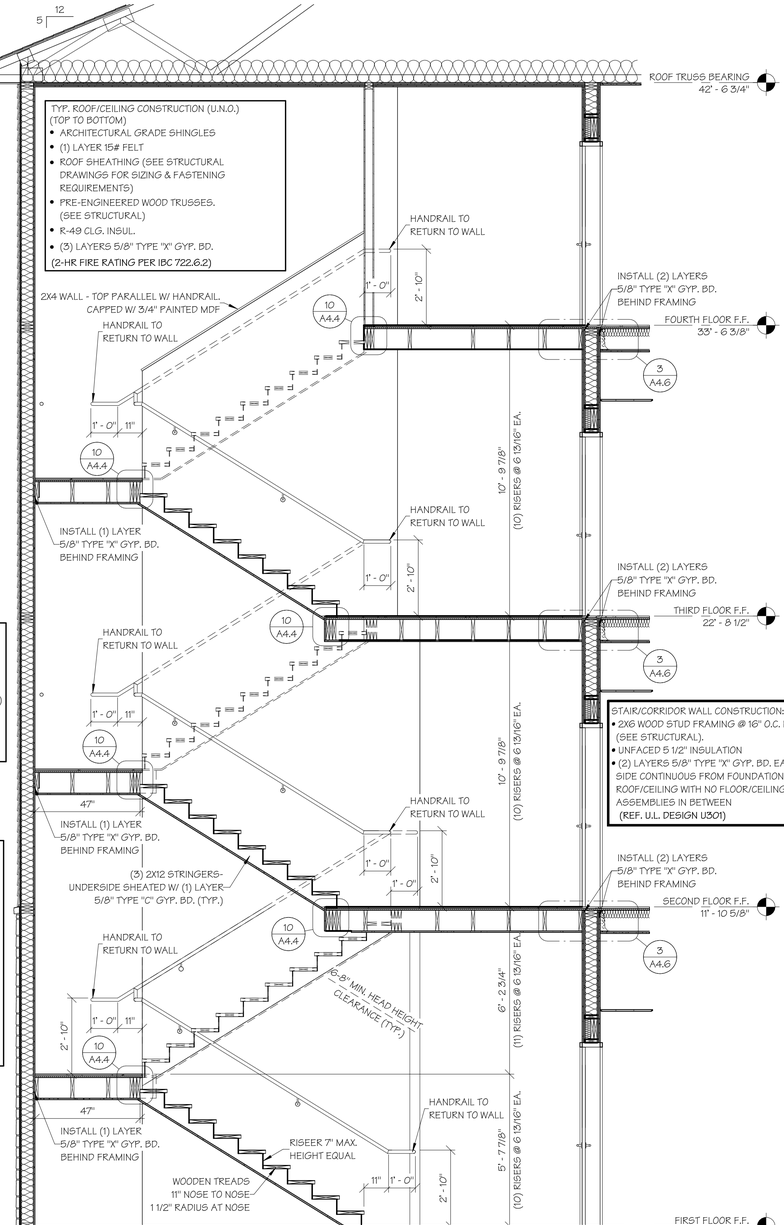
STAIR SHAFT NOTES:

1. THE FIRE RATING OF THE SHAFT ENCLOSURE SHALL BE MAINTAINED CONTINUOUS ON BOTH SIDES OF WALLS FROM THE SHAFT BASE TO SHAFT CEILING THROUGH CONCEALED SPACES.
2. PENETRATIONS OTHER THAN THOSE NECESSARY FOR THE PURPOSE OF THE SHAFT SHALL NOT BE PERMITTED.
3. STRUCTURAL PENETRATIONS OUTSIDE OF THE SHAFT OTHER THAN FLOOR SHEATHING SHALL NOT BE PERMITTED.
4. STRUCTURAL MEMBRANE PENETRATIONS INSIDE THE SHAFT SHALL HAVE TIGHT FITTING 2X FIRE BLOCKING ON ALL SIDES INSIDE A RATED SHAFT WALL OR CEILING; (1) LAYER 2X FIRE BLOCKING.
5. MEMBRANE PENETRATIONS BY STRUCTURAL ELEMENTS SUCH AS FLOOR SHEATHING, BEAMS OR JOISTS ON THE INSIDE OF THE SHAFT WALLS ARE PERMITTED. FLOOR SHEATHING SHALL BE TIGHT FITTING. BEAMS AND JOISTS SHALL BE FIRE CAULKED AT FIRE RATED WALLS OR CEILING.
6. 2X NON-STRUCTURAL FIRE BLOCKING WITH TIGHT FITTING JOINTS BETWEEN FRAMING MEMBERS CAN BE USED IN LIEU OF 5/8" TYPE "X" GYPSUM BOARD FIRE BLOCKING: (1) LAYER 2X FIRE BLOCKING.
7. EXPOSED 2X NON-STRUCTURAL FIRE BLOCKING WITH TIGHT FITTING JOINTS INSTALLED IN LIEU OF GYPSUM BOARD SHALL BE FIRE CAULKED AND ALIGNED WITH GYPSUM BOARD ABOVE AND BELOW.
8. OUTSIDE OF FIRE RATED SHAFT WALL AT FLOOR/CEILING INTERSECTIONS, PROVIDE CONTINUOUS 5/8" TYPE "X" GYPSUM BOARD OR 2X NONSTRUCTURAL FIRE BLOCKING TO MAINTAIN FIRE RATING.
9. ELECTRICAL PENETRATIONS OF SHAFT WALL AND CEILING, ELECTRICAL BOXES SHALL BE FIRE RATED ELECTRICAL BOXES OR PROVIDE FIRE RATED PUTTY PACKS TO MAINTAIN FIRE RATING.
10. ANY GAPS IN FIRE BLOCKING WITH FRAMING MEMBERS AND GYPSUM BOARD SHALL BE FIRE CAULKED.

STAIR LANDING CONSTRUCTION (TOP TO BOTTOM)
- 3/4" GYPCRETE
- 3/4" T&G PLYWOOD W/ JOINTS STAGGERED, (SEE STRUCTURAL FOR FASTENING REQUIREMENTS)
- 2X10 FLOOR JOIST @ 16" O.C. (SEE STRUCTURAL)
- (1) LAYER 5/8" TYPE "C" OR "ULIX" GYP. BD.

BRICK & SIDING EXTERIOR WALL CONSTRUCTION (EXTERIOR TO INTERIOR)
- @ UPPER WALL FIBER CEMENT SIDING (SEE SPECS)
- @ LOWER WALL PRE-MANUFACTURED STONE VENEER AND STONE VENEER SILL (ATTACH PER MANUF. SPECS)
- (1) LAYER WEATHER BARRIER
- EXTERIOR WALL SHEATHING (REFER TO STRUCTURAL FOR SHEAR WALL LOCATIONS & FASTENING REQUIREMENTS.)
- 2X6 WOOD STUD FRAMING @ 16" O.C. MAX. (SEE STRUCTURAL)
- BATT INSUL. R-13 MIN.
- (1) LAYER 5/8" TYPE "X" GYP. BD.

(REF. U.L. DESIGN U356)



4 A4.6 STAIR SHAFT SECTION

SCALE: 3/8" = 1'-0"

REGISTERED ARCHITECT MARTIN RANDALL PORTER 24739 STATE OF TEXAS

25 OCT 2024

MARTIN RANDALL PORTER
ARCHITECT LICENSE #24739

DASHWOOD TRAILS
HOUSTON, HARRIS COUNTY, TEXAS

Wallace ARCHITECTS LLC
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SHEET NO. A4.6

JOB NO. 4809

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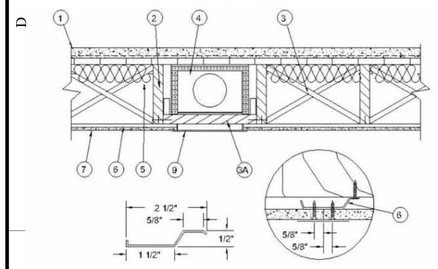
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Design No. **L516**

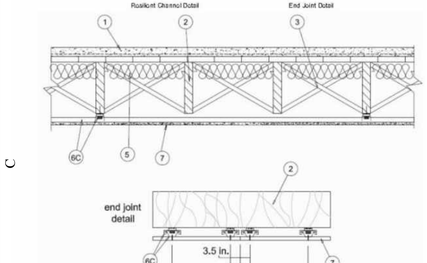
September 26, 2024

Unrestrained Assembly Rating — 1 Hr.
Finish Rating — 28 Min. or (16 Min. See Item 7B)
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.**



Rosklot Channel Detail — End Joint Detail



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

System No. 1

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 joists with joints staggered.

Wire Reinforcement — Hexagonal mesh constructed of No. 19 SWG galv steel wire with No. 16 SWG galv steel wire woven longitudinally into the mesh spaced 3 in. OC. Mesh installed with No. 16 SWG wires perpendicular to joists and lapped 5 in. at the sides.

Sheathing Material* — Polyethylene film vapor barrier.

See **Sheathing Materials** (BVDV) Category in the Building Materials Directory for names of manufacturers.

Finish Flooring Perlite Concrete — Min 1-5/8 in. thickness of perlite-sand concrete, having a min compressive strength of 2000 psi. Mixture shall consist of 1 part Portland cement, 2 parts sand and 3 parts **Perlite Aggregate***.

See **Perlite Aggregate** (CFFX) category for names of manufacturers.

System No. 2

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 joists with joints staggered.

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 12 in. with adjacent sub-floor joints.

HOMASOTE CO — Type 440-32 Mineral and Fiber Board

System No. 3

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 joists with joints staggered.

Floor Mat Materials* — (Optional) — Floor mat material nom 5/64 in. (2mm) 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. (6mm) 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. (32mm) 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 min of 3/4 in. (19mm)

HACKER INDUSTRIES INC — FIRM-FILL SCM 125

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

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

Alternate Floor Mat Materials - (Optional) — Floor mat material nom 3/8 in. (10mm) 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. (19mm) thick loose laid over the subfloor. Floor topping thickness shall be a min of 1-1/2 in. (38mm)

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

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 the floor mat.

Finish Flooring - Floor Topping Mixture* — Min 3/4 in. thickness of floor topping mixture having a min compressive strength of 1100 psi. Mixture shall consist of 6.8 gal of water to 80 lbs of floor topping mixture to 1.9 cu ft of sand.

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

System No. 4

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 joists with joints staggered.

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 — Type 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 reinforcement.

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 material.

System No. 5

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 joists with joints staggered.

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

Finish Flooring — Floor Topping Mixture* — Min 3/4 in. thickness of floor topping mixture having a min compressive strength of 1000 psi. Refer to manufacturer's instructions accompanying the material for specific mix design.

FORMULATED MATERIALS LLC — FR-25, FR-30, SiteMix, and Treadstone Advantage

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 3/4 in.

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

System No. 6

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 joists with joints staggered.

Vapor Barrier — (Optional) - Nom 0.010 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 1800 psi. Refer to manufacturer's instructions accompanying the material for specific mix design.

UNITED STATES GYPSUM CO — Types LRK, HSLRK, CSD

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

Alternate Floor Mat Materials* — (Optional) - Nom 3/8 in. thick floor mat material loose laid over the subfloor.

GRASSWORX L L C — Type SC50

System No. 7

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 joists with joints staggered.

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

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

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

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

Alternate Floor Mat Materials* — (Optional) - Floor mat material Nom. 3/8 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 1 in.

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

Alternate Floor Mat Materials* — (Optional) - Floor mat material Nom. 3/4 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 1-1/2 in.

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

Alternate Floor Mat Materials* — (Optional) - Floor mat material Nom. 1/8 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 3/4 in.

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

Alternate Floor Mat Materials* — (Optional) - Floor mat material Nom. 1/4 in. entangled net core with a compressible fabric attached to the bottom loose laid over the subfloor. Floor topping thickness shall be a minimum of 1 in.

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

System No. 8

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 joists with joints staggered.

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

Finish Flooring - Floor Topping Mixture* — Min 3/4 in. thickness of floor topping mixture 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®, AccuLevel® Types G40, G50 and SD30

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 3/4 in.

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

System No. 9

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.

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

GEORGIA-PACIFIC GYPSUM L L C — Type DS

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

MAXXON CORP — Type Encapsulated Sound Mat.

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 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 from the joints of the subfloor.

GEORGIA-PACIFIC GYPSUM L L C — Type DS

System No. 10

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 joists with joists staggered.

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

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.
DEPENDABLE LLC — Types GSL M3.4, GSL K2.6, GSL -CSD and GSL RH

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

Alternate Floor Mat Materials* — (Optional) — Floor mat material Nom. 3/8 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 1 in.
KEENE BUILDING PRODUCTS CO INC — Types Quiet Qurl 60/040 and Quiet Qurl 60/040 N

Alternate Floor Mat Materials* — (Optional) — Floor mat material Nom. 3/4 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 1-1/2 in.
KEENE BUILDING PRODUCTS CO INC — Types Quiet Qurl 65/075, Quiet Qurl 65/075 N

Alternate Floor Mat Materials* — (Optional) — Floor mat material Nom. 1/8 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 3/4 in.
KEENE BUILDING PRODUCTS CO INC — Types Quiet Qurl 52/013 and Quiet Qurl 52/013 N

Alternate Floor Mat Materials* — (Optional) — Floor mat material Nom. 1/4 in. entangled net core with a compressible fabric attached to the bottom loose laid over the subfloor. Floor topping thickness shall be a minimum of 1 in.
KEENE BUILDING PRODUCTS CO INC — Types Quiet Qurl 55/025 MT and Quiet Qurl 55/025 N MT

System No. 11

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 joists with joints staggered.

Finish Flooring* — Floor Topping Materials — Min 3/4 in. to 1-1/2 in. thickness of any Floor Topping Mixture bearing the UL Classification Marking as to Fire Resistance with a minimum compressive strength of 1500 psi.
See **Floor- and Roof-Topping Mixtures** (CCOX) category for names of Classified Companies.

Floor Mat Materials* — (Optional) — Floor mat material nom 1/8 in. to 3/4 in. thick. Loose laid over the subfloor. When used, Acousti-flor CSM (crack suppression mat) is loose laid over the floor mat material. Floor topping material thickness is dependent on thickness of floor mat used.
WALFLOR INDUSTRIES INC — Type Acousti-flor, Acousti-flor CSM. Floor topping thickness depends on products used as follows:

Acousti-flor (1/8 in. thick) - Floor topping thickness shall be a minimum of 3/4 in.

Acousti-flor (1/4 in. thick) - Floor topping thickness shall be a minimum of 1 in.

Acousti-flor (3/8 in. thick) - Floor topping thickness shall be a minimum of 1 in.

Acousti-flor (3/4 in. thick) - Floor topping thickness shall be a minimum of 1-1/2 in.

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.

System No. 12

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 joists with joints staggered.

Finish Flooring - Floor Topping Mixture* — Min 3/4 in. thickness of floor topping mixture having a min compressive strength of 1000 psi. Refer to manufacturer's instructions accompanying the material for specific mix design.

ALPHAGYP, LLC — Type AG3000

System No. 12

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 joists with joints staggered.

Finish Flooring - Floor Topping Mixture* — Min 1 in. thickness of floor topping mixture having a min compressive strength of 4500 psi. Refer to manufacturer's instructions accompanying the material for specific mix design.
SIKA DEUTSCHLAND GMBH — Type SCHONOX AP Rapid Plus

System No. 13

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 joists with joints staggered.

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

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.
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.
Freudenberg Performance Materials LP — 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.

2. **Wood Joists —** Min 2 by 10, spaced 16 in. OC and effectively fireblocked in accordance with local codes.

3. **Cross Bridging —** Min 1 by 3 in. or min 2 by 10 in. solid blocking.

3A. **Horizontal Bridging —** Used in lieu of Item 3 in same joist bay as ceiling damper (Item 4), when ceiling damper is employed. Wood 2 by 4 in. secured between joists with nails.

4. **Ceiling Damper* - (Optional) —** Max nom area shall be 198 sq in. Max rectangular size shall be 12 in. wide by 16-1/2 in. long. Max height of damper shall be 8-3/4 in. Aggregate damper openings shall not exceed 99 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.
AIR BALANCE INC — Type 299 (See Item 7B)

AIR KING VENTILATION PRODUCTS — Series FRAS, Series FRAK, Series FRAKV

CENTRAL VENTILATION SYSTEMS CO L L C — Models C-S/R-HC(-A), C-RD-HC(-A)

JAMIL ALI NASSER AL-ZADJALI FOR INDUSTRY— Models C-S/R-HC(-A), C-RD-HC(-A)

BADR & ASFOUR COMPANY FOR ENGINEERING AND METAL INDUSTRIES — Models C-S/R-HC(-A), C-RD-HC(-A)

GREENHECK FAN CORP — Model CRD-1WJ

METAL-FAB INC — Models MSCDHC, MRCDHC

BRISK MFG INC — Model BMI-50-CRD-S/R-WT

PRICE INDUSTRIES LTD — Models CD-S/R-HC, CD-RD-HC

RUSKIN COMPANY — Model CFD7

UNITED ENERTECH CORP — Models C-S/R-HC(-A), C-RD-HC(-A)

5. **Batts and Blankets* - (Optional) —** Nom 48 by 16 by 3 in. thickness of glass fiber batts secured to joists on both sides with staples spaced 12 in. OC.
CERTAINTEED CORP

KNAUF INSULATION LLC

JOHNS MANVILLE

KNAUF INSULATION LLC

MANSON INSULATION INC

OWENS CORNING

6. **Resilient Channels —** Resilient channels, formed from No. 25 MSG galv steel and shaped as shown, spaced 24 in. OC perpendicular to joists. Channels overlapped 1/2 in. at ends and secured to each joist with one 1-1/4 in. long No. 7 Type S bugle head screw. Additional resilient channels positioned so as to coincide with end joints of gypsum board (Item 7). Additional channels shall extend min 3 in. beyond each side edge of board.

6A. **Steel Framing Members* —** (Not Shown) - As an alternate to Item 6. Used with Item 7A only.
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 joists and Cold Rolled Channels (Item 6Ab). 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. Optional Batts and Blankets may be draped over furring channels as described in Item 5. Two layers of gypsum board attached to furring channels as described in Item 7A.

b. **Cold Rolled Channels —** 1-1/2 in. by 1/2 in., formed from No. 16 ga. galv steel, positioned vertically and parallel to joists, friction-fitted into the channel caddy on the Steel Framing Members (Item 6Ad). 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 joist 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 joists (Item 2) at the top and bottom of the blocking at each Steel Framing Member (Item 6Ad) location.

d. **Steel Framing Members* —** Hangers spaced 48 in. OC. max along joist, and secured to the Blocking (Item 6Ac) on alternating joists 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 joists before gypsum board installation. Spring gauge of hanger chosen per manufacturer's instructions.
KINETICS NOISE CONTROL INC — Type ICW.

6B. **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 24 in. OC perpendicular to joists. Channels secured to joists 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 joists (Item 2). Clips spaced 48 in. OC. RSIC-1 and RSIC-1 (2.75) secured to alternating joists 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. RSIC-Si-X secured to alternating joists with No. 10 x 3-1/2 in. coarse screw. 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. 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), RSIC-Si-X.

6C. **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 24 in. OC perpendicular to joists. Channels secured to joists 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 joists (Item 2). Clips spaced 48 in. OC., and secured to alternating joists with No. 8 x 2-1/2 in. coarse drywall screw through the center grommet. Furring channels are friction fitted into clips. Adjoining channels are overlapped as described in Item a. Additional clips required to hold furring channel that supports the gypsum board butt joints, as described in Item 7.
PLITEQ INC — Type GENIECLIP

6D. **Alternate 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, 2-5/8 in. wide by 7/8 in deep, spaced 24 in OC, perpendicular to joists. Channels secured to joists as described in Item b.

b. **Steel Framing Members* —** Used to attach furring channels (Item a) to the wood joists (Item 2). Clips spaced at 48 in. 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 7.
STUDCO BUILDING SYSTEMS — RESILMOUNT Sound Isolation Clips - Type A237 or A237R

6E. **Alternate 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, 2-1/2 in. wide by 7/8 in deep, spaced 24 in OC, perpendicular to joists. Channels secured to joists as described in Item b.

b. **Steel Framing Members* —** Used to attach furring channels (Item a) to the wood joists (Item 2). Clips spaced at 48 in. OC and secured to the bottom of the joists 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

6F. **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 24 in. OC, perpendicular to the joists. 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 positioned 3 in. OC, 1-1/2 in. on each side of gypsum board (Item 7) end joints, 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 joists, friction-fitted into the channel caddy on the Steel Framing Members (Item 6Fc) 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. **Steel Framing Members* —** Spaced 48 in. OC. max along joist, and secured to the joist on alternating joists with two, #10 x 1-1/2 in. screws through mounting holes on the hanger bracket.
PAC INTERNATIONAL L L C — Type RSIC-SI-CRC EZ Clip

6G. **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 24 in. OC perpendicular to joists and friction fit into Steel Framing Members (Item 6Gb). 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 positioned 6 in. OC, 3 in. on each side of gypsum board (Item 7) end joints. 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. **Steel Framing Members* —** Used to attach furring channels (Item 6Ga) to joists. Clips spaced 48 in. OC and secured along joist 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-S1-1 Ultra

7. **Gypsum Board* —** Nom 5/8 in. thick, 48 in. wide gypsum board, installed with long dimension perpendicular to resilient channels and side edges located between joists. Gypsum board secured with 1 in. long No. 7 Type S bugle head screws spaced 12 in. OC. End joints of gypsum board similarly fastened to additional resilient channels positioned at end joint locations. Screws located 3/4 and 5/8 in. from side and end joints, respectively.
When **Steel Framing Members*** (Item 6B, 6C) are used, sheets installed with long dimension perpendicular to furring channels and side joints of sheet located beneath joists. Nom 1 in. long No. 6 Type S bugle head screws are driven through channel spaced 12 in. OC in the field. Gypsum board butt joints shall be staggered min. 2 ft. within the assembly, and occur between the 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 6 in. on each end. The two furring channels shall be spaced approximately 3-1/2 in. OC, and be attached to the joist with one clip at each end of the channel. Screw spacing along the butt joint to attach the gypsum board to the furring channels shall be 8 in. OC.

When **Steel Framing Members** (Item 6D) 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 6E) 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 joist beyond the width of the gypsum board and be attached to the adjacent joists with one SonusClip at every joist involved with the butt joint.

When **Steel Framing Members** (Item 6F) 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 6G) 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

CERTAINTEED GYPSUM INC — Type C

CGC INC — Type 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 eXP-C, FSK-C, FSW-C, FSW-G

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

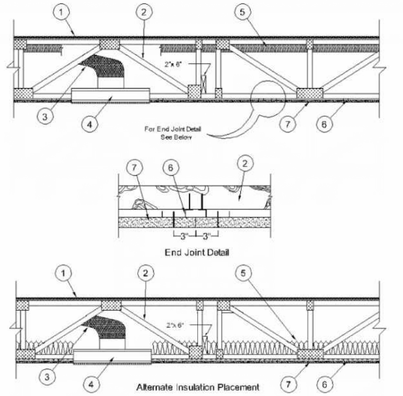
7A. **Gypsum Board* —** When **Steel Framing Members** (Item 6A) are used, two layers of nom 5/8 in. thick, 4 ft wide gypsum board are installed with long dimensions perpendicular to furring channels (Item 6Aa). Base layer attached to the furring channels using 1 in. long Type S bugle head steel screws 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.
CGC INC — Type C, IP-X2, IPC-AR

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

Design No. L550

Unrestrained Assembly Rating — 1 Hr.
Finish Rating — 23 Min (See Items 5 or 5A and 7), 20 Min. (See Items 6E and 7A)
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.**



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

System No. 1

Subflooring — Nom 23/32 in. thick wood structural panels installed perpendicular to trusses with end joints staggered. Plywood or 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.

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

Finish Flooring — Min 1 by 4 in. T & G lumber fastened diagonally to trusses, or min 15/32 in. plywood, min grade "Underlayment" or "Sturd-I-Floor" with T & G edges and conforming to PS1-83 specifications, or nonveneer APA rated Sturd-I-Floor, T & G panels per APA specifications PRP-108. Face grain of plywood to be perpendicular to trusses with joints staggered.

System No. 2

Subflooring — Nom 23/32 in. thick wood structural panels installed perpendicular to trusses with end joints staggered. Plywood or 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.

Vapor Barrier — (Optional) — Nom 0.010 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 1800 psi. Refer to manufacturer's instructions accompanying the material for specific mix design.

Subflooring — Nom 23/32 in. thick wood structural panels installed perpendicular to trusses with end joints staggered. Plywood or panels
UNITED STATES GYPSUM CO — Types LRK, HSLRK, CSD

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

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

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

GRASSWORX L L C — SC Types

System No. 3

Structural Cement-Fiber Units* — Nom 3/4 in. thick, with long edges tongue and grooved. Long dimension of panels to be perpendicular to wood trusses with end joints staggered a min of 2 ft and centered over the trusses. Panels secured to wood trusses with 1-5/8 in. long, No. 8, self-countersinking wood screw spaced a max of 12 in. OC in the field with a screw located 1 in. and 2 in. from each edge, and 8 in. OC on the perimeter with a screw located 2 in. from each edge, located 1/2 in. from the end edges of the panel.

UNITED STATES GYPSUM CO — Type STRUCTO-CRETE or USGSP

Finish Flooring* — Floor Topping Mixture — Min 3/4 in. thickness of floor topping mixture having a minimum compressive strength of 1800 psi. Refer to manufacturer's instructions accompanying the material for specific mix design.

UNITED STATES GYPSUM CO — Types LRK, HSLRK, CSD

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

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

System No. 4

Structural Cement-Fiber Units* — Nom 3/4 in. thick, with long edges tongue and grooved. Long dimension of panels to be perpendicular to wood trusses with end joints staggered a min of 2 ft and centered over the trusses. Panels secured to wood trusses with 1-5/8 in. long, No. 8, self-countersinking wood screw spaced a max of 12 in. OC in the field with a screw located 1 in. and 2 in. from each edge, and 8 in. OC on the perimeter with a screw located 2 in. from each edge, located 1/2 in. from the end edges of the panel.

UNITED STATES GYPSUM CO — Types STRUCTO-CRETE or USGSP

System No. 5

Subflooring — Min 23/32 in. thick plywood with T & G edges along the 8 ft sides and exterior glue or nonveneer APA Sturd-I-Floor T & G panels per APA specifications PRP 108. Face grain of plywood or strength axis of panel to be perpendicular to trusses with joints staggered 4 ft. Plywood or panels secured to trusses with construction adhesive and No. 6d ring 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.

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

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. (3 mm) thick loose laid over the subfloor. Floor topping thickness shall be a min of 3/4 in. (19 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 subfloor. Floor topping thickness shall be a min of 1 in. (25 mm).

HACKER INDUSTRIES INC — Type FIRM-FILL SCM 250, Quiet Quiet 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. (32 mm).

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 a min of 1-1/2 in. (38 mm).

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

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 the floor mat.

Finish Flooring* — Floor Topping Mixture — Min 3/4 in. thickness of floor topping mixture having a min compressive strength of 1100 psi. Mixture shall consist of 6.8 gal of water to 80 lbs of floor topping mixture to 1.9 cu ft of sand.

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

System No. 6

Deleted.

System No. 7

Subflooring — Min 23/32 in. thick plywood with T & G edges along the 8 ft sides and exterior glue or nonveneer APA Sturd-I-Floor T & G panels per APA specifications PRP 108. Face grain of plywood or strength axis of panel to be perpendicular to trusses with joints staggered 4 ft. Plywood or panels secured to trusses with construction adhesive and No. 6d ring 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.

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 12 in. with adjacent sub-floor joints.

HOMASOTE CO — Type 440-32 Mineral and Fiber Board

System No. 8

Subflooring — Min 23/32 in. thick T & G wood structural panels installed perpendicular to trusses with joints staggered 4 ft. Plywood or nonveneer APA rated panels secured to trusses with construction adhesive and No. 6d ring 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.

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 pluc 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

System No. 9

Subflooring — Min 23/32 in. thick T & G wood structural panels installed perpendicular to trusses with joints staggered 4 ft. Plywood or nonveneer APA rated panels secured to trusses with construction adhesive and No. 6d ring 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.

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 pluc or minus 5 pcf. Foam concentrate mixed 40:1 by volume with water and expanded at 100 psi through nozzle. Mixture shall consist of 1.2 cu feet of preformed foam concentrate to 94 lbs Type I Portland cement, 300 lbs of sand with 5.5 gal of water.

AERIX INDUSTRIES — Floor-Topping Mixture

System No. 10

Subflooring — Min 23/32 in. thick T & G wood structural panels installed perpendicular to trusses with joints staggered 4 ft. Plywood or nonveneer APA rated panels secured to trusses with construction adhesive and No. 6d ring 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.

Finish Flooring* — Floor Topping Mixture — Min 3/4 in. thickness of floor topping mixture having a min compressive strength of 1000 psi. Mixture shall consist of 5 to 8 gal of water to 80 lbs of floor topping mixture to 2.1 cu ft of sand.

ULTRA QUIET FLOORS — Types UQF-A, UQF-Super Blend, UQF-Plus 200

System No. 11

Subflooring — Nom 23/32 in. thick wood structural panels installed perpendicular to trusses with end joints staggered. Plywood or 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.

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

DEPENDABLE LLC — GSI, M3.4, GSI, K2.6, GSL-CSD and GSL RH

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.

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

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

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

Alternate Floor Mat Materials* — (Optional) — Floor mat material Nom. 3/4 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 1-1/2 in.

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

Alternate Floor Mat Materials* — (Optional) — Floor mat material Nom. 1/8 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 3/4 in.

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

Alternate Floor Mat Materials* — (Optional) — Floor mat material Nom. 1/4 in. entangled net core with a compressible fabric attached to the bottom loose laid over the subfloor. Floor topping thickness shall be a minimum of 1 in.

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

System No. 13

Subflooring — — Nom 23/32 in. thick wood structural panels installed perpendicular to trusses with end joints staggered. Plywood or 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.

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 min compressive strength of 1000 psi. Refer to manufacturer's instructions accompanying the material for specific mix design.
FORMULATED MATERIALS LLC — Types FR-25, FR-30, and SiteMix

Floor Mat Materials* — (Optional) — Floor mat material nominal 2 - 9.5 mm thick loose laid over the subfloor. Floor topping shall be a min of 3/4 in.
FORMULATED MATERIALS LLC — Types M1, M2, M3, Elite, Duo, R1, and R2

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. Truss members secured together with min 0. 0356 in. thick galvanized 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 tool 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 approx. 7/8 in. centers with four rows of teeth per inch of plate width.

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

4. **Damper* —** For use with min 18 in. deep trusses. Max nom 20 in. long by 18 in. wide by 2-1/8 in. high, fabricated from galvanized steel. Plenum box max 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 Classification Marking for 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, 0758, 0759, 0760, 0761, 0762, 0763, CRD5, CRD5I, CRD6I, CRD6F, CRD6DFP

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

5. **Batts and Blankets* —** (Optional) — Glass fiber or mineral wool insulation bearing the UL Classification Marking as to Surface Burning Characteristics and/or Fire Resistance. When no insulation is installed in the concealed space the resilient channels are spaced 24 in. OC. When the resilient channels (Item 6) 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 are spaced a max of 12 in. OC or when the Steel Framing Members (Item 6A) 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 channels (or Steel Framing Members) and gypsum panel membrane. The finished rating has only been determined when the insulation is secured to the subflooring.

5A. **Loose Fill Material* —** (Optional) — As an alternate to Item 5, when the resilient channels (Item 6) are spaced a maximum of 12 in. OC, or when the Steel Framing Members (Item 6A) are used - Any loose fill material bearing the UL Classification Marking for Surface Burning Characteristics. There is no limit in the overall thickness of insulation. The finished rating when loose fill material is used has not been determined.

5B. **Cavity Insulation - Batts and Blankets* or Loose Fill Material* - (Not Shown) —** (As described above in Items 5 and 5A) — For Use with Item 7A — Min. 3-1/2 in thick with no limit on maximum thickness fitted in the concealed space, draped over the resilient channel (Item 6E)/gypsum board (Item 7A) ceiling membrane.

5C. **Foamed Plastic* —** (As alternate to Item 5 and 5A, Not Shown) — Spray foam insulation applied directly to the underside of the plywood subflooring. Spray foam insulation installed to a maximum thickness of 10 in. at a nominal 0.5 lb/ft^3 or 2.0 lb/ft^3 density, depending on the product installed. Spray foam insulation is limited to 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 fire damper (Item 4) in the concealed space, no clearance is necessary between damper housing and spray foam insulation. Only for use with Item 4 not evaluated for use with alternates to Item 4.
CARLISLE SPRAY FOAM INSULATION —Types 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.

6. **Resilient Channels —** Formed from min 25 MSG galv steel installed perpendicular to trusses. When no insulation is installed in the concealed space resilient channels are spaced 24 in. When the insulation (Item 5) is installed to the underside of the subfloor the resilient channels are spaced 16 in. OC. When insulation (Item 5 or 5A) is applied over the resilient channel/gypsum panel ceiling membrane, or when foamed plastic insulation (Item 5C) is sprayed to the underside of the subfloor, the resilient channel 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 panel end joint as shown in the above illustration. Additional channels shall extend min 6 in. beyond each side edge of panel.

6A. **Steel Framing Members* —** (Not Shown) — As an alternate to Item 6.
a. **Main Runners —** Nom 10 or 12 ft long, 15/16 in. or 1-1/2 in. wide face, spaced 4 ft OC perpendicular to trusses. Main runners hung a min of 2 in. from bottom chord of trusses with 12 SWG galv steel wire. Wires spaced max 48 in. OC.

b. **Cross Tees or Channels —** Cross tees, nom 4 ft long, 15/16 in. or 1-1/2 in. wide face, or cross channels, nom 4 ft long, 1-1/2 in. wide face, installed perpendicular to the main runners, spaced 16 in. OC. Additional cross tees or channels used at 8 in. from each side of butted panel 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 Angles or Channels —** Min 0.016 in. thick painted or galvanized steel angle with 1 in. legs or channel with a 1 by 1 1/2 by 1 in. profile, attached to walls at perimeter of ceiling with fasteners 16 in. OC. Used to support steel framing member ends and for screw-attachment of the gypsum panels.
CGC INC — Type DGL, RX

USG INTERIORS LLC — Type DGL, RX

c. **Wall Angles or Channels —** Min 0.016 in. thick painted or galvanized steel angle with 1 in. legs or channel with a 1 by 1 1/2 by 1 in. profile, attached to walls at perimeter of ceiling with fasteners 16 in. OC. Used to support steel framing member ends and for screw-attachment of the gypsum panels.
CGC INC — Type DGL, RX

USG INTERIORS LLC — Type DGL, RX

6B. **Steel Framing Members* —** (Not Shown) — As an alternate to Items 6 and 6A.
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 12 in. OC perpendicular to wood structural members. 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. RSIC-1 and RSIC-1 (2.75) clips secured to bottom of trusses with No. 8 by 2-1/2 in. course drywall screw through the center grommet. RSIC-V and RSIC-V (2.75) clips secured to consecutive trusses with No. 8 by 1-1/2 in. course 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)

6C. **Steel Framing Members* —** (Not Shown) — As an alternate to Items 6, 6A and 6B.
a. **Furring Channels —** Formed of No. 25 MSG galv steel, 2-3/8 in. wide by 7/8 in. deep, spaced 12 in. OC perpendicular to trusses. When insulation (Item 5 or 5A) is applied over the resilient channel/gypsum panel ceiling membrane, the resilient channel spacing shall be reduced to 12 in. OC. Channels secured to trusses as described in Item 6Cb. Ends of adjoining channels overlapped 6 in. and tied together with double strand of No. 18 AWG galvanized steel wire near each end of overlap.

b. **Steel Framing Members* —** Used to attach furring channels (Item 6Ca) to trusses (Item 2). Clips spaced 48 in. OC and secured to the bottom of the trusses with one No. 8 by 2-1/2 in. long coarse drywall screw through center grommet. Furring channels are friction fitted into clips. Adjoining channels are overlapped as described in Item 6Ca. 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 when insulation is draped over Furring Channels.
PLITEQ INC — Type Genie Clip

6D. **Alternate Steel Framing Members* —** (Not Shown) — As an alternate to items 6, 6A, 6B and 6C, 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 insulation (Item5 or 5A) is applied over the resilient channel/gypsum panel 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 the 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

6E. **Resilient Channels - (Not Shown) —** For Use With Item 7A - 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 5B is applied over the resilient channel/gypsum panel (Item 7A) ceiling membrane.

6F. **Alternate Steel Framing Members* —** (Not Shown) — As an alternate to items 6, 6A, 6B, 6C, 6D and 6E 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. When insulation (Item5 or 5A) is applied over the resilient channel/gypsum panel 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 the 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

6G. **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 6Gd) 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 6Gd) 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 1-1/2 in. screws through mounting holes on the hanger bracket.
PAC INTERNATIONAL L L C — Type RSIC-SI-CRC EZ Clip

6H. **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 6Hc). 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 6Hc) location with 16d nails or minimum 2-1/2 in. screws.

c. **Steel Framing Members* —** Used to attach furring channels (Item 6Ha) 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-S1-1 Ultra

6I. **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. Philips 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

6J. **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 where it is secured with a clip.
KEENE BUILDING PRODUCTS CO INC — Type RC+ Assurance Clip

6J. **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

7. **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 end joints. When insulation (Items 5 or 5A) is applied over the resilient channel/gypsum panel ceiling membrane the screw spacing shall be reduced to 8 in. OC. End joints secured in both resilient channels and in end joint detail. When foamed plastic insulation (Item 5C) is applied to the underside of the subflooring, screw spacing shall be reduced to 8 in. OC and minimum 1-1/4 in. long Type S screws to install gypsum to the resilient channels (Item 6), and butted end joints shall be staggered min. 2 ft within the assembly, and occur midway between the continuous furring channels. End joints secured to both resilient channels as shown in end joint detail. When **Steel Framing Members** (Item 6A) 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 8 in. OC in the field and 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 board edge; End joints of panels shall be staggered with spacing between joints on adjacent panels not less than 2 ft OC. When **Steel Framing Members** (Item 6B or 6C) 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 6D) 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 a RESILMOUNT Sound Isolation Clip at each end of the channel.
When **Steel Framing Members** (Item 6F) 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.

When **Steel Framing Members** (Item 6G) 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 6H) 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.

CGC INC — Types C, IP-X2, IPC-AR

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

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

USG BORAL DRYWALL SFZ LLC — Type C

7A. **Gypsum Board* - (Not Shown) —** For use with Items 5B and 6E. Nom 5/8 in. thick, 48 in. wide gypsum panels installed with long dimension perpendicular to resilient channels. Gypsum panels secured with 1 in. long Type S bugle head steel screws spaced 8 in. OC and located a min of 1/2 in. from

Design No. U305

December 7, 2021

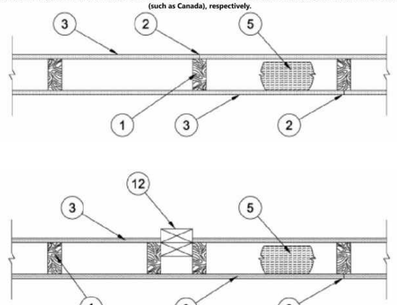
Bearing Wall Rating — 1 Hr

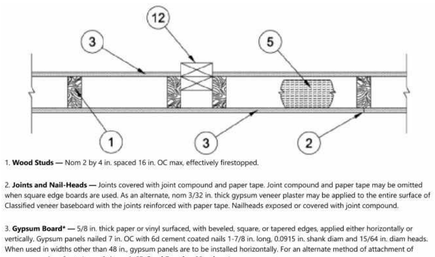
Finish Rating — See Items 3, 3A, 3D, 3E, 3F, 3G, 3H, 3J and 3L.

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 Canada), respectively.**





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

2. **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 steel screws spaced 12 in. OC.

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 channels as described in Item 3.

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 Type X and Mold & Mildew Resistant AR Type X, Type Blueglass Exterior Sheathing

CERTAINTEED GYPSUM INC — Type C, Type X or Type X-1 (finish rating 26 min); Type EGRG or GlasRoc (finish rating 23 min), GlasRoc-2, Type Habito (finish rating 26 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 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 ULX (finish rating 22 min), Type WRC (finish rating 24 min), Type WRX (finish rating 24 min), Type ULIX (finish rating 20 min)

CERTAINTEED GYPSUM INC — 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)

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 C (finish rating 26 min), Type DGG (finish rating 20 min), Type GPF51 (finish rating 20 min), Type GPF52 (finish rating 20 min), Type GPF56 (finish rating 26 min), Type DS, Type DAP, Type DD (finish rating 20 min), Type DA, 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), Water Rated-Type DGLW (finish rating 22 min), Sheathing Type- DGLW (finish rating 22 min), Soffit-Type DGLW (finish rating 22 min), Type LWX (finish rating 22 min), Type LWZX (finish rating 22 min), Veneer Plaster Base – Type LWZX (finish rating 22 min), Water Rated – Type LWZX (finish rating 22 min), Sheathing – Type LWZX (finish rating 22 min), Soffit - Type LWZX (finish rating 22 min), Type DGLZW (finish rating 22 min), Water Rated - 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-2 (finish rating 24 min), Type FSW-3 (finish rating 20 min), Type FSW-G (finish rating 20 min), Type FSW-H (finish rating 20 min), Type FSK-C (finish rating 20 min), Type FSW-C (finish rating 20 min), Type FSMR-C, Type FSW-6 (finish rating 20 min), Type FSL (finish rating 24 min), Type FSW-8, Type FSLX (finish rating 21 min), Type RSX (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 IPC-AR (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 SCX (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 ULIX (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 WRC (finish rating 24 min), Type IP-X1 (finish rating 24 min), Type IP-X2 (finish rating 24 min), Type SHX (finish rating 24 min), SCX (finish rating 24 min), Type IP-AR (finish rating 24 min), Type IPC-AR (finish rating 24 min), Type ULX (finish rating 22 min)

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.), LightRoc (finish rating 25 min.)

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

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 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 WRC (finish rating 24 min), Type IP-X1 (finish rating 24 min), Type IP-X2 (finish rating 24 min), Type IP-AR (finish rating 24 min), Type IPC-AR (finish rating 24 min), Type FRX-G (finish rating 24 min), Type IP-AR (finish rating 24 min), Type IPC-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 WRC (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 SCX, Type IP-AR (finish rating 24 min), Type IPC-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 RB-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, with 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

3I. **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 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 of 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 24 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 FSMR-C, Type FSW-6 (finish rating 20 min), Type FSL (finish rating 24 min).

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 24 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 FSMR-C, Type FSW-6 (finish rating 20 min), Type FSL (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, 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 "B, 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 Drywall

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

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.

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

JOHNS MANVILLE

KNAUF INSULATION LLC

MANSON INSULATION INC

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

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^3. Alternate Application Method: The fiber is applied without water or adhesive at a nominal dry density of 3.5 lb/ft^3, 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.

U S GREENFIBER L L C — INS735, INS745, INS750LD and SANCTUARY for use with wet or dry application. INS515LD, INS541LD, INS735, INS765LD, and INS773LD are to be used for dry application only

5B. **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 wall. See **Batts and Blankets** (BKNV or BZJZ) Categories for names of Classified companies.

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^3.
INTERNATIONAL CELLULOSE CORP — Celbar -RL

5H. **Foamed Plastic* —** (Optional -For use with Item 3R) — 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.

5I. **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. To facilitate the installation of the material, any thin, woven or non-woven netting may be attached by any means possible to the outer face the studs. The material shall reach equilibrium moisture content before the installation of materials on either face of the studs. The minimum dry density shall be 5.79 lbs/ft^3.
APPLEGATE HOLDINGS L L C — Applegate Advanced Stabilized Cellulose Insulation

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.
GACO WESTERN L L C — Types GacoEZSpray F4500, GacoProFill FR6500R, Gaco 052N, GacoOnePass F1850, GacoOnePass Low GWP F1880, and Gaco WallFoam 183M

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.
CARLISLE SPRAY FOAM INSULATION — Types SealTite Pro Closed Cell (CC), SealTite Pro Open Cell (OC), SealTite Pro OCX, SealTite Pro No Trim 21, SealTite Pro One Zero, Foamulate Closed Cell, Foamulate OCX, Foamulate 70, and Foamulate HFO.

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

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 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 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 in Item 3.

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 screw, one through the hole at each end of the clip. Furring channels are friction fitted into clips.
KINETICS NOISE CONTROL INC — Type Isomax

6B. **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 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 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 screw.
KEENE BUILDING PRODUCTS CO INC - Type RC+ Assurance Clip

6F. **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. 2-23/32 in. wide by 7/8 in. or 1-1/2 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

Design No. U341

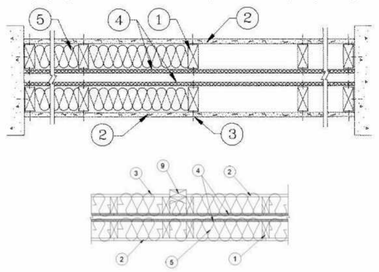
September 23, 2020

Bearing Wall Rating — 1 Hr.

Finish Rating — Min 20 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 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.**



HORIZONTAL SECTION

1. **Wood Studs —** Nom 2 by 4 in., spaced 24 in. OC max. Cross braced at mid-height and effectively firestopped at top and bottom of wall. No min. air space between stud rows except to accommodate attachment of sheathing, where required. See items 4 and 5.

2. **Gypsum Board* — Any 5/8 in. thick UL Classified Gypsum Board that is eligible for use in Design Nos. L501, GS12 or U305.** Nom 5/8 in. thick 4 ft wide. Gypsum board applied horizontally or vertically, unless specified below, and nailed to studs and bearing plates 7 in. OC with 6d cement coated nails, 1-7/8 in. long, 0.0915 in. shank diam and 1/4 in. diam head. As an alternate, No. 6 bugle head drywall screws, 1-7/8 in. long, may be substituted for the 6d cement coated nails.

When **Steel Framing Members*** (Item 6 or any alternate clips) are used, wallboard attached to furring channels with 1 in. long Type S bugle-head steel screws spaced 12 in. OC.

When used in widths other than 48 in., gypsum board to be installed horizontally.

AMERICAN GYPSUM CO (View Classification) — CKNX.R14196

BEIJING NEW BUILDING MATERIALS PUBLIC LTD CO (View Classification) — CKNX.R19374

CABOT MANUFACTURING ULC (View Classification) — CKNX.R25370

CERTAINTEED GYPSUM INC (View Classification) — CKNX.R3660

CGC INC (View Classification) — CKNX.R19751

CONTINENTAL BUILDING PRODUCTS OPERATING CO, L L C (View Classification) — CKNX.R18482

GEORGIA-PACIFIC GYPSUM L L C (View Classification) — CKNX.R2717

LOADMASTER SYSTEMS INC (View Classification) — CKNX.R11809

NATIONAL GYPSUM CO (View Classification) — CKNX.R3501

PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM (View Classification) — CKNX.R7094

PANEL REY S A (View Classification) — CKNX.R21796

SIAM GYPSUM INDUSTRY (SARABURI) CO LTD (View Classification) — CKNX.R19262

THAI GYPSUM PRODUCTS PCL (View Classification) — CKNX.R27517

UNITED STATES GYPSUM CO (View Classification) — CKNX.R1319

USG BORAL DRYWALL SFZ LLC (View Classification) — CKNX.R38438

USG BORAL DRYWALL SFZ LLC (View Classification) — CKNX.R38438

USG MEXICO S A DE C V (View Classification) — CKNX.R16089

2A. **Gypsum Board* —** (As an alternate to Item 2, not shown) — Nominal 5/8 in. thick, 4 ft wide panels, applied vertically to studs and bearing plates on one side of the assembly with 1-5/8 in. long Type S screws spaced 12 in. OC at perimeter of panels and 8 in. OC in the field. Horizontal joints of vertically applied panels need not be backed by studs. Panel joints covered with paper tape and two layers of joint compound. Screwheads covered with two layers of joint compound. Batts and Blankets placed in stud cavity as described in Item 5C. Not evaluated for use with Steel Framing Members, Furring Channels or Fiber, Sprayed.

PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM — Type QuietRock QR-530 (finish rating 23 min).

2B. **Gypsum Board* —** (As an alternate to Item 2, not shown) — Any 5/8 in. thick gypsum panels that are eligible for use in Design Nos. L501, GS12 or U305, supplied by the Classified companies listed below shown in the **Gypsum Board*** (CKNX) category. Applied horizontally or vertically and attached to studs and bearing plates 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 other than 48 in., gypsum board to be installed horizontally.

UNITED STATES GYPSUM CO

USG BORAL DRYWALL SFZ LLC

USG MEXICO S A DE C V

2C. **Gypsum Board* —** (As an alternate to Item 2, Not Shown) — 5/8 in. thick gypsum panels applied horizontally or vertically and attached to studs and bearing plates 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 other than 48 in., gypsum board to be installed horizontally.

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

CERTAINTEED GYPSUM INC — Type C, Type X or Type X-1

NATIONAL GYPSUM CO — Type FSK, Type FSK-G, Type FSW, Type FSW-3, Type FSW-5, Type FSW-G, Type FSK-C, Type FSW-C, Type FSMR-C, Type FSW-6, Type FSL

THAI GYPSUM PRODUCTS PCL — Type C or Type X

2D. **Gypsum Board* —** (As an alternate to Items 2, 2A, 2B and 2C) — 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 as described in Item 2. When used in widths of other than 48 in., gypsum boards are to be installed horizontally.

GEORGIA-PACIFIC GYPSUM L L C — GreenGlass Type X, Type DGG.

2E. **Gypsum Board* —** (As an alternate to Items 2 through 2D) — 5/8 in. thick, 4 ft. wide, paper surfaced applied vertically only and secured as described in Item 2.

GEORGIA-PACIFIC GYPSUM L L C — Type X ComfortGuard Sound Deadening Gypsum Board.

2F. **Gypsum Board* —** (As an alternate to Items 2 through 2E) - Installed as described in Item 2. 5/8 in. thick, 4 ft. wide, paper surfaced, applied vertically only and fastened to the studs and plates with 6d cement coated nails 1-7/8 in. long, 0.0915 in. shank diam and 1/4 in. diam heads, 7 in. OC. Not for use with item #6.

NATIONAL GYPSUM CO — Type SBWB

2G. **Gypsum Board* —** (As an alternate to Items 2 through 2F) — Nominal 5/8 in. thick, 4 ft wide panels, applied vertically and secured as described in Item 2.

PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM — Types QuietRock ES.

2H. **Gypsum Board* —** (As an alternate to Items 2 through 2G) — Installed as described in Item 2. 5/8 in. thick, 4 ft. wide, paper surfaced, applied vertically or horizontally fastened to the studs and plates 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.

CERTAINTEED GYPSUM INC — Type SilentFX

2I. **Wall and Partition Facings and Accessories* —** (As an alternate to Items 2 through 2H) — Nominal 5/8 in. thick, 4 ft wide panels, applied vertically and secured as described in Item 2.

PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM — Type QuietRock 527.

2J. **Gypsum Board* —** (As an alternate to 5/8 in. Type FSW in Item 2) — 2 layers nom. 5/16 in. thick gypsum panels applied vertically or horizontally. Horizontal joints on the same side need not be staggered. Inner layer attached with fasteners, as described in item 2, spaced 24 in. OC. Outer layer attached per Item 2.

NATIONAL GYPSUM CO — Type FSW.

2K. **Gypsum Board* —** (As an alternate to Item 2) — 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.

CONTINENTAL BUILDING PRODUCTS OPERATING CO, L L C — Type LGFC6A (finish rating 21 min), Type LGFC2A, Type LGFC-C/A, Type LGFC-WD, Type LGLLX

3. **Joints and Nailheads —** Gypsum board joints of outer layer covered with tape and joint compound. Nail heads of outer layer covered with joint compound. As an alternate, nom 3/32 in. thick gypsum veneer plaster may be applied to the entire surface of Classified veneer baseboard with joints reinforced with paper tape.

4. **Sheathing —** (Optional) — Septum may be sheathed with min 7/16 in. thick wood structural panels min grade "C-D" or "Sheathing" or min 1/2 in. thick **Mineral and Fiber Boards***.

See **Mineral and Fiber Boards** (CERZ) category for names of Classified companies.

5. **Batts and Blankets* —** 3-1/2 in. max thickness glass or mineral fiber batt insulation. **Optional** when sheathing (Item 4) is used on both halves of wall.

See **Batts and Blankets** (BZJZ) category for list of Classified companies.

5A. **Fiber, Sprayed* —** 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/ft³. Alternate Application Method: 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.

U S GREENFIBER L L C — INS735, INS745 and INS750LD for use with wet or dry application. INS515LD, INS541LD, INS735, INS765LD, and INS773LD are to be used for dry application only.

5B. **Fiber, Sprayed* —** As an alternate to Batts and Blankets (Item 5) when Sheathing (Item 4) is used on both halves of wall - 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 Wall and Partition Facings and Accessories, Item 2A. Use of Sheathing, Item 4, does not nullify requirement of Item 5C for use with Item 2A) — 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.

5D. **Fiber, Sprayed* —** As an alternate to Batts and Blankets (Item 5) and Item 5A when Sheathing (Item 4) is used on both halves of wall - Spray applied cellulose fiber. The fiber is applied with water to completely fill the enclosed cavity in accordance with the application instructions supplied with the product. The minimum dry density shall be 4.30 lbs/ft³.

INTERNATIONAL CELLULOSE CORP — Celbar-RL

5E. **Fiber, Sprayed* —** 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. To facilitate the installation of the material, any thin, woven or non-woven netting may be attached by any means possible to the outer face the studs. The material shall reach equilibrium moisture content before the installation of materials on either face of the studs. The minimum dry density shall be 5.79 lbs/ft³.

APPLEGATE HOLDINGS L L C — Applegate Advanced Stabilized Cellulose Insulation

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 2.

B. **Steel Framing Members* —** Used to attach furring channels (Item a) to studs (Item 1) . 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, 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 2.

b. **Steel Framing Members* —** Used to attach furring channels (Item a) 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

6B. **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 2.

b. **Steel Framing Members* —** Used to attach furring channels (Item 6Ba) 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

6C. **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 6Cb. 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 2.

B. **Steel Framing Members* —** Used to attach furring 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. Furring channels are friction fitted into clips.

REGUPOL AMERICA — Type SonusClip

6D. **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 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 2.

b. **Steel Framing Members* —** Used to attach resilient 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. Resilient channels are secured to clips with one No. 10 x 1/2 in. pan-head self-drilling screw.

KEENE BUILDING PRODUCTS CO INC — Type RC+ Assurance Clip

6E. **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

6F **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. or 1-1/2 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 2.

b **Steel Framing Members* —** Used to attach furring channels (Item 6Fa) 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. **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 attached 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 layer(s) of UL Classified Gypsum Board.

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

8. **Mineral and Fiber Board* —** ((Optional, Not Shown) — For optional use as an additional layer on one or both sides of wall. Nom 1/2 in. thick, 4 ft wide with long dimension parallel and centered over studs. Attached to framing as described in Item 2. 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

9. **Non-Bearing Wall Partition Intersection —** (Optional) — Two nominal 2 by 4 in. stud or nominal 2 by 6 in. stud nailed together with two 3in. 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 studs to be flush with the 2 by 4 in. studs. 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 the bearing wall.

(Optional, Not Shown) Alternate Construction For Use On One Side Of The Wall.

10. **Mineral and Fiber Board* —** For use with Items 10A-10D) —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

10A. **Glass Fiber Insulation —** (For use with Item 10) — 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 companies.

10B. **Batts and Blankets* —** (As an alternate to Item 10B, For use with Item 10), 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

10C. **Adhesive —** (For use with Item 10) — Construction grade adhesive applied in vertical, serpentine, nominal 3/8 in. wide beads down the length of both vertical edges of Mineral and Fiber Board (Item 14A).

10D. **Gypsum Board* —** (For use with Item 10) — 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 10). 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

CERTAINTEED GYPSUM INC — Type C

CONTINENTAL BUILDING PRODUCTS OPERATING CO, L L C — 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 — Type CTypes 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

*** 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 2020-09-23

REGISTERED ARCHITECT MARTIN RANDALL PORTER STATE OF TEXAS 24139
25 OCT 2024
MARTIN RANDALL PORTER
ARCHITECT LICENSE #24739

DASHWOOD TRAILS
HOUSTON, HARRIS COUNTY, TEXAS

Wallace ARCHITECTS LLC
Columbia, MO
P 573-256-7200
TEXAS STATE CERTIFICATE OF AUTHORITY: BR 159

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1ST ISSUE
25 OCT 2024

ISSUE/REVISIONS
0, 25 OCT 2024 ISSUE SET

SHEET NO.
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ISSUE SET

Design No. U356

October 07, 2020

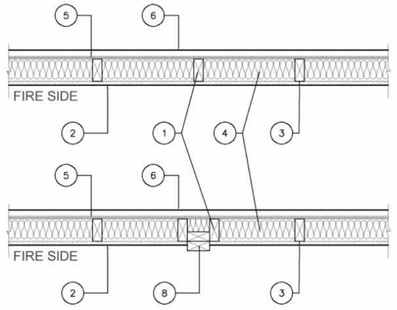
Bearing Wall Rating - 1 Hr Rating Exposed to Fire on Interior Face Only

Bearing Wall Rating — 1 Hr Rating Exposed to Fire on Exterior Face (See Item 6E)

Finish Rating — 23 Min or 25 Min (See Item 2C)

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.**



1. **Wood Studs —** Nom 2 by 4 in. spaced 16 in. OC with two 2 by 4 in. top and one 2 by 4 in. bottom plates. Studs laterally-braced by wood structural panel sheathing (Item 5). When **Mineral and Fiber Boards*** (Item 5A) are considered as bracing for the studs, the load is restricted to 76% of allowable axial load. Walls effectively fire stopped at top and bottom of wall.

2. **Gypsum Board* — Any 5/8 in. thick UL Classified Gypsum Board that is eligible for use in Design Nos. L501, G512 or U305.** Nom 5/8 in. thick, 4 ft wide, applied vertically and nailed to studs and bearing plates 7 in. OC with 6d cement-coated nails, 1-7/8 in. long with 1/4 in. diam head.

When Item **Steel Framing Members*** (Item 7 or any alternate clips), is used, gypsum panels attached to furring channels with 1 in. long Type S bugle-head steel screws spaced 12 in. OC.

When Item 7A **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.

AMERICAN GYPSUM CO (View Classification) — CKNX.R14196

BEIJING NEW BUILDING MATERIALS PUBLIC LTD CO (View Classification) — CKNX.R19374

CABOT MANUFACTURING ULC (View Classification) — CKNX.R25370

CERTAINTEED GYPSUM INC (View Classification) — CKNX.R3660

CGC INC (View Classification) — CKNX.R19751

CERTAINTEED GYPSUM INC (View Classification) — CKNX.R18482

GEORGIA-PACIFIC GYPSUM L L C (View Classification) — CKNX.R2717

LOADMASTER SYSTEMS INC (View Classification) — CKNX.R11809

NATIONAL GYPSUM CO (View Classification) — CKNX.R3501

PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM (View Classification) — CKNX.R7094

PANEL REY S A (View Classification) — CKNX.R21796

SIAM GYPSUM INDUSTRY (SARABURI) CO LTD (View Classification) — CKNX.R19262

THAI GYPSUM PRODUCTS PCL (View Classification) — CKNX.R27517

UNITED STATES GYPSUM CO (View Classification) — CKNX.R1319

USG BORAL DRYWALL SFZ LLC (View Classification) — CKNX.R38438

USG MEXICO S A DE C V (View Classification) — CKNX.R16089

2A. **Gypsum Board* —** (As an alternate to Item 2, Not Shown) — Any 5/8 in. thick 4 ft wide gypsum panels that are eligible for use in Design Nos. L501, G512 or U305, supplied by the Classified Companies listed below shown in the **Gypsum Board*** (CKNX) category. Applied vertically and attached to studs and bearing plates 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.
CGC INC

UNITED STATES GYPSUM CO

USG BORAL DRYWALL SFZ LLC

USG MEXICO S A DE C V

2B. **Gypsum Board* —** (As an alternate to Item 2, Not Shown) — 5/8 in. thick 4 ft wide gypsum panels applied vertically and attached to studs and bearing plates 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.
AMERICAN GYPSUM CO — Types AGX-1, M-Glass, AG-C, LightRoc

CABOT MANUFACTURING ULC — Type X, 5/8 Type X, Type Blueglass Exterior Sheathing

CERTAINTEED GYPSUM INC — Type C, Type X, Type X-1, Easi-Lite Type X-2

GEORGIA-PACIFIC GYPSUM L L C — Types X, Veneer Plaster Base-Type X, Water Rated-Type X, Sheathing Type-X, Soffit-Type X, Type X ComfortGuard Sound Deadening Gypsum Board.

PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM — Types PG-11, PGS-WRS, PGI.

THAI GYPSUM PRODUCTS PCL — Type C or Type X

2C. **Gypsum Board* —** (As an alternate to Item 2, Not Shown) — For Use with Item 5A only - 5/8 in. thick 4 ft wide gypsum panels applied horizontally and attached to studs and bearing plates with 1-1/4 in, long Type W coarse thread gypsum panel steel screws spaced a max 8 in. OC, with last screws 1 in.and 4 in. from edges of board. Finish Rating is 25 min.
CABOT MANUFACTURING ULC — 5/8 Type X, Type Blueglass Exterior Sheathing

GEORGIA-PACIFIC GYPSUM L L C — Type X, Veneer Plaster Base-Type X, Water Rated-Type X, Sheathing Type-X, Soffit-Type X

PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM — Types PG-11, PGS-WRS, PGI

2D. **Gypsum Board* —** (As an alternate to Item 2) — Not to be used with item 7. 5/8 in. thick, 4 ft. wide, paper surfaced, applied vertically only and fastened to the studs and plates with 6d cement coated nails 1-7/8 in. long, 0.0915 in. shank diam and 1/4 in. diam heads, 7 in. OC.
NATIONAL GYPSUM CO — Type SBWB

2E **Gypsum Board* —** (As an alternate to Items 2 through 2D) — Nominal 5/8 in. thick, 4 ft wide panels, secured as described in Item 2.
PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM — Type QuietRock ES.

2F. **Gypsum Board* —** (As an alternate to Item 2) — Not to be used with item 7. 5/8 in. thick, 4 ft. wide, paper surfaced, applied vertically or horizontally and fastened to the studs and plates 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.
CERTAINTEED GYPSUM INC — Type SilentFX

2G. **Wall and Partition Facings and Accessories* —** (As an alternate to Items 2 through 2F) — Nominal 5/8 in. thick, 4 ft wide panels, secured as described in Item 2.
PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM — Type QuietRock 527.

2H. **Gypsum Board* —** (As an alternate to Item 2) — 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

2I. **Gypsum Board* —** (As an alternate to Item 2) — 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.), LightRoc (finish rating 25 min.)

NATIONAL GYPSUM CO — Type FSK, Type FSK-G, Type FSW, Type FSW-3, Type FSW-5, Type FSW-G, Type FSK-C, Type FSW-C, Type FSMR-C, Type FSW-6, Type FSL

2J. **Gypsum Board* —** (As an alternate to Item 2) - 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 steel screws spaced a max 8 in. OC with the last screw 1 in. from edge of board. When used in widths other than 48 in., gypsum boards are to be installed horizontally.
CERTAINTEED GYPSUM INC — Type C, Type X or Type X-1(finish rating 26 min), Easi-Lite Type X (finish rating 24 min), Easi-Lite Type X-2, Type EGRG or GlasRoc or GlasRoc Sheathing (finish rating 23 min)

3. **Joints and Fastener Heads —** (Not Shown) — Gypsum board joints covered with tape and joint compound. Fastener heads covered with joint compound.

4. **Batts and Blankets* —** Mineral fiber or glass fiber insulation, 3-1/2 in. thick, pressure fit to fill wall cavities between studs and plates. Mineral fiber insulation to be unfaced and to have a min density of 3 pcf. Glass fiber insulation to be faced with aluminum foil or kraft paper and to have a min density of 0.9 pcf (min R-13 thermal insulation rating).
See **Batts and Blankets*** (BKNV) Category in the Building Materials Directory and **Batts and Blankets*** (BZJZ) Category in the Fire Resistance Directory for names of Classified Companies.

4A. **Fiber, Sprayed* —** As an alternate to Batts and Blankets (Item 4) — 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^3. Alternate Application Method: The fiber is applied without water or adhesive at a nominal dry density of 3.5 lb/ft^3, in accordance with the application instructions supplied with the product.
U S GREENFIBER L L C — INS735 and INS745 for use with wet or dry application. INS515LD, INS541LD, INS735, INS745, INS765LD, and INS773LD are to be used for dry application only.

4B. **Fiber, Sprayed* —** As an alternate to Item 4 and 4A — 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. Nominal dry density of 4.58 lb/ft^3.
NU-WOOL CO INC — Cellulose Insulation

4C. **Fiber, Sprayed* —** As an alternate to Batts and Blankets (Item 4) — Spray applied cellulose fiber. The fiber is applied with water to completely fill the enclosed cavity in accordance with the application instructions supplied with the product. The minimum dry density shall be 4.30 lbs/ft^3.
INTERNATIONAL CELLULOSE CORP — Celbar-RL

4D. **Fiber, Sprayed* —** As an alternate to Batts and Blankets (Item 4) — 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

5. **Wood Structural Panel Sheathing —** Min 7/16 in. thick, 4 ft wide wood structural panels, min grade "C-D" or "Sheathing". Installed with long dimension of sheet (strength axis) or face grain of plywood parallel with or perpendicular to studs. Vertical joints centered on studs. Horizontal joints backed with nom 2 by 4 in. wood blocking. Attached to studs on exterior side of wall with 6d cement coated box nails spaced 6 in. OC at perimeter of panels and 12 in. OC along interior studs.

5A. **Mineral and Fiber Boards* —** As an alternate to Item 5 - Min 1/2 in. thick, 4 ft wide sheathing, installed vertically to studs. Vertical joints centered on studs. Horizontal joints backed with nom 2 by 4 in. wood blocking. Attached to studs on exterior side of wall with 1-1/2 in. long galvanized roofing nails spaced 6 in. OC at perimeter of panels and 12 in. OC along interior studs. As an option a weather resistive barrier may be applied over the Mineral and Fiber Boards.

6. **Exterior Facings —** Installed in accordance with the manufacturer's installation instructions. One of the following exterior facings is to be applied over the sheathing:

A. **Vinyl Siding — Molded Plastic* —** Contoured rigid vinyl siding having a flame spread value of 20 or less.
See **Molded Plastic** (BTAT) category in the Building Materials Directory for names of manufacturers.

B. **Particle Board Siding —** Hardboard exterior sidings including patterned panel or lap siding.

C. **Wood Structural Panel or Lap Siding —** APA Rated Siding, Exterior, plywood, OSB or composite panels with veneer faces and structural wood core, per PS 1 or APA Standard PRP-108, including textured, rough sawn, medium density overlay, brushed, grooved and lap siding.

D. **Cementitious Stucco —** Portland cement or synthetic stucco systems with self-furring metal lath or adhesive base coat. Thickness from 3/8 to 3/4 in., depending on system.

E. **Brick Veneer —** Any type on nom 4 in. wide brick veneer. When brick veneer is used, the rating is applicable with exposure on either face. Brick veneer fastened with corrugated metal wall ties attached over sheathing to wood studs with 8d nail per tie; ties spaced not more than each sixth course of brick and max 32 in. OC horizontally. One in. air space provided between brick veneer and sheathing.

F. **Exterior Insulation and Finish System (EIFS) —** Nom 1 in. **Foamed Plastic*** insulation bearing the UL Classification Marking, attached over sheathing and finished with coating system, or Portland cement or synthetic stucco systems, in accordance with manufacturer's instructions. See **Foamed Plastic** (BRYX and CCVW) categories for names of Classified companies.

G. **Siding —** Aluminum or steel siding attached over sheathing to studs.

H. **Fiber-Cement Siding —** Fiber-cement exterior sidings including smooth and patterned panel or lap siding.

I. **Wall and Partition Facings and Accessories* —** Stone veneer is mortar bonded to a lath, scratch coat and water resistant barrier applied to sheathing, installed in accordance with the manufacturers installation instructions, and meeting the requirements of local code agencies.
ELDORADO STONE OPERATIONS L L C — Type Eldorado Stone

J. **Cementitious Backer Units —** 1/2 in. or 5/8 in., 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 3/4 in., spaced a max of 8 in. OC. Horizontal joints need not be backed by framing. When Cementitious Backer Units are used, the rating is applicable with exposure on either face. Cementitious Backer Units for use as substrate for exterior finishes such as ceramic tile, slate, marble, natural stone, manufactured stone, thin brick, or Portland cement or synthetic stucco.
NATIONAL GYPSUM CO — Type PermaBase

6A. **Building Units* — As an alternate to Exterior Facing Item 6 —** Insulated steel panels, 12 through 42 in. wide. Attached over sheathing through retainer clips to studs or support steel with No. 14 hex head self-tapping screws located at each joint in the concealed lip of the units and spaced in accordance with the structural design requirements. KINGSPAN INSULATED PANELS INC — Types 200, 300, 400, 900, or KS series, 2 through 6 in. thickness; CWP-V, H, 2 through 3 in. nominal thickness or Designwall 2000 or Designwall 4000, 2 and 3 in. nominal thickness.

7. **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. Gypsum board attached to furring channels as described in Item 2.

b. **Steel Framing Members* —** Used to attach furring channels (Item 7A) 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

7A. **Steel Framing Members* —** (Optional, Not Shown, As an alternate to Item 7) — 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 7Db. 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 2.

b. **Steel Framing Members* —** Used to attach furring channels (Item 7Da) 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

7B. **Steel Framing Members* —** (Optional, Not Shown, As an alternate to Item 7) — 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. or 1-1/2 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 2.

b. **Steel Framing Members* —** Used to attach furring channels (Item 7Fa) 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

8. **Non-Bearing Wall Partition Intersection —** (Optional) — Two nominal 2 by 4 in. stud or nominal 2 by 6 in. stud nailed together with two 3in. 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 studs to be flush with the 2 by 4 in. studs. 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 the bearing wall.

*** 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 2020-10-07

REGISTERED ARCHITECT
MARTIN RANDALL PORTER
24139
STATE OF TEXAS
25 OCT 2024
MARTIN RANDALL PORTER
ARCHITECT LICENSE #24739

DASHWOOD TRAILS
HOUSTON, HARRIS COUNTY, TEXAS

Wallace ARCHITECTS LLC
Columbia, MO
P 573-256-7200
TEXAS STATE CERTIFICATE OF AUTHORITY: BR 159

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1ST ISSUE
25 OCT 2024

ISSUE/REVISIONS
0, 25 OCT 2024 ISSUE SET

SHEET NO.
A5.4

JOB NO.
4809

ISSUE SET

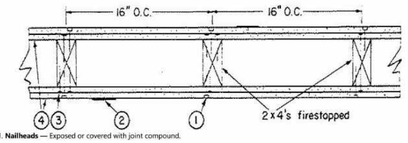
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Design No. **U301**

November 21, 2023

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 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.**



1. **Nailheads** — Exposed or covered with joint compound.

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 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.
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. long 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 LWZX, Veneer Plaster Base - Type LWZX, Water Rated - Type LWZX, Sheathing - Type LWZX, Soffit - Type LWZX, Type DGLZW, Water Rated - Type DGLZW, Sheathing - Type DGLZW

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, PGI

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, ULIX, 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

4B. **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 Studs 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, FrEJcne 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 R8-LBG.

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.
NATIONAL GYPSUM CO — Type SBW8

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 described in Item 4.
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

4I. **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 Item 6, 6A, 6B, or 6C.
NATIONAL GYPSUM CO — Types eXP-C, FSK, FSK-C, FSK-G, FSW, FSW-3, FSW-5, FSW-6, FSW-C, FSW-G, FSMR-C, SBW8

4J. **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 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, 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, FrEJcne 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.
RADIATION PROTECTION PRODUCTS INC — Type RPP - Lead Lined Drywall

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, SBW8.

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

4L. **Gypsum Board* —** (As an alternate to Item 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.
CERTAINTEED GYPSUM INC — Type LGFC2A, Type LGFC6A, Type LGFC-C/A, Type LGFC-WD, Type LGLLX

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

4O. **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 GS12. 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

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

THAI GYPSUM PRODUCTS PCL — Type X

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 studs 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 A2378

6B. **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 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 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 screw.
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 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 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.

THERMAFIBER INC — Type SAFB, SAFB FF

9. **Batts and Blankets* —** (As an alternate to Item 8) — Min. 3 in. thick glass fiber batts bearing the UL Classification Marking as to Surface Burning and/or Fire Resistance, friction-fitted to fill the stud cavities. See Batts and Blankets (BKNV or BZJZ) Categories for names of Classified companies.

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 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 layer(s) of UL 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 illmod 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 — Neoseal™ 2.0 or Neoseal™ 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, Foamulate Closed Cell, Foamulate OCX, Foamulate 70, and Foamulate 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® 8120G, Walltite® 200, Walltite® US , Walltite® US-N, Walltite® HP+, Spraytite® Comfort XL, and Walltite® XL

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 Class A", "Xci 28E", "Xci Foil (Class A)", "Xci CG", "Xci Foil", "Xci CG NH", "Xci Foil NH"

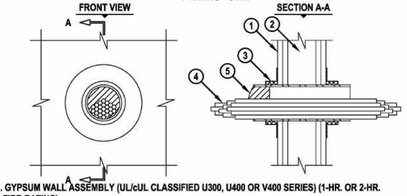
15. **Building Units* —** (Optional, Not Shown - For use over Gypsum Board, Item 4) Polyisocyanurate composite foamed plastic boards, any thickness, applied vertically with vertical joints located over studs. May be used with Molded Plastic, Item 5 or any exterior facing, as authorized by the Authority Having Jurisdiction and installed in accordance with the manufacturer's installation instructions.
HUNTER PANELS, A DIVISION OF CARLISLE CONSTRUCTION MATERIALS, LLC — "Xci NB", "Xci Ply"

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 ¼ 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 Canada), respectively.**

UL/cUL SYSTEM NO. W-L-3282
CABLE BUNDLE THROUGH "UNIQUE FIRESTOP SLEEVE" IN 1-HR. OR 2-HR. GYPSUM WALL ASSEMBLY
F-RATING = 1-HR. OR 2-HR.
T-RATING = 0-HR.

WL3282a.04.1905



1. GYPSUM WALL ASSEMBLY (UL/cUL CLASSIFIED U300, U400 OR V400 SERIES) (1-HR. OR 2-HR. FIRE-RATING).
2. [NOT SHOWN] WOOD STUDS TO CONSIST OF NOMINAL 2" x 4" LUMBER. STEEL STUDS TO BE MINIMUM 3-1/2" WIDE.
3. UNIQUE FIRESTOP PRODUCTS, DIVISION OF "IT'S UNIQUE" INC. SMOOTH SLEEVE, THREADED SLEEVE, OR SPLIT SLEEVE (2" AND 4" SIZES).
4. CABLE BUNDLE TO BE A COMBINATION OF ANY OF THE FOLLOWING :
   A. MAXIMUM 300 PAIR NO. 24 AWG TELEPHONE CABLE WITH PVC JACKET.
   B. MAXIMUM 750 KCMIL POWER CABLE WITH PVC JACKET.
   C. MAXIMUM 7/C NO. 12 AWG POWER CABLE WITH PVC JACKET.
   D. MAXIMUM 1/2" DIAMETER FIBER-OPTIC CABLE (MAXIMUM 24 FIBER).
   E. MAXIMUM 3/C NO. 12 AWG METAL-CLAD CABLE WITH PVC JACKET.
   F. MAXIMUM 1" DIAMETER METAL-CLAD TEK CABLE WITH PVC JACKET.
   G. MAXIMUM 2/0 ALUMINUM SER CABLE.
   H. TYPE RG 59/U COAXIAL CABLE WITH PVC JACKET.
5. ONE HILTI CP 658T FIRESTOP PLUG CUT TO FIT AROUND THE CABLE BUNDLE AND INSTALLED TIGHTLY WITHIN SLEEVE SUCH THAT THE OUTER CIRCUMFERENCE OF THE DOME SHAPED PLUG IS FLUSH WITH EITHER END OF SLEEVE. WHEN SPLIT SLEEVE IS USED, INSTALL TWO HILTI CP 658T FIRESTOP PLUGS, FLUSH WITH BOTH ENDS OF SLEEVE.

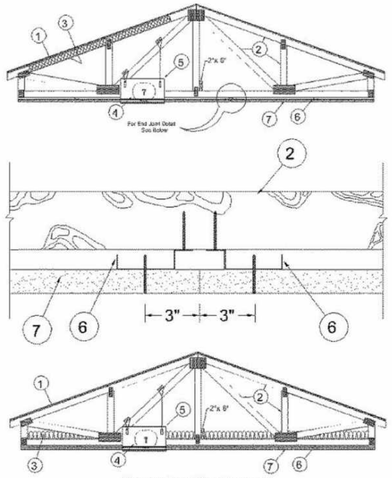
NOTES : 1. MAXIMUM DIAMETER OF OPENING

Design No. P556

December 6, 2023

Unrestrained Assembly Rating — 1 Hr.
Finish Rating — 24 or 25 Min (See Items 3, 3A and 3B)
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.**



Alternate Insulation Placement

1. **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 and may be used with either nails or staples.

2. **Trusses —** Pitch or Parallel 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. Minimum parallel chord truss depth shall be 18 in. Where the truss intersects with the interior face of the exterior walls, the min truss depth shall be 5-1/4 in. with a min roof slope of 3/12 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.

3. **Batts and Blankets* —** (Optional) -Glass fiber insulation, secured to the wood structural panesl 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 board ceiling membrane when resilient channels and gypsum board 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.

3A. **Loose Fill Material* —** As an alternate to Item 3 — Any thickness of 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 board ceiling membrane when resilient channels and gypsum board attachment is modified as specified in Items 6 and 7. The finished rating when loose fill material is used has not been determined.

3B. **Fiber, Sprayed* —** As an alternate to Items 3 and 3A (not evaluated for use with Items 6B, 6C, 6D and 6E) — Any thickness of spray-applied cellulose insulation material, having a min density of 0.5 lb/ft3, 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/ft3 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/ft3 behind netting (Item 9) stapled to the rafters. The netting is stapled at both lower edges of the rafters creating a cavity to accept the cellulose fiber.
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* —** (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^3 density, while maintaining a minimum 8-1/2 in. clearance between the spray foam insulation and the gypsum board (Item 7). 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 (Item 7) 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 fire damper (Items 5 through 5B) 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 — Sucraseal

3D. **Foamed Plastic* —** (As alternate to Item 3 - Not Shown) — Spray foam insulation applied directly to 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^3 or 2.0 lb/ft^3 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 (Item 7) to be installed maximum 3 in. away from gypsum butt joints. Gypsum board (Item 7) 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 radiation damper 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.
BASF CORP — Enertite® NM, Enertite® G, FE178® , Spraytite® 178, Spraytite® 81206, Walltite® 200, Walltite® US, Walltite® US-N, and Walltite® HP+

3E. **Foamed Plastic* —** (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 17 in. at a nominal 0.5 lb/ft^3 density, while maintaining a minimum 1-1/2 in. clearance between the spray foam insulation and the gypsum board (Item 7). 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 (Item 7) 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 fire damper (Items 5 through 5B) 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.5, EasySeal ULD

3F. **Foamed Plastic* —** (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 17 in. at a nominal 0.5 lb/ft^3 density, while maintaining a minimum 1-1/2 in. clearance between the spray foam insulation and the gypsum board (Item 7). 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 (Item 7) 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 fire damper (Items 5 through 5B) 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.
EVEREST SYSTEMS LLC — Opticell 0.5

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

5. **Ceiling Damper* —** Max 14 in. long by 14 in. wide by 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 50 w/Boot, 50EA w/Boot, 51 w/Boot, 50 w/Box, 50EA w/Box or 51 w/Box.

AIRVAC INDUSTRIES — Series AVI-50 w/Boot, AVI-50EA w/Boot, AVI-51 w/Boot, AVI-50 w/Box, AVI-50EA w/Box, AVI-51 w/Box.

5A. **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. 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 — Series 57

AIRVAC INDUSTRIES — Model AVI-57IB

5B. **Alternate Ceiling Damper* —** Max 20 in. long by 16 in. wide by 4 in. high rectangular damper with duct board 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*. 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

AIRVAC INDUSTRIES — Series AVI-58

5C. **Alternate Ceiling Damper* —** (Optional. To be used with Air Duct Item 4.) — For use with min. 18 in. deep trusses. Max 7-11/32 in. long by 7-11/16 in. wide fabricated from galvanized steel. Aggregate area of the register opening(s) through the ceiling membrane shall not exceed 28.5 sq in. per 100 sq ft of ceiling area. Damper assembly installed in accordance with the manufacturer's installation instructions.

AIRE TECHNOLOGIES INC — Models ITG-CRD2.

5D. **Alternate Ceiling Damper* —** (Optional. To be used with Air Duct Item 4.) — For use with min. 18 in. deep trusses. Max 9-11/16 in long by 9-1/16 in. wide fabricated from galvanized steel. Aggregate area of the register opening(s) through the ceiling membrane shall not exceed 44.5 sq in. per 100 sq ft of ceiling area. Damper assembly installed in accordance with the manufacturer's installation instructions.

AIRE TECHNOLOGIES INC — Models SIG-CRD2.

5E. **Alternate Ceiling Damper* —** (Optional. To be used with Air Duct Item 4.) — For use with min. 18 in. deep trusses. Max 10-13/32 in. long by 10-22/32 in. wide fabricated from galvanized steel. Aggregate area of the register opening(s) through the ceiling membrane shall not exceed 56 sq in. per 100 sq ft of ceiling area. Damper assembly installed in accordance with the manufacturer's installation instructions.

AIRE TECHNOLOGIES INC — Models SMT-CRD2

5F. **Alternate Ceiling Damper* —** (Optional. To be used with Air Duct Item 4.) — For use with min. 18 in. deep trusses. Max 8-13/16 in. wide and 8-1/2 in. long fabricated from galvanized steel. Aggregate area of the register opening(s) through the ceiling membrane shall not exceed 37.5 sq in. per 100 sq ft of ceiling area. Damper assembly installed in accordance with the manufacturer's installation instructions.

AIRE TECHNOLOGIES INC — Models GBR-CRD2

6. **Furring Channels —** Resilient channels formed of 25 MSG galv steel, spaced 16 in. OC, installed perpendicular to trusses. When batt and blanket material, Item 3, is draped over the resilient channel/gypsum board ceiling membrane, the spacing shall be 12 in. OC. 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 board butt joints (spaced 6 in. OC) as shown in the above illustration.

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 6Ca) to trusses (Item 2). Clips secured to the bottom chord of each truss (24 in. OC) with one No. 8 by 2-1/2 in. long coarse drywall screw through center grommet. Furring channels are friction fitted into clips. Adjoining channels are overlapped as described in Item 6Ca. 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.
PLITEQ INC — Type Genie Clip

6D. **Steel Framing Members* —** (Not Shown) - As an alternate to Items 6, 6A, 6B and 6C.
a. **Main runners —** Installed perpendicular to trusses — Nom 10 or 12 ft long, 15/16 in. or 1-1/2 in. wide face, spaced 4 ft OC. Main runners hung a min of 2 in. from bottom chord of trusses with 12 SWG galv steel wire. Wires located a max of 48 in. OC.

b. **Cross tees or channels —** Nom 4 ft long, 15/16 in. or 1-1/2 in. wide face or cross channels, nom 4 ft long, 1-1/2 wide face, installed perpendicular to the main runners, spaced 16 in. OC. Additional cross tees or channels used at 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 angles or channels —** Used to support steel framing member ends and for screw-attachment of the gypsum board — Min 0.016 in. thick painted or galvanized steel angle with 1 in. legs or min. 0.016 in. thick painted or galvanized steel channel with a 1 by 1-1/2 by 1 in. profile, attached to walls at perimeter of ceiling with fasteners 16 in. OC.
CGC INC — Type DGL or RX.

USG INTERIORS LLC — Type DGL or RX.

6E. **Alternate Steel Framing Members* —** (Not Shown) - As an alternate to items 6, 6A, 6B, 6C and 6D, 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 (Item 3, 3A or 3B) 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 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

6F. **Steel Framing Members* —** (Not Shown) - As an alternate to Items 6 through 6E- Not for use with Items 3, 3A, or 3B. Main runners nom 12 ft long, spaced 72 in. OC. Main runners suspended by min 12 SWG galv steel hanger wires spaced 48 in. OC. Cross tees, nom 6 ft long, installed perpendicular to main runners and spaced 24 in. OC. Additional 6 ft long cross tees required at each gypsum board end joint with butted gypsum board end joints 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.
USG INTERIORS LLC — Type DGL or RX

6G. **Alternate Steel Framing Members* —** (Not Shown) - As an alternate to items 6 through 6F 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. When batt insulation (Item 3, 3A or 3B) 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 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

6H. **Furring Channels — For use with American Gypsum Co. Type AG-C gypsum board only.** Resilient channels formed of 25 MSG galv steel, spaced 16 in. OC, installed perpendicular to trusses. When insulation material, Item 3, 3A or 3B, 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 steel screws. Channels overlapped 4 in. at splices. Channels oriented opposite at gypsum board butt joints (spaced 6 in. OC) as shown in the above illustration.

7. **Gypsum Board* —** One layer of nom 5/8 in. thick, 48 in. wide, installed with long dimension perpendicular to resilient 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 insulation (Item 3, 3A, 3B) is draped over the resilient channel/gypsum board ceiling membrane, screws shall be installed at 8 in. OC.
When **Steel Framing Members*** (Item 6A or 6C) are used, sheets installed with long dimension perpendicular to furring channels and side joints of sheet located beneath trusses. Gypsum board screws are driven through channel spaced 12 in. OC in the field when no insulation (Item 3, 3A, 3B) is fitted in the concealed space, or 8 in. OC in the field when insulation (Item 3, 3A, 3B) is fitted in the concealed space, draped over the furring channel/gypsum board ceiling membrane. Gypsum board butt joints shall be staggered min. 2 ft within the assembly, and occur between the main furring channels. At the gypsum board butt joints, each end of the 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 furring channels shall be spaced approximately 3-1/2 in. OC, and be attached to the trusses with one clip at each end of the channel. Screw spacing along the butt joint to attach the gypsum board to the furring channels shall be 8 in. OC. Second (outer) layer of gypsum board required when furring channels (Item 6A, a) are spaced 24 in. OC and insulation is fitted in the concealed space, draped over the furring channel/gypsum board ceiling membrane. Outer layer of gypsum board attached to the furring channels using 1-5/8 in. long Type S bugle-head screws spaced 8 in. OC at butted joints and 12 in. OC in the field. Butted end joints of outer layer to be offset a minimum of 8 in. from base layer end joints. Butted side joints of outer layer to be offset minimum 18 in. from butted side joints of base layer..

When **Steel Framing Members** (Item 6B) 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 6Ba). 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 6E) 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. Butt joing furring channels shall be attached with one RESILMOUNT Sound Isolation Clip at each end of the channel.

When **Steel Framing Members*** (Item 6F) are used, one layer of nom 5/8 in. thick, 4 ft wide gypsum board sheets installed with long dimension (side joints) perpendicular to the 6 ft long cross tees with the end joints staggered min 4 ft and centered between cross tees which are spaced 8 in. OC. Gypsum board side joints may occur beneath or between main runners. 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 with hold down clips to prevent the backer strips from being uplifted during screw-attachment of the gypsum board sheets. Gypsum board fastened to cross tees with 1 in. 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.

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, 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

CGC INC — Types C, IP-X2, IPC-AR.

CERTAINTEED GYPSUM INC — Type C

CERTAINTEED GYPSUM INC — Type LGFC-C/A

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

NATIONAL GYPSUM CO — Types eXP-C, FSW-G, FSW-C, FSX-G, FSX-C.

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.

7A. **Gypsum Board* —** For use with **Steel Framing Members** (Item 6D) when **Batts and Blankets*** (Item 3) are not used - One layer of nom 5/8 in. thick by 48 in. wide boards, installed with long dimension parallel to the main runners. Gypsum board fastened to each cross tee or channel with five gypsum board screws, with one screw located at the midspan of the cross tee or channel, one screw located 12 in. from and on each side of the cross tee or channel mid span and one screw located 1-1/2 in. from each gypsum board side joint. Except at gypsum board end joints, gypsum board screws shall be located on alternating sides of cross tee flange. At gypsum board end joints, gypsum board screws shall be located 1/2 in. from the joint. Gypsum board fastened to main runners with gypsum board screws 1/2 in. from side joints, midway between intersections with cross tees or channels (16 in. OC). End joints of adjacent gypsum board sheets shall be staggered not less than 32 in. Gypsum board sheets screw attached to leg of wall angle with gypsum board screws spaced 12 in. OC. Joints treated as described in Item 7. For use with **Steel Framing Members*** (Item 6D) when **Batts and Blankets*** (Item 3) are used - 5/8 in. thick, 4 ft wide; installed with long dimension perpendicular to cross tees with side joints centered along main runners and end joints centered along cross tees. Fastened to cross tees with 1 in. long steel gypsum board screws spaced 8 in. OC in the field and 8 in. OC along end joints. Fastened to main runners with 1 in. long gypsum board screws spaced midway between cross tees. Screws along sides and ends of boards spaced 3/8 to 1/2 in. from board edge. End joints of the sheets shall be staggered with spacing between joints on adjacent boards not less than 4 ft OC.
CGC INC — Type C or IP-X2.

UNITED STATES GYPSUM CO — Type C or IP-X2.

USG BORAL DRYWALL SFZ LLC — Type C

USG MEXICO S A DE C V — Type C or IP-X2.

7B. **Gypsum Board* (As an alternative to Items 7 and 7A) —** Nom 5/8 in. thick, 48 in. wide gypsum board, installed and secured as described in Items 7 and 7A with max screw spacing 8 in. OC.
CGC INC — Type ULIX

UNITED STATES GYPSUM CO — ULIX

7C. **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 board.

9. **Netting —** (Not Shown) - For use when Sprayed Fiber* (Item 3B) is used - Woven netting material fastened to underside of each truss with staples, with side joints overlapped.

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

REGISTERED ARCHITECT
MARTIN RANDALL PORTER
STATE OF TEXAS
24139
25 OCT 2024
MARTIN RANDALL PORTER
ARCHITECT LICENSE #24739

DASHWOOD TRAILS
HOUSTON, HARRIS COUNTY, TEXAS

Wallace ARCHITECTS LLC
Columbia, MO
P 573-256-7200
TEXAS STATE CERTIFICATE OF AUTHORITY: BR 159

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1ST ISSUE
25 OCT 2024

ISSUE/REVISIONS
0, 25 OCT 2024 ISSUE SET

SHEET NO.
A5.6

JOB NO.
4809

ISSUE SET

10/31/2024 11:52:36 AM

UNIT FINISH SCHEDULE

NAME	FLOOR FINISH	BASE FINISH	WALL FINISH	CEILING FINISH
ADA 1-BR UNIT				
BATH	LUXURY VINYL PLANK	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
BEDROOM	LUXURY VINYL PLANK	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
CLOSET	LUXURY VINYL PLANK	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
ENTRY	LUXURY VINYL PLANK	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
EXT. STORAGE	SEALED CONCRETE	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
KITCHEN / DINING	LUXURY VINYL PLANK	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
LAUNDRY	LUXURY VINYL PLANK	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
LIVING ROOM	LUXURY VINYL PLANK	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
MECH.	LUXURY VINYL PLANK	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
PATIO / BALCONY	SEALED CONCRETE	NO ADDITIONAL FINISH	NO ADDITIONAL FINISH	NO ADDITIONAL FINISH
ADA 2-BR UNIT				
BATH	LUXURY VINYL PLANK	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
BEDROOM 1	LUXURY VINYL PLANK	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
BEDROOM 2	LUXURY VINYL PLANK	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
CLOSET 1	LUXURY VINYL PLANK	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
CLOSET 2	LUXURY VINYL PLANK	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
ENTRY	LUXURY VINYL PLANK	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
EXT. STORAGE	SEALED CONCRETE	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
KITCHEN	LUXURY VINYL PLANK	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
LAUNDRY	LUXURY VINYL PLANK	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
LIVING ROOM / DINING	LUXURY VINYL PLANK	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
MECH.	LUXURY VINYL PLANK	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
PATIO / BALCONY	SEALED CONCRETE	NO ADDITIONAL FINISH	NO ADDITIONAL FINISH	NO ADDITIONAL FINISH
ADA 3-BR UNIT				
BATH 1	LUXURY VINYL PLANK	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
BATH 2	LUXURY VINYL PLANK	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
BEDROOM 1	LUXURY VINYL PLANK	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
BEDROOM 2	LUXURY VINYL PLANK	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
BEDROOM 3	LUXURY VINYL PLANK	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
CLOSET 1	LUXURY VINYL PLANK	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
CLOSET 2	LUXURY VINYL PLANK	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
CLOSET 3	LUXURY VINYL PLANK	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
ENTRY	LUXURY VINYL PLANK	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
EXT. STORAGE	SEALED CONCRETE	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
HALL	LUXURY VINYL PLANK	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
KITCHEN	LUXURY VINYL PLANK	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
LAUNDRY	LUXURY VINYL PLANK	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
LIVING ROOM / DINING	LUXURY VINYL PLANK	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
MECH.	LUXURY VINYL PLANK	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
PATIO / BALCONY	SEALED CONCRETE	NO ADDITIONAL FINISH	NO ADDITIONAL FINISH	NO ADDITIONAL FINISH
FHA 1-BR UNIT				
BATH	LUXURY VINYL PLANK	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
BEDROOM	CARPET	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
CLOSET	CARPET	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
ENTRY	LUXURY VINYL PLANK	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
EXT. STORAGE	SEALED CONCRETE	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
KITCHEN / DINING	LUXURY VINYL PLANK	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
LAUNDRY	LUXURY VINYL PLANK	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
LIVING ROOM	LUXURY VINYL PLANK	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
MECH.	LUXURY VINYL PLANK	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
PATIO / BALCONY	SEALED CONCRETE	NO ADDITIONAL FINISH	NO ADDITIONAL FINISH	NO ADDITIONAL FINISH
FHA 2-BR UNIT				
BATH	LUXURY VINYL PLANK	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
BEDROOM 1	CARPET	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
BEDROOM 2	CARPET	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
CLOSET 1	CARPET	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
CLOSET 2	CARPET	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
ENTRY	LUXURY VINYL PLANK	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
EXT. STORAGE	SEALED CONCRETE	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
KITCHEN	LUXURY VINYL PLANK	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
LAUNDRY	LUXURY VINYL PLANK	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
LIVING ROOM / DINING	LUXURY VINYL PLANK	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
MECH.	LUXURY VINYL PLANK	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
PATIO / BALCONY	SEALED CONCRETE	NO ADDITIONAL FINISH	NO ADDITIONAL FINISH	NO ADDITIONAL FINISH
FHA 3-BR UNIT				
BATH 1	LUXURY VINYL PLANK	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
BATH 2	LUXURY VINYL PLANK	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
BEDROOM 1	CARPET	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
BEDROOM 2	CARPET	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
BEDROOM 3	CARPET	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
CLOSET 1	CARPET	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
CLOSET 2	CARPET	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
CLOSET 3	CARPET	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
ENTRY	LUXURY VINYL PLANK	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
EXT. STORAGE	SEALED CONCRETE	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
HALL	LUXURY VINYL PLANK	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
KITCHEN	LUXURY VINYL PLANK	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
LAUNDRY	LUXURY VINYL PLANK	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
LIVING ROOM / DINING	LUXURY VINYL PLANK	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
MECH.	LUXURY VINYL PLANK	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
PATIO / BALCONY	SEALED CONCRETE	NO ADDITIONAL FINISH	NO ADDITIONAL FINISH	NO ADDITIONAL FINISH

ACCESSIBLE UNIT BATH NOTES

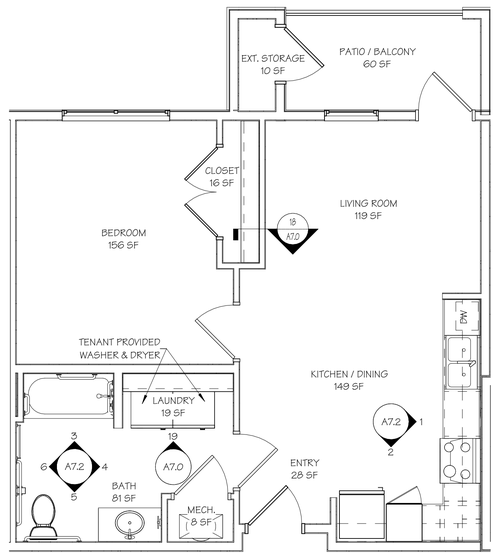
1) VALVE & SHOWER HEAD SHALL BE ON 2X6 WALL OR WALL @ LAV., (SEE BATH ELEVATIONS SHEET A7.0)
2) PROVIDE HAND-HELD SHOWER W/VACUUM BREAKER (IN LIEU OF FIXED SHOWER HEAD), FLEXIBLE HOSE, & 24" SLIDE BAR.
3) INSTALL GRAB BARS WITH ROUND HEAD SCREWS.
4) PROVIDE & INSTALL 36" GRAB BAR BEHIND & 42" GRAB BAR BESIDE WATER CLOSET ON WALL @ 34" A.F.F. (SEE BATH ELEVATIONS SHEET A7.0)
5) BOTTOM OF MIRROR TO REST ON COUNTERTOP BACKSPLASH.
6) VANITY SINK FAUCET TO BE LEVER TYPE, & EXPOSED PIPING TO BE WRAPPED W/ PIPE WRAP.
7) EXTEND VINYL FLOORING BENEATH LAV. SPACE.

ACCESSIBLE UNIT KITCHEN NOTES

1) COUNTER HEIGHT SHALL BE 34" A.F.F. TO TOP OF SINK.
2) EXTEND VINYL FLOORING BENEATH SINK SPACE AND THE 30" WORKSPACE BESIDE THE RANGE. PROVIDE REMOVABLE FRONT & FLOOR IN LIEU OF SINK BASE.
3) TOE KICK SPACE @ BOTTOM OF BASE CABINETS SHALL REMAIN 4" MIN. (STANDARD)
4) ADD SEPARATE WALL SWITCHES FOR RANGE HOOD FAN AND RANGE HOOD LIGHT (SEE ELECTRICAL PLANS)
5) ADD SWITCHES FOR CONTROL OF LIGHT OVER SINK & GARBAGE DISPOSAL.
6) TOP OF WALL TELEPHONE OUTLET TO BE 46" MAX. A.F.F.
7) SWITCHES & OUTLETS IN KITCHEN ABOVE BASE CABINETS SHALL BE 40" A.F.F. TO BOTTOM OF SWITCH PLATE, SO AS NOT INTERFERE WITH WALL CABINET.
8) INSULATE EXPOSED PIPING BELOW KITCHEN SINK W/ PIPE WRAP.
9) DISHWASHER HOOKUPS ARE UNDER SINK, ACCESS OPENING IS TO BE MADE THROUGH END PANEL OF SNIK.

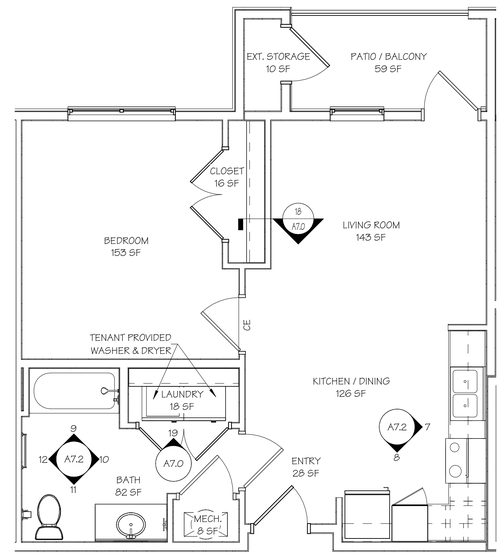
GENERAL UNIT NOTES

1) CONTRACTOR SHALL FURNISH & INSTALL 4" BUILDING NUMBERS FOR EACH UNIT AS REQUIRED BY CITY OR LOCAL POSTMASTER.
2) CONTRACTOR SHALL FURNISH ONE MAILBOX PER UNIT, PER OWNER SELECTION (SEE SPECS).
3) CERTIFICATION OF R-49 CEILING INSULATION MUST BE POSTED IN ATTIC.
4) PROVIDE CARPET EDGES AS NECESSARY, DESIGNATED BY "CE" (COLOR SELECTED BY OWNER).
5) COAT AND BEDROOM CLOSETS SHALL HAVE EPOXY-COATED WIRE SHELVING.
6) PRIME & PAINT WALLS BEHIND MILLWORK.
7) SEAL CONCRETE FLOOR TO REDUCE MOISTURE PENETRATION.
8) APPROPRIATELY SIZED BLINDS SHALL BE PROVIDED AND INSTALLED FOR EACH GLAZED OPENING, INCLUDING PAIRED WINDOWS (PROVIDED WITH TWO SETS) AND DOOR GLAZING WHERE HALF LITE OR LARGER.



1 A6.0 ADA 1-BR UNIT FINISH PLAN

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



2 A6.0 FHA 1-BR UNIT FINISH PLAN

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

REGISTERED ARCHITECT
MARTIN RANDALL PORTER
24739
STATE OF TEXAS

25 OCT 2024

MARTIN RANDALL PORTER
ARCHITECT LICENSE #24739

DASHWOOD TRAILS
HOUSTON, HARRIS COUNTY, TEXAS

Wallace ARCHITECTS LLC
Columbia, MO
P 573-256-7200

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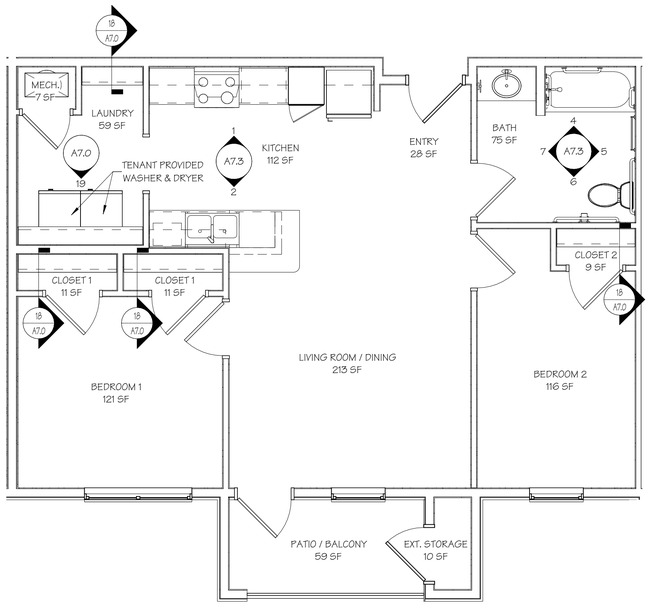
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SHEET NO. A6.0

JOB NO. 4809

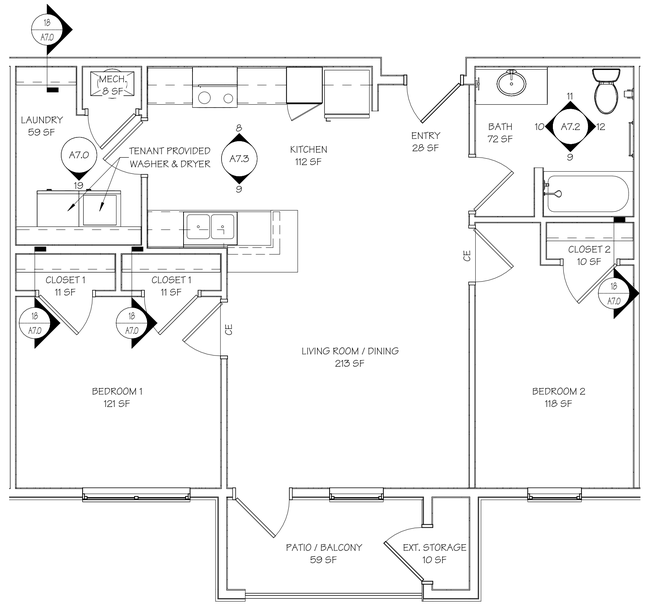
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1 A6.1 ADA 2-BR UNIT FINISH PLAN

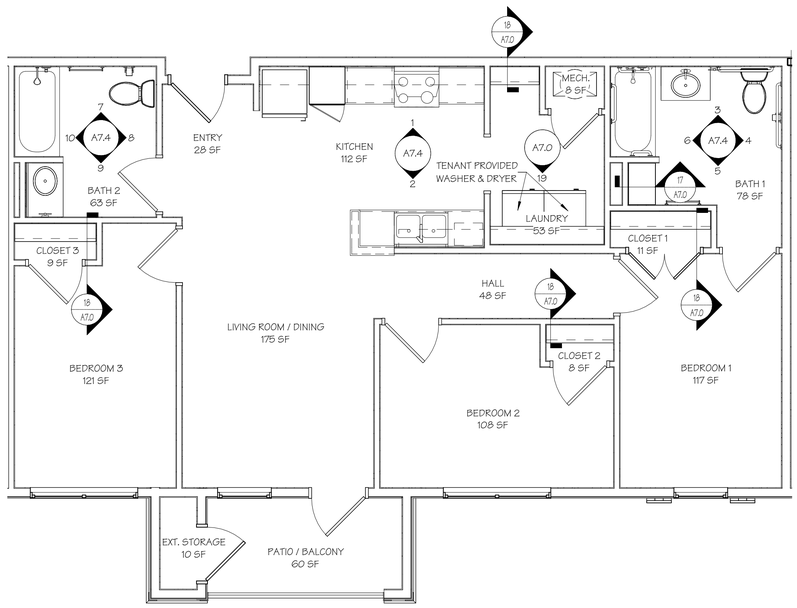
SCALE: 1/4" = 1'-0"



2 A6.1 FHA 2-BR UNIT FINISH PLAN

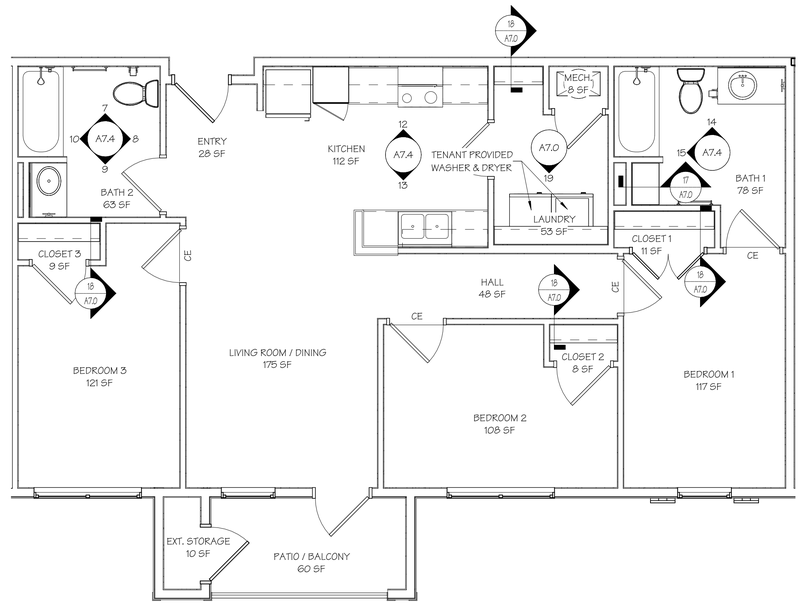
SCALE: 1/4" = 1'-0"

NOTE: SEE SHEET A6.0 FOR FINISH SCHEDULE AND NOTES.



3 A6.1 ADA 3-BR UNIT FINISH PLAN

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



4 A6.1 FHA 3-BR UNIT FINISH PLAN

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

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REGISTERED ARCHITECT
MARTIN RANDALL PORTER
#24739
STATE OF TEXAS

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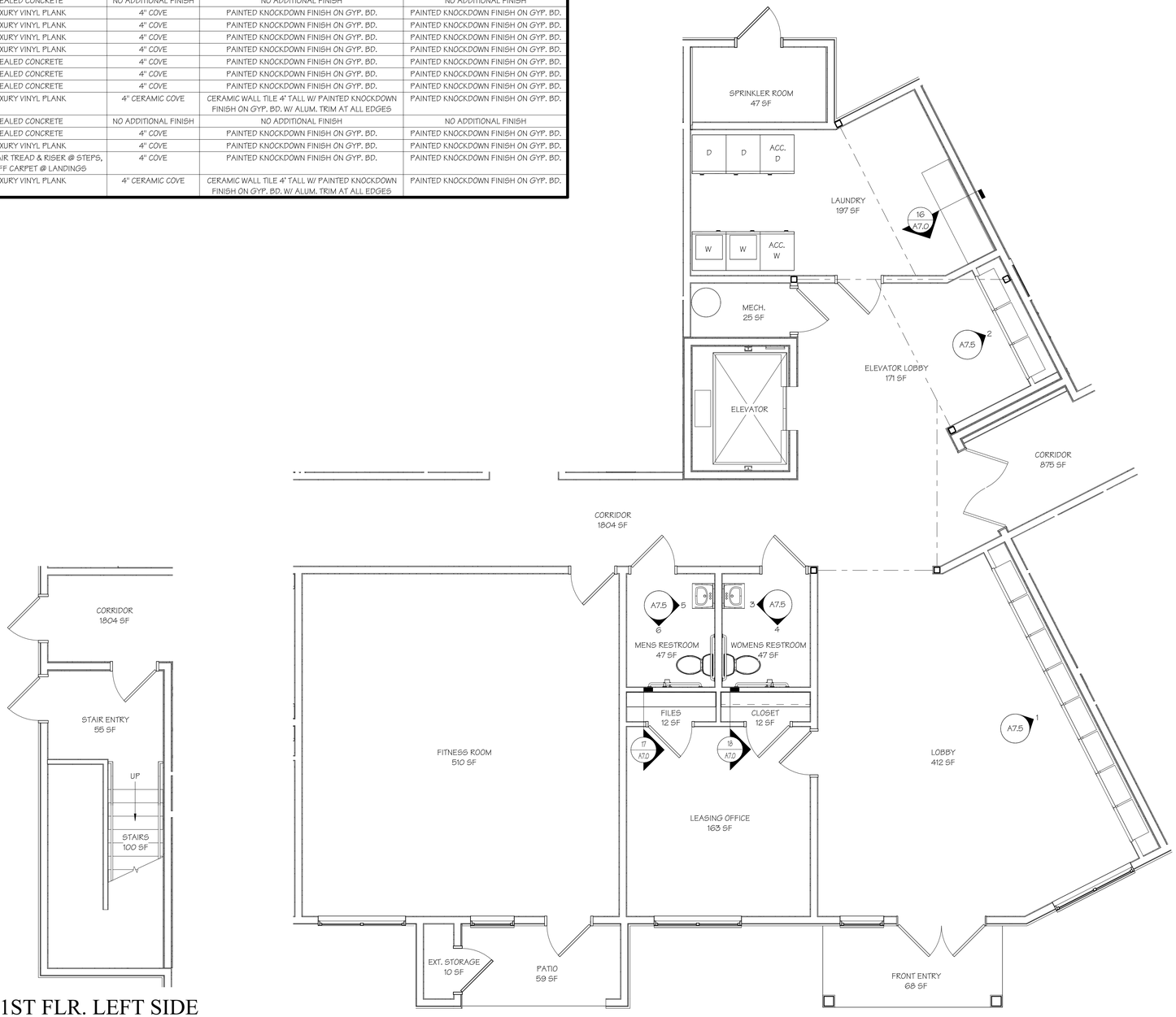
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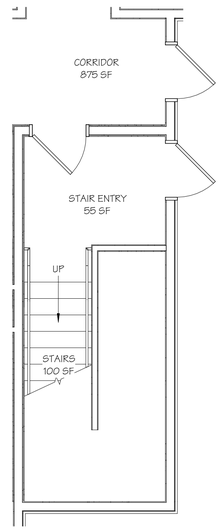
COMMON AREA FINISH SCHEDULE

NAME	FLOOR FINISH	BASE FINISH	WALL FINISH	CEILING FINISH
COMMON AREA				
AFTER SCHOOL LEARNING CENTER	LUXURY VINYL PLANK	4" COVE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
BALCONY	SEALED CONCRETE	NO ADDITIONAL FINISH	NO ADDITIONAL FINISH	NO ADDITIONAL FINISH
CLOSET	LUXURY VINYL PLANK	4" COVE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
COMMUNITY ROOM	LUXURY VINYL PLANK	4" COVE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
CORRIDOR	LUXURY VINYL PLANK	4" COVE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
ELEVATOR LOBBY	LUXURY VINYL PLANK	4" COVE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
EXT. STORAGE	SEALED CONCRETE	4" COVE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
FILES	LUXURY VINYL PLANK	4" COVE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
FITNESS ROOM	LUXURY VINYL PLANK	4" COVE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
FOOD PANTRY	LUXURY VINYL PLANK	4" COVE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
FRONT ENTRY	SEALED CONCRETE	NO ADDITIONAL FINISH	NO ADDITIONAL FINISH	NO ADDITIONAL FINISH
KITCHENETTE	LUXURY VINYL PLANK	4" COVE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
LAUNDRY	LUXURY VINYL PLANK	4" COVE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
LEASING OFFICE	LUXURY VINYL PLANK	4" COVE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
LOBBY	LUXURY VINYL PLANK	4" COVE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
MAINT.	SEALED CONCRETE	4" COVE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
MECH.	SEALED CONCRETE	4" COVE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
MECH. / MAINT.	SEALED CONCRETE	4" COVE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
MENS RESTROOM	LUXURY VINYL PLANK	4" CERAMIC COVE	CERAMIC WALL TILE 4' TALL W/ PAINTED KNOCKDOWN FINISH ON GYP. BD. W/ ALUM. TRIM AT ALL EDGES	PAINTED KNOCKDOWN FINISH ON GYP. BD.
PATIO	SEALED CONCRETE	NO ADDITIONAL FINISH	NO ADDITIONAL FINISH	NO ADDITIONAL FINISH
SPRINKLER ROOM	SEALED CONCRETE	4" COVE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
STAIR ENTRY	LUXURY VINYL PLANK	4" COVE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
STAIRS	RUBBER STAIR TREAD & RISER @ STEPS, WALK-OFF CARPET @ LANDINGS	4" COVE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
WOMENS RESTROOM	LUXURY VINYL PLANK	4" CERAMIC COVE	CERAMIC WALL TILE 4' TALL W/ PAINTED KNOCKDOWN FINISH ON GYP. BD. W/ ALUM. TRIM AT ALL EDGES	PAINTED KNOCKDOWN FINISH ON GYP. BD.



1 A6.2 1ST FLR. LEFT SIDE STAIRWELL FIN. PLAN
SCALE: 1/4" = 1'-0"

2 A6.2 1ST FLOOR COMMON AREA FINISH PLAN
SCALE: 1/4" = 1'-0"



3 A6.2 1ST FLR. RIGHT SIDE STAIRWELL FIN. PLAN
SCALE: 1/4" = 1'-0"

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REGISTERED ARCHITECT MARTIN RANDALL PORTER 24739 STATE OF TEXAS
25 OCT 2024
MARTIN RANDALL PORTER
ARCHITECT LICENSE #24739

DASHWOOD TRAILS
HOUSTON, HARRIS COUNTY, TEXAS

Wallace ARCHITECTS LLC
Columbia, MO
P 573-256-7200

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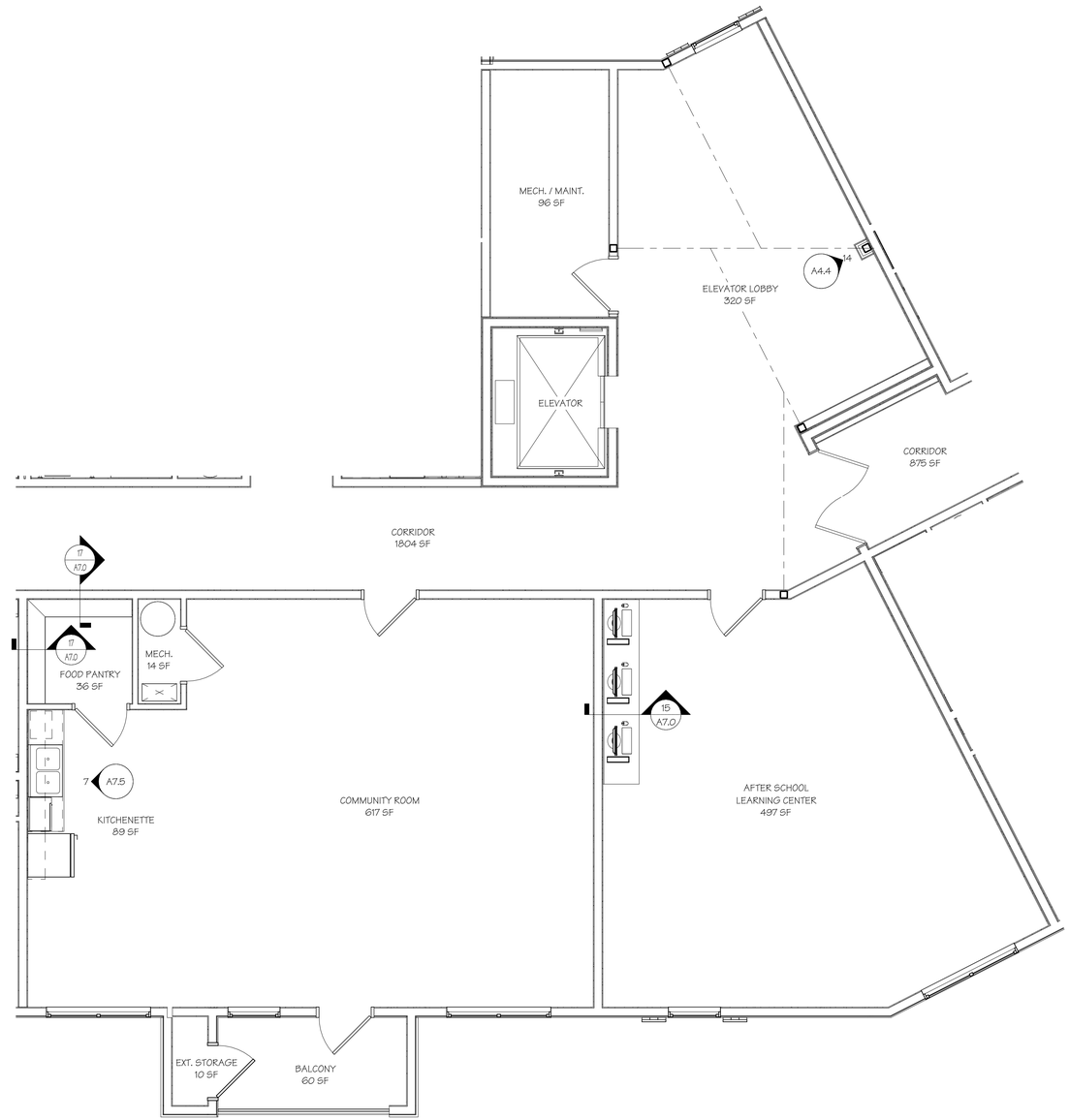
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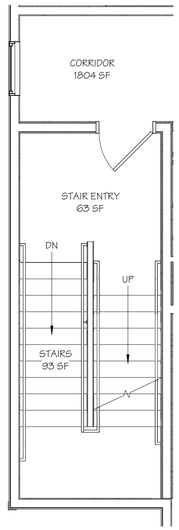
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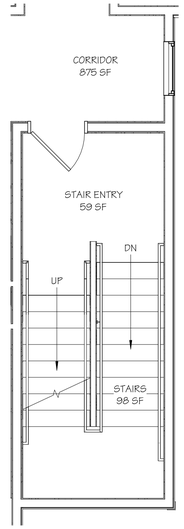
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2ND FLR. LEFT SIDE STAIRWELL FIN. PLAN

1 A6.3 SCALE: 1/4" = 1'-0"

2ND FLOOR COMMON AREA FINISH PLAN

2 A6.3 SCALE: 1/4" = 1'-0"

2ND FLR. RIGHT SIDE STAIRWELL FIN. PLAN

3 A6.3 SCALE: 1/4" = 1'-0"

DASHWOOD TRAILS
HOUSTON, HARRIS COUNTY, TEXAS

REGISTERED ARCHITECT
MARTIN RANDALL PORTER
24739
STATE OF TEXAS

25 OCT 2024

MARTIN RANDALL PORTER
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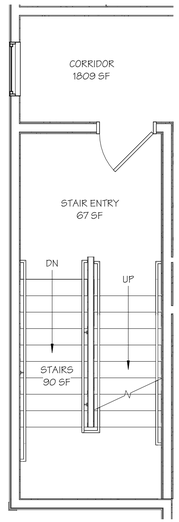
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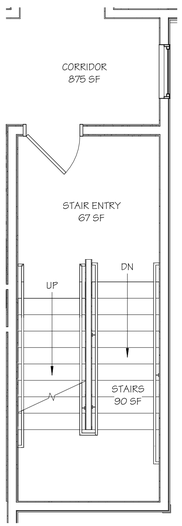
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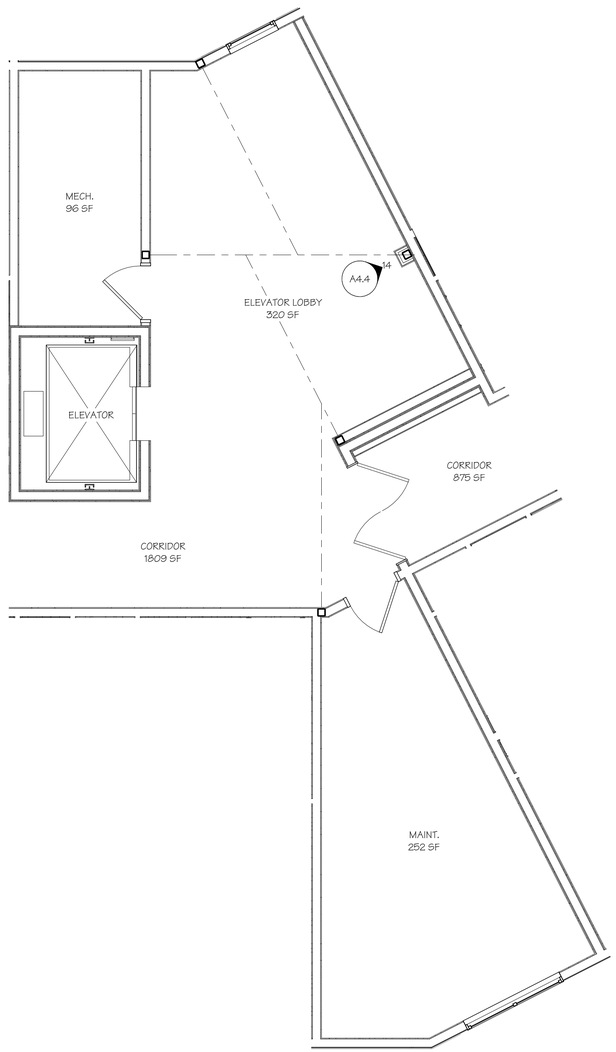
1 A6.4 3RD FLR. LEFT SIDE STAIRWELL FIN. PLAN

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



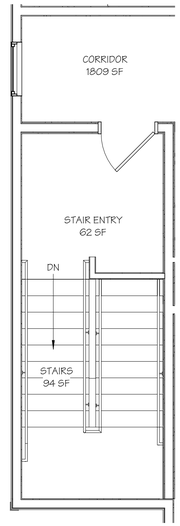
2 A6.4 3RD FLR. RIGHT SIDE STAIRWELL FIN.PLAN

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



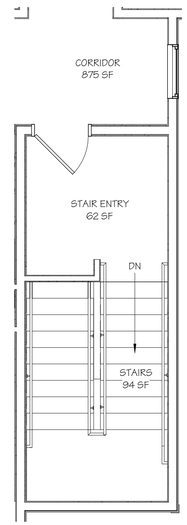
3 A6.4 3RD FLOOR COMMON AREA FINISH PLAN

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



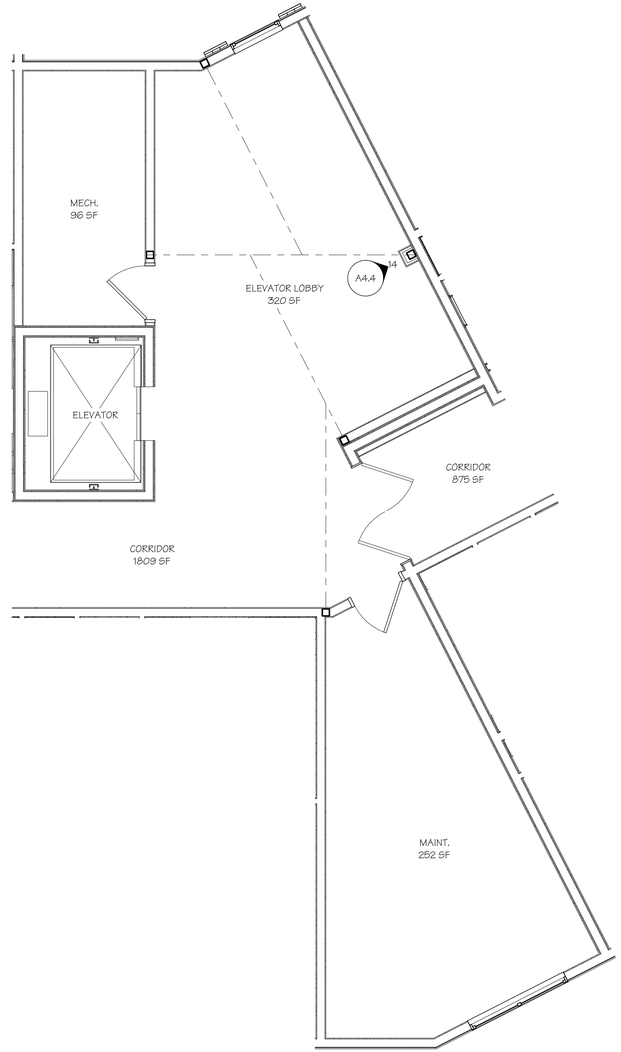
4 A6.4 4TH FLR. LEFT SIDE STAIRWELL FIN. PLAN

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



5 A6.4 4TH FLR. RIGHT SIDE STAIRWELL FIN. PLAN

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



6 A6.4 4TH FLOOR COMMON AREA FINISH PLAN

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

REGISTERED ARCHITECT
MARTIN RANDALL PORTER
#24739
STATE OF TEXAS

25 OCT 2024

MARTIN RANDALL PORTER
ARCHITECT LICENSE #24739

DASHWOOD TRAILS
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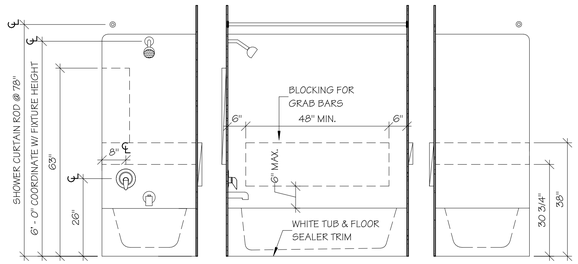
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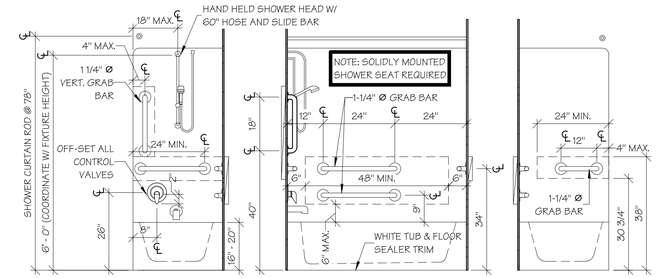
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NOTE:
CONTRACTOR OPTION TO ORDER TUBS, SHOWERS WITH FACTOR INSTALLED GRAB BAR BLOCKING. IF SELECTED, BLOCKING MUST STILL COVER AT LEAST THE AREAS SHOWN.

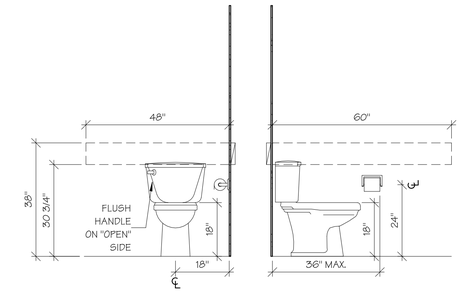
GRAB BAR BLOCKING NOTE:
MANUFACTURER INSTALLED INTEGRAL BACKING OR 2X8 BLOCKING FOR GRAB BARS



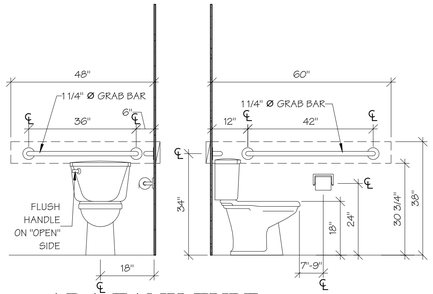
1 FHA TUB SHOWER ELEVATIONS
A7.0 SCALE: 1/2" = 1'-0"



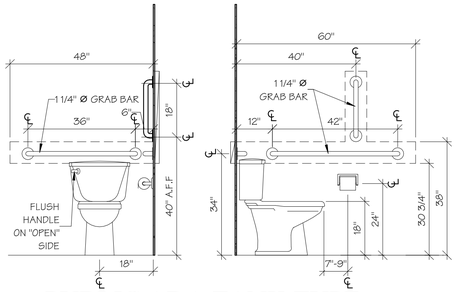
2 ADA TUB SHOWER ELEVATIONS
A7.0 SCALE: 1/2" = 1'-0"



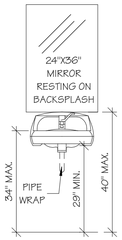
3 FHA TANK TYPE WATER CLOSET ELEVATIONS
A7.0 SCALE: 1/2" = 1'-0"



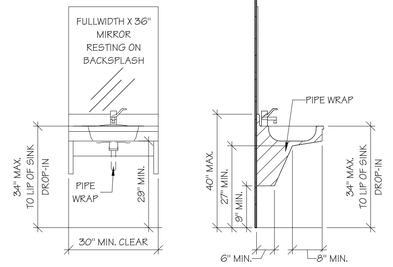
4 ADA TANK TYPE WATER CLOSET ELEVATIONS
A7.0 SCALE: 1/2" = 1'-0"



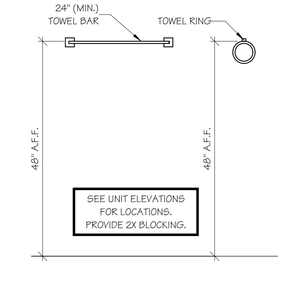
5 PUBLIC ADA TANK TYPE WATER CLOSET ELEVATIONS
A7.0 SCALE: 1/2" = 1'-0"



6 ADA WALL HUNG LAVATORY
A7.0 SCALE: 1/2" = 1'-0"

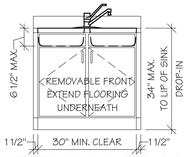


7 ADA WALL HUNG VANITY
A7.0 SCALE: 1/2" = 1'-0"



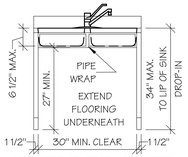
8 BATH ACCESSORIES
A7.0 SCALE: 3/4" = 1'-0"

NOTE:
IF UNDER MOUNT SINK MEASURE TO COUNTER TOP

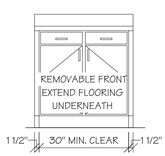


9 REMOV. FRONT KITCHEN SINK
A7.0 SCALE: 1/2" = 1'-0"

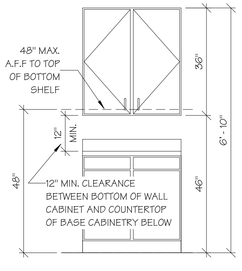
NOTE:
IF UNDER MOUNT SINK MEASURE TO COUNTER TOP



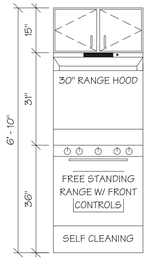
10 OPEN FRONT KITCHEN SINK
A7.0 SCALE: 1/2" = 1'-0"



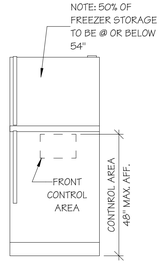
11 REMOV. FRONT WORK STATION
A7.0 SCALE: 1/2" = 1'-0"



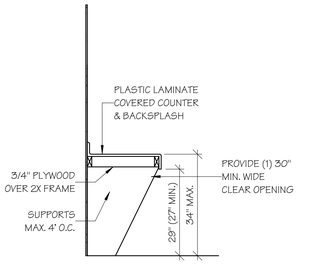
12 ADA WALL CABINET
A7.0 SCALE: 1/2" = 1'-0"



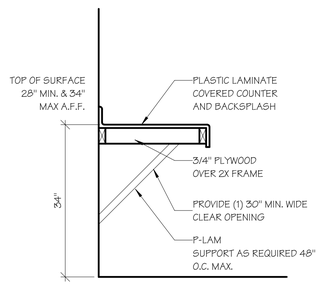
13 ADA RANGE
A7.0 SCALE: 1/2" = 1'-0"



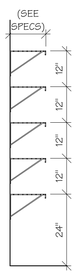
14 ADA REFRIGERATOR
A7.0 SCALE: 1/2" = 1'-0"



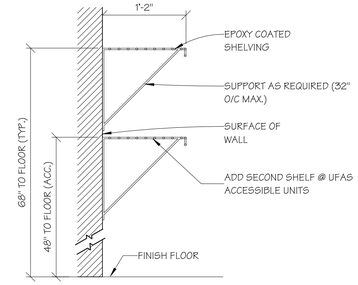
15 COMPUTER COUNTER
A7.0 SCALE: 1/2" = 1'-0"



16 LAUNDRY COUNTER
A7.0 SCALE: 3/4" = 1'-0"

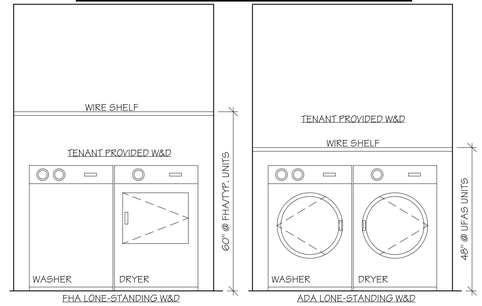


17 CLOSET SHELVING DETAIL
A7.0 SCALE: 1/2" = 1'-0"

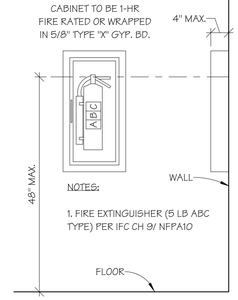


18 CLOTHES CLOSET SHELVING SECTION
A7.0 SCALE: 1" = 1'-0"

NOTE: LAUNDRY HOOKUPS SHALL BE PLACED SO THAT DRYER IS ALWAYS ON THE RIGHT, WASHER IS ALWAYS ON THE LEFT AND FLOOR DRAIN IS ALWAYS IN FRONT OF WASHER - REGARDLESS OF UNIT ORIENTATION.



19 LAUNDRY DETAILS
A7.0 SCALE: 1/2" = 1'-0"



20 FIRE EXT. DETAIL
A7.0 SCALE: 3/4" = 1'-0"

ISSUE SET

REGISTERED ARCHITECT
MARTIN RANDALL PORTER
#24739
STATE OF TEXAS
25 OCT 2024
MARTIN RANDALL PORTER
ARCHITECT LICENSE #24739

DASHWOOD TRAILS
HOUSTON, HARRIS COUNTY, TEXAS

Wallace ARCHITECTS LLC
Columbia, MO
P 573-256-7200

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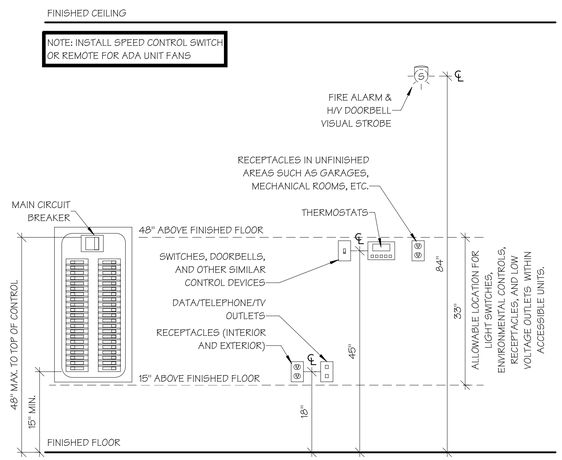
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25 OCT 2024

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0. 25 OCT 2024 ISSUE SET

SHEET NO. A7.0

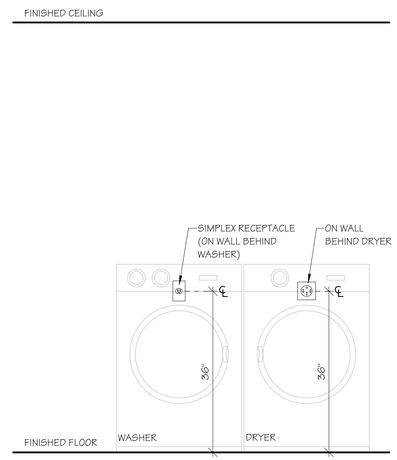
JOB NO. 4809

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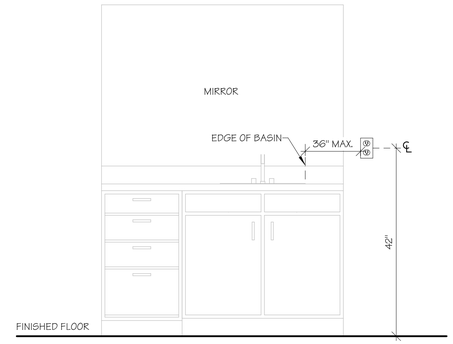
AREAS WITH NO OBSTRUCTIONS ELECTRICAL MOUNTING HEIGHTS (SCHEMATIC)

1 A7.1 SCALE: 3/4" = 1'-0"



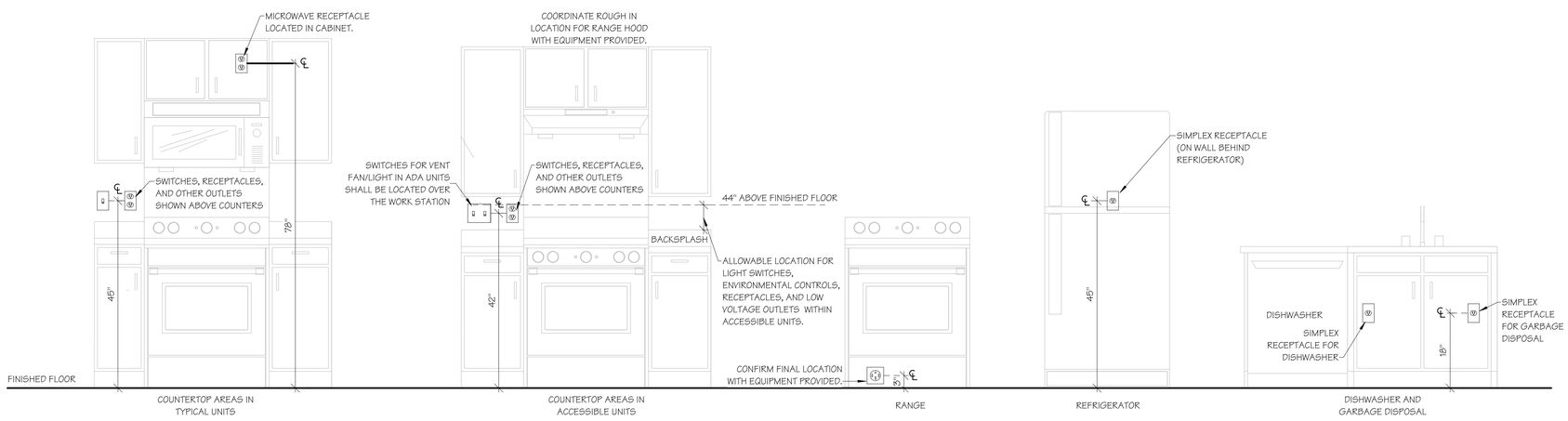
WASHER & DRYER ELECTRICAL MOUNTING HEIGHTS (SCHEMATIC)

2 A7.1 SCALE: 3/4" = 1'-0"



BATHROOM LAVATORY ELECTRICAL MOUNTING HEIGHTS (SCHEMATIC)

3 A7.1 SCALE: 3/4" = 1'-0"



KITCHEN ELECTRICAL MOUNTING HEIGHTS (SCHEMATIC)

4 A7.1 SCALE: 3/4" = 1'-0"

REGISTERED ARCHITECT
MARTIN RANDALL PORTER
24739
STATE OF TEXAS
25 OCT 2024
MARTIN RANDALL PORTER
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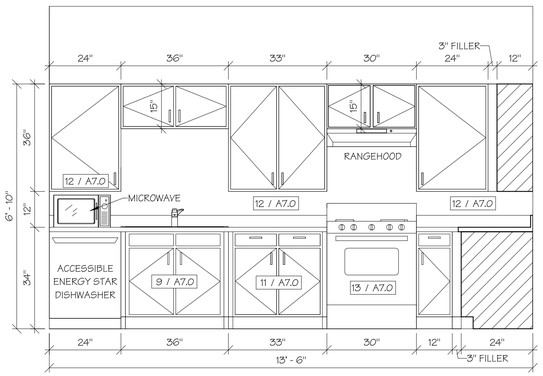
SHEET NO. A7.1

JOB NO. 4809

ISSUE SET

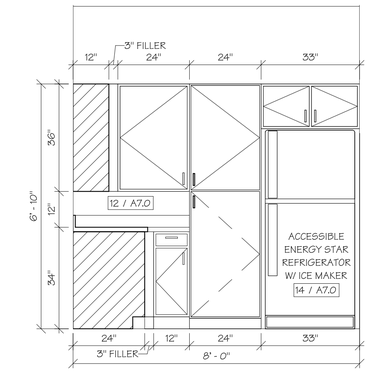
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NOTE: SEE SHEET A7.0 FOR ADDITIONAL REQUIREMENTS, NOTES & DETAILS.



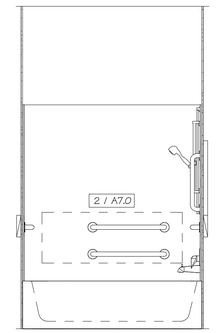
1 A7.2 ADA 1-BR KITCHEN ELEV. 1

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



2 A7.2 ADA 1-BR KITCHEN ELEV. 2

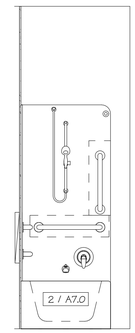
SCALE: 1/2" = 1'-0"



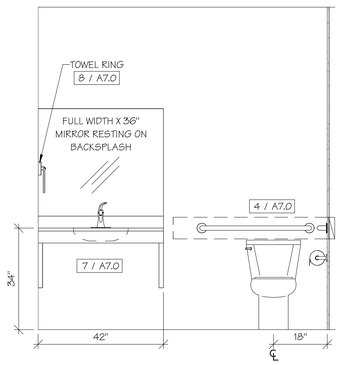
3 A7.2 ADA 1-BR BATH ELEV. 1

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

ADA 1-BR BATH ELEV. 2

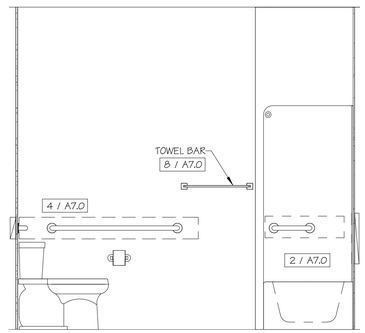


4 A7.2 SCALE: 1/2" = 1'-0"



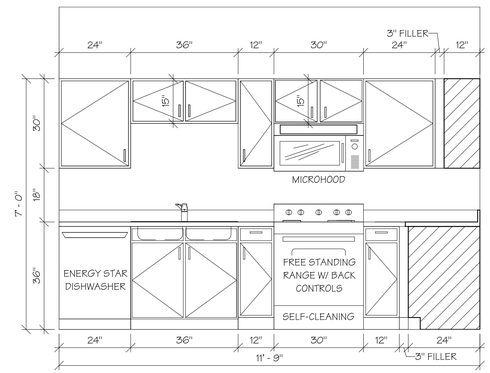
5 A7.2 ADA 1-BR BATH ELEV. 3

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



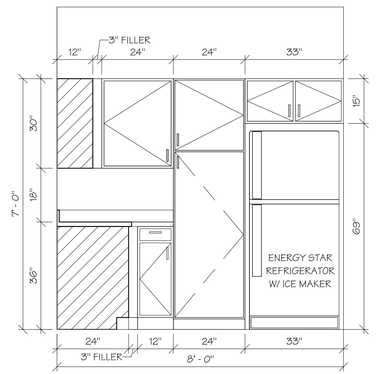
6 A7.2 ADA 1-BR BATH ELEV. 4

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



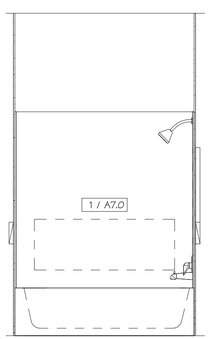
7 A7.2 FHA 1-BR KITCHEN ELEV. 1

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



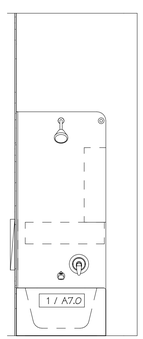
8 A7.2 FHA 1-BR KITCHEN ELEV. 2

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



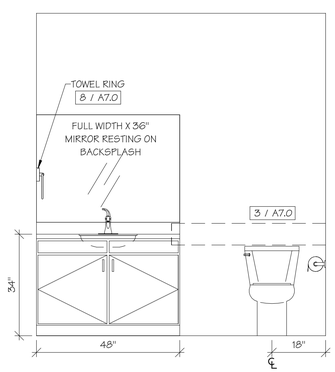
9 A7.2 FHA 1-BR & 2-BR BATH ELEV. 1

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



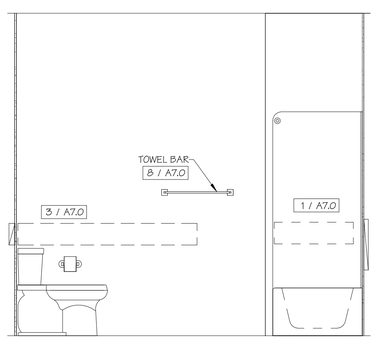
10 A7.2 FHA 1-BR & 2-BR BATH ELEV. 2

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



11 A7.2 FHA 1-BR & 2-BR BATH ELEV. 3

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



12 A7.2 FHA 1-BR & 2-BR BATH ELEV. 4

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

ISSUE SET

REGISTERED ARCHITECT
MARTIN RANDALL PORTER
24739
STATE OF TEXAS
25 OCT 2024
MARTIN RANDALL PORTER
ARCHITECT LICENSE #24739

DASHWOOD TRAILS
HOUSTON, HARRIS COUNTY, TEXAS

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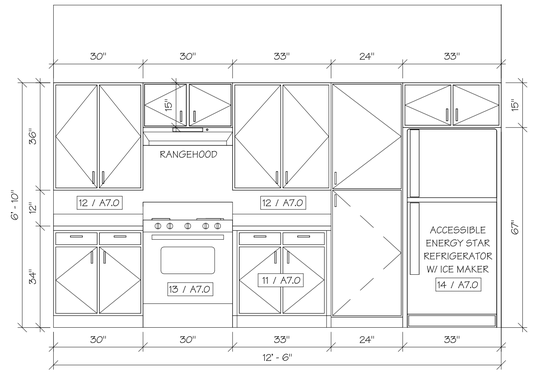
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JOB NO. 4809

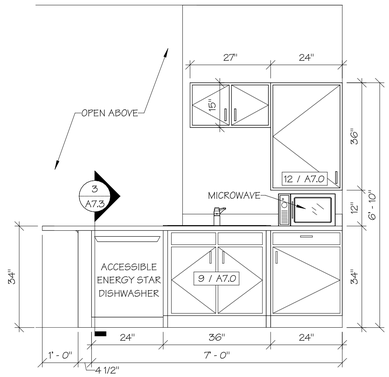
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NOTE: SEE SHEET A7.0 FOR ADDITIONAL REQUIREMENTS, NOTES & DETAILS.



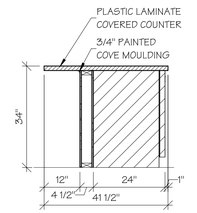
1 A7.3 ADA 2-BR KITCHEN ELEV. 1

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



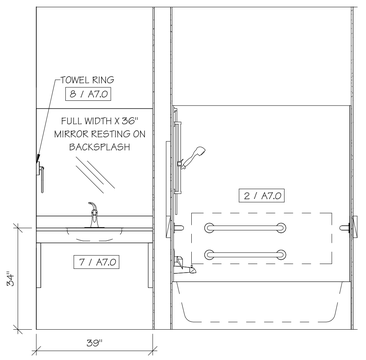
2 A7.3 ADA 2-BR KITCHEN ELEV. 2

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



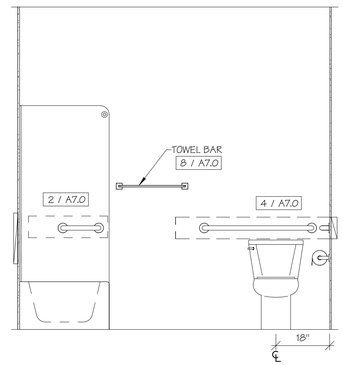
3 A7.3 ADA KITCHEN BAR SECTION

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



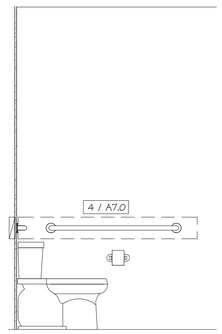
4 A7.3 ADA 2-BR BATH ELEV. 1

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



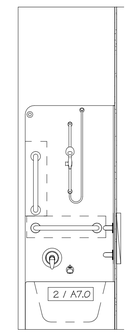
5 A7.3 ADA 2-BR BATH ELEV. 2

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



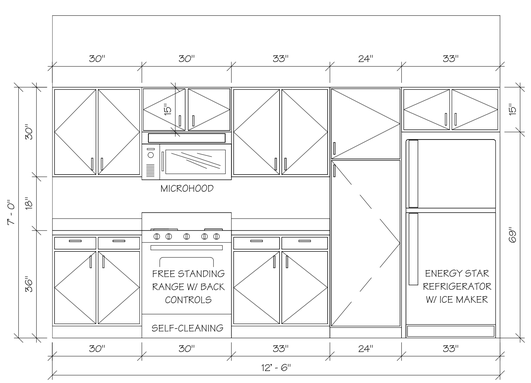
6 A7.3 ADA 2-BR BATH ELEV. 3

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



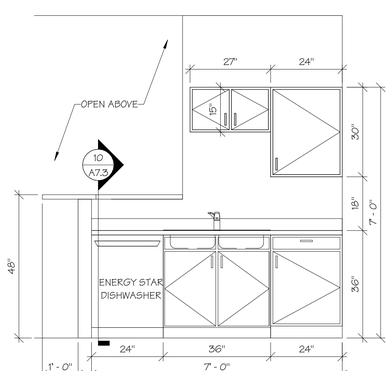
7 A7.3 ADA 2-BR BATH ELEV. 4

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



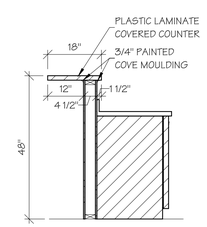
8 A7.3 FHA 2-BR KITCHEN ELEV. 1

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



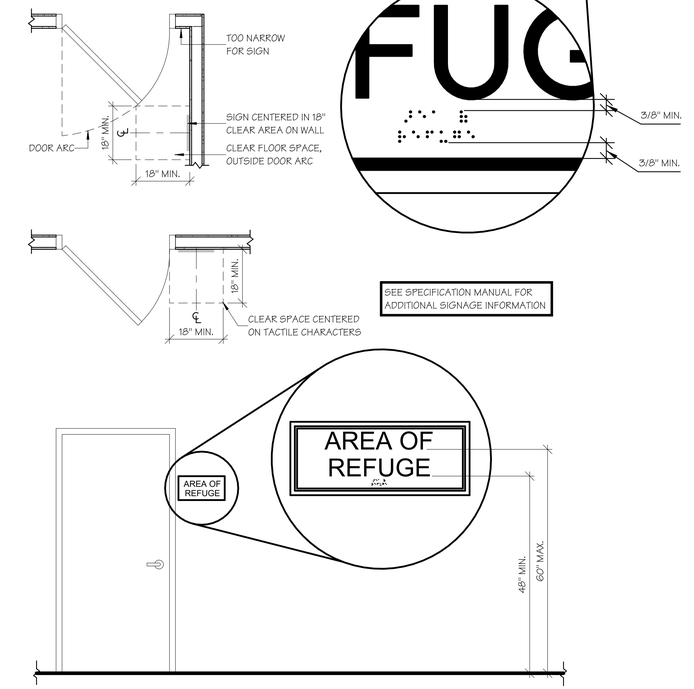
9 A7.3 FHA 2-BR KITCHEN ELEV. 2

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



10 A7.3 FHA KITCHEN BAR SECTION

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



11 A7.3 INTERIOR SIGNAGE DETAIL

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

ISSUE SET

REGISTERED ARCHITECT MARTIN RANDALL PORTER #24739 STATE OF TEXAS

25 OCT 2024

MARTIN RANDALL PORTER
ARCHITECT LICENSE #24739

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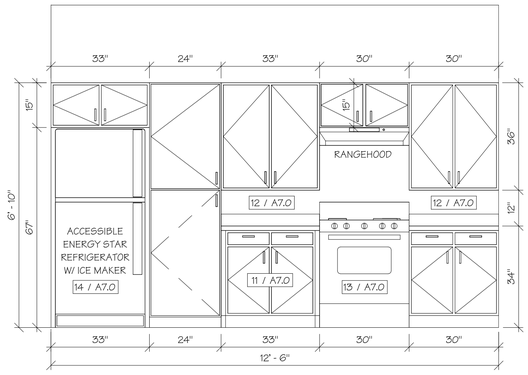
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SHEET NO. A7.3

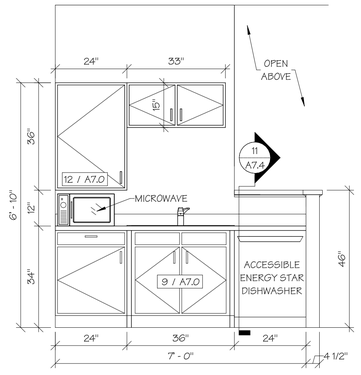
JOB NO. 4809

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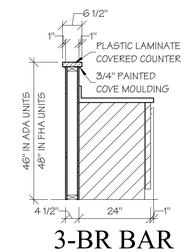
1 A7.4 ADA 3-BR KITCHEN ELEV. 1

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



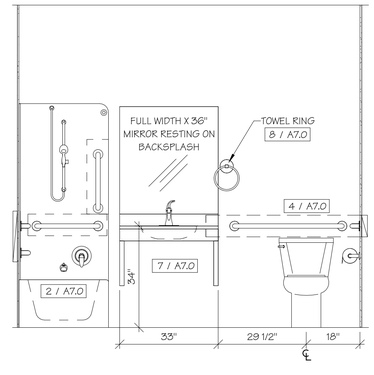
2 A7.4 ADA 3-BR KITCHEN ELEV. 2

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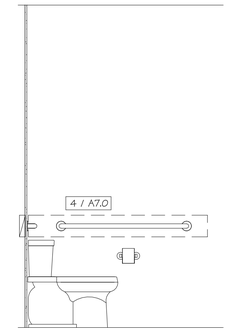
11 A7.4 3-BR BAR SECTION

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



3 A7.4 ADA 3-BR BATH 1 ELEV. 1

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



4 A7.4 ADA 3-BR BATH 1 ELEV. 2

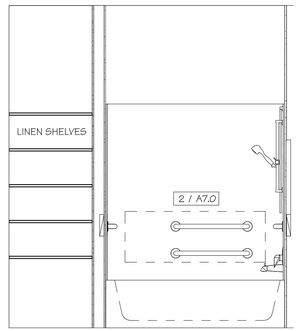
SCALE: 1/2" = 1'-0"

NOTE: SEE SHEET A7.0 FOR ADDITIONAL REQUIREMENTS, NOTES & DETAILS.



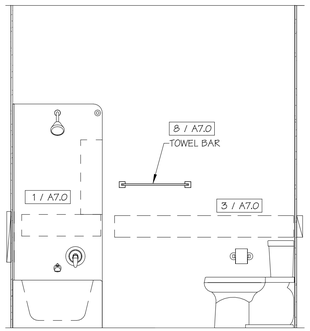
5 A7.4 ADA 3-BR BATH 1 ELEV. 3

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



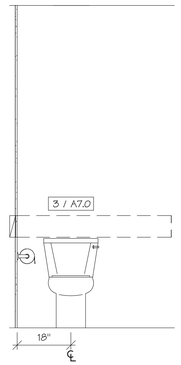
6 A7.4 ADA 3-BR BATH 1 ELEV. 4

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



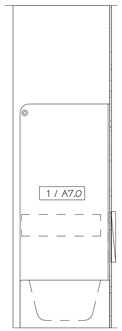
7 A7.4 3-BR BATH 2 ELEV. 1

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



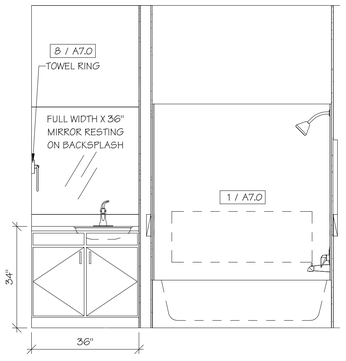
8 A7.4 3-BR BATH 2 ELEV. 2

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



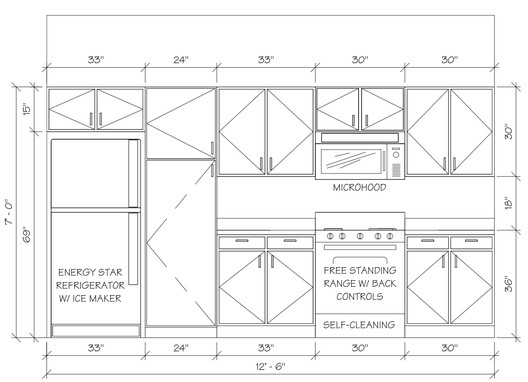
9 A7.4 3-BR BATH 2 ELEV. 3

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



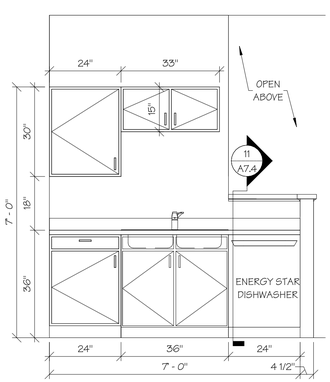
10 A7.4 3-BR BATH 2 ELEV. 4

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



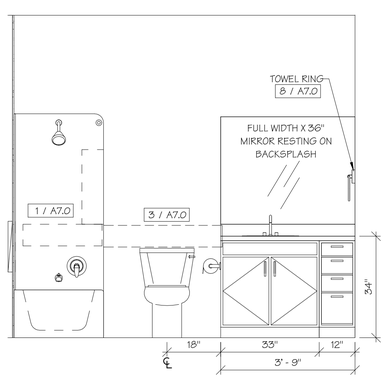
12 A7.4 FHA 3-BR KITCHEN ELEV. 1

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



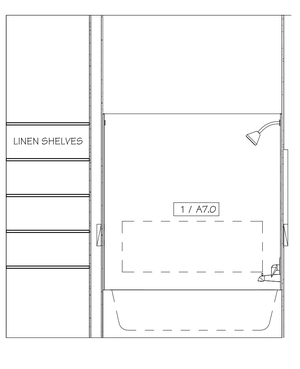
13 A7.4 FHA 3-BR KITCHEN ELEV. 2

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



14 A7.4 FHA 3-BR BATH 1 ELEV. 1

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



15 A7.4 FHA 3-BR BATH 1 ELEV. 2

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

ISSUE SET

REGISTERED ARCHITECT
MARTIN RANDALL PORTER
24739
STATE OF TEXAS
25 OCT 2024
MARTIN RANDALL PORTER
ARCHITECT LICENSE #24739

DASHWOOD TRAILS

HOUSTON, HARRIS COUNTY, TEXAS

Wallace ARCHITECTS LLC
Columbia, MO
P 573-256-7200
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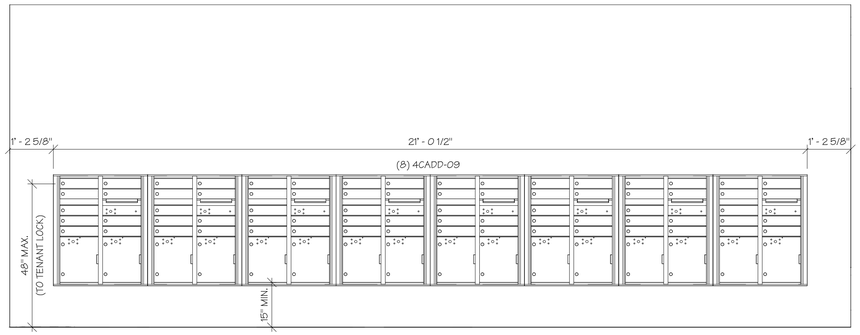
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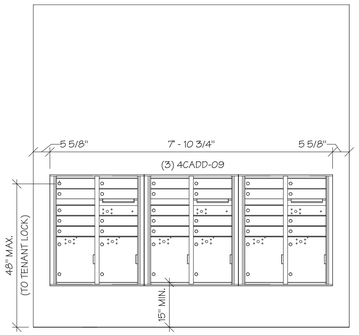
JOB NO. 4809

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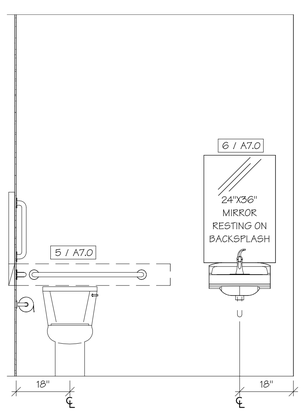
NOTE: SEE SHEET A7.0 FOR ADDITIONAL REQUIREMENTS, NOTES & DETAILS



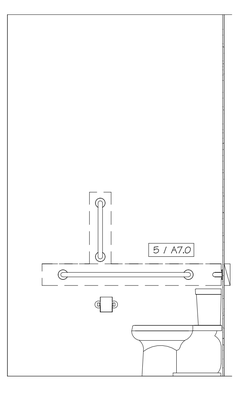
1 A7.5 MAILBOXES ELEV. 1
SCALE: 1/2" = 1'-0"



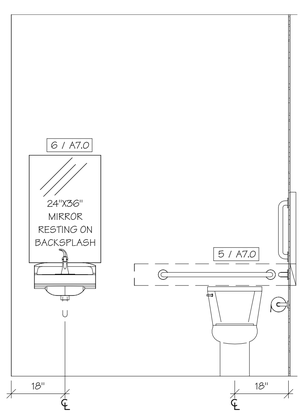
2 A7.5 MAILBOXES ELEV. 2
SCALE: 1/2" = 1'-0"



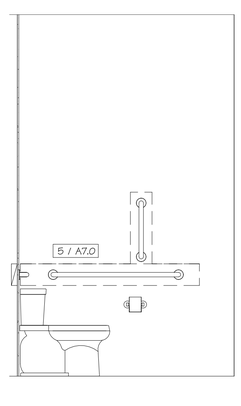
3 A7.5 WOMEN'S RESTROOM ELEV. 1
SCALE: 1/2" = 1'-0"



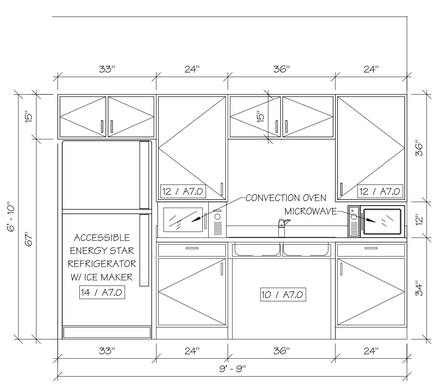
4 A7.5 WOMEN'S RESTROOM ELEV. 2
SCALE: 1/2" = 1'-0"



5 A7.5 MEN'S RESTROOM ELEV. 1
SCALE: 1/2" = 1'-0"



6 A7.5 MEN'S RESTROOM ELEV. 2
SCALE: 1/2" = 1'-0"



7 A7.5 KITCHENETTE ELEV.
SCALE: 1/2" = 1'-0"

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MARTIN RANDALL PORTER
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HOUSTON, HARRIS COUNTY, TEXAS

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A7.5

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OCCUPANCY LOAD CALCULATIONS

2018 IBC, TABLE 1004.1.1

OCCUPANCY	AREA	LOCATION	FACTOR	OCCUPANCY LOAD
ACCESSORY	355 SF	1ST FLOOR	300 SF	2
ACCESSORY	111 SF	2ND FLOOR	300 SF	1
ACCESSORY	384 SF	3RD FLOOR	300 SF	2
ACCESSORY	384 SF	4TH FLOOR	300 SF	2
				TOTAL ACCESSORY = 7
ASSEMBLY	672 SF	1ST FLOOR	15 SF	45
ASSEMBLY	1139 SF	2ND FLOOR	15 SF	80
ASSEMBLY	333 SF	3RD FLOOR	15 SF	23
ASSEMBLY	333 SF	4TH FLOOR	15 SF	23
				TOTAL ASSEMBLY = 171
RESIDENTIAL	19,151 SF	1ST FLOOR	200 SF	96
RESIDENTIAL	19,151 SF	2ND FLOOR	200 SF	96
RESIDENTIAL	20,208 SF	3RD FLOOR	200 SF	102
RESIDENTIAL	20,208 SF	4TH FLOOR	200 SF	102
				TOTAL RESIDENTIAL = 396
BUSINESS	751 SF	1ST FLOOR	150 SF	6
BUSINESS	528 SF	2ND FLOOR	150 SF	4
				TOTAL BUSINESS = 10
				BUILDING TOTAL = 584

FIRE SAFETY LEGEND

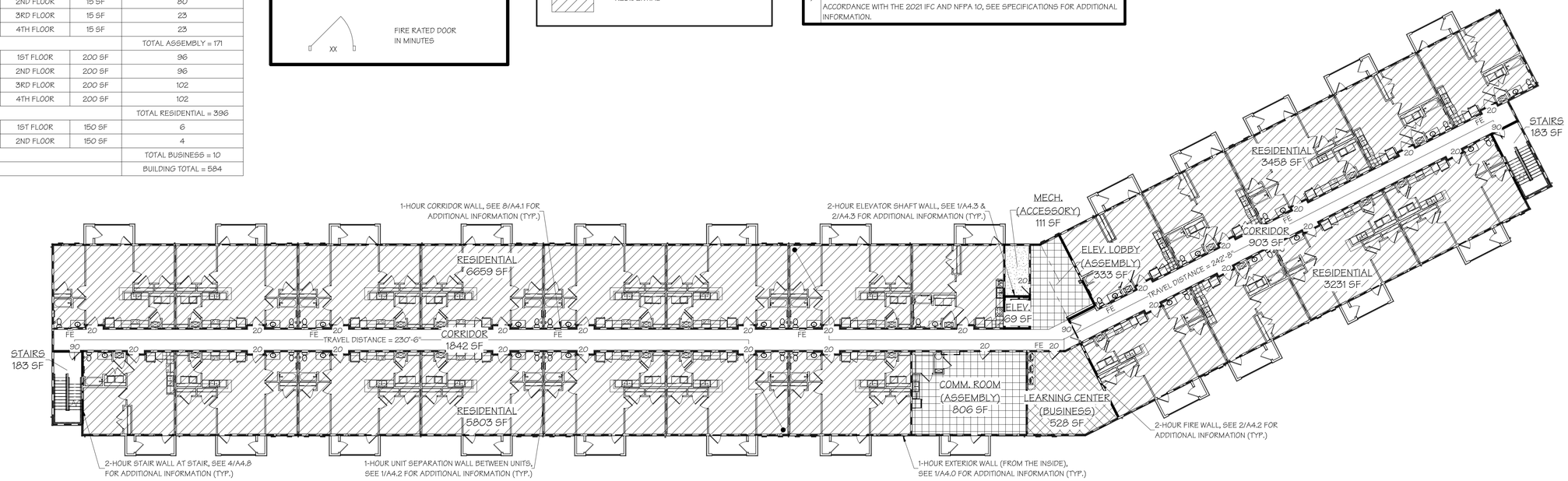
- FE — FIRE EXTINGUISHER
- 1-HR RATED WALL
- 2-HR RATED WALL
- XX — FIRE RATED DOOR IN MINUTES

AREA LEGEND

- ACCESSORY
- ASSEMBLY
- BUSINESS
- RESIDENTIAL

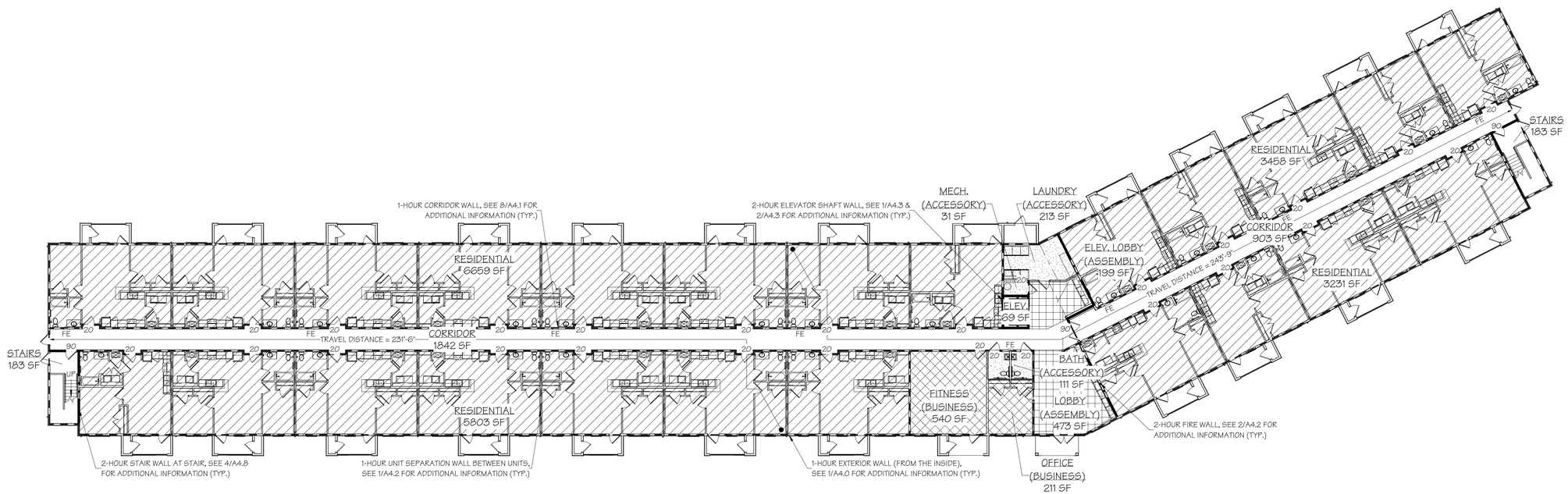
GENERAL LIFE SAFETY NOTES

1) SEE DOOR SCHEDULE (SHEET A1.4) AND SPECIFICATIONS FOR ADDITIONAL DOOR INFORMATION INCLUDING CLOSERS AND PANIC HARDWARE.
2) EXITS AND EXIT ACCESS DOORS SHALL BE MARKED BY AN APPROVED EXIT SIGN READILY VISIBLE FORM ANY DIRECTION OF EGRESS TRAVEL AND COMPLY WITH SECTION 1013 OF THE 2021 IBC AS WELL AS ADA 2010 FOR COMMON AREAS.
3) EVERY ROOM OR SPACE THAT IS AN ASSEMBLY OCCUPANCY SHALL COMPLY WITH SECTION 1005 OF THE 2021 IBC AS WELL AS ADA 2010 FOR COMMON AREAS.
4) ILLUMINATION SHALL BE PROVIDED IN THE MEANS OF EGRESS IN ACCORDANCE WITH SECTION 1008 OF THE 2021 IBC.
5) TWO EXITS PER FLOOR PROVIDED IN ACCORDANCE WITH SECTION 1006 OF THE 2021 IBC.
6) PORTABLE FIRE EXTINGUISHERS SHALL BE INSTALLED NO MORE THAN 75' APART IN ACCORDANCE WITH THE 2021 IFC AND NFPA 10, SEE SPECIFICATIONS FOR ADDITIONAL INFORMATION.



1 LS1.0 SECOND FLOOR LIFE SAFETY PLAN

SCALE: 1/16" = 1'-0"



2 LS1.0 FIRST FLOOR LIFE SAFETY PLAN

SCALE: 1/16" = 1'-0"

REGISTERED ARCHITECT MARTIN RANDALL PORTER #24739 STATE OF TEXAS

25 OCT 2024

MARTIN RANDALL PORTER
ARCHITECT LICENSE #24739

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HOUSTON, HARRIS COUNTY, TEXAS

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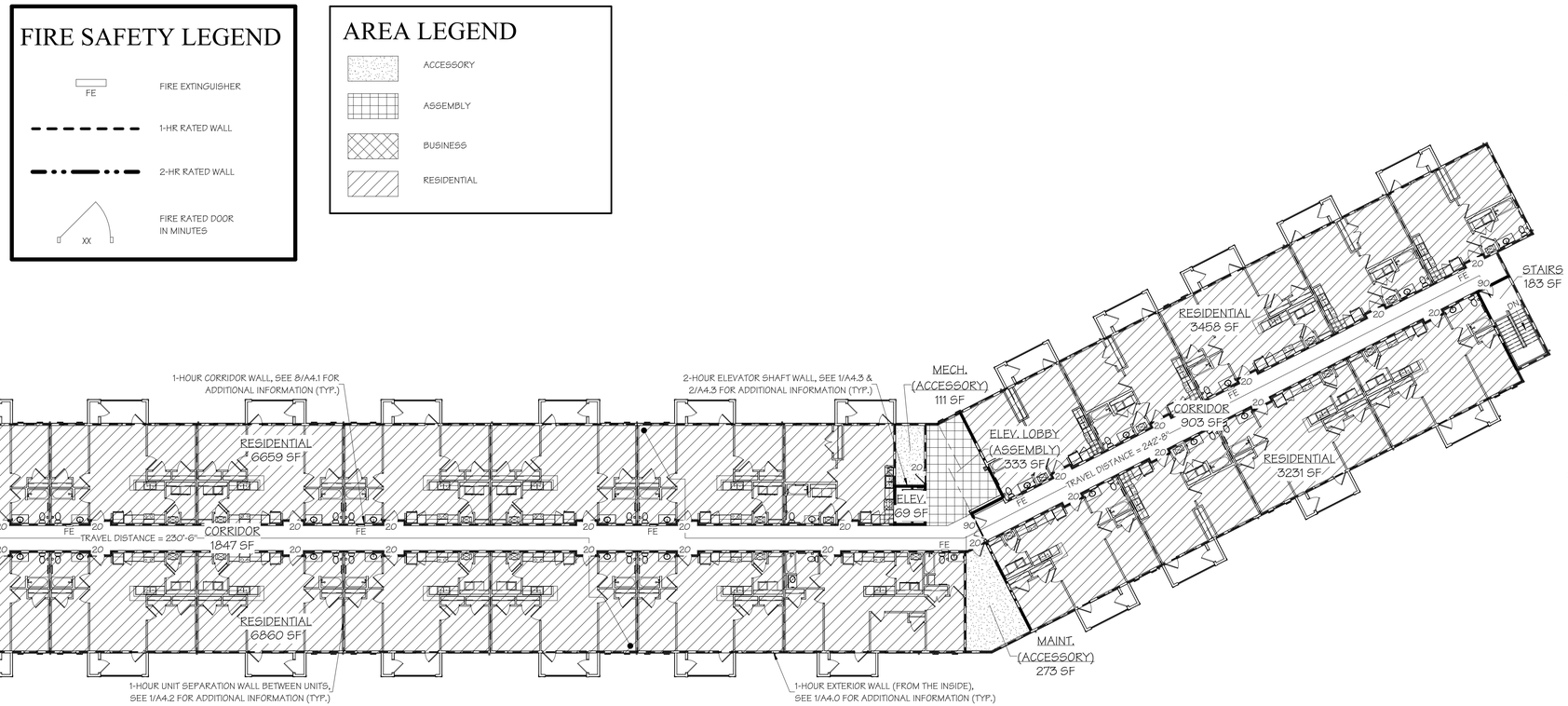
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SHEET NO. LS1.0

JOB NO. 4809

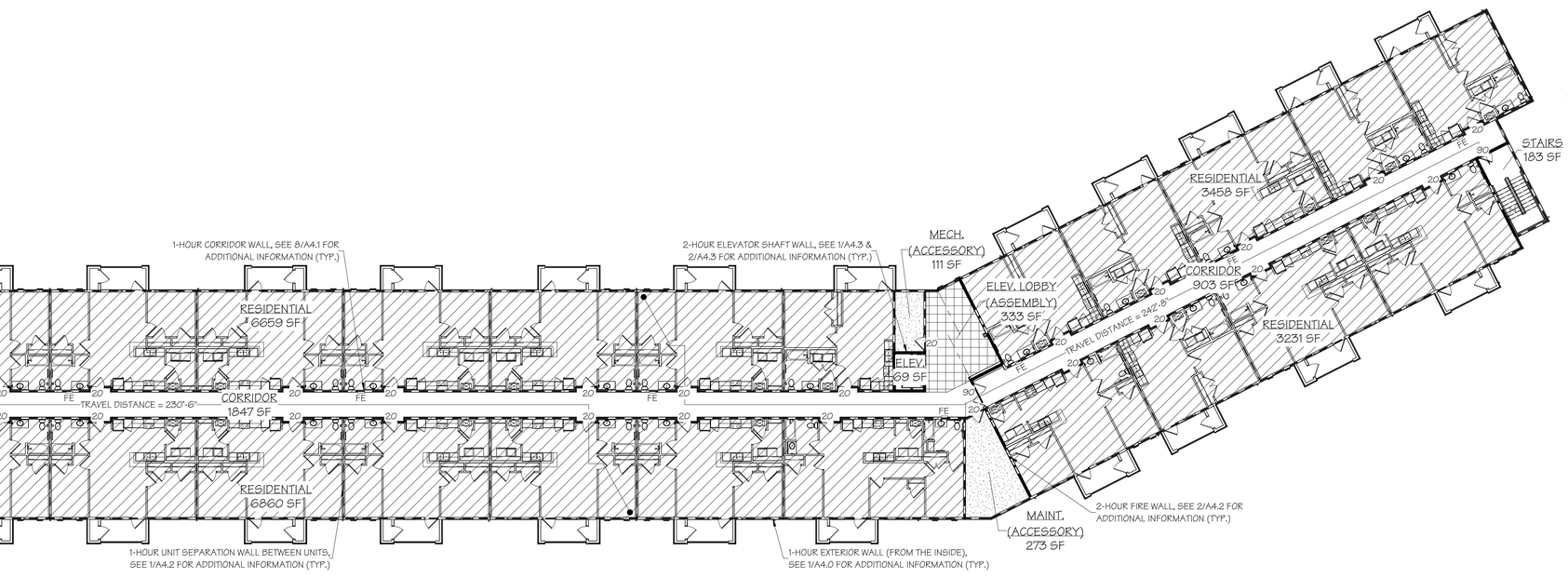
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ISSUE SET



1 LS1.1 FOURTH FLOOR LIFE SAFETY PLAN

SCALE: 1/16" = 1'-0"



2 LS1.1 THIRD FLOOR LIFE SAFETY PLAN

SCALE: 1/16" = 1'-0"

REGISTERED ARCHITECT
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2021 IECC REQUIREMENTS

EACH HVAC ZONE SHALL BE CONTROLLED BY INDIVIDUAL THERMOSTATIC CONTROLS AND SHALL BE PROVIDED WITH THERMOSTATIC SETBACK CONTROLS THAT ARE CONTROLLED BY EITHER AN AUTOMATIC TIME CLOCK OR PROGRAMMABLE CONTROL SYSTEM. THERMOSTATIC SETBACK CONTROLS SHALL BE CONFIGURED TO SET BACK OR TEMPORARILY OPERATE THE SYSTEM TO MAINTAIN ZONE TEMPERATURES DOWN TO 55°F (13°C) OR UP TO 85°F (29°C). AUTOMATIC TIME CLOCK OR PROGRAMMABLE CONTROLS SHALL BE CAPABLE OF STARTING AND STOPPING THE SYSTEM FOR SEVEN DIFFERENT DAILY SCHEDULES PER WEEK AND RETAINING THEIR PROGRAMMING AND TIME SETTING DURING A LOSS OF POWER FOR NOT FEWER THAN 10 HOURS. ADDITIONALLY, THE CONTROLS SHALL HAVE A MANUAL OVERRIDE THAT ALLOWS TEMPORARY OPERATION OF THE SYSTEM FOR UP TO 2 HOURS; A MANUALLY OPERATED TIMER CONFIGURED TO OPERATE THE SYSTEM FOR UP TO 2 HOURS; OR AN OCCUPANCY SENSOR. AUTOMATIC START AND STOP CONTROLS SHALL BE PROVIDED FOR EACH HVAC SYSTEM. THE AUTOMATIC START CONTROLS SHALL BE CONFIGURED TO AUTOMATICALLY ADJUST THE DAILY START TIME OF THE HVAC SYSTEM IN ORDER TO BRING EACH SPACE TO THE DESIRED OCCUPIED TEMPERATURE IMMEDIATELY PRIOR TO SCHEDULED OCCUPANCY. AUTOMATIC STOP CONTROLS SHALL BE PROVIDED FOR EACH HVAC SYSTEM WITH DIRECT DIGITAL CONTROL OF INDIVIDUAL ZONES. THE AUTOMATIC STOP CONTROLS SHALL BE CONFIGURED TO REDUCE THE HVAC SYSTEM'S HEATING TEMPERATURE SETPOINT AND INCREASE THE COOLING TEMPERATURE SETPOINT BY NOT LESS THAN 2°F (1.11°C) BEFORE SCHEDULED UNOCCUPIED PERIODS BASED ON THE THERMAL LAG AND ACCEPTABLE DRIFT IN SPACE TEMPERATURE THAT IS WITHIN COMFORT LIMITS.

HEAT PUMPS SHALL HAVE CONTROLS THAT PREVENT SUPPLEMENTAL HEAT OPERATION WHEN THE HEAT PUMP CAN MEET THE HEATING LOAD. (NO SIMULTANEOUS OPERATION).

DUCT AND PLENUM INSULATION AND SEALING – SUPPLY AND RETURN AIR DUCTS AND PLENUMS SHALL BE INSULATED WITH NOT LESS THAN R-6 INSULATION WHERE LOCATED IN UNCONDITIONED SPACES AND WHERE LOCATED OUTSIDE THE BUILDING WITH NOT LESS THAN R-8 INSULATION IN CLIMATE ZONES 0 THROUGH 4 AND NOT LESS THAN R-12 INSULATION IN CLIMATE ZONES 5 THROUGH 8. DUCTS LOCATED UNDERGROUND BENEATH BUILDINGS SHALL BE INSULATED AS REQUIRED IN THIS SECTION OR HAVE AN EQUIVALENT THERMAL DISTRIBUTION EFFICIENCY. UNDERGROUND DUCTS UTILIZING THE THERMAL DISTRIBUTION EFFICIENCY METHOD SHALL BE LISTED AND LABELED TO INDICATE THE R-VALUE EQUIVALENCY. WHERE LOCATED WITHIN A BUILDING ENVELOPE ASSEMBLY, THE DUCT OR PLENUM SHALL BE SEPARATED FROM THE BUILDING EXTERIOR OR UNCONDITIONED OR EXEMPT SPACES BY NOT LESS THAN R-8 INSULATION IN CLIMATE ZONES 0 THROUGH 4 AND NOT LESS THAN R-12 INSULATION IN CLIMATE ZONES 5 THROUGH 8.

MECHANICAL SYSTEM PIPING CAPABLE OF CARRYING FLUIDS GREATER THAN 105°F OR LESS THAN 55°F SHALL BE INSULATED TO NOT LESS THAN R-3.

HEAT TRAPS FOR HOT WATER STORAGE TANKS – STORAGE TANK-TYPE WATER HEATERS AND HOT WATER STORAGE TANKS THAT HAVE VERTICAL WATER PIPES CONNECTING TO THE INLET AND OUTLET OF THE TANK SHALL BE PROVIDED WITH INTEGRAL HEAT TRAPS AT THOSE INLETS AND OUTLETS OR SHALL HAVE PIPE-CONFIGURED HEAT TRAPS IN THE PIPING CONNECTED TO THOSE INLETS AND OUTLETS. TANK INLETS AND OUTLETS ASSOCIATED WITH SOLAR WATER HEATING SYSTEM CIRCULATION LOOPS SHALL NOT BE REQUIRED TO HAVE HEAT TRAPS.

MAXIMUM ALLOWABLE PIPE LENGTH METHOD – NOTE PUBLIC LAVATORIES ARE ONLY ALLOWED 2' OF 1/2" PIPE CONNECTION FROM THE HOT WATER SOURCE. THIS NECESSITATES EITHER A POINT OF USE ON-DEMAND WATER HEATER OR A RECIRCULATION WATER SYSTEM THAT BEING THE RECIRCULATION LOOP WITHIN 2' OF THE LAVATORY CONNECTIONS. OTHER FIXTURES AT OTHER SIZED PIPES SHALL COMPLY WITH THE REQUIREMENTS OF C404.5.1.

HEATERS – THE ELECTRIC POWER TO ALL HEATERS SHALL BE CONTROLLED BY AN ON-OFF SWITCH THAT IS AN INTEGRAL PART OF THE HEATER, MOUNTED ON THE EXTERIOR OF THE HEATER, OR EXTERNAL TO AND WITHIN 3 FEET (914 MM) OF THE HEATER IN A LOCATION WITH READY ACCESS. OPERATION OF SUCH SWITCH SHALL NOT CHANGE THE SETTING OF THE HEATER THERMOSTAT. SUCH SWITCHES SHALL BE IN ADDITION TO A CIRCUIT BREAKER FOR THE POWER TO THE HEATER.

2021 IECC REQUIREMENTS [RE]

THE THERMOSTAT CONTROLLING THE HVAC SYSTEM OF A DWELLING UNIT SHALL BE CAPABLE OF CONTROLLING THE SYSTEM ON A DAILY SCHEDULE TO MAINTAIN DIFFERENT SETPOINTS AT DIFFERENT TIMES OF THE DAY. THE THERMOSTAT SHALL INCLUDE THE CAPABILITY TO SET BACK OR TEMPORARILY OPERATE THE SYSTEM TO MAINTAIN ZONE TEMPERATURES OF NOT LESS THAN 55°F TO NOT GREATER THAN 85°F. THE THERMOSTAT SHALL BE PROGRAMMED INITIALLY BY THE MANUFACTURER WITH A HEATING SETPOINT OF NOT GREATER THAN 70°F AND A COOLING TEMPERATURE OF NOT LESS THAN 78°F.

HEAT PUMPS SHALL HAVE CONTROLS THAT PREVENT SUPPLEMENTAL HEAT OPERATION WHEN THE HEAT PUMP CAN MEET THE HEATING LOAD. (NO SIMULTANEOUS OPERATION).

DUCT AND PLENUM INSULATION AND SEALING – SUPPLY AND RETURN AIR DUCTS AND PLENUMS SHALL BE INSULATED WITH NOT LESS THAN R-6 INSULATION WHERE LOCATED IN UNCONDITIONED SPACES AND WHERE LOCATED OUTSIDE THE BUILDING WITH NOT LESS THAN R-8 INSULATION IN CLIMATE ZONES 0 THROUGH 4 AND NOT LESS THAN R-12 INSULATION IN CLIMATE ZONES 5 THROUGH 8. DUCTS LOCATED UNDERGROUND BENEATH BUILDINGS SHALL BE INSULATED AS REQUIRED IN THIS SECTION OR HAVE AN EQUIVALENT THERMAL DISTRIBUTION EFFICIENCY. UNDERGROUND DUCTS UTILIZING THE THERMAL DISTRIBUTION EFFICIENCY METHOD SHALL BE LISTED AND LABELED TO INDICATE THE R-VALUE EQUIVALENCY. WHERE LOCATED WITHIN A BUILDING ENVELOPE ASSEMBLY, THE DUCT OR PLENUM SHALL BE SEPARATED FROM THE BUILDING EXTERIOR OR UNCONDITIONED OR EXEMPT SPACES BY NOT LESS THAN R-8 INSULATION IN CLIMATE ZONES 0 THROUGH 4 AND NOT LESS THAN R-12 INSULATION IN CLIMATE ZONES 5 THROUGH 8.

AIR HANDLERS SHALL HAVE THE MANUFACTURER'S DESIGNATION FOR AN AIR LEAKAGE OF NOT GREATER THAN 2% OF THE DESIGN AIRFLOW RATE WHEN TESTED IN ACCORDANCE WITH ASHRAE 193.
DUCTS SHALL BE PRESSURE TESTED TO DETERMINE AIR LEAKAGE BY ONE OF THE FOLLOWING METHODS:
ROUGH-IN TEST: TOTAL LEAKAGE SHALL BE MEASURED WITH A PRESSURE DIFFERENTIAL OF 0.1 INCH W.G. ACROSS THE SYSTEM, INCLUDING THE MANUFACTURER'S AIR HANDLER ENCLOSURE IF INSTALLED AT THE TIME OF THE TEST. REGISTERS SHALL BE TAPED OR OTHERWISE SEALED DURING THE TEST.
POST CONSTRUCTION TEST: TOTAL LEAKAGE SHALL BE MEASURED WITH A PRESSURE DIFFERENTIAL OF 0.1 INCH W.G. ACROSS THE ENTIRE SYSTEM, INCLUDING THE MANUFACTURER'S AIR HANDLER ENCLOSURE. RESISTERS SHALL BE TAPED OR OTHERWISE SEALED DURING THE TEST.
EXCEPTIONS:
A DUCT AIR-LEAKAGE TEST SHALL NOT BE REQUIRED WHERE THE DUCTS AND AIR HANDLERS ARE LOCATED ENTIRELY WITHIN THE BUILDING THERMAL ENVELOPE.

A WRITTEN REPORT OF THE RESULTS OF THE TEST SHALL BE SIGNED BY THE PARTY CONDUCTING THE TEST AND PROVIDED TO THE CODE OFFICIAL

PIPING INSULATION – MECHANICAL SYSTEM PIPING CAPABLE OF CARRYING FLUIDS GREATER THAN 105°F OR LESS THAN 55°F SHALL BE INSULATED TO NOT LESS THAN R-3.

HEATED WATER CIRCULATION SYSTEMS SHALL INCLUDE AUTOMATIC CONTROLS, TEMPERATURE SENSORS AND PUMPS AND SHALL BE ACCESSIBLE. THE SYSTEM SHALL HAVE A DEDICATED RETURN PIPE. CONTROLS FOR CIRCULATING HOT WATER SYSTEM PUMPS SHALL START THE PUMP BASED ON THE IDENTIFICATION OF A DEMAND FOR HOT WATER WITHIN THE OCCUPANCY. THE CONTROLS SHALL AUTOMATICALLY TURN OFF WHEN THE WATER IN THE CIRCULATION LOOP IS AT THE DESIRED TEMPERATURE AND THERE IS NO DEMAND FOR HOT WATER. IDENTIFICATION FOR DEMAND SHALL BE WHEN FLOW IS DETECTED OF HOT WATER. CONTROLS SHALL LIMIT WATER ENTERING THE COLD WATER PIPING TO 104°F.

NO LESS THAN 90 PERCENT OF THE PERMANENTLY INSTALLED LIGHTING SERVING DWELLING UNITS, EXCLUDING KITCHEN APPLIANCE LIGHTING, SHALL BE PROVIDED BY LAMPS WITH AN EFFICACY OF NOT LESS THAN 65 LM/W OR LUMINAIRES WITH AN EFFICACY OF NOT LESS THAN 45 LM/W

INTERIOR LIGHTING CONTROLS – PERMANENTLY INSTALLED LIGHTING FIXTURES SHALL BE CONTROLLED WITH A DIMMER,
EXCEPTION: BATHROOMS, HALLWAYS, EXTERIOR LIGHTING FIXTURES, LIGHTING DESIGNED FOR SAFETY OR SECURITY.

(FOR ALL SYSTEMS, ALL MEP PLANS)

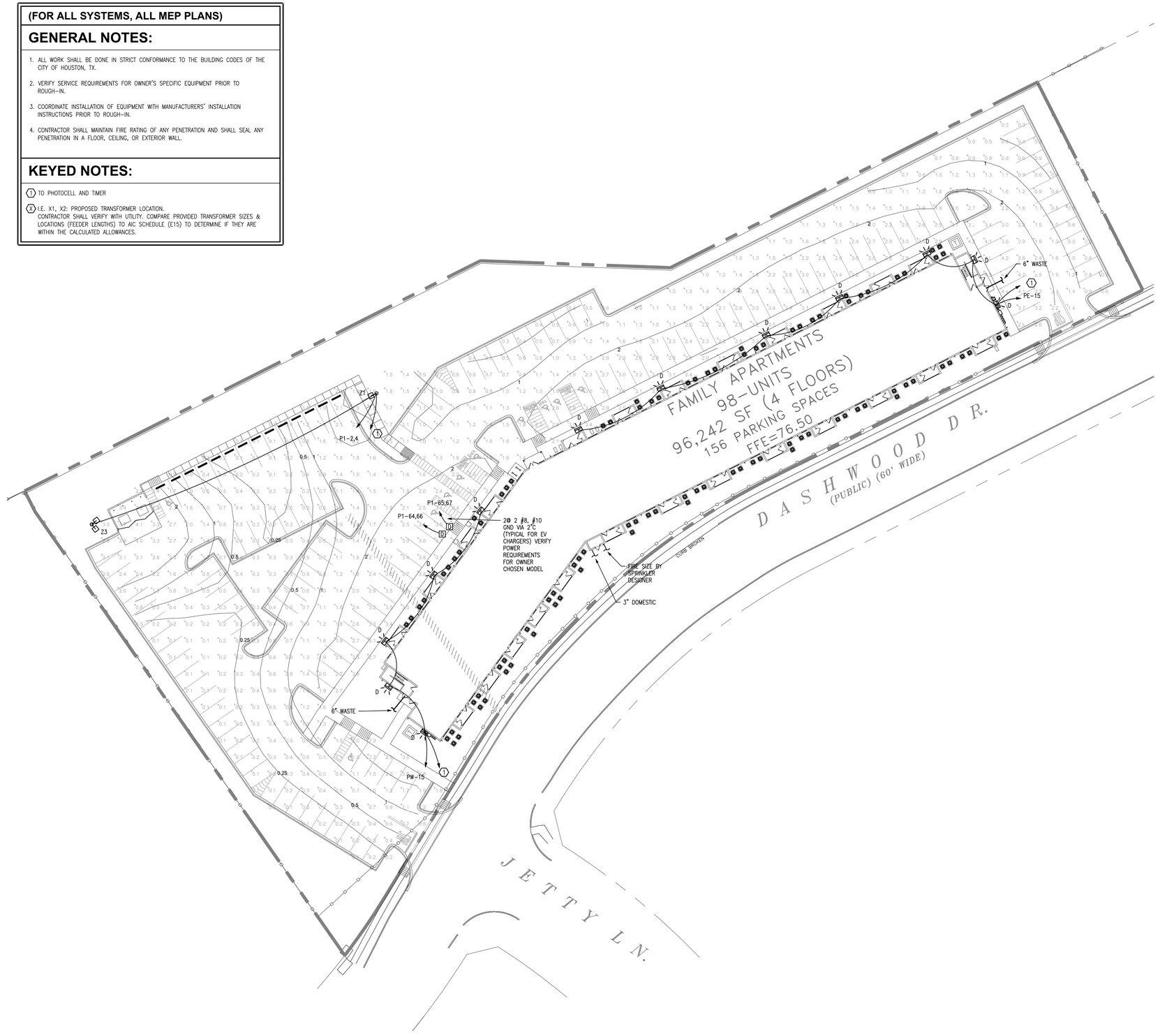
GENERAL NOTES:

1. ALL WORK SHALL BE DONE IN STRICT CONFORMANCE TO THE BUILDING CODES OF THE CITY OF HOUSTON, TX.
2. VERIFY SERVICE REQUIREMENTS FOR OWNER'S SPECIFIC EQUIPMENT PRIOR TO ROUGH-IN.
3. COORDINATE INSTALLATION OF EQUIPMENT WITH MANUFACTURERS' INSTALLATION INSTRUCTIONS PRIOR TO ROUGH-IN.
4. CONTRACTOR SHALL MAINTAIN FIRE RATING OF ANY PENETRATION AND SHALL SEAL ANY PENETRATION IN A FLOOR, CEILING, OR EXTERIOR WALL.

KEYED NOTES:

(1) TO PHOTOCELL AND TIMER

(X) I.E. X1, X2: PROPOSED TRANSFORMER LOCATION.
CONTRACTOR SHALL VERIFY WITH UTILITY. COMPARE PROVIDED TRANSFORMER SIZES & LOCATIONS (FEEDER LENGTHS) TO AIC SCHEDULE (E15) TO DETERMINE IF THEY ARE WITHIN THE CALCULATED ALLOWANCES.



1 ME1 **SITE MEP PLAN**
1" = 30'-0"

FREDDIE L. MALICOAT - ENGINEER
TX# 113587
STATE OF TEXAS
FREDDIE MALICOAT
113587
LICENSED PROFESSIONAL ENGINEER
11-01-24

MALICOAT - WINSLOW ENGINEERS, INC.
TEXAS STATE REGISTERED ENGINEERING FIRM F-19643
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FREDDIE MALICOAT, P.E.

DASHWOOD TRAILS
DASHWOOD DRIVE & JETTY LANE
HOUSTON, HARRIS COUNTY, TX, 77072

CONTRACTOR SHALL CHECK & VERIFY ALL DIMENSIONS & CONDITIONS AT JOB SITE.

DATE : 10-25-24

REVISIONS :

TITLE : **SITE MEP PLAN**

SHEET : **ME1** OF **ME4**

PROJECT : 24216

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MECHANICAL SYMBOL SCHEDULE

WST	WASTE PIPING	
V	VENT PIPING	
VW	VENT PIPING OVER WASTE PIPING	
CW	COLD WATER PIPING	
HW	HOT WATER PIPING	
	PIPE FITTINGS (ELL DOWN – TEE DOWN – TEE UP)	
N	VALVE	– CHECK VALVE
	UNION	– STRAINER
	GAS COCK	– BALANCING COCK
A200 12x12	AIR TERMINAL TAG. "A" INDICATES MARK ON GRILLE AND REGISTER SCHEDULE.	
	"200" INDICATES AIR VOLUME IN CFM. "12x12" INDICATES FACE SIZE.	
	AIR TERMINALS (REGISTER – GRILLE)	
	FIRE DAMPER	
	SMOKE DAMPER	
	MANUAL DAMPER	
	MOTORIZED DAMPER	
T_1 H_1	THERMOSTAT – HUMIDISTAT (ZONE SUBSCRIPT)	
WST V	WASTE	– VENT
CO VTR	CLEAN OUT	– VENT THROUGH ROOF
SA RA	SUPPLY AIR	– RETURN AIR
FA EA	FRESH AIR	– EXHAUST AIR
N/E E/R	NEW CONNECTS TO EXISTING	– EXISTING TO REMAIN
	PENDANT MOUNTED SPRINKLER HEAD	
	UPRIGHT MOUNTED SPRINKLER HEAD	
	PENDANT HEAD BELOW / UPRIGHT HEAD ABOVE	
	SIDEWALL SPRINKLER HEAD	
	EXTENDED COVERAGE SIDEWALL SPRINKLER HEAD	

ELECTRICAL SYMBOL SCHEDULE

P2–22,24	HOME RUN CIRCUIT TO PANEL P2, CIRCUITS 22,24
	EACH ARROW INDICATES ONE CIRCUIT
	SHORT HATCH MARKS INDICATE # OF PHASE CONDUCTORS
	LONG HATCH MARKS INDICATE # OF NEUTRAL CONDUCTORS
	NO HATCH MARK INDICATES TWO CONDUCTORS
E	ELECTRICAL SERVICE OR FEEDER WIRING
	WIRING IN WALL OR CEILING – WIRING IN FLOOR
	RECEPTACLE OUTLET (DUPLEX – QUADRUPLEX – SPLIT WIRED – SPECIAL POWER)
	COMMUNICATIONS OUTLET (TELEPHONE – CATV – DATA/PHONE)
3 D 4 P S K T	WALL SWITCH SINGLE POLE (3–WAY – DIMMER – 4–WAY – PILOT – SPEED – KEYED – TIMER)
	INCANDESCENT OR HID LIGHT FIXTURE (CEILING MOUNTED – WALL MOUNTED)
CS S	FLUORESCENT LIGHT FIXTURE (ENCLOSED – STRIP) (S INDICATES SPLIT WIRED)
	EXIT LIGHT – EMERGENCY LIGHT – EMERGENCY/EXIT LIGHT
C	CLOCK RECEPTACLE
	ELECTRIC PANEL
S T	SPEAKER – PUSH TO TALK
J P	JUNCTION BOX – PULL BOX
F D	DISCONNECT (FUSED – NONFUSED)
S C	STARTER
5–208–3	ELECTRIC MOTOR (5 HP – 208V – 3 PHASE)
T H	THERMOSTAT – HUMIDISTAT (ZONE SUBSCRIPT)
42 G W	OUTLET (MOUNT HEIGHT INCHES – GFI PROTECTED – WEATHER PROOF GFI)
S H	SMOKE DETECTOR – HEAT DETECTOR
F A	MANUAL PULL STATION – ALARM
M R	MAGNETIC DOOR HOLDER – INTERLOCK RELAY
	END OF LINE RESISTOR
FACP	FIRE ALARM CONTROL PANEL
DIAL	DIALER

ELECTRICAL FIXTURE SCHEDULE

MARKEL ELECTRIC HEATERS

MARK	HTG KW IN	HTG BTU OUT	V / ø	AMPS	WATTS	LENGTH	MODEL	REMARKS
EH1	1.50	5,120	120 / 1	12.5	1,500	–	E332STD–RP (WALL)	1,2,3

1. OR APPROVED EQUAL.
2. WITH INTEGRAL THERMOSTAT.
3. SEE ARCHITECTURAL DRAWINGS FOR FIRE RATED ENCLOSURE FOR FIXTURES LOCATED IN FIRE RATED WALL OR CEILING SYSTEMS.

PLUMBING FIXTURE SCHEDULE

MARK	FIXTURE	MODEL NUMBER
WC1	WATER CLOSET	AMERICAN STANDARD 3517C.101.020, WHITE VITREOUS CHINA, 15" HEIGHT, ELONGATED BOWL,
		FLUSH TANK, BEMIS 1200SLOWA WHITE SEAT. SUPPLY & STOP.
WC2	WATER CLOSET	AMERICAN STANDARD 3517A.101.020, WHITE VITREOUS CHINA, 16 1/2" HEIGHT, ELONGATED BOWL,
		FLUSH TANK, ADA HEIGHT. BEMIS 1200SLOWA WHITE SEAT, SUPPLY & STOP.
L1	LAVATORY	AMERICAN STANDARD 0476.028.020, WHITE VITREOUS CHINA, SELF–RIMMING, MOEN 8917 FAUCET,
		POPUP DRAIN, P–TRAP, SPEEDWAY 1920A SUPPLIES AND STOPS – FOR EXPOSED PIPING
		WITH TRUEBRO INSULATION KIT.
L2	LAVATORY	AMERICAN STANDARD 0476.028.020, WHITE VITREOUS CHINA, SELF–RIMMING, MOEN 8915 FAUCET,
		DEARBORN BRASS 760–1 GRID DRAIN, P–TRAP, SPEEDWAY 1920A SUPPLIES AND STOPS
		FOR EXPOSED PIPING WITH TRUEBRO INSULATION KIT, MOUNT PER ADA.
L3	LAVATORY	AMERICAN STANDARD 0355.012.020, WHITE VITREOUS CHINA, MOEN 8938 FAUCET,
		DEARBORN BRASS 760–1 GRID DRAIN, P–TRAP, SPEEDWAY CR1920A SUPPLIES AND STOPS.
		CONCEALED CHAIR CARRIER, FOR EXPOSED PIPING WITH TRUEBRO INSULATION KIT, MOUNT PER ADA.
S1	SINK	ELKAY DAYTON DSE2–3321–4, 20GA STAINLESS STEEL, LK–35 STRAINER,
		LK2423C FAUCET W/SPRAY, SPEEDWAY CR1920A SUPPLIES AND STOPS.
S2	SINK	ELKAY DAYTON GE2–3321–4, 22GA STAINLESS STEEL, LK–35 STRAINER,
		LK2423C FAUCET W/SPRAY, SPEEDWAY CR1920A SUPPLIES AND STOPS
		FOR EXPOSED PIPING WITH TRUEBRO INSULATION KIT, MOUNT PER ADA.
WB	WASHER BOX	GUY GRAY BB200TS WASHING MACHINE CONNECTION BOX.
IMB	ICE MAKER BOX	GUY GRAY BIM875 ICE MAKER CONNECTION BOX.
DSP	DISPOSAL	INSINKERATOR EVOLUTION PRO 880, 7/8 HP, 2 STAGE GRIND, SOUND REDUCING COMPONENTS
DW	DISHWASHER	DISHWASHER BY CONTRACTOR AS SELECTED BY OWNER.
T1	TUB/SHOWER	BOOTZ MAUI PLUS 011–2342, L OR R DRAIN NO ACCESSORIES, MOEN 62320 VALVE
		PFISTER LF89–8TNTB FAUCET 1.8 GPM WATER SENSE, K–7160–TF–BKB DRAIN
T2	TUB/SHOWER	AQUATIC 2603SMTE L OR R DRAIN, MOEN 62320 VALVE, K–7160–TF–BKB DRAIN
		HAND–HELD SHOWER (WATERSENSE FAUCET), 24" SLIDE BAR, VACUUM BREAKER AND 60" HOSE,
		PRESSURE BALANCING MIXING VALVE, 3–1/4" DRAIN, L–SHAPED GRAB BAR,
		L–SHAPED FOLD–UP CUSHIONED SEAT, SOAP DISH, CURTAIN ROD AND CURTAIN. ADA CONFIGURATION
HD	HUB DRAIN	SOIUX CHIEF SERIES 832–3HHD PVC HUB DRAIN WITH TRAP PRIMER OR TRAP GUARD
		WITH P–TRAP FOR WOOD FLOORS.
FPHB	FRZ PROOF HOSE BIB	WOODFORD MODEL 67 SERIES POLISHED CHROME WALL FAUCET WITH TEE KEY, VACUUM BREAKER.
WH1	WATER HEATER	A.O. SMITH ENLB–40, 40 GALLON ELECTRIC, DUAL 4,500W ELEMENTS.
WH2	WATER HEATER	EEMAX FLOWCO SPEX1812 SINGLE SINK TANKLESS, 1,800 WATT, 120V.
WH3	WATER HEATER	EEMAX FLOWCO SPEX3208 SINGLE SINK TANKLESS, 3,000 WATT, 208V.
RPZ	BACKFLOW PREVENTER	WATTS LF909QT SERIES – REDUCED PRESSURE ZONE ASSEMBLY
DCA	BACKFLOW PREVENTER	WATTS 350 SERIES – DOUBLE CHECK DETECTOR ASSEMBLY
ET	EXPANSION TANK	AMTROL ST–5
SP	SUMP PUMP	STANCOR OIL–MINDER SE50 ELEVATOR PIT SUMP PUMP, 1/2 HP, 208V, 1ø, 4 FLA.
		BY PLUMBING CONTRACTOR.

NOTE: A WATER–HAMMER ARRESTOR SHALL BE INSTALLED WHERE QUICK–CLOSING VALVES ARE UTILIZED (ICE MAKERS, DISHWASHERS, AND WASHING MACHINES).

FIRE DAMPER SCHEDULE

WHERE REQUIRED	LOCATION	TYPE	DESCRIPTION
UNITS	MECHANICAL	CEILING	FIRE DAMPER REQUIRED AT MAIN DUCT TRUNK PENETRATION INTO THE RATED CEILING/FLOOR ASSEMBLY. (TYPICAL FOR ALL UNIT SUPPLY DUCT).
UNITS	CEILING	CEILING	CEILING RADIATION DAMPER REQUIRED FOR EACH CEILING SUPPLY REGISTER AT THE RATED CEILING/FLOOR ASSEMBLY PENETRATION. (TYPICAL FOR ALL SUPPLY REGISTERS).
UNITS	BATH	CEILING	FIRE DAMPER REQUIRED FOR ALL EXHAUST FANS MOUNTED IN THE RATED CEILING/FLOOR ASSEMBLY. (TYPICAL FOR ALL EXHAUST FANS).

NOTE: TESTED AND LISTED SYSTEMS SPECIFICALLY STATE THE MANUFACTURER AND THE EXACT PRODUCTS THAT MAY BE USED. THERE ARE NO SUBSTITUTIONS, AS EACH PRODUCT HAS DIFFERENT PROPERTIES, AND THESE SPECIFIC COMBINATIONS AND APPLICATIONS ARE WHAT HAVE PASSED TESTING. MANY TIMES, A SYSTEM IS INCORRECTLY INSTALLED USING A DIFFERENT MANUFACTURER, THE WRONG FIRESTOP PRODUCT, DIFFERENT BRAND OF INSULATION, LACK OF USE OF MATERIALS FOR SOUND TRANSFER CONSTRUCTION (STC), ETC. THAN WHAT IS SPECIFIED IN THE LISTED SYSTEM AND WILL NOT BE ACCEPTED FOR ANY REASON (EVEN LACK OF AVAILABILITY). IT WILL BE THE CONTRACTORS RESPONSIBILITY TO VERIFY ALL UL LISTINGS MATCH THE ASSEMBLIES AND THE CORRECT QUANTITY IS AVAILABLE FOR THE JOB PRIOR TO ROUGH–IN.

GRILLE AND REGISTER SCHEDULE

MARK	MFG / MODEL	DAMPER	COLOR	DESCRIPTION
A	PRICE / 620DAL	YES	WHITE	ALL ALUMINUM DOUBLE DEFLECTION SUPPLY REGISTER WITH O.B.D. AND FIRE DAMPER.
B	PRICE / 620	NO	WHITE	WALL MOUNT ALL ALUMINUM RETURN AIR GRILLE.

NOTE: ALL GRILLES, REGISTERS, AND DIFFUSERS TO BE ALL ALUMINUM UNLESS NOTED OTHERWISE. STEEL CAN BE USED IF POWDER COATED PAINT IS APPLIED. QUANTITIES, SIZES, FRAMES AND ACCESSORIES TO BE CONFIRMED BY CONTRACTOR.

HVAC EQUIPMENT SCHEDULE

GOODMAN FAN COILS / HEAT PUMP UNITS

MARK	HTG KW IN	HTG BTU OUT	TOTAL CLG	SENS CLG	CFM @ 0.5"	O.A. CFM	V / ø	FLA	MOCP	MODEL	REMARKS
F1	5.0	12,788	18,000	13,500	600	SEE UNIT LIGHTING KEY NOTE "2"	208 / 1	20.6	30	AWST18SU1405AA	1,2,6
C1							208 / 1	8.5	20	GSZH501810A	

MITSUBISHI MULTI SPLIT SYSTEMS

MARK	ZONES	HTG BTU OUT	TOTAL CLG	SENS CLG	–		V / ø	FLA	MOCP	MODEL	REMARKS
OU1	3	42000	36,000	27,000			208 / 1	32	50	MXZ–SM36NAMHZ2–U1	1,3
OU2	3	48,000	42,000	31,500			208 / 1	33.8	50	MXZ–SM42NAMHZ2–U1	1,3
OU3	3	54,000	48,000	36,000			208 / 1	38	50	MXZ–SM48NAMHZ2–U1	1,3

MITSUBISHI MULTI SPLIT SYSTEMS

MARK	STYLE	HTG BTU OUT	TOTAL CLG	SENS CLG	–	–	V / ø	FLA	MOCP	MODEL	REMARKS
IU1	WALL	7200	6000	4,500			208 / 1	0.65	–	MSZ–GS06NA–U1	1,2,3,5
IU2	WALL	10900	9000	6,750			208 / 1	0.65	–	MSZ–GS09NA–U1	1,2,3,5
IU3	WALL	14,400	12,000	9,000			208 / 1	0.65	–	MSZ–GS12NA–U1	1,2,3,5
IU4	WALL	18000	14000	10,500			208 / 1	0.65	–	MSZ–GS15NA–U1	1,2,3,5
IU5	WALL	21600	18000	13,500			208 / 1	0.65	–	MSZ–GS18NA–U1	1,2,3,5

BROAN EXHAUST FANS

MARK	CFM	ESP	DRIVE	RPM	SONES	HP	V / ø	FLA	–	MODEL	REMARKS
EF1	80	0.100"	DIRECT	935	< 0.3	–	120 / 1	0.4	–	ZB80	1,3,7,8

GE RANGE HOOD AND MICROWAVE FANS

MARK	CFM	–	–	–	SONES	AMPS	V / ø	WATTS	–	MODEL	REMARKS
MW	300	–	–	–	–	–	120 / 1	1,580	–	JVM3150DFWW	1
RH	160	–	–	–	7.0	2.5	120 / 1	–	–	JV338HWW	1

DRYERBOX DRYER CONNECTION BOXES

MARK	–	–	–	–	–	–	–	–	–	MODEL	REMARKS
DB	–	–	–	–	–	–	–	–	–	DB–425	1

1. OR APPROVED EQUAL.
2. WITH PROGRAMMABLE STAT, COMMON AREAS TO HAVE CONTROLS DESCRIBED IN THE IECC. (IE SETBACK, OFF HOUR, START AND STOP).
3. ENERGY STAR RATED
4. WITH INTEGRAL THERMOSTAT.
5. MOUNT INDOOR UNIT WITH TOP AT 7'–0" AFF.
6. HEAT PUMPS SHALL HAVE ELECTRIC HEAT LOCKOUT WHEN IN THE DEFROST CYCLE.
7. WITH FIRE DAMPER.
8. WITH TIMER FOR FRESH AIR, SEE UNIT LIGHTING FOR CFM/TIME REQUIREMENTS.

LIGHTING FIXTURE SCHEDULE

MARK	FIXTURE	MANUFACTURER AND MODEL NUMBER	TYPE	LAMPS #	LAMPS SIZE	MOUNTING	REMARKS
A	CAN	HALO HLBSL6099FS351EMW	LED	1	9	RECESSED	1
B	BATH VANITY	RP LIGHTING 4904BN–3	LED	3	4	WALL	1
C	CEILING FAN	VISUAL COMFORT MONTE CARLO 5HV52BSF	LED	3	6	SURFACE	1
D	WALLPACK	LSI XWM–FT–LED–12L–50	LED	1	77	WALL	1,3
E	SCONCE	RP LIGHTING 4408–30	LED	1	15	WALL	1
E1	EMERGENCY	SURE LITES SEL60	LED	2	3	SURFACE	1
E2	EGRESS EYE	SURE LITES APWR2	LED	1	3	SURFACE	1
E3	EMERG/EXIT	SURE LITE APC7RGSAL	LED	3	3	SURFACE	1,2
E4	EMERG/EXIT	SURE LITES APC7RGSAL	LED	2	6	SURFACE	1
E5	EMERG/EXIT	SURE LITES APC7RGSAL	LED	2	6	SURFACE	1
F	PORC. KEYLESS	LEVITON 9875	SFL	1	26	WALL	1
I	WALL BRACKET	METALUX 4BCLED–LD4–40SL–F–UNV–EL14W–L840	LED	1	42	WALL	1
I	TROFFER	WILLIAMS 50G–S24–L60/840–SAF12125–DRV–UNV	LED	1	56	RECESSED	1
J	WRAP	WILLIAMS 17–4–L55/840–AF–DRV–UNV	LED	1	32	SURFACE	1
Z1	PARKING	LSI SLM–LED–12L–SIL–3–50–70CRI	LED	1	85	25' POLE	1,3
Z3	PARKING	2@ LSI SLM–LED–12L–SIL–3–50–70CRI	LED	2	85	25' POLE	1,3

1. CONFIRM FIXTURE SELECTIONS WITH OWNER PRIOR TO PURCHASE.
2. REMOTE HEADS AS SHOWN.
3. VIA PHOTOCELL AND TIMER.

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STATE OF TEXAS
FREDDIE MALICOAT
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LICENSED PROFESSIONAL ENGINEER
11-01-24

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CONTRACTOR SHALL CHECK & VERIFY ALL DIMENSIONS & CONDITIONS AT JOB SITE.

DATE : 10–25–24

REVISIONS :

TITLE : **SCHEDULES**

SHEET : **ME2** OF **ME4**

PROJECT : 24216

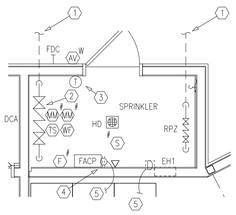
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SVC CLOSET GENERAL NOTES:

1. SEE SHEET ME1 FOR GENERAL NOTES FOR ALL SYSTEM .
2. PROVIDE TEMPERATURE SENSING ALARM TO NOTIFY OWNER IF SPRINKLER CLOSET FALLS BELOW 35°F.

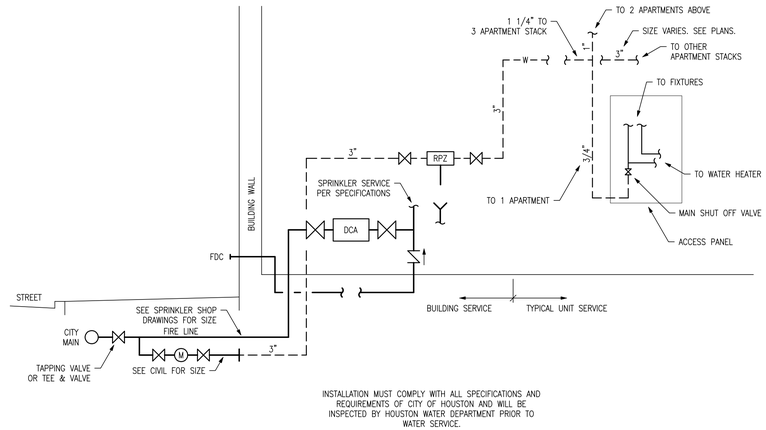
SVC CLOSET KEYED NOTES:

1. SEE CIVIL FOR CONTINUATION. (VERIFY LOCATION.)
2. SEE WATER SERVICE DETAIL.
3. THERMOSTAT TO OPERATE HEATER BELOW 40°F.
4. PHONE AND POWER FOR FACP/DIALER.
5. SEE COMMONS AREA PLANS FOR CIRCUITING.



2 ME3 SVC CLOSET MEP PLAN

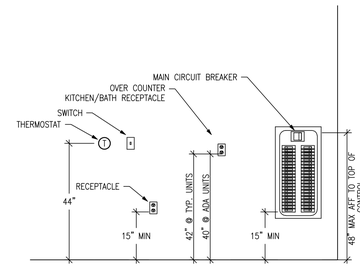
SCALE 1/4" = 1'-0"



INSTALLATION MUST COMPLY WITH ALL SPECIFICATIONS AND REQUIREMENTS OF CITY OF HOUSTON AND WILL BE INSPECTED BY HOUSTON WATER DEPARTMENT PRIOR TO WATER SERVICE.

6 ME3 WATER SERVICE DETAIL

NO SCALE

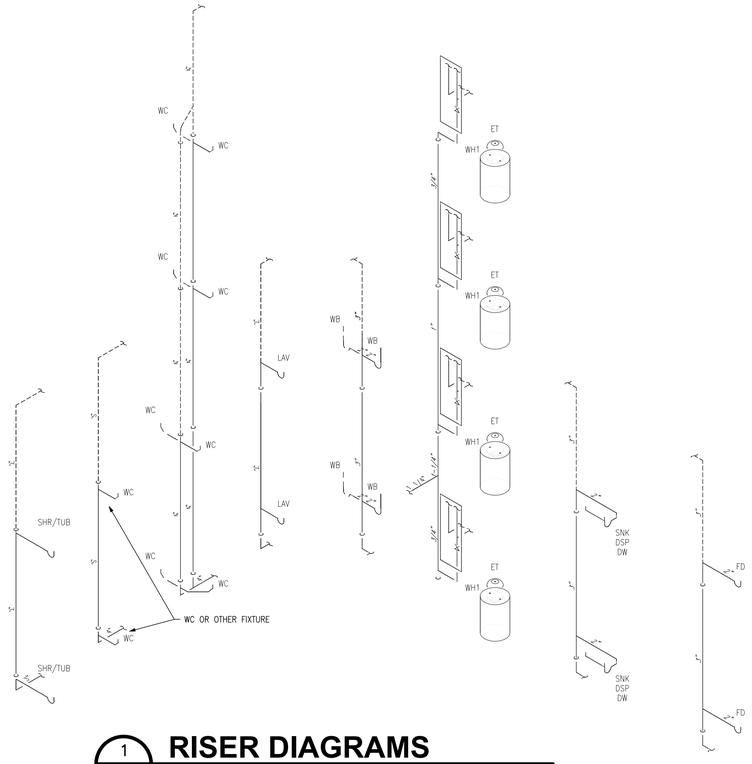


3 ME3 TYPICAL MOUNTING HEIGHTS

NO SCALE (VERIFY WITH ARCHITECTURAL)

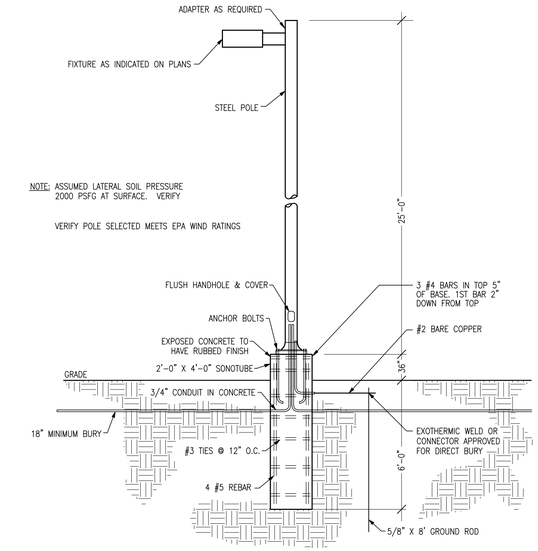
GENERAL NOTES: PLUMBING RISER

1. 2021 UPC SECTION C 601 "SINGLE STACK VENT SYSTEM" USED FOR ALL STACKED WATER CLOSETS (LIMIT 2 WATER CLOSETS PER 3" STACK) AND 3BR STACKED FIXTURES.
2. NOTE SEPARATE STACKS REQUIRED FOR MORE THAN 2 BRANCH INTERVALS. NO CONNECTIONS ALLOWED ON STACKS MORE THAN 2 BETWEEN THE LOWER 2 FLOORS.



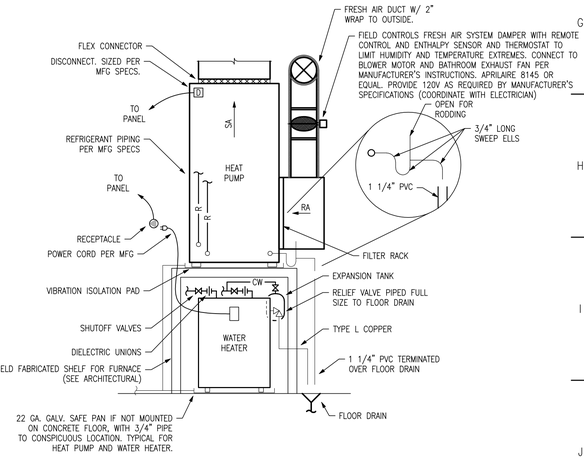
1 ME3 RISER DIAGRAMS

SCALE 1/4" = 1'-0"



5 ME3 LIGHT POST BASE DETAIL

SCAEL: NO SCALE



4 ME3 WH/HP MOUNTING DETAIL

NO SCALE

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DATE : 10-25-24

REVISIONS :

TITLE : **DETAILS**

SHEET : **ME3** OF **ME4**

PROJECT : 24216

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CONTROLS REQUIRMENT SCHEDULE

	MANUAL CONTROLS		AUTOMATIC ON/OFF CONTROLS							OTHER	
					SETTINGS						
ROOM	SWITCH	DIMMER OR SCENE CONTROL	TIMECLOCK	OCCUPANCY SENSOR	FULL ON	PARTIAL ON	MANUAL ON	FULL OFF (9)	PARTIAL OFF	DAYLIGHT	RECEPTACLE
ATRIUM		X	X			X		X		X (8)	
CLASSROOM/LECTURE/ TRAINING ROOM	X			X			X	X		X (8)	X
CONFERENCE / BREAKROOM	X			X			X	X		X (8)	X
CORRIDOR (2)		X		X	X				X (7)	X (8)	
GUESTROOM (3)	X			X			X	X			
LOBBY		X		X	X			X		X (8)	
OPEN OFFICE		X		X		X		X	X	X (8)	X
PARKING GARAGE (4)			X	X	X	X		X	X (6)	X	
PRIVATE OFFICE	X			X			X	X		X (8)	X
RESTAURANT/CAFE/RETAIL		X	X			X		X		X (8)	
RESTROOM	X			X	X			X		X (8)	
STAIRWELL (2)		X		X	X				X (7)	X (8)	
STORAGE ROOM	X			X			X	X		X (8)	
WAREHOUSE AISLE/ LIBRARY STACKS	X			X					X	X (8)	
FACADE/LANDSCAPE			X		X	X		X	X	X	
PARKING LOT/ OTHER EXTERIOR (5)			X		X	X		X	X	X	

KEYNOTES:
1. ALL RETROFITS ALTERING MORE THAN 10% OF THE LUMINAIRES, OR RETROFITS THAT INCREASE THE INSTALLED LIGHTING POWER MUST COMPLY WITH ALL NEW CONSTRUCTION REQUIREMENTS.
2. TO COMPLY WITH SOME LIFE-SAFETY CODE REQUIREMENTS FOR EGRESS ILLUMINATION, AUTOMATIC FULL OFF IS NOT SUGGESTED. FOR NON-EGRESS AREAS, THE OCCUPANCY SENSOR SHOULD TURN THE LIGHTS TO FULL OFF AND A SWITCHING CONTROL MAY BE USED.
3. AUTOMATIC SHUTOFF IS REQUIRED FOR ALL INSTALLED LUMINAIRES AND SWITCHED RECEPTACLES.
4. TIMECLOCK ENSURES THE LIGHTS ARE ON WHEN TYPICALLY OCCUPIED. OCCUPANCY SENSOR CONTROLS LIGHTS WHEN TYPICALLY UNOCCUPIED.
5. ASTRONOMICAL TIMECLOCK SHALL ENSURE ALL LIGHTS ARE OFF DURING DAYLIGHT HOURS. LIGHTS SHOULD BE SCHEDULED TO PARTIAL OFF DURING NIGHT HOURS. SEE SECTION C405.2.6.3 FOR SCHEDULING TIMES.
6. CONTROL ZONES ARE LIMITED TO 600 SQ. FT. OR LESS. ONCE A ZONE IS VACANT FOR 20 MINUTES, THE OCCUPANCY SENSOR AUTOMATICALLY REDUCES LIGHTING IN THE ZONE BY 80% OF FULL LIGHT OUTPUT OR TURNS LIGHTING OFF IN THE VACANT ZONE.
7. NOT A CODE REQUIREMENT. LUTRON RECOMMENDS THIS SOLUTION FOR SPACES DESIGNATED AS A PATH OF EGRESS.
8. THESE SPACES REQUIRE CONTINUOUS DAYLIGHT DIMMING TO OFF.
9. SENSOR(S) AUTOMATICALLY TURNS LIGHTING OFF IN THE ENTIRE SPACE WITHIN 20 MINUTES OF VACANCY IN THE WHOLE SPACE.

LUTRON CONTROLS SCHEDULE

MARK	MODEL	DESCRIPTION	AREAS
CONTROL HUBS			
HUB1	HJS-1-FM	VIVE WIRELESS HUB	SHARED
HUB2	HJS-0-FM	VIVE WIRELESS HUB	RESTAURANTS/RETAIL
POWER PACKS (120/277V)			
PP1	RMJS-8T-DV-B	POWPAK DIMMING MODULE WITH 0-10V	EGRESS CORRIDORS/ATRIUMS/BREAK ROOMS/CLASSROOMS/CONFERENCE ROOMS/OPEN OFFICES/RESTAURANTS/MULTI-STALL RESTROOMS/RETAIL/
PP2	FCJS-010	WIRELESS FIXTURE CONTROL WITH 0-10V	PRIVATE OFFICES/EGRESS STAIRWELL
RELAY MODULES			
RM1	RMJS-20R-DV-B	20A POWPAK RELAY MODULE (BOTH)	BREAK ROOMS/CLASSROOMS/CONFERENCE ROOM/OPEN OFFICES/PRIVATE OFFICES
RM2	PP-DV	RELAY POWER PACK (LIGHTING)	GUESTROOM
RM3	CU300HD-CPN6814	RELAY POWER PACK (RECEPTACLES)	GUESTROOM
OCCUPANCY SENSORS			
OS1	LRF2-OHLB-P-WH	RADIO POWR SAVR WIRELESS, HALLWAY OCCUPANCY SENSOR	EGRESS CORRIDOR
OS2	LRF2-OCR2B-P-WH	RADIO POWR SAVR WIRELESS CEILING-MOUNT OCCUPANCY SENSOR	GUESTROOM/OPEN OFFICES/RESTAURANTS/MULTI-STALL RESTROOMS/RETAIL
OS3	LRF2-OKLB-P-WH	RADIO POWR SAVR WIRELESS, CORNER-MOUNT OCCUPANCY SENSOR	EGRESS STAIRWELLS
POWER SUPPLIES			
PS1	LUT-8X8-ENC WITH MQSE-2S1-D AND MQSPS-DH-1-30	LUTRON-PROVIDED ENCLOSURE, SWITCHING LOAD CONTROLLER, MYROOM POWER SUPPLY	GUESTROOM
VACANCY SENSORS			
VS1	LRF2-VKLB-P-WH	RADIO POWR SAVR WIRELESS, CORNER-MOUNT VACANCY SENSOR	BREAKROOMS/CLASSROOMS/CONFERENCE ROOM
QUANTUM SENSORS			
QS1	QSM2-XW-C	QS SENSOR MODULE	GUESTROOM
DAYLIGHT SENSORS			
DS1	LRF2-DCRB-WH	RADIO POWR SAVR WIRELESS DAYLIGHT SENSOR	ATRIUMS/CLASSROOMS/CONFERENCE ROOM/OPEN OFFICES
DS2	FC-SENSOR	POWPAK FIXTURE SENSOR	PRIVATE OFFICES
MANUAL CONTROLS			
S1	PJ2-4B-GWH-L31	PICO WIRELESS, 4-BUTTON SCENE CONTROL	ATRIUMS/RESTAURANTS/RETAIL
S2	PJ2-3BRL-GWH-L01	PICO WIRELESS, 3-BUTTON WITH RAISE/LOWER CONTROL	EGRESS CORRIDOR/BREAK ROOMS/OPEN OFFICES/PRIVATE OFFICES/ RESTAURANTS/MULTI-STALL RESTROOMS
S3	PJ2-3BRL-GWH-L01	PICO WIRELESS, 2-BUTTON CONTROL	CLASSROOMS/CONFERENCE ROOMS

VERIFY ALL REQUIRED DEVICES WITH LOCAL LUTRON REP (OR APPROVED EQUAL DEVICES AND REPS) TO ENSURE ALL DEVICES AND QUANTITIES ARE ACCURATE FOR PROPER OPERATION AND COMPLIANCE TO THE IECC.
WALL ADAPTOR BOXES AS REQUIRED.

CONTROL DESCRIPTION SCHEDULE

MINIMUM CONTROL TYPE			DESCRIPTION	CODE PROVISION
MANUAL CONTROLS (1)	SWITCH		LIGHTING SHALL BE CAPABLE OF TURNING ON AND OFF. THERE SHALL BE AT LEAST ONE MANUAL DEVICE FOR CONTROL OF THE LIGHTING WITHIN A SPACE. SEE CODE FOR SPACES THAT ALLOW REMOTE LOCATION OF CONTROL.	C405.2.6
	DIMMER OR SCENE		LIGHTING SHALL BE CAPABLE OF BEING REDUCED BY AT LEAST 50% OF MAXIMUM LIGHTING POWER. THERE SHALL BE AT LEAST ONE MANUAL CONTROL DEVICE FOR LIGHT REDUCTION WITHIN A SPACE. SEE CODE FOR SPACES THAT ALLOW REMOTE LOCATION OF CONTROL. AUTOMATIC DAYLIGHT CONTROL MAY BE USED INSTEAD OF MANUAL CONTROL.	C405.2.2.3
AUTOMATIC ON/OFF (1)	TIMECLOCK		INTERIOR: SCHEDULED CONTROL, BASED ON TIME-OF-DAY, TURNS LIGHTING ON OR OFF BASED ON OPERATING SCHEDULE. OCCUPANCY SENSORS ALSO COMPLY AS AN ALTERNATE TO USING A TIMECLOCK. EXTERIOR: SCHEDULED CONTROL, BASED ON TIME-OF-DAY AND SUNRISE/SUNSET (REQUIRES ASTRONOMICAL TIMECLOCK), TURNS LIGHTING ON OR OFF BASED ON TYPICAL OCCUPANCY AND DAYLIGHT.	C405.2.2 C405.2.7
	OCCUPANCY		AUTOMATIC CONTROL TURNS LIGHTING ON UPON OCCUPANCY OR OFF AFTER A VACANCY OF 20 MINUTES OR LESS.	C405.2.1
	SETTINGS	FULL ON	WHEN INITIATED BY A TIMECLOCK OR OCCUPANCY SENSOR, LIGHTING IS AUTOMATICALLY TURNED ON TO MAXIMUM LIGHTING POWER.	C405.2.1.1 Exception
		PARTIAL ON	WHEN INITIATED BY A TIMECLOCK OR OCCUPANCY SENSOR, LIGHTING IS AUTOMATICALLY TURNED ON TO 50% OR LESS OF MAXIMUM LIGHTING POWER	C405.2.1.1
		MANUAL ON	LIGHTING IS TURNED ON MANUALLY BY AN OCCUPANT.	C405.2.1.1
		FULL OFF	WHEN INITIATED BY A TIMECLOCK OR OCCUPANCY SENSOR, LIGHTING IS AUTOMATICALLY TURNED OFF.	C405.2.1
		PARTIAL OFF	IN VACANT CORRIDORS, WAREHOUSE AISLES, OPEN OFFICE ZONES, AND PARKING GARAGE ZONES, LIGHTING IS AUTOMATICALLY REDUCED BY AT LEAST 50% OF MAXIMUM LIGHTING POWER (80% FOR OPEN OFFICE, 30% FOR PARKING GARAGES). AUTOMATIC FULL OFF ALSO COMPLIES.	C405.2.1.2, C405.2.1.3 C405.2.1.4 C405.2.8
OTHER	DAYLIGHT		INTERIOR: A SENSOR WHICH ADJUSTS LIGHTING IN RESPONSE TO AVAILABLE DAYLIGHT IS REQUIRED FOR SIDELIGHT AND SKYLIGHT ZONES WHEN THE TOTAL LIGHTING POWER IN THE DAYLIGHT ZONES IN A SPACE IS AT LEAST 150 W. CONTINOUS DAYLIGHT DIMMING DOWN TO AT LEAST 15% OF FULL OUTPUT PLUS OFF IS REQUIRED. EXTERIOR: A PHOTOSENSOR CAN BE USED AS AN ALTERNATE TO THE DAWN/DUSK OPERATION OF AN ASTRONOMICAL TIMECLOCK.	C405.2.4 C405.2.7.1
	RECEPTACLE		AT LEAST 50% OF THE RECEPTACLES IN CERTAIN SPACES SHALL AUTOMATICALLY TURN OFF BASED ON OPERATING SCHEDULE OR AFTER A VACANCY OF 20 MINUTES OR LESS.	C405.11

FOR AREAS BEING USED AS A PATH OF EGRESS OR FIXTURES BEING USED FOR EMERGENCY, VERIFY COMPLIANCE WITH YOUR LOCAL AUTHORITY HAVING JURISDICTION.
ACCEPTANCE (FUNCTIONAL) TESTING IS REQUIRED FOR ALL NEW CONSTRUCTION APPLICATIONS TO ENSURE THAT CONTROL HARDWARE AND SOFTWARE ARE CALIBRATED, PROGRAMMED AND FUNCTIONING PROPERLY (CODE PROVISION C408.3).
ENHANCED DIGITAL LIGHTING CONTROLS IS ONE COMPLIANCE PATH OF THE ADDITIONAL EFFICIENCY PACKAGE REQUIREMENT (SECTION C406).
1. LUMINAIRE LEVEL LIGHTING CONTROLS (LLLC) CAN BE CAN BE USED AS AN ALTERNATE COMPLIANCE PATH. SEE SECTION C405.2 FOR MORE INFORMATION.

DAYLIGHT ZONE REQUIREMENTS: FIXTURES IN THE PRIMARY AND SECONDARY DAYLIGHT ZONES MUST BE INDEPENDENTLY CONTROLLED BY ZONE. SIDELIGHTED ZONES MUST BE CONTROLLED SEPARATELY FROM TOPLIGHTED ZONES.

DAYLIGHT EXCEPTIONS: DAYLIGHT CONTROL IS NOT REQUIRED WHEN THE TOTAL LIGHTING POWER IN ALL DAYLIGHT ZONES IN A SPACE IS LESS THAN 150W OR WHEN THE TOTAL GLAZING AREA IS LESS THAN 24 FT2.

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11-01-24

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CONTRACTOR SHALL CHECK & VERIFY ALL DIMENSIONS & CONDITIONS AT JOB SITE.

DATE : 10-25-24

REVISIONS :

TITLE :
IECC CONTROL REQUIREMENTS

SHEET :
ME4
OF
ME4

PROJECT : 24216

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APARTMENT PLAN SCHEDULE

APARTMENT TYPE	PLUMBING	HVAC	POWER	LIGHTING	FIRE ALARM
A	3 / M18	3 / M20	3 / E18	3 / E20	3 / FA10
A_A	4 / M18	4 / M20	4 / E18	4 / E20	4 / FA10
A_V	3 / M18	3 / M20	3 / E18	3 / E20	4 / FA9
B	1 / M18	1 / M20	1 / E18	1 / E20	1 / FA10
B_A	2 / M18	2 / M20	2 / E18	2 / E20	2 / FA10
B_V	1 / M18	1 / M20	1 / E18	1 / E20	3 / FA9
C	1 / M17	1 / M19	1 / E17	1 / E19	1 / FA9
C_A	2 / M17	2 / M18	2 / E17	2 / E19	2 / FA9

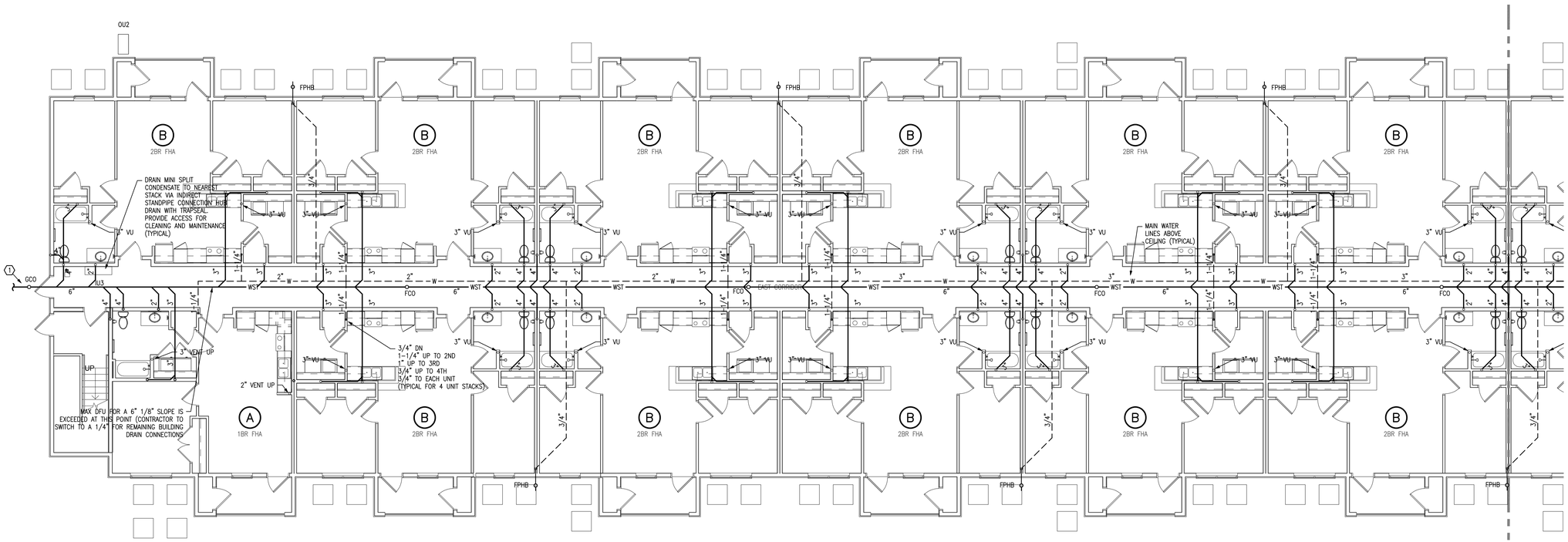
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GENERAL NOTES:

1. SEE SHEET ME1 NOTES FOR ALL SYSTEMS.
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3. SEE PLUMBING RISER DIAGRAMS FOR TYPICAL PIPE SIZING FOR SINGLE STACK SYSTEMS.
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KEYED NOTES:

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2. SEE WATER SERVICE DETAIL.
3. PIPE 2" SUMP PUMP WASTE VIA INDIRECT CONNECTION INTO TOP OF WASTE PIPE. SUMP PUMP AND ALL RELATED PIPING BY PLUMBING CONTRACTOR.



1st FLOOR E PLUMBING PLAN

1/8" = 1'-0"

EAST

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11-01-24

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DATE : 10-25-24

REVISIONS :

TITLE : 1st FLOOR E PLUMBING PLAN

SHEET : **M1** OF **M20**

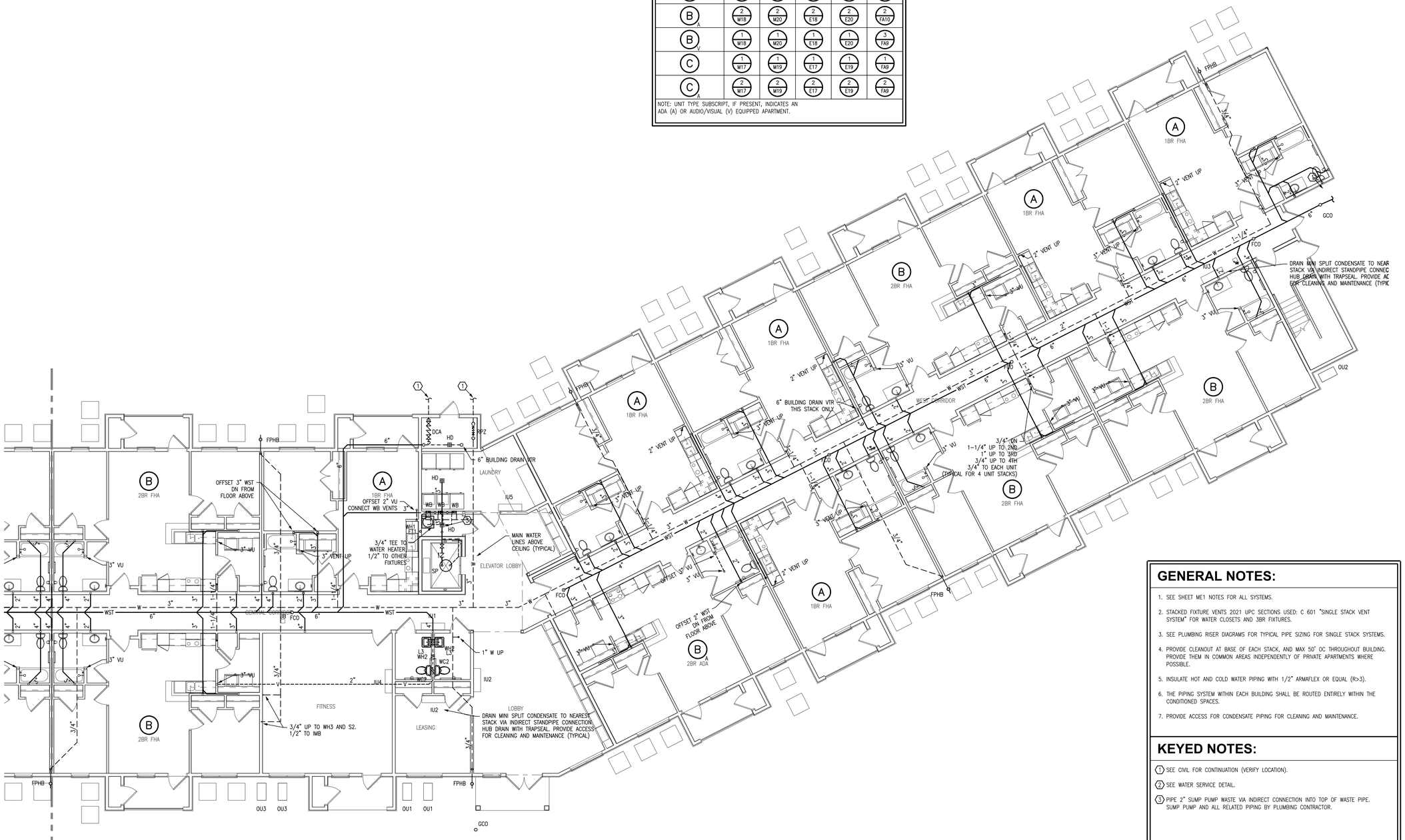
PROJECT : 24216

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APARTMENT PLAN SCHEDULE

APARTMENT TYPE	PLUMBING	HVAC	POWER	LIGHTING	FIRE ALARM
A	3 / M18	3 / M20	3 / E18	3 / E20	3 / FA10
A_A	4 / M18	4 / M20	4 / E18	4 / E20	4 / FA10
A_V	3 / M18	3 / M20	3 / E18	3 / E20	4 / FA9
B	1 / M18	1 / M20	1 / E18	1 / E20	1 / FA10
B_A	2 / M18	2 / M20	2 / E18	2 / E20	2 / FA10
B_V	1 / M18	1 / M20	1 / E18	1 / E20	1 / FA9
C	1 / M17	1 / M19	1 / E17	1 / E19	1 / FA9
C_A	2 / M17	2 / M19	2 / E17	2 / E19	2 / FA9

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1st FLOOR W PLUMBING PLAN

1/8" = 1'-0" WEST

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DATE : 10-25-24

REVISIONS :

TITLE : 1st FLOOR W PLUMBING PLAN

SHEET : M2 OF M20

PROJECT : 24216

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APARTMENT PLAN SCHEDULE

APARTMENT TYPE	PLUMBING	HVAC	POWER	LIGHTING	FIRE ALARM
A	3/M18	3/M20	3/E18	3/E20	3/FA10
A_A	4/M18	4/M20	4/E18	4/E20	4/FA10
A_V	3/M18	3/M20	3/E18	3/E20	4/FA9
B	1/M18	1/M20	1/E18	1/E20	1/FA10
B_A	2/M18	2/M20	2/E18	2/E20	2/FA10
B_V	1/M18	1/M20	1/E18	1/E20	3/FA9
C	1/M17	1/M19	1/E17	1/E19	1/FA9
C_A	2/M17	2/M18	2/E17	2/E19	2/FA9

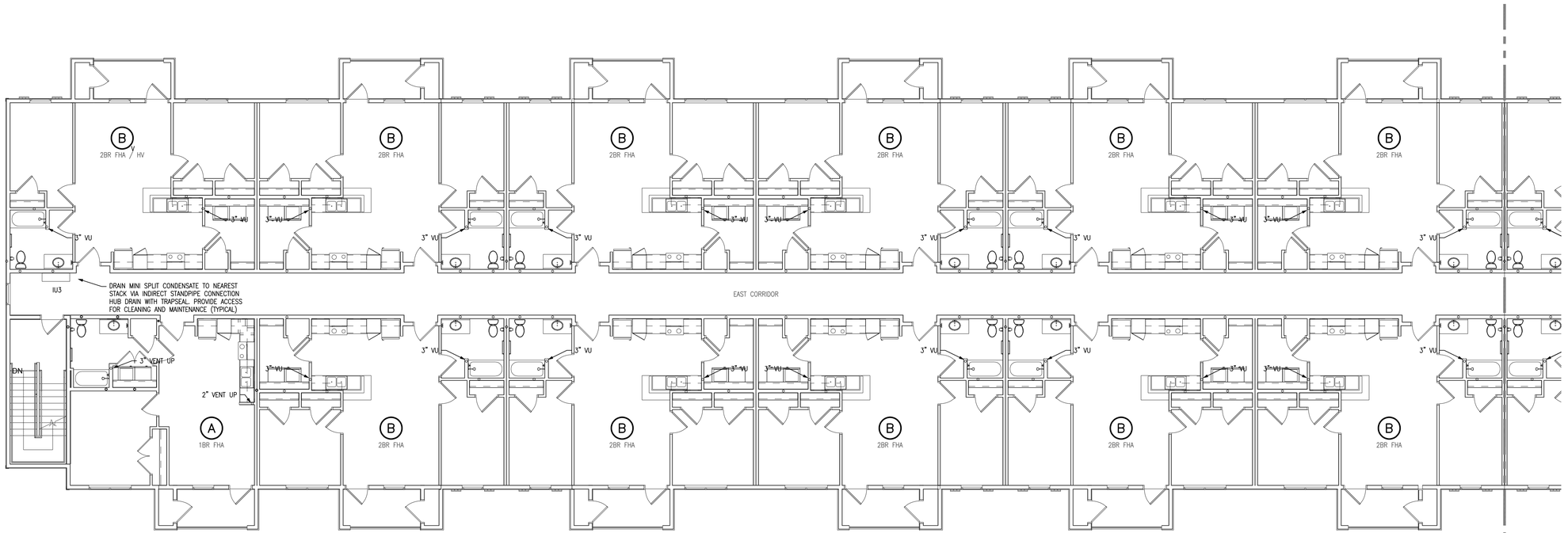
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GENERAL NOTES:

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1 / M3 **2nd FLOOR E PLUMBING PLAN**

1/8" = 1'-0" EAST

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DATE : 10-25-24

REVISIONS :

TITLE : **2nd FLOOR E PLUMBING PLAN**

SHEET : **M3** OF **M20**

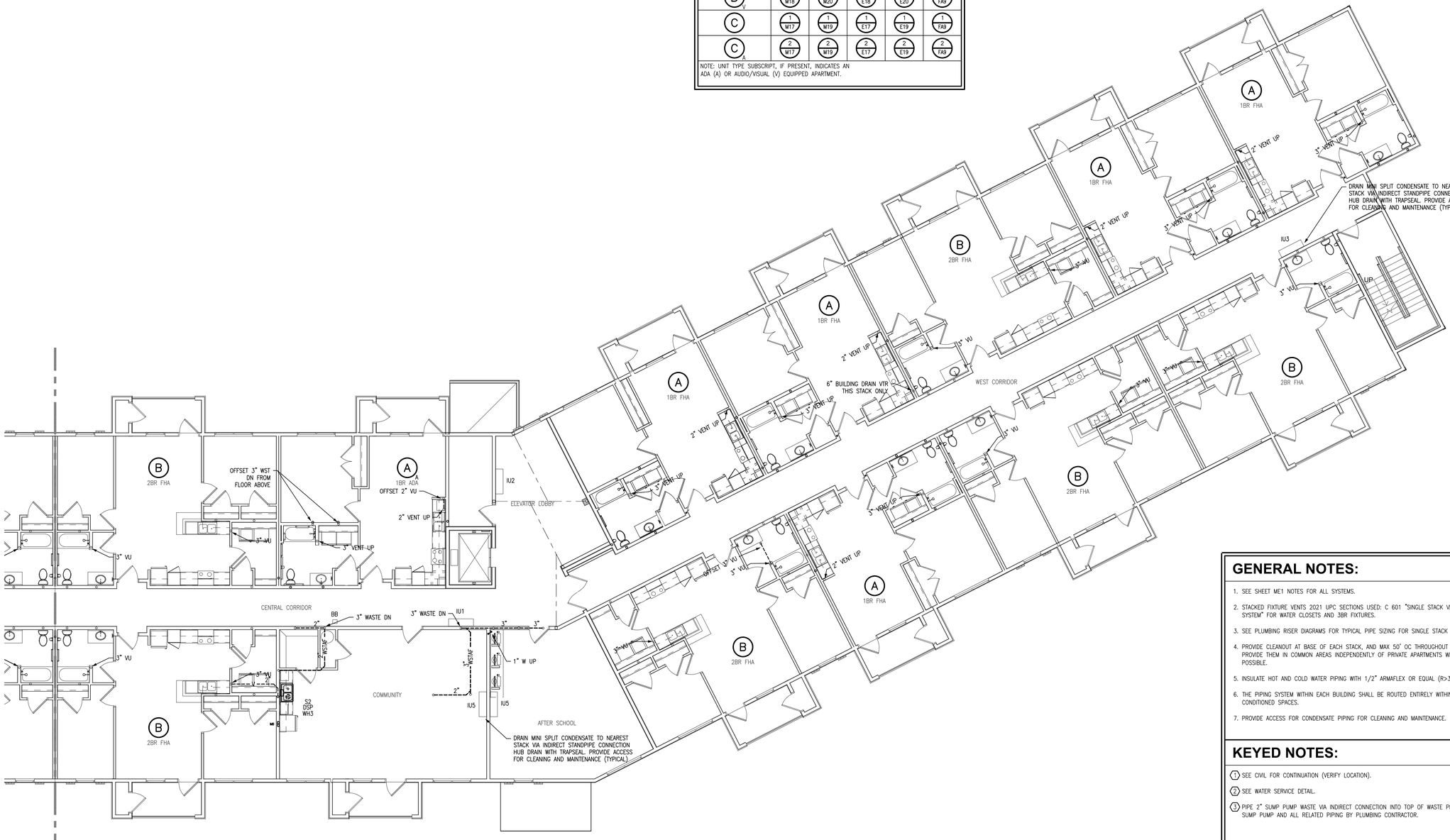
PROJECT : 24216

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APARTMENT PLAN SCHEDULE

APARTMENT TYPE	PLUMBING	HVAC	POWER	LIGHTING	FIRE ALARM
A	3 / M18	3 / M20	3 / E18	3 / E20	3 / FA10
A$_A$	4 / M18	4 / M20	4 / E18	4 / E20	4 / FA10
A$_V$	3 / M18	3 / M20	3 / E18	3 / E20	4 / FA9
B	1 / M18	1 / M20	1 / E18	1 / E20	1 / FA10
B$_A$	2 / M18	2 / M20	2 / E18	2 / E20	2 / FA10
B$_V$	1 / M18	1 / M20	1 / E18	1 / E20	1 / FA9
C	1 / M17	1 / M19	1 / E17	1 / E19	1 / FA9
C$_A$	2 / M17	2 / M19	2 / E17	2 / E19	2 / FA9

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GENERAL NOTES:

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2nd FLOOR W PLUMBING PLAN

1/8" = 1'-0" WEST

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DATE : 10-25-24

REVISIONS :

TITLE : 2nd FLOOR W PLUMBING PLAN

SHEET : M4 OF M20

PROJECT : 24216

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APARTMENT PLAN SCHEDULE

APARTMENT TYPE	PLUMBING	HVAC	POWER	LIGHTING	FIRE ALARM
A	3 / M18	3 / M20	3 / E18	3 / E20	3 / FA10
A_A	4 / M18	4 / M20	4 / E18	4 / E20	4 / FA10
A_V	3 / M18	3 / M20	3 / E18	3 / E20	4 / FA9
B	1 / M18	1 / M20	1 / E18	1 / E20	1 / FA10
B_A	2 / M18	2 / M20	2 / E18	2 / E20	2 / FA10
B_V	1 / M18	1 / M20	1 / E18	1 / E20	3 / FA9
C	1 / M17	1 / M19	1 / E17	1 / E19	1 / FA9
C_A	2 / M17	2 / M18	2 / E17	2 / E19	2 / FA9

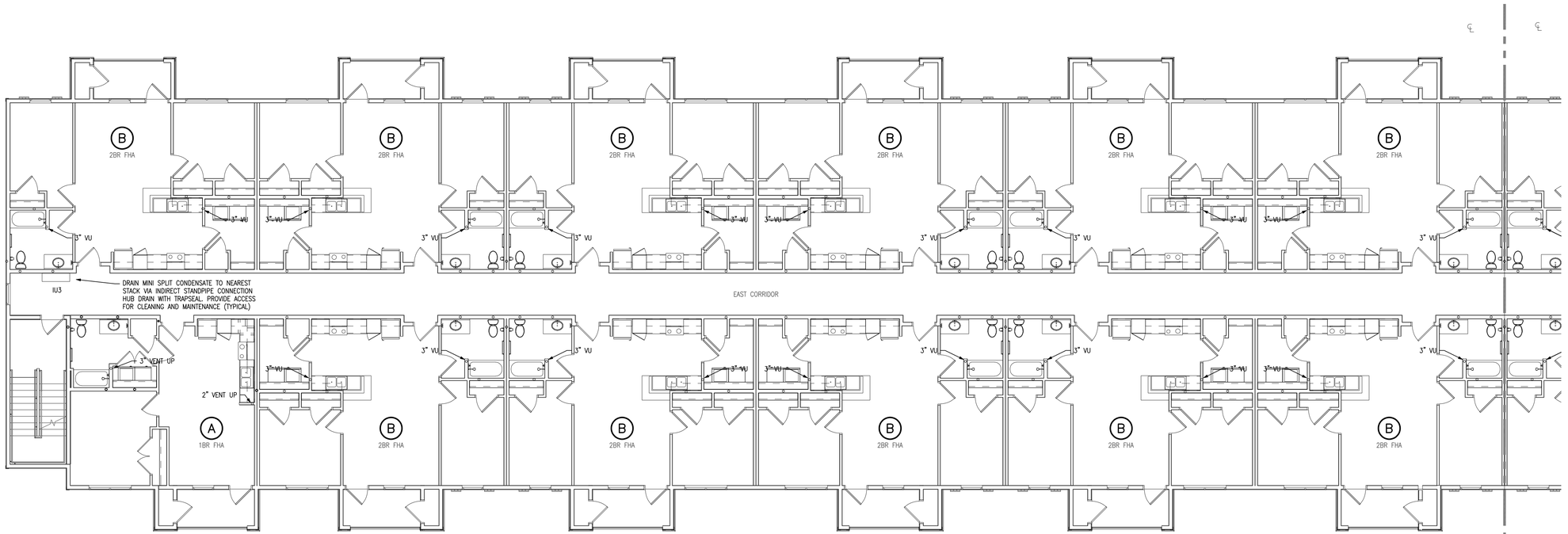
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1 / M5 **3rd FLOOR E PLUMBING PLAN**

1/8" = 1'-0" EAST

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DASHWOOD DRIVE & JETTY LANE
HOUSTON, HARRIS COUNTY, TX, 77072

CONTRACTOR SHALL CHECK & VERIFY ALL DIMENSIONS & CONDITIONS AT JOB SITE.

DATE : 10-25-24

REVISIONS :

TITLE : **3rd FLOOR E PLUMBING PLAN**

SHEET : **M5** OF **M20**

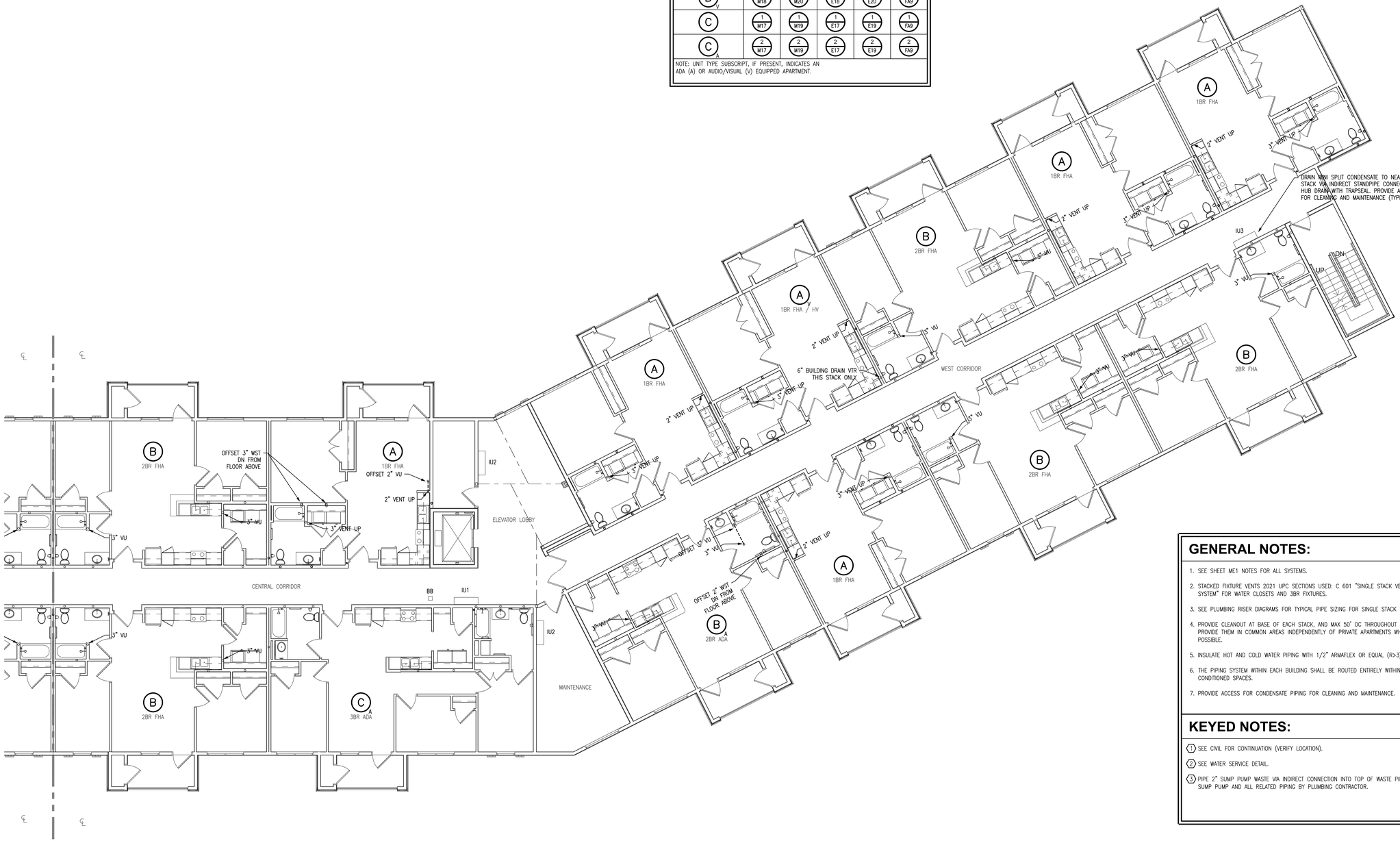
PROJECT : 24216

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APARTMENT PLAN SCHEDULE

APARTMENT TYPE	PLUMBING	HVAC	POWER	LIGHTING	FIRE ALARM
A	3 M18	3 M20	3 E18	3 E20	3 FA10
A A	4 M18	4 M20	4 E18	4 E20	4 FA10
A V	3 M18	3 M20	3 E18	3 E20	4 FA9
B	1 M18	1 M20	1 E18	1 E20	1 FA10
B A	2 M18	2 M20	2 E18	2 E20	2 FA10
B V	1 M18	1 M20	1 E18	1 E20	1 FA9
C	1 M17	1 M19	1 E17	1 E19	1 FA9
C A	2 M17	2 M19	2 E17	2 E19	2 FA9

NOTE: UNIT TYPE SUBSCRIPT, IF PRESENT, INDICATES AN ADA (A) OR AUDIO/VISUAL (V) EQUIPPED APARTMENT.



GENERAL NOTES:

1. SEE SHEET ME1 NOTES FOR ALL SYSTEMS.
2. STACKED FIXTURE VENTS 2021 UPC SECTIONS USED: C 601 "SINGLE STACK VENT SYSTEM" FOR WATER CLOSETS AND 3BR FIXTURES.
3. SEE PLUMBING RISER DIAGRAMS FOR TYPICAL PIPE SIZING FOR SINGLE STACK SYSTEMS.
4. PROVIDE CLEANOUT AT BASE OF EACH STACK, AND MAX 50' OC THROUGHOUT BUILDING. PROVIDE THEM IN COMMON AREAS INDEPENDENTLY OF PRIVATE APARTMENTS WHERE POSSIBLE.
5. INSULATE HOT AND COLD WATER PIPING WITH 1/2" ARMAFLEX OR EQUAL (R>3).
6. THE PIPING SYSTEM WITHIN EACH BUILDING SHALL BE ROUTED ENTIRELY WITHIN THE CONDITIONED SPACES.
7. PROVIDE ACCESS FOR CONDENSATE PIPING FOR CLEANING AND MAINTENANCE.

KEYED NOTES:

1. SEE CIVIL FOR CONTINUATION (VERIFY LOCATION).
2. SEE WATER SERVICE DETAIL.
3. PIPE 2" SUMP PUMP WASTE VIA INDIRECT CONNECTION INTO TOP OF WASTE PIPE. SUMP PUMP AND ALL RELATED PIPING BY PLUMBING CONTRACTOR.

1/M6 3rd FLOOR W PLUMBING PLAN

1/8" = 1'-0" WEST

FREDDIE L. MALICOAT - ENGINEER
TX# 113587
STATE OF TEXAS
FREDDIE MALICOAT
113587
LICENSED PROFESSIONAL ENGINEER
11-01-24

MALICOAT - WINSLOW ENGINEERS, INC.
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DASHWOOD TRAILS

DASHWOOD DRIVE & JETTY LANE
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DATE : 10-25-24

REVISIONS :

TITLE : 3rd FLOOR W PLUMBING PLAN

SHEET : M6 OF M20

PROJECT : 24216

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APARTMENT PLAN SCHEDULE

APARTMENT TYPE	PLUMBING	HVAC	POWER	LIGHTING	FIRE ALARM
A	3 / M18	3 / M20	3 / E18	3 / E20	3 / FA10
A_A	4 / M18	4 / M20	4 / E18	4 / E20	4 / FA10
A_V	3 / M18	3 / M20	3 / E18	3 / E20	4 / FA9
B	1 / M18	1 / M20	1 / E18	1 / E20	1 / FA10
B_A	2 / M18	2 / M20	2 / E18	2 / E20	2 / FA10
B_V	1 / M18	1 / M20	1 / E18	1 / E20	3 / FA9
C	1 / M17	1 / M19	1 / E17	1 / E19	1 / FA9
C_A	2 / M17	2 / M18	2 / E17	2 / E19	2 / FA9

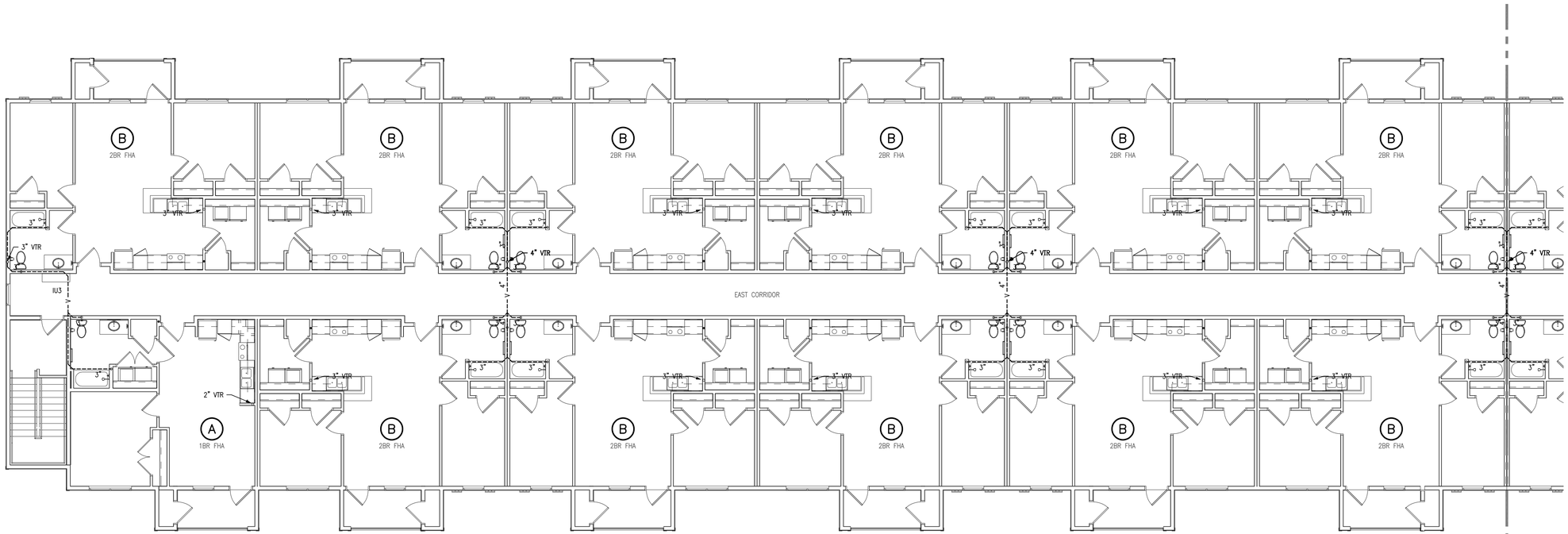
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GENERAL NOTES:

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2. STACKED FIXTURE VENTS 2021 UPC SECTIONS USED: C 601 "SINGLE STACK VENT SYSTEM" FOR WATER CLOSETS AND 3BR FIXTURES.
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7. PROVIDE ACCESS FOR CONDENSATE PIPING FOR CLEANING AND MAINTENANCE.

KEYED NOTES:

1. SEE CIVIL FOR CONTINUATION (VERIFY LOCATION).
2. SEE WATER SERVICE DETAIL.
3. PIPE 2" SUMP PUMP WASTE VIA INDIRECT CONNECTION INTO TOP OF WASTE PIPE. SUMP PUMP AND ALL RELATED PIPING BY PLUMBING CONTRACTOR.



1 / M7 **4th FLOOR E PLUMBING PLAN**

1/8" = 1'-0" EAST

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FREDDIE MALICOAT
113587
LICENSED PROFESSIONAL ENGINEER
11-01-24

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DASHWOOD TRAILS

DASHWOOD DRIVE & JETTY LANE
HOUSTON, HARRIS COUNTY, TX, 77072

CONTRACTOR SHALL CHECK & VERIFY ALL DIMENSIONS & CONDITIONS AT JOB SITE.

DATE : 10-25-24

REVISIONS :

TITLE : **4th FLOOR E PLUMBING PLAN**

SHEET : **M7** OF **M20**

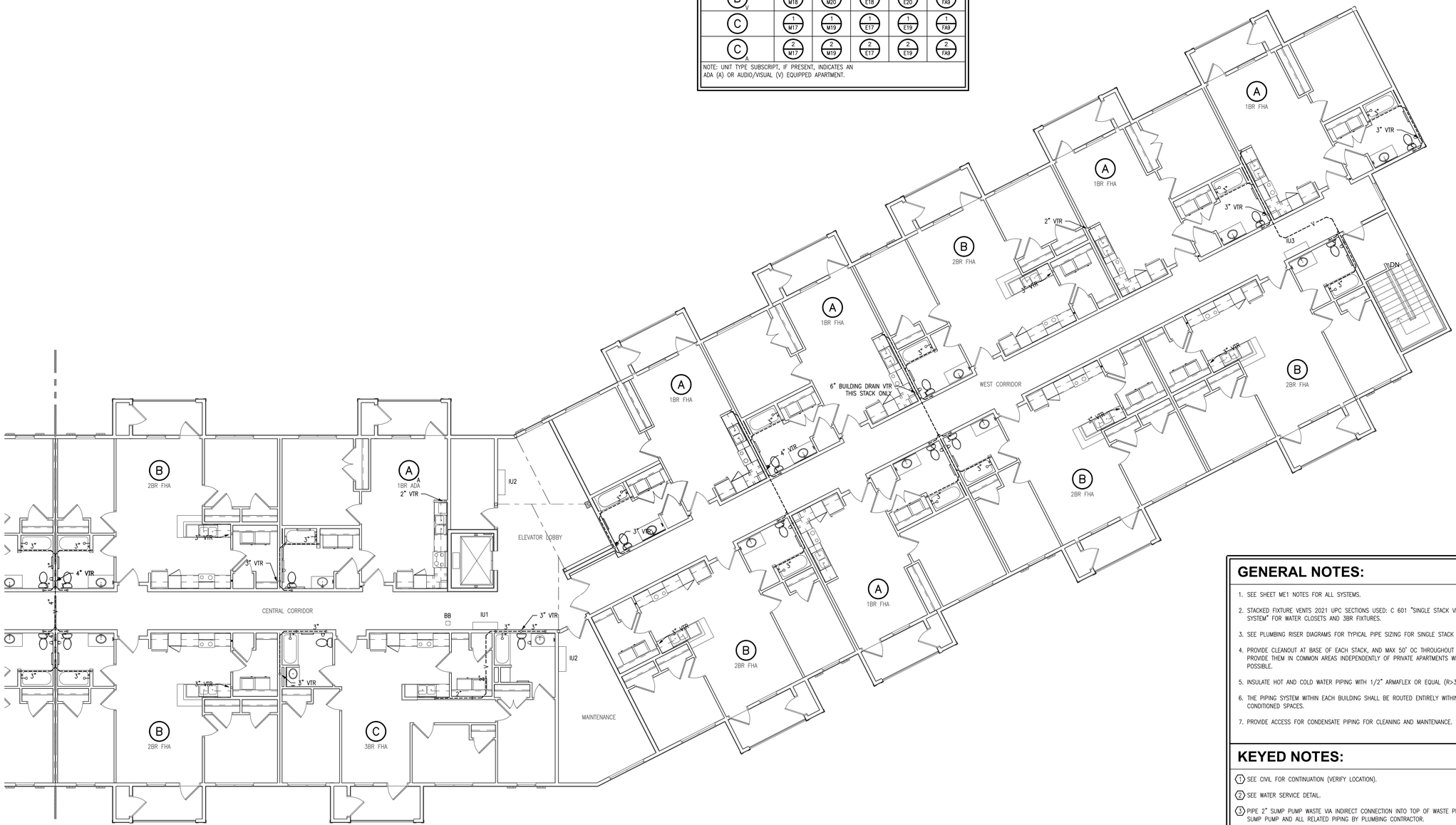
PROJECT : 24216

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APARTMENT PLAN SCHEDULE

APARTMENT TYPE	PLUMBING	HVAC	POWER	LIGHTING	FIRE ALARM
A	3 / M18	3 / M20	3 / E18	3 / E20	3 / FA10
A$_A$	4 / M18	4 / M20	4 / E18	4 / E20	4 / FA10
A$_V$	3 / M18	3 / M20	3 / E18	3 / E20	4 / FA9
B	1 / M18	1 / M20	1 / E18	1 / E20	1 / FA10
B$_A$	2 / M18	2 / M20	2 / E18	2 / E20	2 / FA10
B$_V$	1 / M18	1 / M20	1 / E18	1 / E20	1 / FA9
C	1 / M17	1 / M19	1 / E17	1 / E19	1 / FA9
C$_A$	2 / M17	2 / M19	2 / E17	2 / E19	2 / FA9

NOTE: UNIT TYPE SUBSCRIPT, IF PRESENT, INDICATES AN ADA (A) OR AUDIO/VISUAL (V) EQUIPPED APARTMENT.



GENERAL NOTES:

1. SEE SHEET ME1 NOTES FOR ALL SYSTEMS.
2. STACKED FIXTURE VENTS 2021 UPC SECTIONS USED: C 601 "SINGLE STACK VENT SYSTEM" FOR WATER CLOSETS AND 3BR FIXTURES.
3. SEE PLUMBING RISER DIAGRAMS FOR TYPICAL PIPE SIZING FOR SINGLE STACK SYSTEMS.
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KEYED NOTES:

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2. SEE WATER SERVICE DETAIL.
3. PIPE 2" SUMP PUMP WASTE VIA INDIRECT CONNECTION INTO TOP OF WASTE PIPE. SUMP PUMP AND ALL RELATED PIPING BY PLUMBING CONTRACTOR.

4th FLOOR W PLUMBING PLAN

1/8" = 1'-0"

WEST

FREDDIE L. MALICOAT - ENGINEER
TX# 113587

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FREDDIE MALICOAT
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LICENSED PROFESSIONAL ENGINEER
11-01-24

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DASHWOOD TRAILS

DASHWOOD DRIVE & JETTY LANE
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CONTRACTOR SHALL CHECK & VERIFY ALL DIMENSIONS & CONDITIONS AT JOB SITE.

DATE : 10-25-24

REVISIONS :

TITLE : 4th FLOOR W PLUMBING PLAN

SHEET : M8 OF M20

PROJECT : 24216

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APARTMENT PLAN SCHEDULE

APARTMENT TYPE	PLUMBING	HVAC	POWER	LIGHTING	FIRE ALARM
A	3 / M18	3 / M20	3 / E18	3 / E20	3 / FA10
A_A	4 / M18	4 / M20	4 / E18	4 / E20	4 / FA10
A_V	3 / M18	3 / M20	3 / E18	3 / E20	4 / FA9
B	1 / M18	1 / M20	1 / E18	1 / E20	1 / FA10
B_A	2 / M18	2 / M20	2 / E18	2 / E20	2 / FA10
B_V	1 / M18	1 / M20	1 / E18	1 / E20	3 / FA9
C	1 / M17	1 / M19	1 / E17	1 / E19	1 / FA9
C_A	2 / M17	2 / M18	2 / E17	2 / E19	2 / FA9

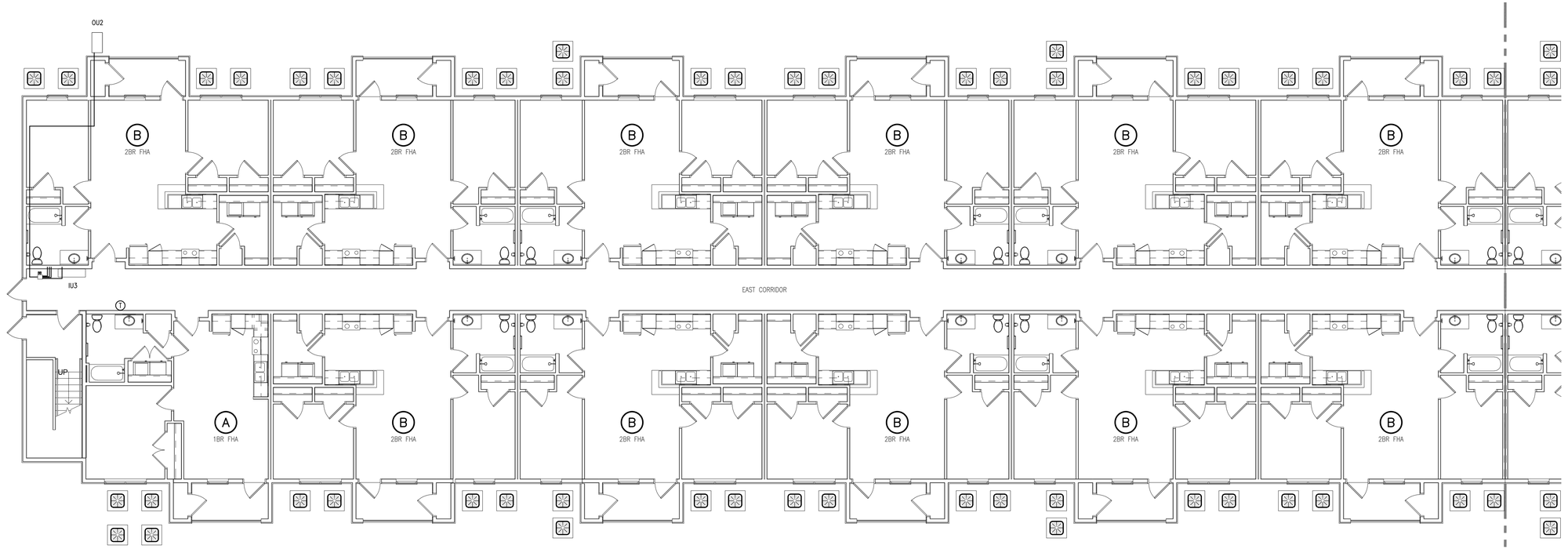
NOTE: UNIT TYPE SUBSCRIPT, IF PRESENT, INDICATES AN ADA (A) OR AUDIO/VISUAL (V) EQUIPPED APARTMENT.

GENERAL NOTES:

1. SEE SHEET ME1 NOTES FOR ALL SYSTEMS.
2. EXCEPT IN DRYER VENTS, INSTALL A FIRE DAMPER AT EVERY FIRE RATED ASSEMBLY PENETRATION TO MAINTAIN FIRE RATING OF ASSEMBLY.
3. DRYER AND EXHAUST DUCTS SHALL BE METAL DUCT RUN IN FLOOR/CEILING ASSEMBLY WITH ANNULAR AREA FIRE CAULKED AT PENETRATIONS.
4. DRYER EXHAUST DUCTS SHALL BE 4" RIGID METAL WITH FIREMASTER "DRYERWRAP" OR EQUAL, USE IN-O-VATE "DRYER-ELL" OR EQUAL 10" RADIUS SMOOTH WALL ELBOWS FOR ALL TURNS.
5. DUCTWORK IN CONDITIONED AREAS SHALL BE INSTALLED WITH EITHER 1/2" DUCT LINER OR 1-1/2" WRAP. DUCTWORK IN UNCONDITIONED AREAS (ATTIC WITH INSULATION BELOW DUCTWORK) SHALL BE INSTALLED WITH EITHER 1" LINER OR 2" WRAP. SIZES OF PLANS HAVE BEEN SHOWN TO INCLUDE DUCT LINER. REFER TO SPECIFICATION BOOK FOR MORE DETAILS.
6. FLEXIBLE DUCT – FLEXMASTER #6M INSULATED FLEXIBLE DUCT. MYLAR INNER LINER, 1" THICK FIBERGLASS INSULATION WITH SEAMLESS ALUMINIZED VAPOR BARRIER, MAXIMUM LENGTH UNLESS OTHERWISE NOTED SHALL NOT EXCEED 10', AND SUPPORTED MAXIMUM 3' ON CENTER. USE FLEXRIGHT® DURABLE ELBOW SUPPORTS AT ALL ELBOWS.
7. AC CONDENSATE PIPING SHALL BE INSULATED WITH 3/8" THICK ARMAFLEX AND HAVE A APRIL-AIRE SAFETY OVERFLOW SWITCH.
8. TRUSS MANUFACTURER SHALL COORDINATE TRUSS DESIGN WITH MEP LAYOUT.

KEYED NOTES:

1. SEE WH/FC MOUNTING DETAIL.
2. TO WALLCAP OR ROOF JACK WITH BIRDSCREEN (TYPICAL FOR EXHAUST FANS).
3. TO WALLCAP WITH BACKDRAFT DAMPER. (TYPICAL FOR DRYERS).



1st FLOOR E HVAC PLAN

1/8" = 1'-0"

EAST

FREDDIE L. MALICOAT - ENGINEER
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11-01-24

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CONTRACTOR SHALL CHECK & VERIFY ALL DIMENSIONS & CONDITIONS AT JOB SITE.

DATE : 10-25-24

REVISIONS :

TITLE : 1st FLOOR E HVAC PLAN

SHEET : **M9** OF **M20**

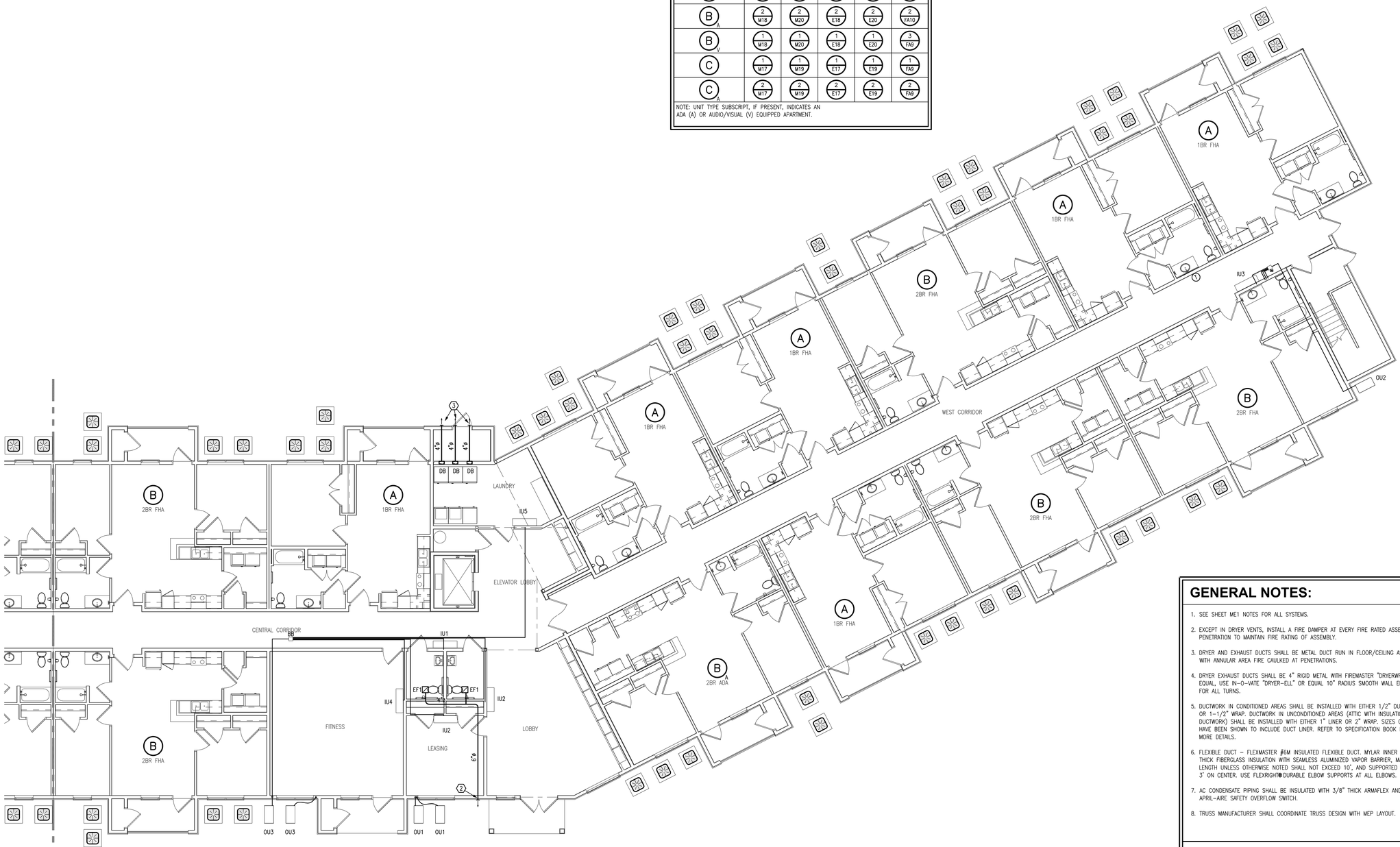
PROJECT : 24216

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APARTMENT PLAN SCHEDULE

APARTMENT TYPE	PLUMBING	HVAC	POWER	LIGHTING	FIRE ALARM
A	3 / M18	3 / M20	3 / E18	3 / E20	3 / FA10
A A	4 / M18	4 / M20	4 / E18	4 / E20	4 / FA10
A V	3 / M18	3 / M20	3 / E18	3 / E20	4 / FA9
B	1 / M18	1 / M20	1 / E18	1 / E20	1 / FA10
B A	2 / M18	2 / M20	2 / E18	2 / E20	2 / FA10
B V	1 / M18	1 / M20	1 / E18	1 / E20	1 / FA9
C	1 / M17	1 / M19	1 / E17	1 / E19	1 / FA9
C A	2 / M17	2 / M19	2 / E17	2 / E19	2 / FA9

NOTE: UNIT TYPE SUBSCRIPT, IF PRESENT, INDICATES AN ADA (A) OR AUDIO/VISUAL (V) EQUIPPED APARTMENT.



1st FLOOR W HVAC PLAN

1/8" = 1'-0"

WEST

GENERAL NOTES:

1. SEE SHEET ME1 NOTES FOR ALL SYSTEMS.
2. EXCEPT IN DRYER VENTS, INSTALL A FIRE DAMPER AT EVERY FIRE RATED ASSEMBLY PENETRATION TO MAINTAIN FIRE RATING OF ASSEMBLY.
3. DRYER AND EXHAUST DUCTS SHALL BE METAL DUCT RUN IN FLOOR/CEILING ASSEMBLY WITH ANNULAR AREA FIRE CAULKED AT PENETRATIONS.
4. DRYER EXHAUST DUCTS SHALL BE 4" RIGID METAL WITH FIREMASTER "DRYERWRAP" OR EQUAL, USE IN-O-VATE "DRYER-ELL" OR EQUAL 10" RADIUS SMOOTH WALL ELBOWS FOR ALL TURNS.
5. DUCTWORK IN CONDITIONED AREAS SHALL BE INSTALLED WITH EITHER 1/2" DUCT LINER OR 1-1/2" WRAP. DUCTWORK IN UNCONDITIONED AREAS (ATTIC WITH INSULATION BELOW DUCTWORK) SHALL BE INSTALLED WITH EITHER 1" LINER OR 2" WRAP. SIZES OF PLANS HAVE BEEN SHOWN TO INCLUDE DUCT LINER. REFER TO SPECIFICATION BOOK FOR MORE DETAILS.
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7. AC CONDENSATE PIPING SHALL BE INSULATED WITH 3/8" THICK ARMAFLEX AND HAVE A APRIL-AIRE SAFETY OVERFLOW SWITCH.
8. TRUSS MANUFACTURER SHALL COORDINATE TRUSS DESIGN WITH MEP LAYOUT.

KEYED NOTES:

1. SEE WH/FC MOUNTING DETAIL.
2. TO WALLCAP OR ROOF JACK WITH BIRDSCREEN (TYPICAL FOR EXHAUST FANS).
3. TO WALLCAP WITH BACKDRAFT DAMPER. (TYPICAL FOR DRYERS).

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11-01-24

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CONTRACTOR SHALL CHECK & VERIFY ALL DIMENSIONS & CONDITIONS AT JOB SITE.

DATE : 10-25-24

REVISIONS :

TITLE : 1st FLOOR W HVAC PLAN

SHEET : M10 OF M20

PROJECT : 24216

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APARTMENT PLAN SCHEDULE

APARTMENT TYPE	PLUMBING	HVAC	POWER	LIGHTING	FIRE ALARM
A	3 / M18	3 / M20	3 / E18	3 / E20	3 / FA10
A_A	4 / M18	4 / M20	4 / E18	4 / E20	4 / FA10
A_V	3 / M18	3 / M20	3 / E18	3 / E20	4 / FA9
B	1 / M18	1 / M20	1 / E18	1 / E20	1 / FA10
B_A	2 / M18	2 / M20	2 / E18	2 / E20	2 / FA10
B_V	1 / M18	1 / M20	1 / E18	1 / E20	3 / FA9
C	1 / M17	1 / M19	1 / E17	1 / E19	1 / FA9
C_A	2 / M17	2 / M18	2 / E17	2 / E19	2 / FA9

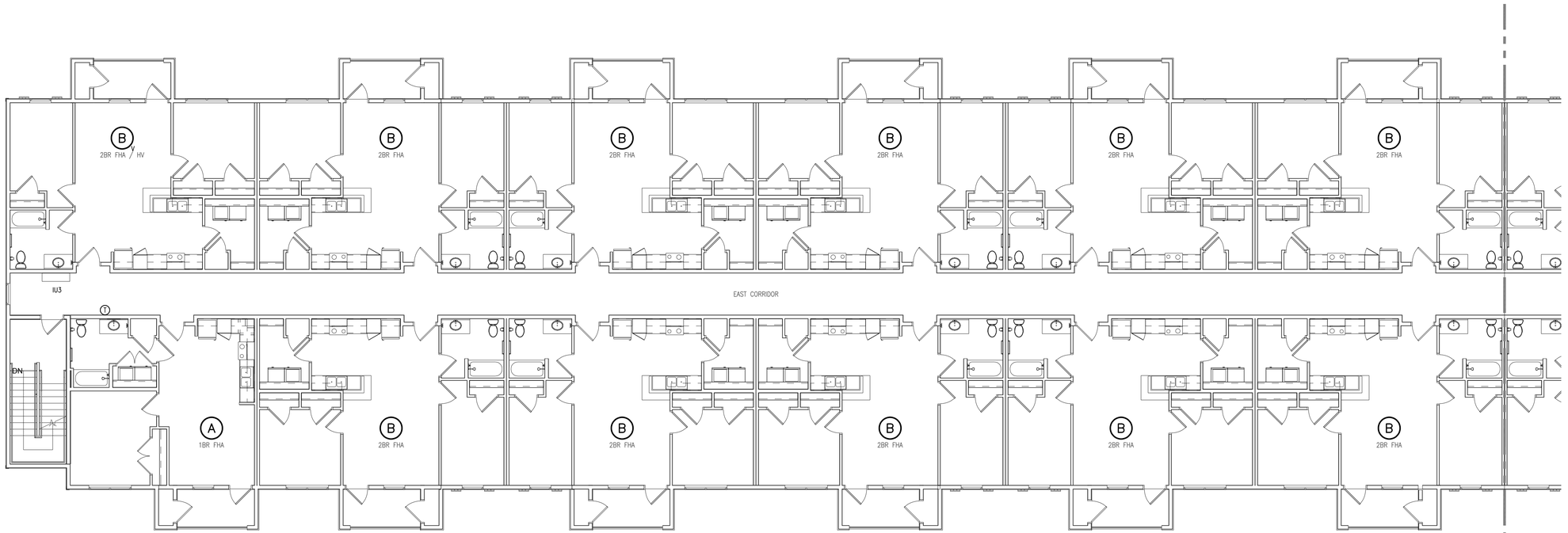
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KEYED NOTES:

1. SEE WH/FC MOUNTING DETAIL.
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1 / M11 **2nd FLOOR E HVAC PLAN**

1/8" = 1'-0" EAST

FREDDIE L. MALICOAT - ENGINEER
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FREDDIE MALICOAT
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LICENSED PROFESSIONAL ENGINEER
11-01-24

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CONTRACTOR SHALL CHECK & VERIFY ALL DIMENSIONS & CONDITIONS AT JOB SITE.

DATE : 10-25-24

REVISIONS :

TITLE : **2nd FLOOR E HVAC PLAN**

SHEET : **M11** OF **M20**

PROJECT : 24216

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APARTMENT PLAN SCHEDULE

APARTMENT TYPE	PLUMBING	HVAC	POWER	LIGHTING	FIRE ALARM
A	3 M18	3 M20	3 E18	3 E20	3 FA10
A A	4 M18	4 M20	4 E18	4 E20	4 FA10
A V	3 M18	3 M20	3 E18	3 E20	4 FA9
B	1 M18	1 M20	1 E18	1 E20	1 FA10
B A	2 M18	2 M20	2 E18	2 E20	2 FA10
B V	1 M18	1 M20	1 E18	1 E20	1 FA9
C	1 M17	1 M19	1 E17	1 E19	1 FA9
C A	2 M17	2 M19	2 E17	2 E19	2 FA9

NOTE: UNIT TYPE SUBSCRIPT, IF PRESENT, INDICATES AN ADA (A) OR AUDIO/VISUAL (V) EQUIPPED APARTMENT.



GENERAL NOTES:

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4. DRYER EXHAUST DUCTS SHALL BE 4" RIGID METAL WITH FIREMASTER "DRYERWRAP" OR EQUAL, USE IN-O-VATE "DRYER-ELL" OR EQUAL 10" RADIUS SMOOTH WALL ELBOWS FOR ALL TURNS.
5. DUCTWORK IN CONDITIONED AREAS SHALL BE INSTALLED WITH EITHER 1/2" DUCT LINER OR 1-1/2" WRAP. DUCTWORK IN UNCONDITIONED AREAS (ATTIC WITH INSULATION BELOW DUCTWORK) SHALL BE INSTALLED WITH EITHER 1" LINER OR 2" WRAP. SIZES OF PLANS HAVE BEEN SHOWN TO INCLUDE DUCT LINER. REFER TO SPECIFICATION BOOK FOR MORE DETAILS.
6. FLEXIBLE DUCT – FLEXMASTER #6M INSULATED FLEXIBLE DUCT. MYLAR INNER LINER, 1" THICK FIBERGLASS INSULATION WITH SEAMLESS ALUMINIZED VAPOR BARRIER, MAXIMUM LENGTH UNLESS OTHERWISE NOTED SHALL NOT EXCEED 10', AND SUPPORTED MAXIMUM 3' ON CENTER. USE FLEXRIGHT® DURABLE ELBOW SUPPORTS AT ALL ELBOWS.
7. AC CONDENSATE PIPING SHALL BE INSULATED WITH 3/8" THICK ARMAFLEX AND HAVE A APRIL-AIRE SAFETY OVERFLOW SWITCH.
8. TRUSS MANUFACTURER SHALL COORDINATE TRUSS DESIGN WITH MEP LAYOUT.

KEYED NOTES:

1. SEE WH/FC MOUNTING DETAIL.
2. TO WALLCAP OR ROOF JACK WITH BIRDSCREEN (TYPICAL FOR EXHAUST FANS).
3. TO WALLCAP WITH BACKDRAFT DAMPER. (TYPICAL FOR DRYERS).

2nd FLOOR W HVAC PLAN

1/8" = 1'-0"

WEST

FREDDIE L. MALICOAT - ENGINEER
TX# 113587
STATE OF TEXAS
FREDDIE MALICOAT
113587
LICENSED PROFESSIONAL ENGINEER
11-01-24

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FREDDIE MALICOAT, P.E.

DASHWOOD TRAILS

DASHWOOD DRIVE & JETTY LANE
HOUSTON, HARRIS COUNTY, TX, 77072

CONTRACTOR SHALL CHECK & VERIFY ALL DIMENSIONS & CONDITIONS AT JOB SITE.

DATE : 10-25-24

REVISIONS :

TITLE : 2nd FLOOR W HVAC PLAN

SHEET : M12 OF M20

PROJECT : 24216

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APARTMENT PLAN SCHEDULE

APARTMENT TYPE	PLUMBING	HVAC	POWER	LIGHTING	FIRE ALARM
A	3 / M18	3 / M20	3 / E18	3 / E20	3 / FA10
A_A	4 / M18	4 / M20	4 / E18	4 / E20	4 / FA10
A_V	3 / M18	3 / M20	3 / E18	3 / E20	4 / FA9
B	1 / M18	1 / M20	1 / E18	1 / E20	1 / FA10
B_A	2 / M18	2 / M20	2 / E18	2 / E20	2 / FA10
B_V	1 / M18	1 / M20	1 / E18	1 / E20	3 / FA9
C	1 / M17	1 / M19	1 / E17	1 / E19	1 / FA9
C_A	2 / M17	2 / M18	2 / E17	2 / E19	2 / FA9

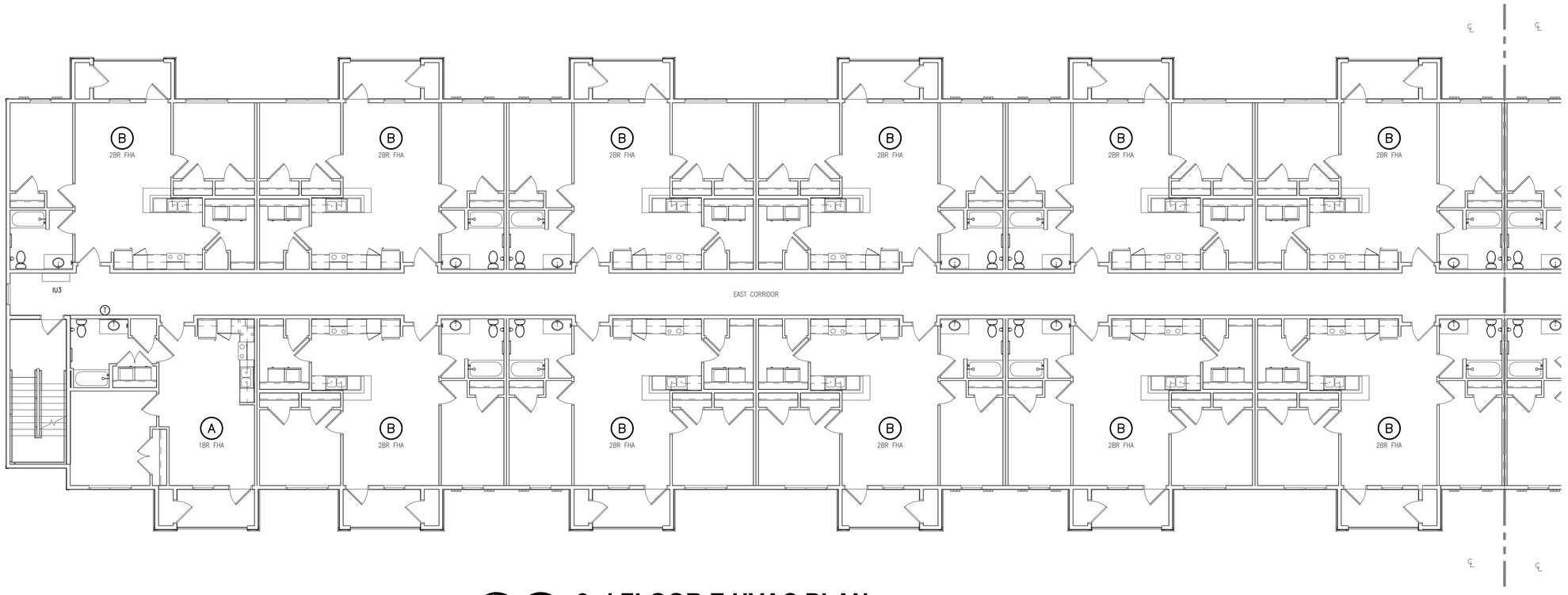
NOTE: UNIT TYPE SUBSCRIPT, IF PRESENT, INDICATES AN ADA (A) OR AUDIO/VISUAL (V) EQUIPPED APARTMENT.

GENERAL NOTES:

1. SEE SHEET ME1 NOTES FOR ALL SYSTEMS.
2. EXCEPT IN DRYER VENTS, INSTALL A FIRE DAMPER AT EVERY FIRE RATED ASSEMBLY PENETRATION TO MAINTAIN FIRE RATING OF ASSEMBLY.
3. DRYER AND EXHAUST DUCTS SHALL BE METAL DUCT RUN IN FLOOR/CEILING ASSEMBLY WITH ANNULAR AREA FIRE CAULKED AT PENETRATIONS.
4. DRYER EXHAUST DUCTS SHALL BE 4" RIGID METAL WITH FIREMASTER "DRYERWRAP" OR EQUAL, USE IN-O-VATE "DRYER-ELL" OR EQUAL 10" RADIUS SMOOTH WALL ELBOWS FOR ALL TURNS.
5. DUCTWORK IN CONDITIONED AREAS SHALL BE INSTALLED WITH EITHER 1/2" DUCT LINER OR 1-1/2" WRAP. DUCTWORK IN UNCONDITIONED AREAS (ATTIC WITH INSULATION BELOW DUCTWORK) SHALL BE INSTALLED WITH EITHER 1" LINER OR 2" WRAP. SIZES OF PLANS HAVE BEEN SHOWN TO INCLUDE DUCT LINER. REFER TO SPECIFICATION BOOK FOR MORE DETAILS.
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7. AC CONDENSATE PIPING SHALL BE INSULATED WITH 3/8" THICK ARMAFLEX AND HAVE A APRIL-AIRE SAFETY OVERFLOW SWITCH.
8. TRUSS MANUFACTURER SHALL COORDINATE TRUSS DESIGN WITH MEP LAYOUT.

KEYED NOTES:

1. SEE WH/FC MOUNTING DETAIL.
2. TO WALLCAP OR ROOF JACK WITH BIRDSCREEN (TYPICAL FOR EXHAUST FANS).
3. TO WALLCAP WITH BACKDRAFT DAMPER. (TYPICAL FOR DRYERS).



3rd FLOOR E HVAC PLAN

1/8" = 1'-0"

EAST

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DASHWOOD TRAILS

DASHWOOD DRIVE & JETTY LANE
HOUSTON, HARRIS COUNTY, TX, 77072

CONTRACTOR SHALL CHECK & VERIFY ALL DIMENSIONS & CONDITIONS AT JOB SITE.

DATE : 10-25-24

REVISIONS :

TITLE : 3rd FLOOR E HVAC PLAN

SHEET : **M13** OF **M20**

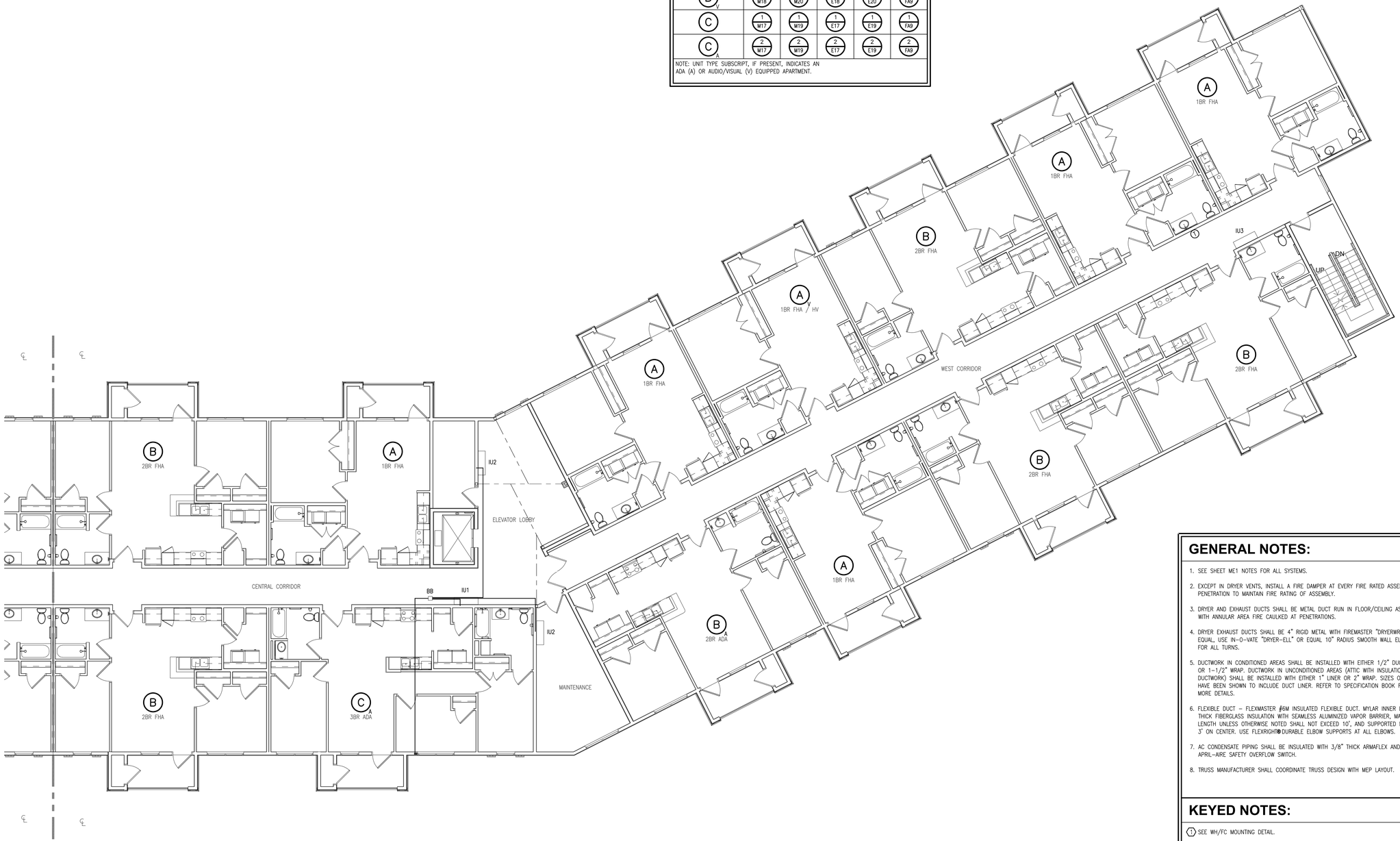
PROJECT : 24216

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APARTMENT PLAN SCHEDULE

APARTMENT TYPE	PLUMBING	HVAC	POWER	LIGHTING	FIRE ALARM
A	3 M18	3 M20	3 E18	3 E20	3 FA10
A A	4 M18	4 M20	4 E18	4 E20	4 FA10
A V	3 M18	3 M20	3 E18	3 E20	4 FA9
B	1 M18	1 M20	1 E18	1 E20	1 FA10
B A	2 M18	2 M20	2 E18	2 E20	2 FA10
B V	1 M18	1 M20	1 E18	1 E20	1 FA9
C	1 M17	1 M19	1 E17	1 E19	1 FA9
C A	2 M17	2 M19	2 E17	2 E19	2 FA9

NOTE: UNIT TYPE SUBSCRIPT, IF PRESENT, INDICATES AN ADA (A) OR AUDIO/VISUAL (V) EQUIPPED APARTMENT.



GENERAL NOTES:

1. SEE SHEET ME1 NOTES FOR ALL SYSTEMS.
2. EXCEPT IN DRYER VENTS, INSTALL A FIRE DAMPER AT EVERY FIRE RATED ASSEMBLY PENETRATION TO MAINTAIN FIRE RATING OF ASSEMBLY.
3. DRYER AND EXHAUST DUCTS SHALL BE METAL DUCT RUN IN FLOOR/CEILING ASSEMBLY WITH ANNULAR AREA FIRE CAULKED AT PENETRATIONS.
4. DRYER EXHAUST DUCTS SHALL BE 4" RIGID METAL WITH FIREMASTER "DRYERWRAP" OR EQUAL, USE IN-O-VATE "DRYER-ELL" OR EQUAL 10" RADIUS SMOOTH WALL ELBOWS FOR ALL TURNS.
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8. TRUSS MANUFACTURER SHALL COORDINATE TRUSS DESIGN WITH MEP LAYOUT.

KEYED NOTES:

1. SEE WH/FC MOUNTING DETAIL.
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3. TO WALLCAP WITH BACKDRAFT DAMPER. (TYPICAL FOR DRYERS).

1 / M14 **3rd FLOOR W HVAC PLAN**

1/8" = 1'-0" WEST

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DASHWOOD TRAILS

DASHWOOD DRIVE & JETTY LANE
HOUSTON, HARRIS COUNTY, TX, 77072

CONTRACTOR SHALL CHECK & VERIFY ALL DIMENSIONS & CONDITIONS AT JOB SITE.

DATE : 10-25-24

REVISIONS :

TITLE : 3rd FLOOR W HVAC PLAN

SHEET : M14 OF M20

PROJECT : 24216

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APARTMENT PLAN SCHEDULE

APARTMENT TYPE	PLUMBING	HVAC	POWER	LIGHTING	FIRE ALARM
A	3 / M18	3 / M20	3 / E18	3 / E20	3 / FA10
A_A	4 / M18	4 / M20	4 / E18	4 / E20	4 / FA10
A_V	3 / M18	3 / M20	3 / E18	3 / E20	4 / FA9
B	1 / M18	1 / M20	1 / E18	1 / E20	1 / FA10
B_A	2 / M18	2 / M20	2 / E18	2 / E20	2 / FA10
B_V	1 / M18	1 / M20	1 / E18	1 / E20	3 / FA9
C	1 / M17	1 / M19	1 / E17	1 / E19	1 / FA9
C_A	2 / M17	2 / M18	2 / E17	2 / E19	2 / FA9

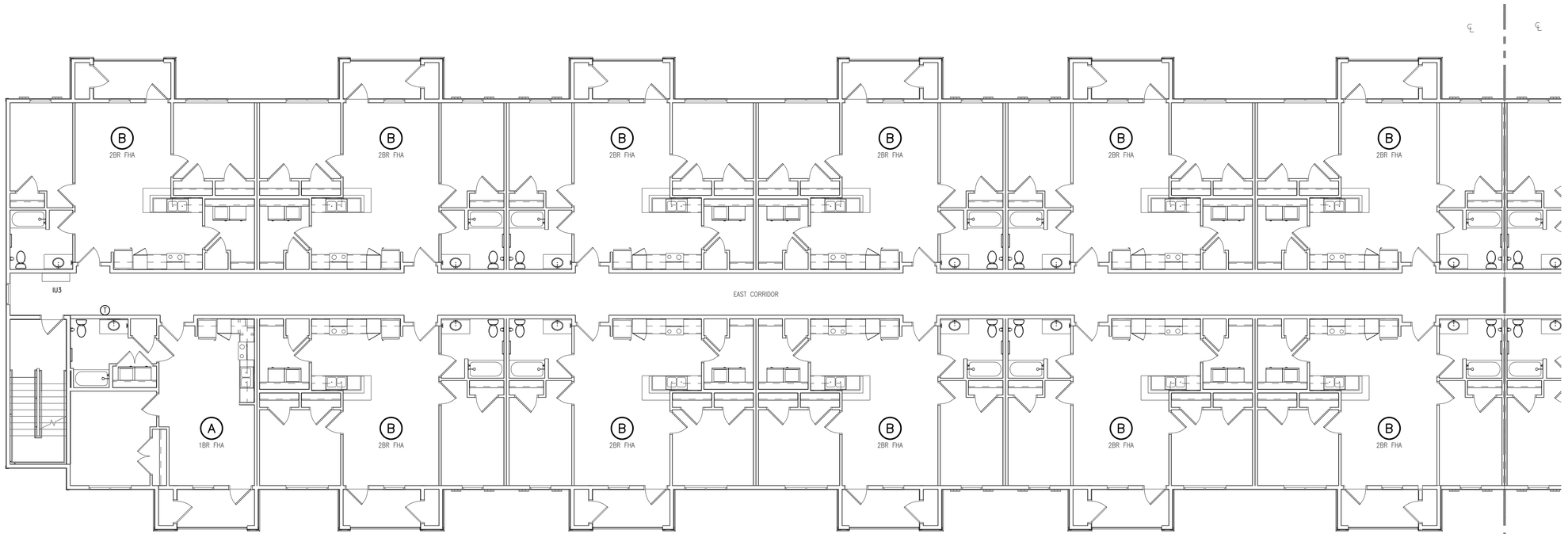
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GENERAL NOTES:

1. SEE SHEET ME1 NOTES FOR ALL SYSTEMS.
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KEYED NOTES:

1. SEE WH/FC MOUNTING DETAIL.
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3. TO WALLCAP WITH BACKDRAFT DAMPER. (TYPICAL FOR DRYERS).



1 / M15 **4th FLOOR E HVAC PLAN**

1/8" = 1'-0" EAST

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11-01-24

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DASHWOOD TRAILS

DASHWOOD DRIVE & JETTY LANE
HOUSTON, HARRIS COUNTY, TX, 77072

CONTRACTOR SHALL CHECK & VERIFY ALL DIMENSIONS & CONDITIONS AT JOB SITE.

DATE : 10-25-24

REVISIONS :

TITLE : **4th FLOOR E HVAC PLAN**

SHEET : **M15** OF **M20**

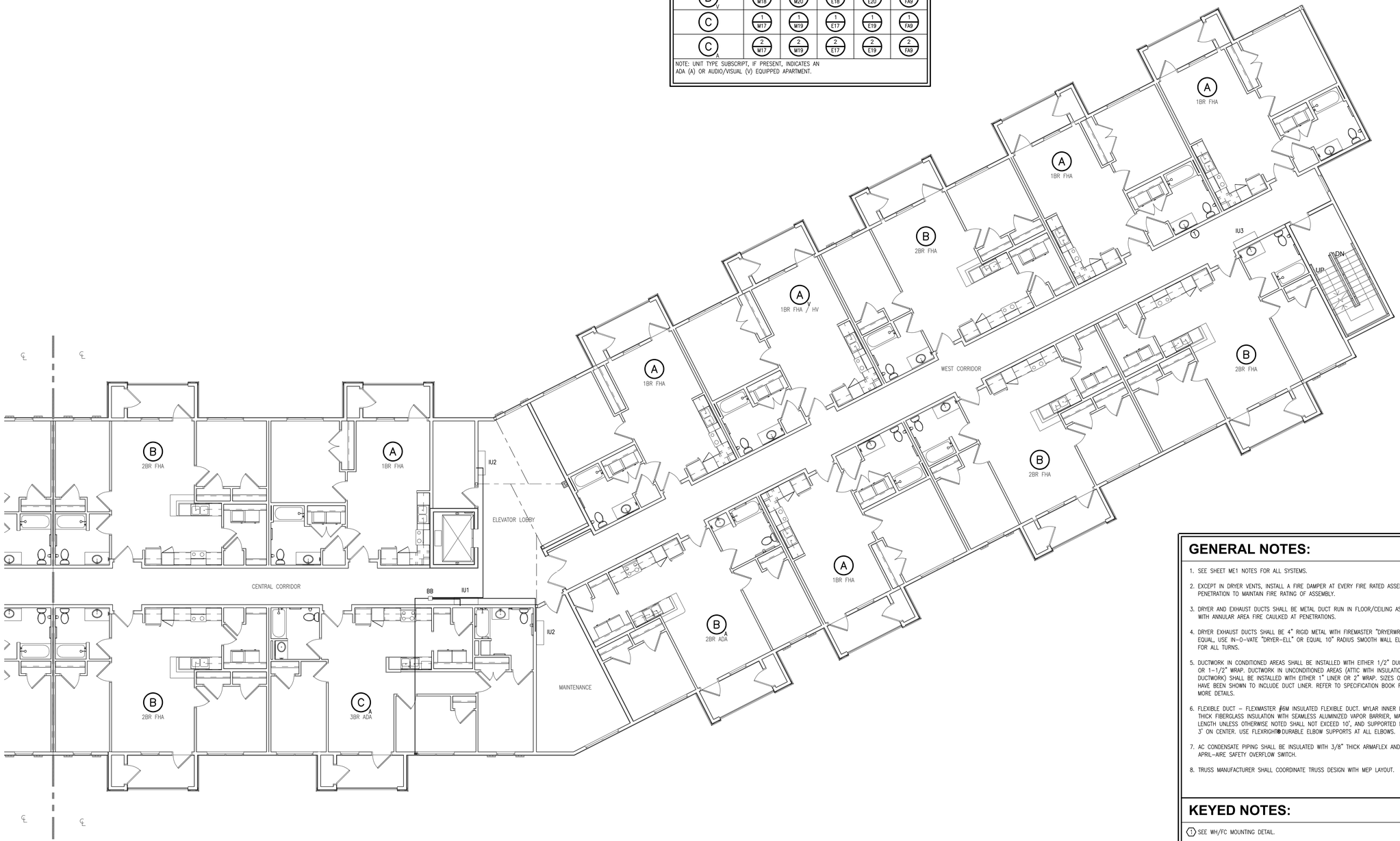
PROJECT : 24216

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APARTMENT PLAN SCHEDULE

APARTMENT TYPE	PLUMBING	HVAC	POWER	LIGHTING	FIRE ALARM
A	3 M18	3 M20	3 E18	3 E20	3 FA10
A A	4 M18	4 M20	4 E18	4 E20	4 FA10
A V	3 M18	3 M20	3 E18	3 E20	4 FA9
B	1 M18	1 M20	1 E18	1 E20	1 FA10
B A	2 M18	2 M20	2 E18	2 E20	2 FA10
B V	1 M18	1 M20	1 E18	1 E20	1 FA9
C	1 M17	1 M19	1 E17	1 E19	1 FA9
C A	2 M17	2 M19	2 E17	2 E19	2 FA9

NOTE: UNIT TYPE SUBSCRIPT, IF PRESENT, INDICATES AN ADA (A) OR AUDIO/VISUAL (V) EQUIPPED APARTMENT.



GENERAL NOTES:

1. SEE SHEET ME1 NOTES FOR ALL SYSTEMS.
2. EXCEPT IN DRYER VENTS, INSTALL A FIRE DAMPER AT EVERY FIRE RATED ASSEMBLY PENETRATION TO MAINTAIN FIRE RATING OF ASSEMBLY.
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8. TRUSS MANUFACTURER SHALL COORDINATE TRUSS DESIGN WITH MEP LAYOUT.

KEYED NOTES:

1. SEE WH/FC MOUNTING DETAIL.
2. TO WALLCAP OR ROOF JACK WITH BIRDSCREEN (TYPICAL FOR EXHAUST FANS).
3. TO WALLCAP WITH BACKDRAFT DAMPER. (TYPICAL FOR DRYERS).

4th FLOOR W HVAC PLAN

1/8" = 1'-0"

WEST

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TX# 113587
STATE OF TEXAS
FREDDIE MALICOAT
113587
LICENSED PROFESSIONAL ENGINEER
11-01-24

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HOUSTON, HARRIS COUNTY, TX, 77072

CONTRACTOR SHALL CHECK & VERIFY ALL DIMENSIONS & CONDITIONS AT JOB SITE.

DATE : 10-25-24

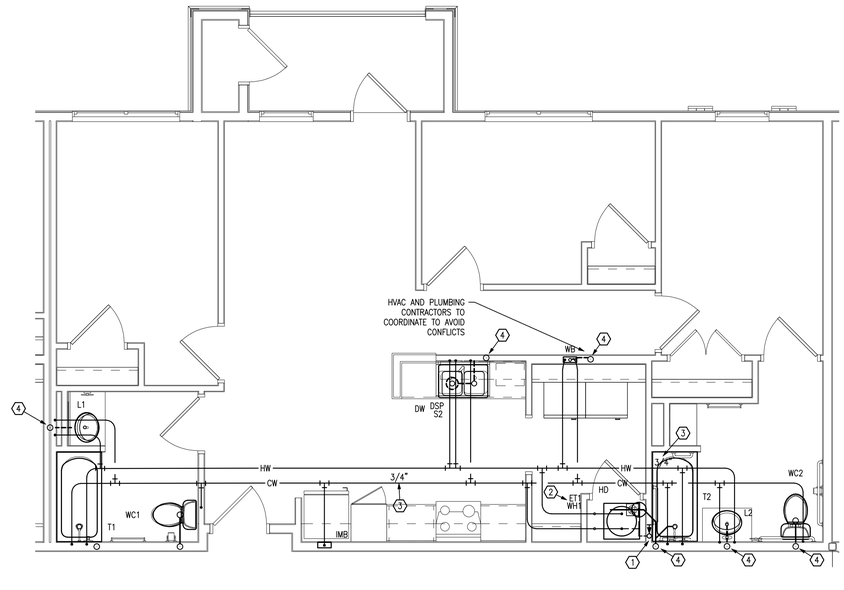
REVISIONS :

TITLE : 4th FLOOR W HVAC PLAN

SHEET : M16 OF M20

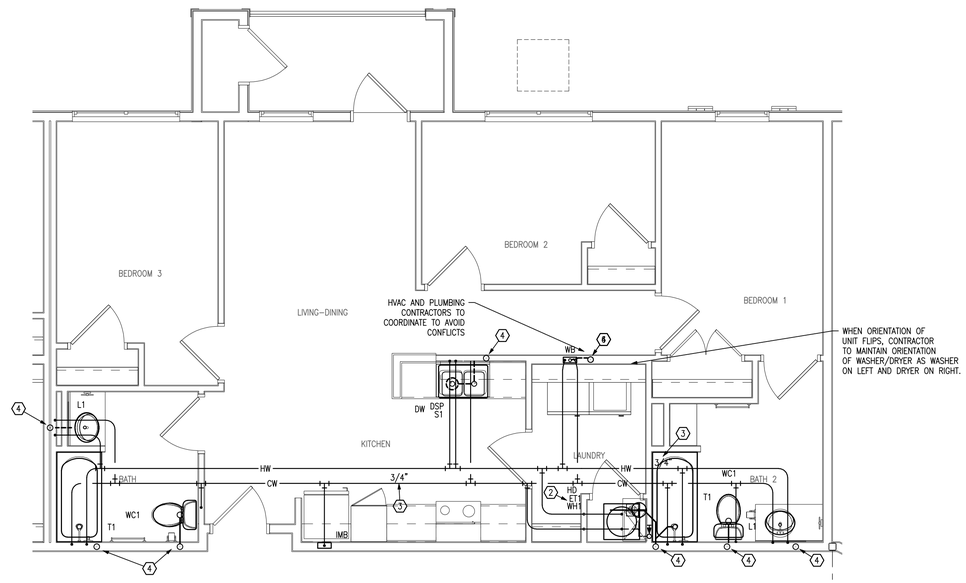
PROJECT : 24216

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2 M17 3BR ADA PLUMBING PLAN

1/4" = 1'-0"



1 M17 3BR FHA PLUMBING PLAN

1/4" = 1'-0"

GENERAL NOTES:

1. SEE SHEET ME1 NOTES FOR ALL SYSTEMS.
2. INSULATE ALL HOT AND COLD WATER PIPING WITH 1/2" THICK ARMAFLEX.
3. THE PIPING SYSTEM WITHIN EACH UNIT SHALL BE ROUTED ENTIRELY WITHIN THE CONDITIONED SPACES.

KEYED NOTES:

1. SEE WATER SERVICE DETAIL.
2. SEE WATER/AIR HANDLER DETAIL.
3. 3/4" TO MULTIPLE FIXTURES. 1/2" TO EACH INDIVIDUAL FIXTURE FROM TEE OR MULTI-PORT TEE IN WALL (TYPICAL).
4. SINGLE STACK VENT SYSTEM, SEE RISER.
5. FLOOR TO FLOOR VENT STACK FOR FIXTURES. (2" FOR SINK ONLY, 3" FOR ALL OTHERS)
6. WASTE DOWN STACK (2" FOR LAVS, 3" FOR ALL OTHERS.)

FREDDIE L. MALICOAT - ENGINEER
TX# 113587

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CONTRACTOR SHALL CHECK & VERIFY ALL DIMENSIONS & CONDITIONS AT JOB SITE.

DATE : 10-25-24

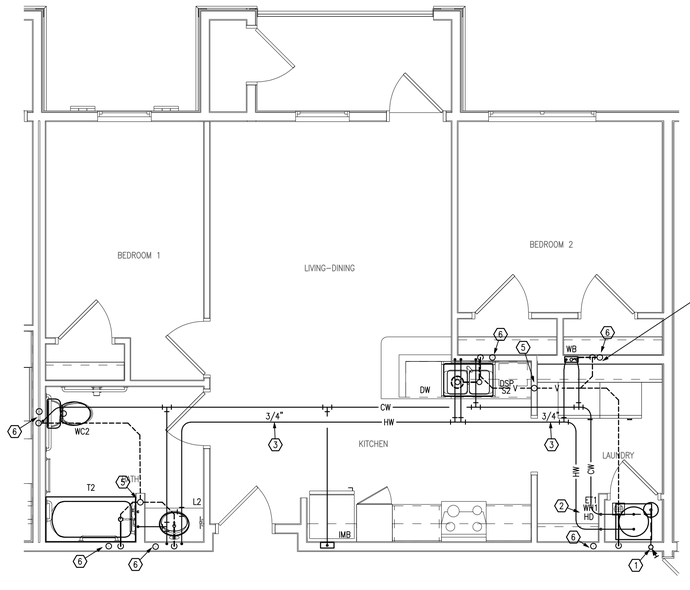
REVISIONS :

TITLE : **3BR APT PLUMBING PLANS**

SHEET : **M17** OF **M20**

PROJECT : 24216

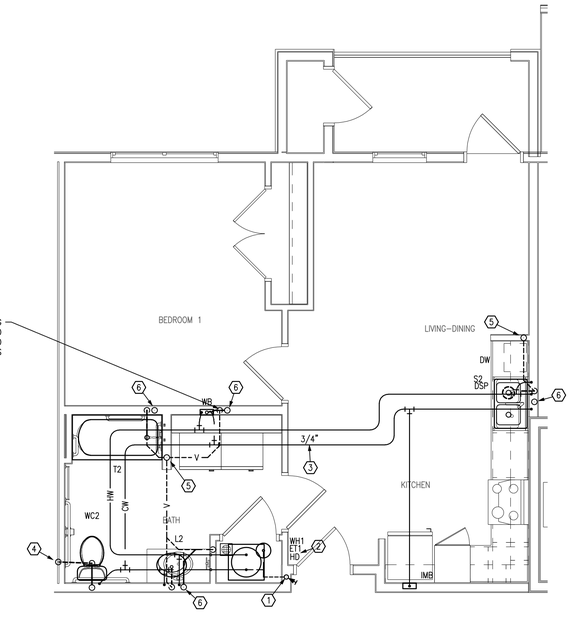
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2 M18 2BR ADA PLUMBING PLAN

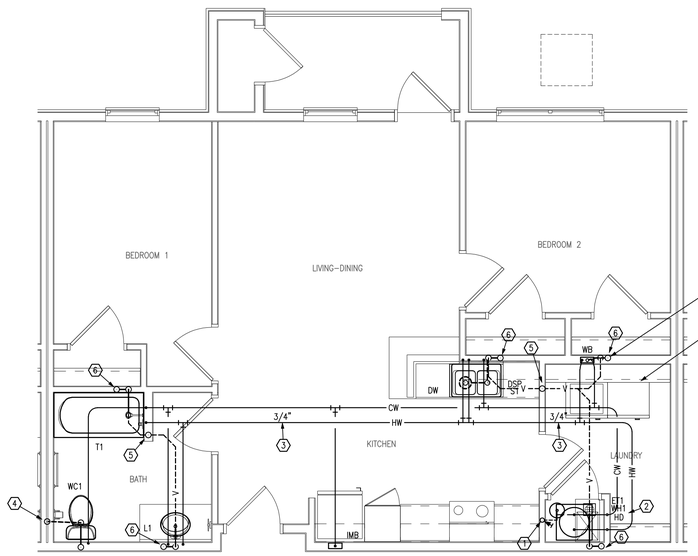
1/4" = 1'–0"

HVAC AND PLUMBING CONTRACTORS TO COORDINATE TO AVOID CONFLICTS



4 M18 1BR ADA PLUMBING PLAN

1/4" = 1'–0"

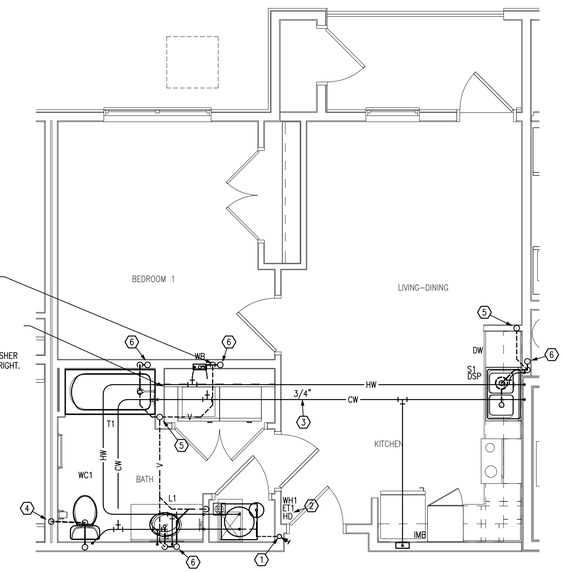


1 M18 2BR FHA PLUMBING PLAN

1/4" = 1'–0"

HVAC AND PLUMBING CONTRACTORS TO COORDINATE TO AVOID CONFLICTS

WHEN ORIENTATION OF UNIT FLIPS, CONTRACTOR TO MAINTAIN ORIENTATION OF WASHER/DRYER AS WASHER ON LEFT AND DRYER ON RIGHT.



3 M18 1BR FHA PLUMBING PLAN

1/4" = 1'–0"

GENERAL NOTES:

1. SEE SHEET ME1 NOTES FOR ALL SYSTEMS.
2. INSULATE ALL HOT AND COLD WATER PIPING WITH 1/2" THICK ARMAFLEX.
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KEYED NOTES:

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2. SEE WATER/AIR HANDLER DETAIL.
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6. WASTE DOWN STACK (2" FOR LAVS, 3" FOR ALL OTHERS.)

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DASHWOOD TRAILS

DASHWOOD DRIVE & JETTY LANE
HOUSTON, HARRIS COUNTY, TX, 77072

CONTRACTOR SHALL CHECK & VERIFY ALL DIMENSIONS & CONDITIONS AT JOB SITE.

DATE : 10–25–24

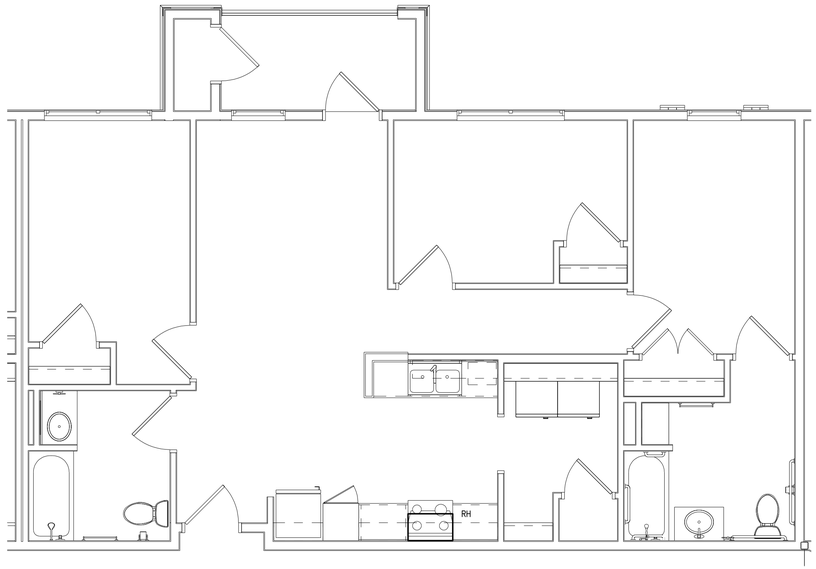
REVISIONS :

TITLE : **2-1BR APT PLUMBING PLANS**

SHEET : **M18** OF **M20**

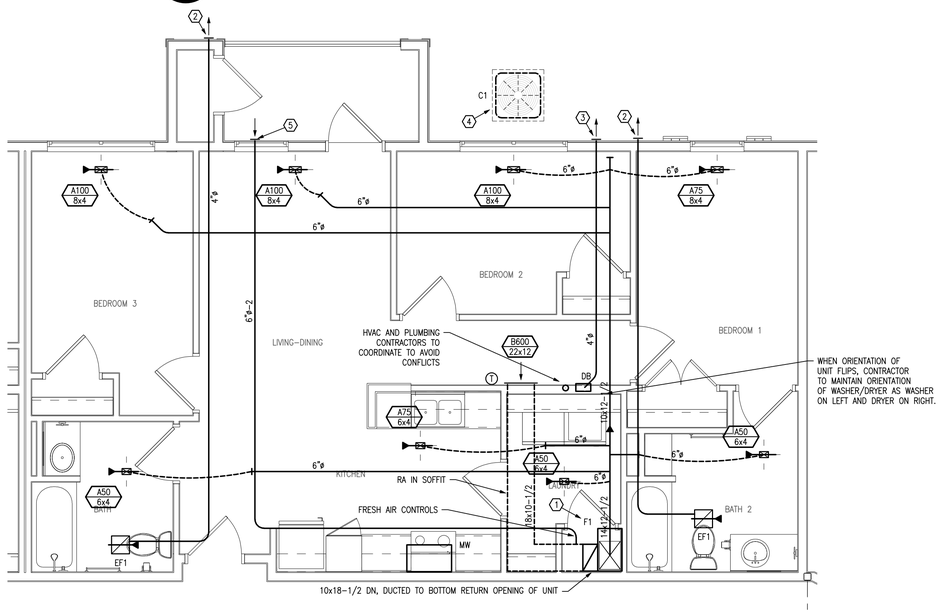
PROJECT : 24216

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2 M19 3BR ADA HVAC PLAN

1/4" = 1'-0" (ADA: SEE FHA – SIMILAR)



1 M19 3BR FHA HVAC PLAN

1/4" = 1'-0"

GENERAL NOTES:

1. SEE SHEET ME1 NOTES FOR ALL SYSTEMS.
2. EXCEPT IN DRYER VENTS, INSTALL A FIRE DAMPER AT EVERY FIRE RATED ASSEMBLY PENETRATION TO MAINTAIN FIRE RATING OF ASSEMBLY.
3. DRYER AND EXHAUST DUCTS SHALL BE METAL DUCT RUN IN FLOOR/CEILING ASSEMBLY WITH ANNULAR AREA FIRE CAULKED AT PENETRATIONS.
4. DRYER EXHAUST DUCTS SHALL BE 4" RIGID 0.018?" OR THICKER GALVANIZED STEEL WITH FIREMASTER "DRYERWRAP" OR EQUAL WHEN RUN IN RATED FLOOR/CEILING ASSEMBLY. USE IN-O-VATE "DRYER-ELL" OR EQUAL 10" RADIUS SMOOTH WALL ELBOWS FOR ALL TURNS.
5. DUCTWORK IN CONDITIONED AREAS SHALL BE INSTALLED WITH EITHER 1/2" DUCT LINER OR 1-1/2" WRAP. DUCTWORK IN UNCONDITIONED AREAS (ATTIC WITH INSULATION BELOW DUCTWORK) SHALL BE INSTALLED WITH EITHER 1" LINER OR 2" WRAP. SIZES OF PLANS HAVE BEEN SHOWN TO INCLUDE DUCT LINER. REFER TO SPECIFICATION BOOK FOR MORE DETAILS. FRESH AIR DUCT SHALL BE INSULATED WITH 2" DUCT WRAP, INSULATION, WITH "K" VALUE OF .24.
6. FLEXIBLE DUCT – FLEXMASTER #6M INSULATED FLEXIBLE DUCT. MYLAR INNER LINER, 1" THICK FIBERGLASS INSULATION WITH SEAMLESS ALUMINIZED VAPOR BARRIER, MAXIMUM LENGTH UNLESS OTHERWISE NOTED SHALL NOT EXCEED 10', AND SUPPORTED MAXIMUM 3' ON CENTER. USE FLEXRIGHT® DURABLE ELBOW SUPPORTS AT ALL ELBOWS.
7. AC CONDENSATE PIPING SHALL BE INSULATED WITH 3/8" THICK ARMAFLEX AND HAVE A APRIL-AIRE SAFETY OVERFLOW SWITCH.
8. TRUSS MANUFACTURER SHALL COORDINATE TRUSS DESIGN WITH MEP LAYOUT.
9. UNDERCUT BEDROOM DOORS 1" FOR RETURN AIR.
10. ALL EXHAUST TERMINALS SHALL BE A MINIMUM OF 3' FROM ANY OPENING INTO THE BUILDING AND 10' MINIMUM FROM ANY FRESH AIR DUCT OPENINGS.

KEYED NOTES:

1. SEE WH/FC MOUNTING DETAIL.
2. TO WALLCAP OR ROOF JACK WITH BIRDSCREEN (TYPICAL FOR EXHAUST FANS).
3. TO WALLCAP WITH BACKDRAFT DAMPER (TYPICAL FOR DRYERS).
4. SEE BUILDING PLANS FOR ACTUAL CONDENSING UNIT LOCATIONS.
5. 8x8 F.A. WALL OR SOFFIT GRILLE. SEE WH/FC MOUNTING DETAIL.

FREDDIE L. MALICOAT - ENGINEER
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STATE OF TEXAS
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LICENSED PROFESSIONAL ENGINEER
11-01-24

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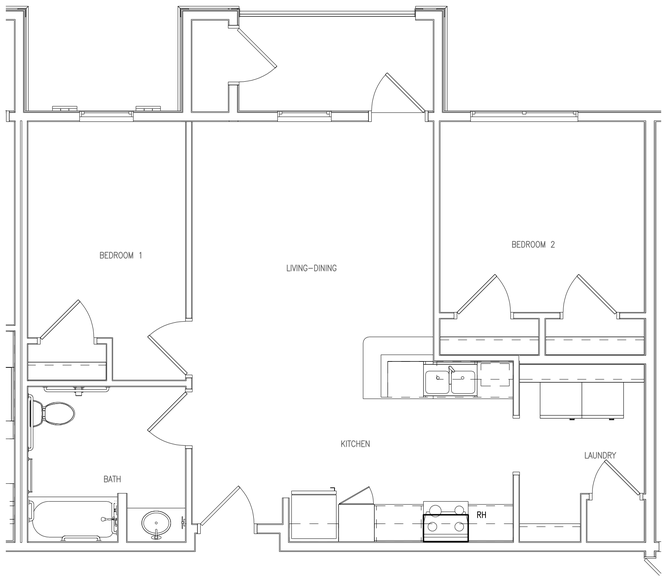
REVISIONS :

TITLE : **3BR APT HVAC PLANS**

SHEET : **M19** OF **M20**

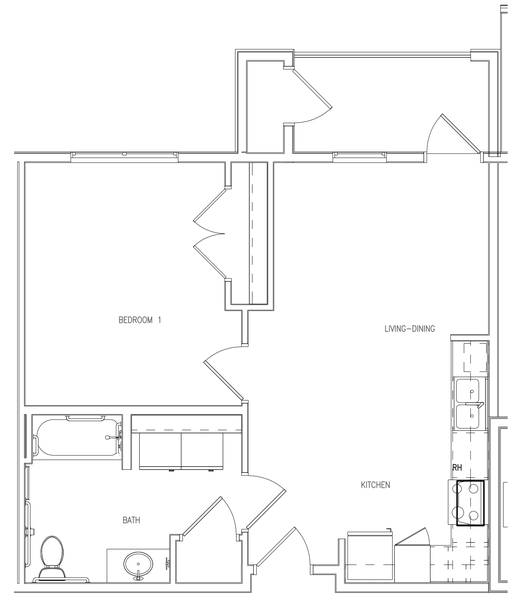
PROJECT : 24216

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2 M20 2BR ADA HVAC PLAN

1/4" = 1'–0" (ADA: SEE FHA – SIMILAR)



4 M20 1BR ADA HVAC PLAN

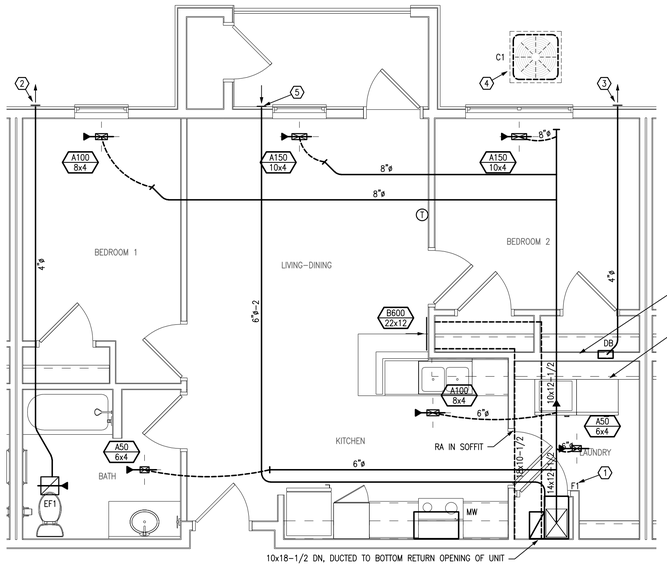
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6. FLEXIBLE DUCT – FLEXMASTER #6M INSULATED FLEXIBLE DUCT. MYLAR INNER LINER, 1" THICK FIBERGLASS INSULATION WITH SEAMLESS ALUMINIZED VAPOR BARRIER, MAXIMUM LENGTH UNLESS OTHERWISE NOTED SHALL NOT EXCEED 10', AND SUPPORTED MAXIMUM 3' ON CENTER. USE FLEXRIGHT® DURABLE ELBOW SUPPORTS AT ALL ELBOWS.
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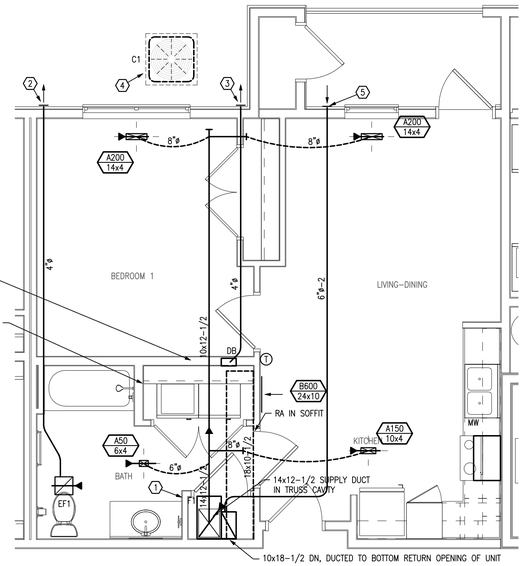


1 M20 2BR FHA HVAC PLAN

1/4" = 1'–0"

HVAC AND PLUMBING CONTRACTORS TO COORDINATE TO AVOID CONFLICTS

WHEN ORIENTATION OF UNIT FLIPS, CONTRACTOR TO MAINTAIN ORIENTATION OF WASHER/DRYER AS WASHER ON LEFT AND DRYER ON RIGHT.



3 M20 1BR FHA HVAC PLAN

1/4" = 1'–0"

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DATE : 10–25–24

REVISIONS :

TITLE : **2-1BR APT HVAC PLANS**

SHEET : **M20** OF **M20**

PROJECT : 24216

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APARTMENT PLAN SCHEDULE

APARTMENT TYPE	PLUMBING	HVAC	POWER	LIGHTING	FIRE ALARM
A	3 / M18	3 / M20	3 / E18	3 / E20	3 / FA10
A_A	4 / M18	4 / M20	4 / E18	4 / E20	4 / FA10
A_V	3 / M18	3 / M20	3 / E18	3 / E20	4 / FA9
B	1 / M18	1 / M20	1 / E18	1 / E20	1 / FA10
B_A	2 / M18	2 / M20	2 / E18	2 / E20	2 / FA10
B_V	1 / M18	1 / M20	1 / E18	1 / E20	3 / FA9
C	1 / M17	1 / M19	1 / E17	1 / E19	1 / FA9
C_A	2 / M17	2 / M18	2 / E17	2 / E19	2 / FA9

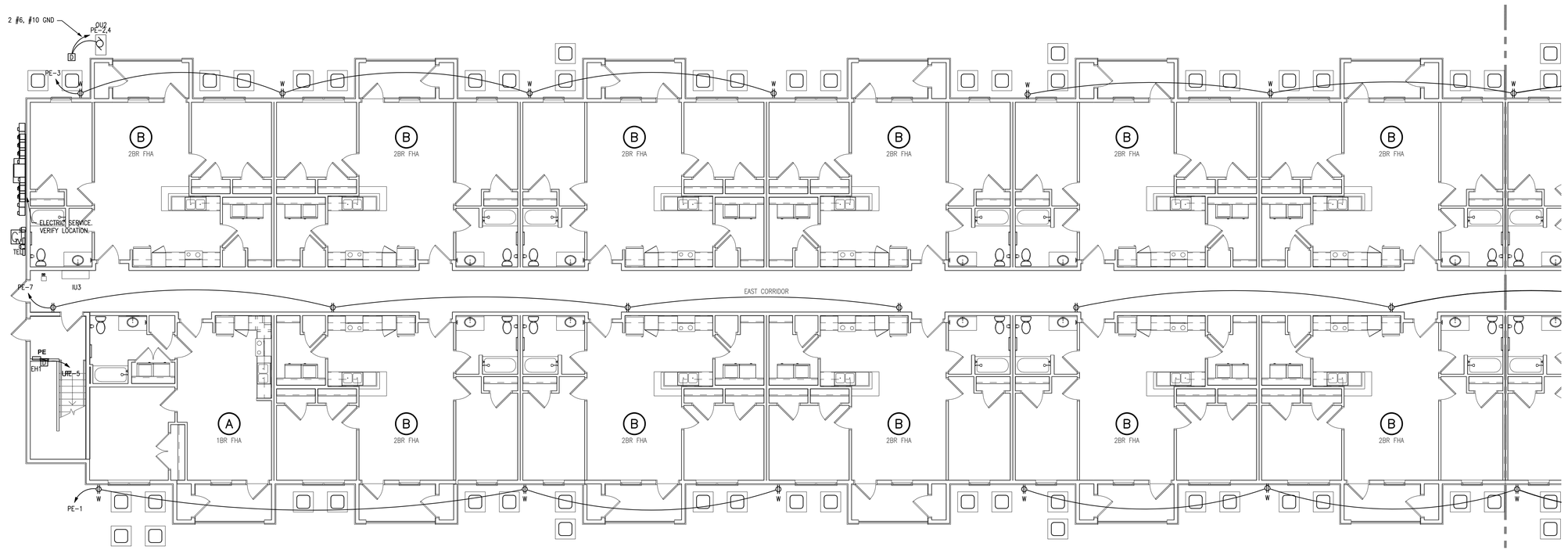
NOTE: UNIT TYPE SUBSCRIPT, IF PRESENT, INDICATES AN ADA (A) OR AUDIO/VISUAL (V) EQUIPPED APARTMENT.

GENERAL NOTES: ELECTRICAL

1. SEE SHEET ME1 NOTES FOR ALL SYSTEMS.
2. ALL LIGHT FIXTURE, SWITCH, AND RECEPTACLE LOCATIONS SHALL BE FIELD VERIFIED WITH OWNER FOR EACH TYPE OF UNIT BEFORE INSTALLATION.
3. COORDINATE FIXTURE LOCATIONS WITH SPRINKLER AND HVAC CONTRACTORS.
4. ALL WIRING ABOVE GRIDS SHALL BE MC CABLES, ROMEX MAY BE USED IN WOOD CONSTRUCTION.
5. ALL CONDUCTORS SHALL BE COPPER MINIMUM #12 OR LARGER AS REQUIRED OR SHOWN. NOTE THAT ALL 120V, 20A LIGHTING AND RECEPTACLE CIRCUITS REQUIRING MORE THAN 100' OF CONDUCTORS (ONE WAY) SHALL BE #10 CONDUCTORS.
6. REVIEW CONTROL REQUIREMENTS ON ME4. SEE CODE PROVISIONS FOR SPECIFIC PROGRAMING REQUIREMENTS.
7. WHERE CONTROL RECEPTACLES ARE INSTALLED, THE TOP PLUG SHALL BE CONTROLLED AND THEY SHALL BE MARKED IN ACCORDANCE WITH NFPA 70.

KEYED NOTES:

1. TO RECEPTACLE/LIGHT ON FLOORS ABOVE/BELOW.
2. TO POWER PACK "PP1" (SEE SHEET ME4). PROVIDE "OS1" OCCUPANCY SENSORS AS REQUIRED PER MANUFACTURE'S SPECS AND PROVIDE "S2" MANUAL CONTROLS IN OWNER APPROVED LOCATION.
3. TO PP2 (LIGHTS) OR RM1 (RECEPTACLES). PROVIDE "S2" MANUAL CONTROLS "VS1" VACANCY SENSOR FOR LIGHTING AND "OS2" OCCUPANCY SENSORS TO CONTROL RECEPTACLES. NOTE DAYLIGHT ZONE WATTAGE IS LESS THAN 150W AND EXEMPT FROM SENSOR REQUIREMENTS.
4. TO POWER PACK "PP1". PROVIDE "OS2" OCCUPANCY SENSORS.
5. TO "PP2" CONTROLLED WITH "OS3" OCCUPANCY SENSORS.



1st FLOOR E POWER PLAN

1/8" = 1'-0"

EAST

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DATE : 10-25-24

REVISIONS :

TITLE : 1st FLOOR E POWER PLAN

SHEET : E1 OF E21

PROJECT : 24216

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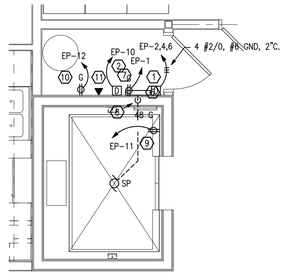
ELEVATOR KEYED NOTES:

1. MAIN POWER 175A, 208V, 3ø LOCKABLE FUSED DISCONNECT FED FROM SHUNT-TRIP BREAKER.
2. CAR HVAC AND LIGHTING 20A, 120V, 1ø DISCONNECT.
3. PROVIDE NORMALLY CLOSED CONTACT REPRESENTING ALL MACHINE ROOM AND HOISTWAY SMOKE DETECTORS.
4. PROVIDE NORMALLY CLOSED CONTACT REPRESENTING THE SMOKE DETECTOR AT THE DESIGNATED RETURN LANDING.
5. PROVIDE NORMALLY CLOSED CONTACT WITH WIRING FROM HEAT DETECTOR TO A CONTROLLER DESIGNATED BY ELEVATOR MANUFACTURER.
6. DEDICATED 20A RECEPTACLE SERVING OIL MINDER CONTROL SYSTEM.
7. STANCOR OIL-MINDER 20A, 120V, 1ø CONTROL SYSTEM WITH AUDIBLE ALARM.
8. 4" SCHED. 40 PVC CONDUIT WITH PULL WIRE FOR ROUTING OF OIL MINDER POWER CABLE, PROBE AND HIGH LIQUID ALARM.
9. DEDICATED 20A GFI RECEPTACLE FOR ELEVATOR SERVICE.
10. DEDICATED 20A RECEPTACLE FOR ELEVATOR ROOM.
11. DEDICATED OUTSIDE "ANALOG" TELEPHONE LINE CAPABLE OF CARRYING BOTH VOICE AND DATA. PROVIDE TWO-WAY COMMUNICATION SYSTEM BETWEEN THE LANDING SERVING THE ELEVATOR ON EACH FLOOR AND THE FIRE COMMAND CENTER OR A CENTRAL CONTROL POINT LOCATION APPROVED BY THE FIRE DEPARTMENT. WHERE THE CENTRAL CONTROL POINT IS NOT CONSISTENTLY MONITORED, THE TWO WAY COMMUNICATION SYSTEM SHALL HAVE TIMED, AUTOMATIC TELEPHONE DIAL-OUT CAPABILITY THAT PROVIDES TWO-WAY COMMUNICATION WITH AN APPROVED SUPERVISORY STATION OR 911. TWO-WAY SYSTEM SHALL INCLUDE BOTH AUDIBLE AND VISIBLE SIGNALS. DIRECTIONS FOR THE USE OF THE SYSTEM SHALL BE PROVIDED PER IBC 1009.8.2.

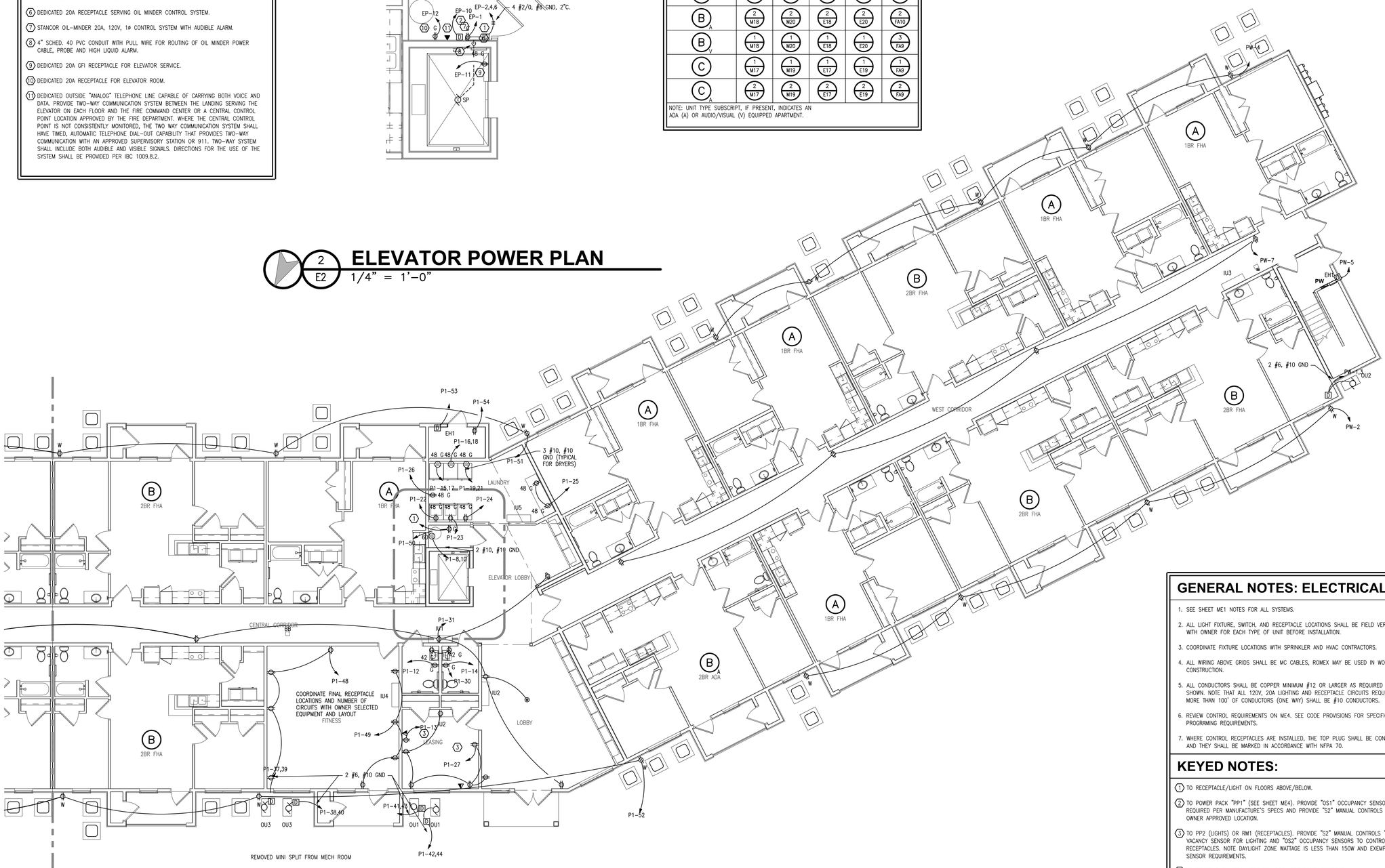
APARTMENT PLAN SCHEDULE

APARTMENT TYPE	PLUMBING	HVAC	POWER	LIGHTING	FIRE ALARM
A	3 M18	3 M20	3 E18	3 E20	3 FA10
A A	4 M18	4 M20	4 E18	4 E20	4 FA10
A V	3 M18	3 M20	3 E18	3 E20	4 FA9
B	1 M18	1 M20	1 E18	1 E20	1 FA10
B A	2 M18	2 M20	2 E18	2 E20	2 FA10
B V	1 M18	1 M20	1 E18	1 E20	1 FA9
C	1 M17	1 M19	1 E17	1 E19	1 FA9
C A	2 M17	2 M19	2 E17	2 E19	2 FA9

NOTE: UNIT TYPE SUBSCRIPT, IF PRESENT, INDICATES AN ADA (A) OR AUDIO/VISUAL (V) EQUIPPED APARTMENT.



2/E2 ELEVATOR POWER PLAN
1/4" = 1'-0"



1/E2 1st FLOOR W POWER PLAN
1/8" = 1'-0" WEST

GENERAL NOTES: ELECTRICAL

1. SEE SHEET ME1 NOTES FOR ALL SYSTEMS.
2. ALL LIGHT FIXTURE, SWITCH, AND RECEPTACLE LOCATIONS SHALL BE FIELD VERIFIED WITH OWNER FOR EACH TYPE OF UNIT BEFORE INSTALLATION.
3. COORDINATE FIXTURE LOCATIONS WITH SPRINKLER AND HVAC CONTRACTORS.
4. ALL WIRING ABOVE GRIDS SHALL BE MC CABLES, ROMEX MAY BE USED IN WOOD CONSTRUCTION.
5. ALL CONDUCTORS SHALL BE COPPER MINIMUM #12 OR LARGER AS REQUIRED OR SHOWN. NOTE THAT ALL 120V, 20A LIGHTING AND RECEPTACLE CIRCUITS REQUIRING MORE THAN 100' OF CONDUCTORS (ONE WAY) SHALL BE #10 CONDUCTORS.
6. REVIEW CONTROL REQUIREMENTS ON ME4. SEE CODE PROVISIONS FOR SPECIFIC PROGRAMING REQUIREMENTS.
7. WHERE CONTROL RECEPTACLES ARE INSTALLED, THE TOP PLUG SHALL BE CONTROLLED AND THEY SHALL BE MARKED IN ACCORDANCE WITH NFPA 70.

KEYED NOTES:

1. TO RECEPTACLE/LIGHT ON FLOORS ABOVE/BELOW.
2. TO POWER PACK "PP1" (SEE SHEET ME4). PROVIDE "OS1" OCCUPANCY SENSORS AS REQUIRED PER MANUFACTURE'S SPECS AND PROVIDE "S2" MANUAL CONTROLS IN OWNER APPROVED LOCATION.
3. TO PP2 (LIGHTS) OR RM1 (RECEPTACLES). PROVIDE "S2" MANUAL CONTROLS "VS1" VACANCY SENSOR FOR LIGHTING AND "OS2" OCCUPANCY SENSORS TO CONTROL RECEPTACLES. NOTE DAYLIGHT ZONE WATTAGE IS LESS THAN 150W AND EXEMPT FROM SENSOR REQUIREMENTS.
4. TO POWER PACK "PP1". PROVIDE "OS2" OCCUPANCY SENSORS.
5. TO "PP2" CONTROLLED WITH "OS3" OCCUPANCY SENSORS.

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DATE : 10-25-24

REVISIONS :

TITLE : 1st FLOOR W POWER PLAN

SHEET : E2 OF E21

PROJECT : 24216

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APARTMENT PLAN SCHEDULE

APARTMENT TYPE	PLUMBING	HVAC	POWER	LIGHTING	FIRE ALARM
A	3 / M18	3 / M20	3 / E18	3 / E20	3 / FA10
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A_V	3 / M18	3 / M20	3 / E18	3 / E20	4 / FA9
B	1 / M18	1 / M20	1 / E18	1 / E20	1 / FA10
B_A	2 / M18	2 / M20	2 / E18	2 / E20	2 / FA10
B_V	1 / M18	1 / M20	1 / E18	1 / E20	3 / FA9
C	1 / M17	1 / M19	1 / E17	1 / E19	1 / FA9
C_A	2 / M17	2 / M18	2 / E17	2 / E19	2 / FA9

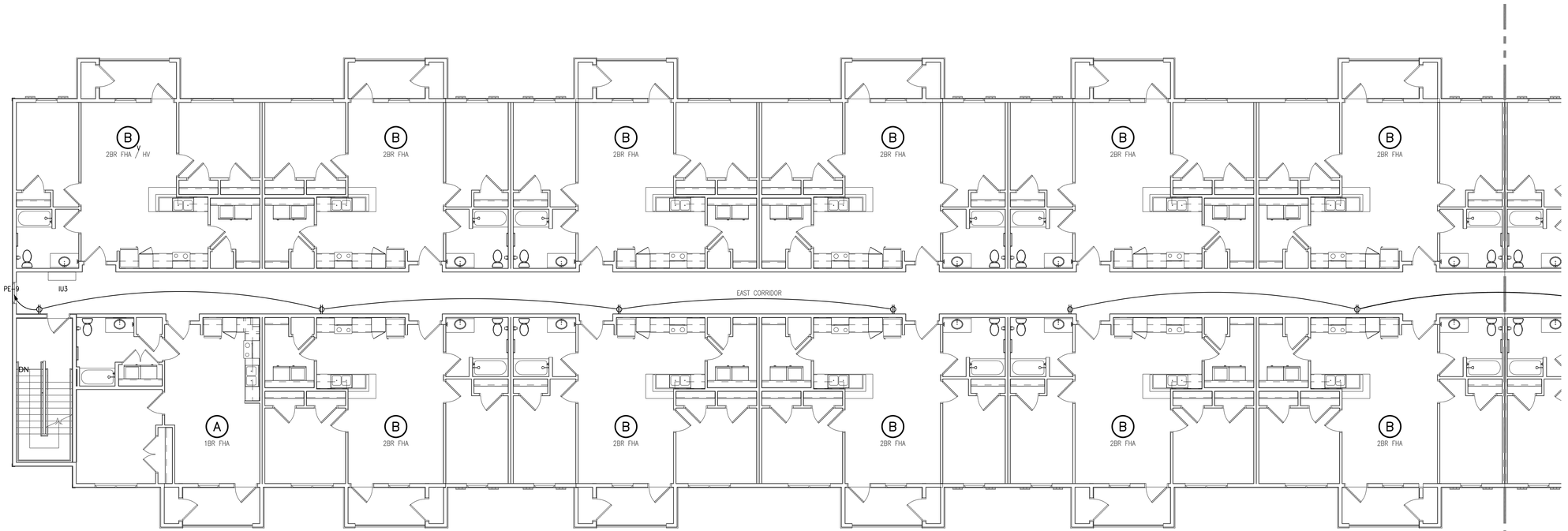
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4. TO POWER PACK "PP1". PROVIDE "OS2" OCCUPANCY SENSORS.
5. TO "PP2" CONTROLLED WITH "OS3" OCCUPANCY SENSORS.



1 / E3 **2nd FLOOR E POWER PLAN**

1/8" = 1'-0"

EAST

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DATE : 10-25-24

REVISIONS :

TITLE : **2nd FLOOR E POWER PLAN**

SHEET : **E3** OF **E21**

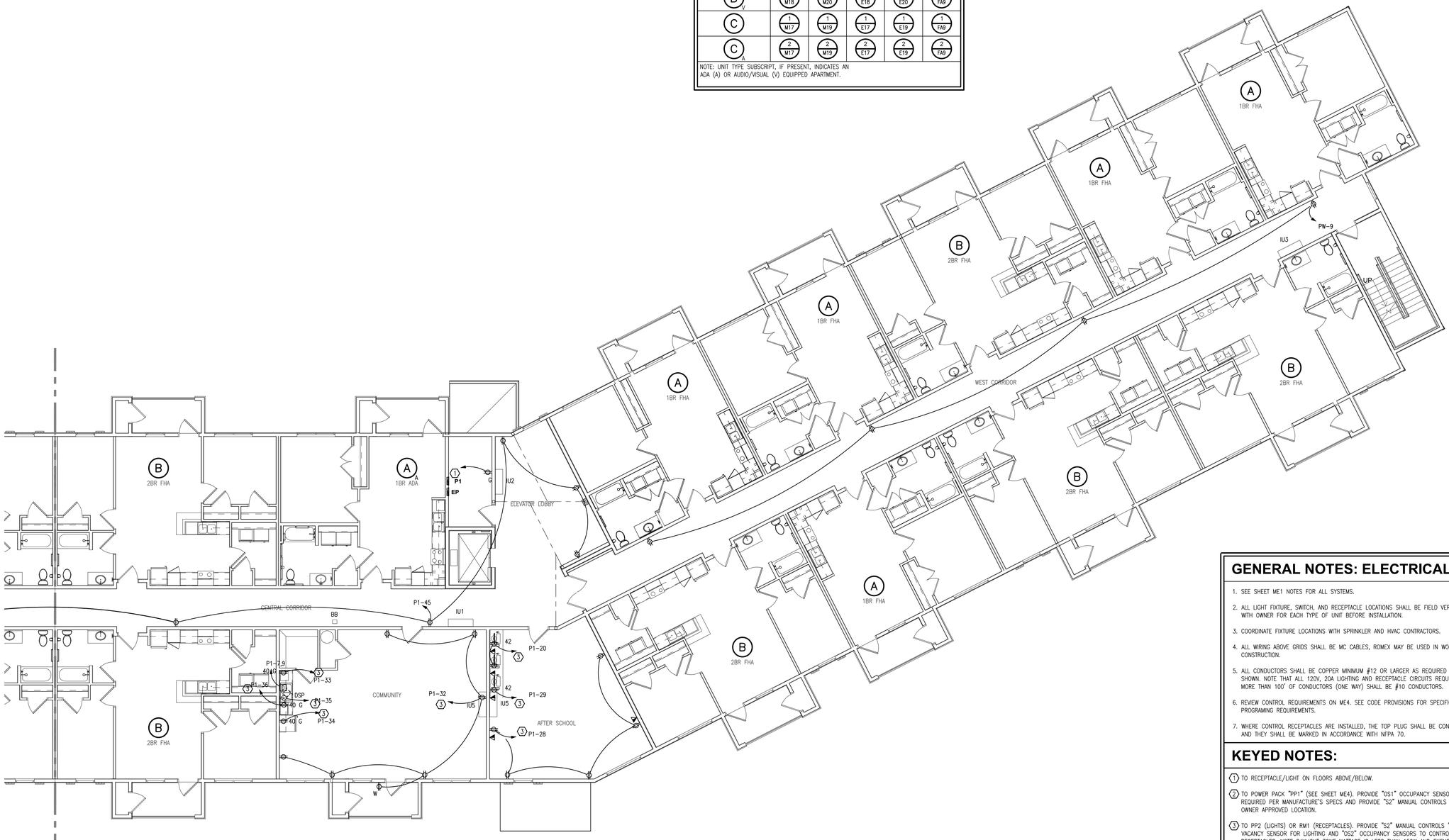
PROJECT : 24216

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APARTMENT PLAN SCHEDULE

APARTMENT TYPE	PLUMBING	HVAC	POWER	LIGHTING	FIRE ALARM
A	3 M18	3 M20	3 E18	3 E20	3 FA10
A A	4 M18	4 M20	4 E18	4 E20	4 FA10
A V	3 M18	3 M20	3 E18	3 E20	4 FA9
B	1 M18	1 M20	1 E18	1 E20	1 FA10
B A	2 M18	2 M20	2 E18	2 E20	2 FA10
B V	1 M18	1 M20	1 E18	1 E20	1 FA9
C	1 M17	1 M19	1 E17	1 E19	1 FA9
C A	2 M17	2 M19	2 E17	2 E19	2 FA9

NOTE: UNIT TYPE SUBSCRIPT, IF PRESENT, INDICATES AN ADA (A) OR AUDIO/VISUAL (V) EQUIPPED APARTMENT.



2nd FLOOR W POWER PLAN

1/8" = 1'-0" WEST

GENERAL NOTES: ELECTRICAL

1. SEE SHEET ME1 NOTES FOR ALL SYSTEMS.
2. ALL LIGHT FIXTURE, SWITCH, AND RECEPTACLE LOCATIONS SHALL BE FIELD VERIFIED WITH OWNER FOR EACH TYPE OF UNIT BEFORE INSTALLATION.
3. COORDINATE FIXTURE LOCATIONS WITH SPRINKLER AND HVAC CONTRACTORS.
4. ALL WIRING ABOVE GRIDS SHALL BE MC CABLES, ROMEX MAY BE USED IN WOOD CONSTRUCTION.
5. ALL CONDUCTORS SHALL BE COPPER MINIMUM #12 OR LARGER AS REQUIRED OR SHOWN. NOTE THAT ALL 120V, 20A LIGHTING AND RECEPTACLE CIRCUITS REQUIRING MORE THAN 100' OF CONDUCTORS (ONE WAY) SHALL BE #10 CONDUCTORS.
6. REVIEW CONTROL REQUIREMENTS ON ME4. SEE CODE PROVISIONS FOR SPECIFIC PROGRAMING REQUIREMENTS.
7. WHERE CONTROL RECEPTACLES ARE INSTALLED, THE TOP PLUG SHALL BE CONTROLLED AND THEY SHALL BE MARKED IN ACCORDANCE WITH NFPA 70.

KEYED NOTES:

1. TO RECEPTACLE/LIGHT ON FLOORS ABOVE/BELOW.
2. TO POWER PACK "PP1" (SEE SHEET ME4). PROVIDE "OS1" OCCUPANCY SENSORS AS REQUIRED PER MANUFACTURE'S SPECS AND PROVIDE "S2" MANUAL CONTROLS IN OWNER APPROVED LOCATION.
3. TO PP2 (LIGHTS) OR RM1 (RECEPTACLES). PROVIDE "S2" MANUAL CONTROLS "VS1" VACANCY SENSOR FOR LIGHTING AND "OS2" OCCUPANCY SENSORS TO CONTROL RECEPTACLES. NOTE DAYLIGHT ZONE WATTAGE IS LESS THAN 150W AND EXEMPT FROM SENSOR REQUIREMENTS.
4. TO POWER PACK "PP1". PROVIDE "OS2" OCCUPANCY SENSORS.
5. TO "PP2" CONTROLLED WITH "OS3" OCCUPANCY SENSORS.

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11-01-24

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DASHWOOD TRAILS

DASHWOOD DRIVE & JETTY LANE
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CONTRACTOR SHALL CHECK & VERIFY ALL DIMENSIONS & CONDITIONS AT JOB SITE.

DATE : 10-25-24

REVISIONS :

TITLE : 2nd FLOOR W POWER PLAN

SHEET : E4 OF E21

PROJECT : 24216

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APARTMENT PLAN SCHEDULE

APARTMENT TYPE	PLUMBING	HVAC	POWER	LIGHTING	FIRE ALARM
A	3 / M18	3 / M20	3 / E18	3 / E20	3 / FA10
A_A	4 / M18	4 / M20	4 / E18	4 / E20	4 / FA10
A_V	3 / M18	3 / M20	3 / E18	3 / E20	4 / FA9
B	1 / M18	1 / M20	1 / E18	1 / E20	1 / FA10
B_A	2 / M18	2 / M20	2 / E18	2 / E20	2 / FA10
B_V	1 / M18	1 / M20	1 / E18	1 / E20	3 / FA9
C	1 / M17	1 / M19	1 / E17	1 / E19	1 / FA9
C_A	2 / M17	2 / M18	2 / E17	2 / E19	2 / FA9

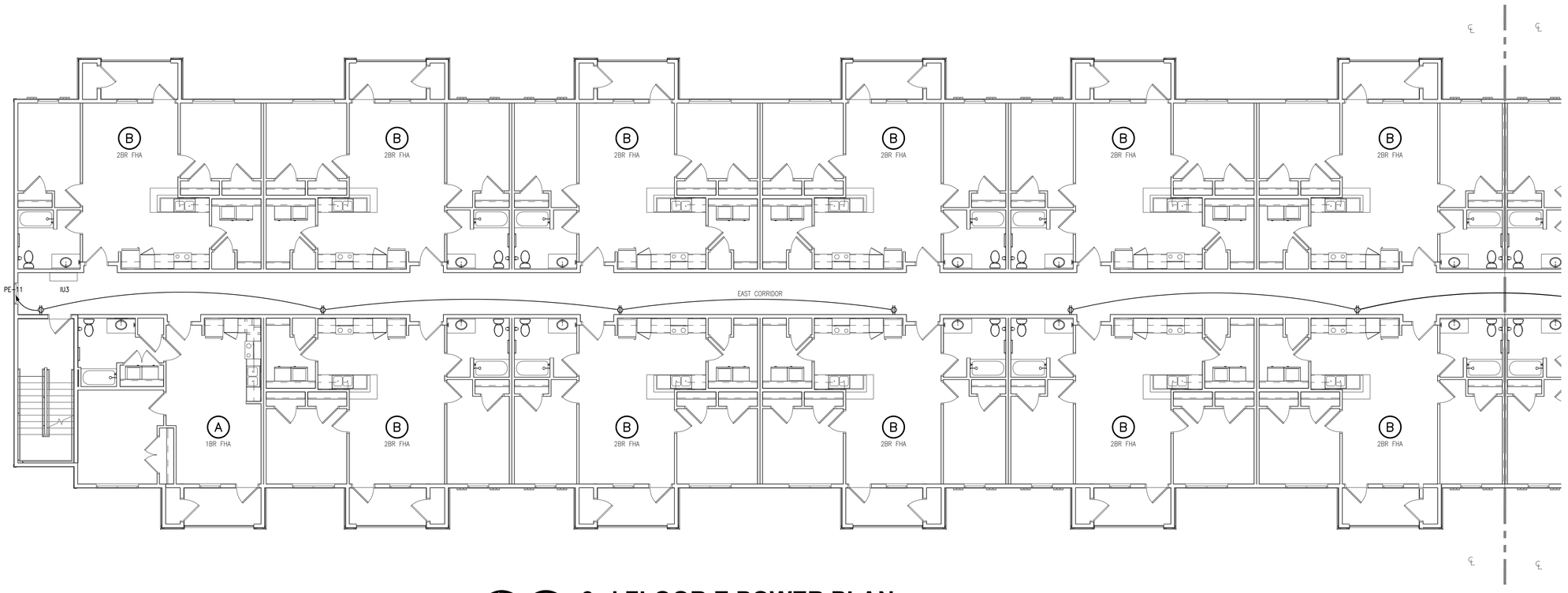
NOTE: UNIT TYPE SUBSCRIPT, IF PRESENT, INDICATES AN ADA (A) OR AUDIO/VISUAL (V) EQUIPPED APARTMENT.

GENERAL NOTES: ELECTRICAL

1. SEE SHEET ME1 NOTES FOR ALL SYSTEMS.
2. ALL LIGHT FIXTURE, SWITCH, AND RECEPTACLE LOCATIONS SHALL BE FIELD VERIFIED WITH OWNER FOR EACH TYPE OF UNIT BEFORE INSTALLATION.
3. COORDINATE FIXTURE LOCATIONS WITH SPRINKLER AND HVAC CONTRACTORS.
4. ALL WIRING ABOVE GRIDS SHALL BE MC CABLES, ROMEX MAY BE USED IN WOOD CONSTRUCTION.
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KEYED NOTES:

1. TO RECEPTACLE/LIGHT ON FLOORS ABOVE/BELOW.
2. TO POWER PACK "PP1" (SEE SHEET ME4). PROVIDE "OS1" OCCUPANCY SENSORS AS REQUIRED PER MANUFACTURE'S SPECS AND PROVIDE "S2" MANUAL CONTROLS IN OWNER APPROVED LOCATION.
3. TO PP2 (LIGHTS) OR RM1 (RECEPTACLES). PROVIDE "S2" MANUAL CONTROLS "VS1" VACANCY SENSOR FOR LIGHTING AND "OS2" OCCUPANCY SENSORS TO CONTROL RECEPTACLES. NOTE DAYLIGHT ZONE WATTAGE IS LESS THAN 150W AND EXEMPT FROM SENSOR REQUIREMENTS.
4. TO POWER PACK "PP1". PROVIDE "OS2" OCCUPANCY SENSORS.
5. TO "PP2" CONTROLLED WITH "OS3" OCCUPANCY SENSORS.



1 / E5 **3rd FLOOR E POWER PLAN**

1/8" = 1'-0" EAST

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DATE : 10-25-24

REVISIONS :

TITLE : **3rd FLOOR E POWER PLAN**

SHEET : **E5** OF **E21**

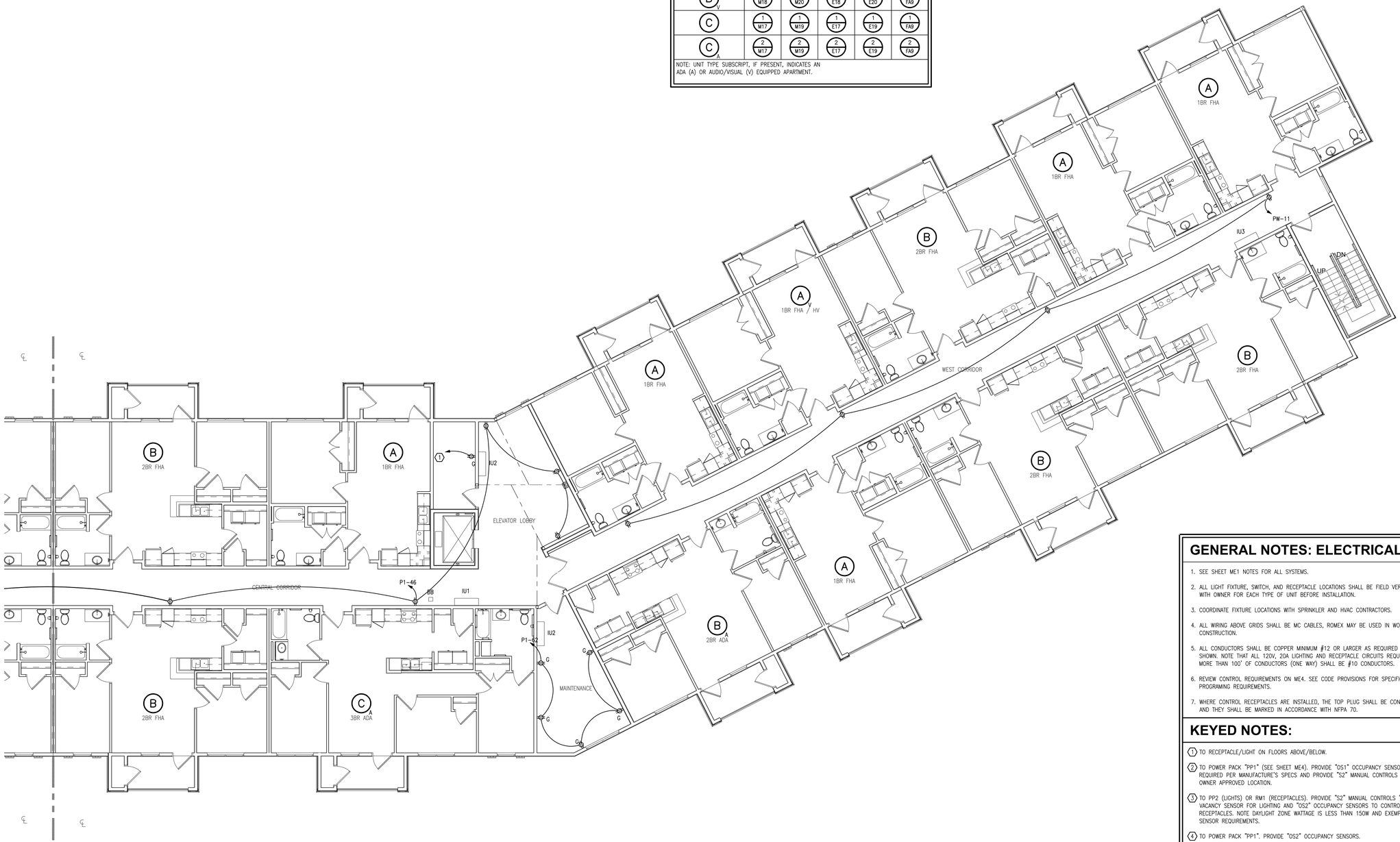
PROJECT : 24216

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APARTMENT PLAN SCHEDULE

APARTMENT TYPE	PLUMBING	HVAC	POWER	LIGHTING	FIRE ALARM
A	3 M18	3 M20	3 E18	3 E20	3 FA10
A$_A$	4 M18	4 M20	4 E18	4 E20	4 FA10
A$_V$	3 M18	3 M20	3 E18	3 E20	4 FA9
B	1 M18	1 M20	1 E18	1 E20	1 FA10
B$_A$	2 M18	2 M20	2 E18	2 E20	2 FA10
B$_V$	1 M18	1 M20	1 E18	1 E20	1 FA9
C	1 M17	1 M19	1 E17	1 E19	1 FA9
C$_A$	2 M17	2 M19	2 E19	2 E19	2 FA9

NOTE: UNIT TYPE SUBSCRIPT, IF PRESENT, INDICATES AN ADA (A) OR AUDIO/VISUAL (V) EQUIPPED APARTMENT.



3rd FLOOR W POWER PLAN

1/8" = 1'-0" WEST

GENERAL NOTES: ELECTRICAL

1. SEE SHEET ME1 NOTES FOR ALL SYSTEMS.
2. ALL LIGHT FIXTURE, SWITCH, AND RECEPTACLE LOCATIONS SHALL BE FIELD VERIFIED WITH OWNER FOR EACH TYPE OF UNIT BEFORE INSTALLATION.
3. COORDINATE FIXTURE LOCATIONS WITH SPRINKLER AND HVAC CONTRACTORS.
4. ALL WIRING ABOVE GRIDS SHALL BE MC CABLES, ROMEX MAY BE USED IN WOOD CONSTRUCTION.
5. ALL CONDUCTORS SHALL BE COPPER MINIMUM #12 OR LARGER AS REQUIRED OR SHOWN. NOTE THAT ALL 120V, 20A LIGHTING AND RECEPTACLE CIRCUITS REQUIRING MORE THAN 100' OF CONDUCTORS (ONE WAY) SHALL BE #10 CONDUCTORS.
6. REVIEW CONTROL REQUIREMENTS ON ME4. SEE CODE PROVISIONS FOR SPECIFIC PROGRAMING REQUIREMENTS.
7. WHERE CONTROL RECEPTACLES ARE INSTALLED, THE TOP PLUG SHALL BE CONTROLLED AND THEY SHALL BE MARKED IN ACCORDANCE WITH NFPA 70.

KEYED NOTES:

1. TO RECEPTACLE/LIGHT ON FLOORS ABOVE/BELOW.
2. TO POWER PACK "PP1" (SEE SHEET ME4). PROVIDE "OS1" OCCUPANCY SENSORS AS REQUIRED PER MANUFACTURE'S SPECS AND PROVIDE "S2" MANUAL CONTROLS IN OWNER APPROVED LOCATION.
3. TO PP2 (LIGHTS) OR RM1 (RECEPTACLES). PROVIDE "S2" MANUAL CONTROLS "VS1" VACANCY SENSOR FOR LIGHTING AND "OS2" OCCUPANCY SENSORS TO CONTROL RECEPTACLES. NOTE DAYLIGHT ZONE WATTAGE IS LESS THAN 150W AND EXEMPT FROM SENSOR REQUIREMENTS.
4. TO POWER PACK "PP1". PROVIDE "OS2" OCCUPANCY SENSORS.
5. TO "PP2" CONTROLLED WITH "OS3" OCCUPANCY SENSORS.

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11-01-24

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CONTRACTOR SHALL CHECK & VERIFY ALL DIMENSIONS & CONDITIONS AT JOB SITE.

DATE : 10-25-24

REVISIONS :

TITLE : 3rd FLOOR W POWER PLAN

SHEET : E6 OF E21

PROJECT : 24216

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APARTMENT PLAN SCHEDULE

APARTMENT TYPE	PLUMBING	HVAC	POWER	LIGHTING	FIRE ALARM
A	3 / M18	3 / M20	3 / E18	3 / E20	3 / FA10
A_A	4 / M18	4 / M20	4 / E18	4 / E20	4 / FA10
A_V	3 / M18	3 / M20	3 / E18	3 / E20	4 / FA9
B	1 / M18	1 / M20	1 / E18	1 / E20	1 / FA10
B_A	2 / M18	2 / M20	2 / E18	2 / E20	2 / FA10
B_V	1 / M18	1 / M20	1 / E18	1 / E20	3 / FA9
C	1 / M17	1 / M19	1 / E17	1 / E19	1 / FA9
C_A	2 / M17	2 / M18	2 / E17	2 / E19	2 / FA9

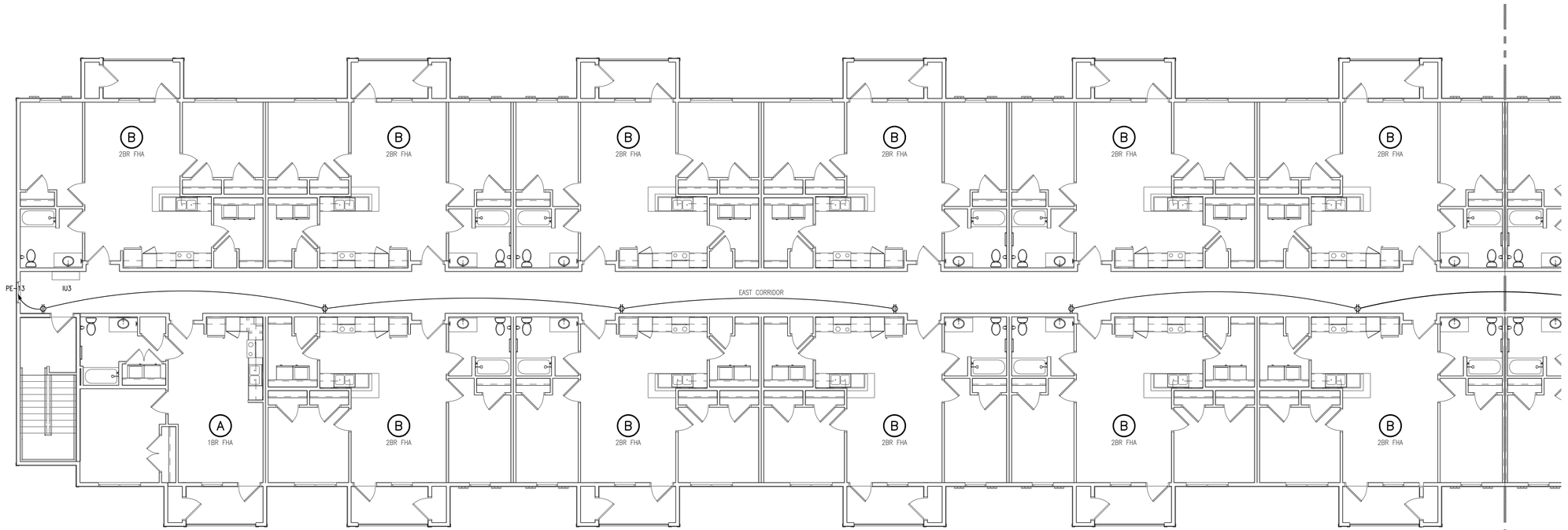
NOTE: UNIT TYPE SUBSCRIPT, IF PRESENT, INDICATES AN ADA (A) OR AUDIO/VISUAL (V) EQUIPPED APARTMENT.

GENERAL NOTES: ELECTRICAL

1. SEE SHEET ME1 NOTES FOR ALL SYSTEMS.
2. ALL LIGHT FIXTURE, SWITCH, AND RECEPTACLE LOCATIONS SHALL BE FIELD VERIFIED WITH OWNER FOR EACH TYPE OF UNIT BEFORE INSTALLATION.
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3. TO PP2 (LIGHTS) OR RM1 (RECEPTACLES). PROVIDE "S2" MANUAL CONTROLS "VS1" VACANCY SENSOR FOR LIGHTING AND "OS2" OCCUPANCY SENSORS TO CONTROL RECEPTACLES. NOTE DAYLIGHT ZONE WATTAGE IS LESS THAN 150W AND EXEMPT FROM SENSOR REQUIREMENTS.
4. TO POWER PACK "PP1". PROVIDE "OS2" OCCUPANCY SENSORS.
5. TO "PP2" CONTROLLED WITH "OS3" OCCUPANCY SENSORS.



1 / E7 **4th FLOOR E POWER PLAN**

1/8" = 1'-0" EAST

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CONTRACTOR SHALL CHECK & VERIFY ALL DIMENSIONS & CONDITIONS AT JOB SITE.

DATE : 10-25-24

REVISIONS :

TITLE : **4th FLOOR E POWER PLAN**

SHEET : **E7** OF **E21**

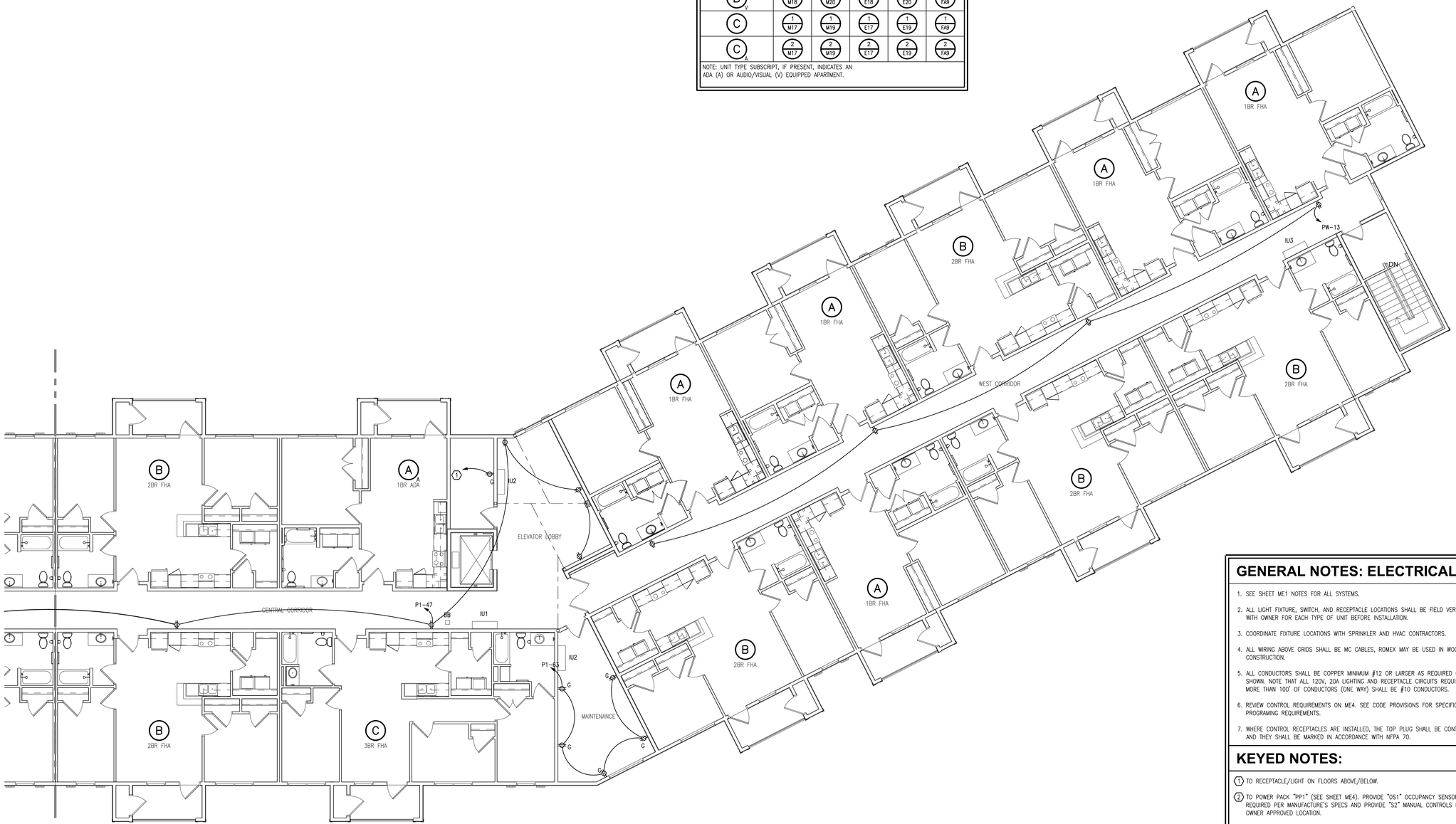
PROJECT : 24216

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APARTMENT PLAN SCHEDULE

APARTMENT TYPE	PLUMBING	HVAC	POWER	LIGHTING	FIRE ALARM
A	3 M18	3 M20	3 E18	3 E20	3 FA10
A A	4 M18	4 M20	4 E18	4 E20	4 FA10
A V	3 M18	3 M20	3 E18	3 E20	4 FA9
B	1 M18	1 M20	1 E18	1 E20	1 FA10
B A	2 M18	2 M20	2 E18	2 E20	2 FA10
B V	1 M18	1 M20	1 E18	1 E20	1 FA9
C	1 M17	1 M19	1 E17	1 E19	1 FA9
C A	2 M17	2 M19	2 E17	2 E19	2 FA9

NOTE: UNIT TYPE SUBSCRIPT, IF PRESENT, INDICATES AN ADA (A) OR AUDIO/VISUAL (V) EQUIPPED APARTMENT.



GENERAL NOTES: ELECTRICAL

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2. ALL LIGHT FIXTURE, SWITCH, AND RECEPTACLE LOCATIONS SHALL BE FIELD VERIFIED WITH OWNER FOR EACH TYPE OF UNIT BEFORE INSTALLATION.
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4. TO POWER PACK "PP1". PROVIDE "OS2" OCCUPANCY SENSORS.
5. TO "PP2" CONTROLLED WITH "OS3" OCCUPANCY SENSORS.

1 / E8 **4th FLOOR W POWER PLAN**

1/8" = 1'-0" WEST

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11-01-24

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CONTRACTOR SHALL CHECK & VERIFY ALL DIMENSIONS & CONDITIONS AT JOB SITE.

DATE : 10-25-24

REVISIONS :

TITLE : **4th FLOOR W POWER PLAN**

SHEET : **E8** OF **E21**

PROJECT : 24216

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APARTMENT PLAN SCHEDULE

APARTMENT TYPE	PLUMBING	HVAC	POWER	LIGHTING	FIRE ALARM
A	3 M18	3 M20	3 E18	3 E20	3 FA10
A_A	4 M18	4 M20	4 E18	4 E20	4 FA10
A_V	3 M18	3 M20	3 E18	3 E20	4 FA9
B	1 M18	1 M20	1 E18	1 E20	1 FA10
B_A	2 M18	2 M20	2 E18	2 E20	2 FA10
B_V	1 M18	1 M20	1 E18	1 E20	3 FA9
C	1 M17	1 M19	1 E17	1 E19	1 FA9
C_A	2 M17	2 M18	2 E17	2 E19	2 FA9

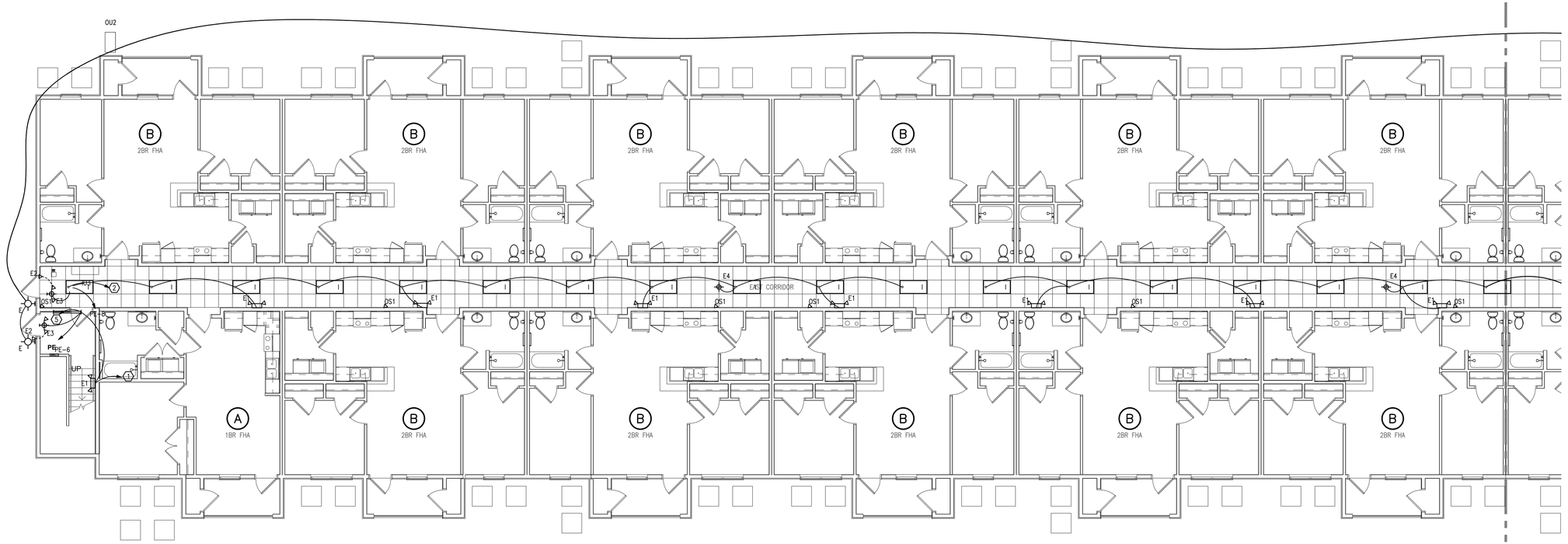
NOTE: UNIT TYPE SUBSCRIPT, IF PRESENT, INDICATES AN ADA (A) OR AUDIO/VISUAL (V) EQUIPPED APARTMENT.

GENERAL NOTES: ELECTRICAL

1. SEE SHEET ME1 NOTES FOR ALL SYSTEMS.
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KEYED NOTES:

1. TO RECEPTACLE/LIGHT ON FLOORS ABOVE/BELOW.
2. TO POWER PACK "PP1" (SEE SHEET ME4). PROVIDE "OS1" OCCUPANCY SENSORS AS REQUIRED PER MANUFACTURE'S SPECS AND PROVIDE "S2" MANUAL CONTROLS IN OWNER APPROVED LOCATION.
3. TO PP2 (LIGHTS) OR RM1 (RECEPTACLES). PROVIDE "S2" MANUAL CONTROLS "VS1" VACANCY SENSOR FOR LIGHTING AND "OS2" OCCUPANCY SENSORS TO CONTROL RECEPTACLES. NOTE DAYLIGHT ZONE WATTAGE IS LESS THAN 150W AND EXEMPT FROM SENSOR REQUIREMENTS.
4. TO POWER PACK "PP1". PROVIDE "OS2" OCCUPANCY SENSORS.
5. TO "PP2" CONTROLLED WITH "OS3" OCCUPANCY SENSORS.



1st FLOOR E LIGHTING PLAN

1/E9 — 1/8" = 1'-0" — EAST

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11-01-24

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DATE : 10-25-24

REVISIONS :

TITLE : **1st FLOOR E LIGHTING PLAN**

SHEET : **E9** OF **E21**

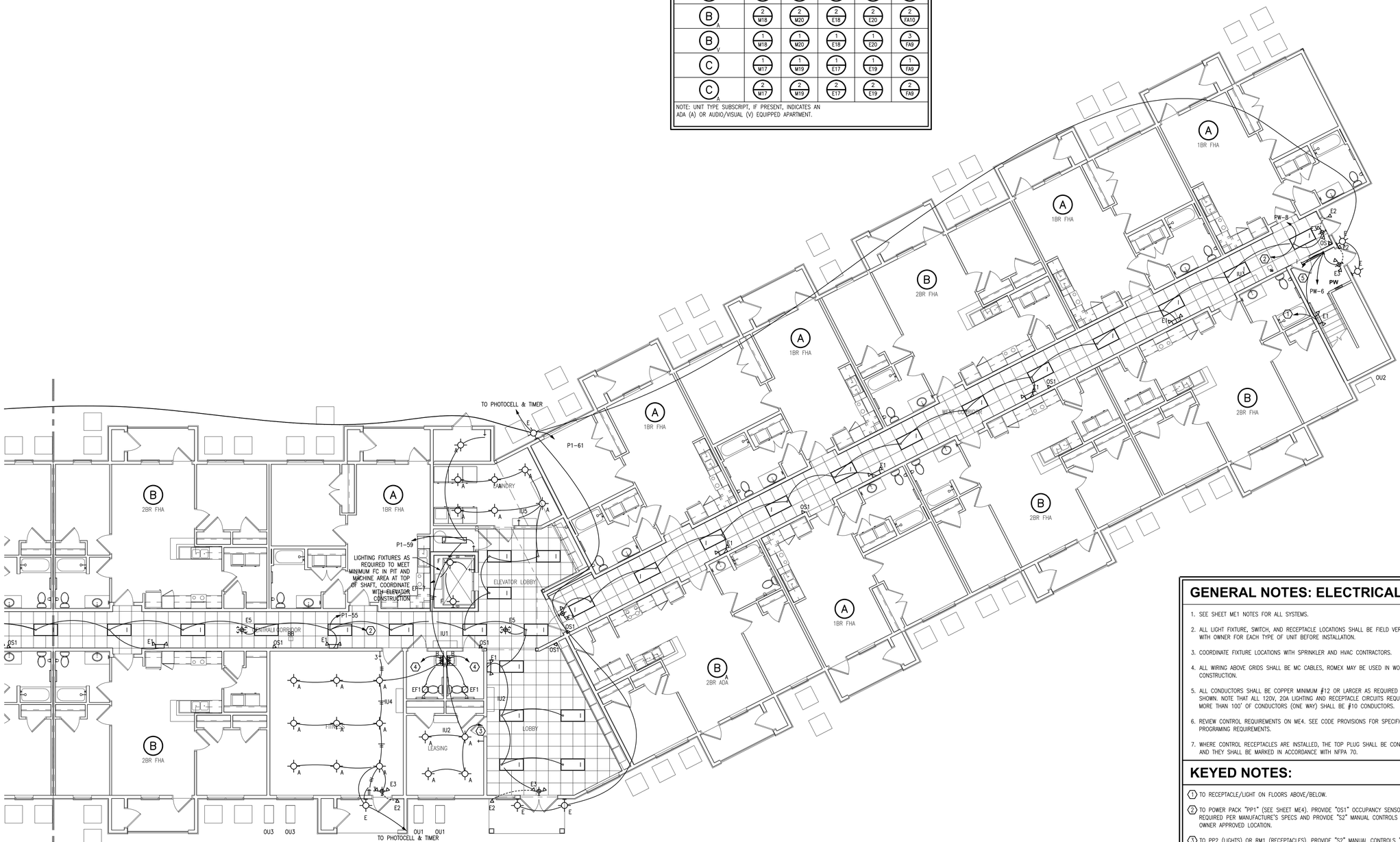
PROJECT : 24216

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APARTMENT PLAN SCHEDULE

APARTMENT TYPE	PLUMBING	HVAC	POWER	LIGHTING	FIRE ALARM
A	3 M18	3 M20	3 E18	3 E20	3 FA10
A A	4 M18	4 M20	4 E18	4 E20	4 FA10
A V	3 M18	3 M20	3 E18	3 E20	4 FA9
B	1 M18	1 M20	1 E18	1 E20	1 FA10
B A	2 M18	2 M20	2 E18	2 E20	2 FA10
B V	1 M18	1 M20	1 E18	1 E20	1 FA9
C	1 M17	1 M19	1 E17	1 E19	1 FA9
C A	2 M17	2 M19	2 E17	2 E19	2 FA9

NOTE: UNIT TYPE SUBSCRIPT, IF PRESENT, INDICATES AN ADA (A) OR AUDIO/VISUAL (V) EQUIPPED APARTMENT.



1st FLOOR W LIGHTING PLAN

1/8" = 1'-0"

WEST

GENERAL NOTES: ELECTRICAL

1. SEE SHEET ME1 NOTES FOR ALL SYSTEMS.
2. ALL LIGHT FIXTURE, SWITCH, AND RECEPTACLE LOCATIONS SHALL BE FIELD VERIFIED WITH OWNER FOR EACH TYPE OF UNIT BEFORE INSTALLATION.
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5. ALL CONDUCTORS SHALL BE COPPER MINIMUM #12 OR LARGER AS REQUIRED OR SHOWN. NOTE THAT ALL 120V, 20A LIGHTING AND RECEPTACLE CIRCUITS REQUIRING MORE THAN 100' OF CONDUCTORS (ONE WAY) SHALL BE #10 CONDUCTORS.
6. REVIEW CONTROL REQUIREMENTS ON ME4. SEE CODE PROVISIONS FOR SPECIFIC PROGRAMING REQUIREMENTS.
7. WHERE CONTROL RECEPTACLES ARE INSTALLED, THE TOP PLUG SHALL BE CONTROLLED AND THEY SHALL BE MARKED IN ACCORDANCE WITH NFPA 70.

KEYED NOTES:

1. TO RECEPTACLE/LIGHT ON FLOORS ABOVE/BELOW.
2. TO POWER PACK "PP1" (SEE SHEET ME4). PROVIDE "OS1" OCCUPANCY SENSORS AS REQUIRED PER MANUFACTURE'S SPECS AND PROVIDE "S2" MANUAL CONTROLS IN OWNER APPROVED LOCATION.
3. TO PP2 (LIGHTS) OR RM1 (RECEPTACLES). PROVIDE "S2" MANUAL CONTROLS "VS1" VACANCY SENSOR FOR LIGHTING AND "OS2" OCCUPANCY SENSORS TO CONTROL RECEPTACLES. NOTE DAYLIGHT ZONE WATTAGE IS LESS THAN 150W AND EXEMPT FROM SENSOR REQUIREMENTS.
4. TO POWER PACK "PP1". PROVIDE "OS2" OCCUPANCY SENSORS.
5. TO "PP2" CONTROLLED WITH "OS3" OCCUPANCY SENSORS.

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LICENSED PROFESSIONAL ENGINEER
11-01-24

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DASHWOOD TRAILS

DASHWOOD DRIVE & JETTY LANE
HOUSTON, HARRIS COUNTY, TX, 77072

CONTRACTOR SHALL CHECK & VERIFY ALL DIMENSIONS & CONDITIONS AT JOB SITE.

DATE : 10-25-24

REVISIONS :

TITLE : 1st FLOOR W LIGHTING PLAN

SHEET : E10 OF E21

PROJECT : 24216

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APARTMENT PLAN SCHEDULE

APARTMENT TYPE	PLUMBING	HVAC	POWER	LIGHTING	FIRE ALARM
A	3 M18	3 M20	3 E18	3 E20	3 FA10
A_A	4 M18	4 M20	4 E18	4 E20	4 FA10
A_V	3 M18	3 M20	3 E18	3 E20	4 FA9
B	1 M18	1 M20	1 E18	1 E20	1 FA10
B_A	2 M18	2 M20	2 E18	2 E20	2 FA10
B_V	1 M18	1 M20	1 E18	1 E20	3 FA9
C	1 M17	1 M19	1 E17	1 E19	1 FA9
C_A	2 M17	2 M18	2 E17	2 E19	2 FA9

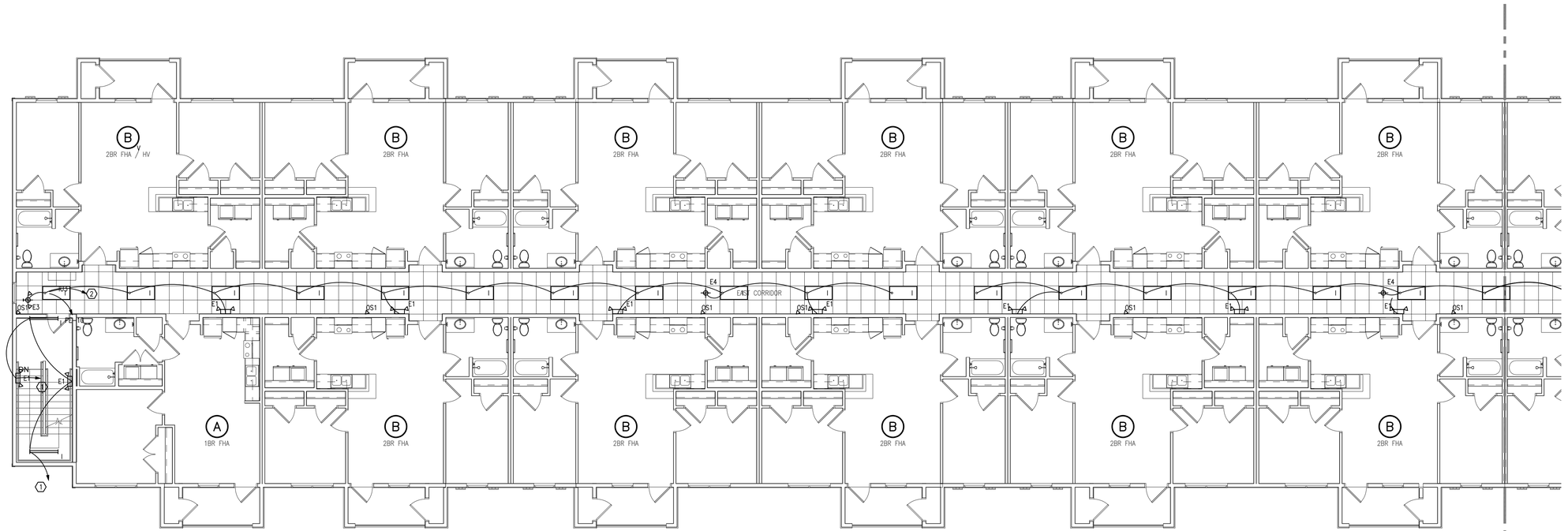
NOTE: UNIT TYPE SUBSCRIPT, IF PRESENT, INDICATES AN ADA (A) OR AUDIO/VISUAL (V) EQUIPPED APARTMENT.

GENERAL NOTES: ELECTRICAL

1. SEE SHEET ME1 NOTES FOR ALL SYSTEMS.
2. ALL LIGHT FIXTURE, SWITCH, AND RECEPTACLE LOCATIONS SHALL BE FIELD VERIFIED WITH OWNER FOR EACH TYPE OF UNIT BEFORE INSTALLATION.
3. COORDINATE FIXTURE LOCATIONS WITH SPRINKLER AND HVAC CONTRACTORS.
4. ALL WIRING ABOVE GRIDS SHALL BE MC CABLES, ROMEX MAY BE USED IN WOOD CONSTRUCTION.
5. ALL CONDUCTORS SHALL BE COPPER MINIMUM #12 OR LARGER AS REQUIRED OR SHOWN. NOTE THAT ALL 120V, 20A LIGHTING AND RECEPTACLE CIRCUITS REQUIRING MORE THAN 100' OF CONDUCTORS (ONE WAY) SHALL BE #10 CONDUCTORS.
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4. TO POWER PACK "PP1". PROVIDE "OS2" OCCUPANCY SENSORS.
5. TO "PP2" CONTROLLED WITH "OS3" OCCUPANCY SENSORS.



2nd FLOOR E LIGHTING PLAN

1/8" = 1'-0"

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CONTRACTOR SHALL CHECK & VERIFY ALL DIMENSIONS & CONDITIONS AT JOB SITE.

DATE : 10-25-24

REVISIONS :

TITLE : 2nd FLOOR E LIGHTING PLAN

SHEET : E11 OF E21

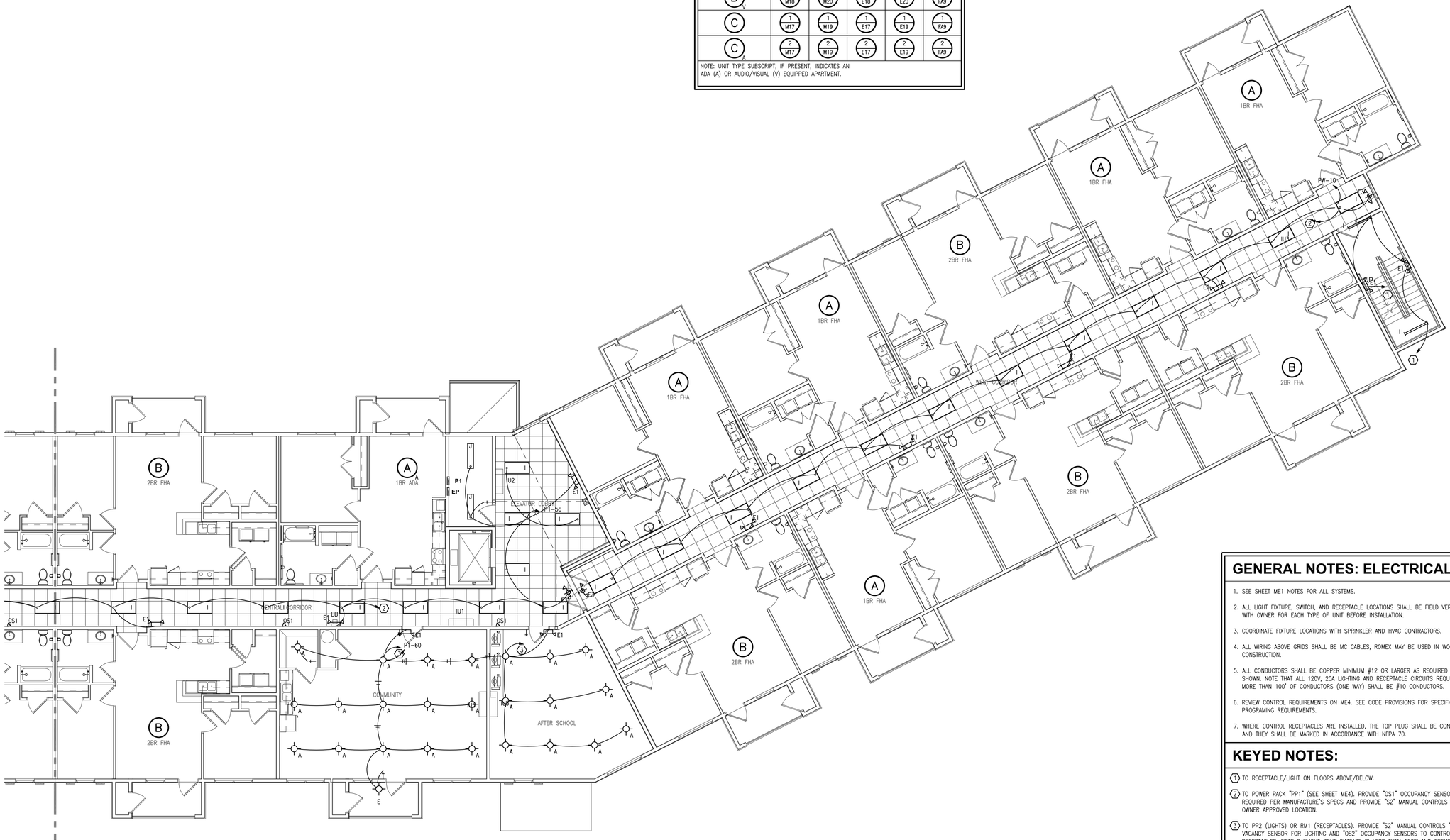
PROJECT : 24216

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APARTMENT PLAN SCHEDULE

APARTMENT TYPE	PLUMBING	HVAC	POWER	LIGHTING	FIRE ALARM
A	3 M18	3 M20	3 E18	3 E20	3 FA10
A A	4 M18	4 M20	4 E18	4 E20	4 FA10
A V	3 M18	3 M20	3 E18	3 E20	4 FA9
B	1 M18	1 M20	1 E18	1 E20	1 FA10
B A	2 M18	2 M20	2 E18	2 E20	2 FA10
B V	1 M18	1 M20	1 E18	1 E20	1 FA9
C	1 M17	1 M19	1 E17	1 E19	1 FA9
C A	2 M17	2 M19	2 E17	2 E19	2 FA9

NOTE: UNIT TYPE SUBSCRIPT, IF PRESENT, INDICATES AN ADA (A) OR AUDIO/VISUAL (V) EQUIPPED APARTMENT.



GENERAL NOTES: ELECTRICAL

1. SEE SHEET ME1 NOTES FOR ALL SYSTEMS.
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4. TO POWER PACK "PP1". PROVIDE "OS2" OCCUPANCY SENSORS.
5. TO "PP2" CONTROLLED WITH "OS3" OCCUPANCY SENSORS.

1 / E12 **2nd FLOOR W LIGHTING PLAN**

1/8" = 1'-0" WEST

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CONTRACTOR SHALL CHECK & VERIFY ALL DIMENSIONS & CONDITIONS AT JOB SITE.

DATE : 10-25-24

REVISIONS :

TITLE : 2nd FLOOR W LIGHTING PLAN

SHEET : E12 OF E21

PROJECT : 24216

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APARTMENT PLAN SCHEDULE

APARTMENT TYPE	PLUMBING	HVAC	POWER	LIGHTING	FIRE ALARM
A	3 M18	3 M20	3 E18	3 E20	3 FA10
A_A	4 M18	4 M20	4 E18	4 E20	4 FA10
A_V	3 M18	3 M20	3 E18	3 E20	4 FA9
B	1 M18	1 M20	1 E18	1 E20	1 FA10
B_A	2 M18	2 M20	2 E18	2 E20	2 FA10
B_V	1 M18	1 M20	1 E18	1 E20	3 FA9
C	1 M17	1 M19	1 E17	1 E19	1 FA9
C_A	2 M17	2 M18	2 E17	2 E19	2 FA9

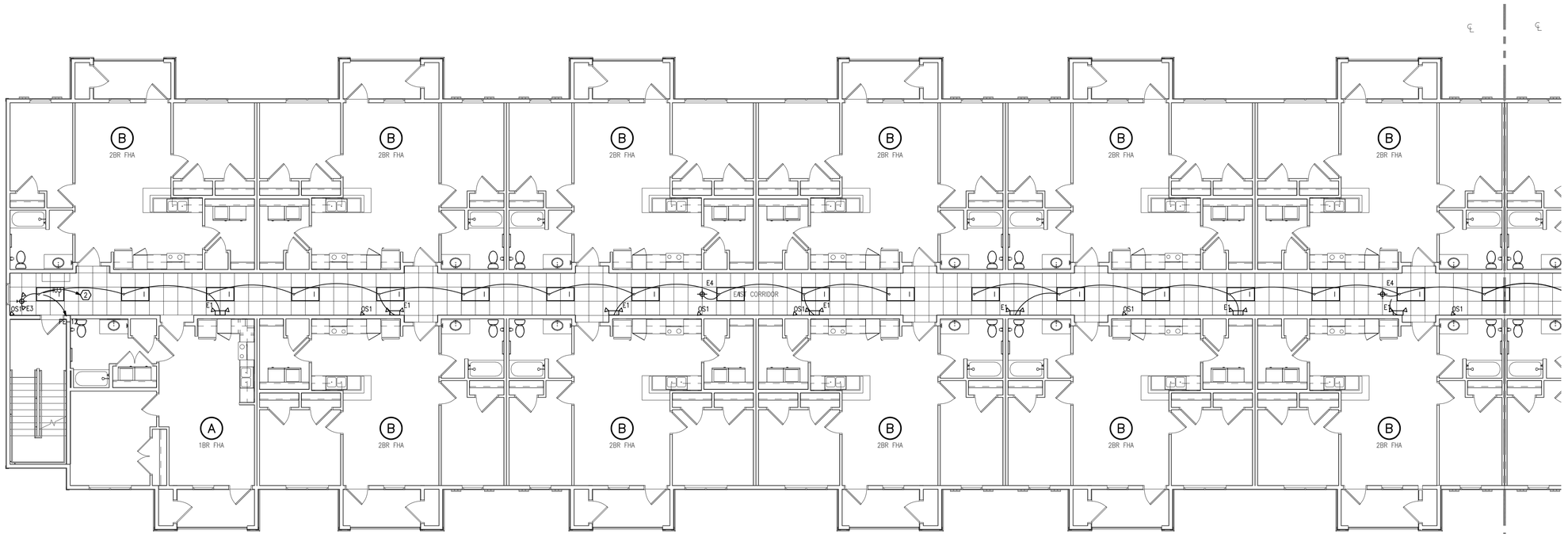
NOTE: UNIT TYPE SUBSCRIPT, IF PRESENT, INDICATES AN ADA (A) OR AUDIO/VISUAL (V) EQUIPPED APARTMENT.

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4. TO POWER PACK "PP1". PROVIDE "OS2" OCCUPANCY SENSORS.
5. TO "PP2" CONTROLLED WITH "OS3" OCCUPANCY SENSORS.



1 / E13 **3rd FLOOR E LIGHTING PLAN**

1/8" = 1'-0" EAST

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CONTRACTOR SHALL CHECK & VERIFY ALL DIMENSIONS & CONDITIONS AT JOB SITE.

DATE : 10-25-24

REVISIONS :

TITLE : **3rd FLOOR E LIGHTING PLAN**

SHEET : **E13** OF **E21**

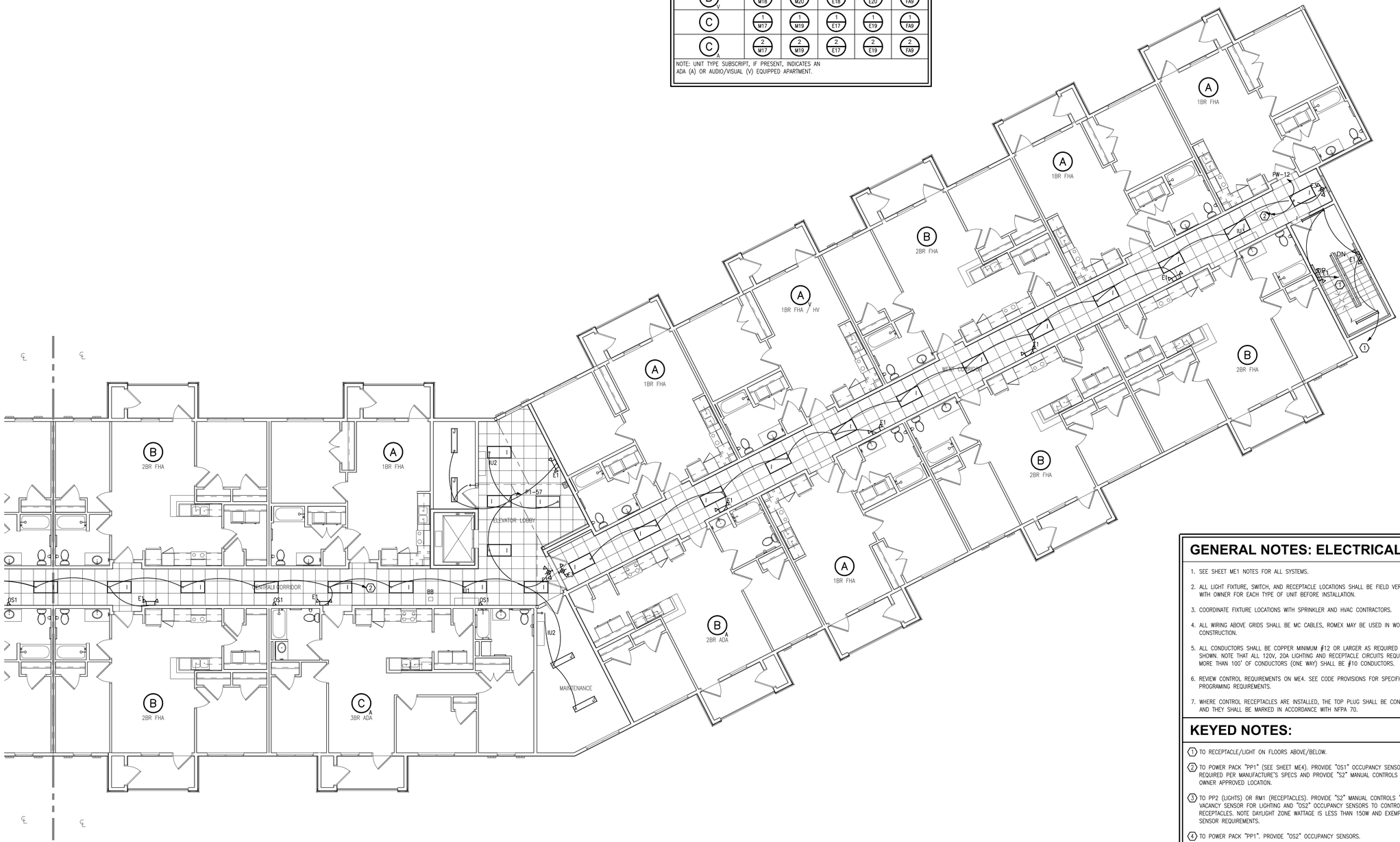
PROJECT : 24216

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APARTMENT PLAN SCHEDULE

APARTMENT TYPE	PLUMBING	HVAC	POWER	LIGHTING	FIRE ALARM
A	3 M18	3 M20	3 E18	3 E20	3 FA10
A_A	4 M18	4 M20	4 E18	4 E20	4 FA10
A_V	3 M18	3 M20	3 E18	3 E20	4 FA9
B	1 M18	1 M20	1 E18	1 E20	1 FA10
B_A	2 M18	2 M20	2 E18	2 E20	2 FA10
B_V	1 M18	1 M20	1 E18	1 E20	2 FA9
C	1 M17	1 M19	1 E17	1 E19	1 FA9
C_A	2 M17	2 M19	2 E17	2 E19	2 FA9

NOTE: UNIT TYPE SUBSCRIPT, IF PRESENT, INDICATES AN ADA (A) OR AUDIO/VISUAL (V) EQUIPPED APARTMENT.



GENERAL NOTES: ELECTRICAL

1. SEE SHEET ME1 NOTES FOR ALL SYSTEMS.
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4. TO POWER PACK "PP1". PROVIDE "OS2" OCCUPANCY SENSORS.
5. TO "PP2" CONTROLLED WITH "OS3" OCCUPANCY SENSORS.

1 / E14 **3rd FLOOR W LIGHTING PLAN**

1/8" = 1'-0" WEST

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CONTRACTOR SHALL CHECK & VERIFY ALL DIMENSIONS & CONDITIONS AT JOB SITE.

DATE : 10-25-24

REVISIONS :

TITLE : 3rd FLOOR W LIGHTING PLAN

SHEET : E14 OF E21

PROJECT : 24216

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APARTMENT PLAN SCHEDULE

APARTMENT TYPE	PLUMBING	HVAC	POWER	LIGHTING	FIRE ALARM
A	3 M18	3 M20	3 E18	3 E20	3 FA10
A_A	4 M18	4 M20	4 E18	4 E20	4 FA10
A_V	3 M18	3 M20	3 E18	3 E20	4 FA9
B	1 M18	1 M20	1 E18	1 E20	1 FA10
B_A	2 M18	2 M20	2 E18	2 E20	2 FA10
B_V	1 M18	1 M20	1 E18	1 E20	3 FA9
C	1 M17	1 M19	1 E17	1 E19	1 FA9
C_A	2 M17	2 M18	2 E17	2 E19	2 FA9

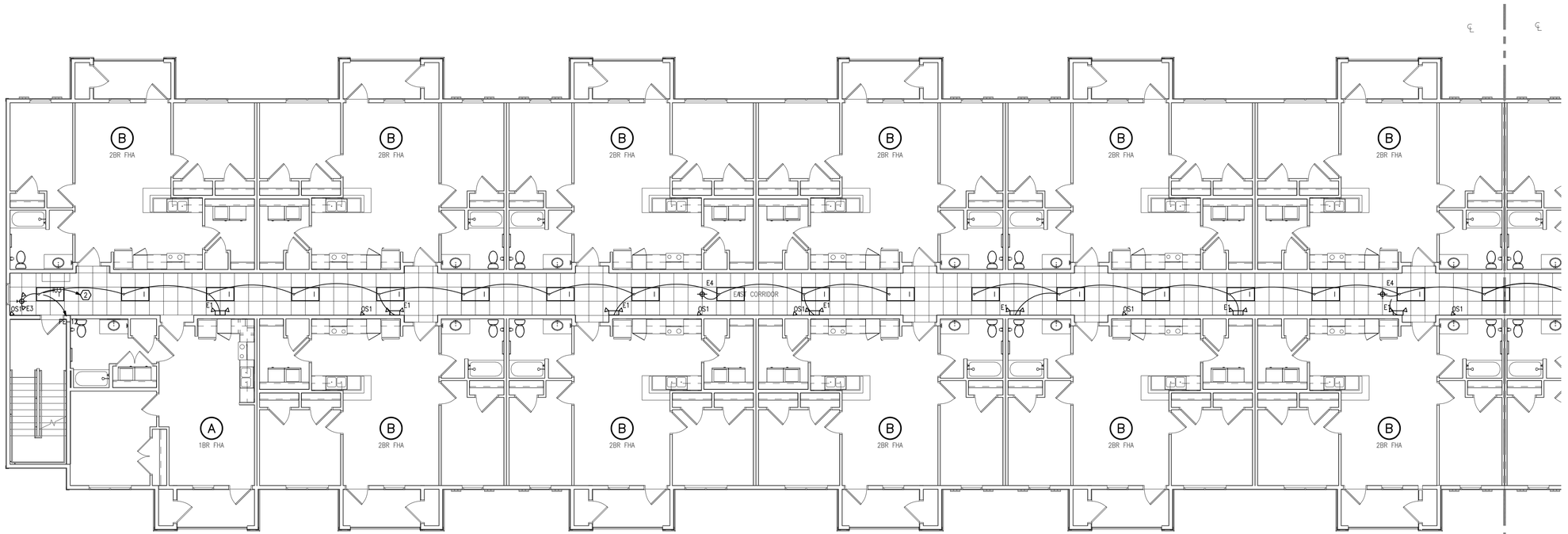
NOTE: UNIT TYPE SUBSCRIPT, IF PRESENT, INDICATES AN ADA (A) OR AUDIO/VISUAL (V) EQUIPPED APARTMENT.

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4. TO POWER PACK "PP1". PROVIDE "OS2" OCCUPANCY SENSORS.
5. TO "PP2" CONTROLLED WITH "OS3" OCCUPANCY SENSORS.



1 / E15 **4th FLOOR E LIGHTING PLAN**

1/8" = 1'-0" EAST

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CONTRACTOR SHALL CHECK & VERIFY ALL DIMENSIONS & CONDITIONS AT JOB SITE.

DATE : 10-25-24

REVISIONS :

TITLE : **4th FLOOR E LIGHTING PLAN**

SHEET : **E15** OF **E21**

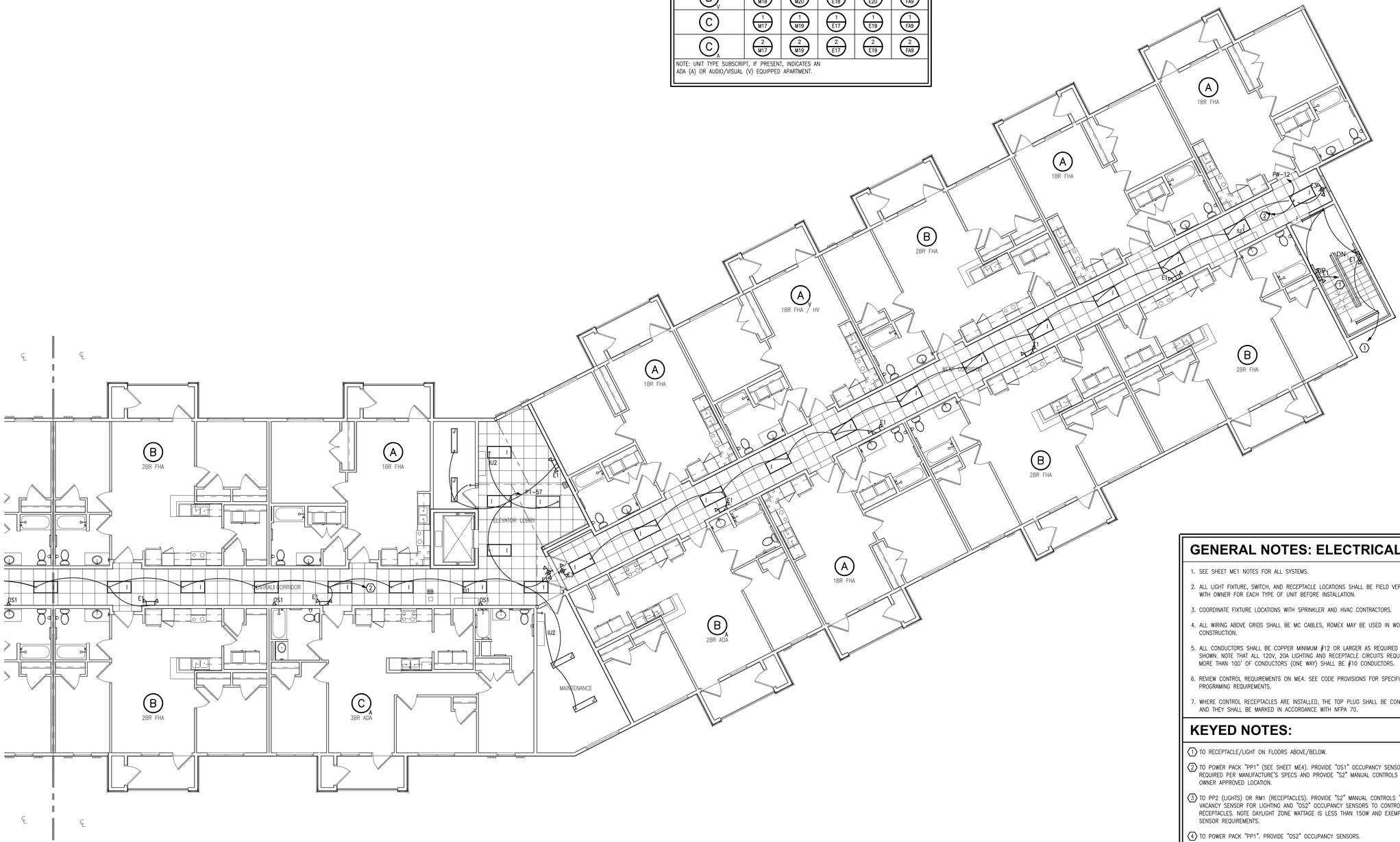
PROJECT : 24216

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APARTMENT PLAN SCHEDULE

APARTMENT TYPE	PLUMBING	HVAC	POWER	LIGHTING	FIRE ALARM
A	3 M18	3 M20	3 E18	3 E20	3 FA10
A A	4 M18	4 M20	4 E18	4 E20	4 FA10
A V	3 M18	3 M20	3 E18	3 E20	4 FA9
B	1 M18	1 M20	1 E18	1 E20	1 FA10
B A	2 M18	2 M20	2 E18	2 E20	2 FA10
B V	1 M18	1 M20	1 E18	1 E20	1 FA9
C	1 M17	1 M19	1 E17	1 E19	1 FA9
C A	2 M17	2 M19	2 E17	2 E19	2 FA9

NOTE: UNIT TYPE SUBSCRIPT, IF PRESENT, INDICATES AN ADA (A) OR AUDIO/VISUAL (V) EQUIPPED APARTMENT.



GENERAL NOTES: ELECTRICAL

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4. TO POWER PACK "PP1". PROVIDE "OS2" OCCUPANCY SENSORS.
5. TO "PP2" CONTROLLED WITH "OS3" OCCUPANCY SENSORS.

1 / E16 4th FLOOR W LIGHTING PLAN

1/8" = 1'-0" WEST

FREDDIE L. MALICOAT - ENGINEER
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DASHWOOD DRIVE & JETTY LANE
HOUSTON, HARRIS COUNTY, TX, 77072

CONTRACTOR SHALL CHECK & VERIFY ALL DIMENSIONS & CONDITIONS AT JOB SITE.

DATE : 10-25-24

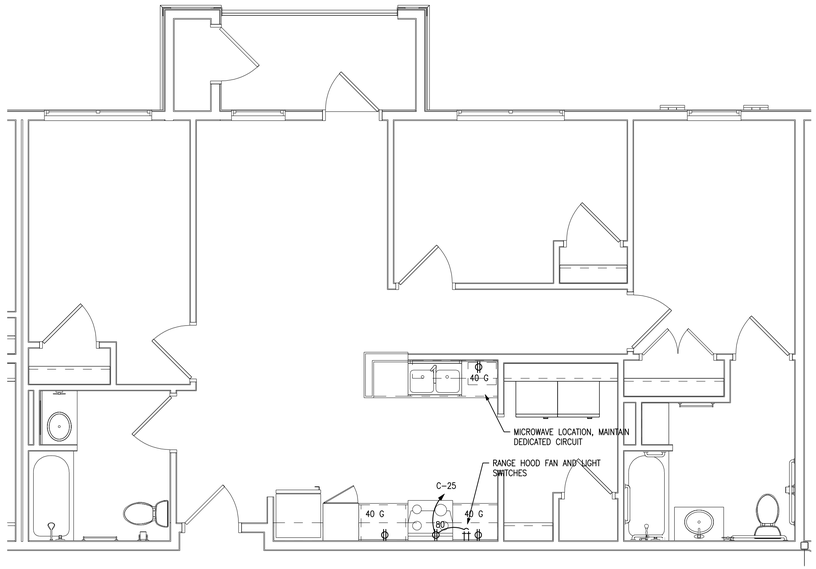
REVISIONS :

TITLE : 4th FLOOR W LIGHTING PLAN

SHEET : E16 OF E21

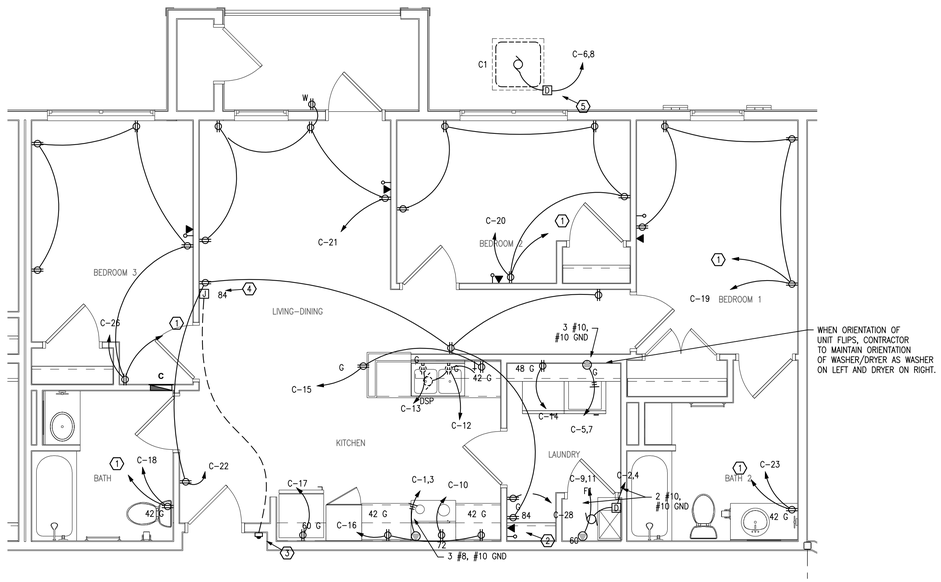
PROJECT : 24216

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2 / E17 3BR ADA POWER PLAN

1/4" = 1'-0" (ADA: SEE TYP FHA – SIMILAR)



1 / E17 3BR FHA POWER PLAN

1/4" = 1'-0"

GENERAL NOTES:

1. SEE SHEET ME1 NOTES FOR ALL SYSTEMS.
2. ALL LIGHT FIXTURE, SWITCH, AND RECEPTACLE LOCATIONS SHALL BE FIELD VERIFIED WITH OWNER FOR EACH TYPE OF UNIT BEFORE INSTALLATION.
3. ALL 120 VOLT, SINGLE PHASE, 15 & 20 AMPERE BRANCH CIRCUITS SUPPLYING DEVICES INSTALLED IN DWELLING UNIT FAMILY ROOMS, KITCHENS, LAUNDRY ROOMS, DINING ROOMS, LIVING ROOMS, PARLORS, LIBRARIES, DENS, BEDROOMS, SUNROOMS, RECREATION ROOMS, CLOSETS, HALLWAYS OR SIMILAR ROOMS OR AREAS SHALL BE PROTECTED BY A LISTED ARC-FAULT CIRCUIT INTERRUPTER, COMBINATION-TYPE, INSTALLED TO PROVIDE PROTECTION OF THE BRANCH CIRCUIT PER NEC 210.12(A).
4. TAMPER RESISTANT RECEPTACLES IN ALL DWELLING UNITS IN AREAS SPECIFIED IN NEC 210.52, ALL NONLOCKING-TYPE 125 VOLT, 15 & 20 AMPERE RECEPTACLES SHALL BE LISTED TAMPER-RESISTANT RECEPTACLES.

KEYED NOTES:

1. UP TO LIGHT (VIA "LINE" SIDE IF CONNECTING TO A GFI).
2. PHONE AND CATV SERVICE CONNECTION BOXES.
3. DOOR BELL. FOR A/V UNITS, SEE FIRE ALARM PLAN FOR DIFFERENT SYSTEM.
4. CHIME/TRANSFORMER. FOR A/V UNITS, SEE FIRE ALARM PLAN FOR DIFFERENT SYSTEM.
5. SEE BUILDING PLANS FOR ACTUAL CONDENSING UNIT LOCATIONS. MOUNT AND LABEL EACH DISCONNECT ON BUILDING WALL ADJACENT TO CONDENSING UNIT.

C

TYPICAL 3BR APT

VOLTS	120/208	MAIN CAPACITY	125 A MLO	A WATTS	19905		
PHASE	1	BUSS MATERIAL	ALUMINUM	B WATTS	18365		
WIRE	3	MOUNTING	RECESSED				
AIC		MODEL	SQUARE D QO	TOTAL WATTS	38270		

CIRC	LOCATION / DESCRIPTION	BRKR	WATTS	ø	WATTS	BRKR	LOCATION / DESCRIPTION	CIRC
1	KITCHEN / RANGE	40-2	4000	A	2143	30-2	APARTMENT / FAN COIL F1	2
3	–	–	4000	B	2143	–	–	4
5	LAUNDRY / DRYER	30-2	2500	A	884	20-2	OUTSIDE / CONDENSING UNIT C1	6
7	–	–	2500	B	884	–	–	8
9	MECH. / WATER HEATER	30-2	2250	A	1580	20-1	KITCHEN / MICROWAVE	10
11	–	–	2250	B	1200	20-1	KITCHEN / DISPOSER	12
13	KITCHEN / DISHWASHER	20-1	1200	A	1200	20-1	LAUNDRY / WASHER	14
15	KITCHEN / RECEPTACLES	20-1	360	B	360	20-1	KITCHEN / RECEPTACLES	16
17	KITCHEN / REFRIGERATOR	20-1	500	A	368	20-1	BATH / OUTLETS	18
19	BED 1 / OUTLETS	20-1	1000	B	1180	20-1	BED 2 / OUTLETS	20
21	LIVING / RECEPTACLES	20-1	900	A	900	20-1	UTILITY / RECEPTACLES	22
23	BATH 2 / OUTLETS	20-1	368	B	540	20-1	APARTMENT / LIGHTS	24
25	RANGE HOOD (UFAS ONLY)	20-1	300	A	1180	20-1	BED 3 / OUTLETS	26
27				B	1580	20-1	LAUNDRY RECEPTACLE	28
29				A				30
31				B				32
33				A				34
35				B				36
37				A				38
39				B	0	20-2	SURGE PROTECTOR	40
41	OUTSIDE AIR CONTROL	20-1	0	A	0	–	–	42

FREDDIE L. MALICOAT - ENGINEER
TX# 113587

STATE OF TEXAS
FREDDIE MALICOAT
113587
LICENSED PROFESSIONAL ENGINEER

11-01-24

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DATE : 10-25-24

REVISIONS :

TITLE : **3BR APT POWER PLANS**

SHEET : **E17** OF **E21**

PROJECT : 24216

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A

VOLTS 120/208 | MAIN CAPACITY 125 A MLO | A WATTS 18745
PHASE 1 | BUSS MATERIAL ALUMINUM | B WATTS 15297
WIRE 3 | MOUNTING RECESSED
A/C | MODEL SQUARE D QO
TOTAL WATTS 34042

TYPICAL 1BR APT

CIRC	LOCATION / DESCRIPTION	BRKR	WATTS	ø	WATTS	BRKR	LOCATION / DESCRIPTION	CIRC
1	KITCHEN / RANGE	40–2	4000	A	2143	30–2	APARTMENT / FAN COIL F1	2
3	–	–	4000	B	2143	–	–	4
5	LAUNDRY / DRYER	30–2	2500	A	884	20–2	OUTSIDE / CONDENSING UNIT C1	6
7	–	–	2500	B	884	–	–	8
9	MECH. / WATER HEATER	30–2	2250	A	1580	20–1	KITCHEN / MICROWAVE	10
11	–	–	2250	B	1200	20–1	KITCHEN / DISPOSER	12
13	KITCHEN / DISHWASHER	20–1	1200	A	1200	20–1	LAUNDRY / WASHER	14
15	KITCHEN / RECEPTACLES	20–1	360	B	360	20–1	KITCHEN / RECEPTACLES	16
17	KITCHEN / REFRIGERATOR	20–1	500	A	388	20–1	BATH / OUTLETS	18
19	BED 1 / OUTLETS	20–1	1180	B	0	20–1	BED 2 / OUTLETS	20
21	LIVING / RECEPTACLES	20–1	1080	A	720	20–1	UTILITY / RECEPTACLES	22
23	BATH / LIGHTS	20–1	0	B	420	20–1	APARTMENT / LIGHTS	24
25	RANGE HOOD (UFAS ONLY)	20–1	300	A				26
27				B	0	20–1	LAUNDRY RECEPTACLE	28
29				A				30
31				B				32
33				A				34
35				B				36
37				A				38
39				B	0	20–2	SURGE PROTECTOR	40
41	OUTSIDE AIR CONTROL	20–1	0	A	0	–	–	42

B

VOLTS 120/208 | MAIN CAPACITY 125 A MLO | A WATTS 18365
PHASE 1 | BUSS MATERIAL ALUMINUM | B WATTS 18177
WIRE 3 | MOUNTING RECESSED
A/C | MODEL SQUARE D QO
TOTAL WATTS 36542

TYPICAL 2BR APT

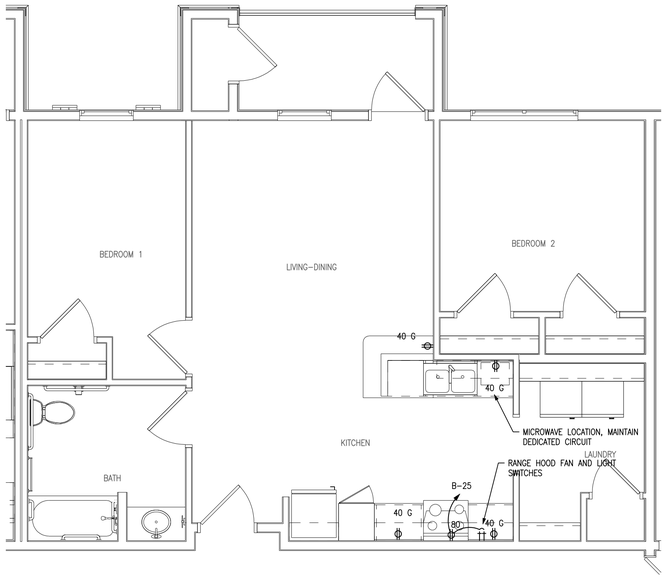
CIRC	LOCATION / DESCRIPTION	BRKR	WATTS	ø	WATTS	BRKR	LOCATION / DESCRIPTION	CIRC
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5	LAUNDRY / DRYER	30–2	2500	A	884	20–2	OUTSIDE / CONDENSING UNIT C1	6
7	–	–	2500	B	884	–	–	8
9	MECH. / WATER HEATER	30–2	2250	A	1580	20–1	KITCHEN / MICROWAVE	10
11	–	–	2250	B	1200	20–1	KITCHEN / DISPOSER	12
13	KITCHEN / DISHWASHER	20–1	1200	A	1200	20–1	LAUNDRY / WASHER	14
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21	LIVING / RECEPTACLES	20–1	900	A	540	20–1	UTILITY / RECEPTACLES	22
23				B	540	20–1	APARTMENT / LIGHTS	24
25	RANGE HOOD (UFAS ONLY)	20–1	300	A				26
27				B	1580	20–1	LAUNDRY RECEPTACLE	28
29				A				30
31				B				32
33				A				34
35				B				36
37				A				38
39				B	0	20–2	SURGE PROTECTOR	40
41	OUTSIDE AIR CONTROL	20–1	0	A	0	–	–	42

GENERAL NOTES:

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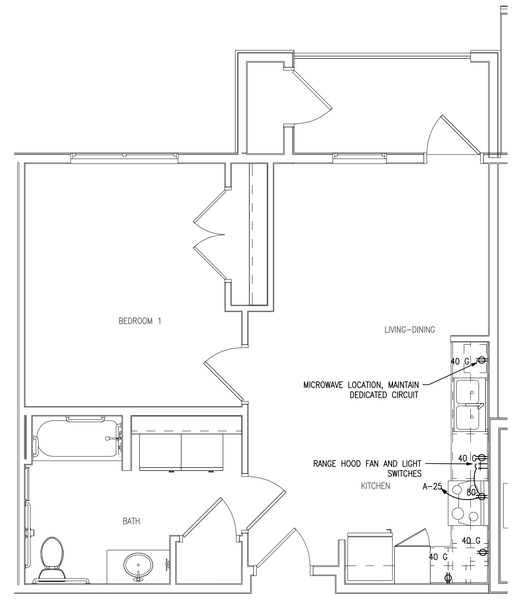
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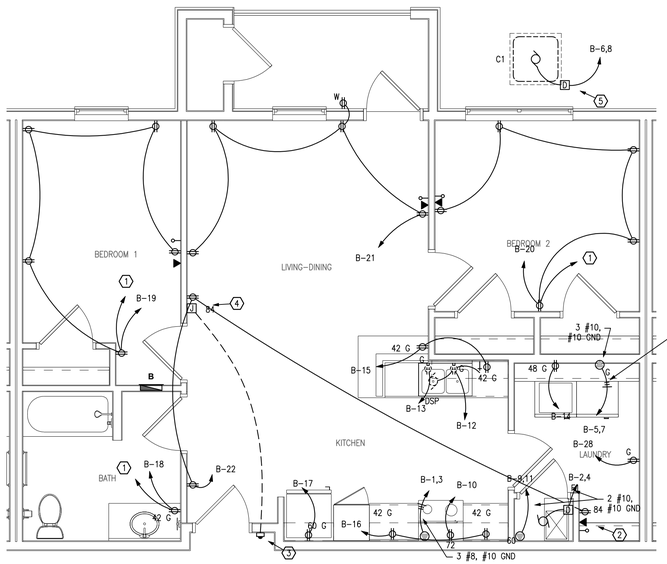
2 / E18 2BR ADA POWER PLAN

1/4" = 1'–0" (ADA: SEE TYP FHA – SIMILAR)



4 / E18 1BR ADA POWER PLAN

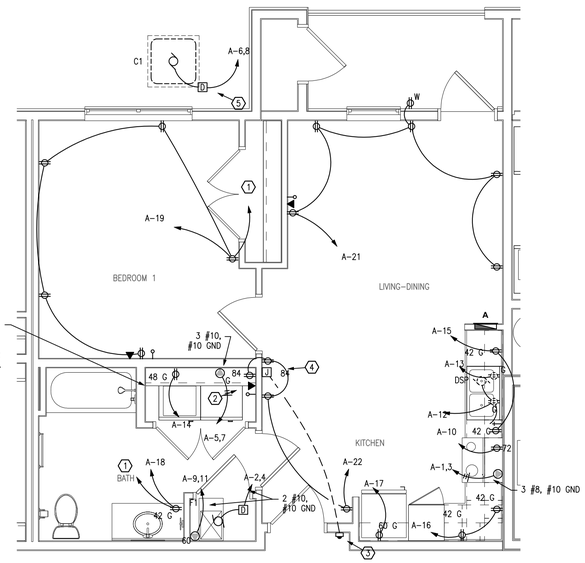
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1 / E18 2BR FHA POWER PLAN

1/4" = 1'–0"

WHEN ORIENTATION OF UNIT FLIPS, CONTRACTOR TO MAINTAIN ORIENTATION OF WASHER/DRYER AS WASHER ON LEFT AND DRYER ON RIGHT.



3 / E18 1BR FHA POWER PLAN

1/4" = 1'–0"

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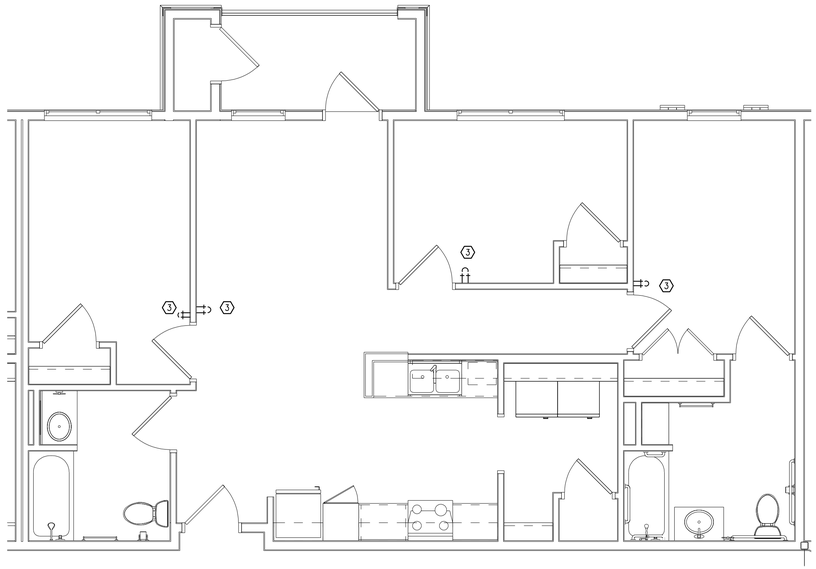
REVISIONS :

TITLE : **2-1BR APT POWER PLANS**

SHEET : **E18** OF **E21**

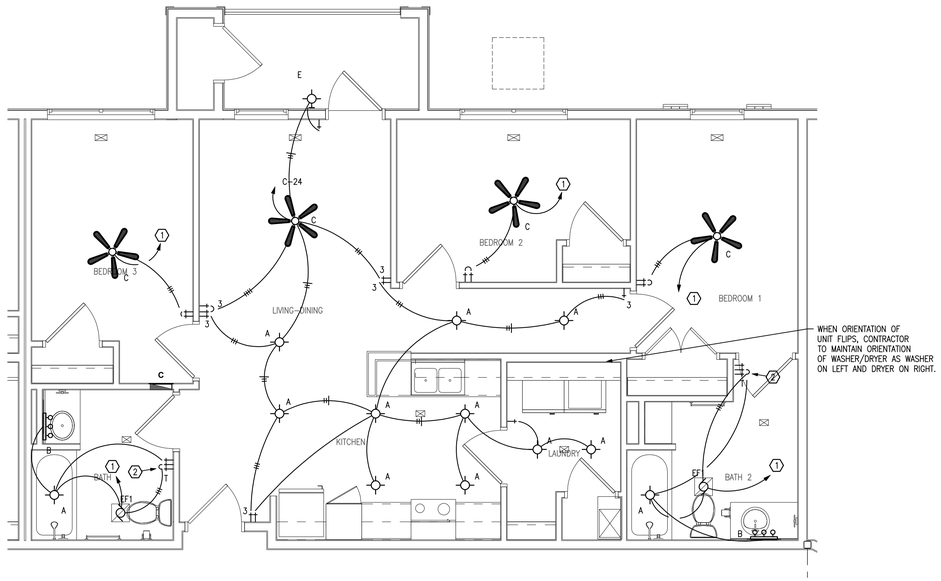
PROJECT : 24216

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2 E19 3BR ADA LIGHTING PLAN

1/4" = 1'-0" (ADA: SEE FHA – SIMILAR)



1 E19 3BR FHA LIGHTING PLAN

1/4" = 1'-0"

GENERAL NOTES:

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5. COORDINATE FIXTURE LOCATIONS WITH HVAC AND SPRINKLER CONTRACTORS.
6. EXCEPT IN BATHROOMS, HALLWAYS AND EXTERIOR LIGHTING. ALL LIGHTING FIXTURES SHALL BE CONTROLLED WITH A DIMMER SWITCH.

KEYED NOTES:

(1) DOWN TO RECEPTACLE (VIA "LINE" SIDE IF GFI).

(2) "MASTER" AND "MODE" SWITCHES (PLAIN SINGLE POLE SWITCHES) WIRED PER FAN INSTALLATION INSTRUCTIONS. SET FAN TO RUN CONTINUOUS AT 34 CFM OR PROVIDE TIMER FOR 26 MIN/HR IN 1BR, 45 CFM OR PROVIDE TIMER FOR 36 MIN/HR IN 2BR, 31 CFM OR PROVIDE TIMER FOR 24 MIN/HR IN 3BR. COORDINATE WITH OUTSIDE AIR CONTROLS.

(3) ADA UNITS ONLY: FAN SPEED CONTROL SWITCH AT ACCESSIBLE HEIGHT.

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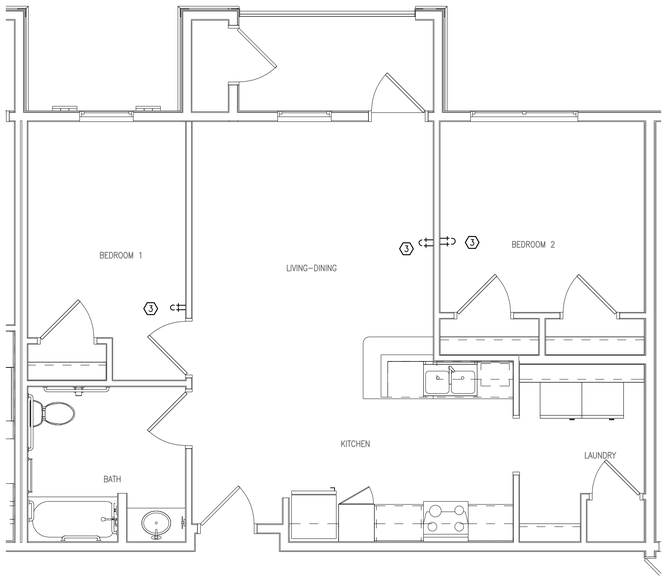
REVISIONS :

TITLE : 3BR APT LIGHTING PLANS

SHEET : E19 OF E21

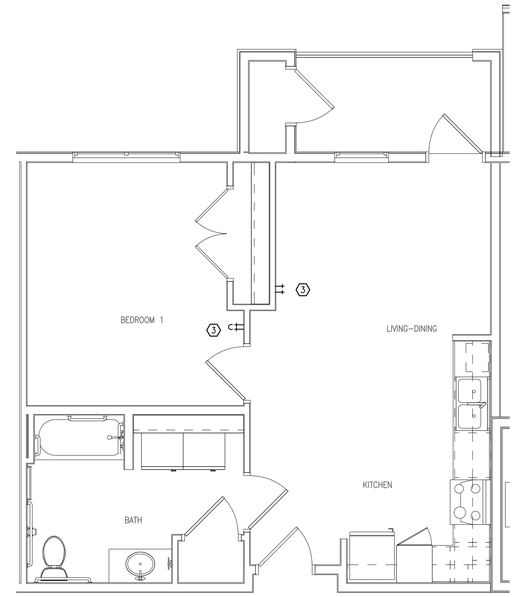
PROJECT : 24216

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2 E20 2BR ADA LIGHTING PLAN

1/4" = 1'–0" (ADA: SEE FHA – SIMILAR)



4 E20 1BR ADA LIGHTING PLAN

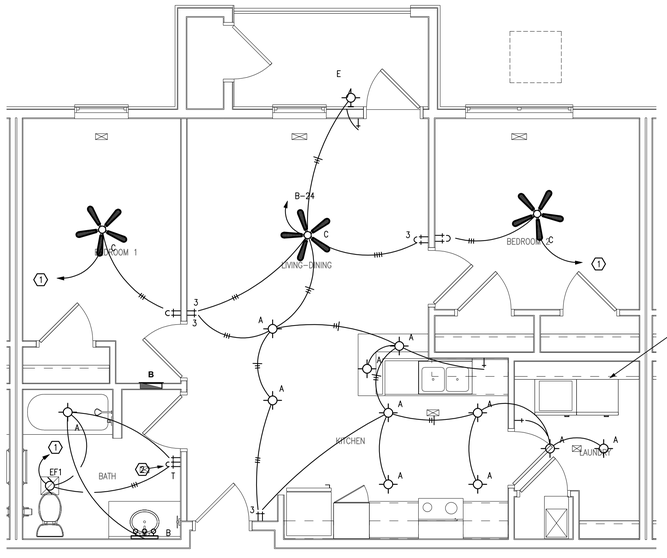
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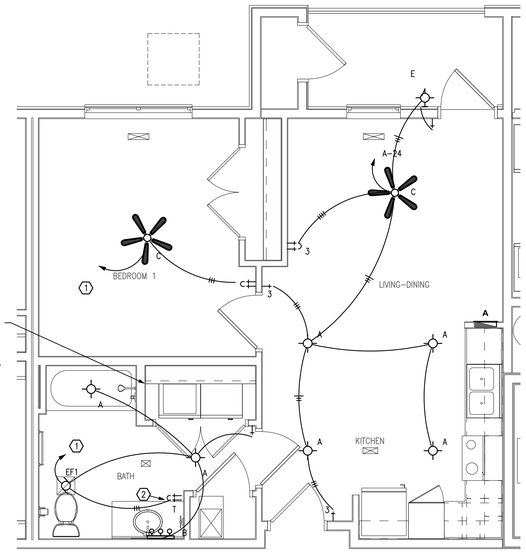
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3. ADA UNITS ONLY: FAN SPEED CONTROL SWITCH AT ACCESSIBLE HEIGHT.



1 E20 2BR FHA LIGHTING PLAN

1/4" = 1'–0"

WHEN ORIENTATION OF UNIT FLIPS, CONTRACTOR TO MAINTAIN ORIENTATION OF WASHER/DRYER AS WASHER ON LEFT AND DRYER ON RIGHT.



3 E20 1BR FHA LIGHTING PLAN

1/4" = 1'–0"

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DATE : 10–25–24

REVISIONS :

TITLE : **2-1BR APT LIGHTING PLANS**

SHEET : **E20** OF **E21**

PROJECT : 24216

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ELECTRIC CALCULATIONS

TYPICAL APT PANEL		A (2BR)	B (2BR)	C (2BR)
TOTAL CONNECTED LOAD	(W)	34,862	34,862	34,862
FLOOR AREA	(SF)	646	855	1,064
3 WATTS / SQUARE FOOT	(W)	1,938	2,565	3,192
2 SMALL APPL @ 1,500	(W)	3,000	3,000	3,000
LAUNDRY	(W)	1,500	1,500	1,500
WATER HEATER	(W)	4,500	4,500	4,500
DRYER	(W)	5,000	5,000	5,000
RANGE	(W)	8,000	8,000	8,000
MICROWAVE	(W)	1,500	1,500	1,500
DISHWASHER	(W)	1,200	1,200	1,200
DISPOSER	(W)	1,200	1,200	1,200
SUBTOTAL	(W)	27,838	28,465	29,092
FIRST 10KW @ 100%	(W)	10,000	10,000	10,000
REMAINDER @ 40%	(W)	7,135	7,386	7,637
NON-CONCURRENT HVAC	(W)	4,300	4,300	4,300
CALCULATED TOTAL LOAD	(W)	32,138	32,765	33,392
CALCULATED DEMAND LOAD	(W)	21,435	21,686	21,937
@208-1-60	(A)	103.1	104.3	105.5

BLDG METER CENTER		MC EAST	MC WEST
TOTAL CONNECTED LOAD	(W)	2,111,720	1,275,032
A APTS	(#)	8	20
B APTS	(#)	52	16
C APTS	(#)	2	0
TOTAL APTS	(#)	62	36
SUBTOTAL	(W)	2,027,668	1,167,000
DEMAND FACTOR	(%)	23	30
APT DEMAND	(W)	466,364	350,100
HOUSE PANELS	(W)	20000	20000
CALCULATED DEMAND LOAD	(W)	486,364	370,100
@208-3-60	(A)	1,350.0	1,027.3
@125%=	(A)	1,687.5	1,284.1

WIRE SIZE SCHEDULE

MARK	DESCRIPTION	RATING	WIRE SIZE
A1	BLDG METER CENTER	2000-3	6@ 4 400MCM, #3/0 GND, 4"C.
A2	BLDG METER CENTER	1400-3	4@ 4 500MCM, #3/0 GND, 4"C.
B	PANEL P1	600-3	2@ 4 350MCM, #1 GND, 3 1/2"C.
C	PANEL EP	200-3	4 #3/0, #6 GND, 2 1/2"C.
D	PANELS PE & PW	125-2	3 #1, #6 GND, 2"C.
E1	FAR APT PNL (FED >150')	125-2	3 #1, #6 GND, 2"C. OR SE CABLE
E2	ALL OTHER APT PANELS	125-2	3 #2, #6 GND, 1 1/2"C. OR SE CABLE

AIC SCHEDULE

MARK	FED FROM	MIN. LENGTH	MAX. AFC	MIN. AIC	REMARKS
X1 (3ø, 500KVA, 1.5%Z)	–	–	92,524	–	
METER CENTER WEST	X1	5'	–	100 kA	
METER CENTER EAST	X1	5'	–	100 kA	
METER	X1	30'	–	65 kA	
PANEL P1	METER	250'	–	22 kA	
PANEL PW	MC	10'	–	65 kA	
PANEL S	MC	10	–	65 kA	
PANEL EP	P1	–	–	22 kA	
APT PANEL (NEAREST ONLY)	MC	10'	–	42 kA	
APT PANEL (FARTHER ONLY)	MC	70'	–	10 kA	
APT PANEL (ALL OTHERS)	MC	30'	–	22 kA	

CONTRACTOR SHALL VERIFY PROVIDED TRANSFORMERS' AVAILABLE FAULT CURRENTS AND ENSURE FEEDER CONDUCTOR LENGTHS MATCH OR EXCEED THOSE LISTED IN THIS TABLE. NOTE THAT SHORTER CONDUCTORS REQUIRE HIGHER AIC RATINGS.

IF A) PROVIDED TRANSFORMER'S AFC IS HIGHER, OR B) ANY FEEDER LENGTH IS SHORTER THAN SHOWN, OR C) ANY WIRE SIZE IS LARGER THAN SHOWN IN THE WIRE SIZE SCHEDULE, THEN THESE CALCULATIONS MUST BE REVISED AND DESIGN CHANGES SHALL BE MADE TO ASSURE LIFE SAFETY.

P1

VOLTS 120/208 | PHASE 3 | WIRE 4 | AIC 65000 | MAIN CAPACITY 600 A MLO | BUSS MATERIAL ALUMINUM | MOUNTING SURFACE | MODEL SQUARE D NQ

A WATTS 54011 | B WATTS 52165 | C WATTS 46196 | TOTAL WATTS 152372

MAIN HOUSE PANEL

CIRC	LOCATION / DESCRIPTION	BRKR	WATTS	ø	WATTS	BRKR	LOCATION / DESCRIPTION	CIRC
1	ELEVATOR MECH / PANEL EP	200-3	16326	A	675	20-2	POLE LIGHTS	2
3	–	–	16080	B	675	–	–	4
5	–	–	15360	C				6
7	COMMUNITY / WH3	20-2	1500	A	2250	30-2	MECH / WH1	8
9	–	–	1500	B	2250	–	–	10
11				C	1800	20-1	RESTROOM WH2	12
13	OFFICE PRINTER	20-1	180	A	1800	20-1	RESTROOM WH2	14
15	LAUNDRY / DRYER	30-2	2500	B	2500	30-2	LAUNDRY / DRYER	16
17	–	–	2500	C	2500	–	–	18
19	LAUNDRY / DRYER	30-2	2500	A	360	20-1	AFTER SCHOOL / COMPUTERS	20
21	–	–	2500	B	1200	20-1	LAUNDRY / WASHER	22
23	LAUNDRY / WASHER	20-1	1200	C	1200	20-1	LAUNDRY / WASHER	24
25	LAUNDRY / RECEPTACLES	20-1	1380	A	180	20-1	LAUNDRY / RECEPTACLES	26
27	OFFICE / RECEPTACLES	20-1	1080	B	900	20-1	AFTER SCHOOL / RECEPTACLES	28
29	AFTER SCHOOL / COMPUTERS	20-1	180	C	360	20-1	BATH / RECEPTACLES	30
31	1st FLOOR CORRIDOR / RECEPTACLES	20-1	1440	A	1260	20-1	COMMUNITY ROOM / RECEPTACLES	32
33	KITCHEN / MICROWAVE	20-1	1580	B	500	20-1	KITCHEN / FRIDGE	34
35	KITCHEN / DISPOSER DSP	20-1	1200	C	180	20-1	KITCHEN / COUNTER RECEPS	36
37	1st FLOOR OU3	50-2	3800	A	3800	50-2	2ND FLOOR OU3	38
39	–	–	3800	B	3800	–	–	40
41	3RD FLOOR OU1	50-2	3800	C	3800	50-2	4TH FLOOR OU1	42
43	–	–	3800	A	3800	–	–	44
45	2nd FLOOR CORR / RECEPTACLES	20-1	1260	B	1260	20-1	3RD FLOOR CORR / RECEPTACLES	46
47	4TH FLOOR CORR / RECEPTACLES	20-1	1260	C	720	20-1	FITNESS ROOM / RECEPTACLES	48
49	FITNESS ROOM / RECEPTACLES	20-1	720	A	720	20-1	MECH. / RECEPTACALES	50
51	OUTSIDE SVC RECEPTACLES	20-1	900	B	900	20-1	OUTSIDE SVC RECEPTACLES	52
53	SPRINKLER EH1	20-1	1500	C	180	20-1	FACP	54
55	1st FLOOR CORRIDOR / LIGHTS	20-1	1440	A	1160	20-1	2nd FLOOR CORRIDOR / LIGHTS	56
57	3rd FLOOR CORRIDOR / LIGHTS	20-1	1240	B	1240	20-1	4TH FLOOR CORRIDOR / LIGHTS	58
59	AFTER SCHOOL/LEASING/RR/ LTS	20-1	716	C	540	20-1	FITNESS/COMMUNITY LIGHTS	60
61	OUTSIDE / LIGHTS	20-1	420	A	900	20-1	3RD FLOOR MAINT RECEPTACLES	62
63	4TH FLOOR MAINT RECEPTACLES	20-1	900	B	3600	40-2	EV CHARGER	64
65	EV CHARGER	40-2	3600	C	3600	–	–	66
67	–	–	3600	A				68
69				B				70
71				C				72
73				A				74
75				B				76
77				C				78
79				A				80
81				B				82
83				C				84

EP

VOLTS 120/208 | PHASE 3 | WIRE 4 | AIC | MAIN CAPACITY 200 A MLO | BUSS MATERIAL ALUMINUM | MOUNTING RECESSED | MODEL SQUARE D QO

A WATTS 16326 | B WATTS 16080 | C WATTS 15360 | TOTAL WATTS 47766

ELEVATOR PANEL

CIRC	LOCATION / DESCRIPTION	BRKR	WATTS	ø	WATTS	BRKR	LOCATION / DESCRIPTION	CIRC
1	ELEV. EQ. / PIT SUMP POWER	20-1	1176	A	15000	175-3	ELEV. EQ. / HOIST MOTOR POWER	2
3				B	15000	–	–	4
5				C	15000	–	–	6
7	ELEV. EQ. / LIGHTS	20-1	150	A	0	20-1	– (SHUNT TRIP BREAKER SPACE) –	8
9				B	1080	20-1	ELEV. EQ. / CAR POWER	10
11	ELEV. PIT / SERVICE RECEPTACLE	20-1	180	C	180	20-1	ELEV. EQ. / SERVICE RECEPTACLE	12
13				A				14
15				B				16
17				C				18
19				A				20
21				B				22
23				C				24
25				A				26
27				B				28
29				C				30

PW

VOLTS 120/208 | PHASE 1 | WIRE 3 | AIC 42000 | MAIN CAPACITY 125 A MLO | BUSS MATERIAL ALUMINUM | MOUNTING RECESSED | MODEL SQUARE D QO

A WATTS 9130 | B WATTS 8200 | TOTAL WATTS 17330

WEST END HOUSE PANEL

CIRC	LOCATION / DESCRIPTION	BRKR	WATTS	ø	WATTS	BRKR	LOCATION / DESCRIPTION	CIRC
1	1st FLOOR CORRIDOR / OU1	50-2	3800	A	720	20-1	OUTSIDE / SVC RECEPTACLES	2
3	–	–	3800	B	900	20-1	OUTSIDE / SVC RECEPTACLES	4
5	STAIRS / ELECTRIC HEATER EH1	20-1	1500	A	350	20-1	STAIRS / LIGHTS	6
7	1st FLOOR CORR / RECEPTACLES	20-1	720	B	900	20-1	1st FLOOR CORRIDOR / LIGHTS	8
9	2st FLOOR CORR / RECEPTACLES	20-1	720	A	660	20-1	2nd FLOOR CORRIDOR / LIGHTS	10
11	3rd FLOOR CORR / RECEPTACLES	20-1	720	B	660	20-1	3rd FLOOR CORRIDOR / LIGHTS	12
13	4th FLOOR CORR / RECEPTACLES	20-1	720	A	660	20-1	4th FLOOR CORRIDOR / LIGHTS	14
15	OUTSIDE WALL PACKS	20-1	500	B				16
17				A				18
19				B				20
21				A				22
23				B				24

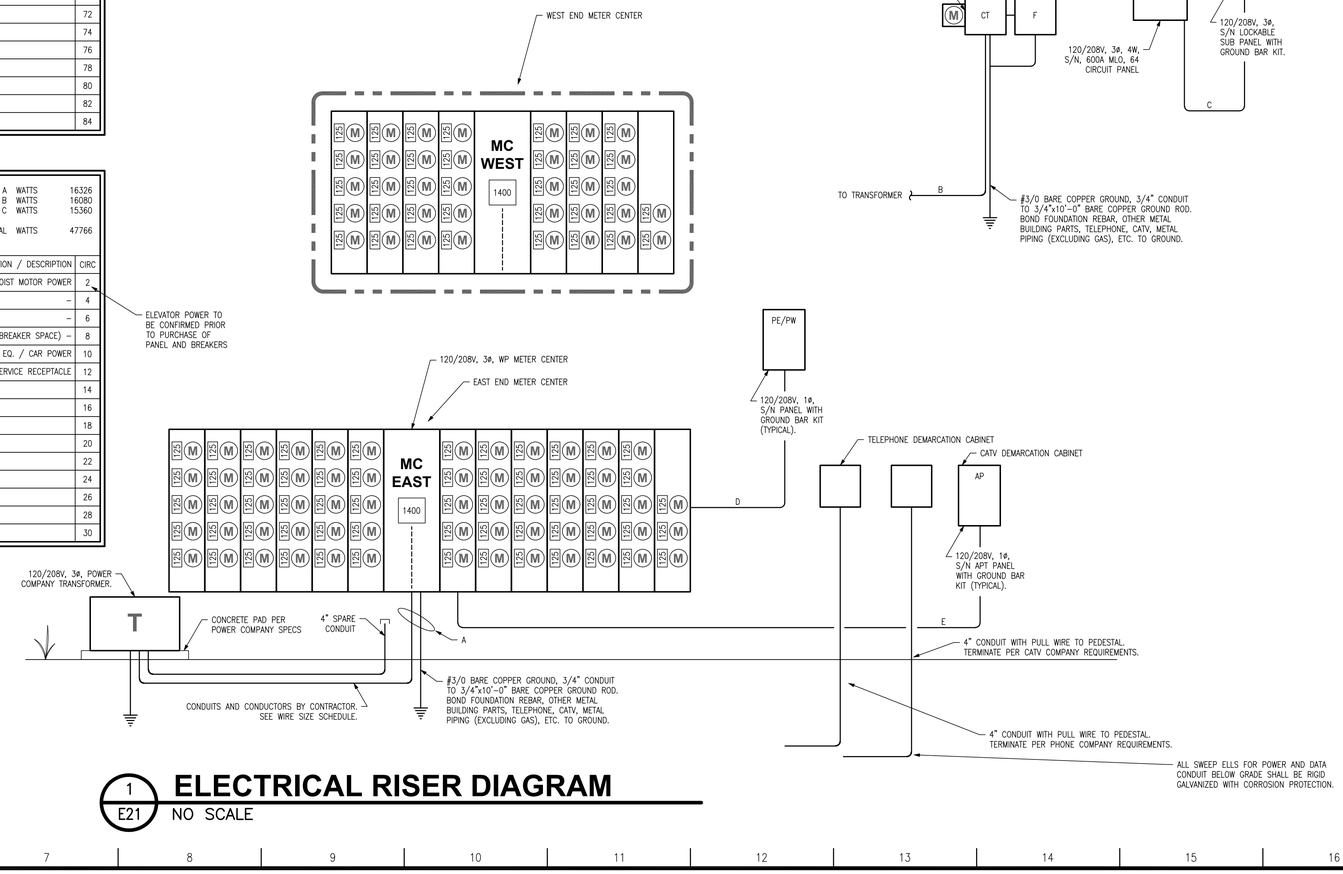
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VOLTS 120/208 | PHASE 1 | WIRE 3 | AIC | MAIN CAPACITY 125 A MLO | BUSS MATERIAL ALUMINUM | MOUNTING RECESSED | MODEL SQUARE D QO

A WATTS 8750 | B WATTS 7980 | TOTAL WATTS 16730

EAST END HOUSE PANEL

CIRC	LOCATION / DESCRIPTION	BRKR	WATTS	ø	WATTS	BRKR	LOCATION / DESCRIPTION	CIRC
1	OUTSIDE / SVC RECEPTACLES	20-1	540	A	3800	50-2	CORRIDORS/ OU1	2
3	OUTSIDE / SVC RECEPTACLES	20-1	720	B	3800	–	–	4
5	STAIRS / ELECTRIC HEATER EH1	20-1	1500	A	150	20-1	STAIRS / LIGHTS	6
7	1st FLOOR CORR / RECEPTACLES	20-1	720	B	660	20-1	1st FLOOR CORRIDOR / LIGHTS	8
9	2nd FLOOR CORR / RECEPTACLES	20-1	720	A	660	20-1	2nd FLOOR CORRIDOR / LIGHTS	10
11	3rd FLOOR CORR / RECEPTACLES	20-1	720	B	660	20-1	3rd FLOOR CORRIDOR / LIGHTS	12
13	4th FLOOR CORR / RECEPTACLES	20-1	720	A	660	20-1	4th FLOOR CORRIDOR / LIGHTS	14
15	OUTSIDE WALL PACKS	20-1	700	B				16
17				A				18
19				B				20
21				A				22
23				B				24



1 / E21 **ELECTRICAL RISER DIAGRAM**

NO SCALE

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DASHWOOD DRIVE & JETTY LANE
HOUSTON, HARRIS COUNTY, TX, 77072

CONTRACTOR SHALL CHECK & VERIFY ALL DIMENSIONS & CONDITIONS AT JOB SITE.

DATE : 10-25-24

REVISIONS :

TITLE : ELECTRICAL RISER DIAGRAM

SHEET : E21 OF E21

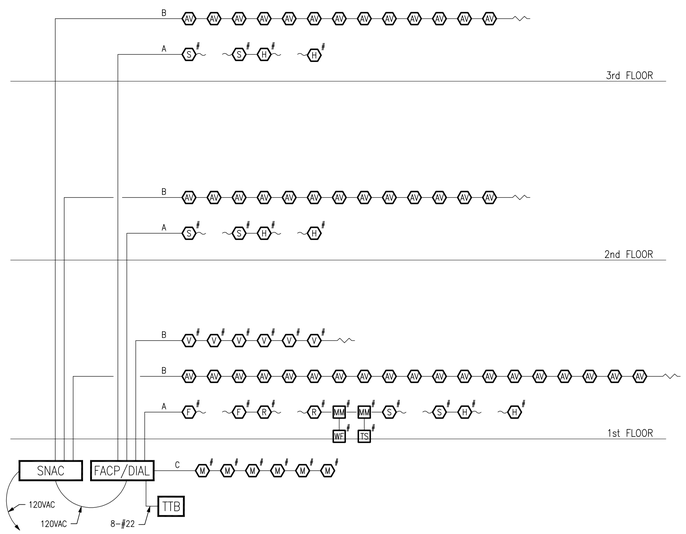
PROJECT : 24216

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F.A. SYMBOL SCHEDULE

SYMBOL	DESCRIPTION
FACP	FIRE ALARM CONTROL PANEL – FCI MODEL 71002D
SNAC	AUXILIARY POWER SUPPLY – FCI SNAC-4
F	FCI ADDRESSABLE PULL STATION
S	FCI ADDRESSABLE SMOKE DETECTOR
S	FCI ANALOG SMOKE DETECTOR WITH MINI HORN
H	FCI ANALOG HEAT DETECTOR
M	MAGNETIC DOOR HOLD
AV	FCI AUDIO / VISUAL
V	FCI VISUAL
S	24V SMOKE DETECTOR WITH FCI ADDRESSABLE MODULE AND SOUNDER (LOW FREQ.)
	FCI MINI HORN
V	FCI MINI HORN W/ STROBE
WF	WATERFLOW SWITCH
TS	TAMPER SWITCH
R	RELAY
CO	CARBON MONOXIDE DETECTOR
1	CORNELL 4200 SERIES AREA OF REFUGE AUDIO/VISUAL INTERCOM BUTTON IN STAIRS, CONTROL PANEL IN LOBBY, WITH CONNECTION TO PUBLIC PHONE SYSTEM.
~	RESISTOR
A	18/2 FPLP ANALOG ADDRESSABLE LOOP (PROVIDE 2 SEPARATE LOOPS)
B	14/2 FPLP AUDIO/VISUAL CIRCUIT
C	14/2 FPLP DOOR HOLDER CIRCUIT

TYPICAL RISER IS REPRESENTATIVE ONLY, VERIFY ACTUAL NUMBER OF DEVICES WITH PLANS



2 FA1 **FIRE ALARM RISER DIAGRAM**
NO SCALE

APARTMENT PLAN SCHEDULE

APARTMENT TYPE	PLUMBING	HVAC	POWER	LIGHTING	FIRE ALARM
A	3 M18	3 M20	3 E18	3 E20	3 FA10
A (A)	4 M18	4 M20	4 E18	4 E20	4 FA10
A (V)	3 M18	3 M20	3 E18	3 E20	4 FA9
B	1 M18	1 M20	1 E18	1 E20	1 FA10
B (A)	2 M18	2 M20	2 E18	2 E20	2 FA10
B (V)	1 M18	1 M20	1 E18	1 E20	3 FA9
C	1 M17	1 M19	1 E17	1 E19	1 FA9
C (A)	2 M17	2 M18	2 E17	2 E19	2 FA9

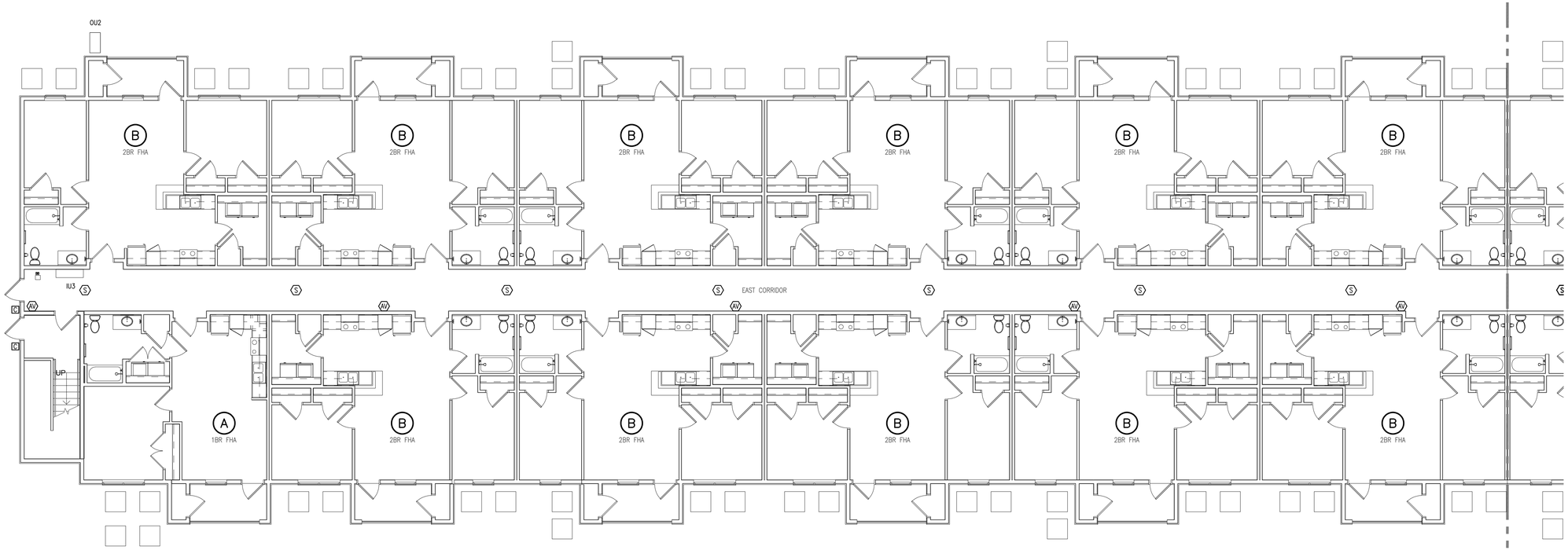
NOTE: UNIT TYPE SUBSCRIPT, IF PRESENT, INDICATES AN ADA (A) OR AUDIO/VISUAL (V) EQUIPPED APARTMENT.

GENERAL NOTES:

1. BUILDING FIRE ALARM SYSTEM TO MONITOR SPRINKLER SYSTEM AND PROVIDE OCCUPANT NOTIFICATION.
2. PROVIDE WP AV AT THE EXTERIOR WHERE THE FDC IS LOCATED.
3. SOUND PRESSURE IN COMMON AREA SHALL NOT EXCEED 110 dBA AT THE MINIMUM HEARING DISTANCE. VERIFY WITH FULL SYSTEM TEST.
4. ADJUST NUMBER OF CIRCUITS AND NUMBER OF DEVICES PER CIRCUIT AS NEEDED TO ENSURE 20% SPARE CAPACITY PER CIRCUIT (TYPICAL).
5. CONNECT ALL BUILDING FACPs VIA FA NETWORK (ONLY 1 DIAL REQUIRED).

KEYED NOTES:

1. ADDRESSABLE ID VARIES, ASSIGN A UNIQUE NUMBER TO EACH DEVICE (TYPICAL)



1 FA1 **1st FLOOR E FIRE ALARM PLAN**
1/8" = 1'-0" EAST

FREDDIE L. MALICOAT - ENGINEER
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FREDDIE MALICOAT
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11-01-24

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CONTRACTOR SHALL CHECK & VERIFY ALL DIMENSIONS & CONDITIONS AT JOB SITE.

DATE : 10-25-24

REVISIONS :

TITLE : **1st FLOOR E FIRE ALARM PLAN**

SHEET : **FA1** OF **FA10**

PROJECT : 24216

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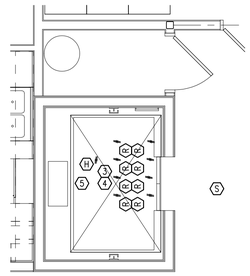
ELEVATOR KEYED NOTES:

1. MAIN POWER 175A, 208V, 3ø LOCKABLE FUSED DISCONNECT FED FROM SHUNT-TRIP BREAKER.
2. CAR HVAC AND LIGHTING 20A, 120V, 1ø DISCONNECT.
3. PROVIDE NORMALLY CLOSED CONTACT REPRESENTING ALL MACHINE ROOM AND HOISTWAY SMOKE DETECTORS.
4. PROVIDE NORMALLY CLOSED CONTACT REPRESENTING THE SMOKE DETECTOR AT THE DESIGNATED RETURN LANDING.
5. PROVIDE NORMALLY CLOSED CONTACT WITH WIRING FROM HEAT DETECTOR TO A CONTROLLER DESIGNATED BY ELEVATOR MANUFACTURER.
6. DEDICATED 20A RECEPTACLE SERVING OIL MINDER CONTROL SYSTEM.
7. STANCOR OIL-MINDER 20A, 120V, 1ø CONTROL SYSTEM WITH AUDIBLE ALARM.
8. 4" SCHED. 40 PVC CONDUIT WITH PULL WIRE FOR ROUTING OF OIL MINDER POWER CABLE, PROBE AND HIGH LIQUID ALARM.
9. DEDICATED 20A GFI RECEPTACLE FOR ELEVATOR SERVICE.
10. DEDICATED 20A RECEPTACLE FOR ELEVATOR ROOM.
11. DEDICATED OUTSIDE "ANALOG" TELEPHONE LINE CAPABLE OF CARRYING BOTH VOICE AND DATA. PROVIDE TWO-WAY COMMUNICATION SYSTEM BETWEEN THE LANDING SERVING THE ELEVATOR ON EACH FLOOR AND THE FIRE COMMAND CENTER OR A CENTRAL CONTROL POINT LOCATION APPROVED BY THE FIRE DEPARTMENT. WHERE THE CENTRAL CONTROL POINT IS NOT CONSISTENTLY MONITORED, THE TWO WAY COMMUNICATION SYSTEM SHALL HAVE TIMED, AUTOMATIC TELEPHONE DIAL-OUT CAPABILITY THAT PROVIDES TWO-WAY COMMUNICATION WITH AN APPROVED SUPERVISORY STATION OR 911. TWO-WAY SYSTEM SHALL INCLUDE BOTH AUDIBLE AND VISIBLE SIGNALS. DIRECTIONS FOR THE USE OF THE SYSTEM SHALL BE PROVIDED PER IBC 1009.8.2.

APARTMENT PLAN SCHEDULE

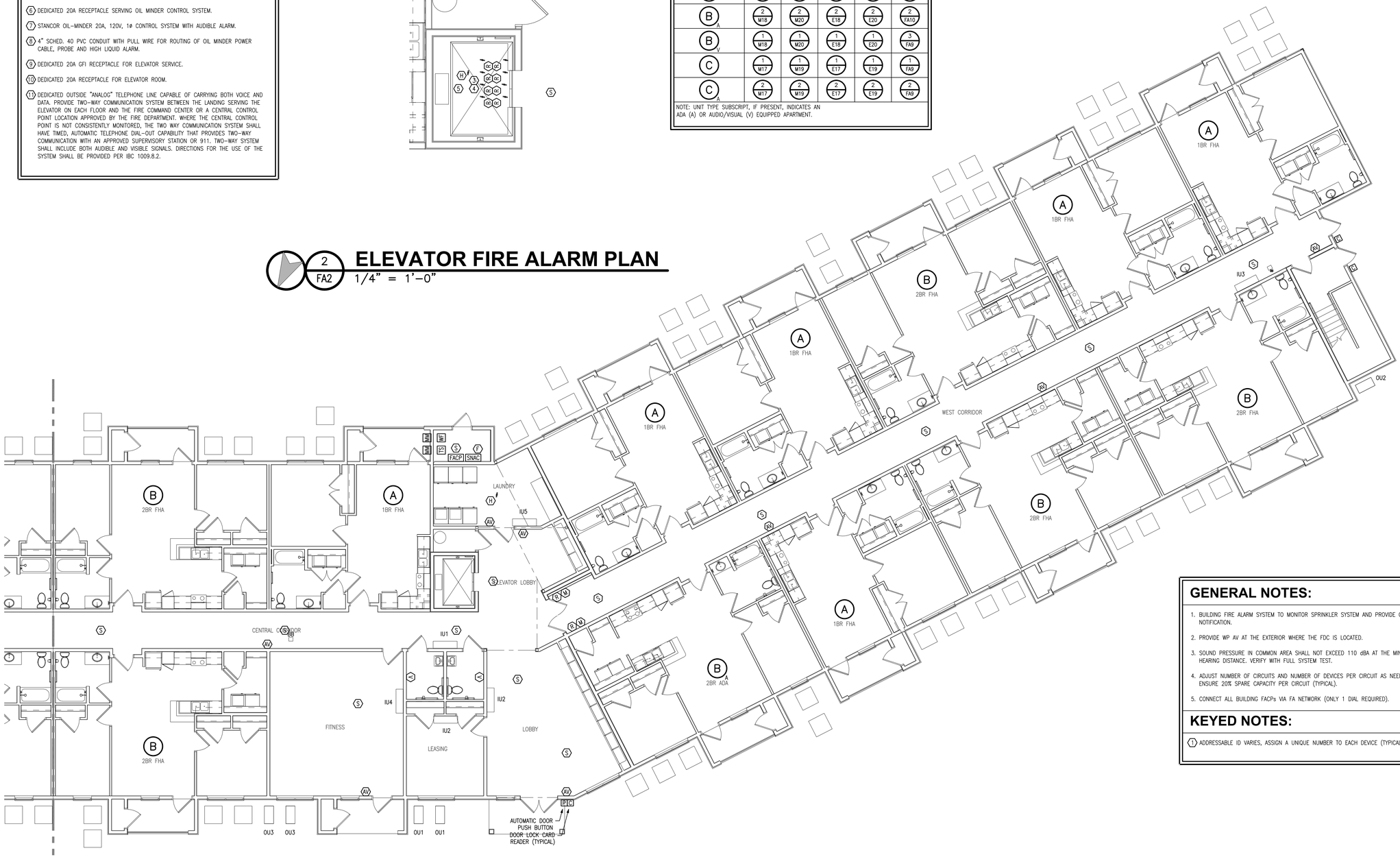
APARTMENT TYPE	PLUMBING	HVAC	POWER	LIGHTING	FIRE ALARM
A	3 M18	3 M20	3 E18	3 E20	3 FA10
A A	4 M18	4 M20	4 E18	4 E20	4 FA10
A V	3 M18	3 M20	3 E18	3 E20	4 FA9
B	1 M18	1 M20	1 E18	1 E20	1 FA10
B A	2 M18	2 M20	2 E18	2 E20	2 FA10
B V	1 M18	1 M20	1 E18	1 E20	3 FA9
C	1 M17	1 M19	1 E17	1 E19	1 FA9
C A	2 M17	2 M19	2 E17	2 E19	2 FA9

NOTE: UNIT TYPE SUBSCRIPT, IF PRESENT, INDICATES AN ADA (A) OR AUDIO/VISUAL (V) EQUIPPED APARTMENT.



2 FA2 ELEVATOR FIRE ALARM PLAN

1/4" = 1'-0"



1 FA2 1st FLOOR W FIRE ALARM PLAN

1/8" = 1'-0" WEST

GENERAL NOTES:

1. BUILDING FIRE ALARM SYSTEM TO MONITOR SPRINKLER SYSTEM AND PROVIDE OCCUPANT NOTIFICATION.
2. PROVIDE WP AV AT THE EXTERIOR WHERE THE FDC IS LOCATED.
3. SOUND PRESSURE IN COMMON AREA SHALL NOT EXCEED 110 dBA AT THE MINIMUM HEARING DISTANCE. VERIFY WITH FULL SYSTEM TEST.
4. ADJUST NUMBER OF CIRCUITS AND NUMBER OF DEVICES PER CIRCUIT AS NEEDED TO ENSURE 20% SPARE CAPACITY PER CIRCUIT (TYPICAL).
5. CONNECT ALL BUILDING FACPs VIA FA NETWORK (ONLY 1 DIAL REQUIRED).

KEYED NOTES:

1. ADDRESSABLE ID VARIES, ASSIGN A UNIQUE NUMBER TO EACH DEVICE (TYPICAL)

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DASHWOOD DRIVE & JETTY LANE
HOUSTON, HARRIS COUNTY, TX, 77072

CONTRACTOR SHALL CHECK & VERIFY ALL DIMENSIONS & CONDITIONS AT JOB SITE.

DATE : 10-25-24

REVISIONS :

TITLE : 1st FLOOR W FIRE ALARM PLAN

SHEET : FA2 OF FA10

PROJECT : 24216

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APARTMENT PLAN SCHEDULE

APARTMENT TYPE	PLUMBING	HVAC	POWER	LIGHTING	FIRE ALARM
A	3 M18	3 M20	3 E18	3 E20	3 FA10
A_A	4 M18	4 M20	4 E18	4 E20	4 FA10
A_V	3 M18	3 M20	3 E18	3 E20	4 FA9
B	1 M18	1 M20	1 E18	1 E20	1 FA10
B_A	2 M18	2 M20	2 E18	2 E20	2 FA10
B_V	1 M18	1 M20	1 E18	1 E20	3 FA9
C	1 M17	1 M19	1 E17	1 E19	1 FA9
C_A	2 M17	2 M18	2 E17	2 E19	2 FA9

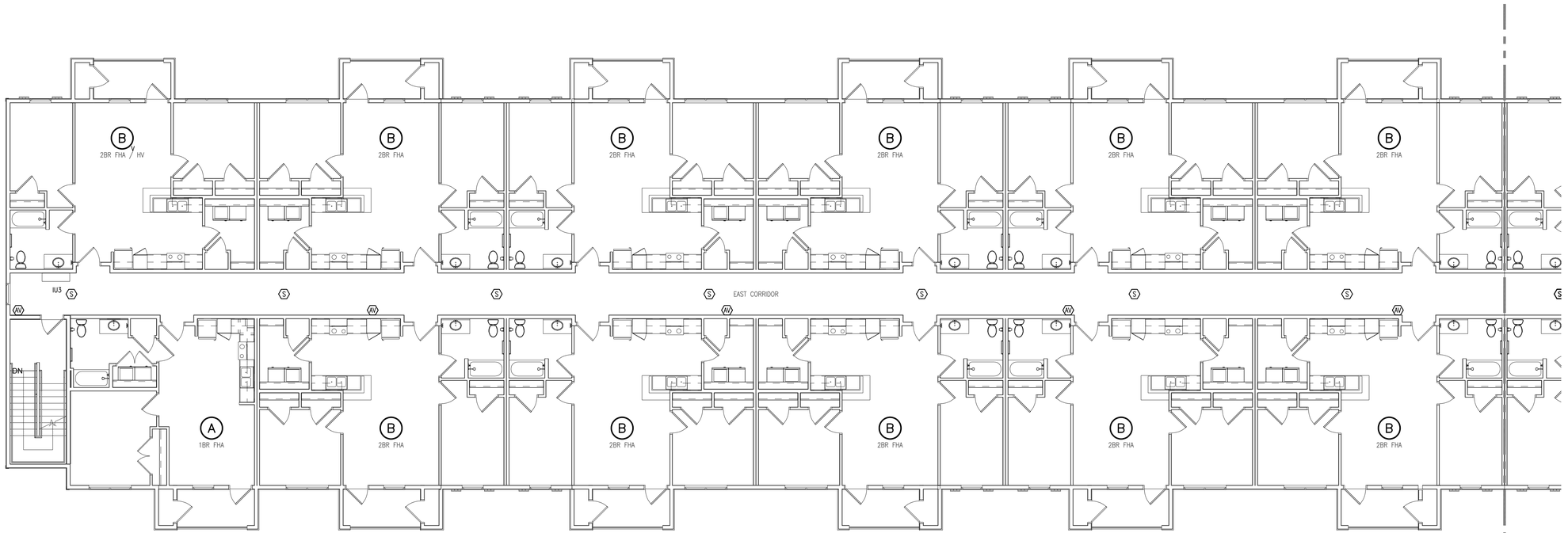
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4. ADJUST NUMBER OF CIRCUITS AND NUMBER OF DEVICES PER CIRCUIT AS NEEDED TO ENSURE 20% SPARE CAPACITY PER CIRCUIT (TYPICAL).
5. CONNECT ALL BUILDING FACPs VIA FA NETWORK (ONLY 1 DIAL REQUIRED).

KEYED NOTES:

(1) ADDRESSABLE ID VARIES, ASSIGN A UNIQUE NUMBER TO EACH DEVICE (TYPICAL)



1 / FA3 **2nd FLOOR E FIRE ALARM PLAN**

1/8" = 1'-0" EAST

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11-01-24

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CONTRACTOR SHALL CHECK & VERIFY ALL DIMENSIONS & CONDITIONS AT JOB SITE.

DATE : 10-25-24

REVISIONS :

TITLE : **2nd FLOOR E FIRE ALARM PLAN**

SHEET : **FA3** OF **FA10**

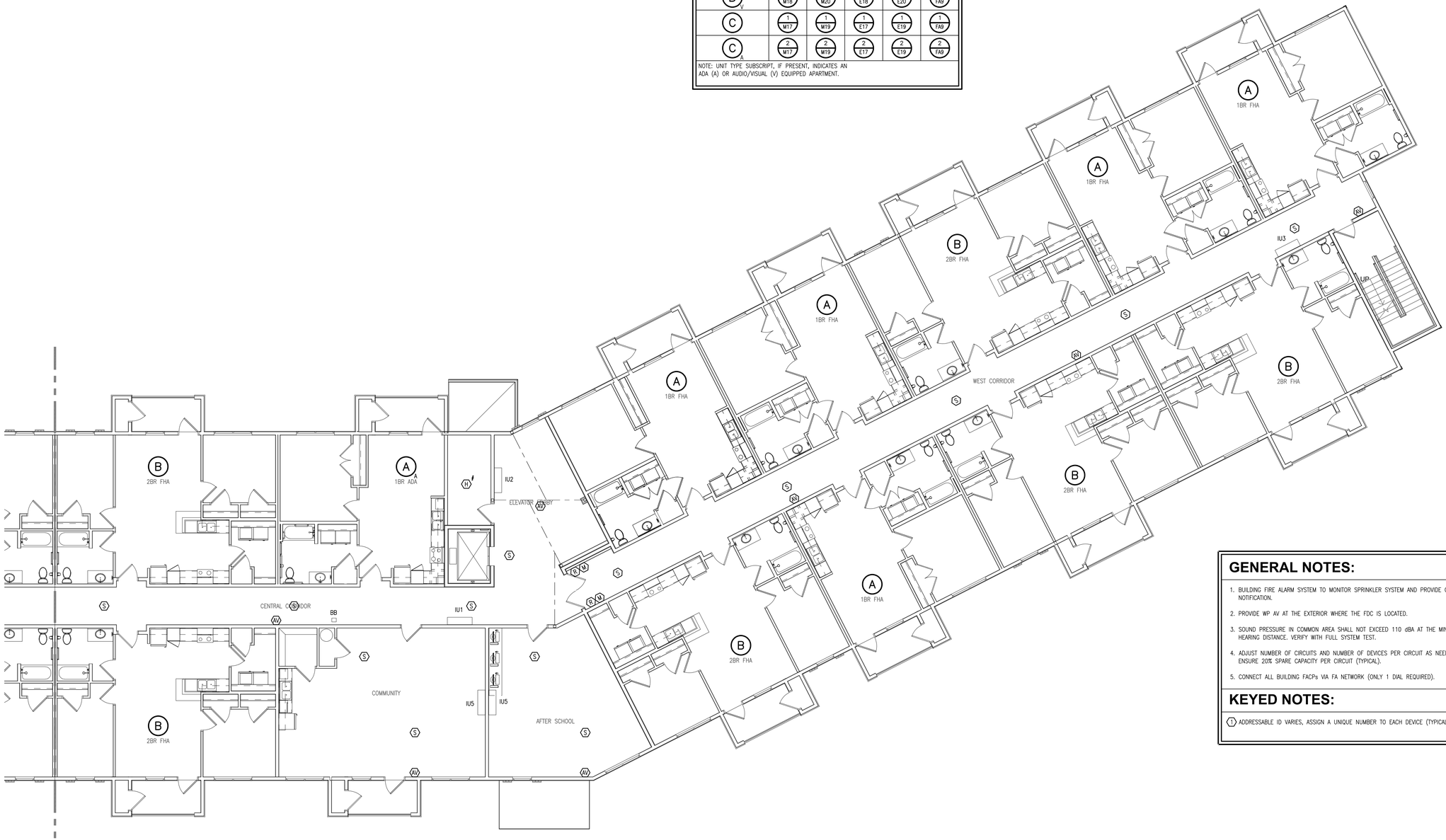
PROJECT : 24216

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APARTMENT PLAN SCHEDULE

APARTMENT TYPE	PLUMBING	HVAC	POWER	LIGHTING	FIRE ALARM
A	3 M18	3 M20	3 E18	3 E20	3 FA10
A A	4 M18	4 M20	4 E18	4 E20	4 FA10
A V	3 M18	3 M20	3 E18	3 E20	4 FA9
B	1 M18	1 M20	1 E18	1 E20	1 FA10
B A	2 M18	2 M20	2 E18	2 E20	2 FA10
B V	1 M18	1 M20	1 E18	1 E20	1 FA9
C	1 M17	1 M19	1 E17	1 E19	1 FA9
C A	2 M17	2 M19	2 E17	2 E19	2 FA9

NOTE: UNIT TYPE SUBSCRIPT, IF PRESENT, INDICATES AN ADA (A) OR AUDIO/VISUAL (V) EQUIPPED APARTMENT.



GENERAL NOTES:

1. BUILDING FIRE ALARM SYSTEM TO MONITOR SPRINKLER SYSTEM AND PROVIDE OCCUPANT NOTIFICATION.
2. PROVIDE WP AV AT THE EXTERIOR WHERE THE FDC IS LOCATED.
3. SOUND PRESSURE IN COMMON AREA SHALL NOT EXCEED 110 dBA AT THE MINIMUM HEARING DISTANCE. VERIFY WITH FULL SYSTEM TEST.
4. ADJUST NUMBER OF CIRCUITS AND NUMBER OF DEVICES PER CIRCUIT AS NEEDED TO ENSURE 20% SPARE CAPACITY PER CIRCUIT (TYPICAL).
5. CONNECT ALL BUILDING FACPs VIA FA NETWORK (ONLY 1 DIAL REQUIRED).

KEYED NOTES:

(1) ADDRESSABLE ID VARIES, ASSIGN A UNIQUE NUMBER TO EACH DEVICE (TYPICAL)

2nd FLOOR W FIRE ALARM PLAN

1/8" = 1'-0" WEST

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TX# 113587
STATE OF TEXAS
FREDDIE MALICOAT
113587
LICENSED PROFESSIONAL ENGINEER
11-01-24

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DASHWOOD TRAILS

DASHWOOD DRIVE & JETTY LANE
HOUSTON, HARRIS COUNTY, TX, 77072

CONTRACTOR SHALL CHECK & VERIFY ALL DIMENSIONS & CONDITIONS AT JOB SITE.

DATE : 10-25-24

REVISIONS :

TITLE : 2nd FLOOR W FIRE ALARM PLAN

SHEET : FA4 OF FA10

PROJECT : 24216

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APARTMENT PLAN SCHEDULE

APARTMENT TYPE	PLUMBING	HVAC	POWER	LIGHTING	FIRE ALARM
A	3 M18	3 M20	3 E18	3 E20	3 FA10
A_A	4 M18	4 M20	4 E18	4 E20	4 FA10
A_V	3 M18	3 M20	3 E18	3 E20	4 FA9
B	1 M18	1 M20	1 E18	1 E20	1 FA10
B_A	2 M18	2 M20	2 E18	2 E20	2 FA10
B_V	1 M18	1 M20	1 E18	1 E20	3 FA9
C	1 M17	1 M19	1 E17	1 E19	1 FA9
C_A	2 M17	2 M18	2 E17	2 E19	2 FA9

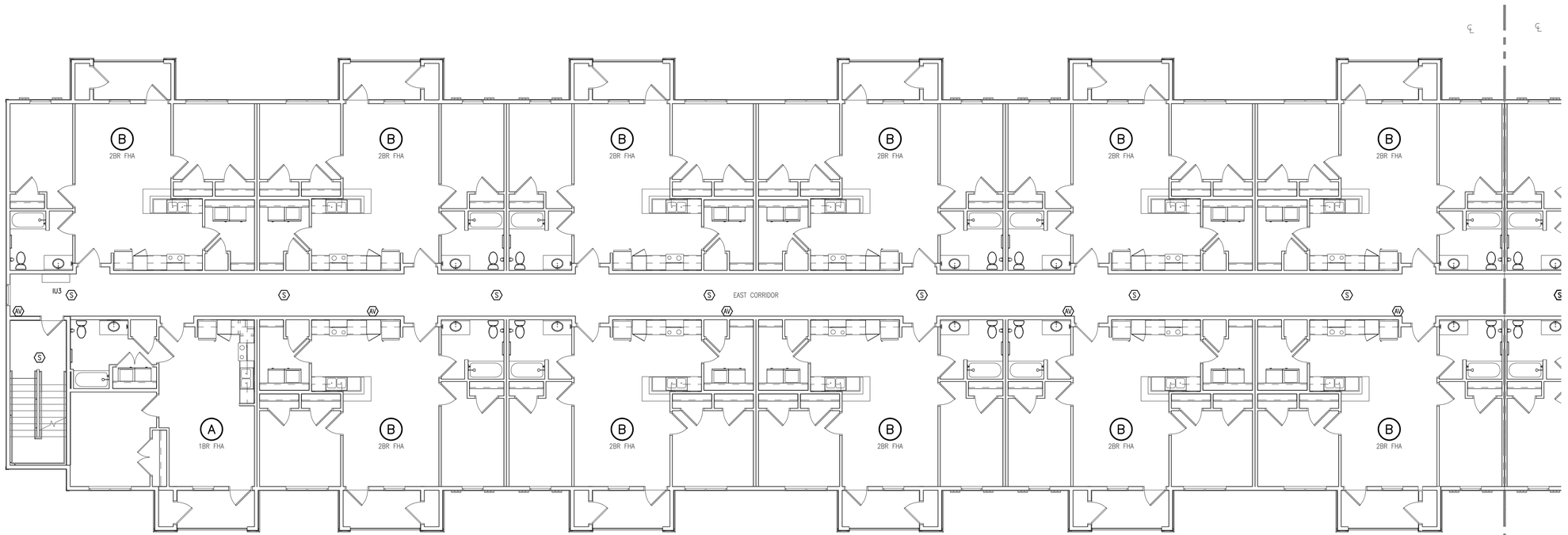
NOTE: UNIT TYPE SUBSCRIPT, IF PRESENT, INDICATES AN ADA (A) OR AUDIO/VISUAL (V) EQUIPPED APARTMENT.

GENERAL NOTES:

1. BUILDING FIRE ALARM SYSTEM TO MONITOR SPRINKLER SYSTEM AND PROVIDE OCCUPANT NOTIFICATION.
2. PROVIDE WP AV AT THE EXTERIOR WHERE THE FDC IS LOCATED.
3. SOUND PRESSURE IN COMMON AREA SHALL NOT EXCEED 110 dBA AT THE MINIMUM HEARING DISTANCE. VERIFY WITH FULL SYSTEM TEST.
4. ADJUST NUMBER OF CIRCUITS AND NUMBER OF DEVICES PER CIRCUIT AS NEEDED TO ENSURE 20% SPARE CAPACITY PER CIRCUIT (TYPICAL).
5. CONNECT ALL BUILDING FACPs VIA FA NETWORK (ONLY 1 DIAL REQUIRED).

KEYED NOTES:

(1) ADDRESSABLE ID VARIES, ASSIGN A UNIQUE NUMBER TO EACH DEVICE (TYPICAL)



1 FA5 **3rd FLOOR E FIRE ALARM PLAN**

1/8" = 1'-0" EAST

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DATE : 10-25-24

REVISIONS :

TITLE : **3rd FLOOR E FIRE ALARM PLAN**

SHEET : **FA5** OF **FA10**

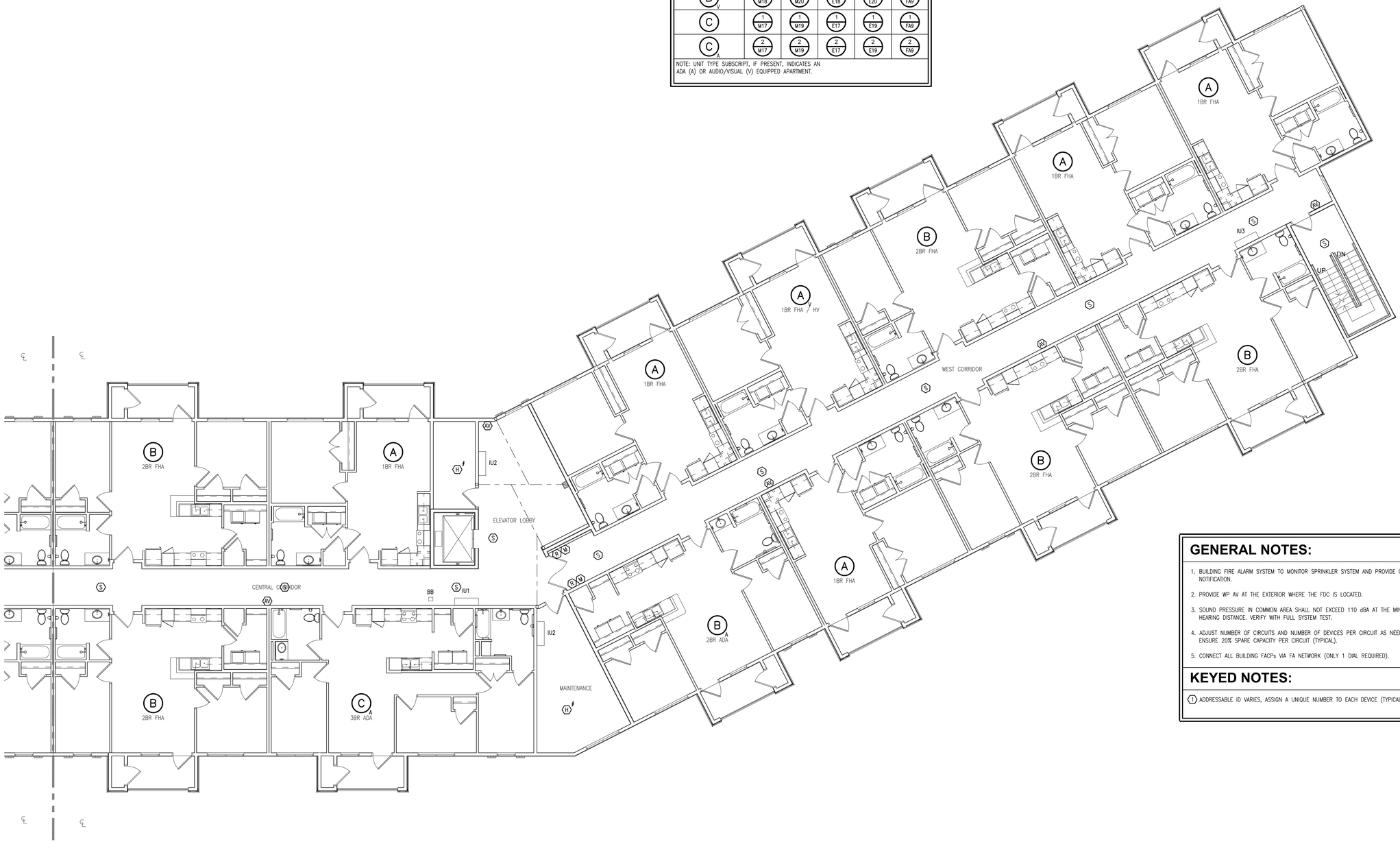
PROJECT : 24216

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APARTMENT PLAN SCHEDULE

APARTMENT TYPE	PLUMBING	HVAC	POWER	LIGHTING	FIRE ALARM
A	3 M18	3 M20	3 E18	3 E20	3 FA10
A A	4 M18	4 M20	4 E18	4 E20	4 FA10
A V	3 M18	3 M20	3 E18	3 E20	4 FA9
B	1 M18	1 M20	1 E18	1 E20	1 FA10
B A	2 M18	2 M20	2 E18	2 E20	2 FA10
B V	1 M18	1 M20	1 E18	1 E20	1 FA9
C	1 M17	1 M19	1 E17	1 E19	1 FA9
C A	2 M17	2 M19	2 E17	2 E19	2 FA9

NOTE: UNIT TYPE SUBSCRIPT, IF PRESENT, INDICATES AN ADA (A) OR AUDIO/VISUAL (V) EQUIPPED APARTMENT.



GENERAL NOTES:

1. BUILDING FIRE ALARM SYSTEM TO MONITOR SPRINKLER SYSTEM AND PROVIDE OCCUPANT NOTIFICATION.
2. PROVIDE WP AV AT THE EXTERIOR WHERE THE FDC IS LOCATED.
3. SOUND PRESSURE IN COMMON AREA SHALL NOT EXCEED 110 dBA AT THE MINIMUM HEARING DISTANCE. VERIFY WITH FULL SYSTEM TEST.
4. ADJUST NUMBER OF CIRCUITS AND NUMBER OF DEVICES PER CIRCUIT AS NEEDED TO ENSURE 20% SPARE CAPACITY PER CIRCUIT (TYPICAL).
5. CONNECT ALL BUILDING FACPs VIA FA NETWORK (ONLY 1 DIAL REQUIRED).

KEYED NOTES:

(1) ADDRESSABLE ID VARIES, ASSIGN A UNIQUE NUMBER TO EACH DEVICE (TYPICAL)

1/FA6 3rd FLOOR W FIRE ALARM PLAN

1/8" = 1'-0" WEST

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CONTRACTOR SHALL CHECK & VERIFY ALL DIMENSIONS & CONDITIONS AT JOB SITE.

DATE : 10-25-24

REVISIONS :

TITLE : 3rd FLOOR W FIRE ALARM PLAN

SHEET : FA6 OF FA10

PROJECT : 24216

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APARTMENT PLAN SCHEDULE

APARTMENT TYPE	PLUMBING	HVAC	POWER	LIGHTING	FIRE ALARM
A	3 / M18	3 / M20	3 / E18	3 / E20	3 / FA10
A_A	4 / M18	4 / M20	4 / E18	4 / E20	4 / FA10
A_V	3 / M18	3 / M20	3 / E18	3 / E20	4 / FA9
B	1 / M18	1 / M20	1 / E18	1 / E20	1 / FA10
B_A	2 / M18	2 / M20	2 / E18	2 / E20	2 / FA10
B_V	1 / M18	1 / M20	1 / E18	1 / E20	3 / FA9
C	1 / M17	1 / M19	1 / E17	1 / E19	1 / FA9
C_A	2 / M17	2 / M18	2 / E17	2 / E19	2 / FA9

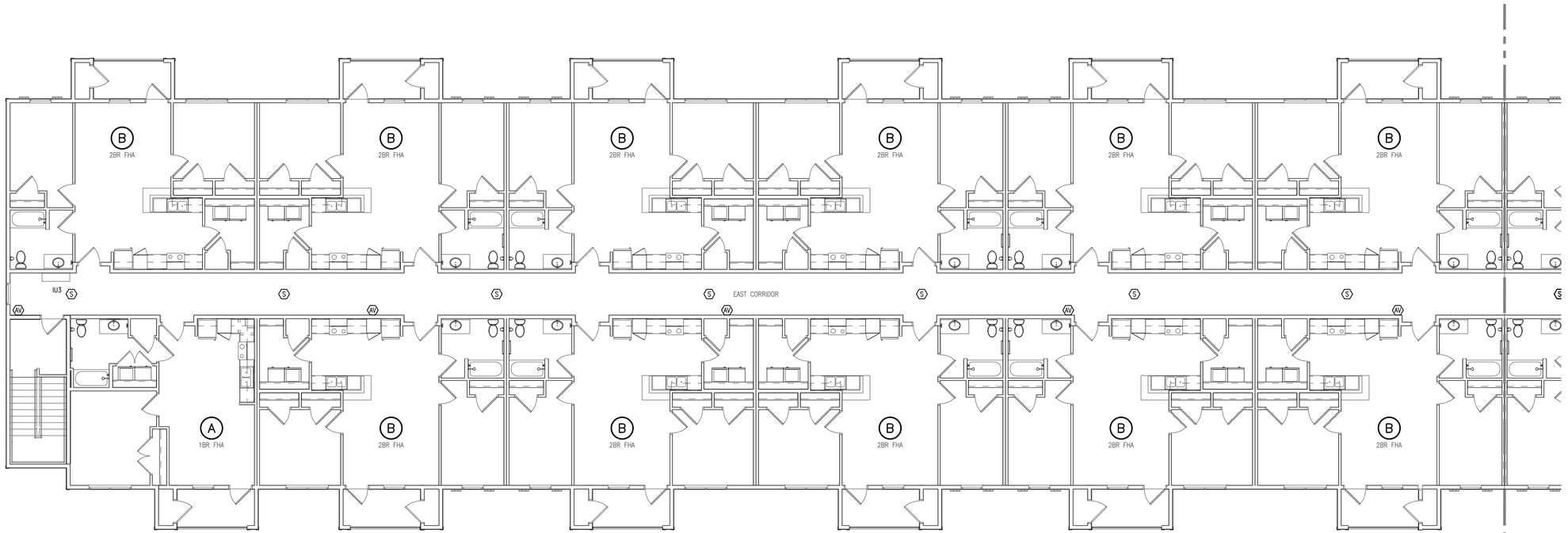
NOTE: UNIT TYPE SUBSCRIPT, IF PRESENT, INDICATES AN ADA (A) OR AUDIO/VISUAL (V) EQUIPPED APARTMENT.

GENERAL NOTES:

1. BUILDING FIRE ALARM SYSTEM TO MONITOR SPRINKLER SYSTEM AND PROVIDE OCCUPANT NOTIFICATION.
2. PROVIDE WP AV AT THE EXTERIOR WHERE THE FDC IS LOCATED.
3. SOUND PRESSURE IN COMMON AREA SHALL NOT EXCEED 110 dBA AT THE MINIMUM HEARING DISTANCE. VERIFY WITH FULL SYSTEM TEST.
4. ADJUST NUMBER OF CIRCUITS AND NUMBER OF DEVICES PER CIRCUIT AS NEEDED TO ENSURE 20% SPARE CAPACITY PER CIRCUIT (TYPICAL).
5. CONNECT ALL BUILDING FACPs VIA FA NETWORK (ONLY 1 DIAL REQUIRED).

KEYED NOTES:

(1) ADDRESSABLE ID VARIES, ASSIGN A UNIQUE NUMBER TO EACH DEVICE (TYPICAL)



1 / FA7 **4th FLOOR E FIRE ALARM PLAN**

1/8" = 1'-0" EAST

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DASHWOOD DRIVE & JETTY LANE
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CONTRACTOR SHALL CHECK & VERIFY ALL DIMENSIONS & CONDITIONS AT JOB SITE.

DATE : 10-25-24

REVISIONS :

TITLE : **4th FLOOR E FIRE ALARM PLAN**

SHEET : **FA7** OF **FA10**

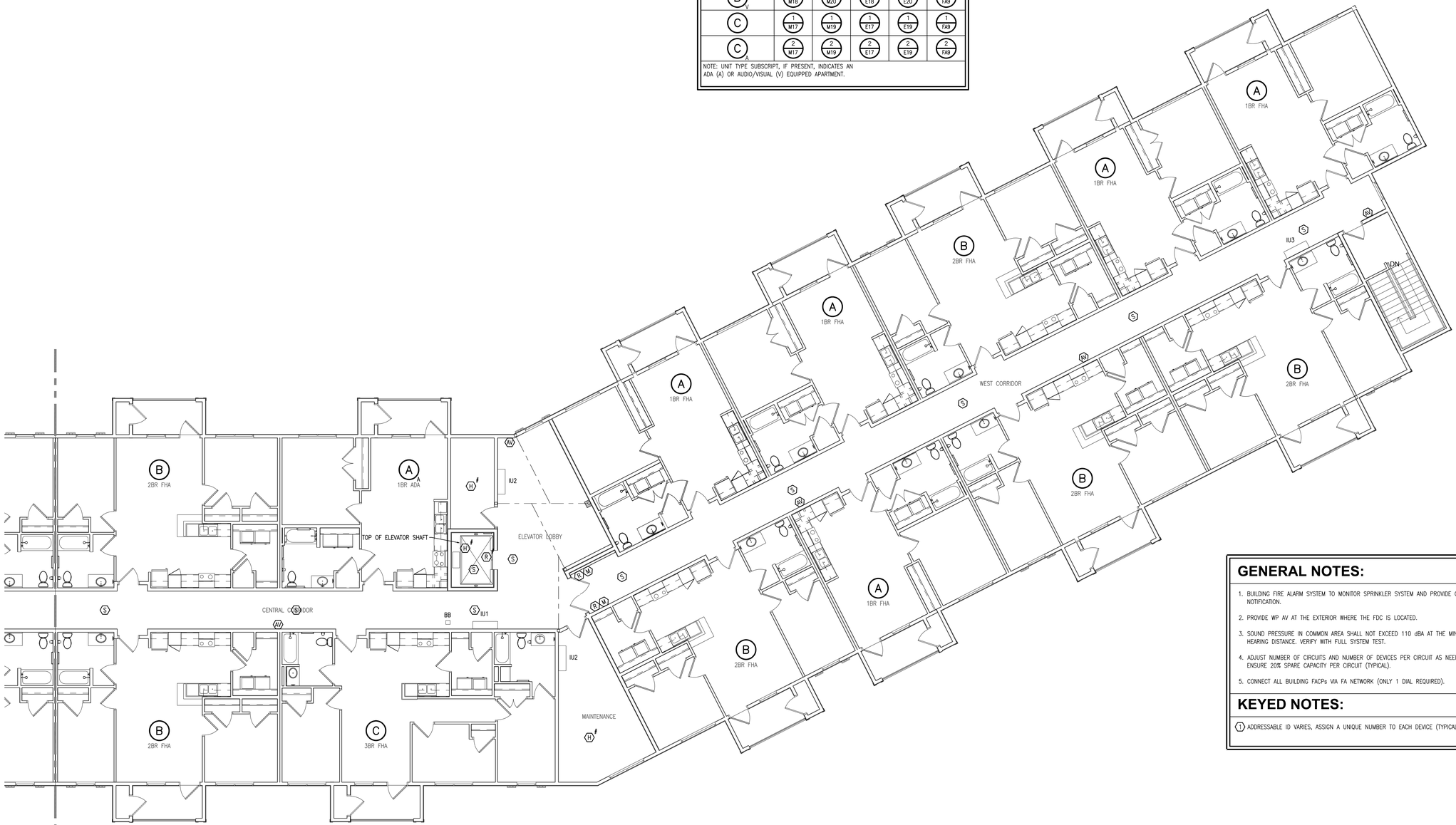
PROJECT : 24216

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APARTMENT PLAN SCHEDULE

APARTMENT TYPE	PLUMBING	HVAC	POWER	LIGHTING	FIRE ALARM
A	3 M18	3 M20	3 E18	3 E20	3 FA10
A A	4 M18	4 M20	4 E18	4 E20	4 FA10
A V	3 M18	3 M20	3 E18	3 E20	4 FA9
B	1 M18	1 M20	1 E18	1 E20	1 FA10
B A	2 M18	2 M20	2 E18	2 E20	2 FA10
B V	1 M18	1 M20	1 E18	1 E20	1 FA9
C	1 M17	1 M19	1 E17	1 E19	1 FA9
C A	2 M17	2 M19	2 E17	2 E19	2 FA9

NOTE: UNIT TYPE SUBSCRIPT, IF PRESENT, INDICATES AN ADA (A) OR AUDIO/VISUAL (V) EQUIPPED APARTMENT.



GENERAL NOTES:

1. BUILDING FIRE ALARM SYSTEM TO MONITOR SPRINKLER SYSTEM AND PROVIDE OCCUPANT NOTIFICATION.
2. PROVIDE WP AV AT THE EXTERIOR WHERE THE FDC IS LOCATED.
3. SOUND PRESSURE IN COMMON AREA SHALL NOT EXCEED 110 dBA AT THE MINIMUM HEARING DISTANCE. VERIFY WITH FULL SYSTEM TEST.
4. ADJUST NUMBER OF CIRCUITS AND NUMBER OF DEVICES PER CIRCUIT AS NEEDED TO ENSURE 20% SPARE CAPACITY PER CIRCUIT (TYPICAL).
5. CONNECT ALL BUILDING FACPs VIA FA NETWORK (ONLY 1 DIAL REQUIRED).

KEYED NOTES:

(1) ADDRESSABLE ID VARIES, ASSIGN A UNIQUE NUMBER TO EACH DEVICE (TYPICAL)

4th FLOOR W FIRE ALARM PLAN

1/8" = 1'-0" WEST

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CONTRACTOR SHALL CHECK & VERIFY ALL DIMENSIONS & CONDITIONS AT JOB SITE.

DATE : 10-25-24

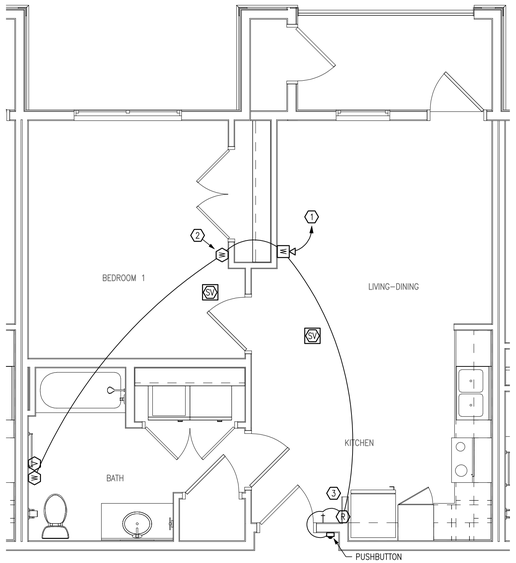
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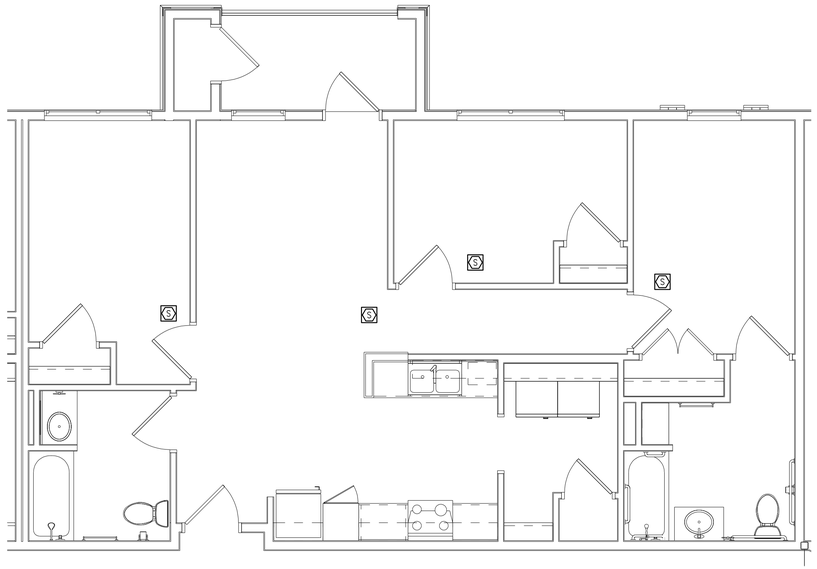
TITLE : 4th FLOOR W FIRE ALARM PLAN

SHEET : FA8 OF FA10

PROJECT : 24216

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4 FA9 1BR FHA/HV FIRE ALARM PLAN
1/4" = 1'–0"

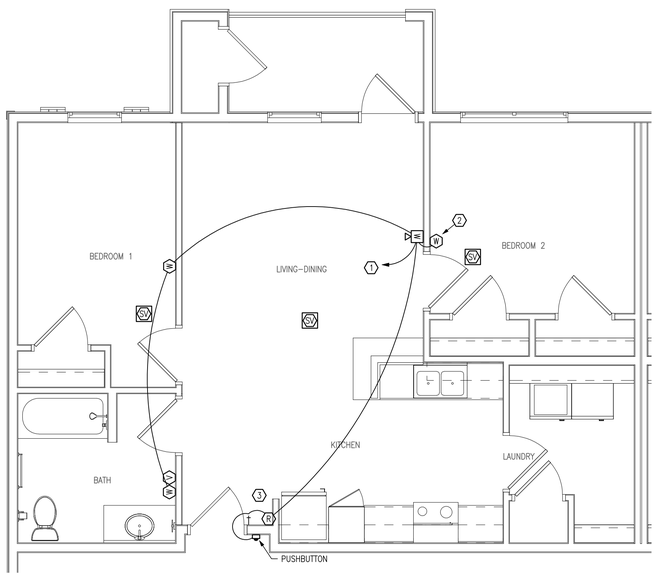
2 FA9 3BR ADA FIRE ALARM PLAN
1/4" = 1'–0"

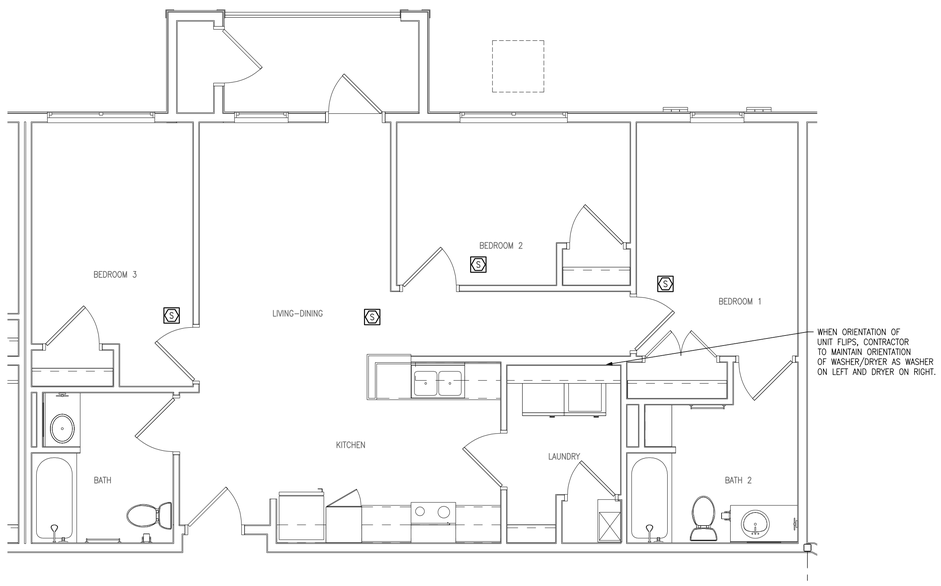
GENERAL NOTES:

1. PROVIDE 24V SMOKE DETECTORS (SUPERVISORY ONLY) WITH LOW FREQUENCY SOUNDERS (TO ALARM ON BOTH INDIVIDUAL UNIT ALARM AND BUILDING SYSTEM ALARM) INSIDE ALL SLEEPING AREAS AND OUTSIDE OF EACH SEPARATE DWELLING UNIT WITHIN 21FT OF ANY DOOR TO A SLEEPING ROOM MEASURED ALONG THE PATH OF TRAVEL.
2. UNIT SMOKE ALARMS SHALL BE INTERCONNECTED PER IBC 907.2.11.5.
3. ADJUST NUMBER OF CIRCUITS AND NUMBER OF DEVICES PER CIRCUIT AS NEEDED TO ENSURE 20% SPARE CAPACITY PER CIRCUIT (TYPICAL).
4. SUPPLY SEPARATE 20V DC POWER FOR ALL AUDIBLE (LOW FREQUENCY) SMOKE DETECTORS IN UNITS.
5. UNIT ALARMS TO PROVIDE SOUND OF 15dBA ABOVE AMBIENT.

KEYED NOTES:

1. 24V. POWER FROM (NO COMMUNICATION WITH) FIRE ALARM CONTROL PANEL (FACP).
2. WHITE LIGHT INDICATOR (TYPICAL FOR ALL DEVICES MARKED "W").
3. PROVIDE SWITCH FOR DISABLING DOOR ALERT SYSTEM AND TIMED RELAY TO HOLD POWER ON A FEW SECONDS AFTER RELEASE OF PUSHBUTTON SWITCH (TYPICAL).





3 FA9 2BR FHA/HV FIRE ALARM PLAN
1/4" = 1'–0"

1 FA9 3BR FHA FIRE ALARM PLAN
1/4" = 1'–0"

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HOUSTON, HARRIS COUNTY, TX, 77072

CONTRACTOR SHALL CHECK & VERIFY ALL DIMENSIONS & CONDITIONS AT JOB SITE.

DATE : 10–25–24

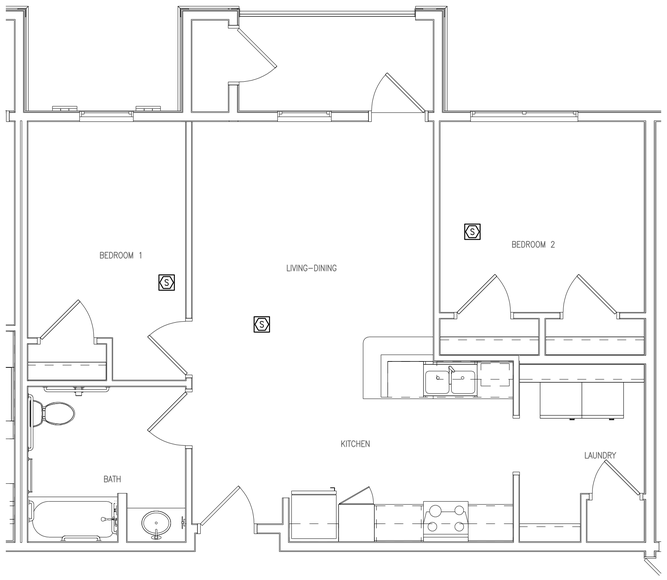
REVISIONS :

TITLE : **3BR APT FIRE ALARM PLANS**

SHEET : **FA9** OF **FA10**

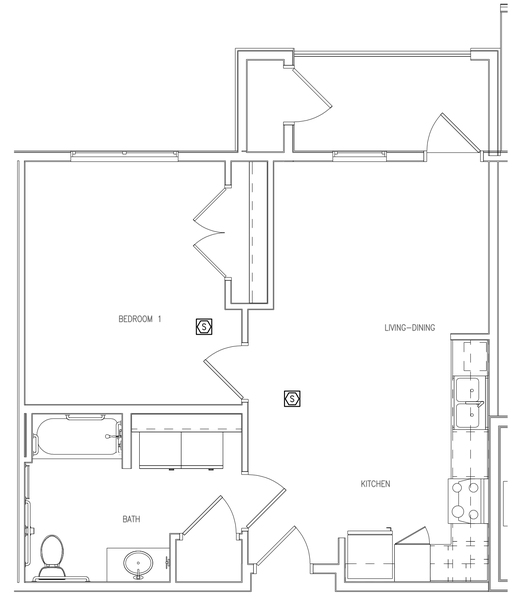
PROJECT : 24216

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2 FA10 2BR ADA FIRE ALARM PLAN

1/4" = 1'–0"



4 FA10 1BR ADA FIRE ALARM PLAN

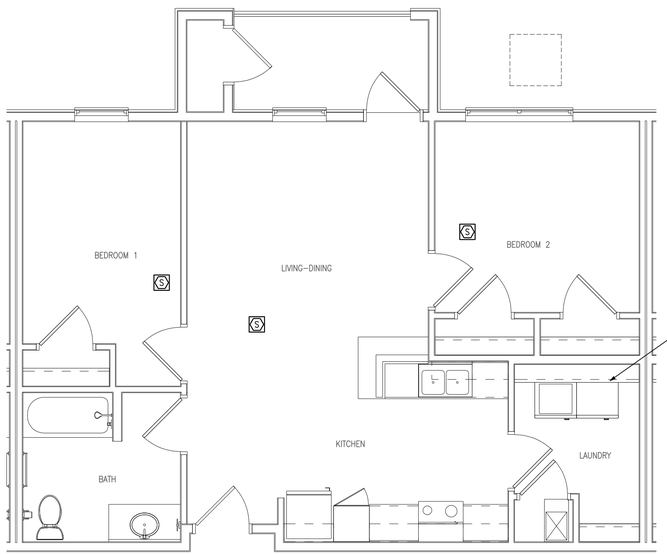
1/4" = 1'–0"

GENERAL NOTES:

1. PROVIDE 24V SMOKE DETECTORS (SUPERVISORY ONLY) WITH LOW FREQUENCY SOUNDERS (TO ALARM ON BOTH INDIVIDUAL UNIT ALARM AND BUILDING SYSTEM ALARM) INSIDE ALL SLEEPING AREAS AND OUTSIDE OF EACH SEPARATE DWELLING UNIT WITHIN 21FT OF ANY DOOR TO A SLEEPING ROOM MEASURED ALONG THE PATH OF TRAVEL.
2. UNIT SMOKE ALARMS SHALL BE INTERCONNECTED PER IBC 907.2.11.5.
3. ADJUST NUMBER OF CIRCUITS AND NUMBER OF DEVICES PER CIRCUIT AS NEEDED TO ENSURE 20% SPARE CAPACITY PER CIRCUIT (TYPICAL).
4. SUPPLY SEPARATE 20V DC POWER FOR ALL AUDIBLE (LOW FREQUENCY) SMOKE DETECTORS IN UNITS.
5. UNIT ALARMS TO PROVIDE SOUND OF 15dBA ABOVE AMBIENT.

KEYED NOTES:

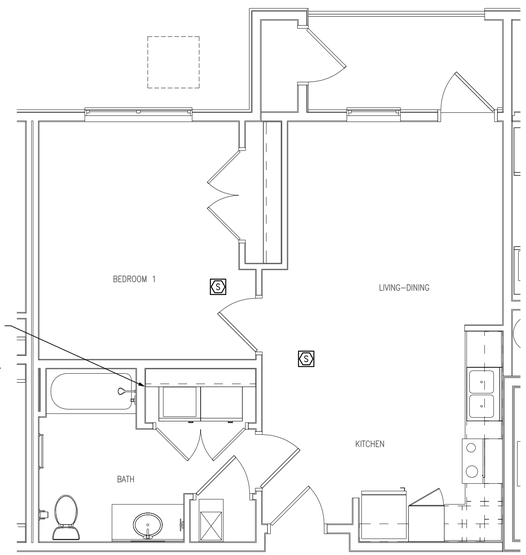
1. 24V. POWER FROM (NO COMMUNICATION WITH) FIRE ALARM CONTROL PANEL (FACP).
2. WHITE LIGHT INDICATOR (TYPICAL FOR ALL DEVICES MARKED "W").
3. PROVIDE SWITCH FOR DISABLING DOOR ALERT SYSTEM AND TIMED RELAY TO HOLD POWER ON A FEW SECONDS AFTER RELEASE OF PUSHBUTTON SWITCH (TYPICAL).



1 FA10 2BR FHA FIRE ALARM PLAN

1/4" = 1'–0"

WHEN ORIENTATION OF UNIT FLIPS, CONTRACTOR TO MAINTAIN ORIENTATION OF WASHER/DRYER AS WASHER ON LEFT AND DRYER ON RIGHT.



3 FA10 1BR FHA FIRE ALARM PLAN

1/4" = 1'–0"

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HOUSTON, HARRIS COUNTY, TX, 77072

CONTRACTOR SHALL CHECK & VERIFY ALL DIMENSIONS & CONDITIONS AT JOB SITE.

DATE : 10–25–24

REVISIONS :

TITLE :
2-1BR APT FIRE ALARM PLANS

SHEET :
FA10
OF
FA10

PROJECT : 24216

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