## Vanguard

### Lee's Summit, Missouri

**PROJECT NO.: 20-078** 

ISSUE DATE: 9.2.2021 100% BID/PERMIT PACKAGE

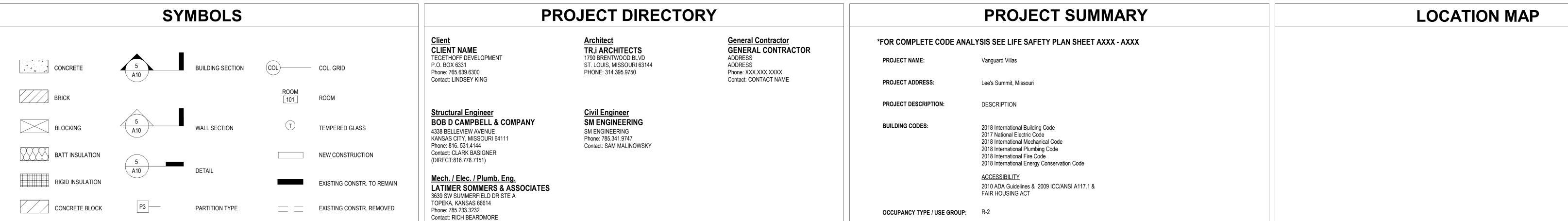
#### **GENERAL NOTES**

- . AIA DOCUMENT A-201, GENERAL CONDITIONS OF THE CONTRACT FOR CONSTRUCTION, CURRENT EDITION, AND SPECIAL CONDITIONS AS NOTED IN THE PROJECT MANUAL, SHALL GOVERN THE WORK.
- 2. GENERAL CONTRACTOR AND SUBCONTRACTORS SHALL VERIFY EXISTING FIELD CONDITIONS PRIOR TO THE START OF CONSTRUCTION AND SHALL REPORT ANY DISCREPANCIES TO THE ARCHITECT IMMEDIATELY.
- 3. GENERAL CONTRACTOR SHALL CROSS-REFERENCE THE VARIOUS DISCIPLINES' PLANS HEREIN AND REVIEWED SHOP DRAWINGS PRIOR TO STARTING
- 4. ONLY CONTRACT DOCUMENTS APPROVED FOR CONSTRUCTION AND REVIEWED SHOP DRAWINGS SHALL BE USED FOR CONSTRUCTION. GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR DISTRIBUTION OF SAID DOCUMENTS AND LIPDATES TO THE FIELD FOR CONSTRUCTION.
- 5. IT SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO COORDINATE THE SUBCONTRACTOR WORK WITH THESE PROJECT
- 6. DIMENSIONS TO THE EXTERIOR OF THE BUILDING ARE TO THE EXTERIOR OF FOUNDATION/MASONRY UNLESS NOTED OTHERWISE.
- 7. DO NOT SCALE DRAWINGS.
- THE WORD 'ALIGN' AS USED IN THESE DOCUMENTS SHALL SUPERSEDE DIMENSIONAL INFORMATION.
- 9. NO PRODUCTS CONTAINING ASBESTOS SHALL BE INSTALLED IN OR USED DURING THE CONSTRUCTION OF THIS PROJECT. IT SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO CERTIFY TO THE OWNER THAT THIS REQUIREMENT HAS BEEN COMPLIED WITH
- 10. ALL HVAC EQUIPMENT AND DUCTWORK SHALL COMPLY WITH THE CURRENT APPLICABLE MECHANICAL CODE AND INSTALLED PER SMACN RECOMMENDATIONS.
- 11. CODE COMPLIANCE THE WORK SHALL BE GOVERNED BY ALL CURRENT APPLICABLE LOCAL, CITY, STATE AND NATIONAL CODES AND LAWS. THESE AUTHORITIES INCLUDE, BUT ARE NOT LIMITED TO THE INTERNATIONAL BUILDING CODE, NATIONAL ELECTRIC CODE, NATIONAL FIRE PROTECTION ASSOCIATION OR ANY OTHER AUTHORITY OR BODY HAVING JURISDICTION OVER WORK. THE SITE, PARKING LOT, AND BUILDING SHALL COMPLY WITH ADA (AMERICANS WITH DISABILITIES ACT) REGULATIONS. NOTIFY ARCHITECT OF ANY REQUIRED CHANGES TO COMPLY WITH ADA
- 2. REFERENCE CIVIL DRAWINGS FOR SITE WORK, INCLUDING THE BUILDING LOCATION ON THE SITE.

<b>ABBREVIATIONS</b>	3

	ADDI				
ABV	ABOVE	HDWD	HARDWOOD	SCHED	SCHEDULE
AFF	ABOVE FINISH FLOOR	HDPB	HIGH DENSITY	SECT	SECTION
ACT	ACOUSTICAL		PARTICLE BOARD	SHT	SHEET
ALUM	ALUMINUM	HT	HEIGHT	SIM	SIMILAR
&	AND	HR	HOUR	SC	SOLID CORE
@	AT	TIIX	HOOK	SPEC	SPECIFICATION
0		INSUL	INSULATION	SQ	SQUARE
BLK	BLOCK			SF	SQUARE FOOT
D	BOARD	JT	JOINT	SS	STAINLESS STEEL
30	BOTTOM OF	0.1	33.11	STD	STANDARD
	2011011101	LAV	LAVATORY	STL	STEEL
LG	CEILING	LAV	LAVATORT	STRUCT	STRUCTURAL
<b>©</b> CT	CENTER LINE	MO	MASONRY OPENING		
<del>بر</del>	CERAMIC TILE	MSRY	MASONRY	SUSP	SUSPENDED
LR	CLEAR		MEDIUM DENSITY	TEI	TELEDUONE
ONC	CONCRETE	MDF	FIBERBOARD	TEL	TELEPHONE
CMU	CONCRETE CONC. MASONRY UNIT	MEOU		THK	THICK
		MECH	MECHANICAL	TO	TOP OF
CONT	CONTINOUS	MTL	METAL	T&G	TONGUE & GROOVE
ONTR	CONTRACTOR			TYP	TYPICAL
FCI	CONTRACTOR FURNISHED	NIC	NOT IN CONTRACT	LINIE	LINENIOLIED
	CONTRACTOR INSTALLED	NTS	NOT TO SCALE	UNF	UNFINISHED
J	CONTROL JOINT			UNO	UNLESS NOTED OTHERWISE
G	CORNER GUARD	OFCI	OWNER FURNISHED		
	DETAIL		CONTRACTOR INSTALLED	VERT	VERTICAL
)TL	DETAIL	OFOI	OWNER FURNISHED	VEST	VESTIBULE
IA	DIAMETER		OWNER INSTALLED		
)R	DOOR	OC	ON CENTER	WP	WATERPROOF
S	DOWNSPOUT	OPNG	OPENING	WT	WEIGHT
)WG	DRAWING			W/	WITH
00	EDGE OF CLAP	PTD	PAINTED	W/O	WITH OUT
OS ELEC	EDGE OF SLAB ELECTRICAL	PLAM	PLASTIC LAMINATE	WD	WOOD
LEV	ELEVATION	PLYWD	PLYWOOD	WD	WOOD
	EQUAL	PT	PRESSURE TREATED		
EQ FOLUD			TREGOORE TREATED		
EQUIP	EQUIPMENT	RAD	RADIUS		
EXIST	EXISTING	RE:	REFERENCE		
EJ	EXPANSION JOINT	REINF	REINFORCING		
-T	FEET	RCP	REFLECTED CEILING PLAN		
-1 =G	FINISH GRADE	REQ'D	REQUIRED		
		REQ D	ROOF DRAIN		
F R	FINISH FLOOR FIRE RETARDANT				
-K -L	FIRE RETARDANT FLOOR	RM	ROOM		
-	LOOK	RO	ROUGH OPENING		
GC	GENERAL CONTR.				
GYP	GYPSUM				







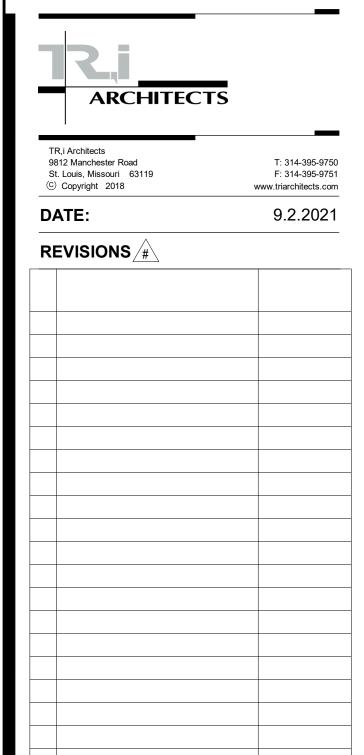
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ENERAL CONTRACTOR
ECHANICAL ENGINEER

OB D CAMPBELL & COMPANY
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ENERAL CONTRACTOR

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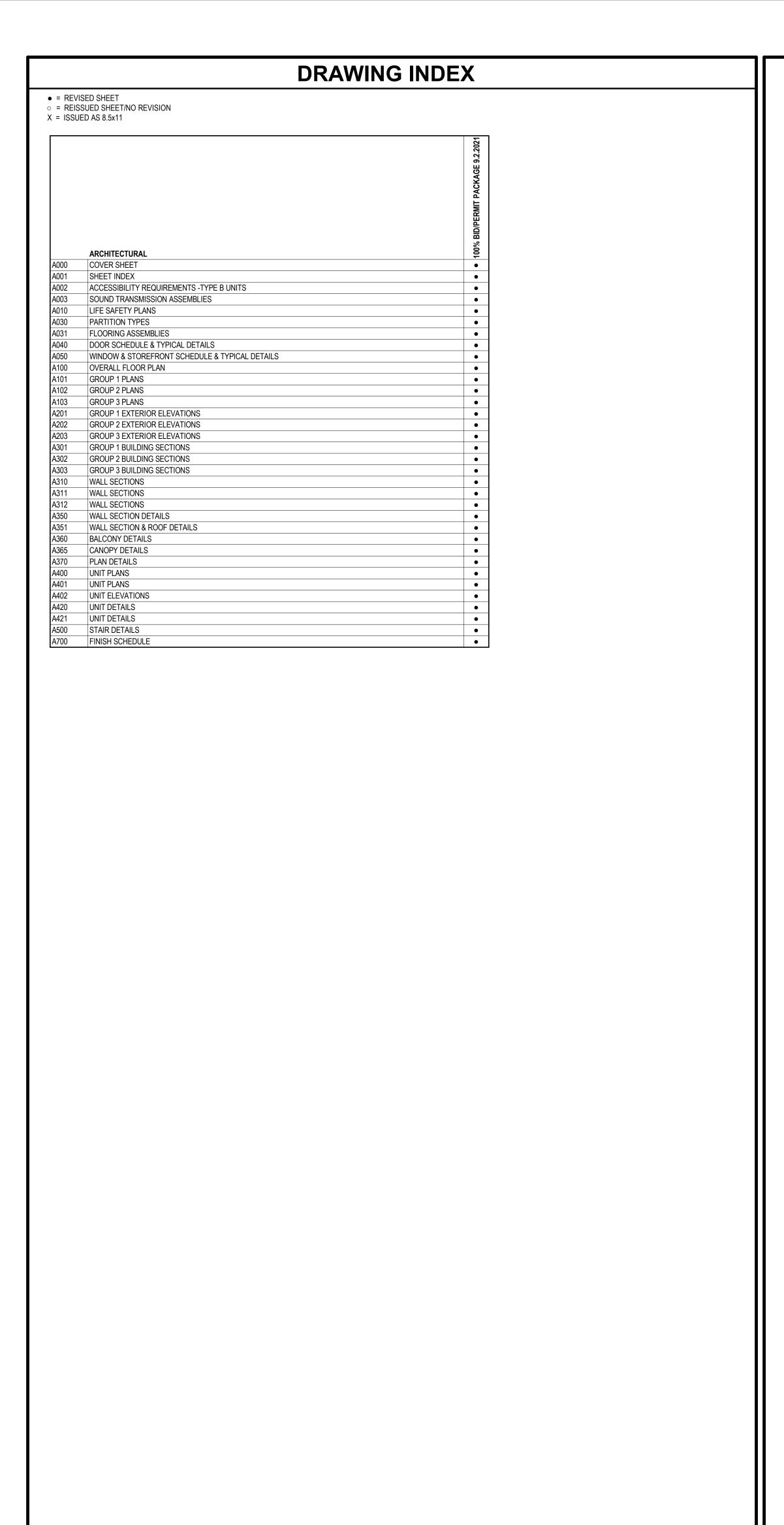
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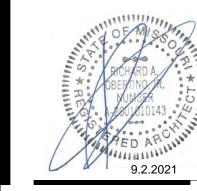
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BOB D CAMPBELL & COMPSM ENGINEERING
GENERAL CONTRACTOR

SM EN GENER ASSOC

nguard Villas

TR,i Architects
9812 Manchester Road
St. Louis, Missouri 63119
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St. Louis, Missouri 63119
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T: 314-395-9750
F: 314-395-9751
www.triarchitects.com

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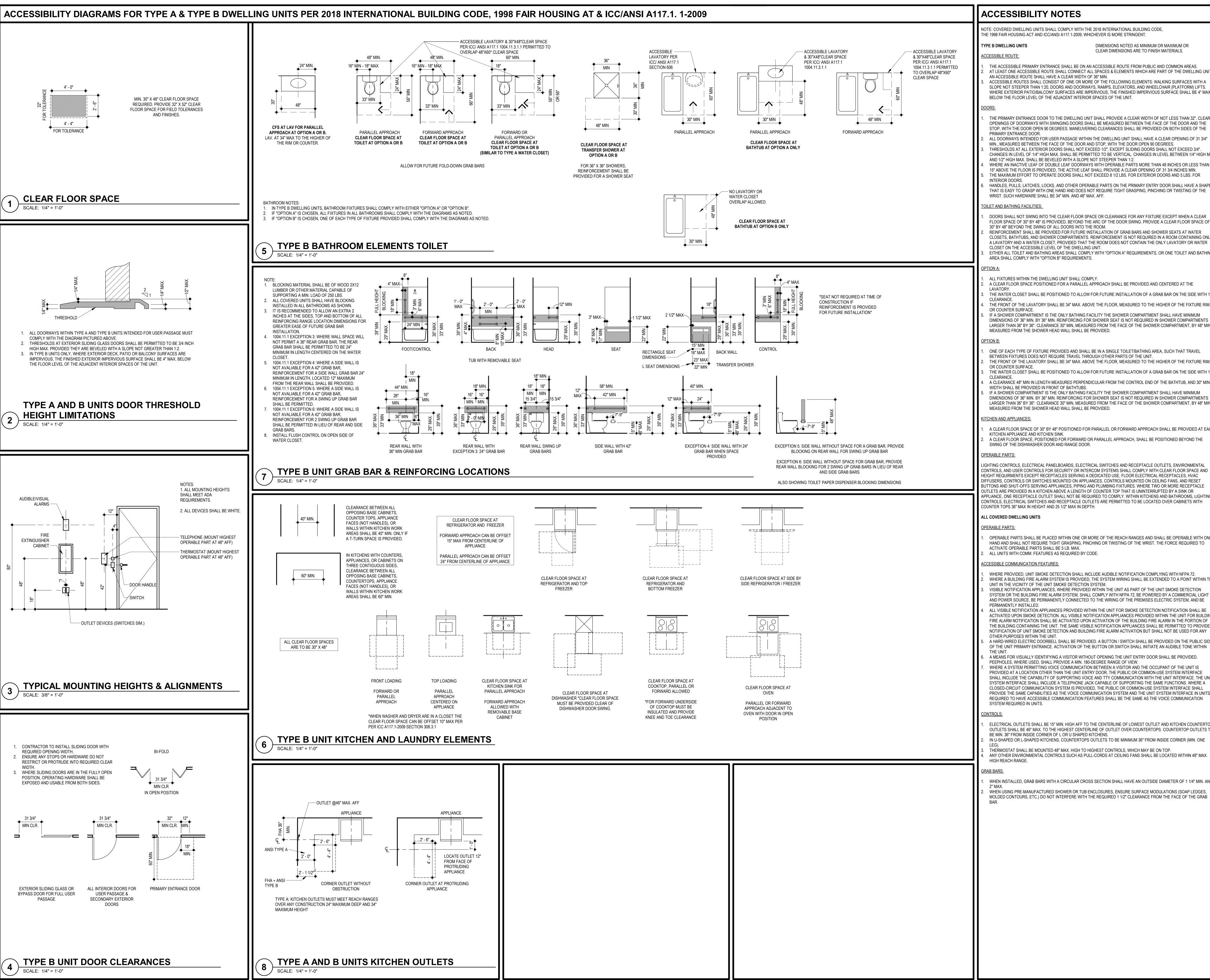
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A001
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#### **ACCESSIBILITY NOTES**

NOTE: COVERED DWELLING UNITS SHALL COMPLY WITH THE 2018 INTERNATIONAL BUILDING CODE, THE 1998 FAIR HOUSING ACT AND ICC/ANSI A117.1-2009. WHICHEVER IS MORE STRINGENT.

TYPE B DWELLING UNITS DIMENSIONS NOTED AS MINIMUM OR MAXIMUM OR CLEAR DIMENSIONS ARE TO FINISH MATERIALS.

AT LEAST ONE ACCESSIBLE ROUTE SHALL CONNECT ALL SPACES & ELEMENTS WHICH ARE PART OF THE DWELLING UNIT AN ACCESSIBLE ROUTE SHALL HAVE A CLEAR WIDTH OF 36" MIN.

ACCESSIBLE ROUTES SHALL CONSIST OF ONE OR MORE OF THE FOLLOWING ELEMENTS: WALKING SURFACES WITH A SLOPE NOT STEEPER THAN 1:20, DOORS AND DOORWAYS, RAMPS, ELEVATORS, AND WHEELCHAIR (PLATFORM) LIFTS. WHERE EXTERIOR PATIO/BALCONY SURFACES ARE IMPERVIOUS. THE FINISHED IMPERVIOUS SURFACE SHALL BE 4" MAX. BELOW THE FLOOR LEVEL OF THE ADJACENT INTERIOR SPACES OF THE UNIT.

THE PRIMARY ENTRANCE DOOR TO THE DWELLING UNIT SHALL PROVIDE A CLEAR WIDTH OF NOT LESS THAN 32". CLEAR OPENINGS OF DOORWAYS WITH SWINGING DOORS SHALL BE MEASURED BETWEEN THE FACE OF THE DOOR AND THE STOP, WITH THE DOOR OPEN 90 DEGREES. MANEUVERING CLEARANCES SHALL BE PROVIDED ON BOTH SIDES OF THE

- ALL DOORWAYS INTENDED FOR USER PASSAGE WITHIN THE DWELLING UNIT SHALL HAVE A CLEAR OPENING OF 31 3/4" MIN., MEASURED BETWEEN THE FACE OF THE DOOR AND STOP, WITH THE DOOR OPEN 90 DEGREES. THRESHOLDS AT ALL EXTERIOR DOORS SHALL NOT EXCEED 1/2", EXCEPT SLIDING DOORS SHALL NOT EXCEED 3/4".
- CHANGES IN LEVEL OF 1/4" HIGH MAX. SHALL BE PERMITTED TO BE VERTICAL. CHANGES IN LEVEL BETWEEN 1/4" HIGH MIN AND 1/2" HIGH MAX. SHALL BE BEVELED WITH A SLOPE NOT STEEPER THAN 1:2. WHERE AN INACTIVE LEAF OF DOUBLE LEAF DOORWAYS WITH OPERABLE PARTS MORE THAN 48 INCHES OR LESS THAN
- 15" ABOVE THE FLOOR IS PROVIDED, THE ACTIVE LEAF SHALL PROVIDE A CLEAR OPENING OF 31 3/4 INCHES MIN. THE MAXIMUM EFFORT TO OPERATE DOORS SHALL NOT EXCEED 8 1/2 LBS. FOR EXTERIOR DOORS AND 5 LBS. FOR
- HANDLES, PULLS, LATCHES, LOCKS, AND OTHER OPERABLE PARTS ON THE PRIMARY ENTRY DOOR SHALL HAVE A SHAPE THAT IS EASY TO GRASP WITH ONE HAND AND DOES NOT REQUIRE TIGHT GRASPING. PINCHING OR TWISTING OF THE WRIST. SUCH HARDWARE SHALL BE 34" MIN. AND 48" MAX. AFF.

#### OILET AND BATHING FACILITIES:

DOORS SHALL NOT SWING INTO THE CLEAR FLOOR SPACE OR CLEARANCE FOR ANY FIXTURE EXCEPT WHEN A CLEAR FLOOR SPACE OF 30" BY 48" IS PROVIDED. BEYOND THE ARC OF THE DOOR SWING. PROVIDE A CLEAR FLOOR SPACE OF 30" BY 48" BEYOND THE SWING OF ALL DOORS INTO THE ROOM.

- REINFORCEMENT SHALL BE PROVIDED FOR FUTURE INSTALLATION OF GRAB BARS AND SHOWER SEATS AT WATER CLOSETS, BATHTUBS, AND SHOWER COMPARTMENTS, REINFORCEMENT IS NOT REQUIRED IN A ROOM CONTAINING ONLY A LAVATORY AND A WATER CLOSET, PROVIDED THAT THE ROOM DOES NOT CONTAIN THE ONLY LAVATORY OR WATER CLOSET ON THE ACCESSIBLE LEVEL OF THE DWELLING UNIT.
- EITHER ALL TOILET AND BATHING AREAS SHALL COMPLY WITH "OPTION A" REQUIREMENTS, OR ONE TOILET AND BATHING AREA SHALL COMPLY WITH "OPTION B" REQUIREMENTS.
- ALL FIXTURES WITHIN THE DWELLING UNIT SHALL COMPLY.
- A CLEAR FLOOR SPACE POSITIONED FOR A PARALLEL APPROACH SHALL BE PROVIDED AND CENTERED AT THE
- THE WATER CLOSET SHALL BE POSITIONED TO ALLOW FOR FUTURE INSTALLATION OF A GRAB BAR ON THE SIDE WITH 18' THE FRONT OF THE LAVATORY SHALL BE 34" MAX. ABOVE THE FLOOR, MEASURED TO THE HIGHER OF THE FIXTURE RIM
- IF A SHOWER COMPARTMENT IS THE ONLY BATHING FACILITY THE SHOWER COMPARTMENT SHALL HAVE MINIMUM DIMENSIONS OF 36" MIN. BY 36" MIN. REINFORCING FOR SHOWER SEAT IS NOT REQUIRED IN SHOWER COMPARTMENTS LARGER THAN 36" BY 36". CLEARANCE 30" MIN, MEASURED FROM THE FACE OF THE SHOWER COMPARTMENT, BY 48" MIN., MEASURED FROM THE SHOWER HEAD WALL SHALL BE PROVIDED.

ONE OF EACH TYPE OF FIXTURE PROVIDED AND SHALL BE IN A SINGLE TOILET/BATHING AREA, SUCH THAT TRAVEL BETWEEN FIXTURES DOES NOT REQUIRE TRAVEL THROUGH OTHER PARTS OF THE UNIT.

- THE FRONT OF THE LAVATORY SHALL BE 34" MAX. ABOVE THE FLOOR, MEASURED TO THE HIGHER OF THE FIXTURE RIM OR COUNTER SURFACE.
- THE WATER CLOSET SHALL BE POSITIONED TO ALLOW FOR FUTURE INSTALLATION OF A GRAB BAR ON THE SIDE WITH 18"
- A CLEARANCE 48" MIN IN LENGTH MEASURED PERPENDICULAR FROM THE CONTROL END OF THE BATHTUB, AND 30" MIN IN WIDTH SHALL BE PROVIDED IN FRONT OF BATHTUBS.
- IF A SHOWER COMPARTMENT IS THE ONLY BATHING FACILITY THE SHOWER COMPARTMENT SHALL HAVE MINIMUM DIMENSIONS OF 36" MIN. BY 36" MIN. REINFORCING FOR SHOWER SEAT IS NOT REQUIRED IN SHOWER COMPARTMENTS LARGER THAN 36" BY 36". CLEARANCE 30" MIN, MEASURED FROM THE FACE OF THE SHOWER COMPARTMENT, BY 48" MIN., MEASURED FROM THE SHOWER HEAD WALL SHALL BE PROVIDEL

#### (ITCHEN AND APPLIANCES:

A CLEAR FLOOR SPACE OF 30" BY 48" POSITIONED FOR PARALLEL OR FORWARD APPROACH SHALL BE PROVIDED AT EACH KITCHEN APPLIANCE AND KITCHEN SINK. A CLEAR FLOOR SPACE, POSITIONED FOR FORWARD OR PARALLEL APPROACH, SHALL BE POSITIONED BEYOND THE

#### **OPERABLE PARTS:**

LIGHTING CONTROLS, ELECTRICAL PANELBOARDS, ELECTRICAL SWITCHES AND RECEPTACLE OUTLETS, ENVIRONMENTAL CONTROLS, AND USER CONTROLS FOR SECURITY OR INTERCOM SYSTEMS SHALL COMPLY WITH CLEAR FLOOR SPACE AND HEIGHT REQUIRMENTS EXCEPT RECEPTACLES SERVING A DEDICATED USE. FLOOR ELECTRICAL RECEPTACLES. HVAC DIFFUSERS, CONTROLS OR SWITCHES MOUNTED ON APPLIANCES, CONTROLS MOUNTED ON CEILING FANS, AND RESET BUTTONS AND SHUT-OFFS SERVING APPLIANCES, PIPING AND PLUMBING FIXTURES. WHERE TWO OR MORE RECEPTACLE OUTLETS ARE PROVIDED IN A KITCHEN ABOVE A LENGTH OF COUNTER TOP THAT IS UNINTERRUPTED BY A SINK OR APPLIANCE, ONE RECEPTACLE OUTLET SHALL NOT BE REQUIRED TO COMPLY. WITHIN KITCHENS AND BATHROOMS, LIGHTING CONTROLS, ELECTRICAL SWITCHES AND RECEPTACLE OUTLETS ARE PERMITTED TO BE LOCATED OVER CABINETS WITH COUNTER TOPS 36" MAX IN HEIGHT AND 25 1/2" MAX IN DEPTH.

#### ALL COVERED DWELLING UNITS

OPERABLE PARTS SHALL BE PLACED WITHIN ONE OR MORE OF THE REACH RANGES AND SHALL BE OPERABLE WITH ONE HAND AND SHALL NOT REQUIRE TIGHT GRASPING, PINCHING OR TWISTING OF THE WRIST. THE FORCE REQUIRED TO ACTIVATE OPERABLE PARTS SHALL BE 5 LB. MAX. ALL UNITS WITH COMM. FEATURES AS REQUIRED BY CODE.

#### CCESSIBLE COMMUNICATION FEATURES:

WHERE PROVIDED, UNIT SMOKE DETECTION SHALL INCLUDE AUDIBLE NOTIFICATION COMPLYING WITH NFPA 72. WHERE A BUILDING FIRE ALARM SYSTEM IS PROVIDED, THE SYSTEM WIRING SHALL BE EXTENDED TO A POINT WITHIN THE UNIT IN THE VICINITY OF THE UNIT SMOKE DETECTION SYSTEM. VISIBLE NOTIFICATION APPLIANCES, WHERE PROVIDED WITHIN THE UNIT AS PART OF THE UNIT SMOKE DETECTION

#### AND POWER SOURCE, BE PERMANENTLY CONNECTED TO THE WIRING OF THE PREMISES ELECTRIC SYSTEM, AND BE PERMANENTLY INSTALLED. ALL VISIBLE NOTIFICATION APPLIANCES PROVIDED WITHIN THE UNIT FOR SMOKE DETECTION NOTIFICATION SHALL BE ACTIVATED UPON SMOKE DETECTION. ALL VISIBLE NOTIFICATION APPLIANCES PROVIDED WITHIN THE UNIT FOR BUILDING FIRE ALARM NOTIFICATION SHALL BE ACTIVATED UPON ACTIVATION OF THE BUILDING FIRE ALARM IN THE PORTION OF THE BUILDING CONTAINING THE UNIT. THE SAME VISIBLE NOTIFICATION APPLIANCES SHALL BE PERMITTED TO PROVIDE NOTIFICATION OF UNIT SMOKE DETECTION AND BUILDING FIRE ALARM ACTIVATION BUT SHALL NOT BE USED FOR ANY

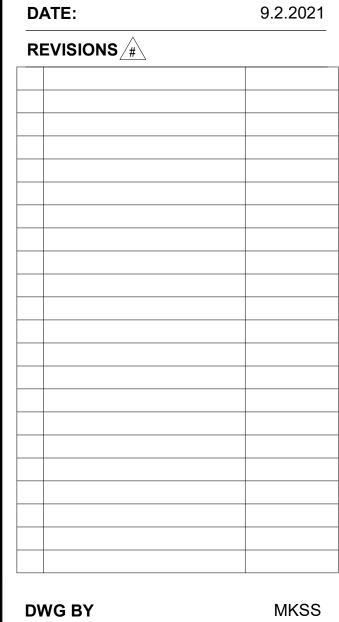
- OTHER PURPOSES WITHIN THE UNIT. A HARD-WIRED ELECTRIC DOORBELL SHALL BE PROVIDED. A BUTTON / SWITCH SHALL BE PROVIDED ON THE PUBLIC SIDE OF THE UNIT PRIMARY ENTRANCE. ACTIVATION OF THE BUTTON OR SWITCH SHALL INITIATE AN AUDIBLE TONE WITHIN
- A MEANS FOR VISUALLY IDENTIFYING A VISITOR WITHOUT OPENING THE UNIT ENTRY DOOR SHALL BE PROVIDED. PEEPHOLES, WHERE USED, SHALL PROVIDE A MIN. 180-DEGREE RANGE OF VIEW.
- WHERE A SYSTEM PERMITTING VOICE COMMUNICATION BETWEEN A VISITOR AND THE OCCUPANT OF THE UNIT IS PROVIDED AT A LOCATION OTHER THAN THE UNIT ENTRY DOOR, THE PUBLIC OR COMMON-USE SYSTEM INTERFACE SHALL INCLUDE THE CAPABILITY OF SUPPORTING VOICE AND TTY COMMUNICATION WITH THE UNIT INTERFACE. THE UN SYSTEM INTERFACE SHALL INCLUDE A TELEPHONE JACK CAPABLE OF SUPPORTING THE SAME FUNCTIONS. WHERE A CLOSED-CIRCUIT COMMUNICATION SYSTEM IS PROVIDED, THE PUBLIC OR COMMON-USE SYSTEM INTERFACE SHALL PROVIDE THE SAME CAPABILITIES AS THE VOICE COMMUNICATION SYSTEM AND THE UNIT SYSTEM INTERFACE IN UNITS REQUIRED TO HAVE ACCESSIBLE COMMUNICATION FEATURES SHALL BE THE SAME AS THE VOICE COMMUNICATION

ELECTRICAL OUTLETS SHALL BE 15" MIN. HIGH AFF TO THE CENTERLINE OF LOWEST OUTLET AND KITCHEN COUNTERTOP OUTLETS SHALL BE 46" MAX. TO THE HIGHEST CENTERLINE OF OUTLET OVER COUNTERTOPS. COUNTERTOP OUTLETS TO BE MIN. 36" FROM INSIDE CORNER OF L OR U SHAPED KITCHENS.

- IN U-SHAPED OR L-SHAPED KITCHENS, COUNTERTOPS OUTLETS TO BE MINIMUM 36" FROM INSIDE CORNER (MIN. ONE
- THERMOSTAT SHALL BE MOUNTED 48" MAX. HIGH TO HIGHEST CONTROLS, WHICH MAY BE ON TOP. ANY OTHER ENVIRONMENTAL CONTROLS SUCH AS PULL-CORDS AT CEILING FANS SHALL BE LOCATED WITHIN 48" MAX.

WHEN INSTALLED, GRAB BARS WITH A CIRCULAR CROSS SECTION SHALL HAVE AN OUTSIDE DIAMETER OF 1 1/4" MIN. AND

WHEN USING PRE-MANUFACTURED SHOWER OR TUB ENCLOSURES, ENSURE SURFACE MODULATIONS (SOAP LEDGES, MOLDED CONTOURS, ETC.) DO NOT INTERFERE WITH THE REQUIRED 1 1/2" CLEARANCE FROM THE FACE OF THE GRAB



ARCHITECTS

T: 314-395-9750

F: 314-395-9751

www.triarchitects.com

TR.i Architects

9812 Manchester Road

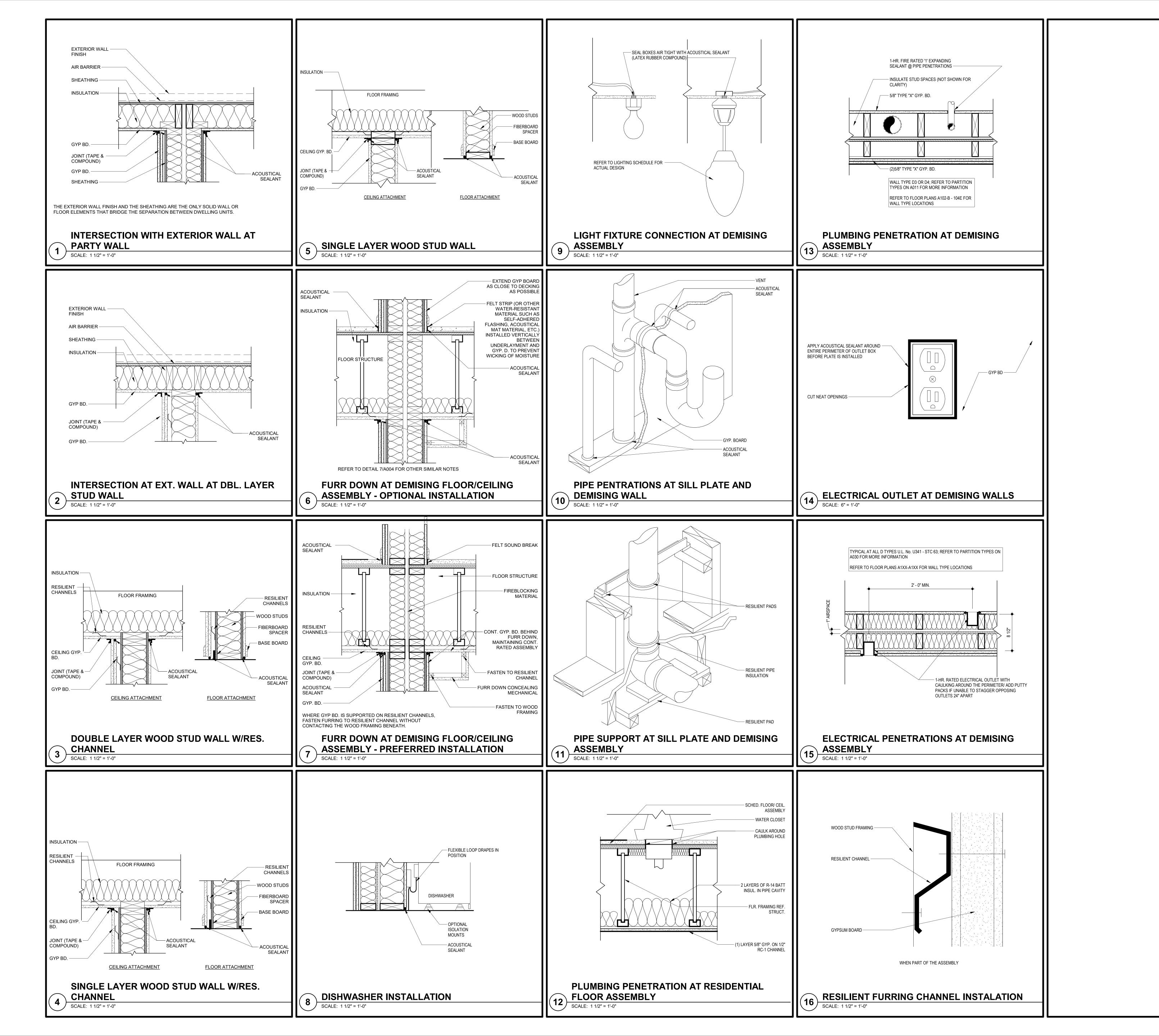
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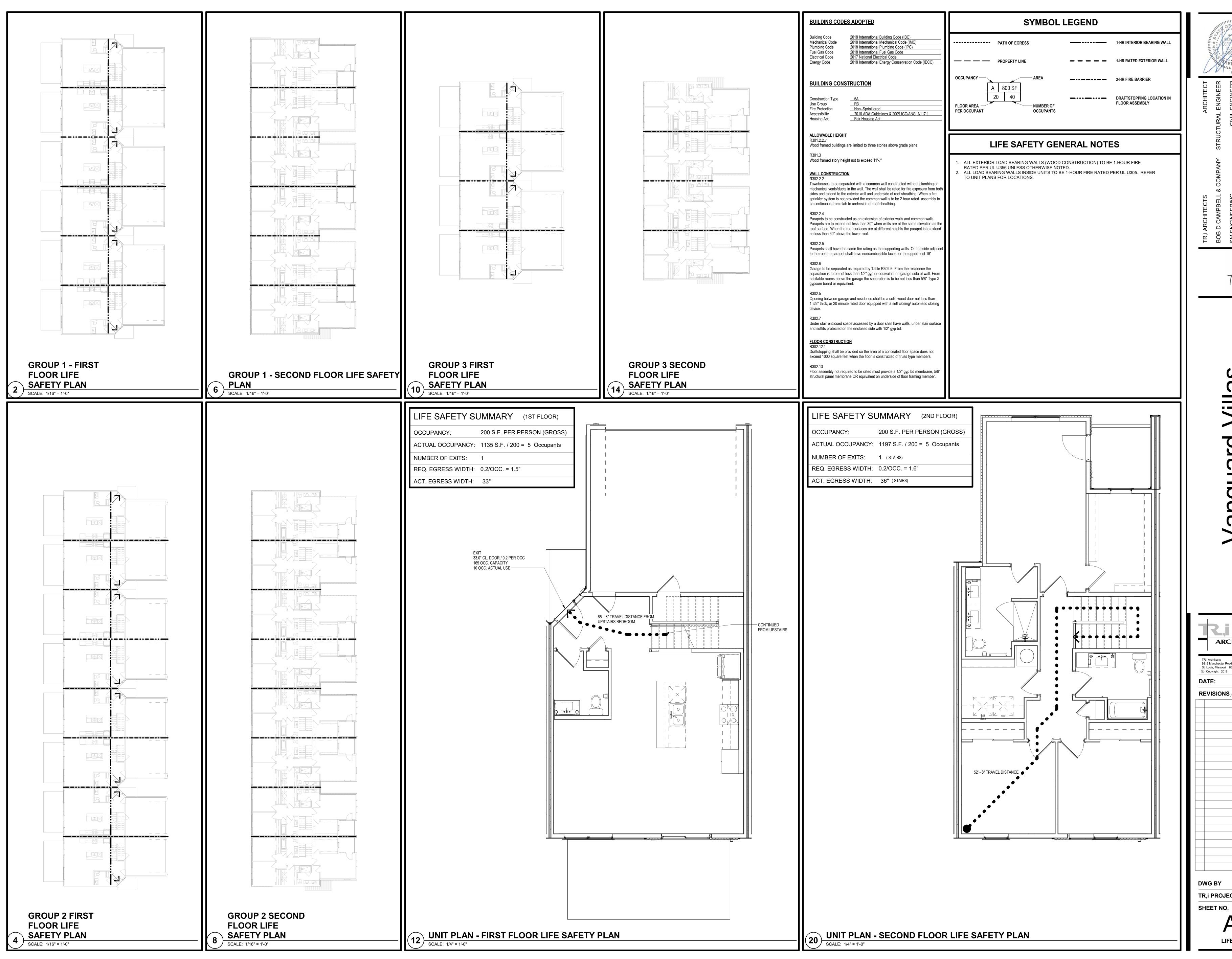
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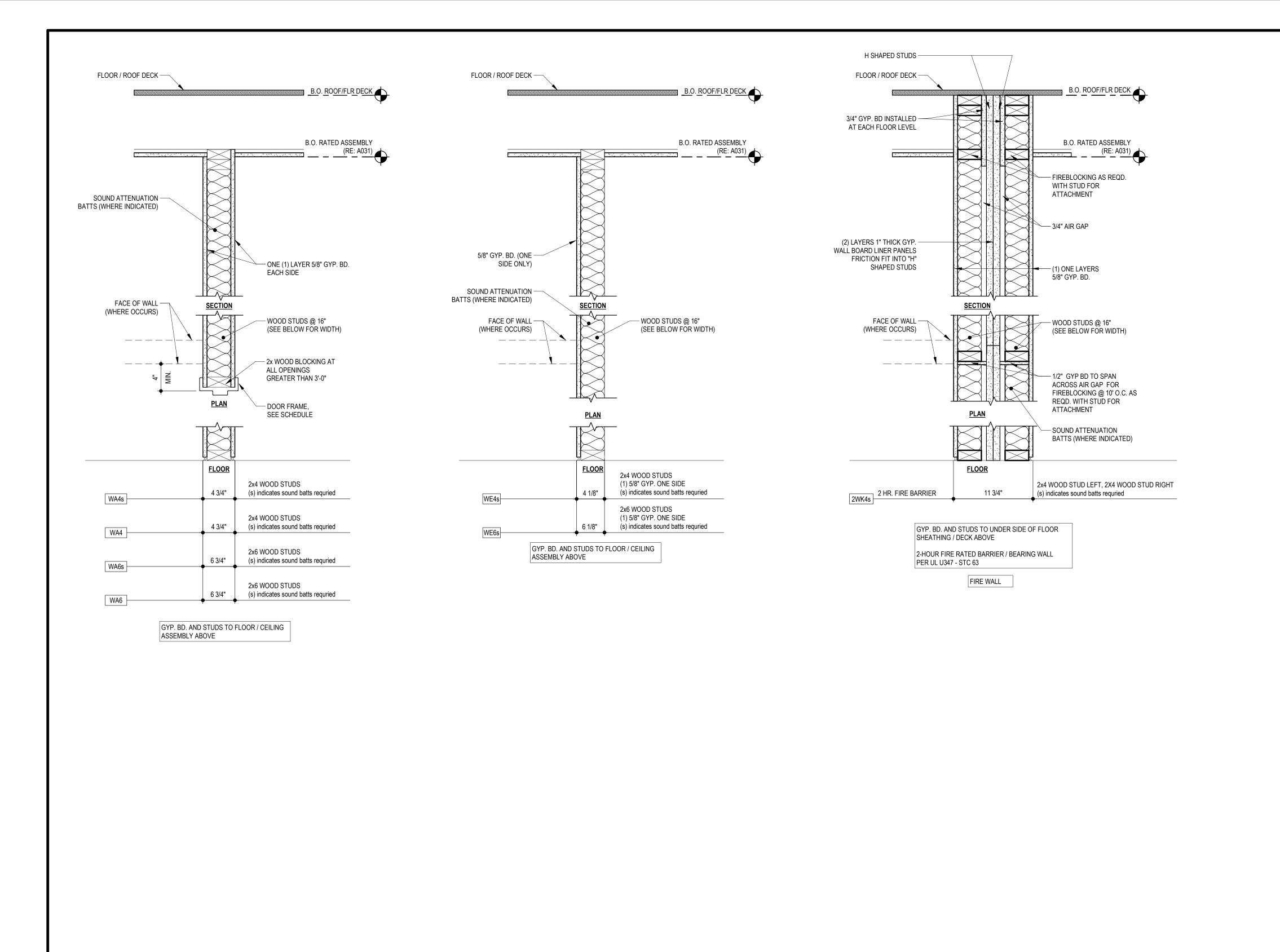


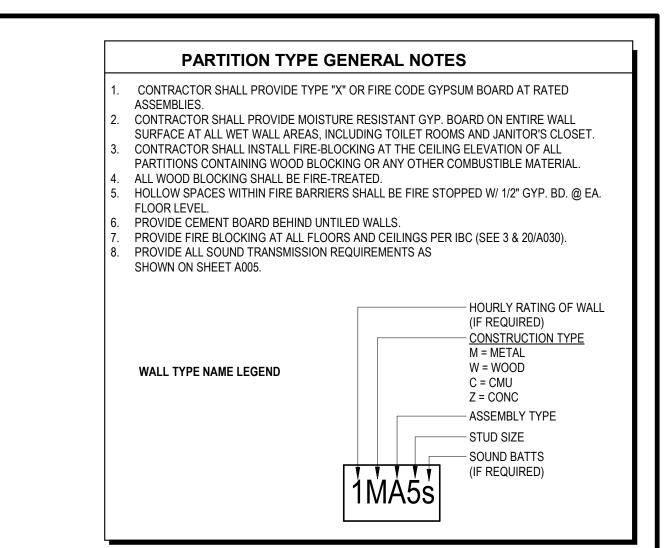
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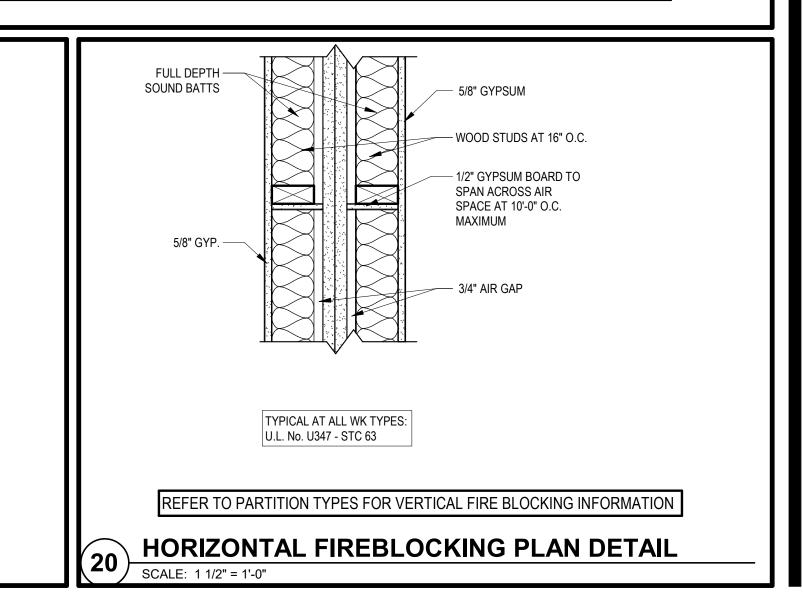
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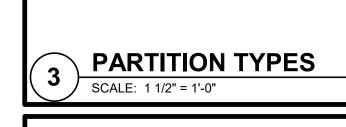
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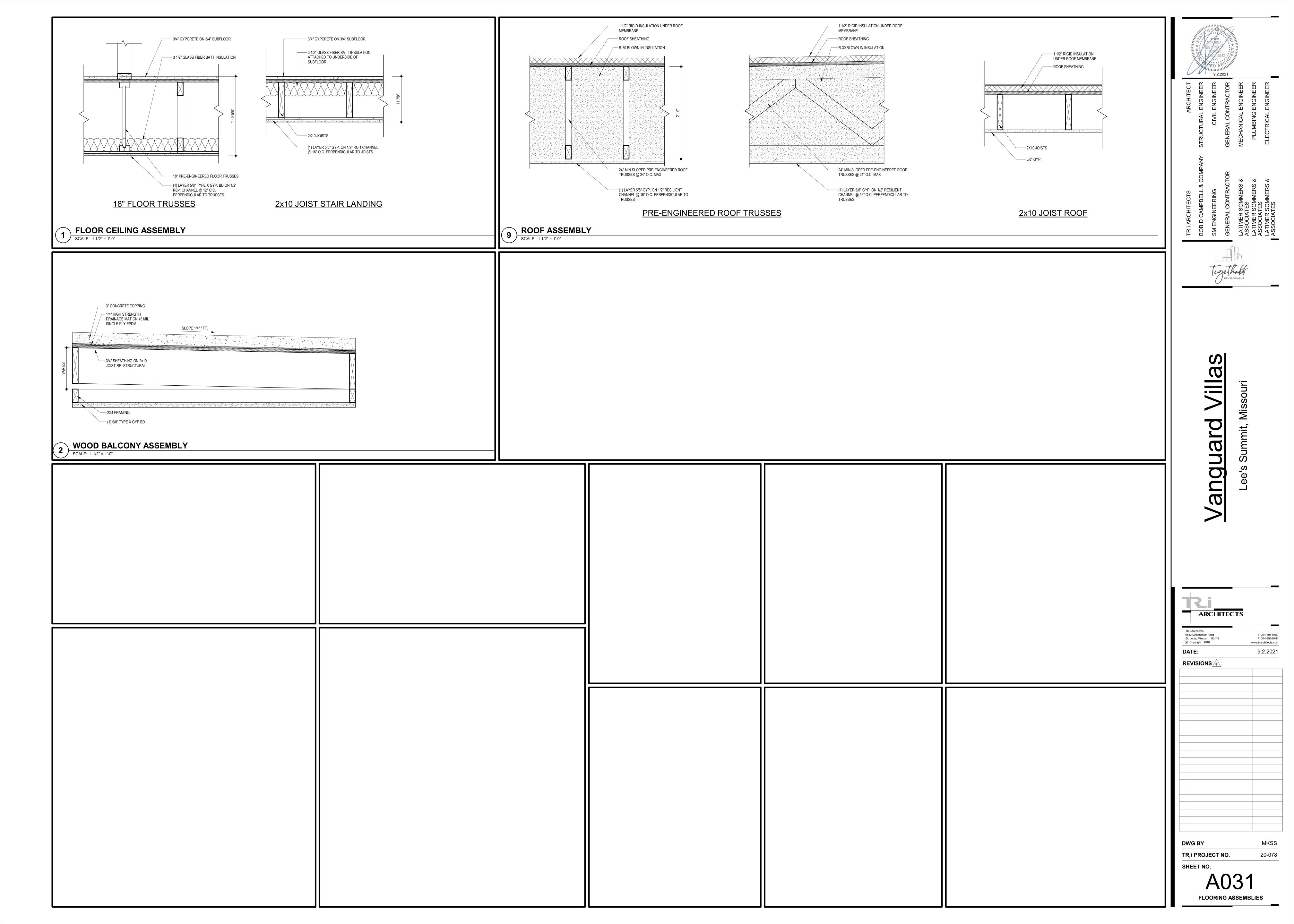
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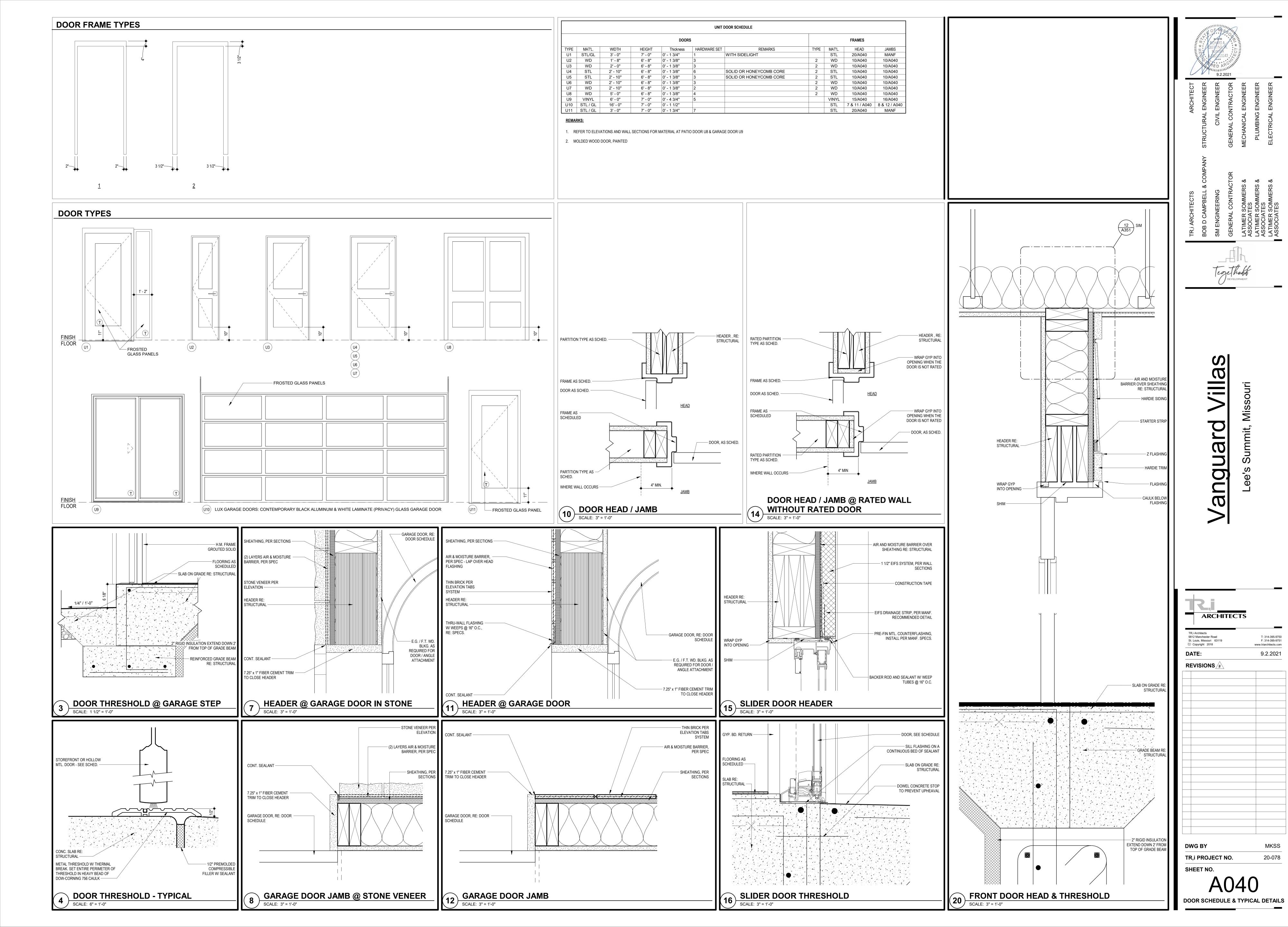
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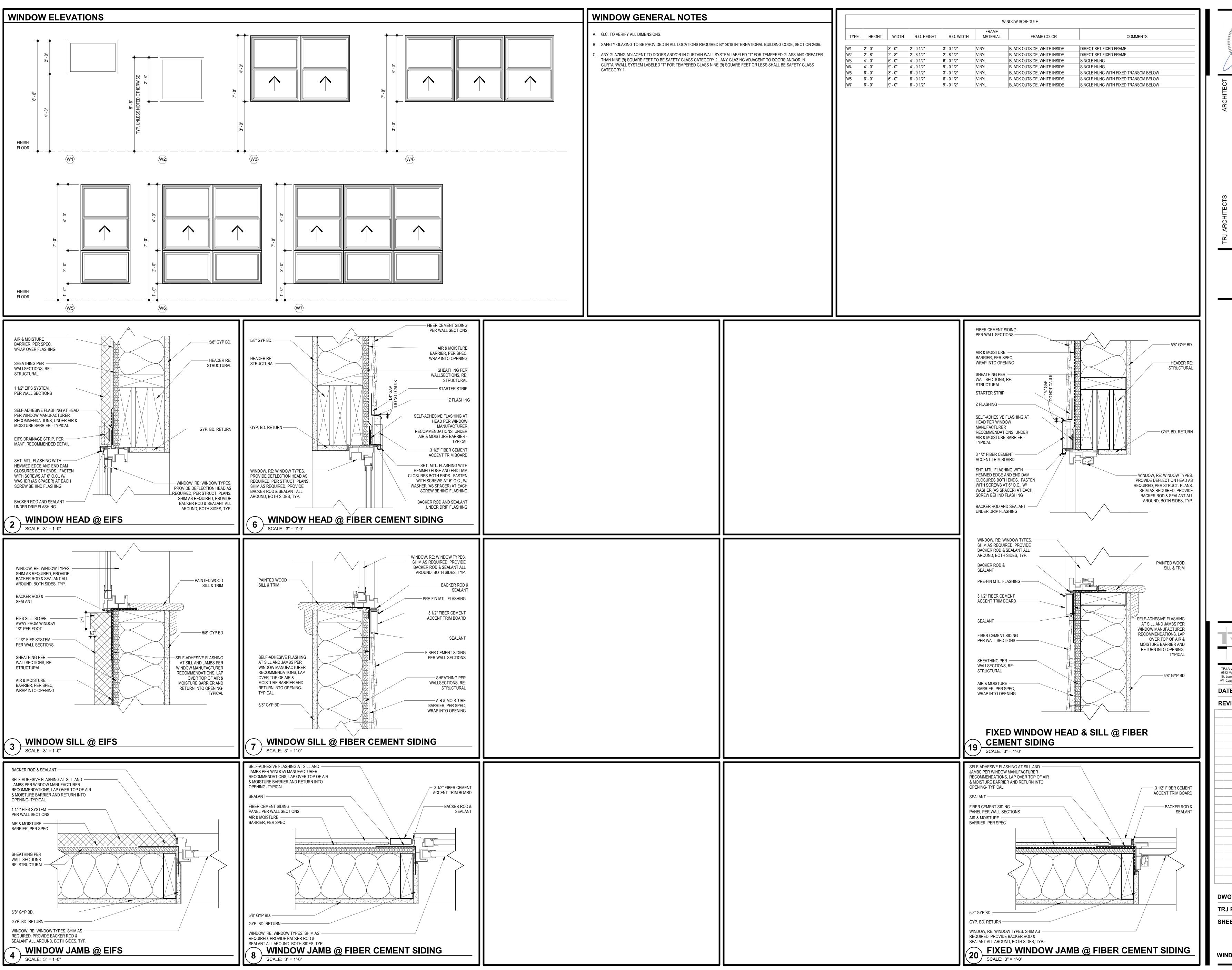
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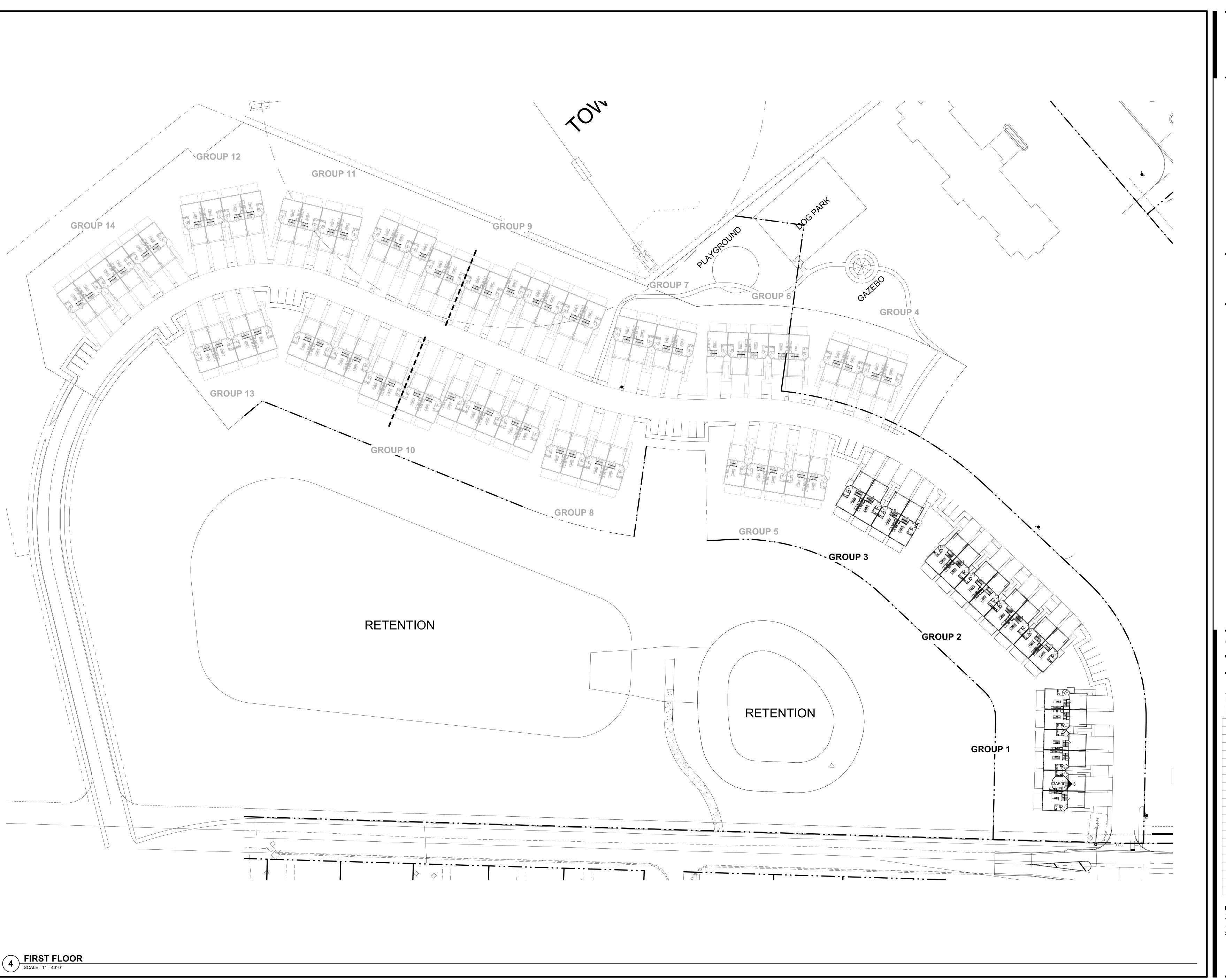


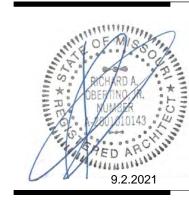


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STRUCTURAL ENGINEER

CIVIL ENGINEER

GENERAL CONTRACTOR

SM ENGINEERING
GENERAL CONTRACTOR
LATIMER SOMMERS &
ASSOCIATES

BOB D SM EN GENE LATIM ASSO

anguard Villas

TR,i Architects
9812 Manchester Road
St. Louis, Missouri 63119
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TR,i Architects
9812 Manchester Road
T: 3
F: 3
www.trian

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St. Louis, Missouri 63119
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F: 314-395-9751
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#### **GENERAL NOTES**

- A. DIMENSIONS ARE TO FACE OF STUD OR FACE OF MASONRY.
- B. FOR DOOR SCHEDULE SEE SHEET A040 XXX
- C. FOR WINDOW SCHEDULE SEE SHEET A050  $\langle$  X  $\rangle$
- D. FOR PARTITION TYPES SEE SHEET A030 X
- E. FOR UNIT INTERIOR PARTITION TYPES AND LOCATIONS REFER TO UNIT SHEETS (A400 THROUGH A401).
- F. GENERAL CONTRACTOR WILL FURNISH & INSTALL 5 LB MULTIPURPOSE DRY CHEMICAL 2A:10B:C RATED FIRE EXTINGUISHERS w/ MOUNTING BRACKETS & ACCESSORIES @ 4'-0" A.F.F. AS REQUIRED BY GOVERNMENTAL AUTHORITIES. MAXIMUM TRAVEL DISTANCE OF 75'-0" FOR PLACEMENT IN PUBLIC SPACES AND CORRIDORS. A MINIMUM RATED 1A:10B:C FIRE EXTINGUISHER TO BE PROVIDED IN EACH UNIT.
- G. CONTROL JOINTS SHOULD BE SPACED IN GYPSUM WALL BOARD TO LIMIT EXPANSES TO 30-'0" MAXIMUM. CONTROL JOINTS ARE RECOMMENDED AT DOOR JAMBS EXTENDING FROM DOOR HEAD TO CEILING. CEILING GYPSUM BOARD CONTROL JOINTS SHOULD LIMIT THE CEILING AREA TO 2,500 SF MAX. AND 50'-0" IN EITHER DIRECTION. CONTROL JOINT SHOULD BE INSTALLED WHERE THERE IS A CHANGE IN DIRECTION IN CEILING FRAMING/FURRING OR SPACE CONTROL JOINTS AT THE CEILING AND WALL PER THE MANUFACTURER'S RECOMMENDED INSTALLATION GUIDELINES. CEILING AND WALL CONTROL JOINTS ARE TO ALIGN AT ALL INTERSECTIONS WHERE APPLICABLE TO FORM A CONTINUOUS CONTROL JOINT. ENSURE THAT CONTROL JOINTS ARE LOCATED AT STRUCTURAL CONSTRUCTION JOINTS AND AT THE TOP AND BOTTOM OF ALL INTERIOR RAMPS.

- MATERIAL DIMENSION STRING

49' - 6 5/8"

49' - 6 5/8"

- STUD DIMENSION STRING

GROUP 1 - FIRST FLOOR PLAN

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

- MATERIAL DIMENSION STRING

4' - 6 1/2"

19' - 10 1/4"

1/4" / 1'-0"**►** 5 /

STUD DIMENSION STRING

- H. COORDINATE LOCATION OF BEARING WALLS INSIDE DWELLING UNITS WITH UNIT PLANS.
- I. REFER TO LIFE SAFETY PLANS FOR ADDITIONAL INFORMATION ON FIRE RATED PARTITION LOCATIONS.

- J. FINISH FLOOR ELEVATION AT GROUP 1 IS 100'-0" AND ALL OTHER GROUPS ARE LABELED IN RELATION TO THAT LEVEL RE: CIVIL DRAWINGS FOR ALL GRADE INFORMATION.
- K. 5" CONCRETE FLOOR SLAB WITH 6"x6" W1.4xW1.4 W.W.F. ON 10 MIL POLY FILM VAPOR BARRIER ON 4" GRANULAR
- FILL. RE: STRUCTURAL DWGS.
- L. NO PENETRATIONS WITHIN 4' OF FIRE WALLS. VERIFY IN FIELD. M. IT IS THE GENERAL CONTRACTOR'S RESPONSIBILITY TO COORDINATE, LOCATE AND CONFIRM ALL FLOOR SINK,
- UNDERGROUND / OVERHEAD PLUMBING AND ELECTRICAL STUB-UPS, SPOT GRADING AT PERIMETER FOUNDATIONS N. THE ARCHITECT ASSUMES THE GENERAL CONTRACTOR HAS INCLUDED IN HIS BID THE HIGHEST QUALITY AND GREATEST QUANTITY FOR THE PURPOSE OF RESOLVING ANY CONFLICTS IN THE CONSTRUCTION DOCUMENTS
- WHICH ARE IMPLIED OR UNDEFINED. O. \* ASSUMED FIRST FLOOR FINISH FLOOR ELEVATION = 100.00'\* VERIFY ACTUAL FINISH FLOOR ELEVATION WITH CIVIL
- P. GENERAL CONTRACTOR TO CAULK AND SEAL EXPANSION JOINTS AT ALL EXTERIOR/INTERIOR CONCRETE SEE
- Q. GENERAL CONTRACTOR SHALL VERIFY GOVERNMENTAL REQUIREMENTS PRIOR TO BID AND INCLUDE IN BID ALL COSTS ASSOCIATED WITH FIRE ALARM SYSTEM INCLUDING AUDIO/VISUAL DEVICES AND PULL STATIONS WHERE
- R. FIRE RETARDANT TREATED WOOD PERMITTED TO BE USED IN LOCATIONS SPECIFIED IN TABLE 602, NOTE D AND SECTION 603.2 AND 2310.0. VERIFY SECTIONS IN 2018 IBC.
- S. ALL OPENING DIMENSIONS ARE TO CENTERLINE OF OPENING.

MASONRY SPECIFICATIONS.

#### **ROOF GENERAL NOTES**

- VERIFY LOCATIONS OF ALL ROOF PENETRATIONS WITH STRUCTURAL, M.E.P. AND ARCHITECTURAL DRAWINGS.
- B. EXHAUST FANS AND VENTS TO BE LOCATED A MINIMUM OF 10'-0" FROM RTU's.
- ALL ROOF EQUIPMENT TO BE MOUNTED ON CURBS. MECHANICAL SUBCONTRACTOR TO COORDINATE INSTALLATION AND ACCEPTANCE OF PREFABRICATED CURBS AND PENETRATIONS WITH ROOF MEMBRANE MANUFACTURER. GENERAL CONTRACTOR TO PROVIDE ALL REQUIRED BLOCKING, NAILING, ETC. AS REQUIRED FOR A WATERTIGHT BUILDING.
- IT IS THE GENERAL CONTRACTOR'S RESPONSIBILITY TO COORDINATE THE INSTALLATION OF ALL FLASHING, BLOCKING, NAILERS, INSULATION STOPS, CRICKETS, ETC. NECESSARY FOR A COMPLETE, WARRANTED AND WATERTIGHT INSTALLATION.
- ALL ROOF SLOPES ARE TO HAVE A MINIMUM OF 1/4" FALL WHERE CRICKETS AND VALLEYS OCCUR. CRICKETS ARE TO BE PROVIDED WITH SUFFICIENT DEPTH AND SLOPE TO ACCOMMODATE A MINIMUM 1/4" PER FOOT FALL AT

#### ROOF KEYED NOTES (#)

STEP PARAPET DOWN 1'-6" FOR ROOF ACCESS —

GROUP 1 - ROOF PLAN

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

DOWNSPOUT CALC

1,059 S.F. / 1 DOWNSPOUTS = 1,058 S.F./D.S.

USE (1) 4" SQ. DOWNSPOUTS PER VILLA

(SMACNA) TABLE 1-2 - 100 YEAR S.F./S.I. = 120

1,059 /120 = 8.825 SQUARE INCHES OF DOWNSPOUT AREA

3 1/4" / 1'-0"

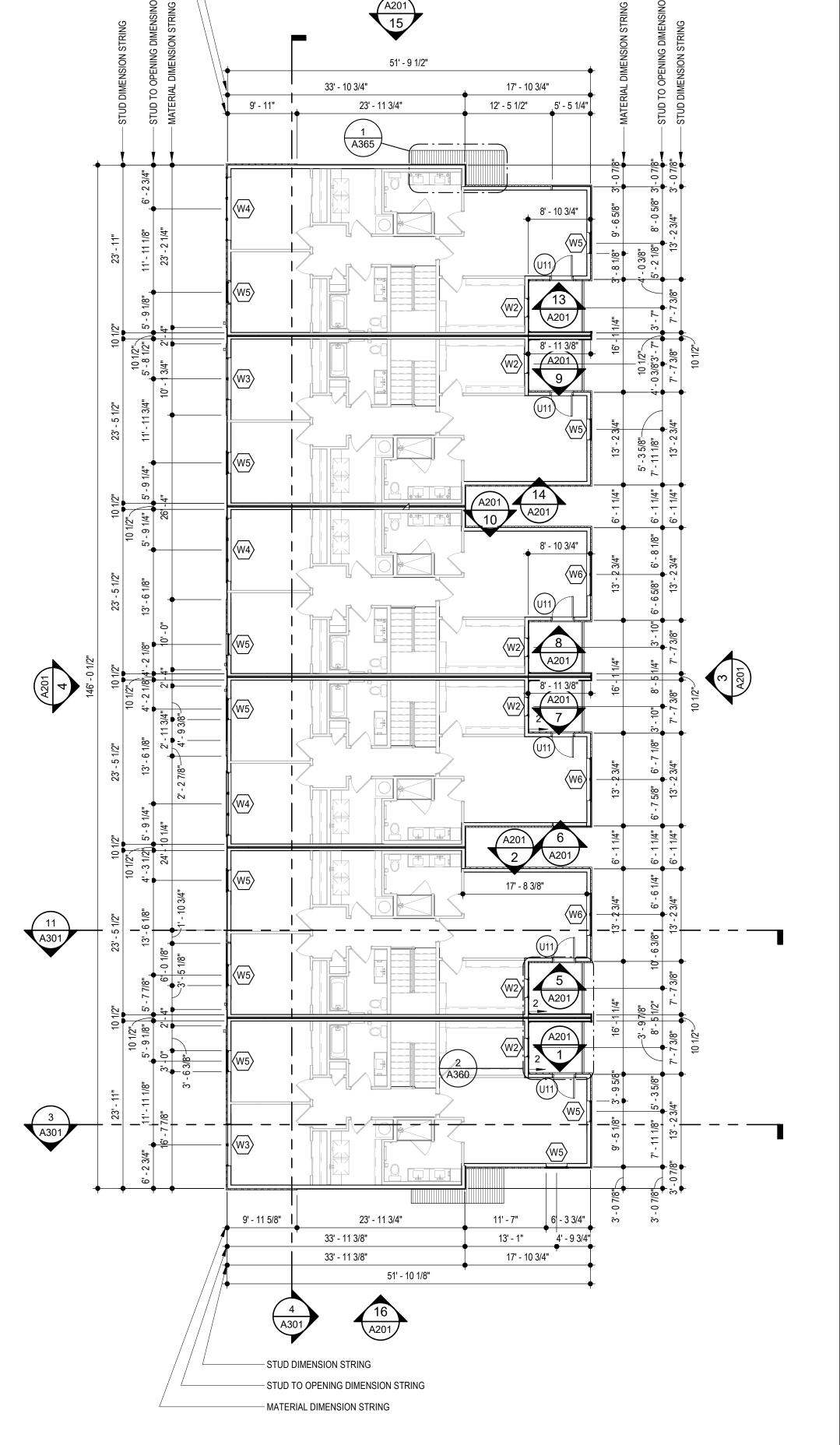
- . PROVIDE TAPERED CRICKETS AT ALL ROOF TOP UNITS, SLOPE 1/2" PER FOOT MINIMUM. INSTALL FLASHING AND COUNTER FLASHING PER ROOFING MANUFACTURER'S WRITTEN RECOMMENDATIONS.
- 2. TAPERED CRICKETS AS REQUIRED. SLOPE 1/2" PER FOOT MINIMUM.
- 3. FULLY ADHERED T.P.O. ROOF MEMBRANE.
- 4. CHANGE IN ROOF SLOPE AND/OR ELEVATION.
- 5. THRU-WALL ROOF SCUPPER WITH OVERFLOW.
- 6. PROVIDE WALKWAY PADS FROM ROOF ACCESS TO ALL ROOFTOP EQUIPMENT.
- ". ROOF SHEATHING TO BE CONSTRUCTED OF FIRE RETARDANT TREATED WOOD 4'-0" EACH SIDE OF FIRE WALL, NO PENETRATIONS ALLOWED IN THIS AREA
- 8. GUTTER TO DOWNSPOUT TO MAIN ROOF

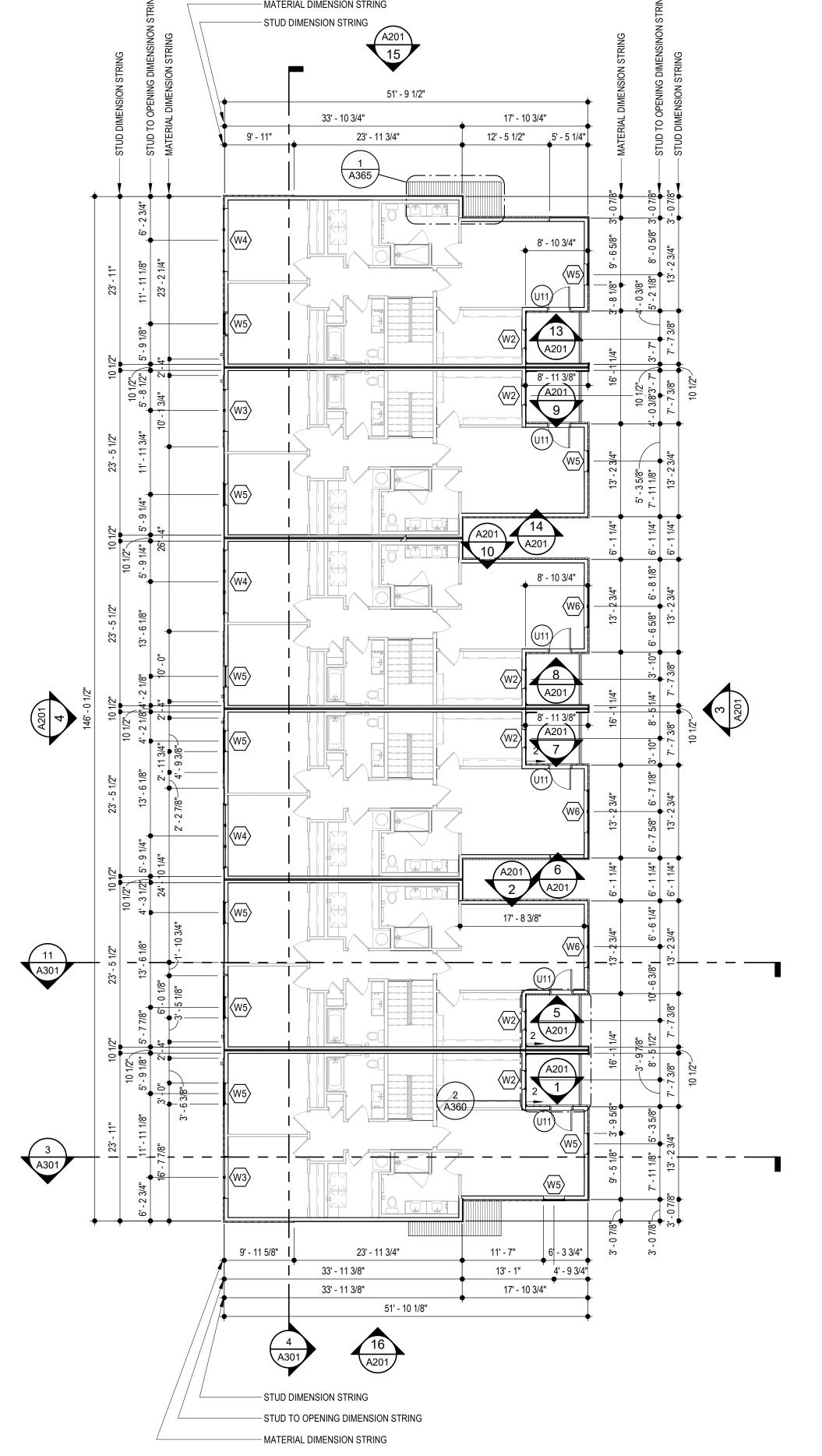


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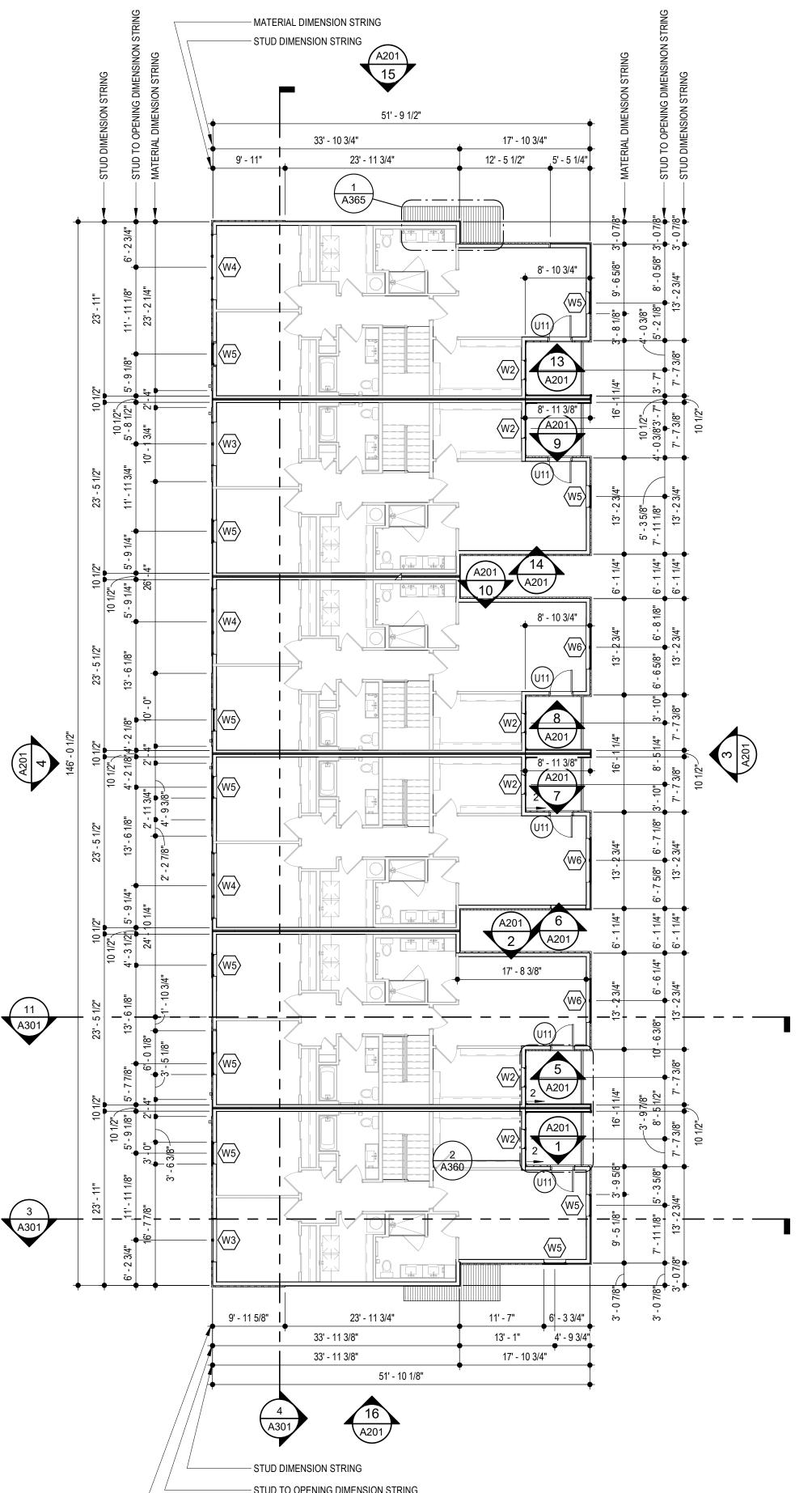
SHEET NO.





GROUP 1 - SECOND FLOOR PLAN

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



#### **GENERAL NOTES** A. DIMENSIONS ARE TO FACE OF STUD OR FACE OF MASONRY. B. FOR DOOR SCHEDULE SEE SHEET A040 XXX C. FOR WINDOW SCHEDULE SEE SHEET A050 (X) D. FOR PARTITION TYPES SEE SHEET A030 X E. FOR UNIT INTERIOR PARTITION TYPES AND LOCATIONS REFER TO UNIT SHEETS (A400 THROUGH A401). F. GENERAL CONTRACTOR WILL FURNISH & INSTALL 5 LB MULTIPURPOSE DRY CHEMICAL 2A:10B:C RATED FIRE EXTINGUISHERS w/ MOUNTING BRACKETS & ACCESSORIES @ 4'-0" A.F.F. AS REQUIRED BY GOVERNMENTAL AUTHORITIES. MAXIMUM TRAVEL DISTANCE OF 75'-0" FOR PLACEMENT IN PUBLIC SPACES AND CORRIDORS. A MINIMUM RATED 1A:10B:C FIRE EXTINGUISHER TO BE PROVIDED IN EACH UNIT. G. CONTROL JOINTS SHOULD BE SPACED IN GYPSUM WALL BOARD TO LIMIT EXPANSES TO 30-'0" MAXIMUM. CONTROL JOINTS ARE RECOMMENDED AT DOOR JAMBS EXTENDING FROM DOOR HEAD TO CEILING. CEILING GYPSUM BOARD CONTROL JOINTS SHOULD LIMIT THE CEILING AREA TO 2,500 SF MAX. AND 50'-0" IN EITHER DIRECTION. CONTROL JOINT SHOULD BE INSTALLED WHERE THERE IS A CHANGE IN DIRECTION IN CEILING FRAMING/FURRING OR SPACE CONTROL JOINTS AT THE CEILING AND WALL PER THE MANUFACTURER'S RECOMMENDED INSTALLATION GUIDELINES. CEILING AND WALL CONTROL JOINTS ARE TO ALIGN AT ALL INTERSECTIONS WHERE APPLICABLE TO FORM A CONTINUOUS CONTROL JOINT. ENSURE THAT CONTROL JOINTS ARE LOCATED AT STRUCTURAL CONSTRUCTION JOINTS AND AT THE TOP AND BOTTOM OF ALL INTERIOR RAMPS. H. COORDINATE LOCATION OF BEARING WALLS INSIDE DWELLING UNITS WITH UNIT PLANS. . REFER TO LIFE SAFETY PLANS FOR ADDITIONAL INFORMATION ON FIRE RATED PARTITION LOCATIONS. - MATERIAL DIMENSION STRING STUD DIMENSION STRING 26' - 2 1/4" 49' - 6 5/8"

#### J. FINISH FLOOR ELEVATION AT GROUP 1 IS 100'-0" AND ALL OTHER GROUPS ARE LABELED IN RELATION TO THAT LEVEL

- RE: CIVIL DRAWINGS FOR ALL GRADE INFORMATION.
- K. 5" CONCRETE FLOOR SLAB WITH 6"x6" W1.4xW1.4 W.W.F. ON 10 MIL POLY FILM VAPOR BARRIER ON 4" GRANULAR FILL. RE: STRUCTURAL DWGS.
- L. NO PENETRATIONS WITHIN 4' OF FIRE WALLS. VERIFY IN FIELD.
- M. IT IS THE GENERAL CONTRACTOR'S RESPONSIBILITY TO COORDINATE, LOCATE AND CONFIRM ALL FLOOR SINK, UNDERGROUND / OVERHEAD PLUMBING AND ELECTRICAL STUB-UPS, SPOT GRADING AT PERIMETER FOUNDATIONS
- N. THE ARCHITECT ASSUMES THE GENERAL CONTRACTOR HAS INCLUDED IN HIS BID THE HIGHEST QUALITY AND GREATEST QUANTITY FOR THE PURPOSE OF RESOLVING ANY CONFLICTS IN THE CONSTRUCTION DOCUMENTS WHICH ARE IMPLIED OR UNDEFINED.
- O. \* ASSUMED FIRST FLOOR FINISH FLOOR ELEVATION = 100.00'\* VERIFY ACTUAL FINISH FLOOR ELEVATION WITH CIVIL
- P. GENERAL CONTRACTOR TO CAULK AND SEAL EXPANSION JOINTS AT ALL EXTERIOR/INTERIOR CONCRETE SEE MASONRY SPECIFICATIONS.
- Q. GENERAL CONTRACTOR SHALL VERIFY GOVERNMENTAL REQUIREMENTS PRIOR TO BID AND INCLUDE IN BID ALL COSTS ASSOCIATED WITH FIRE ALARM SYSTEM INCLUDING AUDIO/VISUAL DEVICES AND PULL STATIONS WHERE
- R. FIRE RETARDANT TREATED WOOD PERMITTED TO BE USED IN LOCATIONS SPECIFIED IN TABLE 602, NOTE D AND SECTION 603.2 AND 2310.0. VERIFY SECTIONS IN 2018 IBC.
- S. ALL OPENING DIMENSIONS ARE TO CENTERLINE OF OPENING.

20' - 0 3/4"

1/4" / 1'-0"

0,0

— STUD DIMENSION STRING

— MATERIAL DIMENSION STRING

A202

6' - 2 3/4"

GROUP 2 FIRST FLOOR

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

1/4" / 1'-0"

20' - 0 3/4"

GROUP 2 SECOND FLOOR

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

4' - 6 1/2"

#### **ROOF GENERAL NOTES**

- A. VERIFY LOCATIONS OF ALL ROOF PENETRATIONS WITH STRUCTURAL, M.E.P. AND ARCHITECTURAL DRAWINGS.
- B. EXHAUST FANS AND VENTS TO BE LOCATED A MINIMUM OF 10'-0" FROM RTU's.
- . ALL ROOF EQUIPMENT TO BE MOUNTED ON CURBS. MECHANICAL SUBCONTRACTOR TO COORDINATE INSTALLATION AND ACCEPTANCE OF PREFABRICATED CURBS AND PENETRATIONS WITH ROOF MEMBRANE MANUFACTURER. GENERAL CONTRACTOR TO PROVIDE ALL REQUIRED BLOCKING, NAILING, ETC. AS REQUIRED FOR A WATERTIGHT BUILDING.
- IT IS THE GENERAL CONTRACTOR'S RESPONSIBILITY TO COORDINATE THE INSTALLATION OF ALL FLASHING, BLOCKING, NAILERS, INSULATION STOPS, CRICKETS, ETC. NECESSARY FOR A COMPLETE, WARRANTED AND WATERTIGHT INSTALLATION.
- ALL ROOF SLOPES ARE TO HAVE A MINIMUM OF 1/4" FALL WHERE CRICKETS AND VALLEYS OCCUR. CRICKETS ARE TO BE PROVIDED WITH SUFFICIENT DEPTH AND SLOPE TO ACCOMMODATE A MINIMUM 1/4" PER FOOT FALL AT

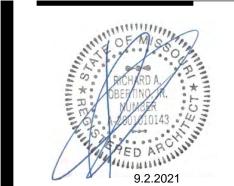
#### ROOF KEYED NOTES (#)

PROVIDE TAPERED CRICKETS AT ALL ROOF TOP UNITS, SLOPE 1/2" PER FOOT MINIMUM. INSTALL FLASHING AND COUNTER FLASHING PER ROOFING MANUFACTURER'S WRITTEN RECOMMENDATIONS.

- TAPERED CRICKETS AS REQUIRED. SLOPE 1/2" PER FOOT MINIMUM.
- FULLY ADHERED T.P.O. ROOF MEMBRANE.
- CHANGE IN ROOF SLOPE AND/OR ELEVATION.
- THRU-WALL ROOF SCUPPER WITH OVERFLOW.
- PROVIDE WALKWAY PADS FROM ROOF ACCESS TO ALL ROOFTOP EQUIPMENT.
- ROOF SHEATHING TO BE CONSTRUCTED OF FIRE RETARDANT TREATED WOOD 4'-0" EACH SIDE OF FIRE WALL, NO PENETRATIONS ALLOWED IN THIS AREA
- GUTTER TO DOWNSPOUT TO MAIN ROOF

#### DOWNSPOUT CALC

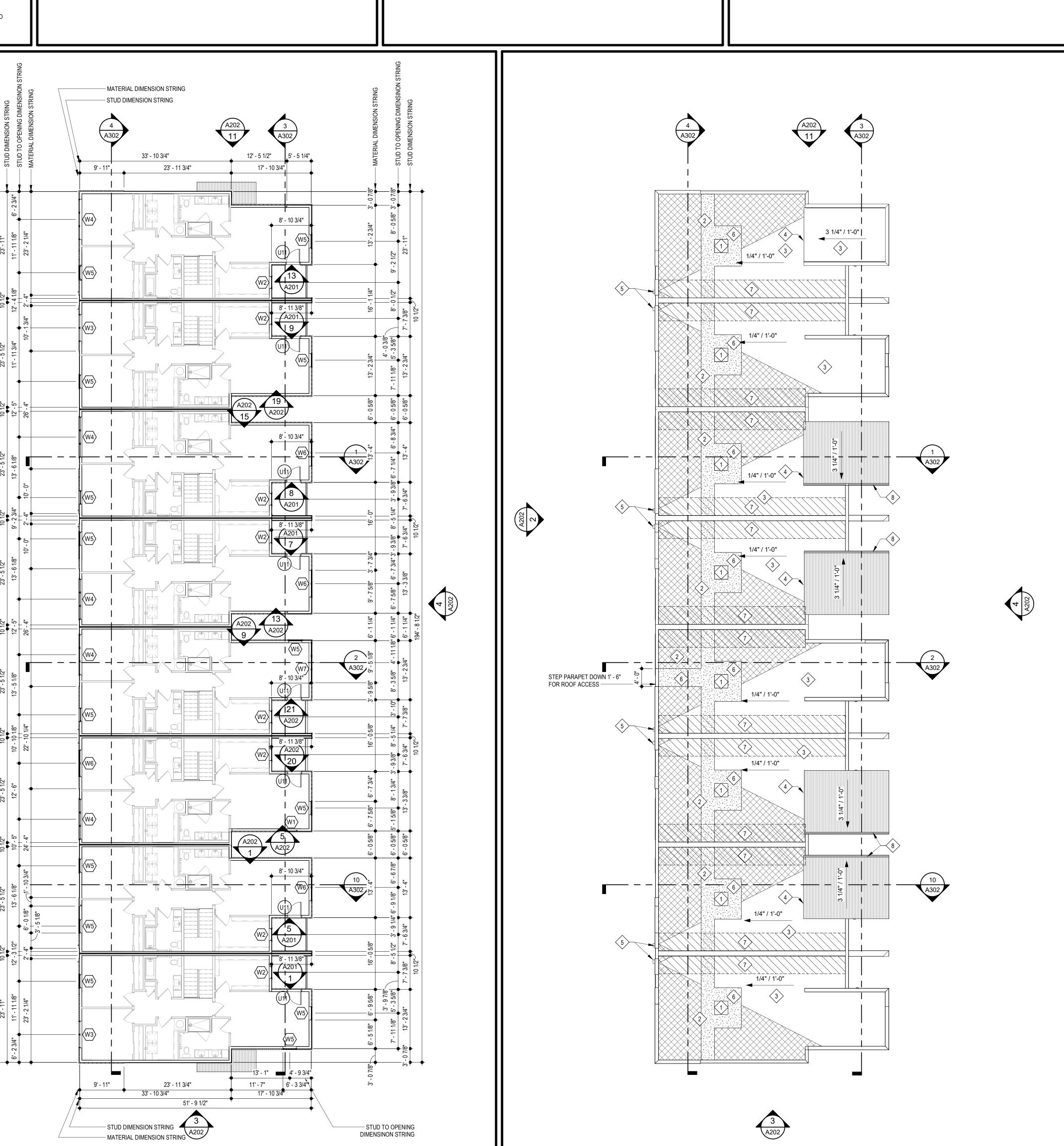
AREA OF 1 VILLA: 1,059 S.F. / 1 DOWNSPOUTS = 1,058 S.F./D.S. (SMACNA) TABLE 1-2 - 100 YEAR S.F./S.I. = 120 1,059 /120 = 8.825 SQUARE INCHES OF DOWNSPOUT AREA USE (1) 4" SQ. DOWNSPOUTS PER VILLA



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20-078 TR,i PROJECT NO.

SHEET NO.



- | GRUUF \_ \_ \_ SCALE: 3/32" = 1'-0"

GROUP 2 PARAPET

#### **GENERAL NOTES**

- A. DIMENSIONS ARE TO FACE OF STUD OR FACE OF MASONRY.
- B. FOR DOOR SCHEDULE SEE SHEET A040 XXX
- C. FOR WINDOW SCHEDULE SEE SHEET A050  $\langle$  X  $\rangle$
- D. FOR PARTITION TYPES SEE SHEET A030 X
- E. FOR UNIT INTERIOR PARTITION TYPES AND LOCATIONS REFER TO UNIT SHEETS (A400 THROUGH A401).
- F. GENERAL CONTRACTOR WILL FURNISH & INSTALL 5 LB MULTIPURPOSE DRY CHEMICAL 2A:10B:C RATED FIRE EXTINGUISHERS w/ MOUNTING BRACKETS & ACCESSORIES @ 4'-0" A.F.F. AS REQUIRED BY GOVERNMENTAL AUTHORITIES. MAXIMUM TRAVEL DISTANCE OF 75'-0" FOR PLACEMENT IN PUBLIC SPACES AND CORRIDORS. A MINIMUM RATED 1A:10B:C FIRE EXTINGUISHER TO BE PROVIDED IN EACH UNIT.
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- MATERIAL DIMENSION STRING

20' - 0 3/4"

26' - 2 1/4"

- STUD DIMENSION STRING - MATERIAL DIMENSION STRING

STUD DIMENSION STRING

- H. COORDINATE LOCATION OF BEARING WALLS INSIDE DWELLING UNITS WITH UNIT PLANS.
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- J. FINISH FLOOR ELEVATION AT GROUP 1 IS 100'-0" AND ALL OTHER GROUPS ARE LABELED IN RELATION TO THAT LEVEL RE: CIVIL DRAWINGS FOR ALL GRADE INFORMATION.
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MASONRY SPECIFICATIONS.

#### **ROOF GENERAL NOTES**

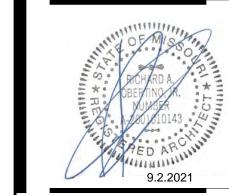
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- E. ALL ROOF SLOPES ARE TO HAVE A MINIMUM OF 1/4" FALL WHERE CRICKETS AND VALLEYS OCCUR. CRICKETS ARE TO BE PROVIDED WITH SUFFICIENT DEPTH AND SLOPE TO ACCOMMODATE A MINIMUM 1/4" PER FOOT FALL AT

#### ROOF KEYED NOTES (#)

- PROVIDE TAPERED CRICKETS AT ALL ROOF TOP UNITS, SLOPE 1/2" PER FOOT MINIMUM. INSTALL FLASHING AND COUNTER FLASHING PER ROOFING MANUFACTURER'S WRITTEN RECOMMENDATIONS.
- TAPERED CRICKETS AS REQUIRED. SLOPE 1/2" PER FOOT MINIMUM.
- . FULLY ADHERED T.P.O. ROOF MEMBRANE.
- CHANGE IN ROOF SLOPE AND/OR ELEVATION.
- THRU-WALL ROOF SCUPPER WITH OVERFLOW.
- PROVIDE WALKWAY PADS FROM ROOF ACCESS TO ALL ROOFTOP EQUIPMENT.
- ROOF SHEATHING TO BE CONSTRUCTED OF FIRE RETARDANT TREATED WOOD 4'-0" EACH SIDE OF FIRE WALL, NO PENETRATIONS ALLOWED IN THIS AREA
- GUTTER TO DOWNSPOUT TO MAIN ROOF

#### DOWNSPOUT CALC

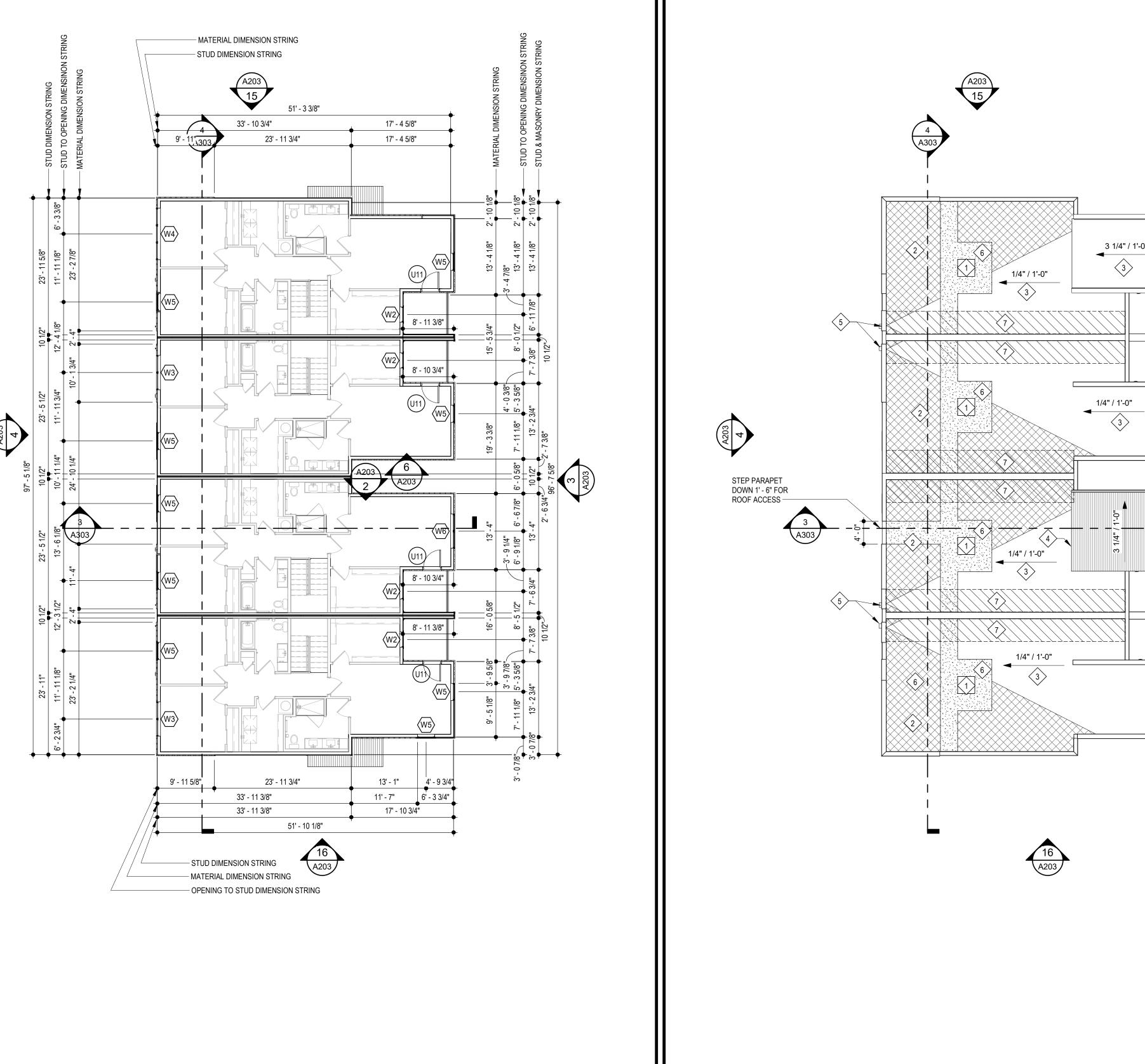
AREA OF 1 VILLA: 1,059 S.F. / 1 DOWNSPOUTS = 1,058 S.F./D.S. (SMACNA) TABLE 1-2 - 100 YEAR S.F./S.I. = 120 1,059 /120 = 8.825 SQUARE INCHES OF DOWNSPOUT AREA USE (1) 4" SQ. DOWNSPOUTS PER VILLA



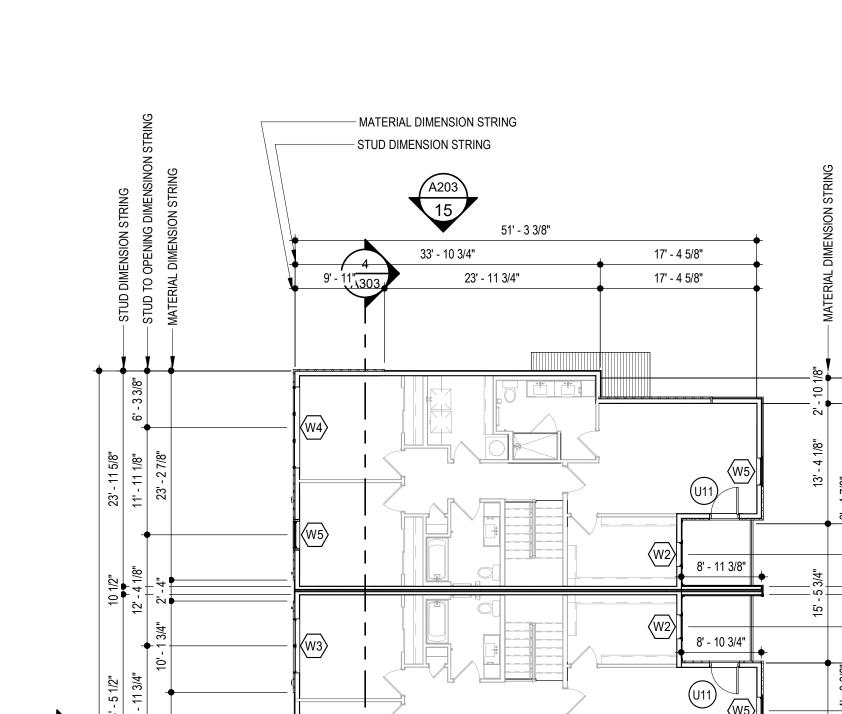


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**GROUP 3 ROOF PLAN**SCALE: 3/32" = 1'-0"

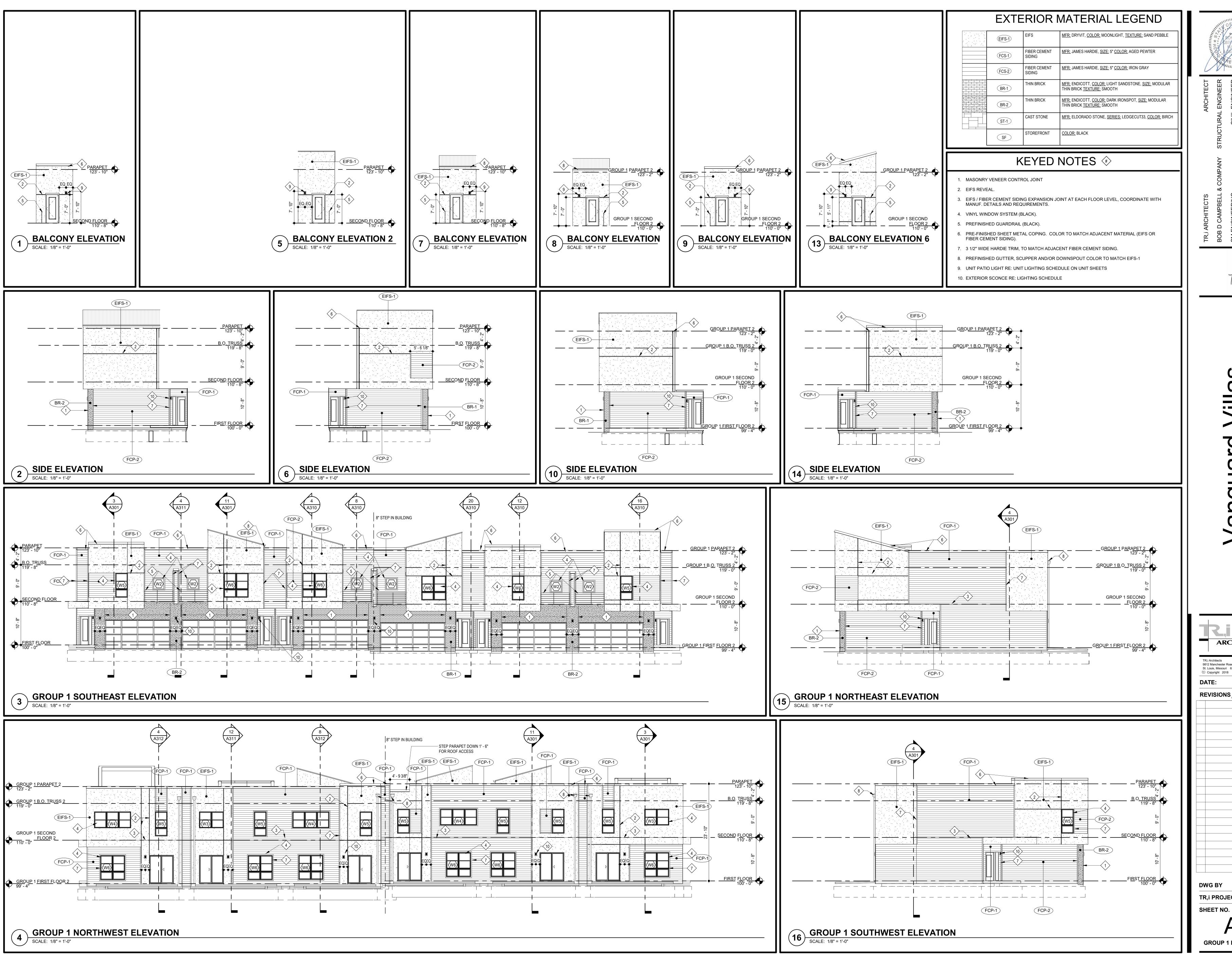


GROUP 3 FIRST FLOOR

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

GROUP 3 SECOND FLOOR

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



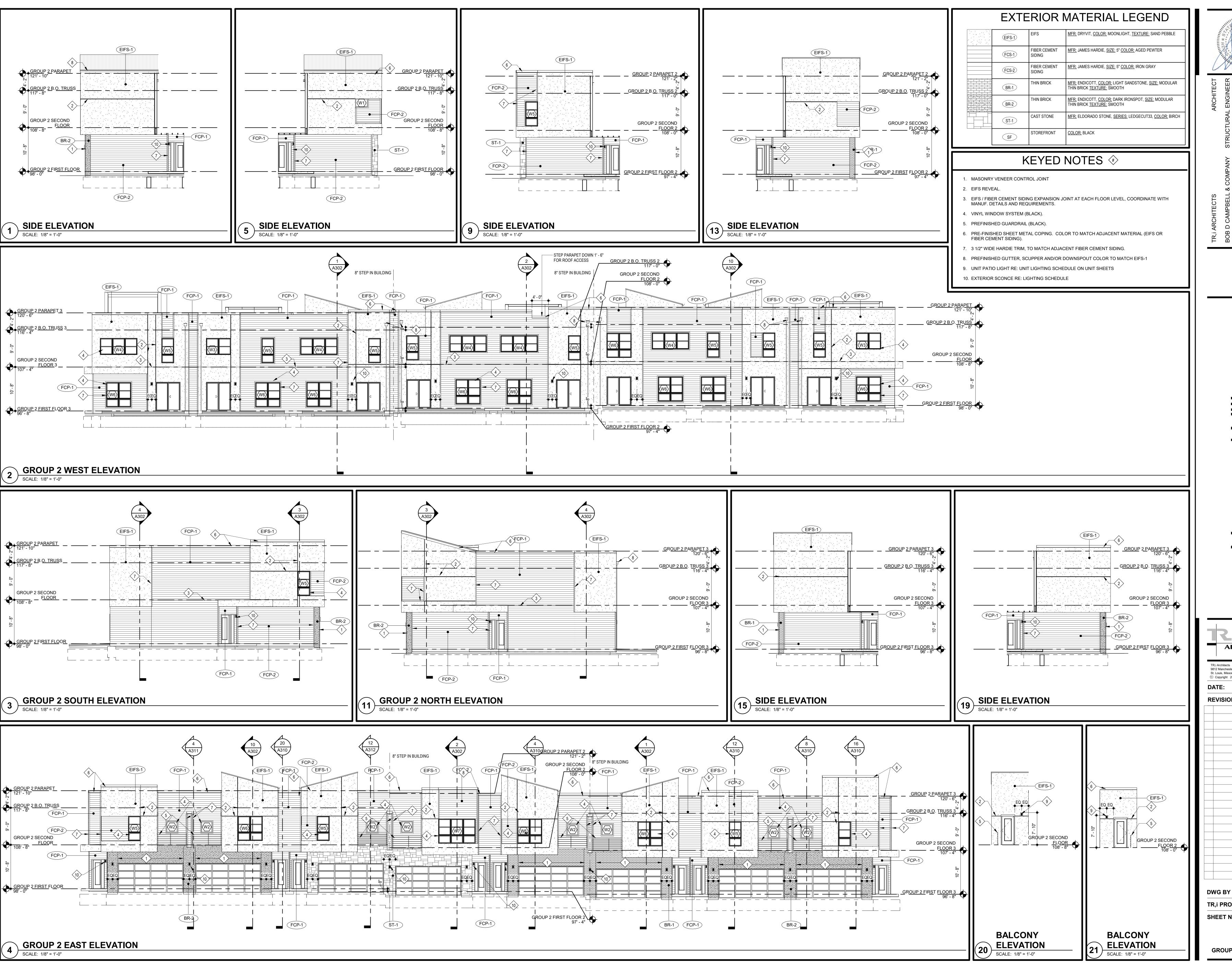
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RICHARD A.

BED ARCHARD A.

9.2.2021

GENERAL CONTRACTOR
MECHANICAL ENGINEER

SM ENGINEERING
GENERAL CONTRACTOR
LATIMER SOMMERS &
ASSOCIATES

SM ENGINEE
GENERAL CC
LATIMER SOI
ASSOCIATES
LATIMER SOI
ASSOCIATES

Vanguard Villas

TR,i Architects
9812 Manchester Road
St. Louis, Missouri 63119
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T: 314-395-9750
F: 314-395-9751
www.triarchitects.com

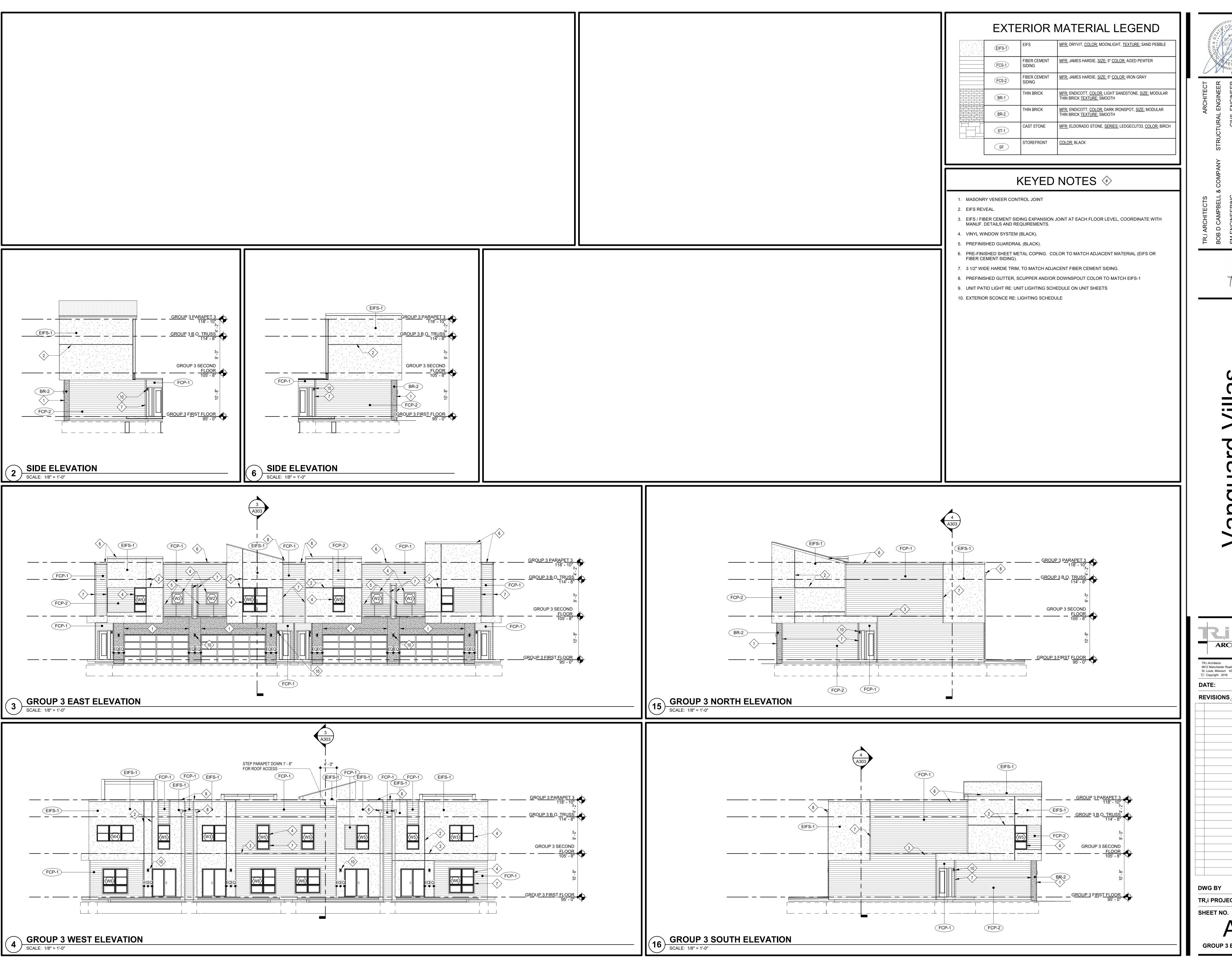
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9.2.2021

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A202
GROUP 2 EXTERIOR ELEVATIONS



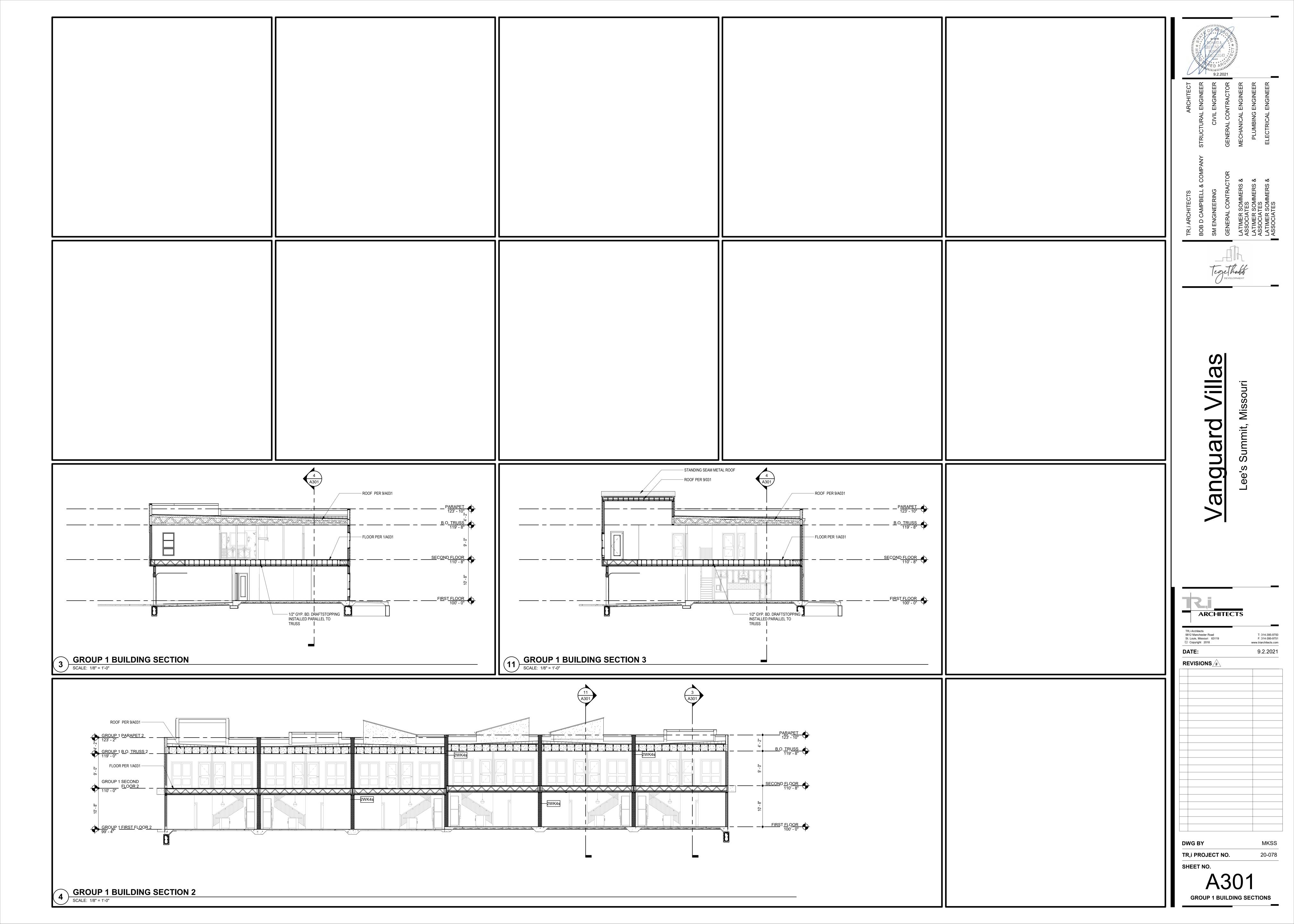


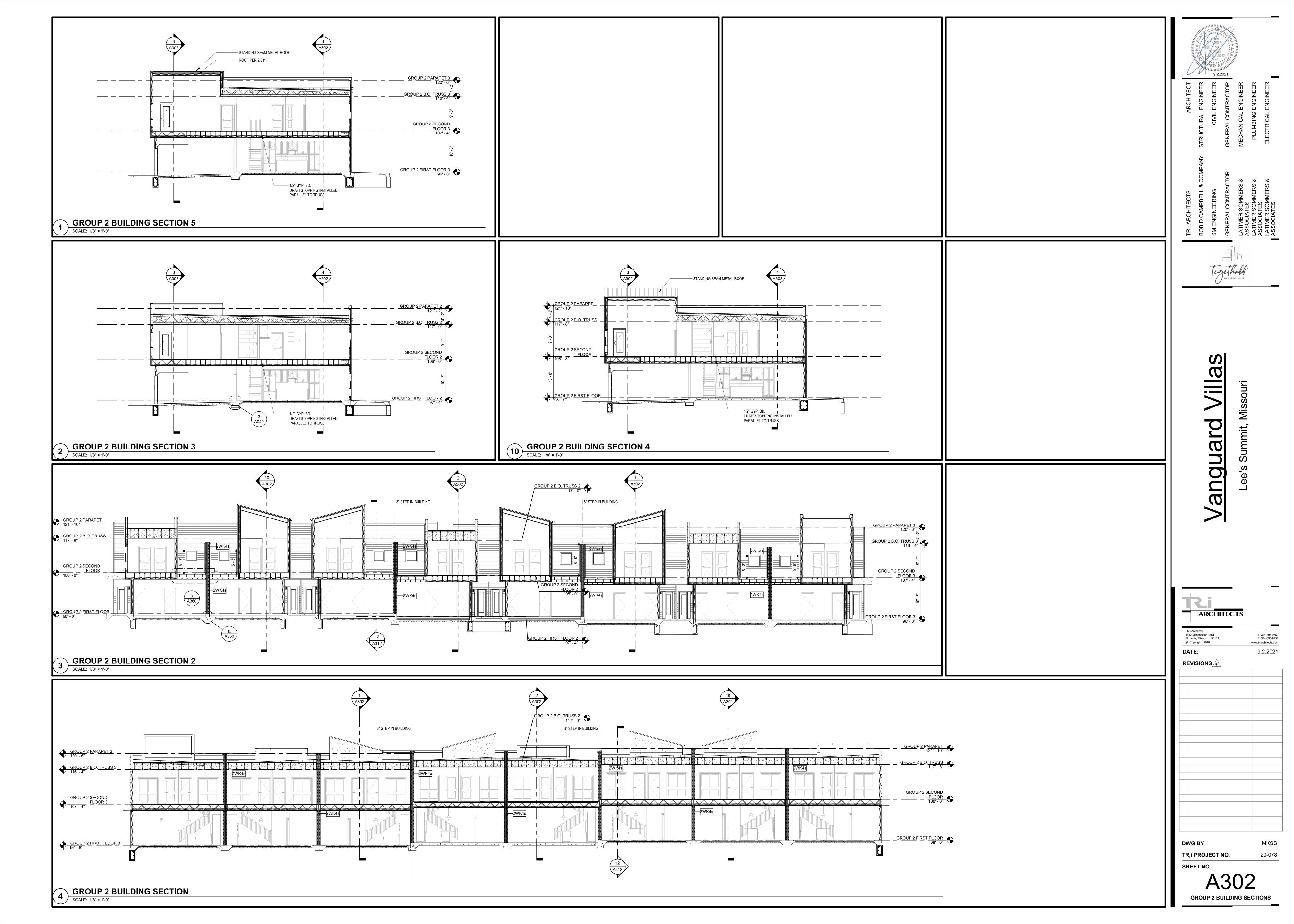
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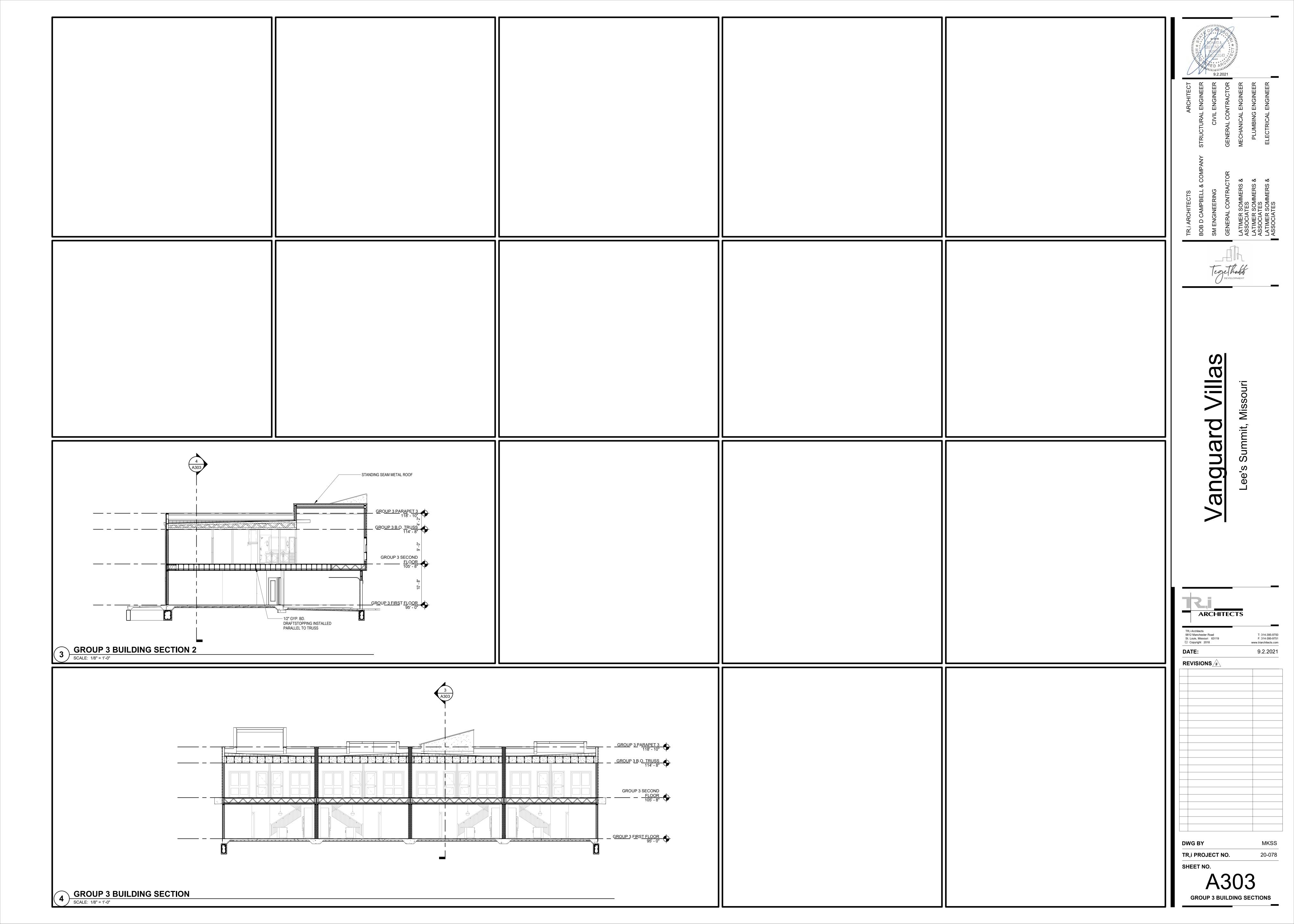
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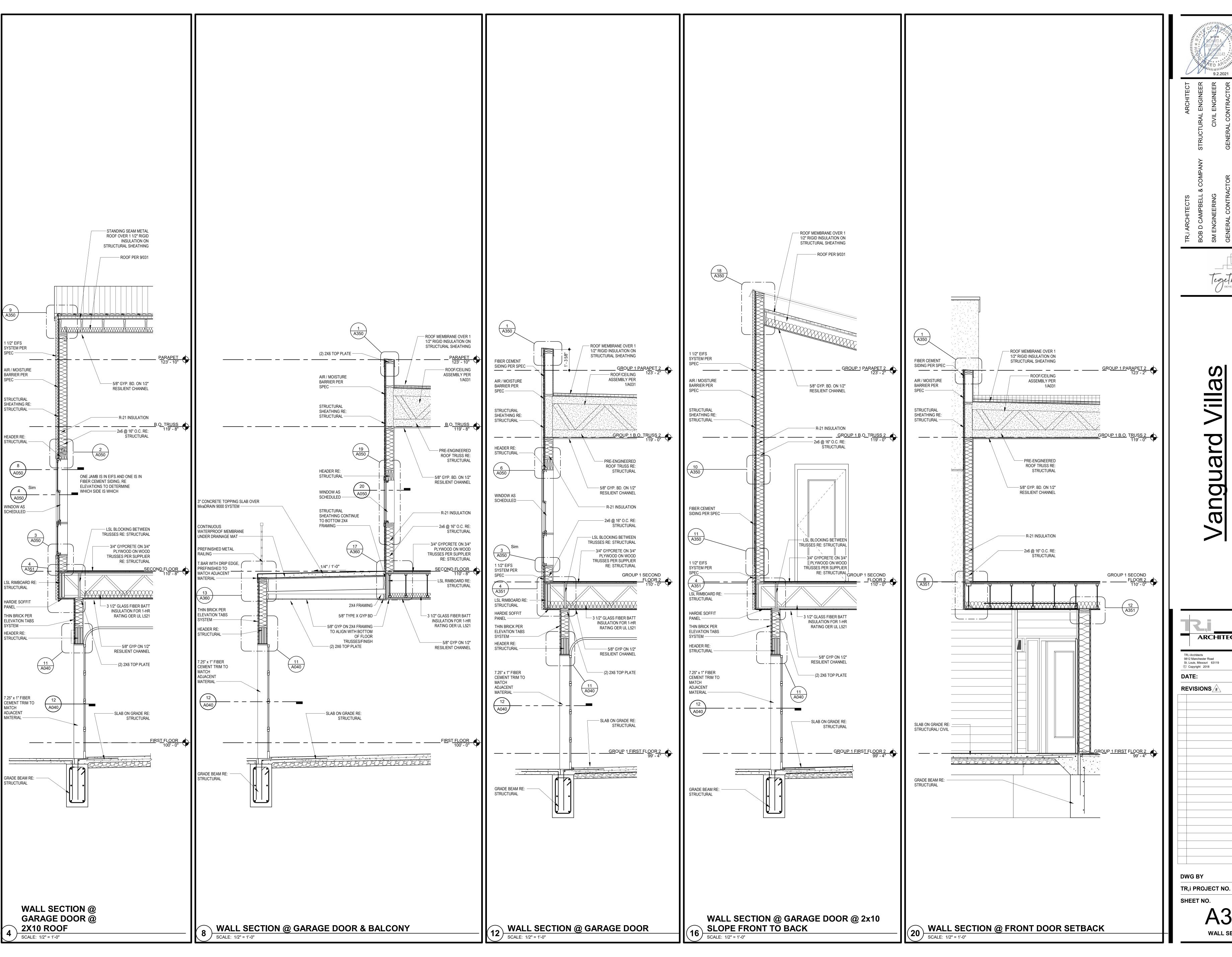
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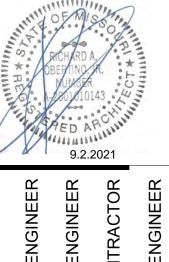
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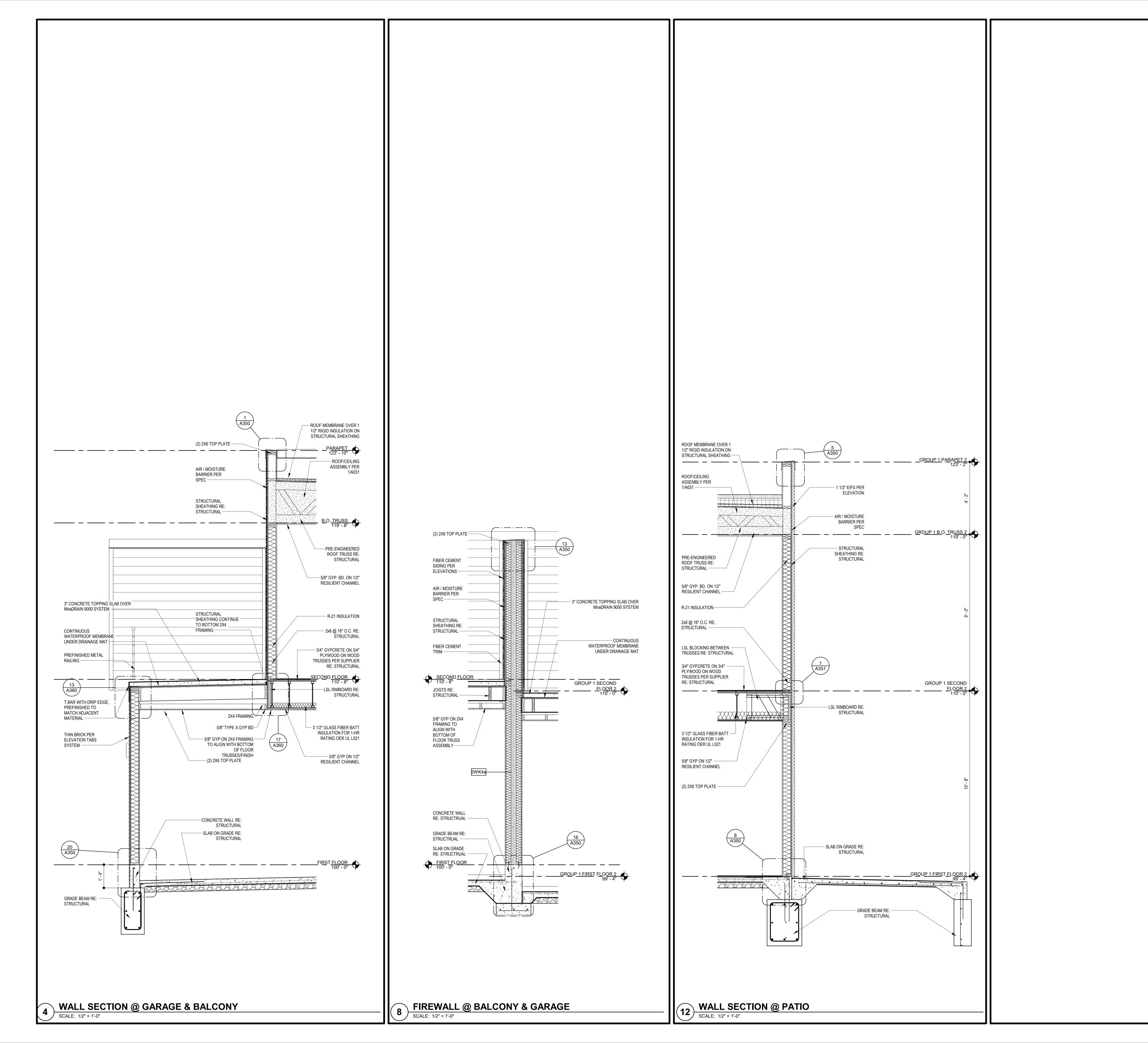








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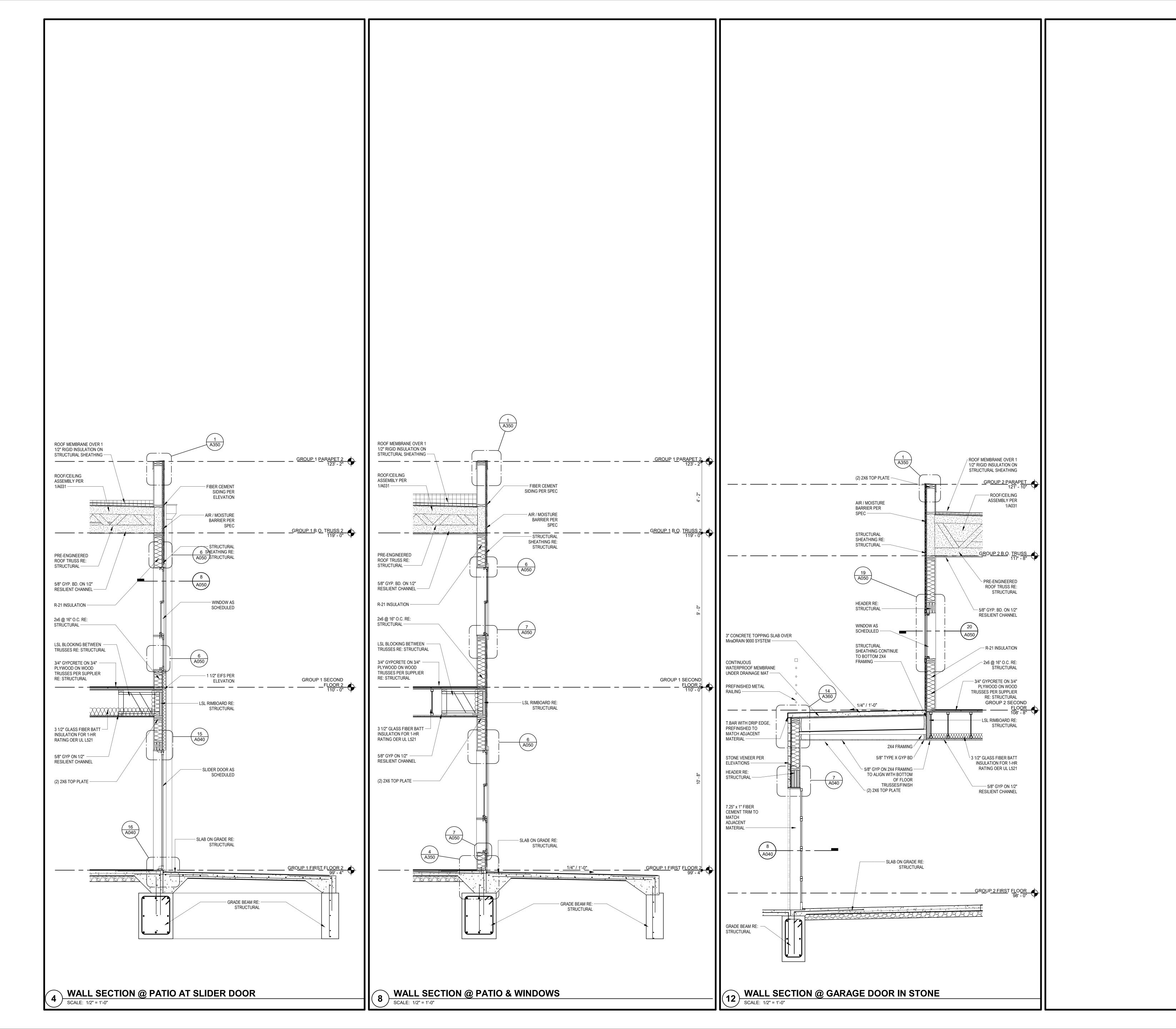
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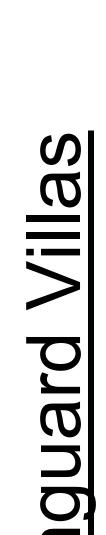
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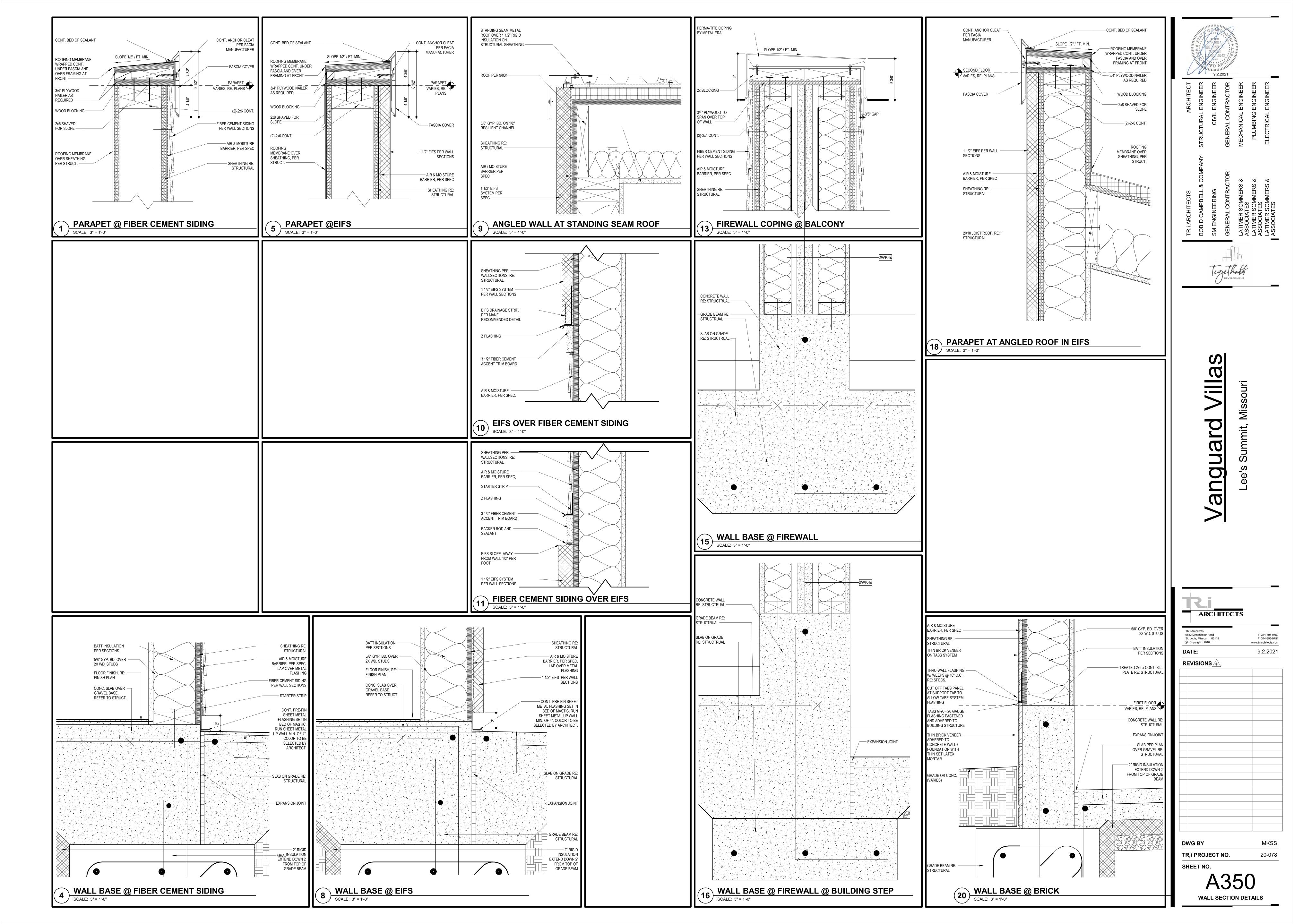
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TR.j PROJECT NO.
20-078

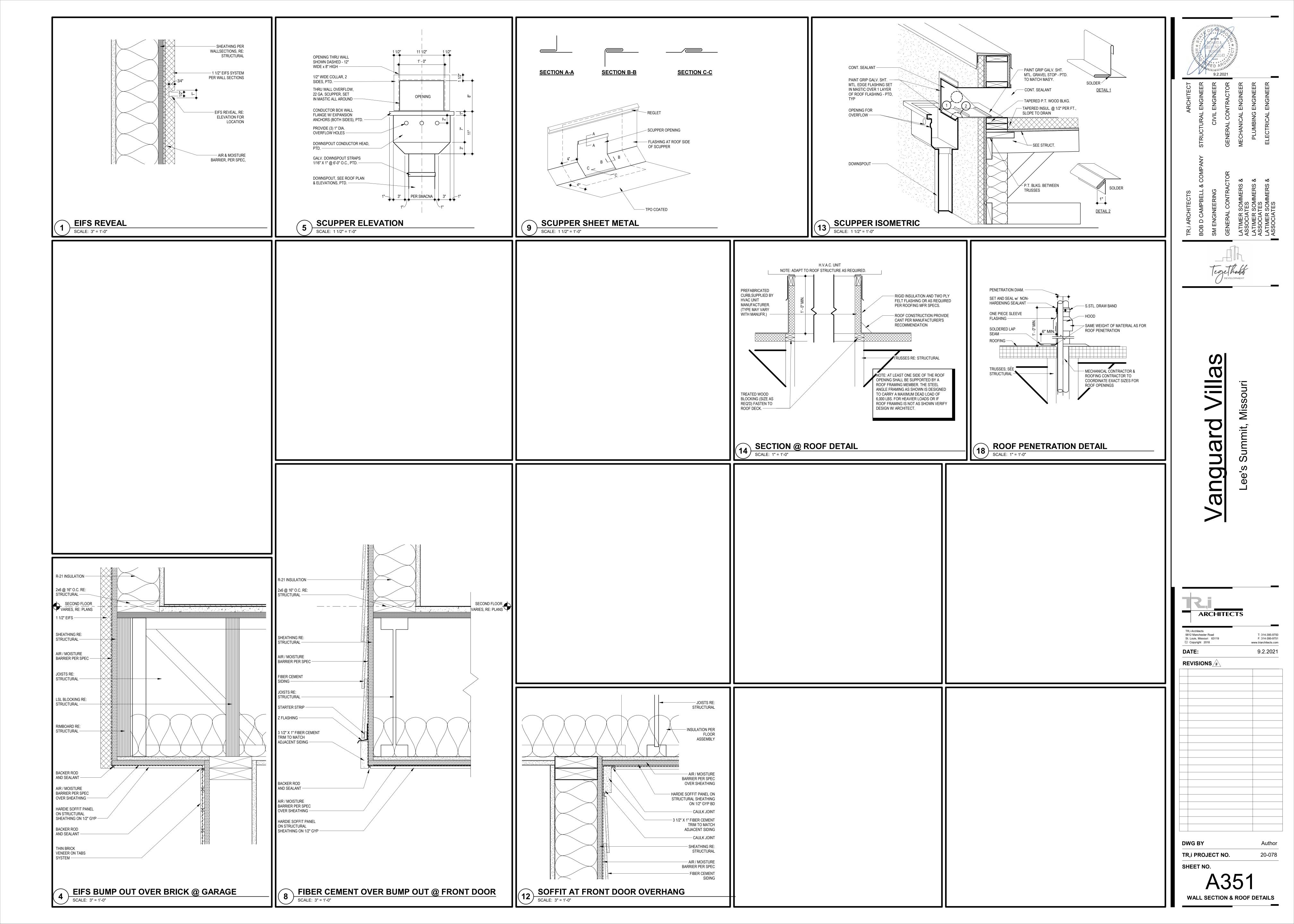
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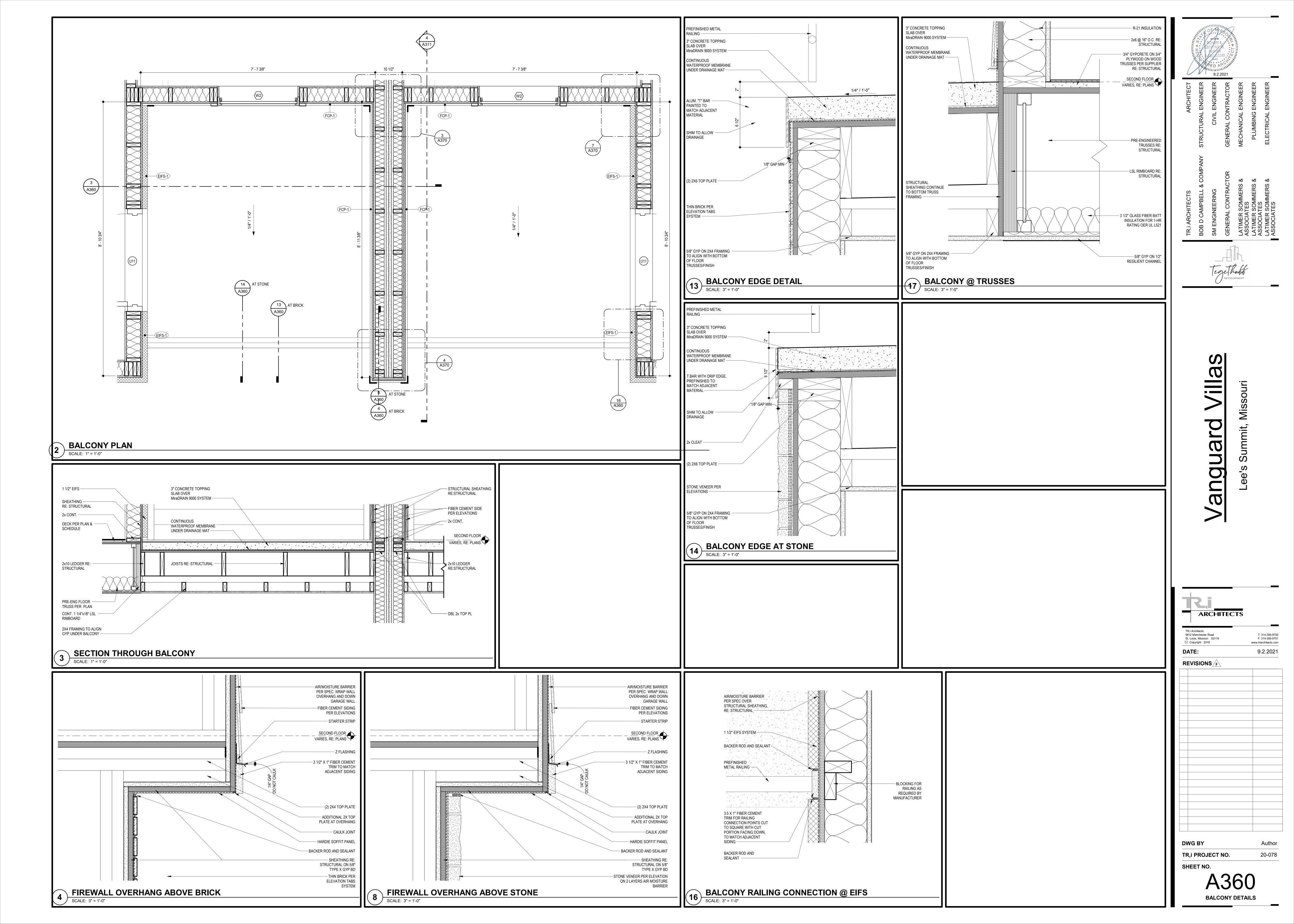


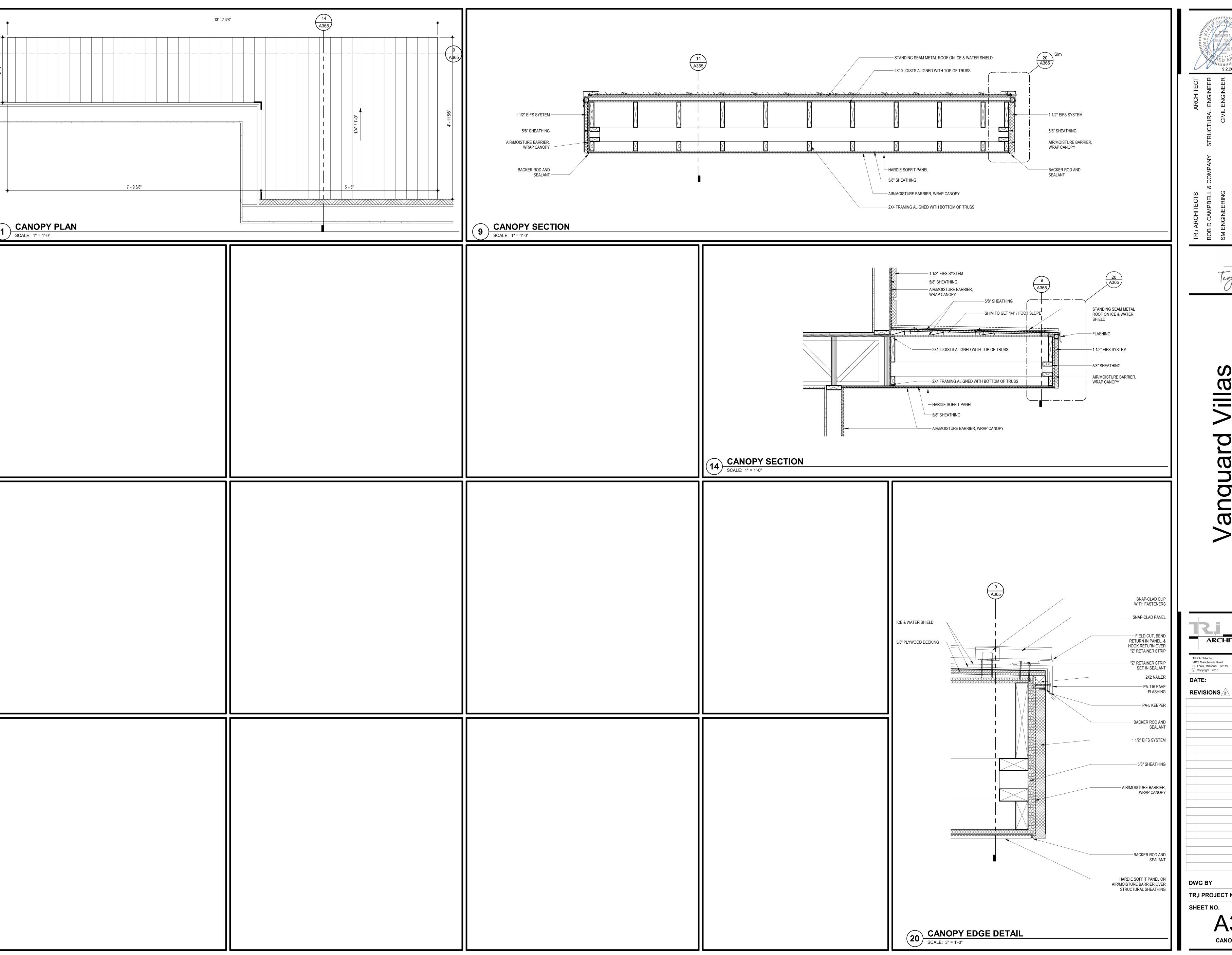


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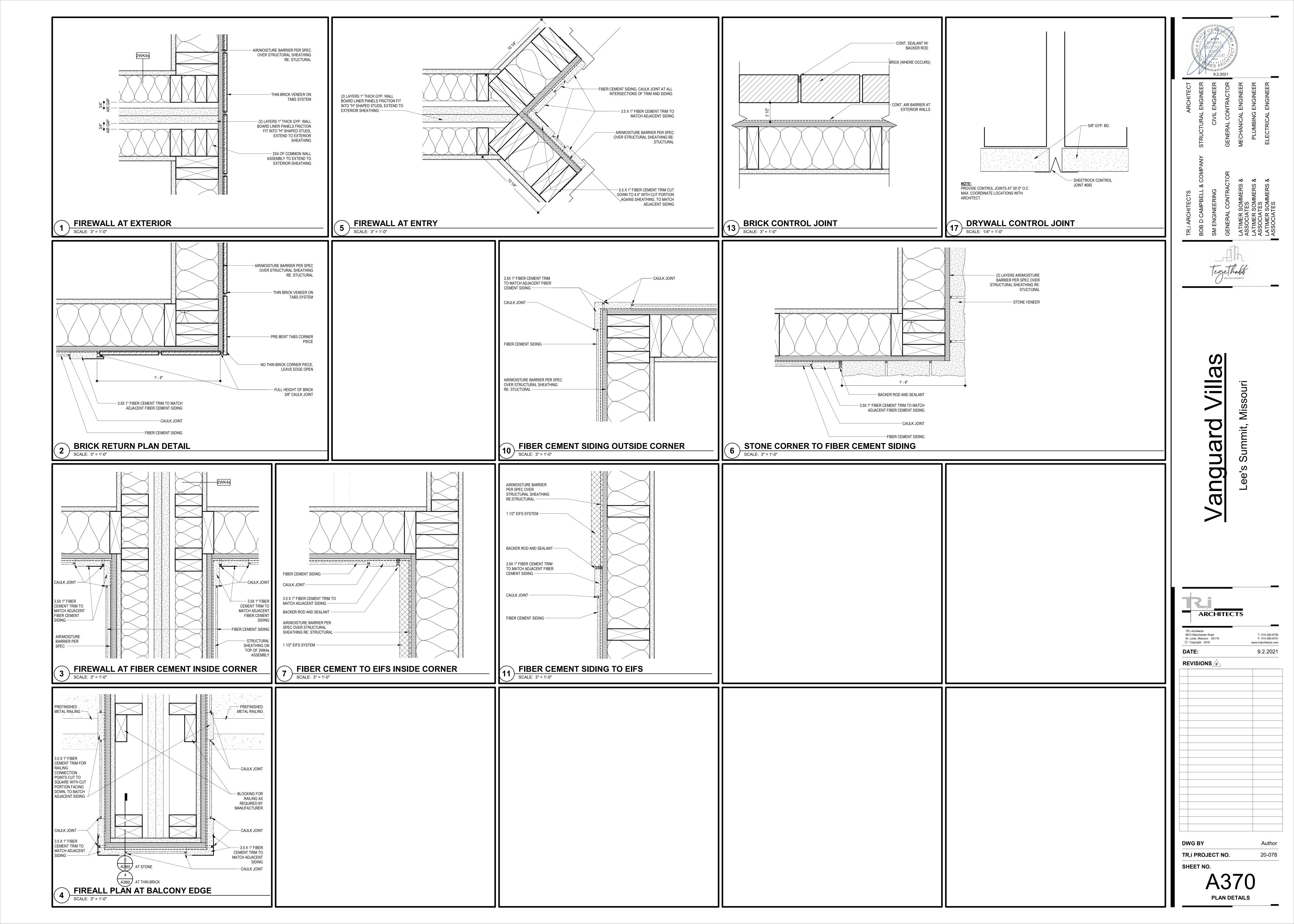
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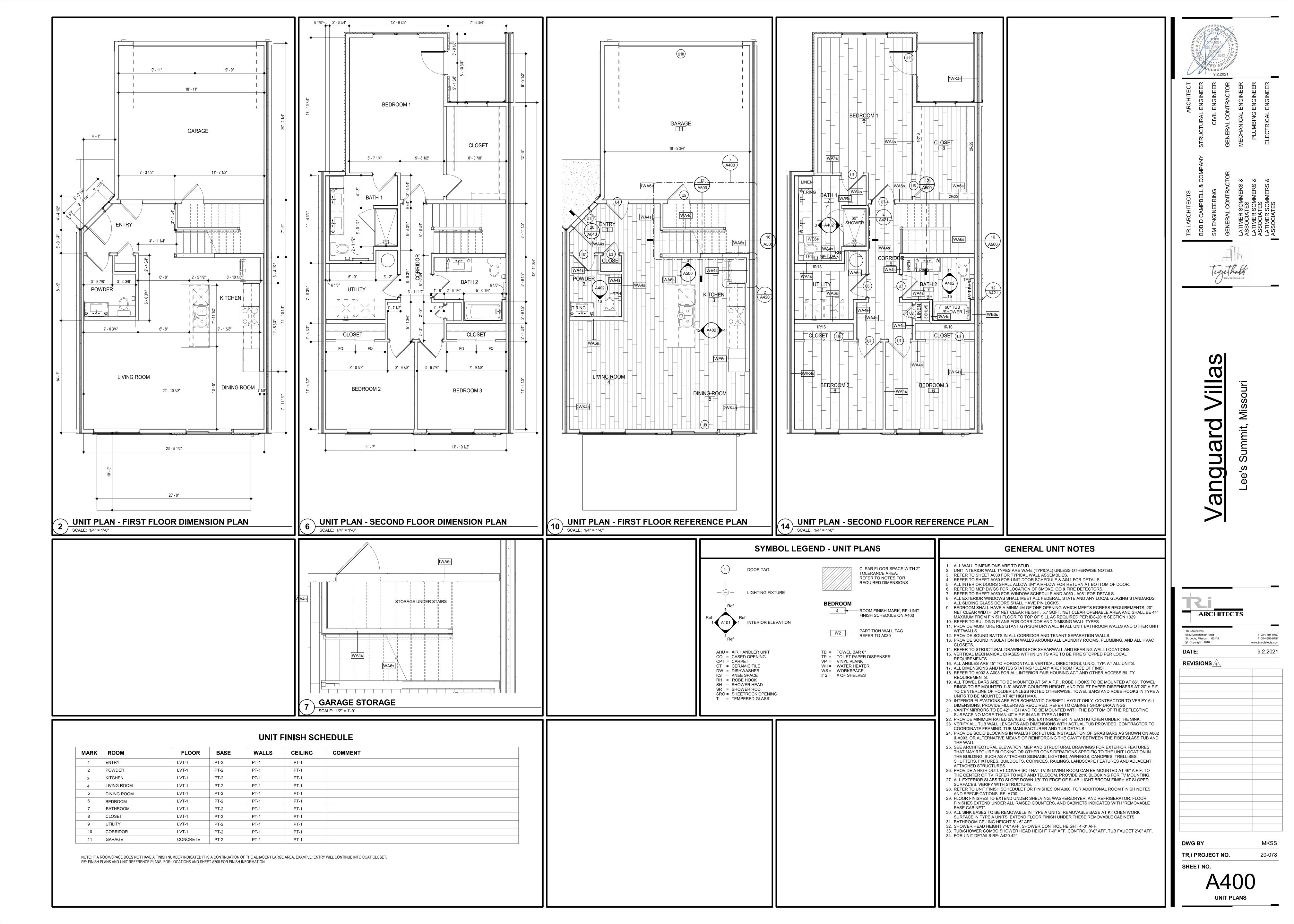
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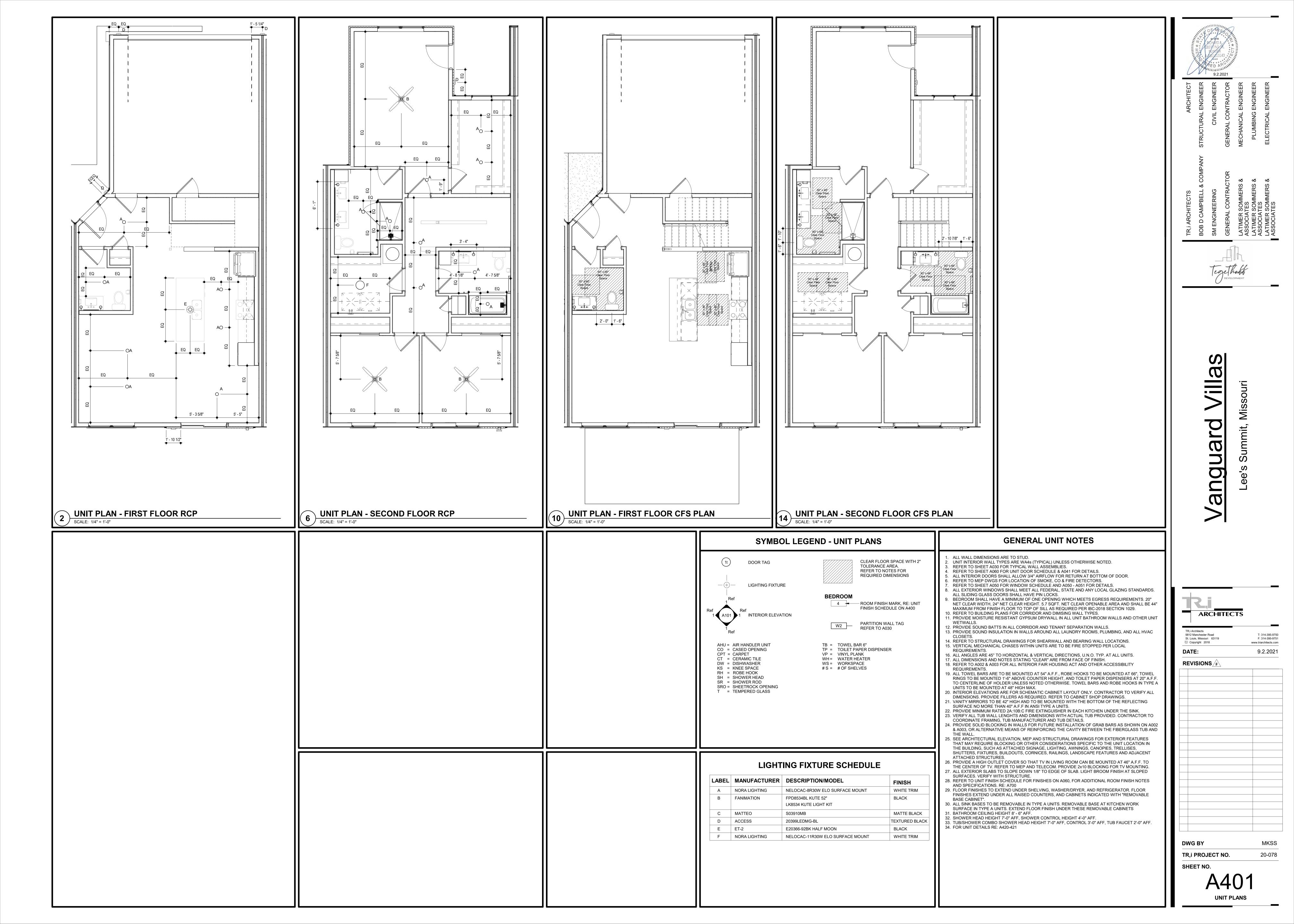
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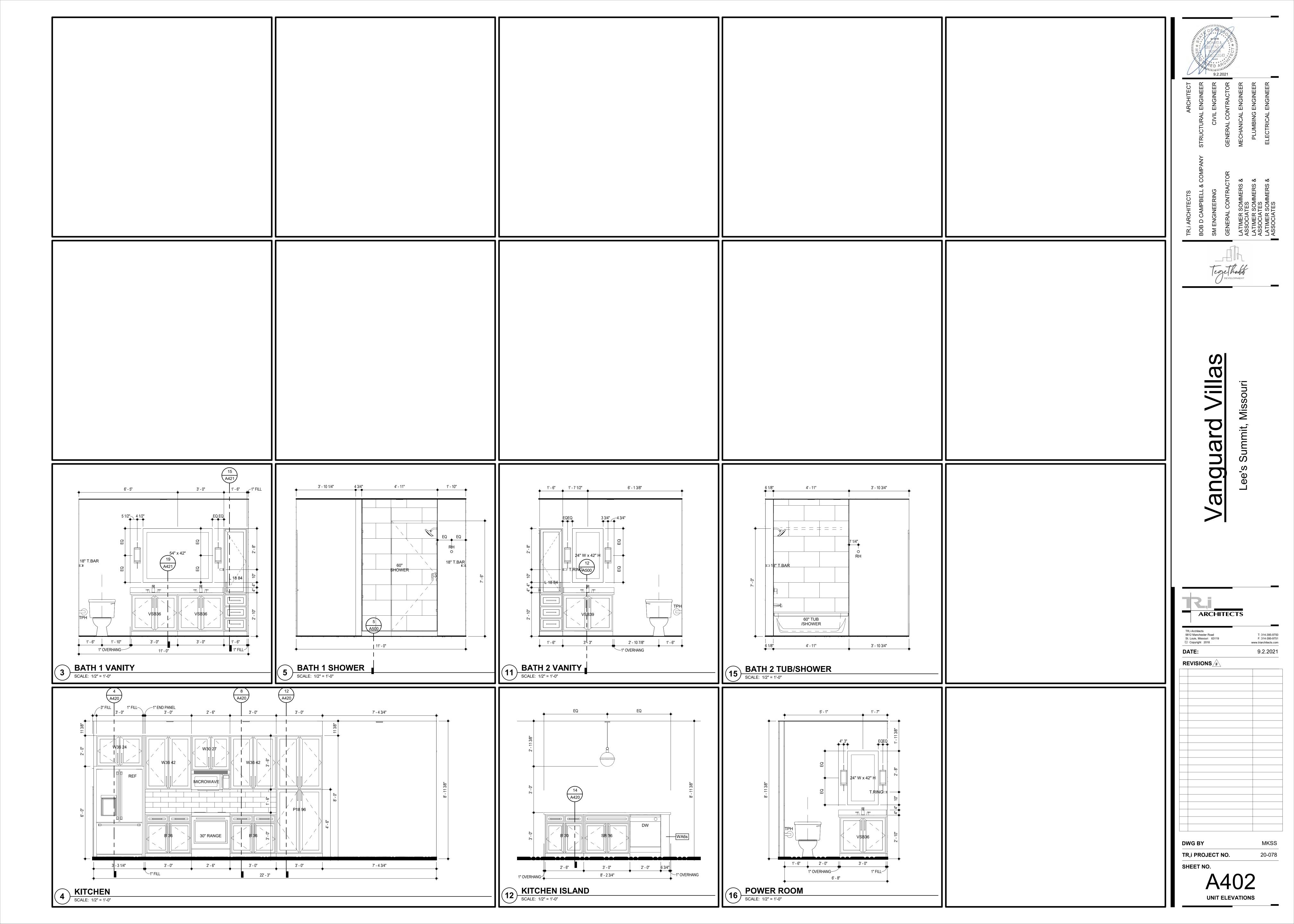
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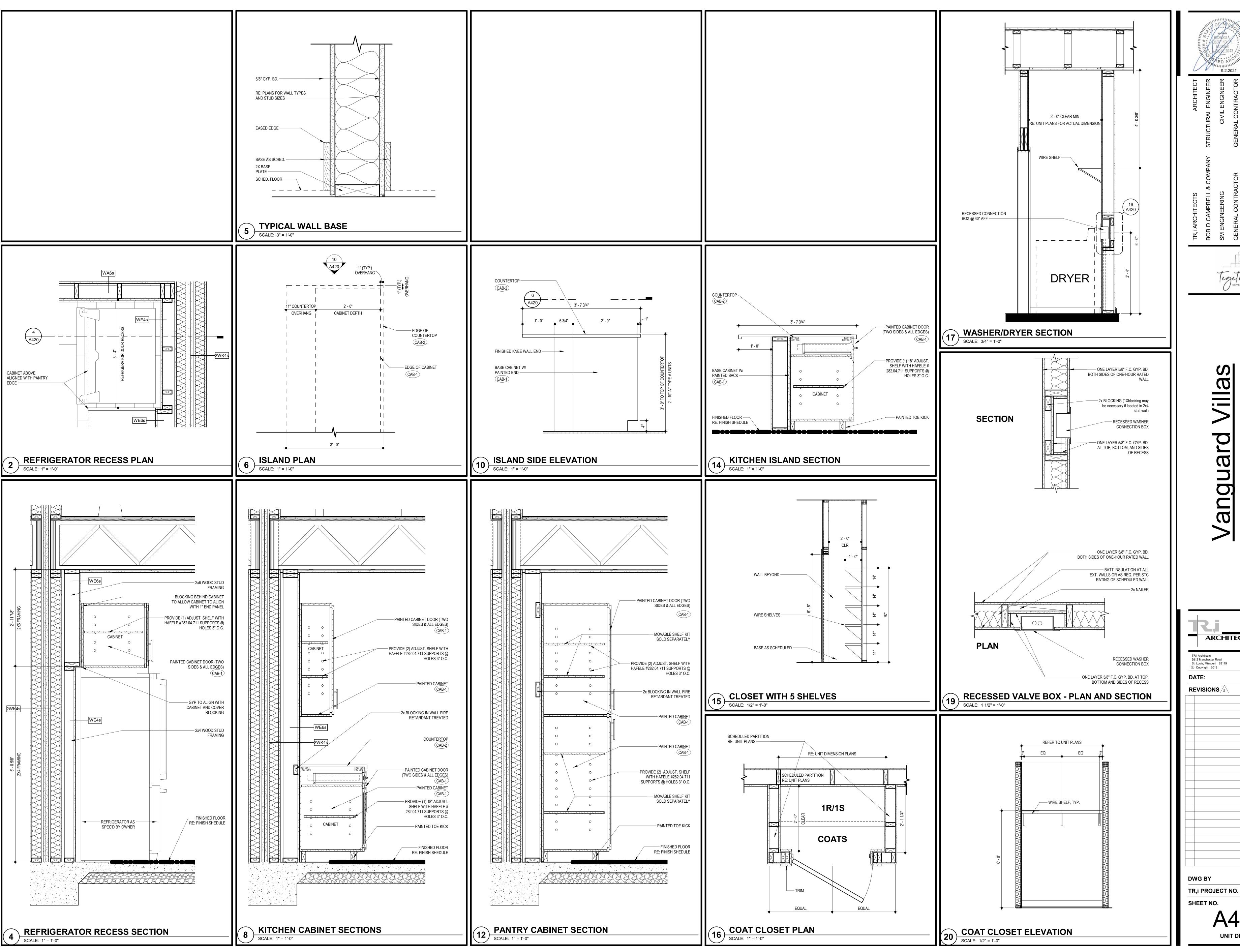
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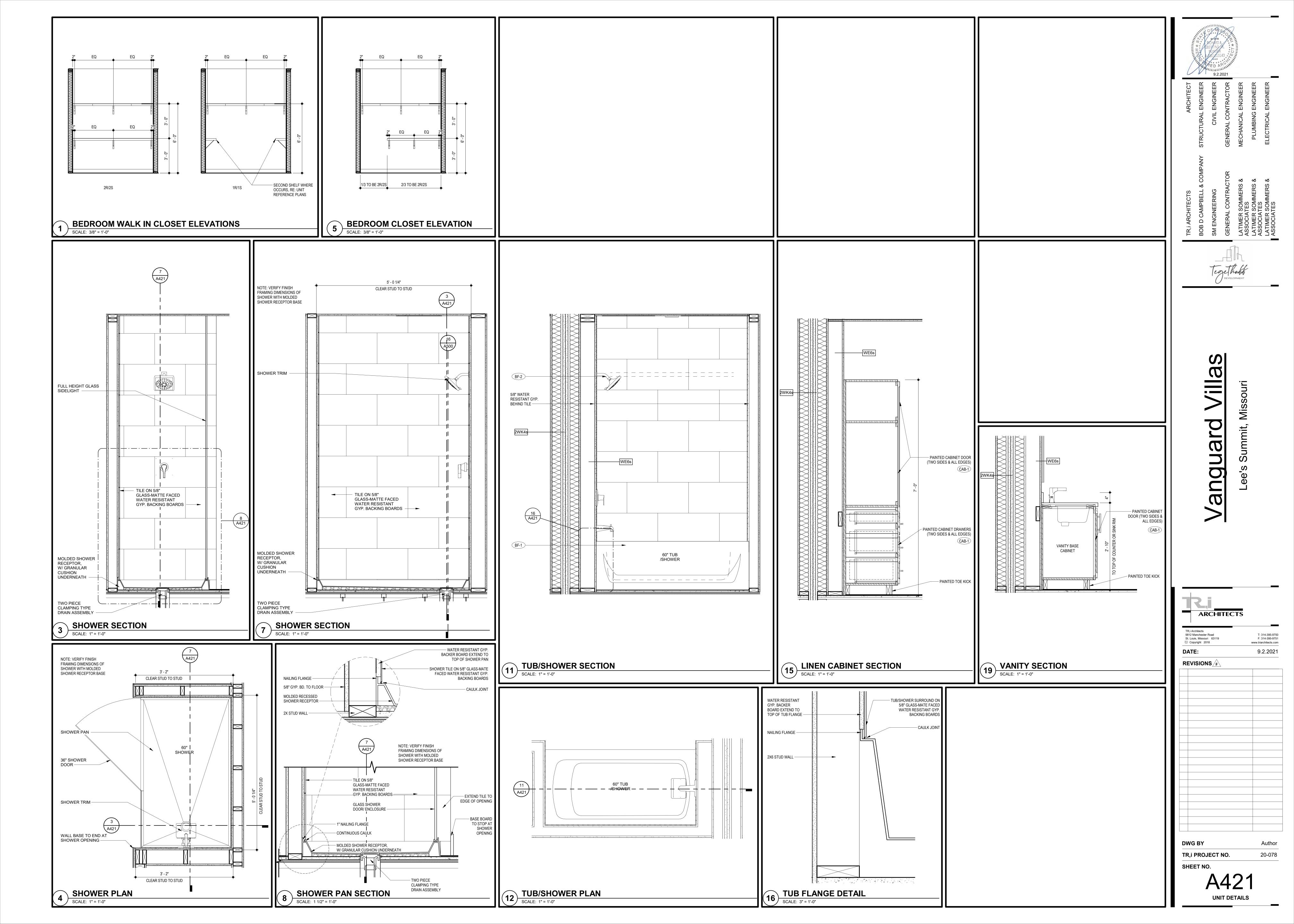


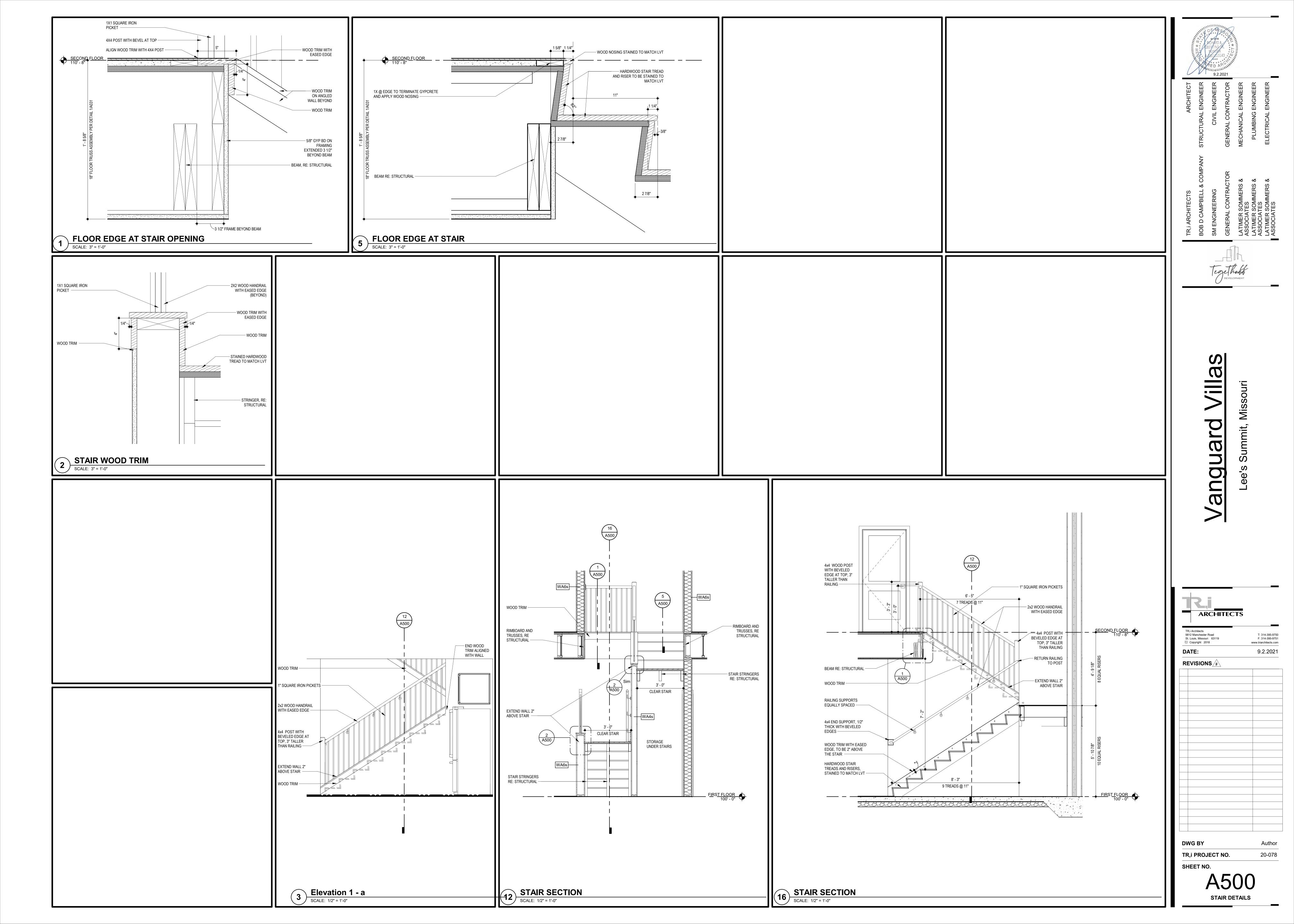




**ARCHITECTS** T: 314-395-9750 F: 314-395-9751 St. Louis, Missouri 63119 www.triarchitects.com 9.2.2021 REVISIONS /#\

20-078





#### FLOOR FINISH SCHEDULE

MARK	ITEM	MANUFACTURER	MODEL / DESCRIPTION	RESPONSIBILITY
LVT-1	LUXURY VINYL TILE	PHILIDELPHIA COMMERCIAL	PRODUCT NAME/#: 5533V G-FORCE 12 MIL COLOR: 00343 00343 SIZE: 6 in. x 48 in. INSTALL METHOD: DIRECT GLUE ASHLAR	CFCI

#### **WALL FINISH SCHEDULE**

PT-1	PAINT - WALLS	BENJAMIN MOORE	COLOR: OC-64 PURE WHITE FINISH: FLAT AT CEILING FINISH: EGGSHELL AT WALLS TYPE: INTERIOR ACRYLIC WATERBASE PRIMER: BENJAMIN MOORE FRESH START 100% ACRYLIC SUPERIOR PRIMER (046) INSTALLATION: 1 COAT PRIMER, 2 COATS PAINT, APPLY PER MANUFACTURER RECOMMENDATION	CFCI
PT-2	PAINT - DOOR AND TRIM	BENJAMIN MOORE	COLOR: PM-1 SUPER WHITE FINISH: SEMI-GLOSS AT PAINTED DOORS AND TRIM TYPE: INTERIOR ACRYLIC WATERBASE PRIMER: BENJAMIN MOORE FRESH START 100% ACRYLIC SUPERIOR PRIMER (046) INSTALLATION: 1 COAT PRIMER, 2 COATS PAINT, APPLY PER MANUFACTURER RECOMMENDATION	CFCI
T-1	WALL TILE	MSI	PRODUCT NAME/#: TEKTILE PORCELAIN COLLECTION COLOR: LINEART IVORY DIMENSIONS: 12" X 24" X 3/8" INSTALL METHOD: HORIZONTAL STACKED WITH 1/16" JOINT	CFCI
	GROUT	MOSAIC TILE & STONE	GROUT: TEC POWER GROUT COLOR: #949 SILVERADO NOTE: TO BE SEALED	
T-2	KITCHEN BACKSPLASH	DALTILE	PRODUCT NAME/#: LINEAR COLOR: ARTIC WHITE 0190 FINISH: SEMI-GLOSS DIMENSIONS: 4" X 12" X 5/16" INSTALL METHOD: HORIZONTAL RUNNING BOND WITH 1/16" JOINT	CFCI
	GROUT	ARCHITECTURAL CERAMICS	GROUT: LATICRETE COLOR: #89 SMOKEY GREY NOTE: TO BE SEALED	
T-3	KITCHEN BACKSPLASH ALTERNATE	CERAMIC TECHNICS LTD	PRODUCT NAME/#: DESIGN WALL COLOR: CRACKLE BIANCO FINISH: GLOSSY DIMENSIONS: 4" X 12" X 8mm INSTALL METHOD: HORIZONTAL STACKED WITH 1/16" JOINT	CFCI
	GROUT	MOSAIC TILE & STONE	GROUT: TEC POWER GROUT COLOR: #910 BRIGHT WHITE NOTE: TO BE SEALED	
WB-1	WOOD TRIM	MILLWORKER TO PROVIDE	PRODUCT: PAINT GRADE FINISH: PAINT GRADE- PAINTED PT-2 IN TRIM FINISH DIMENSIONS: 4" HIGH BASE, 2.25" DOOR TRIM	CFCI

#### **CASEWORK FINISH SCHEDULE**

MARK	ITEM	MANUFACTURER	MODEL / DESCRIPTION	RESPONSIBILITY
C-1	KITCHEN CABINETRY PAINTED SHAKER	SMART CABINETS	PRODUCT LINE: CAMBRIDGE STANDARD OVERLAY WITH SQUARE EDGE PROFILE COLOR: TBD INSTALL: SOFT CLOSE DIMENSION: CABINET SIZE SHOWN ON ELEVATIONS	CFCI
C-2	BATHROOM CABINETRY PAINTED SHAKER	SMART CABINETS	PRODUCT LINE: CAMBRIDGE STANDARD OVERLAY WITH SQUARE EDGE PROFILE COLOR: TBD INSTALL: SOFT CLOSE DIMENSION: CABINET SIZE SHOWN ON ELEVATIONS	CFCI
C-3	CABINET PULLS	TOP KNOBS	PRODUCT NAME/#: LYDIA PULL #TK795BLK 6 5/16" C. TO C. COLOR: BLACK FINISH: FLAT DIMENSION: 5 1/16" CENTER TO CENTER PULL	CFCI
C-4	KITCHEN COUNTERTOP	CAESARSTONE	QUARTZ PRODUCT: 5110 COLOR: ALPINE MIST FINISH: POLISHED THICKNESS: 3cm DIMENSIONS: 56.5" X 120" LARGEST AVAILABLE SLAB, RE TO UNIT PLANS FOR SIZES	CFCI
C-5	KITCHEN COUNTERTOP ALTERNATE	CAESARSTONE	QUARTZ PRODUCT: 4130 COLOR: CLAMSHELL FINISH: POLISHED THICKNESS: 3cm DIMENSIONS: 56.5" X 120" LARGEST AVAILABLE SLAB, RE TO UNIT PLANS FOR SIZES	CFCI
C-5	BATHROOM COUNTERTOP	CORIAN	QUARTZ COLOR: COARSE CARRARA FINISH: POLISHED THICKNESS: 3cm DIMENSIONS: RE TO UNIT PLANS FOR SIZES INSTALL: 4" BACKSPLASH AT SIDES AND BACK OF BATHROOM VANITIES	CFCI

#### MISC FINISH SCHEDULE

MARK	ITEM	MANUFACTURER	MODEL / DESCRIPTION	RESPONSIBILITY
M-1	WINDOW BLINDS	SWF CONTRACT	PRODUCT LINE: FAUX WOOD HORIZONTAL BLINGS COLOR: COCONUT 5630 DIMENSION: RE: WINDOW SCHEDULE	CFCI
M-2	WIRE CLOSET SHELVING	CLOSETMAID	HANGING SHELVING PRODUCT LINE: CLOSETMAID SHELF & ROD #30000 DIMENSION: RE: UNIT PLANS	CFCI
			LINEN/STORAGE SHELVING PRODUCT LINE: CLOSETMAID 16" TIGHT MESH #56402 DIMENSION: RE: UNIT PLANS	

#### **UNIT KITCHEN SCHEDULE**

MARK	ITEM	MANUFACTURER	MODEL / DESCRIPTION	RESPONSIBILITY
KF-1	KITCHEN SINK	PROFLO	PRODUCT NAME/#: PFUC301A COLOR: STAINLESS DIMENSIONS: 23 5/16" X 17 5/8"	CFCI
KF-2	FAUCET	MOEN	PRODUCT NAME/#: SINGLE HANDLE HIGH ARC PULLDOWN 7864 SERIES COLOR: BLACK	CFCI

#### **UNIT BATHROOM SCHEDULE**

MARK	ITEM	MANUFACTURER	MODEL / DESCRIPTION	RESPONSIBILIT
BF-1	BATHROOM SINK	KOHLER	PRODUCT NAME/#: K-2355 ARCHER UNDER-MOUNT COLOR: WHITE DIMENSIONS: 17 5/8" x 13"	CFCI
BF-2	WATER CLOSET	STERLING	PRODUCT NAME/#: VALTON COMFORT HEIGHT ELONGATED TOILET BOWL COLOR: WHITE  PRODUCT NAME/#: VALTON TOILET TANK COLOR: WHITE  PRODUCT NAME/#: PLASTIC TOILET SEAT PFTSE2000 COLOR: WHITE	CFCI
BF-3	FAUCET	MOEN	PRODUCT NAME/#: GENTA 6702 COLOR: BLACK	CFCI
BF-4	TUB/SHOWER BASE	STERLING	PRODUCT NAME/#: ENSEMBLE 30" BATH 71171110 COLOR: WHITE DIMENSION: 60" x 30" x 18"	CFCI
BF-5	TUB/SHOWER TRIM	MOEN	PRODUCT NAME/#: GENTA POSI-TEMP SINGLE HANDLE TUB/SHOWER TRIM KIT T2473EPBL FINISH: BLACK	CFCI
BF-6	SHOWER PAN	STERLING	PRODUCT NAME/#: ENSEMBLE 60 1/4" x 34" SHOWER BASE COLOR: WHITE DIMENSION: 60" x 34" x 5 1/2"	CFCI
BF-7	SHOWER TRIM SHOWER DRAIN	MOEN	PRODUCT NAME/#: GENTA POSI-TEMP SINGLE HANDLE SHOWER TRIM KIT T2472EPBL FINISH: BLACK  PRODUCT NAME/#: SHOWER DRAIN K-9132	CFCI
	SHOWER DRAIN	KOHLEK	COLOR: MATTE BLACK	CFCI
BF-8	SHOWERHEAD	AMERICAN STANDARD	PRODUCT NAME/#: 1660.528 WATER SAVING SHOWERHEAD FINISH: MATTE BLACK	CFCI
BF-9	SHOWER DOOR	KOHLER	PRODUCT: REVEL FRAMELESS PIVOT SHOWER DOOR #K-707511-L HARDWARE FINISH: BLACKENED BRONZE, BKN DIMENSION: 60", RE:UNIT PLANS & DETAILS	CFCI
BF-10	TOILET PAPER HOLDER	MOEN	PRODUCT NAME/#: GENTA MATTE BLACK PIVOTING PAPER HOLDER #BH3808BL FINISH: MATTE BLACK DIMENSIONS: 7 53/64" W x 3 1/4" D	CFCI
BF-11	TOWEL RING AT SINK	MOEN	PRODUCT NAME/#: TOWEL RING #BH3886BL FINISH: MATTE BLACK	CFCI
BF-12	TOWEL BARS	MOEN	PRODUCT NAME/#: GENTA MATTE BLACK TOWEL BAR #BH3818BL OR #BH3824BL FINISH: MATTE BLACK DIMENSION: 18" OR 24"	CFCI
BF-13	ROBE HOOK	MOEN	PRODUCT NAME/#: GENTA MATTE BLACK SINGLE ROBE HOOK #BH3803BL FINISH: MATTE BLACK	CFCI

#### UNIT APPLIANCE SCHEDULE

APPLIANCE	MANUFACTURER	MODEL / DESCRIPTION	COLOR	RESPONSIBILITY
REFRIGERATOR	SAMSUNG	SRF260BEAESRAA STAINLESS STEEL 26 cu.ft. FRENCH DOOR REFRIGERATOR	STAINLESS	CFCI
RANGE / OVEN	SAMSUNG	NE58K9430SS 5.8 cu.ft.	FINGERPRINT RESISTANT STAINLESS	CFCI
MICROWAVE W/ VENT	SAMSUNG	ME16H703SES 1.6 cu.ft OVER THE RANGE MICROWAVE	SPOT RESISTANT STAINLESS	CFCI
DISHWASHER	SAMSUNG	DW80M2020US/AA BUILD IN DISHWASHER	STAINLESS	CFCI
WASHER	GE APPLIANCES	GGTW220ACKWW WHITE TOP LOAD WASHER	WHITE	CFCI
DRYER	GE APPLIANCES	GGTX22EASKWW WHITE FRONT LOAD DRYER	WHITE	CFCI
GARBAGE DISPOSAL	MOEN	GXP33C		CFCI



ENERAL CONTRACTOR ECHANICAL ENGINEER

NG TRACTOR GENER. AERS & MECHA

SM ENGINEERING

GENERAL CONTRACT

LATIMER SOMMERS (
ASSOCIATES



# Vanguard Villas

ARCHITECTS

TR,i Architects
9812 Manchester Road
St. Louis, Missouri 63119
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T: 314-395-9750
F: 314-395-9751
www.triarchitects.com

PATE:
9.2.2021

REVISIONS #

DWG BY M
TR,i PROJECT NO. 20

SHEET NO

A700

#### General Information

- **A**. The contractor shall verify dimensions and conditions before construction and notify the engineer of any discrepancies, inconsistencies, or difficulties affecting the work before proceeding.
- B. The contractor shall coordinate all disciplines, verifying size and location of all openings, whether shown on structural drawings or not, as called for on architectural, mechanical, or electrical drawings. In the case of work in an existing building the contractor shall scan existing structure to locate all rebar in the area of the new core/opening using ground penetrating radar and notify the engineer of record for review prior to coring/cutting. Conflicts, inconsistencies, or other difficulties affecting structural work shall be called to the architect or engineer's attention for direction
- before proceeding.
  C. All design and construction work for this project shall conform to the requirements of the following governing design codes:
  1.) International Building Code (IBC 2018) as amended by the city of Lee's Summit, Missouri
- Minimum Design Loads for Buildings and Other Structures (ASCE7-16)
   Building Code Requirements for Structural Concrete (ACI 318-14)
   North American Specification for the Design of Cold-Formed Steel Structural Members (AISI S100-07/S1-1)
   National Design Specification (NDS) for Wood Constriction with 2015
- Supplements (ANSI/AWC NDS-2015)
  6.) Special Design Provisions for Wind and Seismic (AWC SDPWS-2015)
  D. These drawings are for this specific project and no other use is authorized.

#### 2. Structural Load Design Criteria

۸	Dead Load:	
A.	Deck Floors	= 35 psf
	Apartment Floors	= 35 psf
	Roofs	= 20 psf
	Stairs	= 40 psf
B.	Live Load:	•
	Public Rooms	= 100 psf
	Stairs	= 100 psf
	Apartment Floors (Private Rooms)	= 40 psf
	Corridors	= 100  psf
	Storage Areas	= 125 psf
	Decks/Balconies (Private)	= 60 psf
	Decks/Balconies (Public)	= 100  psf
	Roofs	= 20 psf

- C. Snow:

  Pg = 20 psf, Ce = 1.0

  Pf = 14 psf, Pm = 20 psf
- Is = 1.0, Cs = 1.0, Ct = 1.0

  Drift & unbalanced snow loads per ASCE/SEI 7-10

  D. Lateral Loads:
- D. Lateral Loads:
  1.) Wind V(ult) = 109 mph, Exposure B, GCpi = +/- 0.18
  Design wind pressures to be used for the deisgn of exterior components and cladding material son the designated zones of walls and roof structures shall be per section 30.7 and table 30.7-2 of ASCE/SEI 7-16.
  Tabulated pressures shall be multiplied by effective are
- reduction factors, exposure adjustment factors, and topographic factors where applicable.

  2.) Seismic: Ss = 0.099, S1 = 0.068, le = 1.0
  Sds=0.086; Sd1=0.068; Site Classification C
  Seismic Design Category B
- A.17- Light-Framed Walls with Shear Panels of All Other Materials

  R=2, Omega = 2 1/2, Cd = 2, V=0.043W

  E. This project is designed to resist the most critical effects resulting from the load combinations of section 1605.3 of the

Basic Seismic Force-Resisting System:

2018 International Building Code.

#### 3. Concrete

- A. All concrete for foundations (walls, grade beams, footings and piers) shall develop minimum ultimate compressive design strength of 3500 psi in 28 days, but not less than 500 pounds of cement shall be used per cubic yard of concrete regardless of strengths obtained, not over 6 gallons of water per 100 pounds of cement and not over 4 inches of slump.
- B. All concrete for garage slab on grade shall develop minimum ultimate compressive design strength of 4000 psi in 28 days, but not less than 525 pounds of cement shall be used per cubic yard of concrete regardless of strengths obtained, not over 5.75 gallons of water per 100 pounds of cement and not over 4 inches of slump. Concrete mix shop drawing shall contain testing data proving concrete design mix shrinkage is less than 0.034% at 28 days when
- tested according to ASTM C157 (air drying method only).

  C. All concrete for interior flatwork (except garage slab on grade) shall develop minimum ultimate compressive design strength of 4000 psi in 28 days, but not less than 540 pounds of cement shall be used per cubic yard of concrete regardless of strengths obtained, not over 5.40 gallons of water per 100 pounds of cement and not over 4 inches of slump. Concrete mix shop drawing shall contain testing data proving concrete design mix shrinkage is less than 0.034% at 28 days when tested according to ASTM C157 (air drying method only).
- at 28 days when tested according to ASTM C157 (air drying method only).

  D. All concrete for exterior flatwork shall have a minimum design compressive strength of 4500 psi in 28 days, with not less than 560 pounds of cement per cubic yard of concrete, not over 5 gallons of water per 100 pounds of cement, with 6% +/- 1% air entrainment, and a maximum of 4 inches of slump.
- conforming to ASTM C494 added to the mix at manufacturer's dosage rates for improved workability.

  F. The preceding minimum mix requirements may have up to 15% maximum of the cement content replaced with an approved ASTM C618 Class C fly ash
- F. The preceding minimum mix requirements may have up to 15% maximum of the cement content replaced with an approved ASTM C618 Class C fly ash, provided the total minimum cementitious content is not reduced.
  G. All interior concrete slabs on grade shall be placed over 15 mil, Class A Vapor

The preceding minimum mix requirements may have water-reducing admixtures

- Barrier per ASTM E1745 with less than 0.01 perms, tested after mandatory conditioning. All joints shall be lapped and sealed per manufacturer's recommendations. All penetrations, as well as damaged vapor barrier material shall also be sealed per manufacturer's recommendation prior to concrete placement. Install barrier per manufacturer recommended details at all discontinuous edges (at interior columns, exterior edge of slab, etc.) to ensure terms of warranty are followed. The vapor barrier shall be placed over freedraining granular material as prescribed by the project soils report.
- H. Basement foundation walls shall be braced at the base and top of wall by the contractor until the slab on grade at the base and the floor framing/slab at the top of wall is complete and the concrete has achieved 75% of the design strength. The contractor is responsible for engineering and design of the wall bracing, if required.
- I. All concrete is reinforced concrete unless specifically called out as unreinforced. Reinforce all concrete not otherwise shown with same steel as in similar sections or areas. Any details not shown shall be detailed per ACI 315 and meet requirements of ACI 318, current editions.
- J. Control joints in dirt formed slab to be as shown on plans. Where not shown, limit controlled areas to not more than 144 square feet, or 12 feet on any side. Slab panel side ratio shall not exceed 1 1/2 to 1.
- K. Contractor shall verify that all concrete inserts, reinforcing and embedded items are correctly located and rigidly secured prior to concrete placement.
  L. Construction joints in beams, slabs, and grade beams shall occur at midspan (middle third) unless noted otherwise. Provide 2 x 4 horizontal keys at
- construction joints for shear transfer.

  M. No aluminum items shall be embedded in any concrete.

#### 4. Reinforcing Steel

- A. All reinforcing steel shall conform to the requirements of ASTM A615 or A706 grade 60 steel. Welded plain wire fabric shall be supplied in sheets and conform to the requirements of ASTM A185.
- to the requirements of ASTM A185.

  B. Clear minimum coverage of concrete over reinforcing steel shall be as follows:

  1.) Concrete placed against earth:

  2.) Formed concrete against earth:

  2."
- 2.) Formed concrete against earth: 2"
  3.) Slabs: 1"
  4.) Beams or Columns: 1-1/2"
  5.) Other 2"
- All coverage shall be nominal bar diameter minimum.

  C. All dowels shall be the same size and spacing as adjoining main bars (splice lap 48 bar diameters or 24" minimum unless noted otherwise).
- D. At corners of all walls, beams, and grade beams supply corner bars (minimum 2'-0" in each direction or 48 bar diameters) in outside face of wall, matching size and spacing of horizontal bars. Where there are no vertical bars in outside face of wall, supply 3 #4 vertical support bars for corner bars.

. Bars marked continuous and all vertical steel shall be lapped 48 bar diameters

- (2'-0" minimum) at splices and embedments, unless shown otherwise. Splice top bars near midspan and splice bottom bars over supports, unless noted otherwise.
  F. At all holes in concrete walls and slabs, add 2 #5 bars (opening dimension plus 96 diameters long) at each of four sides and add 2 #5 x 5'-0" diagonally at
- each of four corners of hole. Openings in 8" thick walls are reinforced similar, but with 1 #5 instead of 2 #5, respectively.
  G. Unless otherwise covered on architectural plans or specifications, vertical control joints in concrete wall shall be spaced at a maximum of 20'-0" on center and coordinated with the architect. Every other horizontal wall reinforcing bar shall be discontinuous at control joints except heavy top and bottom bars unless noted
- otherwise. Provide base seal waterstop style number 772 (by Greenstreak Inc. or approved equal) on dirt face side of wall at all walls below grade.

  H. Accessories shall be as specified in latest edition of the ACI Detailing Handbook and the concrete Reinforcing Steel Institute Design Handbook. Maximum accessory spacing shall be 4'-0" on center, and all accessories on exposed
- surfaces are to have plastic coated feet.

  I. All slabs and stairs not shown otherwise shall be 6" thick with #4 bars at 12" on center each way. All exterior porches and stoops not otherwise detailed may be constructed in any standard manner, solid or hollow, but must be reinforced with #4 bars at 12" on center each way minimum. Porches shall be doweled to adjacent walls or grade beams with #4 bars at 12" on center, hooked or embedded 48 diameters into both members. Slope porches 1/8" per foot for
- drainage unless noted otherwise.

  J. Allow 1 ton of reinforcing bars #4 or larger to be used as directed in the field for special conditions by the engineer of record (labor for placing same to be included).

#### 5. Structural Steel

- A. All structural steel beams and columns shall be ASTM A992, grade 50 steel and all miscellaneous steel shall be ASTM A36 grade steel (except at moment connections where plates shall be ASTM A572, grade 50). Hollow Structural Sections (HSS) shall be ASTM A500, grade B. Fabrication and erection shall be in accordance with AISC 303-05 "Code of Standard Practice for Steel Buildings and Bridges" in the
- 13th Edition of the AISC Steel Construction Manual.

  B. All welding shall conform to the recommendations of the AWS.
- C. All exterior steel and connections, and brick relief angles shall be hot-dip galvanized.

  D. All bolts not otherwise specified shall be 3/4" diameter high strength (ASTM A325-N). All bolts shall be fully pretensioned. All beam connections shall be designed per the AISC Manual of Steel Construction "Framed Beam Connections" for the indicated reactions or at least 0.3 x beam total shear capacity, Vn/Omega, shown in the maximum total uniform load tables, whichever is greater; and, shall account for eccentricity when the bolt line is more than 2" from the center of the support.
- All connections must be two bolt minimum.

  E. All anchor bolts shall be 3/4" diameter, ASTM F1554, Grade 36 unless noted otherwise. Washers of minimum size and thickness for the given anchor diameter in Table 14-2 of the AISC Steel Construction Manual shall be provided at every column anchor bolt. Washers shall have a standard size hole for the anchor bolt.

#### 6. Post Installed Anchors

- A. Post-installed anchors shall be used only where specified on the drawings unless approved in writing by the engineer of record. See drawings for anchor diameter, spacing and embedment. Performance values of the anchors shall be obtained for specified products using appropriate design procedures and/or standards as required by the governing building code. Anchors installed in concrete shall have an ICC-ES Evaluation Service Report. Special inspection is required for all post installed anchors. The contractor shall coordinate an on-site meeting with the post installed anchor manufacturer field representative to educate the construction
- Installed anchor manufacturer field representative to educate the construction team on the anchor installation guidelines and requirements.

  B. Mechanical anchors used in cracked and uncracked concrete shall have been tested and qualified for use in accordance with ACI 355.2 and ICC-ES AC193. All anchors shall be installed per the anchor manufacturer's written instructions.

Adhesive anchors used in cracked and uncracked concrete shall have been tested

- and qualified for use in accordance with ICC-ES AC308. All anchors shall be installed per the anchor manufacturer's written instructions.
  D. Mechanical anchors used in solid grouted masonry shall have been tested and qualified for use in accordance with ICC-ES AC01. All anchors shall be installed
- E. Adhesive anchors used in solid grouted masonry shall have been tested and qualified for use in accordance with ICC-ES AC58. All anchors shall be installed per the anchor manufacturer's written instructions.
  F. Anchors used in hollow concrete masonry shall have been tested and qualified in accordance with ICC-ES AC106 or ICC-ES AC58 as appropriate. All anchors

shall be installed per the anchor manufacturer's written instructions with

per the anchor manufacturer's written instructions.

appropriate screen tubes used for adhesives

#### 7. Foundations

- A. The soil investigation was prepared by CFS Engineers, the report
- number is 20-5555 and their telephone number is 913-627-9040.
  B. Spread footings, grade beams, and retaining walls are designed to bear on insitu clay or engineered clay fill capable of safely sustaining 2,500 psf.
- C. Retaining walls are designed for an active lateral load of 55 pcf equivalent fluid pressure.
- D. Basement walls are designed for an at rest lateral load of 80 pcf equivalent fluid pressure. See General Note 3H for wall bracing requirements.
- E. Contractor shall provide for dewatering at excavations from either surface water or seepage.F. All foundation excavations shall be inspected by a qualified soil engineer, approved
- F. All foundation excavations shall be inspected by a qualified soil engineer, approved by the architect and/or structural engineer, prior to placement of steel or concrete. This inspection shall be at the owner's expense.
  G. All concrete in the structural portion retaining the backfill shall have attained its
- design strength prior to being backfilled.

  H. Moisture content in soils beneath building locations should not be allowed to change after footing excavations and after grading for slabs on grade are completed. If subgrade materials become desiccated or softened by water or other conditions, recompact materials to the density and water content specified for engineered fill. Do not place concrete on frozen ground.

#### 8. Timber and Wood Framing

- A. Quality and construction of wood framing members and their fasteners for load supporting purposes not otherwise indicated on the drawings shall be in accordance with the International Building Code.
- B. All studs and top and bottom plates shall be Douglas Fir No. 2 grade visually graded lumber, with an allowable fiber stress in bending of 900 psi minimum and an elastic modulus of 1,600,000psi unless noted otherwise. All joist, truss members, and headers to be No. grade 2 (min.) unless noted otherwise. All lumber for exterior decks and balconies shall be treated Southern Yellow Pine No. 2 grade.

  11. Copyright and Disclaimer
- C. Blocking of stud bearing walls and shear walls shall be solid, matching sheathing joints.
  D. Joist blocking and bridging shall be solid wood or cross bridging of either wood or metal straps. Spacing, in any case, shall not exceed 8'-0".
- E. Wood members and sheathing shall be fastened with number and size of fasteners not less than that set forth in Table 2304.9.1 of the International Building Code. Floor sheathing shall be APA rated tongue and groove Sturd-I-Floor, exposure 1, glued and nailed with 8d ring shank nails or # 10 screws at 12" on center to all supports. Sheathing of shear walls or roof diaphragms shall be edge nailed with 8d common nails at 6" on center and nailed to intermediate framing and/or blocking members with 8d common nails at 12" on center unless otherwise noted on the drawings. All floor sheathing shall be installed with 1/8 inch gaps between panel edges and end joints.
- F. Sill plates shall be bolted to concrete walls or steel beams with 1/2" diameter bolts at 32" on center. Sill plates in direct contact with concrete or masonry shall be treated lumber.
- G. Joist hangers shall have Uniform Building Code approval and shall be equal to Simpson Strong Tie "LUS" for wood application and "LB" for steel weld-on application.
- H. Service condition dry with moisture content at or below 19% in service.
  I. Laminated veneer lumber (LVL) shall have an allowable flexural stress (Fb) of 2,600 psi (reduced by size factor) and an elastic modulus (E) of 1,900,000 psi.
- J. Parallel Strand Lumber (PSL) shall have an allowable flexural stress (Fb) of 2,900 psi (reduced by size factor) and an elastic modulus (E) of 2,000,000 psi.
  K. Pre-engineered wood trusses shall be designed in accordance with the Truss Plate Institute's national design standard for metal-plate connected wood truss construction (ANSI/TPI-1 latest edition). Trusses shall be designed and manufactured by an authorized member of the Wood Truss Council of America (WTCA). Truss design shall conform to
- specified codes, allowable stress increases, deflection limitations and other applicable criteria of the governing code.
  L. Shop drawings showing complete erection and fabrication details and calculations (including connections) shall be submitted to the project architect/engineer for review prior to fabrication and/or erection. Such drawings shall bear the seal of a professional engineer,
- registered in the state of the project location. Shop drawings shall also be submitted to the local government controlling agency when requested by that agency.

  M. All trusses shall be securely braced both during erection and permanently, as indicated on the approved truss design drawings and in accordance with TPI's commentary and
- the approved truss design drawings and in accordance with TPI's commentary and recommendations for handling, installing and bracing metal-plate connected wood trusses (HIB-91, booklet) and the latest edition of ANSI/TPI-1.

  N. The truss manufacturer shall supply all hardware and fasteners for joining truss members together and fastening truss members to their supports. Metal connector plates

shall be manufactured by a member of the Wood Truss Council of America (WTCA) and

shall be 20 gauge minimum. Connector plates shall meet or exceed ASTM A653, grade 33,

- with ASTM A924 galvanized coating designation G60.
  O. Shipment, handling, and erection of trusses shall be by experienced, qualified persons and shall be performed in a manner so as not to endanger life or property. Apparent truss damage shall be reported to the truss manufacturer for evaluation prior to erection. Cutting or alteration of trusses is not permitted.
- P. Contractor shall coordinate truss layout for openings and penetrations required by other trades including for plumbing, HVAC, electrical, roof access hatches, chases, etc.
   Q. Pre-engineered floor truss and I-Joist design load and deflection criteria are as
- ollows:
  Top Chord Dead Load = 20psf
  Top Chord Live Load = Per General Note 2A
  Bottom Chord Dead Load = 5psf
  Allowable Total Load Deflection = L/360
  Allowable Live Load Deflection = L/480: 16" maximum
- Allowable Live Load Deflection = L/480; ½" maximum

  R. Pre-engineered roof truss design load and deflection criteria are as follows:

  Top Chord Dead Load = 15psf

  Top Chord Live Load = 20psf
- Top Chord Live Load = 20psf
  Bottom Chord Dead Load = 10psf
  Allowable Total Load Deflection = L/300
  Allowable Live Load Deflection = L/360
- Allowable Live Load Deflection = L/360
  Roof trusses shall be designed for wind uplift loads indicated in Building
  Components & Cladding Wind Loads Diagram.

#### 9. Shop Drawing Review

- A. Bob D. Campbell and Company, Inc. will review the General Contractor's (GC) shop drawings and related submittals (as indicated below) with respect to the ability of the detailed work, when complete, to be a properly functioning integral element of the overall structural system designed by
- Bob D. Campbell and Company, Inc.

  B. Prior to submittal of a shop drawing or any related material to Bob D. Campbell and Company, Inc., the GC shall:
- Review each submission for conformance with the means, methods, techniques, sequences and operations of construction and safety precautions and programs incidental thereto, all of which are the sole responsibility of the GC.
   Review and approve each submission.
- 3.) Stamp each submission as approved.
  C. Bob D. Campbell and Company, Inc. shall assume that no submission comprises a variation unless the GC advises Bob D. Campbell and Company, Inc. with written documentation.
- D. Bob D. Campbell and Company, Inc. shall review shop drawings and related materials with comments provided that each submission has met the above requirements. Bob D. Campbell and Company, Inc. shall return without comment unrequired material or submissions without GC approval stamp.
  E. Shop drawings and related material (if any) required are indicated below.
- Should Bob D. Campbell and Company, Inc. require more than ten (10) working days to perform the review, Bob D. Campbell and Company, Inc. shall so notify the GC.
- Concrete mix designs and material certificates including admixtures and compounds applied to the concrete after placement.
   Reinforcing steel shop drawings including erection drawings and

bending details. Bar list will not be reviewed for correct quantities.

3.) Construction and control joint plans and/or elevations.
4.) Miscellaneous anchors shown on the structural drawings.
5.) Wood truss design calculations and detailed erection and fabrication drawings. Standard stick framing shop drawings need not be submitted.

#### 10. Statement of Structural Special Inspections

A. The structural design for this project is based on completion of special inspections during construction in accordance with section 1704 of the International Building Code. The owner shall employ one or more qualified

special inspectors to provide the required special inspections.

- B. The special inspector shall furnish inspection reports to the building official, owner, architect and structural engineer, and any other designated person.C. All discrepancies shall be brought to the immediate attention of the contractor for correction, then, if uncorrected, to the proper design authority, building official and structural engineer.
- D. The special inspector shall submit a final signed report stating that the work requiring special inspection was, to the best of the inspector's knowledge, in conformance with the approved plans and specifications and the applicable workmanship provisions of the building code.
  E. The following inspections and tests are required with the frequency (continuous or
- periodic) as defined within the referenced section or standard listed below. The General Contractor shall provide notification to the inspector when items requiring inspection are ready to be inspected and provide access for those inspections.
- Shop Fabrication pre-engineered wood trusses per Section 1704.2.5 unless TPI certified shop
   Concrete Construction per Section 1705.3 and Table 1705.3
   Reinforcing Steel Placement
  - a. Reinforcing Steel Placementb. Reinforcing Steel Weldingc. Cast in Place Anchorsd. Post Installed Anchorse. Design Mix Verification
- f. Concrete Sampling and Testing
  g. Concrete Placement
  h. Concrete Curing
  3. Verification of Soils per Table 1705.6
- 4. Wood Lateral System (periodic)
  a. Wood shearwalls (include sheathing, rim board and bottom plate attachments)
  b. Portal frames
- c. Shear wall and portal frame holdownsd. Shear wall tension rod system5. Wood Gravity Framing and Placement (adjust frequency of random sampling where indicated as required)
- a. Heavy timber/SCL/glulam beams and supports (periodic)
  b. Headers and jambs (random sampling)
  c. Bearing walls (random sampling)

#### d. Connector/hardware installation (random sampling) e. Floor and roof trusses (random sampling)

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

ES.	TIMATED BUILDII	NG MOVEMENT T	ABLE
FLOOR	ACCUMULATIVE WOOD SHRINKAGE	HEIGHT OF BRICK	ACCUMULATIVE BRICK EXPANSION
ROOF	0.7"	20'	0.22"
2nd FLOOR	0.35"	10'	0.11"

#### Wood Shrinkage Notes:

Bob D. Campbell & Company takes no responsibility for the naturally-occurring shrinkage that will occur in a wood structure or the impact the movement will have on the architectural, mechanical, electrical and plumbing systems that are designed by others. The analysis provided below are estimated values in accordance with IBC Section 2304.3.3 and indicate the systems and/or routing of the systems shall be designed to accommodate the movement. Failure to follow the considerations below can result in a failure of the impacted components within the system.

Estimated values are based on the following moisture content in the framing a. At install (MC) = 19% b. At equilibrium (EMC) = 8%

Reference wall sections on this sheet for estimated cumilative values per floor.

The following is a list of recommendations to minimize potential issues related to wood shrinkage and veneer expansion. Veneer expansion is seasonable

in the first 24 months of occupancy with minor seasonal variations.
1. MEP System Considerations
a. Postpone MEP installation as long as possible to allow as much dead

and variable depending on sun exposure. The majority of wood shrinkage will occur

- load to be applied--allowing construction gaps to close.

  b. Provide oversized and vertically slotted holes at pipe horizontal papetration and patches. Refer to typical notching and cutting of study.
- penetration and notches. Refer to typical notching and cutting of stud wall detail for additional considerations on size limitations.

  c. Plumbing pipe and electrical conduit joints and
- connections shall be flexible and allow for expansion/contraction to prevent a rigid assembly.

  d. Hangers and necessary rigid connections shall be adjusted
- prior to completion of construction or closing of wall/ceiling assembly.

  e. Horizontal vent penetrations through exterior veneers shall be provided with double flashing.
- with double flashing.

  f. All sheet metal vertical down spouts shall have intermediate slip joints.

  g. Roof drains shall utilize adjustable fittings that are adjusted back to the
- roof finish sheathing elevation at the completion of construction and then shall be adjusted as required to maintain proper drainage.

  2. Architectural System Considerations

  a. At stucco, EIFS and thin set veneer systems provide
- horizontal expansion joints, slip joints with appropriate flashing, this includes transitions between changes in veneer material.

  b. At brick and stone veneers provide veneers ties designed to accommodate differential movement.
- Refer to architectural window and door head and sill; parapet; and horizontal material changes for specific horizontal gap requirements between materials.
- Construction Tolerance Considerations
   a. All studs shall be cut level, square and tight to top and
- bottom plates to reduce any additional shortening of the building due to nesting.
- All wood structural panels on the walls shall have a 1/2" relief gap at each floor level to reduce the potential for bulging.
- c. All floor sheathing shall have 1/8" gaps around all four sides at time of install to allow for expannsion.
  d. All shearwall holdown shall be checked and retighten immediately prior to sheathing of the walls. If a continuous rod system is utilized for
- holdowns or uniform uplift anchors, the take-up devise pins shall be verified to have been pulled prior to sheathing the walls.

  4. Material Storage and Protection
  a. All stored material shall remain covered and elevated from
- the elements to reduce the potential for an increase in moisture content.b. Do not allow water to pond on the floor sheathing. Provide drain holes in the floor sheathing as required to relieve any water that might
- Post Occupancy Consideration
   Recommend a review of roof drains every 3 months for the first 24 months of occupancy and then annually and adjusted as needed.
- b. Recommend a review of vertical joints at exterior doors, windows and at changes in materials. Caulked as needed as shrinkage occurs and original joint fails.

temporary pond.

LEGEND:

(A#-#)

SPAN DIRECTION OF DECK

SHEET S001

SAW JOINT PER 1/S200

**CONSTRUCTION JOINT PER 2/S200** 

FOOTING MARK - SEE SCHEDULE ON

BEAM OR HEADER PER SCHEDULE ON S002

SHEAR WALL PER SCHEDULE ON SHEET S003

UPSET BEAM OR HEADER PER SCHEDULE ON S002

FDN

FTG

FOUNDATION

FAR FACE

FINISH

FLOOR

FAR SIDE

FOOTING

FIELD VERIFY

	INAIL	ING SCHEDULE (METER)	
No.	CONNECTION	ATTACHMENTS	(REF NOTE #3 and #4)
1	JOIST TO SILL OR GIRDER	3- 3" x 0.131" NAILS-TOENAIL	3-8d NAILS-TOENAIL
2	BRIDGING TO JOIST	2- 3" x 0.131" NAILS-TOENAIL EACH END	2-8d NAILS-TOENAIL EACH END
3	SOLE PLATE TO JOIST OR BLOCKING	3" x 0.131" NAILS AT 8"o.c TYPICAL FACE NAIL 4-3" x 0.131" NAILS AT 6"o.c. BRACED WALL PANELS	16d BOX NAILSZ AT 16"o.c. MAX. FACE NAILING 3-16d BOX NAILS AT 16"o.c. BRACED WALL PANEL
4	TOP PLATE TO STUD	3- 3" x 0.131" NAILS-END NAIL	2-16d NAILS-END NAIL
5	STUD TO SOLE PLATE	4- 3" x 0.131" NAILS-TOENAIL OR 3- 3" x 0.131" NAILS-END NAIL	4-8d NAILS-TOENAIL OR 2-16d NAILS-END NAIL
6	DOUBLE STUDS	3" x 0.131" NAILS AT 8"o.cFACE NAIL	16d BOX NAILS AT 24"o.c. MAX. FACE NAIL
7	DOUBLED TOP PLATES	3" x 0.131" NAILS AT 12"o.cFACE NAIL	16d BOX NAILS AT 16"o.c. MAX. FACE NAIL
8	DOUBLE TOP PLATE LAPS AND INTERSECTIONS	12-3" x 0.131" NAILS	8-16d NAILS
9	BLOCKING BETWEEN JOISTS OR RAFTERS TO TOP PLATE	3-3" x 0.131" NAILS -TOENAIL	3-8d NAILS-TOENAIL
10	RIM JOIST TO TOP PLATE	3" x 0.131" NAILS AT 6"o.cTOENAIL	8d NAILS AT 6"o.c. MAXTOENAIL
11	TOP PLATE LAPS AND INTERSECTIONS	3- 3" x 0.131" NAILS-FACE NAIL	2-16d NAILS-FACE NAIL
12	CONTINUOUS HEADER, TWO PIECES	3" x 0.131" NAILS AT 10"o.c. ALONG EACH EDGE	16d NAILS AT 16"o.c. MAX. ALONG EACH EDGE-TOENAIL
13	CEILING JOISTS TO PLATE	5- 3" x 0.131" NAILS-TOENAIL	3-8d NAILS-TOENAIL
14	CONTINUOUS HEADER TO STUD	4- 3" x 0.131" NAILS-TOENAIL	4-8d NAILS-TOENAIL
15	CEILING JOISTS, LAPS OVER PARTITIONS	4- 3" x 0.131" NAILS-FACE NAIL	3-16d NAILS-FACE NAIL
16	CEILING JOISTS TO PARALLEL RAFTERS	4- 3" x 0.131" NAILS-FACE NAIL	3-16d NAILS-FACE NAIL
17	RAFTER TO PLATE	3- 3" x 0.131" NAILS-TOENAIL	3-8d NAILS-TOENAIL
18	1" BRACE TO EACH STUD AND PLATE	2- 3" x 0.131" NAILS-FACE NAIL	2-8d NAILS-FACE NAIL
19	BUILT-UP CORNER AND MULTIPLE STUDS	3" x 0.131" NAILS AT 16"o.c.	16d NAILS AT 24"o.c. MAX.
20	BUILT-UP GIRDER AND BEAMS	3" x 0.131" NAILS AT 24"o.c. FACE NAILED TOP AND BOTTOM STAGGERED ON OPPOSITE SIDES 3- 3" x 0.131" NAILS AT ENDS AND EACH SPLICE	20d NAILS AT 32"o.c. MAX. TOP AND BOTTOM, STAGGERED ON OPPSITE SIDES. 2-20d NAILS AT ENDS AND EACH SPLICE
21	BUILT-UP LAMINATED VENEER LUMBER BEAMS	3" x 0.131" NAILS AT 6"o.c. TOP AND BOTTOM ALONG EDGE	16d NAILS AT 12"o.c. TOP AND BOTTOM ALONG EDGE
22	2" PLANKING	4- 3" x 0.131" NAILS AT EACH SUPPORT	16d NAILS AT EACH SUPPORT
23	RIM BOARD TO TRUSS	2- 3" x 0.131" FACE NAILS (IT/IB @ EA. TRUSS)	2- 10d NAILS - FACE NAILS (IT/IB @ EA. TRUSS)

NAILING SCHEDULE (REFER TO NOTES #1 and #2)

NOTES:

1.) ALL NAILS SHALL BE AS NOTED UNLESS OTHERWISE SPECIFIED ON STRUCTURAL DRAWINGS OR ALTERNATE PROVIDED BY ENGINEER IN WRITING.

2.) CONDITIONS NOT SPECIFIED SHALL BE IN ACCORDANCE WITH CURRENT INTERNATIONAL BUILDING CODE.

3.) NAILING DESIGNATION:

REFER TO DETAIL 3/S003

**BUILD-UP STUD-PACK** 

4.) ALL NAILS NOTED AS 8d, 10d, 16d, ETC. SHALL BE COMMON NAILS UNLESS NOTED BOX.

REFER TO DETAIL 3/S003

## STRUCTURAL DECK & SLAB SCHEDULE MARK DESCRIPTION T-1 COMPOSITE DECKING PER ARCHITECTURAL DRAWINGS/SPECIFICATIONS %" GYPCRETE ATOP 23/32" T&G PLYWOOD SHEATHING. SHEATHING SHALL BE GLUED AND NAILED W/ 8d RING SHANK NAILS OR #10 SCREWS @ 6"o.c. @ EDGES & 12"o.c. AT FIELD. RD-1 19/32" PLYWOOD SHEATHING ATTACHED WITH 8d NAILS @ 6"o.c. AT EDGES

4" CONCRETE SLAB REINFORCED W/ 6x6-W2.9xW2.9 WWF ATOP VAPOR

BARRIER PER GENEARL NOTES ATOP 4" COMPACTED GRANULAR FILL ATOP 4"

#### NOTE

- NOTES:

  1. CD = COMPOSITE/CONCRETE DECK TYPE
- 2. FD = FLOOR DECK TYPE
  3. NCD = NON-COMPOSITE DECK TYPE
- 4. RD = ROOF DECK TYPE5. SOG = SLAB-ON-GRADE TYPE
- REFER TO NOTE 10.T ON SHEET S0.01 FOR FIRE RETERDANT TREAD SHEATHING REQUIREMENTS.
   PROVIDE 1" DEEP TOOLED CONTROL JOINT (TRANSVERSE DIRECTION) @ MID-SPAN OF SINGLE BAY BALCONY OR @ THIRD POINTS OF DOUBLE BAY BALCONY. FILL JOINT w/ SEALANT

MINIMUM OPEN GRADED STONE ATOP PREVIOUSLY

PREPARED PAD IN COMPLIANCE WITH SOILS REPORT

#### STRUCTURAL ABBREVIATIONS

@	AT	GA	GAGE	RAD	RADIUS
&	AND	GALV	GALVANIZE(D)	RD-#	ROOF DECK TYPE
Ø	ROUND, DIAMETER	GEN	GENERAL	REF	REFERENCE
ADTL	ADDITIONAL	GR	GRADE	REINF	REINFORCEMENT
AFF	ABOVE FINISHED FLOOR	HORIZ	HORIZONTAL	REQD	REQUIRED
		HURIZ			
ALT	ALTERNATE	HSS	HOLLOW STRUCTURAL SECTION	REV	REVISION
ARCH	ARCHITECTURAL	IF	INSIDE FACE	RLL	ROOF LIVE LOAD
BLDG	BUILDING	info	INFORMATION	RTU	ROOF TOP UNIT
B/	BOTTOM OF	INT	INTERIOR	SC	SLIP CRITICAL
BM	BEAM	JST	JOIST	SCHED	SCHEDULE(D)
BOTT	BOTTOM	JT	JOINT	SECT	SECTION
BRG	BEARING	K	KIPS (1000 LBS)	SHT	SHEET
С	CAMBER	KSF	KIPS PER SQUARE FOOT	SIM	SIMILAR
CD-#	CONCRETE DECK TYPE	KSI	KIPS PER SQUARE INCH	SJ	SAW JOINT
CJ "	CONSTRUCTION/CONTROL JOIN	LBS, #	POUNDS	SL	SNOW LOAD
CJP	COMPLETE JOINT PENETRATION	Ld	DEVELOPMENT LENGTH	SOG	SLAB-ON-GRADE
CL	CENTERLINE	LL	LIVE LOAD	SOG-#	SLAB-ON-GRADE TYPE
CMU	CONCRETE MASONRY UNIT	LLH	LONG LEG HORIZONTAL	SPCG	SPACING
COL	COLUMN	LLV		SPEC	
		LLV	LONG LEG VERTICAL	SPEC	SPECIFICATION
CONC	CONCRETE	LONG	LONGITUDINAL	SPRT	SUPPORT
CONN	CONNECTION	LSLT	LONG-SLOTTED HOLE TRANSVERSE	SQ	SQUARE
CONT	CONTINUOUS	LTWT	LIGHTWEIGHT	SS	STAINLESS STEEL
COORD	COORDINATE	M	MOMENT FORCE	SSLT	SHORT-SLOTTED HOLE TRANSVERSE
		IVI NAAN	NAA VINALINA	CTD	STANDARD
COV, CVR	COVER	MAX	MAXIMUM	STD	
DBL	DOUBLE	MECH	MECHANICAL	STIFF	STIFFENER
DET	DETAIL	MFGR	LONGITUDINAL LONG-SLOTTED HOLE TRANSVERSE LIGHTWEIGHT MOMENT FORCE MAXIMUM MECHANICAL MANUFACTURER MINIMUM MISCELLANEOUS MASONRY METAL NEAR FACE NEAR SIDE NOT TO SCALE NORMAL WEIGHT	STIR	STIRRUP
DIA	DIAMETER	MIN	MINIMUM	STL	STEEL
DIM	DIMENSION	MISC	MISCELLANEOUS	STRUCT	STRUCTURE, STRUCTURAL
DL	DEAD LOAD	MSRY	MASONDV	T/	TOP OF
		NATI	MACTAL	TUDU	
DWG	DRAWING	MTL	METAL	THRU	THROUGH
EA	EACH	NF	NEAR FACE	TOS	TOP OF STEEL, TOP OF SLAB
EF	EACH FACE	NS	NEAR SIDE	TRANS	TRANSVERSE
EJ	EXPANSION JOINT	NTS	NOT TO SCALE	TYP	TYPICAL
EL, ELEV	ELEVATION	NW	NORMAL WEIGHT	UNO	UNLESS NOTED OTHERWISE
EMBED		OC	ON CENTER	V	
	EMBEDMENT, EMBEDDED				SHEAR FORCE
ENGR	ENGINEER	OF	OUTSIDE FACE	VERT	VERTICAL
EOD	EDGE OF DECK	OPNG	OPENING	W/	WITH
EOR	ENGINEER OF RECORD	OPP	OPPOSITE	W/0	WITHOUT
EOS	EDGE OF SLAB	OVS	OVERSIZED HOLE	WF	WIDE FLANGE
EQ	EQUAL	Р	AXIAL FORCE	WL	WIND LOAD
EQUIP	EQUIPMENT	PAF	POWDER ACTUATED FASTENER	WP	WORK POINT
EW	EACH WAY	PC	PRECAST	WWF	WELDED WIRE FABRIC
EXP	EXPANSION	PCF	POUNDS PER CUBIC FOOT		· · · · - · · · · · · · · · · · ·
EXT	EXTERIOR	PEMB	PRE-ENGINEERED METAL BUILDING		
EXTG, EXIST		PERP	PERPENDICULAR		
FD-#	FLOOR DECK TYPE	PL	PLATE		
EDNI	FOUNDATION	 D. E	DOLINDO DED LINEAD FOOT		

POUNDS PER LINEAR FOOT

PARTIAL JOINT PENETRATION

POUNDS PER SQUARE FOOT

POUNDS PER SQUARE INCH

QUANTITY

PSF

PSI

QTY

CINCY ADDREW
BASINGER
PE-2010026832
SQI0212ACS
ONAL STATEMENT OF THE STATE

GENERAL CONTRACTOR

MECHANICAL ENGINEER

PLUMBING ENGINEER

SM ENGINEERING

GENERAL CONTRACTOR

LATIMER SOMMERS &

ASSOCIATES

Tegetholds
DEVELOPMENT

anguard Villas

ARCHITECTS

Architects
S. Brentwood Blvd.

St. Louis, Missouri 63144

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T: 314-395-9750
www.triarchitects.com

PATE:

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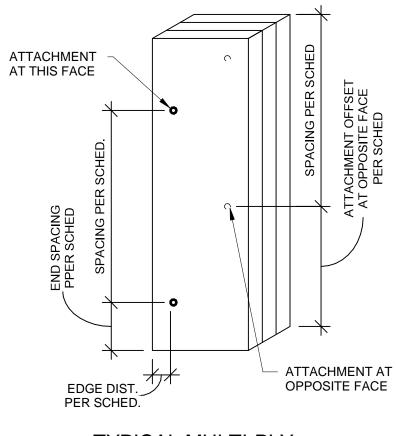
SUU I
GENERAL NOTES

TYPICAL NOTES FOR BEARING WALLS

1. HOLES SHALL NOT BE LOCATED IN THE SAME STUD AS A CUT OR NOTCH 2. CONTACT ARCHITECT PRIOR TO CUTTING OR NOTCHING TO VERIFY SIZE AND LOCATION IF HOLE IS GREATER THAN 20% STUD WIDTH OR NOTCHES GREATER THAN 10% STUD WIDTH ARE REQUIRED IN TWO OR MORE CONSECUTIVE STUDS 3. NOTCHES OR HOLES NOT PERMITTED IN JAMBS, STUD PACKS AND AT ENDS OF SHEARWALLS 4. STUD SHOES ARE NOTE AN ACCEPTABLE REMEDIATION OF OVER-NOTCHED OR OVER-CUT STUDS WITHOUT PRIOR APPROVAL BY EOR

5. SLOT HOLES VERTICALLY FOR SHRINKAGE ALLOWANCE. ALLOWABLE HOLES/NOTCHES IN WALL STUDS

#### 2 DETAIL 3/4" = 1'-0"



TYPICAL MULTI-PLY
STUD CONNECTION
2 DETAIL

BU	ILT-UP STUD PACK COLUM	IN ATTACHMENT SCHEDULE
NUMBER OF PLIES	ATTACHMENT AT COLUMN STUD PACKS SUPPORTING BEAMS	ATTACHMENT AT COLUMN STUD PACKS SUPPORTING TRUSSES
2-PLY MEMBERS	8d NAILS AT 12"oc, 1" FROM EDGE, w/ OPPOSITE EDGE NAILED FROM OPPOSITE SIDE OFFSET 6", @ 12"oc w/ FIRST NAIL 2" FROM EA. END	8d NAILS AT 12"oc, 1" FROM EDGE, w/ OPPOSITE EDGE NAILED FROM OPPOSITE SIDE OFFSET 6", @ 12"oc w/ FIRST NAIL 2" FROM EA. END
3-PLY MEMBERS	20d NAILS AT 16"oc, 1 1/2" FROM EDGE w/ OPPOSITE EDGE NAILED FROM OPPOSITE SIDE OFFSET 8", @ 16"oc w/ FIRST NAIL 4" FROM EA. END	8d NAILS AT 12"oc, 1" FROM EDGE, w/ OPPOSITE EDGE NAILED FROM OPPOSITE SIDE OFFSET 6", @ 12"oc w/ FIRST NAIL 2" FROM EA. END
4-PLY MEMBERS	1/4"Øx5" SIMPSON SDS SCREWS AT 16"oc, 1 1/2" FROM EDGE w/ OPPOSITE EDGE SCREWED FROM OPPOSITE SIDE OFFSET 8", @ 16"oc w/ FIRST SCREW 4" FROM EA. END	3 PLIES ATTACHED PER 3-PLY ATTACHMENT w/ 4th PLY ATTACHED w/ 8d NAILS AT 12"oc IN 2 ROWS, 1 1/2" FROM EDGE, OFFSET ROW 6"
5-PLY MEMBERS	1/4"Øx6" SIMPSON SDS SCREWS AT 12"oc, 1 1/2" FROM EDGE w/ OPPOSITE EDGE SCREWED FROM OPPOSITE SIDE OFFSET 6", @ 12"oc w/ FIRST SCREW 4" FROM EA. END	3 PLIES ATTACHED PER 3-PLY ATTACHMENT w/ 4th & 5th PLY ATTACHED w/ 8d NAILS AT 12"oc IN 2 ROWS, 1 1/2" FROM EDGE, OFFSET ROW 6"
6-PLY MEMBERS	1/4"Øx8" SIMPSON SDS SCREWS AT 12"oc, 1 1/2" FROM EDGE w/ OPPOSITE EDGE SCREWED FROM OPPOSITE SIDE OFFSET 6", @ 12"oc w/ FIRST SCREW 4" FROM EA. END	3 PLIES ATTACHED PER 3-PLY ATTACHMENT w/ 4th PLY ATTACHED w/ 8d NAILS AT 12"oc IN 2 ROWS, 1 1/2" FROM EDGE OFFSET ROW 6" AND 5th AND 6th PLIES ATTACHED w/ 1/4"Øx5" SIMPSON SDS SCREWS @ 12"oc IN 2 ROWS, 1 1/2" FROM EDGE OFFSET ROSS 6"oc w/ FIRST SCREW 4" FROM EA. END

1. ALL BUILT-UP STUD PACKS MUST ALIGN FLOOR-TO-FLOOR WITH SOLID BLOCKING (SQUASH BLOCKS) AT FLOOR CAVATIES. 2. EXTEND ALL STUD PACKS TO COLUMNS UNLESS NOTED OTHERWISE. 3. ALL NAILS ARE COMMON NAILS UNLESS NOTED OTHERWISE.

### 3 <u>DETAIL</u>

BUILT-UP STUD PACK COLUMN ATTACHMENT SCHEDULE			
NUMBER OF PLIES	ATTACHMENT AT COLUMN STUD PACKS SUPPORTING BEAMS	ATTACHMENT AT COLUMN STUD PACKS SUPPORTING TRUSSES	
2-PLY MEMBERS	8d NAILS AT 12"oc, 1" FROM EDGE, w/ OPPOSITE EDGE NAILED FROM OPPOSITE SIDE OFFSET 6", @ 12"oc w/ FIRST NAIL 2" FROM EA. END	8d NAILS AT 12"oc, 1" FROM EDGE, w/ OPPOSITE EDGE NAILED FROM OPPOSITE SIDE OFFSET 6", @ 12"oc w/ FIRST NAIL 2" FROM EA. END	
3-PLY MEMBERS	20d NAILS AT 16"oc, 1 1/2" FROM EDGE w/ OPPOSITE EDGE NAILED FROM OPPOSITE SIDE OFFSET 8", @ 16"oc w/ FIRST NAIL 4" FROM EA. END	8d NAILS AT 12"oc, 1" FROM EDGE, w/ OPPOSITE EDGE NAILED FROM OPPOSITE SIDE OFFSET 6", @ 12"oc w/ FIRST NAIL 2" FROM EA. END	
4-PLY MEMBERS	1/4"Øx5" SIMPSON SDS SCREWS AT 16"oc, 1 1/2" FROM EDGE w/ OPPOSITE EDGE SCREWED FROM OPPOSITE SIDE OFFSET 8", @ 16"oc w/ FIRST SCREW 4" FROM EA. END	3 PLIES ATTACHED PER 3-PLY ATTACHMENT w/ 4th PLY ATTACHED w/ 8d NAILS AT 12"oc IN 2 ROWS, 1 1/2" FROM EDGE, OFFSET ROW 6"	
5-PLY MEMBERS	1/4"Øx6" SIMPSON SDS SCREWS AT 12"oc, 1 1/2" FROM EDGE w/ OPPOSITE EDGE SCREWED FROM OPPOSITE SIDE OFFSET 6", @ 12"oc w/ FIRST SCREW 4" FROM EA. END	3 PLIES ATTACHED PER 3-PLY ATTACHMENT w/ 4th & 5th PLY ATTACHED w/ 8d NAILS AT 12"oc IN 2 ROWS, 1 1/2" FROM EDGE, OFFSET ROW 6"	
6-PLY MEMBERS	1/4"Øx8" SIMPSON SDS SCREWS AT 12"oc, 1 1/2" FROM EDGE w/ OPPOSITE EDGE SCREWED FROM OPPOSITE SIDE OFFSET 6", @ 12"oc w/ FIRST SCREW 4" FROM EA. END	3 PLIES ATTACHED PER 3-PLY ATTACHMENT w/ 4th PLY ATTACHED w/ 8d NAILS AT 12"oc IN 2 ROWS, 1 1/2" FROM EDGE, OFFSET ROW 6" AND 5th AND 6th PLIES ATTACHED w/ 1/4"Øx5" SIMPSON SDS SCREWS @ 12"oc IN 2 ROWS, 1 1/2" FROM EDGE, OFFSET ROSS 6"oc w/ FIRST SCREW 4" FROM EA. END	

BTWN HOLES

NOTCHING NOT OUTER 1/3 OF SPAN PERMITTED IN OUTER 1/3 OF SPAN

MIDDLE 1/3 OF SPAN

1. CONTACT ARCHITECT PRIOR TO CUTTING JOISTS TO VERIFY SIZE & LOCATION.

2. DETAIL APPLIES TO 2x FRAMING ONLY. REFER TO ENGINEERED OR COMPOSITE

LUMBER MANUFACTURER'S RECOMMENDATIONS AT PSLs, LVLS, LSLs & GLULAM.

>DBTWN 才

HOLE & —

BRG POINT

>D BTWN

─ HOLE &

**BRG POINT** 

	WOOD STUD BEARING WALL SCHEDULE			
TYPE	1st FLOOR WALLS (2nd FLOOR FRAMING)	2nd FLOOR WALLS (ROOF FRAMING)		NOTES
EXTERIOR	2x6 @ 16"oc	2x6 @ 16"oc		
DEMISING	(2) 2x4 @ 16"oc	2x4 @ 16"oc		PROVIDE 2x BLOCKING AT MID HEIGHT BTWN EA. STUD

NOTES:

1. PROVIDE 2x BLOCKING AT MID HEIGHT (5'-0" MAX) AT ALL LOAD BEARING WALLS NOT SHEATHED ON BOTH SIDES.

2. ALL STUDS TO BE No. 2 GRADE U.N.O.

3. RE: 3/S003 FOR NAILING OF MULTIPLE STUDS.

4. REFER TO ARCH/MED TO AND AND FOR LOCATIONS OF FURRED OUT WALLS TO ACCOMODATE PLUMBING OR MEP ITEMS.

MSRY VENEER PER

ARCH

LOOSE LINTEL PER — SCHEDULE W/ 8" MIN.

BEARING AT EACH END

(ALL EXTERIOR LINTELS

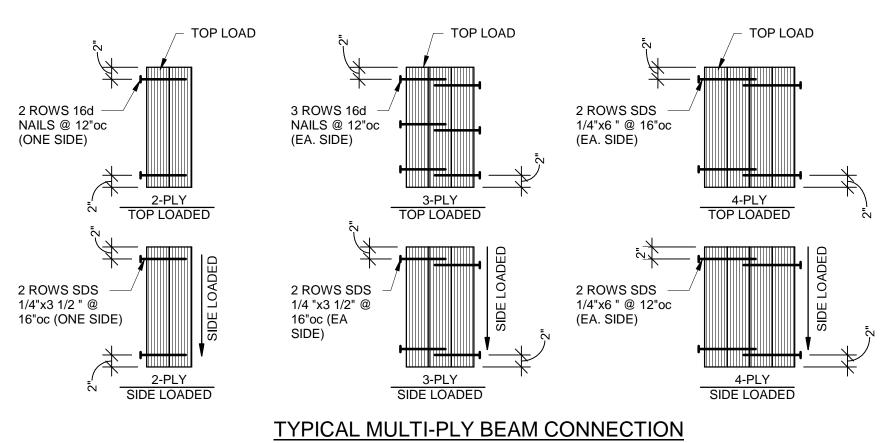
TO BE GALV.)

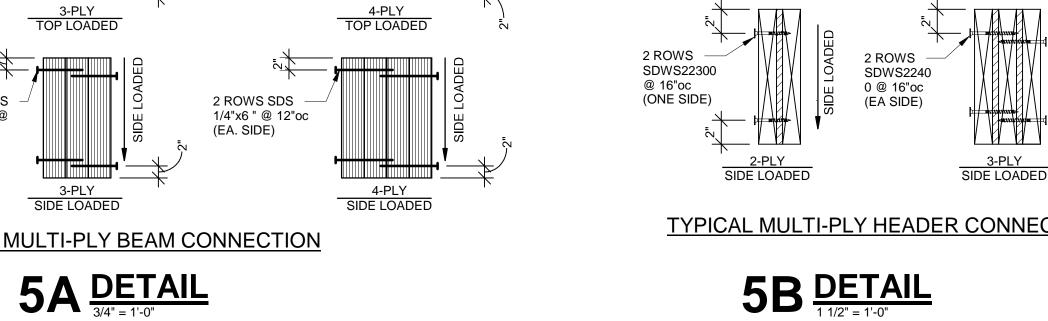
5. REFER TO FRAMING PLANS AND ARCH PLANS FOR LEVEL(S) AT WHICH WALLS OCCUR. 6. STACK/ALIGN WALL STUDS FROM FLOOR TO FLOOR AT ALL EXTERIOR WALLS.

KING STUD(S). FASTEN MULTIPLE KING STUDS TOGETHER PER BUILT-UP STUD PACK ATTACHMENT SCHEDULE INDEPENDENT OF JACK STUDS	
ADDITIONAL JACK STUD(S) (SEE SCHEDULE OR PLAN NOTES FOR EXACT QUANTITIES OF JACK STUDS)  FASTEN SUCCESSIVE JACK STUDS w/ 0.131"x3" OR 10d COMMON NAILS. FACE NAILS @ 12"oc STAGGERED	JACK STUD  0.131"x3" OR 10d COMMON NAILS. FACE NAIL TO KING STUDS @ 12"oc STAGGERED.
AND MIRRORED FROM PREVIOUS PLY  1" EDGE DIST.	

TYPICAL JACK STUD ATTACHMENT

#### 4 DETAIL 1 1/2" = 1'-0"





2 ROWS 16d —/ NAILS @ 12"oc (ONE SIDE)

NAILS @ 12"oc (EA. SIDE)

SDWS2240 0 @ 16"oc (EA SIDE)

3-PLY TOP LOADED	
3-PLY SIDE LOADED	
R CONNECTION	

	TYPICAL LOOSE	LINTEL DETAIL	
TYPI	CAL LOOS	E LINTEL [	DETAIL
3/4" = 1'-0"			1
	LOOSE LINTE	EL SCHEDULE	
	FOR OPENINGS:	GALV. ANGLE	
	OPENING < 9'-0"	6"x4"x5/16" (LLV)	

EL PER ARCH STUD PLAN

 STUD WALL PER SCHED.

> GALV. 2 1/2x2 1/2x3/16" CLOSURE ANGLE SHOP WELDED TO LOOSE LINTEL (CLOSURE ANGLE

LENGTH TO MATCH

OPENING WIDTH)

JOIST/BEAM/	TRUSS HANGE	R SCHEDULE
JOIST/BEAM/TRUSS SIZE	HANGER SIZE	NOTES
2x10	LUS28 HU210	AT CORRIDOR & BALCONY * AT SKEWED CONDITIONS
2x12	LUS210	AT CORRIDOR
(2) 2x12	LUS210-2	AT CORRIDOR
18" TRUSS FACE MOUNT TO UPSET BEAM	LUS410 *HHUS419	* AT SKEWED CONDITIONS

1. HANGERS APPLY TO ALL LOCATIONS WHERE NOT OTHERWISE SPECIFIED IN DETAIL OR PLAN NOTE

TRUSS TYPE	SIMPSON STRONG TIE CONNECTION
COMMON/HIP/JACK AND 1-PLY TRUSSES	H2.5A
1-PLY TRUSS PER TRUSS SHOP DWGS GIRDER TRUSS AS NOTED PER PLAN	(2) H2.5A (ONE EACH SIDE)
2-PLY TRUSS PER TRUSS SHOP DWGS GIRDER TRUSS AS NOTED PER PLAN	LGT2
3-PLY TRUSS PER TRUSS SHOP DWGS OR GIRDER TRUSS AS NOTED PER PLAN	LGT3

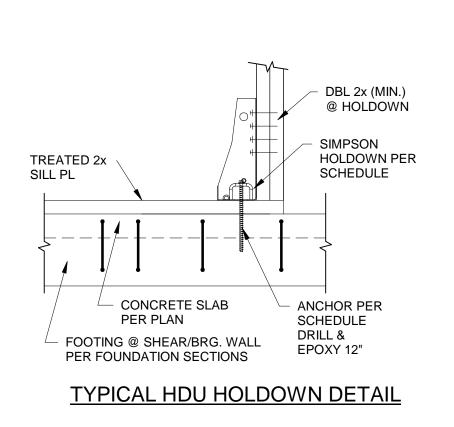
 GC COORDINATE HOLDOWN CONNECTION TYPE, QUANTITY & LOCATION WITH FINAL ROOF TRUSS SHOP DRAWINGS.

## /illa ard 'angu

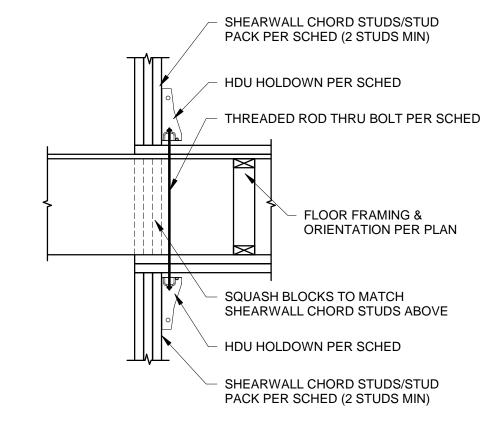
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TR,i PROJECT NO.	20-078	
SHEET NO.		

S002 TYPICAL WOOD GRAVITY
\_\_SCHEDULES & DETAILS\_\_\_\_

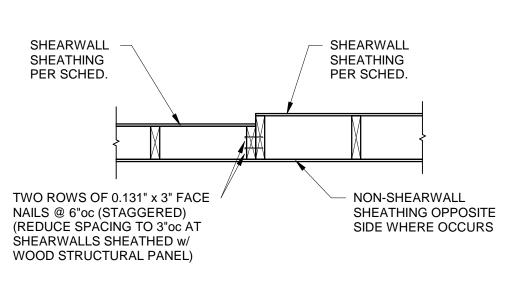






TYPICAL HDU FLOOR TO FLOOR HOLDOWN

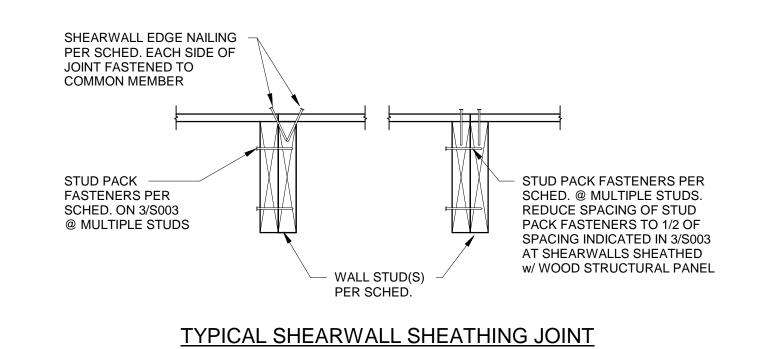
# 2 **SECTION**3/4" = 1'-0"



TYPICAL SHEARWALL DETAIL AT WALL STUD SIZE TRANSITION

3 SECTION

3/4" = 1'-0"



4 **SECTION**1 1/2" = 1'-0"

	SHEA	ARWALL SCHED	ULE						
SHEAF	RWALL TYPE	FLOOR							
		1st FLOOR WALLS	2nd FLOOR WALLS						
SW1	SHEATHING & FASTENING	5/8" GYPSUM SHEATHING FINISH SIDE, w/ EDGES BLOCKED 6d NAILS @ 7/7	5/8" GYPSUM SHEATHIN FINISH SIDE, w/ EDGES BLOCKED 6d NAILS @ 7/						
	HOLDOWN	HDU2 W/ (2) STUDS	HDU2 W/ (2) STUDS						
SW2	SHEATHING & FASTENING	7/16" OSB SHEATHING AIR SIDE, w/ EDGES BLOCKED 8d NAILS @ 6/12	7/16" OSB SHEATHING AIR SIDE, w/ EDGES BLOCKED 8d NAILS @ 6/1						
	HOLDOWN	HDU4 W/ (2) STUDS	HDU4 W/ (2) STUDS						

- NOTES:

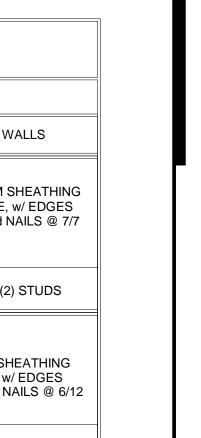
  1. NAILING SHALL BE TO ALL STUDS, TOP & BOTTOM PLATES, AND BLOCKING WHERE INDICATED. NAILS FOR GYPSUM SHEATHING ARE COOLER NAILS AND NAILS FOR OSB SHEATHING ARE COMMON NAILS. GYPSUM CAN BE ATTACHED WITH DRYWALL SCREWS AT SAME SPACING INDICATED FOR NAILS.

  2. HOLDOWNS PER PLAN & SCHEDULE.
- HOLDOWNS PER PLAN & SCHEDULE.
   WHERE THE ENDS OF PERPENDICULAR SHEAR WALLS INTERSECT AND ONLY ON HOLDOWN SHOWN ON PLAN, FASTEN ALL STUDS TOGETHER PER SCHEDULE AND USE LARGER OF THE TWO HOLDOWNS SHOWN IN THE SHEARWALL SCHEDULE.
   REFER TO HOLDOWN SCHEDULE FOR NUMBER OF STUDS REQ'D AT EA END OF THE
- SHEARWALL
  5. NAIL AND STAPLE SPACING SHOWN AS (#/#) INDICATES FASTENERS SPACING IN
- INCHES AT THE EDGES/FIELD WHERE FIELD IS THE INTERMEDIATE MEMBERS.

  6. TYPICAL SILL PLATE TO WOOD (RIM BOARD) SHALL BE 20d NAILS AT 12"oc UNLESS NOTED OTHERWISE IN SCHEDULE. TYPICAL WOOD (RIM BOARD) TO TOP PLATES
- SHALL BE SDWS22500 SCREWS @ 16"oc.

  7. TYPICAL SILL PLATE TO CONCRETE SHALL BE 1/2"Øx6" Lg SIMPSON TITEN HD ANCHOR:
  AT 2x4 WALLS SPACE AT 24"oc MAX WITH 1/4"x2 1/2"x2 1/2" PLATE WASHER OR
  SIMPSON BPS1/2-3 @ CONTRACTORS OPTION
  AT 2x6 WALLS SPACE AT 24"oc MAX WITH 1/4"x2 1/2"x4 1/2" PLATE WASHER OR
  SIMPSON BPS1/2-6 @ CONTRACTORS OPTION
- SIMPSON BPS1/2-6 @ CONTRACTORS OPTION
  AT 2x8 WALLS STAGGER AT 18"oc MAX WITH 1/4"x2 1/4"x2 1/2" PLATE WASHER OR
  SIMPSON BPS1/2-3 @ CONTRACTORS OPTION

  8. PLATE WASHERS TO MAINTAIN MAX OF 1/2" BETWEEN EDGE OF SILL PLATE AND EDGE
  OF PLATE WASHER.



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ASSOCIATES
LATIMER SOMMERS



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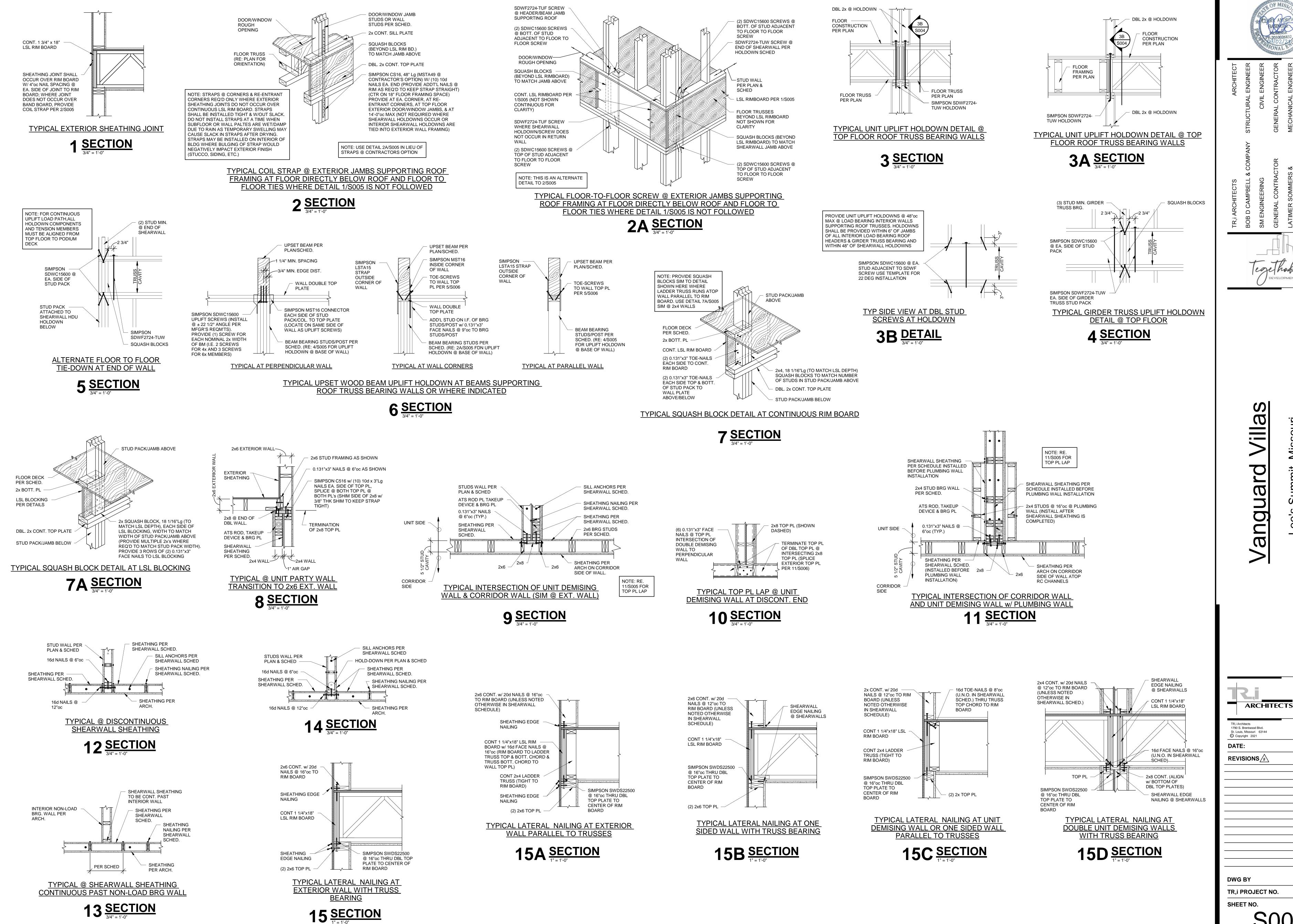
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TR,i PROJECT NO. 20-078

SHEET NO.

TYPICAL WOOD LATERAL



**DWG BY** TR,i PROJECT NO. 20-078 SHEET NO. S004

TYPICAL WOOD DETAILS

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B \_\_\_

13 **SECTION** 

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SM ENGINEERING
CIV
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ASSOCIATES
LATIMER SOMMERS & MECHANIC,
ASSOCIATES
LATIMER SOMMERS & PLUMBIN

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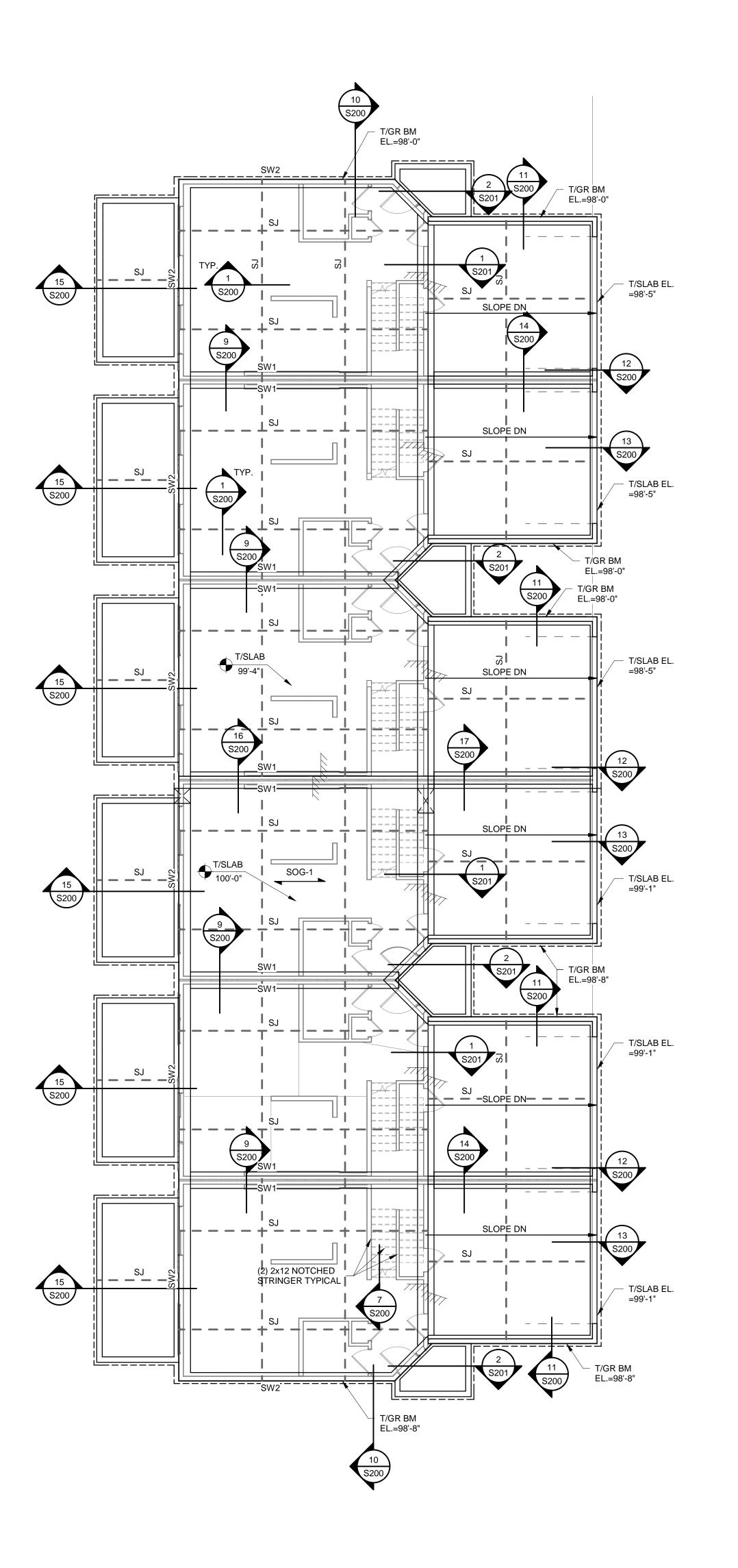
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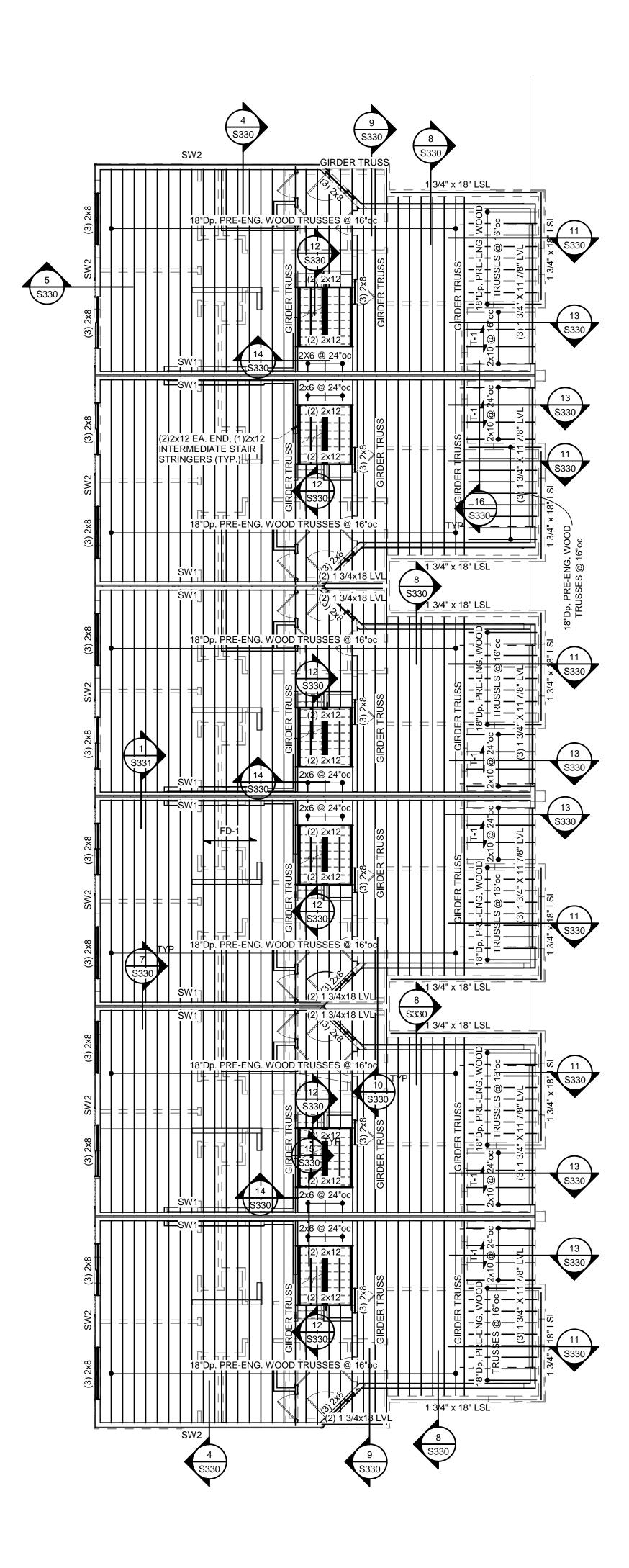
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SHEET NO.

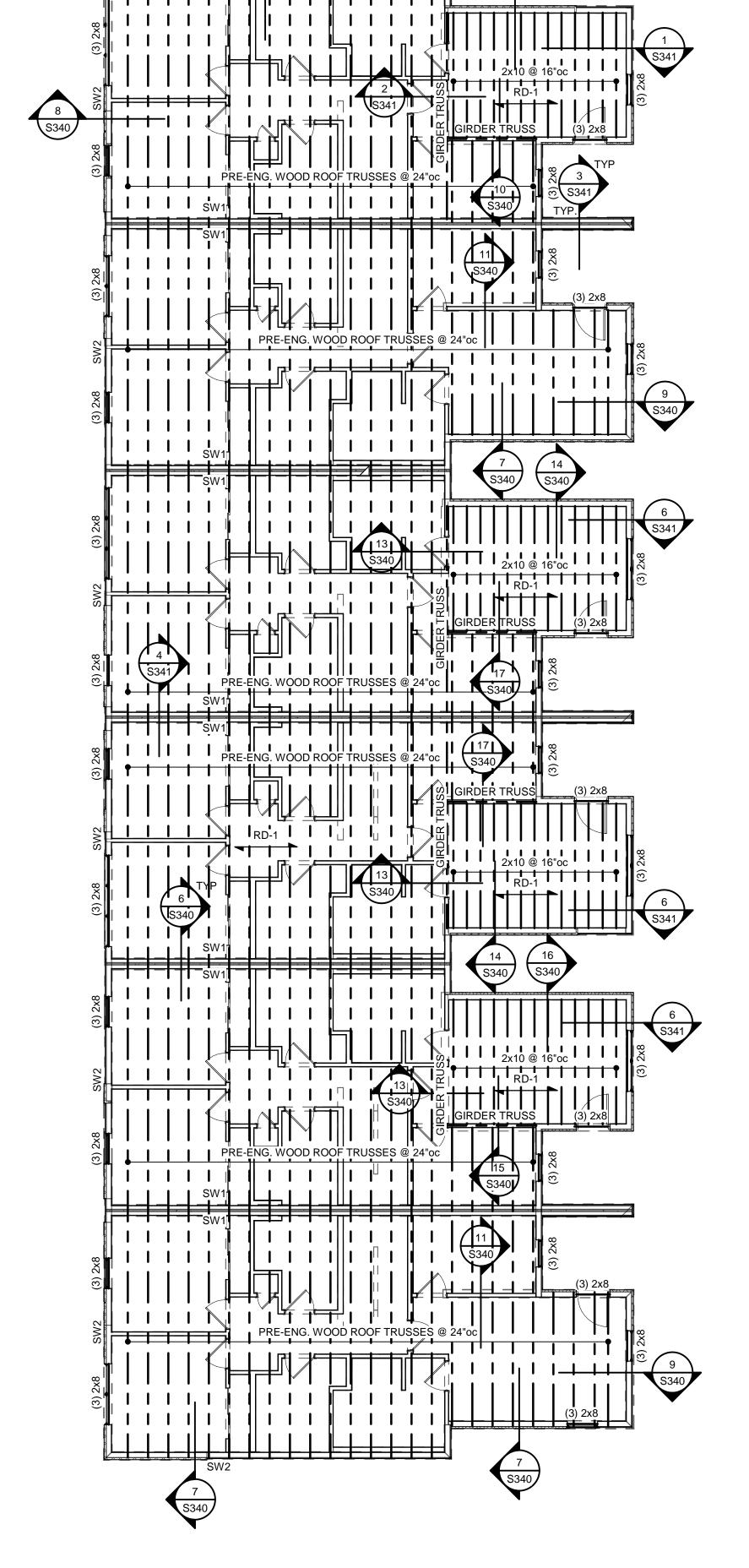
S005
TYPICAL WOOD DETAILS



1 GROUP 1 - FOUNDATION PLAN

1/8" = 1'-0"





2 GROUP 1 - SECOND FLOOR FRAMING PLAN

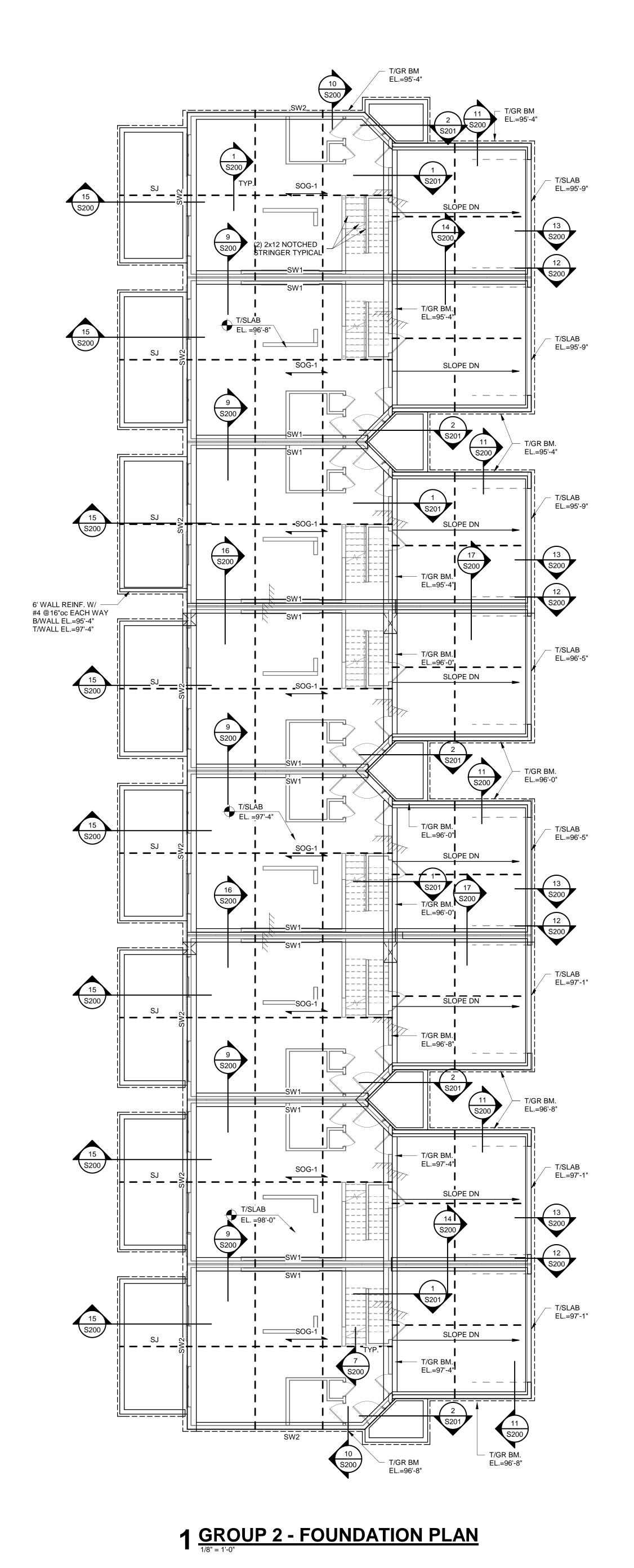
1/8" = 1'-0"

3 GROUP 1 - ROOF FRAMING PLAN



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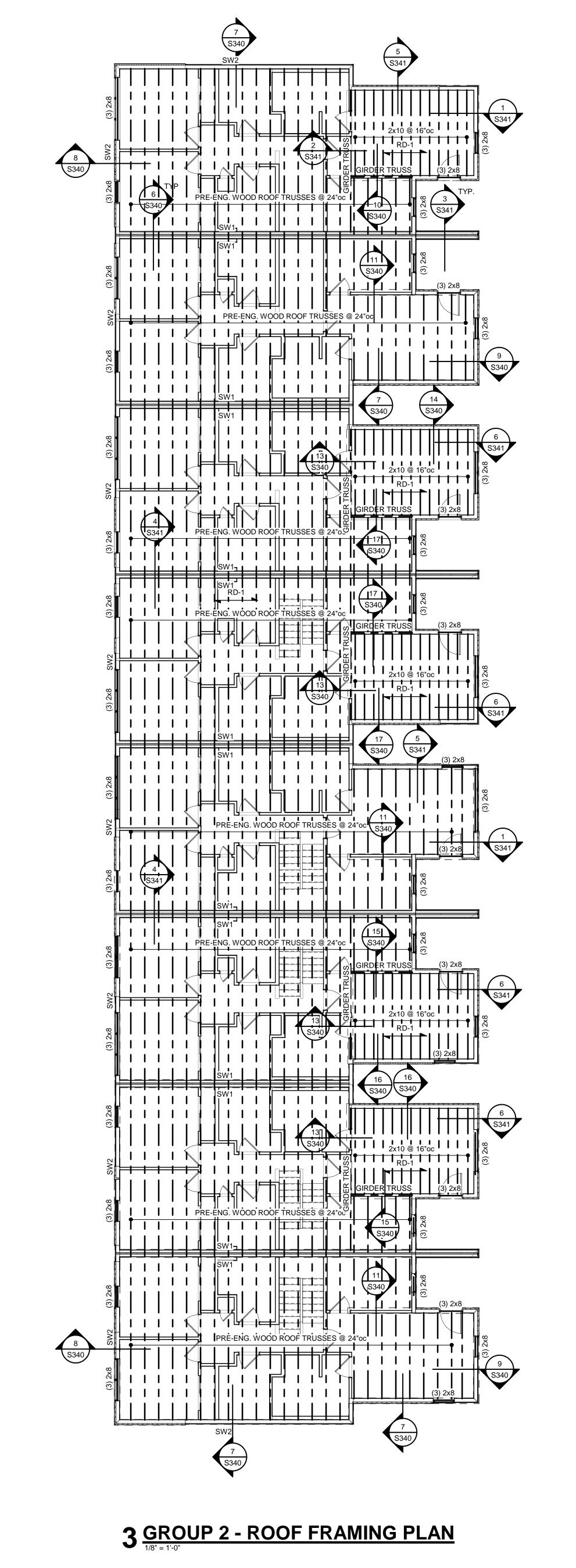
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2 GROUP 2 - SECOND FLOOR FRAMING PLAN

1/8" = 1'-0"

(2)2x12 EA. END, (1)2x12 INTERMEDIATE STAIR STRINGERS (TYP.)



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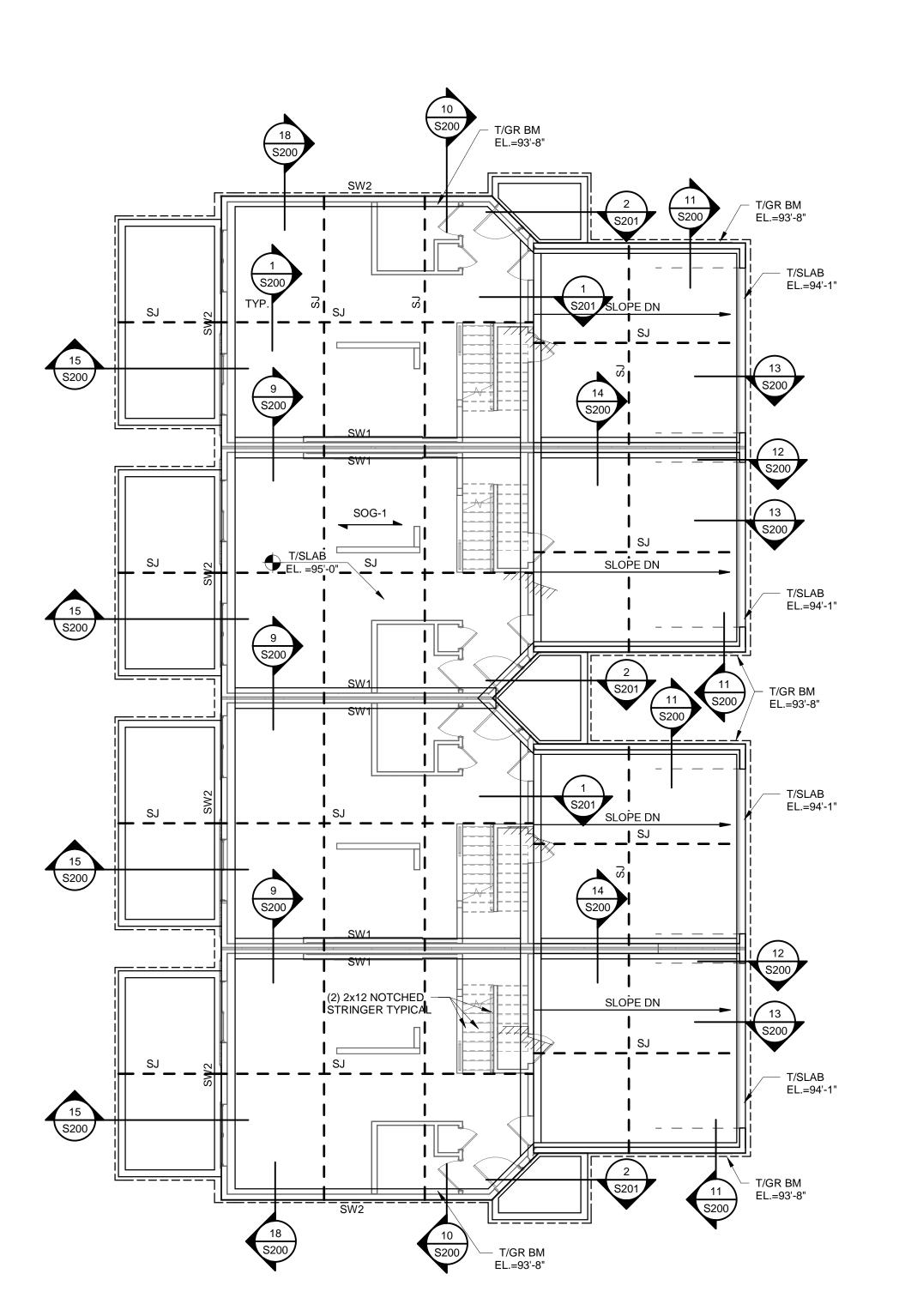
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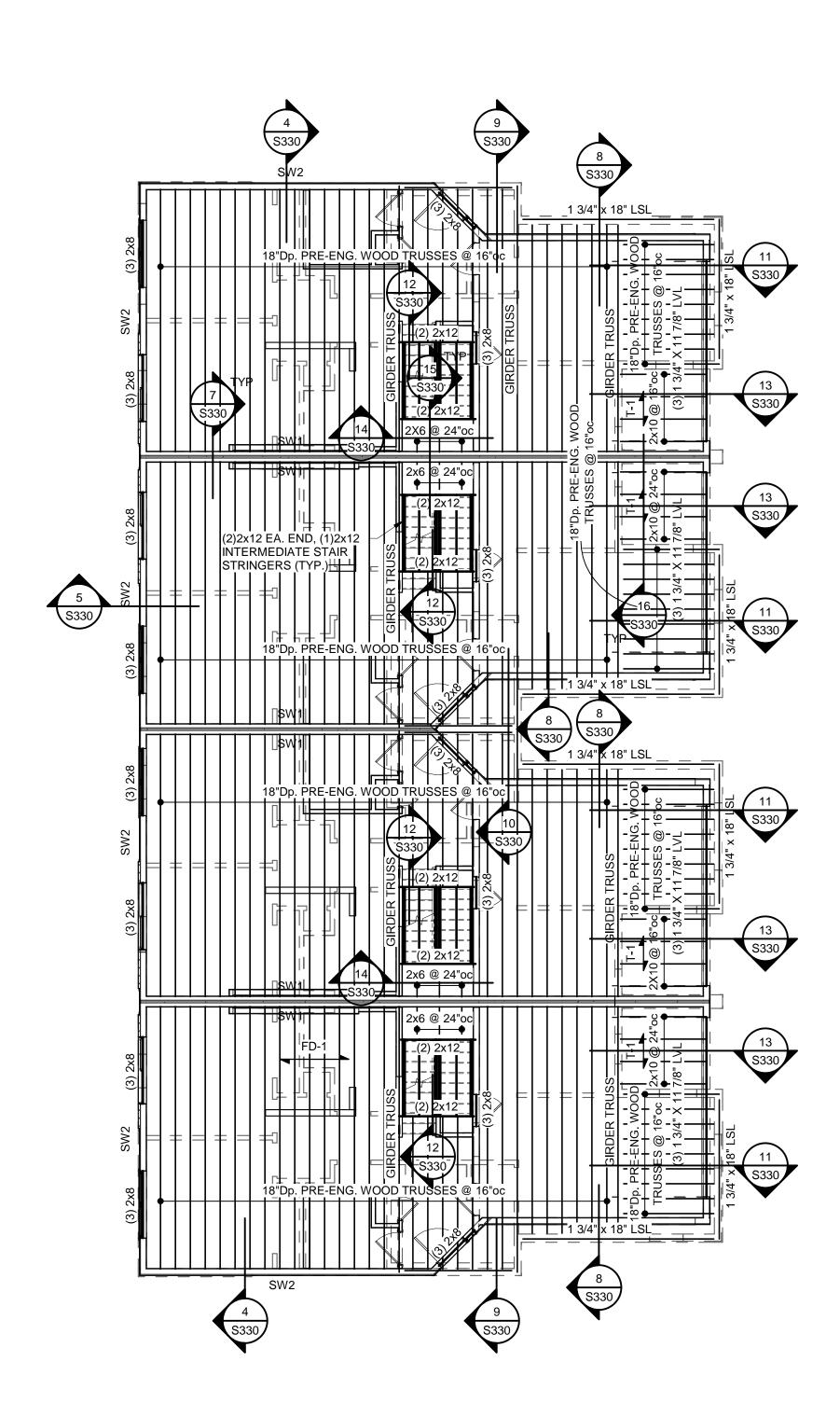
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S102

GROUP 2 PLANS

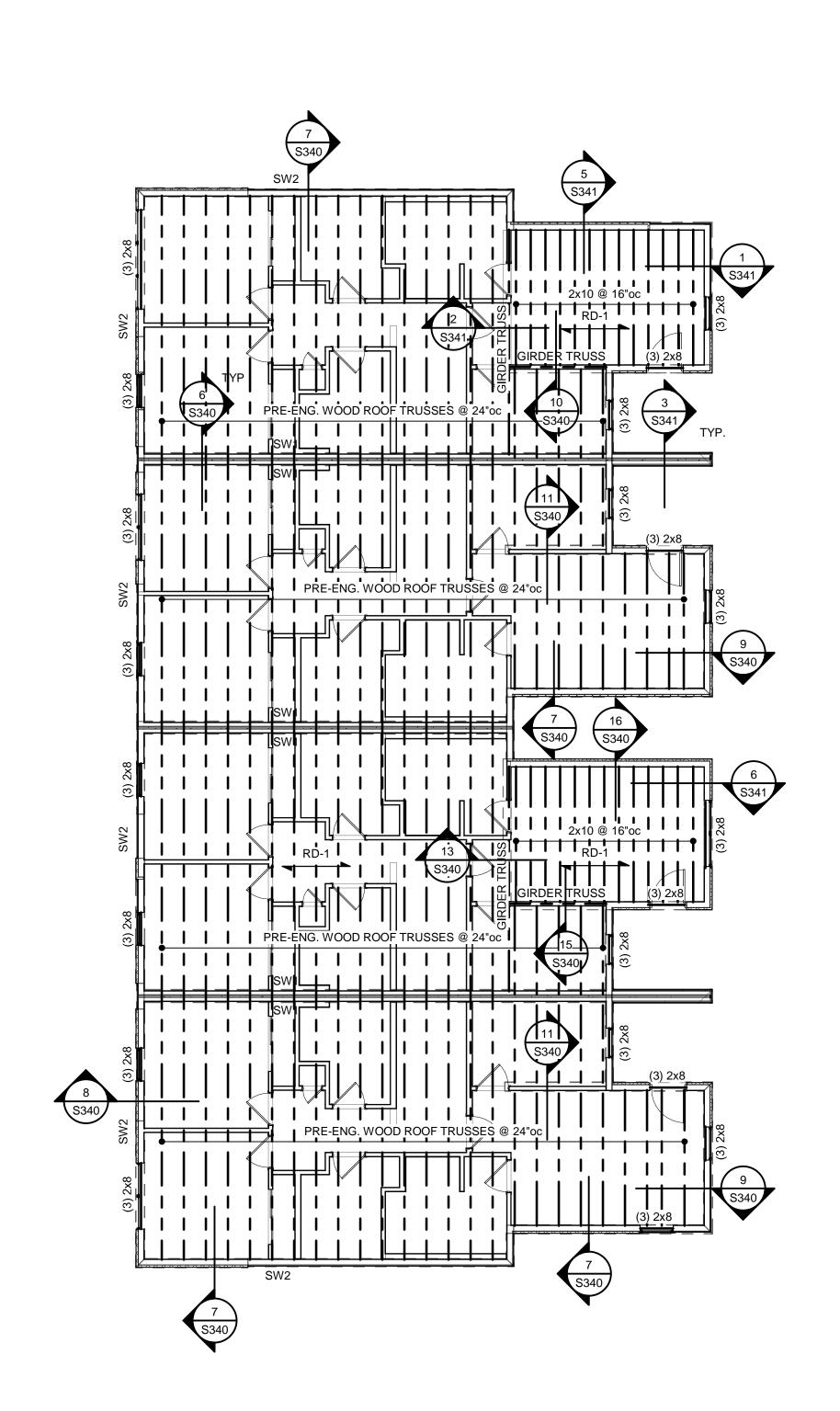


1 GROUP 3 - FOUNDATION PLAN



2 GROUP 3 - SECOND FLOOR FRAMING PLAN

1/8" = 1'-0"



3 GROUP 3 - ROOF FRAMING PLAN

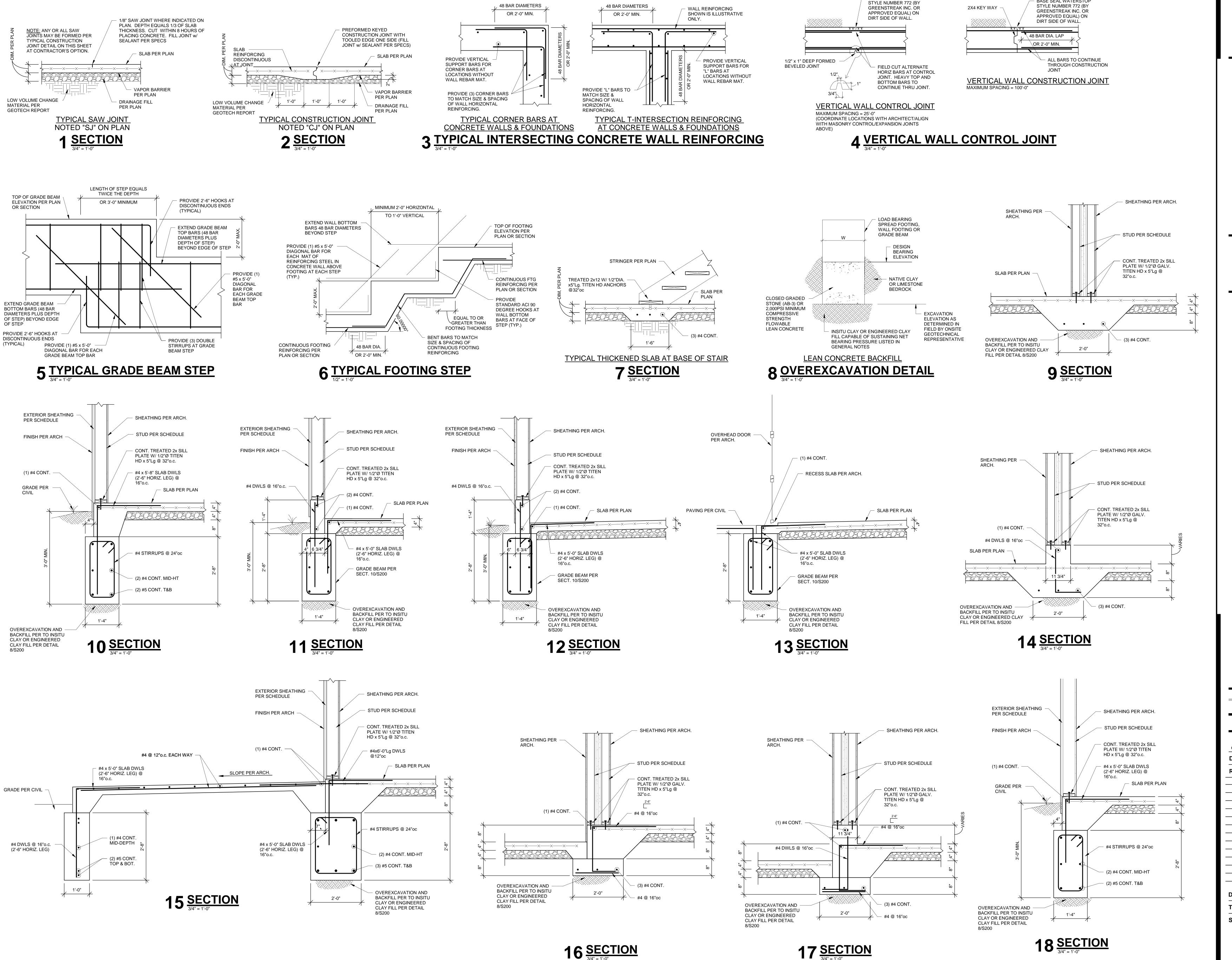


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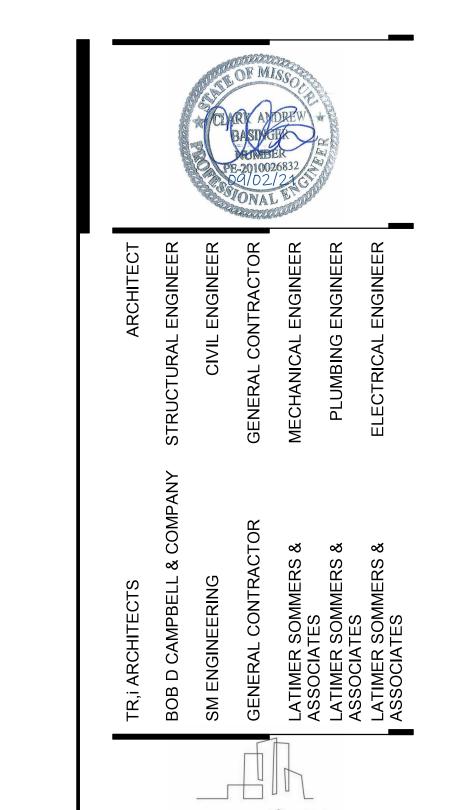
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BASE SEAL WATERSTOP

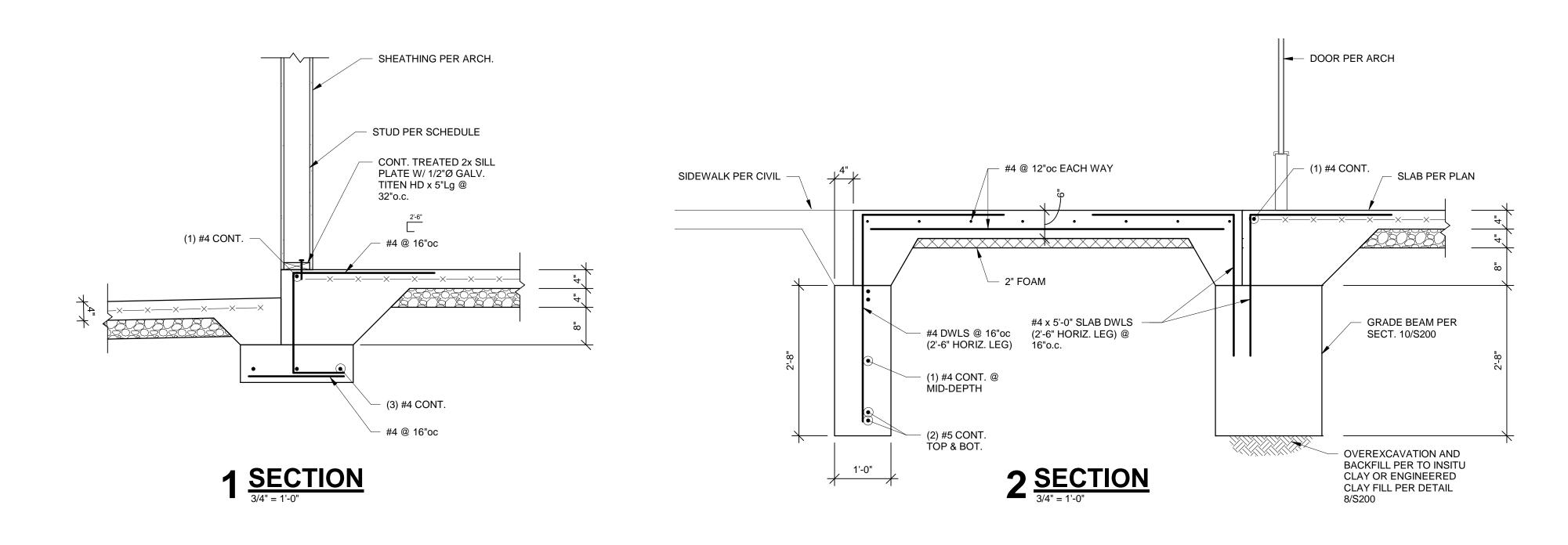
BASE SEAL WATERSTOP



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SHEET NO. **FOUNDATION SECTIONS** 





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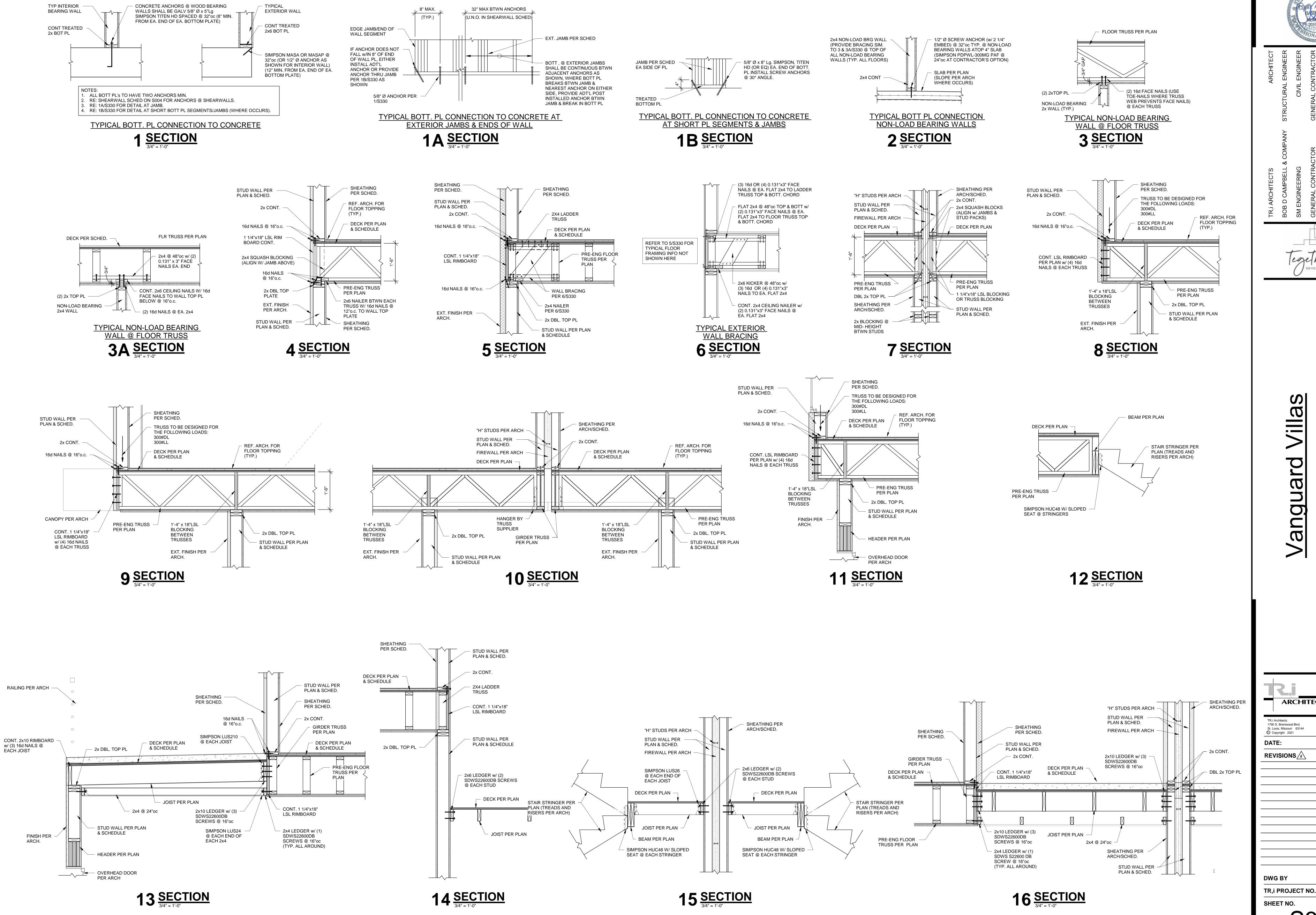
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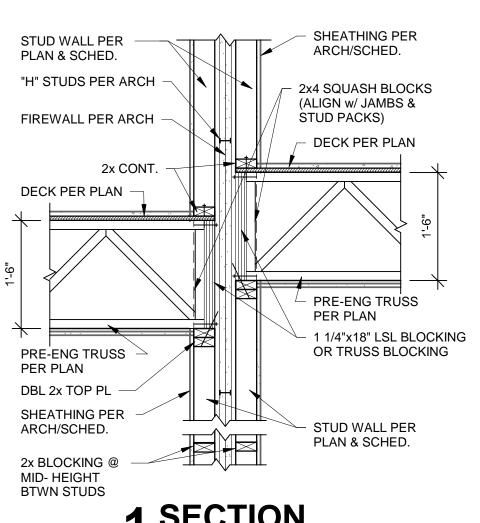


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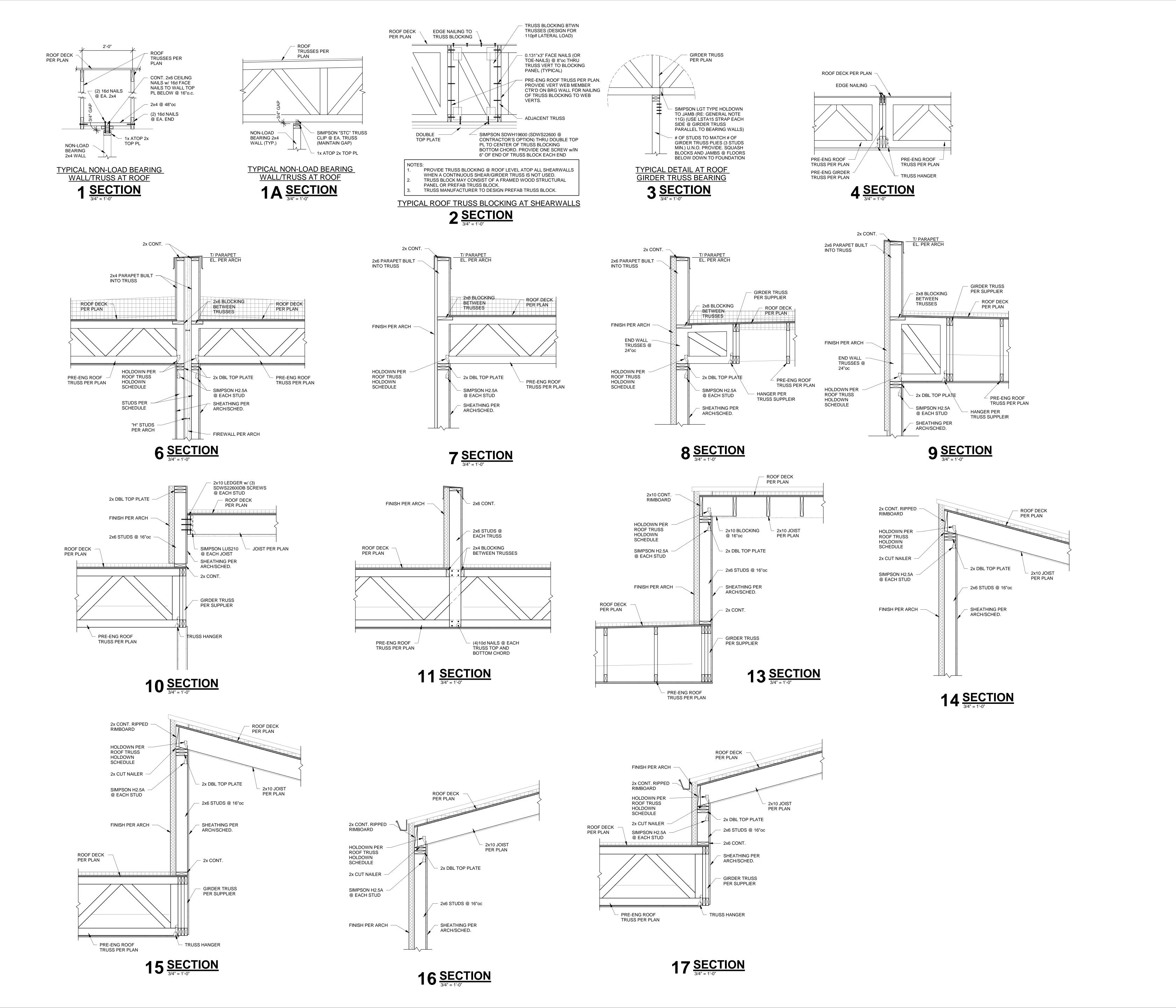
**WOOD FLOOR FRAMING SECTIONS** 

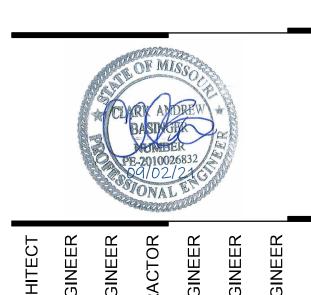


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ACTOR

GENERAL CONTRACTOR

ACTOR

GENERAL CONTRACTOR

MECHANICAL ENGINEER

RS & MECHANICAL ENGINEER

RS & PLUMBING ENGINEER

BOB D CAMPBELL & COMP,

SM ENGINEERING

GENERAL CONTRACTOR

LATIMER SOMMERS &

ASSOCIATES

LATIMER SOMMERS &

Tegetholds

RS

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DEVELOPMENT

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SHEET NO.

S340
WOOD ROOF FRAMING SECTIONS

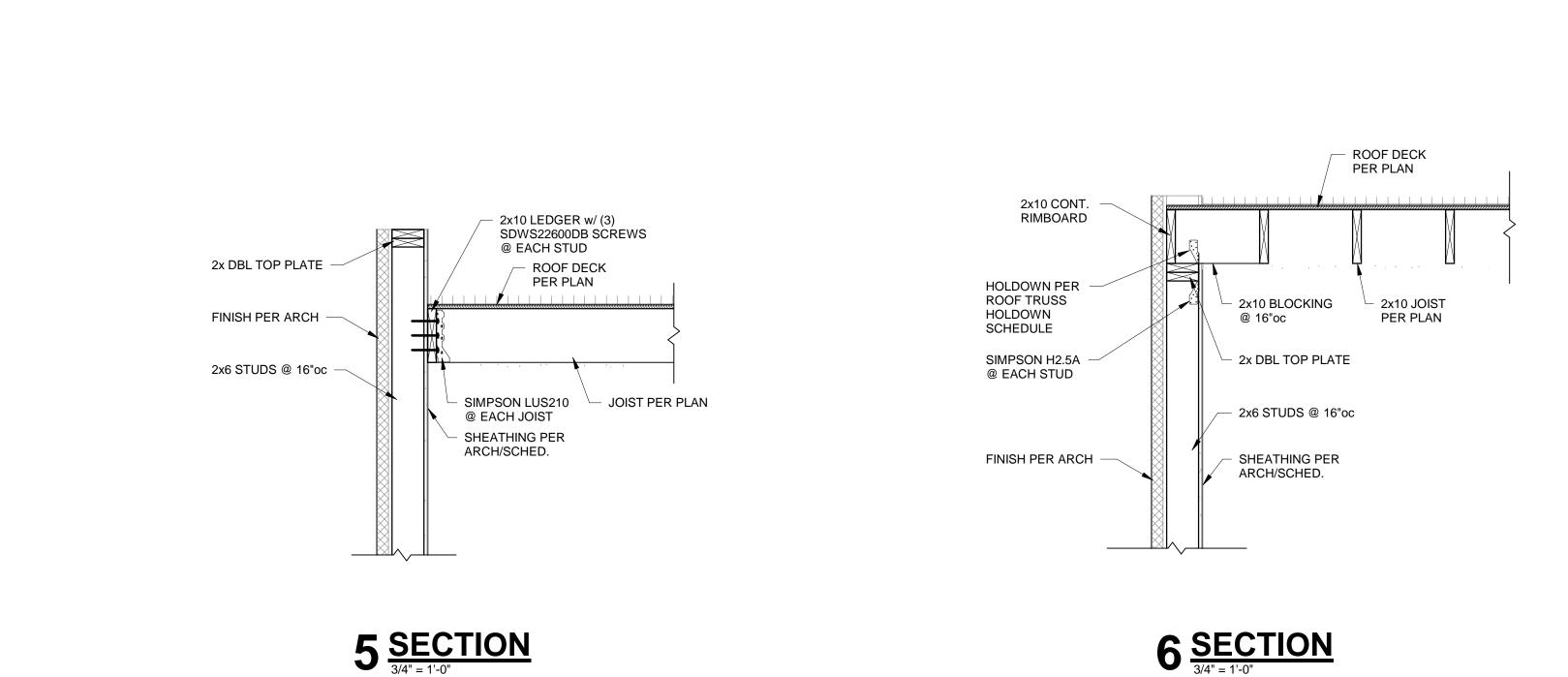
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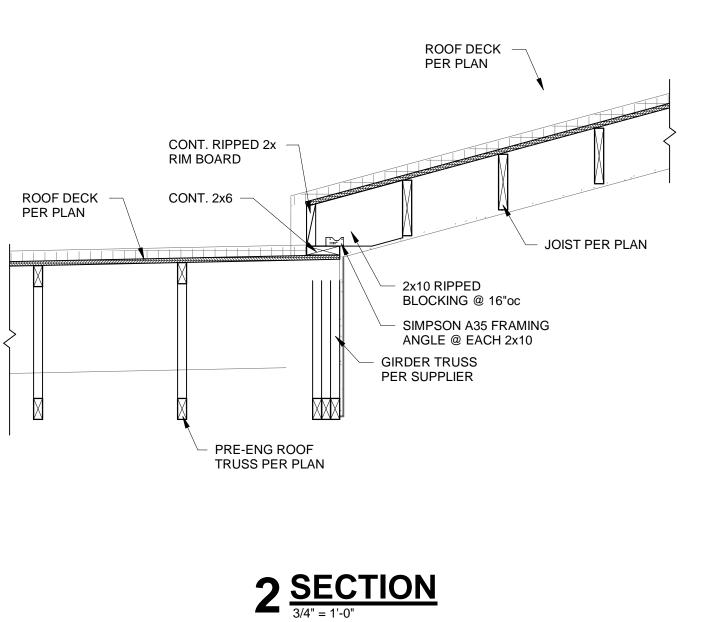
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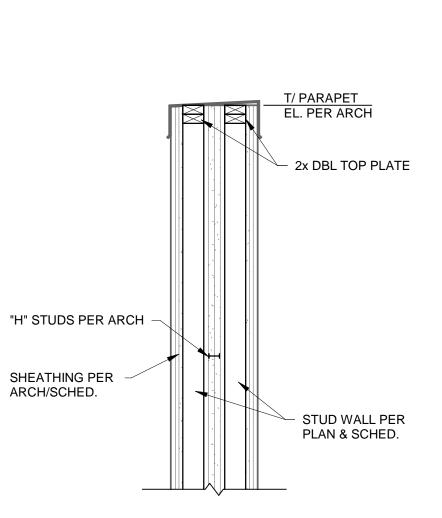
SHEET NO. WOOD ROOF FRAMING SECTIONS



8 / 1 |

1 SECTION  $\frac{3}{4}$  = 1'-0"





3 **SECTION**3/4" = 1'-0"

2x4 PARAPET BUILT -INTO TRUSS

HOLDOWN PER ROOF TRUSS HOLDOWN SCHEDULE

"H" STUDS -PER ARCH

4 SECTION  $\frac{3}{4} = 1'-0"$ 

STUDS PER SCHEDULE

ROOF DECK — PER PLAN

PRE-ENG ROOF — TRUSS PER PLAN

- 2x6 BLOCKING BETWEEN TRUSSES

- 2x DBL TOP PLATE

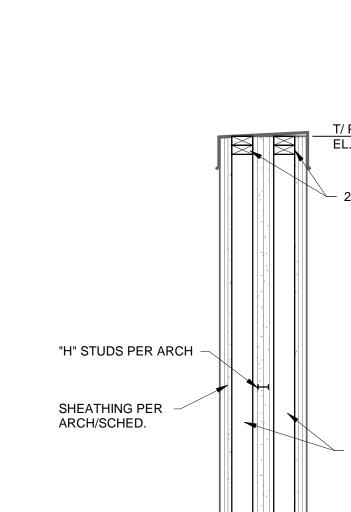
- SIMPSON H2.5A @ EACH STUD

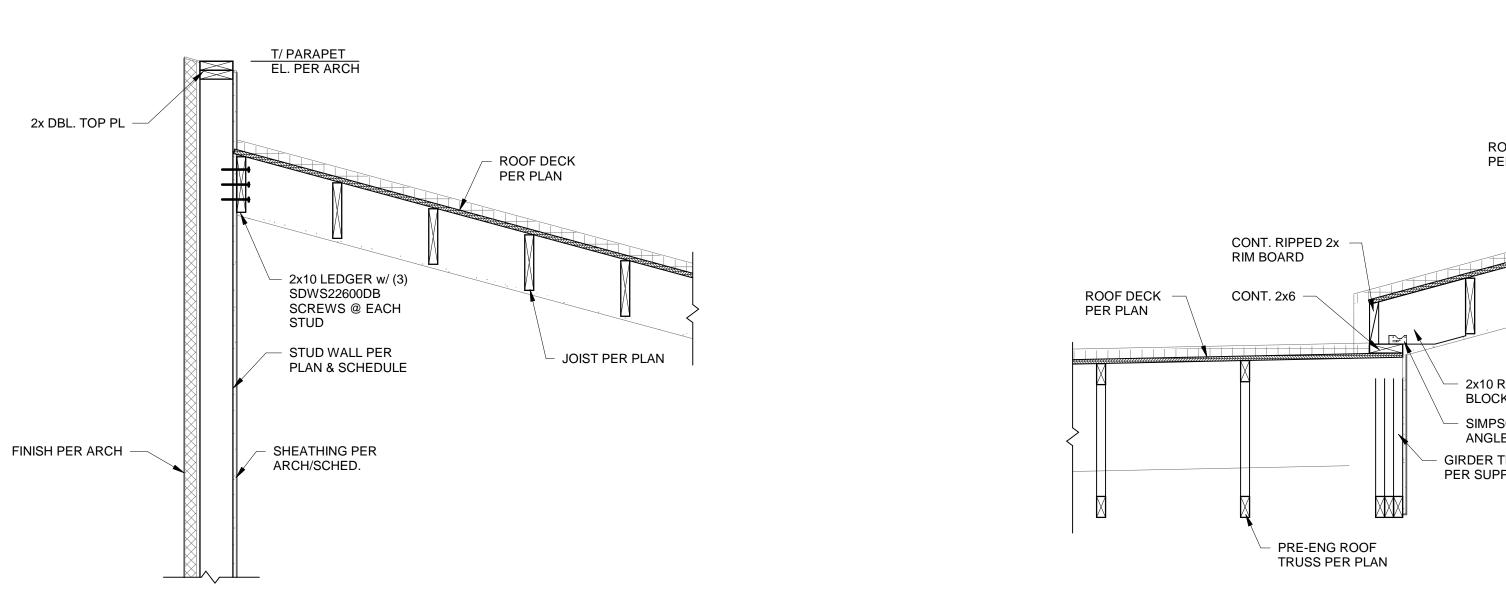
SHEATHING PER ARCH/SCHED.

FIREWALL PER ARCH

- ROOF DECK PER PLAN

PRE-ENG ROOF TRUSS PER PLAN







- . VERIFY UTILITIES WITH CIVIL DRAWING AND PROVIDERS.
- 2. SEE 1-ME1.02 FOR GARAGE DETAIL.
- ELECTRICAL SERVICE PRIMARY AND TRANSFORMER LOCATIONS ARE PROPOSED. OBTAIN KCPL DESIGN PRIOR TO CONSTRUCTION OR ORDERING EQUIPMENT.
- 4. FOR GAS SERVICES TO AMENITIES, PROVIDE STEEL RISER, SHUT-OFF AND KEY OPERATED VALVE. VERIFY WITH LANDSCAPE ARCHITECT.
- 5. CARPORTS ROUTE TO GARAGE PANELS.
- ALL SITE LIGHTING IS (3) #10 IN 3/4" PVC CONDUIT AND ROUTES THRU PHOTOCELL.
- 7.  $\boxtimes$  = PROPOSED TRANSFORMER LOCATION.

LEGEND:

1 1" CW SERVICE FROM 5/8" METER

2 4" SANITARY EXIT.

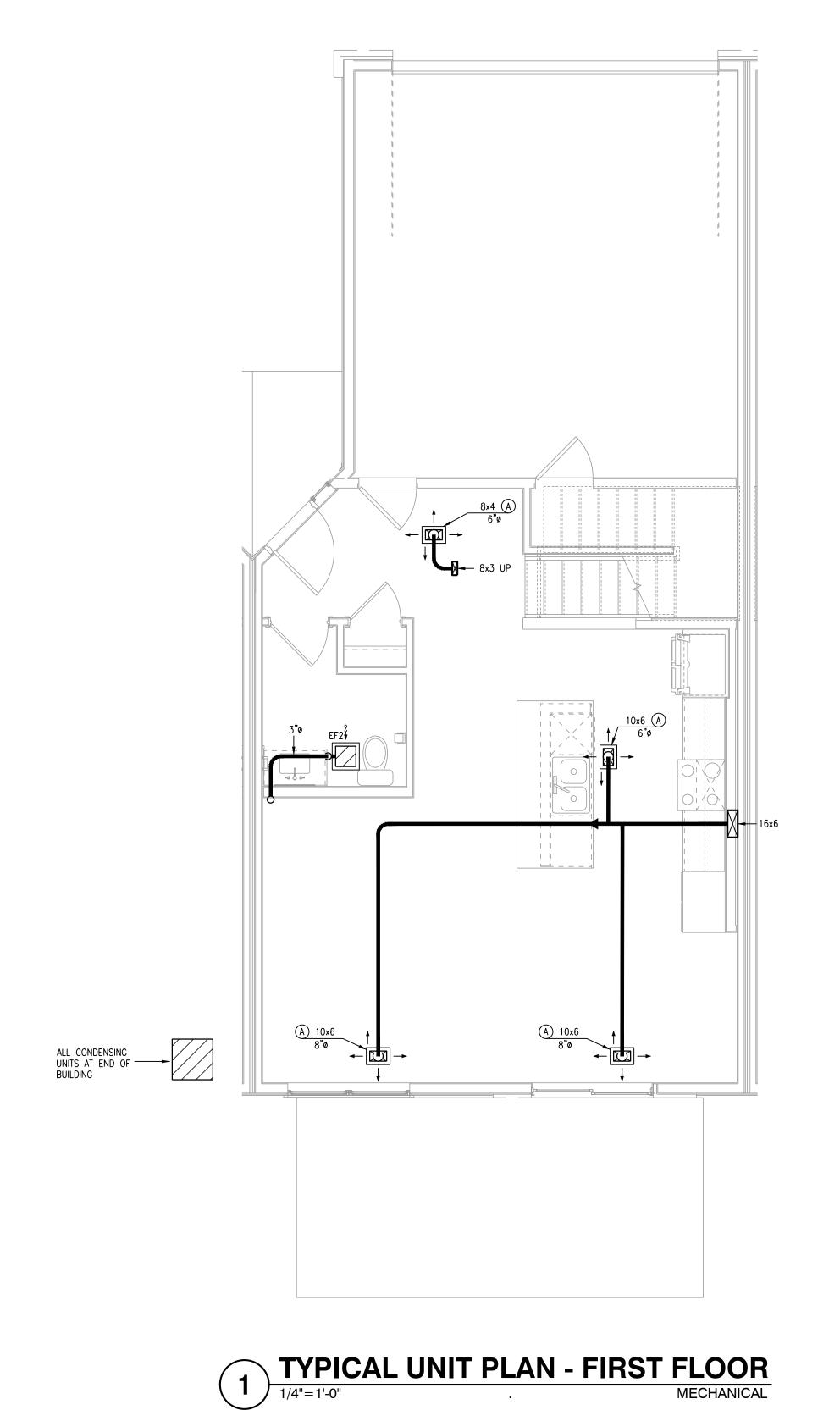
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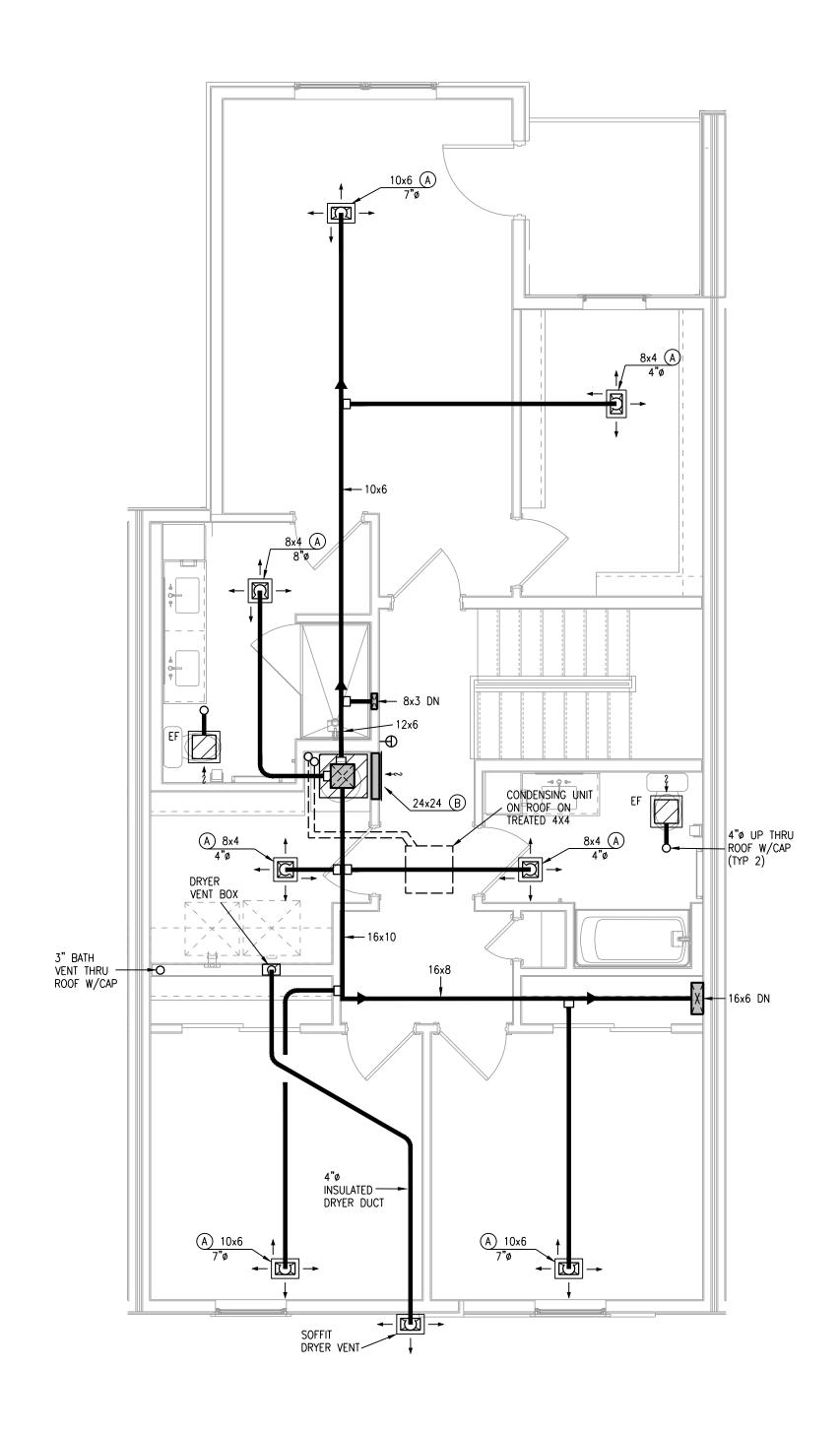
TR,i PROJECT NO.

SHEET NO. SITE PLAN - MECHANICAL

3639 SW Summerfield Drive, Suite A Topeka, Kansas 66614-3974 Telephone: (785) 233-3232 FAX: (785) 233-0647 Email: Isapa@Isapa.com

LSA PROJECT NO. 2104028





TYPICAL UNIT PLAN - SECOND FLOOR

1/4"=1'-0"

MECHANICAL





TR,i PROJECT NO. SHEET NO.

PROVIDE MANUFACTURER REQUIRED CLEARANCES FOR

. ALL CONDENSING UNITS ARE GROUND MOUNTED.
MANUFACTURER SHALL PROVIDE ANY ACCESSORIES
REQUIRED FOR PROPER OPERATION INCLUDING LONG
LINE SETS.

3. PROVIDE GUY GRAY MODEL DB350/DB3D DRYER VENT BOX AT ALL DRYER LOCATIONS. NOTE TOP FLOOR SHALL ROUTE THRU FLOOR BELOW TO EXTERIOR WALL.

. GENERALLY CENTER GRILLES/REGISTERS IN WALLS, OVER DOORS, ALIGN WITH WINDOWS, ETC.

MAINTAIN 3 FT. FROM EXHAUST/VENTS TO BUILDING OPENINGS. DRYER VENT CAPS SHALL HAVE 4" DEEP

. ROUTE AHU CONDENSATE INDIRECT TO FLOOR DRAINS IN AHU CLOSETS.

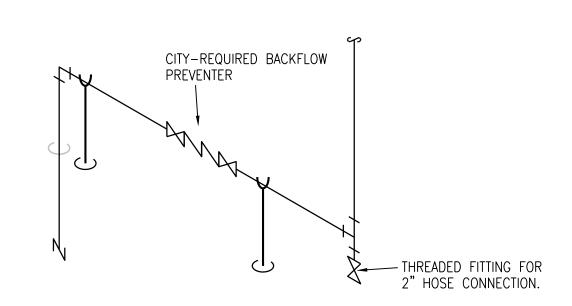
. EXHAUST FANS AT TOP FLOOR VENT TO ROOF.

8. EXHAUST FANS TO BE HUMIDITY-SENSING TYPE.

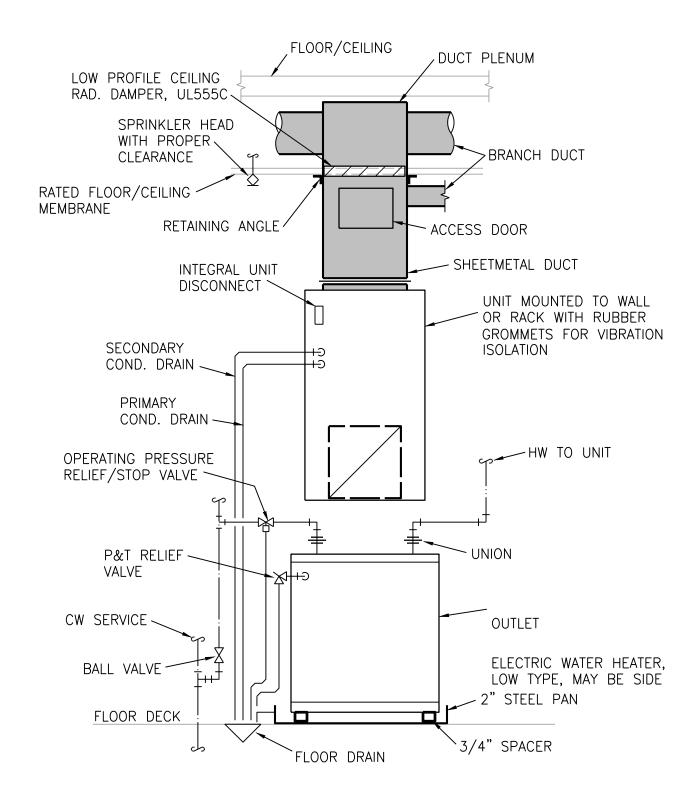
. TOP FLOOR DUCTS SHALL BE R-8 INSULATED AND SEALED TO PREVENT CONDENSATION.

BY 4" WIDE OPENING FOR AIR FLOW.

AHU'S AND WATER HEATERS.

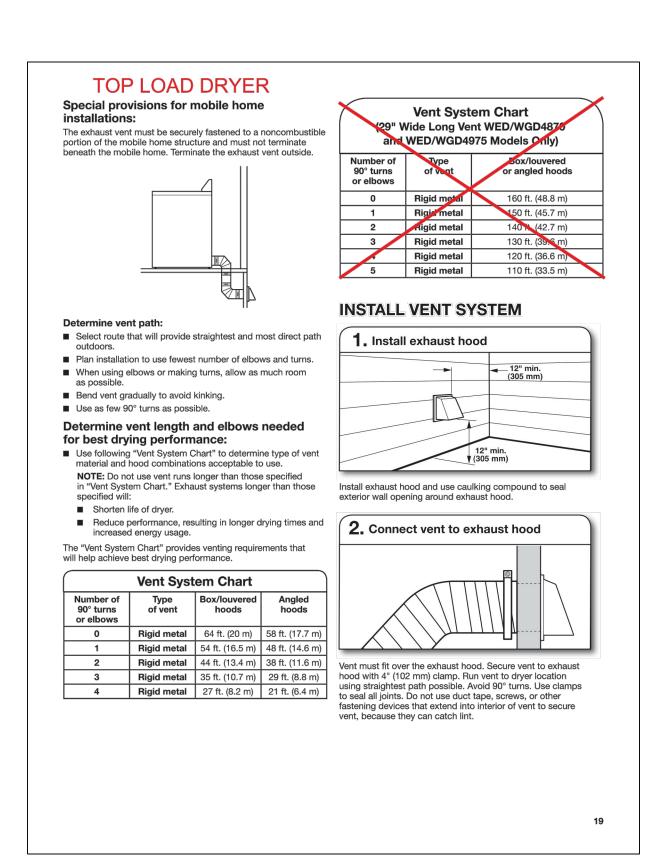


**DOMESTIC WATER RISER** 

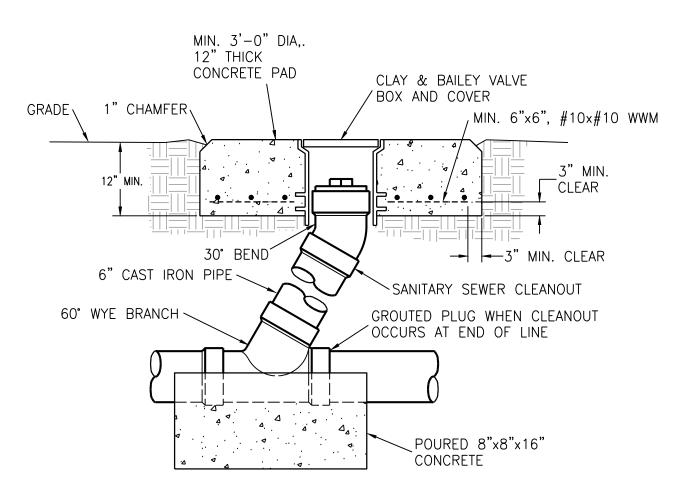


MECHANICAL CLOSET DETAIL

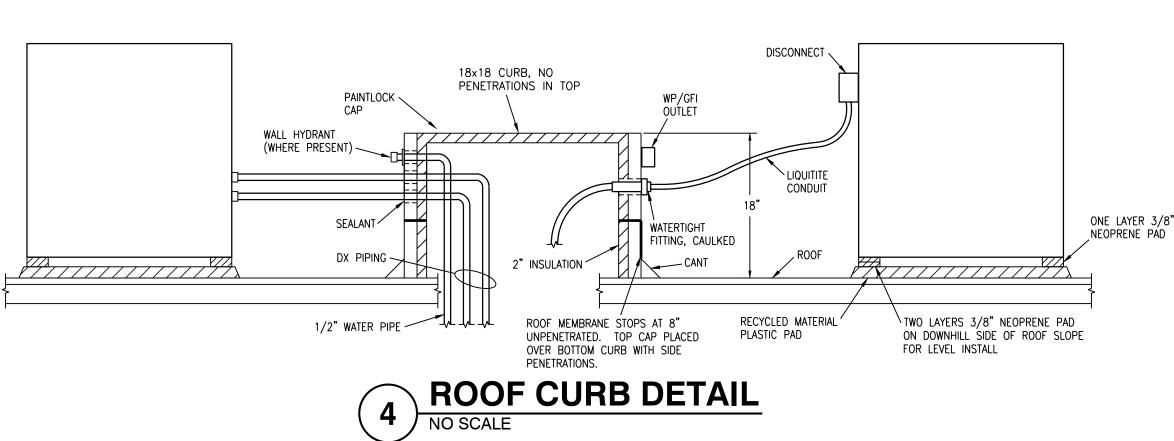
NO SCALE



6 DRYER VENT DETAIL
NO SCALE



PLUSH GRADE CLEANOUT DETAIL
NO SCALE

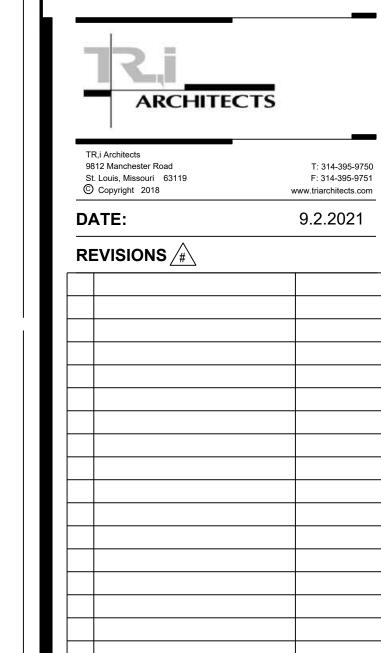


ONE LAYER 3/8" NEOPRENE PAD

MECHANICAL SYMBOLS LEGEND WATER CLOSET & TYPE (TYP. FOR ALL PLUMBING FIXTURES) MANUAL DAMPER WASTE LINE ABOVE EARTH (W.) BACKDRAFT DAMPER |+ --- + WASTE LINE IN EARTH (W.) AUTOMATIC DAMPER FIRE DAMPER **——II** CO FFCO O FLUSH FLOOR CLEAN OUT FIRE/SMOKE DAMPER FGCO O FLUSH GRADE CLEAN OUT SMOKE DAMPER FLOOR DRAIN AND TYPE GRILLE, REGISTER OR DIFFUSER, SIZE, TYPE & CFM — RD — ROOF DRAIN VOLUME EXTRACTOR AND TURNING VANES RETURN, EXHAUST OR FRESH AIR DUCT SECTION UP & DOWN ROOF DRAIN AND TYPE VENT LINE (V.) SUPPLY AIR DUCT SECTION UP AND DOWN FLEXIBLE DUCT CONNECTION DOMESTIC COLD WATER SUPPLY (DCW) ROUND OR RECTANGULAR DUCT DOMESTIC HOT WATER SUPPLY (DHW) DOMESTIC HOT WATER RETURN (DHWR) FLEXIBLE DUCT — + HB/36" HOSE BIBB AND MOUNTING HEIGHT THERMOSTAT <del>— ⊑</del>I w⊦ WALL HYDRANT REFRIGERANT LIQUID REFRIGERANT SUCTION FIRE LINE/STANDPIPE DRAIN LINE ACCESS DOOR ABOVE FINISHED FLOOR NATURAL GAS LINE EXHAUST AIR RISE & DROP IN PIPE WITH CUT-OFF VALVE OUTSIDE AIR OA REDUCER RETURN AIR **─**// CHECK VALVE SUPPLY AIR  $-\bowtie$ STOP VALVE VENT BELOW SLAB BALANCING VALVE VENT THRU ROOF PLUG VALVE CONNECT NEW TO EXISTING 2-WAY CONTROL VALVE OR SOLENOID VALVE LOCKABLE GUARD 3-WAY CONTROL VALVE OR SOLENOID VALVE PRESSURE REDUCING VALVE <del>--|>|-</del> STRAINER ---UNION —~— FLEXIBLE PIPE CONNECTION NOTES: ALL SYMBOLS SHOWN ABOVE REFER TO ELECTRICAL SYMBOLS LEGEND FOR ELECTRICAL MAY NOT APPEAR ON PLANS. SYMBOLS THAT MAY BE SHOWN ON MECHANICAL PLANS.

> TO OTHER VENTS 1 1/2"\_\_\_ PARTITION FLOOR

5 ISLAND VENT DETAIL
NO SCALE



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Email: lsapa@lsapa.com LSA PROJECT NO. 2104028

CAD/RRB **DWG BY** TR,i PROJECT NO. SHEET NO. MECHANICAL DETAILS

			PLUMBING FIX	TURE S	CHED	ULE							
/lark	Item	Model	Description		Individual C	onnections				Acc	essories		
				W	V	CW	HW	Supplies	Stops	Carrier	P-Trap	Drain	Other
			Floor-mounted standard height white vitreous china elongated bowl 1.6 gpf gravity type with Fluidmaster 400A flush mechanicsm and bolt covers. Provide molded wood closed front elongated white seat with integral bumpers, external check										
<b>-1</b>	Water Closet, Tank Type	ProFlo #PF1401T	hinges with stainle	3" or 4"	2"	1"		2					
P-2	Lavatory, Countertop	ProFlo #PF20174 with Peerless #P136PF-M	20" x 17" oval vitreous china countertop lavatory with overflow. Faucet is 4" o.c. single lever ADA handle, copper waterways, chrome finish, 1.5 GPM, metal pop-up.	2"	1 1/2" or 2"	1/2"	1/2"	2	1		1	1	
<b>-</b> -3	Bathtub	Kohler #K-715/6 with Delta #R- 10000-UN/T13420	60" x 30" x 20" tall non-slip basin and tub overflow and turn and lift stop with finish to match faucet. Pressure-balanced single handle chrome valve, 1.5 gpm showerhead, tub spout with pull-up diverter. Provide future grab bar blocking. Water Sense la	2"	2"	1/2"	1/2"				2		
P-3S	Shower	Aquarius G6036 with Peerless #PTT188780	60" x 36" white fiberglass reinforced plastic/acrylic non-slip basin with surround, soap dishes. Pressure-balanced single handle valve, 2.0 gpm chrome showerhead, drain to match.	2"	2"	1/2"	1/2"				2		
P-4	Kitchen Sink	ProFlo #PFUE206 with Peerless #P188103LF	Stainless steel under-mount 20 ga.dual bowl 33" x 22" x 8" deep. Single handle faucet with pull-out sprayer. Evergrind Model E101 disposer with cord/plug.	2"	2"	1/2"	1/2"	1	1		2	2	
P-5	Washer Box	Guy Gray #WB200HATM	Recessed non-metallic with dual PVC/ABS 2" outlets, two angle quarter turn stops with built-in shock absorbers.		2"	1/2"	1/2"	1			3		
P- <mark>6</mark>	Water Outlet Box	Guy Gray #BIM877QTS	Recessed non-metallic with two angle quarter turn stops.			1/2"		1					

Supplies 1 - Flexible braided stainless steel 2 - Flexible braided compression hose.

Stops 1 - Angle handle compression

Carrier 1 - Steel tube floor-mounted in-wall carrier with arms

P-Trap 1 - PVC with deep escutcheon

3 - deep seal PVC trap and 30" standpipe.

Drain 1 - Metal pop-up with tailpiece 2 - Basket strainers in finish to match faucet, tailpiece.

Other 1 - Provide trap and supply guard if exposed. 2 - Provide mop bracket, hose bracket, SS wall guards

WATER HEATER SCHEDULE												
MARK	MFGR	MODEL	FUEL	VOLTAGE/PH/ AMPS	INPUT	EFFICIENCY/ PF	GALLONS STORAGE	GPH RECOVERY @ 80° RISE	FLUE TYPE	EXPANSION	CIRCULATOR GPM/HD	NOTES
TYP APT	A.O. SMITH	ENJB-40	ELEC	240/1/19	4.5 KW	0.95	38	23	N/A			1, 2, 3

1- PROVIDE ASME P&T VALVE, DRAIN VALVE

2- PROVIDE COMBINATION STOP AND OPERATING PRESSURE RELIEF VALVE

3- LOW TYPE, SIDE CONNECT

DRAIN SCHEDULE											
MARK	APPLICATION	MFGR	MODEL	BODY MAT'L	DEPTH	GRATE MAT'L	GRATE SHAPE	ACCESSORIES			
APT FD	FLOOR	SIOUXCHIEF	842	ABS/PVC	3"	NICKEL BRONZE	6" ROUND	1			

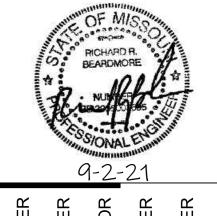
1 - USE WIDE FLANGE MODEL WHERE IN WOOD CONSTRUCTION

HVAC SYSTEM SCHEDULE																				
						AH	U/RTL	J							OL	JTDOOR L	INIT			
MARK	MFGR	NOM TON	MODEL	CFM	OA CFM	E.S.P.	HP	SMBH	TMBH	HEAT CAP	ELEC	FLA	OCP	MFGR	MODEL	ELEC	FLA	OCP	SEER	NOTES
TOWNHOME	GOODMAN	3	ARUF3710C14	1100		0.5	0.5	24	34	10 KW	240/1	45	60	GOODMAN	GSX14036	208/1	15	30	14.0	
																				_

NOTE: PROVIDE LONG LINE ACCESSORY KIT ON ALL SPLIT SYSTEMS THAT EXCEED MFGR'S LIMITS

AIR TERMINAL DEVICE SCHEDULE									
MARK	MANUFACTURER	MODEL	FINISH	DAMPER	FRAME TYPE	NOTES			
Α	AIR MATE	A190	WHITE	YES	GYP BD	W/CRD			
В	AIR MATE	170	WHITE	NO	GYP BD				

FAN SCHEDULE										
		ELE	CTRIC	AL.						
MARK	MFGR	MODEL	CFM	ESP	FAN HP	VOLTS / PH	FLA	ОСР	WIRING	CONFIGURATION - NOTES
APT EF	BROAN	AE80	80	0.1	Fr.	120/1	1	15	(3) #12	ceiling, 1
APT EF2	BROAN	AE50	50	0.1	Fr.	120/1	1	15	(3) #12	ceiling, 2
NOTES: 1-CEILING GRILLE, DS, WALL/ROOF CAP, HUMIDITY-SENSING WALL CONTROL 2-CEILING GRILLE, DS, WALL/ROOF CAP										



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ARCHITEC	CTS
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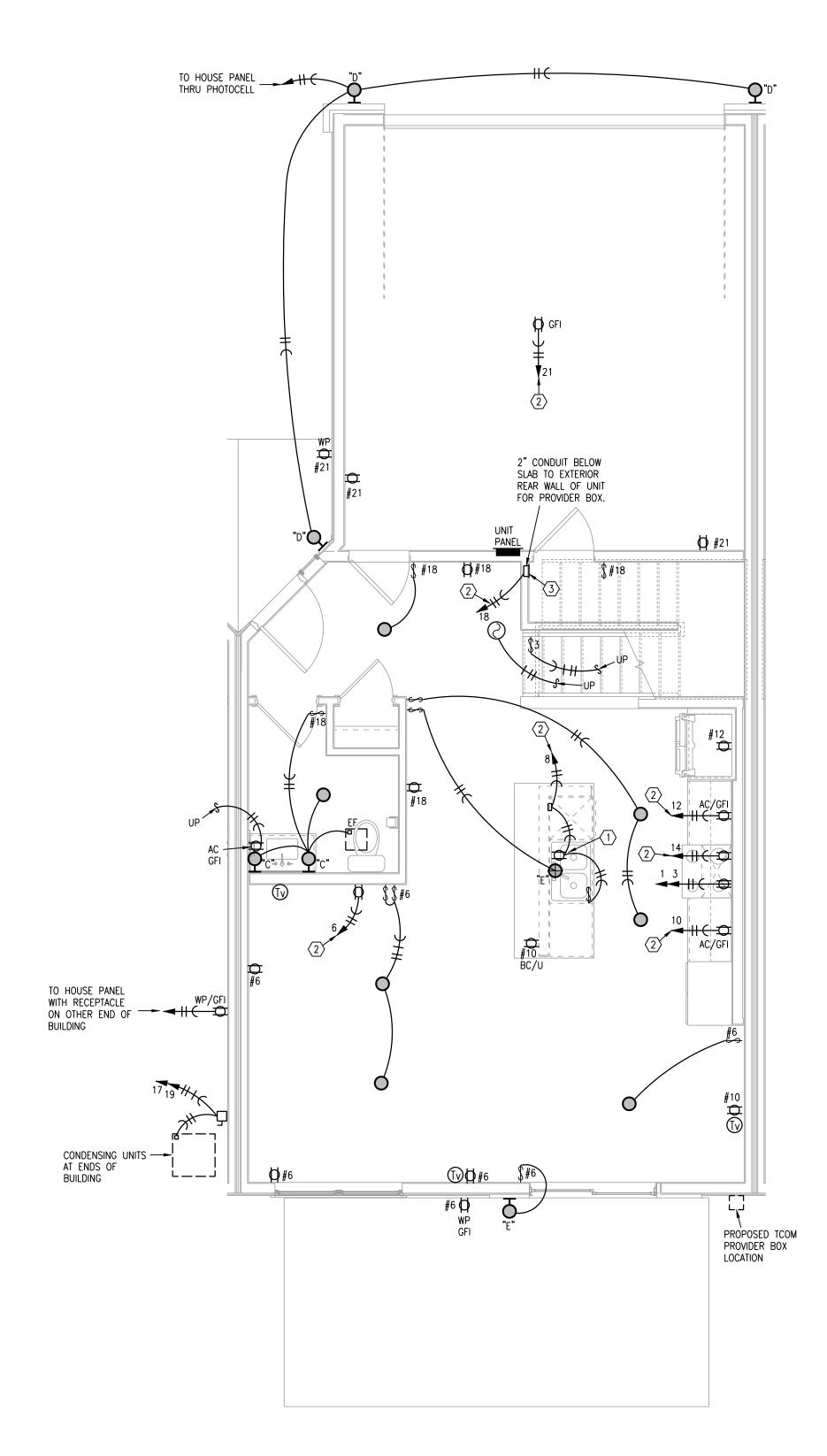
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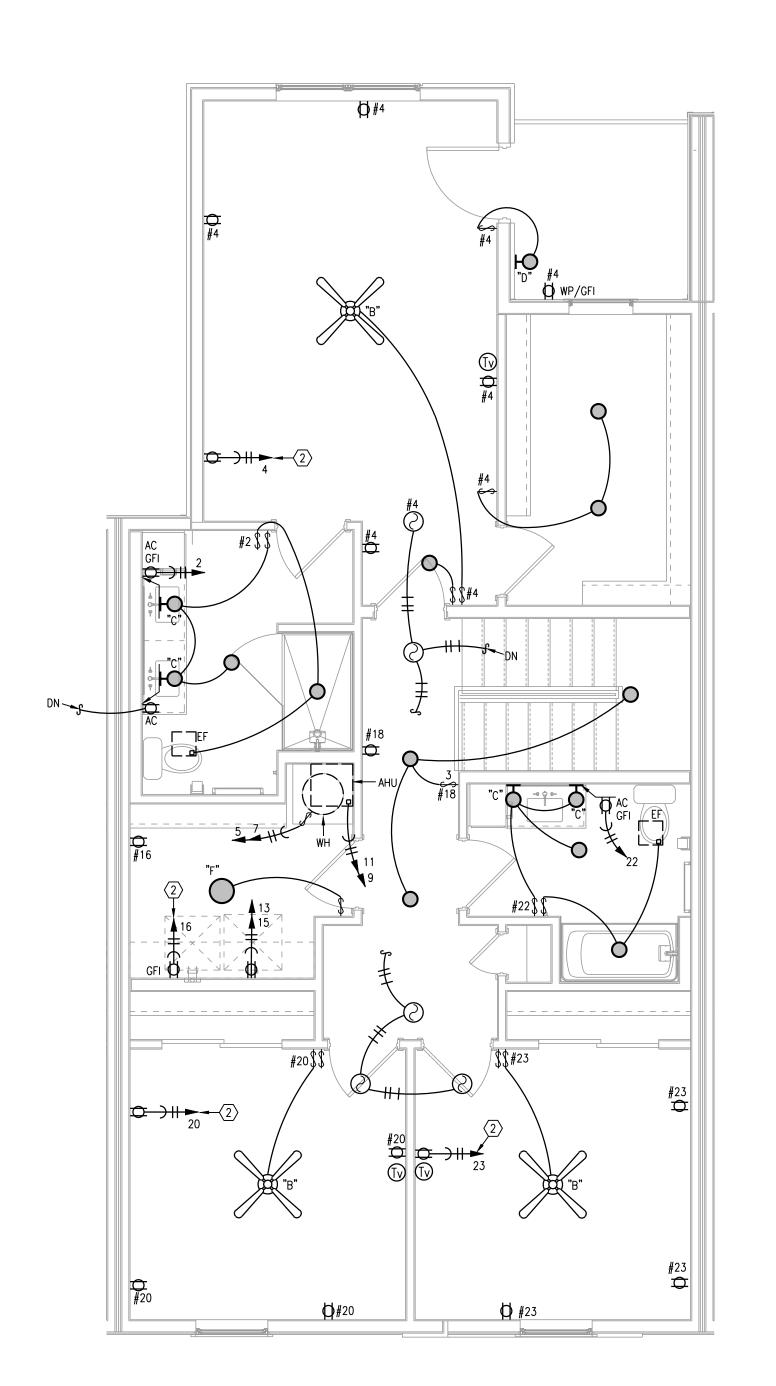
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MECHANICAL SCHEDULES

## LIGHTING FIXTURE SCHEDULE

LABEL	MANUFACTURER	DESCRIPTION/MODEL	FINISH
Α	NORA LIGHTING	NELOCAC-8R30W ELO SURFACE MOUNT	WHITE TRIM
В	FANIMATION	FPD8534BL KUTE 52" LK8534 KUTE LIGHT KIT	BLACK
С	MATTEO	S03910MB	MATTE BLACK
D	ACCESS	20399LEDMG-BL	TEXTURED BLACK
E	ET-2	E20366-92BK HALF MOON	BLACK
F	NORA LIGHTING	NELOCAC-11R30W ELO SURFACE MOUNT	WHITE TRIM





TYPICAL UNIT PLAN - FIRST FLOOR

1/4"=1'-0"

ELECTRICAL

TYPICAL UNIT PLAN - SECOND FLOOR

1/4"=1'-0"

ELECTRICAL

GANG BOX.

2. CENTER ISLAND PENDANT LIGHTS OVER BASE BACK WALL AND CENTERED EQUALLY LEFT TO RIGHT OVER SINK. THESE ARE SEPARATELY SWITCHED.

3. GENERALLY CENTER LIGHT ON WINDOWS, DOOR, HALLWAYS, SINKS, OVER TUBS, ETC. VERIFY ALL LOCATIONS IN EACH UNIT DIMENSIONALLY WITH ARCHITECT, INTERIOR DESIGNER AND OWNER. MOUNT SWITCHES CLOSE TO DOORS OR WALL CORNERS.

THERMOSTATS HAVE LOW VOLTAGE WIRE BACK TO AHU. CONDENSING UNITS HAVE LOW VOLTAGE WIRE BACK TO

= 120V. SMOKE/CO ALARM WITH BATTERY
BACK-UP AND AUXILIARY CONTACT SO ALL SOUND
TOGETHER.

ALL ARC-FAULT CIRCUIT BREAKERS SHALL BE COMPATIBLE WITH CEILING FANS, LED FIXTURES AND OTHER ELECTRONIC DEVICES.

3. FIXTURES ARE TYPE "A" UNLESS NOTED OTHERWISE.

FIRE ALARM HORN/STROBE CIRCUITS SHALL BE SIZED TO ACCEPT BEDROOM HORN/STROBES IN FUTURE INCLUDING WIRING AND PANÉL CAPACITY.

10. ALL RANGES SERVED BY (3) #8 AND (1) # 10 AND 50A. RECEPTACLE.

11. ALL WATER HEATERS SERVED BY (3) #10.

12. ALL WASHERS AND REFRIGERATORS HAVE RECEPTACLES AT 48". MW RECEPTACLES AT 66" (VERIFY).

13. SEE HVAC SCHEDULE AND SHOP DRAWINGS FOR AHU AND OUTDOOR UNIT CIRCUITS.

ALL DRYERS SERVED BY (4) #10 AND 30A. RECEPTACLE.

15. BELOW COUNTER RECEPTACLES AND PLATES SHALL MATCH THE BASE CABINETS WHERE THEY ARE MOUNTED (BROWN, WHITE, ETC.) VERIFY WITH ARCHITECT.

SWITCHED GFI RECEPTACLE FOR GARBAGE DISPOSER CONTINUE CIRCUIT TO DISHWASHER.

2 PROVIDE ARC-FAULT CIRCUIT BREAKER IN PANEL.

3) TELE/TV DEMARK FLUSH BOX. PROVIDE WITH DUPLEX OUTLET. PROVIDE 1" CONDUIT FROM BOX TO ABOVE CEILING AND OUT TO CEILING IN THE HALLWAY. SEE DETAILS.

CEILING FAN SWITCHES PROVIDED WITH FAN. CONTROL LIGHT AND FAN SEPARATELY. INTENDED FOR SINGLE

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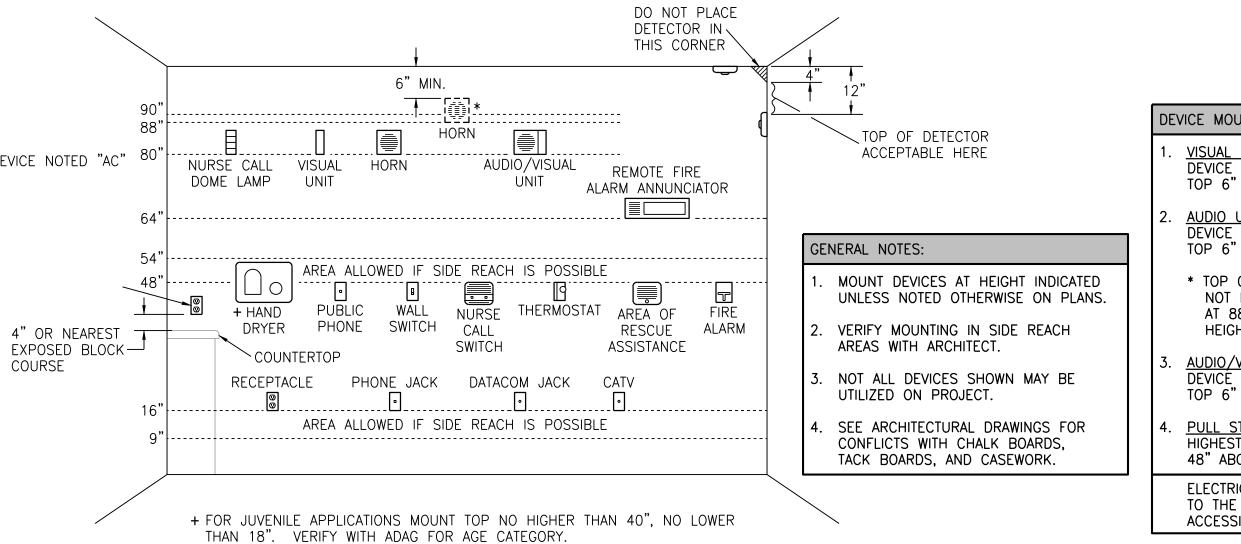
_FLOOR/CEILING	DUCT PLENUM
LOW PROFILE CEILING RAD. DAMPER, UL555C	DOCT FELNOW
SPRINKLER HEAD WITH PROPER CLEARANCE	BRANCH DUCT
RATED FLOOR/CEILING MEMBRANE RETAINING ANGLE	
RETAINING ANGLE	ACCESS DOOR
INTEGRAL UNIT	SHEETMETAL DUCT
DISCONNECT	UNIT MOUNTED TO WALL OR RACK WITH RUBBER GROMMETS FOR VIBRATION
SECONDARY COND. DRAIN	ISOLATION
PRIMARY COND. DRAIN	
OPERATING PRESSURE RELIEF/STOP VALVE	HW TO UNIT
P&T RELIEF \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	UNION
VALVE	
CW SERVICE	OUTLET
BALL VALVE	ELECTRIC WATER HEATER, LOW TYPE, MAY BE SIDE
FLOOR DECK	2" STEEL PAN
FLOOR DRAIN	3/4" SPACER

<del> </del>	CONDUIT CONCEALED IN CEILING OR WALL	\$	SWITCH - SINGLE POLE
#/	CONDUIT CONCEALED IN FLOOR SLAB	\$ 3, 4	3-WAY, 4-WAY
- 1/	EXPOSED CONDUIT	"A"	LIGHT FIXTURE AND TYPE
#	HOMERUN - ARROW INDICATES CKT., LINES INDICATE WIRES		FLUORESCENT LIGHT FIXTURE
<b>*</b>	GROUND WIRE	>	EMERGENCY LIGHT FIXTURE WITH BATTERY PACK
<b>⊣</b> ≟	GROUNDING ROD		FIXTURE ON LIFE SAFETY BRANCH OF EMERGENCY SYSTEM
ф	SINGLE RECEPTACLE	0 🗆	INCANDESCENT OR H.I.D. LIGHT FIXTURE
ø	DUPLEX RECEPTACLE (20 AMP UNLESS NOTED)	어머	INCANDESCENT OR H.I.D. LIGHT FIXTURE (WALL MOUNTED)
#	FOURPLEX RECEPTACLE	⊗ ⊗	EXIT LIGHT (CEILING OR WALL MOUNTED)
ф	208 OR 240 VOLT RECEPTACLE (20 AMP UNLESS NOTED)		FLUSH PANELBOARD (LIGHT & RECEPTACLES)
•	FLOOR DUPLEX RECEPTACLE (20 AMP UNLESS NOTED)		SURFACE PANELBOARD (LIGHT & RECEPTACLES)
▼	TELE/DATA OUTLET *		DISTRIBUTION PANEL OR SWITCHBOARD
$\nabla$	TELE/DATA OUTLET *	AC	DEVICE LOCATED ABOVE COUNTER
<b>5</b>	PUSHBUTTON	AFF	ABOVE FINISHED FLOOR
<u>s</u>	CEILING SPEAKER	D	DIMMER
<u>6</u>	BELL	E	INDICATES EXISTING DEVICE
Ó	MOTOR	EDF	ELECTRIC DRINKING FOUNTAIN
\$	FUSIBLE SWITCH (BUSSMAN SSU)	GFI	GROUND FAULT INTERRUPTER
6	DISCONNECT SWITCH (D.S.)	NL	NIGHTLIGHT FIXTURE, WIRED HOT
ᡌ	COMBINATION MOTOR STARTER (CMS)	WP	WEATHERPROOF
R	RELAY	•	CONNECT NEW TO EXISTING
	JUNCTION BOX		LOCKABLE GUARD
θ	THERMOSTAT		

Luminaire Schedule - Units and Buildings							
MARK	DESCRIPTION	MFGR	MODEL	MOUNTING	FINISH	LAMPS	NOTES
Α	Disk Light	Halo	SLD612/8030/WH	jb/surface	white	1200 Lumen 3000K 15W LED	Wet Location
В	Counter pendant	Hudson Valley	Lambert #612-OB	pendant	old bronze	1-15W LED	
C	Tub/shower	Halo	SLD606/8030/WH	jb/surface	white	1200 Lumen 3000K 15W LED	Wet Location
D	Vanity Sconce	Custom	To match Stephan Outdoor Sconce	wall	aged iron	1 - 12W LED	
E	Entry/Patio Light	Avenue	54350ABZ	wall	bronze	2-8W LED	Wet Location
F	5-blade fan, 3-spd, rev. w/globe	Minka-Aire	Aviation #F852L-BN/CL with light	surface	coal	1-15W LED	Energy Star - dimmable
G	Glass globe - small	Nuvo/Rensen House	041203	surface	br. nickel	1-10W LED	
SL1	Pole Light	Cooper	GLEON-SA1-D-740-U-T3-BZ	pole	braonze	67W 8,125 Lumen 4000K	16 ft pole

# 1 TYPICAL PANELBOARD INSTALLATION DETAIL NO SCALE

COORDINATE ALL WORK WITH OTHER TRADES. MAINTAIN ALL OTHER NEC CLEARANCES AND REQUIREMENTS.



UFER GROUND

(1) #6 ALUM.

4-UNIT SERVICE

400A. MLO 42 KAIC

UFER GROUND

3 ELECTRICAL DEVICE MOUNTING HEIGHTS
NO SCALE

(1) #6 ALUM.

6-UNIT SERVICE

5 ELECTRICAL DISTRIBUTION RISER DIAGRAM
NO SCALE

HOUSE 120/240V. 60A. 8 POLE

UFER GROUND

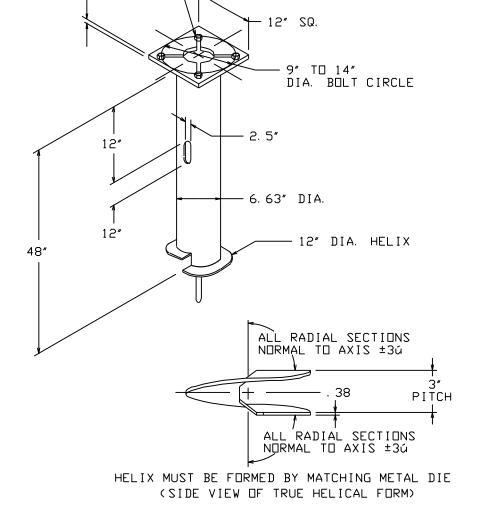
DEV	VICE MOUNTING NOTES:
1.	VISUAL UNIT DEVICE BOTTOM 80" ABOVE HIGHEST FLOOR LEVEL OR TOP 6" BELOW CEILING; WHICHEVER IS LOWER.
2.	AUDIO UNIT DEVICE BOTTOM 80" ABOVE HIGHEST FLOOR LEVEL OR TOP 6" BELOW CEILING; WHICHEVER IS LOWER.
	* TOP OF UNIT NOT LESS THAN 90" ABOVE FLOOR AND NOT LESS THAN 6" BELOW CEILING (NFPA) (BOTTOM AT 88" WITH BLOCK COURSES). MOUNT AT NFPA HEIGHT ONLY IF REQUIRED BY LOCAL AHJ.
3.	AUDIO/VISUAL UNIT DEVICE BOTTOM 80" ABOVE HIGHEST FLOOR LEVEL OR TOP 6" BELOW CEILING; WHICHEVER IS LOWER.
4.	PULL STATION HIGHEST OPERABLE PART SHALL NOT BE MORE THAN 48" ABOVE THE FLOOR (FRONT APPROACH).
	ELECTRICAL DEVICE MOUNTING HEIGHTS SHALL CONFORM TO THE LATEST EDITION OF THE ADA STANDARDS FOR ACCESSIBLE DESIGN.

(1) #6 ALUM.

8-UNIT SERVICE

MECHANICAL CLOSET DETAIL

NO SCALE



1" X 4" CARRIAGE BOLTS W/NUTS

1. FINISH: HOT DIP GALVANIZE PER ASTM-A153 (LATEST REVISION).
2. BASEPLATE TO BE PERPENDICULAR TO SHAFT AXIS (±1ώ) AND HOLE CENTERLINE CONCENTRIC (±.188) TO SHAFT AXIS.
3. STENCIL MIN. 1/2 IN. LETTERS MANUFACTURER'S NUMBER AFTER GALVANIZING.
4. PILOT POINT AND SHAFT AXES TO BE CONCENTRIC (±.125 FIM) AND IN LINE (±2ώ).
5. FLAME CUT SLOT PERPENDICULAR TO THE BASEPLATE.
6. PREHEAT, TUMBLEBLAST, HANDGRIND, AND CLEAN BASEPLATE, HELIX, AND PILOT POINT ON ALL WELDED AREAS.
7. FLAMECUT IRREGULARITIES PERMISSIBLE: (1) VALLEYS NOT TO EXCEED 3/32 IN. BELOW NOMINAL SURFACE LEVEL, (2) PEAKS OR POSITIVE IRREGULARITIES NOT TO EXCEED 1/32 IN. ABOVE NOMINAL SURFACE LEVEL OR INTERSECTIONS OF NOMINAL SURFACES.
8. MANUFACTURER TO HAVE IN EFFECT INDUSTRY RECOGNIZED WRITTEN QUALITY CONTROL FOR ALL MATERIALS AND MANUFACTURING PROCESSES.
9. ALL MATERIAL IS TO BE NEW, UNUSED AND MILL TRACEABLE MEETING THE FOLLOWING SPECIFICATIONS:

BASEPLATE: ASTM A36-(LATEST REVISION) HOT ROLLED STEEL PLATE, CONFORM TO AASHTO TECH. BUL. #270)

SHAFT: STEEL PIPE PILES, SEAMLESS OR STRAIGHT WELDED, GRADE-2 PER ASTM A252. ALT MATERIAL: STEEL

PLATE, (CONFORM TO AASHTO TECH. BUL. #270)

SHAFT: STEEL PIPE PILES, SEAMLESS OR STRAIGHT WELDED, GRADE-2 PER ASTM A252. ALT. MATERIAL: STEEL PIPE TYPE E OR S, GRADE-B PER ASTM A53.

HELIX: ASTM A635 (LATEST REVISION) HOT ROLLED STEEL.

PILOT POINT: ASTM A575 (LATEST REVISION) STEEL BAR.

BOLTS: CARR BOLT PER ANSI B-18. 2. 1, SAE J429 GRADE-5.

10. BASEPLATE IS PERMANENTLY STAMPED WITH MANUFACTURER'S IDENTIFICATION 'ABC' IN 1/2' LETTERS AND DATE CODE IN 1/4' LETTERS.

# 4 LIGHT POLE FOUNDATION NO SCALE CAT. NO. C11242NG4VP

	EL	ECTRICA	L PAN	IEL S	CHE	DULE			
PANEL: ALL PANELS	EXCEPTLISTED OT	HERWISE	POLES:	24			MOUNTING:	FLUSH	
BUS: 125A.	MAINS:	MLO	VOLTAGI	Ξ:	120/240	PHASE/WIRE:	1 Ph 3 Wire	KAIC:10K	
CIRCUIT NUMBERS	DESCRIPTION					AMPS	POLES	QUANTITY	R
1, 3	RANGE					40	2		1
5, 7, 13, 15	WATER HEATE	ER, DRYER				30	2		2
9, 11	AHU					60	2		1
17, 19	CONDENSING	UNIT				30	2		1
2, 22	LIGHTS AND R	ECEPTACLES				20	1		2
4-22 EV EN, 21	ARC-FAULT LI	GHTS AND RECE	EPTACLES			20	1		10
23	SPARE					20	1		1

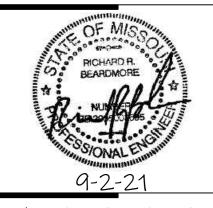
	<b>Unit Load Calculation</b>	
Unit: TH		VA
1635 square feet	4905	
2 small appliance circ	uits	3000
Range		8000
MW		1000
Washer		1500
Dryer		5000
Water Heater		4500
Dishwasher		800
Disposer		850
Total general load		29555
NEC 220-84 Calculation	on	
First 10 KVA at 100%		10000
Remainder at 40%		7822
Heating Load	10000 65%	6500
Total load		24322
Load for unit service	Amp @ 240 volt/1	101
Connected Load	an areas	39555

Multi	Multi-Family Building Load Analysis						
Building:	4-UNIT						
Unit Quantity	Unit Type	Connected Load - VA	Total KVA				
4	TH	39555	158.22				
		Total Building KVA	158.22				
		Total Units Per Entrance	4				
		Diversity per NEC Table 220.84	0.45				
		Diversified KVA	71.20				
		Amps @ 240 V Single Phase	296.66				
		House Load - Amps	10				
		Total Transformer Demand - Amps	306.66				

Mult	i-Family	y Building Load Analy	/sis
Building:	6-UNIT		
Unit Quantity	Unit Type	Connected Load - VA	Total K\
6	TH	39555	237.
		Total Building KVA	237.
		Total Units Per Entrance	
		Diversity per NEC Table 220.84	0.
		Diversified KVA	104.
		Amps @ 240 V Single Phase	435.
		House Load - Amps	
		Total Transformer Demand - Amps	445.

Multi-Family Building Load Analysis							
Building:	8-UNIT	-					
Unit Quantit	y Unit Type	Connected Load - VA	Total KV				
8	TH	39555	316.4				
		Total Building KVA	316.4				
Total Units Per Entrance							
Diversity per NEC Table 220.84							
Diversified KVA							
Amps @ 240 V Single Phase							
		House Load - Amps	1				
		Total Transformer Demand - Amps	576.9				





GENERAL CONTRACTOR
MECHANICAL ENGINEER
PLUMBING ENGINEER
ELECTRICAL ENGINEER

CIVIL
GENERAL CONTRACTOR
ENGINEER
PLUMBING

aguard Villas

TR.i Architects
9812 Manchester Road
St. Louis, Missouri 63119
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T. 314-395-9751
www.triarchitects.com

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ELECTRICAL DETAILS AND SCHEDULES

ROUTE TOP FLOOR SUPPLY PLUMBING IN CEILING BELOW. NO SUPPLY IN ATTIC.

- PROVIDE AIR CHAMBERS ON P-4, P-5. AND P-6.
   CONNECT DISHWASHERS, DISPOSERS, ICE MAKERS, WASHERS.
- 4. PROVIDE 2" FLOOR DRAIN AT EACH AHU/WH LOCATION.
  5. ROUTE 1/2" PEX TO EACH FIXTURE FROM MANIFOLD, 3/4" TO TWO OR MORE FIXTURES.

ILING
P-6.

PICHAPOR BEARDMORE

NUMBER

NUMBER

NUMBER

OPEN

NUMBER

OPEN

OP

STRUCTURAL ENGINEER
CIVIL ENGINEER
GENERAL CONTRACTOR
MECHANICAL ENGINEER

SENERAL CONTRACTOR
ENGINEER

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9812 Manchester Road
St. Louis, Missouri 63119
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F: 314-395-9751
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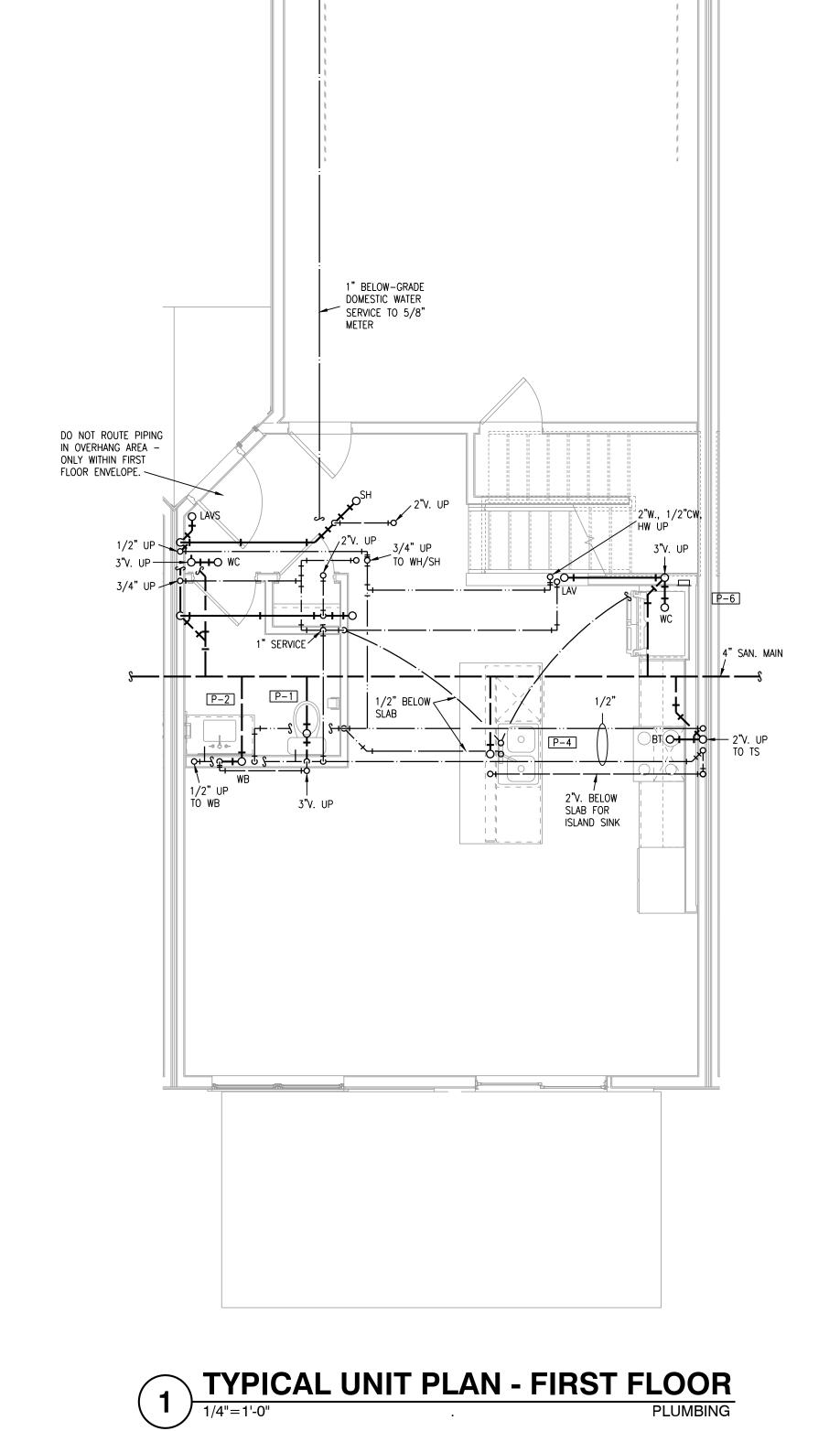
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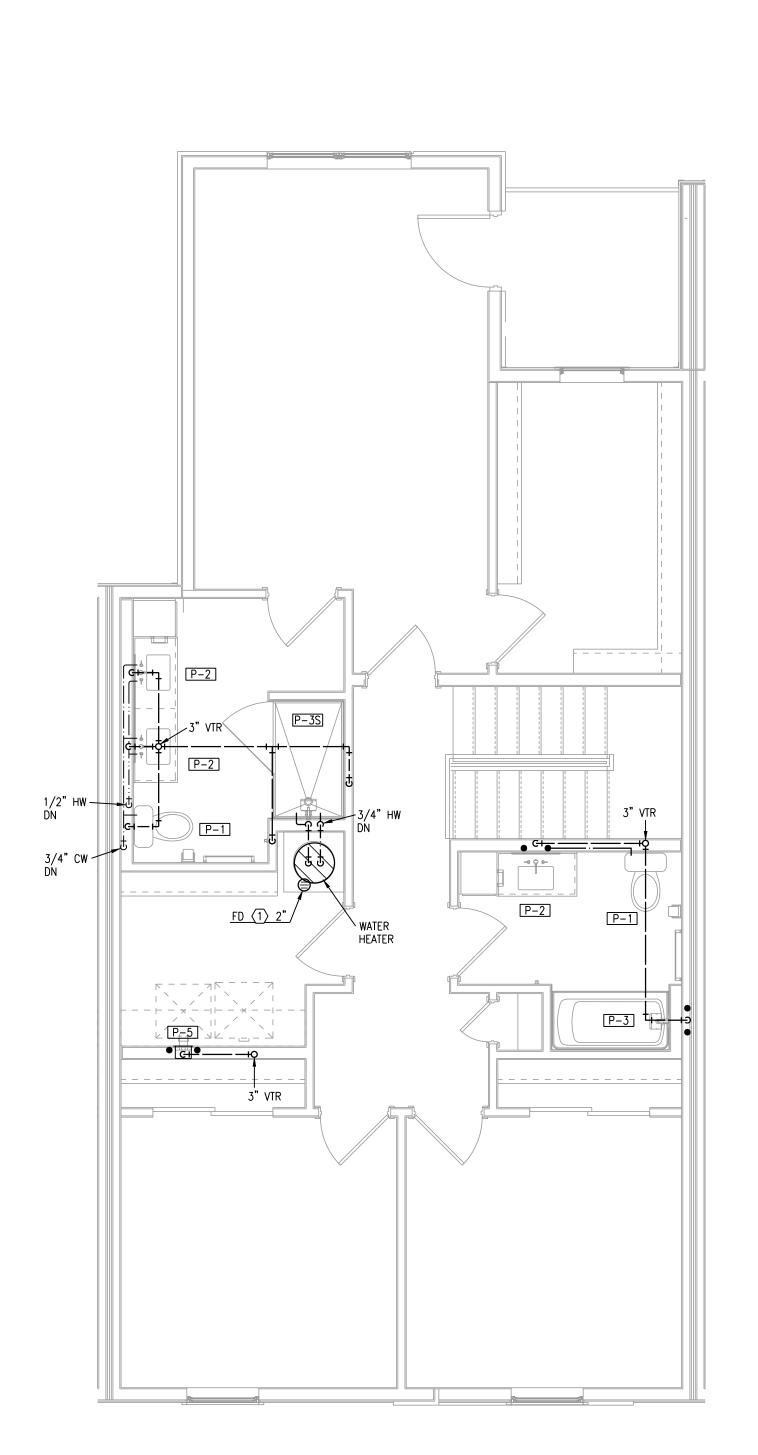
TYPICAL UNIT PLAN - PLUMBING

3639 SW Summerfield Drive, Suite A Topeka, Kansas 66614-3974

Telephone: (785) 233-3232 FAX: (785) 233-0647 Email: lsapa@lsapa.com

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TYPICAL UNIT PLAN - SECOND FLOOR

1/4"=1'-0"
PLUMBING