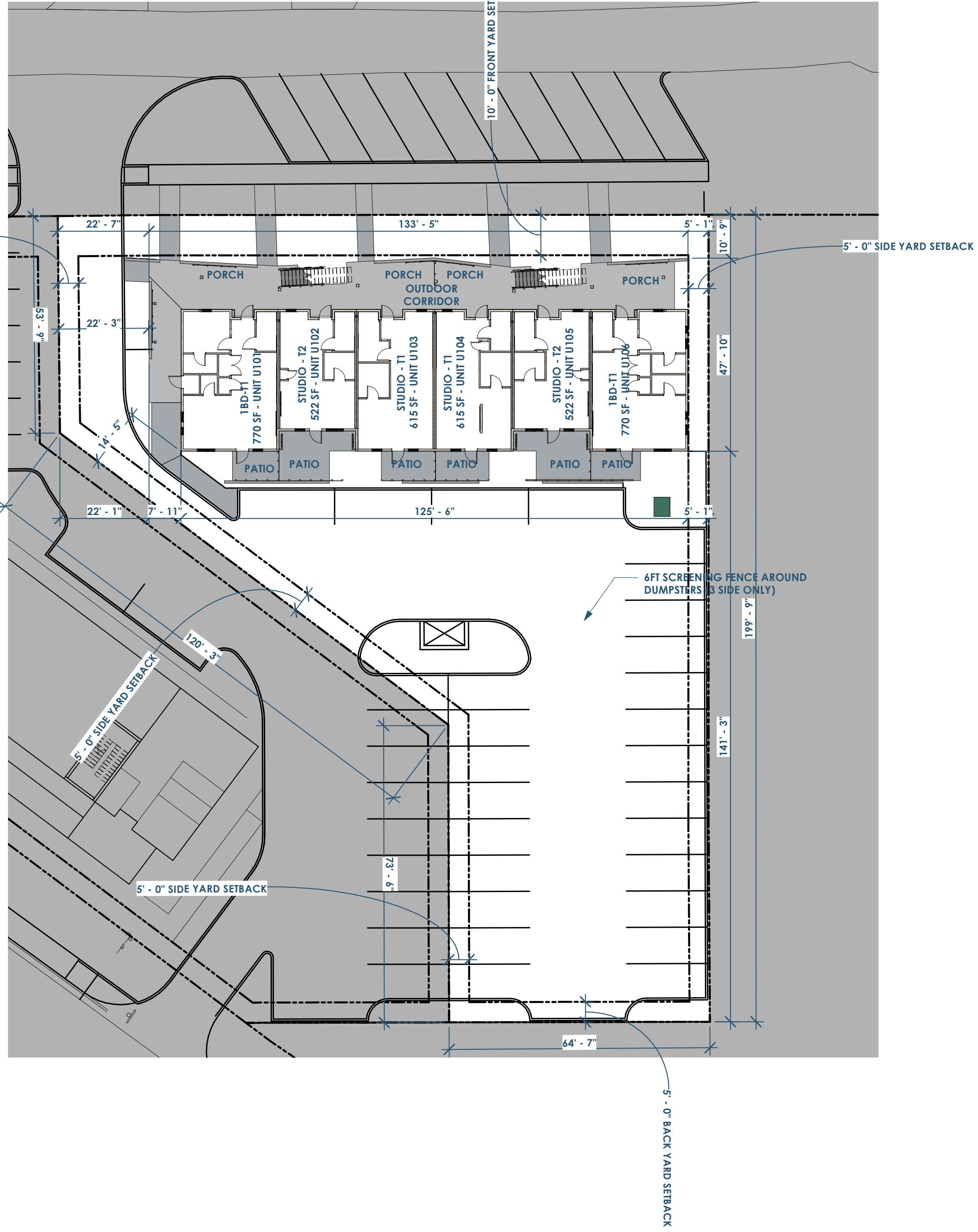


MARCO POLO - 101 W 33RD STREET

CITY OF BRYAN TOWNSITE, BLOCK 96, LOT 3-5 & PT OF 6 & PT OF ALLEY



68 SITE PLAN
G000
1" = 20'-0"

CODE INFORMATION	
APPLICABLE CODES:	<p>GENERAL:</p> <ul style="list-style-type: none"> BUILDING/DWELLING CODE IBC 2015 & AHJ AMENDMENTS EXISTING ENERGY CONSERVATION: INTERNATIONAL ENERGY CONSERVATION CODE 2015 & AHJ AMENDMENTS PLUMBING: MECHANICAL CODE IMC 2015 & AHJ AMENDMENTS ELECTRICAL: ELECTRICAL CODE NEC 2017 & AHJ AMENDMENTS FIRE: FIRE/LIFE SAFETY CODE 2009 NFPA-1 & AHJ AMENDMENTS ACCESSIBILITY: ANSI STANDARD A117.1-2009- FOR ACCESSIBILITY FUEL: INTERNATIONAL FUEL GAS CODE 2015 & AHJ AMENDMENTS <p>CHAPTER 3 USE AND OCCUPANCY CLASSIFICATION: 310.4 RESIDENTIAL GROUP R-2</p> <p>SECTION 420 GROUPS I-1, R-1, R-2, R-3 AND R-4: SECTION 420 GROUPS R-2</p> <p>CHAPTER 5 CLASSIFICATION OF WORK: NEW</p> <p>504.3 HEIGHT IN FEET: R-2 - TYPE VB (SPRINKLERED): • ACTUAL: 35 FT • ALLOWED: 40 FT</p> <p>504.4 NUMBER OF STORIES: R-2 - TYPE VB (SPRINKLERED): • ACTUAL: 3 • ALLOWED: 4</p> <p>506.2 ALLOWABLE AREA DETERMINATION: • TABULAR PER FLOOR AREA LIMIT PER CHAPTER 5 = 7000 SQ.FT. • NFPA 13 SPRINKLERS • COMPUTE AREA INCREASE DUE TO FRONTAGE: FRONTAGE COEFFICIENT, IF 0.589 • PERIMETER: P 354 FT • FRONTAGE PERIMETER: F 304 FT • WEIGHTED AVERAGE DISTANCE FROM "F" = 228.75 FT • COMPUTE ALLOWABLE PER STORY AREA, AA = A1 + (NS X F) = 25120.94 SQ.FT. • MAXIMUM ALLOWABLE AREA: AA X 3 = 75362.83 SQ.FT. • MAXIMUM NUMBER OF STORIES FOR GROUP R WITH NFPA 13R SPRINKLERS, PER SEC. 903.3.1.2 THIS CRITERIA IS MET, SO STORY LIMIT = 3 • THE REVISD ALLOWABLE HEIGHT IS 60 FT.</p> <p>506.3 FRONTAGE INCREASE:</p> <p>508.3 NONSEPARATED OCCUPANCIES: N/A</p> <p>508.4 SEPARATED OCCUPANCIES: N/A</p> <p>TABLE 601 FIRE-RESISTANCE RATING REQUIREMENTS FOR BUILDING ELEMENTS (HOURS): FOR TYPE VB STRUCTURAL FRAME: 0 HR BEARING WALLS- EXTERIOR: 0 HR BEARING WALLS- INTERIOR: 0 HR NON-BEARING WALLS- EXTERIOR - (SEE TABLE 602) NON-BEARING WALLS- INTERIOR: 0 HR FLOOR CONSTRUCTION: 0 HR ROOF CONSTRUCTION: 0 HR</p> <p>TABLE 602 FIRE-RESISTANCE RATING REQUIREMENTS FOR EXTERIOR WALLS BASED ON FIRE SEPARATION DISTANCE: TYPE-VB FIRE SEPARATION DISTANCE: • X 5C = 1 HR • 5 X X 5 10 = 1 HR • 10 X 5 X 30 = 0 HR • X 2-30 = 0 HR</p> <p>708.3 FIRE-RESISTANCE RATING: CORRIDORS: 1/2HR RATED DWELLING UNIT AND SLEEPING UNIT SEPARATIONS: 1/2HR RATED BETWEEN DWELLING UNITS: 1/2HR RATED</p> <p>711.2.4.3 DWELLING UNITS AND SLEEPING UNITS: FOR SPRINKLERED R-2: INTERIOR EXIT STAIRWAYS AND RAMPS AND EXIT PASSAGeways: CLASS C CORRIDORS AND ENCLOSURE FOR EXIT ACCESS STAIRWAYS AND RAMPS: CLASS C ROOMS AND ENCLOSED: CLASS C</p> <p>SPRINKLERS (SECTION 903 AUTOMATIC SPRINKLER SYSTEMS): SECTION 1020 CORRIDORS: CORRIDORS: 1/2HR RATED SEE SECTION 1021 EGRESS BALCONIES FOR CORRIDOR RATING AT EXTERIOR WALL</p> <p>SECTION 1004 OCCUPANT LOAD: TABLE 1004.1.2 MAXIMUM FLOOR AREA ALLOWANCES PER OCCUPANT RESIDENTIAL: 200 GROSS</p> <p>1004.2.1 EGRESS BASED ON OCCUPANT LOAD AND COMMON PATH OF EGRESS TRAVEL DISTANCE: SECTION 1017 EXIT ACCESS TRAVEL DISTANCE: FOR R-2: 250 (W/SPRINKLER) SECTION 1021 EGRESS BALCONIES: SOFT (WITH NFPA13 SPRINKLERS) EXTERIOR EGRESS BALCONIES SHALL BE SEPARATED FROM THE INTERIOR OF THE BUILDING BY WALLS AND OPENING PROTECTIVES AS REQUIRED FOR CORRIDORS.</p> <p>SECTION 1020 CORRIDORS 1020.1 CONSTRUCTION: CORRIDORS SHALL BE FIRE-RESISTANCE-RATED IN ACCORDANCE WITH TABLE 1020.1. THE CORRIDOR WALLS REQUIRED TO BE FIRE-RESISTANCE-RATED SHALL COMPLY WITH SECTION 708 FOR FIRE PARTITIONS. EXCEPTIONS: CORRIDORS ADJACENT TO THE EXTERIOR WALLS OF BUILDINGS SHALL BE PERMITTED TO HAVE UNPROTECTED OPENINGS ON UNRATED EXTERIOR WALLS WHERE UNRATED WALLS ARE PERMITTED BY TABLE 602 AND UNPROTECTED OPENINGS ARE PERMITTED BY TABLE 705.8.</p> <p>2902.1 MINIMUM NUMBER OF FIXTURES: CLASSIFICATION & OCCUPANCY: ... R-2 • WATER CLOSETS: 1 PER DWELLING • LAVATORIES: 1 PER DWELLING • BATHTUBS/ SHOWERS: 1 PER DWELLING</p>

GENERAL NOTES

- GENERAL CONTRACTOR RESPONSIBLE FOR ALL FEES ASSOCIATED WITH PERMITS, APPLICATIONS, TAXES, AND CERTIFICATES OF INSPECTIONS.
- ANY CONSTRUCTION THAT DEVIATES FROM THE DRAWING IS UNAUTHORIZED, IF NOT AUTHORIZED BY THE ARCHITECT. IN SUCH AN EVENT, CONTRACTOR IS RESPONSIBLE FOR ANY REWORK THAT MIGHT BE REQUIRED.
- ARCHITECT IS RESPONSIBLE FOR ALL THE RULES/REGULATIONS OF THE AUTHORITY HAVING JURISDICTION, INCLUDED, BUT NOT LIMITED TO ALL CITY, TOWNSHIP, COUNTY, STATE, AND FEDERAL CODES, STATUTES, AND ORDINANCES.
- CONTRACTORS SHALL VISIT THE SITE PRIOR TO CONSTRUCTION TO DETERMINE HOW NEW CONSTRUCTION IS COMPATIBLE WITH EXISTING CONDITIONS.
- CONTRACTOR TO NOTIFY ARCHITECT IF THERE ARE ANY OMISSIONS, CONFLICTS, OR DISCREPANCIES IN THE DRAWINGS BEFORE ANY CONSTRUCTION TAKES PLACE. A FAILURE TO DO SO WILL RESULT IN THE CONTRACTOR RESPONSIBLE FOR ANY REWORK.
- CONTRACTOR RESPONSIBLE FOR VERIFYING ALL DIMENSIONS AND TAKEOFFS BEFORE BIDDING AND/OR ORDERING MATERIALS. CONTRACTOR WILL NOTIFY ARCHITECT IF THERE ARE ANY DRAWING CONFLICTS AND AWAIT DIRECTION BEFORE COMMENCING.
- DO NOT SCALE THE DRAWINGS.
- ALL THROUGH AND MEMBRANE PENETRATIONS AT ALL FIRE/SMOKE RATED PARTITIONS/CEILING/FLOORS TO BE SEALED WITH A CODE COMPLIANT, U.L. APPROVED FIRE STOP.
- GENERAL CONTRACTOR TO COORDINATE THE SIZE/LOCATION OF ANY ACCESS PANELS AND/OR CLEAN OUTS WITH THE M/E/P CONTRACTOR AND ARCHITECT.
- ALL CONTRACTORS AND VENDORS TO FAMILIARIZE THEMSELVES WITH THE ENTIRE DRAWING SET, AS REQUIRED INFORMATION MAY BE ON MULTIPLE SHEETS AND ALTERNATE DISCIPLINES.
- ANY FURNITURE SHOWN IS FOR REFERENCE AND IS NOT IN THE CONTRACTOR. CONTRACTORS SHALL BE RESPONSIBLE FOR REPAIRING ANY PROPERTY DAMAGE THAT MAY HAVE RESULTED FROM THEIR WORK.
- OWNER RESPONSIBLE FOR ANY WORK NOT SPECIFICALLY CALLED OUT IN THE DRAWINGS.
- ANY CHANGE THAT RESULTS IN ADDITIONAL COST/TIME MUST TO APPROVED BY THE OWNER/ARCHITECT PRIOR TO CONSTRUCTION.
- DETAILS ARE TO BE INTERPRETED AS TYPICAL, THAT IS, UNLESS SPECIFICALLY CALLED OUT OTHERWISE, THE DETAIL IS TO BE APPLIED TO SIMILAR CONDITIONS THROUGHOUT THE PROJECT.
- ALL EXTERIOR FLATWAYS AROUND THE BUILDING TO SLOPE A MINIMUM OF 2% AWAY FROM THE BUILDING.
- ANY PENETRATIONS IN THE EXTERIOR ENVELOPE TO BE SEALED TO PREVENT ANY AIR/WATER LEAKAGE PER IBC CODE REQUIREMENTS.
- ALL FINISH AND COLOR SELECTIONS TO BE VERIFIED WITH ARCHITECT UNLESS OTHERWISE NOTED, SLOPE FLOOR 2% TOWARD ANY DRAINS INDICATED ON THE DRAWINGS.
- CONTRACTOR SHALL KEEP THE CONSTRUCTION CLEAN-REMOVING ANY ACCUMULATION OF DEBRIS AND/OR UNUSED EQUIPMENT.
- CONTRACTOR TO BE RESPONSIBLE FOR THE COLLECTION, TRANSPORT AND DISPOSAL OF ALL CONSTRUCTION WASTE.
- CONTRACTORS RESPONSIBLE FOR ANY TEMPORARY SHORING THAT MIGHT BE NECESSARY DURING CONSTRUCTION, ALL SHORING TO BE DESIGNED BY A LICENSED STRUCTURAL ENGINEER RETAINED BY THE CONTRACTOR.
- GENERAL CONTRACTOR TO VERIFY WITH THE M/E/P CONTRACTORS ALL PIPE/DUCT LOCATION PRIOR TO FRAMING.
- MANUFACTURED MATERIAL/EQUIPMENT TO BE INSTALLED PER MANUFACTURER'S REQUIREMENTS.
- CONTRACTOR TO PROTECT ANY EXPOSED CONCRETE THAT IS MEANT TO BE A FINISHED SURFACE.
- GENERAL CONTRACTOR TO PROVIDE ARCHITECT AT LEAST (2) WEEKS WHEN REVIEWING ANY SHOP DRAWINGS AND/OR SUBSTITUTION REQUESTS.
- REVIEW OF SHOP DRAWINGS DOES NOT CONSTITUTE THE APPROVAL OF SAFETY REQUIREMENTS AND/OR CONSTRUCTION MEAN AND METHODS.
- THE PRESENCE OF THE ARCHITECT ON SITE DOES NOT CONSTITUTE APPROVAL OF THE WORK. THE CONTRACTOR SHALL CALL THE ARCHITECT'S ATTENTION TO ANYTHING SPECIFICALLY NEEDS THE ARCHITECT'S APPROVAL.
- ONLY ARCHITECTURAL AND STRUCTURAL DRAWINGS HAVE BEEN COORDINATED WITH THE ARCHITECT. CONTRACTOR SHALL NOTIFY ARCHITECT OF ANY WORK OUTSIDE THESE SCOPES (M/E/P, FOR EXAMPLE) THAT INTERFERES WITH THIS ARCHITECT DRAWING SET.
- GENERAL CONTRACTOR TO EDUCATE THE OWNER ON THE OPERATION AND MAINTENANCE OF ALL INSTALLED PRODUCT AND/OR EQUIPMENT.
- PRIOR TO SUBSTANTIAL COMPLETION, THE CONTRACTOR SHALL CLEAN SITE AND DELIVER ALL REQUIRED GUARANTEES, LIEN WAIVERS AND MAINTENANCE MANUALS.
- ARCHITECT NOT RESPONSIBLE FOR THE EXPLORATION, PRESENCE, HANDLING, AND/OR ADVERSE EXPOSURE OF ANY HAZARDOUS MATERIALS, IN ANY FORM, INCLUDING, BUT NOT LIMITED TO ASBESTOS PRODUCTS, POLYCHLORINATED BIPHENYL (PCB) OR OTHER TOXIC SUBSTANCES.
- ALL EXTERIOR STRUCTURAL STEEL SHALL BE HOT DIPPED GALVANIZED, ALL NOTICING, DRILLING, WELDING AND BENDING DONE PRIOR TO DIPPING.
- ANY PRODUCT OR MATERIALS THAT ARE NOT CALLED OUT IN THE DRAWINGS, BUT REQUIRED FOR PROPER INSTALLATION AND PERFORMANCE OF THE WORK, SHALL BE PROVIDED BY THE CONTRACTOR.
- THE CONTRACTOR TO PROVIDE ALL THE NECESSARY BLOCKING AND/OR STRUCTURAL SUPPORT REQUIRE TO PROPERLY INSTALL MOUNTED ASSEMBLIES, INCLUDED BY NOT LIMITED TO GRAB BARS, PLUMBING FIXTURES, MILLWORK AND CASEWORK.
- MAINTAIN INGRESS AND EGRESS TO THE PROJECT SITE.

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2A VICINITY MAP
G000
1" = 200'-0"

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Structural: Dudley
102 E 26th St
Bryan, TX 77803
Katherine@time.com | 979.450.9969

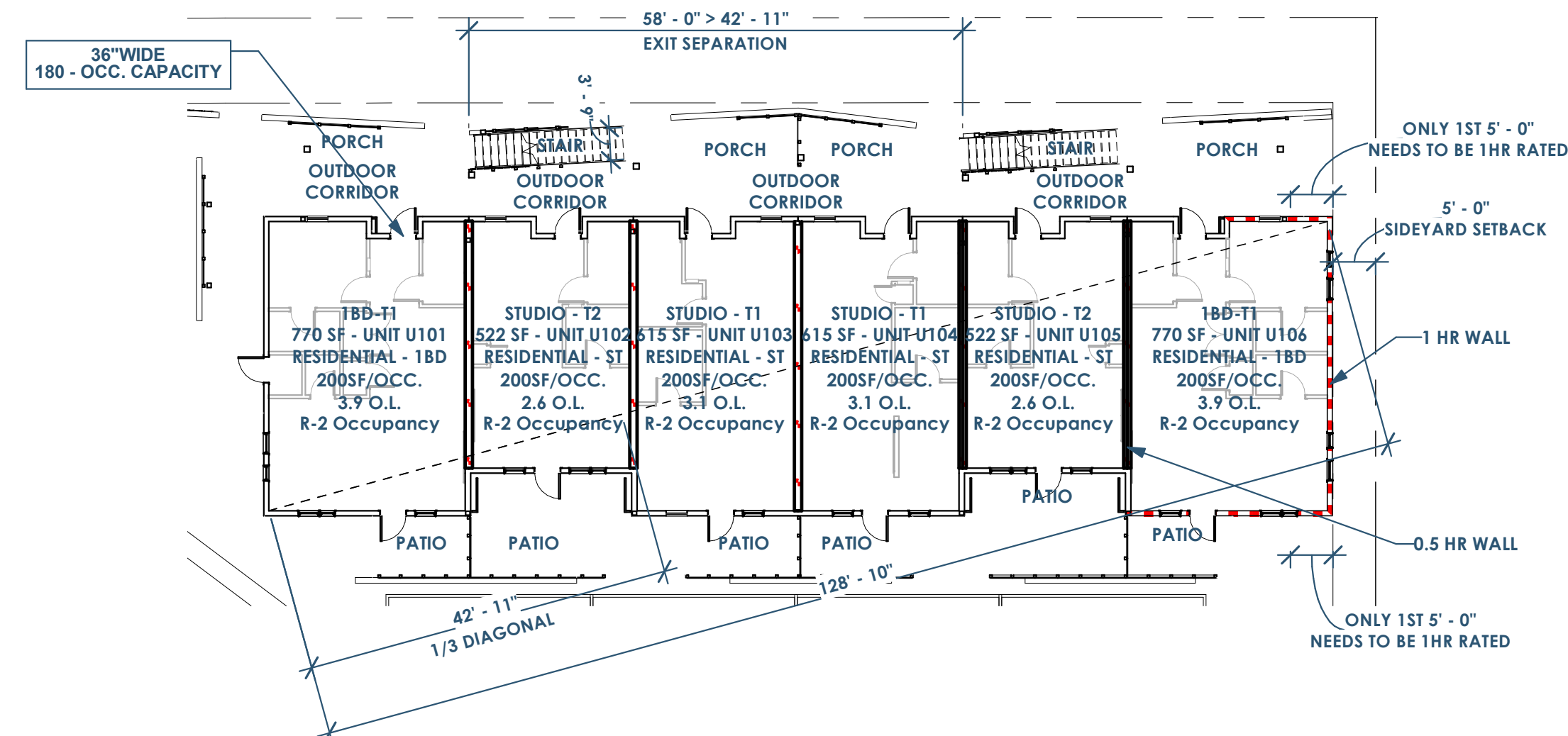
ARCHITECTURE
Architect of Record: LKB Architecture
2929 Allen Pkwy Suite 200
Houston, TX 77019
isa@lkbarchitecture.com | 713.425.3076

STRUCTURAL: DUDLEY
Structural: Dudley
6102 Impetual Loop Drive
College Station, TX 77845
(979) 777-0720

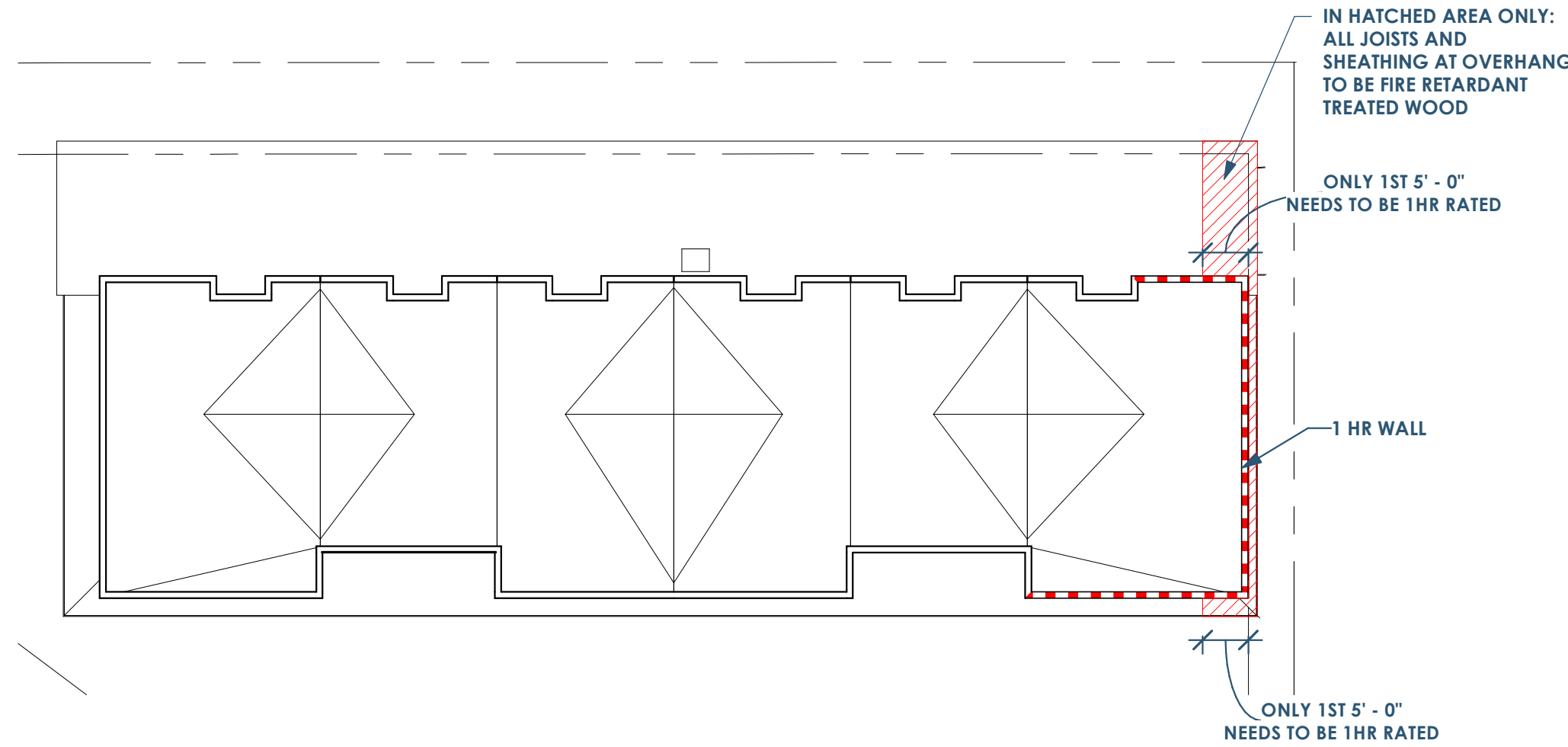
MEP: AMC ENGINEERS
MEP: AMC Engineers
508 E Jackson St # 552
Burnet, TX 78611
info@amcengineers.com

openingdesign
Architect: OpeningDesign
17 S Fairchild | FL 7
Madison, WI 53703
ryan@openingdesign.com | 773.425.6456

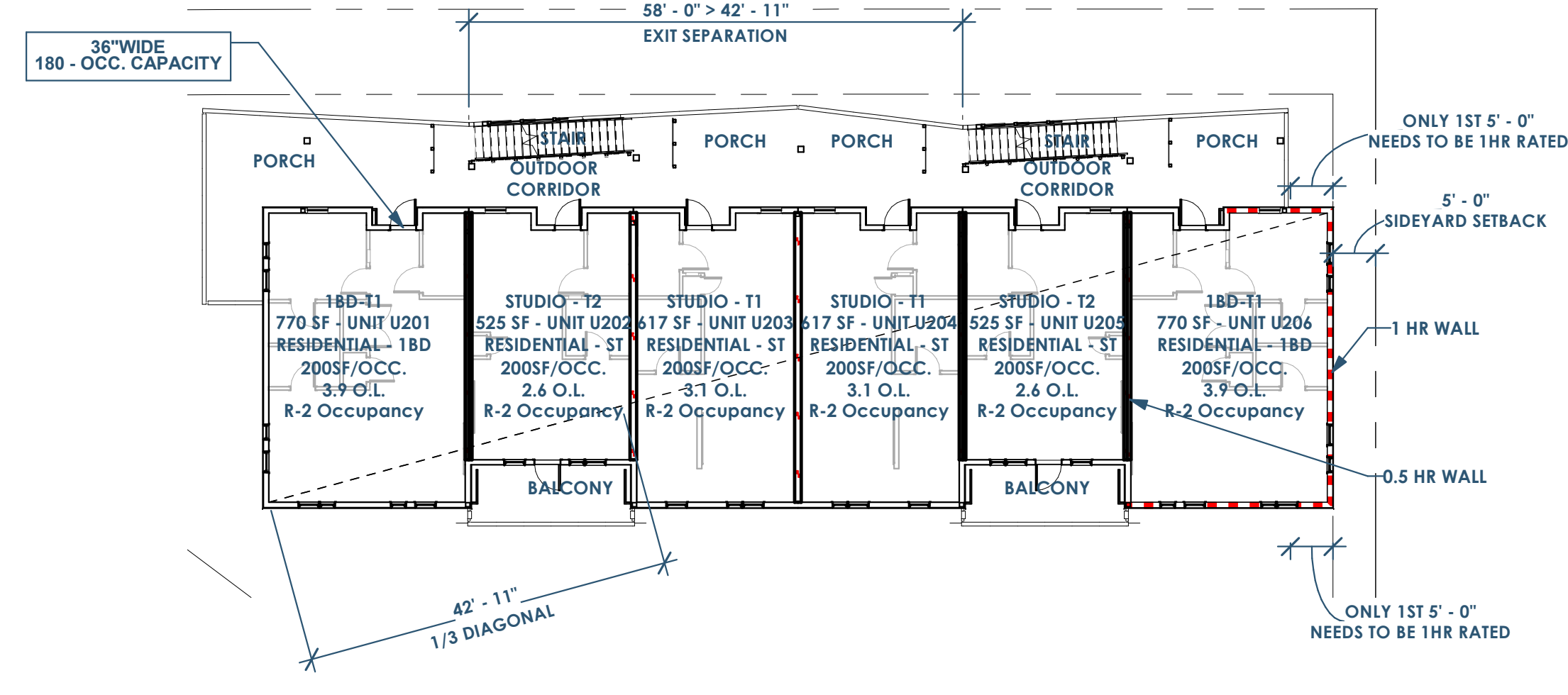
Date: 06/02/2022
Description: Review before Permit



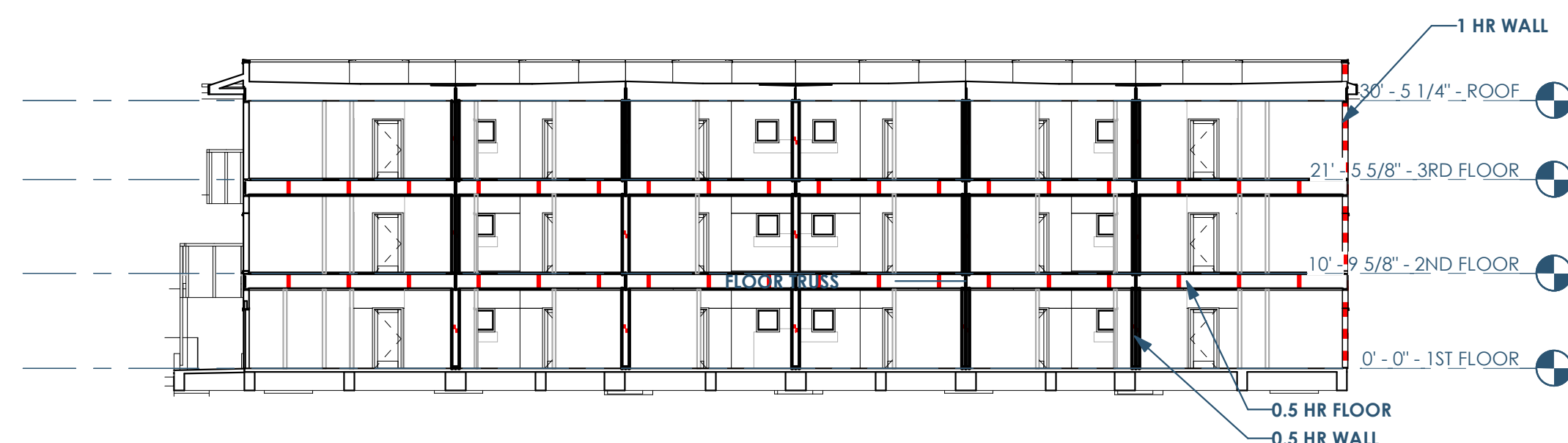
43
G001 LIFE SAFETY - 1ST FLOOR
1/16" = 1'-0"



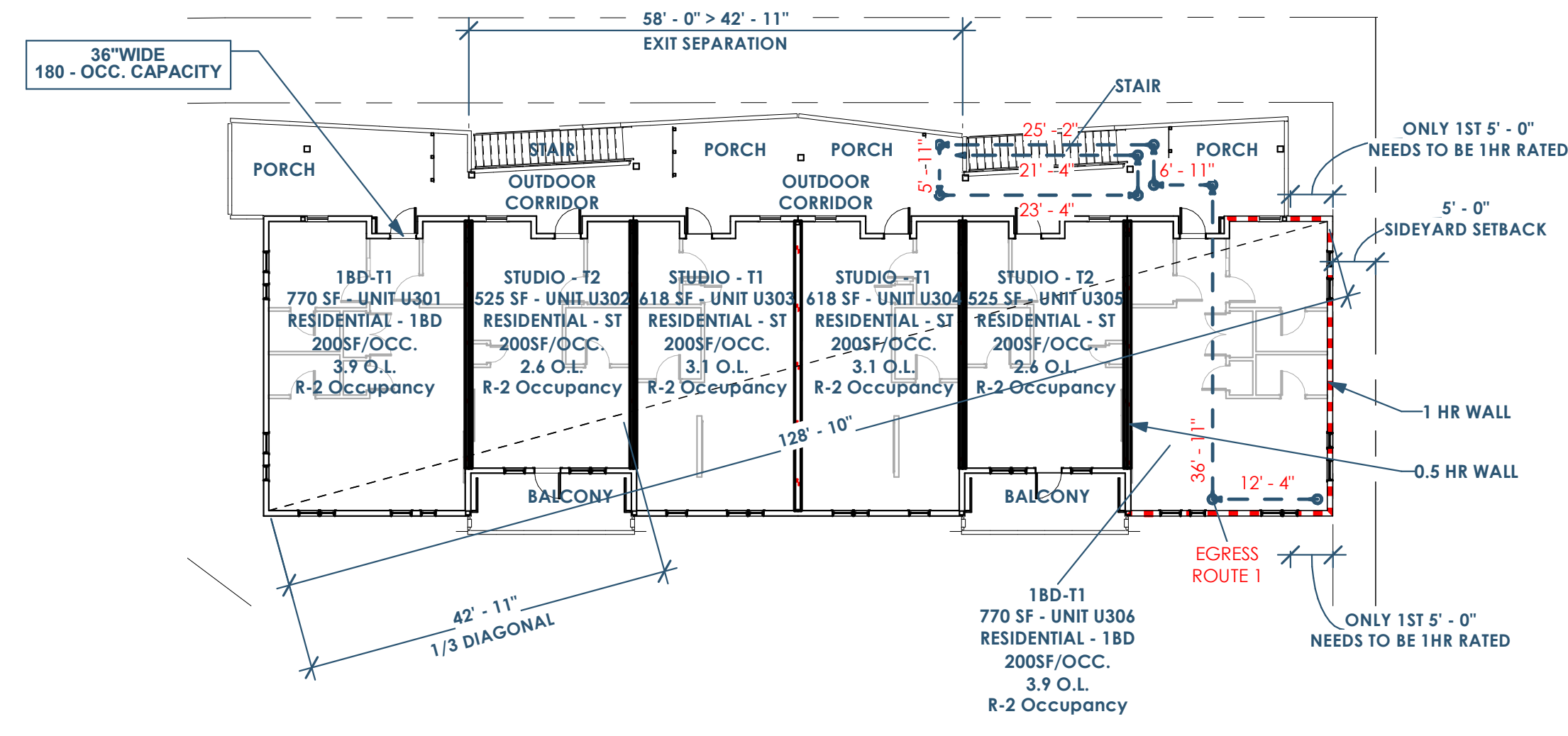
4D
G001 LIFE SAFETY - ROOF
1/16" = 1'-0"



48
G001 LIFE SAFETY - 2ND FLOOR
1/16" = 1'-0"



48
G001 LIFE SAFETY SECTION - EAST/WEST
1/16" = 1'-0"



4A
G001 LIFE SAFETY - 3RD FLOOR
1/16" = 1'-0"

RATED WALLS/FLOORS LEGEND

- RATED - 4 HR
- RATED - 3 HR
- RATED - 2 HR
- RATED - 1.5 HR
- RATED - 1 HR
- RATED - 0.5 HR

EGRESS DATA	
EXIT ROUTE	DISTANCE
EGRESS ROUTE 1	141' - 4"

OCCUPANT LOAD (BASED ON TABLE 1004.1.2)					
Level	Name	Occupancy	Area	Function of Space	Occupant Load
1ST FLOOR	OUTDOOR CORRIDOR	R-2	759 SF	CIRCULATION	200
1ST FLOOR	STAIR	R-2	84 SF	CIRCULATION	200
1ST FLOOR	STAIR	R-2	84 SF	CIRCULATION	200
1ST FLOOR	PATIO	R-2	84 SF	RESIDENTIAL	200
1ST FLOOR	PATIO	R-2	149 SF	RESIDENTIAL	200
1ST FLOOR	PATIO	R-2	98 SF	RESIDENTIAL	200
1ST FLOOR	PATIO	R-2	96 SF	RESIDENTIAL	200
1ST FLOOR	PATIO	R-2	141 SF	RESIDENTIAL	200
1ST FLOOR	PATIO	R-2	90 SF	RESIDENTIAL	200
1ST FLOOR	PORCH	R-2	145 SF	RESIDENTIAL	200
1ST FLOOR	PORCH	R-2	97 SF	RESIDENTIAL	200
1ST FLOOR	PORCH	R-2	94 SF	RESIDENTIAL	200
1ST FLOOR	PORCH	R-2	86 SF	RESIDENTIAL	200
1ST FLOOR	1BD-T1	R-2	770 SF	RESIDENTIAL - 1BD	200
1ST FLOOR	1BD-T1	R-2	770 SF	RESIDENTIAL - 1BD	200
1ST FLOOR	STUDIO - T1	R-2	615 SF	RESIDENTIAL - ST	200
1ST FLOOR	STUDIO - T1	R-2	615 SF	RESIDENTIAL - ST	200
1ST FLOOR	STUDIO - T2	R-2	522 SF	RESIDENTIAL - ST	200
1ST FLOOR	STUDIO - T2	R-2	522 SF	RESIDENTIAL - ST	200
1ST FLOOR: 19			5842 SF		29.2
2ND FLOOR	OUTDOOR CORRIDOR	R-2	613 SF	CIRCULATION	200
2ND FLOOR	STAIR	R-2	84 SF	CIRCULATION	200
2ND FLOOR	STAIR	R-2	84 SF	CIRCULATION	200
2ND FLOOR	BALCONY	R-2	123 SF	RESIDENTIAL	200
2ND FLOOR	BALCONY	R-2	123 SF	RESIDENTIAL	200
2ND FLOOR	PORCH	R-2	334 SF	RESIDENTIAL	200
2ND FLOOR	PORCH	R-2	107 SF	RESIDENTIAL	200
2ND FLOOR	PORCH	R-2	101 SF	RESIDENTIAL	200
2ND FLOOR	PORCH	R-2	131 SF	RESIDENTIAL	200
2ND FLOOR	1BD-T1	R-2	770 SF	RESIDENTIAL - 1BD	200
2ND FLOOR	1BD-T1	R-2	770 SF	RESIDENTIAL - 1BD	200
2ND FLOOR	STUDIO - T1	R-2	617 SF	RESIDENTIAL - ST	200
2ND FLOOR	STUDIO - T1	R-2	617 SF	RESIDENTIAL - ST	200
2ND FLOOR	STUDIO - T2	R-2	525 SF	RESIDENTIAL - ST	200
2ND FLOOR	STUDIO - T2	R-2	525 SF	RESIDENTIAL - ST	200
2ND FLOOR: 15			5524 SF		27.4
3RD FLOOR	OUTDOOR CORRIDOR	R-2	635 SF	CIRCULATION	200
3RD FLOOR	STAIR	R-2	84 SF	CIRCULATION	200
3RD FLOOR	STAIR	R-2	81 SF	CIRCULATION	200
3RD FLOOR	BALCONY	R-2	123 SF	RESIDENTIAL	200
3RD FLOOR	BALCONY	R-2	123 SF	RESIDENTIAL	200
3RD FLOOR	PORCH	R-2	224 SF	RESIDENTIAL	200
3RD FLOOR	PORCH	R-2	107 SF	RESIDENTIAL	200
3RD FLOOR	PORCH	R-2	101 SF	RESIDENTIAL	200
3RD FLOOR	PORCH	R-2	131 SF	RESIDENTIAL	200
3RD FLOOR	1BD-T1	R-2	770 SF	RESIDENTIAL - 1BD	200
3RD FLOOR	1BD-T1	R-2	770 SF	RESIDENTIAL - 1BD	200
3RD FLOOR	STUDIO - T1	R-2	618 SF	RESIDENTIAL - ST	200
3RD FLOOR	STUDIO - T1	R-2	618 SF	RESIDENTIAL - ST	200
3RD FLOOR	STUDIO - T2	R-2	525 SF	RESIDENTIAL - ST	200
3RD FLOOR	STUDIO - T2	R-2	525 SF	RESIDENTIAL - ST	200
3RD FLOOR: 15			5435 SF		27.2
Grand total: 49			16804 SF		84.0

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RENOVATION Wranglers
 Owner: Renovation Wranglers
 102 E 26th St
 Bryan, TX 77803
 Katerencason@wrangler.com | 979.450.9969

ARCHITECTURE
 Architect of Record: LKB Architecture
 2929 Allen Pkwy Suite 200
 Houston, TX 77019
 isa@lkbarchitecture.com | 713.425.3076

DUDDLEY
 Structural: Dudley
 6102 Imperial Loop Drive
 College Station, TX 77845
 (979) 777-0720

amc ENGINEERS
 MEP: AMC Engineers
 508 E Jackson St # 552
 Burnet, TX 78611
 info@amcengineers.com

openingdesign
 Architect: OpeningDesign
 17 S Fairchild | FL 7
 Madison, WI 53703
 ryan@openingdesign.com | 773.425.6456

Date	Description
06/02/2022	Review before Permit

STRUCTURAL STATEMENT OF SPECIAL INSPECTIONS & TESTING

- 1. SPECIAL INSPECTIONS AND STRUCTURAL TESTING SHALL BE PROVIDED BY AN INDEPENDENT AGENCY EMPLOYED BY THE OWNER FOR THE ITEMS IDENTIFIED IN THIS SECTION AND IN OTHER AREAS OF THE APPROVED CONSTRUCTION PLANS AND SPECIFICATIONS...
2. THE NAMES AND CREDENTIALS OF THE SPECIAL INSPECTORS TO BE USED SHALL BE SUBMITTED TO THE BUILDING OFFICIAL FOR APPROVAL...
3. DATES OF THE SPECIAL INSPECTION...
4. DUTIES AND RESPONSIBILITIES OF THE CONTRACTOR...

WIND-RESISTING COMPONENTS (7703.1.1.3)

- PERIODIC SPECIAL INSPECTION IS REQUIRED FOR FASTENING OF THE FOLLOWING SYSTEMS AND COMPONENTS:
1. ROOF COVERING, ROOF DECK AND ROOF FRAMING CONNECTIONS.
2. EXTERIOR WALL COVERING AND WALL CONNECTIONS TO ROOF AND FLOOR DIAPHRAGMS AND FRAMING.

REQUIRED VERIFICATION AND INSPECTION OF GRADING AND DRAINAGE FOR FOUNDATIONS ON EXPANSIVE SOILS

Table with 4 columns: VERIFICATION AND INSPECTION, CONTINUOUS, PERIODIC, REQUIRED. Rows include: AFTER BUILDING CONSTRUCTION AND LANDSCAPING HAVE BEEN COMPLETED, FINAL GRADES SHALL BE VERIFIED TO DOCUMENT REQUIRED DRAINAGE; AFTER BUILDING CONSTRUCTION AND LANDSCAPING HAVE BEEN COMPLETED, DOWNPOUTS SHALL BE INSPECTED TO CONFIRM CONFORMANCE; GRADES AROUND THE STRUCTURE SHALL BE PERIODICALLY INSPECTED AND ADJUSTED AS PART OF THE BUILDING'S MAINTENANCE PROGRAM; PLUMBING LEAK "HYDROSTATIC" TEST PERFORMED BY A LICENSED PLUMBER, TEST TO OCCUR AFTER ROUGH PLUMBING INSTALL; WHERE PAVING/FLATWORK ABOUT THE FOUNDATION, A MAINTENANCE PROGRAM SHALL BE ESTABLISHED TO EFFECTIVELY SEAL AND MAINTAIN JOINTS AND PREVENT SURFACE WATER INFILTRATION.

REQUIRED VERIFICATION AND INSPECTION OF SOILS (TABLE 7703.4)

Table with 4 columns: VERIFICATION AND INSPECTION, CONTINUOUS, PERIODIC, REQUIRED. Rows include: VERIFY MATERIALS BELOW SHALLOW FOUNDATIONS ARE ADEQUATE TO ACHIEVE THE DESIGN BEARING CAPACITY; VERIFY EXCAVATIONS ARE EXTENDED TO PROPER DEPTH AND HAVE REACHED PROPER MATERIALS; PERFORM CLASSIFICATION AND TESTING OF COMPACTED MATERIALS; VERIFY USE OF PROPER MATERIALS, DENSITIES AND LIFT THICKNESS DURING PLACEMENT AND COMPACTION OF COMPACTED FILL; PRIOR TO PLACEMENT OF COMPACTED FILL, OBSERVE SUBGRADE AND VERIFY THE SITE HAS BEEN PREPARED PROPERLY.

REQUIRED VERIFICATION AND INSPECTION OF WOOD CONSTRUCTION (§1703.5)

Table with 4 columns: VERIFICATION AND INSPECTION, CONTINUOUS, PERIODIC, REQUIRED. Rows include: PREFABRICATED WOOD STRUCTURAL ELEMENTS (METAL PLATE CONNECTED WOOD TRUSSES FABRICATION AND IMPERMEATION PROCEDURES) (NOT REQUIRED WHERE THE WORK IS DONE ON THE PREMISES OF A FABRICATOR REGISTERED AND APPROVED TO PERFORM SUCH WORK WITHOUT SPECIAL INSPECTION; HIGH-LOAD DIAPHRAGMS; METAL-PLATE-CONNECTED WOOD TRUSSES SPANNING 60 FT OR GREATER; INSPECTION OF NAILING, BOLTING, ANCHORING AND OTHER FASTENING COMPONENTS WITHIN THE SEISMIC / MAIN WIND-FORCE RESISTING SYSTEM; MOISTURE CONTENT OF LOAD BEARING WOOD FRAMING.

REQUIRED VERIFICATION AND INSPECTION OF STRUCTURAL STEEL CONSTRUCTION (§1703.2.1)

Table with 4 columns: VERIFICATION AND INSPECTION, CONTINUOUS, PERIODIC, REQUIRED. Rows include: INSPECTION TASKS PRIOR TO WELDING (ASCC 340 TABLE N6.4-1); WELDING PROCEDURE SPECIFICATION (WPS) AVAILABLE; MANUFACTURER CERTIFICATIONS FOR WELDING CONSUMABLES AVAILABLE; MATERIAL IDENTIFICATION (MPE / GRADE); WELDER IDENTIFICATION SYSTEM; FIT-UP GROOVE WELDS; CONFIGURATION AND FINISH OF ACCESS HOLES; FIT-UP FILLET WELDS; CHECK WELDING EQUIPMENT.

STRUCTURAL STEEL - ANCHOR RODS / EMBEDDED PLATES

THE SPECIAL INSPECTOR SHALL BE ON THE PREMISES FOR INSPECTION DURING THE PLACEMENT OF ANCHOR RODS AND OTHER EMBEDDED/SET STRUCTURAL STEEL FOR COMPLIANCE WITH THE CONSTRUCTION DOCUMENTS, AS A MINIMUM, THE DIAMETER, GRADE, TYPE AND LENGTH OF THE ANCHOR RODS OR EMBEDDED ITEM, AND THE EXTENT OR DEPTH OF EMBEDMENT INTO THE CONCRETE, SHALL BE VERIFIED PRIOR TO PLACEMENT OF CONCRETE.

STRUCTURAL STEEL - WELDS

Table with 4 columns: VERIFICATION AND INSPECTION, CONTINUOUS, PERIODIC, REQUIRED. Rows include: USE OF QUALIFIED WELDERS; CONTROL AND HANDLING OF WELDING CONSUMABLES; NO WELDING OVER CRACKED TACK WELDS; ENVIRONMENTAL CONDITIONS (WIND SPEED WITHIN LIMITS, PRECIPITATION AND TEMPERATURE); WPS FOLLOWED; WELDED TECHNIQUES; WELDS CLEANED; SIZE, LENGTH AND LOCATION OF WELDS; WELDS MEET VISUAL ACCEPTANCE CRITERIA; ARC STRIKES; I-AREA; BACKING REMOVED AND WELD TABS REMOVED (IF REQUIRED); REPAIR ACTIVITIES; DOCUMENT ACCEPTANCE OR REJECTION OF WELDED JOINT MEMBER.

NON-DESTRUCTIVE TESTING OF WELDED JOINTS

Table with 4 columns: VERIFICATION AND INSPECTION, CONTINUOUS, PERIODIC, REQUIRED. Rows include: FILLET WELDS; PARTIAL JOINT PENETRATION (PJP) WELDS INCLUDING FLARE BEVEL WELDS; COMPLETE JOINT PENETRATION (CJP) WELDS.

STRUCTURAL STEEL HIGH-STRENGTH BOLTS (TURN-OF-NUT)

TURN-OF-NUT PRETENSIONING: THE INSPECTOR SHALL OBSERVE THE PRE-INSTALLATION VERIFICATION TESTING REQUIRED IN SECTION 8.2. SUBSEQUENTLY, IT SHALL BE ENSURED BY ROUTINE OBSERVATION THAT THE BOLTING CREW PROPERLY ROTATES THE TURNED ELEMENT RELATIVE TO THE UNTURNED ELEMENT BY THE AMOUNT SPECIFIED IN TABLE 8.2.4 (AS APPLICABLE). WHEN FASTENER ASSEMBLIES ARE MANIPULATED AFTER THE INITIAL FIT-UP OF THE JOINT BUT PRIOR TO PRETENSIONING, VISUAL INSPECTION AFTER PRETENSIONING IS PERMITTED IN LIEU OF ROUTINE OBSERVATION. NO FURTHER EVIDENCE OF CONFORMANCY IS REQUIRED. A PRETENSION THAT IS GREATER THAN THE VALUE SPECIFIED IN TABLE 8.1 SHALL NOT BE CAUSE FOR REJECTION. A ROTATION THAT EXCEEDS THE REQUIRED VALUES, INCLUDING TOLERANCE, SPECIFIED IN TABLE 8.2 SHALL NOT BE CAUSE FOR REJECTION.

Table 8.2: NUT ROTATION FROM SNUG-TIGHT CONDITION FOR TURN-OF-NUT PRETENSIONING. Columns: BOLT LENGTH, DISPOSITION OF OUTER FACES OF BOLTED PARTS (BOTH FACES NORMAL TO BOLT AXIS, ONE FACE NORMAL TO BOLT AXIS, OTHER SLOPED NOT MORE THAN 1:20, BOTH FACES SLOPED NOT MORE THAN 1:20 FROM NORMAL TO BOLT AXIS). Rows: LENGTH ≤ 4d, 4d < LENGTH ≤ 8d, 8d < LENGTH ≤ 12d.

STRUCTURAL STEEL HIGH-STRENGTH BOLTS (SNUG-TIGHT) - INSPECTION TASKS PRIOR TO BOLTING

Table with 4 columns: VERIFICATION AND INSPECTION, CONTINUOUS, PERIODIC, REQUIRED. Row: DOCUMENTATION AND ACCEPTANCE OR REJECTION OF BOLTED CONNECTIONS.

STRUCTURAL STEEL HIGH-STRENGTH BOLTS (SNUG-TIGHT) - INSPECTION TASKS DURING BOLTING

Table with 4 columns: VERIFICATION AND INSPECTION, CONTINUOUS, PERIODIC, REQUIRED. Row: DOCUMENTATION OF ACCEPTANCE OR REJECTION OF BOLTED CONNECTIONS.

RENOVATION Wranglers logo and contact information: Owner: Renovation Wranglers, 102 E 26th St, Bryan, TX 77803, kate@renovationsma.com | 979.450.9969; ARCHITECTURE: Architect of Record: LKB Architecture, 2929 Allen Pkwy Suite 200, Houston, TX 77019, isa@lkbarchitecture.com | 713.425.3076

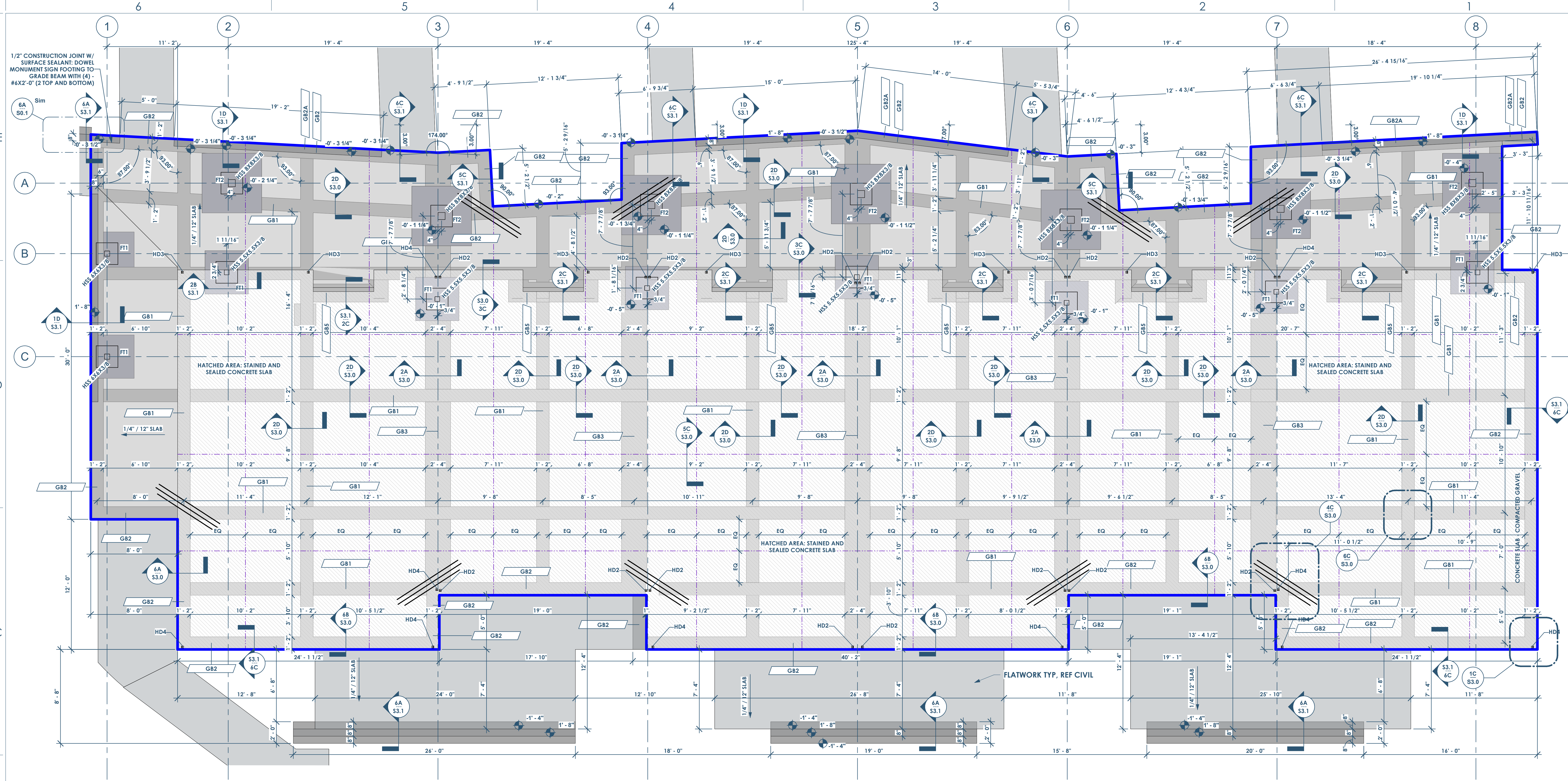
DUDDLEY logo and contact information: Structural: Dudley, 6102 Impetial Loop Drive, College Station, TX 77845, (979) 777-0720

amc ENGINEERS logo and contact information: MEP: AMC Engineers, 508 E Jackson St # 552, Burnet, TX 78611, info@amcengineers.com

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openingdesign logo and contact information: Architect: OpeningDesign, 17 S Fairchild | FL 7, Madison, WI 53703, ryan@openingdesign.com | 773.425.6456

Table with 2 columns: Date, Description. Row: 06/02/2022, Review before Permit



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S0.1 STRUCTURAL - FOUNDATION
1/4" = 1'-0"

SHEARWALL HOLDDOWN AT FOUNDATION						
TYPE MARK	TYPE	HARDWARE	END POST	ATTACHMENT TO END POST	ANCHORAGE TO FOUNDATION	CAPACITY
HD2	POST-INSTALLED HOLDDOWN	SIMPSON HTS	(2)-2X	(26) 0.148 X 3 NAILS	5/8" DIA. GR.36 ALL-THREAD WITH 8" EMBEDMENT WITH NUT AND WASHER	SEE SHEET S4.3 FOR DETAILS 4670
HD3	POST-INSTALLED HOLDDOWN	SIMPSON HDU8-SDS2.5	(3)-2X	(20) 1/4" X 2 1/2" SDS SCREWS	7/8" DIA. GR.36 ALL-THREAD WITH 17 1/2" EMBEDMENT WITH NUT AND WASHER	SEE SHEET S4.3 FOR DETAILS 6200
HD4	CAST IN PLACE	SIMPSON HDU14-SDS2.5	6X6	(36) 1/4" X 2 1/2" SDS SCREWS	1" DIA. GR.36 ANCHOR ROD WITH 18" EMBEDMENT	SEE SHEET S4.3 FOR DETAILS 10000

- STRUCTURAL CONNECTION NOTES:**
- MINIMUM EDGE DISTANCE TO CENTERLINE OF BOLT IS 3". AT CORNERS, THE OPPOSING EDGE DISTANCE MUST BE ≥ 6".
 - MINIMUM #4X3" LONG REINFORCING BAR LOCATED 3"-5" BELOW THE TOP OF THE SLAB IS REQUIRED TO BE CENTERED ON THE HOLDDOWN. AT CORNER, BEND THE BAR 90° AT THE CENTER.
 - REFERENCE MECHANICALLY LAMINATED BUILT-UP COLUMN FOR NAILING REQUIREMENTS FOR END POST.
 - SIMPSON ATR(REQUIRED Ø) WITH SIMPSON SET-3G IS AN ACCEPTABLE OPTION.

FOOTING SCHEDULE						
TYPE MARK	NAME	COUNT	WIDTH	LENGTH	DEPTH	TYPE COMMENTS
FT1	CONCRETE STEEL COLUMN FOOTING - 4' X 4' X 2'-4"	9	4'-0"	4'-0"	2'-4"	SEE DETAIL 2B/S3.1 SEE DETAIL 2B/S3.1
FT2	CONCRETE STEEL COLUMN FOOTING 5.5' X 5.5' X 2.5'	7	5'-6"	5'-6"	2'-6"	SEE DETAIL 2B/S3.1 SEE DETAIL 2B/S3.1

PTI PARAMETERS	
E _m - CENTER	4.8"
E _m - EDGE	2.0"
Y _m - CENTER	1.0"
Y _m - EDGE	1.25"
EFFECTIVE PLASTICITY INDEX	35
ALLOW. BEARING (PSF)	1,800 PSF
MIN. BEAM EMBEDMENT BLOW FINAL GRADE	18"
MIN PERIMETER BEAM EMBEDMENT BELOW FINAL GRADE	52"

SLAB GEOMETRY	
AREA (SF)	5711 SF
PERIMETER (FT)	394 FT
SHAPE FACTOR (PERIMETER ² /AREA)	27.5

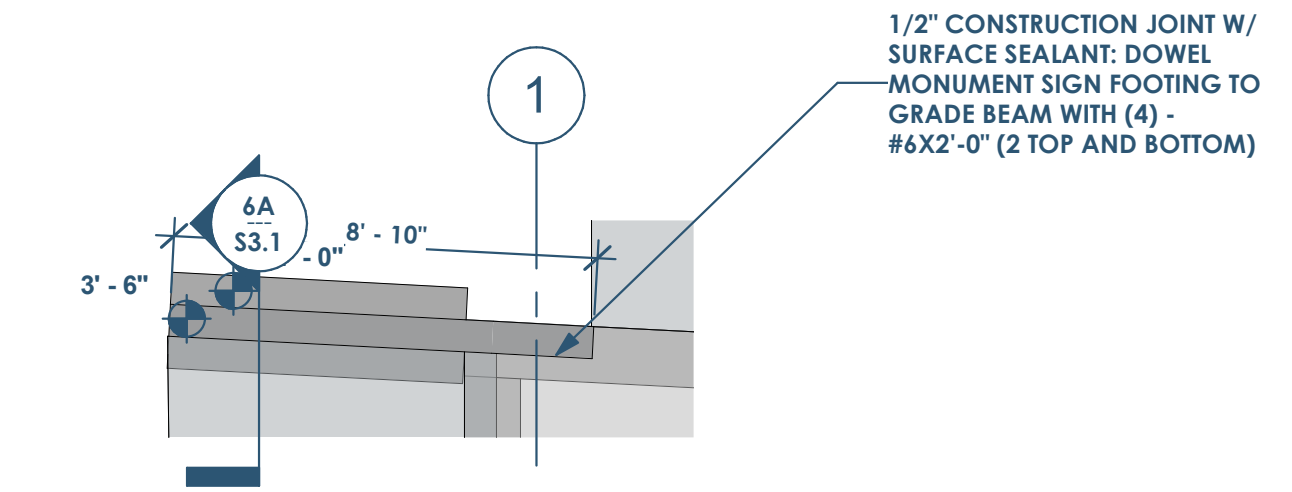
FOUNDATION SCHEDULE							
BEAM ID	DESCRIPTION	WIDTH	DEPTH	TOP BARS	BOTTOM BARS	STIRRUPS	Type Comments
GB1	GRADE BEAM - INTERIOR - 14"	14"	30"	(3) - #6	(3) - #6	#3 @24" OC	
GB2	VERTICAL MOISTURE BARRIER	14"	30"	(3) - #6	(3) - #6	#3 @24" OC	
GB2A	GRADE BEAM - PERIMETER - 14" - W/ 8" CONCRETE WALL	8"	30"	(3) - #6	(3) - #6	#3 @24" OC	SEE 1D/S3.1 FOR MORE DETAIL
GB3	GRADE BEAM - INTERIOR - 28"	28"	30"	DOUBLE GB1	DOUBLE GB1	DOUBLE GB1	(2) GB1 STIRRUP CAGES (SIDE/SIDE - SEE DETAIL 2A/S3.0
GB4	8" CONCRETE FOUNDATION	8"	36"				SEE 6A/S3.1
GB5	TURNDOWN THICKENED SLAB	12"	12"	N/R	(2) - #4	N/R	SEE DETAIL 2C/S3.1

FOUNDATION NOTES	
FOUNDATION TYPE:	BRAB TYPE III - STIFFENED NON-STRUCTURAL SLAB-ON-GROUND
SLAB THICKNESS:	5"
SLAB REINFORCEMENT:	#4 @ 16" OC EACH WAY - REF DETAIL
DESIGN METHOD:	ACI 318
VAPOR RETARDER:	MINIMUM 15 MIL (UNLESS THICKER REQ'D BY ARCHITECT)

- NOTES:**
- BEAMS ARE TYPE B1 UNO.
 - LOCATE THE FIRST STIRRUP A MAXIMUM OF 3" FROM FACE OF SUPPORT.
 - BEAM DEPTH INDICATED IN THE SCHEDULE IS A STRUCTURAL MINIMUM THAT THE BEAM REINFORCEMENT GAUGE MAY BE BASED UPON. REFERENCE GEOTECHNICAL REPORT FOR MINIMUM GRADE BEAM EMBEDMENT BELOW ADJACENT FINAL GRADE OR FLATWORK/PAVEMENT.
 - N/R = NOT REQUIRED



- PLAN NOTES:**
- VERIFY ALL EDGE OF FOUNDATION DIMENSIONS WITH FINAL ARCHITECTURE FLOOR PLANS.
 - FORM DIMENSIONS: SLAB DROPS, SLOPES, ETC. SHOWN AS AN AID TO CONTRACTOR ONLY. VERIFY EXACT DIMENSIONS AND LOCATIONS WITH ARCHITECT.
 - DIMENSIONS ARE TO OF GRADE BEAMS OR EDGE OF SLAB UNLESS NOTED OTHERWISE.
 - CONTROL JOINTS (SAW-CUTS) ARE RECOMMENDED TO REDUCE CRACKS IN THE SLAB, BUT ARE NOT REQUIRED FOR STRUCTURAL REQUIREMENTS. FOR THE RECOMMENDED MAXIMUM JOINT SPACING, REFERENCE DETAIL.
 - FOR FLATWORK OR PAVEMENT ABUTTING THE BUILDING FOUNDATION REFERENCE DETAIL.
 - CONCRETE IS ASSUMED TO RECEIVE A STEEL TROWEL FINISH UNLESS NOTED OTHERWISE. NOTIFY ENGINEER IF ARCHITECTUALLY EXPOSED CONCRETE (STAINED, POLISHED, ETC.) IS PLANNED FOR ADDITIONAL SHRINKAGE CRACKING MITIGATION METHODS.



6A
S0.1 STRUCTURAL - FOUNDATION - SIGN AREA
1/4" = 1'-0"

RENOVATION Wranglers
 Owner: Renovation Wranglers
 102 E 26th St
 Bryan, TX 77803
 Katerencason@rw.com | 979.450.9969

ARCHITECTURE
 Architect of Record: LKB Architecture
 2929 Allen Pkwy Suite 200
 Houston, TX 77019
 isa@lkbarchitecture.com | 713.425.3076

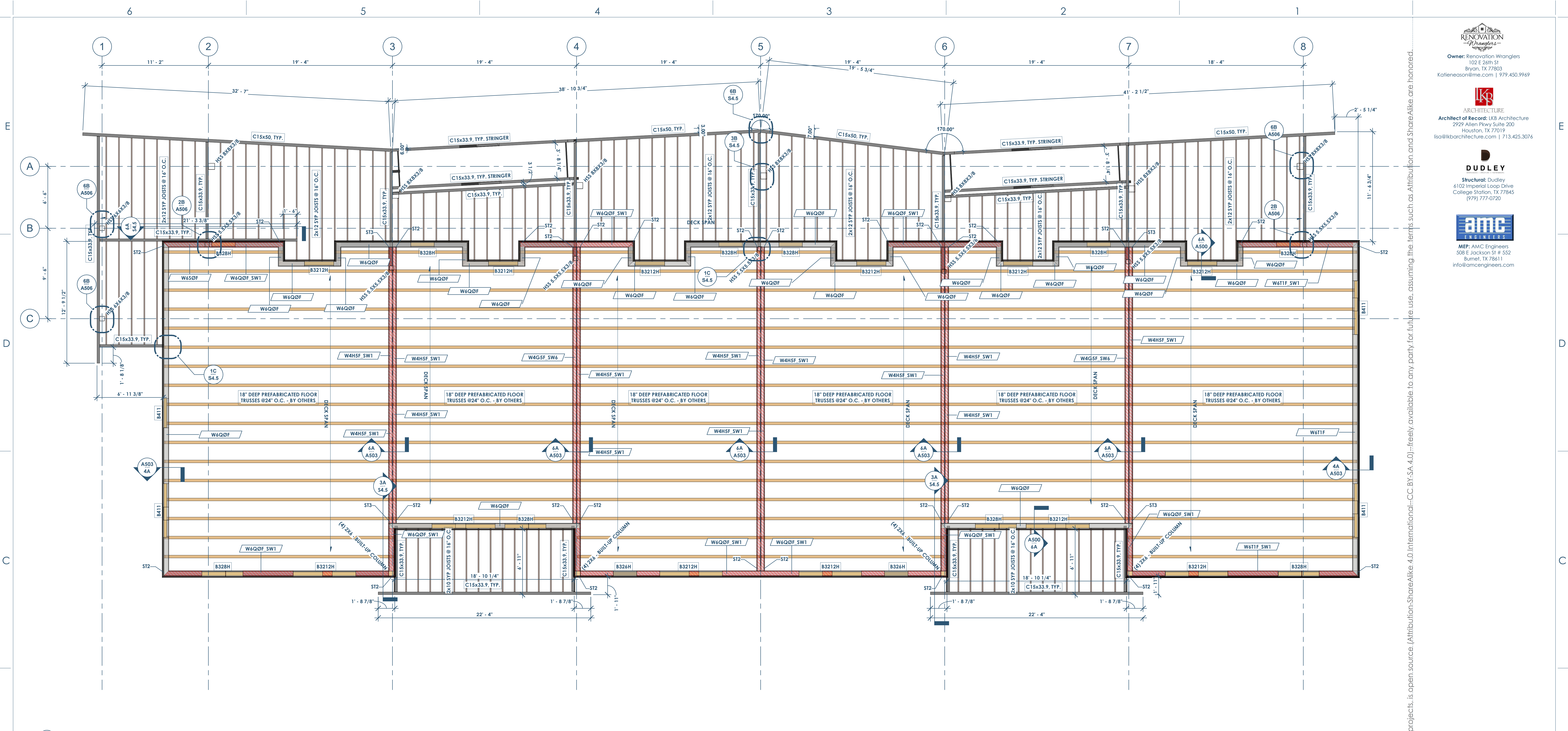
DUDDLEY
 Structural: Dudley
 4102 Imperial Loop Drive
 College Station, TX 77845
 (979) 777-0720

amc ENGINEERS
 MEP: AMC Engineers
 508 E Jackson St # 552
 Burnet, TX 78611
 info@amcengineers.com

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openingdesign
 Architect: OpeningDesign
 17 S Fairchild | FL 7
 Madison, WI 53703
 ryan@openingdesign.com | 773.425.6456

Date: 06/02/2022 Description: Review before Permit



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S0.2 FRAMING PLAN - 2ND FLOOR
1/4" = 1'-0"

SHEAR WALL SCHEDULE				
SHEAR WALL TYPE	SHEATHING TYPE	PANEL EDGE NAILING	FIELD NAILING	ALLOWABLE WIND SHEAR CAPACITY
SW1	7/16" WSP	6"	12"	(5/8" @ 40" O.C. - AT CONCRETE) - (0.131" X 3" LONG NAILS @ 3" OC - AT WOOD) 335 PLF
SW2	7/16" WSP	4"	12"	(5/8" @ 32" O.C. - AT CONCRETE) - (0.131" X 3" LONG NAILS @ 3" OC - AT WOOD) 490 PLF
SW3	7/16" WSP	3"	12"	(5/8" @ 24" O.C. - AT CONCRETE) - (0.131" X 3" LONG NAILS @ 2" OC - AT WOOD) 630 PLF
SW4	15/32" WSP	3"	12"	(5/8" @ 24" O.C. - AT CONCRETE) - (0.148" X 3" LONG NAILS @ 2" OC - AT WOOD) 840 PLF
SW5	15/32" WSP	2"	12"	(5/8" @ 24" O.C. - AT CONCRETE) - (0.148" X 3" LONG NAILS @ 2" OC - AT WOOD) 991 PLF
SW6	5/8" GYP WALLBOARD	7"	12"	(5/8" @ 48" O.C. - AT CONCRETE) - (0.131" X 3" LONG NAILS @ 12" OC - AT WOOD) 115 PLF
SW7	5/8" GYP WALLBOARD	4"	12"	(5/8" @ 48" O.C. - AT CONCRETE) - (0.131" X 3" LONG NAILS @ 12" OC - AT WOOD) 145 PLF

- SHEAR WALL NOTES:**
- ALL FASTENERS FOR WOOD STRUCTURAL PANEL SHALL BE FLAT HEAD NAILS CONSISTING OF THE FOLLOWING UNO:
 - A. 0.131" X 2 1/2" LONG
 - B. 0.148" X 3" LONG
 - FASTENERS FOR GYPSUM WALLBOARD SHALL BE ONE OF THE FOLLOWING:
 - A. 6d COOLER NAILS (0.092" X 1 7/8" LONG, 1/4" HEAD)
 - B. WALLBOARD NAIL (0.0915" X 1 7/8" LONG, 19/64" HEAD)
 - C. 0.120" NAIL X 1-3/4" LONG, MIN 3/8" HEAD
 - D. NO. 6 TYPE S OR W DRYWALL SCREWS 1-1/4" LONG
 - ANCHORS INTO CONCRETE SHALL EITHER BE CAST-IN-PLACE J-BOLTS OR ADHESIVE ANCHORS WITH A MINIMUM EMBEDMENT OF 8". THE CONTRACTOR SHALL SUBMIT PROPOSED ADHESIVE ANCHOR ASSEMBLY FOR APPROVAL.
 - ALL PANEL EDGES SHALL BE BLOCKED.
 - WSP = WOOD STRUCTURAL PANEL. REF GENERAL NOTES FOR SPECIFICATIONS.
 - IF WALL IS SHEATHED ON BOTH SIDES, THEN SILL PLATE ANCHORAGE AND CONNECTION OF BOTTOM PLATE TO TOP PLATE SHALL BE DOUBLED.
 - PANELS MUST BE INSTALLED DIRECTLY TO FRAMING.
 - VALUES CALCULATED ARE FOR SOUTHERN PINE OR DOUGLAS-FIR LARCH FRAMING. CONTACT FOR IF OTHER SPECIES ARE USED.
 - PROVIDE 1/8" WIDE JOINTS IN SHEATHING TO ALLOW FOR SHRINKAGE AND EXPANSION OF THE PANELS.
 - SHEAR WALLS REFERENCED ARE FOR SHEAR WALLS BELOW FLOOR

WALL STUD SCHEDULE				
TOP OF WALL	MAX PLATE HT	EXTERIOR WALL	INTERIOR NON-LOAD BEARING	PARTY WALL
ROOF	8" - 11 5/8"	2X6 NO.2 @ 16" O.C.	2X4 STUD @ 16" O.C.	2X4 STUD @ 16" O.C.
3RD	10" - 8"	2X4 NO.2 @ 16" O.C.	2X4 STUD @ 16" O.C.	2X4 STUD @ 12" O.C.
2ND	10" - 9 5/8"	2X4 NO.2 @ 16" O.C.	2X4 STUD @ 16" O.C.	2X4 STUD @ 8" O.C.

SHEARWALL HOLD-DOWNS AT ELEVATED FLOOR					
TYPE MARK	HOLD-DOWN HARDWARE	END LENGTH (IN)	FASTENERS	END POST	ALLOWABLE TENSION LOAD (LBF)
ST1	(1) SIMPSON CS18	12"	((11) 0.131 X 2 1/2" NAILS	(2) - 2X	1,370
ST2	(2) SIMPSON CS18	12"	((11) 0.131 X 2 1/2" NAILS	(2) - 2X	2,740
ST3	(2) SIMPSON CS14	19"	((18) 0.131 X 2 1/2" NAILS	(3) - 2X	4,980

- SHEARWALL & HOLD-DOWN NOTES:**
- MULTIPLE PILES OF END POSTS SHALL BE FASTENED TOGETHER PER THE MECHANICALLY BUILT-UP COLUMN NAILED DETAIL.
 - REFERENCE DETAIL 6A/S4.2 FOR TYPICAL HOLD-DOWN CONFIGURATIONS.
 - HOLD-DOWNS REFERENCED ARE FOR SHEAR WALLS ABOVE FLOOR

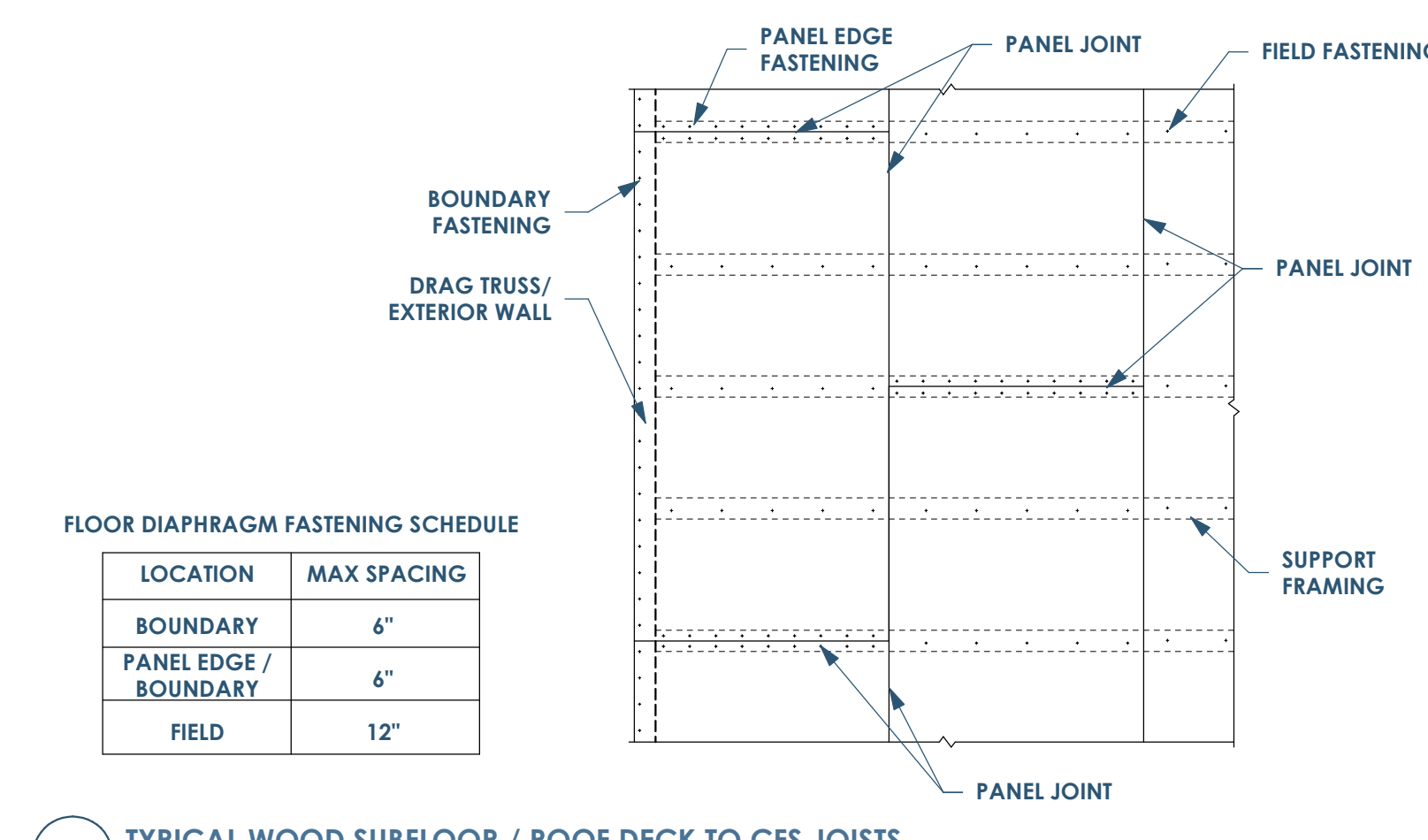
BEAM SCHEDULE				
BEAM TAG	BEAM SIZE	STUD PACK - NUMBER OF STUDS	FACE-MOUNT HANGER	TOP-FLANGE HANGER
B326H	(3)2X6	2	LU526-2	HU26-2TF
B328H	(3)-2X8	2	LU528-3	HU548TF
B3212H	(3)-2X12	2	HU210-3	HU212-3TF
B411	GL - 3 1/2" X 11 1/4"	3	HHU5410	H83.56/11.25

- BEAM LEGEND NOTES:**
- "1" INDICATES MULTIPLE PLY DIMENSIONAL LUMBER BEAMS W/ 1/2" PLYWOOD SHEATHING. SEE 2A/S4.0
 - FOR KING AND JACK STUD REQUIREMENTS FOR EXTERIOR HEADERS REFER TO DETAIL 4C/S4.1
 - FOR KING AND JACK STUD REQUIREMENTS IN INTERIOR HEADERS REFER TO DETAIL 5B/S4.1
 - GL - GLULAM BEAMS SHALL BE ANTHONY POWER BEAM GLUE LAMINATED BEAMS OR APPROVED EQUAL.
 - STUD PACKS ARE REQUIRED WHEN BEAM IS BEARING ON A WALL ASSEMBLY. STUD PACKS MUST CONTINUE ALL THE WAY TO THE FOUNDATION UNLESS TRANSFERRED BY A BEAM.
 - ALL STUDS IN STUD PACK SHALL BE NO.2 SOUTHERN PINE OR BETTER.
 - SHEATHING AND/OR DRYWALL MUST BE ATTACHED TO EACH INDIVIDUAL STUD IN THE STUD PACK.
 - ALL STUDS IN STUD PACK MUST BE FASTENED PER MECHANICALLY LAMINATED BUILT-UP COLUMN-NAILED - REFER TO 6A/S4.1

- SUBFLOOR NOTES:**
- THE SUBFLOOR SHALL BE MIN 3/4" APA RATED TONGUE AND GROOVE OSB STRUCTURAL SHEATHING WITH A FLOOR SPAN RATING OF 24.
 - FASTEN TO FRAMING SHALL CONSIST OF 8x2" LONG WOOD SCREWS. ALTERNATIVELY, 0.131X2" NAILS MAY BE USED IF SCREWS ARE ADDED @ 12" O.C. MAX ADDITIONALLY.
 - THE SUBFLOOR SHALL BE GLUED TO THE SUPPORTING FRAMING WITH POLYURETHANE OR SOLVENT-BASED SUBFLOOR ADHESIVES CONFORMING TO APA-AFG-01 OR ASTM D 3498.
 - A. APPLY A 1/4" BEAD OF ADHESIVE TO THE TOP OF SUPPORTING MEMBERS. APPLY TWO BEADS WHERE PANELS JOINTS MEET.
 - B. APPLY ONLY ENOUGH ADHESIVE TO LAY ONE OR TWO PANELS AT A TIME TO KEEP THE ADHESIVE FROM CURING OR SKINNING.
 - C. FLOOR PANELS SHALL BE FULLY FASTENED WITHIN 10 MINUTES OF APPLYING ADHESIVE.
 - D. EXCESS ADHESIVE SHALL BE REMOVED IMMEDIATELY.
 - PANELS SHALL SPAN ACROSS 3 OR MORE SUPPORTING MEMBERS WITH THE LONG DIMENSION PERPENDICULAR TO THE FLOOR FRAMING. STAGGER END JOINT OF PANEL A MINIMUM OF 2"

- FLOOR PLAN NOTES:**
- METAL PLATE CONNECTED FLOOR TRUSS FRAMING:**
- METAL PLATE CONNECTED FLOOR TRUSS SHALL BE 18" DEEP AND SPACED AT 24" O.C. MAX UNLESS NOTED OTHERWISE. LOADING CRITERIA SHALL BE AS FOLLOWS:
 - TOP CHORD LIVE LOAD (TCLL): 40 PSF
 - TOP CHORD DEAD LOAD (TCDL): 10 PSF
 - BOTTOM CHORD LIVE LOAD (BCLL): 10 PSF (NON-CONCURRENT WITH TCLL)
 - BOTTOM CHORD DEAD LOAD (BCDL): 5 PSF
 - NON-LOAD BEARING WALL ABOVE: 100 PLF DL
 - LOAD-BEARING WALL ABOVE: SEE PLAN
 - TRUSS DEFLECTION LIMITS: TRUSSES SHALL BE LIMITED TO THE FOLLOWING DEFLECTION LIMITS:
 - RATIO: LIVE LOAD (L/360) TOTAL LOAD (L/240)
 - MAXIMUM: 1/2"
 - CAMBER SHALL BE BUILT INTO FLOOR TRUSSES TO COMPENSATE FOR VERTICAL DEAD LOAD DEFLECTION
 - FLOOR TRUSS: 0.85 X DEFLECTION FROM ACTUAL DEAD LOAD.
 - THE TRUSS LAYOUT SHOWN ON THIS DRAWING REPRESENTS DIRECTION OF TRUSS SPAN ONLY. THE DRAWINGS SHALL NOT BE USED FOR PLACEMENT OF TRUSSES. REFER TO APPROVED TRUSS MFRS. DRAWINGS FOR PLACEMENT, DIMENSIONS, BRACING, AND CONNECTIONS.
 - THE BOTTOM OF ALL DROP BEAMS OVER OPENINGS SHALL EQUAL THE TOP OF THE ROUGH OPENING.
 - REFER TO TYPICAL ROOF UPLIFT LOAD PATH DETAIL FOR REQUIRED STRAPS, ANCHORS, ETC.
 - DRAG TRUSSES SHALL BE PROVIDED DIRECTLY OVER INTERIOR WALLS AND SHALL BE DESIGNED FOR A TOTAL FORCE EQUAL TO THE LENGTH OF THE SHEAR WALL MULTIPLIED BY THE ALLOWABLE SHEAR VALUE PROVIDED IN THE SHEAR WALL SCHEDULE FOR THAT SHEAR TYPE.

- 2X DIMENSIONAL LUMBER FRAMING:**
- FLOOR JOISTS ARE 2X12 @ 16" O.C. UNO.
 - THE BOTTOM OF ALL DROP BEAMS OVER OPENINGS SHALL EQUAL THE TOP OF THE ROUGH OPENING.
 - REFER TO TYPICAL ROOF UPLIFT LOAD PATH DETAIL FOR REQUIRED STRAPS, ANCHORS, ETC.



TYPICAL WOOD SUBFLOOR / ROOF DECK TO CFS JOISTS

FRAMING PLAN - 2ND FLOOR

RENOVATION
Planners
Engineers

Owner: Renovation Wranglers
102 E 26th St
Bryan, TX 77803
kate@renovations.com | 979.450.9969

ARCHITECTURE
Architect of Record: LKB Architecture
2929 Allen Pkwy Suite 200
Houston, TX 77019
isa@lkbarchitecture.com | 713.425.3076

DUDDLEY
Structural: Dudley
4102 Imperial Loop Drive
College Station, TX 77845
(979) 777-0720

amc
ENGINEERS

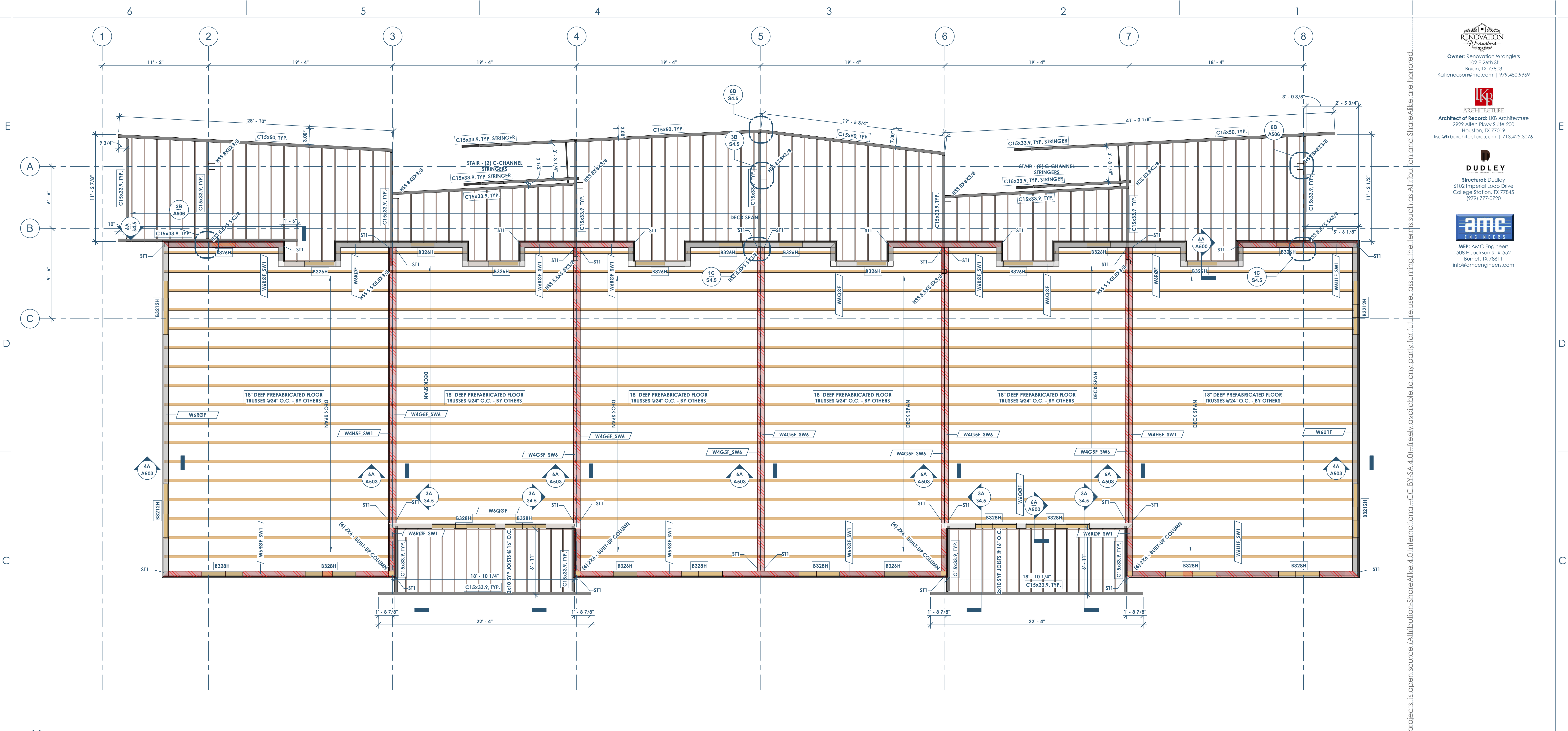
MEP: AMC Engineers
508 E Jackson St # 552
Burnet, TX 78611
info@amcengineers.com

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Architect: OpeningDesign
17 S Fairchild | FL 7
Madison, WI 53703
ryan@openingdesign.com | 773.425.6456

Date	Description
06/02/2022	Review before Permit



6B
50.3 FRAMING PLAN - 3RD FLOOR
1/4" = 1'-0"

SHEAR WALL TYPE	SHEATHING TYPE	PANEL EDGE NAILING	FIELD NAILING	ANCHORAGE	ALLOWABLE WIND SHEAR CAPACITY
SW1	7/16" WSP	6"	12"	(5/8" @ 40" O.C. - AT CONCRETE) - (0.131" X 3" LONG NAILS @ 3" OC - AT WOOD)	335 PLF
SW2	7/16" WSP	4"	12"	(5/8" @ 32" O.C. - AT CONCRETE) - (0.131" X 3" LONG NAILS @ 3" OC - AT WOOD)	490 PLF
SW3	7/16" WSP	3"	12"	(5/8" @ 24" O.C. - AT CONCRETE) - (0.131" X 3" LONG NAILS @ 2" OC - AT WOOD)	630 PLF
SW4	15/32" WSP	3"	12"	(5/8" @ 24" O.C. - AT CONCRETE) - (0.148" X 3" LONG NAILS @ 2" OC - AT WOOD)	840 PLF
SW5	15/32" WSP	2"	12"	(5/8" @ 24" O.C. - AT CONCRETE) - (0.148" X 3" LONG NAILS @ 2" OC - AT WOOD)	991 PLF
SW6	5/8" GYP WALLBOARD	7"	12"	(5/8" @ 48" O.C. - AT CONCRETE) - (0.131" X 3" LONG NAILS @ 12" OC - AT WOOD)	115 PLF
SW7	5/8" GYP WALLBOARD	4"	12"	(5/8" @ 48" O.C. - AT CONCRETE) - (0.131" X 3" LONG NAILS @ 12" OC - AT WOOD)	145 PLF

- SHEAR WALL NOTES:**
- ALL FASTENERS FOR WOOD STRUCTURAL PANEL SHALL BE FLAT HEAD NAILS CONSISTING OF THE FOLLOWING UNO:
 - A. 0.131" X 2 1/2" LONG
 - B. 0.148" X 3" LONG
 - FASTENERS FOR GYPSUM WALLBOARD SHALL BE ONE OF THE FOLLOWING:
 - A. 6d COOLER NAILS (0.092" X 1 7/8" LONG, 1/4" HEAD)
 - B. WALLBOARD NAIL (0.0915" X 1 7/8" LONG, 19/64" HEAD)
 - C. 0.120" NAIL X 1-3/4" LONG, MIN 3/8" HEAD
 - D. NO.6 TYPE S OR W DRYWALL SCREWS 1-1/4" LONG
 - ANCHORS INTO CONCRETE SHALL EITHER BE CAST-IN-PLACE J-BOLTS OR ADHESIVE ANCHORS WITH A MINIMUM EMBEDMENT OF 8". THE CONTRACTOR SHALL SUBMIT PROPOSED ADHESIVE ANCHOR ASSEMBLY FOR APPROVAL.
 - ALL PANEL EDGES SHALL BE BLOCKED.
 - WSP = WOOD STRUCTURAL PANEL. REF GENERAL NOTES FOR SPECIFICATIONS.
 - IF WALL IS SHEATHED ON BOTH SIDES, THEN SILL PLATE ANCHORAGE AND CONNECTION OF BOTTOM PLATE TO TOP PLATE SHALL BE DOUBLED.
 - PANELS MUST BE INSTALLED DIRECTLY TO FRAMING.
 - VALUES CALCULATED ARE FOR SOUTHERN PINE OR DOUGLAS-FIR LARCH FRAMING. CONTACT EOR IF OTHER SPECIES ARE USED.
 - PROVIDE 1/8" WIDE JOINTS IN SHEATHING TO ALLOW FOR SHRINKAGE AND EXPANSION OF THE PANELS.
 - SHEAR WALLS REFERENCED ARE FOR SHEAR WALLS BELOW FLOOR.

TYPE MARK	HOLDOWN HARDWARE	END LENGTH (IN)	FASTENERS	END POST	ALLOWABLE TENSION LOAD (LBF)
ST1	(1) SIMPSON CS18	12"	(11) 0.131 X 2 1/2" NAILS	(2) - 2X	1,370
ST2	(2) SIMPSON CS18	12"	(11) 0.131 X 2 1/2" NAILS	(2) - 2X	2740
ST3	(2) SIMPSON CS14	19"	(18) 0.131 X 2 1/2" NAILS	(3) - 2X	4980

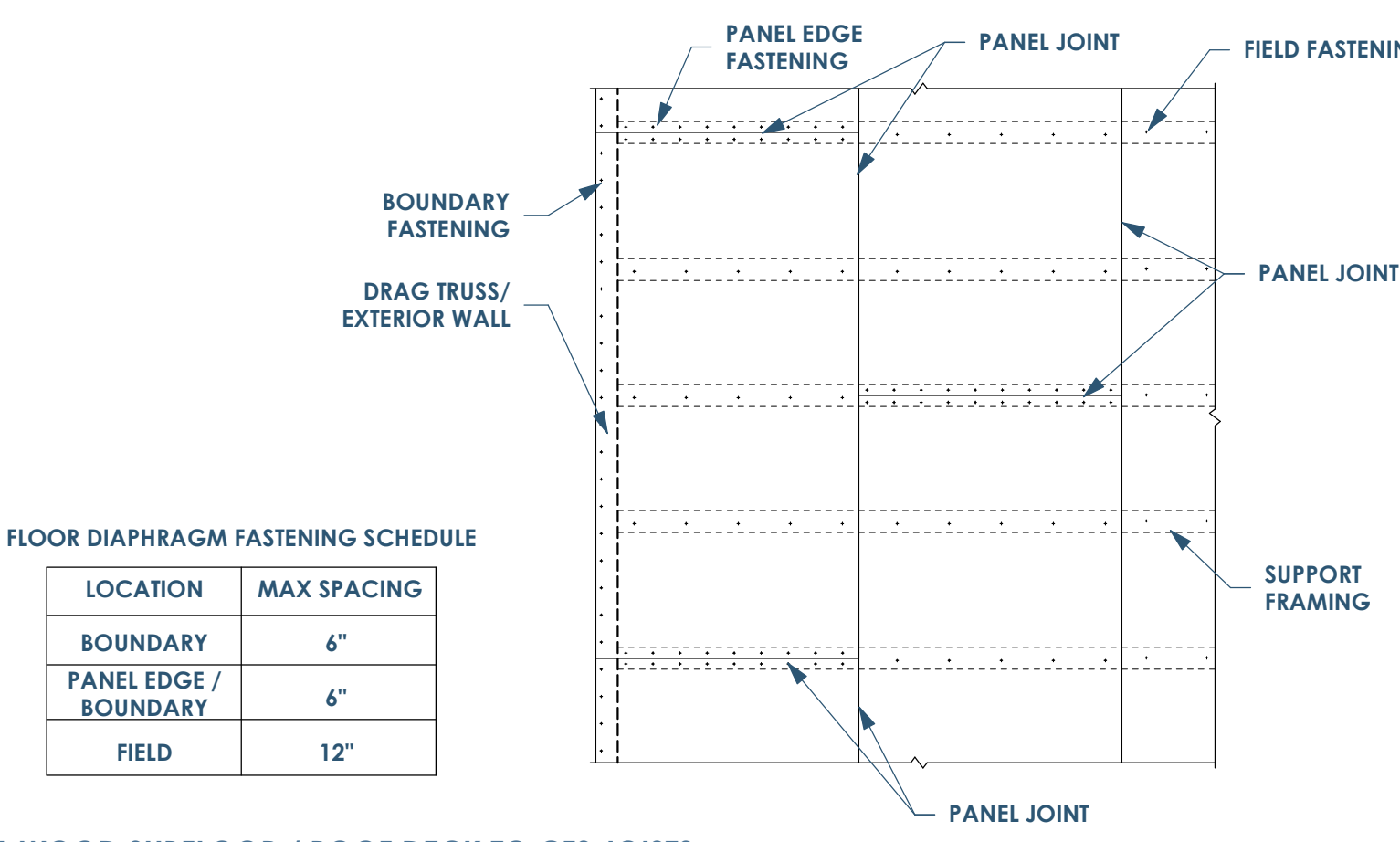
- SHEARWALL & HOLDOWN NOTES:**
- MULTIPLE PILES OF END POSTS SHALL BE FASTENED TOGETHER PER THE MECHANICALLY BUILT-UP COLUMN NAILED DETAIL.
 - REFERENCE DETAIL 6A/54.2 FOR TYPICAL HOLDOWN CONFIGURATIONS.
 - HOLDOWNS REFERENCED ARE FOR SHEAR WALLS ABOVE FLOOR.

BEAM TAG	BEAM SIZE	STUD PACK - NUMBER OF STUDS	FACE-MOUNT HANGER	TOP-FLANGE HANGER
B326H	(3)2X4	2	LUS26-2	HU26-2TF
B328H	(3)-2X8	2	LUS26-3	HUS48TF
B3212H	(3)-2X12	3	HU210-3	HU212-3TF
B411	GL - 3 1/2" X 11 1/4"	3	HHUS410	HB356/11.25

- BEAM LEGEND NOTES:**
- "H" INDICATES MULTIPLE PLY DIMENSIONAL LUMBER BEAMS W/ 1/2" PLYWOOD SHEATHING. SEE 2A/54.0
 - FOR KING AND JACK STUD REQUIREMENTS FOR EXTERIOR HEADERS REFER TO DETAIL 4C/54.1
 - FOR KING AND JACK STUD REQUIREMENTS IN INTERIOR HEADERS REFER TO DETAIL 5B/54.1
 - GL - GULLIAM BEAMS SHALL BE ANTHONY POWER BEAM GLUE LAMINATED BEAMS OR APPROVED EQUAL.
 - STUD PACKS ARE REQUIRED WHEN BEAM IS BEARING ON A WALL ASSEMBLY. STUD PACKS MUST CONTINUE ALL THE WAY TO THE FOUNDATION UNLESS TRANSFERRED BY A BEAM.
 - ALL STUDS IN STUD PACK SHALL BE NO.2 SOUTHERN PINE OR BETTER.
 - SHEATHING AND/OR DRYWALL MUST BE ATTACHED TO EACH INDIVIDUAL STUD IN THE STUD PACK.
 - ALL STUDS IN STUD PACK MUST BE FASTENED PER MECHANICALLY BUILT-UP COLUMN-NAILED - REFER TO 6A/54.1

TOP OF WALL	MAX PLATE HT	EXTERIOR WALL	INTERIOR NON-LOAD BEARING	PARTY WALL
ROOF	8" - 11 5/8"	2X6 NO.2 @ 16" O.C.	2X4 STUD @ 16" O.C.	2X4 STUD @ 16" O.C.
3RD	10" - 8"	2X6 NO.2 @ 16" O.C.	2X4 STUD @ 16" O.C.	2X4 STUD @ 12" O.C.
2ND	10" - 9 5/8"	2X6 NO.2 @ 16" O.C.	2X4 STUD @ 16" O.C.	2X4 STUD @ 8" O.C.

- SUBFLOOR NOTES:**
- THE SUBFLOOR SHALL BE MIN 3/4" APA RATED TONGUE AND GROOVE OSB STRUCTURAL SHEATHING WITH A FLOOR SPAN RATING OF 24.
 - FASTEN TO FRAMING SHALL CONSIST OF #8X2" LONG WOOD SCREWS. ALTERNATIVELY, 0.131X2" NAILS MAY BE USED IF SCREWS ARE ADDED @ 12" O.C. MAX ADDITIONALLY.
 - THE SUBFLOOR SHALL BE GLUED TO THE SUPPORTING FRAMING WITH POLYURETHANE OR SOLVENT-BASED SUBFLOOR ADHESIVES CONFORMING TO APA-AFG-01 OR ASTM D 3498.
 - A. APPLY A 1/4" BEAD OF ADHESIVE TO THE TOP OF SUPPORTING MEMBERS. APPLY TWO BEADS WHERE PANELS JOINTS MEET.
 - B. APPLY ONLY ENOUGH ADHESIVE TO LAY ONE OR TWO PANELS AT A TIME TO KEEP THE ADHESIVE FROM CURING OR SKINNING.
 - C. FLOOR PANELS SHALL BE FULLY FASTENED WITHIN 10 MINUTES OF APPLYING ADHESIVE.
 - D. EXCESS ADHESIVE SHALL BE REMOVED IMMEDIATELY.
 - PANELS SHALL SPAN ACROSS 3 OR MORE SUPPORTING MEMBERS WITH THE LONG DIMENSION PERPENDICULAR TO THE FLOOR FRAMING. STAGGER END JOINT OF PANEL A MINIMUM OF 2"



TYPICAL WOOD SUBFLOOR / ROOF DECK TO CFS JOISTS

- FLOOR PLAN NOTES:**
- METAL PLATE CONNECTED FLOOR TRUSS FRAMING:**
- METAL PLATE CONNECTED FLOOR TRUSS SHALL BE 18" DEEP AND SPACED AT 24" OC MAX UNLESS NOTED OTHERWISE. LOADING CRITERIA SHALL BE AS FOLLOWS:
 - TOP CHORD LIVE LOAD (TCLL): 40 PSF
 - TOP CHORD DEAD LOAD (TCDL): 10 PSF
 - BOTTOM CHORD LIVE LOAD (BCLL): 10 PSF (NON-CONCURRENT WITH TCLL)
 - BOTTOM CHORD DEAD LOAD (BCDL): 5 PSF
 - NON-LOAD BEARING WALL ABOVE: 100 PLF DL
 - LOAD-BEARING WALL ABOVE: SEE PLAN
 - TRUSS DEFLECTION LIMITS: TRUSSES SHALL BE LIMITED TO THE FOLLOWING DEFLECTION LIMITS:
 - RATIO: LIVE LOAD (L/340) TOTAL LOAD (L/240)
 - MAXIMUM: 1/2"
 - CAMBER SHALL BE BUILT INTO FLOOR TRUSSES TO COMPENSATE FOR VERTICAL DEAD LOAD DEFLECTION
 - FLOOR TRUSS: 0.85 X DEFLECTION FROM ACTUAL DEAD LOAD.
 - THE TRUSS LAYOUT SHOWN ON THIS DRAWING REPRESENTS DIRECTION OF TRUSS SPAN ONLY. THE DRAWINGS SHALL NOT BE USED FOR PLACEMENT OF TRUSSES. REFER TO APPROVED TRUSS MFRS. DRAWINGS FOR PLACEMENT, DIMENSIONS, BRACING, AND CONNECTIONS.
 - THE BOTTOM OF ALL DROP BEAMS OVER OPENINGS SHALL EQUAL THE TOP OF THE ROUGH OPENING.
 - REFER TO TYPICAL ROOF UPLIFT LOAD PATH DETAIL FOR REQUIRED STRAPS, ANCHORS, ETC.
 - DRAG TRUSSES SHALL BE PROVIDED DIRECTLY OVER INTERIOR WALLS AND SHALL BE DESIGNED FOR A TOTAL FORCE EQUAL TO THE LENGTH OF THE SHEAR WALL MULTIPLIED BY THE ALLOWABLE SHEAR VALUE PROVIDED IN THE SHEAR WALL SCHEDULE FOR THAT SHEAR TYPE.
- 2X DIMENSIONAL LUMBER FLOOR FRAMING:**
- FLOOR JOISTS ARE 2X12 @ 16" O.C. UNO.
 - THE BOTTOM OF ALL DROP BEAMS OVER OPENINGS SHALL EQUAL THE TOP OF THE ROUGH OPENING.
 - REFER TO TYPICAL ROOF UPLIFT LOAD PATH DETAIL FOR REQUIRED STRAPS, ANCHORS, ETC.

Owner: Renovation Wranglers
102 E 26th St
Bryan, TX 77803
kate@renovationwranglers.com | 979.450.9969

ARCHITECTURE
Architect of Record: LKB Architecture
2929 Allen Pkwy Suite 200
Houston, TX 77019
isa@lkbarchitecture.com | 713.425.3076

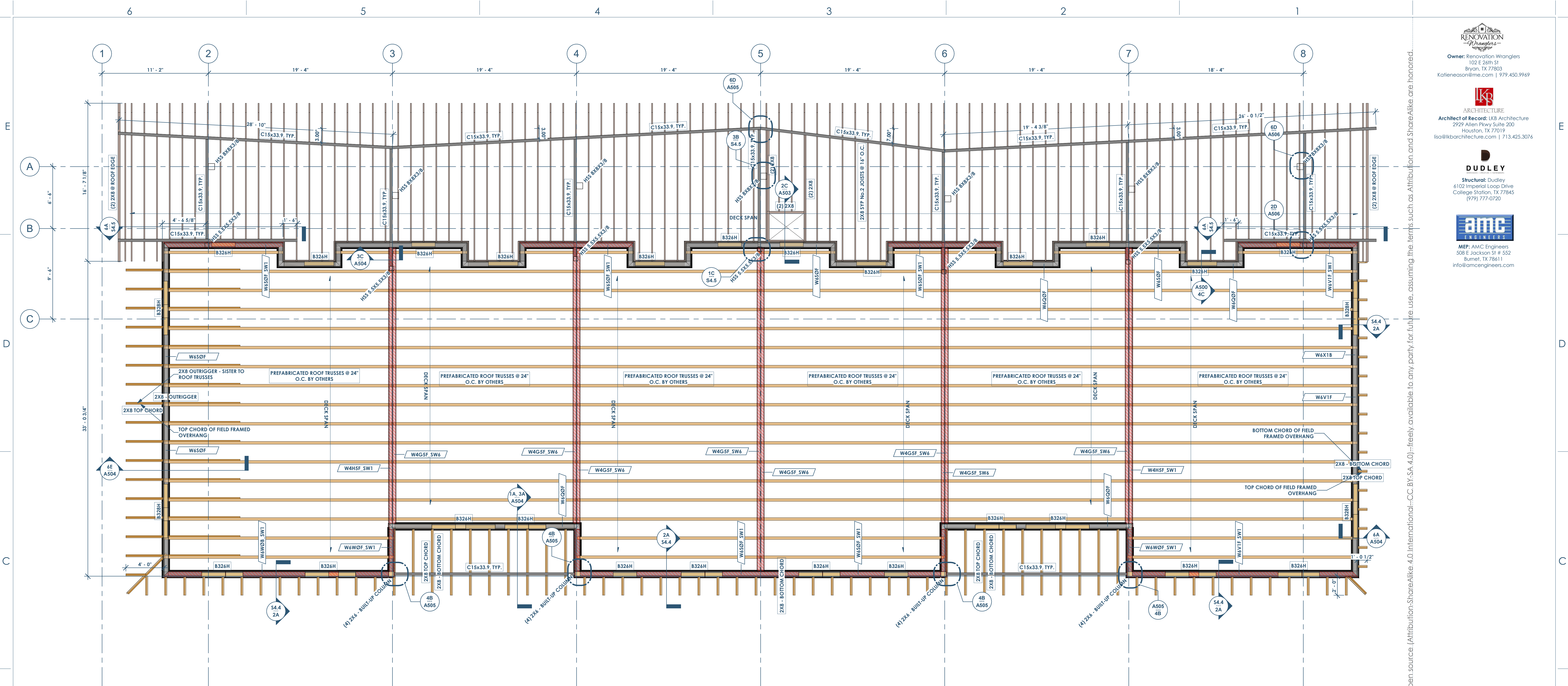
DUDDLEY
STRUCTURAL
4102 Imperial Loop Drive
College Station, TX 77845
(979) 777-0720

amc
ENGINEERS
MEP: AMC Engineers
508 E Jackson St # 552
Burnet, TX 78611
info@amcengineers.com

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openingdesign
Architect: OpeningDesign
17 S Fairchild | FL 7
Madison, WI 53703
ryan@openingdesign.com | 773.425.6456

Date: 06/02/2022 Description: Review before Permit



68
S0.4
FRAMING PLAN - ROOF
1/4" = 1'-0"

SHEAR WALL SCHEDULE					
SHEAR WALL TYPE	SHEATHING TYPE	PANEL EDGE NAILING	FIELD NAILING	ANCHORAGE	ALLOWABLE WIND SHEAR CAPACITY
SW1	7/16" WSP	6"	12"	(5/8" Ø @ 40" O.C. - AT CONCRETE) - (0.131" X 3" LONG NAILS @ 3" OC - AT WOOD)	335 PLF
SW2	7/16" WSP	4"	12"	(5/8" Ø @ 32" O.C. - AT CONCRETE) - (0.131" X 3" LONG NAILS @ 3" OC - AT WOOD)	490 PLF
SW3	7/16" WSP	3"	12"	(5/8" Ø @ 24" O.C. - AT CONCRETE) - (0.131" X 3" LONG NAILS @ 2" OC - AT WOOD)	630 PLF
SW4	1 5/32" WSP	3"	12"	(5/8" Ø @ 24" O.C. - AT CONCRETE) - (0.148" X 3" LONG NAILS @ 2" OC - AT WOOD)	840 PLF
SW5	1 5/32" WSP	2"	12"	(5/8" Ø @ 24" O.C. - AT CONCRETE) - (0.148" X 3" LONG NAILS @ 2" OC - AT WOOD)	991 PLF
SW6	5/8" GYP WALLBOARD	7"	12"	(5/8" Ø @ 48" O.C. - AT CONCRETE) - (0.131" X 3" LONG NAILS @ 12" OC - AT WOOD)	115 PLF
SW7	5/8" GYP WALLBOARD	4"	12"	(5/8" Ø @ 48" O.C. - AT CONCRETE) - (0.131" X 3" LONG NAILS @ 12" OC - AT WOOD)	145 PLF

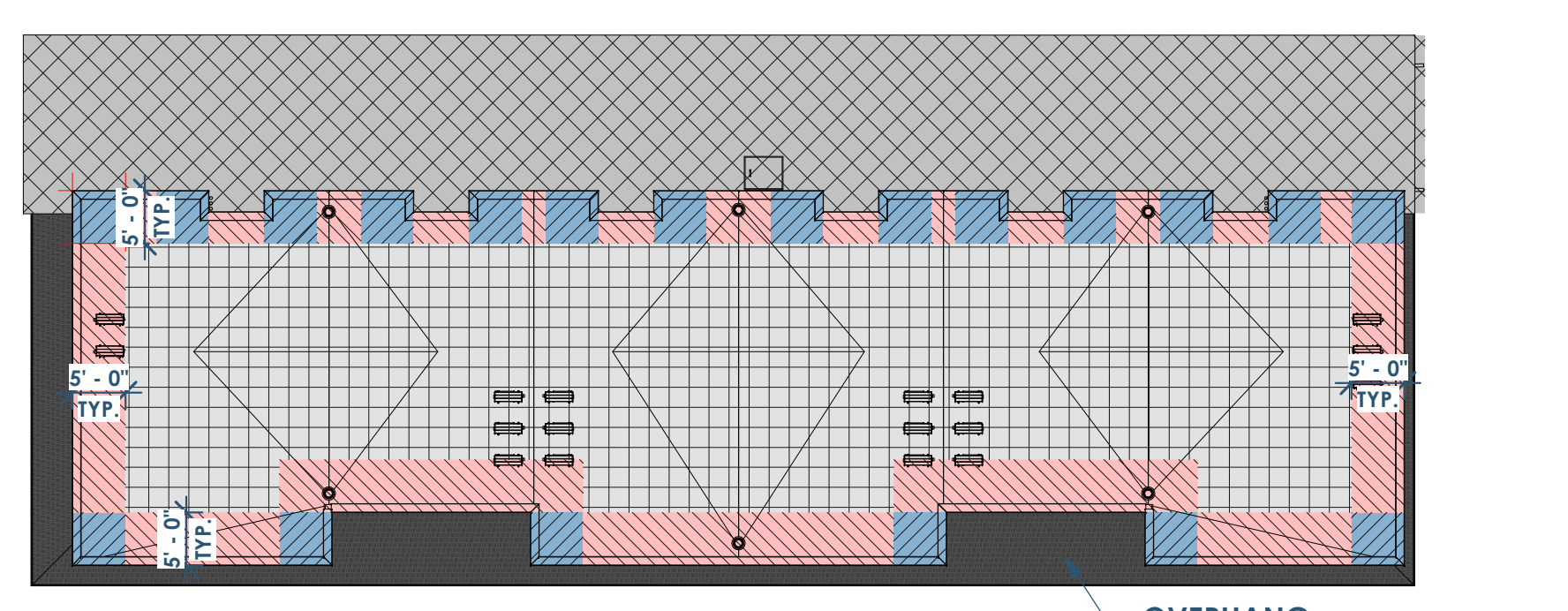
- SHEAR WALL NOTES:**
- ALL FASTENERS FOR WOOD STRUCTURAL PANEL SHALL BE FLAT HEAD NAILS CONSISTING OF THE FOLLOWING UNO:
 - 0.131" Ø X 3" LONG
 - 0.148" Ø X 3" LONG
 - FASTENERS FOR GYPSUM WALLBOARD SHALL BE ONE OF THE FOLLOWING:
 - 6d COOLER NAILS (0.092" X 1 7/8" LONG, 1/4" HEAD)
 - WALLBOARD NAIL (0.0915" X 1 7/8" LONG, 19/64" HEAD)
 - 130" NAIL X 1-3/4" LONG, MIN 3/8" HEAD
 - NO. 6 TYPE S OR W DRYWALL SCREWS 1-1/4" LONG
 - ANCHORS INTO CONCRETE SHALL EITHER BE CAST-IN-PLACE J-BOLTS OR ADHESIVE ANCHORS WITH A MINIMUM EMBEDMENT OF 8". THE CONTRACTOR SHALL SUBMIT PROPOSED ADHESIVE ANCHOR ASSEMBLY FOR APPROVAL.
 - ALL PANEL EDGES SHALL BE BLOCKED.
 - WSP = WOOD STRUCTURAL PANEL. REF GENERAL NOTES FOR SPECIFICATIONS.
 - IF WALL IS SHEATHED ON BOTH SIDES, THEN SILL PLATE ANCHORAGE AND CONNECTION OF BOTTOM PLATE TO TOP PLATE SHALL BE DOUBLED.
 - PANELS MUST BE INSTALLED DIRECTLY TO FRAMING.
 - VALUES CALCULATED ARE FOR SOUTHERN PINE OR DOUGLAS-FIR LARCH FRAMING. CONTACT EOR IF OTHER SPECIES ARE USED.
 - PROVIDE 1/8" WIDE JOINTS IN SHEATHING TO ALLOW FOR SHRINKAGE AND EXPANSION OF THE PANELS.
 - SHEAR WALLS REFERENCED ARE FOR SHEAR WALLS BELOW FLOOR.

- ROOF FRAMING NOTES:**
- METAL PLATE CONNECTED ROOF TRUSS FRAMING:**
- METAL PLATE CONNECTED WOOD TRUSSES SHALL BE SPACED @ 24" OC UNLESS NOTED OTHERWISE. LOADING CRITERIA SHALL BE AS FOLLOWS:
 - TOP CHORD LIVE LOAD (TCLL): 20 PSF
 - REF MECHANICAL DRAWINGS FOR RTUS.
 - TOP CHORD DEAD LOAD (TCDL): 5 PSF - SINGLE-PLY MEMBRANE ROOF (NOT INCLUDING SELF-WEIGHT)
 - BOTTOM CHORD LIVE LOAD (BCLL): 10 PSF (NON-CONCURRENT WITH TCLL)
 - BOTTOM CHORD DEAD LOAD (BCDL): 5 PSF
 - TOP CHORD WIND LOAD. REF COMPONENTS AND CLADDING SCHEDULE
 - TRUSS DEFLECTION LIMITS: TRUSSES SHALL BE LIMITED TO THE FOLLOWING DEFLECTION LIMITS:
 - PITCHED ROOF TRUSS: LIVE LOAD (L/240) TOTAL LOAD (L/180)
 - SHALLOW (< 4:12) PITCHED ROOF TRUSS: LIVE LOAD (L/240) TOTAL LOAD (L/240)
 - PITCHED ROOF TRUSS: 1.00 X DEFLECTION FROM ACTUAL DEAD LOAD.
 - DRAG TRUSSES SHALL BE PROVIDED DIRECTLY OVER INTERIOR SHEAR WALLS AND SHALL BE DESIGNED FOR A TOTAL FORCE EQUAL TO THE LENGTH OF THE SHEAR WALL MULTIPLIED BY THE ALLOWABLE SHEAR VALUE PROVIDED IN THE SHEAR WALL SCHEDULE FOR THAT SHEAR WALL TYPE.
 - TRUSS RESTRAINT/BRACING METHODS SHALL BE IN ACCORDANCE WITH BC31-B3 UNLESS NOTED OTHERWISE.

- ROOF DECKING NOTES:**
- ROOF DECKING SHALL BE 3/4" APA RATED SHEATHING (SPAN RATING 48/24).
 - PANELS SHALL SPAN 3 MORE RAFTERS IN THE .ONG DIMENSION.
 - PANEL CLIPS:
 - SINGLE-PLY OR MODIFIED BITUMEN ROOFING SYSTEMS:
 - LOW SLOPE ROOF (LESS THAN OR EQUAL TO 2:12)
 - DECKING SHALL HAVE PANEL EDGE CLIPS (H-CLIPS) LOCATED MIDWAY BETWEEN EACH SUPPORT.
 - SLOPE GREATER THAN 2:12
 - DECKING SHALL HAVE PANEL EDGE CLIPS (H-CLIPS) LOCATED MIDWAY BETWEEN EACH SUPPORT FOR ANY SPAN GREATER THAN 12.2' O.C.
 - ANY OTHER TYPE OF ROOFING SYSTEM
 - DECKING SHALL HAVE PANEL EDGE CLIPS (H-CLIPS) LOCATED MIDWAY BETWEEN EACH SUPPORT.

ROOF DECKING FASTENING		
ZONE	PANE EDGE / BOUNDARY	FIELD
ZONE 1	@ 4" O.C. MAX	@ 12" O.C. MAX
ZONE 2	@ 6" O.C. MAX	@ 6" O.C. MAX
ZONE 3	@ 4" O.C. MAX	@ 6" O.C. MAX
ZONE 3 OVERHANG	@ 3" O.C. MAX	@ 6" O.C. MAX

- ROOF DECKING FASTENING NOTES:**
- ALL NAILS SHALL BE 0.131" Ø X 2 1/2"; RING SHANK NAILS
 - REFERENCE THE COMPONENTS AND CLADDING WIND PRESSURE MAP ON THE
 - GENERAL NOTES FOR ZONE LOCATIONS.
 - EDGE SPACING ALSO APPLIES OVER THE TOP OF SHEARWALLS.



6A
S0.4
FLOOR PLAN - ROOF WIND ZONE
1/16" = 1'-0"

BEAM SCHEDULE				
BEAM TAG	BEAM SIZE	STUD PACK - NUMBER OF STUDS	FACE-MOUNT HANGER	TOP-FLANGE HANGER
B326H	(3)2X6	2	LU26-2	HU26-2TF
B328H	(3)-2X8	2	LU26-3	HU548TF
B3212H	(3)-2X12	3	HU210-3	HU212-3TF
B411	GL - 3 1/2" X 11 1/4"	3	HU5410	HB3.56/11.25

- BEAM LEGEND NOTES:**
- 'H' INDICATES MULTIPLE PLY DIMENSIONAL LUMBER BEAMS W/ 1/2" PLYWOOD SHEATHING. SEE 2A/S4.0
 - FOR KING AND JACK STUD REQUIREMENTS FOR EXTERIOR HEADERS REFER TO DETAIL 4C/S4.1
 - FOR KING AND JACK STUD REQUIREMENTS IN INTERIOR HEADERS REFER TO DETAIL 5B/S4.1
 - GL - GULIAM BEAMS SHALL BE ANTHONY POWER BEAM GLUE LAMINATED BEAMS OR APPROVED EQUAL
 - STUD PACKS ARE REQUIRED WHEN BEAM IS BEARING ON A WALL ASSEMBLY. STUD PACKS MUST CONTINUE ALL THE WAY TO THE FOUNDATION UNLESS TRANSFERRED BY A BEAM.
 - ALL STUDS IN STUD PACK SHALL BE NO.2 SOUTHERN PINE OR BETTER.
 - SHEATHING AND/OR DRYWALL MUST BE ATTACHED TO EACH INDIVIDUAL STUD IN THE STUD PACK.
 - ALL STUDS IN STUD PACK MUST BE FASTENED PER MECHANICALLY LAMINATED BUILT-UP COLUMN-NAILED - REFER TO 6A/S4.1

WALL STUD SCHEDULE				
TOP OF WALL	MAX PLATE HT	EXTERIOR WALL	INTERIOR NON-LOAD BEARING	PARTY WALL
ROOF	8' - 11 5/8"	2X6 NO.2 @ 16" O.C.	2X4 STUD @ 16" O.C.	2X4 STUD @ 16" O.C.
3RD	10' - 8"	2X6 NO.2 @ 16" O.C.	2X4 STUD @ 16" O.C.	2X4 STUD @ 12" O.C.
2ND	10' - 9 5/8"	2X6 NO.2 @ 16" O.C.	2X4 STUD @ 16" O.C.	2X4 STUD @ 8" O.C.

RENOVATION
Owner: Renovation Wranglers
102 E 26th St
Bryan, TX 77803
kate@renovations.com | 979.450.9969

ARCHITECTURE
Architect of Record: LKB Architecture
2929 Allen Pkwy Suite 200
Houston, TX 77019
isa@lkbarchitecture.com | 713.425.3076

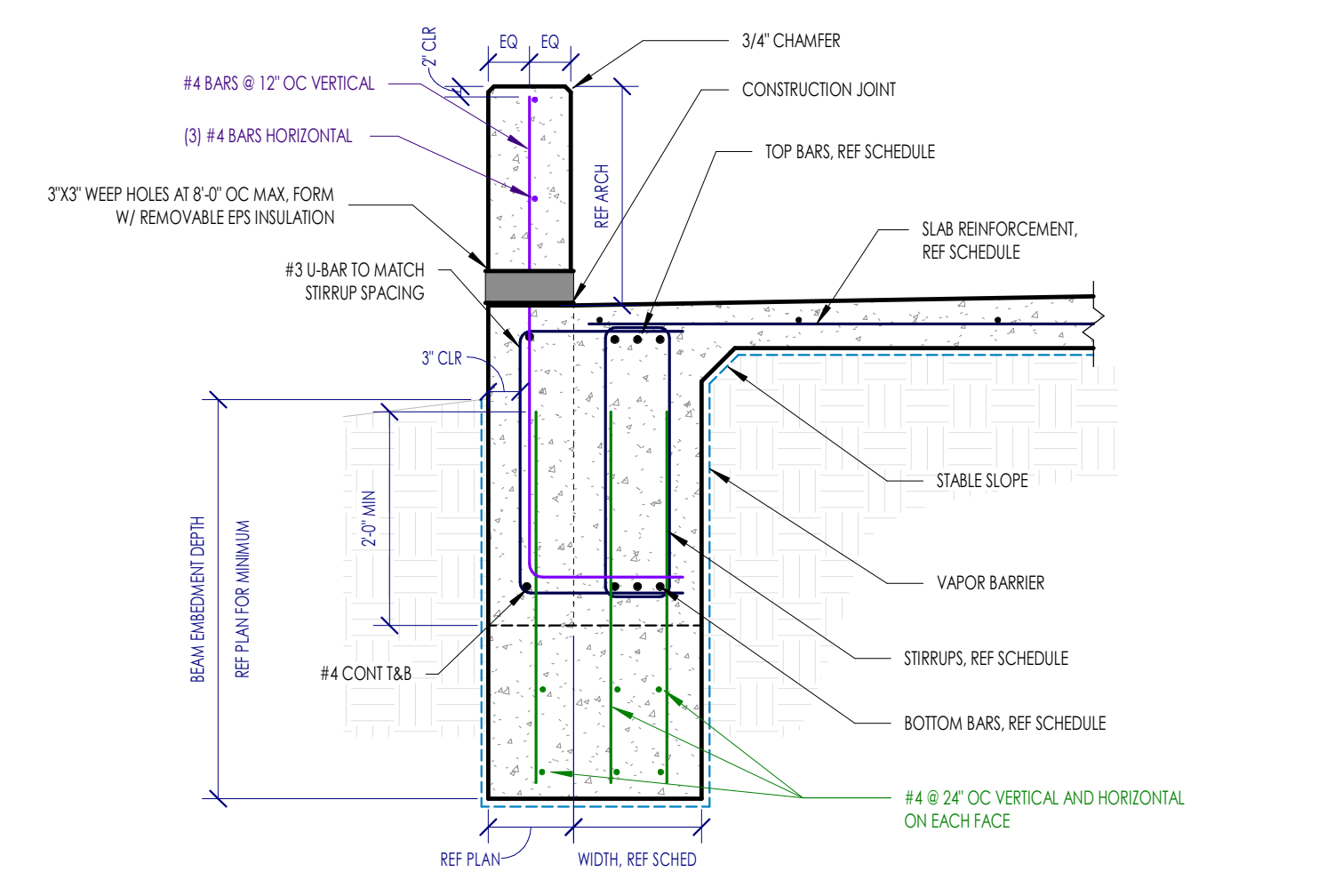
DUDDLEY
Structural: Dudley
4102 Imperial Loop Drive
College Station, TX 77845
(979) 777-0720

amc
MEP: AMC Engineers
508 E Jackson St # 552
Burnet, TX 78611
info@amcengineers.com

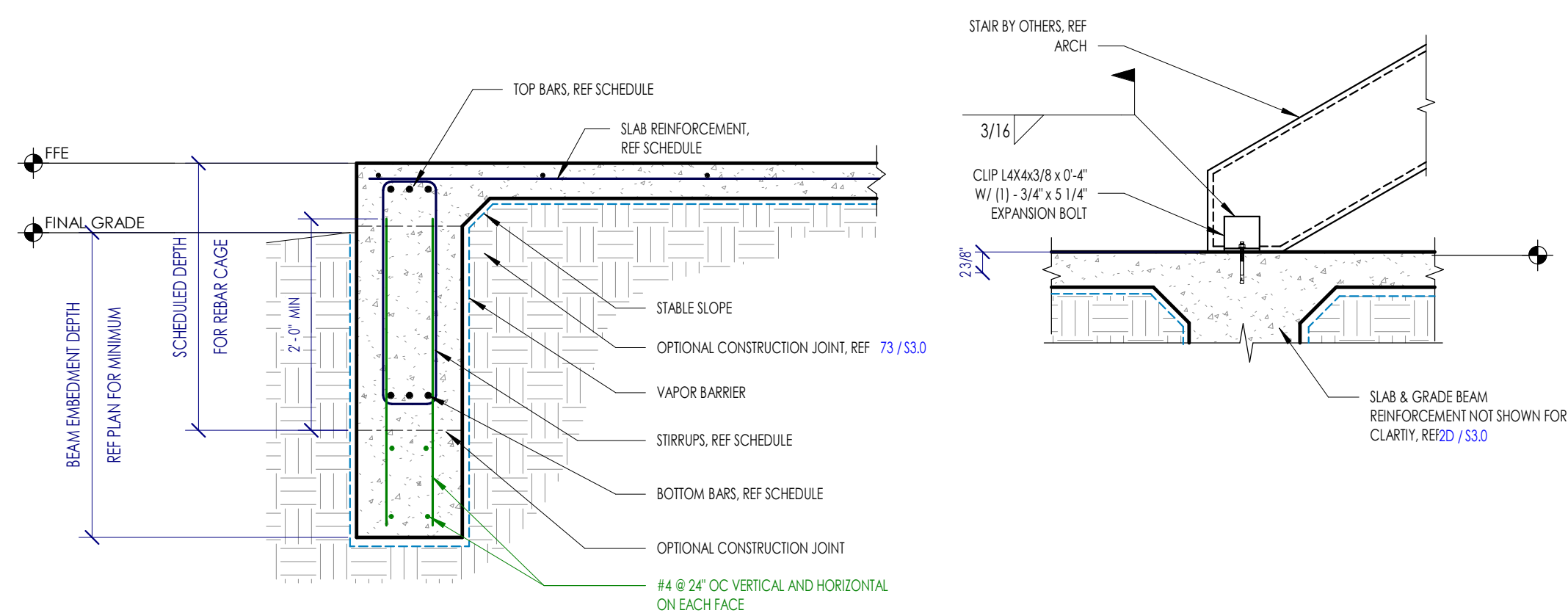
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Architect: OpeningDesign
17 S Fairchild | FL 7
Madison, WI 53703
ryan@openingdesign.com | 773.425.6456

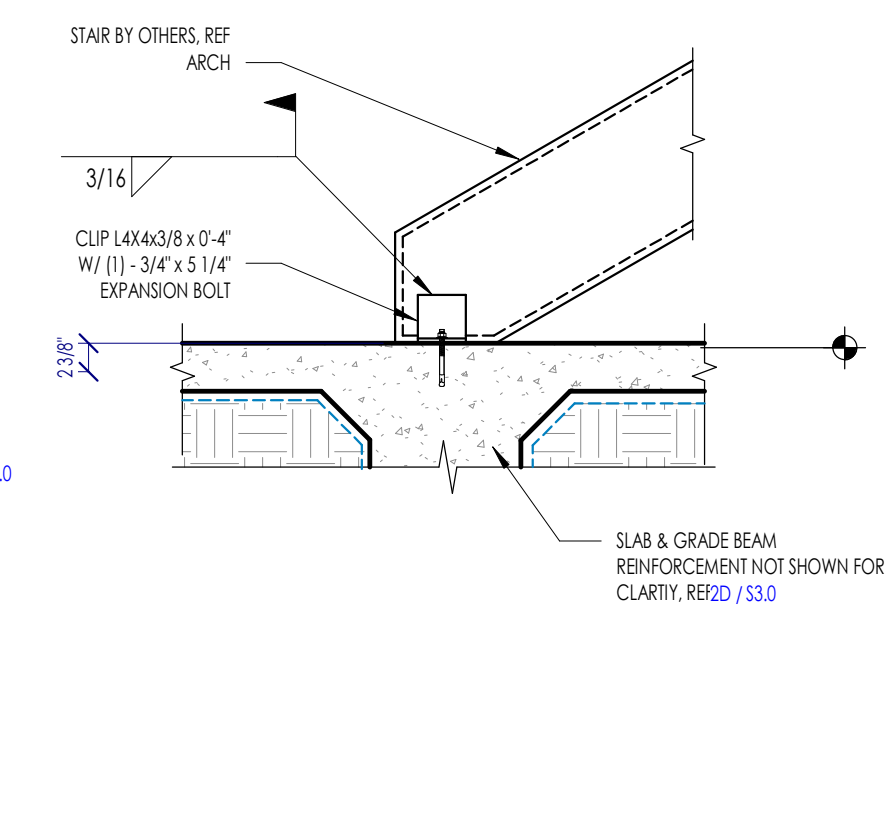
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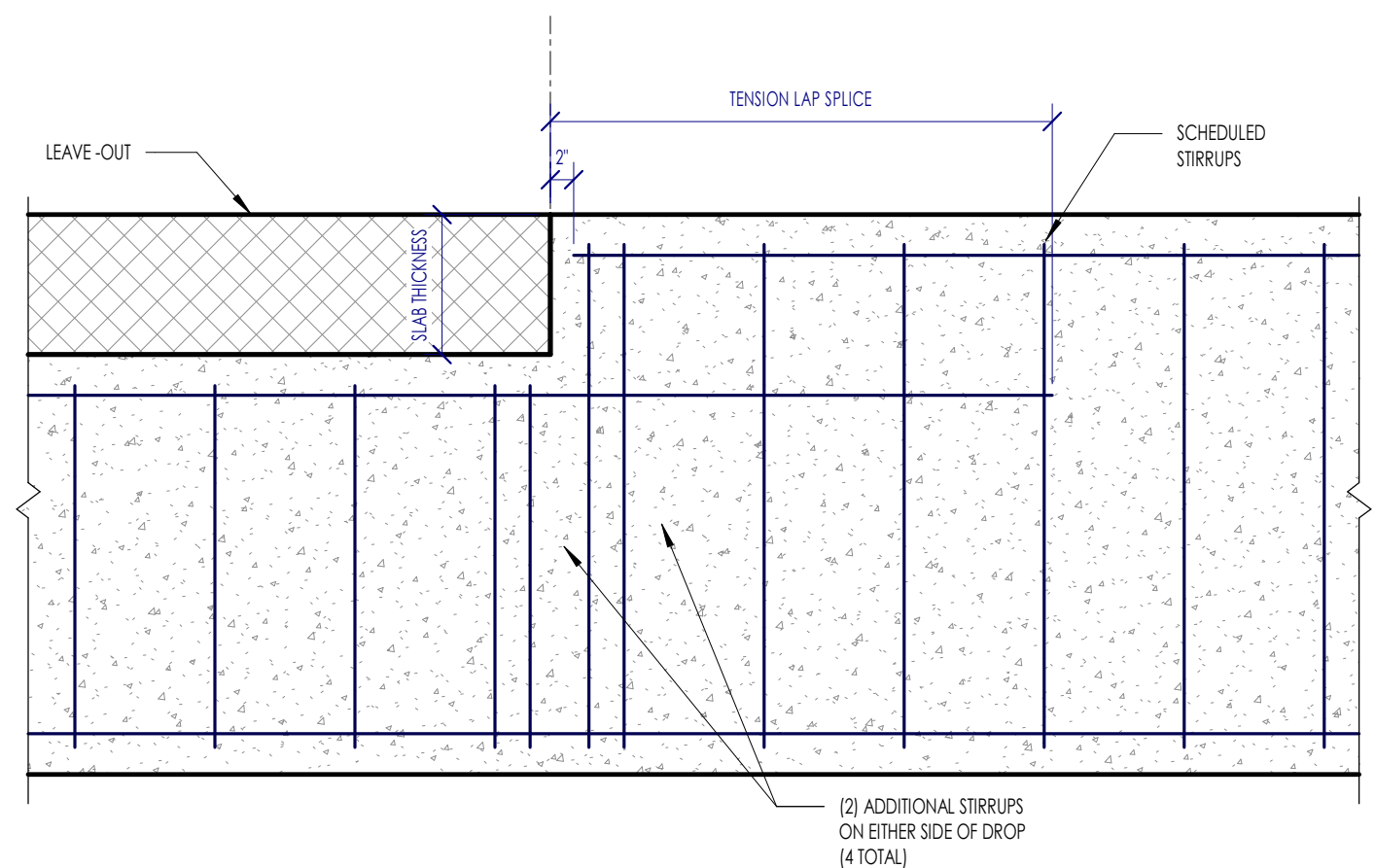
1D S3.1 TYPICAL EXTERIOR WIDENED GRADE BEAM AT CURB - VERTICAL MOISTURE BARRIER



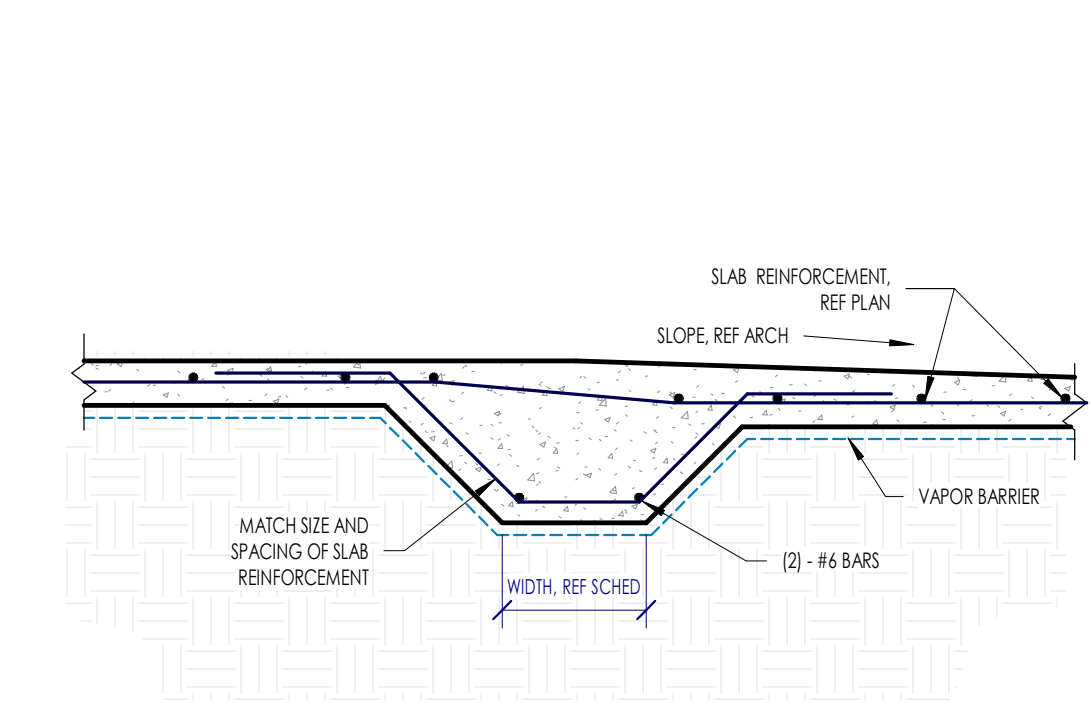
6C S3.1 TYPICAL EXTERIOR GRADE BEAM - VERTICAL MOISTURE BARRIER



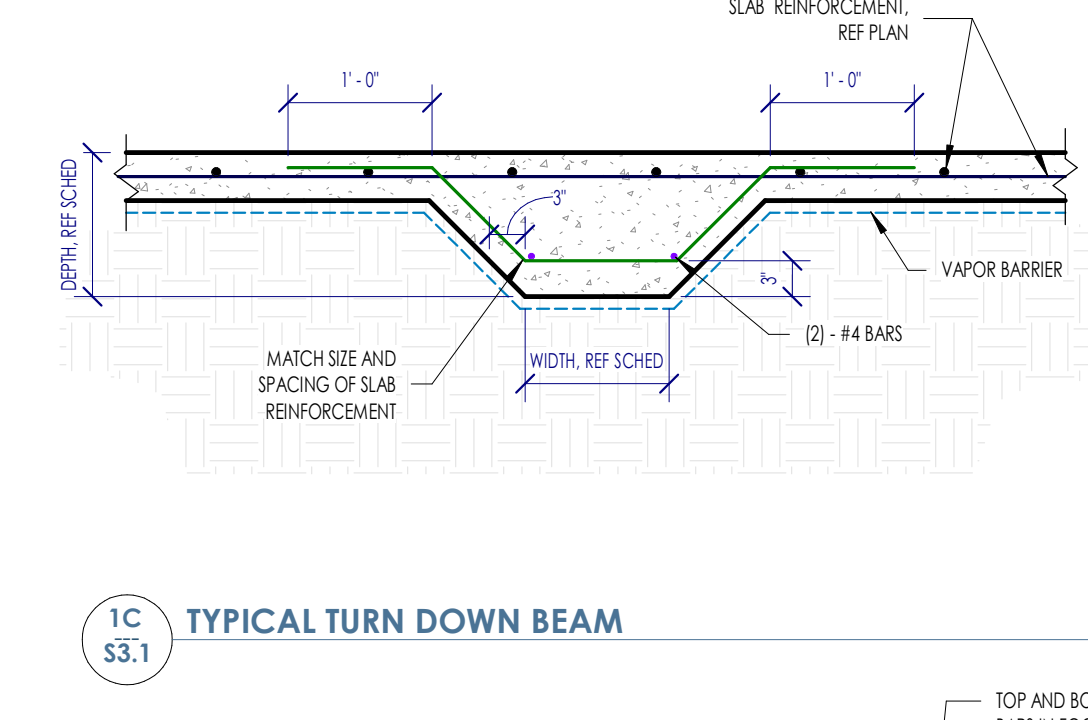
5C S3.1 TYPICAL GRADE BEAM AT STEEL STAIRS



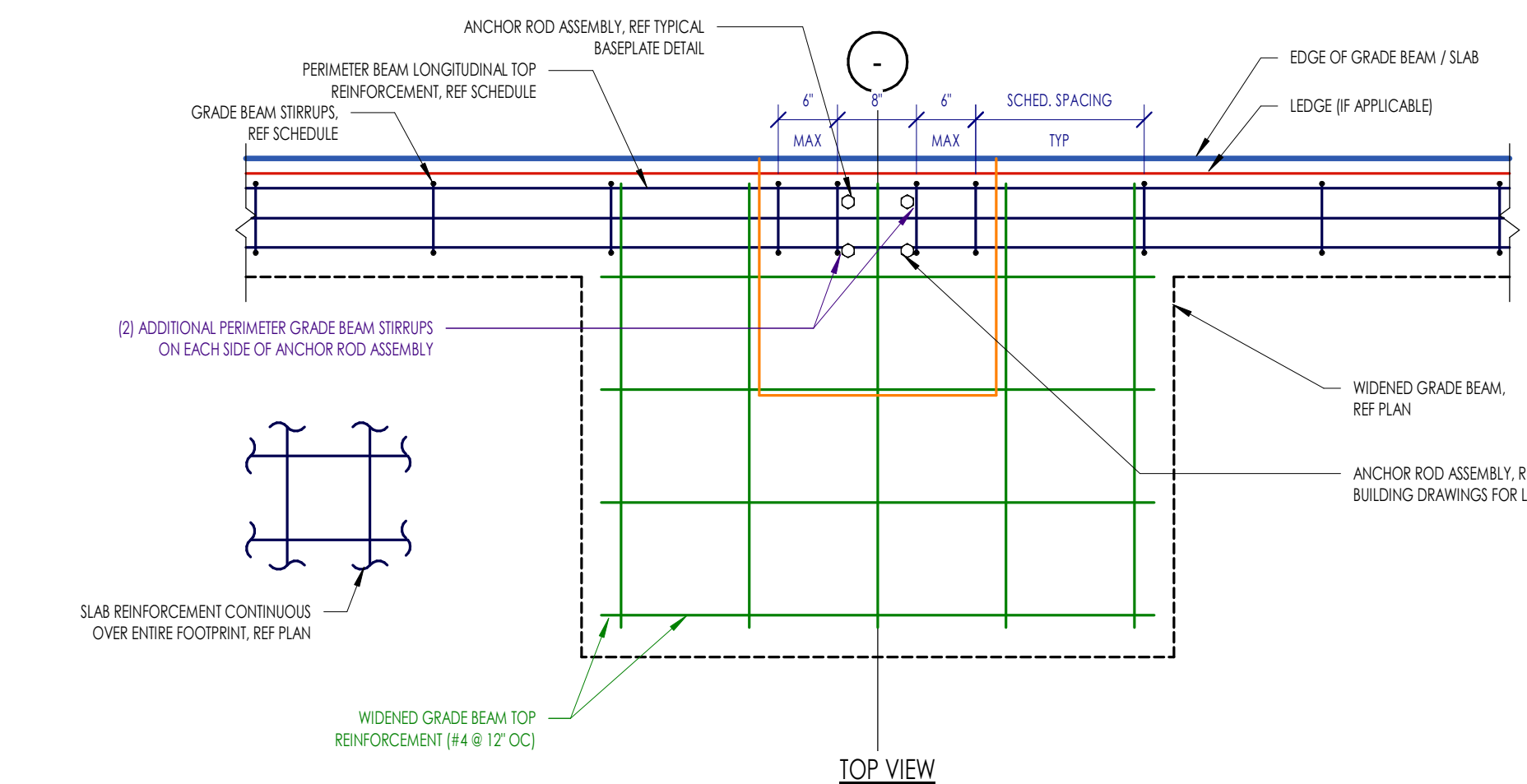
4C S3.1 TYPICAL DROP TRANSITION IN GRADE BEAM TOP REINFORCEMENT AT SLAB LEAVE-OUT



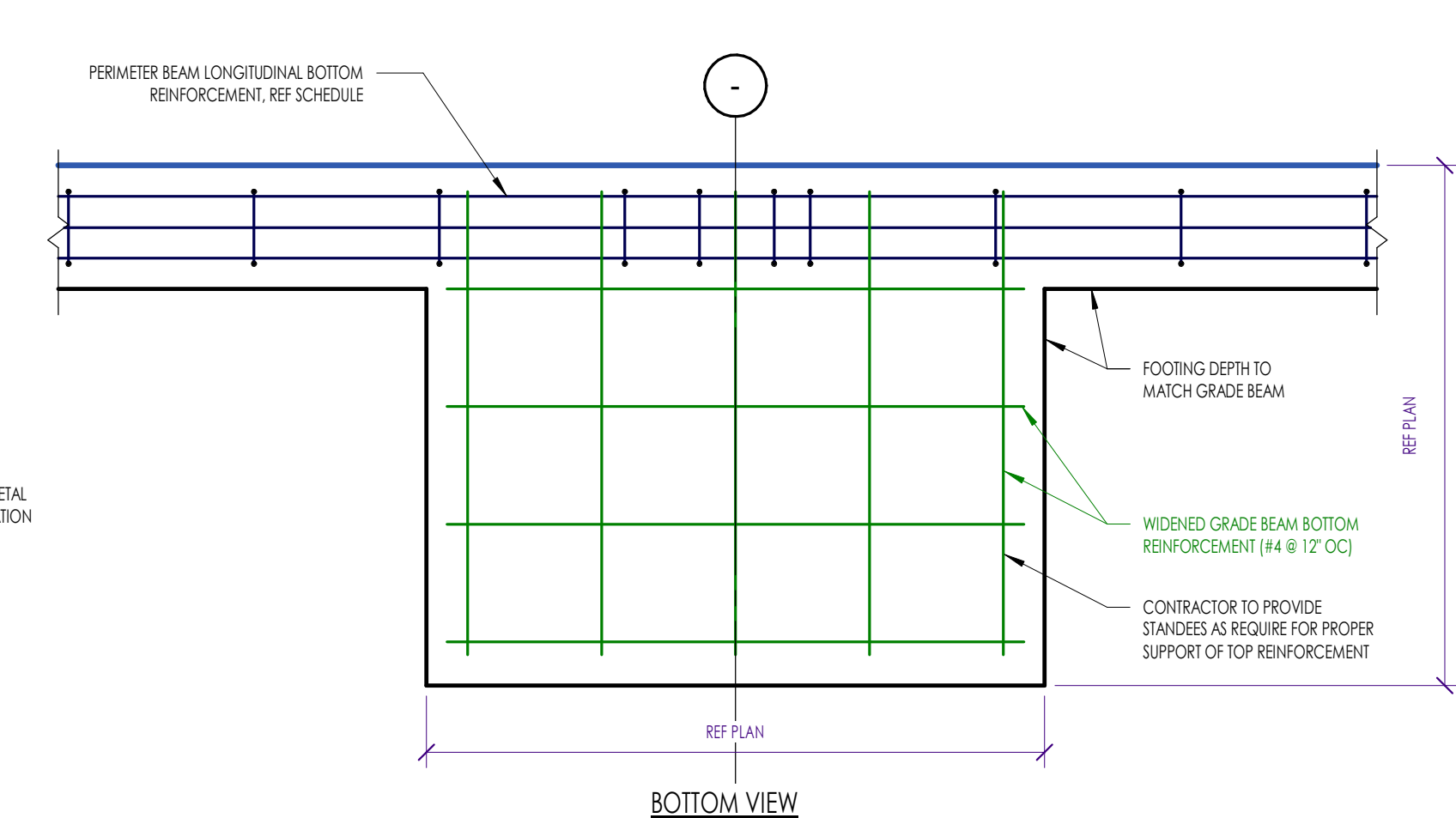
2C S3.1 CSOG - TURN DOWN AT SLAB DROP



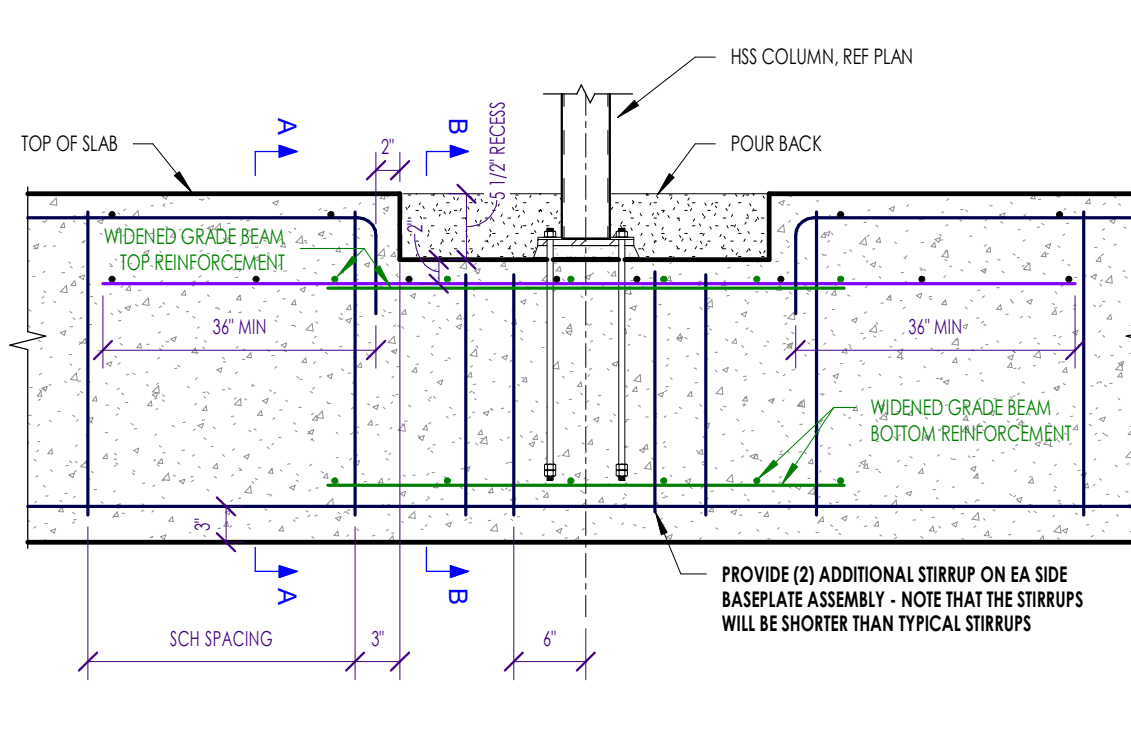
1C S3.1 TYPICAL TURN DOWN BEAM



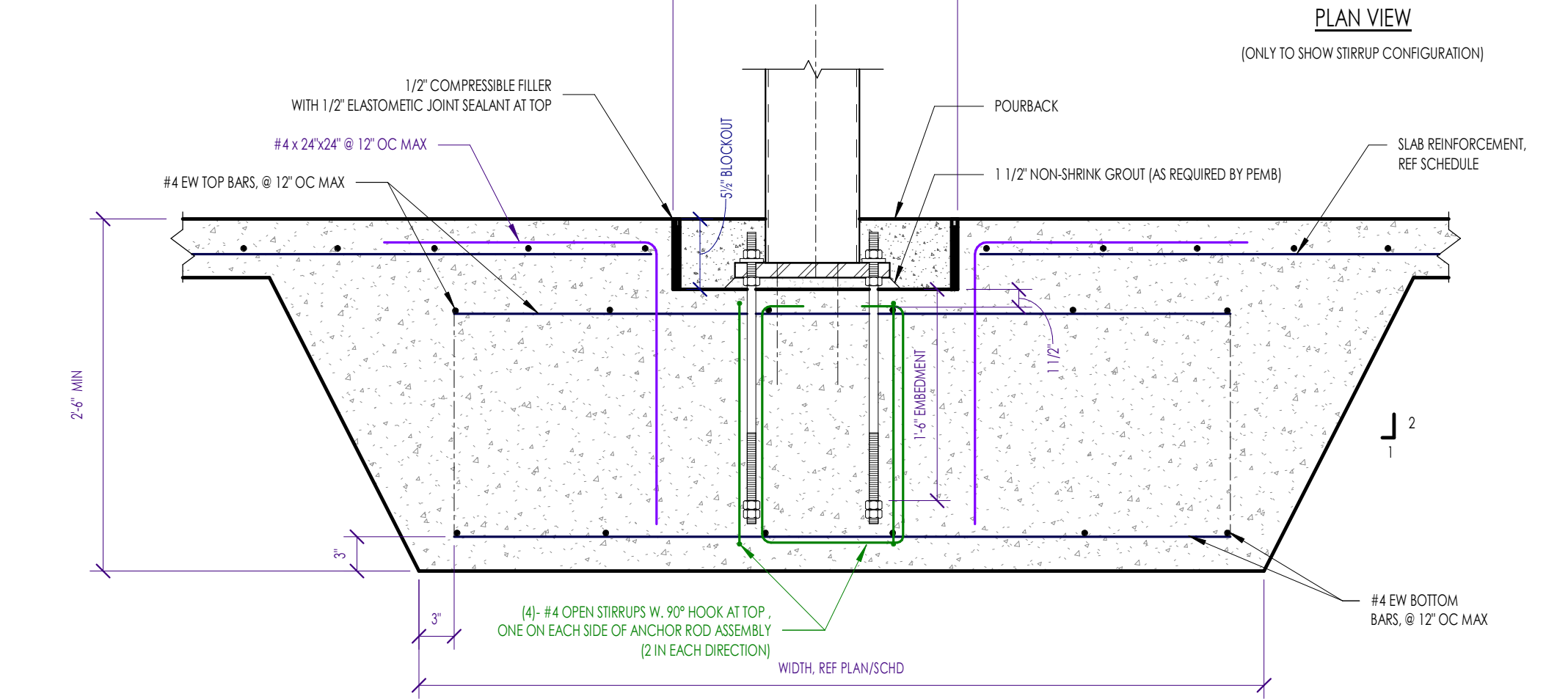
6B S3.1 TYPICAL WIDENED FOOTING AT COLUMN - EMBEDDED BASE PLATE



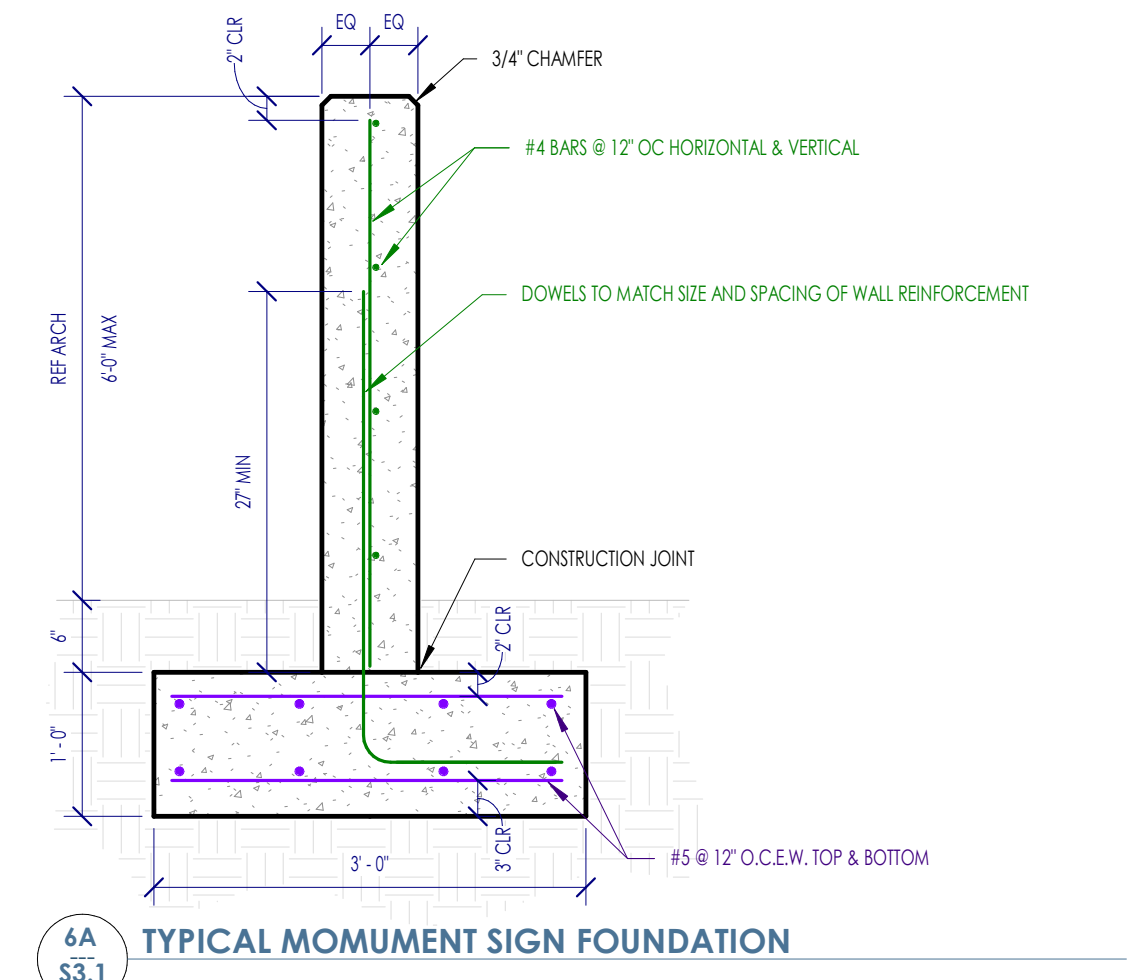
5C S3.1 TYPICAL GRADE BEAM AT STEEL STAIRS



3A S3.1 TYPICAL ANCHOR ROD



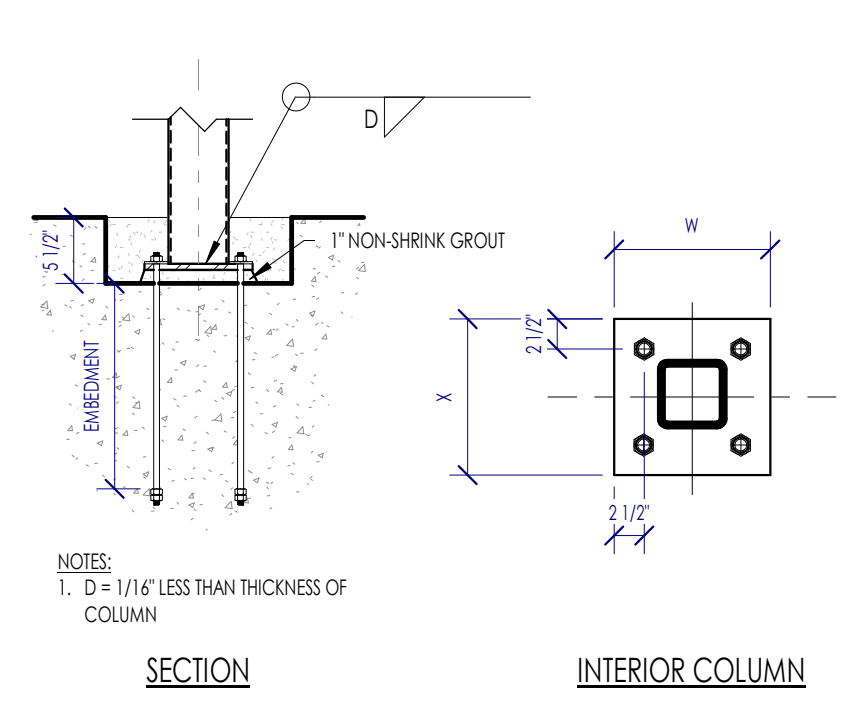
2B S3.1 TYPICAL SPREAD FOOTING AT INTERIOR COLUMN



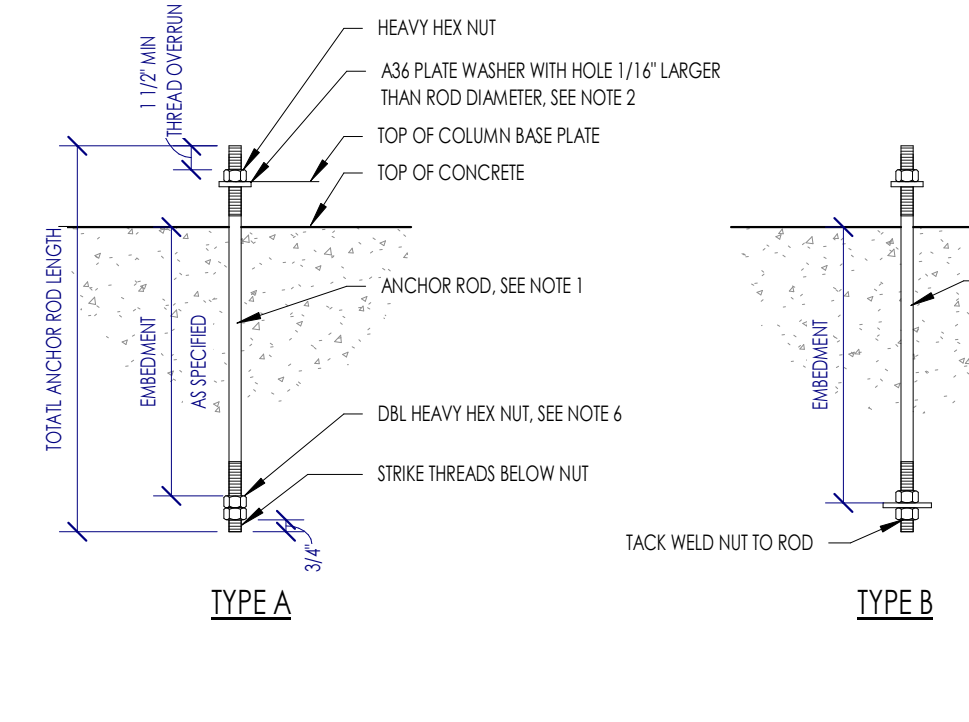
4A S3.1 TYPICAL MOMENT SIGN FOUNDATION

COLUMN	BASE PLATE DIMENSIONS				CONDITION	ANCHOR BOLTS		
	X	W	T	F		NO./TYPE	DIA.	EMBEDMENT
HSS3x3.5	13"	13"	1"	1"	INTERIOR	4/A	1"	1'-0"
HSS3x3	14"	14"	1"	1"	INTERIOR	4/A	1"	1'-0"

5A S3.1 TYPICAL BASEPLATE DETAIL



3A S3.1 TYPICAL ANCHOR ROD



3A S3.1 TYPICAL ANCHOR ROD

ANCHOR ROD DIAMETER	HOLE DIAMETER	SQUARE PLATE WASHER SIZE	PLATE WASHER THICKNESS	TYPE B ANCHOR PLATE
5/8"	1.31/4"	1 1/2"	1/4"	PL17X10-4
3/4"	1.51/4"	2"	1/4"	PL17X10-4
7/8"	1.91/4"	2 1/2"	5/16"	PL17X10-4
1"	1.13/16"	3"	3/8"	PL11X10-5
1 1/2"	2.51/4"	3 1/2"	1/2"	PL11X10-5

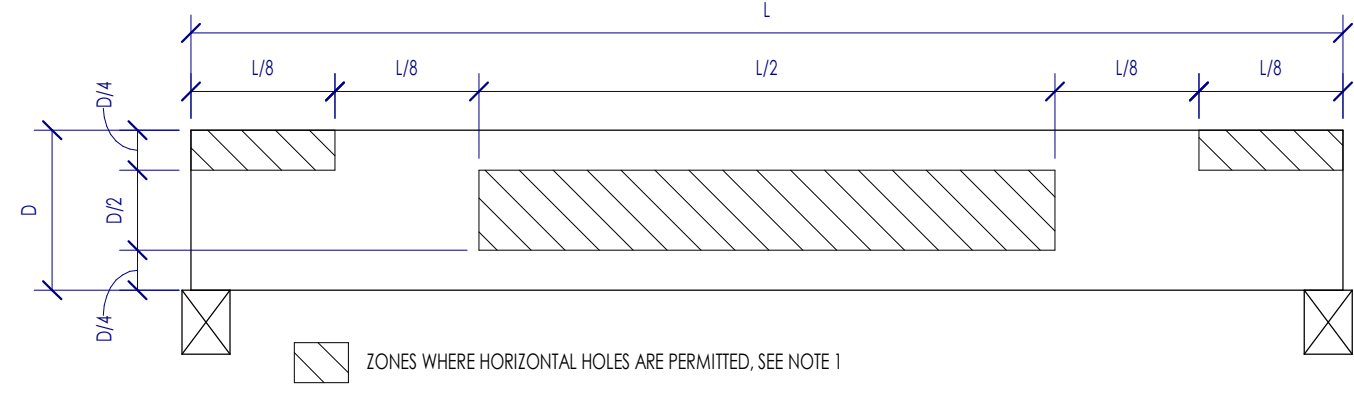
- NOTES:
- ALL TYPE A ANCHOR RODS SHALL BE F1554 GRADE 36.
 - ALL TYPE B ANCHOR RODS SHALL BE F1554 GRADE 55.11.
 - PLATE WASHERS MUST BE WELDED TO THE BASE PLATE WITH MINIMUM 3/16" FLLET WELD ALL-AROUND.
 - EMBEDMENT DEPTH IS PRELIMINARY. FINAL EMBEDMENT TO BE PROVIDED AFTER REVIEW OF METAL BUILDING REACTIONS.
 - ALL ANCHOR ROD HOLES SHALL ADHERE TO AISC DESIGN GUIDE 01 - TABLE 2.3.
 - THE DOUBLE NUT MAY BE OMITTED IF THE NUT IS TACK WELDED TO THE ROD.

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TYPICAL FASTENING SCHEDULE			
CONNECTION ID	CONNECTION TYPE	FASTENING	FASTENING ORIENTATION
1	JOIST TO BIL OR GIRDER	(1) - 0.131"Ø X 3"	TOENAIL
2	SOLE PLATE TO JOIST OR BLOCKING	0.148"Ø X 3"X NAILS @ 12" OC NAILS	FACE NAIL
3	TOP PLATE TO STUD	(3) - 0.131"Ø X 3" NAILS	END NAIL
4	STUD TO SOLE PLATE - OPTION 1	(2) - 1/4" COMMON (2) - 0.131"Ø X 3" NAILS	END NAIL
5	STUD TO SOLE PLATE - OPTION 2	(4) 0.131"Ø X 3" NAILS	TOENAIL
6	DOUBLE/MULTIPLE STUDS	REFERENCE DETAIL 3A/S4.0	FACE NAIL
7	DOUBLE TOP PLATES	0.131"Ø X 3" NAILS @ 12" OC	FACE NAIL
8	DOUBLE TOP PLATE SPICE	REFERENCE DETAIL 3A/S4.0	FACE NAIL
9	BLOCKING BETWEEN JOISTS/RAFTERS TO TOP PLATE	(3) - 0.131"Ø X 3" NAILS	TOENAIL
10	BIM JOIST TO TOP PLATE	0.131"Ø X 3" NAILS @ 6" OC	TOENAIL
11	CEILING JOIST TO TOP PLATE	(3) - 0.131"Ø X 3" NAILS	TOENAIL
12	CEILING JOIST LAP OVER PARTITION	(4) - 0.131"Ø X 3" NAILS	FACE NAIL
13	CEILING JOIST TO PARALLEL RAFTERS	(4) - 0.131"Ø X 3" NAILS	FACE NAIL
14	RAFTER TO TOP PLATE	(3) - 0.131"Ø X 3" NAILS	TOENAIL
15	BUILT-UP CORNER STUDS	0.131"Ø X 3" NAILS @ 14" OC	FACE NAIL
16	BUILT-UP BEAMS	REFERENCE DETAIL 2A/S4.0	FACE NAIL
17	COLLAR TIE TO RAFTER	(4) - 0.131"Ø X 3" NAILS	FACE NAIL
18	JACK RAFTER TO HP	(4) - 0.131"Ø X 3" NAILS	TOENAIL
19	RAFTER TO RIDGE BOARD/BEAM	(3) - 0.131"Ø X 3" NAILS	TOENAIL
20	BLOCKING AT STUDS	(3) - 0.131"Ø X 3" NAILS EACH SIDE	TOENAIL

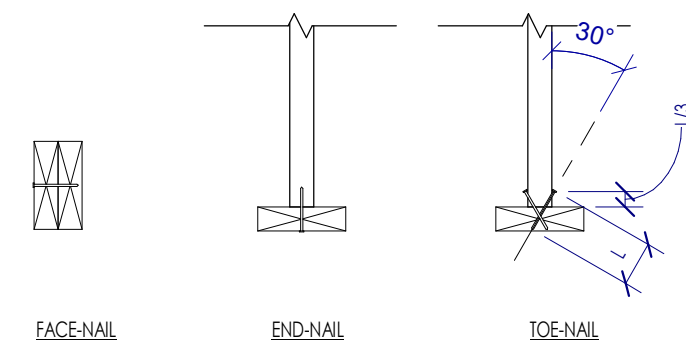
NOTES:
1. THESE CONNECTIONS ARE TO BE APPLIED UNLESS NOTED OTHERWISE IN PLAN SECTION, ELEVATION OR DETAIL VIEWS.

6D S4.0 TYPICAL WOOD FASTENING SCHEDULE

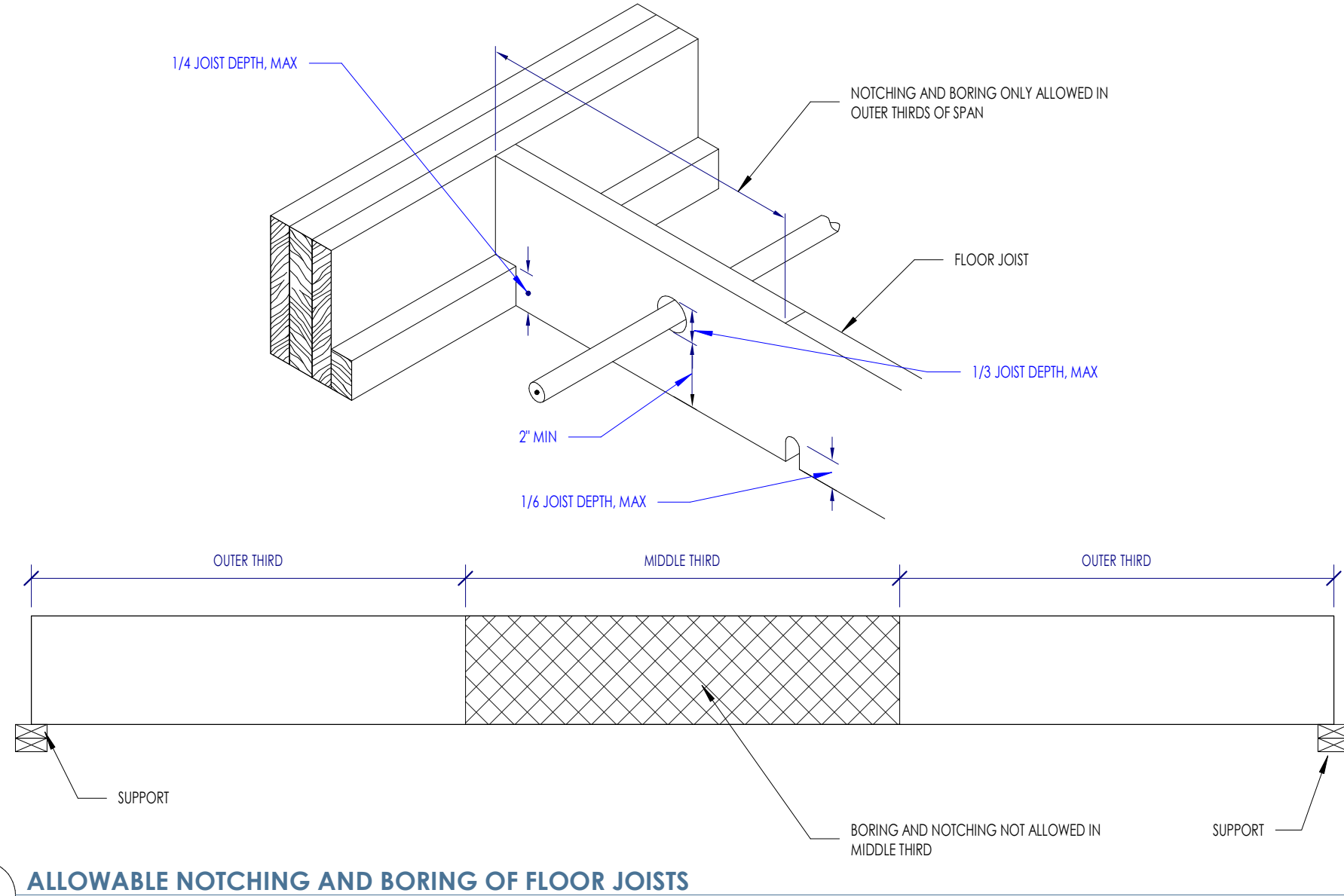


NOTES:
1. HOLE SIZE: THE HOLE DIAMETER SHALL NOT EXCEED 1/4" OR D/10, WHICHEVER IS SMALLER.
2. SPACING: FOR LARGER HOLE DIAMETERS OR FOR HOLES OUTSIDE OF THE PERMITTED ZONES, WRITTEN PERMISSION MUST BE OBTAINED FROM THE ECR.
3. LIMITATIONS: THE ABOVE CRITERIA ONLY APPLY TO SIMPLY SUPPORTED, UNIFORMLY LOADED GLUE LAMINATED BEAMS. FOR BEAMS THAT ARE EITHER CONTINUOUS ACROSS MULTIPLE SPANS OR THAT ARE SUPPORTING NON-UNIFORM LOADS, WRITTEN PERMISSION MUST BE OBTAINED FROM THE ECR.

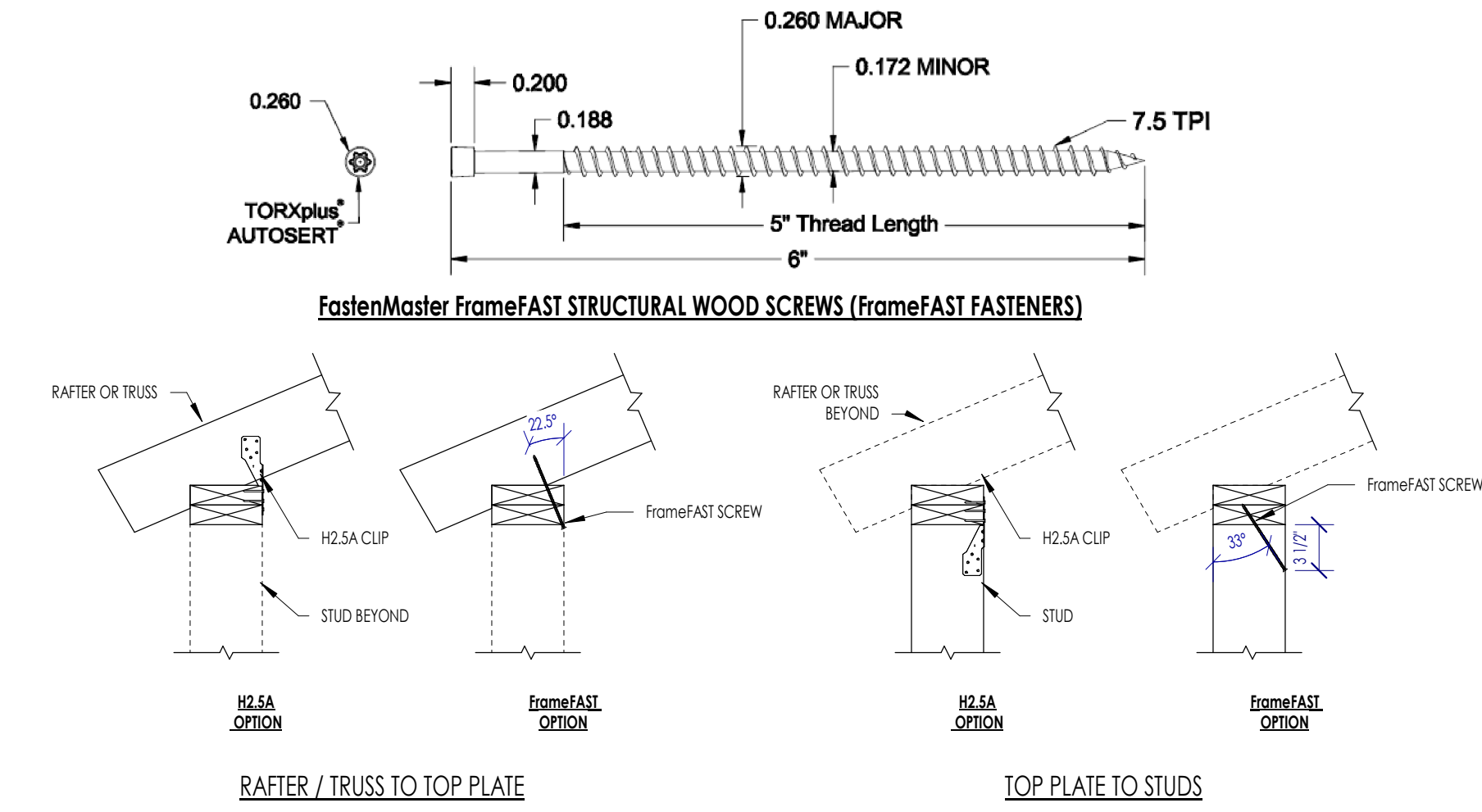
4E S4.0 ALLOWABLE HORIZONTAL HOLE LOCATIONS IN GLUE LAMINATED TIMBER BEAMS



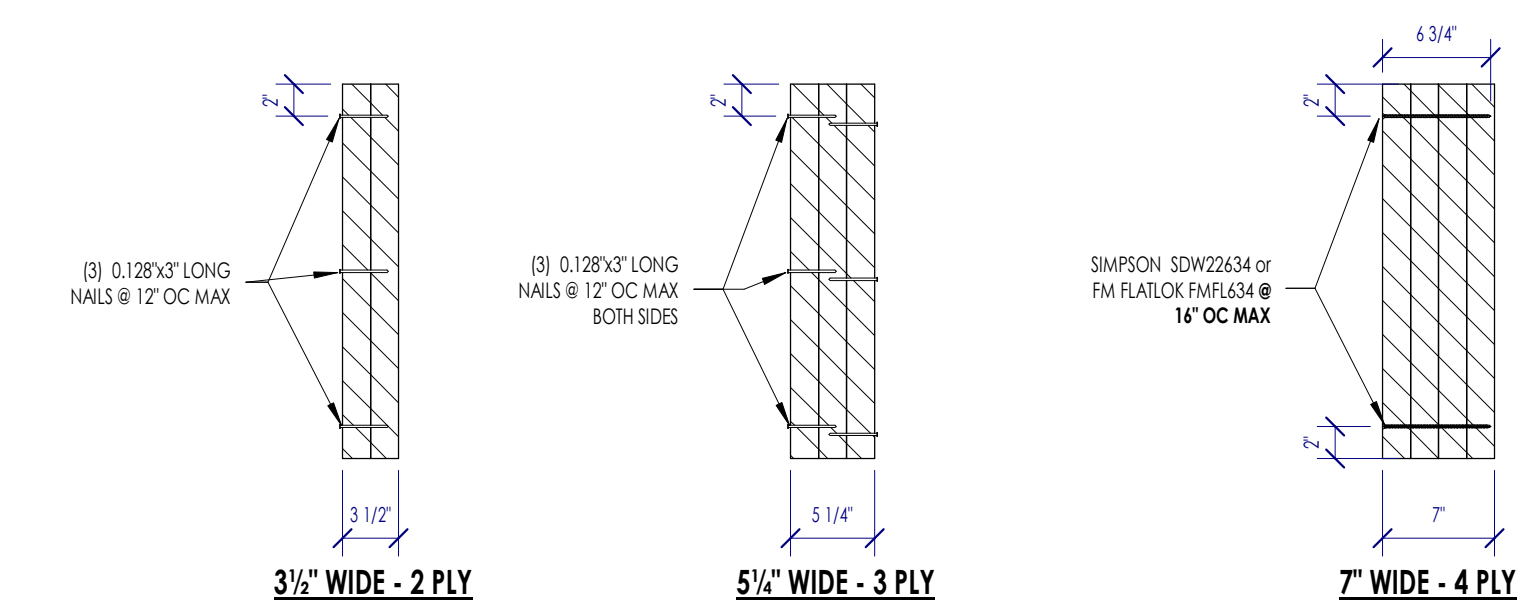
4D S4.0 TYPICAL NAILING CONFIGURATIONS



6C S4.0 ALLOWABLE NOTCHING AND BORING OF FLOOR JOISTS



4C S4.0 ALLOWABLE SUBSTITUTION OF H2.5A CLIPS WITH FrameFAST SCREWS - UPLIFT LOAD PATH



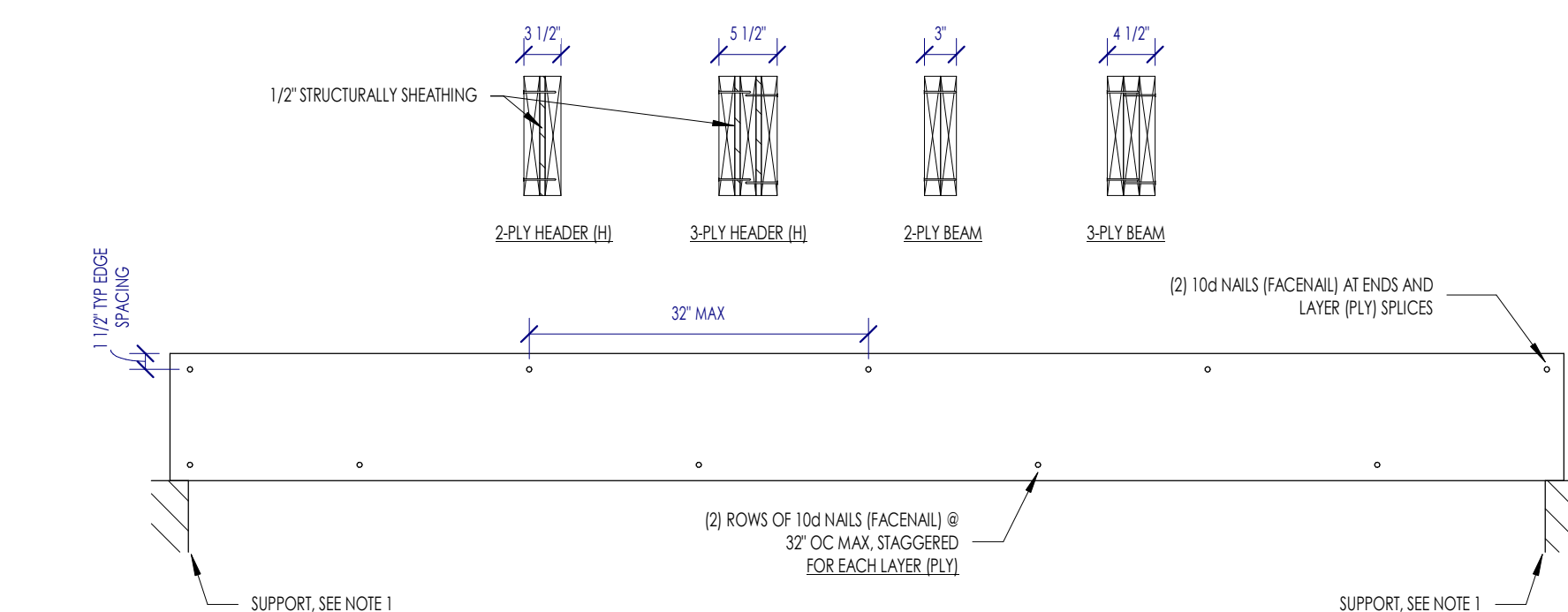
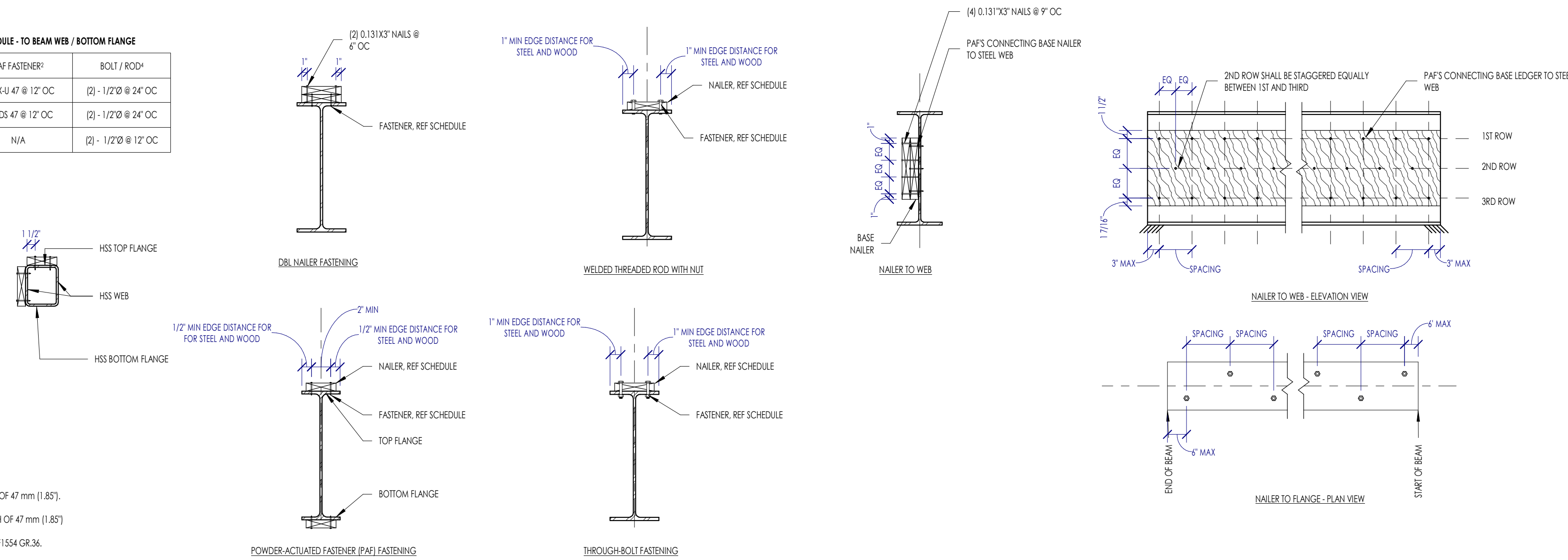
2C S4.0 TYPICAL LVL MULTIPLE PLY FASTENING REQUIREMENTS

FASTENER SCHEDULE - TO BEAM TOP FLANGE			FASTENER SCHEDULE - TO BEAM WEB / BOTTOM FLANGE		
l _c (ft)	PAF FASTENER	BOLT / ROD*	l _c (ft)	PAF FASTENER	BOLT / ROD*
≤ 0.35	X-1/4 @ 12" OC	1/2"Ø @ 24" OC	≤ 0.35	(1) - X-1/4 @ 12" OC	(2) - 1/2"Ø @ 24" OC
0.35 < l _c ≤ 0.44	D5-47 @ 12" OC	1/2"Ø @ 24" OC	0.35 < l _c ≤ 0.44	(2) - D5-47 @ 12" OC	(2) - 1/2"Ø @ 24" OC
l _c > 0.44	N/A	1/2"Ø @ 12" OC	l _c > 0.44	N/A	(2) - 1/2"Ø @ 12" OC

NAILER SCHEDULE - TO BEAM FLANGE		NAILER SCHEDULE - TO BEAM WEB	
b (ft)	NAILER SIZE	d (ft)	NAILER SIZE
≤ 5.5	2x4	≤ 5	2x4
5.5 < b ≤ 7.25	2x6	5 < d ≤ 6.75	2x6
l _c > 7.25	2x8	6.75 < d ≤ 8.75	2x8
		8.75 < d ≤ 10.75	2x10
		10.75 < d ≤ 15	(2) - 2x8
		15 < d ≤ 19	(2) - 2x10
		19 < d ≤ 23	(2) - 2x12
		d > 23	(3) - 2x8

NOTES:
1. ALL FASTENERS SHALL BE STAGGERED.
2. FASTENER DESCRIPTIONS: ALL FASTENERS ARE POWDER-ACTUATED FASTENERS MFR'D BY HELIX, INC.
A. 80147
B. 80147
C. UNIVERSAL SHANK FASTENER WITH A SHANK DIAMETER OF 0.157" AND A SHANK LENGTH OF 47 mm (1.85")
D. 80147
E. HEAVY DUTY SMOOTH SHANK FASTENER WITH A SHANK DIAMETER OF 0.177" AND A SHANK LENGTH OF 47 mm (1.85")
3. FASTENER INSTALLATION SHALL FOLLOW ALL SPECIFICATIONS PER THE MFR.
4. THROUGH BOLTS SHALL BE GALVANNEED ASTM A307 BOLTS. THROUGH BOLTS SHALL BE GALVANNEED ASTM F1554 GR.36.

4A S4.0 WOOD NAILER TO TOP OF STRUCTURAL STEEL



2A S4.0 TYPICAL NAILING BUILT UP BEAMS, GIRDERS & HEADERS

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RENOVATION
Architects
Owner: Renovation Wranglers
102 E 26th St
Bryan, TX 77803
Katherine@rwa.com | 979.450.9969

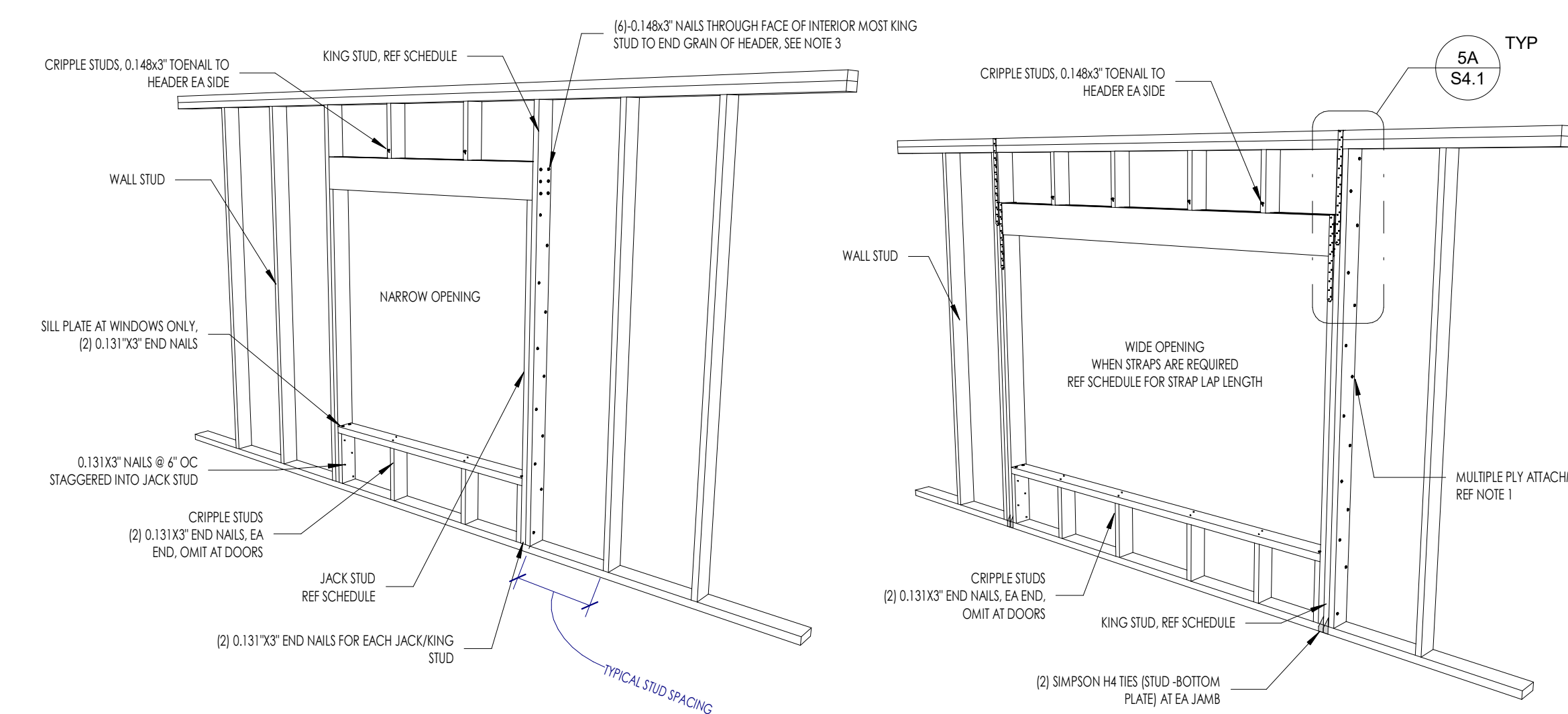
DUDDLEY
Architecture
Structural of Record: LKB Architecture
2929 Allen Pkwy Suite 200
Houston, TX 77019
isa@lkbarchitecture.com | 713.425.3076

amc
ENGINEERS
MEP: AMC Engineers
508 E Jackson St # 552
Burnet, TX 78611
info@amcengineers.com

openingdesign
Architect: OpeningDesign
17 S Fairchild | FL 7
Madison, WI 53703
ryan@openingdesign.com | 773.425.6456

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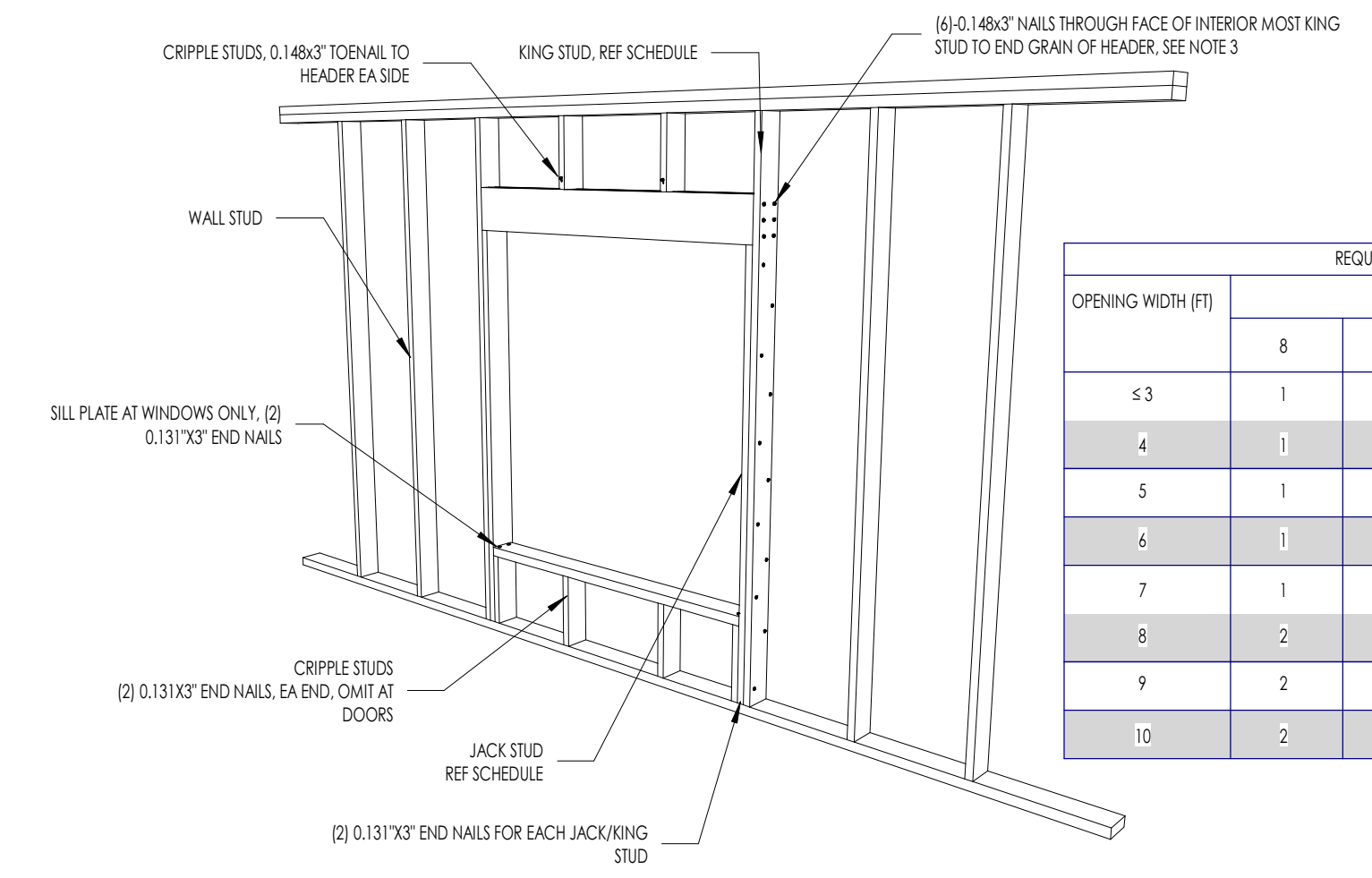
2X4 STUD WALL

OPENING WIDTH (FT)	REQUIRED NO. OF KING STUDS				NO. JACK STUDS	STRAP LAP LENGTH (IN)
	8	9	10	12		
≤3	1	1	1	2	2	1
4	1	1	2	2	2	1
5	2	2	2	3	3	1
6	2	2	3	3	3	1
7	2	2	3	3	4X6	1
8	3	3	3	4X6	4X6	2
9	3	3	4X6	4X6	4X6	2
10	3	3	4X6	4X6	4X6	2

2X6 STUD WALL

OPENING WIDTH (FT)	REQUIRED NO. OF KING STUDS				NO. JACK STUDS	STRAP LAP LENGTH (IN)
	8	9	10	12		
≤3	1	1	1	1	1	N/R
4	1	1	1	1	1	N/R
5	1	1	1	1	2	1
6	1	1	1	2	2	1
7	1	1	2	2	2	1
8	1	1	2	2	2	2
9	1	2	2	2	2	2
10	1	2	2	2	3	2

NOTES:
1. MULTIPLE PLYS MUST BE ATTACHED PER THE MECHANICALLY LAMINATED BUILT-UP COLUMN, NAILED DETAIL.
2. TABLE IS BASED OFF A HORIZONTAL WIND PRESSURE OF 20 PSF AND GRAVITY LOADING OF 200 PLF.
3. NAILS MUST BE CENTERED ON THE INDIVIDUAL PLYS OF THE HEADER.
4. N/R = NOT REQUIRED. IF N/R, THEN REFERENCE NARROW OPENING DIAGRAM FOR CONNECTION REQUIREMENTS, OTHERWISE REFERENCE THE WIDE OPENING DIAGRAM.



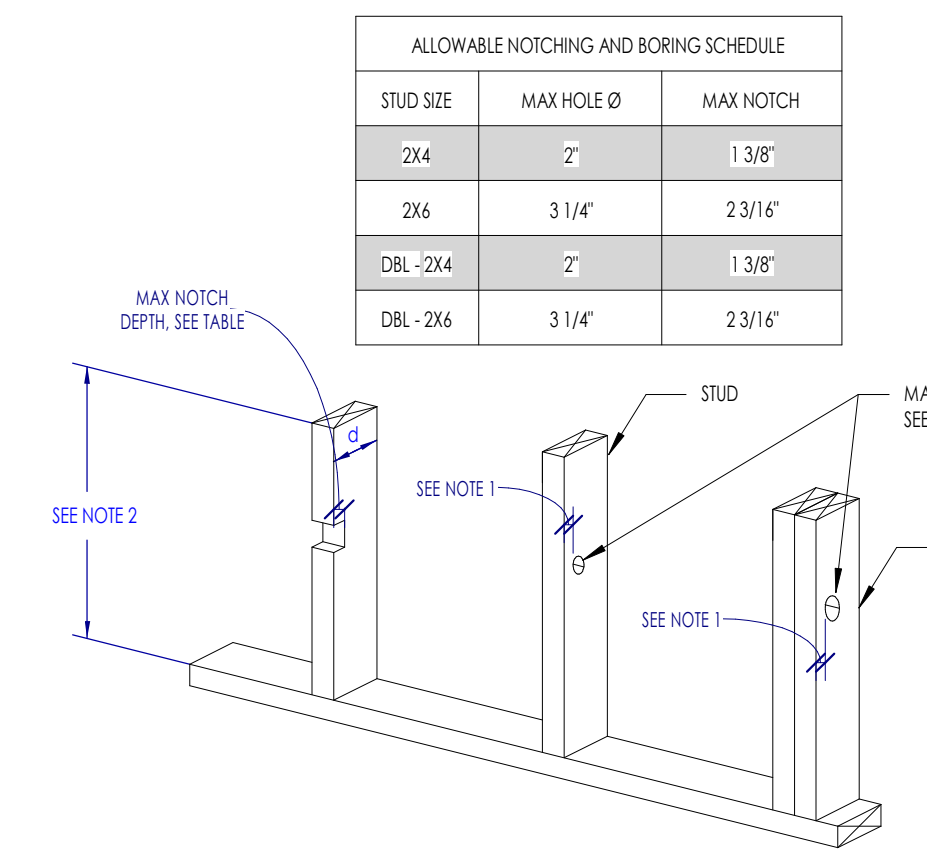
LOAD BEARING WALL

OPENING WIDTH (FT)	REQUIRED NO. OF KING STUDS				NO. JACK STUDS	HEADER SIZE
	8	9	10	12		
≤3	1	1	1	1	1	2X6H
4	1	1	1	1	1	2X6H
5	1	1	1	2	2	2X6H
6	1	1	2	2	2	2X6H
7	1	1	2	2	3	1
8	2	2	2	3	3	2
9	2	2	3	3	3	2
10	2	2	3	3	3	2

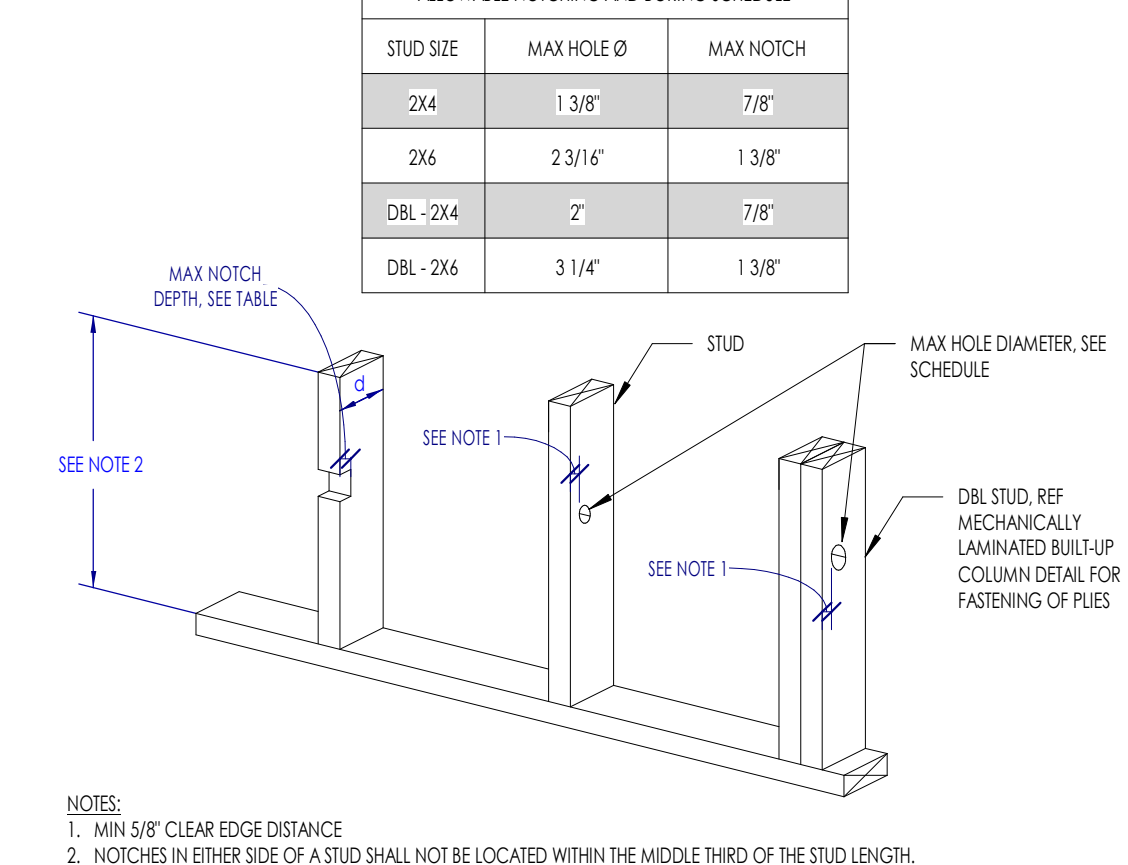
NON-LOAD BEARING WALL

OPENING WIDTH (FT)	REQUIRED NO. OF KING STUDS				NO. JACK STUDS	HEADER SIZE
	8	9	10	12		
≤3	1	1	1	1	1	2X4 STUD WALL
4	1	1	1	1	1	2X4 STUD WALL
5	1	1	1	2	2	2X4 STUD WALL
6	1	1	2	2	2	2X4 STUD WALL
7	1	1	2	2	3	1
8	2	2	2	3	3	1
9	2	2	3	3	3	1
10	2	2	3	3	3	1

NOTES:
1. LOAD BEARING WALLS AND ASSOCIATED HEADERS ARE INDICATED ON PLAN.



NOTES:
1. MIN 5/8" CLEAR EDGE DISTANCE.
2. NOTCHES IN EITHER SIDE OF A STUD SHALL NOT BE LOCATED WITHIN THE MIDDLE THIRD OF THE STUD LENGTH.
3. NOTCHES AND BORINGS SHALL NOT OCCUR IN THE SAME CROSS SECTION.

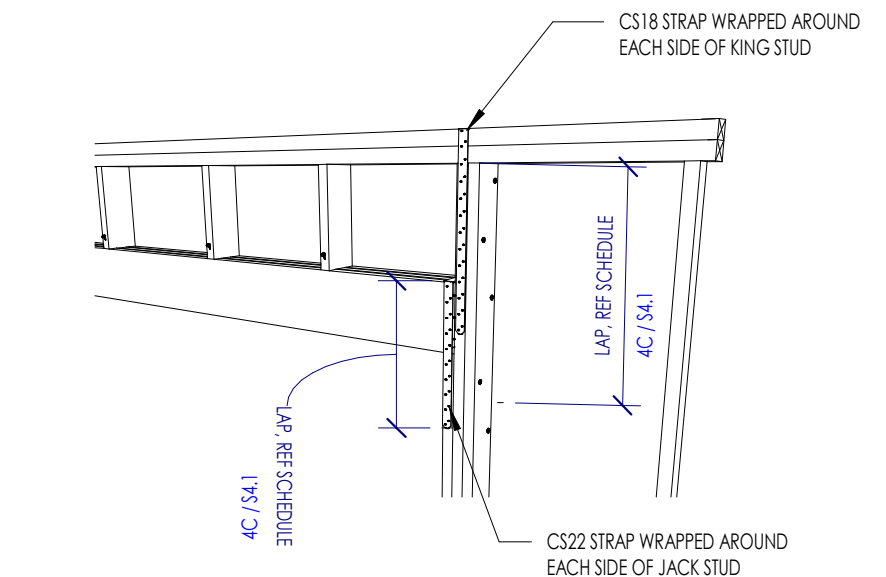


NOTES:
1. MIN 5/8" CLEAR EDGE DISTANCE.
2. NOTCHES IN EITHER SIDE OF A STUD SHALL NOT BE LOCATED WITHIN THE MIDDLE THIRD OF THE STUD LENGTH.
3. NOTCHES AND BORINGS SHALL NOT OCCUR IN THE SAME CROSS SECTION.

5A TYPICAL STRAP AT WIDE EXTERIOR OPENINGS

BUILT-UP SECTION	NAIL SIZE	SPACING	NO. ROWS	NOTES
(2) -2X4	0.131 x 2"	6"	1	STAGGERED
(2) -2X6	0.131 x 3"	8"	2	
(1) -2X4	0.131 x 4"	6"	1	STAGGERED
(3) -2X6	0.131 x 4"	8"	2	

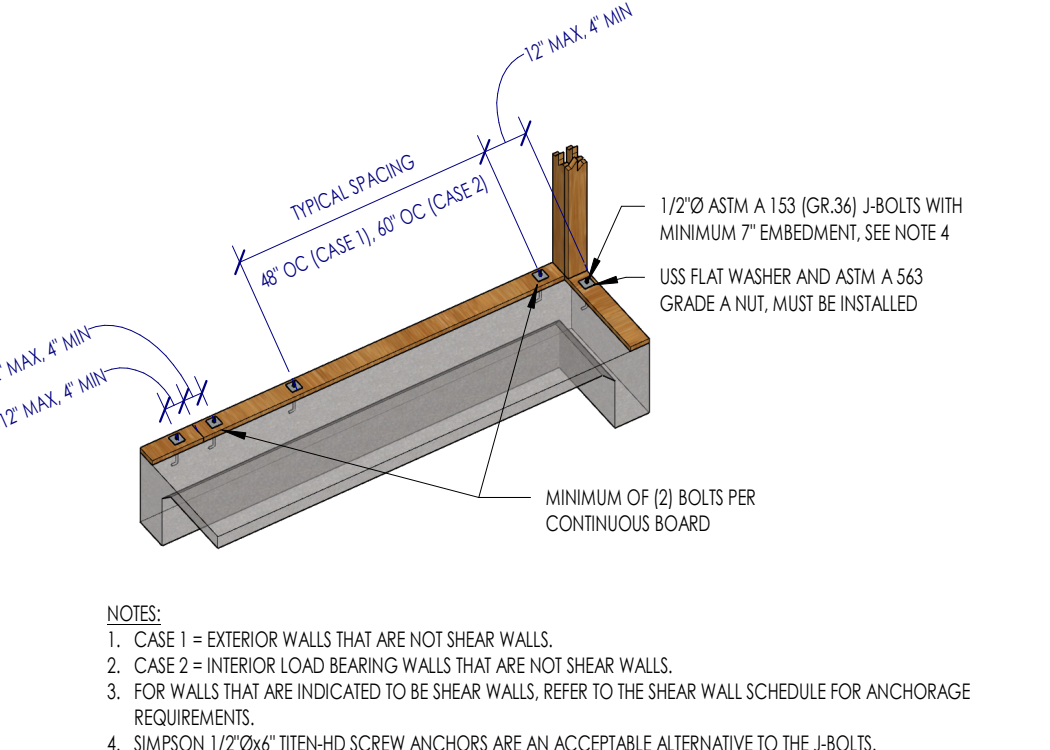
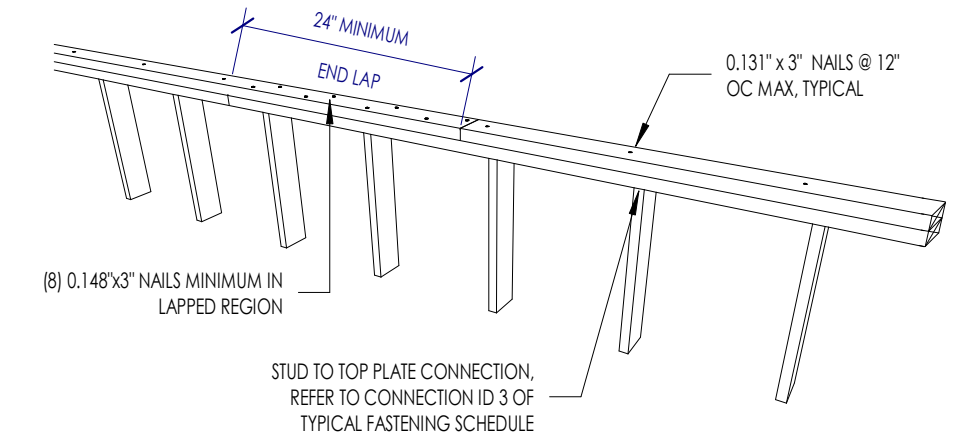
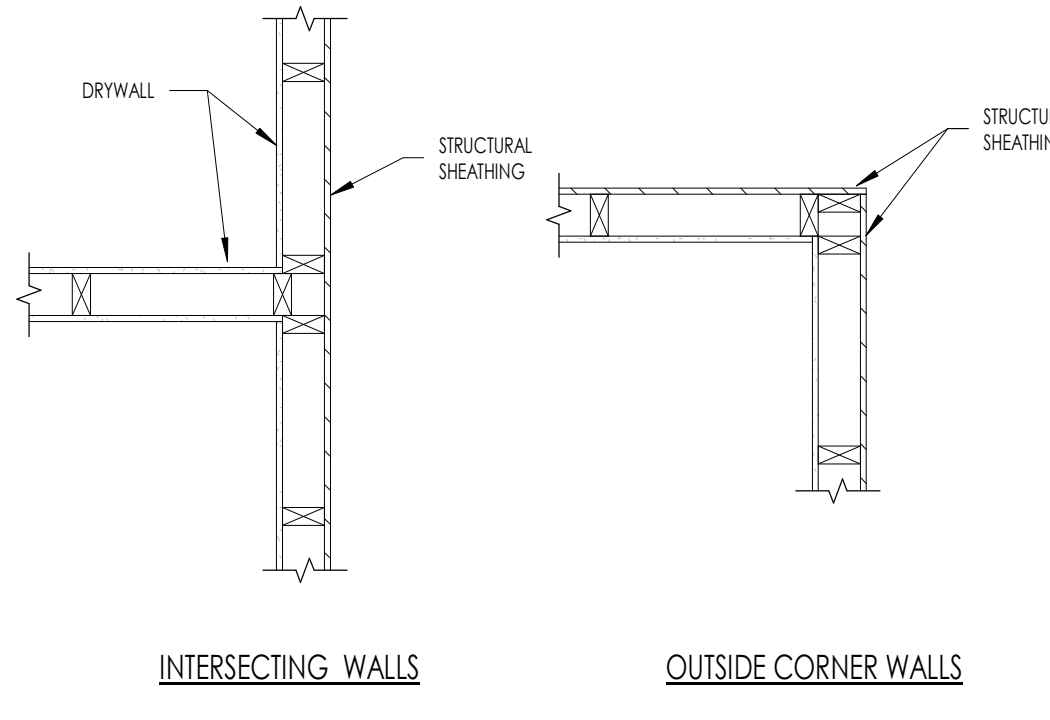
NOTES:
1. END DISTANCE: THE FIRST FASTENERS SHALL BE LOCATED 2" FROM THE END OF THE COLUMN ON EACH END.
2. EDGE DISTANCE: 3/4" EDGE DISTANCES ± 1/2"



4A TYPICAL CORNER AND INTERSECTION WALL STUDS (NOT AT SHEAR WALL)

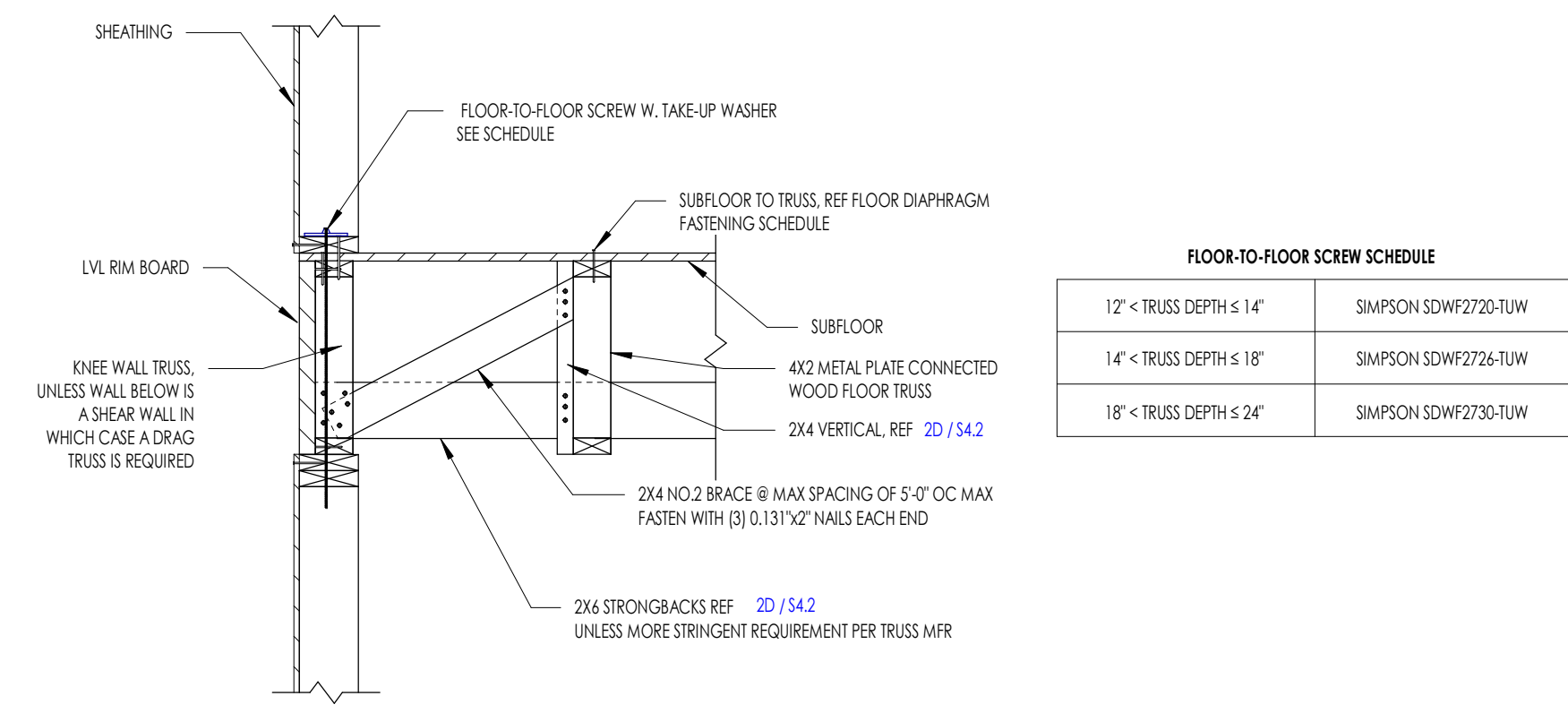
3A TYPICAL LOAD BEARING / SHEAR WALL DOUBLE TOP PLATE SPLICE

2A TYPICAL BOTTOM PLATE ANCHORAGE



NOTES:
1. CASE 1 = EXTERIOR WALLS THAT ARE NOT SHEAR WALLS.
2. CASE 2 = INTERIOR LOAD BEARING WALLS THAT ARE NOT SHEAR WALLS.
3. FOR WALLS THAT ARE INDICATED TO BE SHEAR WALLS, REFER TO THE SHEAR WALL SCHEDULE FOR ANCHORAGE REQUIREMENTS.
4. SIMPSON 1/2" DIA 110# THIN HD SCREW ANCHORS ARE AN ACCEPTABLE ALTERNATIVE TO THE BOLTS.

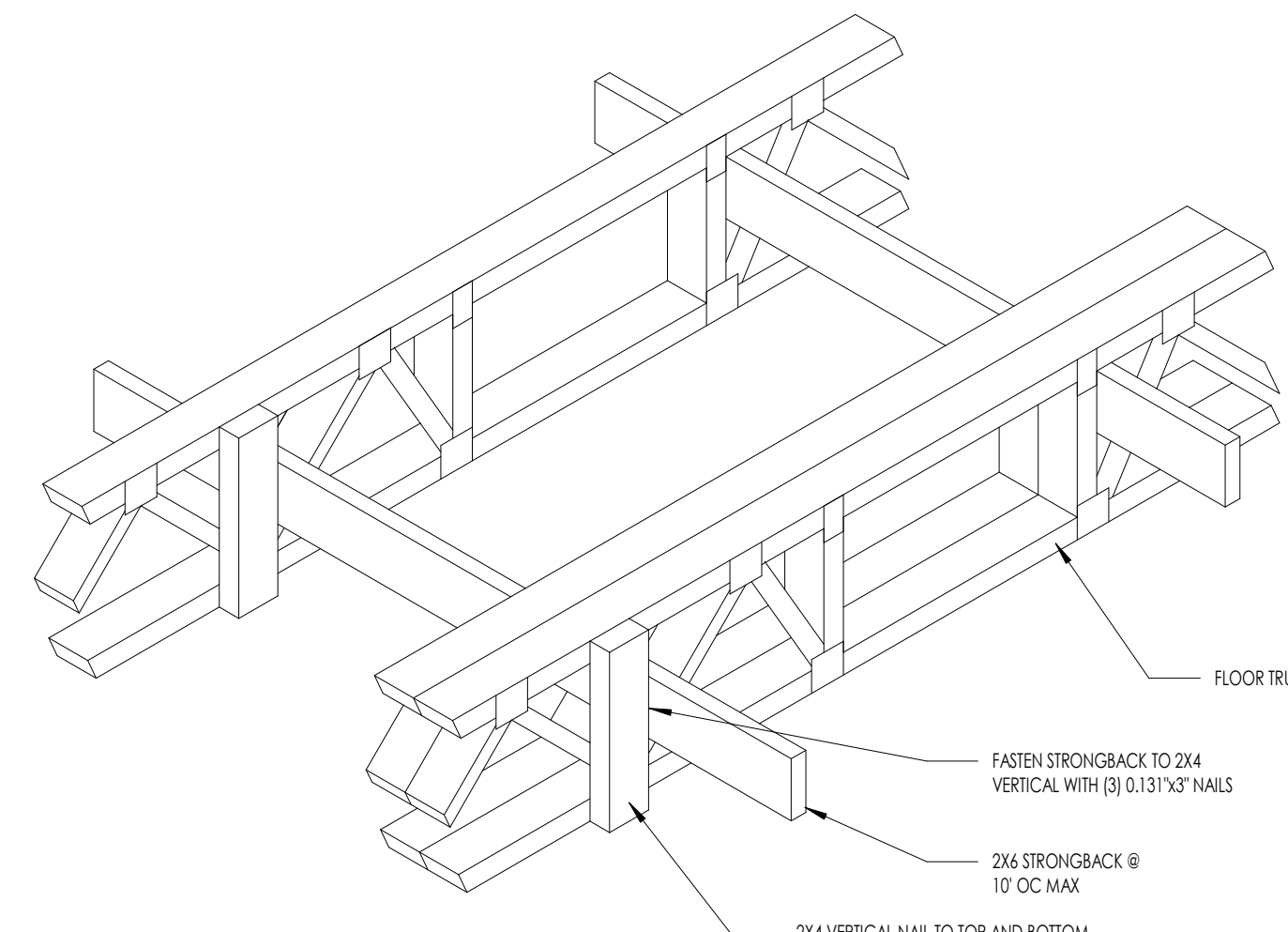
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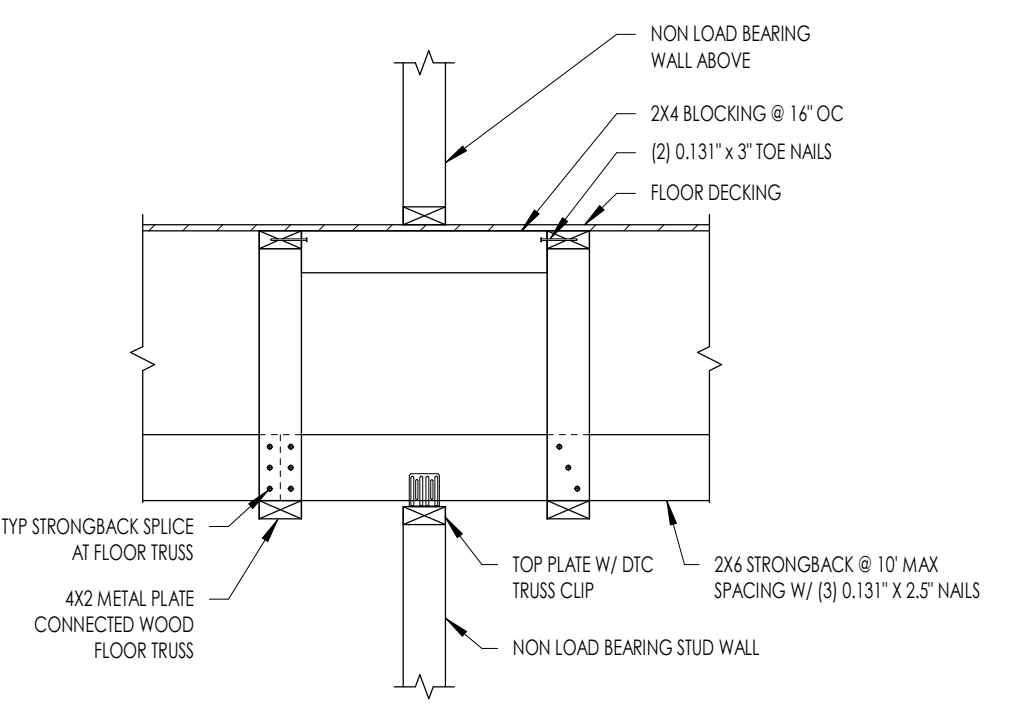
FLOOR-TO-FLOOR SCREW SCHEDULE	
12" C TRUSS DEPTH ≤ 14"	SIMPSON SDWF2720-TUM
14" C TRUSS DEPTH ≤ 18"	SIMPSON SDWF2724-TUM
18" C TRUSS DEPTH ≤ 24"	SIMPSON SDWF2730-TUM

NOTES:
1. REFERENCE GENERAL NOTES FOR WOOD SHRINKAGE NOTES AND SPECIFICATIONS. IF THE FRAMING HAS A MC HIGHER THAN 1.95 WHEN THE SHEATHING IS APPLIED, IT MAY LEAD TO BUCKLING OF THE SHEATHING AND/OR THE CLADDING. CONTRACTOR TO QC FRAMING MC PRIOR TO INSTALLING WALL SHEATHING.

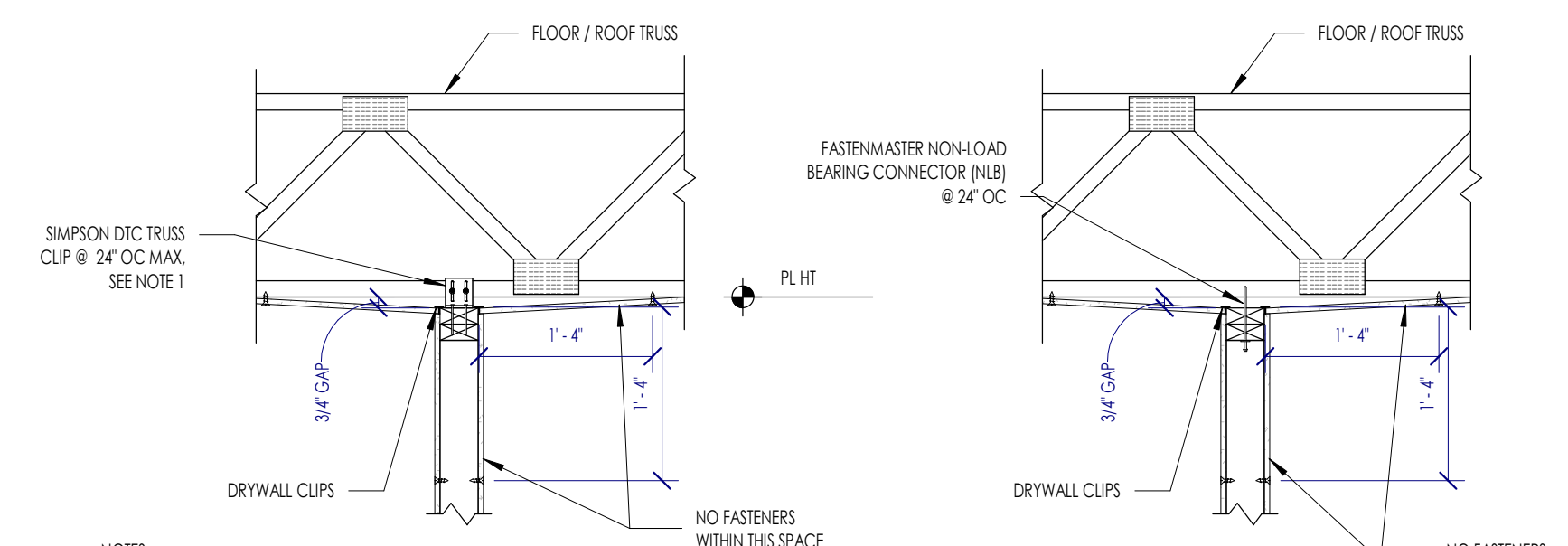
4D S4.2 TYPICAL FLOOR TRUSS PARALLEL TO EXTERIOR WALL - MULTI-STORY



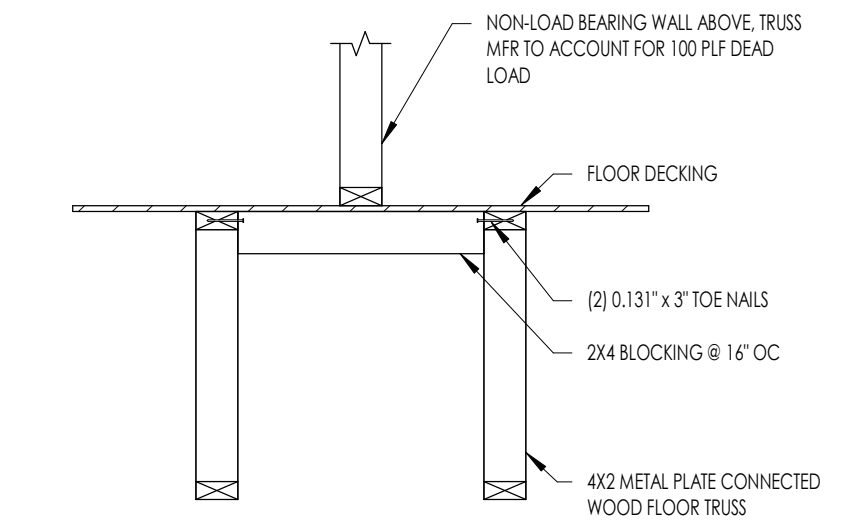
2D S4.2 TYPICAL TRUSS STRONGBACK



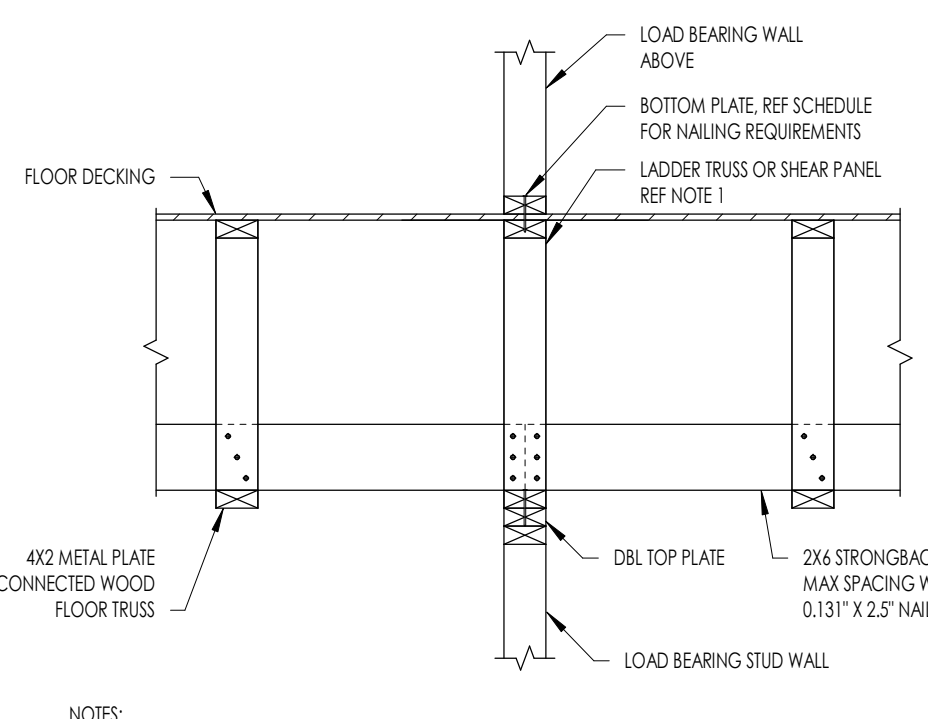
5C S4.2 TYPICAL NON-LOAD BEARING WALL PARALLEL TO FLOOR TRUSSES



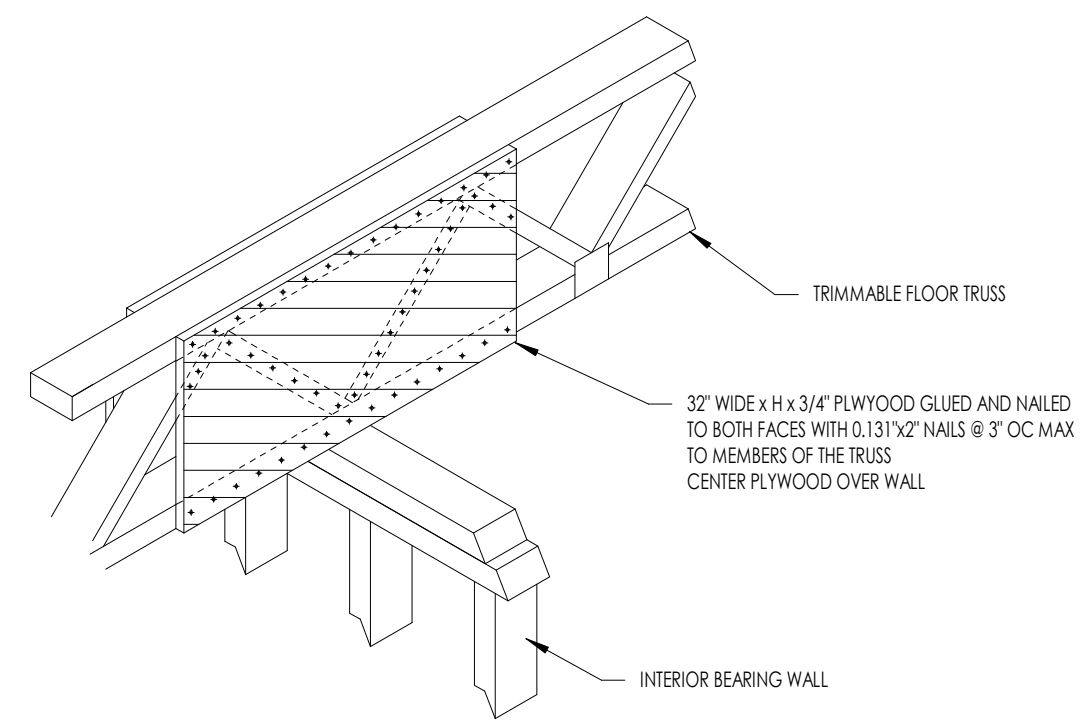
4C S4.2 TYPICAL NON-LOAD BEARING WALL ATTACHMENT TO PERPENDICULAR FLOOR TRUSS



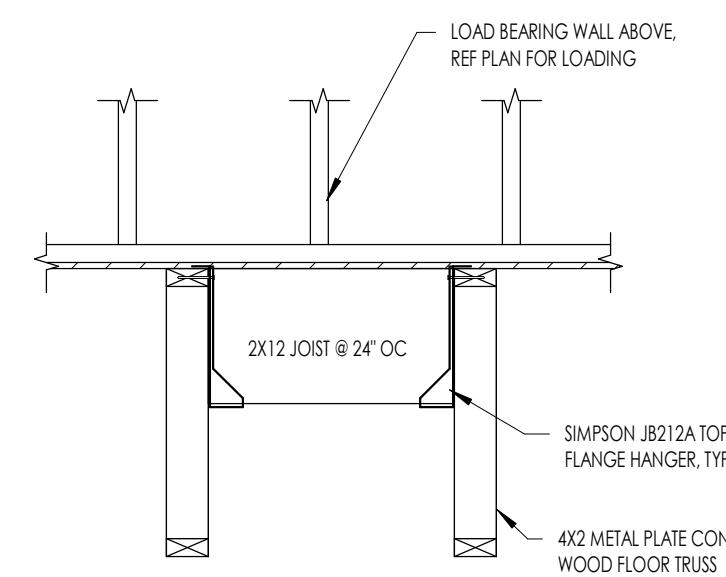
2C S4.2 TYPICAL NON-LOAD BEARING WALL PARALLEL TO FLOOR TRUSS



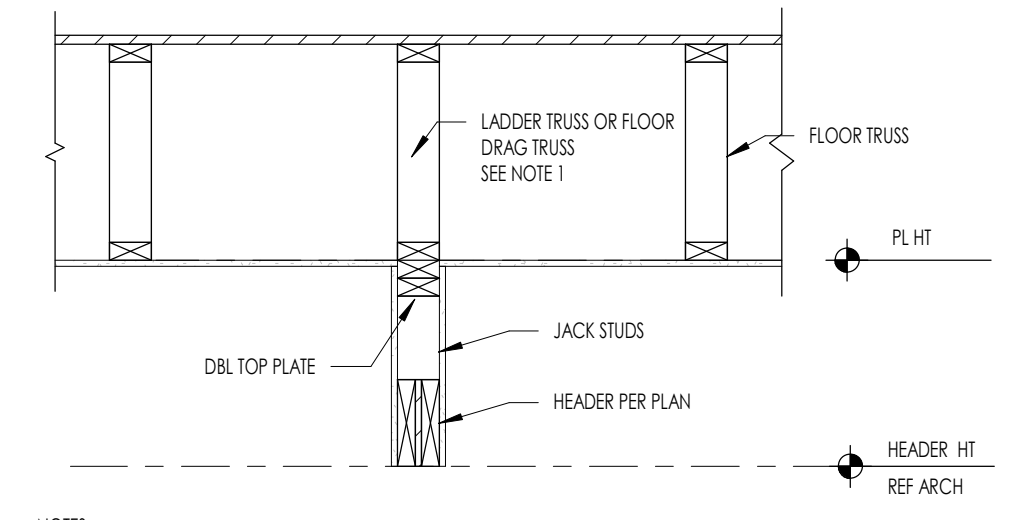
1C S4.2 TYPICAL LOAD BEARING WALL PARALLEL TO FLOOR TRUSSES



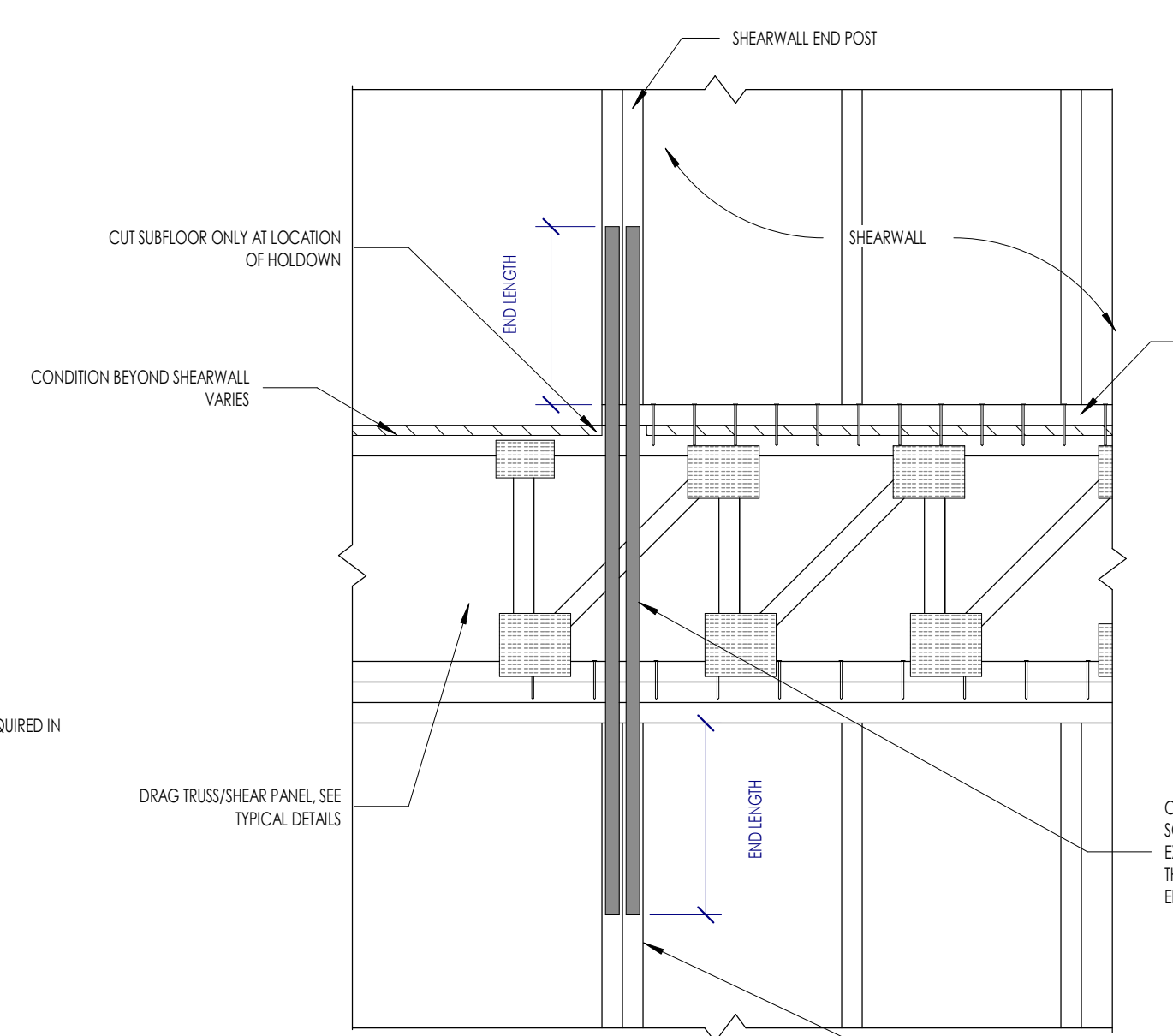
1B S4.2 TYPICAL TRIMMABLE TRUSS STIFFENING AT INTERIOR SUPPORT



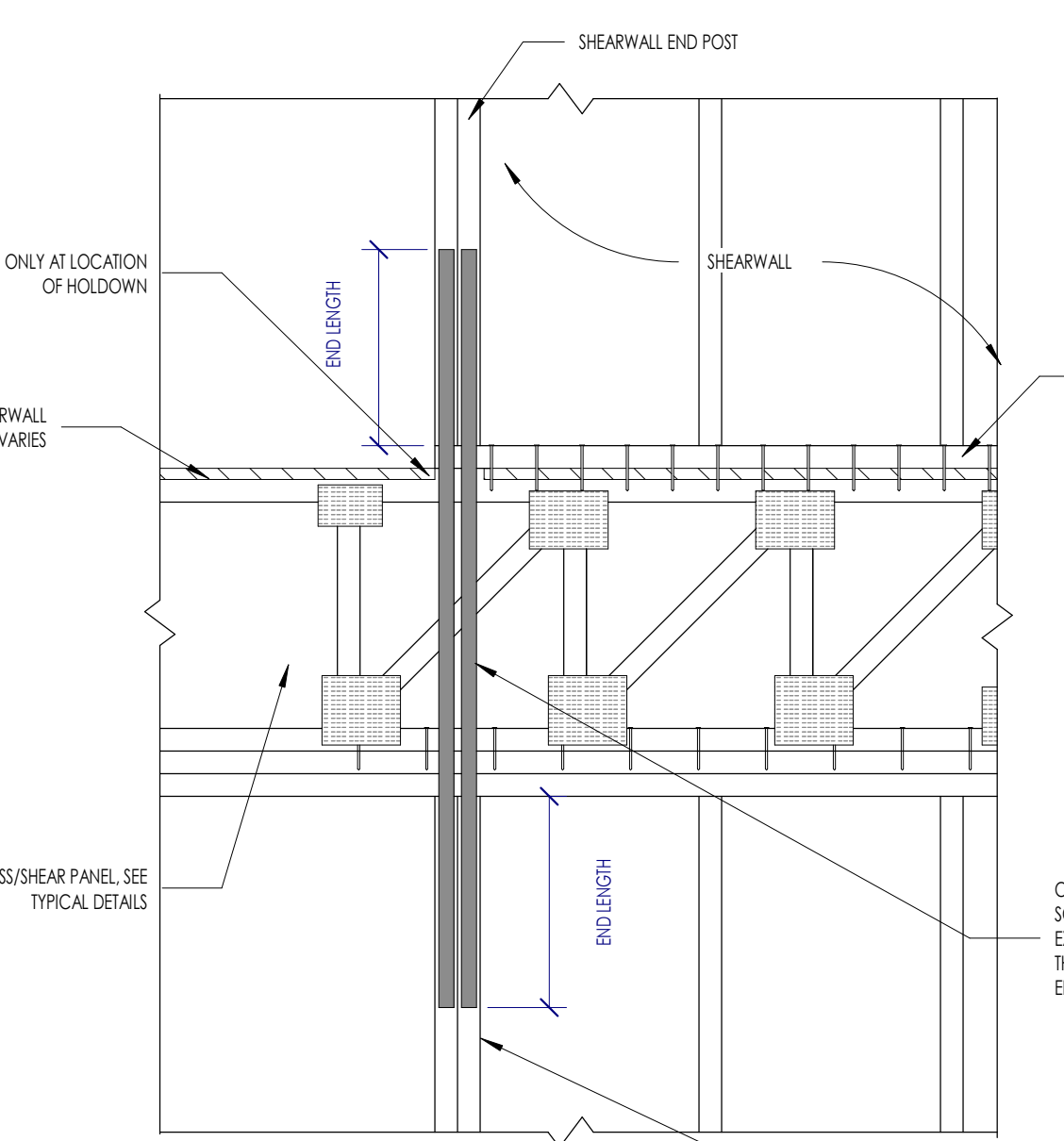
3B S4.2 TYPICAL LOAD BEARING WALL PERP. TO FLOOR TRUSS



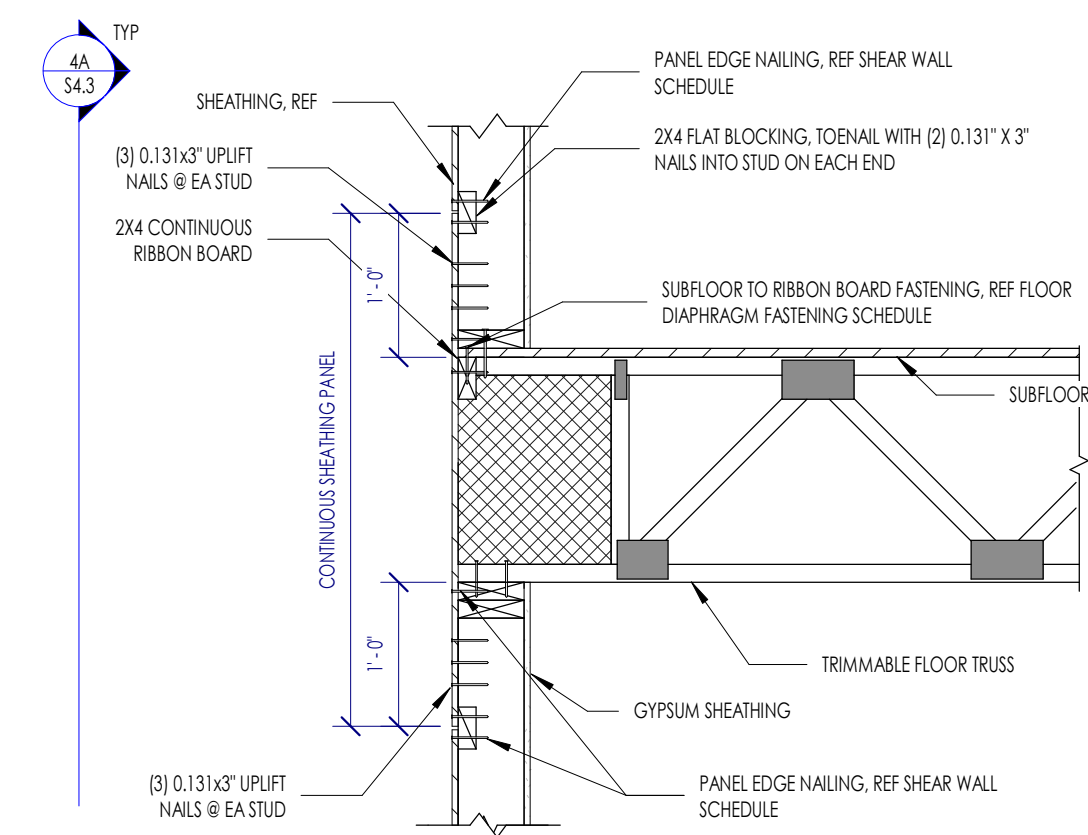
2B S4.2 TYPICAL LOAD BEARING HEADER PARALLEL TO FLOOR TRUSSES



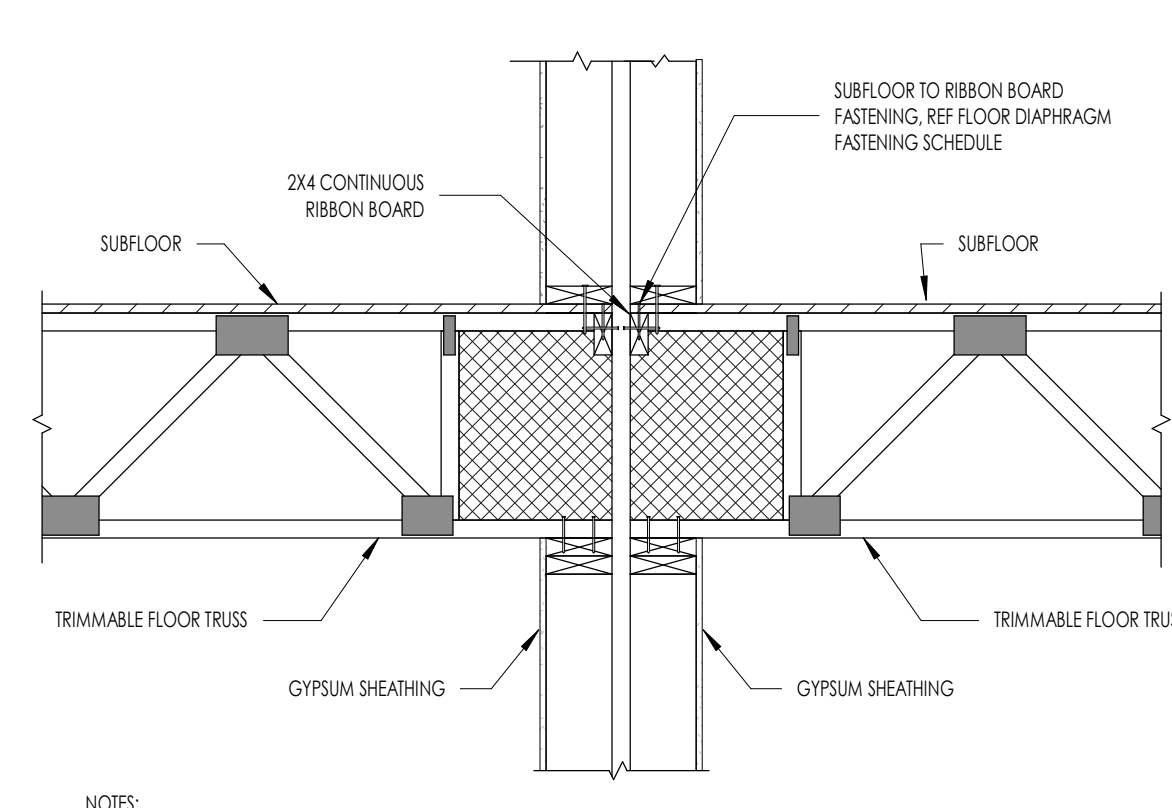
6A S4.2 TYPICAL SHEARWALL HOLDDOWN AT ELEVATED FLOOR



HOLDDOWN AT INTERIOR SHEAR WALL



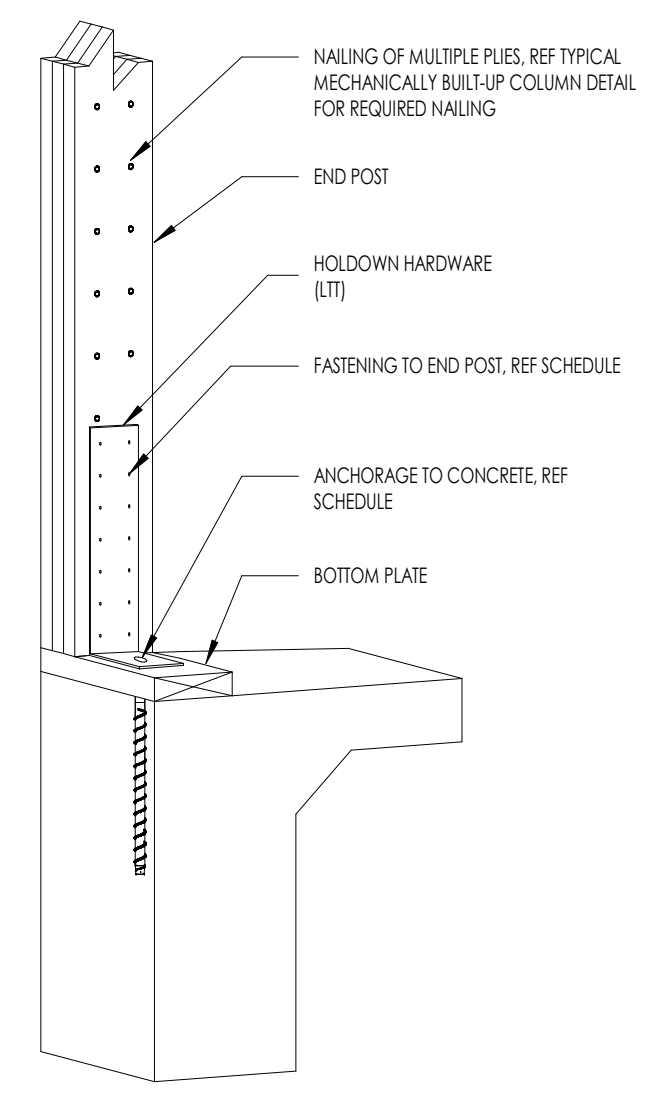
3A S4.2 061760 FLOOR - TRIMMABLE TRUSS BOTTOM CHORD BEARING ON EXTERIOR WALL



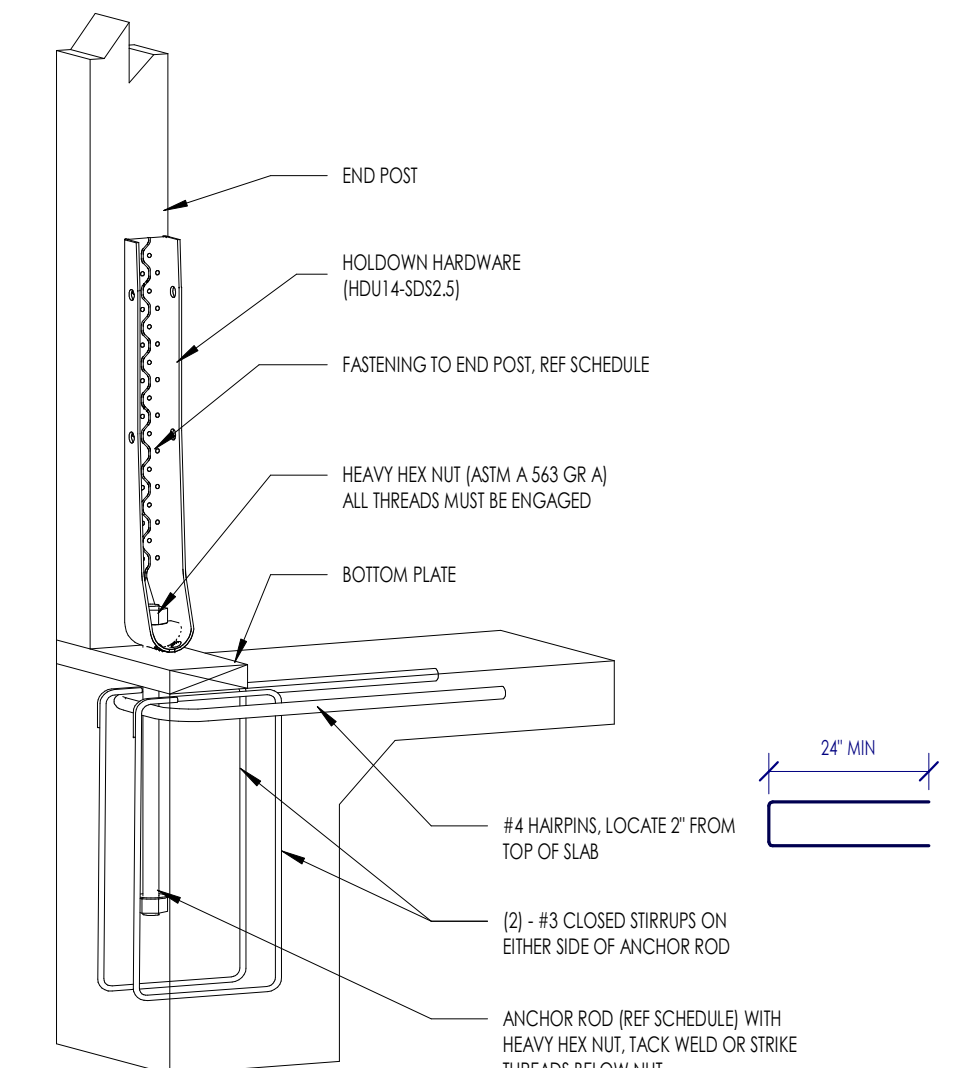
2A S4.2 TYPICAL INTERIOR BOTTOM CHORD BEARING AT PARTY WALL

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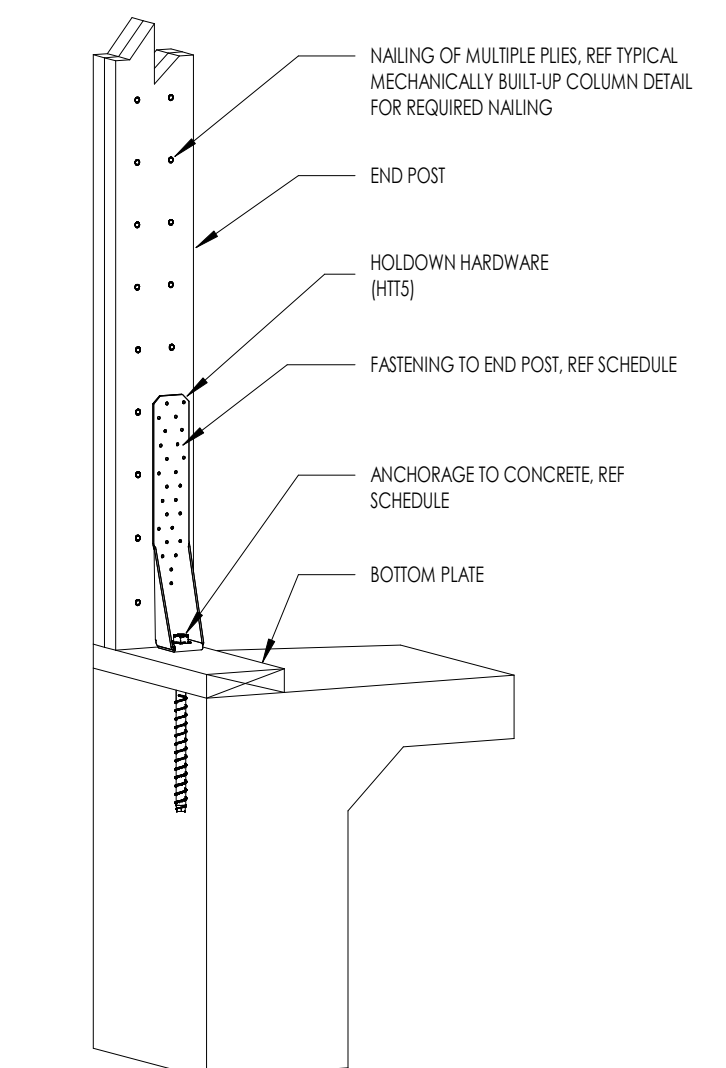
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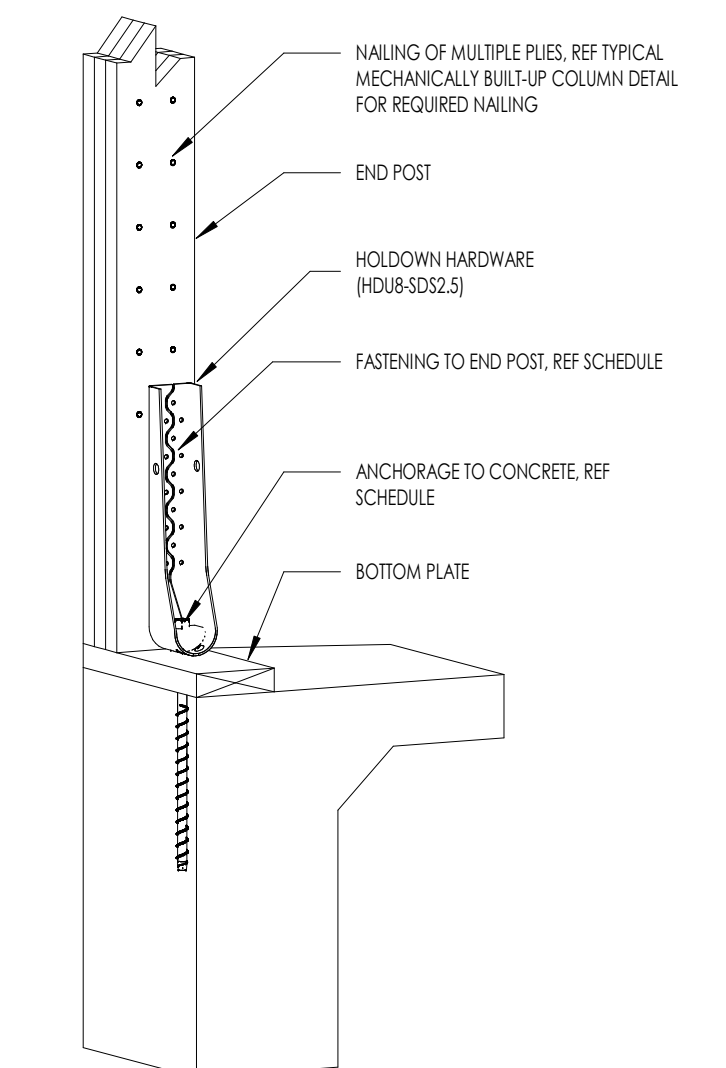
5D S4.3 LIT HOLDOWN



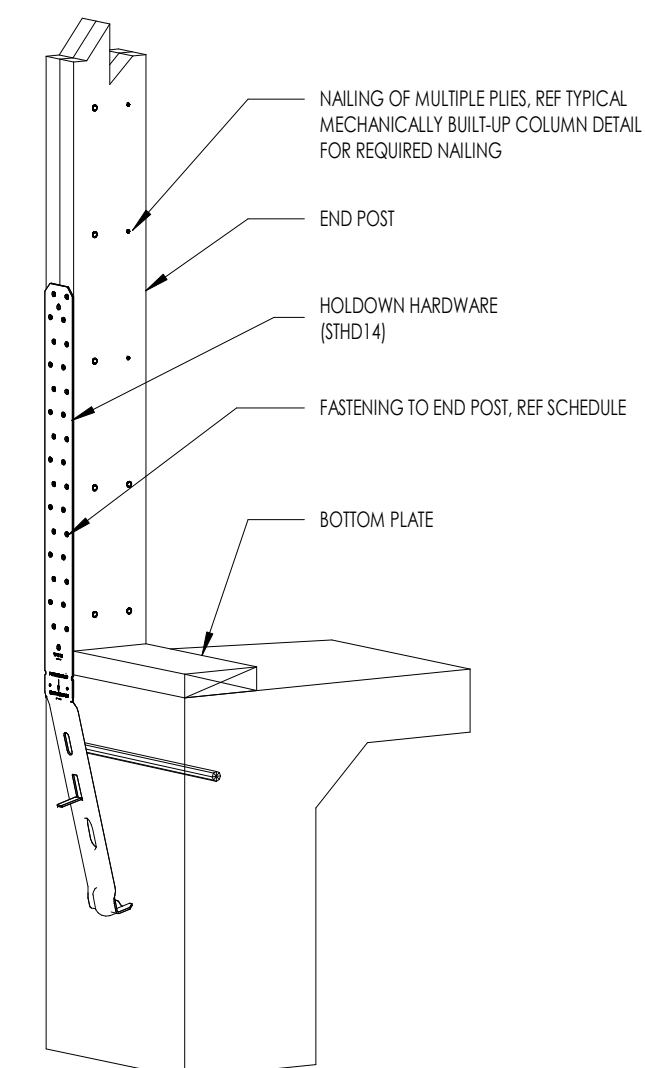
4D S4.3 HDU14-SDS2.5 HOLDOWN



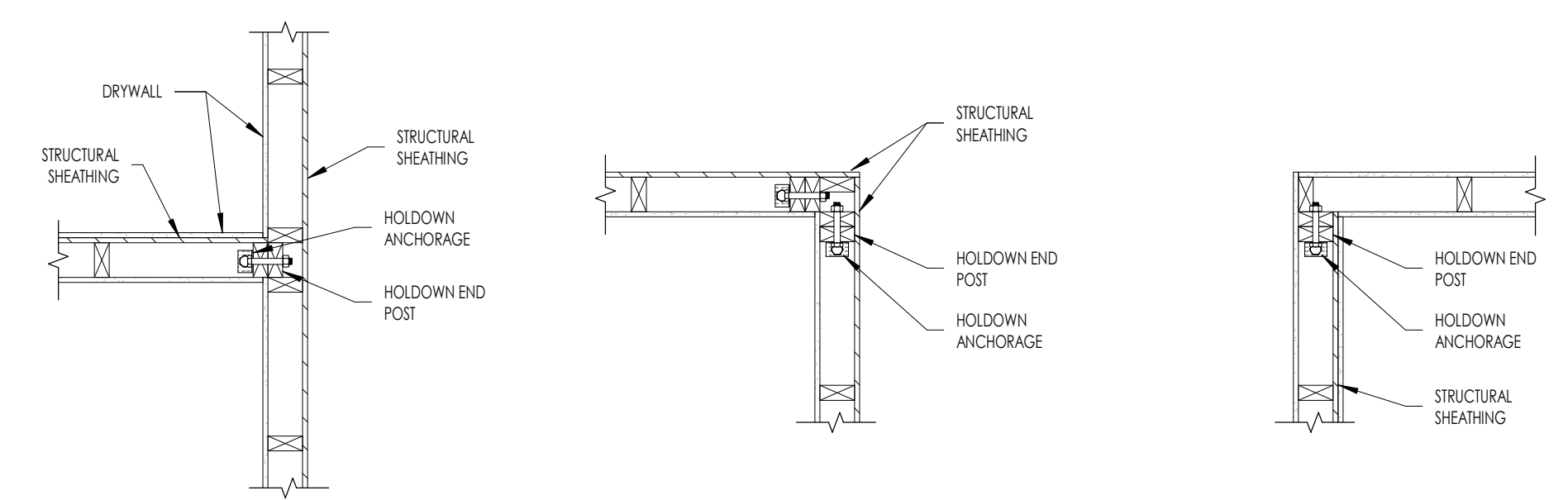
3D S4.3 HTS HOLDOWN



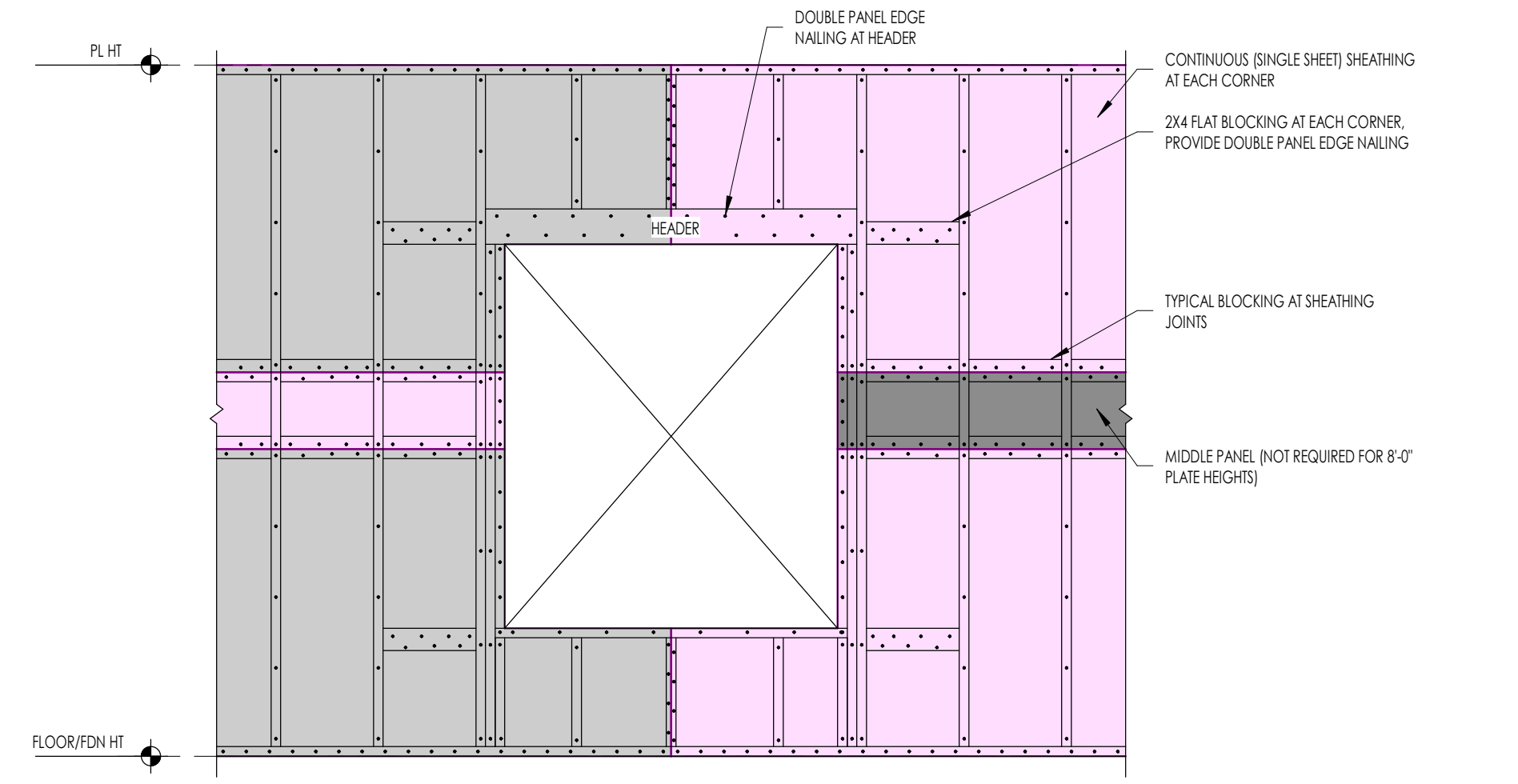
2D S4.3 HDU8-SDS2.5 HOLDOWN



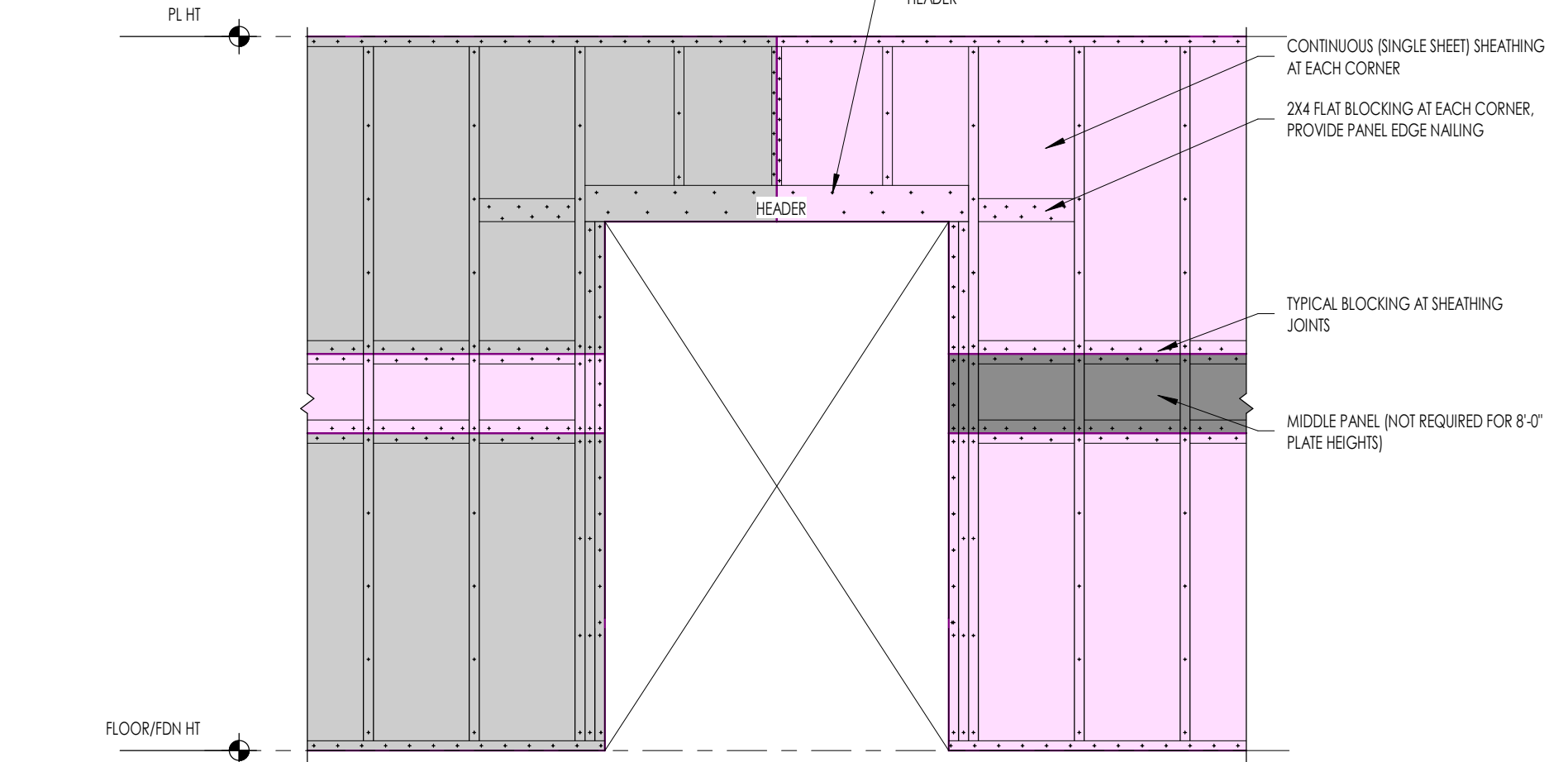
1D S4.3 STHD14 HOLDOWN



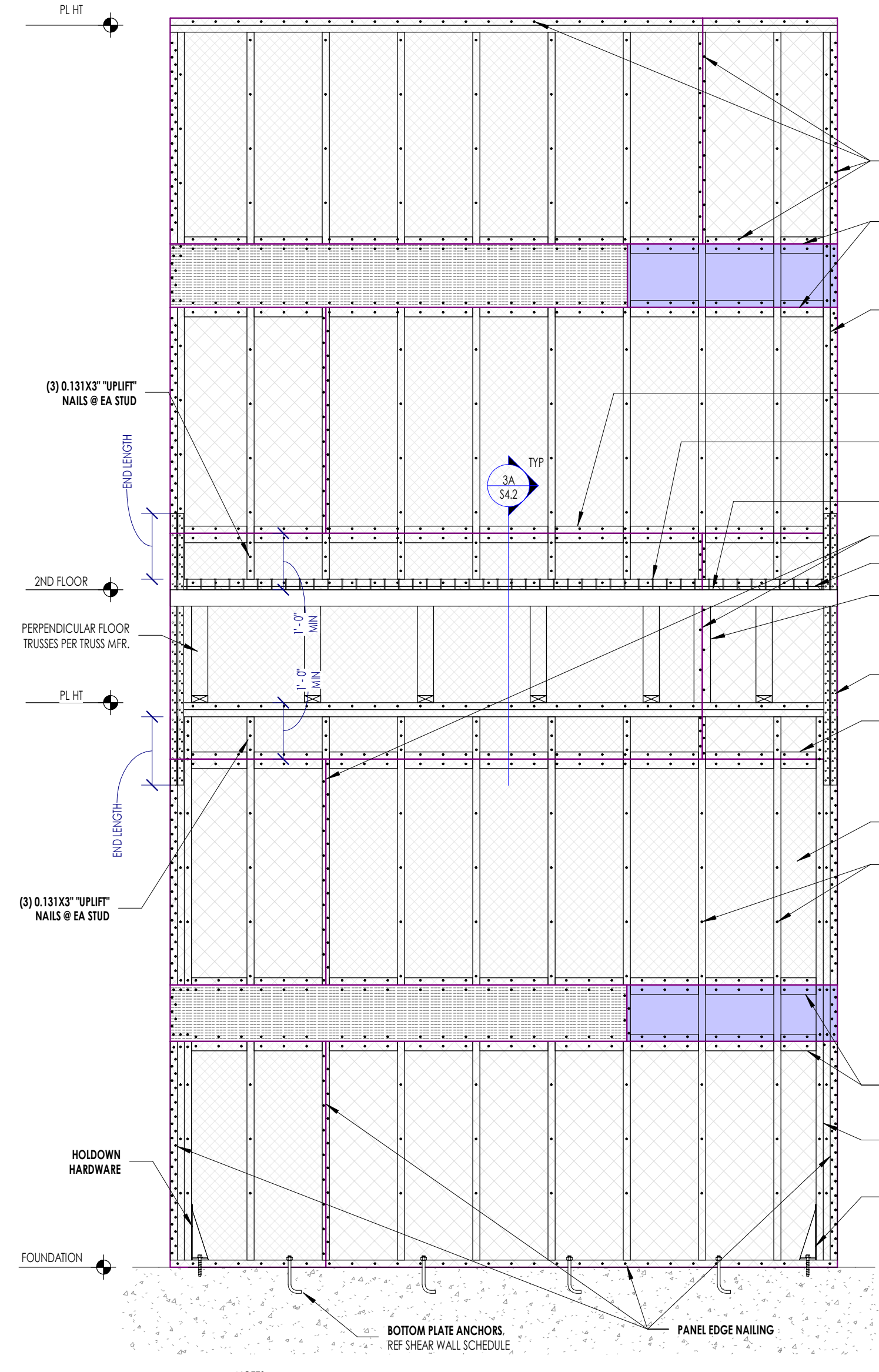
6C S4.3 SHEAR WALL - END POST CONFIGURATIONS



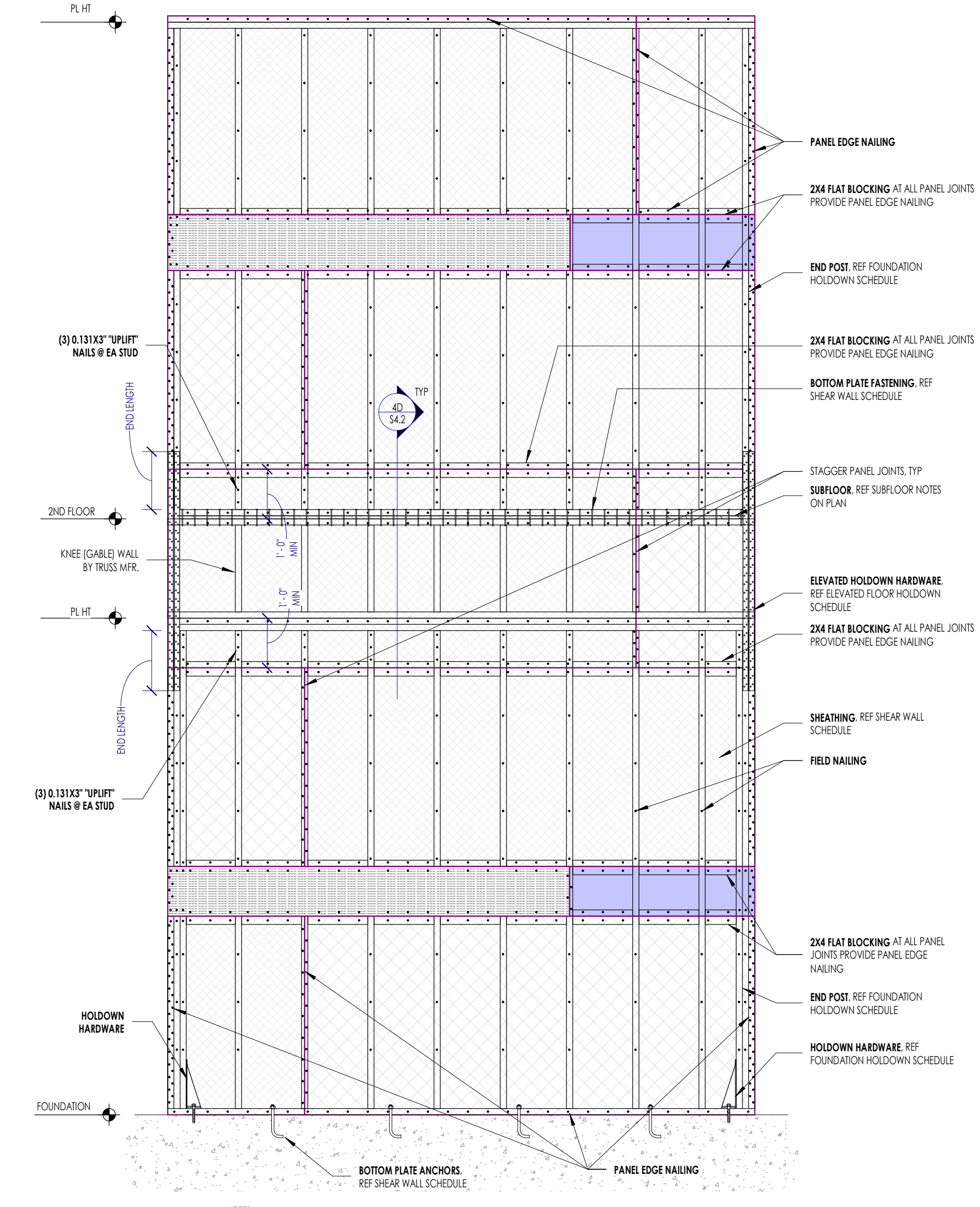
6B S4.3 SHEARWALL - FORCE TRANSFER AROUND OPENING



6A S4.3 SHEARWALL - FORCE TRANSFER AROUND OPENING (DOOR)



4A S4.3 TYPICAL MULTIPLE STORY SHEARWALL FRAMING AND FASTENING, TRUSSES PERPENDICULAR



2A S4.3 TYPICAL MULTIPLE STORY SHEARWALL FRAMING AND FASTENING, TRUSSES PARALLEL

RENOVATION Wranglers
 Owner: Renovation Wranglers
 102 E 26th St
 Bryan, TX 77803
 kate@renovations.com | 979.450.9969

LKB ARCHITECTURE
 Architect of Record: LKB Architecture
 2929 Allen Pkwy Suite 200
 Houston, TX 77019
 isa@lkbarchitecture.com | 713.425.3076

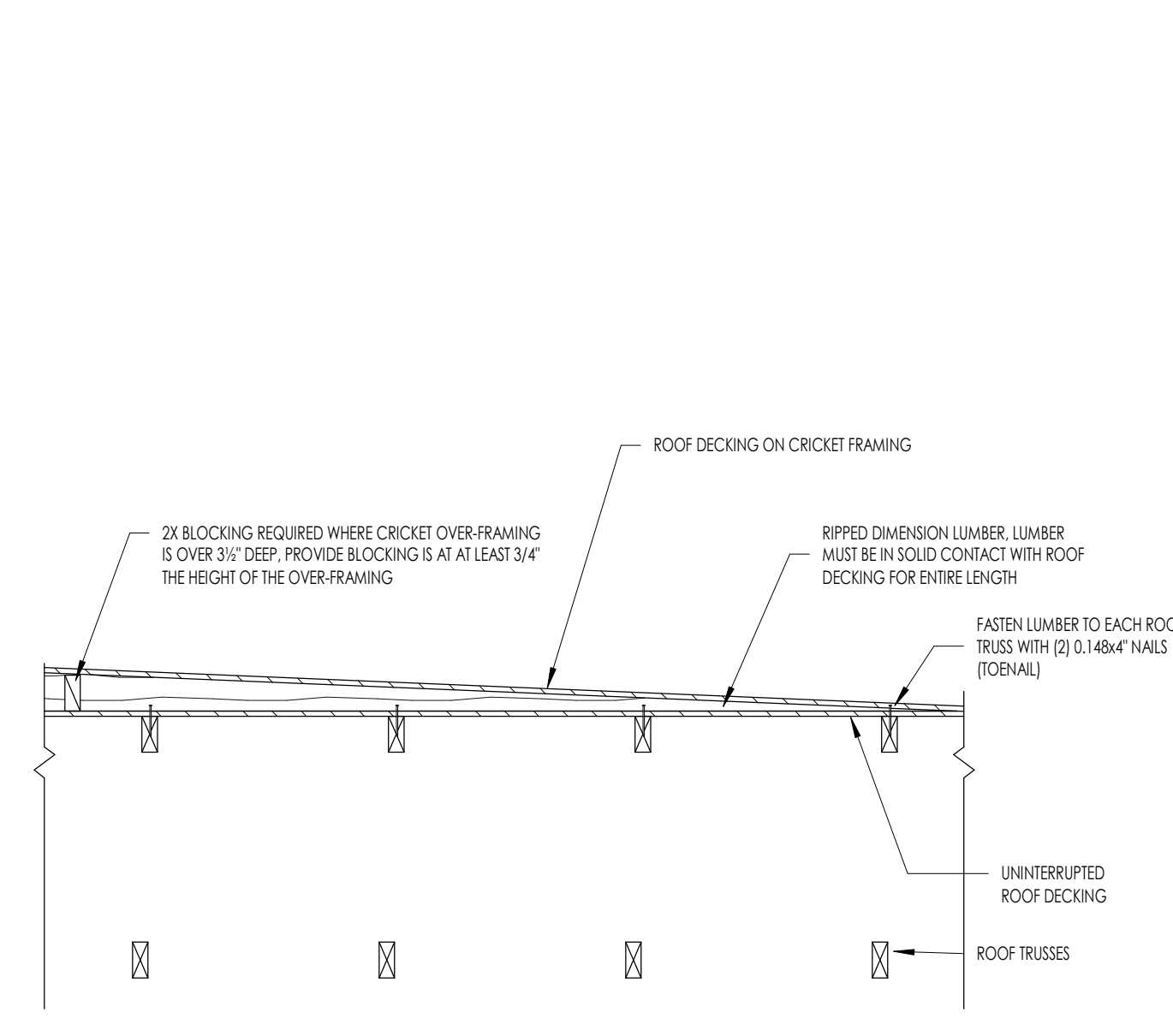
DUDDLEY
 Structural: Dudley
 6102 Imperial Loop Drive
 College Station, TX 77845
 (979) 777-0720

amc ENGINEERS
 MEP: AMC Engineers
 508 E Jackson St # 552
 Burnet, TX 78611
 info@amcengineers.com

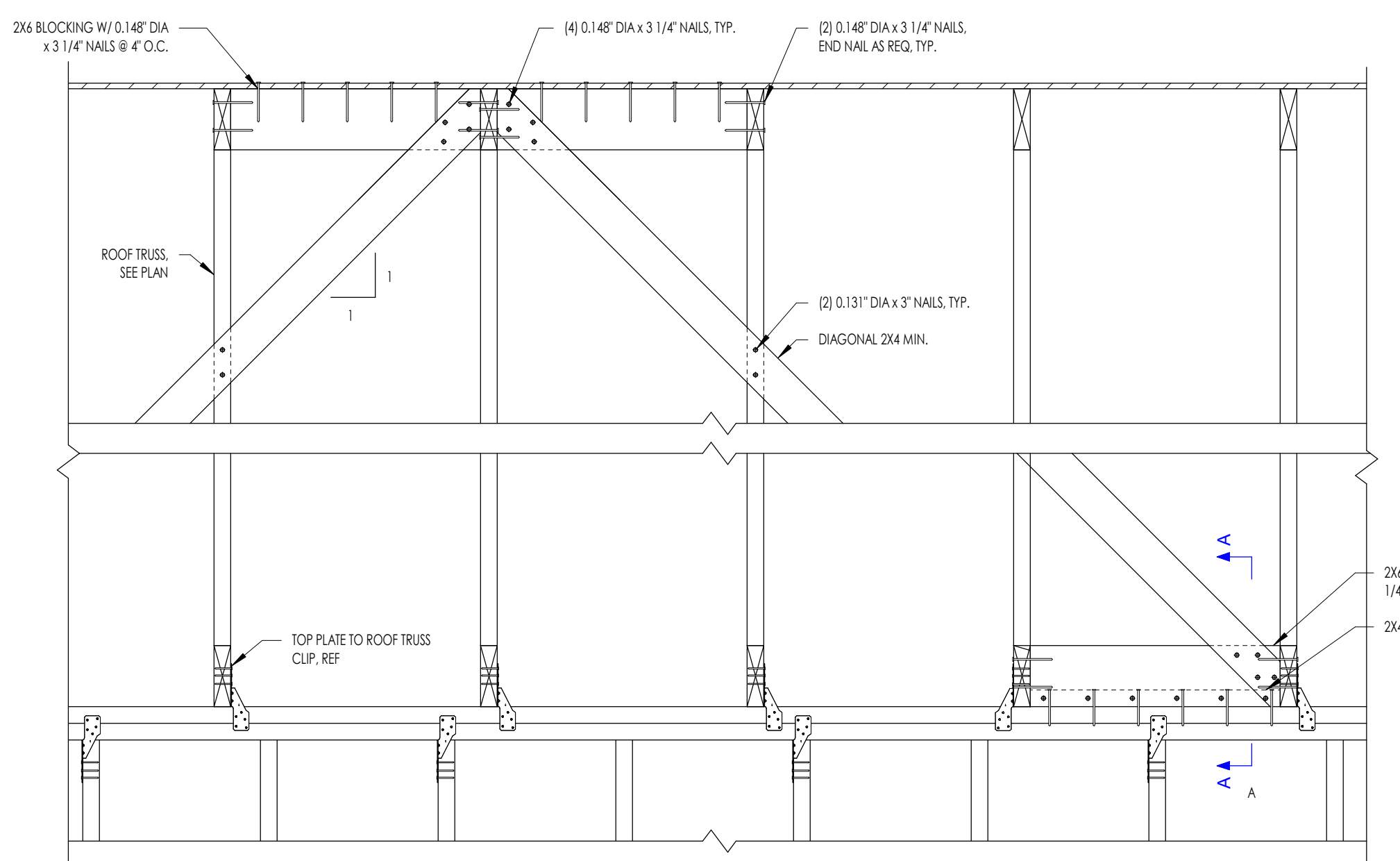
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openingdesign
 Architect: OpeningDesign
 17 S Fairchild | FL 7
 Madison, WI 53703
 ryan@openingdesign.com | 773.425.6456

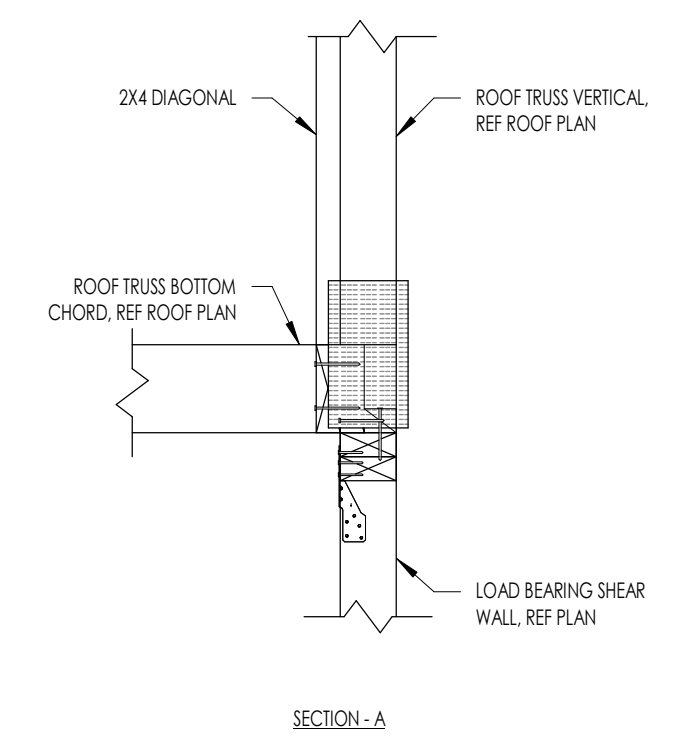
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06/02/2022	Review before Permit



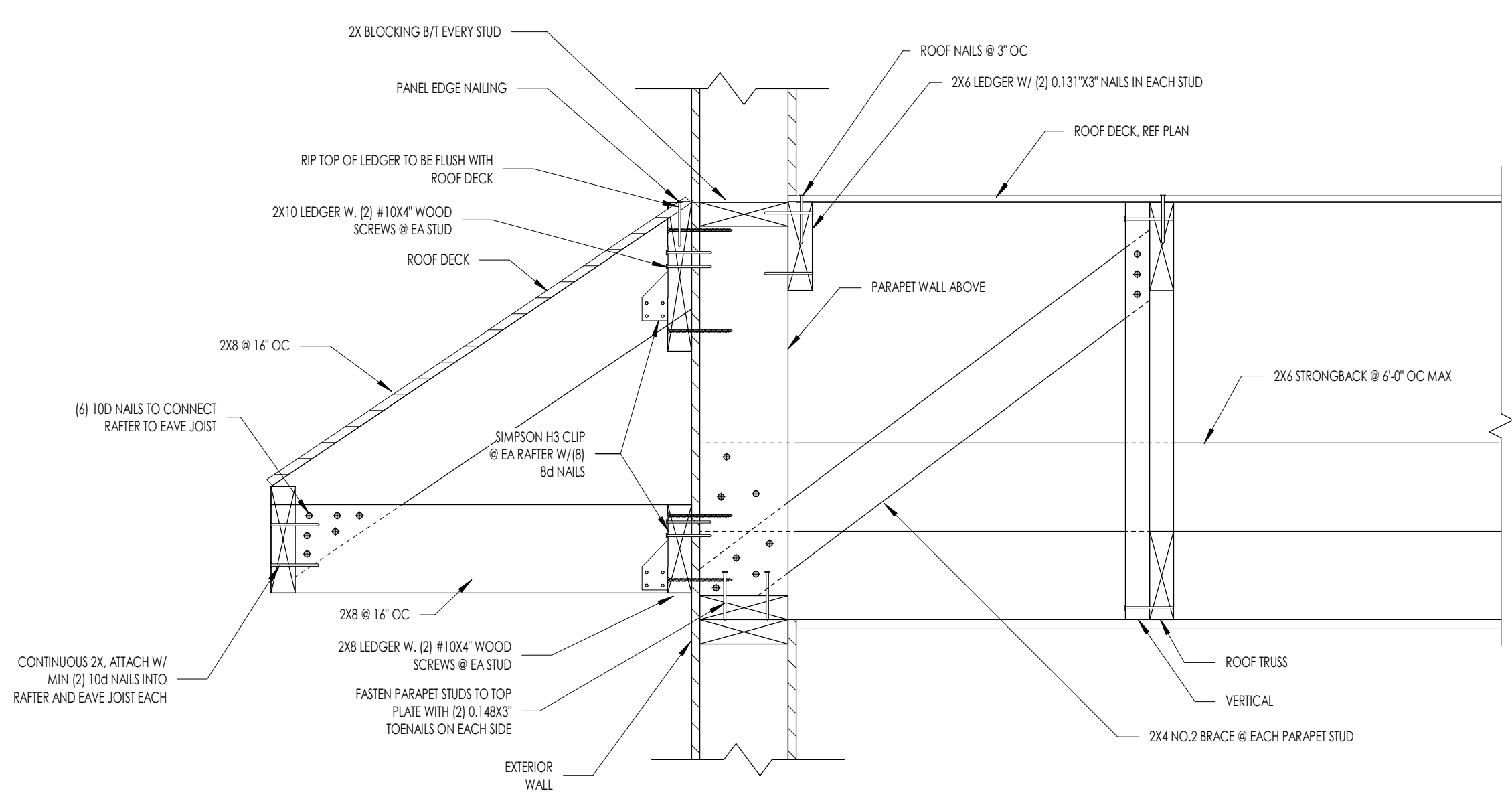
6A S4.4 TYPICAL CRICKET FRAMING AT ROOF



5A S4.4 061760 ROOF - BRACING AT INTERIOR SHEAR WALL



SECTION A



2A S4.4 ROOF - RAFTER ATTACHMENT INTO WALL

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RENOVATION Wranglers
 Owner: Renovation Wranglers
 102 E 26th St
 Bryan, TX 77803
 Katenecason@wranglers.com | 979.450.9969

LKB ARCHITECTURE
 Architect of Record: LKB Architecture
 2929 Allen Pkwy Suite 200
 Houston, TX 77019
 isa@lkbarchitecture.com | 713.425.3076

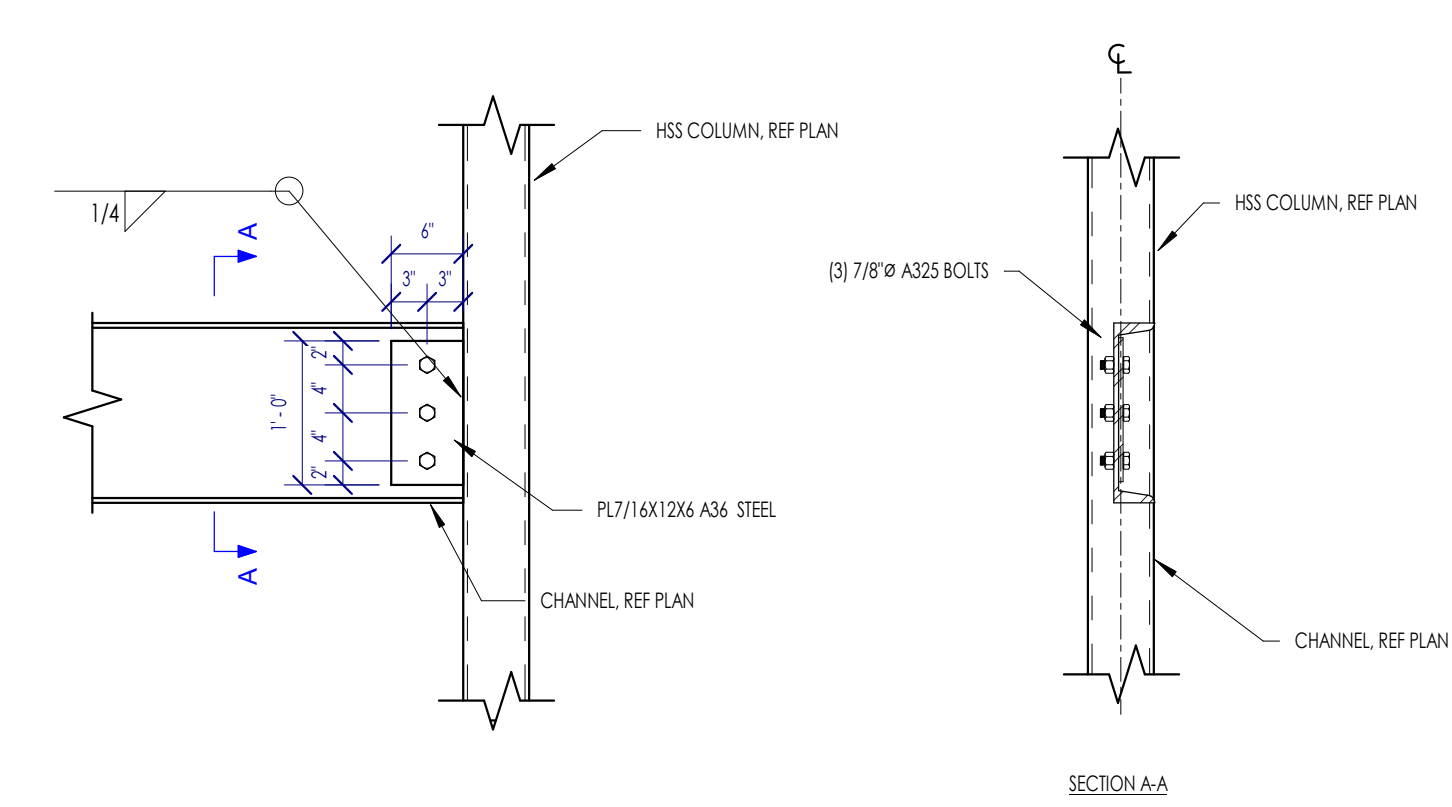
DUDLEY
 Structural: Dudley
 6102 Imperial Loop Drive
 College Station, TX 77845
 (979) 777-0720

amc ENGINEERS
 MEP: AMC Engineers
 508 E Jackson St # 552
 Burnet, TX 78611
 info@amcengineers.com

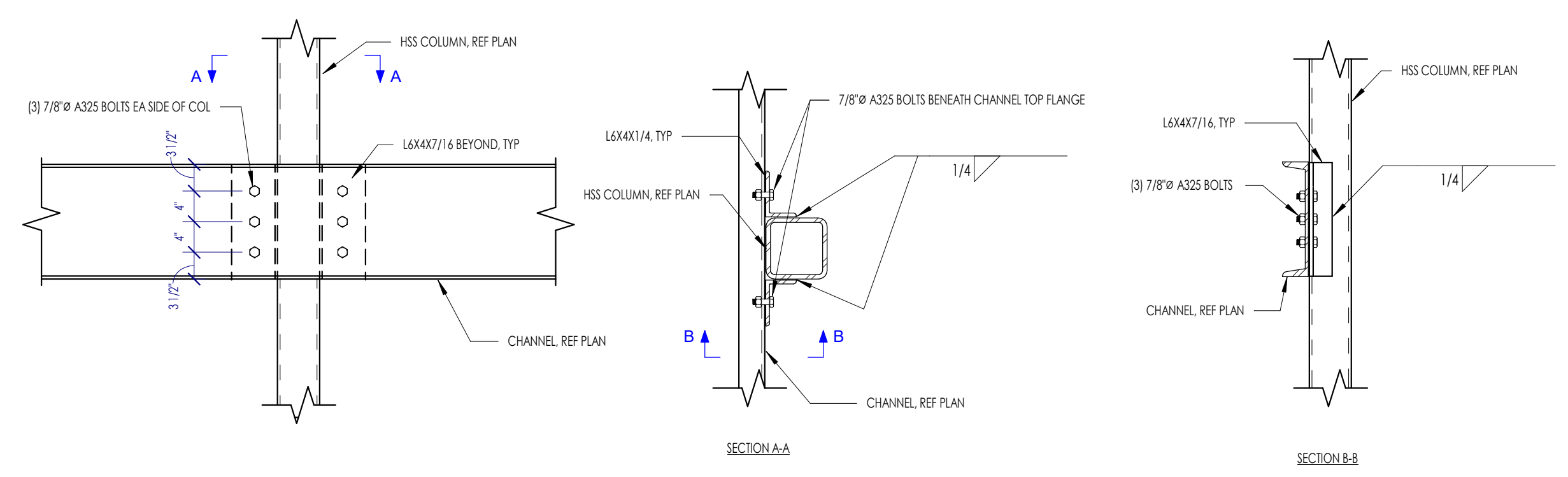
openingdesign
 Architect: OpeningDesign
 17 S Fairchild | FL 7
 Madison, WI 53703
 ryan@openingdesign.com | 773.425.6456

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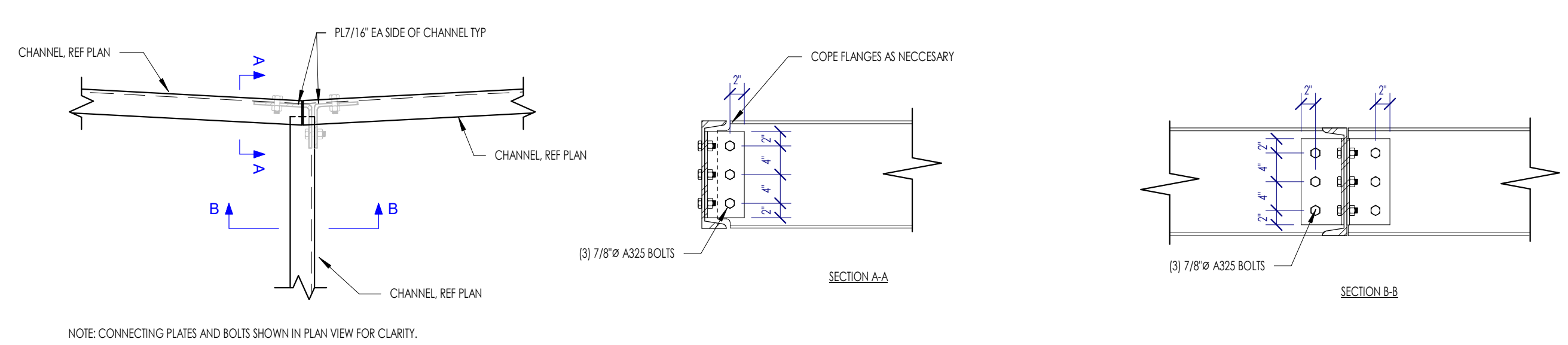
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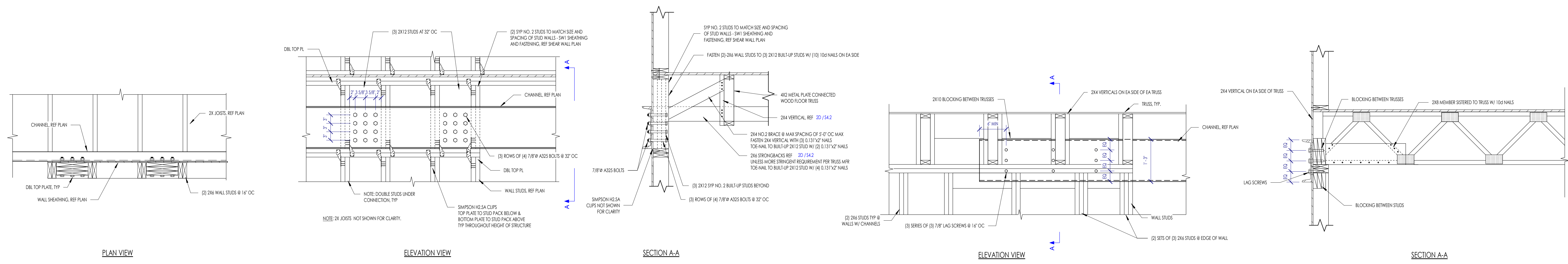
1C S4.5 CHANNEL TO HSS COLUMN CONNECTION - ALIGNED



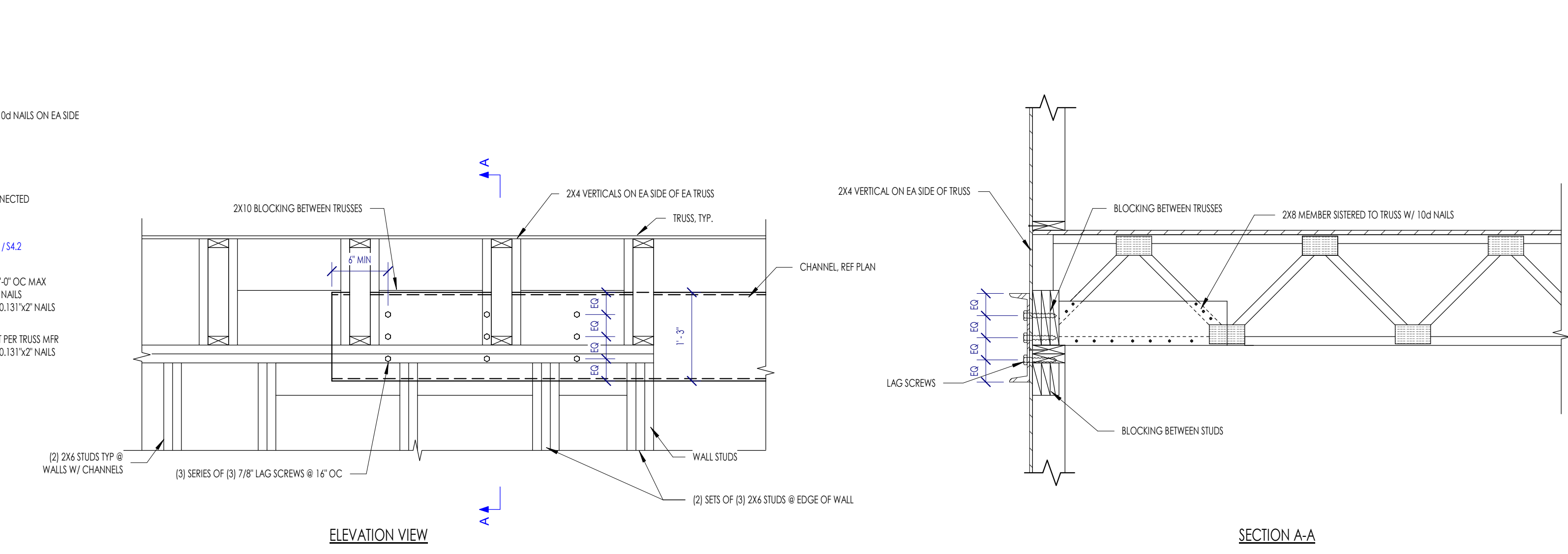
3B S4.5 CHANNEL TO HSS COLUMN CONNECTION - ECCENTRIC



6B S4.5 TYPICAL CHANNEL CONNECTION AT BALCONY1

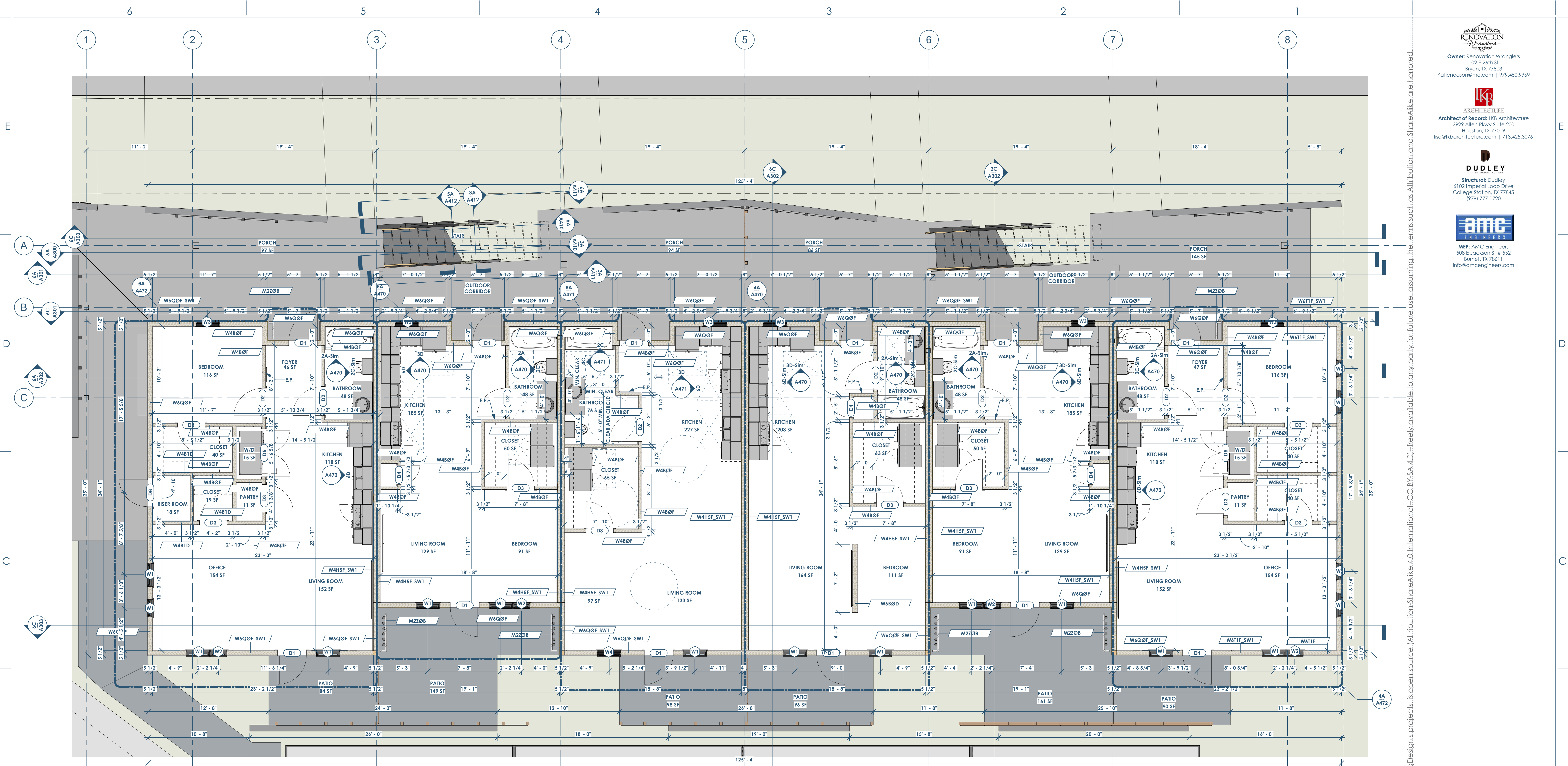


6A S4.5 TYPICAL CHANNEL TO WALL STUD BOLTED CONNECTIONX



3A S4.5 TYPICAL CHANNEL TO WALL STUD CONNECTION

Date	Description
06/02/2022	Review before Permit



68
A101 FLOOR PLAN - 1ST FLOOR
1/4" = 1'-0"

- FLOOR PLAN NOTES**
- SEE A800 FOR PARTITION TYPES
 - SEE A600 FOR DOOR AND WINDOW TYPES
 - REFERENCE A751 FOR ACCESSIBILITY COMPLIANCE REQUIREMENTS
 - ALL FINISHES TO BE PROVIDED BY OWNER
 - MILLWORK AND APPLIANCES TO BE PROVIDED BY OWNER

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RENOVATION Wranglers
 Owner: Renovation Wranglers
 102 E 26th St
 Bryan, TX 77803
 Katerencason@wranglers.com | 979.450.9969

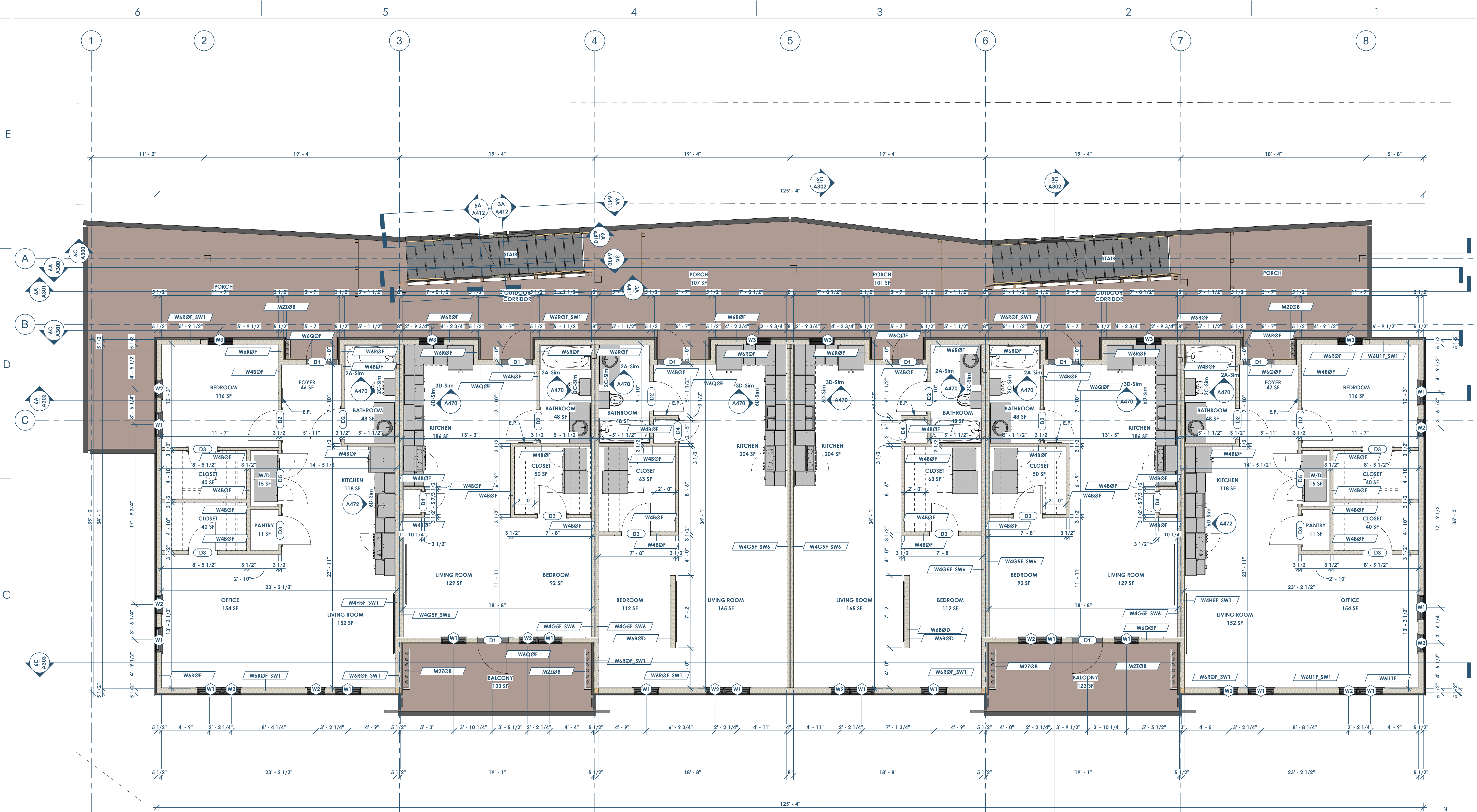
LK ARCHITECTURE
 Architect of Record: LK Architecture
 2929 Allen Pkwy Suite 200
 Houston, TX 77019
 isa@lkarchitecture.com | 713.425.3076

DUDDLEY
 Structural: Dudley
 6102 Imperial Loop Drive
 College Station, TX 77845
 (979) 777-0720

amc ENGINEERS
 MEP: AMC Engineers
 508 E Jackson St # 552
 Burnet, TX 78611
 info@amcengineers.com

openingdesign
 Architect: OpeningDesign
 17 S Fairchild | FL 7
 Madison, WI 53703
 ryan@openingdesign.com | 773.425.6456

Date	Description
06/02/2022	Review before Permit



68 A102 FLOOR PLAN - 2ND FLOOR
1/4" = 1'-0"

- FLOOR PLAN NOTES**
- SEE A800 FOR PARTITION TYPES
 - SEE A600 FOR DOOR AND WINDOW TYPES
 - REFERENCE A751 FOR ACCESSIBILITY COMPLIANCE REQUIREMENTS
 - ALL FINISHES TO BE PROVIDED BY OWNER
 - MILLWORK AND APPLIANCES TO BE PROVIDED BY OWNER

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RENOVATION
Wranglers
Engineers

Owner: Renovation Wranglers
102 E 26th St
Bryan, TX 77803
katenearson@re.com | 979.450.9969

ARCHITECTURE
Architect of Record: LKB Architecture
2929 Allen Pkwy Suite 200
Houston, TX 77019
isa@lkbarchitecture.com | 713.425.3076

DUDDLEY
Structural: Dudley
6102 Imperial Loop Drive
College Station, TX 77845
(979) 777-0720

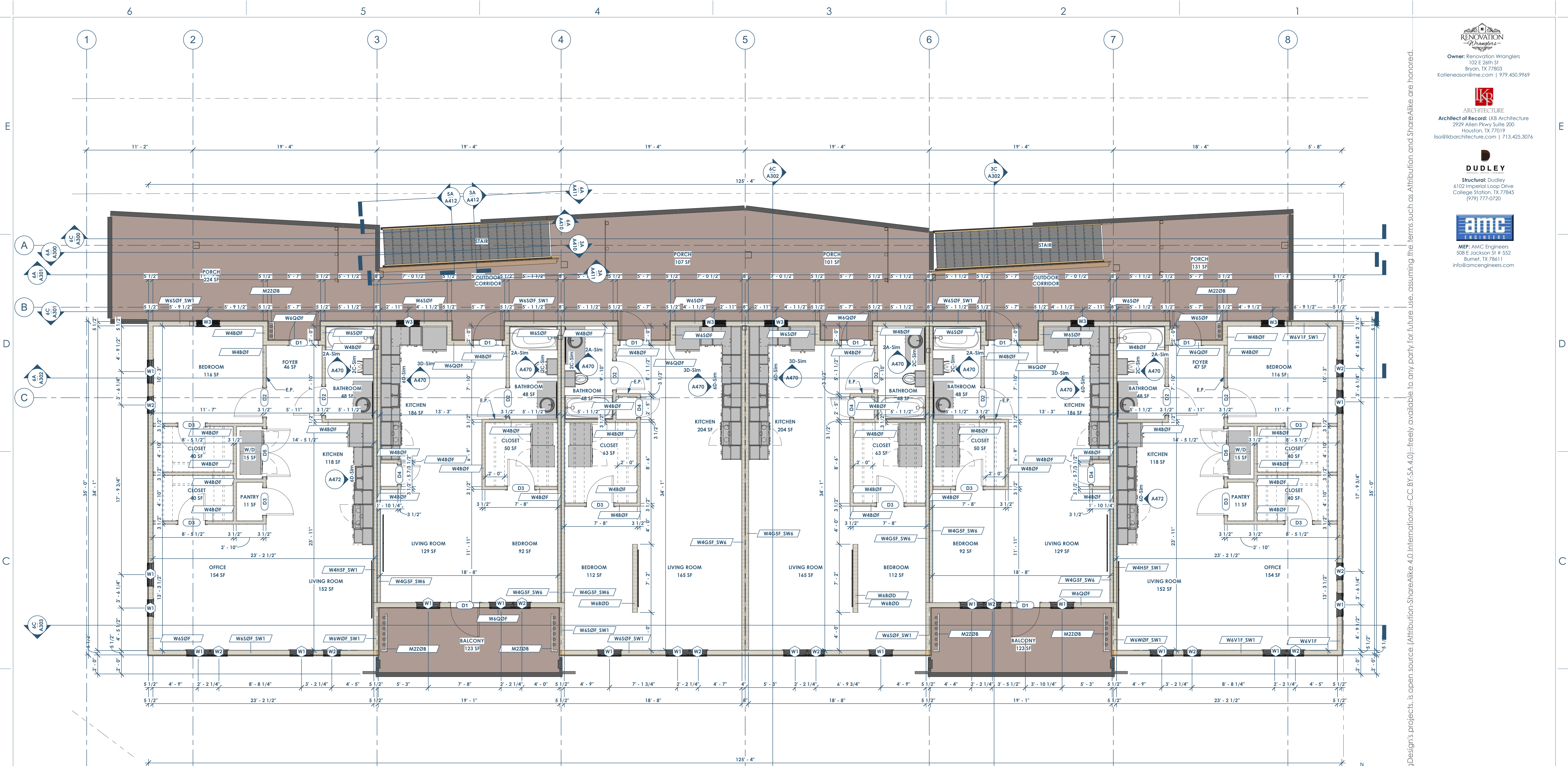
amc
ENGINEERS

MEP: AMC Engineers
508 E Jackson St # 552
Burnet, TX 78611
info@amcengineers.com

openingdesign

Architect: OpeningDesign
17 S Fairchild | FL 7
Madison, WI 53703
ryan@openingdesign.com | 773.425.6456

Date	Description
06/02/2022	Review before Permit



68 A103 FLOOR PLAN - 3RD FLOOR
1/4" = 1'-0"

- FLOOR PLAN NOTES**
- SEE A600 FOR PARTITION TYPES
 - SEE A600 FOR DOOR AND WINDOW TYPES
 - REFERENCE A751 FOR ACCESSIBILITY COMPLIANCE REQUIREMENTS
 - ALL FINISHES TO BE PROVIDED BY OWNER
 - MILLWORK AND APPLIANCES TO BE PROVIDED BY OWNER

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RENOVATION
Wranglers
Engineers

Owner: Renovation Wranglers
102 E 26th St
Bryan, TX 77803
Kateneason@rw.com | 979.450.9969

ARCHITECTURE
Architect of Record: LKB Architecture
2929 Allen Pkwy Suite 200
Houston, TX 77019
isa@lkbarchitecture.com | 713.425.3076

DUDDLEY
Structural: Dudley
4102 Imperial Loop Drive
College Station, TX 77845
(979) 777-0720

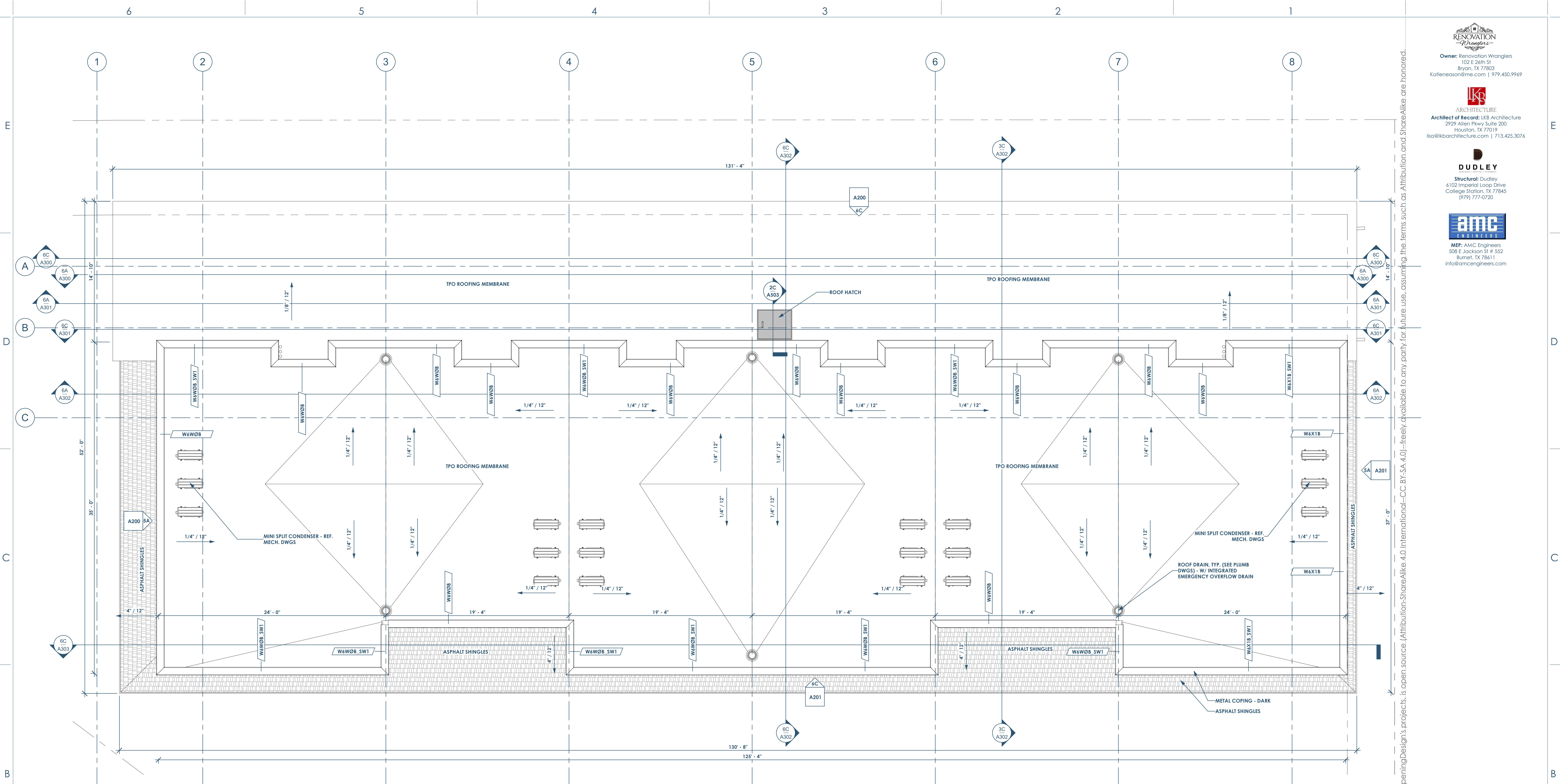
amc
ENGINEERS

MEP: AMC Engineers
508 E Jackson St # 552
Burnet, TX 78611
info@amcengineers.com

openingdesign

Architect: OpeningDesign
17 S Fairchild | FL 7
Madison, WI 53703
ryan@openingdesign.com | 773.425.6456

Date	Description
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68 FLOOR PLAN - ROOF
A104 1/4" = 1'-0"


 Owner: Renovation Wranglers
 102 E 26th St
 Bryan, TX 77803
 Kateracaron@me.com | 979.450.9969

 ARCHITECTURE
 Architect of Record: LKB Architecture
 2929 Allen Pkwy Suite 200
 Houston, TX 77019
 isa@lkbarchitecture.com | 713.425.3076

 STRUCTURAL: DUDLEY
 4102 Imperial Loop Drive
 College Station, TX 77845
 (979) 777-0720

 MEP: AMC ENGINEERS
 508 E Jackson St # 552
 Burnet, TX 78611
 info@amcengineers.com


 openingdesign
 Architect: OpeningDesign
 17 S Fairchild | FL 7
 Madison, WI 53703
 ryan@openingdesign.com | 773.425.6456

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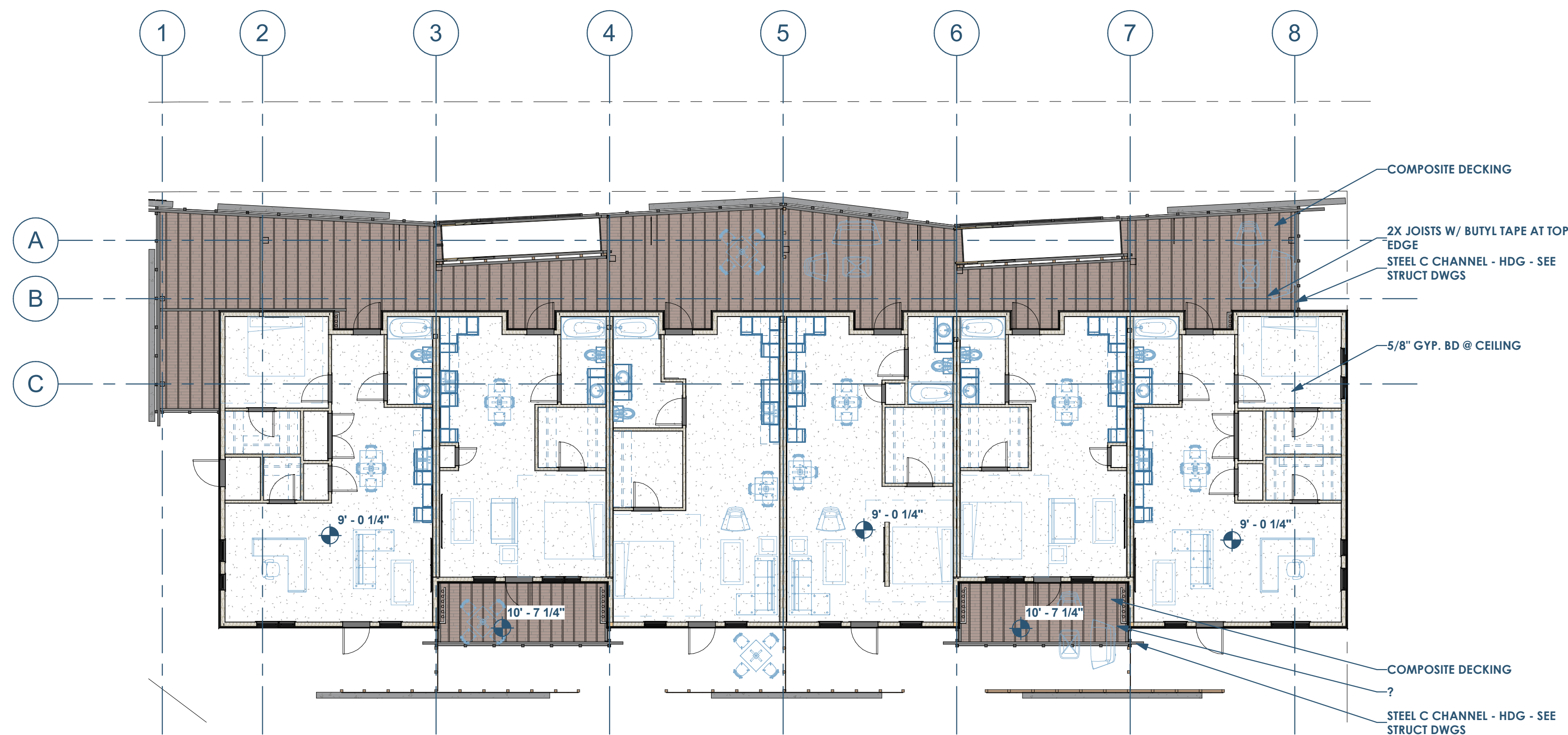
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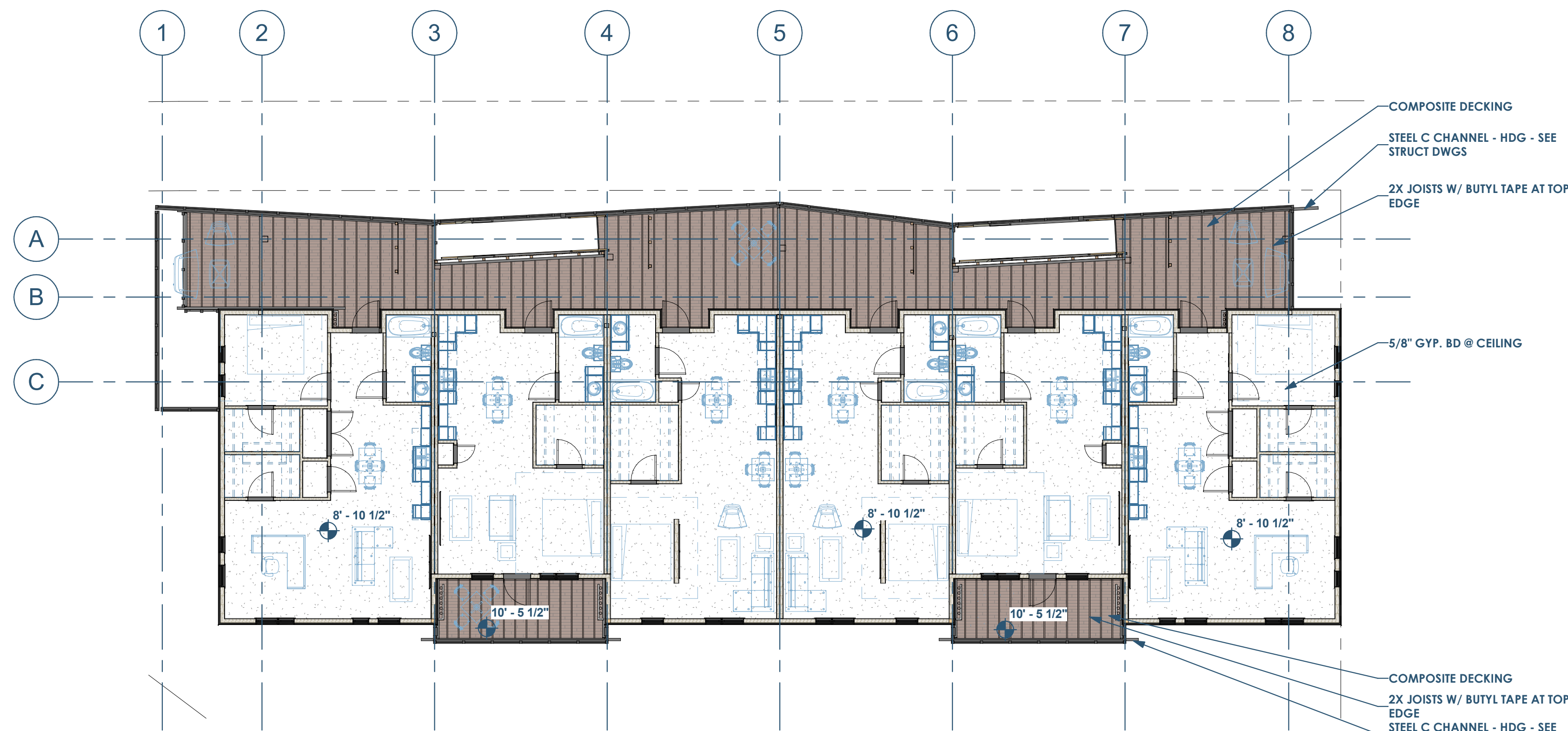
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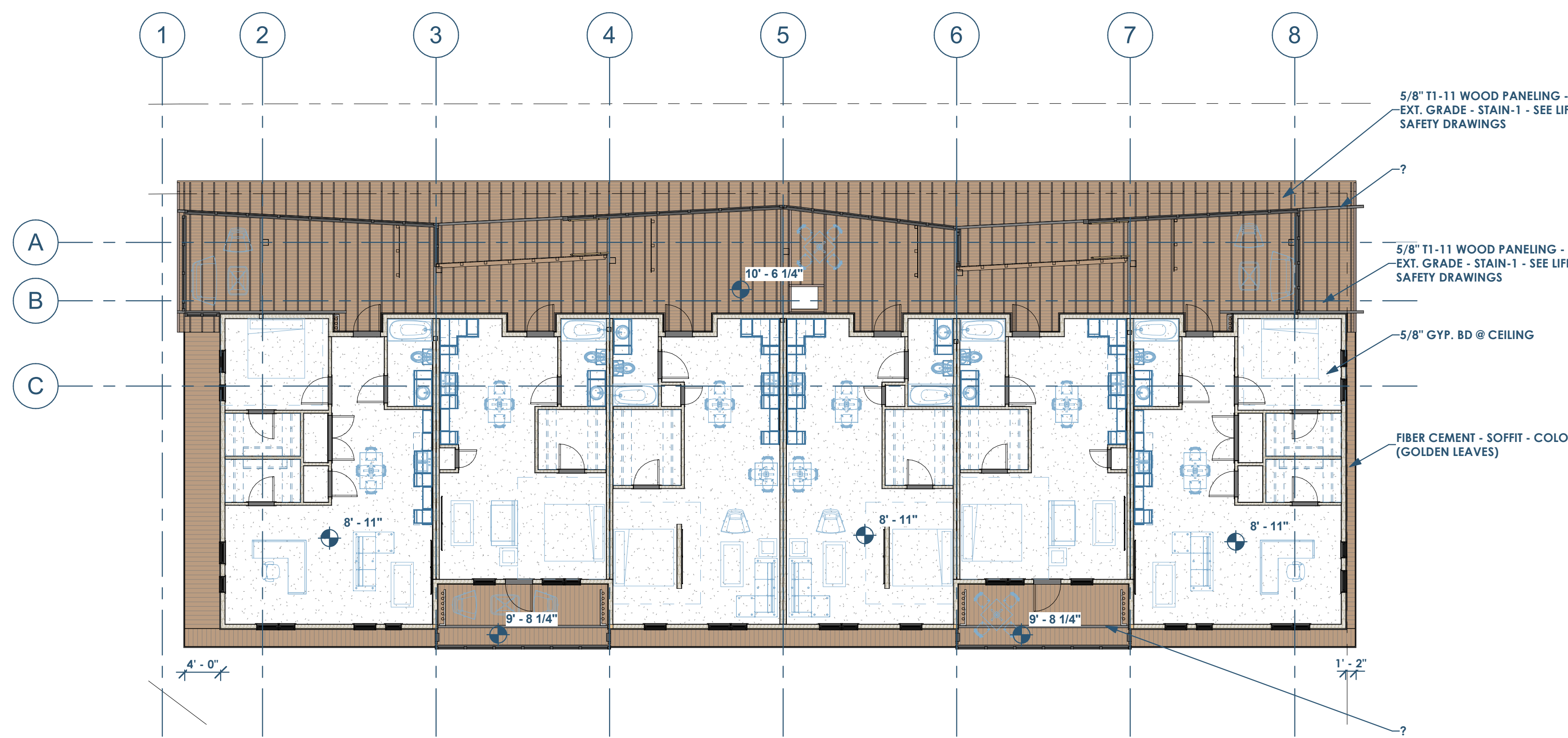
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6D
A150 RCP - 1ST FLOOR
1" = 10'-0"



3D
A150 RCP - 2ND FLOOR
1" = 10'-0"



6B
A150 RCP - 3RD FLOOR
1" = 10'-0"



RENOVATION
Wranglers
ENGINEERS

Owner: Renovation Wranglers
102 E 26th St
Bryan, TX 77803
Katherine@time.com | 979.450.9969

LKB
ARCHITECTURE

Architect of Record: LKB Architecture
2929 Allen Pkwy Suite 200
Houston, TX 77019
isa@lkbarchitecture.com | 713.425.3076

DUDDLEY
STRUCTURAL

Structural: Dudley
6102 Imperial Loop Drive
College Station, TX 77845
(979) 777-0720

amc
ENGINEERS

MEP: AMC Engineers
508 E Jackson St # 552
Burnet, TX 78611
info@amcengineers.com

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openingdesign

Architect: OpeningDesign
17 S Fairchild | FL 7
Madison, WI 53703
ryan@openingdesign.com | 773.425.6456

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6

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4

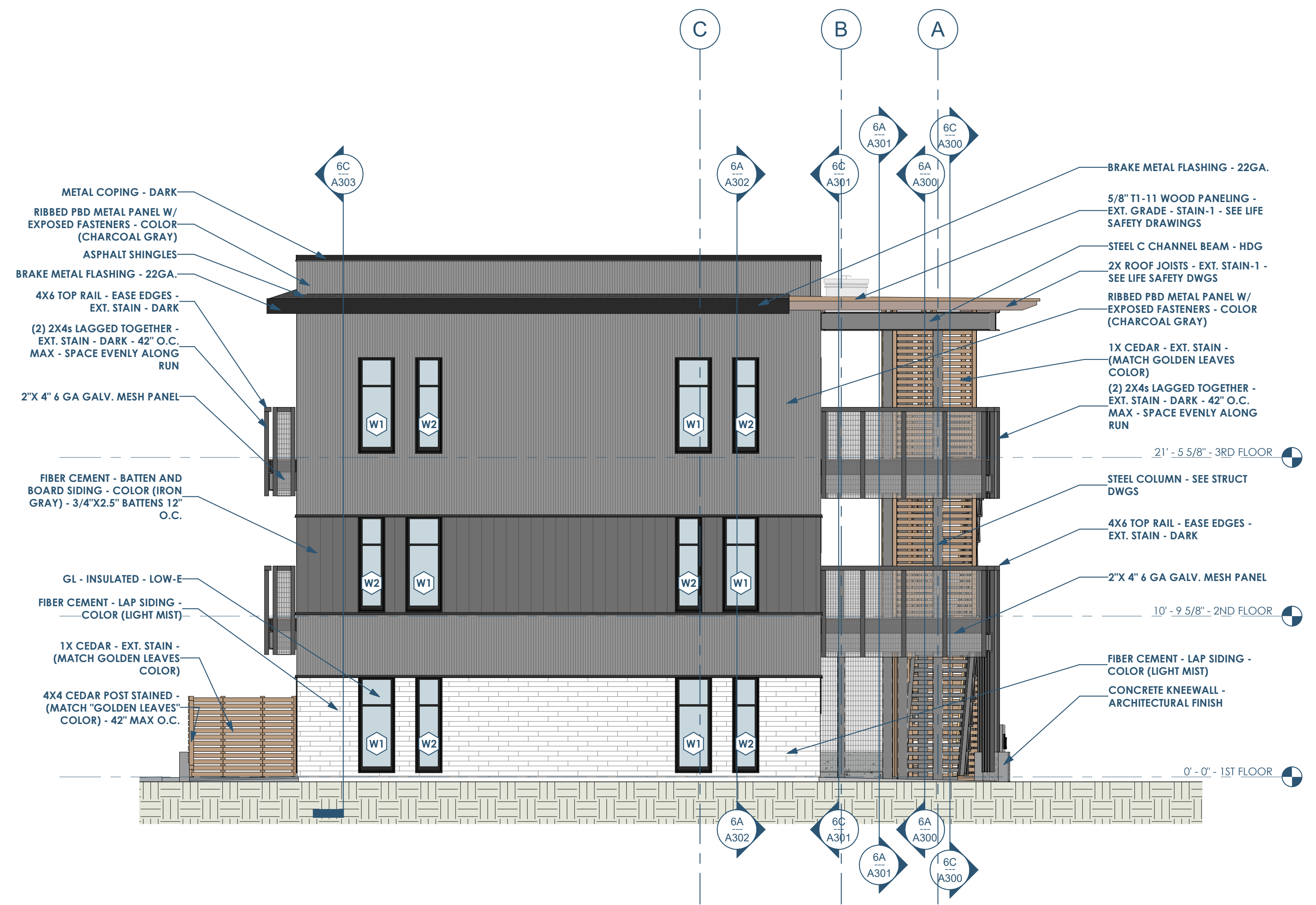
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2

1



6C A201 BUILDING ELEVATION - SOUTH
3/16" = 1'-0"



6A A201 BUILDING ELEVATION - EAST
3/16" = 1'-0"

RENOVATION
Architects
Owner: Renovation Wranglers
102 E 26th St
Bryan, TX 77803
Kateneason@re.com | 979.450.9969

DUDDLEY
Structural: Dudley
6102 Imperial Loop Drive
College Station, TX 77845
(979) 777-0720

amc
ENGINEERS
MEP: AMC Engineers
508 E Jackson St # 552
Burnet, TX 78611
info@amcengineers.com

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openingdesign
Architect: OpeningDesign
17 S Fairchild | FL 7
Madison, WI 53703
ryan@openingdesign.com | 773.425.6456

6

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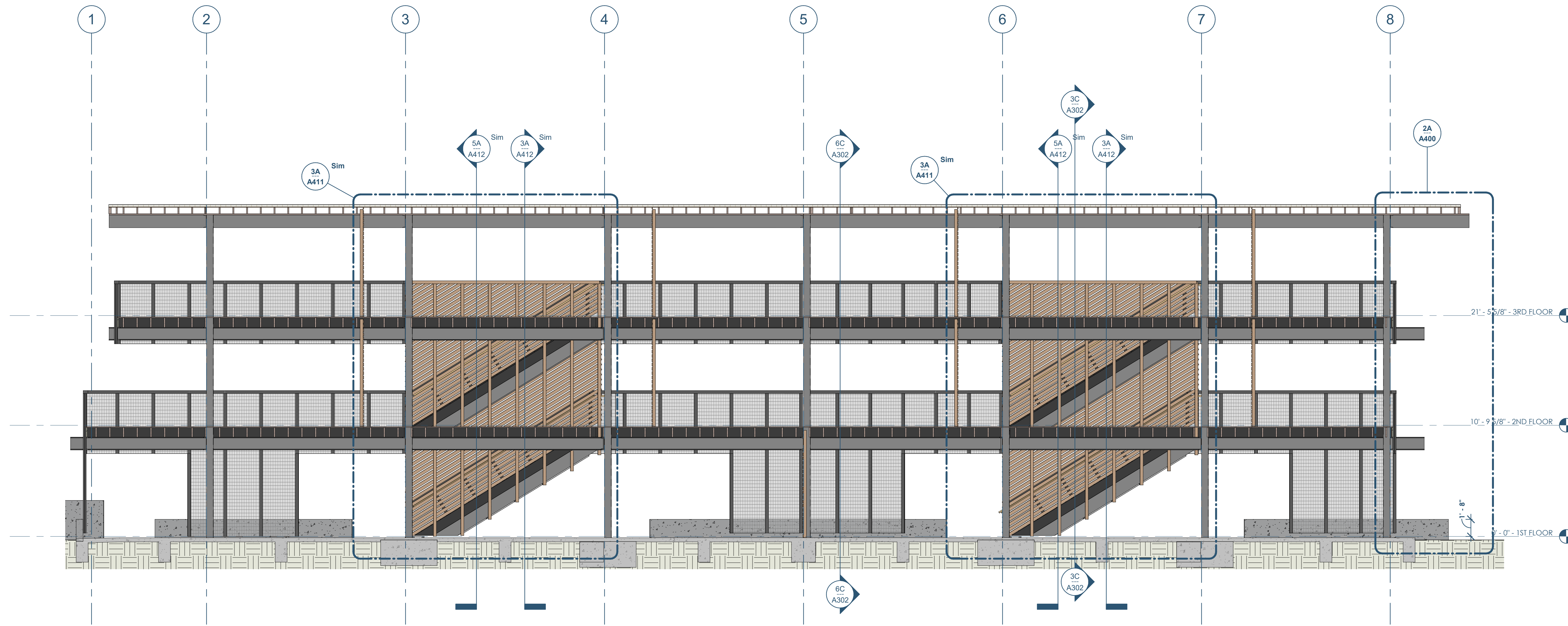
C

B

A



6C
A301 BUILDING SECTION - THRU BALCONY - LOOKING SOUTH
3/16" = 1'-0"



6A
A301 BUILDING SECTION - THRU BALCONY - LOOKING NORTH
3/16" = 1'-0"

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RENOVATION Wranglers
 Owner: Renovation Wranglers
 102 E 26th St
 Bryan, TX 77803
 Katenecason@time.com | 979.450.9969

LKB ARCHITECTURE
 Architect of Record: LKB Architecture
 2929 Allen Pkwy Suite 200
 Houston, TX 77019
 isa@lkbarchitecture.com | 713.425.3076

DUDLEY
 Structural: Dudley
 6102 Imperial Loop Drive
 College Station, TX 77845
 (979) 777-0720

amc ENGINEERS
 MEP: AMC Engineers
 508 E Jackson St # 552
 Burnet, TX 78611
 info@amcengineers.com

openingdesign
 Architect: OpeningDesign
 17 S Fairchild | FL 7
 Madison, WI 53703
 ryan@openingdesign.com | 773.425.6456

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6

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E

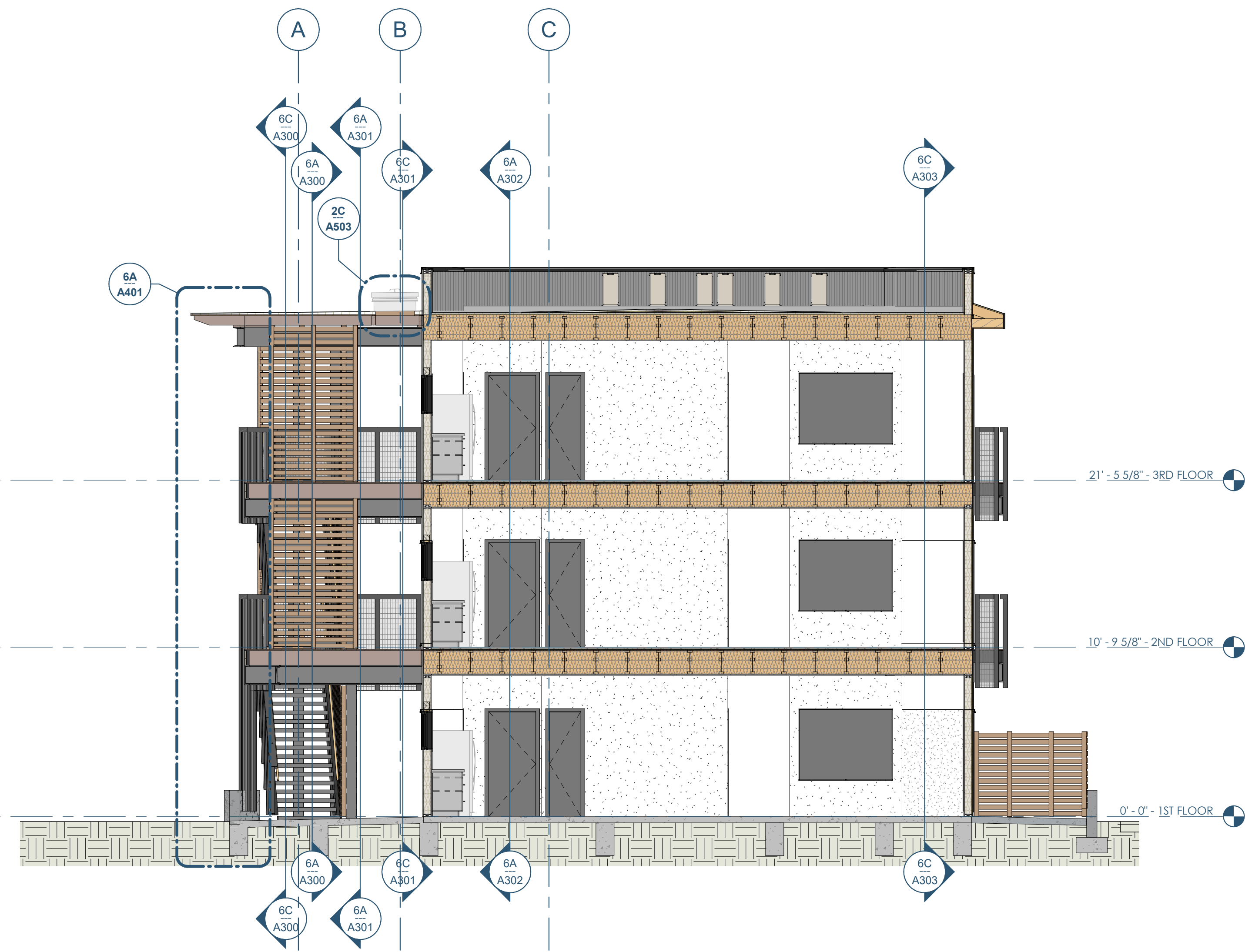
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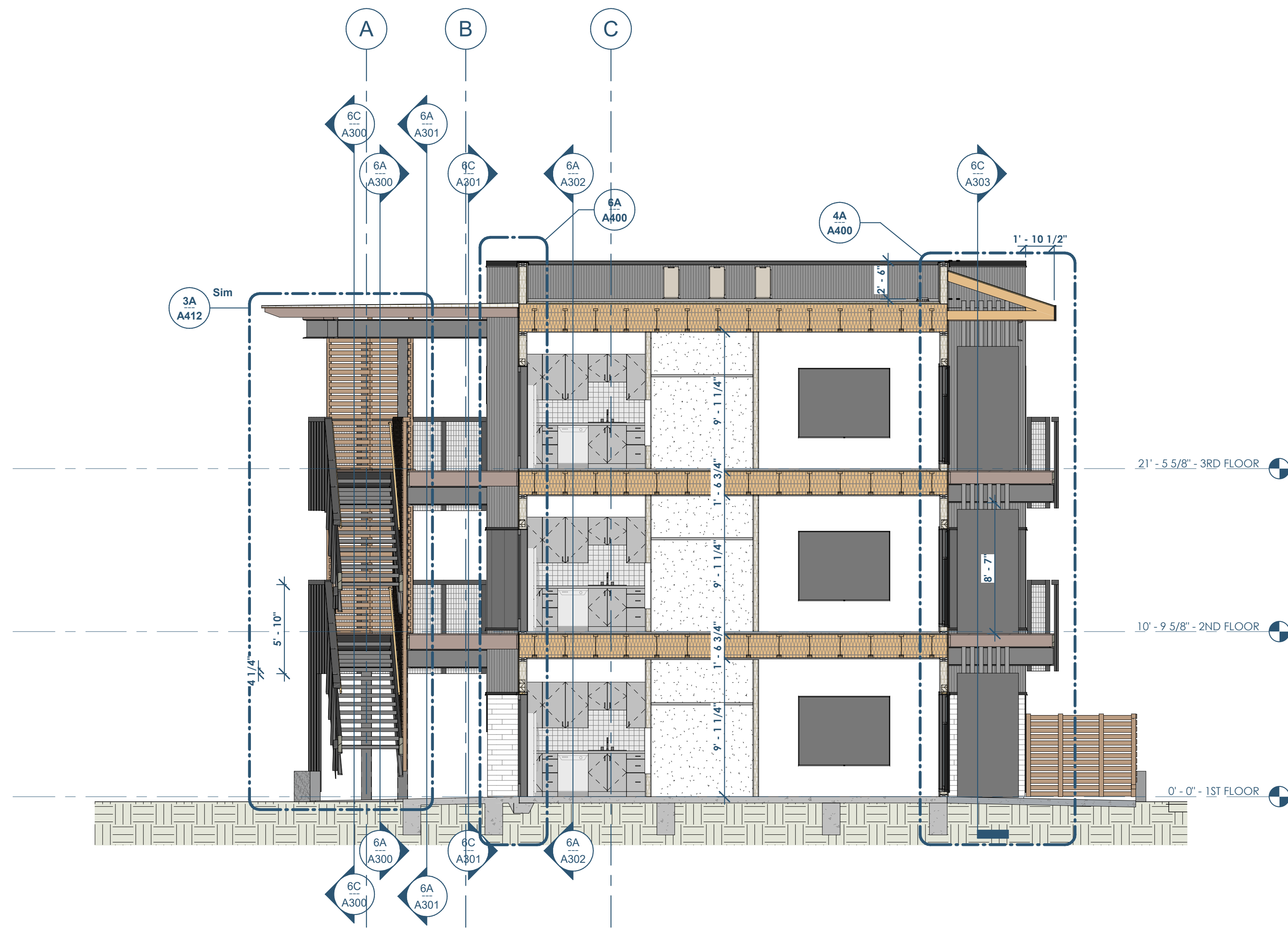
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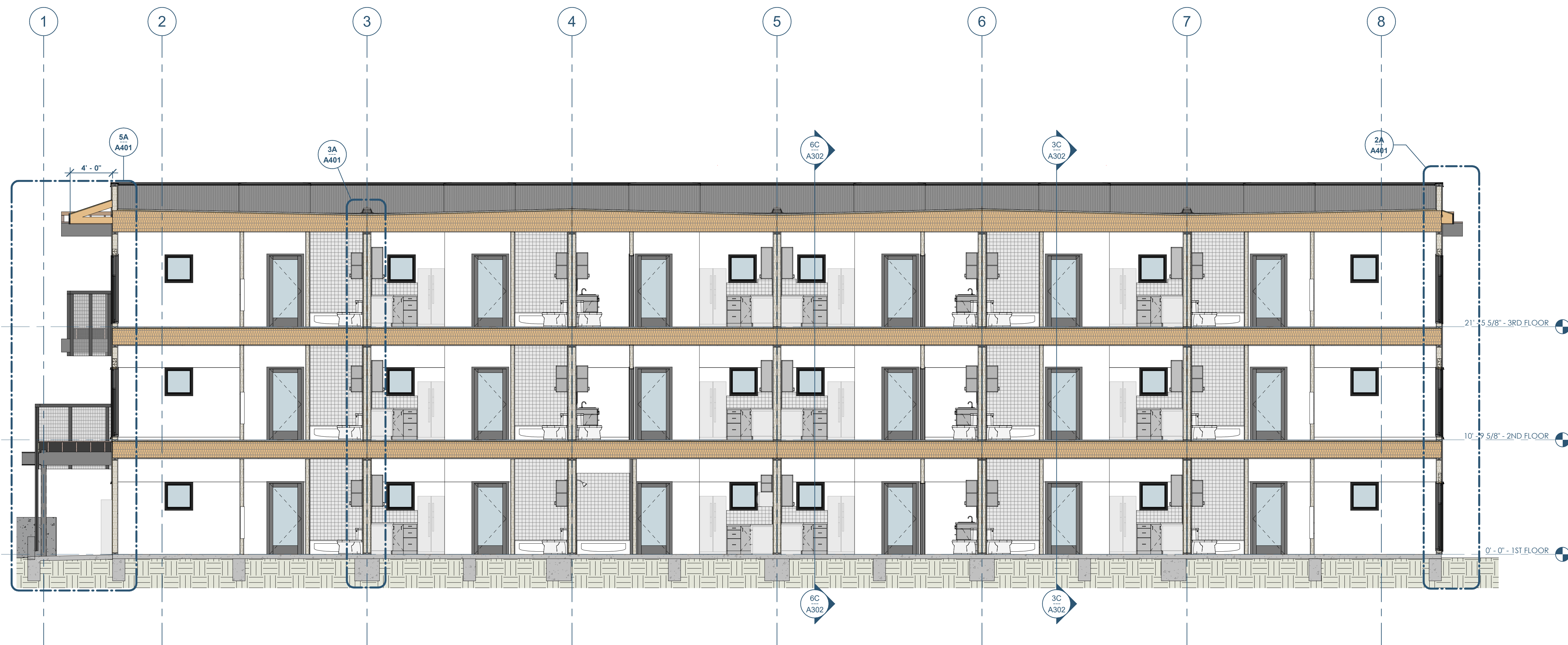
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6C A302 BUILDING SECTION - THRU LARGE STUDIO - LOOKING EAST
3/16" = 1'-0"



3C A302 BUILDING SECTION - THRU SMALL STUDIO - LOOKING EAST
3/16" = 1'-0"



6A A302 BUILDING SECTION - EAST/WEST - LOOKING NORTH
3/16" = 1'-0"

RENOVATION
Wranglers
ENGINEERS

Owner: Renovation Wranglers
102 E 26th St
Bryan, TX 77803
Kateneason@rwr.com | 979.450.9969

LKB
ARCHITECTURE

Architect of Record: LKB Architecture
2929 Allen Pkwy Suite 200
Houston, TX 77019
isa@lkbarchitecture.com | 713.425.3076

DUDDLEY

Structural: Dudley
4102 Imperial Loop Drive
College Station, TX 77845
(979) 777-0720

amc
ENGINEERS

MEP: AMC Engineers
508 E Jackson St # 552
Burnet, TX 78611
info@amcengineers.com

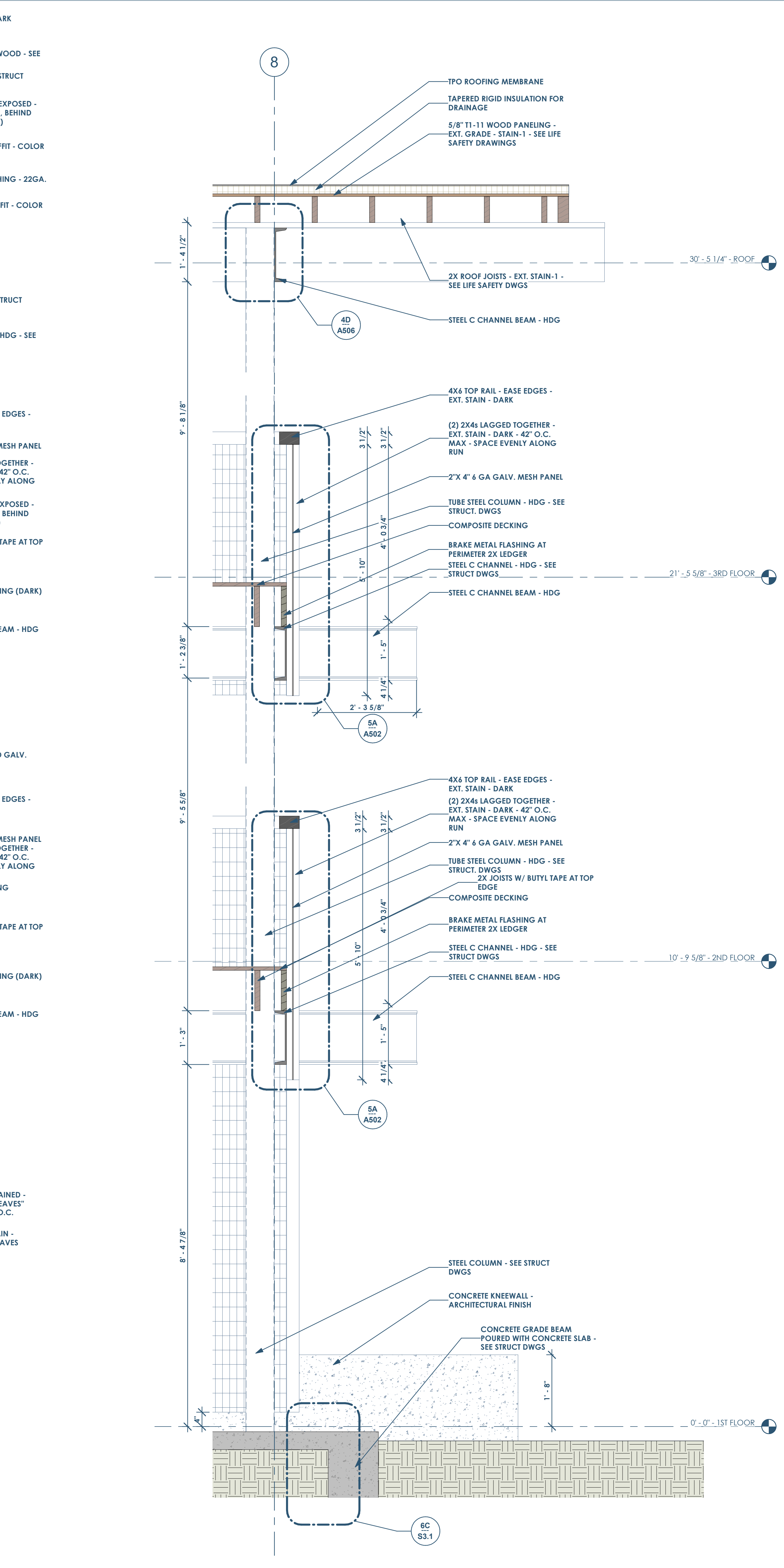
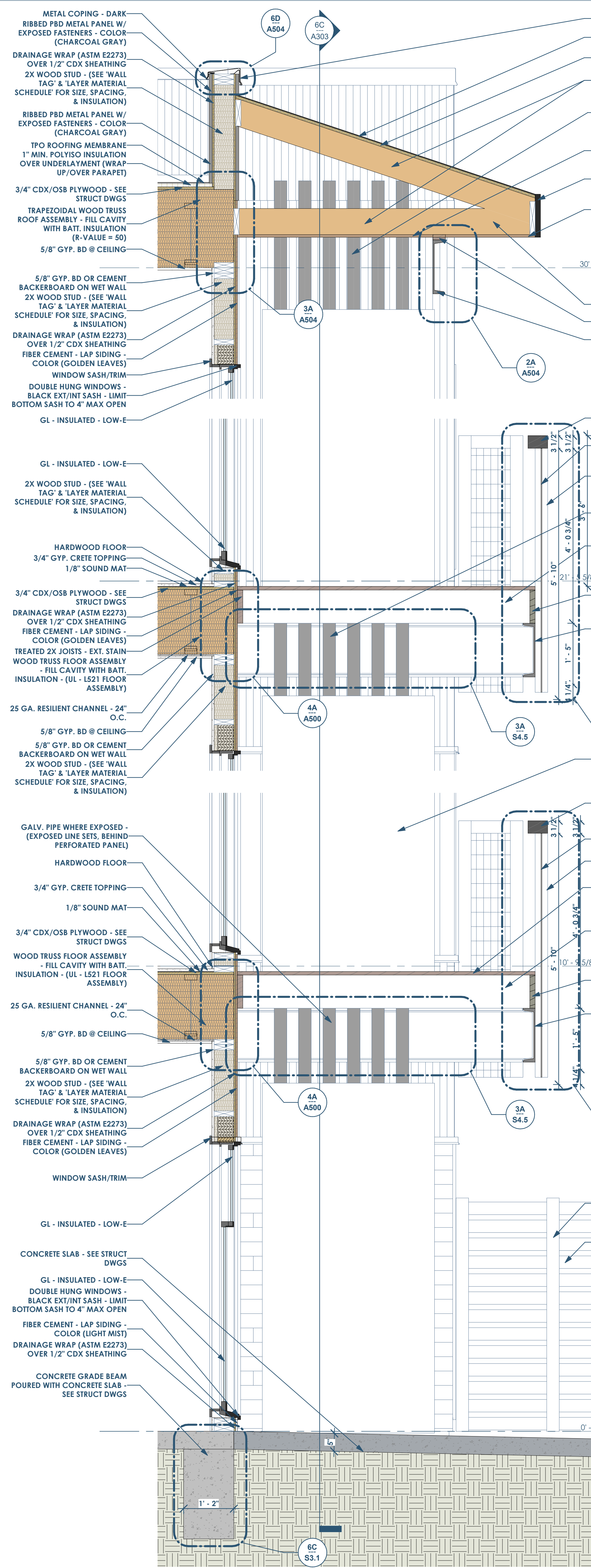
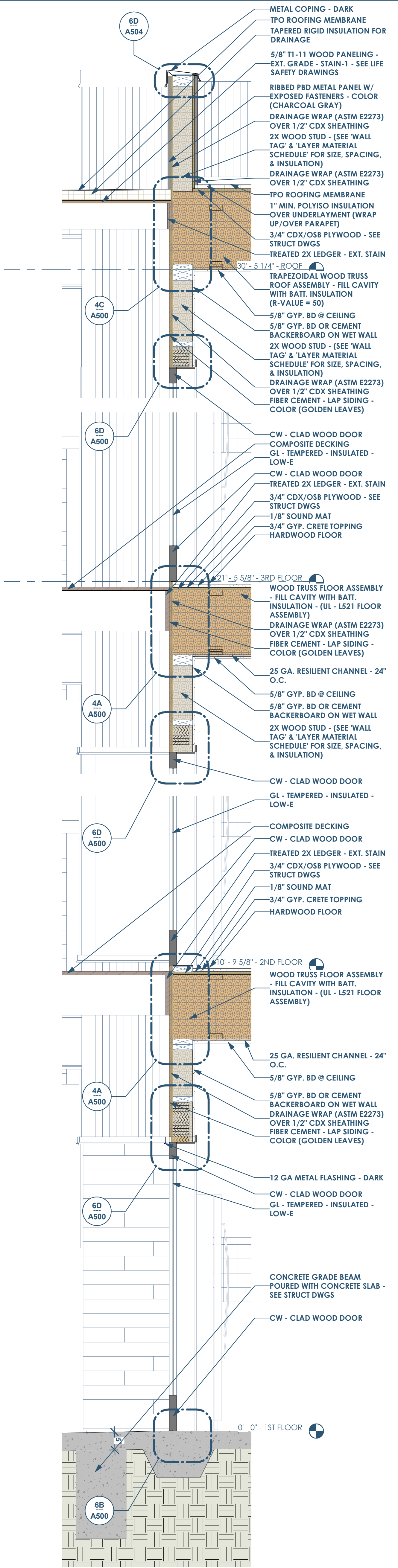
opening design

Architect: OpeningDesign
17 S Fairchild | FL 7
Madison, WI 53703
ryan@openingdesign.com | 773.425.6456

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4A WALL SECTION - THRU SMALL STUDIO - LOOKING EAST - @ PARAPET WALL
3/4" = 1'-0"

4A WALL SECTION - SOUTH BALCONY
3/4" = 1'-0"

2A WALL SECTION - THRU BALCONY - RAILING
3/4" = 1'-0"

6

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E

D

C

B

A

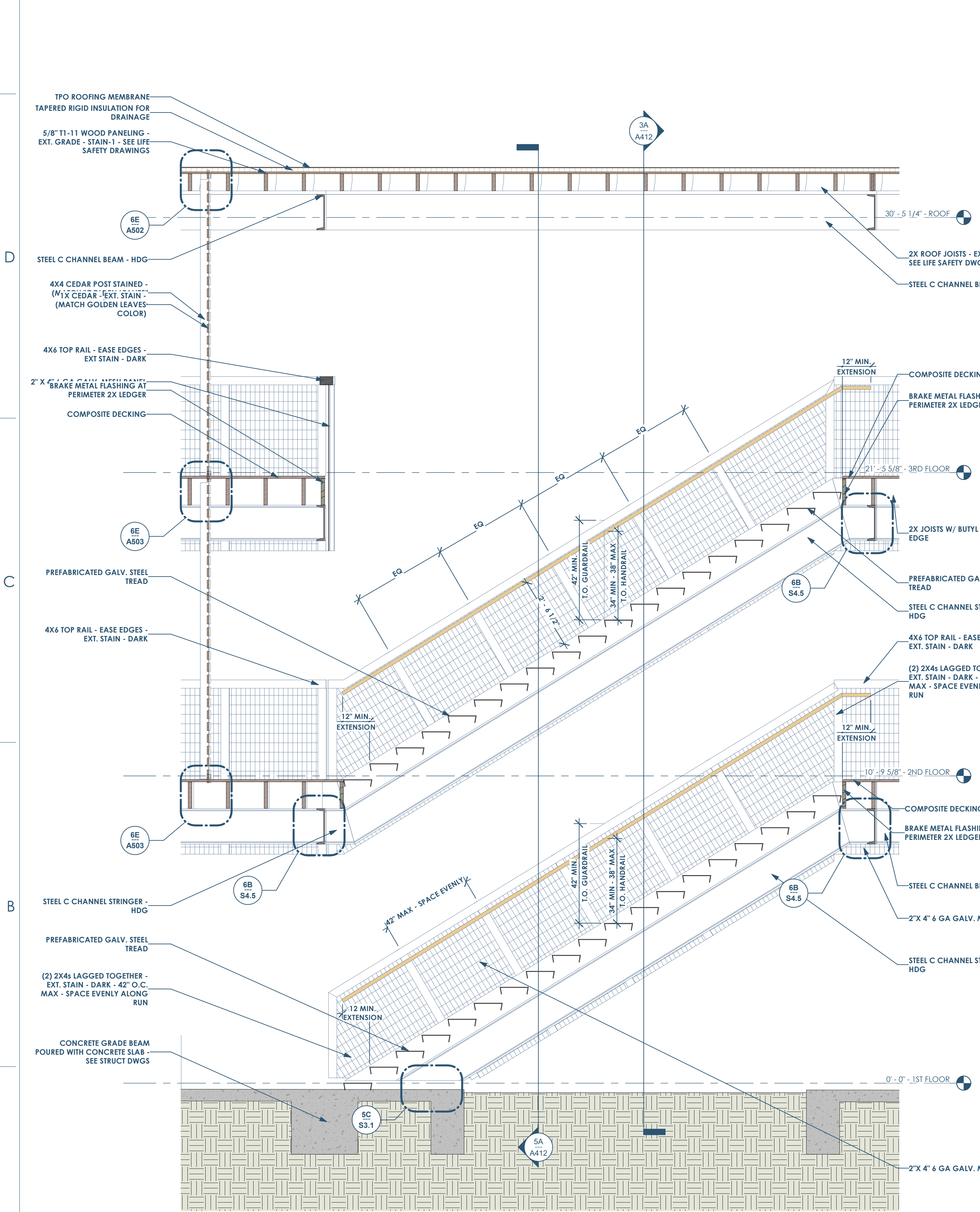
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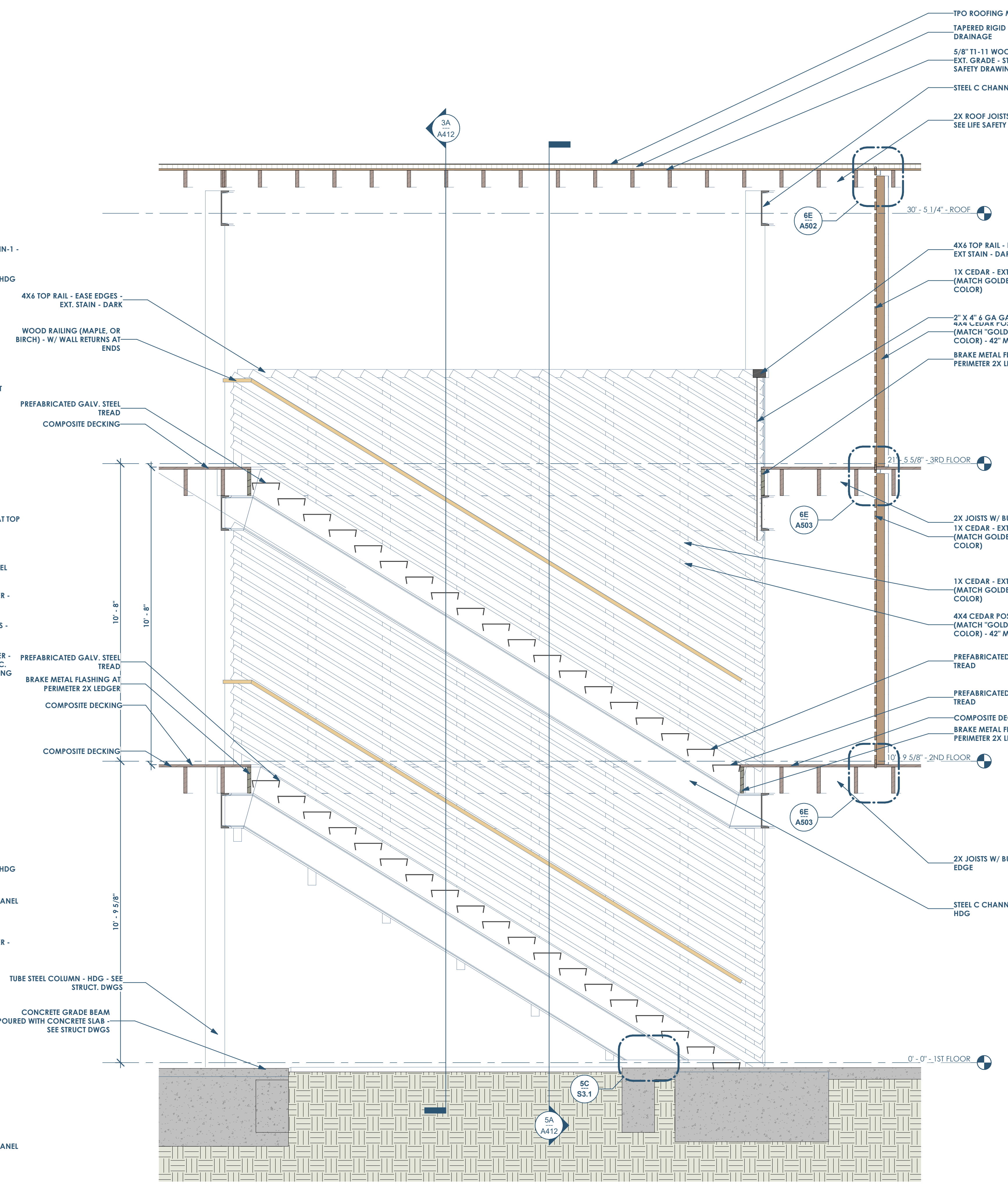
C

B

A



6A A410 STAIR SECTION - LOOKING NORTH
1/2" = 1'-0"



3A A410 STAIR SECTION - LOOKING SOUTH
1/2" = 1'-0"

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RENOVATION Wranglers
 Owner: Renovation Wranglers
 102 E 26th St
 Bryan, TX 77803
 kate@renovations.com | 979.450.9969

LKB ARCHITECTURE
 Architect of Record: LKB Architecture
 2929 Allen Pkwy Suite 200
 Houston, TX 77019
 isa@lkbarchitecture.com | 713.425.3076

DUDLEY
 Structural: Dudley
 6102 Imperial Loop Drive
 College Station, TX 77845
 (979) 777-0720

amc ENGINEERS
 MEP: AMC Engineers
 508 E Jackson St # 552
 Burnet, TX 78611
 info@amcengineers.com

Date	Description
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6

5

4

3

2

1

E

D

C

B

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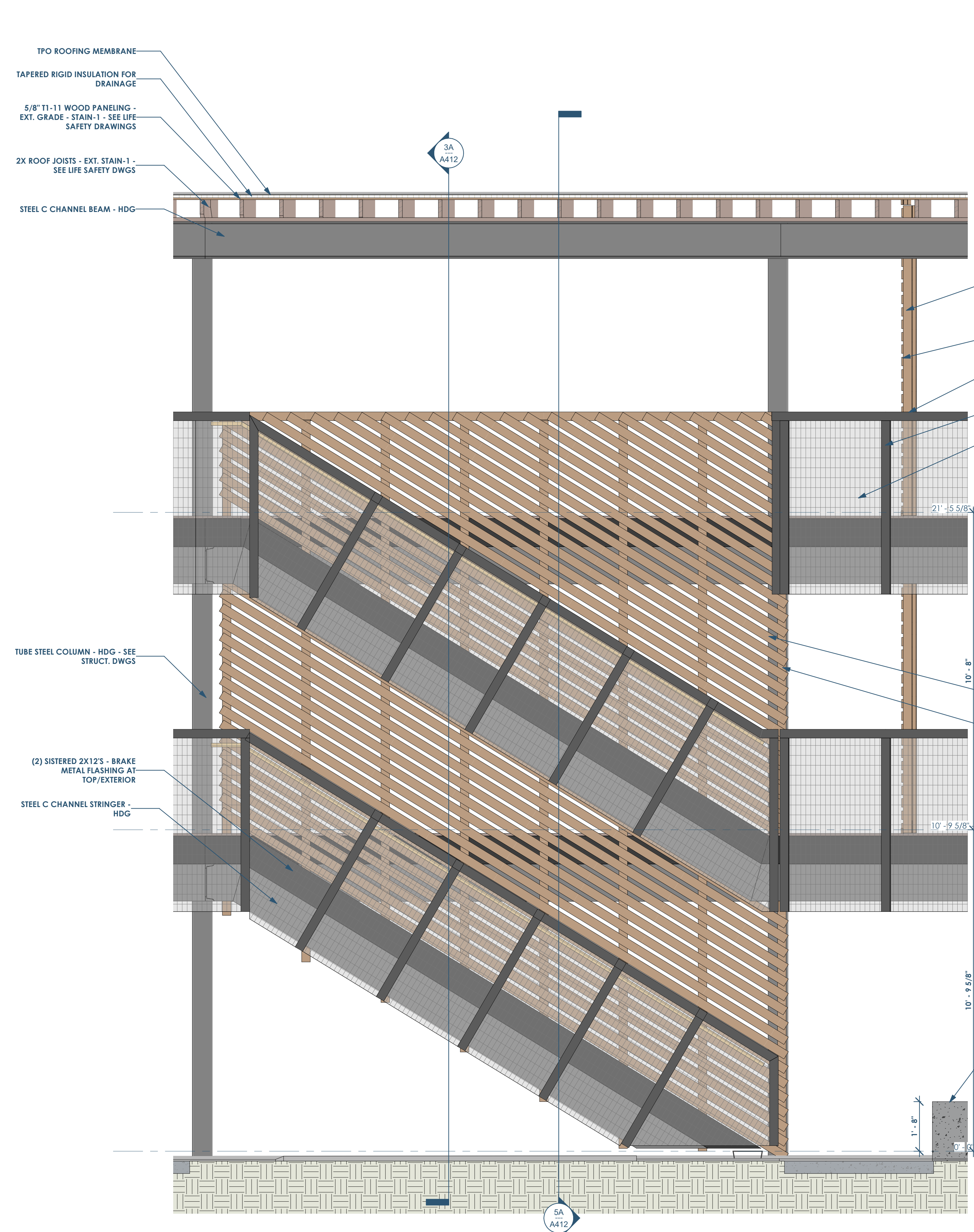
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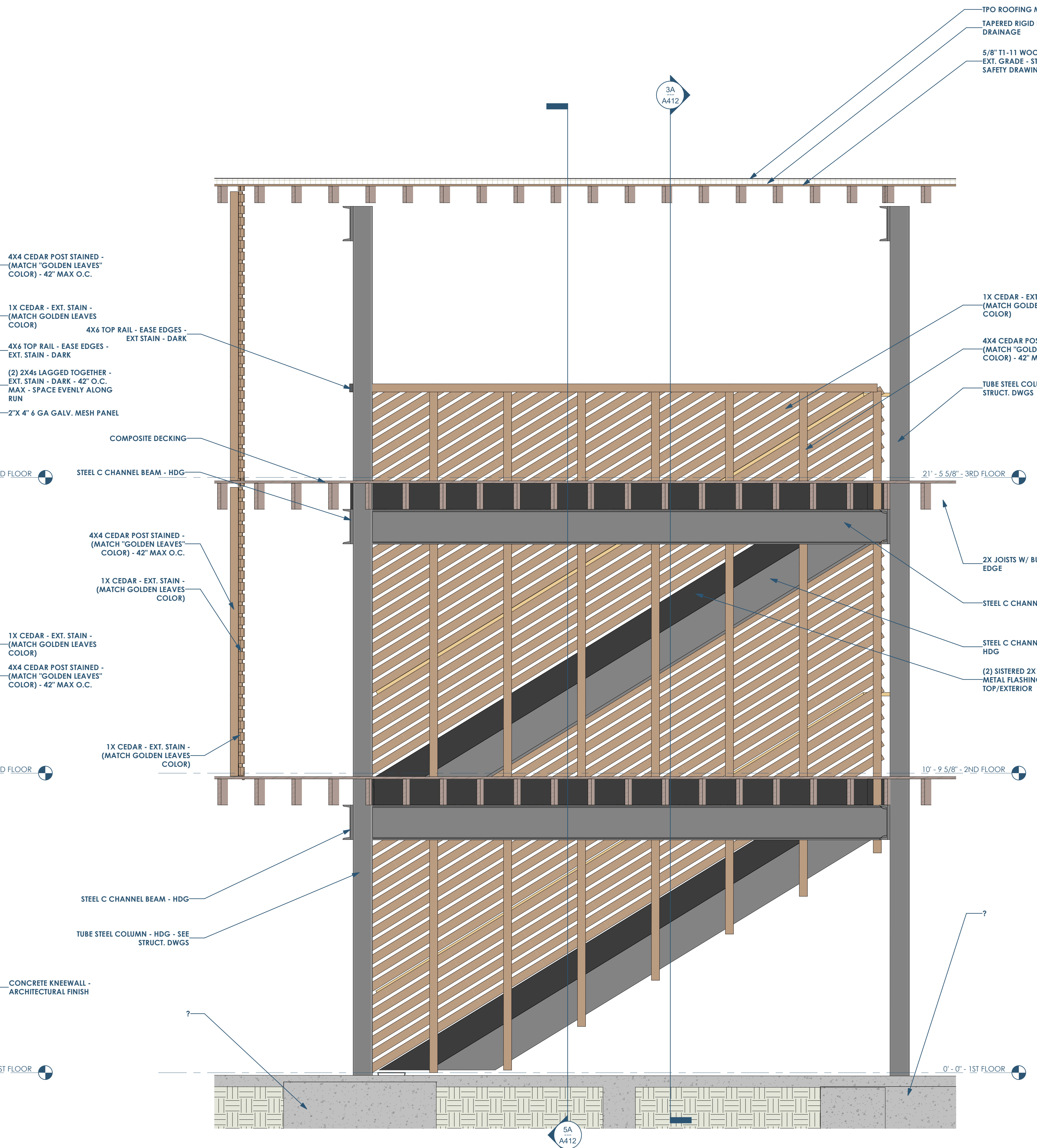
C

B

A



6A A411 STAIR VIEW - FRONT OF STAIR
1/2" = 1'-0"



3A A412 STAIR SECTION - CUT THROUGH BALCONY
1/2" = 1'-0"

6

5

4

3

2

1

RENOVATION
Wranglers
Engineers

Owner: Renovation Wranglers
102 E 26th St
Bryan, TX 77803
kate@renovations.com | 979.450.9969

ARCHITECTURE
Architect of Record: LKB Architecture
2929 Allen Pkwy Suite 200
Houston, TX 77019
isa@lkbarchitecture.com | 713.425.3076

DUDDLEY
Structural: Dudley
4102 Imperial Loop Drive
College Station, TX 77845
(979) 777-0720

amc
ENGINEERS

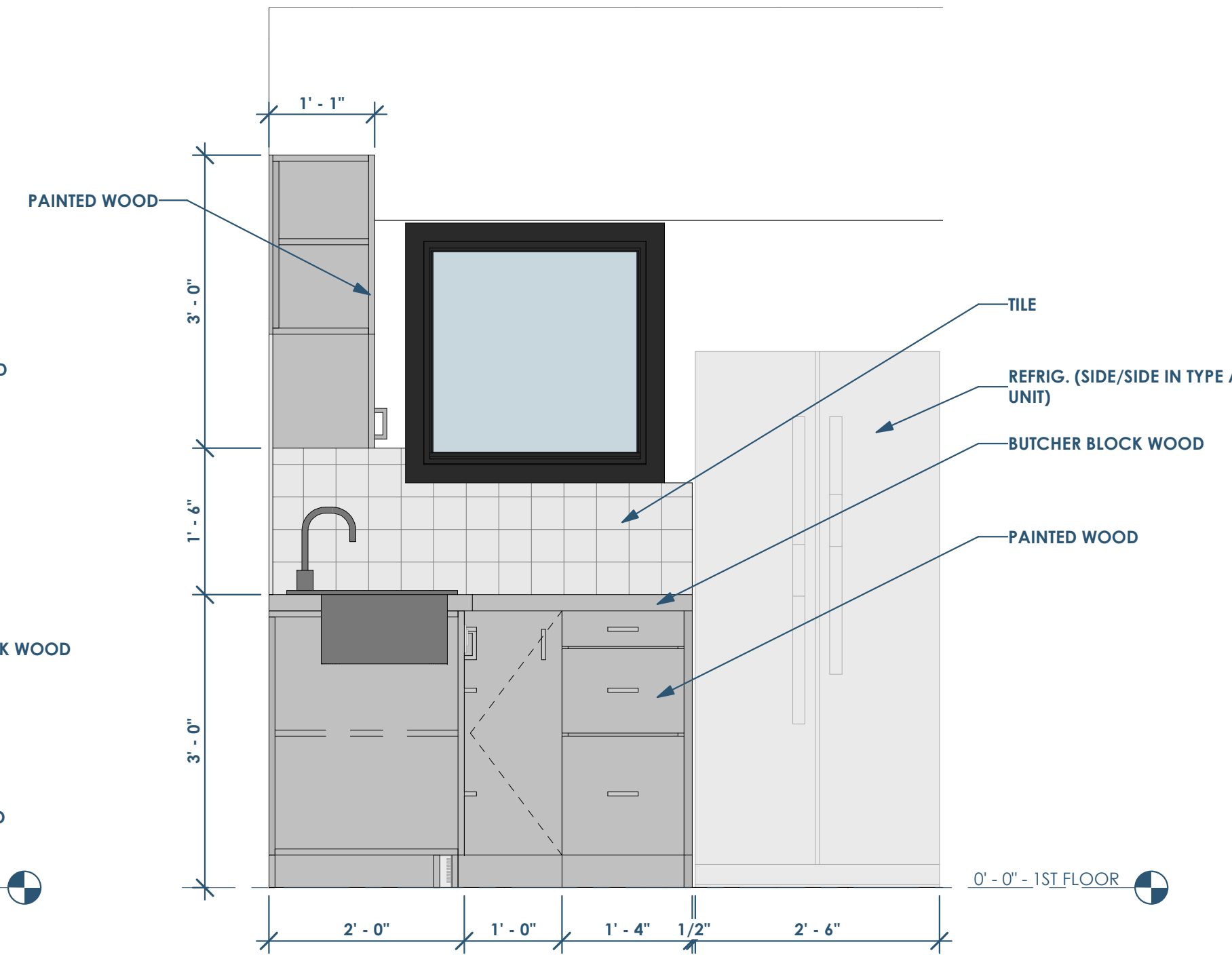
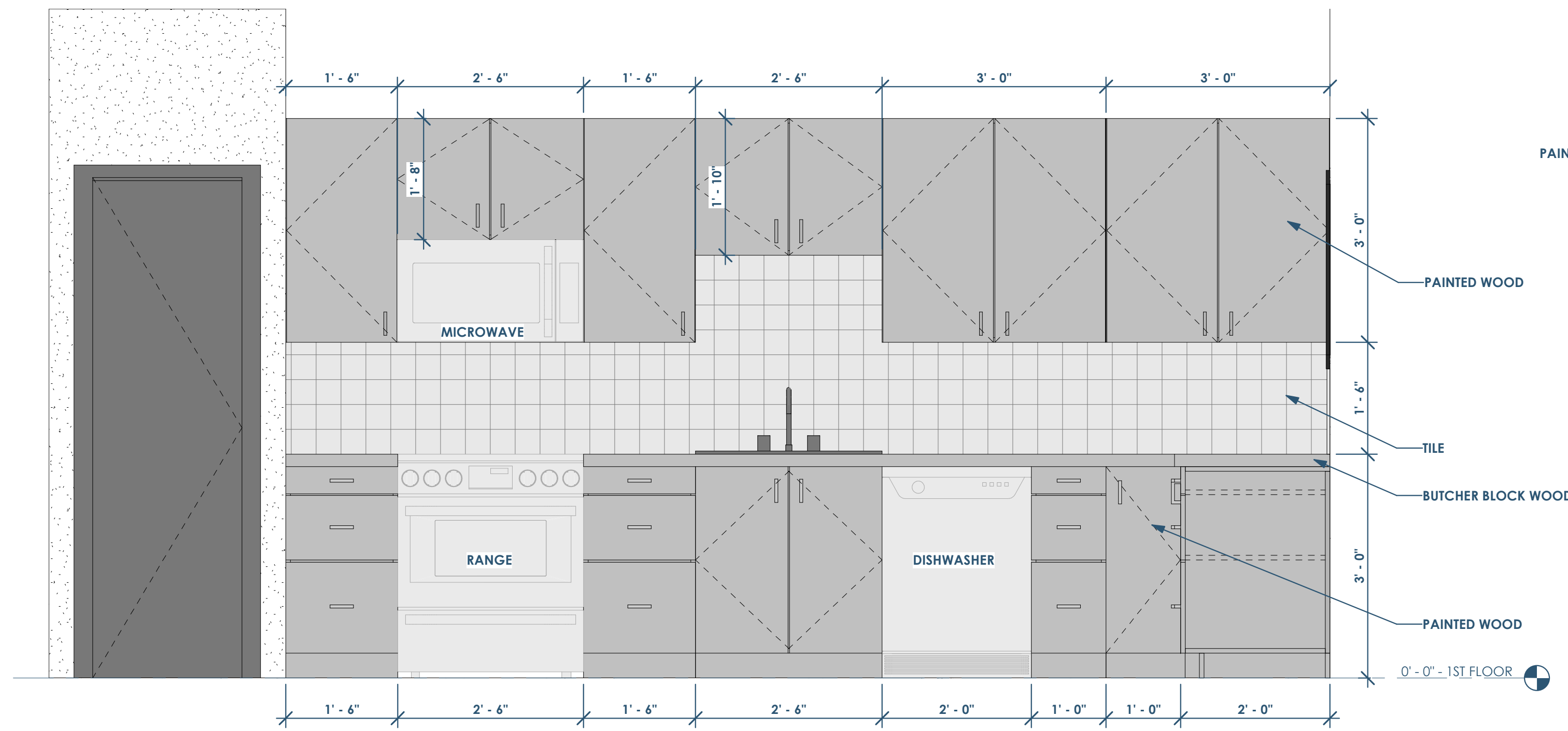
MEP: AMC Engineers
508 E Jackson St # 552
Burnet, TX 78611
info@amcengineers.com

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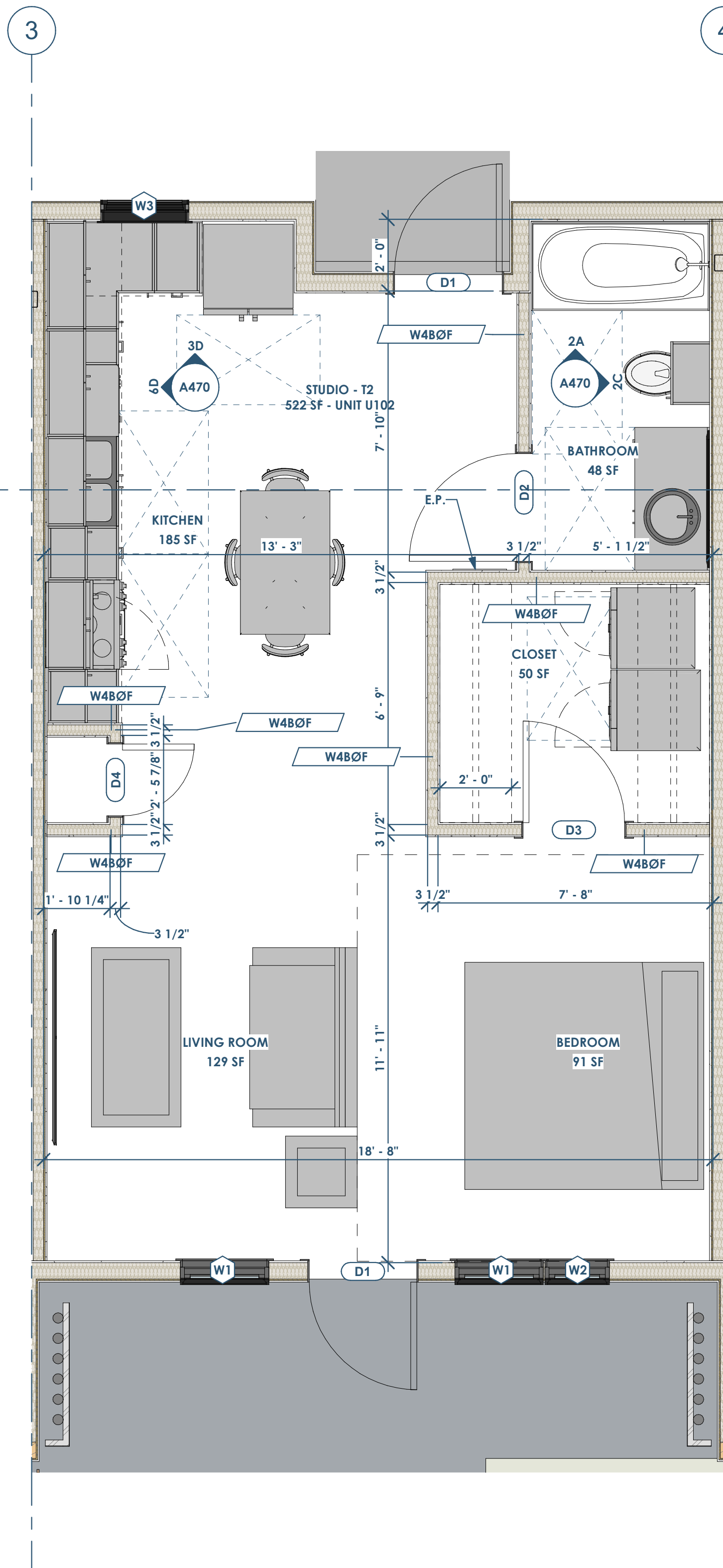
Architect: OpeningDesign
17 S Fairchild | FL 7
Madison, WI 53703
ryan@openingdesign.com | 773.425.6456

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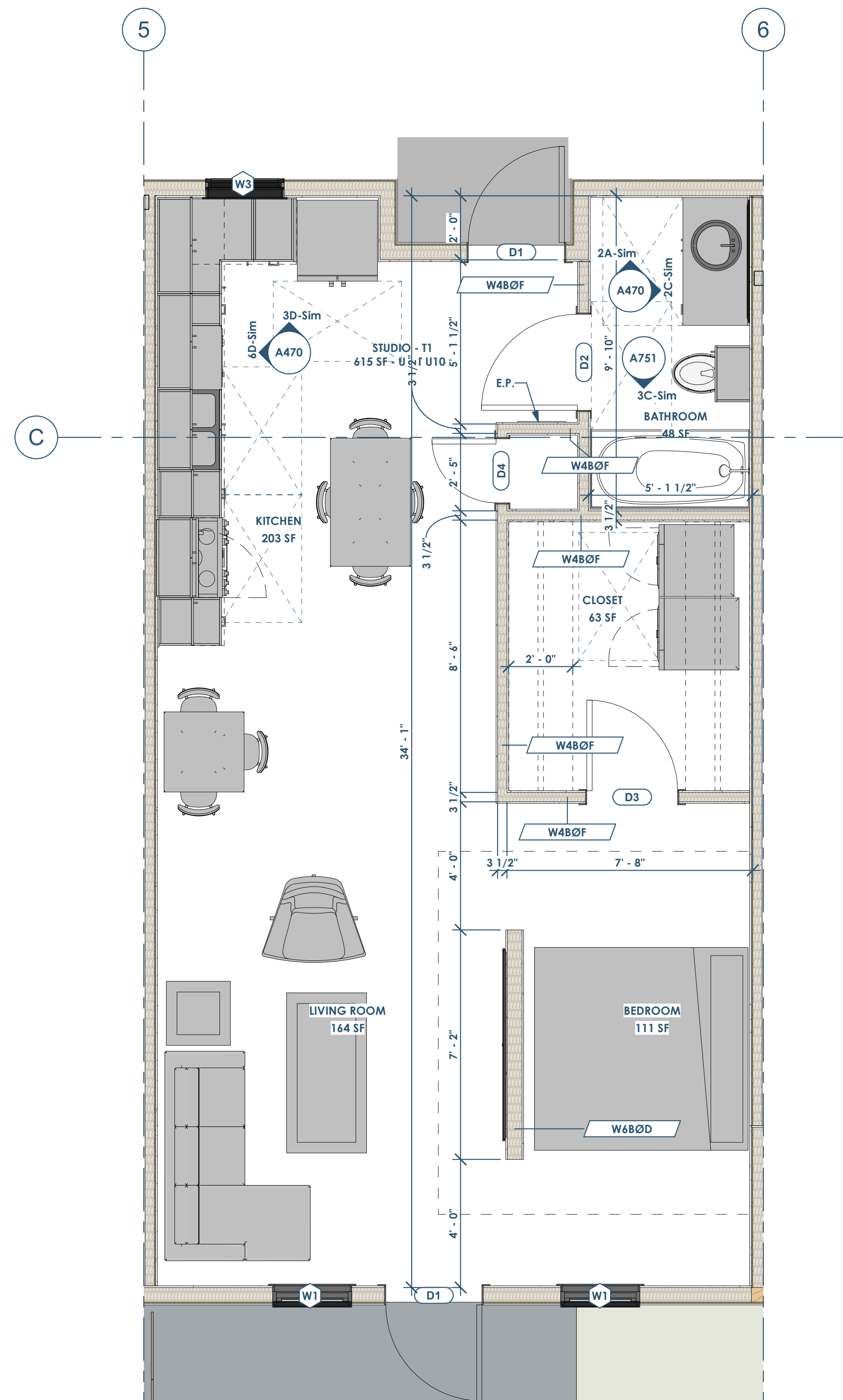


4D A470 ELEVATION - 1 BD - KITCHEN
3/4" = 1'-0"

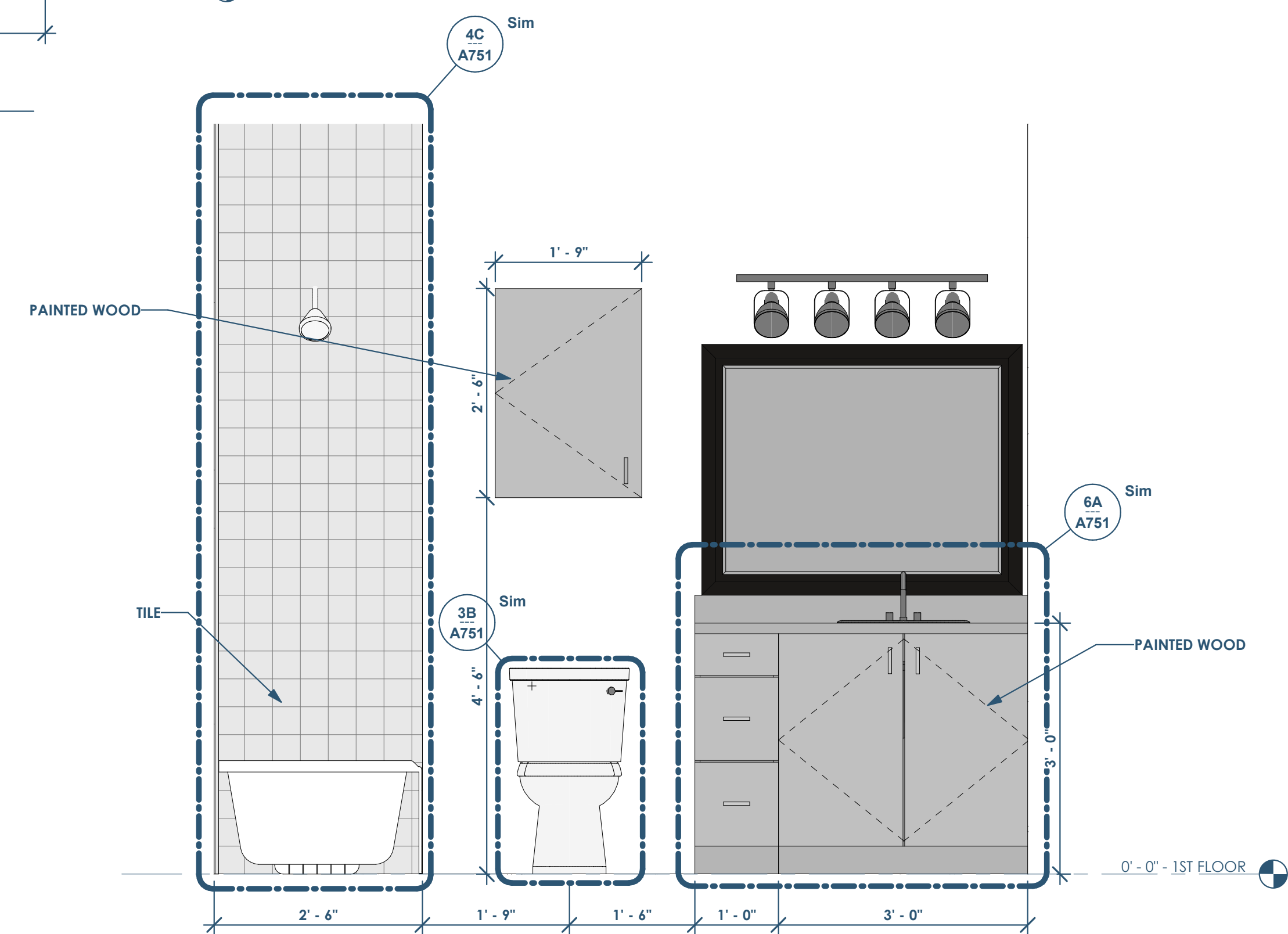
3D A470 ELEVATION - 1 BD - KITCHEN - FRIDGE
3/4" = 1'-0"



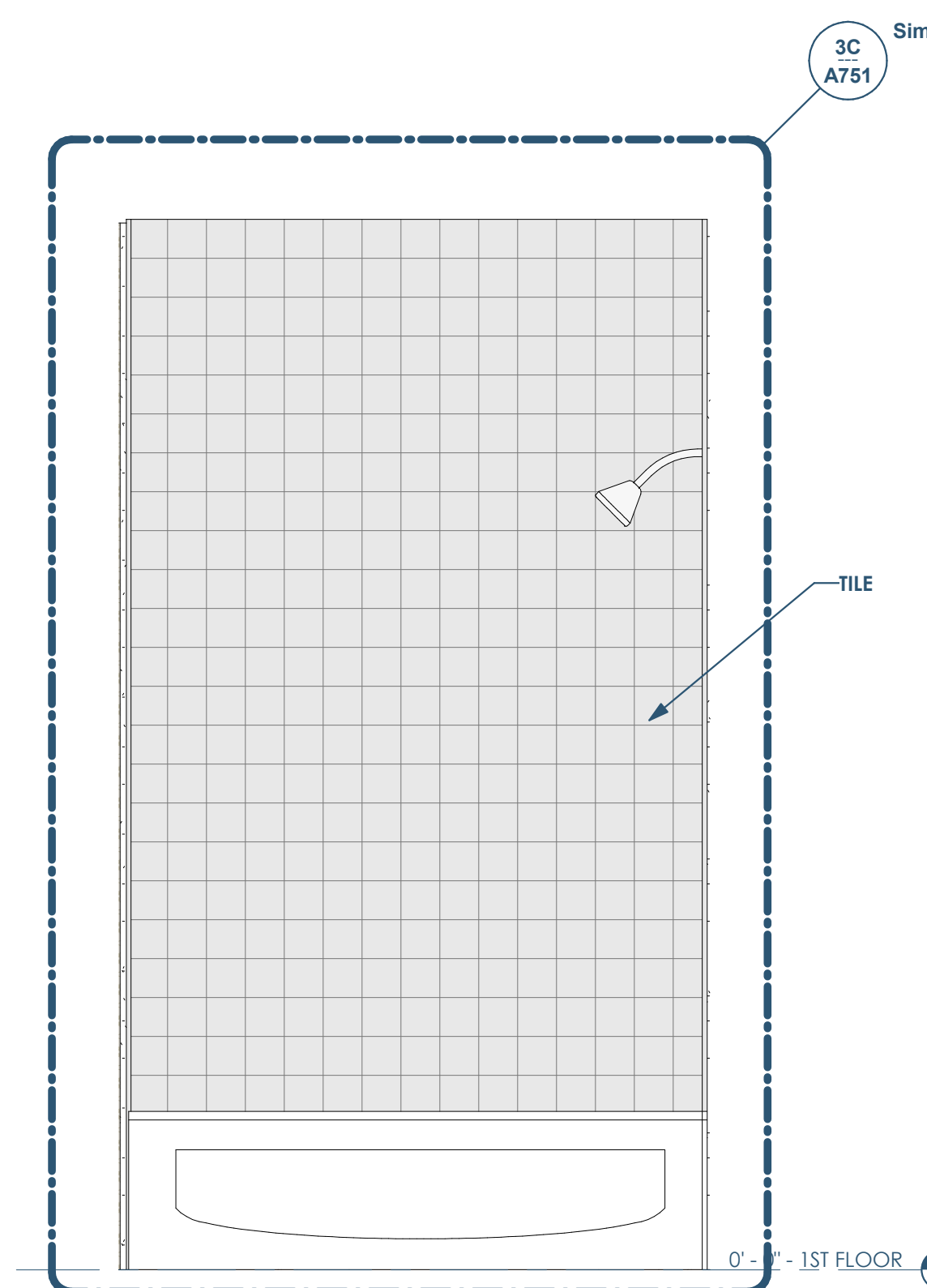
6A A470 UNIT PLAN - 1BD SHORT (TYPE B ADA UNIT - 1ST FLOOR ONLY)
3/8" = 1'-0"



4A A470 UNIT PLAN - 1BD LONG (TYPE B ADA UNIT - 1ST FLOOR ONLY)
3/8" = 1'-0"



2C A470 ELEVATION - BATH - LAV
3/4" = 1'-0"



2A A470 ELEVATION - BATH - SHOWER
3/4" = 1'-0"

- FLOOR PLAN NOTES
- SEE A800 FOR PARTITION TYPES
 - SEE A600 FOR DOOR AND WINDOW TYPES
 - REFERENCE A751 FOR ACCESSIBILITY COMPLIANCE REQUIREMENTS
 - ALL FINISHES TO BE PROVIDED BY OWNER
 - MILLWORK AND APPLIANCES TO BE PROVIDED BY OWNER

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RENOVATION Wranglers
Owner: Renovation Wranglers
102 E 26th St
Bryan, TX 77803
Kateneason@rw.com | 979.450.9969

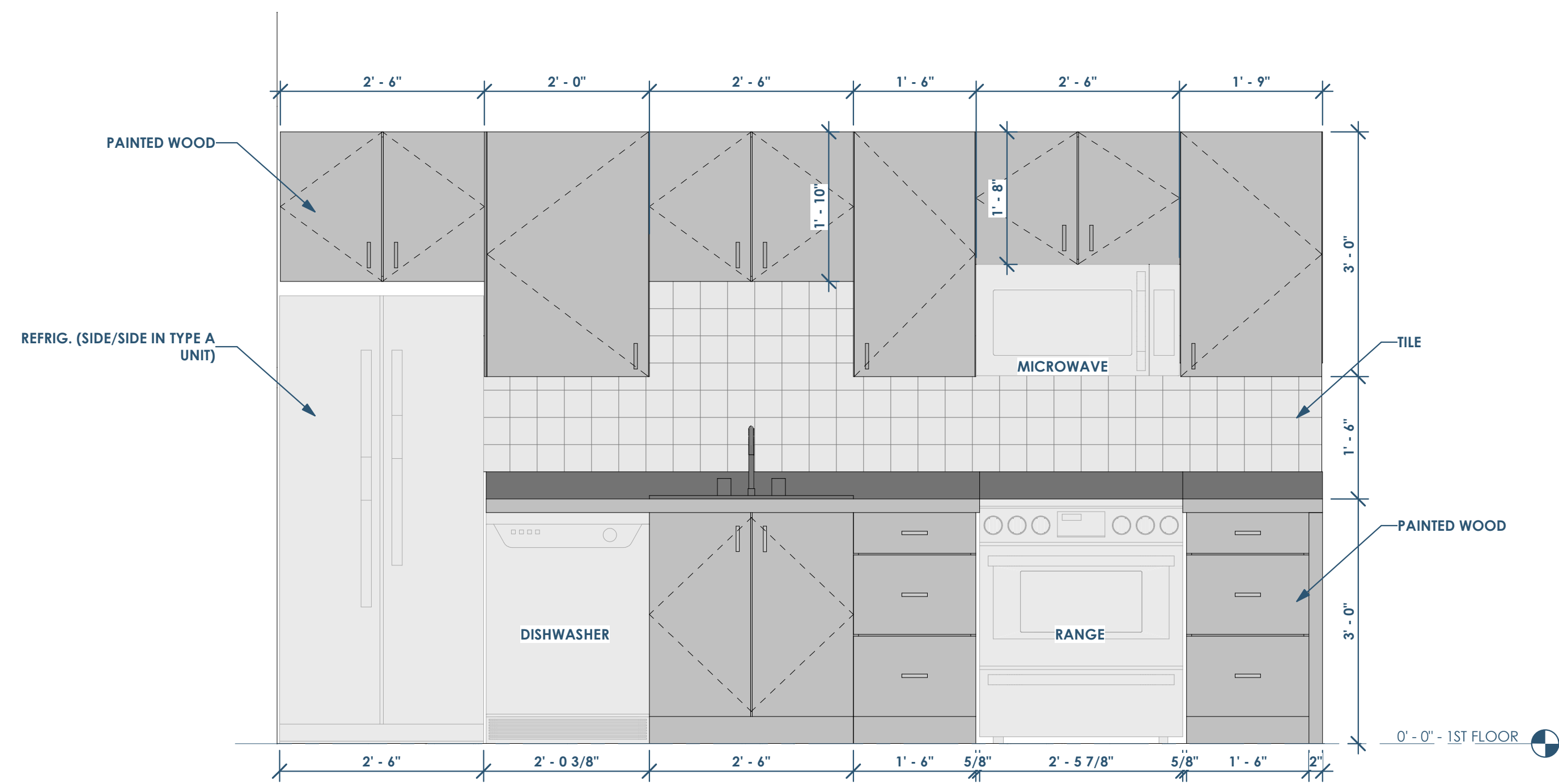
LKB ARCHITECTURE
Architect of Record: LKB Architecture
2929 Allen Pkwy Suite 200
Houston, TX 77019
isa@lkbarchitecture.com | 713.425.3076

DUDLEY
Structural: Dudley
6102 Imperial Loop Drive
College Station, TX 77845
(979) 777-0720

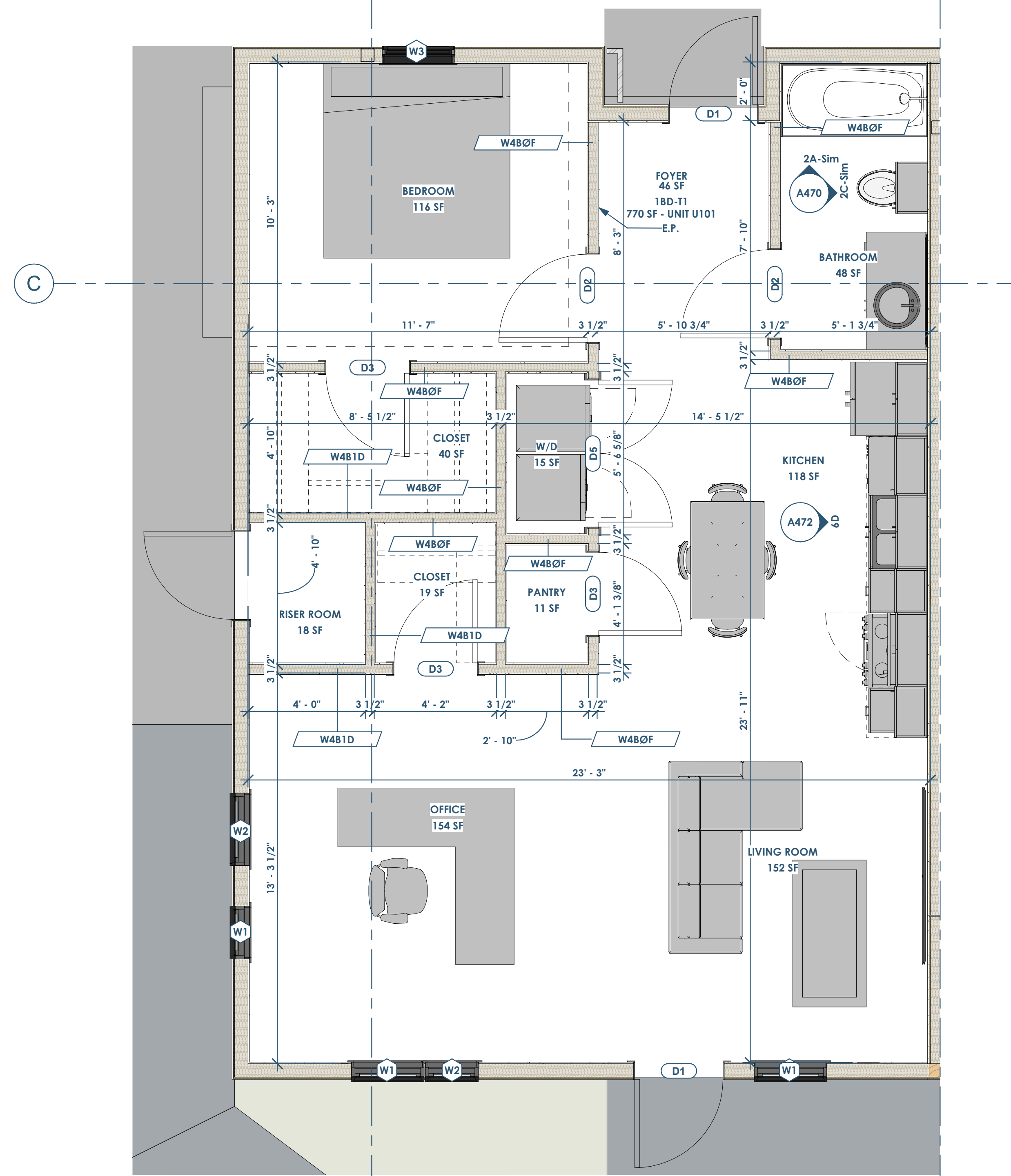
amc ENGINEERS
MEP: AMC Engineers
508 E Jackson St # 552
Burnet, TX 78611
info@amcengineers.com

openingdesign
Architect: OpeningDesign
17 S Fairchild | FL 7
Madison, WI 53703
ryan@openingdesign.com | 773.425.6456

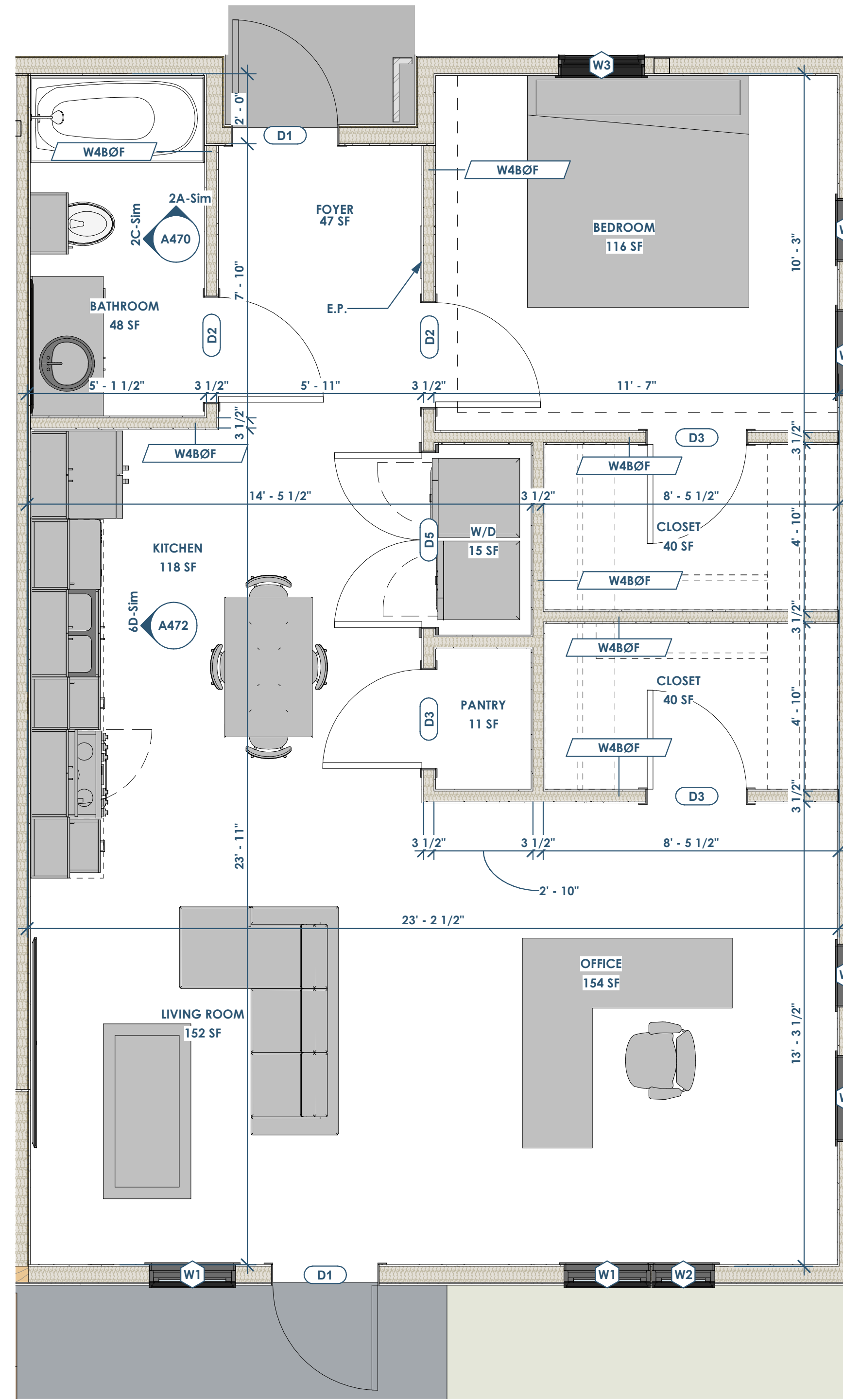
Date	Description
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4D
A472 ELEVATION - END UNIT - KITCHEN
3/4" = 1'-0"



6A
A472 UNIT PLAN - END UNIT W/ RISER ROOM (TYPE B ADA UNIT - 1ST FLOOR ONLY)
3/8" = 1'-0"



4A
A472 UNIT PLAN - END UNIT (TYPE B ADA UNIT - 1ST FLOOR ONLY)
3/8" = 1'-0"

- FLOOR PLAN NOTES
- SEE A800 FOR PARTITION TYPES
 - SEE A600 FOR DOOR AND WINDOW TYPES
 - REFERENCE A751 FOR ACCESSIBILITY COMPLIANCE REQUIREMENTS
 - ALL FINISHES TO BE PROVIDED BY OWNER
 - MILLWORK AND APPLIANCES TO BE PROVIDED BY OWNER

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UNIT PLANS - 1 BD - END UNITS

MARCO POLO - 101 33RD STREET - CITY OF BRYAN TOWNSITE, BLOCK 96, LOT 3-5 & PT OF 6 & PT OF ALLEY - BRYAN, TX 77803

RENOVATION
Wranglers
Engineers

Owner: Renovation Wranglers
102 E 26th St
Bryan, TX 77803
Kateneason@time.com | 979.450.9969

ARCHITECTURE
Architect of Record: LKB Architecture
2929 Allen Pkwy Suite 200
Houston, TX 77019
isa@lkbarchitecture.com | 713.425.3076

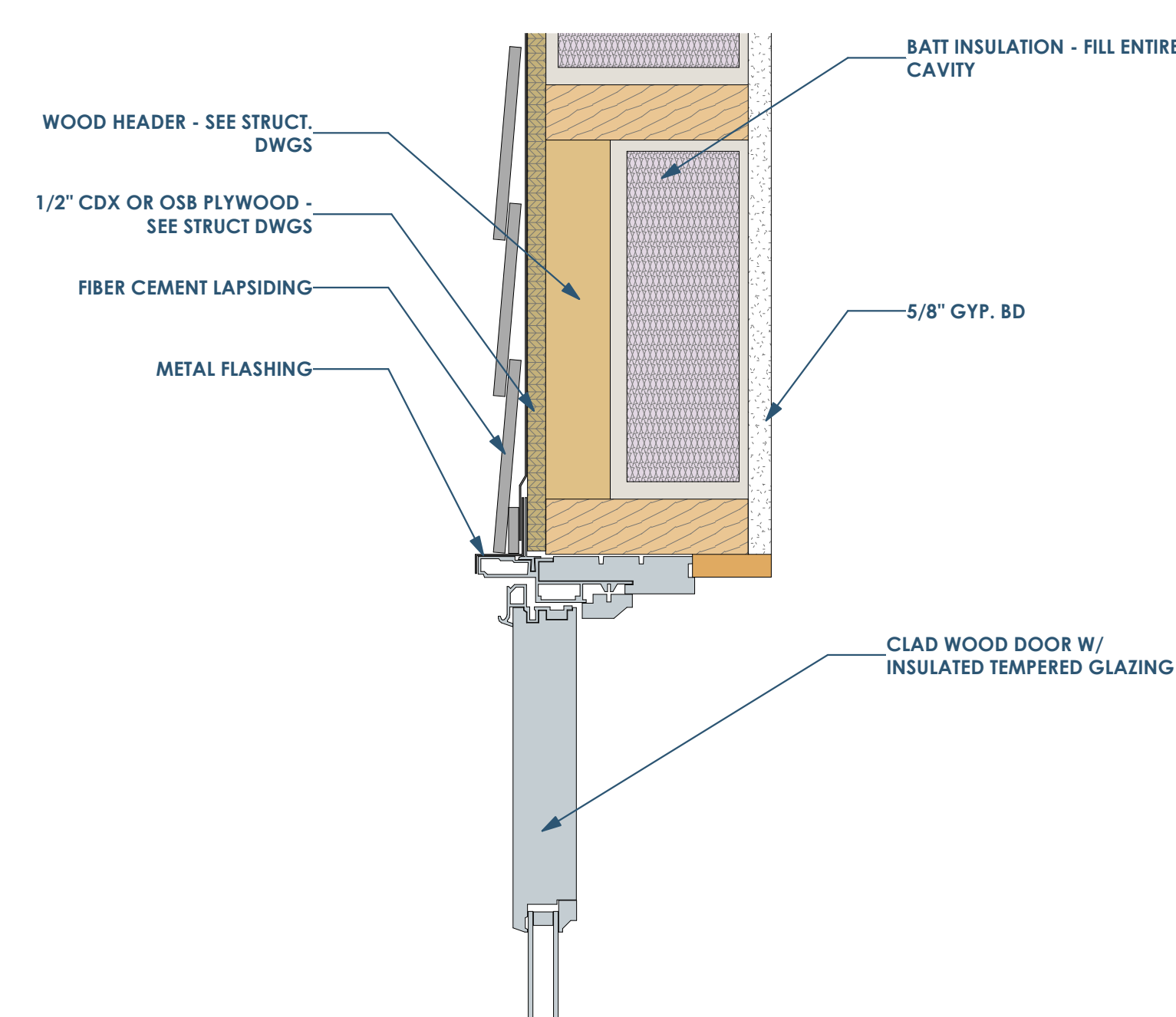
DUDDLEY
Structural: Dudley
6102 Imperial Loop Drive
College Station, TX 77845
(979) 777-0720

amc
ENGINEERS
MEP: AMC Engineers
508 E Jackson St # 552
Burrmet, TX 78611
info@amcengineers.com

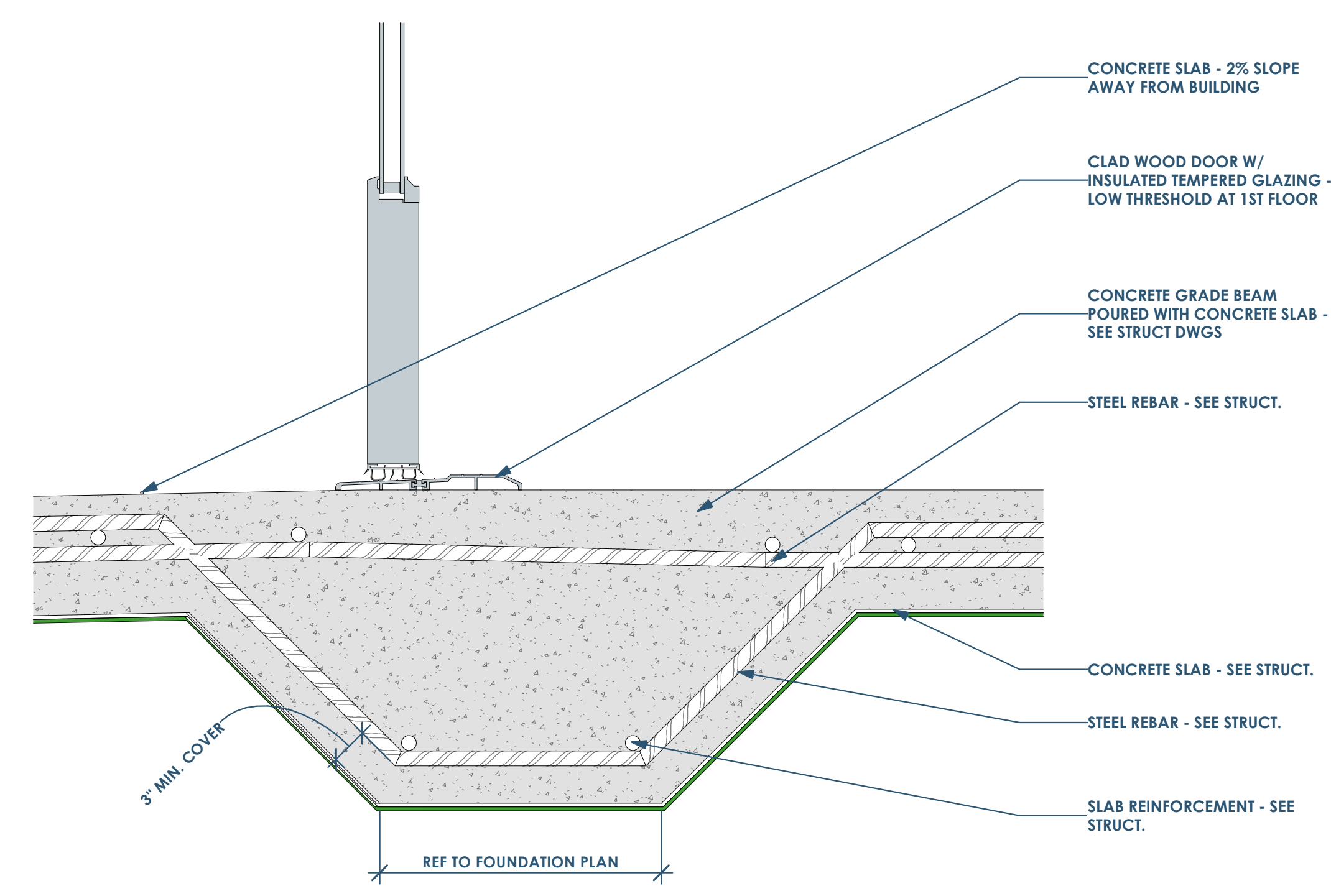
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openingdesign
Architect: OpeningDesign
17 S Fairchild | FL 7
Madison, WI 53703
ryan@openingdesign.com | 773.425.6456

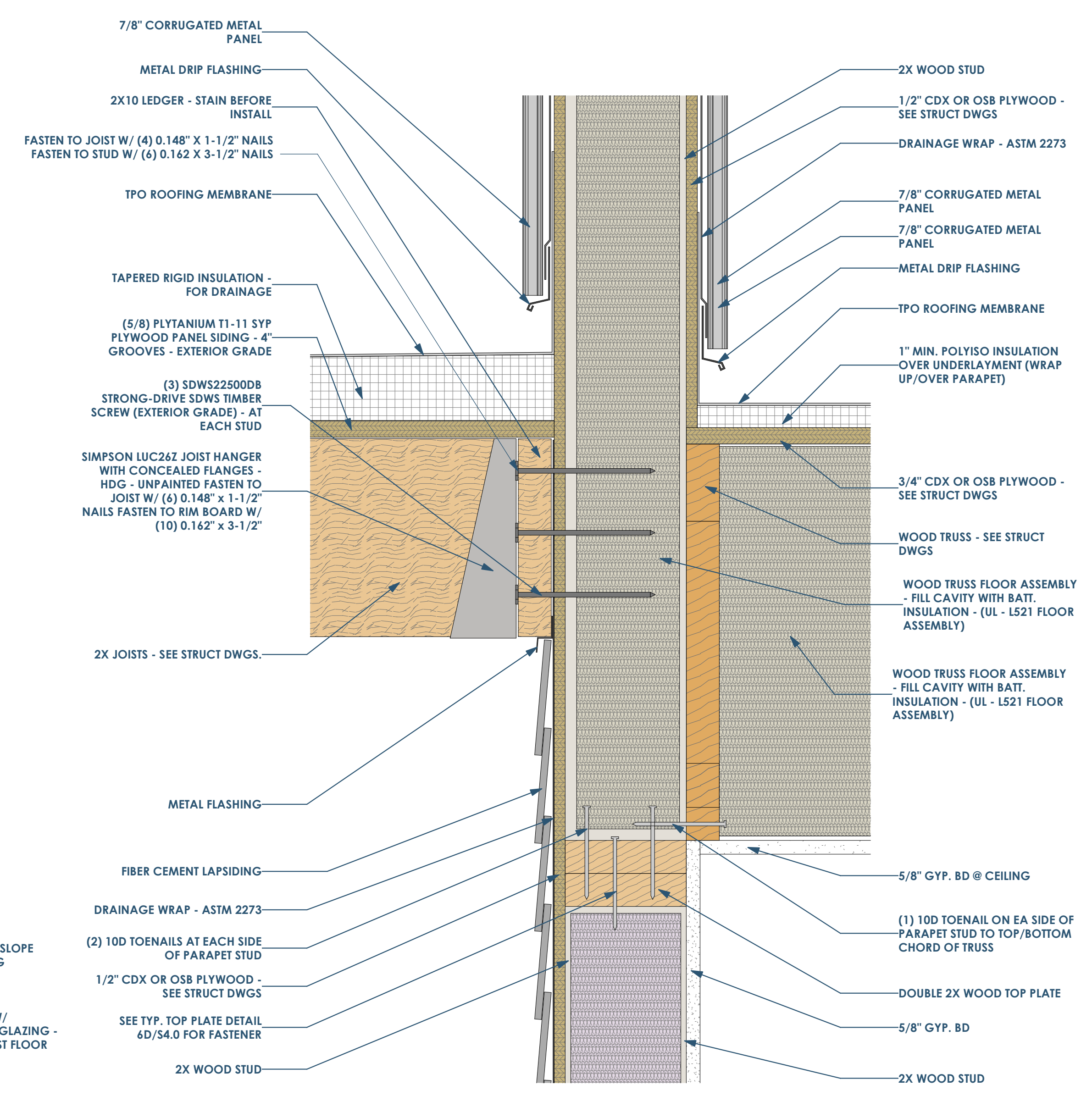
A472



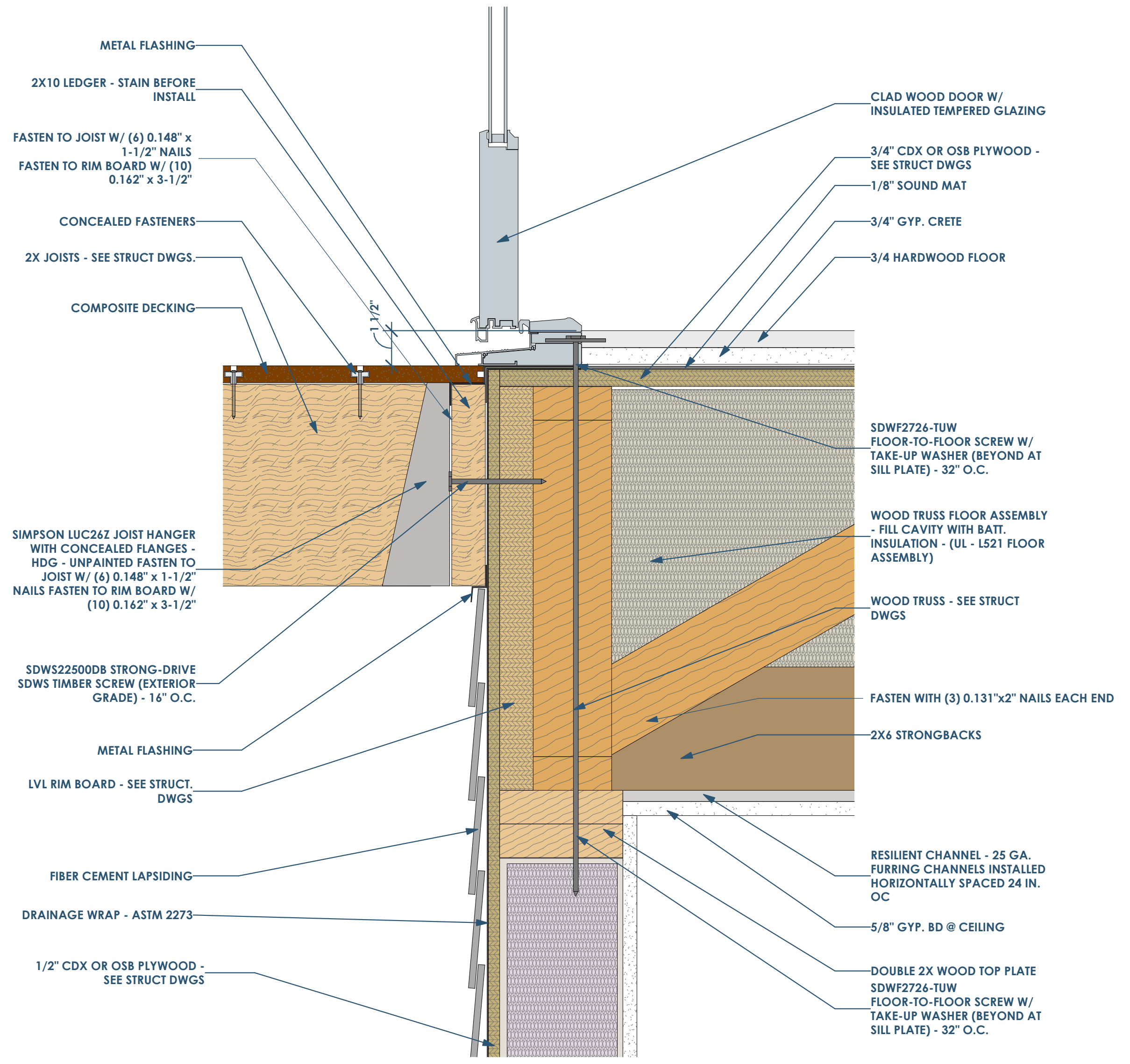
6D SECTION DETAIL AT DOOR HEADER
3" = 1'-0"



6B SECTION DETAIL AT DOOR SILL - 1ST FLOOR
3" = 1'-0"



4C SECTION DETAIL AT PORCH ROOF AND PARAPET
3" = 1'-0"



4A SECTION DETAIL AT UNIT DOOR SILL (2ND OR 3RD FLOOR)
3" = 1'-0"

RENOVATION Wranglers
Owner: Renovation Wranglers
102 E 26th St
Bryan, TX 77803
Kateneason@rwr.com | 979.450.9969

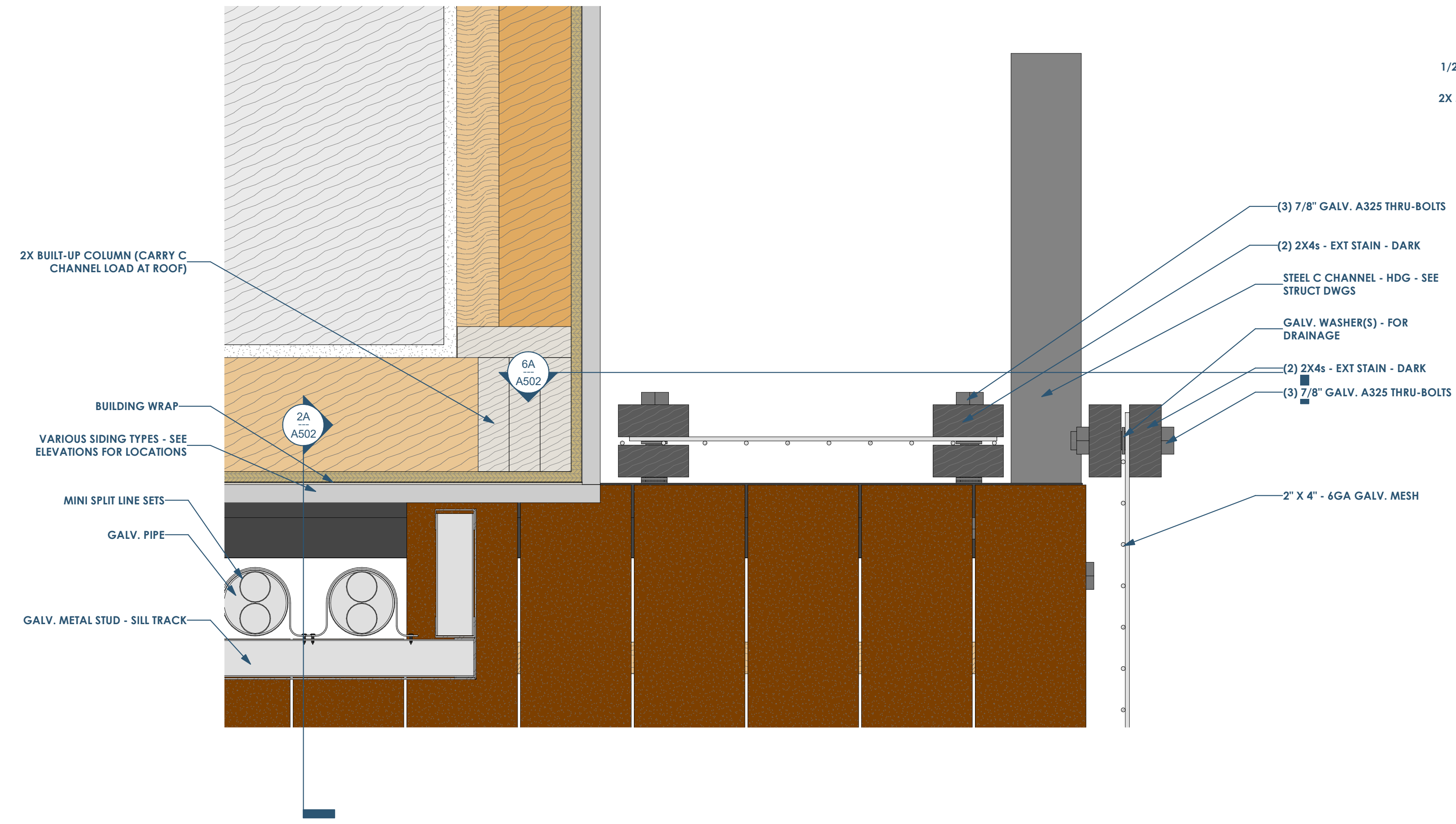
ARCHITECTURE
Architect of Record: LKB Architecture
2929 Allen Pkwy Suite 200
Houston, TX 77019
isa@lkbarchitecture.com | 713.425.3076

DUDLEY
Structural: Dudley
6102 Imperial Loop Drive
College Station, TX 77845
(979) 777-0720

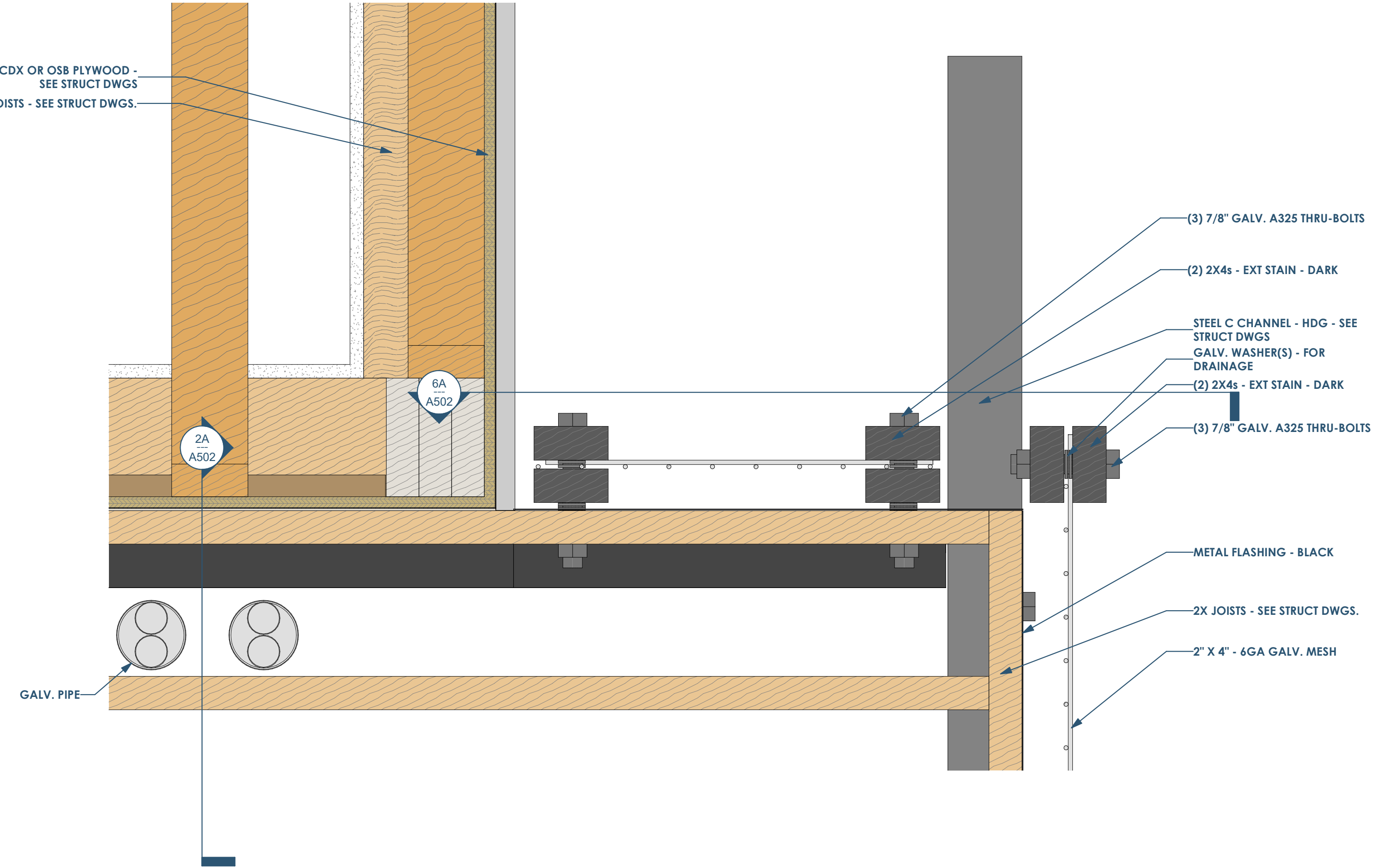
amc ENGINEERS
MEP: AMC Engineers
508 E Jackson St # 552
Burnet, TX 78611
info@amcengineers.com

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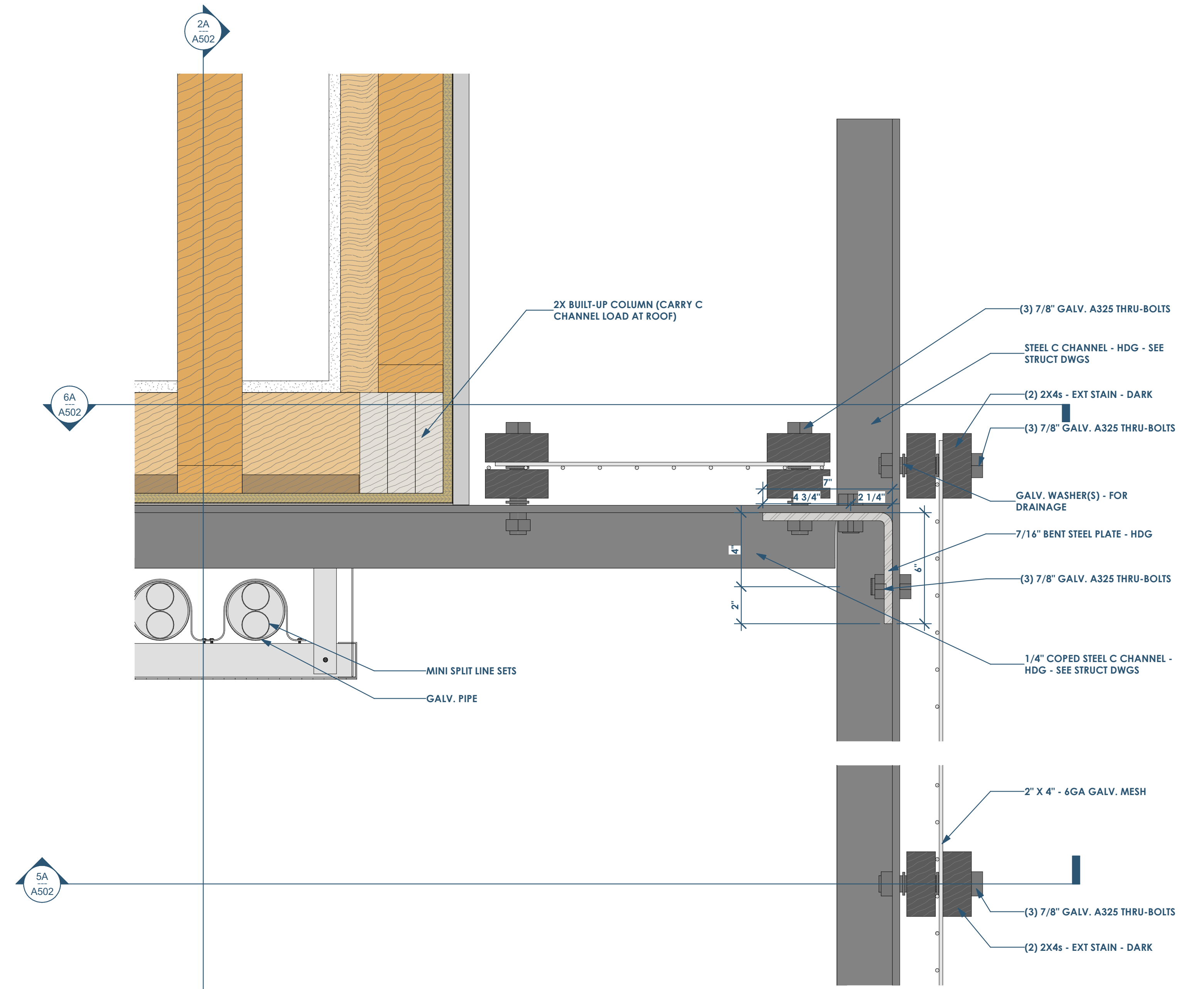
Date	Description
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6C A501 PLAN DETAIL AT SOUTH BALCONY - ABOVE DECKING
3" = 1'-0"



3C A501 PLAN DETAIL AT SOUTH BALCONY - AT LEDGER
3" = 1'-0"



3A A501 PLAN DETAIL AT SOUTH BALCONY - AT STEEL
3" = 1'-0"

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RENOVATION Wranglers
 Owner: Renovation Wranglers
 102 E 26th St
 Bryan, TX 77803
 Katenearson@rw.com | 979.450.9969

LKB ARCHITECTURE
 Architect of Record: LKB Architecture
 2929 Allen Pkwy Suite 200
 Houston, TX 77019
 isa@lkbarchitecture.com | 713.425.3076

DUDDLEY
 Structural: Dudley
 6102 Imperial Loop Drive
 College Station, TX 77845
 (979) 777-0720

amc ENGINEERS
 MEP: AMC Engineers
 508 E Jackson St # 552
 Burnet, TX 78611
 info@amcengineers.com

openingdesign
 Architect: OpeningDesign
 17 S Fairchild | FL 7
 Madison, WI 53703
 ryan@openingdesign.com | 773.425.6456

Date	Description
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6

5

4

3

2

1

E

D

C

B

A

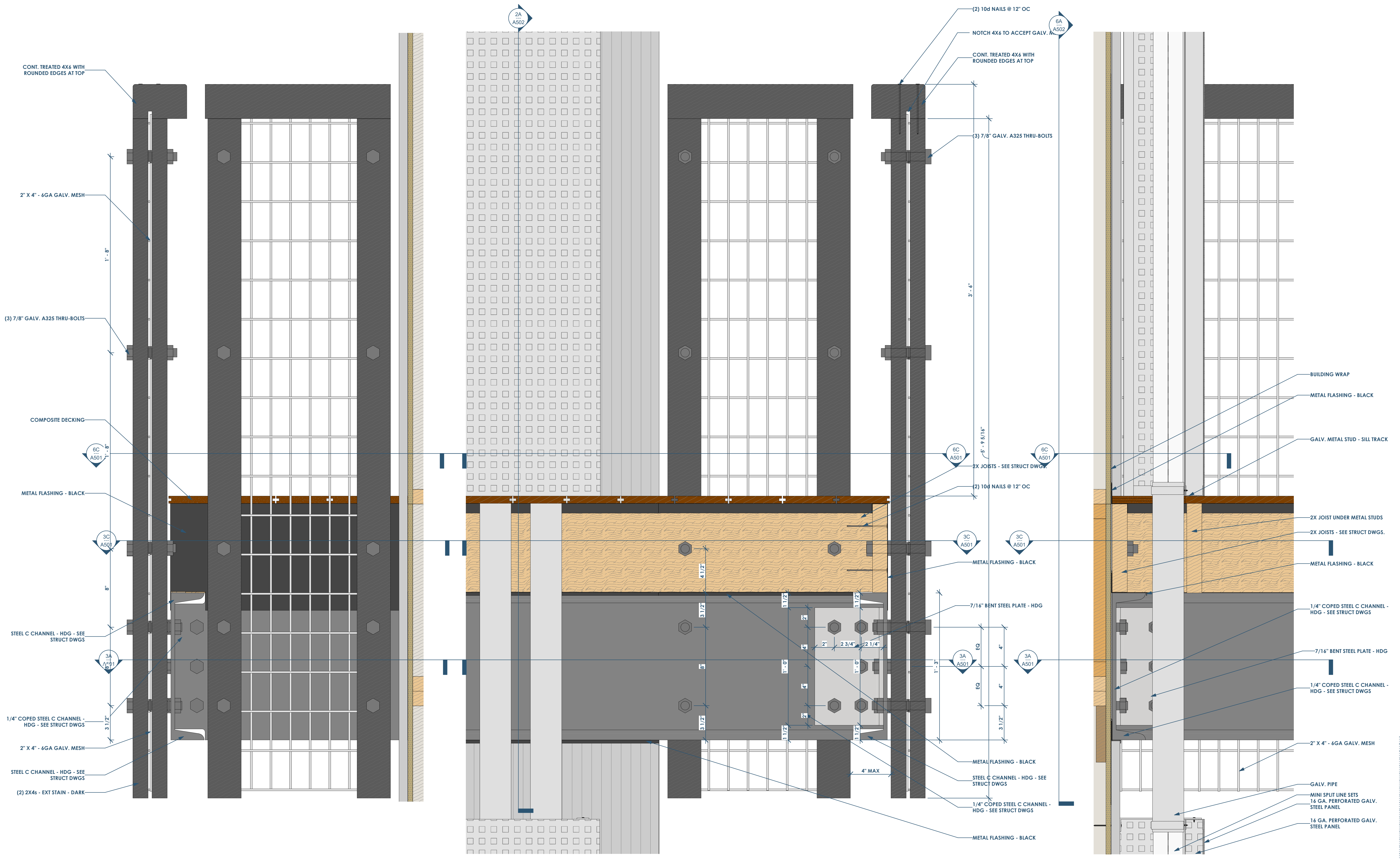
E

D

C

B

A



6A A502 SECTION (ELEVATION) DETAIL AT SOUTH BALCONY - LOOKING EAST OR WEST
3" = 1'-0"

5A A502 SECTION DETAIL AT SOUTH BALCONY - LOOKING EAST OR WEST
3" = 1'-0"

2A A502 SECTION AT BALCONY 4
3" = 1'-0"

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 Owner: Renovation Wranglers
 102 E 26th St
 Bryan, TX 77803
 Kateracaron@me.com | 979.450.9969

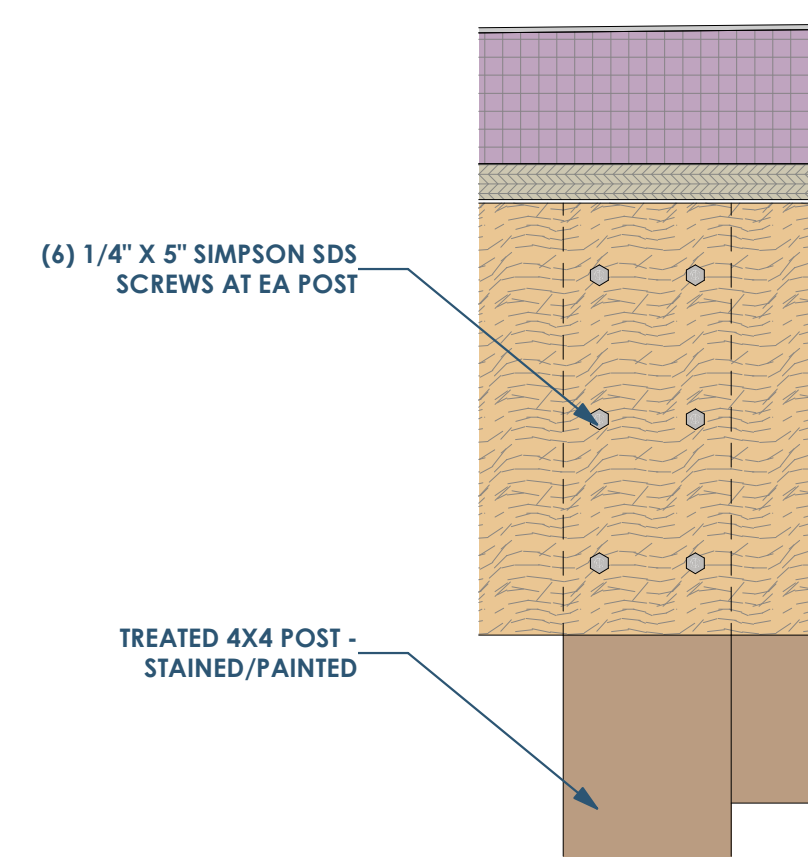
LKB ARCHITECTURE
 Architect of Record: LKB Architecture
 2929 Allen Pkwy Suite 200
 Houston, TX 77019
 isa@lkbarchitecture.com | 713.425.3076

DUDLEY
 Structural: Dudley
 4102 Imperial Loop Drive
 College Station, TX 77845
 (979) 777-0720

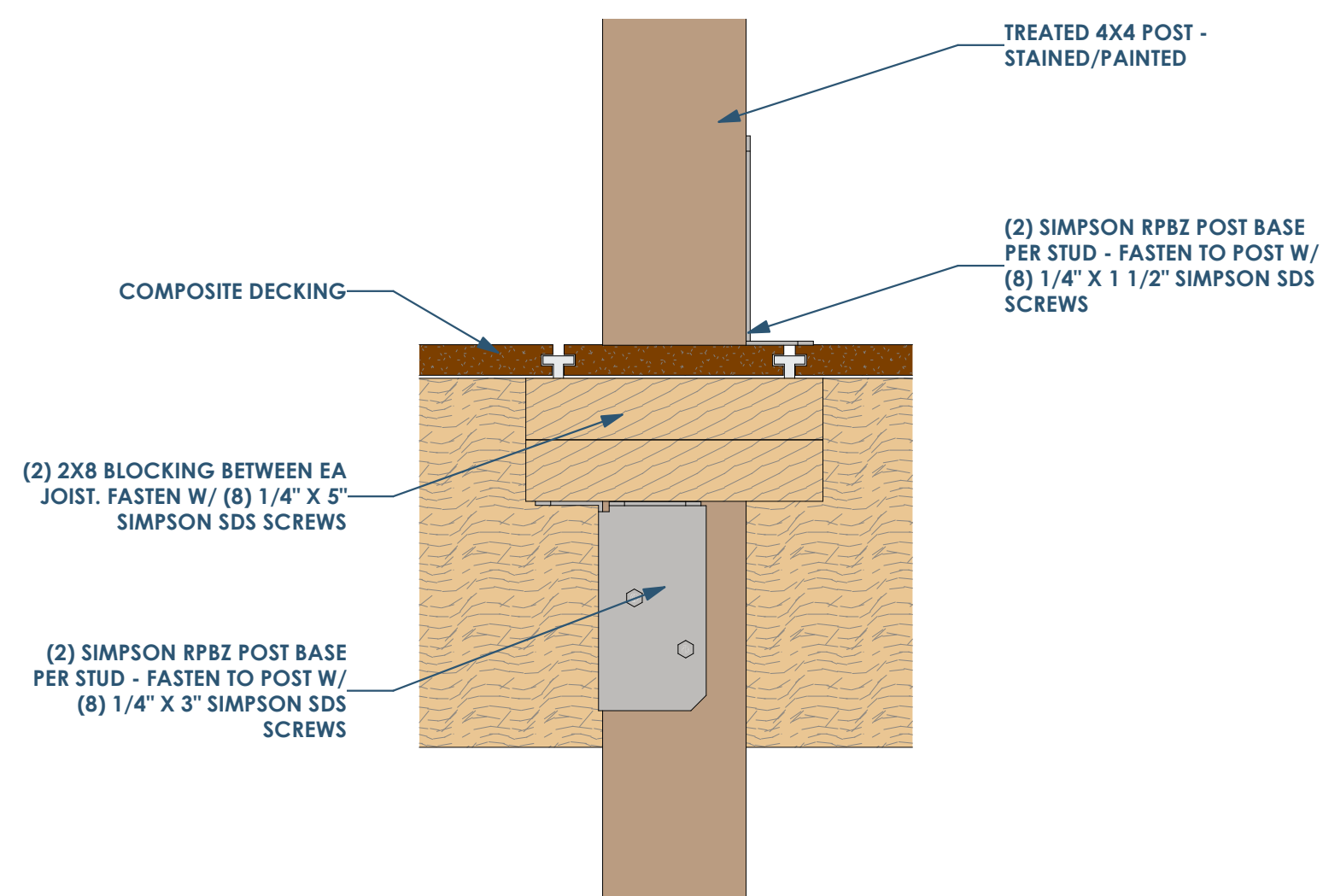
amc ENGINEERS
 MEP: AMC Engineers
 508 E Jackson St # 552
 Burnet, TX 78611
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openingdesign
 Architect: OpeningDesign
 17 S Fairchild | FL 7
 Madison, WI 53703
 ryan@openingdesign.com | 773.425.6456

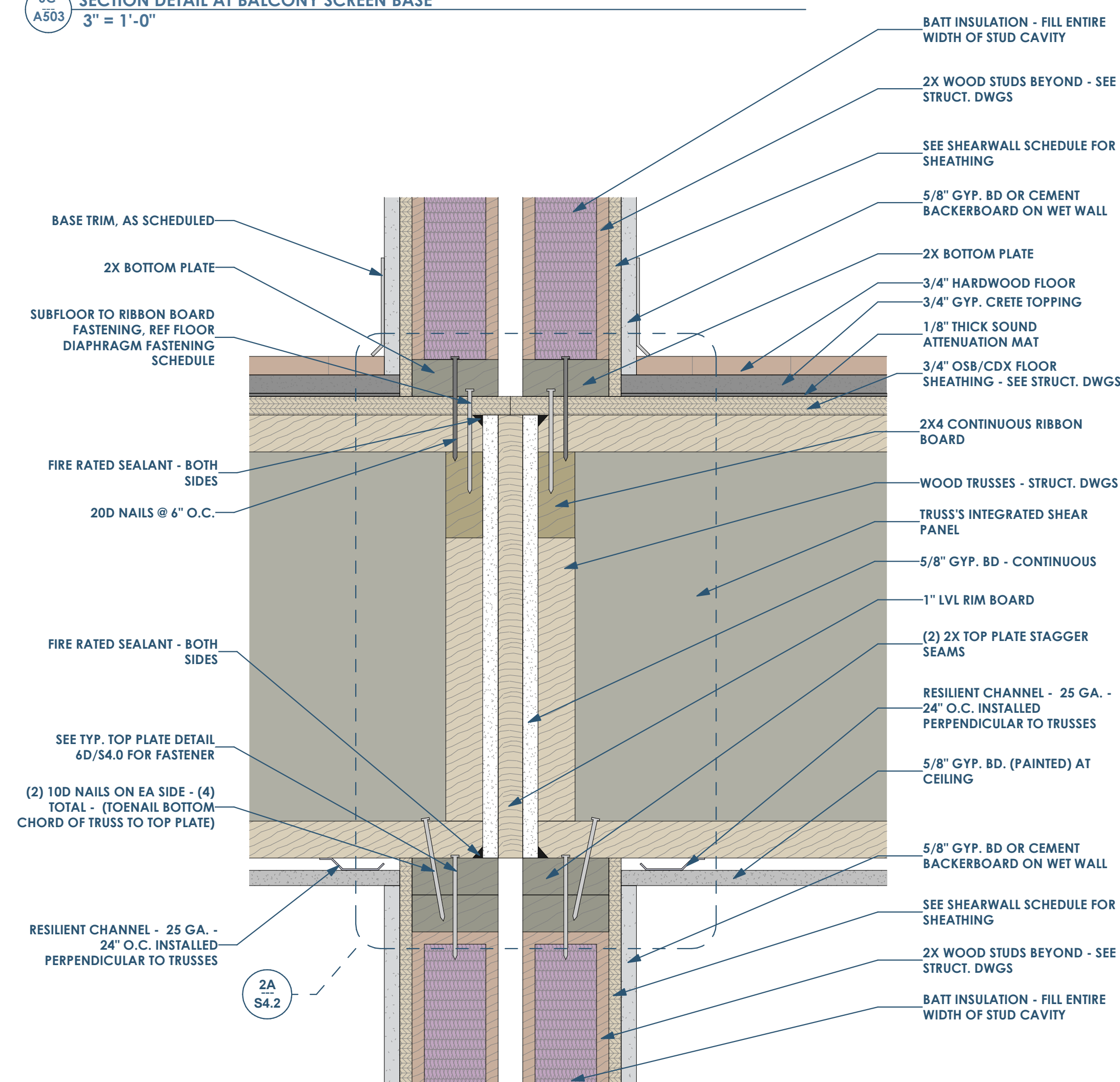
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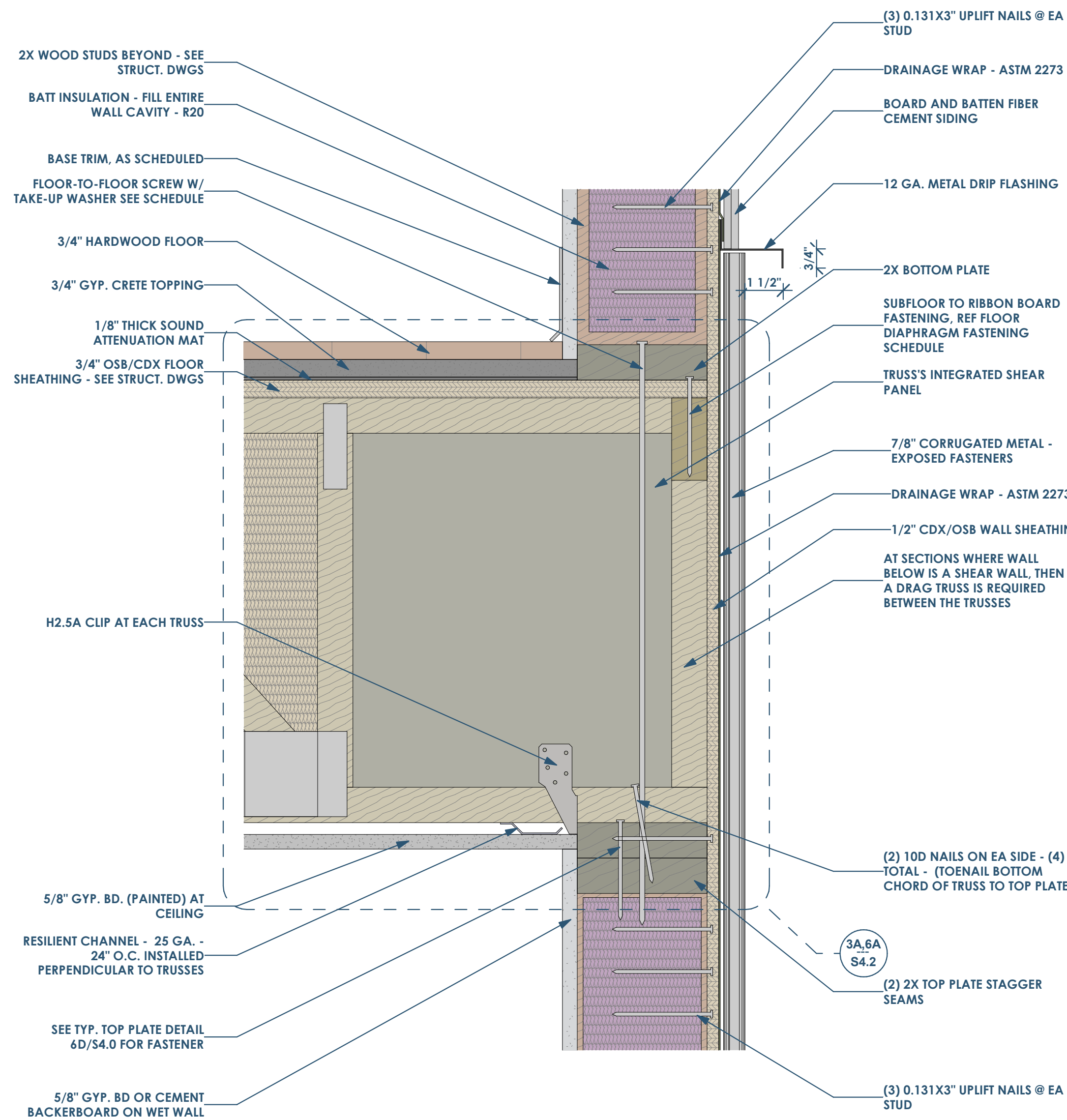
4E A503 SECTION DETAIL AT BALCONY SCREEN HEAD
3" = 1'-0"



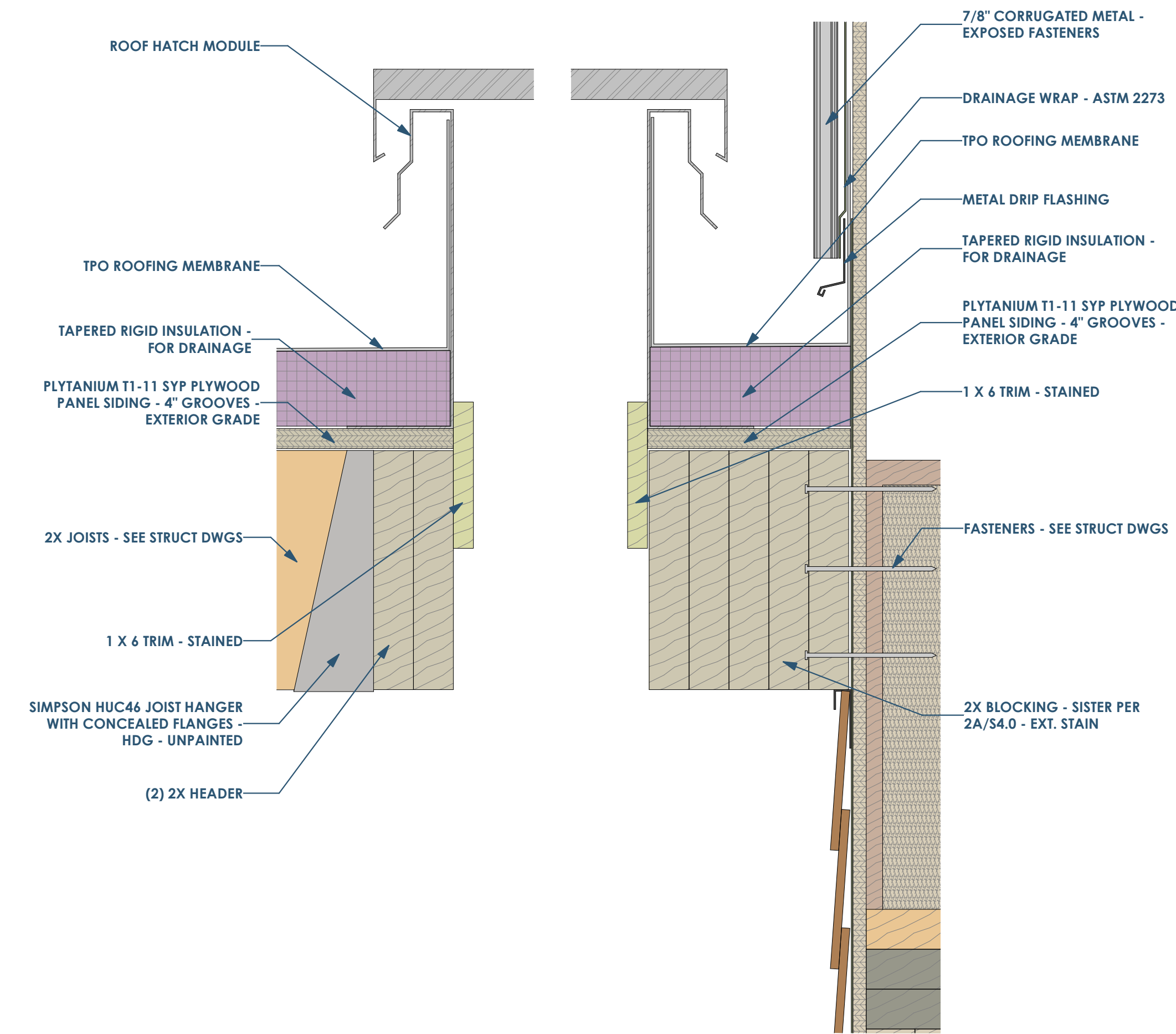
6C A503 SECTION DETAIL AT BALCONY SCREEN BASE
3" = 1'-0"



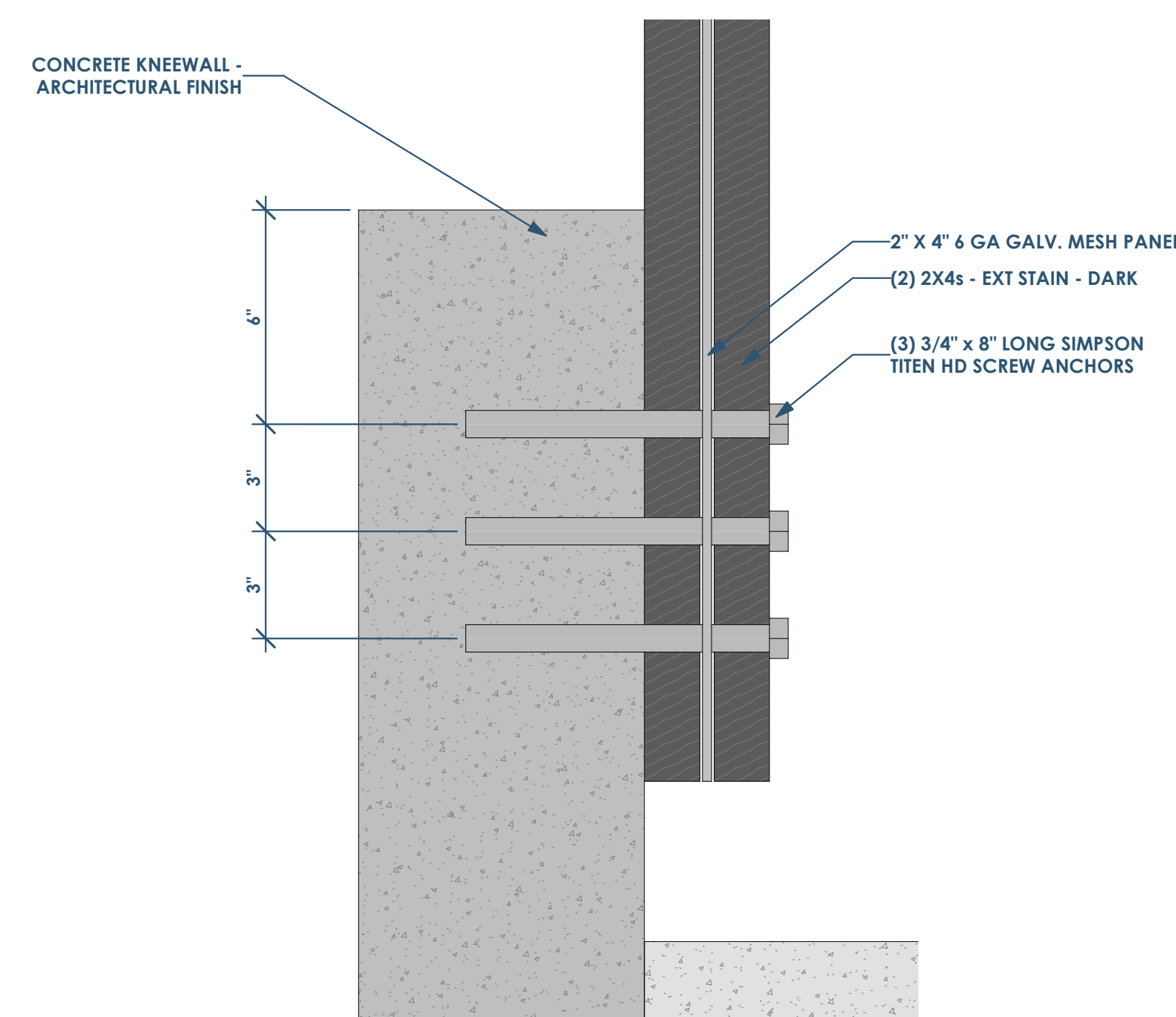
6A A503 SECTION DETAIL - PARTY WALL AND FLOOR TRUSS
3" = 1'-0"



4A A503 SECTION DETAIL - EXTERIOR WALL & FLOOR TRUSS
3" = 1'-0"



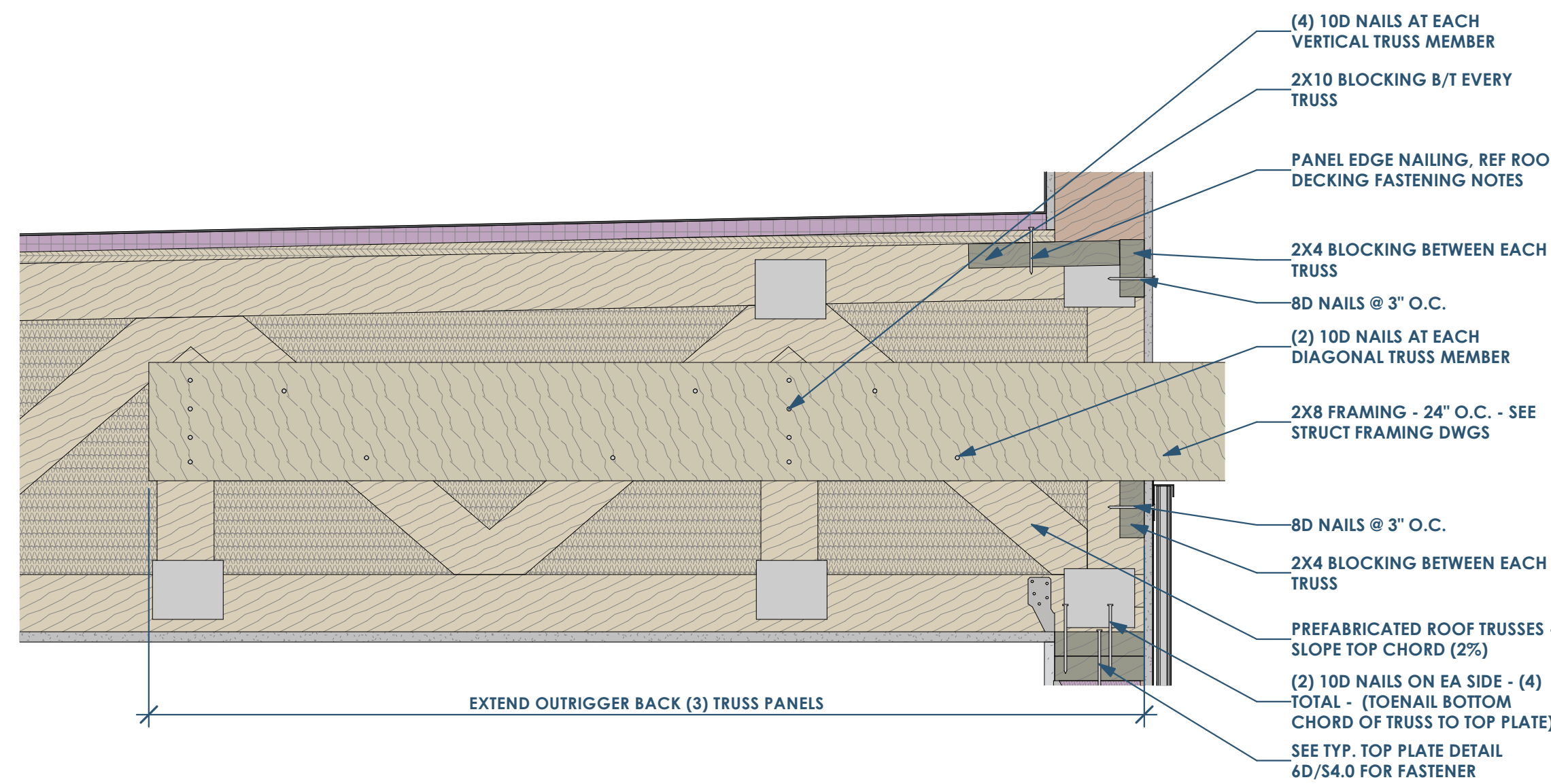
2C A503 SECTION DETAIL - ROOF HATCH
3" = 1'-0"



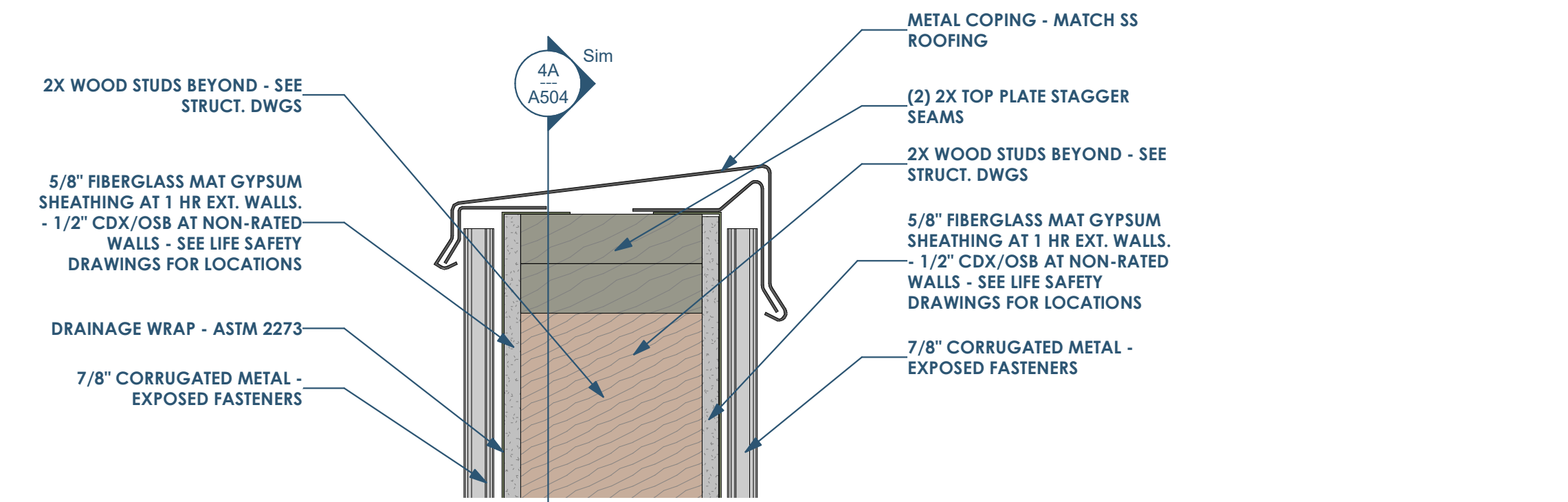
2A A503 SECTION DETAIL - AT CONCRETE KNEEWALL
3" = 1'-0"

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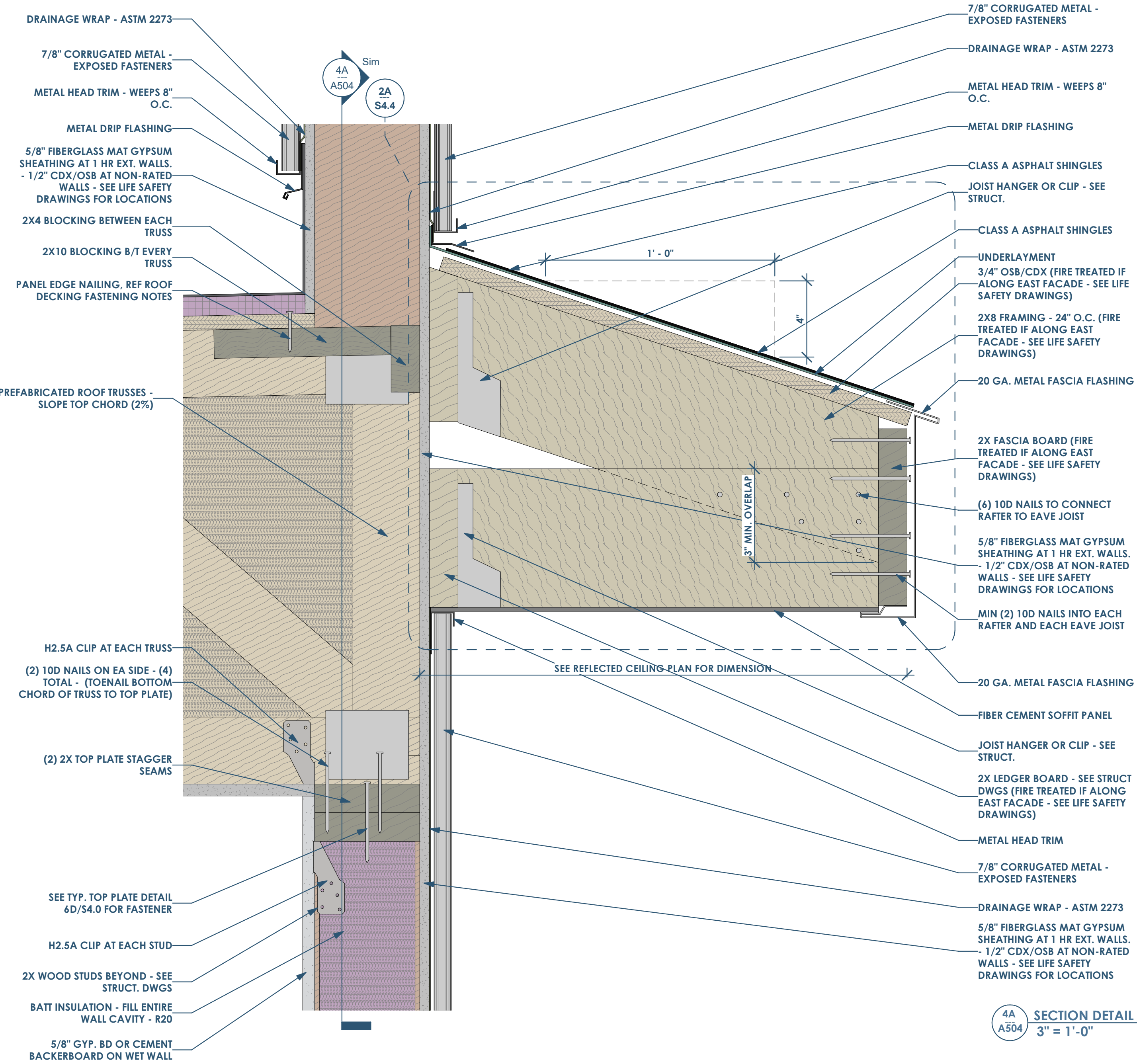
Date	Description
06/02/2022	Review before Permit



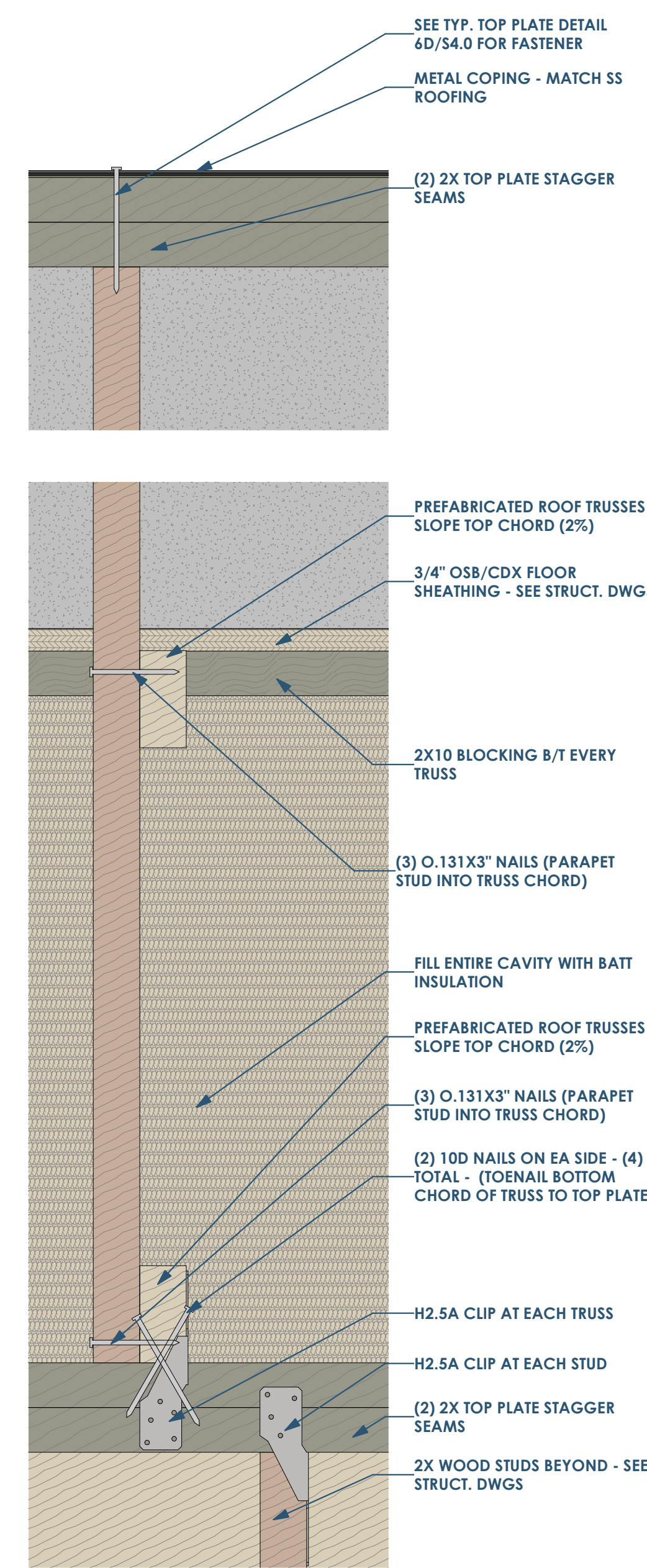
6E SECTION DETAIL AT OUTRIGGER 1 1/2" = 1'-0"



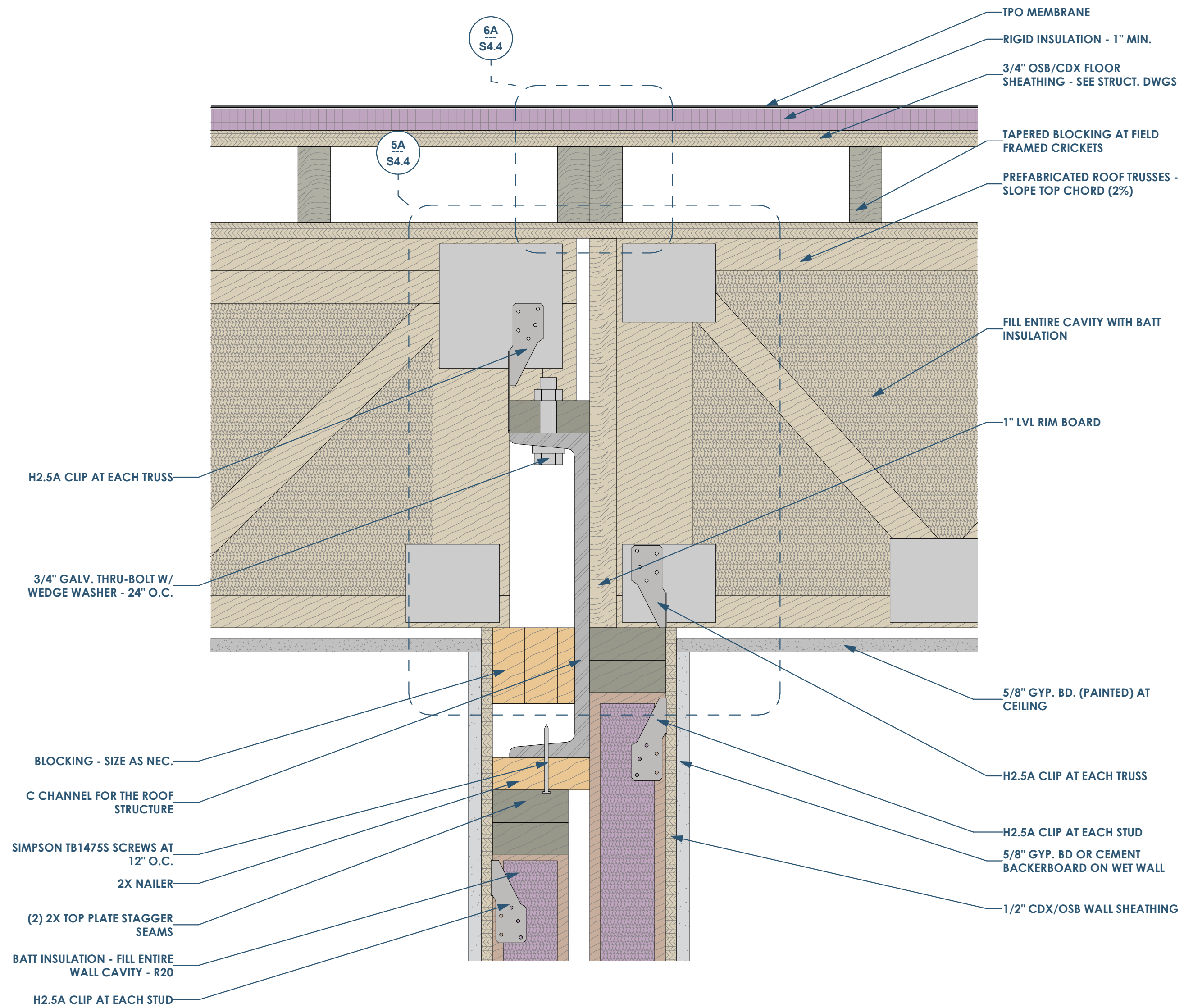
6D SECTION DETAIL - TOP OF PARAPET 3" = 1'-0"



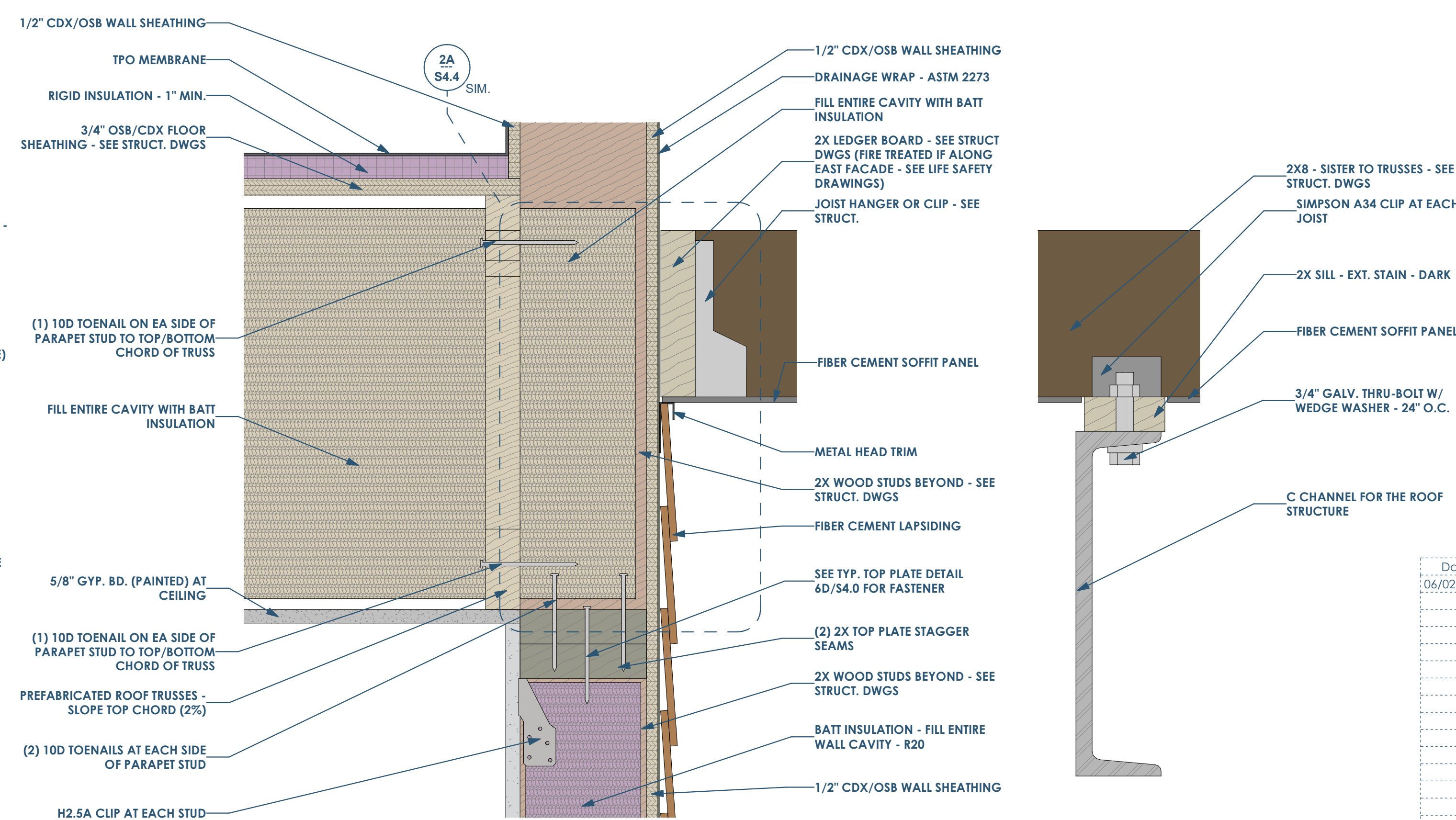
4A SECTION DETAIL - AT PARAPET WALL 3" = 1'-0"



3A SECTION DETAIL - AT SOFFIT AND ALCOVE 3" = 1'-0"



3C SECTION DETAIL - AT ROOF BEAM 3" = 1'-0"

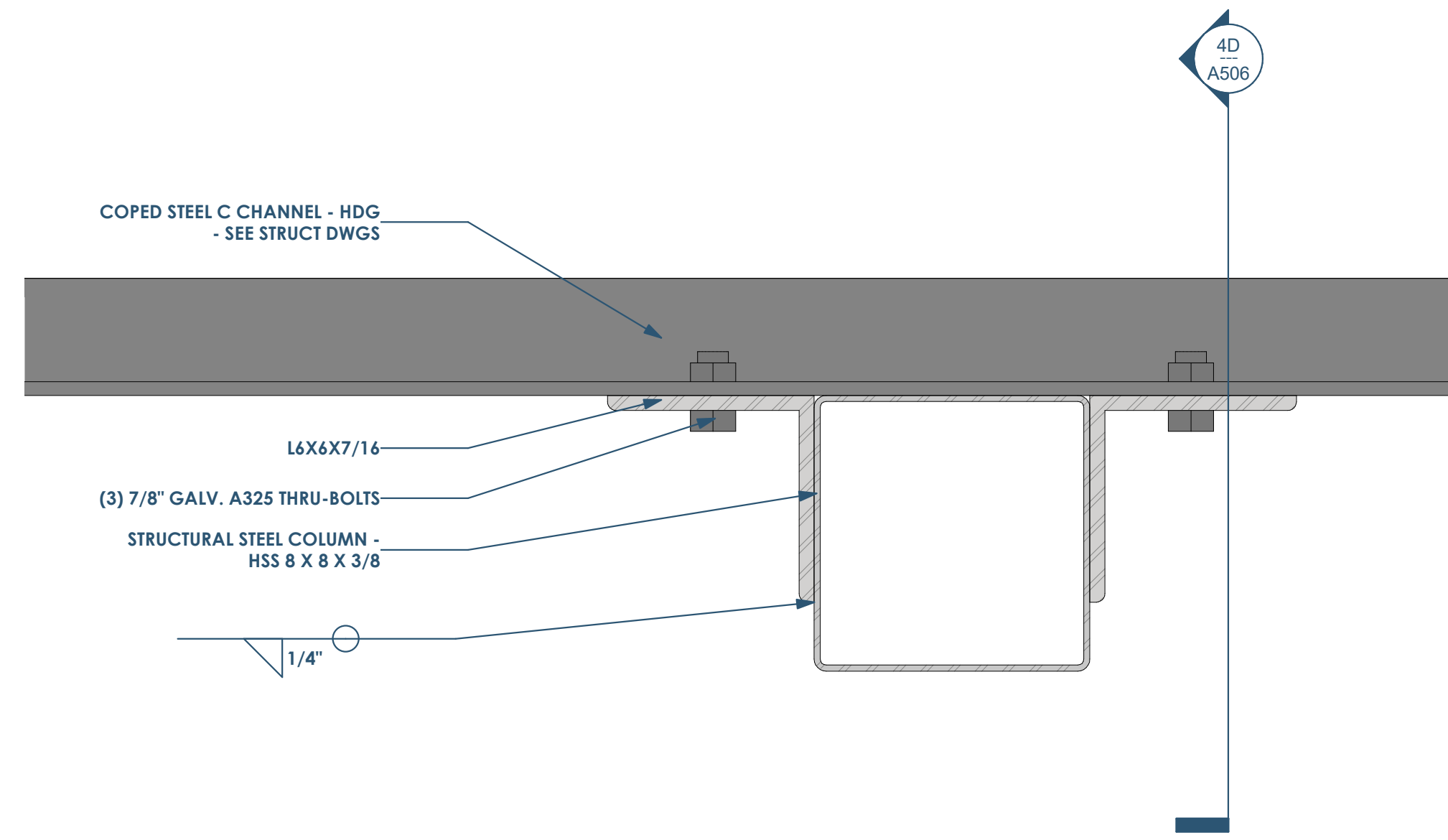


2A SECTION DETAIL - ALCOVE AT ROOF BEAM 3" = 1'-0"

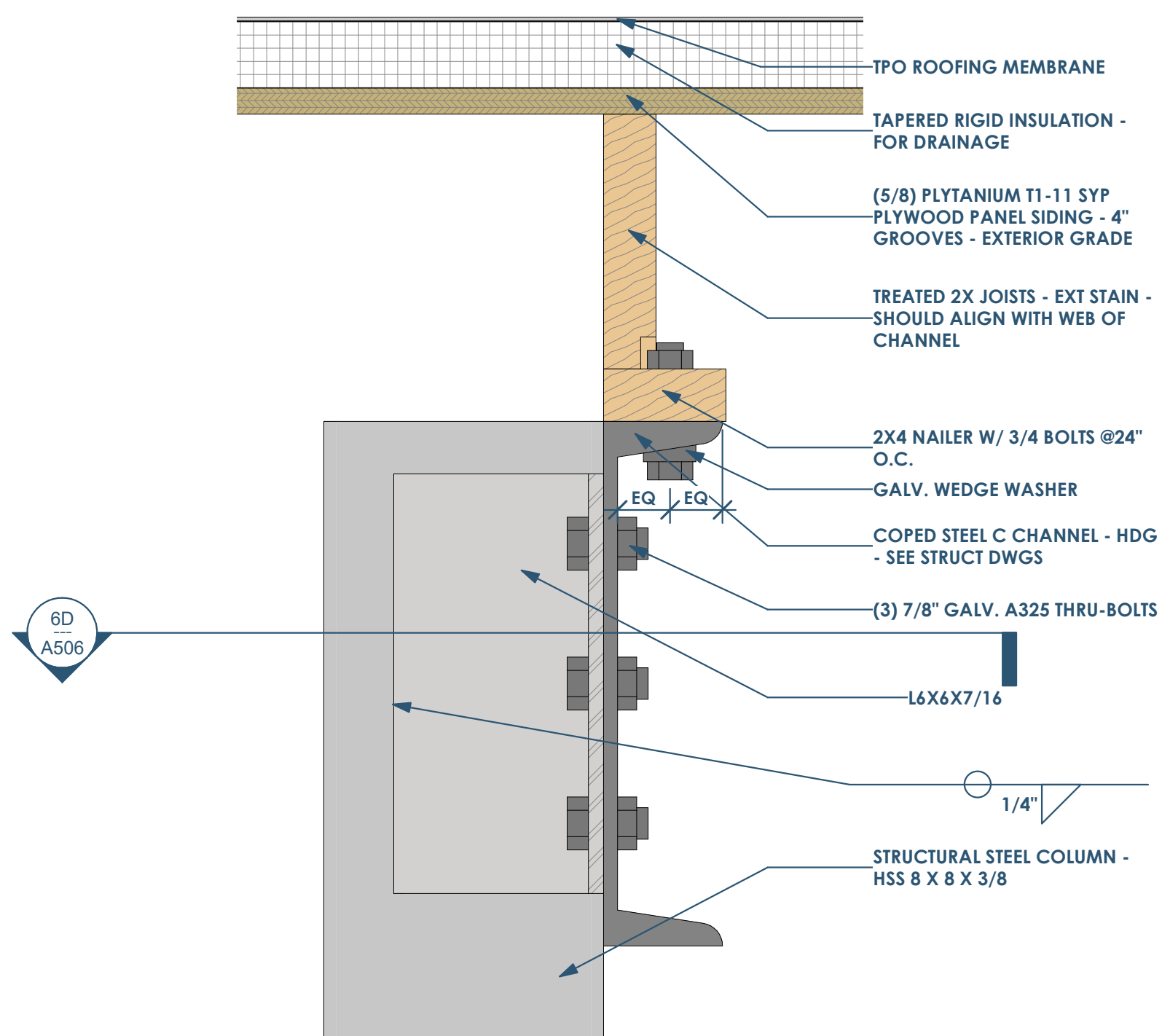
6A SECTION DETAIL - ROOF AND SOFFIT 3" = 1'-0"

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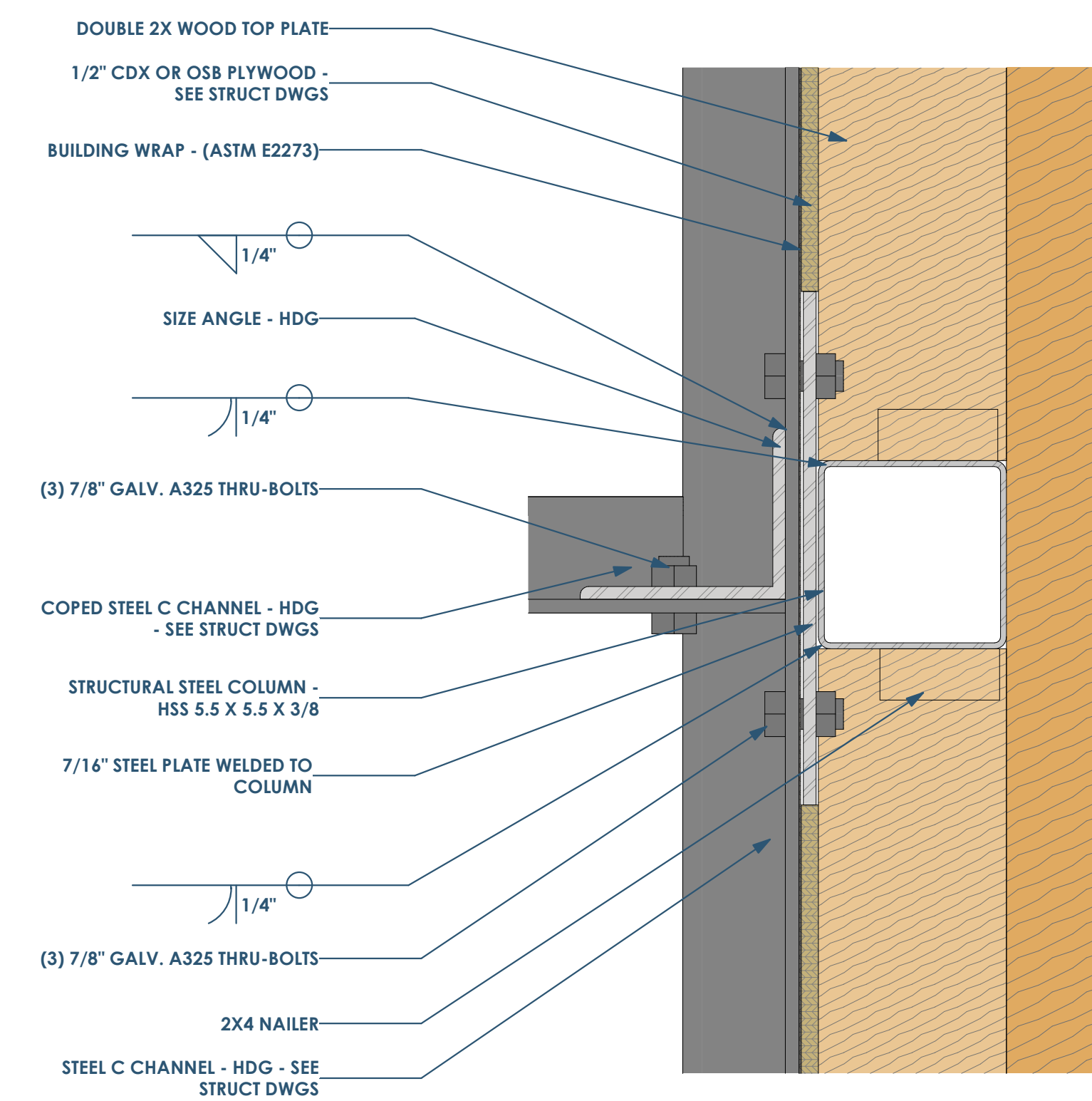
Date	Description
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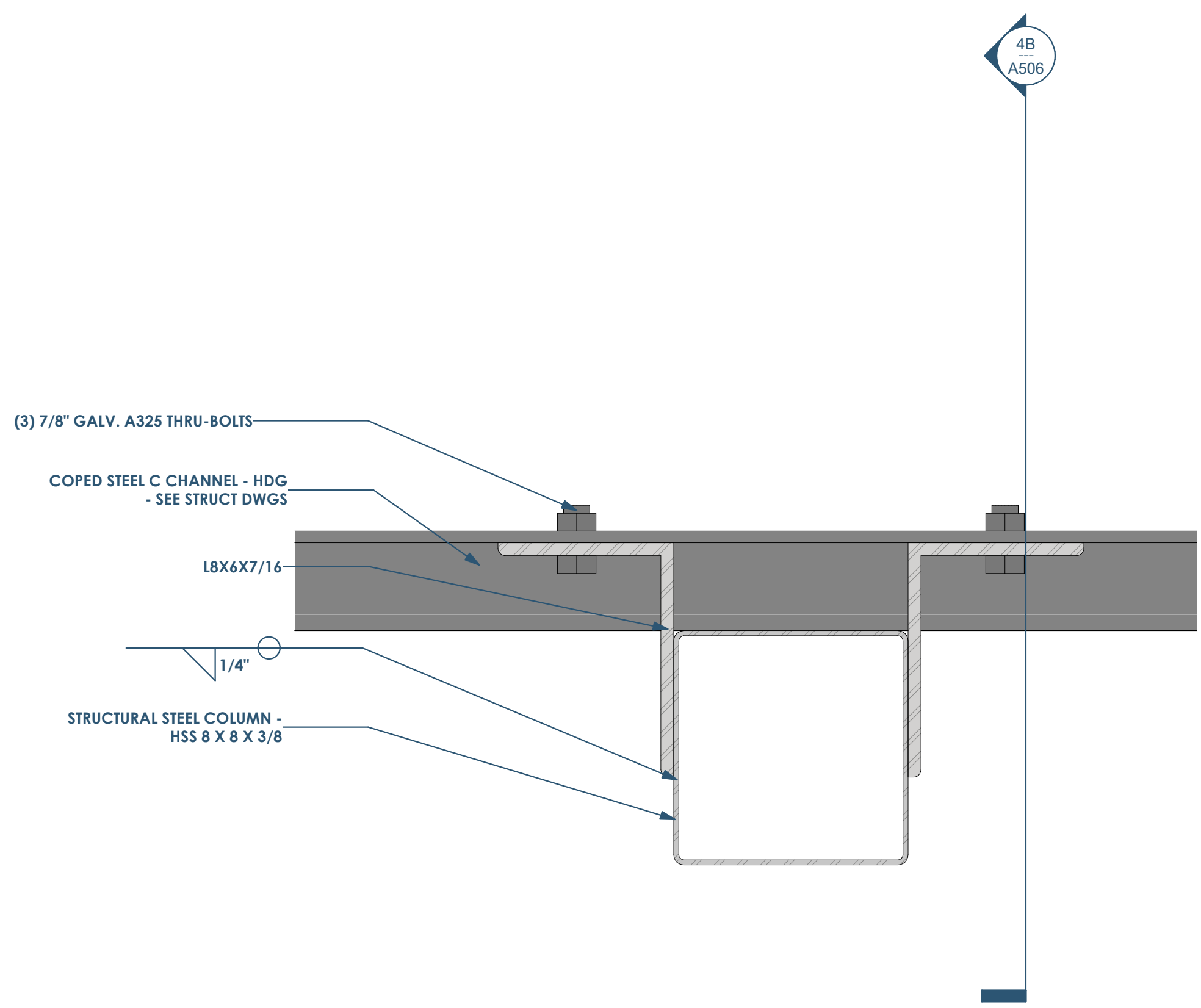
4D
A506
PLAN DETAIL C CHANNEL TO COLUMN - AT ROOF
3" = 1'-0"



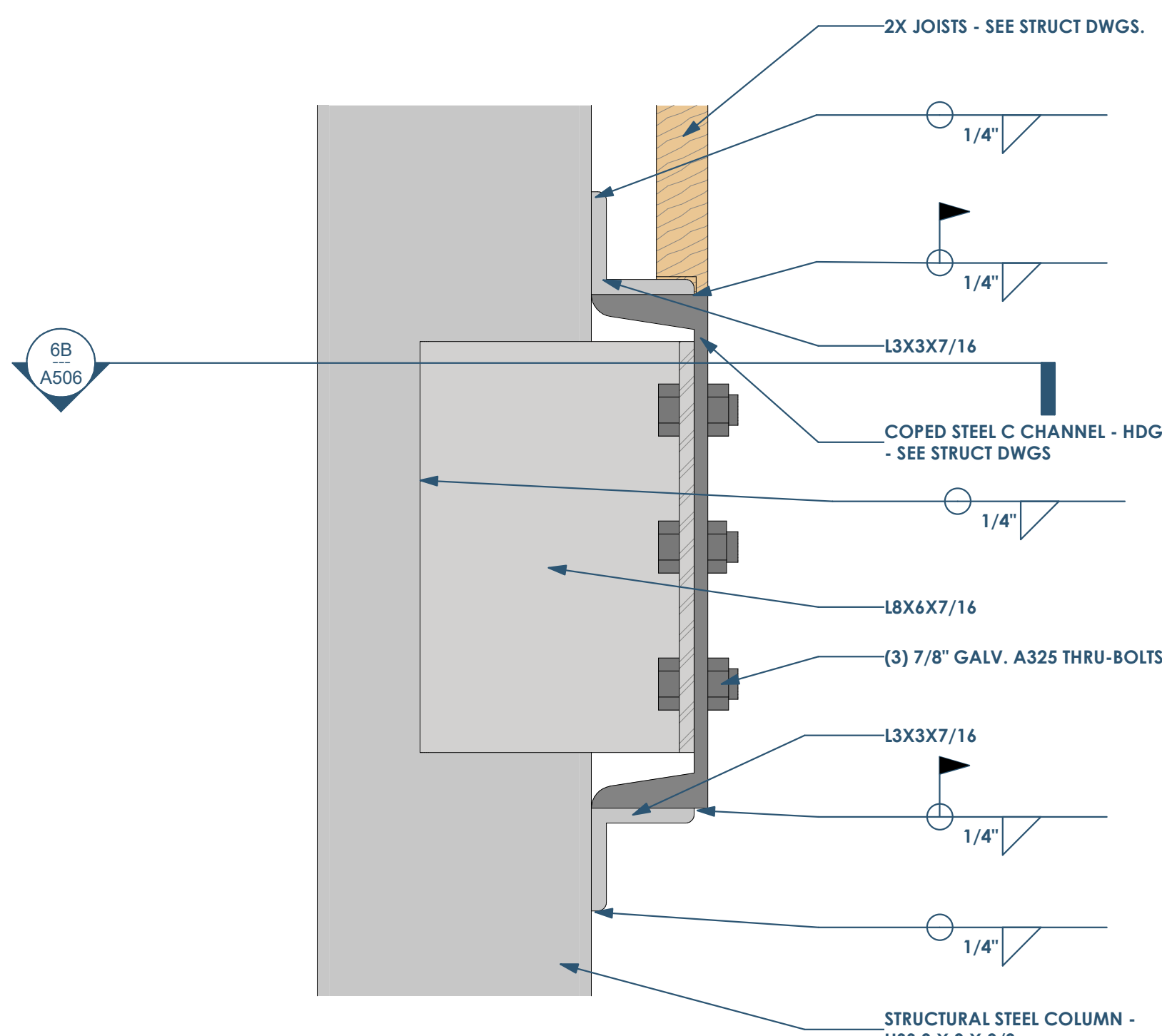
4D
A506
SECTION DETAIL C CHANNEL TO COLUMN - AT ROOF
3" = 1'-0"



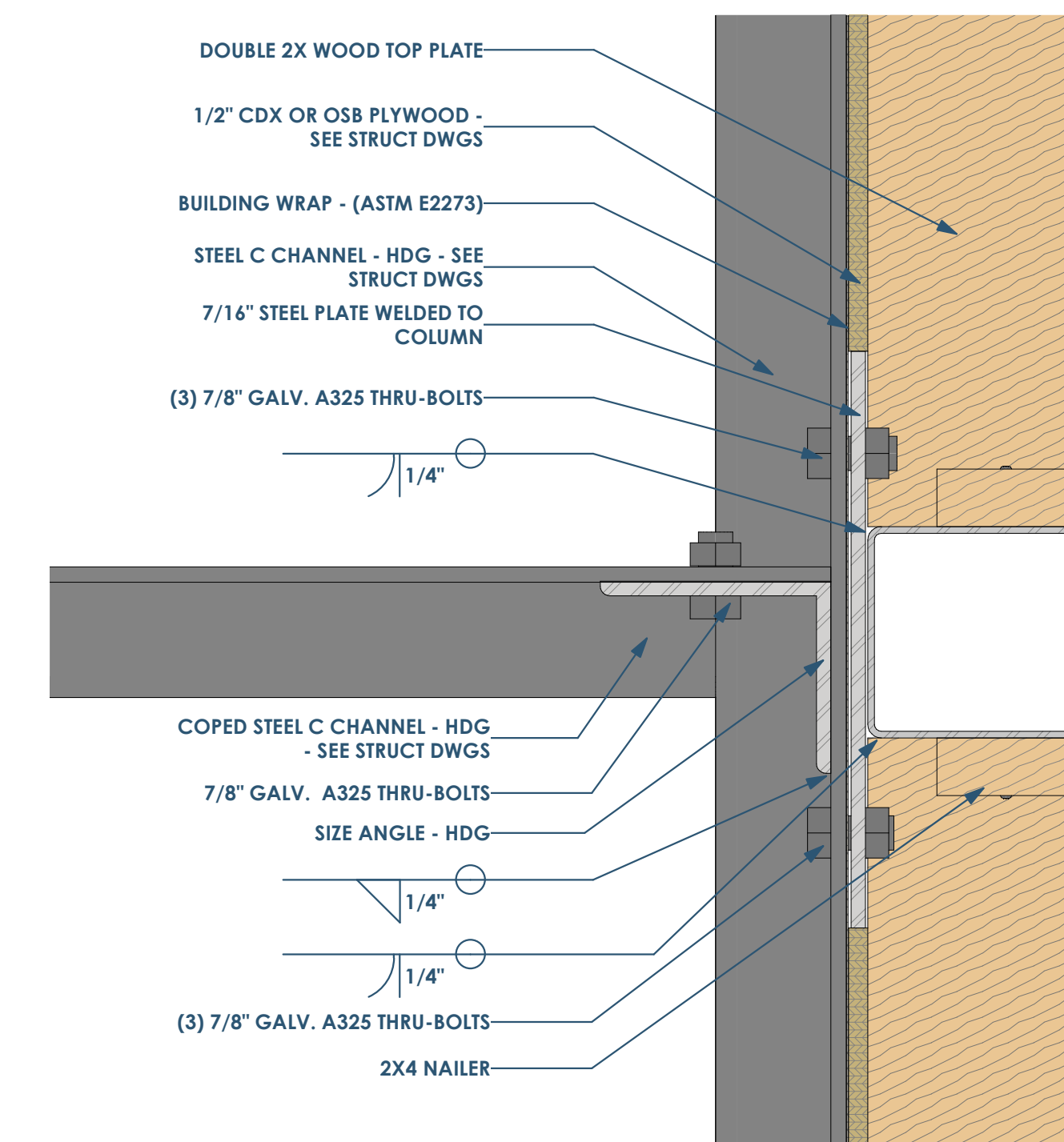
2D
A506
PLAN DETAIL C CHANNEL TO COLUMN AT WALL - ROOF
3" = 1'-0"



6B
A506
PLAN DETAIL C CHANNEL TO COLUMN - 3RD AND 2ND FLOORS
3" = 1'-0"



4B
A506
SECTION DETAIL C CHANNEL TO COLUMN - AT ROOF 2ND AND 3RD FLOORS
3" = 1'-0"



2B
A506
PLAN DETAIL C CHANNEL TO COLUMN AT WALL - 3RD AND 2ND FLOORS
3" = 1'-0"

RENOVATION
Wranglers
Engineers

Owner: Renovation Wranglers
102 E 26th St
Bryan, TX 77803
Kateneason@rwe.com | 979.450.9969

LKB
ARCHITECTURE

Architect of Record: LKB Architecture
2929 Allen Pkwy Suite 200
Houston, TX 77019
isa@lkbarchitecture.com | 713.425.3076

DUDLEY
STRUCTURAL

Structural: Dudley
6102 Imperial Loop Drive
College Station, TX 77845
(979) 777-0720

amc
ENGINEERS

MEP: AMC Engineers
508 E Jackson St # 552
Burnet, TX 78611
info@amcengineers.com

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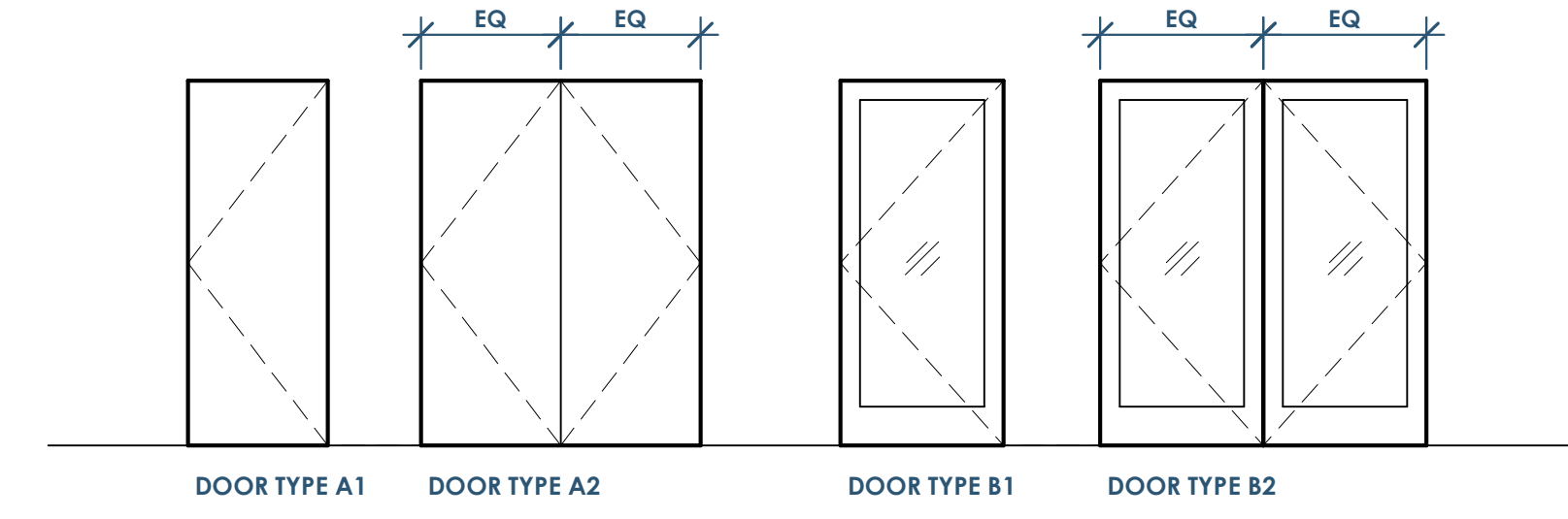
openingdesign

Architect: OpeningDesign
17 S Fairchild | FL 7
Madison, WI 53703
ryan@openingdesign.com | 773.425.6456

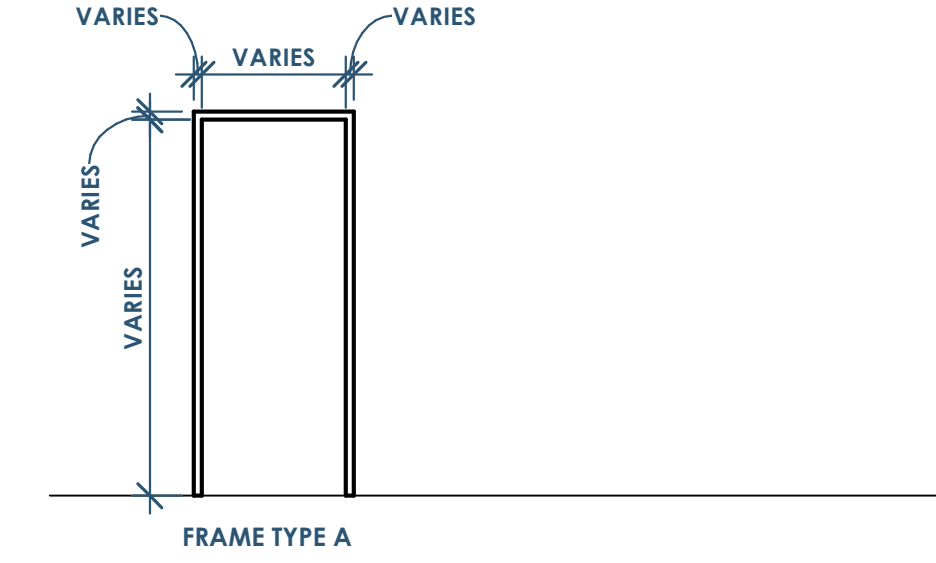
Date	Description
06/02/2022	Review before Permit

DOOR SCHEDULE - TYPE											
TYPE MARK	COUNT	TYPE	WIDTH	HEIGHT	FIRE RATING	DOOR TYPE	DOOR MATERIAL	FRAM TYPE	FRAME MATERIAL	GLAZING	TYPE COMMENTS
D1	28	SINGLE - LITE - MUNTINS - 3-0 x 6-8	3'-0"	6'-8"		B1	CW - CLAD WOOD DOOR	A	CW - CLAD WOOD DOOR	GL - TEMPERED - INSULATED - LOW-E	
D2	24	SINGLE - FLUSH - 3-0 x 6-8	3'-0"	6'-8"		A1	WD - HOLLOW CORE	A	WD	-	
D3	30	SINGLE - FLUSH - 2-10 x 6-8	2'-10"	6'-8"		A1	WD - HOLLOW CORE	A	WD	-	
D4	11	SINGLE - FLUSH - 2-0 x 6-8	2'-0"	6'-8"		A1	WD - HOLLOW CORE	A	WD	-	
D5	6	DOUBLE - FLUSH - 5-0 x 6-8	5'-0"	6'-8"		A2	WD - HOLLOW CORE	A	WD	-	
D6	1	SINGLE - HOLLOW METAL - 3-0 x 6-8	3'-0"	6'-8"		A1	HM	A	HM	N/A	

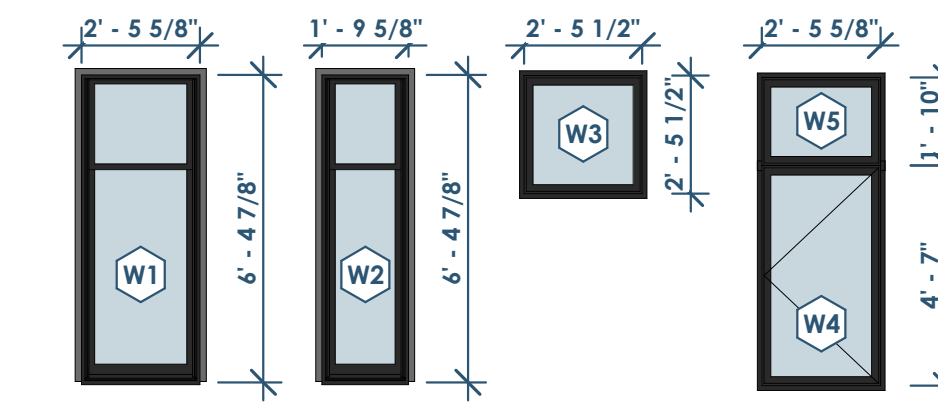
SIMPLIFIED WINDOW SCHEDULE						
PHASE CREATED	TYPE MARK	COUNT	TYPE	WIDTH	HEIGHT	TYPE COMMENTS
1ST PHASE	W1	46	DOUBLE HUNG - TYPE 2	2'-5 5/8"	6'-4 7/8"	BOTTOM SASH LIMITED TO 4" MAX OPEN
1ST PHASE	W2	31	DOUBLE HUNG - TYPE 1	1'-9 5/8"	6'-4 7/8"	BOTTOM SASH LIMITED TO 4" MAX OPEN
1ST PHASE	W3	18	FIXED PICTURE - TYPE 1	2'-5 1/2"	2'-5 1/2"	
1ST PHASE	W4	1	CASEMENT - TYPE 1	2'-5 5/8"	4'-7"	ADA REACH REQUIREMENTS FOR TYPE A UNITS
1ST PHASE	W5	1	FIXED PICTURE - TYPE 2	2'-5 5/8"	1'-10"	



2E
A600
DOORS - PANEL TYPES
1/4" = 1'-0"



2D
A600
DOORS - FRAME TYPES
1/4" = 1'-0"



2C
A600
WINDOW TYPES
1/4" = 1'-0"

RENOVATION Wranglers
 Owner: Renovation Wranglers
 102 E 26th St
 Bryan, TX 77803
 Katerneason@time.com | 979.450.9969

LKB ARCHITECTURE
 Architect of Record: LKB Architecture
 2929 Allen Pkwy Suite 200
 Houston, TX 77019
 isa@lkbarchitecture.com | 713.425.3076

DUDDLEY
 Structural: Dudley
 6102 Imperial Loop Drive
 College Station, TX 77845
 (979) 777-0720

amc ENGINEERS
 MEP: AMC Engineers
 508 E Jackson St # 552
 Burnet, TX 78611
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openingdesign
 Architect: OpeningDesign
 17 S Fairchild | FL 7
 Madison, WI 53703
 ryan@openingdesign.com | 773.425.6456

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SCHEDULES

MARCO POLO - 101 33RD STREET - CITY OF BRYAN TOWNSITE, BLOCK 96, LOT 3-5 & PT OF 6 & PT OF ALLEY - BRYAN, TX 77803

A600

UL Product iQ®
BXUV.L521 - Fire-resistance Ratings - ANSI/UL 263

Design/System/Construction/Assembly Usage Disclaimer

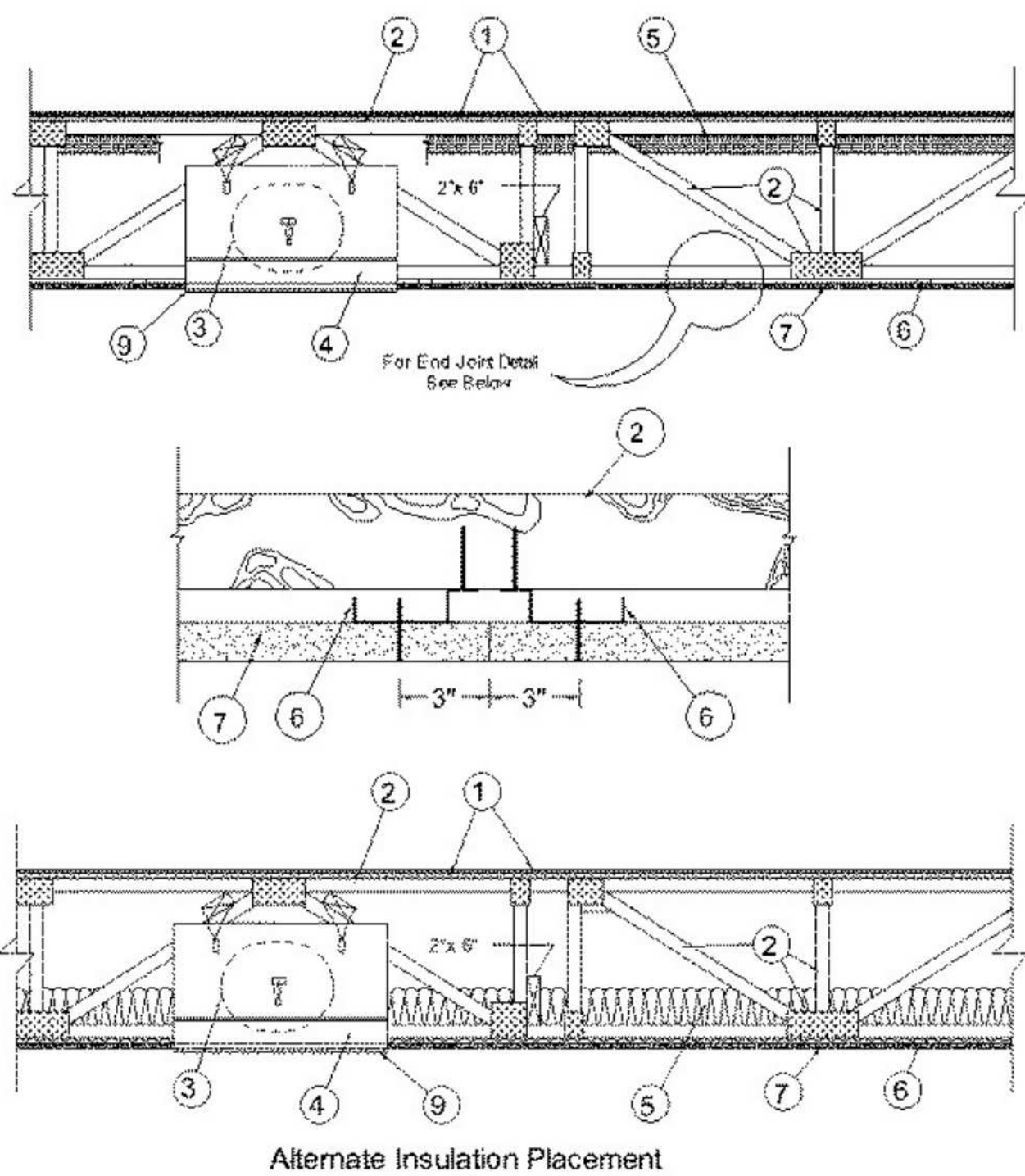
- Authorities Having Jurisdiction should be consulted in all cases as to the particular requirements covering the installation and use of UL Certified products, equipment, systems, devices, and materials.
Authorities Having Jurisdiction should be consulted before construction.
Fire resistance assemblies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

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

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

Design No. L521

February 14, 2022



- 1. Flooring System - The flooring system shall consist of one of the following:
System No. 1
Subflooring - Nom 23/32 in. thick wood structural panels installed perpendicular to trusses with end joints staggered. Plywood or panels secured to trusses with construction adhesive and No. 6d ringed shank nails, spaced 12 in. OC along each truss. Staples having equal or greater withdrawal and lateral resistance strength may be substituted for the 6d nails.
Vapor Barrier - (Optional) - Nom 0.030 in. thick commercial asphalt saturated felt.
Finish Floor - Min 1 by 4 in. T & G lumber installed perpendicular to trusses, or min 15/32 in. thick wood structural panels, min grade "Underlayment" or "Single-Floor." Face grain of plywood or strength axis of panel to be perpendicular to joints with joints staggered.
System No. 2
Subflooring - Nom 23/32 in. thick wood structural panels installed perpendicular to trusses with end joints staggered. Plywood or panels secured to trusses with construction adhesive and No. 6d ringed shank nails, spaced 12 in. OC along each truss. Staples having equal or greater withdrawal and lateral resistance strength may be substituted for the 6d nails.

1 of 14

5/19/2022, 8:54 PM1 of 14

5/19/2022, 8:54 PM3 of 14

5/19/2022, 8:54 PM4 of 14

5/19/2022, 8:54 PM

Alternate Floor Mat Materials - (Optional) - Floor mat material nom 1/4 in. (6 mm) thick adhered to subfloor with Hacker Floor Primer. Primer to be applied to the surface of the mat prior to the placement of the metal lath. When metal lath is used, floor topping mixture.

HACKER INDUSTRIES INC - Type Hacker Sound-Mat II

Metal Lath (Optional) - For use with 3/8 in. (10 mm) floor mat materials, 3/8 in. expanded steel diamond mesh, 3.4 lbs/sq yd placed over the floor mat material. Hacker Floor Primer to be applied prior to the placement of the metal lath. When metal lath is used, floor topping thickness a nom 1-1/4 in. over the floor mat.

Finish Flooring - Floor Topping Mixture - Min 3/4 in. thickness of floor topping mixture having a min compressive strength of 1100 psi. Mixture shall consist of 6.8 gal of water to 80 lbs of floor topping mixture to 1.9 cu ft of sand. Refer to the manufacturer's instructions accompanying the material and/or contact the manufacturer's technical support for specific mix design and minimum thickness recommended for use with eligible floor mats.

HACKER INDUSTRIES INC - Firm-Fill Gypsum Concrete, Firm-Fill High Strength, Gyp-Span Radiant

Trusses - Parallel chord trusses, spaced a max of 24 in. OC, fabricated from nom 2 by 4 lumber, with lumber oriented vertically or horizontally. Min truss depth is 12 in. when no Ceiling Damper* is used and 18 in. when a Ceiling Damper* is used. Truss members secured together with min 0.0356 in. thick galv steel plates. Plates have 5/16 in. long teeth projecting perpendicular to the plane of the plate. The teeth are in pairs facing each other (made by the same punch), forming a split tooth type plate. Each tooth has a chisel point on its outside edge. These points are diagonally opposite each other for each pair. The top half of each tooth has a twist for stiffness. The pairs are repeated on approx. 7/8 in. centers with four rows of teeth per inch of plate width.

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

Ceiling Damper* - For use with min 18 in. deep trusses. Max nom area shall be 324 sq in. with the length not to exceed 24 in. and the width not to exceed 20 in. Max height of damper shall be 14 in. Aggregate damper openings shall not exceed 162 sq in. per 100 sq ft of ceiling area. Damper installed in accordance with the manufacturer's installation instructions provided with the damper. A steel grille (Item 9) shall be installed in accordance with installation instructions.

C&S AIR PRODUCTS - Model RD-521-RT

POTTORFF - Model CFD-521

Alternate Ceiling Damper* - For use with min 18 in. deep trusses. Max nom area shall be 196 sq in. with the length not to exceed 26 in. and the width not to exceed 14 in. Max height of damper shall be 7 in. Aggregate damper openings shall not exceed 98 sq in. per 100 sq ft of ceiling area. Damper installed in accordance with the manufacturer's installation instructions provided with the damper. A steel grille (Item 9) not to exceed 144 in² shall be installed in accordance with installation instructions.

C&S AIR PRODUCTS - Model RD-521-RT

POTTORFF - Model CFD-521-BT

Alternate Ceiling Damper* - For use with min 18 in. deep trusses. Max nom area shall be 256 sq in. with the length not to exceed 24 in. and the width not to exceed 20 in. Max height of damper shall be 17 in. Aggregate damper openings shall not exceed 128 sq in. per 100 sq ft of ceiling area. Damper installed in accordance with the manufacturer's installation instructions provided with the damper. A steel grille (Item 9) shall be installed in accordance with installation instructions.

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

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

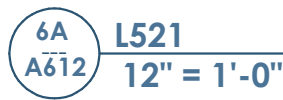
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- Vapor Barrier - (Optional) - Nom 0.030 in. thick commercial asphalt saturated felt.
Finish Flooring - Floor Topping Mixture - Min 3/4 in. thickness of floor topping mixture having a minimum compressive strength of 1800 psi. Refer to manufacturer's instructions accompanying the material for specific mix design.
UNITED STATES GYPSUM CO - Types LK, HSLR, CSD
LATICRETE SUPERCAP L L C - Types LK, HSLR
USG MEXICO S A D E V C O - Types LK, HSLR, CSD
Floor Mat Materials* - (Optional) - Floor mat material loose laid over the subfloor. Refer to manufacturer's instructions regarding the minimum thickness of floor topping over each floor mat material.
UNITED STATES GYPSUM CO - Types SAM, LEVEROCK® Brand Sound Reduction Board, LEVEROCK® Brand Floor Underlayment SRM-25
Alternate Floor Mat Materials* - (Optional) - Floor mat material loose laid over the subfloor. Refer to manufacturer's instructions regarding minimum thickness of floor topping over floor mat.
GRASSWORX L L C - SC Types

System No. 3 (For Use with Item 7A Only)
Finish Floor - Nom 23/32 in. thick wood structural panels installed perpendicular to trusses with end joints staggered. Plywood or panels secured to trusses with construction adhesive and 2-1/2 in. long nails, spaced 12 in. OC along each truss and 8 in. OC at the perimeter.

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

Finish Flooring - Floor Topping Mixture - Min 3/4 in. thickness of floor topping mixture having a minimum compressive strength of 1800 psi. Refer to manufacturer's instructions accompanying the material for specific mix design.
UNITED STATES GYPSUM CO - Types LK, HSLR, CSD

LATICRETE SUPERCAP L L C - Types LK, HSLR

USG MEXICO S A D E V C O - Types LK, HSLR, CSD

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

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

accordance with installation instructions.

BROAN-NUTONE L L C - Model RDWMT

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

BROAN-NUTONE L L C - Model RDWMT2

Batts and Blankets* - (Optional) - Glass fiber or mineral wool insulation bearing the UL Classification Marking as to Surface Burning Characteristics and/or Fire Resistance. When the resilient channels (Item 6) or furring channels (Item 6A) are spaced 24 in. OC, no insulation shall be installed in the concealed space. When the resilient channels (Item 6) or furring channels (Item 6A) are spaced 16 in. OC, the insulation shall be a max of 3-1/2 in. thick, and shall be secured against the subflooring with staples at 12 in. OC or held suspended in the concealed space with 0.090 in. diam galv steel wires attached to the wood trusses at 12 in. OC. When the resilient channels (Item 6) or furring channels (Item 6A) are spaced a max of 12 in. OC or when the Steel Framing Members (Item 6B) are used, there is no limit in the overall thickness of insulation, and the insulation can be secured against the subflooring, held suspended in the concealed space or draped over the resilient or furring channels (or Steel Framing Members) and gypsum panel membrane. When Steel Framing Members (Item 6C) are used, max 3-1/2 in. thick insulation shall be draped over the furring channels (Item 6A) and gypsum board ceiling membrane, and friction-fitted between trusses and Steel Framing Members (Item 6C). The finished rating has only been determined when the insulation is secured to the subflooring.

Fiber, Sprayed* - (Dry Dense Packed 100% Borate Formulation) - (Optional) - As an alternate to Item 5. When used, the resilient channel and gypsum board attachment is modified as specified in Items 6 and 7 and wire mesh (Item 10) shall be attached to the furring channels to facilitate installation of the material. The finished rating when Fiber, Sprayed is used has not been determined. The fiber is applied without water or adhesive at a nominal dry density of 3.5 lb/ft³, in accordance with the application instructions supplied with the product. When Item 5A (Fiber, Sprayed) is used, two layers of gypsum board required as described in Item 7. Not evaluated for use with Item 6B, 6C, 6E, 6F, 6G, 6H or 6I.
U S GREENFIBER L L C - INS735, INS745, INS750LD, INS765LD, INS773LD, & SANCTUARY to be used with dry application only.

Fiber, Sprayed* - (Loose Fill 100% Borate Formulation) - (Optional) - As an alternate to Items 5 and 5A. The finished rating when Fiber, Sprayed is used has not been determined. The fiber is applied without water or adhesive at a minimum dry density of 0.5 lb/ft³ and at a max thickness of 3-1/2 in., in accordance with the application instructions supplied with the product. Wire mesh (Item 10) shall be attached to the furring channels to facilitate installation of the material. When Item 5B (Fiber, Sprayed) is used, two layers of gypsum board required as described in Item 7. Not evaluated for use with Item 6B, 6C, 6E, 6F, 6G, 6H or 6I.
U S GREENFIBER L L C - INS735, INS745, INS750LD, INS765LD, INS773LD, & SANCTUARY to be used with dry application only.

Foamed Plastic* - (As alternate to Item 5, 5A, or 5B, Not Shown) - Spray foam insulation applied directly to the underside of the plywood subflooring. Spray foam insulation installed to a maximum thickness of 10 in. at a nominal 0.5 lb/ft³ density, while maintaining a minimum 8-1/2 in. clearance between the spray foam insulation and the gypsum board (Item 7). Spray foam insulation is limited for use with minimum 18 in. deep trusses (Item 2). When spray foam insulation is installed, resilient channels (Item 6) shall be installed maximum 12 in. OC, with channels adjacent to butt joints of gypsum board (Item 7) spaced maximum 3 in. away from gypsum butt joints. Gypsum board (Item 7) to be installed using minimum 1-1/4 in. long Type 5 screws, spaced maximum 8 in. OC, and butted end joints shall be staggered min. 2 ft within the assembly, and occur midway between the continuous furring channels. If used with a fire damper (Items 4 through 4K) in the concealed space, minimum 1 in. clearance to be maintained between damper housing and spray foam insulation. Not evaluated for use with Items 5 through 5B, or 6A through 6I.
SES FOAM INC - Sucraeal

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

Foamed Plastic* - (As alternate to Item 5, 5A, or 5C, Not Shown) - Spray foam insulation applied directly to the underside of the plywood subflooring. Spray foam insulation installed to a maximum thickness of 10 in. at a nominal 0.5 lb/ft³ or 2.0 lb/ft³ density, depending on the product installed. Spray foam insulation is limited to use with minimum 18 in. deep trusses (Item 2).

- System No. 6
Subflooring - Nom 23/32 in. thick wood structural panels installed perpendicular to trusses with end joints staggered. Plywood or panels secured to trusses with construction adhesive and No. 6d ringed shank nails, spaced 12 in. OC along each truss. Staples having equal or greater withdrawal and lateral resistance strength may be substituted for the 6d nails.
Vapor Barrier - (Optional) - Nom 0.030 in. thick commercial asphalt saturated felt.
Floor Mat Materials* - (Optional) - Floor mat material nom 1/8 in. (3 mm) thick loose laid over the subfloor. Floor topping thickness shall be a min of 3/4 in. (19 mm).
HACKER INDUSTRIES INC - FIRM-FILL SCM 125
Alternate Floor Mat Materials - (Optional) - Floor mat material nom 1/4 in. (6 mm) thick loose laid over the subfloor. Floor topping thickness shall be a min of 1-1/2 in. (38 mm).
HACKER INDUSTRIES INC - Type FIRM-FILL SCM 250

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

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

Metal Lath (Optional) - (Optional) - For use with 3/8 in. (10 mm), or greater, floor mat materials, 3/8 in. expanded steel diamond mesh, 3.4 lbs/sq yd placed over the floor mat material. Hacker Floor Primer to be applied prior to the placement of the metal lath. When metal lath is used, floor mat thickness a nom 1 in. (25 mm) over the floor mat. Finish Flooring - Floor Topping Mixture - Min 3/4 in. thickness of floor topping mixture having a min compressive strength of 1100 psi. Mixture shall consist of 6.8 gal of water to 80 lbs of floor topping mixture to 1.9 cu ft of sand. Refer to the manufacturer's instructions accompanying the material and/or contact the manufacturer's technical support for specific mix design and minimum thickness recommended for use with eligible floor mats.
HACKER INDUSTRIES INC - Firm-Fill Gypsum Concrete, Firm-Fill 2010, Firm-Fill 3310, Firm-Fill 4010, Gyp-Span Radiant

System No. 7
Subflooring - Nom 23/32 in. thick wood structural panels installed perpendicular to trusses with end joints staggered. Plywood or panels secured to trusses with construction adhesive and No. 6d ringed shank nails, spaced 12 in. OC along each truss. Staples having equal or greater withdrawal and lateral resistance strength may be substituted for the 6d nails.

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

Finish Floor* - Mineral and Fiber Board - Min 1/2 in. thick, supplied in sizes ranging from 3 ft by 4 ft to 8 ft by 12 ft.
HOMASOTE CO - Type 440-32 Mineral and Fiber Board

System No. 8
Subflooring - Nom 23/32 in. thick wood structural panels installed perpendicular to trusses with end joints staggered. Plywood or panels secured to trusses with construction adhesive and No. 6d ringed shank nails, spaced 12 in. OC along each truss. Staples having equal or greater withdrawal and lateral resistance strength may be substituted for the 6d nails.

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

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

When spray foam insulation is installed, resilient channels (Item 6) shall be installed maximum 12 in. OC, with channels adjacent to butt joints of gypsum board (Item 7) spaced maximum 3 in. away from gypsum butt joints. Gypsum board (Item 7) to be installed using minimum 1-1/4 in. long Type 5 screws, spaced maximum 8 in. OC, and butted end joints shall be staggered min. 2 ft within the assembly, and occur midway between the continuous furring channels. If used with a fire damper (Items 4 through 4H) in the concealed space, minimum 1 in. clearance to be maintained between damper housing and spray foam insulation. Not evaluated for use with Items 5 through 5B, or 6A through 6I.
BASF CORP - EnerLite® NM, EnerLite® G, FE178®, Spraytite® 178, Spraytite® 81206, WalLite® 200, WalLite® US, WalLite® US-N, and WalLite® HP

Foamed Plastic* - (As alternate to Item 5, 5A, 5B, 5C or 5E, Not Shown) - Spray foam insulation applied directly to the underside of the plywood subflooring. Spray foam insulation installed to a maximum thickness of 17 in. at a nominal 0.5 lb/ft³ density, while maintaining a minimum 1-1/2 in. clearance between the spray foam insulation and the gypsum board (Item 7). Spray foam insulation is limited for use with minimum 18 in. deep trusses (Item 2). When spray foam insulation is installed, resilient channels (Item 6) shall be installed maximum 12 in. OC, with channels adjacent to butt joints of gypsum board (Item 7) spaced maximum 3 in. away from gypsum butt joints. Gypsum board (Item 7) to be installed using minimum 1-1/4 in. long Type 5 screws, spaced maximum 8 in. OC, and butted end joints shall be staggered min. 2 ft within the assembly, and occur midway between the continuous furring channels. If used with a fire damper (Items 4 through 4K) in the concealed space, minimum 1 in. clearance to be maintained between damper housing and spray foam insulation. Not evaluated for use with Items 5 through 5B, or 6A through 6I.
SES FOAM INC - EasySeal5

Foamed Plastic* - (As alternate to Item 5 - not to be used in combination with any alternates to Item 5) - Spray foam insulation applied directly to the underside of the plywood subflooring. Spray foam insulation installed to a maximum thickness of 11 in. at a nominal 0.5 lb/ft³ - 2.5 lb/ft³ density, while maintaining a minimum 7 in. clearance between the spray foam insulation and the gypsum board (Item 7). Spray foam insulation is limited for use with minimum 18 in. deep trusses (Item 2). When spray foam insulation is installed, resilient channels (Item 6) shall be installed maximum 12 in. OC, with channels adjacent to butt joints of gypsum board spaced maximum 3 in. away from gypsum butt joints. Gypsum board to be installed using minimum 1-1/4 in. long Type 5 screws, spaced maximum 8 in. OC, and butted end joints shall be staggered min. 2 ft within the assembly, and occur midway between the continuous furring channels. If used with a fire damper (Items 4 through 4K) in the concealed space, no clearance is necessary between damper housing and spray foam insulation. Only for use with Item 6 not evaluated for use with alternates to Item 6.
CARLISLE SPRAY FOAM INSULATION - Types SealTite Pro Closed Cell (CC), SealTite Pro Open Cell (OC), SealTite Pro OCK, SealTite Pro Tri-Ton 21, SealTite Pro Zero, Foamulate Closed Cell, Foamulate OCK, Foamulate 70, and Foamulate HFO.

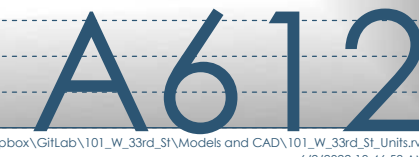
Resilient Channels - Formed from min 25 MSG galv steel installed perpendicular to trusses. When there is no insulation installed in the concealed space the resilient channels are spaced 24 in. OC. When insulation (Item 5) is secured to the underside of the subfloor the resilient channels are spaced 16 in. OC. When insulation, Items 5, 5A or 5B is applied over the resilient channel/gypsum panel ceiling membrane, or when Item 5C, 5E or 5F is applied to underside of subflooring, the resilient channels are spaced 12 in. OC. Channels secured to each truss with 1-1/4 in. long Type 5 bugle head steel screws. Channels overlapped 4 in. at splices. Two channels, spaced 6 in. OC, oriented opposite each gypsum panel end joint as shown in the above illustration. Additional channels shall extend min 6 in. beyond each side edge of panel.

Steel Framing Members* - (Not Shown) - As an alternate to Item 6.
Furring Channels - Formed of No. 25 MSG galv steel, 2-9/16 in. or 2-23/32 in. wide by 7/8 in. deep, spaced 16 in. OC perpendicular to wood structural members. When insulation, Items 5, 5A or 5B is applied over the furring channel/gypsum panel ceiling membrane, the furring channel spacing shall be reduced to 12 in. OC. Channels secured to trusses as described in Item 6. Ends of adjoining channels overlapped 6 in. and tied together with double strand of No. 18 AWG galv steel wire near each end of overlap.

Steel Framing Members* - Used to attach furring channels (Item a) to trusses (Item 2). Clips spaced 48 in. OC. R5C-1 and R5C-1 (2.75) clips secured to alternating trusses with No. 8 x 1-1/2 in. coarse drywall screw through the center grommet. R5C-V and R5C-V (2.75) clips secured to alternating trusses with No. 8 x 1-1/2 in. coarse drywall screw through the center hole. R5C-Si-X secured to alternating trusses with No. 10, X 3-1/2 in. coarse screw. Furring channels are friction fitted into clips. R5C-1, R5C-V and R5C-Si-X clips for use with 2-9/16 in. wide furring channels. R5C-1 (2.75) and R5C-V (2.75) clips for use with 2-23/32 in. wide furring channels. Adjoining channels are overlapped as described in Item a. As an alternate, ends of adjoining channels may be overlapped 6 in. and secured together with two self-tapping No. 6 framing screws, min 7/16 in. long at the midpoint of the overlap, with one screw on each flange of the channel. Additional clips required to hold furring channel that

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RENOVATION
Dudley
Owner: Renovation Wranglers
102 E 26th St
Bryan, TX 77803
Katherine@rwr.com | 979.450.9969

ARCHITECTURE
Architect of Record: LK Architecture
2929 Allen Pkwy Suite 200
Houston, TX 77019
isa@lkarchitecture.com | 713.425.3076

amc
ENGINEERS
MEP: AMC Engineers
508 E Jackson St # 552
Burnet, TX 78611
info@amcengineers.com

openingdesign
Architect: OpeningDesign
17 S Fairchild | FL 7
Madison, WI 53703
ryan@openingdesign.com | 773.425.6456

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supports the gypsum board butt joints, as described in Item 7. When **Fiber-Sprayed** (Item 5B) is used, two layers of nom 5/8 in. thick, 4 ft wide gypsum board shall be installed as described in Item 7.

PAC INTERNATIONAL L L C — Types R5C-1, R5C-V, R5C-C (2,75), R5C-V (2,75), R5C-SI-X

6B. Steel Framing Members — (Not Shown) — As an alternate to Item 6, main runners, cross tees, cross channels and wall angle as listed below.
a. Main Runners — Nom 10 or 12 ft long, 15/16 in. or 1-1/2 in. wide face, spaced 4 ft. OC. Main runners suspended by min 12 SWG galv steel hanger wires spaced 48 in. OC. Hanger wires to be located adjacent to main runner/cross tee intersections. Hanger wires wrapped and twist-tied on 16d nails driven in to side of trusses at least 5 in. above the bottom flange.

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

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

USG INTERIORS LLC — Type DGL or RX

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

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

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

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

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

b. Steel Framing Members — Used to attach furring channels (Item a) to trusses (Item 2). Clips spaced 48 in. OC, and secured to

the bottom chord of alternating trusses with two No. 8 x 2-1/2 in. course drywall screws, one through the hole at each end of the clip. When insulation, Items 5 or 5A is applied over the furring channel/gypsum panel ceiling membrane, the clip spacing shall be reduced to 24 in. OC and secured to consecutive trusses. Furring channels are friction fitted into clips. Adjoining channels are overlapped 6 in. and tied together with double strand of No. 18 AWG galvanized steel wire. Additional clips are required to hold the furring channel that supports one end of the gypsum board butt joints, as described in Item 7. Two layers of gypsum board required as described in Item 7. Not evaluated for use with Item 5B.

KINETICS NOISE CONTROL INC — Type IsoMax

6E. Steel Framing Members — (Not Shown) — As an alternate to Item 6.
a. Furring Channels — Formed of No. 25 MSG galv steel, 2-3/8 in. wide by 7/8 in. deep, spaced 16 in. OC, perpendicular to wood structural members. When insulation, Items 5 or 5A is applied over the furring channel/gypsum panel ceiling membrane, the furring channel spacing shall be reduced to 12 in. OC. Channels secured to trusses as described in Item b. Ends of adjoining channels overlapped 6 in. and tied together with double strand of No. 18 AWG galvanized steel wire near each end of overlap.

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

PLTTEQ INC — Type Genie Clip

6F. Steel Framing Members — (Not Shown) — As an alternate to Items 6, furring channels and Steel Framing Members as described below.
a. Furring Channels — Formed of No. 25 MSG galv steel, 2-3/8 in. wide by 7/8 in. deep, spaced 16 in. OC, perpendicular to joists. Channels are then friction fitted into clips. Ends of channels are overlapped 6" and tied together with double strand of No. 18 AWG galvanized steel wire. Supplemental furring channels at base layer and outer layer gypsum panel ceiling membrane, the furring channel spacing shall be reduced to 12 in. OC. Channels secured to joists as described in Item b.

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

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

6G. Steel Framing Members — (Not Shown) — As an alternate to Item 6 — Not for use with Items 5, 5A or 5B — Main runners nom 12 ft long, spaced 72 in. OC. Main runners suspended by min 12 SWG galv steel hanger wires spaced 48 in. OC. Cross tees, nom 6 ft long, installed perpendicular to main runners and spaced 24 in. OC. Additional 6 ft long cross tees required at each gypsum board end joint with butted gypsum board end joints centered between cross tees spaced 8 in. OC. The main runners and cross tees may be riveted or screw attached to the wall angle or channel to facilitate the ceiling installation.
USG INTERIORS LLC — Type DGL or RX

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

6i. Steel Framing Members — (Not Shown) — As an alternate to Item 6, furring channels and Steel Framing Members as described below.
a. Furring Channels — Formed of No. 25 MSG galvanized steel, 2-1/2 in. wide by 7/8 in. deep, spaced 16 in. OC, perpendicular to trusses. When insulation, Items 5 or 5A is applied over the furring channel/gypsum panel ceiling membrane, the furring channel spacing shall be reduced to 12 in. OC. Channels secured to trusses as described in Item b.

b. Steel Framing Members — Used to attach furring channels (Item 6a) to the trusses (Item 2). Clips spaced 48 in. OC on alternating trusses and secured to the bottom chord of the trusses with one 2-1/2 in. coarse drywall screw through the center grommet in accordance with the manufacturer's installation instructions. Furring channels are then friction fitted into clips. Ends of channels are overlapped 6 in. and tied together with double strand of No. 18 AWG galvanized steel wire. Additional clips are required to hold the furring channel that supports one end of the gypsum board butt joints as described in Item 7.

REGUPOL AMERICA — Type SonoClip

6j. Steel Framing Members — (Not Shown) — Used to attach resilient channels (Item 6) to trusses (Item 2). Clips spaced 48 in. OC on adjacent trusses, and secured to trusses with one No. 8 x 2-1/2 in. coarse drywall screw through center grommet hole. Channels secured to clips with one #10 x 1/2 in. pan-head self-drilling screw. Ends of adjoining channels overlapped 6 in. and secured together with two #8 15 x 1/2 in. Phillips Modified Truss screws spaced 2-1/2 in. from the center of the overlap. Gypsum board butt joints require additional resilient channels spaced 3 in. from the butt joint on either side. One edge of the extra channels will extend to an adjacent truss where it is secured with a clip.
KEENE BUILDING PRODUCTS CO INC — Type RC - Assurance Clip

6K. Steel Framing Members — (Not Shown) — As an alternate to Item 6, furring channels and Steel Framing Members as described below.
a. Furring Channels — Hat channels formed of No. 25 MSG galv steel, nom 2-23/32 in. wide by 7/8 in. deep. When there is no insulation installed in the concealed space the resilient channels are spaced 24 in. OC. When insulation (Item 5) is secured to the underside of the subfloor the resilient channels are spaced 16 in. OC. When insulation, Items 5, 5A or 5B is applied over the resilient channel/gypsum panel ceiling membrane, or when Item 5C, 5E or 5F is applied to underside of subflooring, the resilient channels are spaced 12 in. OC. Channels secured to trusses as described in Item b. Ends of adjoining channels overlapped 6 in. and tied together with double strand of No. 18 AWG galv steel wire near each end of overlap.

b. Steel Framing Members — Used to attach furring channels (Item a) to trusses (Item 2). Clips spaced 48 in. OC with No. 8 x 2-1/2 in. course drywall screw through the center grommet. Furring channels are friction fitted into clips. Additional clips required to hold furring channel that supports the gypsum board butt joints, as described in Item 7.

CLARKDIERTRICH BUILDING SYSTEMS — Type ClarkDiertrich Sound Clip

6L. Steel Framing Members — (Not Shown) — As an alternate to Item 6.
a. Furring Channels — Formed of No. 25 MSG galv steel, nominal 2-1/2 in. wide by 7/8 in. deep, spaced as indicated in Item 6, perpendicular to the trusses. Channels secured to Cold Rolled Channels at every intersection with a 3/4 in. TEK screw through each furring channel leg. Ends of adjoining channels overlapped 12 in. and fastened together with two double strand No. 18 SWG galv steel wire ties, one at each end of overlap, or with two 3/4 in. TEK screws in each leg of the overlap section. Two furring channels used at end joints of gypsum board (Item 7), each extending a min of 6 in. beyond both side edges of the board.

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

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

d. Steel Framing Members — Spaced 48 in. OC, max along truss, and secured to the truss on alternating trusses with two, #10 x 1-1/2 in. screws through mounting holes on the hanger bracket.
PAC INTERNATIONAL L L C — Type R5C-SI-CRC E2 Clip

6M. Steel Framing Members — (Not Shown) — As an alternate to Item 6.

a. Furring Channels — Formed of No. 25 MSG galv steel, nominal 2-1/2 in. wide by 7/8 in. deep, spaced as indicated in Item 6, perpendicular to trusses and friction fit into Steel Framing Members (Item 6M). Ends of adjoining channels overlapped 6 in. and tied together with double strand of No. 18 SWG galv steel wire near each end of overlap or with two TEK screws along each leg of the 6 in. overlap. Two furring channels used at end joints of gypsum board (Item 7). Butt joint channels held in place by blocking.

from base layer end joints. Butted side joints of outer layer to be offset min. 18 in. from butted side joints of base layer. When **Steel Framing Members** (Item 6C) are used, two layers of nom 5/8 in. thick, 4 ft wide gypsum board are installed with long dimensions perpendicular to furring channels (Item 6Ca). Base layer attached to the furring channels using 1 in. long Type 5 bugle head steel screws spaced 8 in. OC along butted end joints and 12 in. OC in the field of the board. Butted end joints centered on the continuous furring channels. Butted base layer end joints to be offset a min of 16 in. in adjacent courses. Outer layer attached to the furring channels using 1-5/8 in. long Type 5 bugle head steel screws spaced 8 in. OC at butted end joints and 12 in. OC in the field of the board. Butted end joints shall be staggered min 2 ft within the assembly, and occur midway between the continuous furring channels. Each end of each gypsum board shall be supported by a single length of furring channel equal to the width of the gypsum board plus 6 in. on each end. The two furring channels shall be spaced approximately 4 in. OC, and be attached to underside of the truss with one IsoMax clip at each end of the channel. Screw spacing along the gypsum board butt joint shall be 8 in. OC. Outer layer attached to the furring channels using 1-5/8 in. long Type 5 bugle head steel screws spaced 12 in. OC in the field of the board. Butted end joints shall be staggered min 2 ft within the assembly, and occur midway between the continuous furring channels. Each end of each gypsum board shall be supported by a single length of furring channel equal to the width of the gypsum board plus 6 in. on each end. The two furring channels shall be spaced approximately 4 in. OC, and be attached to underside of the truss with one IsoMax clip at each end of the channel. Screw spacing along the gypsum board butt joint shall be 8 in. OC. Outer layer attached to the furring channels using 1-5/8 in. long No. 6 Type 5 bugle head steel screws spaced 12 in. OC in the field of the board. Butted end joints shall be staggered minimum 2 ft within the assembly. Additional furring channels constructed as per Item 6E shall be used to support each end of each gypsum board. These additional furring channels shall be attached to underside of the truss with Genie clips as described in Item 6E. Screw spacing along the gypsum board butt joint shall be 8 in. OC. Outer layer attached to the furring channels using 1-5/8 in. long No. 6 Type 5 bugle head steel screws spaced 12 in. OC in the field of the board. The outer layer boards at the butt joint shall be attached to the base layer boards with No. 10, 1-1/2 in. long drywall screws spaced 8 in. OC and 1-1/2 in. from the end joint. Butted end joints to be offset a min of 24 in. from base layer end joints. Butted side joints of outer layer to be offset min 16 in. from butted side joints of base layer. When **Steel Framing Members** (Item 6F) are used, one layer of nom 5/8 in. thick, 4 ft wide gypsum board is installed with long dimensions perpendicular to furring channels. Gypsum board secured to furring channels with nom 1 in. long Type 5 bugle-head steel screws spaced 8 in. OC in the field of the board. Gypsum board butted end joints shall be staggered minimum 48 in. and centered over main furring channels. At the gypsum board butt joints, each end of each gypsum board shall be supported by a single length of furring channel equal to the width of the gypsum board plus 3 in. on each end. The two support furring channels shall be spaced approximately 3 in. in from joint. Screw spacing along the gypsum board butt joint and along both additional channels shall be 8 in. OC. Additional screws shall be placed in the adjacent section of gypsum board into the aforementioned 3 in. extension of the extra butt joint channels as well as into the main channel that runs between. Butt joint furring channels shall be attached with one RESILMOUNT Sound Isolation Clip at each end of the channel.

When alternate **Steel Framing Members** (Item 6G) are used, gypsum board sheets installed with long dimension (side joints) perpendicular to the 8 ft long cross tees with the end joints staggered min 4 ft and centered between cross tees which are spaced 8 in. OC. Gypsum board side joints may occur beneath or between main runners. Prior to installation of the gypsum board sheets, backer strips consisting of nom 7-3/4 in. wide pieces of gypsum board are to be laid atop the cross tee flanges and centered over each butted end joint location. The backer strips are to be secured to the flanges of the cross tees at opposite corners of the backer strip with hold down clips to prevent the backer strips from being uplifted during screw attachment of the gypsum board sheets. Gypsum board fastened to cross tees with 1 in. drywall screws spaced 1 in. and 4 in. from the side joints and max 8 in. OC in the field of the board. The butted end joints are to be secured to the backer strip with No. 10 by 1-1/2 in. long Type G laminating screws located 1 in. from each side of the butted end joint and spaced 1 in. and 4 in. from the side joints and max 8 in. OC in the field of the board.

When **Steel Framing Members** (Item 6I) are used, one layer of nom 5/8 in. thick, 4 ft wide gypsum board is installed with long dimensions perpendicular to furring channels. Gypsum board secured to furring channels with nom 1-1/4 in. long, fine thread, #6, Type 3 bugle-head steel screws spaced 8 in. OC along butt joints and in the field of the board. Gypsum board butted end joints shall be staggered minimum 24 in. and occur 3 in. from the continuous furring channels. At the gypsum board butt joints, an additional single length of furring channel shall be installed and be spaced approximately 3 in. from the butt joint (6 in. from the continuous furring channels) to support the floating end of the gypsum board. Each of these shorter sections of furring channel shall extend one truss beyond the width of the gypsum panel and be attached to the adjacent trusses with one SonoClip at every truss involved with the butt joint.

When **Steel Framing Members** (Item 6J) are used, one layer of nom 5/8 in. thick, 4 ft wide gypsum board is installed with long dimensions perpendicular to resilient channels. Gypsum board secured to resilient channels with nom 1 in. long Type 5 bugle-head steel screws spaced 8 in. OC in the field of the board and located 3/4 in. from side joints and 3 in. end joints. Gypsum board joints are to be staggered by a minimum of 24 in.

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

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

CGC INC — Types C, IP-X2, IPC-AR

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

USG BORAL DRYWALL SFZ LLC — Type C

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

7A. Gypsum Board — For use with Items 5D and 6H. Nom 5/8 in. thick, 48 in. wide gypsum panels installed with long dimension perpendicular to resilient channels. Gypsum panels secured with 1 in. long Type 5 bugle head steel screws spaced 8 in. OC and located a min of 1/2 in. from side joints and 3 in. from the end joints. Finish Rating with this ceiling system is 20 min.
CGC INC — Type ULX

UNITED STATES GYPSUM CO — Type ULX

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

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

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

* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively. Last Updated on 2022-02-14

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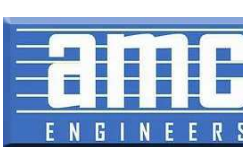
Owner: Renovation Wranglers
102 E 26th St
Bryan, TX 77803
Katelencason@renotime.com | 979.450.9969



ARCHITECTURE
Architect of Record: iKB Architecture
2929 Allen Pkwy Suite 200
Houston, TX 77019
isa@ikbarchitecture.com | 713.425.3076



Structural: Dudley
6102 Impetral Loop Drive
College Station, TX 77845
(979) 777-0720



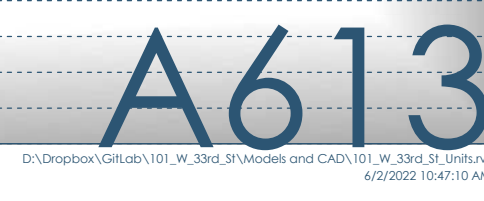
MEP: AMC Engineers
508 E Jackson St # 552
Burnet, TX 78611
info@amcengineers.com

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Architect: OpeningDesign
17 S Fairchild | FL 7
Madison, WI 53703
ryan@openingdesign.com | 773.425.6456

Table with 2 columns: Date, Description. Row 1: 06/02/2022, Review before Permit.



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UL Product IQ®

XHEZ.F-C-3012 - Through-penetration Firestop Systems

Design/System/Construction/Assembly Usage Disclaimer

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

XHEZ - Through-penetration Firestop Systems

XHEZ7 - Through-penetration Firestop Systems Certified for Canada

See General Information for Through-penetration Firestop Systems

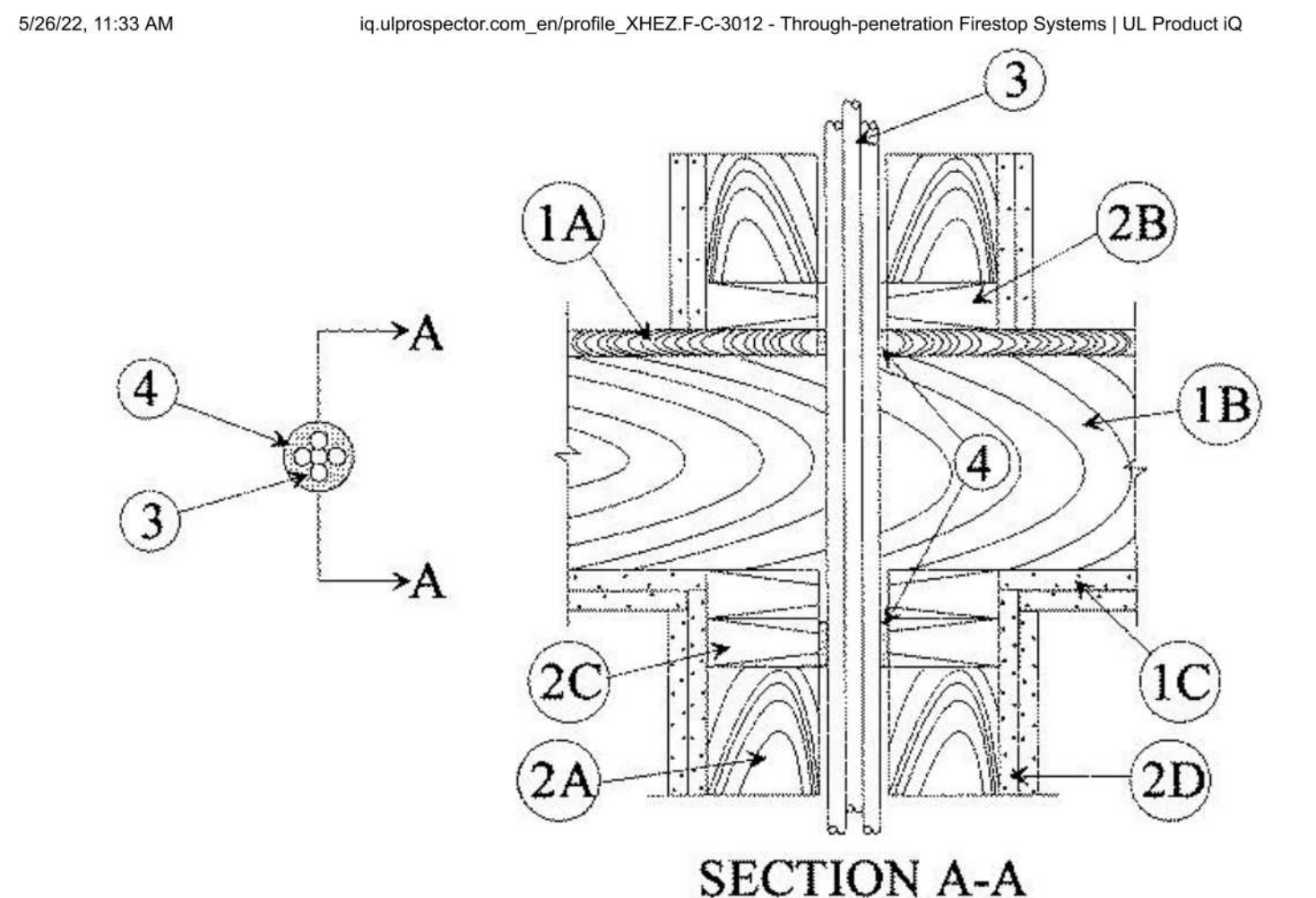
See General Information for Through-penetration Firestop Systems Certified for Canada

System No. F-C-3012
April 06, 2018

ANSI/UL1479 (ASTM E814)	CAN/ULC S115
F Ratings — 1 and 2 Hr (See Item 1)	F Ratings — 1 and 2 Hr (See Item 1)
T Ratings — 0, 1 and 1-3/4 Hr (See Item 3)	FT Ratings — 0, 1 and 1-3/4 Hr (See Item 3)
	FH Ratings — 1 and 2 Hr (See Item 1)
	FTH Ratings — 0, 1 and 1-3/4 Hr (See Item 3)

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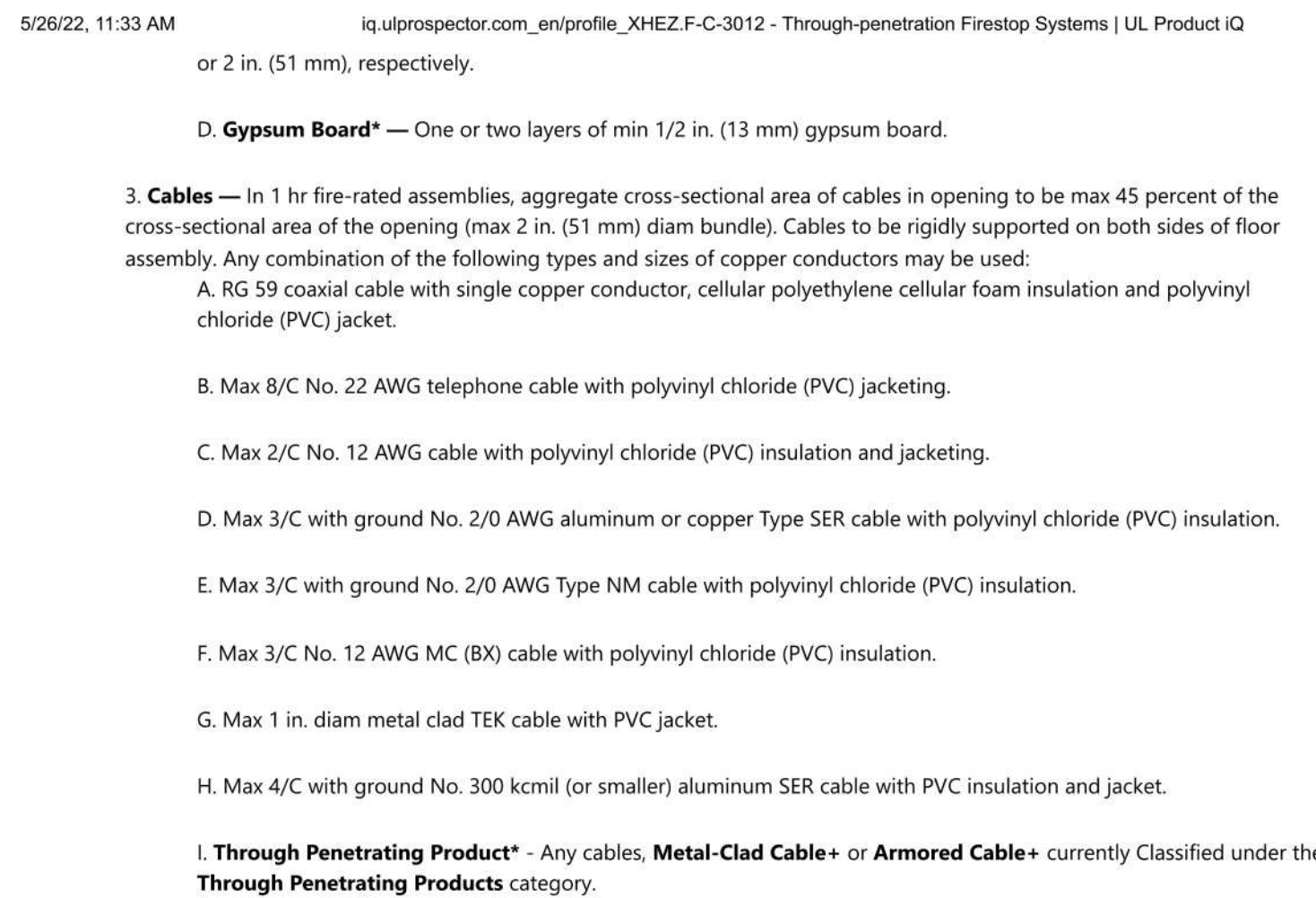


- Floor-Ceiling Assembly** — The 1 or 2 hr fire-rated solid or trussed lumber joist floor-ceiling assembly shall be constructed of the materials and in the manner specified in the individual L500 Series Floor-Ceiling Designs in the UL Fire Resistance Directory. The general construction features of the floor-ceiling assembly are summarized below:
 - Flooring System** — Lumber or plywood subfloor with finish floor of lumber, plywood or **Floor Topping Mixture*** as specified in the individual Floor-Ceiling Design. Max diam of opening for 1 or 2 hr assembly is 2-1/2 in. (64 mm) or 2 in. (51 mm), respectively.
 - Wood Joists*** — Nom 10 in. (254 mm) deep (or deeper) lumber, steel or combination lumber and steel joists, trusses or **Structural Wood Members*** with bridging as required and with ends firestopped.
 - Furring Channels** — (Not Shown) — (As required) — Resilient galvanized steel furring installed in accordance with the manner specified in the individual L500 Series Designs in the Fire Resistance Directory.
 - Gypsum Board*** — Thickness, type, number of layers and fasteners shall be as specified in the individual Floor-Ceiling Design. Max diam of opening for 1 or 2 hr assembly is 2-1/2 in. (64 mm) or 2 in. (51 mm), respectively.

- The F Rating of the firestop system is equal to the rating of the floor-ceiling assembly.
- Chase Wall** — (Optional) — The through penetrant (Item 3) may be routed through a fire-rated or non-rated single, double or staggered wood stud/gypsum wallboard chase wall. The chase wall shall be constructed to include the following construction features:
 - Studs** — Nom 2 by 6 in. (51 by 152 mm) or double nom 2 by 4 in. (51 by 102 mm) lumber studs.
 - Sole Plate** — Nom 2 by 6 in. (51 by 152 mm) or parallel 2 by 4 in. (51 by 102 mm) lumber plates, tightly butted. Max diam of opening for 1 or 2 hr rated assembly is 2-1/2 in. (64 mm) or 2 in. (51 mm), respectively.
 - Top Plate** — The double top plate shall consist of two nom 2 by 6 in. (51 by 152 mm) or two sets of parallel 2 by 4 in. (51 by 102 mm) lumber plates, tightly butted. Max diam of opening for 1 or 2 hr rated assembly is 2-1/2 in. (64 mm)

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- Floor-Ceiling Assembly** — The 1 or 2 hr fire-rated solid or trussed lumber joist floor-ceiling assembly shall be constructed of the materials and in the manner specified in the individual L500 Series Floor-Ceiling Designs in the UL Fire Resistance Directory. The general construction features of the floor-ceiling assembly are summarized below:
 - Flooring System** — Lumber or plywood subfloor with finish floor of lumber, plywood or **Floor Topping Mixture*** as specified in the individual Floor-Ceiling Design. Max diam of opening for 1 or 2 hr assembly is 2-1/2 in. (64 mm) or 2 in. (51 mm), respectively.
 - Wood Joists*** — Nom 10 in. (254 mm) deep (or deeper) lumber, steel or combination lumber and steel joists, trusses or **Structural Wood Members*** with bridging as required and with ends firestopped.
 - Furring Channels** — (Not Shown) — (As required) — Resilient galvanized steel furring installed in accordance with the manner specified in the individual L500 Series Designs in the Fire Resistance Directory.
 - Gypsum Board*** — Thickness, type, number of layers and fasteners shall be as specified in the individual Floor-Ceiling Design. Max diam of opening for 1 or 2 hr assembly is 2-1/2 in. (64 mm) or 2 in. (51 mm), respectively.

- The F Rating of the firestop system is equal to the rating of the floor-ceiling assembly.
- Chase Wall** — (Optional) — The through penetrant (Item 3) may be routed through a fire-rated or non-rated single, double or staggered wood stud/gypsum wallboard chase wall. The chase wall shall be constructed to include the following construction features:
 - Studs** — Nom 2 by 6 in. (51 by 152 mm) or double nom 2 by 4 in. (51 by 102 mm) lumber studs.
 - Sole Plate** — Nom 2 by 6 in. (51 by 152 mm) or parallel 2 by 4 in. (51 by 102 mm) lumber plates, tightly butted. Max diam of opening for 1 or 2 hr rated assembly is 2-1/2 in. (64 mm) or 2 in. (51 mm), respectively.
 - Top Plate** — The double top plate shall consist of two nom 2 by 6 in. (51 by 152 mm) or two sets of parallel 2 by 4 in. (51 by 102 mm) lumber plates, tightly butted. Max diam of opening for 1 or 2 hr rated assembly is 2-1/2 in. (64 mm)

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6A A614 FIRE STOP - FLOOR - FRAMED - ELECTRIC CABLE - F 1HR&2HR - T 1HR&2HR - L NA - HILTI - XHEZ.F-C-3012 12" = 1'-0"

5/26/22, 11:38 AM iqluprospector.com_en/profile_XHEZ.F-C-8009 - Through-penetration Firestop Systems | UL Product IQ

UL Product IQ®

XHEZ.F-C-8009 - Through-penetration Firestop Systems

Design/System/Construction/Assembly Usage Disclaimer

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

XHEZ - Through-penetration Firestop Systems

XHEZ7 - Through-penetration Firestop Systems Certified for Canada

See General Information for Through-penetration Firestop Systems

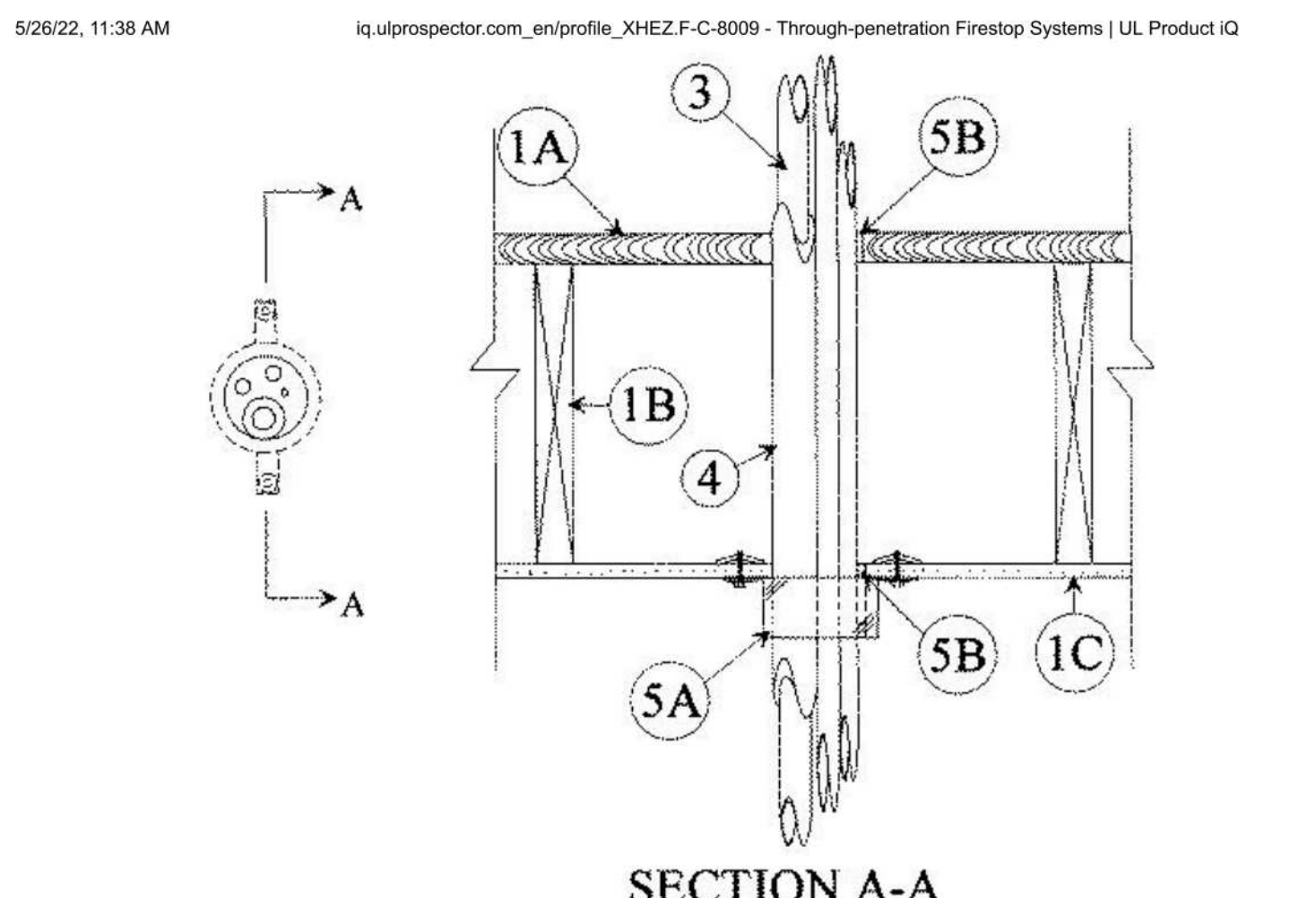
See General Information for Through-penetration Firestop Systems Certified for Canada

System No. F-C-8009
January 21, 2015

ANSI/UL1479 (ASTM E814)	CAN/ULC S115
F Rating — 1 Hr	F Rating — 1 Hr
T Rating — 1 Hr	FT Rating — 1 Hr
	FH Rating — 1 Hr
	FTH Rating — 1 Hr

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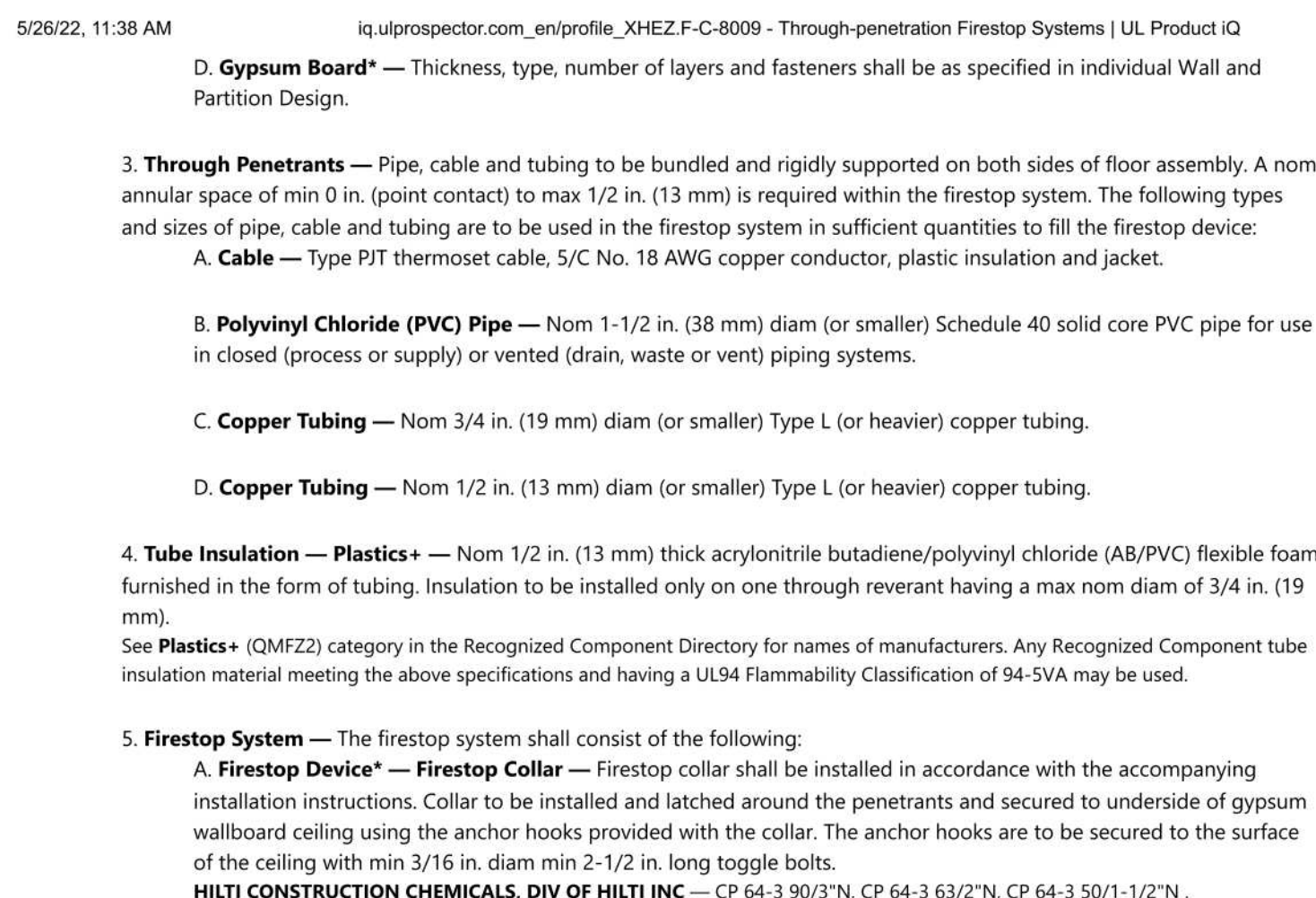


- System tested with a pressure differential of 2.5 Pa between the exposed and the unexposed surfaces with the higher pressure on the exposed side.**
- Floor-Ceiling Assembly** — The 1 hr fire-rated wood joist floor-ceiling assembly shall be constructed of the materials and in the manner specified in the individual L500 Series Floor-Ceiling Designs in the UL Fire Resistance Directory, as summarized below:
 - Flooring System** — Lumber or plywood subfloor with finish floor of lumber, plywood or **Floor Topping Mixture*** as specified in the individual Floor-Ceiling Design. Max diam of opening is 3 in. (76 mm).
 - Wood Joists*** — Nom 10 in. (254 mm) deep (or deeper) lumber, steel or combination lumber and steel joists, trusses or **Structural Wood Members*** with bridging as required and with ends firestopped.
 - Gypsum Board*** — Thickness, type, number of layers and fasteners shall be as specified in the individual Floor-Ceiling Design. Max diam of opening in ceiling (when chase wall (Item 2) is not provided) is 3 in. (76 mm).

- The F Rating of the firestop system is equal to the rating of the floor-ceiling assembly.
- Chase Wall** — (Optional, Not Shown) — The through penetrant (Item 3) may be routed through a 1 hr fire-rated single, double or staggered wood stud/gypsum wallboard chase wall constructed of the materials and in the manner specified in the individual U300 Series Wall and Partition Designs in the UL Fire Resistance Directory and shall include the following construction features:
 - Studs** — Nom 2 by 6 in. (51 by 152 mm) lumber or double nom 2 by 4 in. (51 by 102 mm) lumber studs.
 - Sole Plate** — Nom 2 by 6 in. (51 by 152 mm) lumber or parallel 2 by 4 in. (51 by 102 mm) lumber plates, tightly butted. Max diam of opening shall be 3 in. (76 mm).
 - Top Plate** — The double top plate shall consist of two nom 2 by 6 in. (51 by 152 mm) lumber plates or 2 sets of parallel nom 2 by 4 in. (51 by 102 mm) lumber, tightly butted. Max diam of opening is 3 in. (76 mm).

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- Floor-Ceiling Assembly** — The 1 hr fire-rated wood joist floor-ceiling assembly shall be constructed of the materials and in the manner specified in the individual L500 Series Floor-Ceiling Designs in the UL Fire Resistance Directory, as summarized below:
 - Flooring System** — Lumber or plywood subfloor with finish floor of lumber, plywood or **Floor Topping Mixture*** as specified in the individual Floor-Ceiling Design. Max diam of opening is 3 in. (76 mm).
 - Wood Joists*** — Nom 10 in. (254 mm) deep (or deeper) lumber, steel or combination lumber and steel joists, trusses or **Structural Wood Members*** with bridging as required and with ends firestopped.
 - Gypsum Board*** — Thickness, type, number of layers and fasteners shall be as specified in the individual Floor-Ceiling Design. Max diam of opening in ceiling (when chase wall (Item 2) is not provided) is 3 in. (76 mm).

- The F Rating of the firestop system is equal to the rating of the floor-ceiling assembly.
- Chase Wall** — (Optional, Not Shown) — The through penetrant (Item 3) may be routed through a 1 hr fire-rated single, double or staggered wood stud/gypsum wallboard chase wall constructed of the materials and in the manner specified in the individual U300 Series Wall and Partition Designs in the UL Fire Resistance Directory and shall include the following construction features:
 - Studs** — Nom 2 by 6 in. (51 by 152 mm) lumber or double nom 2 by 4 in. (51 by 102 mm) lumber studs.
 - Sole Plate** — Nom 2 by 6 in. (51 by 152 mm) lumber or parallel 2 by 4 in. (51 by 102 mm) lumber plates, tightly butted. Max diam of opening shall be 3 in. (76 mm).
 - Top Plate** — The double top plate shall consist of two nom 2 by 6 in. (51 by 152 mm) lumber plates or 2 sets of parallel nom 2 by 4 in. (51 by 102 mm) lumber, tightly butted. Max diam of opening is 3 in. (76 mm).

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6A A614 FIRE STOP - FLOOR - FRAMED - GROUPINGS - F 1HR&2HR - T 1HR&2HR - L NA - HILTI - XHEZ.F-C-8009 12" = 1'-0"

Owner: Renovation Wranglers
102 E 26th St
Bryan, TX 77803
katerencason@me.com | 979.450.9969

ARCHITECTURE
Architect of Record: LKB Architecture
2929 Allen Pkwy Suite 200
Houston, TX 77019
isa@lkbarchitecture.com | 713.425.3076

STRUCTURE
Structural: Dudley
6102 Imperial Loop Drive
College Station, TX 77845
(979) 777-0720

ENGINEERS
MEP: AMC Engineers
508 E Jackson St # 552
Burnet, TX 78611
info@amcengineers.com

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

Last Updated on 2018-04-06

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6A A614 FIRE STOP - FLOOR - FRAMED - GROUPINGS - F 1HR&2HR - T 1HR&2HR - L NA - HILTI - XHEZ.F-C-8009 12" = 1'-0"

UL Product IQ®

XHEZ.F-C-1168 - Through-penetration Firestop Systems

Design/System/Construction/Assembly Usage Disclaimer

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

XHEZ - Through-penetration Firestop Systems XHEZ7 - Through-penetration Firestop Systems Certified for Canada

See General Information for Through-penetration Firestop Systems

See General Information for Through-penetration Firestop Systems Certified for Canada

System No. F-C-1168

April 29, 2020

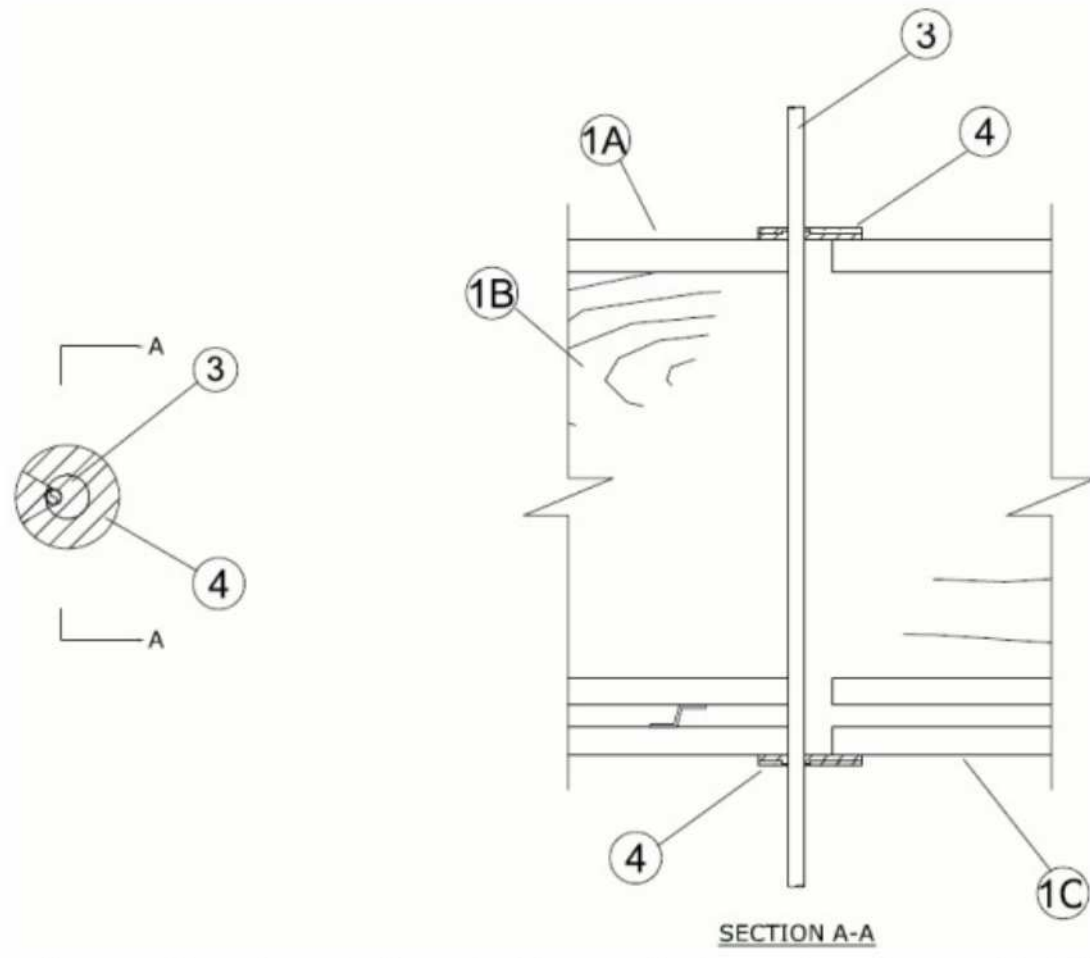
ANSI/UL1479 (ASTM E814)	CAN/ULC 5115
F Ratings — 1 and 2 Hr (See Item 1)	F Ratings — 1 and 2 Hr (See Item 1)
T Ratings — 1 and 2 Hr (See Item 1)	FT Ratings — 1 and 2 Hr (See Item 1)
L Rating at Ambient — Less than 1 CFM/Opening	FH Ratings — 1 and 2 Hr (See Item 1)
L Rating at 400 F — Less than 1 CFM/Opening	FTH Ratings — 1 and 2 Hr (See Item 1)
	L Rating at Ambient — Less than 1 CFM/Opening
	L Rating at 400 F — Less than 1 CFM/Opening

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6C A615 FIRE STOP - FLOOR - FRAMED - METALLIC PIPE, CONDUIT OR TUBING - F_1HR&2HR - T_1HR&2HR - L_NA - HILTI - XHEZ.F-C-1168
12" = 1'-0"



1. **Floor-Ceiling Assembly** — The 1 or 2 hr fire-rated solid or trussed lumber joist Floor-Ceiling assembly shall be constructed of the materials and in the manner specified in the individual L500 Series Floor-Ceiling Designs in the UL Fire Resistance Directory, as summarized below:

A. Flooring System — Lumber or plywood subfloor with finish floor of lumber, plywood or **Floor Topping Mixture*** as specified in the individual Floor-Ceiling Design. Opening may be round, rectangular or irregular with a max diam or dimension of 1 in. (25 mm).

B. Joists — Nom 10 in. (254 mm) deep (or deeper) lumber, steel or combination lumber and steel joists, trusses or **Structural Wood Members*** with bridging as required and with ends firestopped.

C. Gypsum Board* — Nom 4 ft (122 cm) wide by 5/8 in. (16 mm) thick. Gypsum board direct-attached to joists or screw-attached to furring channels as specified in the individual Floor-Ceiling Design. Opening may be round, rectangular or irregular with a max diam or dimension of 1 in. (25 mm).

The F, FT, FH and FTH Rating of the firestop system is equal to the rating of the floor-ceiling assembly.

2. **Chase Wall** — (Optional, Not Shown) — The through penetrants (Item 3) may be routed through a fire-rated or non-rated single, double or staggered wood stud/gypsum board chase wall constructed of the materials and Partition design in the UL Fire Resistance Directory and shall include the following construction features:

A. Studs — Nom 2 by 4 in. (51 by 102 mm), 2 by 6 in. (51 by 152 mm) or 2 by 8 in. (51 by 203 mm) lumber studs.

B. Sole Plate — Nom 2 by 4 in. (51 by 102 mm), 2 by 6 in. (51 by 152 mm) or 2 by 8 in. (51 by 203 mm) lumber plates. Opening to be centered in sole plate. Opening may be round, rectangular or irregular with a max diam or dimension of 1 in. (25 mm).

C. Top Plate — The double top plate shall consist of two nom 2 by 4 in. (51 by 102 mm), 2 by 6 in. (51 by 152 mm) or 2 by 8 in. (51 by 203 mm) lumber. Opening to be centered in top plate. Opening may be round, rectangular or irregular with a max diam or dimension of 1 in. (25 mm).

D. Gypsum Board* — Thickness, type, number of layers and fasteners shall be as specified in individual Wall and Partition Design.

3. **Through Penetrant** — Max one metallic pipe, tubing or conduit installed either concentrically or eccentrically within the firestop system. The annular space between penetrant and periphery of the opening shall be min 0 in. (point contact). Pipe or tubing to be rigidly supported on both sides of floor-ceiling assembly. The following types and sizes of pipes, tubing or conduit may be used:

A. Steel Pipe — Nom 3/4 in. (19 mm) diam (or smaller) Schedule 5 (or heavier) steel pipe.

B. Iron Pipe — Nom 3/4 in. (19 mm) diam (or smaller) cast or ductile iron pipe.

C. Copper Tubing — Nom 1/2 in. (13 mm) diam (or smaller) Type L and Type K (or heavier) copper tubing.

D. Copper Pipe — Nom 1/2 in. (13 mm) diam (or smaller) Regular (or heavier) copper pipe.

E. Conduit — Nom 3/4 in. (19 mm) diam (or smaller) rigid or flexible steel conduit.

F. Conduit — Nom 3/4 in. (19 mm) diam (or smaller) electrical metallic tubing (EMT).

4. **Fill, Void or Cavity Material*** — Nom 60 mm diam by 3 mm thick putty disc with one seam at radius. Paper-backer of disc to be removed and disc firmly pressed around the penetrant lapping nom 5 mm onto penetrant to completely cover opening and firmly pressed to lay onto the floor and ceiling (or plates) around periphery of opening. Disc seam to be firmly pressed and sealed tight. Disc to be installed at both sides of opening in floor-ceiling assembly.

HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — CFS-D 1" Firestop Putty Disc

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

Last Updated on 2020-04-29

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UL Product IQ®

XHEZ.F-C-2030 - Through-penetration Firestop Systems

Design/System/Construction/Assembly Usage Disclaimer

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- When field issues arise, it is recommended the first contact for assistance be the technical service staff provided by the product manufacturer noted for the design. Users of fire resistance assemblies are advised to consult the general Guide Information for each product category and each group of assemblies. The Guide Information includes specifics concerning alternate materials and alternate methods of construction.
- Only products which bear UL's Mark are considered Certified.

XHEZ - Through-penetration Firestop Systems

See General Information for Through-penetration Firestop Systems

System No. F-C-2030

April 06, 2018

F Ratings — 1 and 2 Hr (See Item 1)

T Ratings — 0, 3/4, 1, 1-1/2 and 2 Hr (See Item 3)

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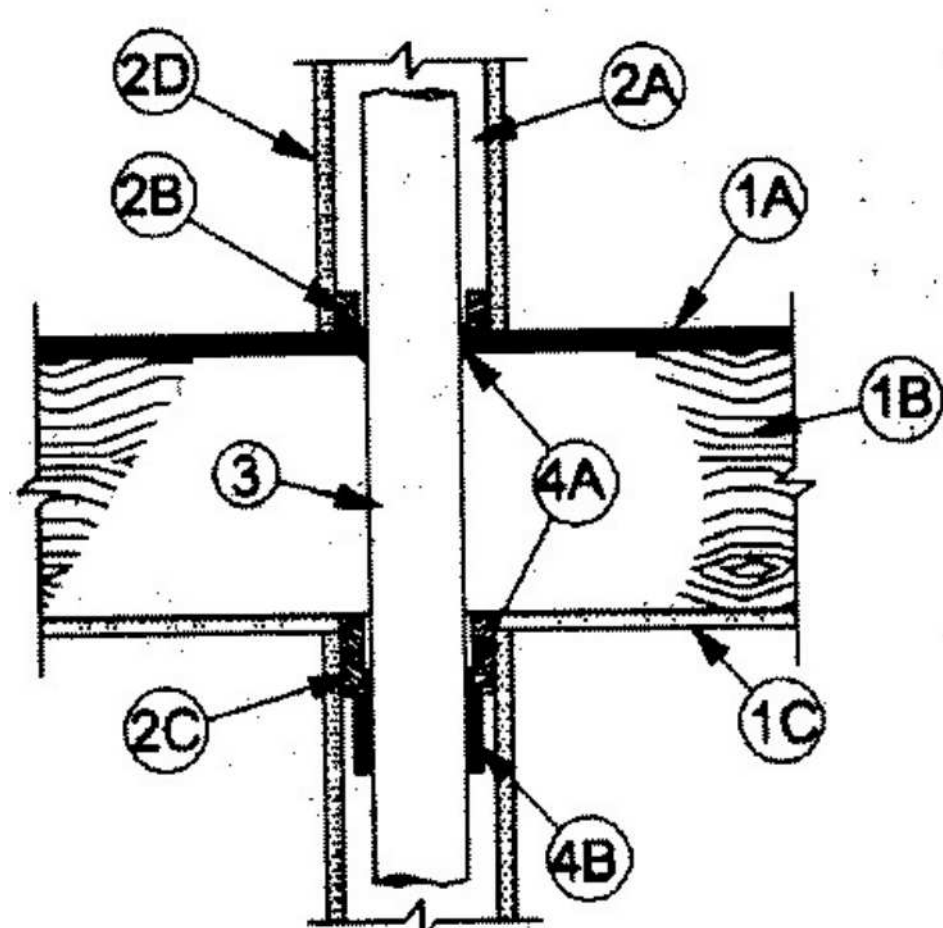
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4/4

6A A615 FIRE STOP - FLOOR - FRAMED - NONMETALLIC PIPE CONDUIT TUBING - F_1HR&2HR - T_1HR&2HR - L_NA - HILTI - XHEZ.F-C-2030
12" = 1'-0"



System tested with a pressure differential of 2.5 Pa between the exposed and the unexposed surfaces with the higher pressure on the exposed side.

1. **Floor-Ceiling Assembly** — The 1 or 2 hr fire-rated solid or trussed lumber joist floor-ceiling assembly shall be constructed of the materials and in the manner specified in the individual L500 Series Floor-Ceiling Designs in the UL Fire Resistance Directory. **The F Rating of the firestop system is equal to the rating of the floor-ceiling and wall assemblies.** The general construction features of the floor-ceiling assembly are summarized below:

A. Flooring System — Lumber or plywood subfloor with finish floor of lumber, plywood or **Floor Topping Mixture*** as specified in the individual Floor-Ceiling Design. Diam of opening shall be 1 in. (25 mm) larger than the nom diam of through-penetrant (Item 3).

B. Joists — Nom 10 in. (254 mm) deep (or deeper) lumber, steel or combination lumber and steel joists, trusses or **Structural Wood Members*** with bridging as required and with ends firestopped.

C. Gypsum Board* — Thickness, type, number of layers and fasteners shall be as specified in the individual Floor-Ceiling Design. Diam of opening shall be 1 in. (25 mm) larger than the nom diam of through-penetrant (Item 3).

D. Furring Channels — (Not Shown) (As required) - Resilient galvanized steel furring installed in accordance with the manner specified in the individual L500 Series Designs in the Fire Resistance Directory.

2. **Chase Wall** — (Optional) - The through penetrant (Item 3) may be routed through a fire-rated or non-rated single, double or staggered wood stud/gypsum wallboard chase wall. The chase wall shall be constructed to include the following construction features:

A. Studs — Nom 2 by 6 in. (51 by 152 mm) or double nom 2 by 4 in. (51 by 102 mm) lumber studs.

B. Sole Plate — Nom 2 by 6 in. (51 by 152 mm) (or larger) or parallel 2 by 4 in. (51 by 102 mm) lumber plates, tightly butted. Diam of opening shall be 1 in. (25 mm) larger than the nom diam of through-penetrant (Item 3).

C. Top Plate — The double top plate shall consist of two nom 2 by 6 in. (51 by 152 mm) (or larger) or parallel 2 by 4 in. (51 by 102 mm) lumber plates, tightly butted. Diam of opening shall be 1 in. (25 mm) larger than the nom diam of through-penetrant (Item 3).

D. Gypsum Board* — One or two layers of min 1/2 in. (13 mm) gypsum board.

3. **Through-Penetrants** — One nom 1-1/2 in. (38 mm), 2 in. (51 mm), 3 in. (76 mm) or 4 in. (102 mm) diam nonmetallic pipe to be installed within the firestop system. Diam of opening through flooring system and through sole and top plates of chase wall to be max 2-1/8 in. (64 mm), 2-5/8 in. (67 mm), 4 in. (102 mm) or 5 in. (127 mm) for nom 1-1/2 in. (38 mm), 2 in. (51 mm), 3 in. (76 mm) or 4 in. (102 mm) diam nonmetallic pipe sizes, respectively. Pipe to be rigidly supported on both sides of the floor-ceiling assembly. The T Rating is dependent on the size of the through-penetrant. For 2 hr rated assemblies, the T Rating is 2 hr for 1-1/2 in. (38 mm) diam (and smaller) pipes and 1-1/2 hr for pipes greater than 1-1/2 in. (38 mm) diam. For 1 hr rated assemblies, the T Rating is 1 hr for 1-1/2 in. (38 mm) diam (and smaller) pipes, 3/4 hr for 2 in. (51 mm) diam pipes and 0 hr for pipes greater than 2 in. (51 mm) diam. The following types of nonmetallic pipes may be used:

A. Polyvinyl Chloride (PVC) Pipe — Schedule 40 solid-core or cellular core PVC pipe for use in closed (process or supply) or vented (drain, waste or vent) piping system.

B. Chlorinated Polyvinyl Chloride (CPVC) Pipe — SDR17 CPVC pipe for use in closed (process or supply) or vented (drain, waste or vent) piping systems.

C. Acrylonitrile Butadiene Styrene (ABS) pipe — Schedule 40 solid-core or cellular core ABS pipe for use in closed (process or supply) or vented (drain, waste or vent) piping systems.

D. Flame Retardant Polypropylene (FRPP) Pipe — Schedule 40 FRPP pipe for use in closed (process or supply) or vented (drain, waste or vent) piping system.

4. **Firestop System** — The details of the firestop system shall be as follows:

A. Fill, Void or Cavity Material* — **Sealant** — Min 3/4 in. (19 mm) thickness of fill material to be installed within the annular space between the pipe and the flooring (Item 1A) or sole plate. Min 5/8 in. (16 mm) thickness applied within the annular space. Flush with the bottom surface of ceiling or lower top plate.
HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — FS-ONE Sealant FS-ONE MAX Intumescent Sealant.

B. Firestop Device* — **Firestop Collar** — Firestop collar shall be installed in accordance with the accompanying installation instructions. Collar to be installed and latched around the pipe and secured to underside of ceiling or chase wall top plate (Item 2C) using the anchor hooks provided with the collar. (Minimum 2 anchor hooks for 1-1/2 (38 mm) and 2 in. (51 mm) diam pipes and 3 anchor hooks for 3 in. (76 mm) diam pipes). The anchor hooks are to be secured to the ceiling with min 3/16 in. (5 mm) diam steel toggler bolts or to the chase wall top plate with min No. 12 by min 1 in. (25 mm) long steel wood screws in conjunction with steel washers.
HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — CP 643 50/1.5"N, CP643 63/2"N, CP 643 90/3"N or CP643 110/4"N Firestop Collar

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

Last Updated on 2018-04-06

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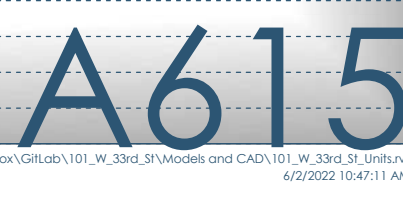
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Date	Description
06/02/2022	Review before Permit



UL Product IQ® XHEZ.W-L-3441 - Through-penetration Firestop Systems

Design/System/Construction/Assembly Usage Disclaimer

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

XHEZ - Through-penetration Firestop Systems XHEZ7 - Through-penetration Firestop Systems Certified for Canada

See General Information for Through-penetration Firestop Systems

See General Information for Through-penetration Firestop Systems Certified for Canada

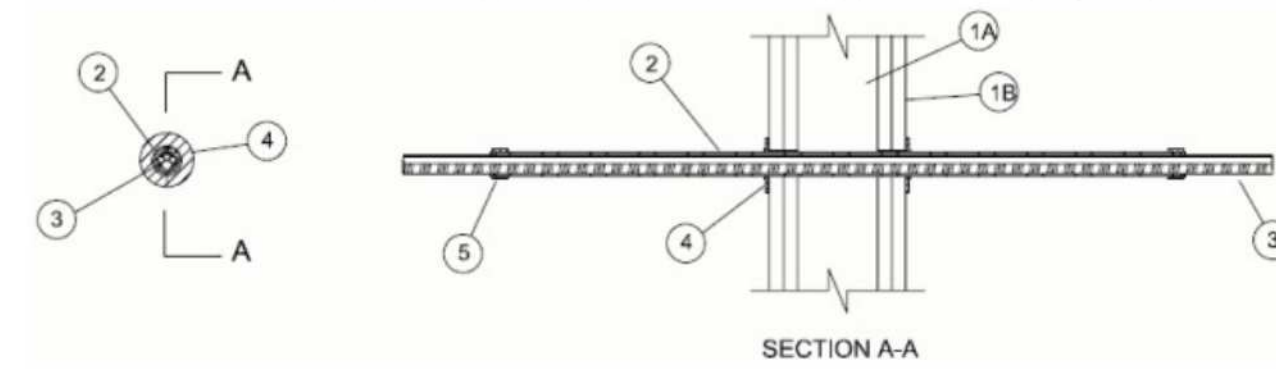
System No. W-L-3441

April 29, 2020

ANSI/UL1479 (ASTM E814)	CAN/ULC S115
F Ratings — 1 and 2 Hr (See Item 1)	F Ratings — 1 and 2 Hr (See Item 1)
T Ratings — 1 and 2 Hr (See Item 1)	FT Ratings — 1 and 2 Hr (See Item 1)
L Rating at Ambient — Less than 1 CFM/Opening	FH Ratings — 1 and 2 Hr (See Item 1)
L Rating at 400 F — Less than 1 CFM/Opening	FTH Ratings — 1 and 2 Hr (See Item 1)
	L Rating at Ambient — Less than 5.1 L/s/m ² /Opening
	L Rating at 204 C — Less than 5.1 L/s/m ² /Opening

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1. Wall Assembly — The 1 or 2 fire-rated gypsum wallboard/stud wall assembly shall be constructed of the materials and in the manner specified in the individual U300, U400, V400 or W400 Series Wall and Partition Designs in the UL Fire Resistance Directory and shall include the following construction features:

A. Studs — Wall framing may consist of either wood studs or steel channel studs. Wood studs to consist of nom 2 by 4 in. (51 by 102 mm) lumber spaced 16 in. (406 mm) OC. Steel studs to be min 3-1/2 in. (89 mm) wide and spaced max 24 in. (610 mm) OC.

B. Gypsum Board — Nom 5/8 in. (16 mm) thick gypsum board, with square or tapered edges. The gypsum board type, thickness, number of layers, fastener type and sheet orientation shall be as specified in the individual Wall and Partition Design in the UL Fire Resistance Directory. Opening may be round, rectangular or irregular with a max diam or dimension of 1-1/8 in. (19 mm).

The Ratings of the firestop system are equal to the fire rating of the wall assembly.

2. Metallic Sleeve — Nom 1 in. (25 mm) diam (or smaller) rigid steel conduit installed flush with wall surfaces. The annular space between steel sleeve and periphery of opening shall be min 0 in. (point contact) to max 1/8 in. (3 mm). When opening dimension exceeds 1 in. (25 mm), max annular space is 3/8 in. (10 mm). The sleeve shall extend up to 12 in. (305 mm) beyond one or both wall surfaces. As an option, sleeve may extend continuously beyond one wall surface. The conduit sleeve shall be secured to the adjacent stud within the wall cavity with a steel conduit strap attached to web of stud with min two no. 8 sheet metal screws with washers or shall be rigidly supported on those sides of the wall where the sleeve is extended. As an option, the sleeve may be provided with a plastic grommet at the ends of the sleeve.

3. Cables — Within the sleeve (Item 2), the cables may represent a 0 to 100 percent visual fill. Cables to be tightly bundled within the sleeve and rigidly supported on both sides of wall assembly. Any combination of the following types of cables may be used:

- A. Max 3/C No. 8 AWG NM copper conductor cable (Romex) with PVC insulation and jacket.
- B. Type RG 6/U coaxial cable with fluorinated ethylene or PVC insulation and jacketing.
- C. Max 24 fiber optic cable with polyvinyl chloride (PVC) or polyethylene (PE) jacket and insulation.
- D. Max 4 pr No. 22 AWG (or smaller) Cat 5 or Cat 6 computer cables with PVC or plenum rated insulation and jacketing.
- E. Maximum 3/C No. 10 AWG copper conductor metal-clad cable.
- F. **Through Penetrating Product*** — Max two copper conductor No. 18 AWG (or smaller) Power or Non-Power Limited Fire Alarm Cable with or without a jacket under a metal armor.
AFC CABLE SYSTEMS INC
- G. Max 7/C-No. 12 AWG copper conductor control cable with PVC or XLPE insulation and jacket.
- H. Max 100 pair No. 24 AWG (or smaller) copper conductor telecommunication cable with PVC or plenum rated insulation and jacketing.

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4. Fill, Void or Cavity Material* — Nom 60 mm diam by 3 mm thick putty disc with one seam at radius. Paper-backer of disc to be removed and disc firmly pressed around the sleeve at each surface of wall to lap min 5 mm onto sleeve and firmly pressed to lap onto the wall around periphery of opening. Disc seams to be firmly pressed and sealed tight. Discs to be installed at both sides of wall opening.
HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — CFS-D 1" Firestop Cable Disc

5. Fill, Void or Cavity Material* — Nom 60 mm diam by 3 mm thick putty disc with one seam at radius. Paper-backer of disc to be removed and disc firmly pressed around the cable/cable bundle at exit from each end of sleeve, lapping min 5 mm onto cables to completely cover opening and firmly pressed to lap onto the sleeve periphery. Disc seam to be firmly pressed and sealed tight. Discs to be installed at both sides of wall opening.
HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — CP 606 or FS-ONE MAX Intumescent Sealant

6. Fill, Void or Cavity Material*— Sealant — As an alternate to Item 4, a min 1/2 in. (13 mm) diam bead of fill material shall be applied at the sleeve/wall interface. Fill material installed symmetrically on both sides of the wall.
HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — CP 606 or FS-ONE MAX Intumescent Sealant

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Last Updated on 2020-04-29

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6C A616 FIRE STOP - WALLS - FRAMED WALLS - ELECTRIC CABLE - F 1HR&2HR - T 1HR&2HR - L 5 - HILTI - XHEZ.W-L-3441 12" = 1'-0"

UL Product IQ® XHEZ.W-L-1095 - Through-penetration Firestop Systems

Design/System/Construction/Assembly Usage Disclaimer

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XHEZ - Through-penetration Firestop Systems XHEZ7 - Through-penetration Firestop Systems Certified for Canada

See General Information for Through-penetration Firestop Systems

See General Information for Through-penetration Firestop Systems Certified for Canada

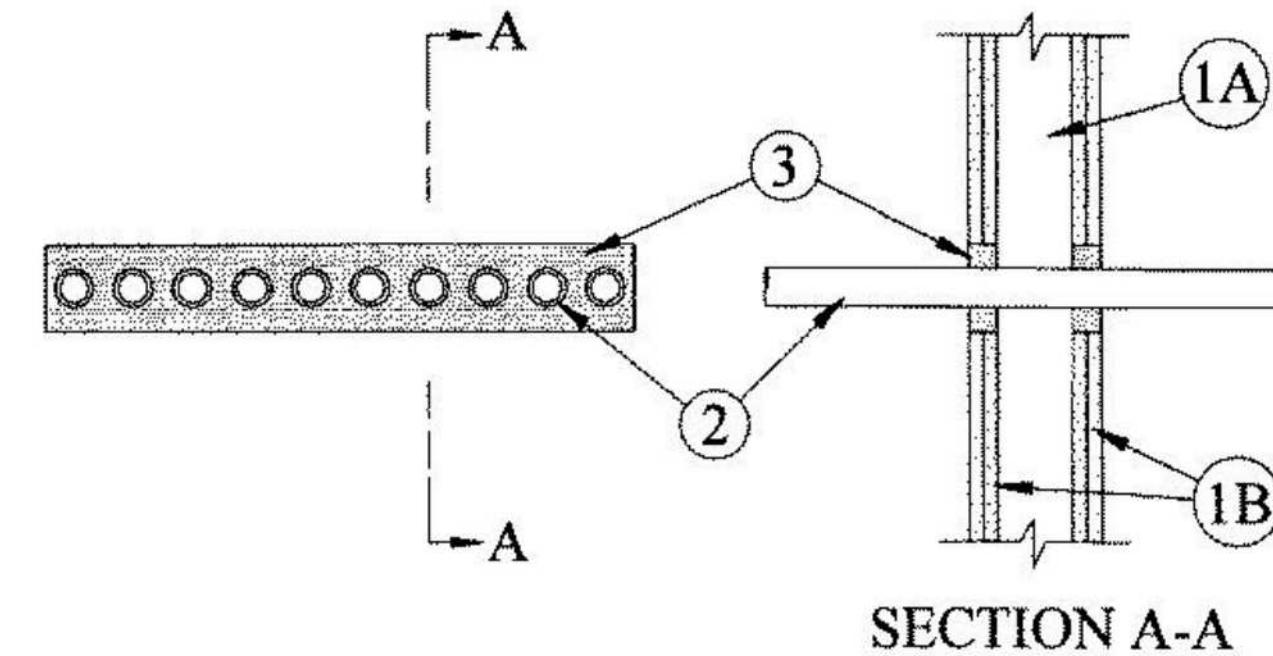
System No. W-L-1095

January 21, 2015

ANSI/UL1479 (ASTM E814)	CAN/ULC S115
F Ratings — 1 & 2 Hr (See Item 1)	F Ratings — 1 & 2 Hr (See Item 1)
T Ratings — 1 & 2 Hr (See Item 3)	FT Ratings — 1 & 2 Hr (See Item 3)
L Rating At Ambient — Less Than 1 CFM/sq ft	FH Ratings — 1 & 2 Hr (See Item 1)
L Rating At 400 F — 4 CFM/sq ft	FTH Ratings — 1 & 2 Hr (See Item 3)
	L Rating At Ambient — Less Than 1 CFM/sq ft
	L Rating At 400 F — 4 CFM/sq ft

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1. Wall Assembly — The 1 or 2 h fire-rated gypsum wallboard/stud wall assembly shall be constructed of the materials and in the manner described in the individual U300 or U400 Series Wall and Partition Designs in the UL Fire Resistance Directory and shall include the following construction features:

A. Studs — Wall framing may consist of either wood studs or steel channel studs. Wood studs to consist of nom 2 by 4 in. (51 by 102 mm) lumber spaced 16 in. (406 mm) OC. Steel studs to be min 2-1/2 in. (64 mm) wide and spaced max 24 in. (610 mm) OC.

B. Gypsum Board — 5/8 in. (16 mm) thick, 4 ft (122 cm) wide with square or tapered edges. The gypsum wallboard type, thickness, number of layers, fastener type and sheet orientation shall be as specified in the individual U300 or U400 Series Design in the UL Fire Resistance Directory. Max size of opening 2-5/8 in. (67 mm) by 18 in. (457 mm). **The hourly F Rating of the firestop system is equal to the hourly fire rating of the wall assembly in which it is installed.**

2. Electric Metallic Tubing (EMT) — One or more nom 1 in. (25 mm) diam steel electric tubing. The annular space shall be min 1/2 in. (13 mm) to a max 1 in. (25 mm). Conduit to be rigidly supported on both sides of wall assembly.

3. Fill, Void or Cavity Material* — Sealant — For 2 h F Rating, min 1-1/4 in. (32 mm) thickness of fill material applied within the annulus, flush with both surfaces of wall. For 1 h F Rating, min 5/8 in. (16 mm) thickness of fill material applied within the annulus, flush with both surfaces of wall.
HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — FS-One Sealant or FS-ONE MAX Intumescent Sealant

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

Last Updated on 2015-01-21

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6A A616 FIRE STOP - WALLS - FRAMED WALLS - METALLIC PIPE, CONDUIT OR TUBING - F 1HR&2HR - T 1HR&2HR - L 5 - HILTI - XHEZ.W-L-1095 12" = 1'-0"

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RENOVATION Wranglers
Owner: Renovation Wranglers
102 E 26th St
Bryan, TX 77803
katerinecasarini@me.com | 979.450.9969

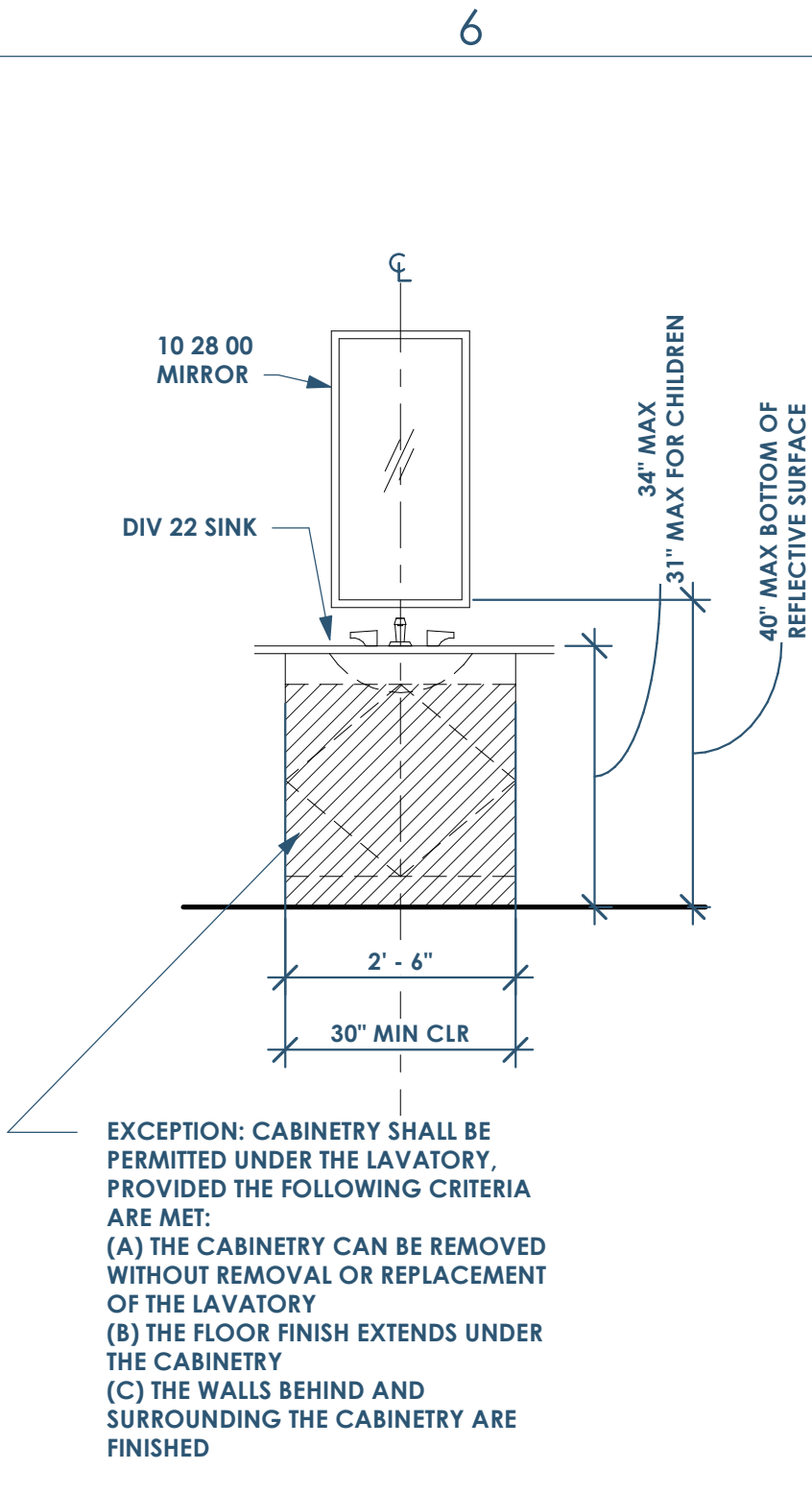
ARCHITECTURE
Architect of Record: LKB Architecture
2929 Allen Pkwy Suite 200
Houston, TX 77019
isa@lkbarchitecture.com | 713.425.3076

DUDDLEY
Structural: Dudley
4102 Imperial Loop Drive
College Station, TX 77845
(979) 777-0720

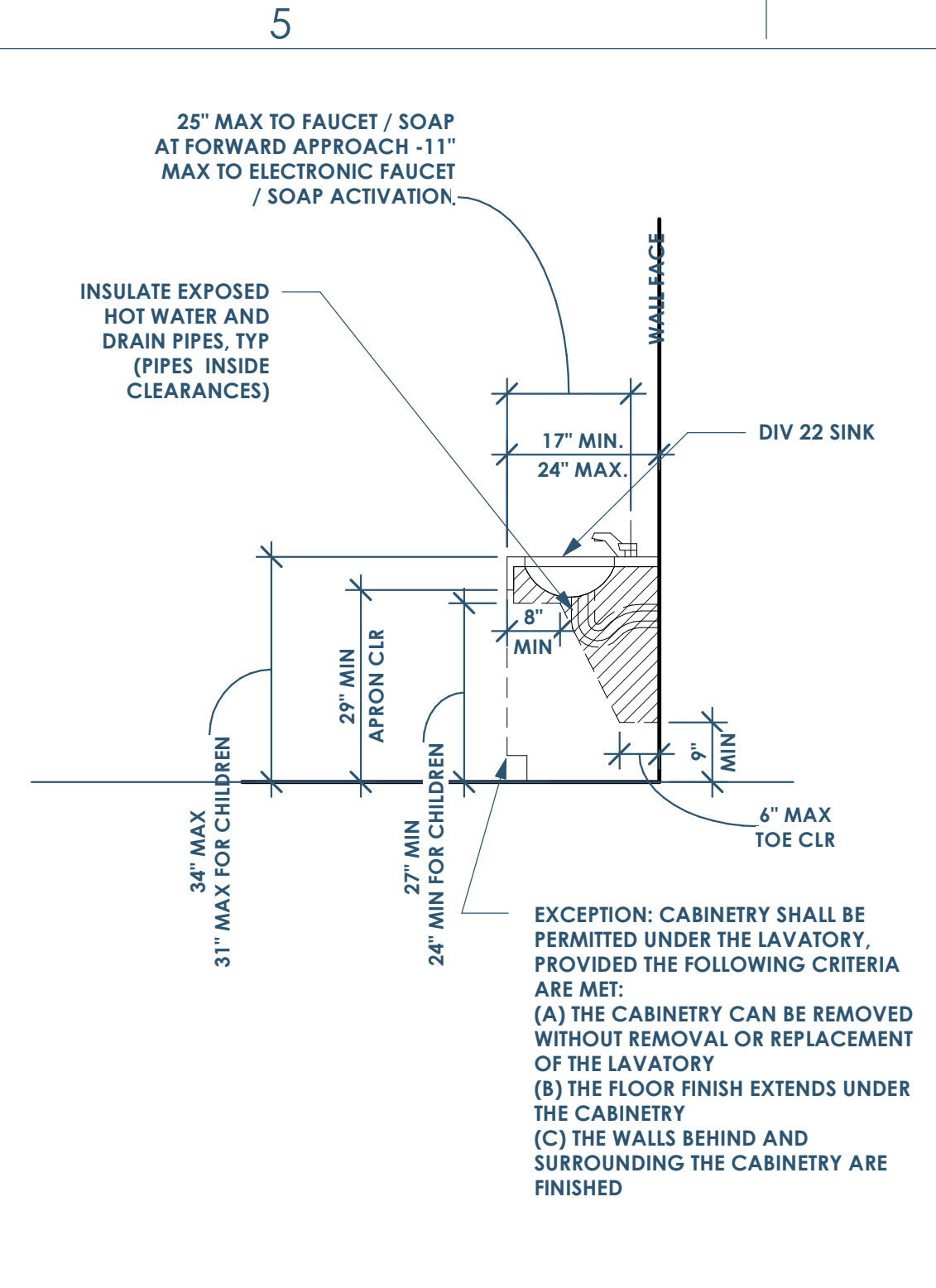
amc ENGINEERS
MEP: AMC Engineers
508 E Jackson St # 552
Burnet, TX 78611
info@amcengineers.com

openingdesign
Architect: OpeningDesign
17 S Fairchild | FL 7
Madison, WI 53703
ryan@openingdesign.com | 773.425.6456

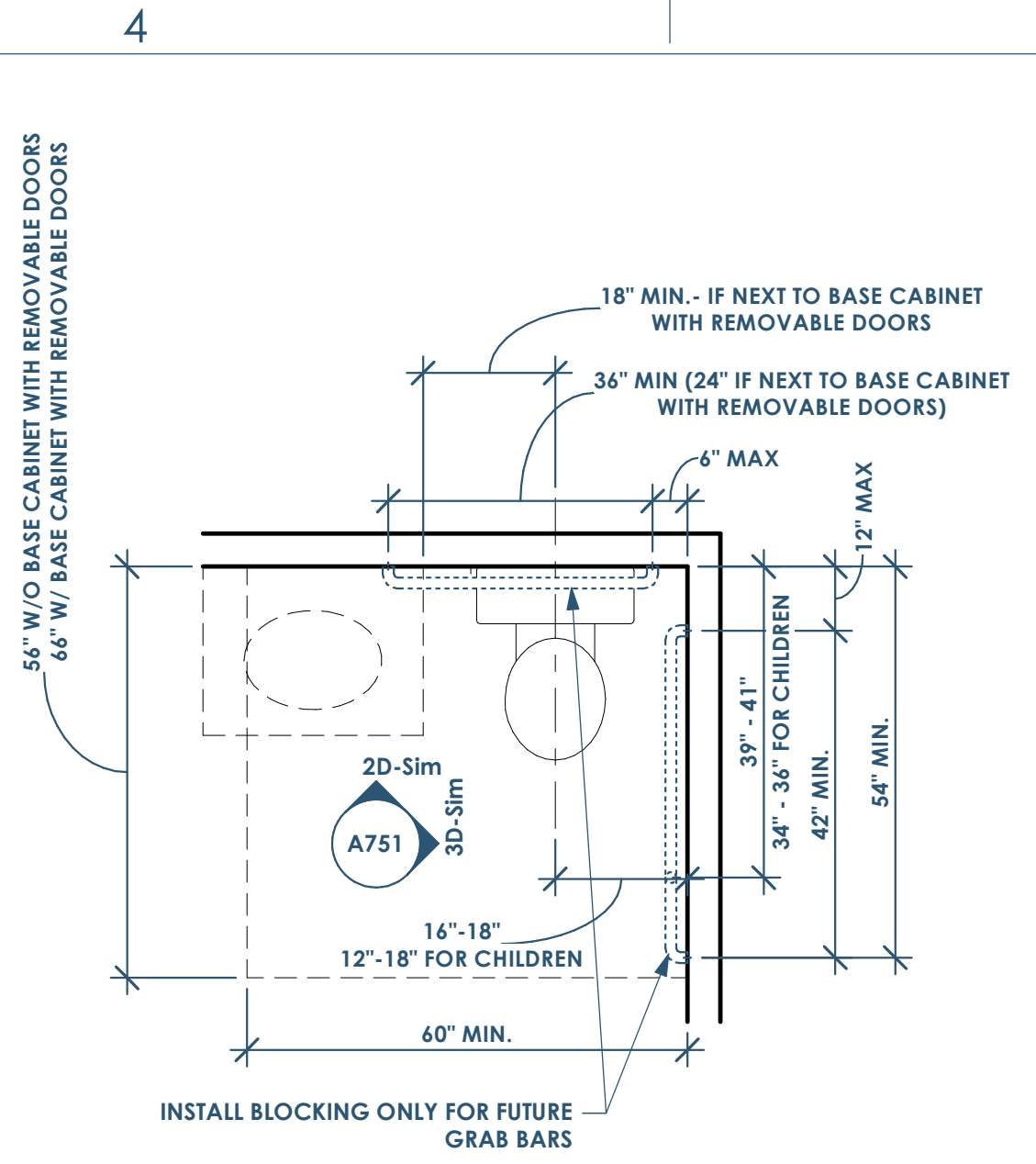
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06/02/2022	Review before Permit



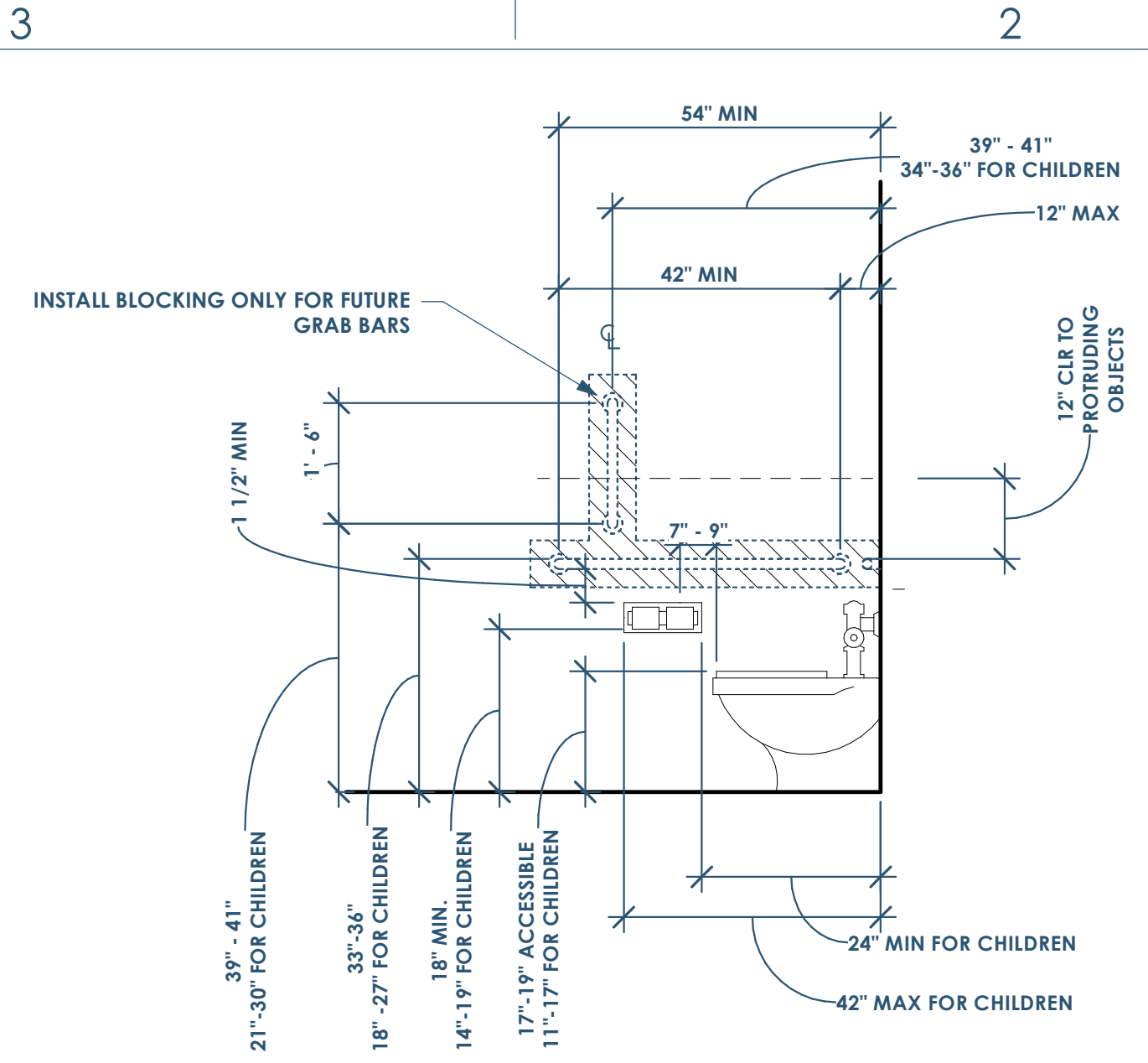
6D A751 ADA - TYPE A - LAVATORY - FRONT (OR TYPE B FRONT APPROACH)
1/2" = 1'-0"



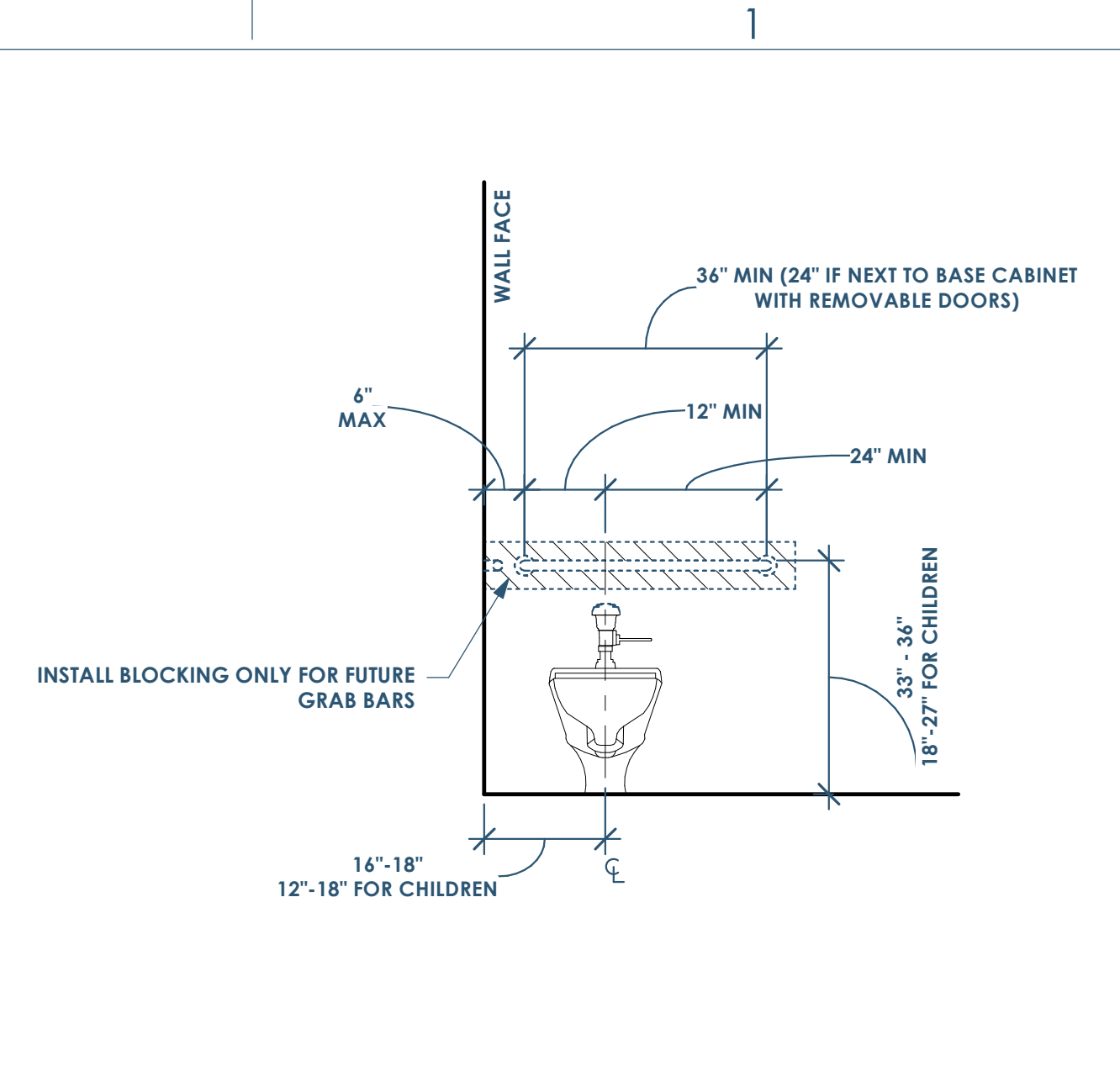
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1/2" = 1'-0"



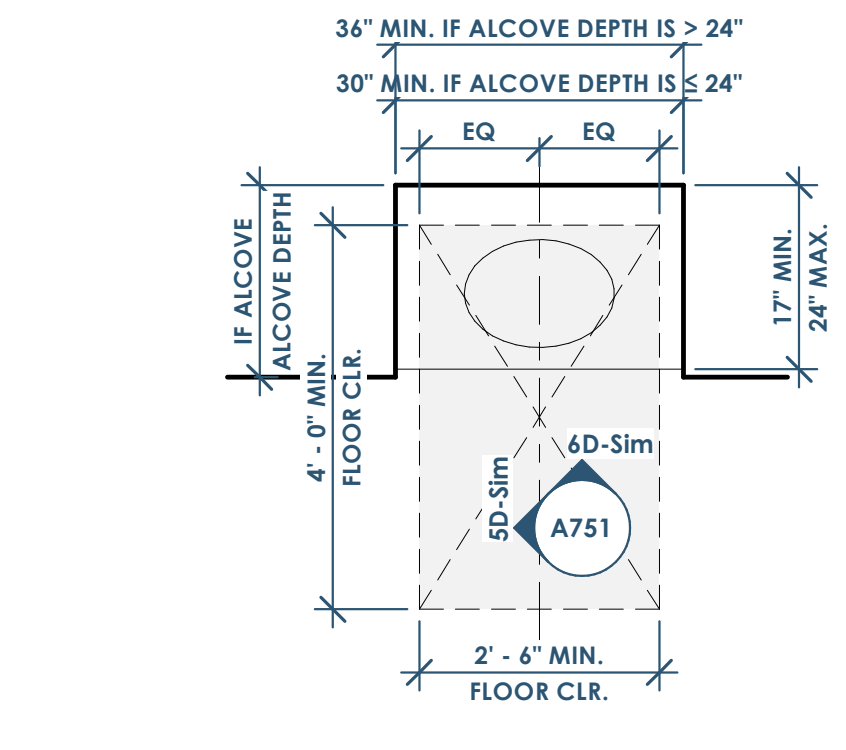
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1/2" = 1'-0"



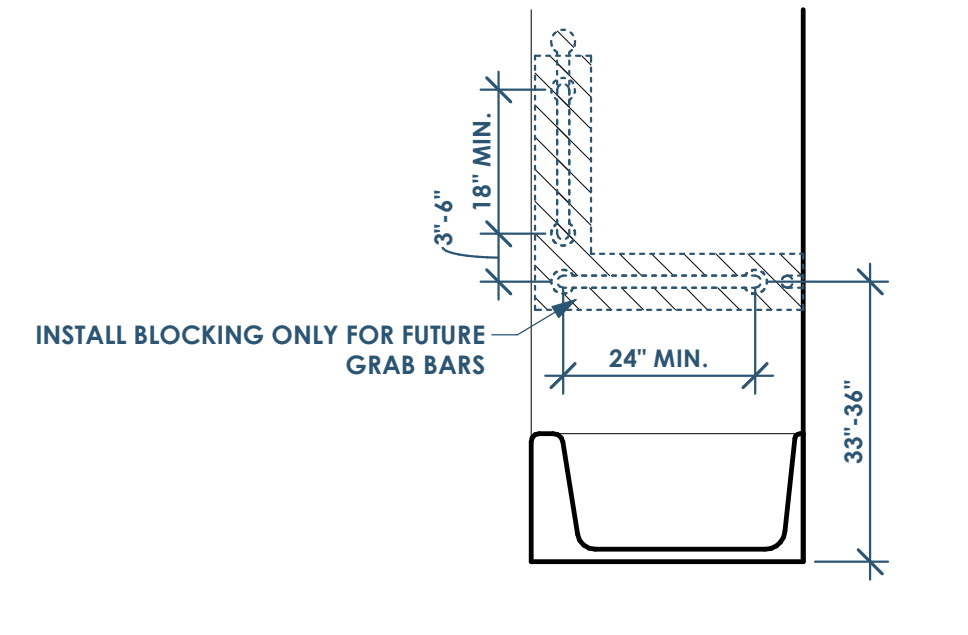
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1/2" = 1'-0"



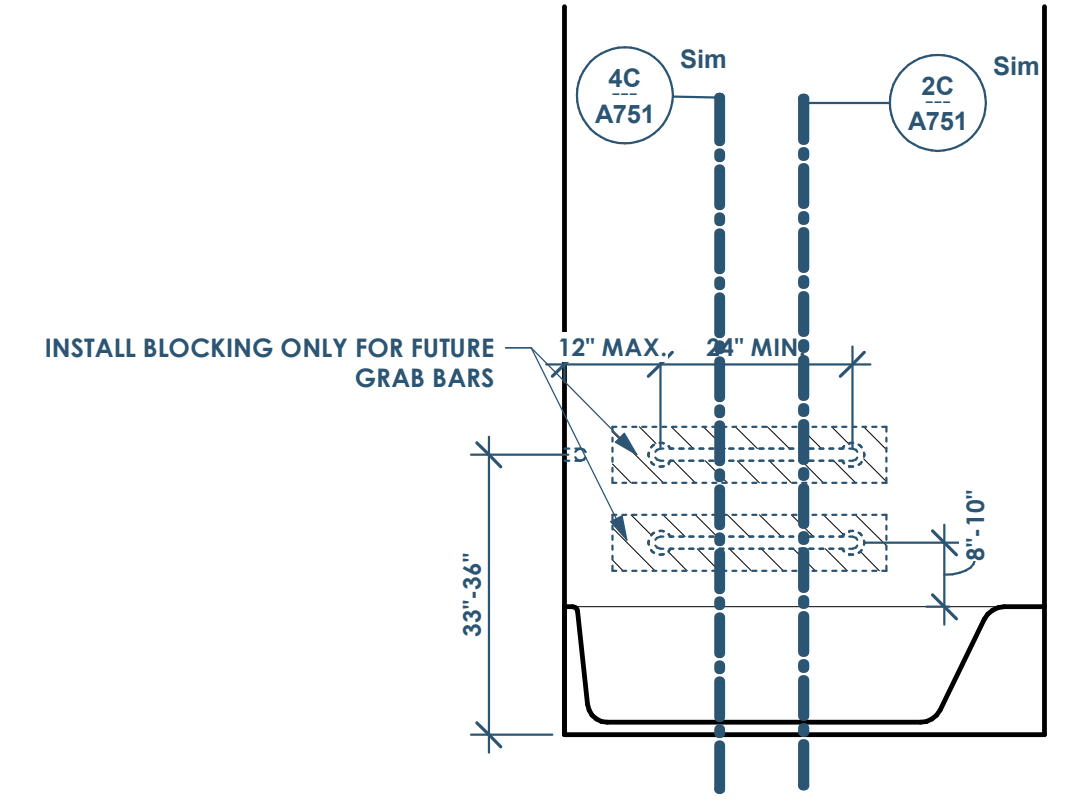
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1/2" = 1'-0"



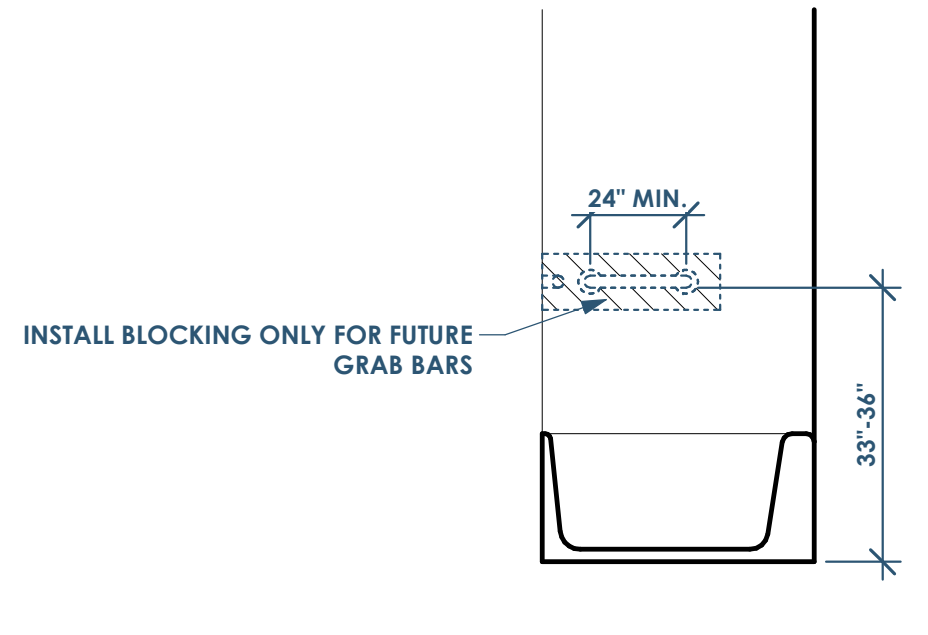
4C A751 ADA - TYPE A - LAVATORY - PLAN
1/2" = 1'-0"



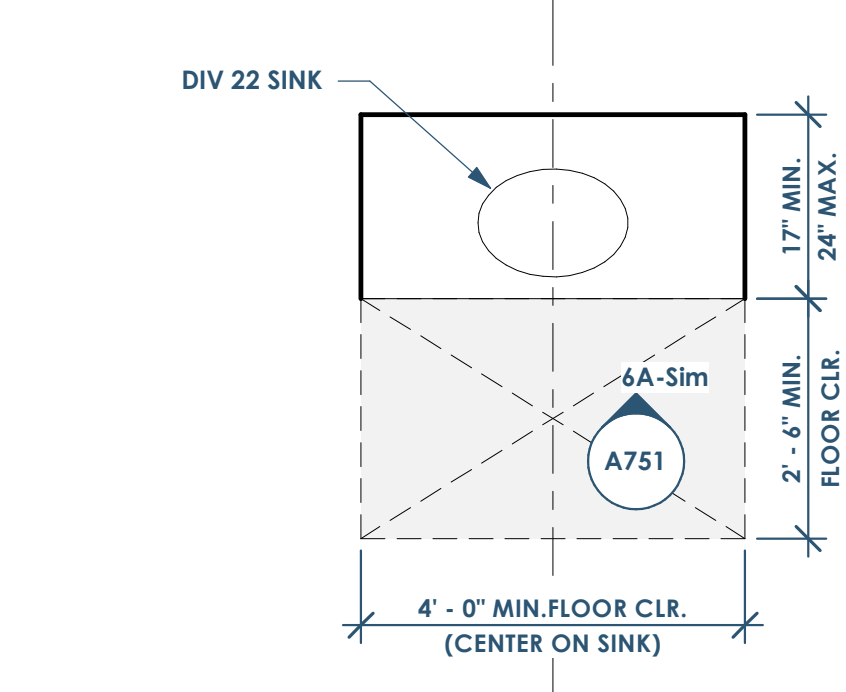
4C A751 ADA - TYPE A & B - BATH - CONTROLS SIDE
1/2" = 1'-0"



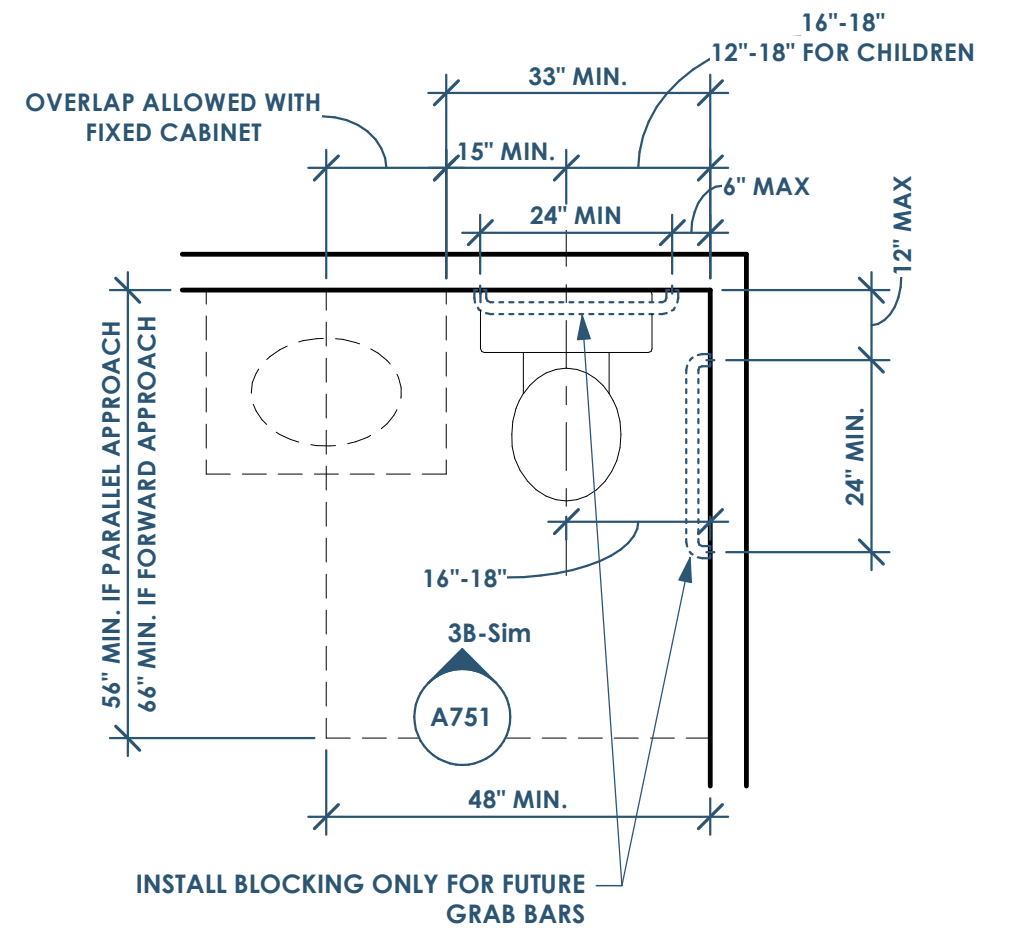
3C A751 ADA - TYPE A & B - BATH - FRONT
1/2" = 1'-0"



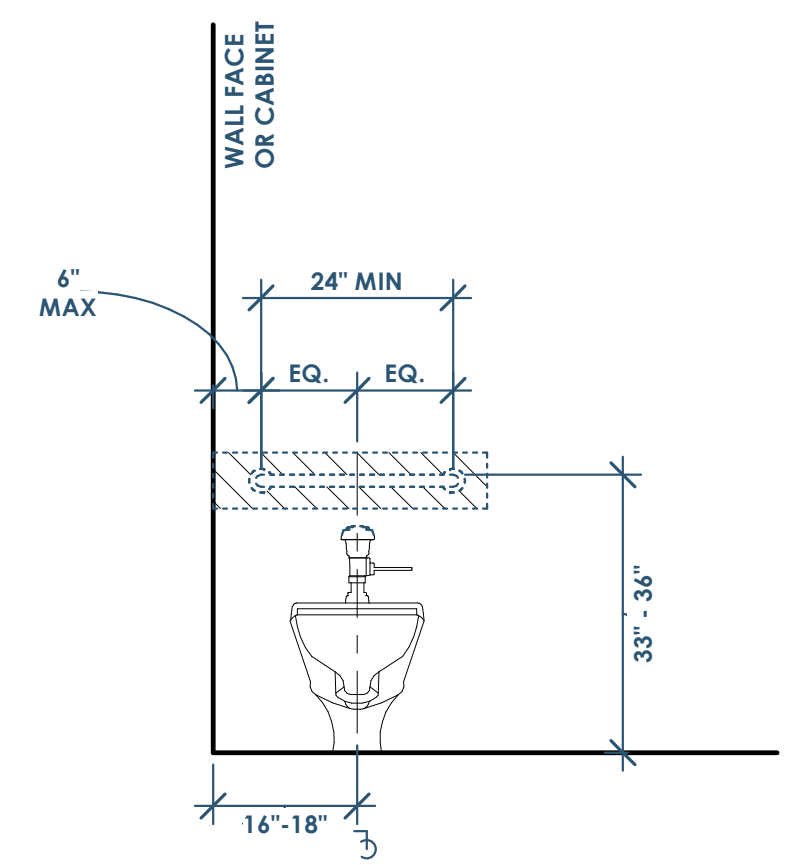
2C A751 ADA - TYPE A & B - BATH - NON-CONTROL SIDE
1/2" = 1'-0"



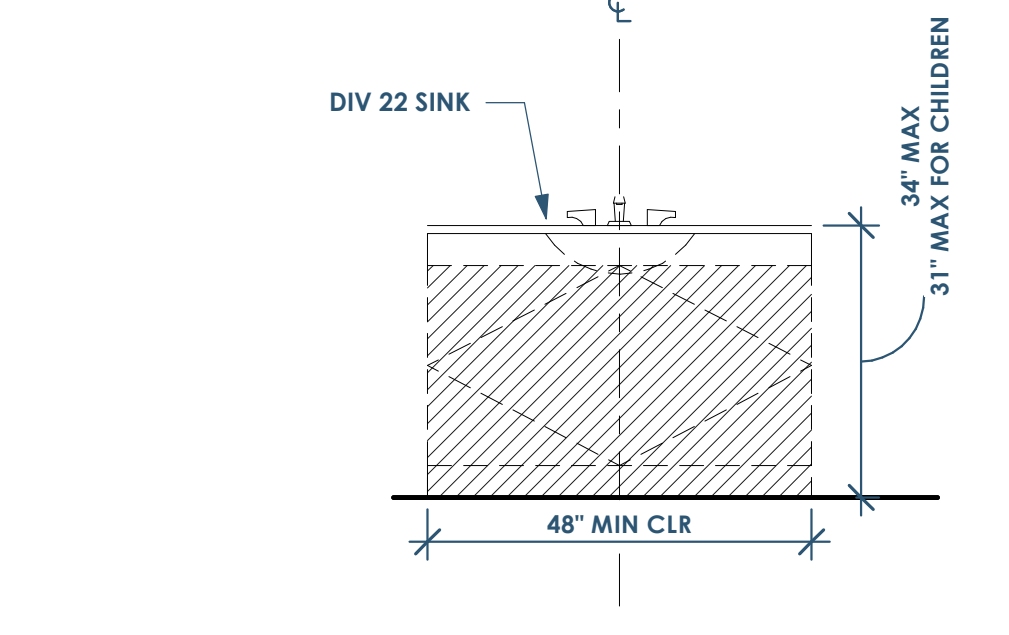
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1/2" = 1'-0"



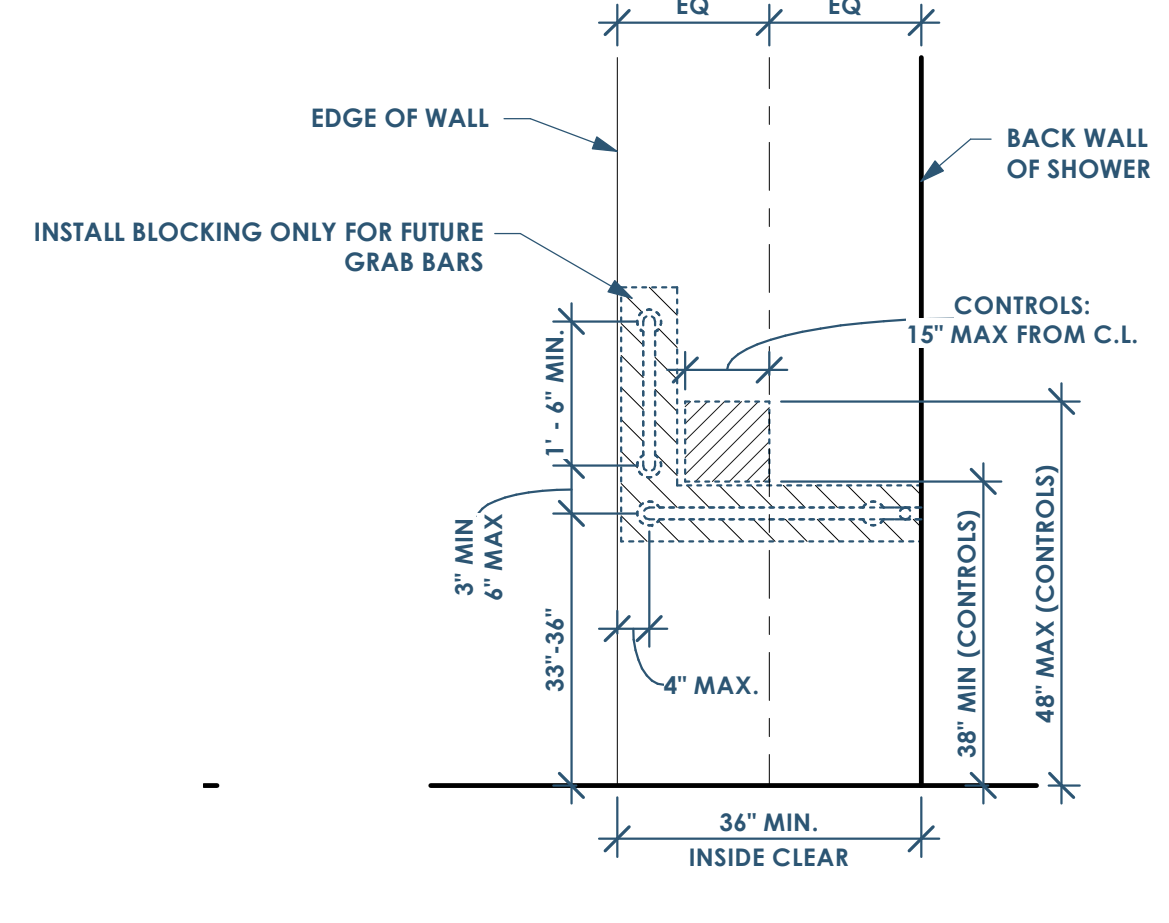
5B A751 ADA - TYPE B - WATER CLOSET - FLOOR PLAN
1/2" = 1'-0"



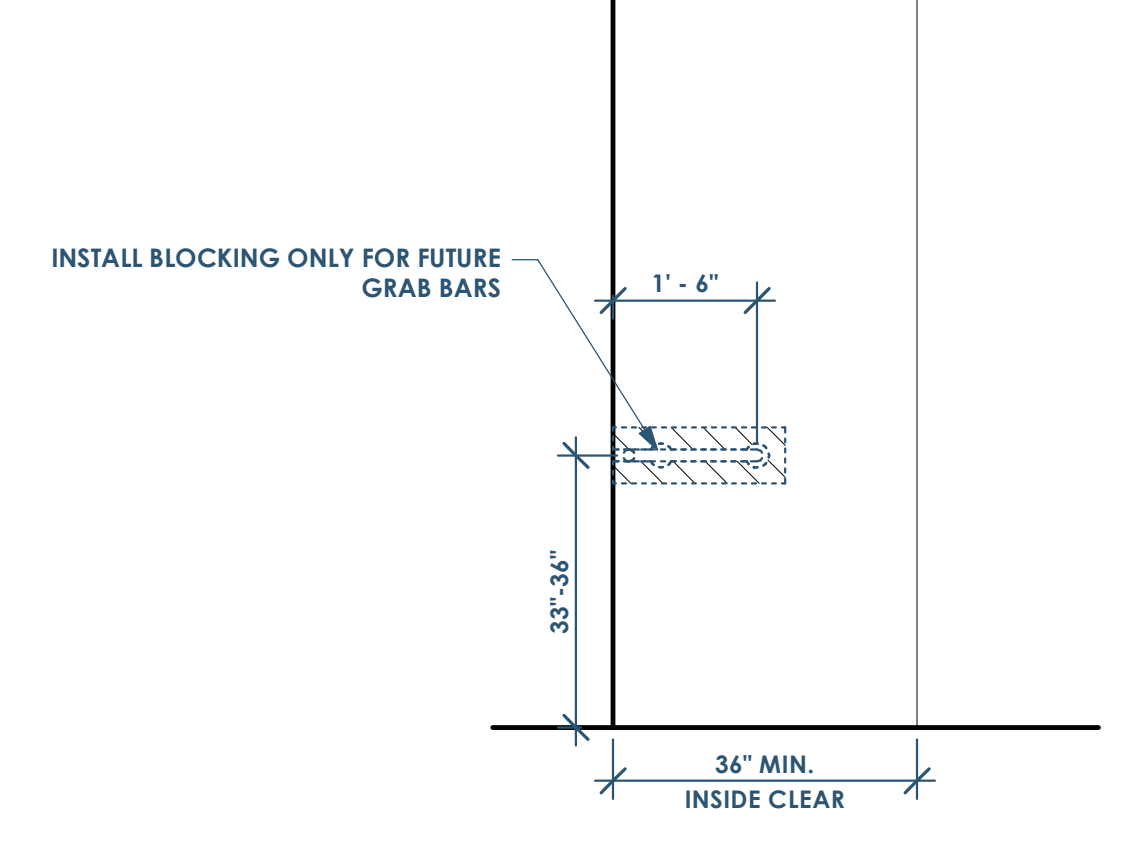
3B A751 ADA - TYPE B - WATER CLOSET - FRONT
1/2" = 1'-0"



4A A751 ADA - TYPE B - LAVATORY - FRONT
1/2" = 1'-0"



4A A751 ADA - TYPE A & B - SHOWER - SIDE
1/2" = 1'-0"



3A A751 ADA - TYPE A & B - SHOWER - BACK
1/2" = 1'-0"

GENERAL NOTES:
 • NOTE: PER IBC1210.2.2 WALLS AND PARTITIONS WITHIN 2 FEET (610MM) OF SERVICE SINKS, URINALS AND WATER CLOSETS SHALL HAVE A SMOOTH, HARD, NONABSORBENT SURFACE, TO A HEIGHT OF NOT LESS THAN 4 FEET (1219 MM) ABOVE THE FLOOR, AND EXCEPT FOR STRUCTURAL ELEMENTS, THE MATERIAL USED IN SUCH WALLS SHALL BE OF A TYPE THAT IS NOT ADVERSELY AFFECTED BY MOISTURE
 • THESE ADA CLEARANCES AND GRAB BAR BLOCKING ARE ONLY REQUIRED FOR THE 1ST FLOOR UNITS

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RENOVATION
Wranglers
 Owner: Renovation Wranglers
 102 E 26th St
 Bryan, TX 77803
 Katerencason@time.com | 979.450.9969

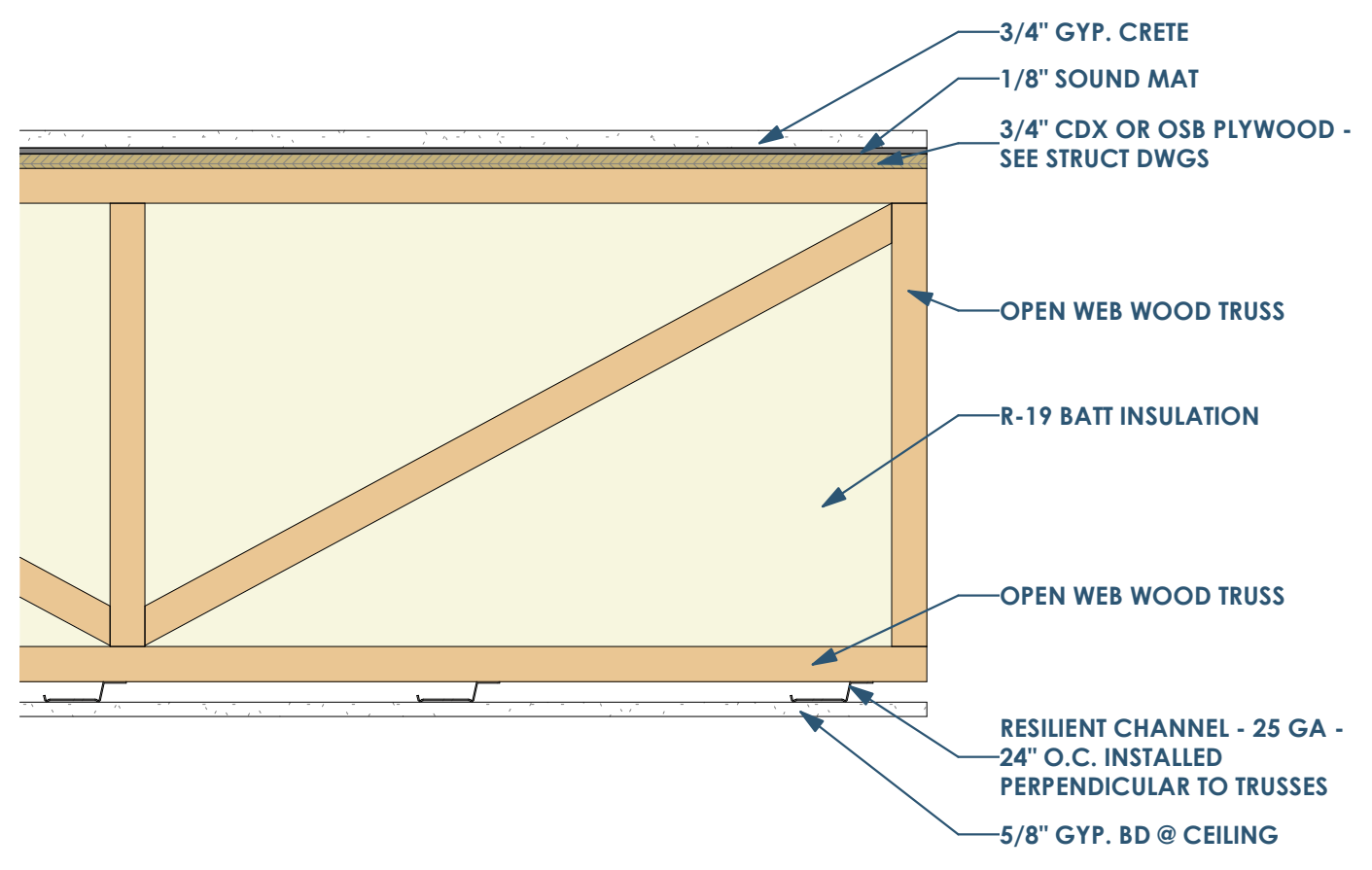
ARCHITECTURE
 Architect of Record: LKB Architecture
 2929 Allen Pkwy Suite 200
 Houston, TX 77019
 isa@lkbarchitecture.com | 713.425.3076

DUDDLEY
 Structural: Dudley
 4102 Imperial Loop Drive
 College Station, TX 77845
 (979) 777-0720

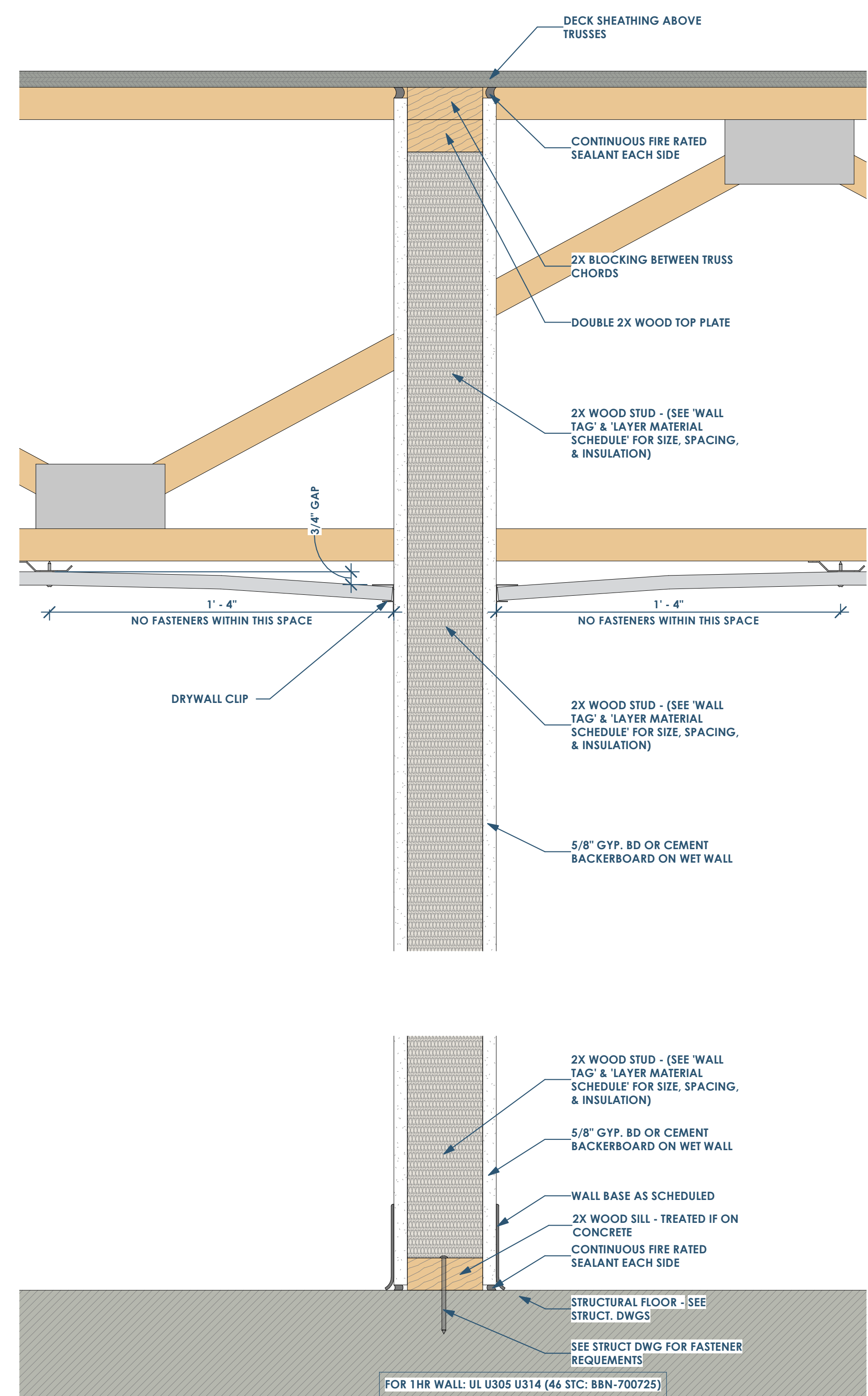
amc
 ENGINEERS
 MEP: AMC Engineers
 508 E Jackson St # 552
 Burnet, TX 78611
 info@amcengineers.com

openingdesign
 Architect: OpeningDesign
 17 S Fairchild | FL 7
 Madison, WI 53703
 ryan@openingdesign.com | 773.425.6456

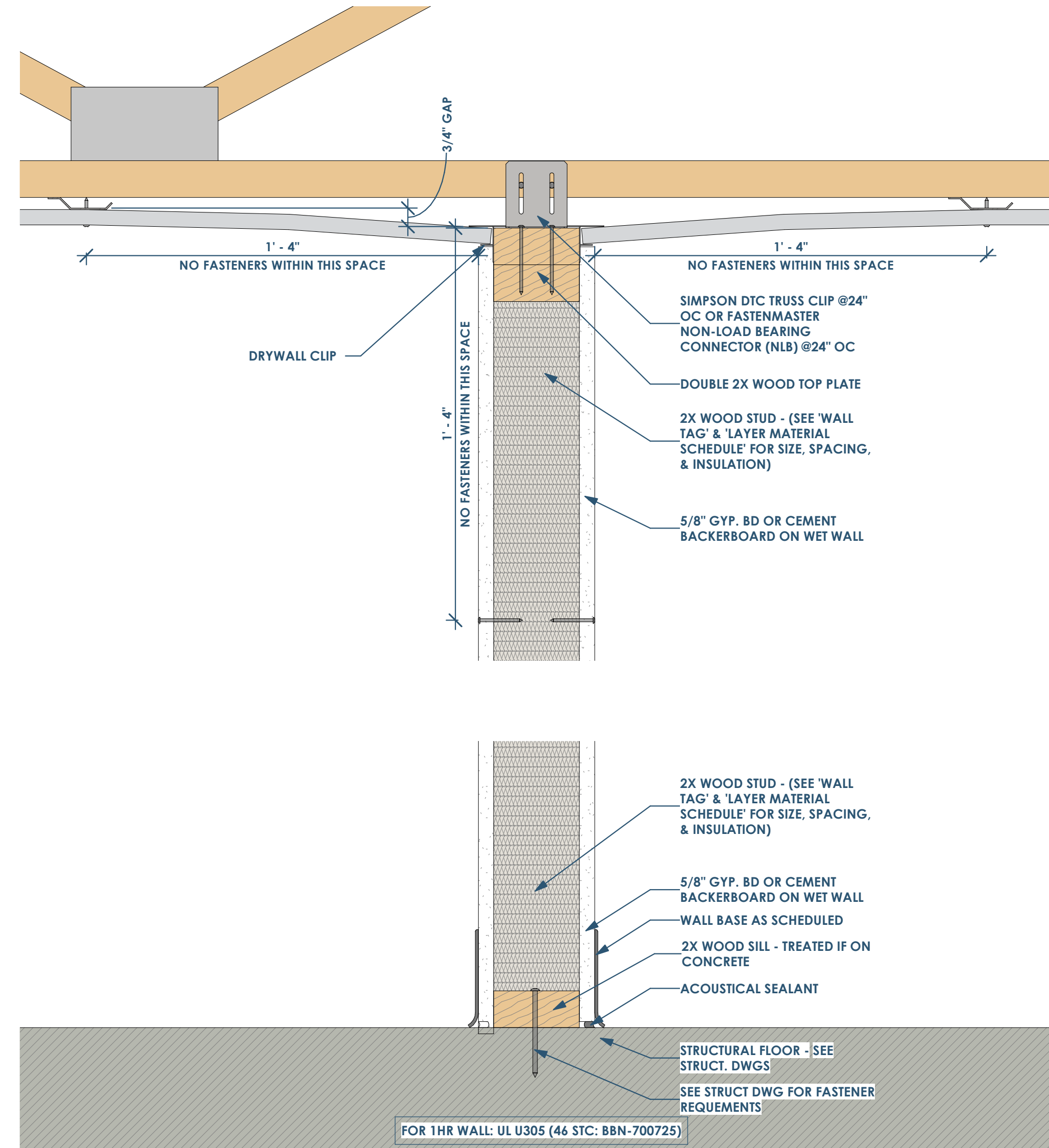
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65
A800 FLOOR/CEILING ASSEMBLY - L521
1 1/2" = 1'-0"



6A
A800 W () 1D - FULL HEIGHT - TO DECK - PARTITION (1 HR RATED)
3" = 1'-0"



3A
A800 W () OF FULL HEIGHT PARTITION
3" = 1'-0"

PARTITION TAG NOMENCLATURE

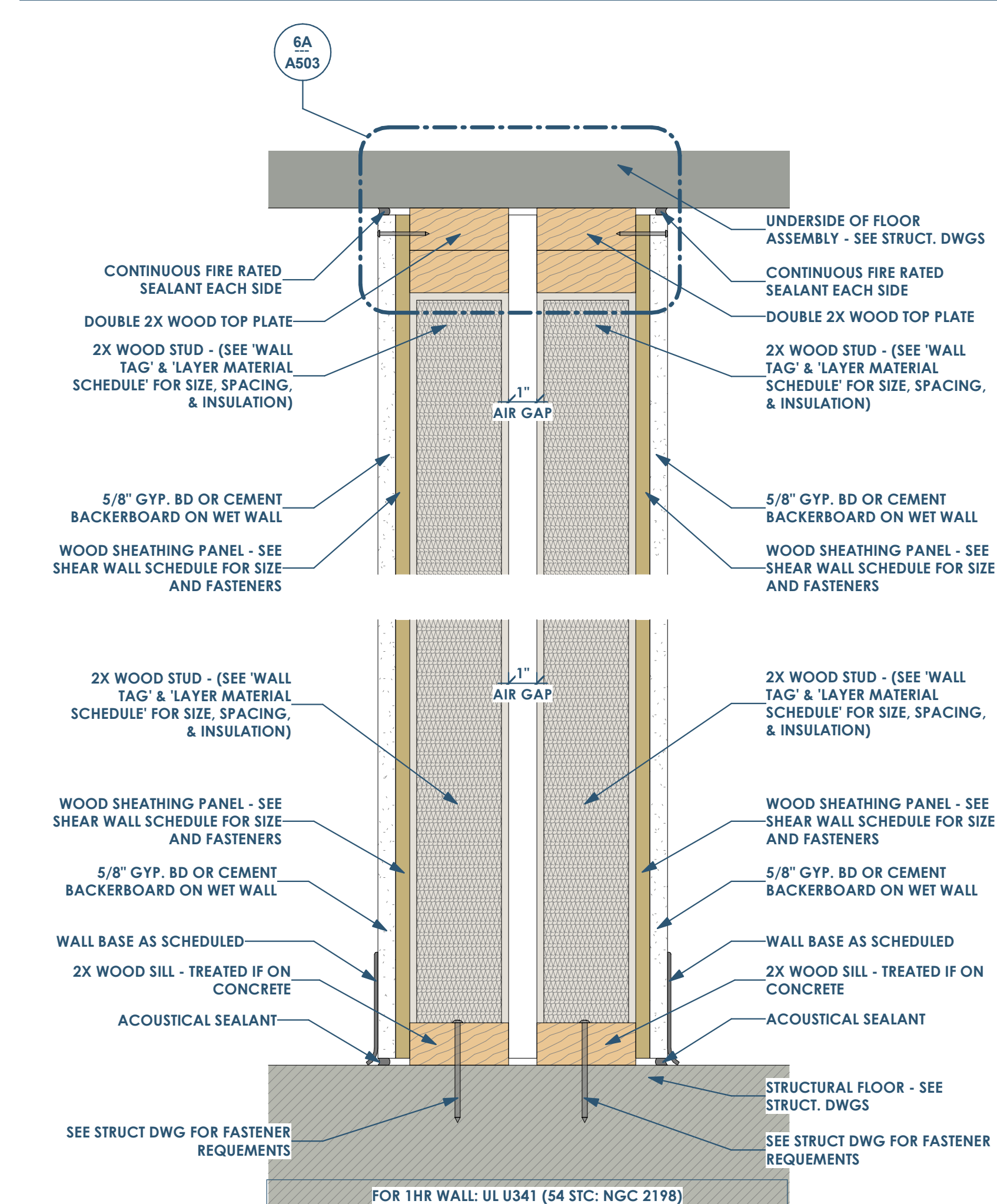
- 1ST LETTER = CORE MATERIAL
 - W= WOOD
 - M=METAL
 - C=CONCRETE
 - B=MASONRY BLOCK
- 2ND LETTER = SIZE OF CORE
 - WOOD: NOMINAL STUD SIZES (EX: 4 = 3 1/2")
 - METAL STUD: (EX 358 = 3 5/8")
 - CONCRETE: ACTUAL WALL THICKNESS (EX: 8 = 8")
 - MASONRY: NOMINAL BRICK MODULES (EX: 8 = 7 5/8")
- 3RD LETTER = LAYER MATERIAL

	LAYER MATERIAL (3RD LETTER)						IF FIRE RATED - UL NUMBER
	LAYER 3	LAYER 2	LAYER 1	CORE	LAYER 1	LAYER 2	
A=	-	-	5/8" GYP. BD OR CEMENT BACKERBOARD ON WET WALL	STUDS 16" O.C. (20 GA. IF METAL)	5/8" GYP. BD OR CEMENT BACKERBOARD ON WET WALL	-	UL U305
B=	-	-	5/8" GYP. BD OR CEMENT BACKERBOARD ON WET WALL	STUDS 16" O.C. (20 GA. IF METAL) BATT INSULATION	5/8" GYP. BD OR CEMENT BACKERBOARD ON WET WALL	-	UL U305
C=	-	-	5/8" GYP. BD OR CEMENT BACKERBOARD ON WET WALL	STUDS 16" O.C. (20 GA. IF METAL)	(PROVIDE 1/4" AIR GAP IF AGAINST CONCRETE OR MASONRY)	-	-
D=	-	-	5/8" GYP. BD OR CEMENT BACKERBOARD ON WET WALL	STUDS 16" O.C. (20 GA. IF METAL) BATT INSULATION	(PROVIDE 1/4" AIR GAP IF AGAINST CONCRETE OR MASONRY) - USE TREATED WOOD STUDS IF IN CONTACT WITH CONCRETE/MASONRY	-	-
G=	-	-	5/8" GYP. BD OR CEMENT BACKERBOARD ON WET WALL	SEE WALL STUD SCHEDULE - STRUCT. DWGS. - W/(R-19) BATT INSULATION	1" AIR GAP (PART OF A DOUBLE STUD WALL)	-	UL 341
H=	-	5/8" GYP. BD OR CEMENT BACKERBOARD ON WET WALL	SHEATHING - SEE STRUCT. DWGS	SEE WALL STUD SCHEDULE - STRUCT. DWGS. - W/(R-19) BATT INSULATION	1" AIR GAP (PART OF A DOUBLE STUD WALL)	-	UL 341
Q=	FIBER CEMENT - CLAPBOARD SIDING	DRAINAGE WRAP - ASTM 2273	SHEATHING - SEE STRUCT. DWGS	SEE WALL STUD SCHEDULE - STRUCT. DWGS. - W/(R-19) BATT INSULATION	5/8" GYP. BD OR CEMENT BACKERBOARD ON WET WALL	-	-
R=	FIBER CEMENT - BATTEN AND BOARD SIDING	DRAINAGE WRAP - ASTM 2273	SHEATHING - SEE STRUCT. DWGS	SEE WALL STUD SCHEDULE - STRUCT. DWGS. - W/(R-19) BATT INSULATION	5/8" GYP. BD OR CEMENT BACKERBOARD ON WET WALL & SHEATHING LAYER, IF AT PARTY WALL (SEE STRUCT DWGS)	-	-
S=	7/8" CORRUGATED METAL SIDING	DRAINAGE WRAP - ASTM 2273	SHEATHING - SEE STRUCT. DWGS	SEE WALL STUD SCHEDULE - STRUCT. DWGS. - W/(R-19) BATT INSULATION	5/8" GYP. BD OR CEMENT BACKERBOARD ON WET WALL & SHEATHING LAYER, IF AT PARTY WALL (SEE STRUCT DWGS)	-	-
T=	FIBER CEMENT - CLAPBOARD SIDING	DRAINAGE WRAP - ASTM 2273	5/8" FIBERGLASS MAT GYPSUM SHEATHING	SEE WALL STUD SCHEDULE - STRUCT. DWGS. - W/(R-19) BATT INSULATION	5/8" GYP. BD OR CEMENT BACKERBOARD ON WET WALL & SHEATHING LAYER, IF AT PARTY WALL (SEE STRUCT DWGS)	-	UL U305
U=	FIBER CEMENT - BATTEN AND BOARD SIDING	DRAINAGE WRAP - ASTM 2273	5/8" FIBERGLASS MAT GYPSUM SHEATHING	SEE WALL STUD SCHEDULE - STRUCT. DWGS. - W/(R-19) BATT INSULATION	5/8" GYP. BD OR CEMENT BACKERBOARD ON WET WALL & SHEATHING LAYER, IF AT PARTY WALL (SEE STRUCT DWGS)	-	UL U305
V=	7/8" CORRUGATED METAL SIDING	DRAINAGE WRAP - ASTM 2273	5/8" FIBERGLASS MAT GYPSUM SHEATHING	SEE WALL STUD SCHEDULE - STRUCT. DWGS. - W/(R-19) BATT INSULATION	5/8" GYP. BD OR CEMENT BACKERBOARD ON WET WALL & SHEATHING LAYER, IF AT PARTY WALL (SEE STRUCT DWGS)	-	UL U305
W=	7/8" CORRUGATED METAL SIDING	DRAINAGE WRAP - ASTM 2273	SHEATHING - SEE STRUCT. DWGS	SEE WALL STUD SCHEDULE - STRUCT. DWGS. - W/(R-19) BATT INSULATION	SHEATHING - SEE STRUCT. DWGS	DRAINAGE WRAP - ASTM 2273	7/8" CORRUGATED METAL SIDING
X=	7/8" CORRUGATED METAL SIDING	DRAINAGE WRAP - ASTM 2273	5/8" FIBERGLASS MAT GYPSUM SHEATHING	SEE WALL STUD SCHEDULE - STRUCT. DWGS. - W/(R-19) BATT INSULATION	5/8" FIBERGLASS MAT GYPSUM SHEATHING	DRAINAGE WRAP - ASTM 2273	7/8" CORRUGATED METAL SIDING
Z=	-	-	16 GA PERFORATED GALV. STEEL	2.5" 12GA. STRUCTURAL METAL STUD - CFP90 GALV.	-	-	-

- 4TH NUMBER: FIRE RATING
 - 0=0 HOUR
 - 1=1 HOUR
 - 2=2 HOUR
 - 3=3 HOUR
 - 5=5 HOUR

- 5TH (AND BEYOND) LETTERS = MODIFIERS
 - A=PARTIAL HEIGHT PARTITION (WALL LAYER 1, 2, & 3 TO EXTEND 4" ABOVE FINISHED CEILING HEIGHT)
 - B=PARTIAL HEIGHT WALL (WALL LAYER 1, 2, & 3 TO TERMINATE AT OR BELOW HUNG CEILING)
 - D=FULL HEIGHT TO UNDERSIDE OF STRUCTURAL DECK/SHEATHING (CORE AND WALL LAYER 1, 2, & 3 TO TERMINATE AT STRUCTURAL DECK)
 - F=FULL HEIGHT TO THE BOTTOM OF STRUCTURE
 - K=KNEE WALL PARTITION
 - R=FURRED OUT WALL

- EXAMPLE: M358B0AR
 - M=METAL
 - 358=3 5/8" METAL STUD
 - B=20 GA METAL STUDS 16" O.C. W/ BATT INSULATION
 - 0=0 HOUR
 - A=PARTIAL HEIGHT PARTITION (WALL LAYER 1, 2, & 3 TO EXTEND 4" ABOVE FINISHED CEILING HEIGHT)
 - R=FURRED OUT WALL



2A
A800 W4 () 5F PARTY WALL - 1 HR RATED WALL (ONLY NEEDS TO BE 1/2 HR RATED)
3" = 1'-0"

PARTITION DETAILS - WOOD STUDS

MARCO POLO - 101 33RD STREET - CITY OF BRYAN TOWNSITE, BLOCK 96, LOT 3-5 & PT OF 6 & PT OF ALLEY - BRYAN, TX 77803

RENOVATION
Wranglers
ENGINEERS

Owner: Renovation Wranglers
102 E 26th St
Bryan, TX 77803
kate@renovationtime.com | 979.450.9969

ARCHITECTURE
Architect of Record: LKB Architecture
2929 Allen Pkwy Suite 200
Houston, TX 77019
isa@lkbarchitecture.com | 713.425.3076

DUDDLEY

Structural: Dudley
6102 Imperial Loop Drive
College Station, TX 77845
(979) 777-0720

amc
ENGINEERS

MEP: AMC Engineers
508 E Jackson St # 552
Burnet, TX 78611
info@amcengineers.com

opening design

Architect: OpeningDesign
17 S Fairchild | FL 7
Madison, WI 53703
ryan@openingdesign.com | 773.425.6456

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