

SHEATHING AND FRAMING FASTENING SCHEDULE

BUILDING COMPONENT	MATERIAL	FASTENING																		
ROOF SHEATHING	1/2" OSB PLYWOOD	16 GA x 1-3/4" STAPLES AT 6" OC EDGES AND 12" IN FIELD																		
	1X4 #3 FURRING	1/2" CROWN STAPLES																		
FLOOR SHEATHING	3/4" T&G YELLOW PINE PLYWOOD APPLIED PERPENDICULAR TO JOISTS AND ENDS STAGGERED	8d COMMON NAILS AT 6" OC EDGES AND 12" OC IN FIELD																		
		14 GA x 1-3/4" STAPLES AT 6" OC EDGES AND 12" IN FIELD																		
		12 GA x 1-1/2" RING OR SCREW SHANK NAILS AT 6" OC EDGES AND 12" OC IN FIELD																		
CEILING COVERING	1/2" GYPSUM SHEATHING	7" OC NAILED / 12" OC SCREWED WITH 13 GA, 1-3/8" LONG, 19/64" HEAD, 0.098 DIA, 1-1/4" LONG, ANG-RINGED, 5d COOLER NAIL, 0.086 DIA, 1-5/8" LONG, 15/64" HEAD OR GYP BD NAIL, 0.085 DIA, 1-5/8" LONG, 19/64" HEAD																		
INTERIOR WALL COVERING	1/2" GYPSUM SHEATHING	6d COMMON NAILS: 1-5/8" GALVANIZED STAPLES, 1-1/4" SCREWS, TYPE W OR S - AT 4" OC EDGES AND 8" OC IN FIELD																		
EXTERIOR WALL SHEATHING	MIN 5/16" APA RATED SHEATHING	8d COMMON NAILS AT 6" OC EDGES AND 12" OC IN FIELD																		
CONVENTIONAL WOOD FRAMED WALLS	*SUPPORTING 2 FLOORS, ROOF AND CEILING OR LESS, "HEIGHT:10'-0" OR LESS SIZE: NOM 2x4 (NOM 2x6 WHEN SUPPORTING 2 FLOORS, CEILING AND ROOF.) *SPECIES: DOUG-FIR, HEM-FIR, SOUTH PINE, SPRUCE-PINE-FIR *MAXIMUM SPACING 16" OC *GRADE #3, STANDARD, OR STUD GRADE	<table style="width: 100%; border: none;"> <tr> <td style="width: 33%;">*TOENAIL RIM JOIST TO SILL OR TOP PLATE</td> <td style="width: 33%;">*8d COMMON AT 6" OC 3"x0.131" AT 6" OC 3-1/4" x 0.120" AT 6" O, 3"x0.120 AT 4" OC,</td> <td style="width: 33%;">(4) 8d COMMON, (4) 3"x 0.131", (4) 3"x0.120",</td> </tr> <tr> <td>*TOENAIL STUD TO TOP AND SOLE PLATE</td> <td>(2) 16d COMMON AT 24" OC (3) 3"x0.131" AT 8" OC, (3) 3"x0.120" AT 8" OC WITH (2)</td> <td>*FACE NAIL BUILT-UP CORNER STUDS AT BRACED WALL PANELS</td> </tr> <tr> <td>*FACE NAIL BUILT-UP CORNER STUDS AT BRACED WALL PANELS</td> <td>2" x 0.131" AT 16" OC, 3"x0.120" AT 12" OC</td> <td></td> </tr> <tr> <td>FACE NAIL JACK STUDS/TRIMMERS SUPPORTING HEADERS WITH FACE NAIL DBL TOP PLATE</td> <td>10d NAILS AT 6" OC 16d COMMON NAILS AT 16"OC, 3"x0.131" AT 12" OC, 3"x0.120" AT 12" OC</td> <td></td> </tr> <tr> <td>DBL TOP PLATES WITH MIN 4" OFFSET OF EACH FACE MWL LAPPED AREA WITH FACE NAIL DBL TOP PLATES AT LAPPED CORNERS AND INTERSECTIONS WITH FACE NAIL SOLE PLATE TO FRAMING SYSTEM</td> <td>(6) 16d COMMON (12) 3"x0.131", (12) 3"x0.120". (2) 16d COMMON, (3) 3"x0.131", (3) 3"x0.120"</td> <td></td> </tr> <tr> <td>TOENAIL BRIDGING TO JOIST EACH END FACE NAIL LEDGER STRIPS SUPPORTING JOIST OR RAFTERS</td> <td>16d COMMON AT 16" OC, 3"x0.131" AT 8" OC 3"x0.120" AT 8" OC (2) 8d COMMON, (2) 3"x0.131" (3) 3"x0.120" (3) 16d COMMON, (4) 3"x0.131", (4) 3"x0.120"</td> <td></td> </tr> </table>	*TOENAIL RIM JOIST TO SILL OR TOP PLATE	*8d COMMON AT 6" OC 3"x0.131" AT 6" OC 3-1/4" x 0.120" AT 6" O, 3"x0.120 AT 4" OC,	(4) 8d COMMON, (4) 3"x 0.131", (4) 3"x0.120",	*TOENAIL STUD TO TOP AND SOLE PLATE	(2) 16d COMMON AT 24" OC (3) 3"x0.131" AT 8" OC, (3) 3"x0.120" AT 8" OC WITH (2)	*FACE NAIL BUILT-UP CORNER STUDS AT BRACED WALL PANELS	*FACE NAIL BUILT-UP CORNER STUDS AT BRACED WALL PANELS	2" x 0.131" AT 16" OC, 3"x0.120" AT 12" OC		FACE NAIL JACK STUDS/TRIMMERS SUPPORTING HEADERS WITH FACE NAIL DBL TOP PLATE	10d NAILS AT 6" OC 16d COMMON NAILS AT 16"OC, 3"x0.131" AT 12" OC, 3"x0.120" AT 12" OC		DBL TOP PLATES WITH MIN 4" OFFSET OF EACH FACE MWL LAPPED AREA WITH FACE NAIL DBL TOP PLATES AT LAPPED CORNERS AND INTERSECTIONS WITH FACE NAIL SOLE PLATE TO FRAMING SYSTEM	(6) 16d COMMON (12) 3"x0.131", (12) 3"x0.120". (2) 16d COMMON, (3) 3"x0.131", (3) 3"x0.120"		TOENAIL BRIDGING TO JOIST EACH END FACE NAIL LEDGER STRIPS SUPPORTING JOIST OR RAFTERS	16d COMMON AT 16" OC, 3"x0.131" AT 8" OC 3"x0.120" AT 8" OC (2) 8d COMMON, (2) 3"x0.131" (3) 3"x0.120" (3) 16d COMMON, (4) 3"x0.131", (4) 3"x0.120"	
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CONVENTIONAL WOOD HEADER FRAMING	PER PLAN	TOENAIL HDRS TO WALL STUDS WITH (4) 8d NAILS AT EACH END. FACE NAIL DOUBLE PIECE HEADERS WITH 1/2" SPACERS WITH 16d COMMON NAILS AT 16" OC CENTERS ALONG EACH EDGE. IF NO 1/2" SPACER, NAIL WITH 3"x0.131 NAILS AT 12" CENTERS EACH EDGE, OR 3"x0.120" NAILS AT 8" CENTERS EACH EDGE																		
RAFTER TIES	MIN 2x4 MEMBERS AT EACH RAFTER	REFERENCE TABLE R802.5.1 (9)																		
COLLAR TIES	MIN 1X4 MEMBERS AT 48" OC	FACE NAIL TO RAFTERS IN UPPER 1/3 OF EACH ATTIC SPACE WITH (3) 10d NAILS AT EACH																		

NOTE:
 1. ALL SHEATHING MATERIALS TO BE APPLIED PERPENDICULAR TO JOIST AND ENDS STAGGERED.
 2. RAFTER TIES SHALL NOT BE REQUIRED WHEN A STRUCTURAL RIDGE HAS BEEN PROVIDED AND ADEQUATELY DESIGNED (AS IN A FULLY VAULTED ROOM). SUCH SHALL BE NOTED AS "STRUCTURAL" ON THE PLAN

JOIST HANGER SCHEDULE

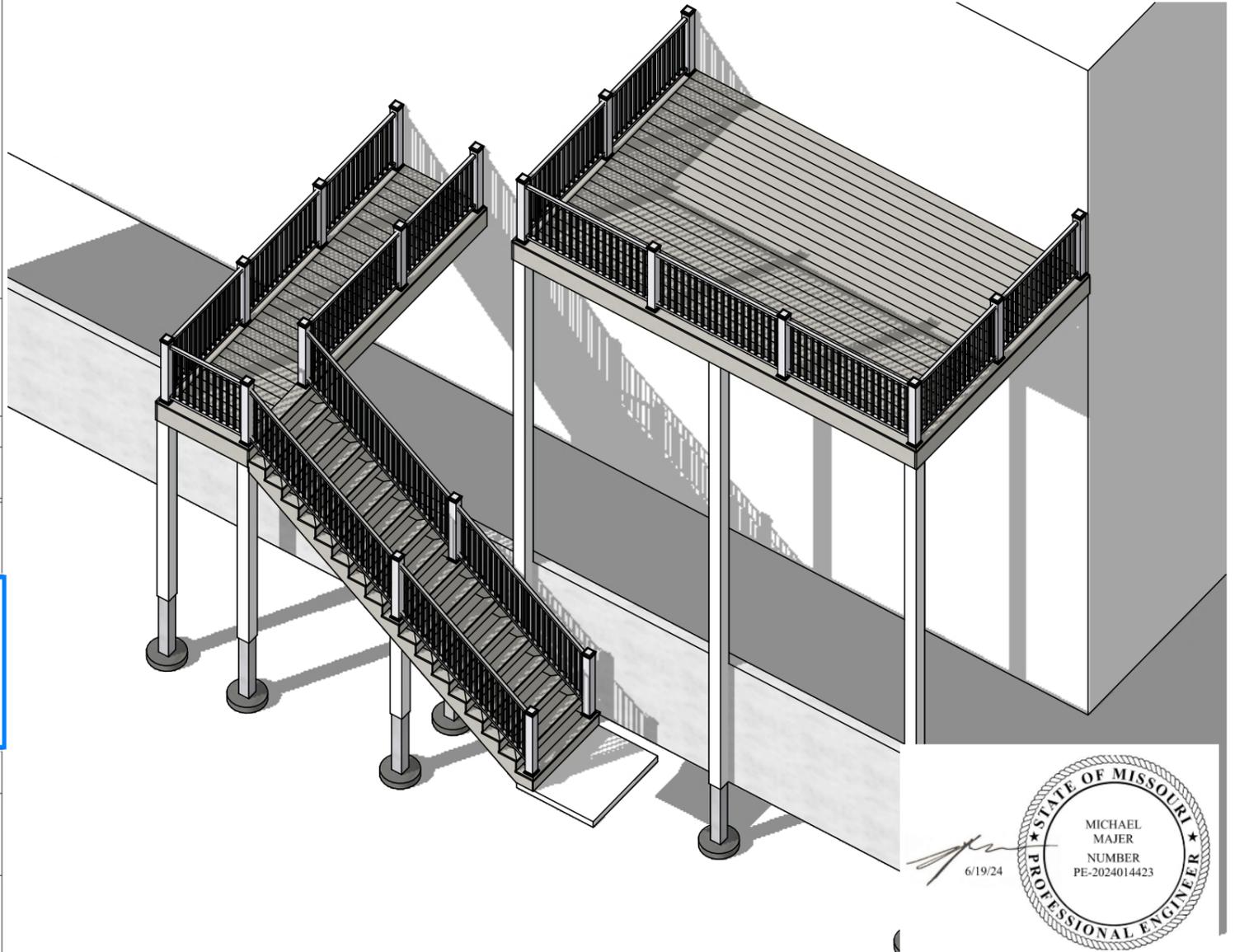
JOIST	HANGER	FASTENERS		CONCEALED HANGER	FASTENERS	
		HEADER	JOIST		HEADER	JOIST
2x8	LUS26	(4) SD9112 SCREWS	(4) 0.148"x3" NAILS	LUC26Z	(6) SD9112 SCREWS	(4) 0.148"x1 1/2" NAILS
2x10	LUS28	(6) SD9112 SCREWS	(4) 0.148"x3" NAILS	LUC210Z	(10) SD9112 SCREWS	(6) 0.148"x1 1/2" NAILS
2x12	LUS210	(8) SD9112 SCREWS	(4) 0.148"x3" NAILS	LUC210Z	(10) SD9112 SCREWS	(6) 0.148"x1 1/2" NAILS

BRACED WALL PANELS PERP TO FRAMING MEMBERS ABOVE/ BELOW PARALLEL TO FRAMING MEMBERS ABOVE/ BELOW	TO FRAMING MEMBER	SOLE PL, 16" OC WITH (3) 16d COMMON, (4) 3"x0.131", (4) 3"x0.120" TOP PL, 6" OC WITH 8d COMMON, 3"x0.131"
	TO FRAMING AND BLOCKING AT 16" OC	SOLE PL, 16" OC WITH (3) 16d COMMON, (4) 3"x0.131", (4) 3"x0.120" AND AT EACH BLOCK, (3) 16d COMMON, (4) 3"x0.131", (4) 3"x0.120" TOP PL, 6" OC WITH 8d COMMON, 3"x0.131" AND AT EACH BLOCK, (3) 8d COMMON, 3"x0.131"

NOTE:
 1. MEMBER THICKNESS AND FASTENING LISTED IN THIS SCHEDULE ARE MINIMUM IRC REQUIREMENTS. SPECIFIC PROJECT REQUIREMENTS NOTED WITHIN THE STRUCTURAL OR ARCHITECTURAL DRAWINGS, IF REQUIRED BY CATON ARCHITECTURAL DESIGN NEEDING TO BE MORE STRINGENT, SHALL BE FOLLOWED.

NOTE:

- 1/ DESIGN BASED ON IRC 2018, 40 PSF LIVE LOAD, 20 PSF SNOW LOAD AND 10 PSF DEAD LOAD, 90 MPH WIND SPEED, EXP C.
- 2/ FOOTING DESIGN BASED ON 12000 PSF SOIL BEARING VALUE.
- 3/ POST ATTACHED TO FOOTER USING ALUM METAL POST BASE.
- 4/ LOWER DECK HEIGHT ABOVE GRADE IS 11'5".
- 5/ UPPER DECK HEIGHT ABOVE GRADE IS 26'.
- 6/ SP#2 OR HIGHER GRADE FRAMING FOR EXTERIOR DECK.
- 7/ HSS 5x5x1/4 STEEL POST, 6x6 WOOD POST
- 8/ 2X BLOCKING SHALL BE PLACED AT MIDSPAN OF EACH BAY FOR SPANS GREATER THAN 10' AND ALSO OVER DROP BEAM.



6/19/24

STATE OF MISSOURI

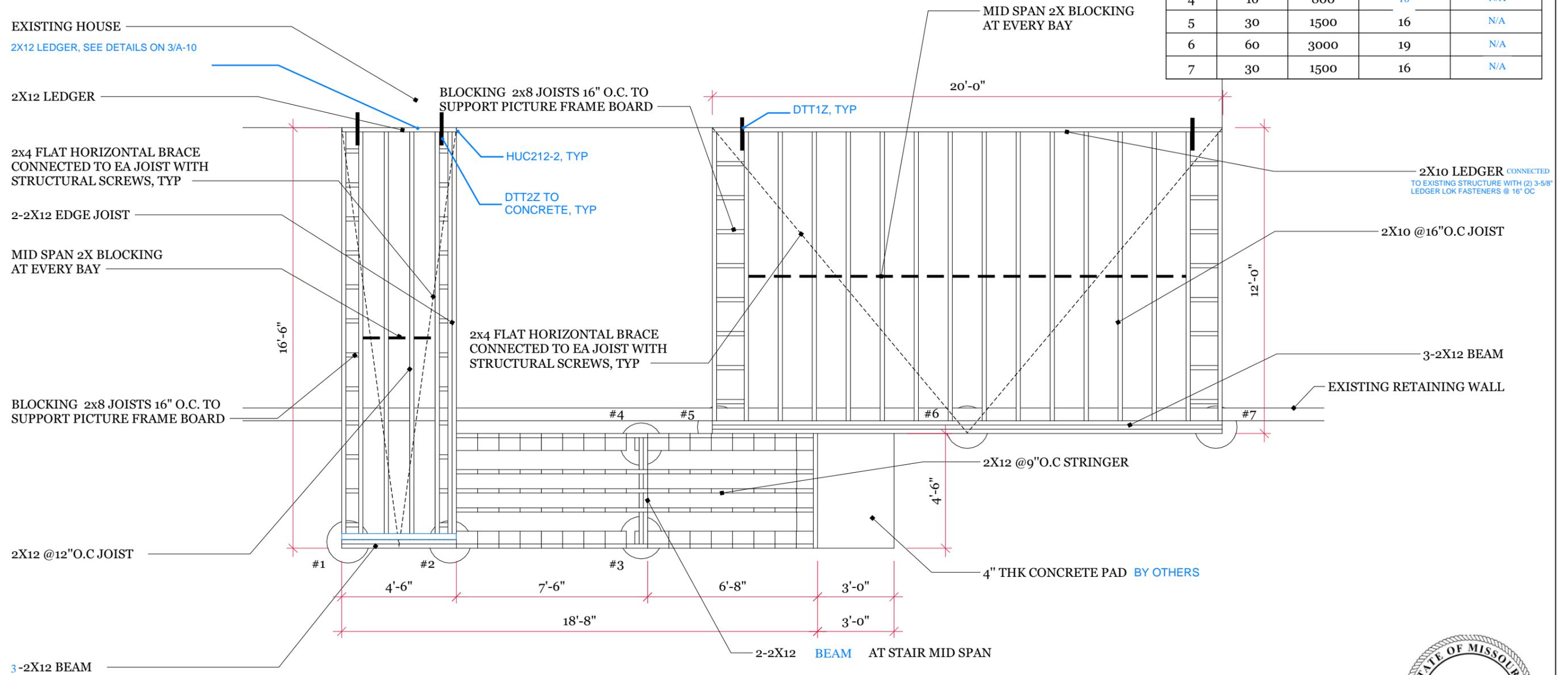
MICHAEL MAJER
NUMBER
PE-2024014423

PROFESSIONAL ENGINEER

<p style="text-align: center;">CUSTOMER: DON MEEK LOCATION: 5286 NE Ash Grove Ct, Lee's Summit, Mo 64064</p>	<p>REVISIONS</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>MM/DD/YY</th> <th>REMARKS</th> </tr> </thead> <tbody> <tr> <td>6 / 20 / 2024</td> <td>PERMIT/CONSTRUCTION</td> </tr> <tr> <td> </td> <td> </td> </tr> </tbody> </table>	MM/DD/YY	REMARKS	6 / 20 / 2024	PERMIT/CONSTRUCTION									<p style="font-size: 2em; font-weight: bold;">A 01</p>
MM/DD/YY	REMARKS													
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PERMA/TRADITIONAL
CONCRETE FOOTING SCHEDULE

#Pier	Area Tributary (sq.ft)	Load (lbs)	Traditional concrete footing diameter (in)	Composite footing pad diameter (in)
1	19	950	16	N/A
2	27	1350	16	N/A
3	16	800	12	10
4	16	800	16	N/A
5	30	1500	16	N/A
6	60	3000	19	N/A
7	30	1500	16	N/A



1 FOOTING AND FRAMING PLAN
SCALE: 1/4" = 1'



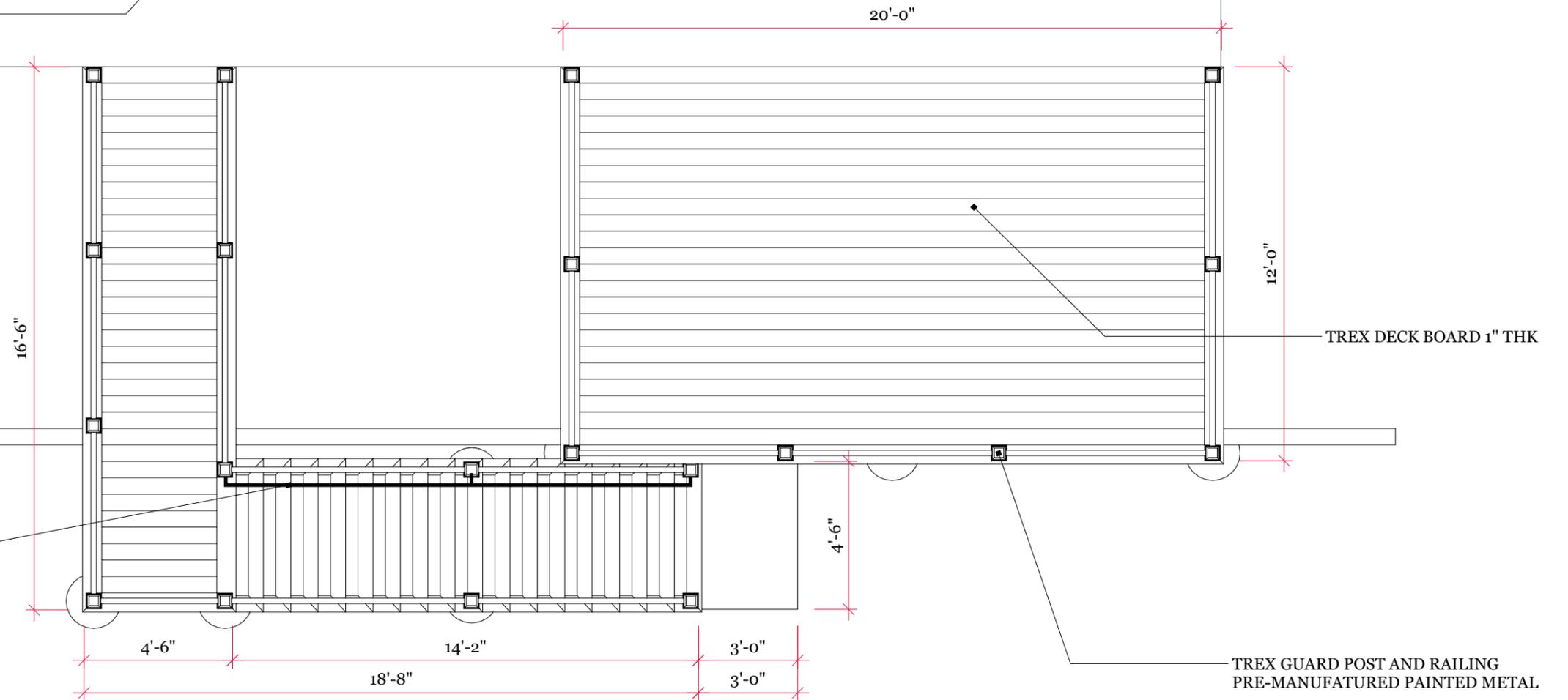
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A 02

EXISTING HOUSE

ADA HANDRAIL



1 DECK AND RAILING PLAN
SCALE: 1/4" = 1'

TREX DECK BOARD 1" THK
TREX GUARD POST AND RAILING
PRE-MANUFACTURED PAINTED METAL

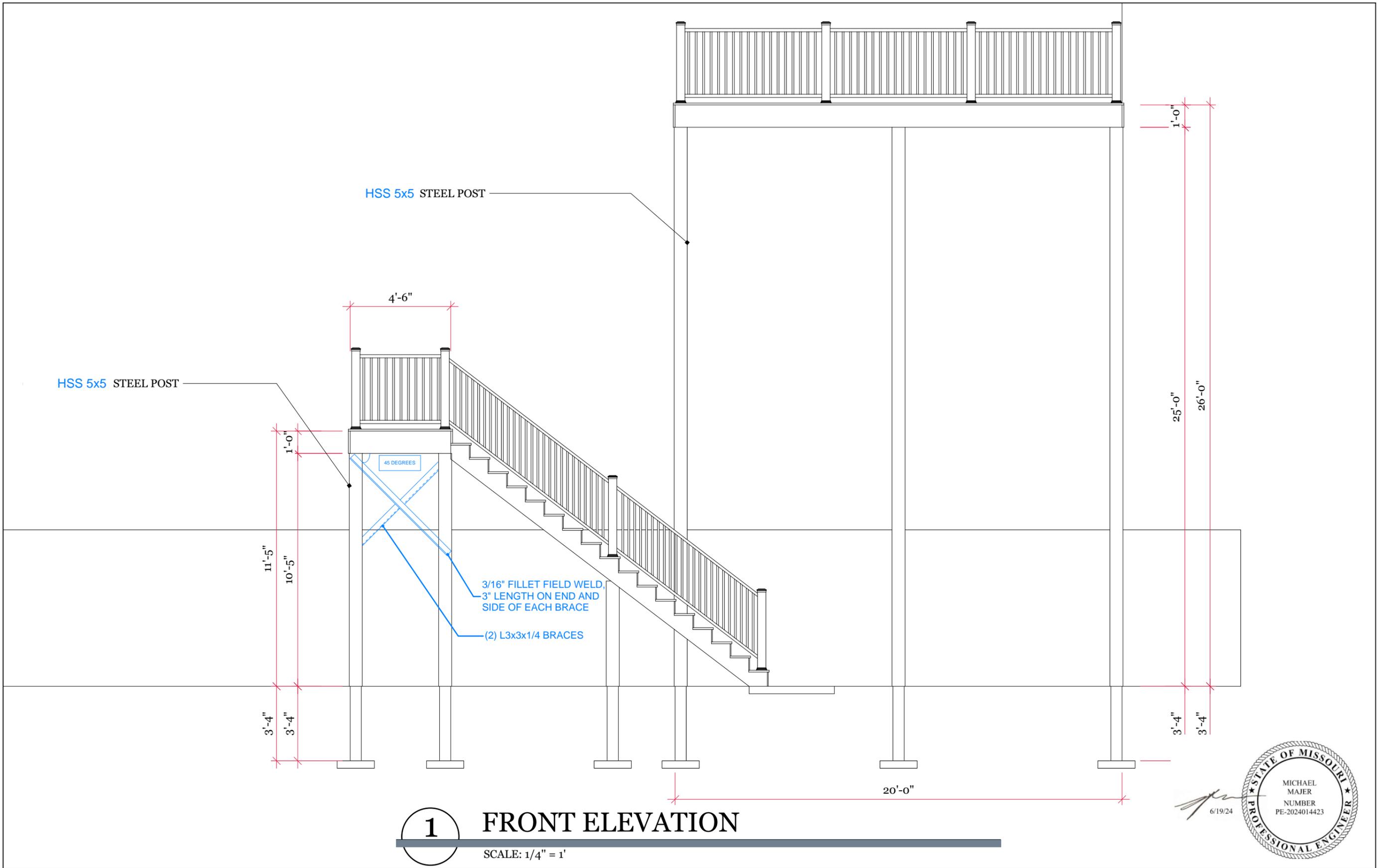
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1 FRONT ELEVATION
 SCALE: 1/4" = 1'

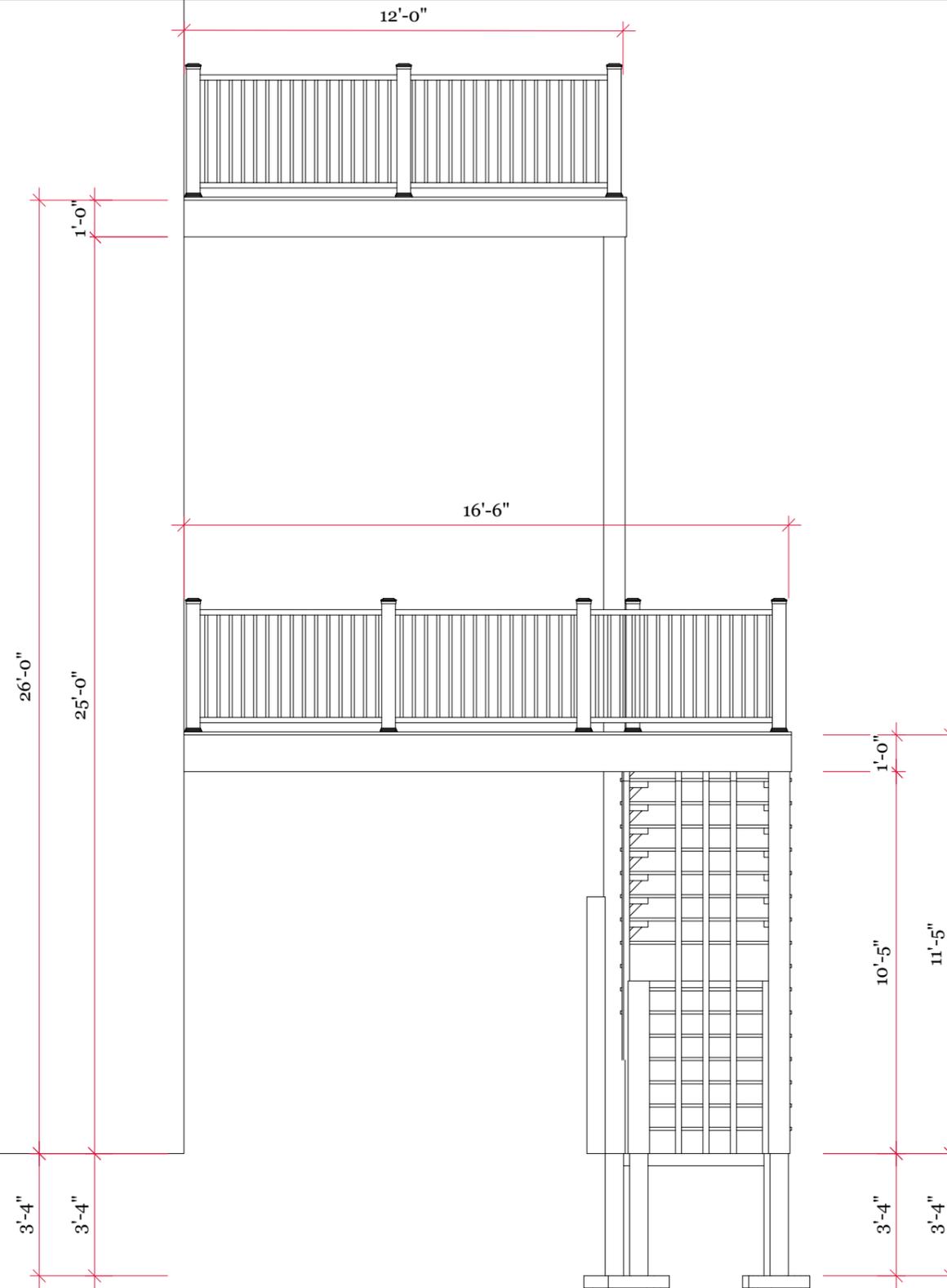
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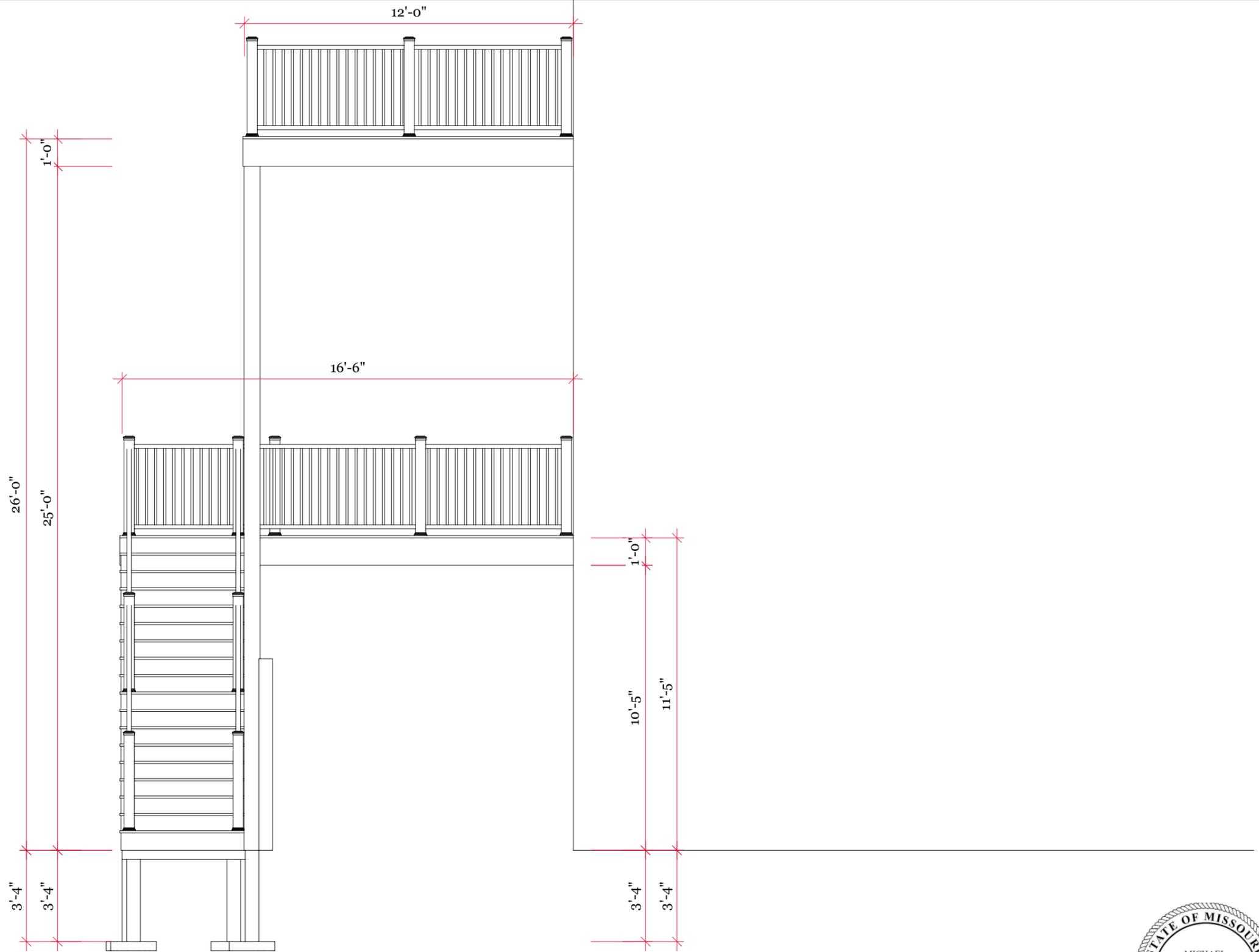


1 LEFT ELEVATION
SCALE: 1/4" = 1'

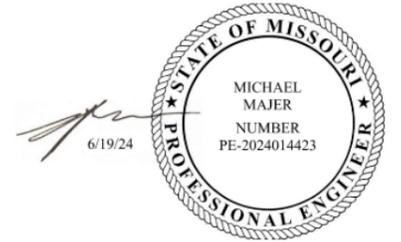


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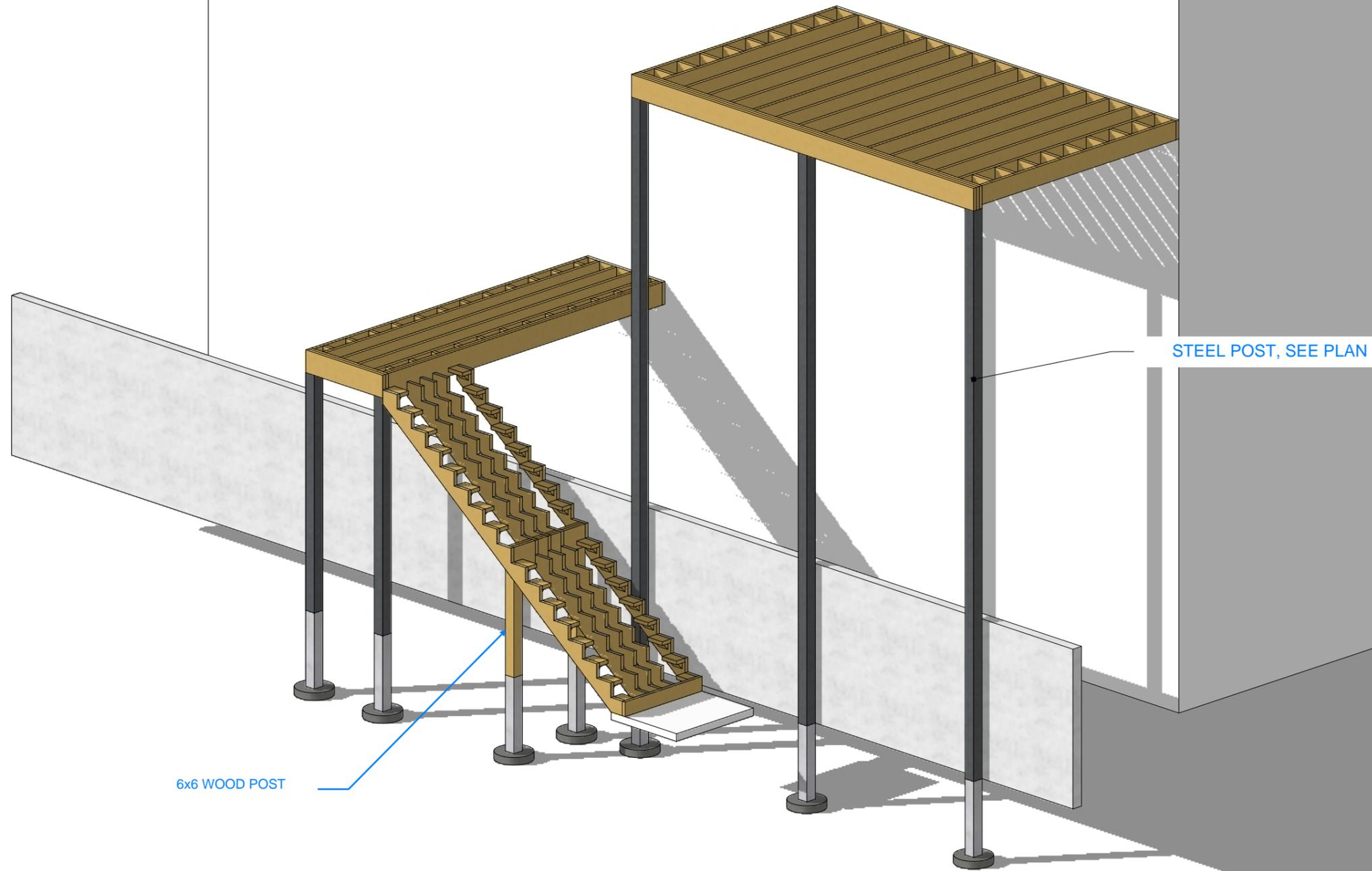
1 RIGHT ELEVATION
SCALE: 1/4" = 1'



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1 3D DECK FRAMING

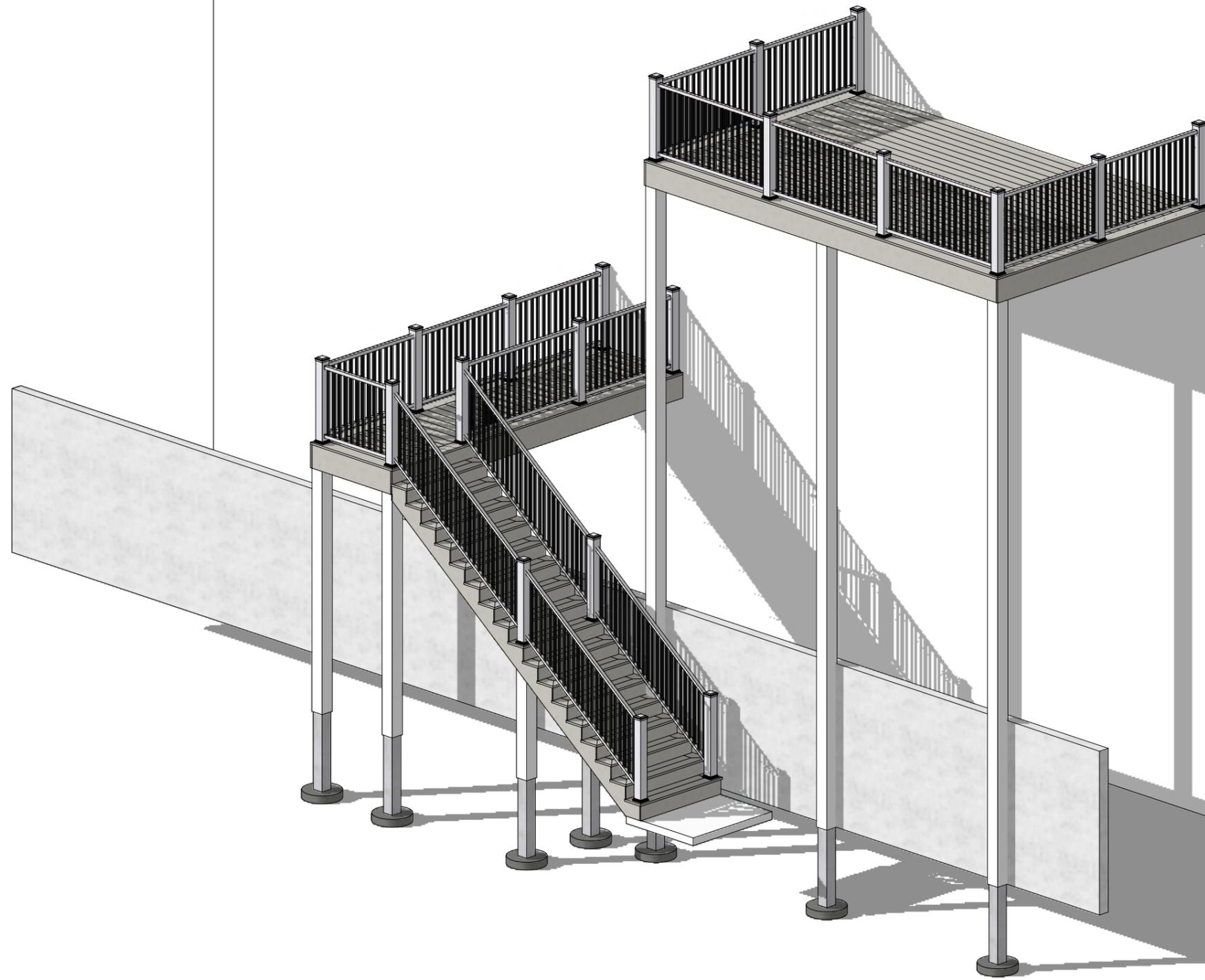
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1 3D DECK AND RAILING

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STRUCTURAL NOTES

1. SCOPE:

THIS SPECIFICATION OUTLINES THE STRUCTURAL DESIGN CRITERIA FOR REPLACEMENT DECK. WHEN A DIFFERENCE OCCURS BETWEEN THIS SPECIFICATION AND OTHER APPLICABLE CODE, THE MORE STRINGENT SHALL CONTROL. ANY OTHER ITEMS NOT COVERED HEREIN SHALL BE COMMENSURATE WITH GOOD ENGINEERING PRACTICE.

ENGINEERING SEAL ON THESE DRAWINGS APPLIES TO STRUCTURAL ENGINEERING ITEMS ONLY. ENGINEERING SEAL DOES NOT APPLY TO ANY ARCHITECTURAL, SITE, WATERPROOFING, SETBACK, AND OTHER NON-STRUCTURAL INFORMATION INDICATED ON THESE DRAWINGS.

IN THE EVENT GENERAL NOTES SHEET CONFLICTS WITH OTHER SHEETS OF THE STRUCTURAL DRAWINGS, OTHER SHEETS TAKE PRECEDENCE.

2. FOUNDATION:

ASSUMED ALLOWABLE SOIL BEARING PRESSURE = 12000 PSF CONTRACTORS MUST VERIFY EXISTING BED ROCK WITHIN 40 INCHES OF EXISTING GRADE. NOTIFY ENGINEER OF RECORD FOR REDESIGN IF FOOTINGS CANNOT BE POURED DIRECTLY ON BED ROCK.

SELECT FILL CONSISTS OF 95% CLEAN, HARD, TOUGH, DURABLE AND SOUND MINERAL AGGREGATES E.G. CRUSHED STONE, GRAVEL OR SLAG FREE FROM DELETERIOUS AND ORGANIC MATTER.

WHERE NON-FROST SUSCEPTIBLE FILL IS SPECIFIED, PROVIDE FILL MATERIAL WITH LESS THAN 6% OF MASS PASSING A #200 (0.074MM) MESH SIEVE IN ACCORDANCE WITH ASTM D422 OR OTHER APPROVED NON-FROST- SUSCEPTIBLE MATERIALS.

GRADE SITE SURFACE TO MOVE WATER OFF SITE WITH AT LEAST 5% SLOPE AND AVOID STANDING WATER. INSTALL DRAINS OR SWALES AS NEEDED TO ENSURE DRAINAGE. DISCHARGE ROOF RUNOFF AWAY FROM FOUNDATIONS. PROPER GRADING SHALL BE PROVIDED DURING CONSTRUCTION AS WELL AS THROUGHOUT THE LIFE OF THE STRUCTURE TO AVOID EROSION OF FOUNDATIONS.

DECK POST IS MANUFACTURED BY PERMA-COLUMN LLC. FABRICATION AND INSTALLATION OF DECK POST MUST COMPLY WITH ESR 4237, PROJECT NUMBER-E342-18 (PERMA-COLUMN DECK POST DESIGN MANUAL).

FOOTING PAD IS MANUFACTURED BY AG-CO PRODUCTS, INC. FABRICATION AND INSTALLATION OF FOOTING PAD MUST COMPLY WITH ESR 2147, E342-18.

PERMA CAPACITIES WERE NOT DETERMINED BY DEKAT ENGINEERING LLC (DE) SEE TABLES 1, TABLE 2 FROM ESR 2147. VERIFICATION OF CAPACITIES LISTED IN ESR 2147 IS THE RESPONSIBILITY OF PERMA-COLUMN LLC.

AG-CO FOOTING PAD CAPACITIES WERE NOT DETERMINED BY DE. SEE TABLE 1, ESR 2147. VERIFICATION OF CAPACITIES LISTED IN ESR 2147 IS THE RESPONSIBILITY OF AG-CO PRODUCTS, INC.

PERMA-COLUMN DECK POST DESIGN MANUAL SPECIFIES CONNECTIONS OF PERMA-COLUMNS TO AG CO FOOTINGS BY STATING THE FOLLOWING IN PERMA-COLUMN DECK POST DESIGN MANUAL BY DIMITRY REZNIK OF TIMBERTECH ENGINEERING IN PROJECT NUMBER E342-18: PERMA COLUMN STATES ALL PERMA-COLUMN DECK POST MODELS CAN BE INSTALLED ON AG-CO 10 INCH OR 16 INCH MOLDED PLASTIC FOOTING PADS MANUFACTURED BY AG-CO PRODUCTS, INC., SEE E342-18. THE INTERNAL STEEL COMPONENTS AT THE BOTTOM OF THE PERMA-COLUMN DECK POST FOR THIS OPTION ARE DIFFERENT FROM THE STANDARD MODELS AND MAY NOT BE AVAILABLE IN SOME REGIONS. SPECIFICALLY, THE 1/2" PST, DESCRIBED IN SECTION 2 OF E342-18, IS THREADED ON THE INSIDE AND PLACED VERTICALLY. THE VERTICAL TUBE EXTENDS FROM THE BOTTOM FACE OF THE CONCRETE COLUMN TO VERTICAL REBAR WHERE IT IS WELDED WITH 1/4" FILLET WELD ALL AROUND. THE AG-CO MOLDED PLASTIC FOOTING PAD IS FASTENED TO THE VERTICAL THREADED PIPE OF THE PERMA-COLUMN DECK POST VIA ONE 1/2"X12" AND 1/2"X21/2" GRADE 5 BOLT FOR 10 INCH AND 16 INCH FOOTING PAD MODELS RESPECTIVELY. THE BOLT IS INSTALLED WITH A 2" DIAMETER X 1/8" FLAT WASHER ON THE BOTTOM FACE OF THE FOOTINGPAD. A MORE THOROUGH DESCRIPTION OF THIS PRODUCT AND INSTALLATION REQUIREMENTS ARE PROVIDED BY ESR- 2147 REPORT BY ICC-ES AND GEE111711-10 REPORT BY NTA, INC. ENGINEERING OF THE PERMA-COLUMN TO AG CO FOOTING IS THE RESPONSIBILITY OF PERMA-COLUMN LLC, NOT DE.

ACCORDING TO GEE111711-10 BY NTA, INC, THE ULTIMATE UPLIFT STRENGTH OF THE 10 INCH AND 16 INCH AG-CO MOLDED PLASTIC FOOTING PAD IS 908 LB AND 1315 LB, RESPECTIVELY, GOVERNED BY THE BOLT-HEAD-PULL-THROUGH TEST. WITH THE SAFETY FACTOR OF 3, THE RECOMMENDED ALLOWABLE UPLIFT STRENGTH (ASD) OF THE 10 INCH AND 16 INCH FOOTING PAD IS 300 LB AND 430 LB, RESPECTIVELY. THE RECOMMENDED DESIGN UPLIFT STRENGTH (LRFD) IS 420 LB AND 600 LB, RESPECTIVELY (LRFD = ASD X 1.4). THE UPLIFT STRENGTH OF THE FOOTINGPAD CONTROLS THE DESIGN. THE UPLIFT STRENGTH OF THE FOUNDATION (SOIL) IS GREATER THAN THE UPLIFT STRENGTH OF THE AG-CO MOLDED PLASTIC FOOTINGPAD. HOWEVER, SOIL PROPERTIES VARY AND MAY BE LESS FAVORABLE THAN WHAT IS ASSUMED IN E342-18 IN SECTION 6. IF THE PROPERTIES OF THE SOIL IN SECTION 6 OF E342-18 ARE NOT VERIFIED BY CONSTRUCTION TESTING, THE UPLIFT STRENGTH OF THE FOUNDATION (SOIL) WILL CONTROL THE FOUNDATION DESIGN WITH 30 INCH DECK POST MODELS. THE ANALYSIS AND DESIGN OF THE FOUNDATION (SOIL) IS THE RESPONSIBILITY OF PERMA-COLUMN LLC. DE IS RESPONSIBLE ONLY FOR SELECTING THE CORRECT ALLOWABLE UPLIFT BASED ON THE FOOTINGPAD SIZE. THE ALLOWABLE VERTICAL BEARING STRENGTH OF THE FOOTINGPAD IS PROVIDED IN TABLE 1 OF ESR-2147 REPORT. THE ASD VALUES PROVIDED IN ESR-2147 TO LRFD USING THE FOLLOWING RELATIONSHIP: LRFD = ASD X 1.4. THE ALLOWABLE LATERAL STRENGTH FOR THE DECK POST AND THE FOUNDATION (SOIL) IS PROVIDED IN TABLES 7.1 AND 7.3 IN E342-18. INSTALLATION OF A CONCRETE COLLAR ABOVE THE FOOTINGPAD IS NOT PERMITTED FOR REASONS DESCRIBED IN THE FOUNDATION DESIGN SECTION OF E342-18. THE BOTTOM OF THE MOLDED PLASTIC FOOTINGPAD MUST BE LOCATED BELOW THE FROST DEPTH LINE AS DETERMINED BY THE LOCAL AUTHORITIES. PERMA-COLUMN LLC IS RESPONSIBLE FOR GUARANTEEING THE CAPACITIES STATED IN THEIR LITERATURE. DE IS RESPONSIBLE FOR GUARANTEEING THE DEMAND DOES NOT EXCEED THE CAPACITIES STATED IN PERMA-COLUMN LLC LITERATURE.

3. NEW CONCRETE:

ALL STRUCTURAL CONCRETE MEMBERS AND SLAB ON GRADE CONFORM TO ACI 301 AND ASTM C150 TYPE 1 PORTLAND CEMENT OR ASTM C595 TYPE IL BLENDED HYDRAULIC CEMENT. 2500 PSI MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS AGGREGATES PER ASTM C33 AND 3/4" MAXIMUM SIZE 0.45 MAXIMUM WATER CEMENT RATIO FOR SLABS ON GRADE 0.55 MAXIMUM WATER CEMENT RATIO FOR FOUNDATIONS DESIGN MIX FOR F2, S3, W1, C1

4. NEW WOOD FRAMING:

CUTS, NOTCHES, AND DRILLED HOLES IN STRUCTURAL MEMBERS ARE NOT PERMITTED UNLESS NOTED OTHERWISE. CUTS, NOTCHES, AND DRILLED HOLES OF PRESERVATIVE TREATED WOOD MEMBERS SHALL BE TREATED IN ACCORDANCE WITH IRC R317.1.1 AND AWPA M4.

ALL EXPOSED WOOD MUST BE TREATED TO COMPLY WITH ITS USE CATEGORY, SEE AWPA TABLE. WHERE PROPRIETARY ENGINEERED MEMBERS OCCUR, PRESERVATIVE TREATMENT DESIGNED BY SUPPLIER.

NEW WOOD FRAMING MUST BE INSTALLED DRY AND KEPT DRY THROUGHOUT CONSTRUCTION. MAXIMUM MOISTURE CONTENT 19%.

DROP BEAMS MUST BE SPLICED AT INTERIOR SUPPORTS. DO NOT RUN DROP BEAMS CONTINUOUS OVER SUPPORTS.

ALL CONNECTION HARDWARE IS SIMPSON UNLESS NOTED OTHERWISE. WHERE SIMPSON PROVIDES CHOICE OF FASTENINGS, ALWAYS PROVIDE MAX FASTENING.

EQUIVALENT HARDWARE FROM ALTERNATE MANUFACTURERS IS ACCEPTABLE. COMPLY WITH MANUFACTURER'S INSTRUCTIONS. FLANGES OF HANGERS MUST BE FASTENED WITH SCREWS, NOT NAILS. WHERE MANUFACTURER SPECIFIES NAILS IN SUPPORTING MEMBERS, SUBSTITUTE EQUIVALENT SIZE SCREWS.

ALL EXPOSED FASTENERS AND HARDWARE MUST BE GALVANIZED OR OTHERWISE RATED FOR EXTERIOR USE. ALL FASTENERS AND HARDWARE IN CONTACT WITH GROUND MUST BE STAINLESS STEEL.

ALL NAILS ARE ASTM F1667 COMMON NAILS.

ALL SCREWS ARE ASME B18.6.1 OR EQ.



 CUSTOMER: DON MEEK LOCATION: 5286 NE Ash Grove Ct, Lee's Summit, Mo 64064	REVISIONS	
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STRUCTURAL NOTES

6. EXISTING FRAMING & RETAINING WALL:

FIELD VERIFICATION OF THE FOLLOWING EXISTING FRAMING IS NOT REQUIRED UNLESS NOTED ON PLANS, DETAILS, OR OTHER SHEETS OF THIS DRAWING SET OUTSIDE OF THE GENERAL NOTES SHEET. WHERE FIELD VERIFICATION IS REQUIRED, THE EXISTING FRAMING MUST MEET OR EXCEED THE FOLLOWING:

ALL EXISTING WOOD IS SOUTHERN PINE STUD GRADE OR BETTER.

EXISTING STUD WALLS ARE 2x4 SPACED AT MOST 16" OC WITH DOUBLE TOP PLATE AND SINGLE BOTTOM PLATE, FASTENED PER S0.2, MAXIMUM WALL PANEL HEIGHT 9'-0".

EXISTING WALL SHEATHING IS CONTINUOUS 7/16" APA RATED PANEL WITH 6d NAILS OR LARGER AT 6" OC EDGE 12" OC FIELD OR TIGHTER.

EXISTING FLOOR JOISTS ARE NOMINAL 2" THICK LUMBER AT 24" OC MAX SPACING WITH NOMINAL 2" THICK RIM JOIST.

EXISTING FRAMING FASTENERS COMPLY WITH FASTENING SCHEDULE SHEET.

FIELD VERIFICATION OF THE EXISTING RETAINING WALL IS REQUIRED AND MUST MEET OR EXCEED FOLLOWING CONDITIONS ALONG WITH THE CONDITIONS NOTED ON PLANS, DETAILS, OR OTHER SHEETS OF THIS DRAWING SET.

CONCRETE RETAINING STEM WALL IS MIN 8" THICK w/ #6 VERTICAL @ 12" OC AND #4 HORIZONTAL @ 12" OC AT SOIL FACE w/ 2-1/2" CLEAR COVER. BOTTOM OF EXISTING CONCRETE FOOTING IS 40 INCHES BELOW GRADE. ASSUMED HEIGHT OF UNBALANCED BACKFILL IS 7 FT. RETAINED SOIL ASSUMED TO BE SILTY CLAY.

CONCRETE FOOTING IS 16" THICK AND 5'-6" WIDE w/ #6 REBAR @ 12" OC TRANSVERSE AND #4 TEMPERATURE AND SHRINKAGE REINFORCEMENT @ 12" OC LONGITUDINAL w/ 2-1/2" CLEAR COVER AT BOTH TOP AND BOTTOM.

ASSUMED ACTIVE SOIL PRESSURE = 45 PSF/FT & ASSUMED PASSIVE SOIL PRESSURE = 100 PSF/FT, VERIFY WITH EXISTING GEOTECHNICAL REPORT. ASSUMED SOIL FRICTION FOR BEDROCK = 0.7

IF EXISTING CONDITIONS VARY FROM THOSE INDICATED, CONTACT STRUCTURAL ENGINEER OF RECORD FOR REDESIGN.

7. MISCELLANEOUS:

CONTRACTOR TO FIELD VERIFY ALL DIMENSIONS SHOWN ON THESE DRAWINGS BEFORE BEGINNING CONSTRUCTION. LOCATE EXISTING UTILITIES AND NOTIFY PROJECT ARCHITECT OF UTILITIES OR SUBGRADE CONDITIONS WHICH INTERFERE WITH SCOPE OF WORK. DO NOT SCALE DRAWINGS.

THE STRUCTURE IS DESIGNED TO FUNCTION AS A UNIT UPON COMPLETION. STRUCTURAL DRAWINGS REPRESENT THE FINISHED STRUCTURE. THEY DO NOT INDICATE THE MEANS OR METHOD OF CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE ALL TEMPORARY MEASURES NECESSARY TO PROTECT THE STRUCTURE DURING CONSTRUCTION. SUCH TEMPORARY MEASURES MAY INCLUDE, BUT ARE NOT LIMITED TO BRACING, SHORING, FORMWORK, WORKER SAFETY, AND PROTECTION OF ON SITE ITEMS FROM WEATHER CONDITIONS AND ENVIRONMENTAL FACTORS.

STRUCTURAL DRAWINGS ARE INTENDED TO BE USED WITH ARCHITECTURAL AND OTHER DISCIPLINES' DRAWINGS FOR ADDITIONAL INFORMATION RELATING TO THE STRUCTURE. CONTRACTOR IS RESPONSIBLE FOR COORDINATING SUCH REQUIREMENTS INTO THEIR SHOP DRAWINGS AND WORK.

SERVICE CONDITON FOR USE CATEGORIES (AWPA 2020 BOOK OF STANDARDS, TABLE 2-1)			
USE CATEGORY	SERVICE CONDITIONS	USE ENVIRONMENT	TYPICAL APPLICATIONS
UC1 INTERIOR, DRY	INTERIOR CONSTRUCTION ABOVE GROUND, DRY	CONTINUOUSLY PROTECTED FROM WEATHER OR OTHER SOURCES OF MOISTURE	INTERIOR CONSTRUCTION AND FURNISHING
UC2 INTERIOR, DAMP	INTERIOR CONSTRUCTION ABOVE GROUND, DAMP	PROTECTED FROM WEATHER, BUT MAY BE SUBJECT TO SOURCES OF MOISTURE	INTERIOR CONSTRUCTION, SILL PLATES
UC3A ABOVE GROUND, PROTECTED	EXTERIOR CONSTRUCTION ABOVE GROUND COATED & RAPID WATER RUNOF	EXPOSED TO ALL WEATHER CYCLES, INCLUDING INTERMITTENT WETTING	COATED MILLWORK, SIDING, TRIM
UC3B ABOVE GROUND, EXPOSED (COMMODITY SPECIFICATION A ONLY)	GROUND CONTACT OR FRESH WATER NON-CRITICAL COMPONENTS (INCLUDES ABOVE GROUND APPLICATIONS WITH GROUND CONTACT TYPE HAZARDS OR THAT ARE CRITICAL OR HARD TO REPLACE)	EXPOSED TO ALL WEATHER CYCLES INCLUDING INTERMITTENT WETTING BUT WITH SUFFICIENT AIR CIRCULATION SO WOOD CAN READILY DRY	DECKING, RAILINGS, JOISTS AND BEAMS FOR DECKS AND FRESHWATER DOCKS, FENCE PICKETS, UNCOATED MILLWORK
UC4A GROUND CONTACT, GENERAL USE (COMMODITY SPECIFICATION A ONLY)	GROUND CONTACT OR FRESH WATER NON-CRITICAL COMPONENTS (INCLUDES ABOVE GROUND APPLICATIONS WITH GROUND CONTACT TYPE HAZARDS OR THAT ARE CRITICAL OR HARD TO REPLACE)	EXPOSED TO ALL WEATHER CYCLES, INCLUDING PROLONGED WETTING	SAWN FENCE, DECK AND GUARDRAIL POSTS, JOISTS AND BEAMS FOR DECKS AND FRESHWATER DOCKS. JOISTS AND BEAMS SHALL BE TREATED TO REQUIREMENTS FOR UC4A WHEN THEY ARE DIFFICULT TO MAINTAIN, REPAIR OR REPLACE AND ARE CRITICAL TO THE PERFORMANCE AND SAFETY OF THE ENTIRE SYSTEM/CONSTRUCTION.
UC4B GROUND CONTACT, HEAVY DUTY	GROUND CONTACT OR FRESH WATER CRITICAL COMPONENTS OR DIFFICULT REPLACEMENT	EXPOSED TO ALL WEATHER CYCLES, INCLUDING CONTINUOUS OR PROLONGED WETTING, HIGH DECAY POTENTIAL INCLUDES SALT WATER SPLASH	PERMANENT WOOD FOUNDATIONS, SAWN HORTICULTURAL POSTS

7. ABBREVIATIONS:

- ARCH = ARCHITECT
- LVL = LAMINATED VENEER LUMBER
- MAX = MAXIMUM
- MIN = MINIMUM
- OC = ON CENTER
- PSL = PARALLEL STRAND LUMBER
- SIM = SIMILAR
- SEOR = STRUCTURAL ENGINEER OF RECORD
- TYP = TYPICAL
- VIF = VERIFY IN FIELD
- UNO = UNLESS NOTED OTHERWISE

TABLE 2—REFERENCE DESIGN VALUES PERMA-COLUMN DECK POST ANCHOR BRACKETS^{1,2,3}

MODEL NO.	BRACKET DIMENSIONS			THICKNESS OF WOOD MEMBER	FASTENERS ⁴		ASD (C _D = 1.6)			LRFD (λ = 1.0)		
	W (inch)	D (inch)	H (inch)		Qty	Screw	F ₁ ⁴ (lbf)	F ₂ ⁴ (lbf)	F _{uplift} (lbf)	F ₁ ⁴ (lbf)	F ₂ ⁴ (lbf)	F _{uplift} (lbf)
DP4430	3 1/8	3 1/2	5	3 1/2	8	#14 X 2-inch	595	616	636	952	986	956
DP4440	3 1/8	3 1/2	5	3 1/2	8	#14 X 2-inch	595	616	636	952	986	956
DP4448	3 1/8	3 1/2	5	3 1/2	8	#14 X 2-inch	595	616	636	952	986	956
DP4460	3 1/8	3 1/2	5	3 1/2	8	#14 X 2-inch	595	616	636	952	986	956
DP6630	5 1/8	5	7	5 1/2	10	#14 X 2-inch	1,318	1,813	1,103	2,109	2,900	1,658
DP6640	5 1/8	5	7	5 1/2	10	#14 X 2-inch	1,318	1,813	1,103	2,109	2,900	1,658
DP6648	5 1/8	5	7	5 1/2	10	#14 X 2-inch	1,318	1,813	1,103	2,109	2,900	1,658
DP6660	5 1/8	5	7	5 1/2	10	#14 X 2-inch	1,318	1,813	1,103	2,109	2,900	1,658
DP6430	6 1/8	5	7	6	10	#14 X 2-inch	1,436	2,117	857	2,297	3,388	1,289
DP6440	6 1/8	5	7	6	10	#14 X 2-inch	1,436	2,117	857	2,297	3,388	1,289
DP6448	6 1/8	5	7	6	10	#14 X 2-inch	1,436	2,117	857	2,297	3,388	1,289
DP6460	6 1/8	5	7	6	10	#14 X 2-inch	1,436	2,117	857	2,297	3,388	1,289

For S_t: 1 inch = 25.4 mm, 1 lbf = 4.45 N.
¹The reference design values are for Allowable Strength Design (ASD) method and the Load and Resistance Factor Design (LRFD) method and have been increased for wind or earthquake loading with no further increase allowed. The ASD values must be reduced when other load durations govern.
²Download shall be checked and limited by the design capacity of the foundation, deck post or wood column.
³Screws must comply with Section 3.2.5 of this evaluation report and used together in order to achieve the tabulated allowable loads.
⁴Lateral load, F₁, is perpendicular to the axis of the fasteners in x-x direction; lateral load, F₂, is parallel to the axis of the fasteners in z-z direction.

TABLE 2 - ESR-4237 (REPORT HOLDER: PERMA-COLUMN LLC)



 CUSTOMER: DON MEEK LOCATION: 5286 NE Ash Grove Ct, Lee's Summit, Mo 64064	REVISIONS	9' A										
	<table border="1" style="width: 100%;"> <thead> <tr> <th>MM/DD/YY</th> <th>REMARKS</th> </tr> </thead> <tbody> <tr> <td>6 / 20 / 2024</td> <td>PERMIT/CONSTRUCTION</td> </tr> <tr> <td>...</td> <td>...</td> </tr> <tr> <td>...</td> <td>...</td> </tr> <tr> <td>...</td> <td>...</td> </tr> <tr> <td>...</td> <td>...</td> </tr> </tbody> </table>		MM/DD/YY	REMARKS	6 / 20 / 2024	PERMIT/CONSTRUCTION
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MINIMUM FASTENING SCHEDULE		
FASTEN AS INDICATED UNLESS NOTED OTHERWISE		
DESCRIPTION OF BUILDING ELEMENTS	NUMBER AND TYPE OF FASTENER	SPACING AND LOCATION
ROOF		
BLOCKING BETWEEN CEILING JOISTS, RAFTERS OR TRUSSES TO TOP PLATE OR OTHER FRAMING BELOW	4-8d BOX (2 1/2" X 0.113"); OR 3-8d COMMON (2 1/2" X 0.131") OR 3-10d BOX (3" X 0.128"); OR 3-3" X 0.131" NAILS; OR 3-3" 14 GAGE STAPLES, 7/16" CROWN	EACH END, TOENAIL
BLOCKING BETWEEN RAFTERS OR TRUSS NOT AT THE WALL TOP PLATE, TO RAFTER OR TRUSS	2-8d COMMON (2 1/2" X 0.131") 2-3" X 0.131" NAILS 2-3" 14 GAGE STAPLES	EACH END, TOENAIL
	2-16d COMMON (3 1/2" X 0.162") 3-3" X 0.131" NAILS 3-3" 14 GAGE STAPLES	END NAIL
FLAT BLOCKING TO TRUSS AND WEB FILLER	16d COMMON (3 1/2" X 0.162") @6" O.C. 3" X 0.131" NAILS @6" O.C. 3" X 14 GAGE STAPLES @6" O.C.	FACE NAIL
CEILING JOISTS TO TOP PLATE	4-8d BOX (2 1/2" X 0.113"); OR 3-8d COMMON (2 1/2" X 0.131") OR 3-10d BOX (3" X 0.128"); OR 3-3" X 0.131" NAILS; OR 3-3" 14 GAGE STAPLES, 7/16" CROWN	EACH JOIST, TOENAIL
CEILING JOIST NOT ATTACHED TO PARALLEL RAFTER, LAPS OVER PARTITIONS (NO THRUST)	3-16d COMMON (3 1/2" X 0.162") OR 4-10d BOX (3" X 0.128"); OR 4-3" X 0.131" NAILS; OR 4-3" 14 GAGE STAPLES, 7/16" CROWN	FACE NAIL
CEILING JOIST ATTACHED TO PARALLEL RAFTER (HEEL JOINT)	(60) 16d COMMON	FACE NAIL
COLLAR TIE TO RAFTER	3-10d COMMON (3" X 0.148") OR 4-10d BOX (3" X 0.128"); OR 4-3" X 0.131" NAILS; OR 4-3" 14 GAGE STAPLES, 7/16" CROWN	FACE NAIL
RAFTER OR ROOF TRUSS TO TOP PLATE	3-10d COMMON (3" X 0.148") OR 3-16d BOX (3 1/2" X 0.135"); OR 4-10d BOX (3" X 0.128"); OR 4-3" X 0.131" NAILS; OR 4-3" 4-3" 14 GAGE STAPLES, 7/16" CROWN	2 TOENAILS ON ONE SIDE AND 1 TOE NAIL ON OPPOSITE SIDE OF RAFTER OR TRUSS
ROOF RAFTERS TO RIDGE VALLEY OR HIP RAFTERS; OR ROOF RAFTER TO 2-INCH RIDGE BEAM	2-16d COMMON (3 1/2" X 0.162") OR 3-16d BOX (3 1/2" X 0.135"); OR 3-10d BOX (3" X 0.128") OR 3-3" X 0.131" NAILS; OR 3-3" 14 GAGE STAPLES, 7/16" CROWN	END NAIL
	3-10d COMMON (3 1/2" X 0.148") OR 4-16d BOX (3 1/2" X 0.135"); OR 4-10d BOX (3" X 0.128") OR 4-3" X 0.131" NAILS; OR 4-3" 14 GAGE STAPLES, 7/16" CROWN	TOENAIL
WALL		
STUD TO STUD (NOT AT BRACED WALL PANELS)	16d COMMON (3 1/2" X 0.162")	24" O.C. FACE NAIL
	10d BOX (3" X 0.128") OR 3" X 0.131" NAILS; OR 3-3" 14 GAGE STAPLES, 7/16" CROWN	16" O.C. FACE NAIL
STUD TO STUD AND ABUTTING STUDS AT INTERSECTING WALL CORNERS (AT BRACED WALL PANELS)	16d COMMON (3 1/2" X 0.162")	16" O.C. FACE NAIL
	16d BOX (3" X 0.135") OR 3" X 0.131" NAILS; OR 3-3" 14 GAGE STAPLES, 7/16" CROWN	12" O.C. FACE NAIL

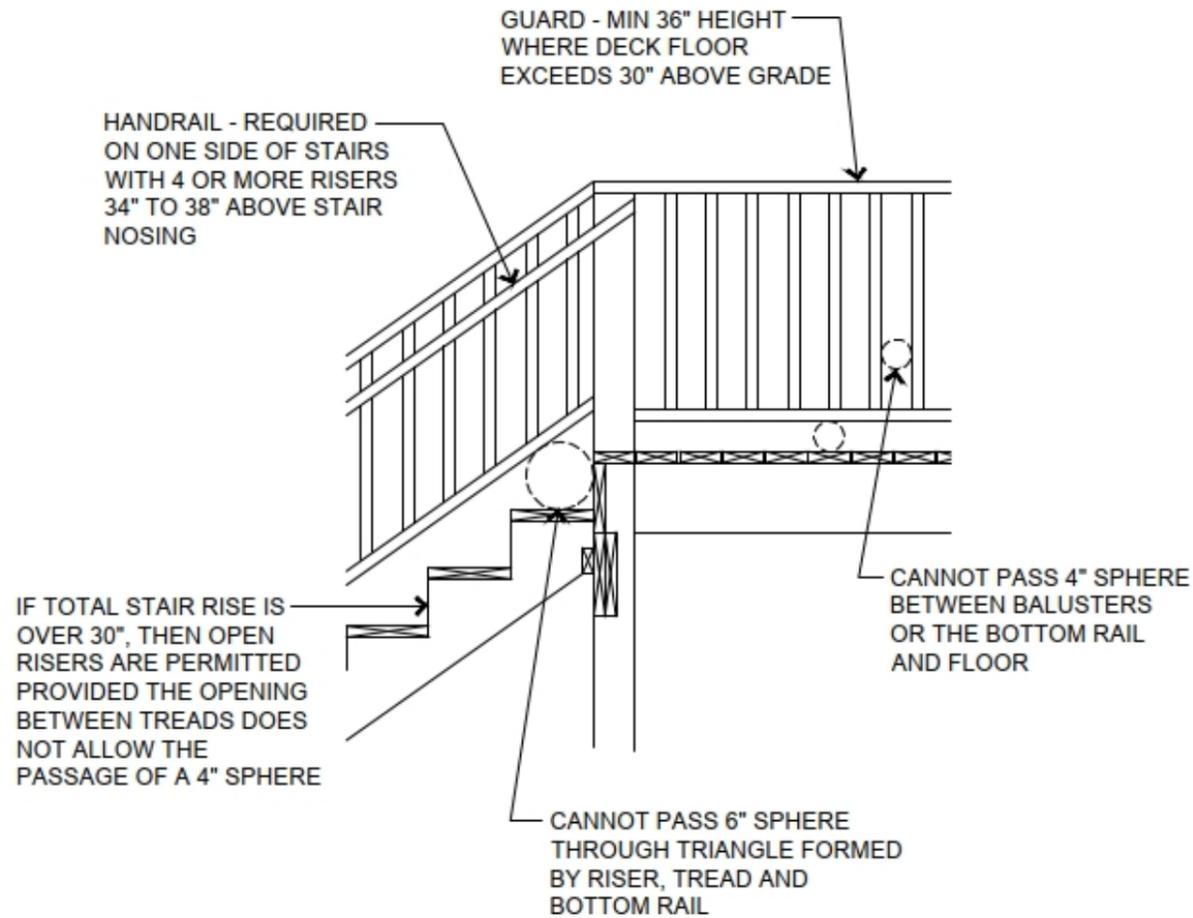
CONTINUOUS HEADER TO STUD	4-8d COMMON (2 1/2" X 0.131"); OR 4-10d BOX (3" X 0.128"); OR 5-8d BOX (2 1/2" X 0.113")	TOENAIL
TOP PLATE TO TOP PLATE	16d COMMON (3 1/2" X 0.162")	16" O.C. FACE NAIL
	10d BOX (3" X 0.128") OR 3" X 0.131" NAILS; OR 3" 14 GAGE STAPLES, 7/16" CROWN	12" O.C. FACE NAIL
TOP PLATE TO TOP PLATE, AT END JOINTS	4-16d COMMON (3 1/2" X 0.162") OR 6-16d BOX (3 1/2" X 0.135"); OR 6-10d BOX (3" X 0.128") OR 6-3" X 0.131" NAILS; OR 6-3" 14 GAGE STAPLES, 7/16" CROWN	EACH SIDE OF END JOINT, FACE NAIL (MINIMUM 24" LAP SPLICE LENGTH EACH SIDE OF END JOINT)
BOTTOM PLATE TO JOIST, RIM JOIST, BAND JOIST OR BLOCKING (NOT AT BRACED WALL PANELS)	16d COMMON (3 1/2" X 0.162")	16" O.C. FACE NAIL
	16d BOX (3 1/2" X 0.135") OR 3" X 0.131" NAILS; OR 3" 14 GAGE STAPLES, 7/16" CROWN	12" O.C. FACE NAIL
BOTTOM PLATE TO JOIST, RIM JOIST, BAND JOIST OR BLOCKING AT BRACED WALL PANELS	2-16d COMMON (3 1/2" X 0.162") OR 3-16d BOX (3 1/2" X 0.135"); OR 4-3" X 0.131" NAILS; OR 4-3" 14 GAGE STAPLES, 7/16" CROWN	16" O.C. FACE NAIL
STUD TO TOP OR BOTTOM PLATE	3-16d BOX (3 1/2" X 0.135"); OR 4-8d COMMON (2 1/2" X 0.131"); OR 4-10d BOX (3" X 0.128"); OR 4-3" X 0.131" NAILS; OR 4-8d BOX (2 1/2" X 0.113"); OR 4-3" 14 GAGE STAPLES, 7/16" CROWN	TOENAIL
	2-16d COMMON (3 1/2" X 0.162"); OR 3-16d BOX (3 1/2" X 0.135"); OR 3-10d BOX (3" X 0.128"); OR 3-3" X 0.131" NAILS; OR 3-3" 14 GAGE STAPLES, 7/16" CROWN	END NAIL
TOP PLATES, LAPS AT CORNERS AND INTERSECTIONS	2-16d COMMON (3 1/2" X 0.162"); OR 3-10d BOX (3" X 0.128"); OR 3-3" X 0.131" NAILS; OR 3-3" 14 GAGE STAPLES, 7/16" CROWN	FACE NAIL
FLOOR		
JOIST TO SILL, TOP PLATE, OR GIRDER	4-8d BOX (2 1/2" X 0.113"); OR 3-8d COMMON (2 1/2" X 0.131"); OR FLOOR 3-10d BOX (3" X 0.128"); OR 3-3" X 0.131" NAILS; OR 3-3" 14 GAGE STAPLES, 7/16" CROWN	TOENAIL
RIM JOIST, BAND JOIST, OR BLOCKING TO TOP PLATE, SILL OR OTHER FRAMING BELOW	8d BOX (2 1/2" X 0.113")	4" O.C., TOENAIL
	8d COMMON (2 1/2" X 0.131"); OR 10d BOX (3" X 0.128"); OR 3" X 0.131" NAILS; OR 3" 14 GAGE STAPLES, 7/16" CROWN	6" O.C., TOENAIL
BUILT-UP GIRDERS, BEAMS, AND WALL HEADERS, 2" LUMBER PLIES	20d COMMON (4" X 0.192")	32" O.C. FACE NAIL AT TOP AND BOTTOM STAGGERED EACH PLY
	10d BOX (3" X 0.128"); OR 3" X 0.131" NAILS; OR 3" 14 GAGE STAPLES, 7/16" CROWN AND: 2-20d COMMON (4" X 0.192"); OR 3-10d BOX (3" X 0.128"); OR 3-3" X 0.131" NAILS; OR 3-3" 14 GAGE STAPLES, 7/16" CROWN	24" O.C. FACE NAIL AT TOP AND BOTTOM STAGGERED EACH PLY
JOIST TO BAND JOIST OR RIM JOIST	3-16d COMMON (3 1/2" X 0.162"); OR 4-10d BOX (3" X 0.128"); OR 4-3" X 0.131" NAILS; OR 4-3" 14 GAGE STAPLES, 7/16" CROWN	ENDS AND AT EACH SPLICE, FACE NAIL
		END NAIL

BRIDGING OR BLOCKING TO JOIST, RAFTER OR TRUSS	2-8d COMMON (2 1/2" X 0.131"); OR 2-10d BOX (3" X 0.128"); OR 2-3" X 0.131" NAILS; OR 2-3" 14 GAGE STAPLES, 7/16" CROWN	EACH END, TOENAIL
BLOCKING TO STUD	(2) 10d COMMON (3) 3" X 0.131" NAILS	TOE NAIL



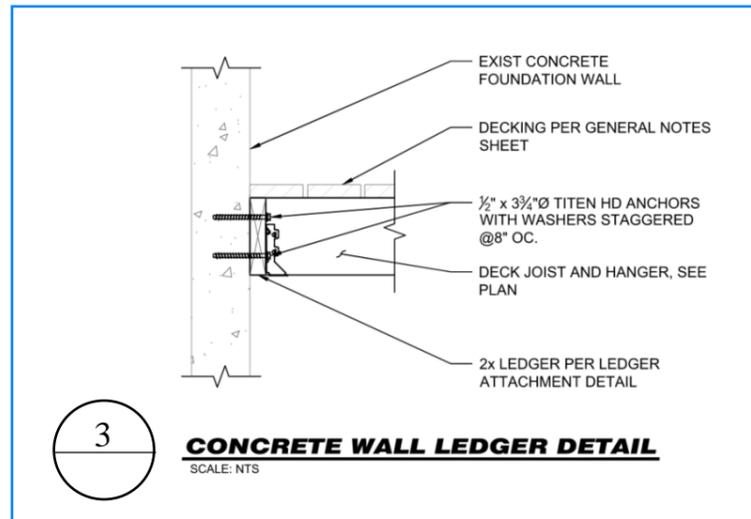
 CUSTOMER: DON MEEK LOCATION: 5286 NE Ash Grove Ct, Lee's Summit, Mo 64064	REVISIONS		9"
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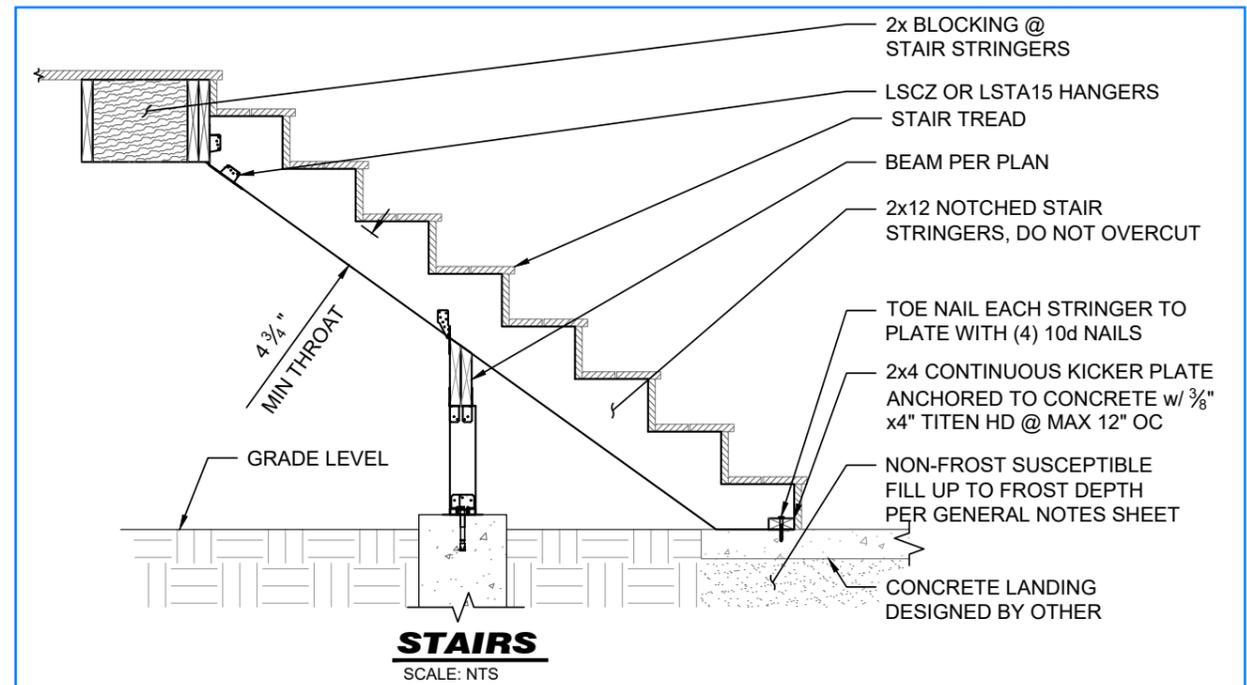
GUARD DETAIL



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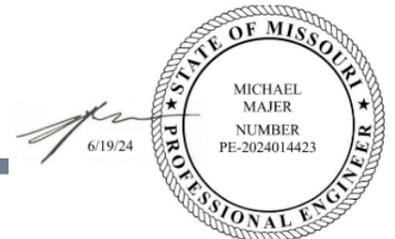
CONCRETE WALL LEDGER DETAIL

SCALE: NTS



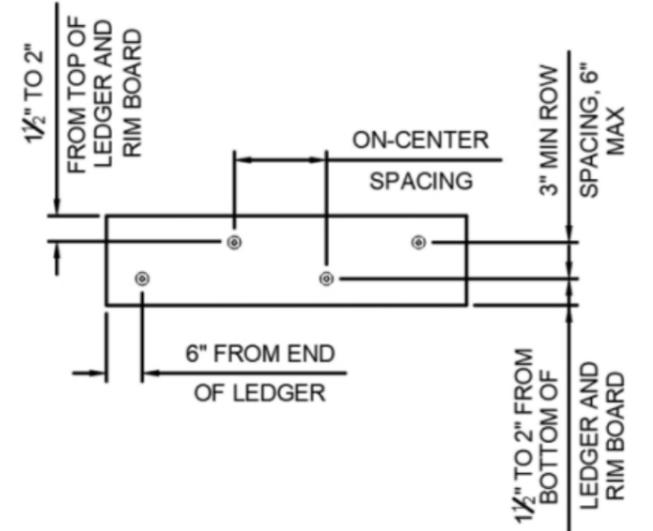
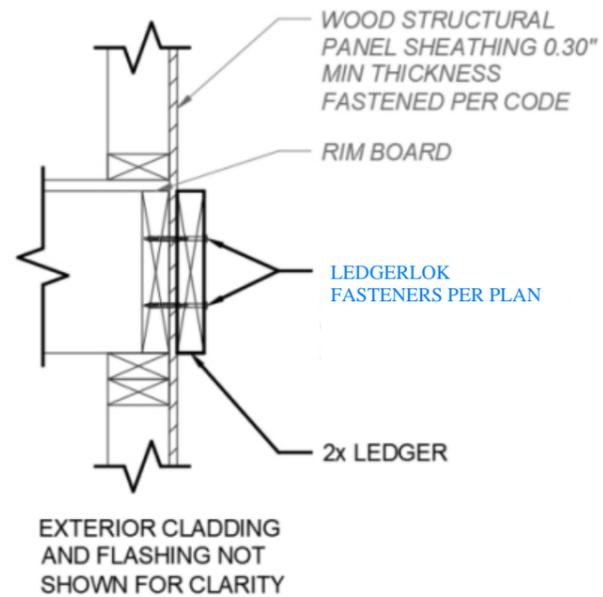
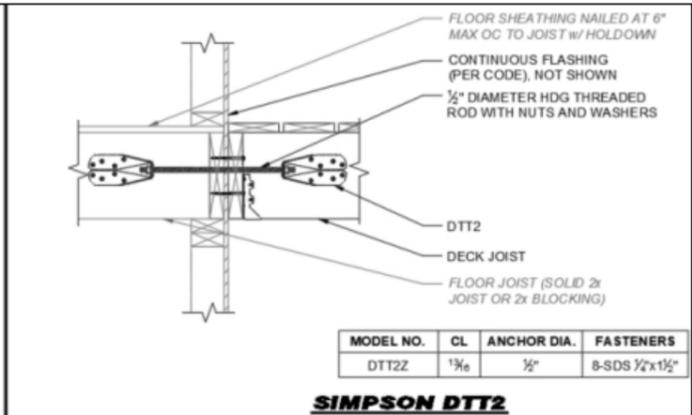
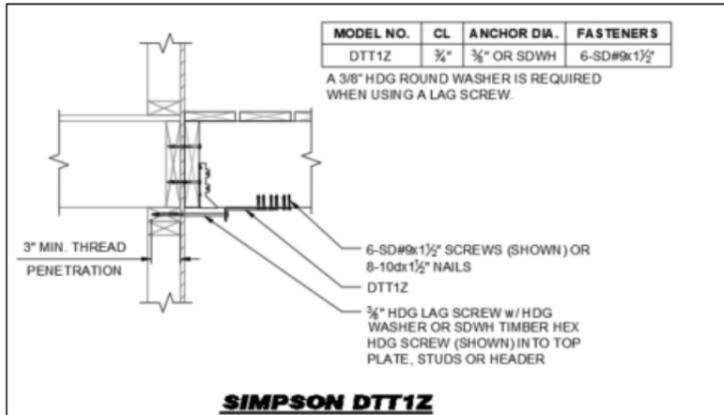
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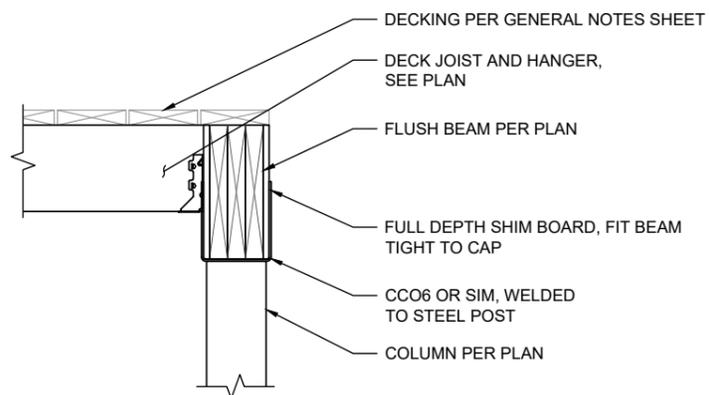
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LOCATION: 5286 NE Ash Grove Ct, Lee's Summit, Mo 64064

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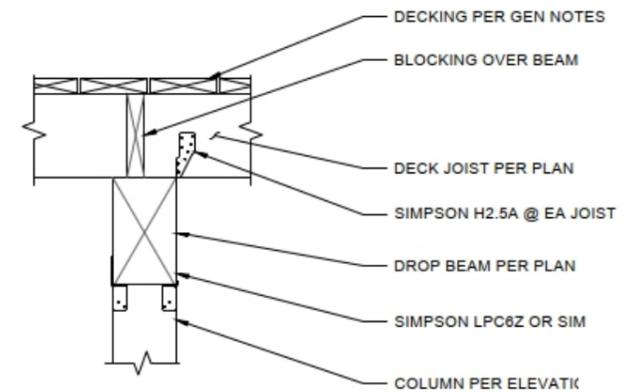


2 DECK LEDGER DETAIL
SCALE: NTS

1 DECK LEDGER ATTACHMENT
SCALE: NTS



3 DECK BEAM TO STEEL COLUMN CONNECTION



4 DROP BEAM TO JOIST

6/19/24

MICHAEL MAJER
NUMBER
PE-2024014423

STATE OF MISSOURI
PROFESSIONAL ENGINEER

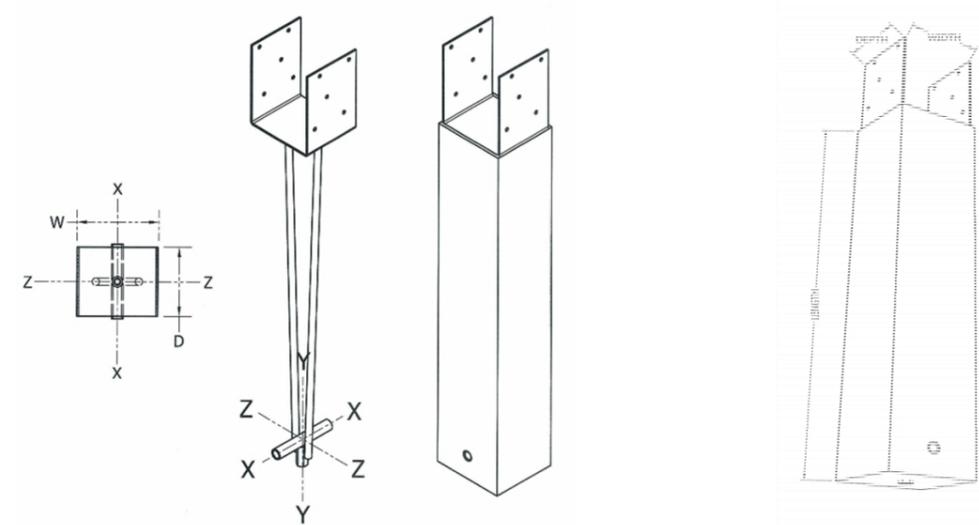
TRIX PRO PLATINUM

CUSTOMER: DON MEEK
LOCATION: 5286 NE Ash Grove Ct, Lee's Summit, Mo 64064

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TABLE 1 - ESR-4237 (REPORT HOLDER: PERMA-COLUMN LLC), SEE GENERAL NOTES SHEET

ALLOWABLE STRENGTH DESIGN (ASD)									
MODEL ID	WIDTH (inch)	DEPTH (inch)	LENGTH (inch)	P _{ASD} (lbf)	M _{ASD-x} (ft-lb)	M _{ASD-z} (ft-lb)	V _{ASD-x} (lbf)	V _{ASD-z} (lbf)	T _{ASD} (lbf)
DP4430	3 ⁵ / ₈	3 ¹ / ₂	30	28,798	910	875	595	616	636
DP4440	3 ⁵ / ₈	3 ¹ / ₂	40	28,798	910	875	595	616	636
DP4448	3 ⁵ / ₈	3 ¹ / ₂	48	28,798	910	875	595	616	636
DP4460	3 ⁵ / ₈	3 ¹ / ₂	60	28,798	910	875	595	616	636
DP6630	5 ⁵ / ₈	5	30	63,293	1,863	2,530	1,318	1,813	1,103
DP6640	5 ⁵ / ₈	5	40	63,293	1,863	2,530	1,318	1,813	1,103
DP6648	5 ⁵ / ₈	5	48	63,293	1,863	2,530	1,318	1,813	1,103
DP6660	5 ⁵ / ₈	5	60	63,293	1,863	2,530	1,318	1,813	1,103
DP6430	6 ¹ / ₈	5	30	68,472	2,009	2,553	1,436	2,117	857
DP6440	6 ¹ / ₈	5	40	68,472	2,009	2,553	1,436	2,117	857
DP6448	6 ¹ / ₈	5	48	68,472	2,009	2,553	1,436	2,117	857
DP6460	6 ¹ / ₈	5	60	68,472	2,009	2,553	1,436	2,117	857



For SI: 1 inch = 25.4 mm, 1 lbf = 4.45 N

¹For biaxial bending: $\frac{m_x}{M_x} + \frac{m_y}{M_y} \leq 1$

²The tabulated values account for combined axial compression load and bending moment load. No reduction in axial compression loads and bending moment loads for combined axial compression and bending moment is required.

³For combined tension loads and bending moment loads: $\frac{t}{T} + \frac{m}{M} \leq 1$

ESR-2147 (REPORT HOLDER: AG- CO PRODUCTS, INC.), SEE GENERAL NOTES SHEET

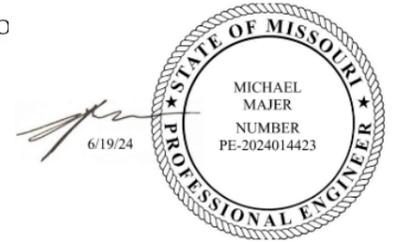
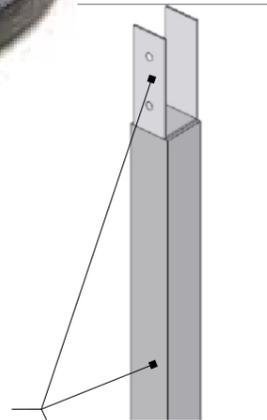
TABLE 1— FOOTINGPAD® POST FOUNDATION ALLOWABLE LOADS (POUNDS) RELATED TO LOAD-BEARING PRESSURES OF FOUNDATION MATERIALS

FOOTINGPAD® MODEL	PAD DIAMETER	LOAD-BEARING PRESSURES OF FOUNDATION MATERIALS ¹			
		1500 psf	2000 psf	2500 psf	3000 psf
FP-10	10 inch	810 lbs.	1081 lbs	1351 lbs	1622 lbs.
FP-12	12 inch	1126 lbs.	1536 lbs	1946 lbs	2356 lbs.
FP-16	16 inch	2009 lbs.	2739 lbs	3470 lbs	4200 lbs.
FP-20	20 inch	2687 lbs.	3973 lbs	5259 lbs	6545 lbs.
FP-24	24 inch	4013 lbs.	5784 lbs	7556 lbs	9327 lbs.

For SI: 1 inch = 25.4 mm; 1 lbf = 4.4 N; 1 lbf/ft² = 47.9 Pa.

1. Load-bearing pressures of foundation materials shall be determined using the presumptive load-bearing values in IBC Table 1806.2 or IRC R401.4.1, as applicable, or the load-bearing values shall be determined with a site-specific soil investigation, as required by the code official.

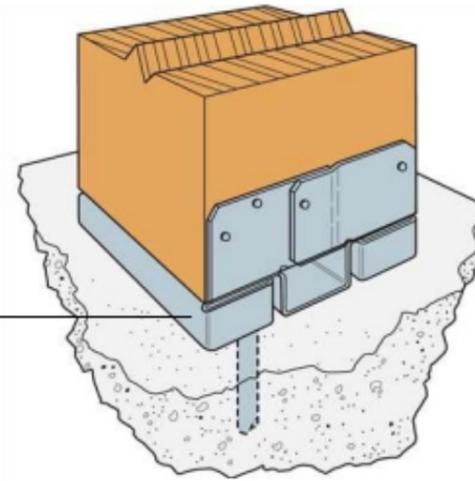
ANCHOR BRACKET w/ (10) #14-2-INCH
 DP6640 PERMA COLUMN w/ UPLIFT ANCHORS
 AG CO FOOTING PAD ACCORDING TO FOC



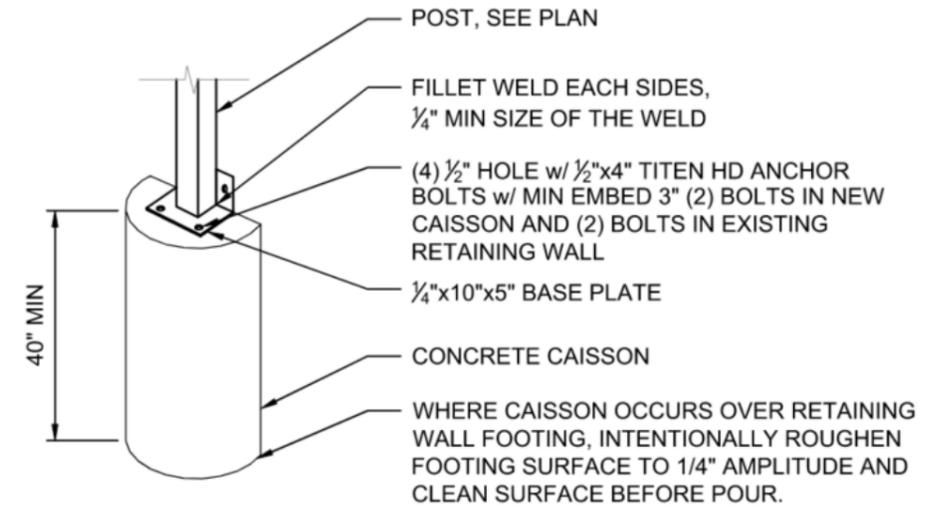
1 PERMA COLUMN DETAIL TYP

PERMA COLUMN AND AG CO FOOTING ARE ONLY PERMITTED AT FOOTING #3

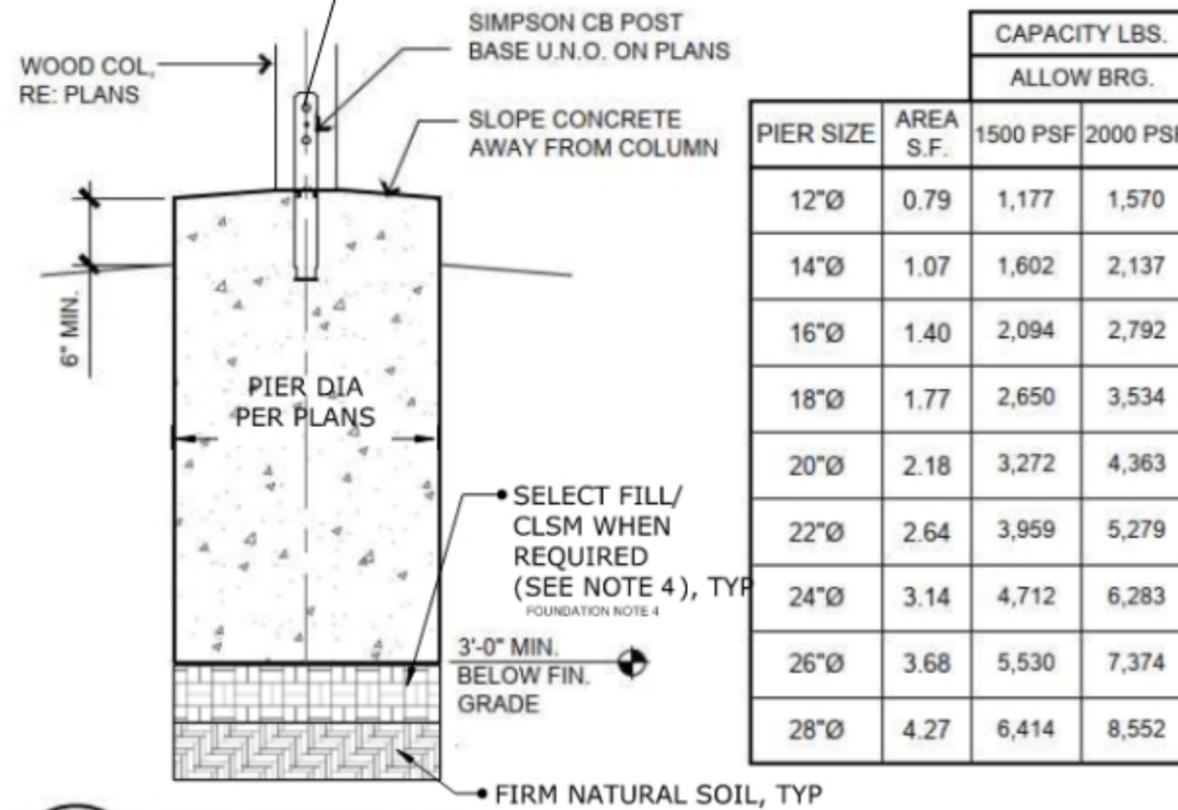
 CUSTOMER: DON MEEK LOCATION: 5286 NE Ash Grove Ct, Lee's Summit, Mo 64064	REVISIONS	
	MM/DD/YY	REMARKS
	1	6 / 20 / 2024 ... PERMIT/CONSTRUCTION
	2	... / ... / ...
	3	... / ... / ...
	4	... / ... / ...
	5	... / ... / ...



ABA ZMAX Galvanized Adjustable Standoff Post Base for 6x6 Nominal Lumber

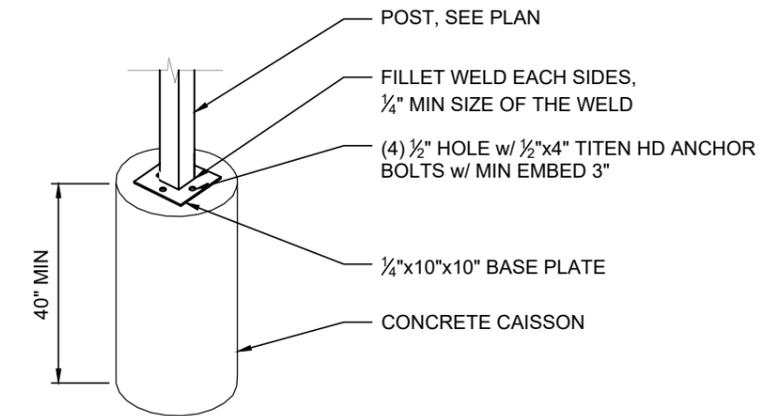


2) CAISSON CONNECTION ADJACENT TO RETAINING WALL



1 DECK PIER
SCALE: 3/4" = 1'-0"

TRADITIONAL CONCRETE CAISSONS REQUIRED AT ALL POSTS EXCEPT CAISSON #3



CAISSON
SCALE: NTS

3) STEEL POST TO CAISSON CONNECTION



CUSTOMER: DON MEEK
LOCATION: 5286 NE Ash Grove Ct, Lee's Summit, Mo 64064

REVISIONS	
MM/DD/YY	REMARKS
6 / 20 / 2024	PERMIT/CONSTRUCTION
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