

Energy Efficiency Design Summary			
Compliance Option: SB-12 Prescriptive (SB-12 3.1.1.3.)		Table: 3.1.1.3.A	Package: A1
Climatic Zone: ☐ Zone 1 (<5000 Degree Days) ☒ Zone 2 (>5000 Degree Days)	Heating Equipment Efficiency: ☒ >92% AFUE ☐ >84%<92% AFUE	Space Heating Fuel Source: ☒ Gas ☐ Propane ☐ Solid Fuel ☐ Oil ☐ Electric ☐ Geothermal	
	Windows, Skylights & Glass Doors: Gross Wall Area: 179 m^2 Gross Window Area: 12.2 m^2	%Windows = 7 % Space Heating Fuel Source: ☐ ICF Basement ☒ Crawlspace ☐ ICF Above Grade ☐ Slab-on grade	
Building Specifications:			
Building Component:	R Values:	Building Component:	Efficiency Ratings:
Ceiling with Attic Space	R60	Windows/Sliding Glass Doors	U=0.21 ER=34
Ceiling without Attic Space	R31	Skylights	U=0.49
Exposed Floor	R31	Space Heating Equipment	96%
Walls Above Grade	R19 + 5 CI	HRV Efficiency	81%
Basement Walls	R12 + 10CI	DHW Heater	0.7
Slab (all>600mm below grade)	-		
Heated Slab or Slab <600mm below grade	R10		
Edge of Below Grade Slab <600mm below grade	R10		

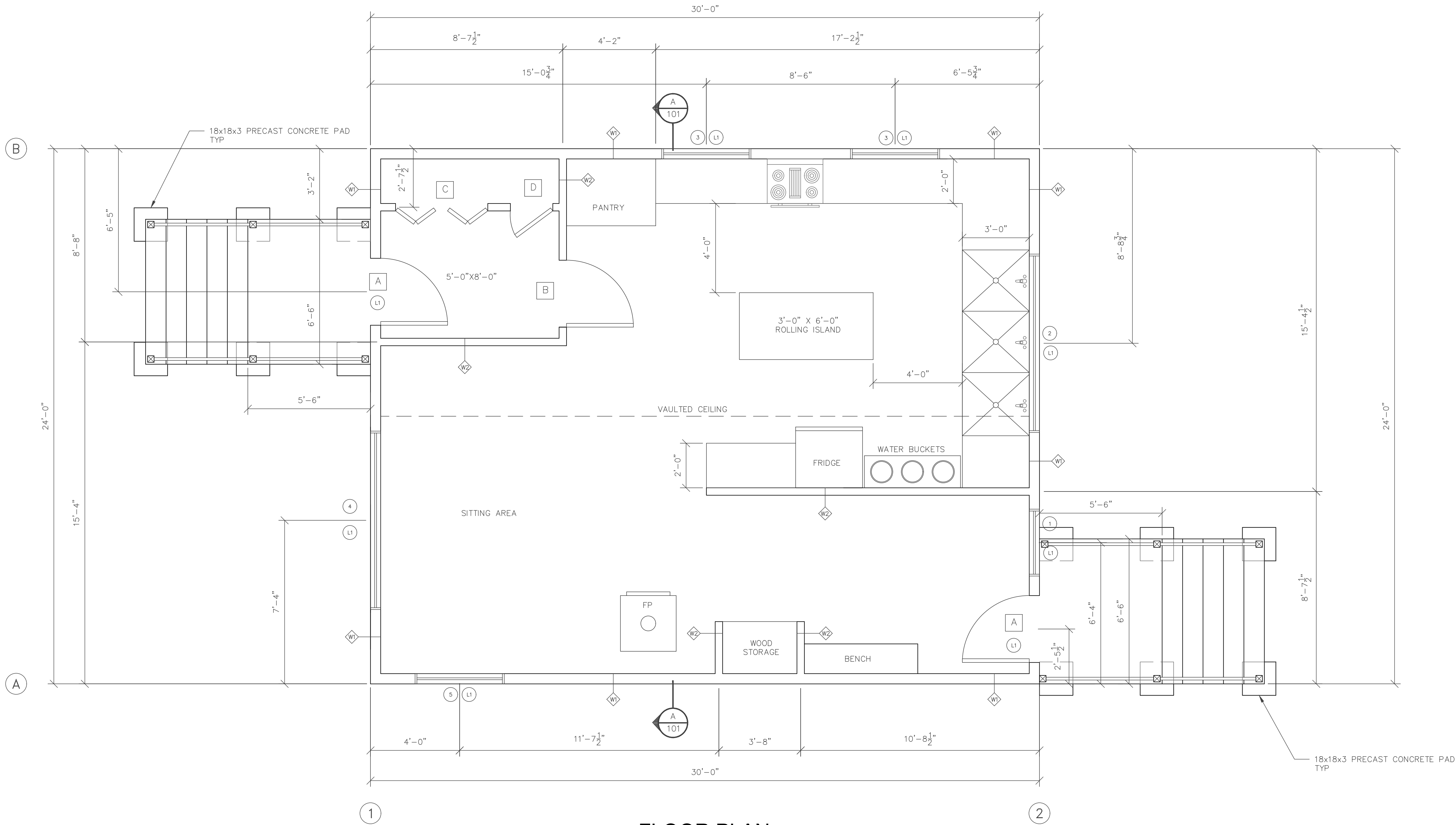
WALL SCHEDULE:			
MARK:	DESCRIPTION:	CONSTRUCTION:	DRAWING:
W1	EXTERIOR 2X6	-EXTERIOR FINISH -1" RIGID INSULATION -TYVEK BUILDING WRAP -7/16" OSB SHEETING -2X6 @ 16" O.C. C/W BLOCKING @ 48" O.C. -R20 BATT INSULATION -6MIL POLY VAPOUR BARRIER -T&G PED PINE	
W2	INTERIOR 2X4	-T&G RED PINE -2X4 @ 16" O.C. -T&G RED PINE	

DOOR SCHEDULE:				
MARK:	QTY:	SIZE:	DESCRIPTION:	LOCATION:
A	2	36"x80"	PATIO DOOR W/SCREEN	NORTH & SOUTH ENTRANCE
B	1	36"x80"	INTERIOR DOOR	FOYER
C	1	48"x80"	BI-FOLD DOOR	CLOSET
D	1	24"x80"	INTERIOR DOOR	CLOSET
ALL EXTERIOR DOORS TO HAVE 2-PLY 2X10 LINTEL.				

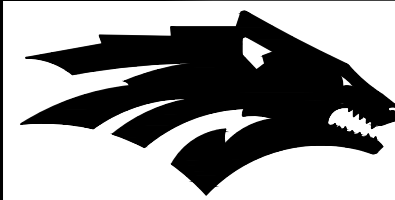
WINDOW SCHEDULE:			
MARK:	QTY:	SIZE (WxH):	DESCRIPTION:
1	1	36"x36"	DOUBLE PANE, ARGON FILLED, LOW-E
2	1	96"x36"	DOUBLE PANE, ARGON FILLED, LOW-E
3	2	48"x36"	DOUBLE PANE, ARGON FILLED, LOW-E
4	1	96"x60"	DOUBLE PANE, ARGON FILLED, LOW-E
5	1	48"x60"	DOUBLE PANE, ARGON FILLED, LOW-E

LINTEL SCHEDULE:		
MARK:	SIZE (WXH):	FRAMING:
L1	2-PLY 2X10	SINGLE 2X6 JACK STUD
-	-	-
-	-	-
NOTES: 1. ALL SAWN LUMBER LINTELS SHALL BE SPF NO.1/NO.2 2. ALL LVL LINTELS SHALL BE 2.0E 3. ALL COLUMNS TO HAVE SINGLE JACK STUD U.N.O. MATCHING STUD ABOVE JACK 4. JACK & KING STUD SIZES TO MATCH WALL STUD SIZE 5. PROVIDE 2-PLY SILL AT BOTTOM OF WINDOWS IN EXTERIOR WALLS		
TYPICAL LINTEL FRAMING		

- NOTES:
- GENERAL:
- ALL DIMENSIONS ARE IN FEET AND INCHES.
 - THE USE OF THESE DRAWINGS IS LIMITED TO THAT IDENTIFIED IN THE REVISION COLUMN. DO NOT CONSTRUCT FROM THESE DRAWINGS UNLESS MARKED "ISSUED FOR CONSTRUCTION".
 - READ STRUCTURAL DRAWINGS IN CONJUNCTION WITH SPECIFICATIONS AND ALL OTHER CONTRACT DOCUMENTS.
 - UNDER NO CIRCUMSTANCES ARE THESE DRAWINGS TO BE SCALED, INCLUDING FOR PREPARATION OF SHOP DRAWINGS, CONSTRUCTION LAYOUT, OR BIDDING PURPOSES. ERRORS MADE BY PERSONS SCALING THESE DRAWINGS SHALL NOT BE THE RESPONSIBILITY OF ALPHA ENGINEERING.
 - CONTRACTOR SHALL SUBMIT ANY SHOP DRAWINGS FOR REVIEW BY THE CONSULTANT PRIOR TO FABRICATION.
 - CONTRACTOR RESPONSIBLE FOR PROTECTING THE PUBLIC AGAINST ANY JOB SITE HAZARDS DURING CONSTRUCTION.
 - ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE ONTARIO BUILDING CODE AND LOCAL BYLAWS.
- SITE PREPARATION:
- CONTRACTOR RESPONSIBLE FOR ALL SITE LOCATES.
 - BACKFILL SHALL BE GRANULAR B; TYPE 1 ONTARIO PROVINCIAL STANDARD SPECIFICATIONS (OPSS) COMPACTED TO 98% OF STANDARD PROCTOR MAXIMUM DRY DENSITY (SPMDD). BACKFILL SHALL BE PLACED IN 12" LIFTS. BACKFILLING SHALL NOT START UNTIL CONCRETE REACHED 80 PER CENT OF ITS COMPRESSIVE STRENGTH.
 - COMPACTION TESTING SHALL BE PERFORMED TO ENSURE COMPACTION HAS BEEN ACHIEVED PRIOR TO PLACEMENT OF THE NEXT LIFT.
 - PROTECT ALL SOIL FROM FREEZING ADJACENT TO AND BELOW ALL FOUNDATIONS.
 - EXCAVATION SHALL BE CLEAR OF ALL DELETERIOUS MATERIALS.
 - FOUNDATION DESIGN IS BASED ON AN ALLOWABLE BEARING CAPACITY OF 100KPa. OWNER SHALL BE RESPONSIBLE FOR PROVIDING CONFIRMATION OF ALL COMPACTION TESTING REQUIRED TO ACHIEVE THE DESIGN BEARING CAPACITY.
- CONCRETE:
- THE CONTRACTOR SHALL CHECK AND VERIFY ALL DIMENSIONS, ON SITE, PRIOR TO FABRICATION OF REINFORCING STEEL..
 - CONCRETE SHALL HAVE A MINIMUM ULTIMATE COMPRESSIVE STRENGTH OF 32MPa AT 28 DAYS, 5-8% AIR ENTRAINMENT.
 - REINFORCING BARS SHALL BE DEFORMED BARS GRADE 400.
 - THE CONTRACTOR SHALL MAKE ADEQUATE PROVISION TO PROTECT CONCRETE FROM EXPOSURE TO FREEZING TEMPERATURES AND PRECIPITATION AT LEAST 7 DAYS AFTER CONCRETE PLACEMENT.
 - CLEAR CONCRETE COVER TO REINF. STEEL SHALL BE
 - CONCRETE POURED AGAINST EARTH -----3"
 - CONCRETE EXPOSED TO EARTH OR WEATHER -----1 1/2"
 - SLAB & WALLS NOT EXPOSED TO EARTH OR WEATHER ----2"
 - CONCRETE PLACING, CURING AND TESTING SHALL CONFORM TO CSA -A23.1 AND A23.2.
 - FORM WORK AND TOLERANCES SHALL CONFORM TO CSA-A23.1.
 - ALL REINFORCING TO BE CAST IN PLACE SHALL BE INSPECTED BY THE ENGINEER PRIOR TO POURING OF CONCRETE.
 - MINIMUM BAR LAP LENGTH SHALL BE:
 - 18" FOR 10M BARS
 - 24" FOR 15M BARS



FLOOR PLAN



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ARROW RIVER
FORETS HERMITAGE

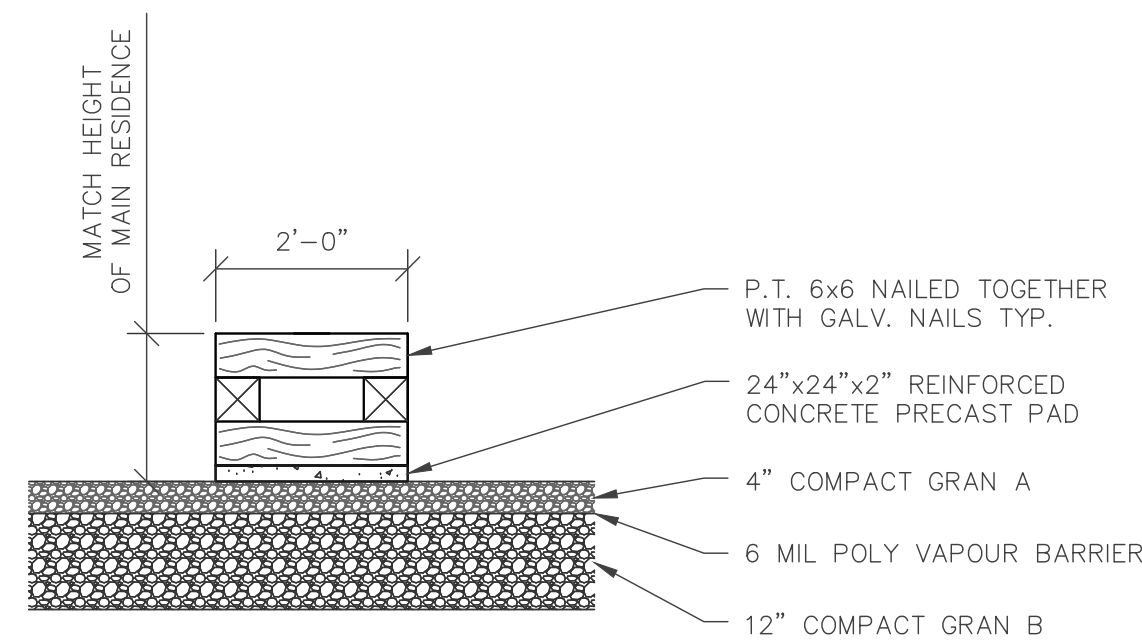
DEVON ROAD

FLOOR PLAN

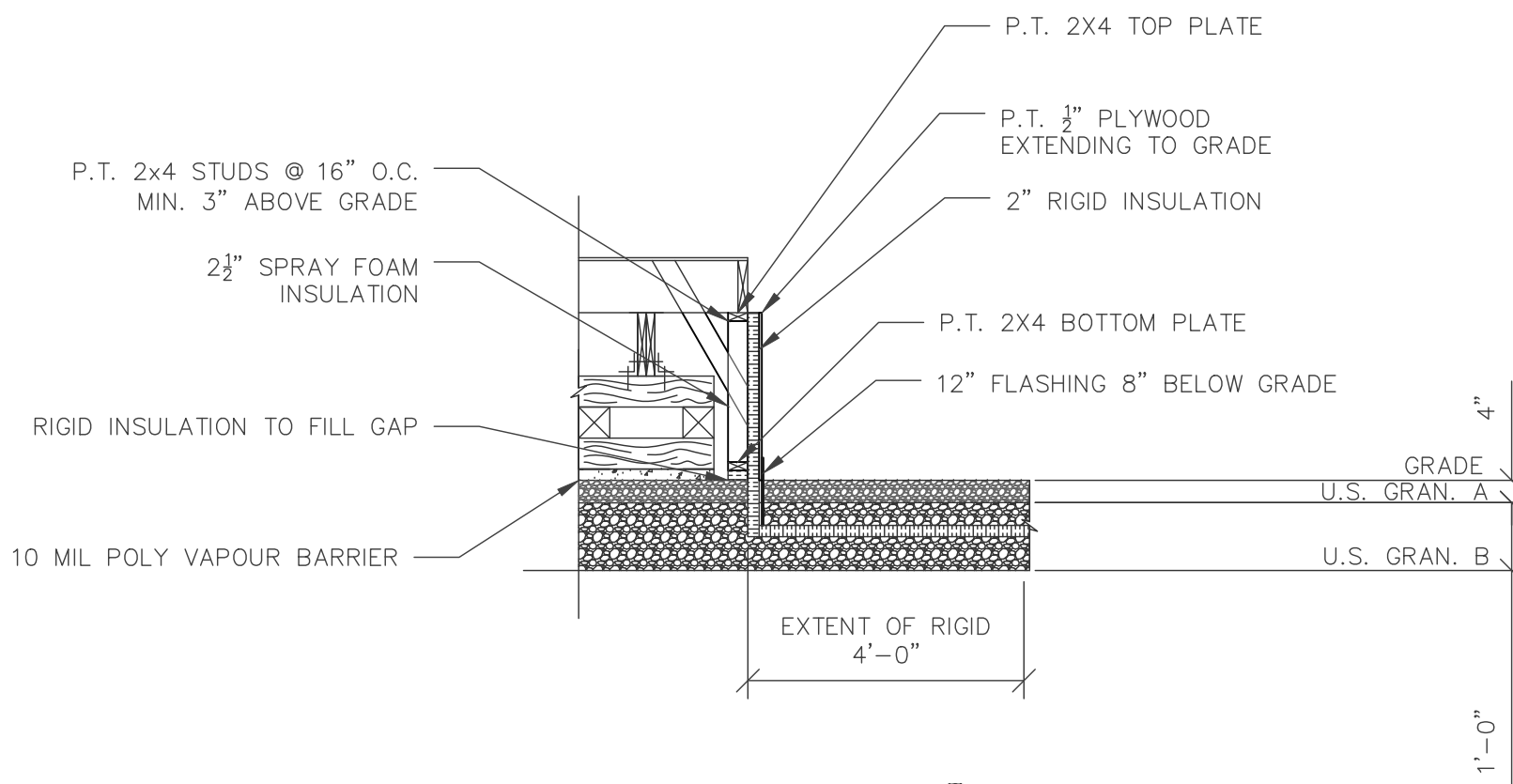
DRAWN: TN	REVIEWED: JF	DESIGN: RJF	ICF: RJF
DATE: 15/05/2024	SCALE: 3/8"=1'-0"		

DWG No:AE-24022-100



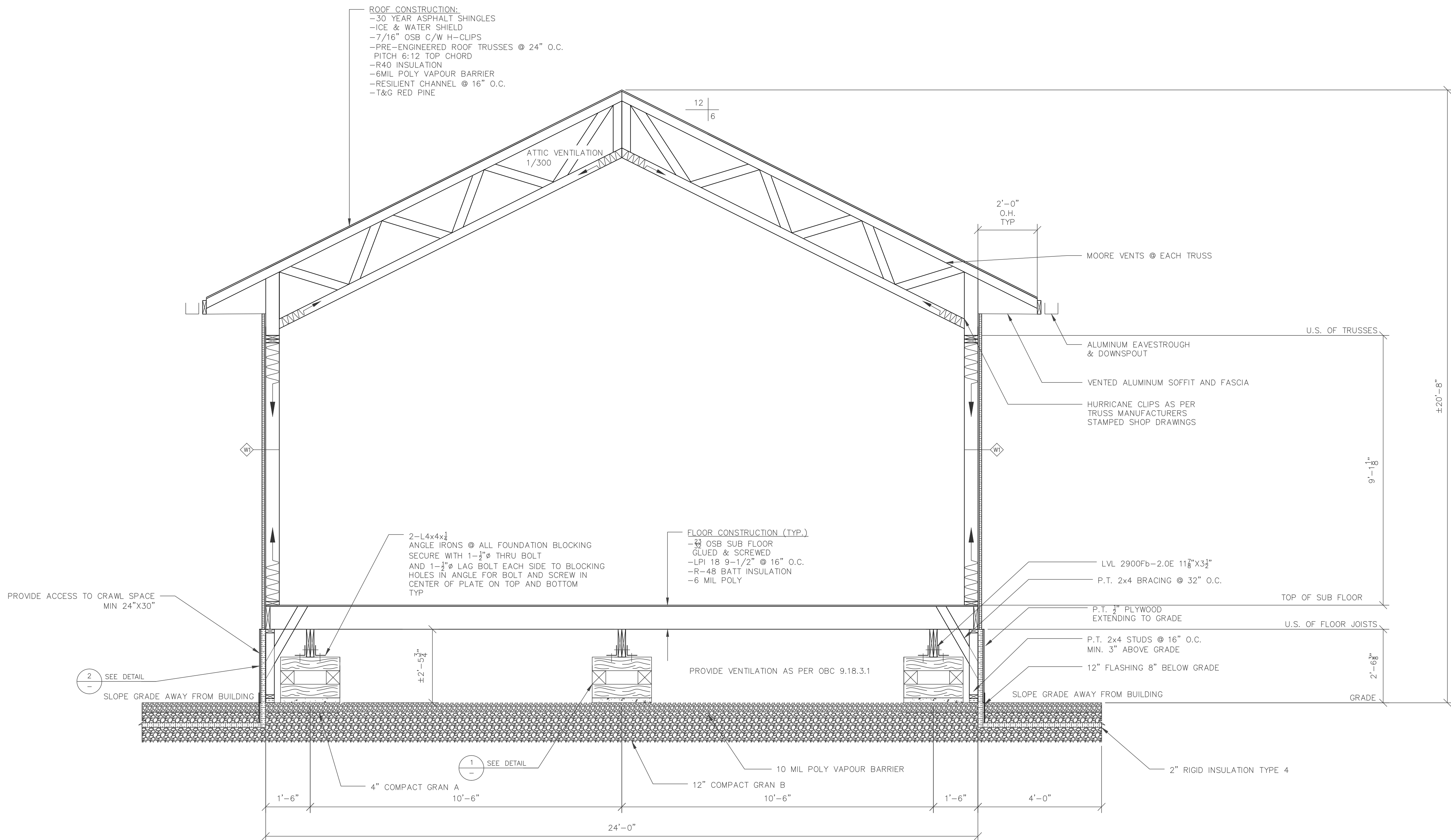


DETAIL 1
1/2" = 1'-0"



DETAIL 2
3/8" = 1'-0"

TYPICAL SKIRT DETAIL



SECTION A
1/2" = 1'-0"

NOTES:

DESIGN NOTES CONT'D:

WOOD:

- ALL FRAMING LUMBER SHALL COMPLY WITH PERTINENT PROVISIONS OF CSA 086 AND CSA 0141, AND TO THE NATIONAL LUMBER GRADES AUTHORITY, STANDARD GRADING RULE.
- FRAMING MATERIAL, UNLESS OTHERWISE NOTED, SHALL BE KILN DRIED LUMBER.
- ALL WOOD MEMBERS SHALL BE SPF GRADE NO. 2 OR BETTER.
- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE ONTARIO BUILDING CODE AND LOCAL BY-LAWS.
- ENGINEER TO REVIEW ALL SHOP DRAWINGS. LVL, TRUSSES, ETC.

DESIGN LOADS:

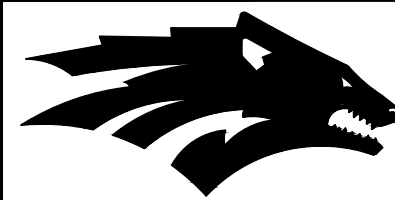
SNOW LOAD = 2.0 kPa
FLOOR LIVE LOAD = 1.9 kPa
ROOF LOAD = 1.0 kPa
FLOOR DEAD LOAD = 0.5 kPa

SQUARE FOOTAGE

TOTAL SQUARE FOOTAGE = 720 SQ.FT.

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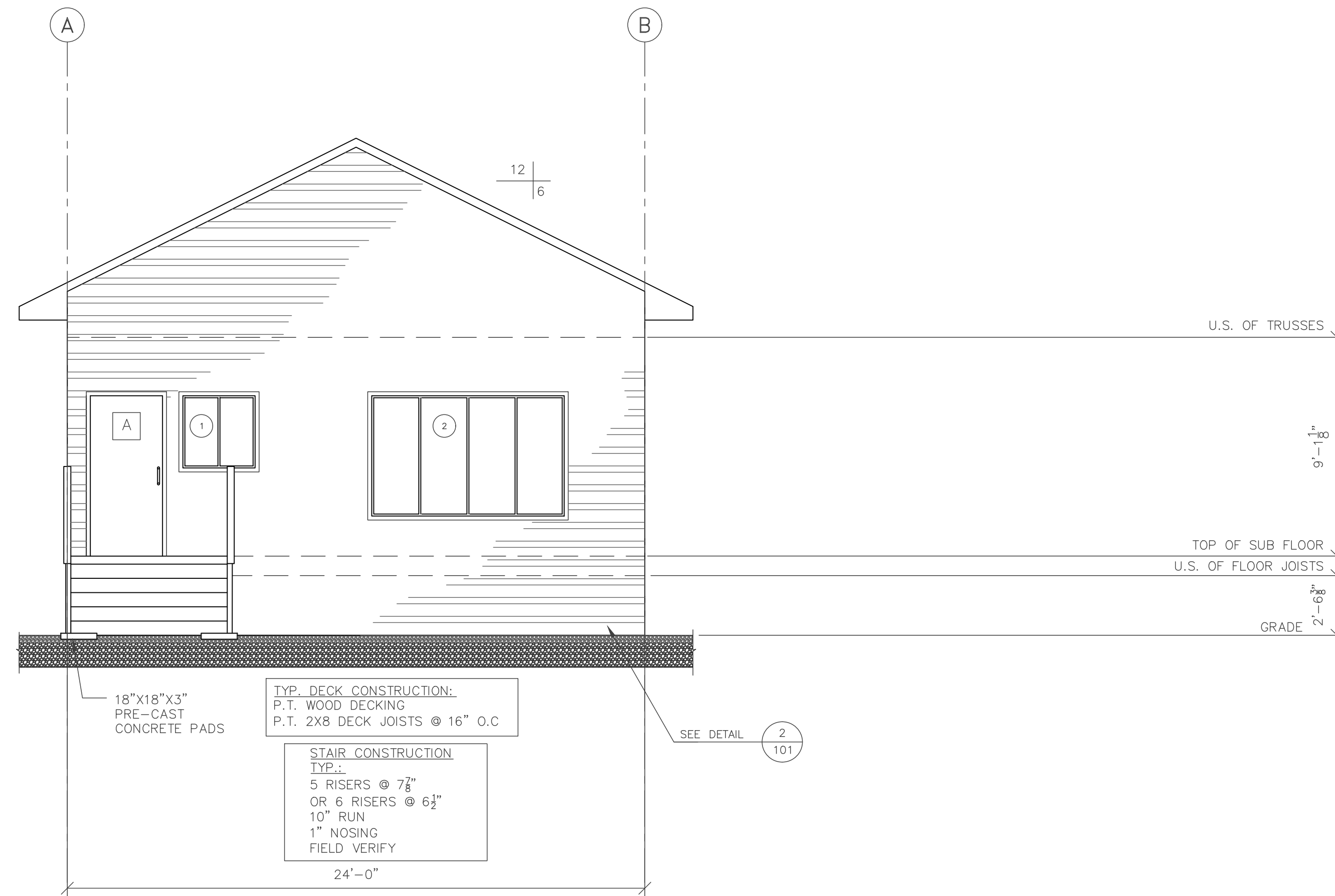
DEVON ROAD

SECTION & DETAILS

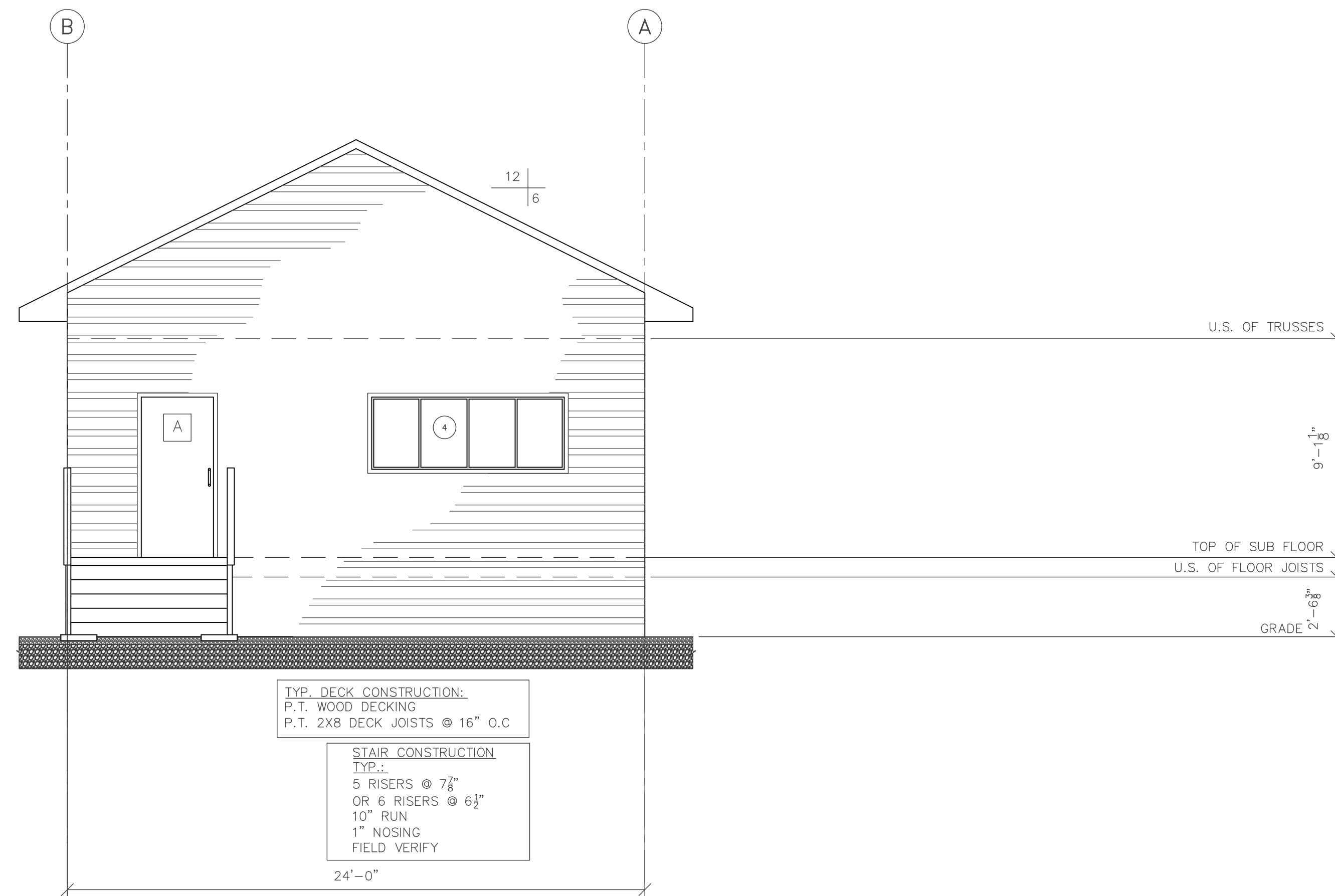
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DATE: 15/05/2024	SCALE: AS NOTED

DWG No: AE-24022-101





SOUTH ELEVATION



NORTH ELEVATION

NOTES:

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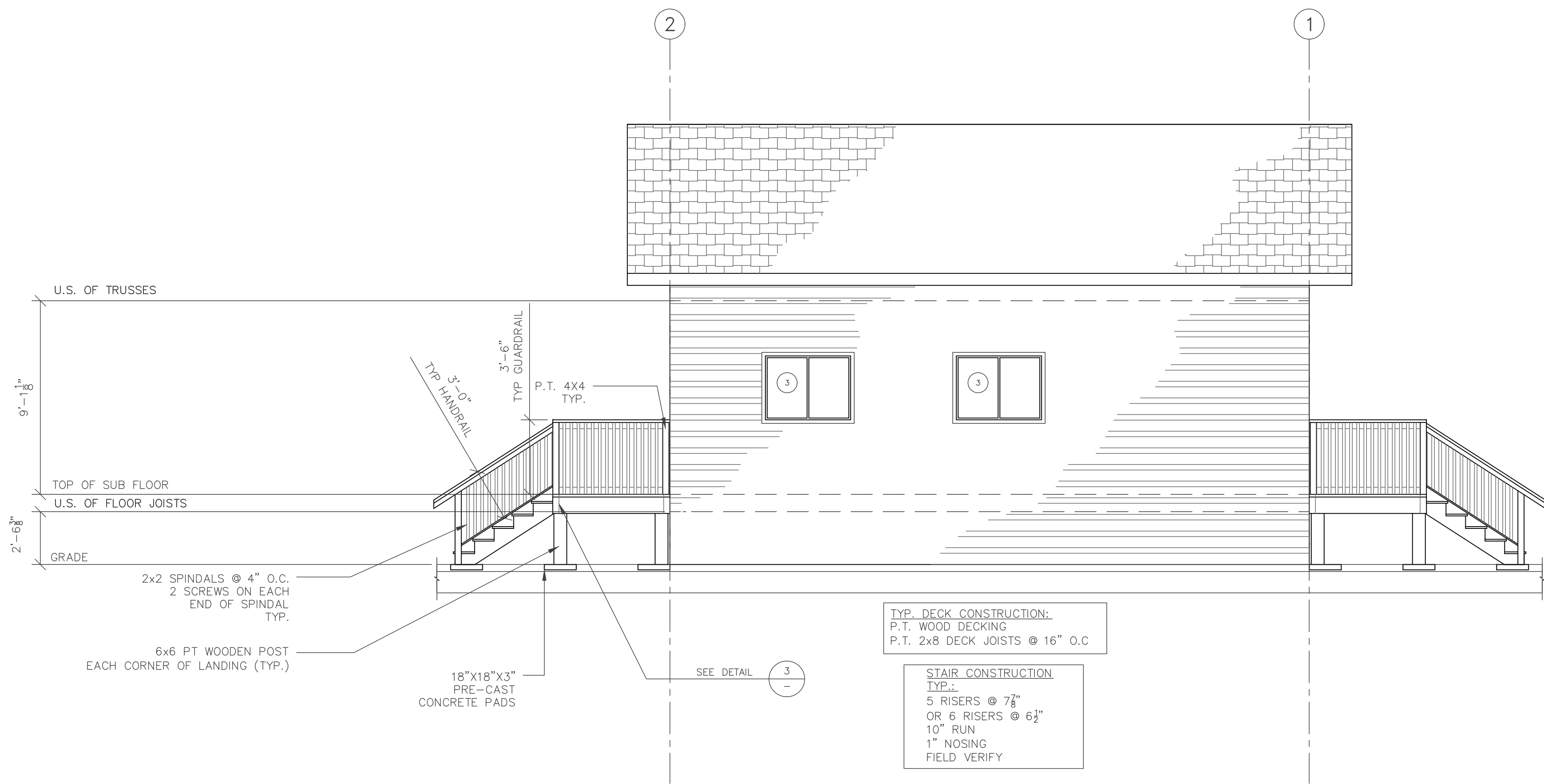
**ARROW RIVER
FORETS HERMITAGE**

DEVON ROAD

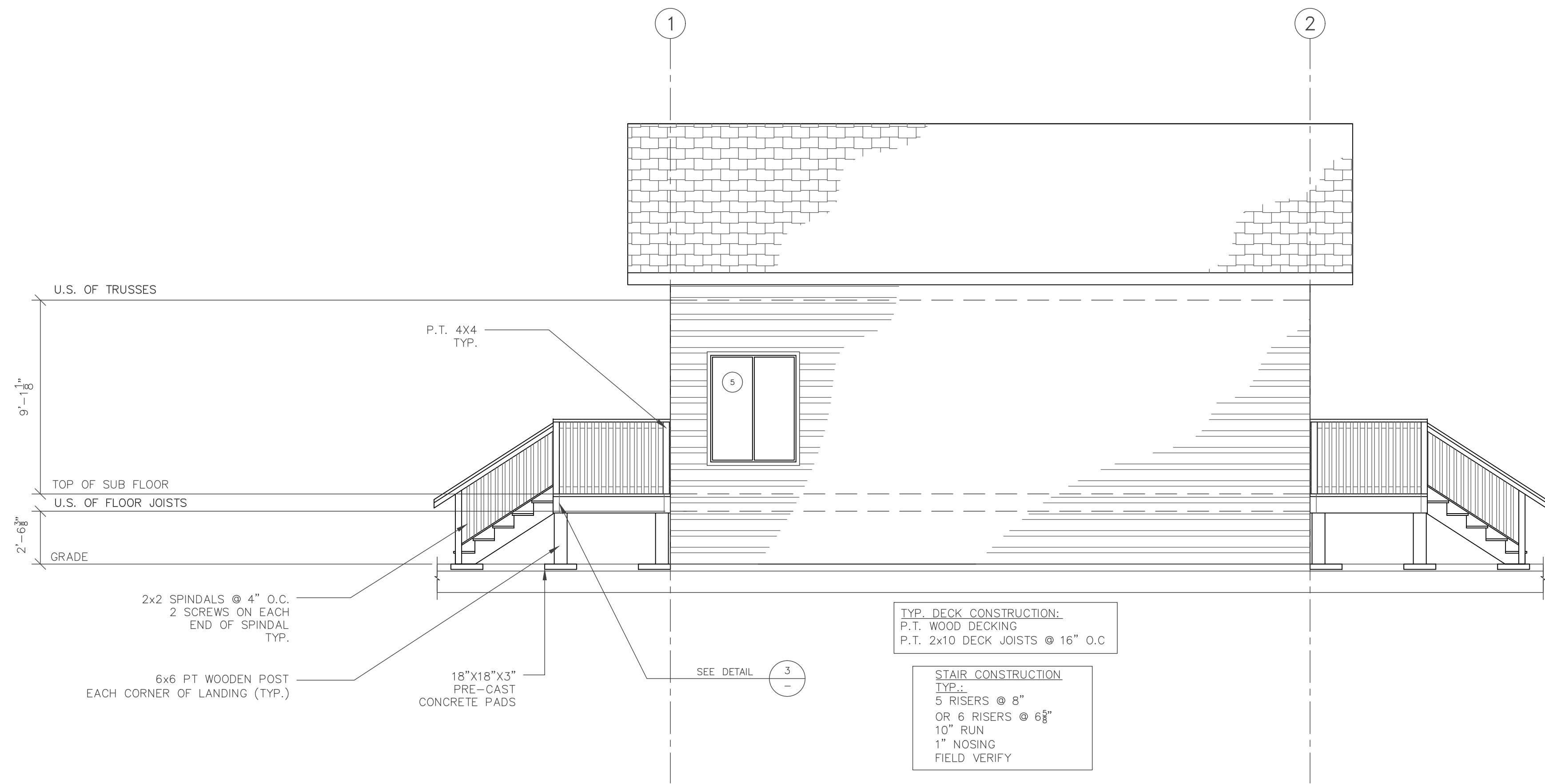
SOUTH & NORTH ELEVATIONS

DRAWN: TN	CHECKED: RJF
DATE: 15/05/2024	SCALE: 1/4"=1'-0"

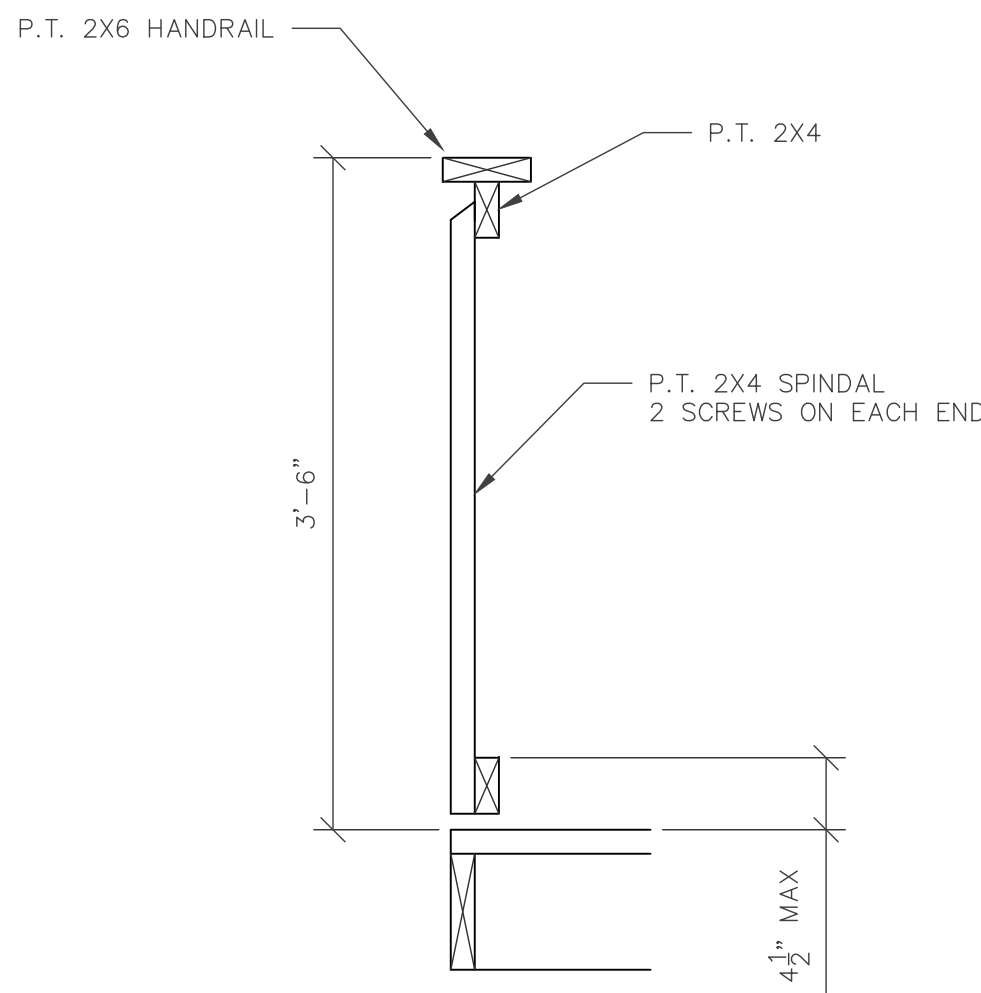
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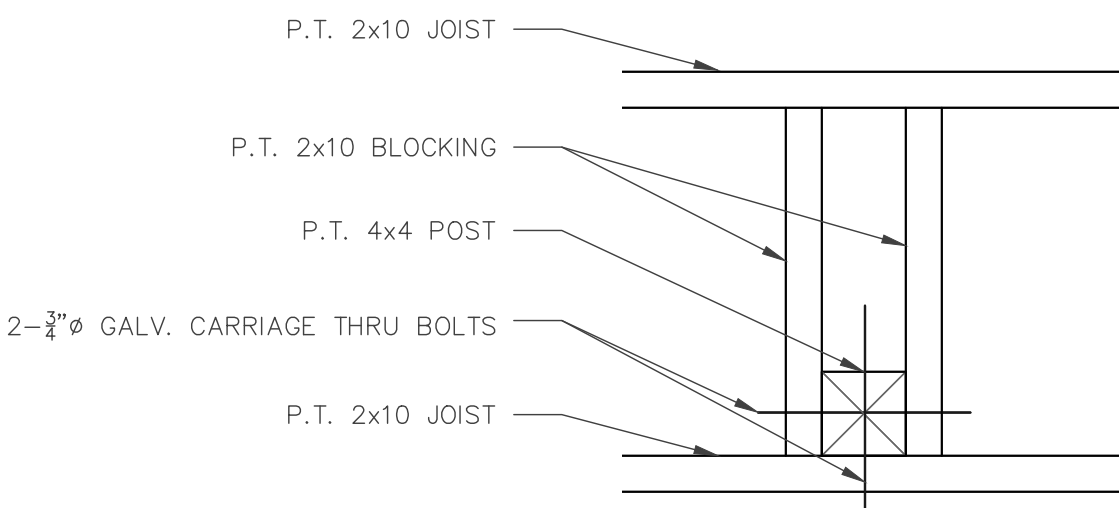
EAST ELEVATION



WEST ELEVATION



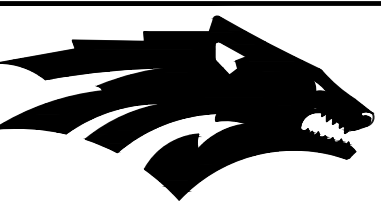
TYPICAL WOOD RAILING ASSEMBLY
SECTION B
1"=1'-0"



TYPICAL P.T. 4x4 BLOCKING DETAIL

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

NOTES:

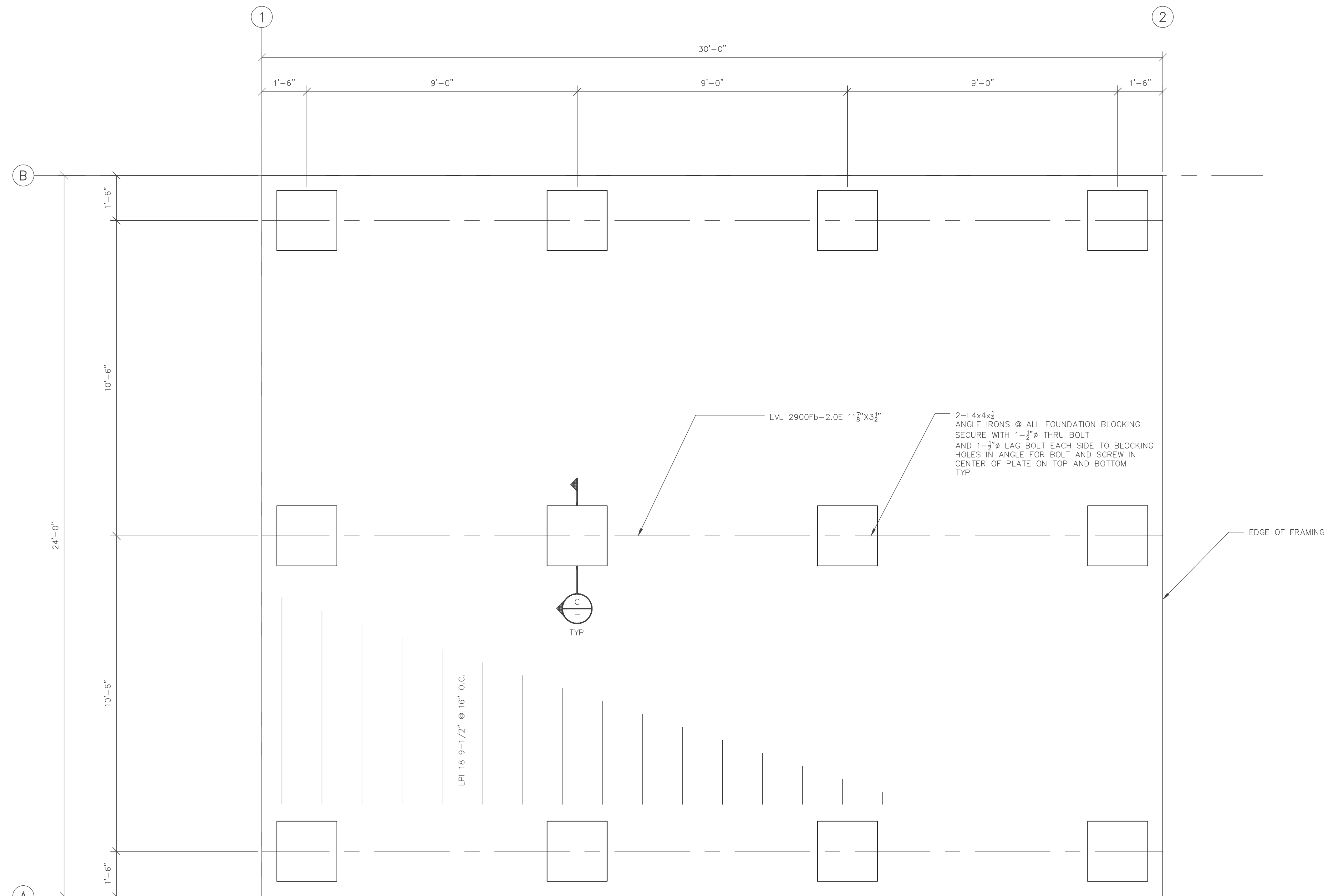
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ARROW RIVER
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DEVON ROAD

EAST & WEST ELEVATIONS





2'-0"

P.T. 6x6 NAILED TOGETHER WITH GALV. NAILS TYP.

24"x24"x2" REINFORCED PRECAST CONCRETE PAD

4" COMPACT GRAN. A

10 MIL POLY VAPOUR BARRIER

12" COMPACT GRAN. B

P.T. 2x4 STUDS @ 16" O.C. MIN. 3" ABOVE GRADE

2 1/2" SPRAY FOAM INSULATION

RIGID INSULATION TO FILL GAP

10 MIL POLY VAPOUR BARRIER

P.T. 2x4 TOP PLATE

P.T. 3/4" PLYWOOD EXTENDING TO GRADE

2" RIGID INSULATION

P.T. 2x4 BOTTOM PLATE

12" FLASHING 8" BELOW GRADE

GRADE

U.S. GRAN. A

U.S. GRAN. B

EXTENT OF RIGID 4'-0"

1'-0"

SECTION
1/2"=1'-0"



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