



# HARKER RESIDENCE

## LAKE BLAINE, MONTANA

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### DRAWING LIST

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### GENERAL NOTES

- DO NOT SCALE DRAWINGS; DIMENSIONS GOVERN. ADDITIONAL DIMENSIONS WHICH NEED CLARIFICATION SHALL BE PROVIDED BY THE ARCHITECT UPON WRITTEN REQUEST BY THE SUBCONTRACTOR.
- DIMENSIONS ARE TO OUTSIDE FACE OF SHEATHING AT EXTERIOR WALLS AND TO CENTERLINE OF WALL FRAMING AT INTERIOR WALLS.
- DIMENSIONS FOR ELEVATIONS, SECTIONS, AND DETAILS ARE CALLED OUT FROM TOP OF SUBFLOOR.
- DOOR AND WINDOW SIZES ARE SHOWN AS WIDTH BY HEIGHT IN FEET AND INCHES. FOR EXAMPLE, A 3080 DOOR IS A 3'-0" WIDE BY 8'-0" TALL DOOR. A 2880 DOOR IS A 2'-8" WIDE BY 8'-0" TALL DOOR.
- DIMENSIONS NOTED AS "CLEAR" SHALL BE MEASURED FROM FINISH FACE TO FINISH FACE.
- "TYPICAL" MEANS THE REFERENCED DETAIL SHALL APPLY FOR ALL SIMILAR CONDITIONS, UNLESS NOTED OTHERWISE.
- ADJACENT OUTLETS AND SWITCHES SHALL BE GANGED WHEN POSSIBLE. IF NOT POSSIBLE, INSTALL WITH MINIMUM DISTANCE BETWEEN UNITS. ALL TOPS SHALL ALIGN.
- DOOR JAMB SHALL BE LOCATED 4" OFF ADJACENT WALL, TYPICAL, UNLESS SHOWN OTHERWISE.
- PROVIDE WOOD BLOCKING FOR ALL MILLWORK AND ANY WALL HUNG COUNTERS, LEDGES AND SHELVING. PROVIDE BLOCKING AS REQUIRED BY CONSTRUCTION.
- ALL FINISH WORK SHALL BE SMOOTH, FREE FROM ABRASION AND/OR TOOL MARKS ON ANY EXPOSED SURFACES. ALL SPECIFIED FINISHES ARE TO BE INSTALLED PER MANUFACTURERS INSTRUCTIONS.
- ALL CONSTRUCTION SHALL COMPLY WITH ALL BUILDING CODES AND REQUIREMENTS HAVING JURISDICTION OVER THIS PROJECT.
- BEAMS, HEADERS AND LENTILS TO BE SIZED BY AN ENGINEER OR MANUFACTURER.
- USE DOUBLE JOISTS UNDER WALLS, WHICH RUN PARALLEL TO JOISTS.
- EXACT SIZE AND REINFORCEMENT OF ALL CONCRETE FOOTINGS MUST BE DETERMINED BY LOCAL SOIL CONDITIONS AND ACCEPTABLE PRACTICES OF CONSTRUCTION. VERIFY DESIGN WITH LOCAL GEOTECH ENGINEER.

MARCH 29, 2019

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COVER SHEET  
A0.0

## DIVISION 2

INSTALL HAY BALES AND SILT FENCING OR OTHER APPROVED MEANS OF SILT CONTROL AT PERIMETER OF DISTUBED AREA UNTIL WORK IS COMPLETE.

STRIP AND STORE TOPSOIL TO DEPTH IT OCCURS FROM ALL AREAS COVERED BY HOUSE OR DRIVEWAY. STORE TOPSOIL ON SITE WHERE DIRECTED.

FILL BELOW FINAL GRADE AREAS RESULTING FROM CONSTRUCTION WITH SOIL MATERIAL FREE OF CLAY, ROCK OR GRAVEL LARGER THAN 3" IN ANY DIMENSION, DEBRIS, PLANT MATTER, WASTE, AND FROZEN MATERIALS. PLACE IN 8" DEEP HORIZONTAL LAYERS WITH EACH LAYER THOROUGHLY COMPACTED.

GRADE GROUND SURFACE TO PROVIDE SURFACE DRAINAGE AWAY FROM AND AROUND THE BUILDING FOOTPRINT.

DO NOT BACKFILL AGAINST FOUNDATION UNTIL FOUNDATION WALLS ARE WATERPROOFED AND HOME MAIN LEVEL FLOOR IS COMPLETELY FRAMED.

DRIVE AREAS SHALL BE MADE UP OF 6-8" OF PIT RUN AND 4" OF GRAVEL. PROVIDE GEOTEXTILE FABRIC AT DAMP LOCATIONS AND SLOPED AREAS.

## DIVISION 3

CONCRETE SLABS, STEM WALLS AND FOUNDATIONS SHALL BE CONSTRUCTED OF A MINIMUM 3000 TO 3600 PSI CONCRETE, 28 DAY TEST, WITH A 4" MINIMUM TO 6" MAXIMUM SLUMP, AIR ENTRAINED TO 5-8%. NO ADDITIONAL WATER SHALL BE ADDED TO CONCRETE AFTER SLUMP TEST IS RECORDED. MAXIMUM AGGREGATE SIZE SHALL BE 3/4". GRAVEL SHOULD BE WELL GRADED AND NOT EXCEED 1 1/2" IN SIZE.

REINFORCING STEEL SHALL BE MINIMUM ASTM A615, GRADE 40. ALL REBAR SHALL BE LOCATED 3" CLEAR FROM BOTTOM AND SIDE OF FOOTING AND 2" CLEAR FROM TOP. LOCATE VERTICAL REBAR 4'-0" O.C. IN RETAINING SITUATIONS. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A105 AND BE LOCATED IN THE CENTER OF THE DEPTH.

PROVIDE 1/2" DIA. X 10" LONG ANCHOR BOLTS AT 48" O.C. AND ON EACH SIDE OF WINDOWS AND DOORS.

CONCRETE FLOOR SLABS SHALL BE CONSTRUCTED OF 3000 PSI CONCRETE, REINFORCED WITH 10 GAUGE 6' X 6' WELDED WIRE MESH AND REBAR. CONTROL JOINTS SHALL BE PROVIDED IN SLABS SO THAT THE MAXIMUM AREA BETWEEN JOINTS SHALL BE 400 SQ. FT. AND THE LENGTH OF THAT AREA IS NOT MORE THAN TWICE THE WIDTH.

## DIVISION 4

CONCRETE MASONRY UNITS (CMU) SHALL BE IN ACCORDANCE WITH ASTM C90 OR C145, 1500 PSI COMPRESSIVE STRENGTH, GRADE N, TYPE 1, HOLLOW CORE LOAD BEARING CMU AND SHALL HAVE A NET COMPRESSIVE STRENGTH OF 1900 PSI. LAY CMU PLUMB WITH ALL COURSES LEVEL USING APPROPRIATE CORNER BLOCKS AT CORNERS, WINDOWS AND DOOR JAMBS. FOUNDATION WALLS SHALL BE CONSTRUCTED WITH 8X8X16 CMU. COMPLETELY BED CMU WITH TYPE "M" MORTAR. FILL ALL CELLS CONTAINING VERTICAL REBAR WITH 3000 PSI CONCRETE. REINFORCE MASONRY WALLS WITH 9 GAUGE STEEL "H" WIRE TRUSS-DESIGN MASONRY HORIZONTAL WALL REINFORCEMENT A MINIMUM OF EVERY THIRD COURSE, AND REBAR.

DO NO MASONRY WORK WHEN THERE IS DANGER OF FREEZING BEFORE MORTAR HAS SET.

LAY BLOCKS IN A STANDARD RUNNING BOND WITH FACE SHELLS COMPLETELY BEDDED IN MORTAR, WEBS CLEAN, VERTICAL JOINTS SHOVED TIGHT. NO FURROWING OF MORTAR PERMITTED WITH JOINTS NOT OVER 1/2" THICK AND EXTENDED MORTAR CUT OFF FLUSH WITH FACE OF WALL.

## DIVISION 6

MANUFACTURED LUMBER SHALL BE S4S AND GRADE STAMPED FIR-LARCH MIX. PROVIDE SEASONED LUMBER WITH MAX 19% MOISTURE CONTENT AT TIME OF DRESSING AND SHIPMENT, FOR SIZES OF 2" OR LESS IN THICKNESS.

SUBFLOOR SHALL BE 3/4" T&G ENGINEERED FLOORS, SCREWED AND GLUED TO JOISTS BELOW.

ROOF SHEATHING SHALL BE 3/4" CDX PLYWOOD W/ T&G EDGES.

WALL SHEATHING SHALL BE 1/2" OSB SHEATHING.

## DIVISION 6, (con.)

SECURELY ATTACH CARPENTRY WORK TO SUBSTRATES AND SUPPORTING MEMBERS USING FASTENERS OF SIZE THAT WILL NOT PENETRATE MEMBERS WHERE OPPOSITE SIDE WILL BE EXPOSED TO VIEW OR RECEIVE FINISH MATERIALS. INSTALL FASTENERS WITHOUT SPLITTING WOOD; FASTEN PRODUCTS TO ALLOW FOR EXPANSION AT JOINTS UNLESS OTHERWISE INDICATED.

GLU-LAM BEAMS SHALL HAVE A MINIMUM BENDING DESIGN VALUE (Fb) OF 2400 PSI AND A MODULUS OF ELASTICITY OF 1,800,000. INSTALL WITH CROWN UP.

MICRO-LAM LUMBER SHALL HAVE A MINIMUM BENDING DESIGN VALUE OF 2800 PSI AND A MODULUS OF ELASTICITY OF 2,000,000 PSI.

PARA-LAM BEAMS SHALL HAVE A MINIMUM BENDING DESIGN VALUE OF 2900 PSI AND A MODULUS OF ELASTICITY OF 2,000,000 PSI.

FINISH CARPENTRY SUCH AS BASEBOARDS AND WINDOW AND DOOR CASING SHALL BE SOLID WOOD, PRIMED ON ALL FOUR SIDES, PRIOR TO INSTALLATION. INSTALL TRIM WITH MINIMUM NUMBER OF JOINTS POSSIBLE, USING FULL LENGTH PIECES FROM MAXIMUM LENGTH OF LUMBER AVAILABLE. MITER AT CORNERS TO PRODUCE TIGHT FITTING JOINTS. USE SCARF JOINTS FOR END TO END JOINTS.

INSTALL FINISH CARPENTRY WORK PLUMB, LEVEL, TRUE AND STRAIGHT WITH NO DISTORTIONS. SHIM AS REQUIRED USING CONCEALED SHIMS. SCRIBE AND CUT FINISH CARPENTRY ITEMS TO FIT ADJOINING WORK. ANCHOR FINISH CARPENTRY WORK SECURELY TO SUPPORTS AND SUBSTRATES, USING CONCEALED FASTENERS AND BLIND NAILING WHERE POSSIBLE. USE FINE FINISHING NAILS FOR EXPOSED NAILING EXCEPT AS INDICATED, COUNTERSUNK AND FILLED FLUSH WITH FINISHED SURFACE.

ALL INTERIOR WALLS SHALL BE WOOD STUDS WITH SINGLE BOTTOM PLATES AND DOUBLE TOP PLATES THROUGHOUT. PROVIDE SOLID BLOCKING AT MID-HEIGHT OF ALL WALLS WHICH EXCEED 9'-0" IN HEIGHT. INTERIOR WALLS SHALL HAVE STUDS PLACED 16" O.C.

ALL EXTERIOR WALLS SHALL BE 2X6 SINGLE BOTTOM PLATES AND DOUBLE TOP PLATES.

MOISTURE CONTENT FOR INTERIOR WOODWORK SHALL BE 8-10% TO REDUCE EXCESS SHRINKAGE.

STAIR TREADS, RISERS AND OVERALL WIDTH OF STAIRS SHALL COMPLY WITH APPLICABLE BUILDING CODES. STRUCTURAL STAIR STRINGERS SHALL BE CONSTRUCTED OF 2X12'S. GLUE AND SCREW FRAMING TOGETHER.

## DIVISION 7

UNDERSLAB VAPOR BARRIER SHALL BE INSTALLED DIRECTLY UNDERNEATH CONCRETE SLAB. LAP JOINTS NOT LESS THAN 12 INCHES AND TAPE AND SEAL IN ACCORDANCE WITH MANUFACTURER'S GUIDELINES.

EXTERIOR WALLS SHALL CONTAIN ONE LAYER OF 5.5" THICK INSULATION. RECOMMEND A 1" LAYER OF CONTINUOUS RIGID INSULATION.

INTERIOR WALLS SHALL CONTAIN ONE LAYER OF 3.5" THICK MINERAL FIBER INSULATION AT 2X4 WALLS AND 5.5" THICK AT 2X6 WALLS AND AT FLOOR SYSTEMS BETWEEN OCCUPIED FLOORS.

PROVIDE A MINIMUM OF 7" OF CLOSED CELL SPRAY FOAM AT EXTERIOR RIM JOISTS, UNDERSIDE OF ROOF DECKING, AND GABLE ENDS ABOVE THE UPPER LEVEL TOP PLATE.

ON ALL ROOF SURFACES, INSTALL ICE AND WATER SHIELD UNDER ALL METAL ROOF SYSTEMS AND UNDER SHINGLE ROOFS WITH LESS THAN A 4:12 SLOPE.

METAL DRIP EDGES SHALL BE BRAKE FORMED SHEET METAL WITH AT LEAST A 2" ROOF DECK FLANGE AND A 1 1/2" FASCIA FLANGE WITH A 3/8" DRIP AT LOWER EDGE. FURNISH THE MATERIAL IN MINIMUM LENGTHS OF 8'.

APPLY EXTERIOR SEALANT IN CONFORMITY WITH MANUFACTURER'S PRINTED SPECIFICATIONS AND RECOMMENDATIONS. COLOR TO BE SELECTED FROM MANUFACTURER'S STANDARD LINE BY ARCHITECT. CUT NOZZLE TO PROPER SIZE TO OBTAIN NEAT, SMOOTH, SLIGHTLY CONCAVE AND UNIFORM BEADS. TOOL SEALANT WITH CAULKING TOOL AND MAKE ALL SEALANT JOINTS WATERTIGHT.

## DIVISION 8

ALL EXTERIOR DOORS SHALL BE INSULATED OR SOLID WOOD WITH FIBERGLASS EXTERIOR TO MATCH WINDOWS. PROVIDE WEATHER TIGHT THRESHOLDS AND BLACK WEATHER STRIPPING AROUND THE ENTIRE DOOR.

INTERIOR DOORS SHALL BE PAINT GRADE 1-3/4" SOLID CORE TWO PANEL DOORS.

PROVIDE 9'-0" WIDE X 7'-0" HIGH INSULATED GARAGE DOOR WITH ELECTRIC OPENERS AND A REMOTE CONTROL UNIT. INSTALL WEATHERSTRIPPING AROUND DOOR OPENING.

WINDOWS SHALL CONFORM WITH ALL APPLICABLE BUILDING CODES CONCERNING EGRESS. MINIMUM NET CLEAR OPENING SHALL BE 5.7 SQ. FT. MINIMUM NET CLEAR WIDTH SHALL BE 20" AND MINIMUM NET CLEAR HEIGHT SHALL BE 24". SILL HEIGHT SHALL NOT EXCEED 44" ABOVE THE FLOOR.

WINDOWS SHALL BE FIBERGLASS EXTERIOR WITH A FIBERGLASS OR WOOD INTERIOR IN CASEMENT OR FIXED CASEMENT STYLE. GLASS SHALL BE CLEAR AND INSULATED WITH LOW-E AND ARGON FILLED. SCREENS SHALL BE PROVIDED AT ALL OPERABLE WINDOWS. WINDOW HARDWARE FINISH SHALL BE SELECTED BY OWNER.

DOOR HARDWARE SHALL INCLUDE KEYED DEADBOLT LOCKSETS AT ALL EXTERIOR DOORS. INTERIOR DOORS SHALL BE A COMBINATION OF PRIVACY AND PASSAGE LOCKS. HARDWARE FINISH SHALL BE SELECTED BY OWNER.

## DIVISION 9

GYPSUM WALLBOARD (GBD) SHALL BE HELD FIRMLY AGAINST THE FRAMING WHILE FASTENING TO AVOID LATER MOVEMENT ON THE SHANK OF THE SCREWS. SCREWS SHALL BE SEATED SLIGHTLY BELOW THE SURFACE WITHOUT BREAKING THE PAPER. NAILS ARE NOT ALLOWED.

AT GYPSUM WALLBOARD JOINTS INSTALL A 2" CROSS THREADED TAPE WITH A CROSS TENSILE STRENGTH OF 45 LBS PER LINEAL INCH.

SHEATH WALLS AND CEILINGS WITH WALLBOARD HORIZONTALLY WITH LONG EDGES AT RIGHT ANGLES TO FRAMING MEMBERS. OFFSET JOINTS BETWEEN LAYERS AT LEAST 24". SCREWS TO BE PLACED AT 12" O.C.

ALL WALLS AND TRIM SHALL BE CAULKED AND PRIMED PRIOR TO APPLICATION OF PAINT. ALL INTERIOR GBD WALLS SHALL BE AN EGGHELL SHEEN. TWO COATS OF PAINT ARE REQUIRED AT ALL INTERIOR APPLICATIONS.

ALL INTERIOR TRIM SHALL BE SEMI-GLOSS SHEEN. TRIM SURFACES SHALL BE SANDED SMOOTH BEFORE PAINT IS APPLIED. PUTTY AREAS WITH A WOOD BASED FILLER WHERE NAILS OR OTHER DEFECTS APPEAR IN THE SURFACE.

ALL CEILINGS SHALL BE FLAT SHEEN.

PRE-PRIME ALL EXTERIOR WOOD TRIM, INCLUDING THE BACKSIDE, EDGES AND ENDS BEFORE INSTALLATION.

DO NOT PAINT ANY MOVING PARTS OF OPERATING UNITS OR CODE REQUIRED LABELS.

ACCEPTABLE PAINT MANUFACTURERS INCLUDE BENJAMIN MOORE AND SHERWIN-WILLIAMS.

TILE SHALL BE LAID OUT SO CUT TILES OCCUR AT EDGES ONLY. MAKE CUTS SO TILE SIZES ARE EQUAL AT PARALLEL WALLS. ENSURE TILE JOINTS ARE UNIFORM IN WIDTH, WATERTIGHT, WITHOUT VOIDS, CRACKS, EXCESS MORTAR AND GROUT.

PROVIDE A PAINT ON WATERPROOFING MEMBRANE SUCH AS RED-GUARD OR AN APPROVED LATICRETE SYSTEM UNDER ALL TILE WITHIN SHOWER LOCATIONS.

## DIVISION 10

PREFABRICATED FIREPLACE UNITS SHALL BE UL APPROVED AND INSTALLED PER MANUFACTURER'S SPECIFICATIONS. SUPPLY AIR SHALL BE DRAWN FROM EXTERIOR.

## DIVISION 15

PLUMBING SHALL BE A FULLY OPERATIONAL SYSTEM OF HOT AND COLD WATER. WATER SHALL BE PROVIDED BY THE ON SITE SURFACE SPRING OR SITE WELL. FILTRATION SHALL BE PROVIDED AS REQUIRED. WATER SHALL BE HEATED BY ELECTRIC POWER.

## DIVISION 16

FROM ELECTRICAL TRANSFORMER, INSTALL BELOW GROUND WIRING TO BUILDING. MOUNT METER ON THE EAST FACE OF THE LOWER LEVEL OF THE HOUSE. METER SHALL CONNECT TO METAL RECESSED ELECTRIC PANEL BEHIND METER AT INTERIOR OF GARAGE.

INSTALL SINGLE BRAND AND MATCHING WHITE RECEPTACLES, SWITCHES AND COVER PLATES AT LOCATIONS SHOWN IN CONSTRUCTION DOCUMENTS. FOR EXTERIOR RECEPTACLES, INSTALL GRAY COVER PLATES. WHEN TWO OR MORE SWITCHES OR RECEPTACLES ARE LOCATED TOGETHER, GANG WITH ONE COMMON FACEPLATE. INSTALL ALL RECEPTACLES 14" ABOVE FINISHED FLOOR, SWITCHES AT 48" A.F.F., AND RECEPTACLES ABOVE COUNTERS AT 44" A.F.F. LOCATE LIGHT SWITCHES 6" FROM FRAME OF DOOR.

PANELBOARDS SHALL BE SQUARE D, G.E. OR ITE. PROVIDE TYPEWRITTEN DIRECTORY OF CIRCUITS MOUNTED IN BOX.

BATH VENT FANS SHALL BE INSTALLED IN ALL TOILET ROOMS.

SMOKE AND CO2 DETECTORS SHALL BE INSTALLED PER CODE THROUGHOUT HOUSE.

PROVIDE GFCI CIRCUITS WITH NO. 12 GAUGE WIRE IN ALL WET AREAS, BATHS AND EXTERIOR OUTLETS.

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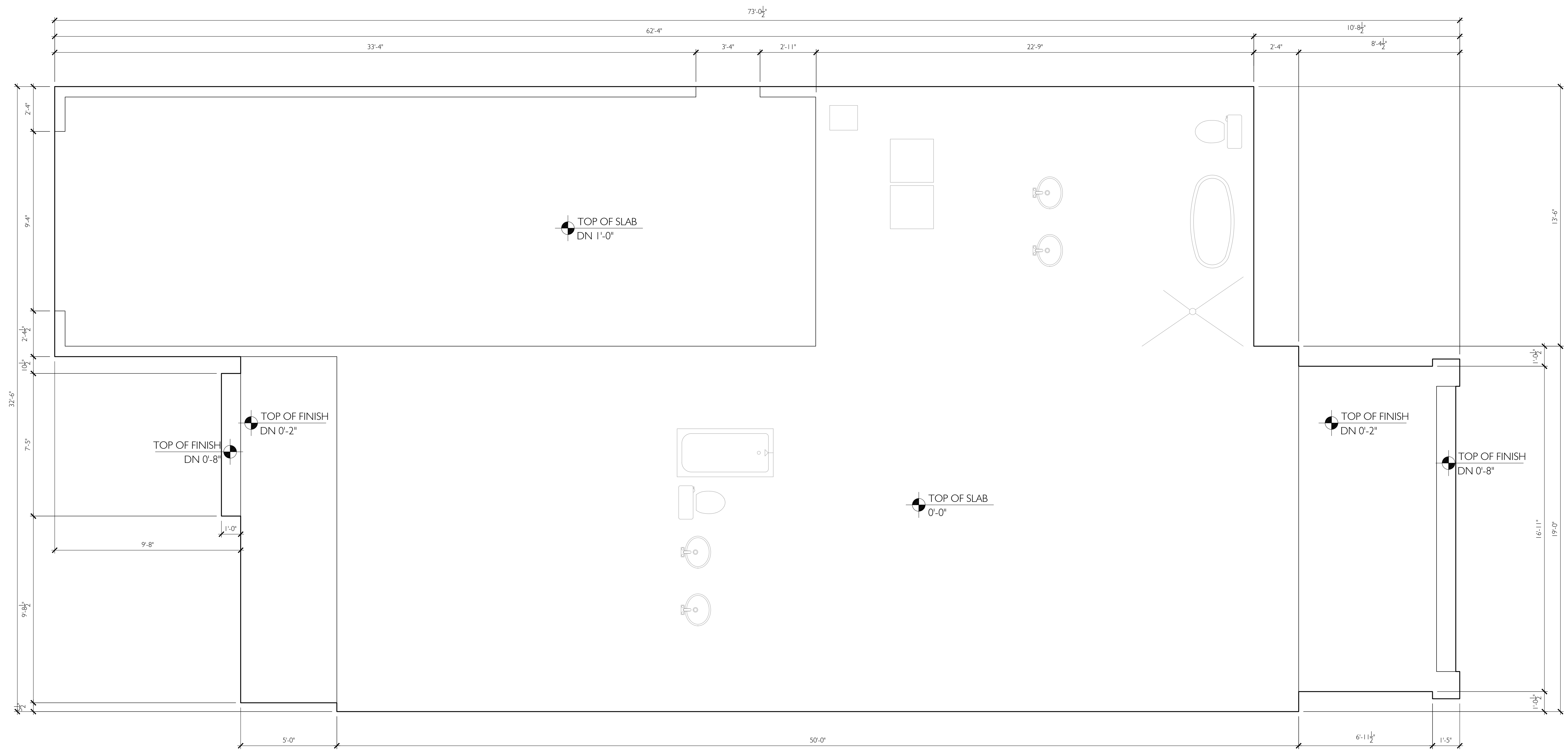
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SPECIFICATIONS

A1.0



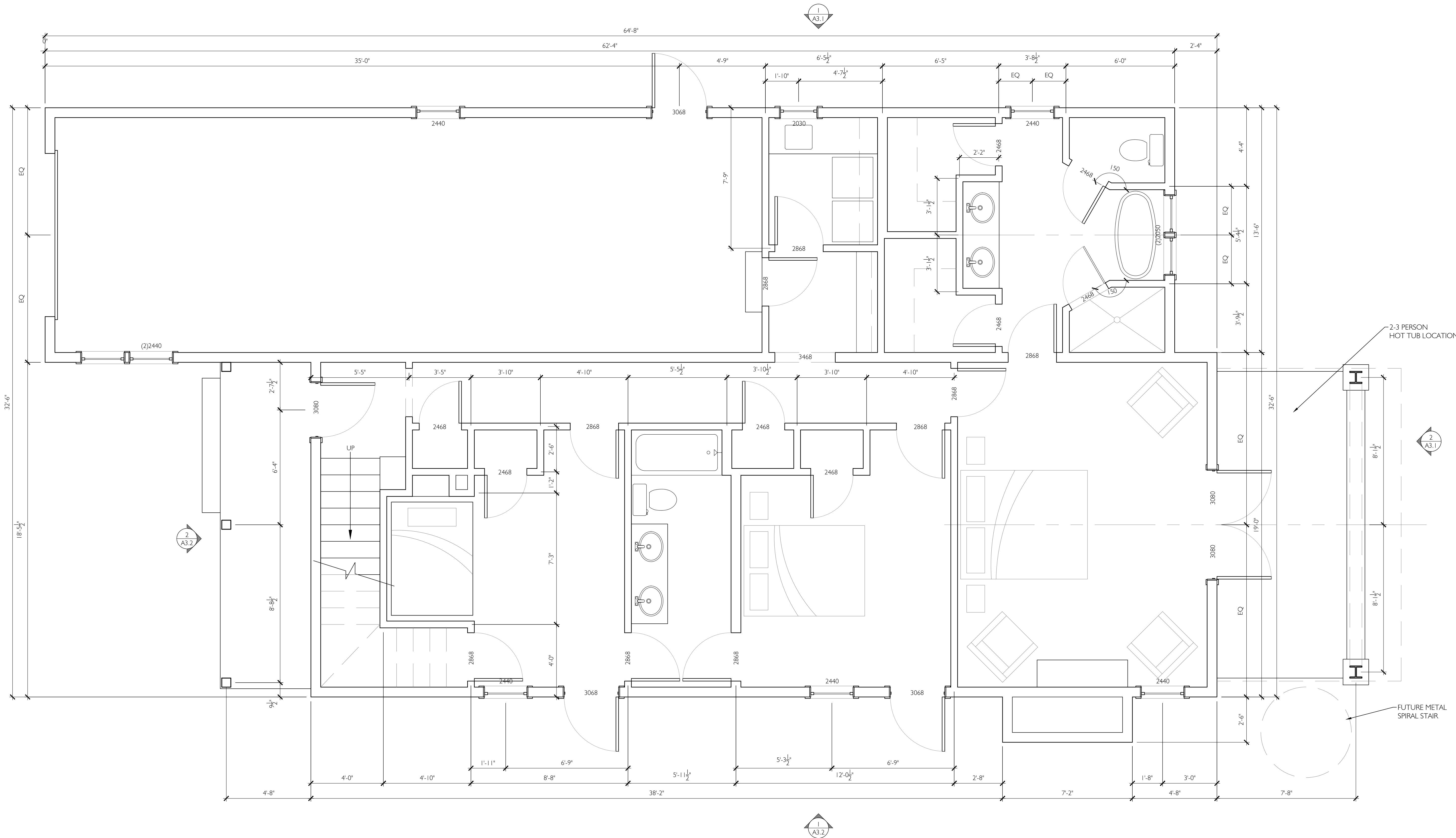
1 FOUNDATION PLAN  
A2.0 Scale 3/8" = 1'-0"

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FOUNDATION PLAN  
A2.0

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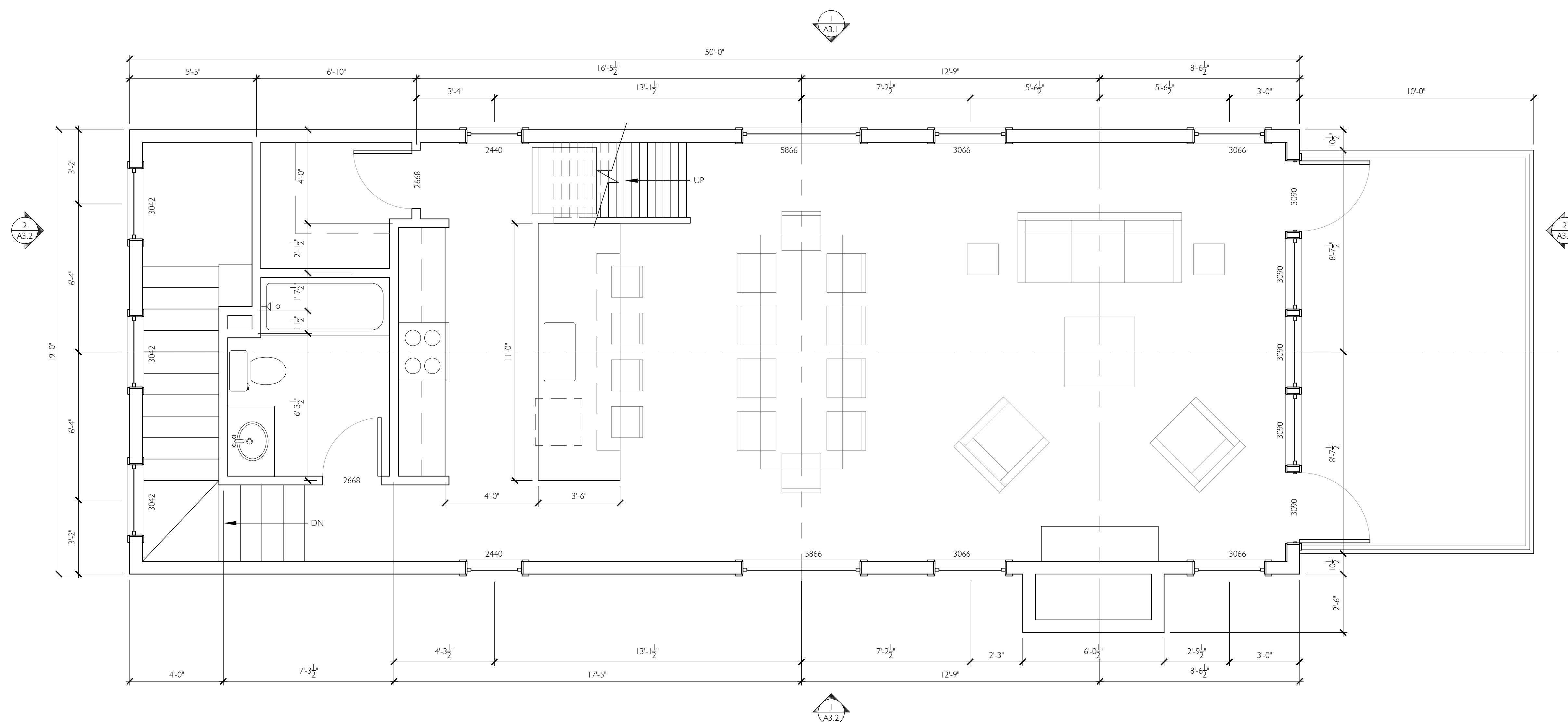


1 MAIN LEVEL FLOOR PLAN  
 A2.1 Scale 3/8" = 1'-0"

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MAIN LEVEL PLAN  
 A2.1

HARKER RESIDENCE  
LAKE BLAINE, MONTANA

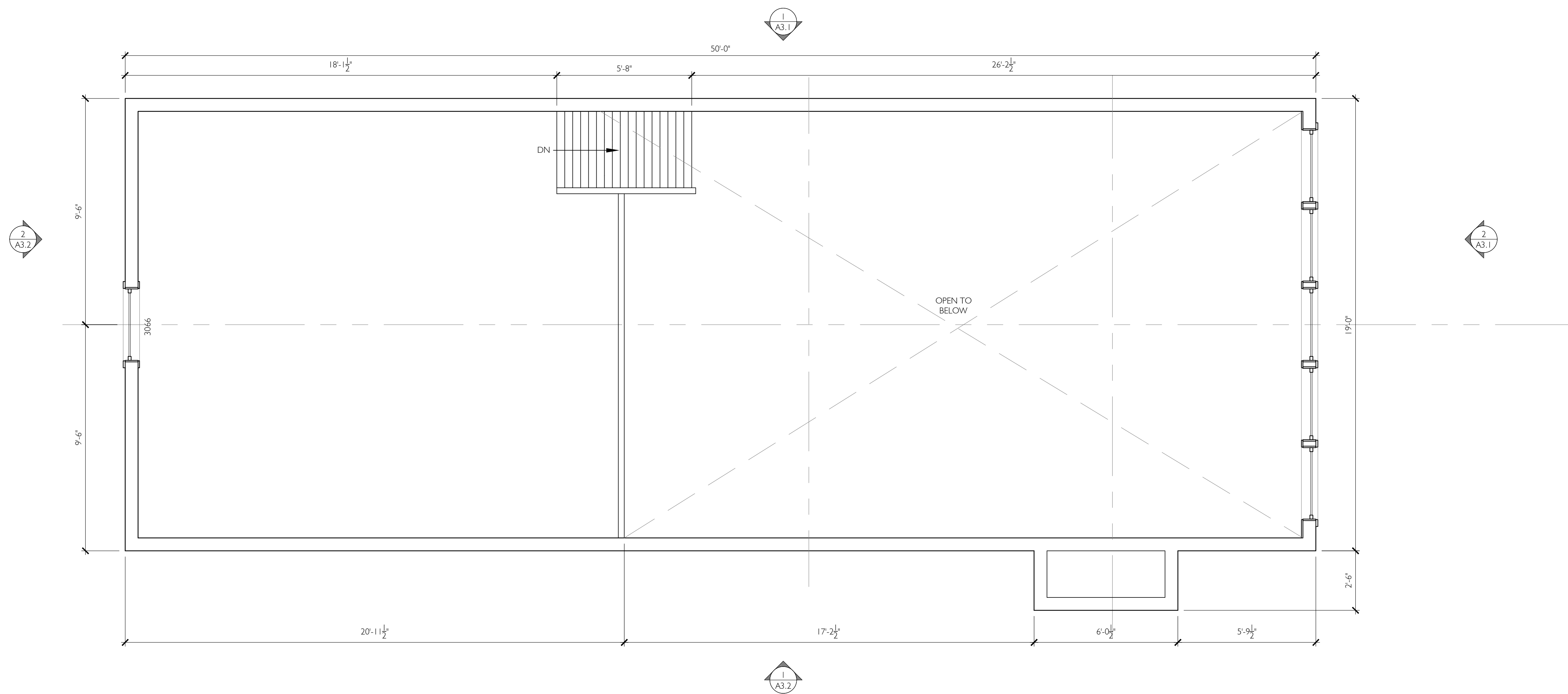


1 UPPER LEVEL FLOOR PLAN  
A2.2 Scale 3/8" = 1'-0"

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UPPER LEVEL PLAN  
A2.2

HARKER RESIDENCE  
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1 LOFT LEVEL FLOOR PLAN  
A2.3 Scale 3/8" = 1'-0"

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LOFT LEVEL PLAN  
A2.3

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1 ROOF PLAN  
A2.4 Scale 3/8" = 1'-0"

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ROOF PLAN  
A2.4

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1 NORTH ELEVATION  
A3.1 Scale 1/4" = 1'-0"



2 EAST ELEVATION  
A3.1 Scale 1/4" = 1'-0"





1 SOUTH ELEVATION  
 A3.2 Scale 1/4" = 1'-0"



2 WEST ELEVATION  
 A3.2 Scale 1/4" = 1'-0"

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EXTERIOR ELEVATIONS  
 A3.2