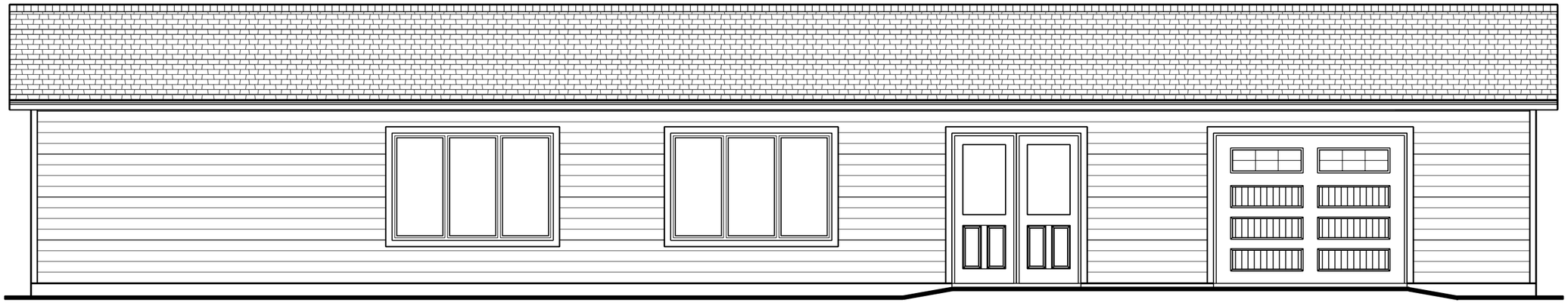

DETACHED SHOP ADDITION

7686 DORCHESTER ROAD
NIAGARA FALLS, ONTARIO

EXISTING SHOP FLOOR AREA = 1,113 SQ. FT.
PROPOSED SHOP FLOOR AREA = 1,600 SQ. FT.

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NAME:	DUSTIN VANTWEL
BCIN:	107 105
FIRM BCIN:	117 864
SIGNATURE:	

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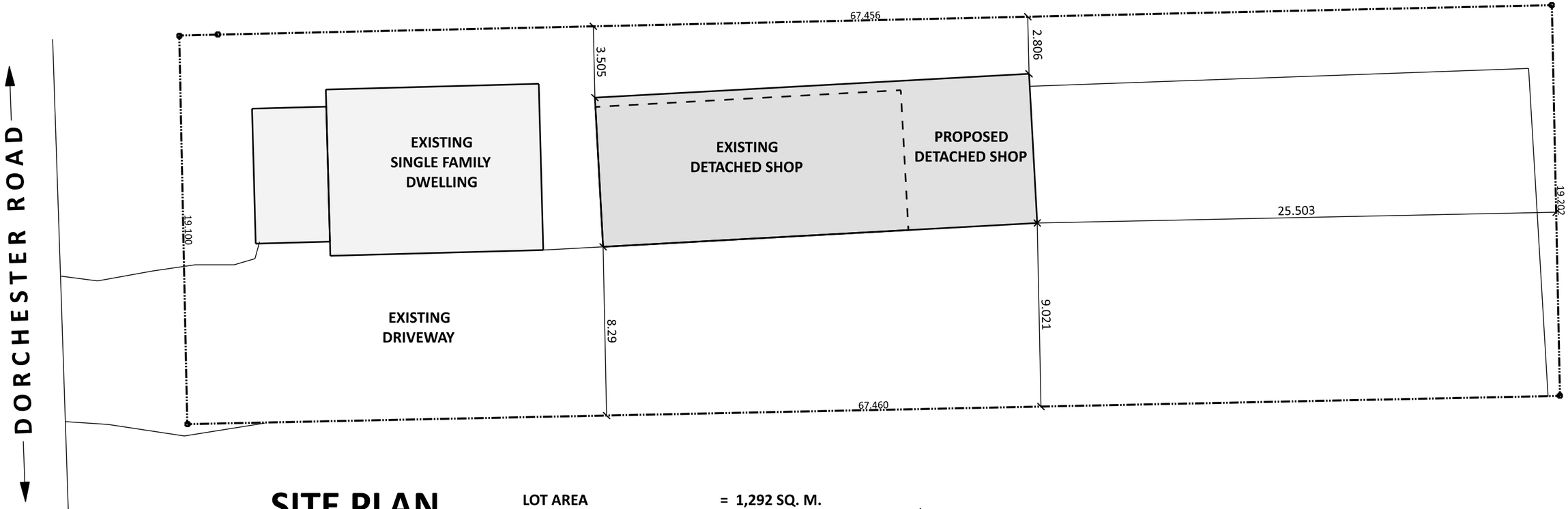

SITE PLAN

7686 DORCHESTER RD
NIAGARA FALLS, ON

LOT AREA = 1,292 SQ. M.

EXISTING LOT COVERAGE = 213.1 SQ. M (16.5%)

PROPOSED LOT COVERAGE = 266.5 SQ. M. (20.6%)

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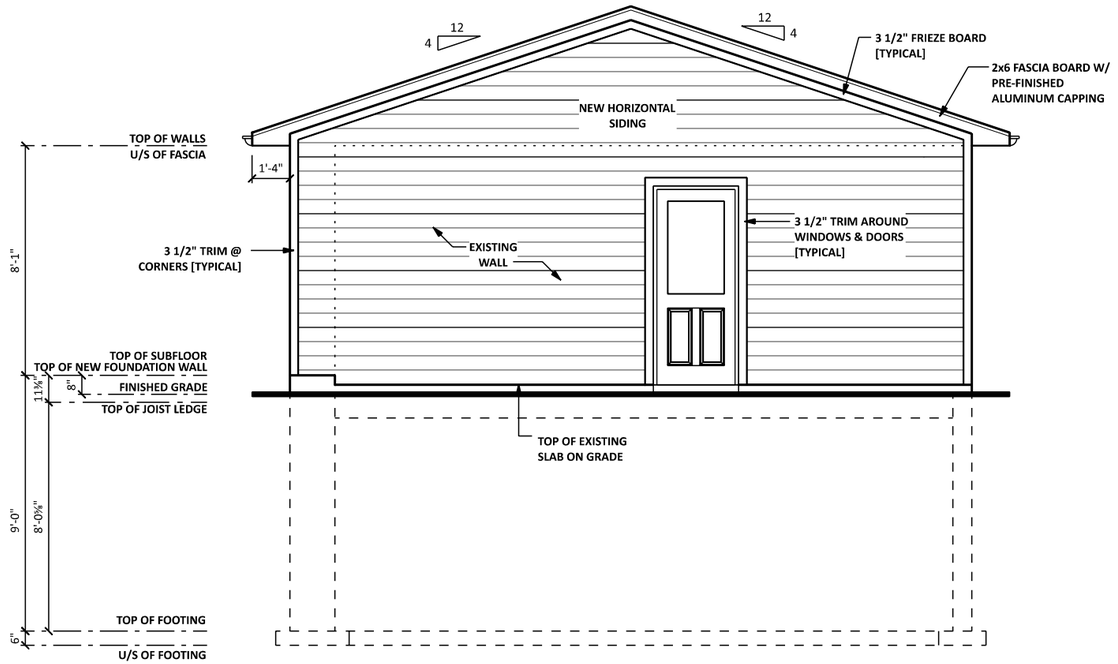
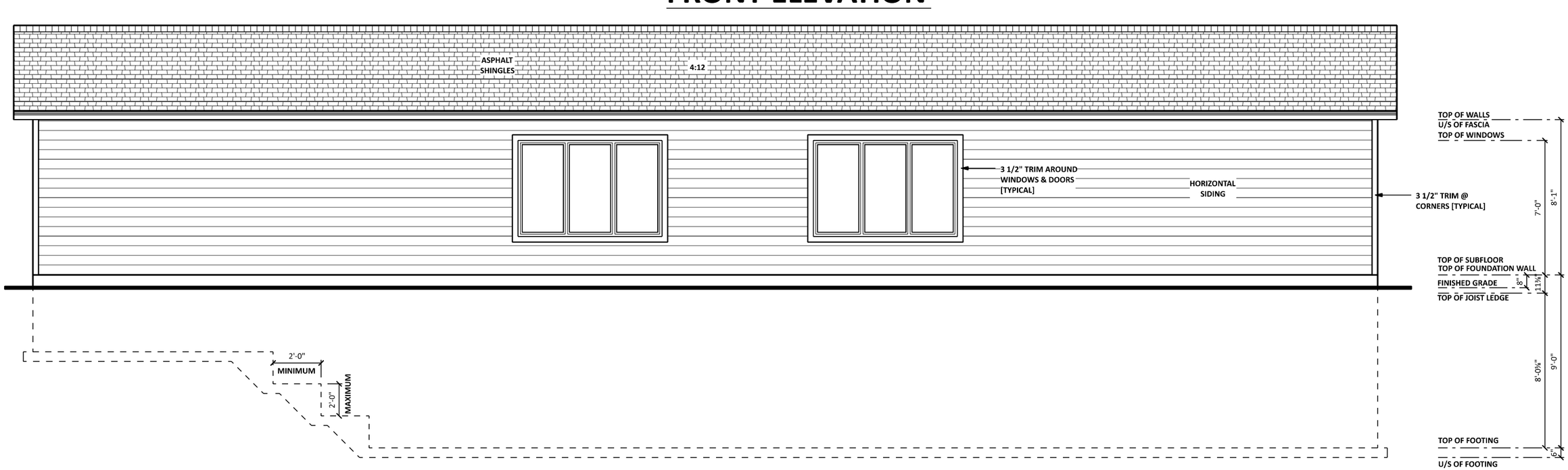


FRONT ELEVATION



LEFT ELEVATION

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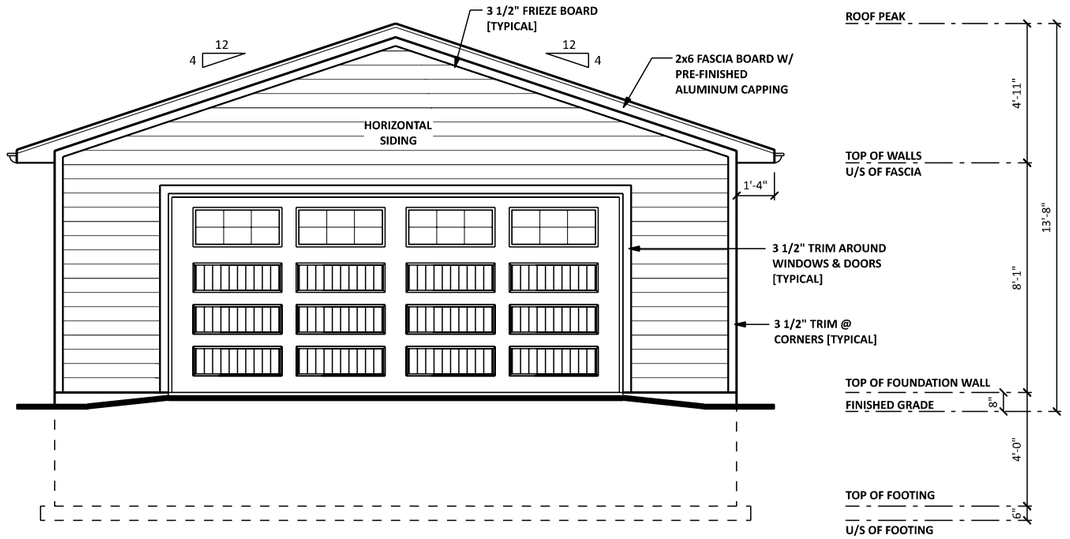
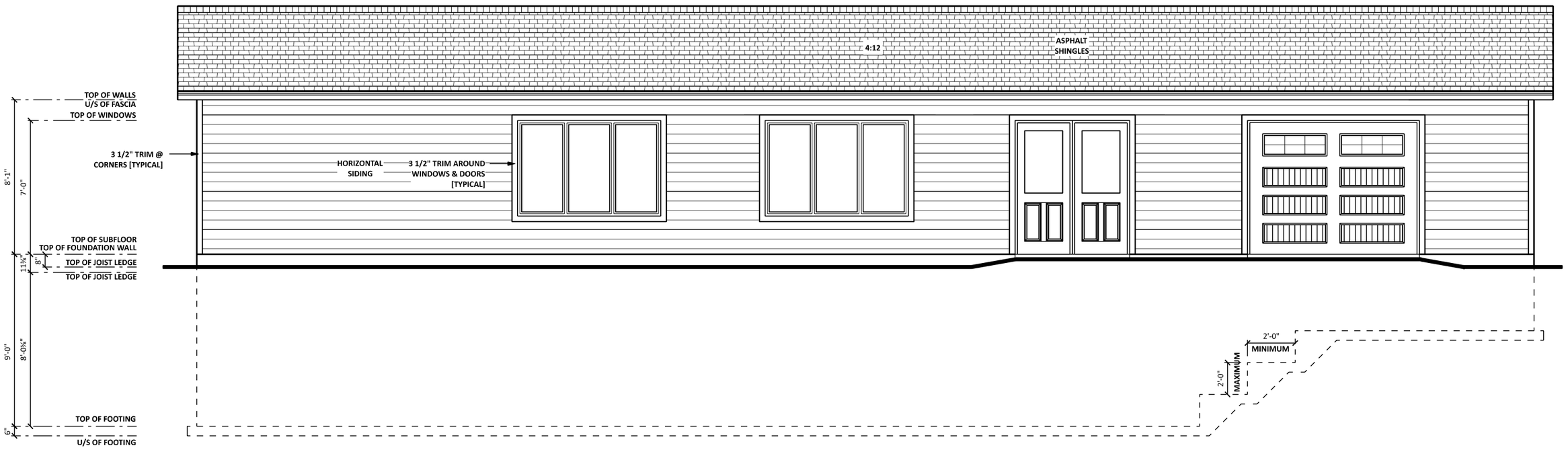


REAR ELEVATION



RIGHT ELEVATION

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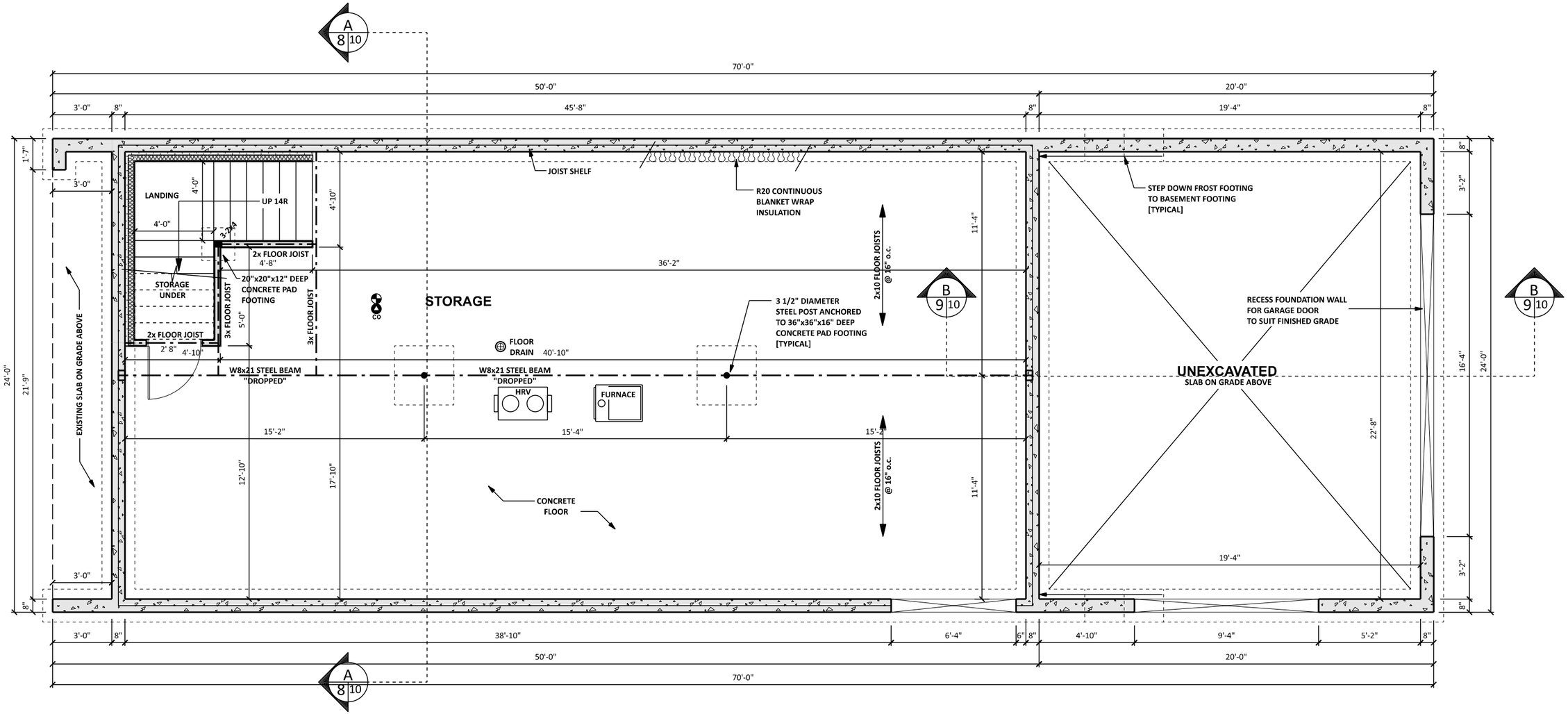

CONCRETE STRENGTHS	
FOOTINGS:	20mPa
WALLS:	20mPa
INTERIOR FLATWORK:	25mPa
EXTERIOR FLATWORK:	32mPa

PROVIDE 20" WIDE x 6" THICK CONCRETE FOOTING UNDER ALL NEW FOUNDATION WALLS

PERIMETER OF ALL CONCRETE PORCHES AND PATIO SLABS SUPPORTED BY A CONCRETE FOUNDATION WALL TO HAVE 15M 24"x24" BENT REBAR @ 24" o.c. @ TOP OF FOUNDATION WALL INTO CONCRETE SLAB

FOUNDATION DRAINAGE SYSTEM AS PER 9.14 OF THE O.B.C. DRAINAGE LAYER TO CONSIST OF PVC WATERPROOF BARRIER BITUMEN DAMPPROOFING, 12"TH. 3/4" CLEAR WEEPER COVER, 4" DIAMETER WEEPING TILE ON UNDISTURBED SOIL @ PERIMETER OF FOOTING.

PROVIDE 2x4 SILL PLATE W/ FOAM SILL GASKET 1/2" DIA. ANCHOR BOLTS @ 7'-10" [MAX.] EMBED ANCHOR BOLTS 4" [MIN.] INTO TOP OF JOIST SHELF

SLAB ON GRADE CONSTRUCTION TO BE 5"TH. 32 MPa, MAX 4" SLUMP, REINFORCED WITH WELDED WIRE MESH, 5%-8% AIR ENTRAINMENT, 2" R10 RIGID INSULATION 6"TH. 3/4" CLEAR STONE BASE. SUB-BASE TO BE COMPACTED TO 98% PROCTOR DENSITY.

PROVIDE 2x6 SILL PLATE W/ FOAM SILL GASKET 1/2" DIA. ANCHOR BOLTS @ 7'-10" [MAX.] EMBED ANCHOR BOLTS 4" [MIN.] INTO TOP OF FOUNDATION WALL

SMOKE ALARM

CARBON MONOXIDE ALARM CO

CONCRETE FOUNDATION WALL
20mPa CONCRETE WALL [SEE PLAN FOR THICKNESS]

CONCRETE FOUNDATION WALL
20mPa CONCRETE WALL WITH 4" x 11 3/8" JOIST SHELF [SEE PLAN FOR THICKNESS]

CONCRETE FOUNDATION WALL
PVC DRAINAGE LAYER
BITUMEN DAMPPROOFING
20mPa CONCRETE WALL [SEE PLAN FOR THICKNESS]
R20 BLANKET WRAP INSUL.

CONCRETE FOUNDATION WALL
PVC DRAINAGE LAYER
BITUMEN DAMP PROOFING
20mPa CONCRETE WALL [SEE PLANS FOR THICKNESS]
R10 RIGID INSULATION
2x4 STRAPPING @ 16" o.c.
R12 BATT INSULATION
6MIL VAPOR BARRIER
1/2" DRYWALL

2x4 PARTITION WALL
1/2" DRYWALL
2x4 STUDS @ 16" o.c.
1/2" DRYWALL

FOUNDATION PLAN

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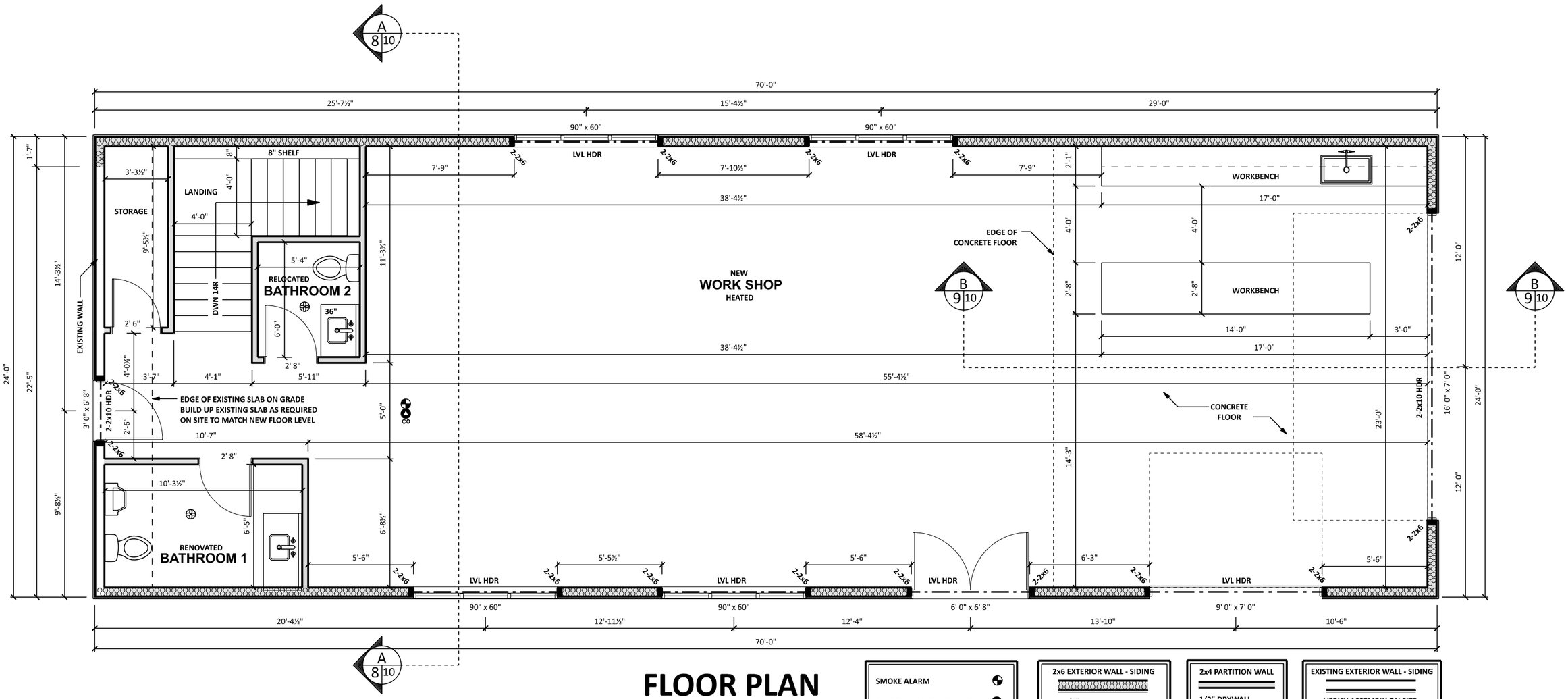
PAGE 5 10



FLOOR PLAN

FLOOR AREA = 1,600 SQ. FT.

SMOKE ALARM	
CARBON MONOXIDE ALARM	CO
EXHAUST FAN	

2x6 EXTERIOR WALL - SIDING

1/2" DRYWALL
6 MIL VAPOR BARRIER
R22 BATT INSULATION
2x6 STUDS @ 16" o.c.
7/16" OSB SHEATHING
TYVEK AIR BARRIER
HORIZONTAL SIDING

2x4 PARTITION WALL

1/2" DRYWALL
2x4 STUDS @ 16" o.c.
1/2" DRYWALL

EXISTING EXTERIOR WALL - SIDING

VERIFY ASSEMBLY ON SITE

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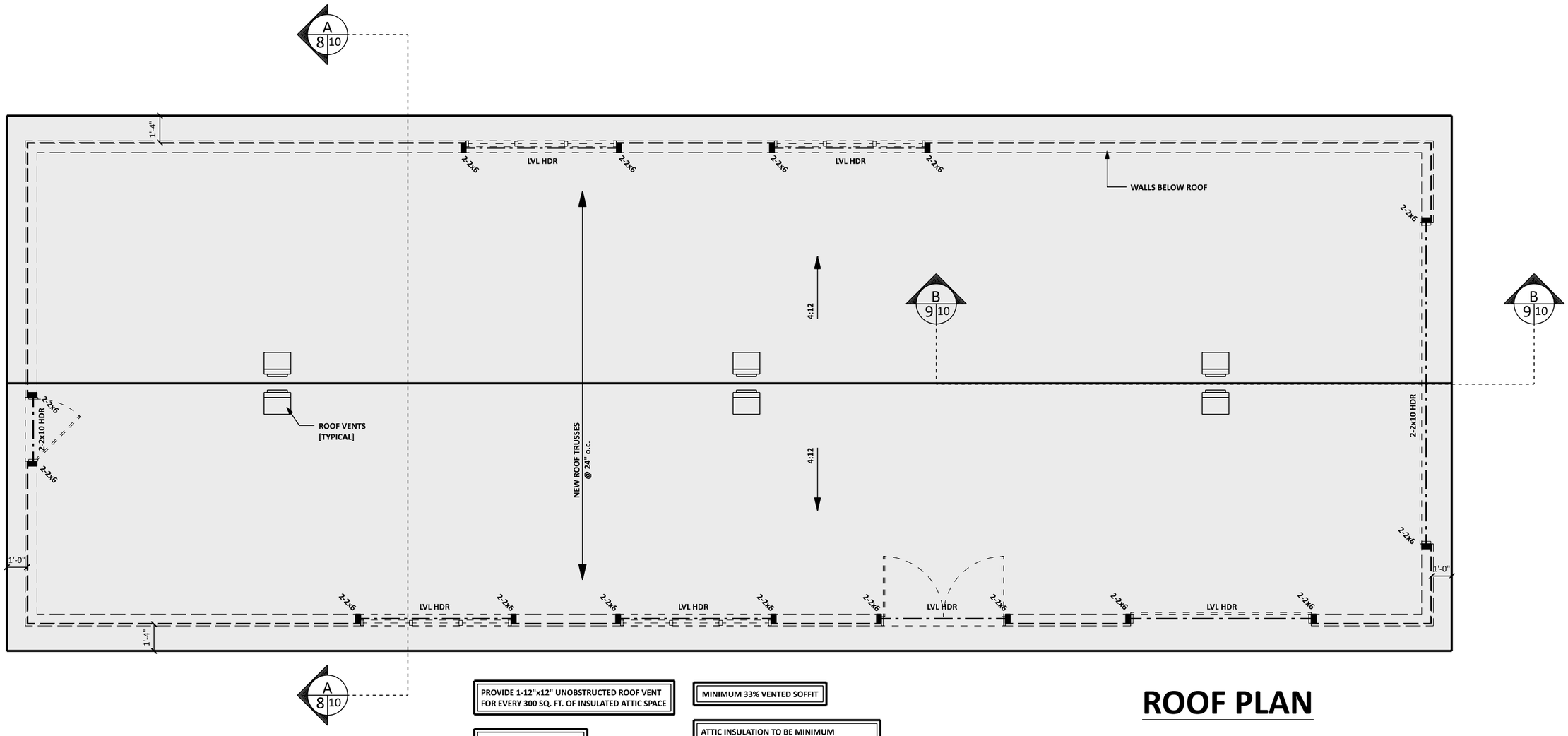

PROVIDE 1-12"x12" UNOBSTRUCTED ROOF VENT FOR EVERY 300 SQ. FT. OF INSULATED ATTIC SPACE

MINIMUM 33% VENTED SOFFIT

ALL OVERHANGS TO BE 16"
ALL GABLE ENDS TO BE 12"

ATTIC INSULATION TO BE MINIMUM R60 BLOWN-IN LOOSE CELLULOSE INSULATION

PROVIDE ATTIC BAFFLES BETWEEN EVERY OTHER TRUSS SPACE

ROOF PLAN

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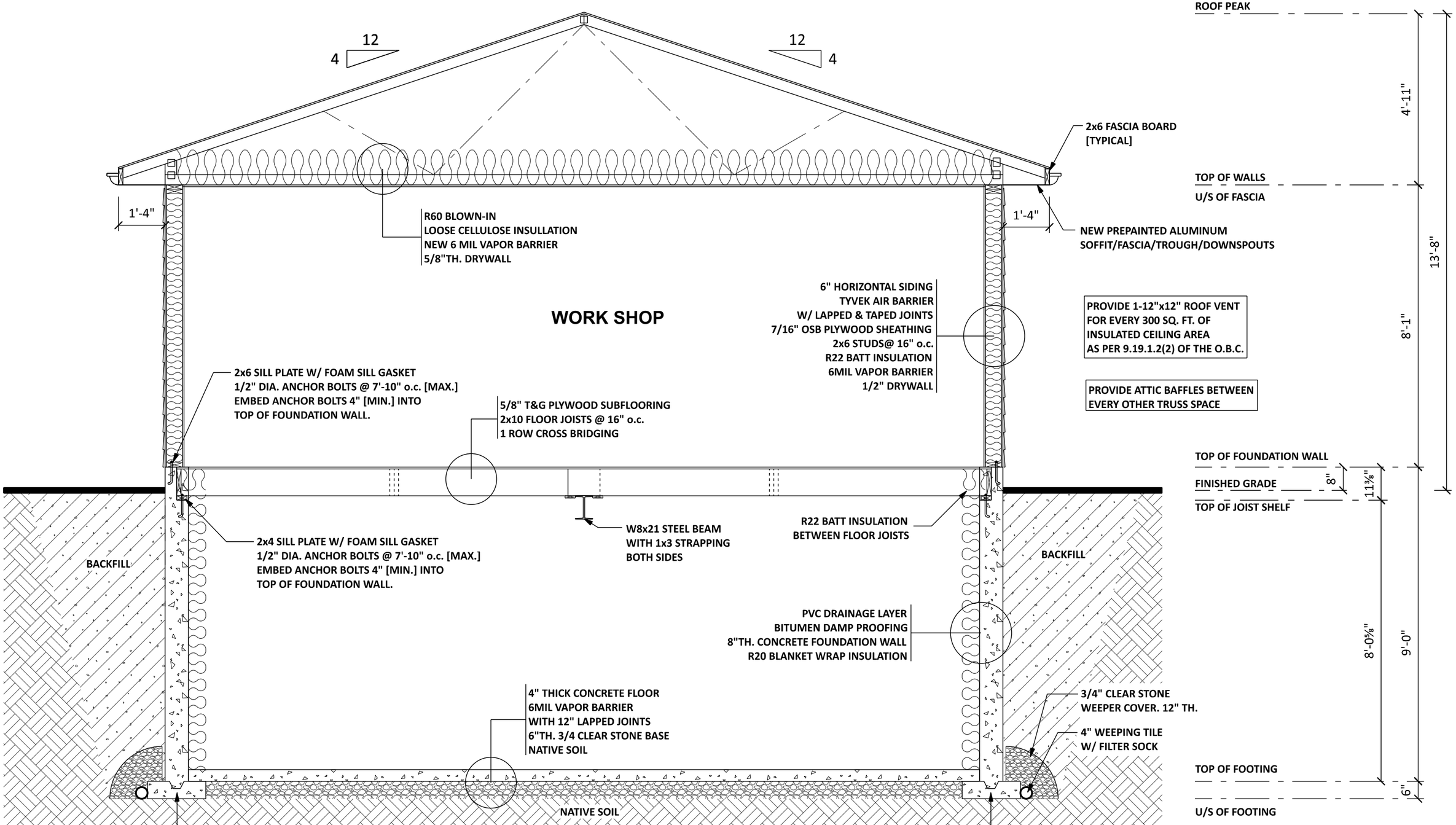

CROSS SECTION A

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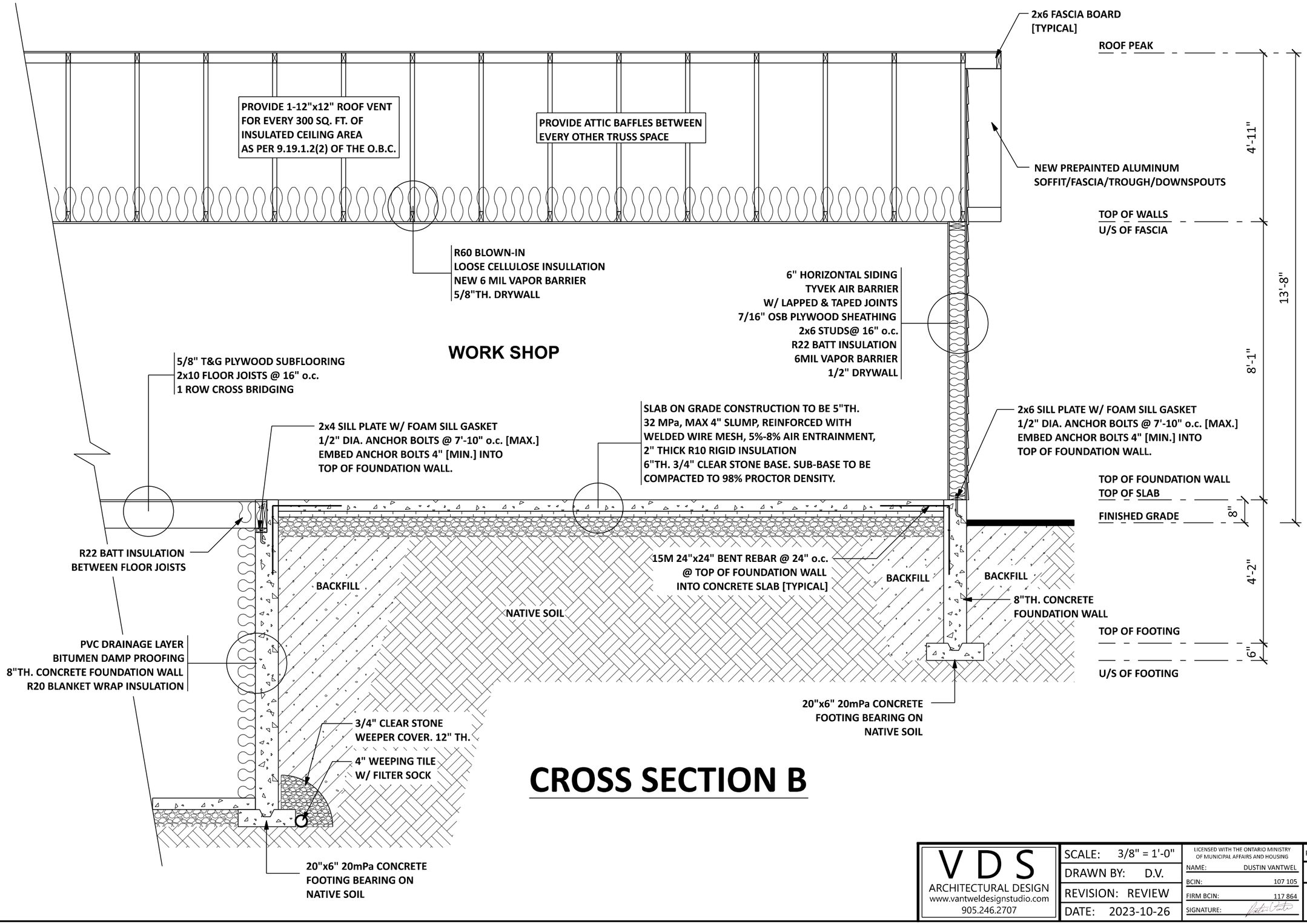

CROSS SECTION B

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PROJECT # 2023-034

GENERAL NOTES:

-ALL WORK TO BE COMPLETED ACCORDING TO THE LATEST VERSION OF THE ONTARIO BUILDING CODE.

-ALL TRADES AND SUPPLIERS ARE TO NOTIFY THE HOMEOWNER OR CONTRACTOR OF ANY DISCREPANCIES FOUND WITHIN THESE PLANS.

-ALL CONSTRUCTION MATERIALS USED SHALL BE APPROVED AS PER THE ONTARIO BUILDING CODE.

-IT IS THE RESPONSIBILITY OF THE BUILDER OR CONTRACTOR TO ENSURE ALL CONSTRUCTION METHODS, MATERIALS AND TRADES ARE COMPLIANT WITH THE ONTARIO BUILDING CODE.

-ALL SITE PREPARATION WORK AND UTILITY LOCATES ARE THE RESPONSIBILITY OF THE CONTRACTOR.

-THESE BLUEPRINTS ARE NOT TO BE SCALED.

EXCAVATION NOTES:

-ALL EXCAVATION WORK TO CONFORM TO 9.12. OF THE O.B.C.

-EXCAVATIONS SHALL BE KEPT FREE OF STANDING WATER

-THE BOTTOM OF EXCAVATIONS SHALL BE KEPT FREE FROM FREEZING

-ALL EXCAVATION TO EXTEND TO UNDISTURBED SOIL

FOUNDATION NOTES:

-SOIL BEARING CAPACITY OF 75kPa ASSUMED AS PER 9.15.1.(1) OF THE O.B.C.

-ALL CONCRETE FOR FOUNDATIONS, FOOTINGS AND FLATWORK TO CONFORM TO 9.3. OF THE O.B.C.

-LATERALLY UNSUPPORTED FOUNDATION WALLS TO BE DESIGNED BY A STRUCTURAL ENGINEER AS PER PART 4 OF THE O.B.C.

-TOP OF FOUNDATION WALLS TO EXTEND A MINIMUM OF 6" ABOVE FINISHED GRADE.

-CONCRETE STRENGTHS SHALL BE:

FOOTINGS:	20 mPa
WALLS:	20 mPa
INTERIOR FLATWORK:	25 mPa
EXTERIOR FLATWORK	32 mPa

-8" LONG x 1/2" DIAMETER ANCHOR BOLTS TO BE EMBEDDED A MINIMUM OF 4" INTO THE TOP OF THE FOUNDATION WALL SPACED AT A MINIMUM OF 7' 10" AS PER 9.23.6.1 OF THE O.B.C.

-FOUNDATION WALLS TO CURE FOR 7 DAYS PRIOR TO BACKFILLING.

-PROVIDE 10M REBAR GRID @ 7 7/8" FOR ALL SUSPENDED CONCRETE FLATWORK.

-SUSENDED SLAB SPANS EXCEEDING 8'-0" TO BE DESIGNED BY A STRUCTURAL ENGINEER AS PER PART 4 OF THE O.B.C.

-FOUNDATION DRAINAGE SYSTEM AS PER 9.14 OF THE O.B.C. DRAINAGE LAYER TO CONSIST OF PVC WATERPROOF BARRIER BITUMEN DAMPPROOFING, 12"TH. 3/4" CLEAR WEEPER COVER, 4" DIAMETER WEEPING TILE ON UNDISTURBED SOIL @ PERIMETER OF FOOTING.

-FOUNDATION WALL BEAM POCKETS TO PROVIDE A MINIMUM OF 3 1/2" BEARING SUPPORT. AS PER 9.23.8.1. OF THE O.B.C.

-SLAB ON GRADE CONSTRUCTION TO BE 5"TH. 32 MPa, MAX 4" SLUMP, REINFORCED WITH WELDED WIRE MESH, 5%-8% AIR ENTRAINMENT, 6"TH. 3/4" CLEAR STONE BASE. SUB-BASE TO BE COMPACTED TO 98% PROCTOR DENSITY.

-RECESS FOUNDATION WALLS FOR GARAGE DOORS, AND GARAGE MAN DOORS TO SUIT FINISHED GRADE.

WOOD FRAME CONSTRUCTION NOTES:

-ALL WOOD FRAME CONSTRUCTION TO COMPLY WITH 9.23 OF THE O.B.C.

-FRAMING MEMBERS TO No.1 OR No2. GRADE S.P.F. LUMBER OR BETTER.

-SILL PLATES TO BE LEVELED IN MORTAR BED AS PER 9.23.7.2. OF THE O.B.C. OR LAID ON TOP OF FOUNDATION WALL WHERE FOUNDATION IS ALREADY LEVEL. PROVIDE FOAM SILL GASKET UNDER ALL WOOD SILL PLATES IN CONTACT WITH CONCRETE.

-ANCHORAGE OF SILL PLATE TO CONCRETE SLAB OR FOUNDATION WALLS TO CONSIST OF 1/2" ANCHOR BOLTS SPACED AT A MAXIMUM OF 7'-10" o.c. AS PER 9.23.6.1.(1) OF THE O.B.C. ANCHOR BOLTS TO BE EMBEDDED A MINIMUM OF 4" INTO TOP OF FOUNDATION WALL OR CONCRETE SLAB.

-PROVIDE BUILT UP WOOD COLUMNS EQUAL TO THE WIDTH OF ALL BEAMS, GIRDER TRUSSES, COLUMNS AND LINTELS.

-HANDRAILS AND GUARDS TO CONFORM TO 9.8.8. OF THE O.B.C. AND SB-7 OF THE O.B.C. PROVIDE MANUFACTURER'S SPECIFICATIONS FOR GLASS OR ACRYLIC GUARDS.

-CANTILEVERED FLOOR JOISTS, 2x8 OR GREATER ARE NOT TO EXCEED 24" OR LESS THAN 6 TIMES THE TOTAL LENGTH OF THE JOIST SPAN.

-INTERIOR PARTITION WALLS TO BE SUPPORTED BY JOISTS RUNNING PARALLEL TO PARTITION WALLS OR SOLID BLOCKING BETWEEN JOISTS @ 16" o.c.

-DOUBLE STUDS REQUIRED AT EACH SIDE OF OPENINGS.

-PROVIDE A MINIMUM OF 1 1/2" BEARING FOR ALL FLOOR JOISTS, CEILING JOISTS ROOF RAFTERS AND ROOF TRUSSES.

-PROVIDE A MINIMUM OF 3 1/2" BEARING FOR ALL BEAMS AS PER 9.23.8.1. OF THE O.B.C.

-BUILT UP WOOD BEAMS SHALL NOT HAVE MORE THAN 1 BUTT JOINT IN ANY MEMBER WITHIN ANY SPAN BETWEEN SUPPORTS.

-PROVIDE METAL HANGERS FOR ALL FLOOR JOISTS, RAFTERS, TRUSSES, CEILING JOISTS AND CEILING TRUSSES FRAMED INTO THE SIDES OF BEAMS AS PER 9.23.9.2. OF THE O.B.C.

-PROVIDE DOUBLE HEADER JOISTS AROUND FLOOR OPENINGS WHEN THEY EXCEED 3'-11" IN LENGTH.

-PROVIDE DOUBLE TRIMMER JOISTS AROUND FLOOR OPENINGS WHEN THEY EXCEED 2'-7 1/2" IN LENGTH.

-PROVIDE DOUBLE STUDS @ EACH SIDE OF OPENINGS IN ALL LOADBEARING INTERIOR AND EXTERIOR WALLS.

-ALL BUILT UP STUD POSTS IN WALLS SHALL MEET OR EXCEED THE WIDTH OF ALL GIRDERS AND BEAMS THAT IT SUPPORTS.

STRUCTURAL STEEL NOTES:

-ALL STRUCTURAL STEEL BEAMS, COLUMNS AND LINTELS TO MEET THE REQUIREMENTS FOR GRADE 350W STEEL.

-ALL STEEL BEAMS SUSCEPTIBLE TO CORROSION TO BE PRIMED WITH 2 COATS OF RUST-INHIBITIVE PAINT AS PER 9.23.8.2. OF THE O.B.C.

-WHERE A STEEL BEAM WITH A STEEL PLATE IS WELDED TO THE TOP OR BOTTOM FLANGE SUPPORTING MASONRY VENEER, PROVIDE 2" LONG x 1/4" WIDE FILLET WELDS @ 8" o.c. STAGGERED.

ROOFING NOTES:

-ALL PRE-ENGINERED ROOF TRUSSES TO BE DESIGNED BY THE SUPPLIER AS PER 9.23.13.11. OF THE O.B.C. AND SEALED BY A STRUCTURAL ENGINEER.

-PROVIDE METAL "H" CLIPS FOR ROOF SHEATHING EDGE SUPPORT

-PROVIDE FELT PAPER UNDER ALL ASPHALT ROOFING.

-ICE AND WATERSHILED UNDERLAYMENT REQUIRED FOR ALL ROOFS WITH ROOF PITCHES OF 3/12 OR LESS.

-PROVIDE 36" EAVE PROTECTION FROM EDGE OF ROOF TO A MINIMUM OF 12" BEYOND THE INTERIOR FACE OF THE WALL BELOW.

-PROVIDE FLASHING AT JUNCTIONS BETWEEN ROOFS WHERE ROOFS ABUT WALLS, AND ALL ROOF VALLEYS.

-ATTIC ACCESS HATCH TO BE 20"x28" MINIMUM W/ WEATHER STRIPPING.

MASONRY NOTES:

-MASONRY UNITS TO COMPLY WITH 9.20.2.1 OF THE O.B.C.

-MASONRY SUPPORT TO CONFORM TO 9.20.5. OF THE O.B.C.

-MASONRY VENEER TIE SPACING AS PER TABLE 9.20.9.5. OF THE O.B.C.

-BRICK LEDGE CONSTRUCTION AS PER 9.15.4.7(2) OF THE O.B.C.
VERTICAL TIES @ 8" o.c. MAX.
HORIZONTAL TIES @ 36" o.c. MAX.
FILL VOID BETWEEN VENEER AND WALL WITH MORTAR

STAIR, HANDRIAL, GUARD NOTES:

-ALL HANDRAILS AND GUARDS TO CONFORM TO 9.8.8. OF THE O.B.C. AND SB-7 OF THE O.B.C.

-SEE MANUFACTURER'S SPECIFICATIONS FOR ALL HANDRAILS AND GUARDS THAT ARE NOT WOOD CONSTRUCTION.

-PROVIDE 2 HANDRAILS (1 PER SIDE) FOR ALL STAIRS THAT EXCEED 3'-7" IN WIDTH AS PER 9.8.7. OF THE O.B.C.

-PROVIDE A MINIMUM OF 6'-5" OF HEADROOM FOR ALL STAIRS MEASURED VERTICALLY FROM EDGE OF STAIR NOSING.

-MAXIMUM STAIR RISE = 7 7/8"
MAXIMUM RUN FOR RECTANGULAR TREADS = 1'-2"
MINIMUM RUN FOR RECTANGULAR TREADS = 10"

-PROVIDE LANDING WHERE 4 OR MORE RISERS ARE REQUIRED FROM HOUSE TO GRADE. (INCLUDES GARAGE)

-MAXIMUM HEIGHT OF HANDRAILS ON STAIRS = 38"
MINIMUM HEIGHT OF HANDRAILS ON STAIRS = 34"

FIRE & OCCUPANT SAFETY NOTES:

-SMOKE ALARM AND DETECTION SYSTEMS AS PER 9.10.19 OF THE O.B.C.

-LOCATION OF SMOKE DETECTORS AS PER 9.10.19.3 OF THE O.B.C.

-ALL SMOKE DETECTORS WITH ALARMS TO BE HARDWIRED AND INTER-CONNECTED SO THAT WHEN ONE ALARM SOUNDS, ALL ALARMS SOUND.

-PROVIDE A VISUAL SIGNALING COMPONENT ON ALL DETECTORS WITH ALARMS THAT CONFORM TO NFPA 72, "NATIONAL FIRE ALARM AND SIGNALING CODE"

-CARBON MONOXIDE DETECTORS WITH ALARMS SHALL BE PROVIDED FOR FUEL APPLICANCES.

-THERMAL PROTECTION OF FOAMED PLASTICS AS PER 9.10.17.10 OF THE O.B.C.

MECHANICAL NOTES:

-ENERGY EFFICIENCY REQUIREMENTS AS PER SB-12 OF THE O.B.C.

-SEE HVAC REPORT AND ENERGY EFFICIENCY DESIGN SUMMARY FOR THERMAL RATING SPECIFICATIONS. HVAC REPORT BY OTHERS.

-DRAIN WATER RECOVERY UNITS AS PER 2.1.1.11 OF SB-12.

-ALL SWITCHES AND OUTLETS TO BE INSTALLED AS PER 9.34.2. OF THE O.B.C.

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