

CONTRACTOR TO FIELD VERIFY ALL DIMENSIONS PRIOR TO CONSTRUCTION AND NOTIFY ARCHITECT IMMEDIATELY OF ANY CONFLICTS

CS-WSP, CONTINUOUSLY SHEATHED WOOD STRUCTURAL PANEL

EVERY SLEEPING ROOM SHALL HAVE AT LEAST ONE OPENABLE EMERGENCY ESCAPE WINDOW WITH A SILL HEIGHT OF NO MORE THAN 44 INCHES ABOVE THE FLOOR. THE MINIMUM OPENING HEIGHT SHALL BE 24 INCHES, THE MINIMUM OPENING WIDTH SHALL BE 20 INCHES, AND THE MINIMUM OPENING AREA SHALL BE 5.7 SQUARE FEET. (5.0 SQ. FT. ON THE GRADE FLOOR)

ELECTRICAL LAYOUT SHOWN IS SCHEMATIC. A WALK THROUGH SHALL BE SCHEDULED WITH THE OWNER AND ARCHITECT.

HVAC LAYOUT IS SCHEMATIC ONLY. DESIGN BY MECHANICAL CONTRACTOR.

RELOCATE ALL EXISTING MECHANICAL SYSTEMS AS REQUIRED

PROVIDE ACCESS TO ALL ATTIC AREAS. COORDINATE LOCATIONS WITH BUILDER

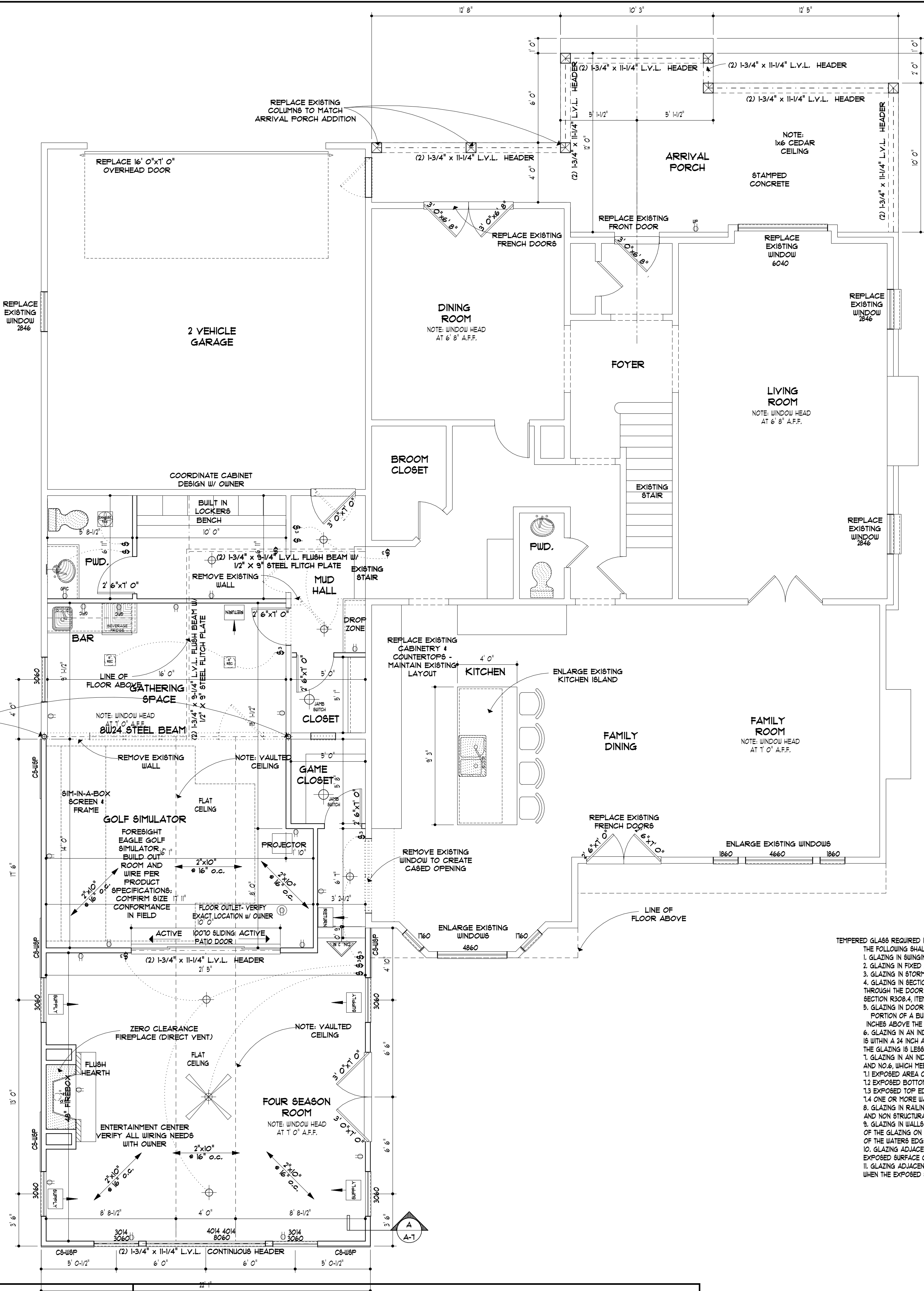
Fireplace clearance.

All wood beams, joists, studs and other combustible material shall have a clearance of not less than 2 inches (51 mm) from the front faces and sides of masonry fireplaces and not less than 4 inches (102 mm) from the back faces of masonry fireplaces. The air space shall not be filled, except to provide fire blocking in accordance with Section 1001.2.

- Masonry fireplaces listed and labeled for use in contact with combustibles in accordance with UL, IT and installed in accordance with the manufacturer's installation instructions are permitted to have combustible material in contact with their exterior surface.
- When masonry fireplaces are part of masonry or concrete walls, combustible materials shall not be in contact with the masonry or concrete walls less than 12 inches (306 mm) from the inside surface of the nearest firebox lining.
- Exposed combustible trim and the edges of sheathing materials such as wood siding, flooring and drywall shall be permitted to abut the masonry fireplace side walls and hearth extension in accordance with Figure 1001.1, provided such combustible trim or sheathing is a minimum of 12 inches (305 mm) from the inside surface of the nearest firebox lining.
- Exposed combustible materials or trim may be placed directly on the masonry fireplace front surrounding the fireplace opening providing such combustible materials are not placed within 6 inches (152 mm) of a fireplace opening. Combustible material within 12 inches (306 mm) of the fireplace opening shall not project more than 1/8 inch (3 mm) for each 1-inch (25 mm) distance from such an opening.

ALL POINT LOADS AND BEARING WALLS SHALL BE BLOCKED DOWN TO STRUCTURAL MEMBERS

NOTE: 3" FIRE COLUMN TO EXTEND DOWN TO SOLID FOUNDATION



WALL BRACING SCHEDULE

ALL BRACED WALLS SHALL COMPLY WITH SECTION R602.10.5 " CONTINUOUS STRUCTURAL PANEL SHEATHING" BASED ON METHOD 3 FROM SECTION R602.10.3 WHICH CALLS FOR A MINIMUM 5/16" PANEL AT 16" O.C. STUD SPACING INSTALLED IN ACCORDANCE WITH SECTION R602.3(3) THE BRACING SHALL LOCATED AT EACH END AND AT LEAST 25' O' C. THE FOREGOING IS BASED ON THE FOLLOWING DESIGN CRITERIA:
1. SEISMIC DESIGN CATEGORY: B
2. WIND SPEED: 80 M.P.H.
3. CONDITIONS: ONE STORY AND TOP OF TWO STORY

303.1 Habitable rooms. All habitable rooms shall have an aggregate glazing area of not less than 8 percent of the floor area of such rooms. Natural ventilation shall be through windows, doors, louvers or other approved openings to the outdoor air. Such openings shall be provided with ready access or shall otherwise be readily controllable by the building occupants. The minimum operable area to the outdoors shall be 4 percent of the floor area being ventilated.

1. The glazed areas need not be operable where the opening is not required by Section 310 and an approved mechanical ventilation system capable of producing 0.35 air change per hour in the room is installed or a whole-house mechanical ventilation system is installed capable of supplying outdoor ventilation air of 15 cubic feet per minute (cfm) (78 L/s) per occupant computed on the basis of two occupants for the first bedroom and one occupant for each additional bedroom.

2. The glazed areas need not be installed in rooms where Exception 1 above is satisfied and artificial light is provided capable of producing an average illumination of 6 footcandles (65 lux) over the area of the room at a height of 30 inches (762 mm) above the floor level.

3. Use of sunroom additions and patio covers, as defined in Section 303, shall be permitted for natural ventilation if in excess of 40 percent of the exterior sunroom walls are open, or are enclosed only by insect screening.

303.3 Adjoining rooms. For the purpose of determining light and ventilation requirements, any room shall be considered as a portion of an adjoining room when at least one-half of the area of the common wall is open and unobstructed and provides an opening of not less than one-tenth of the floor area of the interior room but not less than 25 square feet (2.3 m²).

Exception: Openings required for light and/or ventilation shall be permitted to open into a thermally isolated sunroom addition or patio cover, provided that there is an operable area between the adjoining room and the sunroom addition or patio cover of not less than one-tenth of the floor area of the interior room but not less than 20 square feet (2 m²).

303.3.1 The minimum operable area to the outdoors shall be based upon the total floor area being ventilated. 303.3.2 Bathrooms, bedrooms, water closet compartments and other similar rooms shall be provided with aggregate glazing area in windows of not less than 3 square feet (0.3 m²).

Exception: The glazed areas shall not be required where artificial light and a mechanical ventilation system are provided. The minimum ventilation rates shall be 50 cubic feet per minute (1.4 L/s) for intermittent ventilation or 20 cubic feet per minute (0.5 L/s) for continuous ventilation. Ventilation air from the space shall be exhausted directly to the outside.

303.4 Opening location. Outdoor intake and exhaust openings shall be located in accordance with Sections 303.4.1 and 303.4.2.

303.4.1 Intake openings. Mechanical and gravity outdoor air intake openings shall be located a minimum of 10 feet (3048 mm) from any hazardous or noxious contaminant, such as vents, chimneys, plumbing vents, streets, alleys, parking lots and loading docks, except as otherwise specified in this code. Where a source of contaminant is located within 10 feet (3048 mm) of an intake opening, such opening shall be located a minimum of 2 feet (610 mm) below the contaminant source.

For the purpose of this section, the exhaust from dwelling unit toilet rooms, bathrooms and kitchens shall not be considered as hazardous or noxious.

303.4.2 Exhaust openings. Exhaust air shall not be directed onto walkways. 303.5 Outside opening protection. Air exhaust and intake openings that terminate outdoors shall be protected with corrosion-resistant screens, louvers or grilles having a minimum opening size of 1/4 inch (6 mm) and a maximum opening size of 1/2 inch (13 mm), in any dimension. Openings shall be protected against local weather conditions. Outdoor air exhaust and intake openings shall meet the provisions for exterior wall opening protections in accordance with this code.

TEMPERED GLASS REQUIRED IN BY R.C.O. 3308.4 "HAZARDOUS LOCATIONS"

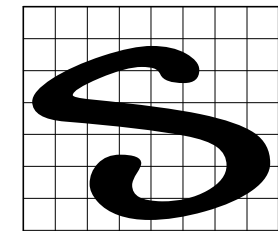
THE FOLLOWING SHALL BE CONSIDERED SPECIFIC HAZARDOUS LOCATIONS REQUIRING SAFETY GLAZING MATERIALS:

- GLAZING IN SLIDING DOORS EXCEPT JALOUSIES.
- GLAZING IN FIXED AND SLIDING PANELS OF SLIDING DOOR ASSEMBLIES AND PANELS IN SLIDING AND BIFOLD CLOSET DOOR ASSEMBLIES.
- GLAZING IN STORM DOORS.
- GLAZING IN SECTION 3308.4, ITEM 6 IN WALLS PERPENDICULAR TO THE PLANE OF THE DOOR IN A CLOSED POSITION OR WHERE ACCESS THROUGH THE DOOR IS TO A CLOSET, STORAGE AREA OR BATHROOM GLAZING IN THESE APPLICATIONS SHALL COMPLY WITH SECTION 3308.4, ITEM 1.
- GLAZING IN DOORS AND ENCLOSURES FOR HOT TUBS, WHIRLPOOLS, SAUNAS, STEAM ROOMS, BATHTUBS, AND SHOWERS. GLAZING IN ANY PORTION OF A BUILDING WALL ENCLOSING THESE COMPARTMENTS WHERE THE BOTTOM EDGE OF AN EXPOSED PANEL IS LESS THAN 60 INCHES ABOVE THE DRAIN INLET AND 36 INCHES HORIZONTALLY FROM THE INSIDE EDGE OF THE TUB OR COMPARTMENT.
- GLAZING IN AN INDIVIDUAL FIXED OR OPERABLE PANEL ADJACENT TO A DOOR WHERE THE NEAREST EXPOSED EDGE OF THE GLAZING IS WITHIN A 24 INCH ARC OF EITHER VERTICAL EDGE OF THE DOOR IN A CLOSED POSITION AND WHERE THE BOTTOM EXPOSED EDGE OF THE GLAZING IS LESS THAN 60 INCHES ABOVE THE WALKING SURFACE.
- GLAZING IN AN INDIVIDUAL FIXED OR OPERABLE PANEL, OTHER THAN THOSE LOCATIONS DESCRIBED IN PRECEDING ITEMS NO.5 AND NO.6, WHICH MEETS ALL OF THE FOLLOWING CONDITIONS:
 - EXPOSED AREA OF AN INDIVIDUAL PANE GREATER THAN 9 SQUARE FEET.
 - EXPOSED BOTTOM EDGE LESS THAN 18 INCHES ABOVE THE FLOOR.
 - EXPOSED TOP EDGE GREATER THAN 36 INCHES ABOVE THE FLOOR; AND
 - ONE OR MORE WALKING SURFACES WITHIN 36 INCHES HORIZONTALLY OF THE PLANE OF GLAZING.
- GLAZING IN RAILINGS REGARDLESS OF AREA OR HEIGHT ABOVE A WALKING SURFACE, INCLUDED ARE STRUCTURAL BALUSTER PANELS AND NON STRUCTURAL INFILL PANELS.
- GLAZING IN WALLS AND FENCES ENCLOSING INDOOR AND OUTDOOR SWIMMING POOLS, HOT TUBS, AND SPAS WHERE THE BOTTOM EDGE OF THE GLAZING ON THE POOL OR SPA SIDE IS LESS THAN 60 INCHES ABOVE A WALKING SURFACE AND WITHIN 60 INCHES HORIZONTALLY OF THE WATER'S EDGE OF A SWIMMING POOL OR SPA. THIS SHALL APPLY TO SINGLE GLAZINGS AND ALL PANELS IN MULTIPLE GLAZING.
- GLAZING ADJACENT TO STAIRWAYS, LANDINGS AND RAMPERS WITHIN 36 INCHES HORIZONTALLY OF A WALKING SURFACE, WHEN THE EXPOSED SURFACE OF THE GLASS IS LESS THAN 60 INCHES ABOVE THE PLANE OF THE ADJACENT WALKING SURFACE.
- GLAZING ADJACENT TO STAIRWAYS WITHIN 60 INCHES HORIZONTALLY OF THE BOTTOM TREAD OF A STAIRWAY IN ANY DIRECTION WHEN THE EXPOSED SURFACE OF THE GLASS IS LESS THAN 60 INCHES ABOVE THE NOSE OF THE TREAD.

MAIN FLOOR PLAN

SCALE: 1/4" = 1' 0"

ALL CONSTRUCTION SHALL COMPLY WITH THE REQUIREMENTS OF THE 2019 RESIDENTIAL CODE OF OHIO



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DESIGN LOADS

COMPONENT	LIVE LOAD	DEAD LOAD	TOTAL LOAD
ATTIC (WALK UP STORAGE)	30 P.S.F.	15 P.S.F.	45 P.S.F.
ATTIC (LIMITED STORAGE)	20 P.S.F.	15 P.S.F.	35 P.S.F.
ATTIC (NO STORAGE)	10 P.S.F.	15 P.S.F.	25 P.S.F.
DECKS	40 P.S.F.	15 P.S.F.	55 P.S.F.
EXTERIOR BALCONIES	60 P.S.F.	15 P.S.F.	75 P.S.F.
GUARDRAIL AND HANDRAILS	200 P.S.F.	15 P.S.F.	215 P.S.F.
GUARDRAIL INFILL COMPONENTS	50 P.S.F.	15 P.S.F.	65 P.S.F.
PASSENGER VEHICLE GARAGES	50 P.S.F.	15 P.S.F.	65 P.S.F.
ROOMS (OTHER THAN SLEEPING ROOMS)	40 P.S.F.	15 P.S.F.	55 P.S.F.
SLEEPING ROOMS	30 P.S.F.	15 P.S.F.	45 P.S.F.
STAIRS	40 P.S.F.	15 P.S.F.	55 P.S.F.
ROOFS	25 P.S.F.	15 P.S.F.	40 P.S.F.
SNOW	25 P.S.F.	N.A.	25 P.S.F.
WIND	15 M.P.H.	N.A.	15 M.P.H.
SOIL BEARING	3000 P.S.F.	N.A.	3000 P.S.F.

NOTES:
1. ASSUMED SOIL BEARING CAPACITY IS 3000 P.S.F. A GEOTECHNICAL ENGINEER SHALL BE RETAINED AND THE ARCHITECT SHALL BE NOTIFIED AT ONCE IF UNUSUAL OR UNSTABLE SOIL CONDITIONS EXIST.
2. NOTIFY ARCHITECT IF STONE OR TILE FLOORING IS TO BE USED.
3. NOTIFY ARCHITECT IF ROOFING MATERIAL IS OTHER THAN ASPHALT SHINGLE

SPACE	MATERIAL	HEIGHT
BASEMENT	CONCRETE- 8"	8' 0"
MAIN FLOOR	WOOD- 2"x4"	8' 0"
UPPER FLOOR	WOOD- 2"x4"	8' 0"

AREA	SIZE
UNFINISHED BASEMENT	0,000 SQ.FT.
FINISHED BASEMENT AREA	0,000 SQ.FT.
MAIN FLOOR ADDITION	146 SQ.FT.
UPPER FLOOR ADDITION	241 SQ.FT.
THIRD FLOOR ADDITION	85 SQ.FT.
TOTAL HEATED AREA	0,000 SQ.FT.
GARAGE	0,000 SQ.FT.
ARRIVAL PORCH	312 SQ.FT.
FRIENDS/ FAMILY PORCH	0,000 SQ.FT.
REAR PORCH	0,000 SQ.FT.
TOTAL AREA UNDER ROOF	0,000 SQ.FT.

AREA CALCULATIONS ARE MADE FROM THE OUTSIDE FACE OF EXTERIOR WALLS, STAIRWELLS AND FIREPLACE AREAS ARE INCLUDED ONCE, GARAGES, OPEN SPACES, DECKS, PATIOS AND EXTERIOR PORCHES ARE NOT INCLUDED IN THESE FIGURES. THEY ARE SUMMARIZED AS ADDITIONAL AREAS IN THIS TABLE

ISSUED FOR PERMIT & BIDDING	21 JUNE 2023
ISSUED FOR REVIEW	19 MAY 2023
ISSUED FOR REVIEW	16 MAY 2023
ISSUED FOR PERMIT & BIDDING	27 JAN 2023
ISSUED FOR REVIEW	5 DEC 2022

REV. NO.	DESCRIPTION	DATE
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PROJECT:
ADDITION & RENOVATION TO PRIVATE RESIDENCE

LOCATION: 22105 LAKE ROAD
ROCKY RIVER, OHIO 44116
CUYAHOGA COUNTY
PERMANENT PARCEL NUMBER: 302-06-008

MAIN FLOOR PLAN

SCALE: A6 NOTED	JOB NUMBER: 22 ENROH
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DATE: 02 DECEMBER 2022	CAD FILE NAME: C:\DRAWINGS\CENTRAL\ARCHIVE\ SCHILL\RESIDENCE\BL002.CAD
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A-1

DRAWING NUMBER

STEPHEN M. SCHILL, LICENSE # 8871
EXPIRATION DATE: 03/2025

CONTRACTOR TO FIELD VERIFY ALL DIMENSIONS PRIOR TO CONSTRUCTION AND NOTIFY ARCHITECT IMMEDIATELY OF ANY CONFLICTS

CS-WSP, CONTINUOUSLY SHEATHED WOOD STRUCTURAL PANEL
EVERY SLEEPING ROOM SHALL HAVE AT LEAST ONE OPENABLE EMERGENCY ESCAPE WINDOW WITH A SILL HEIGHT OF NO MORE THAN 44 INCHES ABOVE THE FLOOR. THE MINIMUM OPENING HEIGHT SHALL BE 24 INCHES, THE MINIMUM OPENING WIDTH SHALL BE 20 INCHES, AND THE MINIMUM OPENING AREA SHALL BE 5.7 SQUARE FEET. (5.0 SQ. FT. ON THE GRADE FLOOR)

ELECTRICAL LAYOUT SHOWN IS SCHEMATIC. A WALK THROUGH SHALL BE SCHEDULED WITH THE OWNER AND ARCHITECT.

HVAC LAYOUT IS SCHEMATIC ONLY. DESIGN BY MECHANICAL CONTRACTOR.

RELOCATE ALL EXISTING MECHANICAL SYSTEMS AS REQUIRED

PROVIDE ACCESS TO ALL ATTIC AREAS. COORDINATE LOCATIONS WITH BUILDER

WALL BRACING SCHEDULE

ALL BRACED WALLS SHALL COMPLY WITH SECTION R602.10.5 "CONTINUOUS STRUCTURAL PANEL SHEATHING" BASED ON METHOD 3 FROM SECTION R602.10.3 WHICH CALLS FOR A MINIMUM 5/16" PANEL AT 16" O.C. STUD SPACING INSTALLED IN ACCORDANCE WITH SECTION R602.3(3) THE BRACING SHALL LOCATED AT EACH END AND AT LEAST 25' 0" O.C. THE FOREGOING IS BASED ON THE FOLLOWING DESIGN CRITERIA:
1. SEISMIC DESIGN CATEGORY: B
2. WIND SPEED: 90 M.P.H.
3. CONDITIONS: ONE STORY AND TOP OF TWO STORY

303.1 Habitable rooms. All habitable rooms shall have an aggregate glazing area of not less than 8 percent of the floor area of such room. Natural ventilation shall be through windows, doors, louvers or other approved openings to the outdoor air. Such openings shall be provided with ready access or shall otherwise be readily controllable by the building occupants.
The minimum operable area to the outdoors shall be 4 percent of the floor area being ventilated.
Exception:
1. The glazed area need not be operable where the opening is not required by Section 310 and an approved mechanical ventilation system capable of producing 0.35 air change per hour in the room is installed or a whole-house mechanical ventilation system is installed capable of supplying outdoor ventilation air of 15 cubic feet per minute (cfm) (75 L/s) per occupant computed on the basis of two occupants for the first bedroom and one occupant for each additional bedroom.

2. The glazed area need not be installed in rooms where Exception 1 above is satisfied and artificial light is provided capable of producing an average illumination of 6 footcandles (65 lux) over the floor area of the room at a height of 30 inches (762 mm) above the floor level.
3. Use of sunroom additions and patio covers, as defined in Section 302, shall be permitted for natural ventilation if in excess of 40 percent of the exterior sunroom walls are open, or are enclosed only by insect screening.

303.2 Adjoining rooms. For the purpose of determining light and ventilation requirements, any room shall be considered as a portion of an adjoining room when at least one-half of the area of the common wall is open and unobstructed and provides an opening of not less than one-tenth of the floor area of the interior room but not less than 25 square feet (2.3 m²).

Exception: Openings required for light and/or ventilation shall be permitted to open into a thermally isolated sunroom addition or patio cover, provided that there is an operable area between the adjoining room and the sunroom addition or patio cover of not less than one-tenth of the floor area of the interior room but not less than 25 square feet (2.3 m²).

303.3 Bathrooms. Bathrooms, toilet closets, compartments and other similar rooms shall be provided with aggregate glazing area in windows of not less than 3 square feet (0.3 m²), one-half of which must be operable.

Exception: The glazed area shall not be required where artificial light and a mechanical ventilation system are provided. The minimum ventilation rates shall be 30 cubic feet per minute (24 L/s) for intermittent ventilation or 20 cubic feet per minute (16 L/s) for continuous ventilation. Ventilation air from the space shall be exhausted directly to the outside.

303.4 Opening location. Outdoor intake and exhaust openings shall be located in accordance with Sections 303.4.1 and 303.4.2.

303.4.1 Intake openings. Mechanical and gravity outdoor air intake openings shall be located a minimum of 10 feet (3048 mm) from any hazardous or noxious contaminant, such as vents, chimneys, plumbing vents, streets, alleys, parking lots and loading docks, except as otherwise specified in this code. Where a source of contaminant is located within 10 feet (3048 mm) of an intake opening, such opening shall be located a minimum of 2 feet (610 mm) below the contaminant source.

For the purpose of this section, the exhaust from dwelling unit toilet rooms, bathrooms and kitchens shall not be considered as hazardous or noxious.

303.4.2 Exhaust openings. Exhaust air shall not be directed onto walkways.

303.5 Outside opening protection. Air exhaust and intake openings that terminate outdoors shall be protected with corrosion-resistant screens, louvers or grilles having a minimum opening size of 1/4 inch (6 mm) and a maximum opening size of 1/2 inch (13 mm). In any dimension. Openings shall be protected against local weather conditions. Outdoor air exhaust and intake openings shall meet the provisions for exterior wall opening protectives in accordance with this code.

TEMPERED GLASS REQUIRED IN BY R.C.O. R308.4 "HAZARDOUS LOCATIONS"

THE FOLLOWING SHALL BE CONSIDERED SPECIFIC HAZARDOUS LOCATIONS REQUIRING SAFETY GLAZING MATERIALS:

1. GLAZING IN SWINGING DOORS EXCEPT JALOUSIES.
2. GLAZING IN FIXED AND SLIDING PANELS OF SLIDING DOOR ASSEMBLIES AND PANELS IN SLIDING AND BI-FOLD CLOSET DOOR ASSEMBLIES.
3. GLAZING IN STORM DOORS.
4. GLAZING IN SECTIO R308.4, ITEM 6 IN WALLS PERPENDICULAR TO THE PLANE OF THE DOOR IN A CLOSED POSITION OR WHERE ACCESS THROUGH THE DOOR IS TO A CLOSET, STORAGE AREA OR BATHROOM GLAZING IN THESE APPLICATIONS SHALL COMPLY WITH SECTION R308.4, ITEM 1.

5. GLAZING IN DOORS AND ENCLOSURES FOR HOT TUBS, WHIRLPOOLS, SAUNAS, STEAM ROOMS, BATHTUBS, AND SHOWERES. GLAZING IN ANY PORTION OF A BUILDING WALL ENCLOSING THESE COMPARTMENTS WHERE THE BOTTOM EDGE OF AN EXPOSED PANEL IS LESS THAN 60 INCHES ABOVE THE DRAIN INLET AND 36 INCHES HORIZONTALLY FROM THE INSIDE EDGE OF THE TUB OR COMPARTMENT.

6. GLAZING IN AN INDIVIDUAL FIXED OR OPERABLE PANEL ADJACENT TO A DOOR WHERE THE NEAREST EXPOSED EDGE OF THE GLAZING IS WITHIN A 24 INCH ARC OF EITHER VERTICAL EDGE OF THE DOOR IN A CLOSED POSITION AND WHERE THE BOTTOM EXPOSED EDGE OF THE GLAZING IS LESS THAN 60 INCHES ABOVE THE WALKING SURFACE.

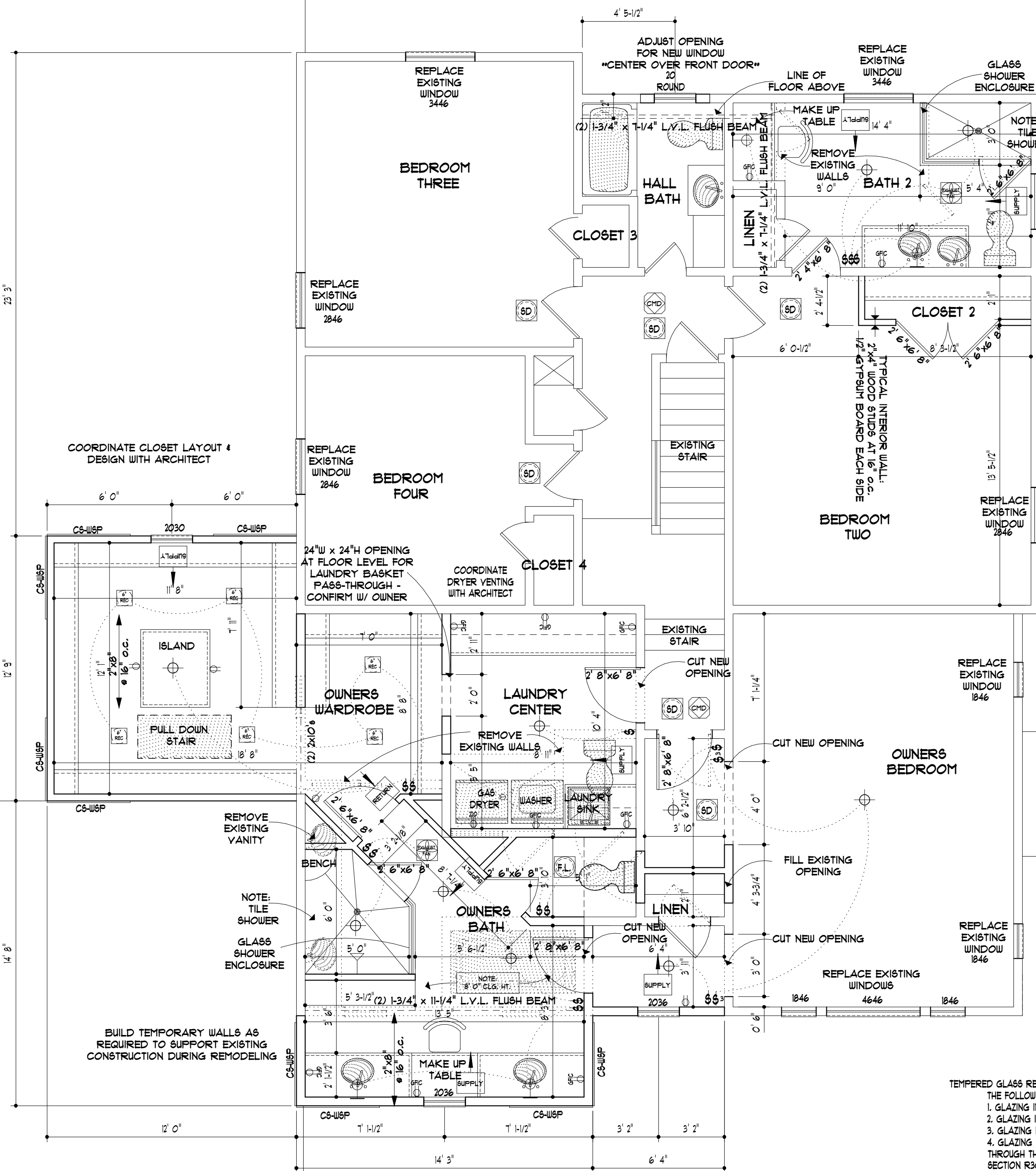
7. GLAZING IN AN INDIVIDUAL FIXED OR OPERABLE PANEL, OTHER THAN THOSE LOCATIONS DESCRIBED IN PRECEDING ITEMS NO.5 AND NO.6, WHICH MEETS ALL OF THE FOLLOWING CONDITIONS:
1. EXPOSED AREA OF AN INDIVIDUAL PANE GREATER THAN 3 SQUARE FEET.
2. EXPOSED BOTTOM EDGE LESS THAN 18 INCHES ABOVE THE FLOOR.
3. EXPOSED TOP EDGE GREATER THAN 36 INCHES ABOVE THE FLOOR; AND
4. ONE OR MORE WALKING SURFACES WITHIN 36 INCHES HORIZONTALLY OF THE PLANE OF GLAZING.

8. GLAZING IN RAILINGS REGARDLESS OF AREA OR HEIGHT ABOVE A WALKING SURFACE. INCLUDED ARE STRUCTURAL BALUSTER PANELS AND NON STRUCTURAL INFILL PANELS.

9. GLAZING IN WALLS AND FENCES ENCLOSING INDOOR AND OUTDOOR SWIMMING POOLS, HOT TUBS, AND SPAS WHERE THE BOTTOM EDGE OF THE GLAZING ON THE POOL OR SPA SIDE IS LESS THAN 60 INCHES ABOVE A WALKING SURFACE AND WITHIN 60 INCHES HORIZONTALLY OF THE WATERS EDGE OF A SWIMMING POOL OR SPA. THIS SHALL APPLY TO SINGLE GLAZING AND ALL PANES IN MULTIPLE GLAZING.

10. GLAZING ADJACENT TO STAIRWAYS, LANDINGS AND RAMPERS WITHIN 30 INCHES HORIZONTALLY OF A WALKING SURFACE WHEN THE EXPOSED SURFACE OF THE GLASS IS LESS THAN 60 INCHES ABOVE THE PLANE OF THE ADJACENT WALKING SURFACE.

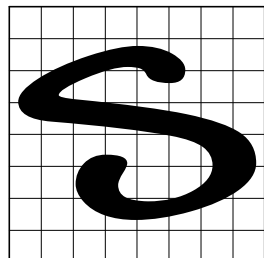
11. GLAZING ADJACENT TO STAIRWAYS WITHIN 60 INCHES HORIZONTALLY OF THE BOTTOM TREAD OF A STAIRWAY IN ANY DIRECTION WHEN THE EXPOSED SURFACE OF THE GLASS IS LESS THAN 60 INCHES ABOVE THE NOSE OF THE TREAD.



UPPER FLOOR PLAN

SCALE: 1/4" = 1' 0"

ALL CONSTRUCTION SHALL COMPLY WITH THE REQUIREMENTS OF THE 2018 RESIDENTIAL CODE OF OHIO



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Architecture

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WESTLAKE, OHIO 44145

DESIGN LOADS

COMPONENT	LIVE LOAD	DEAD LOAD	TOTAL LOAD
ATTIC (WALK UP STORAGE)	30 P.S.F.	15 P.S.F.	45 P.S.F.
ATTIC (LIMITED STORAGE)	20 P.S.F.	15 P.S.F.	35 P.S.F.
ATTIC (NO STORAGE)	10 P.S.F.	15 P.S.F.	25 P.S.F.
DECKS	40 P.S.F.	15 P.S.F.	55 P.S.F.
EXTERIOR BALCONIES	60 P.S.F.	15 P.S.F.	75 P.S.F.
GUARDRAIL AND HANDRAILS	200 P.S.F.	15 P.S.F.	215 P.S.F.
GUARDRAIL INFILL COMPONENTS	50 P.S.F.	15 P.S.F.	65 P.S.F.
PASSENGER VEHICLE GARAGES	50 P.S.F.	15 P.S.F.	65 P.S.F.
ROOMS (OTHER THAN SLEEPING ROOMS)	40 P.S.F.	15 P.S.F.	55 P.S.F.
SLEEPING ROOMS	30 P.S.F.	15 P.S.F.	45 P.S.F.
STAIRS	40 P.S.F.	15 P.S.F.	55 P.S.F.
ROOFS	25 P.S.F.	15 P.S.F.	40 P.S.F.
SNOW	25 P.S.F.	N.A.	25 P.S.F.
WIND	15 M.P.H.	N.A.	15 M.P.H.
SOIL BEARING	3000 P.S.F.	N.A.	3000 P.S.F.

NOTES:
1. ASSUMED SOIL BEARING CAPACITY IS 3000 P.S.F. A GEOTECHNICAL ENGINEER SHALL BE RETAINED AND THE ARCHITECT SHALL BE NOTIFIED AT ONCE IF UNUSUAL OR UNSTABLE SOIL CONDITIONS EXIST.
2. NOTIFY ARCHITECT IF STONE OR TILE FLOORING IS TO BE USED.
3. NOTIFY ARCHITECT IF ROOFING MATERIAL IS OTHER THAN ASPHALT SHINGLE

MATERIAL SUMMARY

SPACE	MATERIAL	HEIGHT
BASEMENT	CONCRETE- 8"	8' 0"
MAIN FLOOR	WOOD- 2"x4"	8' 0"
UPPER FLOOR	WOOD- 2"x4"	8' 0"

AREA SUMMARY

AREA	SIZE
UNFINISHED BASEMENT	0,000 SQ.FT.
FINISHED BASEMENT AREA	0,000 SQ.FT.
MAIN FLOOR ADDITION	146 SQ.FT.
UPPER FLOOR ADDITION	241 SQ.FT.
THIRD FLOOR ADDITION	85 SQ.FT.
TOTAL HEATED AREA	0,000 SQ.FT.
GARAGE	0,000 SQ.FT.
ARRIVAL PORCH	312 SQ.FT.
FRIENDS/ FAMILY PORCH	0,000 SQ.FT.
REAR PORCH	0,000 SQ.FT.
TOTAL AREA UNDER ROOF	0,000 SQ.FT.

AREA CALCULATIONS ARE MADE FROM THE OUTSIDE FACE OF EXTERIOR WALLS, STAIRWELLS AND FIREPLACE AREAS ARE INCLUDED ONCE, GARAGES, OPEN SPACES, DECKS, PATIOS, AND EXTERIOR PORCHES ARE NOT INCLUDED IN THESE FIGURES. THEY ARE SUMMARIZED AS ADDITIONAL AREAS IN THIS TABLE

1		
2		
3	ISSUED FOR PERMIT & BIDDING	22 JUNE 2023
4	ISSUED FOR PERMIT & BIDDING	27 JAN 2023
5	ISSUED FOR REVIEW	5 DEC 2022

REV. NO.	DESCRIPTION	DATE
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PROJECT:

ADDITION & RENOVATION TO PRIVATE RESIDENCE

LOCATION: 22105 LAKE ROAD
ROCKY RIVER, OHIO 44116
CUTAHOGA COUNTY
PERMANENT PARCEL NUMBER: 302-06-008

UPPER FLOOR PLAN

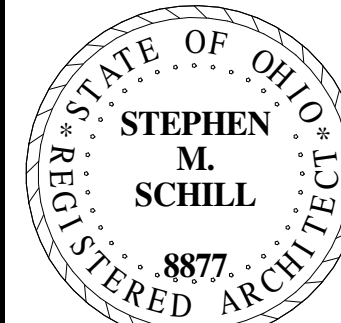
SCALE: AS NOTED	JOB NUMBER: 22 ENROH
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DATE:
02 DECEMBER 2022

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A-2

DRAWING NUMBER



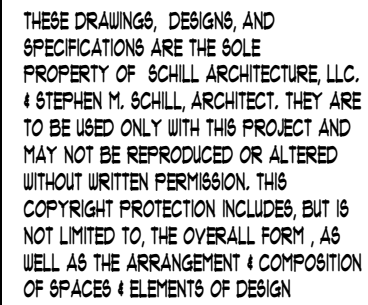
STEPHEN M. SCHILL, LICENSE # 8877
EXPIRATION DATE: 12/31/2023

WALL BRACING SCHEDULE

ALL BRACED WALLS SHALL COMPLY WITH SECTION R602.10.5 " CONTINUOUS STRUCTURAL PANEL SHEATHING" BASED ON METHOD 3 FROM SECTION R602.10.3 WHICH CALLS FOR A MINIMUM 5/16" PANEL AT 16" O.C. STUD SPACING INSTALLED IN ACCORDANCE WITH SECTION R602.3(3) THE BRACING SHALL LOCATED AT EACH END AND AT LEAST 25' O' O.C. THE FOREGOING IS BASED ON THE FOLLOWING DESIGN CRITERIA:

1. SEISMIC DESIGN CATEGORY: B
2. WIND SPEED: 90 M.P.H.
3. CONDITIONS: ONE STORY AND TOP OF TWO STORY

ALL CONSTRUCTION SHALL COMPLY
WITH THE REQUIREMENTS OF THE 2019
RESIDENTIAL CODE OF OHIO

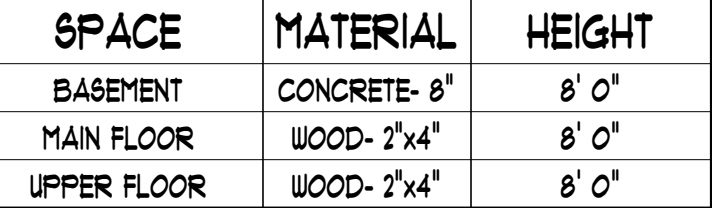


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OFFICE ADDRESS:
1650 CROSSINGS PARKWAY SUITE E
WESTLAKE, OHIO 44145

COMPONENT	LIVE LOAD	DEAD LOAD	TOTAL LOAD
ATTIC (WALK UP STORAGE)	30 P.S.F.	15 P.S.F.	45 P.S.F.
ATTIC (LIMITED STORAGE)	20 P.S.F.	15 P.S.F.	35 P.S.F.
ATTIC NO STORAGE)	10 P.S.F.	15 P.S.F.	25 P.S.F.
DECKS	40 P.S.F.	15 P.S.F.	55 P.S.F.
EXTERIOR BALCONIES	60 P.S.F.	15 P.S.F.	75 P.S.F.
GUARDRAIL AND HANDRAILS	100 P.S.F.	15 P.S.F.	25 P.S.F.
CORRIDOR INRILL COMPONENTS	30 P.S.F.	15 P.S.F.	65 P.S.F.
15SENGER VEHICLE GARAGES	50 P.S.F.	15 P.S.F.	65 P.S.F.
ROOMS (OTHER THAN SLEEPING ROOMS)	40 P.S.F.	15 P.S.F.	55 P.S.F.
SLEEPING ROOMS	30 P.S.F.	15 P.S.F.	45 P.S.F.
STAIRS	40 P.S.F.	15 P.S.F.	55 P.S.F.
ROOFS	25 P.S.F.	15 P.S.F.	40 P.S.F.
SNOW	25 P.S.F.	N.A.	25 P.S.F.
WIND	15 M.P.H.	N.A.	15 M.P.H.
SOIL BEARING	2000 P.S.F.	N.A.	2000 P.S.F.

NOTES:
ASSUMED SOIL BEARING CAPACITY IS 2000 P.S.F. A GEOTECHNICAL
ENGINEER SHALL BE RETAINED AND THE ARCHITECT SHALL BE
NOTIFIED AT ONCE IF UNUSUAL OR UNSTABLE SOIL CONDITIONS EXIST.
NOTIFY ARCHITECT IF STONE OR TILE FLOORING IS TO BE USED.
NOTIFY ARCHITECT IF ROOFING MATERIAL IS OTHER THAN ASPHALT SHINGLES.



AREA CALCULATIONS ARE MADE FROM THE OUTSIDE FACE OF EXTERIOR WALLS. STAIRWELLS AND FIREPLACE AREAS ARE INCLUDED ONCE. GARAGES, OPEN SPACES, DECKS, PATIOS, AND EXTERIOR PORCHES ARE NOT INCLUDED IN THESE FIGURES. THEY ARE SUMMARIZED AS ADDITIONAL AREAS IN THIS TABLE

5		
4		
3	ISSUED FOR PERMIT 4 BIDDING	22 JUNE 2023
2	ISSUED FOR PERMIT 4 BIDDING	27 JAN 2023
1	ISSUED FOR REVIEW	5 DEC 2022

RY. NO.	DESCRIPTION	DATE
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PROJECT:
ADDITION & RENOVATION
TO PRIVATE RESIDENCE

LOCATION: 22105 LAKE ROAD
ROCKY RIVER, OHIO 44116
CUYAHOGA COUNTY
PERMANENT PARCEL NUMBER: 302-06-008

FOUNDATION PLAN

ALE: AS NOTED	JOB NUMBER: 22 ENROH
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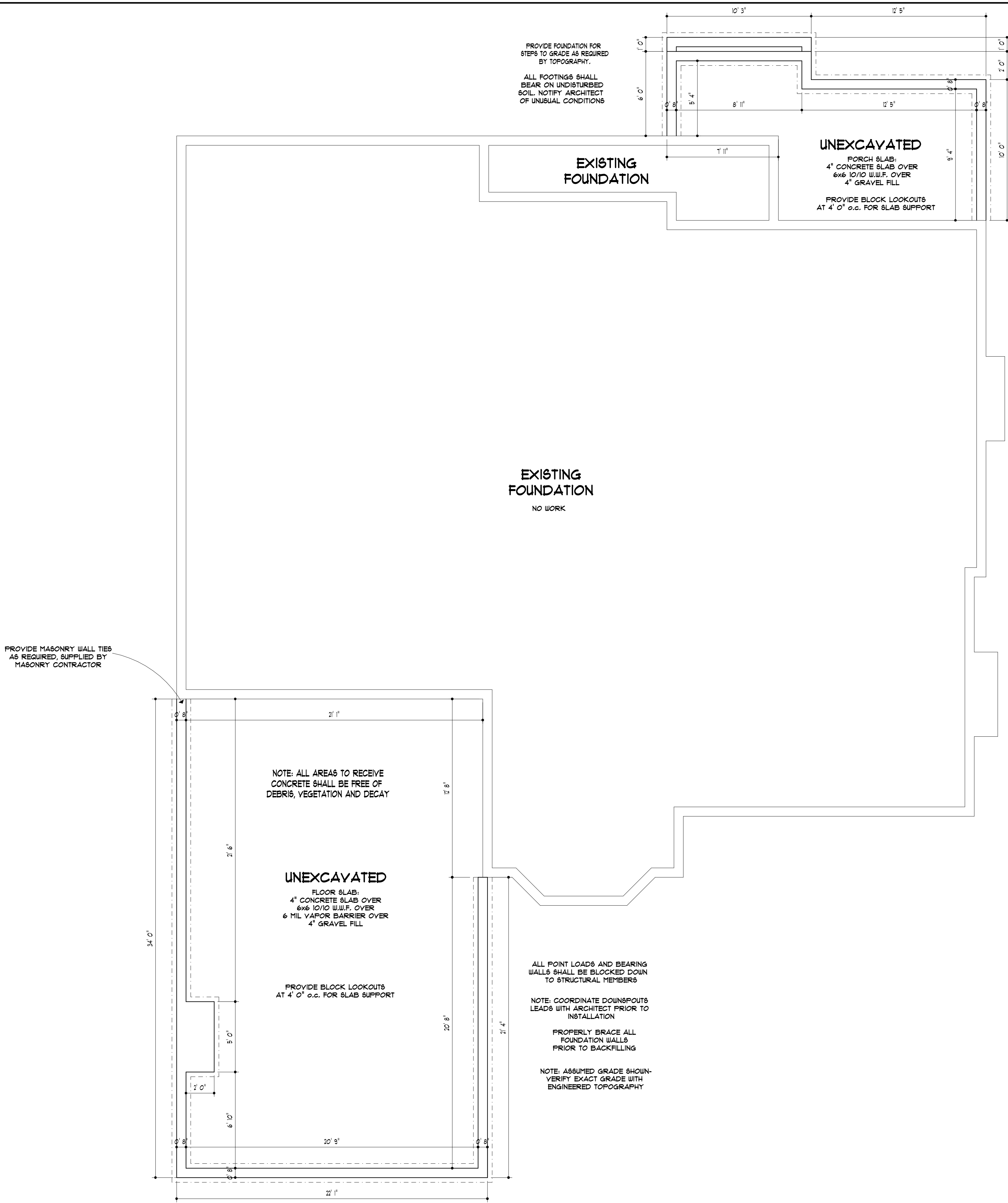
DATE: 02 DECEMBER 2022

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A-4

STEPHEN M. SCHILL, LICENSE # 8871
EXPIRATION DATE: 12/31/2023



MINIMUM FROST DEPTH
FOR PORCH FOUNDATION
TO BE 42"

REFER TO ROOF PLAN FOR
DOWNSPOUT LOCATIONS

ALL POINT LOADS AND BEARING
WALLS SHALL BE BLOCKED DOWN
TO STRUCTURAL MEMBERS

MATCH ALL
EXISTING BEARING
POINTS

NOTE: UNDERPIN
EXISTING FOUNDATION
AS NECESSARY

CONTRACTOR TO FIELD VERIFY
ALL DIMENSIONS PRIOR TO
CONSTRUCTION AND NOTIFY
ARCHITECT IMMEDIATELY
OF ANY CONFLICTS

403.1.6 Foundation anchorage. Wood sill plates and wood walls supported directly on continuous foundations shall be anchored to the foundation in accordance with this section.

Cold-formed steel framing shall be anchored directly to the foundation or stened to wood sill plates in accordance with Section 505.3.1 or 603.3.1, as applicable. Wood sill plates supporting cold-formed steel framing shall be anchored to the foundation in accordance with this section.

b) loose sole plates at all exterior walls on monolithic slabs, wood sole plates shall be bolted to wall panels at building interiors on monolithic slabs and all wood sole plates shall be anchored to foundation with minimum 17-inch diameter (2.1 m) anchor bolts spaced not greater than 6 feet (929 mm) on center over full length of wall. Anchor bolts shall extend through sole plate and be anchored to 17-inch diameter (2.1 m) anchor bolts. Bolts shall extend no less than 1 inches (76 mm) into concrete or grouted cells of concrete masonry blocks. A nut and washer shall be tightened on each anchor bolt. There shall be no fewer than two bolts per plate section with one bolt located not more than 18 inches (509 mm) or less than seven bolt distances from each end of the plate section. The remaining portion of the plate section shall be secured by the remaining part of a bracket wall plate shall be positively anchored with approved fasteners. Sill plates and sole plates shall be protected against decay and termites where required by Sections 311 and 318.

Exceptions:

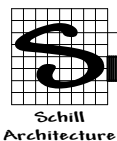
1. Walls 24 inches (610 mm) total length or shorter connecting offset braced wall panels shall be anchored to the foundation with not fewer than one anchor bolt located in the center third of the plate section and shall be attached to adjacent braced wall panels at corners as shown in item 9 of Table 602.3(I).
2. Connection of walls 12 inches (305 mm) total length or shorter connecting offset braced wall panels to the foundation without anchor bolts shall be permitted. The wall shall be attached to adjacent braced wall panels at corners as shown in item 9 of Table 602.3(I).

NOTE: ALL STAIRS SHALL COMPLY WITH SECTION R 311.5 OF THE RCO. ALL CONSTRUCTION SHALL INCLUDED, BUT NOT BE LIMITED TO THE FOLLOWING:

1. ALL EXTERIOR DOORS SHALL HAVE A LANDING ON EACH SIDE OF THE DOOR. SEE EXCEPTIONS OF SECTION R311.4.3. WHEN THESE LANDINGS MAY BE OMITTED.

2. GUARDS SHALL BE INSTALLED AS REQUIRED BY SECTION R 312.1 OF THE RCO.

3. HANDRAILS SHALL BE INSTALLED ON AT LEAST ONE SIDE OF CONTINUOUS RUN OF TREADS OR FLIGHT WITH FOUR OR MORE RISERS. THE HANDRAIL SHALL BE LOCATED NOT LESS THAN 34 INCHES AND NOT MORE THAN 38 INCHES FROM THE SLOPED PLANE OF THE TREAD NOSING

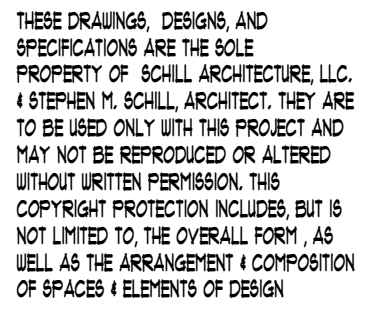


GRAPHIC SCALE



FOUNDATION PLAN

ALL CONSTRUCTION SHALL COMPLY
WITH THE REQUIREMENTS OF THE 2019
RESIDENTIAL CODE OF OHIO



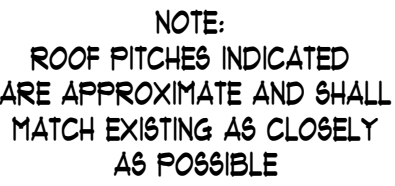
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OFFICE ADDRESS:
1650 CROSSINGS PARKWAY SUITE E
WESTLAKE, OHIO 44145

COMPONENT	LIVE LOAD	DEAD LOAD	TOTAL LOAD
ATTIC (WALK UP STORAGE)	30 P.S.F.	15 P.S.F.	45 P.S.F.
ATTIC (LIMIT STORAGE)	20 P.S.F.	15 P.S.F.	35 P.S.F.
ATTIC (NO STORAGE)	10 P.S.F.	15 P.S.F.	25 P.S.F.
DECKS	40 P.S.F.	15 P.S.F.	55 P.S.F.
EXTERIOR BALCONIES	60 P.S.F.	15 P.S.F.	75 P.S.F.
WARDWARD AND HANDRAILS	200 P.S.F.	15 P.S.F.	215 P.S.F.
WARDWARD INFL. COMPONENTS	50 P.S.F.	15 P.S.F.	65 P.S.F.
15SEENR VEHICLE GARAGES	50 P.S.F.	15 P.S.F.	65 P.S.F.
ROOMS (OTHER THAN SLEEPING ROOMS)	40 P.S.F.	15 P.S.F.	55 P.S.F.
SLEEPING ROOMS	30 P.S.F.	15 P.S.F.	45 P.S.F.
STAIRS	40 P.S.F.	15 P.S.F.	55 P.S.F.
ROOFS	25 P.S.F.	15 P.S.F.	40 P.S.F.
SNOW	25 P.S.F.	N.A.	25 P.S.F.
WIND	15 P.S.F.	N.A.	15 P.S.F.
SOIL BEARING	2000 P.S.F.	N.A.	2000 P.S.F.

FROM THE OUTSIDE FACE OF
FIREPLACE AREAS ARE INCLUDED
DECKS, PATIOS, AND EXTERIOR
IN THESE FIGURES. THEY ARE
AL AREAS IN THIS TABLE

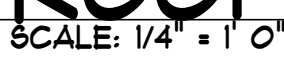
DATE:	JOB NUMBER:
AS NOTED	22 ENROH



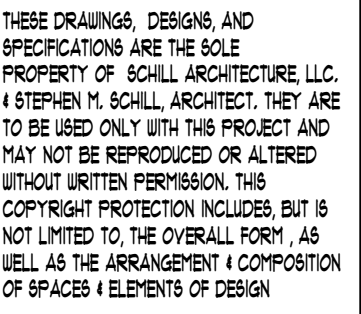
ROOF AREAS SHALL BE VENTILATED
ACCORDING TO THE REQUIREMENTS OF
SECTION R806 "ROOF VENTILATION" OF
THE RESIDENTIAL CODE OF OHIO
IF FOAM INSULATION IS NOT USED

ALL POINT LOADS AND BEARING
ALLS SHALL BE BLOCKED DOWN
TO STRUCTURAL MEMBERS

PROVIDE ACCESS TO ALL
ATTIC AREAS. COORDINATE
LOCATIONS WITH BUILDER



ALL CONSTRUCTION SHALL COMPLY
WITH THE REQUIREMENTS OF THE 2019
RESIDENTIAL CODE OF OHIO



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COMPONENT	LIVE LOAD	DEAD LOAD	TOTAL LOAD
TIC (WALK UP STORAGE)	30 P.S.F.	15 P.S.F.	45 P.S.F.
ATTIC (LIMITED STORAGE)	20 P.S.F.	15 P.S.F.	35 P.S.F.
ATTIC (NO STORAGE)	10 P.S.F.	15 P.S.F.	25 P.S.F.
DECKS	40 P.S.F.	15 P.S.F.	55 P.S.F.
EXTERIOR BALCONIES	60 P.S.F.	15 P.S.F.	75 P.S.F.
CHIMNEY AND HANDRAILS	200 P.S.F.	15 P.S.F.	215 P.S.F.
CHIMNEY INFL COMPONENTS	50 P.S.F.	15 P.S.F.	65 P.S.F.
BUS/SEMI TRAILER GARAGES	50 P.S.F.	15 P.S.F.	65 P.S.F.
TRUCKS (OTHER THAN SLEEPING ROOMS)	40 P.S.F.	15 P.S.F.	55 P.S.F.
SLEEPING ROOMS	30 P.S.F.	15 P.S.F.	45 P.S.F.
STAIRS	40 P.S.F.	15 P.S.F.	55 P.S.F.
ROOFS	25 P.S.F.	15 P.S.F.	40 P.S.F.
SNOW	25 P.S.F.	N.A.	25 P.S.F.
WIND	15 M.P.H.	N.A.	15 M.P.H.
SOIL BEARING	2000 P.S.F.	N.A.	2000 P.S.F.

ASSUMED SOIL BEARING CAPACITY IS 2000 P.S.F. A GEOTECHNICAL
ENGINEER SHALL BE RETAINED AND THE ARCHITECT SHALL BE
NOTIFIED AT ONCE, IF UNUSUAL OR UNSTABLE SOIL CONDITIONS EXIST.
NOTIFY ARCHITECT IF STONE OR TILE FLOORING IS TO BE USED.
NOTIFY ARCHITECT IF ROOFING MATERIAL IS OTHER THAN ASPHALT SHINGLE.

SPACE	MATERIAL	HEIGHT
BASEMENT	CONCRETE- 8"	8' 0"
MAIN FLOOR	WOOD- 2"x4"	8' 0"
UPPER FLOOR	WOOD- 2"x4"	8' 0"

AREA	SIZE
UNFINISHED BASEMENT	0,000 SQ.FT.
FINISHED BASEMENT AREA	0,000 SQ.FT.
MAIN FLOOR ADDITION	746 SQ.FT.
UPPER FLOOR ADDITION	241 SQ.FT.
THIRD FLOOR ADDITION	85 SQ.FT.
TOTAL HEATED AREA	0,000 SQ.FT.
GARAGE	0,000 SQ.FT.
ARRIVAL PORCH	312 SQ.FT.
FRIENDS/ FAMILY PORCH	0,000 SQ.FT.
REAR PORCH	0,000 SQ.FT.
TOTAL AREA UNDER ROOF	0,000 SQ.FT.

AREA CALCULATIONS ARE MADE FROM THE OUTSIDE FACE OF
TERIOR WALLS. STAIRWELLS AND FIREPLACE AREAS ARE INCLUDED
ONCE. GARAGES, OPEN SPACES, DECKS, PATIOS, AND EXTERIOR
PORCHES ARE NOT INCLUDED IN THESE FIGURES. THEY ARE
SUMMARIZED AS ADDITIONAL AREAS IN THIS TABLE

5		
4		
3	ISSUED FOR PERMIT & BIDDING	22 JUNE 2023
2	ISSUED FOR PERMIT & BIDDING	21 JAN 2023
1	ISSUED FOR REVIEW	5 DEC 2022

NO.	DESCRIPTION	DATE
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PROJECT:


LOCATION: 22105 LAKE ROAD
ROCKY RIVER, OHIO 44116
CUYAHOGA COUNTY
PERMANENT PARCEL NUMBER: 302-06-008

LE:	JOB NUMBER:
AS NOTED	22 ENROH

	DATE: _____
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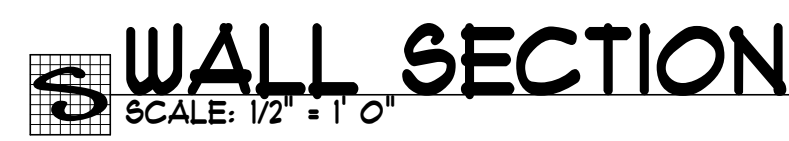
STATE OF OHIO
02 DECEMBER 2022
GAD FILE NAME:

STEPHEN
M.
SCHILL

PHEN M. SCHILL, LICENSE # 8871
EXPIRATION DATE: 12/31/2023



PORCHES, BALCONIES OR RAISED FLOOR SURFACES LOCATED MORE THAN 30 INCHES ABOVE THE FLOOR OR GRADE BELOW SHALL HAVE GUARDS NOT LESS THAN 36 INCHES IN HEIGHT. OPEN SIDES OF STAIRS WITH A TOTAL RISE OF MORE THAN 30 INCHES ABOVE THE FLOOR OR GRADE BELOW SHALL HAVE GUARDS NOT LESS THAN 34 INCHES IN HEIGHT MEASURED VERTICALLY FROM THE NOSING OF THE TREADS. REQUIRED GUARDS ON OPEN SIDES OF STAIRWAYS, RAISED FLOOR AREA, BALCONIES AND PORCHES SHALL HAVE INTERMEDIATE RAILS OR ORNAMENTAL CLOSURES WHICH DO NOT ALLOW PASSAGE OF A SPHERE 4 INCHES OR MORE IN DIAMETER.

CONTRACTOR TO FIELD VERIFY
ALL DIMENSIONS PRIOR TO
CONSTRUCTION AND NOTIFY
ARCHITECT IMMEDIATELY
OF ANY CONFLICTS

EVERY SLEEPING ROOM SHALL HAVE AT LEAST ONE OPENABLE EMERGENCY ESCAPE WINDOW WITH A SILL HEIGHT OF NO MORE THAN 44 INCHES ABOVE THE FLOOR. THE MINIMUM OPENING HEIGHT SHALL BE 24 INCHES, THE MINIMUM OPENING WIDTH SHALL BE 20 INCHES, AND THE MINIMUM OPENING AREA SHALL BE 5.7 SQUARE FEET. (5.0 SQ. FT. ON THE GRADE FLOOR)

ALL MATERIALS TO MATCH EXISTING

NOTE:
ROOF PITCHES INDICATED
ARE APPROXIMATE AND SHALL
MATCH EXISTING AS CLOSELY
AS POSSIBLE

THE TERMINATION OF THE CHIMNEY SHALL EXTEND AT LEAST TWO FEET HIGHER THAN ANY PORTION OF THE BUILDING WITHIN TEN FEET, BUT SHALL BE NOT LESS THAN THREE FEET ABOVE THE HIGHEST POINT WHERE THE CHIMNEY PASSES THROUGH THE ROOF.

ALL CHIMNEYS SHALL BE CONSTRUCTED ACCORDING TO THE REQUIREMENTS OF SECTION R1003 "MASONRY CHIMNEYS" OF THE RESIDENTIAL CODE OF OHIO



SCALE: 1/4" = 1' 0"

ALL CONSTRUCTION SHALL COMPLY
WITH THE REQUIREMENTS OF THE 2019
RESIDENTIAL CODE OF OHIO

FASTENING SCHEDULE FOR STRUCTURAL MEMBERS

ITEM	DESCRIPTION OF BUILDING ELEMENT	NUMBER AND TYPE OF FASTENERS a,b,c	SPACING OF FASTENERS
ROOF			
1	Blocking between joists or rafters to top plate, toe nail	3-8d (2½" x 0.113")	-----
2	Ceiling joists to plate, toe nail	3-8d (2½" x 0.113")	-----
3	Ceiling joists not attached to parallel rafter, lips over partitions, face nail	3-10d	-----
4	Ceiling tie rafter, face nail or 1¼"x 20 gauge ridge strap	3-10d (3" x 0.128")	-----
5	Rafter to plate, toe nail	2-16d (3½" x 0.135")	-----
6	Roof rafters to ridge, valley or hip rafters: toe nail face nail	4-16d (3½" x 0.135") 3-16d (3½" x 0.135")	-----

WALL			
1	Built-up corner studs	10d/3" x 0.128")	24" o.c.
8	Built-up header, two pieces with ½" spacer	16d (3½" x 0.135")	16" o.c. along each edge
9	Continued header, two pieces	16d (3½" x 0.135")	16" o.c. along each edge
10	Continuous header to stud, toe nail	4-8d (2½" x 0.113")	-----
11	Double studs, face nail	10d/3" x 0.128")	24" o.c.
12	Double top plates, face nail	10d/3" x 0.128")	24" o.c.
13	Double top plates, minimum 24-inch offset of end joints, face nail in lapped area	8-16d (3½" x 0.135")	24" o.c.

14	Sole plate to joist or blocking, face nail	16d (3½" x 0.135")	16" o.c.
15	Sole plate to joist or blocking at braced wall panels	3-16d (3½" x 0.135")	16" o.c.
16	Stud to sole plate, toe nail	3-8d (2½" x 0.113") or 2-16d (3½" x 0.135")	-----
17	Top or sole plate to stud, end nail	2-16d (3½" x 0.135")	-----
18	Top plates, lips at corners and intersections, face nail	2-10d (3" x 0.128")	-----
19	1" brace to each stud and plate, face nail	2-8d (2½" x 0.113") 2 staples 1½"	-----
20	1"x 8" sheathing to each bearing, face nail	2-8d (2½" x 0.113") 2 staples 1½"	-----
21	1"x 8" sheathing to each bearing, face nail	2-8d (2½" x 0.113") 3 staples 1½"	-----
22	Wider than 1"x 8" sheathing to each bearing, face nail	3-8d (2½" x 0.113") 4 staples 1½"	-----

FLOOR			
23	Joist to sill or girder, toe nail	3-8d (2½" x 0.113")	-----
24	1"x 6" subfloor or less to each joist, face nail	2-8d (2½" x 0.113") 3 staples 1½"	-----
25	2" subfloor to joist or girder, blind and face nail	2-16d (3½" x 0.135")	-----
26	Rite joist to top plate, toe nail (roof applications also)	8d (2½" x 0.113")	6" o.c.
27	2" planks (plank & beam - floor & roof)	2-16d (3½" x 0.135")	at each bearing
28	Built-up girders and beams, 2-inch lumber layers	10d (3" x 0.128")	Nail each layer as follows: 32" o.c. at top and bottom and staggered. Two nails at ends and at each splice.
29	Ledger strip supporting joists or rafters	3-16d (3½" x 0.135")	At each joist or rafter

WOOD STRUCTURAL PANELS, SUBFLOOR, ROOF AND INTERIOR WALL SHEATHING AND PARTICLEBOARD WALL SHEATHING TO FRAMING

ITEM	DESCRIPTION OF BUILDING MATERIALS	NUMBER AND TYPE OF FASTENERS b,c,e	SPACING OF FASTENERS
EDGE (INCHES)f			
INTERMEDIATE SUPPORTS g,h (INCHES)			
30	3/8"-1/4"	6d common (2" x 0.113") nail (subfloor wall) 8d common (2½" x 0.131") nail (roof?)	6 12 g
31	19/32"-1"	8d common nail (2½" x 0.131")	6 12 g
32	1 1/8"-1¼"	10d common (3" x 0.148") nail or 8d (2½" x 0.131") deformed	6 12

OTHER WALL SHEATHING h

33	½" structural cellulose fiberboard sheathing	1½" galvanized roofing nail, 1/16" crown or 1" crown staple 16 ga., ½" long	3 6
34	25/32" structural cellulose fiberboard sheathing	1½" galvanized roofing nail, 1/16" crown or 1" crown staple 16 ga., ½" long	3 6
35	½" gypsum sheathing d	1½" galvanized roofing nail: staple galvanized, 1½" long; 1¼" screws, Type W or S	7 7
36	5/8" gypsum sheathing d	1½" galvanized roofing nail: staple galvanized, 1 5/8" long; 1 5/8" screws, Type W or S	7 7

WOOD STRUCTURAL PANELS, COMBINATION SUBFLOOR UNDERLAYMENT TO FRAMING

37	¾" and less	6d deformed (2" x 0.120") nail or 8d common (2½" x 0.131")	12 16
38	1/8"-1"	8d common (2½" x 0.131") nail or 8d deformed (2½" x 0.120")	12 16
39	1 1/8"-1¼"	10d common (3" x 0.148") nail or 8d deformed (2½" x 0.120")	12 16

For 8d: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 mile per hour = 0.447 m/s, 1 ksi = 6.895 MPa.
a. All nails are smooth-common, box or deformed shanks except where otherwise stated. Nails used for framing and sheathing connections shall have minimum average bending yield strengths as shown: 80 ksi for shank diameter of 0.192 inch (20d common nail), 90 ksi for shank diameters larger than 0.142 inch but not larger than 0.171 inch, and 100 ksi for shank diameters of 0.142 inch or less.
b. Staples are 16 gauge wire and have a minimum 1/16-inch on diameter crown width.
c. Nails shall be spaced at not more than 6 inches on center at all supports where spans are 48 inches or greater.
d. Four-foot-by-8-foot or 4-foot-by-9-foot panels shall be applied vertically.
e. Spacing of fasteners not included in this table shall be based on Table 602.3(1).
f. For regions having basic wind speed of 100 mph or greater, 8d deformed (2½" x 0.120") nails shall be used for attaching plywood and wood structural panel roof sheathing to framing within minimum 48-inch distance from gables and walls. If mean roof height is more than 25 feet, up to 35 feet maximum.
g. For regions having basic wind speed of 100 mph or less, nails for attaching wood structural panel roof sheathing to gable and wall framing shall be spaced 6 inches on center, when basic wind speed is greater than 100 mph nails for attaching panel roof sheathing to intermediate supports shall be spaced 6 inches on center for minimum 48-inch distance from ridges, eaves and gable and walls and 4 inches on center to gable and wall framing.
h. Gypsum sheathing shall conform to ASTM C 396 and shall be installed in accordance with GA 253. Fiberboard sheathing shall conform to ASTM C 208.
i. Spacing of fasteners on floor sheathing panel edges applies to panel edges supported by framing members and required blocking and at all floor perimeters only. Spacing of fasteners on roof sheathing panel edges applies to panel edges supported by framing members and required blocking. Blocking of roof or floor sheathing panel edges perpendicular to the framing members need not be provided except as required by other provisions of this code. Floor perimeter shall be supported by framing members or solid blocking.



GRAPHIC SCALE

ALTERNATE ATTACHMENTS

WOOD STRUCTURAL PANELS, SUBFLOOR, ROOF AND INTERIOR WALL SHEATHING AND PARTICLEBOARD WALL SHEATHING TO FRAMING

NOMINAL MATERIAL THICKNESS (INCHES)/DESCRIPTION a,b OF FASTENERS (INCHES)		SPACING c OF FASTENERS	
EDGE (INCHES)f		INTERMEDIATE SUPPORTS (INCHES)	
UP TO 1/2"	Staple 15 ga. 1½"	4	8
	0.091 - 0.099 Nail 2¼"	3	6
	Staple 16 ga. 1½"	3	6
	0.113 Nail 2	3	6
19/32 and 5/8"	Staple 15 and 16 ga. 2	4	8
	0.091 - 0.099 Nail 2¼"	4	8
	Staple 14 ga. 2	4	8
	Staple 15 ga. 1½"	3	6
23/32 and ¾"	0.091 - 0.099 Nail 2¼"	4	8
	Staple 16 ga. 2	4	8
	Staple 14 ga. 2	4	8
	0.113 Nail 2¼"	3	6
1	Staple 15 ga. 2¼"	4	8
	0.091 - 0.099 Nail 2¼"	4	8
	Staple 16 ga. 2	4	8
	0.113 Nail 2¼"	3	6

FLOOR UNDERLAYMENT: PLYWOOD-HARDWOOD-PARTICLEBOARD f

NOMINAL MATERIAL THICKNESS (INCHES)/DESCRIPTION a,b OF FASTENERS (INCHES)		SPACING c OF FASTENERS	
		EDGE (INCHES)f	INTERMEDIATE SUPPORTS (INCHES)
PLYWOOD			
¾ and 5/16	¼ ring or screw shank nail-minimum 12½ ga. (0.099 ") shank diameter	3	6
	Staple 18 ga, 1/8, 3/16 crown width	2	5
19/32, 3/8, 5/32, and 1/2	¼ ring or screw shank nail-minimum 12½ ga. (0.099 ") shank diameter	6	8e
	¼ ring or screw shank nail-minimum 12½ ga. (0.099 ") shank diameter	6	8
19/32, 3/8, 5/32 and 3/4	Staple 16 ga. 1½	6	8

HARDBOARD f			
0.200		1½ long ring-grooved underlayment nail	6 6
		4d cement-coated sinker nail	6 6
		Staple 18 ga, 1/8 long (plastic coated)	3 6

PARTICLEBOARD			
¾		4d ring-grooved underlayment nail	3 6
		Staple 18 ga, 1/8 long, 3/16" crown	3 6
		6d ring-grooved underlayment nail	6 10
		Staple 16 ga. 1/8 long, 3/8 crown	3 6
		6d ring-grooved underlayment nail	6 10
½, 5/8		Staple 16 ga., 1 5/8 long, 3/8 crown	3 6

For 8d: 1 inch = 25.4 mm.
a. Nail is a general description and may be T-head, modified round head or round head.
b. Staples shall have a minimum crown width of 5/8-inch on diameter except as noted.
c. Nails or staples shall be spaced at not more than 6 inches on center at all supports where spans are 48 inches or greater. Nails or staples shall be spaced at not more than 12 inches on center at intermediate supports for floors.
d. Fasteners shall be placed in a grid pattern throughout the body of the panel.
e. For 5-ply panels, intermediate nails shall be spaced not more than 12 inches on center each way.
f. Hardboard underlayment shall conform to CPAN/AISI A 135.4.

REQUIREMENTS FOR WOOD STRUCTURAL PANEL WALL SHEATHING USED TO RESIST WIND PRESSURES a,b,c

MINIMUM NAIL		MINIMUM WOOD STRUCTURAL PANEL SPAN RATINGS	MINIMUM NOMINAL PANEL THICKNESS (inches)	MAXIMUM WALL STUD SPACING (inches)	PANEL NAIL SPACING		MAXIMUM WIND SPEED (mph)		
SIZE	PENETRATION (INCHES)				Edges (Inches o.c.)	Field (Inches o.c.)	Wind exposure category		
6d Common (2.0" x 0.13")	1.5	24/0	3/8	16	6	12	B	C	D
8d Common (2.5" x 0.13")	1.75	24/6	1/16	16	6	12	130	110	105
				24	6	12	110	90	85

For 8d: 1 inch = 25.4 mm, 1 mile per hour = 0.447 m/s.
a. Panel strength axis parallel or perpendicular to supports. Three-ply plywood sheathing with studs spaced more than 16 inches on center shall be applied with panel strength axis perpendicular to supports.
b. Table is based on wind pressures acting toward and away from building surfaces per Section 301.2. Lateral bracing requirements shall be in accordance with Section 602.10.
c. Wood Structural Panels with span ratings of Wall-16 or Wall-24 shall be permitted as an alternate to panels with a 24/0 span rating. Plywood siding rated 16 oc or 24 oc shall be permitted as an alternate to panels with a 24/6 span rating. Wall-16 and Plywood siding 16 oc shall be used with studs spaced a maximum of 16 inches on center.

2019 RESIDENTIAL CODE OF OHIO COMPLIANCE PATH OPTIONS

CLIMATE ZONE 5- SELECT ONE OPTION				
DESCRIPTION	OPTION 1 2009 IECC	OPTION 2 RCO 110/1004	OPTIONS RCO 1105 (OHBA)	
			OPTION 3A OHBA PATH 1	OPTION 3B OHBA PATH 2
MINIMUM FENESTRATION U-FACTOR (ALL GLAZED FENESTRATION EXCEPT SKYLIGHTS)	0.35	0.35	0.32	0.32
SKYLIGHT FENESTRATION U-FACTOR	0.60	0.60	0.60	0.60
CEILING R-VALUE	R-38	R-38	R-43	R-43
WOOD FRAMED WALL R-VALUE	20 OR 13+ *	20 OR 13+ *	15 OR 13+ *	13
MASS WALL R-VALUE (ABOVE GRADE WALLS OF CONCRETE BLOCK, ICF, SOLID TIMBER LOGS, ETC.)	13/11	13/11	13/11	13/11
FRAMED FLOOR R-VALUE	30 **	30 **	30 **	30 **
BASEMENT WALL R-VALUE	10/13 ** (FULL)	10/13 ** (FULL)	10/13 ** (MIN. 4 FT.)	10/13 ** (MIN. 4 FT.)
SLAB R-VALUE (A)	R-10 # 2 FT.	R-10 # 2 FT.	R-10 # 2 FT.	R-10 # 2 FT.
CRAWL SPACE WALL R-VALUE	10/13 **	10/13 **	10/13 **	10/13 **
BLOWER DOOR TEST	YES (B)	YES (B)	YES (D)	YES (D)
DUCTS MUST BE TESTED FOR FOR TIGHTNESS (IECC 403.2.2)	YES (C)	YES (C)	YES (C) (D)	YES (C) (D)
SUPPLY DUCTS IN ATTICS SHALL BE INSULATED TO A MINIMUM OF (E)	R-8	R-8	R-8	R-8
ALL OTHER DUCTS (OUTSIDE THE BUILDING ENVELOPE) SHALL BE SEALED AND INSULATED TO A MINIMUM OF (E)	R-6	R-6	R-6	R-6
AIR SEALING (IECC 402.4) OF PLATES, WALLS, WOODS, DOORS, UTILITY PENETRATIONS, ATTIC ACCESS, RECESSED	YES	YES	YES	YES
WOOD BURNING FIREPLACES SHALL HAVE GASKETED DOORS AND OUTDOOR COMBUSTION AIR (F)	YES	YES	YES	YES
ACCESS DOORS FROM CONDITIONED SPACES TO UNCONDITIONED SPACE SHALL BE WEATHERSTRIPPED	YES	YES	YES	YES
CIRCULATING HOT WATER SYSTEMS PIPING SHALL BE INSULATED TO AT LEAST R- (PER SECTION 1103.4)	R-2 (ALL)	R-2 (ALL)	R-2 (FIRST 5 FT.)	R-2 (FIRST 5 FT.)
MECHANICAL SYSTEM PIPING (ABOVE 105 F OR BELOW 55 F MUST BE INSULATED TO A MINIMUM OF	R-3	R-3	R-3	R-3
MINIMUM PERCENTAGE OF HIGH EFFICIENCY LIGHT FIXTURES	50%	50%	75%	75%
PROGRAMMABLE THERMOSTAT REQUIRED	YES	YES	YES	YES
PERMANENT CERTIFICATE SHALL BE POSTED ON THE ELECTRICAL PANEL	YES	YES	YES	YES
FURNACE EFFICIENCY RATING	EQUIPMENT SIZING SHALL MEET SECTION M1401.0 OF THE IRC			
AIR CONDITIONING SEER RATING				

NOTES:
* 13+ MEANS R-13 CAVITY INSULATION PLUS R-5 INSULATED SHEATHING (LIKEWISE FOR 13+3)
** OR INSULATION SUFFICIENT TO FILL THE FRAMING CAVITY
*** 10/13 MEANS R-10 CONTINUOUS INSULATION (ON THE INTERIOR OR EXTERIOR) OR R-13 CAVITY INSULATION ON THE BASEMENT/CRAWL WALL
(A) FOR HEATED SLABS R-5 SHALL BE ADDED TO THE REQUIRED SLAB EDGE R VALUES
(B) EXCEPTION: COMPLIANCE MAY BE DETERMINED BY A VISUAL INSPECTION BASED ON THE CRITERIA LISTED IN IECC TABLE 402.4.2 (IN LIEU OF BLOWER DOOR)
(C) EXCEPTION: DUCT TIGHTNESS TEST IS NOT REQUIRED IF THE AIR HANDLER AND ALL DUCTS ARE LOCATED WITHIN CONDITIONED SPACE
(D) THIS REQUIREMENT WILL TAKE EFFECT ONE YEAR AFTER THE EFFECTIVE DATE OF THIS RULE (1/1/14)
(E) BUILDING FRAMING CAVITIES SHALL NOT BE USED AS SUPPLY DUCTS
(F) EXCEPTION: PRE MANUFACTURED FIREPLACES MUST BE INSTALLED PER MANUFACTURER'S INSTRUCTIONS (WHICH MAY OR MAY NOT INCLUDE GASKETED DOORS AND OUTSIDE AIR)

(OHBA) OHIO HOME BUILDERS ASSOCIATION
(RCO) RESIDENTIAL CODE OF OHIO
(IECC) INTERNATIONAL ENERGY CONSERVATION CODE

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Schill Architecture

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WESTLAKE, OHIO 44145

DESIGN LOADS			
COMPONENT	LIVE LOAD	DEAD LOAD	TOTAL LOAD
ATTIC (WALK UP STORAGE)	30 P.S.F.	15 P.S.F.	45 P.S.F.
ATTIC (LIMITED STORAGE)	20 P.S.F.	15 P.S.F.	35 P.S.F.
ATTIC (NO STORAGE)	10 P.S.F.	15 P.S.F.	25 P.S.F.
DECKS	40 P.S.F.	15 P.S.F.	55 P.S.F.
EXTERIOR BALCONIES	60 P.S.F.	15 P.S.F.	75 P.S.F.
GUARDRAIL AND HANDRAILS	200 P.S.F.	15 P.S.F.	215 P.S.F.
GUARDRAIL INFL COMPONENTS	50 P.S.F.	15 P.S.F.	65 P.S.F.
PASSENGER VEHICLE GARAGES	50 P.S.F.	15 P.S.F.	65 P.S.F.
ROOMS OTHER THAN SLEEPING ROOMS	40 P.S.F.	15 P.S.F.	55 P.S.F.
SLEEPING ROOMS	30 P.S.F.	15 P.S.F.	45 P.S.F.
STAIRS	40 P.S.F.	15 P.S.F.	55 P.S.F.
ROOFS	25 P.S.F.	15 P.S.F.	40 P.S.F.
SNOW	25 P.S.F.	N.A.	25 P.S.F.
WIND	15 M.P.H.	N.A.	15 M.P.H.
SOIL BEARING	3000 P.S.F.	N.A.	3000 P.S.F.

NOTES:
1. ASSUMED SOIL BEARING CAPACITY IS 3000 P.S.F. A GEOTECHNICAL ENGINEER SHALL BE RETAINED AND THE ARCHITECT SHALL BE NOTIFIED AT ONCE IF UNUSUAL OR UNSTABLE SOIL CONDITIONS EXIST.
2. NOTIFY ARCHITECT IF STONE OR TILE FLOORING IS TO BE USED.
3. NOTIFY ARCHITECT IF ROOFING MATERIAL IS OTHER THAN ASPHALT SHINGLE

MATERIAL SUMMARY		
SPACE	MATERIAL	HEIGHT
BASEMENT	CONCRETE- 8"	8' 0"
MAIN FLOOR	WOOD- 2"x4"	8' 0"
UPPER FLOOR	WOOD- 2"x4"	8' 0"

AREA SUMMARY	
AREA	SIZE
UNFINISHED BASEMENT	0,000 SQ.FT.
FINISHED BASEMENT AREA	0,000 SQ.FT.
MAIN FLOOR ADDITION	146 SQ.FT.
UPPER FLOOR ADDITION	241 SQ.FT.
THIRD FLOOR ADDITION	85 SQ.FT.
TOTAL HEATED AREA	0,000 SQ.FT.
GARAGE	0,000 SQ.FT.
ARRIVAL PORCH	312 SQ.FT.
FRIENDS/ FAMILY PORCH	0,000 SQ.FT.
REAR PORCH	0,000 SQ.FT.
TOTAL AREA UNDER ROOF	0,000 SQ.FT.
AREA CALCULATIONS ARE MADE FROM THE OUTSIDE FACE OF EXTERIOR WALLS, STAIRWELLS AND FIREPLACE AREAS ARE INCLUDED ONCE, GARAGES, OPEN SPACES, DECKS, PATIOS, AND EXTERIOR PORCHES ARE NOT INCLUDED IN THESE FIGURES. THEY ARE SUMMARIZED AS ADDITIONAL AREAS IN THIS TABLE	

	ISSUED FOR PERMIT & BIDDING	22 JUNE 2023
	ISSUED FOR PERMIT & BIDDING	27 JAN 2023
	ISSUED FOR REVIEW	5 DEC 2022

REV. NO.	DESCRIPTION	DATE
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PROJECT:
ADDITION & RENOVATION TO PRIVATE RESIDENCE

LOCATION: 22105 LAKE ROAD
ROCKY RIVER, OHIO 44116
CUYAHOGA COUNTY
PERMANENT PARCEL NUMBER: 302-06-008

SPECIFICATIONS	
SCALE: AS NOTED	JOB NUMBER: 22 ENROH
	DATE: 02 DECEMBER 2022
	CAD FILE NAME: C:\DRAWINGS\CENTRAL\ARCHIVE\ SCHILL\RESIDENCE\BL000.CAD
	A-8
STEPHEN M. SCHILL, LICENSE # 8871 EXPIRATION DATE: 12/3/2023	DRAWING NUMBER