

Schill  
Architecture

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WELL AS THE ARRANGEMENT & COMPOSITION  
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1650 CROSSINGS PARKWAY SUITE E  
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	2000 P.S.F.	N.A.	2000 P.S.F.

NOTES:  
1. 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.  
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 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.
<b>TOTAL HEATED AREA</b>	<b>0,000 SQ.FT.</b>
GARAGE	0,000 SQ.FT.
ARRIVAL PORCH	312 SQ.FT.
FRINEDS/ FAMILY PORCH	0,000 SQ.FT.
REAR PORCH	0,000 SQ.FT.
<b>TOTAL AREA UNDER ROOF</b>	<b>0,000 SQ.FT.</b>

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 21 JAN 2023
	ISSUED FOR REVIEW 23 JAN 2023

REV. NO. DESCRIPTION DATE

**PROJECT:**  
**ADDITION & RENOVATION  
TO PRIVATE RESIDENCE**

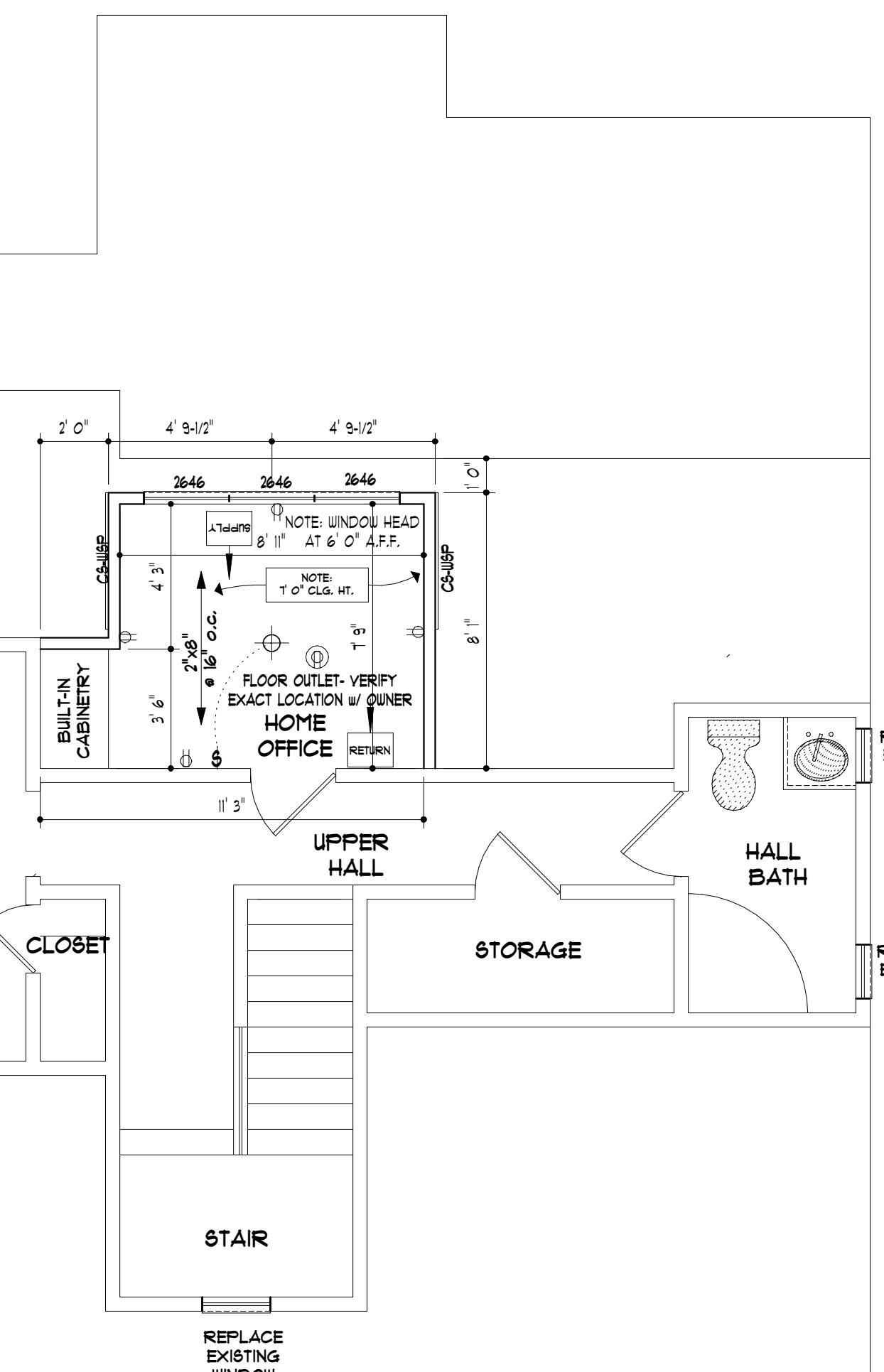
LOCATION: 22105 LAKE ROAD  
ROCKY RIVER, OHIO 44116  
CUYAHOGA COUNTY  
PERMANENT PARCEL NUMBER: 302-06-008

**ATTIC PLAN**

SCALE:	JOB NUMBER:
AS NOTED	22 ENROH
	DATE: 02 DECEMBER 2022
	CAD FILE NAME: CADRAILS\CENTRAL\ARCHIVE\A SCHILL\REIDENCE\BLO.CAD
	8877

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

**A-3**  
DRAWING NUMBER



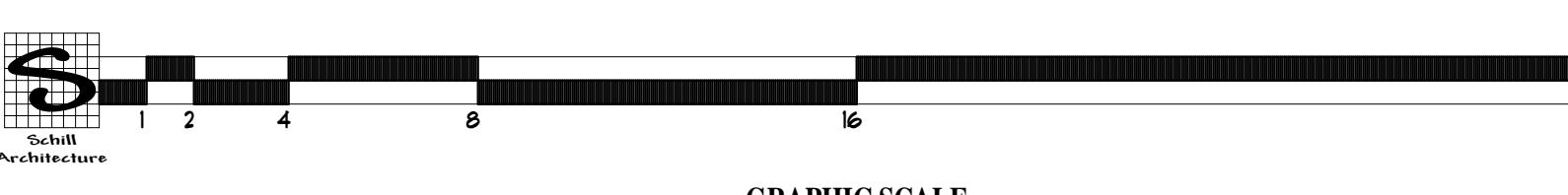
CONTRACTOR TO FIELD VERIFY  
ALL DIMENSIONS PRIOR TO  
CONSTRUCTION AND NOTIFY  
ARCHITECT IMMEDIATELY  
OF ANY CONFLICTS

TEMPERED GLASS REQUIRED IN BY R.C.O. R208.4 "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 SECTION R308.6, 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.  
5. 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.  
6. GLAZING IN AN INDIVIDUAL FIXED OR OPERABLE PANEL ADJACENT TO A DOOR WHERE THE NEAREST EXPOSED EDGE OF THE GLAZING IS WITHIN A 6 INCH ARC FROM 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 INDIVIDUAL FIXED OR OPERABLE PANELS OTHER THAN THOSE LOCATIONS DESCRIBED IN PRECEDING ITEM 6.  
8. GLAZING IN WALKING SURFACES WITHIN 36 INCHES HORIZONTALLY FROM THE PLANE OF GLAZING.  
9. GLAZING IN HALLS 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 FROM THE WATER'S 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 RAMPS WITHIN 36 INCHES HORIZONTALLY OF A WALKING SURFACE; WHEN THE EXPOSED SURFACE OF THE GLAZING IS LESS THAN 60 INCHES ABOVE THE PLANE OF THE ADJACENT WALKING SURFACE.  
II. GLAZING ADJACENT TO STAIRWAYS WITHIN 60 INCHES HORIZONTALLY OF THE BOTTOM TREAD OF A STAIRWAY IN ANY DIRECTION WHEN THE EXPOSED SURFACE OF THE GLAZING IS LESS THAN 60 INCHES ABOVE THE NOSE OF THE TREAD.

**THIRD FLOOR PLAN**

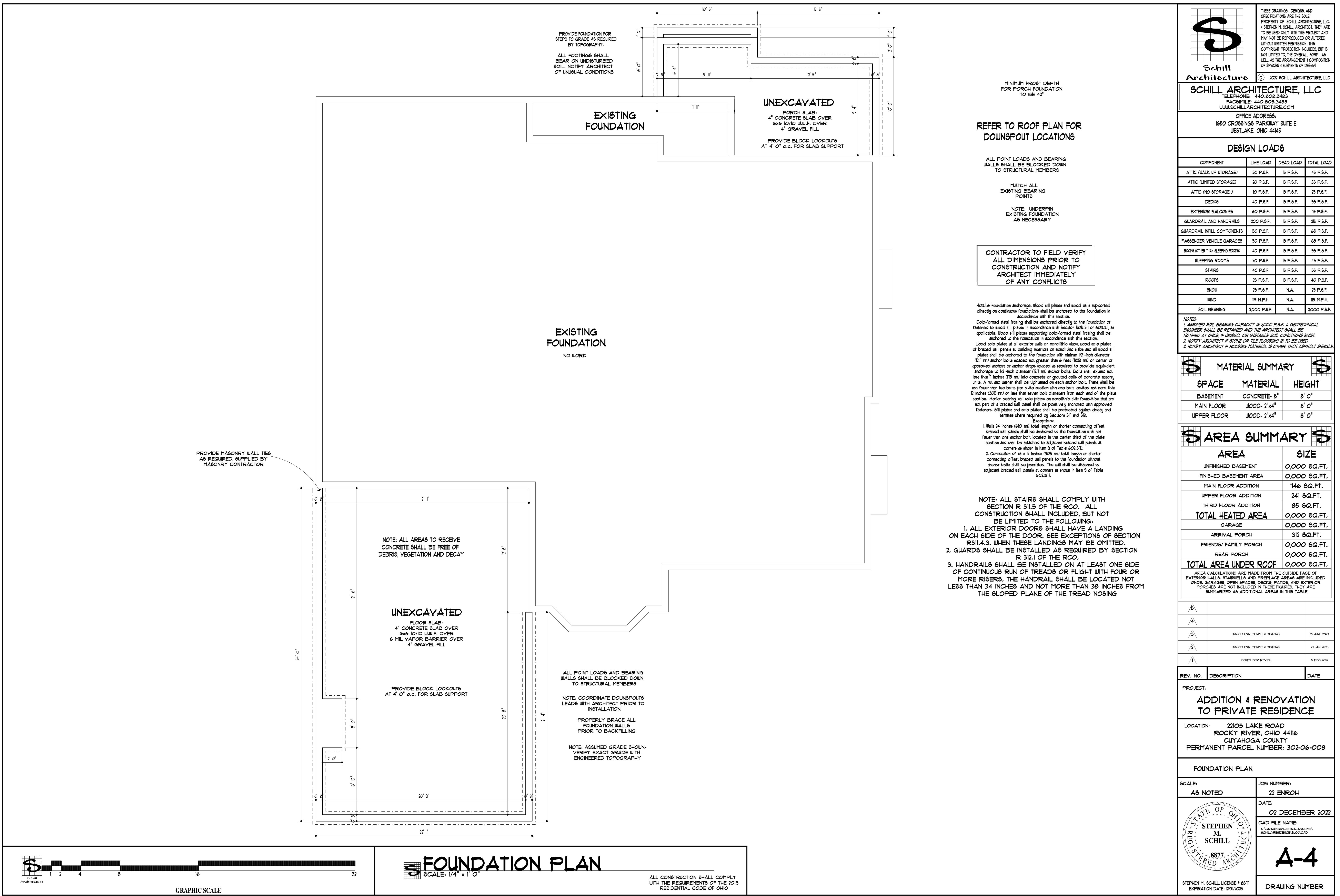
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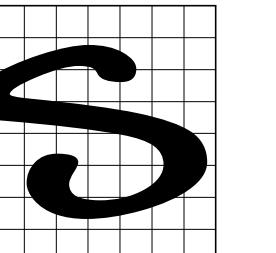
ALL CONSTRUCTION SHALL COMPLY  
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RESIDENTIAL CODE OF OHIO



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GRAPHIC SCALE





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WESTLAKE, OHIO 44145

**DESIGN LOADS**

COMPONENT	LIVE LOAD	DEAD LOAD	TOTAL LOAD
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SNOW	25 P.S.F.	N.A.	N.A.
WIND	15 M.P.H.	N.A.	15 M.P.H.
SOIL BEARING	2000 P.S.F.	N.A.	2000 P.S.F.

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

NOTE:  
ALL ROOF PENETRATIONS  
SHALL BE PAINTED BLACK

ALL 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

NOTE: ALL ROOFING MATERIALS, GUTTERS  
AND OVERHANGS TO MATCH EXISTING

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

NOTE: COORDINATE DOWNSPOUTS  
LEADS WITH ARCHITECT PRIOR TO  
INSTALLATION

PROVIDE ACCESS TO ALL  
ATTIC AREAS. COORDINATE  
LOCATIONS WITH BUILDER

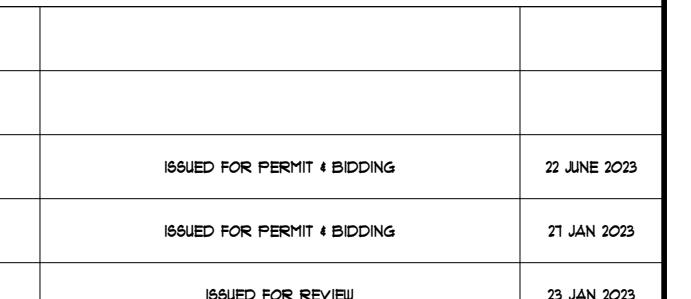
**MATERIAL SUMMARY**

SPACE	MATERIAL	HEIGHT
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REV. NO. DESCRIPTION DATE

PROJECT:  
**ADDITION & RENOVATION  
TO PRIVATE RESIDENCE**

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

**ROOF PLAN**

SCALE: AS NOTED JOB NUMBER:  
22 ENROH

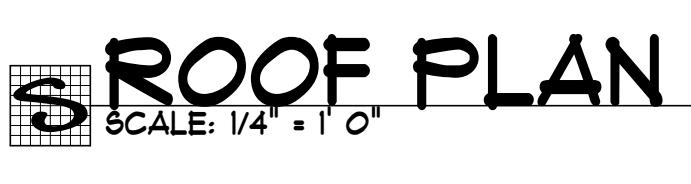
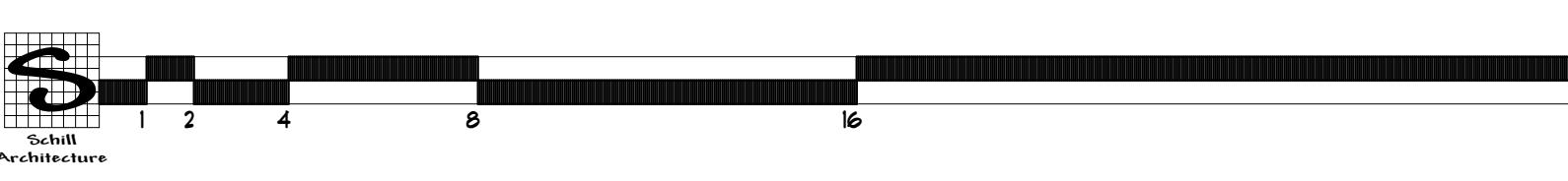
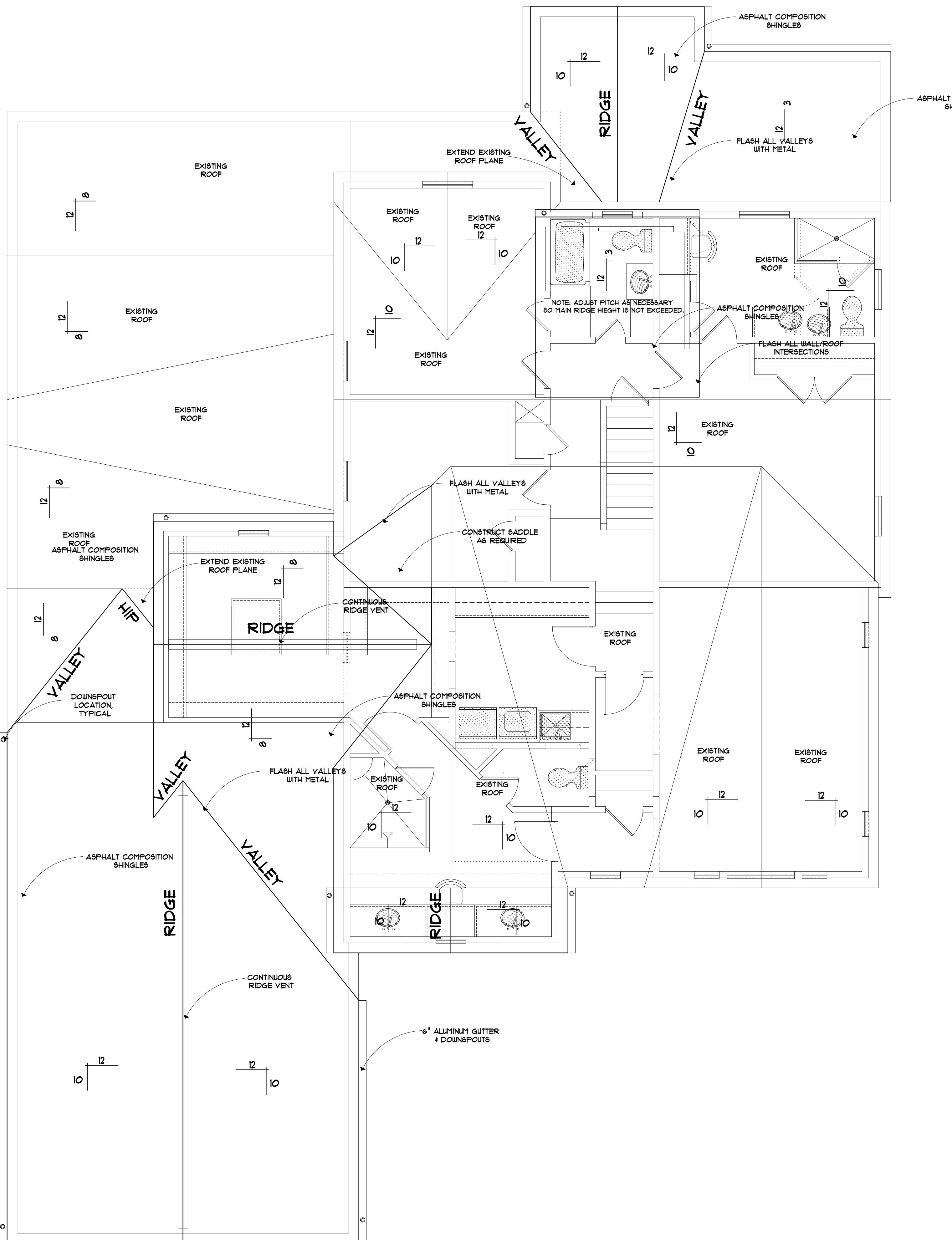
DATE: 02 DECEMBER 2022

CAD FILE NAME:  
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SCHILL\RESIDENCE\BLO.CAD



**A-5**

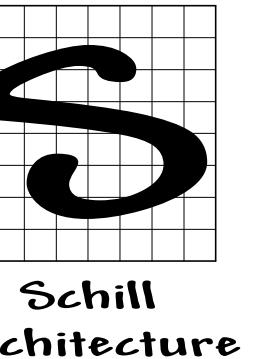
DRAWING NUMBER



GRAPHIC SCALE

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





Schill Architecture

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WESTLAKE, OHIO 44145

## DESIGN LOADS

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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:  
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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"
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## AREA SUMMARY

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3	
4	
5	ISSUED FOR PERMIT & BIDDING 22 JUNE 2023
6	ISSUED FOR PERMIT & BIDDING 21 JAN 2023
7	ISSUED FOR REVIEW 9 DEC 2022

REV. NO. DESCRIPTION DATE

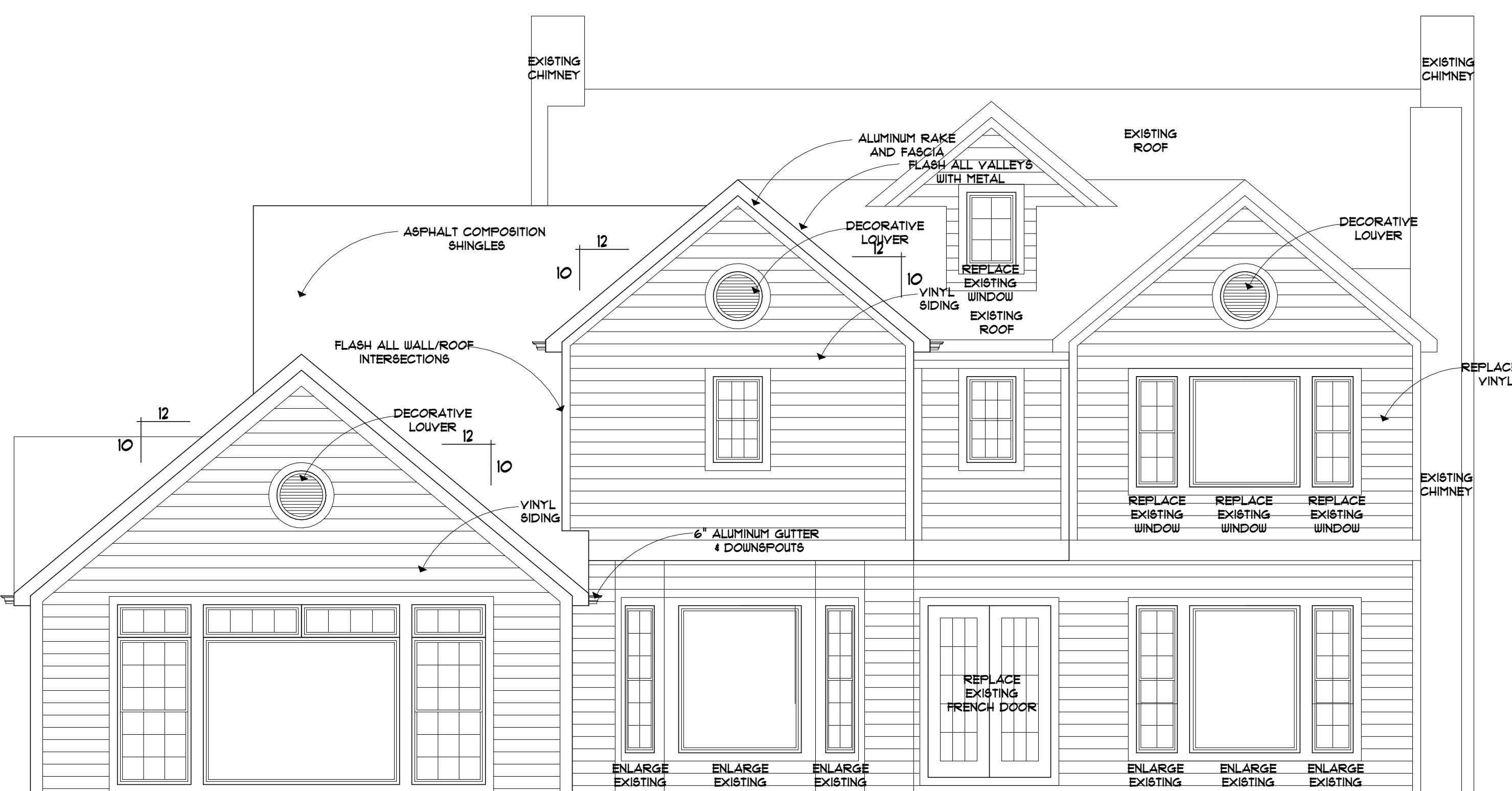
PROJECT:  
ADDITION & RENOVATION  
TO PRIVATE RESIDENCELOCATION: 22105 LAKE ROAD  
ROCKY RIVER, OHIO 44116  
CUYAHOGA COUNTY  
PERMANENT PARCEL NUMBER: 302-06-008

## MISC. PLANS

SCALE:	JOB NUMBER:
AS NOTED	22 ENROH
DATE:	02 DECEMBER 2022
CAD FILE NAME:	C:\DRIVEM\CENTRAL\ARCHIVE\SCILL\RESIDENCE\BLO.CAD
8877	

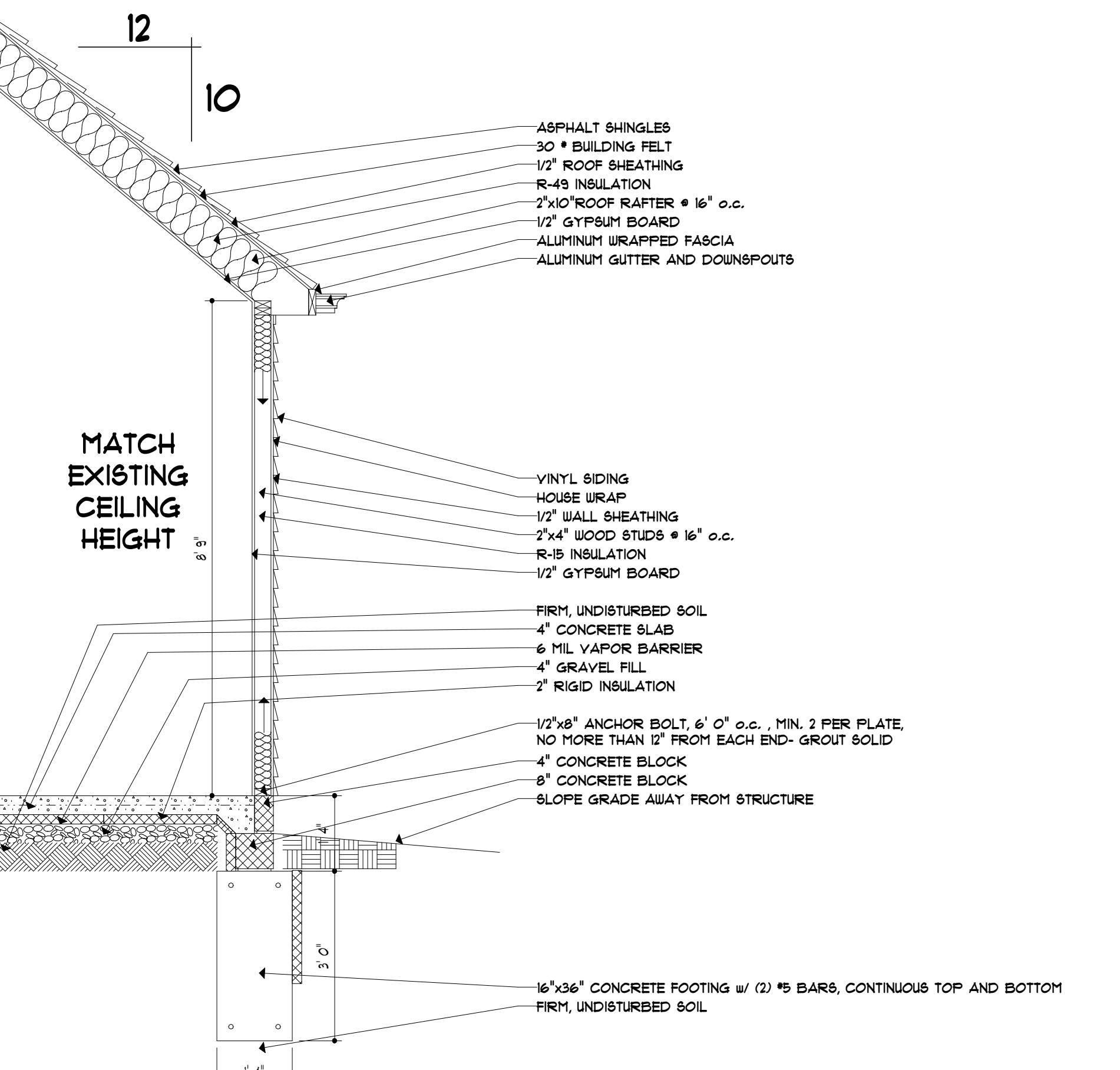
STEPHEN M. SCHILL, LICENSE # 8877  
EXPIRATION DATE: 12/31/2023

A-1



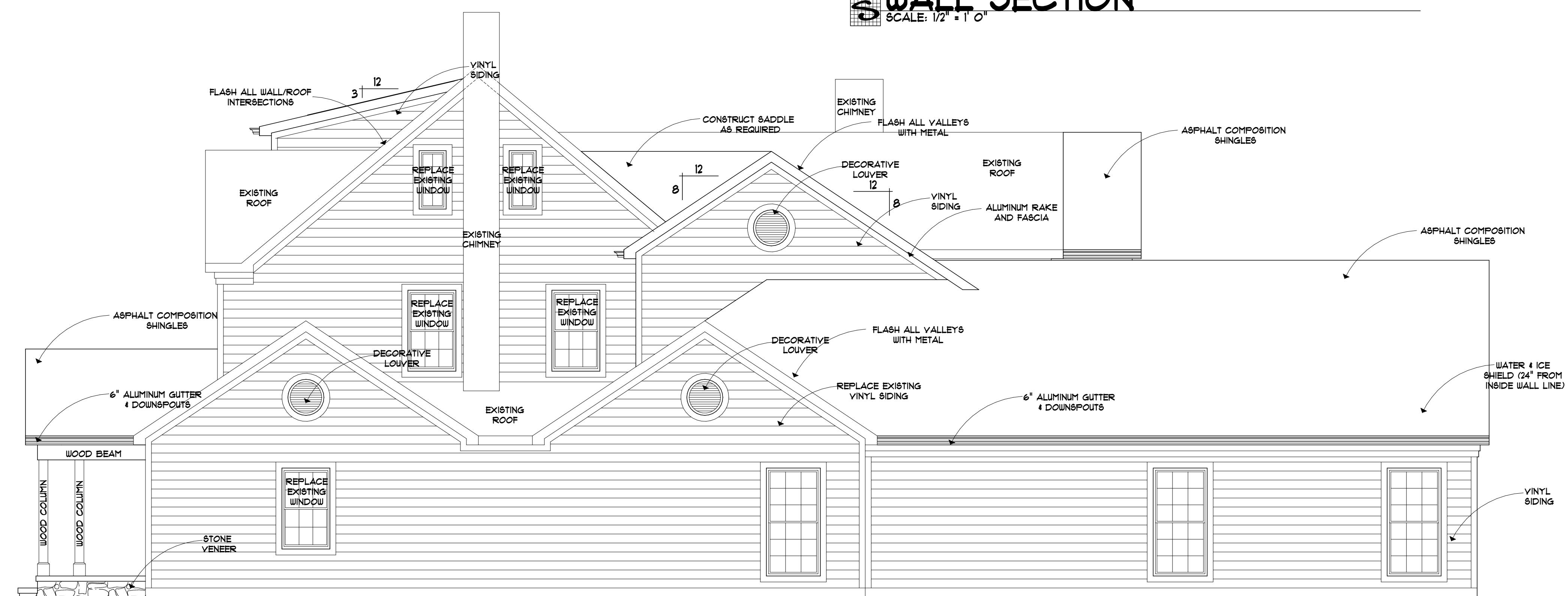
## SOUTH ELEVATION

SCALE: 1/4" = 1' 0"



## WALL SECTION

SCALE: 1/2" = 1' 0"

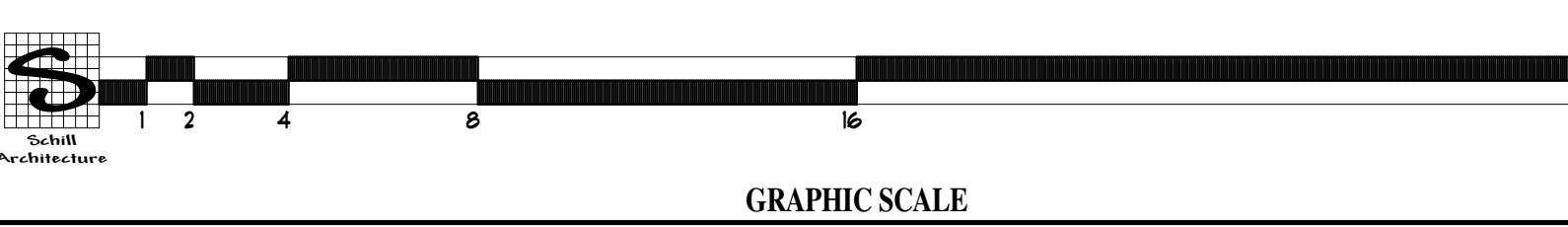


## WEST ELEVATION

SCALE: 1/4" = 1' 0"

## MISCELLANEOUS PLANS

SCALE: 1/4" = 1' 0"

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

GRAPHIC SCALE

## FASTENING SCHEDULE FOR STRUCTURAL MEMBERS

ITEM	DESCRIPTION OF BUILDING ELEMENT	NUMBER AND TYPE OF FASTENERS <i>a,b,c</i>	SPACING OF FASTENERS
<b>ROOF</b>			
1	Blocking between joists or rafters to top plate, toe nail	3-8d (2 1/2" x 0.113")	-----
2	Ceiling joists to plate, toe nail	3-8d (2 1/2" x 0.113")	-----
3	Ceiling joists not attached to parallel rafter, tops over partitions, face nail	3-10d	-----
4	Collar tie rafter, face nail or 1/4" x 20 gauge ridge strap	3-10d (3" x 0.128")	-----
5	Rafter to plate, toe nail	2-16d (3 1/2" x 0.135")	-----
6	Roof rafters to ridge, valley or hip rafters: toe nail face nail	4-16d (3 1/2" x 0.135") 3-16d (3 1/2" x 0.135")	-----
<b>WALL</b>			
7	Built-up corner stud	10d (3" x 0.128")	24° o.c.
8	Built-up header, two pieces with 1/2" spacer	16d (3 1/2" x 0.135")	16" o.c. along each edge
9	Continued header, two pieces	16d (3 1/2" x 0.135")	16" o.c. along each edge
10	Continuous header to stud, toe nail	4-8d (2 1/2" x 0.113")	-----
11	Double stud, 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 (3 1/2" x 0.135")	24° o.c.
14	Sole plate to joist or blocking, face nail	16d (3 1/2" x 0.135")	16" o.c.
15	Sole plate to joist or blocking at braced wall panels	3-16d (3 1/2" x 0.135")	16" o.c.
16	Stud to sole plate, toe nail	3-8d (2 1/2" x 0.113") or 2-16d (3 1/2" x 0.135")	-----
17	Top or sole plate to stud, end nail	2-16d (3 1/2" x 0.135")	-----
18	Top plates, laps at corners and intersections, face nail	2-10d (3" x 0.128")	-----
19	1" brace to each stud and plate, face nail	2-8d (2 1/2" x 0.113") 2 staples 1/8"	-----
20	1" x 8" sheathing to each bearing, face nail	2-8d (2 1/2" x 0.113") 2 staples 1/8"	-----
21	1" x 8" sheathing to each bearing, face nail	2-8d (2 1/2" x 0.113") 3 staples 1/8"	-----
22	Wider than 1" x 8" sheathing to each bearing, face nail	3-8d (2 1/2" x 0.113") 4 staples 1/8"	-----
<b>FLOOR</b>			
23	Joist to sill or girder, toe nail	3-8d (2 1/2" x 0.113")	-----
24	1" x 6" subfloor or less to each joist, face nail	2-8d (2 1/2" x 0.113") 3 staples 1/8"	-----
25	2" subfloor to joist or girder, blind and face nail	2-16d (3 1/2" x 0.135")	-----
26	Rim joist to top plate, toe nail (roof applications allow)	8d (2 1/2" x 0.113")	6" o.c.
27	2" planks (laminated beam - floor or roof)	2-16d (3 1/2" x 0.135")	-----
28	Built-up girders and beams, 2-inch lumber layers	10d (3" x 0.128") At each joist or rafter	-----
29	Ledger strip supporting joists or rafters	3-16d (3 1/2" x 0.135") At each joist or rafter	-----
<b>WOOD STRUCTURAL PANELS, SUBFLOOR, ROOF AND INTERIOR WALL SHEATHING AND PARTICLEBOARD WALL SHEATHING TO FRAMING</b>			
ITEM	DESCRIPTION OF BUILDING MATERIALS	NUMBER AND TYPE OF FASTENERS <i>b,c,e</i>	SPACING OF FASTENERS
			EDGE (INCHES) INTERMEDIATE SUPPORTS (INCHES)
30	3/8"-1/2"	8d common (2" x 0.135") nail (subfloor wall) 8d common (2 1/2" x 0.135") nail (roof)	6 12 8
31	19/32"-1"	8d common nail (2 1/2" x 0.135")	6 12 8
32	1 1/8"-1 1/4"	10d common (3" x 0.148") nail or 8d (2 1/2" x 0.135") deformed nail	12
<b>OTHER WALL SHEATHING <i>h</i></b>			
33	1/2" structural cellulose fiberboard sheathing	1/8" galvanized roofing nail, 7/16" crown or 1" crown staple 16 ga, 1/4" long	3 6
34	25/32" structural cellulose fiberboard sheathing	1/8" galvanized roofing nail, 7/16" crown or 1" crown staple 16 ga, 1/4" long	3 6
35	1/2" gypsum sheathing <i>d</i>	1/8" galvanized roofing nail, staple galvanized, 1/8" long; 1/4" screws, Type II or III	1 1
36	5/8" gypsum sheathing <i>d</i>	1/8" galvanized roofing nail, staple galvanized, 1 5/8" long; 1 5/8" screws, Type II or III	1 1
<b>WOOD STRUCTURAL PANELS, COMBINATION SUBFLOOR UNDERLAYMENT TO FRAMING</b>			
37	1/4" and less	6d deformed (2 1/2" x 0.135") nail	12
38	7/8"-1"	8d common (2 1/2" x 0.135") nail or 8d deformed (2 1/2" x 0.135") nail	12
39	1 1/8"-1 1/4"	10d common (3" x 0.148") nail or 8d deformed (2 1/2" x 0.135") nail	12

For 8d: 1 inch = 25.4 mm, 1 mile per hour = 0.441 mi/h, 1 foot = 0.488 m/s.  
*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 strength as shown: 80 ksi for shank diameter of 0.032 inch (2d 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-long 1/2" panels shall be applied with 16d (2 1/2" x 0.135") nails.  
*e*. For regions having basic wind speed of 100 mph or less, 8d deformed (2 1/2" x 0.135") nails shall be used for attaching plywood and wood structural panel roof sheathing to framing within 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 end walls and framing shall be spaced 6 inches on center. When basic wind speed is greater than 100 mph, nails for attaching panel roof sheathing shall be spaced 4 inches on center for a maximum 48-inch distance from ridge, eaves and gable end walls; and 4 inches on center for a maximum 120-inch distance from eaves and gable end walls.  
*h*. Gypsum sheathing shall conform to ASTM C 355 and shall be installed in accordance with G4-253. 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.

## ALTERNATE ATTACHMENTS

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

NOMINAL MATERIAL THICKNESS (INCHES)		DESCRIPTION <i>ab</i> OF FASTENERS (INCHES)		SPACING <i>c</i> OF FASTENERS	
				EDGE (INCHES)	INTERMEDIATE SUPPORTS (INCHES)
UP TO 1/2"		Staple 15 ga, 1/8"	4	8	
		0.091 - 0.099 Nail 24	3	6	
		Staple 16 ga, 1/8"	3	6	
19/32 and 5/8		Staple 15 ga, 1/8"	4	8	
		0.091 - 0.099 Nail 24	4	8	
		Staple 14 ga, 2	3	6	
		0.113 Nail 24	3	6	
23/32 and 3/4		Staple 15 ga, 1/8"	3	6	
		0.091 - 0.099 Nail 24	4	8	
		Staple 16 ga, 2	4	8	
		0.113 Nail 24	3	6	
		Staple 15 ga, 1/8"	4	8	
		0.091 - 0.099 Nail 24	4	8	

### FLOOR UNDERLAYMENT: PLYWOOD-HARDWOOD-PARTICLEBOARD *f*

NOMINAL MATERIAL THICKNESS (INCHES)		DESCRIPTION <i>ab</i> OF FASTENERS (INCHES)		SPACING <i>c</i> OF FASTENERS	
				EDGE (INCHES)	INTERMEDIATE SUPPORTS (INCHES)
1/4 and 5/16		1/8 ring or screw shank nail-minimum 1/8 ga (0.099") shank diameter	3	6	
11/32, 3/8, 15/32, and 1/2		Staple 18 ga, 7/8, 3/16" crown width	2	5	
		1/8 ring or screw shank nail-minimum 1/8 ga (0.099") shank diameter	6	10	
19/32, 5/8, 32/32 and 3/4		1/8 ring or screw shank nail-minimum 1/8 ga (0.099") shank diameter	6	8	
		Staple 16 ga, 1/8"	6	8	

### HARDBOARD *f*

0.200	1/8 long ring-grooved underlayment nail	6	6
	4d cement-coated sinker nail	6	6
	Staple 18 ga, 7/8 long (plastic coated)	3	6

### PARTICLEBOARD

4	4d ring-grooved underlayment nail	3	6
	Staple 18 ga, 7/8 long, 3/16" crown	3	6
3/8	ed ring-grooved underlayment nail	6	10
	Staple 16 ga, 1/8 long, 3/8" crown	3	6
1 1/2	ed ring-grooved underlayment nail	6	10

### REQUIREMENTS FOR WOOD STRUCTURAL PANEL WALL SHEATHING USED TO RESIST WIND PRESSURES *abc*

MINIMUM NAIL		MINIMUM WOOD STRUCTURAL PANEL SPAN RATING	MINIMUM NOMINAL PANEL THICKNESS (inches)	MAXIMUM WALL STUD SPACING (inches)	PANEL NAIL SPACING (inches)			MAXIMUM WIND SPEED (mph)
SIZE	PENETRATION (inches)				Edges (inches o.c.)	Field (inches o.c.)	B	
6d Common (2 1/2" x 0.135")	1/8	24/0	3/8					