HOUSE VENTILATION CALCULATION

3976/100 x [(4+1) X 7.5 = 77.26

MIN ½" CLEARANCE BETWEEN MASONRY AND WOOD

FLASHING AND WEEPHOLE DETAIL

19) R402.4.1.2 Testing.
The building or dwelling unit shall be tested and verified as having an air leakage rate not exceeding 6 air changes per hour (ACH) in Climate Zones 4 and 5. The building or dwelling unit shall be provided with a whole-house mechanical ventilation system as designed in accordance with Section R403.5. Testing shall be conducted with a blower door at a pressure of 0.2 inches w.g. (50 Pascals). When required by the code official, a testing shall be conducted by an approved third party. A written report of the results of the test, indicating the ACH, shall be signed by the party conducting the test and provided to the code official. Testing shall be performed at any time after all penetrations of the building thermal envelope have been sealed.

20) R403.5.3 Whole-house Mechanical Ventilation System.
Whole-house mechanical ventilation systems shall be designed in accordance with Sections R403.5.4 through R403.5.6.

21) R403.5.4 System Design.
The whole-house ventilation system shall consist of one or more supply or exhaust fans, or a combination, and associated ducts and controls. Local exhaust or supply fans are permitted to serve as such a system. Outdoor air ducts connected to the return side of an air handler shall be considered to provide supply ventilation.

22) R403.5.5 System Controls.
The whole-house mechanical ventilation system shall be provided with controls that enable manual override.

23) R403.5.6 Mechanical Ventilation Rate.
The whole house mechanical ventilation system shall provide outdoor air at a continuous rate of not less than that determined in accordance with Table R403.5.6(1).
Exception: The whole-house mechanical ventilation system is permitted to operate intermittently when the system has controls that enable operation for not less than 25 percent of each 4-hour segment and the ventilation rate prescribed in Table R403.5.6(1) is multiplied by the factor determined in accordance with Table R403.5.6(2).

TABLE R403.5.6(1)
CONTINUOUS WHOLE-HOUSE MECHANICAL VENTILATION
SYSTEM AIRFLOW RATE REQUIREMENTS
DWELLING UNIT
FLOOR AREA
(square feet) NUMBER OF BEDROOMS
0 - 1 2 - 3 4 - 5 6 - 7 > 7
Airflow in CFM
< 1,500 30 45 60 75 90
1,501 - 3,000 45 60 75 90 105
3,001 - 4,500 60 75 90 105 120
4,501 - 6,000 75 90 105 120 135
6,001 - 7,500 90 105 120 135 150
> 7,500 105 120 135 150 165

For SI: 1 square foot = 0.0929 m2, 1 cubic foot per minute = 0.0004719 m3/s.

TABLE R403.5.6(2)
INTERMITTENT WHOLE-HOUSE MECHANICAL VENTILATION RATE FACTORS[a, b
Run-Time Percentage In Each 4-Hr Segment 25% 33% 50% 66% 75% 100%
Factor x 4 3 2 1.5 1.3 1.0
a For ventilation system run time values between those given, the factors are permitted to be determined by interpolation.
b Extrapolation beyond the table is prohibited.

FIGURE 1
WALLS WITH 6:1 ASPECT RATIO USED WITH CONTINUOUS WOOD STRUCTURAL PANEL SHEATHING

FIGURE 3
BRACING METHOD OVER RAISED WOOD FLOOR OR SECOND FLOOR – WOOD STRUCTURAL PANEL OVERLAP OPTION[a]

FIRE AND DRAFT STOPPING NOTES:

FIRESTOP AROUND ALL OPENINGS AROUND VENTS, PIPES, DUCTS, ETC. WITH NON-COMBUSTIBLE MATERIALS SUCH AS DRYWALL JOINT COMPOUND OR FIRESTOP TYPE CAULKING.

WATER RESISTANT 1/2" SYP.SO. OR 1/2" DURA-ROCK MUST BE BROUGHT DOWN TO THE FLOOR BEHIND ALL TUBS AND SHOWER STALLS FOR PROPER FIRESTOPPING (OR FIRESTOP STUD SPACES W/ 2 BY WOOD AT THE BIG HEIGHT OF TUB EVERY STUD SPACE).

FIRESTOP ALL CONCEALED OPENINGS (VERTICAL AND HORIZONTAL) WITH 2" NOMINAL LUMBER.

DRAFTSTOPPING: NO AREA SHALL BE GREATER THAN 1000 SQ.FT. WHERE THE CEILING IS SUSPENDED UNDER THE FLOOR OR ROOF FRAMING. THESE AREAS SHALL BE DRAFTSTOPPED WITH 1/2" PLYWOOD OR GYPSUM BOARD.

INSULATION NOTE:

ANY EXPOSED INSULATING MATERIALS INCLUDING FACINGS SHALL HAVE A FLAME SPREAD INDEX NOT TO EXCEED 25 WITH AN ACCOMPANYING SMOKE DEVELOPED INDEX NOT TO EXCEED 450.

2018 ENERGY CONSERVATION CODE

2018 Illinois Energy Conservation Code:
As the 2018 International Energy Code adapted by The Board (Illinois Capitol Development Board) as recommended by the Illinois Energy Conservation Council + modifications.
a) R101.5 COMPLIANCE. Residential buildings shall meet the provisions of the Illinois Energy Conservation Code.
Minimum compliance shall be demonstrated by the submission of
i. Compliance certificates generated by the U.S.Department of Energy s ResCheck code compliance tool; or
ii. Other comparable compliance materials that meet or exceed, as determined by the AHJ, U.S.Department of Energy s ResCheck code compliance tool; or
b) R401.3 CERTIFICATE [Mandatory]: A permanent certificate shall be posted on or in the electrical distribution panel (Haparville electrical inspector will provide when electrical service inspection is completed; which provides the R-values of the insulation installed, the U-factors, and the types and efficiencies of heating, cooling and service water heating equipment. This must be completed by the builder or registered design professional.
c) TABLE 402.1.1 INSULATION AND FENESTRATION Criteria [Prescriptive]
The building thermal envelope shall meet the requirements of table R402.1.1
d) 402.4 AIR LEAKAGE [Mandatory] :The Building thermal envelope shall comply with IMR402.4.1.2.
e) 403.1.1 PROGRAMMABLE THERMOSTAT [Mandatory]: One programmable thermostat for each separate heating and cooling system. Initially programmed Max 70° heat and not lower than 78° cooling.
f) R402.4.2 Fireplaces. New wood burning fireplaces shall have tight-fitting dampers and combustion air.
g) R403.2.2. SEALING [Mandatory]: Ducts, air handlers, and filter boxes shall be sealed. Duct tightness test not required if ducts within building thermal envelope.
h) R403.2.3 BUILDING CAVITIES [Mandatory]: Building framing cavities shall not be used as ducts or plenums.
i) R403.3 MECHANICAL SYSTEM PIPING. >105° or <55° insulate Min. R3
R403.4.1. Circulating hot water systems [Mandatory] Pump not in use switch off.
R403.4.2 Hot water pipe insulation [Prescriptive] R-3
j) IMR403.5. MECHANICAL VENTILATION [Mandatory] The building shall be provided with ventilation that meets the requirements of the International Mech. IMR403.5.1 (1) Outdoor air inlets and exhaust shall have automatic or gravity dampers.
k) 404.1 LIGHTING EQUIPMENT [Mandatory]: A minimum of 75 percent of the lamps in permanently installed lighting fixtures shall have high-efficacy lamps.
*Sheet Door Test: The contractor or homeowner can contract a Third Party Certified Service to provide this blower door test.
**Duct Tightness Test: The contractor or homeowner can contract a Third Party Certified Service to provide this duct tightness test.

36) IECC 405. SIMULATED PERFORMANCE ALTERNATIVE
Compliance with this section requires that the mandatory provisions identified in Section R401.2 be met. Section R401.2 Projects shall comply with sections identified as Mandatory AND with either sections identified as prescriptive or the performance approach.

16) IECC 405.3 PERFORMANCE BASE COMPLIANCE:
Compliance, based on simulated energy performance requires that a proposed residence (proposed design) be shown to have an annual energy cost that is less than or equal to the annual energy cost of the standard reference design. See Exception regarding BTU per square foot of conditioned floor area shall be permitted to be substituted for the energy cost.

17) M1301 GENERAL MECHANICAL SYSTEM REQUIREMENTS
Indicate the size and location of additional H.V.A.C. equipment. This includes all exhaust, and make-up, combustion and fresh air requirements.

18) M1503.4 Makeup air required.
Exhaust hood systems capable of exhausting in excess of 400 cubic feet per minute shall be provided with makeup air at a rate approximately equal to the exhaust air rate. Such makeup air systems shall be equipped with a means of closure and shall be automatically controlled to start and operate simultaneously with the exhaust system.
** See Naperville exceptions allowing a CAZ test for compliance.

TABLE R402.1.1
MINIMUM SPECIFIED COMPRESSIVE STRENGTH OF CONCRETE

TYPE OR LOCATION OF CONCRETE CONSTRUCTION	Severe
Basement walls, foundations and other concrete not exposed to the weather	2,500[b]
Basement slabs and interior slabs on grade, except garage floor slabs	2,500[b]
Basement walls, foundation walls, exterior walls and other vertical concrete work exposed to the weather	3,000[b]
Porches, carport slabs and steps exposed to the weather, and garage floor slabs	3,500[b,c]

DUCT CONSTRUCTION - R16B

PROVIDE A DETAIL INDICATING LOCATION AND SIZE OF SUPPLY LINES FOR BOTH SUPPLY AND RETURN FOR EACH FURNACE TO BE INSTALLED ACCORDING TO MANUAL J FORM SUBMITTED. LIST R VALUES OF INSULATION FOR ANY DUCTS OUTSIDE CONDITION SPACE.

DRAFTSTOPPING REQUIRED
IRC R502.12

INSTALL 1/2" GYPSUM BOARD, 3/8"-INCH WOOD STRUCTURAL PANEL, OR EQUIVALENT WHEN THERE IS USABLE SPACE BOTH ABOVE AND BELOW THE CONCEALED SPACE OF A FLOOR/CEILING ASSEMBLY. DRAFTSTOPS SHALL BE INSTALLED SO THAT THE AREA OF THE CONCEALED SPACE DOES NOT EXCEED 1,000 SQUARE FEET. DRAFTSTOPPING SHALL DIVIDE THE CONCEALED SPACE INTO APPROXIMATELY EQUAL AREAS.

DUCT INSULATION
IRC M1105.2.1

EXCEPT WHERE THE DUCTS OR PORTIONS THEREOF ARE LOCATED COMPLETELY INSIDE THE THERMAL ENVELOPE, SUPPLY AND RETURN DUCTS SHALL BE INSULATED TO A MINIMUM OF R-8. DUCTS IN FLOOR TRUSSES SHALL BE INSULATED TO A MINIMUM OF R-6.

WINDOW INSTALLATION INSTRUCTIONS
R613.1

WINDOW INSTALLATION INSTRUCTIONS FROM MANUFACTURER TO BE ON SITE FOR INSPECTION

FIELD VERIFY CODE COMPLIANT FIRESTOPPING IS PROVIDED AT THE FOLLOWING LOCATIONS:
A. CONCEALED SPACES OF STUDS, WALLS, AND PARTITIONS, INCLUDING FURRED SPACES, AT THE CEILING AND FLOOR LEVEL.
B. ALL INTERCONNECTIONS BETWEEN CONCEALED VERTICAL AND HORIZONTAL SPACES SUCH AS OCCURS AT SOFFITS, DROP CEILINGS, COVE CEILINGS, ETC.
C. CONCEALED SPACES BETWEEN STAIR STRINGERS AT THE TOP AND BOTTOM OF THE RUN.
D. OPENINGS AROUND VENTS, PIPES, DUCTS, CHIMNEYS AND FIREPLACES AT CEILING AND FLOOR LEVEL, WITHOUT NON CUMBUSTIBLE MATERIALS.

RETURN AIR AND SUPPLY AIR - R16A

PROVIDE A COMPLETE MECHANICAL PLAN SHOWING SUPPLIES, AND RETURN

5) IECC Table 402.1.1 INSULATION AND FENESTRATION REQUIREMENTS

Table 402.1.1 (N1102.1.1)
Insulation and Fenestration Requirements by Component[a]

Climate Zone	Fenestration U-Factor[b]	Skylight[b] U-Factor	Ceiling R-Value	Wall R-Value	Mass Wall R-Value	Floor R-Value	Basement[c] Wall R-Value	Slab[d] R-Value& Depth	Crawl-space[c] Wall R-Value
5	.30	.55	49	20 or 13+5[h]	13/17	30[g]	10/13-Full 15/19-4'	10,2ft	15/19
U-Value	.30	.55	0.026	0.060	0.082	0.033	0.039		0.055

706 °	Elevation
41	Latitude
-1	Winter Heating
91	Summer Cooling
0	Altitude Correction Factor
72 degree F Maximum	Indoor Design Temperature
75 degree F Minimum	Design Temperature Cooling
73 degrees F	Heating Temperature Difference
16 degrees F	Cooling Temperature Difference
8.4 mph**	Wind Velocity Heating
5.7 mph**	Wind Velocity Cooling
76	Coincident Wet Bulb
Medium (16-25 degrees)	Daily Range
30%	Winter Humidity
50%	Summer Humidity

CARBON MONOXIDE DETECTORS

CARBON MONOXIDE DETECTOR TO BE PROVIDED WITHIN 15'-0" (FIFTEEN FEET) OF EACH BEDROOM OR SLEEPING ROOM. CARBON MONOXIDE DETECTORS SHALL RECEIVE THEIR POWER FROM THE BUILDING WIRING WHERE SUCH WIRING IS SERVED FROM THE COMMERCIAL SOURCE AND SHALL BE EQUIPPED WITH A BATTERY BACKUP. CARBON MONOXIDE DETECTOR SHALL EMIT A SIGNAL WHEN THE BATTERIES ARE LOW. WIRING SHALL BE PERMANENT AND WITHOUT A DISCONNECTING SWITCH OTHER THAN AS REQUIRED FOR OVER-CURRENT PROTECTION. DETECTOR TO BE ON DEDICATED CIRCUIT.

SWITCH AND OUTLET REQUIREMENTS

ALL WALL SWITCHES CONTROLLING LIGHT FIXTURES AND FANS SHALL BE LOCATED AT A HEIGHT NOT TO EXCEED FORTY-EIGHT (48) INCHES ABOVE THE FINISHED FLOOR. HEIGHT SHALL BE DETERMINED BY MEASURING FROM THE FINISHED FLOOR TO THE CENTER OF THE SWITCH.

ALL RECEPTACLES SHALL BE LOCATED AT A HEIGHT NOT LESS THAN FIFTEEN (15) INCHES ABOVE THE FINISHED FLOOR. HEIGHT SHALL BE DETERMINED BY MEASURING FROM THE FINISHED FLOOR TO THE CENTER OF THE RECEPTACLE. WHEN THE RECEPTACLE PLACEMENT IS PROHIBITED BY THE HEIGHT OF A WINDOW OR DESIGN FEATURE, AN ALTERNATE LOCATION CAN BE APPROVED BY THE CHIEF BUILDING OFFICIAL OR A DULY AUTHORIZED DESIGNEE.

WALL REINFORCEMENT

ONE FIRST FLOOR BATH SHALL BE PROVIDED WITH WOOD BLOCKING INSTALLED WITHIN WALL FRAMING TO SUPPORT GRAB BARS AS NEEDED. THE WOOD BLOCKING, WHEN MEASURED TO THE CENTER, SHALL BE LOCATED BETWEEN THIRTY-THREE (33) INCHES AND THIRTY-SIX (36) INCHES ABOVE THE FINISHED FLOOR. THE WOOD BLOCKING SHALL BE LOCATED IN ALL WALLS ADJACENT TO A TOILET, SHOWER STALL OR BATHTUB.

Soil Classification Used For Design -

Soil Group II Soil Class CL

Soil Description: inorganic clays
Drainage Characteristics: Medium
Frost Heave Potential: Medium
Volume Change Potential: Medium to Low

Soil Bearing Pressure: 1500 PSF

DESIGN CRITERIA

DESIGN LOADS
1st Floor = 40 psf LL 10psf DL
2nd Floor = 40 psf LL 10psf DL
Wall = 60 plf or actual
Ceiling = 20 psf LL 10psf DL
Rafters = 30 psf LL 10psf DL
Cathedral = 30 psf LL 15psf DL

DESIGN STRESSES
Hem Fir #2 (Domestic,Yp=850 psi
S.P.F. #2 (Canadian) Fb=875 psi

L.V.L. BEAMS
Truss Joist McMillan Fb=2600 psi
Microlam E=1.9x10^6 psi
Georgia Pacific Fb=2850 psi
G-P Lam E=2.0x10^6 psi

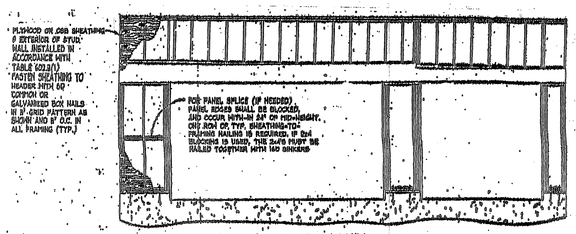
-ALL JOISTS AND RAFTERS TO BE HEM FIR #2 (DOMESTIC) AND/OR S.P.F. #2 (CANADIAN)
-ALL HEADERS AT BEARING WALLS TO BE (2) 2x12 HEM FIR #2 (DOMESTIC) AND/OR S.P.F. #2 (CANADIAN)
-1 3 1/2" x 3 1/2" x 5/16" LINTEL OVER ALL DOORS AND WINDOWS AT MASONRY WALLS
-ALL ELECTRIC 110v SMOKE DETECTORS W/ BATTERY BACK-UP ARE TO BE WIRED IN SEQUENCE
-ALL EXHAUST FANS, DRYERS & MICROWAVES TO BE VENTED TO EXTERIOR
-FIRESTOP AT ALL SOFFITS
-DOUBLE JOISTS UNDER ALL PARALLEL PARTITIONS. DOUBLE JOISTS THAT ARE SEPARATED FOR PIPING & DUCTS SHALL HAVE BLOCKING AT 4'-0" O.C. MAX.
-ALL ELECTRIC & GFI OUTLETS ON BASEMENT WALLS TO BE IN CONDUIT
-1500 PSF SOIL BEARING TYPICAL AT ALL FOOTING
BP = BEARING POINT

NAPERVILLE NOTES

TABLE 301.2(1) CLIMATIC AND GEOGRAPHIC DESIGN CRITERIA

30	Ground Snow Load	
115 mph (nominal design 3-second gust wind speed)	Speed (mph)	Wind Design
No	Topographic Effects	
No	Special Wind Region	
No	Windborne Debris Zone	
A	Seismic Design Category	
Severe	Weathering	Subject to Damage From
42 inches	Frost Line Depth	
Moderate to Heavy	Termite	
-4 degrees F	Winter Design Temp	
Yes	Ice Barrier Underlayment Required	
Refer to Local Ordinance	Flood Hazard	
1635	Air Freezing Index	
48.7 degrees F	Mean Annual Temperature	

Point	Description	Result
A	Datum Point (average elevation of both property lines at front set back)	702.97
	Elevation #1 (used above front set backs)	703.33
	Elevation #2 (used above at front set backs)	703.61
Segment	Description	Result
GI	Height of Roof (bottom of ceiling joist or top of plat to tallest peak)	104
AG	Mean Height AG + (.5 * GI)	25.80
AC	Datum Point to Basement Ceiling	1.66
AD	Datum Point to 1st Story Finished Floor	2.66
AB	Height of Foundation	1.53
BC	Height of Knee Wall above Foundation	.13
DF	Height of 1st Story (bottom of floor joist to bottom of ceilling joist)	11.0
FH	Height of 2nd Story (bottom of floor joist to bottom of ceilling joist)	9.0
AI	Peak Height	34.06
Column	Description	Result
1	Footprint of Principle Structure	3115
2	Footprint of Detached Garage (footprint - 480 sf)(if applicable)	—
3	Total Lot Square Footage	11025
4	Building Coverage = (column 1 + column 2)/column 3	.282
5	Gross Square Footage of Basement (Finished)	0
6	Gross Square Footage of Basement (Unfinished)	1860
7	Gross Square Footage of 1st Floor (not including enclosed porches or garages)	2028
8	Gross Square Footage of Garage (attached)	947
9	Gross Square Footage of Enclosed Porches	138
10	Gross Square Footage of 2nd Floor	1998
11	Gross Square Footage of any 1/2 Story	



ALTERNATE BRACED WALL PANEL

525 HILLSIDE ROAD

LEGAL DESCRIPTION:
LOT 13 IN BLOCK IN MOSER HIGHLANDS, BEING A SUBDIVISION OF PART OF SECTION 19, TOWNSHIP 38 NORTH, RANGE 10, EAST OF THE THIRD PRINCIPLA MERIDIAN, ACCORDING TO THE PLAT THEREOF RECORDED AUGUST 27, 1954 AS DOCUMENT 728128, IN DUPAGE COUNTY, ILLINOIS.

PIN: 18-19-108-008

Pursuant to 17 Ill. Adm. Code 3730.307 (c) 4) and subject to the Illinois Plumbing Code (77 Ill. Adm. Code 890) and the Lawn Irrigation Contractor and Lawn Sprinkler System Registration Code (77 Ill. Adm. Code 892), be it hereby ordained that in the City of Naperville, all new plumbing fixtures and irrigation controllers installed after the effective date of the ordinance shall bear the WaterSense label (as designated by the U.S. Environmental Protection Agency WaterSense Program), when such labeled fixtures are available.

IDPH – Illinois Department of Public Health Ordinance Number 0515-630-0003 Metallic piping ONLY for ... "water service or the domestic water distribution system of any building"... (PE, PVC or PB prohibited)

Building Codes

2018 INTERNATIONAL ENERGY CONSERVATION CODE
- o 2018 International Building Code
- o 2018 International Residential Code
- o 2018 International Property Maintenance Code
- o 2018 International Fire Code
- o 2018 International Fuel Gas Code
- o 2018 International Mechanical Code
- o 2018 International Plumbing Code
- o 2018 International Existing Building Code
- o 2018 International Swimming Pool and Spa Code
- o 2017 National Electric Code (NFPA 70)
- o 2006 International Code Council Electrical Administrative Provisions
- o 2018 Life Safety Code (NFPA 101)
- o Illinois Energy Conservation Code, Current Edition
- o National Fire Code (NFPA), Current Edition
- o Illinois State Plumbing Code, Current Edition
- o Illinois Accessibility Code, Current Edition
- o Local Amendments per Naperville Municipal Code

FIELD COPY

STATE OF ILLINOIS
RAYMOND EWANSON
001-015909
LICENSED ARCHITECT
LICEXP 11-30-2022

CITY OF NAPERVILLE
Permit #: 22-2696
Rev #: 3 Date: 08/22/2022
Class: Other Improvement
REVIEWED FOR CODE COMPLIANCE

REVIEWED FOR SUBSTANTIAL COMPLIANCE WITH ALL APPLICABLE CODES. THIS REVIEW DOES NOT RELIEVE THE APPLICANT FROM COMPLYING WITH ALL CITY OF NAPERVILLE CODES.

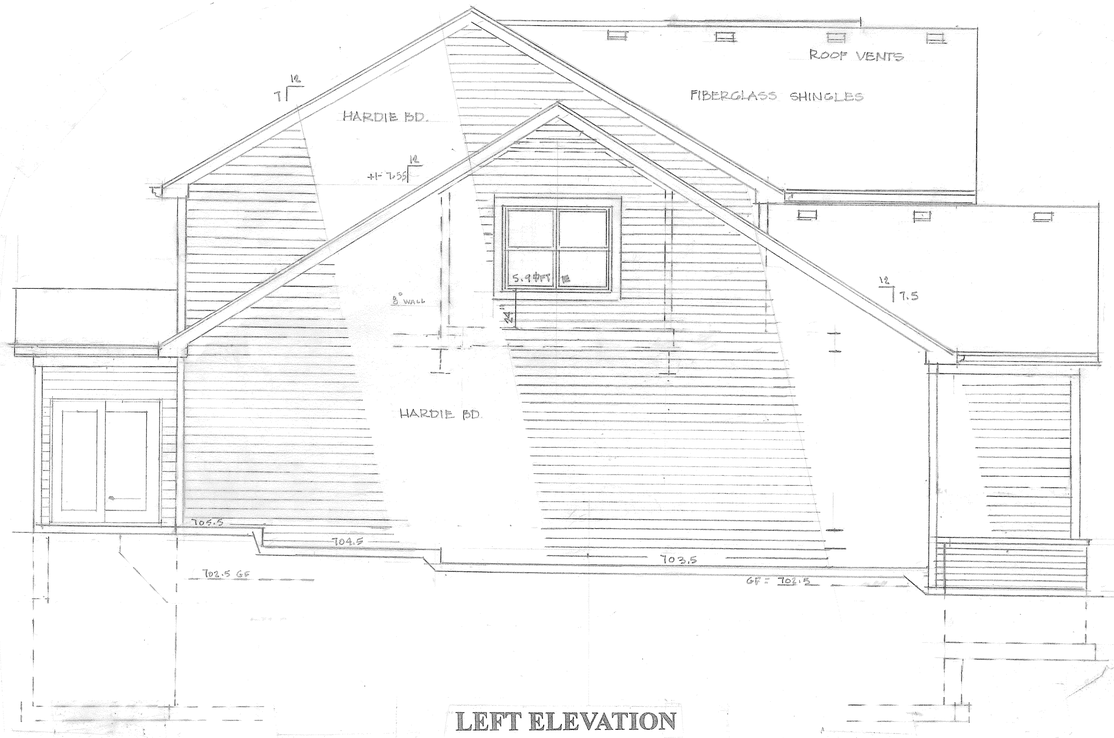
REVISIONS	BY

ARCHITECTS PLUS LTD
10 S 373 NORMANTOWN ROAD
NAPERVILLE, IL. 60564
630-979-7670

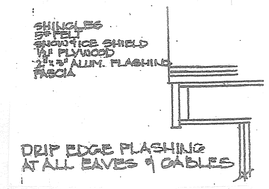
THE LEWIS RESIDENCE
525 E. HILLSIDE
NAPERVILLE, IL.

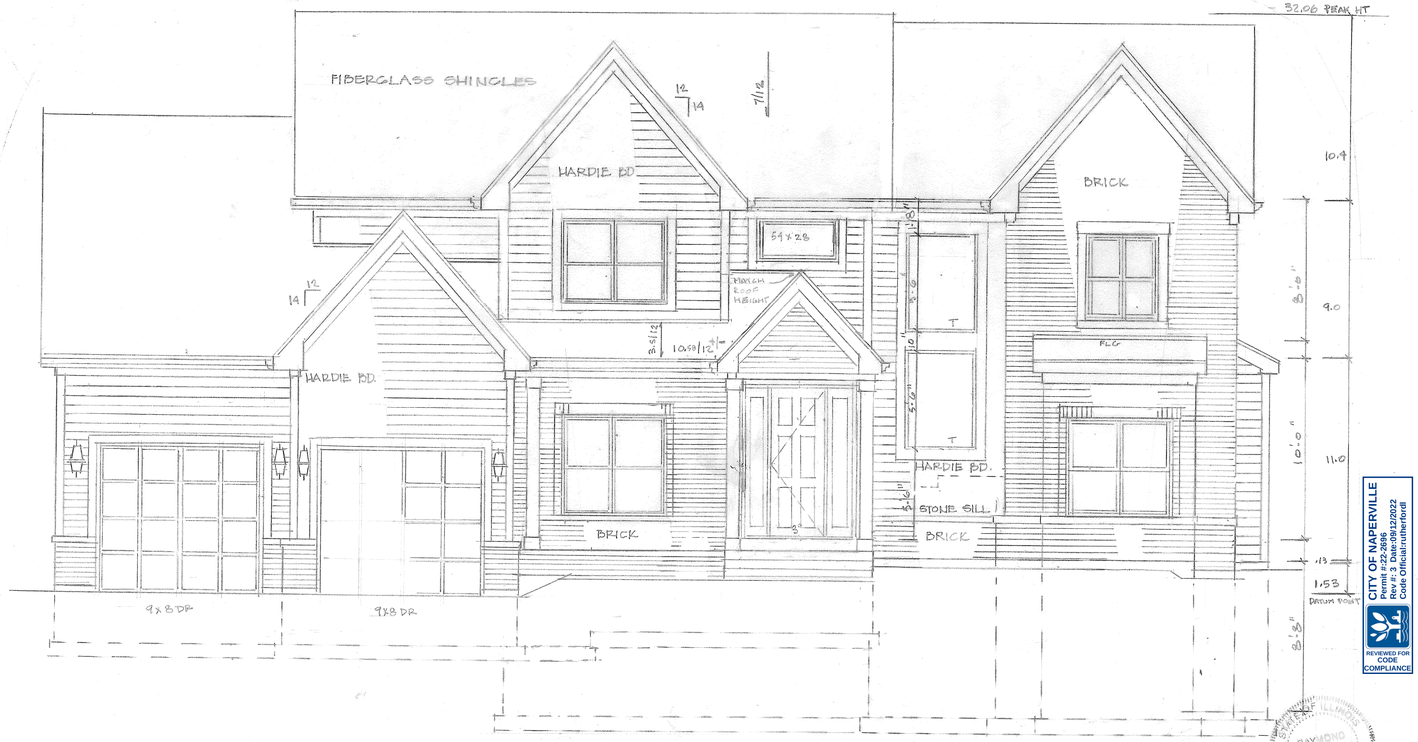
AUTUMN HOMES
630-983-6220

DRAWN RS
CHECKED
DATE 7-11-2022
SCALE
JOB NO. 22-525
SHEET C-1
OF FIVE SHEETS



LEFT ELEVATION





FRONT ELEVATION

CITY OF NAPERVILLE
Permit #:22-2696
Permit #: 5/20/2022
Code Official:rutherford
REVIEWED FOR CODE COMPLIANCE

REVIEWED FOR SUBSTANTIAL COMPLIANCE WITH ALL APPLICABLE CODES. THIS REVIEW DOES NOT RELIEVE THE APPLICANT FROM COMPLYING WITH ALL CITY OF NAPERVILLE CODES.

STATE OF ILLINOIS
RAYMOND SWANSON
001-015896
PROFESSIONAL ENGINEER

REVISIONS	BY
5-10-2022	
5-25-2022	
7-11 GRADE	

ARCHITECTS PLUS LTD
10 S 373 NORMANTOWN ROAD
NAPERVILLE, IL. 60564
630-978-7670

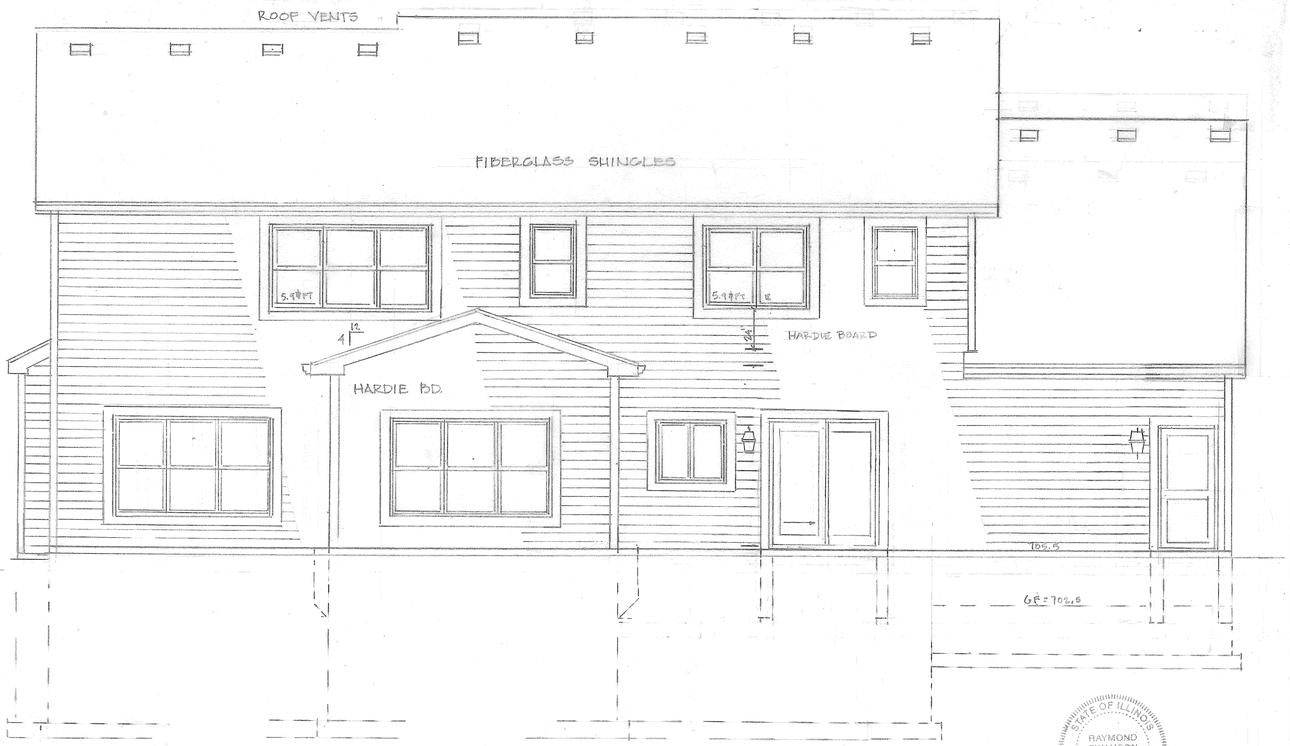
THE LEWIS RESIDENCE
525 E. HILLSIDE
NAPERVILLE, IL.

AUTUMN HOMES
630-983-6220

DRAWN	RS
CHECKED	
DATE	5-6-2022
SCALE	1/4" = 1'-0"
JOB NO.	22-525
SHEET	1

OF FIVE SHEETS

RIGHT ELEVATION



REAR ELEVATION

STATE OF ILLINOIS
RAYMOND EWANSON
001-015905
REGISTERED ARCHITECT

REVIEWED FOR SUBSTANTIAL COMPLIANCE WITH ALL APPLICABLE CODES. THIS REVIEW DOES NOT RELIEVE THE APPLICANT FROM COMPLYING WITH ALL CITY OF NAPERVILLE CODES.

REVISIONS	BY
5-16-2022	
5-23-2022	
7-11-2022 GRADE	

ARCHITECTS PLUS LTD
10 S 373 NORMANTOWN ROAD
NAPERVILLE, IL 60564
630-978-7670

THE LEWIS RESIDENCE
525 E. HILLSIDE
NAPERVILLE, IL.

AUTUMN HOMES
630-983-6220

CITY OF NAPERVILLE
Permit # 22-2586
Plan Review 8/12/2022
Code Official:rutherford
REVIEWED FOR CODE COMPLIANCE

DRAWN	RB EC
CHECKED	
DATE	5-6-2022
SCALE	1/4" = 1'-0"
JOB NO.	22-525
SHEET	2

OF FIVE SHEETS

DESCRIPTION	AREA	LIGHT REQ.	LIGHT ACTUAL	VENT REQ.	VENT ACTUAL	REMARKS
STUDY	155	12.2	26	6.1	13.5	
DINING RM	164	13.1	26	6.5	6.5	
FAMILY RM	396	31.4	59	15.8	20.7	
KIT/BRKFAST	386	30	49	15	25.2	
SUN ROOM	115	9.2	119	4.6	60.7	
BATH	60	N/A	ARTIF	50 CFM	50 CFM	
MSTR. BEDRM	287	22.9	33.9	11.4	17.7	
MSTR. BATH	190	15.2	16.2	7.6	8.8	
BEDRM 2	147	11.7	22.6	5.8	11.8	
BATH	69	N/A	ARTIF	50 CFM	50 CFM	
BEDRM 3	169	13.5	21.6	6.7	11.6	
BATH	87	6.9	2.5 ARTIF	5.4	2.6 + 20 CFM	
BEDRM 4	188	15.0	22.6	7.5	11.8	
LAUNDRY	86	N/A	ARTIF	50 CFM	50 CFM TO MECH	
BASEMENT	1800	57	45	57	45	

Passive Sub-slab Depressurization (SSD) System

'A' Subfloor Preparation" A layer of gas permeable material shall be placed under all concrete slabs and other floor systems that directly contact the ground. Clean aggregate- 4" thick recommend Min.
6MIl Polyethylene, 12" overlap fit right to penetration. Cuts, rips and tears shall be overlapped or taped.

'B' Entry Routes: Floor openings around all penetrations in the slab shall be sealed; pipes, columns, perimeter joints, control and isolation joints shall be caulked/sealed (Polyurethane Caulk) for final inspection.

'C' All exposed and visible interior radon vent pipes shall be conspicuously identified with at least one label on each floor or accessible attics. The label shall read "Radon Reduction System"

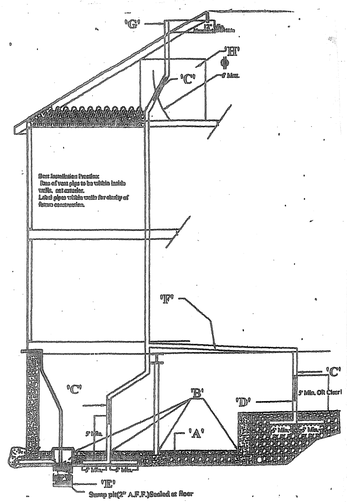
'D' A plumbing tee (min 3" diameter Schedule 40 pvc) or other approved connection with not less than 5 feet of perforated pipe extending from each horizontal opening of the tee shall be inserted horizontally beneath the shrinkage. A 3" Vertical section (measured above finished floor) shall be installed in top opening of tee. Both ends shall be fitted with an individual vent pipe. All vent pipes shall connect to a single vent with a vertical vent pipe installed through the sheeting up through the building floors to exterior termination.

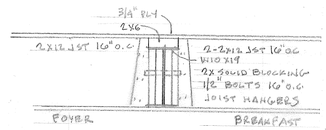
'E' Sump pits open to soil or covering at the termination point for sub-slab or exterior drain tile loops shall be covered with a gasketed or otherwise sealed lid. Sump pits shall can be used as primary suction point in sub-slab depressurization system.

'F' All components of the radon vent pipe system shall be installed to provide positive drainage to the ground beneath the gas exterior sheeting

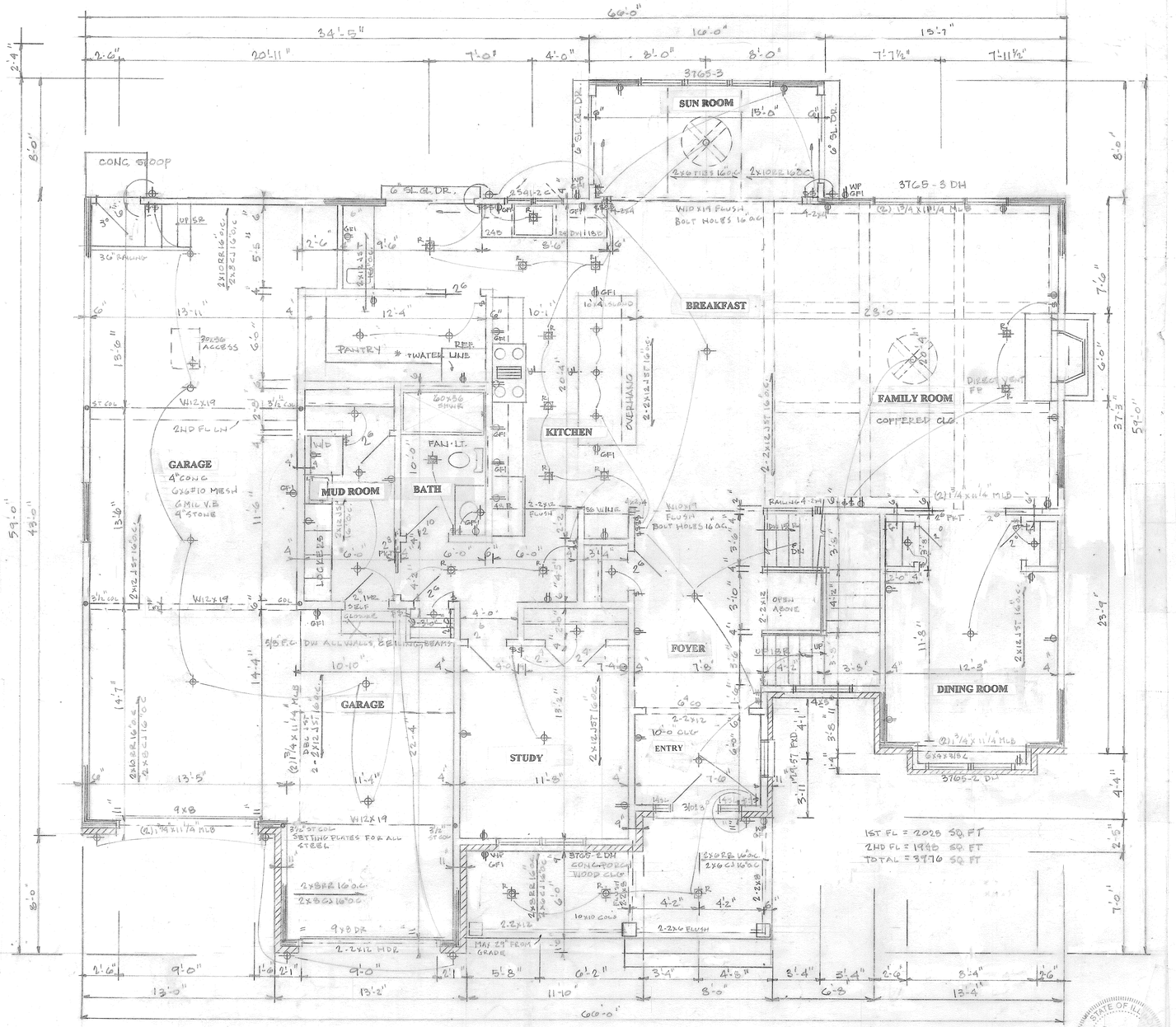
'G' Vent pipes shall connect to a single vent that shall terminate at least 12" above the highest roof in a location at least 2' above any window or other opening into the building and at least 10' from any window or opening in an adjacent building.

'H' Area of access to electrical outlet, installation of power submerior. This area shall have working space for auto appliance and a clear height of thirty-six inches (36"). Elevated "entire" shall be within six-foot (6') of the "cross area" and vent pipe.

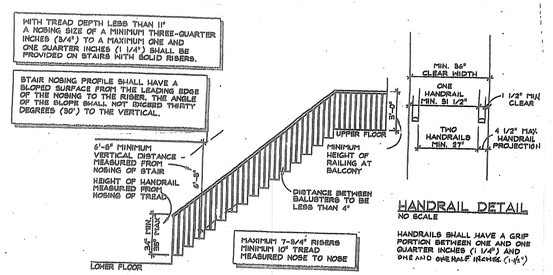




FOYER / BREAKFAST BEAM DETAIL
SCALE: 1/2" = 1'-0"



FIRST FLOOR PLAN



STAIR SECTION
NO SCALE

ALL STAIRS OVER 3 RISERS: 36" GUARDRAIL WITH BALUSTERS MAXIMUM 6" O.C. REQUIRED ON ALL OPEN SIDES AND CONTINUOUS HANDRAIL 34"-38" ON ONE SIDE. ABOVE GUARDRAIL ALSO REQUIRED ON ALL OPEN AREAS EXCEEDING 24" ABOVE ADJACENT GRADE OR FLOOR LEVEL.

ALL INTERIOR/EXTERIOR STAIRS:
MAXIMUM RISE-7 3/4"
MINIMUM TREAD DEPTH-10" CLEAR OF NOSING
MINIMUM HEADROOM-6'-8" CONTINUOUS

HANDRAIL DETAIL
NO SCALE

HANDRAILS SHALL HAVE A GRIP PORTION BETWEEN ONE AND ONE QUARTER INCHES (1 1/4") AND ONE AND ONE HALF INCHES (1 1/2")

ALL HANDRAILS MUST BE CONTINUOUS THE FULL LENGTH OF STAIRS WITH TWO (2) OR MORE RISERS NO INTERRUPTION ENDS SHALL BE RETURNED OR TERMINATED IN A NEWEL POST OR A SAFETY TERMINAL.

REVIEWED FOR SUBSTANTIAL COMPLIANCE WITH ALL APPLICABLE CODES. THIS REVIEW DOES NOT RELIEVE THE APPLICANT FROM COMPLYING WITH ALL CITY OF NAPERVILLE CODES.

REVISIONS	BY
5-10-2022	
5-25-2022	
7-11-2022 GRADE	

ARCHITECTS PLUS LTD
10 S 373 NORMANTOWN ROAD
NAPERVILLE, IL. 60564
630-978-7670

THE LEWIS RESIDENCE
525 E. HILLSIDE
NAPERVILLE, IL.

AUTUMN HOMES
630-983-6220

CITY OF NAPERVILLE
Permit # 22-2696
Date Approved: 12/2/2022
Code Official: rutherford
REVIEWED FOR CODE COMPLIANCE

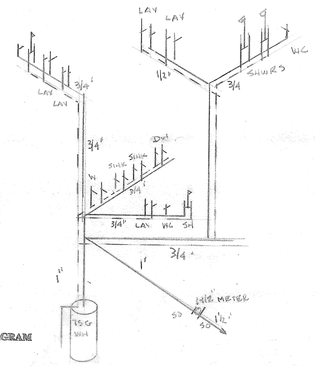
DRAWN	RS EC
CHECKED	
DATE	5-10-2022
SCALE	1/4" = 1'-0"
JOB NO.	22-525
SHEET	3
OF	FIVE SHEETS

STATE OF ILLINOIS
RAYMOND SWANSON
001-015995
REGISTERED ARCHITECT

Table M Load Values Assigned to Fixtures

Fixture	Basement	1st Floor	2nd Floor	3rd Floor	Sub-Totals	Fixture Unit	Totals
Bidet						1	
Water Closet	1	1	3		5	3	15
Lavetory	1	1	5		7	1	7
Bathtub		1	1		1	2	2
Shower Stall (per head)	1	1	2		4	2	8
Kitchen Sink		1			1	2	2
Laundry Trays (1-3)		1	1		2	3	6
Dishwasher			1		1	1	1
Laundry Machine 16lb			1		1	4	4
Sillcocks					2	5	10
						Total	

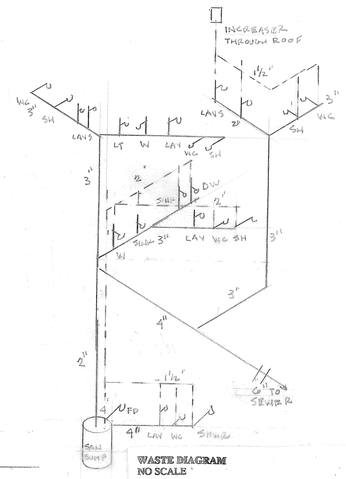
TOTAL WSFU'S 55 Service Size 1 1/2 Meter Size 1 1/2



WATER DIAGRAM
NO SCALE

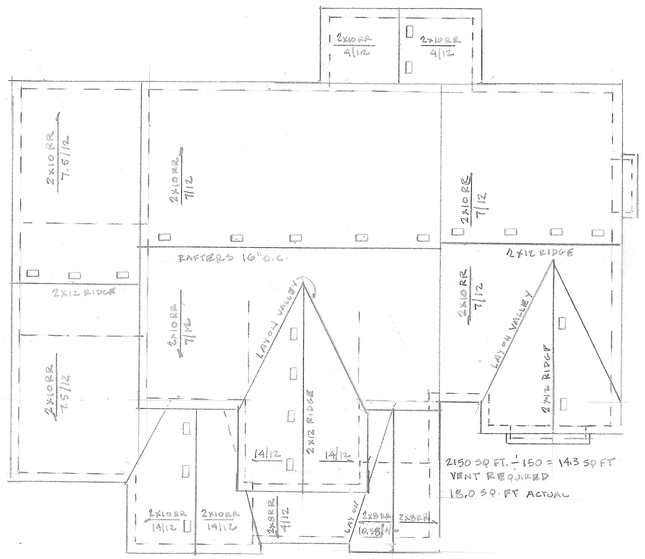
ALL WATER PIPES ARE COPPER
ALL FIXTURES HAVE SHUTOFF VALVES AND 12" RISERS

COLD WATER ———
HOT WATER - - - - -

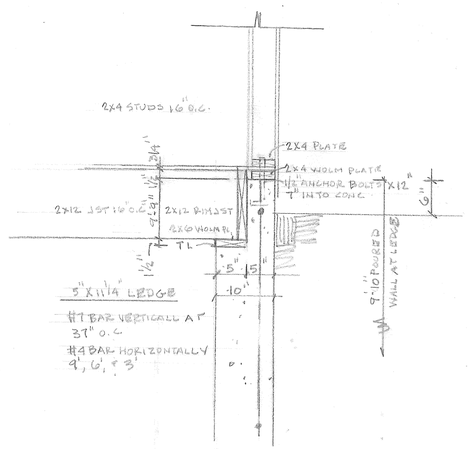


WASTE DIAGRAM
NO SCALE

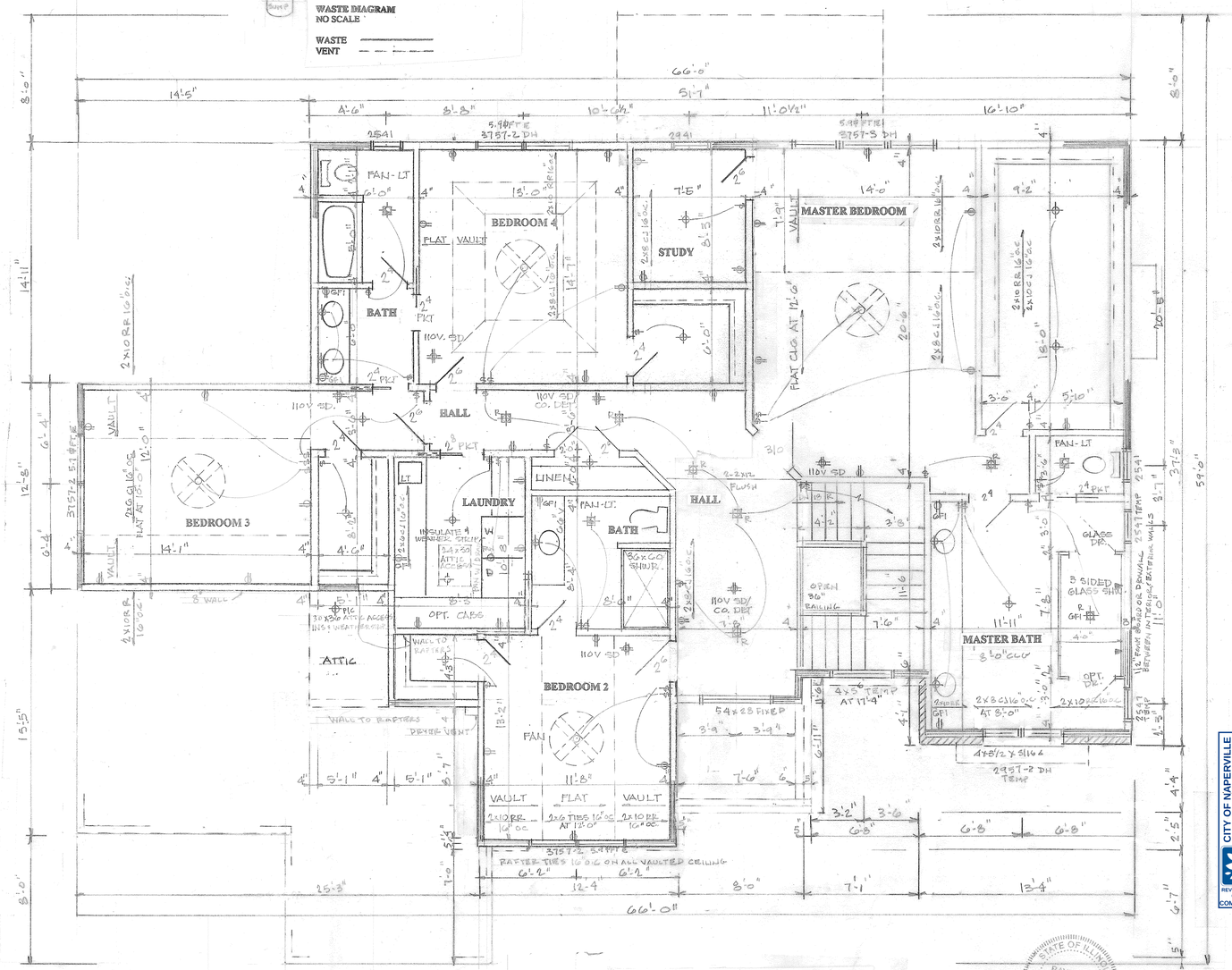
WASTE ———
VENT - - - - -



ROOF PLAN
SCALE: 1/8" = 1'-0"



REVERSE LEDGE DETAIL
SCALE: 1" = 1'-0"



SECOND FLOOR PLAN

CITY OF NAPERVILLE
Permit # 22-2696
Review Date: 6/20/2022
Code Official:rutherford

REVIEWED FOR CODE COMPLIANCE

STATE OF ILLINOIS
RAYMOND EWANSON
001-015905
LICENSED ARCHITECT

REVIEWED FOR SUBSTANTIAL COMPLIANCE WITH ALL APPLICABLE CODES. THIS REVIEW DOES NOT RELIEVE THE APPLICANT FROM COMPLYING WITH ALL CITY OF NAPERVILLE CODES.

REVISIONS	BY
5-10-2022	
5-25-2022	
7-11-2022 GRADE	

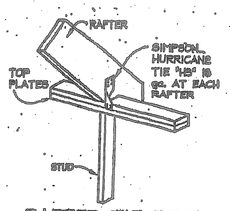
ARCHITECTS PLUS LTD
10 S 373 NORMANTOWN ROAD
NAPERVILLE, IL. 60564
630-978-7674

THE LEWIS RESIDENCE
525 E. HILLSIDE
NAPERVILLE, IL.

AUTUMN HOMES
630-983-6220

DRAWN	RB SC
CHECKED	
DATE	5-6-2022
SCALE	1/4" = 1'-0"
JOB NO.	22-525
SHEET	4

OF FIVE SHEETS



RAFTER TIE DETAIL

AT ALL VAULTED, CATHEDRAL & TRAY CEILINGS

TABLE R403.1
MINIMUM SPECIFIED COMPRESSIVE STRENGTH OF CONCRETE

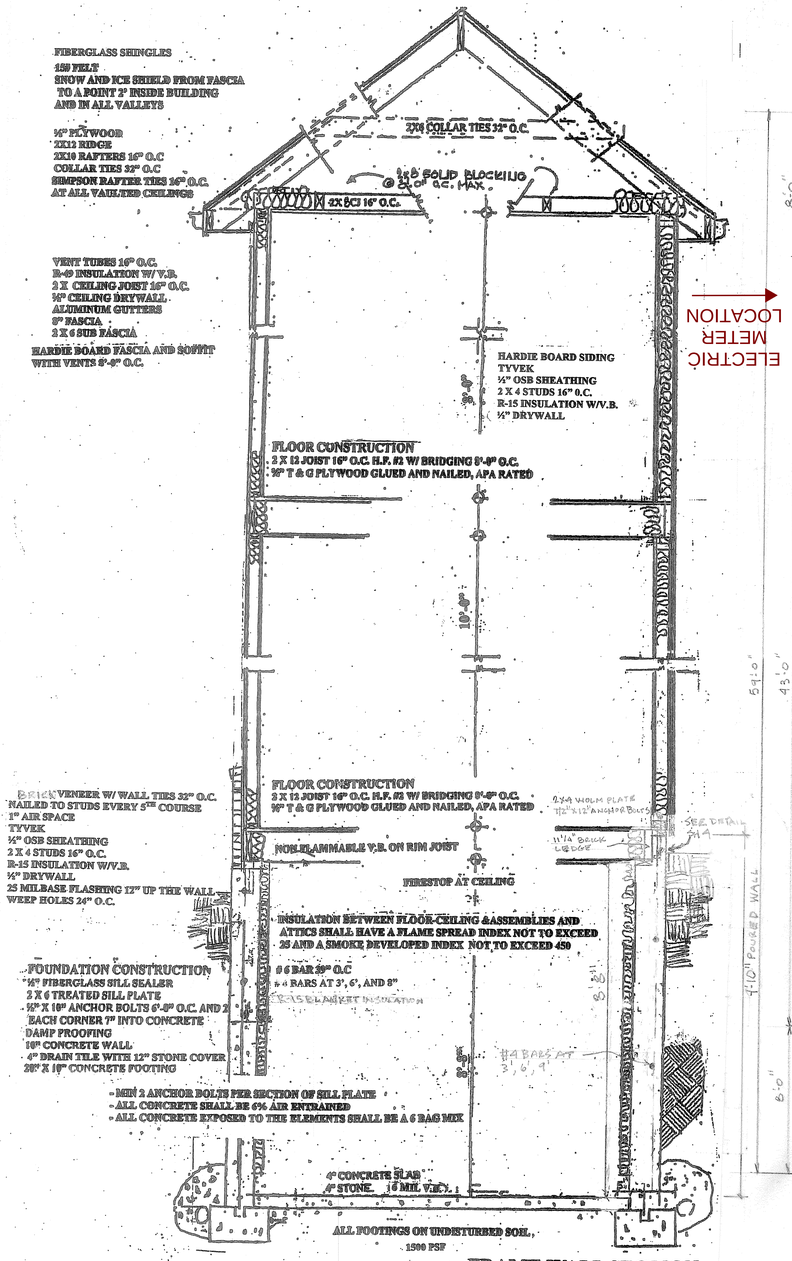
TYPE OR LOCATION OF CONCRETE CONSTRUCTION	f'c
	Severe
Basement walls, foundations and other concrete not exposed to the weather	2,500
Basement slabs and interior slabs on grade, except garage floor slabs	2,500
Basement walls, foundation walls, exterior walls and other vertical concrete work exposed to the weather	3,000
Porches, carport slabs and steps exposed to the weather, and garage floor slabs	3,500[a,f]

CONCRETE FOUNDATION WALLS
TABLE R404.1.1(5)

Foundation walls:
Thickness of walls 10"
Maximum height of wall 9'-6"
Maximum height of unbalanced backfill 9'-0"
#7 AT 37" O.C. vertical reinforcement
#4 AT 9'-6" horizontal reinforcement

CONCRETE FOUNDATION WALLS
TABLE R404.1.1(5)

Foundation walls:
Thickness of walls 10"
Maximum height of wall 8'-0"
Maximum height of unbalanced backfill 8'-0"
#6 AT 29" O.C. vertical reinforcement
#4 AT 8'-0" horizontal reinforcement



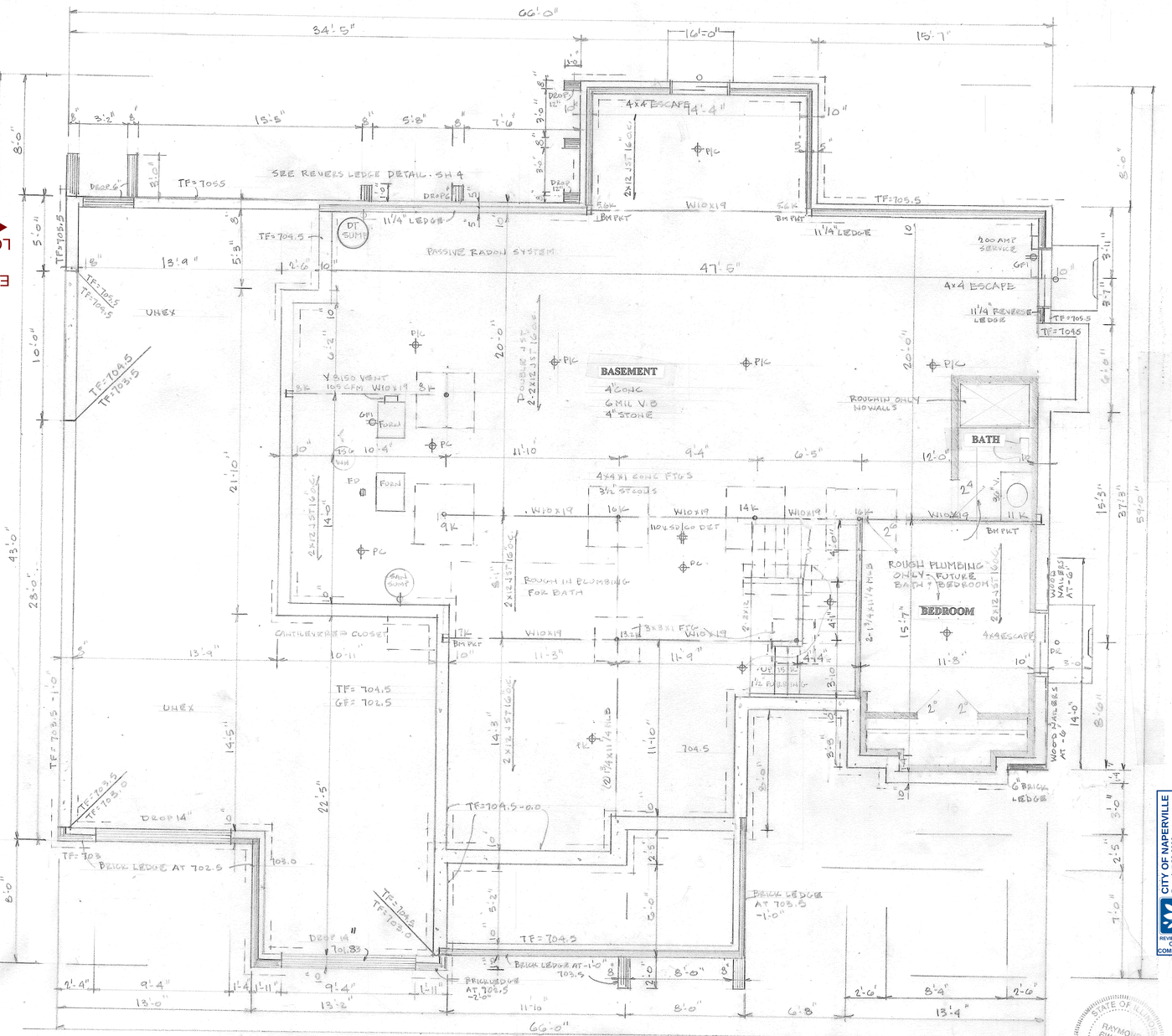
MASONRY VENEER WALL SECTION

SCALE: ½" = 1'-0"

FRAME WALL SECTION

SCALE: ½" = 1'-0"

ELECTRIC METER LOCATION



FOUNDATION PLAN

CITY OF NAPERVILLE
Permit #:22-2686
Review Date:10/31/2022
Code Official:rutherford
REVIEWED FOR CODE COMPLIANCE

REVIEWED FOR SUBSTANTIAL COMPLIANCE WITH ALL APPLICABLE CODES. THIS REVIEW DOES NOT RELIEVE THE APPLICANT FROM COMPLYING WITH ALL CITY OF NAPERVILLE CODES.

REVISIONS	BY
5-10-2022	
5-27-2022	
7-11-2022 GRADE	

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10 S 373 NORMANTOWN ROAD
NAPERVILLE, IL. 60564
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THE LEWIS RESIDENCE
525 E. HILLSIDE
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AUTUMN HOMES
630-983-6220

DRAWN	RS
CHECKED	
DATE	5-6-2022
SCALE	1/4" = 1'-0"
JOB NO.	22-525
SHEET	5

OF FIVE SHEETS