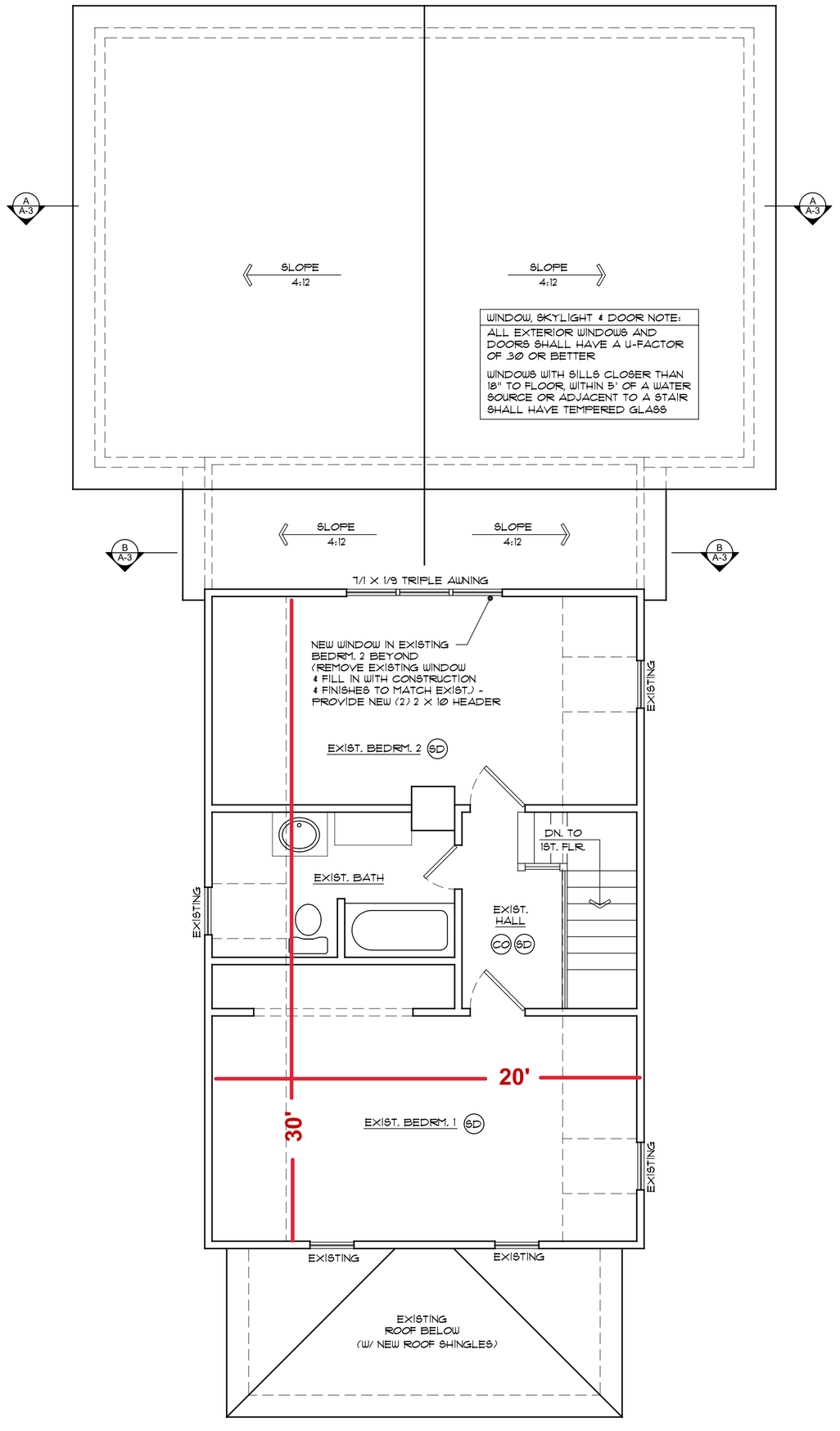
ENERGY NOTES (FOR FINISHED AREAS ONLY, IF APPLICABLE):

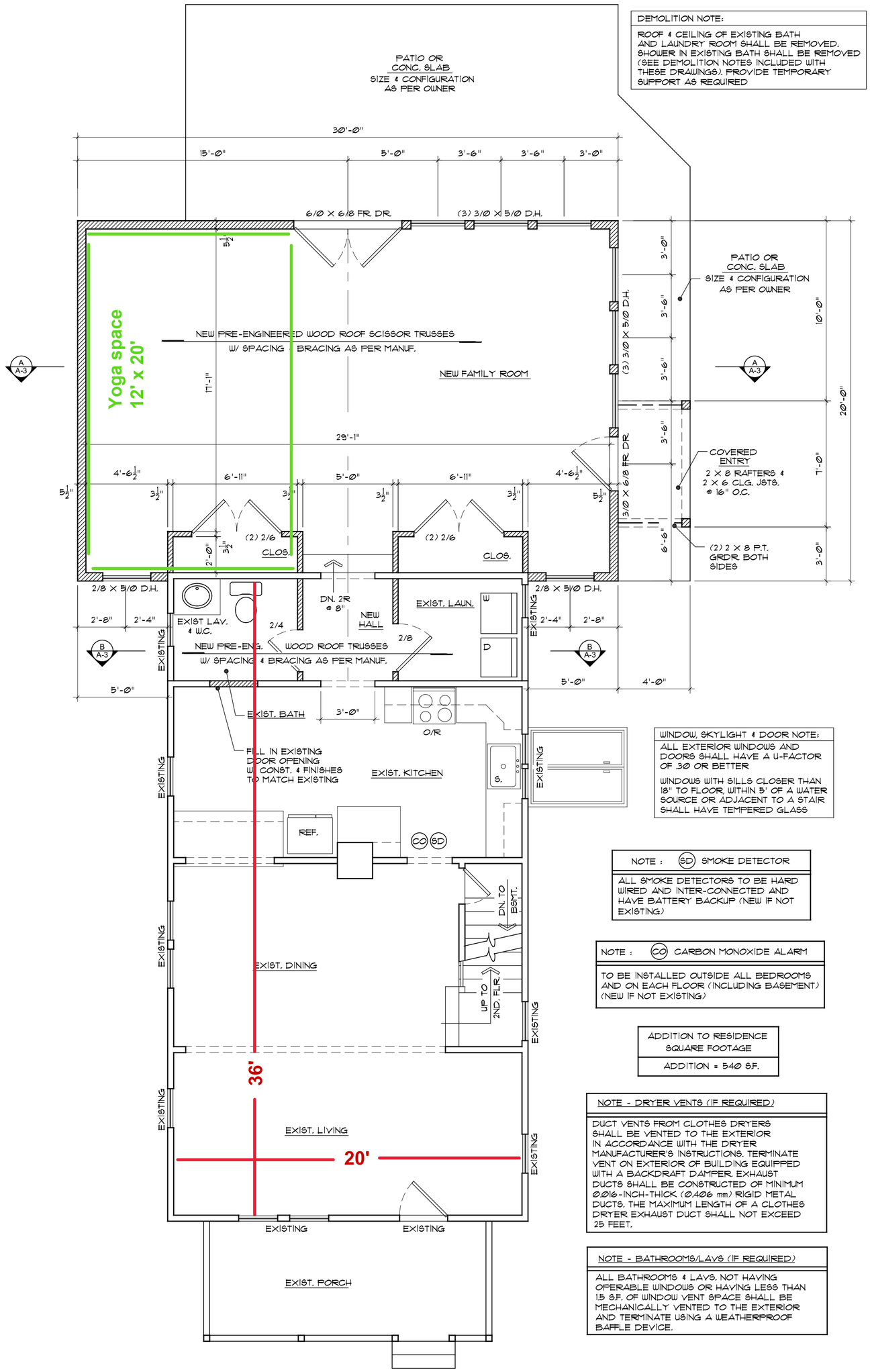
(COMPLYING WITH THE MANDATORY SECTIONS OF THE 2015 INTERNATIONAL ENERGY CONSERVATION CONSTRUCTION CODE (SECTIONS R101, R303, R401, R402, R403, AND R404 AS APPLICABLE) AND THE CURRENT SUPPLEMENT TO THE NYS ENERGY CONSERVATION CONSTRUCTION CODE.)

1. CONSTRUCTION DOCUMENTS WITH THE SEAL & SIGNATURE OF THE DESIGN PROFESSIONAL ARE INCLUDED IN THESE DOCUMENTS.
2. AN R-VALUE IDENTIFICATION MARK SHALL BE APPLIED BY THE MANUFACTURER TO EACH PIECE OF BUILDING THERMAL ENVELOPE INSULATION 12" OR GREATER IN WIDTH. ALTERNATIVELY, THE INSULATION INSTALLERS SHALL PROVIDE A CERTIFICATE LISTING THE TYPE, MANUFACTURER & R-VALUE OF INSULATION INSTALLED IN EACH ELEMENT OF THE BUILDING THERMAL ENVELOPE (THIS INCLUDES INSULATED SIDING). FOR BLOWN IN OR SPRAYED ROOF/CEILING INSULATION, THE THICKNESS SHALL BE WRITTEN IN INCHES ON MARKERS AT LEAST ONE FOR EVERY 300 SQ. FT. AND SHALL BE AFFIXED TO TRUSSES OR JOISTS FACING THE ATTIC ACCESS OPENING. U-FACTORS SHALL BE LABELED ON ALL FENESTRATION PRODUCTS (DOORS, WINDOWS & SKYLIGHTS).
3. A PERMANENT CERTIFICATE SHALL BE POSTED IN OR NEAR THE UTILITY ROOM AT COMPLETION OF THE WORK, STATING R-VALUES OF INSULATION IN CEILING/ROOF, WALLS, FLOORS, FOUNDATIONS, DUCTS OUTSIDE CONDITIONED SPACES, ETC. AND U-FACTORS OF ALL WINDOWS, DOORS & SKYLIGHTS. THE CERTIFICATE SHALL ALSO LIST TYPES & EFFICIENCIES OF THE HEATING, COOLING & WATER HEATING EQUIPMENT. WHERE A GAS-FIRED UNVENTED ROOM HEATER, ELECTRIC FURNACE OR BASEBOARD ELECTRIC HEATER IS INSTALLED, THE CERTIFICATE SHALL STATE THIS (AN EFFICIENCY SHALL NOT BE STATED FOR THESE OPTIONS).
4. CLASS I OR II VAPOR RETARDERS ARE REQUIRED ON THE INTERIOR SIDE OF FRAME WALLS IN ZONES 5 THRU 8. CLASS III VAPOR RETARDERS ARE PERMITTED WHEN CERTAIN CONDITIONS ARE MET AS PER THE NYSRESC. IF CLADDING IS VENTILATED, MINIMUM CLEAR AIR SPACES SHALL BE MET AS PER THE IRC.
5. ALL ACCESS DOORS FROM CONDITIONED TO UNCONDITIONED SPACES SHALL BE WEATHERSTRIPPED & INSULATED TO A LEVEL EQUAL TO THE INSULATION OF THE SURROUNDING SPACES. ACCESS DOORS SHALL BE DESIGNED TO PREVENT DAMAGE OR COMPRESSION OF INSULATION UPON OPENING. IF LOOSE FILL INSULATION IS USED, PROVIDE A BAFFLE OR RETAINER TO PREVENT SPILLAGE OF THE LOOSE FILL INSULATION WHEN THE ACCESS DOOR IS OPENED.
6. THE BUILDING THERMAL ENVELOPE SHALL BE SEALED TO LIMIT INFILTRATION. ALL ITEMS SHALL BE CAULKED, GASKETED, WEATHERSTRIPPED OR OTHERWISE SEALED WITH AN AIR BARRIER MATERIAL AS REQ'D. SEALING METHODS BETWEEN DISSIMILAR MATERIALS SHALL ALLOW FOR EXPANSION & CONTRACTION.
7. BUILDING ENVELOPE AIR TIGHTNESS & INSULATION INSTALLATION SHALL BE TESTED AND VERIFIED AS HAVING AN AIR LEAKAGE RATE NOT EXCEEDING 3 AIR CHANGES PER HOUR FOR CLIMATE ZONES 3 THROUGH 8.
8. RECESSED LIGHTS INSTALLED IN THE BUILDING THERMAL ENVELOPE SHALL BE SEALED TO LIMIT AIR LEAKAGE BETWEEN CONDITIONED & UNCONDITIONED SPACES, SHALL BE IC-RATED AND SHALL BE LABELED AS HAVING AN AIR LEAKAGE RATE NOT MORE THAN 2.0 CFM AT A 1.57 PSF PRESSURE DIFFERENTIAL. ALL RECESSED LUMINAIRES SHALL BE SEALED WITH A GASKET OR CAULK BETWEEN THE HOUSING AND THE INTERIOR WALL OR CEILING COVERING.
9. THE AREA WEIGHTED AVERAGE MAX. FENESTRATION U-FACTOR PERMITTED USING TRADEOFFS SHALL BE 0.48 IN CLIMATE ZONES 4 & 5 AND 0.40 IN CLIMATE ZONES 6 THROUGH 8 FOR VERTICAL FENESTRATION AND 0.75 IN CLIMATE ZONES 4 THROUGH 8 FOR SKYLIGHTS. THE AREA WEIGHTED AVERAGE MAX. FENESTRATION SHGC PERMITTED USING TRADEOFFS IN CLIMATE ZONES 1 THROUGH 3 SHALL BE 0.50.
10. AT LEAST ONE THERMOSTAT IS REQUIRED FOR EACH SEPARATE HEATING & COOLING SYSTEM. THE THERMOSTAT CONTROLLING THE PRIMARY HEATING OR COOLING SYSTEM SHALL BE PROGRAMMABLE TO MEET THE REQUIREMENTS OF THE ENERGY CODE. HEAT PUMPS W/ SUPPLEMENTARY ELECTRIC HEAT SHALL HAVE CONTROLS THAT PREVENT SUPPLEMENTAL HEAT OPERATION WHEN THE HEAT PUMP COMPRESSOR CAN MEET THE HEATING LOAD (EXCEPT DURING DEFROST).
11. UNLESS LOCATED COMPLETELY INSIDE THE BUILDING THERMAL ENVELOPE, SUPPLY & RETURN DUCTS IN ATTICS SHALL BE R-8 MIN. WHERE 3"Ø OR GREATER AND R-6 WHERE LESS THAN 3"Ø. UNLESS LOCATED COMPLETELY INSIDE THE BUILDING THERMAL ENVELOPE, SUPPLY & RETURN DUCTS IN OTHER PORTIONS OF THE BUILDING SHALL BE INSULATED TO A MIN. OF R-6 WHERE 3"Ø OR MORE, AND R-4.2 WHERE LESS THAN 3"Ø. ALL DUCTS, ETC. SHALL BE SEALED AND PRESSURE TESTED TO DETERMINE AIR LEAKAGE BY EITHER THE ROUGH-IN TEST OR THE POST CONSTRUCTION TEST UNLESS THE DUCTS, ETC. ARE LOCATED ENTIRELY WITHIN THE BUILDING THERMAL ENVELOPE. BUILDING FRAMING CAVITIES SHALL NOT BE USED AS DUCTS OR PLENUMS.
12. MECHANICAL SYSTEM PIPING CARRYING LIQUIDS ABOVE 105°F OR BELOW 55°F SHALL BE R-3 MINIMUM. CIRCULATING HOT WATER SYSTEMS SHALL HAVE AN AUTOMATIC OR READILY ACCESSIBLE SHUT OFF SWITCH FOR THE PUMP WHEN SYSTEM IS NOT IN USE.
13. THE BUILDING SHALL BE PROVIDED WITH MECHANICAL VENTILATION IN ACCORDANCE WITH THE IRC. OUTDOOR AIR INTAKES & EXHAUSTS SHALL HAVE AUTOMATIC GRAVITY DAMPERS THAT CLOSE WHEN THE VENTILATION SYSTEM IS NOT OPERATING.
14. HEATING & COOLING EQUIPMENT SHALL BE SIZED AS PER MANUAL "S" BASED ON BLDG. LOADS IN ACCORDANCE WITH MANUAL "J". NEW OR REPLACEMENT HETING AND COOLING EQUIPMENT SHALL HAVE AN EFFICIENCY RATING EQUAL TO OR GREATER THAN THE MINIMUM REQ'D BY FEDERAL LAW OR FOR THE GEOGRAPHIC LOCATION WHERE THE EQUIPMENT IS INSTALLED.
15. A MINIMUM OF 75% OF THE LAMPS IN PERMANENTLY INSTALLED FIXTURES SHALL BE HIGH EFFICACY LAMPS OR NOT LESS THAN 75% OF THE PERMANENTLY INSTALLED LIGHTING FIXTURES SHALL CONTAIN ONLY HIGH EFFICACY LAMPS.



1 A-4 **Second Floor / Partial Roof Plan**

Scale: 1/4" = 1'-0"



2 A-4 **First Floor Plan**

Scale: 1/4" = 1'-0"

REVISION	DATE

ENERGY NOTE :

ENERGY CONFORMANCE IS BY THE PRESCRIPTIVE METHOD, MEETING R-VALUES AND U-FACTORS AS LISTED IN TABLE 402.1.2 OF THE 2020 NEW YORK STATE ENERGY CONSERVATION CONSTRUCTION CODE.

BUILDING INSPECTOR NOTE :

THESE PLANS ARE NOT VALID FOR A BUILDING PERMIT UNLESS ORIGINALLY SIGNED AND SEALED BY ARCHITECT. BLUEPRINTS OR PHOTO COPIES OF SEAL AND SIGNATURE ARE INVALID. THESE PLANS ARE FOR THE CONSTRUCTION OF ONE BUILDING ONLY BY THE PERSONS WHOSE NAME APPEARS ON THE PLANS.

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BUILDER / HOMEOWNER:	ED & CRISTINA ROY
JOB TITLE:	ADDITION TO SINGLE FAMILY RESIDENCE
JOB LOCATION:	6 BROADWAY AVE. T/O WAPPINGER DUTCHESS COUNTY, NY
JOB	20-472
DATE	JULY, 2020
SCALE	NOTED
DWN BY	KR

SHEET NO : A-4 OF 5

REVISED 7-21-2020