GENERAL NOTES

THE ARCHITECT'S ADMINISTRATION OF THE CONSTRUCTION WORK. BY MUTUAL CONSENT IS NOT PART OF THIS AGREEMENT. THE OWNER AND/ OR GENERAL CONTRACTOR SHALL APPOINT A PERSON TO BE IN CHARGE OF THE WORK PER NJUCC 5.23-2.21 CONSTRUCTION CONTROL EXECUTION. THE ARCHITECT SHALL NOT BE RESPONSIBLE WHERE CONSTRUCTION DEVIATES FROM THESE DRAWINGS OR FROM WRITTEN RECOMMENDATIONS. CHANGES TO THE PLAN BY THE OWNER AND/ OR CONTRACTOR SHALL BE THE RESPONSIBILITY OF THE PERSONS MAKING SUCH CHANGES. THE OWNER AND/ OR CONTRACTOR SHALL HOLD THE ARCHITECT HARMLESS FROM & AGAINST ALL CLAIMS, DAMAGES, LOSSES & EXPENSES INCLUDING, BUT NOT LIMITED TO, ATTORNEY'S FEES ARISING OUT OF OR RESULTING FROM THE PERFORMANCE OF THE WORK BY THE CONTRACTOR. THE ARCHITECT SHALL NOT HAVE CONTROL OR CHANGE OF & SHALL NOT BE RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, OR PROCEDURES, FOR SAFETY PRECAUTIONS & PROGRAMS IN CONNECTION WITH THE WORK, FOR THE ACTS OR OMISSIONS OF THE CONTRACTOR, SUBCONTRACTOR, FOR ANY OTHER PERSONS PERFORMING ANY OF THE WORK, OR FOR THE FAILURE OF ANY OF THEM TO CARRY OUT THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.

MITS: THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING & PAYING FOR ALL THE REQUIRED PERMITS, INSPECTIONS, ETC. PROJECT COMPLETION: UPON COMPLETION OF THE PROJECT, THE CONTRACTOR MUST SUBMIT A CERTIFICATE OF OCCUPANCY APPROVED BY THE BUILDING DEPARTMENT TO

ALL WORK, MATERIALS AND EQUIPMENT SHALL MEET THE LATEST REQUIREMENTS OF ALL APPLICABLE STATE & LOCAL BUILDING CODES, REGULATIONS, THE REQUIREMENTS OF THE AUTHORITIES HAVING JURISDICTION & THE SPECIFICATIONS OF THE NATIONAL BOARD OF UNDERWRITERS. WHERE APPLICABLE COMPLY WITH ALL REQUIREMENTS OF THE NJUCC BARRIER FREE SUBCODE AND/ OR THE AMERICANS WITH DISABILITIES ACT (ADA). EXCEPT WHERE SPECIFIED, REQUIREMENTS ARE MORE STRINGENT;

NSTALL ALL PRODUCTS IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS, RECOMMENDATIONS & THE STANDARD OF RECOGNIZED AGENCIES & ASSOCIATIONS. PROVIDE ALL ANCHORS, FASTENERS, & ACCESSORIES REQUIRED FOR A COMPLETE INSTALLATION. ALLOW FOR THERMAL EXPANSION/ CONTRACTION & BUILDING MOVEMENT. SEPARATE INCOMPATIBLE MATERIALS WITH SUITABLE MATERIALS OR SPACING. PREVENT CATHODIC CORROSION. PROTECT ALUMINUM SURFACES FROM CONTACT WITH MASONRY OR OTHER METALS. PROVIDE CONTROL JOINTS AT MATERIALS & ISOLATION JOINTSBETWEEN MATERIALS/ STRUCTURE AS INDICATED & AS REQUIRED BY MANUFACTURER OR RECOGNIZED INDUSTRY STANDARDS. INSTALL PRODUCTS UNDER APPROPRIATE ENVIROMENTAL CONDITIONS (AIR TEMPERATURE, SURFACE TEMPERATURE, RELATIVE HUMIDITY, ETC.) TO INSURE QUALITY AND DURABILITY, MAINTAIN PROPER PROTECTION DURING DRYING/CURING.

THE CONTRACTOR SHALL, WITHOUT DELAY & PRIOR TO FABRICATION OR INSTALLATION, BRING TO THE ATTENTION OF THE ARCHITECT ANY DISCREPANCIES BETWEEN THE MANUFACTURER'S SPECIFICATIONS OR RECOMMENDATIONS, APPLICABLE CODE PROVISIONS, AND THE CONTRACT DOCUMENTS. UNAUTHORIZED CHANGES TO PLANS BY THE OWNER AND/ OR CONTRACTOR SHALL BE THE RESPONSIBILITY OF THE PERSONS MAKING SUCH CHANGES.

PRODUCT OPTIONS: IT IS THE CONTRACTOR'S RESPONSIBILITY TO SELECT PRODUCTS WHICH COMPLY WITH THE CONTRACT DOCUMENTS & WHICH ARE COMPATIBLE WITH ONE ANOTHER, WITH EXISTING WORK, & THE PRODUCTS SELECTED BY OTHER CONTRACTORS. PROVIDE MANUFACTURER'S INFORMATION, SAMPLES,

SUBMISSION OF A SUBSTUTION REQUEST BY THE CONTRACTOR, WHERE PERMITTED ON THE CONTRACT DOCUMENTS. SHALL CONSTITUTE A REPRESENTATION BY THE CONTRACTOR THAT HE/ SHE HAS INVESTIGATED THE PROPOSED PRODUCT OR CONDITIONS & DETERMINED THAT IT IS EQUAL TO OR BETTER THAN THE SPECIFIED PRODUCT OR CONDITION, INCLUDING WARRANTY COVERAGE, & THAT HE/ SHE WILL COORDINATE THE INSTALLATION & MAKE OTHER CHANGES, INCLUDING MODIFICATION AND COORDINATION OF OTHER WORK AFFECTED BY THECHANGE, WHICH MAY BE REQUIRED FOR THEIR WORK TO BE COMPLETE

THIS IS A 'BUILDER'S PLAN'. THE TERM BUILDER'S PLAN REFERS TO A CERTAIN LEVEL OF DEVELOPMENT OF THE DRAWINGS. AS THE NAME IMPLIES, THESE PLANS REQUIRE THAT THE CONTRACTOR POSSESSES COMPETENCE IN RESIDENTIAL CONSTRUCTION WITH THE UNDERSTANDING THAT THE CONTRACTO POSSESSES SUCH SKILL, COMPETENCE & KNOWLEDGE OF APPLICABLE CODES & REGULATIONS, THE ARCHITECTURAL SERVICE PROVIDED IN THESE DRAWINGS IS LIMITED TO ROOM ARRANGEMENT DIMENSION, STRUCTURAL DESIGN & CONSTRUCTION DETAILS AS INDICATED. THE FOLLOWING, UNLESS PROVIDED FOR IN THESE DRAWINGS. SHALL BE FURNISHED & COORDINATED BY THE CONTRACTOR OR OWNER & SHALLNOT BE PART OF THE SCOPE OF WORK OF THESE CONSTRUCTION DOCUMENTS: - DEMOLITION OF ANY OR ALL EXISTING STRUCTURES, PAVEMENT OR TREES - SITE ENGINEERING INCLUDING BUT NOT LIMITED TO: SITE GRADING, SOIL INVESTIGATIONS

- INVESTIGATIONS, SITE DRAINAGE, LANDSCAPING, DRIVEWAYS, RETAINING WALLS, UTILITIES, SEPTIC, WHERE APPLICABLE, AND OTHER IMPROVEMENTS OUTSIDE THE BUILDING ENVELOPE. -FOUNDATION WALL DESIGN

NOTIFY THE ARCHITECT IF THE PROPOSED USE IS NOT IN ACCORDANCE WITH LOCAL & STATE REQUIREMENTS & PROVIDE THE ARCHITECT WITH ANY NECESSARY DOCUMENTATION INCLUDING ZONING, SETBACKS, ENVIROMENTAL REGULATIONS, OR ANY SIMILAR CONSTRAINTS WHICH MAY AFFECT THE PROJECT. HOWEVER, IN NO CASE SHALL ANY PART OF THE DWELLING BE LOCATED WITHIN 3'-0" OF A PROPERTY LINE WITHOUT APPROVAL OF THE ARCHITECT AND AUTHORITY HAVE JURISDICTION.

SELECTION OF APPROVED INTERIOR FINISHES MATERIALS, CABINETRY, HARDWARE, FURNISHINGS, & OTHER SIMILAR EQUIPMENT. STANDARDS OF QUALITY, PERFORMANCE & ACCEPTABLE MANUFACTURERS FOR PREFABRICATED SYSTEMS & ITEMS.

DESIGN OF HEATING VENTILATION & AIR CONDITIONING PLUMBING GAS & FLECTRICAL SYSTEMS INCLUDING PREPARATION OF REQUIRED DRAWINGS & COORDINATION WITH ARCHITECTURAL DRAWINGS THE DRAWINGS SHOW THE GENERAL ARRANGEMENT & EXTENT OF THE WORK AS THE WORK PROGRESSES THE OWNER & THE CONTRACTOR AT NO EXTRA COST, SHALL MAKE MODIFICATIONS TO MAKE THE PARTS ALIGN. WHERE COMPLETE SIZES OR DIMENSIONS OF MEMBERS, CONNECTIONS, OR FASTENERS OF ANY ITEM ARE NOT INDICATED, DESIGN THE ITEM TO PRODUCE STRENGTH APPROPRIATE TO THE USE INTENDED.

DO NOT SCALE DRAWINGS. WRITTEN DIMENSION SHALL GOVERN.

CONTRACTOR SHALL CHECK VERIFY & MAINTAIN ALL DIMENSIONS, GRADES, LEVELS & OTHER CONDITIONS BEFORE PROCEEDING WITH FABRICATION & CONSTRUCTION. COORDINATE EXACT LOCATIONS OF EQUIPMENT, FIXTURES & OUTLETS WITH FINISHED ELEMENTS. WHERE NECESSARY OR WHERE SPECIFICALLY INDICATED, THE CONTRACTOR SHALL PROVIDE SHOP DRAWINGS & DETAILED COMPONENT DESIGN AS REQUIRED FOR THE PROPER FABRICATION, INSTALLATION, AND COORDINATION WITH OTHER

SHOP DRAWINGS: CONTRACTOR SHALL FURNISH SHOP DRAWINGS FOR ALL SHOP FABRICATED ITEMS & WHERE CLISTOMARILY REQUIRED & SUBMIT FOUR SETS OF SHOP DRAWINGS FOR REVIEW. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CHECKING THE SHOP DRAWINGS FOR ACCURACY, COORDINATION WITH OTHER TRADES, & COMPLIANCE WITH THE CONTRACT DOCUMENTS BEFORE BEING SUBMITTED FOR APPROVAL. ARCHITECT'S OR ENGINEER'S APPROVAL OF SHOP DRAWINGS SHALL CONSTITUTE REVIEW & APPROVAL OF THE GENERAL ARRANGEMENT OF COMPONENTS TO COMPLY WITH THE GENERAL INTENT OF THE CONSTRUCTION DOCUMENTS & IN NO WAY RELIEVES THE CONTRACTOR FROM HIS/ HER RESPONSIBILITY FOR COMPLIANCE WITH THE CONTRACT DOCUMENTS, EVEN IF SUCH ITEMS ARE NOT SHOWN ON THE SHOP DRAWINGS. THE CONTRACTOR SHALL CHECK ALL DIMENSIONS & CONDITIONS TO INSURE A PROPER FIT UNDER FIELD CONDITIONS & SHALL MAKE ADJUSTMENTS AS REQUIRED TO MAKE PARTS ALIGN. ALL REVISIONS TO SHOP DRAWINGS AFTER THE FIRST SUBMISSION MUST BE PROPERLY IDENTIFIED ON SUBSEQUENT SUBMISSIONS.

PRIOR TO PERFORMING ANY WORK, THE CONTRACTOR SHALL EXAMINE THE APPLICABLE CONDITIONS & SUBSTRATES & CORRECT ANY UNSATISFACTORY CONDITIONS BEFORE PROCEEDING WITH THE WORK. VERIFY THAT SUBSTRATE & BASE PLIES/ COATS ARE COMPATIBLE WITH NEW WORK. NOTIFY THE ARCHITECT PROMPTLY OF ANY MODIFICATIONS REQUIRED. WORK PERFORMED OVER ANY SURFACE CONSTITUTES ACCEPTANCE OF THAT SURFACE FOR THE SPECIFIED QUALITY OF THE WORK BEING PERFORMED THEREON. ANY CHANGES TO THE PLANS BY THE OWNER OR ${\tt CONTRACTOR} \quad {\tt SHALL} \ {\tt BE} \ {\tt THE} \ {\tt RESPONSIBILITY} \ {\tt OF} \ {\tt THE} \ {\tt PERSONS} \ {\tt MAKING} \ {\tt SUCH} \ {\tt CHANGES}.$

ING AND PATCHING: INCLUDE ALL CUTTING & PATCHING FOR PENETRATIONS THROUGH FLOORS. WALLS CEILINGS AND ROOFS. DO NOT CUT OR NOTCH ANY STRUCTURAL MEMBER TO REDUCE ITS LOAD CARRYING CAPACITY OR FIRE RESISTANCE.

UNFORSEEN CONDITIONS: SHOULD UNFORSEEN CONDITIONS BE ENCOUNTERED THAT AFFECT DESIGN OR FUNCTION OF THE PROJECT, CONTRACTOR SHALL INVESTIGATE FULLY & SUBMIT AN ACCURATE, DETAILED REPORT TO THE ARCHITECT WITHOUT DELAY. WHILE AWAITING A RESPONSE, CONTRACTOR SHALL RESCHEDULE OPERATIONS AS REQUIRED TO AVOID DELAY OF OVERALL PROJECT.

PROVIDE TEMPORARY FACILITIES, SERVICE UTILITIES, & PROTECTION AS REQUIRED TO SAFELY EXECUTING ALL WORK. PROTECT ADJACENT CONSTRUCTION, AND INHABITANTS. COMPLY WITH ALL APPLICABLE REQUIREMENTS OF GOVERNING AUTHORITIES INCLUDING, BUT NOT LIMITED TO PUBLIC UTILITIES. PROVIDE

24-HOUR NOTIFICATION OF ANY DISCONTINUITY OF UTILITY SERVICES WITH OWNER. CONTRACTOR SHALL BE RESPONSIBLE TO REMOVE AND LEGALLY DISPOSE OF ALL GARBAGE AND EXCESS MATERIALS FROM THE JOB SITE.

ECORD DRAWINGS: THE CONTRACTOR SHALL PREPARE & MAINTAIN A COMPLETE SET OF RECORD ONSTRUCTION DRAWINGS INDICATING ALL ACTUAL WORK, MODIFICATION & REVISIONS TO THE WORK DELINIATED ON THE CONSTRUCTIONS DRAWINGS AS WELL AS ANY CONCEALED CONSTRUCTION WORK. INCLUDE ANY OTHER INFORMATION WHICH WOULD BE HELPFUL TO THE OWNER.

JRANCE: ALL CONTRACTORS & ALL SUB-CONTRACTORS SHALL TAKE OUT & MAINTAIN WORKMAN'S OMPENSATION INSURANCE, AND PUBLIC LIABILITY & PROPERTY DAMAGE INSURANCE ACCEPTABLE TO THE OWNER & THE AUTHORITIES HAVING JURISDICTION. AT PROJECT CLOSEOUT.

<u>UBSTANTIAL COMPLETION</u>: CONTRACTOR SHALL PROCURE FINAL CERTIFICATE OF OCCUPANCY UPON OMPLETION OF THE PROJECT AND FORWARD SAME TO THE OWNER. CONTRACTOR SHALL CLEAN THE PREMISES, TEST APPLICABLE SYSTEMS, AND LEAVE READY FOR OCCUPANCY.

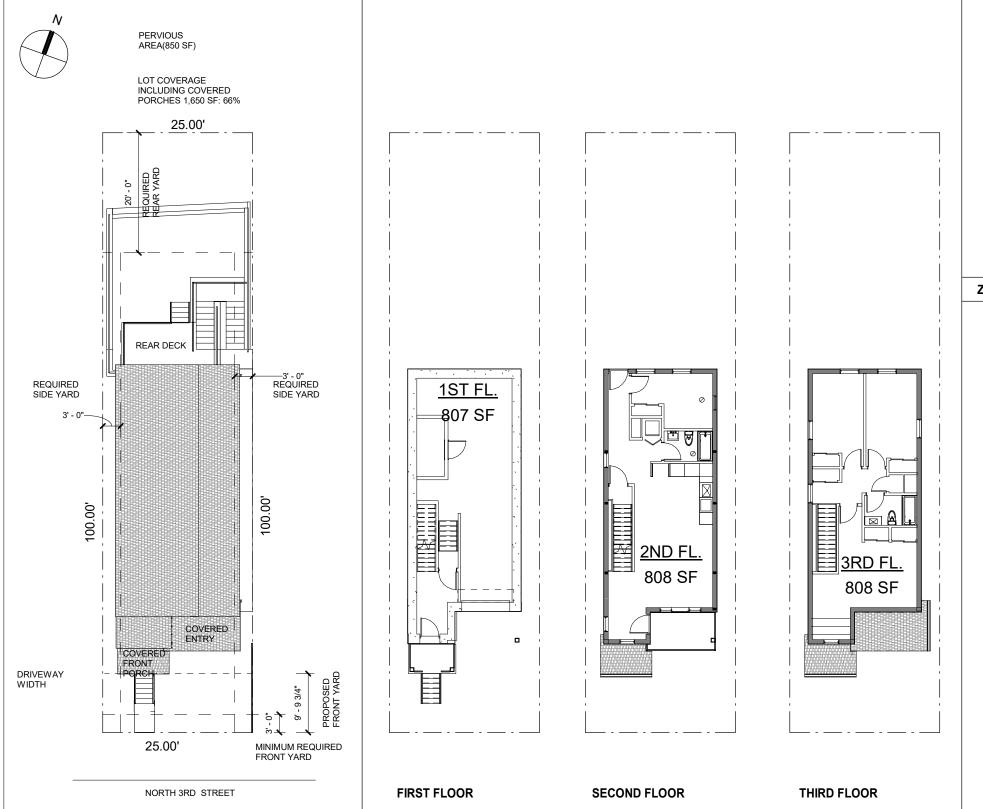
RRANTIES: UNI ESS OTHERWISE INDICATED. CONTRACTOR IS TO PROVIDE WRITTEN WARRANTY FOR A PERIOD OF ONE YEAR FROM THE DATE OF SUBSTANTIAL COMPLETION, THE WARRANTY SHALL STATE ALL WORK HAS BEEN COMPLETED IN CONFORMANCE WITH THE CONTRACT DOCUMENTS, APPLICABLE CODES, AND ENFORCING AUTHORITIES AND THAT ALL WORK IS FREE FROM DEFECTS OF MATERIAL AND WORKMANSHIP.THIS IS IN ADDITION TO AND NOT A LIMITATION TO ANY PRODUCT MANUFACTURER'S PRODUCT WARRANTIES

- ROOFING - 2 YEAR WARRANTY BY INSTALLER - ROOFING - 25 YEAR STANDARD WARRANTY BY MANUFACTURER

CONFORM TO THE NATIONAL STANDARD PLUMBING CODE. LATEST EDITION

- HOME OWNERS WARRANTY (HOW) - WHERE APPLICABLE IN ACCORDANCE WITH THE AUTHORITIES HAVING

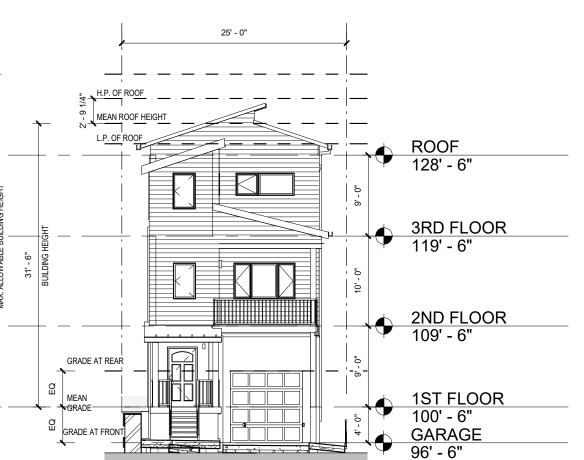
ALL ELECTRICAL WORK SHALL BE CARRIED OUT BY A LICENSED ELECTRICIAN ONLY. ALL WORK SHALL CONFORM TO THE PROVISIONS OF THE NATIONAL FLECTRIC CODE OF NEPA LATEST EDITION ALL PLUMBING WORK SHALL BE CARRIED OUT BY A LICENSED PLUMBER. ALL EQUIPMENT & FIXTURES TO



SCALE: 1/16" = 1'-0" | FLOOR AREA CALCULATIONS

	A-1.0	FRAMING PLAN - FIRST FLOOR	
	A-1.1	FRAMING PLANS-2ND FL, 3RD FL, ROOF	
	A-2.0	CONSTRUCTION FLOOR PLANS	
	A-3.0	REFLECTED CEILING PLAN / ELECTRICAL PLANS	
	A-4.0	NORTH AND SOUTH ELEVATIONS, BUILDING CROSS SECTIONS	
	A-4.1	EAST AND WEST ELEVATIONS	
	A-4.2	LONGITUDINAL BUILDING SECTIONS	
	A-5.0	EXTERIOR WALL DETAILS	
	A-5.1	EXTERIOR WALL AND ROOF DETAILS	
	A-5.2	TYPICAL FRAMING DETAILS	
	A-6.0	ENERGY STAR NOTES	
	A-7.0	PLUMBING RISER DIAGRAMS	
ZONI	NG HEIGHT [DIAGRAM - SOUTH ELEVATION	
		25' - 0"	

COVER SHEET



101 NORTH THIRD STREET: BLOCK: LOT DIMENSIONS: 25.00' X 100.00' LOT AREA: FIRST FLOOR: SECOND FLOOR: 808 SF THIRD FLOOR: 808 SF TOTAL SF: 2,423 SF **COMPLIANCE** ZONING SECTION REQUIREMENTS (1)SINGLE FAMILY RESIDENCE - COMPLIES PRINCIPAL PERMITTED USES: SINGLE FAMILY DWELLINGS 2 PARKING SPACES PROVIDE - COMPLIES ACCESSORY USES: PARKING 3 BEDROOMS IN DWELLING: 2 PARKING SPACES REQUIRED LOT WIDTH: 25'-0" WIDE - COMPLIES MIMIMUM LOT WIDTH MIMIMUM FRONT YARD SETBACK: 3'-0" MINIMUM, OR PREVAILING CONDITIONS WITHIN 200'-0" ON EITHER SIDE UP TO 7'-0" MAXIMUM 3"-0" AT BOTH SIDE YARDS -MINIMUM SIDE YARD SETBACK: MAXIMUM SIDE YARD SETBACK, 3'-0" MAXIMUM SIDE YARD MAXIMUM SIDE YARD SETBACK: COMPLIES SETBACK(EITHER SIDE): 12'-0" REAR YARD SETBACK: EXCEEDS 20'-0", MINIMUM REAR YARD SETBACK: | MINIMUM REAR YARD SETBACK: 20'-0" MAXIMUM BUILDING HEIGHT: THIRTY BUILDING HEIGHT: 31'-3" AND THREE(3) STORIES MAXIMUM BUILDING HEIGHT:

FIRST WARD REDEVELOPMENT DISTRICT: RA-2, SINGLE FAMILY DWELLING

SITE IS NOT LOCATED WITHIN A FLOOD HAZARD ZONE

MAXIMUM BUILDING COVERAGE

COVERAGE

FIRE RESISTANT CONSTRUCTION

SITE PLAN

EXTERIOR WALLS. PER R302.1 CONSTRUCTION, PROJECTIONS, OPENINGS AND PENETRATIONS OF EXTERIOR WALLS OF DWELLINGS AND ACCESSORY BUILDINGS SHALL COMPLY WITH TABLE R302.1; (NON-SPRINKLERED). **EXCEPTIONS**: WALLS, PROJECTIONS, OPENINGS OR PENETRATIONS IN WALLS PERPENDICULAR TO THE LINE USED TO DETERMINE THE FIRE SEPARATION DISTANCE, FOUNDATION VENTS INSTALLED IN COMPLIANCE WITH THIS CODE ARE PERMITTED.

EXTERIOR WALL ELEMENT	MIMIMUM FIRE- RESISTANCE RATING	MINIMUM FIRE SEPARATION DISTANCE
WALLS FIRE-RESISTANCE RATED NOT FIRE-RESISTANCE RATED	1 HOUR(FROM BOTH SIDES) 0 HOURS	< 5'-0" > 5'-0"
PROJECTIONS NOT ALLOWED FIRE-RESISTANCE RATED NOT FIRE-RESISTANCE RATED	N/A 1 HOUR ON THE UNDERSIDE 0 HOURS	< 2'-0" 2'-0" TO < 5'-0" > 5'-0"
OPENINGS IN WALLS NOT ALLOWED 25% MAXIMUM OF WALL AREA	N/A 0 HOURS	< 3'-0" 3'-0"
<u>PENETRATIONS</u> ALL	COMPLY WITH SECTION R302.4 NONE REQUIRED	< 3'-0" 3'-0"

<u>DWELLING-GARAGE OPENING AND PENETRATION PROTECTION</u>. PER R302.5 OPENINGS AND PENETRATIONS THROUGH THE WALLS OR CEILINGS SEPARATING THE DWELLING FROM THE GARAGE SHALL BE IN ACCORDANCE WITH SECTIONS R302.5.1 THROUGH R302.5.3.

DWELLING-GARAGE FIRE SEPARATION. PER R302.6 THE GARAGE SHALL BE SEPARATED AS REQUIRED BY TABLE R302.6. OPENINGS IN GARAGE WALLS SHALL COMPLY WITH SECTION R302.5. THE WALL SEPARATION PROVISIONS OF TABLE R302.6 SHALL NOT APPLY TO GARAGE WALLS THAT ARE PERPENDICULAR TO THE ADJACENT DWELLING UNIT WALL.

PER TABLE R302.6, DWELLING GARAGE SEPARATION:

FROM THE RESIDENCE AND ATTICS: NOT LESS THAN 1/2" GYPSUM BOARD OR EQUIVALENT APPLIED TO THE GARAGE SIDE

FROM HABITABLE ROOMS ABOVE THE GARAGE: CONSTRUCT WITH NOT LESS THAN A ONE-HOUR FIRE-RESISTANCE RATING (SEE N.J.U.C.C. FTO-13)

STRUCTURE(S) SUPPORTING FLOOR/CEILING ASSEMBLIES: USED FOR SEPARATION REQUIRED BY THIS SECTION CONSTRUCTED WITH NOT LESS THAN A ONE-HOUR FIRE-RESISTANCE RATING (SEE N.J.U.C.C. FTO-13)

GARAGES LOCATED LESS THAN 3 FEET FROM A DWELLING UNIT ON THE SAME LOT NOT LESS THAN 1/-INCH GYPSUM BOARD OR EQUIVALENT APPLIED TO THE INTERIOR SIDE OF EXTERIOR WALLS THAT ARE WITHIN THIS AREA

UNDER-STAIR PROTECTION. PER R302.7, ENCLOSED ACCESSIBLE SPACE UNDER STAIRS SHALL HAVE WALLS, UNDER-STAIR SURFACE AND ANY SOFFITS PROTECTED ON THE ENCLOSED SIDE WITH 1/2 -INCH GYPSUM BOARD.

FLAME SPREAD INDEX AND SMOKE-DEVELOPED INDEX FOR WALL AND CEILING FINISHES. PER R302.9 FLAMESPREAD AND SMOKE DEVELOPED INDEXES FOR WALL AND CEILING FINISHES SHALL BE IN ACCORDANCE WITH SECTIONS R302.9.1 THROUGH R302.9.4

FIREBLOCKING. PER R302.11, IN COMBUSTIBLE CONSTRUCTION, FIRE- BLOCKING SHALL BE PROVIDED TO CUT OFF BOTH VERTICAL AND HORIZONTAL CONCEALED DRAFT OPENINGS AND TO FORM AN EFFECTIVE FIRE BARRIER BETWEEN STORIES, AND BETWEEN A TOP STORY AND THE ROOF SPACE.

COMBUSTIBLE INSULATION CLEARANCE. PER R302.14, COMBUSTIBLE INSULATION SHALL BE SEPARATED NOT LESS THAN 3" FROM RECESSED LUMINAIRES, FAN MOTORS AND OTHER HEAT-PRODUCING DEVICES.

THERMAL BARRIER. PER R316.4, UNLESS OTHERWISE ALLOWED IN SECTION FOAM PLASTIC SHALL BE SEPARATED FROM THE INTERIOR OF A BUILDING BY AN APPROVED THERMAL BARRIER OF NOT LESS THAN 1/-INCH (12.7 MM) GYPSUM WOOD STRUCTURAL PANEL OR A MATERIAL THAT IS TESTED IN ACCORDANCE WITH AND MEETS THE ACCEPTANCE CRITERIA OF BOTH THE TEMPERATURE TRANSMISSION FIRE TEST AND THE INTEGRITY FIRE TEST OF NFPA 275

HABITABLE ROOMS. PER R303.1 ,HABITABLE ROOMS SHALL HAVE AN AGGREGATE GLAZING AREA OF NOT LESS THAN 8% OF THE FLOOR AREA OF SUCH ROOMS. NATURAL VENTILATION SHALL BE THROUGH WINDOWS, SKYLIGHTS, DOORS, LOUVERS OR OTHER APPROVED OPENINGS

TOACCESS OR SHALL OTHERWISE BE READILY CONTROLLABLE BY THE BUILDING OCCUPANTS THE OPENABLE AREA TO THE OUTDOORS SHALL BE NOT LESS THAN 4% OF THE FLOOR AREA

HABITABLE ROOMS AND EGRESS

SCALE: 1/16" = 1'-0" | DRAWING LIST

MINIMUM AREA. PER R304.1, HABITABLE ROOMS SHALL HAVE A FLOOR AREA OF NOT LESS THAN 70 SQUARE FEET. EXCEPTION: KITCHENS

MINIMUM DIMENSIONS. PER R304.2, HABITABLE ROOMS SHALL BE NOT LESS THAN 7 FEET IN ANY

HORIZONTAL DIMENSION. **EXCEPTION**: KITCHEN BATHROOMS. PER R303.3 BATHROOMS, WATER CLOSET COMPARTMENTS AND OTHER SIMILAR

ROOMS SHALL BE PROVIDED WITH AGGREGATE GLAZING AREA IN WINDOWS OF NOT LESS THAN 3 SQUARE FEET, ONE- HALF OF WHICH MUST BE OPENABLE. EXCEPTION: THE GLAZED AREAS SHALL NOT BE REQUIRED WHERE ARTIFICIAL LIGHT AND A LOCAL EXHAUST SYSTEM ARE PROVIDED. THE MINIMUM LOCAL EXHAUST RATES SHALL BE DETERMINED IN ACCORDANCE WITH SECTION M1507. EXHAUST AIR FROM THE SPACE SHALL BE EXHAUSTED DIRECTLY TO THE OUTDOORS.

MINIMUM CEILING HEIGHT. R305.1 HABITABLE SPACE, HALLWAYS AND PORTIONS OF BASEMENTS CONTAINING THESE SPACES SHALL HAVE A CEILING HEIGHT OF NOT LESS THAN 7'-0". BATHROOMS, TOILET ROOMS AND LAUNDRY ROOMS SHALL HAVE A CEILING HEIGHT OF NOT LESS THAN 6'-8".

GLAZING ADJACENT TO STAIRS AND RAMPS. PER R308.4.6, GLAZING WHERE THE BOTTOM EXPOSED EDGE OF THE GLAZING IS LESS THAN 36 INCHES ABOVE THE PLANE OF THE ADJACENT WALKING SURFACE OF STAIRWAYS, LANDINGS BETWEEN FLIGHTS OF STAIRS AND RAMPS SHALL BE CONSIDERED TO BE A HAZARDOUS LOCATION. WHERE A RAIL IS INSTALLED ON THE ACCESSIBLE SIDE(S) OF THE GLAZING 34" TO 38" ABOVE THE WALKING SURFACE. THE RAIL SHALL BE CAPABLE OF WITHSTANDING A HORIZONTAL LOAD OF 50 POUNDS PER LINEAR FOOT WITHOUT CONTACTING THE GLASS AND HAVE A CROSS-SECTIONAL HEIGHT OF NOT LESS THAN 1 1/2"

GLAZING ADJACENT TO THE BOTTOM STAIR LANDING. R308.4.7 PER GLAZING ADJACENT TO THE LANDING AT THE BOTTOM OF A STAIRWAY WHERE THE GLAZING IS LESS THAN 36 INCHES ABOVE THE LANDING AND WITHIN A 60-INCH HORIZONTAL ARC LESS THAN 180 DEGREES FROM THE BOTTOM TREAD NOSING SHALL BE CONSIDERED TO BE A HAZARDOUS LOCATION.

GARAGES AND CARPORTS PER R309.1, FLOOR SURFACE. GARAGE FLOOR SURFACES SHALL BE OF APPROVED NONCOMBUSTIBLE MATERIAL. THE AREA OF FLOOR USED FOR PARKING OF AUTOMOBILES OR OTHER VEHICLES SHALL BE SLOPED TO FACILITATE THE MOVEMENT OF LIQUIDS TO A DRAIN OR TOWARD THE MAIN VEHICLE ENTRY DOORWAY.

EMERGENCY ESCAPE AND RESCUE OPENINGS. PER R310.1 EVERY SLEEPING ROOM SHALL HAVE NOT LESS THAN ONE OPERABLE EMERGENCY ESCAPE AND RESCUE OPENING. WHERE BASEMENTS CONTAIN ONE OR MORE SLEEPING ROOMS, AN EMERGENCY ESCAPE AND RESCUE OPENING SHALL BE REQUIRED IN EACH SLEEPING ROOM. EMERGENCY ESCAPE AND RESCUE OPENINGS SHALL OPEN DIRECTLY INTO A PUBLIC WAY, OR TO A YARD OR COURT THAT OPENS TO A PUBLIC WAY.

MINIMUM OPENING AREA. PER R310.2.1, EMERGENCY AND ESCAPE RESCUE OPENINGS SHALI HAVE A NET CLEAR OPENING OF NOT LESS THAN 5.7 SQUARE FEET. THE NET CLEAR OPENING DIMENSIONS REQUIRED BY THIS SECTION SHALL BE OBTAINED BY THE NORMAL OPERATION OF THE EMERGENCY ESCAPE AND RESCUE OPENING FROM THE INSIDE. THE NET CLEAR HEIGHT OPENING SHALL BE NOT LESS THAN 24" AND THE NET CLEAR WIDTH SHALL BE NOT LESS THAN 20". EXCEPTION: GRADE FLOOR OR BELOW GRADE OPENINGS SHALL HAVE A NET CLEAR OPENING OF NOT LESS THAN 5 SQUARE FT.

EGRESS DOOR. PER R311.2, NOT LESS THAN ONE EGRESS DOOR SHALL BE PROVIDED FOR EACH DWELLING UNIT. THE EGRESS DOOR SHALL BE SIDE-HINGED, AND SHALL PROVIDE A CLEAR WIDTH OF NOT LESS THAN 32"WHERE MEASURED BETWEEN THE FACE OF THE DOOR AND THE STOP, WITH THE DOOR OPEN 90%. THE CLEAR HEIGHT OF THE DOOR OPENING SHALL BE NOT LESS THAN 78"IIN HEIGHT MEASURED FROM THE TOP OF THE THRESHOLD TO THE BOTTOM OF THE STOP. OTHER DOORS SHALL NOT BE REQUIRED TO COMPLY WITH THESE MINIMUM DIMENSIONS. EGRESS DOORS SHALL BE READILY OPENABLE FROM INSIDE THE DWELLING WITHOUT USE OF A KEY OR SPECIAL KNOWLEDGE OR EFFORT

HALLWAYS. PER R311.6, THE WIDTH OF A HALLWAY SHALL BE NOT LESS THAN 3 FEET.

WIND DESIGN

GROUND

STAIRS AND FALL PROTECTION

<u>VERTICAL RISE.</u> PER R311.7.3A FLIGHT OF STAIRS SHALL NOT HAVE A VERTICAL RISE LARGER THAN 147 INCHES BETWEEN FLOOR LEVELS OR LANDINGS.

STAIR WIDTH. PER R311.7.1, STAIRWAYS SHALL BE NOT LESS THAN 36" IN CLEAR WIDTH AT ALL POINTS ABOVE THE PERMITTED HANDRAIL HEIGHT AND BELOW THE REQUIRED HEADROOM. HANDRAILS SHALL NOT PROJECT MORE THAN 4 1/2" ON EITHER SIDE OF THE STAIRWAY AND THE CLEAR WIDTH OF THE STAIRWAY AT AND BELOW THE HANDRAIL HEIGHT, INCLUDING TREADS AND LANDINGS, SHALL BE NOT LESS THAN 31" WHERE A HANDRAIL IS INSTALLED ON ONE SIDE AND 27"(WHERE HANDRAILS ARE PROVIDED ON BOTH SIDES)

RISERS. PER R311.7.5.1, THE RISER HEIGHT SHALL BE NOT MORE THAN 8 ½" IN HEIGHT.

TREADS. PER R311.7.5.2, THE TREAD DEPTH SHALL BE NOT LESS THAN 9"

VERTICAL RISE. PER R311.7.3A FLIGHT OF STAIRS SHALL NOT HAVE A VERTICAL RISE LARGER THAN 147 INCHES BETWEEN FLOOR LEVELS OR LANDINGS.

HANDRAIL HEIGHT. PER R311.7.8.1, HANDRAIL HEIGHT, MEASURED VERTICALLY FROM THE SLOPED PLANE ADJOINING THE TREAD NOSING, OR FINISH SURFACE OF RAMP SLOPE, SHALL BE NOT LESS THAN 30 INCHES AND NOT MORE THAN 38".

STAIR HEADROOM. PER R311.7.2, THE HEADROOM IN STAIRWAYS SHALL BE NOT LESS THAN 6'- 8" MEASURED VERTI- CALLY FROM THE SLOPED LINE ADJOINING THE TREAD NOSING OR FROM THE FLOOR SURFACE OF THE LANDING OR PLATFORM ON THAT PORTION OF THE STAIRWAY

GUARDS AND FALL PROTECTION PER R312.1.2, REQUIRED GUARDS AT OPEN-SIDED WALKING SURFACES, INCLUDING STAIRS, PORCHES, BALCONIES OR LANDINGS, SHALI BE NOT LESS THAN 36" IN HEIGHT AS MEASURED VERTICALLY ABOVE THE ADJACENT WALKING SURFACE OR THE LINE CONNECTING THE LEADING EDGES OF THE TREADS. EXCEPTIONS: GUARDS ON THE OPEN SIDES OF STAIRS SHALL HAVE A HEIGHT NOT LESS THAN 34" MEASURED VERTICALLY FROM A LINE CONNECTING THE LEADING EDGES OF THE TREADS. WHERE THE TOP OF THE GUARD SERVES AS A HANDRAIL ON THE OPEN SIDES OF STAIRS, THE TOP OF THE GUARD SHALL BE NOT LESS THAN 34 " AND NOT MORE THAN 38" AS MEASURED VERTICALLY FROM A LINE CONNECTING

WINDOW FALL PROTECTION. WINDOW FALL PROTECTION SHALL BE PROVIDED IN ACCORDANCE WITH SECTIONS R312.2.1 AND R312.2.2.

SMOKE AND CO ALARMS

THE LEADING EDGES OF THE TREADS.

SMOKE ALARMS. PER R314.3. SMOKE ALARMS SHALL BE INSTALLED IN THE FOL-LOWING LOCATIONS: IN EACH SLEEPING ROOM, OUTSIDE EACH SEPARATE SLEEPING AREA IN THE IMMEDIATE VICINITY OF THE BEDROOMS, ON EACH ADDITIONAL STORY OF THE DWELLING, INCLUDING BASEMENTS AND HABITABLE ATTICS AND NOT INCLUDING CRAWL SPACES AND UNINHABITABLE ATTICS. IN DWELLINGS OR DWELL- ING UNITS WITH SPLIT LEVELS AND WITHOUT AN INTERVENING DOOR BETWEEN THE ADJACENT LEVELS, A SMOKE ALARM INSTALLED ON THE UPPER LEVEL SHALL SUFFICE FOR THE ADJACENT LOWER LEVEL PROVIDED THAT THE LOWER LEVEL IS LESS THAN ONE FULL STORY BELOW THE UPPER LEVEL. SMOKE ALARMS SHALL BE INSTALLED NOT LESS THAN 3'-0" HORIZONTALLY FROM THE DOOR OR OPENING OF A BATHROOM THAT CONTAINS A BATHTUB OR SHOWER UNLESS THIS WOULD PREVENT PLACEMENT OF A SMOKE ALARM REQUIRED BY SECTION R314.3.

CARBON MONOXIDE ALARMS. PER R315.2.1, NEW CONSTRUCTION. FOR NEW CONSTRUCTION, CARBON MONOXIDE ALARMS SHALL BE PROVIDED IN DWELLING UNITS WHERE EITHER OR BOTH OF THE FOLLOWING CONDITIONS EXIST: THE DWELLING UNIT CONTAINS A FUEL-FIRED APPLIANCE OR THE DWELLING UNIT HAS AN ATTACHED GARAGE WITH AN OPENING THAT COMMUNICATES WITH THE DWELLING UNIT

WINTER | ICE BARRIER | FLOOD |

PER R315.3 CARBON MONOXIDE ALARMS IN DWELLING UNITS SHALL BE INSTALLED OUTSIDE OF EACH SEPARATE SLEEPING AREA IN THE IMMEDIATE VICINITY OF THE BEDROOMS.

AIR

DESIGN LOAD CRITERIA

FIVE(35) FEET AND 2 1/2 STORIES

MAXIMUM BUILDING COVERAGE:

SIXTY PERCENT(60%)

COVERAGE: EIGHTY

PERCENT(80%)

MAXIMUM IMPERVIOUS SURFACE MAXIMUM IMPERVIOUS SURFACE

DESIGN LOADS: PER SECTION R301.1, BUILDINGS AND STRUCTURES, AND PARTS THEREOF, SHALL BE CONSTRUCTED TO SAFELY SUPPORT ALL LOADS, INCLUDING DEAD LOADS, LIVE LOADS, ROOF LOADS, FLOOD LOADS, SNOW LOADS, WIND LOADS AND SEISMIC LOADS AS PRESCRIBED BY CODE. THE CONSTRUCTION OF BUILDINGS AND STRUCTURES IN ACCORDANCE WITH THE PROVISIONS OF THE CODE SHALL RESULT IN A SYSTEM THAT PROVIDES A COMPLETE LOAD PATH THAT MEETS THE REQUIREMENTS FOR THE TRANSFER OF LOADS FROM THEIR POINT OF ORIGIN THROUGH THE LOAD-RESISTING ELEMENTS TO THE FOUNDATION.

66.00 % COMPLIES

MAXIMUM BUILDING COVERAGE: 2,500 SF X .6 =

1,500 ACTUAL = 808 SF, 32.32% (COMPLIES)

MAXIMUM IMPERVIOUS SURFACE COVERAGE:

EIGHTY PERCENT(80%) X 2,500 SF = 2,000 SF

IMPERVIOUS AREA = 2,500 -850 SF = 1,650 SF,

ALTERNATIVE PROVISIONS. AS AN ALTERNATIVE TO THE REQUIREMENTS IN SECTION R301.1, THE FOLLOWING STANDARDS ARE PERMITTED SUBJECT TO THE LIMITATIONS OF THIS CODE AND THE LIMITATIONS THEREIN. WHERE ENGINEERED DESIGN IS USED IN CONJUNCTION WITH THESE STANDARDS, THE DESIGN SHALL COMPLY WITH THE INTERNATIONAL BUILDING CODE AND AF&PA WOOD FRAME CONSTRUCTION MANUAL(WFCM). CONSTRUCTION SYSTEMS. AS PER SECTION R301.1.2, THE REQUIRÈMENTS FOR THIS PROJECT ARE BASED ON PLATFORM CONSTRUCTION FOR LIGHT-FRAME BUILDINGS.

SEISMIC PROVISIONS: PER R301.2.2 DETACHED ONE AND TWO FAMILY DWELLINGS AND ATTACHED SINGLEFAMILY TOWNHOUSES ARE EXEMPT FROM THE SEISMIC REQUIREMENTS OF THIS CODE.

<u>SNOW LOADS</u>. PER R301.2.3 WOOD-FRAMED CONSTRUCTION, COLD- FORMED, STEEL-FRAMED CONSTRUCTION AND MASONRY ANDCONCRETE CONSTRUCTION, AND STRUCTURAL INSULATED PANEL CONSTRUCTION IN REGIONS WITH GROUND SNOW LOADS 70 POUNDS PER SQUARE FOOT OR LESS, SHALL BE IN ACCORDANCE WITH CHAPTERS 5, 6 AND 8

R301.2.4 FLOODPLAIN CONSTRUCTION. PROJECT LOCATION IS NOT WITHIN A FLOOD PLAIN

STORY HEIGHT. PER 301.3 THE WIND AND SEISMIC PROVISIONS OF THIS CODE SHALL APPLY TO BUILDINGS WITH STORY HEIGHTS NOT EXCEEDING THE FOLLOWING: FOR WOOD WALL FRAMING, THE STORY HEIGHT SHALL NOT EXCEED 11'- 7" AND THE LATERALLY UNSUPPORTED BEARING WALL STUD HEIGHT PERMITTED BY TABLE R602.3(5). FOR INSULATING CONCRETE FORM WALLS, THE MAXIMUM STORY HEIGHT SHALL NOT EXCEED 11'-7" AND THE MAXIMUM UNSUPPORTED WALL HEIGHT PER STORY AS PER- MITTED BY SECTION R608 TABLES SHALL NOT EXCEED 10'-0".

LIVE LOAD. R301.5 THE MINIMUM UNIFORMLY DISTRIBUTED LIVE LOAD SHALL BE AS PROVIDED IN TABLE R301.5.

<u>USE</u>	LIVE LOAD
UNINHABITABLE ATTICS WITHOUT STORAGE UNINHABITABLE ATTICS WITH LIMITED STORAGE DECKS GUARDS AND HANDRAILS GUARD IN-FILL COMPONENTS PASSENGER VEHICLE GARAGES ROOMS OTHER THAN SLEEPING ROOMS SLEEPING ROOMS STAIRS	10 PSF 20 PSF 40 PSF 200 LBSS OR 50 PSF 50 PSF 50 PSF 40 PSF 30 PSF 40 PSF

ROOF LOAD. PER R301.6 THE ROOF SHALL BE DESIGNED FOR THE LIVE LOAD INDICATE ${f t}$ IN TABLE R301.6 OR THE SNOW LOAD INDICATED IN TABLE R301.2(1), WHICHEVER IS

ROOF SLOPE	_	Y LOADED AREA II STRUCTURAL MEN	
	0 TO 200	201 TO 600	OVER 600
FLAT OR RISE LESS THAN 4 INCHES PER FOOT (1:3)	20	16	12
RISE 4 INCHES PER FOOT (1:3) TO LESS THAN 12 INCHES PER FOOT (1:1)	16	14	12
RISE 12 INCHES PER FOOT (1:1) AND GREATER	12	12	12

for **Humanity**

Passaic County Habitat For Humanity 146 North 1st Street Paterson, NJ 07522

PROJECT NAME

101 NORTH 3RD STREET SINGLE FAMILY **RESIDENCE**

EN CHEN O'NEIL ARCHITECTS, PLL

646-812-5566 STRUCTURAL ENGINEER: BNJ ENGINEERING PC

29 GANUNG DRIVE

OSSINING, NY 10562

CIVIL ENGINEER:

20 FRANCISCAN WAY

FAIR LAWN, NJ 07410

201-796-0003

GOLDEN & MORAN ENGINEERING PC SPARTA, NJ 07871 973-714-2131

> ISSUE FOR FILING 75% CD SET 03/13/23 50% CD SET 3 25% CD SET DESIGN DEVELOPMENT CONCEPT DESIGN 09/09/22

02/04/23

12/02/22

10/02/22

DATE

DRAWING TITLE

ISSUE/REVISION

COVER SHEET

DRAWING NO.

06/09/2023 As indicated

STAMP & SIGNATURE

NJ LICENSE 20591

SNOW DESIGN | UNDERLAYMENT | HAZARDS | FREEZING INDEX | Speed Topographic Special Wind | Wind-borne DESIGN Weathering Frost-line Termite Debris Zone CATEGORY LOAD TEMP (mph) REQUIRED Effects depth Moderate LESS THAN 1500 N/A N/A Severe 3'-0" 13 F N/A 25 psf 115 mph to heavy

SEISMIC

CLIMACTIC AND GEOGRAPHIC DESIGN CRITERIA

SUBJECT TO DAMAGE FROM

GENERAL FOUNDATION NOTES

REQUIREMENTS. PER R401.2 FOUNDATION CONSTRUCTION SHALL BE CAPABLE OF ACCOMMODATING ALL LOADS IN ACCORDANCE WITH SECTION R301 AND OF TRANSMITTING THE RESULTING LOADS TO THE SUPPORTING SOIL. FILL SOILS THAT SUPPORT FOOTINGS AND FOUNDATIONS SHALL BE DESIGNED, INSTALLED AND TESTED IN ACCORDANCE WITH ACCEPTED ENGINEERING PRACTICE.

<u>DRAINAGE.</u> PER R401.3 SURFACE DRAINAGE SHALL BE DIVERTED TO A STORM SEWER CONVEYANCE OR OTHER *APPROVED* POINT OF COLLECTION THAT DOES NOT CREATE A HAZARD. *LOTS* SHALL BE GRADED TO DRAIN SURFACE WATER AWAY FROM FOUNDATION WALLS. THE *GRADE* SHALL FALL A MINIMUM OF 6" WITHIN THE FIRST 10'-0"

MASONRY. PER R402.4 MASONRY SYSTEMS SHALL BE DESIGNED AND INSTALLED IN ACCORDANCE WITH THIS CHAPTER AND SHALL HAVE A MIN- IMUM SPECIFIED COMPRESSIVE STRENGTH OF 1,500 PSI.

GENERAL. PER R403.1, ALL EXTERIOR WALLS SHALL BE SUPPORTED ON CONTINUOUS SOLID OR FULLY GROUTED MASONRY OR CONCRETE FOOTINGS, CRUSHED STONE FOOTINGS, WOOD FOUNDATIONS, OR OTHER APPROVED STRUCTURAL SYSTEMS WHICH SHALL BE OF SUFFICIENT DESIGN TO ACCOMMODATE ALL LOADS ACCORDING TO SECTION R301 AND TO TRANSMIT THE RESULTING LOADS TO THE SOIL WITHIN THE LIMITATIONS AS DETERMINED FROM THE CHARACTER OF THE SOIL. FOOTINGS SHALL BE SUPPORTED ON UNDISTURBED NATURAL SOILS OR ENGINEERED FILL.

WEATHERING POTENTIAL: CONCRETE FOUNDATIONS STRENGTHA (F¢)	SEVERE MINIMUM SPECIFIED COMPRES
BASEMENT WALLS, FOUNDATIONS AN OTHER CONCRETE NOT EXPOSED TO THE WEATHER	3,500 PSI
BASEMENT SLABS AND INTERIOR SLABS ON GRADE, EXCEPT GARAGE FLOOR SLABS	3,500 PSI
BASEMENT WALLS, FOUNDATION WALLS, EXTERIOR WALLS AND OTHER VERTICAL CONCRETE WORK EXPOSED TO THE WEATHER	3,500 PSI
PORCHES, CARPORT SLABS AND STEPS EXPOSED TO THE WEATHER, AND GARAGE FLOOR SLABS	3,500 PSI

BACKFILL PLACEMENT. PER R404.1.7, BACKFILL SHALL NOT BE PLACED AGAINST THE WALL UNTIL THE WALL HAS SUFFICIENT STRENGTH AND HAS BEEN ANCHORED TO THE FLOOR ABOVE, OR HAS BEEN SUFFICIENTLY BRACED TO PREVENT DAMAGE BY THE BACKFILL.

WEATHERPROOFING AND DAMPROOFING. PER R406.1, WALLS OR PORTIONS THEREOF THAT RETAIN EARTH AND ENCLOSE INTERIOR SPACES AND FLOORS BELOW GRADE SHALL BE WATERPROOFED AND DAMPPROOFED IN ACCORDANCE WITH THIS SEC-TION, WITH THE EXCEPTION OF THOSE SPACES CONTAINING GROUPS OTHER THAN RESIDENTIAL AND INSTITUTIONAL WHERE SUCH OMISSION IS NOT DETRIMENTAL TO THE BUILDING OR OCCUPANCY.

STORY ABOVE GRADE PLANE. PER R406.1.1, WHERE A BASEMENT IS CONSIDERED A STORY ABOVE GRADE AND THE FINISHED GROUND LEVEL ADJACENT TO THE BASEMENT WALL IS BELOW THE BASEMENT FLOOR ELEVATION FOR 25 PERCENT OR MORE OF THE PERIMETER, THE FLOOR AND WALLS SHALL BE DAMPPROOFED IN ACCORDANCE WITH SECTION R406.2 AND A FOUNDATION DRAIN SHALL BE INSTALLED IN ACCORDANCE WITH SECTION R406.4.1. THE FOUNDATION DRAIN SHALL BE INSTALLED AROUND THE PORTION OF THE PERIMETER WHERE THE BASEMENT FLOOR IS BELOW GROUND LEVEL. THE PRO

DAMPPROOFING. PER R406.2, WHERE HYDROSTATIC PRESSURE WILL NOT OCCUR, FLOORS AND WALLS FOR OTHER THAN WOOD FOUNDATION SYS- TEMS SHALL BE DAMPPROOFED IN ACCORDANCE WITH THIS SECTION. PER R406.2.1 FLOORS. DAMPPROOFING MATERIALS FOR FLOORS SHALL BE INSTALLED BETWEEN THE FLOOR AND THE BASE COURSE REQUIRED BY SECTION R406.4.1. WHERE INSTALLED BENEATH THE SLAB, DAMPPROOFING SHALL CONSIST OF NOT LESS THAN 6-MIL (0.006") POLY-ETHYLENE WITH JOINTS LAPPED NOT LESS THAN 6" OR OTHER APPROVED METHODS OR MATERIALS. WHERE PER-MITTED TO BE INSTALLED ON TOP OF THE SLAB, DAMPPROOFING SHALL CONSIST OF MOPPED-ON BITUMEN, NOT LESS THAN 4-MIL (0.004") POLYETHYLENE, OR OTHER APPROVED METHODS OR MATERIALS. JOINTS IN THE MEMBRANE SHALL BE LAPPED AND SEALED IN ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION INSTRUCTIONS PER DAMPPROOFING MATERIALS FOR WALLS SHALL BE INSTALLED ON THE EXTERIOR SURFACE OF THE WALL, AND SHALL EXTEND FROM THE TOP OF THE FOOTING TO ABOVE GROUND LEVEL. DAMPPROOFING SHALL CONSIST OF A BITUMINOUS MATERIAL, 3 POUNDS PER SQUARE YARD (16 N/M2) OF ACRYLIC MODIFIED CEMENT, 1/8" COAT OF SURFACE-BONDING MORTAR COMPLYING WITH ASTM C887, ANY OF THE MATERIALS PERMITTED FOR WATERPROOFING BY SECTION R406.3.2 OR OTHER APPROVED METHODS OR MATERIALS.

 ${\tt WATE\underline{RPROOFING}}.\ R406.3\ {\tt WHERE\ THE\ GROUND-WATER\ INVESTIGATION\ INDICATES\ THAT\ A\ HYDROSTATIC}$ PRESSURE CONDITION EXISTS, AND THE DESIGN DOES NOT INCLUDE A GROUND-WATER CONTROL SYSTEM AS DESCRIBED IN SECTION R406.1.3, WALLS AND FLOORS SHALL BE WATERPROOFED IN ACCORDANCE WITH THIS SECTION. PER R406.3.1, FLOORS REQUIRED TO BE WATERPROOFED SHALL BE OF CONCRETE AND DESIGNED AND CONSTRUCTED TO WITHSTAND THE HYDROSTATIC PRESSURES TO WHICH THE FLOORS WILL BE SUBJECTED. WATERPROOFING SHALL BE ACCOMPLISHED BY PLACING A MEMBRANE OF RUBBERIZED ASPHALT, BUTYL RUBBER, FULLY ADHERED/ FULLY BONDED HDPE OR POLYOLEFIN COMPOSITE MEMBRANE OR NOT LESS THAN 6-MIL (0.006") POLYVINYL CHLORIDE WITH JOINTS LAPPED NOT LESS THAN 6" OR OTHER APPROVED MATERIALS UNDER THE SLAB. JOINTS IN THE MEMBRANE SHALL BE LAPPED AND SEALED IN ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION INSTRUCTIONS. PER R406.3.2. WALLS REQUIRED TO BE WATERPROOFED SHALL BE OF CONCRETE OR MASONRY AND SHALL BE DESIGNED AND CONSTRUCTED TO WITHSTAND THE HYDROSTATIC PRESSURES AND OTHER LATERAL LOADS TO WHICH THE WALLS WILL BE SUBJECTED. WATERPROOFING SHALL BE APPLIED FROM THE BOTTOM OF THE WALL TO NOT LESS THAN 12 INCHES (305 MM) ABOVE THE MAXI- MUM ELEVATION OF THE GROUND-WATER TABLE. THE REMAINDER OF THE WALL SHALL BE DAMPPROOFED IN ACCORDANCE WITH SECTION R406.2.2. WATERPROOFING SHALL CONSIST OF TWO-PLY HOT- MOPPED FELTS, NOT LESS THAN 6-MIL (0.006") POLYVINYL CHLORIDE, 40-MIL (0.040") POLYMER-MODIFIED ASPHALT, 6-MIL (0.006 INCH; 0.152 MM) POLY- ETHYLENE OR OTHER APPROVED METHODS OR MATERIALS CAPABLE OF BRIDGING NONSTRUCTURAL CRACKS. JOINTS IN THE MEMBRANE SHALL BE LAPPED AND SEALED IN ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION INSTRUCTIONS.

CONCRETE FLOORS (ON GROUND)- SECTION R506

GENERAL. PER R506.1,CONCRETE SLAB-ON-GROUND FLOORS SHALL BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH THE PROVISIONS OF THIS SECTION OR ACI 332. FLOORS SHALL BE A MINIMUM 3 ½" THICK. THE SPECIFIED COMPRESSIVE STRENGTH OF CONCRETE SHALL BE AS SET FORTH IN SECTION R402.2.

<u>SITE PREPARATION</u>. PER R506.2, THE AREA WITHIN THE FOUNDATION WALLS SHALL HAVE ALL VEGETATION, TOP SOIL AND FOREIGN MATERIAL REMOVED.

<u>FILL.</u> PER R506.2.1, FILL MATERIAL SHALL BE FREE OF VEGETATION AND FOREIGN MATERIAL. THE FILL SHALL BE COMPACTED TO ENSURE UNIFORM SUPPORT OF THE SLAB, AND EXCEPT WHERE APPROVED, THE FILL DEPTHS SHALL NOT EXCEED 24" FOR CLEAN SAND OR GRAVEL AND 8" FOR EARTH.

<u>BASE</u>. PER R506.2.2, A 4-INCH-THICK BASE COURSE CONSISTING OF CLEAN GRADED SAND, GRAVEL, CRUSHED STONE, CRUSHED CONCRETE OR CRUSHED BLAST-FURNACE SLAG PASSING A 2 $\frac{1}{2}$ " SIEVE SHALL BE PLACED ON THE PREPARED SUB- GRADE WHERE THE SLAB IS BELOW GRADE

<u>VAPOR RETARDER</u>. PER R506.2.3, A 6-MIL (0.006") POLYETHYLENE OR APPROVED VAPOR RETARDER WITH JOINTS LAPPED NOT LESS THAN 6" SHALL BE PLACED BETWEEN THE CONCRETE FLOOR SLAB AND THE BASE COURSE OR THE PREPARED SUBGRADE WHERE NO BASE COURSE EXISTS. <u>EXCEPTION</u>: THE VAPOR RETARDER IS NOT REQUIRED FOR THE FOLLOWING: GARAGES, UTILITY BUILDINGS AND OTHER UNHEATED ACCESSORY STRUCTURES, FOR UNHEATED STORAGE ROOMS HAVING AN AREA OF LESS THAN 70 SQUARE FEET AND CARPORTS, DRIVEWAYS, WALKS, PATIOS AND OTHER FLATWORK NOT LIKELY TO BE ENCLOSED AND HEATED AT A LATER DATE.

EXTERIOR WALL FRAMING NOTES

SAWN LUMBER. PER R602.1.1, SAWN LUMBER SHALL BE IDENTIFIED BY A GRADE MARK OF AN ACCREDITED LUMBER GRADING OR INSPECTION AGENCY AND HAVE DESIGN VALUES CERTIFIED BY AN ACCREDITATION BODY THAT COMPLIES WITH DOC PS 20. IN LIEU OF A GRADE MARK, A CERTIFICATION OF INSPECTION ISSUED BY A LUMBER GRADING OR INSPECTION AGENCY MEETING THE REQUIRE- MENTS OF THIS SECTION SHALL BE ACCEPTED.

WOOD STRUCTURAL PANELS. PER, R602.1.8 WOOD STRUCTURAL PANEL SHEATHING SHALL CONFORM TO DOC PS 1, DOC PS 2 OR, WHEN MANUFACTURED IN CANADA, CSA O437 OR CSA O325. PANELS SHALL BE IDENTIFIED FOR GRADE, BOND CLASSIFICATION, AND PER- FORMANCE CATEGORY BY A GRADE MARK OR CERTIFICATE OF INSPECTION ISSUED BY AN APPROVED AGENCY.

PARTICLEBOARD. PER R602.1.9, PARTICLEBOARD SHALL CONFORM TO ANSI A208.1. PARTICLEBOARD SHALL BE IDENTIFIED BY THE GRADE MARK OR CERTIFICATE OF INSPECTION ISSUED BY AN APPROVED AGENCY

FIBERBOARD. PER R602.1.10, FIBERBOARD SHALL CONFORM TO ASTM C208. FIBERBOARD SHEATHING, WHERE USED STRUCTURALLY, SHALL BE IDENTIFIED BY AN APPROVED AGENCY AS CONFORMING TO ASTM C208.

STUD GRADE. PER R602.2, STUDS SHALL BE A MINIMUM NO. 3, STANDARD OR STUD GRADE LUMBER. EXCEPTION: BEARING STUDS NOT SUPPORTING FLOORS AND NON- BEARING STUDS SHALL BE PERMITTED TO BE UTILITY GRADE LUMBER, PROVIDED THE STUDS ARE SPACED IN ACCORDANCE WITH TABLE R602.3(5).

DESIGN AND CONSTRUCTION. PER R602.3, EXTERIOR WALLS OF WOOD- FRAME CONSTRUCTION SHALL BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH THE PROVISIONS OF THIS CHAPTER AND FIGURES R602.3(1) AND R602.3(2), OR IN ACCORDANCE WITH AWC NDS. COMPONENTS OF EXTERIOR WALLS SHALL BE FASTENED IN ACCORDANCE WITH TABLES R602.3(1) THROUGH R602.3(4). WALL SHEATHING SHALL BE FASTENED DIRECTLY TO FRAMING MEMBERS AND, WHERE PLACED ON THE EXTERIOR SIDE OF AN EXTERIOR WALL, SHALL BE CAPABLE OF RESISTING THE WIND PRESSURES LISTED IN TABLE R301.2(2) ADJUSTED FOR HEIGHT AND EXPOSURE USING TABLE R301.2(3) AND SHALL CONFORM TO THE REQUIREMENTS OF TABLE R602.3(3). WALL SHEATHING USED ONLY FOR EXTERIOR WALL COVERING PURPOSES SHALL COMPLY WITH SECTION R703. STUDS SHALL BE CONTINUOUS FROM SUPPORT AT THE SOLE PLATE TO A SUPPORT AT THE TOP PLATE TO RESIST LOADS PERPENDICULAR TO THE WALL. THE SUPPORT SHALL BE A FOUNDATION OR FLOOR, CEILING OR ROOF DIAPHRAGM OR SHALL BE DESIGNED IN ACCORDANCE WITH ACCEPTED ENGINEERING PRACTICE.

STUD SIZE, HEIGHT AND SPACING. PER R602.3.1, THE SIZE, HEIGHT AND SPACING OF STUDS SHALL BE IN ACCORDANCE WITH TABLE R602.3.(5). EXCEPTIONS: UTILITY GRADE STUDS SHALL NOT BE SPACED MORE THAN 16 INCHES (406 MM) ON CENTER, SHALL NOT SUPPORT MORE THAN A ROOF AND CEILING, AND SHALL NOT EXCEED 8 FEET (2438 MM) IN HEIGHT FOR EXTERIOR WALLS AND LOAD-BEARING WALLS OR 10 FEET (3048 MM) FOR INTERIOR NONLOAD-BEARING WALLS.

TOP PLATE. PER R602.3.2, WOOD STUD WALLS SHALL BE CAPPED WITH A DOUBLE TOP PLATE INSTALLED TO PROVIDE OVERLAPPING AT CORNERS AND INTERSECTIONS WITH BEARING PARTITIONS. END JOINTS IN TOP PLATES SHALL BE OFFSET NOT LESS THAN 24 INCHES). JOINTS IN PLATES NEED NOT OCCUR OVER STUDS. PLATES SHALL BE NOT LESS THAN 2-INCHES NOMINAL THICKNESS AND HAVE A WIDTH NOT LESS THAN THE WIDTH OF THE STUDS. **EXCEPTION**: A SINGLE TOP PLATE USED AS AN ALTERNATIVE TO A DOUBLE TOP PLATE SHALL COMPLY WITH THE FOLLOWING: THE SINGLE TOP PLATE SHALL BE TIED AT CORNERS, INTER-SECTING WALLS, AND AT IN-LINE SPLICES IN STRAIGHT WALL LINES IN ACCORDANCE WITH TABLE R602.3.2. THE RAFTERS OR JOISTS SHALL BE CENTERED OVER THE STUDS WITH A TOLERANCE OF NOT MORE THAN 1 INCH. OMISSION OF THE TOP PLATE IS PERMITTED OVER HEADERS WHERE THE HEADERS ARE ADEQUATELY TIED TO ADJACENT WALL SECTIONS IN ACCORDANCE WITH TABLE R602.3.2.

BEARING STUDS. PER R602.3.3, WHERE JOISTS, TRUSSES OR RAFTERS ARE SPACED MORE THAN 16 INCHES ON CENTER AND THE BEARING STUDS BELOW ARE SPACED 24 INCHES ON CENTER, SUCH MEMBERS SHALL BEAR WITHIN 5 INCHES OF THE STUDS BENEATH. **EXCEPTIONS**: THE TOP PLATES ARE TWO 2-INCH BY 6-INCH OR TWO 3-INCH BY 4-INCH MEMBERS, A THIRD TOP PLATE IS INSTALLED, OR SOLID BLOCKING EQUAL IN SIZE TO THE STUDS IS INSTALLED TO REINFORCE THE DOUBLE TOP PLATE.

<u>BOTTOM (SOLE) PLATE</u>. PER R602.3.4, STUDS SHALL HAVE FULL BEARING ON A NOMINAL 2-BY OR LARGER PLATE OR SILL HAVING A WIDTH NOT LESS THAN TO THE WIDTH OF THE STUDS.

INTERIOR LOAD-BEARING WALLS. PER R602.4, INTERIOR LOAD-BEARING WALLS SHALL BE CONSTRUCTED, FRAMED AND FIREBLOCKED AS SPECIFIED FOR EXTERIOR WALLS.

INTERIOR NONBEARING WALLS. PER R602.5, INTERIOR NONBEARING WALLS SHALL BE PERMITTED TO BE CONSTRUCTED WITH 2" BY 3" STUDS SPACED 24" ON CENTER OR, WHERE NOT PART OF A BRACED WALL LINE, 2" BY 4" FLAT STUDS SPACED AT 16 INCHES (ON CENTER. INTERIOR NONBEARING WALLS SHALL BE CAPPED WITH NOT LESS THAN A SINGLE TOP PLATE. INTERIOR NONBEARING WALLS SHALL BE FIREBLOCKED IN ACCORDANCE WITH SECTION R602.8.

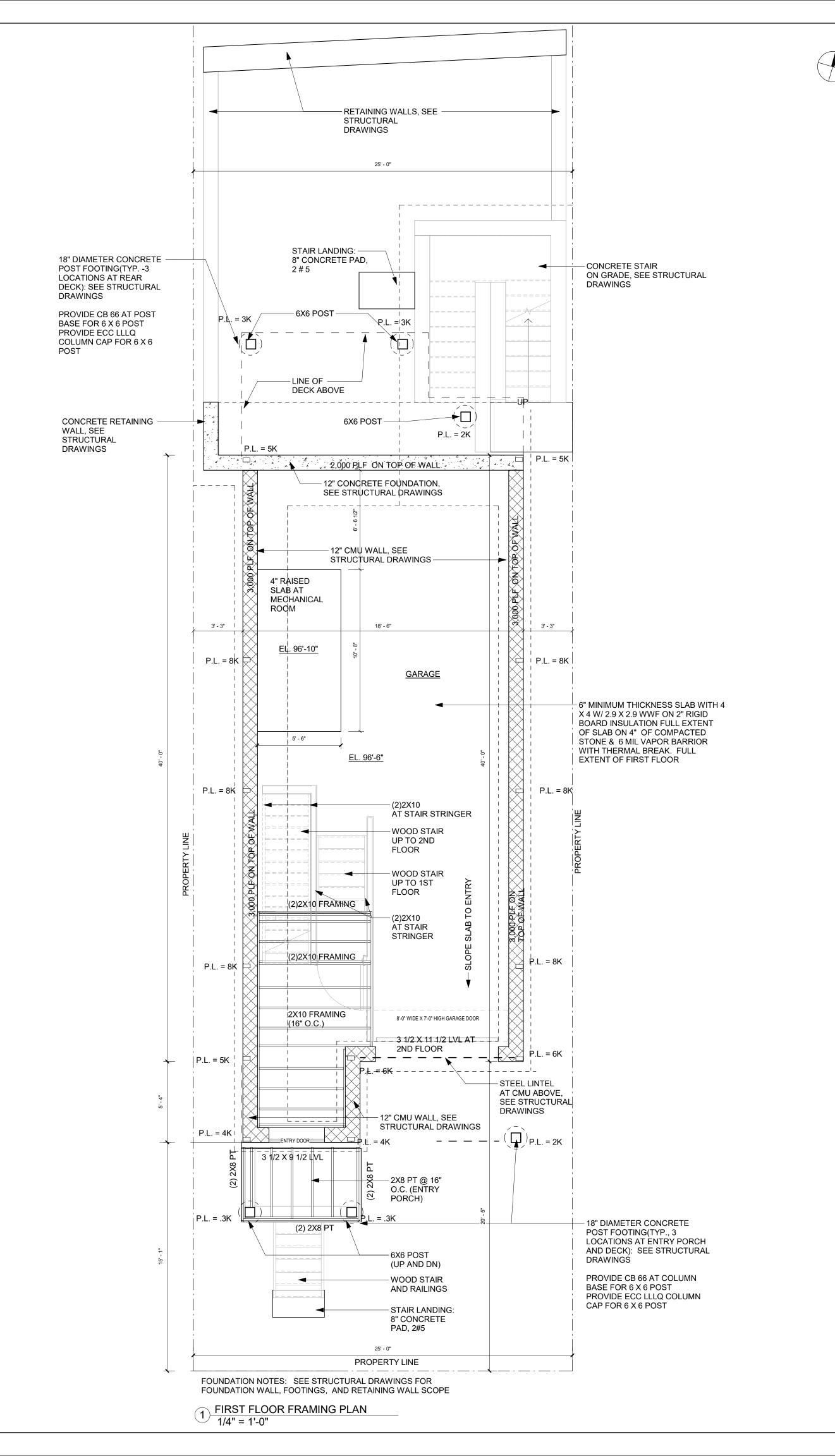
HEADERS. HEADER SPANS TO COMPLY WITH TABLES R602.7(1), R602.7(2) AND R602.7(3).

SINGLE MEMBER HEADERS. PER R602.7.1, SINGLE HEADERS SHALL BE FRAMED WITH A SINGLE FLAT 2-INCH-NOMINAL MEMBER OR WALL PLATE NOT LESS IN WIDTH THAN THE WALL STUDS ON THE TOP AND BOTTOM OF THE HEADER IN ACCORDANCE WITH FIGURES R602.7.1(1) AND R602.7.1(2) AND FACE NAILED TO THE TOP AND BOTTOM OF THE HEADER WITH 10D BOX NAILS (3 INCHES × 0.128 INCHES) SPACED 12 INCHES ON CENTER.

RIM BOARD HEADERS. PER R602.7.2, RIM BOARD HEADER SIZE, MATERIAL AND SPAN SHALL BE IN ACCORDANCE WITH TABLE R602.7(1). RIM BOARD HEADERS SHALL BE CONSTRUCTED IN ACCOR-DANCE WITH FIGURE R602.7.2 AND SHALL BE SUPPORTED AT EACH END BY FULL-HEIGHT STUDS. THE NUMBER OF FULL-HEIGHT STUDS AT EACH END SHALL BE NOT LESS THAN THE NUMBER OF STUDS DISPLACED BY HALF OF THE HEADER SPAN BASED ON THE MAXIMUM STUD SPAC- ING IN ACCORDANCE WITH TABLE R602.3(5). RIM BOARD HEADERS SUPPORTING CONCENTRATED LOADS SHALL BE DESIGNED IN ACCORDANCE WITH ACCEPTED ENGINEERING PRACTICE.

NONBEARING WALLS. PER R602.7.4, LOAD-BEARING HEADERS ARE NOT REQUIRED IN INTERIOR OR EXTERIOR NONBEARING WALLS. A SINGLE FLAT 2"X4" MEMBER SHALL BE PERMITTED TO BE USED AS A HEADER IN INTERIOR OR EXTERIOR NON- BEARING WALLS FOR OPENINGS UP TO 8 FEET IN WIDTH IF THE VERTICAL DISTANCE TO THE PARALLEL NAILING SURFACE ABOVE IS NOT MORE THAN 24" FOR SUCH NON-BEARING HEADERS

FIREBLOCKING REQUIRED. PER R602.8, FIREBLOCKING SHALL BE PROVIDED IN ACCORDANCE WITH





Passaic County Habitat For Humanity 146 North 1st Street Paterson, NJ 07522

PROJECT NAME

101 NORTH 3RD STREET SINGLE FAMILY RESIDENCE

ET CHEN O'NEIL ARCHITECTS, PLLO

29 GANUNG DRIVE OSSINING, NY 10562 646-812-5566

STRUCTURAL ENGINEER: BNJ ENGINEERING PC

20 FRANCISCAN WAY FAIR LAWN, NJ 07410 201-796-0003

CIVIL ENGINEER:

973-714-2131

GOLDEN & MORAN ENGINEERING PC 22 ANGELO DRIVE SPARTA, NJ 07871

6 ISSUE FOR FILING 5 75% CD SET 4 50% CD SET 3 25% CD SET 2 DESIGN

DEVELOPMENT

CONCEPT DESIGN

03/13/23

02/04/23

12/02/22

10/02/22

09/09/22

DATE

DRAWING TITLE

FRAMING PLAN - FIRST FLOOR

DRAWING NO.

A-1.0

DATE: 06/09/2023

SCALE: ____As indicated_

STAMP & SIGNATURE

<u>SAWN LUMBER.</u> PERT R502.1.1, SAWN LUMBER SHALL BE IDENTIFIED BY A GRADE *MARK* OF AN ACCREDITED LUMBER GRADING OR INSPECTION AGENCY AND HAVE DESIGN VALUES CERTIFIED BY AN ACCREDITATION BODY THAT COMPLIES WITH DOC PS 20. IN LIEU OF A GRADE MARK, A CERTIFICATE OF INSPECTION ISSUED BY A LUMBER GRADING OR INSPECTION AGENCY MEETING THE REQUIRE- MENTS OF THIS SECTION SHALL BE ACCEPTED.

PREFABRICATED WOOD I-JOISTS. PER R502.1.1, STRUCTURAL CAPACITIES AND DESIGN PROVISIONS FOR PREFABRICATED WOOD I-JOISTS SHALL BE ESTABLISHED AND MONITORED IN ACCORDANCE WITH ASTM D5055.

STRUCTURAL GLUED LAMINATED TIMBERS. PER R502.1.3 GLUED LAMINATED TIMBERS SHALL BE MANUFACTURED AND IDENTIFIED AS REQUIRED IN ANSI/AITC A190.1 AND ASTM D3737

<u>ALLOWABLE JOIST SPANS.</u> PER R502.3 SPANS FOR FLOOR JOISTS SHALI BE IN ACCORDANCE WITH TABLES R502.3.1(1) AND R502.3.1(2). FOR OTHER GRADES AND SPECIES AND FOR OTHER LOADING CONDITIONS, REFER TO THE AWC STJR.

<u>FLOOR CANTILEVERS</u>. PER R502.3.3 FLOOR CANTILEVER SPANS SHALL NOT EXCEED THE NOMINAL DEPTH OF THE WOOD FLOOR JOIST. FLOOR CANTILEVERS CONSTRUCTED IN ACCORDANCE WITH TABLE R502.3.3(1 SHALL BE PERMITTED WHERE SUPPORTING A LIGHT- FRAME BEARING WALL AND ROOF ONLY. FLOOR CANTILEVERS SUPPORTING AN EXTERIOR BALCONY ARE PERMITTED TO BE CONSTRUCTED IN ACCORDANCE WITH

BEARING. PER R502.6 THE ENDS OF EACH JOIST, BEAM OR GIRDER SHALL 2HAVE NOT LESS THAN 1 1/2" METAL AND NOT LESS THAN 3" ON MASONRY OR CONCRETE EXCEPT WHERE SUPPORTED ON A 1" BY 4" RIBBON STRIP AND NAILED TO THE ADJACENT STUD OR BY THE USE OF APPROVED JOIST HANGERS. THE BEARING ON MASONRY OR CONCRETE SHALL BE DIRECT OR A SILL PLATE OF 2" MINIMUM NOMINAL THICKNESS SHALL BE PROVIDED UNDER THE JOIST, BEAM OR GIRDER. THE SILL PLATE SHALL PROVIDE A MINIMUM NOMI- NAL BEARING AREA OF 48 SQUARE INCHES.

JOIST FRAMING. PER R502.6.2 JOISTS FRAMING INTO THE SIDE OF A WOOD GIRDER SHALL BE SUPPORTED BY *APPROVED* FRAMING ANCHORS OR ON LEDGER STRIPS NOT LESS THAN NOMINAL 2 INCHES BY 2 INCHES (51 MM

LATERAL RESTRAINT AT SUPPORTS. PER R502.7, JOISTS SHALL BE SUPPORTED LATERALLY AT THE ENDS BY FULL-DEPTH SOLID BLOCKING NOT LESS THAN 2" NOMINAL IN THICKNESS; OR BY ATTACHMENT TO A FULL-DEPTH HEADER, BAND OR RIM JOIST, OR TO AN ADJOINING STUD OR SHALL BE OTHERWISE PROVIDED WITH LATERAL SUPPORT TO PREVENT

<u>BRIDGING.</u> PER R502.7.1, JOISTS EXCEEDING A NOMINAL 2" X 12" SHALL BE SUPPORTED LATERALLY BY SOLID BLOCKING, DIAGONAL BRIDGING (WOOD OR METAL), OR A CONTINUOUS 1" X 3" STRIP NAILED ACROSS THE BOTTOI OF JOISTS PERPENDICULAR TO JOISTS AT INTERVALS NOT EXCEEDING 8'-0". EXCEPTION: TRUSSES, STRUCTURAL COMPOSITE LUMBER, STRUCTURAL GLUED-LAMINATED MEMBERS AND I-JOISTS SHALL BE SUPPORTED LATERALLY AS REQUIRED BY THE MANUFACTURER'S

<u>CUTTING, DRILLING AND NOTCHING.</u> STRUCTURAL FLOOR MEMBERS SHALL NOT BE CUT, BORED OR NOTCHED IN EXCESS OF THE LIMITATIONS SPECIFIED IN THIS SECTION. SEE FIGURE R502.8

<u>FASTENING.</u> PER R502.9 FLOOR FRAMING SHALL BE NAILED IN ACCOR-DANCE WITH TABLE R602.3(1). WHERE POSTS AND BEAM OR GIRDER CONSTRUCTION IS USED TO SUPPORT FLOOR FRAMING, POSITIVE CON-NECTIONS SHALL BE PROVIDED TO ENSURE AGAINST UPLIFT AND LATERAL DISPLACEMENT.

FRAMING OF OPENINGS. PER R502.10, OPENINGS IN FLOOR FRAMING HALL BE FRAMED WITH A HEADER AND TRIMMER JOISTS. WHERE THE HEADER JOIST SPAN DOES NOT EXCEED 4'-0". THE HEADER JOIST SHALI BE A SINGLE MEMBER THE SAME SIZE AS THE FLOOR JOIST. SINGLE TRIMMER JOISTS SHALL BE USED TO CARRY A SINGLE HEADER JOIST THAT IS LOCATED WITHIN 3'-0" OF THE TRIMMER JOIST BEARING. WHERE THE HEADER JOIST SPAN EXCEEDS 4'-0" THE TRIMMER JOISTS AND THE HEADER JOIST SHALL BE DOUBLED AND OF SUFFICIENT CROSS SECTION TO SUPPORT THE FLOOR JOISTS FRAMING INTO THE HEADER.

DRAFTSTOPPING REQUIRED. PER R502.12, DRAFTSTOPPING SHALL BE PROVIDED IN ACCORDANCE WITH SECTION R302.12.

FIREBLOCKING REQUIRED. PER R502.13, FIREBLOCKING SHALL BE PRO-VIDED IN ACCORDANCE WITH SECTION R302.11.

WOOD STRUCTURAL PANEL SHEATHING (R503.2)

IDENTIFICATION AND GRADE. PER R503.2.1 WOOD STRUCTURAL PANEL SHEATHING USED FOR STRUCTURAL PURPOSES SHALL CONFORM TO DOC PS 1, DOC PS 2, CSA O437 OR CSA O325. PANELS SHALL BE IDENTIFIED FOR GRADE, BOND CLASSIFICATION AND PERFORMANCE CATEGORY BY A GRADE MARK OR CERTIFICATE OF INSPECTION ISSUED BY AN APPROVED AGENCY. THE PERFORMANCE CATEGORY VALUE SHALL BE USED AS THE "NOMINAL PANEL THICKNESS" OR "PANEL THICKNESS" WHEREVER REFERENCED IN THIS CODE

<u>SUBFLOOR AND COMBINED SUBFLOOR UNDERLAYMENT</u>. PER R503.2.1.1, WHERE USED AS SUBFLOORING OR COMBINATION SUB-FLOOR UNDERLAYMENT, WOOD STRUCTURAL PANELS SHALL BE OF ONE OF THE GRADES SPECIFIED IN TABLE R503.2.1.1(1). WHERE SANDED PLYWOOD IS USED AS COMBINATION SUBFLOOR UNDER- LAYMENT, THE GRADE, BOND CLASSIFICATION, AND PERFORMANCE CATEGORY SHALL BE AS SPECIFIED IN TABLE R503.2.1.1(2).

ALLOWABLE SPANS. PER R503.2.2 THE MAXIMUM ALLOWABLE SPAN FOR WOOD STRUCTURAL PANELS USED AS SUBFLOOR OR COMBINATION SUBFLOOR UNDERLAYMENT SHALL BE AS SET FORTH IN TABLE R503.2.1.1(1), OR APA E30. THE MAXIMUM SPAN FOR SANDED PLYWOOD COMBINATION SUBFLOOR UNDERLAYMENT SHALL BE AS SET FORTH IN TABLE R503.2.1.1(2).

INSTALLATION. PER R503.2.3, WOOD STRUCTURAL PANELS USED AS SUBFLOOR OR COMBINATION SUBFLOOR UNDERLAYMENT SHALL BE ATTACHED TO WOOD FRAMING IN ACCORDANCE WITH TABLE R602.3(1) AND SHALL BE ATTACHED TO COLD-FORMED STEEL FRAM- ING IN ACCORDANCE WITH TABLE R505.3.1(2). PARTICLEBOARD.(R503.3)

IDENTIFICATION AND GRADE. PER R503.3.1, PARTICLEBOARD SHALL CONFORM TO ANSI A208.1 AND SHALL BE SO IDENTIFIED BY A GRADE MARK OR CERTIFICATE OF INSPECTION ISSUED BY AN APPROVED AGENCY.

FLOOR UNDERLAYMENT. PER R503.3.2, PARTICLEBOARD FLOOR UNDERLAYMENT SHALL CONFORM TO TYPE PBU AND SHALL BE NOT LESS

THAN 1/4" IN THICKNESS

TABLE R602.3(1).

INSTALLATION. PER R503.3.3 PARTICLEBOARD UNDERLAYMENT SHALL BE INSTALLED IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE MANUFACTURER AND ATTACHED TO FRAMING IN ACCORDANCE WITH

EXTERIOR DECKS SECTION R507

DECK FRAMING NOTES

<u>DECKS</u>. PER R507.1, WOOD-FRAMED DECKS SHALL BE IN ACCORDANCE WITH THIS SECTION OR SECTION R301 FOR MATERIALS AND CONDITIONS NOT PRESCRIBED HEREIN. WHERE SUPPORTED BY ATTACHMENT TO AN EXTERIOR WALL, DECKS SHALL BE POSITIVELY ANCHORED TO THE PRIMARY STRUCTURE AND DESIGNED FOR BOTH VERTICAL AND LATERAL LOADS. SUCH ATTACHMENT SHALL NOT BE ACCOMPLISHED BY THE USE OF TOENAILS OR NAILS SUBJECT TO WITHDRAWAL.

DECK PER R507.2, LEDGER CONNECTION TO BAND JOIST. DECK LEDGER CONNECTIONS TO BAND JOISTS SHALL BE IN ACCORDANCE WITH TABLES R507.2 AND R507.2.1, AND FIGURES R507.2.1(1) AND R507.2.1(2). FOR OTHER GRADES, SPECIES, CONNECTION DETAILS AND LOADING CONDITIONS, DECK LEDGER CONNECTIONS SHALL BE DESIGNED IN ACCORDANCE WITH

LEDGER DETAILS. PER R507.2.1, DECK LEDGERS INSTALLED IN ACCORDANCE WITH SECTION R507.2 SHALL BE A MINIMUM 2"X8" NOMINAL, PRESSURE-PRESERVATIVE-TREATED SOUTHERN PINE, INCISED PRESSURE-PRESERVATIVE-TREATED HEM-FIR, OR APPROVED, NATURALLY DURABLE, NO. 2 GRADE OR BETTER LUMBER. DECK LEDGERS INSTALLED IN ACCORDANCE WITH SECTION R507.2 SHALL NOT SUPPORT CONCENTRATED LOADS FROM BEAMS OR GIRDERS. DECK LEDGERS SHALL NOT BE SUPPORTED ON STONE OR MASONRY VENEER.

BAND JOIST DETAILS. PER R507.2.2, BAND JOISTS ATTACHED BY A LEDGER IN ACCORDANCE WITH SECTION R507.2 SHALL BE A MINIMUM 2" NOMINAL SOLID-SAWN, SPRUCE-PINE-FIR LUMBER OR A MINIMUM 1" BY 9 1/2" JOISTS ATTACHED BY A LEDGER IN ACCORDANCE WITH SECTION R507.2 SHALL BE FULLY SUPPORTED BY A WALL OR SILL PLATE BELOW.

FASTENERS USED IN DECK LEDGER CONNECTIONS IN ACCORDANCE WITH TABLE R507.2 SHALL BE HOT-DIPPED GALVANIZED OR STAINLESS STEEL AND SHALL BE INSTALLED IN ACCORDANCE WITH TABLE R507.2.1 AND FIGURES R507.2.1(1) AND

<u>PLASTIC COMPOSITE DECK BOARDS, STAIR TREADS, GUARDS, OR</u> HANDRAILS. PER R507.3 ,PLASTIC COMPOSITE EXTERIOR DECK BOARDS, STAIR TREADS, GUARDS AND HANDRAILS SHALL COMPLY WITH THE REQUIREMENTS OF ASTM D7032 AND THE REQUIREMENTS OF SECTION 507.3.

LABELING. PER R507.3.1, PLASTIC COMPOSITE DECK BOARDS AND STAIR TREADS, OR THEIR PACKAGING, SHALL BEAR A LABEL THAT INDICATES COMPLIANCE TO ASTM D7032 AND INCLUDES THE ALLOW- ABLE LOAD AND MAXIMUM ALLOWABLE SPAN DETERMINED IN ACCORDANCE WITH ASTM D7032. PLASTIC OR COMPOSITE HANDRAILS AND GUARDS, OR THEIR PACKAGING, SHALL BEAR A LABEL THAT INDICATES COMPLIANCE TO ASTM D7032 AND INCLUDES THE MAXIMUM ALLOWABLE SPAN DETERMINED IN ACCORDANCE WITH ASTM D7032.

FLAME SPREAD INDEX. PER R507.3.2, PLASTIC COMPOSITE DECK BOARDS, STAIR TREADS, GUARDS, AND HANDRAILS SHALL EXHIBIT A FLAME SPREAD INDEX NOT EXCEEDING 200 WHEN TESTED IN ACCOR- DANCE WITH ASTM E84 OR UL 723 WITH THE TEST SPECIMEN REMAINING IN PLACE DURING THE TEST. EXCEPTION: PLASTIC COMPOSITES DETERMINED TO BE NONCOMBUSTIBLE.

DECAY RESISTANCE. PER R507.3.3, PLASTIC COMPOSITE DECK BOARDS, STAIR TREADS, GUARDS AND HANDRAILS CONTAINING WOOD, CELLULOSIC OR OTHER BIODEGRADABLE MATERIALS SHALL BE DECAY RESISTANT IN ACCORDANCE WITH ASTM D7032.

ERMITE RESISTANCE. PER R507.3.4, WHERE REQUIRED BY SECTION 318, PLASTIC COMPOSITE DECK BOARDS, STAIR TREADS GUARDS AND HANDRAILS CONTAINING WOOD, CELLULOSIC OR BIODEGRADABLE MATERIALS SHALL BE TERMITE RESISTANT IN ACCORDANCE WITH ASTM D7032.

DECKING. PER R507.4, MAXIMUM ALLOWABLE SPACING FOR JOISTS SUPPORTING DECKING SHALL BE IN ACCORDANCE WITH TABLE R507.4. WOOD DECKING SHALL BE ATTACHED TO EACH SUPPORTING MEMBER WITH NOT LESS THAN (2) 8D THREADED NAILS OR (2) NO. 8 WOOD SCREWS.

DECK JOISTS. PER R507.5, MAXIMUM ALLOWABLE SPANS FOR WOOD DECK JOISTS, AS SHOWN IN FIGURE R507.5, SHALL BE IN ACCORDANCE WITH TABLE R507.5. DECK JOISTS SHALL BE PERMITTED TO CANTILEVER NOT GREATER THAN ONE-FOURTH OF THE ACTUAL, ADJACENT JOIST SPAN.

DECK BEAMS. MAXIMUM ALLOWABLE SPANS FOR WOOD DECK BEAMS, AS SHOWN IN FIGURE R507.6, SHALL BE IN ACCORDANCE WITH TABLE R507.6. BEAM PLIES SHALL BE FASTENED WITH TWO ROWS OF 10D (3-INCH × 0.128-INCH) NAILS MINIMUM AT 16" (406 MM) ON CENTER ALONG EACH EDGE. BEAMS SHALL BE PERMITTED TO CANTILEVER AT EACH END UP TO ONE-FOURTH OF THE ACTUAL BEAM SPAN. SPLICES OF MULTISPAN BEAMS SHALL BE LOCATED AT INTERIOR POST LOCATIONS

LATERAL RESTRAINT AT SUPPORTS. PER R507.5.1 JOIST ENDS AND BEARING LOCATIONS SHALL BE PROVIDED WITH LATERAL RESTRAINT TO PREVENT ROTATION. WHERE LATERAL RESTRAINT IS PROVIDED BY JOIST HANGERS OR BLOCKING BETWEEN JOISTS THEIR DEPTH SHALL EQUAL NOT LESS THAN 60 PERCENT OF THE JOIST DEPTH. WHERE LATERAL RESTRAINT IS PROVIDED BY RIM JOISTS, THEY SHALL BE SECURED TO THE END OF EACH JOIST WITH NOT LESS THAN (3) 10D (3-INCH 0.128-INCH) NAILS OR (3) NO. 10 3-INCH LONG WOOD SCREWS.

INSTALLATION OF PLASTIC COMPOSITES. PER 507.3.5, PLASTIC COM- POSITE DECK BOARDS, STAIR TREADS, GUARDS AND HANDRAILS SHALL BE INSTALLED IN ACCORDANCE WITH THIS CODE AND THE MANUFACTURER'S INSTRUCTIONS

DECK JOIST AND DECK BEAM BEARING. PER R507.7 THE ENDS OF EACH JOIST AND BEAM SHALL HAVE NOT LESS THAN 1 ½ OF BEARING ON WOOD OR METAL AND NOT LESS THAN 3 INCHES (76 MM) ON CONCRETE OR MASONRY FOR THE ENTIRE WIDTH OF THE BEAM. JOIST FRAMING INTO THE SIDE OF A LEDGER BOARD OR BEAM SHALL BE SUPPORTED BY APPROVED JOIST HANGERS. JOISTS BEARING ON A BEAM SHALL BE CONNECTED TO THE BEAM TO RESIST LATERAL DIS- PLACEMENT

DECK POST TO DECK BEAM. PER R507.7.1, DECK BEAMS SHALL BE ATTACHED TO DECK POSTS IN ACCORDANCE WITH FIGURE R507.7 OR BY OTHER EQUIVALENT MEANS CAPABLE TO RESIST LATERAL DIS- PLACEMENT. MANUFACTURED POST-TO-BEAM CONNECTORS SHALL BE SIZED FOR THE POST AND BEAM SIZES. ALL BOLTS SHALL HAVE WASHERS UNDER THE HEAD AND NUT.

<u>DECK POSTS</u>. PER R507.8, FOR SINGLE-LEVEL WOOD-FRAMED DECKS WITH BEAMS SIZED IN ACCORDANCE WITH TABLE R507.6. DECK POST SIZE SHALL BE IN ACCORDANCE WITH TABLE R507.8.

SURROUNDING SOILS OR CONCRETE PIERS

DECK POST TO DECK FOOTING. PER R507.8.1, POSTS SHALL BEAR ON FOOTINGS IN ACCORDANCE WITH SECTION R403 AND FIGURE R507.8.1. POSTS SHALL BE RESTRAINED TO PREVENT LATERAL DIS-PERMANENT TRUSS MEMBER BRACING LOCATION. PLACEMENT AT THE BOTTOM SUPPORT. SUCH LATERAL RESTRAINT SHALL BE PROVIDED BY MANUFACTURED CONNECTORS INSTALLED IN ACCORDANCE WITH SECTION R507 AND THE MANUFACTURERS' INSTRUCTIONS OR A MINIMUM POST EMBEDMENT OF 12" IN

TRUSS DESIGN DRAWINGS. PER R802.10.1, TRUSS DESIGN DRAWINGS, PREPARED IN CONFORMANCE TO SECTION R802.10.1, SHALL BE PROVIDED TO THE BUILDING OFFICIAL AND APPROVED PRIOR TO INSTALLATION. TRUSS DESIGN DRAWINGS AND TRUSS LAYOUT DRAWINGS SHALL BE PROVIDED WITH THE SHIPMENT OF TRUSSES. DELIV- ERED TO THE JOB SITE. TRUSS DESIGN DRAWINGS SHALL INCLUDE, AT A MINIMUM, THE FOLLOWING INFORMATION: SLOPE OR DEPTH, SPAN AND SPACING, LOCATION OF ALL JOINTS, REQUIRED BEARING WIDTHS, DESIGN LOADS AS APPLICABLE., TOP CHORD LIVE LOAD (AS DETERMINED FROM SECTION R301.6), TOP CHORD DEAD LOAD, BOTTOM CHORD LIVE LOAD, BOTTOM CHORD DEAD LOAD, CONCENTRATED LOADS AND THEIR POINTS OF APPLICATION, CONTROLLING WIND AND EARTHQUAKE LOADS, ADJUSTMENTS TO LUMBER AND JOINT CONNECTOR DESIGN VALUES FOR CONDITIONS OF USE, EACH REACTION FORCE AND DIRECTION, JOINT CONNECTOR TYPE AND DESCRIPTION SUCH AS SIZE, THICKNESS OR GAGE AND THE DIMENSIONED LOCATION OF EACH JOINT CONNECTOR EXCEPT

3 1/2" X 11-7/8 VL

AJS-20X11-7/8

@16" O.C.

NORTH WALL(42'-5" AVG. SEP.)

↑ 3 1/2 X 11 7/8 PT PL

- HOLD DOWN

3 1/2 X 11 7/8 PTP

2' - 9"

- (2)-1-3/4 X 11-7/8 VL

RIM JOISTS

→ AJS-20X11-7/8 @16" O.C.

- FRAME SIDES

AJS-20X11-7/8 @16" O.C.

ON TOP OF FOUNDATION

OF FOUNDATION)

3 1/2 X 11-7/8 VL

WALL(TYP. FULL PERIMETER

AJS-20X11-7/8 @16" O.C.

3 1/2" X 11-7/8 VL

- HOLD DOWN

HOLD DOWN

1/4" = 1'-0"

3 1/2 X 11-7/8 VL

4X6 PSL POSTS(UP)

OF DUCT OPENING

BETWEEN JOISTS

WITH 2X10 FRAMING

-6X6 POST(DN)

HOLD DOWN -

HOLD DOWN -

HOLD DOWN -

2x8 OUTER JOIST

6X6 POST(UP & DN) -

2ND FLOOR FRAMING PLAN

<u>SOUTH WALL(42'-5" AVG. SEP.)</u>

BWP PROVIDED = 10'-2"

(2)-1-3/4 X 11-7/8 VL

-6X6 POST(DN)

(2)-2x8 SILL PLATE

HOLD DOWN

4X6 PSL POST

-4X6 PSL POST(UP)

- 4X6 PSL POSTS(UP)

HOLD DOWN

LEDGER

- (2)-2X6 POSTS(UP)

-(1)-3 1/2 11 7/8 PT DECK

- (2)2x8 PT OUTER JOIST

ON TOP OF FOUNDATION

(2)-2X6 POSTS(UP)

(1)-3x8 PT DECK LEDGERWALL

HOLD DOWN -

4X6 PSL POST -

4X6 PSL POST

HOLD DOWN -

HOLD DOWN -

4X6 PSL POST -

BWP PROVIDED = 7'-9"

6X6 POST(DN) —

(2)-2X6 POSTS(UP) -

HOLD DOWN —

4X6 PSL POST(UP)

HOLD DOWN -

(2)-2x10 SILL PLATE

ON TOP OF

WALL

FOUNDATION

HOLD DOWN

HOLD DOWN —

HOLD DOWN —

6X6 PSL POST(DN)

ROOF TRUSS NOTES

3 1/2 X 11 7/8 PT PL

(LOW) —

LL = 40 PSF

DL = 10 PSF

TL = 50 PSF

4X6 PSL POST(UP)

WHERE SYMMETRICALLY LOCATED RELATIVE TO THE JOINT INTERFACE, LUMBER SIZE, SPECIES AND GRADE FOR EACH MEMBER, CONNECTION REQUIREMENTS FOR: TRUSS TO GIRDER-TRUSS, TRUSS PLY TO PLY, FIELD SPLICES, CALCULATED DEFLECTION RATIO AND/OR MAXIMUM DESCRIPTION FOR LIVE AND TOTAL LOAD, MAXIMUM AXIAL COMPRESSION FORCES IN THE TRUSS MEMBERS TO ENABLE THE BUILDING DESIGNER TO DESIGN THE SIZE, CONNECTIONS AND ANCHORAGE OF THE PERMA- NENT CONTINUOUS LATERAL BRACING. FORCES SHALL BE SHOWN ON

OOD TRUSSES. PER R802.10.2, DESIGN SHALL BE DESIGNED IN ACCORDANCE VITH ACCEPTED ENGINEERING PRACTICE. THE DESIGN AND MANUFACTURE OF METAL-PLATE-CONNECTED WOOD TRUSSES SHALL COMPLY WITH ANSI/TPI 1. THE TRUSS DESIGN DRAWINGS SHALL BE PREPARED BY A REGISTERED PROFESSIONAL WHERE REQUIRED BY THE STATUTES OF THE JURISDICTION IN WHICH THE PROJ-ECT IS TO BE CONSTRUCTED IN ACCORDANCE WITH SECTION R106.1

THE TRUSS DESIGN DRAWING OR ON SUPPLEMENTAL DOCUMENTS, REQUIRED

TRUSS BRACING. PER R802.10.3, TRUSSES SHALL BE BRACED TO PREVENT ROTATION AND PROVIDE LATERAL STABILITY IN ACCORDANCE WITH THE REQUIREMENTS SPECIFIED IN THE CONSTRUCTION DOCUMENTS FOR THE BUILDING AND ON THE INDIVIDUAL TRUSS DESIGN DRAWINGS. IN THE ABSENCE OF SPECIFIC BRACING REQUIREMENTS, TRUSSES SHALL BE BRACED IN ACCORDANCE WITH ACCEPTED INDUSTRY PRACTICE SUCH AS THE SBCA BUILDING COMPONENT SAFETY INFORMATION (BCSI) GUIDE TO GOOD PRACTICE FOR HANDLING, INSTALLING & BRACING OF METAL PLATE CONNECTED WOOD TRUSSES

HOLD DOWN -

<u>LEGEND</u>

AJS = BOISE CASCADE

FOUNDATION WALLS

HOLD DOWN

SEE RIM BOARD/ HEADER DETAIL

HDU-SDS2.5 HOLD-DOWN AT BUILDING CORNERS AND BEAM

LOADS, SEE TYPICAL HOLD DOWN DETAILS ON DWG. A5.2 FOR

AJS-20X11-7/8 @16" O.C.

3 1/2 X 11-7/8 VL

3 1/2 X 11-7/8 VL

3 1/2 X 11-7/8 VL

- HOLD DOWN AJS-20X11-7/8 @16" O.C.

HOLD DOWN-3 1/2 X 11-7/8 VL

AJS-20X11-7/8

2' - 4"

HOLD DOWN -

3RD FLOOR / LOW ROOF FRAMING PLAN

@16" O.C.

// | | - - - | | | | |

2' - 4"

1/4" = 1'-0"

BWP

FRAME SIDES

AJS-20X11-7/8 @16" O.C.

(2)2x6 SILL PLATE

AT TOP OF WALL(TYP.)

AJS-20X11-7/8 @16" O.C.

OF DUCT OPENING

WITH 2X10 FRAMING

BETWEEN JOISTS -

NORTH WALL(42'-5" AVG. SEP.)

BWP LENGTH PROVIDED = 12'-0"

BWP

HOLD DOWN -

HOLD DOWN —

HOLD DOWN-

3 1/2 X 7 3/4 LVL LEDGER 2'-6"

3 1/2 X 7 3/4 LVL

IN ACCORDANCE WITH SECTION R301.1

EACH END OF A BRACED WALL LINE

TABLE R602..10.3(2)

PARALLEL BRACED WALL LINES IS 60'-0" (COMPLIES)

-2X8 ROOF

FRAMING(LOW

TO LEDGER

BRACED WALL PANELS

PERPENDICULAR

ROOF PITCH (3:12) →

1' - 6 1/2'

HOLD DOWN

-4X6 PSL POST

-4X6 PSL POST

-4X6 PSL POST

- HOLD DOWN

-2X8 RAFTER

-6X6 POST(DN)

SOUTH WALL(42'-5" AVG. SEP.):

BWP PROVIDED = 10'-2"

3RD FLOOR

DL = 10 PSF

TL = 40 PSF

WALL BRACING. PER R602.10, BUILDINGS SHALL BE BRACED IN

R602.12. WHERE A BUILDING, OR PORTION THEREOF, DOES NOT

ACCORDANCE WITH THIS SECTION OR, WHEN APPLICABLE, SECTION

COMPLY WITH ONE OR MORE OF THE BRACING REQUIREMENTS IN THIS

SECTION, THOSE PORTIONS SHALL BE DESIGNED AND CONSTRUCTED

SPACING BETWEEN PARRALELL BRACED WALL LINES SHALL BE PER

LOCATION: BRACED WALL PANEL SHALL BEGIN WITHIN 10'-0" FROM

BRACING ALONG EACH BRACED WALL LINE SHAL BE AS FOLLOW:

ALL BULDING IN SEISMIC DESIGN CATEGORY A AND B SHALL USE

TABLE R602.10.3(1) AND THE APPLICABLE ADJUSMENT FACTORS IN

R602.10.2.3 MINIMUM NUMBER OF BRACED WALL PANELS: BRACED

2 BRACED WALL PANELS OF ANY LENGTH OR ONE BRACED PANEL

16'-0" SHALL HAVE NOT LESS THAN TWO BRACED WALL PANELS

WALLS WITH A LENGHT OF 16'-0" OR LESS SHALL HAVE NOT LESS THAN

EQUAL TO 48 INCHES OR MORE. BRACED WALL LINES GREATER THAN

TABLE R602.10.1.3: MAXIMUM SPACING FOR WIND BRACING BETWEEN

<u>R602.10.3 REQUIRED LENGHT OF BRACING:</u> THE REQUIRED LENGTH OF

L = 30PSF

FRAMING(HIGH)

LINES, WITH MINIMUM 4,000 DF/SP ALLOWABLE TENSIONS

 \Box — \Box AT TYPICAL WINDOW/DOOR OPENINGS,

LTERATIONS TO TRUSSES. PER R802.10.4, TRUSS MEMBERS SHALL NOT BE CUT, NOTCHED, DRILLED, SPLICED OR OTHERWISE ALTERED IN ANY WAY WITHOUT THE APPROVAL OF A REGISTERED DESIGN PROFESSIONAL.

TRUSS IDENTIFICATION. PER R802.10.5, EACH TRUSS SHALL BE LABELED OR OTHERWISE INDELIBLY MARKED AT THE FACTORY WITH THE INDIVIDUAL TRUSS NUMBER AS ASSIGNED IN THE TRUSS LAYOUT PLAN. THE INDELIBLE MARKING OR LABEL SHALL BE LOCATED ON THE BOTTOM CHORD OF THE TRUSS, INSIDE THE BEARING POINTS. WHEN INDELIBLE MARKINGS ARE USED, EACH DIGIT SHALL BE NO LESS THAN ONE INCH HIGH. WHEN LABELS ARE USED, THE LABEL SHALL BE A MINIMUM OF FIVE INCHES BY THREE INCHES AND SHALL BE AFFIXED TO THE TRUSS BY A TRUSS PLATE. LABELS SHALL REMAIN AFFIXED TO THE TRUSS.

UPLIFT RESISTANCE. PER R802.11.1, ROOF ASSEMBLIES SHALL HAVE UPLIFT RESISTANCE IN ACCORDANCE WITH SECTIONS R802.11.1.1 AND R802.11.1.2.

TRUSS UPLIFT RESISTANCE. PER R802.11.1.1, TRUSSES SHALL BE ATTACHED TO SUPPORTING WALL ASSEMBLIES BY CONNECTIONS CAPABLE OF RESISTING UPLIFT FORCES AS SPECIFIED ON THE TRUSS DESIGN DRAWINGS FOR THE ULTIMATE DESIGN WIND SPEED AS DETERMINED BY FIGURE R301.2(4)A AND LISTED IN TABLE R301.2(1) OR AS SHOWN ON THE CONSTRUCTION DOCUMENTS. UPLIFT FORCES SHALL BE PERMITTED TO BE DETER- MINED AS SPECIFIED BY TABLE R802.11. IF APPLICABLE, OR AS DETERMINED BY ACCEPTED ENGINEERING PRACTICE

INSTALL SHEATHED BLOCKING BETWEEN EACH TRUSS PER I.R.C. 2021 NJ EDITION, STRAP TRUSSES TO WALL STUD WITH SIMPSON H7Z HURRICANE TIES

ROOF FRAMING NOTES

-2X6 DOUBLE SILL

TOP OVERHANG OF TRUSS +

EDGE OF CLERESTORY WALL -

HIGHPOINT OF TRUSS →

|◀ 2X6 DOUBLE SILL

ROOF PITCH

■ ROOF PITCH

1/4" = 1'-0"

Penetration

Common

(2.0" ×

0.113")

Common

(2.5" ×

0.131")

WOOD STRUCTURAL PANEL SHEATHING

MINIMUM

WOOD

STRUCTURAL

RATING

ROOF(ATTIC)

LL = 10 PSF

DL = 10 PSF

TL = 20 PSF

(4:12)

PLATE AT TOP OF

PLATE

ROOF PITCH

ATTIC ACCESS 22" X 30" WITH UNOBSTRUCTED HEADROOM WILL BE PROVIDED IF ATTIC HAS A HEADROOM OF MORE THAN 30" OR MORE WITH ROOF TRUSS DESIGN. NO STORAGE OR MECHANICAL EQUIPMENT WILL BE LOCATED IN THE ATTIC

PITCH(4:12)

─ (2)2+4 FRAMED INTO BOTTON

MOUNTED HANGERS

PITCH(4:12)

2X6 DOUBLE SILL

PLATE

(2)2X6 AT TOP

TABLE R602.3(3)

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

MINIMUM MAXIMUM

(inches)

PANEL

(inches)

PANEL SPAN THICKNESS SPACING

OF WALL BELOW

2X10 RAFTER FRAMING

CATHEDRAL CEILING

TRUSS CHORD WITH FACE

Passaic County

201-796-0003

CIVIL ENGINEER:

— 2X6 DOUBLE

SILL PLATE A

TOP OF WALI

GOLDEN & MORAN ENGINEERING PC SPARTA, NJ 07871 973-714-2131

ISSUE FOR FILING 5 75% CD SET 4 50% CD SET 3 25% CD SET DESIGN DEVELOPMENT

STAMP & SIGNATURE

1.75 24/16 24 6 12 140 115 110 For SI: 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. Table is based on wind pressures acting toward and away from building surfaces in accordance with Section R301.2. Lateral bracing requirements shall be in accordance with Section R602.10. 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 o.c. or 24 o.c. shall be permitted as an alternate to panels with a 24/16 span rating. Wall-16 and Plywood siding 16 o.c. shall be used with studs spaced not more than 16 inches on center.

PANEL NAIL

SPACING

(inches (inches

Edges

o.c.)

for Humanity Passaic County Habitat For Humanity 146 North 1st Street Paterson, NJ 07522 **PROJECT NAME 101 NORTH 3RD STREET** SINGLE FAMILY **RESIDENCE** ELL CHEN O'NEIL ARCHITECTS, PLL 29 GANUNG DRIVE OSSINING, NY 10562 646-812-5566 STRUCTURAL ENGINEER BNJ ENGINEERING PC 20 FRANCISCAN WAY FAIR LAWN, NJ 07410

> 06/09/23 03/13/23 02/04/23 12/02/22 10/02/22 CONCEPT DESIGN 09/09/22 **ISSUE/REVISION** DATE

DRAWING TITLE

FRAMING PLANS-2ND FL, 3RD FL, ROOF

DRAWING NO.

ULTIMATE DESIGN

WIND SPEED Vult

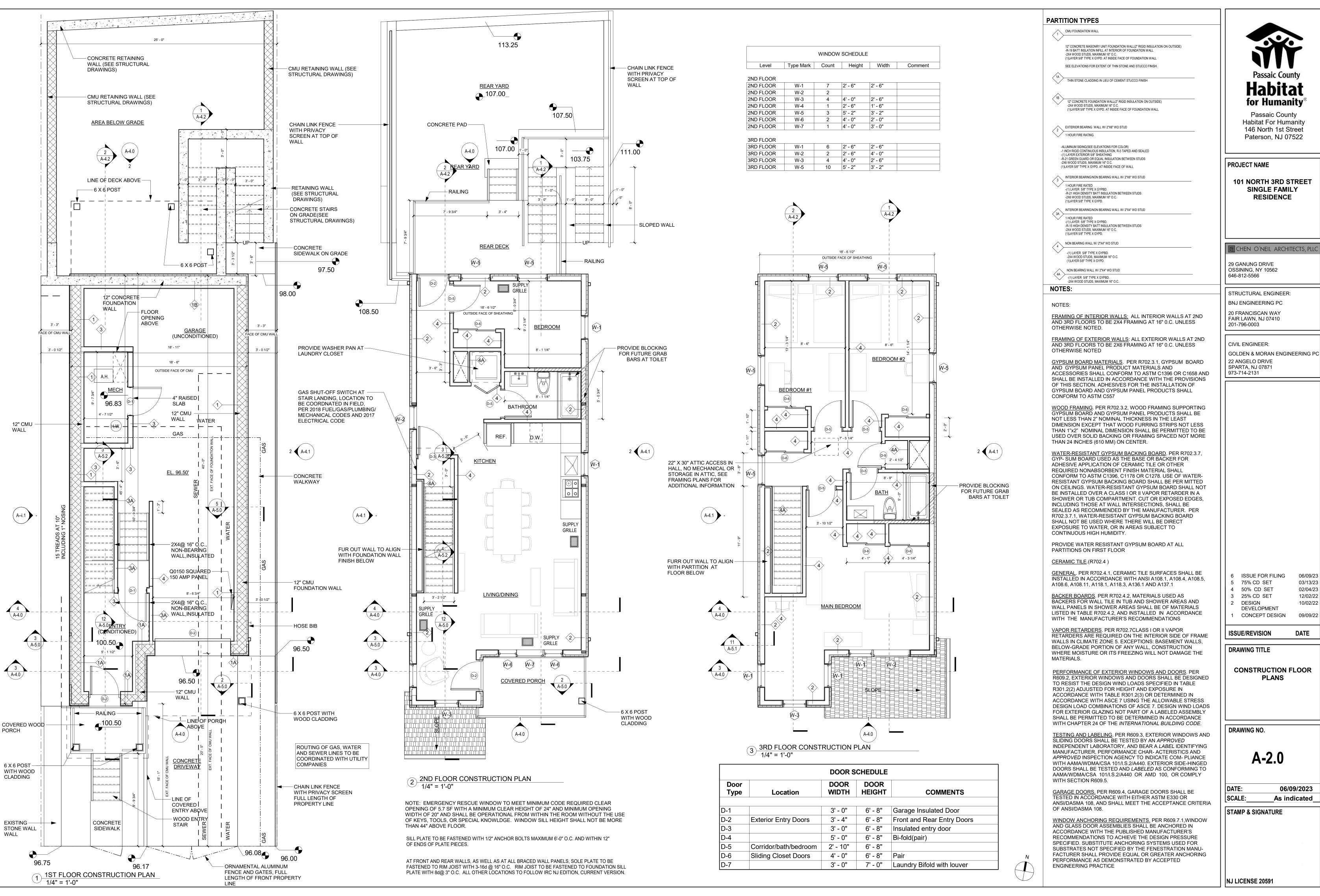
(mph)

Wind exposure

category

B C D

06/09/2023 As indicated



Passaic County for Humanity

> Passaic County Habitat For Humanity 146 North 1st Street Paterson, NJ 07522

PROJECT NAME

101 NORTH 3RD STREET SINGLE FAMILY RESIDENCE

ELL CHEN O'NEIL ARCHITECTS, PLLO

29 GANUNG DRIVE OSSINING, NY 10562

STRUCTURAL ENGINEER: BNJ ENGINEERING PC

20 FRANCISCAN WAY FAIR LAWN, NJ 07410 201-796-0003

> DEVELOPMENT CONCEPT DESIGN 09/09/22

03/13/23

02/04/23

12/02/22

10/02/22

DATE

DRAWING TITLE

CONSTRUCTION FLOOR PLANS

DRAWING NO.

06/09/2023 As indicated_

STAMP & SIGNATURE

ROOF / CEILING CONSTRUCTION NOTES (CONTINUED)

REQUIREMENTS. PER R801.2, ROOF AND CEILING CONSTRUCTION SHALL BE CAPABLE OF ACCOMMODATING ALL LOADS IMPOSED IN ACCORDANCE WITH SECTION R301 AND OF TRANSMITTING THE RESULTING LOADS TO THE SUPPORTING STRUCTURAL ELEMENTS.

GENERAL. PER R802.1, WOOD AND WOOD-BASED PRODUCTS USED FOR LOAD-SUPPORTING PURPOSES SHALL CONFORM TO THE APPLICABLE PROVISIONS OF THIS SECTION.

SAWN LUMBER. PER R802.1.1, SAWN LUMBER SHALL BE IDENTIFIED BY A GRADE MARK OF AN ACCREDITED LUMBER GRADING OR INSPECTION AGENCY AND HAVE DESIGN VALUES CERTIFIED BY AN ACCREDITATION BODY THAT COMPLIES WITH DOC PS 20. IN LIEU OF A GRADE MARK, A CERTIFICATE OF INSPECTION ISSUED BY A LUMBER GRADING OR INSPECTION AGENCY MEETING THE REQUIRE- MENTS OF THIS SECTION SHALL BE ACCEPTED.

STRUCTURAL PER R802.1.2, GLUED LAMINATED TIMBERS. GLUED LAMINATED TIMBERS SHALL BE MANUFACTURED AND IDENTIFIED AS REQUIRED IN ANSI/AITC A190.1 AND ASTM D3737

LABELING. PER LABELING, FIRE-RETARDANT-TREATED LUMBER AND WOOD STRUCTURAL PANELS SHALL BE *LABELED*. THE *LABEL* SHALL CONTAIN: THE IDENTIFICATION *MARK* OF AN *APPROVED AGENCY* IN ACCORDANCE WITH SECTION 1703.5 OF THE *INTERNA-TIONAL BUILDING CODE.*, IDENTIFICATION OF THE TREATING MANUFACTURER, THE NAME OF THE FIRE-RETARDANT TREATMENT, THE SPECIES OF WOOD TREATED, FLAME SPREAD INDEX AND SMOKE-DEVELOPED INDEX, METHOD OF DRYING AFTER TREATMENT, CONFORMANCE TO APPLICABLE STANDARDS IN ACCORDANCE WITH SECTIONS R802.1.5.5 THROUGH R802.1.5.10, AND FOR FRTW EXPOSED TO WEATHER, OR A DAMP OR WET LOCATION, THE WORDS "NO INCREASE IN THE LISTED CLASSIFICATION WHEN SUBJECTED TO THE STANDARD RAIN TEST" (ASTM D2898).

EXPOSURE TO WEATHER. PER R802.1.5.8, WHERE FIRE-RETARDANT-TREATED WOOD IS EXPOSED TO WEATHER OR DAMP OR WET LOCATIONS, IT SHALL BE IDENTIFIED AS "EXTERIOR" TO INDICATE THERE IS NOT AN INCREASE IN THE LISTED FLAME SPREAD INDEX AS DEFINED IN SECTION R802.1.5 WHEN SUB- JECTED TO ASTM D2898.

DESIGN AND CONSTRUCTION. PER R802.2, THE FRAMING DETAILS REQUIRED IN SECTION R802 APPLY TO ROOFS HAVING A MINIMUM SLOPE OF THREE UNITS VERTICAL IN 12 UNITS HORIZONTAL (25-PERCENT SLOPE) OR GREATER. ROOF-CEILINGS SHALL BE DESIGNED AND CON-STRUCTED IN ACCORDANCE WITH THE PROVISIONS OF THIS CHAPTER AND FIGURES R606.11(1), R606.11(2) AND R606.11(3) OR IN ACCORDANCE WITH AWC NDS. COMPONENTS OF ROOF-CEILINGS SHALL BE FASTENED IN ACCORDANCE WITH TABLE R602.3(1).

ALLOWABLE CEILING JOIST SPANS. PER R802.4, SPANS FOR CEILING JOISTS SHALL BE IN ACCORDANCE WITH TABLES R802.4(1) AND R802.4(2). FOR OTHER GRADES AND SPECIES AND FOR OTHER LOADING CONDITIONS, REFER TO THE AWC STJR.

ALLOWABLE RAFTER SPANS. PER R802.5, SPANS FOR RAFTERS SHALL BE IN ACCORDANCE WITH TABLES R802.5.1(1) THROUGH R802.5.1(8). FOR OTHER GRADES AND SPECIES AND FOR OTHER LOADING CONDITIONS, REFER TO THE AWC STJR. THE SPAN OF EACH RAFTER SHALL BE MEA- SURED ALONG THE HORIZONTAL PROJECTION OF THE RAFTER.

BEARING. PER R802.6, THE ENDS OF EACH RAFTER OR CEILING JOIST SHALL HAVE NOT LESS THAN 1 ½" INCHES OF BEARING ON WOOD OR METAL AND NOT LESS THAN 3 INCHES ON MASONRY OR CONCRETE. THE BEARING ON MASONRY OR CONCRETE SHALL BE DIRECT, OR A SILL PLATE OF 2" MINIMUM NOMINAL THICKNESS SHALL BE PROVIDED UNDER THE RAFTER OR CEILING JOIST. THE SILL PLATE SHALL PROVIDE A MINIMUM NOMINAL BEARING AREA OF 48 SQUARE INCHES.

<u>CUTTING, DRILLING AND NOTCHING.</u> PER R802.7, STRUCTURAL ROOF MEMBERS SHALL NOT BE CUT, BORED OR NOTCHED IN EXCESS OF THE LIMITATIONS SPECIFIED IN THIS SECTION.

ENGINEERED WOOD PRODUCTS. PER R802.7.2, CUTS, NOTCHES AND HOLES BORED IN TRUSSES, STRUCTURAL COMPOSITE LUMBER, STRUCTURAL GLUE-LAMINATED MEMBERS, CROSS-LAMINATED TIMBER MEMBERS OR I-JOISTS ARE PROHIBITED EXCEPT WHERE PERMITTED BY THE MANUFACTURER'S RECOMMENDATIONS OR WHERE THE EFFECTS OF SUCH ALTERATIONS ARE SPECIFICALLY CONSIDERED IN THE DESIGN OF THE MEMBER BY A REGISTERED DESIGN PROFESSIONAL

LATERAL SUPPORT. PER R802.8, ROOF FRAMING MEMBERS AND CEILING JOISTS HAVING A DEPTH-TO-THICKNESS RATIO EXCEEDING 5 TO 1 BASED ON NOMINAL DIMENSIONS SHALL BE PROVIDED WITH LATERAL SUPPORT AT POINTS OF BEARING TO PREVENT ROTATION. FOR ROOF RAFTERS WITH CEILING JOISTS ATTACHED IN ACCORDANCE WITH TABLE R602.3(1), THE DEPTH-TO-THICKNESS RATIO FOR THE TOTAL ASSEMBLY SHALL BE DETERMINED USING THE COMBINED THICKNESS OF THE RAFTER PLUS THE ATTACHED CEILING JOIST. EXCEPTION: ROOF TRUSSES SHALL BE BRACED IN ACCORDANCE WITH SECTION R802.10.3.

FRAMING OF OPENINGS. PER R802.9, OPENINGS IN ROOF AND CEILING FRAMING SHALL BE FRAMED WITH HEADER AND TRIMMER JOISTS. WHERE THE HEADER JOIST SPAN DOES NOT EXCEED 4 FEET, THE HEADER JOIST SHALL BE PERMITTED TO BE A SINGLE MEMBER THE SAME SIZE AS THE CEILING JOIST OR RAFTER. SINGLE TRIMMER JOISTS SHALL BE PERMITTED TO BE USED TO CARRY A SINGLE HEADER JOIST THAT IS LOCATED WITHIN 3 FEET OF THE TRIMMER JOIST BEARING. WHERE THE HEADER JOIST SPAN EXCEEDS 4 FEET, THE TRIMMER JOISTS AND THE HEADER JOIST SHALL BE DOUBLED AND OF SUFFICIENT CROSS SECTION TO SUPPORT THE CEILING JOISTS OR RAFTER FRAMING INTO THE HEADER. APPROVED HANGERS SHALL BE USED FOR THE HEADER JOIST TO TRIMMER JOIST CONNECTIONS WHERE THE HEADER JOIST SPAN EXCEEDS 6 FEET. TAIL JOISTS OVER 12 FEET) LONG SHALL BE SUPPORTED AT THE HEADER BY FRAMING ANCHORS OR ON LEDGER STRIPS NOT LESS THAN 2 INCHES BY 2

RAFTER UPLIFT RESISTANCE. PER R802.11.1.2,INDIVIDUAL RAFTERS SHALL BE ATTACHED TO SUPPORTING WALL ASSEMBLIES BY CONNECTIONS CAPABLE OF RESISTING UPLIFT FORCES AS DETER-MINED BY TABLE R802.11 OR AS DETERMINED BY ACCEPTED ENGINEERING PRACTICE. CONNECTIONS FOR BEAMS USED IN A ROOF SYSTEM SHALL BE DESIGNED IN ACCORDANCE WITH ACCEPTED ENGINEERING PRACTICE.

IDENTIFICATION AND GRADE OF WOOD STRUCTURAL PANELS. PER R803.2.1, WOOD STRUCTURAL PANELS SHALL CONFORM TO DOC PS 1, DOC PS 2, CSA O437 OR CSA O325, AND SHALL BE IDENTIFIED FOR GRADE, BOND CLASSIFI- CATION AND PERFORMANCE CATEGORY BY A GRADE MARK OR CERTIF- ICATE OF INSPECTION ISSUED BY AN *APPROVED* AGENCY. WOOD STRUCTURAL PANELS SHALL COMPLY WITH THE GRADES SPECIFIED IN TABLE R503.2.1.1(1).

EXPOSURE DURABILITY. PER R803.2.1.1, WOOD STRUCTURAL PANELS, WHEN DESIGNED TO BE PERMANENTLY EXPOSED IN OUTDOOR APPLICATIONS, SHALL BE OF AN EXTERIOR EXPOSURE DURABILITY. WOOD STRUCTURAL PANEL ROOF SHEATHING EXPOSED TO THE UNDERSIDE SHALL BE PERMITTED TO BE OF INTERIOR TYPE BONDED WITH EXTERIOR GLUE, IDENTIFIED AS EXPOSURE 1.

FIRE-RETARDANT-TREATED PLYWOOD. PER R803.2.1.2, THE ALLOWABLE UNIT STRESSES FOR FIRE-RETARDANT-TREATED PLY-WOOD, INCLUDING FASTENER VALUES, SHALL BE DEVELOPED FROM AN APPROVED METHOD OF INVESTIGATION THAT CONSIDERS THE EFFECTS OF ANTICIPATED TEMPERATURE AND HUMIDITY TO WHICH THE FIRE-RETARDANT-TREATED PLYWOOD WILL BE SUB-JECTED, THE TYPE OF TREATMENT AND REDRYING PROCESS. THE FIRE-RETARDANT-TREATED PLYWOOD SHALL BE GRADED BY AN APPROVED AGENCY

ALLOWABLE SPANS. PER R503.2.1.1, THE MAXIMUM ALLOWABLE SPANS FOR WOOD STRUCTURAL PANEL ROOF SHEATHING SHALL NOT EXCEED THE VALUES SET FORTH IN

TABLE R503.2.1.1(1), OR APA E30.

INSTALLATION. PER R803.2.3, WOOD STRUCTURAL PANEL USED AS ROOF SHEATHING SHALL BE INSTALLED WITH JOINTS STAGGERED OR NOT STAGGERED IN ACCORDANCE WITH TABLE R602.3(1), APA E30 FOR WOOD ROOF FRAMING OR WITH TABLE R804.3 FOR COLD- FORMED STEEL ROOF FRAMING.

<u>CEILING INSTALLATION</u>. PER R805.1, CEILINGS SHALL BE INSTALLED IN ACCORDANCE WITH THE REQUIREMENTS FOR INTERIOR WALL FINISHES AS PROVIDED IN SECTION R702

VENTILATION REQUIRED. PER R806.1, ENCLOSED ATTICS AND ENCLOSED RAFTER SPACES FORMED WHERE CEILINGS ARE APPLIED DIRECTLY TO THE UNDERSIDE OF ROOF RAFTERS SHALL HAVE CROSS VENTILATION FOR EACH SEPARATE SPACE BY VENTILATING OPENINGS PROTECTED AGAINST THE ENTRANCE OF RAIN OR SNOW. VENTILATION OPENINGS SHALL HAVE A LEAST DIMENSION OF 1/16" AND MAXIMUM OF 1/4.

<u>VENT AND INSULATION CLEARANCE</u>. PER, R806.3, WHERE EAVE OR CORNICE VENTS ARE INSTALLED, INSULATION SHALL NOT BLOCK THE FREE FLOW OF AIR. NOT LESS THAN A 1-INCH SPACE SHALL BE PROVIDED BETWEEN THE INSULATION AND THE ROOF SHEATHING AND AT THE LOCATION OF THE VENT.

INSTALLATION AND WEATHER PROTECTION. PER R806.4, VENTILATORS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS. INSTALLATION OF VENTILATORS IN ROOF SYSTEMS SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF SECTION R903. INSTALLATION OF VENTILATORS IN WALL SYSTEMS SHALL BE IN

ACCORDANCE WITH THE REQUIREMENTS OF SECTION R703.1

UNVENTED ATTIC AND UNVENTED ENCLOSED RAFTER ASSEMBLIES. PER R806.5, UNVENTED ATTICS AND UNVENTED ENCLOSED ROOF FRAMING ASSEMBLIES CREATED BY CEILINGS THAT ARE APPLIED DIRECTLY TO THE UNDERSIDE OF THE ROOF FRAMING MEMBERS AND STRUCTURAL ROOF SHEATHING APPLIED DIRECTLY TO THE TOP OF THE ROOF FRAMING MEMBERS/RAFTERS, SHALL BE PERMITTED WHERE ALL THE FOLLOWING CONDITIONS ARE MET: THE UNVENTED ATTIC SPACE IS COMPLETELY WITHIN THE BUILDING THERMAL ENVELOPE:

-NO INTERIOR CLASS I VAPOR RETARDERS ARE INSTALLED ON THE CEILING SIDE (ATTIC FLOOR) OF THE UNVENTED ATTIC ASSEMBLY OR ON THE CEILING SIDE OF THE UNVENTED ENCLOSED ROOF FRAMING ASSEMBLY.
-IN CLIMATE ZONE 5 ANY AIR-IMPERMEABLE INSULATION SHALL BE A CLASS II VAPOR RETARDER, OR SHALL HAVE A CLASS II VAPOR RETARDER COATING OR COVERING IN DIRECT CONTACT WITH THE UNDERSIDE OF THE INSULATION.

-INSULATION SHALL BE LOCATED IN ACCORDANCE WITH THE FOLLOWING:
-ITEM 5.1.1, 5.1.2, 5.1.3 OR 5.1.4 SHALL BE MET, DEPENDING ON THE AIR PERMEABILITY
OF THE INSULATION DIRECTLY UNDER THE STRUCTURAL ROOF SHEATHING.
-WHERE ONLY AIR-IMPERMEABLE INSULATION IS PROVIDED, IT SHALL BE APPLIED IN
DIRECT CONTACT WITH THE UNDERSIDE OF THE STRUCTURAL ROOF SHEATHING.
-WHERE BOTH AIR-IMPERMEABLE AND AIR-PERMEABLE INSULATION ARE PROVIDED,
THE AIR-IMPERMEABLE INSULATION SHALL BE APPLIED IN DIRECT CONTACT WITH THE

UNDERSIDE OF THE STRUCTURAL ROOF SHEATHING IN ACCORDANCE WITH ITEM 5.1.1 AND SHALL BE IN ACCORDANCE WITH THE R-VALUES IN TABLE R806.5 FOR CONDENSATION CONTROL. THE AIR-PERMEABLE INSULATION SHALL BE INSTALLED DIRECTLY UNDER THE AIR-IMPERMEABLE INSULATION. ALTERNATIVELY, SUFFICIENT RIGID BOARD OR SHEET INSULATION SHALL BE INSTALLED DIRECTLY ABOVE THE STRUCTURAL ROOF SHEATHING TO MAINTAIN THE MONTHLY AVER- AGE TEMPERATURE OF THE UNDERSIDE OF THE STRUCTURAL ROOF SHEATHING ABOVE 45° F (7°C). FOR CALCULATION PURPOSES, AN INTE- RIOR AIR TEMPERATURE OF 68°F (20°C) IS ASSUMED AND THE EXTERIOR AIR TEMPERA- TURE IS ASSUMED TO BE THE MONTHLY AVER- AGE OUTSIDE AIR TEMPERATURE OF THE THREE COLDEST MONTHS.

ELECTRICAL NOTES

ELECTRICAL DRAWINGS ARE DIAGRAMMATIC, SIZES AND LOCATION OF EQUIPMENT AND WIRING ARE SHOWN TO SCALE WHERE POSSIBLE, BUT MAY BE DISTORTED FOR CLARITY. WIRING ARE SHOWN TO SCALE WHERE POSSIBLE, BUT MAY BE DISTORTED FOR CLARITY ON THE DRAWINGS. FINAL LOCATION OF OUTLETS AND EQUIPMENT SHALL BE PER THE DRAWINGS. IT IS NOT WITHIN THE SCOPE OF THE DRAWINGS TO SHOW ALL NECESSARY BENDS, OFFSETS, PULL BOXES, AND OBSTRUCTIONS. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO INSTALL HIS WORK TO CONFORM TO THE STRUCTURE, AND PRESERVE THE DESIGN INTENT OF THE DRAWINGS.

THE CONTRACTOR, BEFORE SUBMITTING A PROPOSAL, SHALL VISIT AND CAREFULLY EXAMINE THE AREAS AFFECTED BY THIS WORK TO BECOME FAMILIAR WITH EXISTING CONDITIONS AND WITH THE DIFFICULTIES THAT WILL ATTEND THE EXECUTION OF THIS WORK. SUBMISSION OF A PROPOSAL WILL BE CONSTRUED AS EVIDENCE THAT SUCH AN EXAMINATION HAS BEEN MADE. LATE CLAIMS WILL NOT BE RECOGNIZED FOR EXTRA LABOR, EQUIPMENT, OR MATERIALS REQUIRED BECAUSE OF DIFFICULTIES ENCOUNTERED WHICH COULD HAVE BEEN FORESEEN, HAD SUCH EXAMINATION BEEN MADE.

BIDS SHALL INCLUDE ALL POWER, GROUNDING, AND EMPTY CONDUIT REQUIREMENTS NECESSARY FOR THE COMPLETE ELECTRICAL INSTALLATION.

FURNISH AND INSTALL WIRING FOR EQUIPMENT FURNISHED BY OTHERS, AS SHOWN ON ARCHITECTURAL, HVAC, PLUMBING, AND/OR ELECTRICAL DRAWINGS. COORDINATE WITH OTHER TRADES FOR DETAILS OF INSTALLATION AND WIRING REQUIREMENTS. THE TERM "WIRING" AS USED HEREIN SHALL INCLUDE FURNISHING AND INSTALLING CONDUIT, WIRES, JUNCTION/OUTLET BOXES, DISCONNECTS AND OVER CURRENT PROTECTION, AND FINAL CONNECTIONS. COORDINATE FINAL CONDUCTORS SIZES, QUANTITIES, VOLTAGE REQUIREMENTS, OVER CURRENT DEVICES, AND OUTLET RATINGS WITH ACTUAL EQUIPMENT TO BE FURNISHED TO THE SITE PRIOR TO FINALIZING WIRING INSTALLATION. MINOR ADJUSTMENTS TO WIRING REQUIREMENTS NECESSARY TO ACCOMMODATE ACTUAL FURNISHED EQUIPMENT SHALL BE PROVIDED AT NO ADDITIONAL COST TO

THE ELECTRICAL CONTRACTOR SHALL COMPLY WTH THE LATEST EDITION OF THE FOLLOWING CODES AND STANDARDS:

- A. UNDERWRITERS LABORATORIES, INC.. (UL)
- B. NEW JERSEY ELECTRICAL CODEC. OCCUPATIONAL SAFETY AND HEALTH ACT (OSHA)
- D. ALL LOCAL JURISDICTION DIRECTIVES AND REQUIREMENTS
 E. AMERICAN DISABILITIES ACT (ADA)

RESULTING FROM FAILURE TO DO SO WITHOUT EXPENSE TO OWNER.

VERIFY LOCATIONS OF ALL ELECTRICAL EQUIPMENT WITH ARCHITECTURAL DRAWINGS OR INTERIOR DETAILS. IN CENTERING OUTLETS AND LOCATING BOXES OR OUTLETS, ALLOW FOR OVERHEAD PIPES, DUCTS, MECHANICAL EQUIPMENT, VARIATIONS IN FIREPROOFING AND PLASTERING, WINDOW AND DOOR TRIM. PANELING. HUNG CEILING, ETC., AND CORRECT ANY INACCURACY

CITY OF PATERSON BUILDING CODE, RULES AND REGULATIONS.

LOCATE JUNCTION AND PULL BOXES TO BE CONCEALED IN FINISHED SPACES. WHERE NECESSARY, REROUTE RACEWAYS OR MAKE OTHER ARRANGEMENTS FOR CONCEALMENT. PROVIDE PULL BOXES WHERE NECESSARY FOR WIRE PULLING. COORDINATE ALL BOX LOCATIONS WITH OTHER TRADES. COVERS OF JUNCTION AND PULL BOXES SHALL BE ACCESSIBLE.

SECURE ALL SUPPORTS TO BUILDING STRUCTURE AS REQUIRED. SUPPORT HORIZONTAL CONDUIT RUNS AT NO MORE THAN 10' INTERVALS.

UPON COMPLETION OF ALL ELECTRICAL WORK, ELECTRICAL CONTRACTOR SHALL ADJUST AND TEST ALL CIRCUITS, OUTLETS, SWITCHES, LIGHTS, MOTORS, AND ANY OTHER ELECTRICAL ITEMS INSTALLED. ANY DEFECTIVE ITEMS SHALL BE IMMEDIATELY REPAIRED OR REPLACED WITH NEW EQUIPMENT OR MATERIALS AND THAT PORTION OF THE SYSTEM SHALL BE RETESTED. ALL SUCH REMEDIAL WORK SHALL BE PROVIDED AT NO ADDITIONAL COST TO THE OWNER.

ELECTRICAL CONTRACTOR SHALL BALANCE LOADS AMONG PHASES.

EQUIPMENT, DUCTWORK, AND MATERIALS SHALL BE PROTECTED AGAINST DAMAGE DUE TO BUILDING MATERIALS, ACID, TOOLS, AND EQUIPMENT OR ANY CAUSES INCIDENTAL TO CONSTRUCTION. ALL EQUIPMENT DAMAGE BY ANY CAUSE SHALL BE REPAIRED AT NO COST TO THE OWNER.

AFTER COMPLETION OF WORK, THIS CONTRACTOR SHALL CLEAN ALL EQUIPMENT AND DEVICES AND SHALL REMOVE ALL RUBBISH, CRATING, UNUSED MATERIAL, AND ANY OTHER DEBRIS OCCASIONED BY THIS INSTALLATION. CONTRACTOR SHALL LEAVE ALL WORK IN A FINISHED, CLEAN, AND SATISFACTORY WORKING CONDITION

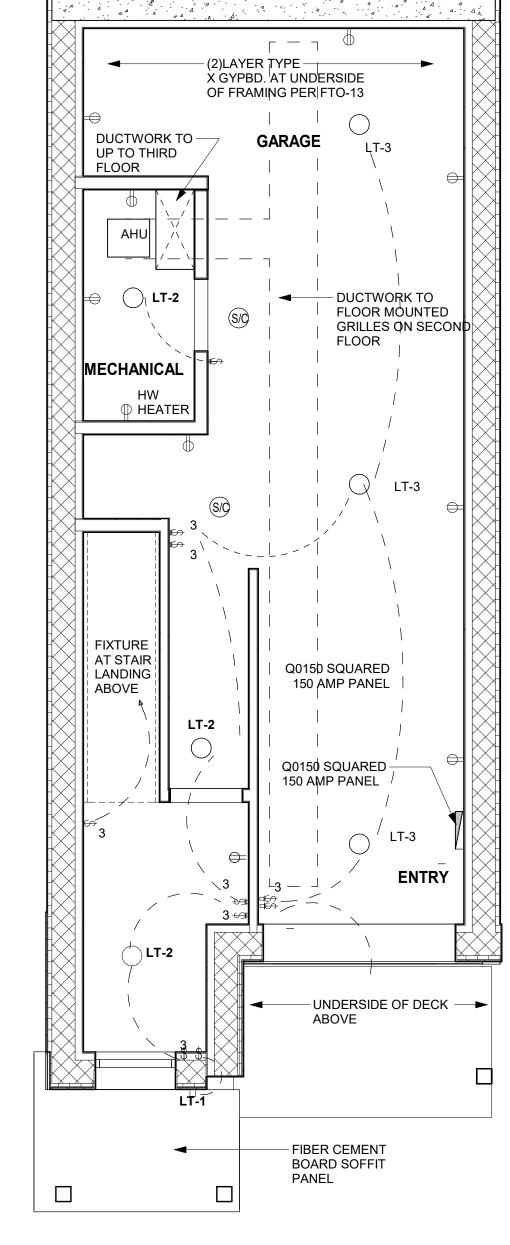
ALL CONDUIT SHALL BE ELECTRIC METALLIC TUBING (EMT), MINIMUM 3/4", UNLESS OTHERWISE NOTED. FLEXIBLE METAL CONDUIT ("GREENFIELD") MAY BE USED ONLY FOR FINAL CONNECTIONS TO LIGHTING FIXTURES OR VIBRATING EQUIPMENT UNLESS OTHERWISE INDICATED ON DRAWINGS. ARMORED CABLE ("BX") MAY BE USED, AS COORDINATED WITH THE OWNER, WHERE ALLOWED BY CODE, FOR CONCEALED WORK IN PARTITIONS AND CEILINGS.

ALL PENETRATIONS THROUGH FIRE RATED WALLS OR FLOORS SHALL BE SEALED TO MATCH THE FIRE RATINGS OF WALLS OR FLOORS IN THE SAME AREA. USE A UL APPROVED SEALING METHOD.

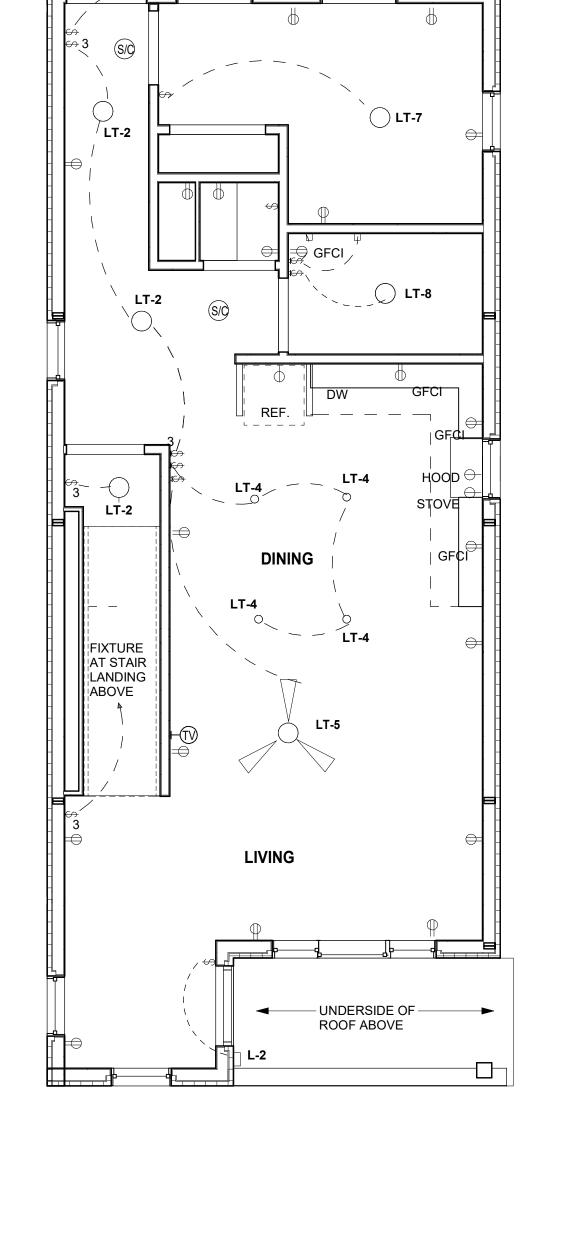
PROVIDE PANEL SCHEDULES AND "AS-BUILT" DRAWINGS INDICATING TRUE CIRCUITING AND CONTROLS UPON COMPLETION OF WORK.

THE ELECTRICAL CONTRACTOR SHALL BRING TO THE ATTENTION OF THE ARCHITECT ANY ITEMS WHICH DIFFER FROM THE BID DOCUMENTS, OR MIGHT PREVENT PROPER INSTALLATION. ALL ELECTRICAL SHALL CONFORM TO LOCAL STANDARDS AND REQUIREMENTS.

THE OPERATION OF THE ELECTRICAL INSTALLATION DOES NOT CONSTITUTE AN ACCEPTABLE OF THE WORK BY THE OWNER. FINAL ACCEPTANCE IS TO BE MADE AFTER THE CONTRACTOR HAS DEMONSTRATED THAT THE WORK FULFILLS THE REQUIREMENTS OF THE PLANS AND SPECIFICATIONS AND HAS FURNISHED ALL REQUIRED CERTIFICATES OF APPROVAL FROM MUNICIPAL AUTHORITIES AND UNDERWRITERS.



1 1ST FLOOR REFLECTED CEILING PLAN



2 2ND FLOOR REFLECTED CEILING PLAN

FLUORESCENT LIGHT

COMBINATION SMOKE/CARBON MONOXIDE DETECTOR

- ALL OUTLETS AND LIGHT SWITCHES TO BE GANGED WHEREVER APPLICABLE

POWER PLAN LEGEND:

RECESSED FLOOR OUTLET

STANDARD WALL OUTLET

SWITCHED OUTLET

THREE-WAY SWITCH

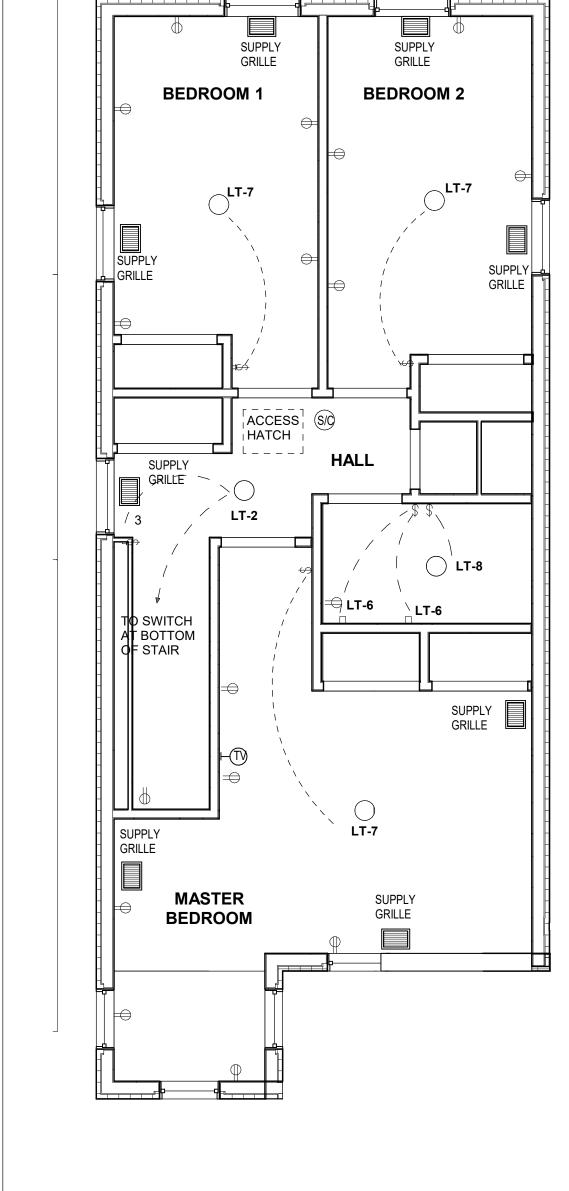
DIMMING LIGHT SWITC

RECESSED DOWNLIGHT

OS WALL SCONCE

GROUND FAULT CIRCUIT INTERRUPTERS

QUAD OUTLE



3 3RD FLOOR REFLECTED CEILING PLAN



PROTECTED.

ELECTRICAL NOTES (CONTINUED)

ELECTRICAL CONTRACTOR SHALL PROVIDE AN ELECTRICAL INSPECTION APPROVAL CERTIFICATE TO BUILDING OWNER UPON COMPLETION OF WORK.

FOR EXACT LOCATION AND MOUNTING HEIGHTS OF ALL LIGHTING FIXTURES, SWITCHES AND JUNCTION BOXES, SEE ARCHITECTURAL DRAWINGS.

COORDINATE LIGHTING FIXTURE TYPES, CONTROL DEVICES (SWITCHES, DIMMERS, KEY PADS, ETC.) AND SPECIFICATIONS WITH ARCHITECT. REFER TO LIGHTING FIXTURE SCHEDULE ON ARCHITECTURAL DRAWINGS.

FOR ADDITIONAL LIGHTING NOTES, SEE ARCHITECTURAL DRAWINGS.

U.O.N. ALL BRANCH CIRCUIT WIRING SHALL BE RUN IN WALLS AND ABOVE HUNG TO THE CEILING. FINAL CONNECTIONS TO LIGHTING FIXTURES SHALL BE MADE WITH WIRING HAVINI3 90 DEGREE CELCIUS RATED INSULATION

FOR EXACT LOCATION AND MOUNTING HEIGHTS OF ALL POWER, TELEPHONE/DATA

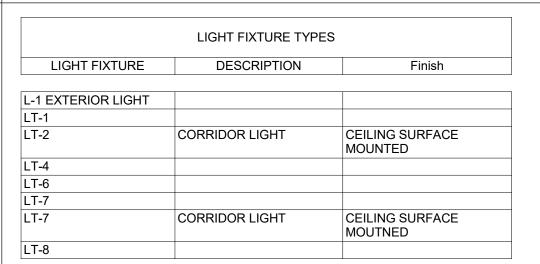
OUTLETS AND MECHANICAL EQUIPMENT SEE, ARCHITECTURAL DRAWINGS.

ALL 120 VLT, SINGLE PHASE, 15 AND 20AMP BRANCH CIRCUITS SUPPLYING OUTLETS INSTALLED IN DWELLING UNIT, FAMILY ROOMS, DINING ROOMS, LIVING ROOMS, PARLORS, LIBRARIES, DENS, BEDROOMS, SUNROOMS, RECREATION

ROOMS, CLOSETS, HALLWAYS, OR SIMILAR ROOMS OR AREAS SHALL BE AFCI

METALLIC OUTLET BOXES SHALL BE PERMITTED TO BE INSTALLED IN WOOD AND STEEL STUD WALLS OR PARTITIONS HAVING GYPSUM BOARD FACINGS AND CLASSIFIED AS TWO HOURS OR LESS. THE SURFACE AREA OF INDIVIDUAL BOXES HALL NOT EXCEED 16 SQUARE INCHES. THE AGGREGATE SURFACE AREA OF THE BOXES SHALL NOT EXCEED 100 SQUARE INCHES IN ANY 100 SQUARE FEET. BOXES LOCATED ON OPPOSITE SIDES OF WALLS OR PARTITIONS SHALL BE IN SEPARATE STUD CAVITIES AND SHALL BE SEPARATED BY A MINIMUM HORIZONTAL DISTANCE OF 24 INCHES.





ALL LIGHT FIXTURE TYPES TO BE PER PASSAIC COUNTY HABITAT FOR HUMANITY SPECIFICATIONS

Habitat for Humanity

Passaic County
Habitat For Humanity
146 North 1st Street
Paterson, NJ 07522

PROJECT NAME

101 NORTH 3RD STREET SINGLE FAMILY RESIDENCE

29 GANUNG DRIVE OSSINING, NY 10562 646-812-5566

STRUCTURAL ENGINEER:
BNJ ENGINEERING PC
20 FRANCISCAN WAY
FAIR LAWN, NJ 07410
201-796-0003

CIVIL ENGINEER:

GOLDEN & MORAN ENGINEERING PC

22 ANGELO DRIVE

SPARTA, NJ 07871

973-714-2131

6 ISSUE FOR FILING 06/09/23 5 75% CD SET 03/13/23 4 50% CD SET 02/04/23 3 25% CD SET 12/02/22 2 DESIGN 10/02/22 DEVELOPMENT 1 CONCEPT DESIGN 09/09/22

DATE

REFLECTED CEILING PLAN / ELECTRICAL PLANS

DRAWING NO.

ISSUE/REVISION

DRAWING TITLE

A-3.0

DATE: 06/09/2023
SCALE: As indicated

STAMP & SIGNATURE

WATER RESISTANSCE. PER R703.1, EXTERIOR WALLS SHALL PROVIDE THE BUILDING WITH A WEATHER-RESISTANT EXTERIOR WALL ENVELOPE. THE EXTERIOR WALL ENVELOPE SHALL INCLUDEFLASHING AS DESCRIBED IN SECTION R703.4. THE EXTERIOR WALL ENVELOPE SHALL BE DESIGNED AND CONSTRUCTED IN A MANNER THAT PREVENTS THE ACCUMULATION OF WATER WITHIN THE WALL ASSEMBLY BY PROVIDING A WATER-RESISTANT BARRIER BEHIND THE EXTERIOR VENEER AS REQUIRED BY SECTION R703.2 AND A MEANS OF DRAINING TO THE EXTERIOR WATER THAT ENTERS THE ASSEMBLY. PROTECTION AGAINST CONDENSATION IN THE EXTERIOR WALL ASSEMBLY SHALL BE PROVIDED IN ACCORDANCE WITH SECTION R702.7.

WIND RESISTANCE. PER R703.1.2, WALL COVERINGS, BACKING MATERIALS AND THEIR ATTACHMENTS SHALL BE CAPABLE OF RESISTING WIND LOADS IN ACCORDANCE WITH TABLES R301.2(2) AND R301.2(3). WIND-PRESSURE RESISTANCE OF THE SIDING AND BACKING MATERIALS SHALL BE DETERMINED BY ASTM E330 OR OTHER APPLICABLE STANDARD TEST METHODS. WHERE WIND-PRES- SURE RESISTANCE IS DETERMINED BY DESIGN ANALYSIS, DATA FROM APPROVED DESIGN STANDARDS AND ANALYSIS CONFORMING TO GENERALLY ACCEPTED ENGINEERING PRACTICE SHALL BE USED TO EVALUATE THE SIDING AND BACKING MATERIAL AND ITS FASTENING. ALL APPLICABLE FAILURE MODES INCLUDING BENDING RUPTURE OF SIDING, FASTENER WITHDRAWAL AND FASTENER HEAD PULL-THROUGH SHALL BE CONSIDERED IN THE TESTING OR DESIGN ANALYSIS. WHERE THE WALL COVERING AND THE BACKING MATERIAL RESIST WIND LOAD AS AN ASSEMBLY, USE OF THE DESIGN CAPACITY OF THE ASSEMBLY SHALL BE PERMITTED.

WATER-RESISTIVE BARRIER. PER R703.2, ONE LAYER OF NO. 15 ASPHALT FELT, FREE FROM HOLES AND BREAKS, COMPLYING WITH ASTM D226 FOR TYPE 1 FELT OR OTHER APPROVED WATER-RESISTIVE BARRIER SHALL BE APPLIED OVER STUDS OR SHEATHING OF ALL EXTERIOR WALLS. SUCH FELT OR MATERIAL SHALL BE APPLIED HORIZONTALLY, WITH THE UPPER LAYER LAPPED OVER THE LOWER LAYER NOT LESS THAN 2" WHERE JOINTS OCCUR, FELT SHALL BE LAPPED NOT LESS THAN 6". THE FELT OR OTHER APPROVED MATERIAL SHALL BE CONTINUOUS TO THE TOP OF WALLS AND TERMINATED AT PENETRATIONS AND BUILDING APPENDAGES IN A MANNER TO MEET THE REQUIREMENTS OF THE EXTERIOR WALL ENVELOPE AS DESCRIBED IN SECTION R703.1.

NOMINAL THICKNESS AND ATTACHMENTS. PER R703.3, THE NOMINAL THICKNESS AND ATTACHMENT OF EXTERIOR WALL COVERINGS SHALL BE IN ACCORDANCE WITH TABLE R703.3(1). THE WALL COVERING MATERIAL REQUIREMENTS OF THIS SECTION, AND THE WALL COVERING MANUFACTURER'S INSTALLATION INSTRUCTIONS. CLADDING ATTACHMENT OVER FOAM SHEATHING SHALL COMPLY WITH THE ADDITIONAL REQUIREMENTS AND LIMITATIONS OF SECTIONS R703.15 THROUGH R703.17. NOMINAL MATERIAL THICKNESSES IN TABLE R703.3(1) ARE BASED ON A MAXIMUM STUD SPACING OF 16" ON CENTER. WHERE SPECIFIED BY THE SIDING MANUFACTURER'S INSTRUCTIONS AND SUPPORTED BY A TEST REPORT OR OTHER DOCUMENTATION, ATTACHMENT TO STUDS WITH GREATER SPACING IS PERMITTED. FASTENERS FOR EXTERIOR WALL COVERINGS ATTACHED TO WOOD FRAMING SHALL BE IN ACCORDANCE WITH SECTION R703.3.2 AND TABLE R703.3(1). EXTERIOR WALL COVERINGS SHALL BE ATTACHED TO COLD-FORMED STEEL LIGHT FRAME CONSTRUCTION IN ACCORDANCE WITH THE CLADDING MANUFACTURER'S INSTALLATION INSTRUCTIONS, THE REQUIREMENTS OF TABLE R703.3(1) USING SCREW FASTENERS SUBSTITUTED FOR THE NAILS SPECIFIED IN ACCORDANCE WITH TABLE R703.3(2), OR AN APPROVED DESIGN FASTENERS. PER R703.3.2, EXTERIOR WALL COVERINGS SHALL BE SECURELY FASTENED WITH ALUMINUM, GALVANIZED, STAINLESS STEEL OR RUST-PREVENTATIVE COATED NAILS OR STAPLES IN ACCOR DANCE WITH TABLE R703.3(1) OR WITH OTHER APPROVED CORROSION-RESISTANT FASTENERS IN ACCORDANCE WITH THE WALL COVERING MANUFACTURER'S INSTALLATION INSTRUCTIONS. . WHERE FIBERBOARD, GYPSUM, OR FOAM PLASTIC SHEATHING BACKING IS USED, NAILS OR STAPLES SHALL BE DRIVEN INTO THE STUDS. WHERE WOOD OR WOOD STRUCTURAL PANEL SHEATHING IS USED, FASTENERS SHALL BE DRIVEN INTO STUDS UNLESS OTHERWISE PERMITTED TO BE DRIVEN INTO SHEATHING IN ACCORDANCE WITH EITHER THE SIDING MANUFACTURER'S INSTALLATION INSTRUCTIONS OR TABLE R703.3.2.

FLASHING. PER R703.4, APPROVED CORROSION-RESISTANT FLASHING SHALL BE APPLIED SHINGLE-FASHION IN A MANNER TO PREVENT ENTRY OF WATER INTO THE WALL CAVITY OR PENETRATION OF WATER TO THE BUILDING STRUCTURAL FRAMING COMPONENTS. SELF-ADHERED MEMBRANES USED AS FLASHING SHALL COMPLY WITH AAMA 711. FLUID-APPLIED MEMBRANES USED AS FLASHING IN EXTERIOR WALLS SHALL COMPLY WITH AAMA 714. THE FLASHING SHALL EXTEND TO THE SURFACE OF THE EXTERIOR WALL FINISH. APPROVED CORROSION-RESISTANT FLASHINGS SHALL BE INSTALLED AT THE FOLLOWING LOCATIONS:

-EXTERIOR WINDOW AND DOOR OPENINGS. FLASHING AT EXTERIOR WINDOW AND DOOR OPENINGS SHALL EXTEND TO THE SURFACE OF THE EXTERIOR WALL FINISH. MECHANICALLY ATTACHED FLEXIBLE FLASHINGS SHALL COMPLY WITH AAMA 712. FLASHING AT EXTERIOR WINDOW AND DOOR OPENINGS SHALL BE INSTALLED IN ACCORDANCE WITH ONE OR MORE OF THE FOLLOWING:

-AT THE INTERSECTION OF CHIMNEYS OR OTHER MASONRY CONSTRUCTION WITH FRAME OR STUCCO WALLS, WITH PROJECTING LIPS ON BOTH SIDES UNDER STUCCO COPINGS.
-UNDER AND AT THE ENDS OF MASONRY, WOOD OR METAL COPINGS AND SILLS.
-CONTINUOUSLY ABOVE ALL PROJECTING WOOD TRIM.

-WHERE EXTERIOR PORCHES, DECKS OR STAIRS ATTACH TO A WALL OR FLOOR ASSEMBLY
OF WOOD-FRAME CONSTRUCTION
-AT WALL AND ROOF INTERSECTIONS
-AT BUILT-IN GUTTERS

WOOD, HARDBOARD AND WOOD STRUCTURAL PANEL SIDING. PER R703.5, WOOD, HARDBOARD, AND WOOD STRUCTURAL PANEL SIDING SHALLBE INSTALLED IN ACCORDANCE WITH THIS SECTION AND TABLE R703.3 HARDBOARD SIDING SHALL COMPLY WITH CPA/ANSI A135.6. HARDBOARD SIDING USED AS ARCHITECTURAL TRIM SHALL COMPLY WITH CPA/ANSI A 135.7.

VERTICAL WOOD SIDING. PER R703.5.1, WOOD SIDING APPLIED VERTICALLY SHALL BE NAILED TO HORIZONTAL NAILING STRIPS OR BLOCK- ING SET NOT MORE THAN 24" ON CENTER.

PANEL SIDING. PER R703.5.2, 3/8" WOOD STRUCTURAL PANEL SIDING SHALL NOT BE APPLIED DIRECTLY TO STUDS SPACED MORE THAN 16" ON CENTER WHERE LONG DIMENSION IS PARALLEL TO STUDS. WOOD STRUCTURAL PANELSID ING 7/16" OR THINNER SHALL NOT BE APPLIED DIRECTLY TO STUDS SPACED MORE THAN 24" ON CENTER. THE STUD SPACING SHALL NOT EXCEED THE PANEL SPAN RATING PROVIDED BY THE MANUFACTURER UNLESS THE PANELS ARE INSTALLED WITH THE FACE GRAIN PERPENDICULAR TO THE STUDS OR OVER SHEATHING APPROVED FOR THAT STUD SPACING.

JOINTS IN WOOD, HARDBOARD OR WOOD STRUCTURAL PANEL SIDING SHALL BE MADE AS FOLLOWS UNLESS OTHERWISE APPROVED. VERTICAL JOINTS IN PANEL SIDING SHALL OCCUR OVER FRAMING MEMBERS, UNLESS WOOD OR WOOD STRUCTURAL PANEL SHEATHING IS USED, AND SHALL BE SHIPLAPPED OR COVERED WITH A BATTEN. HORIZONTAL JOINTS IN PANEL SIDING SHALL BE LAPPED NOT LESS THAN 1 INCH (25 MM) OR SHALL BE SHIPLAPPED OR FLASHED WITH Z-FLASHING AND OCCUR OVER SOLID BLOCKING, WOOD OR WOOD STRUCTURAL PANEL SHEATHING.

HORIZONTAL WOOD SIDING. PER R703.5.3, HORIZONTAL LAP SIDING SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. WHERE THERE ARE NO RECOMMENDATIONS THE SIDING SHALL BE LAPPED NOT LESS THAN 1", OR ½" IF RABBETED, AND SHALL HAVE THE ENDS CAULKED, COVERED WITH A BATTEN OR SEALED AND INSTALLED OVER A STRIP OF FLASHING.

EXTERIOR PLASTER. PER R703.7, INSTALLATION OF THESE MATERIALS SHALL BE IN COMPLIANCE WITH ASTM C926, ASTM C1063 AND THE PROVISIONS OF THIS CODE

LATH. PER R703.7.1,LATH AND LATH ATTACHMENTS SHALL BE OF COR- ROSION-RESISTANT MATERIALS.

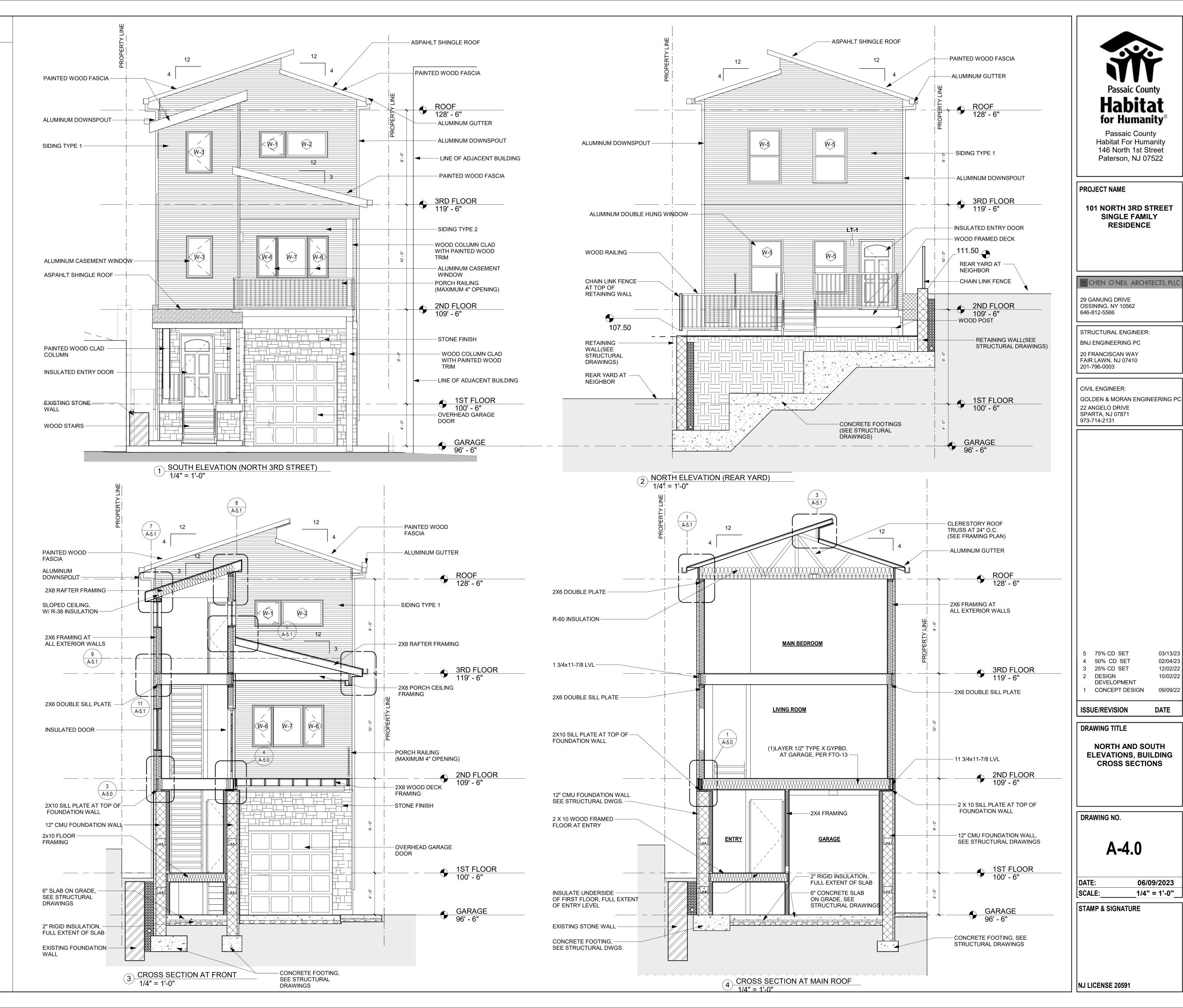
PLASTER. PER R703.7.2, PLASTERING WITH PORTLAND CEMENT PLASTER SHALL BE NOT LESS THAN THREE COATS WHERE APPLIED OVER METAL LATH OR WIRE LATH AND SHALL BE NOT LESS THAN TWO COATS WHERE APPLIED OVER MASONRY, CONCRETE, PRESSURE-PRESERVATIVE-TREATED WOOD OR DECAY-RESISTANT WOOD AS SPECIFIED IN SEC-TION R317.1 OR GYPSUM BACKING. IF THE PLASTER SURFACE IS COMPLETELY COVERED BY VENEER OR OTHER FACING MATERIALOR IS COMPLETELY CONCEALED, PLASTER APPLICATION NEED BE ONLY TWO COATS, PROVIDED THE TOTAL THICKNESS IS AS SET FORTH IN TABLE R702.1(1

WEEP SCREEDS. PER R703.7.2.1, CORROSION-RESISTANT WEEP SCREED OR PLASTIC WEEP SCREED, WITH A MINIMUM VERTICAL ATTACHMENT OF 3 ½" SHALL BE PROVIDED AT OR BELOW THE FOUNDATION PLATE LINE ON EXTERIOR STUD WALLS IN ACCORDANCE WITH ASTM C926. THE WEEP SCREED SHALL BE PLACED NOT LESS THAN 4" ABOVE THE EARTH OR 2" ABOVE PAVED AREAS AND SHALL BE OF A TYPE THAT WILL ALLOW TRAPPED WATER TO DRAIN TO THE EXTERIOR OF THE BUILDING. THE WEATHER-RESISTANT BARRIER SHALL LAP THE ATTACHMENT FLANGE. THE EXTERIOR LATH SHALL COVER AND TERMINATE ON THE ATTACHMENT FLANGE OF THE WEEP SCREED

WATER-RESISTIVE BARRIERS. PER R703.7.3, WATER-RESISTIVE BARRIERS SHALL BE INSTALLED AS REQUIRED IN SECTION R703.2 AND, WHERE APPLIED OVER WOOD-BASED SHEATHING, SHALL INCLUDE A WATER-RESISTIVE VAPOR-PERMEABLE BARRIER WITH A PERFOR- MANCE AT LEAST EQUIVALENT TO TWO LAYERS OF GRADE D PAPER. THE INDIVIDUAL LAYERS SHALL BE INSTALLED INDEPENDENTLY SUCH THAT EACH LAYER PROVIDES A SEPARATE CONTINUOUS PLANE AND ANY FLASHING (INSTALLED IN ACCORDANCE WITH SECTION R703.4) INTENDED TO DRAIN TO THE WATER-RESISTIVE BARRIER IS DIRECTED BETWEEN THE LAYERS.

A<u>PPLICATION</u>. PER R703.7.4, EACH COAT SHALL BE KEPT IN A MOIST CONDITION FOR AT LEAST 48 HOURS PRIOR TO APPLICATION OF THE NEXT COAT.

CURING. PER R703.7.5, THE FINISH COAT FOR TWO-COAT CEMENPLASTER SHALL NOT BE APPLIED SOONER THAN SEVEN DAYS AFTER APPLICATION OF THE FIRST COAT. FOR THREE-COAT CEMENT PLASTER, THE SECOND COAT SHALL NOT BE APPLIED SOONER THAN 48 HOURS AFTER APPLICATION OF THE FIRST COAT. THE FINISH COAT FOR THREE-COAT CEMENT PLASTER SHALL NOT BE APPLIED SOONER THAN SEVEN DAYS AFTER APPLICATION OF THE SECOND COAT.



EXTERIOR WALL NOTES (CONTINUED)

ANCHORED STONE AND MASONRY VENEER, PER R703.8, ANCHORED STONE AND MASONRY VENEER SHALL BE INSTALLED IN ACCORDANCE WITH THIS CHAPTER, TABLE R703.3(1) AND FIGURE R703.8. THESE VENEERS INSTALLED OVER A BACKING OF WOOD OR COLD-FORMED STEEL SHALL BE LIMITED TO THE FIRST STORY ABOVE GRADE PLANE AND SHALL NOT EXCEED 5" IN THICKNESS. SEE SECTION R602.10 FOR WALL BRACING REQUIREMENTS FOR MASONRY VENEER FOR WOOD-FRAMED CONSTRUCTION AND SECTION R603.9.5 FOR WALL BRACING REQUIREMENTS FOR MASONRY VENEER FOR COLD-FORMED STEEL CONSTRUCTION.

EXTERIOR VENEER SUPPORT. PER R703.8.2, EXCEPT IN SEISMIC DESIGN D CATEGORIES EXTERIOR MASONRY VENEERS HAVING AN INSTALLED WEIGHT OF 40 PSF OR LESS SHALL BE PERMITTED TO BE SUPPORTED ON WOOD OR COLDFORMED STEEL CONSTRUCTION. WHERE MASONRY VENEER SUPPORTED BY WOOD OR COLD-FORMED STEEL CONSTRUCTION ADJOINS MASONRY VENEER SUPPORTED BY THE FOUNDATION, THERE SHALL BE A MOVEMENT JOINT BETWEEN THE VENEER SUPPORTED BY THE WOOD OR COLD-FORMED STEEL CONSTRUCTION AND THE VENEER SUPPORTED BY THE FOUNDATION. THE WOOD OR COLD-FORMED STEEL CONSTRUCTION SUPPORTING THE MASONRY VENEER SHALL BE DESIGNED TO LIMIT THE DEFLECTION TO 1/600 OF THE SPAN FOR THE SUPPORTING MEMBERS. THE DESIGN OF THE WOOD OR COLD-FORMED STEEL CONSTRUCTION SHALL CONSIDER THE WEIGHT OF THE VENEER AND ANY OTHER LOADS

SUPPORT BY STEEL ANGLE. PER R703.8.2.1, A MINIMUM 6"X4" STEEL ANGEL WITH THE LONG LEG PLACED VERTICALLY, SHALL BE ANCHORED TO DOUBLE 2"X4" WOOD STUDS OR DOUBLE 350S162 COLD FORMED STEEL STUDS AT A MAXIMUM ON CENTER SPACING OF 16". NOT LESS THAN TWO-THIRDS THE WIDTH OF THE MASONRY VENEER THICKNESS SHALL BEAR ON THE STEEL ANGLE. FLASHING AND WEEP HOLES SHALL BE LOCATED IN THE MASONRY VENEER IN ACCORDANCE WITH FIGURE R703.8.2.1COLD-FORMED STEEL CONSTRUCTION. THE MAXIMUM HEIGHT OF MASONRY VENEER ABOVE THE STEEL ANGLE SUPPORT SHALL BE 12'-8". THE AIRSPACE SEPARATING THE MASONRY VENEER FROM THE WOOD BACKING SHALL BE IN ACCORDANCE WITH SECTIONS R703.8.4 AND R703.8.4.2. THE METHOD OF SUPPORT FOR THE MASONRY VENEER ON WOOD CONSTRUCTION SHALL BE CONSTRUCTED IN ACCORDANCE WITH FIGURE R703.8.2.1

LINTELS. PER R703.8.3, MASONRY VENEER SHALL NOT SUPPORT ANY VERTICAL LOAD OTHER THAN THE DEAD LOAD OF THE VENEER ABOVE. VENEER ABOVE OPENINGS SHALL BE SUPPORTED ON LINTELS OF NON- COMBUSTIBLE MATERIALS. THE LINTELS SHALL HAVE A LENGTH OF BEARING NOT LESS THAN 4 INCHES (102 MM). STEEL LINTELS SHALL BE SHOP COATED WITH A RUST-INHIBITIVE PAINT, EXCEPT FOR LINTELS MADE OF CORROSION-RESISTANT STEEL OR STEEL TREATED WITH COAT- INGS TO PROVIDE CORROSION RESISTANCE. CONSTRUCTION OF OPEN- INGS SHALL COMPLY WITH EITHER SECTION R703.8.3.1

ALLOWABLE SPAN. PER R703.8.3.1, THE ALLOWABLE SPAN SHALL NOT EXCEED THE VALUES SET FORTH IN TABLE R703.8.3.1.

MAXIMUM SPAN. PER R703.8.3.2, THE ALLOWABLE SPAN SHALL NOT EXCEED 18'-3" BE CONSTRUCTED TO COMPLY WITH FIGURE R703.8.3.2.

ANCHORAGE. PER R703.8.4, MASONRY VENEER SHALL BE ANCHORED TO THE SUPPORTING WALL STUDS WITH CORROSION-RESISTANT METAL TIES EMBEDDED IN MORTAR OR GROUT AND EXTENDING INTO THE VENEER A MINIMUM OF 1 ½" WITH NOT LESS THAN 5/8" MORTAR OR GROUT COVER TO OUTSIDE FACE. MASONRY VENEER SHALL CONFORM TO TABLE R703.8.4

GROUT FILL. PER R703.8.4.2, AS AN ALTERNATIVE TO THE AIRSPACE REQUIRED BY TABLE R703.8.4, GROUT SHALL BE PERMITTED TO FILL THE AIRSPACE. WHERE THE AIRSPACE IS FILLED WITH GROUT, A WATER-RESISTIVE BARRIER IS REQUIRED OVER STUDS OR SHEATHING. WHERE THE AIRSPACE IS FILLED, REPLACING THE SHEATHING AND WATER-RESISTIVE BARRIER WITH A WIRE MESH AND APPROVED WATER-RESISTIVE BARRIER OR AN APPROVED WATER-RESISTIVE BARRIER-BACKED REINFORCEMENT ATTACHED DIRECTLY TO THE STUDS IS PERMITTED

FLASHING. PER R703.8.5, FLASHING SHALL BE LOCATED BENEATH THE FIRST COURSE OF MASONRY ABOVE FINISHED GROUND LEVEL ABOVE THE FOUNDATION WALL OR SLAB AND AT OTHER POINTS OF SUPPORT, INCLUDING STRUCTURAL FLOORS, SHELF ANGLES AND LINTELS WHERE MASONRY VENEERS ARE DESIGNED IN ACCORDANCE WITH SECTION R703.8. SEE SECTION R703.4 FOR ADDITIONAL REQUIREMENTS

WEEPHOLES. PER R703.8.6, WEEPHOLES SHALL BE PROVIDED IN THE OUTSIDE WYTHE OF MASONRY WALLS AT A MAXIMUM SPACING OF 33" ON CENTER. WEEPHOLES SHALL BE NOT LESS THAN 3/16" IN DIAMETER. WEEPHOLES SHALL BE LOCATED IMMEDIATELY ABOVE THE FLASHING;

R703.10 FIBER CEMENT SIDING. PANEL SIDING. PER R703.10.1, FIBER-CEMENT PANELS SHALL COMPLY WITH THE REQUIREMENTS OF ASTM C1186, TYPE A, MINIMUM GRADE II OR ISO 8336, CATEGORY A, MINIMUM CLASS 2. PANELS SHALL BE INSTALLED WITH THE LONG DIMENSION EITHER PARALLEL OR PERPENDICULAR TO FRAMING. VERTICAL AND HORIZONTAL JOINTS SHALL OCCUR OVER FRAMING MEMBERS AND SHALL BE PROTECTED WITH CAULKING, OR WITH BATTENS OR FLASHING, OR BE VERTICAL OR HORIZONTAL SHIPLAP, OR OTHERWISE DESIGNED TO COMPLY WITH SECTION R703.1. PANEL SIDING SHALL BE INSTALLED WITH FASTEN- ERS IN ACCORDANCE WITH TABLE R703.3(1) OR THE APPROVED MANUFACTURER'S INSTRUCTIONS.

LAP SIDING. PER R703.10.2, FIBER-CEMENT LAP SIDING HAVING A MAXIMUM WIDTH OF 12" SHALL COMPLY WITH THE REQUIREMENTS OF ASTM C1186, TYPE A, MINIMUM GRADE II OR ISO 8336, CATEGORY A, MINIMUM CLASS 2. LAP SIDING SHALL BE LAPPED A MINIMUM OF 11/4" AND LAP SIDING NOT HAVING TONGUE-AND-GROOVE END JOINTS SHALL HAVE THE ENDS PROTECTED WITH CAULKING, COVERED WITH AN H-SECTION JOINT COVER, LOCATED OVER A STRIP OF FLASHING, OR SHALL BE DESIGNED TO COMPLY WITH SECTION R703.1. LAP SIDING COURSES SHALL BE INSTALLED WITH THE FASTENER CONCEALED, IN ACCORDANCE WITH TABLE R703.3(1) OR APPROVED MANUFACTURER'S INSTRUCTIONS.

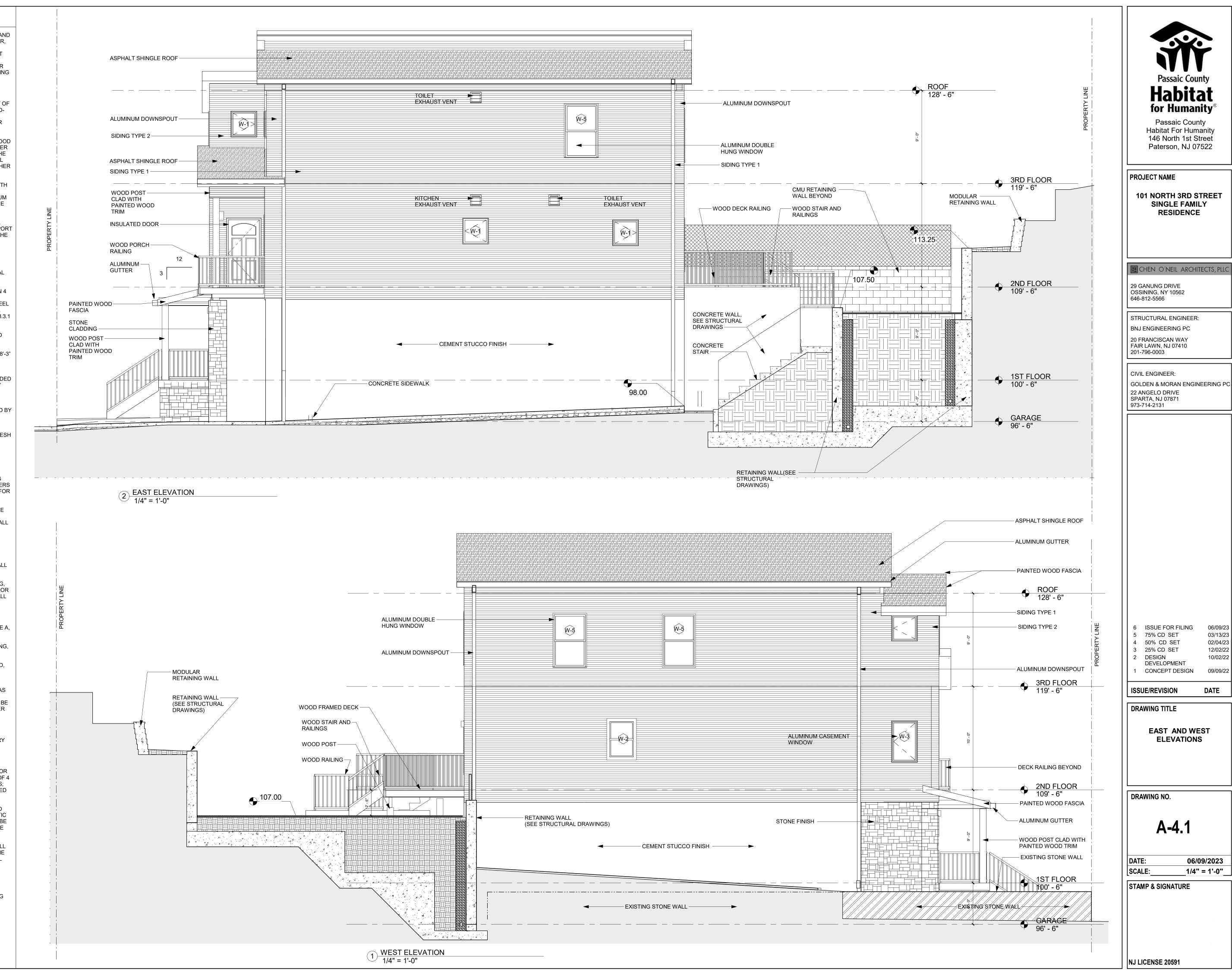
VINYL SIDING. PER R703.11, VINYL SIDING SHALL BE CERTIFIED AND LABELED AS CONFORMING TO THE REQUIREMENTS OF ASTM D3679 BY AN APPROVED QUALITY CONTROL AGENCY. VINYL SIDING, SOFFIT AND ACCESSORIES SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS. PER R703.11.1.4, VINYL SOFFIT PANELS SHALL BE INDIVIDUALLY FASTENED TO A SUPPORTING COMPONENT SUCH AS A NAILING STRIP, FASCIA OR SUBFASCIA COMPONENT OR AS SPECIFIED BY THE MANUFACTURER'S INSTRUCTIONS

ADHERED MASONRY VENEER INSTALLATION. PER R703.12, ADHERED MASONRY VENEER SHALL COMPLY WITH THE REQUIREMENTS OF SECTION R703.7.3 AND THE REQUIREMENTS IN SECTIONS 12.1 AND 12.3 OF TMS 402/ACI 530/ASCE 5. ADHERED MASONRY VENEER SHALL BE INSTALLED IN ACCORDANCE WITH SECTION R703.7.1, ARTICLE 3.3C OF TMS 602/ACI 530.1/ASCE 6 OR THE MANUFACTURER'S INSTRUC- TIONS. PER R703.12.1, CLEARANCES. ON EXTERIOR STUD WALLS, ADHERED MASONRY VENEER SHALL BE INSTALLED AMINIMUM OF 4 INCHES ABOVE THE GROUND, , A MINIMUM OF 2 INCHES ABOVE PAVED AREAS; OR MINIMUM 1/2" ABOVE EXTERIOR WALKING SURFACES THAT ARE SUPPORTED BY THE SAME FOUNDATION THAT SUPPORTS THE EXTERIOR WALL.

PER, R703.12.2 FLASHING AT FOUNDATION. A CORROSION-RESISTANT SCREED OR FLASHING OF A MINIMUM 0.019-INCH OR 26-GAGE GALVANIZED OR PLASTIC WITH A MINIMUM VERTICAL 2 ATTACHMENT FLANGE OF 3 ½" INCHES SHALL BE INSTALLED TO EXTEND A MINIMUM OF 1" BELOW THE FOUNDATION PLATE LINE ON EXTERIOR STUD WALLS IN ACCORDANCE WITH SECTION R703.4.

WATER-RESISTIVE BARRIER. PER R703.12, A WATER-RESISTIVE BARRIER SHALL BE INSTALLED AS REQUIRED BY SECTION R703.2 AND SHALL COMPLY WITH THE REQUIREMENTS OF SECTION R703.6.3. THE WATER-RESISTIVE BARRIER SHALL LAP OVER THE EXTERIOR OF THE ATTACHMENT FLANGE OF THE SCREED OR FLASHING PROVIDED IN ACCORDANCE WITH SECTION R703.12.2

INSULATED VINYL SIDING. PER R703.13, INSULATED VINYL SIDING SHALL BE CERTIFIED AND LABELED AS CONFORMING TO THE REQUIREMENTS OF ASTM D7793 BY AN APPROVED QUALITY CONTROL AGENCY INSULATED VINYL SIDING AND ACCESSORIES SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS



R902.1 ROOFING COVERING MATERIALS. ROOFS SHALL BE COVERED WITH MATERIALS AS SET FORTH IN SECTIONS R904 AND R905. CLASS A, B OR C ROOFING SHALL BE INSTALLED IN JURISDICTIONS DESIGNATED BY LAW AS REQUIRING THEIR USE OR WHERE THE EDGE OF THE ROOF IS LESS THAN 3 FEET FROM A LOT LINE. CLASS A, B AND C ROOFING REQUIRED BY THIS SECTION TO BE LISTED SHALL BE TESTED IN ACCORDANCE WITH UL 790 OR ASTM E108.

R902.2 FIRE-RETARDANT-TREATED SHINGLES SHALL BE TREATED BY IMPREGNATION WITH CHEMICALS IN ACCORDANCE WITH AWPA C1. EACH BUNDLE SHALL BE MARKED TO IDENTIFY THE MANUFACTURED UNIT AND THE MANUFACTURER, AND SHALL BE LABELED TO IDENTIFY THE CLASSIFICATION OF THE MATERIAL IN ACCORDANCE WITH THE TESTING REQUIRED IN SECTION R902.1, THE TREATING COMPANY AND THE QUALITY CONTROL AGENCY.

R903.1 GENERAL. ROOF DECKS SHALL BE COVERED WITH APPROVED ROOF COVERINGS SECURED TO THE BUILDING OR STRUCTURE IN ACCOR- DANCE WITH THE PROVISIONS OF THIS CHAPTER. ROOF ASSEMBLIES SHALL BE DESIGNED AND INSTALLED IN ACCORDANCE WITH THIS CODE AND THE APPROVED MANUFACTURER'S INSTRUCTIONS SUCH THAT THE ROOF ASSEMBLY SHALL SERVE TO PROTECT THE BUILDING OR STRUCTURE.

R903.2 FLASHING. FLASHINGS SHALL BE INSTALLED IN A MANNER THAT PREVENTS MOISTURE FROM ENTERING THE WALL AND ROOF THROUGH JOINTS IN COPINGS, THROUGH MOISTURE PERMEABLE MATERIALS AND AT INTERSECTIONS WITH PARAPET WALLS AND OTHER PENETRATIONS THROUGH THE ROOF PLANE.

R903.2.1 LOCATIONS. FLASHINGS SHALL BE INSTALLED AT WALL AND ROOF INTERSECTIONS, WHEREVER THERE IS A CHANGE IN ROOF SLOPE OR DIRECTION AND AROUND ROOF OPENINGS. A FLASHING SHALL BE INSTALLED TO DIVERT THE WATER AWAY FROM WHERE THE EAVE OF A SLOPED ROOF INTERSECTS A VERTICAL SIDEWALL. WHERE FLASHING IS OF METAL, THE METAL SHALL BE CORROSION RESISTANT WITH A THICKNESS OF NOT LESS THAN 0.019 INCH (NO. 26 GALVANIZED SHEET).

R903.2.2 CRICKETS AND SADDLES. A CRICKET OR SADDLE SHALL BE INSTALLED ON THE RIDGE SIDE OF ANY CHIMNEY OR PENETRATION MORE THAN 30 INCHES WIDE AS MEASURED PERPENDICULAR TO THE SLOPE. CRICKET OR SADDLE COVERINGS SHALL BE SHEET METAL OR OF THE SAME MATERIAL AS THE ROOF COVERING

R904.2 COMPATIBILITY OF MATERIALS. ROOF ASSEMBLIES SHALL BE OF MATERIALS THAT ARE COMPATIBLE WITH EACH OTHER AND WITH THE BUILDING OR STRUCTURE TO WHICH THE MATERIALS ARE APPLIED

R904.4 PRODUCT IDENTIFICATION. ROOF COVERING MATERIALS SHALL BE DELIVERED IN PACKAGES BEARING THE MANUFACTURER'S IDENTIFING MARKS AND APPROVED TESTING AGENCY *LABELS* REQUIRED. BULK SHIPMENTS OF MATERIALS SHALL BE ACCOMPANIED BY THE SAME INFORMATION ISSUED IN THE FORM OF A CERTIFICATE OR ON A BILL OF LADING BY THE MANUFACTURER.

R905.1 ROOF COVERING APPLICATION. ROOF COVERINGS SHALL BE APPLIED IN ACCORDANCE WITH THE APPLICABLE PROVISIONS OF THIS SECTION AND THE MANUFACTURER'S INSTALLATION INSTRUCTIONS. UNLESS OTHERWISE SPECIFIED IN THIS SECTION, ROOF COVERINGS SHALL BE INSTALLED TO RESIST THE COMPONENT AND CLADDING LOADS SPECIFIED IN TABLE R301.2(2), ADJUSTED FOR HEIGHT AND EXPOSURE IN ACCORDANCE WITH TABLE R301.2(3).

R905.1.1 UNDERLAYMENT. UNDERLAYMENT FOR ASPHALT SHINGLES SHALL CONFORM TO THE APPLICABLE STANDARDS LISTED IN THIS CHAPTER. UNDERLAYMENT MATERIALS REQUIRED TO COMPLY WITH ASTM D226, D1970, D4869 AND D6757 SHALL BEAR A LABEL INDICATING COM- PLIANCE TO THE STANDARD DESIGNATION AND, IF APPLICABLE, TYPE CLASSIFICATION INDICATED IN TABLE R905.1.1(1). UNDERLAYMENT SHALL BE APPLIED IN ACCORDANCE WITH TABLE R905.1.1(2). UNDERLAYMENT SHALL BE ATTACHED IN ACCORDANCE WITH TABLE R905.1.1(3)

R905.2.1 SHEATHING REQUIREMENTS. ASPHALT SHINGLES SHALL BE FASTENED TO SOLIDLY SHEATHED DECKS.

R905.2.2 SLOPE. ASPHALT SHINGLES SHALL BE USED ONLY ON ROOF SLOPES OF TWO UNITS VERTICAL IN 12 UNITS HORIZONTAL (2:12) OR GREATER. FOR ROOF SLOPES FROM TWO UNITS VERTICAL IN 12 UNITS HORIZONTAL (2:12) UP TO FOUR UNITS VERTICAL IN 12 UNITS HORIZONTAL (4:12), DOUBLE UNDERLAYMENT APPLICATION IS REQUIRED IN ACCORDANCE WITH SECTION R905.1.1.

R905.2.4 ASPHALT SHINGLES SHALL COMPLY WITH ASTM D3462

R905.2.4.1 WIND RESISTANCE OF ASPHALT SHINGLES. ASPHALT SHINGLES SHALL BE TESTED IN ACCORDANCE WITH ASTM D7158. ASPHALT SHINGLES SHALL MEET THE CLASSIFICATION REQUIREMENTS OF TABLE R905.2.4.1 FOR THE APPROPRIATE ULTIMATE DESIGN WIND SPEED. ASPHALT SHINGLE PACKAGING SHALL BEAR A LABEL TO INDICATE COMPLIANCE WITH ASTM D7158 AND THE REQUIRED CLASSIFICATION IN TABLE R905.2.4.1.

R905.2.5 FASTENERS. FASTENERS FOR ASPHALT SHINGLES SHALL BE GALVANIZED STEEL, STAINLESS STEEL, ALUMINUM OR COPPER ROOFING NAILS, MINIMUM 12-GAGE [0.105 INCH SHANK WITH A MINIMUM 3/8" DIAMETER HEAD, COMPLYING WITH ASTM F1667, OF A LENGTH TO PENETRATE NOT LESS THAN 3/4" INTO THE ROOF SHEATHING. WHERE THE ROOF SHEATH ING IS LESS THAN 3/4" THICK, THE FASTENERS SHALL PENETRATE THROUGH THE SHEATHING.

R905.2.6 ATTACHMENT. ASPHALT SHINGLES SHALL HAVE THE MINIMUM NUMBER OF FASTENERS REQUIRED BY THE MANUFACTURER, BUT NOT LESS THAN FOUR FASTENERS PER STRIP SHINGLE OR TWO FASTENERS PER INDIVIDUAL SHINGLE. R905.2.7 ICE BARRIER. WHERE REQUIRED, ICE BARRIERS SHALL COMPLY WITH SECTION R905.1.2.

R905.2.8 FLASHING. FLASHING FOR ASPHALT SHINGLES SHALL COMPLY WITH SECTION R905.2.8.1 BASE AND CAP FLASHING. BASE AND CAP FLASHING SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS. BASE FLASHING SHALL BE OF EITHER CORROSION-RESISTANT METAL OF MINIMUM NOMINAL 0.019-INCH THICKNESS OR MINERAL-SURFACED ROLL ROOFING WEIGHING NOT LESS THAN 77 POUNDS PER 100 SQUARE FEET. CAP FLASHING SHALL BE CORROSION-RESISTANT METAL OF MINIMUM NOMINAL 0.019-INCH THICKNESS

R905.2.8.2 VALLEYS. VALLEY LININGS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS BEFORE APPLYING SHINGLES. VALLEY LININGS OF THE FOLLOWING TYPES SHALL BE PERMITTED:

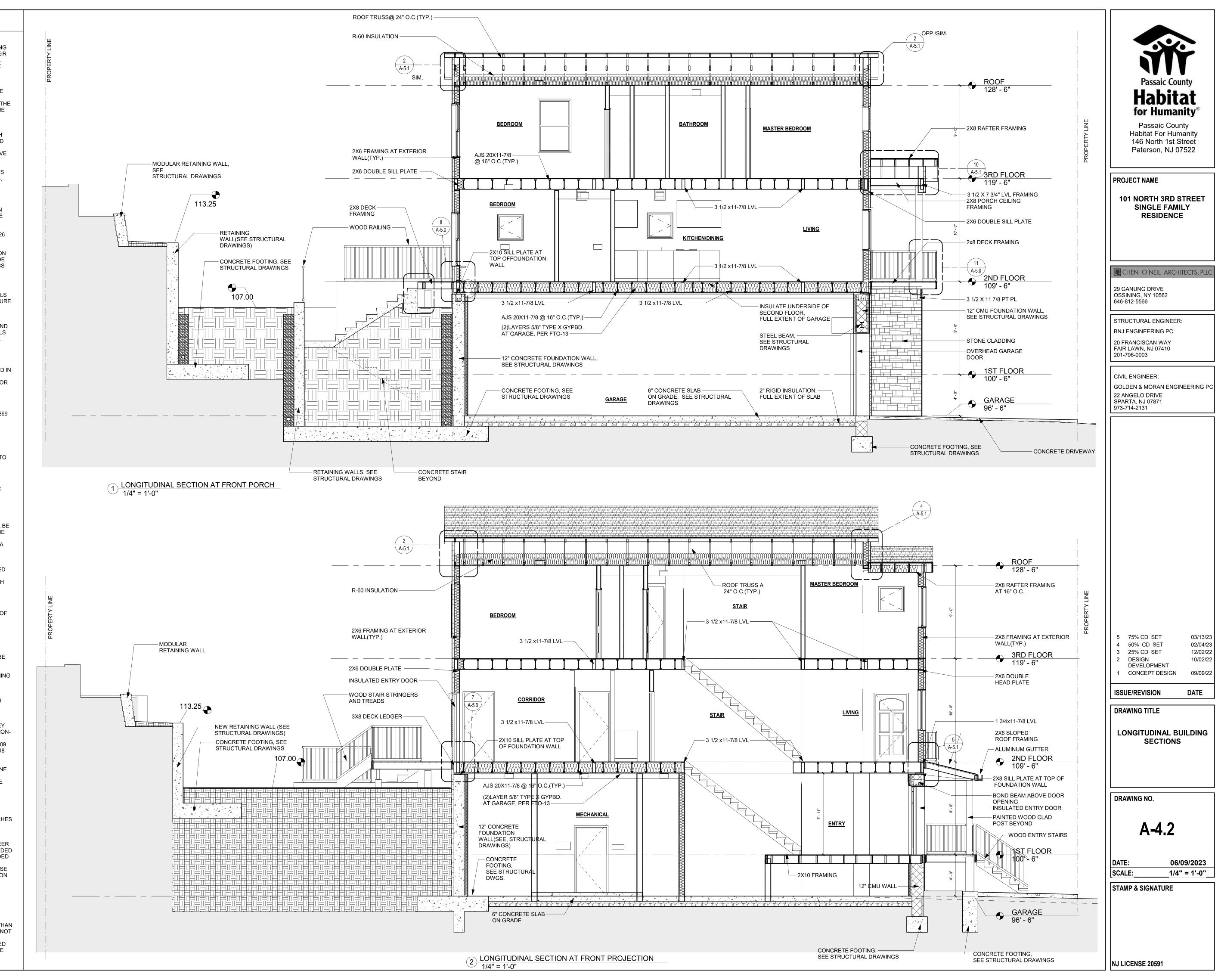
FOR OPEN VALLEYS (VALLEY LINING EXPOSED) LINED WITH METAL, THE VALLEY LINING SHALL BE NOT LESS THAN 24 INCHES WIDE AND OF ANY OF THE CORROSION-RESISTANT METALS IN TABLE R905.2.8.2. FOR OPEN VALLEYS, VALLEY LINING OF TWO PLIES OF MINERAL-SURFACED ROLL ROOFING, COMPLYING WITH ASTM D3909 OR ASTM D6380 CLASS M, SHALL BE PERMITTED. THE BOTTOM LAYER SHALL BE 18 INCHES (457 MM) AND THE TOP LAYER NOT LESS THAN 36 INCHES WIDE

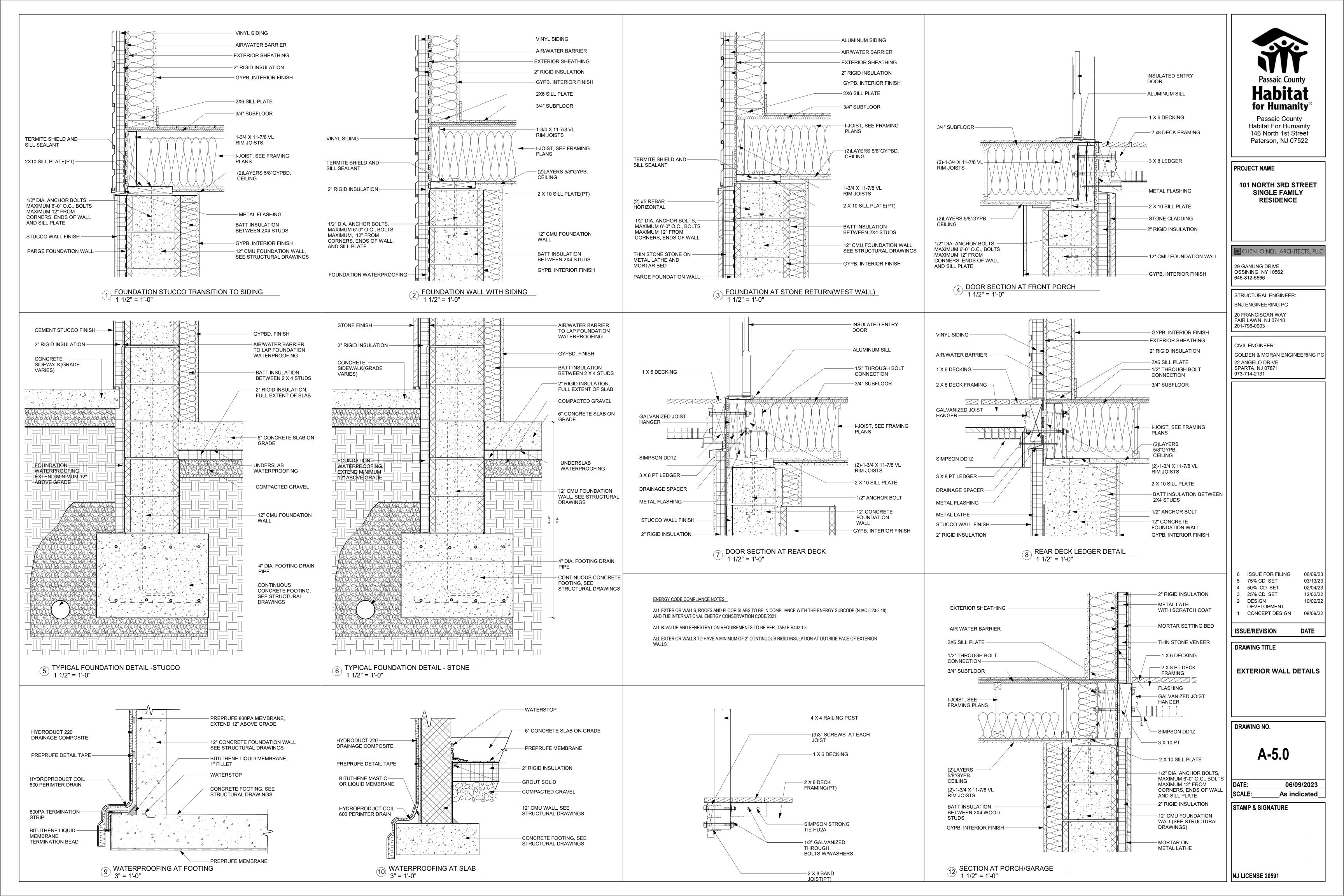
FOR CLOSED VALLEYS (VALLEY COVERED WITH SHINGLES), VALLEY LINING OF ONE PLY OF SMOOTH ROLL ROOFING COMPLYING WITH ASTM D6380 AND NOT LESS THAN 36 INCHES WIDE OR VALLEY LINING AS DESCRIBED IN ITEM 1 OR 2 SHALL BE PERMITTED. SELF-ADHERING POLYMER MODIFIED BITUMEN UNDERLAY- MENT COMPLYING WITH ASTM D1970 SHALL BE PER MITTED IN LIEU OF THE LINING

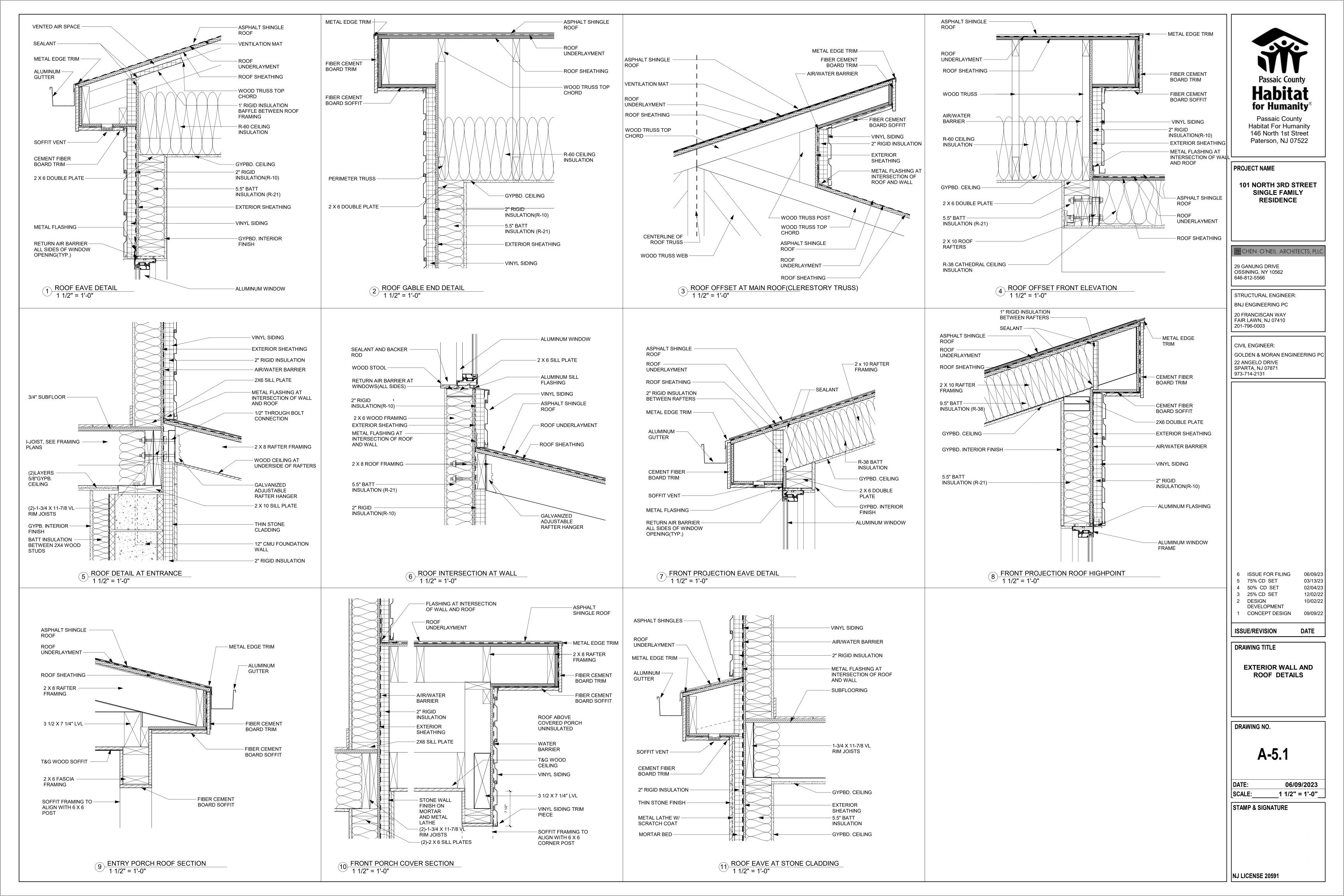
R905.2.8.3 SIDEWALL FLASHING. BASE FLASHING AGAINST A VERTICAL SIDEWALL SHALL BE CONTINUOUS OR STEP FLASHING AND SHALL BE NOT LESS THAN 4 INCHES IN HEIGHT AND 4 INCHES IN WIDTH AND SHALL DIRECT WATER AWAY FROM THE VERTICAL SIDEWALL ONTO THE ROOF OR INTO THE GUTTER. WHERE SIDING IS PROVIDED ON THE VERTICAL SIDE- WALL, THE VERTICAL LEG OF THE FLASHING SHALL BE CONTINUOUS UNDER THE SIDING. WHERE ANCHORED MASONRY VENEER IS PROVIDED ON THE VERTICAL SIDEWALL, THE BASE FLASHING SHALL BE PROVIDED IN ACCORDANCE WITH THIS SECTION AND COUNTERFLASHING SHALL BE PROVIDED IN ACCORDANCE WITH SECTION R703.7.2.2. WHERE EXTERIOR PLASTER OR ADHERED MASONRY VENEER IS PROVIDED ON THE VERTICAL SIDEWALL, THE BASE FLASHING SHALL BE PROVIDED IN ACCORDANCE WITH THIS SECTION AND SECTION R703.6.3

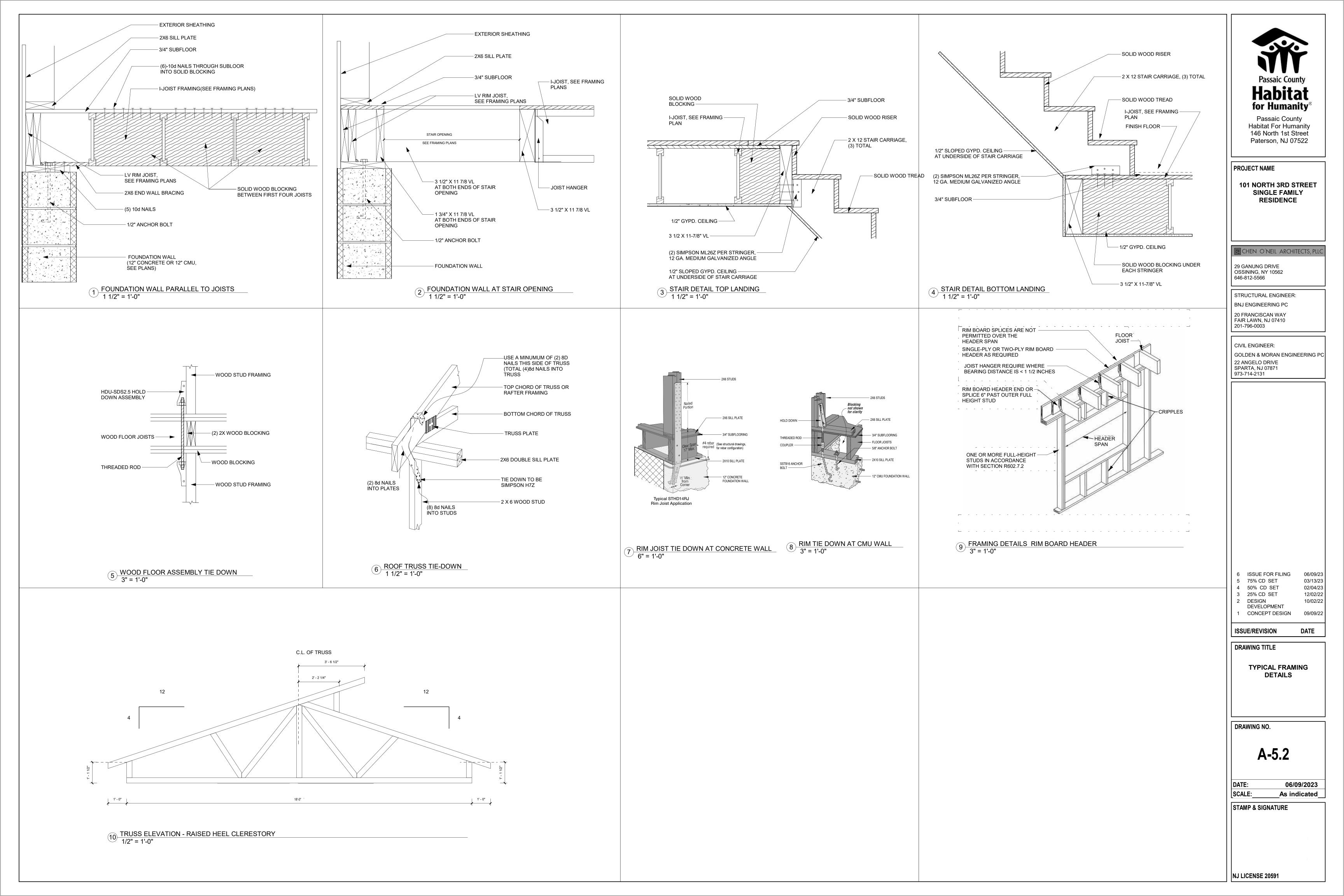
R905.2.8.4 OTHER FLASHING. PROVIDE FLASHING AGAINST VERTICAL WALLS, AS WELL AS SOIL STACK, VENT PIPE AND OTHER ROOF PENETRATIONS

R905.2.8.5 DRIP EDGE. A DRIP EDGE SHALL BE PROVIDED AT EAVES AND RAKE EDGES OF SHINGLE ROOFS. ADJACENT SEGMENTS OF DRIP EDGE SHALL BE OVERLAPPED NOT LESS THAN 2 INCHES DRIP EDGES SHALL EXTEND NOT LESS THAN 1/4" BELOW THE ROOF SHEATHING AND EXTEND UP BACK ONTO THE ROOF DECK NOT LESS THAN 2 INCHES. DRIP EDGES SHALL BE MECHANICALLY FASTENED TO THE ROOF DECK AT NOT MORE THAN 12 INCHES O.C. WITH FASTENERS AS SPEC-IFIED IN SECTION R905.2.5. UNDERLAYMENT SHALL BE INSTALLED OVER THE DRIP EDGE









ENERGY CODE

BUILDING THERMAL ENVELOPE INSULATION. PER N1101.10.1(R303.1.1), AN R-VALUE IDENTIFICATION MARK SHALL BE APPLIED BY THE MANUFACTURER TO EACH PIECE OF BUILDING THERMAL ENVELOPE INSULATION12 " OR GREATER IN WIDTH. ALTERNATELY, THE INSULATION INSTALLERS SHALL PROVIDE A CERTIFICATION LISTING THE TYPE, MANUFACTURE R AND R-VALUE OF INSULATION INSTALLED IN EACH ELEMENT OF THE BUILDING THERMAL ENVELOPE. FOR BLOWN OR SPRAYED INSULATION (FIBERGLASS AND CELLULOSE), THE INITIAL INSTALLED THICKNESS, SETTLED THICKNESS, SETTLED R-VALUE, INSTALLED DENSITY, COVERAGE AREA AND NUMBER OF BAGS INSTALLED SHALL BE LISTED ON

BLOWN OR SPRAYED ROOF/ CEILING INSULATION. PER N1101.10.1.1(R303.1.1.1), THE THICKNESS OF BLOWN-IN OR SPRAYED ROOF/CEILING INSULATION (FIBERGLASS OR CELLULOSE) SHALL BE WRITTEN IN INCHES ON MARKERS THAT ARE INSTALLED AT LEAST ONE FOR EVERY 300 SQUARE FEET THROUGHOUT THE ATTIC SPACE. THE MARKERS SHALL BE AFFIXED TO THE TRUSSES OR JOISTS AND MARKED WITH THE MINIMUM INITIAL INSTALLED THICKNESS WITH NUMBERS NOT LESS THAN 1" IN HEIGHT. EACH MARKER SHALL FACE THE ATTIC ACCESS OPENING. SPRAY POLYURETHANE FOAM THICKNESS AND INSTALLED R-VALUE SHALL BE LISTED ON CERTIFICATION PRO- VIDED BY THE INSULATION INSTALLER.

NSULATION MARK INSTALLATION. PER N1101.10.2(R303.1.2), INSULATING MATERIALS SHALL BE INSTALLED SUCH THAT THE MANUFACTURER'S R-VALUE MARK IS READILY OBSERVABLE UPON

INSULATION AND FENESTRATION REQUIREMENTS BY COMPONENT TABLE R402 1.3

TABLE N402.1.3	
CLIMATE ZONE:	5
FENESTRATION U-FACTOR	0.30
GLAZED FENESTRATION SHGC	0.40
CEILING R-VALUE(ATTIC)	60
CEILING R-VALUE(CATHEDRAL)	38
WOOD FRAME WALL R-VALUE	13(CAVITY) + 10(CONTINUOUS INSULATION)
MASS WALL R-VALUE	17(CAVITY) + 13(CONTINUOUS INSULATION)
FLOOR R-VALUE	30
BASEMENT WALL R-VALUE	5(CONTINUOUS INSULATION) + 13
SLAB R-VALUE & DEPTH	10, 4 ft
CRAWL SPACE WALL R-VALUE	10(CONTINUOUS INSULATION) OR 13
	,
NIAAOO O (DAOO O) ODEOJEJO INICIJI ATI	ON DECLUDEMENTO (DDE CODIDTIVE) IN ADDITION TO THE

I1102.2 (R402.2) SPECIFIC INSULATION REQUIREMENTS (PRE- SCRIPTIVE). IN ADDITION TO THE REQUIREMENTS OF SECTION N1102.1, INSULATION SHALL MEET THE SPECIFIC REQUIREMENTS OF SECTIONS N1102.2.1 THROUGH N1102.2.13.

CEILINGS WITH ATTIC SPACES. PER N1102.2.1 (R402.2.1) WHERE SECTION R1102.1.2 WOULD REQUIRE R-38 INSULATION IN THE CEILING, INSTALLING R-30 OVER 100 PERCENT OF THE CEILING AREA REQUIRING INSULATION SHALL BE DEEMED TO SATISFY THE REQUIRE- MENT FOR R-38 WHEREVER THE FULL HEIGHT OF UNCOMPRESSED R- 30 INSULATION EXTENDS OVER THE WALL TOP PLATE AT THE EAVES. SIMILARLY, WHERE SECTION R1102.1.2 WOULD REQUIRE R-49 INSULATION IN THE CEILING, INSTALLING R-38 OVER 100 PERCENT OF THE CEILING AREA REQUIRING INSULATION SHALL BE DEEMED TO SAT- ISFY THE REQUIREMENT FOR R-49 INSULATION WHEREVER THE FULL HEIGHT OF UNCOMPRESSED R-38 INSULATION EXTENDS OVER THE WALL TOP PLATE AT THE EAVES. THIS REDUCTION SHALL NOT APPLY TO THE *U*-FACTOR ALTERNATIVE APPROACH IN SECTION R1102.1.4 AND THE TOTAL UA ALTERNATIVE IN SECTION R1102.1.5.

EAVE BAFFLE, PER N1102.2.3 (R402.2.3). FOR AIR-PERMEABLE INSULATIONS IN VENTED ATTICS. A BAFFLE SHALL BE INSTALLED ADJA- CENT TO SOFFIT AND EAVE VENTS. BAFFLES SHALL MAINTAIN AN OPENING EQUAL OR GREATER THAN THE SIZE OF THE VENT. THE BAFFLE SHALL EXTEND OVER THE TOP OF THE ATTIC INSULATION. THE BAFFLE SHALL BE PERMITTED TO BE ANY SOLID MATERIAL.

BASEMENT WALLS. PER N1102.2.9 (R402.2.9) BASEMENT WALLS. WALLS ASSOCIATED WITH CONDITIONED BASEMENTS SHALL BE INSULATED FROM THE TOP OF THE *BASEMENT WALL* DOWN TO 10 FEET (3048 MM) BELOW GRADE OR TO THE BASEMENT FLOOR, WHICHEVER IS LESS. WALLS ASSOCIATED WITH UNCONDITIONED BASEMENTS SHALL MEET THIS REQUIREMENT UNLESS THE FLOOR OVERHEAD IS INSULATED IN ACCORDANCE WITH SECTIONS N1102.1.2 AND N1102.2.8.

MASONRY VENEER. N1102.2.12 (R402.2.12) INSULATION SHALL NOT BE REQUIRED ON THE HORIZONTAL PORTION OF THE FOUNDATION THAT SUPPORTS A MASONRY VENEER.

<u>AIR LEAKAGE</u> (MANDATORY). PER N1102.4 (R402.4), THE BUILDING THERMAL ENVELOPE SHALL BE CONSTRUCTED TO LIMIT AIR LEAKAGE IN ACCORDANCE WITH THE REQUIREMENTS OF SECTIONS R1102.4.1 THROUGH R1102.4.4.

TESTING PER N1102.4.1.2 (R402.4.1.2), THE BUILDING OR DWELLING UNIT SHALL BE TESTED AND VERIFIED AS HAVING AN AIR LEAKAGE RATE OF NOT EXCEEDING THREE AIR CHANGES PER HOUR IN CLIMATE ZONES TR-4A. TESTING SHALL BE CONDUCTED IN ACCORDANCE WITH ASTM E779 OR ASTM E1827 AND REPORTED AT A PRESSURE OF 0.2 INCHES W.G. (50 PASCALS). WHERE REQUIRED BY THE CODE OFFICIAL, TESTING SHALL BE CON- DUCTED BY AN APPROVED THIRD PARTY. A WRITTEN REPORT OF THE RESULTS OF THE TEST SHALL BE SIGNED BY THE PARTY CON- DUCTING THE TEST AND PROVIDED TO THE CODE OFFICIAL. TESTING SHALL BE PERFORMED AT ANY TIME AFTER CREATION OF ALL PEN ETRATIONS OF THE BUILDING THERMAL ENVELOPE.

FENESTRATION AIR LEAKAGE. PER N1102.4.3 (R402.4.3) FENESTRATION AIR LEAKAGE. WINDOWS, AND SLIDING GLASS DOORS SHALL HAVE AN AIR INFILTRATION RATE OF NO MORE THAN 0.3 CFM PER SQUARE FOOT AND SWINGING DOORS NO MORE THAN 0.5 CFM PER SQUARE FOOT WHEN TESTED ACCORDING TO NFRC 400 OR AAMA/ WDMA/CSA 101/I.S.2/A440 BY AN ACCREDITED, INDEPENDENT LABORATORY AND *LISTED* AND *LABELED* BY THE MANUFACTURER.

AIR BARRIER AND INSULATION INSTALLATION, PER TABLE N1102.4.1.1 (402.4.1.1)

GENERAL REQUIREMENTS: A CONTINUOUS AIR BARRIER SHALL BE INSTALLED IN THE BUILDING ENVELOPE. THE EXTERIOR THERMAL ENVELOPE CONTAINS A CONTINUOUS AIR BARRIER. BREAKS OR JOINTS IN THE AIR BARRIER SHALL BE SEALED. AIR-PERMEABLE INSULATION SHALL NOT BE USED AS A SEALING MATERIAL.

CEILING/ATTIC. THE AIR BARRIER IN ANY DROPPED CEILING/SOFFIT SHALL BE ALIGNED WITH THE INSULATION AND ANY GAPS IN THE AIR BARRIER SEALED. ACCESS OPENINGS, DROP DOWN STAIRS OR KNEE WALL DOORS TO UNCONDITIONED ATTIC SPACES SHALL BE SEALED.THE INSULATION IN ANY DROPPED CEILING/SOFFIT SHALL BE ALIGNED WITH THE AIR BARRIER.

WALLS . THE JUNCTION OF THE FOUNDATION AND SILL PLATE SHALL BE SEALED. THE JUNCTION OF THE TOP PLATE AND THE TOP OF EXTERIOR WALLS SHALL BE SEALED. KNEE WALLS SHALL BE SEALED. CAVITIES WITHIN CORNERS AND HEADERS OF FRAME WALLS SHALL BE INSULATED BY COMPLETELY FILLING THE CAVITY WITH A MATERIAL HAVING A THERMAL RESISTANCE OF R-3 PER INCH MINIMUM. EXTERIOR THERMAL ENVELOPE INSULATION FOR FRAMED WALLS SHALL BE INSTALLED IN SUBSTANTIAL CONTACT AND CONTINUOUS ALIGNMENT WITH THE AIR BARRIER.

<u>FLOORS</u> (INCLUDING ABOVE GARAGE AND CANTILEVERED FLOORS). THE AIR BARRIER SHALL BE INSTALLED AT ANY EXPOSED EDGE OF INSULATION. FLOOR FRAMING CAVITY INSULATION SHALL BE INSTALLED TO MAINTAIN PERMANENT CONTACT WITH THE UNDERSIDE OF SUBFLOOR DECKING, OR FLOOR FRAMING CAVITY INSULATION SHALL BE PERMITTED TO BE IN CONTACT WITH THE TOP SIDE OF SHEATHING, OR CONTINUOUS INSULATION INSTALLED ON THE UNDERSIDE OF FLOOR FRAMING; AND EXTENDS FROM THE BOTTOM TO THE TOP OF ALL PERIMETER FLOOR FRAMING MEMBERS. SHAFTS, PENETRATIONS DUCT SHAFTS, UTILITY PENETRATIONS, AND FLUE SHAFTS OPENING TO EXTERIOR OR UNCONDITIONED SPACE SHALL BE SEALED.

NARROW CAVITIES BATTS IN NARROW CAVITIES SHALL BE CUT TO FIT, OR NARROW CAVITIES SHALL BE FILLED BY INSULATION THAT ON INSTALLATION READILY CONFORMS TO THE AVAILABLE CAVITY SPACE.

GARAGE SEPARATION. AIR SEALING SHALL BE PROVIDED BETWEEN THE GARAGE AND CONDITIONED SPACES.

RECESSED LIGHTING RECESSED LIGHT FIXTURES INSTALLED IN THE BUILDING THERMAL ENVELOPE SHALL BE SEALED TO THE DRYWALL. RECESSED LIGHT FIXTURES INSTALLED IN THE BUILDING THERMAL ENVELOPE SHALL BE AIR TIGHT AND IC RATED.

PLUMBING AND WIRING. BATT INSULATION SHALL BE CUT NEATLY TO FIT AROUND WIRING AND PLUMBING IN EXTERIOR WALLS, OR INSULATION THAT ON INSTALLATION READILY CONFORMS TO AVAILABLE SPACE SHALL EXTEND BEHIND PIPING AND WIRING.

SHOWER/TUB ON EXTERIOR WALL. THE AIR BARRIER INSTALLED AT EXTERIOR WALLS ADJACENT TO SHOWERS AND TUBS SHALL SEPARATE THEM FROM THE SHOWERS AND TUBS. EXTERIOR WALLS ADJACENT TO SHOWERS AND TUBS SHALL BE INSULATED.

ELECTRICAL BOXES ON EXTERIOR WALLS THE AIR BARRIER SHALL BE INSTALLED BEHIND ELECTRICAL OR COMMUNICATION BOXES OR AIR-SEALED BOXES SHALL BE INSTALLED.

<u>HVAC REGISTER BOOTS</u>. HVAC REGISTER BOOTS THAT PENETRATE BUILDING THERMAL ENVELOPE SHALL BE SEALED TO THE SUBFLOOR OR DRYWALL.

MAXIMUM FENESTRATION U-FACTOR AND SHGC (MANDATORY). PER N1102.5 (R402.5), THE AREA-WEIGHTED AVERAGE MAXIMUM FENESTRATION U-FACTOR PERMITTED USING TRADEOFFS FROM SECTION N1102.1.5 OR N1105 SHALL BE 0.48 IN CLIMATE ZONES 5 FOR VERTICAL FENESTRATION. THE AREA-WEIGHTED AVERAGE MAXIMUM FENESTRATION SHGC PERMITTED USING TRADEOFFS FROM SECTION N1105 IN CLIMATE ZONES 1 THROUGH 3 SHALL BE 0.50.

DUCTS. PER N1103.3 (R403.3) DUCTS AND AIR HANDLERS SHALL BE IN ACCORDANCE WITH SECTIONS N1103.3.1 THROUGH N1103.3.5.

LIGHTING EQUIPMENT (MANDATORY). N1104.1 (R404.1) NOT LESS THAN 75 PERCENT OF THE LAMPS IN PERMANENTLY INSTALLED LIGHTING FIXTURES SHALL BE HIGH-EFFICACY LAMPS OR NOT LESS THAN 75 PERCENT OF THE PERMANENTLY INSTALLED LIGHTING FIXTURES SHALL CONTAIN ONLY HIGH-EFFICACY LAMPS. EXCEPTION: LOW-VOLTAGE LIGHTING.

ENERGY STAR VERSION 3.2 CRITERIA

HOMES PERMITED ON OR AFTER January 1, 2024 SHALL USE VERSION 3.2 (REV 12) FOR COMPLIANCE WITH ENERGY STAR CRITERIA

Emittance = .90

RESNET/ ICC Std. 301

Internal Mass:

PROJECT IN CLIMATE ZONE 5, WOOD FRAME CONSTRUCTION INSULATION QUALITY: GRADE 1

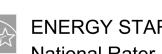
ENVELOPE, WINDOWS AND DOORS	
Foundations:	Construction Type: Concrete Slab on Grade Gross Area: 807 sf Underslab Insulation = R10 at perimeter for entire depth of slab and underentire slab area Insulation Depth = 4'-0"
Floors Over Unconditioned Spaces: Above Garage/Entry	Construction Type: Wood Frame Gross Area: 808 sf Floor Assembly U Factor = .033
Above-Grade Walls	Construction Type: Wood Frame Solar Absorptance: 0.75 Emittance: 0.90 Wall Assembly U-Factor: 0.045
Thermally Isolated Sunrooms	None
Doors. Opaque	U-factor 0.17 SHGC: Any
≤ 1/2 Lite	U-factor 0.25 SHGC: 0.25
> 1/2 Lite	U-factor 0.30 SHGC: 0.40
Glazing	Orientation: Equally Distributed to North, East, South, West Interior Shade Coefficient: Same as Energy Rating Reference Home, as defined by ANSI/RESNET/ICC Std. 301 Exterior Shading: None
	U-factor 0.27 SHGC: 0.40
Skylights	None
Ceilings	Construction Type: Wood Frame Ceiling Assembly U-Factor 0.024
Attics:	Vented with Aperture, 1sf per 300 sf ceiling area Radiant Barrier: None
Roofs	Construction Type: Composite shingle on wood sheathing Gross Area: Same as Rated Home Solar Absorptance = 0.92

Same as Energy Rating Reference Home, as defined by ANSI/

ouct Leakage to Outside	0 CFM25 per 100sf of conditioned floor area
Duct Insulation	None, All ductwork to run within conditioned space
Duct Surface Area	Same as Rated Home
Supply and Return Ducts Locations	Ductwork on Second and Third Floors (within conditioned space)
Duct Insulation for Ducts in Unconditioned Space	N/A All ductwork to run within conditioned space
Thermostat Type	Programmable: Same as Energy Rating Reference Home, but with offsets for a programmable thermostat as defined by ANSI/ RESNET/ ICC Std. 301
HEATING SYSTEMS	
Heating Capacity	Heating capacity shall be selected in accordance with ACCA Manual S based on building heating and cooling loads calculated in Accordance with ACCA Manual J, 8th Edition, ASHRAE Handbook of Fundamental, or an equivalent computational procedure
Gas Furnace	95 AFUE
Gas Boiler	95 AFUE
COOLING SYSTEMS	
Cooling Capacity	Heating capacity shall be selected in accordance with ACCA Manual S based on building heating and cooling loads calculated in Accordance with ACCA Manual J, 8th Edition, ASHRAE Handbook of Fundamental, or an equivalent computational procedure
Air Conditioner	14 SEER
Air Source Heat Pump	16 SEER
WATER HEATING EQUIPMENT	•
Use(gallons per day)	Same as Energy Rating Reference Home, as defined by ANSI/ RESNET / ICC st. 301, except for reduced usage resulting from the dishwasher specified in the Lighting, Appliances and Internal Gains Section
Gas: Storage Tank Capacity	60 Gallons
Gas: Tankless Water Heater	2.20 EUF
LIGHTING AND APPLIANCES	
Lighting	Fraction of qualifying Tier 1 light fixtures to all fixtures in qualifyin light fixture locations: Interior: 90% Exterior and Garage: 0%
Refrigerators	ENERGY STAR, 423 kWh per year
Dishwashers	ENERGY STAR, 0,66 EF, Place Setting Capacity same as rated home
Ceiling Fans	ENERGY STAR, 122 CFM per watt, Quantity = Number of bedrooms +1 when ceiling fans present in the rated home, otherwise quantity = 0
Clothes Washer and Dryer	Same as Energy Rating Reference Home, as defined by ANSI/ RESNET/ ICC Std. 301
Internal Gains	Same as Energy Rating Reference Home, as defined by ANSI/ RESNET/ ICC Std. 301, except for adjustmens for the lighting, refrigerator, diswasher, and ceiling fans specified in this section

Mandatory Requirements for All Certified Homes

Manuatory Requirement	its for All Certified Homes
HVAC Installing Contractor system, the Rater is the party responsible for assessing its installation in accordance with ANS RESNET / ACCA Std. 310. Requirements Only Applicable to Path B - HVAC Credential	
Requirements Applicable to I	Path A and B
Rater	
- tatoi	Completion of National Rater Field Checklist, Version 3.2
Builder	Completion of National Water Management System Builder Requirement Version 3.2
Requirements Only Applicab	le to Path A - HVAC Grading
HVAC System Design	
HVAC Installing Contractor	None, while the HVAC contractor plays a critical role in properly installing and commisioning a system, the Rater is the party responsible for assessing its installation in accordance with ANSI / RESNET / ACCA Std. 310.
Requirements Only Applicab	le to Path B - HVAC Credential
HVAC System Design	Completion of National HVAC Design Report Version 3.2
HVAC Installing Contractor	Completion of National HVAC Commissioning Checklist Version 3.2



ENERGY STAR Single-Family New Homes

Home Address: City: State:	P	ermit Date	:		
Thermal Enclosure System	Must	Builder	Rater	N/A	
1. High-Performance Fenestration & Insulation	Correct	Verified ¹	Verified ²	1177	
1.1 Fenestration meets or exceeds specification in Item 2.1 of the National Rater Design Review Checklist.				-	
1.2 Insulation meets or exceeds specification in Item 3.1 of the National Rater Design Review Checklist. 4				-	
1.3 All insulation achieves Grade I install. per ANSI / RESNET / ICC 301. Alternatives in Footnote 5. 5,6				_	
Hermal Enclosure System					
Climate Zones 4-8. Also, at exterior vertical surface of ceiling insulation in all climate zones (e.g., using a wind	d baffle t	hat extends	s to the full		
	insulatio	n in Climate	e Zones 4-	·8. ⁹	
2.4 Walls adjoining porch roofs or garages.					
2.5 Double-walls and all other exterior walls.				<u> </u>	
including supports to ensure alignment. Alternatives in Footnotes 12 & 13. 11, 12, 13	o at inter	ior horizont	tal surface		
2.6 Floors above garages, floors above unconditioned basements or crawlspaces, and cantilevered floors.					
2.7 All other floors adjoining unconditioned space (e.g., rim / band joists at exterior wall or at porch roof).					
inside face of the exterior wall below and is ≥ R-21 in CZ 1-5; ≥ R-30 in CZ 6-8. ¹⁴				□	
3.3 Insulation beneath attic platforms (e.g., HVAC platforms, walkways) ≥ R-21 in CZ 1-5; ≥ R-30 in CZ 6-8.					
3.4 At above-grade walls separating conditioned from unconditioned space, one of the following options used	(rim / ba	and joists e	xempted):	17	
3.4.2 Structural Insulated Panels OR ; Insulated Concrete Forms OR ; Double-wall framing OR ; ^{18, 21}					
3.4.3a Corners insulated ≥ R-6 to edge ²³ , AND ;					
and ≥ R-5 for all other assemblies (e.g., with 2x6 framing) ²⁴ , AND ;				□	
3.4.3d Interior / exterior wall intersections insulated to same R-value as rest of exterior wall, ²⁵ AND ;					
				-	
	ial)		1		
sealed, with blocking / flashing as needed.				-	
insulated ceiling without attic above, exterior surface of fixture insulated to ≥ R-10 in CZ 4-8.				□	
placed beneath above-grade sill plate if resting atop concrete / masonry & adjacent to cond. space. ^{27,28}					
4.4 Continuous top plate or blocking is at top of walls adjoining unconditioned space, and sealed.					
4.5 Drywall sealed to top plate at all unconditioned attic / wall interfaces using caulk, foam, drywall adhesive (but not other construction adhesives), or equivalent material. Either apply sealant directly between drywall and top plate or to the seam between the two from the attic above.					
4.6 Rough opening around windows & exterior doors sealed. 29				 	
4.7 Walls that separate attached garages from occupiable space sealed and, also, an air barrier installed and sealed at floor cavities aligned with these walls.					
4.8 In multifamily buildings, the gap between the common wall (e.g., the drywall shaft wall) and the structural framing between units sealed at all exterior boundaries.				┌	
4.9 Doors adjacent to unconditioned space (e.g., attics, garages, basements) or ambient conditions made				<u></u>	
substantially air-tight with weatherstripping or equivalent gasket.				_	

OMB Control Number: 2060-0586

Revised 09/15/2022 OMB Control Expiration Date: 01/31/2024 EPA Form Number: 5900-428

RESNET Registry ID #

ENERGY STAR Qualified Homes, Version 3 (Rev. 05)

Home Address: City:				
Inspection Guidelines	Must Correct	Builder Verified	Rater Verified	N
1. Water-Managed Site and Foundation				
1.1 Patio slabs, porch slabs, walks, and driveways sloped ≥ 0.25 in. per ft. away from home to edge of surface or 10 ft., whichever is less. 4	of 📗 🗆			
1.2 Back-fill has been tamped and final grade sloped \geq 0.5 in. per ft. away from home for \geq 10 ft. See footnote for alternatives. ⁴				
1.3 Capillary break beneath all slabs (e.g., slab on grade, basement slab) except crawlspace slabs us either: ≥ 6 mil polyethylene sheeting, lapped 6-12 in., or ≥ 1" extruded polystyrene insulation with taped joints. ⁵	sing \Box			
1.4 Capillary break at all crawlspace floors using ≥ 6 mil polyethylene sheeting, lapped 6-12 in., and in options: ⁵	nstalled using or	ne of the fo	llowing thr	ee
1.4.1 Placed beneath a concrete slab; OR,				
1.4.2 Lapped up each wall or pier and fastened with furring strips or equivalent; OR,				Г
1.4.3 Secured in the ground at the perimeter using stakes.				
 1.5 Exterior surface of below-grade walls finished as follows: For poured concrete, concrete masonry, and insulated concrete forms, finish with damp-proofic coating. For wood framed walls, finish with polyethylene and adhesive or other equivalent waterproofin 				
1.6 Class 1 vapor retarders not installed on the interior side of air permeable insulation in exterior beligrade walls. ⁶	ow-			
1.7 Sump pump covers mechanically attached with full gasket seal or equivalent.				
1.8 Drain tile surrounded with clean gravel and fabric filter. 7				
2. Water-Managed Wall Assembly	<u>'</u>			
2.1 Flashing at bottom of exterior walls with weep holes included for masonry veneer and weep scree stucco cladding systems, or equivalent drainage system.	ed for			
2.2 Fully sealed continuous drainage plane behind exterior cladding that laps over flashing in Item 2.7 Additional bond-break drainage plane layer provided behind all stucco and non-structural mason cladding wall assemblies.				
2.3 Window and door openings fully flashed. ⁹				
3. Water-Managed Roof Assembly				
3.1 Step and kick-out flashing at all roof-wall intersections, extending \geq 4" on wall surface above roof and integrated with drainage plane above. ¹⁰	deck			
3.2 For homes that don't have a slab-on-grade foundation and do have expansive or collapsible soils gutters & downspouts provided that empty to lateral piping that deposits water on sloping final gra 5 ft. from foundation or to underground catchment system ≥ 10 ft. from foundation. ¹¹				
3.3 Self-sealing bituminous membrane or equivalent at all valleys & roof deck penetrations. 12				
3.4 In 2009 IECC Climate Zones 5 and higher, self-sealing bituminous membrane or equivalent over sheathing at eaves from the edge of the roof line to > 2 ft. up roof deck from the interior plane of the exterior wall. 12	he 🗆			
4. Water-Managed Building Materials				
4.1 Wall-to-wall carpet <i>not</i> installed within 2.5 ft. of toilets, tubs, and showers.				
4.2 Cement board or equivalent moisture-resistant backing material installed on all walls behind tub a shower enclosures composed of tile or panel assemblies with caulked joints. Paper-faced backers shall not be used. ¹³				
4.3 In Warm-Humid climates, Class 1 vapor retarders not installed on the interior side of air permeable insulation in above-grade walls, except at shower and tub walls. 6	le 🗆			Г
4.4 Building materials with visible signs of water damage or mold <i>not</i> installed. ¹⁴				Г
4.5 Interior walls not enclosed (e.g., with drywall) if either the framing members or insulation products have high moisture content. ¹⁵	·			
Builder Employee: Builder Signature:	Date:			
Builder has completed Builder Checklist in its entirety, except for items that are checked in the Rater		(if any) ²		_

Effective for homes permitted starting 3/15/2012

Revised 1/15/2012

Page 15 of 16



ENERGY STAR Single-Family New Homes

National Rater Field Checklist, Version 3 / 3.1 / 3.2 (Rev. 12)

HVAC Sy		Equipment Complete Track A. 1874	Crading 32 on Track D. LIVAC Condens 1 133		/lust orrect	Rater Verified ²
		• •	C Grading ³² or Track B - HVAC Credential ³³		_	Verified
Trook		olumetric airflow is Grade I or II per ANSI			<u></u>	ᆜ
A 5a.2		vatt draw is Grade I or II per ANSI / RESN		24	ᆜ	
			CCA / ICC 310. See Footnote 34 for exemption			_ Ц
			ipment matches either of the following (check b	oox):35		
HUOK		VAC Design Report	☐ Written approval received from designer			
		•	ctor-provided test locations and documented be			
			Supply-Side External Static Pressure:	_IWC		
			oning Checklist collected, with no items left bla		Ш	_ 니
			ation, Exhaust, & Pressure Balancing Ducts, U			ootnote)
		ithout kinks, sharp bends, compressions,				Ш
achieve	a Rater-mea	sured pressure differential ≥ -3 Pa and ≤	o ducts, dedicated return ducts, undercut doors' +3 Pa with respect to the main body of the hou alternative compliance option in Footnote 38.	se		
			connections to trunk ducts, are insulated to ≥ R-		\Box	
	•		two options. Alternative in Footnote 41: ^{40, 41, 42}	-		
			or ≤ 40 CFM25, with air handler & all ducts, bu	ildina		_
cavi	ies used as o	ducts, & duct boots installed. <u>All</u> duct boot	s sealed to finished surface, Rater-verified at fi 80 CFM25, with the air handler & all ducts, but	nal. ⁴³		
			e finished surface (e.g., drywall, floor) installed			
			FM25 per 100 sq. ft. of CFA or ≤ 40 CFM25. 40,			
		anical Ventilation Systems ("Vent Sy				
		tilation rate is within either ± 15 CFM or ±	,			
		ventilation override control installed and a le wall switch, but not for a switch that's o	ollso labeled if its function is n ot obvious (e.g., a n the ventilation equipment). 49	label		
7.3 For any	outdoor air ir	nlet connected to a ducted return of the H	VAC system (Complete if present; otherwise ch	eck "N/A")): ⁴⁷	
7.3.1 Cont	rols automati	cally restrict airflow using a motorized da	mper during vent. off-cycle and occupant overri	de. ⁵⁰		
7.3.2 Rate	r-measured v	vent. rate is ≤ 15 CFM or 15% above desi	gn value at highest HVAC fan speed. Alt. in Fn.	51. ⁵¹		
7.4 System	fan rated ≤ 3	sones if intermittent and ≤ 1 sone if conti	nuous, or exempted. ⁵²			
			fan operation is intermittent and either the fan t ng for HVAC system heating or cooling hours.			
		NERGY STAR certified if used as part of				
7.7 Air inlet	location (Cor	mplete if ventilation air inlet location was s	specified on design report; otherwise check "N/A	۹"): ^{55, 56}		
7.7.1 Inle	pulls ventila	tion air directly from outdoors and not fror	n attic, crawlspace, garage, or adjacent dwellin	g unit.		
		ove grade or roof deck; \geq 10 ft. of stretche of, and \geq 3 ft. distance from dryer exhaus	d-string distance from known contamination so ts and sources exiting the roof. ⁵⁷	urces		
7.7.3 Inle	is provided	with rodent / insect screen with ≤ 0.5 inch	mesh.			
8. Local M	echanical E		a system is installed that exhausts directly to the irflow and manufacturer-rated sound level stan	40 EC		meets one
Location		Continuous Rate	Intermittent Rate 59			
		≥ 5 ACH,	≥ 100 CFM and, if not integrated with rang	e.		
8.1 Kitchen	Airflow	based on kitchen volume ^{60, 61}	also ≥ 5 ACH based on kitchen volume ^{60,1}	24 60		
	Sound	Recommended: ≤ 1 sone	Recommended: ≤ 3 sones		_	_
000 "	Airflow	≥ 20 CFM	≥ 50 CFM			
8.2 Bathroo	m Sound	Required: ≤ 1 sone	Recommended: ≤ 3 sones			
9. Filtratio	n '					
			gned so all return and mechanically supplied ou facilitate occupant access & regular service. ⁶³			
			osed edge of filter when closed to prevent bypa			
10. Combu	stion Appli	ances				
10.1 Furnac	es, boilers, &	water heaters are mechanically drafted	or direct-vented. Alternatives in Footnote 67. 65,	66, 67		
		hanically drafted or direct-vented. Alternat				
10.3 No unv	rented combu	ustion appliances other than cooking rang re in Footnote 70. 65, 69, 70	es or ovens are located inside the home's pres	sure		
			ter Pre-Drywall Inspection Date:	Rater Initi	als:	
		Ra	ter Final Inspection Date:	Rater Initi	_	
Ruilder Em				Ruilder Ini		

Builder Employee: ____

OMB Control Number: 2060-0586

ENERGY STAR Single-Family New Homes National Rater Design Review Checklist, Version 3 / 3.1 / 3.2 (Rev. 12)

Builder Inspection Date:

Revised 09/15/2022

OMB Control Expiration Date: 01/31/2024

Builder Initials:

EPA Form Number: 5900-428

		City:			State: P	ermit Date:		
1. Partnership Statu								Rater ² Verified
1.1 Rater has verified a energystar.gov/Res	and documented that builder h sPartnerDirectory. ⁴	as an ENE	RGY STA	R partners	hip agreen	nent using		
2. High-Performance	Fenestration							
2.1 Specified fenestrat	ion meets or exceeds 2009 IE	CC or, for	National v3	3.2, 2021 IE	ECC requir	ements. 5, 6		
3. High-Performance	e Enclosure							
3.1 Specified total build	ding thermal envelope UA mee	ets one of t	he followin	g options.	Note: Item	3.1.2 is not an option for	or Nationa	l v3.2.
	00% of the total UA resulting ECC Table 402.1.2. See exception				Table 402	2.1.3 or, for National		
	ions except National v3.2: Act 402.1.3, per guidance in Foot .8,9							
		1 - 2 ≤ 3.0	3 - 4 ≤ 2.5	5 - 7 ≤ 2.0	o ≤ 1.5			
4a Daview of ANCI	Infiltration Limit (ACH50)					STAD Supplement 10		
4a. Review of ANSI	RESNET / ACCA / ICC 310					• •		
1- 1 IIV/AC design non	ort compliant with ANSI / RES 310 for Dwellings & Units, co							
4a.1 HVAC design rep Supplement to Std.		4a.2 ANSI / RESNET / ACCA / ICC 310 design review criteria have been met for applicable housing type.						
Supplement to Std.		w criteria h	nave been	met for app	olicable ho	using type.		
Supplement to Std. 4a.2 ANSI / RESNET /						using type.		

If pursuing Track B - HVAC Credential, complete this page.										
Home Address:	Permit Date:									
1. Partnership Status	Must Correct	N/								
1.1 Rater has verified and documented that builder has an ENERGY STAR partnership agreement using energystar.gov/ResPartnerDirectory. 4		Verified	-							
1.2 Rater has verified and documented ¹² that HVAC contractor holds credential required to complete National HVAC Commissioning Checklist, unless all equipment to be installed in home to be certified is an exempted type, in which case check "N/A". ¹³ HVAC Contractor Company Name:										
2. High-Performance Fenestration										
2.1 Specified fenestration meets or exceeds 2009 IECC or, for National v3.2, 2021 IECC requirements. ^{5, 6}										
3. High-Performance Enclosure										
3.1 Specified total building thermal envelope UA meets one of the following options. Note: Item 3.1.2 is not an option f	or Nationa	l v3.2.								
3.1.1 Achieves ≤ 100% of the total UA resulting from the U-factors in 2009 IECC Table 402.1.3 or, for National v3.2, 2021 IECC Table 402.1.2. See exception in Fn. 7 ^{6,7,8,9} OR;										
3.1.2 For all Versions except National v3.2: Achieves ≤ 133% of the total UA resulting from the U-factors in 2009 IECC Table 402.1.3, per guidance in Footnote 7, AND specified home infiltration does not exceed the following: ^{6,7,8,9} 2009 IECC Climate Zone 1 - 2 3 - 4 5 - 7 8 Infiltration Limit (ACH50) ≤ 3.0 ≤ 2.5 ≤ 2.0 ≤ 1.5										
4b. Review of ENERGY STAR National HVAC Design Report 14, 15										
4b.1 National HVAC Design Report collected for records, with no applicable Items left blank.			-							
4b.2 National HVAC Design Report reviewed by Rater for the following parameters (National HVAC Design Report Ite	m # in par	enthesis):								
4b.2.1 Cooling season and heating season outdoor design temperatures used in loads (3.3) are within the limits defined for the State and County, or US Territory, where the home will be built, or the designer has provided an allowance from EPA to use alternative values. All limits are published at energystar.gov/hvacdesigntemps . Note that revised (i.e., 2019 Edition) limits are required to be used for all HVAC Design Reports generated after 10/01/2020. 16										
4b.2.2 Number of occupants used in loads (3.4) is within ± 2 of the home to be certified. ¹⁷										
4b.2.3 Conditioned floor area used in loads (3.5) is between 100 sq. ft. smaller and 300 sq. ft. larger than the home to be certified. ¹⁸										
4b.2.4 Window area used in loads (3.6) is between 15 sq. ft. smaller and 60 sq. ft. larger than the home to be certified, or, for homes to be certified with > 500 sq. ft. of window area, between 3% smaller and 12% larger. 19			Ш							
4b.2.5 Predominant window SHGC used in loads (3.7) is within 0.1 of predominant value in the home to be certified. ²⁰										
4b.2.6 Sensible, latent, & total heat gain are documented (3.10 - 3.12) for the orientation of the home to be certified. ²¹										
4b.2.7 The variation in total heat gain across orientations (3.13) is ≤ 6 kBtuh. ²¹										
4b.2.8 Cooling sizing % (4.13) is within the cooling sizing limit (4.15) selected by the HVAC designer.										
Rater Name: Date of Review:										



Habitat For Humanity 146 North 1st Street Paterson, NJ 07522

Passaic County

PROJECT NAME

101 NORTH 3RD STREET SINGLE FAMILY **RESIDENCE**

ELL CHEN O'NEIL ARCHITECTS, PLLC 29 GANUNG DRIVE

OSSINING, NY 10562 646-812-5566

STRUCTURAL ENGINEER: BNJ ENGINEERING PC 20 FRANCISCAN WAY FAIR LAWN, NJ 07410 201-796-0003

CIVIL ENGINEER:

GOLDEN & MORAN ENGINEERING PC 22 ANGELO DRIVE SPARTA, NJ 07871 973-714-2131

6 ISSUE FOR FILING 5 75% CD SET 03/13/23 4 50% CD SET 02/04/23 3 25% CD SET 12/02/22 2 DESIGN 10/02/22 DEVELOPMENT

CONCEPT DESIGN

09/09/22

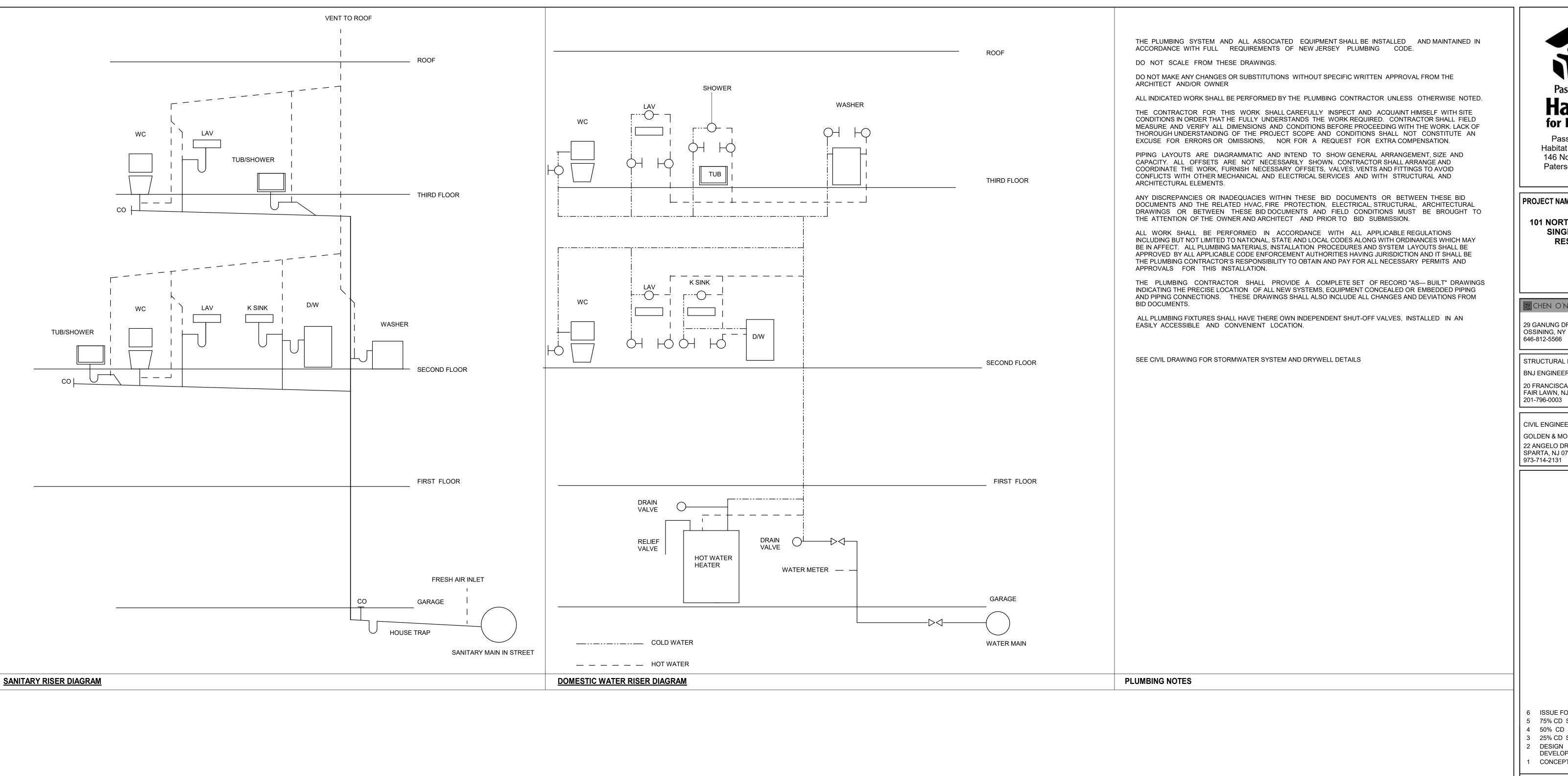
DATE

ISSUE/REVISION DRAWING TITLE

ENERGY STAR NOTES

DRAWING NO.

06/09/2023 As indicated STAMP & SIGNATURE



Habitat for Humanity®

Passaic County Habitat For Humanity 146 North 1st Street Paterson, NJ 07522

PROJECT NAME

101 NORTH 3RD STREET SINGLE FAMILY RESIDENCE

ELL CHEN O'NEIL ARCHITECTS, PLLC

29 GANUNG DRIVE OSSINING, NY 10562

STRUCTURAL ENGINEER:

BNJ ENGINEERING PC 20 FRANCISCAN WAY FAIR LAWN, NJ 07410

CIVIL ENGINEER:

GOLDEN & MORAN ENGINEERING PC 22 ANGELO DRIVE SPARTA, NJ 07871 973-714-2131

6 ISSUE FOR FILING 06/09/23 5 75% CD SET 03/13/23 4 50% CD SET 02/04/23 3 25% CD SET 12/02/22 2 DESIGN 10/02/22 DEVELOPMENT 1 CONCEPT DESIGN 09/09/22

DRAWING TITLE

ISSUE/REVISION

PLUMBING RISER **DIAGRAMS**

DATE

DRAWING NO.

A-7.0

06/09/2023 As indicated_

STAMP & SIGNATURE