



CUSTOM RESIDENTIAL DESIGN for:  
**MR. & MRS. P. J. PATEL**  
COLUMBIA COUNTY, FLORIDA

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CUSTOM RESIDENTIAL DESIGN for:  
**MR. & MRS. P. J. PATEL**  
COLUMBIA COUNTY, FLORIDA  
**COVER SHEET**

Celebrating  
48 Years of  
Service

1972-2020  
N.P. Geisler, Architect  
AR0007005

NICHOLAS  
GEISLER  
ARCHITECT  
N.C.A.A.R.E. Certified

1758 NW Brown, Rd.  
Columbia, SC 29205  
386-525-4355

DATE:  
21 SEP 2021

COMM:  
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SHEET:  
CS.1  
1 OF 1

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TEMPERED GLASS NOTES:

THE FOLLOWING SHALL BE CONSIDERED SPECIFIC HAZARDOUS LOCATIONS FOR THE PURPOSES OF GLAZING:

- GLAZING IN SWINGING DOORS AND FIXED AND SLIDING PANELS OF SLIDING (PATIO) DOOR ASSEMBLIES.
- GLAZING IN DOORS AND WALLS OF ENCLOSURES FOR HOT TUBS, WHIRLPOOLS, SAUNAS, STEAM ROOMS, BATHTUBS, SHOWERS AND OTHER SUCH FACILITIES WHERE SUCH GLAZING IS LOCATED 36 INCHES (914 MM) OR LESS MEASURED HORIZONTALLY, FROM A STANDING OR WALKING SURFACE WITHIN THE ENCLOSURE AND WHERE THE BOTTOM EDGE OF THE EXPOSED GLAZING IS LESS THAN 60 INCHES (1524 MM) MEASURED VERTICALLY, ABOVE SUCH STANDING OR WALKING SURFACES.
- GLAZING IN AN INDIVIDUAL FIXED OR OPERABLE PANEL ADJACENT TO A DOOR WHERE THE NEAREST VERTICAL EDGE IS WITHIN A 24-INCH (610 MM) RADIUS OF THE DOOR IN A CLOSED POSITION AND WHOSE BOTTOM EDGE IS LESS THAN 60 INCHES (1524 MM) ABOVE THE FLOOR OR WALKING SURFACE.  
EXCEPTION: GLAZING IN WALLS PERPENDICULAR TO THE PLANE OF THE DOOR IN A CLOSED POSITION IN GROUP R3 OR WITHIN DUELLING UNITS IN GROUP R2 SHALL BE SUBJECT TO 2004 FBC 2405.2.1(4).
- GLAZING IN AN INDIVIDUAL FIXED OR OPERABLE PANEL, OTHER THAN THOSE LOCATIONS DESCRIBED IN ITEMS 2 AND 3 ABOVE, THAT MEETS ALL OF THE FOLLOWING CONDITIONS:
  - EXPOSED AREA OF AN INDIVIDUAL PANE GREATER THAN 9 SQ FT (0.84 M<sup>2</sup>).
  - BOTTOM EDGE LESS THAN 18 INCHES (457 MM) ABOVE THE FLOOR.
  - TOP EDGE GREATER THAN 36 INCHES (914 MM) ABOVE THE FLOOR.
  - ONE OR MORE WALKING SURFACES WITHIN 36 INCHES (914 MM) HORIZONTALLY OF THE PLANE OF THE GLAZING.

GENERAL INTERIOR FINISH SCHEDULE:

FLOOR AREA:	CARPET AND PAD, PATTERN 4 COLOR AS PER THE OWNER OR LAMINATE STRIP WOOD, OR TILE - SEE OWNER FOR CHANGES
R/R FLOOR AREA:	THINSET CERAMIC TILE OR NATURAL STONE, PAT. 4 COLOR AS SELECTED BY THE OWNER
BASE:	TRIM, STYLE AND COLOR AS SELECTED BY THE OWNER OR CERAMIC TILE OR STONE - MATCH WITH FLOORING
TRIM:	COVES, CROWN, CASINGS CHAIRRAILS AND THE LIKE AS PER OWNER WITH STAIN 4 VARNISH OR PAINT COLOR AS SELECTED BY THE OWNER
WALLS:	5/8" GWB, PRIMED AND PAINTED 2 COATS LATEX WALL PAINT, COLOR 4 GLOSS AS SELECTED BY THE OWNER
MAIN CEILING:	5/8" GWB, DIRECT HUNG, TAPED 4 FINISHED, W/ 2 COATS OF LATEX CEILING PAINT, COLOR 4 GLOSS AS SELECTED BY THE OWNER
APPLIED FINISHES:	APPLIED FINISHED TO GWB, i.e. SPRAY, KNOCK-DOWN, SKIP-TROWEL AND SIMILAR TREATMENTS AS DIRECTED BY THE OWNER
CABINETS:	AS SELECTED BY THE OWNER MINIMUM API GRADE, "CUSTOM" - ALL COUNTERTOPS SHALL BE AS SELECTED BY THE OWNER

OPTIONAL EQUIPMENT & FEATURES

BUILT-IN FOOD CENTER:

SUPPLY AND INSTALL A BUILT-IN FOOD PROCESSING SYSTEM WITH THE POWER UNIT RECESSED IN THE KITCHEN COUNTER AS INDICATED IN THE PLANS. ALL EQUIPMENT, DETAILS OF INSTALLATION 4 OPERATING FEATURES SHALL BE PER THE MANUFACTURER'S REQUIREMENTS FOR "NUTONE" "BUILT-IN FOOD CENTER" OR EQUAL. REFER TO COMPONENT LIST.

BUILT-IN FOOD CENTER COMPONENTS LIST:

PART N°:	DESCRIPTION:
25155	POWER UNIT, 1/3 HP.
1131	FRUIT JUICER
756	FOOD PROCESSOR
211	MIXER
212	BLENDER
216	COFFEE GRINDER

INCLUDE ALL FITTINGS, BRACKETS, ROUGH-INS, WIRING AND OTHER COMPONENTS OF INSTALLATION AS REQUIRED FOR A COMPLETE, OPERATIONAL SYSTEM.

NUTONE CENTRAL VACUUM SYSTEM COMPONENTS LIST:

PART N°:	DESCRIPTION:
CV-150	POWER UNIT, 2 MOTOR 2 1/2 HP., 6 GAL. CAPACITY
593	MOTOR DRIVEN POWER BRUSH
OK-230	DELUXE TOOLKIT
CH-510	DELUXE CURRENT CARRYING HOSE
360W	AUTOMATIC ON/OFF WALL INLET
CI-360W	VAC PAN AUTOMATIC DUSTPAN INLET

INCLUDE ALL FITTINGS, BRACKETS, ROUGH-INS, TUBING, PIPING AND OTHER COMPONENTS OF INSTALLATION AS REQUIRED FOR A COMPLETE, OPERATIONAL SYSTEM.

OPTIONAL NUTONE INTERCOM SYSTEM COMPONENTS LIST:

PART N°:	DESCRIPTION:
IM-4406	INTERCOM MASTER CONTROL, W/ RADIO 4 CD PLAYER
IS-4404H	INSIDE 5" SPEAKER WITH CONTROLS
IS-4404H	OUTSIDE CAST METAL 5" SPEAKER WITH CONTROLS

INCLUDE ALL WIRING, BRACKETS, ROUGH-INS AND OTHER COMPONENTS OF INSTALLATION AS REQUIRED FOR A COMPLETE OPERATIONAL SYSTEM.

OPTIONAL BUILT-IN IRONING CENTER:

SUPPLY AND INSTALL A BUILT-IN IRONING CENTER WITH WORK LIGHT AUTOMATIC SHUT-OFF TIMER AT LOCATION INDICATED IN THE PLANS. ALL EQUIPMENT, DETAILS OF INSTALLATION 4 OPERATING FEATURES SHALL BE PER THE MANUFACTURER'S SPECIFICATIONS FOR "NUTONE" "BUILT-IN IRONING CENTER" OR EQUAL. REFER TO COMPONENTS LIST.

BUILT-IN IRONING CENTER COMPONENTS LIST:

PART N°:	DESCRIPTION:
AVC-40NR	MAIN CABINET ASSEMBLY
AVC-RP	RAISED PANEL OAK DOOR
AVC-CP	REPLACEMENT IRONING BOARD COVER
AVC-SLI	SLEEVE BOARD

INCLUDE ALL FITTINGS, BRACKETS, ROUGH-INS, WIRING AND OTHER COMPONENTS OF INSTALLATION AS REQUIRED FOR A COMPLETE, OPERATIONAL SYSTEM.

OPTIONAL FIRE/INTRUSION ALARM SYSTEM

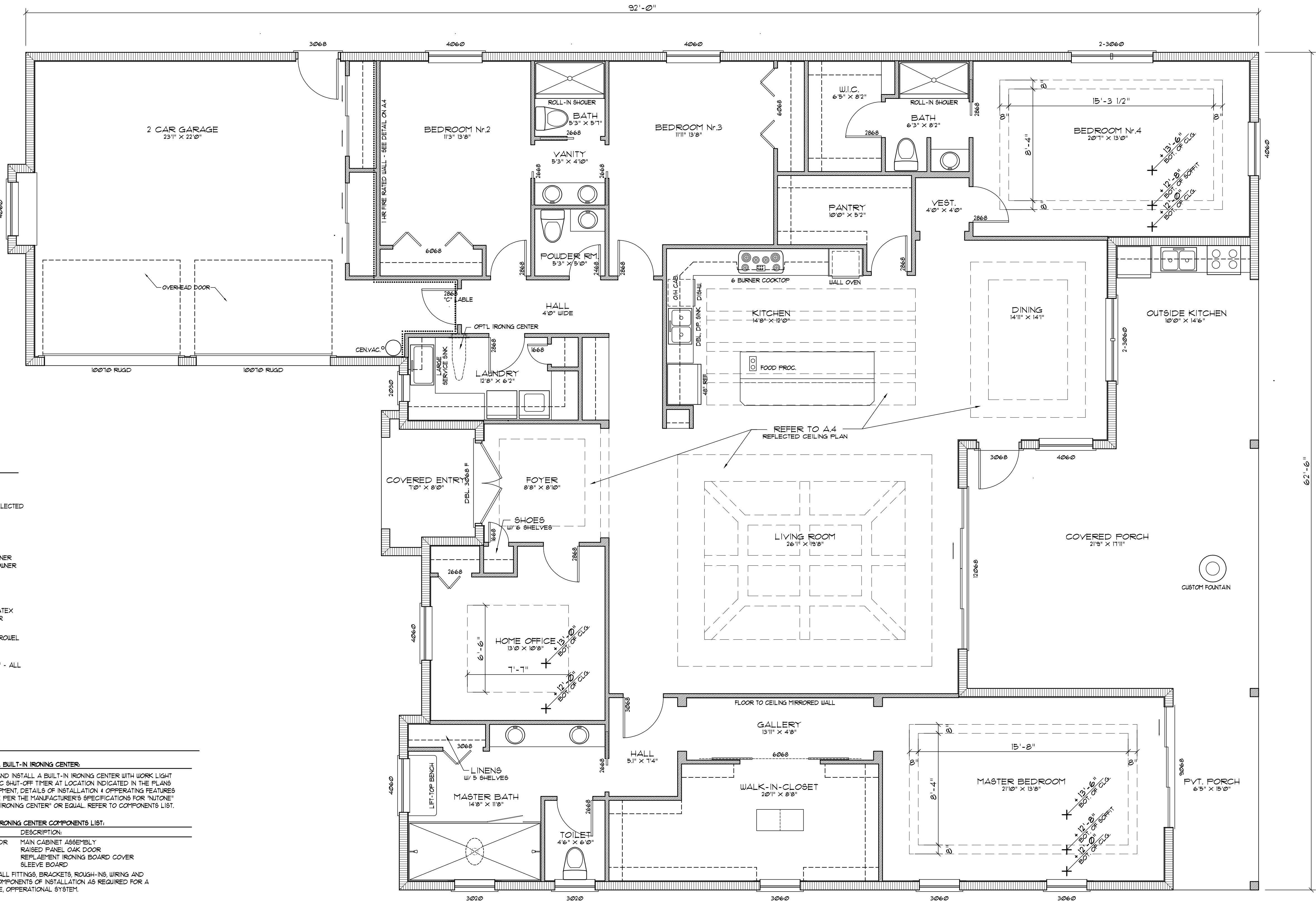
THIS RESIDENCE SHALL BE EQUIPPED WITH A SELF-CONTAINED FIRE ALARM - INTRUSION ALARM SYSTEM. THE OPERATION OF WHICH SHALL ALERT THE RESIDENT OCCUPANTS AND NOTIFY THE 911 EMERGENCY RESPONSE SYSTEM. EQUIPMENT AND SERVICE PROVIDER SHALL BE AS SELECTED BY THE OWNER. DETAILS OF INSTALLATION SHALL BE VIA SHOP DRAWINGS AND OPERATING FEATURES SHALL BE AS REQUIRED BY NFPA 101, 2003 EDITION, "LIFE SAFETY CODE" SECTION 403.4.

OPTIONAL INTERCOM SYSTEM

SUPPLY AND INSTALL AN INTERCOM SYSTEM WITH A MASTER CONTROL CABINET FEATURING AM/FM RADIO, AUDIO CD/MP3, AND 2-WAY VOICE COMMUNICATION. SATELLITE STATIONS SHALL BE LOCATED IN BEDROOMS, ENTRY'S AND COMMON AREAS. THE MASTER CONTROL SHALL BE LOCATED IN THE KITCHEN AREA. ALL EQUIPMENT, DETAILS OF INSTALLATION AND OPERATING FEATURES SHALL BE PER THE MANUFACTURER'S REQ'TS FOR "NUTONE" IM-4406 SYSTEM OR EQUAL. REFER TO COMPONENT LIST.

CENTRAL VACUUM SYSTEM

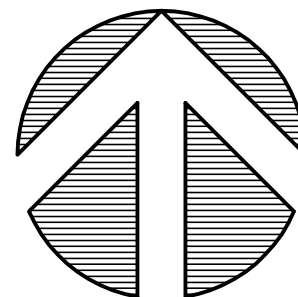
SUPPLY AND INSTALL A CENTRAL VACUUM SYSTEM WITH THE POWER UNIT SOIL RECEPTACLE LOCATED IN THE GARAGE AND THE POWERED INLETS AS INDICATED IN THE PLANS. ALL EQUIPMENT, DETAILS OF INSTALLATION 4 OPERATING FEATURES SHALL BE PER THE MANUFACTURER'S REQ'TS FOR "NUTONE" CV-150 QUIET SERIES SYSTEM OR EQUAL. REFER TO COMPONENT LIST.



FLOOR PLAN

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

North



NOTE:  
CABINETS, COUNTERS, SHELVES AND THE LIKE, SHOWN ON THIS PLAN SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE STANDARDS OF QUALITY AS OUTLINED IN THE NOTES TITLED "GENERAL MILLWORK NOTES", AND SHALL INCLUDE SUCH FEATURES, HARDWARE AND FINISHES AS DIRECTED BY THE OWNER. THE PLAN VIEWS INDICATED ARE FOR GENERAL LOCATION AND EXTENT OF THE WORK - UNLESS DETAILED CABINET PLANS ARE INCLUDED WITH THIS PLANS PACKAGE ALL OTHER PHYSICAL CHARACTERISTICS SHALL BE AS DIRECTED BY THE OWNER.

NOTE:  
PROVIDE 2X6 BACKING AT ALL OVERHEAD CABINET LOCATIONS, FLUSH WITH FACE OF FRAMING - TOP OF BACKING TO BE 1'-0" AFF.

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**FLOOR PLAN**

48 Years of Service  
1972 - 2020  
N.P. Geisler, Architect  
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**NICHOLAS  
GEISLER  
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N.C.A.R.B. Certified

DATE:

21 SEP 2021

CONTRACT:

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SHEET:

**A.2**  
**2 OF 13**

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GENERAL NOTES:

- THE CONTRACTOR SHALL INDEMNIFY THE OWNER AGAINST ALL CLAIMS, WHETHER FROM PERSONAL INJURY OR PROPERTY DAMAGE, ARISING FROM EVENTS ASSOCIATED WITH THE WORK PERFORMED UNDER THE CONTRACT FOR THIS PROJECT.
- THE CONTRACTOR AND/OR SUB-CONTRACTORS SHALL WARRANT ALL WORK FOR A PERIOD OF ONE YEAR FOLLOWING THE DATE OF FINAL COMPLETION AND ACCEPTANCE BY THE OWNER. DEFECTS IN MATERIALS, EQUIPMENT, COMPONENTS AND WORKMANSHIP SHALL BE CORRECTED AT NO FURTHER COST TO THE OWNER DURING THE ONE YEAR WARRANTY PERIOD.
- AT THE OWNER'S OPTION, A WARRANTY INSPECTION SHALL BE PERFORMED DURING THE ELEVENTH MONTH FOLLOWING THE COMMENCEMENT OF THE WARRANTY PERIOD, FOR THE PURPOSE OF DETERMINING ANY WARRANTY WORK THAT MAY BE REQUIRED; THE CONTRACTOR SHALL BE PRESENT DURING THIS INSPECTION IF REQUESTED BY THE OWNER.
- THE CONTRACTOR SHALL PAY FOR ALL PERMITS, LICENSES, TESTS AND THE LIKE THAT MAY BE REQUIRED BY THE VARIOUS AUTHORITIES HAVING JURISDICTION OVER THIS PROJECT BE THEY CITY, COUNTY, STATE OR FEDERAL.
- THE OWNER SHALL FILE A "NOTICE OF COMMENCEMENT" PRIOR TO THE BEGINNING OF THE PROJECT AND THE CONTRACTOR(S) SHALL FILE "NOTICE TO OWNER" AND PROVIDE "RELEASE OF LIEN" FOR ALL PAYMENT REQUESTS PRIOR TO DISBURSEMENT OF ANY FUNDS.
- ANY AND ALL DISPUTES ARISING FROM EVENTS ASSOCIATED WITH THE CONSTRUCTION OF THIS PROJECT BETWEEN THE OWNER, CONTRACTOR(S) AND SUPPLIERS SHALL BE RESOLVED THROUGH BINDING ARBITRATION.
- ALL WORK SHALL BE IN ACCORDANCE W/ APPLICABLE CODES AND LOCAL REGULATIONS, INCLUDING APPLICABLE ENERGY CODES. ALL COMPONENTS OF THE BUILDING SHALL MEET WITH THE MINIMUM ENERGY REQUIREMENTS OF THE BUILDING CODE. ANY DISCREPANCIES SHALL BE REPORTED TO THE ARCHITECT IN WRITING PRIOR TO THE COMMENCEMENT OF THE WORK.
- ALL INSULATION SHALL BE LEFT EXPOSED AND ALL LABLES LEFT INTACT ON THE WINDOWS AND DOORS UNTIL INSPECTED BY THE BUILDING OFFICIAL.
- ALL WOOD IN CONTACT WITH CONCRETE OR MASONRY SHALL BE PRESSURE TREATED.
- INTERIOR BEARING WALLS SHALL BE CONSTRUCTED IN COMPLIANCE WITH "UL Design U333"; BATT INSULATION SHALL BE INCLUDED WHERE UNCONDITIONED AREA IS BEING SEPARATED FROM HEATED / COOLED AREA.
- INTERIOR STUD WALLS SEPARATING LIVING AREA FROM GARAGE AREAS SHALL BE CONSTRUCTED IN COMPLIANCE WITH "UL Design U333", INCLUDING R-II BATT INSULATION.
- CEILINGs OVER ATTACHED GARAGES OR GARAGES W/ LIVING AREA ABOVE SHALL BE 5/8" FIRECODE "C" GIB ON 1x3 WOOD FURRING AT 16" O.C., ATTACHED W/ 1 1/4" BUGLEHEAD SCREWS @ 6" O.C. ALONG EACH POINT OF BEARING.

AS - BUILT DRAWING REQUIREMENTS:

- A. ELECTRICAL "AS-BUILT" DRAWINGS**  
ELECTRICAL CONTR'S SHALL PREPARE "AS-BUILT" SHOP DUGS INDICATING ALL ELECTRICAL WORK, INCLUDING ANY CHANGES TO THE ELEC. PLAN, ADDNS TO THE ELEC. PLAN, RISER DIAGRAM, AS-BUILT PANEL SCHEDULE W/ ALL CKTS IDENTIFIED W/ CKT N<sup>o</sup>, DESCRIPTION 4 BRKR, SERVICE ENT. 4 ALL UNDERGROUND WIRE LOCATIONS/ROUTING/DEPTH, RISER DIA. SHALL INCLUDE WIRE SIZES/TYPER 4 EQUIPMENT TYPE W/ RATINGS 4 LOADS. CONTRACTOR SHALL PROVIDE 1 COPY OF AS-BUILT DUGS TO OWNER 4 1 COPY TO THE PERMIT ISSUING AUTHORITY.
- B. HVAC, "AS-BUILT" DRAWINGS**  
HVAC CONTRACTOR SHALL PREPARE "AS-BUILT" SHOP DRAWINGS INDICATING ALL HVAC WORK, INCLUDING ALL DUCTWORK LOC, SIZES, LINES, EQUIPMENT SCH. 4 BALANCING REPORT - CONTR SHALL PROVIDE 1 COPY OF AS-BLT. DUGS TO OWNER 4 1 COPY TO THE PERMIT ISSUING AUTHORITY.
- C. PLUMBING "AS-BUILT" DRAWINGS**  
PLUMBING CONTRACTOR SHALL PREPARE "AS-BUILT" SHOP DRAWINGS INDICATING ALL PLUMBING WORK, INCLUDING ALL PLUMBING LINE LOCATIONS AND RISER DIAGRAM - CONTR SHALL PROVIDE 1 COPY OF AS-BUILT DUGS TO OWNER AND 1 COPY TO THE PERMIT ISSUING AUTHORITY.

GENERAL MILLWORK NOTES:

- MILLWORK SUB-CONTRACTOR PROVIDING CASEWORK, MILLWORK OR THE LIKE FOR THIS PROJECT SHALL BE SUBJECT TO THE PROVISIONS OF NOTES 1 THRU 6 OF THE GENERAL NOTES, THIS SHEET.
- SCOPE OF WORK INCLUDES, BUT IS NOT LIMITED TO THE FOLLOWING: FABRICATION AND DELIVERY OF MILLWORK, SHOWN IN THE DRAWINGS, TO THE JOB SITE, INSTALLATION OF CABINET HINGES, CATCHES, DRAWER 4 TRAY GUIDES, ADJUSTABLE SHELF STANDARDS 4 SURFACE BOLTS.
- ALL APPLICABLE STANDARDS OF "AUI QUALITY STANDARDS 4 GUIDE SPECIFICATIONS" APPLY TO THIS PROJECT, UNLESS NOTED OTHERWISE.
- AUI "CUSTOM" GRADE EXCEPT AS OTHERWISE NOTED OR DIRECTED BY THE OWNER, SHALL BE THE BASE STANDARD OF QUALITY REQ'D FOR THIS WORK.
- MILLWORK SUB-CONTRACTOR SHALL SUBMIT FOR APPROVAL BY THE OWNER, THE FOLLOWING ITEMS, PRIOR TO FABRICATING ANY MATLS OR MILLWORK: COMPLETE SET OF SHOP DRAWINGS, SAMPLES OF WD. SPECIES RECEIVING TRANSPARENT FINISH, MFR'S LITERATURE FOR ALL SPECIALTY ITEMS NOT YET BY THE ARCHITECTURAL WOODWORK FIRM AND HARDWARE SCHEDULE, SHOWING HARDWARE USED AT EA. LOCATION 4 CONFORMANCE W/ THE DESIGN INTENT OF THE DRAWINGS OR DIRECTIVES ISSUED BY THE OWNER.
- PRODUCTS SHALL INCLUDE THE FOLLOWING:  
SOFTWOOD - SOLID STOCK PINE, C OR BETTER  
HARDWOOD - SPECIES AS SELECTED BY OWNER  
PLYWOOD, OPAQUE FINISH - FIR, GRADE A/B  
PLYWOOD, TRANSPARENT FINISH - SPECIES AS SELECTED BY OWNER  
PARTICLE BOARD - HIGH DENSITY, W/ RESIN BINDER  
LAM. PLASTIC - MFG, COLORS, PATTERNS 4 TEXTURES AS SELECTED BY OWNER  
LAMINATING ADHESIVES - POLYVINYL ACETATE, UREA-FORMALDEHYDE, CASEIN
- ASSEMBLE WORK AT MILL 4 DELIVER TO JOB SITE READY TO INSTALL INSOFAR AS POSSIBLE.
- PROTECT MILLWORK FROM MOISTURE 4 DAMAGE WHILE IN TRANSIT TO THE JOB SITE, UNLOAD AND STORE IN A PLACE WHERE IT WILL BE PROTECTED FROM MOISTURE AND DAMAGE AND BE CONVENIENT FOR INSTALLATION.
- FABRICATE WORK IN ACCORDANCE WITH MEASUREMENTS TAKEN AT THE JOB SITE.
- INSTALL HARDWARE IN ACCORDANCE WITH MANUFR'S DIRECTIONS. LEAVE OPERATING HARDWARE OPERATING SMOOTHLY 4 QUIETLY.
- DAMAGED SURFACES SHALL BE REPAIRED TO MATCH UNDAMAGED ADJACENT PORTION OF THE WORK.

GENERAL H.V.A.C. NOTES:

- SUB-CONTRACTORS PROVIDING HVAC INSTALLATION SHALL BE SUBJECT TO THE PROVISIONS OF NOTES 1 THRU 6, GENERAL NOTES/D.1a.
- HVAC SUB-CONTRACTOR SHALL PROVIDE ALL LABOR MATERIALS, TOOLS AND EQUIPMENT TO INSTALL A COMPLETE 4 OPERATING HVAC SYSTEM.
- HVAC SYSTEM SHALL BE AS DETAILED IN THE PLANS (IF INCLUDED), OR SHALL BE AS DIRECTED BY THE OWNER IN CONSULTATION WITH THE HVAC SUB-CONTRACTOR.
- HVAC SUB-CONTRACTOR SHALL FURNISH SHOP DUGS FOR DUCTWORK, CONDENSING UNIT 4 AIR HANDLER, EXHAUST FANS AND AIR DEVICES.
- IT IS THE HVAC SUB-CONTRACTOR'S RESPONSIBILITY TO COMPLY WITH NFPA-90A AND ALL APPLICABLE CODES.
- FLEXIBLE DUCT SHALL BE FULLY ANNEALED, CORRUGATED ALUMINUM W/ 1 3/4 LB. DENSITY FIBERGLASS INSULATION AND SHALL BE UL LISTED. SHEET METAL DUCT SHALL BE LINED W/ 1" MATFACED DUCT LINER 4 WRAPPED W/ 1 3/4 LB. FOILFACED FIBERGLASS INSULATION. ALL FIBERGLASS DUCT SHALL BE FOILFACED, R4.2/R6.0 DUCTBOARD.
- ALL EXHAUST AND OUTSIDE AIR DUCT SHALL BE GALVANIZED SHEET METAL, CONSTRUCTED AND INSTALLED IN ACCORDANCE WITH ASHREA AND SMACNA STANDARDS.
- ALL AIR DEVICES SHALL BE OF ALUMINUM CONSTRUCTION FOR WALL AND CEILING APPLICATIONS AND STEEL CONSTRUCTION IN FLOOR APPLICATIONS. ACCEPTABLE MANUFACTURER'S SHALL BE TITUS, METALAIRE, NAILORHART, HART 4 COOLIE OR AS DIRECTED BY THE OWNER.
- IF REQUIRED BY THE OWNER, THE HVAC SUB-CONTRACTOR SHALL SUPPLY A TEST AND BALANCE REPORT IN ACCORDANCE WITH AIR BALANCE COUNCIL STANDARDS, SIGN AND SEALED BY A REGISTERED ENGINEER.
- HVAC SUB-CONTRACTOR SHALL SUPPLY ALL CONTRACTORS, RELAYS, AND THERMOSTATS. THE ELECTRICAL SUB-CONTRACTOR SHALL PROVIDE ALL SWITCHES, DISCONNECTS 4 CONTROL WIRING. THERMOSTATS SHALL BE APPROVED BY THE EQUIPMENT MFR.
- ALL DUCT SIZES INDICATED IN THE PLANS (IF INCLUDED) ARE NET INSIDE DIMENSIONS.
- ALL EQUIPMENT SHALL BE FULLY WARRANTED FOR 1 YEAR AND THE COMPRESSOR(S) SHALL BE WARRANTED 5 YEARS FROM DATE OF FINAL ACCEPTANCE, BY THE OWNER.
- ALL WORK IN THIS TRADE SHALL BE COORDINATED WITH ALL OTHER TRADES SO AS TO AVOID CONFLICTS OR HINDERANCE TO COMPLETION OF THE JOB.
- CONDENSATE DRAIN PIPING SHALL BE INSULATED WITH 1/2" THICK ARMAFLEX INSULATION.
- FILTERS SHALL BE DISPOSABLE TYPE AND HAVE INITIAL SHARE WEIGHT RESISTANCE OF 10% AND A CLEAN PRESSURE DROP OF 0.15. PROVIDE 2 SETS, ONE DURING CONSTRUCTION AND ONE FOR USE AT FINAL ACCEPTANCE.
- HVAC SUB-CONTRACTOR SHALL PROVIDE 4 INSTALL ALL NECESSARY OFFSETS, TRANSITIONS 4 BENDS REQUIRED TO PROVIDE A COMPLETE SYSTEM AT NO ADDITIONAL COST TO THE OWNER.
- IT IS THE RESPONSIBILITY OF THE HVAC SUB-CONTRACTOR TO COORDINATE LOCATION OF CEILING DIFFUSERS, GRILLES AND REGISTERS IN THE FIELD WITH THE ELECTRICIAN, LIGHTS AND ARCHITECTURAL ELEMENTS.
- COORDINATE W/ THE ELECTRICIAN, PARTICULARLY ELECTRICAL NOTE N<sup>o</sup>. 23, TO ASSURE SUITABLE SIZES OF BREAKERS, SWITCHES AND WIRING.

GENERAL PLUMBING NOTES:

- SUB-CONTRACTORS PROVIDING PLUMBING MATERIALS AND INSTALLATION SHALL BE SUBJECT TO THE PROVISIONS OF NOTES 1 THRU 6.
- ALL WORKMANSHIP AND MATERIALS SHALL BE IN STRICT ACCORDANCE WITH APPLICABLE LOCAL CODES, RULES AND ORDINANCES.
- ALL MATERIALS SHALL BE NEW.
- ALL WORK SHALL BE PERFORMED BY A LICENSED PLUMBING CONTRACTOR IN A FIRST CLASS WORKMANLIKE MANNER. THE COMPLETED SYSTEM SHALL BE FULLY OPERATIONAL.
- ALL EXCAVATION 4 BACKFILL AS REQUIRED FOR THIS PHASE OF THE CONSTRUCTION SHALL BE PART OF THE PLUMBING SUB-CONTRACTOR'S RESPONSIBILITIES.
- PLUMBING FLAT PLANS AND RISER DIAGRAMS (IF INCLUDED) ARE DIAGRAMATIC. DO NOT SCALE THE DRAWINGS FOR EXACT LOCATIONS OF THE PLUMBING FIXTURES.
- ALL WORK SHALL BE COORDINATED WITH OTHER TRADES TO AVOID INTERFERENCE WITH THE PROGRESS OF THE CONSTRUCTION.
- WATER PIPING SHALL BE TYPE L COPPER UP TO 1", 4 TYPE K FOR ALL LARGER SIZES. ALL UNDERGROUND PIPING SHALL BE TYPE K COPPER. AT THE OWNER'S OPTION SUPPLY PIPING MAY BE C.P.V.C. SCHEDULE 40 OR SCHEDULE 80.
- DO NOT USE LEAD BASED SOLDER FOR JOINING SUPPLY PIPING.
- SOIL, WASTE, VENT 4 RAINWATER PIPING SHALL BE CAST IRON NO-HUB 30"-12" ABOVE GRADE WITH NEOPRENE GASKETS AND STAINLESS STEEL BANDS 4 BELL 4 SPIGOT CAST IRON BELOW GRADE W/ LEAD 4 OAKUM JOINTS OR AT THE OWNER'S OPTION, F.V.C. SCHEDULE 40, SEE NOTE 12.
- AIR CONDITIONING CONDENSATE DRAIN PIPING SHALL BE THREADED STEEL PIPE, COPPER DRAIN, WASTE OR VENT PIPE AND FITTINGS, OR F.V.C. SEE NOTE 12, BELOW. INSULATE ALL CONDENSATE PIPING EXCEPT WHERE UNDERGROUND, AND ELECTRIC HEAT WRAP WHERE EXPOSED TO FREEZING CONDITIONS.
- F.V.C. SCHEDULE 40 PIPE AND FITTINGS MAY BE USED FOR SOIL, WASTE, VENT, RAINWATER OR CONDENSATE PIPING AS APPROPRIATE, WHERE APPROVED BY LOCAL BUILDING CODES 4 OFFICIALS. F.V.C. MAY NOT BE USED TO PENETRATE CHASES OR FIRE RATED WALLS / CEILINGS.
- ALL FIXTURES MUST BE PROVIDED WITH READILY ACCESSIBLE STOPS AND WHERE PROVIDED, MARKED ACCESS PANELS.
- FURNISH AND INSTALL APPROVED AIR CHAMBERS AT EACH PLUMBING FIXTURE AND APPROVED SHOCK ARRESTERS ON MAIN LINE OR RISERS.
- DIELECTRIC COUPLINGS ARE REQUIRED BETWEEN ALL DISSIMILAR METALS IN PIPING AND EQUIPMENT CONNECTIONS.
- ISOLATE COPPER PIPING FROM HANGERS OR SUPPORTS W/ HAIR FELT INSULATOR PADS.
- PROVIDE 1/2" TRAP PRIMER LINE FOR ALL FLOOR DRAINS FROM NEAREST PLUMBING FIXTURE, DO NOT MANIFOLD.
- PROVIDE ACCESS PANELS FOR ALL CONCEALED VALVES.
- PROVIDE COMBINATION COVERPLATE / CLEANOUT PLUG FOR ALL WALL CLEANOUTS, FINISH AS DIRECTED BY THE OWNER.
- FIXTURES, HARDWARE, EQUIPMENT, COLORS AND FINISHES SHALL BE AS SELECTED BY THE OWNER.

GENERAL WELL 4 SEPTIC NOTES:

- SUB-CONTRACTORS PROVIDING WATER WELLS AND/OR SEPTIC TANKS AND DRAINFIELDS SHALL BE SUBJECT TO THE PROVISIONS OF NOTES 1 THRU 6, THIS SHEET.
- LOCATION OF POTABLE WATER WELLS SHALL BE DETERMINED BY THE OWNER IN CONSULTATION WITH THE WELL DRILLING CONTRACTOR. WELLS SHALL NOT BE LOCATED CLOSER THAN 15'-0" TO ANY PROPOSED OR EXISTING SEPTIC TANK OR DRAINFIELD, EITHER ON SUBJECT PROPERTY OR ADJACENT/ADJOINING PROPERTY.
- POTABLE WATER WELLS SHALL BE A MINIMUM 4"ø WITH BLACK IRON CASING TO A DEPTH OF 80'-0". PUMPS SHALL BE OF THE SUBMERSIBLE TYPE, THREE WIRE SYSTEM, MINIMUM HORSEPOWER SHALL BE 1/2 H/P OR AS DIRECTED BY THE OWNER. MOTOR STARTER SHALL BE ENCLOSED IN A WEATHERPROOF HOUSING, MOUNTED ON A P/T 4X4 POST AT THE WELL HEAD.
- WELL HEAD SHALL PROJECT 12" ABOVE GRADE.
- ALL REQUIRED COMPONENTS FOR A COMPLETE OPERATING SYSTEM SHALL BE PROVIDED, INCLUDING ANTI-FREEZE BLEEDER FITTING, CHECKVALVE, AIR BLEEDERS, SHUTOFF VALVE, HOSE BIBB, PRESSURE REGULATOR/CONTRACTOR UNIONS AND PRESSURE GAUGE.
- PRESSURE TANK SHALL BE GALVANIZED 82 GALLON CAPACITY, UNLESS DIRECTED OTHERWISE BY THE OWNER.
- SEPTIC TANK LOCATION 4 DRAINFIELD INVERT SHALL BE DETERMINED BY THE LOCAL HEALTH DEPARTMENT, IN CONSULTATION W/ THE OWNER.
- SEPTIC TANKS SHALL BE OF A SIZE 4 CONSTRUCTION AS DETERMINED BY THE LOCAL HEALTH DEPARTMENT. TANK MAT'L SHALL BE POURED CONCRETE OR FIBERGLASS AS ALLOWED BY THE SEPTIC TANK PERMIT.
- SEPTIC DRAINFIELDS SHALL BE CONSTRUCTED TO THE STANDARDS OF THE LOCAL HEALTH DEPARTMENT. DRAINFIELD PIPING SHALL BE CLAY TILE OR P.V.C. OR POLY AS ALLOWED BY THE SEPTIC TANK PERMIT. DRAINFIELD BEDS SHALL BE 3/4" WASHED ROCK, INSTALLED THICKNESS SHALL BE AS PER SEPTIC TANK PERMIT.
- SAND FILTER BEDS, MOUND SYSTEMS, DOSING TANKS, GREASE TRAPS, DISTRIBUTION BOXES, GRINDER PUMPS, SUMP PUMPS AND OTHER SUCH RELATED ITEMS (IF REQUIRED OR REQUESTED) SHALL BE AS PER THE DESIGN STANDARDS OF THE LOCAL HEALTH DEPARTMENT.

ELECTRICAL NOTES: General

- DO NOT SCALE THE ELECTRICAL DRAWINGS. REFER TO ARCHITECTURAL PLANS AND ELEVATIONS FOR EXACT LOCATION OF ALL EQUIPMENT. CONFERT WITH OWNER.
- INSTALL ALL ELECTRICAL WORK IN CONFORMANCE WITH THE NEC 1991 EDITION, AND ITS AMENDMENTS AS ADOPTED BY THE PERMIT ISSUING AUTHORITY AT THE TIME OF CONSTRUCTION.
- GROUNDING: GROUND ALL MAIN DISCONNECTS TO STANDARD GROUND ROD(S) AND TO COLD WATER SUPPLY AS PER ARTICLE 250 OF NEC-2010.
- INSTALL ONLY COPPER WIRING ON THIS PROJECT: THW, TW, THHN, THHN OR NYT CABLE, UNLESS NOTED OTHERWISE. ALL CONDUCTORS #10 4 SMALLER MAY BE SOLID. ALL CONDUCTORS #8 AND LARGER SHALL BE STRANDED TYPE.
- PROVIDE CONTINUITY OF NEUTRAL ON MULTI-BRANCH CIRCUITS BY SPlicing AND BRINGING OUT A TAP, ASSURING NO OPENINGS OF NEUTRAL IN REPLACEMENT OF A DEVICE.
- COLOR CODE MULTI-CIRCUIT WIRING AS FOLLOWS: NEUTRAL - WHITE, GROUND - GREEN, LINE - ALL OTHER COLORS.
- INSTALL ONLY HIGH POWER FACTOR BALLASTS AT FLUORESCENT FIXTURES.
- INSTALL GFI BREAKERS OF DEVICES AT ALL BATHROOM, RESTROOM, KITCHEN, GARAGE AND EXTERIOR RECEPTACLES AND AS NOTED ON THE DRAWINGS.
- INSTALL ONLY THOSE ELECTRICAL DEVICES THAT BEAR A "UL" OR OTHER RECOGNIZED TESTING LAB LABEL. ALL MATERIALS SHALL BE NEW.
- INSTALL NON-FUSED DISCONNECT SWITCHES AT ALL PIECES OF ELECTRICAL EQUIPMENT LOCATED WHERE SAID EQUIPMENT IS NOT VISIBLE FROM THE CIRCUIT BREAKER THAT PROTECTS IT; SIZE IN ACCORD WITH THE LOAD. ALL DISCONNECT SWITCHES SHALL BE H.P. RATED, HEAVY DUTY, QUICK-MAKE - QUICK-BREAK TYPE - ENCLOSURES SHALL BE AS REQ'D FOR EXPOSURE.
- MOTOR STARTERS SHALL BE MANUAL OR MAGNETIC WITH OVERLOAD RELAYS IN EACH HOT LEG.
- ISOLATE DISSIMILAR CONDUIT AND TUBING METALS FROM SOIL, WATER AND GAS PIPING AND OTHER BUILDING MATERIALS WHERE DAMAGE BY FRICTION OR ELECTROLYSIS MAY OCCUR, EXCEPT WHERE ELECTRICAL GROUND IS PROVIDED.
- FURNISH AND INSTALL ALL ELECTRICAL DEVICES AND ITEMS REQUIRED FOR A COMPLETE, OPERATING SYSTEM, PROVIDING THE FUNCTIONS AS DETAILED IN THE PLANS (AND SPECS).
- OUTLET BOXES SHALL BE PRESSED STEEL OR PLASTIC OR ALL DRY LOCATIONS, FOR WET LOCATIONS, CAST ALLOY WITH THREADED HUB OUTLET BOXES SHALL BE INSTALLED.
- HOT CHECK ALL SYSTEMS WITH THE OWNER'S REPRESENTATIVE PRESENT TO VERIFY PROPER FUNCTION PRIOR TO C.O.
- COORDINATE ALL WORK THROUGH GC TO AVOID CONFLICTS. COORDINATE WITH HVAC CONTRACTOR AND ELECTRONICS SYSTEMS CONTRACTORS SO THAT A COMPLETE, FUNCTIONING SYSTEM IS INSTALLED, IN EACH CASE, WITH NO EXTRA COST TO THE OWNER.
- EMERGENCY LIGHTING AND EXIT SIGNS, IF INDICATED ON THE PLANS, SHALL BE WIRED PER NEC 100-112f.
- ALL PANEL SCHEDULES SHALL BE FULLY FILLED OUT AND SHALL BE TYPEWRITTEN. EA. CIRCUIT SHALL BE CLEARLY IDENTIFIED A TO WHAT IS INCLUDED ON SAID CIRCUIT.
- IT IS NOT THE INTENT OF THESE DRAWINGS TO SHOW EVERY MINOR DETAIL OF THE CONSTRUCTION.
- THE ELECTRICAL INSTALLATION SHALL MEET ALL STANDARD REQUIREMENTS OF THE POWER COMPANY 4 TELEPHONE COMPANY.
- FURNISH AND INSTALL DISCONNECT SWITCHES AND WIRING FOR HVAC SYSTEM AS PER MANUFACTURER'S RECOMMENDATIONS. CONTROLS ARE TO BE SUPPLIED BY THE HVAC CONTRACTOR, AND CONNECTED BY THE ELECTRICAL CONTRACTOR.
- ALL RACEWAYS BELOW GROUND SHALL BE A MINIMUM OD 3/4".
- ALL CIRCUIT BREAKERS, TWO AND THREE POLE, SHALL BE COMMON TRIP, NO TIE HANDLES OR TANDEMS SHALL BE ACCEPTABLE.
- ALL FUSES, UNLESS NOTED OTHERWISE ON THE DRAWINGS, SHALL BE CURRENT LIMITED TYPE (CL) RATED 200,000 AIC.
- ELECTRICAL CONTRACTOR SHALL VERIFY ALL COMPONENTS FOR ALL ELECTRICAL APPLICATIONS 4 DETERMINE THE CORRECTNESS OF SAME. ANY DISCREPANCY SHALL BE REPORTED TO THE OWNER PRIOR TO FABRICATING ANY MATERIALS, ORDERING COMPONENTS OR DOING ANY WORK.
- CIRCUITS ON PANEL SCHEDULE (AND PLANS) ARE TO DETERMINE LOAD DATA AND SIZE. THE CONTRACTOR SHALL PROVIDE CIRCUITS AND ROUTING OF CONDUITS AND WIRING TO SUIT JOB CONDITIONS, AND BALANCE THE JOB, THROUGHOUT.
- CHECK EQUIPMENT FOR PROPER VOLTAGE, PHASE AND AMPERAGE RATING PRIOR TO CONNECTION TO CIRCUITS.
- PANEL BOARDS SHALL BE CIRCUIT BREAKER TYPE. VERIFY NUMBER AND SIZES OF CIRCUITS.
- WHEN CONDUIT RUNS EXCEED 200 FEET, FULL BOXES SHALL BE INSTALLED SO THAT NO FULL EXCEEDS THIS DISTANCE.
- ELECTRICAL EQUIPMENT AIC RATING AND FEEDER SIZE SHOWN ON THE PLANS ARE DESIGNED FOR MAX. AVAILABLE FAULT CURRENT AND MAX. ALLOWABLE VOLTAGE DROP, RESPECTIVELY.

PROJECT INFORMATION / NOTES:

DESIGN VALUES/LOADS 4 CODES  
WIND DESIGN SPEED: 130 MPH, UNLESS NOTED OTHERWISE

SOIL DESIGN STATEMENT:  
FOOTING DESIGN IS BASED UPON 1000PSF SOIL BEARING PRESSURE PROVIDED BY CLEAN SAND, GRAVEL OR STONE. OTHER SOIL CONDITIONS 1s: CLAY, HIGH LEVEL OF ORGANICS OR OTHER UNDESIRABLE SOILS SHALL REQUIRE FOUNDATION MODIFICATIONS.

LIVE LOADS: 1st FLOOR: 40PSF, 2nd FLOOR: 30PSF, ROOF: AS DETERMINED BY SHAPE FACTORS APPLIED TO THE WIND FORCE GENERATED BY THE DESIGN WIND SPEED.

BUILDING CODE: 2020 FLORIDA BUILDING CODE, 7th EDITION

ELECTRICAL CODE: NATIONAL ELECTRICAL CODE - 2020  
LIFE SAFETY: NFPA-101 - LATEST

CONSTRUCTION DOCUMENTS

THE CUSTOMER IS RESPONSIBLE FOR DELIVERING THE REQUIRED SETS OF CONSTRUCTION DOCUMENTS TO THE PERMIT ISSUING AUTHORITIES, FOR THE ISSUANCE OF CONSTRUCTION PERMITS. THE CONTRACTOR SHALL REVIEW THE CONSTRUCTION DOCUMENTS AND VERIFY ALL DIMENSIONS. ANY DISCREPANCIES SHALL BE REPORTED TO THE ARCHITECT PRIOR TO THE COMMENCEMENT OF ANY WORK OR FABRICATION OF ANY MATERIALS.

DO NOT SCALE OFF THESE PLANS

AMPLE DIMENSIONS ARE SHOWN ON THE PLANS TO LOCATE ALL ITEMS. SIMPLE ARITHMETIC MAY BE USED TO DETERMINE THE LOCATIONS OF THOSE ITEMS NOT DIMENSIONED.

CHANGES TO FINAL PLAN SETS

PLEASE DO NOT MAKE ANY STRUCTURAL CHANGES TO THESE PLANS WITHOUT CONSULTING WITH THE ARCHITECT. THE OWNER SHALL ASSUME ANY AND ALL LIABILITY FOR STRUCTURAL DAMAGE RESULTING FROM CHANGES MADE TO THE PLANS OR BY SUBSTITUTION OF MATERIALS DIFFERENT FROM SPECIFICATION ON THE PLANS.

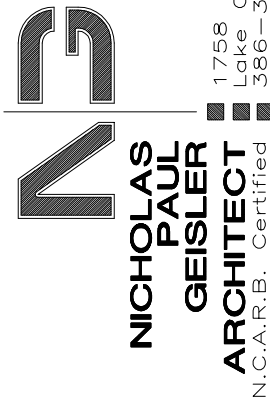
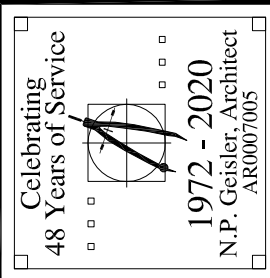
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CUSTOM RESIDENTIAL DESIGN for:  
**MR. & MRS. P. J. PATEL**  
COLUMBIA COUNTY, FLORIDA  
**GENERAL NOTES**



DATE:

21 SEP 2021

COMB:

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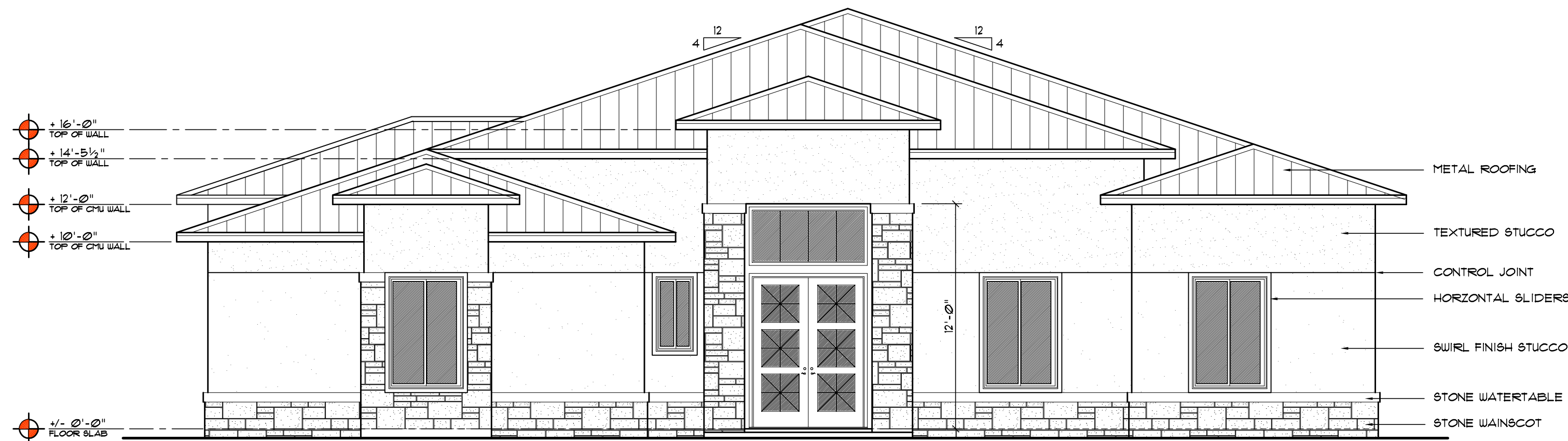
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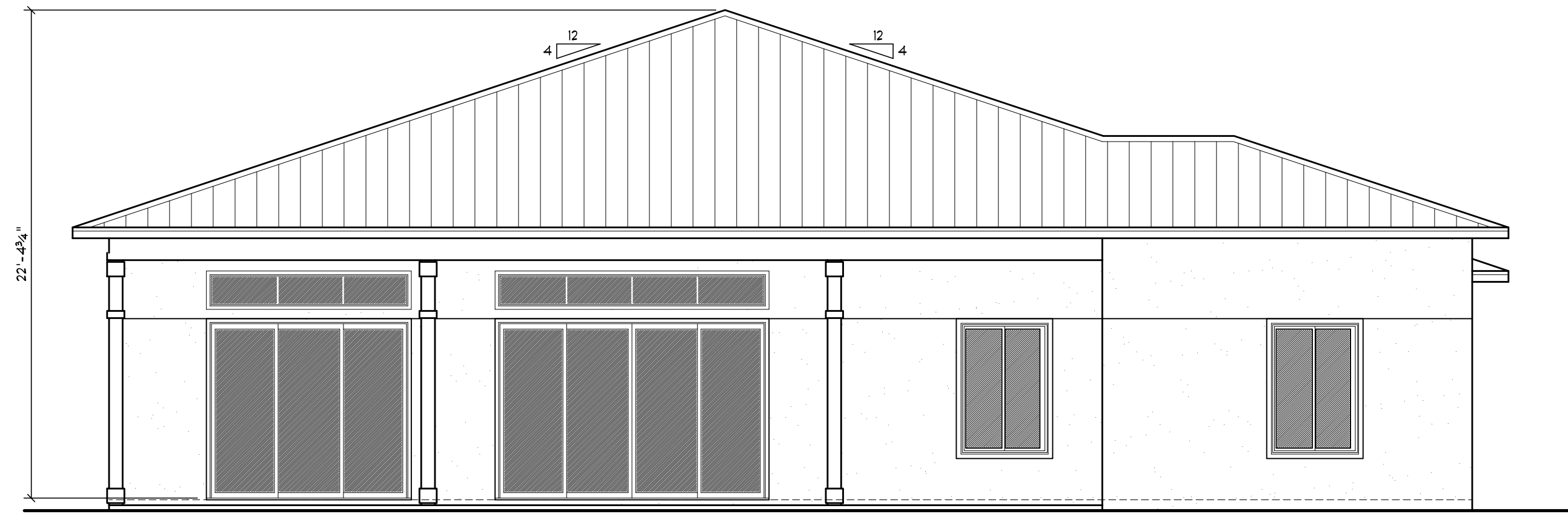
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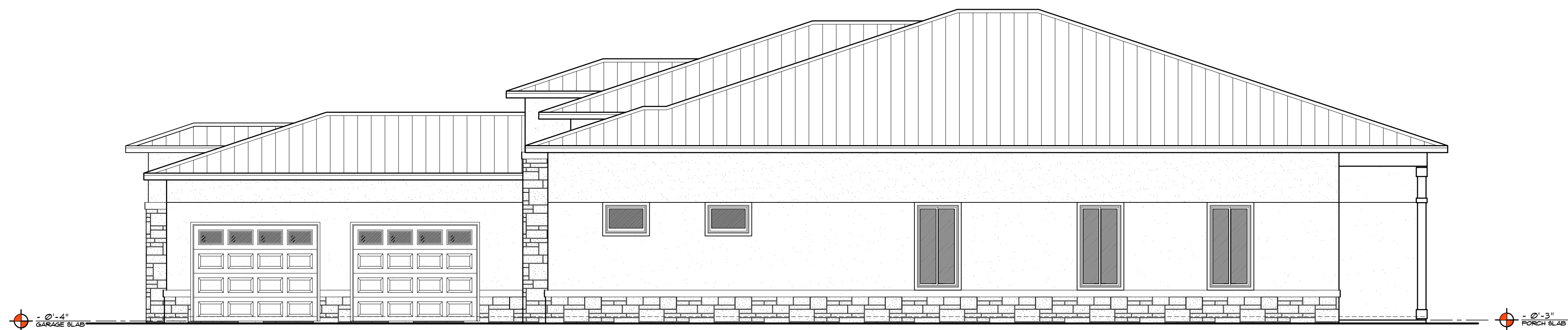
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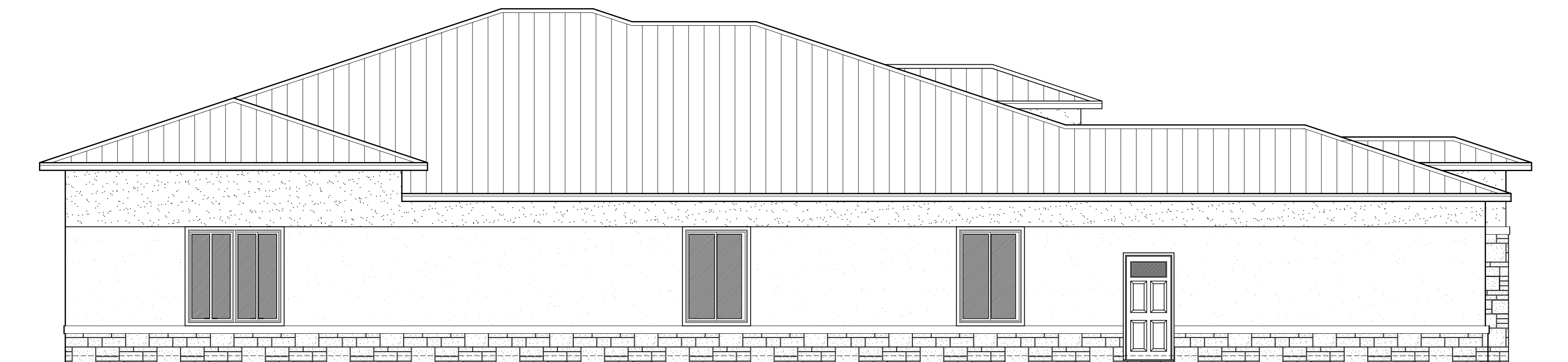
**FRONT ELEVATION**  
SCALE: 3/16" = 1'-0"



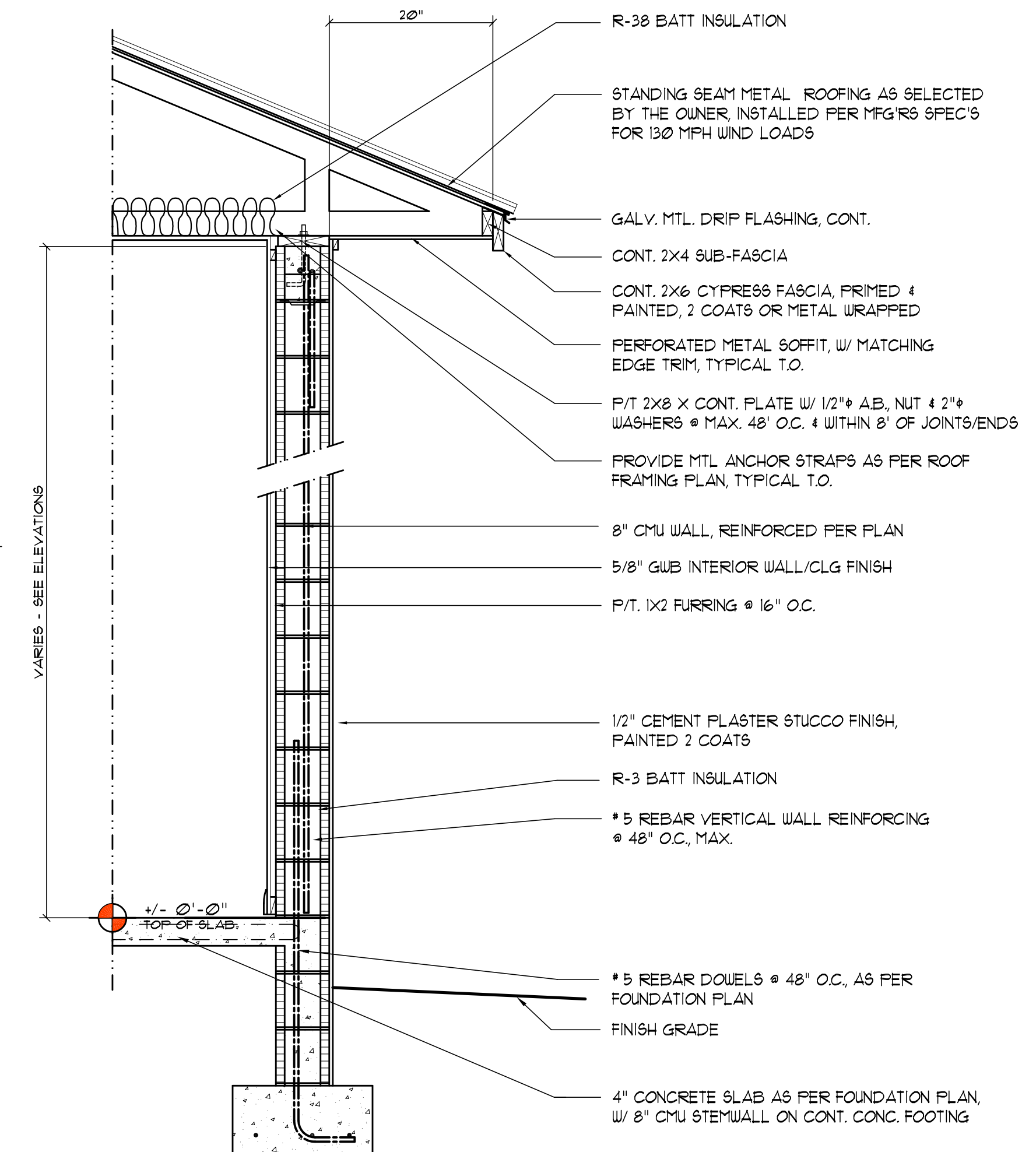
**REAR ELEVATION**  
SCALE: 3/16" = 1'-0"



**SIDE ELEVATION**  
SCALE: 3/16" = 1'-0"



**SIDE ELEVATION**  
SCALE: 3/16" = 1'-0"



CMU WALL CONSTRUCTION  
CONSTRUCT W/ C-30 CMU, WITH PUMP-MIX CONCRETE  
FILLED CELLS, REINFORCED W/ 1 #5 REBAR HOOKED TO  
THE FTG. BELOW & TO THE BOND BEAM, ABOVE, @ 48" O.C.,  
ADJACENT TO WALL OF VGS & @ CORNERS/INTERSECTIONS  
PROVIDE HORIZ. 9 GA. LADDER JOINT REINFORCEMENT  
@ 16" O.C. VERTICALLY (ALTERNATING BLOCK COURSES)  
BOND BEAM SHALL BE 8" X 8" W/ 1 #5 REBAR

**Typical Wall SECTION**  
SCALE: 3/4" = 1'-0"

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CUSTOM RESIDENTIAL DESIGN FOR:  
**MR. & MRS. P. J. PATEL**  
COLUMBIA COUNTY, FLORIDA  
**ELEVATIONS & TYPICAL WALL SECTION**

48 Years of Service  
1972 - 2020  
N.P. Geisler, Architect  
Architect

**NICHOLAS  
GEISLER  
ARCHITECT**  
N.C.A.R.B. Certified  
7758 NW Browns Rd.  
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DATE:

21 SEP 2021

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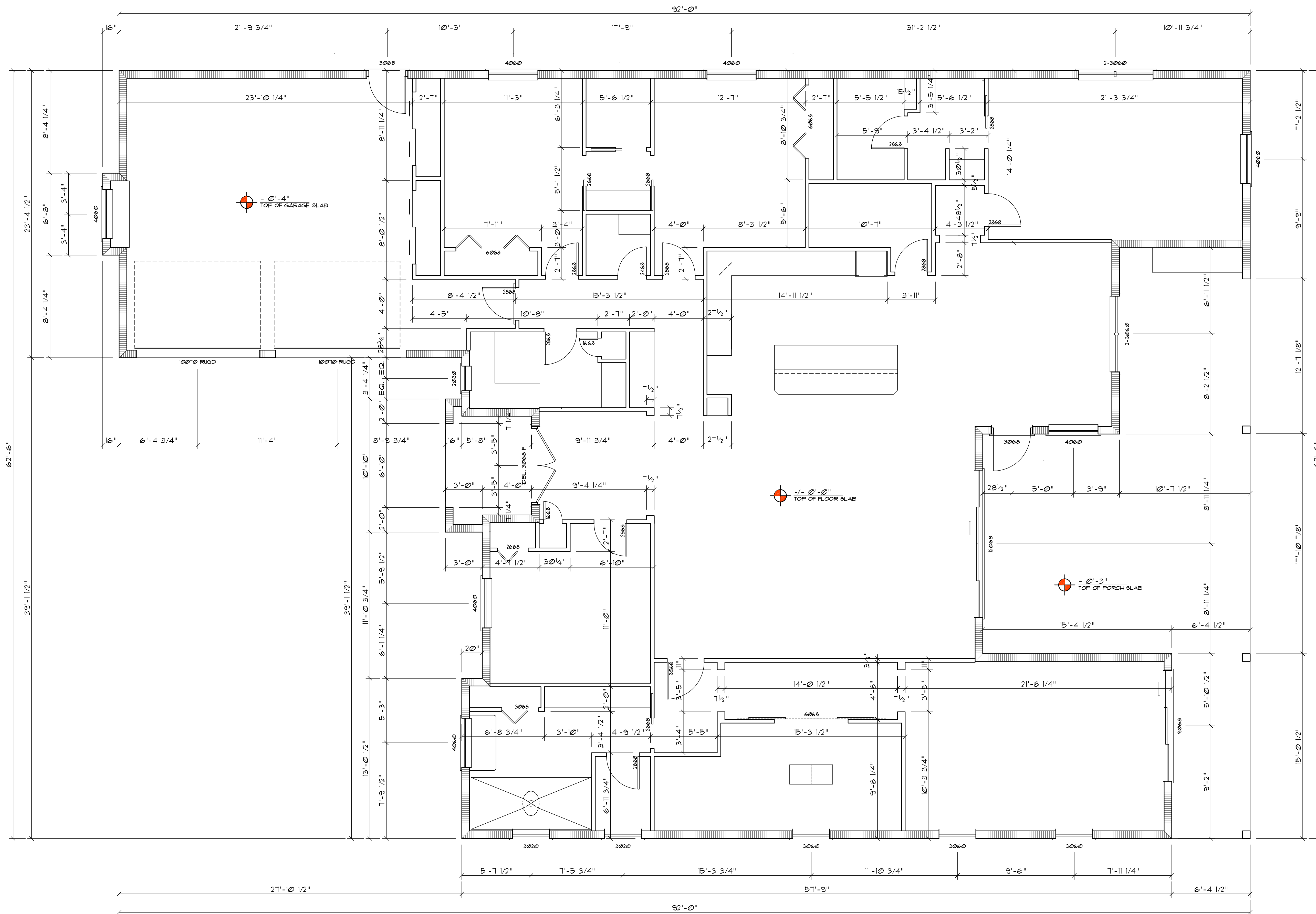
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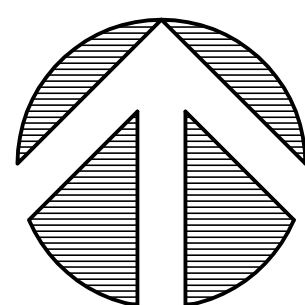
## DIMENSION PLAN

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



GRAPHIC SCALE

North



## AREA CALCULATION

GROSS 1st FLOOR AREA:	3307.0 SF
GARAGE AREA:	649.3 SF
COVERED ENTRY AREA:	62.3 SF
COVERED PORCH AREA:	644.2 SF
TOTAL AREA:	4662.8 SF

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CUSTOM RESIDENTIAL DESIGN FOR:  
**MR. & MRS. P. J. PATEL**  
COLUMBIA COUNTY, FLORIDA  
DIMENSION PLAN

Celebrating  
48 Years of Service  
1972 - 2020  
N.P. Geisler, Architect  
Architect

**NICHOLAS  
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N.C.A.R.B. Certified

DATE:

21 SEP 2021

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GENERAL STRUCTURAL NOTES

G E N E R A L

1. THE DRAWINGS ARE INTENDED TO SHOW THE GENERAL ARRANGEMENT, DESIGN AND EXTENT OF THE WORK AND ARE PARTIALLY DIAGRAMMATIC. THEY ARE NOT INTENDED TO BE SCALED FOR ROUGH-IN MEASUREMENTS, OR TO SERVE AS SHOP DRAWINGS OR PORTIONS THEREOF.
2. ALL DETAILS AND SECTIONS SHOWN ON THE DRAWINGS ARE INTENDED TO BE TYPICAL AND SHALL BE CONSTRUED TO APPLY TO ANY SIMILAR SITUATION ELSEWHERE ON THE PROJECT, EXCEPT WHERE A DIFFERENT DETAIL OR SECTION IS SHOWN.
3. PRIOR TO START OF CONSTRUCTION, THE CONTRACTOR AND ALL THE SUBCONTRACTORS SHALL VERIFY ALL GRADES, LINES, LEVELS, DIMENSIONS AND COORDINATE EXISTING CONDITIONS AT THE JOB SITE WITH THE PLANS AND SPECIFICATIONS. THEY SHALL REPORT ANY INCONSISTENCIES OR ERRORS IN THE ABOVE TO THE ARCHITECT/ENGINEER BEFORE COMMENCING WORK. THE CONTRACTOR AND HIS SUBCONTRACTORS SHALL LAY OUT THEIR WORK FROM ESTABLISHED REFERENCE POINTS AND BE RESPONSIBLE FOR ALL LINES, ELEVATIONS AND MEASUREMENTS IN CONNECTION WITH THEIR WORK.
4. IF ANY ERRORS OR OMISSIONS APPEAR IN THE DRAWINGS, GENERAL NOTES OR OTHER DOCUMENTS, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IN WRITING OF SUCH OMISSION OR ERROR PRIOR TO PROCEEDING WITH ANY WORK WHICH APPEARS IN QUESTION. IN THE EVENT OF THE CONTRACTOR FAILING TO GIVE SUCH AN ADVANCED NOTICE, HE SHALL BE HELD RESPONSIBLE FOR THE RESULTS OF ANY SUCH ERRORS OR OMISSIONS AND THE COST OF RECTIFYING THE SAME.
5. THE CONTRACTOR SHALL USE THE STRUCTURAL DRAWINGS AND SPECIFICATIONS TOGETHER WITH THE ARCHITECTURAL, MECHANICAL, ELECTRICAL AND OTHER TRADE DRAWINGS AND SHOP DRAWINGS, TO LOCATE DEPRESSIONED SLABS, SLOPES, DRAINS, OUTLETS, RECESSES, OPENINGS, BOLT SETTING, SLEEVES, DIMENSIONS, ETC. NOTIFY ARCHITECT/ENGINEER, IN WRITING, OF ANY POTENTIAL CONFLICTS BEFORE PROCEEDING WITH THE WORK.

SHOP DRAWINGS AND DELEGATED ENGINEERING:

1. ALL SHOP DRAWINGS SHALL BE SUBMITTED FOR ENGINEER'S REVIEW ONLY AFTER THEY HAVE BEEN THOROUGHLY REVIEWED BY THE CONTRACTOR FOR CONSTRUCTION METHODS, DIMENSIONS AND OTHER TRADE REQUIREMENTS, AND STAMPED WITH THE CONTRACTOR'S APPROVAL. STAMP. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR DIMENSIONS, QUANTITIES, ENGINEERING DESIGN BY DELEGATED ENGINEERS, ERRORS OR OMISSIONS AS A RESULT OF REVIEWING ANY SHOP DRAWINGS. ANY ERRORS OR OMISSIONS MUST BE MADE GOOD BY THE CONTRACTOR, IRRESPECTIVE OF RECEIPT, CHECKING OR REVIEW OF DRAWINGS BY THE ENGINEER AND EVEN THOUGH WORK IS DONE IN ACCORDANCE WITH SUCH DRAWINGS.
2. BEFORE STRUCTURAL INSPECTIONS CAN BE MADE ON A PORTION OF THE STRUCTURE, ALL RELATED SHOP DRAWINGS, DELEGATED ENGINEERING, PRODUCT APPROVAL, MANUFACTURER'S DATA AND OTHER RELATED INFORMATION, MUST BE REVIEWED AND ACCEPTED BY THE ENGINEER-OF-RECORD AND APPROVED BY THE BUILDING DEPARTMENT.
3. SHOP DRAWINGS SHALL CONTAIN ALL INFORMATION SHOWN ON THE STRUCTURAL PLANS (RELATED TO THE DELEGATED DESIGN) INCLUDING ALL DESIGN LOADS, IN ADDITION TO THE INFORMATION REQUIRED BY THE DELEGATED ENGINEER'S DESIGN.
4. A/E WILL REVIEW ALL SUBMITTED SHOP DRAWINGS, PREPARED AND SIGNED AND SEALED BY THE CONTRACTOR'S DELEGATED ENGINEER, ONLY FOR GENERAL COMPLIANCE WITH THE DESIGN INTENT, REQUIRED LOADING AND COORDINATION WITH THE STRUCTURAL DESIGN.
5. CONTRACTOR SHALL SUBMIT TO THE A/E ONLY ONE SET OF SEPIA AND TWO SETS OF BLUE PRINTS OF THE STRUCTURAL SHOP DRAWINGS FOR A/E REVIEW, BEFORE STARTING FABRICATION. THE A/E WILL RETURN THE MARKED-UP AND STAMPED SEPIA TO THE CONTRACTOR. THESE SEPIA COPIES SHALL BE USED TO MAKE THE PRINTS REQUIRED FOR SHOP DRAWING DISTRIBUTION. SETS OF BLUE PRINTS (WITHOUT SEPIA) WILL NOT BE ACCEPTED.

CONSTRUCTION MEANS AND METHODS:

1. THE CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCE OR PROCEDURES, SAFETY PRECAUTIONS, SHORES, RESHORES, LATERAL BRACING AND PROGRAMS IN CONNECTION WITH THE PROJECT, ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. OUR SERVICES DO NOT GUARANTEE NOR ASSURE LIABILITY FOR THE JOB SAFETY, TEMPORARY SHORING AND BRACING AND THE PERFORMANCE OF THE CONTRACTOR.
2. THE CONTRACTOR IS RESPONSIBLE AND SHALL COMPLY WITH THE SAFETY REQUIREMENTS OF THE STANDARD BUILDING CODE AND APPLICABLE LOCAL, STATE AND FEDERAL LAWS.
3. PROVIDE ALL SHORING, BRACING AND SHEETING AS REQUIRED FOR SAFETY, STRUCTURAL STABILITY AND FOR THE PROPER EXECUTION OF THE WORK. REMOVE WHEN WORK IS COMPLETED.
4. PROVIDE AND MAINTAIN GUARD LIGHTS AT ALL BARRICADES, RAILINGS, OBSTRUCTIONS IN THE STREETS, ROADS OR SIDEWALKS AND ALL TRENCHES OR FITS ADJACENT TO PUBLIC WALKS OR ROADS.
5. AT ALL TIMES, PROVIDE PROTECTION AGAINST WEATHER (RAIN, WIND, STORMS OR THE SUN), SO AS TO MAINTAIN ALL WORK MATERIALS, APPARATUS AND FIXTURES FREE FROM INJURY OR DAMAGE.
6. AT THE END OF THE DAYS WORK, COVER ALL WORK LIKELY TO BE DAMAGED. ANY WORK DAMAGED BY FAILURE TO PROVIDE PROTECTION SHALL BE REMOVED AND REPLACED WITH NEW WORK AT THE CONTRACTOR'S EXPENSE.

1. THE CONTRACTOR SHALL PAY FOR ALL DAMAGES TO ADJACENT STRUCTURES, SIDEWALKS AND TO STREETS OR OTHER PUBLIC PROPERTY OR PUBLIC UTILITIES.

STRUCTURAL DESIGN CRITERIA:

1. THE DESIGN COMPLIES WITH THE REQUIREMENTS OF THE 2017 FLORIDA BUILDING CODE, 6th EDITION AND OTHER REFERENCED CODES AND SPECIFICATIONS. ALL CODES AND SPECIFICATIONS SHALL BE LATEST EDITION AT TIME OF PERMIT.
2. WIND LOAD CRITERIA:  
BASED ON ANSI/ASCE 7-97. BASIC WIND VELOCITY 130 MPH.
3. ROOF DESIGN LOADS:  
SUPERIMPOSED DEAD LOADS: ..... 20 PSF  
SUPERIMPOSED LIVE LOADS: ..... 20 PSF
4. FLOOR DESIGN LOADS:  
SUPERIMPOSED DEAD LOADS: ..... 25 PSF  
SUPERIMPOSED LIVE LOADS:  
RESIDENTIAL ..... 40 PSF  
BALCONIES ..... 60 PSF
5. WIND NET UPLIFT: ARE AS INDICATED ON PLANS

FOUNDATIONS: (SPREAD FOOTINGS)

1. FOUNDATIONS ARE DESIGNED TO BEAR ON WELL COMPACTED GRADE OR CLEAN FILL OF AN ALLOWABLE BEARING CAPACITY OF 2500 PSF MAXIMUM. A CERTIFIED TESTING LABORATORY SHALL BE ENGAGED BY THE OWNER TO VERIFY THAT THE REQUIRED BEARING CAPACITY WAS OBTAINED. SAID SOIL CAPACITY SHALL BE CERTIFIED AND TESTED BY A FLORIDA REGISTERED FOUNDATION ENGINEER, PRIOR TO CASTING OF CONCRETE IN THE FOOTINGS.
2. NATURAL GRADE (OR FILL) BELOW FOOTINGS SHALL BE COMPACTED TO 98% MODIFIED PROCTOR (ASTM D-1557).
3. TOP OF WALL FOOTINGS TO BE AT THE SAME ELEVATION AS TOP OF COLUMN PAD FOOTINGS. STEP WALL FOOTING FROM HIGHER COLUMN FOOTING TO THE LOWER ONE (AS DETAILED ON THE PLANS).
4. TOP OF ALL FOOTINGS TO BE A MINIMUM 1'-4" BELOW THE TOP OF CONCRETE SLAB ON GRADE (UNLESS OTHERWISE NOTED) OR MINIMUM 1'-0" BELOW FINISHED GRADE, WHICHEVER IS LOWER. IN THE EVENT THAT THE SLAB STEPS ON EACH SIDE OF THE FOOTING, THE FOOTING SHALL BE 1'-4" BELOW TOP OF THE LOWER SLAB.
5. REINFORCING IN THE CONTINUOUS WALL FOOTINGS (MONOLITHIC AND NON-MONOLITHIC) SHALL BE SPLICED 36 BAR DIAMETERS MINIMUM AND SHALL EXTEND CONTINUOUSLY THRU ALL FOOTING PADS.
6. ALL LONGITUDINAL REBARS IN THE CONTINUOUS WALL FOOTINGS, SHALL BE CONTINUED AT BENTS AND CORNERS BY BENDING THE REBARS 48 BAR DIAMETERS AROUND THE CORNERS OR ADDING MATCHING CORNER BARS, EXTENDING 48 BAR-DIAMETERS INTO FOOTING EACH SIDE OF CORNER OR BENT.
7. ALL FOOTINGS SHALL BE 12" MINIMUM THICKNESS.

CONCRETE SLABS ON GRADE:

1. ALL INTERIOR AND EXTERIOR SLABS AND WALKWAYS AS SHOWN ON THE STRUCTURAL OR ARCHITECTURAL PLANS SHALL BE FOUR INCHES THICK MINIMUM REINFORCED WITH 6 x 6 - W/4 x W/4 WELDED WIRE FABRIC (UNLESS OTHERWISE NOTED).
2. ALL SLABS ON GRADE TO BE CONSTRUCTED IN ACCORDANCE WITH LATEST A.C.I. - "GUIDE FOR CONCRETE FLOOR AND SLAB CONSTRUCTION" (A.C.I. - 302.1R).
3. JOINTS SHALL BE PROVIDED IN ALL INTERIOR SLABS ON GRADE AT COLUMN CENTER-LINES DIVIDING THE SLAB INTO SQUARE PANELS NOT TO EXCEED 20 x 20 FT. IN SIZE. CAST SLAB IN LONG ALTERNATE STRIPS. PROVIDE A CONTRACTION JOINT BETWEEN EACH STRIP. SEE PLAN FOR SAW-CUT, CONTRACTION AND ISOLATION JOINT DETAILS.
4. PROVIDE SAW-CUT JOINTS AT ALL SIDEWALKS AT A MAXIMUM SPACING OF FIVE FEET ON CENTERS AND ISOLATION JOINTS AT 20 FEET O.C. (U.O.N.).
5. FILL MATERIAL SHALL BE PLACED IN LIFTS NOT EXCEEDING 12" AND COMPACTED TO 98% MODIFIED PROCTOR (ASTM D-1557) WITHIN A DISTANCE OF 3 FEET BEYOND ALL FOOTING EDGES. TAKE AT LEAST ONE DENSITY TEST FOR EACH 1600 SQFT. OF AREA AND 12" BELOW SURFACE. SEND RESULTS OF THE TEST TO OWNER, ARCHITECT AND ENGINEER.

CONCRETE AND REINFORCING:

1. CONCRETE DESIGN AND REINFORCEMENT IN ACCORDANCE WITH "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE" (A.C.I. 318 - LATEST EDITION) AND WITH "DETAILS AND DETAILING OF CONCRETE REINFORCEMENT" - (A.C.I. 315 - LATEST EDITION).
2. ALL CONCRETE WORK IN ACCORDANCE WITH "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDING" (A.C.I. 301 - LATEST EDITION). PRODUCTION OF CONCRETE, DELIVERY, PLACING AND CURING TO BE IN ACCORDANCE WITH "HOT WEATHER CONCRETING" (A.C.I. 305R - LATEST EDITION).
3. ALL CONCRETE TO BE REGULAR WEIGHT WITH A DESIGN STRENGTH OF 3000 P.S.I. AT 28 DAYS. MAXIMUM SLUMP 5".
4. ALL REINFORCING TO BE NEW BILLET STEEL CONFORMING TO THE LATEST A.S.T.M. A-615 GRADE 60, FABRICATED IN ACCORDANCE WITH CRS.I. MANUAL OF STANDARD PRACTICE AND PLACED IN ACCORDANCE WITH A.C.I. 315 AND CRS.I. MANUAL OF STANDARD PRACTICE.
5. CONCRETE COVER UNLESS OTHERWISE DETAILED ON DRAWINGS:  
FOOTINGS: (BOTTOM) ..... 3"  
(TOP & SIDES) ..... 2"  
SLABS ON GRADE: CENTERED W/SLAB  
COLUMNS AND BEAMS: (TO THE TIES) ..... 1-1/2"
6. COLUMN REINFORCEMENT: DOUELS TO BE SAME SIZE AND NUMBER AS VERTICAL REBARS ABOVE. LAP 36 BAR DIAMETER OR MINIMUM OF 18 INCHES, U.O.N. PROVIDE RIGID TEMPLATES FOR DOUEL LOCATION. PROVIDE STANDARD HOOKS AT TOP OF ALL VERTICAL REINFORCEMENT AT NONCONTINUOUS COLUMNS (U.O.N.).

1. ALL DOUELS FOR COLUMNS SHALL BE SECURED IN POSITION PRIOR TO CONCRETING. PUSHING THE DOUELS INTO POSITION IN WET CONCRETE IS NOT PERMITTED.
2. BEAM REINFORCEMENT: LAPPED 36 BAR DIAMETER OR MINIMUM 18 INCHES. BOTTOM BARS SPLICED ONLY AT SUPPORTS. TOP BARS SPLICED ONLY AT MID-SPAN. ALL TOP BARS HOOKED AT NONCONTINUOUS EDGES (U.O.N.). ALL HOOKS TO BE STANDARD 90 DEGREE HOOKS AS REQUIRED (U.O.N.).
3. ADDED REINFORCEMENT: PROVIDE ADDITIONAL CORNER BARS BENT 36 INCHES MINIMUM EACH WAY AT "L" AND "T" CORNERS IN OUTER FACES OF ALL BEAMS TO MATCH ALL HORIZONTAL BAR (TOP, BOTTOM AND INTERMEDIATE REBARS).
10. SEE PLAN FOR MINIMUM SIZE CONCRETE TIE BEAM REQUIREMENTS.

REINFORCED MASONRY WALLS:

1. HOLLOW LOAD-BEARING MASONRY UNITS SHALL CONFORM TO ASTM C-90, TYPE I, GRADE N, SQUARE END, WITH A MINIMUM AVERAGE COMPRESSIVE STRENGTH ON NET AREA OF fm=2,000 (PSI). CONSTRUCTION SHALL BE IN ACCORDANCE WITH ACI 530.1 SPECIFICATIONS.
2. SPECIAL INSPECTOR SERVICES ARE REQUIRED FOR ALL REINFORCED MASONRY CONSTRUCTION. THE SPECIAL INSPECTOR SHALL INSPECT THE PLACING OF THE REBARS IN THE CELLS, VERIFY CLEANLINESS OF THE CELLS TO BE GROUTED, AND OBSERVE THE PLACING OF THE GROUT OR CONCRETE INTO THE CELLS.

3. MORTAR SHALL CONFORM TO ASTM C-270, TYPE "M" OR "S".

4. LAY ALL MASONRY WITH FULL FACE HEAD JOINTS AND WITH FACE SHELL MORTAR BEDDING.
5. MASONRY ANCHORAGE TO SUPERSTRUCTURE SHALL BE PROVIDED IN ACCORDANCE WITH STRUCTURAL DRAWINGS AND DETAILS.
6. THE USE OF ADMIXTURES SHALL NOT BE PERMITTED WITHOUT PRIOR REVIEW OF THE ENGINEER.
7. VERTICAL REINFORCING:

- (A) ASTM A-615 PER REINFORCING SECTION.
- (B) WHEN A FOUNDATION DOUEL DOES NOT LINE UP WITH A VERTICAL CORE IT SHALL NOT BE SLOPED MORE THAN ONE HORIZONTAL INCH TO SIX INCHES VERTICAL FOR ALIGNMENT, EVEN THOUGH IT IS IN A CELL ADJACENT TO THE VERTICAL WALL REINFORCING.
- (C) VERTICAL REINFORCING STEEL SHALL BE PLACED CENTERED IN THE CELL. LAP 48 BAR-DIAMETERS. PROVIDE BAR SPACERS AS REQUIRED TO MAINTAIN REINFORCING SECURED IN POSITION.
- (D) VERTICAL REINFORCEMENT SHALL BE PROVIDED AT EACH SIDE OF OPENINGS IN WALL, AT WALL INTERSECTIONS, CORNERS AND ENDS. THIS REINFORCING SHALL BE THE SAME SIZE AS THE SCHEDULED WALL REINFORCING FOR THE PARTICULAR WALL, BUT NEVER LESS THAN A #5 REBAR. SPECIAL CARE SHALL BE TAKEN TO INSURE THAT CELLS TO BE GROUTED LINE UP PROPERLY AND ARE CLEAN OF EXCESS MORTAR.
- (E) ALL VERTICAL REINFORCING SHALL BE HOOKED INTO THE BOND BEAMS AT THE NON-CONTINUOUS END OF THE REBARS.
- (F) PROVIDE INSPECTION HOLES AT THE BOTTOM OF EACH REINFORCED MASONRY CELL, AS REQUIRED FOR LIFTS HIGHER THAN 5 FT.
8. HORIZONTAL REINFORCING:

- PROVIDE GALVANIZED #5 GAGE, LADDER TYPE HORIZONTAL JOINT REINFORCING EVERY SECOND BLOCK COURSE (1'-4" O.C. VERTICALLY) LAPPED 7-1/2". PROVIDE SPECIAL HORIZONTAL REINFORCING AT "T" AND "L" INTERSECTION. ANCHOR TO COLUMNS WITH MINIMUM 4" EXTENSION INTO AREA OF FOUR.
9. PROVIDE "DOVE-TAIL" ANCHORS AT 16" O.C. VERTICALLY FOR ALL MASONRY PLACED ADJACENT TO ALREADY IN PLACE COLUMNS.
10. CELL FILLING CONCRETE SHALL BE "FEA DOCK" CONCRETE MIX (8" TO 9" SLUMP) OR GROUT WITH Fc=3,000 PSI MIN. AT 28 DAYS.
11. LINTELS:
  - A. THE CONTRACTOR SHALL PROVIDE PRECAST CONCRETE OR CAST-IN-SITE LINTELS AT THE HEADS OF ALL OPENINGS IN MASONRY WALLS NOT EXCEEDING SIX (6) FEET IN WIDTH WHERE BEAMS HAVE NOT BEEN SPECIFIED. FOR OPENING ADJACENT TO CONCRETE COLUMNS - THE LINTEL SHALL BE CAST-IN-PLACE WITH THE COLUMN.
  - B. LINTEL MAY BE INTEGRAL WITH THE STRUCTURAL OR TIE BEAM WHEN HEAD OF THE OPENING IS 16 INCHES OR LESS BELOW. CONTINUE BEAM'S TYPICAL BOTTOM REBARS THROUGH AND ADD 2-#5 BOTTOM TRUSS BARS AT DROPS AND 2-#3 STIRRUPS AT 6 INCHES O.C. EACH END AT DROP.
  - C. MINIMUM BEARING FOR ALL LINTELS 8 INCHES EACH SIDE OR PROVIDE DOUELS AND POCKETS IN ADJACENT CONCRETE COLUMNS.
  - D. LINTEL TO BE MINIMUM OF 8 INCHES DEEP WITH 2-#4 TOP AND BOTTOM FOR CLEAR SPANS LESS THAN 6 FEET AND WITH 2-#5 TOP AND BOTTOM AND 2-#5 STIRRUPS AT 6 INCHES O.C. EACH END, FOR SPANS GREATER THAN 6 FEET (UP TO 8 FEET). CALL ENGINEER FOR SPANS LARGER THAN 8 FEET WITH NO SPECIFIED BEAMS OR LINTELS OVER.

STRUCTURAL STEEL: (SHOP DRAWINGS REQUIRED)

1. ALL STRUCTURAL STEEL TO BE DOMESTIC A.S.T.M. A-36 (Fy=36 K.S.I.) AND DESIGNED IN ACCORDANCE WITH THE LATEST A.I.S.C. "SPECIFICATION FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS" AND THE A.I.S.C. CODE OF STANDARD PRACTICE.
2. STEEL TUBES TO BE DOMESTIC STEEL CONFORMING TO A.S.T.M. A-500 GRADE B (Fy=46 K.S.I.).  
TUBE AND PIPE COLUMNS TO BE CONCRETE FILLED WITH VENT HOLES TOP, MIDDLE AND BOTTOM.
3. ALL COLUMN BASE AND CAP PLATES SHALL BE 3/4" THICK (UNLESS OTHERWISE NOTED). WIDTH AND LENGTH AS REQUIRED FOR PROPER BOLTING AND AS INDICATED ON THE PLANS AND DETAILS.
4. ALL WELDING TO BE IN ACCORDANCE WITH AWS, LATEST "STRUCTURAL WELDING CODE - STEEL". CLEAN AND RUSTPROOF ALL FIELD WELDS WITH HEAVY DUTY RUSTPROOFING PAINT.
5. ALL CONNECTIONS TO BE FIELD AND SHOP WELDED AND TO DEVELOP MEMBER IN SHEAR.
6. SPLICE LOCATIONS TO BE REVIEWED BY ARCHITECT/ENGINEER.
7. STEEL BEARING ON STEEL TO BE WELDED THERETO.

STRUCTURAL WOOD:

1. TO CONFORM TO RULES OF THE MANUFACTURER'S ASSOCIATION UNDER WHOSE RULES THE LUMBER IS PRODUCED. (SEE SUPPLIER'S SPECIFICATIONS).
2. TO BE AIR DRIED, WELL SEASONED AND GRADE MARKED AT MILL.
3. TO BE NO. 2 SOUTHERN PINE, UTILITY GRADE DOUGLAS FIR OR WEST COAST HEMLOCK.
4. ALL STRUCTURAL WOOD TO BE SURFACED FOUR (4) SIDES (S-4-S) WITH A MINIMUM FIBER STRESS IN BENDING OF 1200 P.S.I. AND A MAXIMUM MOISTURE CONTENT OF 19 PERCENT.
5. ALL LUMBER AND PLYWOOD IN CONTACT WITH CONCRETE, STUCCO, MASONRY OR OTHER CEMENTITIOUS MATERIALS SHALL BE TREATED TO COMPLY WITH AWPA STANDARD LP-2.
6. STORE ALL LUMBER ABOVE GRADE OR FLOOR. STACK TO ALLOW PROPER AIR CIRCULATION AND PROTECT FROM WETTING WITH SUITABLE COVER.

WOOD TRUSSES: (DELEGATED ENGINEERED SHOP DRAWING REQUIRED)

1. DESIGNED AND FABRICATED IN ACCORDANCE WITH "NATIONAL DESIGN SPECIFICATIONS FOR STEEL GRADE LUMBER AND ITS FASTENERS" BY NFPA (LATEST REVISION).

2. TRUSSES SHALL BE DESIGNED, SIGNED AND SEALED BY A FLORIDA REGISTERED PROFESSIONAL ENGINEER, WHO SHALL BE ASSIGNED AS A DELEGATED ENGINEER FOR THE CONTRACTOR. THE DELEGATED ENGINEER DESIGN AND INDICATE ON THE SHOP DRAWINGS ALL TRUSS COMPONENTS TEMPORARY BRACING, BRIDGING, HARDWARE, METAL HANGERS, ANCHORS AND METAL SHAPES AS REQUIRED BY DESIGN OR AS INDICATED ON THE PLANS. ALL METAL PARTS TO BE GALVANIZED.
3. TRUSS DESIGNER ENGINEER SHALL INDICATE THE NET WIND UPLIFT REACTIONS FOR EACH TRUSS AND GIRDER TRUSS. EACH TRUSS SHALL BE STRAPPED TO THE SUPPORT WITH A HURRICANE STRAP (AS PER DETAIL ON PLAN). THE SIZE OF STRAP AND AMOUNT OF NAILS SHALL BE SELECTED BASED ON THE UPLIFT DATA OF THE STRAP AND THE TRUSS SHOP DRAWINGS.
4. ALL SEATS FOR THE WOOD GIRDER TRUSSES HAVE BEEN SPECIFIED BY THE A/E. IN COORDINATION WITH LOCATION AND LOADING INFORMATION PROVIDED ON THE PRE-ENGINEERED WOOD TRUSS SHOP DRAWINGS.
5. THE STRUCTURAL PLANS INDICATE ALL THE REQUIRED LATERAL PERMANENT BRIDGING, AS RECOMMENDED BY THE "TRUSS PLATE INSTITUTE". TRUSS DESIGNER ENGINEER SHALL PROVIDE INFORMATION AND SHOW ON PLAN, ALL LATERAL BRACING OF ANY TRUSS INDIVIDUAL MEMBERS, AS REQUIRED BY TRUSS DESIGN.
6. TRUSSES SHALL BE INSTALLED WITH OUT OF PLUMB AND OUT OF PLANE TOLERANCES AS PER THE "TRUSS PLATE INSTITUTE" (SHOWN ON THE ROOF PLAN). ANY TRUSS EXCEEDING THE SPECIFIED TOLERANCE MUST BE REALIGNED OR REPLACED.
7. INSTALLATION OF TRUSSES LONGER THAN 35 FT. OR HIGHER THAN 6 FT. SHALL BE MADE UNDER THE DIRECT SUPERVISION OF A LICENSED BUILDING OR GENERAL CONTRACTOR OR A LICENSED STRUCTURAL ENGINEER OR ARCHITECT.

PLYWOOD ROOF DIAPHRAGM:

1. ROOF DIAPHRAGM SHALL COMPLY WITH THE DESIGN RECOMMENDATIONS OF "A.F.A. DESIGN/CONSTRUCTION GUIDE - DIAPHRAGMS" AND THE LOCAL BUILDING CODE.
2. PLYWOOD ROOF DECKING SHALL BE 1/2" MINIMUM THICKNESS, CDX TYPE AND SHALL BE CONTINUOUS OVER TWO OR MORE SPANS, WITH FACE GRAIN PERPENDICULAR TO THE SUPPORTS.
3. CONNECT PLYWOOD DIAPHRAGM TO STRUCTURE WITH 10d GALV. NAILS, SPACED AT 6" O.C. MAX. AT SUPPORTED EDGES AND AT 6" O.C. ALONG THE INTERMEDIATE SUPPORTS.
- GABLE ENDS NAIL SPACING SHALL BE 4" ON CENTERS MAXIMUM.
4. INSPECTIONS: COMPLY WITH THE LOCAL BUILDING CODE AND OTHER REQUIREMENTS FOR INSPECTIONS (BY THE COUNTY, CITY, ARCHITECT OR ENGINEER) OF SPECIFIED COMPONENTS OF THE ROOF STRUCTURE REQUIRING INSPECTIONS.

COLD FORMED METAL FRAMING: (SHOP DRAWINGS REQUIRED)

1. ALL COLD FORMED METAL FRAMING SHALL BE DOMESTIC A.S.T.M. A 653 (Fy = 33 K.S.I.) STEEL, AND DESIGNED IN ACCORDANCE WITH THE LATEST S.S.M.A. SPECIFICATIONS FOR THE DESIGN, FABRICATION AND ERECTION OF COLD FORMED METAL FRAMING AND THE S.S.M.A. CODE OF STANDARD PRACTICE.
2. ALL CFMF COMPONENTS SHALL BE MANUFACTURED AS PER ASTM C 955 AND BE GALVANIZED WITH A MINIMUM G-60 COATING PER ASTM C 955.
- ALL PRODUCTS SHALL BE FREE OF RUST, DENTS, BENDS & TWISTS AND STORED ON A FLAT PLANE PRIOR TO INCLUSION IN THE WORK.
3. ALL WELDING TO BE IN ACCORDANCE WITH AWS, LATEST, E13 & D13 "STRUCTURAL WELDING CODE - STEEL". CLEAN AND RUSTPROOF ALL FIELD WELDS WITH ZINC RICH RUSTPROOFING PAINT.
4. BOTTOM TRACK SHALL BE SECURED TO THE CONCRETE FOUNDATION W/ ANCHOR BOLTS AS PER THE FOUNDATION PLAN AND SHALL BE FURTHER FASTENED AT EA. FULL STUD W/ 1/11" x 1 1/2" PAF, SHOT THROUGH A 1" x 16 GA HOLELESS WASHER.
5. ALL CONNECTIONS TO BE FIELD AND SHOP WELDED AND TO FULLY DEVELOP MEMBER IN SHEAR.
6. SPLICE LOCATIONS TO BE REVIEWED BY ARCHITECT/ENGINEER.
7. STEEL BEARING ON STEEL TO BE WELDED THERETO.

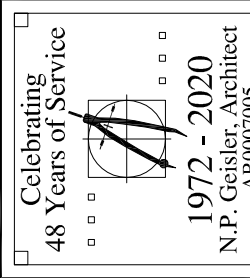
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CUSTOM RESIDENTIAL DESIGN FOR:  
**MR. & MRS. P. J. PATEL**  
COLUMBIA COUNTY, FLORIDA  
**STRUCTURAL NOTES**



**NICHOLAS  
GEISLER**  
ARCHITECT  
N.C.A.A.E. Certified

DATE:

21 SEP 2021

COMM:

2K2104

SHEET:

A.6

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WIND DESIGN SPEED: 130 MPH, UNLESS NOTED OTHERWISE

SOIL DESIGN STATEMENT:  
FOOTING DESIGN IS BASED UPON 1000PSF SOIL BEARING PRESSURE PROVIDED BY CLEAN SAND, GRAVEL OR STONE. OTHER SOIL CONDITIONS ie: CLAY, HIGH LEVEL OF ORGANICS OR OTHER UNDESIRABLE SOILS SHALL REQUIRE FOUNDATION MODIFICATIONS.

LIVE LOADS: 1st FLOOR: 40PSF, 2nd FLOOR: 40PSF, ROOF: AS DETERMINED BY SHAPE FACTORS APPLIED TO THE WIND FORCE GENERATED BY THE DESIGN WIND SPEED.

BUILDING CODE: 2014 FLORIDA BUILDING CODE

ELECTRICAL CODE: NATIONAL ELECTRICAL CODE - LATEST  
LIFE SAFETY: NFPA-101 - LATEST

THE CUSTOMER IS RESPONSIBLE FOR DELIVERING THE REQUIRED SETS OF CONSTRUCTION DOCUMENTS TO THE PERMIT ISSUING AUTHORITIES, FOR THE ISSUANCE OF CONSTRUCTION PERMITS. THE CONTRACTOR SHALL REVIEW THE CONSTRUCTION DOCUMENTS AND VERIFY ALL DIMENSIONS. ANY DISCREPANCIES SHALL BE REPORTED TO THE ARCHITECT PRIOR TO THE COMMENCEMENT OF ANY WORK OR FABRICATION OF ANY MATERIALS.

AMPLE DIMENSIONS ARE SHOWN ON THE PLANS TO LOCATE ALL ITEMS.  
SIMPLE ARITHMETIC MAY BE USED TO DETERMINE THE LOCATIONS OF THOSE  
ITEMS NOT DIMENSIONED.

PLEASE DO NOT MAKE ANY STRUCTURAL CHANGES TO THESE PLANS WITHOUT CONSULTING WITH THE ARCHITECT. THE OWNER SHALL ASSUME ANY AND ALL LIABILITY FOR STRUCTURAL DAMAGE RESULTING FROM CHANGES MADE TO THE PLANS OR BY SUBSTITUTION OF MATERIALS DIFFERENT FROM SPECIFICATION ON THE PLANS.

1. THE CONTRACTOR SHALL INDEMNIFY THE OWNER AGAINST ALL CLAIMS, WHETHER FROM PERSONAL INJURY OR PROPERTY DAMAGE, ARISING FROM EVENTS ASSOCIATED WITH THE WORK PERFORMED UNDER THE CONTRACT FOR THIS PROJECT.
2. THE CONTRACTOR AND/OR SUB-CONTRACTORS SHALL WARRANT ALL WORK FOR A PERIOD OF ONE YEAR FOLLOWING THE DATE OF FINAL COMPLETION AND ACCEPTANCE BY THE OWNER. DEFECTS IN MATERIALS, EQUIPMENT, COMPONENTS AND WORKMANSHIP SHALL BE CORRECTED AT NO FURTHER COST TO THE OWNER DURING THE ONE YEAR WARRANTY PERIOD.
3. AT THE OWNER'S OPTION, A WARRANTY INSPECTION SHALL BE PERFORMED DURING THE ELEVENTH MONTH FOLLOWING THE COMMENCEMENT OF THE WARRANTY PERIOD, FOR THE PURPOSE OF DETERMINING ANY WARRANTY WORK THAT MAY BE REQUIRED. THE OWNER SHALL BE PRESENT DURING THIS INSPECTION IF REQUESTED BY THE OWNER.
4. THE CONTRACTOR SHALL PAY FOR ALL PERMITS, LICENSES, TESTS AND THE LIKE THAT MAY BE REQUIRED BY THE VARIOUS AUTHORITIES HAVING JURISDICTION OVER THIS PROJECT BE THEY CITY, COUNTY, STATE OR FEDERAL.
5. THE OWNER SHALL FILE A 'NOTICE OF COMMENCEMENT' PRIOR TO THE BEGINNING OF THE PROJECT AND THE CONTRACTOR(S) SHALL FILE 'NOTICE TO OWNER' AND PROVIDE 'RELEASE OF LIEN' FOR ALL PAYMENT REQUESTS PRIOR TO DISBURSEMENT OF ANY FUNDS.
6. ANY AND ALL DISPUTES ARISING FROM EVENTS ASSOCIATED WITH THE CONSTRUCTION OF THIS PROJECT BETWEEN THE OWNER, CONTRACTOR(S) AND SUPPLIERS SHALL BE RESOLVED THROUGH BINDING ARBITRATION.
7. ALL WORK SHALL BE IN ACCORDANCE W/ APPLICABLE CODES AND LOCAL REGULATIONS, INCLUDING APPLICABLE ENERGY CODES. ALL COMPONENTS OF THE BUILDING SHALL MEET WITH THE MINIMUM ENERGY REQUIREMENTS OF THE BUILDING CODE. ANY DISCREPANCIES SHALL BE REPORTED TO THE ARCHITECT IN WRITING PRIOR TO THE COMMENCEMENT OF THE WORK.
8. ALL INSULATION SHALL BE LEFT EXPOSED AND ALL LABELS LEFT INTACT ON THE WINDOWS AND DOORS UNTIL INSPECTED BY THE BUILDING OFFICIAL.
9. ALL WOOD IN CONTACT WITH CONCRETE OR MASONRY SHALL BE PRESSURE TREATED.
10. INTERIOR BEARING WALLS SHALL BE CONSTRUCTED IN COMPLIANCE WITH 'UL Design U333'. BATT INSULATION SHALL BE INCLUDED WHERE UNCONDITIONED AREA IS BEING SEPARATED FROM HEATED / COOLED AREA.
11. INTERIOR STUD WALLS SEPARATING LIVING AREA FROM GARAGE AREAS SHALL BE CONSTRUCTED IN COMPLIANCE WITH 'UL Design U333', INCLUDING R-11 BATT INSULATION.
12. CEILINGS OVER ATTACHED GARAGES OR GARAGES W/ LIVING AREA ABOVE SHALL BE 5/8" FIRECODE 1" GIBBS ON 1X3 WOOD FURRING AT 16" O.C. ATTACHED W/ 1 1/4" BUGLEHEAD SCREWS @ 6" O.C. ALONG EACH POINT OF BEARING.

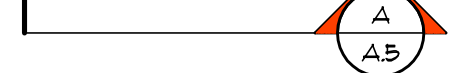
SOIL CHEMICAL BARRIER METHOD:

1. A PERMANENT SIGN WHICH IDENTIFIES THE TERMITE TREATMENT PROVIDER AND MEANS FOR REINSPECTION AND TREATMENT CONTRACT RENEWAL SHALL BE PROVIDED. THE SIGN SHALL BE POSTED NEAR THE WATER HEATER OR ELECTRIC PANEL. **FBC 104276**
2. CONDENSATE AND ROOF DOWNSPOUTS SHALL DISCHARGE AT LEAST 1'-0" AWAY FROM BUILDING SIDE WALLS. **FBC 1503.4.4**
3. IRRIGATION/SPRINKLER SYSTEMS INCLUDING ALL RISERS AND SPRAY NOZZLES SHALL NOT BE INSTALLED WITHIN 1'-0" FROM BUILDING SIDE WALLS. **FBC 1503.4.4**
4. TO PROVIDE FOR INSPECTION FOR TERMITE INFESTATION BETWEEN WALL COVERINGS AND FINAL EXTERIOR GRADE SHALL NOT BE LESS THAN 6". EXCEPTION: PAINT AND DECORATIVE CEMENTIOUS FINISH LESS THAN 5/8" THICK ADHERED DIRECTLY TO THE FOUNDATION WALL. **FBC 1403.16**
5. INITIAL TREATMENT SHALL BE DONE AFTER ALL EXCAVATION AND BACKFILL IS COMPLETE. **FBC 106.11**
6. SOIL DISTURBED AFTER THE INITIAL TREATMENT SHALL BE RETREATED INCLUDING SPACES BOXED OR FORMED. **FBC 106.12**
7. BOXED AREAS IN CONCRETE FLOOR FOR SUBSEQUENT INSTALLATION OF TRAPS, ETC. SHALL BE MADE WITH PERMANENT METAL OR PLASTIC FORMS. PERMANENT FORMS MUST BE OF A SIZE AND DEPTH THAT WILL ELIMINATE THE DISTURBANCE OF SOIL AFTER THE INITIAL TREATMENT. **FBC 106.13**
8. MINIMUM 6 MIL VAPOR RETARDER MUST BE INSTALLED TO PROTECT AGAINST RAINFALL DILUTION IF RAINFALL OCCURS BEFORE VAPOR RETARDER PLACEMENT. RETREATMENT IS REQUIRED. **FBC 106.14**
9. CONCRETE OVERFOUR AND MORTAR ALONG THE FOUNDATION PERIMETER MUST BE REMOVED BEFORE EXTERIOR SOIL TREATMENT. **FBC 106.15**
10. SOIL TREATMENT MUST BE APPLIED UNDER ALL EXTERIOR CONCRETE OR GRADE WITHIN 1'-0" OF THE STRUCTURE SIDEWALLS. **FBC 106.16**
11. AN EXTERIOR VERTICAL CHEMICAL BARRIER MUST BE INSTALLED AFTER CONSTRUCTION IS COMPLETE INCLUDING LANDSCAPING AND IRRIGATION. ANY SOIL DISTURBED AFTER THE VERTICAL BARRIER IS APPLIED, SHALL BE RETREATED. **FBC 106.16**
12. ALL BUILDINGS ARE REQUIRED TO HAVE PER-CONSTRUCTION TREATMENT. **FBC 106.11**
13. A CERTIFICATE OF COMPLIANCE MUST BE ISSUED TO THE BUILDING DEPARTMENT TO ELUCIDATE FIRST CONTROL COMPANY BEFORE A CERTIFICATE OF OCCUPANCY CAN BE ISSUED. THE CERTIFICATE OF COMPLIANCE SHALL STATE: "THE BUILDING HAS RECEIVED A COMPLETE TREATMENT FOR THE PREVENTION OF SUBTERRANEAN TERMITES. THE TREATMENT IS IN ACCORDANCE WITH THE RULES AND REGULATIONS OF THE FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES." **FBC 106.11**
14. AFTER ALL WORK IS COMPLETED, LOOSE WOOD AND FILLS MUST BE REMOVED FROM BELOW AND WITHIN 1'-0" OF THE BUILDING. THIS INCLUDES ALL GRADE STAKES, TUB TRAP BOXES, FORMS, SHORING OR OTHER CELLULOSE CONTAINING MATERIAL. **FBC 2203.13**
15. NO WOOD, VEGETATION, STUMPS, CARDBOARD, TRASH, ETC. SHALL BE BURIED WITHIN 5'-0" OF ANY BUILDING OR PROPOSED BUILDING. **FBC 2203.14**

## STRUCTURAL DESIGN CRITERIA

1. THE DESIGN COMPLIES WITH THE REQUIREMENTS OF THE 2020 FLORIDA BUILDING CODE - SECTION 1609 AND OTHER REFERENCED CODES AND SPECIFICATIONS. ALL CODES AND SPECIFICATIONS SHALL BE LATEST EDITION AT TIME OF PERMIT.
2. WIND LOAD CRITERIA: RISK CATEGORY: 2
- BASED ON ANSI/ASCE 7-16, 2020 FBC 1609-A WIND VELOCITY:  $V_{ULT} = 130$  MPH  
 $V_{ASD} = 108$  MPH
3. ROOF DESIGN LOADS:
- SUPERIMPOSED DEAD LOADS: ..... 20 PSF  
SUPERIMPOSED LIVE LOADS: ..... 20 PSF
4. FLOOR DESIGN LOADS:
- SUPERIMPOSED DEAD LOADS: ..... 25 PSF  
SUPERIMPOSED LIVE LOADS:
- RESIDENTIAL ..... 40 PSF  
BALCONIES ..... 60 PSF
5. WIND NET UPLIFT: ARE AS INDICATED ON TRUSS SHOP DRAWINGS

THESE SYMBOLS ARE MOST OFTEN ENCOUNTERED IN THE FOLLOWING  
DRAWINGS: ELEVATIONS, DIMENSION PLANS,  
SECTIONS & STRUCTURAL PLANS



TYPE OF ELEVATION MARK USED  
TO INDICATE A PREFERRED TARGET  
ELEVATION - TRUE MEASUREMENT.

TYPE OF ELEVATION MARK USED  
TO INDICATE THE TOP OF A LOG  
WALL STACK - NOMINAL ONLY.

TYPE OF DETAIL MARK USED  
TO INDICATE A SECTION OR DETAIL  
ASSOCIATED WITH A PLAN VIEW

TYPE OF DETAIL MARK USED  
TO INDICATE A SECTION is:  
SECTION "A" ON SHEET "A5", TAIL  
INDICATES DIRECTION OF VIEW

TYPE OF SECTION MARK USED  
TO INDICATE A VIEW TAKEN IN THE  
DIRECTION OF THE ARROW ie:  
SECTION "A" FOUND ON "D6a" OF  
THE PROJECT MANUAL

APPLICATION	MANUF/MODEL	CAP.
TRUSS TO WALL:	31MPSON H25a	535*
GIRDER TRUSS TO POST/HEADER:	31MPSON LGT. W/ 28 - 16d NAILS	1185*
HEADER TO KING STUD(S):	31MPSON ST22	1370*
PLATE TO FOUNDATION:	5/8" x THRU-BOLT	3420*
FORCH BEAM TO POST:	31MPSON PC44/EPC44	1700*
FORCH POST TO END:	31MPSON ABB44	7200*
MISC. JOINTS	31MPSON A34	315*/240*

NOTE:  
ALL ANCHORS SHALL BE SECURED W/ NAILS AS PRESCRIBED BY THE  
MANUFACTURER FOR MAXIMUM JOINT STRENGTH, UNLESS NOTED OTHERWISE.

NOTE:  
REFER TO THE INCLUDED STRUCTURAL DETAILS FOR ADDITIONAL ANCHORS/  
JOINT REINFORCEMENT AND FASTENERS.

NOTE:  
ALL UNLISTED JOINTS IN THE LOAD PATH SHALL BE REINFORCED WITH  
SIMPSON A34 FRAMING ANCHORS, TYPICAL T.O.

NOTE:  
"SEMCO" PRODUCT APPROVAL:  
MIAMI/DADE COUNTY REPORT #95-0818.15

NOTE:  
"SIMPSON" PRODUCT APPROVALS:  
MIAMI/DADE COUNTY REPORT #91-0107.05, #96-1126.11, #99-0623.04  
SBCCI NER-443, NER-393

NUMBER OF NAILS FOR CONNECTING WOOD MEMBERS; CONNECTION	COMMON NAILS	Nr. / SPACING
BRIDGING TO JOIST, TOE NAIL	16d	2 EA. END
2" SUBFLOOR TO JOIST, BLIND & FACE NAILING	16d	2
SOLE PLATE TO JOIST OR BLOCKING FACE NAILED	16d	16" O.C.
TOP OR SOLE PLATE TO STUD END NAILED	16d	2
STUD TO SOLE PLATE, TOE NAILED	8d	3 OR 2 16d
DOUBLE STUDS, FACE NAILED	8d	24" O.C.
DOUBLE TOP PLATES, FACE NAILED TOP PLATES - LAPS & INTERSECTIONS	16d	16" O.C.
FACE NAILED	16d	2
1 X 6 SHEATHING TO EACH POINT OF BEARING, FACE NAILED	8d	2
BUILT-UP CORNER STUDS, FACE NAILED	16d	30" O.C.
BUILT-UP GIRDERS & BEAMS	20d	32" O.C. * TOP & BOTTOM 4 STAGGERED - 2 * EA. END 4 * SPLICES
3/4" PLYWOOD SUBFLOORING	8d R.S.	6" O.C. * EDGES 10" O.C. *
OSB SHEATHING, 1/16" THICK	8d R.S.	INTERMEDIATE 6" O.C. * EDGES 10" O.C. * INTERMEDIATE

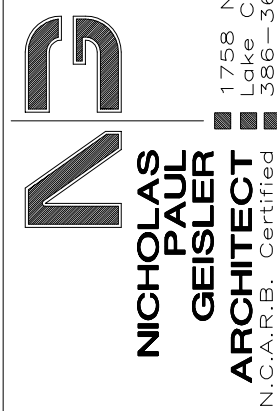
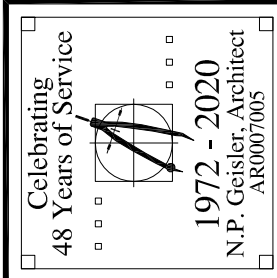
- A. NAILS, BOLTS AND OTHER METAL CONNECTORS WHICH ARE USED IN LOCATIONS EXPOSED TO THE WEATHER SHALL BE GALVANIZED OR OTHERWISE CORROSION RESISTANT.
- B. IN GENERAL, NAIL SHALL PENETRATE THE SECOND MEMBER A DISTANCE EQUAL TO THE THICKNESS OF THE MEMBER BEING NAILED THERETO, OR GREATER.
- C. THERE SHALL BE NOT LESS THAN 2 NAILS PER CONNECTION.
- D. GLUING SHALL NOT BE CONSIDERED AN ACCEPTABLE CONNECTOR IN LIEU OF THOSE SPECIFIED HEREIN.
- E. FORMED METAL CONNECTORS, AS PER THE SCHEDULE HEREIN, SHALL HAVE THE NUMBER OF NAILS INSTALLED AS REQUIRED BY THE MANUFACTURER, OR AS DIRECTED BY THE PLANS.
- F. NAILS PROJECTING BEYOND THE LAST WOOD MEMBER SHALL BE CLINCHED, WHEREVER POSSIBLE.
- G. NOTES IN THE "PLANS" PACKAGE OF THE CONSTRUCTION DOCUMENTS SUPERSEDES SIZES & SPACINGS OF NAILS CONTAINED HEREIN.

REVISION

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N.P. Geisler, Architect

DRAWN:

**CUSTOM RESIDENTIAL DESIGN for:**  
**MR. & MRS. P. J. PATEL**  
COLUMBIA COUNTY, FLORIDA  
**STRUCTURAL INFORMATION**



DATE:

21 SEP 2021

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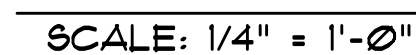
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AR0007005



**NOTE!**  
PRIOR TO THE CONSTRUCTION OF THE FOUNDATION, THE CONTRACTOR SHALL COORDINATE ANY INTERIOR BEARING LOCATION CONDITIONS PER THE TRUSS ENGINEERED SHOP DRAWINGS WITH THE FOUNDATION PLAN. ANY INTERIOR BEARING LOCATIONS OR ANY POINT LOADS OF 4.0 K OR GREATER SHALL BE SUPPORTED VIA A MODIFIED FOUNDATION PLAN. TAKING THESE LOADS INTO CONSIDERATION THE CONTRACTOR SHALL MAKE THE ENGINEERED TRUSS SHOP DRAWINGS AVAILABLE TO THE ARCHITECT FOR THE PURPOSE OF RENDERING SUCH MODIFICATIONS PRIOR TO POURING ANY CONCRETE.

AR0007005





8" AS REQUIRED 8"

14" MIN

2" 2" MIN OPNG

8" AS REQUIRED (20")

12" 12"

PRECAST CONC. LINTEL  
AS PER SHOP DRAWINGS

2 #5 BOND BEAM  
REBAR

#5 ADDED LINTEL  
REBAR (IF REQ'D)

#5 LINTEL WALL TIE,  
HOOKED TO LINTEL

#5 WALL REBAR, BENT  
INTO BOND BEAM

#5 FOUNDATION DOWEL  
HOOKED TO FOOTING

#5 FOUNDATION REBAR  
AS PER PLAN

NOTE!  
REFER TO GENERAL NOTES FOR LAP SPLICE AND HOOK  
MINIMUM LENGTH/SIZE - ALL PER ACI 318-LATEST

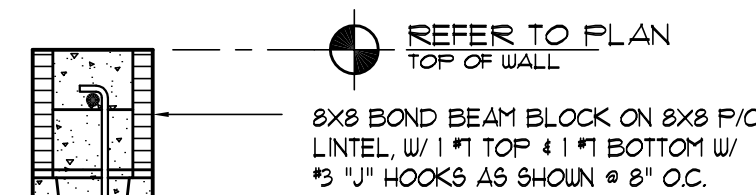
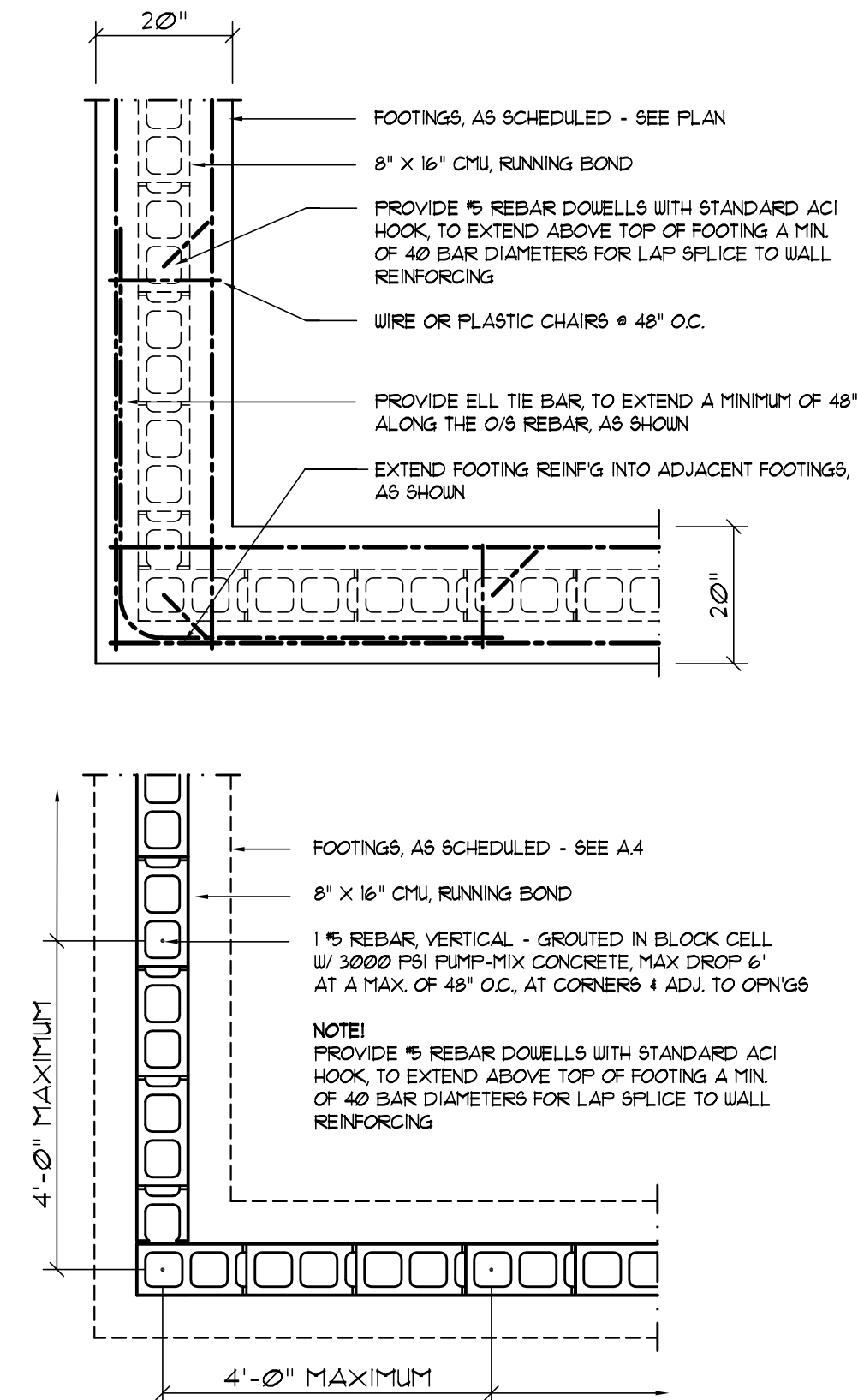


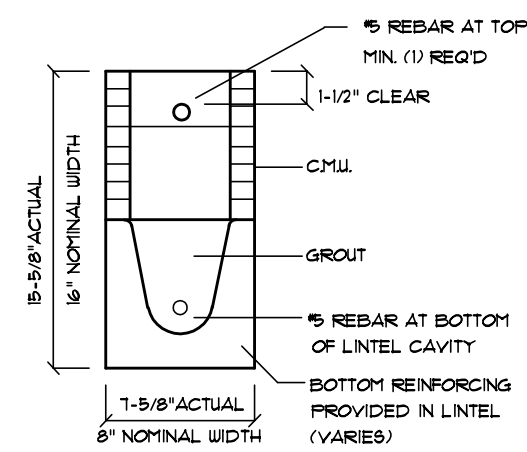
Diagram illustrating the window rough opening and reinforcement details. The rough opening is 6" offset from each end. The reinforcement detail shows off-set rebar to clear the lintel, with a 4" allowance for bearing at each end.

Diagram illustrating the required depth of the formed and poured concrete sill. The sill depth is indicated as being as required, but not less than 2". The diagram also shows the cell tin-cap.

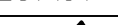
SCALE: 1" = 1'-0"



SCALE: 1/2" = 1'-0"



8F16-1B/1T

2" PRECAST & PRESTRESSED U-INTELS											
			GRAVITY								
MARK	LENGTH	TYPE	8UB	8F8-08B 8F8-18	8F12-08B 1181	8F16-08B 1813	8F16-08B 2651	8F18-08B 3402	8F24-08B 4149	8F28-08B 4956	8F32-08B 5644
L4	4'-6" (34")	PRECAST	1651	2110	4021	6039	7526	9004	10472	12668	14668
				1223	3341	1809	2311	2816	3336	3846	
L5	5'-4" (64")		1889	2884	5051	6096	8400	9434	11454	13454	
				1029	1675	2395	1984	2439	2866	3333	
L6	5'-6" (30")	PRECAST	1661								
				632	1675	2610	3835	5066	6613	8041	
L7	8'-4" (121")	PRECAST	513	1218	1918	2844	3668	4693			
				482	802	125	95	122	329	535	
L10	10'-6" (126")	PRECAST	456								
				658	1025	154	2081	2734	3338	3904	1404

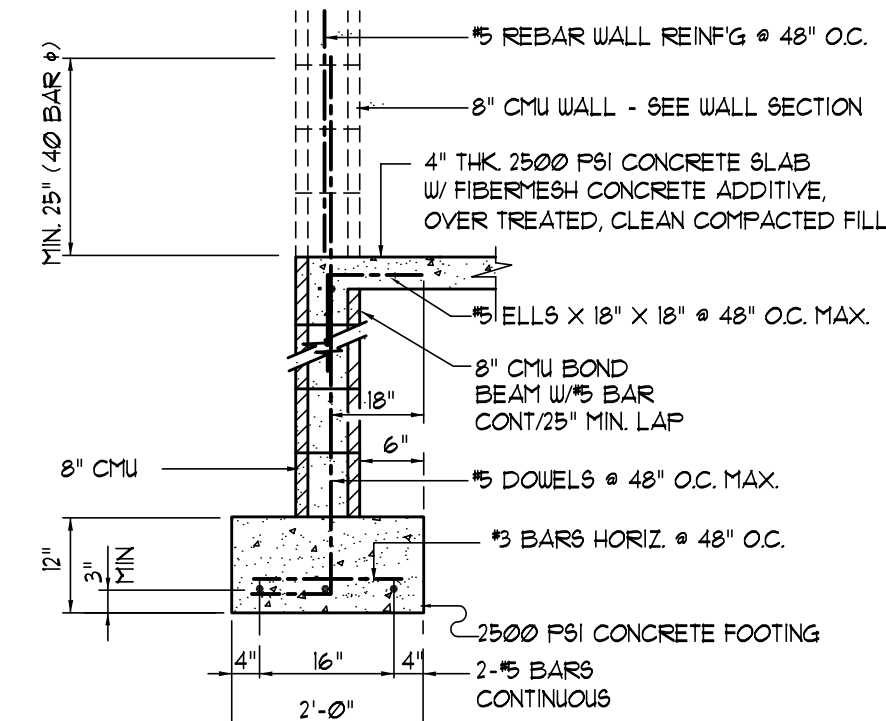
MARK	TYPE	WINDOW LINTEL	ROUGH OPENING	REMARKS
3-2030	9H 25	54"	37 3/4" X 39"	
3-2050	9H 25	54"	37 3/4" X 63"	EGRESS WINDOW
2-3050	(2) 9H 25	30"	14 7/8" X 63"	EGRESS WINDOW
2-2050	(2) 9H 1/2 25	64"	54 3/4" X 63"	
3-2850	(3) 9H 25	31"	100" X 63"	
3-3050	(2) 9H 1/2 25	126"	112" X 63"	

ALL WINDOWS MANUFACTURED BY: TBD

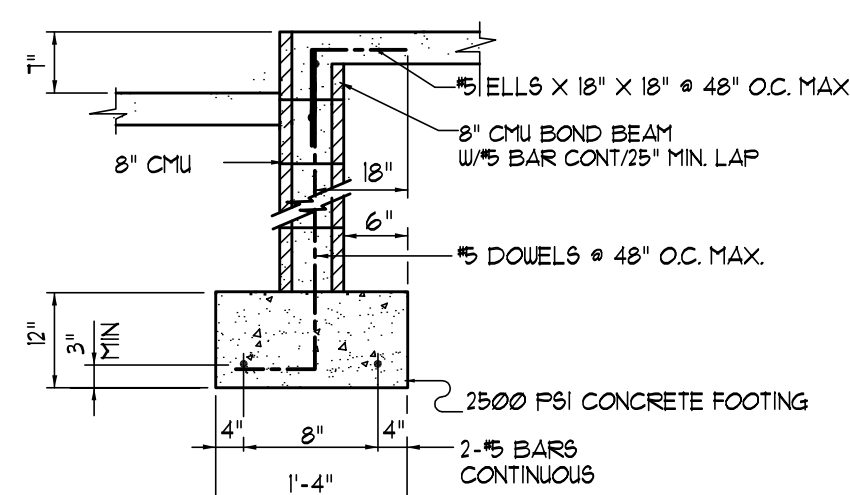
CAST-TYPE			GRAVITY										
MARK	LENGTH	TYPE	BR4	BR4-0B	BR4-0D	BR4-1-0B	BR4-1-0D	BR4-2-0B	BR4-2-1B	BR4-2-1D	BR4-2-0B	BR4-2-0D	
L23	4'-6" (84")	PRECAST	1351	1449	1485	1782	2114	3600	4481	5375	9575	6264	
				1702	342	4382	6472	7914	9446	10878			
				901	1671	2395	2946	3523	3872	4522			
			852	901	1733	2933	4636	6730	8711	9707			
				1641	1311	2252	3958	5451	6944	8438			
L71	7'-6" (90")	PRECAST	669	764	1311	2252	3609	5451	6944	8438			
										9131			

TYPE	DOOR LINTEL	REMARKS
3068 IN5	54"	PRE-CAST REC.
5068 FRENCH	80"	PRE-CAST REC.
6068 FRENCH	90"	PRE-CAST REC.

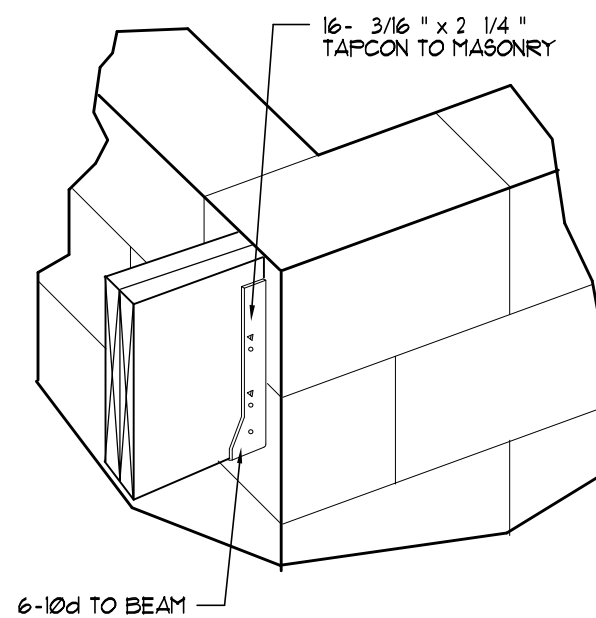
ALL DOORS MANUFACTURED BY: TBD



STEMWALL  
SECTION  
SCALE: 1/2" = 1'-0"



STEMWALL  
SECTION  
SCALE: 1/2" = 1'-0"

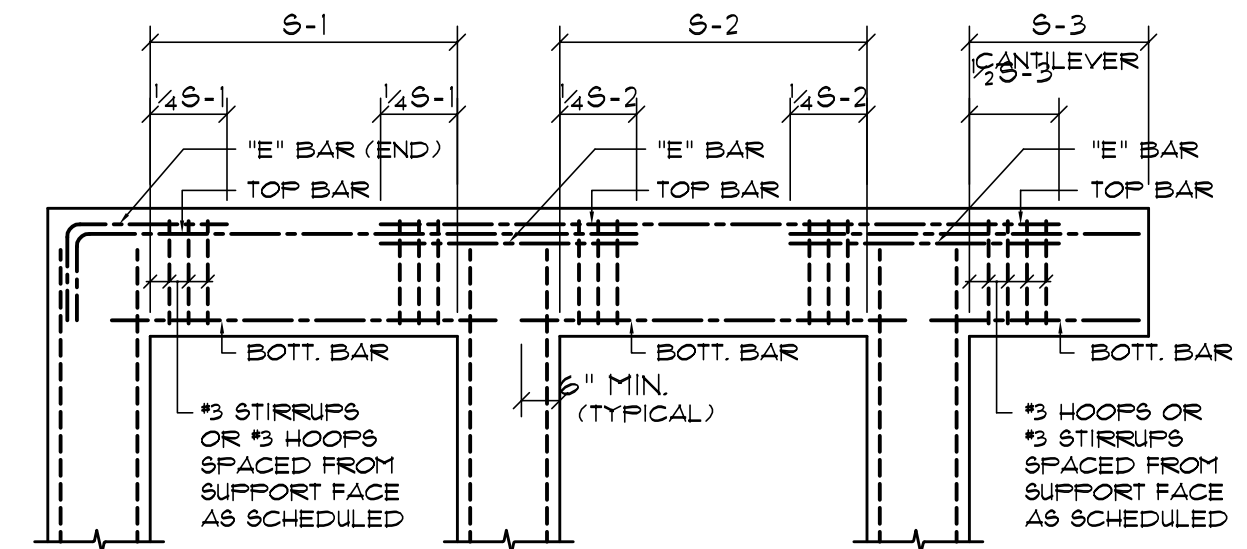


SCALE: NONE  
WOOD BEAM TO MASONRY

CAST-CASTING			GRAVITY										
MARK	LENGTH	TYPE	BRUE	BRP6-CB	BRP6-CD	BRP4-CB	BRP4-CD	BRP8-CB	BRP8-CD	BRP22-CB	BRP22-CD	BRP76-CB	BRP30-CB
L23	4'-6" (54")	PRECAST	1351										
				1102	342	4582	6-712	1741	546	10578			
L26	6'-6" (66")	CAST	822										
				1601	1611	2533	2526	3223	3812	4282			
				1601	1611	2533	4060	6730	8111	6701			
L31	7'-6" (90")	CAST	669										
				1604	1311	2329	2596	3495	5424	5632			

TYPE	DOOR LINTEL	REMARKS
3068 IN5	54"	PRE-CAST REC.
5068 FRENCH	80"	PRE-CAST REC.
6068 FRENCH	90"	PRE-CAST REC.

ALL DOORS MANUFACTURED BY: TBD



BOTTOM BARS - TOP BARS - "E" BARS  
BENDING DIAGRAM: CAST-IN-PLACE  
CONCRETE BEAMS AND SLABS

GENERAL BEAM SCHEDULE NOTE:

1. SCHEDULED HOOPS OR STIRRUPS SHALL BE PLACED AT EACH END OF BEAM UNLESS NOTED OTHERWISE. STIRRUPS SHALL BE TYPE S-6.4 HOOPS SHALL BE TYPE 1-2 TYPICAL CRS) BAR BENDS UNLESS NOTED OTHERWISE.
2. BUNDLE ALL STRUCTURAL BEAM TOP BARS IN PAIRS OR SUPPORTS WITH TOP BARS FROM ADJACENT BEAMS.
3. ALL CONCRETE BEAMS OTHER THAN THOSE WITH THE PREFIX TB SHALL BE POURED PRIOR TO PLACING OF BLOCK BELOW.
4. ALL TIE BEAM REINFORCING SHALL BE CONTINUOUS THROUGH TIE BEAMS ONLY. ALL SPLICES SHALL BE A MINIMUM OF 30 BAR DIAMETERS.
5. ALL TIE BEAM TOP REINFORCING SHALL EXTEND INTO SPAN OF ANY ADJACENT STRUCTURAL BEAM AS PER BENDING DIAGRAM.
6. DROP BOTTOM OF THE BEAMS AS REQUIRED AT WINDOW AND DOOR HEADS (28" MAXIMUM) AND ADD 2" TO BOTTOM IF DROP EXCEEDS 8".
7. TIE BEAM SCHEDULED DEPTHS ARE MINIMUM AND MAY BE INCREASED (8" MAXIMUM) TO FIT BLOCK WORK.
8. ALL ADDED LONGITUDINAL BEAM REINFORCING SHALL EXTEND A MINIMUM OF 6" INTO SUPPORT UNLESS NOTED OTHERWISE.
9. MARK "C" IN REINFORCING COLUMN BETWEEN TWO BEAMS INDICATES THAT REINFORCING SHALL BE CONTINUOUS THROUGH THESE TWO BEAMS.

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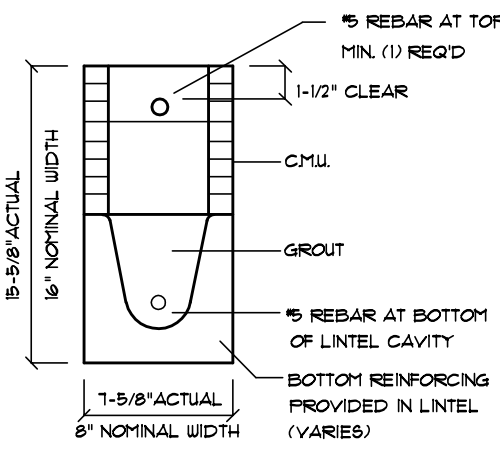
## TYPE DESIGNATION

F = FILLED WITH GROUT / U = UNFILLED  
QUANTITY OF #5 REBAR AT BOTTOM OF LINTEL CAVITY

8F16-1B/1T

NOMINAL WIDTH  
NOMINAL HEIGHT  
QUANTITY OF #5 REBAR AT TOP

8" PRECAST & PRESTRESSED U-LINTELS

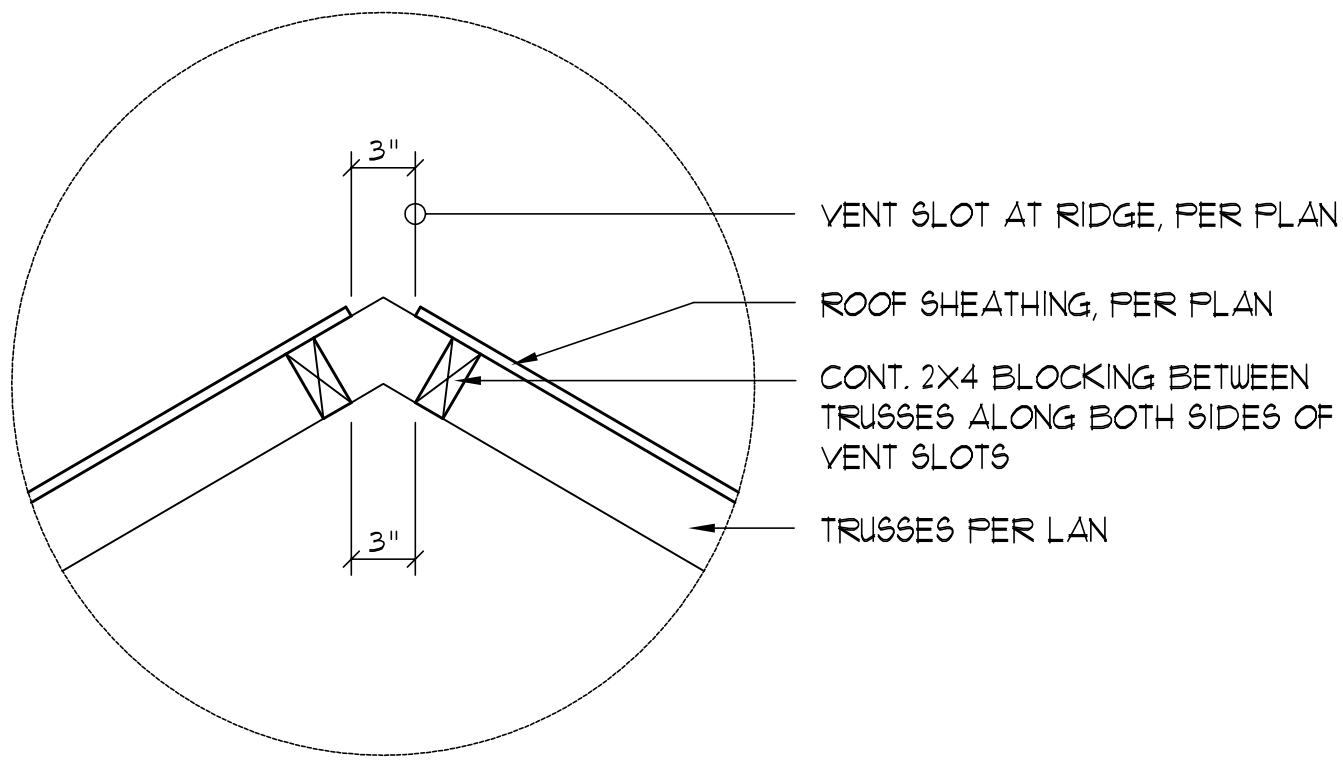


DETAIL A/3  
PRE-CAST LINTEL OVER GARAGE DOOR  
PRE-CAST LINTELS & LANA COLUMNS

		GRAVITY							
MARK	LENGTH	TYPE	8F8-2B	8F12-2B	8F16-2B	8F20-2B	8F24-2B	8F28-2B	8F32-2B
L1	2'-8" (32')	PRECAST	2300	2300	2300	2300	2300	2300	2300
L2	3'-8" (44')	PRECAST	2300	2300	2300	2300	2300	2300	2300
L3	4'-0" (48')	PRECAST	2079	2079	2079	2079	2079	2079	2079
L4	4'-8" (56')	PRECAST	1651	1651	1651	1651	1651	1651	1651
L5	5'-4" (64')	PRECAST	1184	1184	1184	1184	1184	1184	1184
L6	6'-0" (72')	PRECAST	970	970	970	970	970	970	970
L7	6'-8" (80')	PRECAST	937	937	937	937	937	937	937
L8	7'-4" (88')	PRECAST	767	767	767	767	767	767	767
L9	9'-4" (112')	PRECAST	573	573	573	573	573	573	573
L10	10'-0" (120')	PRECAST	456	456	456	456	456	456	456
L11	11'-4" (136')	PRECAST	445	445	445	445	445	445	445
L12	12'-0" (144')	PRECAST	414	414	414	414	414	414	414
L13	13'-4" (160')	PRECAST	362	362	362	362	362	362	362
L14	14'-0" (168')	PRECAST	338	338	338	338	338	338	338
L15	14'-8" (176')	PRESTRESSED	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.
L16	15'-4" (184')	PRESTRESSED	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.
L17	17'-4" (208')	PRESTRESSED	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.
L18	18'-4" (224')	PRESTRESSED	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.
L19	21'-4" (256')	PRESTRESSED	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.
L20	22'-0" (264')	PRESTRESSED	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.
L21	24'-0" (288')	PRESTRESSED	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.

8" PRECAST W/ 2" RECESS DOOR U-LINTELS

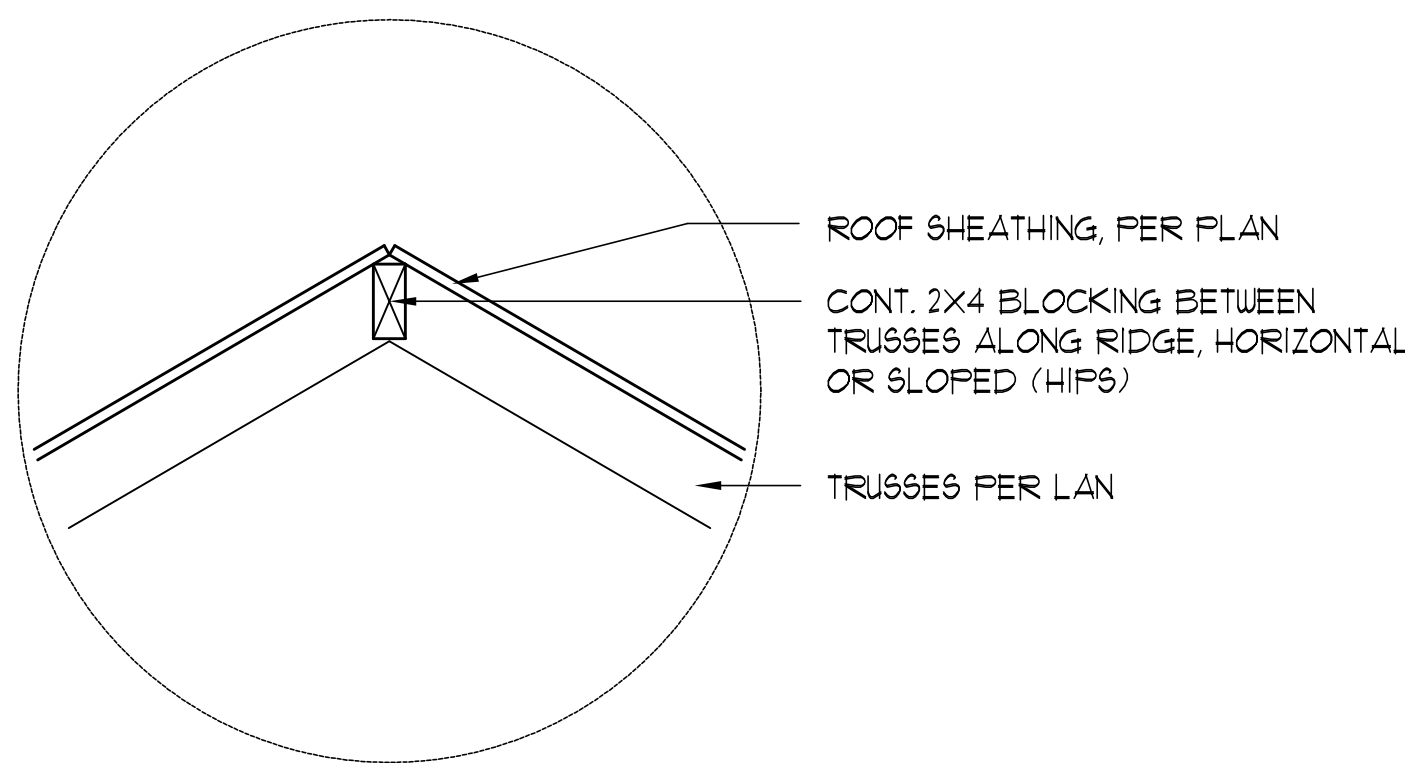
		GRAVITY							
MARK	LENGTH	TYPE	8F8-2B	8F12-2B	8F16-2B	8F20-2B	8F24-2B	8F28-2B	8F32-2B
L22	4'-4" (52')	PRECAST	1488	1488	1488	1488	1488	1488	1488
L23	4'-6" (54')	PRECAST	1357	1357	1357	1357	1357	1357	1357
L24	5'-8" (68')	PRECAST	789	789	789	789	789	789	789
L25	5'-10" (70')	PRECAST	735	735	735	735	735	735	735
L26	6'-8" (80')	PRECAST	822	822	822	822	822	822	822
L27	7'-6" (90')	PRECAST	669	669	669	669	669	669	669
L28	8'-8" (104')	PRECAST	371	371	371	371	371	371	371



## Vent DETAIL

SCALE: 1" = 1'-0"

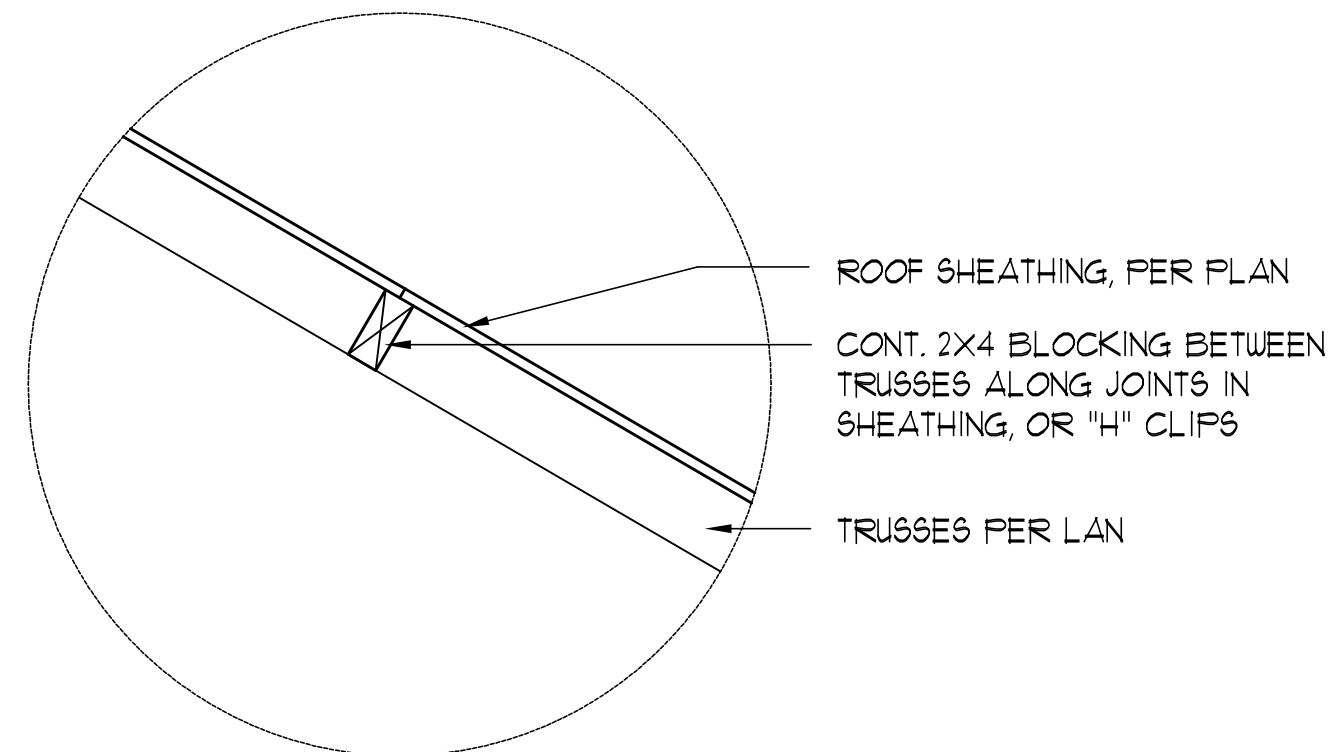
A1



## Ridge DETAIL

SCALE: 1" = 1'-0"

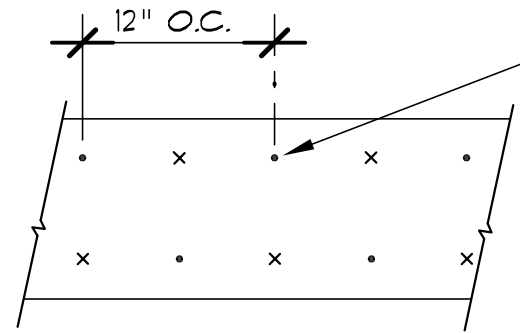
A2



## Joint DETAIL

SCALE: 1" = 1'-0"

A3



## B/U Beam DETAILS

SCALE: NONE

B

ATTENTION !!!

### TRUSS SHOP DRAWING REQUIREMENTS

THIS PROJECT REQUIRES ENGINEERED TRUSS ROOF FRAMING AND/OR ENGINEERED TRUSS FLOOR FRAMING. BECAUSE OF THIS, PRIOR TO COMMENCEMENT OF CONSTRUCTION, THE OWNER/BUILDER SHALL PROVIDE THE ARCHITECT OF RECORD WITH THE SIGNED AND SEALED TRUSS SHOP DRAWINGS FOR THE AOR'S REVIEW AND COMMENT. THE SUBMISSION SHALL CONSIST OF 3 PAPER COPIES OF THE SIGNED AND SEALED TRUSS SHOP DRAWING, AN ELECTRONIC DXF OR DWG (ACAD VERSION 14 OR LOWER) OF THE PLACEMENT PLAN(S) AND A POSTAGE PAID RETURN MAILER.

FAILURE OF THE OWNER/BUILDER TO PROVIDE THE REQUIRED TRUSS SHOP DRAWING PACKAGE TO THE AOR SHALL RESULT IN THE FULL ASSUMPTION OF RESPONSIBILITY BY THE OWNER/BUILDER FOR ALL MATTERS INVOLVING THE TRUSS FRAMING, INCLUDING, BUT NOT LIMITED TO, THE TRUSS PACKAGE SUITABILITY FOR INCLUSION IN THE PROJECT, PROFILES, BEARING REQUIREMENTS, UPLIFT RESTRAINTS OR ANY OTHER ASPECT OF THE INSTALLATION AND HOW SUCH MAY AFFECT ANY OTHER PORTION OF THE PROJECT, THE STRUCTURAL STABILITY OR THE CONTINUED SUITABILITY OF THE TRUSS COMPONENTS FOR THE DURATION OF THE LIFE OF THE STRUCTURE. USE OF TRUSS DOCUMENTS THAT LACK THE AOR'S "SHOP DRAWING REVIEW" STAMP WILL RESULT IN AOR BEING RELEASED FROM ALL LIABILITY INVOLVING ANY TRUSS COMPONENT, FOR ANY REASON.

IF THE 1st SUBMISSION OF THE TRUSS DOCUMENTS FAILS TO MEET THE REQUIREMENTS OF THE DESIGN CONSTRUCTION DOCUMENTS, ADDITIONAL SUBMISSIONS SHALL BE REQUIRED UNTIL SUCH TIME THAT THE TRUSS DOCUMENTS ARE IN CONCURRENCE WITH THE DESIGN CONSTRUCTION DOCUMENTS. EACH SUBSEQUENT SUBMISSION SHALL INCLUDE A POSTAGE PAID MAILER FOR THE RETURN OF THE DOCUMENTS. SUCCESSFUL SUBMISSIONS SHALL BE STAMPED BY THE AOR AND THE DOCUMENTS SHALL BE MARKED AS "NO EXCEPTIONS TAKEN".

FOLLOWING THE REVIEW AND/OR COMMENTS MADE BY THE AOR, 2 SETS OF THE STAMPED TRUSS DOCUMENTS SHALL BE RETURNED TO THE OWNER/BUILDER FOR USE IN THE CONSTRUCTION OF THE PROJECT.

### GENERAL TRUSS NOTES:

- TRUSSES SHALL BE DESIGNED BY A LICENSED ENGINEER, AND IN ACCORDANCE WITH THE REQUIREMENTS OF THE "NATIONAL FOREST PRODUCTS ASSOCIATION" MANUAL FOR "STRESS RATED LUMBER AND ITS CONNECTIONS", LATEST Ed., ALONG W/ THE "TRUSS PLATE INSTITUTE" SUGGESTED GUIDELINES FOR TEMPORARY AND PERMANENT BRACING, AND HANDLING OF TRUSSES. TRUSS SHOP DRAWINGS SHALL INCLUDE TRUSS DESIGN, PLACEMENT PLANS, DETS, & TRUSS TO TRUSS CONNECTIONS.
- TRUSS SHOP DRAWINGS SHALL BE SIGNED & SEALED BY THE DESIGNING ENGINEER.
- FOLLOWING DEVELOPMENT OF TRUSS SHOP DRAWINGS, ADJUSTMENTS TO THE ANCHOR REQUIREMENTS MAY BE REQUIRED DEPENDING ON THE ENGINEERED GRAVITY AND WIND UPLIFT REQUIREMENTS OF TRUSSES OR GIRDERS. THE CONTRACTOR SHALL MAKE AVAILABLE A COMPLETE SET OF TRUSS SHOP DRAWINGS TO THE ARCHITECT FOR THE PURPOSE OF REVIEW OF LOADS IMPOSED ON THE BALANCE OF THE STRUCTURE. ANY SUCH REQUIRED CHANGE SHALL BE INCORPORATED INTO THE CONSTRUCTION OF THIS STRUCTURE.

### FRAMING ANCHOR SCHEDULE

PLATE TO CMU WALL	1/2" A.B. W/ 2" SQ. WASHERS @ 48" O.C.
TRUSS TO PLATE:	SIMPSON H2.5a - 2 REQ'D OVER 500 LB UPLIFT
PORCH RAFTER TO BEAM:	SIMPSON HI
PORCH BEAM TO POST:	SIMPSON PC44/EPC44
PORCH BEAM TO CMU:	SIMPSON HU3C410
PORCH POST TO FND.:	SIMPSON ABU44

### NOTE:

ALL ANCHORS SHALL BE SECURED W/ NAILS AS PRESCRIBED BY THE MANUFACTURER FOR MAXIMUM JOINT STRENGTH, UNLESS NOTED OTHERWISE.

### NOTE:

REFER TO THE INCLUDED STRUCTURAL DETAILS FOR ADDITIONAL ANCHORS/ JOINT REINFORCEMENT AND FASTENERS.

### NOTE:

ALL UNLISTED JOINTS IN THE LOAD PATH SHALL BE REINFORCED WITH SIMPSON A34 FRAMING ANCHORS, TYPICAL T.O.

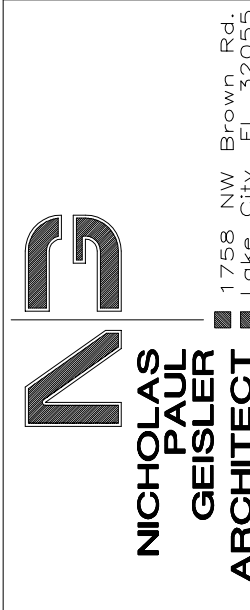
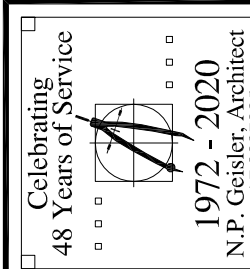
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CUSTOM RESIDENTIAL DESIGN for:  
**MR. & MRS. P. J. PATEL**  
COLUMBIA COUNTY, FLORIDA  
**STRUCTURAL DETAILS**



DATE:

21 SEP 2021

COMB:

2K2104

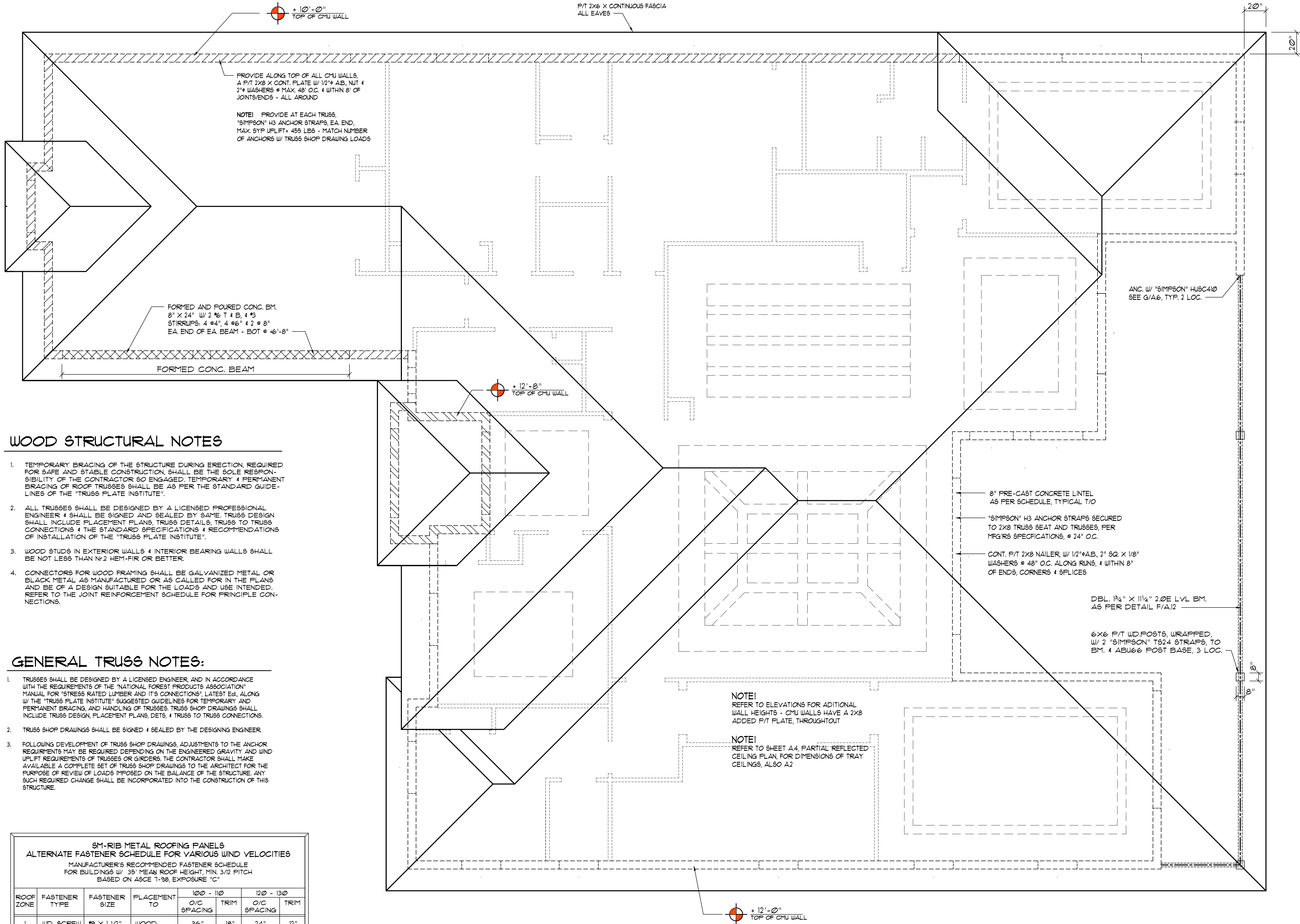
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10 OF 13

AR0007005



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### WOOD STRUCTURAL NOTES

- TEMPORARY BRACING OF THE STRUCTURE DURING ERECTION, REQUIRED FOR SAFE AND STABLE CONSTRUCTION, SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR SO ENGAGED. TEMPORARY & PERMANENT BRACING OF ROOF TRUSSES SHALL BE AS PER THE STANDARD GUIDELINES OF THE "TRUSS PLATE INSTITUTE".
- ALL TRUSSES SHALL BE DESIGNED BY A LICENSED PROFESSIONAL ENGINEER & SHALL BE SIGNED AND SEALED BY SAME. TRUSS DESIGN SHALL INCLUDE PLACEMENT PLANS, TRUSS DETAILS, TRUSS TO TRUSS CONNECTIONS & THE STANDARD SPECIFICATIONS & RECOMMENDATIONS OF INSTALLATION OF THE "TRUSS PLATE INSTITUTE".
- WOOD STUDS IN EXTERIOR WALLS & INTERIOR BEARING WALLS SHALL BE NOT LESS THAN N-2 HEM-FIR OR BETTER.
- CONNECTORS FOR WOOD FRAMING SHALL BE GALVANIZED METAL OR BLACK METAL AS MANUFACTURED OR AS CALLED FOR IN THE PLANS AND BE OF A DESIGN SUITABLE FOR THE LOADS AND USE INTENDED. REFER TO THE JOINT REINFORCEMENT SCHEDULE FOR PRINCIPLE CONNECTIONS.

### GENERAL TRUSS NOTES:

- TRUSSES SHALL BE DESIGNED BY A LICENSED ENGINEER, AND IN ACCORDANCE WITH THE REQUIREMENTS OF THE "NATIONAL FOREST PRODUCTS ASSOCIATION" MANUAL FOR "STRESS RATED LUMBER AND ITS CONNECTIONS", LATEST Ed., ALONG W/ THE "TRUSS PLATE INSTITUTE" SUGGESTED GUIDELINES FOR TEMPORARY AND PERMANENT BRACING, AND HANDLING OF TRUSSES. TRUSS SHOP DRAWINGS SHALL INCLUDE TRUSS DESIGN, PLACEMENT PLANS, DETS., & TRUSS TO TRUSS CONNECTIONS.
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5M-RIB METAL ROOFING PANELS ALTERNATE FASTENER SCHEDULE FOR VARIOUS WIND VELOCITIES							
MANUFACTURER'S RECOMMENDED FASTENER SCHEDULE FOR BUILDINGS W/ 35' MEAN ROOF HEIGHT, MIN. 3/12 PITCH BASED ON ASCE 1-98, EXPOSURE "C"							
ROOF ZONE	FASTENER TYPE	FASTENER SIZE	PLACEMENT TO	100 - 110 O/C SPACING	TRIM	120 - 130 O/C SPACING	TRIM
1	WD. SCREW	#3 X 1 1/2"	WOOD	36"	18"	24"	12"
	MTL. SCR.	#12 X 1" #14 X 1 7/8"	< 18 GA > 18 GA	36"	18"	24"	12"
2 & 3	WD. SCREW	#3 X 1 1/2"	WOOD	36"	18"	24"	12"
	MTL. SCR.	#12 X 1" #14 X 1 7/8"	< 18 GA > 18 GA	36"	18"	24"	12"

## ROOF PLAN

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

NOTE!  
ALL PRECAST LINTELS SHALL BE #8-15  
CONFIGURATION, MINIMUM

NOTE!  
THE DESIGN WIND SPEED FOR THIS PROJECT  
IS 130 MPH PER 2020 1th ED. FBC 1609 AND  
LOCAL JURISDICTION REQUIREMENTS

ROOF SHEATHING:  
SHEATH ROOF W/ 15/32" CDX PLYWOOD OR 7/16"  
OSB PLACED W/ LONG DIMENSION PERPENDICULAR  
TO THE ROOF TRUSSES, SECURE TO FRAMING W/ 8d  
RING SHANK NAILS, PER FASTENER SCHEDULE

### ROOF PLAN NOTES

- R-1 ALL ROOF PITCH 4:12, UNO.  
SEE ROOF PLAN & ELEVATIONS
- R-2 ALL OVERHANG 20"  
UNLESS OTHERWISE NOTED
- R-3 N/A
- R-4 MOVE ALL VENTS AND OTHER  
ROOF PENETRATIONS TO REAR

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CUSTOM RESIDENTIAL DESIGN for:  
**MR. & MRS. P. J. PATEL**  
COLUMBIA COUNTY, FLORIDA  
**ROOF PLAN**

Celebrating 48 Years of Service  
1972-2020  
N.P. Geisler, Architect  
ARCHITECT  
AB0007005

**NICHOLAS  
GEISLER  
ARCHITECT**  
N.C.A.A.R.E. Certified  
1758 NW Brown Rd.  
336-325-4355

DATE:

21 SEP 2021

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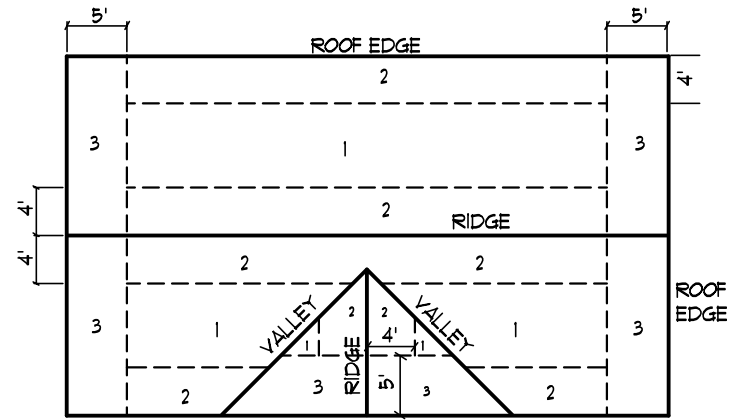
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11 OF 13

AR0007005

ROOF SHEATHING FASTENINGS			
NAILING ZONE	SHEATHING TYPE	FASTENER	SPACING
1	7/16" OSB OR 5/32 CDX	8d COMMON OR 8d HOT DIPPTED GALVANIZED BOX NAILS	6" h.o.c. EDGE 12" h.o.c. FIELD
2			6" h.o.c. EDGE 6" h.o.c. FIELD
3			4" h.o.c. * GABLE TRUSSES OR GABLE ENDWALL 6" h.o.c. EDGE 6" h.o.c. FIELD

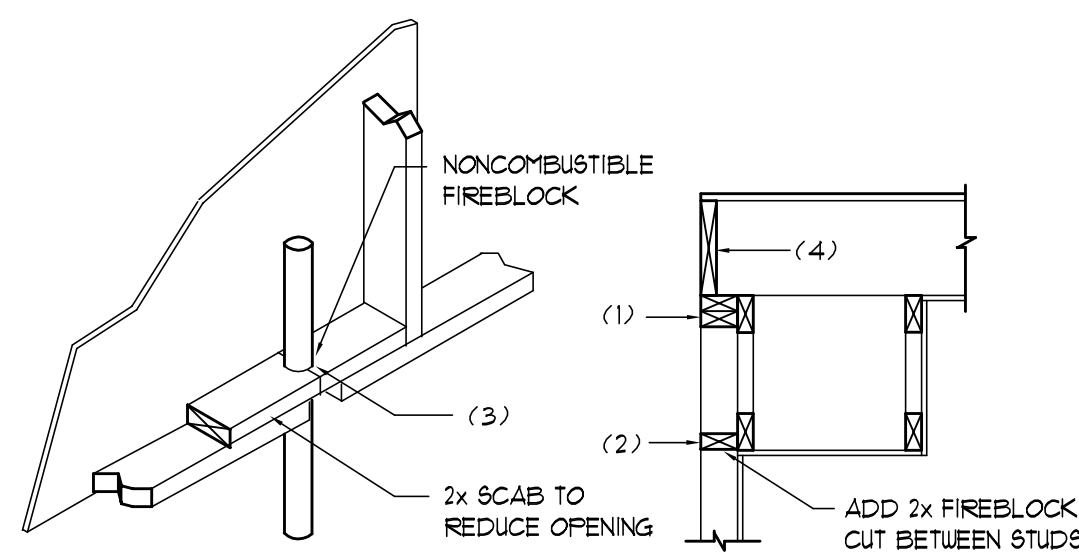


ROOF SHEATHING NAILING ZONES  
(GABLE ROOF)

## Roof Nail Pattern DET.

SCALE: NONE

HEADER SPANS FOR EXTERIOR BEARING WALLS					
HEADERS SUPPORTING:	HEADER SIZE	BUILDING WIDTH (FT.)			
		20'	28'	36'	
ROOF, CEILING	2-2x4	3'-6"	3'-2"	2'-10"	1
	2-2x6	5'-5"	4'-8"	4'-2"	1
	2-2x8	6'-10"	5'-11"	5'-4"	1
	2-2x10	8'-5"	7'-3"	6'-6"	2
	2-2x12	9'-9"	8'-5"	7'-6"	2
	3-2x8	8'-4"	7'-5"	6'-8"	1
	3-2x10	10'-6"	9'-1"	8'-2"	1
	3-2x12	12'-2"	10'-7"	9'-5"	2
	4-2x8	9'-2"	8'-4"	9'-2"	1
	4-2x10	11'-8"	10'-6"	9'-5"	1
	4-2x12	14'-1"	12'-2"	10'-11"	1



PENETRATIONS

SOFFIT/DROPPED CLG.

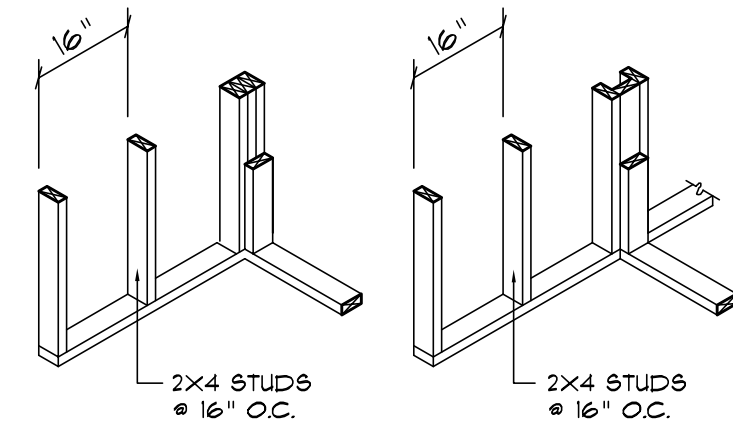
### FIREBLOCKING NOTES:

FIREBLOCKING SHALL BE INSTALLED IN WOOD FRAME CONSTRUCTION IN THE FOLLOWING LOCATIONS:

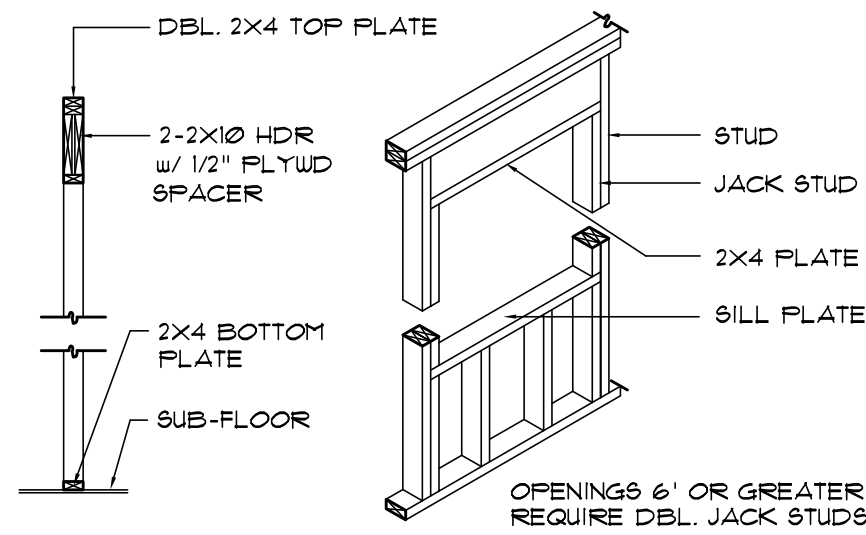
- IN CONCEALED SPACES OF STUD WALLS AND PARTITIONS INCLUDING FURRED SPACES AT CEILING AND FLOOR LEVELS.
- AT ALL INTERCONNECTIONS BETWEEN CONCEALED VERTICAL AND HORIZONTAL SPACES SUCH AS OCCUR AT SOFFITS, DROP CEILINGS, COVE CEILINGS, ETC.
- AT OPENINGS AROUND VENTS, PIPES, DUCTS, CHIMNEYS AND FIREPLACES AT CEILING AND FLOOR LEVELS WITH "PYROFANEL MULTIFLEX SEALANT"
- AT ALL INTERCONNECTIONS BETWEEN CONCEALED VERTICAL STUD WALL OR PARTITION SPACES AND CONCEALED SPACES CREATED BY AN ASSEMBLY OF FLOOR JOISTS, FIREBLOCKING SHALL BE PROVIDED FOR THE FULL DEPTH OF THE JOISTS AT THE ENDS AND OVER THE SUPPORTS.

## Fire Stopping DETAILS

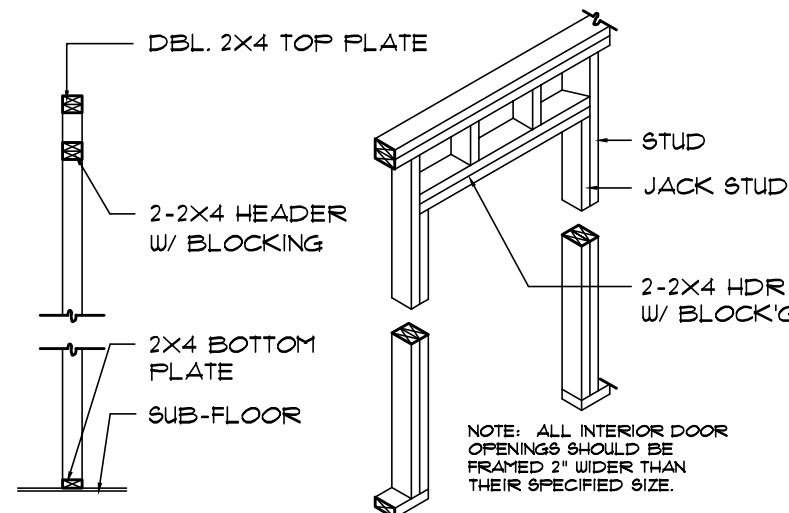
SCALE: NONE



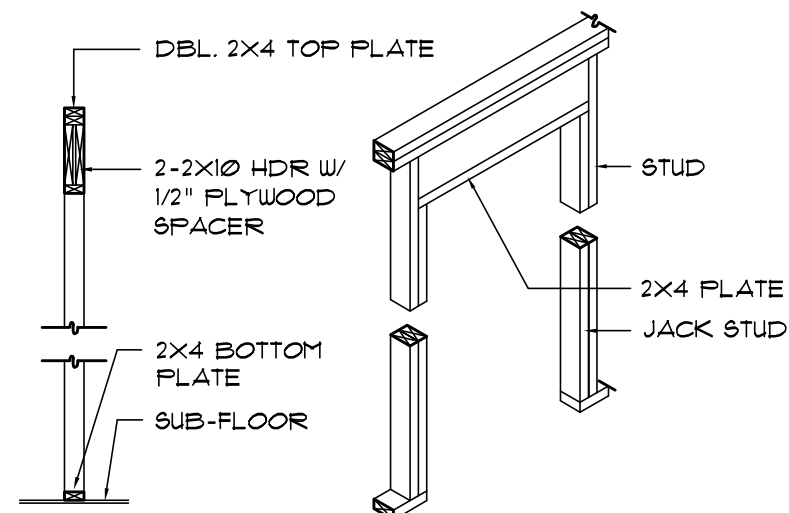
WALL CORNER WALL INTERSECTION



TYPICAL WINDOW HEADER



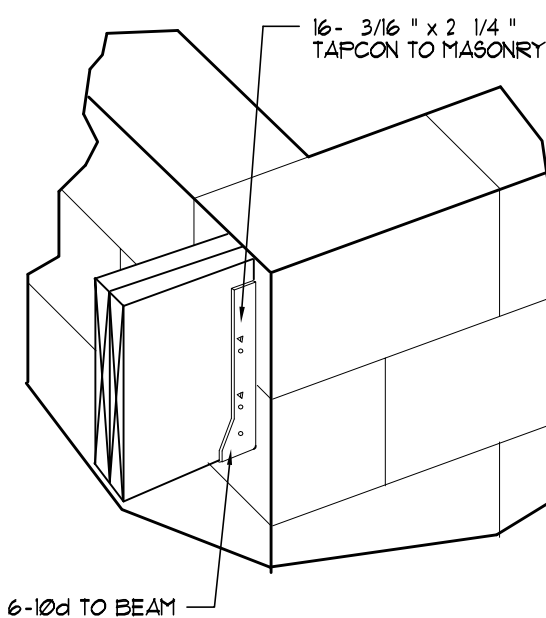
NON-BEARING WALL HEADER



BEARING WALL HEADER

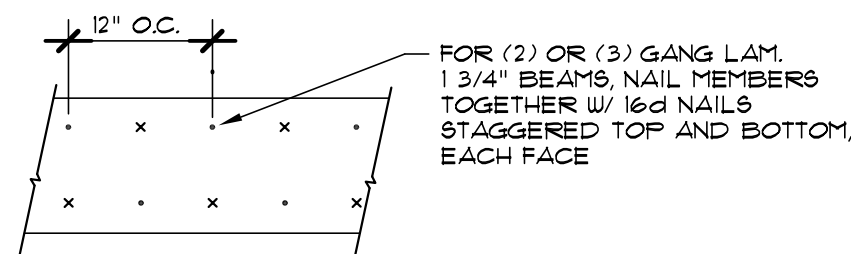
## Wall Framing/ Header DET'S

SCALE: NONE



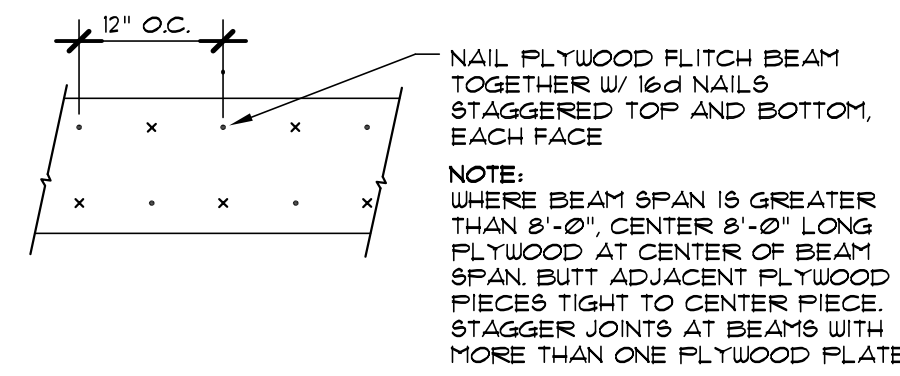
## "Simpson" HUSC410

SCALE: NONE  
WOOD BEAM TO MASONRY



## MULTIPLE GANG LAM. DETAIL

NOT TO SCALE

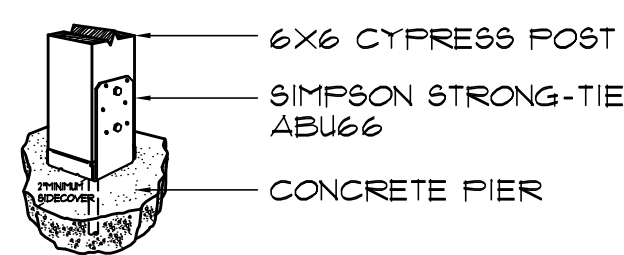


## PLYWOOD FLITCH BEAM DETAIL

NOT TO SCALE

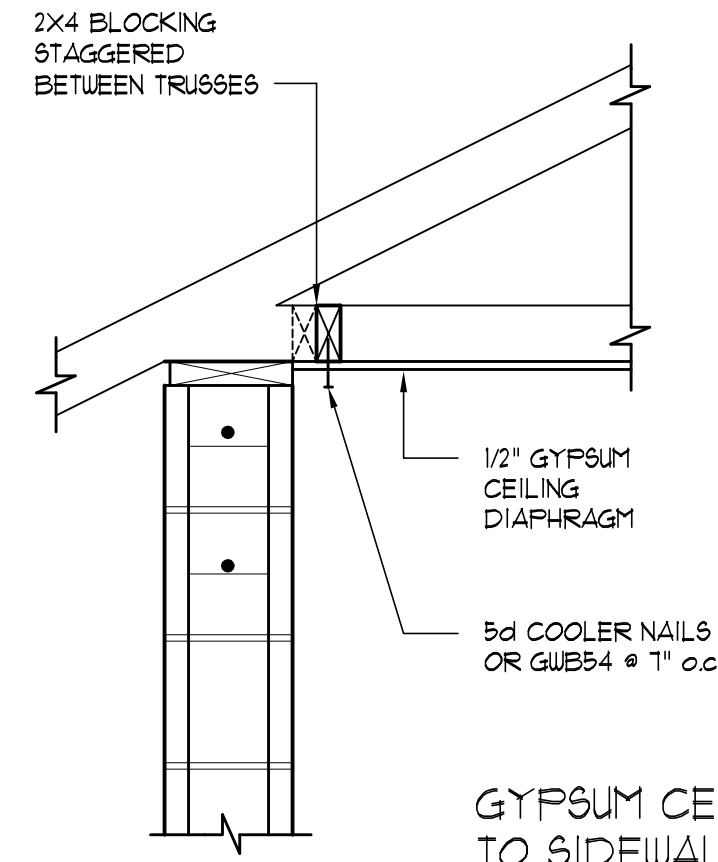
## B/U Beam DETAILS

SCALE: NONE



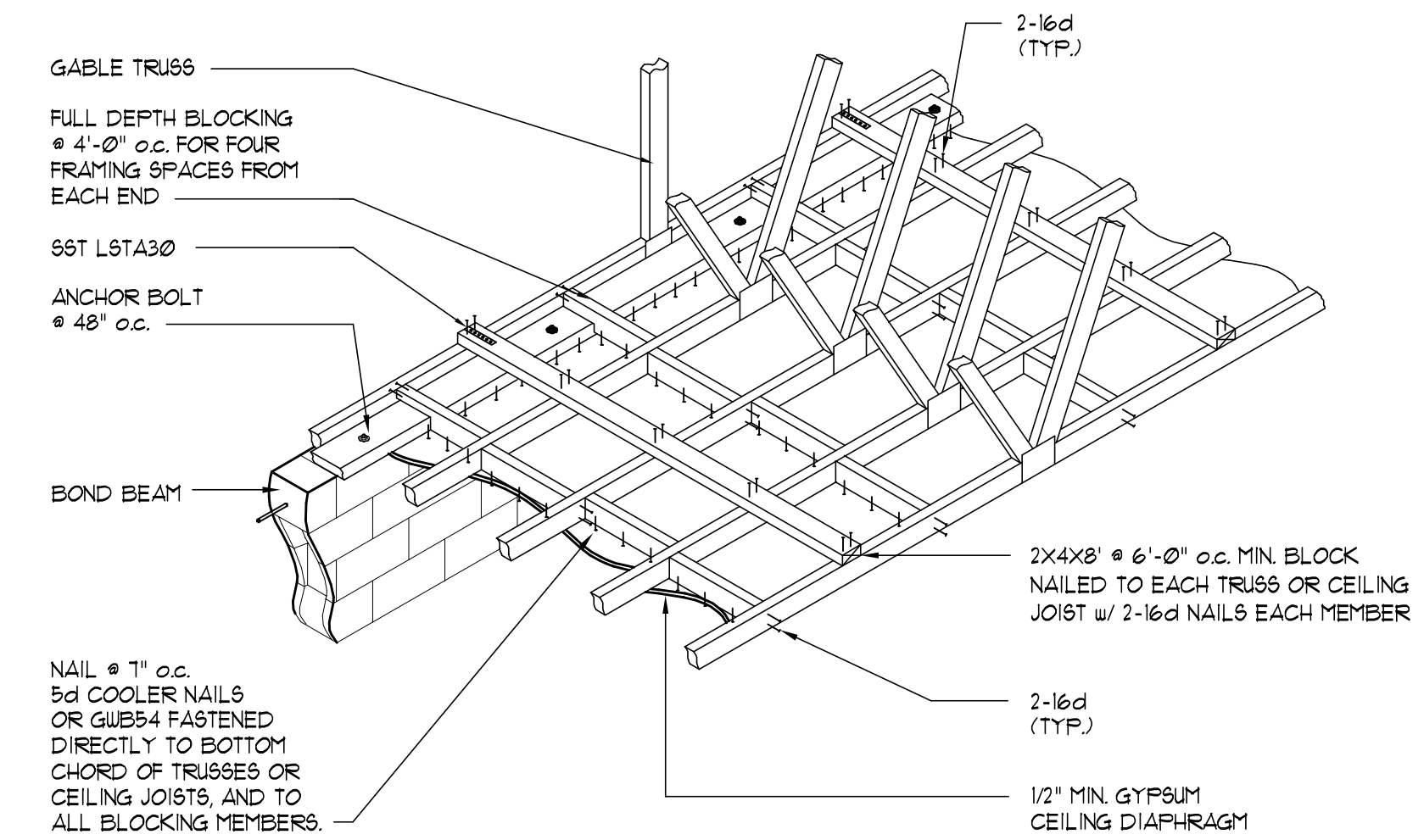
## Post Anchor DETAIL

SCALE: 3/4" = 1'-0"



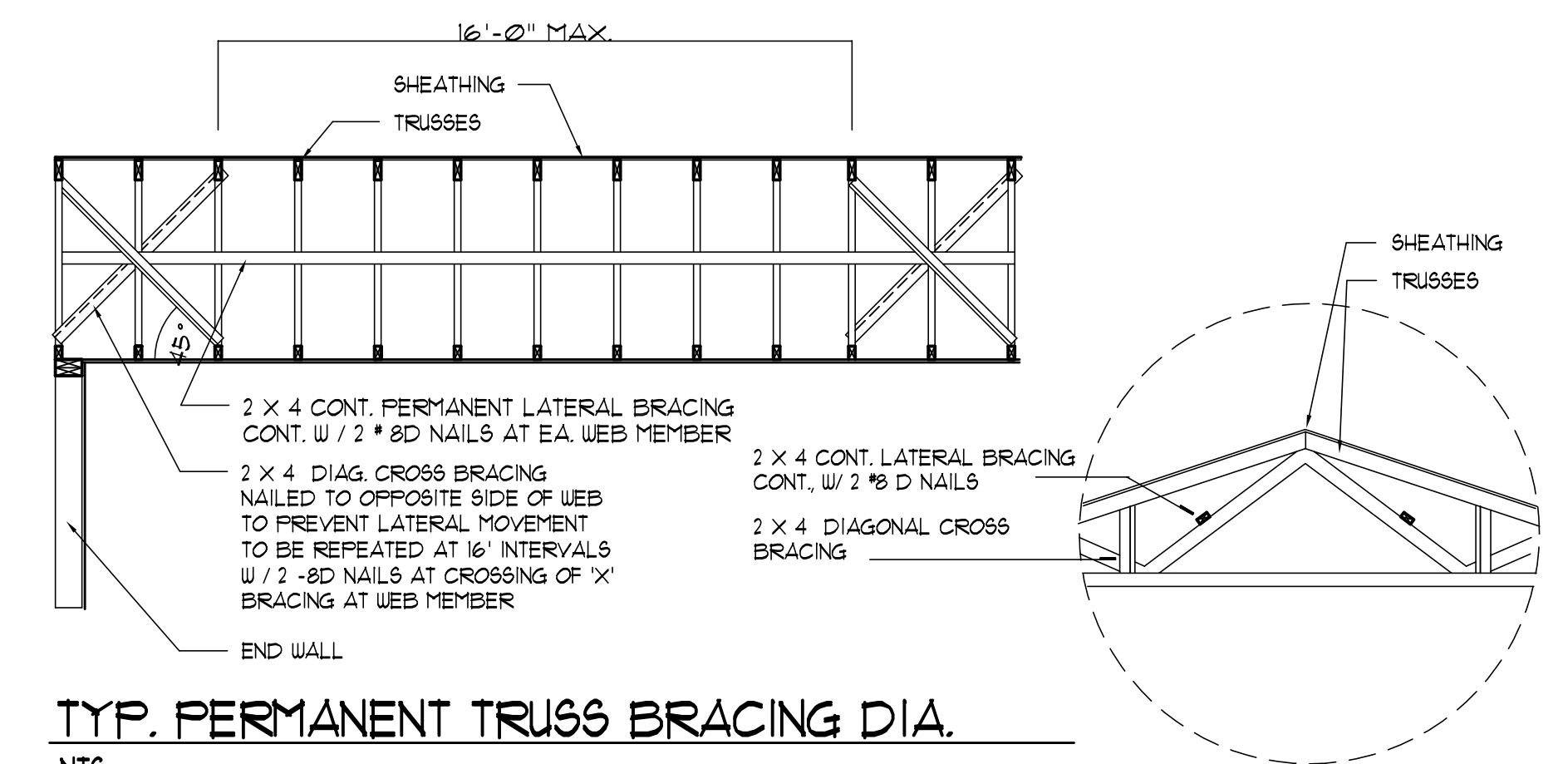
## Roof Edge DETAIL

SCALE: NONE



## DIRECT TRUSS TO MASONRY CONNECTION ENDWALL FOR GYPSUM CEILING DIAPHRAGM

SCALE: NONE



## TYP. PERMANENT TRUSS BRACING DIA.

NTS  
NOTE: ALL WOOD TO BE NUMBER 2 GRADE SOUTHERN YELLOW PINE

## Truss Bracing DETAILS

SCALE: AS NOTED

REVISION:

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N.P. Geisler, Architect

DRAWN:

CUSTOM RESIDENTIAL DESIGN for:  
**MR. & MRS. P. J. PATEL**  
COLUMBIA COUNTY, FLORIDA  
**STRUCTURAL DETAILS**

Celebrating 48 Years of Service  
1972-2020  
N.P. Geisler, Architect  
AR0007005

**NICHOLAS  
GEISLER  
ARCHITECT**  
N.C.A.A.R.E. Certified  
1758 NW Brown, Rd.  
Gainesville, FL 32609  
352-325-4355

DATE:

21 SEP 2021

COMM:

2K2104

SHEET:

A.12  
12 OF 13

AR0007005



Electrical SYMBOLS

POWER

- Ⓢ DUPLEX WALL RECEPTACLE
- Ⓢ DUPLEX WALL RECPT., BELOW COUNTER
- Ⓢ 240V OUTLET
- Ⓢ GND FAULT INTERRUPTER DUPLEX RECEPT.
- Ⓢ WEATHER PROOF GFI DUPLEX RECEPT.
- Ⓢ DUPLEX FLOOR RECEPTACLE
- Ⓢ JUNCTION BOX
- Ⓢ MOTOR
- Ⓢ ELECTRICAL PANEL
- Ⓢ ELECTRICAL SERVICE
- Ⓢ EXHAUST FAN
- Ⓢ SMOKE DETECTOR, 120V
- Ⓢ CARBON MONOXIDE DETECTOR, 120V
- Ⓢ NON-FUSED DISC. SWITCH
- Ⓢ NON-FUSED W/P DISC. SWITCH
- Ⓢ CHIME
- Ⓢ MOMENTARY PUSHBUTTON SWITCH, LIGHTED

LIGHTING

- Ⓢ SPST WALL SWITCH
- Ⓢ DPDT WALL SWITCH (3-WAY)
- Ⓢ SPST WALL SWITCH, W/ DIMMER
- Ⓢ LED. CHANDELIER
- Ⓢ CEILING FAN, W/ LED. LIGHT FIXTURE
- Ⓢ 2 LAMP LED. PRISMATIC WRAP SURFACE FIXTURE
- Ⓢ LED. LIGHT FIXTURE
- Ⓢ LED. HIGH HAT DOWN LIGHT
- Ⓢ VAPOR PROOF LED. LIGHT FIXTURE
- Ⓢ HEAT LAMP
- Ⓢ SWITCH/FIXTURE WIRING
- Ⓢ CONTROL WIRE / LOW VOLTAGE

ELECTRICAL PLAN NOTES

INSTALLATION SHALL BE PER 2008 NAT'L. ELECTRIC CODE.

WIRE ALL APPLIANCES, HVAC UNITS AND OTHER EQUIPMENT PER MANUF. SPECIFICATIONS.

CONSULT THE OWNER FOR THE NUMBER OF SEPERATE TELEPHONE LINES TO BE INSTALLED.

ALL SMOKE DETECTORS SHALL BE 120V W/ BATTERY BACKUP OF THE PHOTOELECTRIC TYPE, AND SHALL BE INTERLOCKED TOGETHER. INSTALL INSIDE AND NEAR ALL BEDROOMS.

PROVIDE 4 INSTALL CARBON MONOXIDE DETECTORS IN ALL BEDROOMS, 6" ABV. FIN. FL., INTERLOCKED TOGETHER.

TELEPHONE, TELEVISION AND OTHER LOW VOLTAGE DEVICES OR OUTLETS SHALL BE AS PER THE OWNER'S DIRECTIONS, 4" IN ACCORDANCE W/ APPLICABLE SECTIONS OF NEC-LATEST EDITION.

ALL RECEPTALS, NOT OTHERWISE DESIGNATED, SHALL BE ARC FAULT INTERRUPTER TYPE, EXCEPT DEDICATED OUTLETS.

ALL RECEPTALS IN KITCHEN AND BATHS SHALL BE GROUND FAULT INTERRUPTER TYPE (GFI).

ALL EXTERIOR RECEPTALS SHALL BE WEATHERPROOF GROUND FAULT INTERRUPTER TYPE (WPGFI).

ELECTRICAL CONTR SHALL PREPARE "AS-BUILT" SHOP DWGS INDICATING ALL ELECTRICAL WORK, INCLUDING ANY CHANGES TO THE ELEC. PLAN, ADDING TO THE ELEC. PLAN, RISER DIAGRAM, AS-BUILT PANEL SCHEDULE W/ ALL CKTS IDENTIFIED W/ CKT N°. DESCRIPTION 4 BRKR. SERVICE ENT. 4 ALL UNDERGROUND WIRE LOCATIONS/ROUTING/DEPTH. RISER DIA. SHALL INCLUDE WIRE SIZES/TYPE 4 EQUIPMENT TYPE W/ RATINGS 4 LOADS.

CONTRACTOR SHALL PROVIDE 1 COPY OF AS-BUILT DWGS TO OWNER 4 1 COPY TO THE PERMIT ISSUING AUTHORITY.

ELECTRICAL COMPUTATIONS

General Lighting/Receptacles @ 3w/sf  
4663 sf x 3w = 13989.0w  
Washer Circuit 1500.0w  
Dishwasher Circuit 1500.0w  
Sm. Appliances Circuits (3 @ 1500w) 4500.0w

Sub-Total 21489.0w  
1st 3KW @ 100% 3000.0w  
Bal. of KW @ 35% 6471.0w

Fixed Appliances:  
Refrigerator (2 @ 1200w) 2400.0w  
Clg. Fans (1 @ 200w) 1400.0w  
GDO (2 @ 150w) 1500.0w  
Pool Pump (future) 1200.0w  
EWH (2 @ 3.6KW) 19200.0w  
Spares (8 @ 400w) 3200.0w

Sub-Total 28900.0w  
Load @ 75% D.F. 21675.0w

100% Demand Factor Loads:  
Dryer 5000.0w  
Range 8000.0w  
Cooktop 6000.0w  
Wall Oven 5000.0w  
HVAC System Nr.1 (3.0T Heat Pump) 3600.0w  
HVAC System Nr.2 (4.0T Heat Pump) 4800.0w

Total Demand Load: 63546w

FEEDER SIZE: 63546w / 240V = 264.8 amperes  
USE: 2-350MCM THW Cu, 1-250MCM THW Cu Neut.,  
w/ 1 #2 Cu GND / 3" C.

PANEL SCHEDULE

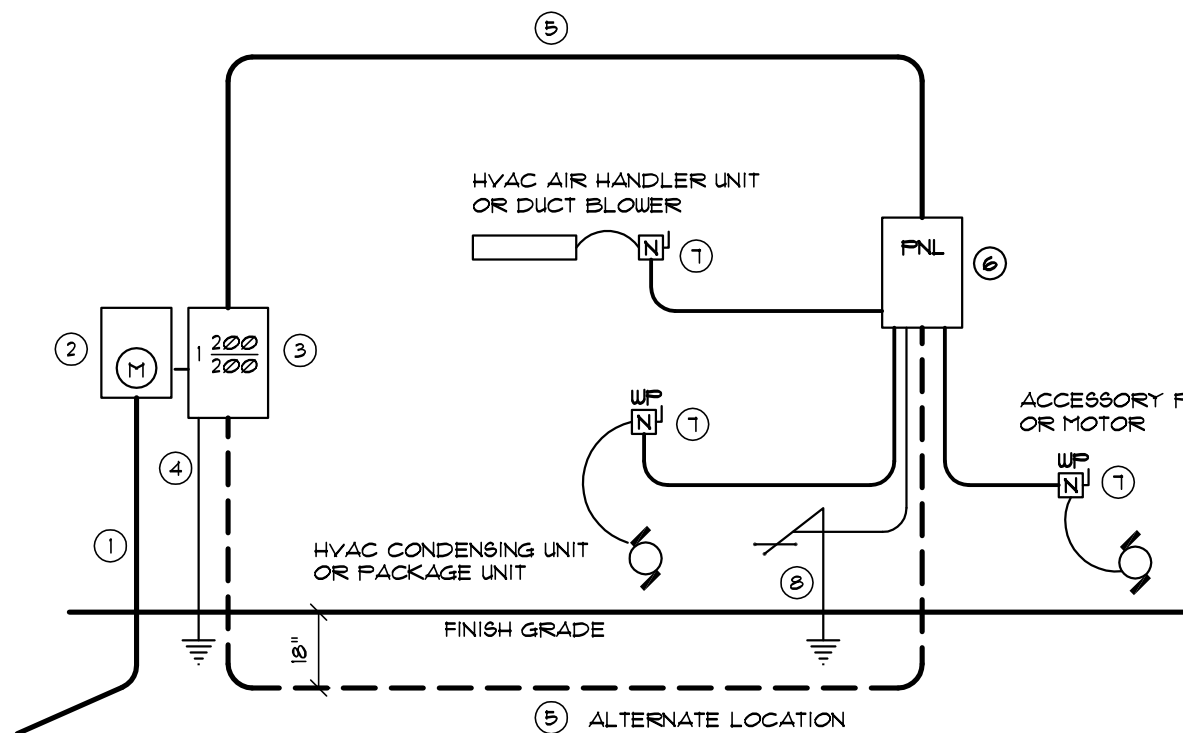
PANEL "L": 300A - MLO - 120/240V - 1φ - 4 WIRE  
52 SLOT - FLUSH MOUNT

Cir. Nr.	Location	Tripp Poles	Wire Size	Load
1-12	Lighting/Recept.	15A/1P	14NM	13989W
13	Dishwasher	"	"	1500W
14-16	Sm. Kit. Appliances	20A/1P	12NM	4500W
17-18	Ceiling Fans	15A/1P	14NM	1400W
19,21	EWH Nr.1	50A/2P	6NM	3600W
20	Refrigerator Nr.1	15A/1P	14NM	1200W
22	Refrigerator Nr.2	"	"	1200W
23,25	EWH Nr.2	50A/2P	6NM	3600W
24,26	Range	50A/2P	6NM	8000W
27,29	Cooktop	50A/2P	6NM	6000W
28,30	Wall Oven	40A/2P	8NM	5000W
31,33	Dryer	30A/2P	10NM	5000W
32,34	HVAC CU Nr.1	50A/2P	6NM	3000W
35,37	HVAC AHU Nr.1	20A/2P	12NM	800W
36,38	HVAC CU Nr.2	50A/2P	6NM	4000W
39,41	HVAC AHU Nr.2	20A/2P	12NM	800W
40,42	Fut. Pool Pump	-	-	1200W
43-50	Spares	-	-	3200W
51-52	Spares	-	-	0W

TOTAL CONNECTED LOAD: 79989W

Electrical PLAN

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



ELECTRICAL RISER DIAGRAM: 200A

SCALE: NONE

- Service/Feeder Entrance Conductors: 2 1/2" rigid conduit, min. 18" deep, w/ continuous Ground Bonding Conductor, Service/Entrance Conductors shall not be applied except this bolted connections at the Meter, Disconnecting Devices and Panel shall be allowed.
- Meter Enclosure, weatherproof, UL Listed.
- Main Disconnect Switch: fused or Main BRKR. weatherproof, UL Listed.
- Service entrance Ground: 3/4" x iron/steel rod x 8'-0" long and/or concrete encased foundation steel rebar x 20'-0" long. Grounding Conductor shall be bonded to each piece of Service/Entrance Equipment, and shall be sized per Item 5, below.
- 200 AMPERE SERVICE: 3-1/2" USE-Cu, 1-1/4" Cu-GND, 2" Conduit.
- House Panel (PNL), UL Listed, sized per schedule.
- Equipment Disconnect Switch: non-fused, in weatherproof enclosure, size according to Panel Schedule loads.
- Provide Ground Bond Wire to metal piping, size in accordance with the Service Ground Conductor.

NOTE!  
THE MINIMUM AIC RATING FOR PANEL BOARDS, BRKRS AND DISCONNECT SWITCHES SHALL BE 22,000 AIC.

REVISION:

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N.P. Geisler, Architect

DRAWN:

178

CUSTOM RESIDENTIAL DESIGN FOR:  
**MR. & MRS. P. J. PATEL**  
COLUMBIA COUNTY, FLORIDA  
**ELECTRICAL PLAN**

48  
Celebrating 48 Years  
1972-2020  
N.P. Geisler, Architect  
386-325-4355  
AR000705

**NICHOLAS  
GEISLER  
ARCHITECT**  
N.C.A.A.E. Certified

DATE:

21 SEP 2021

COMB:

2K2104

SHEET:

A.13

13 OF 13

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