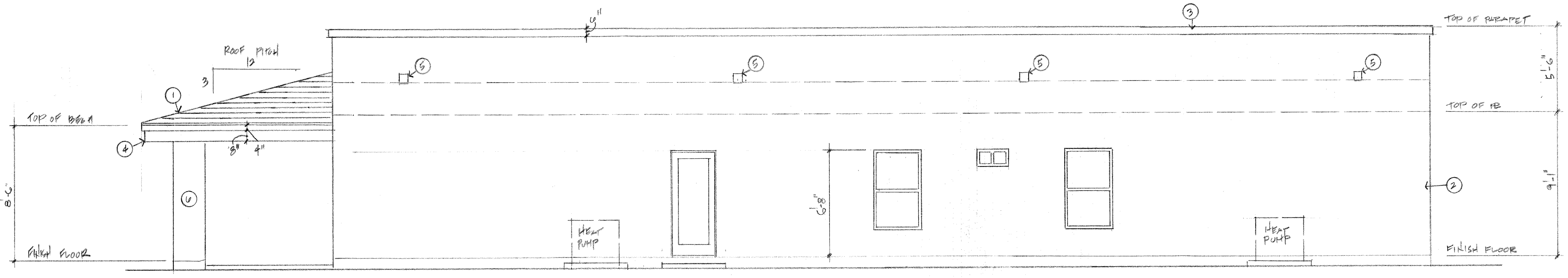
1402 N. Recker Rd.

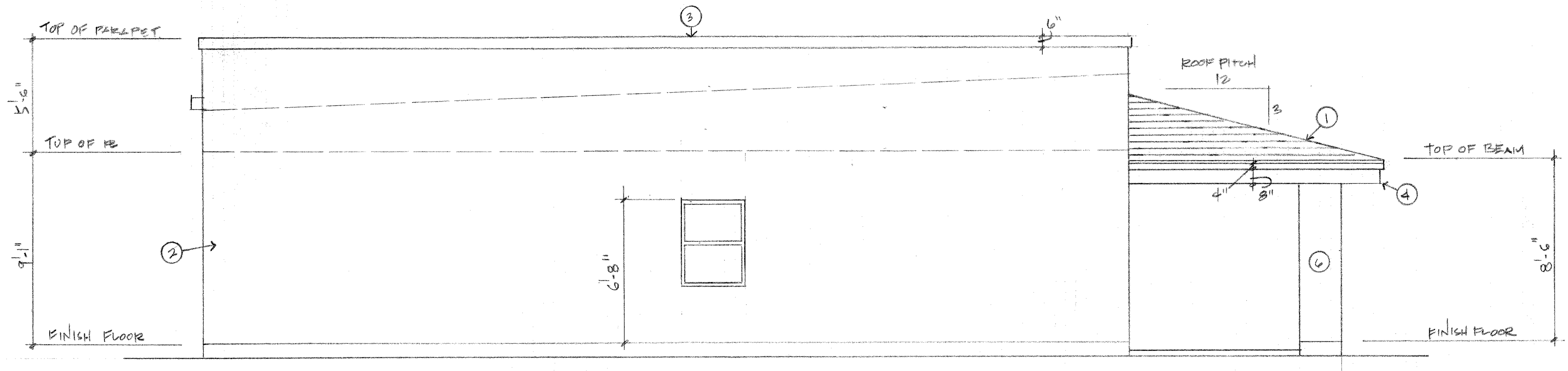
The property i am currently living in is located at 1402 N. Recker Rd. in Mesa, AZ 85205. The property is considered a "Flag Lot" just over an acre in size and is in the vicinity of the major crossroads of Recker Rd. and Brown Rd. There is currently a single family home located on the property and an accessory dwelling unit along with site plans is being submitted for approval. The proposed accessory dwelling unit does not conform to City of Mesa Zoning Codes with regards to the square footage of the Accessory Dwelling Unit at the current zoning status (RM7) of the property. At the discretion of the planning director a plan for re-zoning the property to RM2 BIZ has been suggested to alleviate issues of any non-compliance in regards to the City of Mesa Zoning Codes and the current zoning status of the property.

The proposed Accessory Dwelling Unit provides for a place to take care of my elderly parents and my family to live. It will be built with similar materials and look of the current residence located on the property at this time. It provides a bedroom and bathroom for each of my parents, a small living/sitting area for them, a family kitchen/great room, a bedroom/bathroom for my wife and me and two additional bedrooms and a bathroom for my children. No garage is being proposed for this Accessory Dwelling Unit. The unit is being proposed to be built on the northern side of my property to conform to all setback requirements.

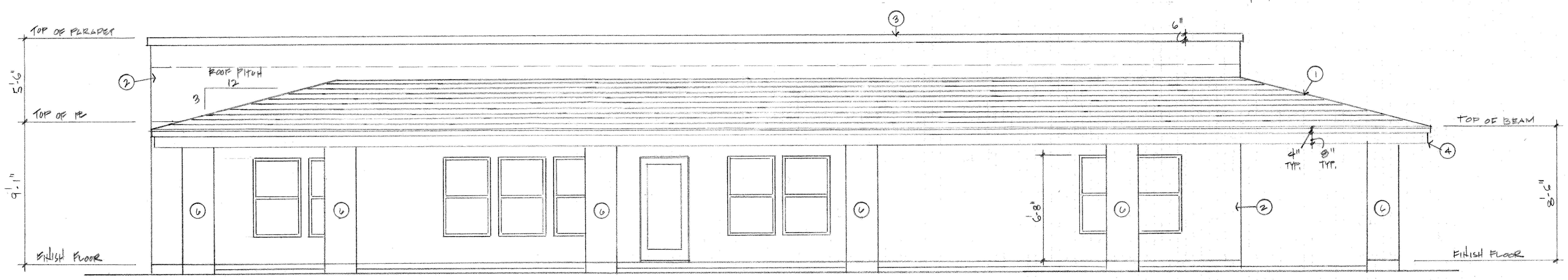
I have included an electronic set of site plans as well as structural plans and elevation plans with this packet. I have also include aerial prints taken from Google maps to show the location of the property within the City of Mesa.



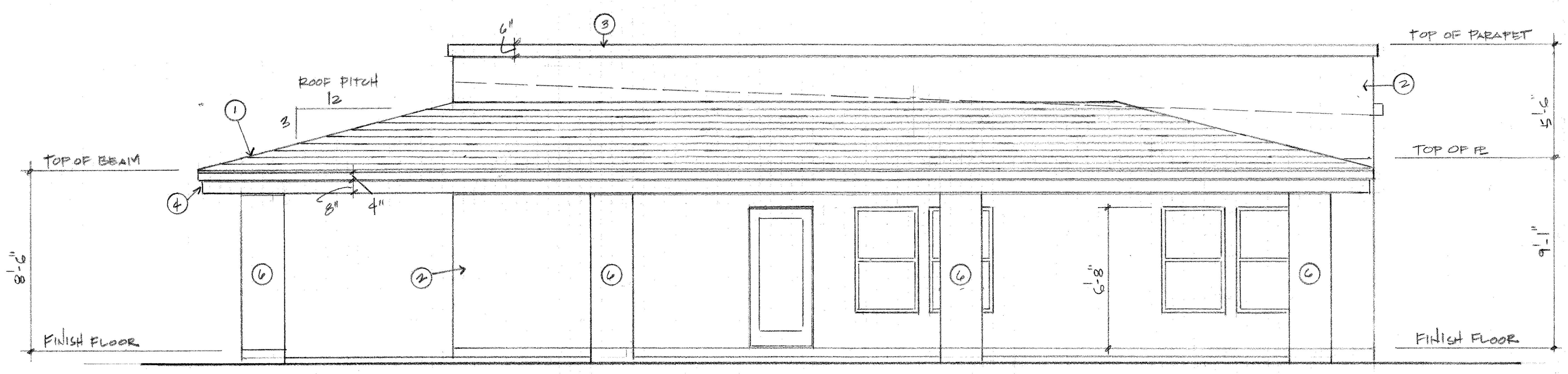
NORTH SIDE ELEVATION
1/4"=1'-0"



WEST SIDE ELEVATION
1/4"=1'-0"



SOUTH SIDE ELEVATION
1/4"=1'-0"



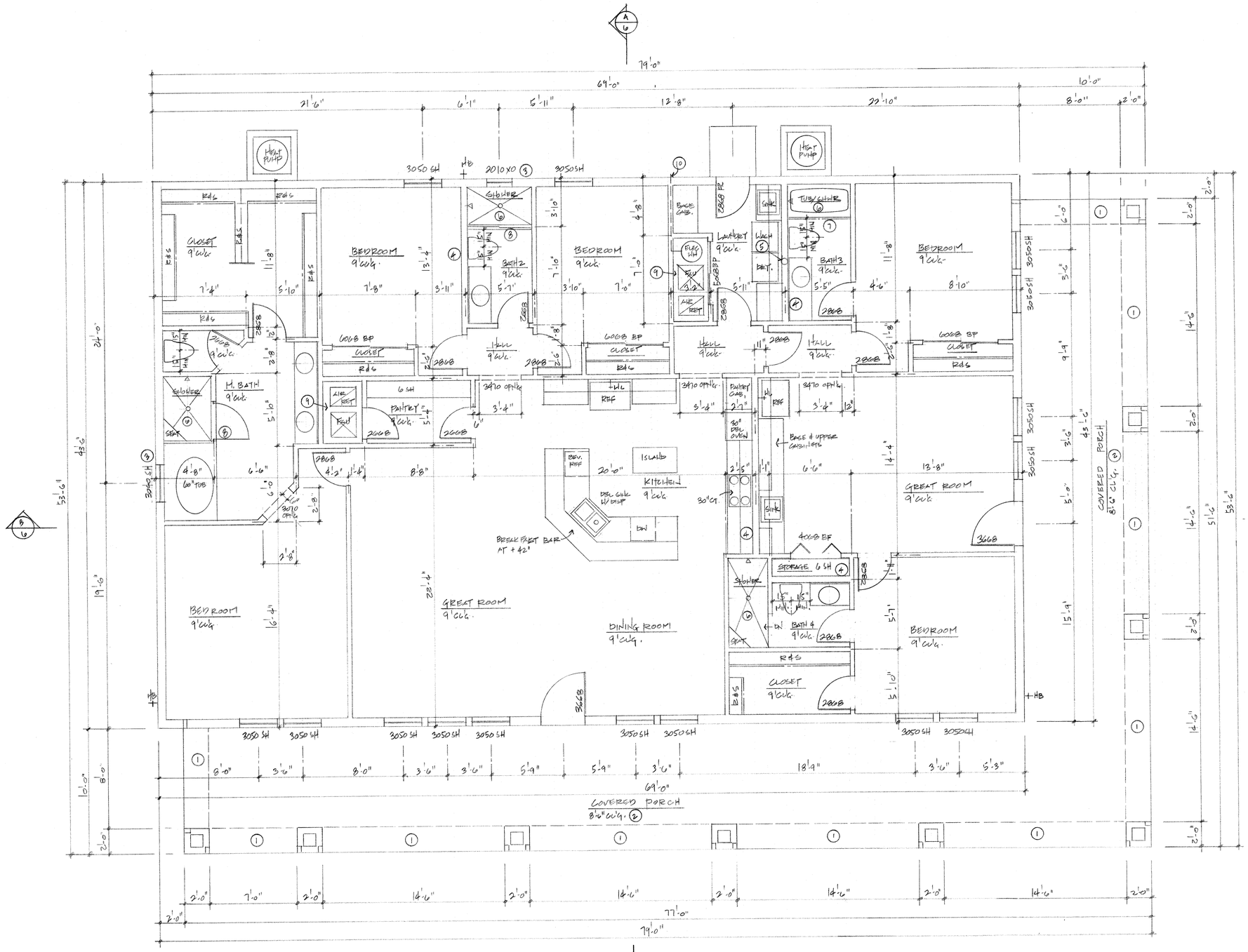
EAST SIDE ELEVATION
1/4"=1'-0"

NOTES

1. GAF DIMENSIONAL SHINGLES (ESR 1475)
2. WESTERN ONE KOTE STUCCO FINISH (ESR 1471)
3. PROJECT 2"
4. STUCCO FINISH ON FRAME SOFFIT
5. 6"x6" SCUPPER - PROJECT 6"
6. STUCCO FINISH ON FRAME COLUMN

SHEET

2



FLOOR PLAN
1/4"=1'0"

NOTES
1. FRAME SOFFIT W/ STUCCO FINISH
2. 1/2" SAG RESISTANT EXTERIOR GRADE SOFFIT BOARD
3. TEMPERED GLASS
4. 2X6 STUD WALL
5. 4" Ø DVTR
6. PROVIDE WATER PROOF SURROUND TO MINIMUM 6'0" AFF
7. SHOWER CURTAIN
8. TEMPERED GLASS SHOWER DOOR & ENCLOSURE
9. FRAME PLATFORM AT 1'6" AFF
10. 3/4" Ø T&P RELIEF LINE

SQUARE FOOTAGE
3201 SF LIVABLE
1190 SF COVERED PORCH
4191 SF TOTAL UNDER ROOF

GENERAL STRUCTURAL NOTES

FRAME CONSTRUCTION:

A. THE LATERAL LOAD RESISTANCE SYSTEM OF THIS BUILDING RELIES ON ROOF SHEATHING, FLOOR SHEATHING (FOR TWO STORY HOMES), AND EXTERIOR AND INTERIOR WALL SHEATHING AS IDENTIFIED ON THE SHEAR WALL PLAN. IT IS SOLELY THE RESPONSIBILITY OF THE FRAMING CONTRACTOR TO PROVIDE ADEQUATE TEMPORARY LATERAL BRACING. THE TEMPORARY BRACING SHALL BE MAINTAINED UNTIL THE PERMANENT LATERAL LOAD RESISTANCE SYSTEM IS FULLY INSTALLED AND FASTENED AS SCHEDULED.

B. WALL STUDS SHALL BE SPACED 16" O.C. TYPICAL EXCEPT THAT INTERIOR NON-SHEAR AND NON-BEARING STUDS MAY BE SPACED 24" O.C.

C. ROOF SHEATHING ON TRUSSES TO CONTINUE TO BEARING OF TRUSSES TYPICAL. THIS APPLIES TO ALL OVERFRAMING AS WELL. SHEATHING MAY BE OMITTED FOR VENTILATION PURPOSES ONLY.

D. AT ALL GABLE WALLS ADJACENT TO SCISSOR TRUSSES, 2x STUDS TO BE CONTINUOUS "BALLOON FRAMED" FROM BOTTOM PLATE TO DOUBLE TOP PLATE.

E. ALL WINDOW OR SIMILAR OPENINGS 6'-Ø" OR WIDER TO HAVE DOUBLE 2x SILL PLATES. ALL WINDOW OR SIMILAR OPENINGS IN EXTERIOR SHEAR WALLS WITH OPENINGS TO HAVE DOUBLE 2x SILL PLATES.

F. OVERLAP TOP PLATES AT INTERSECTIONS. AT BEARING WALLS, SHEAR WALLS, AND EXTERIOR WALLS, IF TOP PLATE IS NOTCHED MORE THAN 50% OF ITS WIDTH, PROVIDE 16ga. x 1 1/2" STRAP ON BOTH PLATES W/ (8) Ø.148" DIA. NAILS WITH 1 1/2" PENETRATION INTO PLATES, EXTENDING 8" ON EA. SIDE OF NOTCH. AT INTERIOR NON-SHEAR WALLS, WHERE TOP PLATES ARE DISCONTINUOUS OR SLOPING PLATES MEET FLAT PLATES, USE 20 ga. x 1 1/2" STRAP W/(8) Ø.131"x1 1/2" NAILS EA. SIDE OF SPLICE.

G. ALL SOLE PLATES AT EXTERIOR WALLS SHALL BE PRESSURE TREATED. INTERIOR SOLE PLATES IN CONTACT WITH CONCRETE SHALL BE PRESSURE TREATED. SEE SHEAR WALL/FOUNDATION PLANS FOR ADDITIONAL ANCHOR REQUIREMENTS AT SHEAR WALLS.

H. WHEN PLANS CALL FOR 4x OR 6x POSTS THESE ARE INTENDED TO BE SOLID MEMBERS, NOT MULTI STUD POSTS.

I. ALL HANGERS & STRAPS SHALL BE INSTALLED PER MANUFACTURERS INSTRUCTIONS, MAXIMUM NAILING, U.N.O.

J. WHERE DOUBLE OR TRIPLE 2x HEADERS ARE SPECIFIED 4x OR 6x HEADERS RESPECTIVELY OF THE SAME DEPTH MAY BE USED IN LIEU OF THE DOUBLE OR TRIPLE HEADER.

K. ALL BEARING AND SHEAR WALLS SHALL HAVE DOUBLE TOP PLATES.

L. FRAME WALL OPENINGS WITH 1 TRIMMER AND 1 KING STUD U.N.O. ON PLAN.

M. ATTACH SHEATHING TO ALL DRAG TRUSSES WITH Ø.131"x2 1/2" @ 6" O.C. U.N.O.

N. DRYWALL SHALL BE STACKED FLAT ON SECOND FLOOR TRUSSES/JOISTS. HEIGHT OF DRYWALL STACK SHALL NOT EXCEED 10" UNLESS ADEQUATE BRACING IS INSTALLED BENEATH SUBFLOOR, CONTINUOUS TO CONCRETE SLAB BELOW.

O. WHERE DOUBLE TRIMMER STUDS (OR MORE) AND MULTI STUD POSTS ARE SPECIFIED IN AN UPPER LEVEL WALL, PROVIDE BLOCKING IN FLOOR SYSTEM(S) AND POST IN LOWER LEVEL WALL(S), CONTINUOUS TO FOUNDATION, TO MATCH POST SIZE ABOVE, U.N.O.

NAILING SCHEDULE:

A Ø.148"x3 1/4" NAIL IS ACCEPTABLE AS A ONE-TO-ONE ALTERNATE FOR ANY Ø.131"x3" NAIL SPECIFIED

CONNECTION	NAILING
JOIST TO SILL OR GIRDER, TOENAIL	(3) Ø.131"x3" NAILS
BRIDGING TO JOIST, TOENAIL EACH END	(2) Ø.131x3" NAILS
1"x6" SUBFLOOR OR LESS TO EACH JOIST, FACE NAIL	(2) Ø.131"x2 1/2" COMMON NAILS
WIDER THAN 1"x6" SUBFLOOR TO EACH JOIST, FACE NAIL	(3) Ø.131"x2 1/2" COMMON NAILS
2" SUBFLOOR TO JOIST OR GIRDER, BLIND AND FACE NAIL	(2) Ø.162"x3 1/2" COMMON NAILS
SOLE PLATE TO JOIST OR BLOCKING, TYPICAL FACE NAIL	Ø.131"x3" NAILS @ 8" O.C.
SOLE PLATE TO JOIST OR BLOCKING, AT SHEAR WALL PANELS	(4) Ø.131"x3" PER 16", U.N.O. ON PLAN
TOP PLATE TO STUD, END NAIL	(3) Ø.131"x3" NAILS
STUD TO SOLE PLATE	TOENAIL - (4) Ø.131"x3" NAILS, FACE NAIL -(3) Ø.131"x3" NAILS
DOUBLE STUDS AND MULTI-STUD POSTS, FACE NAIL	Ø.131"x3" NAILS @ 8" O.C.
DOUBLED TOP PLATES, TYPICAL FACE NAIL	Ø.131"x3" NAILS @ 12" O.C.
DOUBLED TOP PLATES, LAP SPLICE	(12) Ø.131"x3" NAILS
BLOCKING BETWEEN JOISTS OR RAFTERS TO TOP PLATE, TOENAIL	(5) Ø.131"x3" NAILS
RIM JOIST TO TOP PLATE, TOENAIL	Ø.131"x3" NAILS @ 6" O.C.
TOP PLATE INTERSECTIONS, FACE NAIL	(3) Ø.131"x3" NAILS
CONTINUOUS HEADER, TWO PIECES	Ø.131"x3" @ 8" O.C. ALONG EACH EDGE
CEILING JOISTS TO PLATE, TOENAIL	(5) Ø.131"x3" NAILS
CONTINUOUS HEADER TO STUD, TOENAIL	(4) Ø.131"x3" NAILS
CEILING JOISTS, LAPS OVER PARTITIONS, FACE NAIL	(4) Ø.131"x3" NAILS
CEILING JOISTS TO PARALLEL RAFTERS, FACE NAIL	(4) Ø.131"x3" NAILS
RAFTER TO PLATE, RIDGE, VALLEY, HIP, TOENAIL	(3) Ø.131x3" NAILS
1" BRACE TO EACH STUD AND PLATE, FACE NAIL	(2) Ø.131"x3" NAILS
1"x8" SHEATHING OR LESS TO EACH BEARING, FACE NAIL	(3) Ø.131"x2 1/2" COMMON NAILS
BUILT-UP CORNER STUDS	Ø.131"x3" NAILS @ 8" O.C.
BUILT-UP GIRDER AND BEAMS	
FACE NAIL, TOP & BOTTOM, STAGGERED ON OPPOSITE SIDES	(3) Ø.131"x3" NAILS @ 24" O.C.
2" PLANKS	(2) Ø.162"x3 1/2" COMMON NAILS @ EACH BEARING

WHERE REFERENCE IS MADE TO VARIOUS TEST STANDARDS FOR MATERIALS, SUCH STANDARDS SHALL BE THE LATEST EDITION AND/OR ADDENDA.

CONSTRUCTION MATERIALS SHALL BE SPREAD OUT IF PLACED ON FRAMED CONSTRUCTION. LOAD SHALL NOT EXCEED THE DESIGN LIVE LOAD (PER SQUARE FOOT) SHOWN BELOW.

NOTES AND DETAILS ON DRAWINGS SHALL TAKE PRECEDENCE OVER GENERAL STRUCTURAL NOTES AND TYPICAL DETAILS. WHERE NO DETAILS ARE SHOWN, CONSTRUCTION SHALL CONFORM TO SIMILAR WORK ON THE PROJECT AND GOVERNING BUILDING CODES.

THE PERMANENT LATERAL LOAD RESISTANCE SYSTEM OF THIS BUILDING RELIES ON ROOF SHEATHING, FLOOR SHEATHING (FOR TWO STORY HOMES), AND EXTERIOR AND INTERIOR WALL SHEATHING AS IDENTIFIED ON THE SHEAR WALL PLAN. IT IS SOLELY THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE ADEQUATE TEMPORARY LATERAL BRACING DURING CONSTRUCTION. THE CONSTRUCTION OF THE TEMPORARY BRACING SHALL BE MAINTAINED UNTIL THE PERMANENT LATERAL LOAD RESISTANCE SYSTEM IS FULLY INSTALLED AND FASTENED AS SCHEDULED.

BUILDING CODES

THESE PLANS WERE PREPARED IN ACCORDANCE W/ THE 2012 INTERNATIONAL RESIDENTIAL CODE AND SHALL COMPLY WITH OR EXCEED THE REQUIREMENTS OF THE CODE AND ITS AMENDMENTS.

DESIGN LOADS

GROUND SNOW = Ø PSF
ROOF LIVE LOAD = 20 PSF AT ROOF PITCH <4:12, 16 PSF AT ROOF PITCH ≥ 4:12
ROOF DEAD LOAD = 3-PLY OR ROLL, "FLAT", = 10 PSF, TILE, SLOPED = 20 PSF
FLOOR LIVE LOAD = 40 PSF, DECK LIVE LOAD = 40 PSF, BALCONY LIVE LOAD = 60 PSF
WIND = 115 MPH BASIC WIND SPEED EXPOSURE C, RISK CATEGORY II
INTERNAL WIND PRESSURE COEFFICIENT Gcpi = ±.18
SEISMIC DESIGN CATEGORY C SITE CLASS D

FOUNDATIONS

REFER TO FOUNDATION DESIGN PARAMETERS CHART FOR ALL FOUNDATION DESIGN INFORMATION

BOTTOMS OF TURN DOWNS AND/OR BEARING FOOTINGS SHALL BEAR ON COMPACTED SUBGRADE

ALL EXCAVATION, FILL, COMPACTION AND SOIL RELATED OPERATIONS SHALL BE PERFORMED ACCORDING TO SOILS REPORT.

SUBGRADE PREPARATION NOTED ON THESE SHEETS IS RECOMMENDED ONLY AS A MINIMUM. THE REQUIREMENTS OF THE SOILS REPORT SHALL SUPERSEDE THE SUBGRADE REQUIREMENT SHOWN HEREIN.
ENSURE THAT ALL SUBGRADE MATERIALS ARE WETTED JUST PRIOR TO CONCRETE PLACEMENT. SUBGRADE TEMPERATURES AT TIME OF PLACING CONCRETE SHOULD BE CONTROLLED TO AVOID EXCESSIVE CONCRETE SHRINKAGE.

EXCAVATION

THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL EXCAVATION PROCEDURES INCLUDING LAGGING, SHORING, AND PROTECTION OF ADJACENT PROPERTY, STRUCTURES, STREETS, AND UTILITIES IN ACCORDANCE WITH THE LOCAL BUILDING DEPARTMENT.

CONCRETE

FOUNDATIONS SUPPORTING WOOD SHALL EXTEND TO AT LEAST 6" ABOVE ADJACENT FINISHED GRADE (SEC. R404.1.6).

CONCRETE MIX DESIGN TO BE BASED ON VALUES SHOWN BELOW.

MINIMUM 28 DAY CONCRETE COMPRESSIVE STRENGTH W/ TYPE II CEMENT AS FOLLOWS:
POST-TENSIONED SLAB .... SEE PLAN
ISOLATED PIER FOUNDATIONS .... 2500 psi *
EXTERIOR FLATWORK .... 3000 psi *

* NOTE: IF CEMENT TYPE SPECIFIED ON FOUNDATION PLANS IS OTHER THAN TYPE II, USE CONCRETE STRENGTH & CEMENT TYPE SPECIFIED ON FOUNDATION PLAN FOR ALL CONCRETE COMPONENTS.

CONCRETE PLACEMENT AND QUALITY

SHALL BE PER RECOMMENDATIONS IN ACI 614, ACI 301 AND ACI 318. MECHANICALLY VIBRATE CONCRETE AROUND POST-TENSIONING ANCHORS AND UNDER FLOOR DUCTS, ETC. REMOVE ALL DEBRIS FROM FORMS BEFORE POURING. CONCRETE PLACEMENT SLUMP SHALL BE 6 INCHES MAX.

COLD/HOT WEATHER CONCRETE

PROTECT CONCRETE FROM DAMAGE OR REDUCED STRENGTH IN COMPLIANCE W/ ACI 305 & ACI 306.

REINFORCING STEEL

ASTM A307 ALL ANCHOR BOLTS - MINIMUM EMBEDMENT OF ALL BOLTS IN GROUT, OR CONCRETE TO BE 7" WITH A HOOK AS FOLLOWS AT EMBEDDED END U.N.O.
MINIMUM HOOK LENGTH = (1 1/2" @ 1/2" DIA. BOLT) (1 7/8" @ 5/8" DIA. BOLT) (2 5/8" @ 7/8" DIA. BOLT)
ASTM A615 (FY = 60,000 PSI) DEFORMED BARS FOR ALL BARS. WIRE PER ASTM A82.
LATEST ACI CODE AND DETAILING MANUAL APPLY.
CLEAR CONCRETE COVERAGES AS FOLLOWS:
CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH .... 3"
EXPOSED TO EARTH OR WEATHER (#5 AND SMALLER) .... 1 1/2"
SLABS (INTERIOR) .... 3/4"
ALL OTHER PER LATEST EDITION OF ACI 318.

UNLESS NOTED OTHERWISE, LAP SPLICES IN CONCRETE SHALL BE 48 BAR DIAMETERS MINIMUM. STAGGER ALTERNATE SPLICES A MINIMUM OF ONE LAP LENGTH. PROVIDE BENT CORNER BARS TO MATCH AND LAP WITH HORIZONTAL BARS AT CORNERS AND INTERSECTIONS OF FOOTINGS AND WALLS. TYPICAL REINFORCING BAR SPACINGS GIVEN ARE MAXIMUM ON VERTICAL REINFORCING TO FOUNDATION. SECURELY TIE ALL BARS IN LOCATION BEFORE PLACING CONCRETE. LAP WELDED WIRE FABRIC ONE SPACING OF CROSS WIRES PLUS 2"

GENERAL STRUCTURAL NOTES

INFORMATION APPLIES UNLESS NOTED OTHERWISE ON PLANS

WOOD TRUSSES:

ALL TRUSSES SHALL BE PROVIDED BY A CITY OR COUNTY APPROVED FABRICATOR, WHICHEVER HAS JURISDICTION, AND SHALL CONFORM TO CURRENTLY ADOPTED BUILDING CODE & ANSI/TPI 1-2007.

ALL TRUSSES SHALL BE DESIGNED TO SUPPORT DEAD, LIVE, LATERAL, AND ANY ADDITIONAL LOADS RESULTING FROM MECHANICAL EQUIPMENT, PIPING, OR ARCHITECTURAL FEATURES THAT ARE TO BE SUPPORTED BY THE TRUSSES. TRUSS DESIGN DRAWINGS SHALL CLEARLY INDICATE ALL DESIGN LOADING CONDITIONS. TEMPORARY TRUSS BRACING IS THE RESPONSIBILITY OF THE CONTRACTOR.

MAXIMUM DEFLECTION OF TRUSSES SHALL BE AS FOLLOWS:
-ROOF TRUSSES: LIVE LOAD: SPAN/360 TOTAL LOAD: SPAN/240
-FLOOR TRUSSES: LIVE LOAD: SPAN/480 TOTAL LOAD: SPAN/360
FLOOR TRUSSES WITH CEILINGS ATTACHED THAT MEET L/480 CRITERIA DO NOT REQUIRE STRONG BACKS PER ANSI/TPI-2007.

GLULAM BEAMS:

GLULAM BEAMS SHALL HAVE THE FOLLOWING MINIMUM PROPERTIES, U.N.O. ON PLAN:
24F-1.8E, COMBINATION SYMBOL 24F-V4 (DF/DF)
FB = 2,400 PSI, FV = 265 PSI, FC(PERP.) = 650 PSI, E = 1,800,000 PSI.
ALL BEAMS SHALL BE FABRICATED USING WATERPROOF GLUE. FABRICATION AND HANDLING PER LATEST APA OR AITC AND WCLA STANDARDS. BEAMS TO BEAR APA OR AITC STAMP & CERTIFICATE & GRADE STAMP. UNLESS NOTED OTHERWISE GLULAM BEAMS SHALL HAVE STANDARD CAMBER (BASED ON 3500 FT. RADIUS).

SAWN LUMBER:

FRAMING LUMBER SHALL COMPLY WITH THE LATEST EDITION OF THE APPLICABLE AGENCY CERTIFIED BY THE AMERICAN LUMBER STANDARD COMMITTEE BOARD OF REVIEW. ALL LUMBER SHALL BEAR AN APPROVED GRADE MARK. JOISTS, BEAMS, ETC. SHALL HAVE THE FOLLOWING MINIMUM PROPERTIES:

(APPLIES UNLESS NOTED OTHERWISE ON DRAWINGS)

MEMBER	E psi (MINIMUM)	SPECIES & GRADE
HEADERS, RAFTERS, JOISTS	1,600,000	DFL - 2
POSTS 4x4, 4x6	1,600,000	DFL - 2
POSTS 6x6, 6x8	1,600,000	DFL - 1
2x LEDGERS	1,600,000	DFL - 2
TOP PLATES 2x4	1,200,000	HEM-FIR STD.
TOP PLATES 2x6	1,300,000	HEM-FIR-2
BOTTOM PLATES 2x4, 2x6	1,100,000	HEM-FIR UTILITY (P.T.)
4x BEAMS	1,600,000	DFL - 2
6x BEAMS	1,600,000	DFL - 1
CEILING JOISTS	1,600,000	DFL - 2

HEADER SCHEDULE (NON-BEARING INTERIOR):

SPAN	HEADER
SPAN UP TO 3'-Ø"	(1)2x4 FLATWISE
3'-1" UP TO 5'-Ø"	(2)2x4 HEADER
5'-1" UP TO 7'-Ø"	(2)2x6 HEADER
7'-1" UP TO 10'-Ø"	(2)2x8 HEADER

CEILING JOIST SCHEDULE: (LIVE LOAD = 20 PSF, L/360)

SPAN	JOIST
SPAN UP TO 9'-Ø"	2x6 @ 24" O.C.
SPAN UP TO 12'-Ø"	2x8 @ 24" O.C.
SPAN UP TO 15'-Ø"	2x10 @ 24" O.C.
SPAN UP TO 18'-Ø"	2x12 @ 24" O.C.

A.P.A. RATED SHEATHING:

A.P.A. RATED SHEATHING SHALL CONFORM TO ESR-2586. ALL PLYWOOD SHALL BE C-D INTERIOR SHEATHING WITH EXTERIOR GLUE AND SHALL BEAR THE STAMP OF AN APPROVED TESTING AGENCY. LAY UP FLOOR AND ROOF WITH THE FACE GRAIN PERPENDICULAR TO SUPPORTS. STAGGER JOINTS. ALL FLOOR AND DECK OR BALCONY PLYWOOD OR O.S.B. SHALL BE TONGUE AND GROOVE, GLUED AND NAILED TO SUPPORTS WITH END JOINTS HELD 1/8" APART. ALL PLYWOOD SHALL BE OF THE FOLLOWING THICKNESS, SPAN/INDEX RATIO, AND SHALL BE NAILED AS FOLLOWS:

USE	THK.	SPAN RATING	BOUNDRY/EDGE NAILING	FIELD NAILING
ROOF	15/32	32/16	Ø.131"x2 1/2" @ 6" O.C.	Ø.131"x2 1/2" @ 12" O.C. U.N.O.
PER ESR-1539, ROOF-STAPLES: 1 3/4"x7/16"x16ga.			3" O.C.	6" O.C.
WALL	3/8"	24/Ø	Ø.131"x2 1/2" @ 6" O.C.	Ø.131"x2 1/2" @ 12" O.C. U.N.O.
FLOOR	23/32"	48/24	Ø.131"x2 1/2" @ 6" O.C.	Ø.131"x2 1/2" @ 12" O.C. U.N.O.

PER ESR-1472, FOR FLOORS: SIMPSON QUIK-DRIVE WSNTL SERIES #8 COUNTERSUNK WOOD SCREWS MAY BE USED AT SAME SPACING SPECIFIED FOR NAILS ABOVE

A.P.A. RATED O.S.B. MAY BE USED IN LIEU OF PLYWOOD.

FIREPLACE GAS VALVES MUST BE LOCATED OUTSIDE OF REQUIRED HEARTH AREA, BUT NOT MORE THAN 48-INCHES FROM GAS OUTLET AS PER UPC.

MANUFACTURER'S INSTALLATION INSTRUCTIONS AND A COPY OF THE RESEARCH REPORT WILL BE MADE AVAILABLE TO THE INSPECTOR FOR FIREPLACE INSTALLATION

A GAS OR LIQUID FUEL FIREPLACE SHALL HAVE DAMPERS THAT REMAIN PERMANENTLY OPEN. THE INSTALLATION OF A PERMANENT GAS OR ELECTRIC LOG INSERT WILL BE REQUIRED; A GAS OR ELECTRICAL STUB OUT FOR FUTURE INSTALLATION OF A LOG WILL NOT BE ACCEPTABLE AS PER ARIZONA REVISED STATUTE ARS 9-500.16

GAS VENTS PASSING THROUGH A ROOF SHALL COMPLY WITH G2427.6.3.

FIREPLACE VENTS SHALL BE INSTALLED PER MANUFACTURER SPECIFICATIONS.

CHIMENYS SHALL EXTEND AT LEAST 2' HIGHER THAN ANY PORTION OF A BUILDING WITHIN 10' PER G2427.5.3.

GENERAL NOTES

EXITS AND EMERGENCY ESCAPES:
AT LEAST ONE DOORWAY SHALL BE OF A SIZE AS TO PERMIT THE INSTALLATION OF A DOOR NOT LESS THAN 3 FEET IN WIDTH AND NOT LESS THAN 6 FEET 8 INCHES IN HEIGHT.

ALL EXITS TO BE OPENABLE FROM THE INSIDE WITHOUT USE OF A KEY OR ANY SPECIAL KNOWLEDGE OR EFFORT.

EVERY SLEEPING ROOM SHALL HAVE AT LEAST ONE OPERABLE WINDOW OR DOOR APPROVED FOR EMERGENCY ESCAPE OR RESCUE WHICH OPENS DIRECTLY INTO A PUBLIC STREET, PUBLIC ALLEY, YARD OR EXIT COURT. THE UNITS SHALL BE OPERABLE FROM THE INSIDE TO PROVIDE A FULL CLEAR OPENING WITHOUT THE USE OF KEYS OR TOOLS.
ALL ESCAPE OR RESCUE WINDOWS SHALL HAVE A MINIMUM NET CLEAR OPENABLE AREA OF 5.7 SQUARE FEET. THE MINIMUM NET CLEAR OPENABLE HEIGHT DIMENSION SHALL BE 24 INCHES. THE MINIMUM NET CLEAR OPENABLE WIDTH DIMENSION SHALL BE 20 INCHES. EGRESS WINDOWS SHALL HAVE A FINISHED CLEAR OPENING HEIGHT NOT MORE THAN 44 INCHES ABOVE THE FLOOR.

OPENINGS FROM A PRIVATE GARAGE DIRECTLY INTO A ROOM USED FOR SLEEPING PURPOSES SHALL NOT BE PERMITTED.

GLAZING:
LIVING ROOMS AND OTHER ROOMS USED FOR LIVING, DINING OR SLEEPING PURPOSES (HABITABLE ROOMS, EXCEPT KITCHENS) SHALL BE PROVIDED WITH NATURAL LIGHT BY MEANS OF EXTERIOR GLAZED OPENINGS WITH AN AREA NOT LESS THAN 8 PERCENT OF THE FLOOR AREA. HABITABLE ROOMS WITHIN A DWELLING UNIT SHALL BE PROVIDED WITH NATURAL VENTILATION BY MEANS OF OPENABLE EXTERIOR OPENINGS WITH AN AREA NOT LESS THAN 4 PERCENT OF THE FLOOR AREA. BATHROOMS, WATER CLOSET COMPARTMENTS AND SIMILAR ROOMS SHALL BE PROVIDED WITH NATURAL VENTILATION BY MEANS OF OPENABLE EXTERIOR OPENINGS WITH AN AREA NOT LESS THAN 1 1/2" SQUARE FEET OR A MECHANICAL VENTILATION SYSTEM.

WINDOW SILLS
IN DWELLING UNITS, WHERE THE OPENING OF AN OPERABLE WINDOW IS LOCATED MORE THAN 72 INCHES ABOVE THE FINISHED GRADE OR SURFACE BELOW, THE LOWEST PART OF THE CLEAR OPENING OF THE WINDOW SHALL BE A MINIMUM OF 24 INCHES ABOVE THE FINISHED FLOOR OF THE ROOM IN WHICH THE WINDOW IS LOCATED. GLAZING BETWEEN THE FLOOR AND 24 INCHES SHALL BE FIXED OR HAVE OPENINGS THROUGH WHICH A 4 INCH DIAMETER SPHERE CANNOT PASS.

SAFETY GLAZING:
THE FOLLOWING SHALL BE CONSIDERED HAZARDOUS LOCATIONS FOR THE PURPOSE OF GLAZING:

GLAZING IN SIDE-HINGED DOORS.
GLAZING IN FIXED AND SLIDING PANELS OF SLIDING DOOR ASSEMBLIES AND PANELS IN SLIDING AND BIFOLD CLOSET DOOR ASSEMBLIES.
GLAZING IN STORM DOORS.
GLAZING IN DOORS AND ENCLOSURES FOR HOT TUBS, WHIRLPOOLS, SAUNAS, STEAM ROOMS, BATHTUBS AND SHOWERS.
GLAZING IN ANY PORTION OF A BUILDING WALL ENCLOSING THESE COMPARTMENTS WHERE THE BOTTOM EDGE OF THE GLAZING IS LESS THAN 60 INCHES ABOVE A STANDING SURFACE AND DRAIN INLET. ANY GLAZING WITHIN 24 INCHES OF EITHER VERTICAL EDGE OF A DOOR IN A CLOSED POSITION AND WHERE THE BOTTOM EDGE OF THE GLAZING IS LESS THAN 60 INCHES ABOVE THE WALKING SURFACE.
GLAZING IN AN EXPOSED AREA OF AN INDIVIDUAL PANE IS GREATER THAN 9 SQUARE FEET, BOTTOM EDGE IS LESS THAN 18" ABOVE THE FLOOR, TOP EDGE IS GREATER THAN 36 INCHES ABOVE THE FLOOR, AND ONE OR MORE WALKING SURFACES WITHIN 36" HORIZONTALLY OF THE GLAZING..
GLAZING IN RAILINGS REGARDLESS OF AN AREA OR HEIGHT ABOVE WALKING SURFACE SHALL BE SAFETY GLAZING. THIS INCLUDES STRUCTURAL BALUSTER PANELS AND NON-STRUCTURAL IN-FILL PANELS.
GLAZING IN WALLS AND FENCES ENCLOSING INDOOR AND OUTDOOR SWIMMING POOLS, HOT TUBS AND SPAS WHERE THE BOTTOM EDGE OF THE POOL OR SPA SIDE IS LESS THAN 60 INCHES ABOVE WALKING SURFACE AND WITHIN 60 INCHES HORIZONTALLY OF THE WATER'S EDGE. THIS SHALL APPLY TO SINGLE GLAZING AND ALL PANES IN MULTIPLE GLAZING.
GLAZING IN WALLS ENCLOSING STAIRWAY LANDINGS OR WITHIN 60 INCHES OF THE BOTTOM AND TOP OF STAIRWAYS WHERE THE BOTTOM EDGE OF THE GLASS IS LESS THAN 36 INCHES ABOVE A WALKING SURFACE.
EXCEPTIONS:
GLAZING WHEN THERE IS AN INTERVENING WALL OR OTHER PERMANENT BARRIER BETWEEN THE DOOOR AND THE GLAZING.
GLAZING WHERE ACCESS THROUGH THE DOOR IS TO A CLOSET OR A STORAGE AREA 3' OR LESS IN DEPTH.

WEATHER STRIPPING:
ALL SLIDING AND SWINGING DOORS AND WINDOWS OPENING TO THE EXTERIOR OR TO UNCONDITIONED AREAS SHALL BE FULLY WEATHER-STRIPPED, GASKETED OR OTHERWISE TREATED TO LIMIT AIR INFILTRATION.
ALL MANUFACTURED WINDOWS AND SLIDING GLASS DOORS SHALL MEET THE AIR INFILTRATION STANDARDS OF THE CURRENT ASTM E283 WITH A PRESSURE DIFFERENTIAL OF 1.57 POUNDS PER SQUARE FOOT AND SHALL BE CERTIFIED AND LABELED.

SHOWER PANS:
SHOWER PANS TO COMPLY WITH P2709
ALL TILED LINED TUBS/SHOWERS TO COMPLY WITH R702.4.2

WINDOW WELLS
WINDOW WELLS REQUIRED FOR EMERGENCY ESCAPE AND RESCUE SHALL HAVE HORIZONTAL DIMENSIONS THAT ALLOW THE DOOR OR WINDOW OF THE EMERGENCY ESCAPE AND RESCUE OPENING TO BE FULLY OPENED. THE HORIZONTAL DIMENSIONS OF THE WINDOW WELL SHALL PROVIDE A MINIMUM NET CLEAR AREA OF 9 SQUARE FEET WITH A MINIMUM HORIZONTAL PROJECTION AND WIDTH OF 36".

LADDER AND STEPS
WINDOW WELLS WITH A VERTICAL DEPTH GREATER THAN 44 INCHES BELOW THE ADJACENT GROUND LEVEL SHALL BE EQUIPPED WITH A PERMANENTLY AFFIXED LADDER OR STEPS USABLE WITH THE WINDOW IN THE FULLY OPEN POSITION. LADDERS OR RUNGS SHALL HAVE AN INSIDE WIDTH OF AT LEAST 12 INCHES, SHALL PROJECT AT LEAST 3 INCHES FROM THE WALL AND SHALL BE SPACED NOT MORE THAN 18 INCHES ON CENTER VERTICALLY FOR THE FULL HEIGHT OF THE WINDOW WELL

BARS, GRILLS, COVERS AND SCREENS
BARS, GRILLS, COVERS, SCREENS OR SIMILAR DEVICES ARE PERMITTED TO BE PLACED OVER EMERGENCY ESCAPE AND RESCUE OPENINGS, BULKHEAD ENCLOSURES, OR WINDOW WELLS THAT SERVE SUCH OPEININGS, PROVIDED THE MIN. NET CLEAR OPENING SIZE COMPLIES WITH THE I.R.C. AND SUCH DEVICES SHALL BE RELEASABLE OR REMOVABLE FROM THE INSIDE WITHOUT THE USE OF A KEY, TOOL OR FORCE GREATER THAN THAT WHICH IS REQUIRED TO NORMAL OPERATION OF THE ESCAPE AND RESCUE OPENING.

SITE ADDRESS:
SITE ADDRESS TO MEET REQUIREMENTS OF R319.1

GARAGE DOORS:
2x6 DOOR BUCKS AND DOOR TRACK SHALL BE HELD 1/2 INCH OFF GARAGE SLAB.

CONCRETE TILE:
ROOF TILE SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS. MATERIAL AND INSTALLATION SHALL BE IN CONFORMANCE WITH ICBO ESR-1900.

BUILT-UP ROOFING:
ALL COVERED PATIOS SHALL BE CONSTRUCTED WITH SUFFICIENT SLOPE (1/2 INCH PER FOOT) TO INSURE ADEQUATE DRAINAGE
SECONDARY SLOPES SUCH AS VALLEYS OR CRICKETS, SHALL SLOPE NOT LESS THEN 1/8 INCH PER FOOT.
EACH PACKAGE OF FELTS, CEMENTS, AND BASE-PLY-COMBINATION OR CAP SHEETS SHALL BEAR THE LABEL OF AN APPROVED TESTING LABORATORY HAVING A SERVICE FOR THE INSPECTION OF MATERIAL AND FINISHED PRODUCTS DURING MANUFACTURE.
BUILT-UP ROOFING SHALL BE APPLIED TO SOLID ROOF SHEATHINGS AS SPECIFIED IN THE DRAWINGS.
BASE SHEETS SHALL BE NAILED, USING NOT LESS THAN ONE NAIL PER EACH 1-1/3 SQUARE FOOT WITH NAILS OF THE TYPE REQUIRED BY THE MANUFACTURER FOR THE TYPE OF DECK.
SUCCESSIVE LAYERS SHALL BE CEMENTED TO THE BASE SHEETS USING 20 POUNDS OF HOT ASPHALT FOR SOLID MOPPING (10 POUNDS FOR SPOT OR STRIP MOPPING), OR NOT LESS THAN 2 GALLONS OF COLD BITUMINOUS COMPOUND IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS, OR 30 POUNDS OF HOT COAT TAR PITCH PER ROOFING SQUARE.
MINERAL AGGREGATE SURFACED ROOFS SHALL BE SURFACES WITH NOT LESS THAN 60 POUNDS OF HOT ASPHALT OR OTHER CEMENTING MATERIAL IN WHICH EMBEDDED NOT LESS THAN 400 POUNDS OF GRAVEL OR OTHER APPROVED SURFACING MATERIAL OR 300 POUNDS OF CRUSHED SLAG PER ROOFING SQUARE.
CAP SHEETS SHALL BE CEMENTED TO THE BASE SHEETS USING NOT LESS CEMENTING MATERIAL THAN THAT SPECIFIED FOR SOLIDLY CEMENTED BASE SHEETS.

EXTERIOR DECKS:
EXTERIOR PEDESTRIAN DECKING ESR-2097

DECKS SHALL BE WATERPROOFED.
ALL EXTERIOR DECKS EXPOSED TO WEATHER SHALL BE CONSTRUCTED WITH SUFFICIENT SLOPE (1/4 INCH PER FOOT) TO INSURE ADEQUATE DRAINAGE.
UNLESS DESIGNED TO DRAIN OVER DECK EDGES, DRAINS AND OVERFLOWS OF ADEQUATE SIZE SHALL BE INSTALLED AT THE LOW POINTS OF THE DECK.
PROVIDE MINIMUM 2 INCH DROP FROM FINISHED INTERIOR FLOOR TO THE HIGHEST FLOOR LEVEL ON ANY ADJOINING DECK.
ELASTOMERIC OR MEMBRANE DECK COATINGS SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS.
FLASHING AND COUNTERFLASHING:
EXTERIOR OPENINGS EXPOSED TO THE WEATHER SHALL BE FLASHED IN A MANNER TO MAKE THEM WEATHERPROOF.
FLASHING AND COUNTERFLASHING SHALL BE PROVIDED AT THE JUNCTURE OF THE ROOF AND VERTICAL SURFACES.

ALL PARAPETS SHALL BE PROVIDED WITH COPING OF APPROVED MATERIALS.
ALL FLASHING, COUNTERFLASHING AND COPING, WHEN OF METAL, SHALL BE NOT LESS THAN NO. 26 GALVANIZED SHEET CORROSION RESISTANT METAL.

ROOF AND VALLEY FLASHING SHALL BE PROVIDED AS FOLLOWS:
SLATE SHINGLES, AND CLAY AND CONCRETE TILE. THE ROOF VALLEY FLASHING SHALL BE PROVIDED OF NOT LESS THAN NO 28 GALVANIZED SHEET CORROSION-RESISTANT METAL APPLIED OVER AN UNDERLAYMENT OF NOT LESS THAN 15-POUND ASTM FELT. THE METAL SHALL EXTEND AT LEAST 12 INCHES FROM THE CENTER LINE EACH WAY AND SHALL HAVE A SPLASH DIVERTER RIB NOT LESS THAN 1 INCH HIGH AT THE FLOW LINE FORMED AS PART OF THE FLASHING. SECTIONS OF FLASHING SHALL HAVE AN END LAP OF NOT LESS THAN 4 INCHES.

FIREBLOCKING:
SEE SHEET A1.2 FOR NOTES.
FOAMBLOCKING:
FOAMBLOCKING IS REQUIRED AT THE TOP OF SOFFITS AS SHOWN IN DETAILS 6, 10, AND 12 WHEN ANY FOAM IS EXPOSED TO THE INSIDE OF THE SOFFIT. FOAMBLOCKING SHALL CONSIST OF 1/2" A.I.S. BOARD OR 3/8" WOOD PANEL.

CONCEALED CEILING:
APPLY 3/8" MIN. WOOD PANEL TO CONCEALED CEILING AREAS THAT DO NOT RECEIVE GYPSUM BOARD OR FIREBLOCKING, E.G. DOUBLE FRAMED WALLS, SOFFITS, ARCHES, DROPPED CEILINGS LESS THAN 32 SQ. FT., BEHIND POTSHELFS, ETC. WOOD PANEL COMPLETES CEILING MEMBRANE AND SUPPORTS BLOWN-IN ATTIC INSULATION.

ATTICS AND CRAWLSPACES:
WITHIN ATTICS AND CRAWLSPACES WHERE ENTRY IS MADE ONLY FOR SERVICE OF UTILITIES, FOAM PLASTICS SHALL BE PROTECTED AGAINST IGNITION BY 1 1/2-INCH THICK MINERAL FIBER INSULATION, 1/4-INCH THICK WOOD STRUCTURAL PANELS, 3/8-INCH PARTICLE-BOARD, 1/4-INCH HARDBOARD, 3/8-INCH GYPSUM BOARD, OR CORROSION RESISTANT STEEL HAVING A BASE METAL THICKNESS OF 0.016-INCH.

ENCLOSED ATTIC SPACES AND ENCLOSED RAFTER SPACES OVER ENCLOSED AREAS SHALL HAVE CROSS VENTILATION FOR EACH SEPARATE SPACE BY VENTILATING OPENINGS PROTECTED AGAINST THE ENTRANCE OF RAIN. THE NET FREE VENTILATING AREA SHALL NOT BE LESS THAN 1/150 OF THE AREA OF THE SPACE VENTILATED, EXCEPT THAT THE AREA MAY BE 1/300 PROVIDED AT LEAST 40 PERCENT AND NOT MORE THAN 50 PERCENT OF THE REQUIRED VENTILATING AREA IS PROVIDED BY VENTILATORS LOCATED IN THE UPPER PORTION OF THE ATTIC OR RAFTER SPACE. UPPER VENTILATORS SHALL BE LOCATED NO MORE THAN 3 FEET (914 MM) BELOW THE RIDGE OR HIGHEST POINT OF THE SPACE, MEASURED VERTICALLY, WITH THE BALANCE OF THE REQUIRED VENTILATION PROVIDED BY EAVE OR CORNICE VENTS. WHERE THE LOCATION OF WALL OR ROOF FRAMING MEMBERS CONFLICTS WITH THE INSTALLATION OF UPPER VENTILATORS, INSTALLATION MORE THAN 3 FEET (914 MM) BELOW THE RIDGE OR HIGHEST POINT OF THE SPACE SHALL BE PERMITTED.

BAFFLES ARE INSTALLED BEHIND EAVE VENTS TO PROVIDE A MINIMUM 1" AIRSPACE, IN INSULATED AREAS

PROVIDE ATTIC VENTILATION FOR ALL ATTIC AREAS EXCEEDING 24 INCHES IN HEIGHT FROM TOP OF INSULATION TO ROOF SHEATHING.

ATTIC VENTILATION IS NOT REQUIRED OVER UNENCLOSED AREAS (COVERED PATIOS, ENTRY AREAS, PER 2012). NONETHELESS, PATIO COVERS CONSTRUCTED OF TRUSSES WILL BE VENTED SIMILAR TO THE ATTIC OVER THE ENCLOSED AREAS. PATIO COVERS AND DECKS CONSTRUCTED OF RAFTERS WILL BE VENTED AT THE EXTERIOR END WITH VENTED EAVE BLOCKING. FOR PARAPET CONDITIONS, VENTED EAVE BLOCKING IS NOT POSSIBLE AND THEREFORE A SINGLE LINE OF STRIP SOFFIT VENTING WILL BE USED NEAR THE EXTERIOR END OF THE PATIO COVER OR DECK.

STUCCO:
STUCCO MATERIALS AND METHOD OF INSTALLATION SHALL CONFORM TO ULTRAKOTE STUCCO SYSTEM (ESR-1471).

THE BUILDING INSPECTOR WILL REQUIRE THE INSTALLATION CARD, FROM THE STUCCO MANUFACTURER'S APPROVED APPLICATOR, BE ON THE JOB SITE BEFORE THE APPLICATION OF THE WEATHER-RESISTIVE BARRIER. A COPY OF THE INSTALLATION CARD MUST BE PRESENTED TO THE BUILDING INSPECTOR AFTER COMPLETION OF THE WORK AND BEFORE FINAL INSPECTION. A COPY OF THE INSTALLATION CARD SHALL BE LEFT AT THE JOB SITE FOR THE HOMEOWNER.

ALL WEATHER-EXPOSED SURFACES SHALL HAVE A WEATHER-RESISTIVE BARRIER TO PROTECT THE INTERIOR WALL COVERING. BUILDING PAPER AND FELT SHALL BE FREE FROM HOLES AND BREAKS OTHER THAN THOSE CREATED BY FASTENERS AND CONSTRUCTION SYSTEM DUE TO ATTACHING OF THE BUILDING PAPER, AND SHALL BE APPLIED OVER STUDS OR SHEATHING OF ALL EXTERIOR WALLS. SUCH FELT OR PAPER SHALL BE APPLIED HORIZONTALLY, WITH THE UPPER LAYER LAPPED OVER THE LOWER LAYER NOT LESS THAN 2 INCHES. WHERE VERTICAL JOINTS OCCUR, FELT OR PAPER SHALL BE LAPPED NOT LESS THAN 6 INCHES.

USE TWO LAYERS OF GRADE D PAPERS OVER WOOD BASE SHEATHING. ALL LATH AND LATH ATTACHMENTS SHALL BE CORROSION. RESISTANT MATERIAL. A MINIMUM (NO. 26 GALVANIZED SHEET GAGE) CORROSION-RESISTANT WEEP SCREED WITH A MINIMUM VERTICAL ATTACHMENT FLANGE OF 3 1/2 INCHES SHALL BE PROVIDED AT OR BELOW THE FOUNDATION PLATE LINE ON ALL EXTERIOR STUD WALLS. THE SCREED SHALL BE PLACED A MINIMUM OF 4 INCHES ABOVE THE EARTH OR 2 INCHES ABOVE PAVED AREAS AND SHALL BE OF A TYPE THAT WILL ALLOW TRAPPED WATER TO DRAIN TO THE EXTERIOR OF THE BUILDING. THE WEATHER-RESISTIVE BARRIER SHALL LAP THE ATTACHMENT FLANGE, AND THE EXTERIOR LATH SHALL COVER AND TERMINATE ON THE ATTACHMENT FLANGE OF THE SCREED.

BITUMEN MEMBRANE:
BITUMEN MEMBRANE SHALL BE 40 MILS THICKNESS, SELF-ADHERING, RUBBERIZED-ASPHALT FLASHING.

WINDOW FLASHING:
NOT USED.

GYPSUM WALLBOARD:
ICBO # ESR-1338
GYPSUM WALLBOARD SHALL NOT BE INSTALLED UNTIL WEATHER PROTECTION IS PROVIDED.
ALL EDGES AND ENDS OF GYPSUM WALLBOARD SHALL OCCUR ON THE FRAMING MEMBERS, EXCEPT THOSE EDGES AND ENDS WHICH ARE PERPENDICULAR TO THE FRAMING MEMBERS.
ALL EDGES AND ENDS OF GYPSUM WALLBOARD SHALL BE IN MODERATE CONTACT EXCEPT IN CONCEALED SPACES WHERE FIRE-RESISTIVE CONSTRUCTION OR DIAPHRAGM ACTION IS NOT REQUIRED.

CEILING GYPSUM BOARD THICKNESS TO COMPLY WITH IRC TABLE R702.3.5 WHICH REQUIRES 1/2" SAG-RESISTANT OR 5/8" THICK.
THE SIZE AND SPACING OF FASTENERS SHALL COMPLY WITH THE IRC, APPLICABLE EDITION, STATE AND LOCAL CODES. FASTENERS SHALL BE SPACED NOT LESS THAN 3/8 INCHES FROM EDGES AND ENDS OF GYPSUM WALLBOARD. FASTENERS AT THE TOP AND BOTTOM PLATES OF VERTICAL ASSEMBLIES, OR THE EDGES AND ENDS OF HORIZONTAL ASSEMBLIES PERPENDICULAR TO THE SUPPORTS. AND AT THE WALL LINE MAY BE OMITTED EXCEPT ON SHEAR RESISTING ELEMENTS OR FIRE-RESISTIVE ASSEMBLIES. FASTENERS SHALL BE APPLIED IN SUCH A MANNER AS NOT TO FRACTURE THE FACE PAPER WITH THE FASTENER HEAD.

CEMENT, FIBER-CEMENT OR GLASS MAT GYPSUM BACKERS IN COMPLIANCE WITH ASTM C 1288, C 1325 OR C 1178 AND INSTALLED IN ACCORDANCE WITH MANUFACTUERS' RECOMMENDATIONS SHALL BE USED AS BACKERS FOR WALL TILE IN TUB AND SHOWER AREAS AND WALL PANELS IN SHOWER AREAS.

PROVIDE 5/8-INCH TYPE X GYPSUM BOARD ON WALLS AND CEILING IN GARAGE AND ON USABLE SPACE UNDER STAIRS.

PROVIDE EXTERIOR RATED GYPSUM BOARD ON THE CEILINGS OF THE PATIO AND ENTRY.

BULLNOSE ALL CORNERS INCLUDING WINDOWS AND CLOSETS.

INSULATION:
PROVIDE INSULATION TO MEET R-VALUES SPECIFIED IN THE CONTRACT DOCUMENTS. BLOWN-IN INSULATION SHALL BE USED FOR ATTICS WHENEVER POSSIBLE. BATT INSULATION MAY BE USED IN THOSE CASES WHEN BLOWN-IN IS NOT POSSIBLE. INSULATE AREAS UNDER ATTIC WORK AND ACCESS PLATFORMS WITH BATT INSULATION.

THE FOLLOWING OPENINGS IN THE BUILDING ENVELOPE MUST BE CAULKED, SEALED, OR WEATHER-STRIPPED.

EXTERIOR JOINTS AROUND WINDOW AND DOOR FRAMES, BETWEEN WALL PANELS, WALL SOLE PLATES AND FLOORS. OPENINGS FOR PLUMBING, ELECTRICAL AND GAS LINES IN EXTERIOR AND INTERIOR WALLS, CEILINGS AND FLOORS. OPENINGS IN THE ATTIC FLOOR (SUCH AS WHERE CEILING PANELS MEET INTERIOR AND EXTERIOR WALLS AND MASONRY FIREPLACES.
ALL OTHER SUCH OPENINGS IN THE BUILDING ENVELOPE.

ALTERNATIVE APPROVED TECHNIQUES MAY BE USED TO MEET THE STANDARD CAULKING REQUIREMENTS FOR EXTERIOR WALLS, INCLUDING BUT NOT LIMITED TO, CONTINUOUS STUCCO, CAULKING OR TAPING OF ALL JOINTS BETWEEN WALL COMPONENTS, BUILDING WRAPS, OR RIGID WALL INSULATION. BUILDER AND INSULATION INSTALLER ARE TO PROVIDE A CERTIFICATE OF INSULATION AND POST IN THE BUILDING IN A CONSPICUOUS LOCATION.

STONE VENEER:
ADHERED STONE VENEER (REPORT NO. ESR-2598) TO BE APPLIED OVER UNPAINTED BROWN (FIRST) COAT OF STUCCO CEMENT MORTAR.

SOUND ATTENUATION:
A JURISDICTION THAT HAS TERRITORY IN THE VICINITY OF A MILITARY AIRPORT REQUIRES ALL RESIDENTIAL BUILDINGS SHALL EITHER BE CONSTRUCTED WITH A MIN. R18 EXTERIOR WALL ASSEMBLY, A MIN. OF R30 ROOF ASSEMBLY, DUAL-GLAZED WINDOWS AND SOLID WOOD, FOAM-FILLED FIBERGLASS OR METAL DOORS TO THE EXTERIOR OR CERTIFIED BY A STATE OF ARIZONA ARCHITCT OR ENGINEER TO ACHIEVE A MAX. INTERIOR NOISE LEVEL OF FORTY-FIVE (45) DECIBELS AT TIME OF FINAL CONSTRUCTION.

SLIDING GLASS DOOR AND WINDOWS:
SLIDING GLASS DOORS OPENING ONTO PATIOS OR DECKS WHICH ARE LESS THAN ONE STORY ABOVE GRADE OR ARE OTHERWISE ACCESSIBLE FROM THE OUTSIDE SHALL BE SECURED AS FOLLOWS:
ALL SLIDING GLASS DOORS SHALL HAVE A HOOK-BOLT DEADLOCK WHICH IS NO LESS THAN 1/8-INCH IN THICKNESS, AND WHICH HAS A MINIMUM THROW OF 1/2-INCH.
THE HOOK-BOLT DEADLOCK AND THE STRIKE SHALL BE MADE FROM HARDENED STEEL.

ALL SLIDING WINDOWS SHALL HAVE SAFETY LOCKS.

INTERIOR DOORS:
PROVIDE SLIDE BOLT AT THE TOP OF INTERIOR DOOR PAIRS.

EXTERIOR DOORS:
EXTERIOR DOORS AND DOORS LEADING FROM GARAGE AREAS INTO PRIVATE RESIDENCES SHALL BE SOLID CORE.
EXTERIOR DOORS AND DOORS LEADING FROM GARAGE AREAS INTO PRIVATE RESIDENCES SHALL HAVE A DEADLOCKING LATCH DEVICE WITH A MINIMUM THROW OF 1/2-INCH AND A DEADBOLT LOCK WITH A CYLINDER GUARD, HARDENED STEEL INSERT WITH A MINIMUM THROW OF 1-INCH., BOTH LOCKING. ALL DEAD BOLTS AND NIGHT LATCHES TO BE NO MORE THAN 48 INCHES ABOVE FIRST FLOOR. EXTERIOR DOORS SWINGING OUT SHALL HAVE NONREMOVEABLE HINGES. IN-SWINGING EXTERIOR DOOR STOPS SHALL BE OF ONE PIECE CONSTRUCTION. JAMBS FOR ALL DOORS SHALL BE SO CONSTRUCTED OR PROTECTED SO AS TO PREVENT VIOLATION OF THE FUNCTION ON THE STRIKE PLATE FROM THE OUTSIDE.
THE INACTIVE LEAF OF A PAIR OF DOORS SHALL HAVE A DEADBOLT, NOT KEY OPERATED AT TOP AND BOTTOM WITH 1 INCH EMBEDMENT.
PROJECTING CYLINDERS REQUIRE GUARD.
OVERHEAD AND SECTIONAL GARAGE DOORS SHALL BE SECURED WITH A CYLINDER LOCK, PAD WITH A HARDENED STEEL SHACKLE, METAL SLIDE BAR BOLT OR EQUIVALENT WHEN NOT OTHERWISE LOCKED BY ELECTRICAL POWER OPERATION. PLACE DOOR LOCKS AT ALL REAR DOORS AT POOL SAFETY HEIGHT.

LANDINGS AT DOORS
THERE SHALL BE A FLOOR OR LANDING ON EACH SIDE OF EACH EXTERIOR DOOR. THE FLOOR OR LANDING AT THE EXTERIOR DOOR SHALL NOT BE MORE THAN 1.5 INCHES LOWER THAN THE TOP OF THE THRESHOLD. THE LANDING SHALL BE PERMITTED TO HAVE A SLOPE NOT TO EXCEED 0.25 UNIT VERTICAL IN 12 UNITS HORIZONTAL.

ENTRY VISION:
ALL MAIN AND FRONT ENTRY DOORS TO DWELLING UNITS SHALL BE ARRANGED SO THAT THE OCCUPANT HAS A VIEW OF THE AREA IMMEDIATELY OUTSIDE THE DOOR WITHOUT OPENING THE DOOR. SUCH VIEW MAY BE PROVIDED BY A DOOR VIEWER HAVING A FIELD OF VISION OF NOT LESS THAN 180 DEGREES.

SWINGING DOORS:
THE OPEN SPACE BETWEEN THE TRIMMERS AND THE WOOD DOOR JAMBS SHALL BE SOLID SHIMMED BY A SINGLE PIECE EXTENDING NOT LESS THAN 12 INCHES ABOVE AND BELOW THE STRIKE PLATE. STRIKE PLATES SHALL BE ATTACHED IN WOOD WITH NOT LESS THAN FOUR NO. 8 BY 3-INCH SCREWS WHICH SHALL HAVE A MINIMUM OF 3/4-INCH PENETRATION INTO THE NEAREST STUD. ALL STRIKE PLATES OF DOORS IN PAIRS SHALL BE INSTALLED AS TESTED.

WHEN HINGES ARE EXPOSED TO THE EXTERIOR, AT LEAST ONE OF THE THREE REQUIRED HINGES SHALL BE EQUIPPED WITH NONREMOVEABLE HINGE PINS OR A MECHANICAL INTERLOCK TO PRECLUDE REMOVAL OF THE DOOR FROM THE EXTERIOR BY REMOVING THE HINGE PINS. NOT LESS THAN THREE 4-1/2 INCH STEEL HINGE BUTT HINGES SHALL BE SYMMETRICALLY FASTENED TO BOTH THE DOOR AND FRAME WITH NOT LESS THAN FOUR NO. 9 BY 3/4-INCH WOOD SCREWS.

TESTS AND IDENTIFICATION:
TESTS REQUIRED BY THE BUILDING CODE SHALL BE PERFORMED BY AN APPROVED AGENCY AND THE PRODUCT SHALL BEAR AN IDENTIFICATION INDICATING THAT IT CONFORMS TO THE PRESCRIBED STANDARDS.

TESTING AND LABELING
EXTERIOR WINDOWS AND SLIDING DOORS SHALL BE TESTED BY AN APPROVED INDEPENDENT LABORATORY, AND BEAR A LABEL IDENTIFYING MANUFACTURER, PERFORMANCE CHARACTERISTICS AND APPROVED INSPECTION AGENCY TO INDICATE COMPLIANCE WITH AAMA/WDMA/CSA 101/I.S.2/A440. EXTERIOR SIDE-HINGED DOORS SHALL BE TESTED AND LABELED AS CONFORMING TO AAMA/WDMA/CSA 101/I.S.2/A440 OR COMPLY WITH SECTION R613.6.

VEHICULAR ACCESS DOORS
VEHICULAR ACCESS DOORS SHALL BE TESTED IN ACCORDANCE WITH EITHER ASTM E 330 OR ANSI/DASMA 108, AND SHALL MEET THE ACCEPTANCE CRITERIA OF ANSI/DASMA 108.

STAIRWAYS:
STAIR STRINGERS ARE DESIGNED FOR A UNIFORM LOAD OF 40 PSF.
INDIVIDUAL STAIR TREADS ARE DESIGNED TO SUPPORT A 300-POUND CONCENTRATED LOAD PLACED IN A POSITION THAT WOULD CAUSE MAXIMUM STRESS.
STAIRWAYS SHALL NOT BE LESS THAN 36 INCHES IN WIDTH. HANDRAILS MAY PROJECT INTO THE REQUIRED WIDTH A DISTANCE OF 3-1/2 INCHES FROM EACH SIDE OF THE STAIRWAY. STRINGERS AND OTHER PROJECTIONS SUCH AS TRIM AND SIMILAR DECORATIVE FEATURES MAY PROJECT INTO THE REQUIRED WIDTH 1-1/2 INCHES FROM EACH SIDE.
THE RISE SHALL NOT BE MORE THAN 7 3/4 INCHES AND THE RUN NOT LESS THAN 10 INCHES. THE RUN IS MEASURED HORIZONTALLY BETWEEN THE VERTICAL PLANES OF THE FURTHERMOST PROJECTION OF ADJACENT TREADS OR NOSINGS. ADJACENT RISERS SHALL NOT VARY BY MORE THAN 3/16 INCH. THE GREATEST RISER HEIGHT WITHIN A FLIGHT OF STAIRS SHALL NOT EXCEED THE SMALLEST BY MORE THAN 3/8 INCH.
EVERY STAIRWAY SHALL HAVE A HEADROOM CLEARANCE NOT LESS THAN 6 FEET 8 INCHES.
EVERY LANDING SHALL HAVE A DIMENSION MEASURED PERPENDICULAR TO THE DIRECTION OF TRAVEL NOT LESS THAN THE WIDTH OF THE STAIRWAY. MINIMUM DEPTH INTHE DIRECTION OF TRAVEL SHALL NOT BE LESS THAN 36".

HANDRAILS:
HANDRAIL ASSEMBLIES SHALL BE ABLE TO RESIST A SINGLE CONCENTRATED LOAD OF 200 POUNDS, APPLIED IN ANY DIRECTION AT ANY POINT ALONG THE TOP, AND HAVE ATTACHMENT DEVICES AND SUPPORTING STRUCTURES TO TRANSFER THIS LOADING TO APPROPRIATE STRUCTURAL ELEMENTS OF THE BUILDING.
ALL STAIRWAYS SHALL HAVE AT LEAST ONE HANDRAIL, EXCEPT STAIRWAYS HAVING LESS THAN 4 RISERS NEED NOT HAVE HANDRAILS.
THE TOP OF THE HANDRAILS AND HANDRAIL EXTENSIONS SHALL NOT BE PLACED LESS THAN 34 INCHES OR MORE THAN 38 INCHES ABOVE LANDINGS AND THE NOSING OF TREADS.
HANDRAILS SHALL BE CONTINUOUS FOR THE FULL LENGTH OF THE STAIRS.
THE HANDGRIP PORTION OF HANDRAILS SHALL NOT BE LESS THAN 1 1/4 INCHES NOR MORE THAN 2 INCHES IN CROSS SECTIONAL DIMENSION OR THE SHAPE SHALL PROVIDE AN EQUIVALENT GRIPPING SURFACE. THE HAND GRIP PORTION OF HANDRAILS SHALL HAVE A SMOOTH SURFACE WITH NO SHARP CORNERS. HANDRAILS PROJECTING FROM A WALL SHALL HAVE A SPACE OF NOT LESS THAN 1 1/2 INCHES BETWEEN THE WALL AND THE HANDRAIL.

GUARDRAILS:
GUARDRAIL ASSEMBLIES SHALL BE ABLE TO RESIST A SINGLE CONCENTRATED LOAD OF 200 POUNDS, APPLIED IN ANY DIRECTION AT ANY POINT ALONG THE TOP, AND HAVE ATTACHMENT DEVICES AND SUPPORTING STRUCTURES TO TRANSFER THIS LOADING TO APPROPRIATE STRUCTURAL ELEMENTS OF THE BUILDING.
INTERMEDIATE RAILS, PANEL FILLERS AND THEIR CONNECTIONS SHALL BE CAPABLE OF WITHSTANDING A LOAD OF 25 PSF APPLIED HORIZONTALLY AT RIGHT ANGLES OVER THE ENTIRE TRIBUTARY AREA, INCLUDING OPENINGS AND SPACES BETWEEN RAILS.
UNENCLOSED FLOOR OPENINGS, OPEN SIDES OF STAIRWAYS AND WALK DECKS SHALL BE PROTECTED BY GUARDRAILS.
THE TOP OF THE GUARDRAILS SHALL NOT BE LESS THAN 36 INCHES IN HEIGHT.
OPEN GUARDRAILS SHALL HAVE INTERMEDIATE RAILS OR AN ORNAMENTAL PATTERN SUCH THAT A SPHERE 4 INCHES IN DIAMETER CANNOT PASS THROUGH. THE TRIANGULAR OPENINGS FORMED BY THE RISER, TREAD AND BOTTOM ELEMENT OF THE GUARDRAIL AT THE OPEN SIDE OF A STAIRWAY MAY BE OF SUCH SIZE THAT A SPHERE 6 INCHES IN DIAMETER CANNOT PASS THROUGH.

FIRE BLOCKS AND DRAFT STOPS

FIREBLOCKING AND DRAFTSTOPPING SHALL BE INSTALLED TO CUT OFF ALL CONCEALED DRAFT OPENINGS (BOTH VERTICAL AND HORIZONTAL) AND SHALL FORM AN EFFECTIVE BARRIER BETWEEN FLOORS, BETWEEN A TOP STORY AND A ROOF OR ATTIC SPACE, AND SHALL SUBDIVIDE ATTIC SPACES, CONCEALED ROOF SPACES AND FLOOR-CEILING ASSEMBLIES. THE INTEGRITY OF ALL FIRE BLOCKS AND DRAFT STOPS SHALL BE MAINTAINED.

FIREBLOCKING SHALL BE PROVIDED IN THE FOLLOWING LOCATIONS:

IN CONCEALED SPACES OF STUD WALLS AND PARTITIONS, INCLUDING FURRED SPACES, AT THE CEILING AND FLOOR LEVELS AND AT 10-FOOT INTERVALS BOTH VERTICAL AND HORIZONTAL.

AT ALL INTERCONNECTIONS BETWEEN CONCEALED VERTICAL AND HORIZONTAL SPACES SUCH AS OCCUR AT SOFFITS, DROP CEILINGS AND COVE CEILINGS.

IN CONCEALED SPACES BETWEEN STAIR STRINGERS AT THE TOP AND BOTTOM OF THE RUN BETWEEN STUDS ALONG AND IN LINE WITH THE RUN OF THE STAIRS IF THE WALLS UNDER THE STAIR ARE UNFINISHED.

IN OPENINGS AROUND VENTS, PIPES, DUCTS, CHIMNEYS, CABLES, WIRES, FIREPLACES AND SIMILAR OPENINGS THAT AFFORD A PASSAGE FOR FIRE AT CEILING AND FLOOR LEVELS, WITH NONCOMBUSTIBLE MATERIALS.

AT OPENINGS BETWEEN ATTIC SPACES AND CHIMNEY CHASES FOR FACTORY-BUILT CHIMNEYS.

EXCEPT AS NOTED ABOVE, FIREBLOCKING SHALL CONSIST OF 2 INCHES NOMINAL LUMBER OR TWO THICKNESSES OF 1 INCH NOMINAL LUMBER WITH BROKEN LAP JOINTS OR ONE THICKNESS OF 23/32-INCH WOOD STRUCTURAL PANEL WITH JOINTS BACKED BY 23/32-INCH STRUCTURAL PANEL.

FIRE BLOCKS MAY ALSO BE OF GYPSUM BOARD, CEMENT FIBER BOARD, BATTS OR BLANKETS OF MINERAL OR GLASS FIBER, OR OTHER APPROVED MATERIALS INSTALLED IN SUCH A MANNER AS TO BE SECURELY RETAINED IN PLACE. LOOSE-FILL INSULATION MATERIAL SHALL NOT BE USED AS A FIRE BLOCK UNLESS SPECIFICALLY TESTED IN THE FORM AND MANNER INTENDED FOR USE TO DEMONSTRATE ITS ABILITY TO REMAIN IN PLACE AND TO RETARD THE SPREAD OF FIRE AND HOT GASES.

DRAFTSTOPPING SHALL BE PROVIDED IN THE FOLLOWING LOCATIONS;
WHERE THERE IS USABLE SPACE ABOVE AND BELOW THE CONCEALED SPACE OF A FLOOR-CEILING ASSEMBLY IN A SINGLE-FAMILY DWELLING, DRAFT STOPS SHALL BE INSTALLED SO THAT THE AREA OF THE CONCEALED SPACE DOES NOT EXCEED 1000 SQUARE FEET. DRAFTSTOPPING SHALL DIVIDE THE CONCEALED SPACE INTO APPROXIMATELY EQUAL AREAS.

DRAFTSTOPPING MATERIALS SHALL NOT BE LESS THAN 1/2-INCH GYPSUM BOARD, 3/8-INCH WOOD STRUCTURAL PANEL OR OTHER APPROVED MATERIAL ADEQUATELY SUPPORTED.

PLUMBING SHALL BE IN ACCORDANCE WITH THE 2012 IRC

WASTE AND VENT PIPE SHALL BE PLASTIC PVC SCHEDULE 40

THE PLUMBING ISOMETRIC IS FOR PIPE SIZE AND CLEAN OUT LOCATION ONLY. SIZE PIPE ACCORDING TO 2012 IRC.

PROVIDE PRESSURE BALANCE FOR THERMOSTATIC MIXING VALVE TYPE CONTROL VALVES FOR ALL SHOWER AND TUB-SHOWER COMBINATIONS.

SOLDERS AND FLUX HAVING A LEAD CONTENT IN EXCESS OF TWO TENTHS OF ONE PERCENT SHALL NOT BE USED IN THE INSTALLATION OR REPAIR OF ANY PLUMBING PROVIDING WATER FOR HUMAN CONSUMPTION WHICH ARE CONNECTED TO PUBLIC WATER SYSTEMS.

NO WATER, SOIL OR WASTE PIPE SHALL BE INSTALLED OR PERMITTED OUTSIDE OF A BUILDING OR IN AN EXTERIOR WALL, UNLESS WHERE NECESSARY, ADEQUATE PROVISION IS MADE TO PROTECT SUCH PIPE FROM FREEZING.

PIPING SUBJECT TO UNDUE CORROSION, EROSION OR MECHANICAL DAMAGE SHALL BE PROTECTED IN AN APPROVED MANNER.

PLUMBING FIXTURES SHALL BE AS FOLLOWS:
WATER CLOSETS: 1.6 GALLON PER FLUSH, MAX.
SHOWER HEADS: 2.5 GALLON PER MINUTE, MAX.
LAVATORY SINK FAUCETS: 2.2 GALLON PER MINUTE, MAX.

WATER PIPING:
COPPER PIPE FOR WATER PIPING SHALL HAVE A WEIGHT OF NOT LESS THAN THAT OF COPPER WATER TUBE TYPE L. EXCEPTION: TYPE M COPPER TUBING MAY BE USED FOR WATER PIPING WHEN PIPING IS ABOVE GROUND, AS PER 2012 IRC.

ALL WATER SUPPLY PIPING TO BE PEX PIPING.

WASTE PIPING:
ALL WASTE PIPING WHICH PENETRATES WALL WITH 1 HOUR FIRE-RESTRICTIVE MATERIALS SHALL BE NON-COMBUSTIBLE PIPING MATERIAL APPROVED BY THE IPC, APPLICABLE EDITION, STATE AND LOCAL CODES.

RAPID FIT WASTE AND OVERFLOW FITTINGS SHALL BE USED IN LIEU OF ACCESS PANEL AS PER IAPMO, FILE NO. 966.

WATER HEATER:
WATER HEATER HAVING NON-RIGID WATER CONNECTIONS SHALL BE STRAPPED FOR SUPPORT.

WATER HEATER TO BE PROVIDED WITH TEMPERATURE AND PRESSURE RELIEF VALVE HAVING A FULL-SIZED DRAIN OF GALVANIZED STEEL OR HARD-DRAWN COPPER TO OUTSIDE OF BUILDING WITH END OF PIPE NOT MORE THAN 2 FEET OR LESS THAN 6 INCHES ABOVE THE GRADE, POINTING DOWNWARD, THE TERMINAL END BEING UNTHREADED.

GAS PIPING:
ALL PIPE USED FOR THE INSTALLATION OF ANY GAS PIPING SHALL BE STANDARD WEIGHT WROUGHT IRON OR STEEL (GALVANIZED OR BLACK), YELLOW BRASS (CONTAINING NOT MORE THAN 75 PERCENT COPPER) OR INTERNALLY TINNED OR EQUIVALENTLY TREATED COPPER OF IRON PIPE SIZE.

ALL FITTINGS USED IN CONNECTION WITH THE ABOVE PIPING SHALL BE OF MALLEABLE IRON OR YELLOW BRASS (CONTAINING NOT MORE THAN 75 PERCENT COPPER).

GAS PIPING IS NOT ALLOWED UNDER ANY BUILDING OR SLAB. KITCHEN ISLANDS PERMITTED BY EXCEPTION. ALL EXPOSED GAS PIPING SHALL BE KEPT AT LEAST 6 INCHES ABOVE GRADE OF STRUCTURE.

QUALITY:
TRADE PARTNER SHALL INSURE THAT ALL WORK IS DONE IN A PROFESSIONAL WORKMANLIKE MANNER BY SKILLED TRADES PEOPLE AND SHALL REPLACE ANY MATERIALS OR ITEMS DAMAGED BY TRADE PARTNERS PERFORMANCE. TRADE PARTNERS AND SUPPLIERS ARE HEREBY NOTIFIED THAT THEY ARE TO CONFER AND COOPERATE FULLY WITH EACH OTHER DURING THE COURSE OF CONSTRUCTION TO DETERMINE THE EXACT EXTENT AND OVERLAP OF EACH OTHER'S WORK AND TO SUCCESSFULLY COMPLETE THE EXECUTION OF THE WORK. ALL TRADE PARTNER WORKMANSHIP WILL BE THE QUALITY TO PASS INSPECTION BY LOCAL AUTHORITIES, LENDING INSTITUTIONS, THE REGISTRAR OF CONTRACTORS AND SHEA HOMES. ANY ONE OR ALL OF THE ABOVE MAY INSPECT WORKMANSHIP AT ANY TIME, AND ANY CORRECTIONS NEEDED TO ENHANCE THE QUALITY OF THE BUILDING WILL BE DONE IMMEDIATELY.

CLEANING:
EACH TRADE PARTNER, UNLESS SPECIFICALLY EXEMPTED BY THE TERMS OF HIS CONTRACT, SHALL BE RESPONSIBLE FOR CLEANING UP AND REMOVING FROM THE JOB SITE ALL TRASH AND DEBRIS NOT LEFT BY OTHER TRADE PARTNERS.

WORK PERFORMED SHALL COMPLY WITH THE GENERAL NOTES THROUGHOUT THE DRAWINGS, THE PROJECT SPECIFICATIONS, THE UNIFORM BUILDING CODE, AND ALL LOCAL, STATE AND FEDERAL CODES, ORDINANCES, LAWS, REGULATIONS AND PROTECTIVE COVENANTS GOVERNING THE SITE OF WORK.

IN THE CASE OF CONFLICT, THE MORE STRINGENT REQUIREMENTS SHALL GOVERN.

ON SITE VERIFICATION OF ALL DIMENSIONS AND CONDITIONS SHALL BE THE RESPONSIBILITY OF THE TRADE PARTNERS. NOTED DIMENSIONS TAKE PRECEDENT OVER SCALE. EACH TRADE PARTNER SHALL REPORT TO THE PROJECT SUPERINTENDENT ALL CONDITIONS WHICH PREVENT THE PROPER EXECUTION OF THEIR WORK.

WATER FIXTURE CALCULATIONS

1) TOTAL DEVELOPED LENGHT OF THE WATER LINE; FROM THE WATER METER TO THE FURTHEST WATER USING OUTLET: 600 FEET.
2) TOTAL NUMBER OF FIXTURE UNITS OF ALL WATER USING OUTLETS PER CURRENT IRC.

IRC SECTION 2903.6

TYPE OF FIXTURES OR GROUP OF FIXTURES	NUMBER	FIXTURE UNIT VALUE	TOTAL FIXTURE UNITS
BATHTUB (WITH/WITHOUT OVERHEAD SHOWER HEAD)			
CLOTHES WASHER			
DISH WASHER			
FULL BATH GROUP (WITH/WITHOUT SHOWER HEAD)	8	3.6	28.8
HALF BATH GROUP			
HOSE BIBBS	2	2.5	5.0
KITCHEN GROUP (DISHWASHER AND DISPOSAL)	2	2.5	5.0
EXTRA KITCHEN/BAR SINK	1	1.5	1.5
LAUNDRY GROUP (WASHER AND LAUNDRY TUB)	2	2.5	5.0
UTILITY SINK	1	0.7	0.7
EXTRA LAVTORY	2	1	2
EXTRA SHOWER STALL	2	2	4
TOTAL:			52

WATER SUPPLY OUTLETS FOR ITEMS NOT SHOWN ABOVE SHALL BE COMPUTED AT THEIR MAXIMUM DEMAND OR ACCORDING TO THE SIZE OF THE SUPPLY PIPE.

PROVIDE_________ METER AND _________BUILDING SUPPLY

GOVERNING BUILDING CODES

ALL CONSTRUCTION SHALL COMPLY WITH THE FOLLOWING CODES AND AMENDMENTS PER ADOPTING ORDINANCES.

2012 INTERNATIONAL BUILDING CODE

2012 INTERNATIONAL RESIDENTIAL CODE

2011 NATIONAL ELECTRICAL CODE

2012 INTERNATIONAL MECHANICAL CODE

2012 INTERNATIONAL ECC

2012 INTERNATIONAL FIRE CODE

2012 INTERNATIONAL PLUMBING CODE

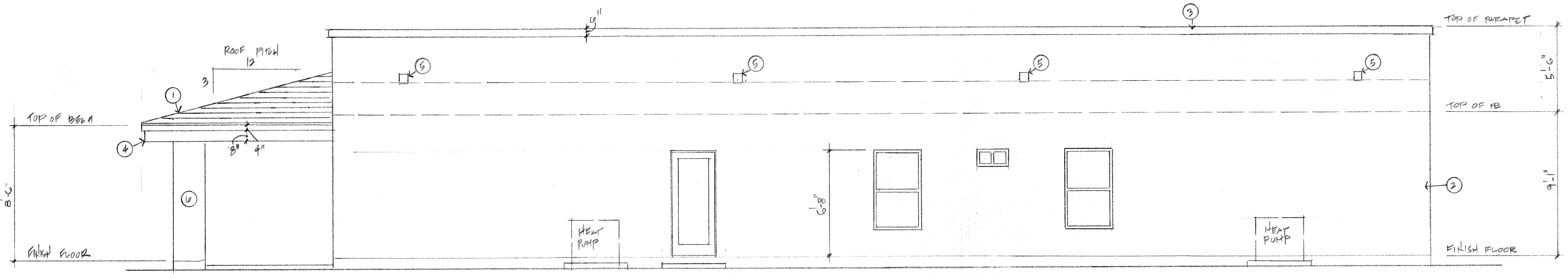
SHEET INDEX

TIM BUERKLE DESIGN
9543 W TIERRA GRANDE
PEORIA, ARIZONA 85383
PHONE: 623-572-9674

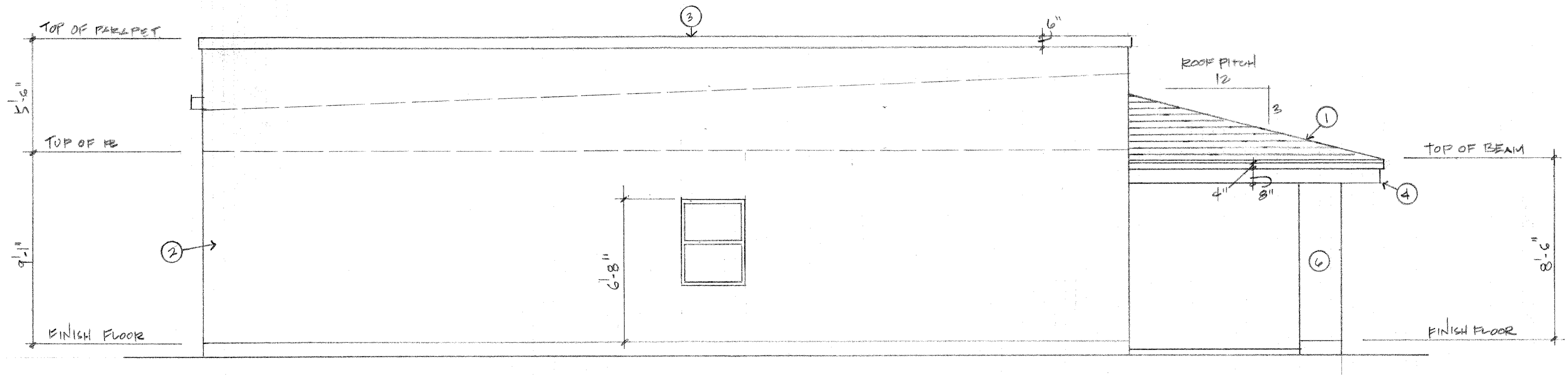
CUSTOM HOME FOR MR. AND MRS. TOWNLEY
1402 N RECKER ROAD
MESA, ARIZONA 85205
141-45-001R APN

SHEET

1



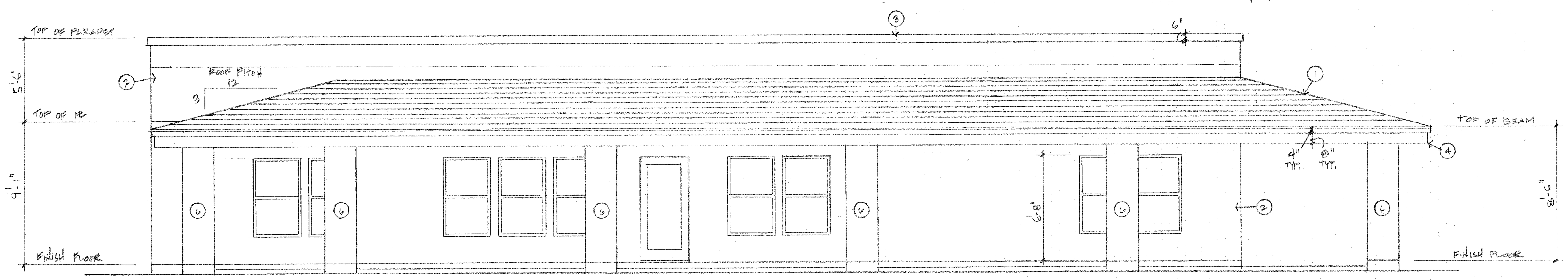
NORTH SIDE ELEVATION
1/4"=1'-0"



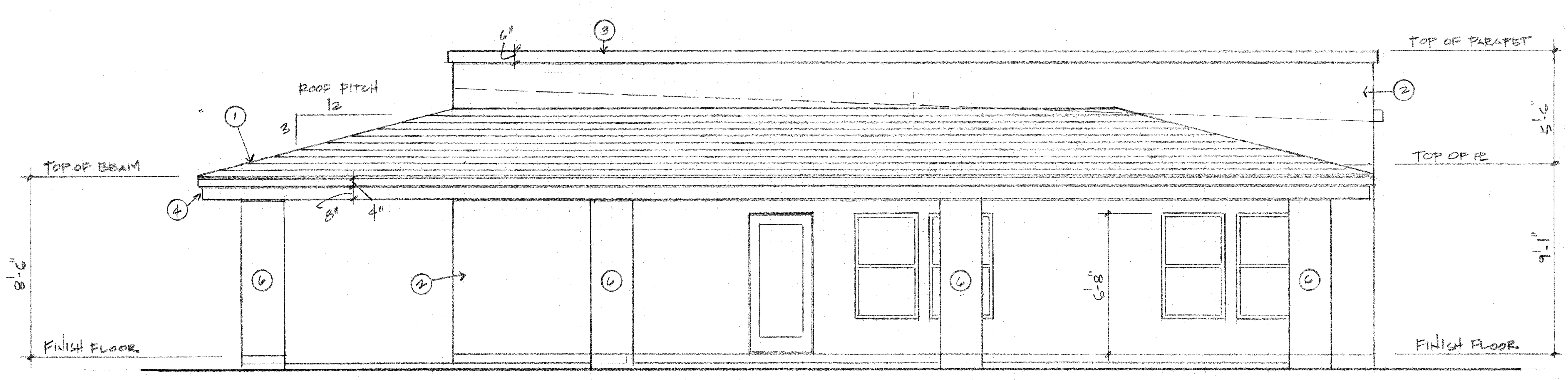
WEST SIDE ELEVATION
1/4"=1'-0"

Notes

1. G&F DIMENSIONAL SHINGES (ESR 1475)
2. WESTERN ONE KOTE STUCCO FINISH (ESR 1471)
3. PROJECT 2"
4. STUCCO FINISH ON FRAME SOFFIT
5. 6"x6" SCUPPER - PROJECT 6"
6. STUCCO FINISH ON FRAME COLUMN



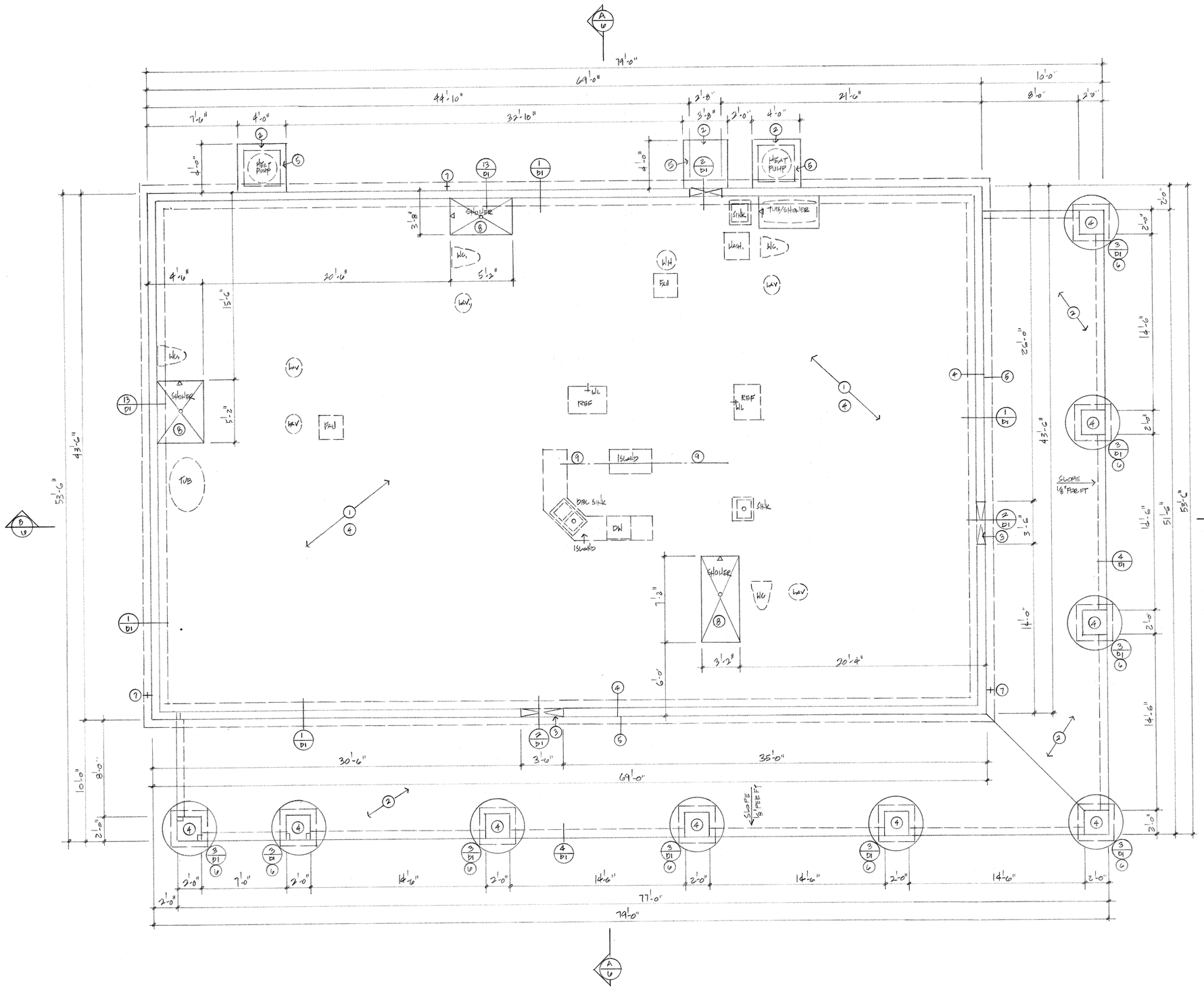
SOUTH SIDE ELEVATION
1/4"=1'-0"



EAST SIDE ELEVATION
1/4"=1'-0"

SHEET

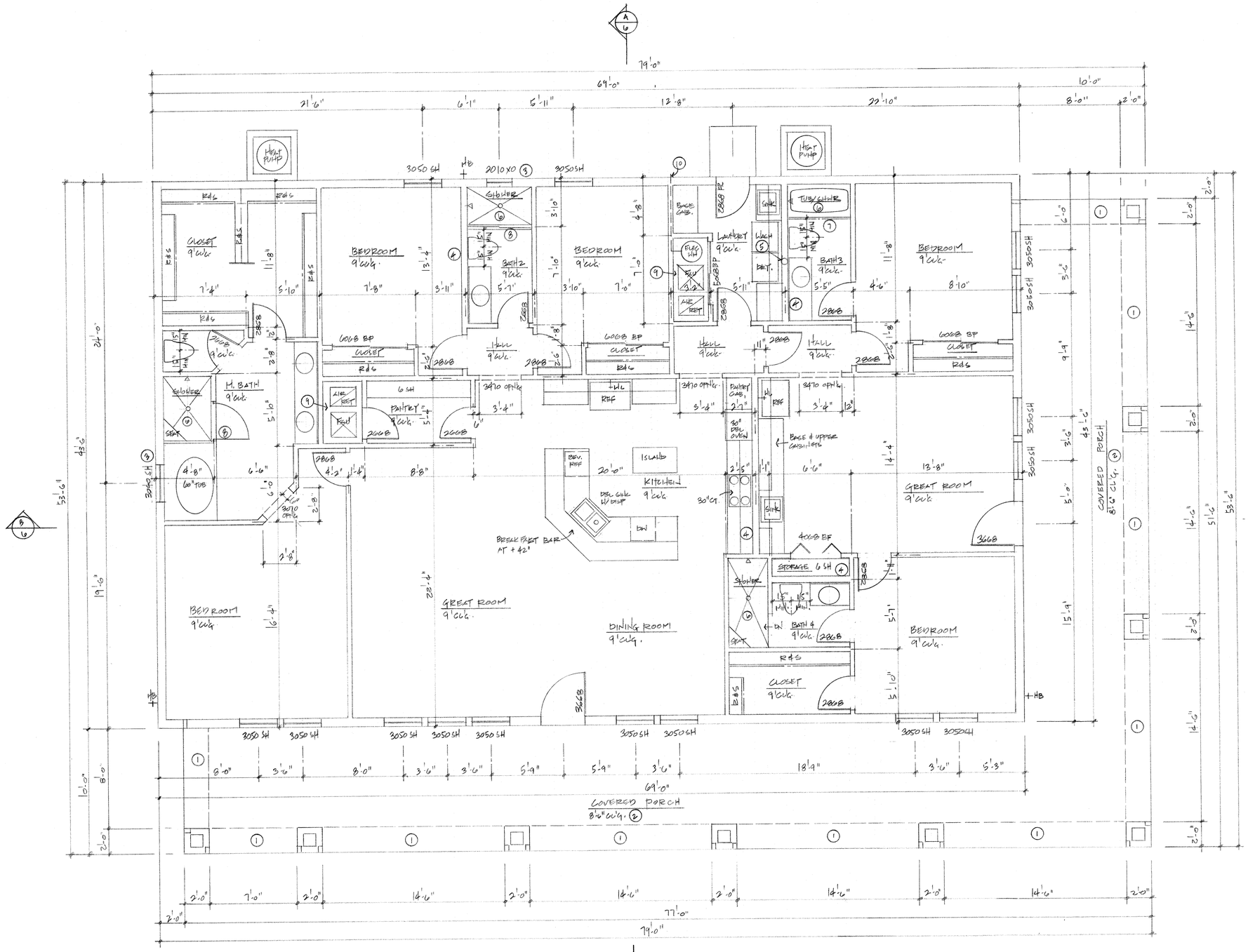
2



FOUNDATION PLAN
1/4" = 1'-0"

NOTES
1. 4" THICK CONCRETE SLAB ON MINIMUM 4" THICK A.B.C. FILL WITH 5 YEAR TERMITE PROTECTION
2. 4" THICK CONCRETE SLAB
3. DEPRESS STEM 6"
4. 0'-0" ELEVATION
5. -2" ELEVATION
6. 30"x30"x12" FOOTING WITH (4) #4 HOOPS EACH WAY
7. HOSE BIBB
8. RECESSED SHOWER PAN
9. PVC UG. ELECTRICAL CONDUIT

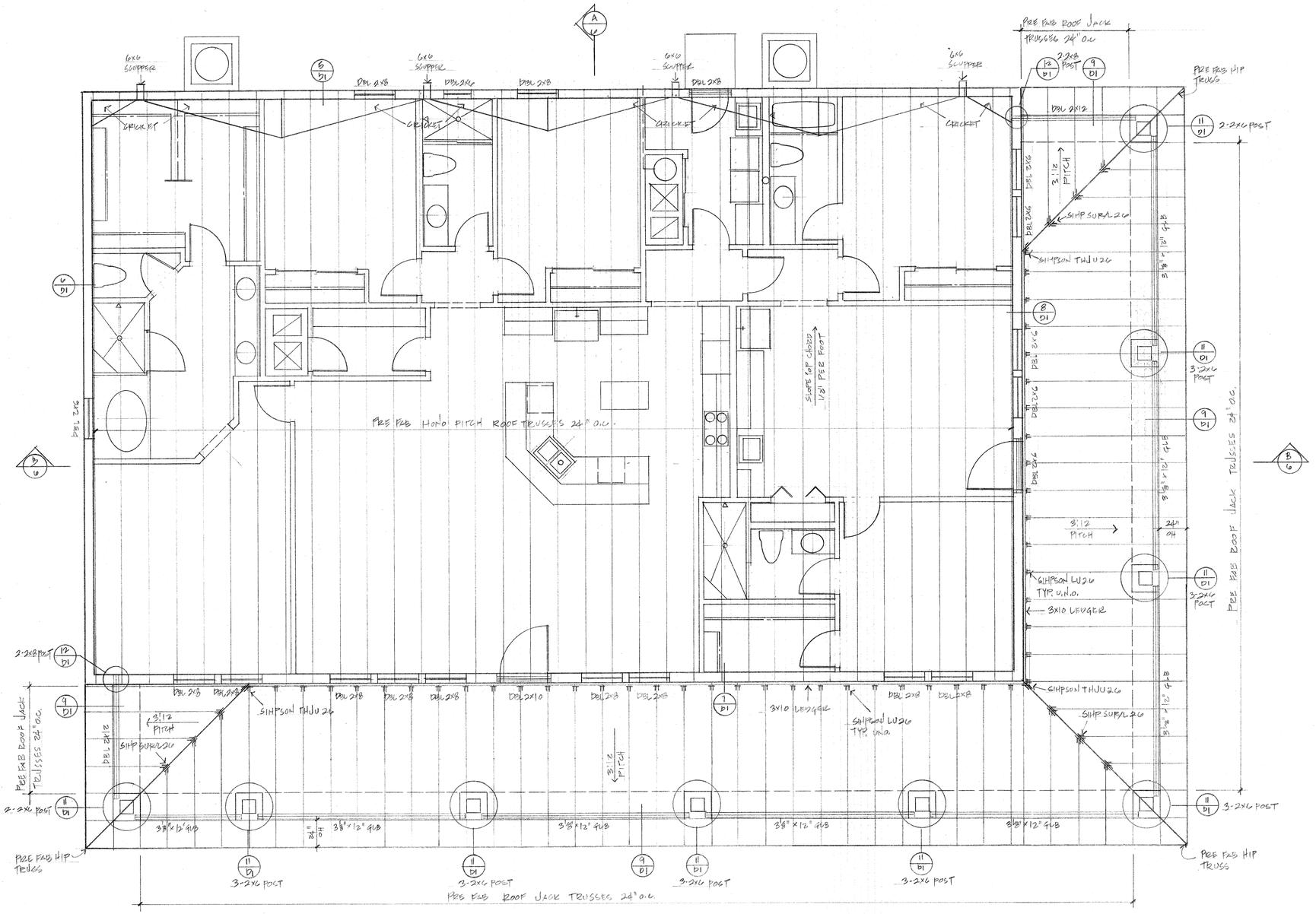
SHEET 3



FLOOR PLAN
1/4"=1'0"

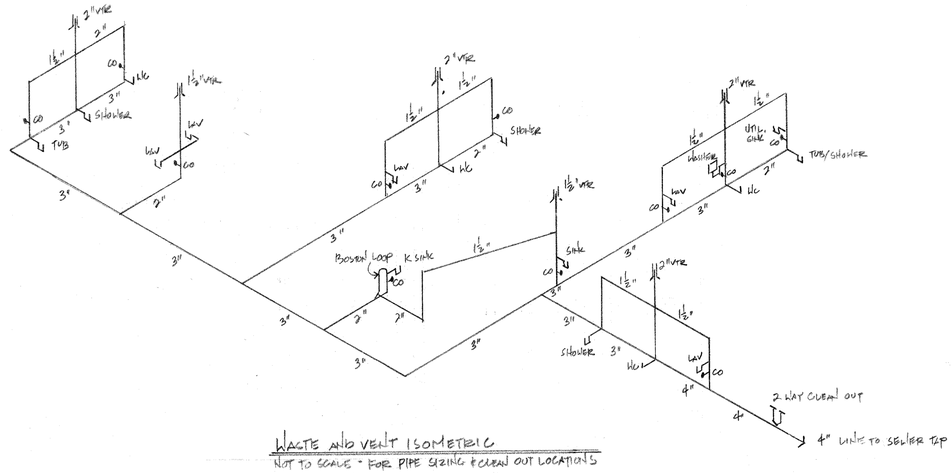
NOTES
1. FRAME SOFFIT W/ STUCCO FINISH
2. 1/2" SAG RESISTANT EXTERIOR GRADE SOFFIT BOARD
3. TEMPERED GLASS
4. 2X6 STUD WALL
5. 4" Ø DVTR
6. PROVIDE WATER PROOF SURROUND TO MINIMUM 6'0" AFF
7. SHOWER CURTAIN
8. TEMPERED GLASS SHOWER DOOR & ENCLOSURE
9. FRAME PLATFORM AT 1'6" AFF
10. 3/4" Ø T&P RELIEF LINE

SQUARE FOOTAGE
3201 SF LIVABLE
1190 SF COVERED PORCH
4191 SF TOTAL UNDER ROOF

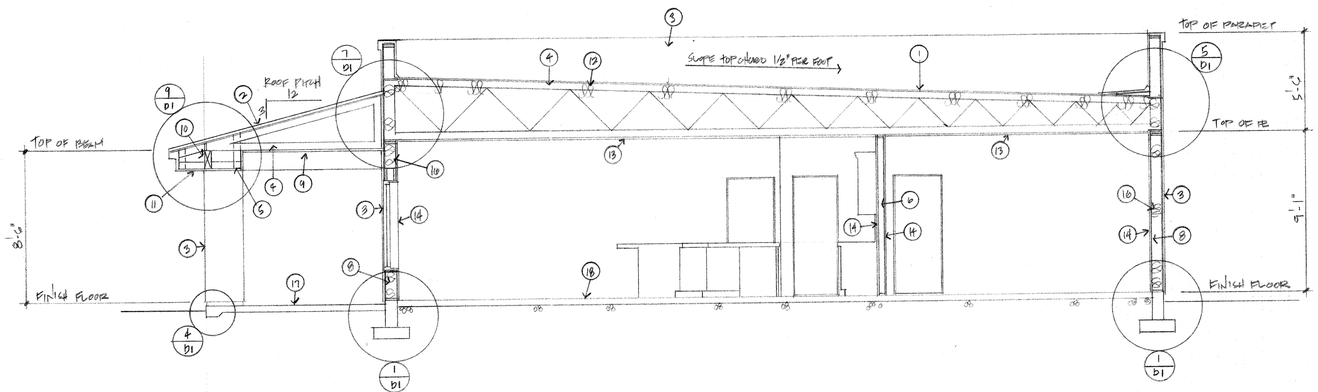


ROOF FRAMING PLAN

1/4" = 1'-0"



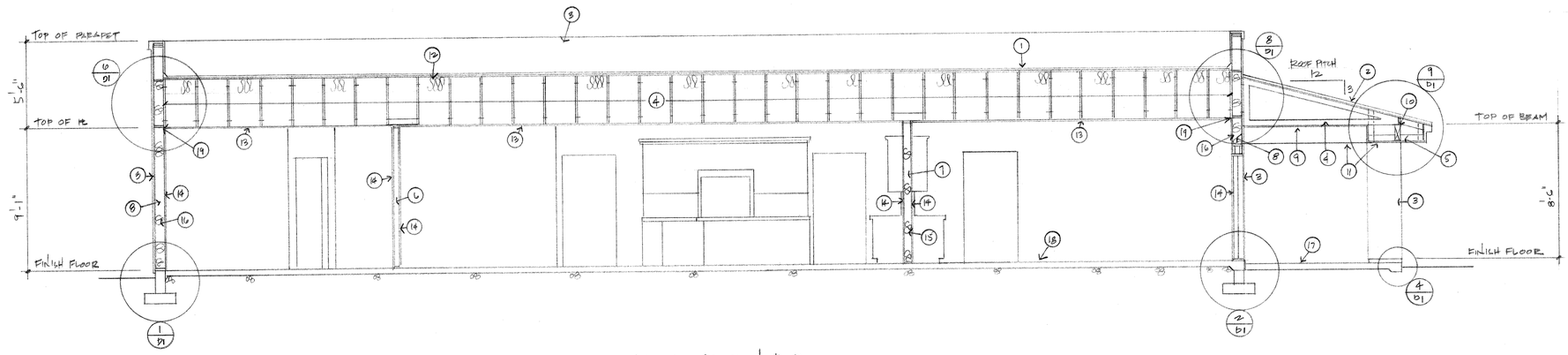
WASTE AND VENT ISOMETRIC
NOT TO SCALE - FOR PIPE SIZING & CLEAN OUT LOCATIONS



CROSS SECTION A-A
1/4"=1'-0"

Notes

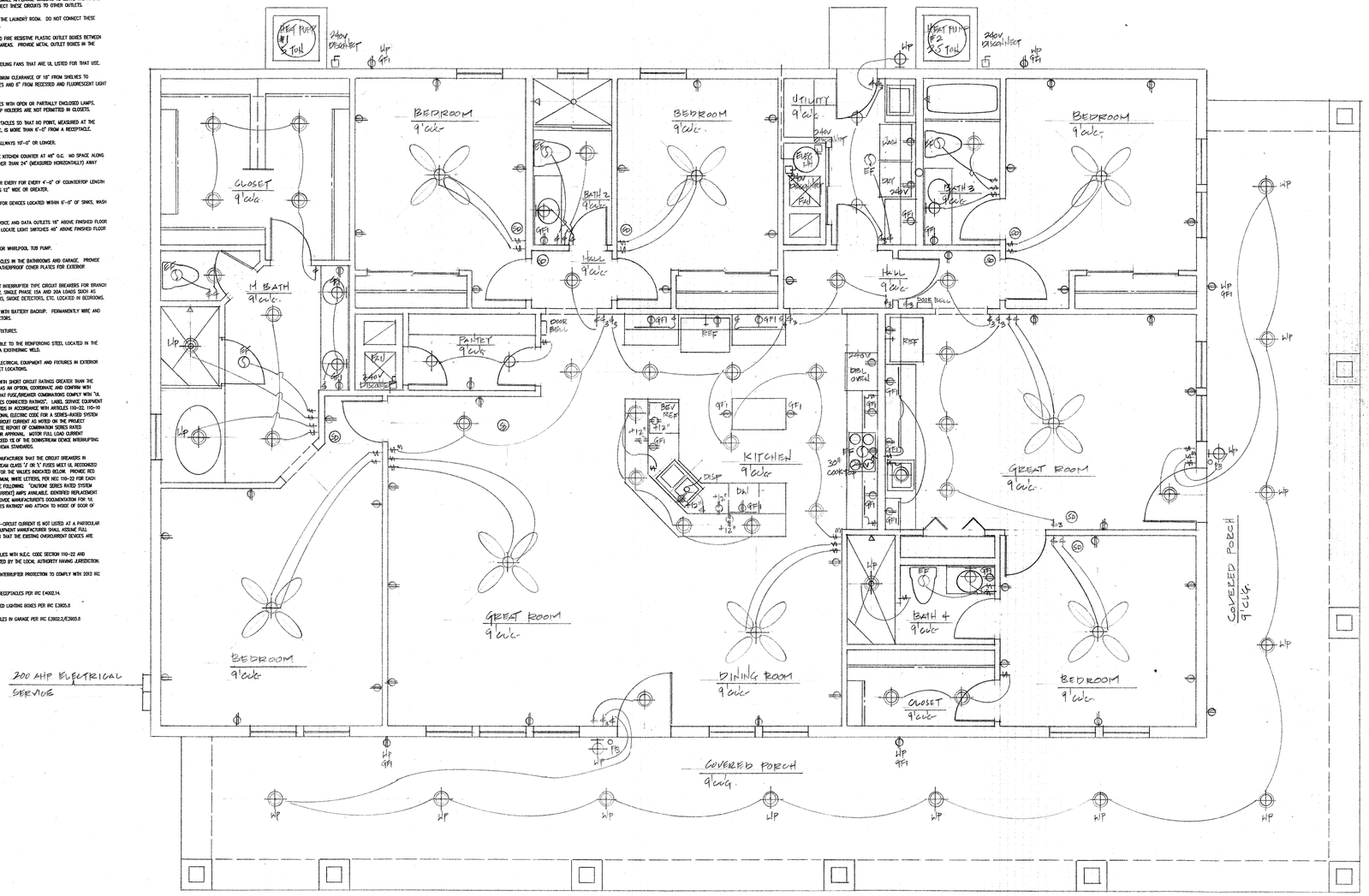
1. 3 PLY BUILT-UP ROOFING ON 1/2" OSB ROOF SHEATHING
2. DIMENSIONAL FIBERGLASS SHINGLES ON 30# ROOFING PAPER ON 1/2" OSB ROOF SHEATHING (GAF FIBERGLASS ESR 1475)
3. WESTERN ONE KOTE STUCCO (ESR 1471) ON 1" EPS INSULATION BOARD ON TYVEK (ESR 1993) ON 3/8" OSB SHEATHING
4. PRE ENG ROOF TRUSSES AT 24" O.C.
5. 2X6 FRAMING 24" O.C.
6. 2X4 STUDS 24" O.C.
7. 2X6 STUDS 24" O.C.
8. 2X8 STUDS 16" O.C.
9. 1/2" EXTERIOR GRADE SOFFIT BOARD (ESR 1338)
10. WOOD BEAM PER PLAN
11. STUCCO ON FRAME SOFFIT
12. R38 ICYNENE INSULATION (ESR 1826) ON UNDERSIDE OF ROOF SHEATHING
13. 1/2" GAS RESISTANT GYPSUM BOARD AT CEILING
14. 1/2" GYPSUM BOARD AT INTERIOR WALLS
15. R-19 INSULATION
16. R-25 INSULATION
17. 4" THICK CONCRETE SLAB
18. 4" THICK CONCRETE SLAB ON MINIMUM 4" THICK A.B.C. FILL W/ 5 YEAR TERMITE PROTECTION
19. 2X8 FIRE STOP



CROSS SECTION B-B
1/4"=1'-0"

ELECTRICAL GENERAL NOTES

1. COMPLY WITH THE LATEST EDITION OF THE NATIONAL ELECTRICAL CODE ADOPTED BY THE LOCAL MUNICIPALITY.
2. PROVIDE AT LEAST (2) 20A SMALL APPLIANCE CIRCUITS TO SERVE THE KITCHEN AND PANTRY. DO NOT CONNECT THESE CIRCUITS TO OTHER OUTLETS.
3. PROVIDE (1) 20A CIRCUIT IN THE LAUNDRY ROOM. DO NOT CONNECT THESE CIRCUITS TO OTHER OUTLETS.
4. PROVIDE METAL OR UL LISTED FIRE RESISTIVE PLASTIC OUTLET BOXES BETWEEN THE GARAGE AND DWELLING AREAS. PROVIDE METAL OUTLET BOXES IN THE GARAGE CEILING.
5. PROVIDE BACK BOXES FOR CEILING FANS THAT ARE UL LISTED FOR THAT USE.
6. IN CLOSETS, MAINTAIN A MINIMUM CLEARANCE OF 15" FROM SHELVES TO INCANDESCENT LIGHT FIXTURES AND 6" FROM RECESSED AND FLUORESCENT LIGHT FIXTURES.
7. INCANDESCENT LIGHT FIXTURES WITH OPEN OR PARTIALLY ENCLOSED LAMPS, PENDANT FIXTURES AND LAMP HOLDERS ARE NOT PERMITTED IN CLOSETS.
8. LOCATE GENERAL USE RECEPTACLES SO THAT NO POINT, MEASURED AT THE WALL ALONG THE FLOOR LINE, IS MORE THAN 6'-0" FROM A RECEPTACLE.
9. PROVIDE RECEPTACLES IN HALLWAYS 10'-0" OR LONGER.
10. LOCATE RECEPTACLES ABOVE KITCHEN COUNTER AT 48" O.C. NO SPACE ALONG THE COUNTER WILL BE FURTHER THAN 24" (MEASURED HORIZONTALLY) AWAY FROM A RECEPTACLE.
11. PROVIDE (1) RECEPTACLE FOR EVERY FOR EVERY 4'-0" OF COUNTERTOP LENGTH FOR ISLANDS OR PENINSULAS 12" WIDE OR GREATER.
12. PROVIDE GFCI RECEPTACLES FOR DEVICES LOCATED WITHIN 6'-0" OF SINKS, WASH BASINS, TUBS OR SHOWERS.
13. LOCATE RECEPTACLES AND VOICE AND DATA OUTLETS 15" ABOVE FINISHED FLOOR UNLESS NOTED OTHERWISE. LOCATE LIGHT SWITCHES 48" ABOVE FINISHED FLOOR UNLESS NOTED OTHERWISE.
14. PROVIDE GFCI RECEPTACLE FOR WHIRLPOOL TUB PUMP.
15. PROVIDE GFCI TYPE RECEPTACLES IN THE BATHROOMS AND GARAGE. PROVIDE GFCI TYPE DEVICES WITH WEATHERPROOF COVER PLATES FOR EXTERIOR RECEPTACLES.
16. PROVIDE ARC-FAULT CIRCUIT INTERRUPTER TYPE CIRCUIT BREAKERS FOR BRANCH CIRCUITS THAT SUPPLY 120V, SINGLE PHASE 15A AND 20A LOADS SUCH AS RECEPTACLES, LIGHTING, FANS, SMOKE DETECTORS, ETC. LOCATED IN BEDROOMS.
17. PROVIDE SMOKE DETECTORS WITH BATTERY BACKUP. PERMANENTLY WIRE AND INTERCONNECT SMOKE DETECTORS.
18. PROVIDE LAMPS FOR LIGHT FIXTURES.
19. CONNECT A#4 GROUNDING CABLE TO THE REINFORCING STEEL LOCATED IN THE BOTTOM OF THE FOOTING VIA EXOTHERMIC WELD.
20. PROVIDE WEATHER PROOF ELECTRICAL EQUIPMENT AND FIXTURES IN EXTERIOR LOCATIONS AND INTERIOR WET LOCATIONS.
21. PROVIDE NEW PANELBOARDS WITH SHORT CIRCUIT RATINGS GREATER THAN THE AVAILABLE FAULT CURRENT. AS AN OPTION, COORDINATE AND CONFIRM WITH EQUIPMENT MANUFACTURER THAT FUSE/BREAKER COMBINATIONS COMPLY WITH "UL COMPONENT RECOGNIZED SERIES CONNECTED RATINGS". LABEL SERVICE EQUIPMENT SWITCHBOARD AND PANELBOARDS IN ACCORDANCE WITH ARTICLES 110-22, 110-10 AND 240-83(D) OF THE NATIONAL ELECTRIC CODE FOR A SERIES-RATED SYSTEM WITH AN AVAILABLE SHORT-CIRCUIT CURRENT AS NOTED ON THE PROJECT DOCUMENTS. SUBMIT COMPLETE REPORT OF COMBINATION SERIES RATED COMPONENTS TO OWNER FOR APPROVAL. MOTOR FULL LOAD CURRENT CONTRIBUTION SHALL NOT EXCEED 1% OF THE DOWNSTREAM DEVICE INTERRUPTING RATING IN COMPLIANCE WITH NEMA STANDARDS.
22. VERIFY WITH PANELBOARD MANUFACTURER THAT THE CIRCUIT BREAKERS IN COMBINATION WITH THE UPSTREAM CLASS "J" OR "L" FUSES MEET UL RECOGNIZED SERIES CONNECTED RATINGS FOR THE VALUES INDICATED BELOW. PROVIDE RED PLASTIC LABELS WITH ¾" MINIMAL WHITE LETTERS, PER NEC 110-22 FOR EACH PANELBOARD WHICH READ THE FOLLOWING: "CAUTION SERIES RATED SYSTEM XXK/YXK, [INDICATE FAULT CURRENT] AMPS AVAILABLE. IDENTIFIED REPLACEMENT COMPONENTS REQUIRED." PROVIDE MANUFACTURER'S DOCUMENTATION FOR "UL COMPONENT RECOGNIZED SERIES RATINGS" AND ATTACH TO INSIDE OF DOOR OF PANEL IN PROTECTIVE COVER.
23. WHERE THE AVAILABLE SHORT-CIRCUIT CURRENT IS NOT LISTED AT A PARTICULAR EQUIPMENT LOCATION, THE EQUIPMENT MANUFACTURER SHALL ASSUME FULL RESPONSIBILITY FOR ENSURING THAT THE EXISTING OVERCURRENT DEVICES ARE PROPERLY APPLIED.
24. PROVIDE SYSTEM WHICH COMPLIES WITH N.E.C. CODE SECTION 110-22 AND 240-83(D) AND AS INTERPRETED BY THE LOCAL AUTHORITY HAVING JURISDICTION.
25. PROVIDE ARC FAULT CIRCUIT INTERRUPTER PROTECTION TO COMPLY WITH 2012 IRC E3902.12.
26. PROVIDE TAMPER RESISTANT RECEPTACLES PER IRC E4002.14.
27. PROVIDE FAN RATED PRE-WIRED LIGHTING BOXES PER IRC E3905.8
28. PROVIDE GFCI TYPE RECEPTACLES IN GARAGE PER IRC E3902.2/E3905.8



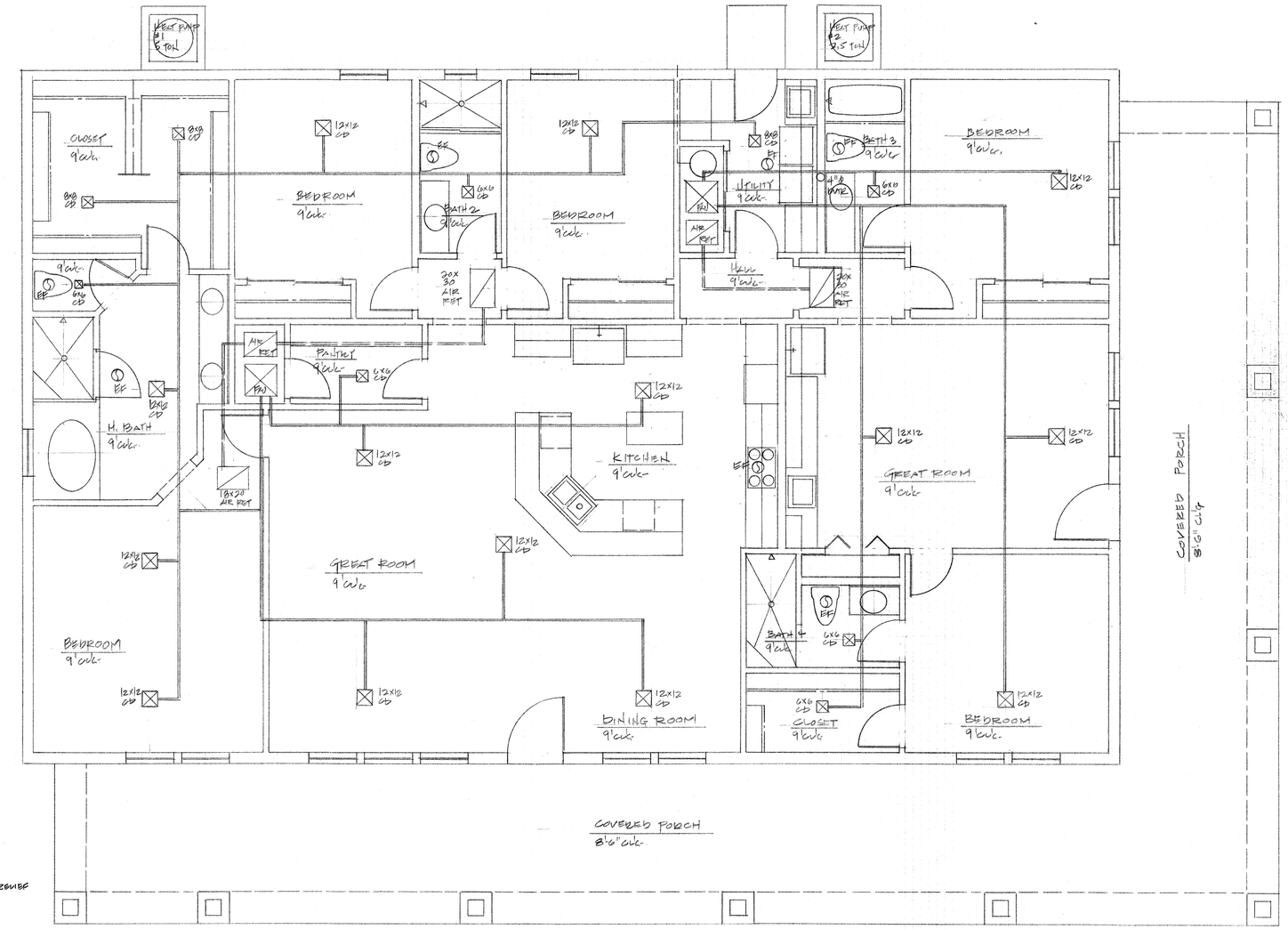
ELECTRICAL PLAN
1/4"=1'-0"

ELECTRICAL LOAD CALCULATIONS

GENERAL LIGHTING & RECEPT	3001	×	3	9003 VA
KITCHEN & SMALL APPLIANCE	3	×	1500	4500 VA
DISHWASHER	1	×	1500	1500 VA
DISPOSAL	1	×	1000	1000 VA
COOKTOP	1	×	6500	6500 VA
DOUBLE OVEN	1	×	12000	12,000 VA
MICROWAVE	1	×	1200	1200 VA
DRYER	1	×	5000	5000 VA
LAUNDRY	1	×	1500	1500 VA
WATER HEATER	1	×	4500	4500 VA

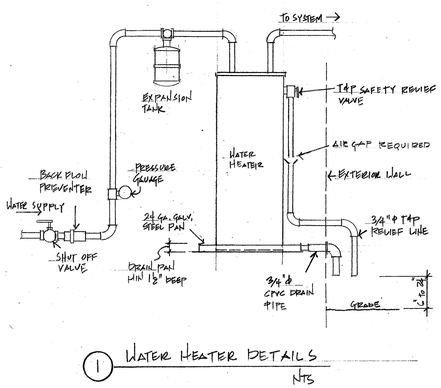
TOTAL CONNECTED		46703 VA
1ST 10,000 AT 100%		10000 VA
REMAINING AT 40%		14681 VA
TOTAL DEMAND		24,681 VA
HVAC 1 5 TON		7800 VA
FAU 1		1302 VA
HVAC 2 2.5 TON		3900 VA
FAU 2		661 VA
TOTAL		38,324 VA
38,324 ÷ 240V		159 AMPS
SERVICE PROVIDED		200 AMPS

SHEET
E1



MECHANICAL PLAN

1/4"=1'-0"



1 WATER HEATER DETAILS

NTS

TABLE M1502.4.4.1
DRYER EXHAUST DUCT FITTING EQUIVALENT LENGTH

DRYER EXHAUST DUCT FITTING TYPE	EQUIVALENT LENGTH
4 inch radius mitered 45 degree elbow	2 feet 6 inches
4 inch radius mitered 90 degree elbow	5 feet
6 inch radius smooth 45 degree elbow	1 foot
6 inch radius smooth 90 degree elbow	1 foot 9 inches
8 inch radius smooth 45 degree elbow	1 foot
8 inch radius smooth 90 degree elbow	1 foot 7 inches
10 inch radius smooth 45 degree elbow	9 inches
10 inch radius smooth 90 degree elbow	1 foot 6 inches

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 degree = 0.0175 rad.

BATHROOM FAN SIZING CHART

Bathroom Size (L x W x H)	Equivalent Duct Length (Feet)									
	10 ft.	20 ft.	30 ft.	40 ft.	50 ft.	60 ft.	70 ft.	80 ft.	90 ft.	100 ft.
400 cu. ft.	60 cfm	60 cfm	60 cfm	60 cfm	60 cfm	60 cfm	60 cfm	60 cfm	60 cfm	60 cfm
480 cu. ft.	60 cfm	60 cfm	60 cfm	60 cfm	60 cfm	70 cfm	90 cfm	90 cfm	90 cfm	90 cfm
560 cu. ft.	70 cfm	70 cfm	90 cfm	90 cfm	110 cfm	110 cfm	110 cfm	150 cfm	150 cfm	150 cfm
640 cu. ft.	90 cfm	90 cfm	90 cfm	90 cfm	110 cfm	110 cfm	110 cfm	150 cfm	150 cfm	150 cfm
730 cu. ft.	90 cfm	90 cfm	110 cfm	110 cfm	110 cfm	150 cfm	150 cfm	150 cfm	190 cfm	190 cfm
800 cu. ft.	110 cfm	110 cfm	110 cfm	150 cfm	150 cfm	150 cfm	190 cfm	190 cfm	190 cfm	190 cfm
1,120 cu. ft.	150 cfm	150 cfm	190 cfm	190 cfm	190 cfm	190 cfm	190 cfm	190 cfm	190 cfm	190 cfm
1,440 cu. ft.	190 cfm	190 cfm	190 cfm	290 cfm	290 cfm	290 cfm	290 cfm	290 cfm	290 cfm	290 cfm
1,920 cu. ft.	290 cfm	290 cfm	290 cfm	290 cfm	290 cfm	290 cfm	290 cfm	380 cfm	380 cfm	380 cfm
2,400 cu. ft.	290 cfm	380 cfm	380 cfm	380 cfm	380 cfm	380 cfm	380 cfm	380 cfm	380 cfm	380 cfm

SECTION M1501
GENERAL

M1501.1 Outdoor discharge. The air removed by every mechanical exhaust system shall be discharged to the outdoors in accordance with Section M1506.2. Air shall not be exhausted into an attic, soffit, ridge vent or crawl space.

Exception: Whole-house *ventilation*-type *attic* fans that discharge into the *attic* space of *dwelling units* having private *attics* shall be permitted.

SECTION M1502
CLOTHES DRYER EXHAUST

M1502.1 General. Clothes dryers shall be exhausted in accordance with the manufacturer's instructions.

M1502.2 Independent exhaust systems. Dryer exhaust systems shall be independent of all other systems and shall convey the moisture to the outdoors.

Exception: This section shall not apply to *listed* and *labeled* condensing (ductless) clothes dryers.

M1502.3 Duct termination. Exhaust ducts shall terminate on the outside of the building. Exhaust duct terminations shall be in accordance with the dryer manufacturer's installation instructions. If the manufacturer's instructions do not specify a termination location, the exhaust duct shall terminate not less than 3 feet (914 mm) in any direction from openings into buildings. Exhaust duct terminations shall be equipped with a backdraft damper. Screens shall not be installed at the duct termination.

M1502.4 Dryer exhaust ducts. Dryer exhaust ducts shall conform to the requirements of Sections M1502.4.1 through M1502.4.6.

M1502.4.1 Material and size. Exhaust ducts shall have a smooth interior finish and be constructed of metal having a minimum thickness of 0.0157 inches (0.3950 mm) (No. 28 gage). The duct shall be 4 inches (102 mm) nominal in diameter.

M1502.4.2 Duct installation. Exhaust ducts shall be supported at intervals not to exceed 12 feet (3658 mm) and shall be secured in place. The insert end of the duct shall extend into the adjoining duct or fitting in the direction of airflow. Exhaust duct joints shall be sealed in accordance with Section M1601.4.1 and shall be mechanically fastened. Ducts shall not be joined with screws or similar fasteners that protrude more than $^{1}/_{4}$ inch (3.2 mm) into the inside of the duct.

M1502.4.3 Transition duct. Transition ducts used to connect the dryer to the exhaust *duct system* shall be a single length that is *listed* and *labeled* in accordance with UL 2158A. Transition ducts shall be a maximum of 8 feet (2438 mm) in length. Transition ducts shall not be concealed within construction.

M1502.4.4 Duct length. The maximum allowable exhaust duct length shall be determined by one of the methods specified in Section M1502.4.4.1 or M1502.4.4.2.

M1502.4.4.1 Specified length. The maximum length of the exhaust duct shall be 35 feet (10 668 mm) from the connection to the transition duct from the dryer to the outlet terminal. Where fittings are used, the maximum length of the exhaust duct shall be reduced in accordance with Table M1502.4.4.1. The maximum length of the exhaust duct does not include the transition duct.

M1502.4.4.2 Manufacturer's instructions. The size and maximum length of the exhaust duct shall be determined by the dryer manufacturer's installation instructions. The code official shall be provided with a copy of the installation instructions for the make and model of the dryer at the concealment inspection. In the absence of fitting equivalent length calculations from the clothes dryer manufacturer, Table M1502.4.4.1 shall be used.

M1502.4.5 Length identification. Where the exhaust duct is concealed within the building construction, the equivalent length of the exhaust duct shall be identified on a permanent label or tag. The label or tag shall be located within 6 feet (1829 mm) of the exhaust duct connection.

M1502.4.6 Exhaust duct required. Where space for a clothes dryer is provided, an exhaust *duct system* shall be installed. Where the clothes dryer is not installed at the time of occupancy the exhaust duct shall be capped or plugged in the space in which it originates and identified and marked "future use."

Exception: Where a *listed* condensing clothes dryer is installed prior to occupancy of the structure.

M1502.5 Protection required. Protective shield plates shall be placed where nails or screws from finish or other work are likely to penetrate the clothes dryer exhaust duct. Shield plates shall be placed on the finished face of all framing members where there is less than $1^{1}/_{4}$ inches (32 mm) between the duct and the finished face of the framing member. Protective shield plates shall be constructed of steel, shall have a minimum thickness of 0.062-inch (1.6 mm) and shall extend a minimum of 2 inches (51 mm) above sole plates and below top plates.

SECTION M1503
RANGE HOODS

M1503.1 General. Range hoods shall discharge to the outdoors through a single-wall duct. The duct serving the hood shall have a smooth interior surface, shall be air tight, shall be equipped with a back-draft damper, and shall be independent of all other exhaust systems. Ducts serving range hoods shall not terminate in an attic or crawl space or areas inside the building.

Exception: Where installed in accordance with the manufacturer's installation instructions, and where mechanical or natural *ventilation* is otherwise provided, *listed* and *labeled* ductless range hoods shall not be required to discharge to the outdoors.

M1503.2 Duct material. Single-wall ducts serving range hoods shall be constructed of galvanized steel, stainless steel or copper.

Exception: Ducts for domestic kitchen cooking *appliances* equipped with down-draft exhaust systems shall be permitted to be constructed of schedule 40 PVC pipe and fittings provided that the installation complies with all of the following:

1. The duct is installed under a concrete slab poured on grade;
2. The underfloor trench in which the duct is installed is completely backfilled with sand or gravel;
3. The PVC duct extends not more than 1 inch (25 mm) above the indoor concrete floor surface;
4. The PVC duct extends not more than 1 inch (25 mm) above grade *outside of the building;* and
5. The PVC ducts are solvent cemented.

M1503.3 Kitchen exhaust rates. Where domestic kitchen cooking *appliances* are equipped with ducted range hoods or down-draft exhaust systems, the fans shall be sized in accordance with Section M1507.4.

M1503.4 Makeup air required. Exhaust hood systems capable of exhausting in excess of 400 cubic feet per minute (0.19 m^3/s) shall be provided with makeup air at a rate approximately equal to the exhaust air rate. Such makeup air systems shall be equipped with a means of closure and shall be automatically controlled to start and operate simultaneously with the exhaust system.

SECTION M1504
INSTALLATION OF MICROWAVE OVENS

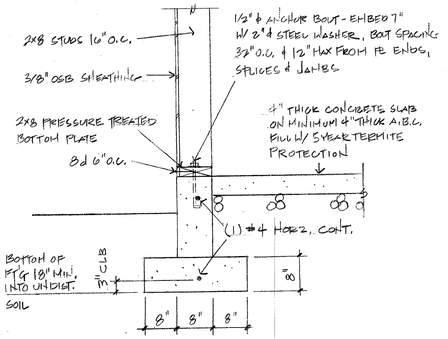
M1504.1 Installation of a microwave oven over a cooking appliance. The installation of a *listed* and *labeled* cooking *appliance* or microwave oven over a *listed and labeled* cooking *appliance* shall conform to the terms of the upper *appliance's listing* and *label* and the manufacturer's installation instructions. The microwave oven shall conform to UL 923.

SECTION M1506
EXHAUST DUCTS AND EXHAUST OPENINGS

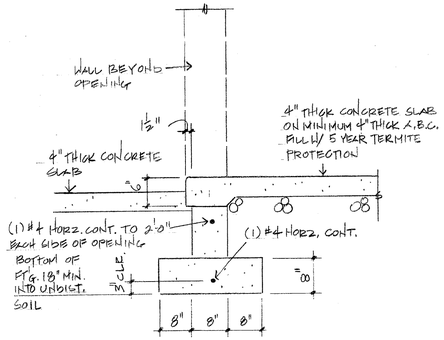
M1506.1 Ducts. Where exhaust duct construction is not specified in this chapter, construction shall comply with Chapter 16.

M1506.2 Exhaust openings. Air exhaust openings shall terminate not less than 3 feet (914 mm) from property lines; 3 feet (914 mm) from operable and nonoperable openings into the building and 10 feet (3048 mm) from mechanical air intakes except where the opening is located 3 feet (914 mm) above the air intake. Openings shall comply with Sections R303.5.2 and R303.6.

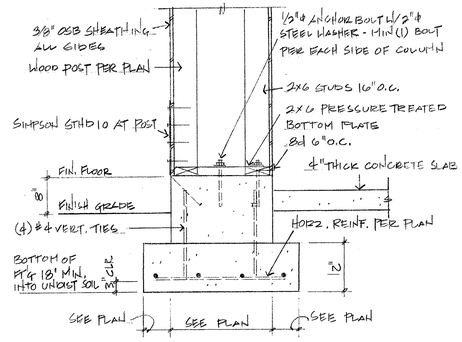
SHEET M1



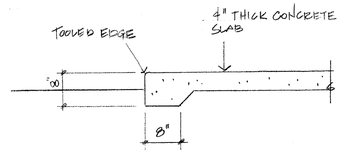
1 FOOTING AT FRAMED WALL
NTS



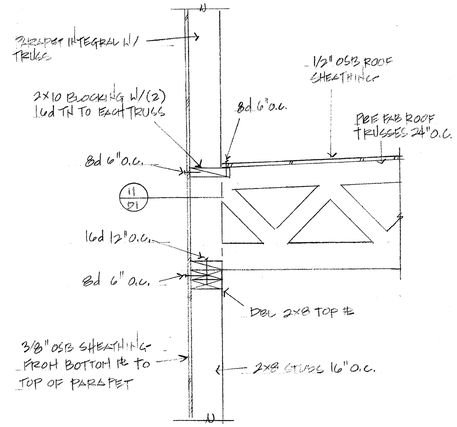
2 FOOTING AT DEPRESSED STEM
NTS



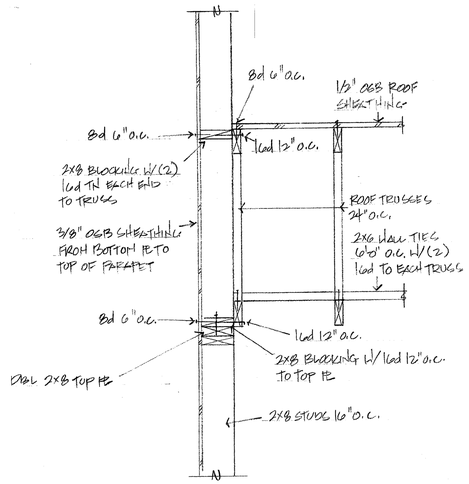
3 FOOTING AT FRAMED COLUMN
NTS



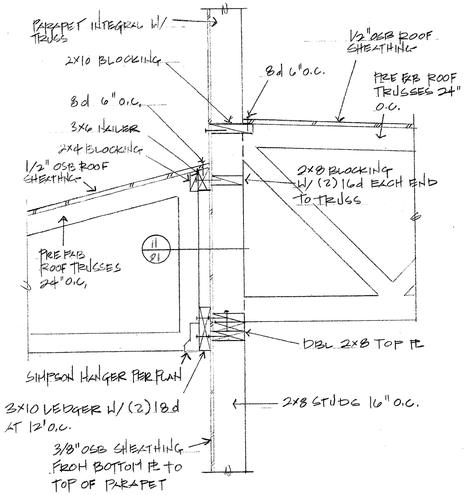
4 TURNDOWN AT SLAB EDGE
NTS



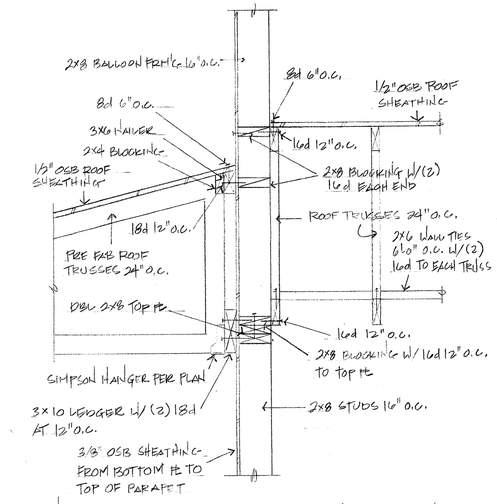
5 FLAT ROOF TRUSSES PERPENDICULAR TO WALL
NTS



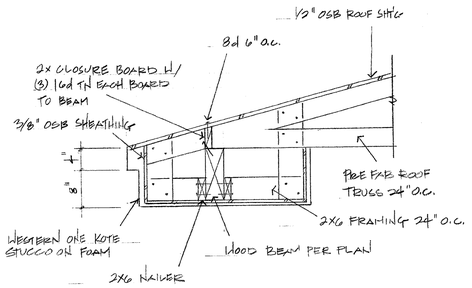
6 FLAT ROOF TRUSSES PARALLEL TO WALL
NTS



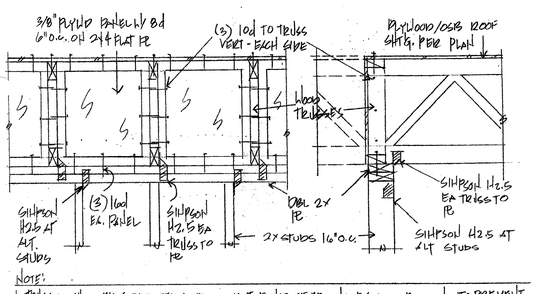
7 JACK TRUSSES AND FLAT ROOF TRUSSES PARALLEL
NTS



8 JACK TRUSSES AND FLAT ROOF TRUSSES PERPENDICULAR
NTS

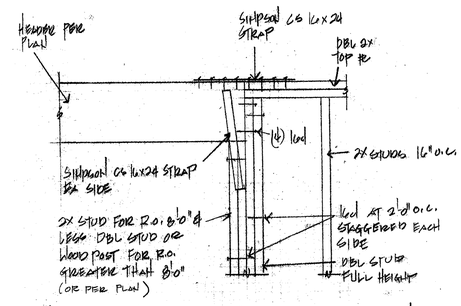


9 ROOF FRAMING AT PORCH EDGE
NTS

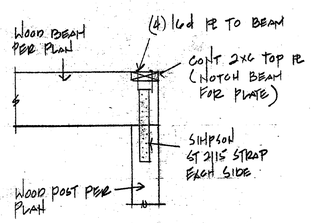


NOTE:
1. TRUSSES SHALL BE SUPPORTED LATERALLY AT POINTS OF BEARING BY SOLID BLOCKING TO PREVENT ROTATION AND LATERAL DISPLACEMENT.
2. PROVIDE FULL HEIGHT PLYWOOD/OSB BLOCKING PANELS AT TRUSSES BEARING POINTS FOR STUBBED TRUSSES, FLAT TRUSSES, AND AT INTERMEDIATE TRUSS BEARING POINTS

10 BLOCKING PANELS AT PREFAB WOOD TRUSSES
NTS

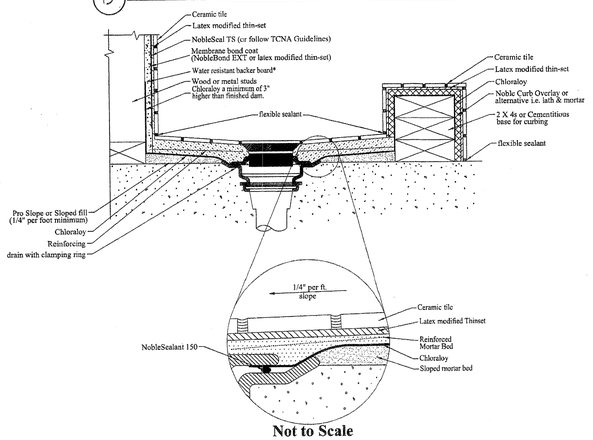


11 HEADER AT FRAME WALL & COLUMN
NTS



12 WOOD BEAM TO WOOD POST
NTS

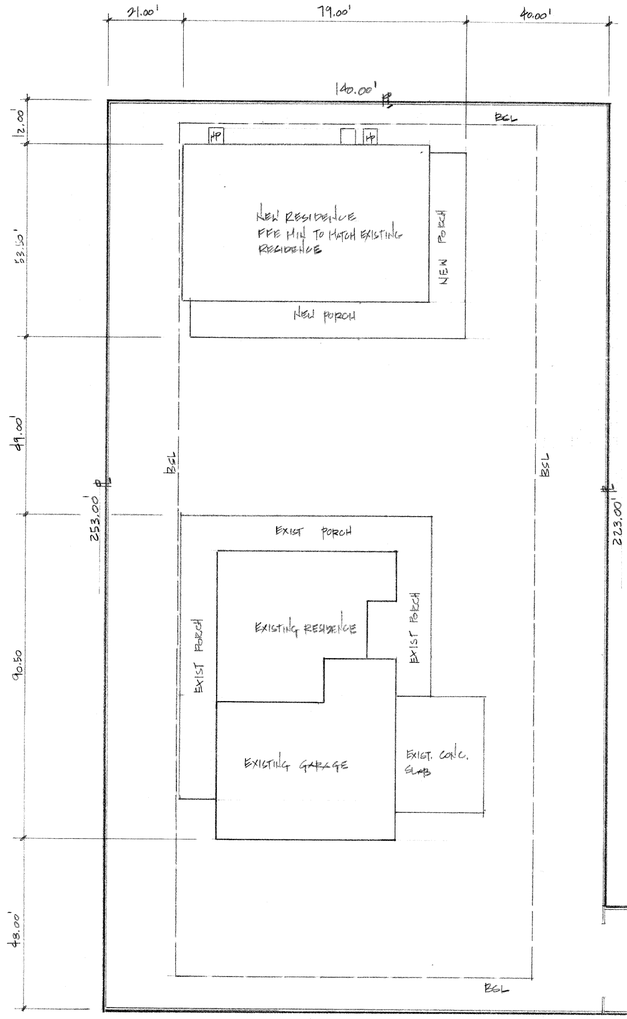
13 **Chloraloy, NobleSeal TS - Mortar Bed Shower Detail**



Not to Scale

*WATER RESISTANT BACKER BOARD RECOMMENDED BY MANUFACTURER FOR APPLICATION. INSTALL TO MANUFACTURER'S INSTRUCTIONS

SHEET
D1



SITE PLAN SCALE: 1" = 20.00'

OWNER INFORMATION

OWNER NAME:	MR. AND MRS. TOWNLEY
PROPERTY ADDRESS:	1402 N RECKER ROAD, MESA, AZ 85205
MAILING ADDRESS:	1402 N RECKER ROAD, MESA, AZ 85205

PROPERTY INFORMATION

JURISDICTION:	MESA
ZONING:	RS-7
LOT SIZE:	49,353

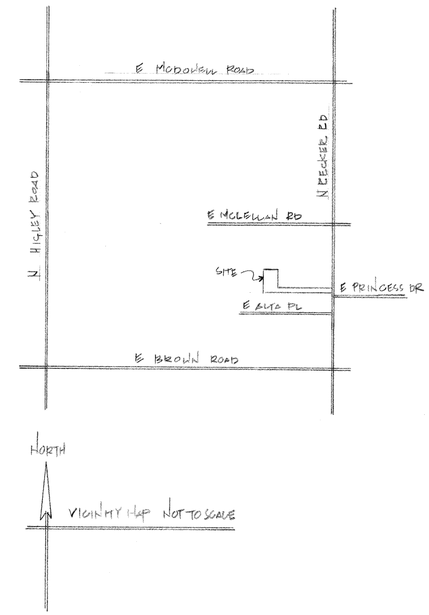
LOT COVERAGE

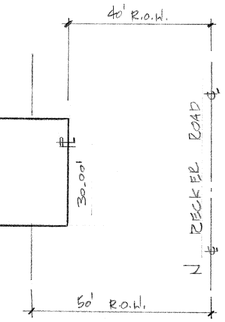
EXISTING RESIDENCE:	5840 SF
NEW RESIDENCE:	4191 SF
TOTAL	10031 SF

10,031 SF ÷ 49,353 SF = 20.30% (ACTUAL) 45% (ALLOWED)
MAXIMUM BUILDING HEIGHT: 15'0" (ACTUAL) 30'0" (ALLOWED)

SETBACKS

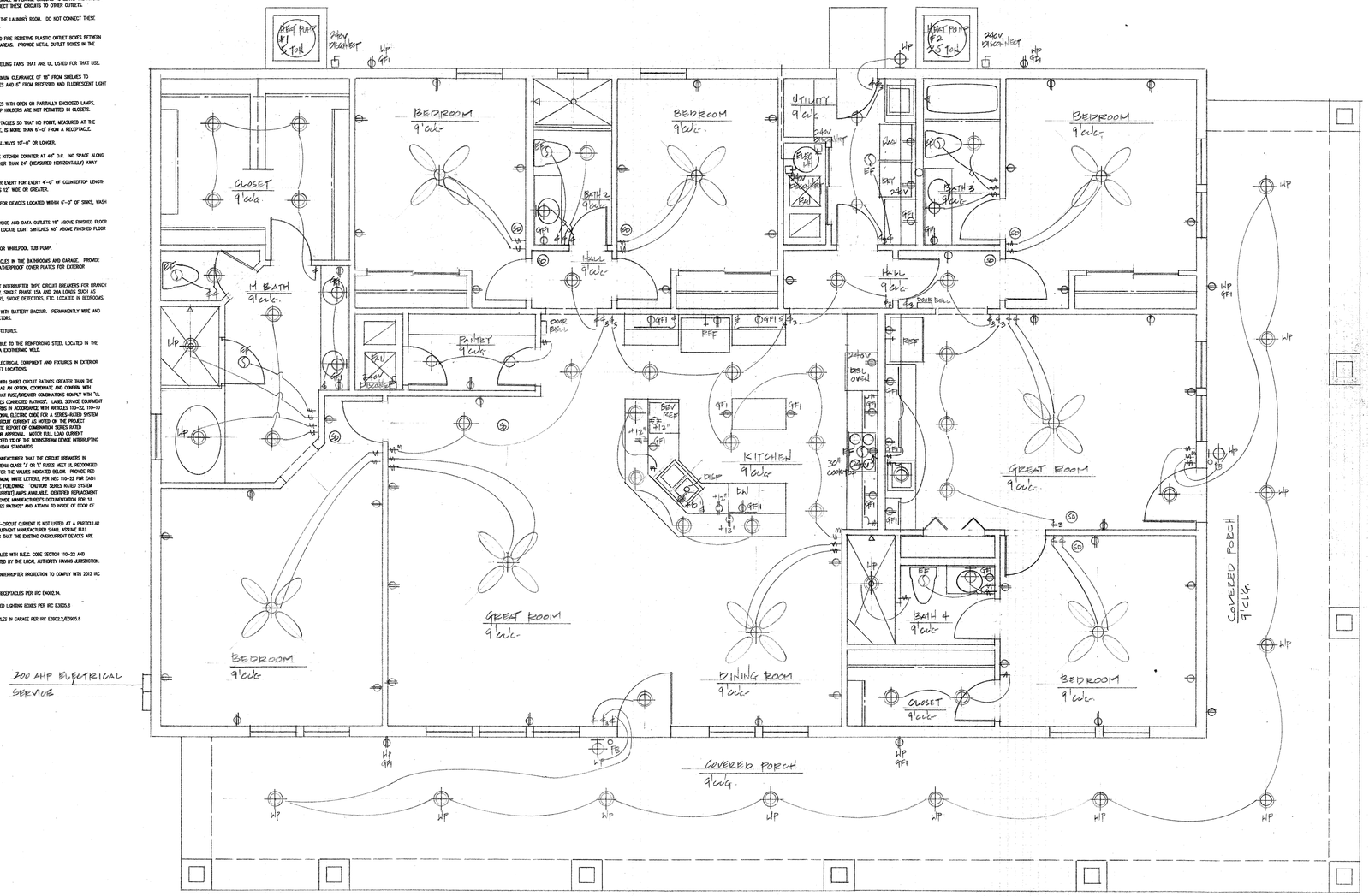
FRONT (ENCLOSED LIVABLE) :	10'
FRONT (GARAGE & CAR PORT) :	20'
SIDES:	10'/5'
REAR :	20'





ELECTRICAL GENERAL NOTES

1. COMPLY WITH THE LATEST EDITION OF THE NATIONAL ELECTRICAL CODE ADOPTED BY THE LOCAL MUNICIPALITY.
2. PROVIDE AT LEAST (2) 20A SMALL APPLIANCE CIRCUITS TO SERVE THE KITCHEN AND PANTRY. DO NOT CONNECT THESE CIRCUITS TO OTHER OUTLETS.
3. PROVIDE (1) 20A CIRCUIT IN THE LAUNDRY ROOM. DO NOT CONNECT THESE CIRCUITS TO OTHER OUTLETS.
4. PROVIDE METAL OR UL LISTED FIRE RESISTIVE PLASTIC OUTLET BOXES BETWEEN THE GARAGE AND DWELLING AREAS. PROVIDE METAL OUTLET BOXES IN THE GARAGE CEILING.
5. PROVIDE BACK BOXES FOR CEILING FANS THAT ARE UL LISTED FOR THAT USE.
6. IN CLOSETS, MAINTAIN A MINIMUM CLEARANCE OF 15" FROM SHELVES TO INCANDESCENT LIGHT FIXTURES AND 6" FROM RECESSED AND FLUORESCENT LIGHT FIXTURES.
7. INCANDESCENT LIGHT FIXTURES WITH OPEN OR PARTIALLY ENCLOSED LAMPS, PENDANT FIXTURES AND LAMP HOLDERS ARE NOT PERMITTED IN CLOSETS.
8. LOCATE GENERAL USE RECEPTACLES SO THAT NO POINT, MEASURED AT THE WALL ALONG THE FLOOR LINE, IS MORE THAN 6'-0" FROM A RECEPTACLE.
9. PROVIDE RECEPTACLES IN HALLWAYS 10'-0" OR LONGER.
10. LOCATE RECEPTACLES ABOVE KITCHEN COUNTER AT 48" O.C. NO SPACE ALONG THE COUNTER WILL BE FURTHER THAN 24" (MEASURED HORIZONTALLY) AWAY FROM A RECEPTACLE.
11. PROVIDE (1) RECEPTACLE FOR EVERY FOR EVERY 4'-0" OF COUNTERTOP LENGTH FOR ISLANDS OR PENINSULAS 12" WIDE OR GREATER.
12. PROVIDE GFCI RECEPTACLES FOR DEVICES LOCATED WITHIN 6'-0" OF SINKS, WASH BASINS, TUBS OR SHOWERS.
13. LOCATE RECEPTACLES AND VOICE AND DATA OUTLETS 15" ABOVE FINISHED FLOOR UNLESS NOTED OTHERWISE. LOCATE LIGHT SWITCHES 48" ABOVE FINISHED FLOOR UNLESS NOTED OTHERWISE.
14. PROVIDE GFCI RECEPTACLE FOR WHIRLPOOL TUB PUMP.
15. PROVIDE GFCI TYPE RECEPTACLES IN THE BATHROOMS AND GARAGE. PROVIDE GFCI TYPE DEVICES WITH WEATHERPROOF COVER PLATES FOR EXTERIOR RECEPTACLES.
16. PROVIDE ARC-FAULT CIRCUIT INTERRUPTER TYPE CIRCUIT BREAKERS FOR BRANCH CIRCUITS THAT SUPPLY 120V, SINGLE PHASE 15A AND 20A LOADS SUCH AS RECEPTACLES, LIGHTING, FANS, SMOKE DETECTORS, ETC. LOCATED IN BEDROOMS.
17. PROVIDE SMOKE DETECTORS WITH BATTERY BACKUP. PERMANENTLY WIRE AND INTERCONNECT SMOKE DETECTORS.
18. PROVIDE LAMPS FOR LIGHT FIXTURES.
19. CONNECT A#4 GROUNDING CABLE TO THE REINFORCING STEEL LOCATED IN THE BOTTOM OF THE FOOTING VIA EXOTHERMIC WELD.
20. PROVIDE WEATHER PROOF ELECTRICAL EQUIPMENT AND FIXTURES IN EXTERIOR LOCATIONS AND INTERIOR WET LOCATIONS.
21. PROVIDE NEW PANELBOARDS WITH SHORT CIRCUIT RATINGS GREATER THAN THE AVAILABLE FAULT CURRENT. AS AN OPTION, COORDINATE AND CONFIRM WITH EQUIPMENT MANUFACTURER THAT FUSE/BREAKER COMBINATIONS COMPLY WITH "UL COMPONENT RECOGNIZED SERIES CONNECTED RATINGS". LABEL SERVICE EQUIPMENT SWITCHBOARD AND PANELBOARDS IN ACCORDANCE WITH ARTICLES 110-22, 110-10 AND 240-83(D) OF THE NATIONAL ELECTRIC CODE FOR A SERIES-RATED SYSTEM WITH AN AVAILABLE SHORT-CIRCUIT CURRENT AS NOTED ON THE PROJECT DOCUMENTS. SUBMIT COMPLETE REPORT OF COMBINATION SERIES RATED COMPONENTS TO OWNER FOR APPROVAL. MOTOR FULL LOAD CURRENT CONTRIBUTION SHALL NOT EXCEED 1% OF THE DOWNSTREAM DEVICE INTERRUPTING RATING IN COMPLIANCE WITH NEMA STANDARDS.
22. VERIFY WITH PANELBOARD MANUFACTURER THAT THE CIRCUIT BREAKERS IN COMBINATION WITH THE UPSTREAM CLASS "J" OR "L" FUSES MEET UL RECOGNIZED SERIES CONNECTED RATINGS FOR THE VALUES INDICATED BELOW. PROVIDE RED PLASTIC LABELS WITH ¾" MINIMAL WHITE LETTERS, PER NEC 110-22 FOR EACH PANELBOARD WHICH READ THE FOLLOWING: "CAUTION SERIES RATED SYSTEM XXK/YXK, [INDICATE FAULT CURRENT] AMPS AVAILABLE. IDENTIFIED REPLACEMENT COMPONENTS REQUIRED." PROVIDE MANUFACTURER'S DOCUMENTATION FOR "UL COMPONENT RECOGNIZED SERIES RATINGS" AND ATTACH TO INSIDE OF DOOR OF PANEL IN PROTECTIVE COVER.
23. WHERE THE AVAILABLE SHORT-CIRCUIT CURRENT IS NOT LISTED AT A PARTICULAR EQUIPMENT LOCATION, THE EQUIPMENT MANUFACTURER SHALL ASSUME FULL RESPONSIBILITY FOR ENSURING THAT THE EXISTING OVERCURRENT DEVICES ARE PROPERLY APPLIED.
24. PROVIDE SYSTEM WHICH COMPLIES WITH N.E.C. CODE SECTION 110-22 AND 240-83(D) AND AS INTERPRETED BY THE LOCAL AUTHORITY HAVING JURISDICTION.
25. PROVIDE ARC FAULT CIRCUIT INTERRUPTER PROTECTION TO COMPLY WITH 2012 IRC E3902.12.
26. PROVIDE TAMPER RESISTANT RECEPTACLES PER IRC E4002.14.
27. PROVIDE FAN RATED PRE-WIRED LIGHTING BOXES PER IRC E3905.8
28. PROVIDE GFCI TYPE RECEPTACLES IN GARAGE PER IRC E3902.2/E3905.8



ELECTRICAL PLAN
1/4"=1'-0"

ELECTRICAL LOAD CALCULATIONS

GENERAL LIGHTING & RECEPT	3001	×	3	9003 VA
KITCHEN & SMALL APPLIANCE	3	×	1500	4500 VA
DISHWASHER	1	×	1500	1500 VA
DISPOSAL	1	×	1000	1000 VA
COOKTOP	1	×	6500	6500 VA
DOUBLE OVEN	1	×	12000	12,000 VA
MICROWAVE	1	×	1200	1200 VA
DRYER	1	×	5000	5000 VA
LAUNDRY	1	×	1500	1500 VA
WATER HEATER	1	×	4500	4500 VA

TOTAL CONNECTED		46703 VA
1ST 10,000 AT 100%		10000 VA
REMAINING AT 40%		14681 VA
TOTAL DEMAND		24,681 VA
HVAC 1 5 TON		7800 VA
FAU 1		1302 VA
HVAC 2 2.5 TON		3900 VA
FAU 2		661 VA
TOTAL		38,324 VA
38,324 ÷ 240V		159 AMPS
SERVICE PROVIDED		200 AMPS

SHEET
E1