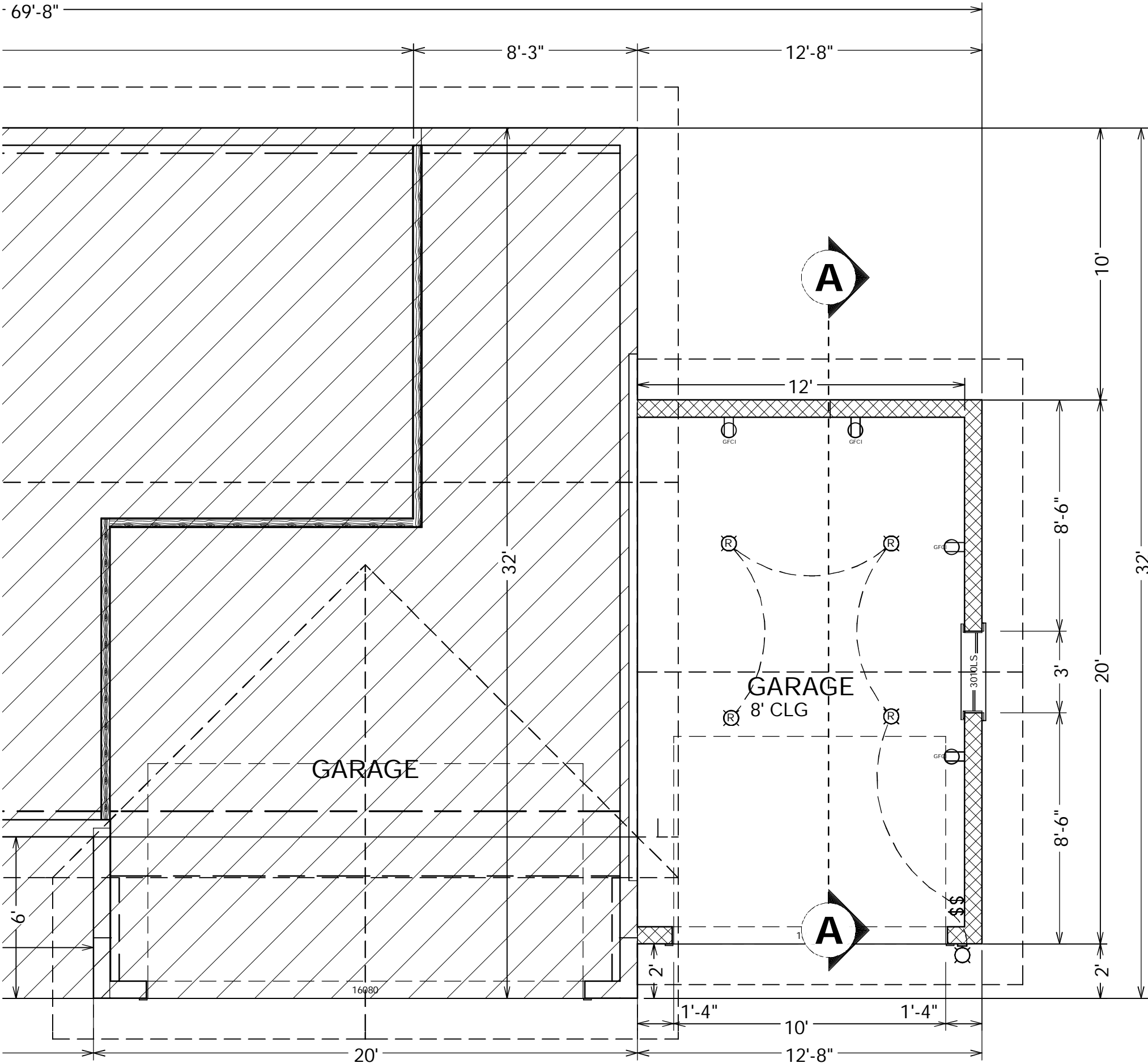


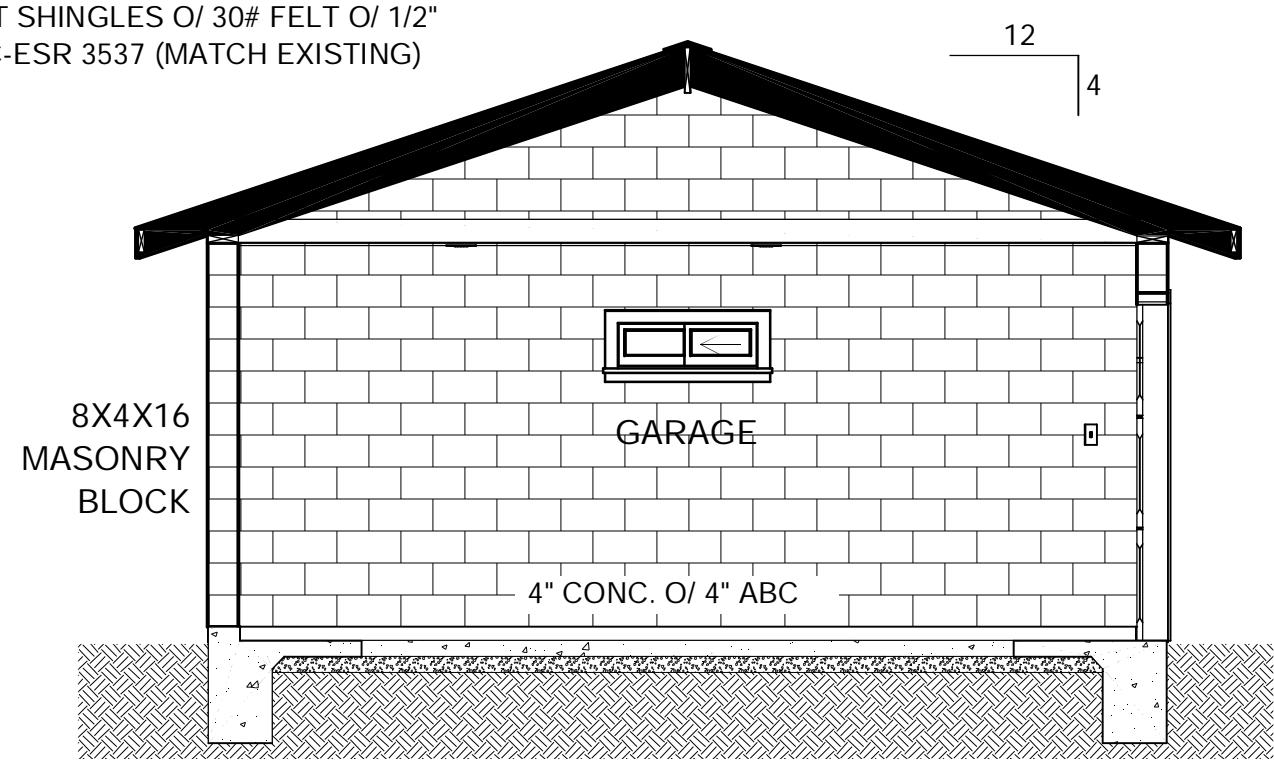
MESA

BUILDING CODES
ALL CONSTRUCTION SHALL COMPLY WITH THE FOLLOWING CODES AND AMENDMENTS.
2018 INTERNATIONAL BUILDING CODE
2018 INTERNATIONAL RESIDENTIAL CODE
2018 INTERNATIONAL MECHANICAL CODE
2017 NATIONAL ELECTRICAL CODE
2018 INTERNATIONAL PLUMBING CODE
2018 IECC



FLOOR PLAN

SCALE 1/4" = 1'-0"
LIVABLE: 1426 SF
GARAGE: 510 SF
NEW GARAGE: 250 SF
PATIO: 112 SF
PORCH: 108 SF
TOTAL: 2406 SF



CROSS SECTION

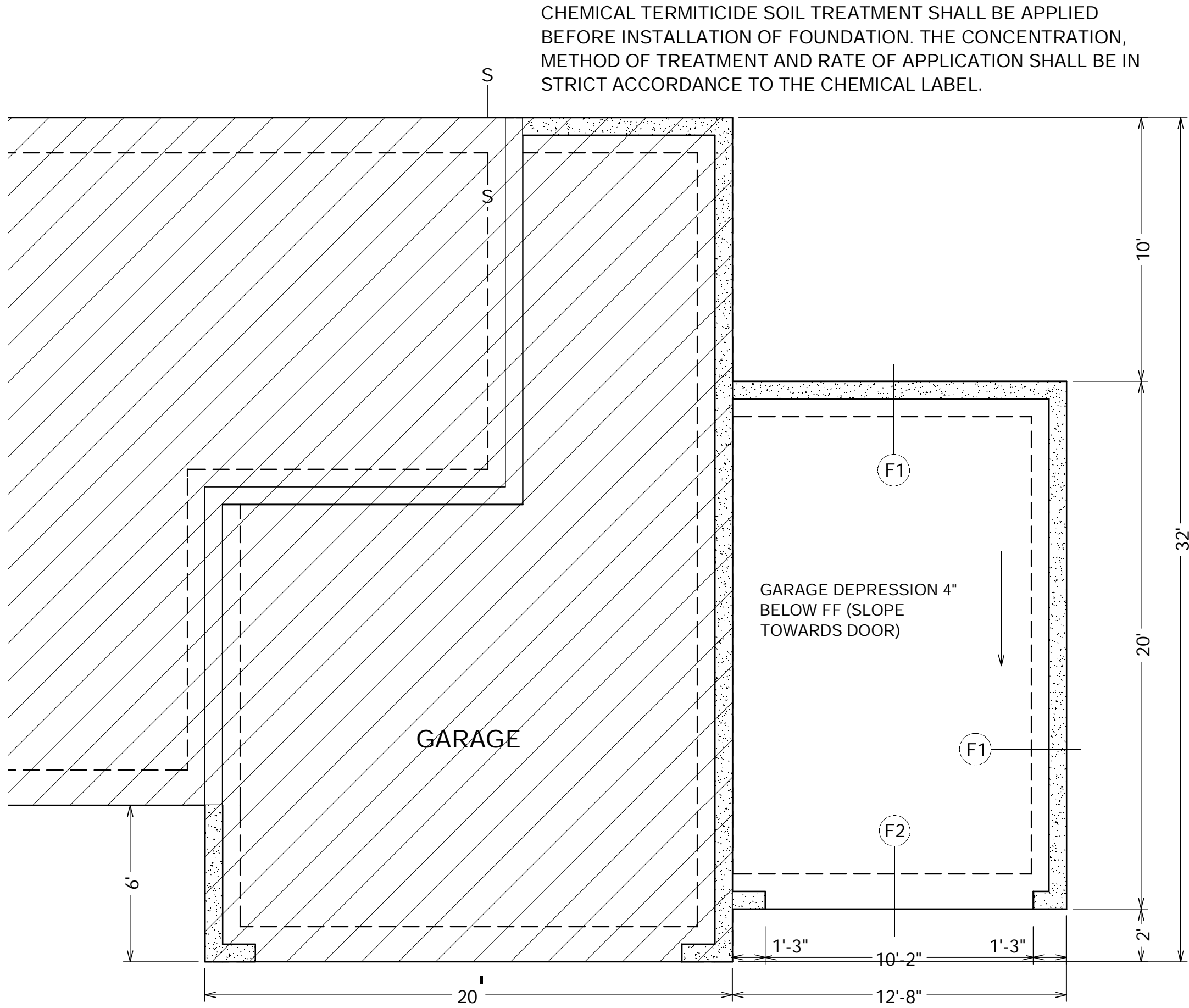
SCALE 1/4" = 1'-0"

5. MIN. INSULATION REQUIREMENTS: FRAME WALLS R19, MAS. WALLS R7, ROOF R38.
6. FIREBLOCKING SHALL BE PROVIDED IN: CONCEALED SPACES OF STUD WALLS (VERTICALLY AT THE CEILING AND FLOOR LEVELS AND HORIZONTALLY AT INTERVALS NOT TO EXCEED 10'); SOFFITS, DROP CEILINGS, AND COVE CEILINGS; CONCEALED SPACES BTW STAIR STIRNGERS AT THE TOP AND BOTTOM OF THE RUN.
7. ALL EXITS TO BE OPENABLE FROM THE INSIDE WITHOUT THE USE OF A KEY OR SPECIAL KNOWLEDGE.
8. MANUALLY OPERATED EDGE OR SURFACE-MOUNTED FLUSH BOLTS AND SURFACE BOLTS ARE PROHIBITED.
9. ALL EXTERIOR SHT. RCK. TO BE TYPE "MR" AKA "BROWNBOARD"
10. ATTIC ACCESS DOOR TO PROVIDE THE SAME DEGREE OF FIRE RESISTANCE AS GARAGE WALL OR 3/4" PLYWD O/ 5/8" SHT RCK. IF HVAC EQUIP. IS LOCATED IN THE ATTIC PROVIDE A SWITCHED LIGHT, ELEC. OUTLET, AND A 24" CATWALK W/IN 20' OF EQUIP. AND A 25'X LENGTH OF EQUIP. WORK PLATFORM.
14. ALL FIXTURES LOCATED OUTSIDE OR IN DAMP AREAS MUST BE LISTED FOR DAMP LOCATIONS E3903.8
15. ALL BRANCH CIRCUITS THAT SUPPLY 125 VOLT, SINGLE PHASE, 15 AND 20 AMP OUTLETS INSTALLED IN BEDROOMS SHALL BE PROTECTED BY AN ARC-FAULT CIRCUIT INTERRUPTER(S).
16. DUCTS IN GARAGE AND DUCTS PENETRATING THE WALLS OR CEILINGS SEPARATING THE DWELLING FROM THE GARAGE SHALL BE OF STEEL AND HAVE NO OPENINGS INTO THE GARAGE PER R309.1.1.
17. PERMANANTLY IDENTIFY MULTIPLE HVAC UNITS WITH LABELS

- GLAZING
SAFETY GLAZING SHALL COMPLY WITH CODE SECTIONS LISTED BELOW AS THEY APPLY. IRC SECTION R308
ALL GLASS LISTED BELOW TO BE TEMPERED
IN DOORS WITH LEAST DIM. GREATER THAN 3'
IN FRENCH OR SLIDING DOORS
IN TUB/ SHOWER ENCLOSURES
LESS THAN 40" FROM A LOCKABLE DOOR
LESS THAN 18" FROM THE FLOOR
WITHIN A 24" ARC OF AN ACTIVE DOOR
ALL EGRESS WINDOWS SHALL MEET CODE REQUIREMENTS: 20" MIN. WIDTH, 24" MIN. HEIGHT; 5.7 SQUARE FEET TOTAL. MAX 44" SILL IRC SECTION R510 SKYLIGHTS WILL CONFORM TO ESR-4108 OR EQUAL.
ALL EXT. WINDOWS WILL BE WEATHER STRIPPED AND AIRTIGHT IN ACCORDANCE WITH ASTM E-283-84-T. STANDARD PERIMETER WINDOW FRAMES WILL BE SEALED TO AIRTIGHT SPECIFICATIONS.

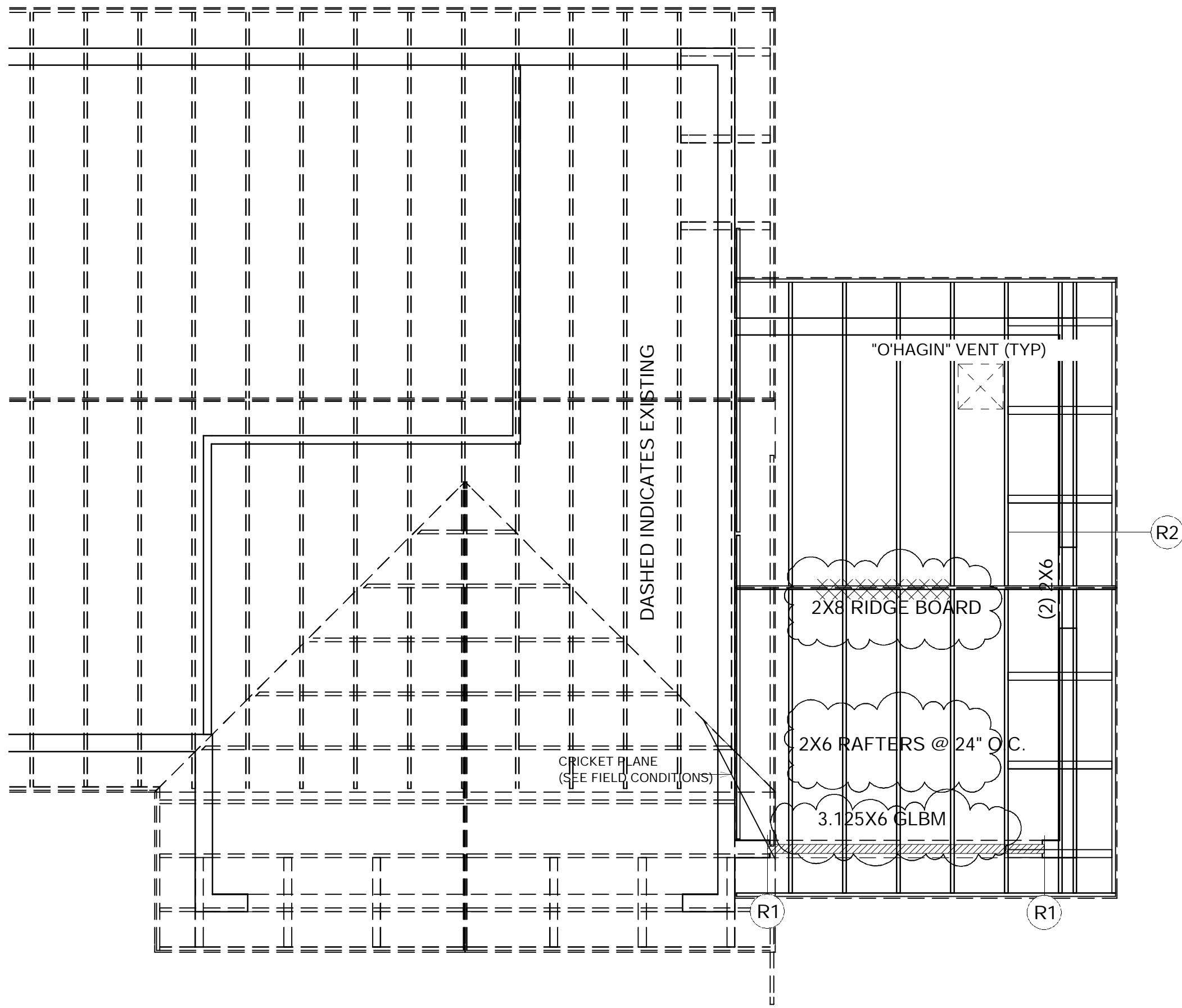
- ELECTRICAL
1. PROVIDE A MIN. OF 1 #4 COPPER WIRE CONNECTING THE METAL WATER SYSTEM TO THE SERVICE EQUIPMENT ENCLOSURE GROUNDING BUSS.
2. PROVIDE A GROUNDING CONDUCTOR 20FT MIN. #4 BARE COPPER WIRE EMBEDDED IN THE CONCRETE FTG.
3. PROVIDE TWO OR MORE 20 AMP APPLIANCE CIRCUITS TO SERVICE THE KITCHEN, BREAKFAST, AND DINING AND ONE SUCH CIRCUIT @ THE LAUNDRY. THESE CIRCUITS SHALL HAVE NO OTHER OUTLETS.
4. OUTLET BOXES IN WALL BETWEEN THE HOUSE AND THE GARAGE MUST BE METAL OR UL APPROVED PLASTIC.
5. ALL CLG FANS TO BE WIRED WITH BOXES UL APPROVED FOR CLG FAN SUPPORT AND RIGIDLY SECURED IN PLACE.
6. PROVIDE A WORK OUTLET W/IN 25' OF ANY OUTDOOR H.V.A.C. EQUIPMENT.
7. RECESSED INCANDESCENT LIGHTS SHALL MAINTAIN A 3" CLEARANCE TO INSULATION OR BE LISTED TO HAVE INSULATION IN DIRECT CONTACT
DOOR AND WINDOW FLASHING
A) PROVIDE TYPE 30 FELT BUILDING PAPER AS FLASHING AT ALL HEADS, JAMBS, AND SILLS OF WINDOW AND DOOR OPENINGS.B) FLASH HORIZONTAL AND/OR SLOPED AREAS AND 6" MIN. OF VERTICAL WALL SURFACE AROUND OPENINGS.C) PROVIDE CONTINUOUS SEALANT BEAD WHERE STUCCO ABUTS WINDOW AND DOOR FRAMES SO AS TO PROVIDE A WEATHER-RESITIVE BARRIER.
SECURITY SPECIFICATIONS
EXTERIOR SWINGING DOORS MUST BE SOLID CORE OR METAL SKIN CONSTRUCTION WITH JAMBS SHIMMED SOLID FOR SIX INCHES (6") ABOVE AND BELOW THE DEADBOLT LOCK STRIKE PLATE. IF HINGES ARE ON THE OUTSIDE, THEY MUST HAVE NON REMOVABLE PINS OR BE PIN STANDARD HINGES. ALL MAIN OR FRONT ENTRY DOORS MUST HAVE A 180 DEGREE DOOR VIEWER OR BE ARRANGED SO THAT THE OCCUPANT CAN VIEW THE IMMEDIATE AREA OUTSIDE THE DOOR THROUGH A WINDOW. DOORS FROM A DWELLING UNIT TO AN ATTACHED GARAGE ARE ALSO CONSIDERED EXTERIOR SWINGING DOORS. THIS DOES NOT PROHIBIT THE USE OF "FRENCH" DOORS.EXTERIOR SLIDING DOORS MUST HAVE THE SLIDING SECTION EQUIPPED SO THAT IT CANNOT BE RAISED OR REMOVED WHILE IN THE CLOSED AND LOCKED POSITION. AN AUXILIARY NON-KEYED LOCK MUST ALSO BE INSTALLED. THE STATIONARY SECTION SHALL NOT BE REMOVABLE FROM THE OUTSIDE.DEADBOLT LOCKS ARE REQUIRED ON ALL EXTERIOR SWINGING DOORS AND MUST BE EQUIPPED WITH A MINIMUM ONE INCH (1") BOLT THROW, WRENCH RESISTANT COLLAR, FASTENERS WHICH THREAD INTO THE CYLINDER BODY, AND A TWO (2) SCREW STRIKE PLATE USING TWO INCH BY NO. 8 SCREWS (#8 MACHINE SCREWS IN METAL JAMBS). SUCH LOCKS MUST BE OPERABLE FROM THE INSIDE WITHOUT THE USE OF A KEY.EXTERIOR WINDOWS SHALL BE CONSTRUCTED AND INSTALLED SO AS TO PROHIBIT SLIDING, RAISING, OR REMOVAL OF THE MOVING SECTION WHILE IN THE CLOSED AND LOCKED POSITION. WINDOW PANELS SHALL HAVE WEATHER STRIP MOLDING OR GLAZING BEAD WHICH IS NOT EASILY REMOVED FROM THE OUTSIDE. AN AUXILIARY LOCK SHALL BE INSTALLED ON ALL WINDOW TRACKS TO PREVENT SLIDING. (SLEEPING-ROOM WINDOWS MAY NOT HAVE LOCKS WHICH REQUIRE A KEY OR SPECIAL KNOWLEDGE OR EFFORT TO UNLOCK).

GARAGE DOORS SHALL BE EQUIPPED WITH AT LEAST TWO LOCKING DEVICES OF THE FOLLOWING TYPES: THROW BOLT OR FLUSH BOLT; CYLINDER-TYPE LOCK; PADLOCK AND HASP. OR BE EQUIPPED WITH A POWER OPERATED MECHANISM.ATTIC ACCESS DOORS MUST BE LOCATED IN THE INTERIOR OF THE DWELLING OR GARAGE. IF NO INTERIOR LOCATION IS AVAILABLE, A STEEL HASP AND PADLOCK MUST BE INSTALLED.NOTE: THESE REQUIREMENTS ARE NOT INTENDED TO PREVENT USE OF ANY HARDWARE OR METHODS OF CONSTRUCTION NOT SPECIFICALLY PRESCRIBED, WHICH PROVIDE EQUIVALENT SECURITY, WHEN FIRST APPROVED BY THE SUPERINTENDENT OF BUILDING INSPECTIONS.NOTE: DEVICES SHALL NOT BE INSTALLED IN A MANNER TO PREVENT PROPER EGRESS THROUGH DOORS OR BEDROOM WINDOWS.



FOUNDATION PLAN

SCALE 1/4" = 1'-0"

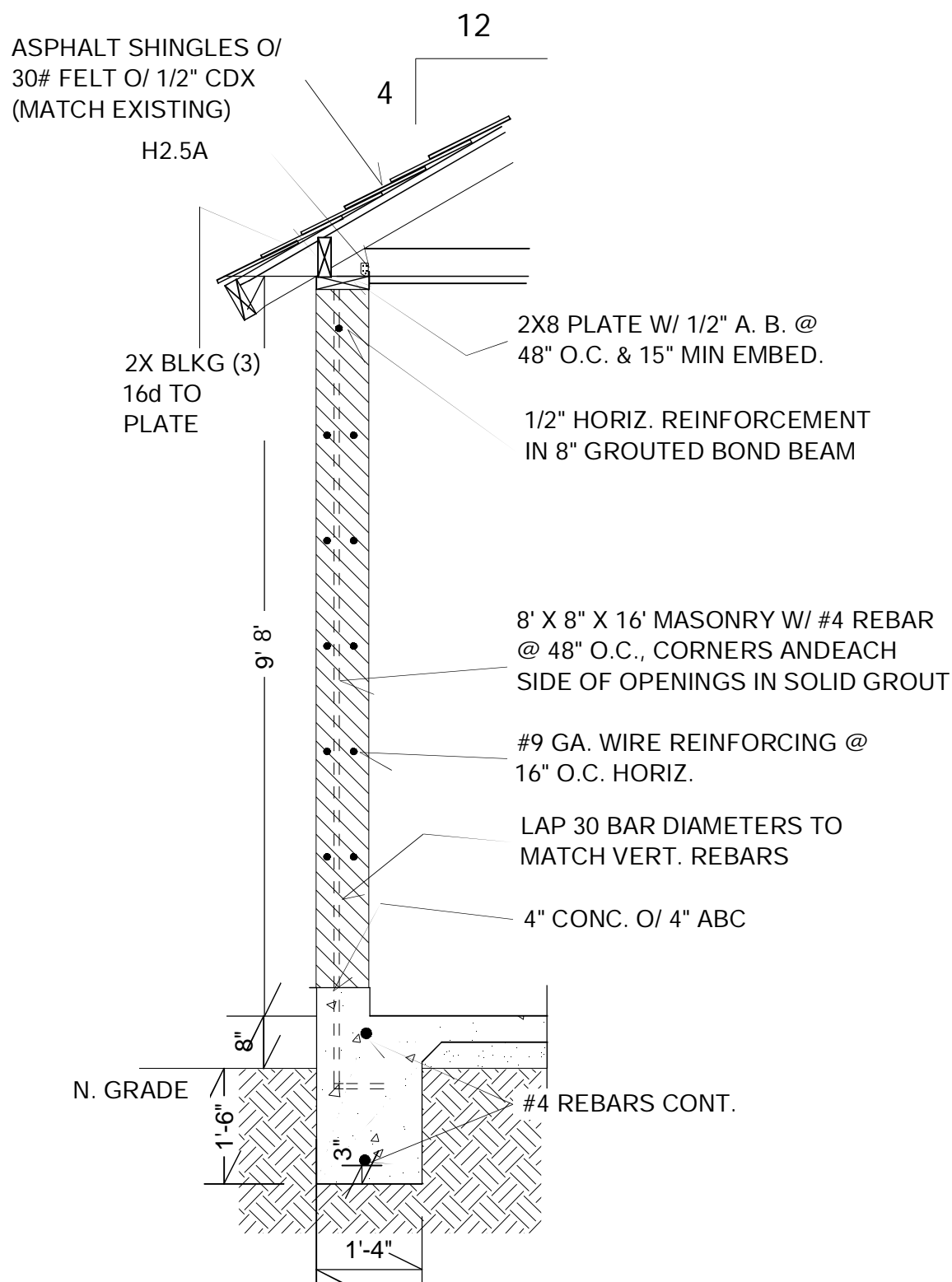


ROOF FRAMING PLAN

SCALE 1/4" = 1'-0"

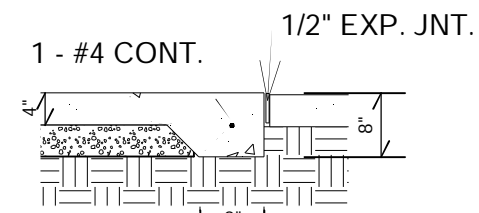
ATTIC VENTILATION

REQUIRED: 250 SF / 300 = .83 SF
PROVIDED: 5' RIDGE VENT @ 18"/FT = 90"/144 = .62 SF
1 "O'HAGIN" VENT @ 98.75"/VENT = 98.75"/144 = .68 SF
TOTAL = 1.3



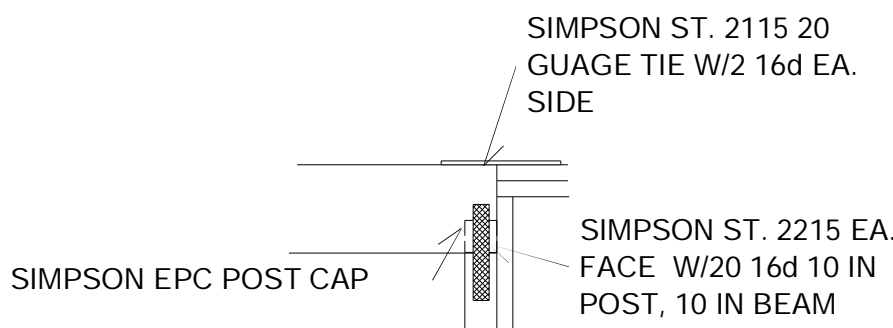
F1 TYPICAL WALL SECTION

SCALE 1/2" = 1'-0"



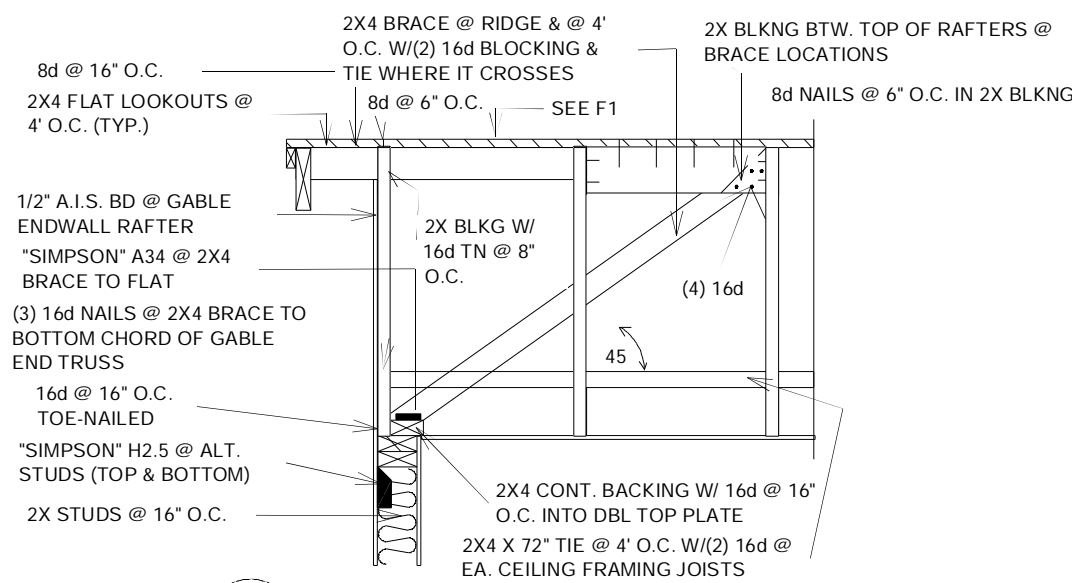
F2 GARAGE SLAB FTG.

SCALE 1/2" = 1'-0"



R1 BM/WALL CONN.

SCALE 1/2" = 1'-0"



R2 GABLE ENDWALL DETAIL

NOTES

1. FINISH FLOOR TO BE 6" MIN. ABOVE FIN. GRADE
2. FINISH GRADE SHALL SLOPE 5% FOR A DISTANCE OF 10' TO APPROVED WATER DISPOSAL AREA
3. LANDINGS AT DOOR AREAS SHALL HAVE A 1/4"/FT. MAX. SLOPE.
4. THERE SHALL BE A LANDING @ EACH DOOR WITH A WIDTH NOT LESS THAN THE WIDTH OF THE DOOR AND LENGTH OF 36" MIN.
5. SPECIFY FLOOR LEVELS @ DOORS. THE LANDING SHALL BE NOT MORE THAN 1" LOWER THAN THE THRESHOLD OF THE DOOR. EXEMPTION 1.1 ALLOWS THE LANDING TO BE MAX. 8" LOWER THAN THE DOOR THRESHOLD WHEN THE DOOR DOES NOT SWING OVER THE LANDING.
6. CONTROL JOINTS TO BE PROVIDED AND LOCATIONS DETERMINED BY THE CONCRETE SUBCONTRACTOR AT THE SITE
7. ALL SOLE PLATES TO BE PRESSURE TREATED. ALL FIELD CUT ENDS, NOTCHES, AND DRILLED HOLES ARE TO BE RETREATED IN THE FIELD IN ACCORDANCE WITH AWPA M4.
8. REFER TO THE MOST CURRENT SOILS REPORT PROVIDED BY THE CLIENT FOR ALL RECOMMENDATIONS PERTAINING TO SITE PREPARATION IF PROVIDED
9. SOIL BEARING CAPACITY, COMPACTION, ENGINEERED FILL, BACKFILLING, ETC. ARE ALL TO BE PERFORMED PER PROJECT SOILS REPORT PLUS ANY ADDITIONAL SUPPLEMENTS
10. CLIENT ASSUMES FULL RESPONSIBILITY FOR FOUNDATION DESIGN FOR FAILURE TO PROVIDE DESIGNER AND ENGINEER WITH SOILS REPORT.
11. DESIGNER ASSUMES NO LIABILITY FOR SOILS CONDITIONS ON THE SITE.
12. PROVIDE TERMITE PROTECTION PER THE STRUCTURAL PEST CONTRIL COMMISSIONS RECOMMENDATIONS AND BULLETIN 64.
13. FINISH FLOOR ELEVATION (AS-BUILT) WILL BE CERTIFIED BY THE CITY FOR THE FEDERAL EMERGENCY MANAGEMENT ASSOCIATION (F.E.M.A.) WHERE REQUIRED.

SOIL/CONCRETE
SOIL BEARING: ASSUMED SOIL BEARING VALUE IS 1500 PSF BELOW UNDISTURBED SOIL. CONCRETE: F'C = 2500 PSI
ANCHOR BOLTS: ASTM A-307 GRADE 60
REINFORCING STEEL: ASTM A-615 GRADE 60
1. SPREAD FOOTINGS UNDER COLS. SHALL BE 12" THICK MIN. AND BEAR AT 18" MIN. BELOW UNDISTURBED SOIL.
2. SLOPE OF LANDINGS @ ALL DOORS SHALL BE A MIN. OF 1/8" / FT.
3. SEAL ALL VOIDS AROUND PIPING PASSING THROUGH CONC. SLABS.
4. HORIZONTAL JOINT REINFORCEMENT: ASTM A-82-70
5. ALL BOTTOM PLATES SHALL BE PRESSURE TREATED OR FOUNDATION GRADE REDWOOD. BEARING PLATES SHALL BE ANCHORED TO THE FOUNDATION W/ 1/2" DIA. ANCHOR BOLTS W/ 7" MIN EMBEDMENT @ 48" O.C. & 12" MAX. FROM PLATE ENDS
6. FOOTINGS ARE TO BE A MIN. OF 18" INTO UNDISTURBED SOIL OR AS DIRECTED BY AN ENGINEER APPROVED FILL.
7. TOP OF EXTERIOR FOUNDATION SHALL BE 12" PLUS 2% ABOVE THE ELEVATION OF THE STREET GUTTER OR THE INLET OF AN APPROVED DRAINAGE DEVICE.

NOTE

PREFABRICATED WOOD TRUSSES SHALL BE PROVIDED BY AN APPROVED FABRICATOR. TRUSS DAIGRAMS TO BE PROVIDED TO THE CITY INSPECTOR AT THE FRAMING INSPECTION.
1. MIN. ROOF SLOPE TO BE 1/4"/FT.
2. WEIGHT OF ALL PLIES & COATING OF ALL BUILT-UP ROOF SHALL COMPLY W/R905.9.
3. CHIMNEYS ARE TO BE 2' ABOVE A 10' HORIZONTAL DIAMETER TO NEAREST ROOF.
4. ROOF VENTILATION SHALL COMPLY PER R806.1.
5. ALL LUMBER SHALL BEAR AN APPROVED GRADING STAMP.

6. PROVIDE APPROVED CONNECTORS AT ALL REQUIRED CONNECTIONS.
7. PROVIDE MULTI. STUDS AS REQUIRED FOR WIDTH BEARING BELOW TRUSS GIRDER SUPPORT POINTS.

8. FOR 1/2' TO 12' SLOPE PROVIDE MINIMUM OF PLIES OF UNDERLAYMENT PER R905.9.
9. STC CONNECTION FROM TOP PLATE TO TRUSS(TYP) CONNECTION @ ALL NON BEARING.
10. SHOT ANCHORS @ SILL PLATE @ 48" O.C. & 12" @ ENDS (TYP). CONNECTION AT REQUIRED INTERIOR WALLS ONLY. (SEE FLOOR PLAN)
11. 2X8 VALLEY AT OVERFRAMING.
12. 18 GA. VALLEY FLASHING.
13. PROVIDE MANUFACTURERS INSTALLATION INSTRUCTIONS AND EVALUATION REPORT TO INSPECTOR AT TIME OF INSPECTION

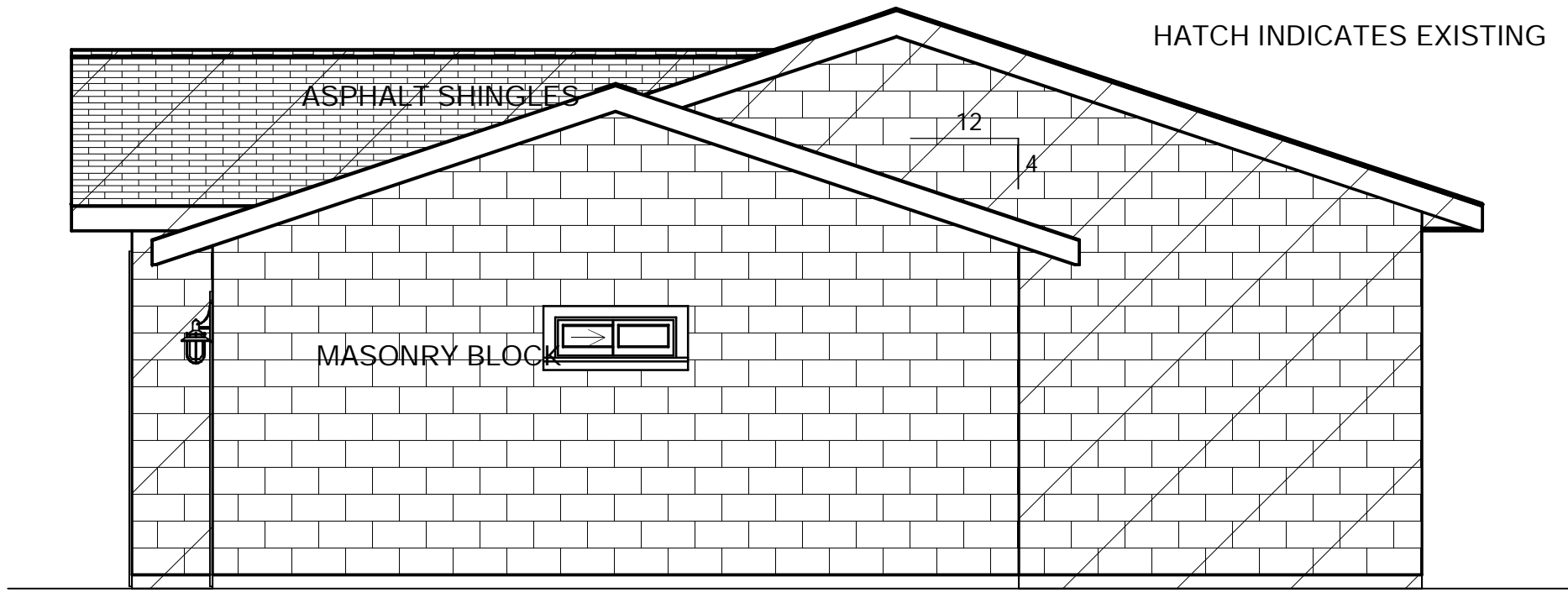
LUMBER
1. ALL LUMBER MUST BEAR AN APPROVED GRADING STAMP.
2. CEILING JOISTS, RAFTERS, FLOOR JOISTS, ETC. NO.2 DOUGLAS FIR/LARCH Fb = 1450 PSI, E = 1,700,000 PSI
3. BUILT-UP BEAMS, LINTELS, HEADERS (EACH MEMBER TO 4") (SINGLE MEMBER USES) NO. 2 DOUGLAS FIR / LARCH Fb 1250 PSI- 1,700,000 PSI.
4. STUDS, BLOCKING (SINGLE MEMBER USES) STD AND BETTER HEM FIR Fb=475 PSI E-1,200,000 PSI
5. PLATES (SINGLE MEMBER USES) STD AND BETTER HEM FIR Fb=475 PSI E-1,200,000 PSI
6. POSTS AND TIMBERS: NO. 1 DOUGLAS FIR/LARCH Fc=625 PSI Fb=1200 PSI E= 1,600,000 PSI
7. BEAMS AND STRINGERS: NO. 1 DOUGLAS FIR/LARCH Fb=1350 PSI E=1,600,000 PSI
8. GLU-LAM BEAMS: DRY CONDITIONS OF USE DOUGLAS FIR/ LARCH COMB 24F Fb=2400 PSI E=1,800,000 PSI
9. ORIENTED STRAND BOARD, WAFWR BOARD, COMPOSITE BOARD, STRUCTURAL PARTICLE BOARD, AND PLYWOOD SHALL CONFORM TO N.E.R.- 108
10. PROVIDE CITY APPROVED WIND AND SIESMIC TIES @ EACH RAFTER TO PL/BM & STUD TO PL. CONN.
11. EAVE VENTS SHALL NOT BE ABOVE WINDOW OR DOOR OPENINGS W/IN 3' LATERALLY.
12. ALL WOOD PLATES IN CONTACT W/CONCRETE SHALL BE REDWOOD OR PRESSURE TREATED.
NAILING SCHEDULE
SOLID BLOCKING BETWEEN JOISTS AND RAFTERS TO DOUBLE PLATE SILL OR GIRDER TOE NAIL PER BLOCKING, 3-16d
BRIDGING TO JOIST, TOE NAIL EA. END 2-8dTOP PLATE TO STUD, END NAIL 2-16dSTUD TO SOLE PLATE, TOE NAIL OR END NAIL 4-8d TOE NAIL 2-16d END NAIL
DOUBLE STUDS, FACE NAIL 16d @ 24" O.C.DOUBLE TOP PLATES, FACE NAIL 16d @ 16 O.C.TOP PL., LAPS & INTERSECTIONS, FACE NAIL 2-16d
CLG. JOISTS TO PLATE, TOE NAIL 3-8dCONT. HEADER TO STUD, TOE NAIL 4-8dCLG. JSTS. LAPS O/PARTITIONS, FACE NAIL 3-16dCLG. JSTS. TO PARALLEL RAFTERS, FACE NAIL 3-16d
RAFTER TO PLATE, TOE NAIL 3-8dRAFTER TO RIDGE BOARD, TOE NAIL 3-16dRAFTER TO VALLEY OR HIP RAFTERS, 3-16d TOE NAIL 3-16d FACE NAILCORNER STUDS, FACE NAIL 16d @ 24" O.C.

ATTICS

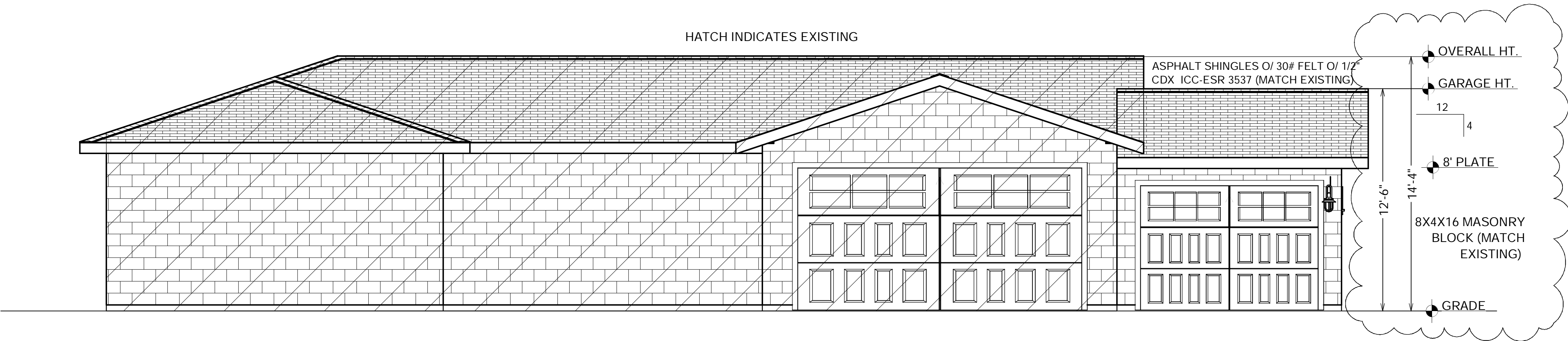
ATTIC VENTILATION MUST COMPLY WITH ALL APPLICABLE CODE REQUIREMENTS (SEE ATTIC VENTILATION CALCS ON ROOF FRAMING PLAN)

PROVIDE ATTIC VENTILATION WITH RIDGE VENTS AND "O'HAGIN" VENTS AS CALLED OUT ON PLANS AND INSTALLED PER MANUFACTURERS WRITTEN INSTRUCTIONS

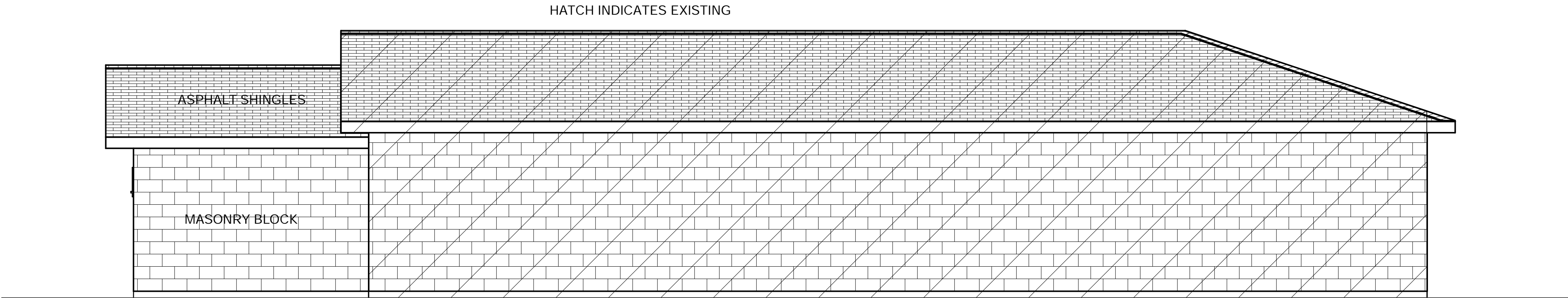
ACCESS DOORS FROM CONDITIONS SPACES TO UNCONDITIONED SPACES SUCH AS ATTICS AND CRAWL SPACES SHALL BE WEATHER STRIPPED AND INSULATED TO A LEVEL EQUIVALENT TO THE INSULATION ON THE ON THE SURROUNDING SURFACES. ACCESS SHALL BE PROVIDED TO ALL EQUIPMENT THAT PREVENTS DAMAGE OR COMPRESSING THE INSULATION. A WOOD FRAMED OR EQUIVALENT BAFFLE OR RETAINER IS REQUIRED TO BE PROVIDED WHEN LOOSE-FILL INSULATION IS INSTALLED



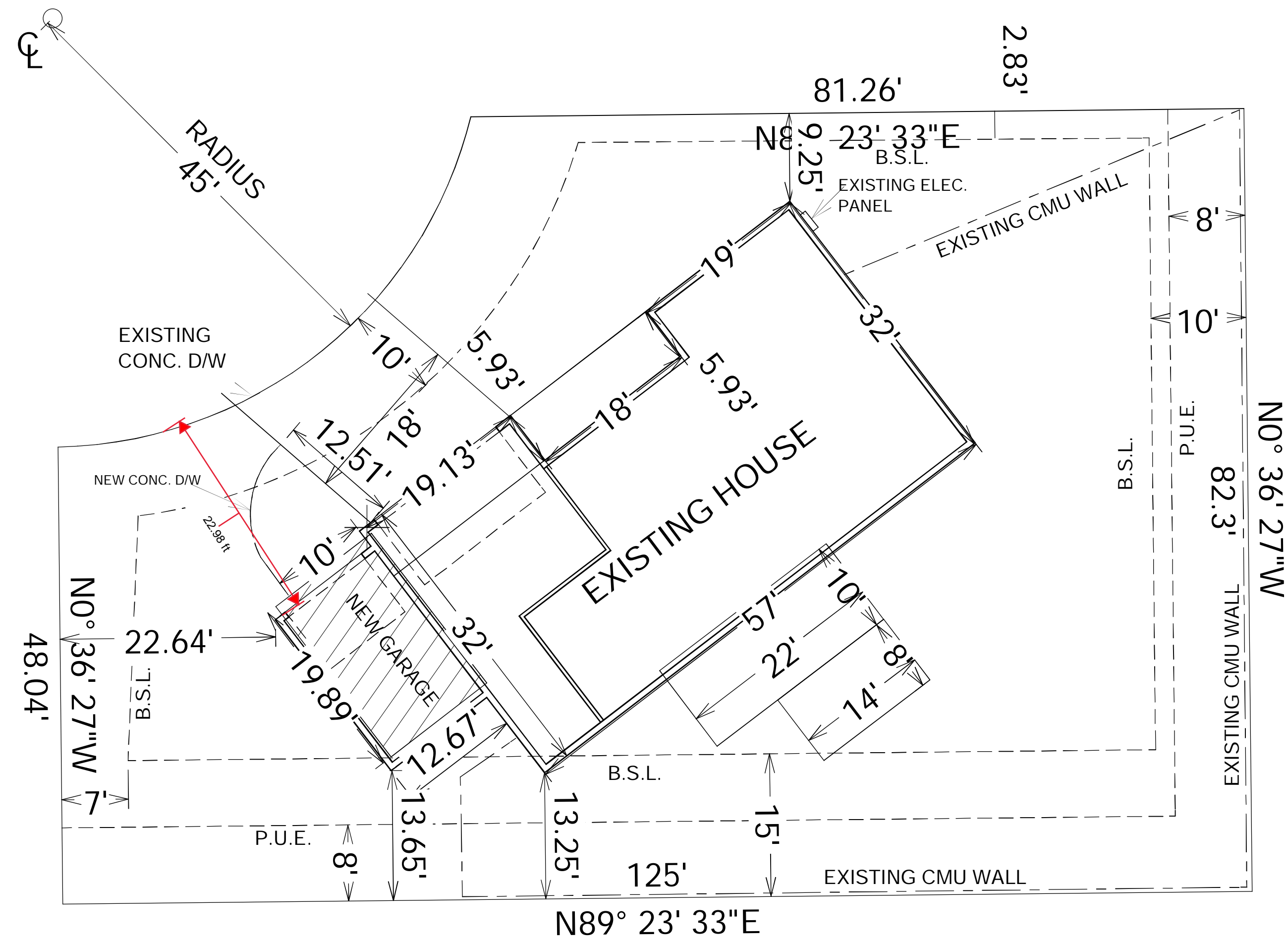
LEFT ELEVATION
SCALE 1/4" = 1'-0"



FRONT ELEVATION
SCALE 1/4" = 1'-0"



REAR ELEVATION
SCALE 1/4" = 1'-0"



SITE PLAN

SCALE: 1" = 10'

735 S PENROSE CIR. MESA, AZ, 85206

APN: 140-36-306

ZONING: RS-6

SUB-D: SUNLAND VILLAGE

LOT #301