Sivarajan Residence

7899 East Mary Sharon Drive
Scottsdale, Arizona 85266

SPECIAL INSPECTION REQUIRED

PER BUILDING CODES CH. 17, NOTE: SPECIAL INSPECTIONS DO NOT WAIVE ANY CITY INSPECTIONS.

☑	Structural steel construction	☐	Soils
☐	Steel construction other than structural steel	☐	Foundations
☐	Concrete construction	☐	Spray applied fire-proofing materials
☑	Masonry construction	☐	Mastic and intumescent fire-resistant coating
☐	Wood Construction	☐	Exterior insulation and finish system (EIFS)
☑	Special case: Post-Installed Anchors	☐	Other
☐	Other	☐	Other

CITY OF SCOTTSDALE
BUILDING PLANS
THESE PLANS HAVE BEEN APPROVED
AND ARE READY FOR A PERMIT
THIS DOES NOT AUTHORIZE VIOLATIONS OF ANY
CODE OR ORDINANCE

CITY APPROVED PLANS ARE TO REMAIN ON THE JOB SITE AT ALL TIMES DURING THE COURSE OF CONSTRUCTION.

GENERAL NOTES

CITY OF SCOTTSDALE GENERAL NOTES

1. *DOORS AND WINDOWS SHALL BE SEPARATED FROM THE SWIMMING POOL/SPA, BY AN APPROVED POOL BARRIER. IPSC 305.4
2. *PLUMBING FIXTURES SHALL COMPLY WITH THE FOLLOWING CONSERVATION REQUIREMENTS: LAVATORY FAUCETS: 1.5 GAL/MINUTE; SHOWER HEADS: 2.0 GAL/MINUTE; KITCHEN FAUCET: 1.8 GAL/MINUTE; WATER CLOSETS: 1.28 GAL/FLUSH. (TABLE P2903.2. AMENDED).
3. *A DEMAND-CONTROLLED HOT WATER CIRCULATION SYSTEM SHALL BE PROVIDED IN ACCORDANCE WITH SECTION N1103.5.1.1 AMENDED.
4. *COOL/LIGHT REFLECTIVE COATED ROOFS. ROOF SOLAR REFLECTANCE AND THERMAL EMITTANCE FOR ROOF SLOPES LESS THAN 2:12. THREE-YEAR-AGED SOLAR REFLECTANCE INDEX (SRI) OF 64, THREE-YEAR-AGED SOLAR REFLECTANCE OF 0.55 AND A THREE-YEAR AGED THERMAL EMITTANCE OF 0.75 OVER CONDITIONED AND NON-CONDITIONED SPACES. N1102.6 AMENDED.
5. *THE BUILDING THERMAL ENVELOPE SHALL COMPLY WITH CLIMATE ZONE 2. ENERGY COMPLIANCE SHALL BE DEMONSTRATED BY UA TRADE-OFF (RESCHECK) OR PERFORMANCE (REM/RATE, ERI, HERS) COMPLIANCE PATH OR BY THE FOLLOWING PRESCRIPTIVE VALUES (TABLE N1102.1.3): PRESCRIPTIVE MINIMUM R-VALUES: (*CEILING=R-49) / (WALLS=R-13).
   PRESCRIPTIVE MAXIMUM WINDOW FENESTRATION VALUES: (U-FACTOR=0.40) / (SHGC=0.25).
6. *EXTERIOR LIGHTING OVER 30 WATTS SHALL INCLUDE AN AUTOMATIC SHUT-OFF. (N1104.3).
7. *ALL PERMANENTLY INSTALLED LIGHTING FIXTURES SHALL CONTAIN ONLY HIGH-EFFICACY LAMPS. (N1104.1).
8. *ALL PERMANENTLY INSTALLED INTERIOR LIGHTING FIXTURES SHALL BE CONTROLLED WITH EITHER A DIMMER, AN OCCUPANT SENSOR CONTROL OR OTHER CONTROL SUCH AS AN AUTOMATIC TIMER SHUT-OFF SWITCH. EXCEPTIONS INCLUDE BATHROOMS AND HALLWAYS. (N1104.2).
9. *E3606.5 SURGE PROTECTION. ALL ELECTRICAL SERVICES SUPPLYING ONE- AND TWO-FAMILY DWELLING UNITS SHALL BE PROVIDED WITH A SURGE PROTECTIVE DEVICE (SPD) INSTALLED IN ACCORDANCE WITH SECTIONS E3606.5.1 THROUGH E3606.5.3.
10. *ELECTRIC VEHICLE CHARGING CAPACITY. RESERVE ELECTRICAL SERVICE PANEL SPACE FOR A FULL SIZE 2-POLE CIRCUIT BREAKER LABELED "FUTURE EV CHARGING". A RACEWAY SHALL BE INSTALLED FROM THE ELECTRICAL SERVICE PANEL TO A LOCATION WITHIN THE GARAGE, WHERE IT SHALL TERMINATE IN A JUNCTION BOX OR OUTLET AND BE LABELED "FUTURE EV CHARGING".
11. *SOLAR-READY ZONES – RB103. MINIMUM 10% OF ROOF AREA BUT NOT LESS THAN 300 SQ. FT. FREE AND CLEAR OF OBSTRUCTIONS INCLUDING MECHANICAL EQUIPMENT AND VENTS. PROVIDE ELECTRICAL PATHWAY FOR CONDUIT RUN FROM SOLAR-READY ZONE TO ELECTRICAL SERVICE PANEL WITH RESERVED SPACE FOR 2-POLE CIRCUIT BREAKER. CAPPED ROOF PENETRATION SLEEVE SHALL BE PROVIDED ON ROOFS WITH A SLOPE OF 1 IN 12 OR LESS.
12. *THE FOLLOWING THREE NOTES ARE APPLICABLE TO NEW CONSTRUCTION ONLY (BPI CERTIFIED PROFESSIONALS ARE APPROVED FOR TESTING AIR LEAKAGE IN EXISTING BUILDINGS, OTHERWISE RESNET PROFESSIONALS ARE APPROVED FOR NEW AND EXISTING):
    1. *THE BUILDING SHALL BE PROVIDED WITH A WHOLE-HOUSE MECHANICAL VENTILATION SYSTEM THAT MEETS THE REQUIREMENTS OF SECTION M1505. OUTDOOR AIR INTAKES AND EXHAUSTS SHALL HAVE AUTOMATIC OR GRAVITY DAMPERS THAT CLOSE WHEN THE VENTILATION SYSTEM IS NOT OPERATING. (N1103.6).
    2. *THE BUILDING OR DWELLING UNIT SHALL BE TESTED AND VERIFIED AS HAVING AN AIR LEAKAGE RATE NOT EXCEEDING FIVE AIR CHANGES PER HOUR FOR DETACHED DWELLING UNITS AND SEVEN AIR CHANGES PER HOUR FOR ATTACHED DWELLING UNITS. TESTING SHALL BE CONDUCTED IN ACCORDANCE WITH ASTM E 779 OR ASTM E 1827 AND REPORTED AT A PRESSURE OF 0.2 INCH W.G. (50 PASCALS). TESTING SHALL BE CONDUCTED BY AN APPROVED THIRD PARTY (RESNET CERTIFIED). A WRITTEN REPORT OF THE RESULTS OF THE TEST SHALL BE SIGNED BY THE PARTY CONDUCTING THE TEST AND PROVIDED TO THE CODE OFFICIAL. TESTING SHALL BE PERFORMED AT ANY TIME AFTER CREATION OF ALL PENETRATIONS OF THE BUILDING THERMAL ENVELOPE. (N1102.4.1.2).
    3. *DUCTS, AIR HANDLERS, AND FILTER BOXES SHALL BE SEALED IN ACCORDANCE WITH N1103.3.4. JOINTS AND SEAMS SHALL COMPLY WITH SECTION M1601.4.1. DUCTS SHALL BE PRESSURE TESTED TO DETERMINE LEAKAGE BY ONE OF THE FOLLOWING METHODS (N1103.3.5):
        1. ROUGH-IN TEST: TOTAL LEAKAGE SHALL BE MEASURED WITH A PRESSURE DIFFERENTIAL OF 0.1 INCHES W.G. (25 PA) ACROSS THE SYSTEM, INCLUDING THE MANUFACTURER'S AIR HANDLER ENCLOSURE IF INSTALLED AT THE TIME OF THE TEST. ALL REGISTERS SHALL BE TAPED OR OTHERWISE SEALED DURING THE TEST.
        2. POST-CONSTRUCTION TEST: TOTAL LEAKAGE SHALL BE MEASURED WITH A PRESSURE DIFFERENTIAL OF 0.1 INCHES W.G. (25 PA) ACROSS THE SYSTEM, INCLUDING THE MANUFACTURER'S AIR HANDLER ENCLOSURE. REGISTERS SHALL BE TAPED OR OTHERWISE SEALED DURING THE TEST.

A WRITTEN REPORT OF THE RESULTS SHALL BE SIGNED BY THE PARTY CONDUCTING THE TEST AND PROVIDED TO THE CODE OFFICIAL PRIOR TO THE FINAL BUILDING INSPECTION.

13. ALL PRODUCTS LISTED BY AN EVALUATION SERVICE REPORT (ESR) SHALL BE INSTALLED PER THE REPORT AND THE MANUFACTURES WRITTEN INSTRUCTIONS. PRODUCT SUBSTITUTIONS SHALL ALSO BE LISTED BY AN ESR.
14. PROVIDE FIRE SPRINKLER SYSTEM PER SCOTTSDALE FIRE CODE (IRC R313 AMENDED).
15. SEPARATE PERMITS REQUIRED: POOLS, SPAS, FENCES, SITE WALLS, RETAINING WALLS, AND GAS STORAGE TANKS.
16. FOUNDATION & FOOTING DEPTH SHALL BE A MINIMUM OF 18 INCHES BELOW GRADE (OR PER PROPERTY SOIL REPORT), PROVIDE A MINIMUM OF 3-INCH CLEARANCE BETWEEN REBAR AND SOIL. (R403.1 AMENDED).
17. DOORS BETWEEN THE GARAGE AND RESIDENCE SHALL BE SELF-CLOSING MINIMUM 1 3/8" THICK SOLID CORE OR 20-MINUTE FIRE RATED. (R302.5.1).
18. WOOD SILL PLATES SHALL BE PRESSURE TREATED OR DECAY RESISTANT. EXTERIOR SILL PLATES SHALL BEAR A MINIMUM OF 6 INCHES ABOVE FINISH GRADE. (R317.1).
19. GYPSUM BOARD APPLIED TO A CEILING SHALL BE 1/2" WHEN FRAMING MEMBERS ARE 16" O.C. OR 5/8" WHEN FRAMING MEMBERS ARE 24" O.C. OR USE LABELED 1/2" SAG-RESISTANT GYPSUM CEILING BOARD. (TABLE R702.3.5 (D)).
20. SHOWERS AND TUB-SHOWER COMBINATIONS SHALL BE PROVIDED WITH INDIVIDUAL CONTROL VALVES OF THE PRESSURE BALANCE OR THERMOSTATIC MIXING VALVE TYPE. (P2708.4).
21. SHOWER AREA WALLS SHALL BE FINISHED WITH A SMOOTH, HARD NON-ABSORBENT SURFACE, SUCH AS CERAMIC TILE, TO A HEIGHT OF NOT LESS THAN 72 INCHES ABOVE THE DRAIN INLET. CEMENT, FIBER-CEMENT, OR GLASS MAT GYPSUM BACKERS INSTALLED IN ACCORDANCE WITH MANUFACTURERS' RECOMMENDATIONS SHALL BE USED AS BACKERS FOR WALL TILE IN TUB AND SHOWER AREAS AND WALL PANELS IN SHOWER AREAS. (R702.4.2).
22. STORAGE-TANK TYPE WATER HEATERS SHALL BE INSTALLED WITH A DRAIN PAN AND DRAIN LINE. (P2801.6).
23. PROVIDE ROOF/ATTIC VENTILATION UNLESS INSULATION IS APPLIED DIRECTLY TO UNDERSIDE OF THE ROOF-SHEATHING, OR THE DEPTH IS 24 INCHES OR LESS BETWEEN THE CEILING AND BOTTOM OF ROOF SHEATHING. (R806.1 AMENDED).
24. PROVIDE MINIMUM R-3 INSULATION ON HOT WATER PIPES. (N1103.5.2).
25. SUPPLY AND RETURN DUCTS LOCATED OUTSIDE CONDITIONED SPACE SHALL BE INSULATED TO A MINIMUM R-8. DUCTS AND AIR HANDLERS LOCATED COMPLETELY WITHIN THE CONTINUOUS AIR BARRIER AND WITHIN THE BUILDING THERMAL ENVELOPE ARE EXEMPT FROM INSULATION. (N1103.3.1 AND N1103.3.2).
26. EXHAUST AIR FROM KITCHENS, BATHROOMS AND TOILET ROOMS SHALL BE EXHAUSTED DIRECTLY TO THE OUTDOORS, NOT RECIRCULATED, OR DISCHARGED INDOORS. (M1505.4.4 AMENDED).
27. EXHAUST FANS IN BATHROOMS WITH A SHOWER OR TUB SHALL BE PROVIDED WITH A DELAY TIMER OR HUMIDITY/CONDENSATION CONTROL SENSOR. EXHAUST FANS SHALL BE SWITCHED SEPARATELY FROM LIGHTING SYSTEMS. (R303.3).
28. PROVIDE A WALL MOUNTED GFCI PROTECTED RECEPTACLE OUTLET WITHIN 36" OF A BATHROOM OR POWDER ROOM LAVATORY. (E3901.6).
29. RECEPTACLES SERVING KITCHEN COUNTERTOPS INSTALLED IN BATHROOMS, GARAGES, UNFINISHED ACCESSORY BUILDINGS, OUTDOORS AND LOCATED WITHIN 6 FEET OF SINKS SHALL HAVE GFCI PROTECTION FOR PERSONNEL. (E3902).
30. ALL BRANCH CIRCUITS THAT SUPPLY 15- AND 20-AMPERE OUTLETS INSTALLED IN KITCHENS, FAMILY ROOMS, DINING ROOMS, LIVING ROOMS, PARLORS, LIBRARIES, DENS, BEDROOMS, SUNROOMS, RECREATIONS ROOMS, CLOSETS, HALLWAYS, LAUNDRY AREAS AND SIMILAR ROOMS OR AREAS SHALL BE PROTECTED BY A COMBINATION TYPE ARC-FAULT CIRCUIT INTERRUPTER (AFCI) INSTALLED TO PROVIDE PROTECTION OF THE BRANCH CIRCUIT. (E3902.12).
31. GENERAL PURPOSE 15- AND 20-AMPERE RECEPTACLES SHALL BE LISTED TAMPER-RESISTANT. (E4002.14).
32. PROVIDE INTERCONNECTED AND HARDWIRED SMOKE ALARMS IN NEW AND EXISTING AREAS OF HOME. (R314).
33. APPROVED CARBON MONOXIDE ALARMS, HARDWIRED AND INTERCONNECTED, SHALL BE INSTALLED OUTSIDE OF EACH SEPARATE SLEEPING AREA IN THE IMMEDIATE VICINITY OF THE BEDROOMS IN DWELLING UNITS WITHIN WHICH FUEL-FIRED APPLIANCES ARE INSTALLED AND IN DWELLING UNITS THAT HAVE ATTACHED GARAGES. (R315).
34. RECESSED LUMINAIRES INSTALLED IN THE BUILDING THERMAL ENVELOPE SHALL BE IC-RATED AND LABELED AS HAVING AN AIR LEAKAGE RATE NOT MORE THAN 2.0 CFM. ALL RECESSED LUMINAIRES SHALL BE SEALED WITH A GASKET OR CAULK BETWEEN THE HOUSING AND THE INTERIOR WALL OR CEILING COVERING. (N1102.4.5).
35. PROVIDE ILLUMINATION WITH WALL SWITCHES FOR STAIRWAYS WHEN THERE ARE 6 OR MORE RISERS. (R303.7).
36. RECEPTACLE OUTLETS SHALL BE INSTALLED SO THAT NO POINT ALONG THE FLOOR LINE IN ANY WALL SPACE IS MORE THAN 6 FEET, MEASURED HORIZONTALLY, FROM AN OUTLET IN THAT SPACE, INCLUDING ANY WALL SPACE 2 FEET OR MORE IN WIDTH. (E3901.2).
37. PROVIDE A MINIMUM OF TWO 20-AMP SMALL APPLIANCE BRANCH CIRCUITS FOR THE KITCHEN/DINING/BREAKFAST. (E3703.2).
38. PROVIDE OUTSIDE COMBUSTION AIR TO ALL INDOOR FIREPLACES PER MANUFACTURES SPECIFICATIONS. (R1006.1).
39. AT LEAST ONE THERMOSTAT SHALL BE PROVIDED FOR EACH SEPARATE HEATING AND COOLING SYSTEM. (N1103.1).

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GENERAL NOTES MISC.

1. BARBECUE UNIT TO BE UL LISTED AND APPROVED. UNIT TO BE INSTALLED IN ACCORDANCE WITH THE LISTING AND WITH THE MANUFACTURER'S INSTALLATION INSTRUCTIONS. THE UNIT SHALL CONFORM TO ANSI Z21.58-1993 AND SHALL BE APPROVED BY A NATIONALLY RECOGNIZED TESTING AGENCY.
2. GAS LINES ARE NOT PERMITTED UNDER SLABS OR STRUCTURES AND SHALL CONFORM TO UPC CHAPTER 12 FOR MATERIALS, INSTALLATION, AND TESTING.
3. PROVIDE A UL LISTED AND APPROVED RANGE AND/OR COOKTOP UNIT INSTALLED IN ACCORDANCE WITH THE LISTING AND WITH THE MANUFACTURER'S INSTALLATION INSTRUCTIONS. VERIFY AND MAINTAIN REQUIRED HORIZONTAL AND VERTICAL CLEARANCES ABOVE THE FINISHED COUNTERTOP SURFACE BEFORE ORDERING OR INSTALLING CABINETS.

IF SUBCONTRACTOR SHOULD FIND ANY DISCREPANCIES IN AND/OR OMISSION FROM THESE DRAWINGS, OR IF HE/SHE SHOULD BE IN QUESTION AS TO THEIR MEANING OR INTENT, HE/SHE SHOULD CONTACT THIS OFFICE IMMEDIATELY FOR INTERPRETATION OR CLARIFICATION.

1. DIMENSIONS TAKE PRECEDENCE OVER SCALE.
2. ALL LABOR AND MATERIALS USED SHALL BE EQUAL TO OR EXCEED ALL APPLICABLE STATE OR LOCAL CODE REQUIREMENTS.
3. SUBCONTRACTORS SHALL TAKE ALL NECESSARY PRECAUTIONARY MEASURES TO PROTECT THE PUBLIC AND ADJACENT PROPERTIES FROM DAMAGE THROUGHOUT CONSTRUCTION.
4. ALL EXISTING UTILITIES TO BE ABANDONED SHALL BE PROPERLY DISCONNECTED, PLUGGED OR CAPPED AS REQUIRED BY CODE AND SOUND CONSTRUCTION PRACTICES.
5. SUBCONTRACTORS SHALL VERIFY LOCATION OF UTILITY EASEMENTS AND PROTECT THE SAME.
6. SUBCONTRACTORS TO VERIFY LOCATIONS OF ALL N.A.O.S. EASEMENTS (AS THEY EXIST) AND PROTECT THESE AREAS THROUGHOUT THE CONSTRUCTION PROCESS.

EMERGENCY EGRESS

SLEEPING ROOMS SHALL HAVE AT LEAST ONE OPERABLE WINDOW OR DOOR APPROVED FOR EMERGENCY ESCAPE OR RESCUE WHICH SHALL OPEN DIRECTLY INTO A PUBLIC STREET, PUBLIC ALLEY, YARD OR EXIT COURT. THE EMERGENCY DOOR OR WINDOW SHALL BE OPERABLE FROM THE INSIDE TO PROVIDE A FULL, CLEAR OPENING WITHOUT THE USE OF SEPARATE TOOLS. ESCAPE OR RESCUE WINDOWS SHALL HAVE A MINIMUM NET CLEAR OPERABLE AREA OF 5.7 SQUARE FEET. THE MINIMUM NET CLEAR OPERABLE HEIGHT DIMENSION SHALL BE 24 INCHES. THE MINIMUM NET CLEAR OPERABLE WIDTH DIMENSION SHALL BE 20 INCHES. WHEN WINDOWS ARE PROVIDED AS A MEANS OF ESCAPE OR RESCUE, THEY SHALL HAVE A FINISHED SILL HEIGHT NOT MORE THAN 44 INCHES ABOVE THE FLOOR.

FIRE BLOCKS

FIRE BLOCKING SHALL BE PROVIDED IN THE FOLLOWING LOCATIONS:
1. IN CONCEALED SPACES OF STUD WALLS AND PARTITIONS, INCLUDING FURRED SPACES, AT THE CEILING AND FLOOR LEVELS AND AT MAXIMUM 10-FOOT INTERVALS BOTH VERTICAL AND HORIZONTAL.
2. AT ALL INTERCONNECTIONS BETWEEN CONCEALED VERTICAL AND HORIZONTAL SPACES SUCH AS OCCUR AT SOFFITS, DROP CEILINGS, COVE CEILINGS AND TOPS OF FRAMED COLUMNS.
3. IN CONCEALED SPACES BETWEEN STAIR STRINGERS AT THE TOP AND BOTTOM OF THE RUN AND BETWEEN STUDS ALONG AND IN LINE WITH THE RUN OF STAIRS IF THE WALLS UNDER THE STAIRS ARE UNFINISHED.
4. IN OPENINGS AROUND VENTS, PIPES, DUCTS, CHIMNEYS, FIREPLACES AND SIMILAR OPENINGS WHICH AFFORD A PASSAGE FOR FIRE AT CEILING AND FLOOR LEVELS, WITH NON COMBUSTIBLE MATERIALS.
5. AT OPENINGS BETWEEN ATTIC SPACES AND CHIMNEY CHASES FOR FACTORY-BUILT CHIMNEYS.

SAFETY GLAZING

SAFETY GLAZING SHALL BE PROVIDED IN THE FOLLOWING LOCATIONS:
1. INGRESS AND EGRESS DOORS.
2. GLAZING IN FIXED AND SLIDING PANELS OF SLIDING DOOR ASSEMBLIES AND PANELS IN SWINGING DOORS OTHER THAN WARDROBE DOORS.
3. GLAZING IN DOORS AND ENCLOSURES FOR BATHTUBS AND SHOWERS. GLAZING IN ANY PORTION OF A BUILDING WALL ENCLOSING THESE COMPARTMENTS WHERE THE BOTTOM EXPOSED EDGE OF THE GLAZING IS LESS THAN 60 INCHES ABOVE A STANDING SURFACE AND DRAIN INLET.
4. GLAZING IN FIXED OR OPERABLE PANELS ADJACENT TO A DOOR WHERE THE NEAREST EXPOSED EDGE OF THE GLAZING IS WITHIN A 24-INCH ARC OF EITHER VERTICAL EDGE OF THE DOOR IN A CLOSED POSITION, AND WHERE THE BOTTOM EXPOSED EDGE OF THE GLAZING IS LESS THAN 60 INCHES ABOVE THE WALKING SURFACE.
5. GLAZING IN RAILINGS REGARDLESS OF HEIGHT ABOVE A WALKING SURFACE.

STUCCO

EXTERIOR STUCCO SYSTEM TO BE WESTERN I-KOTE STUCCO SYSTEM OR APPROVED EQUAL, WIRE LATH ON 1" THICK, 1-1/2 LB. T&G E. P. S. BOARD OVER MIN. 2 LAYERS OF GRADE "D" BLDG PAPER AS SET FORTH IN IBC SECT. 2510.6 OR EQUIVALENT IN CURRENT ICC-ES.

SECURITY

1. ALL EXITS TO BE OPERABLE FROM THE INSIDE WITHOUT USE OF A KEY OR SPECIAL KNOWLEDGE. MANUALLY OPERATED EDGE OR SURFACE MOUNTED FLUSH BOLTS AND SURFACE BOLTS ARE PROHIBITED.
2. ALL EXTERIOR DOOR HINGES SHALL BE MOUNTED WITH THE HINGE ON THE INTERIOR OF THE BUILDING OR HAVE NON-REMOVABLE HINGE PINS.
3. THE STRIKE PLATE OR HOLDING DEVICE FOR PROJECTING DEADBEATS IN WOOD CONSTRUCTION SHALL BE SECURED TO THE JAMB WITH MINIMUM OF 2 SCREWS 1-1/2" MINIMUM IN LENGTH.
4. DEAD BOLTS SHALL PROJECT ONE INCH WHEN EXTENDED IN THE LOCKED POSITION.
5. DEAD BOLTS SHALL BE MADE OF CASE HARDENED STEEL, POWDERED STAINLESS STEEL, BAR BRASS, BRONZE OR ZINC ALLOY.
6. CYLINDER GUARD SHALL BE CONSTRUCTED OF A METAL, NOT A HOLLOW SHELL.
7. NO DOUBLE KEYED LOCKS SHALL BE ALLOWED.
8. THE INACTIVE LEAF OF A PAIR OF DOORS SHALL BE EQUIPPED WITH CANE BOLTS, EDGE OR SURFACE MOUNTED FLUSH BOLTS TOP AND BOTTOM, WITH 1/2" MINIMUM PROJECTION TO HOLD FIRM THIS PORTION OF THE DOOR.
9. ALL DOORS FROM GARAGE INTO THE DWELLING SHALL BE EQUIPPED WITH A SELF-CLOSING DEVICE.
10. OVERHEAD GARAGE DOORS SHALL HAVE THROW BOLT, FLUSH BOLT, CYLINDER TYPE LOCK, OR ELECTRICAL OPERATOR WITH AUTOMATIC LOCKING DEVICE, ALL LOCATED ON INSIDE OF GARAGE, AND SHALL BE CAPABLE OF BEING OPENED AT ALL TIMES FROM INSIDE THE GARAGE WITHOUT THE USE OF A KEY OR ELECTRICAL POWER.

WATER PROOFING

"THUROSEAL" WATERPROOF COATING TO BE APPLIED OVER STUCCO BROWN COAT, PRIOR TO SYNTHETIC COATING, UNDER WALL CAPS, BRICK VENEERS, ETC. WHERE SYNTHETIC COATING MAY NOT BE APPLIED.

SMOKE DETECTORS

A SMOKE DETECTOR SHALL BE INSTALLED IN EACH SLEEPING ROOM AND AT A POINT CENTRALLY LOCATED IN THE CORRIDOR OR AREA GIVING ACCESS TO EACH SEPARATE SLEEPING AREA. WHEN THE DWELLING UNIT HAS MORE THAN ONE STORY, A DETECTOR SHALL BE INSTALLED ON EACH STORY. IN DWELLING UNITS WHERE A STORY IS SPLIT INTO TWO OR MORE LEVELS, THE SMOKE DETECTOR SHALL BE INSTALLED ON THE UPPER LEVEL, EXCEPT THAT WHEN THE LOWER LEVEL CONTAINS A SLEEPING AREA. A DETECTOR SHALL BE INSTALLED ON EACH LEVEL. WHEN SLEEPING ROOMS ARE ON AN UPPER LEVEL, THE DETECTOR SHALL BE PLACED AT THE CEILING OF THE UPPER LEVEL IN CLOSE PROXIMITY TO THE STAIRWAY. IN DWELLING UNITS WHERE THE CEILING HEIGHT OF A ROOM OPEN TO THE HALLWAY SERVING THE BEDROOMS EXCEEDS THAT OF THE OPENING INTO HALLWAY AND IN THE ADJACENT ROOM. DETECTORS SHALL SOUND AN ALARM AUDIBLE IN ALL SLEEPING AREAS OF THE DWELLING UNIT IN WHICH THEY ARE LOCATED. REQUIRED SMOKE DETECTORS SHALL RECEIVE THEIR PRIMARY POWER FROM THE BUILDING WIRING WHEN SUCH WIRING IS SERVED FROM A COMMERCIAL SOURCE AND SHALL BE EQUIPPED WITH A BATTERY BACKUP. THE DISTANCE FROM H.V.A.C. GRILLES AND CEILING FANS IS PER MANUFACTURERS WRITTEN INSTRUCTIONS.

CONSTRUCTION NOTES

1. CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS AT THE SITE AND ALL INCONSISTENCES SHALL BE BROUGHT TO THE ATTENTION OF THE DEVELOPER AND THE ARCHITECT BEFORE PROCEEDING WITH WORK.
2. ALL TRADES SHALL FURNISH ALL LABOR, EQUIPMENT, MATERIALS, AND PERFORM ALL WORK NECESSARY, INDICATED, REASONABLY INFERRED OR REQUIRED BY ANY CODE WITH JURISDICTION TO COMPLETE THEIR SCOPE OF WORK.
3. ALL ALTERNATES AND FINISHES ARE AT THE OPTION OF THE OWNER AND SHALL BE CONSTRUCTED IN ADDITION TO OR IN LIEU OF THE TYPICAL CONDITION AS PER THE SPECIFIC JOB SITE SELECTIONS AND ADDENDUM AVAILABLE THROUGH THE FIELD MANAGER.
4. ANY ERRORS OR OMISSIONS FOUND IN THESE DRAWINGS SHALL BE BROUGHT TO DEVELOPERS AND ARCHITECTS ATTENTION IMMEDIATELY.
5. DO NOT SCALE DRAWINGS WRITTEN DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS.
6. ALL DIMENSIONS ARE TO FACE OF STUD OR TO FACE OF FRAMING UNLESS OTHERWISE NOTED.
7. ALL TRUSS DRAWINGS TO BE REVIEWED AND APPROVED BY THE STRUCTURAL ENGINEER PRIOR TO ISSUANCE OF BUILDING PERMIT.
8. ALL OR EQUAL SUBSTITUTIONS MUST BE SUBMITTED TO AND APPROVED BY CITY BUILDING OFFICIAL PRIOR TO INSTALLATION.
9. ANY DEVIATIONS OR DISCREPANCIES WITHIN THE PLANS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT AND/OR THE GENERAL CONTRACTOR PRIOR TO PROCEEDING WITH ANY WORK RELATED TO THIS PROJECT.

CLIMATIC & GEOGRAPHIC DESIGN CRITERIA

WIND	SEISMIC DESIGN CATEGORY	SUBJECT TO DAMAGE FROM				WINTER DESIGN TEMP	FLOOD HAZARDS
SPEED (MPH)		WEATHERING	FROST LINE DEPTH	TERMITE	DECAY		
115 EXPOSURE C	B	NEGLIGIBLE	12" BELOW FINISH GRADE	MODERATE TO HEAVY	NONE TO SLIGHT	34 DEGREES	NFIP 040049

PROJECT DATA

ADDRESS:	7899 E MARY SHARON DR SCOTTSDALE, AZ 85266
TAX ASSESSORS PARCEL NO.:	216-66-096
PARCEL AREA:	6,588 SF (0.15 ACRES)

BUILDER:
GMK BUILDING & DEVELOPMENT
15933 E TREVINO DR
FOUNTAIN HILLS, AZ 85268
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GEORGE KASNOFF

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CLINT B SCHERF

MECHANICAL ENGINEER:
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SCOTTSDALE, AZ 85254
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ROBERT OTTO FLORI

ARCHITECT:
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8425 WEST EL CORTEZ PLACE
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602.292.6350
BRET.BTA@GMAIL.COM
BRET OVERMYER

CODE COMPLIANCE

CONSTRUCTION TYPE: VB **OCCUPANCY: R3/U**

BUILDING CODES - 2021 EDITION OF THE INTERNATIONAL BUILDING CODE:

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

2021 INTERNATIONAL BUILDING CODE (IBC)
2021 INTERNATIONAL RESIDENTIAL CODE (IRC)
2021 INTERNATIONAL BUILDING CODE ADMINISTRATIVE PROVISIONS
2021 INTERNATIONAL MECHANICAL CODE (IMC)
2021 INTERNATIONAL OR UNIFORM PLUMBING CODE (UPC)
2021 INTERNATIONAL FIRE CODE
2021 INTERNATIONAL FUEL GAS CODE (IFGC)
2020 NATIONAL ELECTRICAL CODE (NEC)
CURRENT ZONING CODES

OWNER TO VERIFY EXACT TYPE AND LOCATION OF ELECTRICAL FIXTURES. CODE REQUIREMENTS MUST STILL BE SATISFIED. ENFORCEMENT SHALL BE PROVIDED BY CITY FIELD INSPECTORS.

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

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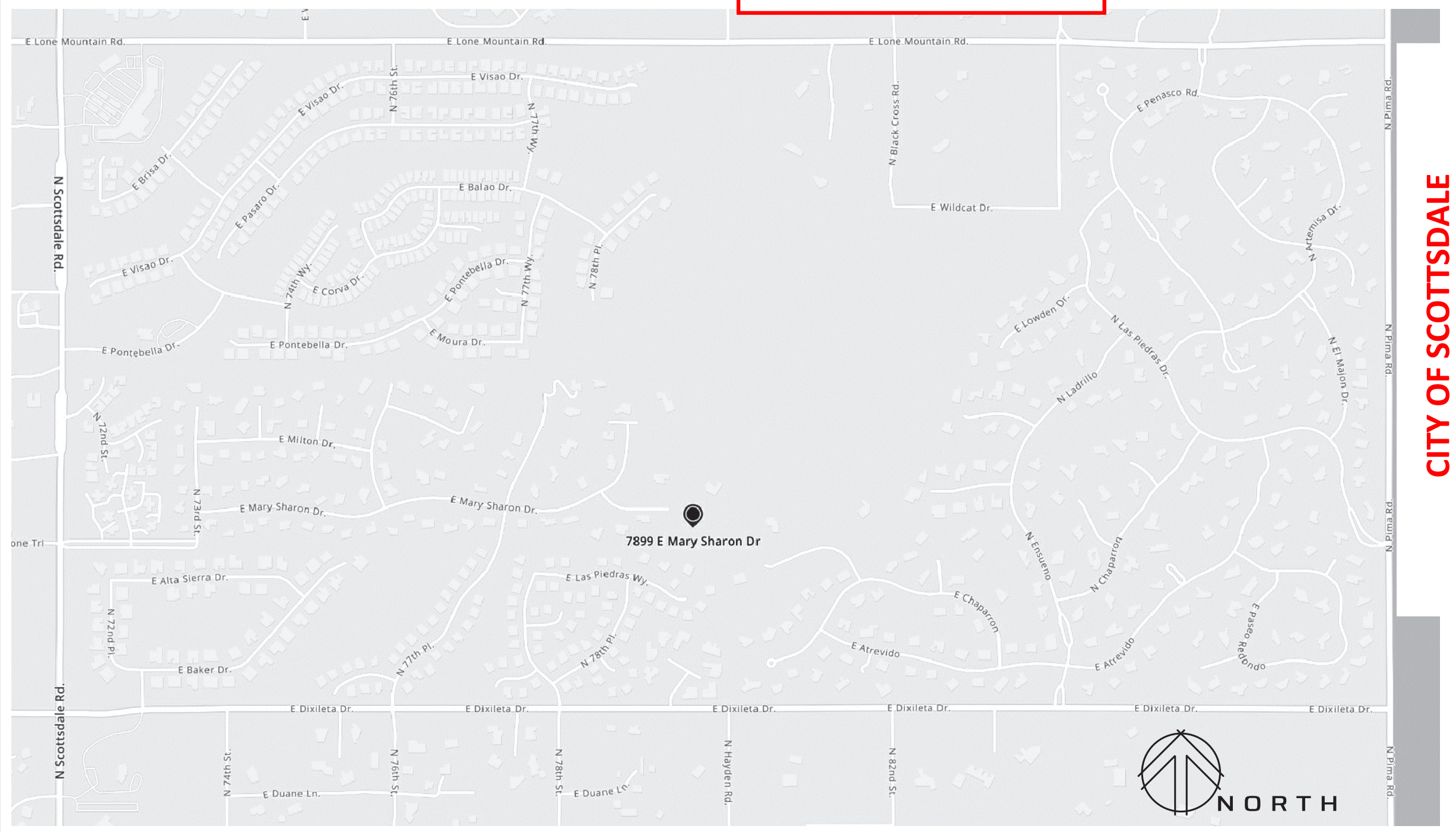
P-1 PLUMBING & GAS DIAGRAMS
GSN GENERAL STRUCTURAL NOTES
S1.0 FOUNDATION LAYOUT
S2.0 FRAMING LAYOUT - ROOF
S2.1 FRAMING LAYOUT - FLOOR
S3.0 SHEAR LAYOUT - UPPER
S3.1 SHEAR LAYOUT - LOWER
SD1 STRUCTURAL DETAILS
SD1A STRUCTURAL DETAILS
SD2 STRUCTURAL DETAILS
SD3 STRUCTURAL DETAILS
SD4 STRUCTURAL DETAILS

AS NOTED

AS NOTED

AREA SCHEDULE	
UPPER LEVEL	3296 SQ. FT.
LOWER LEVEL	3107 SQ. FT.
TOTAL LIVABLE	6402 SQ. FT.
GARAGE 1	899 SQ. FT.
GARAGE 2	728 SQ. FT.
MAIN PATIO	345 SQ. FT.
BED 2 PATIO	155 SQ. FT.
BED 4 PATIO	200 SQ. FT.
FRONT PATIO	296 SQ. FT.
FRONT DECK	392 SQ. FT.
MAIN DECK	344 SQ. FT.
PORCH	64 SQ. FT.
RESIDENCE TOTAL	9824 SQ. FT.
LOT AREA	145641 SQ. FT.
FOOTPRINT	9824 SQ. FT.
COVERAGE	6.75 %



VICINITY MAP

DATE
1/27/2025
4/11/25 - G&D

REGISTERED ARCHITECT
CERTIFICATE NO. 31582
BRET THOMAS OVERMYER
Date Signed 4.11.25
ARIZONA, USA
Bret Overmyer

EXPIRES 9/30/2027

BT ARCHITECTURAL, LLC
8425 West El Cortez Place
Peoria, Arizona 85383
(602) 292-6350
Bret.BTA@GMAIL.COM

Sivarajan Residence
7899 East Mary Sharon Drive
Scottsdale 85266
Lone Mountain Vista Tract A - Lot 93

CITY OF SCOTTSDALE
BUILDING PLANS
THESE PLANS HAVE BEEN APPROVED
AND ARE READY FOR A PERMIT
THIS DOES NOT AUTHORIZE VIOLATIONS OF ANY
CODE OR ORDINANCE

GENERAL NOTES

COS PLAN CHECK #9300-24

SHEET NO.
A0

GRADING & DRAINAGE PLAN
FOR
SIVARAJAN PROPERTY
A SINGLE FAMILY RESIDENCE
at 7899 EAST MARY SHARON DRIVE

A PORTION OF THE SOUTHEAST QUARTER OF SECTION 23, TOWNSHIP 5 NORTH, RANGE 4
EAST OF THE GILA AND SALT RIVER BASE AND MERIDIAN, MARICOPA COUNTY, ARIZONA

GRADING & DRAINAGE NOTES

1. AN APPROVED GRADING AND DRAINAGE PLAN SHALL BE ON THE JOB SITE AT ALL TIMES. DEVIATIONS FROM THE PLAN MUST BE PRECEEDED BY AN APPROVED PLAN REVISION.
2. ALL DRAINAGE PROTECTIVE DEVICES SUCH AS SWALES, PIPES, PROTECTIVE BERMS OR OTHER MEASURES DESIGNED TO PROTECT BUILDINGS OR PROPERTY FROM STORM RUNOFF MUST BE COMPLETED PRIOR TO ANY STRUCTURE BEING BUILT.
3. FOUNDATIONS SHALL BEAR ON NATIVE SOIL OR COMPACTED FILL w/ MIN 95% COMPACTION PER ASTM D698.
4. PREPARATION OF GROUND: THE AREA OVER WHICH FILLS ARE TO BE MADE SHALL BE CLEARED OF ALL TRASH, TREES, STUMPS, DEBRIS OR OTHER MATERIAL NOT SUITABLE AS A FOUNDATION FOR FILL.
5. LOCATIONS OF ALL UTILITIES SHOWN ON THIS PLAN ARE BASED ON INFORMATION SUPPLIED TO THE ENGINEER BY A FIELD SURVEY OR AVAILABLE MAPS. NO GUARANTEE ON LOCATIONS OR ACCURACY IS IMPLIED OR GIVEN. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO CONTACT BLUE STAKE (263–1100) AND ANY OTHER INVOLVED AGENCIES TO LOCATE ALL UTILITIES PRIOR TO CONSTRUCTION.
6. DISTURBED AREAS SHALL BE REPLANTED WITH DESERT PLANTS OR DROUGHT–RESISTANT PLANTS. EXISTING VEGETATION SHALL BE RELOCATED IF DISTURBED BY CONSTRUCTION.
7. CONTRACTOR/BUILDER SHALL NOTIFY THE ENGINEER OF ANY VARIANCES BETWEEN THESE PLANS AND ON–SITE CONDITIONS.
8. ALL DRAINAGE SWALES SHALL BE MAINTAINED BY OWNER TO BE FREE OF TRASH, SILT, VEGETATION AND DEBRIS.
9. CONTRACTOR SHALL VERIFY PROPERTY LINE LOCATIONS PRIOR TO PROCEEDING WITH WORK.
10. ARCHITECTURAL, STRUCTURAL, ELECTRICAL, MECHANICAL AND PLUMBING ARE NOT A PART OF THIS SITE PLAN.
11. LOCATIONS OF ANY VEGETATION NOTED ARE APPROXIMATE AND SHOULD NOT BE USED FOR ARCHITECTURAL LANDSCAPE PLANNING.
12. FINISH GRADE SHALL SLOPE 5% FOR A DISTANCE OF 10' TO AN APPROVED WATER DISPOSAL AREA.
13. UTILITIES SHALL NOT BE LOCATED IN NATURAL AREA OPEN EASEMENTS (NAOS).
14. FINISH FLOOR ELEVATION SHALL BE PROVIDED BY THE C.O.S. FOR FEMA WHERE REQUIRED.
15. SWIMMING POOLS, SPAS, FENCES, SITE WALLS, AND RETAINING WALLS REQUIRE SEPARATE PERMITS.
16. ALL MECHANICAL EQUIPMENT (AIR CONDITIONER, POOL EQUIPMENT, ETC.) SHALL BE SCREENED A MINIMUM OF ONE FOOT HIGHER THAN THE HIGHEST PORTION OF THE EQUIPMENT, AND SHALL BE COMPATIBLE WITH THE ADJACENT BUILDING.
17. GUESTHOUSES ON LOTS LESS THAN 35,000 Sq. Ft. SHALL NOT PROVIDE COOKING FACILITIES AND WILL NEVER BE OFFERED FOR RENT. GUESTHOUSES ON LOTS GREATER THAN 35,000 Sq. Ft. MAY PROVIDE COOKING FACILITIES. (AND WILL NEVER BE OFFERED FOR RENT)
18. LAND DESIGNATED AS NAOS SHALL BE PERMANENTLY MAINTAINED AS NATURAL OPEN SPACE THROUGH EASEMENT, DONATION OR DEDICATION TO THE CITY OR OTHER ENTITY. NAOS SHALL BE MAINTAINED BY THE PROPERTY OWNER.
19. ENSURE NO CONSTRUCTION OFF PROPERTY
20. POOLS SHALL NOT BE EMPTIED OR BACKWASHED INTO WASHES, STREETS, NAOS, SCENIC CORRIDORS, ON TO AN ADJACENT LOT, OR TRACT OF LAND.
21. A GUESTHOUSE OR ACCESSORY STRUCTURE SHALL NOT EXCEED A GROSS SIZE GREATER THAN 50% OF THE FOOTPRINT SIZE OF THE PRINCIPAL BUILDING.
22. REFLECTIVE BUILDING MATERIALS ARE PROHIBITED.
23. THE OWNER AND/OR CONTRACTOR INCORPORATED DEVELOPMENT DESIGN AND CONSTRUCTION TECHNIQUES THAT BLEND SCALE, FORM AND VISUAL CHARACTER INTO THE NATURAL LANDFORM AND MINIMIZE EXPOSED SCARS TO THE SATISFACTION OF THE PLANNING AND DEVELOPMENT SERVICES DEPARTMENT.
24. EXTERIOR LIGHTING SHOULD BE LOW SCALE AND DIRECTED DOWNWARD, RECESSED OR SHIELDED SO THAT THE LIGHT SOURCE IS NOT VISIBLE FROM RESIDENTIAL DEVELOPMENTS IN THE AREA OR FROM PUBLIC VIEWPOINT. EXTERIOR FIXTURES SHALL NOT GENERALLY EXCEED A HEIGHT OF 6 FEET MEASURED FROM THE NEAREST ADJACENT GRADE TO THE TOP OF THE FIXTURE (LOWER HEIGHTS MAY BE REQUIRED BY THE INSPECTION OR CODE ENFORCEMENT STAFF.)
25. LAND DESIGNATED AS NAOS SHALL BE PERMANENTLY MAINTAINED AS OPEN SPACE. THE PROPERTY OWNER SHALL MAINTAIN ALL DESIGNATED NAOS.
26. A REGISTERED SURVEYOR SHALL STAKE AND ROPE OR FENCE THE CONSTRUCTION ENVELOPE AND NAOS EASEMENT IN ACCORDANCE WITH THE SITE PLAN. THE CONSTRUCTION ENVELOPE AND NAOS AREA STAKED IS THE MUST BE THE MOST RESTRICTIVE IN ACCORDANCE WITH THE ZONING ORDINANCE.

CITY OF SCOTTSDALE SITE PLAN NOTES (ESL & FO OVERLAY)

55. POOLS REQUIRE SEPARATE APPROVAL AND PERMIT.
56. POOLS SHALL NOT BE EMPTIED OR BACKWASHED INTO WASHES, STREETS, NAOS, SCENIC CORRIDORS, ON TO AN ADJACENT LOT, OR TRACT OF LAND.
57. ALL MECHANICAL EQUIPMENT (AIR CONDITIONER, POOL EQUIP. ETC.) SHALL BE SCREENED A MINIMUM OF 1 FOOT ABOVE THE HIGHEST PORTION OF THE EQUIPMENT FROM ALL SIDES AND SHALL BE COMPATIBLE WITH THE ADJACENT BUILDING. SHOW LOCATION OF EQUIPMENT ON SITE PLAN.
58. A GUESTHOUSE SHALL NEVER BE OFFERED FOR RENT.
59. A GUESTHOUSE SHALL NOT EXCEED A GROSS FOOTPRINT SIZE GREATER THAN 50% OF THE FOOT PRINT SIZE OF THE PRINCIPAL BUILDING.
60. EXTERIOR MATERIALS AND PAINT COLORS SHALL NOT EXCEED A VALUE AND/OR CHROMA OF 6 AS INDICATED IN THE MUNSEL BOOK OF COLOR ON FILE IN THE CITY OF SCOTTSDALE'S PLANNING & DEVELOPMENT DEPARTMENT. THE CITY MAY REQUIRE COLOR SAMPLES TO VERIFY COMPLIANCE.
61. MATERIALS USED FOR EXTERIOR SURFACES OF ALL STRUCTURES SHALL BLEND IN COLOR, HUE, AND TONE WITH THE SURROUNDING NATURAL DESERT SETTING TO AVOID HIGH CONTRAST.
62. SURFACE MATERIALS OF WALLS, RETAINING WALLS OR FENCES SHALL BE SIMILAR TO AND COMPATIBLE WITH THOSE OF THE ADJACENT MAIN BUILDINGS.
63. PLANT MATERIALS NOT INDIGENOUS TO THE ESL AREA SHALL BE LIMITED TO ENCLOSED YARD AREAS AND NON–INDIGENOUS PLANTS THAT HAVE THE POTENTIAL OF EXCEEDING TWENTY (20) FEET IN HEIGHT ARE PROHIBITED. TURF SHALL BE LIMITED TO ENCLOSED AREAS NOT VISIBLE FROM A LOWER ELEVATION.
64. REFLECTIVE BUILDING MATERIALS ARE PROHIBITED.
65. REFLECTIVE BUILDING AND ROOFING MATERIALS (OTHER THAN WINDOWS AND SOLAR PANELS) INCLUDING MATERIALS WITH HIGH GLOSS FINISHES AND BRIGHT, UNTARNISHED COPPER, ALUMINUM, GALVANIZED STEEL OR OTHER METALLIC SURFACES, SHALL BE TEXTURED OR HAVE A MATTE OR NON–REFLECTIVE SURFACE TREATMENT TO REDUCE THE REFLECTIONS OF SUNLIGHT ONTO OTHER PROPERTY.
66. MIRRORED SURFACES OR ANY TREATMENTS THAT CHANGE ORDINARY GLASS INTO A MIRRORED SURFACE ARE PROHIBITED.
67. THE OWNER SHALL INCORPORATE DEVELOPMENT DESIGN AND CONSTRUCTION TECHNIQUES THAT BLEND IN SCALE, FORM AND VISUAL CHARACTER TO MINIMIZE EXPOSED SCARS TO THE SATISFACTION OF THE PLANNING & DEVELOPMENT DEPARTMENT.
68. ANY PROPOSED MODIFICATIONS TO NATURAL WATERCOURSES AND ALL WALLS AND FENCES CROSSING NATURAL WATERCOURSES SHALL BE DESIGNED IN ACCORDANCE WITH THE STANDARDS AND POLICIES SPECIFIED IN CHAPTER 37 (DRAINAGE AND FLOODPLAIN ORDINANCE) OF THE SCOTTSDALE REVISED CODE.
69. LAND DESIGNATED AS NAOS SHALL BE PERMANENTLY MAINTAINED AS OPEN SPACE. THE PROPERTY OWNER SHALL MAINTAIN ALL DESIGNATED NAOS.
70. ALL EXTERIOR LIGHTING BELOW 3 FEET IN HEIGHT SHALL BE FULLY SHIELDED. ALL EXTERIOR LIGHTING ABOVE 3 FEET IN HEIGHT SHALL CONSIST OF HORIZONTAL FULL–CUTOFF FIXTURES AND DIRECTED DOWNWARD, EXCEPT LIGHTS UTILIZED FOR SECURITY PURPOSES.
71. ALL EXTERIOR LIGHTS INCLUDING THOSE MOUNTED TO BUILDINGS/STRUCTURES AND ON POLES SHALL NOT EXCEED A HEIGHT OF SIXTEEN (16) FEET. EXEMPTION: LIGHTS THAT ARE CONNECTED TO A DELAY SWITCH THAT DO NOT STAY ON MORE THAN 15 MINUTES FOR SECURITY PURPOSES SHALL NOT BE REQUIRED TO BE SHIELDED OR CONTAIN HORIZONTAL CUTOFFS.
72. EXTERIOR LIGHTING SHOULD BE LOW SCALE AND DIRECTED DOWNWARD, RECESSED OR SHIELDED SO THAT THE LIGHT SOURCE IS NOT VISIBLE FROM RESIDENTIAL DEVELOPMENTS IN THE AREA OR FROM A PUBLIC VIEWPOINT. EXTERIOR FIXTURES SHALL NOT GENERALLY EXCEED A HEIGHT OF 6 FEET MEASURED FROM THE NEAREST ADJACENT GRADE TO THE TOP OF THE FIXTURE (LOWER HEIGHTS MAY BE REQUIRED BY THE INSPECTION OR CODE ENFORCEMENT STAFF).
73. WHERE ON–SITE WALLS ARE PLACED ADJACENT TO NAOS AREAS AT LEAST 50 PERCENT OF THE WALL SURFACE SHALL BE A VIEW FENCE.
74. TEMPORARY/SECURITY FENCING THAT IS REQUIRED OR IS OPTIONALLY PROVIDED SHALL BE IN ACCORDANCE WITH THE ZONING ORDINANCE AND THE DESIGN STANDARDS AND POLICIES MANUAL.
75. IN ACCORDANCE WITH THE ZONING ORDINANCE, A REGISTERED SURVEYOR SHALL STAKE AND ROPE THE MOST RESTRICTIVE AREA DEFINED BY THE CONSTRUCTION ENVELOPE AND NAOS EASEMENT AS SHOWN ON THE SITE PLAN.
76. NO PAINT COLOR OR SURFACE TREATMENT SHALL BE USED WHICH HAS A LIGHT REFLECTIVE VALUE (LRV) GREATER THAN 35%.
79. SITE WALLS MUST BE SETBACK 15 FEET FROM SIDE AND REAR PROPERTY LINES. THIS APPLIES ONLY TO RESIDENTIAL PARCELS CONTAINING AN AREA OF 35,000 SQ FT OR LARGER.
80. WASHES OF 50 CFS OR GREATER FLOW SHALL BE IDENTIFIED AND WATERCOURSE(S) SHALL BE UNALTERED. IF WATERCOURSE(S) ARE ALTERED, PROVIDE A COPY OF THE WASH MODIFICATION APPROVAL LETTER AND REFERENCE THE CASE NUMBER ON THE SITE PLAN.
81. APPLICATIONS THAT HAVE RECEIVED A HARDSHIP EXEMPTION SHALL PROVIDE THE CASE NUMBER ON THE SITE PLAN.
82. SITE WALLS SHALL NOT BE PROVIDED IN NAOS AREAS OR DISRUPT THE CONTINUITY OF NAOS CORRIDORS.
83. IDENTIFY THE SPECIFIC LOCATION OF THE CONSTRUCTION ENVELOPE ON SITE PLAN. THE CONSTRUCTION ENVELOPE CONSISTS OF AN AREA ENCLOSED BY A LINE EXTENDING 15 FEET OUT FROM ALL DISTURBANCES ON LOT.

SCOTTSDALE FIRE DEPARTMENT
GUIDELINES FOR EMERGENCY VEHICLE ACCESS

ACCESS GRADES FROM 0 TO 12% FOR ONE SINGLE FAMILY RESIDENCE

Drive Length	Drive Width	Drive Surface	Turn–a–round Required	Hose Lay	Sprinkler Requirements Mod–13d	Attic Pilot Heads & Patio Protection
Less < 200 feet	12'	Hard	No	More than 200 feet	Yes	Yes

FLOOD INSURANCE RATE MAP (FIRM)

COMMUNITY NUMBER	PANEL NUMBER (Panel Date)	SUFFIX	DATE OF FIRM (Index Date)	FIRM ZONE	BASE FLOOD ELEVATION (IN AO ZONE USE DEPTH)
045012	1306 7/20/21	M	2/08/24	X	N/A

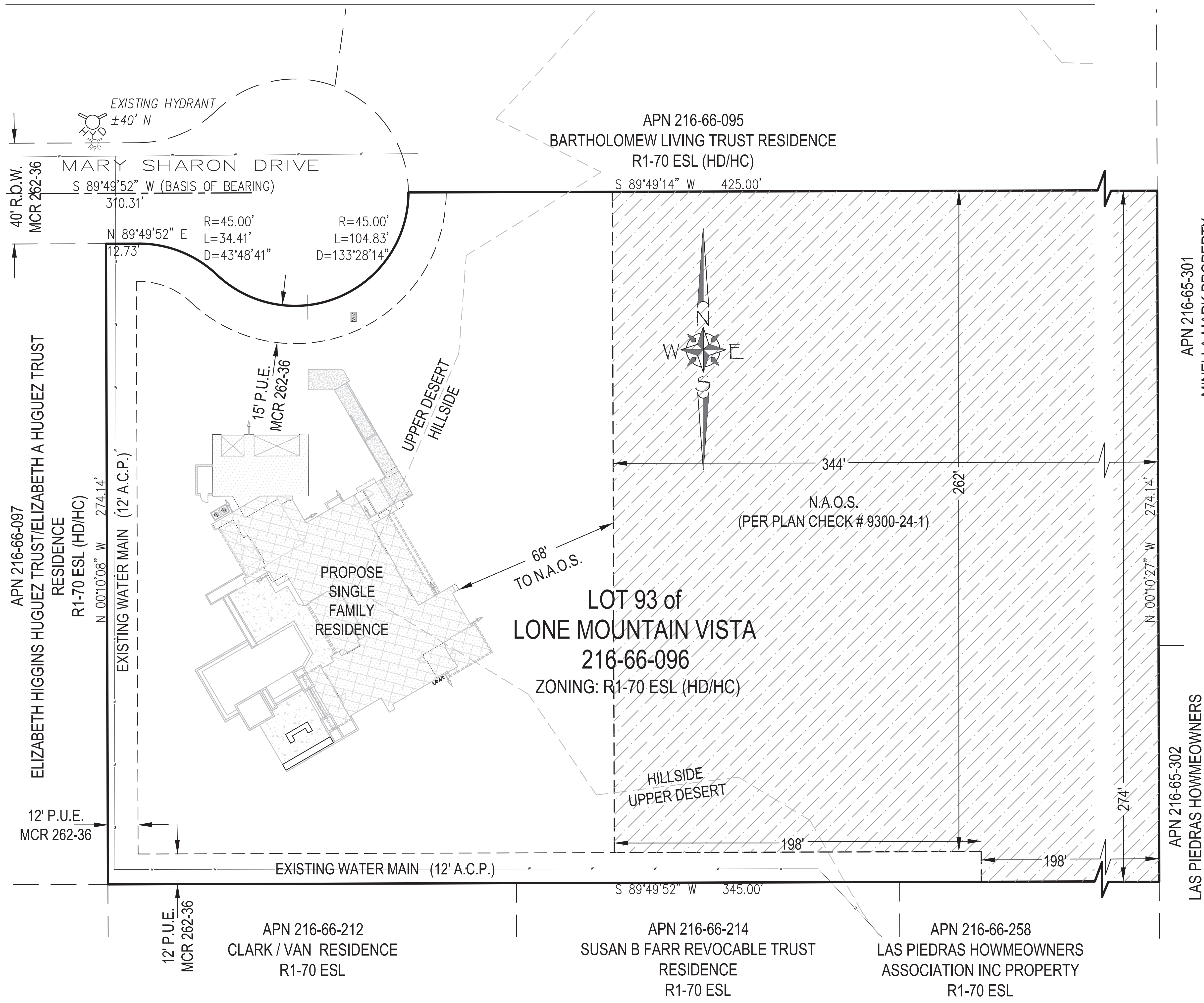
ENGINEER'S CERTIFICATION STATEMENT

THE LOWEST FLOOR ELEVATION(S) AND/OR FLOODPROOFING ELEVATION(S) ON THIS PLAN ARE SUFFICIENTLY HIGH TO PROVIDE PROTECTION FROM FLOODING CAUSED BY A ONE–HUNDERED YEAR STORM, AND ARE IN ACCORDANCE WITH CITY OF SCOTTSDALE REVISED CODE, CHAPTER 37 – FLOODPLAIN & STORMWATER REGULATIONS.

ENGINEERING NOTES:

1. TOPOGRAPHIC/BOUNDARY SURVEY WAS DONE BY OTHERS, S.S.E. MAKES NO ASSURANCES TO THE ACCURACY OF CONTOURS, BOUNDARY LOCATIONS, OR EASEMENT LOCATIONS WITHIN SAID SURVEY.
2. THE BUILDING SETBACKS, ENVELOPE AND LOT COVERAGE ARE SHOWN PER THE ZONING DISTRICT. SETBACKS AND OTHER RESTRICTIONS CREATED BY AMENDED STANDARDS OR COVENANTS MAY BE APPLICABLE. FINAL INTERPRETATION IS THE RESPONSIBILITY OF THE OWNER OF SAID PROPERTY AND THE CORRESPONDING GOVERNMENTAL AGENCY OVERSEEING SAID PROPERTY.
3. WATERMAIN AND SEWER LOCATIONS ARE BASED ON INFORMATION PROVIDED BY THE CITY OF SCOTTSDALE AND MONUMENTS FOUND IN THE FIELD MAY NOT BE EXACT. CONTRACTOR TO VERIFY ACTUAL SIZES, LOCATIONS AND TYPES OF ALL UTILITIES PRIOR TO CONSTRUCTION.
4. CONTRACTOR TO ENSURE POSITIVE DRAINAGE FROM BUILDING FOUNDATION FOR A MINIMUM OF 5% SLOPE FOR 10 FEET, NOTIFY ENGINEER OF ANY DISCREPANCIES.
5. ALL COMPACTION, EXCAVATION AND BACK FILL SHALL BE DONE IN ACCORDANCE WITH GEOTECHNICAL REPORT OR AT MINIMUM A 95% COMPACTION RATE IS REQUIRES PER ASTM D698.
6. ALL SURFACE AND UNDERGROUND DRAINAGE SYSTEM, ARE TO BE MAINTAINED BY OWNER, INCLUDING MAINTENANCE AND CLEANING. PERIODIC MAINTENANCE WILL KEEP SYSTEM OPERATING PROPERLY.
7. POOL AND SPA BUILDING PERMIT TO BE OBTAINED BY OTHERS, AND DESIGN SPECS ARE NOT PART OF THIS PLAN. LOCATION OF SAID FACILITIES ON THIS PLAN ARE APPROXIMATIONS, AND ARE NOT FOR CONSTRUCTION.
7. ON–SITE PLANT SALVAGE INFORMATION SHOWN HEREON IS FOR CITY OF SCOTTSDALE PLAN APPROVAL PURPOSES
8. ONLY. S.S.E. ASSUMES NO LIABILITY FOR THE EVALUATION, SALVAGE ABILITY, REMOVAL, AND/OR RELOCATION OF
9. ON–SITE PLANT MATERIALS. CONTACT SALVAGE CONTRACTOR FOR MORE INFORMATION.
10. THE PAD ELEVATIONS OF ALL NEW A/C &/OR ELECTRO–MECHANICAL UNITS WILL BE SET AT OR ABOVE R.F.E.

PROJECT SITE



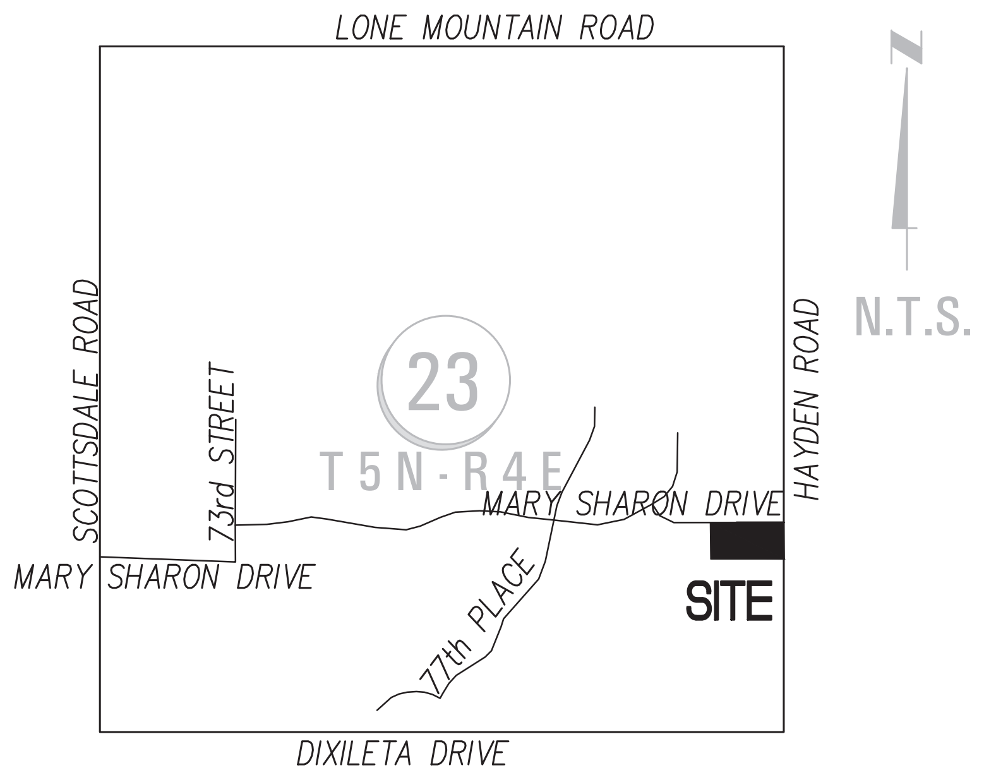
LEGEND

- MONUMENT LINE
- PROPERTY LINE
- OTHERS PROPERTY LINE
- EASEMENT
- B.S.L. BUILDING SETBACK LINE
- SANITARY SEWER LINE
- W WATER LINE
- HYDRANT
- ⊗ WATER VALVE
- WM WATER METER
- T TELEPHONE BOX
- C CABLE TV BOX
- E TRANSFORMER
- Ⓢ SANITARY MANHOLE
- ○ FOUND REBAR (AS NOTED)
- ◉ FOUND BRASS CAP FLUSH
- ● SET REBAR (AS NOTED)

P.U.E.	PUBLIC UTILITIES EASEMENT
D.E.	DRAINAGE EASEMENT
S.V.E.	SIGHT VISIBILITY EASEMENT
R/W	RIGHT OF WAY

- BARREL CACTUS
- PALO VERDE
- MESQUITE
- OCOTILLO
- SAGUARO
- RIPRAP/ROCK
- ▨ N.A.O.S. UNDISTURBED
- N.A.O.S. REVEG

LOCATION MAP



BENCHMARK

GDACS POINT # 42533–Z1, 3" BRASS CAP AT INTERSECTION OF HAYDEN ROAD & DIXILETA DRIVE, HAVING AN ELEVATION OF 2,254.29 FEET NAVD '88.

I HEREBY CERTIFY THAT ALL ELEVATIONS REPRESENTED ON THIS PLAN ARE BASED ON THE NAVD 1988 AND MEET THE FEMA BENCHMARK MAINTENANCE (BMM) CRITERIA.

SITE DATA

LEGAL DESCRIPTION
DEED 2024–0357050 & LOT 93 OF LONE MOUNTAIN VISTA , ACCORDING TO THE RECORDED SURVEY OR RECORD IN THE OFFICE OF THE COUNTY RECORDER OF MARICOPA COUNTY, ARIZONA, RECORDED IN BOOK 262 OF MAPS, PAGE 36.

AREA:	145,641 SqFt (3.43 Ac)
APN:	216–66–096
MCR:	262–36
ZONING:	R1–70 ESL (HD/HC) & HC ESL
Q.S.:	53–46
LANDFORM CLASSIFICATION:	UPPER DESERT / HILLSIDE

BUILDING SETBACKS (BSB):

FRONT	60' (NORTHWEST)
SIDE	15'/40' AGGREGATE (NORTHEAST/SOUTH)
REAR	60' (WEST)

NAOS REQUIREMENTS by SLOPE ANALYSIS
0–5% SLOPE = 21,456 SqFt (14.7% OF LOT) @ 25% NAOS= 5,364 SqFt
5–10% SLOPE = 18,203 SqFt (12.5% OF LOT) @ 35% NAOS= 6,371 SqFt
HILLSIDE
15–25% SLOPE = 26,267 SqFt (18.0% OF LOT) @ 65% NAOS= 17,074 SqFt
25% + SLOPE = 79,715 SqFt (54.7% OF LOT) @ 80% NAOS= 63,772 SqFt
TOTAL NAOS REQUIRED= 92,582 SqFt

PROPOSED
PROVIDED: 92,590 SqFt (63.6% OF LOT)
UNDISTURBED: 92,590 SqFt (100% OF REQ'D NAOS)
DISTURBED(REVEGED AREA): 0 SqFt (0% OF REQ'D NAOS/30% MAX ALLOWED)
TOTAL NAOS CREDIT: 92,590 SqFt (100% OF REQUIRED)

UNDER ROOF: ***REFERENCE BUILDING PLANS FOR DETAILS
LOT COVERAGE: 9,750 SqFt PROPOSED UNDERROOF
(6.69% TOTAL LOT COVERAGE)

WALL QUANTITIES

RETAINING WALL (PER DETAIL – SHEET GD 3)	65 LF

NATIVE PLANTS

OWNER RESPONSIBLE FOR PROVIDING APPROVED NATIVE PLANT SURVEY TO CITY IF REQUIRED. NATIVE PLANT INFORMATION WILL NOT APPEAR ON GRADING & DRAINAGE PLAN.

OWNER

GANESH SIVARAJAN
22230 N. 55th STREET
PHOENIX, AZ 85054
C/O: GEORGE KASNOFF
(480) 816–3205
KASNOFF@AOL.COM

DEVELOPER/BUILDER

GEORGE KASNOFF
(480) 816–3205
KASNOFF@AOL.COM

SURVEYOR

BABBITT SMITH ENGINEERING
1140 E. GREENWAY STREET, SUITE 2
MESA, AZ 85203
(480) 610–1341
SURVEY DATE: MARCH, 2024

ENGINEER

S S E
11350 SOUTH VIEWPOINTE WAY
YUMA, ARIZONA 85367
PRINCIPLE: STEVE SEITZ
PROJECT MANAGER: CLINT SCHERF
PH. 480–225–4920

SITE PLAN
APPROVED
BY THE CITY OF SCOTTSDALE PLANNING DEPARTMENT
9300-24 PLAN CHECK NO.
APPROVED BY
05/22/2025 DATE
CONSTRUCTION AND INSTALLATION SHALL BE IN ACCORDANCE WITH THIS PLAN AND ANY AND ALL DEVIATIONS WILL REQUIRE REAPPROVAL

SHEET INDEX

SHEET GD 1	COVER SHEET
SHEET GD 2	GRADING & DRAINAGE
SHEET GD 3	DETAILS & SITE SECTIONS
SHEET GD 4	DETAILS & SITE SECTIONS
SHEEY GD 5	SLOPE ANALYSIS (N.A.O.S.)

Contact Arizona 811 at least two full working days before you begin excavation
ARIZONA811 BLUE STAKE, INC.
Call 811 or click Arizona811.com

11/14/24	FIRST SUBMITTAL – CITY OF SCOTTSDALE
01/30/25	FINAL SUBMITTAL – CITY OF SCOTTSDALE
3/20/25	FINAL SUBMITTAL – CITY OF SCOTTSDALE
5/08/25	FINAL SUBMITTAL – CITY OF SCOTTSDALE

PROJECT INFO – PLEASE CONTACT PROJECT MANAGER CLINT SCHERF (480) 225–4920

(480) 225-4920 SSEAZ2004@GMAIL.COM
CIVIL ~ STRUCTURAL
S S E
RESIDENTIAL ~ COMMERCIAL
11350 SOUTH VIEWPOINTE WAY
YUMA, ARIZONA 85367

CIVIL ENGINEER
33562
STEVEN J. SEITZ
5-08-25
Expires: 3/31/26

PROJECT MANAGER:
CLINT SCHERF (480) 225-4920

CITY OF SCOTTSDALE
BUILDING PLANS
THESE PLANS HAVE BEEN APPROVED
AND ARE READY FOR A PERMIT
THIS DOES NOT AUTHORIZE VIOLATIONS OF ANY CODE OR ORDINANCE

Grading & Drainage P
COVER SHEET
7899 EAST MARY SHARON DRIVE
SCOTTSDALE, ARIZONA

SCALE: 0 30 60
1 INCH = 30 FEET

PROJECT No. SSE-1049-2024

SHEET: GD 1 of 05

PLAN CHECK # 9300 -24

COS PLAN CHECK #9300-24

SITE PLAN
APPROVED
BY CITY OF SCOTTSDALE PLAN REVIEW
9300-24 PLAN CHECK NO. | scasey REVIEWER | 05/21/2025 DATE
CONSTRUCTION AND INSTALLATION SHALL BE IN ACCORDANCE WITH THIS PLAN AND ANY AND ALL DEVIATIONS WILL REQUIRE REAPPROVAL

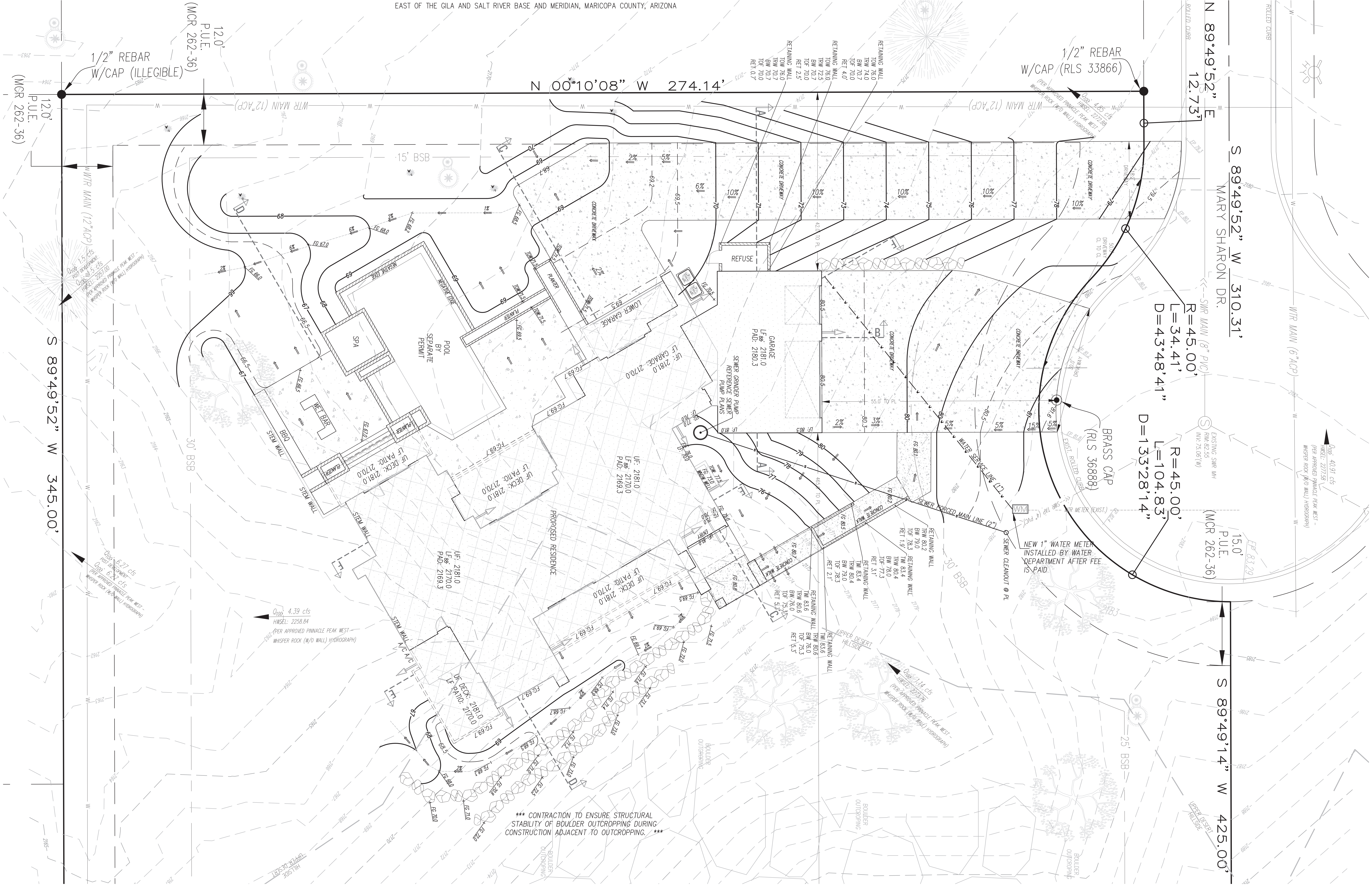
GRADING & DRAINAGE PLAN
FOR
SIVARAJAN PROPERTY

A SINGLE FAMILY RESIDENCE
at 7899 EAST MARY SHARON DRIVE

A PORTION OF THE SOUTHEAST QUARTER OF SECTION 23, TOWNSHIP 5 NORTH, RANGE 4 EAST OF THE GILA AND SALT RIVER BASE AND MERIDIAN, MARICOPA COUNTY, ARIZONA

FRONT SETBACKS

FRONT SETBACK: 155' x 30' = 4,650 SqFt
DRIVEWAY WITHIN FRONT SETBACK: 107 + 159 = 266 SqFt (5.7%)



N 00°10'08" W 274.14'
1/2" REBAR W/CAP (ILLEGIBLE)
1/2" REBAR W/CAP (RLS 33866)
12.0' P.U.E. (MCR 262-36)
15' BSB
30' BSB
25' BSB
WTR MAIN (12"ACP)
WTR MAIN (6"ACP)
SWR MAIN (8" PVC)
N 89°49'52" E 12.73'
S 89°49'52" W 310.31'
MARY SHARON DR.
R=45.00'
L=34.41'
D=43°48'41"
R=45.00'
L=104.83'
D=133°28'14"
BRASS CAP (RLS 36888)
15.0' P.U.E. (MCR 262-36)
S 89°49'52" W 345.00'
S 89°49'14" W 425.00'
ROLLED CURB
EXIST. ROLLED CURB
EXISTING SWR MH RIM:82.55 INV:75.06(W)
CONCRETE DRIVEWAY
REFUSE
GARAGE LF: 2181.0 PAD: 2180.3
LOWER GARAGE
UF GARAGE: 2170.0
SEWER GRINDER PUMP REFERENCE SEWER PUMP PLANS
POOL BY SEPARATE PERMIT
SPA
NEGATIVE EDGE
PLANTER
WET BAR
BBQ
STEM WALL
UF DECK: 2181.0
LF PATIO: 2170.0
UF: 2181.0 LF: 2170.0 PAD: 2169.3
PROPOSED RESIDENCE
ENTRY
A/C
RETAINING WALL
WATER SERVICE LINE (1")
SEWER FORCED MAIN LINE (2")
WM
NEW 1" WATER METER INSTALLED BY WATER DEPARTMENT AFTER FEE IS PAID
SEWER CLEANOUT @ PL
55.0' TO PL
42.0' TO PL
UPPER DESERT HILLSIDE
BOULDER OUTCROPPING
Q100: 4.39 cfs HWSEL: 2258.84 (PER APPROVED PINNACLE PEAK WEST - WHISPER ROCK (W/O WALL) HYDROGRAPH)
Q100: 40.91 cfs
Q100: 1.14 cfs
Q100: 6.27 cfs
10%
2%
5%
15%
*** CONTRACTION TO ENSURE STRUCTURAL STABILITY OF BOULDER OUTCROPPING DURING CONSTRUCTION ADJACENT TO OUTCROPPING. ***

Contact Arizona 811 at least two full working days before you begin excavation
ARIZONA811 BLUE STAKE, INC.
Call 811 or click Arizona811.com

11/14/24		FIRST SUBMITTAL – CITY OF SCOTTSDALE
01/30/25		FINAL SUBMITTAL – CITY OF SCOTTSDALE
3/20/25		FINAL SUBMITTAL – CITY OF SCOTTSDALE
5/08/25		FINAL SUBMITTAL – CITY OF SCOTTSDALE

PROJECT INFO – PLEASE CONTACT PROJECT MANAGER CLINT SCHERF (480) 225-4920

(480) 225-4920 SSEAZ2004@GMAIL.COM
CIVIL ~ STRUCTURAL
SSE
RESIDENTIAL ~ COMMERCIAL
11350 SOUTH VIEWPOINTE WAY
YUMA, ARIZONA 85367

CIVIL ENGINEER
Registered Professional Engineer (Civil) CERTIFICATE NO. 33562 STEVEN J. SEITZ Date Signed 5-08-25 ARIZONA, U.S.A. Expires: 3/31/26

PROJECT MANAGER:
CLINT SCHERF (480) 225-4920

CITY OF SCOTTSDALE
BUILDING PLANS
THESE PLANS HAVE BEEN APPROVED
AND ARE READY FOR A PERMIT
THIS DOES NOT AUTHORIZE VIOLATIONS OF ANY CODE OR ORDINANCE

Grading & Drainage P

PLAN VIEW

7899 EAST MARY SHARON DRIVE
SCOTTSDALE, ARIZONA

0 10 20
SCALE: 1 INCH = 10 FEET

PROJECT No. SSE-1049-2024

SHEET: GD 2 of 05

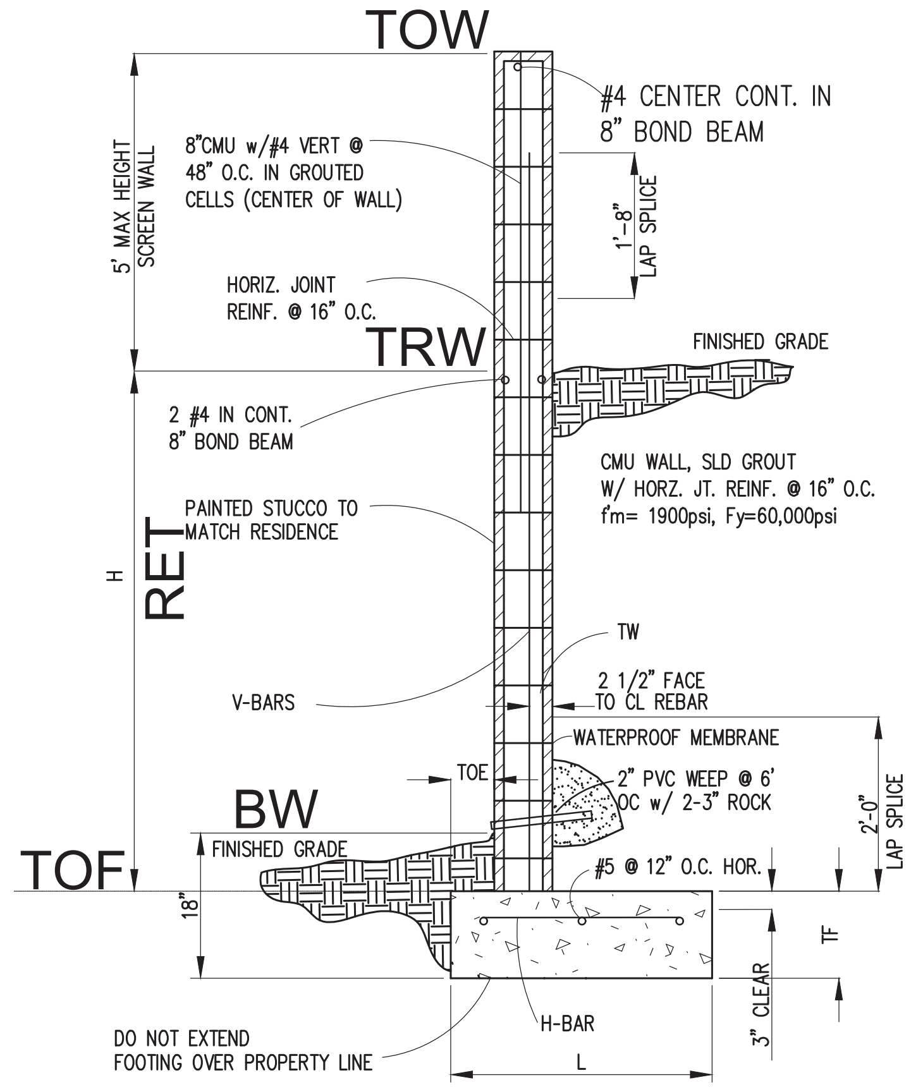
PLAN CHECK # 9300 -24
COS PLAN CHECK #9300-24

GRADING & DRAINAGE PLAN
FOR
SIVARAJAN PROPERTY
A SINGLE FAMILY RESIDENCE
at 7899 EAST MARY SHARON DRIVE

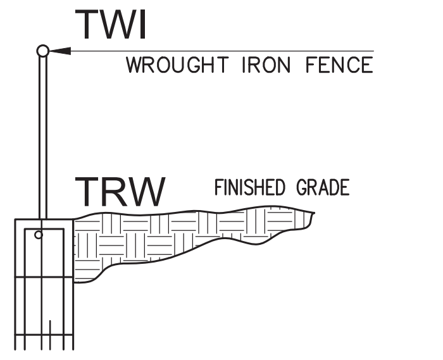
A PORTION OF THE SOUTHEAST QUARTER OF SECTION 23, TOWNSHIP 5 NORTH, RANGE 4 EAST OF THE GILA AND SALT RIVER BASE AND MERIDIAN, MARICOPA COUNTY, ARIZONA

RETAINING WALL DETAIL

CMU WALL (Partial Retention)



TOW
#4 CENTER CONT. IN 8" BOND BEAM
8"CMU w/#4 VERT @ 48" O.C. IN GROUTED CELLS (CENTER OF WALL)
5' MAX HEIGHT SCREEN WALL
1'-8" LAP SPLICE
HORIZ. JOINT REINF. @ 16" O.C.
TRW
FINISHED GRADE
2 #4 IN CONT. 8" BOND BEAM
CMU WALL, SLD GROUT W/ HORZ. JT. REINF. @ 16" O.C. f'm= 1900psi, Fy=60,000psi
PAINTED STUCCO TO MATCH RESIDENCE
H
RET
TW
V-BARS
2 1/2" FACE TO CL REBAR
WATERPROOF MEMBRANE
TOE
2" PVC WEEP @ 6' OC w/ 2-3" ROCK
BW
FINISHED GRADE
2'-0" LAP SPLICE
TOF
#5 @ 12" O.C. HOR.
18"
TF
3" CLEAR
H-BAR
DO NOT EXTEND FOOTING OVER PROPERTY LINE
L



TWI
WROUGHT IRON FENCE
TRW
FINISHED GRADE

DESIGN NOTES:

WIND ABOVE BACKFILL = 15psf
ALLOW SOIL PRESSURE = 1500psf
FOOTING CONCRETE f'c = 2500psi
FOOTING REBAR Fy = 60,000psi

MASONRY
ASTM C90
f'm = 1900psi
GROUT SOLID f'c = 2000psi
TYPE "S" MORTAR, RUNNING BOND

REINFORCING
GR 60 ASTM A615 UNO

CONCRETE
ASTM C-94 2500psi @ 28 DAYS

SOIL
SANDY/GRAVEL, WELL DRAINED
DESIGN IS NOT ALLOWED AT EXPANSIVE SOIL

NOTE:
WALL LENGTHS GREATER THAN 40' SHALL HAVE 1/4" EXPANSION JOINTS AT 20' OC

H HEIGHT	TW	V-BAR	L LENGTH	TF	TOE	H-BAR
4'-0"	8"	#4@ 16" oc	4'-8"	12"	8"	#4@ 18" oc
6'-0"	8"	#5@ 0" oc	6'-0"	12"	8"	#5@ 16" oc

8" per calculations

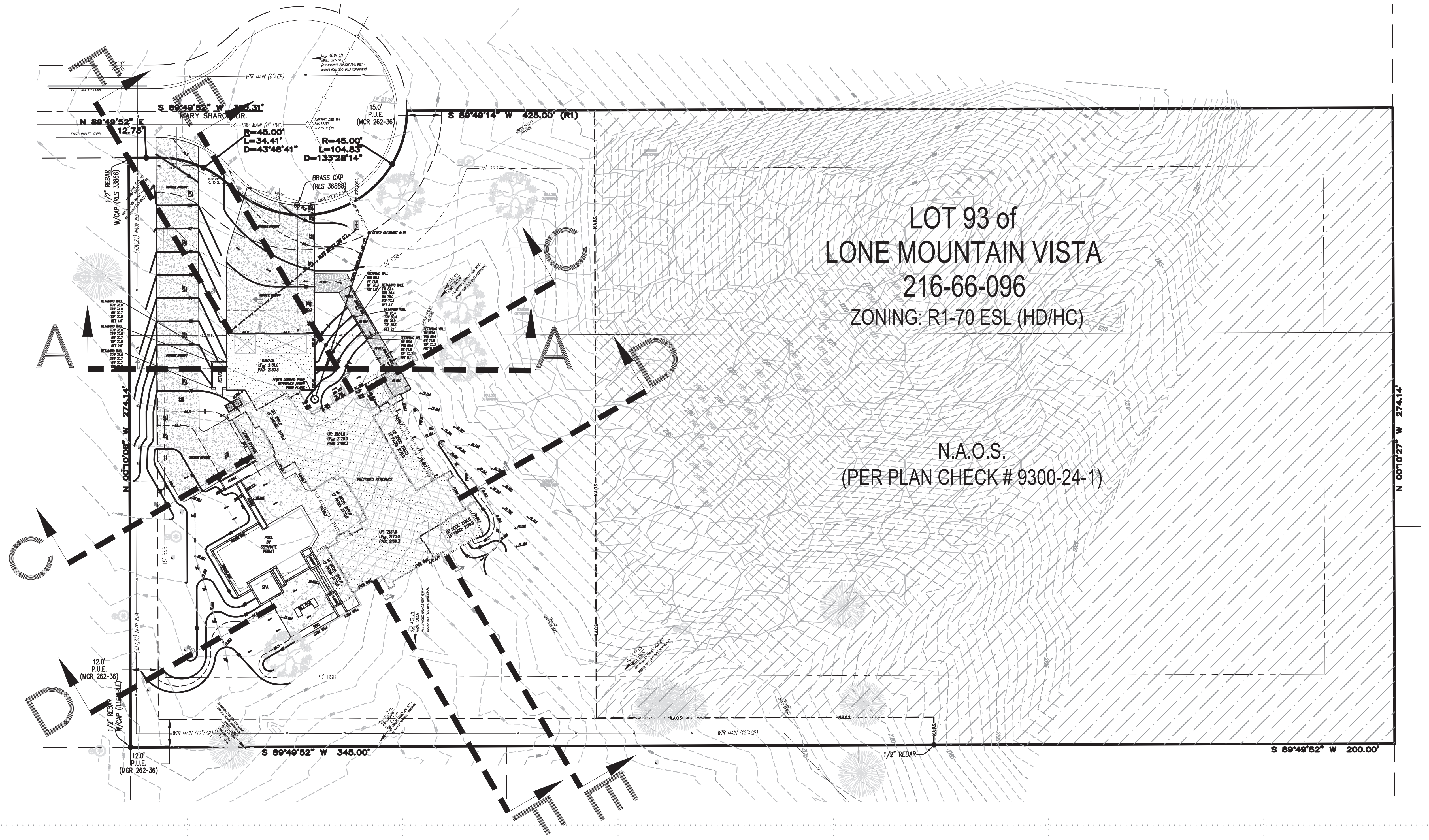
AS NOTED

To coordinate with structural calculations.
Amy Heckathorn, SE
COS Structural Engineer

S J Seitz
33562
STEVEN J. SEITZ
Date Signed 5-19-25
Expires: 3/31/26

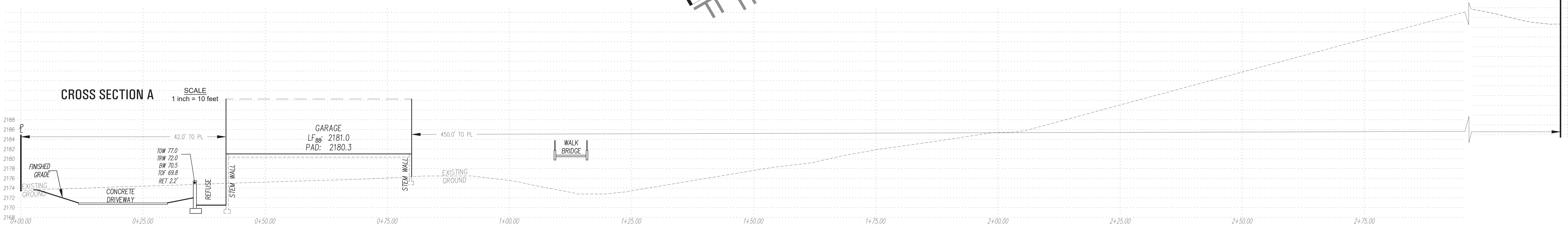
SITE SECTIONS

KEY MAP (SCALE 1" = 30')



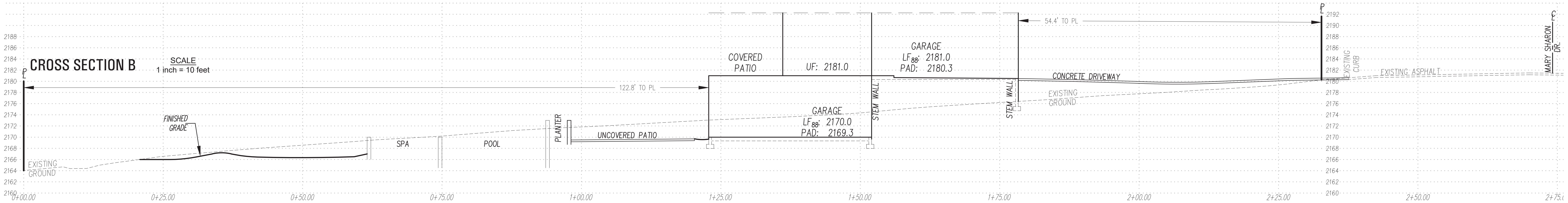
LOT 93 of
LONE MOUNTAIN VISTA
216-66-096
ZONING: R1-70 ESL (HD/HC)
N.A.O.S.
(PER PLAN CHECK # 9300-24-1)
A
A
B
B
C
C
D
D
E
E
S 89°49'52" W
S 89°49'14" W 425.00' (R1)
N 00°10'27" W 274.14'
S 89°49'52" W 345.00'
S 89°49'52" W 200.00'
R=45.00'
L=34.41'
D=43°48'41"
R=45.00'
L=104.83'
D=133°28'14"
1/2" REBAR

CROSS SECTION A
SCALE
1 inch = 10 feet



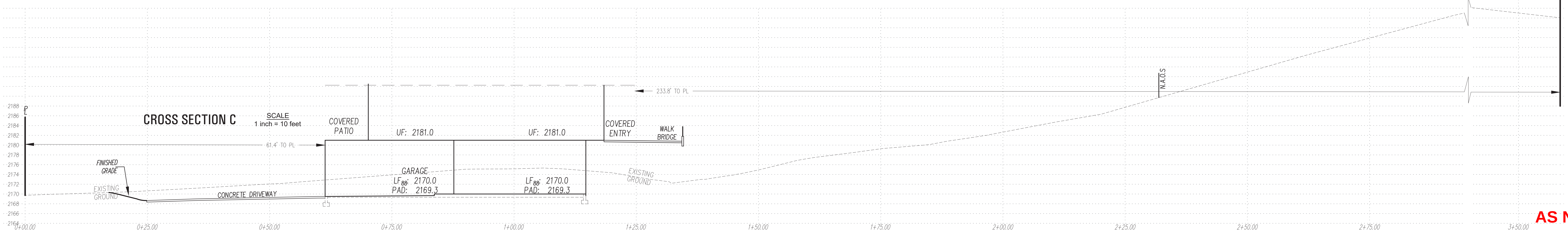
℄
42.0' TO PL
GARAGE
LF88: 2181.0
PAD: 2180.3
450.0' TO PL
WALK BRIDGE
TOW 77.0
TRW 72.0
BW 70.5
TOF 69.8
RET 2.2'
FINISHED GRADE
EXISTING GROUND
CONCRETE DRIVEWAY
REFUSE
STEM WALL
STEM WALL
EXISTING GROUND
2188
2186
2184
2182
2180
2178
2176
2174
2172
2170
2168
0+00.00
0+25.00
0+50.00
0+75.00
1+00.00
1+25.00
1+50.00
1+75.00
2+00.00
2+25.00
2+50.00
2+75.00

CROSS SECTION B
SCALE
1 inch = 10 feet



℄
122.8' TO PL
COVERED PATIO
UF: 2181.0
GARAGE
LF88: 2181.0
PAD: 2180.3
54.4' TO PL
CONCRETE DRIVEWAY
EXISTING CURB
EXISTING ASPHALT
MARY SHARON DR.
EXISTING GROUND
GARAGE
LF88: 2170.0
PAD: 2169.3
STEM WALL
STEM WALL
PLANTER
UNCOVERED PATIO
POOL
SPA
FINISHED GRADE
EXISTING GROUND
2192
2190
2188
2186
2184
2182
2180
2178
2176
2174
2172
2170
2168
2166
2164
2162
2160
0+00.00
0+25.00
0+50.00
0+75.00
1+00.00
1+25.00
1+50.00
1+75.00
2+00.00
2+25.00
2+50.00
2+75.00

CROSS SECTION C
SCALE
1 inch = 10 feet



℄
233.8' TO PL
N.A.O.S.
COVERED PATIO
UF: 2181.0
UF: 2181.0
COVERED ENTRY
WALK BRIDGE
61.4' TO PL
EXISTING GROUND
FINISHED GRADE
EXISTING GROUND
CONCRETE DRIVEWAY
GARAGE
LF88: 2170.0
PAD: 2169.3
LF88: 2170.0
PAD: 2169.3
2188
2186
2184
2182
2180
2178
2176
2174
2172
2170
2168
2166
2164
0+00.00
0+25.00
0+50.00
0+75.00
1+00.00
1+25.00
1+50.00
1+75.00
2+00.00
2+25.00
2+50.00
2+75.00
3+50.00

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3/20/25	FINAL SUBMITTAL - CITY OF SCOTTSDALE
5/08/25	FINAL SUBMITTAL - CITY OF SCOTTSDALE

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YUMA, ARIZONA 85367

CIVIL ENGINEER
33562
STEVEN J. SEITZ
Date Signed 5-08-25
Expires: 3/31/26

PROJECT MANAGER:
CLINT SCHERF (480) 225-4920

CITY OF SCOTTSDALE
BUILDING PLANS
THESE PLANS HAVE BEEN APPROVED
AND ARE READY FOR A PERMIT
THIS DOES NOT AUTHORIZE VIOLATIONS OF ANY
CODE OR ORDINANCE

Grading & Drainage P
DETAILS & SITE SECTIONS
7899 EAST MARY SHARON DRIVE
SCOTTSDALE, ARIZONA

PLAN CHECK # 9300-24
COS PLAN CHECK #9300-24

0 30 60
SCALE: 1 INCH = 30 FEET

PROJECT No.
SSE-1049-2024

SHEET:
GD 3 of 05

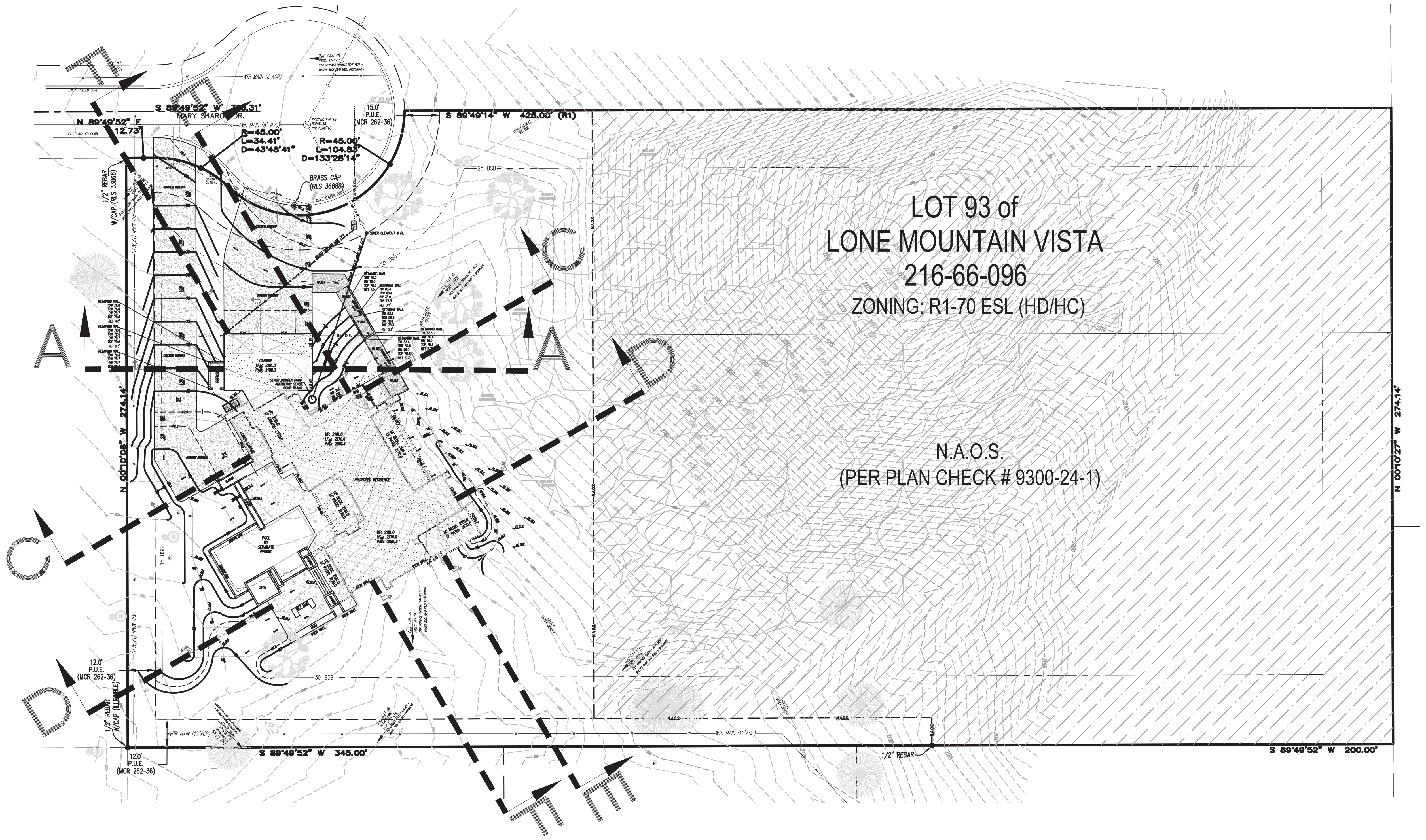
AS NOTED

GRADING & DRAINAGE PLAN
FOR
SIVARAJAN PROPERTY
A SINGLE FAMILY RESIDENCE
at 7899 EAST MARY SHARON DRIVE

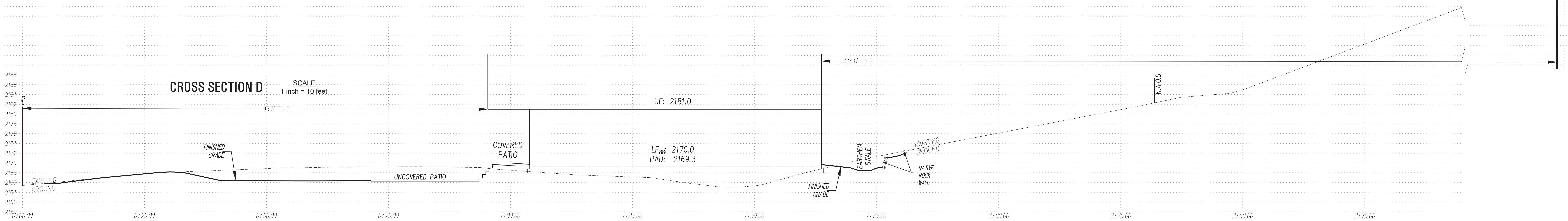
A PORTION OF THE SOUTHEAST QUARTER OF SECTION 23, TOWNSHIP 5 NORTH, RANGE 4 EAST OF THE GILA AND SALT RIVER BASE AND MERIDIAN, MARICOPA COUNTY, ARIZONA

SITE SECTIONS

KEY MAP (SCALE 1" = 30')

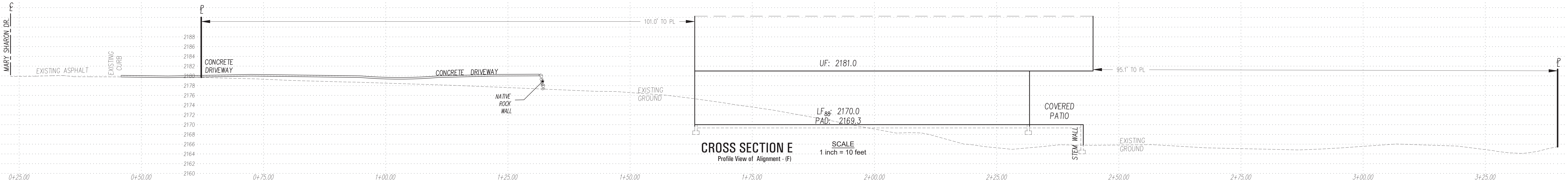


F
E
C
A
A
D
C
D
E
F
LOT 93 of
LONE MOUNTAIN VISTA
216-66-096
ZONING: R1-70 ESL (HD/HC)
N.A.O.S.
(PER PLAN CHECK # 9300-24-1)
S 89°49'14" W 425.00' (R)
S 89°49'52" W 345.00'
S 89°49'52" W 200.00'
N 00°10'27" W 274.14'
N 00°10'08" W 274.14'
N 89°49'52" E 12.73'
R=45.00'
L=34.41'
D=43°48'41"
R=45.00'
L=104.83'
D=133°28'14"
MARY SHARON DR.
1/2" REBAR
12.0' P.U.E. (MCR 262-36)



SCALE
1 inch = 10 feet
95.3' TO PL
334.8' TO PL
UF: 2181.0
COVERED PATIO
LF88: 2170.0
PAD: 2169.3
FINISHED GRADE
EXISTING GROUND
UNCOVERED PATIO
EARTHEN SWALE
NATIVE ROCK WALL
FINISHED GRADE
EXISTING GROUND
N.A.O.S
2188
2186
2184
2182
2180
2178
2176
2174
2172
2170
2168
2166
2164
2162
0+00.00
0+25.00
0+50.00
0+75.00
1+00.00
1+25.00
1+50.00
1+75.00
2+00.00
2+25.00
2+50.00
2+75.00

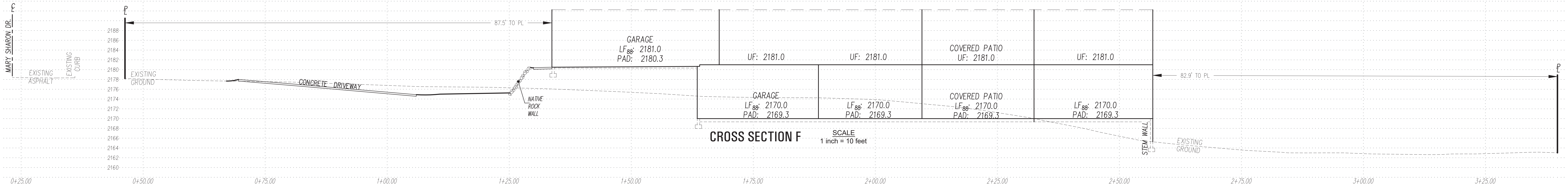
CROSS SECTION D



MARY SHARON DR.
EXISTING ASPHALT
EXISTING CURB
CONCRETE DRIVEWAY
CONCRETE DRIVEWAY
NATIVE ROCK WALL
EXISTING GROUND
101.0' TO PL
UF: 2181.0
95.1' TO PL
LF88: 2170.0
PAD: 2169.3
COVERED PATIO
STEM WALL
EXISTING GROUND
SCALE
1 inch = 10 feet
2188
2186
2184
2182
2180
2178
2176
2174
2172
2170
2168
2166
2164
2162
2160
0+25.00
0+50.00
0+75.00
1+00.00
1+25.00
1+50.00
1+75.00
2+00.00
2+25.00
2+50.00
2+75.00
3+00.00
3+25.00

CROSS SECTION E

Profile View of Alignment - (F)



MARY SHARON DR.
EXISTING ASPHALT
EXISTING CURB
EXISTING GROUND
CONCRETE DRIVEWAY
NATIVE ROCK WALL
87.5' TO PL
GARAGE
LF88: 2181.0
PAD: 2180.3
UF: 2181.0
UF: 2181.0
COVERED PATIO
UF: 2181.0
UF: 2181.0
82.9' TO PL
GARAGE
LF88: 2170.0
PAD: 2169.3
LF88: 2170.0
PAD: 2169.3
COVERED PATIO
LF88: 2170.0
PAD: 2169.3
LF88: 2170.0
PAD: 2169.3
STEM WALL
EXISTING GROUND
SCALE
1 inch = 10 feet
2188
2186
2184
2182
2180
2178
2176
2174
2172
2170
2168
2166
2164
2162
2160
0+25.00
0+50.00
0+75.00
1+00.00
1+25.00
1+50.00
1+75.00
2+00.00
2+25.00
2+50.00
2+75.00
3+00.00
3+25.00

CROSS SECTION F

Contact Arizona 811 at least two full working days before you begin excavation

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11/14/24	FIRST SUBMITTAL – CITY OF SCOTTSDALE
01/30/25	FINAL SUBMITTAL – CITY OF SCOTTSDALE
3/20/25	FINAL SUBMITTAL – CITY OF SCOTTSDALE
5/08/25	FINAL SUBMITTAL – CITY OF SCOTTSDALE

PROJECT INFO – PLEASE CONTACT PROJECT MANAGER CLINT SCHERF (480) 225-4920

(480) 225-4920 SSEAZ2004@GMAIL.COM

CIVIL ~ STRUCTURAL
S S E
RESIDENTIAL ~ COMMERCIAL

11350 SOUTH VIEWPOINTE WAY
YUMA, ARIZONA 85367

CIVIL ENGINEER

33562
STEVEN J.
SEITZ
Date Signed 5-08-25
Expires: 3/31/26

PROJECT MANAGER:
CLINT SCHERF (480) 225-4920

Grading & Drainage Plan
DETAILS & SITE SECTIONS

7899 EAST MARY SHARON DRIVE
SCOTTSDALE, ARIZONA

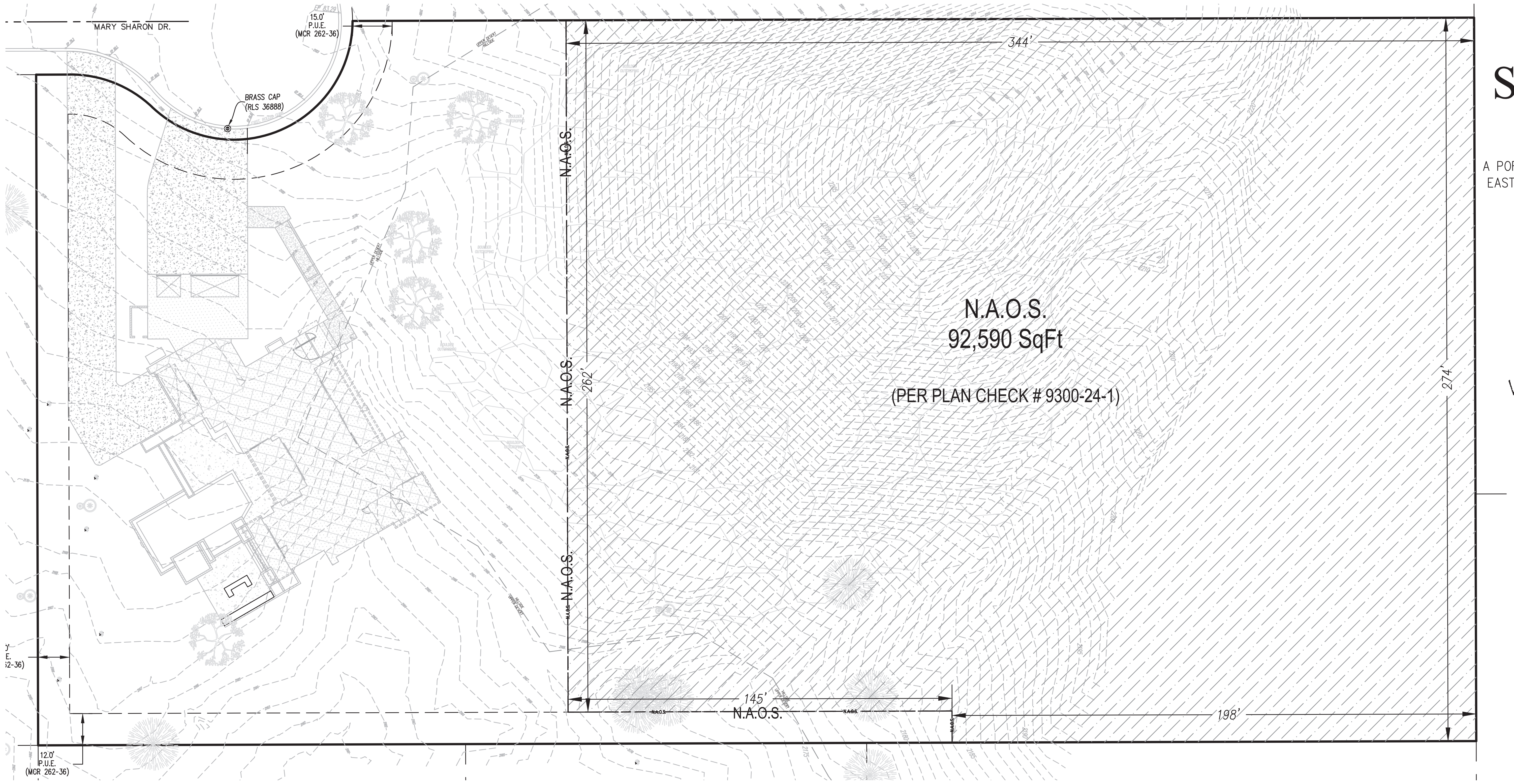
0 30 60
SCALE: 1 INCH = 30 FEET

PROJECT No.
SSE-1049-2024

SHEET:
GD 4 of 05

PLAN CHECK # 9300-24

COS PLAN CHECK #9300-24

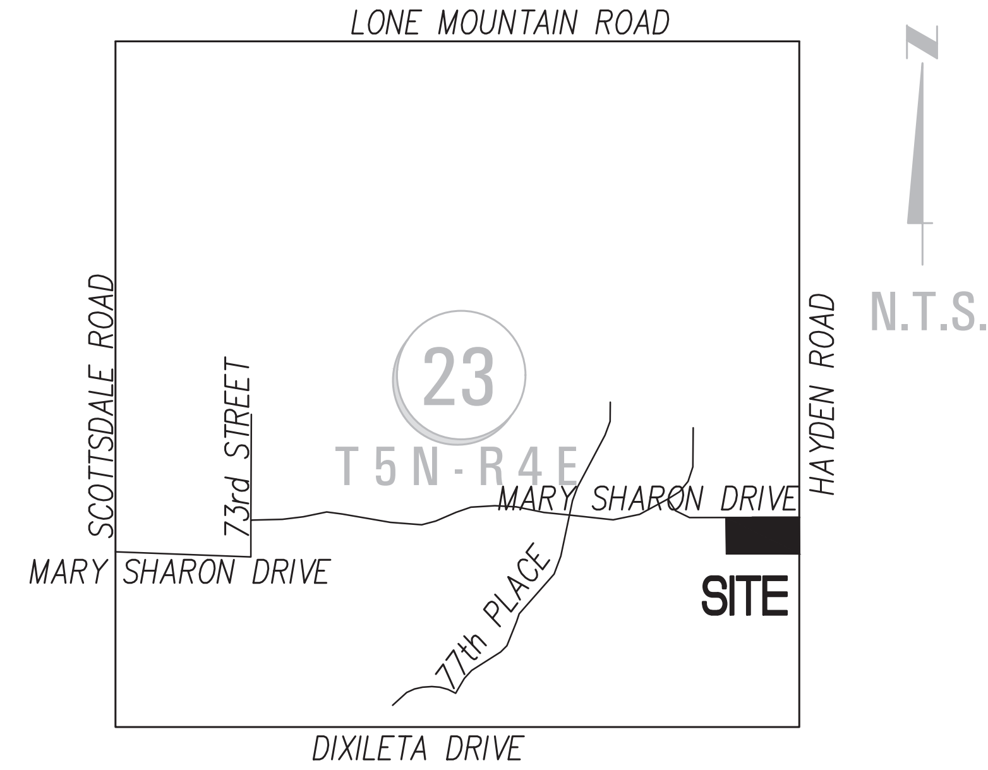

MARY SHARON DR.
15.0' P.U.E. (MCR 262-36)
BRASS CAP (RLS 36888)
344'
N.A.O.S.
N.A.O.S.
N.A.O.S.
262'
274'
N.A.O.S.
92,590 SqFt
(PER PLAN CHECK # 9300-24-1)
145'
N.A.O.S.
198'
12.0' P.U.E. (MCR 262-36)

GRADING & DRAINAGE PLAN
FOR
SIVARAJAN PROPERTY
A SINGLE FAMILY RESIDENCE
at 7899 EAST MARY SHARON DRIVE

A PORTION OF THE SOUTHEAST QUARTER OF SECTION 23, TOWNSHIP 5 NORTH, RANGE 4 EAST OF THE GILA AND SALT RIVER BASE AND MERIDIAN, MARICOPA COUNTY, ARIZONA

N.T.S.

LOCATION MAP


LONE MOUNTAIN ROAD
SCOTTSDALE ROAD
73rd STREET
23
T5N-R4E
MARY SHARON DRIVE
MARY SHARON DRIVE
HAYDEN ROAD
SITE
77th PLACE
DIXILETA DRIVE
N.T.S.

SITE DATA

LEGAL DESCRIPTION
DEED 2024-0357050 & LOT 93 OF LONE MOUNTAIN VISTA , ACCORDING TO THE RECORDED SURVEY OR RECORD IN THE OFFICE OF THE COUNTY RECORDER OF MARICOPA COUNTY, ARIZONA, RECORDED IN BOOK 262 OF MAPS, PAGE 36.

AREA:	145,641 SqFt (3.43 Ac)
APN:	216-66-096
MCR:	262-36
ZONING:	R1-70 ESL (HD/HC) & HC ESL
Q.S.:	53-46
LANDFORM CLASSIFICATION:	UPPER DESERT / HILLSIDE

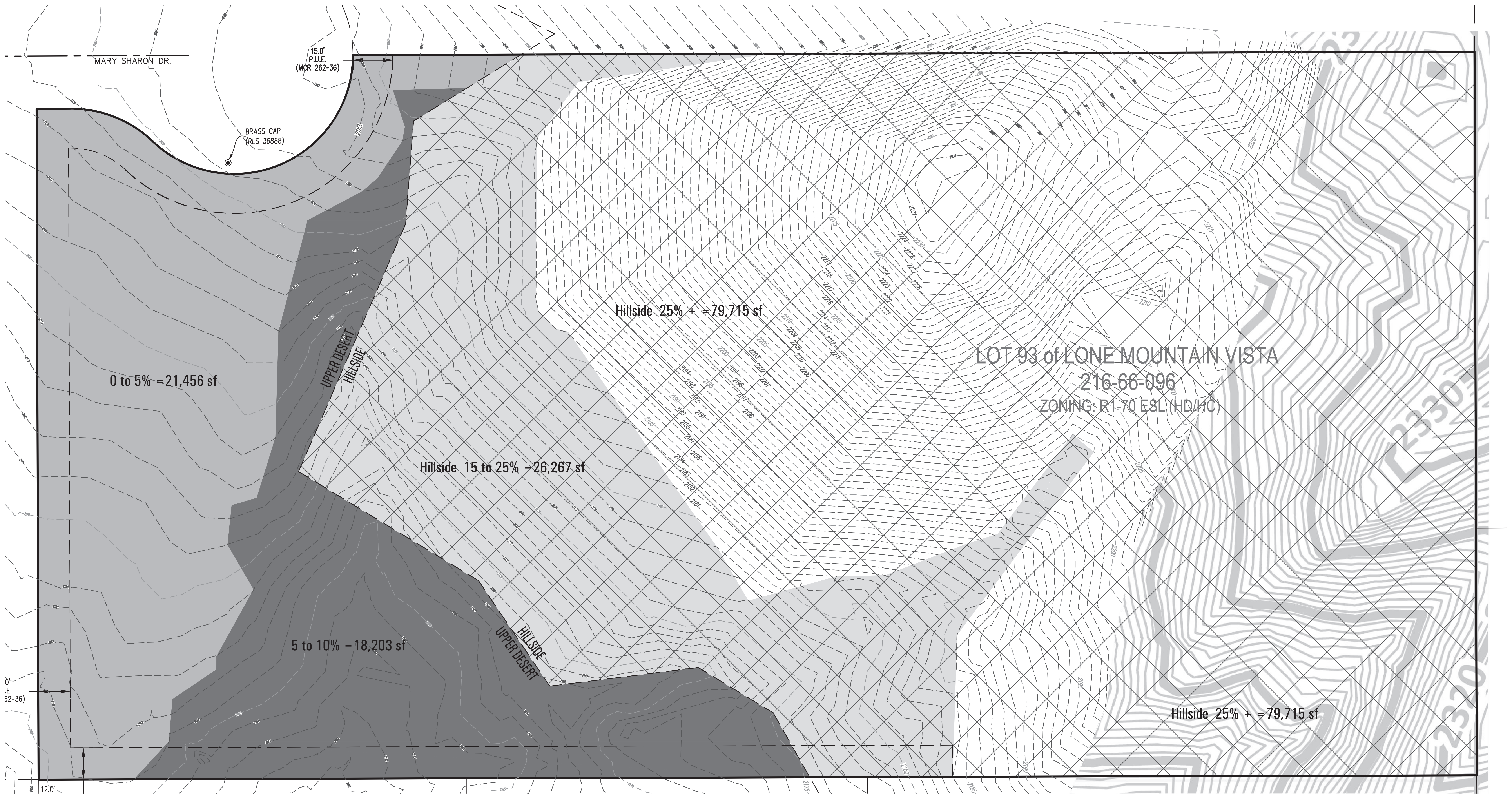
BUILDING SETBACKS (BSB):

FRONT	60' (NORTHWEST)
SIDE	15'/40' AGGREGATE (NORTHEAST/SOUTH)
REAR	60' (WEST)

NAOS REQUIREMENTS by SLOPE ANALYSIS
0-5% SLOPE = 21,456 SqFt (14.7% OF LOT) @ 25% NAOS= 5,364 SqFt
5-10% SLOPE = 18,203 SqFt (12.5% OF LOT) @ 35% NAOS= 6,371 SqFt
HILLSIDE
15-25% SLOPE = 26,267 SqFt (18.0% OF LOT) @ 65% NAOS= 17,074 SqFt
25% + SLOPE = 79,715 SqFt (54.7% OF LOT) @ 80% NAOS= 63,772 SqFt
TOTAL NAOS REQUIRED= 92,582 SqFt

PROPOSED
PROVIDED: 92,590 SqFt (63.6% OF LOT)
UNDISTURBED: 92,590 SqFt (100% OF REQ'D NAOS)
DISTURBED(REVEGED AREA): 0 SqFt (0% OF REQ'D NAOS/30% MAX ALLOWED)
TOTAL NAOS CREDIT: 92,590 SqFt (100% OF REQUIRED)

UNDER ROOF: ***REFERENCE BUILDING PLANS FOR DETAILS
LOT COVERAGE: 9,750 SqFt PROPOSED UNDERROOF
(6.69% TOTAL LOT COVERAGE)


MARY SHARON DR.
15.0' P.U.E. (MCR 262-36)
BRASS CAP (RLS 36888)
0 to 5% =21,456 sf
UPPER DESERT
HILLSIDE
5 to 10% =18,203 sf
HILLSIDE
UPPER DESERT
Hillside 15 to 25% =26,267 sf
Hillside 25% + =79,715 sf
LOT 93 of LONE MOUNTAIN VISTA
216-66-096
ZONING: R1-70 ESL (HD/HC)
2330
Hillside 25% + =79,715 sf
12.0'
N.T.S.

SLOPE ANALYSIS

COLOR	SLOPE	AREA (SqFt)	N.A.O.S. REQUIRED (%)	N.A.O.S. AREA (SqFt)
▨	0 - 5	21,456	25	5,364
▨	5 - 10	18,203	35	6,371
HILLSIDE	0 - 15		50	
▨	15 - 25	26,267	65	17,074
▨	25 +	79,715	80	63,772
	TOTAL N.A.O.S. REQUIRED:			92,582

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33562
STEVEN J. SEITZ
5-08-25
Expires: 3/31/26

PROJECT MANAGER:
CLINT SCHERF (480) 225-4920

Grading & Drainage Plan
SLOPE ANALYSIS FOR N.A.O.S.
7899 EAST MARY SHARON DRIVE
SCOTTSDALE, ARIZONA

SCALE: N.T.S.

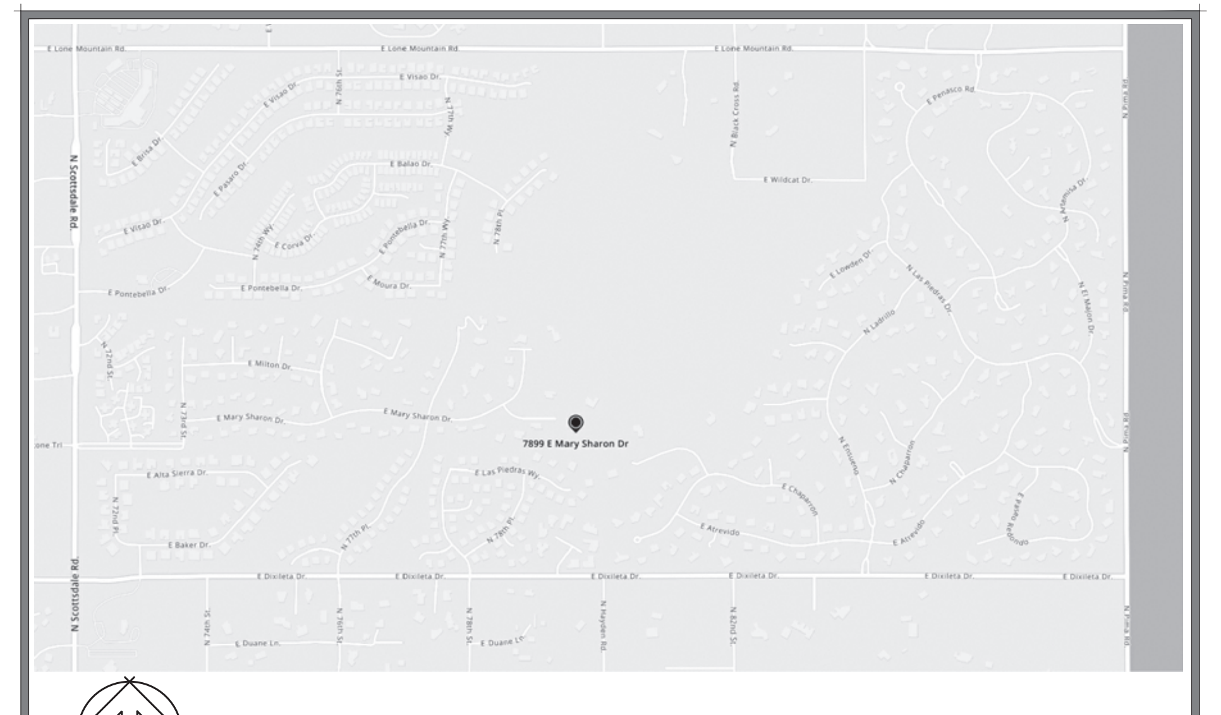
PROJECT No. SSE-1049-2024

SHEET: GD 5 of 05

PLAN CHECK # 9300 -24

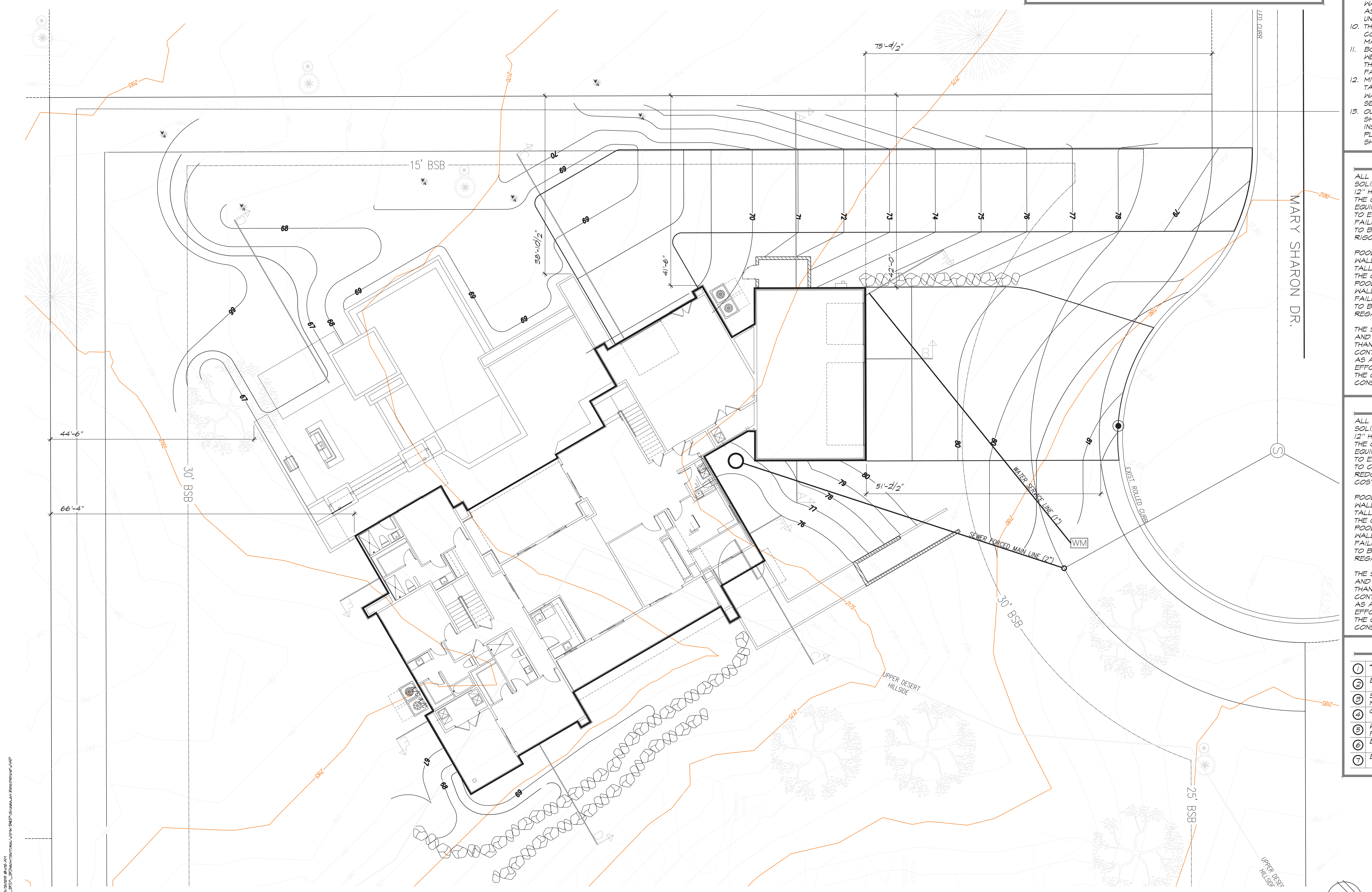
COS PLAN CHECK #9300-24

AREA SCHEDULE	
UPPER LEVEL	3296 SQ. FT.
LOWER LEVEL	3107 SQ. FT.
TOTAL LIVABLE	6402 SQ. FT.
GARAGE 1	899 SQ. FT.
GARAGE 2	728 SQ. FT.
MAIN PATIO	345 SQ. FT.
BED 2 PATIO	155 SQ. FT.
BED 4 PATIO	200 SQ. FT.
FRONT PATIO	296 SQ. FT.
FRONT DECK	392 SQ. FT.
MAIN DECK	344 SQ. FT.
PORCH	64 SQ. FT.
RESIDENCE TOTAL	9824 SQ. FT.
LOT AREA	145641 SQ. FT.
FOOTPRINT	9824 SQ. FT.
COVERAGE	6.75 %



NORTH

VICINITY MAP



SITE PLAN

3/32" = 1'-0"

NORTH

NOTES

GENERAL INFORMATION

1. SEE GRADING PLAN FOR HEIGHTS OF WALLS NOT NOTED ON THIS SHEET.
2. SEE GRADING PLAN FOR FINAL FINISHED FLOOR ELEVATIONS.
3. A/C SCREEN WALL TO BE 12" ABOVE THE TOP OF A/C COMPRESSOR.
4. REFUSE AREA SCREEN WALL AND GATE TO BE A MIN. OF 5 FT. HIGH.
5. WALL AT POOL EQUIPMENT TO BE A MIN. OF 12" ABOVE TOP OF EQUIPMENT.
6. HEIGHTS OF MASONRY WALLS INDICATED SHALL BE MEASURED FROM ADJACENT FINISHED GRADE.
7. ALL MASONRY SCREEN WALLS NOT RETAINING EARTH SHALL HAVE #4 BARS @ 48" O.C. IN SOLID GROUTED CELLS. ALL MASONRY SHALL HAVE 1/2" STUCCO - PAINT TO MATCH THE COLOR OF THE HOUSE.
8. BOULDERS SHOWN ARE TO BE FREE FROM SCARS & SHALL BE SIMILAR IN APPEARANCE TO THOSE FOUND IN THE GENERAL VICINITY OF THIS PROJECT. DRILL AND/OR EPOXY TO PREVENT MOVEMENT.
9. AREA BETWEEN CONSTRUCTION FENCE & BUILDING WALLS (INCLUDING LOW WALLS) SHALL BE LANDSCAPED AS TO BE INDISTINGUISHABLE FROM ADJACENT UNDISTURBED NATURAL DESERT AREAS.
10. THE ROCK UTILIZED AT THE DRIVEWAY FOR EROSION CONTROL SHALL BE INDIGENOUS GRANITE ROCK THAT MATCHES THE NATIVE MATERIAL ON THIS SITE.
11. BOULDERS WHICH ARE MOVED SHALL HAVE EXPOSED WEATHERED FACES SHALL BE TREATED TO SIMULATE THE NATURAL ROCK VARNISH OF THE AGED EXPOSED FACES.
12. MISCELLANEOUS SITE STRUCTURES, GAS STORAGE TANKS, SWIMMING POOLS, SPAS, FENCES AND SITE WALLS (INCLUDING RETAINING WALLS) REQUIRE SEPARATE PERMITS.
13. OUTDOOR SWIMMING POOL (UBDER SEPARATE PERMIT) SHALL BE PROVIDED WITH A BARRIER THAT SHALL BE INSTALLED, INSPECTED AND APPROVED PRIOR TO PLASTERING OR FILLING WITH WATER. THE BARRIER SHALL COMPLY WITH I.R.C. CODES AS AMENDED

EQUIPMENT

ALL EXTERIOR EQUIPMENT SHALL BE SCREENED BY A SOLID WALL AND SOLID GATE THAT ARE A MINIMUM OF 12" HIGHER THAN THE HIGHEST POINT OF THE EQUIPMENT. THE CONTRACTOR SHALL VERIFY THE HEIGHT OF THE EQUIPMENT PRIOR TO CONSTRUCTION OF THE SITE WALL TO ENSURE COMPLIANCE DURING CONSTRUCTION. FAILURE TO COMPLY WILL RESULT IN THE WORK HAVING TO BE REDONE UNTIL COMPLIANCE IS ACHIEVED RIGOROUS OF COST OR DELAY.

POOL EQUIPMENT SHALL BE SCREENED BY A SOLID WALL AND SOLID GATE THAT ARE A MINIMUM OF 12" TALLER THAN THE HIGHEST POINT OF THE EQUIPMENT. THE CONTRACTOR SHALL VERIFY THE HEIGHT OF THE POOL EQUIPMENT PRIOR TO CONSTRUCTION OF THE SITE WALL TO ENSURE COMPLIANCE DURING CONSTRUCTION. FAILURE TO COMPLY WILL RESULT IN THE WORK HAVING TO BE REDONE UNTIL COMPLIANCE IS ACHIEVED REGARDLESS OF COST OR DELAY.

THE SES PANEL SHALL BE SCREENED BY A SOLID WALL AND SOLID GATE THAT ARE A MINIMUM OF 4" TALLER THAN THE HIGHEST POINT OF THE SES PANEL. THE CONTRACTOR SHALL INSTALL THE SES PANEL AS LOW AS ALLOWED BY BUILDING CODE AND APS IN AN EFFORT TO MINIMIZE THE HEIGHT OF THE SCREEN WALL. THE CONTRACTOR SHALL VERIFY COMPLIANCE DURING CONSTRUCTION.

EASEMENT

ALL EXTERIOR EQUIPMENT SHALL BE SCREENED BY A SOLID WALL AND SOLID GATE THAT ARE A MINIMUM OF 12" HIGHER THAN THE HIGHEST POINT OF THE EQUIPMENT. THE CONTRACTOR SHALL VERIFY THE HEIGHT OF THE EQUIPMENT PRIOR TO CONSTRUCTION OF THE SITE WALL TO ENSURE COMPLIANCE DURING CONSTRUCTION. AILURE TO COMPLY WILL RESULT IN THE WORK HAVING TO BE REDONE UNTIL COMPLIANCE IS ACHIEVED RIGOROUS OF COST OR DELAY.

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KEY NOTES

①	400 AMP ELECTRICAL SERVICE.
②	BUILDING SETBACKS
③	SEPTIC SYSTEM REQUIRES SEPARATE PERMIT FROM MCESD
④	CRUSHED GRANITE GRAVEL DRIVEWAY
⑤	WATER SERVICE FROM EXISTING WELL —— —— W —— —— W ——
⑥	ELECTRICAL SERVICE. —— —— E —— —— E ——
⑦	EXISTING GRAVEL ROAD

CITY OF SCOTTSDALE
BUILDING PLANS
THESE PLANS HAVE BEEN APPROVED
AND ARE READY FOR A PERMIT
THIS DOES NOT AUTHORIZE VIOLATIONS OF ANY
CODE OR ORDINANCE

DATE
1/27/2025
4/11/25 - G&D

REGISTERED ARCHITECT
CERTIFICATE NO. 31582
BRET THOMAS OVERMYER
Date Signed 4.11.25
ARIZONA, USA
Bret Overmyer

EXPIRES 9/30/2027

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Peoria, Arizona 85383
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Sivarajan Residence

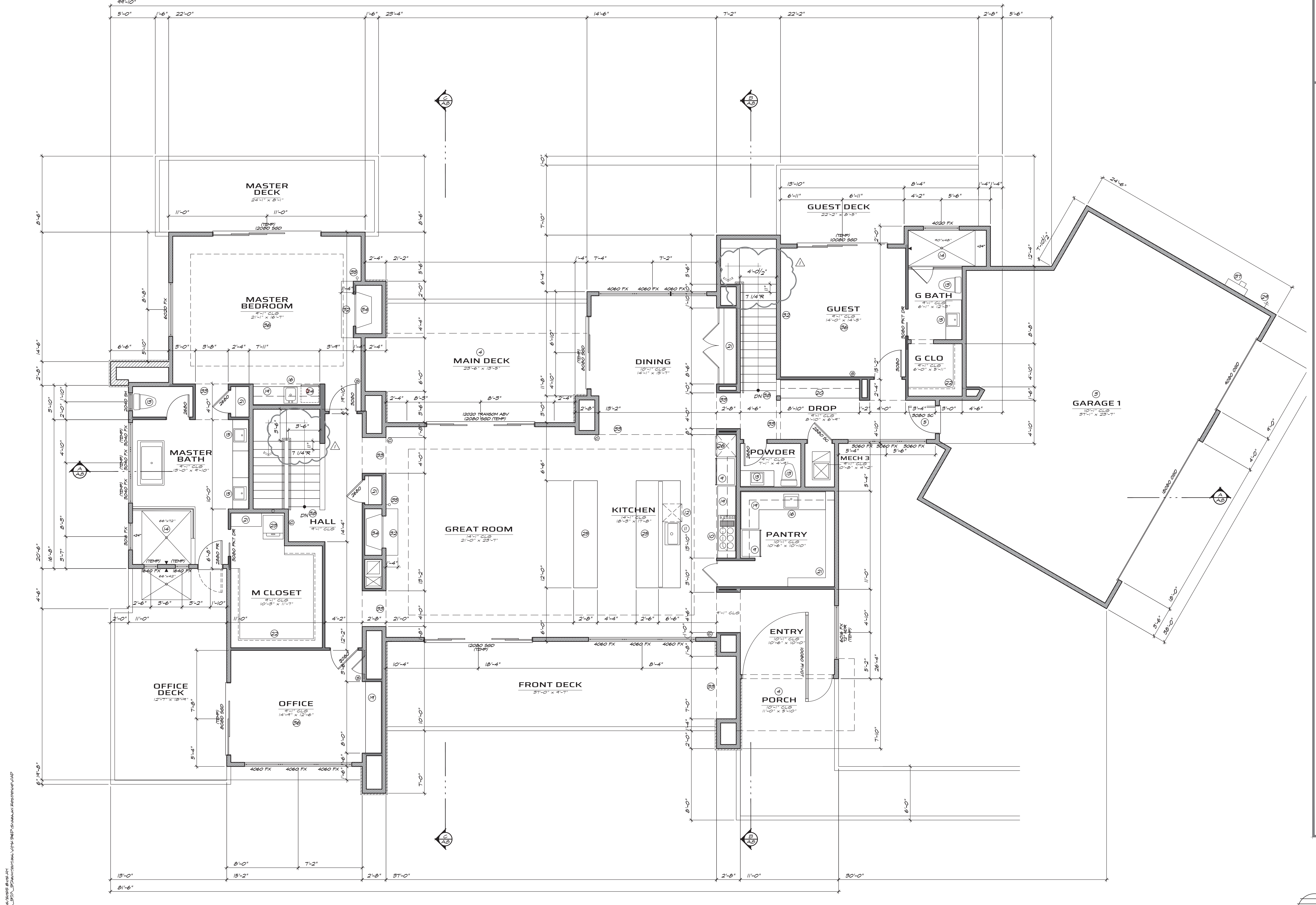
7899 East Mary Sharon Drive
Scottsdale 85266
Lone Mountain Vista Tract A - Lot 93

ARCHITECTURAL SITE PLAN

COS PLAN CHECK #9300-24

SHEET NO.
A1

AREA SCHEDULE	
UPPER LEVEL	3296 SQ. FT.
LOWER LEVEL	3107 SQ. FT.
TOTAL LIVABLE	6402 SQ. FT.
GARAGE 1	899 SQ. FT.
GARAGE 2	728 SQ. FT.
MAIN PATIO	345 SQ. FT.
BED 2 PATIO	155 SQ. FT.
BED 4 PATIO	200 SQ. FT.
FRONT PATIO	296 SQ. FT.
FRONT DECK	392 SQ. FT.
MAIN DECK	344 SQ. FT.
PORCH	64 SQ. FT.
RESIDENCE TOTAL	9824 SQ. FT.
LOT AREA	145641 SQ. FT.
FOOTPRINT	9824 SQ. FT.
COVERAGE	6.75 %



UPPER FLOOR PLAN

3/16" = 1'-0"

NOTES

GENERAL INFORMATION

1. INSULATION:
   R-38 BLOWN-IN @ ROOF - U.N.O. ON PLAN
   R-21 BATTS @ EXT. WALLS - U.N.O. ON PLAN
2. PROVIDE R-19 BATT (2x6 WALL) INSULATION BETWEEN GARAGE & ALL LIVABLE SPACES.
3. PROVIDE 5/8" TYPE 'X' GYPSUM BOARD ON WALLS & CEILING IN GARAGE PER CODE REQUIREMENTS.
4. MAINTAIN A MAXIMUM SILL HEIGHT OF 44" IN BEDROOM EGRESS WINDOWS.
5. SEE COVER SHEET FOR GENERAL NOTES AND SPECIFICATIONS. SEE DETAIL SHEETS FOR STANDARD CONSTRUCTION DETAILS.
6. PROVIDE BATT INSULATION AT WALL LOCATIONS SEPARATING CONDITIONED FROM NON-CONDITIONED AREAS.
7. PROVIDE FIRE / DRAFT STOPS IN ALL WALLS GREATER THAN 10'-0" IN HEIGHT & AT FIREPLACE.
8. SEE SHEET A6.2 FOR INTERIOR ELEVATIONS. A
9. BOTTOM OF WINDOW ROUGH OPENINGS TO BE 34" OR MORE ABOVE FINISH FLOOR OR PROVIDE A GUARDRAIL AND WINDOW FALL PROTECTION PER IRC SECTION R312.
10. WINDOWS AND DOORS TO BE FLASHED WITH APPROVED MATERIALS PER MANUFACTURER'S SPECIFICATIONS.
11. WINDOW EGRESS
    WINDOW OPERABLE FROM THE INSIDE, CLEAR OPENING OF 5.7 SQ. FT., NET CLEAR OPENING 24" HIGH AND 20" WIDE W/ SILL HEIGHT NOT TO EXCEED 44".

KEY NOTES

①	2x4 STUDS AT 24" O.C. INTERIOR WALL w/ 1/2" GYP BD EA SIDE.
②	2x6 STUDS - PLUMBING WALL / BEARING WALL WHERE OCCURS ON PLAN.
③	PROVIDE ONE LAYER 5/8" TYPE "X" GYPSUM BOARD AT WALLS AND CEILINGS IN GARAGE. PENETRATIONS TO BE OF 1-HR RATING FOR ELEC BOXES.
④	PROVIDE 1/2" MOISTURE RESISTANT GYPSUM BOARD AND MOISTURE PROTECTIVE BARRIER AT ALL WET WALLS. AT BUILDING EXTERIOR USE 1/2" SOFFIT BOARD w/ WATER RESISTANT FACE PAPER.
⑤	1-3/8" THICK SOLID CORE DOOR W/SELF-CLOSING, TIGHT FITTING GASKETS & SWEEP.
⑥	PROVIDE A MINIMUM 36"x36" CONCRETE LANDING @ EACH EXTERIOR DOOR.
⑦	TANKLESS WATER HEATER & SOFT WATER LOOP WITH CIRCULATION PUMP. PROVIDE (2) 2.5 SF AIR VENTS WITHIN 12" OF FLOOR AND CEILING.
⑧	T & P RELIEF LINE TO BE FULL SIZE STEEL PIPE OR HARD DRAWN COPPER TUBING TO THE EXTERIOR AND TERMINATING IN A DOWNWARD POSITION BETWEEN 6" AND 12" ABOVE GRADE.
⑨	REFRIGERATOR / FREEZER - PRE-PLUMB FOR ICE MAKER
⑩	COOKTOP W/ EXHAUST HOOD AND POT FILLER
⑪	SINK w/ DISPOSAL
⑫	DISHWASHER - PROVIDE APPROVED AIR GAP
⑬	1.28 GAL/FLUSH WATER CLOSET PROVIDE A (MIN.) 15" ON EACH SIDE & 24" (MIN.) CLEAR IN FRONT
⑭	NONABSORBENT CEMENTITIOUS BACKER PANELS o/ WALL w/ TILE OR EQUAL TO +72" ABV. DRAIN
⑮	LAV SINK WITH MIN. 60" HIGH MIRROR ABOVE VERIFY
⑯	LAUNDRY SINK
⑰	WASHER LOCATION - PROVIDE WATER HAMMER ARRESTOR
⑱	ELECTRIC DRYER- W/ 4"Φ VENT THROUGH ROOF w/ RAINCAP NOT TO EXCEED 15'-0" w/ (2) 90° OFFSETS INSTALL PER IRC G2439
⑲	BASE CABINET W/ COUNTER TOP PER OWNER 42" UPPERS WHERE SHOWN - SEE CABINET DRAWINGS.
⑳	CABINET DROP ZONE PER OWNER
㉑	5 SHELVES EQUALLY SPACED AT A MINIMUM 14" SEPARATION.
㉒	ROD AND SHELF OR CLOSET SYSTEM AT CLOSET PER SPECS
㉓	STACKABLE WASHER DRYER - PROVIDE WATER HAMMER ARRESTOR AND 4"Φ DRYER VENT THROUGH ROOF w/ RAINCAP NOT TO EXCEED 15'-0" w/ (2) 90° OFFSETS INSTALL PER IRC G2439
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㉜	PROVIDE ADDITIONAL SUPPORT BLOCKING AT TELEVISION VERIFY HEIGHT AND SIZE.
㉝	LINE OF SOFFIT / CEILING CHANGE - SEE ROOM CEILING HEIGHTS AND REFLECTED CEILING PLAN
㉞	GAS FIREPLACE W/ STANDARD CHIMNEY SYSTEM (I.R.C. ER5017) W/ NON-COMBUSTIBLE HEARTH OR FLOOR AREA SEE DTL 10/D1
㉟	GAS KEY TO FIREPLACE
㊱	ALL BEDROOM ESCAPE WINDOWS SHALL COMPLY WITH THREE CONDITIONS 1) THE OPERABLE AREA SHALL BE 5.7 SQ. FT. OR GREATER, 2) SHALL MEET A MINIMUM 24" HEIGHT AND 20" WIDTH, 3) 44" MAX. FROM FINISH FLOOR TO FINISH WINDOW OPENING
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CERTIFICATE NO. 31582
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Date Signed 4.11.25
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THESE PLANS HAVE BEEN APPROVED
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CODE OR ORDINANCE

UPPER FLOOR PLAN

COS PLAN CHECK #9300-24

SHEET NO.
A2.1

AREA SCHEDULE	
UPPER LEVEL	3296 SQ. FT.
LOWER LEVEL	3107 SQ. FT.
TOTAL LIVABLE	6402 SQ. FT.
GARAGE 1	899 SQ. FT.
GARAGE 2	728 SQ. FT.
MAIN PATIO	345 SQ. FT.
BED 2 PATIO	155 SQ. FT.
BED 4 PATIO	200 SQ. FT.
FRONT PATIO	296 SQ. FT.
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MAIN DECK	344 SQ. FT.
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RESIDENCE TOTAL	9824 SQ. FT.
LOT AREA	145641 SQ. FT.
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6. PROVIDE BATT INSULATION AT WALL LOCATIONS SEPARATING CONDITIONED FROM NON-CONDITIONED AREAS.
7. PROVIDE FIRE / DRAFT STOPS IN ALL WALLS GREATER THAN 10'-0" IN HEIGHT & AT FIREPLACE.
8. SEE SHEET A6.2 FOR INTERIOR ELEVATIONS. (A)
9. BOTTOM OF WINDOW ROUGH OPENINGS TO BE 34" OR MORE ABOVE FINISH FLOOR OR PROVIDE A GUARDRAIL AND WINDOW FALL PROTECTION PER IRC SECTION R312.
10. WINDOWS AND DOORS TO BE FLASHED WITH APPROVED MATERIALS PER MANUFACTURER'S SPECIFICATIONS.
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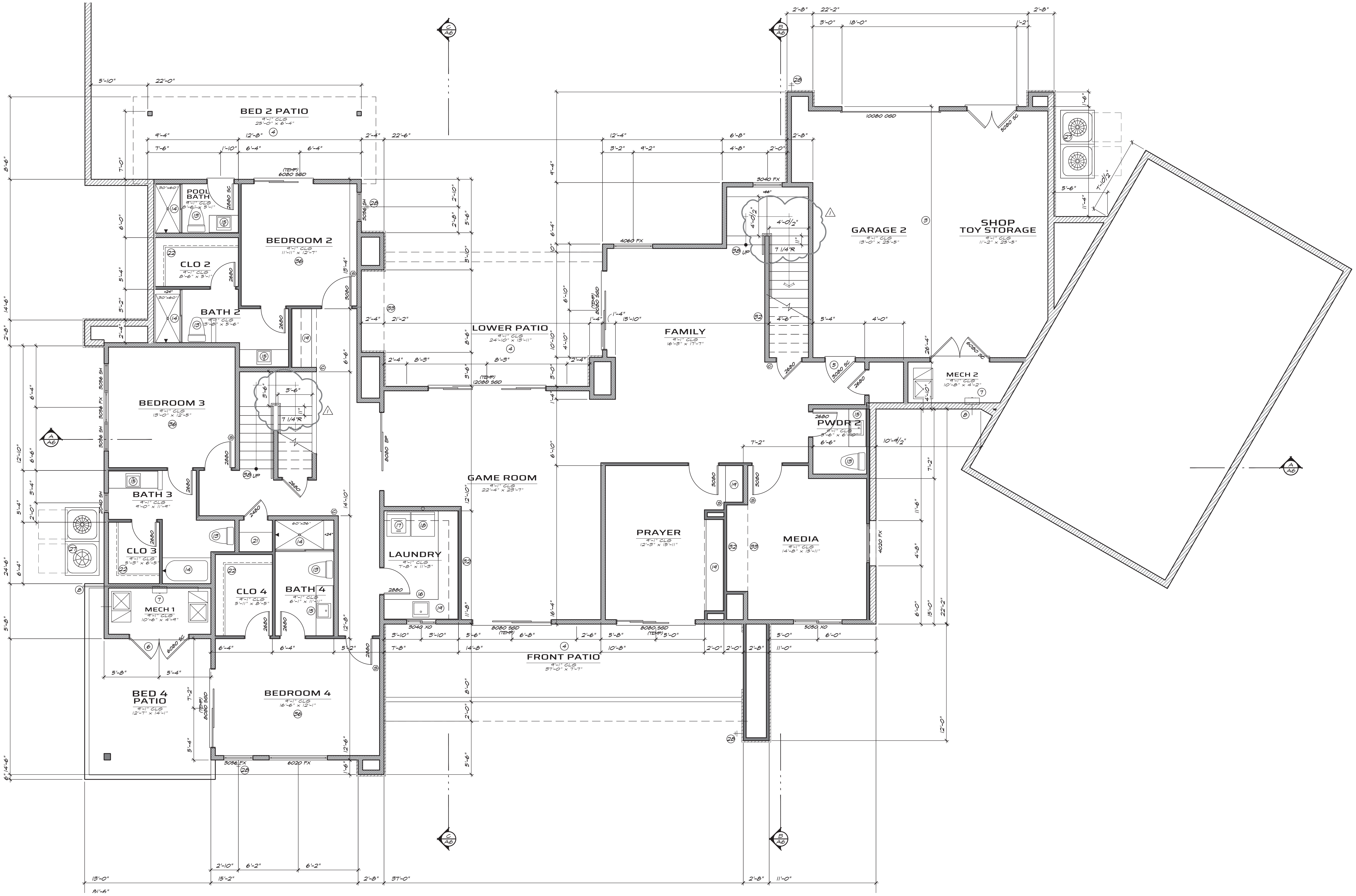
COS PLAN CHECK #9300-24

LOWER FLOOR PLAN

SHEET NO.
A2.2



LOWER FLOOR PLAN
3/16" = 1'-0"

NORTH

AREA SCHEDULE	
UPPER LEVEL	3296 SQ. FT.
LOWER LEVEL	3107 SQ. FT.
TOTAL LIVABLE	6402 SQ. FT.
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GARAGE 2	728 SQ. FT.
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⑦	TANKLESS WATER HEATER & SOFT WATER LOOP WITH CIRCULATION PUMP. PROVIDE (2) 2.5 SF AIR VENTS WITHIN 12" OF FLOOR AND CEILING.
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⑪	SINK w/ DISPOSAL
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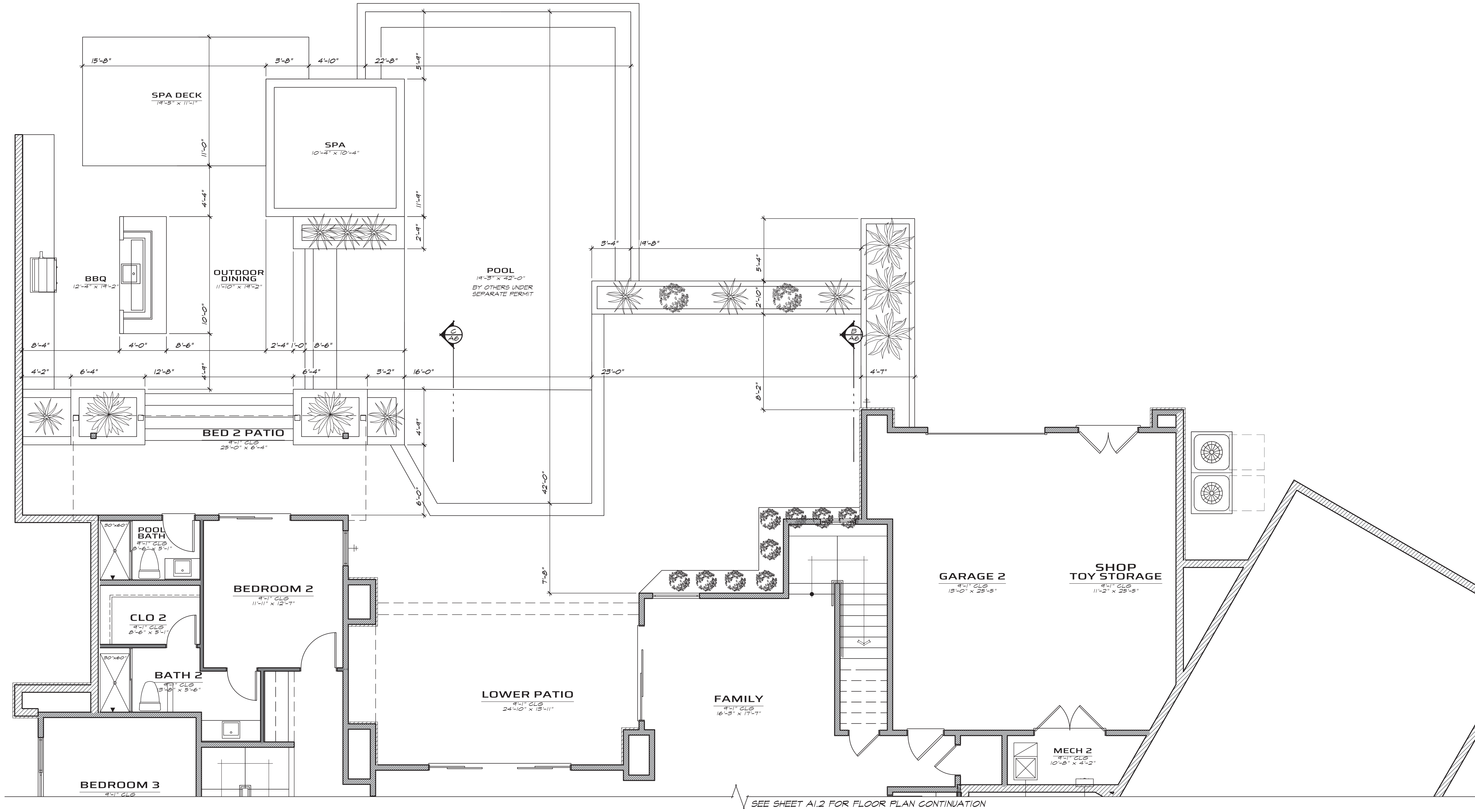
⑬	1.28 GAL/FLUSH WATER CLOSET PROVIDE A (MIN.) 15" ON EACH SIDE & 24" (MIN.) CLEAR IN FRONT
⑭	NONABSORBENT CEMENTITIOUS BACKER PANELS o/ WALL w/ TILE OR EQUAL TO +72" ABV. DRAIN
⑮	LAV SINK WITH MIN. 60" HIGH MIRROR ABOVE VERIFY
⑯	LAUNDRY SINK
⑰	WASHER LOCATION - PROVIDE WATER HAMMER ARRESTOR
⑱	ELECTRIC DRYER- W/ 4"Φ VENT THROUGH ROOF w/ RAINCAP NOT TO EXCEED 15'-0" w/ (2) 90° OFFSETS INSTALL PER IRC G2439
⑲	BASE CABINET W/ COUNTER TOP PER OWNER 42" UPPERS WHERE SHOWN - SEE CABINET DRAWINGS.
⑳	CABINET DROP ZONE PER OWNER
㉑	5 SHELVES EQUALLY SPACED AT A MINIMUM 14" SEPARATION.
㉒	ROD AND SHELF OR CLOSET SYSTEM AT CLOSET PER SPECS
㉓	STACKABLE WASHER DRYER - PROVIDE WATER HAMMER ARRESTOR AND 4"Φ DRYER VENT THROUGH ROOF w/ RAINCAP NOT TO EXCEED 15'-0" w/ (2) 90° OFFSETS INSTALL PER IRC G2439
㉔	UNDERCOUNTER BAR REFRIGERATOR
㉕	KITCHEN ISLAND COUNTERTOP ON BASE CABINETS
㉖	STACKABLE OVEN / MICROWAVE
㉗	CONCRETE A.C. COMPRESSOR PAD - VERIFY LOCATION WITH MECHANICAL
㉘	HOSE BIB W/ BACK FLOW PREVENTION
㉙	HOSE BIB W/ BACK FLOW PREVENTION & SHUT OFF VALUE
㉚	CEILING/WALL MOUNTED SMOKE ALARM WIRED TO HOUSE WIRING ⓢ
㉛	CEILING/WALL MOUNTED CARBON MONOXIDE /SMOKE ALARM WIRED TO HOUSE WIRING ⓒ
㉜	PROVIDE ADDITIONAL SUPPORT BLOCKING AT TELEVISION VERIFY HEIGHT AND SIZE.
㉝	LINE OF SOFFIT / CEILING CHANGE - SEE ROOM CEILING HEIGHTS AND REFLECTED CEILING PLAN
㉞	GAS FIREPLACE W/ STANDARD CHIMNEY SYSTEM (I.R.C. ER5017) W/ NON-COMBUSTIBLE HEARTH OR FLOOR AREA SEE DTL 10/D1
㉟	GAS KEY TO FIREPLACE
㊱	ALL BEDROOM ESCAPE WINDOWS SHALL COMPLY WITH THREE CONDITIONS 1) THE OPERABLE AREA SHALL BE 5.7 SQ. FT. OR GREATER, 2) SHALL MEET A MINIMUM 24" HEIGHT AND 20" WIDTH, 3) 44" MAX. FROM FINISH FLOOR TO FINISH WINDOW OPENING
㊲	ELECTRICAL SERVICE ENTRANCE PANEL AND METER
㊳	STAIRS - MAX. RISE 7 3/4", MIN. RUN 10", MIN CLEAR WIDTH 36", HANDRAIL HEIGHT 34"ON 2x 38" PONY WALL, CONSTRUCT STAIRS PER IRC REQUIREMENTS



SEE SHEET A1.2 FOR FLOOR PLAN CONTINUATION

POOL DECK PLAN

3/16" = 1'-0"

NORTH

DATE
1/27/2025
4/11/25 - G&D

REGISTERED ARCHITECT
CERTIFICATE NO. 31582
BRET THOMAS OVERMYER
Date Signed 4.11.25
ARIZONA, USA

Bret Overmyer

EXPIRES 9/30/2027

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Sivarajan Residence

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Lone Mountain Vista Tract A - Lot 93

POOL DECK PLAN

CITY OF SCOTTSDALE
BUILDING PLANS
THESE PLANS HAVE BEEN APPROVED
AND ARE READY FOR A PERMIT
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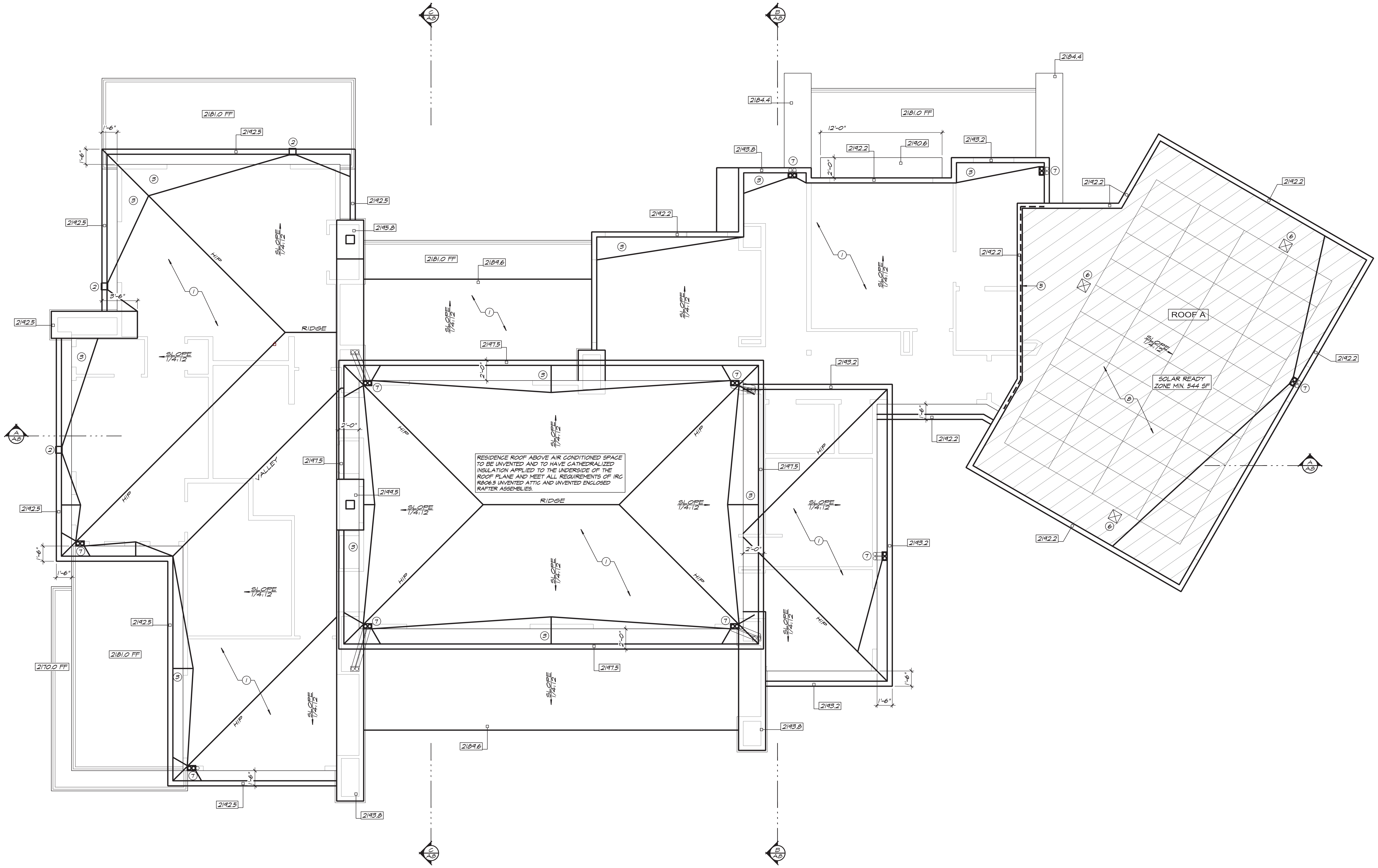
COS PLAN CHECK #9300-24

SHEET NO.
A2.3



RESIDENCE ROOF ABOVE AIR CONDITIONED SPACE TO BE UNVENTED AND TO HAVE CATHEDRALIZED INSULATION APPLIED TO THE UNDERSIDE OF THE ROOF PLANE AND MEET ALL REQUIREMENTS OF IRC R806.5 UNVENTED ATTIC AND UNVENTED ENCLOSED RAFTER ASSEMBLIES.

ROOF PLAN

3/16" = 1'-0"

NORTH

NOTES

1. PROVIDE FIRE BLOCKING @ ALL CEILING LINES & AT ALL BALLOON FRAMED WALLS OVER 10'-0" - U.N.O. ON PLAN.
2. ROOF SHEATHING SHALL BE 15/32" WOOD PRODUCT PANELS WITH SPAN INDEX OF 32/16, EXPOSURE 1. PLACE SHEETS WITH STRONG AXIS PERPENDICULAR TO SUPPORT. BLOCKING IS NOT REQUIRED U.N.O.
3. TYPICAL ROOF SHEATHING FASTENERS SHALL BE:
   - 8d COMMON NAILS AT 6" O.C. ALONG ALL BOUNDARIES AND EDGES AND 12" O.C. IN FIELD
   - ALTERNATE 16 GAUGE x 1 3/4" LONG WITH 7/16" CROWN AT 3" O.C. ALONG ALL BOUNDARIES AND EDGES AND 6" O.C. IN FIELD. STAPLE SHALL BE INSTALLED SO THAT THE CROWN IS PARALLEL TO SUPPORTING FRAMING MEMBERS.

DRAFT STOP:

DRAFT STOP BETWEEN LIVABLE AND "CATHEDRALIZED" AREAS. SEE ROOF PLAN SHEET A.5 FOR LOCATIONS.

FIRE BLOCKING:

FIRE BLOCKING IS REQUIRED IN THE FOLLOWING LOCATIONS:

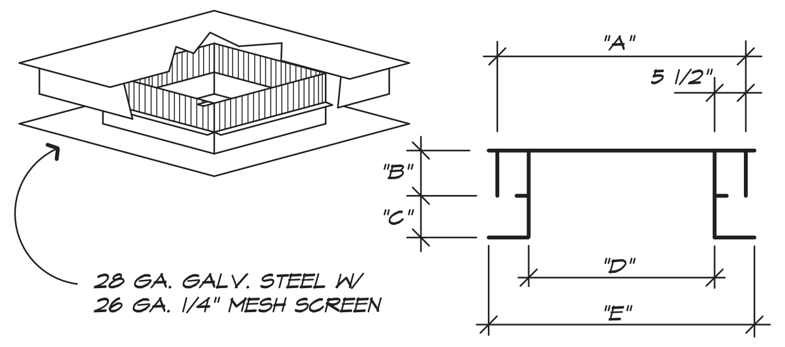
1. CONCEALED SPACES OF STUD WALLS AT CEILING AND FLOOR LEVELS.
2. FURRED SPACES AND SOFFIT AT 10'-0" LEVELS BOTH VERTICAL AND HORIZONTAL.
3. ALL INTERCONNECTIONS BETWEEN CONCEALED VERTICAL AND HORIZONTAL SPACES SUCH AS OCCURS AT DROP CEILING, SOFFITS AND COVE CEILINGS.
4. BETWEEN STAIR STRINGERS IN TOP AND BOTTOM OF RUN BETWEEN STUDS ALONG AND INLINE WITH THE STRINGERS
5. OPENINGS AROUND PIPES, DUCTS, VENTS, AND CHIMNEYS WITH NON COMBUSTIBLE MATERIAL (SUCH AS UNFACED FIBERGLASS INSULATION).
6. AT OPENINGS BETWEEN ATTIC SPACES AND THE CHIMNEY CHASES FOR FACTORY BUILT CHIMNEYS.
7. WALLS HAVING PARALLEL OR STAGGERED STUDS FOR SOUND CONTROL SHALL HAVE FIRE BLOCKS OF MINERAL FIBER OR GLASS FIBER OR OTHER APPROVED NON-RIGID MATERIAL.
8. THE INTEGRITY OF ALL BLOCKING AND DRAFT STOPS SHALL BE MAINTAINED.

KEY NOTES

①	FOAM ROOFING SYSTEM SWD URETHANE ESR #2532 OR EQUAL - SLOPE 3/8" PER FOOT - MAX 80 LRV
②	8x4 GALVANIZED METAL SCUPPER SEE DETAIL 7/D1
③	PLYWOOD CRICKET - SLOPE TO DRAIN
④	18"X18" GALVANIZED METAL ROOF VENT PAINT TO MATCH ROOF
⑤	INSULATION DRAFT STOP BETWEEN CONDITIONED AND UNCONDITIONED ROOF AREAS
⑥	O'HAGIN ROOF VENT WITH SUB FLASHING SEE DETAIL THIS SHEET
⑦	INTERNAL ROOF DRAIN AND OVERFLOW. SEE DETAIL 6/D1
⑧	SOLAR-READY ZONES – RB103. MINIMUM 10% OF ROOF AREA BUT NOT LESS THAN 300 SQ. FT. FREE AND CLEAR OF OBSTRUCTIONS INCLUDING MECHANICAL EQUIPMENT AND VENTS. PROVIDE ELECTRICAL PATHWAY FOR CONDUIT RUN FROM SOLAR-READY ZONE TO ELECTRICAL SERVICE PANEL WITH RESERVED SPACE FOR 2-POLE CIRCUIT BREAKER. CAPPED ROOF PENETRATION SLEEVE SHALL BE PROVIDED ON ROOFS WITH A SLOPE OF 1 IN 12 OR LESS.

COOL/LIGHT REFLECTIVE COATED ROOFS.

ROOF SOLAR REFLECTANCE AND THERMAL EMITTANCE FOR ROOF SLOPES LESS THAN 2:12. THREE-YEAR-AGED SOLAR REFLECTANCE INDEX (SRI) OF 64, THREE-YEAR-AGED SOLAR REFLECTANCE OF 0.55 AND A THREE-YEAR AGED THERMAL EMITTANCE OF 0.75 OVER CONDITIONED AND NON-CONDITIONED SPACES. N1102.6 AMENDED.



28 GA. GALV. STEEL W/ 26 GA. 1/4" MESH SCREEN

DIMENSION CHART FOR STANDARD SIZES

SIZE	A	B	C	D	E	NET AREA
18"x18"	26"	4"	4"	18"	30"	170 SQ. IN.

VENT - FLAT ROOF

SCALE: N.T.S.

VENTILATION CALCS

ROOF	ATTIC AREA	REQ'D VENT	PROVIDED
A	1021 SQ. FT.	3.40 SQ. FT.	
3	FLAT ROOF VENT		3.54
		TOTAL:	3.54

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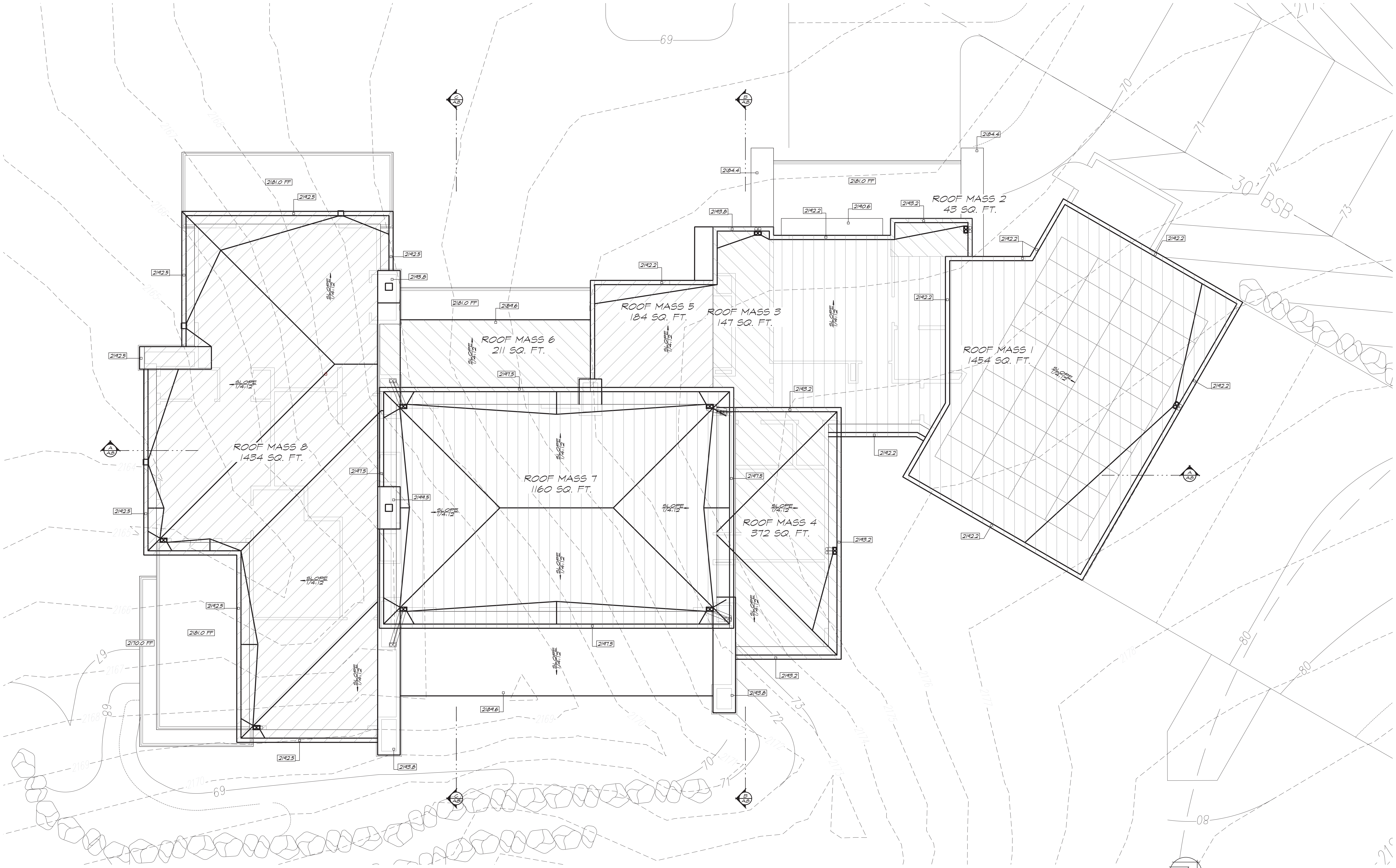
ROOF PLA

SHEET NO.
A3.1

BUILDING MASSING CALCULATIONS

MASS	AREA	TOP OF PARAPET/ROOF	HIGHEST ADLACENT NATURAL GRADE	DIFFERENCE	OVER 1/3 RULE
1	1454 SQ. FT.	2192.20	2177.10	15.10	NO
2	43 SQ. FT.	2193.20	2174.00	19.20	NO
3	147 SQ. FT.	2193.80	2174.80	19.00	NO
4	372 SQ. FT.	2193.20	2175.50	17.70	NO
5	184 SQ. FT.	2192.20	2174.25	17.95	NO
6	211 SQ. FT.	2189.60	2173.00	16.60	NO
7	1160 SQ. FT.	2197.50	2174.50	23.00	NO
8	1434 SQ. FT.	2192.50	2170.00	22.50	NO


ROOF MASS 2
43 SQ. FT.
ROOF MASS 5
184 SQ. FT.
ROOF MASS 3
147 SQ. FT.
ROOF MASS 6
211 SQ. FT.
ROOF MASS 1
1454 SQ. FT.
ROOF MASS 8
1434 SQ. FT.
ROOF MASS 7
1160 SQ. FT.
ROOF MASS 4
372 SQ. FT.
SLOPE 1/4:12
2181.0 FF
2170.0 FF
2192.5
2192.2
2193.2
2193.8
2184.4
2184.6
2190.6
2197.5
2198.5
30' BSB
69
70
71
72
73
80

BUILDING MASSING PLAN

3/16" = 1'-0"

NORTH

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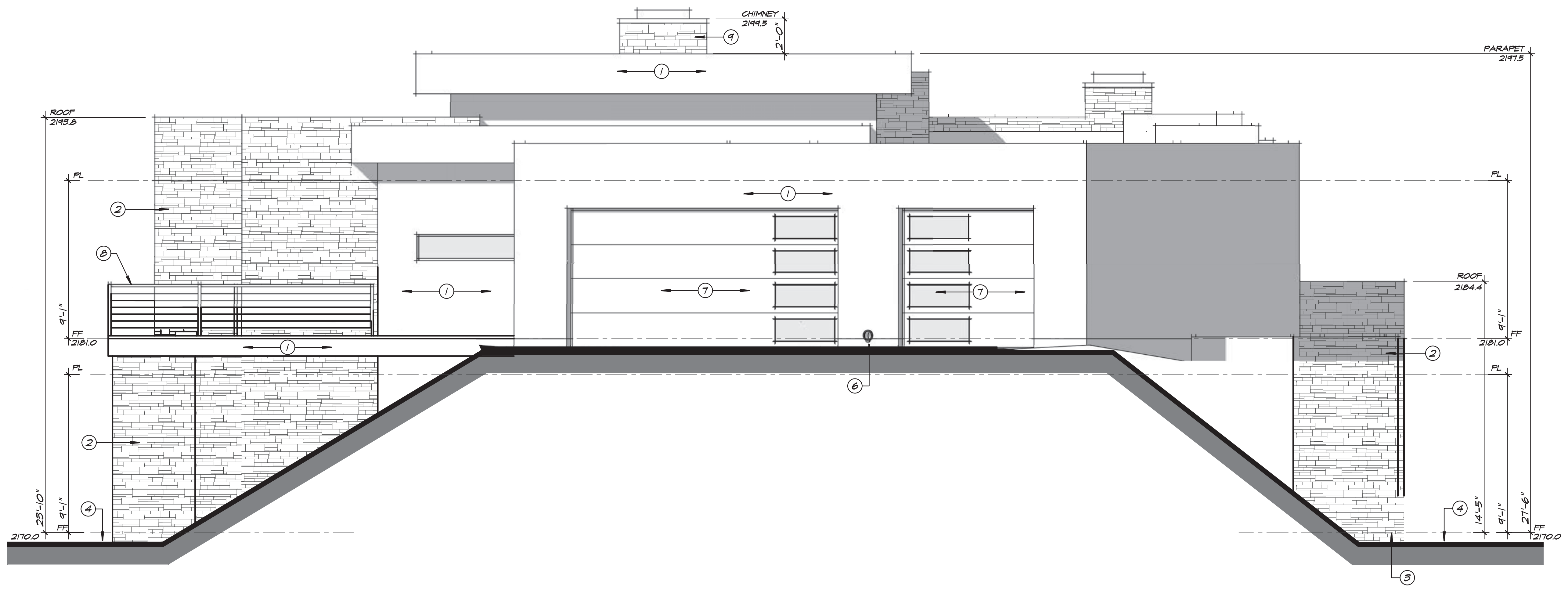
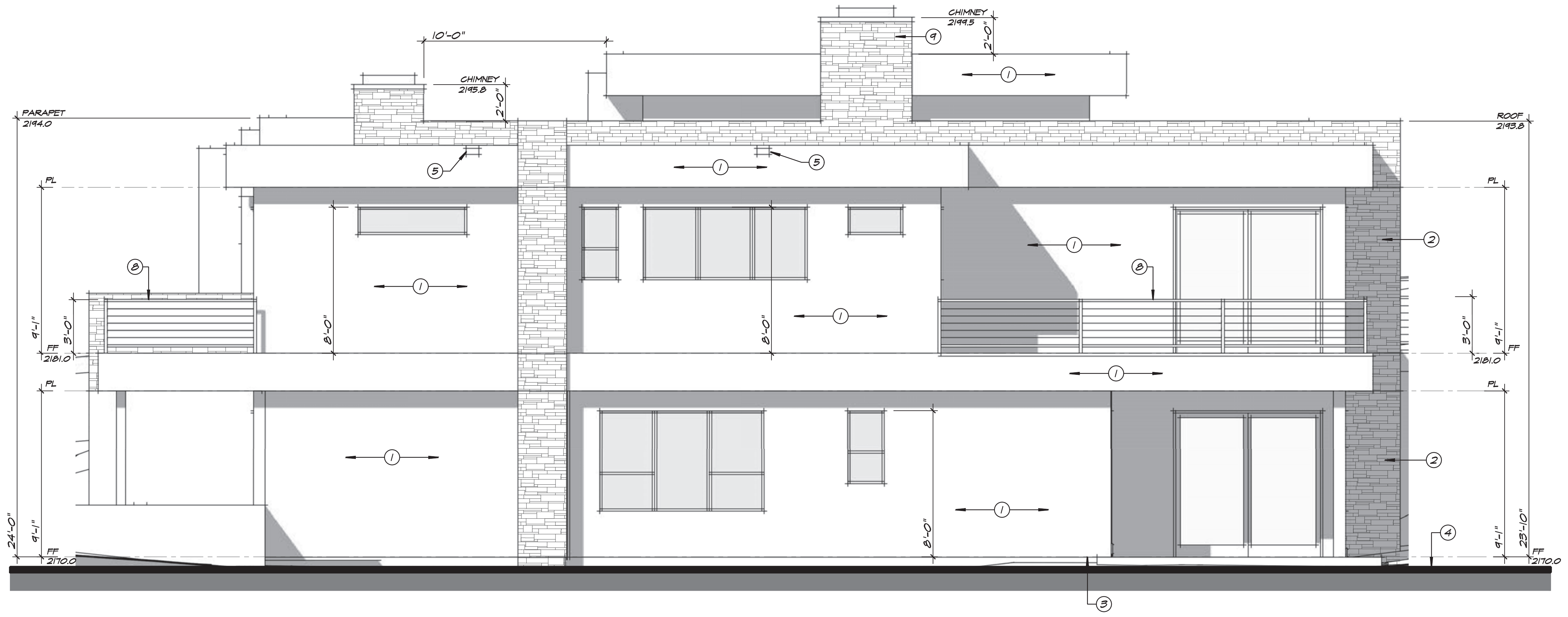


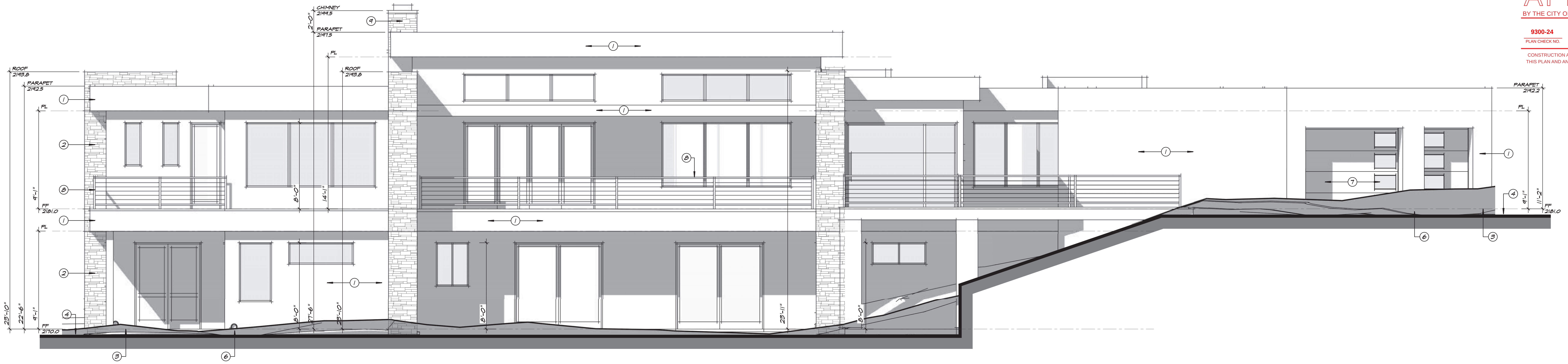
NORTHEAST ELEVATION

3/16" = 1'-0"



SOUTHWEST ELEVATION

3/16" = 1'-0"



SOUTHEAST ELEVATION

3/16" = 1'-0"

NOTES

GENERAL INFORMATION

A. REFER TO GENERAL NOTE AND DETAIL SHEETS FOR TYPICAL REQUIREMENTS AND MATERIALS SPECIFIC TO THIS PROJECT.

B. FLASHING OF EXTERIOR OPENINGS SHALL NOT BE LESS THAN #26 GA. CORROSION RESISTANT METAL & PER I.R.C. SEC. 703.8. ALL EXPOSED FLASHING SHALL BE PAINTED OR ANODIZED TO MATCH EXTERIOR COLOR

C. INSTALL ALL PRE-MANUFACTUREED MATERIALS PER MANUFACTURERS REQUIREMENTS, RECOMMENDATIONS AND SPECIFICATIONS. INSTALLATION REQUIREMENTS TO BE PROVIDED BY BUILDER.

D. ALL VENTS, FLASHING, ELECTRICAL PANEL(S), ETC. TO BE PAINTED TO MATCH HOUSE.

E. WEEP SCREED SHALL BE OF #26 GAUGE CORROSION- RESISTANT METAL w/ A MINIMUM VERTICAL ATTACHMENT FLANGE OF 3 1/2" & PLACED A MINIMUM OF 3/4" BELOW FOUNDATION PLATE & A MIN. 6" A.F.G. @ ALL EXT. WALLS.

F. ALL WINDOW FRAMES SHALL BE PAINTED OR ANODIZED TO MATCH EXTERIOR COLOR - NO EXPOSED WOOD OR METAL

G. CONTRACTOR TO VERIFY VENTILATION SYSTEM COMPLIANCE PER I.R.C.

H. PER IRC SECTION R319.1.3 ALL EXPOSED WOOD SHALL BE PROTECTED WITH TWO (2) COATS OF STAIN OR PRIMED AND PAINTED.

SEE SITE PLAN FOR SITE WALL LOCATIONS.

DOOR AND WINDOW FLASHING:
PROVIDE 30# FELT AT ALL HEADS, JAMBS & SILLS OF WINDOW AND DOOR OPENINGS IN FRAME WALLS
A. FLASH HORIZONTAL AND/OR SLOPED AREAS AND 6" MIN. VERT. WALL SURFACE AROUND OPENINGS.
B. PROVIDE CONTINUOUS SEALANT BEAD WHERE STUCCO ABUTS WINDOW AND DOOR FRAMES SO AS TO PROVIDE A WEATHER-RESISTIVE BARRIER.

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SEE BUILDER SPECS. FOR FINISH AND CORNER BEAD STYLE.

WEATHER RESISTIVE BARRIER:
PROVIDE 1 LAYER 15LB ASPHALT SATURATED ORGANIC FELT OVER ALL EXTERIOR FRAMING/SHEATHING PRIOR TO STUCCO LATH.

EXTERIOR WALL BRACING:
UNLESS NOTED OTHERWISE ON THE "STRUCTURAL FLOOR PLAN", THE EXTERIOR SIDE OF ALL EXTERIOR WALLS SHALL BE BRACED PER SECTION R602.10 IRC - BRACING SHALL BE LOCATED AT EACH CORNER (OR AS NEAR TO AS POSSIBLE) AND EVERY 25' OF WALL LENGTH. BRACING SHALL CONSIST OF 1x4 DIAGONAL LET-IN, SIMPSON RCWB DIAGONAL LET-IN OR SIMPSON WB X-BRACING.

KEY NOTES

①	SAN KOTE STUCCO SYSTEM (ICC-ES-2729) o/ FOAM BOARD (ON AIS BOARD @ ATTIC AREAS).
②	APPLIED STONE VENEER - SEE MANUFACTURER'S INSTALLATION INSTRUCTIONS AND DETAIL 2/D1
③	WEEP SCREED TO MIN. 3/4" BELOW FINISHED FLOOR - PAINT CONCRETE STEM BELOW TO MATCH BUILDING. #26 GAUGE CORROSION- RESISTANT METAL w/ A MINIMUM VERTICAL ATTACHMENT FLANGE OF 3 1/2" AND A MIN. 6" A.F.G. @ ALL EXT. WALLS.
④	FINISH GRADE - SLOPE AWAY FROM BUILDING
⑤	8x4 GALVANIZED METAL SCUPPER SEE DETAIL 7/D1
⑥	ROOF DRAIN TO BE MAX 4" ABV FINISHED GRADE - BLOCKOUT STEM AS REQUIRED (TYP.) SEE DETAIL 6/D1
⑦	GARAGE DOOR PER OWNER
⑧	METAL HANDRAIL TO +36" A.F.F. SEE DETAIL 1/A4.2
⑨	FIREPLACE CHIMNEY CAP CONSTRUCTED WITH NON-COMBUSTIBLE MATERIALS BY CHIMNEY KING OR EQUAL. TOP OF CHIMNEY SHALL BE MIN. 2'-0" ABOVE ANY PART OF BUILDING WITHIN 10'-0" OF FLUE.

ARCHITECTURAL ELEVATIONS
APPROVED
BY THE CITY OF SCOTTSDALE PLANNING DEPARTMENT

9300-24
PLAN CHECK NO.

APPROVED BY

05/22/2025
DATE

CONSTRUCTION AND INSTALLATION SHALL BE IN ACCORDANCE WITH THIS PLAN AND ANY AND ALL DEVIATIONS WILL REQUIRE REAPPROVAL

CITY OF SCOTTSDALE
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4/11/25 - G&D

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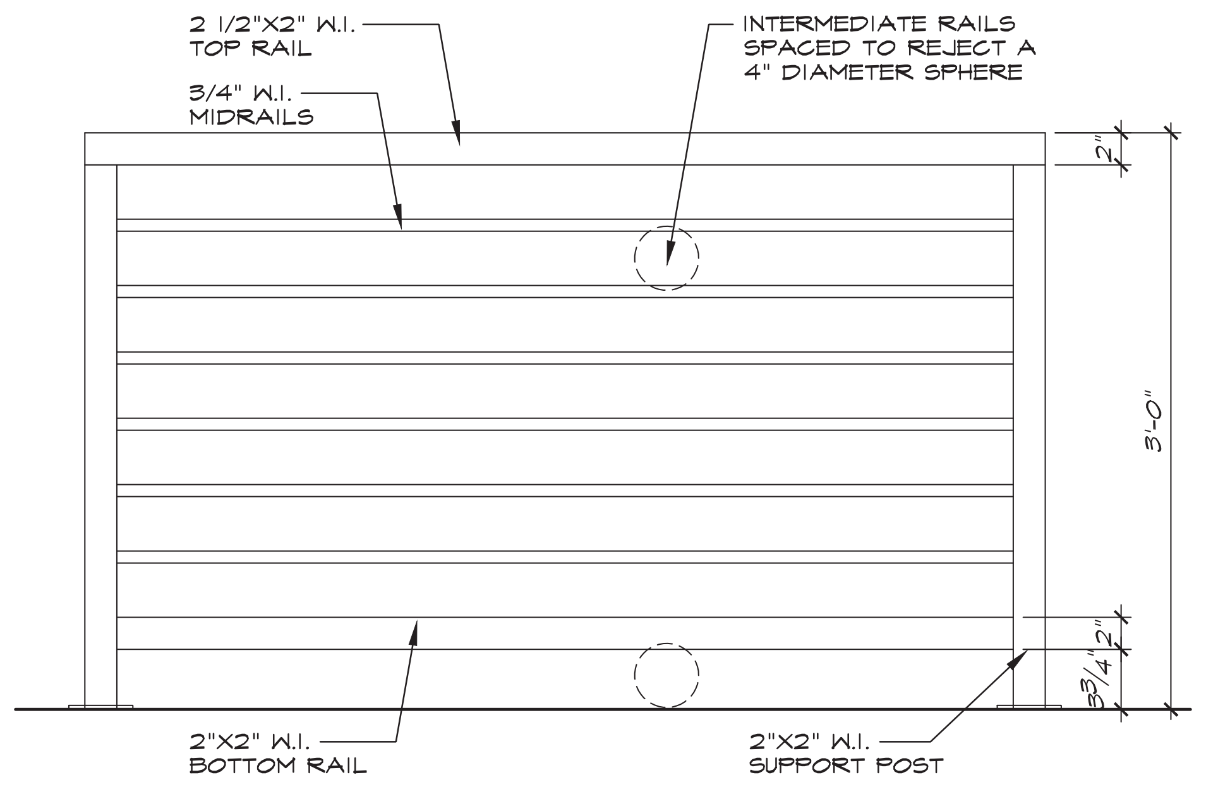

1 TYPICAL GUARDRAIL
SCALE: 1"=1'-0"

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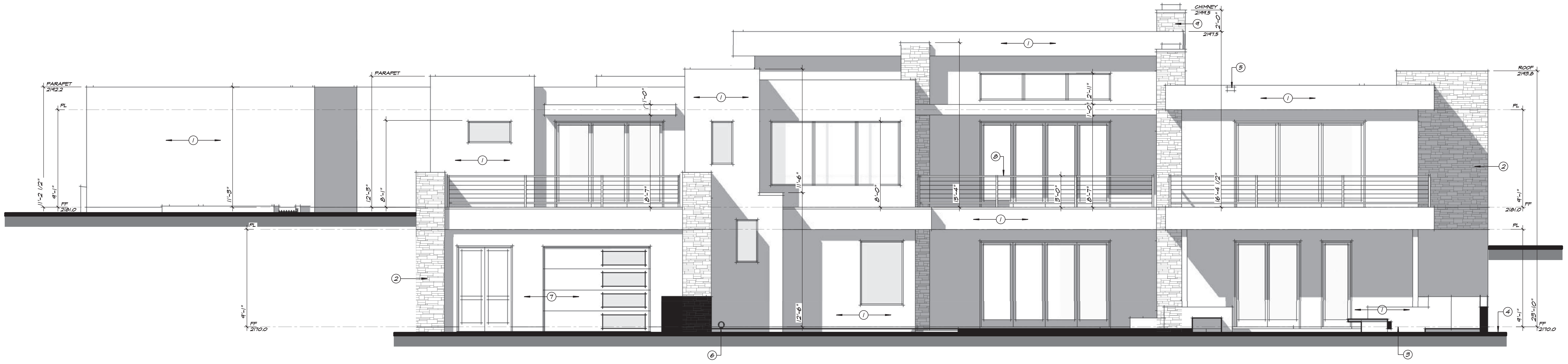

NORTHWEST ELEVATION
3/16" = 1'-0"

ELEVATIONS

SHEET NO.
A4.2

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COS PLAN CHECK #9300-24

4/16/2025 8:03 AM
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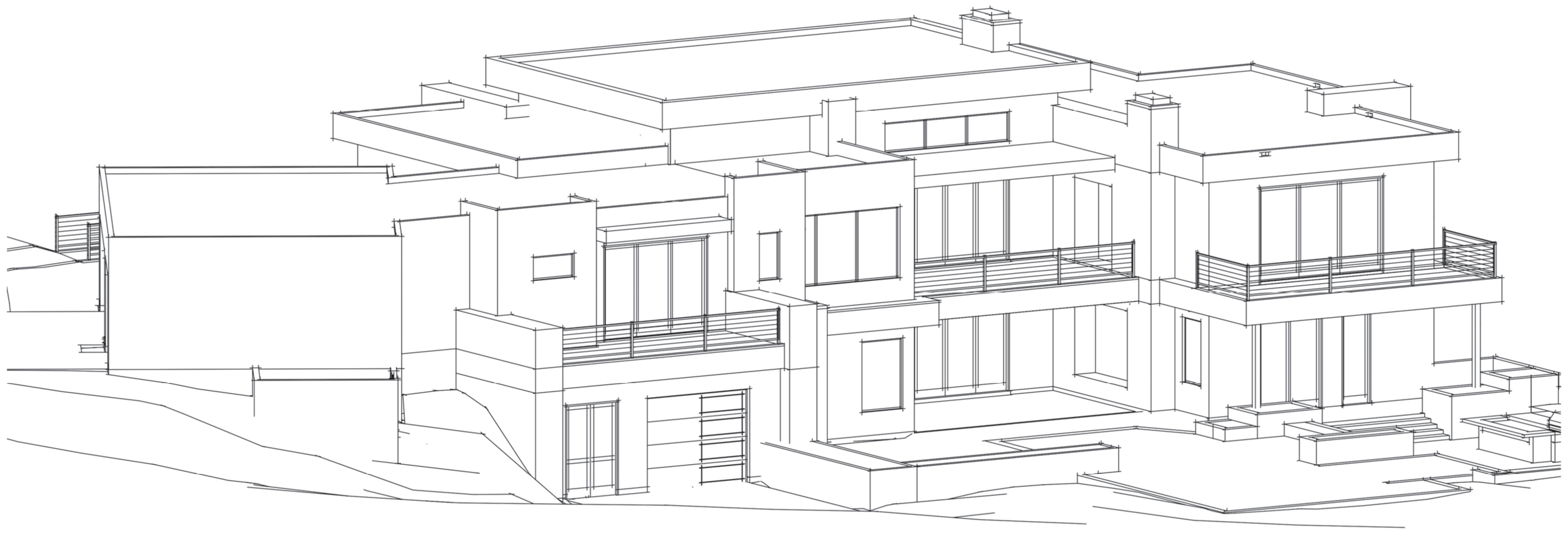
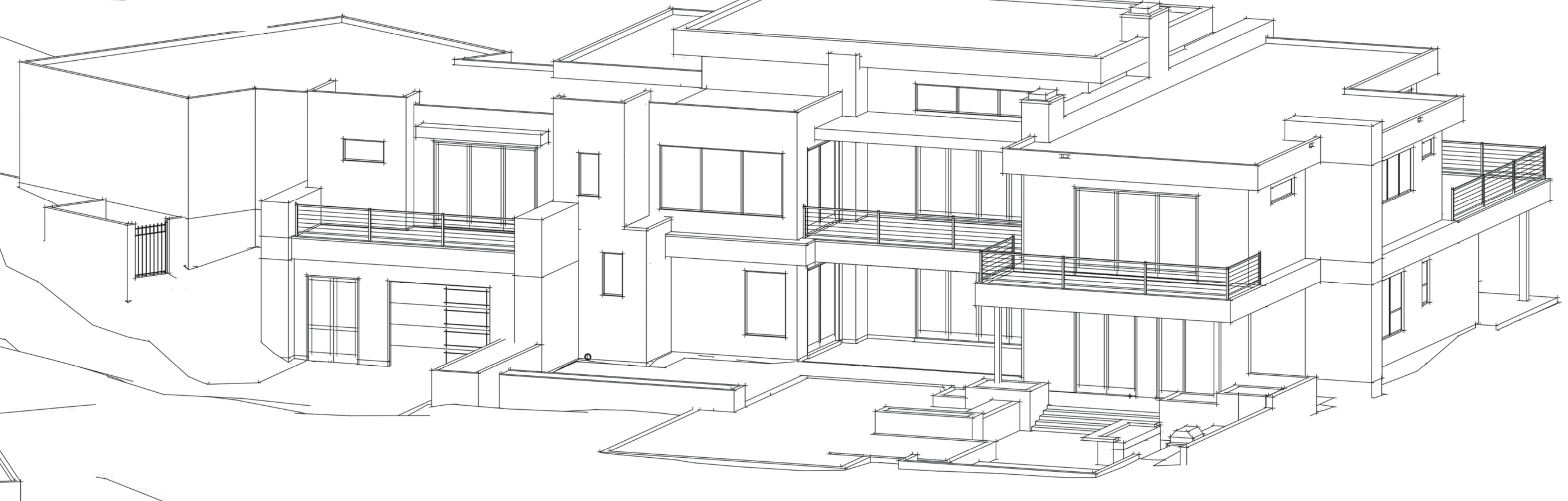
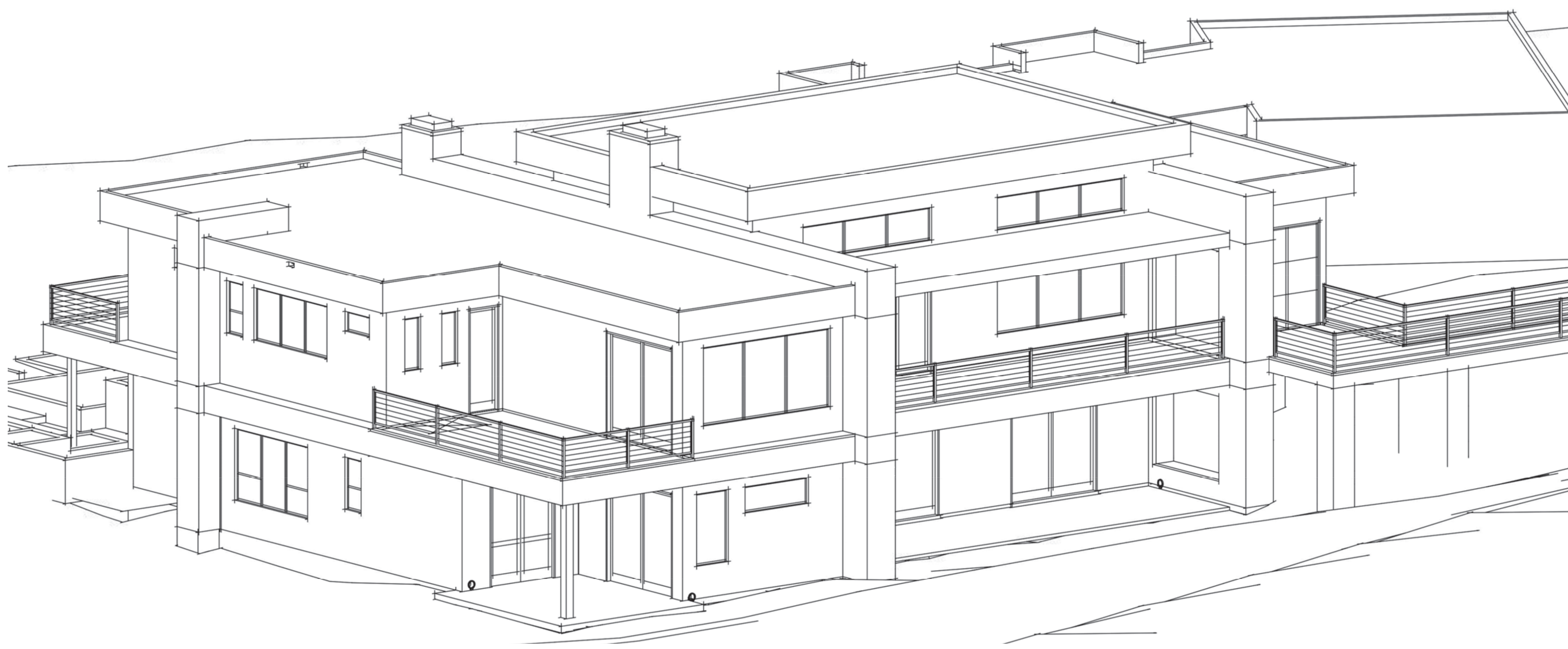


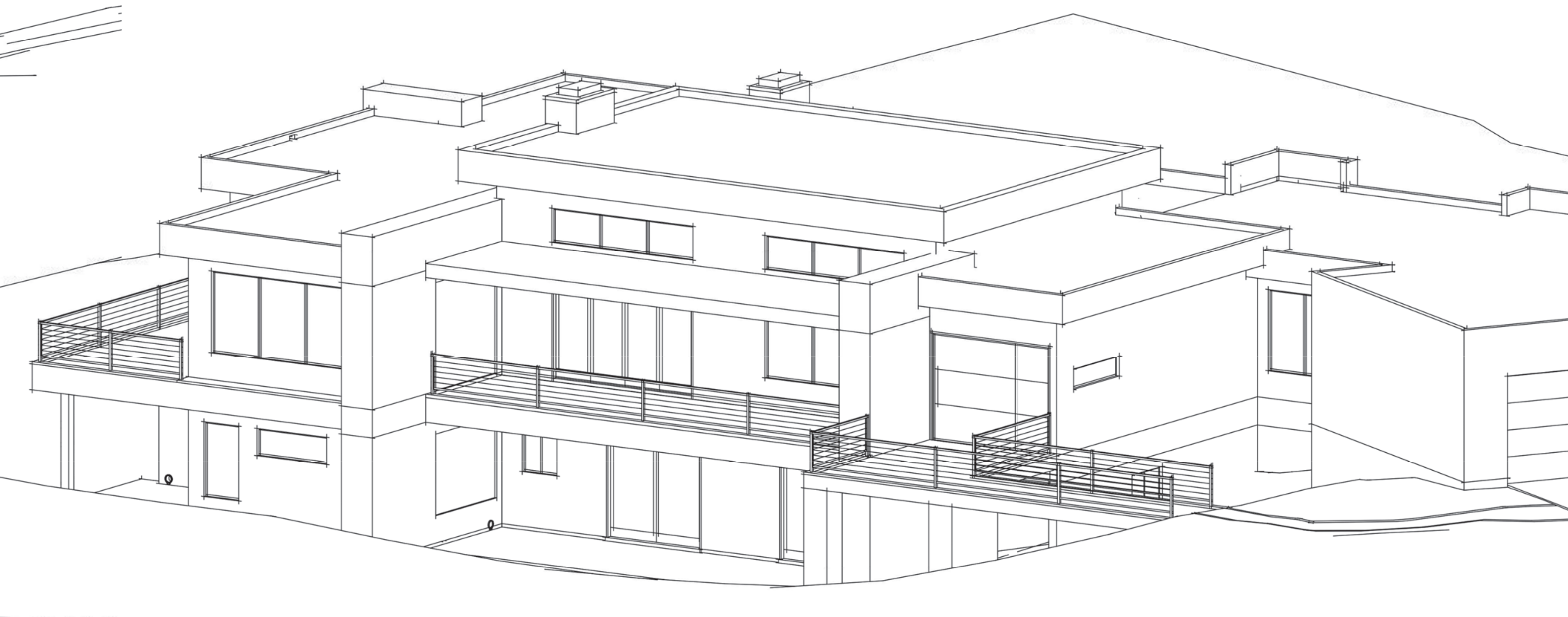
NORTH ISOMETRIC
1/8"=1'-0"



WEST ISOMETRIC
1/8"=1'-0"



SOUTH ISOMETRIC
1/8"=1'-0"



EAST ISOMETRIC
1/8"=1'-0"

4/16/2025 8:03 AM
C:_BTO_BTARCHITECTURAL\CMK B&D\SIVARAJAN RESIDENCE\CAD

DATE
1/27/2025
4/11/25 - G&D

REGISTERED ARCHITECT
CERTIFICATE NO.
31582
BRET THOMAS
OVERMYER
Date Signed 4.11.25
ARIZONA, USA

Bret Overmyer

EXPIRES 9/30/2027

BTA ARCHITECTURAL

BT ARCHITECTURAL, LLC
8425 West El Cortez Place
Peoria, Arizona 85383
(602) 292-6350
Bret.BTA@GMAIL.COM

Sivarajan Residence
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Lone Mountain Vista Tract A - Lot 93

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BUILDING PLANS
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EXTERIOR ISOMETRICS

COS PLAN CHECK #9300-24

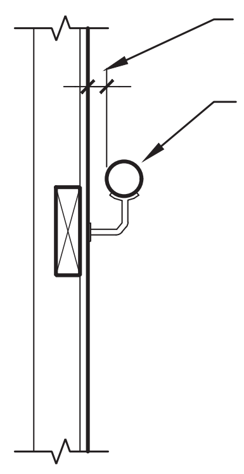
SHEET NO.
A4.3

BUILDING THERMAL ENVELOPE

THE BUILDING THERMAL ENVELOPE SHALL COMPLY WITH CLIMATE ZONE 2. ENERGY COMPLIANCE SHALL BE DEMONSTRATED BY UA TRADE-OFF (RESCHECK) OR PERFORMANCE (REM/RATE, ERI, HERS) COMPLIANCE PATH OR BY THE FOLLOWING PRESCRIPTIVE VALUES (TABLE N1102.1.3):
PRESCRIPTIVE MINIMUM R-VALUES: (*CEILING=R-49) / (WALLS=R-13).
PRESCRIPTIVE MAXIMUM WINDOW FENESTRATION VALUES: (U-FACTOR=0.40) / (SHGC=0.25).
PLEASE CLARIFY WHETHER USING PRESCRIPTIVE ENERGY COMPLIANCE OR UA TRADE-OFF. PROVIDE RESCHECK IF UA TRADE-OFF IS USED.

2021 IRC (T. N1102.1.3) PRESCRIPTIVE ENERGY COMPLIANCE

FENESTRATION/GLAZING: 0.25 MAX. U-FACTOR: 0.40 MAX.
INSULATION: FRAME WALLS: R-19 (2X6) R-13 (2X4)
CMU/MASS WALLS: R-6
ATTIC: R49



HAND GRIP SHALL NOT BE LESS THAN 1 1/2" FROM WALL

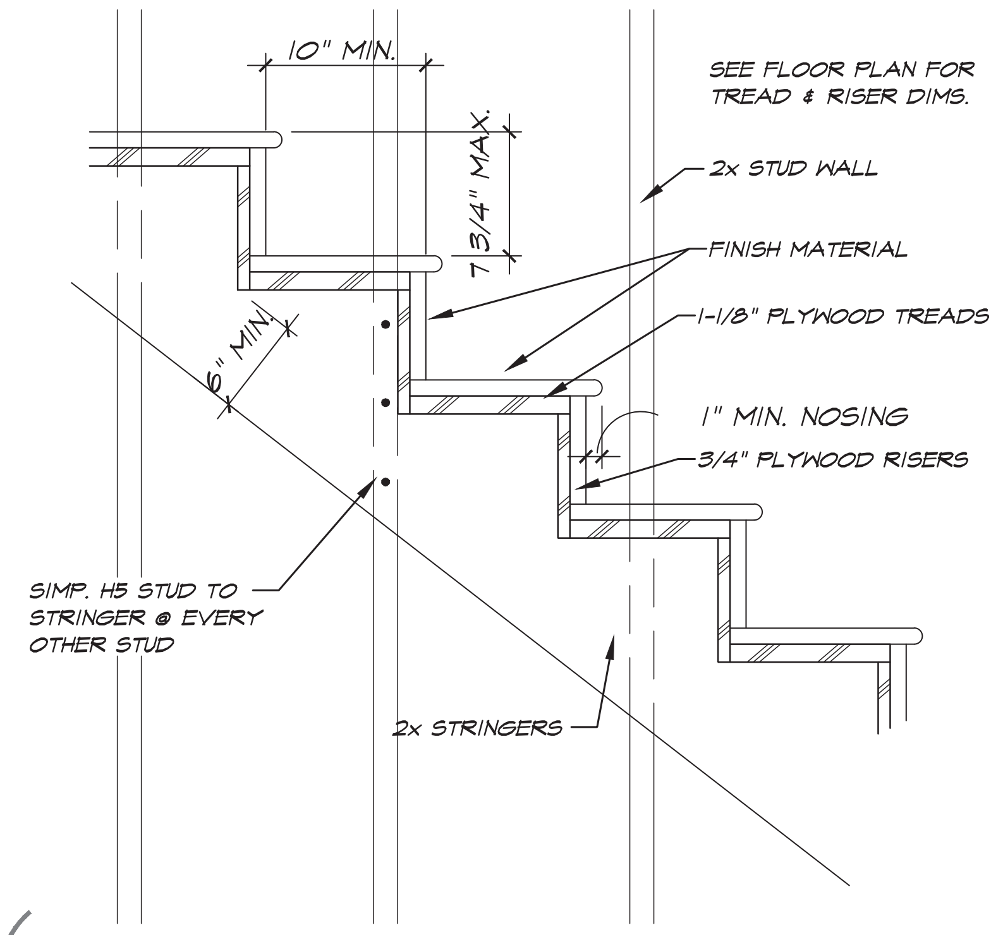
HAND GRIP SHALL BE 1 1/2" DIA. MIN. AND 2" DIA. MAX. O.D. JULIUS BLUM MODEL #4441

HAND RAILS SHALL BE 34" TO 38" ABOVE STAIR NOSING

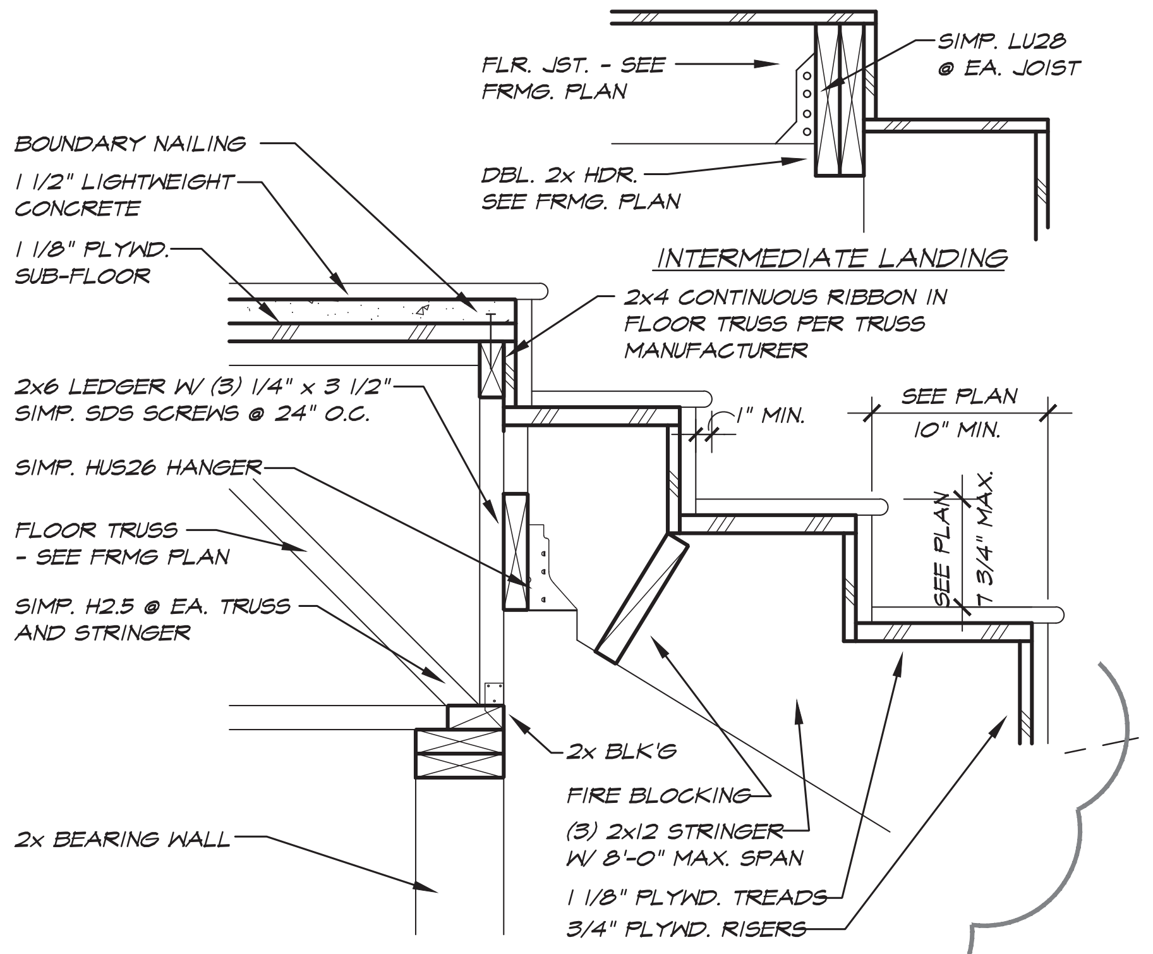
NOTE:
GUARD RAILINGS SHALL BE 36" HIGH AND DESIGNED SUCH THAT A 4" SPHERE CANNOT PASS THROUGH

HANDRAILS ENDS SHALL BE RETURNED TO WALL OR TERMINATE @ NEWEL POST OR SAFETY TERMINAL

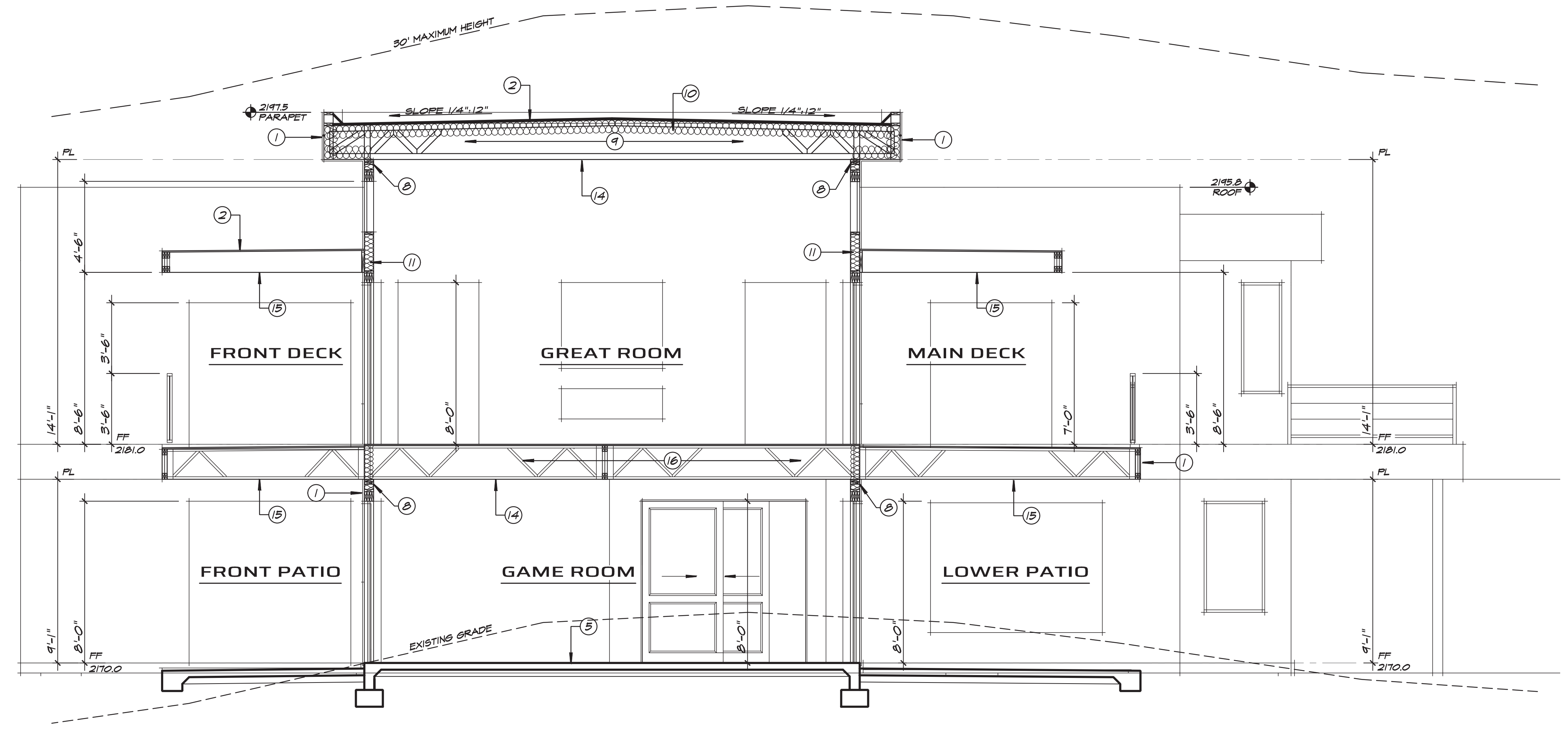
1 STAIR RAIL CONNECTION DETAIL
SCALE: 1 1/2"=1'-0"


10" MIN.
7 3/4" MAX.
6" MIN.
SEE FLOOR PLAN FOR TREAD & RISER DIMS.
2x STUD WALL
FINISH MATERIAL
1-1/8" PLYWOOD TREADS
1" MIN. NOSING
3/4" PLYWOOD RISERS
SIMP. H5 STUD TO STRINGER @ EVERY OTHER STUD
2x STRINGERS

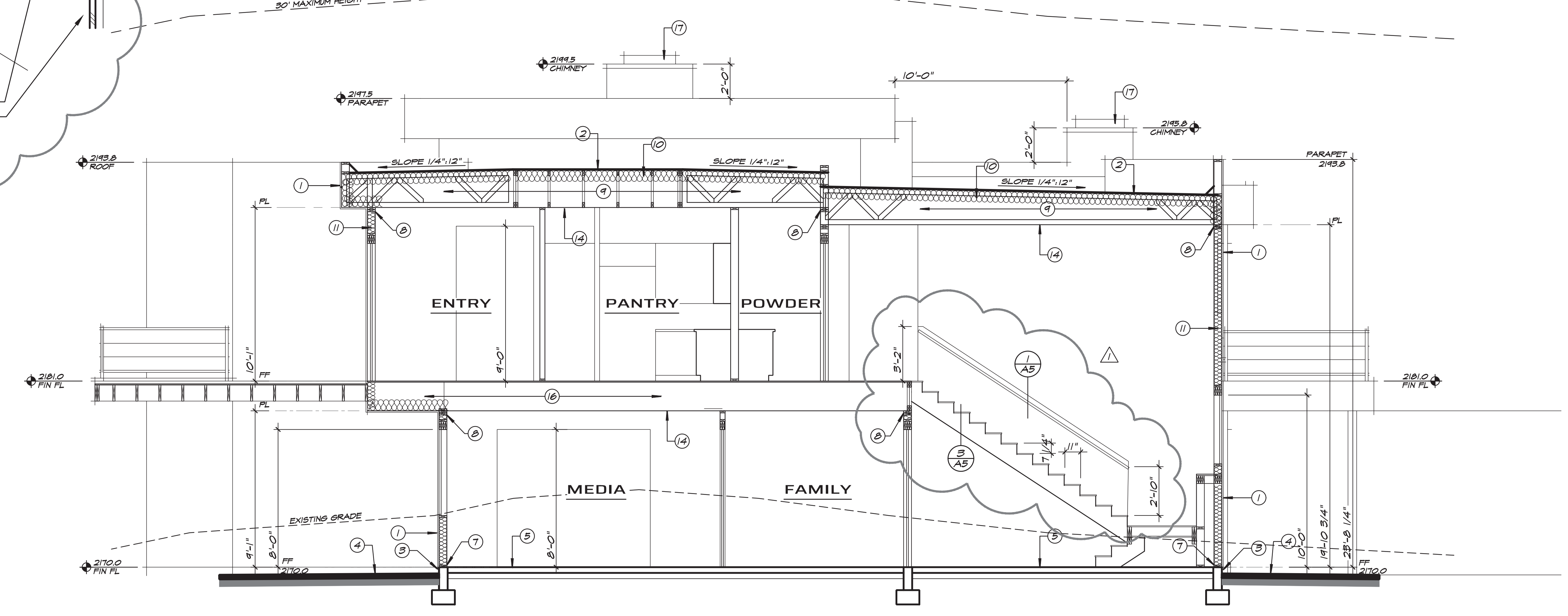
3 STAIR STRINGER DETAIL
SCALE: 1"=1'-0"


FLR. JST. - SEE FRMG. PLAN
SIMP. LU28 @ EA. JOIST
DBL. 2x HDR. SEE FRMG. PLAN
INTERMEDIATE LANDING
BOUNDARY NAILING
1 1/2" LIGHTWEIGHT CONCRETE
1 1/8" PLYWD. SUB-FLOOR
2x4 CONTINUOUS RIBBON IN FLOOR TRUSS PER TRUSS MANUFACTURER
2x6 LEDGER W/ (3) 1/4" x 3 1/2" SIMP. SDS SCREWS @ 24" O.C.
1" MIN.
SEE PLAN
10" MIN.
SEE PLAN
7 3/4" MAX.
SIMP. HUS26 HANGER
FLOOR TRUSS - SEE FRMG PLAN
SIMP. H2.5 @ EA. TRUSS AND STRINGER
2x BLK'G
FIRE BLOCKING
(3) 2x12 STRINGER W/ 8'-0" MAX. SPAN
1 1/8" PLYWD. TREADS
3/4" PLYWD. RISERS
2x BEARING WALL

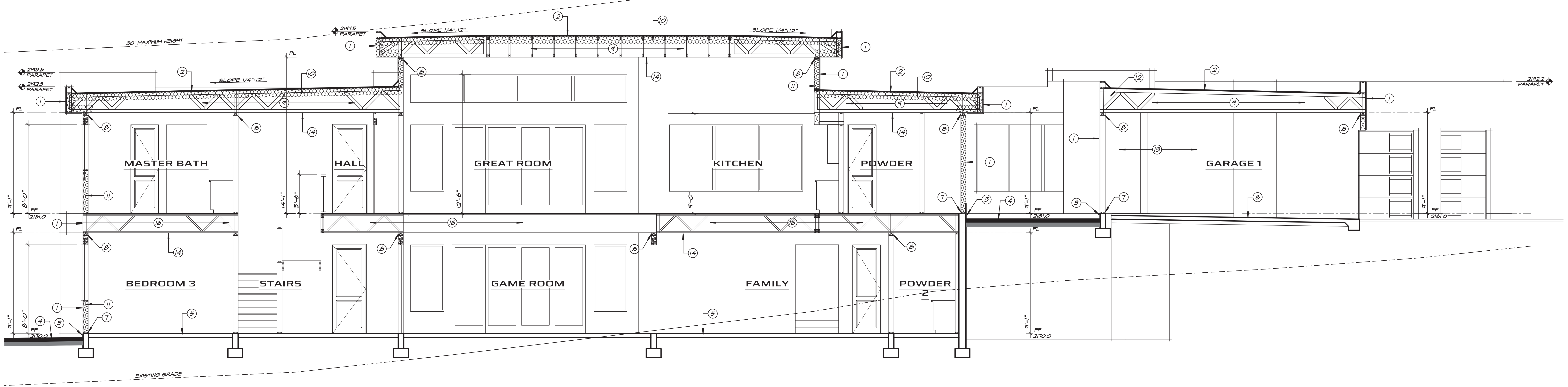
2 STAIR TO FLR JST CONN.
SCALE: 1"=1'-0"


30' MAXIMUM HEIGHT
FRONT DECK
GREAT ROOM
MAIN DECK
FRONT PATIO
GAME ROOM
LOWER PATIO
EXISTING GRADE
2181.0 FF
2170.0 FF

SECTION C
3/16" = 1'-0"


30' MAXIMUM HEIGHT
CHIMNEY
PARAPET
ROOF
10'-0"
ENTRY
PANTRY
POWDER
MEDIA
FAMILY
EXISTING GRADE
2181.0 FIN FL
2170.0 FIN FL

SECTION B
3/16" = 1'-0"


30' MAXIMUM HEIGHT
PARAPET
MASTER BATH
HALL
GREAT ROOM
KITCHEN
POWDER
GARAGE 1
BEDROOM 3
STAIRS
GAME ROOM
FAMILY
POWDER
EXISTING GRADE
2181.0 FF
2170.0 FF

SECTION A
3/16" = 1'-0"

NOTES

GENERAL INFORMATION

1. ALL WEATHER EXPOSED SURFACES SHALL HAVE A WEATHER RESISTIVE BARRIER TO PROTECT THE INTERIOR WALL FINISH AND EXTERIOR OPENINGS SHALL BE FLASHED TO BE WATERPROOFED.
2. FLASHING OF EXTERIOR OPENINGS SHALL NOT BE LESS THAN #27 GA. CORROSION RESISTANT METAL & PER I.R.C. SEC. 803.9. ALL EXPOSED FLASHING SHALL BE PAINTED OR ANODIZED TO MATCH EXTERIOR COLOR.
3. INSTALL ALL PRE-MANUFACTUREED MATERIALS PER MANUFACTURERS REQUIREMENTS, RECOMMENDATIONS AND SPECIFICATIONS.
4. ALL VENTS, FLASHING, ELECTRICAL PANEL(S), ETC. TO BE PAINTED TO MATCH HOUSE.
5. ALL EXPOSED WOOD SHALL BE PROTECTED WITH TWO COATS OF STAIN OR PRIMED AND PAINTED.
6. PROVIDE Z-BAR AND L-BAR METAL FLASHING AT ALL MATERIAL TRANSITIONS WHERE NECESSARY.
7. ALL TRUSSES TO BE DESIGNED AND MANUFACTURED BY AN ARIZONA APPROVED FABRICATOR. TRUSS MANUFACTURER TO COORDINATE TRUSS DESIGNS w/ SPECIFIED HANGERS.
8. 2x WOOD TRIMMER w/ KING STUD @ EA. END OF ALL BALLOON FRAMED WALLS OVER 11'-0" - U.N.O.
9. FRAMER TO PROVIDE 2x4 RIDGE POLES AS REQUIRED FOR TILED ROOF AREAS.
10. PROVIDE 2x4 OUT-LOOKERS @ 49" O.C. @ ALL GABLE- END WALLS - U.N.O. ON PLAN.
11. PROVIDE 2x BLOCKING /FIRE STOPS AT ALL FURRED AREAS.
12. PROVIDE 1/2" MOISTURE RESISTANT GYPSUM BOARD AND MOISTURE PROTECTIVE BARRIER AT ALL WET WALLS. AT BUILDING EXTERIOR USE 1/2" SOFFIT BOARD WITH WATER RESISTANT FACE PAPER. AT CEILINGS USE 1/2" SAG RESISTANT OR 5/9" GYPSUM BOARD WHEN SUPPORTED AT 24" O.C.
13. PROVIDE (1) LAYER 5/9" TYPE "X" GYPSUM BOARD AT ALL WALLS AND CEILINGS AT GARAGE
14. PROVIDE CONTINUOUS AIR LEAKAGE BUILDING THERMAL ENVELOPE TO BE DURABLY SEALED TO LIMIT INFILTRATION PER N1112.4.1

KEY NOTES

①	SAN KOTE STUCCO SYSTEM (ESR #2729) o/ FOAM BOARD (ON AIS BOARD @ ATTIC AREAS).
②	FOAM ROOFING SYSTEM SWD URETHANE ESR #2532 OR EQUAL - SLOPE 1/4" PER FOOT - MAX 80 LRV
③	WEEP SCREED TO MIN. 3/4" BELOW FINISHED FLOOR - PAINT CONCRETE STEM BELOW TO MATCH BUILDING. #26 GAUGE CORROSION- RESISTANT METAL w/ A MINIMUM VERTICAL ATTACHMENT FLANGE OF 3 1/2" AND A MIN. 6" A.F.G. @ ALL EXT. WALLS. FINISH GRADE - SLOPE AWAY FROM BUILDING 2% FOR 10 w/ 6" SILL PLATE TO EARTH SEPARATION
④	FINISH GRADE - SLOPE AWAY FROM BUILDING
⑤	4" CONC. SLAB W/ REINFORCING PER SPECS OVER 4" A.B.C. ON TERMITE TREATED SOIL
⑥	5" CONC. SLAB W/ REINFORCING PER SPECS OVER 4" A.B.C. AT GARAGE ON TERMITE TREATED SOIL
⑦	PRESSURE TREATED BOTTOM PLATE
⑧	DOUBLE TOP PLATE
⑨	PRE-FAB TRUSSES AT 24" O.C. - SEE FRAMING PLAN & TRUSS CALCULATIONS
⑩	R-49 SPRAY FOAM INSULATION CATHEDRALIZED TO UNDERSIDE OF ROOF PLANEAT ALL ATTIC AREAS ABOVE LIVEABLE SPACE
⑪	R-21 SPRAY FOAM OR BATT INSULATION, CONTINUOUS TO ROOF
⑫	INSULATION DRAFTSTOP BETWEEN GARAGE & LIVABLE AREAS - SEE ROOF PLAN
⑬	5/8" TYPE 'X' GYP. BD. ON GARAGE SIDE OF WALLS SEPARATING GARAGE & RESIDENCE, ON GARAGE CEILING & ON ALL WALLS SUPPORTING THE GARAGE CEILING PER IRC
⑭	1/2" SAG RESISTANT GYPSUM OR 5/8" GYPSUM BOARD TYP (ESR #1338) PER IRC TABLE R702.2.5
⑮	1/2" EXTERIOR GYSUM BOARD 1-HOUR FIRE RATING PER IRC TABLE R702.2.5 (ESR #1338) ASTM C 1395 OR ASTM C 1396
⑯	20" FLOOR TRUSSES W/ 1 1/4" PLYWOOD & LIGHTWEIGHT CONCRETE SUBFLOORING RECESS SLAB 4" AT SHOWER
⑰	FIREPLACE CHIMNEY CAP CONSTRUCTED WITH NON-COMBUSTIBLE MATERIALS BY CHIMNEY KING OR EQUAL. TOP OF CHIMNEY SHALL BE MIN. 2'-0" ABOVE

DATE
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4/11/25 - G&D

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BRET THOMAS OVERMYER
31582
Date Signed 4.11.25
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SECTIONS

COS PLAN CHECK #9300-24

SHEET NO.
A5

DECORATIVE LIGHTING LEGEND:

- DECORATIVE WALL MOUNTED SCONCE
- DECORATIVE FLUSH MOUNT CEILING FIXTURE
- DECORATIVE CEILING MOUNTED HANGING PENDANT FIXTURE
- PICTURE LIGHT
- ELECTRIC MIRROR
- UNDER CABINET LIGHTING
- CEILING FAN

NOTES

◑ THIS SYMBOL INDICATES LOCATION OF EXHAUST FANS.

● THIS SYMBOL INDICATES LOCATION OF CARBON MONOXIDE / SMOKE DETECTOR COMBO

1. DO NOT SCALE DRAWINGS, FIELD VERIFY ALL DIMENSIONS, NOTIFY THE CONTRACTOR OF DISCREPANCIES IMMEDIATELY.
2. FIELD VERIFY ALL CONDITIONS AND DIMENSIONS PRIOR TO STARTING CONSTRUCTION.
3. ALL CEILING FINISHES SHALL BE 1/2" SAG-RESISTANT GYP. BD. UNLESS NOTED OTHERWISE.
4. REFER TO SPECS. FOR ALL INTERIOR FINISHES ON FLOORS, WALLS CEILINGS AND CABINETRY.
5. FIRE BLOCK STUD WALLS AT DROPPED CEILINGS, SOFFITS AND AT 10'-0" INTERVALS. SEAL PENETRATIONS OF FIRE BLOCKING W/ APPROVED CAULKING/SEALANT.
6. SEE ELECTRICAL PLAN FOR ADDITIONAL INFORMATION AT ELECTRICAL FIXTURES.
7. SEE MECHANICAL PLAN FOR ADDITIONAL INFORMATION AT MECHANICAL EQUIPMENT.

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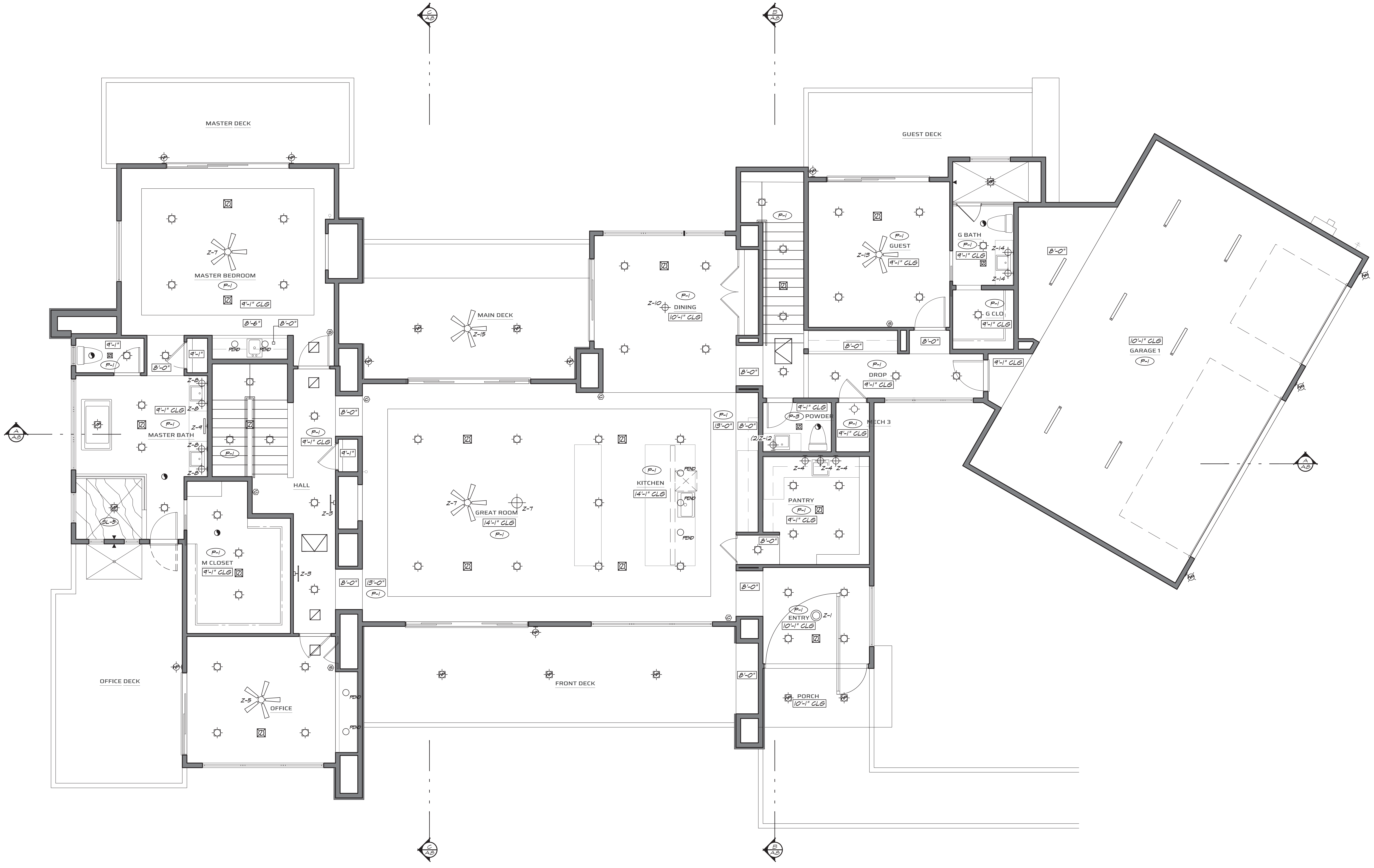
MASTER DECK
GUEST DECK
MASTER BEDROOM
Z-7
P-1
9'-1" CLG
8'-6"
8'-0"
9'-1"
PEND
MASTER BATH
Z-8
Z-9
SL-5
M CLOSET
HALL
Z-3
MAIN DECK
Z-15
DINING
Z-10
10'-1" CLG
GREAT ROOM
14'-1" CLG
KITCHEN
13'-0"
OFFICE DECK
OFFICE
Z-5
FRONT DECK
GUEST
Z-13
G BATH
Z-14
G CLO
DROP
POWDER
P-3
(2)Z-12
MECH 3
PANTRY
Z-4
ENTRY
Z-1
PORCH
GARAGE 1
A
A8

UPPER LEVEL REFLECTED CEILING PLAN

3/16" = 1'-0"

NORTH

CITY OF SCOTTSDALE
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UPPER LEVEL REFLECTED CEILING PLAN

COS PLAN CHECK #9300-24

SHEET NO.
A6.1

NOTES

◑ THIS SYMBOL INDICATES LOCATION OF EXHAUST FANS.

◉ THIS SYMBOL INDICATES LOCATION OF CARBON MONOXIDE / SMOKE DETECTOR COMBO

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2. FIELD VERIFY ALL CONDITIONS AND DIMENSIONS PRIOR TO STARTING CONSTRUCTION.
3. ALL CEILING FINISHES SHALL BE 1/2" SAG-RESISTANT GYP. BD. UNLESS NOTED OTHERWISE.
4. REFER TO SPECS. FOR ALL INTERIOR FINISHES ON FLOORS, WALLS CEILINGS AND CABINETRY.
5. FIRE BLOCK STUD WALLS AT DROPPED CEILINGS, SOFFITS AND AT 10'-0" INTERVALS. SEAL PENETRATIONS OF FIRE BLOCKING W/ APPROVED CAULKING/SEALANT.
6. SEE ELECTRICAL PLAN FOR ADDITIONAL INFORMATION AT ELECTRICAL FIXTURES.
7. SEE MECHANICAL PLAN FOR ADDITIONAL INFORMATION AT MECHANICAL EQUIPMENT.

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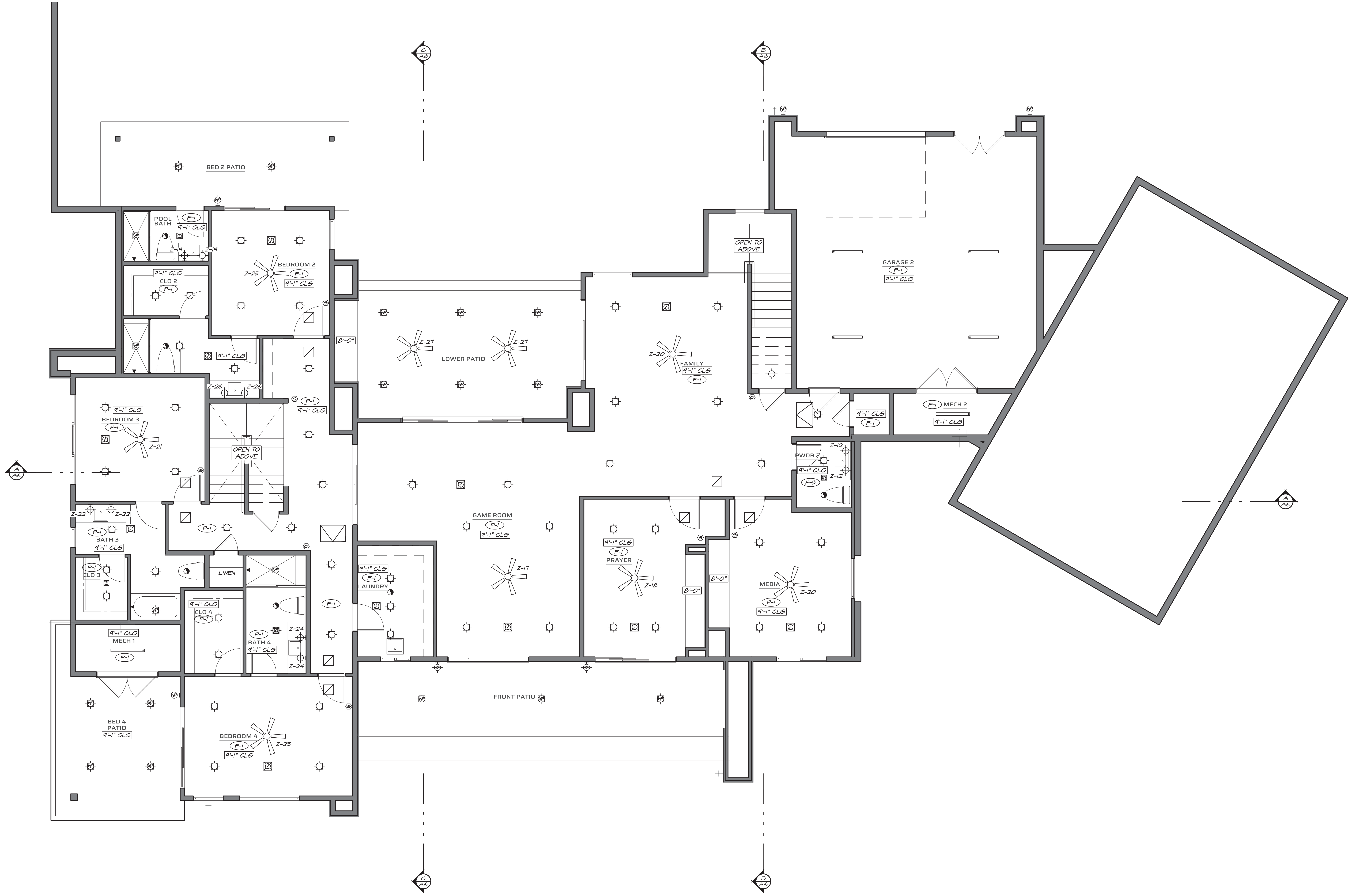
BED 2 PATIO
POOL BATH
P-1
9'-1" CLG
Z-19
Z-19
CLO 2
BEDROOM 2
Z-25
8'-0"
Z-26
Z-26
BEDROOM 3
Z-21
OPEN TO ABOVE
Z-22
Z-22
BATH 3
CLO 3
LINEN
CLO 4
BATH 4
Z-24
Z-24
MECH 1
LAUNDRY
BED 4 PATIO
BEDROOM 4
Z-23
LOWER PATIO
Z-27
Z-27
FAMILY
Z-20
OPEN TO ABOVE
GARAGE 2
MECH 2
PWDR 2
Z-12
Z-12
P-3
GAME ROOM
Z-17
PRAYER
Z-18
8'-0"
8'-0"
MEDIA
Z-20
FRONT PATIO
A
A6

LOWER LEVEL REFLECTED CEILING PLAN

3/16" = 1'-0"

NORTH

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LOWER LEVEL REFLECTED CEILING PLAN

COS PLAN CHECK #9300-24

SHEET NO.
A6.2

4/16/2025 8:03 AM
C:_BTO_BTARCHITECTURAL\GMK BED\SIVARAJAN RESIDENCE\CAD

WOOD FLOORING

WD-1
LOCATION: REFER TO KEYED FLOORING FINISH PLAN
VENDOR: STUDIO RESSOURCE
CONTACT: 480-597-3142 | AMY@STUDIORESSOURCE.COM
FINISH/COLOR: DESERT FERLO | SPECIES: EUROPEAN OAK ABCD GRADE | 5/8" ENGINEERED 10-1/4" WIDTHS X 2-7' LENGTHS
FINISH: MATTE OIL
NOTES: FLOORING DIRECTION PER FLOORING FINISH PLAN

WD-2
LOCATION: OFFICE
VENDOR: STUDIO RESSOURCE
CONTACT: 480-597-3142 | AMY@STUDIORESSOURCE.COM
FINISH/COLOR: DESERT FERLO | SPECIES: EUROPEAN OAK ABCD GRADE | 5/8" ENGINEERED
SIZE: 4" x 28"
FINISH: MATTE OIL
NOTES: *PATTERN: HERRINGBONE

CONCRETE FLOORING

CON-1
LOCATION: OUTDOOR LIVING
VENDOR: BUILDER TO SUPPLY SOURCE
CONTACT: TBD
PRODUCT: POLISHED CONCRETE
COLOR/ FINISH: TBD
GROUT: TBD
NOTES: *FINISH SAMPLES FOR APPROVAL

SLAB

SL-5
COUNTERTOP, BACKSPLASH, SHOWER WALLS, SHOWER CEILING + SHOWER FLOOR
LOCATION: PRIMARY BATHROOM
VENDOR: CRAFTSMAN COURT CERAMICS - CCC
CONTACT/PHONE: 623-748-0607
EDGE: 1.5" EASED
FINISH/COLOR: DYNASTY WHITE HONED
NOTES: SEE CONCEPT IMAGE + REFER TO ELEVATIONS FOR LAYOUT + DETAILS. ALL SEAM LAYOUTS MUST BE SUBMITTED FOR APPROVAL.

TILE/STONE FLOORING

T-1
LOCATION:PRIMARY BATHROOM
VENDOR: CRAFTSMAN COURT CERAMICS- CCC
CONTACT: 480-970-6611 | LINDSEY CLUM OR ANDI SMITH LINDSEYC@CRAFTSMANCOURT.COM
PRODUCT: TAO LIMESTONE
SIZE: 16X24
COLOR/ FINISH: TUMBLED
GROUT: TBD
NOTES: REFER TO FLOORING FINISH PLAN FOR DIRECTION

T-2
LOCATION: GUEST SUITE BATH
VENDOR: CLINE'S NATURAL STONE
CONTACT: WADE@CLINESNATURALSTONE.COM | 623-516-1516
PRODUCT: _______ LIMESTONE
SIZE: 12X24
COLOR/ FINISH:
GROUT: TBD
NOTES: REFER TO FLOORING FINISH PLAN FOR DIRECTION

T-2A
LOCATION: GUEST SUITE BATH -SHOWER FLOOR
VENDOR: CLINE'S NATURAL STONE
CONTACT: WADE@CLINESNATURALSTONE.COM | 623-516-1516
PRODUCT: _______ LIMESTONE
SIZE: 12X24 CUT TO 4X4***
COLOR/ FINISH:
GROUT: TBD
NOTES: REFER TO FLOORING FINISH PLAN FOR DIRECTION

T-3
LOCATION: GUEST BATHROOM #1
VENDOR: BEDROSIANS TILE + STONE
CONTACT: 480-233-0339 | ILEANA.LOPEZ@BEDROSIANS.COM
PRODUCT: NOMAD PORCELAIN TILE
SIZE: 12X24
COLOR/ FINISH: BONE- BON
GROUT: TBD
NOTES: REFER TO FLOORING FINISH PLAN FOR DIRECTION

T-5
LOCATION: GUEST BATHROOM #2 - SHOWER FLOOR
VENDOR: BEDROSIANS TILE + STONE
CONTACT: 480-233-0339 | ILEANA.LOPEZ@BEDROSIANS.COM
PRODUCT: NOMAD PORCELAIN TILE
SIZE: 1X4 MOSAIC
COLOR/ FINISH: ARGENT- ARG
GROUT: TBD
NOTES: REFER TO FLOORING FINISH PLAN FOR DIRECTION

T-6
LOCATION: GUEST BATHROOM #3
VENDOR: VILLAGIO TILE + STONE
CONTACT: 480-422-6700
PRODUCT: VID 14 RETREAT
SIZE: 12X24
COLOR/ FINISH: IVORY
GROUT: TBD
NOTES: REFER TO FLOORING FINISH PLAN FOR DIRECTION

T-7
LOCATION: GUEST BATHROOM #3 - SHOWER FLOOR
VENDOR: VILLAGIO TILE + STONE
CONTACT: 480-422-6700
PRODUCT: VID 14 RETREAT
SIZE: 2X2 MOSAIC | 12 X 12 SHEET
COLOR/ FINISH: IVORY
GROUT: TBD
NOTES: REFER TO FLOORING FINISH PLAN FOR DIRECTION

T-8
LOCATION: LAUNDRY ROOM
VENDOR: FACINGS OF AMERICA
CONTACT: 562-708-5396 | NICOLE DAVIS NDAVIS@FACINGSOFAMERICA.COM
PRODUCT: FOSSIL BONE PORCELAIN
SIZE: 12x24
COLOR/ FINISH: BONE
GROUT: TBD
NOTES:

T-9
LOCATION: POOL POWDER
VENDOR: CRAFTSMAN COURT CERAMICS- CCC
CONTACT: 480-970-6611 | LINDSEY CLUM LINDSEYC@CRAFTSMANCOURT.COM
PRODUCT: ZELLIGE ZIA
SIZE: 2X2
COLOR/ FINISH: PURE WHITE
GROUT: TBD
NOTES:

NOTES

GENERAL INFORMATION

1. DO NOT SCALE DRAWINGS. WRITTEN DIMENSIONS GOVERN.

2. ALL PARTITION LOCATIONS SHALL BE AS SHOWN ON FLOOR PLAN. IN CASE OF CONFLICT, NOTIFY ARCHITECT. ARCHITECT'S DRAWINGS TAKE PRECEDENCE OVER ALL OTHER PLANS.

3. ALL INTERIOR FLOOR FINISHES AND EXTERIOR FLOOR FINISHES AS NOTED TO BE SELECTED BY INTERIOR DESIGNER UNO.

4. FLOOR PATTERNS NTS. FLOOR PATTERNS TO INDICATE LOCATION AND DIRECTION OF MATERIAL INSTALLATION ONLY.

5. REFER TO ID.X FOR FULL DESCRIPTION OF FINISHES AND MATERIALS.

6. ALL STONE SURFACES THROUGHOUT TO BE SEALED PER INDUSTRY STANDARDS.

7. NO UNFINISHED EDGES OF FLOOR TILE TO BE LEFT EXPOSED.

8. GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR ALLOWING FOR DELIVERY LEAD TIMES FOR ALL CUSTOM FINISHES WITHIN THE CONSTRUCTION SCHEDULE. ALL DELIVERY TIMES MUST BE CONFIRMED AND ANY EXCESSIVE LEAD TIMES MUST BE BROUGHT TO THE ARCHITECT'S / INTERIOR DESIGNER'S ATTENTION IMMEDIATELY TO ALLOW FOR RESPECIFICATION IF NECESSARY.

9. TRANSITION INTERIOR FLOOR MATERIALS PER INDICATED DETAIL. TRANSITION INTERIOR TO EXTERIOR FLOOR MATERIALS PER ARCHITECT'S DRAWINGS.

10. FLOORING SHALL CONTINUE UNDER OPEN MILLWORK OR WALL-HUNG SINKS TYP.

11. SUBMIT CARPET SEAMING DIAGRAM TO ARCHITECT AND INTERIOR DESIGNER FOR REVIEW AND APPROVAL PRIOR TO ORDERING. DIAGRAM MUST BE SUBMITTED TO ARCHITECT AT LEAST FOUR (4) WEEKS PRIOR TO INSTALLATION.

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13. EXAMINE ALL FLOOR FINISH SURFACES AFTER COMPLETION OF WORK AND PROCEED WITH "TOUCH UP" AS REQUIRED.

DATE
1/27/2025
4/11/25 - G&D

Bret Overmyer
31582
BRET THOMAS OVERMYER
Date Signed 4.11.25
EXPIRES 9/30/2027

BT ARCHITECTURAL, LLC
8425 West El Cortez Place
Peoria, Arizona 85383
(602) 292-6350
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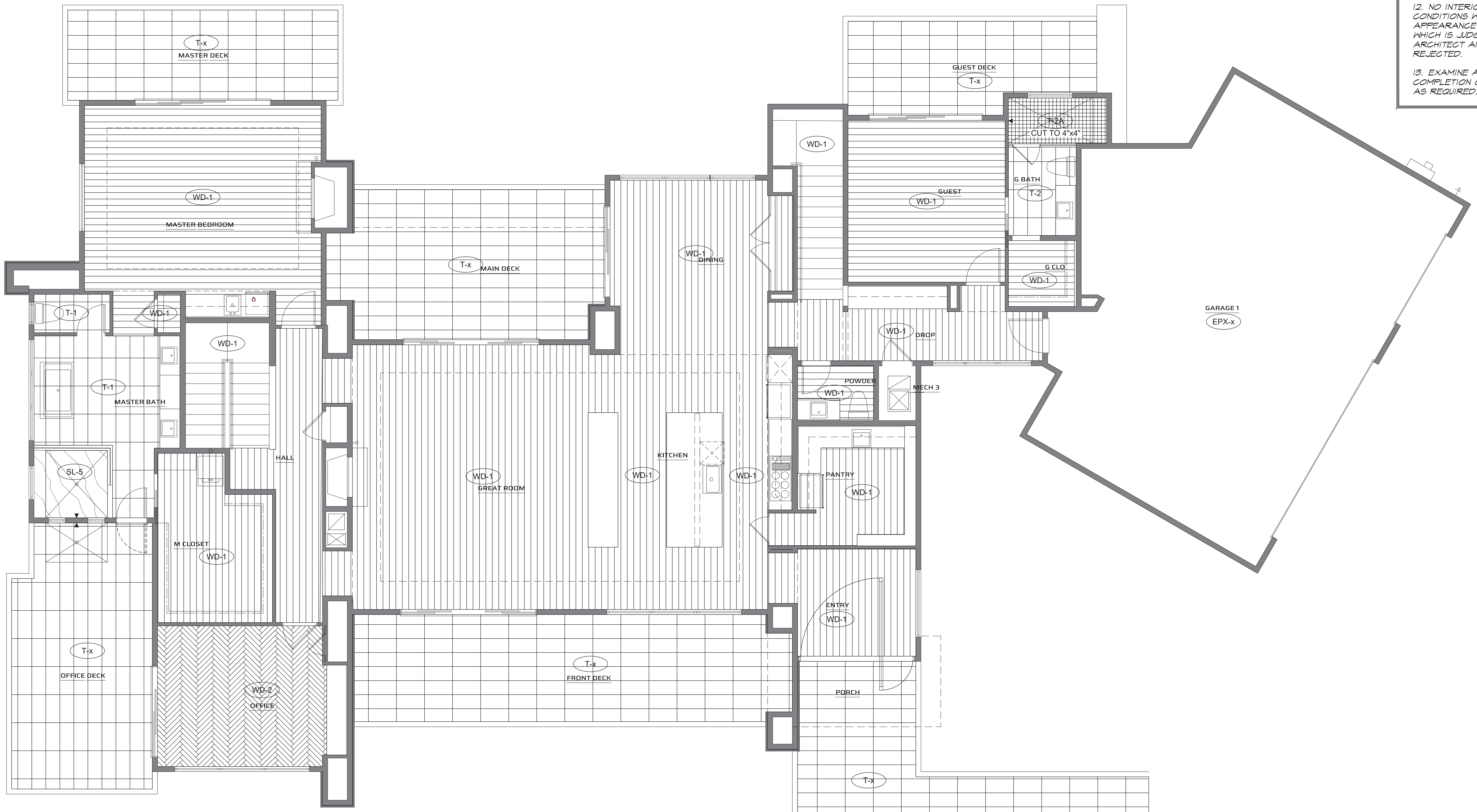

UPPER FLOOR FINISH PLAN

3/16" = 1'-0"

NORTH

4/16/2025 8:03 AM
C:_BTO_BTARCHITECTURAL\GMK B&D\SIVARAJAN RESIDENCE\CAD

CITY OF SCOTTSDALE
BUILDING PLANS
THESE PLANS HAVE BEEN APPROVED
AND ARE READY FOR A PERMIT
THIS DOES NOT AUTHORIZE VIOLATIONS OF ANY
CODE OR ORDINANCE

Sivarajan Residence

7899 East Mary Sharon Drive
Scottsdale 85266
Lone Mountain Vista Tract A - Lot 93

UPPER FLOOR FINISH PLAN

COS PLAN CHECK #9300-24

SHEET NO.
A7.1

WOOD FLOORING

WD-1
LOCATION: REFER TO KEYED FLOORING FINISH PLAN
VENDOR: STUDIO RESSOURCE
CONTACT: 480-597-3142 | AMY@STUDIORESSOURCE.COM
FINISH/COLOR: DESERT FERLO | SPECIES: EUROPEAN OAK
ABCD GRADE | 5/8" ENGINEERED 10-1/4" WIDTHS X 2-7' LENGTHS
FINISH: MATTE OIL
NOTES: FLOORING DIRECTION PER FLOORING FINISH PLAN

WD-2
LOCATION: OFFICE
VENDOR: STUDIO RESSOURCE
CONTACT: 480-597-3142 | AMY@STUDIORESSOURCE.COM
FINISH/COLOR: DESERT FERLO | SPECIES: EUROPEAN OAK
ABCD GRADE | 5/8" ENGINEERED
SIZE: 4" x 28"
FINISH: MATTE OIL
NOTES: *PATTERN: HERRINGBONE

CONCRETE FLOORING

CON-1
LOCATION: OUTDOOR LIVING
VENDOR: BUILDER TO SUPPLY SOURCE
CONTACT: TBD
PRODUCT: POLISHED CONCRETE
COLOR/ FINISH: TBD
GROUT: TBD
NOTES: *FINISH SAMPLES FOR APPROVAL

SLAB

SL-5
COUNTERTOP, BACKSPLASH, SHOWER WALLS, SHOWER CEILING + SHOWER FLOOR
LOCATION: PRIMARY BATHROOM
VENDOR: CRAFTSMAN COURT CERAMICS - CCC
CONTACT/PHONE: 623-748-0607
EDGE: 1.5" EASED
FINISH/COLOR: DYNASTY WHITE HONED
NOTES: SEE CONCEPT IMAGE + REFER TO ELEVATIONS FOR LAYOUT + DETAILS. ALL SEAM LAYOUTS MUST BE SUBMITTED FOR APPROVAL.

TILE/STONE FLOORING

T-1
LOCATION:PRIMARY BATHROOM
VENDOR: CRAFTSMAN COURT CERAMICS- CCC
CONTACT: 480-970-6611 | LINDSEY CLUM OR ANDI SMITH
LINDSEYC@CRAFTSMANCOURT.COM
PRODUCT: TAO LIMESTONE
SIZE: 16X24
COLOR/ FINISH: TUMBLED
GROUT: TBD
NOTES: REFER TO FLOORING FINISH PLAN FOR DIRECTION

T-2
LOCATION: GUEST SUITE BATH
VENDOR: CLINE'S NATURAL STONE
CONTACT: WADE@CLINESNATURALSTONE.COM |
623-516-1516
PRODUCT: _______ LIMESTONE
SIZE: 12X24
COLOR/ FINISH:
GROUT: TBD
NOTES: REFER TO FLOORING FINISH PLAN FOR DIRECTION

T-2A
LOCATION: GUEST SUITE BATH -SHOWER FLOOR
VENDOR: CLINE'S NATURAL STONE
CONTACT: WADE@CLINESNATURALSTONE.COM |
623-516-1516
PRODUCT: _______ LIMESTONE
SIZE: 12X24 CUT TO 4X4***
COLOR/ FINISH:
GROUT: TBD
NOTES: REFER TO FLOORING FINISH PLAN FOR DIRECTION

T-3
LOCATION: GUEST BATHROOM #1
VENDOR: BEDROSIANS TILE + STONE
CONTACT: 480-233-0339 | ILEANA.LOPEZ@BEDROSIANS.COM
PRODUCT: NOMAD PORCELAIN TILE
SIZE: 12X24
COLOR/ FINISH: BONE- BON
GROUT: TBD
NOTES: REFER TO FLOORING FINISH PLAN FOR DIRECTION

T-5
LOCATION: GUEST BATHROOM #2 - SHOWER FLOOR
VENDOR: BEDROSIANS TILE + STONE
CONTACT: 480-233-0339 | ILEANA.LOPEZ@BEDROSIANS.COM
PRODUCT: NOMAD PORCELAIN TILE
SIZE: 1X4 MOSAIC
COLOR/ FINISH: ARGENT- ARG
GROUT: TBD
NOTES: REFER TO FLOORING FINISH PLAN FOR DIRECTION

T-6
LOCATION: GUEST BATHROOM #3
VENDOR: VILLAGIO TILE + STONE
CONTACT: 480-422-6700
PRODUCT: VID 14 RETREAT
SIZE: 12X24
COLOR/ FINISH: IVORY
GROUT: TBD
NOTES: REFER TO FLOORING FINISH PLAN FOR DIRECTION

T-7
LOCATION: GUEST BATHROOM #3 - SHOWER FLOOR
VENDOR: VILLAGIO TILE + STONE
CONTACT: 480-422-6700
PRODUCT: VID 14 RETREAT
SIZE: 2X2 MOSAIC | 12 X 12 SHEET
COLOR/ FINISH: IVORY
GROUT: TBD
NOTES: REFER TO FLOORING FINISH PLAN FOR DIRECTION

T-8
LOCATION: LAUNDRY ROOM
VENDOR: FACINGS OF AMERICA
CONTACT: 562-708-5396 | NICOLE DAVIS
NDAVIS@FACINGSOFAMERICA.COM
PRODUCT: FOSSIL BONE PORCELAIN
SIZE: 12x24
COLOR/ FINISH: BONE
GROUT: TBD
NOTES:

T-9
LOCATION: POOL POWDER
VENDOR: CRAFTSMAN COURT CERAMICS- CCC
CONTACT: 480-970-6611 | LINDSEY CLUM
LINDSEYC@CRAFTSMANCOURT.COM
PRODUCT: ZELLIGE ZIA
SIZE: 2X2
COLOR/ FINISH: PURE WHITE
GROUT: TBD
NOTES:

NOTES

GENERAL INFORMATION

1. DO NOT SCALE DRAWINGS. WRITTEN DIMENSIONS GOVERN.

2. ALL PARTITION LOCATIONS SHALL BE AS SHOWN ON FLOOR PLAN. IN CASE OF CONFLICT, NOTIFY ARCHITECT. ARCHITECT'S DRAWINGS TAKE PRECEDENCE OVER ALL OTHER PLANS.

3. ALL INTERIOR FLOOR FINISHES AND EXTERIOR FLOOR FINISHES AS NOTED TO BE SELECTED BY INTERIOR DESIGNER UNO.

4. FLOOR PATTERNS NTS. FLOOR PATTERNS TO INDICATE LOCATION AND DIRECTION OF MATERIAL INSTALLATION ONLY.

5. REFER TO ID.X FOR FULL DESCRIPTION OF FINISHES AND MATERIALS.

6. ALL STONE SURFACES THROUGHOUT TO BE SEALED PER INDUSTRY STANDARDS.

7. NO UNFINISHED EDGES OF FLOOR TILE TO BE LEFT EXPOSED.

8. GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR ALLOWING FOR DELIVERY LEAD TIMES FOR ALL CUSTOM FINISHES WITHIN THE CONSTRUCTION SCHEDULE. ALL DELIVERY TIMES MUST BE CONFIRMED AND ANY EXCESSIVE LEAD TIMES MUST BE BROUGHT TO THE ARCHITECT'S / INTERIOR DESIGNER'S ATTENTION IMMEDIATELY TO ALLOW FOR RESPECIFICATION IF NECESSARY.

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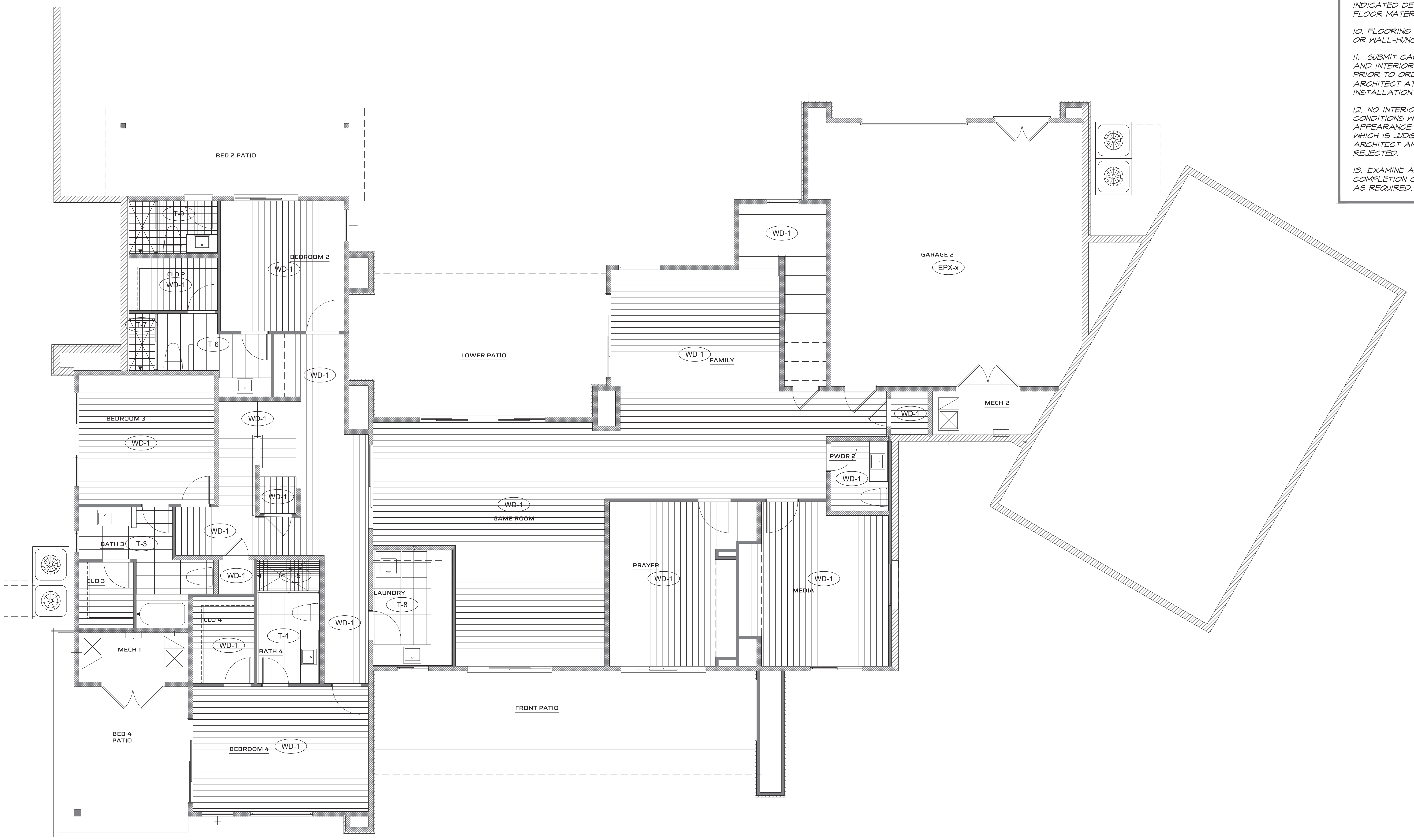

LOWER FLOOR FINISH PLAN
3/16" = 1'-0"
NORTH

CITY OF SCOTTSDALE
BUILDING PLANS
THESE PLANS HAVE BEEN APPROVED
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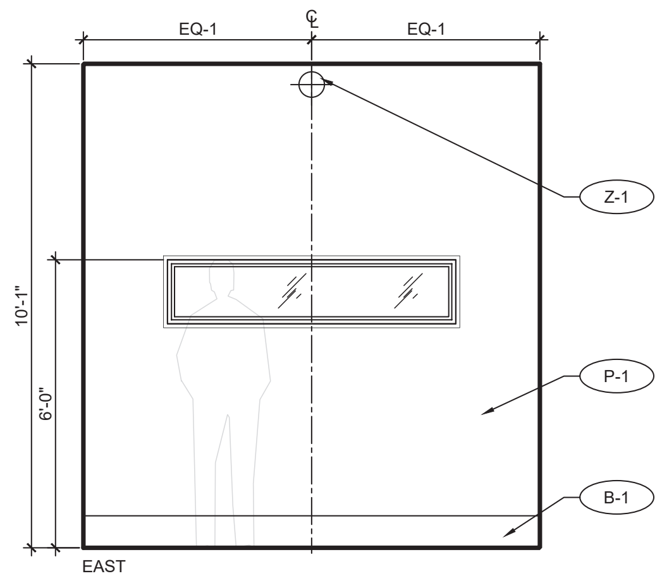
CODE OR ORDINANCE

LOWER FLOOR FINISH PLAN

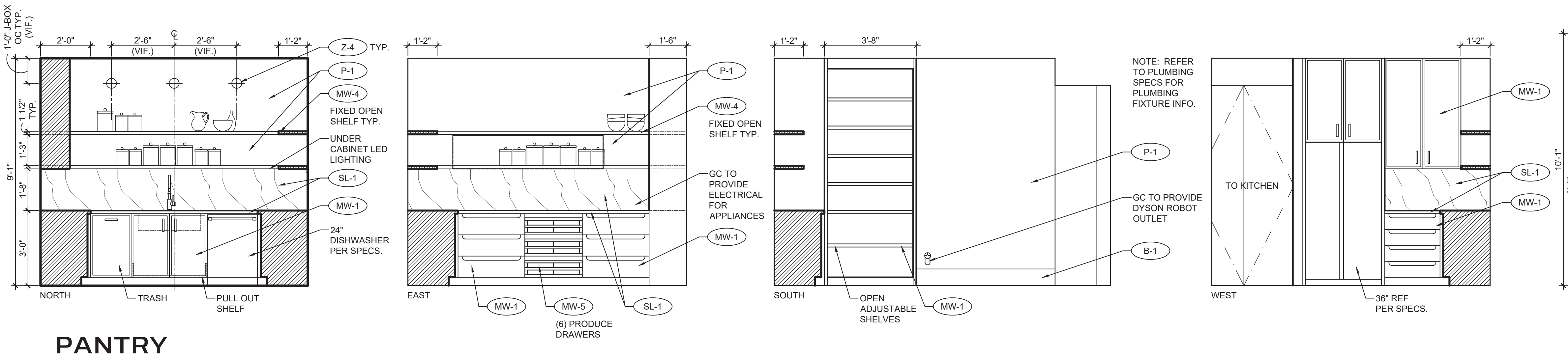
COS PLAN CHECK #9300-24

SHEET NO.
A7.2

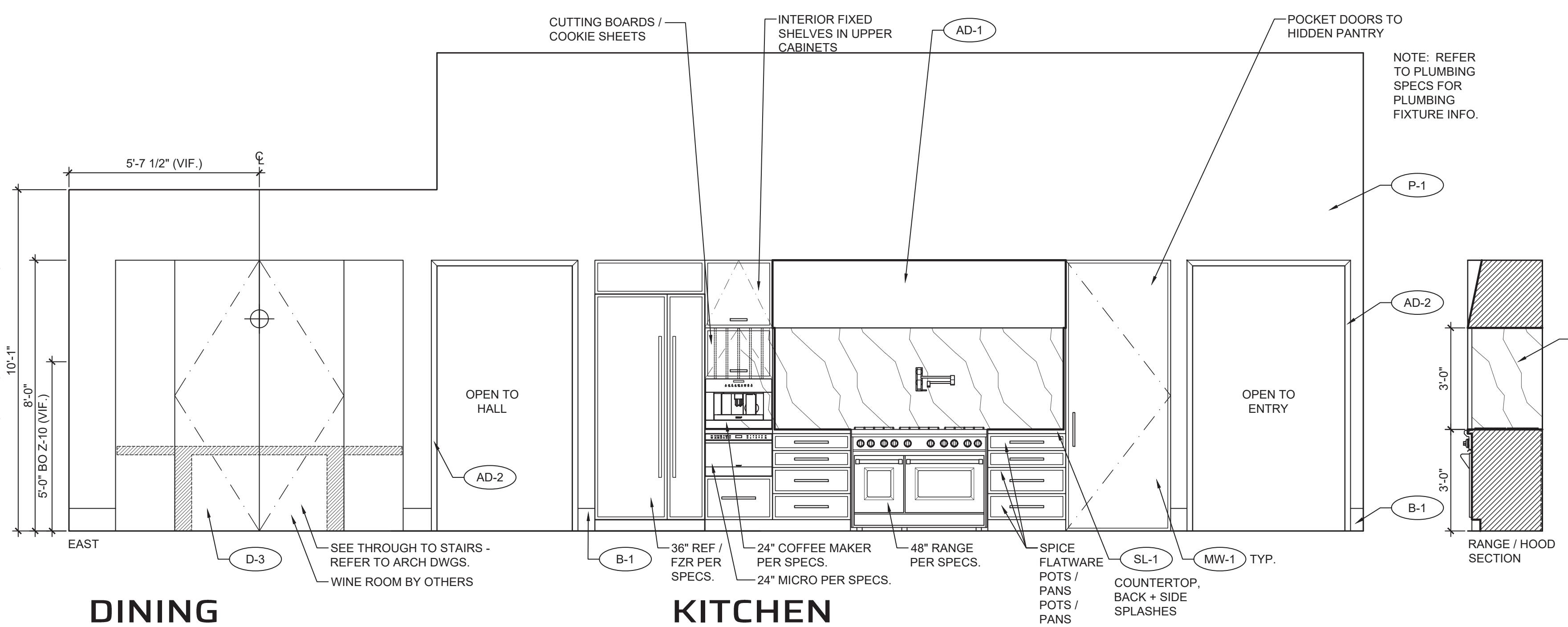
4/16/2025 8:03 AM
C:_BTO_BTARCHITECTURAL\GMK B&D\SIVARAJAN RESIDENCE\CAD


EQ-1
EQ-1
10'-1"
6'-0"
Z-1
P-1
B-1
EAST

ENTRY


1'-0" J-BOX OC TYP. (VIF.)
2'-0"
2'-6" (VIF.)
2'-6" (VIF.)
1'-2"
Z-4 TYP.
P-1
MW-4
FIXED OPEN SHELF TYP.
UNDER CABINET LED LIGHTING
SL-1
MW-1
24" DISHWASHER PER SPECS.
NORTH
TRASH
PULL OUT SHELF
1'-6"
FIXED OPEN SHELF TYP.
GC TO PROVIDE ELECTRICAL FOR APPLIANCES
EAST
MW-5
(6) PRODUCE DRAWERS
3'-8"
SOUTH
OPEN ADJUSTABLE SHELVES
NOTE: REFER TO PLUMBING SPECS FOR PLUMBING FIXTURE INFO.
GC TO PROVIDE DYSON ROBOT OUTLET
TO KITCHEN
WEST
36" REF PER SPECS.

PANTRY


CUTTING BOARDS / COOKIE SHEETS
INTERIOR FIXED SHELVES IN UPPER CABINETS
AD-1
POCKET DOORS TO HIDDEN PANTRY
NOTE: REFER TO PLUMBING SPECS FOR PLUMBING FIXTURE INFO.
5'-7 1/2" (VIF.)
10'-1"
8'-0"
5'-0" BO Z-10 (VIF.)
P-1
AD-2
OPEN TO HALL
OPEN TO ENTRY
SL-1
BOTH SIDES
3'-0"
B-1
EAST
D-3
SEE THROUGH TO STAIRS - REFER TO ARCH DWGS.
WINE ROOM BY OTHERS
36" REF / FZR PER SPECS.
24" COFFEE MAKER PER SPECS.
24" MICRO PER SPECS.
48" RANGE PER SPECS.
SPICE FLATWARE POTS / PANS POTS / PANS
COUNTERTOP, BACK + SIDE SPLASHES
MW-1 TYP.
RANGE / HOOD SECTION

DINING

KITCHEN

BASE

(B-1) BASE
LOCATION: TYPICAL THROUGHOUT HOME; UNLESS OTHERWISE NOTED
VENDOR: BUILDER TO PROVIDE
PRODUCT: PAINT GRADE BASEBOARD
PAINT COLOR: TBD
FINISH: SEMI GLOSS
SIZE: 8" H
NOTES: REFER TO CONCEPT IMAGE BELOW

INTERIOR DOORS

(D-1) INTERIOR DOORS - TYPICAL
LOCATION: REFER TO FLOOR PLAN
VENDOR: BUILDER TO PROVIDE
PRODUCT: PAINT GRADE INTERIOR DOORS
STYLE: SINGLE PANEL SHAKER
FINISH: PAINT COLOR - TBD
NOTES: TYPICAL DOOR STYLE FOR SWING + POCKET DOORS THROUGHOUT THE HOME UNLESS OTHERWISE NOTED.
-REFER TO CONCEPT IMAGE PROVIDED BY DESIGNER

(D-2) PIVOT DOOR
LOCATION: FRONT DOOR
VENDOR: BUILDER TO PROVIDE
PRODUCT: TBD
STYLE: TBD
FINISH: TBD
NOTES: SUPPLIER TO PROVIDE SHOP DWG'S + FINISH SAMPLES FOR APPROVAL

INTERIOR DOOR HARDWARE

INTERIOR DOOR HARDWARE - TYPICAL
LOCATION: REFER TO DOOR SCHEDULE PROVIDED BY ARCHITECT - BUILDER TO CONFIRM
VENDOR: EMTEK
PRODUCT: HELIOS LEVER W/ SQUARE BACK PLATE
FINISH: MATTE BLACK
NOTES:

ARCH DETAILS

(AD-1) METAL HOOD
LOCATION: KITCHEN
VENDOR: BUILDER TO SUPPLY
SIZE: REFER TO INTERIOR ELEVATIONS
FINISH: BLACK POWDERCOAT
NOTES:
- SUPPLIER TO PROVIDE SHOP DRAWINGS + FINISH SAMPLES FOR APPROVAL

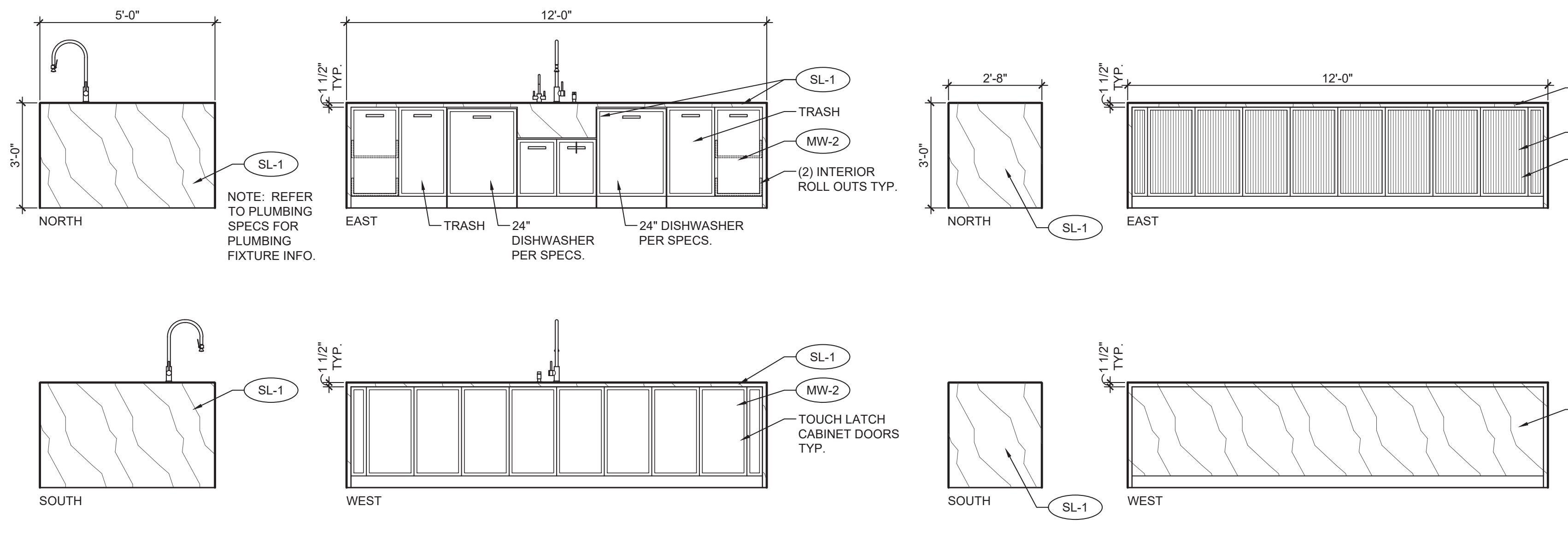
(AD-2) THRESHOLD CASING
LOCATION: REFER TO INTERIOR ELEVATIONS
VENDOR: BUILDER TO SUPPLY
MATERIAL: WHITE OAK PLAIN SAWN
FINISH/ STAIN: NATURAL STAIN - TO MATCH DESIGNER'S SAMPLE
NOTES:
- SUPPLIER TO PROVIDE SHOP DRAWINGS + FINISH SAMPLES FOR APPROVAL

PAINT

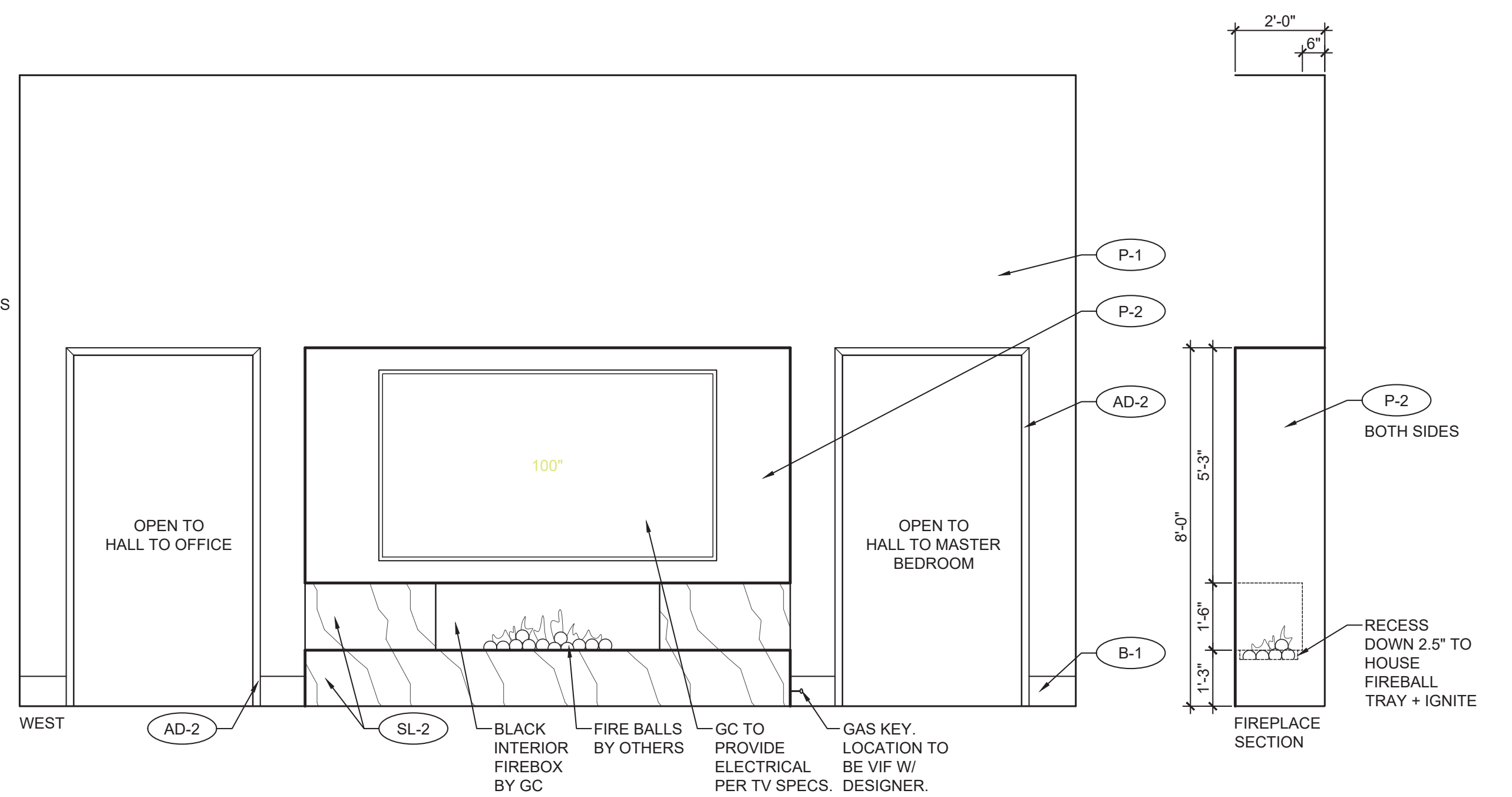
(P-1) PAINT
LOCATION:TYPICAL UNLESS OTHERWISE NOTED
VENDOR: TBD
CONTACT/PHONE: TBD
PRODUCT:
COLOR: TBD
BASEBOARD FINISH: TBD
WALL FINISH: TBD
CEILING FINISH: FLAT

(P-2) PORTOLA ROMAN CLAY
LOCATION: GREAT ROOM FIREPLACE WALL + GAME ROOM TV WALL
VENDOR: PORTOLA PAINT
CONTACT/PHONE: 323-655-2211
PRODUCT: ROMAN CLAY
COLOR: FADE TO BLACK
NOTES:

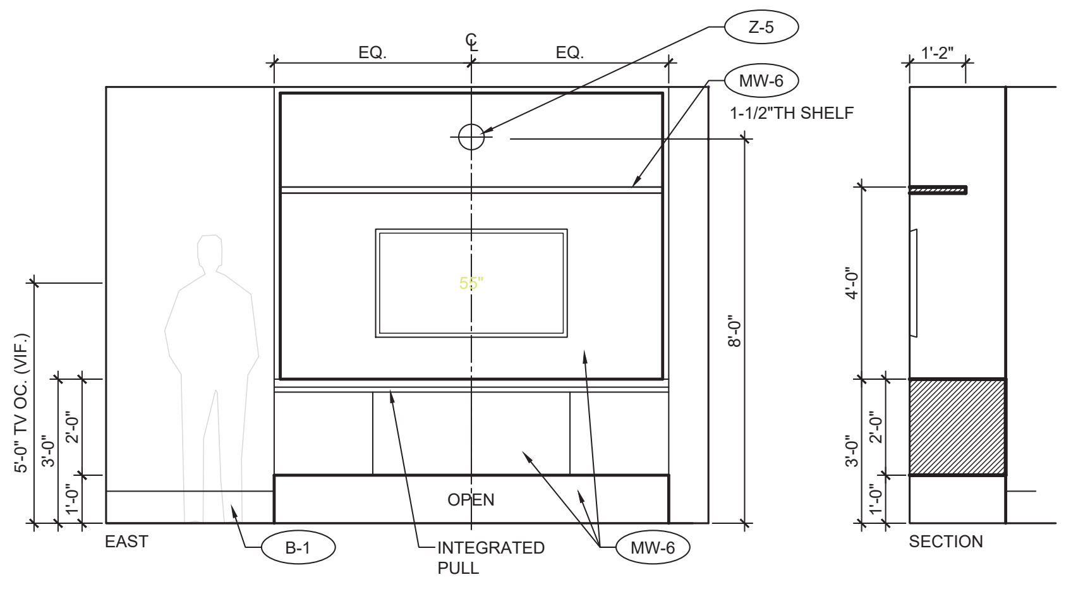
(P-3) PORTOLA ROMAN CLAY
LOCATION: POWDER ROOM
VENDOR: PORTOLA PAINT
CONTACT/PHONE: 323-655-2211
PRODUCT: ROMAN CLAY
COLOR: TBD
NOTES:


5'-0"
3'-0"
SL-1
NORTH
NOTE: REFER TO PLUMBING SPECS FOR PLUMBING FIXTURE INFO.
12'-0"
1 1/2" TYP.
TRASH
MW-2
(2) INTERIOR ROLL OUTS TYP.
EAST
24" DISHWASHER PER SPECS.
24" DISHWASHER PER SPECS.
2'-8"
MW-2A
TOUCH LATCH CABINET DOORS W/ REEDED GLASS TYP.
SOUTH
WEST
TOUCH LATCH CABINET DOORS TYP.

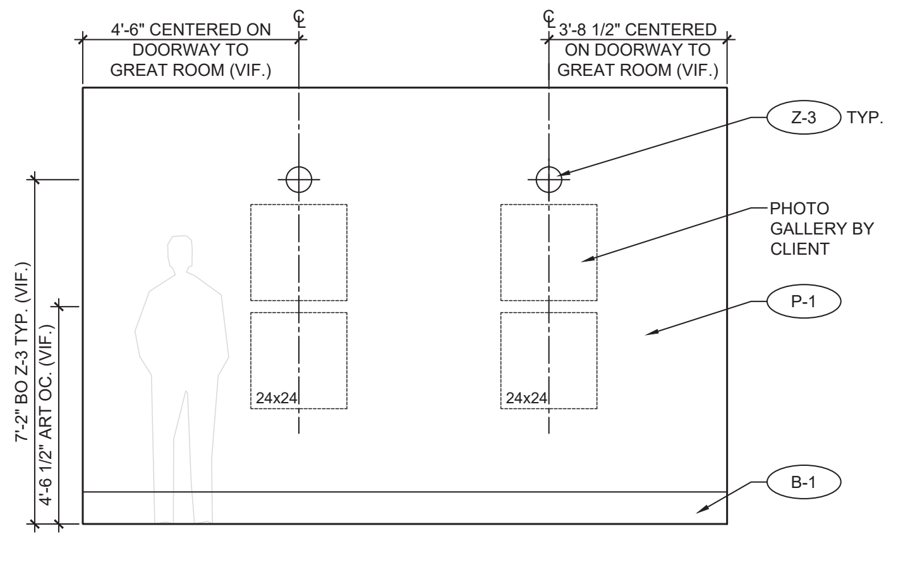
KITCHEN ISLANDS


2'-0"
6"
P-1
P-2
AD-2
P-2
BOTH SIDES
100"
OPEN TO HALL TO OFFICE
OPEN TO HALL TO MASTER BEDROOM
8'-0"
5'-3"
1'-6"
1'-3"
B-1
RECESS DOWN 2.5" TO HOUSE FIREBALL TRAY + IGNITE
WEST
SL-2
BLACK INTERIOR FIREBOX BY GC
FIRE BALLS BY OTHERS
GC TO PROVIDE ELECTRICAL PER TV SPECS.
GAS KEY. LOCATION TO BE VIF W/ DESIGNER.
FIREPLACE SECTION

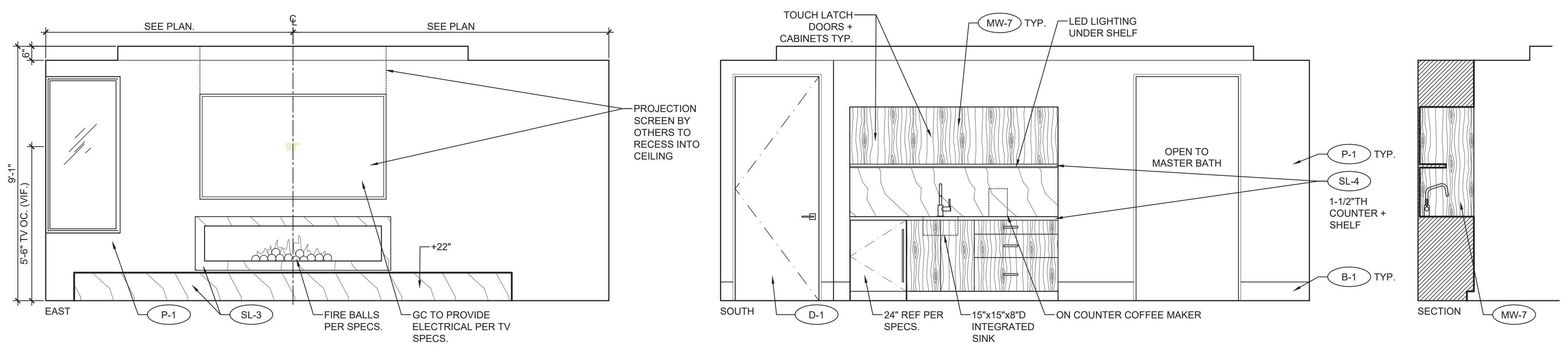
GREAT ROOM


EQ.
EQ.
Z-5
MW-6
1-1/2"TH SHELF
1'-2"
8'-0"
4'-0"
5'-0" TV OC. (VIF.)
3'-0"
2'-0"
1'-0"
OPEN
EAST
B-1
INTEGRATED PULL
MW-6
SECTION

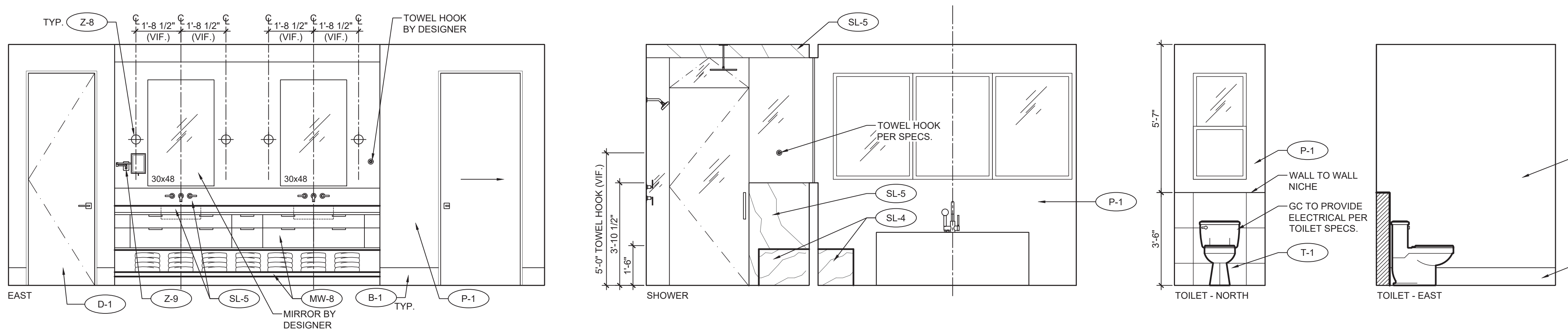
OFFICE


4'-6" CENTERED ON DOORWAY TO GREAT ROOM (VIF.)
3'-8 1/2" CENTERED ON DOORWAY TO GREAT ROOM (VIF.)
Z-3 TYP.
PHOTO GALLERY BY CLIENT
P-1
24x24
24x24
7'-2" BO Z-3 TYP. (VIF.)
4'-6 1/2" ART OC. (VIF.)
B-1

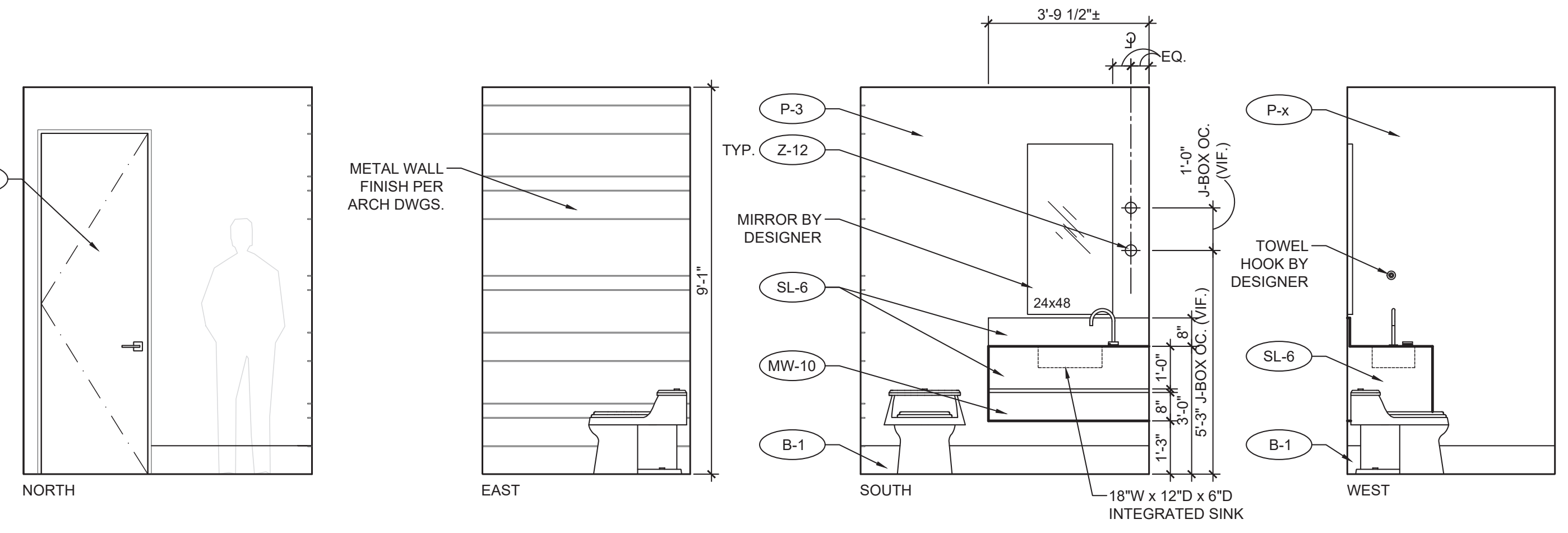
UPPER HALL


SEE PLAN.
SEE PLAN
6"
PROJECTION SCREEN BY OTHERS TO RECESS INTO CEILING
9'-1"
5'-6" TV OC. (VIF.)
+22"
EAST
P-1
SL-3
FIRE BALLS PER SPECS.
GC TO PROVIDE ELECTRICAL PER TV SPECS.
TOUCH LATCH DOORS + CABINETS TYP.
MW-7 TYP.
LED LIGHTING UNDER SHELF
OPEN TO MASTER BATH
P-1 TYP.
SL-4
1-1/2"TH COUNTER + SHELF
B-1 TYP.
SOUTH
D-1
24" REF PER SPECS.
15"x15"x8"D INTEGRATED SINK
ON COUNTER COFFEE MAKER
SECTION
MW-7

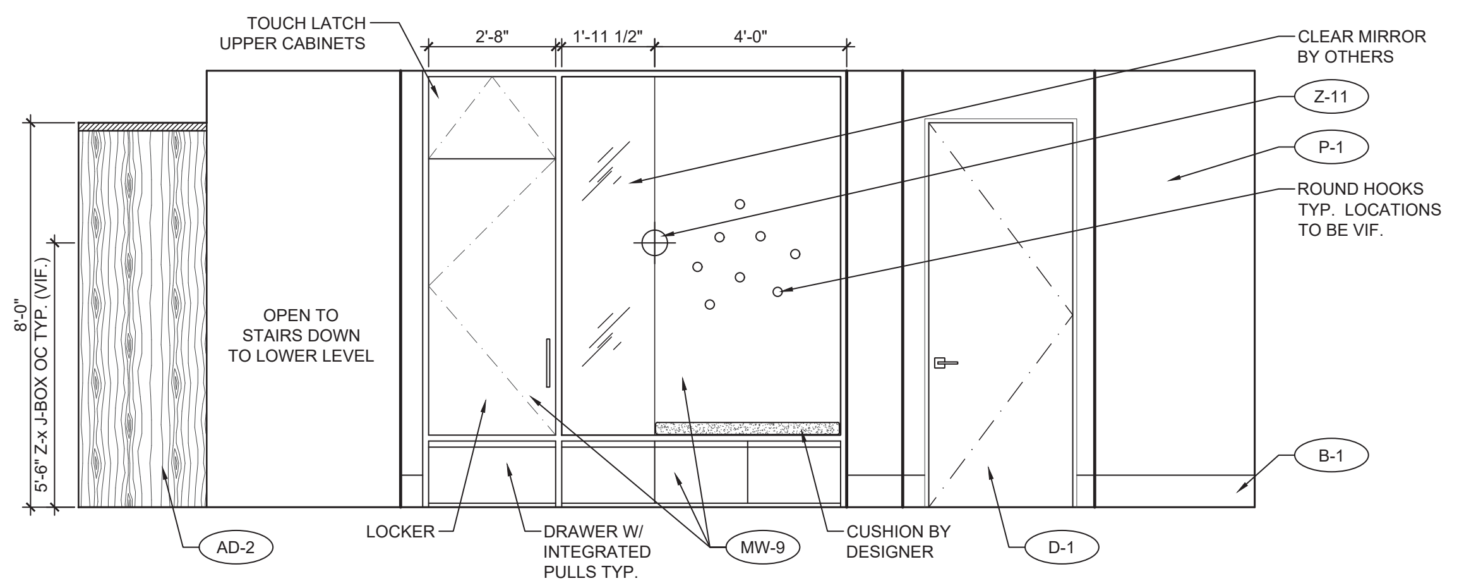
MASTER BEDROOM


TYP. Z-8
1'-8 1/2" (VIF.)
1'-8 1/2" (VIF.)
1'-8 1/2" (VIF.)
1'-8 1/2" (VIF.)
TOWEL HOOK BY DESIGNER
30x48
30x48
EAST
D-1
Z-9
SL-5
MIRROR BY DESIGNER
MW-8
B-1 TYP.
P-1
SL-5
TOWEL HOOK PER SPECS.
SL-4
5'-0" TOWEL HOOK (VIF.)
3'-10 1/2"
1'-6"
SHOWER
5'-7"
3'-6"
WALL TO WALL NICHE
GC TO PROVIDE ELECTRICAL PER TOILET SPECS.
T-1
TOILET - NORTH
TOILET - EAST
B-1

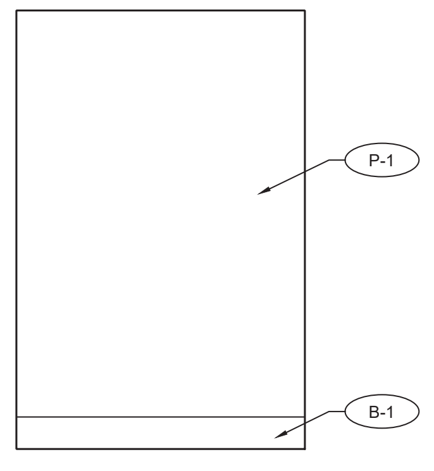
MASTER BATH


D-1
NORTH
METAL WALL FINISH PER ARCH DWGS.
9'-1"
EAST
3'-9 1/2"±
EQ.
P-3
TYP. Z-12
MIRROR BY DESIGNER
24x48
SL-6
MW-10
B-1
1'-0" J-BOX OC. (VIF.)
5'-3" J-BOX OC. (VIF.)
18"W x 12"D x 6"D INTEGRATED SINK
SOUTH
P-x
TOWEL HOOK BY DESIGNER
SL-6
B-1
WEST

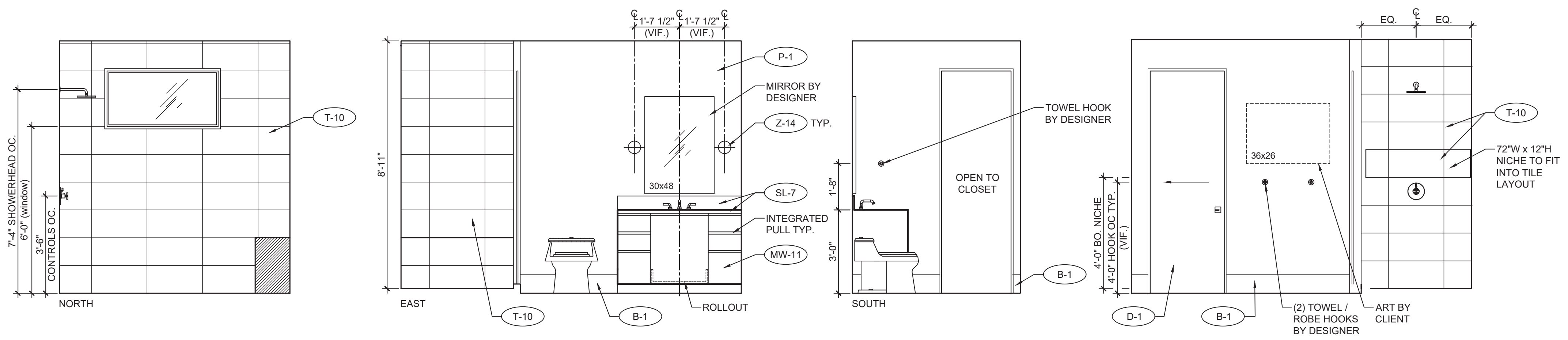
POWDER 1


TOUCH LATCH UPPER CABINETS
2'-8"
1'-11 1/2"
4'-0"
CLEAR MIRROR BY OTHERS
Z-11
P-1
ROUND HOOKS TYP. LOCATIONS TO BE VIF.
8'-0"
5'-6" Z-x J-BOX OC TYP. (VIF.)
OPEN TO STAIRS DOWN TO LOWER LEVEL
AD-2
LOCKER
DRAWER W/ INTEGRATED PULLS TYP.
MW-9
CUSHION BY DESIGNER
D-1
B-1

DROP



GUEST + CLOSET


T-10
7'-4" SHOWERHEAD OC.
6'-0" (window)
3'-6" CONTROLS OC.
NORTH
1'-7 1/2" (VIF.)
1'-7 1/2" (VIF.)
P-1
MIRROR BY DESIGNER
Z-14 TYP.
8'-11"
30x48
SL-7
INTEGRATED PULL TYP.
MW-11
EAST
T-10
B-1
ROLLOUT
1'-8"
3'-0"
OPEN TO CLOSET
TOWEL HOOK BY DESIGNER
SOUTH
B-1
EQ.
EQ.
36x26
T-10
72"W x 12"H NICHE TO FIT INTO TILE LAYOUT
4'-0" BO. NICHE
4'-0" HOOK OC TYP. (VIF.)
D-1
B-1
(2) TOWEL / ROBE HOOKS BY DESIGNER
ART BY CLIENT

GUEST BATH

ELEVATIONS
1/4" = 1'-0"

DATE
1/27/2025
4/11/25 - G&D

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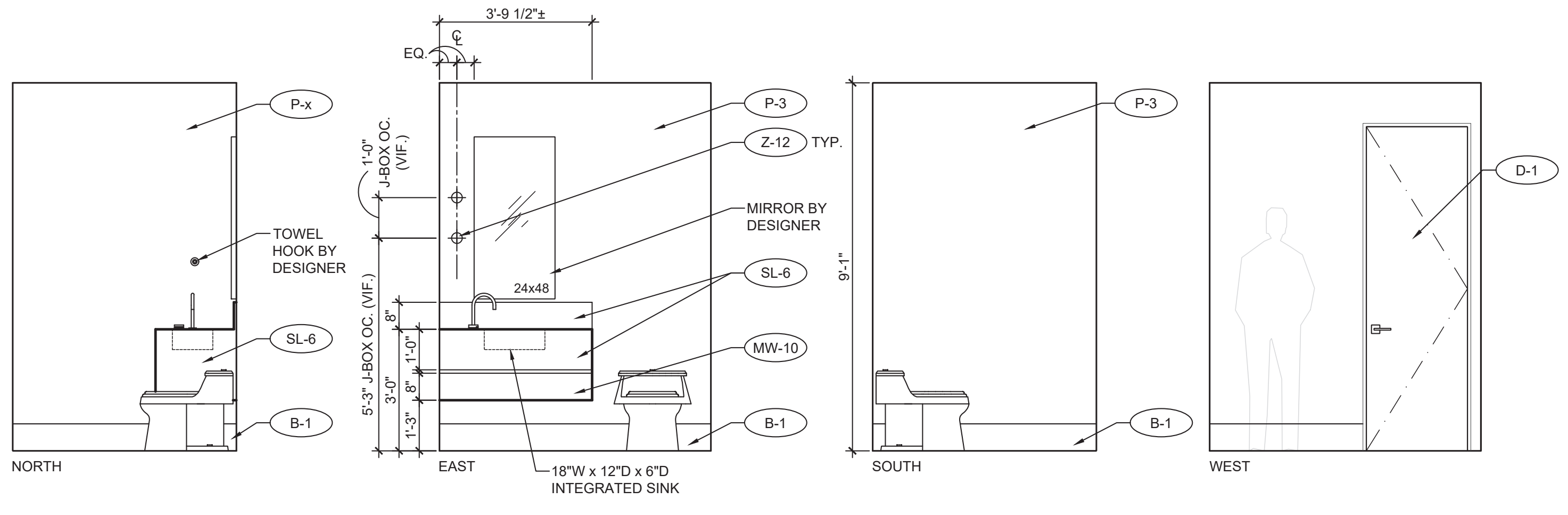
Scottsdale 85266
Lone Mountain Vista Tract A - Lot 93

CITY OF SCOTTSDALE
BUILDING PLANS
THESE PLANS HAVE BEEN APPROVED
AND ARE READY FOR A PERMIT
THIS DOES NOT AUTHORIZE VIOLATIONS OF ANY CODE OR ORDINANCE

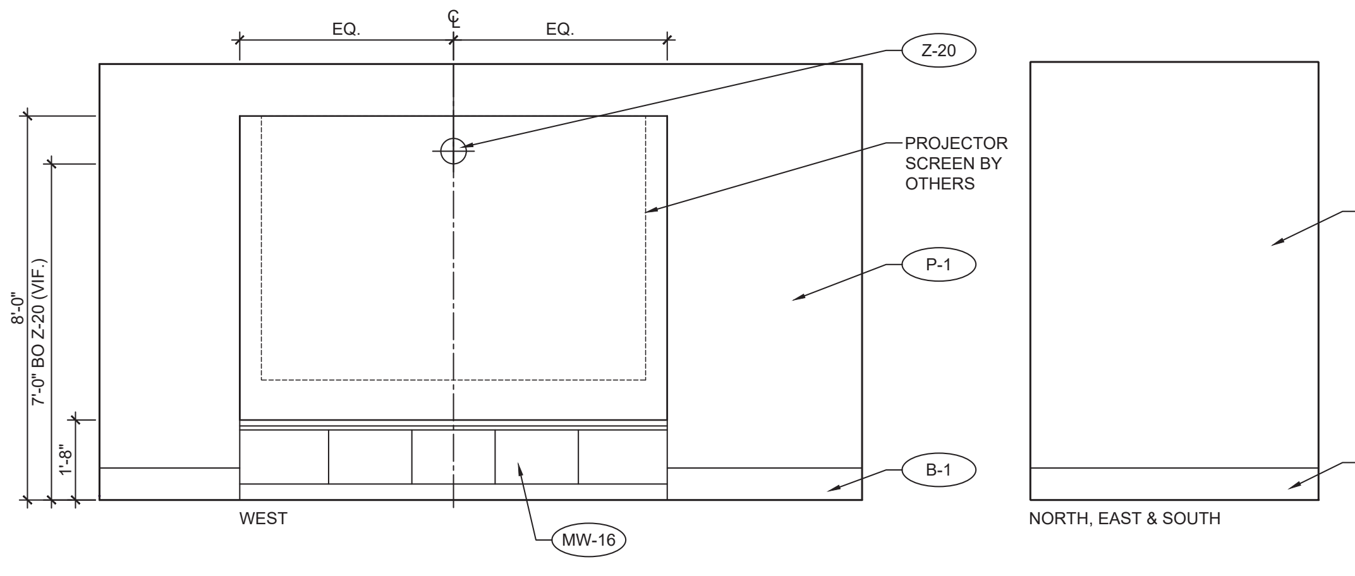
UPPER LEVEL INTERIOR ELEVATIONS

COS PLAN CHECK #9300-24

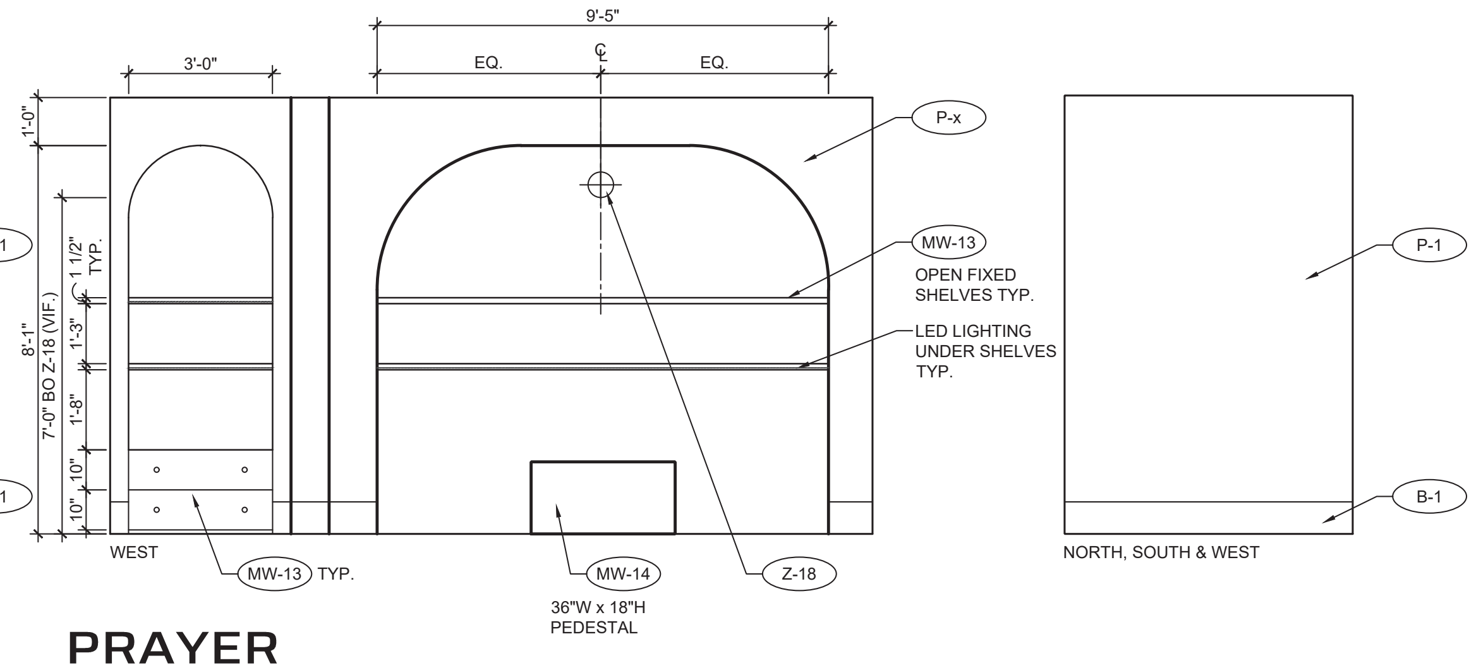
SHEET NO.
A8.1


3'-9 1/2"±
EQ.
P-x
P-3
Z-12 TYP.
TOWEL HOOK BY DESIGNER
MIRROR BY DESIGNER
24x48
SL-6
MW-10
B-1
D-1
18"W x 12"D x 6"D INTEGRATED SINK
NORTH
EAST
SOUTH
WEST

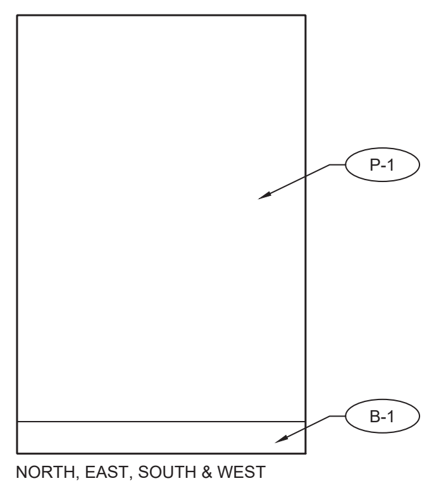
POWDER 2


EQ.
EQ.
Z-20
PROJECTOR SCREEN BY OTHERS
P-1
B-1
MW-16
WEST
NORTH, EAST & SOUTH

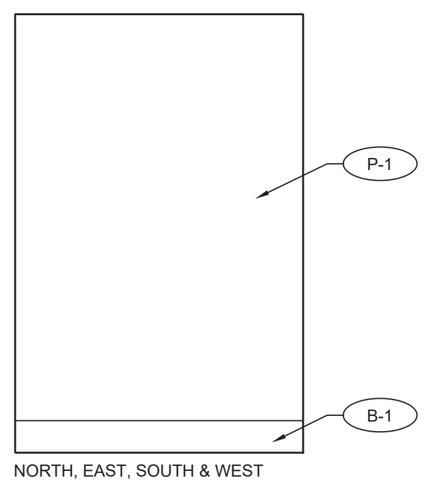
MEDIA


9'-5"
3'-0"
EQ.
EQ.
P-x
P-1
MW-13
OPEN FIXED SHELVES TYP.
LED LIGHTING UNDER SHELVES TYP.
MW-13 TYP.
MW-14
Z-18
36"W x 18"H PEDESTAL
B-1
WEST
NORTH, SOUTH & WEST

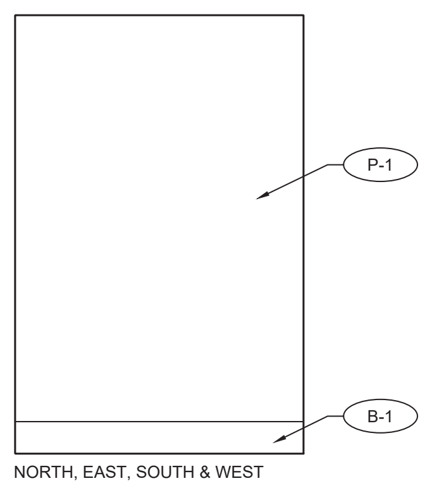
PRAYER


P-1
B-1
NORTH, EAST, SOUTH & WEST

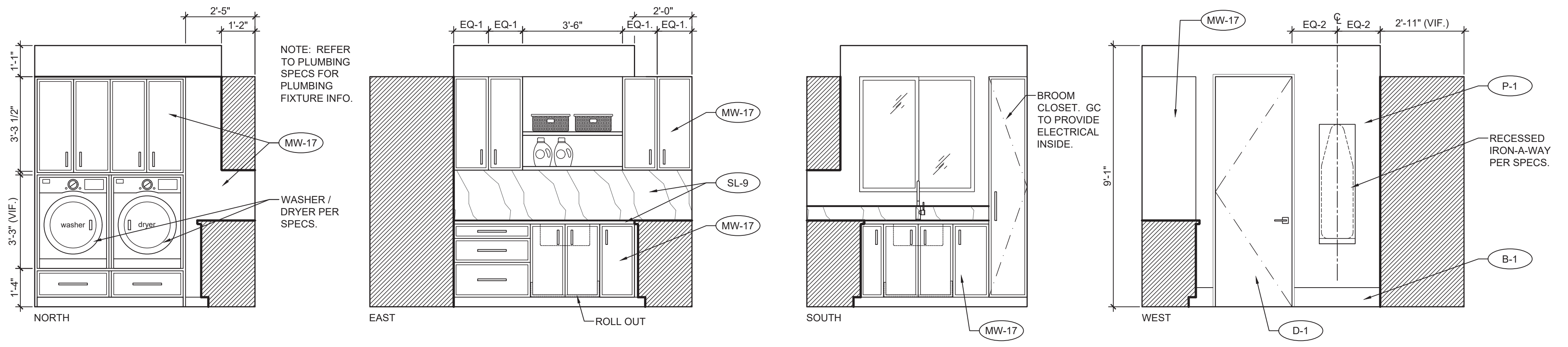
FAMILY

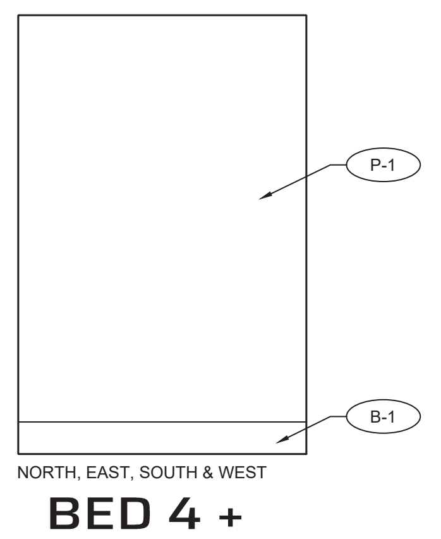

P-1
B-1
NORTH, EAST, SOUTH & WEST

GAME ROOM


P-1
B-1
NORTH, EAST, SOUTH & WEST

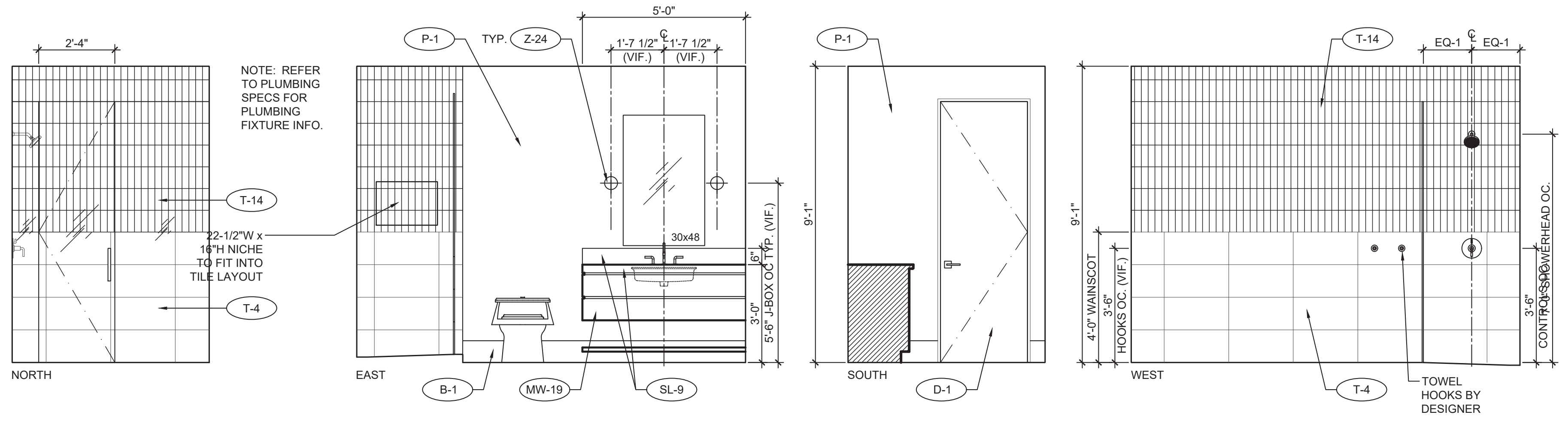
EXERCISE


2'-5"
1'-2"
NOTE: REFER TO PLUMBING SPECS FOR PLUMBING FIXTURE INFO.
MW-17
WASHER / DRYER PER SPECS.
NORTH
EQ-1
3'-6"
MW-17
SL-9
ROLL OUT
EAST
BROOM CLOSET. GC TO PROVIDE ELECTRICAL INSIDE.
SOUTH
MW-17
EQ-2
2'-11" (VIF.)
P-1
RECESSED IRON-A-WAY PER SPECS.
B-1
D-1
WEST

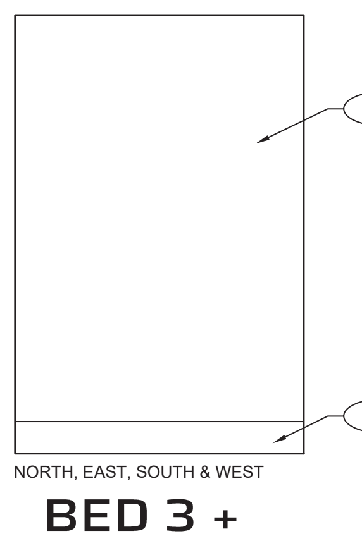

P-1
B-1
NORTH, EAST, SOUTH & WEST

LAUNDRY

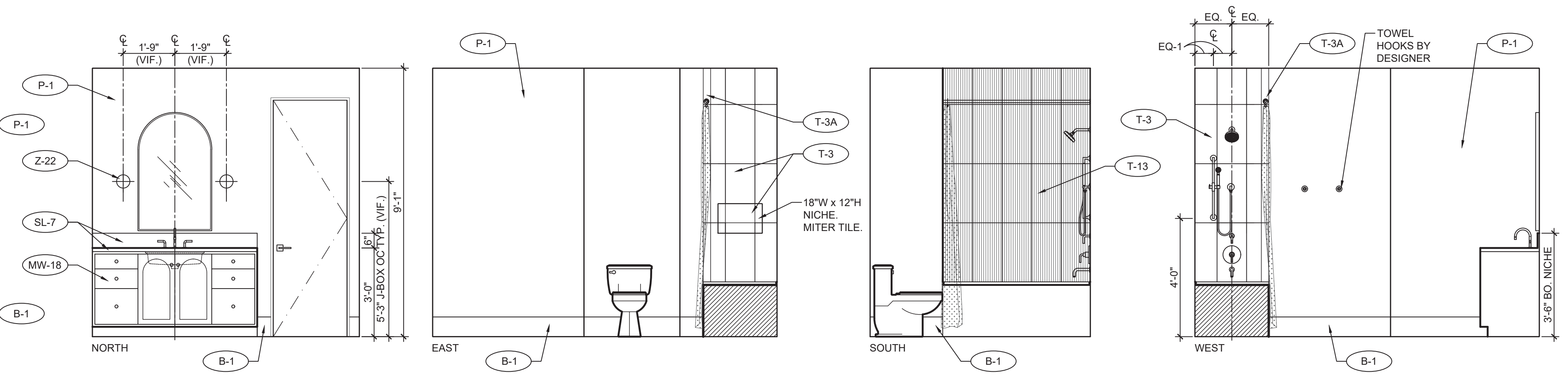
BED 4 + CLOSET


2'-4"
NOTE: REFER TO PLUMBING SPECS FOR PLUMBING FIXTURE INFO.
T-14
22-1/2"W x 16"H NICHE TO FIT INTO TILE LAYOUT
T-4
NORTH
P-1
TYP.
Z-24
5'-0"
30x48
B-1
MW-19
SL-9
EAST
P-1
D-1
SOUTH
T-14
EQ-1
4'-0" WAINSCOT
T-4
TOWEL HOOKS BY DESIGNER
WEST

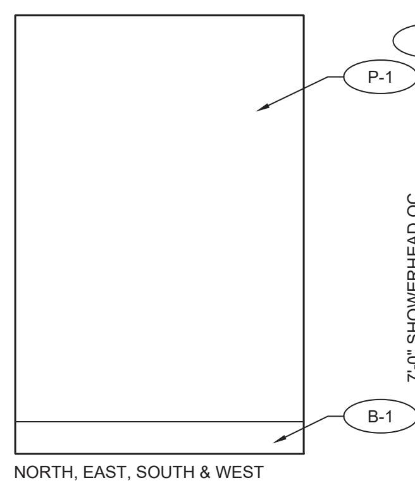
BATH 4


P-1
B-1
NORTH, EAST, SOUTH & WEST

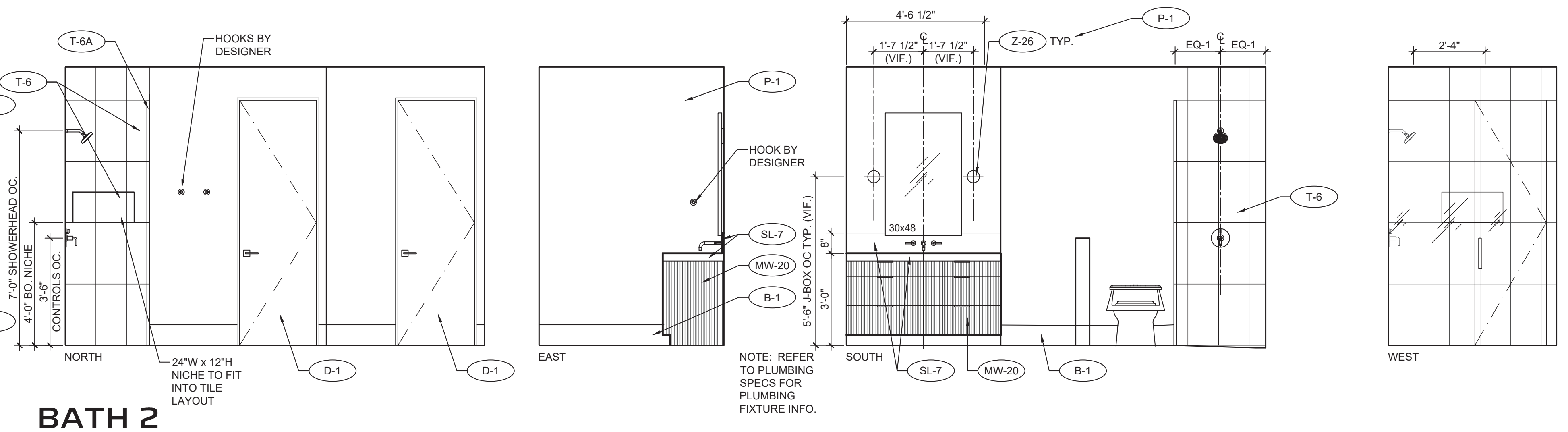
BED 3 + CLOSET


P-1
Z-22
SL-7
MW-18
1'-9" (VIF.)
B-1
NORTH
P-1
T-3A
T-3
18"W x 12"H NICHE. MITER TILE.
EAST
T-13
SOUTH
B-1
EQ.
EQ-1
T-3A
TOWEL HOOKS BY DESIGNER
T-3
WEST

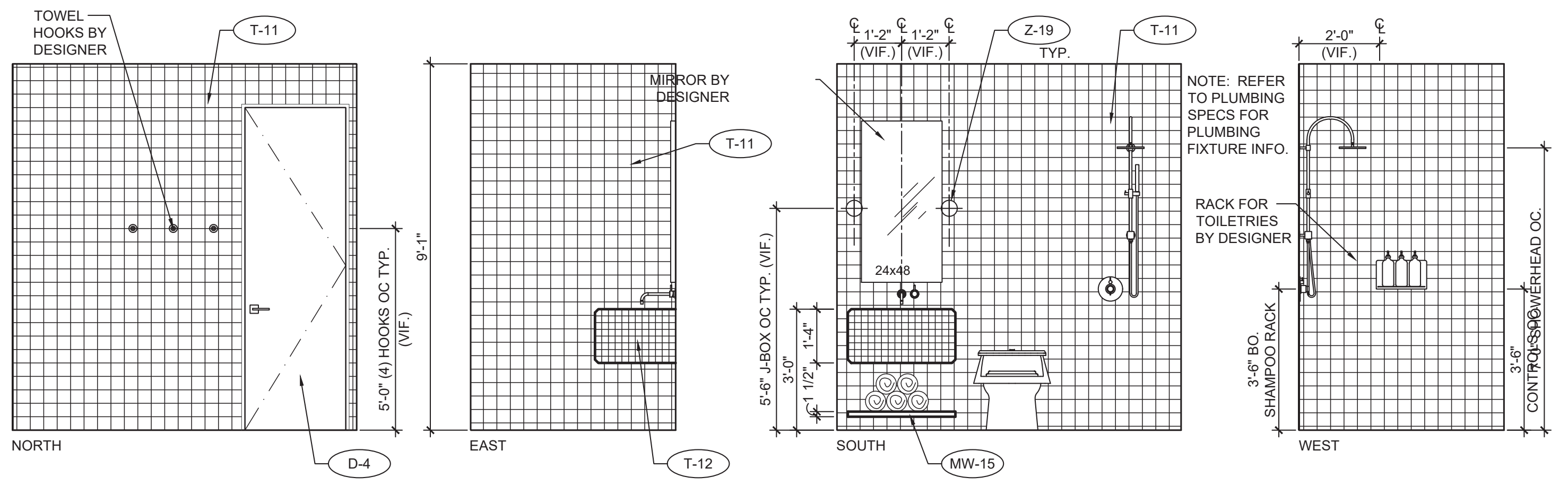
BATH 3


P-1
B-1
NORTH, EAST, SOUTH & WEST

BED 2 + CLOSET


T-6A
T-6
P-1
HOOKS BY DESIGNER
24"W x 12"H NICHE TO FIT INTO TILE LAYOUT
D-1
D-1
NORTH
P-1
HOOK BY DESIGNER
SL-7
MW-20
B-1
EAST
NOTE: REFER TO PLUMBING SPECS FOR PLUMBING FIXTURE INFO.
4'-6 1/2"
Z-26 TYP.
30x48
SOUTH
SL-7
MW-20
B-1
P-1
EQ-1
T-6
WEST
2'-4"

BATH 2


TOWEL HOOKS BY DESIGNER
T-11
NORTH
D-4
MIRROR BY DESIGNER
T-11
EAST
T-12
Z-19 TYP.
24x48
SOUTH
MW-15
NOTE: REFER TO PLUMBING SPECS FOR PLUMBING FIXTURE INFO.
RACK FOR TOILETRIES BY DESIGNER
2'-0" (VIF.)
WEST

POOL BATH

WALL TILE / STONE

T-1 LOCATION: PRIMARY BATHROOM (WC.)
VENDOR: CRAFTSMAN COURT CERAMICS- CCC
CONTACT: 480-970-6611 | LINDSEY CLUM OR ANDI SMITH
LINDSEYC@CRAFTSMANCOURT.COM
PRODUCT: TAO LIMESTONE
SIZE: 16X24
COLOR/ FINISH: TUMBLED
GROUT: TBD
NOTES: REFER TO FLOORING FINISH PLAN FOR DIRECTION

T-3 LOCATION: GUEST BATHROOM #1
VENDOR: BEDROSIANS TILE + STONE
CONTACT: 480-233-0339 | ILEANA.LOPEZ@BEDROSIANS.COM
PRODUCT: NOMAD PORCELAIN TILE
SIZE: 12X24
COLOR/ FINISH: BONE- BON
GROUT: TBD
NOTES: REFER TO INTERIOR ELEVATIONS FOR LAYOUT

T-3A LOCATION: GUEST BATHROOM #1 - TRIM
VENDOR: BEDROSIANS TILE + STONE
CONTACT: 480-233-0339 | ILEANA.LOPEZ@BEDROSIANS.COM
PRODUCT: NOMAD PORCELAIN TILE
SIZE: 3X24 BULLNOSE
COLOR/ FINISH: BONE- BON
GROUT: TBD
NOTES: REFER TO INTERIOR ELEVATIONS FOR LAYOUT

T-4 LOCATION: GUEST BATHROOM #2
VENDOR: BEDROSIANS TILE + STONE
CONTACT: 480-233-0339 | ILEANA.LOPEZ@BEDROSIANS.COM
PRODUCT: NOMAD PORCELAIN TILE
SIZE: 12X24
COLOR/ FINISH: ARGENT- ARG
GROUT: TBD
NOTES: REFER TO INTERIOR ELEVATIONS FOR LAYOUT

T-4A LOCATION: GUEST BATHROOM #2 - TRIM
VENDOR: BEDROSIANS TILE + STONE
CONTACT: 480-233-0339 | ILEANA.LOPEZ@BEDROSIANS.COM
PRODUCT: NOMAD PORCELAIN TILE
SIZE: 3X24 BULLNOSE
COLOR/ FINISH: ARGENT- ARG
GROUT: TBD
NOTES: REFER TO INTERIOR ELEVATIONS FOR LAYOUT

T-6 LOCATION: GUEST BATHROOM #3
VENDOR: VILLAGIO TILE + STONE
CONTACT: 480-422-6700
PRODUCT: VID 14 RETREAT
SIZE: 12X24
COLOR/ FINISH: IVORY
GROUT: TBD
NOTES: REFER TO INTERIOR ELEVATIONS FOR LAYOUT

T-6A LOCATION: GUEST BATHROOM #3 - TRIM
VENDOR: VILLAGIO TILE + STONE
CONTACT: 480-422-6700
PRODUCT: VID 14 RETREAT
SIZE: 3X24 BULLNOSE
COLOR/ FINISH: IVORY
GROUT: TBD
NOTES: REFER TO INTERIOR ELEVATIONS FOR LAYOUT

T-10 LOCATION: GUEST SUITE SHOWER
VENDOR: CLINE'S NATURAL STONE
CONTACT/PHONE: WADE@CLINESNATURALSTONE.COM | 623-516-1516
PRODUCT: _____LIMESTONE
SIZE: 12X24
FINISH/COLOR:
GROUT: TBD
NOTES: REFER TO INTERIOR ELEVATIONS FOR LAYOUT

T-11 LOCATION: POOL POWDER
VENDOR: CRAFTSMAN COURT CERAMICS- CCC
CONTACT/PHONE: 480-970-6611 | LINDSEY CLUM
LINDSEYC@CRAFTSMANCOURT.COM
PRODUCT: ZELLIGE ZIA
SIZE: 4X4
FINISH/COLOR: AGEAN
GROUT: TBD
NOTES: REFER TO INTERIOR ELEVATIONS FOR LAYOUT

T-12 LOCATION: POOL POWDER - TILED SINK
VENDOR: CRAFTSMAN COURT CERAMICS- CCC
CONTACT/PHONE: 480-970-6611 | LINDSEY CLUM
LINDSEYC@CRAFTSMANCOURT.COM
PRODUCT: ZELLIGE ZIA
SIZE: 2X2
FINISH/COLOR: AGEAN
GROUT: TBD
NOTES: REFER TO INTERIOR ELEVATIONS FOR LAYOUT

T-13 LOCATION: GUEST BATHROOM #1 - DECO
VENDOR: BEDROSIANS TILE + STONE
CONTACT: 480-233-0339 | ILEANA.LOPEZ@BEDROSIANS.COM
PRODUCT: NOMAD PORCELAIN TILE
SIZE: 24X48 PARALLELO DECO
COLOR/ FINISH: BONE- BON
GROUT: TBD
NOTES: REFER TO INTERIOR ELEVATIONS FOR LAYOUT

T-14 LOCATION: GUEST BATH #2
VENDOR: CRAFTSMAN COURT CERAMICS- CCC
CONTACT/PHONE: 480-970-6611 | LINDSEY CLUM
LINDSEYC@CRAFTSMANCOURT.COM
PRODUCT: "AGOR" CARMEN GLAZED PORCELAIN
SIZE: 2.5 X 8 X $\frac{3}{8}$" THICKNESS
FINISH/COLOR: BLANCO MATTE
GROUT: TBD
NOTES:

T-14A LOCATION: GUEST BATH #2 - TRIM
VENDOR: CRAFTSMAN COURT CERAMICS- CCC
CONTACT/PHONE: 480-970-6611 | LINDSEY CLUM
LINDSEYC@CRAFTSMANCOURT.COM
PRODUCT: "AGOR" CARMEN TRIM
SIZE: $\frac{5}{8}$" X 8
FINISH/COLOR: BLANCO MATTE
GROUT: TBD
NOTES: REFER TO INTERIOR ELEVATIONS FOR LAYOUT

MILLWORK (cont'd)

MW-19 MILLWORK (STAIN GRADE)
LOCATION: BATH #3
VENDOR: TBD
CONTACT/PHONE:
SPECIES: WHITE OAK PLAIN SAWN
STAIN COLOR: NATURAL STAIN - TO MATCH DESIGNER'S SAMPLE
DOOR STYLE: REFER TO INTERIOR ELEVATIONS
NOTES: PROVIDE SAMPLES FOR APPROVAL

MW-20 MILLWORK (STAIN GRADE)
LOCATION: BATH #4
VENDOR: TBD
CONTACT/PHONE:
SPECIES: WHITE OAK PLAIN SAWN
STAIN COLOR: NATURAL STAIN - TO MATCH DESIGNER'S SAMPLE
DOOR STYLE: SLAB W/ INTEGRATED HARDWARE
NOTES: PROVIDE SAMPLES FOR APPROVAL

SLABS

SL-1 COUNTERTOP, BACKSPLASH + WATERFALL EDGE
LOCATION: KITCHEN + BUTLER PANTRY
VENDOR: NEOLITH - THE STONE COLLECTION
CONTACT/PHONE: 602-889-2067 NICK DOTY
NICK@THESTONECOLLECTION.COM
EDGE: 1.5" EASED
FINISH/COLOR: CALACATTA ROYALE - ULTRA SOFT 12MM
NOTES: SEE CONCEPT IMAGE + REFER TO ELEVATIONS FOR LAYOUT + DETAILS. ALL SEAM LAYOUTS MUST BE SUBMITTED FOR APPROVAL.

SL-2 FIREPLACE SURROUND + HEARTH
LOCATION: GREAT ROOM
VENDOR: NEOLITH - THE STONE COLLECTION
CONTACT/PHONE: 602-889-2067 NICK DOTY
NICK@THESTONECOLLECTION.COM
FINISH/COLOR: CALACATTA ROYALE - ULTRA SOFT 12MM
NOTES: SEE CONCEPT IMAGE + REFER TO ELEVATIONS FOR LAYOUT + DETAILS. ALL SEAM LAYOUTS MUST BE SUBMITTED FOR APPROVAL.

SL-3 FIREPLACE SURROUND + HEARTH
LOCATION: PRIMARY BEDROOM
VENDOR: TBD
CONTACT/PHONE:
FINISH/COLOR:
NOTES: SEE CONCEPT IMAGE + REFER TO ELEVATIONS FOR LAYOUT + DETAILS. ALL SEAM LAYOUTS MUST BE SUBMITTED FOR APPROVAL.

SL-4 COUNTERTOP, INTEGRATED SINK + SHOWER BENCH
LOCATION: PRIMARY SUITE
VENDOR: TBD
CONTACT/PHONE:
EDGE: 1.5" EASED
FINISH/COLOR: TBD
NOTES: SEE CONCEPT IMAGE + REFER TO ELEVATIONS FOR LAYOUT + DETAILS. ALL SEAM LAYOUTS MUST BE SUBMITTED FOR APPROVAL.
INTEGRATED SINK: 15 x 15 x 8" DEEP

SL-5 COUNTERTOP, BACKSPLASH, SHOWER WALLS, SHOWER CEILING + SHOWER FLOOR
LOCATION: PRIMARY BATHROOM
VENDOR: CRAFTSMAN COURT CERAMICS - CCC
CONTACT/PHONE: 623-748-0607
EDGE: 1.5" EASED
FINISH/COLOR: DYNASTY WHITE HONED
NOTES: SEE CONCEPT IMAGE + REFER TO ELEVATIONS FOR LAYOUT + DETAILS. ALL SEAM LAYOUTS MUST BE SUBMITTED FOR APPROVAL.

SL-6 COUNTERTOP, BACKSPLASH + INTEGRATED SINK
LOCATION: POWDER ROOM
VENDOR: DEKTON | COSENTINO
CONTACT/PHONE: STEPHANIE 602-821-0561
EDGE: EASED
FINISH/COLOR: TK06 MARMORIO
NOTES: SEE CONCEPT IMAGE + REFER TO ELEVATIONS FOR LAYOUT + DETAILS. ALL SEAM LAYOUTS MUST BE SUBMITTED FOR APPROVAL.

SL-7 COUNTERTOP + BACKSPLASH
LOCATION: GUEST SUITE BATHROOM, GUEST BATH #1, GUEST BATH #3
VENDOR: CAESARSTONE
CONTACT/PHONE:
EDGE: 1.5" EASED
FINISH/COLOR: 4001 FRESH CONCRETE
NOTES: SEE CONCEPT IMAGE + REFER TO ELEVATIONS FOR LAYOUT + DETAILS. ALL SEAM LAYOUTS MUST BE SUBMITTED FOR APPROVAL.

SL-8 COUNTERTOP, BACKSPLASH + SHELF
LOCATION: GAME ROOM
VENDOR: CAESARSTONE
CONTACT/PHONE:
EDGE: 1.5" EASED
FINISH/COLOR: 5810 BLACK TEMPAL
NOTES: REFER TO ELEVATIONS FOR LAYOUT + DETAILS. ALL SEAM LAYOUTS MUST BE SUBMITTED FOR APPROVAL.

SL-9 COUNTERTOP + BACKSPLASH
LOCATION: LAUNDRY ROOM, GUEST BATH #2
VENDOR: CAESARSTONE
CONTACT/PHONE:
EDGE: 1.5" EASED
FINISH/COLOR: 4043 PRIMORDIA
NOTES: REFER TO ELEVATIONS FOR LAYOUT + DETAILS. ALL SEAM LAYOUTS MUST BE SUBMITTED FOR APPROVAL.

SL-10 COUNTERTOP
LOCATION: BBQ
VENDOR: T B D
CONTACT/PHONE: "
EDGE: T B D
FINISH/COLOR: "
NOTES: REFER TO ELEVATIONS FOR LAYOUT + DETAILS. ALL SEAM LAYOUTS MUST BE SUBMITTED FOR APPROVAL.

MILLWORK

MW-1 MILLWORK (PAINT GRADE)
LOCATION: KITCHEN + PANTRY
VENDOR: TBD
CONTACT/PHONE:
SPECIES: TBD
PAINT COLOR: TO MATCH DESIGNER'S SAMPLE
DOOR STYLE: 1" SKINNY SHAKER
NOTES: PANTRY - DRAWERS W/ INTEGRATED PULLS
PROVIDE SAMPLES FOR APPROVAL

MW-2 MILLWORK (STAIN GRADE)
LOCATION: KITCHEN SINK / EAST ISLAND
VENDOR: TBD
CONTACT/PHONE:
SPECIES: WHITE OAK RIFT CUT
FINISH/COLOR: EBONY STAIN - TO MATCH DESIGNER'S SAMPLE
DOOR STYLE: 1" SKINNY SHAKER
NOTES: PROVIDE SAMPLES FOR APPROVAL

MW-2A MILLWORK (STAIN GRADE)
LOCATION: KITCHEN WEST ISLAND
VENDOR: TBD
CONTACT/PHONE:
SPECIES: WHITE OAK RIFT CUT
FINISH/COLOR: EBONY STAIN - TO MATCH DESIGNER'S SAMPLE
DOOR STYLE: 1" SKINNY SHAKER
NOTES: REEDED GLASS DOORS W/ TOUCH LATCH
PROVIDE SAMPLES FOR APPROVAL

MW-3 MILLWORK (STAIN GRADE)
LOCATION: HALL #1 EAST
VENDOR: TBD
CONTACT/PHONE:
SPECIES: WHITE OAK PLAIN SAWN
FINISH/COLOR: NATURAL STAIN - TO MATCH DESIGNER'S SAMPLE
DOOR STYLE: SLAB
NOTES: PROVIDE SAMPLES FOR APPROVAL

MW-4 SHELVES (STAIN GRADE)
LOCATION: PANTRY
VENDOR: TBD
CONTACT/PHONE:
SPECIES: WHITE OAK PLAIN SAWN
FINISH/COLOR: NATURAL STAIN - TO MATCH DESIGNER'S SAMPLE
NOTES: PROVIDE SAMPLES FOR APPROVAL

MW-5 PRODUCE DRAWERS (STAIN GRADE)
LOCATION: PANTRY
VENDOR: TBD
CONTACT/PHONE:
SPECIES: WHITE OAK PLAIN SAWN
FINISH/COLOR: NATURAL STAIN - TO MATCH DESIGNER'S SAMPLE
NOTES: PROVIDE SAMPLES FOR APPROVAL

MW-6 MILLWORK (STAIN GRADE)
LOCATION: OFFICE
VENDOR: TBD
CONTACT/PHONE:
SPECIES: WALNUT
FINISH/COLOR: TO MATCH DESIGNER'S SAMPLE
DOOR STYLE: SLAB W/ INTEGRATED PULLS
NOTES: PROVIDE SAMPLES FOR APPROVAL

MW-7 MILLWORK (STAIN GRADE)
LOCATION: PRIMARY COFFEE
VENDOR: TBD
CONTACT/PHONE:
SPECIES: WHITE OAK PLAIN SAWN
FINISH/COLOR: EBONY STAIN - TO MATCH DESIGNER'S SAMPLE
DOOR STYLE: SLAB W/ TOUCH LATCH DOORS
NOTES: PROVIDE SAMPLES FOR APPROVAL

MW-7A MILLWORK (STAIN GRADE)
LOCATION: PRIMARY COFFEE
VENDOR: TBD
CONTACT/PHONE:
SPECIES: WHITE OAK PLAIN SAWN
FINISH/COLOR: NATURAL STAIN - TO MATCH DESIGNER'S SAMPLE
NOTES: PROVIDE SAMPLES FOR APPROVAL

MW-8 MILLWORK (STAIN GRADE)
LOCATION: PRIMARY BATHROOM
VENDOR: TBD
CONTACT/PHONE:
SPECIES: WHITE OAK RIFT CUT
FINISH/COLOR: EBONY STAIN - TO MATCH DESIGNER'S SAMPLE
DOOR STYLE: SLAB
NOTES: PROVIDE SAMPLES FOR APPROVAL

MW-8A MILLWORK (STAIN GRADE)
LOCATION: PRIMARY BATHROOM- PURSE STORAGE
VENDOR: TBD
CONTACT/PHONE:
SPECIES: WHITE OAK RIFT CUT
FINISH/COLOR: EBONY STAIN - TO MATCH DESIGNER'S SAMPLE
DOOR STYLE: SLAB
NOTES: PROVIDE SAMPLES FOR APPROVAL

MW-9 MILLWORK (STAIN GRADE)
LOCATION: OWNER ENTRY
VENDOR: TBD
CONTACT/PHONE:
SPECIES: WHITE OAK PLAIN SAWN
FINISH/COLOR: EBONY STAIN - TO MATCH DESIGNER'S SAMPLE
DOOR STYLE: SLAB W/ INTEGRATED HANDLES ON DRAWERS. TOUCH LATCH UPPERS
NOTES: PROVIDE SAMPLES FOR APPROVAL

MW-10 MILLWORK (STAIN GRADE)
LOCATION: POWDER
VENDOR: TBD
CONTACT/PHONE:
SPECIES: WHITE OAK RIFT CUT
FINISH/COLOR: NATURAL STAIN - TO MATCH DESIGNER'S SAMPLE
DOOR STYLE: SLAB W/ INTEGRATED PULL
NOTES: PROVIDE SAMPLES FOR APPROVAL

MW-11 MILLWORK (STAIN GRADE)
LOCATION: GUEST SUITE BATH
VENDOR: TBD
CONTACT/PHONE:
SPECIES: WHITE OAK PLAIN SAWN
FINISH/COLOR: NATURAL STAIN - TO MATCH DESIGNER'S SAMPLE
DOOR STYLE: SLAB W/ INTEGRATED PULL
NOTES: PROVIDE SAMPLES FOR APPROVAL

MW-12 MILLWORK (STAIN GRADE)
LOCATION: GAME ROOM | BAR + MEDIA STORAGE
VENDOR: TBD
CONTACT/PHONE:
SPECIES: WHITE OAK PLAIN SAWN
FINISH/COLOR: EBONY STAIN - TO MATCH DESIGNER'S SAMPLE
DOOR STYLE: SLAB
NOTES: PROVIDE SAMPLES FOR APPROVAL

MW-13 MILLWORK (PAINT GRADE)
LOCATION: PRAYER ROOM
VENDOR: TBD
CONTACT/PHONE:
SPECIES: TBD
PAINT COLOR: TO MATCH DESIGNER'S SAMPLE
DOOR STYLE: SLAB
NOTES: PROVIDE SAMPLES FOR APPROVAL

MW-14 PEDESTAL (PAINT GRADE)
LOCATION: PRAYER ROOM
VENDOR: TBD
CONTACT/PHONE:
SPECIES: WHITE OAK PLAIN SAWN
STAIN COLOR: NATURAL STAIN - TO MATCH DESIGNER'S SAMPLE
NOTES: PROVIDE SAMPLES FOR APPROVAL

MW-15 FLOATING SHELF (STAIN GRADE)
LOCATION: POOL BATH
VENDOR: TBD
CONTACT/PHONE:
SPECIES: WHITE OAK PLAIN SAWN
STAIN COLOR: NATURAL STAIN - TO MATCH DESIGNER'S SAMPLE
NOTES: PROVIDE SAMPLES FOR APPROVAL

MW-16 MILLWORK (STAIN GRADE)
LOCATION: LL MEDIA ROOM
VENDOR: TBD
CONTACT/PHONE:
SPECIES: WHITE OAK PLAIN SAWN
STAIN COLOR: EBONY STAIN - TO MATCH DESIGNER'S SAMPLE
DOOR STYLE: SLAB W/ INTEGRATED PULLS
NOTES: PROVIDE SAMPLES FOR APPROVAL

MW-17 MILLWORK (PAINT GRADE)
LOCATION: LAUNDRY
VENDOR: TBD
CONTACT/PHONE:
SPECIES: TBD
PAINT COLOR: TO MATCH DESIGNER'S SAMPLE
DOOR STYLE: 1" SKINNY SHAKER
NOTES: PROVIDE SAMPLES FOR APPROVAL

MW-18 MILLWORK (STAIN GRADE)
LOCATION: BATH #2
VENDOR: TBD
CONTACT/PHONE:
SPECIES: WHITE OAK PLAIN SAWN
STAIN COLOR: NATURAL STAIN - TO MATCH DESIGNER'S SAMPLE
DOOR STYLE: REEDED DRAWER FRONTS - $\frac{1}{4}$"
NOTES: PROVIDE SAMPLES FOR APPROVAL

4/16/2025 8:04 AM
C:_BTO_BTARCHITECTURAL\GMK B&D\SIVARAJAN RESIDENC

DATE
1/27/2025
4/11/25 - G&D

31582
BRET THOMAS OVERMYER
Date Signed 4.11.25
Bret Overmyer
EXPIRES 9/30/2027

BTA ARCHITECTURAL, LLC
8425 West El Cortez Place
Peoria, Arizona 85383
(602) 292-6350
Bret.BTA@GMAIL.COM

Sivarajan Residence

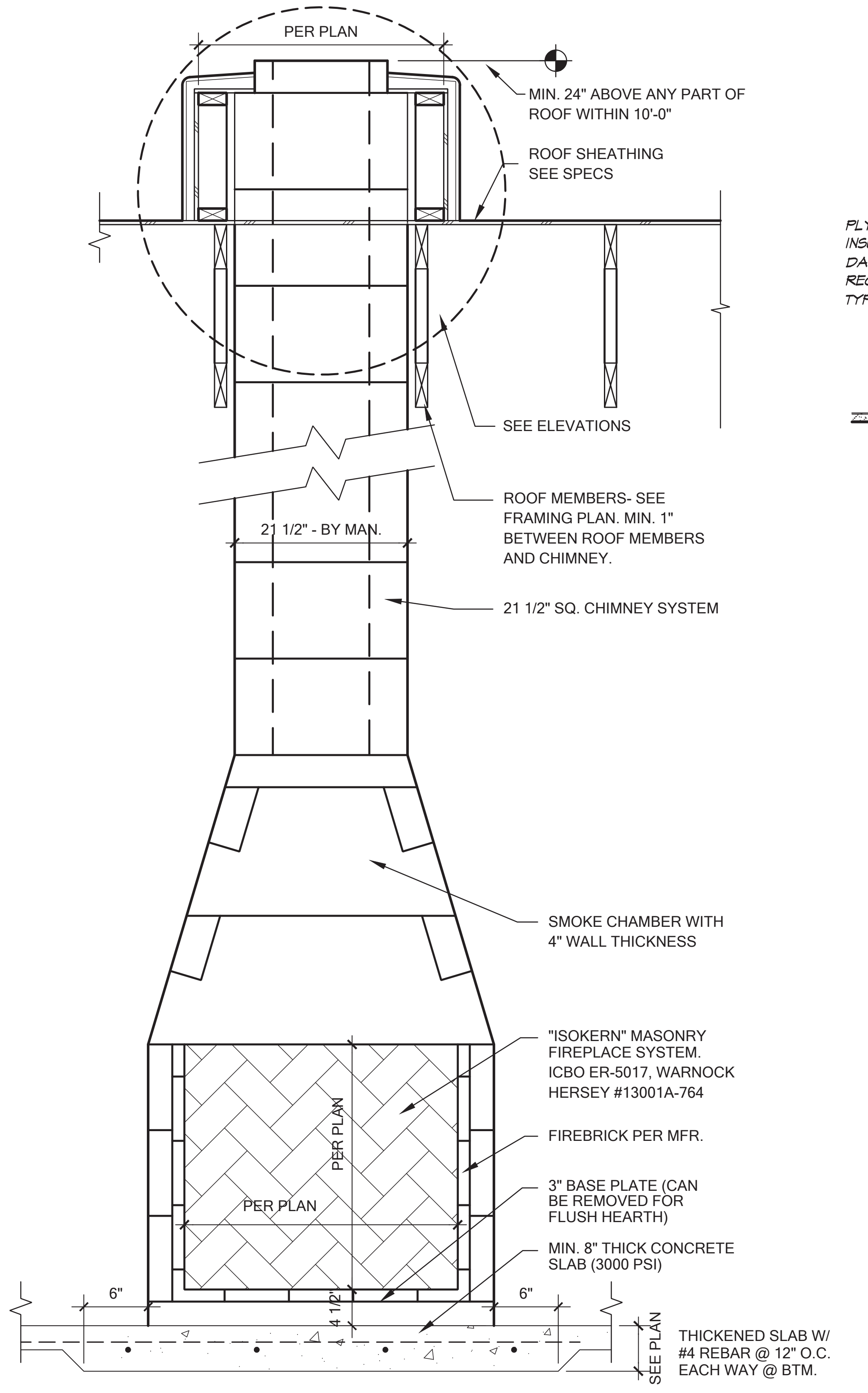
7899 East Mary Sharon Drive
Scottsdale 85266
Lone Mountain Vista Tract A - Lot 93

CITY OF SCOTTSDALE
BUILDING PLANS
THESE PLANS HAVE BEEN APPROVED
AND ARE READY FOR A PERMIT
THIS DOES NOT AUTHORIZE VIOLATIONS OF ANY
CODE OR ORDINANCE

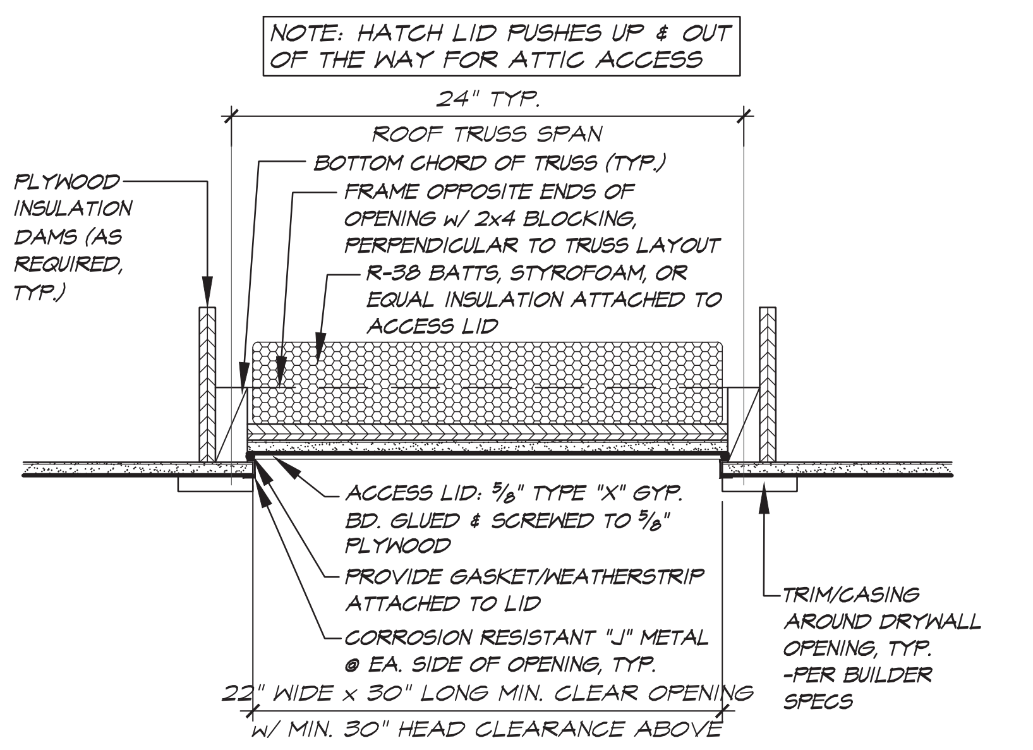
LOWER LI INTERIOR ELEVATIONS

COS PLAN CHECK #9300-24

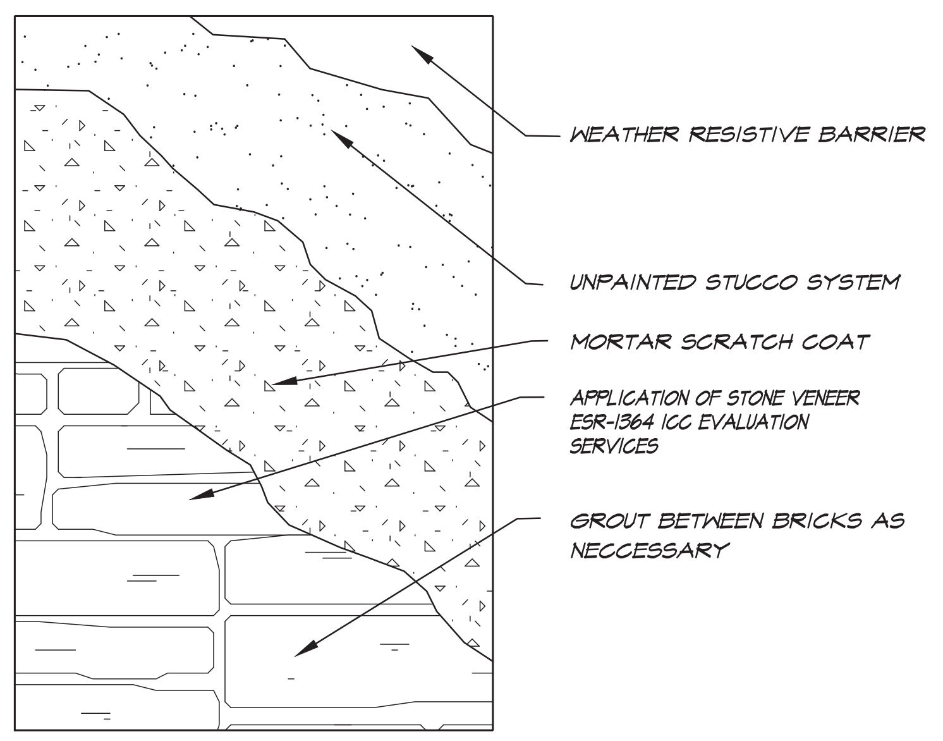
SHEET NO.
A8.2


PER PLAN
MIN. 24" ABOVE ANY PART OF ROOF WITHIN 10'-0"
ROOF SHEATHING SEE SPECS
SEE ELEVATIONS
ROOF MEMBERS- SEE FRAMING PLAN. MIN. 1" BETWEEN ROOF MEMBERS AND CHIMNEY.
21 1/2" - BY MAN.
21 1/2" SQ. CHIMNEY SYSTEM
SMOKE CHAMBER WITH 4" WALL THICKNESS
"ISOKERN" MASONRY FIREPLACE SYSTEM. ICBO ER-5017, WARNOCK HERSEY #13001A-764
FIREBRICK PER MFR.
PER PLAN
PER PLAN
3" BASE PLATE (CAN BE REMOVED FOR FLUSH HEARTH)
MIN. 8" THICK CONCRETE SLAB (3000 PSI)
6"
6"
4 1/2"
SEE PLAN
THICKENED SLAB W/ #4 REBAR @ 12" O.C. EACH WAY @ BTM.

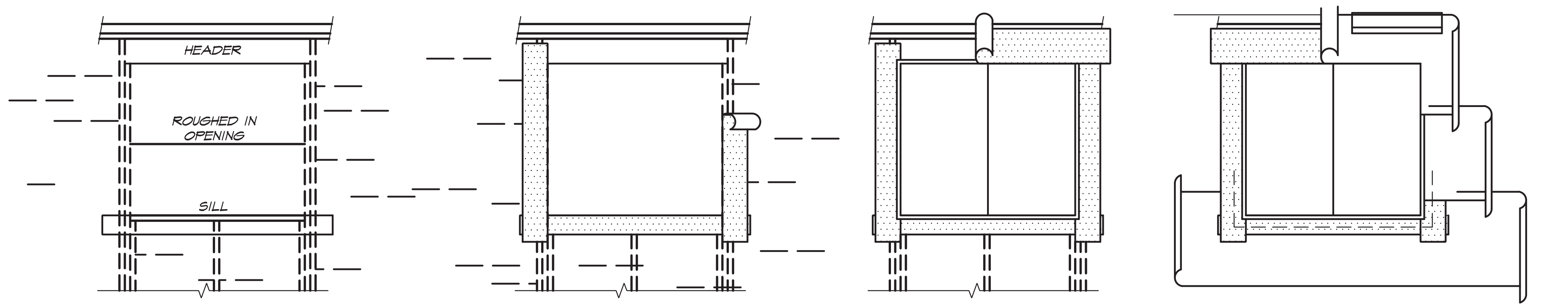
10 ISOKERN FIREPLACE
SCALE: 3/4"=1'-0"


NOTE: HATCH LID PUSHES UP & OUT OF THE WAY FOR ATTIC ACCESS
24" TYP.
ROOF TRUSS SPAN
BOTTOM CHORD OF TRUSS (TYP.)
FRAME OPPOSITE ENDS OF OPENING w/ 2x4 BLOCKING, PERPENDICULAR TO TRUSS LAYOUT
R-38 BATTS, STYROFOAM, OR EQUAL INSULATION ATTACHED TO ACCESS LID
PLYWOOD INSULATION DAMS (AS REQUIRED, TYP.)
ACCESS LID: 5/8" TYPE "X" GYP. BD. GLUED & SCREWED TO 5/8" PLYWOOD
PROVIDE GASKET/WEATHERSTRIP ATTACHED TO LID
CORROSION RESISTANT "J" METAL @ EA. SIDE OF OPENING, TYP.
TRIM/CASING AROUND DRYWALL OPENING, TYP. -PER BUILDER SPECS
22" WIDE x 30" LONG MIN. CLEAR OPENING w/ MIN. 30" HEAD CLEARANCE ABOVE

3 ATTIC ACCESS SCUTTLE
SCALE: 1"=1'-0"


WEATHER RESISTIVE BARRIER
UNPAINTED STUCCO SYSTEM
MORTAR SCRATCH COAT
APPLICATION OF STONE VENEER ESR-1364 ICC EVALUATION SERVICES
GROUT BETWEEN BRICKS AS NECCESSARY

2 STONE VENEER
SCALE: 1"=1'-0"


HEADER
ROUGHED IN OPENING
SILL

ATTACH A SILL OF FLASHING MATERIAL AT LEAST 12" WIDE WITH THE TOP EDGE EVEN WITH THE TOP EDGE OF THE ROUGH SILL. EXTEND THIS SILL STRIP AT LEAST 12" BEYOND THE EDGE OF THE ROUGH OPENING FOR WINDOW. ATTACH FLASHING WITH GALVANIZED ROOFING NAILS OR RUST-RESISTANT STAPLES.

NOTES: FLASHING OF ALL EXTERIOR OPENINGS EXPOSED TO WEATHER TO MAKE THEM WEATHERPROOF. USE 'MOISTOP' FLASHING BY FORTIFIBER CORP. OR EQUAL, WHENEVER POSSIBLE FOR FLASHING MATERIAL CAULK BACK OF WINDOW FRAMES BEFORE SETTING. USE WINDOWS THAT ARE WATERTIGHT.

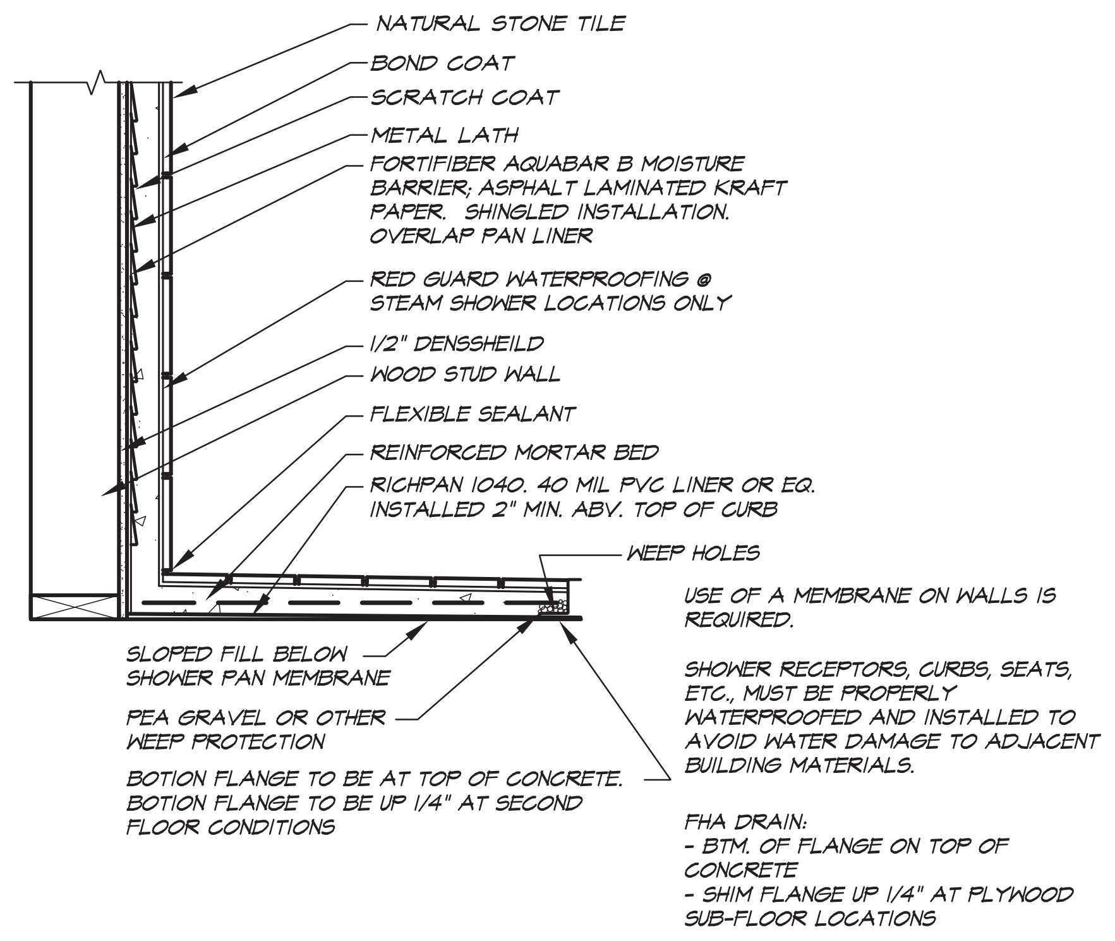
AFTER SILL STRIP IS IN PLACE ATTACH JAMB STRIPS (SIDE OF OPENING) AT LEAST 12" WIDE WITH INSIDE EDGE OF FLASHING EVEN WITH EDGE OF WINDOW OPENING. START JAMB STRIPS 1" BELOW THE SILL STRIP AND EXTEND JAMB STRIPS 6" ABOVE THE LOWER EDGE OF THE HEADER (TOP OF WINDOW OPENING).

LINE WIRE, WHEN USED AS BACKING TO SUPPORT WATER-RESISTANT BUILDING PAPER OR FELT BENEATH LATH FOR STUCCO SHOULD BE INSTALLED ACCORDING TO INDUSTRY STANDARDS AND PRACTICE. NO ATTACHMENT DEVICES NOR THE WIRE BACKING SHOULD COVER OR PENETRATE FLASHING MATERIAL. PERIPHERAL FLASHING AT ALL EDGES OF WALL OPENINGS MUST COVER WIRE BACKING.

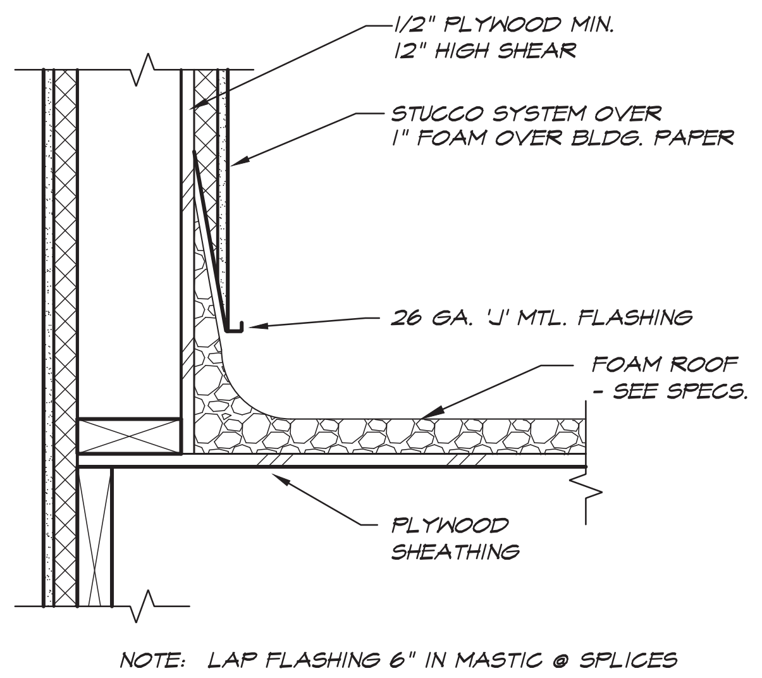
APPLY A BEAD OF CAULKING TO THE BACK SURFACES OF THE WINDOW, THEN PLACE THE WINDOW INTO THE ROUGH OPENING WITH FLANGES OVER THE INSTALLED FLASHING OVER THE WINDOW FLANGE. AFTER WINDOW IS PLACED INSTALL THE HEAD FLASHING OVER THE WINDOW FLANGE.

STARTING AT THE BOTTOM OF THE WALL (SOLE PLATE). LAY WATER-RESISTANT PAPER UNDER THE SILL STRIP. CUT ANY EXCESS WATER-RESISTANT PAPER THAT MAY EXTEND ABOVE THE SILL FLANGE ON EACH SIDE OF THE OPENING. (SHOWN IN DIAGRAM AS SHORT DASH LINES). INSTALL SUCCEEDING COURSES OF WATER-RESISTANT PAPER (B.C. ETC.) OVER JAMB AND HEAD FLANGES IN SINGLE-BOARD FASHION.

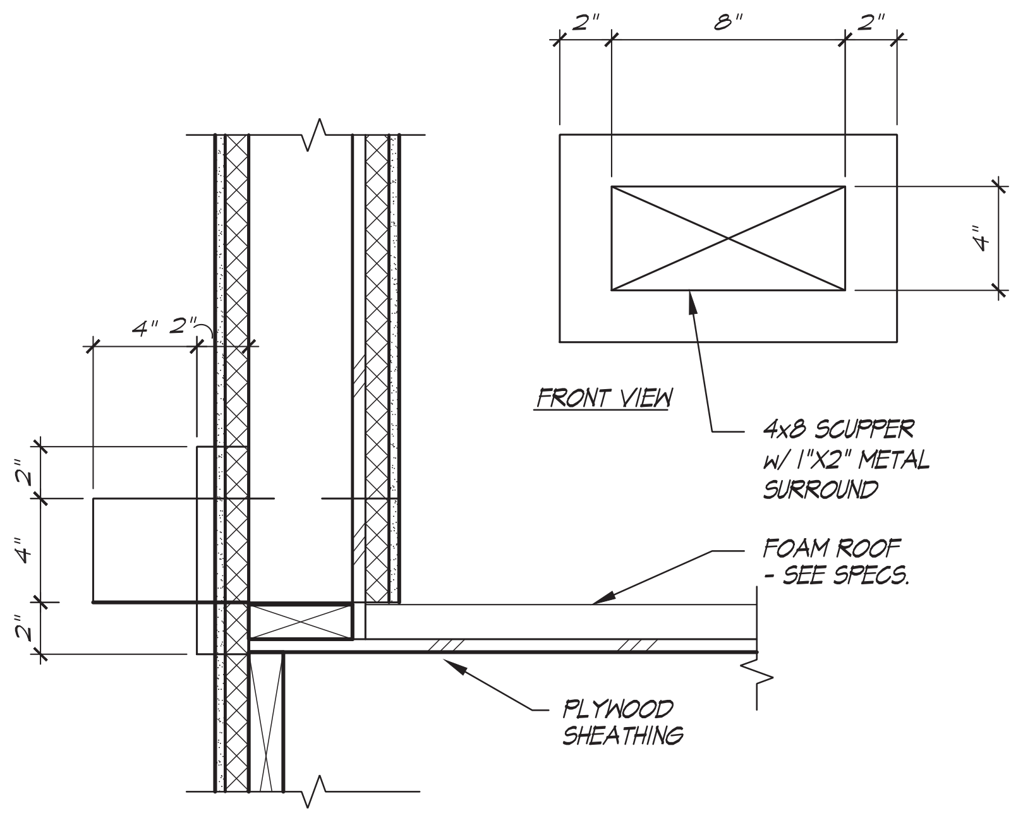
1 TYP. DOOR & WINDOW FLASHING
NOT TO SCALE


NATURAL STONE TILE
BOND COAT
SCRATCH COAT
METAL LATH
FORTIFIBER AQUABAR B MOISTURE BARRIER; ASPHALT LAMINATED KRAFT PAPER. SHINGLED INSTALLATION. OVERLAP PAN LINER
RED GUARD WATERPROOFING @ STEAM SHOWER LOCATIONS ONLY
1/2" DENSSHEILD
WOOD STUD WALL
FLEXIBLE SEALANT
REINFORCED MORTAR BED
RICHPAN 1040. 40 MIL PVC LINER OR EQ. INSTALLED 2" MIN. ABV. TOP OF CURB
WEEP HOLES
SLOPED FILL BELOW SHOWER PAN MEMBRANE
PEA GRAVEL OR OTHER WEEP PROTECTION
BOTION FLANGE TO BE AT TOP OF CONCRETE. BOTION FLANGE TO BE UP 1/4" AT SECOND FLOOR CONDITIONS
USE OF A MEMBRANE ON WALLS IS REQUIRED.
SHOWER RECEPTORS, CURBS, SEATS, ETC., MUST BE PROPERLY WATERPROOFED AND INSTALLED TO AVOID WATER DAMAGE TO ADJACENT BUILDING MATERIALS.
FHA DRAIN:
- BTM. OF FLANGE ON TOP OF CONCRETE
- SHIM FLANGE UP 1/4" AT PLYWOOD SUB-FLOOR LOCATIONS

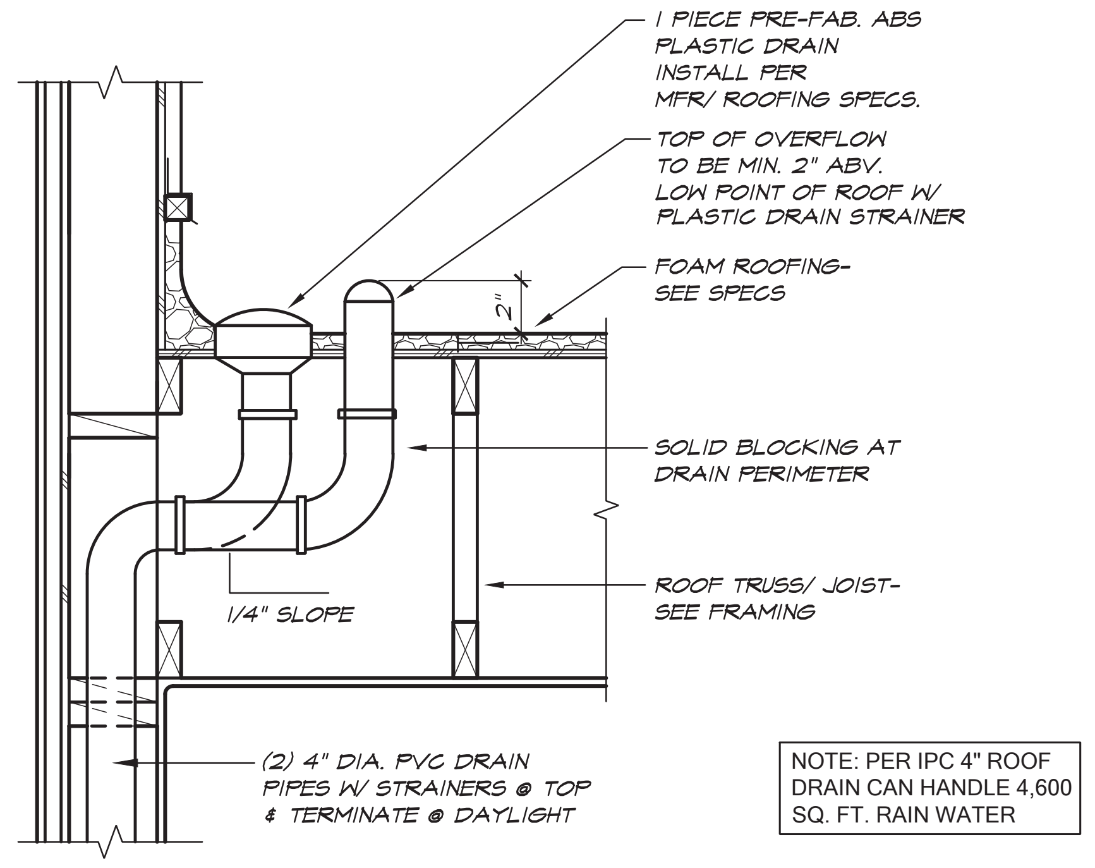
9 SHOWER PAN / VAPOR BARRIER
SCALE: 1"=1'-0"


1/2" PLYWOOD MIN. 12" HIGH SHEAR
STUCCO SYSTEM OVER 1" FOAM OVER BLDG. PAPER
26 GA. 'J' MTL. FLASHING
FOAM ROOF - SEE SPECS.
PLYWOOD SHEATHING
NOTE: LAP FLASHING 6" IN MASTIC @ SPLICES

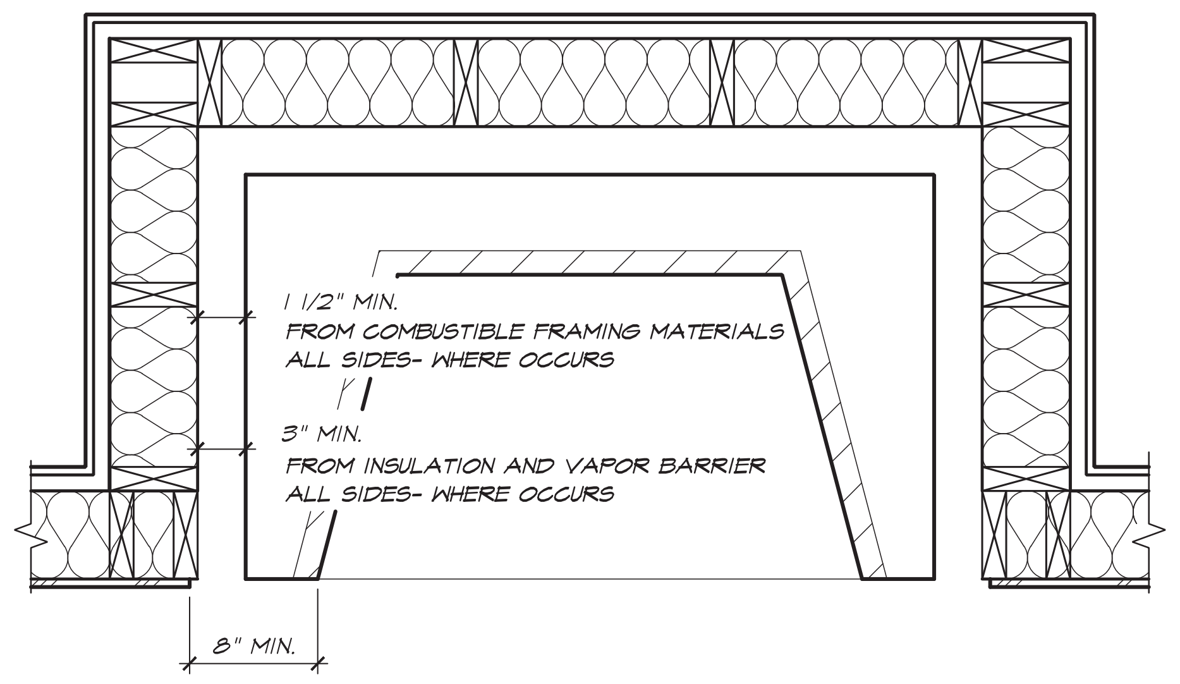
8 FLASHING @ FOAM ROOF
NOT TO SCALE


2"
8"
2"
4"
FRONT VIEW
4x8 SCUPPER w/ 1"X2" METAL SURROUND
4" 2"
2"
4"
2"
FOAM ROOF - SEE SPECS.
PLYWOOD SHEATHING

7 SCUPPER DETAIL
NOT TO SCALE


1 PIECE PRE-FAB. ABS PLASTIC DRAIN INSTALL PER MFR/ ROOFING SPECS.
TOP OF OVERFLOW TO BE MIN. 2" ABV. LOW POINT OF ROOF W/ PLASTIC DRAIN STRAINER
2"
FOAM ROOFING- SEE SPECS
SOLID BLOCKING AT DRAIN PERIMETER
1/4" SLOPE
ROOF TRUSS/ JOIST- SEE FRAMING
(2) 4" DIA. PVC DRAIN PIPES W/ STRAINERS @ TOP & TERMINATE @ DAYLIGHT
NOTE: PER IPC 4" ROOF DRAIN CAN HANDLE 4,600 SQ. FT. RAIN WATER

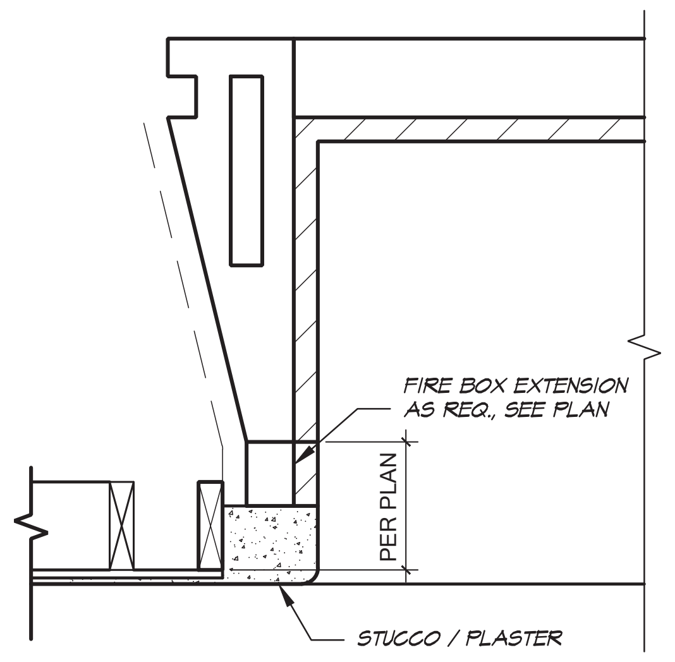
6 ROOF DRAIN & OVERFLOW
SCALE: 1"=1'-0"


1 1/2" MIN.
FROM COMBUSTIBLE FRAMING MATERIALS ALL SIDES- WHERE OCCURS
3" MIN.
FROM INSULATION AND VAPOR BARRIER ALL SIDES- WHERE OCCURS
8" MIN.

FROM COMBUSTIBLE SHEATHING ALL SIDES - WHERE OCCURS

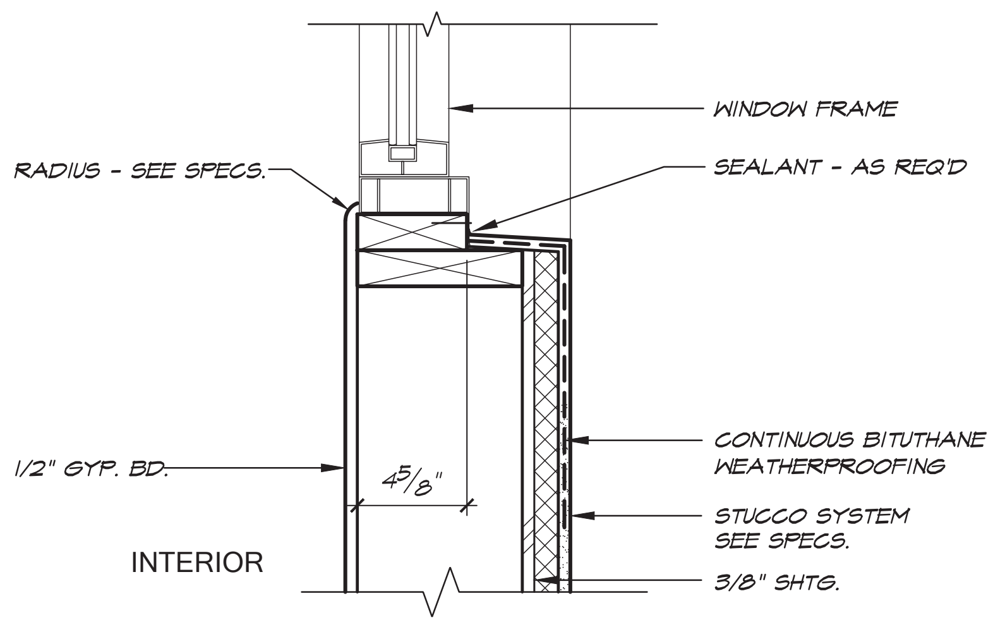
NOTE:
REFER TO INSTALLATION, OPERATION, MAINTENANCE AND OWNER'S MANUAL FOR MORE INFO.

15 ISOKERN CLEARANCES
NOT TO SCALE

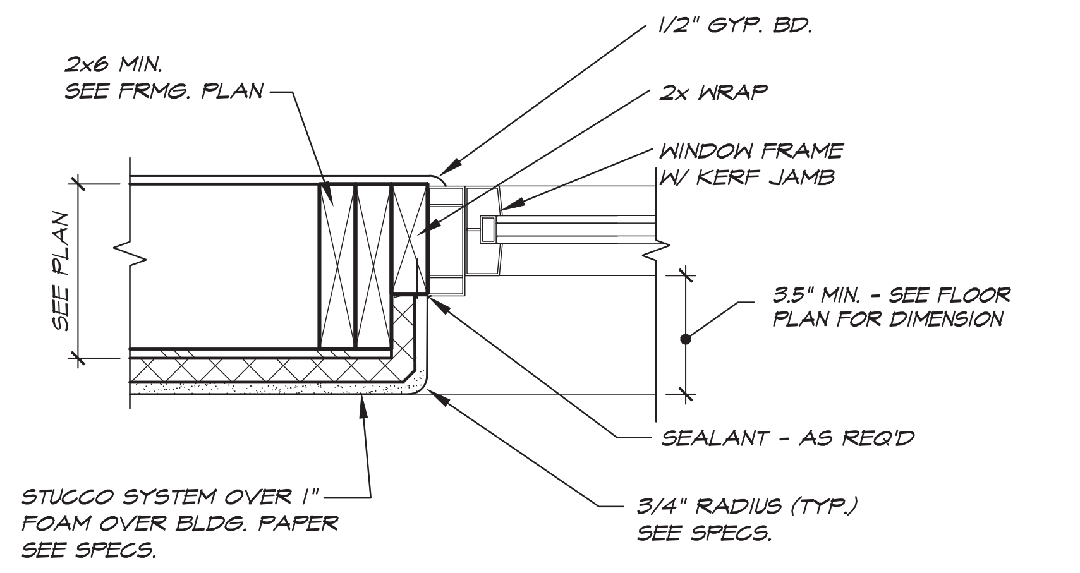

FIRE BOX EXTENSION AS REQ., SEE PLAN
PER PLAN
STUCCO / PLASTER

NOTE:
REFER TO INSTALLATION, OPERATION, MAINTENANCE AND OWNER'S MANUAL FOR MORE INFO.

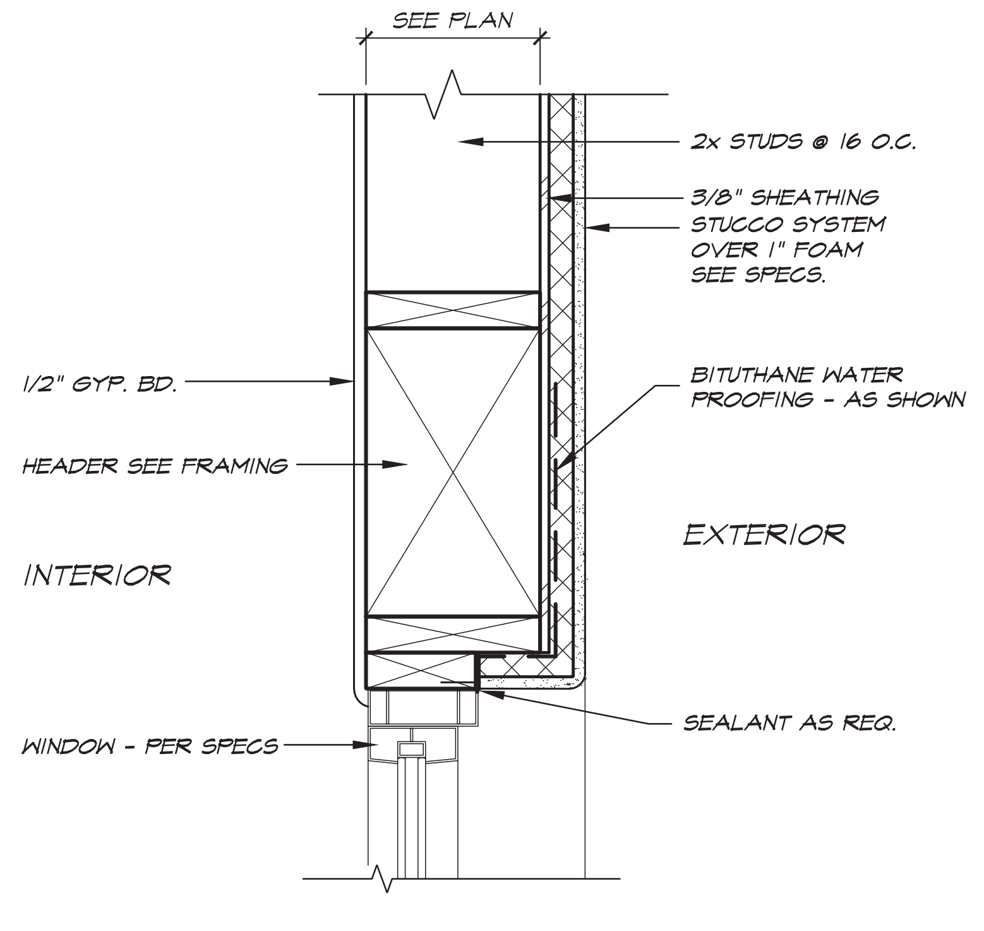
14 FINISH @ ISOKERN FIREPLACE
SCALE: 1" = 1'-0"


WINDOW FRAME
RADIUS - SEE SPECS.
SEALANT - AS REQ'D
1/2" GYP. BD.
4 5/8"
INTERIOR
CONTINUOUS BITUTHANE WEATHERPROOFING
STUCCO SYSTEM SEE SPECS.
3/8" SHTG.

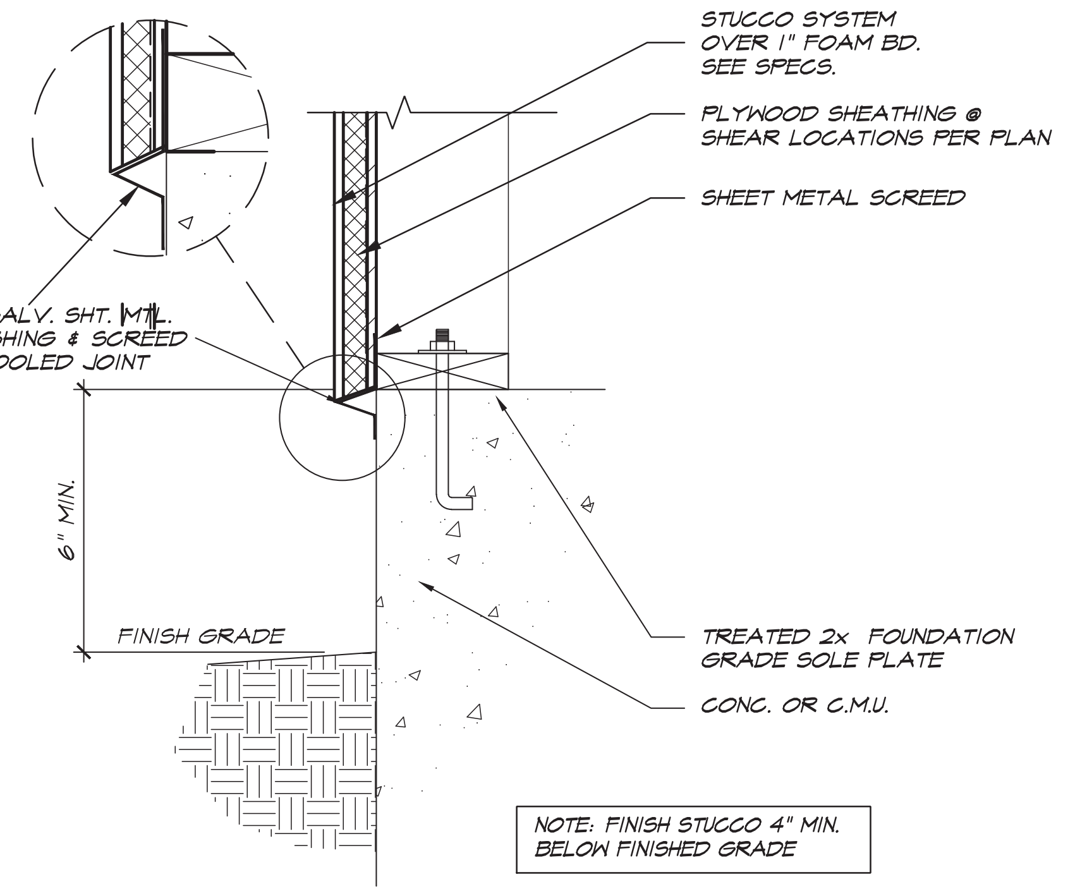
13 WINDOW SILL
SCALE: 1 1/2"=1'-0"


2x6 MIN. SEE FRMG. PLAN
1/2" GYP. BD.
2x WRAP
WINDOW FRAME W/ KERF JAMB
SEE PLAN
3.5" MIN. - SEE FLOOR PLAN FOR DIMENSION
SEALANT - AS REQ'D
STUCCO SYSTEM OVER 1" FOAM OVER BLDG. PAPER SEE SPECS.
3/4" RADIUS (TYP.) SEE SPECS.

12 WINDOW JAMB
SCALE: 1 1/2"=1'-0"

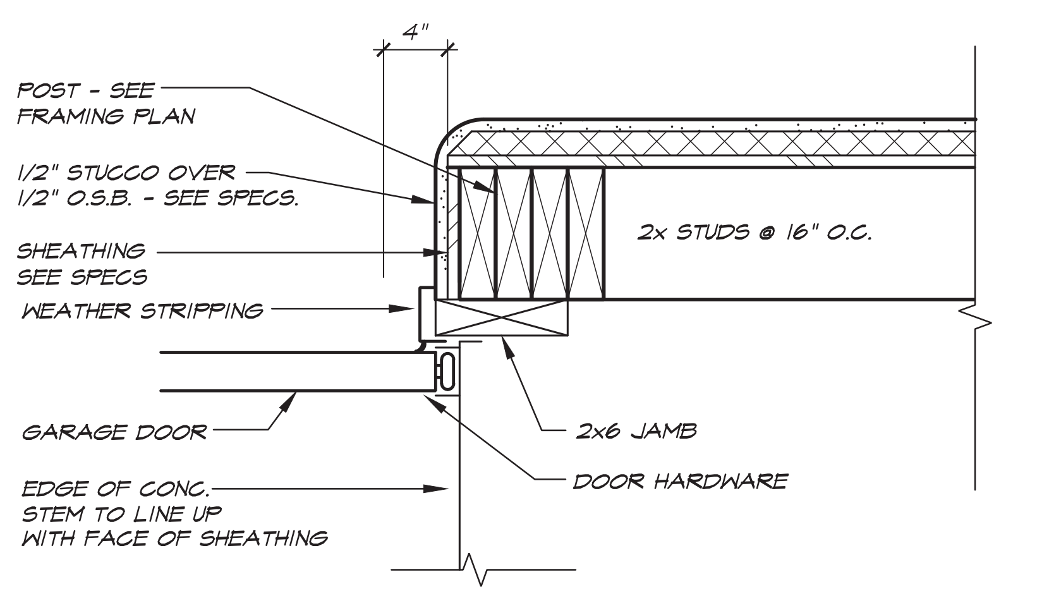

SEE PLAN
2x STUDS @ 16 O.C.
3/8" SHEATHING
STUCCO SYSTEM OVER 1" FOAM SEE SPECS.
1/2" GYP. BD.
BITUTHANE WATER PROOFING - AS SHOWN
HEADER SEE FRAMING
INTERIOR
EXTERIOR
SEALANT AS REQ.
WINDOW - PER SPECS

11 WINDOW HEADER
SCALE: 1 1/2"=1'-0"

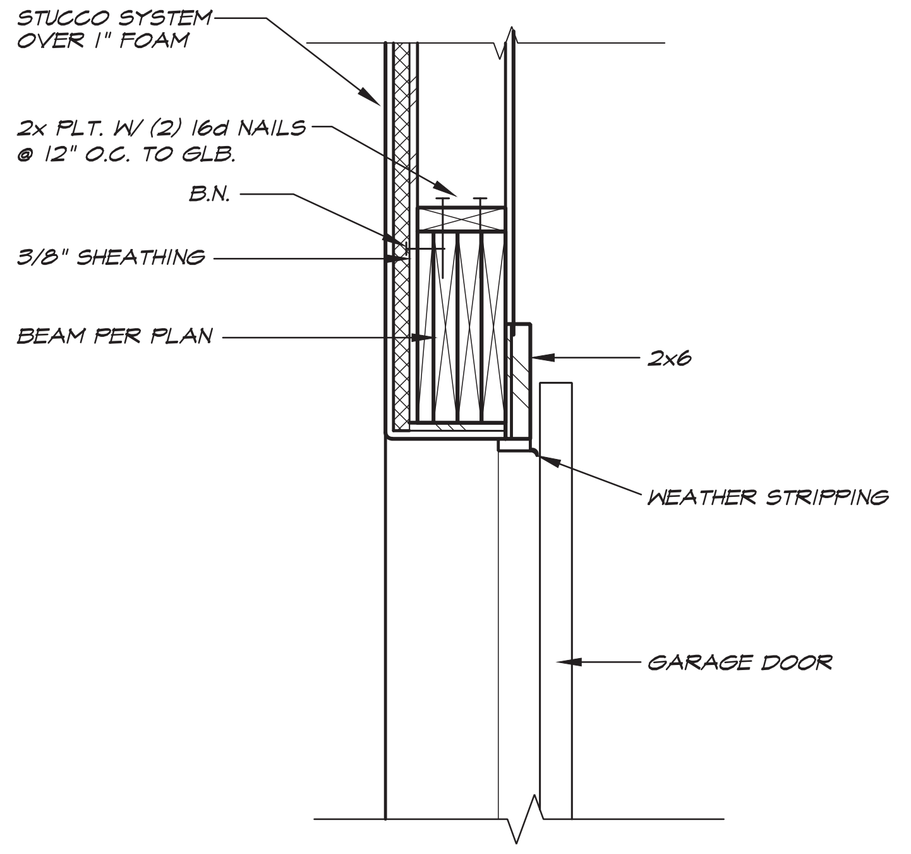

STUCCO SYSTEM OVER 1" FOAM BD. SEE SPECS.
PLYWOOD SHEATHING @ SHEAR LOCATIONS PER PLAN
SHEET METAL SCREED
26 GALV. SHT. MTL. FLASHING & SCREED W/ TOOLED JOINT
6" MIN.
FINISH GRADE
TREATED 2x FOUNDATION GRADE SOLE PLATE
CONC. OR C.M.U.
NOTE: FINISH STUCCO 4" MIN. BELOW FINISHED GRADE

4/16/2025 8:04 AM
C:_BTO_\BTARCHITECTURAL\[illegible]\SIVARAJAN RESIDENCE.VCAD

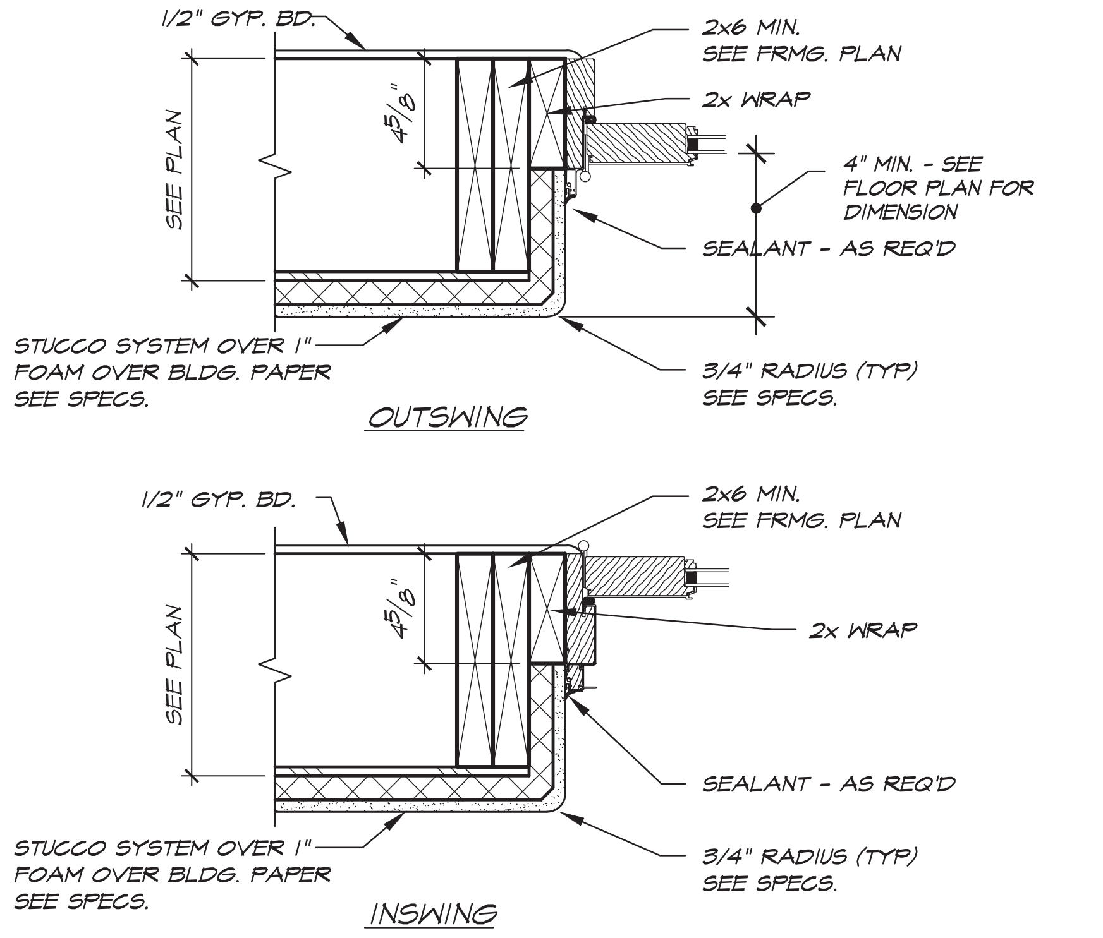
20 WEEP SCREED (STUCCO)
SCALE: 1 1/2"=1'-0"


4"
POST - SEE FRAMING PLAN
1/2" STUCCO OVER 1/2" O.S.B. - SEE SPECS.
2x STUDS @ 16" O.C.
SHEATHING SEE SPECS
WEATHER STRIPPING
GARAGE DOOR
2x6 JAMB
DOOR HARDWARE
EDGE OF CONC. STEM TO LINE UP WITH FACE OF SHEATHING

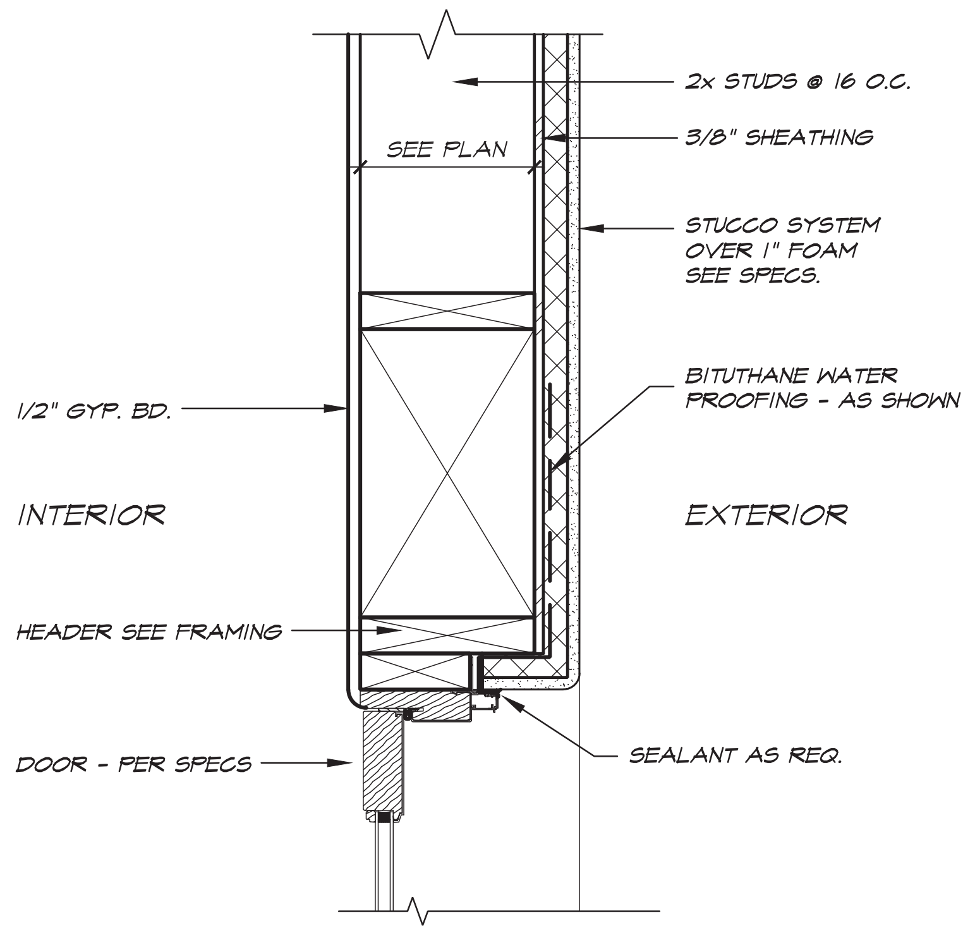
19 GARAGE DOOR JAMB
SCALE: 1 1/2"=1'-0"


STUCCO SYSTEM OVER 1" FOAM
2x PLT. W/ (2) 16d NAILS @ 12" O.C. TO GLB.
B.N.
3/8" SHEATHING
BEAM PER PLAN
2x6
WEATHER STRIPPING
GARAGE DOOR

18 GARAGE DOOR HEADER
SCALE: 1" =1'-0"


1/2" GYP. BD.
2x6 MIN. SEE FRMG. PLAN
2x WRAP
SEE PLAN
4 5/8"
4" MIN. - SEE FLOOR PLAN FOR DIMENSION
SEALANT - AS REQ'D
STUCCO SYSTEM OVER 1" FOAM OVER BLDG. PAPER SEE SPECS.
3/4" RADIUS (TYP) SEE SPECS.
OUTSWING
1/2" GYP. BD.
2x6 MIN. SEE FRMG. PLAN
2x WRAP
SEE PLAN
4 5/8"
SEALANT - AS REQ'D
STUCCO SYSTEM OVER 1" FOAM OVER BLDG. PAPER SEE SPECS.
3/4" RADIUS (TYP) SEE SPECS.
INSWING

17 DOOR JAMB (STUCCO)
SCALE: 1 1/2"=1'-0"


2x STUDS @ 16 O.C.
SEE PLAN
3/8" SHEATHING
STUCCO SYSTEM OVER 1" FOAM SEE SPECS.
1/2" GYP. BD.
BITUTHANE WATER PROOFING - AS SHOWN
INTERIOR
EXTERIOR
HEADER SEE FRAMING
DOOR - PER SPECS
SEALANT AS REQ.

16 DOOR HEADER
SCALE: 1 1/2"=1'-0"

CITY OF SCOTTSDALE
BUILDING PLANS
THESE PLANS HAVE BEEN APPROVED
AND ARE READY FOR A PERMIT
THIS DOES NOT AUTHORIZE VIOLATIONS OF ANY
CODE OR ORDINANCE

DATE
1/27/2025
4/11/25 - G&D

REGISTERED ARCHITECT
CERTIFICATE NO. 31582
BRET THOMAS OVERMYER
Date Signed 4.11.25
ARIZONA, USA
Bret Overmyer
EXPIRES 9/30/2027

BTA ARCHITECTURAL
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Scottsdale 85266
Lone Mountain Vista Tract A - Lot 93

ARCHITECTURAL DETAILS

COS PLAN CHECK #9300-24

SHEET NO.
D1

ELECTRICAL NOTES

ALL WORK IS TO BE PERFORMED IN ACCORDANCE WITH THE LATEST ADOPTED NATIONAL ELECTRIC CODE AND ALL APPLICABLE LOCAL CODES, ORDINANCES, AND AMENDMENTS TO THE NEC. ALL REFERENCES TO THE NEC IN THIS DRAWING CITE THE APPLICABLE ARTICLE FOR THE LATEST EDITION. IF AN EARLIER EDITION OF THE NEC IS THE ADOPTED EDITION FOR THE JURISDICTION THE PARALLEL ARTICLE FOR THE ADOPTED EDITION SHALL APPLY.

ALL WIRING IS TO BE COPPER UNLESS OTHERWISE NOTED. INSULATION SHALL BE TYPE XHHW OR THHN/THWN. WIRING FOR OUTSIDE LIGHTING SHALL BE A MINIMUM OF #10 AWG COPPER.

FOR CIRCUITS RUN IN CONDUIT OR RACEWAYS, PROVIDE A COPPER BOND WIRE SIZED PER NEC 250.66.

THE CONTRACTOR IS TO CONTACT THE POWER COMPANY REGARDING THE EXACT LOCATION OF ALL PRIMARY SERVICE EQUIPMENT, TRENCHES, TRANSFORMERS, METER, AND OTHER SERVICE EQUIPMENT.

THE ELECTRICAL CONTRACTOR SHALL PROVIDE ALL NECESSARY POWER TRENCHING, BACKFILL, SERVICE EQUIPMENT AND CONDUIT STUBS IN TRENCH REQUIRED BY THE POWER COMPANY, INSTALLED PER THE POWER COMPANY'S SPECIFICATIONS.

THE CONTRACTOR IS TO CONTACT THE TELEPHONE COMPANY REGARDING THE EXACT LOCATIONS OF ALL PRIMARY SERVICE EQUIPMENT, TRENCHES, ETC.

THE ELECTRICAL CONTRACTOR SHALL PROVIDE ALL NECESSARY TELEPHONE TRENCHING, BACKFILL, AND CONDUIT STUBS INTO TRENCH REQUIRED BY THE TELEPHONE COMPANY, INSTALLED PER THE TELEPHONE COMPANY'S SPECIFICATIONS.

THE CONTRACTOR IS TO COORDINATE EXACT LOCATIONS OF ALL METER ASSEMBLIES AND TELEPHONE SERVICE ENTRANCES WITH POWER AND TELEPHONE COMPANIES BEFORE ROUGH-IN.

SMOKE DETECTORS SHALL BE TYPE APPROVED BY "THE AUTHORITY HAVING JURISDICTION." CONNECT SMOKE DETECTORS TO A LOCAL 120V GENERAL LIGHTING AND RECEPTACLE CIRCUIT. INSTALL PER NFPA 74, UBC AND OTHER CODES AS REQUIRED BY THE "AUTHORITY HAVING JURISDICTION." LOCATIONS SHOWN ON PLANS SHALL BE VERIFIED AND APPROVED IN WRITING BY THE "AUTHORITY HAVING JURISDICTION" BEFORE ROUGH-IN.

THE ELECTRICAL CONTRACTOR IS TO COORDINATE WITH THE MECHANICAL CONTRACTOR FOR EXACT LOCATIONS AND REQUIREMENTS OF ALL MECHANICAL EQUIPMENT PRIOR TO ROUGH-IN. THE ELECTRICAL CONTRACTOR SHALL PROVIDE COMPLETE CONNECTIONS TO ALL MECHANICAL EQUIPMENT, AND SHALL PROVIDE STARTERS, CONNECTORS, DISCONNECTS AND ALL OTHER MATERIALS REQUIRED FOR A COMPLETE, WORKING INSTALLATION. DISCONNECT SWITCHES AT MECHANICAL EQUIPMENT SHALL BE FUSED PER THE EQUIPMENT MANUFACTURER'S REQUIREMENTS. ALL DISCONNECTING MEANS MUST BE INSTALLED TO PROVIDE NEC 110.26 WORKING CLEARANCES.

ALL GENERAL USE RECEPTACLES MOUNTED WITHIN 6' OF A BASIN OR SINK SHALL BE GFCI PROTECTED. GENERAL USE RECEPTACLES IN KITCHENS, BATHROOMS, AND GARAGES SHALL BE GFCI PROTECTED. EXTERIOR RECEPTACLES SHALL BE GFCI PROTECTED AND SHALL HAVE WEATHERPROOF-IN-USE COVERS.

THE ELECTRICAL CONTRACTOR SHALL VERIFY LOCATIONS OF ALL FIXTURES AND DEVICES PRIOR TO ROUGH-IN. THE ELECTRICAL CONTRACTOR SHALL VERIFY THE SWITCHING SCHEMES AND LOCATIONS AND SHALL ADJUST SOME TO MEET OWNER'S REQUIREMENTS.

THE ELECTRICAL CONTRACTOR SHALL PROVIDE, INSTALL, AND WIRE TELEPHONE JACKS AND CABLE TV JACKS AS DIRECTED.

ALL ELECTRICAL BOXES IN THE WALL BETWEEN THE HOUSE AND THE GARAGE SHALL BE METAL OR SHALL BE LISTED FOR THE APPLICATION. RECEPTACLES IN THE GARAGE AND IN THE ADJACENT EQUIPMENT ROOM SHALL BE MOUNTED AT LEAST 18" TO BOTTOM A.F.F.

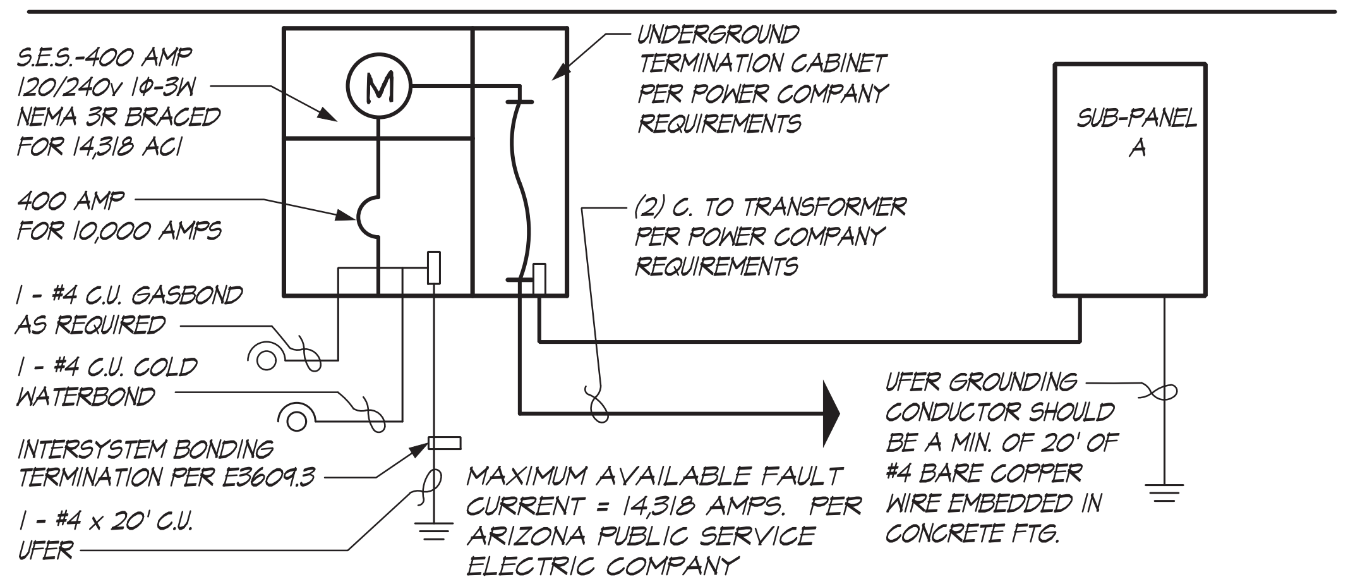
LIGHT FIXTURES AT SINKS SHALL BE MOUNTED ON THE SINK CENTERLINE.

CEILING FAN OUTLET BOXES SHALL BE LISTED FOR THE PURPOSE AND SHALL BE SECURELY FASTENED IN PLACE. PROVIDE SEPARATE WALL SWITCHES FOR FAN AND LIGHT.

CIRCUITS FEEDING BATHROOM RECEPTACLES SHALL FEED NO OTHER LOADS.

ALL APPLIANCES CALLED OUT BY NAME IN THE LOAD CALCULATION SHALL HAVE DEDICATED CIRCUITS. THE DEDICATED CIRCUITS SHALL NOT BE CONNECTED TO ANY OTHER LOADS.

ONE LINE DIAGRAM - 400 AMP



MAXIMUM AVAILABLE FAULT CURRENT = 14,318 AMPS. PER ARIZONA PUBLIC SERVICE ELECTRIC COMPANY

E3902.2 GARAGE AND ACCESSORY BUILDING RECEPTACLES.
ALL 125-VOLT, SINGLE-PHASE, 15- OR 20-AMPERE RECEPTACLES INSTALLED IN GARAGES AND GRADE-LEVEL PORTIONS OF UNFINISHED ACCESSORY BUILDINGS USED FOR STORAGE OR WORK AREAS SHALL HAVE GROUND-FAULT CIRCUIT-INTERRUPTER PROTECTION FOR PERSONNEL.

E3902.3 OUTDOOR RECEPTACLES.
ALL 125-VOLT, SINGLE-PHASE, 15- AND 20-AMPERE RECEPTACLES INSTALLED OUTDOORS SHALL HAVE GROUND-FAULT CIRCUIT-INTERRUPTER PROTECTION FOR PERSONNEL.

E3902.6 KITCHEN RECEPTACLES.
ALL 125-VOLT, SINGLE-PHASE, 15- AND 20- AMPERE RECEPTACLES THAT SERVE COUNTERTOP SURFACES SHALL HAVE GROUND-FAULT CIRCUIT-INTERRUPTER PROTECTION FOR PERSONNEL.

E3902.7 SINK RECEPTACLES.
ALL 125-VOLT, SINGLE-PHASE, 15- AND 20-AMPERE RECEPTACLES THAT ARE LOCATED WITHIN 6 FEET (1829 MM) OF THE OUTSIDE EDGE OF A SINK THAT IS LOCATED IN AN AREA OTHER THAN A KITCHEN, SHALL HAVE GROUND-FAULT CIRCUIT INTERRUPTER PROTECTION FOR PERSONNEL.

NOTES

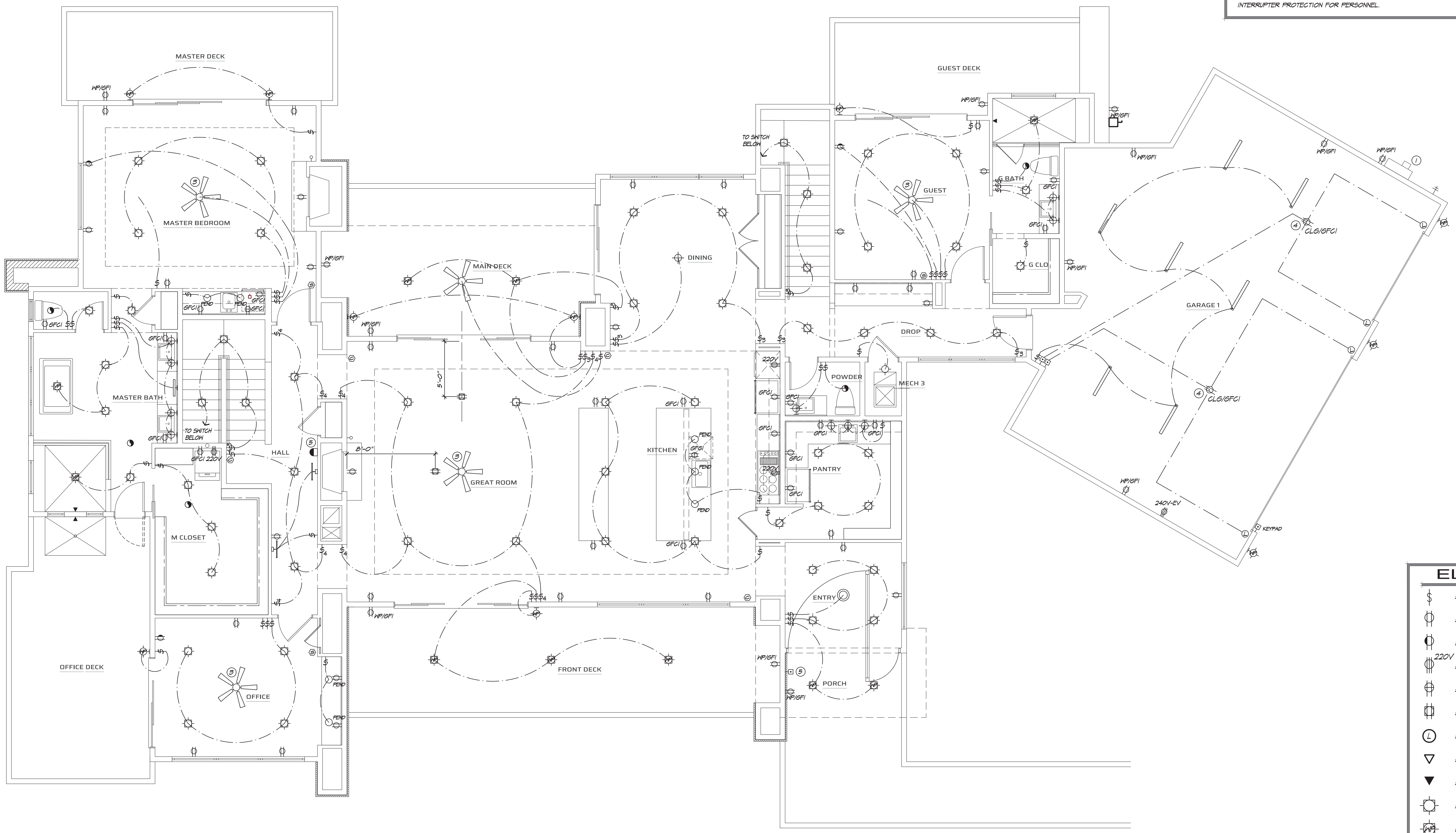
1. ELECTRICAL PLAN DESIGNATES SCHEMATIC LAYOUT ONLY. ALL ELECTRICAL ELEMENTS TO BE VERIFIED BY BUILDER PRIOR TO START OF CONSTRUCTION.
2. ALL SMOKE DETECTORS SHALL BE INTERCONNECTED WITH A POWER SOURCE AND HAVE A BATTERY BACKUP.
3. ALL BRANCH CIRCUITS THAT SUPPLY 125 VOLT, SINGLE-PHASE, 15 AND 20 AMP OUTLETS INSTALLED IN ALL LIVABLE AREAS, KITCHENS, FAMILY ROOMS, DINING ROOMS, LIVING ROOMS, PARLORS, LIBRARIES, DENS, BEDROOMS, SUN-ROOMS, RECREATIONS ROOMS, CLOSETS, HALLWAYS, LAUNDRY AREAS AND SIMILAR ROOMS OR AREAS SHALL BE ON AN ARC-FAULT CIRCUIT INTERRUPTER INSTALLED FOR PROTECTION OF THE BRANCH CIRCUIT. (E3902.16)
4. ALL RECEPTACLES THAT SUPPLY 125 VOLT, SINGLE-
5. PHASE, 15 AND 20 AMP OUTLETS INSTALLED IN ALL LIVABLE AREAS SHALL BE TAMPER-RESISTANT, EXCEPT FOR RECEPTACLES LOCATED 5'-6" ABOVE FINISH FLOOR, PART OF A LUMINAR OR APPLIANCE AND SINGLE RECEPTACLES USED SOLELY FOR A DEDICATED APPLIANCE.
6. SURFACE MOUNTED INCANDESCENT LIGHT FIXTURES IN CLOTHES CLOSET SHALL MAINTAIN 12" BETWEEN FIXTURE & THE NEAREST POINT OF STORAGE.
7. BATHROOM OUTLETS TO BE A MIN. OF 20 AMP BRANCH CIRCUIT w/ NO OTHER OUTLETS.
8. OVEN/RANGE AND ELECT. DRYER SHALL BE SUPPLIED BY 4-WIRE RECEPTACLE.
9. ALL RECEPTACLE AND FIXTURE BOXES IN THE GARAGE SHALL BE OF METAL OR MATERIAL TESTED FOR FIRE RESISTIVE ASSEMBLIES AND INSTALLED IN ACCORDANCE WITH THE TESTED ASSEMBLY.
10. ALL PRE-WIRED, CEILING-MOUNTED OUTLET BOXES SHALL BE LISTED TO SUPPORT A CEILING FAN, WHERE ACCEPTABLE. CEILING FANS NOT EXCEEDING 70 POUNDS (WITH OR WITHOUT ACCESSORIES) MAY BE SUPPORTED BY OUTLET BOXES PROVIDED THE BOXES ARE IDENTIFIED FOR SUCH USE.
11. CEILING FANS OR LIGHTS INSTALLED OUTDOORS OR UNDER PATIO COVERS MUST BE LISTED FOR DAMP LOCATION.
12. CARBON MONOXIDE ALARMS SHALL BE INSTALLED OUTSIDE OF EACH SEPARATE SLEEPING AREA AND THE IMMEDIATE VICINITY OF THE BEDROOMS IN ACCORDANCE WITH R315.3
13. SMOKE ALARMS SHALL BE INSTALLED IN EACH SLEEPING ROOM. R314.3

FIXTURE HEIGHTS

EXTERIOR GFCI OUTLETS	12" TO CL
GARAGE GFCI OUTLETS	48" TO CL
GARAGE COACH LIGHTS	84" TO CL
FRONT DOOR COACH LIGHTS	72" TO CL
DOORBELL BUTTON	@ DOOR HANDLE
DOORBELL CHIMES	84" TO CL
TYPICAL SWITCHES	48" TO CL
TYPICAL WALL OUTLETS	12" TO CL
SWITCHES AT COUNTERS	48" TO CL
WALL OUTLETS AT COUNTERS	48" TO CL
TELEPHONE OUTLET	12" TO CL
TELEVISION OUTLET	12" TO CL
WASHER/DRYER OUTLETS	48" TO CL
THERMOSTAT	54" TO CL
KITCHEN REFRIGERATOR	48" TO CL
KITCHEN RANGE/OVEN	24" TO CL
KITCHEN DISHWASHER	24" TO CL
KITCHEN WALL HUNG MICROWAVE	76" TO CL
KITCHEN HOOD FAN	66" TO CL
FOYER & STAIRWAY FIXTURE	96" TO BTM
DINING & NOOK FIXTURE	64" TO BTM
BATH VANITY FIXTURE	80" TO CL

KEYNOTES

①	200 AMP SERVICE PANEL W/ SURGE PROTECTION - LOCATE PER UTILITY CO.
②	A/C COMPRESSOR DISCONNECT - COORDINATE LOCATION w/ MECHANICAL CONTRACTOR - 30"x30" WORKSPACE
③	SCUTTLE ACCESS w/ SWITCH AND LIGHT. FORCED AIR UNIT IN ATTIC w/ 110v OUTLET. SEE TYPICAL ATTIC INSTALLATION DIAGRAM.
④	CEILING OUTLET FOR AUTOMATIC GARAGE DOOR OPENER - GFCI
⑤	DOORBELL / CHIMES - WIRE TO CONNECT
⑥	REFRIGERATOR / FREEZER
⑦	PROVIDE POWER FOR HOOD AND LIGHT
⑧	20 AMP. CIRCUIT BREAKER OUTLET - 1 LEG SWITCHED @ DISPOSAL, 1 LEG HOT @ DISHWASHER
⑨	REINFORCE J-BOX FOR CEILING FAN



UPPER LEVEL ELECTRICAL PLAN

3/16" = 1'-0"

NORTH

ELECTRICAL SYMBOLS

$	= STD. SWITCH
⦶	= STD. DUPLEX OUTLET
◐	= STD. SWITCHED OUTLET
220V	= STD. 220v. OUTLET
⊕	= STD. UNDER COUNTER OUTLET
⊡	= STD. FLOOR OUTLET
L	= LOW VOLTAGE OUTLET
▽	= COAXIAL OUTLET
▼	= CAT 5 OUTLET
◯	= RECESSED CAN LIGHT
WP	= EXT. REC. CAN - TYP.
◯	STD. HANGING LIGHT
◯	= STD. WALL MOUNT LIGHT
⊢○⊣	= FLUORESCENT LIGHT
○○○○	= MULTI-BULB LIGHT FIXTURE
◑	= EYEBALL LIGHT
✕	= CEILING FAN & LIGHT
◑	= EXHAUST FAN - 5 AIR CHANGES PER HOUR
☐	= FUSED DISCONNECT SWITCH
◯	= CONDENSER MOTOR
○○	= CHIMES
⊡	= PUSH BUTTON SWITCH
T	= TRANSFORMER
S	= 120V WIRE-IN SMOKE ALARM w/ BATTERY BACK UP
C	= COMBINATION CARBON MONOXIDE / SMOKE ALARM w/ BATTERY BACK UP

△1

DATE

1/27/2025

4/11/25 - G&D

REGISTERED ARCHITECT
CERTIFICATE NO. 31582
BRET THOMAS OVERMYER
Date Signed 4.11.25
ARIZONA, USA

Bret Overmyer

EXPIRES 9/30/2027

BT ARCHITECTURAL, LLC
8425 West El Cortez Place
Peoria, Arizona 85383
(602) 292-6350
Bret.BTA@GMAIL.COM

Sivarajan Residence

7899 East Mary Sharon Drive
Scottsdale 85266
Lone Mountain Vista Tract A - Lot 93

UPPER LEVEL ELECTRICA PLAN

CITY OF SCOTTSDALE
BUILDING PLANS
THESE PLANS HAVE BEEN APPROVED
AND ARE READY FOR A PERMIT
THIS DOES NOT AUTHORIZE VIOLATIONS OF ANY
CODE OR ORDINANCE

COS PLAN CHECK #9300-24

SHEET NO.

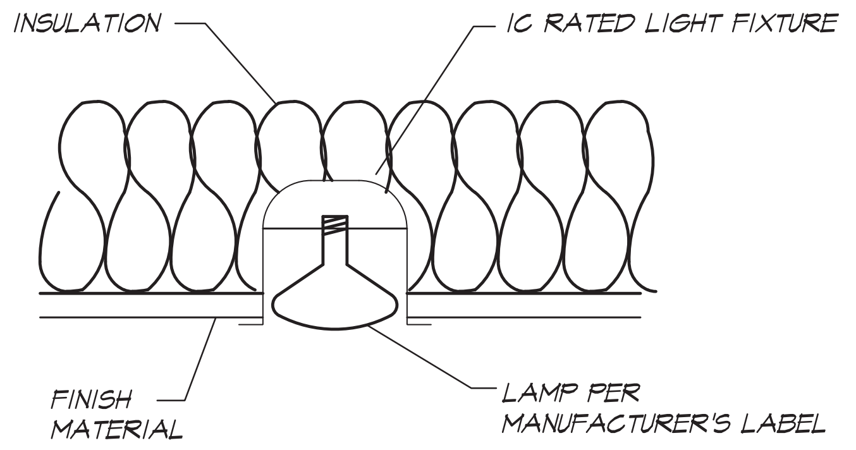
E1.1

4/16/2025 8:04 AM
C:_BTO_BTARCHITECTURAL\GMK BED\SIVARAJAN RESIDENCE\CAD

CITY OF SCOTTSDALE CODE INTERPRETATION

BUILDING SHALL BE INSULATED IN ACCORDANCE WITH THE 2015 INTERNATIONAL RESIDENTIAL CODE CHAPTER 11 AND AS AMENDED BY THE CITY ORDINANCE. THE INSULATION INTEGRITY SHALL NOT BE COMPROMISED BY LIGHT FIXTURE PENETRATIONS.

LIGHT FIXTURES COVERED WITH INSULATION SHALL BE IC RATED AND INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION INSTRUCTIONS AND THE 2014 NATIONAL ELECTRICAL CODE. NEC 110-3(b) 410-66(b).



RECESSED LIGHT FIXTURE

NOT TO SCALE

E3902.2 GARAGE AND ACCESSORY BUILDING RECEPTACLES.
ALL 125-VOLT, SINGLE-PHASE, 15- OR 20-AMPERE RECEPTACLES INSTALLED IN GARAGES AND GRADE-LEVEL PORTIONS OF UNFINISHED ACCESSORY BUILDINGS USED FOR STORAGE OR WORK AREAS SHALL HAVE GROUND-FAULT CIRCUIT-INTERRUPTER PROTECTION FOR PERSONNEL.

E3902.3 OUTDOOR RECEPTACLES.
ALL 125-VOLT, SINGLE-PHASE, 15- AND 20-AMPERE RECEPTACLES INSTALLED OUTDOORS SHALL HAVE GROUND-FAULT CIRCUIT-INTERRUPTER PROTECTION FOR PERSONNEL.

E3902.6 KITCHEN RECEPTACLES.
ALL 125-VOLT, SINGLE-PHASE, 15- AND 20- AMPERE RECEPTACLES THAT SERVE COUNTERTOP SURFACES SHALL HAVE GROUND-FAULT CIRCUIT-INTERRUPTER PROTECTION FOR PERSONNEL.

E3902.7 SINK RECEPTACLES.
ALL 125-VOLT, SINGLE-PHASE, 15- AND 20-AMPERE RECEPTACLES THAT ARE LOCATED WITHIN 6 FEET (1829 MM) OF THE OUTSIDE EDGE OF A SINK THAT IS LOCATED IN AN AREA OTHER THAN A KITCHEN, SHALL HAVE GROUND-FAULT CIRCUIT INTERRUPTER PROTECTION FOR PERSONNEL.

NOTE:
ELECTRICAL SERVICE RESERVED SPACE(U103.7)
THE MAIN ELECTRICAL SERVICE PANEL SHALL HAVE A RESERVED SPACE TO ALLOW INSTALLATION OF A DUAL POLE CIRCUIT BREAKER FOR "FUTURE SOLAR ELECTRIC" INSTALLATION AND SHALL BE LABELED AS SUCH

THE SWITCHGEAR MANUFACTURER SHALL PROVIDE A UL LISTED SERIES-RATED DISTRIBUTION SYSTEM BASED ON THE SHORT-CIRCUIT INFORMATION CONTAINED WITHIN THIS SINGLE-LINE DIAGRAM. IN LIEU OF A UL LISTED SERIES-RATED DISTRIBUTION SYSTEM THE SWITCHGEAR MANUFACTURER MAY PROVIDE A FULLY RATED SYSTEM BASED ON THE AVAILABLE UTILITY FAULT CURRENT INDICATED ON THE SINGLE-LINE DIAGRAM.

THE SERIES-RATED SYSTEM SHALL BE AS NOTED ON SINGLE-LINE DIAGRAM. MOTOR CONTRIBUTION IS LESS THAN 1% ON ALL SERIES-RA TED PANELS (U.N.O.). NO DESIGN CHANGES MAY BE MADE TO THE SYSTEM WITHOUT THE PRIOR APPROVAL OF THE ELECTRICAL DESIGN ENGINEER AND THE ELECTRICAL INSPECTOR. THE MANUFACTURER SHALL PROVIDE THE APPROPRIATE TAGS AND LABELS ON ALL SWITCHBOARDS AND PANELBOARDS AS REQUIRED PER N.E.C. ARTICLES 110 AND 240, TO IDENTIFY THIS AS A SERIES-RATED SYSTEM.

WHERE THE INTERRUPTING RATING NOTED ON PANEL SCHEDULES IS LESS THAN THE AVAILABLE FAULT CURRENT, A SERIES-RATED SYSTEM IS INTENDED. IT SHALL BE THE RESPONSIBILITY OF THE INSTALLING CONTRACTOR AND EQUIPMENT MANUFACTURER TO ENSURE THAT ALL OVERCURRENT DEVICES ARE APPLIED IN ACCORDANCE WITH THE RESPECTIVE EQUIPMENT LISTING. IF SERIES- RATED EQUIPMENT CANNOT BE PROVIDED, PANELS AND DEVICES SHALL BE RATED FOR THE AVAILABLE

SUB PANEL A

METER PANEL TYPE - SQUARE D

#	USE / LOCATION	C/B
1	MECH A/C CONDENSOR 3	2/40
3		
5	MECH A/C CONDENSOR 4	2/40
7		
9	WATER HEATER	2/30
11		
13	AIR HANDLER 3	1/20
15	AIR HANDLER 4	1/20
17	GARAGE 2 G.F.C.I.	1/20
19	GARAGE G.F.C.I.	1/20
21	GARAGE G.F.C.I.	1/20
23	GARAGE G.F.C.I.	1/20
25	SHOP G.F.C.I.	1/20
27	SHOP G.F.C.I.	1/20
29	* RESERVED (U103.7)	1/20
31	SPACE	
33	SPACE	
35	SPACE	
37	SPACE	
39	SPACE	

MAIN PANEL SCHEDULE

METER PANEL TYPE - SQUARE D SURFACE MOUNT 120/240 1Φ 3W

#	USE / LOCATION	C/B	C/B	USE / LOCATION	#
1	MECH A/C CONDENSOR 1 *	2/40	2/30	RANGE	2
3					4
5	MECH A/C CONDENSOR 2 *	2/40	2/30	DRYER	6
7					8
9	WATER HEATER	2/30	2/30	WATER HEATER	10
11					12
13	AIR HANDLER 1	1/20	1/15	BEDROOM 2 & 3 A.F.C.I.	14
15	AIR HANDLER 2	1/20	1/15	OFFICE A.F.C.I.	16
17	GREAT ROOM A.F.C.I.	1/20	1/20	AV / HALL A.F.C.I.	18
19	BEDROOM 1 A.F.C.I.	1/15	1/20	POWDER G.F.C.I.	20
21	KITCHEN G.F.C.I., A.F.C.I.	1/20	1/20	BATH 1 G.F.C.I.	22
23	KITCHEN G.F.C.I., A.F.C.I.	1/20	1/20	BATH 2 G.F.C.I.	24
25	LAUNDRY G.F.C.I., A.F.C.I.	1/20	1/20	BATH 3 G.F.C.I.	26
27	LAUNDRY G.F.C.I., A.F.C.I.	1/20	1/15	SMOKE DET A.F.C.I.	28
29	GARAGE 1 G.F.C.I.	1/20		* RESERVED (U103.7)	30
31	GARAGE EV G.F.C.I.	2/50		SPACE	32
33				SPACE	34
35	GARAGE EV G.F.C.I.	2/50		SPACE	36
37				SPACE	38
39	SPACE			SPACE	40

* VERIFY MECHANICAL EQUIPMENT REQUIREMENTS PRIOR TO INSTALLATION

PROVIDE ADDITIONAL APPLIANCE REQUIREMENTS PER OWNER'S REQUEST

LOAD CALCULATIONS

SIVARAJAN RESIDENCE	6402	SF
GENERAL LIGHTING AND RECEPTACLES (3 VA x LIVABLE S.F.)	19206	VA
2-SMALL APPLIANCE CIRCUITS	3000	VA
MICROWAVE	1500	VA
DISHWASHER	1500	VA
DISPOSER	720	VA
REFRIGERATOR	1500	VA
RANGE	12000	VA
RANGE HOOD	800	VA
ISLAND GFCI	1200	VA
BATHROOM CIRCUIT (8 @ 1500)	12000	VA
LAUNDRY	1500	VA
DRYER (2 @ 5000)	10000	VA
WASHER (2 @ 1500)	3000	VA
WATER HEATER (2 @ 4500)	9000	VA
WATER SOFTENER	1000	VA
GARAGE DOOR OPENER (4 @ 1176)	4704	VA
ELECTRIC VEHICLE (2 @ 12000)	24000	VA
EXTERIOR LIGHTINGB (2 @ 800)	1600	VA
SUBTOTAL	108230	VA
FIRST 10 KVA AT 100%	10000	VA
REMAINDER AT 40%	39292	VA
TOTAL	49292	VA
A/C UNIT 1 (3 TON)	5912	VA
A/C UNIT 2 (4 TON)	8750	VA
A/C UNIT 3 (5 TON)	9874	VA
A/C UNIT 3 (4 TON)	8715	VA
TOTAL HVAC	24536	VA
PANEL TOTAL	73828	VA
AT 120/240V, 1Φ, 3W	308	AMP

NOTES

1. ELECTRICAL PLAN DESIGNATES SCHEMATIC LAYOUT ONLY. ALL ELECTRICAL ELEMENTS TO BE VERIFIED BY BUILDER PRIOR TO START OF CONSTRUCTION.
2. ALL SMOKE DETECTORS SHALL BE INTERCONNECTED WITH A POWER SOURCE AND HAVE A BATTERY BACKUP.
3. ALL BRANCH CIRCUITS THAT SUPPLY 125 VOLT, SINGLE-PHASE, 15 AND 20 AMP OUTLETS INSTALLED IN ALL LIVABLE AREAS, KITCHENS, FAMILY ROOMS, DINING ROOMS, LIVING ROOMS, PARLORS, LIBRARIES, DENS, BEDROOMS, SUN-ROOMS, RECREATIONS ROOMS, CLOSETS, HALLWAYS, LAUNDRY AREAS AND SIMILAR ROOMS OR AREAS SHALL BE ON AN ARC-FAULT CIRCUIT INTERRUPTER INSTALLED FOR PROTECTION OF THE BRANCH CIRCUIT. (E3902.16)
4. ALL RECEPTACLES THAT SUPPLY 125 VOLT, SINGLE-
5. PHASE, 15 AND 20 AMP OUTLETS INSTALLED IN ALL LIVABLE AREAS SHALL BE TAMPER-RESISTANT, EXCEPT FOR RECEPTACLES LOCATED 5'-6" ABOVE FINISH FLOOR, PART OF A LUMINAR OR APPLIANCE AND SINGLE RECEPTACLES USED SOLELY FOR A DEDICATED APPLIANCE.
6. SURFACE MOUNTED INCANDESCENT LIGHT FIXTURES IN CLOTHES CLOSET SHALL MAINTAIN 12" BETWEEN FIXTURE & THE NEAREST POINT OF STORAGE.
7. BATHROOM OUTLETS TO BE A MIN. OF 20 AMP BRANCH CIRCUIT w/ NO OTHER OUTLETS.
8. OVEN/RANGE AND ELECT. DRYER SHALL BE SUPPLIED BY 4-WIRE RECEPTACLE.
9. ALL RECEPTACLE AND FIXTURE BOXES IN THE GARAGE SHALL BE OF METAL OR MATERIAL TESTED FOR FIRE RESISTIVE ASSEMBLIES AND INSTALLED IN ACCORDANCE WITH THE TESTED ASSEMBLY.
10. ALL PRE-WIRED, CEILING-MOUNTED OUTLET BOXES SHALL BE LISTED TO SUPPORT A CEILING FAN, WHERE ACCEPTABLE. CEILING FANS NOT EXCEEDING 70 POUNDS (WITH OR WITHOUT ACCESSORIES) MAY BE SUPPORTED BY OUTLET BOXES PROVIDED THE BOXES ARE IDENTIFIED FOR SUCH USE.
11. CEILING FANS OR LIGHTS INSTALLED OUTDOORS OR UNDER PATIO COVERS MUST BE LISTED FOR DAMP LOCATION.
12. CARBON MONOXIDE ALARMS SHALL BE INSTALLED OUTSIDE OF EACH SEPARATE SLEEPING AREA AND THE IMMEDIATE VICINITY OF THE BEDROOMS IN ACCORDANCE WITH R315.3
13. SMOKE ALARMS SHALL BE INSTALLED IN EACH SLEEPING ROOM. R314.3

FIXTURE HEIGHTS

EXTERIOR GFCI OUTLETS	12" TO CL
GARAGE GFCI OUTLETS	48" TO CL
GARAGE COACH LIGHTS	84" TO CL
FRONT DOOR COACH LIGHTS	72" TO CL
DOORBELL BUTTON	@ DOOR HANDLE
DOORBELL CHIMES	84" TO CL
TYPICAL SWITCHES	48" TO CL
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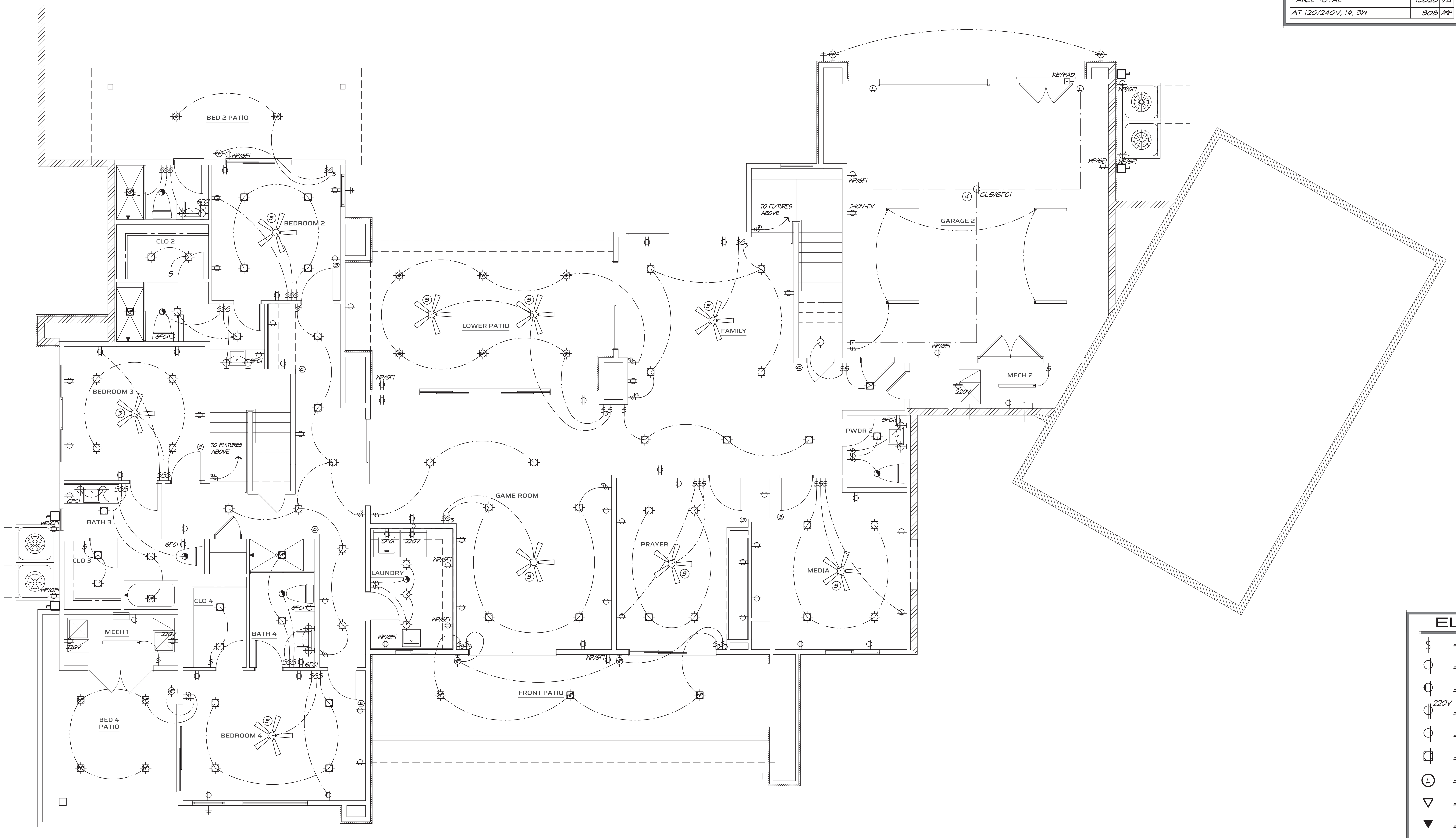
KEYNOTES

①	200 AMP SERVICE PANEL W/ SURGE PROTECTION - LOCATE PER UTILITY CO.
②	A/C COMPRESSOR DISCONNECT - COORDINATE LOCATION w/ MECHANICAL CONTRACTOR - 30"x30" WORKSPACE
③	SCUTTLE ACCESS w/ SWITCH AND LIGHT. FORCED AIR UNIT IN ATTIC w/ 110v OUTLET. SEE TYPICAL ATTIC INSTALLATION DIAGRAM.
④	CEILING OUTLET FOR AUTOMATIC GARAGE DOOR OPENER - GFCI
⑤	DOORBELL / CHIMES - WIRE TO CONNECT
⑥	REFRIGERATOR / FREEZER
⑦	PROVIDE POWER FOR HOOD AND LIGHT
⑧	20 AMP. CIRCUIT BREAKER OUTLET - 1 LEG SWITCHED @ DISPOSAL, 1 LEG HOT @ DISHWASHER
⑨	REINFORCE J-BOX FOR CEILING FAN



LOWER LEVEL ELECTRICAL PLAN

3/16" = 1'-0"

NORTH

ELECTRICAL SYMBOLS

- $ = STD. SWITCH
- = STD. DUPLEX OUTLET
- = STD. SWITCHED OUTLET
- 220V = STD. 220v. OUTLET
- = STD. UNDER COUNTER OUTLET
- = STD. FLOOR OUTLET
- Ⓛ = LOW VOLTAGE OUTLET
- ▽ = COAXIAL OUTLET
- ▼ = CAT 5 OUTLET
- = RECESSED CAN LIGHT
- WP = EXT. REC. CAN - TYP.
- STD. HANGING LIGHT
- = STD. WALL MOUNT LIGHT
- = FLUORESCENT LIGHT
- = MULTI-BULB LIGHT FIXTURE
- ◑ = EYEBALL LIGHT
- = CEILING FAN & LIGHT
- = EXHAUST FAN - 5 AIR CHANGES PER HOUR
- = FUSED DISCONNECT SWITCH
- = CONDENSER MOTOR
- = CHIMES
- = PUSH BUTTON SWITCH
- T = TRANSFORMER
- S = 120V WIRE-IN SMOKE ALARM w/ BATTERY BACK UP
- C = COMBINATION CARBON MONOXIDE / SMOKE ALARM w/ BATTERY BACK UP

1

DATE

1/27/2025

4/11/25 - G&D

REGISTERED ARCHITECT
CERTIFICATE NO. 31582
BRET THOMAS OVERMYER
Date Signed 4.11.25
ARIZONA, USA

Bret Overmyer

EXPIRES 9/30/2027

BT ARCHITECTURAL, LLC
8425 West El Cortez Place
Peoria, Arizona 85383
(602) 292-6350
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Sivarajan Residence

7899 East Mary Sharon Drive
Scottsdale 85266
Lone Mountain Vista Tract A - Lot 93

LOWER LEVEL ELECTRICA PLAN

CITY OF SCOTTSDALE
BUILDING PLANS
THESE PLANS HAVE BEEN APPROVED
AND ARE READY FOR A PERMIT
THIS DOES NOT AUTHORIZE VIOLATIONS OF ANY
CODE OR ORDINANCE

COS PLAN CHECK #9300-24

SHEET NO.

E1.2

MECHANICAL NOTES

1. ADJUST CFM FOR DIFFUSERS BASED ON CAPACITY OF UNIT.
2. UNDERCUT ALL DOORS 1".
3. CLOTHES DRYER IS TO BE PROVIDED WITH AN EXHAUST DUCT 4" MIN. AND NOT TO EXCEED 35 FT. IN LENGTH. THE MAXIMUM LENGTH ALLOWED IS REDUCED BY 2.5 FT. FOR EACH 45-DEGREE BEND AND 5 FT. FOR EACH 90-DEGREE BEND. TERMNATE TO OUTSIDE OF BUILDING WITH A BACKDRAFT DAMPER. NO SCREENS. DUCTS SHALL BE MECHANICALLY FASTENED. SCREWS OR SIMILAR FASTENERS SHALL NOT PROTRUDE MORE THAN 1 EIGHT INCH INTO INSIDE OF THE DUCT. 2" OVER-SIZE NAIL PLATES. SEE IRC SECTION M1502 FOR DETAILS AND EXCEPTIONS.

DUCTWORK

1. DUCTWORK SHALL BE GALVANIZED, PRIME-GRADE, DUCTWORK SHALL BE GALVANIZED, PRIME-GRADE, LOCK-FORMING QUALITY STEEL (LFQ) HAVING A GALVANIZED COATING OF 1-3/4 OUNCES TOTAL FOR BOTH SIDES OF ONE SQUARE FOOT OF A SHEET.
2. ALL ROUND DUCT BRANCH TAKEOFFS SHALL BE ALL ROUND DUCT BRANCH TAKEOFFS SHALL BE PROVIDED WITH SPIN-IN COLLAR AND BALANCING DAMPER.
3. ALL DUCTS SHALL BE SUBSTANTIALLY SUPPORTED ALL DUCTS SHALL BE SUBSTANTIALLY SUPPORTED WITH HANGERS TO THE STRUCTURE OR OTHERWISE DEPENDING ON LOCATION CONDITIONS, PLACING SUPPORTS NOT OVER 8 FEET APART ALONG THE LENGTH OF THE DUCT. HANGERS SHALL CONFORM TO ALL APPLICABLE MECHANICAL CODES AND SMACNA REQUIREMENTS.
4. FLEXIBLE ROUND DUCTS TO OUTLETS SHALL BE FLEXIBLE ROUND DUCTS TO OUTLETS SHALL BE THERMALFLEX TYPE MKE, A MAXIMUM LENGTH OF 8'-0" LONG (AND ALLOWED ONLY WHERE INDICATED ON THE DRAWINGS).

GRILLES, REGISTERS AND DIFFUSERS

1. FURNISH AND INSTALL ALL GRILLES, REGISTERS, FURNISH AND INSTALL ALL GRILLES, REGISTERS, CEILING DIFFUSERS AND DOOR GRILLES WHERE INDICATED. THEY SHALL BE OF SIZE CALLED FOR ON THE DRAWINGS.
2. ALL GRILLES, REGISTERS, AND CEILING DIFFUSERS ALL GRILLES, REGISTERS, AND CEILING DIFFUSERS MUST BE SET FLUSH AND TRUE TO WALL OR CEILING TO PREVENT AIR LEAKAGE AROUND EDGES. ALL UNITS SHALL BE PROVIDED WITH NEOPRENE GASKETING AROUND THE INSIDE OF THE FRAME AND BALANCING DAMPERS
3. ALL UNITS SHALL BE FACTORY FINISHED, OF COLOR ALL UNITS SHALL BE FACTORY FINISHED, OF COLOR SELECTED BY THE ARCHITECT, OR AS OTHERWISE INDICATED.

GENERAL

1. THE DETAILS SHOWN ON THESE DOCUMENTS ARE THE DETAILS SHOWN ON THESE DOCUMENTS ARE TYPICAL. ALL DUCT, PIPE, AND EQUIPMENT CONNECTIONS AND/OR ASSEMBLIES SHALL BE PER THE SPECIFIED DETAIL. TYPICAL DETAILS INDICATE MINIMUM REQUIREMENTS. WHERE CODE AND/OR MANUFACTURER'S REQUIREMENTS ARE MORE STRINGENT THOSE REQUIREMENTS SHALL APPLY.
2. REFER TO ARCHITECTURAL DRAWINGS (REFLECTED CEILING PLAN) FOR EXACT LOCATION OF THE DIFFUSERS AND GRILLS. MATCH FRAME TYPE WITH CEILING.
3. ALL WORK SHALL COMPLY WITH CONSTRUCTION DOCUMENTS, AND 2018 IMC OR MECHANICAL CHAPTERS OF 2018 IRC.
4. PROVIDE DUCT HANGER AT EACH JOINT AND/OR A MAXIMUM 4 FEET ON CENTER.
5. SUPPORT ALL DUCTWORK, PIPING, AND OTHER MECHANICAL EQUIPMENT FROM THE STRUCTURE.
6. FLEX DUCT SHALL BE "ATCO SERIES 30". INSTALL FLEX FLEX DUCT SHALL BE "ATCO SERIES 30". INSTALL FLEX DUCT IN ACCORDANCE TO MANUFACTURE'S INSTALLATION INSTRUCTION WITHOUT ANY TURNS AND PER CONTRACT DOCUMENT. HANG FLEX DUCT FROM THE STRUCTURE USE 20 GAUGE 1-1/8" STRAP AND SADDLE.
7. ALL REFRIGERANT PIPING SHALL BE SIZED, INSTALLED A PER MANUFACTURER'S INSTALLATION INSTRUCTIONS.
8. PROVIDE FLASHING FOR REFRIGERANT PIPING PENETRATION THROUGH THE ROOF OR WALL.
9. PROVIDE FLEX CONNECTION AT SUPPLY DISCHARGE OF THE UNITS.
10. FILTERS SHALL BE "FARR" 2" 30/30 AT MAXIMUM 350 FEET PER MINUTE FACE VELOCITY. PROVIDE WEATHER PROOF FRAME AND ACCESS DOOR.
11. CONTRACTOR SHALL PROVIDE TWO YEAR WARRANTY FOR ALL PARTS AND LABOR.

NOTES:

1. 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 WITHING 6 FEET OF THE EXHAUST DUCT CONNECTION.
2. DUCT SEALING - EITHER A POST CONSTRUCTION DUCT LEAKAGE TEST OR A ROUGH-IN DUCT LEAKAGE TEST SHALL BE PERFORMED AND REQUIRED.
3. AIR LEAKAGE - BUILDING ENVELOPE IS REQUIRE TO BE SEALED AT ALL THE COMPONENTS THAT MAKE UP THE THERMAL ENVELOPE
4. ROOF BATT INSULATION - R-38 IS THE DEFAULT MINIMUM. R-30 MAY BE USED AS AN EXCEPTION IF SHOW COMPLIANCE. TRUSS HEEL HEIGHT SHALL ALLOW FULL UNCOMPRESSED INSULATION TO COVER THE FULL TOP PLATE.
5. CLOTHES DRYER - INDICATE THAT A PERMANENT LABEL SHALL BE INSTALLED WITHIN 6' FT OF THE DRYER INLET STATING THE SIZE AND DEVELOPMENT LENGTH WHEN THE DUCT IS CONCEALED WITHIN THE CONSTRUCTION MAXIMUM LENGTH 35 Ft OR MANUFACTURER LISTED INSTRUCTIONS.

M1507.3.3(1)CONTINUOUS WHOLE HOUSE MECHANICAL VENTILATION SYSTEM AIRFLOW RATE REQUIREMENTS

DWELLING UNIT FLOOR AREA	NUMBER OF BEDROOMS				
	1	2-3	4-5	6-7	7+
	AIRFLOW IN CFM				
< 1500 SF	30	45	60	75	90
1501-3000 SF	45	60	75	90	105
3001-4500 SF	60	75	90	105	120
4501-6000 SF	75	90	105	120	135
6001-7500 SF	90	105	120	135	150
7501+	105	120	135	150	165

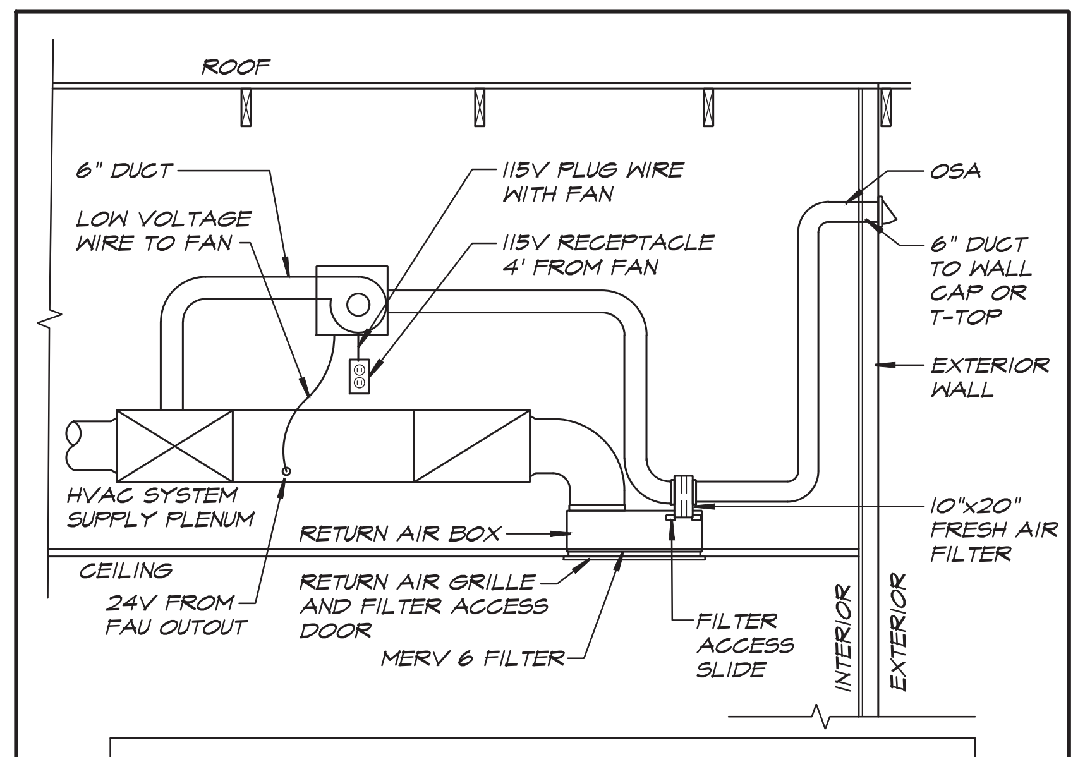
IECC R403.5.1 MECHANICAL VENTILATION SYSTEM FAN EFFICIENCY

FAN LOCATION	AIRFLOW MINIMUM (CFM)	MAXIMUM EFFICIENCY (CFM/WATT)	AIRFLOW RATE MAX (CFM)
RANGE HOOD	ANY	2.8	ANY
IN-LINE FAN	ANY	2.8	ANY
BATH / LAUNDRY	10	1.4	< 90
BATH / LAUNDRY	90	2.8	ANY

EXHAUST FAN

EF-1	50 CFM	5" VTR
EF-2	80 CFM	5"/6" VTR
EF-3	110 CFM	6" VTR
EF-4	150 CFM	6" VTR

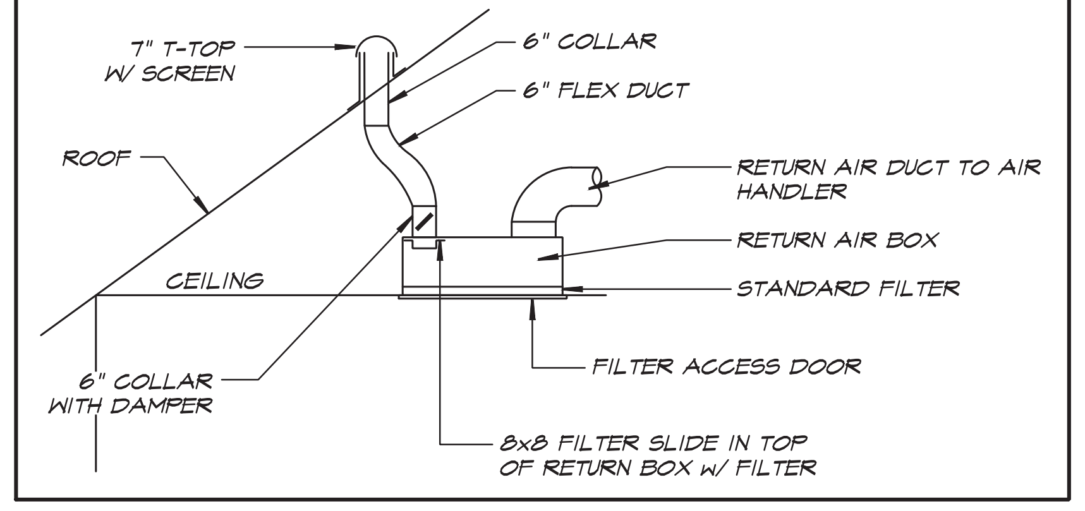
RIGHT-SIZING OF AN HVAC SYSTEM IS THE SELECTION OF EQUIPMENT AND THE DESIGN OF THE AIR DISTRIBUTION SYSTEM TO MEET THE ACCURATE PREDICTED HEATING AND COOLING LOADS OF THE HOUSE. EQUIPMENT SELECTION ARE ALL TAKEN FROM THE INPUTS USED IN THE MANUAL J, D & S PROCEDURE. REFER TO MANUAL J, D & S HVAC LOAD CALCULATION REPORT, FOR SYSTEM LOAD SUMMARY AND EQUIPMENT DATA AND MANUAL D DUCT SIZE GRID FOR ROOM CFM FLOWS.



BROAN SUPPLY AIR FAN

MODEL	CFM	SONE	DUCT	CFM/WATT	SQ. FT.
APRILAIR 8140NF	130	1.5	6"	.66	<5000

OUTSIDE AIR INTAKE



NOTES

1. THE DWELLING MUST BE PROVIDED WITH HEATING CAPABLE OF MAINTAINING ROOM TEMPERATURE OF 70° AT A POINT 3'-0" ABOVE FINISHED FLOOR - I.M.C. & I.R.C..
2. FOR GAS APPLIANCES & FIXTURES PROVIDE COMBUSTION AIR & VENTILATION AIR PER I.M.C. & I.R.C.
3. THE PASSAGEWAY OF DRYER EXHAUST DUCTS TERMINALS SHALL BE UNDIMINISHED IN SIZE AND SHALL PROVIDE AN OPEN AREA OF NOT LESS THAN 12.5 SQUARE INCHES (NOTE TEE-TOPS ARE NO LONGER PERMITTED DRYER DUCTS MUST BE INSTALLED IN WALL CAVITIES THAT ARE NOT LESS THAN 4") M1502.3
4. PROVIDE BACK DRAFT DAMPERS ON THE DRYER EXHAUST VENTS PER M1502.3

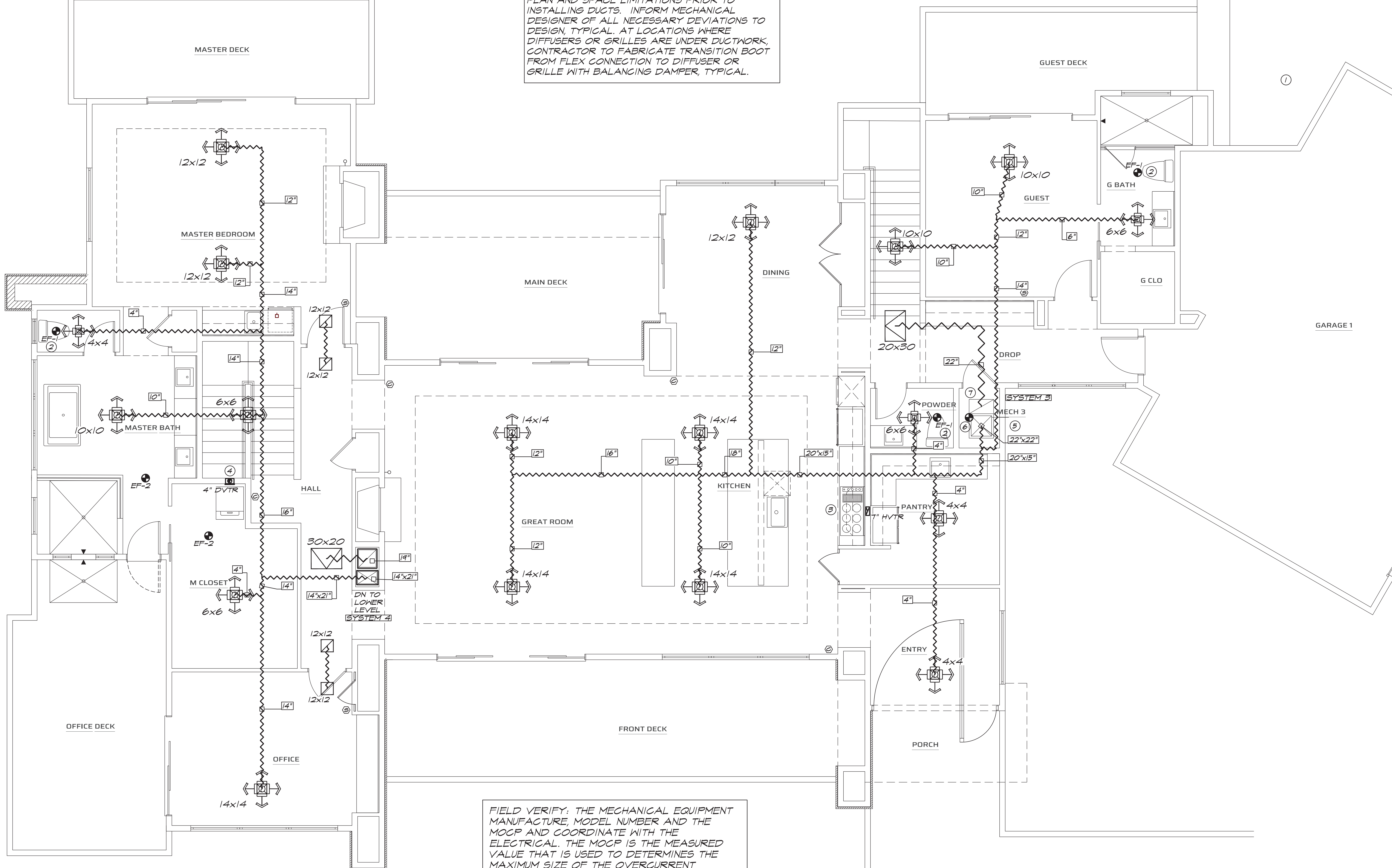
NOTE:
TO COMPLY WITH THE CODE REQUIREMENT THAT DRYER EXHAUST VENTS NOT EXCEED A FIXED LENGTH, THE BUILDER MUST AFFIX A WARNING LABEL THAT APPRISES THE HOME OWNER OF THE RESPONSIBILITY TO INSTALL AN APPLIANCE THAT DOES NOT CREATE A HAZARD. THIS WARNING IS TO BE PERMANATELY ATTACHED TO THE WALL IN AN AREA WITHIN 6 FEET FROM WHERE THE DRYER WILL BE LOCATED AND SHOULD BE VISIBLE TO THE PURCHASER DURING AN INSPECTION / WALK-THROUGH. THE TAG SHOULD READ AS FOLLOWS:

WARNING
DO NOT REMOVE
TO AVOID THE RISK OF FIRE CAUSED BY LINT BUILD-UP IN THE EXHAUST DUCT, ALL DOMESTIC DRYERS INSTALLED AT THIS LOCATION SHALL BE MANUFACTURER APPROVED (UL LISTED) FOR CONNECTION TO AN EXHAUST DUCT THAT IS
☐ WITH ☐
FEET OR GREATER ELBOWS

KEYNOTES

①	OUTDOOR CONDENSING UNIT MOUNTED ON CONCRETE EQUIPMENT PAD 4" MIN. ABOVE FINISH GRADE
②	ROUTE EXHAUST DUCT UP THRU ROOF TO AN APPROVED ROOF CAP
③	ROUTE 6"Φ KITCHEN EXHAUST DUCT UP THRU ROOF TO AN APPROVED ROOF CAP KITCHEN EXHAUST HOOD IS RESIDENTIAL TYPE WITH LESS THAN 400 CFM PER IRC SECTION M1503.4. MAKEUP AIR IS NOT REQUIRED
④	ROUTE DRYER 4"Φ EXHAUST DUCT UP THRU ROOF TO AN APPROVED ROOF CAP. INDICATE THAT A PERMANENT LABEL SHALL BE INSTALLED WITHIN 6' OF THE DRYER INLET STATING THE SIZE AND DEVELOPMENT LENGTH WHEN THE DUCT IS CONCEALED WITHIN THE CONSTRUCTION IA A MAXIMUM LENGTH OF 35' OR MANUFACTURER LISTED INSTRUCTIONS PER IRC M1502-41 & IRC MA502-4
⑤	3/4" CONDENSATE DRAIN FROM FAN COIL UNIT ROUTE TO EXTERIOR WALL AND DOWN TO SPILL OUTSIDE AT APPROXIMATELY 6" ABOVE FINISH GRADE
⑥	PROVIDE 4"Φ OUTSIDE AIR DUCT UP THRU ROOF TO ROOF CAP BALANCED TO PROVIDE 50 CFM
⑦	MOUNT VERTICAL FAN ON TOP OF A MIN. 18" STAND. PROVIDE ACOUSTICAL BAFFLE LINED WITH MINIMUM R8 ACOUSTICAL LINER. MOUNT UNIT PER MANUFACTURER'S REQUIREMENTS. ROUTE 3/4" UNIT CONDENSATE DRAIN PIPE THRU EXTERIOR WALL TO DAYLIGHT TO 6" ABOVE FINISH GRADE. PROVIDE MINIMUM 1/8" PER FOOT SLOPE FOR DRAIN LINE AND IN ACCORDANCE WITH IRC REQUIREMENTS. MAINTAIN MANUFACTURER'S RECOMMENDED CLEARANCES TO COMBUSTABLES

VERIFY ALL DUCT ROUTING WITH MECHANICAL PLAN AND SPACE LIMITATIONS PRIOR TO INSTALLING DUCTS. INFORM MECHANICAL DESIGNER OF ALL NECESSARY DEVIATIONS TO DESIGN, TYPICAL. AT LOCATIONS WHERE DIFFUSERS OR GRILLES ARE UNDER DUCTWORK, CONTRACTOR TO FABRICATE TRANSITION BOOT FROM FLEX CONNECTION TO DIFFUSER OR GRILLE WITH BALANCING DAMPER, TYPICAL.



FIELD VERIFY: THE MECHANICAL EQUIPMENT MANUFACTURE, MODEL NUMBER AND THE MOCP AND COORDINATE WITH THE ELECTRICAL. THE MOCP IS THE MEASURED VALUE THAT IS USED TO DETERMINES THE MAXIMUM SIZE OF THE OVERCURRENT PROTECTION DEVICES SUCH AS CIRCUIT BREAKER OR FUSE THAT IS USED TO PROTECT THE WIRE AND EQUIPMENT UNDER FAULT CONDITIONS. 2017 NEC ARTICLES 240 & 440. THIS IS REQUIRED TO COORDINATE ALSO AT THE ELECTRICAL PANEL.

UPPER LEVEL MECHANICAL PLAN

3/16" = 1'-0"

NORTH

MANUAL J CALCULATIONS

SIVARAJAN RESIDENCE		
	COOLING LOAD	HEATING LOAD
SENSIBLE:	163493	
LATENT:	2999	
TOTALS:	166492	91719

EQUIPMENT

1	2.8 TON AIR SOURCE HEAT PUMP OUTDOOR MODEL: 14HPX-036-230-19 NDOOR MODEL: C33-48+TDR+TXV AHRI REFERENCE: 7044592 HEATING EFFICIENCY: 8.2 HSPF	LENOX MERIT 14HPX SERIES SEER: 15
2	4 TON AIR SOURCE HEAT PUMP OUTDOOR MODEL: 14HPX-048-230-19 INDOOR MODEL: CHB3-62D+TDR+TXV AHRI REFERENCE: 7045193 HEATING EFFICIENCY: 8.7 HSPF	LENOX MERIT 14HPX SERIES SEER: 14.7
3	5 TON AIR SOURCE HEAT PUMP OUTDOOR MODEL: 14HPX-060-230-21 INDOOR MODEL: CX34-62C+TDR AHRI REFERENCE: 9140520 HEATING EFFICIENCY: 8.7 HSPF	LENOX MERIT 14HPX SERIES SEER: 15
4	3.7 TON AIR SOURCE HEAT PUMP OUTDOOR MODEL: 14HPX-042-230-21 INDOOR MODEL: CH34-49+TDR AHRI REFERENCE: 9140576 HEATING EFFICIENCY: 8.5 HSPF	LENOX MERIT 14HPX SERIES SEER: 14.7

HOODS: ROUGH-IN	REGISTERS: RRAC 800-20/150	
FLEX: R-6	GRILLS: RRAC 50GH-5FF	
EF-1=50CFM, EF-2=80CFM, EF-3=110CFM, EF-4=150CFM		
DESIGN CONDITIONS	WINTER	SUMMER
OUTSIDE TEMPERATURE	34DB	108DB-71WB
INSIDE TEMPERATURE	74DB	75DB-63WB
LOAD CALCULATED IN ACCORDANCE WITH AIR CONDITIONING CONTRACTORS OF AMERICA MANUAL J 8TH EDITION		

DATE
1/27/2025
4/11/25 - G&D

31582
BRET THOMAS OVERMYER
Date Signed 4.11.25
Bret Overmyer
EXPIRES 9/30/2027

BT ARCHITECTURAL, LLC
8425 West El Cortez Place
Peoria, Arizona 85383
(602) 292-6350
Bret.BTA@GMAIL.COM

33483
ROBERT OTTO FLORI
Date Signed 4/11/2025
EXPIRES 3/31/2026
MECHANICAL ONLY

Sivarajan Residence

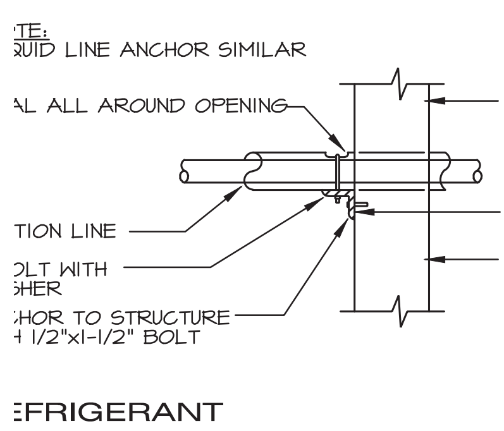
7899 East Mary Sharon Drive
Scottsdale 85266
Lone Mountain Vista Tract A - Lot 93

UPPER LEVEL MECHANIC PLAN

CITY OF SCOTTSDALE
BUILDING PLANS
THESE PLANS HAVE BEEN APPROVED
AND ARE READY FOR A PERMIT
THIS DOES NOT AUTHORIZE VIOLATION OF ANY
CODE OR ORDINANCE

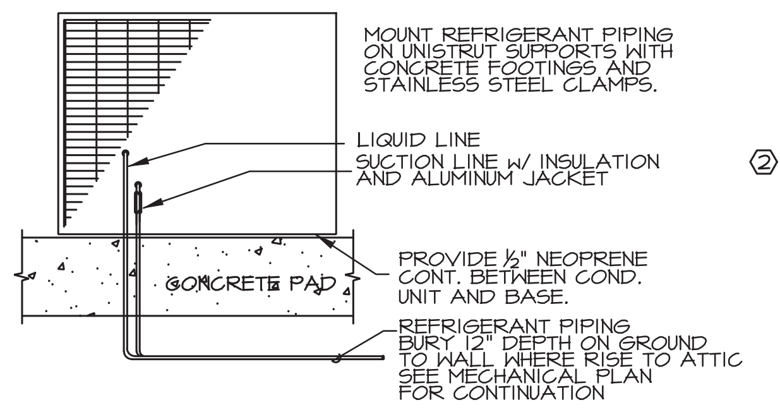
COS PLAN CHECK #9300-24

SHEET NO.
M1.1



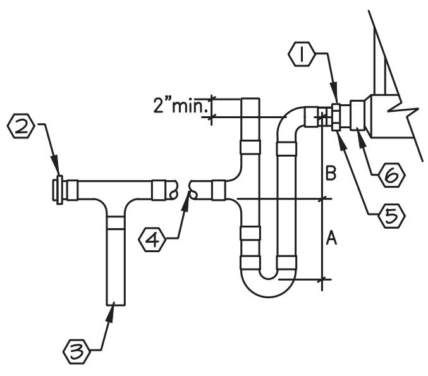
TE:
UID LINE ANCHOR SIMILAR
AL ALL AROUND OPENING
16 GAUGE GALV. SLEEVE
TION LINE
< 2"x2"x3/16"
OLT WITH
SHER
WALL
HOR TO STRUCTURE
1/2"x1-1/2" BOLT

EFRIGERANT
RE-ANCHOR THRU WALL



MOUNT REFRIGERANT PIPING ON UNISTRUT SUPPORTS WITH CONCRETE FOOTINGS AND STAINLESS STEEL CLAMPS.
LIQUID LINE
SUCTION LINE W/ INSULATION AND ALUMINUM JACKET
CONCRETE PAD
PROVIDE ½" NEOPRENE CONT. BETWEEN COND. UNIT AND BASE.
REFRIGERANT PIPING BURY 12" DEPTH ON GROUND TO WALL WHERE RISE TO ATTIC SEE MECHANICAL PLAN FOR CONTINUATION

OUTDOOR CONDENSING
UNIT ON CONCRETE CURB

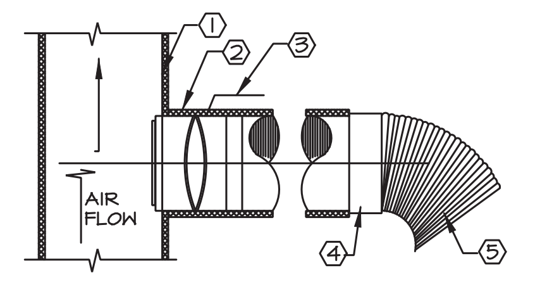


1
2
2"min.
B
A
6
5
4
3

⬡ KEYNOTES
1. DRAIN LINE SHALL BE AT LEAST THE THE SAME SIZE AS THE NIPPLE ON THE DRAIN PAN.
2. PROVIDE CAPPED TEE (WITH SCREWED CAP) AT END AND AT EACH CHANGE OF DIRECTION FOR USE AS CLEAN OUT.
3. SEE PLANS FOR TERMINATION/ CONTINUATION.
4. PITCH DOWN TOWARD DRAIN AT MIN. 1/8" PER FOOT SLOPE.
5. UNION.
6. DRAIN PAN:
A = MIN. 2".
B = 1.5 x S.P.

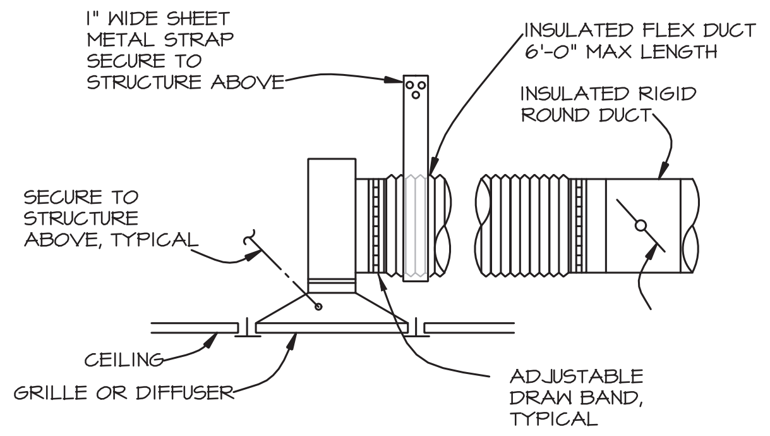
CONDENSATE TRAP DRAIN

⬡ KEYNOTES
1. DUCT INSTALLATION TYPICAL.
2. "SPIN-IN" FITTING & VOLUME DAMPER WITH LOCKING QUADRANT. DAMPER SHAFT PARALLEL TO MAIN FLOW.
3. EXTEND HANDLE ABOVE INSULATION.
4. DRAW BAND
5. ACOUSTICAL FLEXIBLE DUCT TO DIFUSSER MAX 4" STRAIGHT WITHOUT ANY TURN



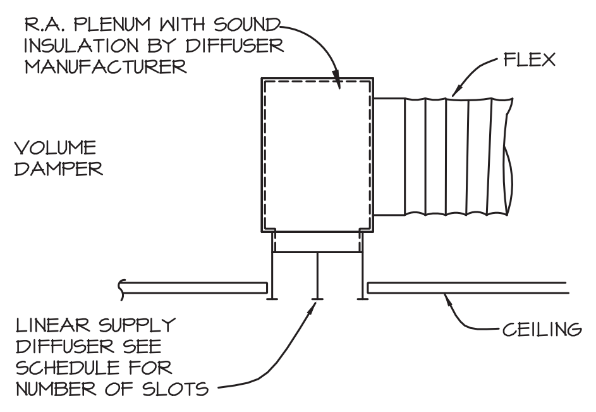
1
2
3
AIR FLOW
4
5

FLEXIBLE DUCT TAKE-OFF



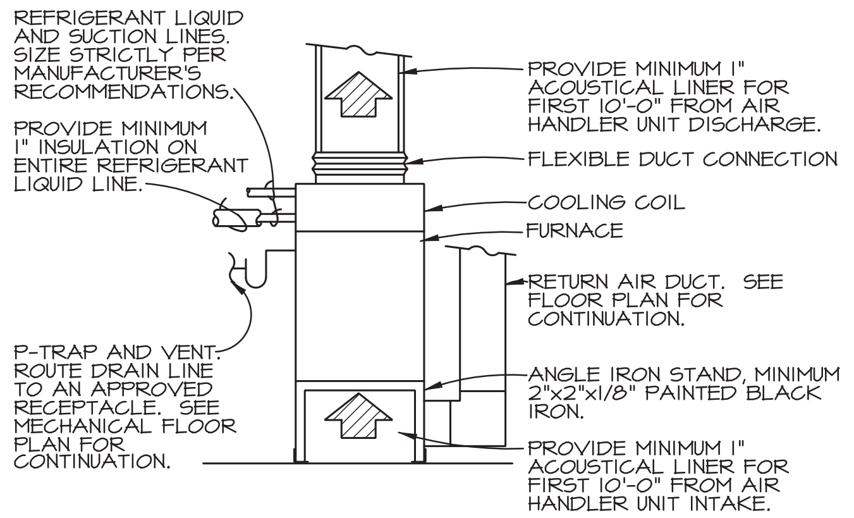
1" WIDE SHEET METAL STRAP SECURE TO STRUCTURE ABOVE
INSULATED FLEX DUCT 6'-0" MAX LENGTH
INSULATED RIGID ROUND DUCT
SECURE TO STRUCTURE ABOVE, TYPICAL
CEILING
GRILLE OR DIFFUSER
ADJUSTABLE DRAW BAND, TYPICAL

LINEAR DIFFUSER / PLENUM



R.A. PLENUM WITH SOUND INSULATION BY DIFFUSER MANUFACTURER
FLEX
VOLUME DAMPER
LINEAR SUPPLY DIFFUSER SEE SCHEDULE FOR NUMBER OF SLOTS
CEILING

LINEAR DIFFUSER / PLENUM



REFRIGERANT LIQUID AND SUCTION LINES. SIZE STRICTLY PER MANUFACTURER'S RECOMMENDATIONS.
PROVIDE MINIMUM 1" INSULATION ON ENTIRE REFRIGERANT LIQUID LINE.
P-TRAP AND VENT. ROUTE DRAIN LINE TO AN APPROVED RECEPTACLE. SEE MECHANICAL FLOOR PLAN FOR CONTINUATION.
PROVIDE MINIMUM 1" ACOUSTICAL LINER FOR FIRST 10'-0" FROM AIR HANDLER UNIT DISCHARGE.
FLEXIBLE DUCT CONNECTION
COOLING COIL
FURNACE
RETURN AIR DUCT. SEE FLOOR PLAN FOR CONTINUATION.
ANGLE IRON STAND, MINIMUM 2"x2"x1/8" PAINTED BLACK IRON.
PROVIDE MINIMUM 1" ACOUSTICAL LINER FOR FIRST 10'-0" FROM AIR HANDLER UNIT INTAKE.

FAN COIL UNIT MOUNTING DETAIL

2018 IECC COMPLIANCE NOTES

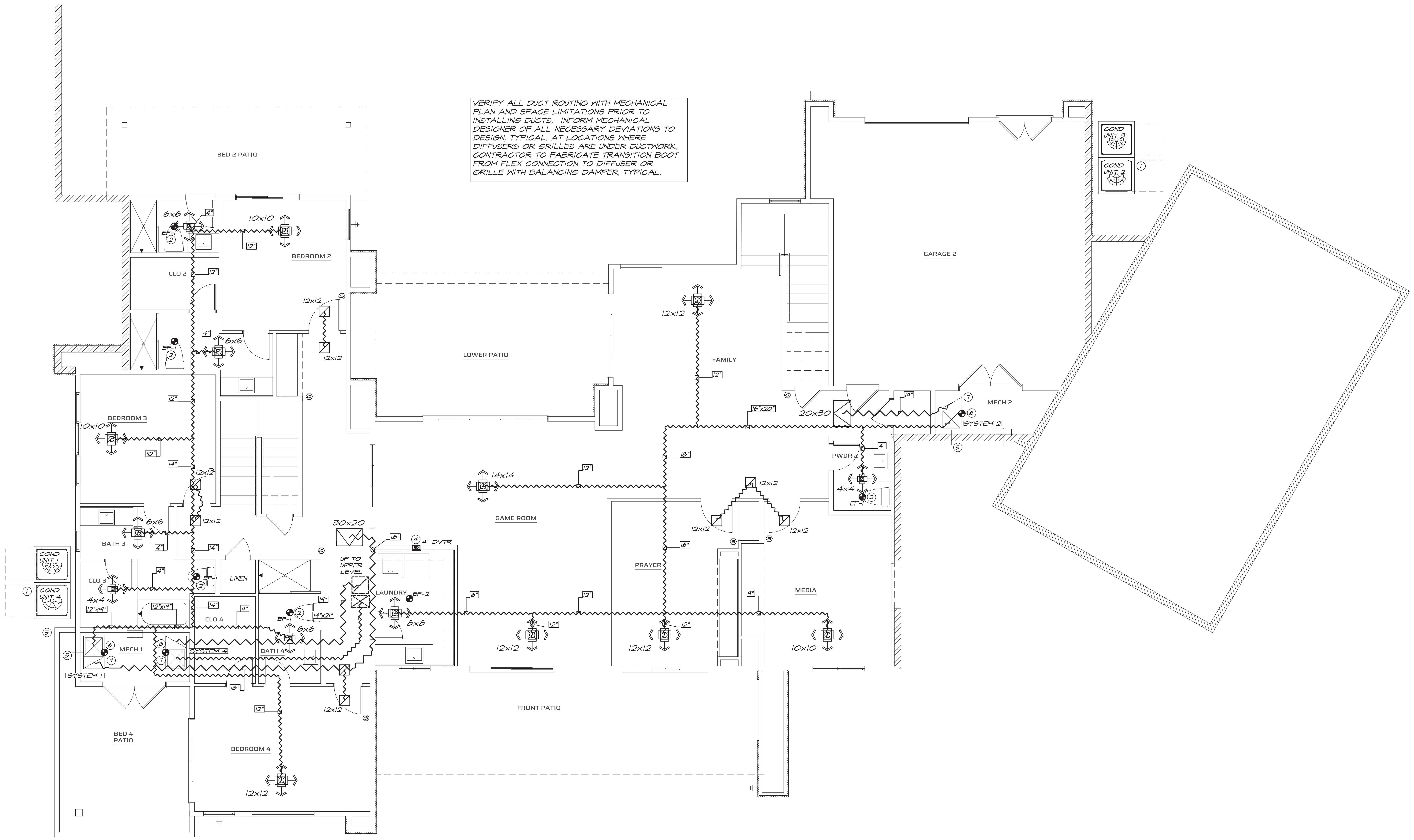
.1 PER 2018 IRC SECTION N1103.1.1 (R403.1.10) PROVIDE AUTOMATIC CHANGEOVER 7-DAY PROGRAMMABLE THERMOSTATS FOR EACH ZONE WITH A 2-HOUR OCCUPANT OVERRIDE, INTELLIGENT RECOVERY, AND 10-HOUR MINIMUM BATTERY BACKUP. PROGRAM SETBACK TEMPERATURES TO 85°F(COOL) AND 55°F(HEAT). THERMOSTATS USED TO CONTROL BOTH HEATING AND COOLING, SHALL PROVIDE A SETPOINT OVERLAP RESTRICTION SUCH AS A DEADBAND OF AT LEAST 5°F. THE THERMOSTAT SHALL INITIALLY BE PROGRAMMED WITH A HEATING TEMPERATURE SETPOINT NO HIGHER THEN 70°F(21°C) AND COOLING TEMPERATURE SETPOINT NO LOWER THEN 78°F(26°C). ALL TEMPERATURE CONTROLS ARE TO BE TESTED, ADJUSTED, AND CALIBRATED FOR PROPER OPERATION. MOUNT ALL THERMOSTATS AND TEMPERATURE SENSORS AS INDICATED ON THE DRAWINGS. COORDINATE EXACT LOCATION WITH THE OWNER. PROVIDE LOCKING COVER AS REQUIRED BY OWNER. MOUNT BETWEEN 48"-54" AFF.

2. WHERE MECHANICAL VENTILATION IS PROVIDED, THE SYSTEM SHALL PROVIDE THE CAPABILITY TO REDUCE THE OUTDOOR AIR SUPPLY TO THE MINIMUM REQUIRED BY CHAPTER 4 OF THE INTERNATIONAL ENERGY EFFICIENCY CODE. OUTDOOR AIR SUPPLY AND EXHAUST DUCTS SHALL BE PROVIDED WITH AUTOMATIC MEANS TO REDUCE AND SHUT OFF AIRFLOW.

3. SEALING DUCTWORK: ALL JOINTS, LONGITUDINAL AND TRANSVERSE SEAMS AND CONNECTIONS IN DUCTWORK MUST BE SECURELY SEALED USING WELDMENTS; MECHANICAL FASTENERS WITH SEALS, GASKETS OR MASTICS; MESH AND MASTIC SEALING SYSTEMS; OR TAPES. TAPES AND MASTICS MUST BE LISTED AND LABELED IN ACCORDANCE WITH UL 181A OR 181B.

4. OUTDOOR AIR SUPPLY AND EXHAUST DUCTS SHALL BE EQUIPPED WITH MOTORIZED DAMPERS THAT WILL AUTOMATICALLY SHUT WHEN THE SYSTEMS OR SPACES SERVED ARE NOT IN USE. EXCEPTION - GRAVITY DAMPERS SHALL BE PERMITTED IN BUILDINGS LESS THAN 3 STORIES IN HEIGHT.

5. PROVIDE OWNER WITH COMPLETE OPERATION AND MAINTENANCE MANUALS FOR ALL EQUIPMENT AND CONTROLS INSTALLED. DOCUMENTATION MUST INCLUDE EQUIPMENT CAPACITY (INPUT & OUTPUT), REQUIRED MAINTENANCE ACTIONS, CONTROLS AND CALIBRATION INFORMATION INCLUDING WIRING DIAGRAMS, CONTROL SEQUENCE DESCRIPTIONS, DESIRED OR FIELD-DETERMINED SETPOINTS, AND A COMPLETE NARRATIVE OF HOW EACH SYSTEM IS INTENDED TO OPERATE.



BED 2 PATIO
6x6
4"
EF-1
2
10x10
12"
BEDROOM 2
CLO 2
12"
12x12
12x12
6x6
4"
EF-1
2
LOWER PATIO
BEDROOM 3
10x10
12"
10"
14"
12x12
6x6
4"
BATH 3
12x12
14"
CLO 3
4x4
12"x19"
4"
COND UNIT 1
COND UNIT 4
1
5
EF-1
2
LINEN
12"x19"
14"
CLO 4
4"
MECH 1
SYSTEM 1
6
7
SYSTEM 4
BATH 4
6x6
EF-1
19"
14"x21"
30x20
18"
4
4" DVTR
UP TO UPPER LEVEL
LAUNDRY
EF-2
8x8
6"
18"
12"
12x12
BED 4 PATIO
BEDROOM 4
12x12
GAME ROOM
14x14
12"
FRONT PATIO
FAMILY
12x12
12"
16"x20"
20x30
19"
GARAGE 2
COND UNIT 3
COND UNIT 2
MECH 2
7
6
SYSTEM 2
5
PWDR 2
4"
4x4
EF-1
18"
12x12
12x12
12x12
16"
PRAYER
MEDIA
9"
12"
12"
12"
12x12
12x12
10x10

VERIFY ALL DUCT ROUTING WITH MECHANICAL PLAN AND SPACE LIMITATIONS PRIOR TO INSTALLING DUCTS. INFORM MECHANICAL DESIGNER OF ALL NECESSARY DEVIATIONS TO DESIGN, TYPICAL. AT LOCATIONS WHERE DIFFUSERS OR GRILLES ARE UNDER DUCTWORK, CONTRACTOR TO FABRICATE TRANSITION BOOT FROM FLEX CONNECTION TO DIFFUSER OR GRILLE WITH BALANCING DAMPER, TYPICAL.

LOWER LEVEL
MECHANICAL PLAN

3/16" = 1'-0"

NORTH

4/16/2025 8:04 AM
C:_BTO_BTARCHITECTURAL\GMK B&D\SIVARAJAN RESIDENCE\CAD

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TO AVOID THE RISK OF FIRE CAUSED BY LINT BUILD-UP IN THE EXHAUST DUCT, ALL DOMESTIC DRYERS INSTALLED AT THIS LOCATION SHALL BE MANUFACTURER APPROVED (UL LISTED) FOR CONNECTION TO AN EXHAUST DUCT THAT IS

☐ WITH ☐

FEET OR GREATER ELBOWS

KEYNOTES

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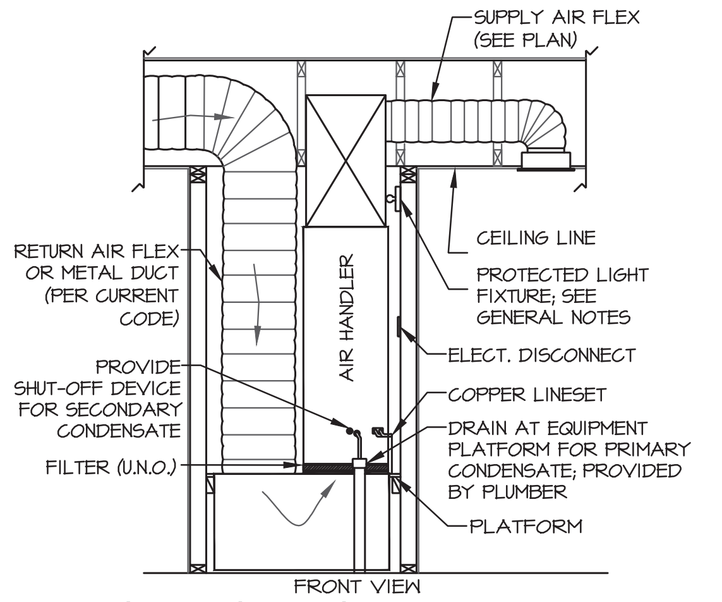
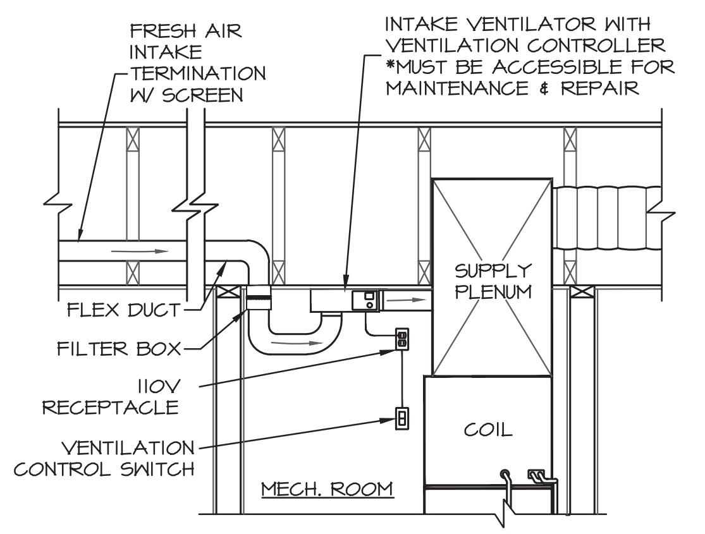


SUPPLY AIR FLEX (SEE PLAN)
RETURN AIR FLEX OR METAL DUCT (PER CURRENT CODE)
AIR HANDLER
CEILING LINE
PROTECTED LIGHT FIXTURE; SEE GENERAL NOTES
ELECT. DISCONNECT
PROVIDE SHUT-OFF DEVICE FOR SECONDARY CONDENSATE
COPPER LINESET
DRAIN AT EQUIPMENT PLATFORM FOR PRIMARY CONDENSATE; PROVIDED BY PLUMBER
FILTER (U.N.O.)
PLATFORM
FRONT VIEW

MECHANICAL EQUIPMENT



FRESH AIR INTAKE TERMINATION W/ SCREEN
INTAKE VENTILATOR WITH VENTILATION CONTROLLER *MUST BE ACCESSIBLE FOR MAINTENANCE & REPAIR
SUPPLY PLENUM
FLEX DUCT
FILTER BOX
110V RECEPTACLE
COIL
VENTILATION CONTROL SWITCH
MECH. ROOM

ELECTRICAL REQUIREMENTS BY BUILDER / ELECTRICIAN
RECEPTACLE CIRCUIT TO BE CONTROLLED VIA SWITCH LABELED AS "MECHANICAL VENTILATION" LOCATION AND LABELING TO BE CONFIRMED BY BUILDER OR ELECTRICIAN

FRESH AIR VENTILATION
DUCT TO SUPPLY PLENUM AND IN-LINE FAN

DATE
1/27/2025
4/11/25 - G&D

Bret Overmyer
REGISTERED ARCHITECT
CERTIFICATE NO. 31582
BRET THOMAS OVERMYER
Date Signed 4.11.25
ARIZONA, USA
EXPIRES 9/30/2027

BTA ARCHITECTURAL
BT ARCHITECTURAL, LLC
8425 West El Cortez Place
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Bret.BTA@GMAIL.COM

Registered Professional Engineer (Mechanical)
CERTIFICATE NO. 33483
ROBERT OTTO FLORI
Date Signed 4/11/2025
ARIZONA, U.S.A.
EXPIRES 3/31/2026
MECHANICAL ONLY

Sivarajan Residence

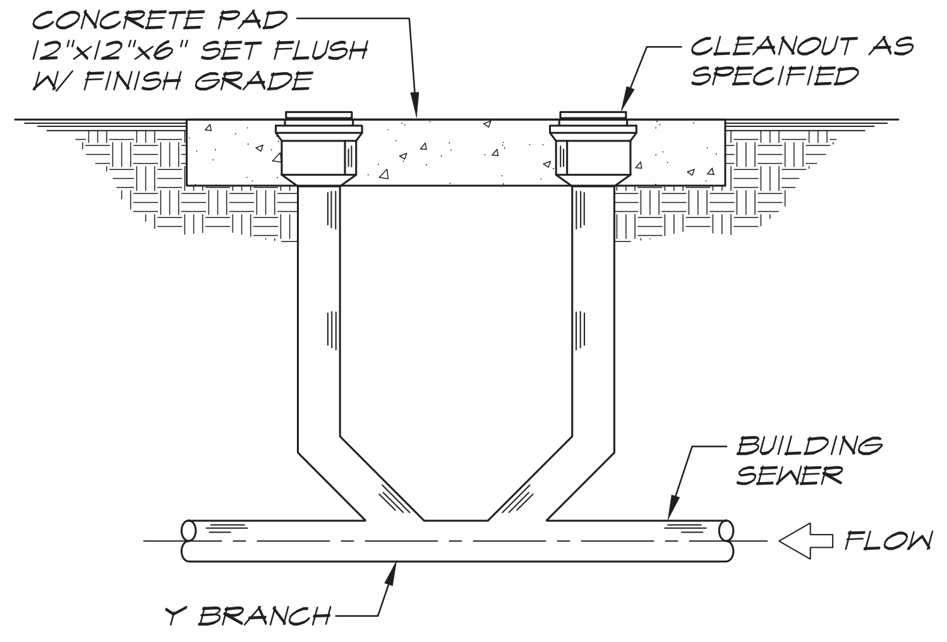
7899 East Mary Sharon Drive
Scottsdale 85266
Lone Mountain Vista Tract A - Lot 93

LOWER LEVEL MECHANIC PLAN

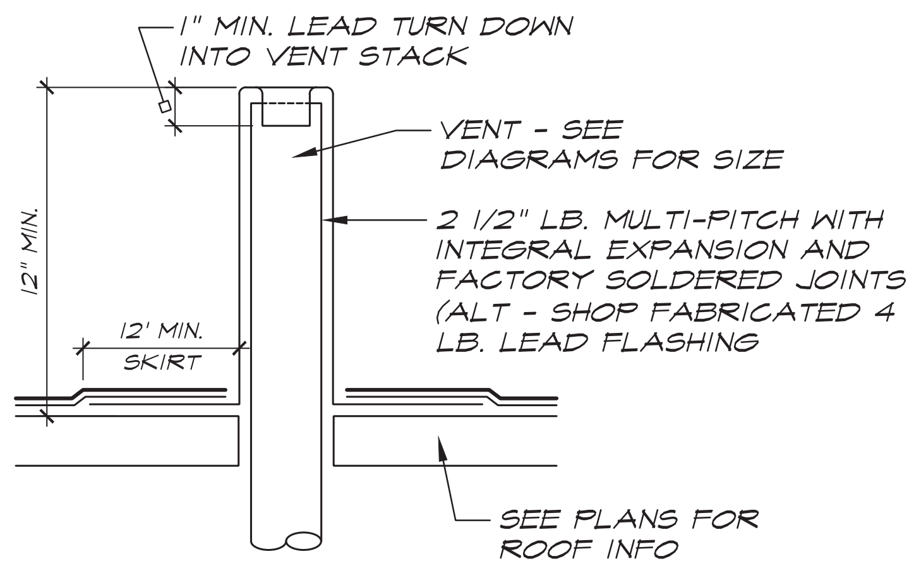
CITY OF SCOTTSDALE
BUILDING PLANS
THESE PLANS HAVE BEEN APPROVED
AND ARE READY FOR A PERMIT
THIS DOES NOT AUTHORIZE VIOLATIONS OF ANY
CODE OR ORDINANCE

COS PLAN CHECK #9300-24

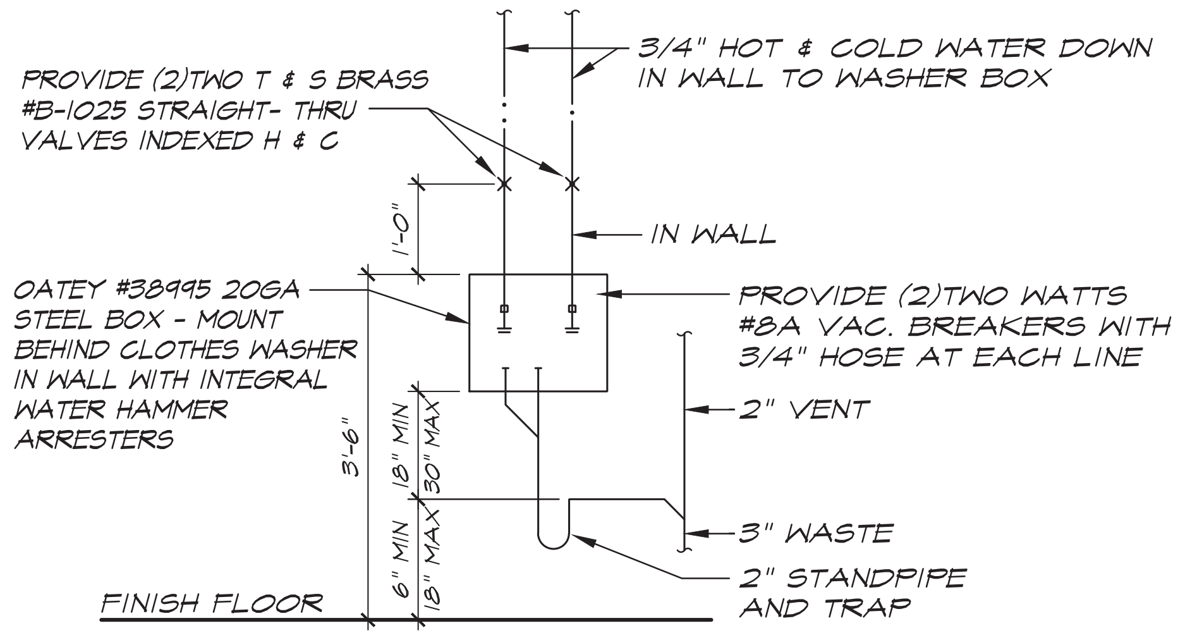
SHEET NO.
M1.2


CONCRETE PAD 12"x12"x6" SET FLUSH W/ FINISH GRADE
CLEANOUT AS SPECIFIED
BUILDING SEWER
FLOW
Y BRANCH

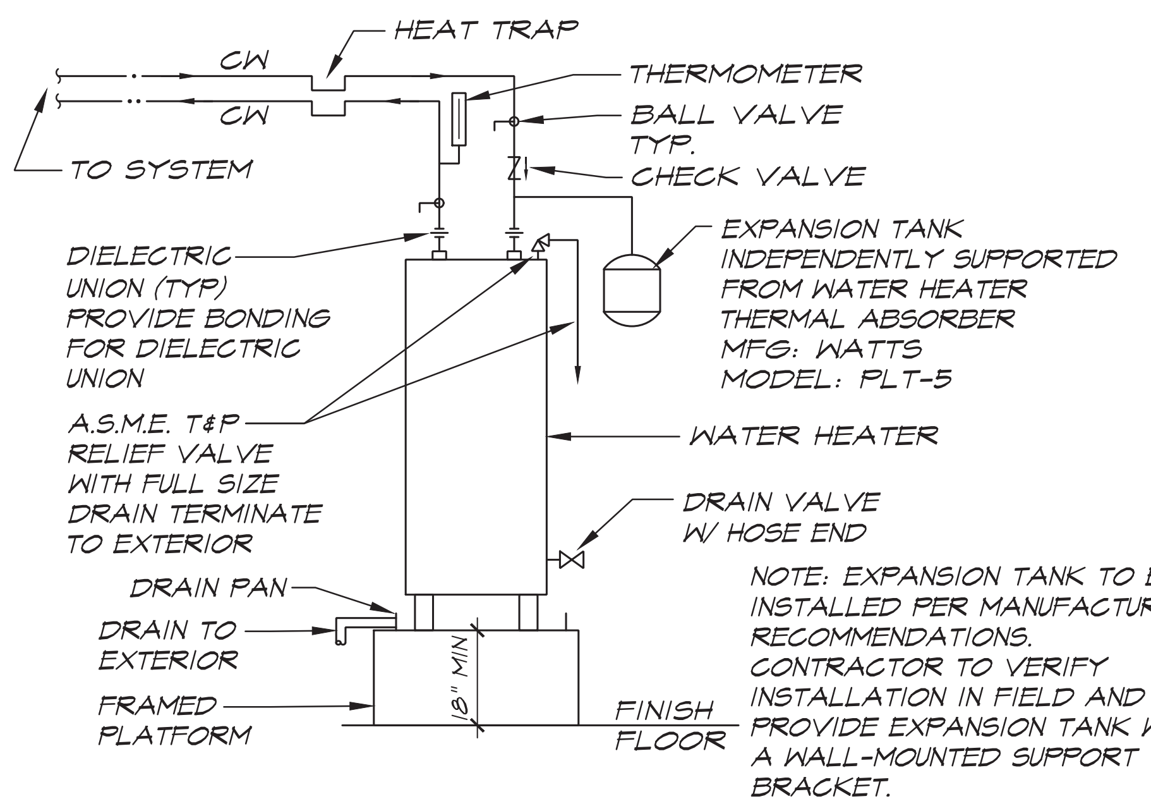
1 2-WAY SURFACE CLEANOUT
NOT TO SCALE


1" MIN. LEAD TURN DOWN INTO VENT STACK
VENT - SEE DIAGRAMS FOR SIZE
2 1/2" LB. MULTI-PITCH WITH INTEGRAL EXPANSION AND FACTORY SOLDERED JOINTS (ALT - SHOP FABRICATED 4 LB. LEAD FLASHING
12" MIN.
12' MIN. SKIRT
SEE PLANS FOR ROOF INFO

2 VENT FLASHING
NOT TO SCALE

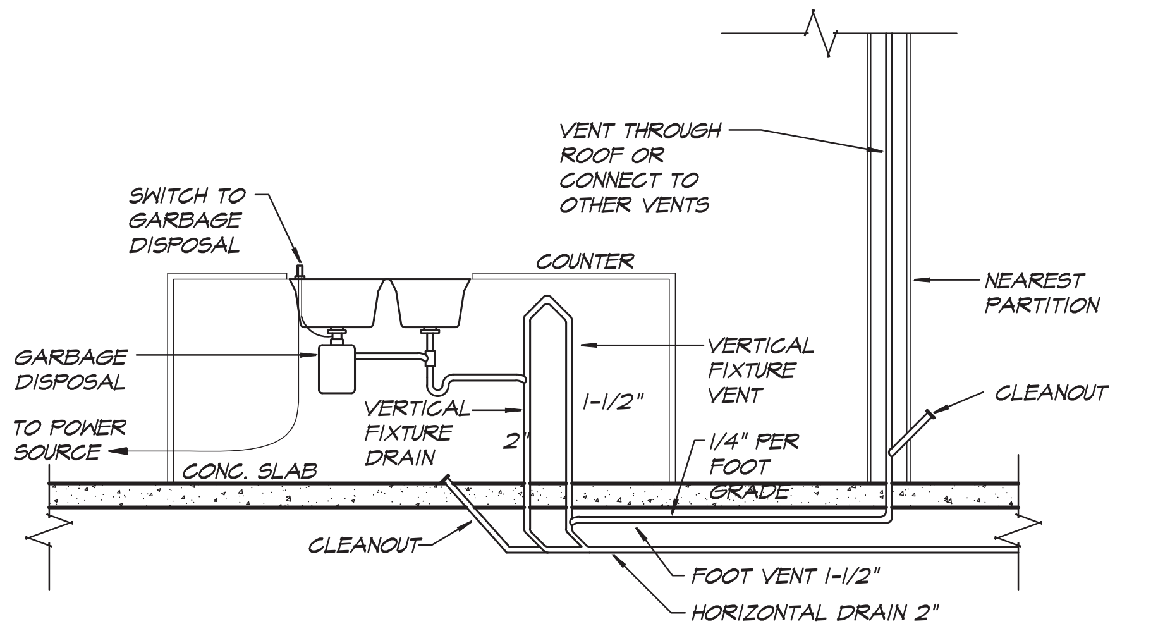

PROVIDE (2)TWO T & S BRASS #B-1025 STRAIGHT- THRU VALVES INDEXED H & C
3/4" HOT & COLD WATER DOWN IN WALL TO WASHER BOX
IN WALL
1'-0"
OATEY #38995 20GA STEEL BOX - MOUNT BEHIND CLOTHES WASHER IN WALL WITH INTEGRAL WATER HAMMER ARRESTERS
PROVIDE (2)TWO WATTS #8A VAC. BREAKERS WITH 3/4" HOSE AT EACH LINE
2" VENT
3'-6"
18" MIN
30" MAX
6" MIN
18" MAX
3" WASTE
2" STANDPIPE AND TRAP
FINISH FLOOR

3 WASHER BOX CONNECT
NOT TO SCALE


HEAT TRAP
CW
CW
TO SYSTEM
THERMOMETER
BALL VALVE TYP.
CHECK VALVE
DIELECTRIC UNION (TYP) PROVIDE BONDING FOR DIELECTRIC UNION
EXPANSION TANK INDEPENDENTLY SUPPORTED FROM WATER HEATER THERMAL ABSORBER MFG: WATTS MODEL: PLT-5
A.S.M.E. T&P RELIEF VALVE WITH FULL SIZE DRAIN TERMINATE TO EXTERIOR
WATER HEATER
DRAIN VALVE W/ HOSE END
DRAIN PAN
DRAIN TO EXTERIOR
18" MIN
FRAMED PLATFORM
FINISH FLOOR

NOTE: EXPANSION TANK TO BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS. CONTRACTOR TO VERIFY INSTALLATION IN FIELD AND PROVIDE EXPANSION TANK WITH A WALL-MOUNTED SUPPORT BRACKET.

4 ELECTRIC WATER HEATER DIAGRAM
NOT TO SCALE


SWITCH TO GARBAGE DISPOSAL
VENT THROUGH ROOF OR CONNECT TO OTHER VENTS
COUNTER
NEAREST PARTITION
GARBAGE DISPOSAL
TO POWER SOURCE
VERTICAL FIXTURE DRAIN
2"
1-1/2"
VERTICAL FIXTURE VENT
CLEANOUT
1/4" PER FOOT GRADE
CONC. SLAB
CLEANOUT
FOOT VENT 1-1/2"
HORIZONTAL DRAIN 2"

5 ISLAND VENT DRAIN
NOT TO SCALE

PLUMBING FIXTURE CONNECTIONS

DESCRIPTION	COLD	HOT	WASTE	VENT
WATER CLOSET FLUSH TANK	3/4"	---	3"	2"
LAVATORY	1/2"	1/2"	2"	1 1/2"
SHOWER	1/2"	1/2"	2"	1 1/2"
BAR SINK	1/2"	1/2"	2"	1 1/2"
BATH TUB	1/2"	1/2"	2"	1 1/2"
KITCHEN SINK 1 COMPARTMENT	1/2"	1/2"	2"	1 1/2"
SINGLE SINK 1 COMPARTMENT	1/2"	1/2"	2"	1 1/2"
CLOTHES WASHER BOX	1/2"	1/2"	3"	2"
HOSEBIB	3/4"	---	---	---
LAUNDRY SINK	1/2"	1/2"	2"	1 1/2"
WATER HEATER	1"	1"	---	---

6.0 PSI FROP

PIPE SIZE	GPM	FU (FT)	FU (FV)
1/2"	2.5	2	---
3/4"	7	8	---
1"	15	21	---
1 1/4"	25	42	8
1 1/2"	41	88	30
2"	77	259	135
2 1/2"	120	479	365
3"	170	748	739

NOTES

1. PLUMBING MATERIALS USED MUST COMPLY WITH SECTION P2904
2. COPPER TUBING USED IN WATER PIPING TO BE TYPE 'M' MIN. WEIGHT IN THE BUILDING ABOVE THE SLAB AND COPPER TUBING USED IN WATER PIPING BELOW SLAB TO BE TYPE 'L' MIN. WEIGHT INSTALLED WITHOUT JOINTS - SECTION P2904.5
3. GAS PIPING MATERIALS MUST COMPLY WITH SECTION G2414
4. WATER CLOSETS TO BE 1.5 GALLONS PER FLUSH. SINKS AND SHOWER HEADS TO BE 2.2 GALLONS PER MINUTE PER LOW FLOW PLUMBING FIXTURE ORDINANCE.
5. WATER HAMMER ARRESTORS ARE REQUIRED AT ALL QUICK-CLOSING VALVES (DISHWASHERS & CLOTHES WASHERS)
6. STORAGE-TANK TYPE WATER HEATERS SHALL BE INSTALLED WITH A DRAIN PAN AND DRAIN LINE (P2801.5).
7. WH-PAN DRAIN-LINE SHALL TERMINATE PER (P2801.5.2)
8. PROVIDE MINIMUM R-3 INSULATION TO HOT WATER PIPES. (N1103.4)
9. CIRCULATING HOT WATER SYSTEMS SHALL BE PROVIDED WHEN THE LENGTH OF HOT WATER PIPING OR TUBING FROM THE SOURCE OF HOT WATER TO THE FURTHEST FIXTURE EXCEEDS 21 FEET FOR A 3/4" LINE, 32 FEET FOR A 5/8" LINE, 43 FEET FOR A 1/2" LINE AND 50 FEET FOR A 3/8" OR LESS LINE. WHEN THE HOT WATER DISTRIBUTION SYSTEM CONTAINS MORE THAN ONE PIPE OR TUBE SIZE, THE LARGEST SIZE SHALL BE USED FOR DETERMINING THE MAXIMUM ALLOWABLE LENGTH BEFORE A CIRCULATING HOT WATER SYSTEM IS REQUIRED. THE CIRCULATING SYSTEM SHALL BE EQUIPPED WITH AN AUTOMATIC OR READILY ACCESSIBLE MANUAL ON SWITCH AND A TEMPERATURE SENSOR ACTIVATED SHUT-OFF THAT CAN AUTOMATICALLY TURN OFF THE HOT-WATER CIRCULATING PUMP WHEN THE SET TEMPERATURE IS REACHED. FOR THE PURPOSED OF THE SECTION, THE SOURCE OF HOT WATER SHALL BE CONSIDERED TO BE A WATER HEATER, BOILER, CIRCULATION LOOP PIPING, DISTRIBUTION MANIFOLD OR HEAT TRACED PIPING. (N1103.4.1 AMEND).
10. 1 1/2" COLD WATER COPPER PIPE TO EXTEND TO 1" WATER METER, SEE SITE PLAN FOR EXACT LOCATION. MINIMUM BURIAL DEPTH OF 12"
11. 4" COPPER WASTE TO EXTEND TO WASTE STUB ON PROPERTY. VERIFY EXACT LOCATION IN THE FIELD.
12. GAS INSTA HOT WATER HEATER WITH FULL SIZE T&P RELIEF TO EXTERIOR TERMINATE WITH 90° ELBOW. INSTALL PER MANUFACTURER'S INSTRUCTIONS WITH 2" PVC INTAKE AND COMBUSTION AIR VENT TO EXTERIOR.
13. PROVIDE 1/2" PEX FOR HOT & COLD WATER DOWN IN WALL TO FIXTURES U.N.O. BELOW.
14. PROVIDE 3/4" PEX FOR COLD WATER DOWN IN WALL TO WATER CLOSETS.
15. STUB DOWN 1" LINE WITH BACKFLOW PREVENTER FOR IRRIGATION SYSTEM. COORDINATE IN FIELD LOCATION OF IRRIGATION CONTROLLER.
16. AT KITCHEN, PROVIDE 3/4" PEX FOR COLD WATER DOWN IN WALL TO REFRIGERATOR FOR SHUT OFF VALVE BOX WITH SHOCK ABSORBER.
17. AT ISLAND, PROVIDE 1/2" HOT & COLD WATER UP FROM BELOW GRADE, 1/2" HOT & COLD WATER TO KITCHEN SINK AND 3/8" HOT WATER TO DISHWASHER. DISHWASHER TO HAVE A 3/4" MINIMUM DRAIN PIPE SECURELY FASTENED TO UNDERSIDE OF THE COUNTER BEFORE CONNECTING TO THE SINK TAIL PIECE.
18. AT ISLAND, 1/2" HOT & COLD PEX DOWN IN WALL THEN ROUTE 1/2" HOT & COLD DOWN BELOW GRADE TO ISLAND SINK. (NO JOINTS BELOW GRADE)
19. AT BATHS, PROVIDE 3/4" HOT & COLD PEX DOWN IN WALL TO FIXTURES, PROVIDE 1/2" HOT & COLD TO LAV, TUB OR SHOWER AND 3/4" COLD WATER TO WATER CLOSET. COORDINATE EACH SHOWER HEAD VALVE WITH OWNER.
20. 3/4" COLD WATER PEX IN WALL TO HOSEBIBS. HOSEBIBS TO BE PROVIDED WITH VACUUM BREAKER. NOTE: SOFT WATER DOES NOT RUN TO HOSEBIBS.
21. AT POWDER, 3/4" COLD WATER AND 1/2" HOT WATER PEX DOWN IN WALL TO FIXTURES, PROVIDE 1/2" HOT AND COLD WATER PEX TO LAV AND 3/4" COLD WATER PEX TO WATER CLOSET.
22. AT LAUNDRY PROVIDE 3/4" HOT & COLD WATER PEX TO FIXTURES, PROVIDE 1/2" HOT & COLD WATER PEX TO CLOTHES WASHER AND LAUNDRY SINK. CLOTHES WASHER TO HAVE SHOCK ABSORBER.

SEWAGE BACKFLOW
WHERE THE FLOOD LEVEL RIMS OF PLUMBING FIXTURES ARE BELOW THE ELEVATION OF THE MANHOLE COVER OF THE NEXT UPSTREAM MANHOLE IN THE PUBLIC SEWER, THE FIXTURES SHALL BE PROTECTED BY A BACKWATER VALVE INSTALLED IN THE BUILDING DRAIN, BRANCH OF THE BUILDING DRAIN OR HORIZONTAL BRANCH SERVING SUCH FIXTURES. PLUMBING FIXTURES HAVING FLOOD LEVEL RIMS ABOVE THE ELEVATION OF THE MANHOLE COVER OF THE NEXT UPSTREAM MANHOLE IN THE PUBLIC SEWER SHALL NOT DISCHARGE THROUGH A BACKWATER VALVE.

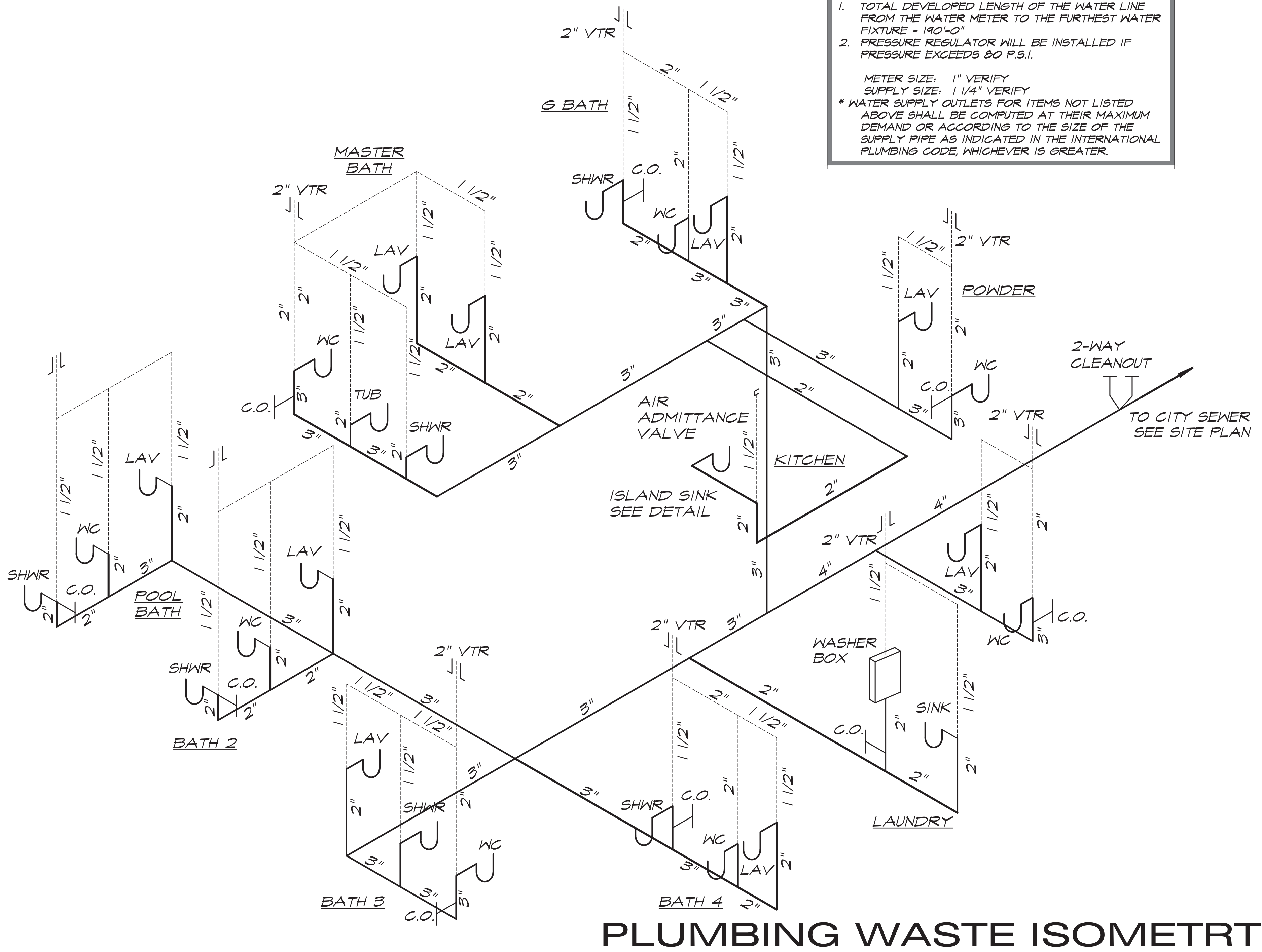
FIXTURE UNIT CALC'S

DESCRIPTION	PLAN	EACH	TOTAL
FULL-BATH GROUP	6	3.6	21.6
HALF-BATH GROUP	2	2.6	5.2
SHOWER	2	1.4	2.8
LAVATORY	1	0.7	0.7
KITCHEN GROUP	1	2.5	2.5
KITCHEN SINK	3	1.4	4.2
LAUNDRY GROUP	1	2.5	2.5
CLOTHES WASHER	1	1.4	1.4
HOSE BIBB (MAX 3)	3	2.5	7.5
* OTHER	0	0	0.0
TOTAL FIXTURE UNITS			48.4

1. TOTAL DEVELOPED LENGTH OF THE WATER LINE FROM THE WATER METER TO THE FURTHEST WATER FIXTURE - 190'-0"
2. PRESSURE REGULATOR WILL BE INSTALLED IF PRESSURE EXCEEDS 80 P.S.I.

METER SIZE: 1" VERIFY
SUPPLY SIZE: 1 1/4" VERIFY

* WATER SUPPLY OUTLETS FOR ITEMS NOT LISTED ABOVE SHALL BE COMPUTED AT THEIR MAXIMUM DEMAND OR ACCORDING TO THE SIZE OF THE SUPPLY PIPE AS INDICATED IN THE INTERNATIONAL PLUMBING CODE, WHICHEVER IS GREATER.


G BATH
MASTER BATH
POWDER
POOL BATH
BATH 2
BATH 3
BATH 4
KITCHEN
LAUNDRY
2" VTR
SHWR
C.O.
WC
LAV
TUB
SINK
WASHER BOX
AIR ADMITTANCE VALVE
ISLAND SINK SEE DETAIL
2-WAY CLEANOUT
TO CITY SEWER SEE SITE PLAN
1 1/2"
2"
3"
4"

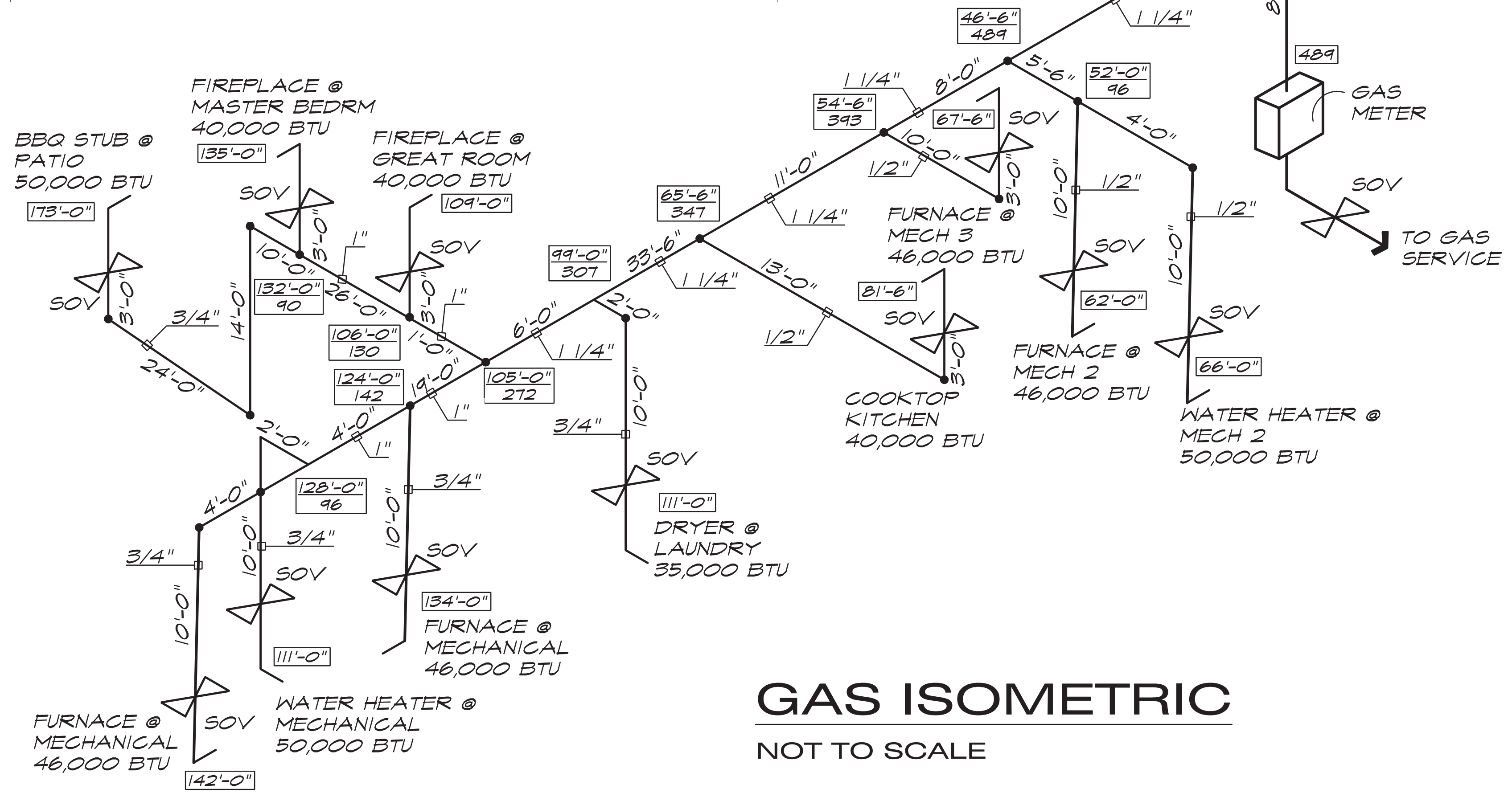
PLUMBING WASTE ISOMETRTC
NOT TO SCALE

GAS PIPING SCHEDULE

QTY	APPLIANCE	BTU EA	TOTAL	CFH
1	BARBEQUE	50,000	50,000	50
1	COOKTOP	40,000	40,000	40
1	CLOTHES DRYER	35,000	35,000	35
2	WATER HEATER	50,000	100,000	100
2	DIRECT VENT FIREPLACE	40,000	80,000	80
4	FURNACE	46,000	184,000	184
	TOTAL FIXTURE UNITS		489,000	489.0

DEVELOPED LENGTH = 173' (LINEAR FEET)

1. GAS PIPING MATERIALS MUST COMPLY WITH SECTION G2414
2. SEDIMENT STRAPS ARE REQUIRED DOWNSTREAM OF THE SHUTOFF VALVE PER G2419.44.
3. GAS PIPING NOT PERMITTED UNDER STRUCTURE.
4. GAS PIPING NOT PERMITTED UNDER SLAB.
5. PROVIDE COMBUSTION AIR VENTILATION AS PER M1702 - M1703 IRC CHAPTER 17.
6. FIREPLACE DAMPERS SHALL BE WELDED OPEN ONE INCH OR PROVIDED WITH A THREE INCH DIAMETER HOLE.


BBQ STUB @ PATIO 50,000 BTU
173'-0"
FIREPLACE @ MASTER BEDRM 40,000 BTU
135'-0"
FIREPLACE @ GREAT ROOM 40,000 BTU
109'-0"
132'-0" 90
106'-0" 130
124'-0" 142
105'-0" 272
128'-0" 96
99'-0" 307
65'-6" 347
54'-6" 393
46'-6" 489
52'-0" 96
67'-6"
81'-6"
62'-0"
66'-0"
111'-0"
134'-0"
142'-0"
489
FURNACE @ MECH 3 46,000 BTU
COOKTOP KITCHEN 40,000 BTU
FURNACE @ MECH 2 46,000 BTU
WATER HEATER @ MECH 2 50,000 BTU
DRYER @ LAUNDRY 35,000 BTU
FURNACE @ MECHANICAL 46,000 BTU
WATER HEATER @ MECHANICAL 50,000 BTU
FURNACE @ MECHANICAL 46,000 BTU
GAS METER
TO GAS SERVICE
SOV
38'-0"
8'-6"
1 1/4"
1/2"
3/4"
1"

GAS ISOMETRIC
NOT TO SCALE

4/16/2025 8:04 AM
C:_BTO_BTARCHITECTURAL\CMK B&D\SIVARAJAN RESIDENCE\CAD

DATE
1/27/2025
4/11/25 - G&D

REGISTERED ARCHITECT
CERTIFICATE NO. 31582
BRET THOMAS OVERMYER
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PLUMBING DIAGRAMS

COS PLAN CHECK #9300-24

SHEET NO.
P1

STRUCTURAL NOTES

IN ACCORDANCE WITH INTERNATIONAL RESIDENTIAL CODE 2021

GENERAL :

WHERE SPECIFIC INSTRUCTIONS IN THESE SPEC'S REQUIRE THAT A PARTICULAR PRODUCT AND/OR MATERIAL(S) BE INSTALLED AND/OR APPLIED BY AN APPROVED APPLICATOR OF THE MANUFACTURER, IT SHALL BE THE SUBCONTRACTOR'S RESPONSIBILITY TO ENSURE THE WORK BE DONE BY AN APPROVED APPLICATOR.

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

WRITTEN DIMENSIONS ON THESE DRAWINGS SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS. CONTRACTORS SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS ON THE JOB AND SHALL NOTIFY THIS OFFICE OF ANY VARIATIONS FROM THE DIMENSIONS OR CONDITIONS SHOWN ON THE DRAWINGS.

TYPICAL DETAILS MAY NOT NECESSARILY BE PUT ON THE PLANS, BUT APPLY UNLESS NOTED OTHERWISE.

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

WHERE ANY DISCREPANCIES OCCUR BETWEEN PLANS, DETAILS, GENERAL STRUCTURAL NOTES, SPECIFICATIONS AND ALL APPLICABLE CODES, THE MOST STRINGENT REQUIREMENTS SHALL GOVERN. THIS OFFICE MUST BE NOTIFIED IN WRITING OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION.

ANY STRUCTURAL DESIGN PROVIDED BY OTHERS AND SUBMITTED FOR REVIEW, SHALL BEAR THE SEAL OF AN ENGINEER REGISTERED IN THE STATE OF THE PROPOSED CONSTRUCTION.

ALL PRODUCTS LISTED BY I.C.C./N.E.R. NUMBER(S) SHALL BE INSTALLED PER THE REPORT AND MANUFACTURER'S WRITTEN INSTRUCTIONS. PRODUCT SUBSTITUTION(S) FOR PRODUCT(S) LISTED SHALL ALSO HAVE I.C.C. APPROVED EVALUATION REPORT(S) OR BE APPROVED AND LISTED BY OTHER NATIONALLY RECOGNIZED TESTING AGENCIES.

THE CONSTRUCTION DOCUMENTS AND SPECIFICATIONS REPRESENT THE FINISHED STRUCTURE. THEY DO NOT INDICATE THE METHOD OF CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE ALL MEASURES NECESSARY TO PROTECT THE STRUCTURE DURING CONSTRUCTION. SUCH MEASURES WILL INCLUDE, BUT NOT BE LIMITED TO BRACING AND SHORING. THE PROJECT ARCHITECT OR THE STRUCTURAL ENGINEER SHALL NOT INCLUDE INSPECTION OF THE ABOVE ITEMS OR METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES OF CONSTRUCTION, OR THE SAFETY PRECAUTIONS AND PROGRAMS RELATING THERETO.

DESIGN LOADS :

ROOF LIVE LOAD = 20 P.S.F.
ROOF DEAD LOAD = 20 P.S.F.
FLOOR LIVE LOAD = 40 P.S.F.
FLOOR DEAD LOAD = 15 P.S.F.
STAIR LIVE LOAD = 100 P.S.F.

WIND LOAD = V_{ULT} 115 mph, EXPOSURE C

SEISMIC DESIGN CATEGORY C (I.R.C. TABLE R301.2.2.1.1)

SITE WORK :

FINISH GRADE SHALL SLOPE 5% FOR A DISTANCE OF 10 FEET TO AN APPROVED WATER DISPOSAL AREA.

FOUNDATIONS :

FOUNDATIONS HAVE BEEN DESIGNED IN ACCORDANCE WITH THE MINIMUM RECOMMENDATIONS STATED IN THE ABOVE MENTIONED BUILDING CODE. ALLOWABLE BEARING PRESSURE ASSUMED TO BE 1,500 P.S.F. AT 18" BELOW UNDISTURBED SOIL.

ALL RECOMMENDATIONS IN THE GEO-TECHNICAL REPORT (IF APPLICABLE) TAKE PRECEDENCE OVER ANY AND ALL GENERAL STRUCTURAL NOTES CONTAINED HEREIN.

PRIOR TO ANY BACK FILLING, ALL BASEMENT OR FOUNDATION WALLS ARE TO BE ADEQUATELY BRACED SO AS TO PREVENT EXCESSIVE PRESSURES DURING CONSTRUCTION, BACK FILLING AND COMPACTION. ALL BRACING TO REMAIN IN POSITION UNTIL MASONRY AND/OR CONCRETE REACHES FULL DESIGN STRENGTH.

REINFORCED CONCRETE :

(THESE NOTES DO NOT APPLY TO POST TENSION OR PRE-STRESSED CONCRETE) DESIGNS BASED ON 2500 P.S.I., HOWEVER, MIX DESIGNED AS FOLLOWS:

MINIMUM 28 DAY CONCRETE COMPRESSIVE STRENGTH:
FOUNDATIONS = 3,000 P.S.I., TYPE II CONCRETE
WALKS, DRIVES AND EXTERIOR SLABS = 3,000 P.S.I.
MAXIMUM SLUMP = 4½"

ALL PROCEDURES, PLACEMENT, FORM WORK, LAP ETC. TO CONFORM WITH LATEST A.C.I. STANDARDS. MECHANICALLY VIBRATE ALL CONCRETE WHEN PLACED, EXCEPT THE SLABS ON GRADE NEED TO BE VIBRATED ONLY AROUND UNDER-FLOOR DUCTS, ETC.

ALL CONCRETE SLABS ON GRADE SHALL BE BOUNDED BY CONSTRUCTION JOINTS (KEYED OR SAW CUT) SUCH THAT THE ENCLOSED AREA DOES NOT EXCEED 400 SQUARE FEET. KEYED CONSTRUCTION JOINTS NEED ONLY OCCUR AT EXPOSED EDGES DURING POURING. ALL OTHER JOINTS MAY BE SAW CUT OR MAY USE "ZIP-STRIPS".

REINFORCEMENT :

ASTM A615 (Fy = 60,000 P.S.I.) LATEST ACI CODE AND DETAILING MANUAL APPLY.

UNLESS NOTED OTHERWISE ON THE DRAWINGS, THE CLEAR CONCRETE COVER PROVIDED FOR REINFORCEMENT SHALL BE :
CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH :3"

EXPOSED TO EARTH OR WEATHER:
- (1) NO. 6 AND LARGER :2"
- (2) NO. 5 AND SMALLER :1½"

NOT EXPOSED TO WEATHER OR IN CONTACT WITH THE GROUND (SLABS & WALLS) :¾"

BEAMS, GIRDERS, COLUMNS, PRIMARY REINFORCEMENT TIES STIRRUPS, SPIRALS :1½"

UNLESS NOTED OTHERWISE, LAP SPLICES IN CONCRETE SHALL BE CLASS "B" TENSION LAP SPLICES 40 BAR DIAMETER MINIMUM. STAGGER ALTERNATE SPLICES A MINIMUM OF ONE LAP LENGTH. ALL SPLICE LOCATIONS SUBJECT TO APPROVAL. PROVIDE BENT CORNER BARS TO MATCH AND LAP WITH HORIZONTAL BARS AT CORNERS AND INTERSECTIONS OF FOOTINGS AND WALLS. REINFORCING BAR SPACING GIVEN ARE MAXIMUM ON VERTICAL REINFORCING TO FOUNDATION. SECURELY TIE ALL BARS IN LOCATION BEFORE PLACING CONCRETE.

MASONRY VENEER SHALL BE ANCHORED WITH A MINIMUM OF ONE 22 GA. GALVANIZED METAL ANCHOR FOR EACH TWO SQUARE FEET OF WALL AREA.

STRUCTURAL STEEL :

ALL STRUCTURAL STEEL SHALL BE ASTM A992 (Fy = 50 KSI). ALL CHANNELS, ANGLES, AND PLATES SHALL BE ASTM A36 (Fy = 36 KSI). ALL TUBE STEEL SHALL BE ASTM A500 (Fy = 46 KSI). ALL BOLTS SHALL BE ASTM A307, UNLESS NOTED OTHERWISE. ALL CONSTRUCTION PER LATEST AISC HANDBOOK. ALL EXPANSION AND EPOXY BOLTS TO HAVE ICC RATING FOR MATERIAL INTO WHICH INSTALLATION TAKES PLACE. ALL BOLTS, ANCHOR BOLTS, EXPANSION BOLTS, ETC. SHALL BE INSTALLED WITH STEEL WASHERS AT SLOTTED HOLES IN STEEL SECTIONS. ALL WELDS SHALL BE PERFORMED BY WELDERS HOLDING VALID CERTIFICATES AND HAVING CURRENT EXPERIENCE IN THE TYPE OF WELD SHOWN ON THE DRAWING OR NOTES. CERTIFICATES SHALL THOSE ISSUED BY AN ACCEPTED TESTING AGENCY. ALL WELDING DONE BY E70 SERIES LOW HYDROGEN RODS UNLESS NOTED OTHERWISE. FOR GRADE 60 REINFORCING BARS, USE E90 SERIES. ALL WELDING PER LATEST AMERICAN WELDING SOCIETY STANDARDS, (EXCEPT STEEL JOISTS SHALL COMPLY WITH SJI STANDARDS). THESE DRAWINGS DO NOT DISTINGUISH BETWEEN SHOP AND FIELD WELDS, THE CONTRACTOR MAY SHOP WELD OR FIELD WELD AT HIS/HER DISCRETION. SHOP WELDS AND FIELD WELDS SHALL BE SHOWN ON THE SHOP DRAWINGS SUBMITTED FOR REVIEW. WHEN STRUCTURAL STEEL IS FURNISHED TO A SPECIFIED MINMIMUM YIELD POINT GREATER THAN 36 KSI, THE ASTM OR OTHER SPECIFICATION DESIGNATION SHALL BE INCLUDED NEAR THE ERECTION MARK ON EACH SHIPPING ASSEMBLY OR IMPORTANT CONSTRUCTION COMPONENT, OVER ANY SHOP COAT OF PAINT, PRIOR TO SHIPMENT FROM FABRICATOR'S PLANT.

STRUCTURAL LUMBER :

THE WESTERN WOOD PRODUCTS ASSOCIATION OR WEST COAST LUMBER INSPECTION GRADING (MUST COMPLY WITH LATEST ADOPTED N.D.S. STANDARDS)

FRAMING LUMBER SHALL COMPLY WITH THE LATEST EDITION OF THE GRADING RULES OF SAWN LUMBER.

FRAMING LUMBER SHALL COMPLY WITH THE LATEST EDITION OF THE GRADING RULES OF AGENCY. ALL LUMBER SHALL BEAR AN APPROVED GRADING STAMP.

JOISTS AND HEADERS :

ALL STRUCTURAL FRAMING MEMBERS SHALL BE DFL-2 OR BETTER WITH THE FOLLOWING MINIMUM VALUES, UNLESS OTHERWISE NOTED:

Fb = 875 P.S.I.
Ft (PARALLEL TO GRAIN) = 575 P.S.I.
Fc (PERP. TO GRAIN) = 625 P.S.I.
Fc (PARALLEL TO GRAIN) = 1300 P.S.I.
Fv = 95 P.S.I.
E = 1,600,000 P.S.I.

TIMBERS :

ALL STRUCTURAL FRAMING MEMBERS SHALL BE DFL-1 OR BETTER WITH THE FOLLOWING MINIMUM VALUES, UNLESS OTHERWISE NOTED:

Fb = 1200 P.S.I.
Ft (PARALLEL TO GRAIN) = 825 P.S.I.
Fc (PERP. TO GRAIN) = 625 P.S.I.
Fc (PARALLEL TO GRAIN) = 1000 P.S.I.
Fv = 85 P.S.I.
E = 1,600,000 P.S.I.

STUDS AND POSTS :

ALL STUDS & POSTS SHALL HAVE THE FOLLOWING MINIMUM PROPERTIES:

MEMBER	E psi (MIN.)	SPECIES AND GRADE
POSTS 4x4, 4x6	1,600,000	DFL-2
POSTS 6x6, 6x8	1,600,000	DFL-1
STUDS 2x4, 3x4, 2x6	1,200,000	HEM-FIR-2 OR BETTER

INTERIOR BEARING WALLS 2x AT 16" O.C. U.N.O.

INTERIOR NON-BEARING WALLS 2x AT 24" O.C. U.N.O.

(FOR STUD SPACING AT 24" O.C., THREE-PLY PLYWOOD OR EQUAL WALL SHEATHING SHALL BE APPLIED WITH LONG DIMENSION ACROSS STUDS TO CONFORM WITH TABLE 602.3(3))

GENERAL :

ALL LUMBER SHALL BE PROPERLY STORED OFF GROUND AND ADEQUATELY PROTECTED FROM THE ELEMENTS.

CONTRACTOR SHALL VERIFY THAT ALL FRAMING LUMBER HAS APPROPRIATE AGENCY STAMPS.

CONTRACTOR SHALL SUPERVISE LUMBER SUPPLIER WHILE OFF LOADING LUMBER MATERIAL TO PREVENT DAMAGE, SPLITTING AND / OR BREAKING OF ANY MATERIAL.

FRAMING CONNECTORS NOTED ARE MANUFACTURED BY SIMPSON STRONG TIE COMPANY, INC. SIMPSON STRONG TIE CONNECTORS ARE SPECIFICALLY REQUIRED TO MEET THE STRUCTURAL CALCULATIONS OF THESE PLANS. BEFORE SUBSTITUTING ANOTHER BRAND THE CONTRACTOR SHALL CONFIRM THE LOAD CAPACITY BASED ON RELIABLE PUBLISHED TESTING DATA OR CALCULATIONS FROM THE SUBSTITUTION BRAND COMPANY, PRIOR TO THEIR USE.

ALL LUMBER (INCLUDING POSTS, BEAMS AND LAMINATED LUMBER) EXPOSED TO THE ELEMENTS SHALL BE PRESSURE TREATED PER I.R.C. 2021. ALL FASTENERS FOR PRESSURE TREATED LUMBER SHALL BE AS PER I.R.C. 2021.

PROVIDE DIAGONAL LET IN BRACING AT ALL EXTERIOR CORNERS AT MAXIMUM 25' O.C. USE ⅜" PLYWOOD OR EQUAL SHEAR PANEL WHERE LET IN BRACING IS NOT APPLICABLE.

NON STRUCTURAL FIRE STOPPING AND / OR DRAFT STOPPING ARE NOT INDICATED ON THE STRUCTURAL DRAWINGS AND ARE PER THE ARCHITECTURAL DRAWINGS.

GLU-LAM BEAMS :

GLU-LAM BEAMS SHALL HAVE THE FOLLOWING PROPERTIES:
Fb = 2,400 P.S.I.
Fv = 265 P.S.I.
Fc (PERP) = 650 P.S.I. (COMB. SYM. 24FV4)
E = 1,800,000 P.S.I.

BEAMS CANTILEVERED OVER SUPPORTS SHALL HAVE THE SPECIFIED MINIMUM PROPERTIES TOP AND BOTTOM. (COMB. SYM. 24FV8)

ALL BEAMS SHALL BE FABRICATED USING WATERPROOF GLUE.

FABRICATION AND HANDLING PER LATEST AITC AND WCLA STANDARDS.

BEAMS TO BEAR AITC STAMP AND CERTIFICATE AND GRADE STAMP. CAMBER AS SHOWN ON DRAWINGS.

SILL PLATE :

ALL INTERIOR AND EXTERIOR WALL SILL PLATES TO CONCRETE FOUNDATION WALLS SHALL BE PRESSURE TREATED WITH MINIMUM 2x4 MEMBERS, AND ANCHORED USING ½" DIAMETER ANCHOR BOLTS AT 4'-0" O.C. (MAXIMUM) OR AS SHOWN ON THE DRAWINGS, WHICHEVER IS LESS. THE STRUCTURAL ENGINEER PRIOR TO CONSTRUCTION SHALL TEST ANY ANCHORING METHOD SUBSTITUTION. CONTRACTOR SHALL NOTIFY THE STRUCTURAL ENGINEER IN WRITING DESCRIBING IN DETAIL THE ALTERNATIVE ANCHORING METHOD. MINIMUM BOLTS EMBEDDED SHALL NOT BE LESS THAN 7", WITH A MINIMUM OF TWO ANCHOR BOLTS PER SECTION OF SILL PLATE, AND SHALL BE PLACED 12 INCHES OR LESS THAN SEVEN BOLT DIAMETERS FROM THE END OF EACH SECTION OF SILL PLATE PER I.R.C. 2021.

SHEATHING :

ALL PLYWOOD SHALL CONFIRM TO APA STAND. PS1 AND PRP 108 EXPOSURE 1.

ICC APPROVED ORIENTED STRAND BOARD MAY BE USED IN PLACE OF PLYWOOD (PRP 108).

ALL PLYWOOD SHALL BE OF THE FOLLOWING THICKNESS, AND SHALL BE NAILED WITH COMMON NAILS AS FOLLOWS:

	THICKNESS	EDGE NAILING	INTERIM NAILING
ROOF	½"	8d AT 6" O.C.	8d AT 12" O.C. (U.N.O.)
FLOOR	¾"	10d AT 6" O.C.	10d AT 12" O.C. (U.N.O.)
WALL	⅜"	8d AT 6" O.C.	8d AT 12" O.C. (U.N.O.)

DEFERRED SUBMITTAL :

SHOP DRAWING SUBMITTALS REQUIRED BY THESE GENERAL STRUCTURAL NOTES WHICH CONTAIN DESIGN CALCULATIONS SEALED BY A REGISTERED ENGINEER OTHER THAN THE ENGINEER OF RECORD, SHALL BE SUBMITTED DURING CONSTRUCTION TO THE CITY FIELD INSPECTOR FOR REVIEW. THE DOCUMENTS WILL BE FIRST REVIEWED BY THE ENGINEER OF RECORD AND DETERMINED TO BE IN CONFORMANCE WITH THE BUILDING DESIGN. THESE DEFERRED SUBMITTAL ITEMS SHALL NOT BE INSTALLED UNTIL THEIR DESIGN SUBMITTAL DOCUMENTS HAVE BEEN APPROVED BY THE BUILDING OFFICIAL.

SPECIAL INSPECTIONS:

PER THE REQUIREMENTS OF THE INTERNATIONAL BUILDING CODE, SPECIAL INSPECTIONS ARE REQUIRED FOR STRUCTURAL ITEMS SUCH AS:

1. EPOXY PROCEDURES
2. EXPANSION BOLTS
3. 3000 PSI CONCRETE
4. MASONRY BASEMENT AND RETAINING WALLS
5. FIELD WELDING (AS REQUIRED)

ALL PROCEDURES LISTED ABOVE REQUIRE CONSTANT ON-SITE STRUCTURAL SUPERVISION EXCEPT STRUCTURAL WELDING WHICH CAN BE DONE WHEN ALL WELDING IS COMPLETE AND PRIOR TO COVERING UP ANY WELDED ITEMS.

THE INSPECTOR SHALL BE A QUALIFIED PERSON WHO SHALL DEMONSTRATE COMPETENCE TO THE SATISFACTION OF THE BUILDING OFFICIAL, FOR THE INSPECTION OF THE PARTICULAR TYPE OF CONSTRUCTION OR OPERATION REQUIRING SPECIAL INSPECTION.

TABLE R602.3(1)
FASTENER SCHEDULE FOR STRUCTURAL MEMBERS

ITEM	DESCRIPTION OF BUILDING ELEMENTS	NUMBER AND TYPE OF FASTENER (a,b,c)	SPACING AND LOCATION
	ROOF		
1	BLOCKING BETWEEN JOISTS OR RAFTERS TO TOP PLATE	4-8d BOX (2½" X 0.113") OR 3-8d COMMON (2½" X 0.131") OR 3-10d BOX (3" X 0.128) OR 3-3" X 0.131" NAILS	TOE NAIL
2	CEILING JOISTS TO TOP PLATE	4-8d BOX (2½" X 0.113") OR 3-8d COMMON (2½" X 0.131") OR 3-10d BOX (3" X 0.128) OR 3-3" X 0.131" NAILS	PER JOIST, TOE NAIL
3	CEILING JOIST NOT ATTACHED TO PARALLEL RAFTER, LAPS OVER PARTITIONS [SEE SECTIONS R802.3.1, R802.3.2 AND TABLE R802.5.1(9)]	4-10d BOX(3" X 0.128") OR 3-16d COMMON (3½" X 0.162") OR 4-3" X 0.131" NAILS	FACE NAIL
4	CEILING JOIST NOT ATTACHED TO PARALLEL RAFTER (HEEL JOINT) [SEE SECTIONS R802.3.1, R802.3.2 AND TABLE R802.5.1(9)]	TABLE 802.5.1(9)	FACE NAIL
5	COLLAR TIE TO RAFTER, FACE NAIL OR 1¼"x20 GAGE RIDGE STRAP	4-10d BOX(3" X 0.128") OR 3-10d COMMON (3½" X 0.148") OR 4-3" X 0.131" NAILS	FACE NAIL EACH RAFTER
6	RAFTER OR ROOF TRUSS TO PLATE	3-16d BOX (3½" X 0.135") OR 3-10d COMMON (3" X 0.148") OR 4-10d BOX (3" X 0.128) OR 4-3" X 0.131" NAILS	2 TOE NAILS ON ONE SIDE AND 1 TOE NAIL ON OPPOSITE SIDE OF EACH RAFTER OR TRUSS
7	ROOF RAFTERS TO RIDGE, VALLEY OR HIP RAFTERS OR ROOF RAFTER TO MINIMUM 2" RIDGE BEAM	4-16d BOX (3½" X 0.135") OR 3-10d COMMON (3½" X 0.148") OR 4-10d BOX (3" X 0.128) OR 4-3" X 0.131" NAILS	TOE NAIL
		3-16d BOX (3½" X 0.135") OR 2-16d COMMON (3½" X 0.162") OR 3-10d BOX (3" X 0.128) OR 3-3" X 0.131" NAILS	END NAIL
	WALL		
8	STUD TO STUD (NOT AT BRACED WALL PANELS)	16d COMMON (3½" X 0.162")	24" O.C. FACE NAIL.
		10d BOX (3" X 0.128") OR 3" x 0.131" NAILS	16" O.C. FACE NAIL.
9	STUD TO STUD AND ABUTTING STUDS AT INTERSECTING WALL CORNERS (AT BRACE WALL PANELS)	16d BOX (3½" X 0.135") OR 3" X 0.131" NAILS	12" O.C. FACE NAIL.
		16d BOX (3½" X 0.162")	16" O.C. FACE NAIL.
10	BUILT-UP HEADER (2" TO 2" HEADER WITH ½" SPACER)	16d COMMON (3½" X 0.162")	16" O.C. EACH EDGE OF FACE NAIL
		16d BOX (3½" X 0.135")	12" O.C. EACH EDGE OF FACE NAIL
11	CONTINUOUS HEADER TO STUD	5-8d BOX(2½" X 0.113") OR 4-8d COMMON (2½" X 0.131") OR 4-10d BOX (3" X 0.128")	TOE NAIL
12	TOP PLATE TO TOP PLATE	16d COMMON (3½" X 0.162")	16" O.C. FACE NAIL.
		10d BOX (3" X 0.128") OR 3" x 0.131" NAILS	12" O.C. FACE NAIL.
13	DOUPLE TOP PLATE SPLICE FOR SDCs-A-D_2 WITH SEISMIC BRACED WALL LINE SPACING < 25'	8-16d COMMON (3½" X 0.162") OR 12-16d BOX (3½" X 0.135) OR 12-10d BOX (3" X 0.128) OR 12-3" X 0.131" NAILS	FACE NAIL ON EACH SIDE OF END JOINT (MINIMUM 24" LAP SPLICE LENGHT EACH SIDE OF END JOINT)
	DOUPLE TOP PLATE SPLICE SDCs D_0, D_1, OR D_2; AND BRACED WALL LINE SPACING < 25'	12-16d (3½" X 0.135")	
14	BOTTOM PLATE TO JOIST, RIM JOIST, BAND JOIST OR BLOCKING (NOT AT BRACED WALL PANELS)	16d COMMON (3½" X 0.162")	16" O.C. FACE NAIL.
		16d BOX (3" X 0.128") OR 3" x 0.131" NAILS	12" O.C. FACE NAIL.
15	BOTTOM PLATE TO JOIST, RIM JOIST, BAND JOIST OR BLOCKING AT BRACED WALL PANELS)	3-16d BOX (3½" X 0.135") OR 2-16d COMMON (3½" X 0.162") OR 4-3" X 0.131" NAILS	3 EACH 16" O.C. FACE NAIL 2 EACH 16" O.C. FACE NAIL 4 EACH 16" O.C FACE NAIL
16	TOP OR BOTTOM PLATE TO STUD	4-8d BOX (2½" X 0.113") OR 3-16d BOX (3½" X 0.135") OR 4-8d COMMON (2½" X 0.131") OR 4-10d BOX (3" X 0.128) OR 4-3" X 0.131" NAILS	TOE NAIL
		3-16d BOX (3½" X 0.135") OR 2-16d COMMON (3½" X 0.162") 3-10d BOX (3" X 0.128") OR 3-3" X 0.131" NAILS	END NAIL
17	TOP PLATES, LAPS AT CORNERS AND INTERSECTIONS	3-10d BOX (3" X 0.128") OR 2-16d COMMON (3½" X 0.162") OR 3-3" X 0.131" NAILS	FACE NAIL
18	1" BRACE TO EACH STUD AND PLATE	3-8d BOX (2½" X 0.113") OR 2-8d COMMON (2½" X 0.131") 2-10d BOX (3" X 0.128") OR 2 STAPLES 1¾"	FACE NAIL
19	1" X 6" SHEATHING TO EACH BEARING	3-8d BOX (2½" X 0.113") OR 2-8d COMMON (2½" X 0.131") 2-10d BOX (3" X 0.128") OR 2 STAPLES, 1 CROWN, 16GA 1¾"	FACE NAIL
20	1" X 8" AND WIDER SHEATHING TO EACH BEARING WIDER THAN 1" X 8"	3-8d BOX (2½" X 0.113") OR 3-8d COMMON (2½" X 0.131") 3-10d BOX (3" X 0.128") OR 3 STAPLES, 1" CROWN, 16 GA, 1¾"	FACE NAIL
		4-8d BOX (2½" X 0.113") OR 3-8d COMMON (2½" X 0.131") 3-10d BOX (3" X 0.128") OR 4 STAPLES, 1" CROWN, 16 GA, 1¾"	

TABLE R602.3(1) - CONTINUED
FASTENER SCHEDULE FOR STRUCTURAL MEMBERS

ITEM	DESCRIPTION OF BUILDING ELEMENTS	NUMBER AND TYPE OF FASTENER (a,b,c)	SPACING AND LOCATION
	FLOOR		
21	JOIST TO SILL, TOP PLATE OR GIRDER	4-8d BOX (2½" X 0.113") OR 3-8d COMMON (2½" X 0.131") OR 3-10d BOX (3" X 0.128) OR 3-3" X 0.131" NAILS	TOE NAIL
22	RIM JOIST, BAND JOIST OR BLOCKING TO SILL OR TOP PALTE (ROOF APPLICATIONS ALSO)	8d BOX (2½" X 0.113") OR	4" O.C. FACE NAIL.
		8d COMMON (2½" X 0.131") OR 10d BOX (3" X 0.128) OR 3-3" X 0.131" NAILS	6" O.C. FACE NAIL.
23	1" X 6" SUBFLOOR OR LESS TO EACH JOIST	3-8d BOX (2½" X 0.113") OR 2-8d COMMON (2½" X 0.131") OR 3-10d BOX (3" X 0.128) OR 2 STAPLES, 1" CROWN, 16 GA, 1¾"	FACE NAIL
24	2" SUBFLOOR TO JOIST OR GIRDER	3-16d BOX (3½" X 0.135") OR 2-16d COMMON (3½" X 0.162")	BLIND AND FACE NAIL
25	2" PLANKS (PLANK & BEAM - FLOOR & ROOF)	3-16d BOX (3½" X 0.135") OR 2-16d COMMON (3½" X 0.162")	AT EACH BEARING FACE NAIL
26	BAND OR RIM JOIST TO JOIST	3-16d COMMON (2½" X 0.162") OR 4-10d BOX (3" X 0.128") OR 4-3" X 0.131" NAILS OR 4-3" X 14GA STAPLES, 7⁄16" CROWN	END NAIL
27	BUILT-UP GIRDERS AND BEAMS, 2-INCH LUMBER LAYERS	20d COMMON (4" X 0.92") OR	NAIL EACH LAYER AS FOLLOWS: 32" O.C. AT TOP AND BOTTOM AND STAGGERED
		3-16d BOX (3½" X 0.135") OR 2-16d COMMON (3½" X 0.162")	24" O.C. FACE NAIL AT TOP AND BOTTOM STAGGERED ON OPPOSITE SIDES
		AND 2-20d COMMON (4" X 0.192") OR 3-10d BOX (3" X 0.128") OR 3-3" X 0.131" NAILS OR	FACE NAIL AT ENDS AND AT EACH SPLICE
28	LEDGER STRIP SUPPORTING JOISTS OR RAFTERS	4-16d BOX (3½" X 0.135") OR 3-16d BOX (3½" X 0.162") OR 4-10d BOX (3" X 0.128") OR 4-3" X 0.131" NAILS	AT EACH JOIST OR RAFTER, FACE NAIL
29	BRIDGING TO JOIST	2-10d BOX (3" X 0.128") OR	EACH END, TOE NAIL

TABLE R602.3(1) - CONTINUED
FASTENER SCHEDULE FOR STRUCTURAL MEMBERS

ITEM	DESCRIPTION OF BUILDING MATERIALS	DESCRIPTION OF FASTENERS (b,c,d,e)	SPACING OF FASTENERS	
			EDGES (INCHES)	INTERMEDIATE SUPPORTS (c,e) (INCHES)
	WOOD STRUCTURAL PANELS, SUBFLOOR, ROOF AND WALL SHEATHING TO FRAMING, AND PARTICLEBOARD WALL SHEATHING TO FRAMING			
30	⅜" -½"	6d COMMON (2"x0.113") (SUBFLOOR, WALL)(j) 8d COMMON (2½"x0.131) NAIL (ROOF)(f)	6	12 (f)
31	19⁄32" - 1"	8d COMMON NAIL (2½"x0.131")	6	12 (f)
32	1⅛" - 1¼"	10d COMMON (3"x0.148") NAIL OR 8d (2½"x0.131") DEFORMED NAIL	6	12
	OTHER WALL SHEATHING (h)			
33	½" REGULAR CELLULOSIC FIBERBOARD SHEATHING	1½" GALVANIZED ROOFING NAIL, 7⁄16" CROWN OR 1" CROWN STAPLE 16 ga., 1 ¼" LONG.	3	6
34	25⁄32" STRUCTURAL CELLULOSIC FIBERBOARD SHEATHING	1¾" GALVANIZED ROOFING NAIL, 7⁄16" CROWN OR 1" CROWN STAPLE 16 ga., 1 ¼" LONG.	3	6
35	½" GYPSUM SHEATHING(d)	1½" GALVANIZED ROOFING NAIL, STAPLE GALVENIZED, 1½" LONG; 1¼" SCREWS, TYPE W OR S	7	7
36	⅝" GYPSUM SHEATHING(d)	1¾" GALVANIZED ROOFING NAIL, STAPLE GALVENIZED, 1½" LONG; 1¼" SCREWS, TYPE W OR S	7	7
Â	WOOD STRUCTURAL PANELS, COMBINATION SUBFLOOR UNDERLAYMENT TO FRAMING			
37	¾" AND LESS	6d DEFORMED (2" x 0.120") NAIL OR 8d COMMON (2½" x 0.131) NAIL	6	12
38	⅞" - 1"	8d COMMON (2½" x 0.131") NAIL OR 8d DEFORMED (2½" x 0.120) NAIL	6	12
39	1⅛" - 1¼"	10d COMMON (3" x 0.148") NAIL OR 8d DEFORMED (2½" x 0.120) NAIL	6	12

FOR SI: 1 INCH = 25.4 mm, 1 FOOT = 304.8 mm, 1 MILE PER HOUR = 0.447 m/S; 1 Ksi = 6.895 MPa.
a. NAILS ARE SMOOTH-COMMON, BOX OR DEFORMED SHANKS, EXCEPT WHERE OTHERWISE STATED. NAILS USED FOR FRAMING AND SHEATHING CONNECTIONS SHALL HAVE MINIMUM AVERAGE BENDING YIELD STRENGTHS AS SHOWN: 80 ksi (551 MPa) FOR SHANK DIAMETER OF 0.192 INCH (20d COMMON NAIL), 90 ksi (620 MPa) FOR SHANK DIAMETERS LARGER THAN 0.142 INCH BUT NOT LARGER THAN 0.177 INCH, AND 100 ksi (689 MPa) FOR SHANK DIAMETERS OF 0.142 INCH OR LESS.
b. STAPLES ARE 16 GAGE WIRE AND HAVE A MINIMUM 7⁄16" ON DIAMETER CROWN WIDTH.
c. NAILS SHALL BE SPACED AT NO MORE THAN 6" O.C. AT ALL SUPPORTS WHERE SPANS ARE 48" OR GREATER.
d. 4'-0" X 8'-0" OR 4'-0" X 9'-0" PANELS SHALL BE APPLIED VERTICALLY.
e. SPACING OF FASTENERS NOT INCLUDED IN THIS TABLE SHALL BE BASED ON TABLE R602.3(2).
f. WHERE THE ULTIMATE DESIGN WIND SPEED IS 130 MPH OR LESS, NAILS FOR ATTACHING WOOD STRUCTURAL PANEL ROOF SHEATHING TO GABLE END WALL FRAMING BE SPACED 6" O.C.. WHERE THE ULTIMATE DESIGN WIND SPEED IS GREATER THAN 130 MPH, NAILS FOR ATTACHING PANEL ROOF SHEATHING TO INTERMEDIATE SUPPORTS SHALL BE SPACED 6" O.C. FOR A MINIMUM 48" DISTANCE FROM RIDGES, EAVES AND GABLE END WALLS; AND 4" O.C. TO GABLE END WALL FRAMING.
g. GYPSUM SHEATHING SHALL CONFORM TO ASTM C 1396 AND SHALL BE INSTALLED IN ACCORDANCE WITH GA 253. FIBERBOARD SHEATHING SHALL CONFORM TO ASTM C 208.
h. SPACING OF FASTENERS ON FLOOR SHEATHING PANEL EDGES APPLIES TO PANEL EDGES SUPPORTED BY FRAMING MEMBERS AND REQUIRED BLOCKING AND AT ALL FLOOR PERIMETERS ONLY. SPACING OF FASTENERS ON ROOF SHEATHING PANEL EDGES APPLIES TO PANEL EDGES SUPPORTED BY FRAMING MEMBERS AND REQUIRED BLOCKING. BLOCKING OF ROOF OR FLOOR SHEATHING PANEL EDGES PERPENDICULAR TO THE FRAMING MEMBERS NEED NOT BE PROVIDED EXCEPT AS REQUIRED BY OTHER PROVISIONS OF THIS CODE. FLOOR PERIMETER SHALL BE SUPPORTED BY FRAMING MEMBERS OR SOLID BLOCKING.
i. WHERE A RAFTER IS FASTENED TO AN ADJACENT PARALLEL CEILING JOIST IN ACCORDANCE WITH THIS SCHEDULE, PROVIDE TWO TOE NAILS ON ONE SIDE OF THE RAFTER AND TOE NAILS FROM THE CEILING JOIST TO TOP PLATE IN ACCORDANCE WITH THIS SCHEDULE. THE TOE NAIL ON THE OPPOSITE SIDE OF THE RAFTER SHALL NOT BE REQUIRED.

SIVARAJAN RESIDENCE
LONE MOUNTAIN VISTAS - LOT 93

7899 EAST MARY SHARON DRIVE
SCOTTSDALE, ARIZONA 85266

CITY OF SCOTTSDALE
BUILDING PLANS
THESE PLANS HAVE BEEN APPROVED
AND ARE READY FOR A PERMIT
THIS DOES NOT AUTHORIZE VIOLATIONS OF ANY
CODE OR ORDINANCE

Gilbert Structural LLC
414 East Southern Avenue
Tempe, Arizona 85282
Office 480-398-8144

PROFESSIONAL SEAL
41931
WILLIAM L.
GILBERT
Date Signed.. 11-26-2024

REVISIONS
1 .
2 .
3 .
4 .
5 .

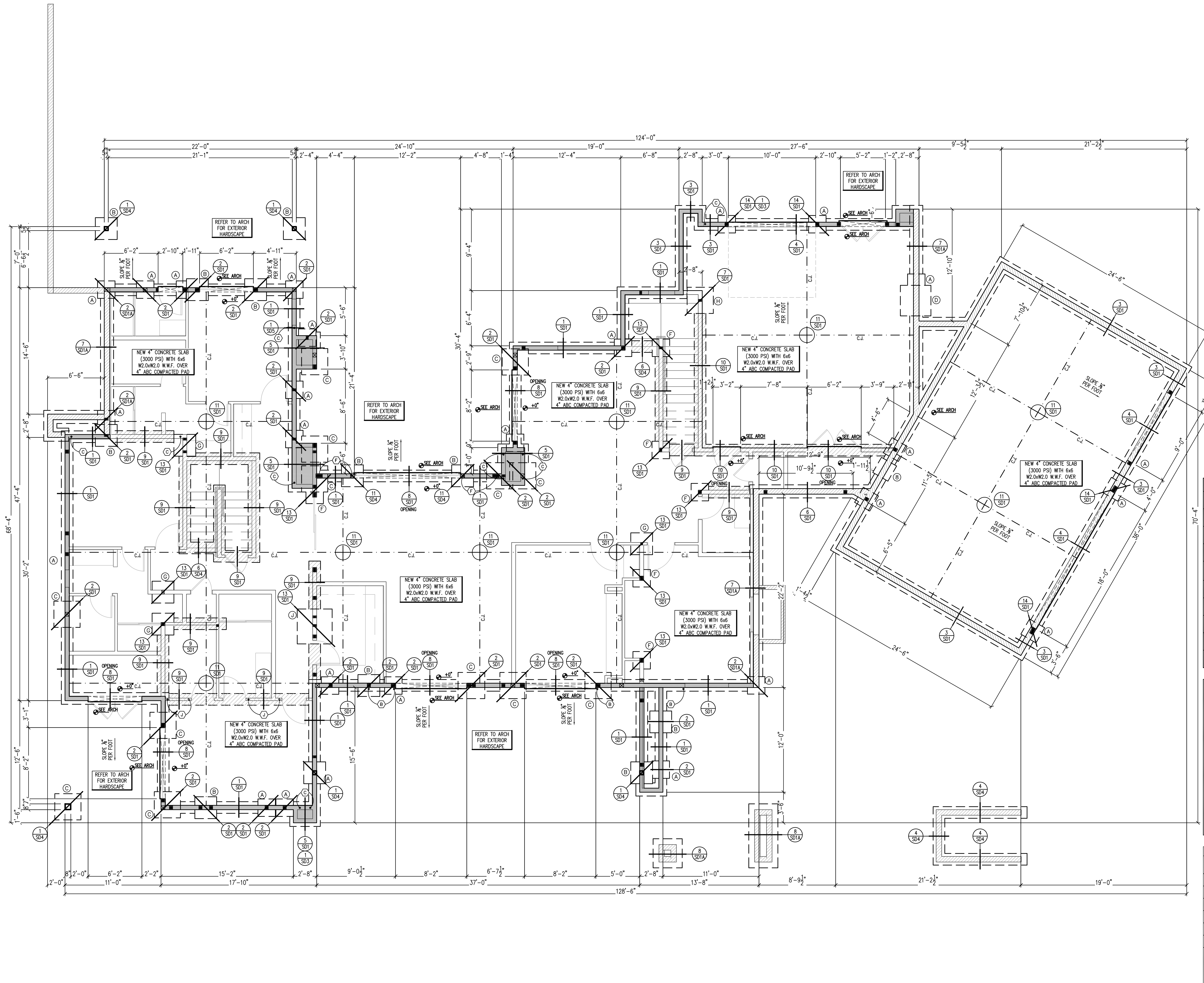
PROJECT NUMBER:

DATE: 11.26.2024

COS PLAN CHECK #9300-24

SHEET TITLE:
GENERAL
STRUCTURAL NOTES

SHEET NUMBER:
GSN


124'-0"
128'-6"
68'-4"
70'-4"
NEW 4" CONCRETE SLAB (3000 PSI) WITH 6x6 W2.0xW2.0 W.W.F. OVER 4" ABC COMPACTED PAD
REFER TO ARCH FOR EXTERIOR HARDSCAPE
SLOPE ⅛" PER FOOT
SEE ARCH
OPENING
C.J.
+0"

FOUNDATION PLAN

SCALE: 3/16" = 1'-0"

Ⓐ	24" x 24" x 12" W/ #4 BARS AT 12" O.C. EACH WAY
Ⓑ	30" x 30" x 12" W/ #4 BARS AT 12" O.C. EACH WAY
Ⓒ	36" x 36" x 12" W/ #4 BARS AT 12" O.C. EACH WAY
Ⓓ	42" x 42" x 12" W/ #4 BARS AT 12" O.C. EACH WAY
Ⓔ	48" x 48" x 12" W/ #4 BARS AT 12" O.C. EACH WAY
Ⓕ	24" x 24" x 18" W/ #4 BARS AT 12" O.C. EACH WAY
Ⓖ	30" x 30" x 18" W/ #4 BARS AT 12" O.C. EACH WAY
Ⓗ	36" x 36" x 18" W/ #4 BARS AT 12" O.C. EACH WAY
Ⓘ	42" x 42" x 18" W/ #4 BARS AT 12" O.C. EACH WAY
Ⓙ	48" x 48" x 18" W/ #4 BARS AT 12" O.C. EACH WAY

FOUNDATION NOTES

1. REFER TO STRUCTURAL NOTES PAGE FOR MATERIAL SPECIFICATIONS AND ADDITIONAL REQUIREMENTS NOT LISTED BELOW.
2. ALL CONSTRUCTION AND FOUNDATION WORK SHALL COMPLY WITH THE LATEST ADOPTED VERSION OF ALL APPLICABLE BUILDING CODES.
3. VERIFY ALL FOUNDATION DIMENSIONS WITH ARCHITECTURAL DRAWINGS.
4. ALL WOOD PLATES THAT ANCHOR TO THE FOUNDATION SHALL BE PRESSURE TREATED OR FOUNDATION REDWOOD.
5. COORDINATE FOUNDATION PLAN WITH SHEARWALL PLAN FOR LOCATION OF HOLDOWNS AND SHEARWALL ANCHOR BOLT SPACING.
6. CONTRACTOR TO PLACE CONTROL JOINTS AS INDICATED ON THE FOUNDATION PLAN WHERE APPLICABLE.
7. CONTRACTOR SHALL REFER TO ARCHITECTURAL DRAWINGS FOR ANY EXTERIOR SLAB, SIDEWALKS WORKS NOT SHOWN ON THESE DRAWINGS.
8. TYPICAL ANCHOR BOLT ½"øx10" LONG AT 48" O.C. UNLESS NOTED OTHERWISE ON PLAN. ALL WOOD SILL PLATES SHALL HAVE MIN. OF 2 ANCHOR BOLTS PER PLATE. ANCHOR BOLTS SHALL BE LOCATED NOT LESS THAN 6" NOR MORE THAN 12" FROM END OF PLATE OR AT PLATE SPLICE. ANCHORS USED FOR HOLDOWNS SHALL NOT BE CONSIDERED IN PLACING ANCHOR BOLTS. REFER SHEAR WALL LAYOUT PLAN FOR THE SPACING OF ANCHOR BOLTS AT THE LOCATION OF SHEAR PANELS. (SIMPSON MASA ANCHORS OR STRONG BOLT2 ½"ø LDT OR EXPANSION ANCHORS (MIN. 2½" EMBED.) MAYBE USED I.L.O. ½"ø EMBEDDED A.B. PROVIDED THEY ARE INSTALLED AT THE SAME SPACING INDICATED IN THE NOTES, DETAILS OR SCHEDULES OF THIS PLAN.)
9. ANY DEVIATION FROM PLAN SHALL REQUIRE ENGINEERS APPROVAL.

HOLDOWN SCHEDULE

MARK	TYPE	FASTENERS	DESCRIPTION
C	HTT-5	(26) 10d x 2-1/2" LONG NAILS	C.I.P. SSTB24 MIN. 12-5/8" EMBED W/ 12" SQ. FTG. OR EPOXY 5/8" DIA. ALL THREAD W/ 6-1/4" EMBED AT INT. (SET-3G)
F	HTT5KT	(26) 10d 2-1/2" SD TO MIN. (2) 2x4 POST	C.I.P. SB5/8x24 MIN. 18" EMBED W/ 18" SQ. FTG. OR EPOXY 5/8" DIA. ALL THREAD W/ 8" EMBED AT INT. (SET-3G)
G	CS16	(22) 10d x 2-1/2" LONG NAILS	13" LAP LENGTH
H	CS14	(30) 10d x 2-1/2" LONG NAILS	16" LAP LENGTH
I	MSTC52	(48) 16d x 3-1/4" LONG NAILS	18" LAP LENGTH
J	HHDQ11-SDS2.5	(24) 1/4 x 2-1/2" SDS TO MIN 4x6 POST	C.I.P. SB1x30 MIN 24" EMB. w/ 8" STEM & 18" SQR FTG.

NOTES:
1. ALL HOLDOWNS REQUIRE DOUBLE FULL HEIGHT STUDS U.N.O., THEREFORE LOCATE HOLDOWNS ON KIN STUDS OF OPENINGS, TRIMMERS NOT INCLUDED.
2. SPECIAL INSPECTION REQUIRED FOR ALL EPOXY OPTIONS.
3. IT IS RECOMMENDED TO CAST IN PLACE (C.I.P.) ALL HOLDOWNS TO AVOID DRASTIC AND COSTLY DESIGN RETROFITS DURING CONSTRUCTION.
4. APPROVED EPOXY: SIMPSON SET-XP (ESR-4057), SIMPSON SET-3G (ESR-4844), SIMPSON AT-3G (ESR-5026).
5. SEE DETAIL 12/SD1 FOR TYPICAL RETROFIT HOLDOWN APPLICATION.
6. STANDARD STORY STRAPS REQUIRED AT EACH END OF SECOND STORY SHEAR PANELS U.N.O. SEE DETAILS 7/SD3 AND 8/SD3 FOR STRAPS.

SIVARAJAN RESIDENCE
LONE MOUNTAIN VISTAS - LOT 93

7899 EAST MARY SHARON DRIVE
SCOTTSDALE, ARIZONA 85266

CITY OF SCOTTSDALE
BUILDING PLANS
THESE PLANS HAVE BEEN APPROVED
AND ARE READY FOR A PERMIT
THIS DOES NOT AUTHORIZE VIOLATIONS OF ANY
CODE OR ORDINANCE

PROFESSIONAL SEAL
41931
WILLIAM L. GILBERT
Date Signed.. 11-26-2024

REVISIONS
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PROJECT NUMBER:
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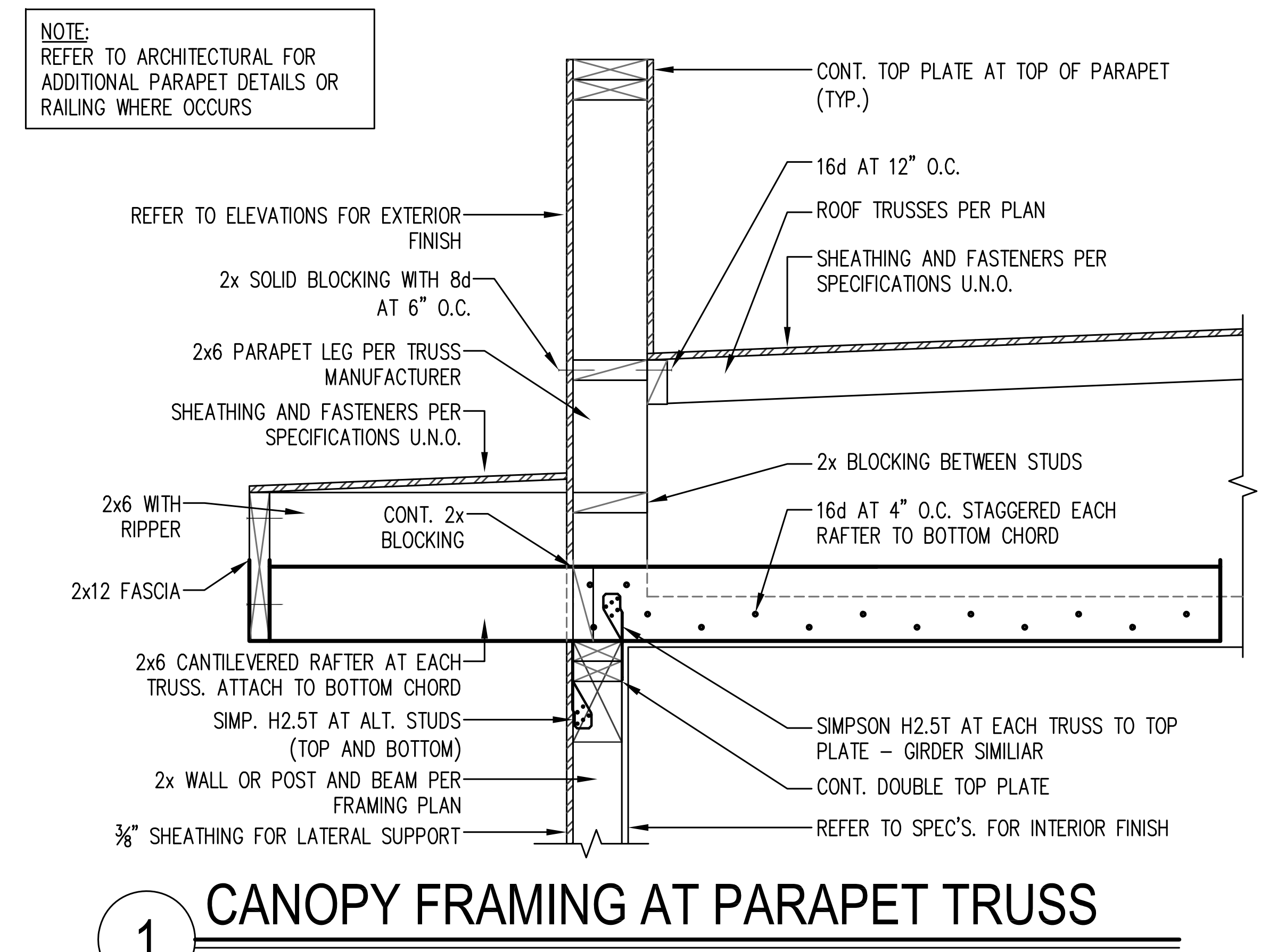
COS PLAN CHECK #9300-24

SHEET TITLE:
FOUNDATION LAYOUT

SHEET NUMBER:
S1.0


CONT. TOP PLATE AT TOP OF PARAPET (TYP.)
16d AT 12" O.C.
ROOF TRUSSES PER PLAN
SHEATHING AND FASTENERS PER SPECIFICATIONS U.N.O.
REFER TO ELEVATIONS FOR EXTERIOR FINISH
2x SOLID BLOCKING WITH 8d AT 6" O.C.
2x6 PARAPET LEG PER TRUSS MANUFACTURER
SHEATHING AND FASTENERS PER SPECIFICATIONS U.N.O.
2x BLOCKING BETWEEN STUDS
16d AT 4" O.C. STAGGERED EACH RAFTER TO BOTTOM CHORD
2x6 WITH RIPPER
CONT. 2x BLOCKING
2x12 FASCIA
2x6 CANTILEVERED RAFTER AT EACH TRUSS. ATTACH TO BOTTOM CHORD
SIMP. H2.5T AT ALT. STUDS (TOP AND BOTTOM)
2x WALL OR POST AND BEAM PER FRAMING PLAN
⅜" SHEATHING FOR LATERAL SUPPORT
SIMPSON H2.5T AT EACH TRUSS TO TOP PLATE – GIRDER SIMILIAR
CONT. DOUBLE TOP PLATE
REFER TO SPEC'S. FOR INTERIOR FINISH

NOTE:
REFER TO ARCHITECTURAL FOR ADDITIONAL PARAPET DETAILS OR RAILING WHERE OCCURS

1 CANOPY FRAMING AT PARAPET TRUSS

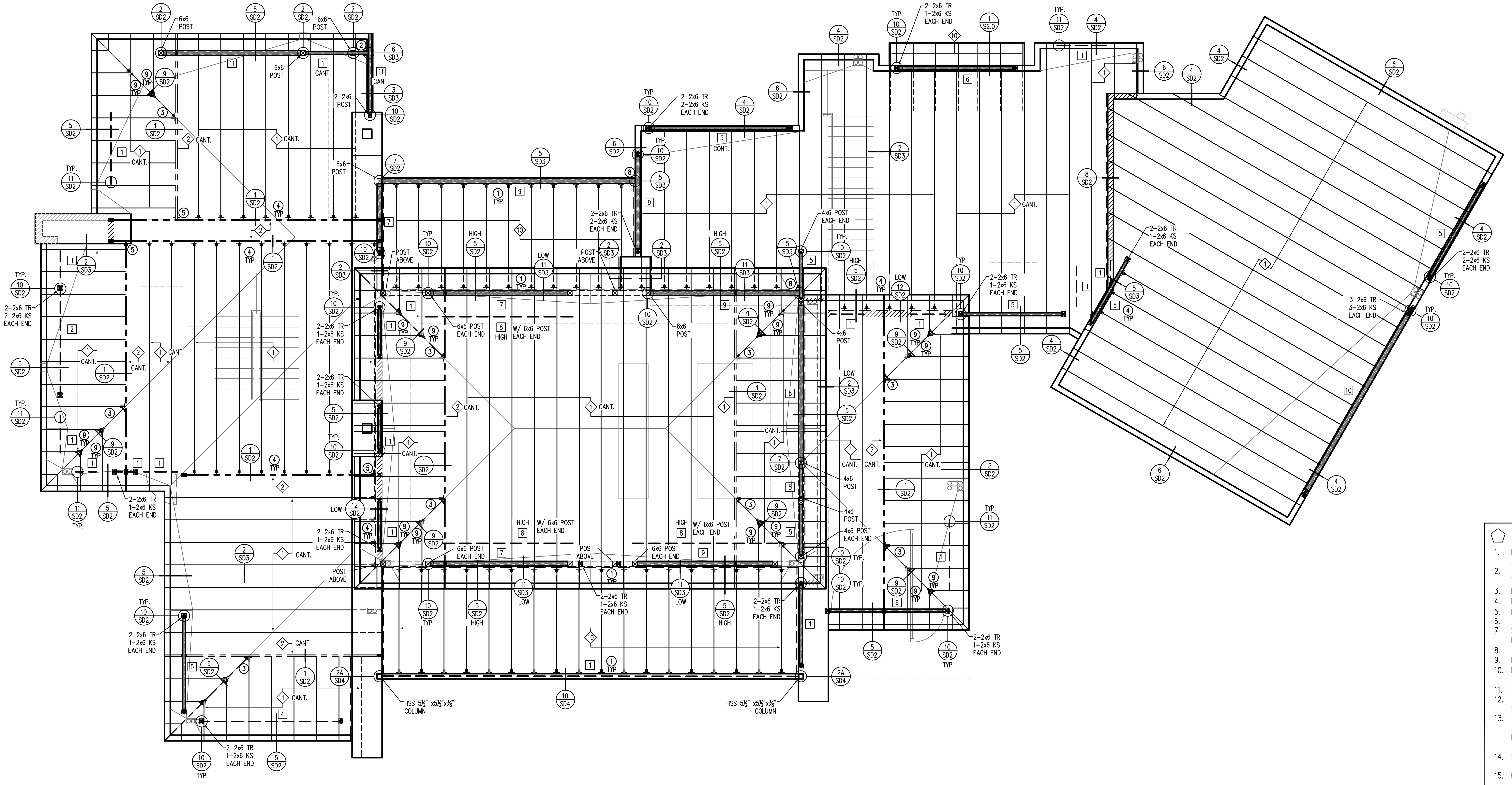
SCALE: 1" = 1'-0"

LEGEND:
▨ BEARING WALL
▒ CMU WALL
⊠ 2-2x POST (U.N.O.)

HANGER SCHEDULE
① LUS26
② HUC3.25/12
③ LTHJ
④ HUS26
⑤ HGUS26-2
⑥ THA422
⑦ LSU26
⑧ HUC5.25/12
⑨ SUR/L210
⑩ BA(MAX)

BEAM SCHEDULE	BEAM SCHEDULE
1 (2) 2x6 DFL #2 OR 4x6	11 (1) 5½" x 15" GLB
2 (2) 2x8 DFL #2 OR 4x8	12 (1) 5½" x 16" GLB
3 (2) 2x10 DFL #2 OR 4x10	13 (1) 5½" x 18" GLB
4 (2) 2x12 DFL #2 OR 4x12	14 W12 x 300 (50 ksi)
5 (1) 3⅛" x 9" GLB	15 W16 x 31 (50 ksi)
6 (1) 3⅛" x 10½" GLB	16 W18 x 36 (50 ksi)
7 (1) 5⅛" x 9" GLB	17 16" DEEP CMU LINTEL WITH 2-#4 BOTTOM REINF
8 (1) 5⅛" x 10½" GLB	
9 (1) 5⅛" x 12" GLB	18 NOT USED
10 (1) 5⅛" x 13½" GLB	

TRUSS SCHEDULE
1 TAPERED TOP CHORD FLAT ROOF TRUSSES AT 24" O.C.
2 TAPERED TOP CHORD FLAT ROOF GIRDER TRUSS
3 BOX GIRDER TRUSS
4 20" DEEP RIM TRUSS
5 20" DEEP FLOOR TRUSSES AT 16" O.C.
6 20" DEEP FLOOR GIRDER TRUSS
7 CANTILEVERED 2x6 RAFTERS AT 24" O.C.
8 18" WALK DECK TRUSSES AT 16" O.C.
9 18" WALK DECK GIRDER TRUSS
10 2x12 RAFTERS WITH RIPPERS AT 24" O.C.
11 2x8 JOISTS AT 16" O.C.
12 3x12 JOISTS AT 12" O.C.


6x6 POST
CANT.
2-2x6 TR
2-2x6 KS
EACH END
1-2x6 KS
TYP.
HIGH
LOW
POST ABOVE
W/ 6x6 POST EACH END
6x6 POST EACH END
4x6 POST
4x6 POST EACH END
CONT.
3-2x6 TR
3-2x6 KS
HSS 5½" x5½"x⅜" COLUMN
SD2
SD3
SD4
S2.0

ROOF FRAMING PLAN

SCALE: 3/16" = 1'-0"

FRAMING NOTES

1. REFER TO STRUCTURAL NOTES PAGE FOR MATERIAL SPECIFICATIONS AND ADDITIONAL REQUIREMENTS NOT LISTED BELOW.
2. ALL FRAMING AND ANCHORING SHALL COMPLY WITH THE LATEST ADOPTED VERSION OF THE BUILDING CODE.
3. EXTERIOR WALLS TO BE 2x STUDS AT 16" O.C., TYPICAL, U.N.O.
4. INTERIOR BEARING WALLS TO BE 2x STUDS AT 16" O.C., U.N.O.
5. INTERIOR PARTITION WALLS TO BE 2x STUDS AT 24" O.C., TYPICAL U.N.O.
6. ALL POSTS TO BE 2-2x THE WALL THICKNESS, U.N.O.
7. SINGLE TRIMMER IS TO BE PROVIDED UNDER THE ENDS OF ALL BEAMS AND HEADERS, U.N.O.
8. ALL JOISTS SHALL BEAR A MINIMUM OF 2" ON ALL BEAMS OR WALL PLATES.
9. PROVIDE H2.5T TIE AT EACH TRUSS ALONG INTERIOR BEARING WALLS.
10. METAL CONNECTORS, HANGERS AND TIES TO BE "SIMPSON STRONG-TIE" OR APPROVED EQUAL.
11. ALL ROOF TRUSSES SHALL BE AT 24" O.C. U.N.O.
12. ALL TRUSSES AND STRUCTURAL MEMBERS SHALL BE BRACED, BLOCKED AND SUPPORTED AT ALL TIMES DURING CONSTRUCTION.
13. TRUSS MANUFACTURER TO COORDINATE WITH MECHANICAL AND ARCHITECTURAL DRAWINGS FOR EXACT WEIGHT AND LOCATION OF MECHANICAL EQUIPMENT. ALL ROOF TRUSSES SHALL BE DESIGNED FOR AN ADDITIONAL LOAD AS SPECIFIED ON MECHANICAL/ARCHITECTURAL PLANS.
14. SEE MECHANICAL AND ARCHITECTURAL PLANS FOR LOCATIONS OF SOFFITS AND LOWERED SOFFITS.
15. PROVIDE BLOCK-OUTS IN ROOF FOR FIREPLACE FLUES, PLUMBING, ETC. VERIFY LOCATIONS OF FIREPLACE FLUES PRIOR TO CONSTRUCTION.
16. PROVIDE CROSS BLOCKING AND 1/2" PLYWOOD BACKING AT ALL CEILING FAN LOCATIONS.
17. REFER TO ARCHITECTURAL FLOOR AND/OR ROOF PLANS FOR ATTIC ACCESS LOCATIONS AND CODE REQUIREMENTS.
18. PROVIDE 2x BLOCKING AT ALL HIPS AND RIDGES FOR PANEL EDGE NAILING REFER TO ENGINEERING SPECIFICATIONS.
19. PROVIDE SIMP. STCT CLIP AT ALL TRUSSES TO EXTERIOR NON-BEARING WALLS.
20. SIMPSON H2.5T OR RSP4 NOT REQUIRED AT TOP OR BOTTOM PLATE CONNECTIONS IF OSB IS INSTALLED AT THAT LOCATION.
21. 16-GAUGE 1¾" LONG (½" CROWN) STAPLES MAY BE USED IN LIEU OF 8d NAILS FOR ROOF SHEATHING CONNECTIONS. SAME SPACING APPLIES TO BOTH 8d NAILS AND 16-GAUGE STAPLES.
22. GIRDER TRUSS POST REQUIREMENTS:
    - SINGLE PLY GIRDER TRUSS – USE 1-2x (WALL THICKNESS) U.N.O.
    - TWO PLY GIRDER TRUSS – USE 2-2x (WALL THICKNESS) U.N.O.
23. ALL EXISTING CONDITIONS SHOULD BE VERIFIED PRIOR TO CONSTRUCTION AND FABRICATION.
24. ROOF SLOPES SHALL MATCH ARCHITECTURAL PLANS.

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414 East Southern Avenue
Tempe, Arizona 85282
Office 480-398-8144

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41931
WILLIAM L. GILBERT
Date Signed.. 11-26-2024

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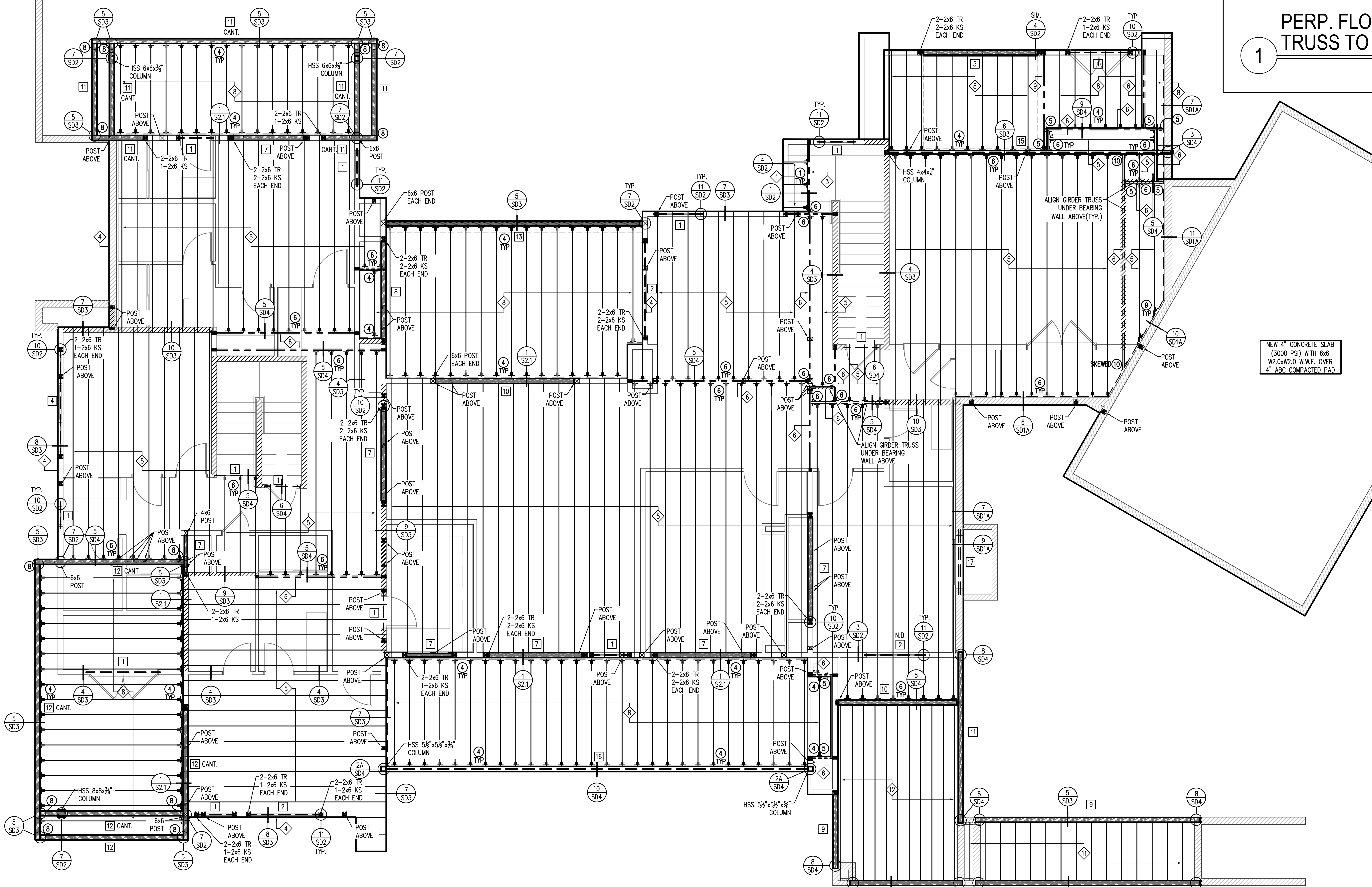
FRAMING LAYOUT

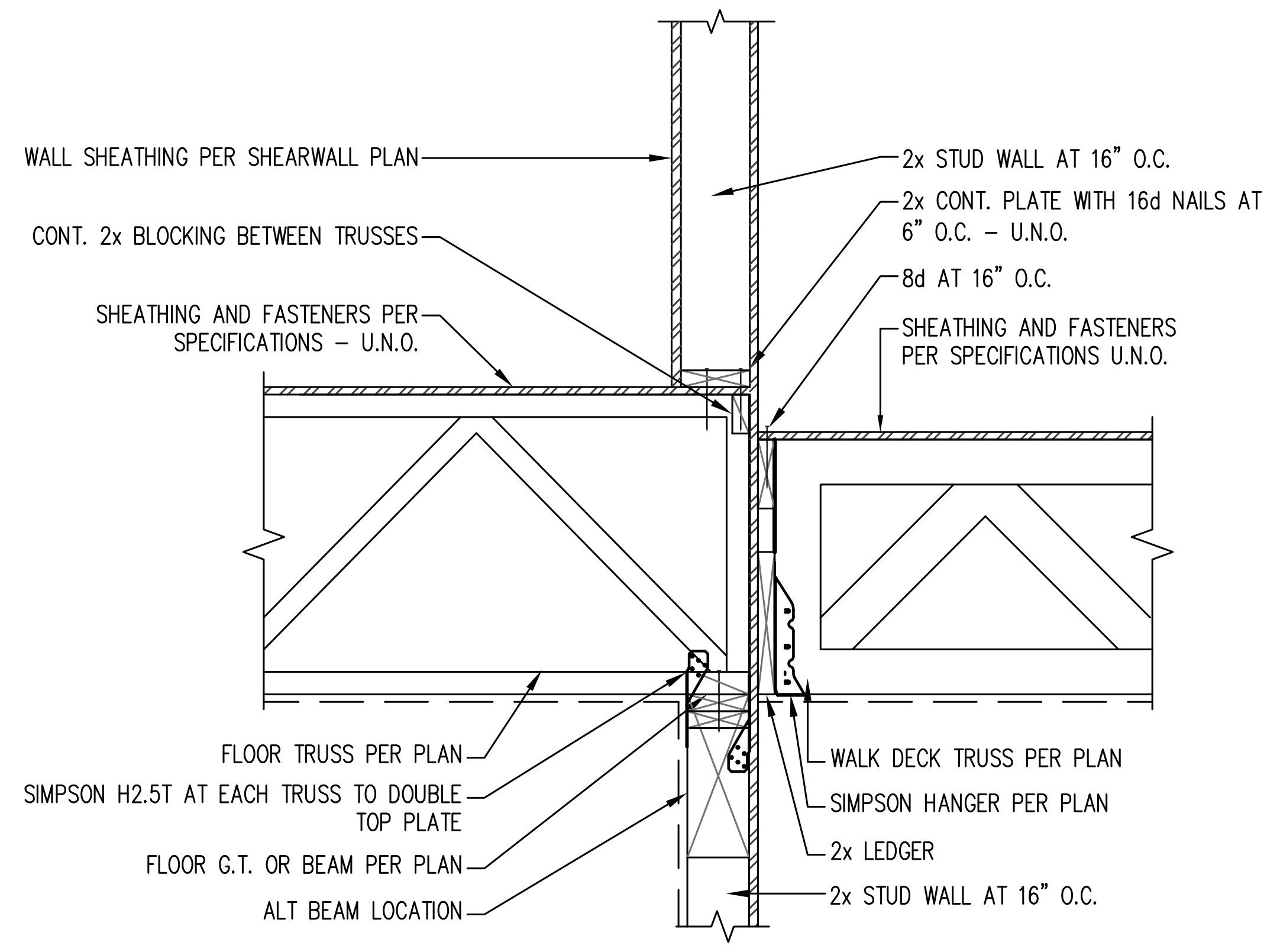
SHEET NUMBER:
S2.0



HSS 6x6x3/8 COLUMN
CANT.
POST ABOVE
2-2x6 TR 1-2x6 KS
2-2x6 TR 2-2x6 KS EACH END
2-2x6 TR 1-2x6 KS EACH END
6x6 POST
6x6 POST EACH END
4x6 POST
HSS 4x4x1/4 COLUMN
ALIGN GIRDER TRUSS UNDER BEARING WALL ABOVE(TYP.)
ALIGN GIRDER TRUSS UNDER BEARING WALL ABOVE
NEW 4" CONCRETE SLAB (3000 PSI) WITH 6x6 W2.0xW2.0 W.W.F. OVER 4" ABC COMPACTED PAD
HSS 5½x5½x3/8 COLUMN
HSS 8x8x3/8 COLUMN
SKEWED
TYP.
SIM.
N.B.
SD1A
SD2
SD3
SD4
S2.1

FLOOR FRAMING PLAN

SCALE: 3/16" = 1'-0"



WALL SHEATHING PER SHEARWALL PLAN
CONT. 2x BLOCKING BETWEEN TRUSSES
SHEATHING AND FASTENERS PER SPECIFICATIONS – U.N.O.
FLOOR TRUSS PER PLAN
SIMPSON H2.5T AT EACH TRUSS TO DOUBLE TOP PLATE
FLOOR G.T. OR BEAM PER PLAN
ALT BEAM LOCATION
2x STUD WALL AT 16" O.C.
2x CONT. PLATE WITH 16d NAILS AT 6" O.C. – U.N.O.
8d AT 16" O.C.
SHEATHING AND FASTENERS PER SPECIFICATIONS U.N.O.
WALK DECK TRUSS PER PLAN
SIMPSON HANGER PER PLAN
2x LEDGER
2x STUD WALL AT 16" O.C.

1 PERP. FLOOR / PERP WALK DECK TRUSS TO WALL/BEAM SIMILAR

SCALE: 1" = 1'-0"

LEGEND:

▨ BEARING WALL

▨ CMU WALL

☒ 2–2x POST (U.N.O.)

HANGER SCHEDULE	
①	LUS26
②	HUC3.25/12
③	LTHJ
④	HUS26
⑤	HGUS26–2
⑥	THA422
⑦	LSU26
⑧	HUC5.25/12
⑨	SUR/L210
⑩	BA(MAX)

BEAM SCHEDULE		BEAM SCHEDULE	
1	(2) 2x6 DFL #2 OR 4x6	11	(1) 5½" x 15" GLB
2	(2) 2x8 DFL #2 OR 4x8	12	(1) 5½" x 16" GLB
3	(2) 2x10 DFL #2 OR 4x10	13	(1) 5½" x 18" GLB
4	(2) 2x12 DFL #2 OR 4x12	14	W12 x 300 (50 ksi)
5	(1) 3⅛" x 9" GLB	15	W16 x 31 (50 ksi)
6	(1) 3⅛" x 10½" GLB	16	W18 x 36 (50 ksi)
7	(1) 5⅛" x 9" GLB	17	16" DEEP CMU LINTEL WITH 2–#4 BOTTOM REINF
8	(1) 5⅛" x 10½" GLB		
9	(1) 5⅛" x 12" GLB	18	NOT USED
10	(1) 5⅛" x 13½" GLB		

TRUSS SCHEDULE	
1	TAPERED TOP CHORD FLAT ROOF TRUSSES AT 24" O.C.
2	TAPERED TOP CHORD FLAT ROOF GIRDER TRUSS
3	BOX GIRDER TRUSS
4	20" DEEP RIM TRUSS
5	20" DEEP FLOOR TRUSSES AT 16" O.C.
6	20" DEEP FLOOR GIRDER TRUSS
7	CANTILEVERED 2x6 RAFTERS AT 24" O.C.
8	18" WALK DECK TRUSSES AT 16" O.C.
9	18" WALK DECK GIRDER TRUSS
10	2x12 RAFTERS WITH RIPPERS AT 24" O.C.
11	2x8 JOISTS AT 16" O.C.
12	3x12 JOISTS AT 12" O.C.

FRAMING NOTES

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3. EXTERIOR WALLS TO BE 2x STUDS AT 16" O.C., TYPICAL, U.N.O.
4. INTERIOR BEARING WALLS TO BE 2x STUDS AT 16" O.C., U.N.O.
5. INTERIOR PARTITION WALLS TO BE 2x STUDS AT 24" O.C., TYPICAL U.N.O.
6. ALL POSTS TO BE 2–2x THE WALL THICKNESS, U.N.O.
7. SINGLE TRIMMER IS TO BE PROVIDED UNDER THE ENDS OF ALL BEAMS AND HEADERS, U.N.O.
8. ALL JOISTS SHALL BEAR A MINIMUM OF 2" ON ALL BEAMS OR WALL PLATES.
9. PROVIDE H2.5T TIE AT EACH TRUSS ALONG INTERIOR BEARING WALLS.
10. METAL CONNECTORS, HANGERS AND TIES TO BE "SIMPSON STRONG–TIE" OR APPROVED EQUAL.
11. ALL ROOF TRUSSES SHALL BE AT 24" O.C. U.N.O.
12. ALL TRUSSES AND STRUCTURAL MEMBERS SHALL BE BRACED, BLOCKED AND SUPPORTED AT ALL TIMES DURING CONSTRUCTION.
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14. SEE MECHANICAL AND ARCHITECTURAL PLANS FOR LOCATIONS OF SOFFITS AND LOWERED SOFFITS.
15. PROVIDE BLOCK–OUTS IN ROOF FOR FIREPLACE FLUES, PLUMBING, ETC. VERIFY LOCATIONS OF FIREPLACE FLUES PRIOR TO CONSTRUCTION.
16. PROVIDE CROSS BLOCKING AND 1/2" PLYWOOD BACKING AT ALL CEILING FAN LOCATIONS.
17. REFER TO ARCHITECTURAL FLOOR AND/OR ROOF PLANS FOR ATTIC ACCESS LOCATIONS AND CODE REQUIREMENTS.
18. PROVIDE 2x BLOCKING AT ALL HIPS AND RIDGES FOR PANEL EDGE NAILING REFER TO ENGINEERING SPECIFICATIONS.
19. PROVIDE SIMP. STCT CLIP AT ALL TRUSSES TO EXTERIOR NON–BEARING WALLS.
20. SIMPSON H2.5T OR RSP4 NOT REQUIRED AT TOP OR BOTTOM PLATE CONNECTIONS IF OSB IS INSTALLED AT THAT LOCATION.
21. 16–GAUGE 1¾" LONG (½" CROWN) STAPLES MAY BE USED IN LIEU OF 8d NAILS FOR ROOF SHEATHING CONNECTIONS. SAME SPACING APPLIES TO BOTH 8d NAILS AND 16–GAUGE STAPLES.
22. GIRDER TRUSS POST REQUIREMENTS:
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    - TWO PLY GIRDER TRUSS – USE 2–2x (WALL THICKNESS) U.N.O.
23. ALL EXISTING CONDITIONS SHOULD BE VERIFIED PRIOR TO CONSTRUCTION AND FABRICATION.
24. ROOF SLOPES SHALL MATCH ARCHITECTURAL PLANS.

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WILLIAM L.
GILBERT
Date Signed.. 11–26–2024

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FRAMING
LAYOUT

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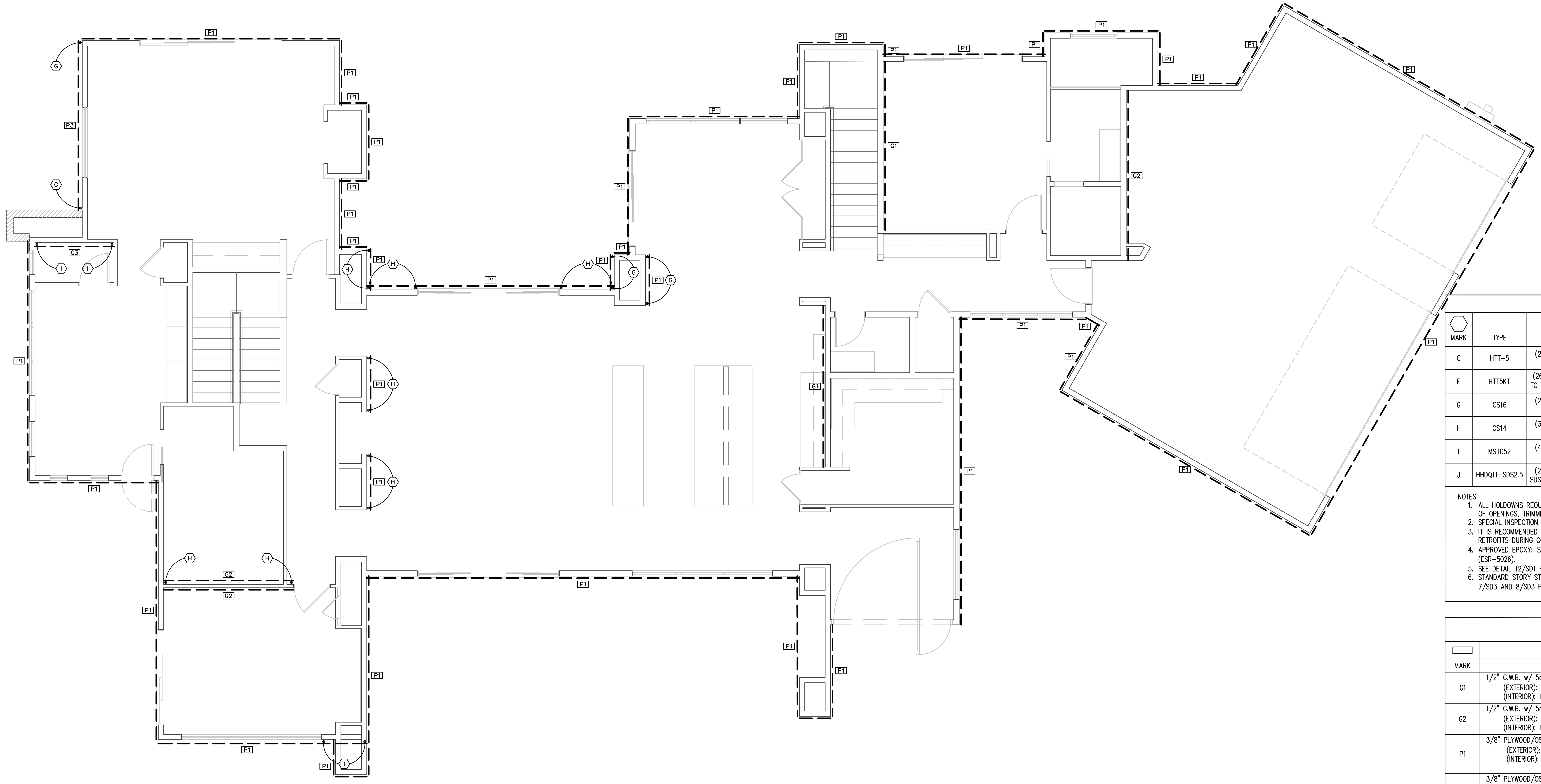
S2.1



UPPER FLOOR SHEARWALL PLAN

SCALE: 3/16" = 1'-0"

WALL TYPES

☐	WOOD STUD WALL PER ARCHITECURE
▨	CMU WALL WITH #5 VERTICAL BARS AT 32" O.C.

HOLDOWN SCHEDULE

⬡ MARK	TYPE	FASTENERS	DESCRIPTION
C	HTT-5	(26) 10d x 2-1/2" LONG NAILS	C.I.P. SSTB24 MIN. 12-5/8" EMBED W/ 12" SQ. FTG. OR EPOXY 5/8" DIA. ALL THREAD W/ 6-1/4" EMBED AT INT. (SET-3G)
F	HTT5KT	(26) 10d 2-1/2" SD TO MIN. (2) 2x4 POST	C.I.P. SB5/8x24 MIN. 18" EMBED W/ 18" SQ. FTG. OR EPOXY 5/8" DIA. ALL THREAD W/ 8" EMBED AT INT. (SET-3G)
G	CS16	(22) 10d x 2-1/2" LONG NAILS	13" LAP LENGTH
H	CS14	(30) 10d x 2-1/2" LONG NAILS	16" LAP LENGTH
I	MSTC52	(48) 16d x 3-1/4" LONG NAILS	18" LAP LENGTH
J	HHDQ11-SDS2.5	(24) 1/4 x 2-1/2" SDS TO MIN 4x6 POST	C.I.P. SB1x30 MIN 24" EMB. w/ 8" STEM & 18" SQR FTG.

NOTES:
1. ALL HOLDOWNS REQUIRE DOUBLE FULL HEIGHT STUDS U.N.O., THEREFORE LOCATE HOLDOWNS ON KIN STUDS OF OPENINGS, TRIMMERS NOT INCLUDED.
2. SPECIAL INSPECTION REQUIRED FOR ALL EPOXY OPTIONS.
3. IT IS RECOMMENDED TO CAST IN PLACE (C.I.P.) ALL HOLDOWNS TO AVOID DRASTIC AND COSTLY DESIGN RETROFITS DURING CONSTRUCTION.
4. APPROVED EPOXY: SIMPSON SET-XP (ESR-4057), SIMPSON SET-3G (ESR-4844), SIMPSON AT-3G (ESR-5026).
5. SEE DETAIL 12/SD1 FOR TYPICAL RETROFIT HOLDOWN APPLICATION.
6. STANDARD STORY STRAPS REQUIRED AT EACH END OF SECOND STORY SHEAR PANELS U.N.O. SEE DETAILS 7/SD3 AND 8/SD3 FOR STRAPS.

SHEATHING SCHEDULE

☐ MARK	DESCRIPTION	SILL PLATE NAIL SPACING - SHEARWALL AT UPPER FLOORS (16d NAILS)
G1	1/2" G.W.B. w/ 5d COOLER NAILS AT 7" O.C. EDGES AND FIELD (UNBLOCKED) (EXTERIOR): ½" X 10" ANCHOR BOLTS AT 48" O.C. (INTERIOR): HILTI PINS AT 12" O.C.	12"
G2	1/2" G.W.B. w/ 5d COOLER NAILS AT 7" O.C. EDGES AND FIELD (BLOCKED) (EXTERIOR): ½" X 10" ANCHOR BOLTS AT 48" O.C. (INTERIOR): HILTI PINS AT 12" O.C.	10"
P1	3/8" PLYWOOD/OSB w/8d AT 6" O.C. EDGES /12" O.C. FIELD (BLOCKED) (EXTERIOR): ½" X 10" ANCHOR BOLTS AT 32" O.C. (INTERIOR): HILTI OR SIMPSON PINS @ 8" O.C., ANCHOR BOLTS OR EQUIV REQUIRED	6"
P2	3/8" PLYWOOD/OSB w/8d AT 4" O.C. EDGES /12" O.C. FIELD (BLOCKED) (EXTERIOR): ½" X 10" ANCHOR BOLTS AT 24" O.C. (INTERIOR): HILTI OR SIMPSON PINS AT 6" O.C., ANCHOR BOLTS OR EQUIV REQUIRED	(2) ROWS AT 8"
P3	3/8" PLYWOOD/OSB w/8d AT 3" O.C. EDGES /12" O.C. FIELD (BLOCKED) (EXTERIOR): ½" X 10" ANCHOR BOLTS AT 16" O.C. (INTERIOR): HILTI OR SIMPSON PINS AT 16" O.C., ANCHOR BOLTS OR EQUIV REQUIRED	(2) ROWS AT 6"
P5	15/32" PLYWOOD/OSB WITH 10d AT 2" O.C. EDGES /12" O.C. FIELD (BLOCKED) (EXTERIOR): ½" X 10" ANCHOR BOLTS AT 12" O.C. (INTERIOR): ANCHOR BOLTS OR EQUIV REQUIRED	(2) ROWS AT 3"

NOTES:
1. ALL SHEARWALLS TO HAVE DOUBLE TOP PLATES AND 2x STUDS AT 16" O.C. - U.N.O.
2. FRAMING AT ADJOINING PANEL EDGES SHALL BE 3" NOMINAL OR WIDER, AND NAILS SHALL BE STAGGERED WHERE NAILS ARE SPACED LESS THAN 3" O.C.
3. 1" MIN HILTI-PIN EMBEDMENT ACCEPTABLE HILTI-PINS: X-U 72 AND X-CF 72 (ESR-2269) (ESR-2379). SIMPSON PINS: PDPA (ESR-2138)
4. USE HILTI 1/2" DIA x 6" LONG HUS SCREW ANCHOR (ESR-2307) OR SIMPSON 1/2" DIA x 6" LONG TITEN HD (ESR-2713) AS A ONE FOR ONE REPLACEMENT OD 1/2" DIA ANCHOR BOLT.
5. AS AN ALTERNATE TO 5d COOLER NAILS, #6 1¼" TYPE 'W' DRYWALL SCREWS MAY BE USED. AS AN ALTERNATE TO 6d COOLER NAILS, #6 1⅝" TYPE 'W' DRYWALL SCREWS MAY BE USED. SAME SPACING APPLIES PER SCHEDULE.

SIVARAJAN RESIDENCE
LONE MOUNTAIN VISTAS - LOT 93

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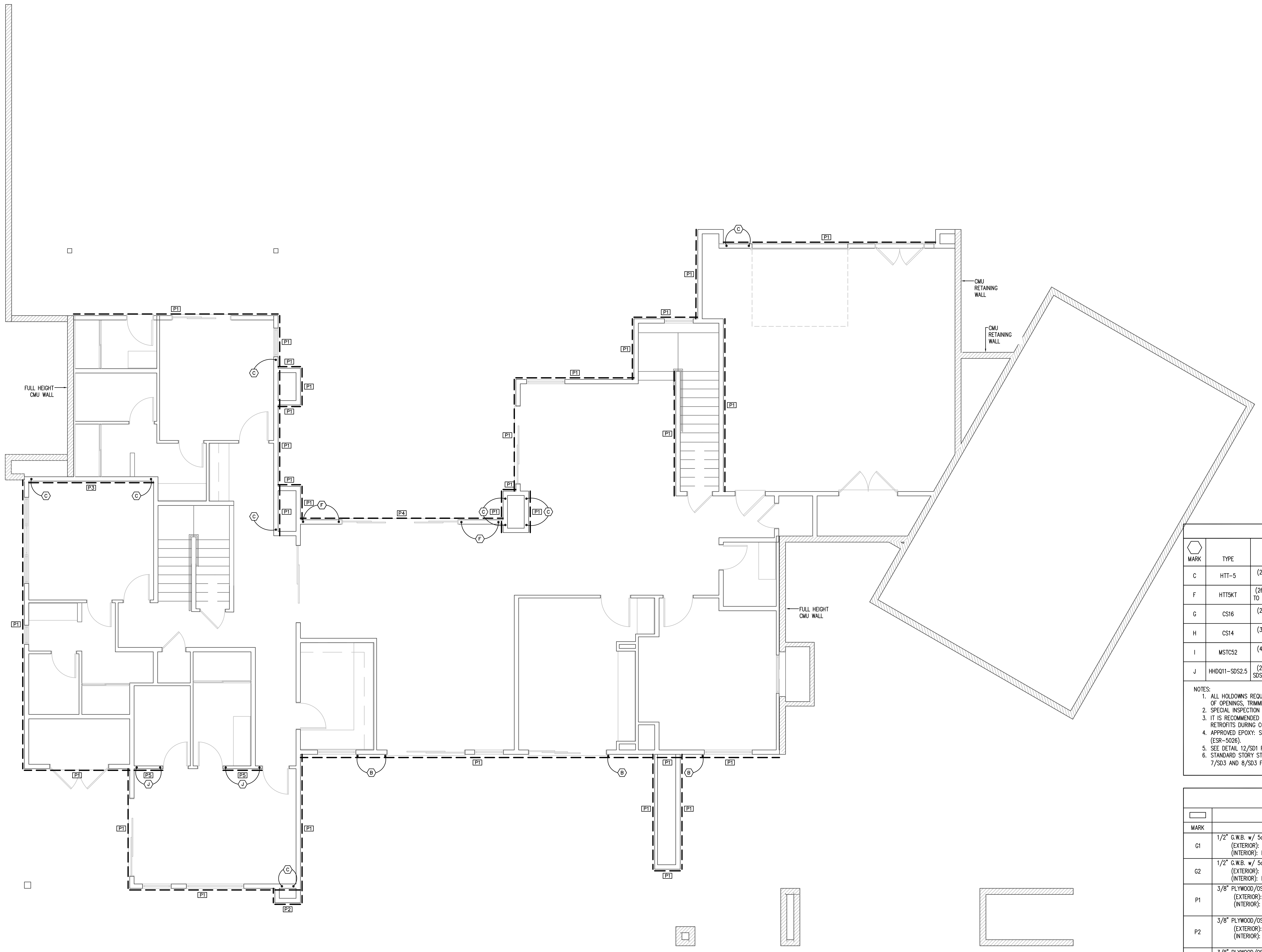
SHEET TITLE:

SHEARWALL LAYOUT

SHEET NUMBER:

S3.0



LOWER FLOOR SHEARWALL PLAN

SCALE: 3/16" = 1'-0"

WALL TYPES

- ☐ WOOD STUD WALL PER ARCHITECURE
- ▨ CMU WALL WITH #5 VERTICAL BARS AT 32" O.C.

HOLDOWN SCHEDULE

MARK	TYPE	FASTENERS	DESCRIPTION
C	HTT-5	(26) 10d x 2-1/2" LONG NAILS	C.I.P. SSTB24 MIN. 12-5/8" EMBED W/ 12" SQ. FTG. OR EPOXY 5/8" DIA. ALL THREAD W/ 6-1/4" EMBED AT INT. (SET-3G)
F	HTT5KT	(26) 10d 2-1/2" SD TO MIN. (2) 2x4 POST	C.I.P. SB5/8x24 MIN. 18" EMBED W/ 18" SQ. FTG. OR EPOXY 5/8" DIA. ALL THREAD W/ 8" EMBED AT INT. (SET-3G)
G	CS16	(22) 10d x 2-1/2" LONG NAILS	13" LAP LENGTH
H	CS14	(30) 10d x 2-1/2" LONG NAILS	16" LAP LENGTH
I	MSTC52	(48) 16d x 3-1/4" LONG NAILS	18" LAP LENGTH
J	HHDQ11-SDS2.5	(24) 1/4 x 2-1/2" SDS TO MIN 4x6 POST	C.I.P. SB1x30 MIN 24" EMB. w/ 8" STEM & 18" SQR FTG.

NOTES:
1. ALL HOLDOWNS REQUIRE DOUBLE FULL HEIGHT STUDS U.N.O., THEREFORE LOCATE HOLDOWNS ON KIN STUDS OF OPENINGS, TRIMMERS NOT INCLUDED.
2. SPECIAL INSPECTION REQUIRED FOR ALL EPOXY OPTIONS.
3. IT IS RECOMMENDED TO CAST IN PLACE (C.I.P.) ALL HOLDOWNS TO AVOID DRASTIC AND COSTLY DESIGN RETROFITS DURING CONSTRUCTION.
4. APPROVED EPOXY: SIMPSON SET-XP (ESR-4057), SIMPSON SET-3G (ESR-4844), SIMPSON AT-3G (ESR-5026).
5. SEE DETAIL 12/SD1 FOR TYPICAL RETROFIT HOLDOWN APPLICATION.
6. STANDARD STORY STRAPS REQUIRED AT EACH END OF SECOND STORY SHEAR PANELS U.N.O. SEE DETAILS 7/SD3 AND 8/SD3 FOR STRAPS.

SHEATHING SCHEDULE

MARK	DESCRIPTION	SILL PLATE NAIL SPACING – SHEARWALL AT UPPER FLOORS (16d NAILS)
G1	1/2" G.W.B. w/ 5d COOLER NAILS AT 7" O.C. EDGES AND FIELD (UNBLOCKED) (EXTERIOR): ½" X 10" ANCHOR BOLTS AT 48" O.C. (INTERIOR): HILTI PINS AT 12" O.C.	12"
G2	1/2" G.W.B. w/ 5d COOLER NAILS AT 7" O.C. EDGES AND FIELD (BLOCKED) (EXTERIOR): ½" X 10" ANCHOR BOLTS AT 48" O.C. (INTERIOR): HILTI PINS AT 12" O.C.	10"
P1	3/8" PLYWOOD/OSB w/8d AT 6" O.C. EDGES /12" O.C. FIELD (BLOCKED) (EXTERIOR): ½" X 10" ANCHOR BOLTS AT 32" O.C. (INTERIOR): HILTI OR SIMPSON PINS @ 8" O.C., ANCHOR BOLTS OR EQUIV REQUIRED	6"
P2	3/8" PLYWOOD/OSB w/8d AT 4" O.C. EDGES /12" O.C. FIELD (BLOCKED) (EXTERIOR): ½" X 10" ANCHOR BOLTS AT 24" O.C. (INTERIOR): HILTI OR SIMPSON PINS AT 6" O.C., ANCHOR BOLTS OR EQUIV REQUIRED	(2) ROWS AT 8"
P3	3/8" PLYWOOD/OSB w/8d AT 3" O.C. EDGES /12" O.C. FIELD (BLOCKED) (EXTERIOR): ½" X 10" ANCHOR BOLTS AT 16" O.C. (INTERIOR): HILTI OR SIMPSON PINS AT 16" O.C., ANCHOR BOLTS OR EQUIV REQUIRED	(2) ROWS AT 6"
P5	15/32" PLYWOOD/OSB WITH 10d AT 2" O.C. EDGES /12" O.C. FIELD (BLOCKED) (EXTERIOR): ½" X 10" ANCHOR BOLTS AT 12" O.C. (INTERIOR): ANCHOR BOLTS OR EQUIV REQUIRED	(2) ROWS AT 3"

NOTES:
1. ALL SHEARWALLS TO HAVE DOUBLE TOP PLATES AND 2x STUDS AT 16" O.C. – U.N.O.
2. FRAMING AT ADJOINING PANEL EDGES SHALL BE 3" NOMINAL OR WIDER, AND NAILS SHALL BE STAGGERED WHERE NAILS ARE SPACED LESS THAN 3" O.C.
3. 1" MIN HILTI-PIN EMBEDMENT ACCEPTABLE HILTI-PINS: X-U 72 AND X-CF 72 (ESR-2269) (ESR-2379). SIMPSON PINS: PDPA (ESR-2138)
4. USE HILTI 1/2" DIA x 6" LONG HUS SCREW ANCHOR (ESR-2307) OR SIMPSON 1/2" DIA x 6" LONG TITEN HD (ESR-2713) AS A ONE FOR ONE REPLACEMENT OD 1/2" DIA ANCHOR BOLT.
5. AS AN ALTERNATE TO 5d COOLER NAILS, #6 1¼" TYPE 'W' DRYWALL SCREWS MAY BE USED. AS AN ALTERNATE TO 6d COOLER NAILS, #6 1⅝" TYPE 'W' DRYWALL SCREWS MAY BE USED. SAME SPACING APPLIES PER SCHEDULE.

SIVARAJAN RESIDENCE
LONE MOUNTAIN VISTAS - LOT 93

7899 EAST MARY SHARON DRIVE
SCOTTSDALE, ARIZONA 85266

CITY OF SCOTTSDALE
BUILDING PLANS
THESE PLANS HAVE BEEN APPROVED
AND ARE READY FOR A PERMIT
THIS DOES NOT AUTHORIZE VIOLATIONS OF ANY
CODE OR ORDINANCE

Gilbert Structural LLC
414 East Southern Avenue
Tempe, Arizona 85282
Office 480-398-8144

PROFESSIONAL SEAL

41931
WILLIAM L.
GILBERT
Date Signed..11-26-2024

REVISIONS
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3 .
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5 .

PROJECT NUMBER:

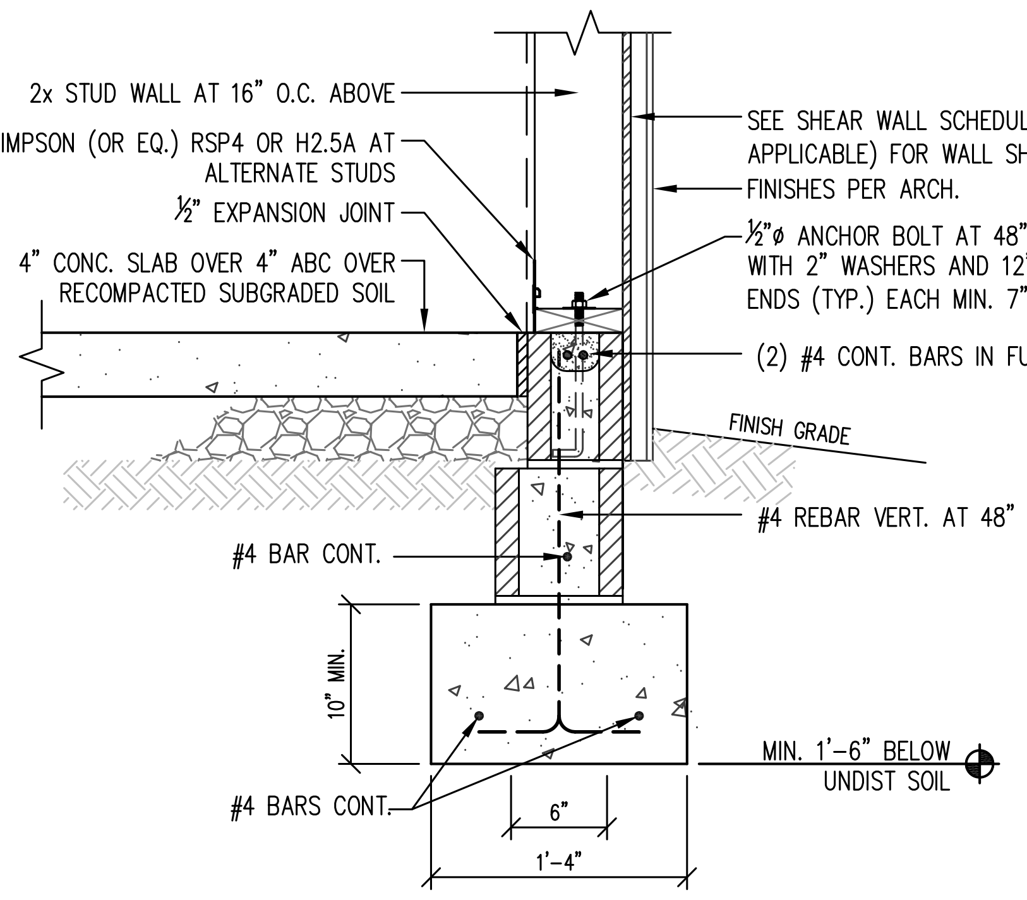
DATE: 11.26.2024

COS PLAN CHECK #9300-24

SHEET TITLE:
SHEARWALL LAYOUT

SHEET NUMBER:
S3.1

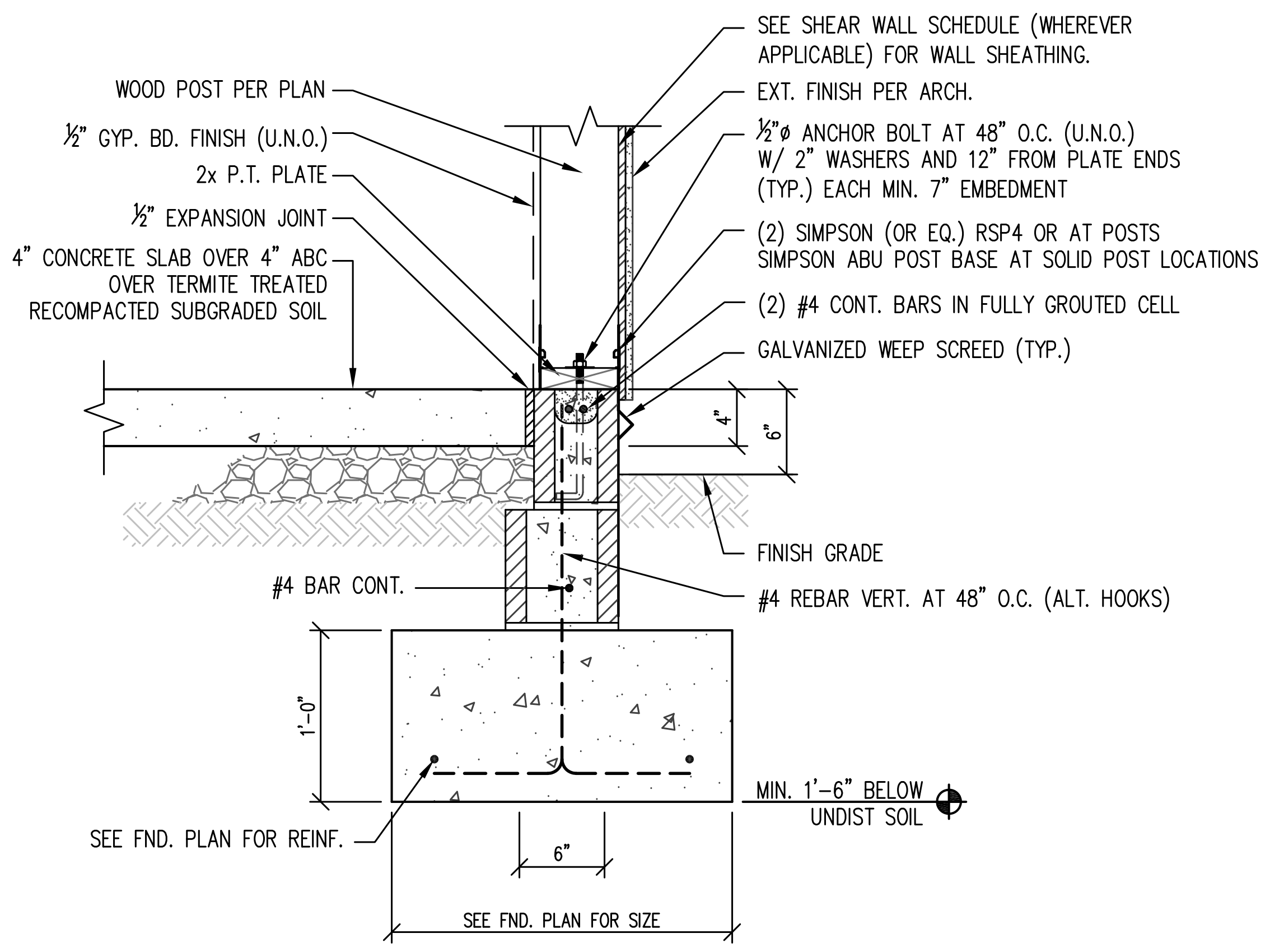
NOTE:
1. SIMPSON MASA MAY BE USED IN LIEU OF ½"ø ANCHOR BOLTS
2. SEE 10/SD3 FOR RETAINING IN ALL STEM HEIGHTS GREATER THAN 1'-6" ABOVE FINISHED GRADE


2x STUD WALL AT 16" O.C. ABOVE
SIMPSON (OR EQ.) RSP4 OR H2.5A AT ALTERNATE STUDS
½" EXPANSION JOINT
4" CONC. SLAB OVER 4" ABC OVER RECOMPACTED SUBGRADED SOIL
SEE SHEAR WALL SCHEDULE (WHEREVER APPLICABLE) FOR WALL SHEATHING.
FINISHES PER ARCH.
½"ø ANCHOR BOLT AT 48" O.C. (U.N.O.) WITH 2" WASHERS AND 12" FROM PLATE ENDS (TYP.) EACH MIN. 7" EMBEDMENT
(2) #4 CONT. BARS IN FULLY GROUTED CELL
FINISH GRADE
#4 REBAR VERT. AT 48" O.C. (ALT. HOOKS)
#4 BAR CONT.
10" MIN.
#4 BARS CONT.
6"
1'-4"
MIN. 1'-6" BELOW UNDIST SOIL

1 EXTERIOR WALL AND FOOTING

SCALE: 1" = 1'-0"

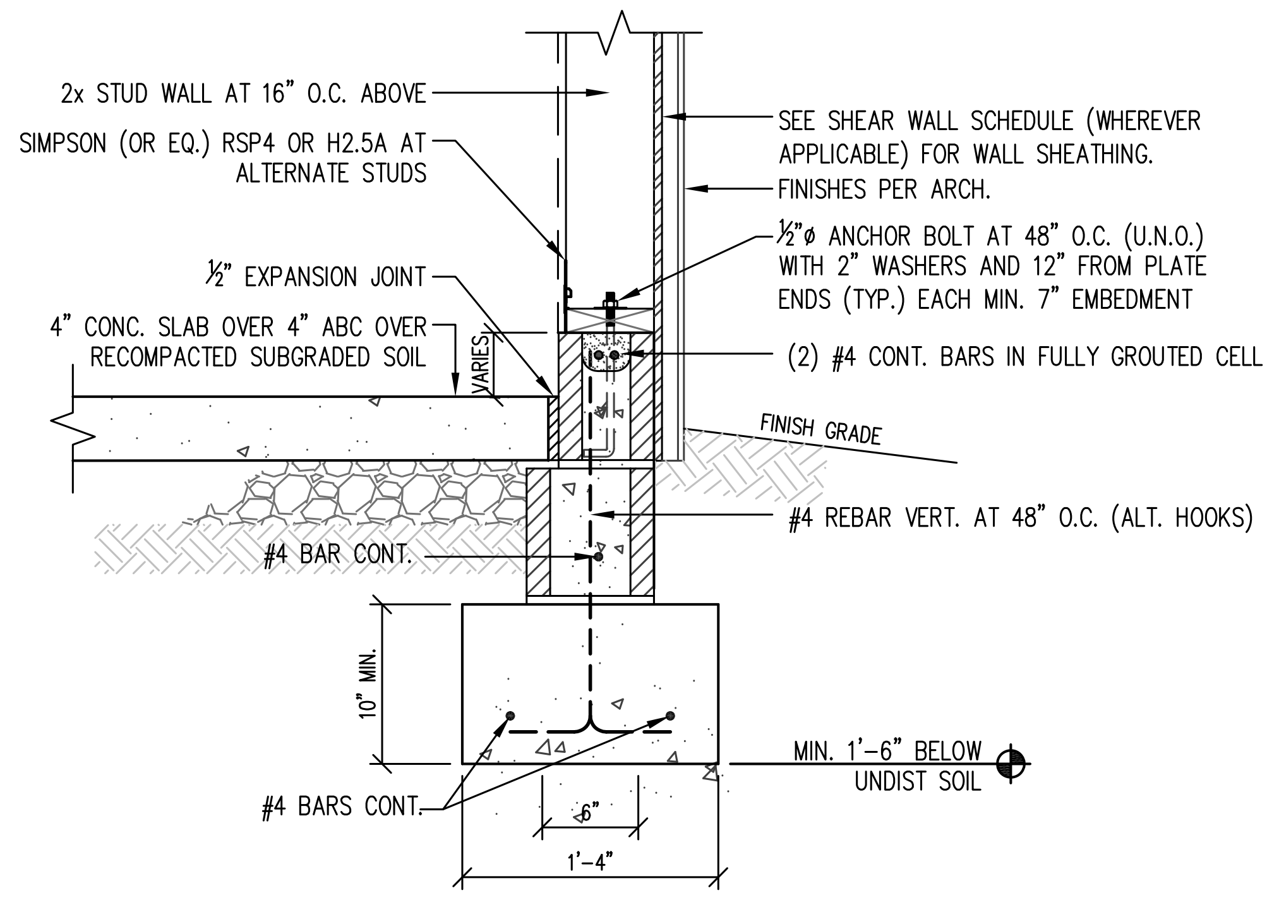
NOTE:
SIMPSON MASA MAY BE USED IN LIEU OF ½"ø ANCHOR BOLTS


WOOD POST PER PLAN
½" GYP. BD. FINISH (U.N.O.)
2x P.T. PLATE
½" EXPANSION JOINT
4" CONCRETE SLAB OVER 4" ABC OVER TERMITE TREATED RECOMPACTED SUBGRADED SOIL
SEE SHEAR WALL SCHEDULE (WHEREVER APPLICABLE) FOR WALL SHEATHING.
EXT. FINISH PER ARCH.
½"ø ANCHOR BOLT AT 48" O.C. (U.N.O.) W/ 2" WASHERS AND 12" FROM PLATE ENDS (TYP.) EACH MIN. 7" EMBEDMENT
(2) SIMPSON (OR EQ.) RSP4 OR AT POSTS SIMPSON ABU POST BASE AT SOLID POST LOCATIONS
(2) #4 CONT. BARS IN FULLY GROUTED CELL
GALVANIZED WEEP SCREED (TYP.)
4"
6"
FINISH GRADE
#4 BAR CONT.
#4 REBAR VERT. AT 48" O.C. (ALT. HOOKS)
1'-0"
MIN. 1'-6" BELOW UNDIST SOIL
SEE FND. PLAN FOR REINF.
6"
SEE FND. PLAN FOR SIZE

2 EXTERIOR WALL AT POST

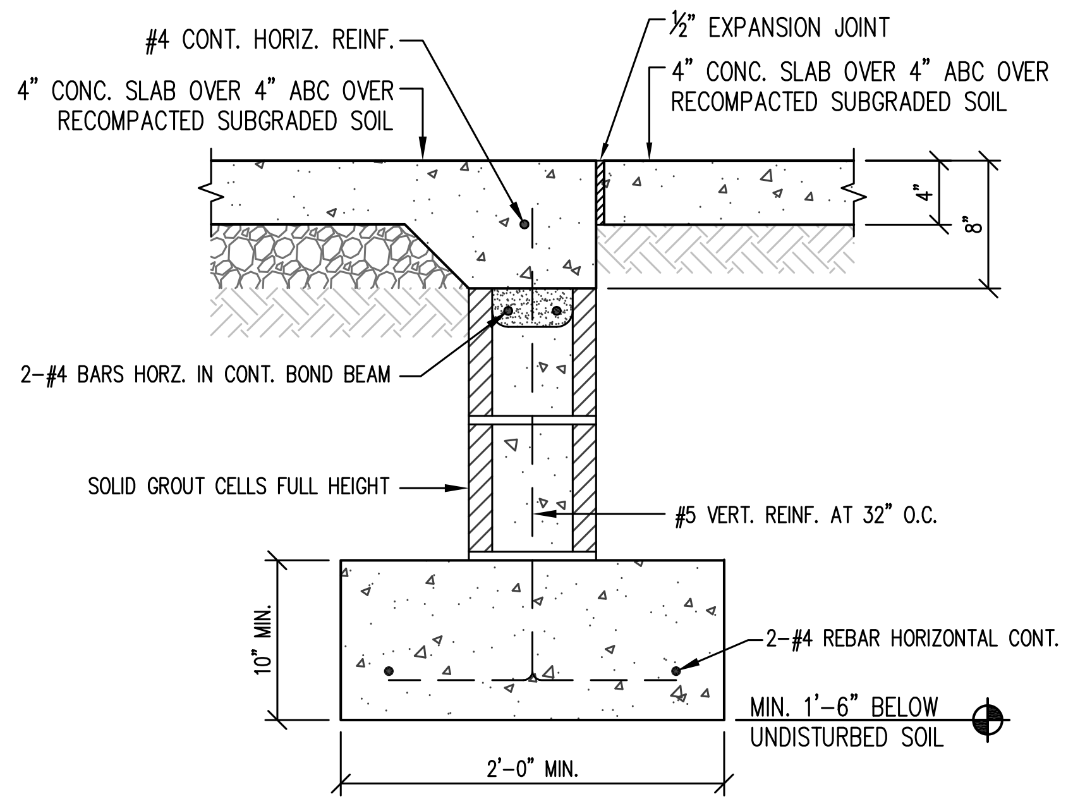
SCALE: 1"=1'-0"

NOTE:
1. SIMPSON MASA MAY BE USED IN LIEU OF ½"ø ANCHOR BOLTS
2. SEE 10/SD3 FOR RETAINING IN ALL STEM HEIGHTS GREATER THAN 1'-6" ABOVE FINISHED GRADE


2x STUD WALL AT 16" O.C. ABOVE
SIMPSON (OR EQ.) RSP4 OR H2.5A AT ALTERNATE STUDS
½" EXPANSION JOINT
4" CONC. SLAB OVER 4" ABC OVER RECOMPACTED SUBGRADED SOIL
VARIES
SEE SHEAR WALL SCHEDULE (WHEREVER APPLICABLE) FOR WALL SHEATHING.
FINISHES PER ARCH.
½"ø ANCHOR BOLT AT 48" O.C. (U.N.O.) WITH 2" WASHERS AND 12" FROM PLATE ENDS (TYP.) EACH MIN. 7" EMBEDMENT
(2) #4 CONT. BARS IN FULLY GROUTED CELL
FINISH GRADE
#4 REBAR VERT. AT 48" O.C. (ALT. HOOKS)
#4 BAR CONT.
10" MIN.
#4 BARS CONT.
6"
1'-4"
MIN. 1'-6" BELOW UNDIST SOIL

3 EXT. STEM AND FOOTING AT GARAGE

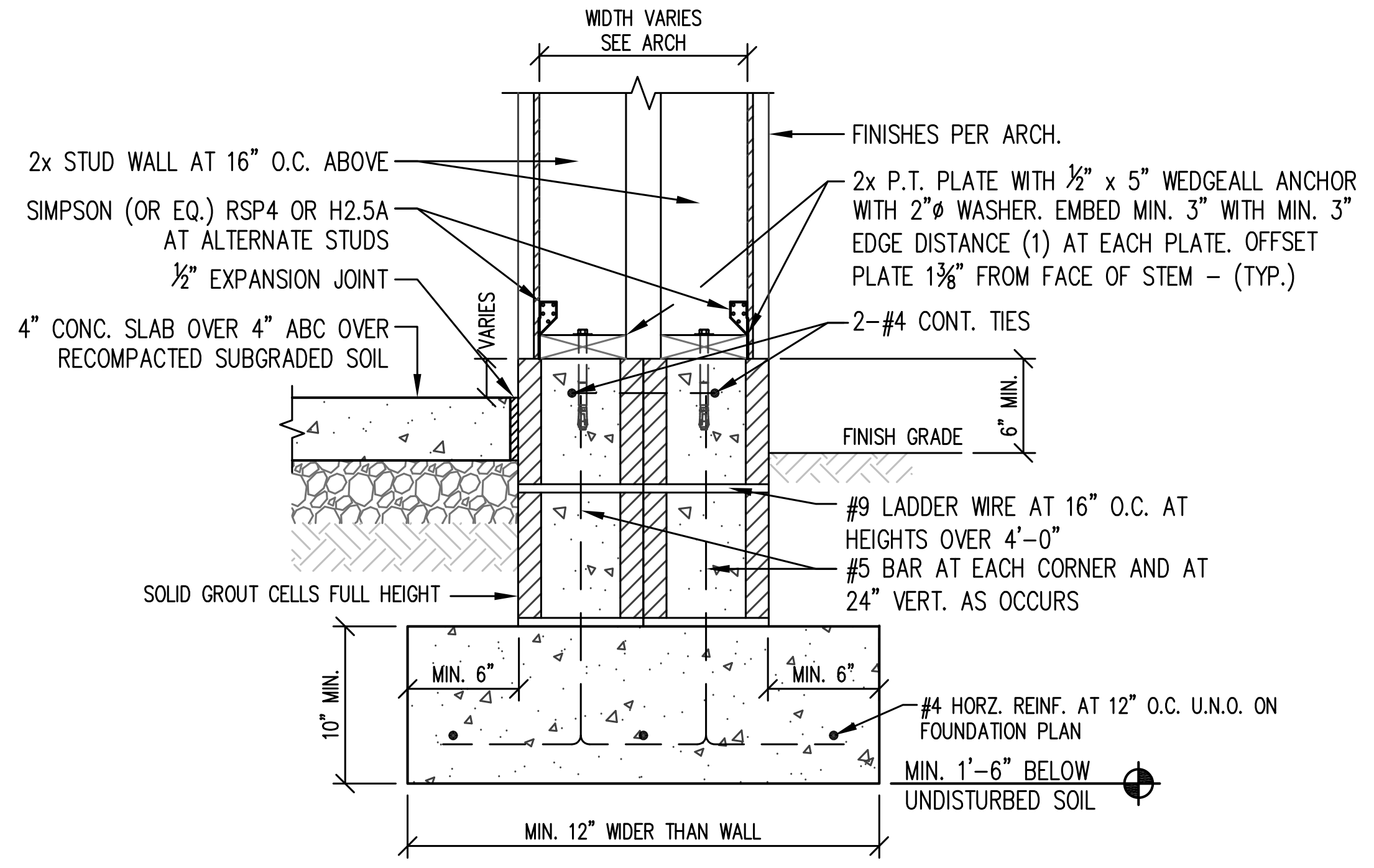
SCALE: 1" = 1'-0"


#4 CONT. HORIZ. REINF.
4" CONC. SLAB OVER 4" ABC OVER RECOMPACTED SUBGRADED SOIL
½" EXPANSION JOINT
4" CONC. SLAB OVER 4" ABC OVER RECOMPACTED SUBGRADED SOIL
4"
8"
2-#4 BARS HORZ. IN CONT. BOND BEAM
SOLID GROUT CELLS FULL HEIGHT
#5 VERT. REINF. AT 32" O.C.
10" MIN.
2-#4 REBAR HORIZONTAL CONT.
MIN. 1'-6" BELOW UNDISTURBED SOIL
2'-0" MIN.

4 SLAB AT GARAGE ONLY

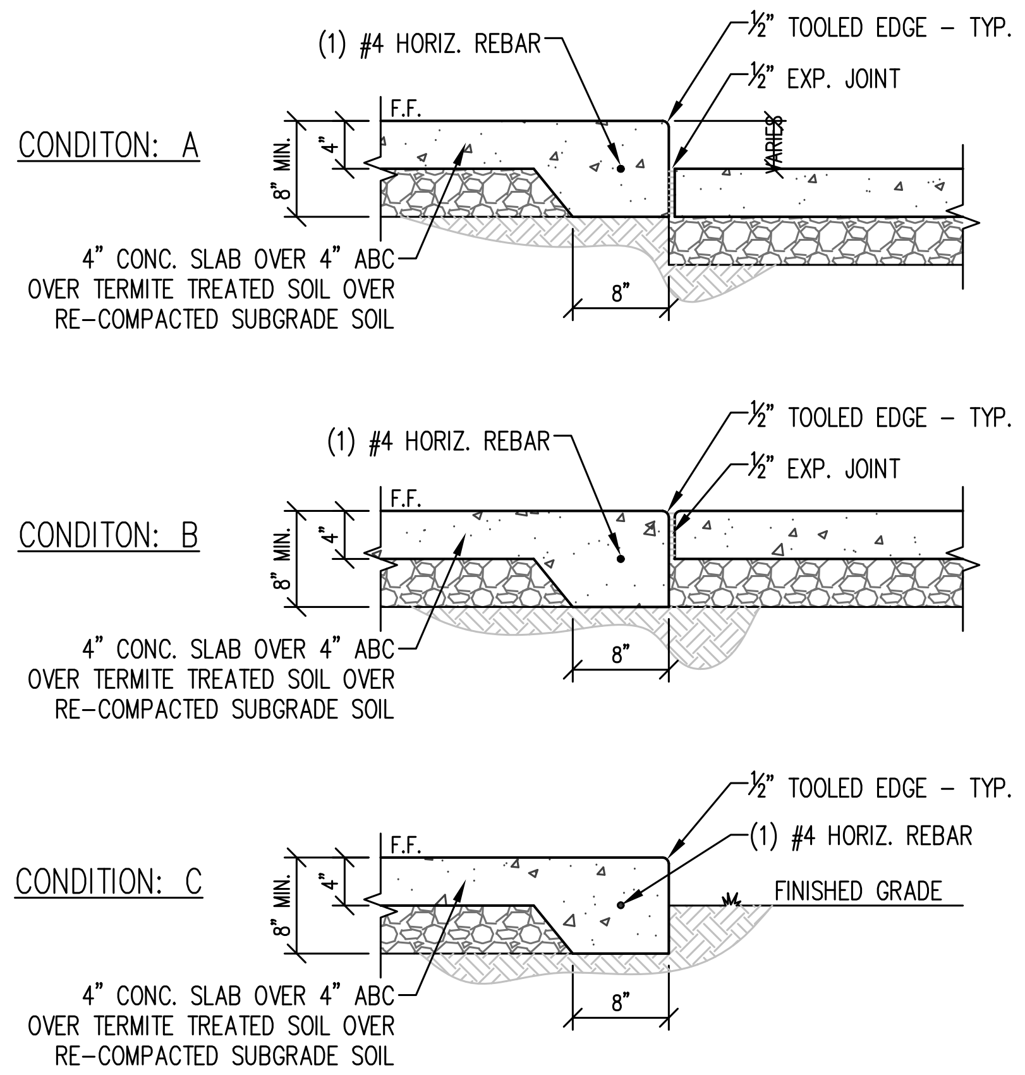
SCALE: 1" = 1'-0"

NOTE:
1. RAISE STEM WALL HEIGHT AS REQUIRED AT PLANTER AREAS. WATER PROOF ALL CMU WALLS INSIDE PLANTERS
2. SEE 10/SD3 FOR RETAINING IN ALL STEM HEIGHTS GREATER THAN 1'-6" ABOVE FINISHED GRADE


WIDTH VARIES SEE ARCH
2x STUD WALL AT 16" O.C. ABOVE
SIMPSON (OR EQ.) RSP4 OR H2.5A AT ALTERNATE STUDS
½" EXPANSION JOINT
4" CONC. SLAB OVER 4" ABC OVER RECOMPACTED SUBGRADED SOIL
VARIES
FINISHES PER ARCH.
2x P.T. PLATE WITH ½" x 5" WEDGEALL ANCHOR WITH 2"ø WASHER. EMBED MIN. 3" WITH MIN. 3" EDGE DISTANCE (1) AT EACH PLATE. OFFSET PLATE 1⅜" FROM FACE OF STEM - (TYP.)
2-#4 CONT. TIES
6" MIN.
FINISH GRADE
#9 LADDER WIRE AT 16" O.C. AT HEIGHTS OVER 4'-0"
#5 BAR AT EACH CORNER AND AT 24" VERT. AS OCCURS
SOLID GROUT CELLS FULL HEIGHT
10" MIN.
MIN. 6"
MIN. 6"
#4 HORZ. REINF. AT 12" O.C. U.N.O. ON FOUNDATION PLAN
MIN. 1'-6" BELOW UNDISTURBED SOIL
MIN. 12" WIDER THAN WALL

5 FRAMED COLUMN AT CMU STEM WALL

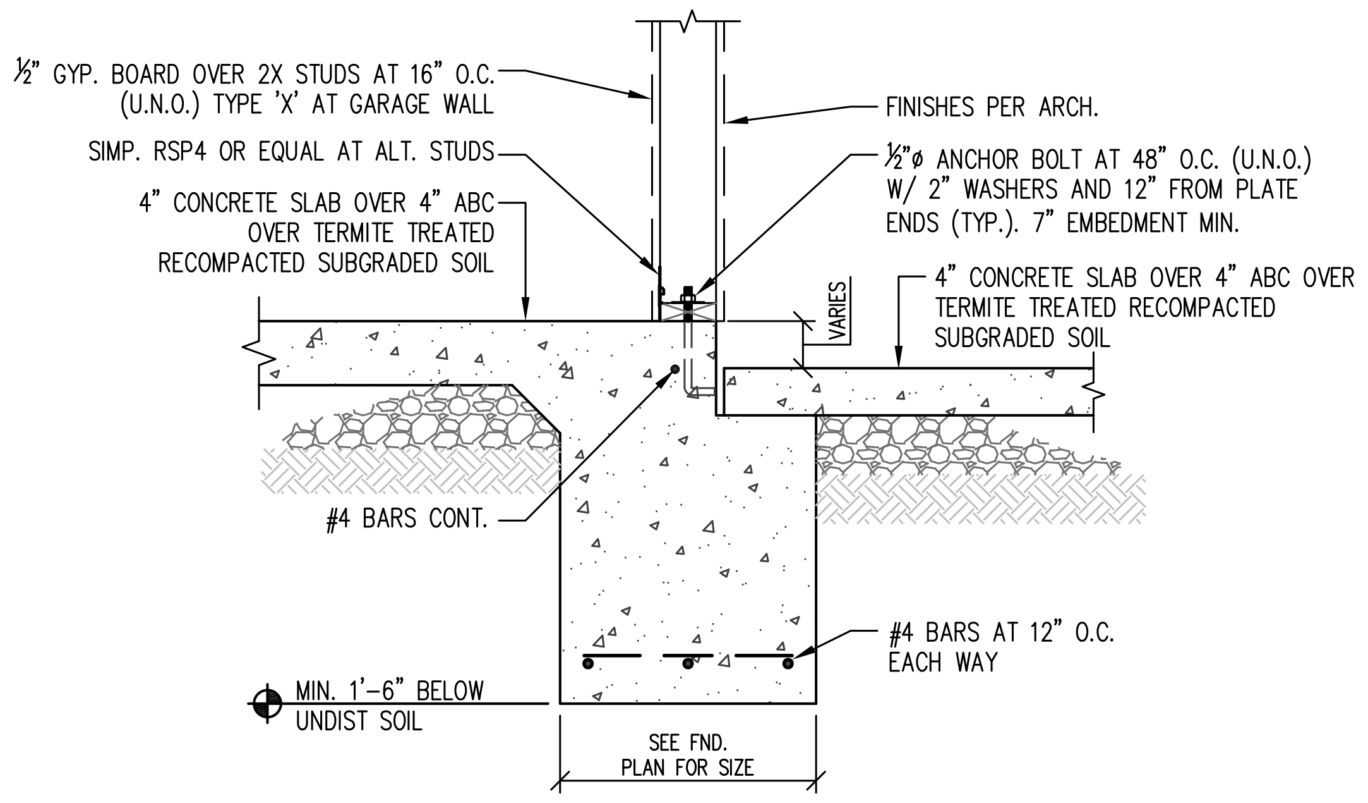
SCALE: 1" = 1'-0"


(1) #4 HORIZ. REBAR
½" TOOLED EDGE - TYP.
½" EXP. JOINT
CONDITON: A
F.F.
4"
8" MIN.
VARIES
4" CONC. SLAB OVER 4" ABC OVER TERMITE TREATED SOIL OVER RE-COMPACTED SUBGRADE SOIL
8"
(1) #4 HORIZ. REBAR
½" TOOLED EDGE - TYP.
½" EXP. JOINT
CONDITON: B
F.F.
4"
8" MIN.
4" CONC. SLAB OVER 4" ABC OVER TERMITE TREATED SOIL OVER RE-COMPACTED SUBGRADE SOIL
8"
½" TOOLED EDGE - TYP.
(1) #4 HORIZ. REBAR
CONDITION: C
F.F.
4"
8" MIN.
FINISHED GRADE
4" CONC. SLAB OVER 4" ABC OVER TERMITE TREATED SOIL OVER RE-COMPACTED SUBGRADE SOIL
8"

6 TURNDOWN SLAB CONDITIONS

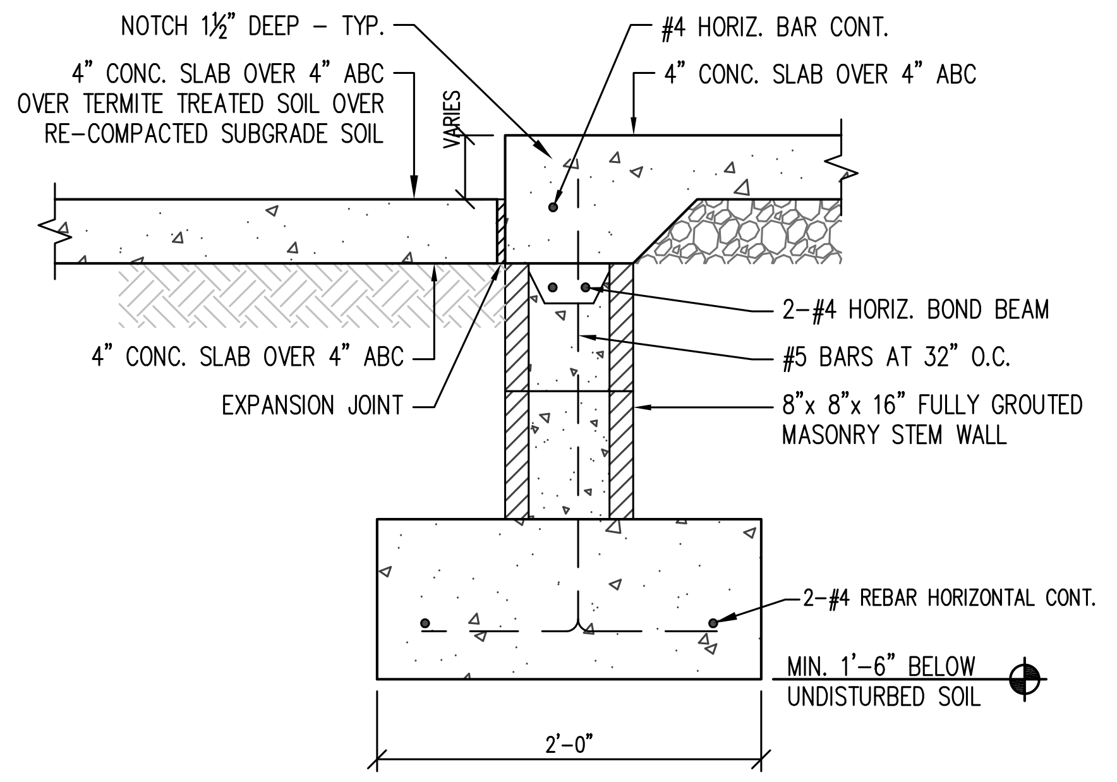
SCALE: 3/4" = 1'-0"

NOTE:
REBAR SHALL BE A MIN. 3" ABOVE BOTTOM OF FOOTING WHERE APPLICABLE


½" GYP. BOARD OVER 2X STUDS AT 16" O.C. (U.N.O.) TYPE 'X' AT GARAGE WALL
SIMP. RSP4 OR EQUAL AT ALT. STUDS
4" CONCRETE SLAB OVER 4" ABC OVER TERMITE TREATED RECOMPACTED SUBGRADED SOIL
FINISHES PER ARCH.
½"ø ANCHOR BOLT AT 48" O.C. (U.N.O.) W/ 2" WASHERS AND 12" FROM PLATE ENDS (TYP.). 7" EMBEDMENT MIN.
VARIES
4" CONCRETE SLAB OVER 4" ABC OVER TERMITE TREATED RECOMPACTED SUBGRADED SOIL
#4 BARS CONT.
#4 BARS AT 12" O.C. EACH WAY
MIN. 1'-6" BELOW UNDIST SOIL
SEE FND. PLAN FOR SIZE

7 INTERIOR POINT LOAD FOOTING AT TURNDOWN SLAB

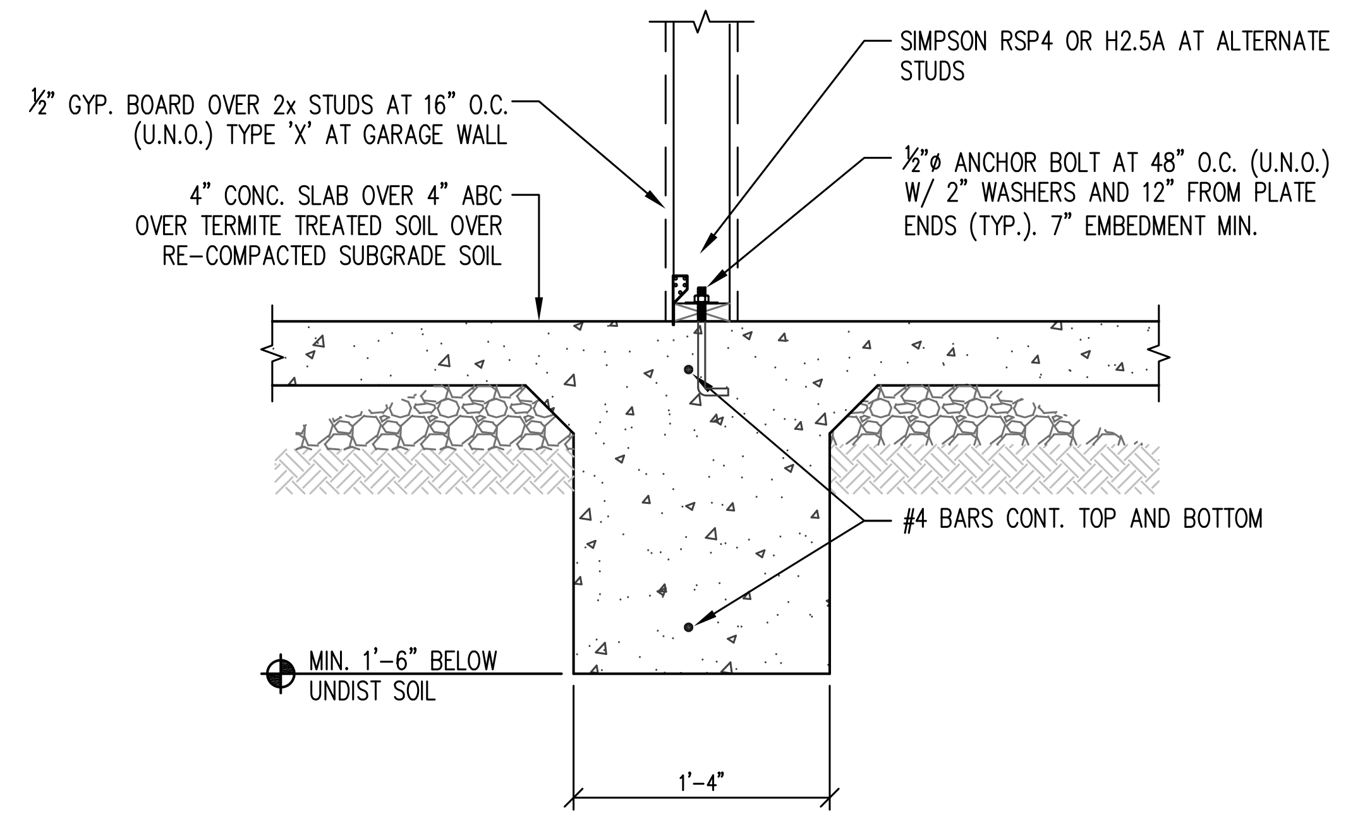
SCALE: 1" = 1'-0"


NOTCH 1½" DEEP - TYP.
4" CONC. SLAB OVER 4" ABC OVER TERMITE TREATED SOIL OVER RE-COMPACTED SUBGRADE SOIL
VARIES
#4 HORIZ. BAR CONT.
4" CONC. SLAB OVER 4" ABC
2-#4 HORIZ. BOND BEAM
#5 BARS AT 32" O.C.
4" CONC. SLAB OVER 4" ABC
EXPANSION JOINT
8"x 8"x 16" FULLY GROUTED MASONRY STEM WALL
2-#4 REBAR HORIZONTAL CONT.
MIN. 1'-6" BELOW UNDISTURBED SOIL
2'-0"

8 TURNDOWN AT EXTERIOR DOOR

SCALE: 1" = 1'-0"

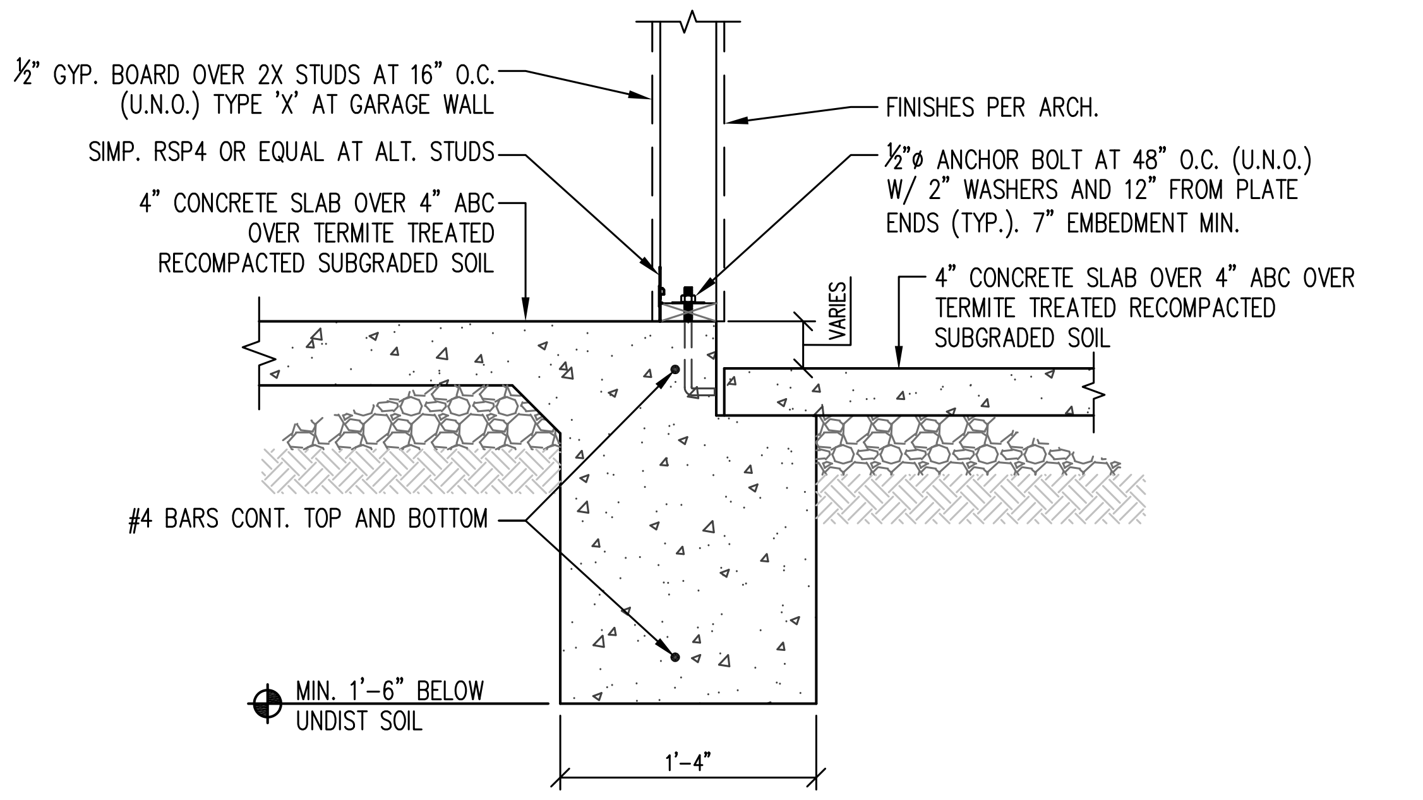
NOTE:
REBAR SHALL BE A MIN. 3" ABOVE BOTTOM OF FOOTING WHERE APPLICABLE


½" GYP. BOARD OVER 2x STUDS AT 16" O.C. (U.N.O.) TYPE 'X' AT GARAGE WALL
4" CONC. SLAB OVER 4" ABC OVER TERMITE TREATED SOIL OVER RE-COMPACTED SUBGRADE SOIL
SIMPSON RSP4 OR H2.5A AT ALTERNATE STUDS
½"ø ANCHOR BOLT AT 48" O.C. (U.N.O.) W/ 2" WASHERS AND 12" FROM PLATE ENDS (TYP.). 7" EMBEDMENT MIN.
#4 BARS CONT. TOP AND BOTTOM
MIN. 1'-6" BELOW UNDIST SOIL
1'-4"

9 INTERIOR BEARING WALL FOOTING

SCALE: 1" = 1'-0"

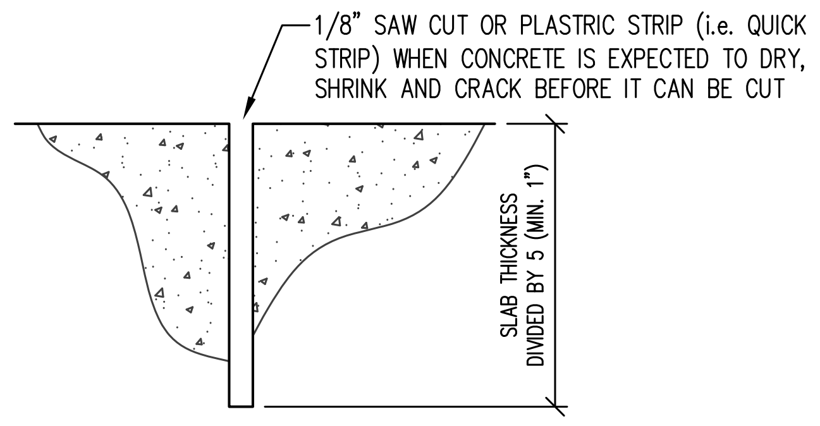
NOTE:
REBAR SHALL BE A MIN. 3" ABOVE BOTTOM OF FOOTING WHERE APPLICABLE


½" GYP. BOARD OVER 2X STUDS AT 16" O.C. (U.N.O.) TYPE 'X' AT GARAGE WALL
SIMP. RSP4 OR EQUAL AT ALT. STUDS
4" CONCRETE SLAB OVER 4" ABC OVER TERMITE TREATED RECOMPACTED SUBGRADED SOIL
FINISHES PER ARCH.
½"ø ANCHOR BOLT AT 48" O.C. (U.N.O.) W/ 2" WASHERS AND 12" FROM PLATE ENDS (TYP.). 7" EMBEDMENT MIN.
VARIES
4" CONCRETE SLAB OVER 4" ABC OVER TERMITE TREATED RECOMPACTED SUBGRADED SOIL
#4 BARS CONT. TOP AND BOTTOM
MIN. 1'-6" BELOW UNDIST SOIL
1'-4"

10 INTERIOR BEARING WALL FOOTING AT TURNDOWN SLAB

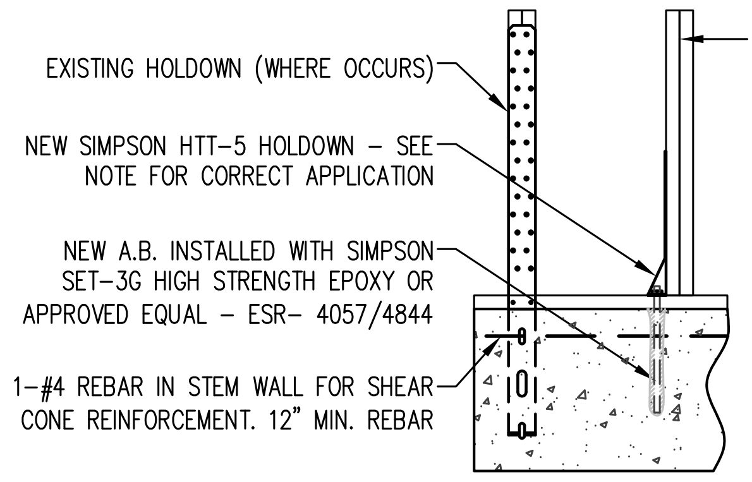
SCALE: 1" = 1'-0"

NOTE:
IN REINFORCED SLABS, HALF THE REINFORCING IS ELIMINATED ACROSS THE CONTROL JOINT


1/8" SAW CUT OR PLASTRIC STRIP (i.e. QUICK STRIP) WHEN CONCRETE IS EXPECTED TO DRY, SHRINK AND CRACK BEFORE IT CAN BE CUT
SLAB THICKNESS DIVIDED BY 5 (MIN. 1")

11 CONTROL JOINT DETAIL

NOT TO SCALE


EXISTING HOLDOWN (WHERE OCCURS)
NEW SIMPSON HTT-5 HOLDOWN - SEE NOTE FOR CORRECT APPLICATION
NEW A.B. INSTALLED WITH SIMPSON SET-3G HIGH STRENGTH EPOXY OR APPROVED EQUAL - ESR- 4057/4844
1-#4 REBAR IN STEM WALL FOR SHEAR CONE REINFORCEMENT. 12" MIN. REBAR
DOUBLE 2x STUD-MIN.

NOTE:
THIS DETAIL CAN BE APPLIED WHERE MISSING OR INCORRECT HOLDOWNS ARE INSTALLED:

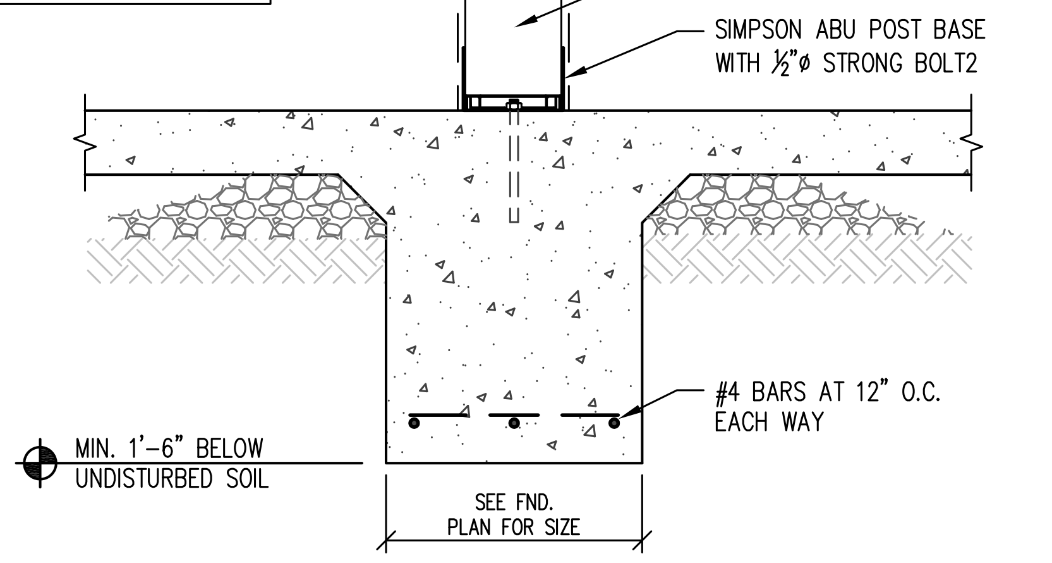
1. THE SIMP. HTT-5 HOLDOWN SHALL BE USED TO REPLACE SIMP. STHD TYPE HOLDOWNS. USE ⅝"ø ANCHOR BOLT WITH 6¼" EMBEDMENT.

SPECIAL INSPECTION IS REQUIRED FOR HIGH STRENGTH EPOXY SYSTEM.

12 HOLDOWN RETROFIT DETAIL

NOT TO SCALE

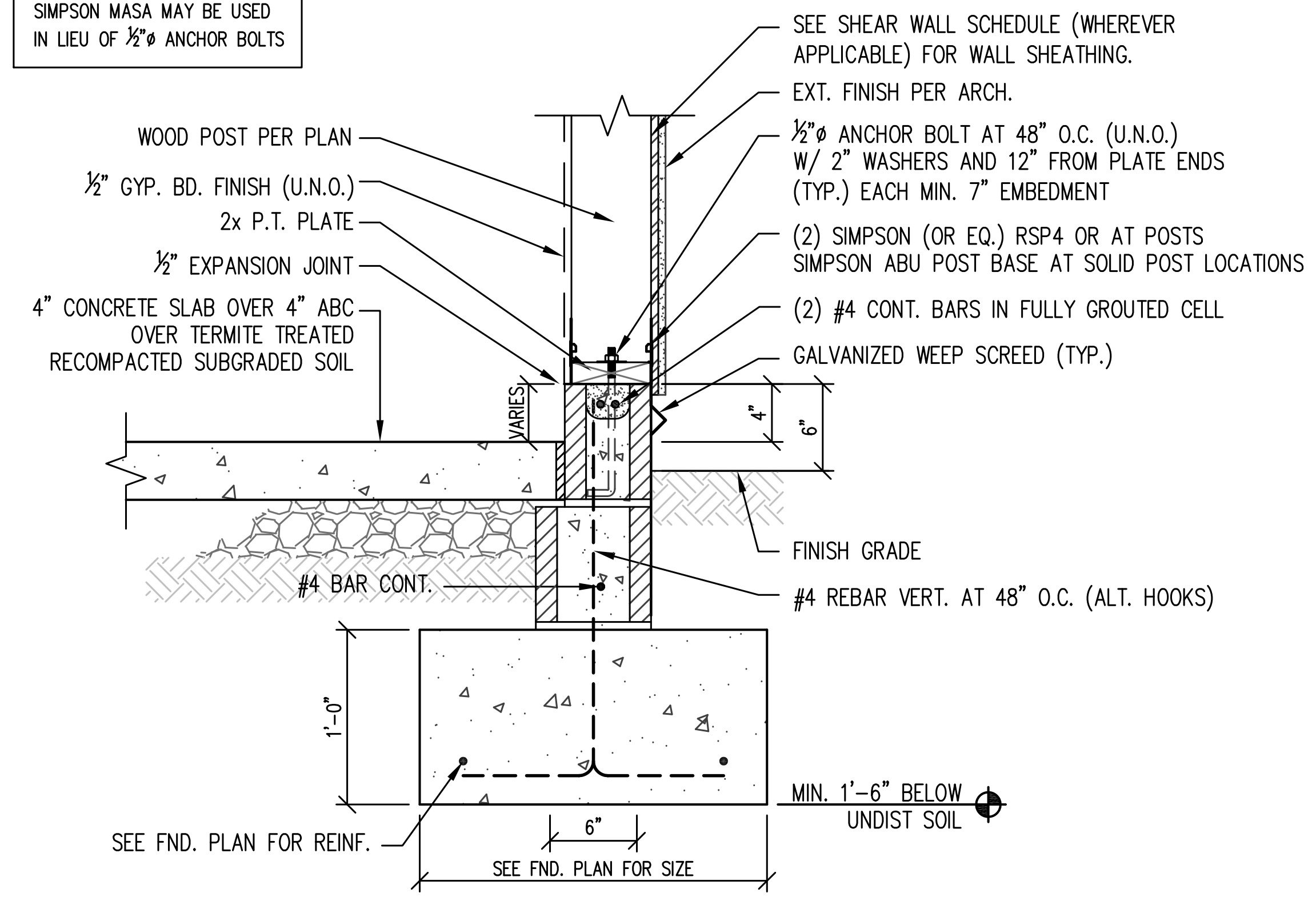
NOTE:
REBAR SHALL BE A MIN. 3" ABOVE BOTTOM OF FOOTING WHERE APPLICABLE


POST PER PLAN
SIMPSON ABU POST BASE WITH ½"ø STRONG BOLT2
#4 BARS AT 12" O.C. EACH WAY
MIN. 1'-6" BELOW UNDISTURBED SOIL
SEE FND. PLAN FOR SIZE

13 INTERIOR POINT LOAD FOOTING

SCALE: 1"=1'-0"

NOTE:
SIMPSON MASA MAY BE USED IN LIEU OF ½"ø ANCHOR BOLTS


WOOD POST PER PLAN
½" GYP. BD. FINISH (U.N.O.)
2x P.T. PLATE
½" EXPANSION JOINT
4" CONCRETE SLAB OVER 4" ABC OVER TERMITE TREATED RECOMPACTED SUBGRADED SOIL
VARIES
SEE SHEAR WALL SCHEDULE (WHEREVER APPLICABLE) FOR WALL SHEATHING.
EXT. FINISH PER ARCH.
½"ø ANCHOR BOLT AT 48" O.C. (U.N.O.) W/ 2" WASHERS AND 12" FROM PLATE ENDS (TYP.) EACH MIN. 7" EMBEDMENT
(2) SIMPSON (OR EQ.) RSP4 OR AT POSTS SIMPSON ABU POST BASE AT SOLID POST LOCATIONS
(2) #4 CONT. BARS IN FULLY GROUTED CELL
GALVANIZED WEEP SCREED (TYP.)
4"
6"
FINISH GRADE
#4 BAR CONT.
#4 REBAR VERT. AT 48" O.C. (ALT. HOOKS)
1'-0"
SEE FND. PLAN FOR REINF.
6"
SEE FND. PLAN FOR SIZE
MIN. 1'-6" BELOW UNDIST SOIL

14 EXTERIOR GARAGE WALL AT POST

SCALE: 1"=1'-0"

SIVARAJAN RESIDENCE
LONE MOUNTAIN VISTAS - LOT 93

7899 EAST MARY SHARON DRIVE
SCOTTSDALE, ARIZONA 85266

CITY OF SCOTTSDALE
BUILDING PLANS
THESE PLANS HAVE BEEN APPROVED
AND ARE READY FOR A PERMIT
THIS DOES NOT AUTHORIZE VIOLATIONS OF ANY
CODE OR ORDINANCE

COS PLAN CHECK #9300-24

Gilbert Structural LLC
414 East Southern Avenue
Tempe, Arizona 85282
Office 480-398-8144

PROFESSIONAL SEAL

41931
WILLIAM L.
GILBERT
Date Signed..11-26-2024

REVISIONS

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2 .
3 .
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PROJECT NUMBER:

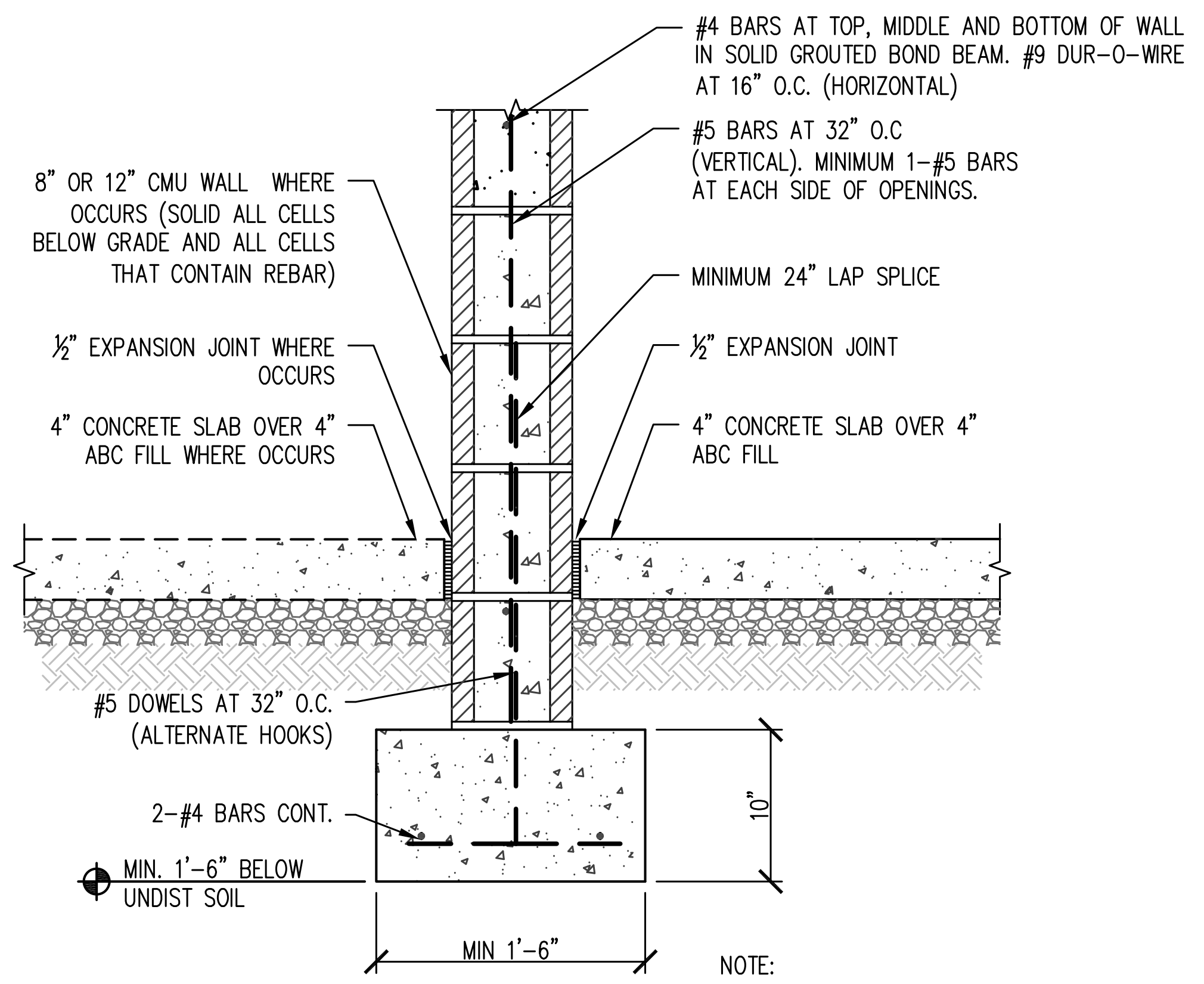
DATE: 11.26.2024

SHEET TITLE:

STRUCTURAL DETAILS

SHEET NUMBER:

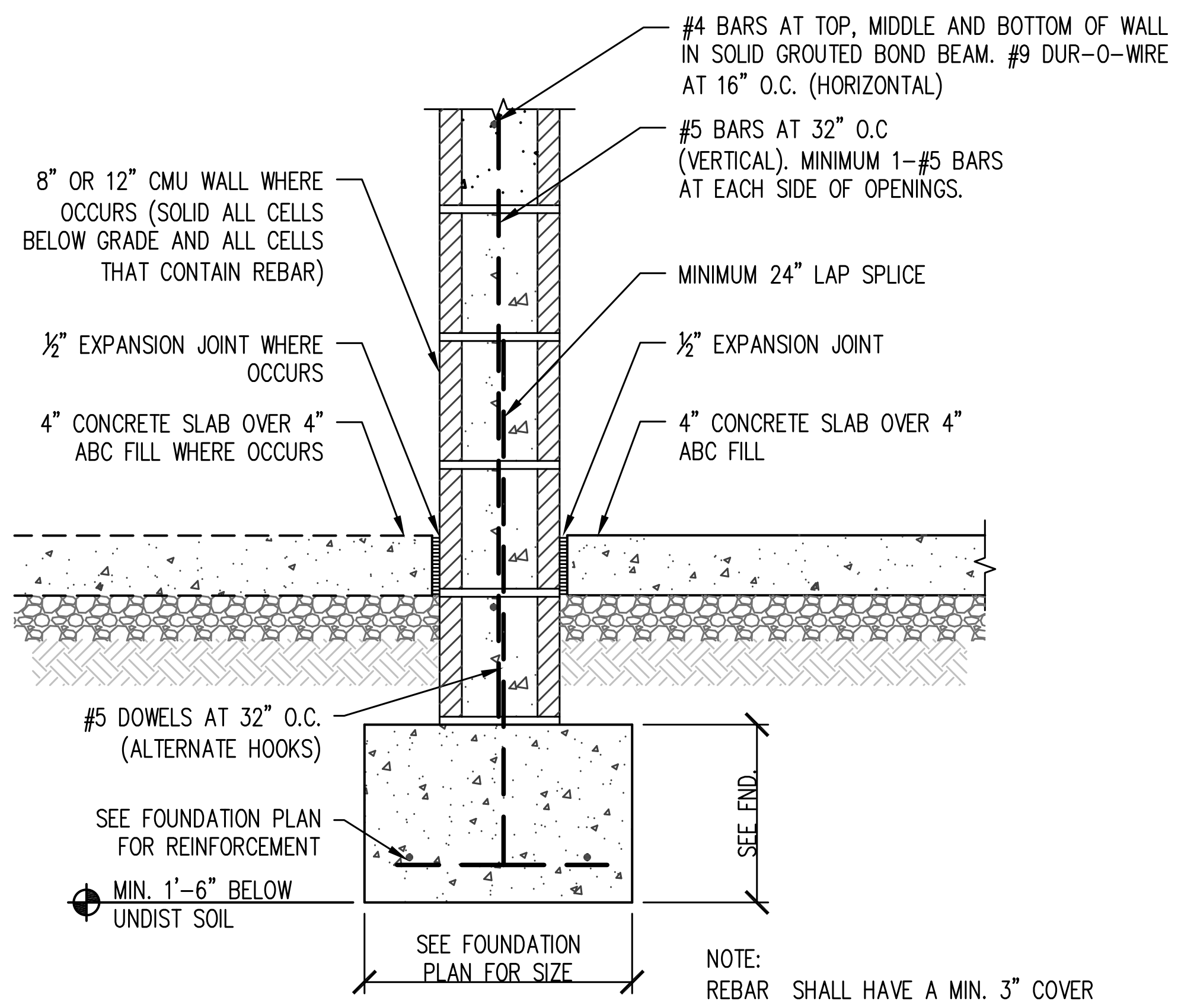
SD1


#4 BARS AT TOP, MIDDLE AND BOTTOM OF WALL IN SOLID GROUTED BOND BEAM. #9 DUR-O-WIRE AT 16" O.C. (HORIZONTAL)
#5 BARS AT 32" O.C (VERTICAL). MINIMUM 1-#5 BARS AT EACH SIDE OF OPENINGS.
8" OR 12" CMU WALL WHERE OCCURS (SOLID ALL CELLS BELOW GRADE AND ALL CELLS THAT CONTAIN REBAR)
MINIMUM 24" LAP SPLICE
½" EXPANSION JOINT WHERE OCCURS
½" EXPANSION JOINT
4" CONCRETE SLAB OVER 4" ABC FILL WHERE OCCURS
4" CONCRETE SLAB OVER 4" ABC FILL
#5 DOWELS AT 32" O.C. (ALTERNATE HOOKS)
2-#4 BARS CONT.
10"
MIN. 1'-6" BELOW UNDIST SOIL
MIN 1'-6"

NOTE:
REBAR SHALL HAVE A MIN. 3" COVER

1 FOUNDATION AT MASONRY WALL

SCALE: 1" = 1'-0"

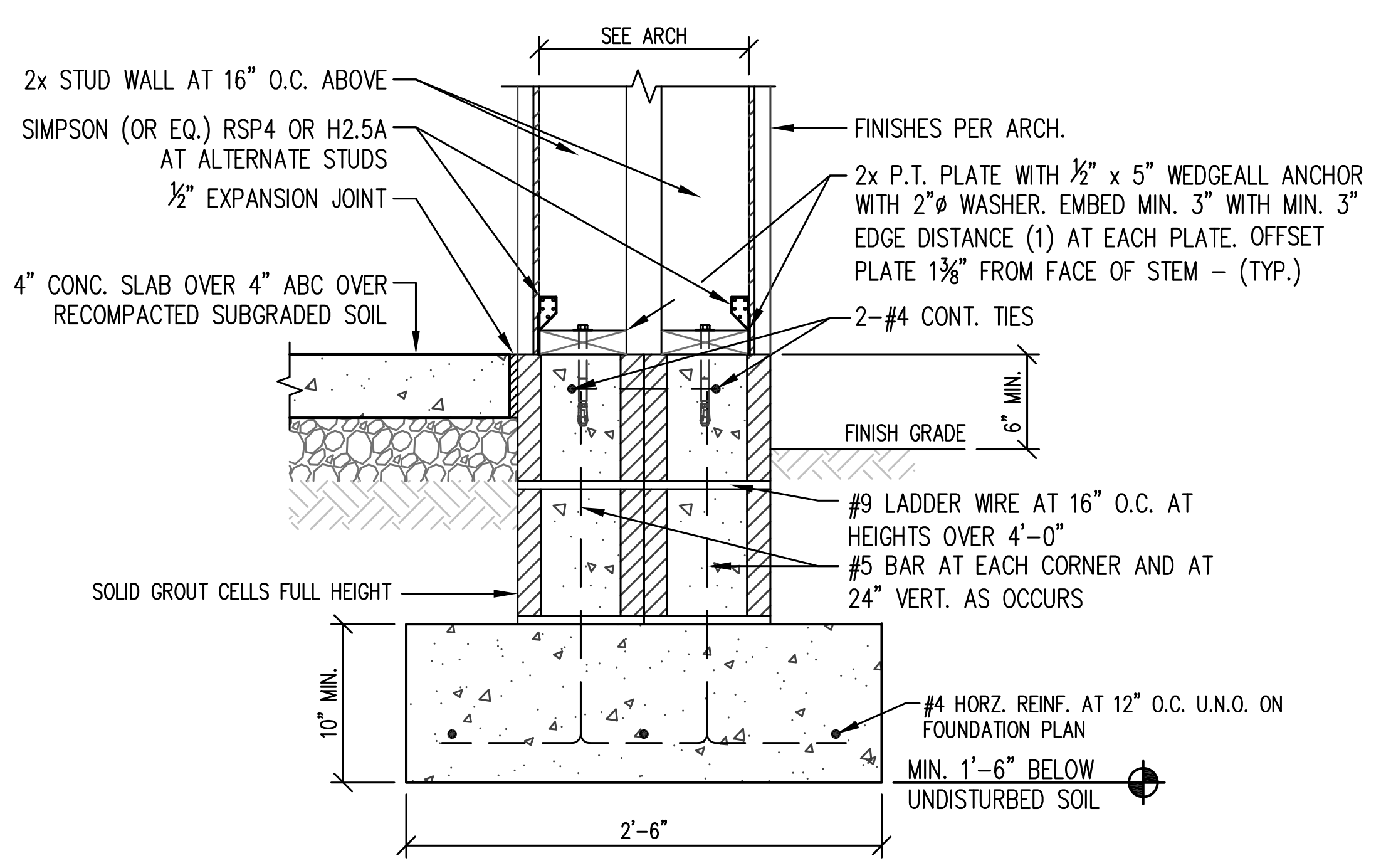

#4 BARS AT TOP, MIDDLE AND BOTTOM OF WALL IN SOLID GROUTED BOND BEAM. #9 DUR-O-WIRE AT 16" O.C. (HORIZONTAL)
#5 BARS AT 32" O.C (VERTICAL). MINIMUM 1-#5 BARS AT EACH SIDE OF OPENINGS.
8" OR 12" CMU WALL WHERE OCCURS (SOLID ALL CELLS BELOW GRADE AND ALL CELLS THAT CONTAIN REBAR)
MINIMUM 24" LAP SPLICE
½" EXPANSION JOINT WHERE OCCURS
½" EXPANSION JOINT
4" CONCRETE SLAB OVER 4" ABC FILL WHERE OCCURS
4" CONCRETE SLAB OVER 4" ABC FILL
#5 DOWELS AT 32" O.C. (ALTERNATE HOOKS)
SEE FOUNDATION PLAN FOR REINFORCEMENT
SEE FND.
MIN. 1'-6" BELOW UNDIST SOIL
SEE FOUNDATION PLAN FOR SIZE

NOTE:
REBAR SHALL HAVE A MIN. 3" COVER

2 POINT LOAD AT MASONRY WALL

NTS

NOTE:
1. RAISE STEM WALL HEIGHT AS REQUIRED AT PLANTER AREAS. WATER PROOF ALL CMU WALLS INSIDE PLANTERS
2. SEE 10/SD3 FOR RETAINING IN ALL STEM HEIGHTS GREATER THAN 1'-6" ABOVE FINISHED GRADE


SEE ARCH
2x STUD WALL AT 16" O.C. ABOVE
SIMPSON (OR EQ.) RSP4 OR H2.5A AT ALTERNATE STUDS
½" EXPANSION JOINT
4" CONC. SLAB OVER 4" ABC OVER RECOMPACTED SUBGRADED SOIL
FINISHES PER ARCH.
2x P.T. PLATE WITH ½" x 5" WEDGEALL ANCHOR WITH 2"ø WASHER. EMBED MIN. 3" WITH MIN. 3" EDGE DISTANCE (1) AT EACH PLATE. OFFSET PLATE 1⅜" FROM FACE OF STEM - (TYP.)
2-#4 CONT. TIES
FINISH GRADE
6" MIN.
#9 LADDER WIRE AT 16" O.C. AT HEIGHTS OVER 4'-0"
#5 BAR AT EACH CORNER AND AT 24" VERT. AS OCCURS
SOLID GROUT CELLS FULL HEIGHT
10" MIN.
#4 HORZ. REINF. AT 12" O.C. U.N.O. ON FOUNDATION PLAN
MIN. 1'-6" BELOW UNDISTURBED SOIL
2'-6"

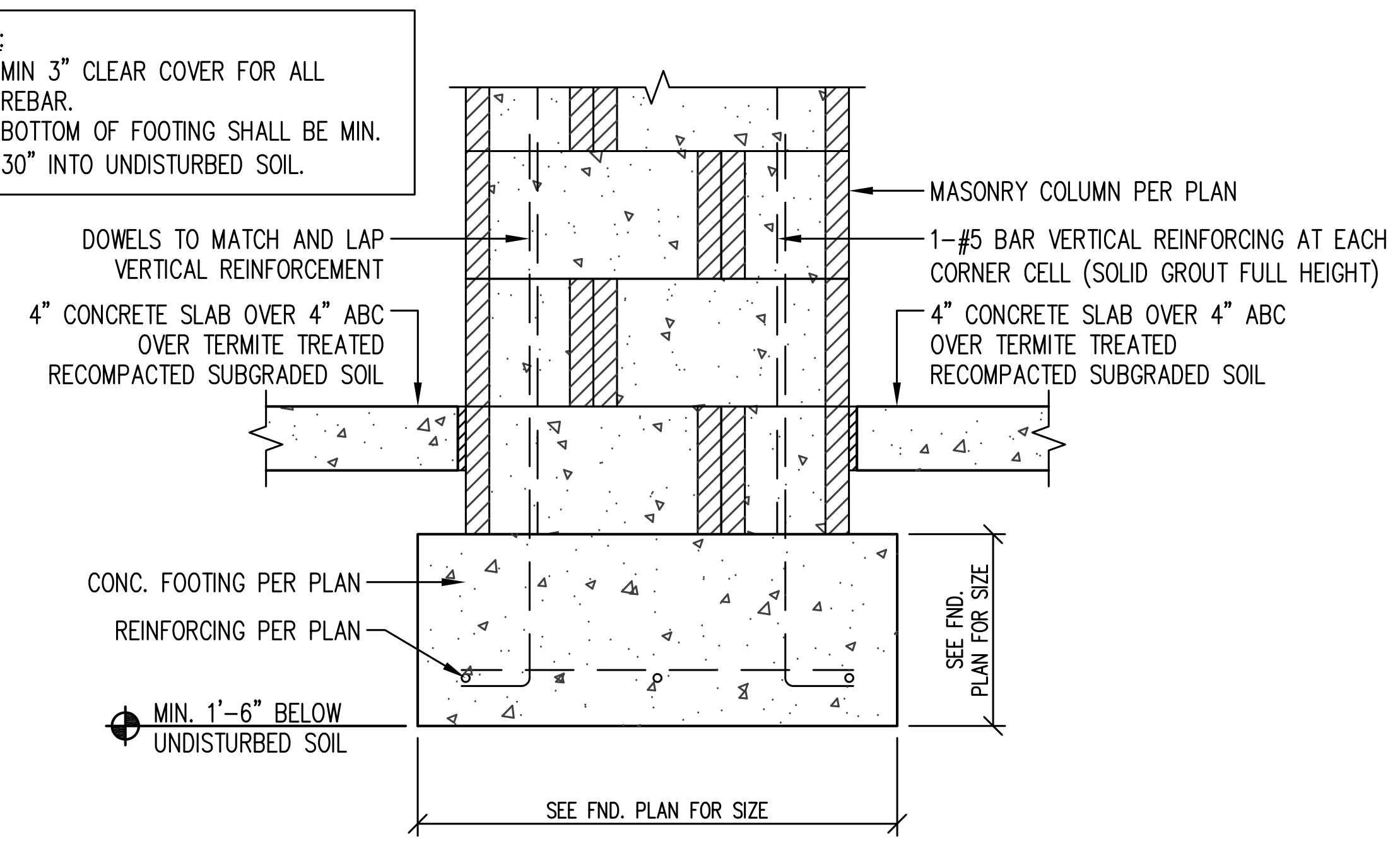
3 EXT. THICKENED WALL AND FOOTING

SCALE: 1" = 1'-0"

4 NOT USED

-

NOTE:
1. MIN 3" CLEAR COVER FOR ALL REBAR.
2. BOTTOM OF FOOTING SHALL BE MIN. 30" INTO UNDISTURBED SOIL.

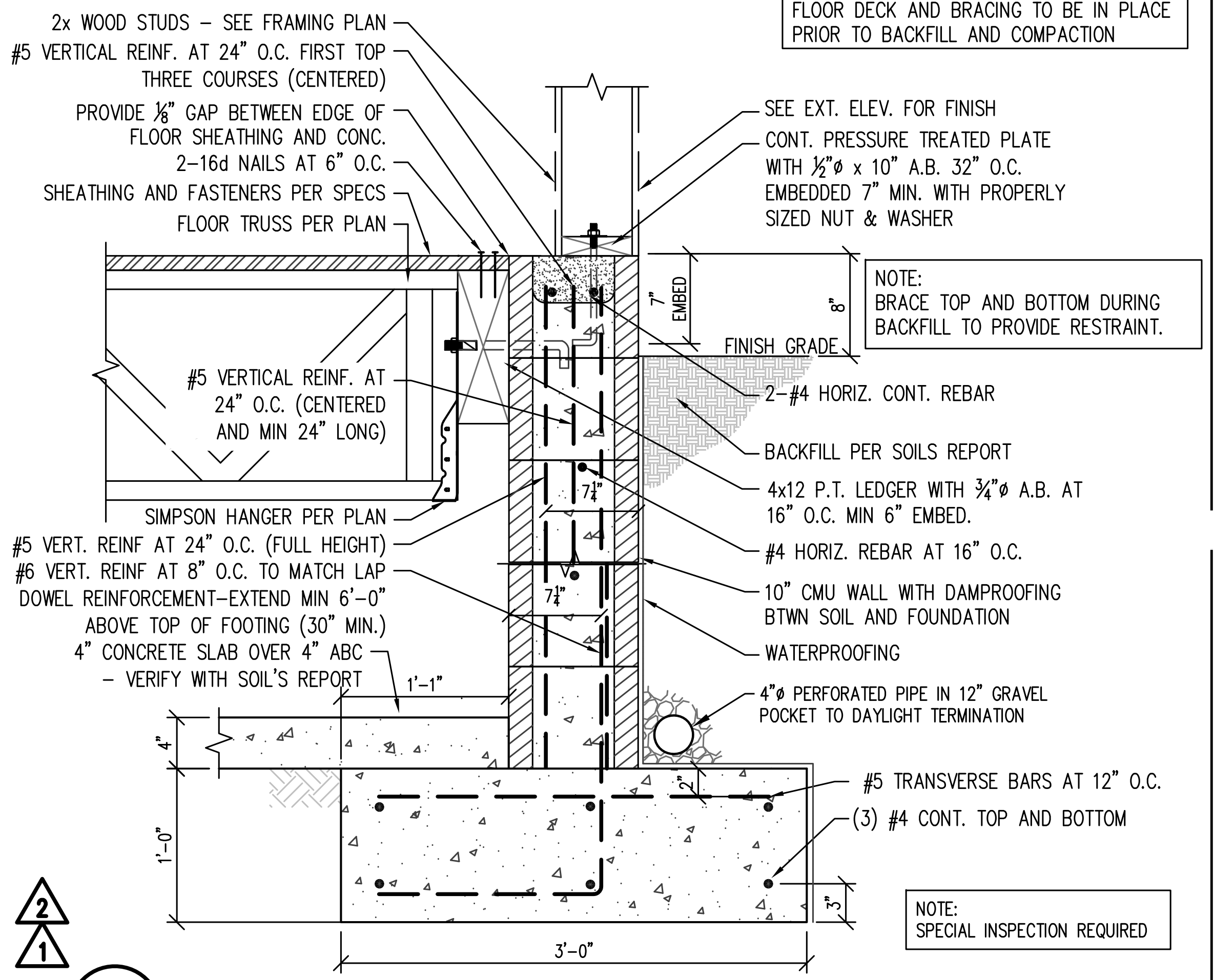

MASONRY COLUMN PER PLAN
DOWELS TO MATCH AND LAP VERTICAL REINFORCEMENT
1-#5 BAR VERTICAL REINFORCING AT EACH CORNER CELL (SOLID GROUT FULL HEIGHT)
4" CONCRETE SLAB OVER 4" ABC OVER TERMITE TREATED RECOMPACTED SUBGRADED SOIL
4" CONCRETE SLAB OVER 4" ABC OVER TERMITE TREATED RECOMPACTED SUBGRADED SOIL
CONC. FOOTING PER PLAN
REINFORCING PER PLAN
MIN. 1'-6" BELOW UNDISTURBED SOIL
SEE FND. PLAN FOR SIZE
SEE FND. PLAN FOR SIZE

8 MASONRY COLUMN AND FOOTING

SCALE: 1" = 1'-0"

5 NOT USED

NOTE:
FLOOR DECK AND BRACING TO BE IN PLACE PRIOR TO BACKFILL AND COMPACTION


2x WOOD STUDS - SEE FRAMING PLAN
#5 VERTICAL REINF. AT 24" O.C. FIRST TOP THREE COURSES (CENTERED)
PROVIDE ⅛" GAP BETWEEN EDGE OF FLOOR SHEATHING AND CONC.
2-16d NAILS AT 6" O.C.
SHEATHING AND FASTENERS PER SPECS
FLOOR TRUSS PER PLAN
SEE EXT. ELEV. FOR FINISH
CONT. PRESSURE TREATED PLATE WITH ½"ø x 10" A.B. 32" O.C. EMBEDDED 7" MIN. WITH PROPERLY SIZED NUT & WASHER
7" EMBED
8"
FINISH GRADE
#5 VERTICAL REINF. AT 24" O.C. (CENTERED AND MIN 24" LONG)
2-#4 HORIZ. CONT. REBAR
BACKFILL PER SOILS REPORT
4x12 P.T. LEDGER WITH ¾"ø A.B. AT 16" O.C. MIN 6" EMBED.
SIMPSON HANGER PER PLAN
7¼"
#5 VERT. REINF AT 24" O.C. (FULL HEIGHT)
#4 HORIZ. REBAR AT 16" O.C.
#6 VERT. REINF AT 8" O.C. TO MATCH LAP DOWEL REINFORCEMENT-EXTEND MIN 6'-0" ABOVE TOP OF FOOTING (30" MIN.)
10" CMU WALL WITH DAMPROOFING BTWN SOIL AND FOUNDATION
4" CONCRETE SLAB OVER 4" ABC - VERIFY WITH SOIL'S REPORT
WATERPROOFING
1'-1"
4"ø PERFORATED PIPE IN 12" GRAVEL POCKET TO DAYLIGHT TERMINATION
4"
2"
#5 TRANSVERSE BARS AT 12" O.C.
(3) #4 CONT. TOP AND BOTTOM
1'-0"
3"
3'-0"

NOTE:
BRACE TOP AND BOTTOM DURING BACKFILL TO PROVIDE RESTRAINT.

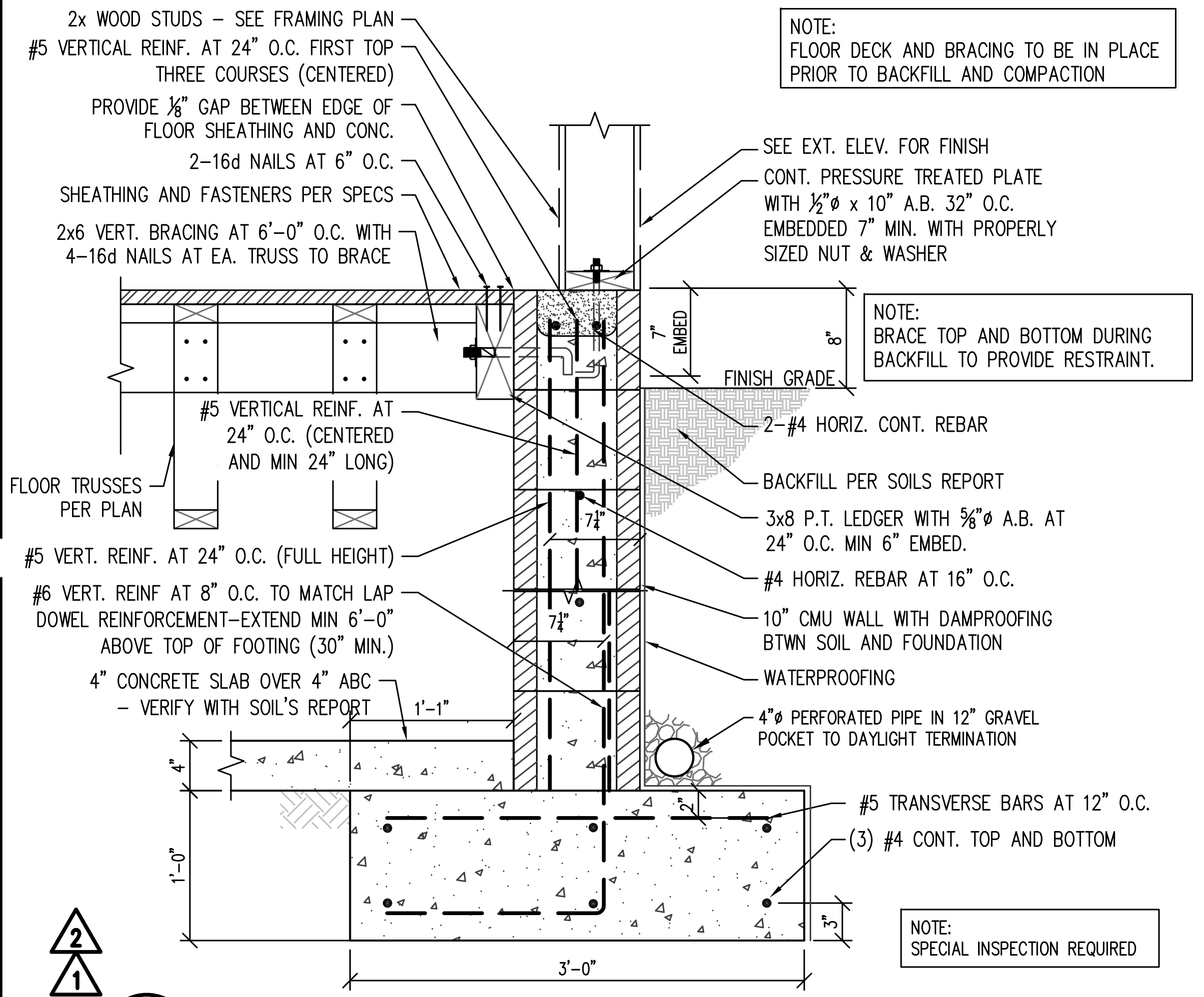
NOTE:
SPECIAL INSPECTION REQUIRED

2
1

6 CMU BASEMENT WALL (TRUSSES PERP.)

NOT TO SCALE

NOTE:
FLOOR DECK AND BRACING TO BE IN PLACE PRIOR TO BACKFILL AND COMPACTION


2x WOOD STUDS - SEE FRAMING PLAN
#5 VERTICAL REINF. AT 24" O.C. FIRST TOP THREE COURSES (CENTERED)
PROVIDE ⅛" GAP BETWEEN EDGE OF FLOOR SHEATHING AND CONC.
2-16d NAILS AT 6" O.C.
SHEATHING AND FASTENERS PER SPECS
2x6 VERT. BRACING AT 6'-0" O.C. WITH 4-16d NAILS AT EA. TRUSS TO BRACE
SEE EXT. ELEV. FOR FINISH
CONT. PRESSURE TREATED PLATE WITH ½"ø x 10" A.B. 32" O.C. EMBEDDED 7" MIN. WITH PROPERLY SIZED NUT & WASHER
7" EMBED
8"
FINISH GRADE
#5 VERTICAL REINF. AT 24" O.C. (CENTERED AND MIN 24" LONG)
2-#4 HORIZ. CONT. REBAR
FLOOR TRUSSES PER PLAN
BACKFILL PER SOILS REPORT
3x8 P.T. LEDGER WITH ⅝"ø A.B. AT 24" O.C. MIN 6" EMBED.
7¼"
#5 VERT. REINF. AT 24" O.C. (FULL HEIGHT)
#4 HORIZ. REBAR AT 16" O.C.
#6 VERT. REINF AT 8" O.C. TO MATCH LAP DOWEL REINFORCEMENT-EXTEND MIN 6'-0" ABOVE TOP OF FOOTING (30" MIN.)
10" CMU WALL WITH DAMPROOFING BTWN SOIL AND FOUNDATION
4" CONCRETE SLAB OVER 4" ABC - VERIFY WITH SOIL'S REPORT
WATERPROOFING
1'-1"
4"ø PERFORATED PIPE IN 12" GRAVEL POCKET TO DAYLIGHT TERMINATION
4"
2"
#5 TRANSVERSE BARS AT 12" O.C.
(3) #4 CONT. TOP AND BOTTOM
1'-0"
3"
3'-0"

NOTE:
BRACE TOP AND BOTTOM DURING BACKFILL TO PROVIDE RESTRAINT.

NOTE:
SPECIAL INSPECTION REQUIRED

2
1

7 CMU BASEMENT WALL (TRUSSES PAR.)

NOT TO SCALE

SHOWER RECEPTORS BUILT DIRECTLY ON GROUND SHALL:

A) BE WATERTIGHT.

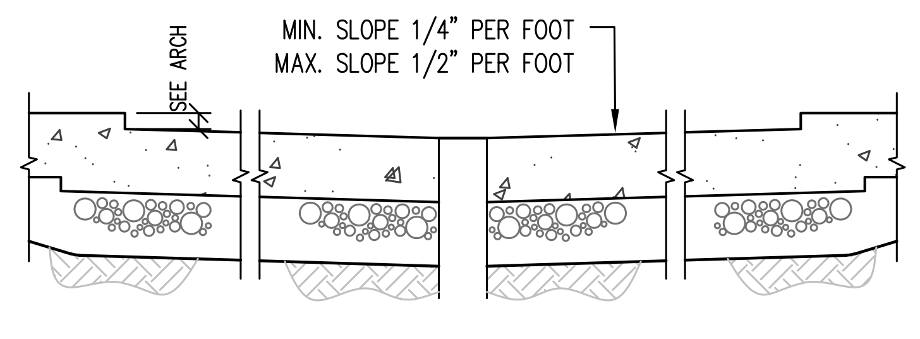
B) BE CONSTRUCTED OF APPROVED TYPE DENSE, NON-ABSORBENT AND NON-CORROSIVE MATERIALS.

C) BE ADEQUATLEY REINFORCED.

D) BE PROVIDED WITH AN APPROVED FLANGED FLOOR DRAIN MADE OF CAST IRON, BRASS OR OTHER APPROVED MATERIAL DESIGNED TO MAKE WATERTIGHT JOINT IN FLOOR.

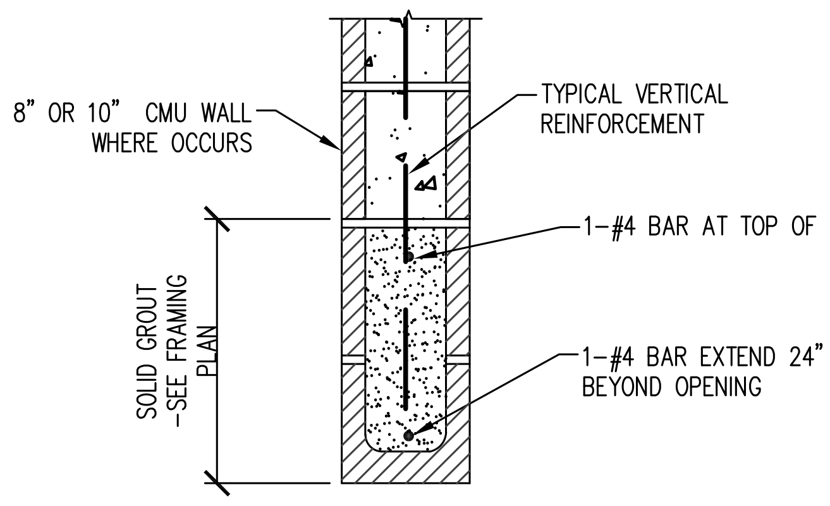
E) HAVE SMOOTH, IMPERVIOUS AND DURABLE SURFACES.

F) HAVE CURBS EXTENDING AT LEAST (3) INCHES ABOVE THE FINISHED THRESHOLD BEFORE ANY WOOD SUPERSTRUCTURE MAY BE ADDED.


SEE ARCH
MIN. SLOPE 1/4" PER FOOT
MAX. SLOPE 1/2" PER FOOT

12 RECESSED SHOWER DETAIL

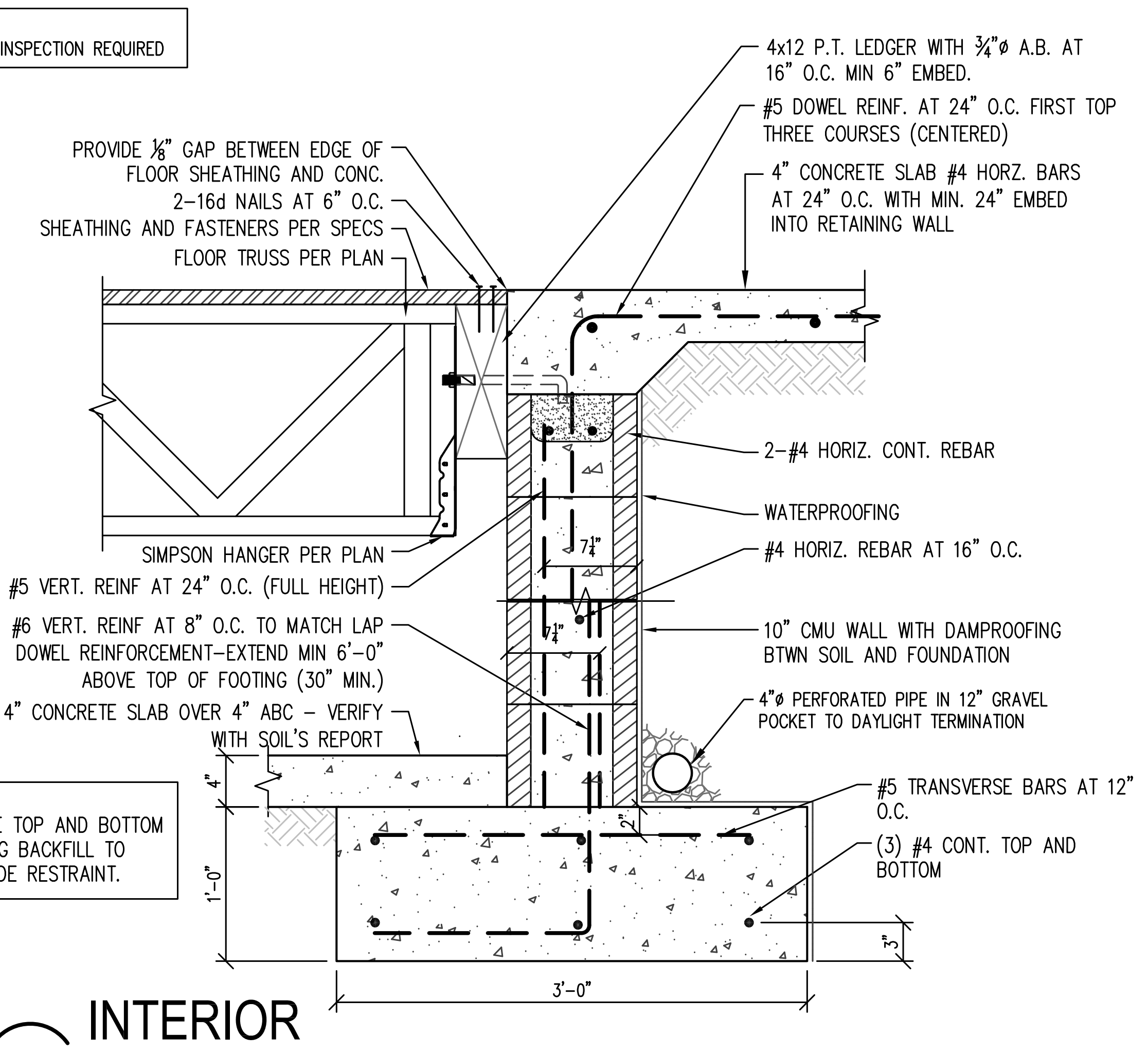
NOT TO SCALE


8" OR 10" CMU WALL WHERE OCCURS
TYPICAL VERTICAL REINFORCEMENT
1-#4 BAR AT TOP OF LINTEL
SOLID GROUT -SEE FRAMING PLAN
1-#4 BAR EXTEND 24" BEYOND OPENING

9 MASONRY LINTEL

SCALE: 1"=1'-0"

NOTE:
SPECIAL INSPECTION REQUIRED


4x12 P.T. LEDGER WITH ¾"ø A.B. AT 16" O.C. MIN 6" EMBED.
#5 DOWEL REINF. AT 24" O.C. FIRST TOP THREE COURSES (CENTERED)
PROVIDE ⅛" GAP BETWEEN EDGE OF FLOOR SHEATHING AND CONC.
2-16d NAILS AT 6" O.C.
SHEATHING AND FASTENERS PER SPECS
FLOOR TRUSS PER PLAN
4" CONCRETE SLAB #4 HORZ. BARS AT 24" O.C. WITH MIN. 24" EMBED INTO RETAINING WALL
2-#4 HORIZ. CONT. REBAR
WATERPROOFING
SIMPSON HANGER PER PLAN
7¼"
#4 HORIZ. REBAR AT 16" O.C.
#5 VERT. REINF AT 24" O.C. (FULL HEIGHT)
#6 VERT. REINF AT 8" O.C. TO MATCH LAP DOWEL REINFORCEMENT-EXTEND MIN 6'-0" ABOVE TOP OF FOOTING (30" MIN.)
10" CMU WALL WITH DAMPROOFING BTWN SOIL AND FOUNDATION
4" CONCRETE SLAB OVER 4" ABC - VERIFY WITH SOIL'S REPORT
4"ø PERFORATED PIPE IN 12" GRAVEL POCKET TO DAYLIGHT TERMINATION
4"
2"
#5 TRANSVERSE BARS AT 12" O.C.
(3) #4 CONT. TOP AND BOTTOM
1'-0"
3"
3'-0"

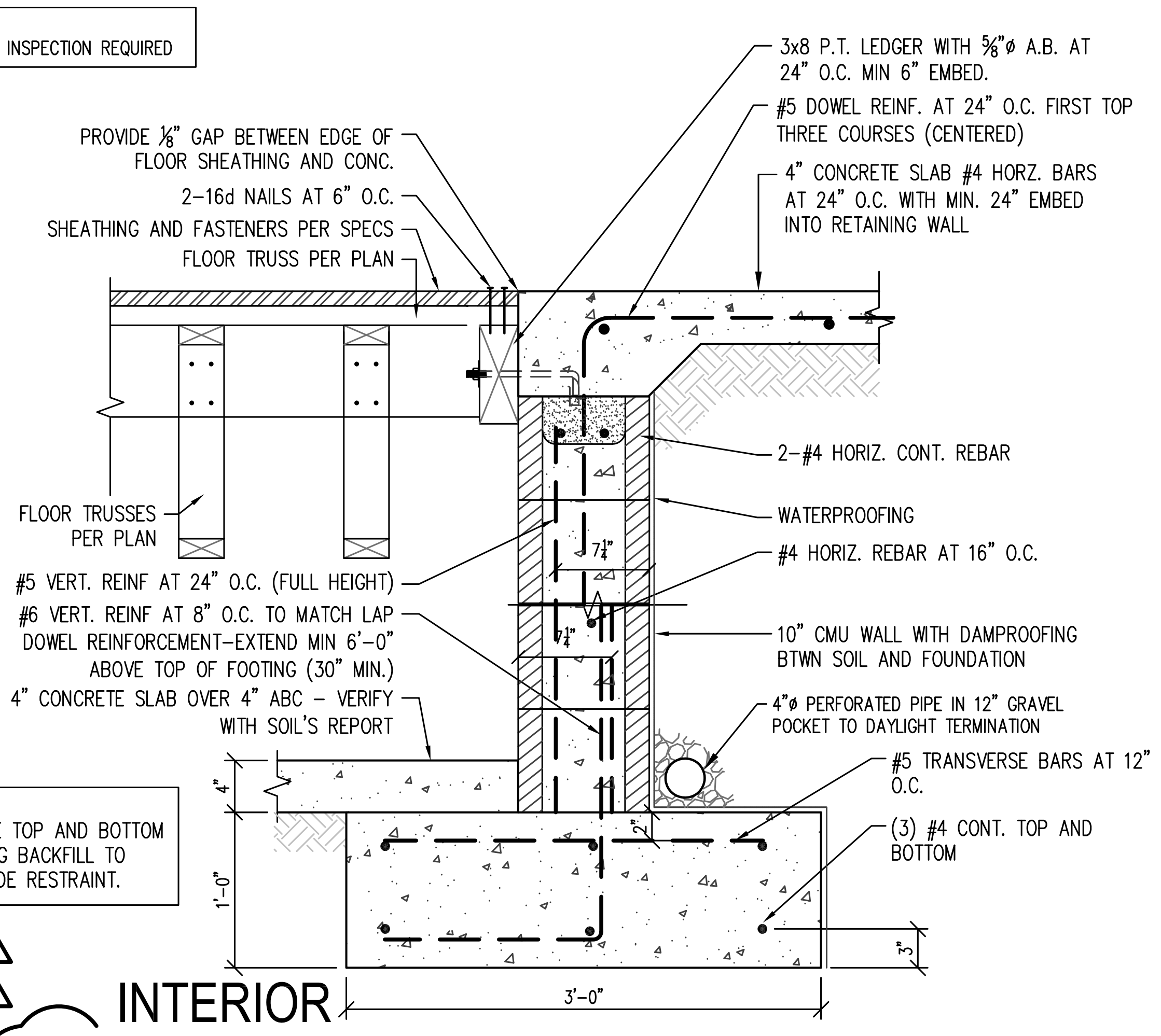
NOTE:
BRACE TOP AND BOTTOM DURING BACKFILL TO PROVIDE RESTRAINT.

2
1

10 INTERIOR CMU BASEMENT WALL (TRUSSES PERP.)

NOT TO SCALE

NOTE:
SPECIAL INSPECTION REQUIRED


3x8 P.T. LEDGER WITH ⅝"ø A.B. AT 24" O.C. MIN 6" EMBED.
#5 DOWEL REINF. AT 24" O.C. FIRST TOP THREE COURSES (CENTERED)
PROVIDE ⅛" GAP BETWEEN EDGE OF FLOOR SHEATHING AND CONC.
2-16d NAILS AT 6" O.C.
SHEATHING AND FASTENERS PER SPECS
FLOOR TRUSS PER PLAN
4" CONCRETE SLAB #4 HORZ. BARS AT 24" O.C. WITH MIN. 24" EMBED INTO RETAINING WALL
2-#4 HORIZ. CONT. REBAR
FLOOR TRUSSES PER PLAN
WATERPROOFING
7¼"
#4 HORIZ. REBAR AT 16" O.C.
#5 VERT. REINF AT 24" O.C. (FULL HEIGHT)
#6 VERT. REINF AT 8" O.C. TO MATCH LAP DOWEL REINFORCEMENT-EXTEND MIN 6'-0" ABOVE TOP OF FOOTING (30" MIN.)
10" CMU WALL WITH DAMPROOFING BTWN SOIL AND FOUNDATION
4" CONCRETE SLAB OVER 4" ABC - VERIFY WITH SOIL'S REPORT
4"ø PERFORATED PIPE IN 12" GRAVEL POCKET TO DAYLIGHT TERMINATION
4"
2"
#5 TRANSVERSE BARS AT 12" O.C.
(3) #4 CONT. TOP AND BOTTOM
1'-0"
3"
3'-0"

NOTE:
BRACE TOP AND BOTTOM DURING BACKFILL TO PROVIDE RESTRAINT.

2
1

11 INTERIOR CMU BASEMENT WALL (TRUSSES PAR.)

NOT TO SCALE

13 NOT USED

-

SIVARAJAN RESIDENCE
LONE MOUNTAIN VISTAS - LOT 93

7899 EAST MARY SHARON DRIVE
SCOTTSDALE, ARIZONA 85266

CITY OF SCOTTSDALE
BUILDING PLANS
THESE PLANS HAVE BEEN APPROVED
AND ARE READY FOR A PERMIT
THIS DOES NOT AUTHORIZE VIOLATIONS OF ANY
CODE OR ORDINANCE

Gilbert Structural LLC
414 East Southern Avenue
Tempe, Arizona 85282
Office 480-398-8144

PROFESSIONAL SEAL

41931
WILLIAM L.
GILBERT
Date Signed..03-18-2025

REVISIONS

1	CITY COMMENTS	2.3.2025
2	CITY COMMENTS	3.18.2025
3	.	
4	.	
5	.	

PROJECT NUMBER:

DATE: 11.26.2024

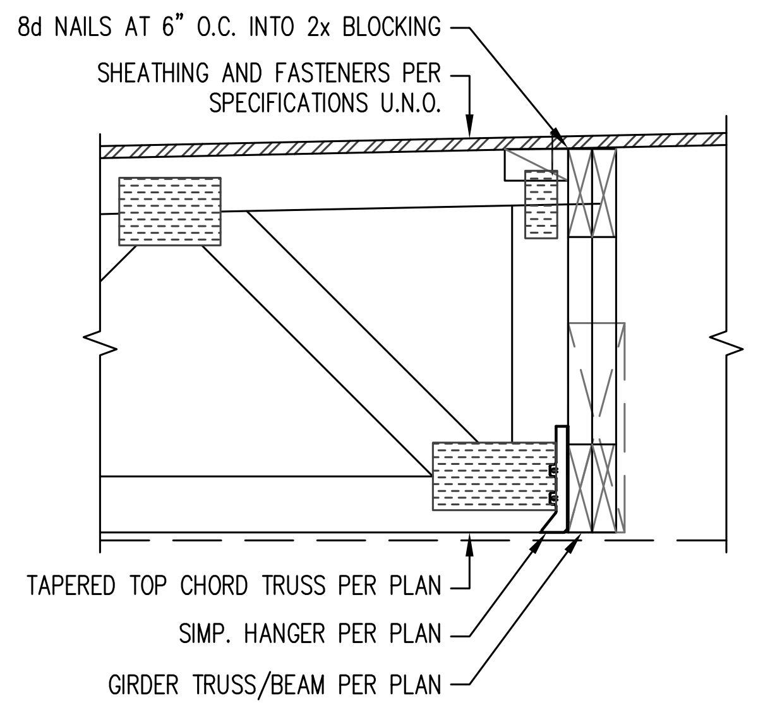
COS PLAN CHECK #9300-24

SHEET TITLE:

STRUCTURAL DETAILS

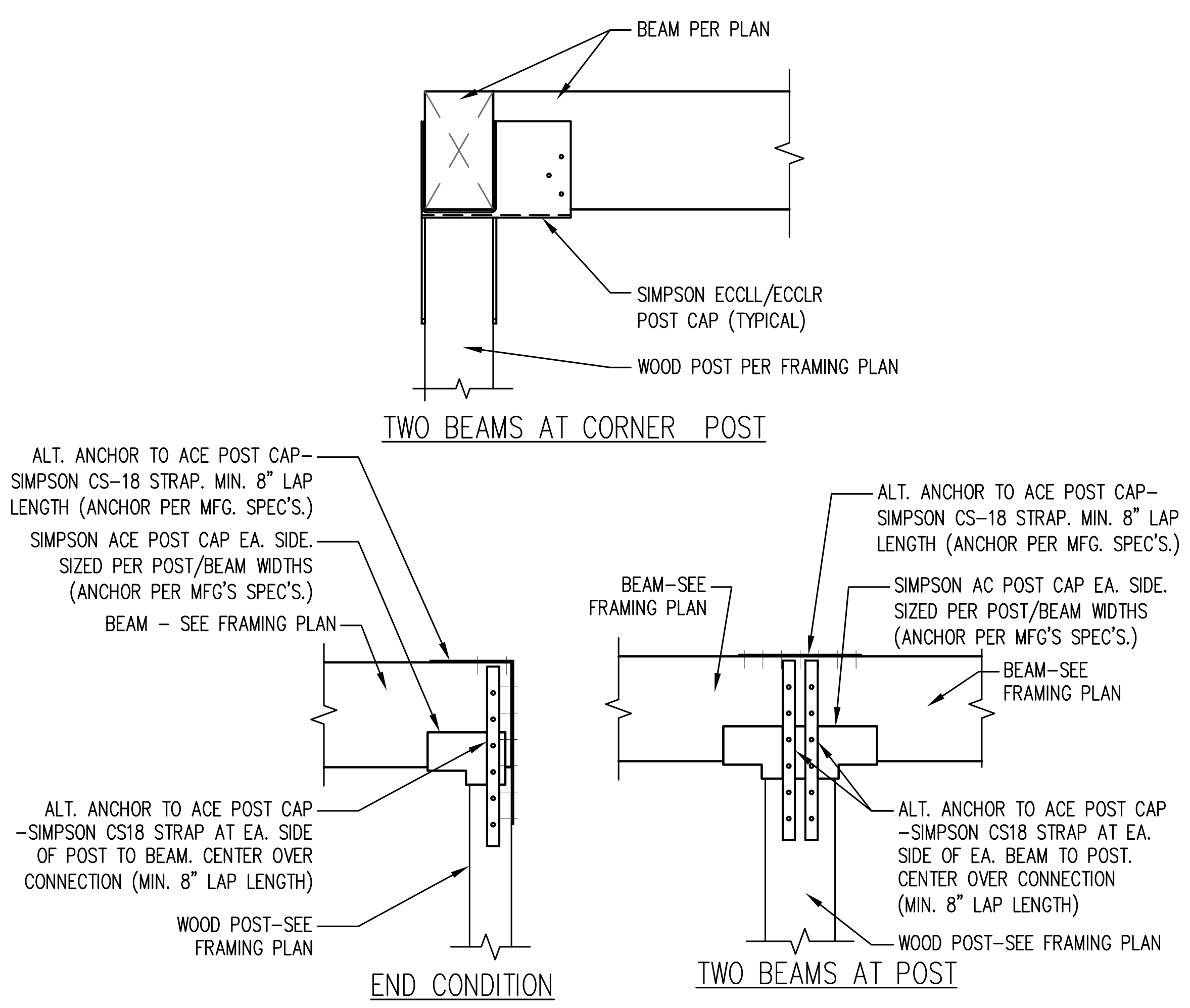
SHEET NUMBER:

SD1A


8d NAILS AT 6" O.C. INTO 2x BLOCKING
SHEATHING AND FASTENERS PER SPECIFICATIONS U.N.O.
TAPERED TOP CHORD TRUSS PER PLAN
SIMP. HANGER PER PLAN
GIRDER TRUSS/BEAM PER PLAN

1 ROOF TRUSS TO GIRDER/BEAM CONN.

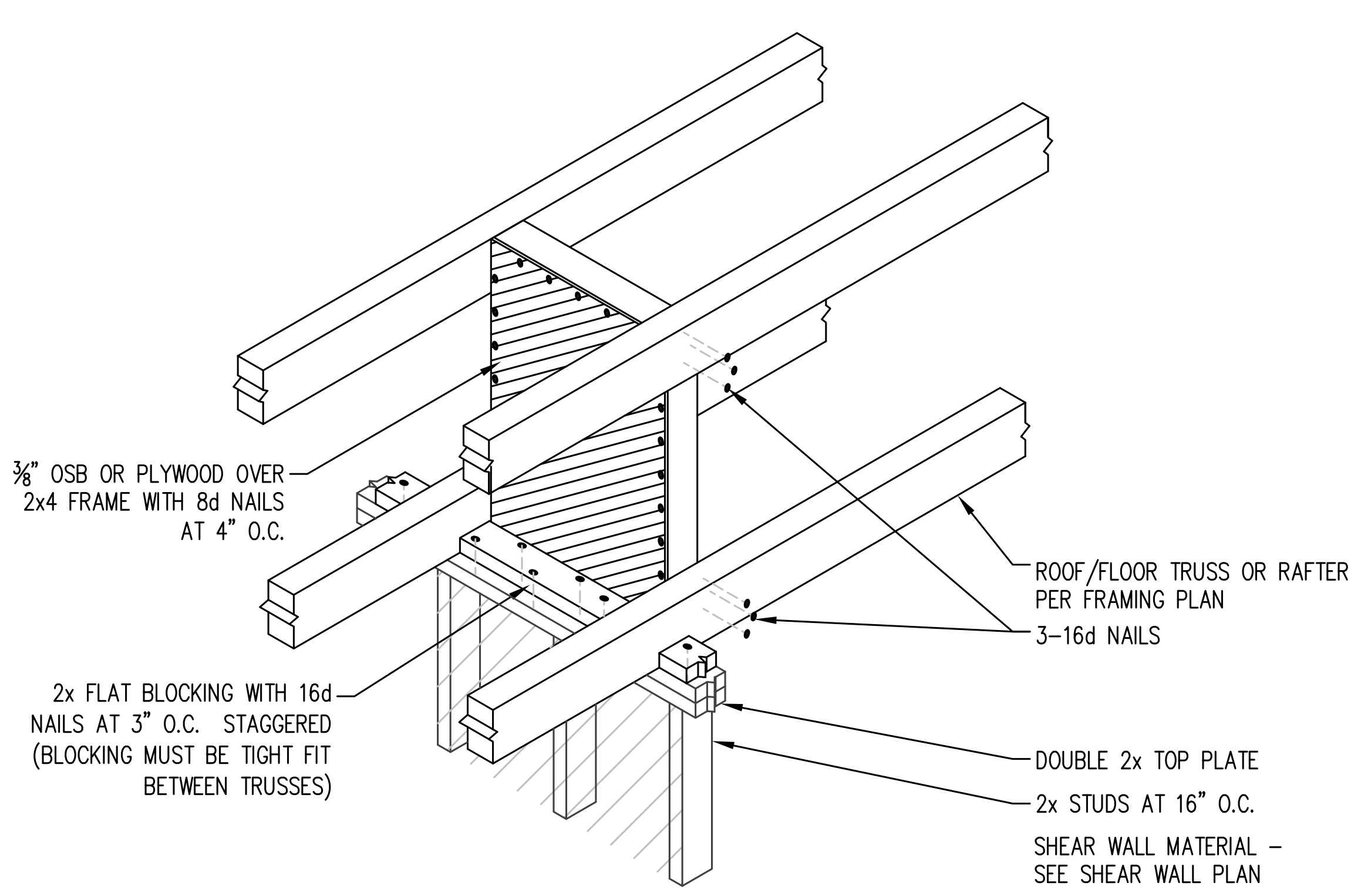
SCALE: 1" = 1'-0"


BEAM PER PLAN
SIMPSON ECCLL/ECCLR POST CAP (TYPICAL)
WOOD POST PER FRAMING PLAN
TWO BEAMS AT CORNER POST
ALT. ANCHOR TO ACE POST CAP–SIMPSON CS–18 STRAP. MIN. 8" LAP LENGTH (ANCHOR PER MFG. SPEC'S.)
SIMPSON ACE POST CAP EA. SIDE. SIZED PER POST/BEAM WIDTHS (ANCHOR PER MFG'S SPEC'S.)
BEAM – SEE FRAMING PLAN
ALT. ANCHOR TO ACE POST CAP –SIMPSON CS18 STRAP AT EA. SIDE OF POST TO BEAM. CENTER OVER CONNECTION (MIN. 8" LAP LENGTH)
WOOD POST–SEE FRAMING PLAN
END CONDITION
BEAM–SEE FRAMING PLAN
ALT. ANCHOR TO ACE POST CAP–SIMPSON CS–18 STRAP. MIN. 8" LAP LENGTH (ANCHOR PER MFG. SPEC'S.)
SIMPSON AC POST CAP EA. SIDE. SIZED PER POST/BEAM WIDTHS (ANCHOR PER MFG'S SPEC'S.)
BEAM–SEE FRAMING PLAN
ALT. ANCHOR TO ACE POST CAP –SIMPSON CS18 STRAP AT EA. SIDE OF EA. BEAM TO POST. CENTER OVER CONNECTION (MIN. 8" LAP LENGTH)
WOOD POST–SEE FRAMING PLAN
TWO BEAMS AT POST

2 TYPICAL BEAM / POST CONNECTION

NOT TO SCALE

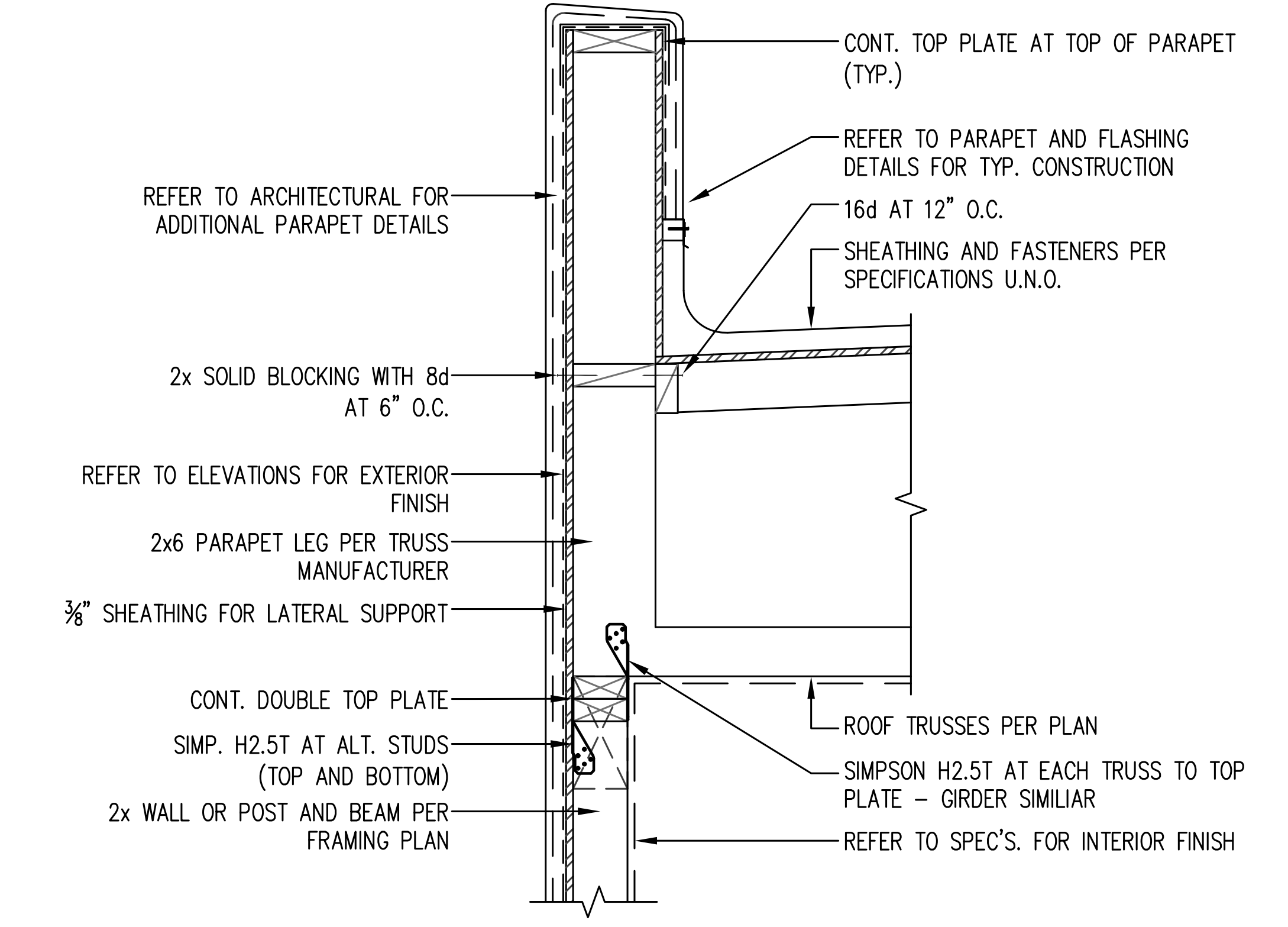
NOTE:
MAINTAIN ½" GAP BETWEEN TRUSS AND TOP PLATE. (AFTER ROOF TILE IS LOADED)


⅜" OSB OR PLYWOOD OVER 2x4 FRAME WITH 8d NAILS AT 4" O.C.
2x FLAT BLOCKING WITH 16d NAILS AT 3" O.C. STAGGERED (BLOCKING MUST BE TIGHT FIT BETWEEN TRUSSES)
ROOF/FLOOR TRUSS OR RAFTER PER FRAMING PLAN
3–16d NAILS
DOUBLE 2x TOP PLATE
2x STUDS AT 16" O.C.
SHEAR WALL MATERIAL – SEE SHEAR WALL PLAN

3 SHEAR TRANSFER AT NONBEARING WALL

NOT TO SCALE

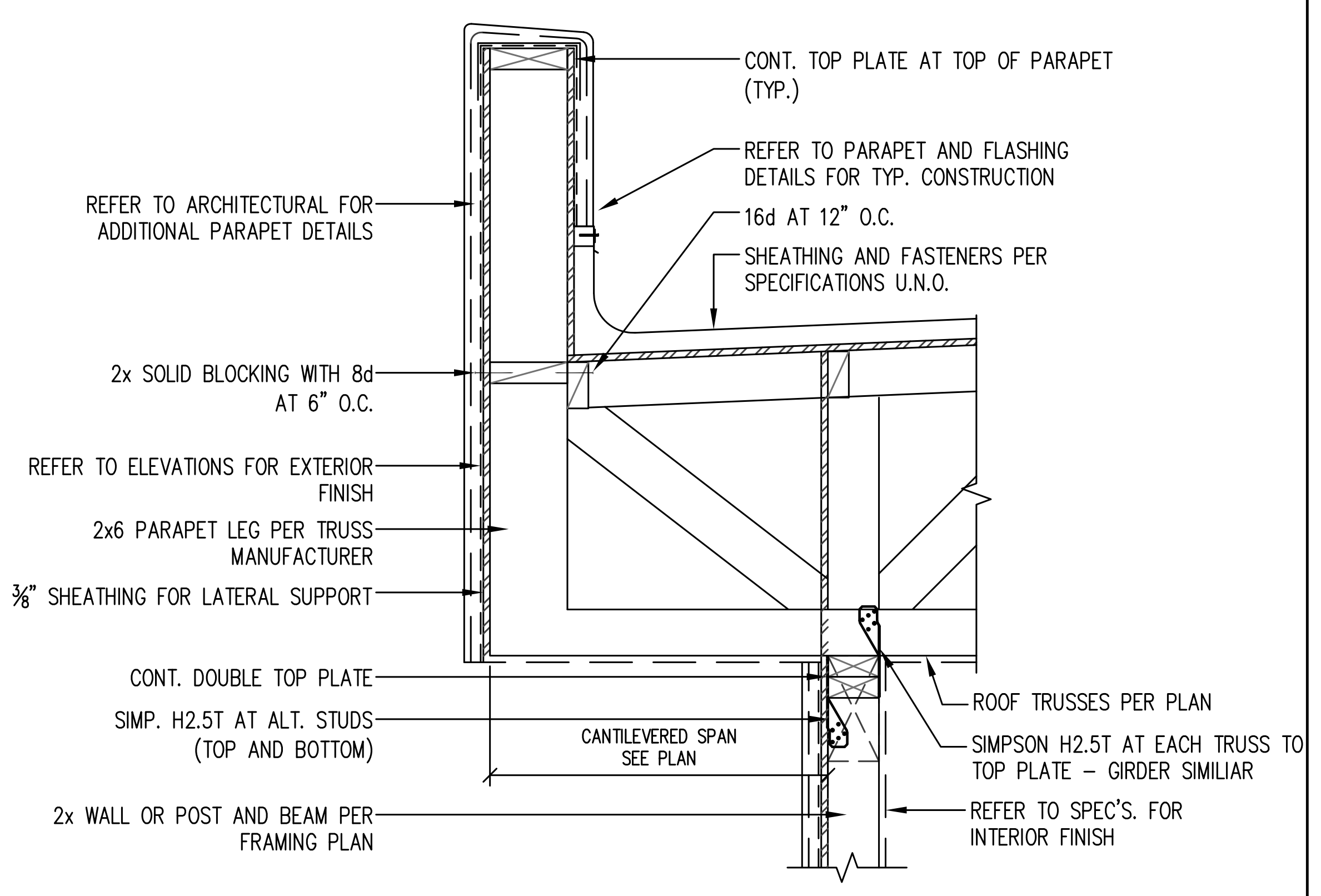
NOTE:
REFER TO ARCHITECTURAL FOR ADDITIONAL PARAPET DETAILS OR RAILING WHERE OCCURS


CONT. TOP PLATE AT TOP OF PARAPET (TYP.)
REFER TO PARAPET AND FLASHING DETAILS FOR TYP. CONSTRUCTION
16d AT 12" O.C.
SHEATHING AND FASTENERS PER SPECIFICATIONS U.N.O.
REFER TO ARCHITECTURAL FOR ADDITIONAL PARAPET DETAILS
2x SOLID BLOCKING WITH 8d AT 6" O.C.
REFER TO ELEVATIONS FOR EXTERIOR FINISH
2x6 PARAPET LEG PER TRUSS MANUFACTURER
⅜" SHEATHING FOR LATERAL SUPPORT
CONT. DOUBLE TOP PLATE
SIMP. H2.5T AT ALT. STUDS (TOP AND BOTTOM)
2x WALL OR POST AND BEAM PER FRAMING PLAN
ROOF TRUSSES PER PLAN
SIMPSON H2.5T AT EACH TRUSS TO TOP PLATE – GIRDER SIMILIAR
REFER TO SPEC'S. FOR INTERIOR FINISH

4 PERP. TRUSSES AT PARAPET WALL

SCALE: 1" = 1'-0"

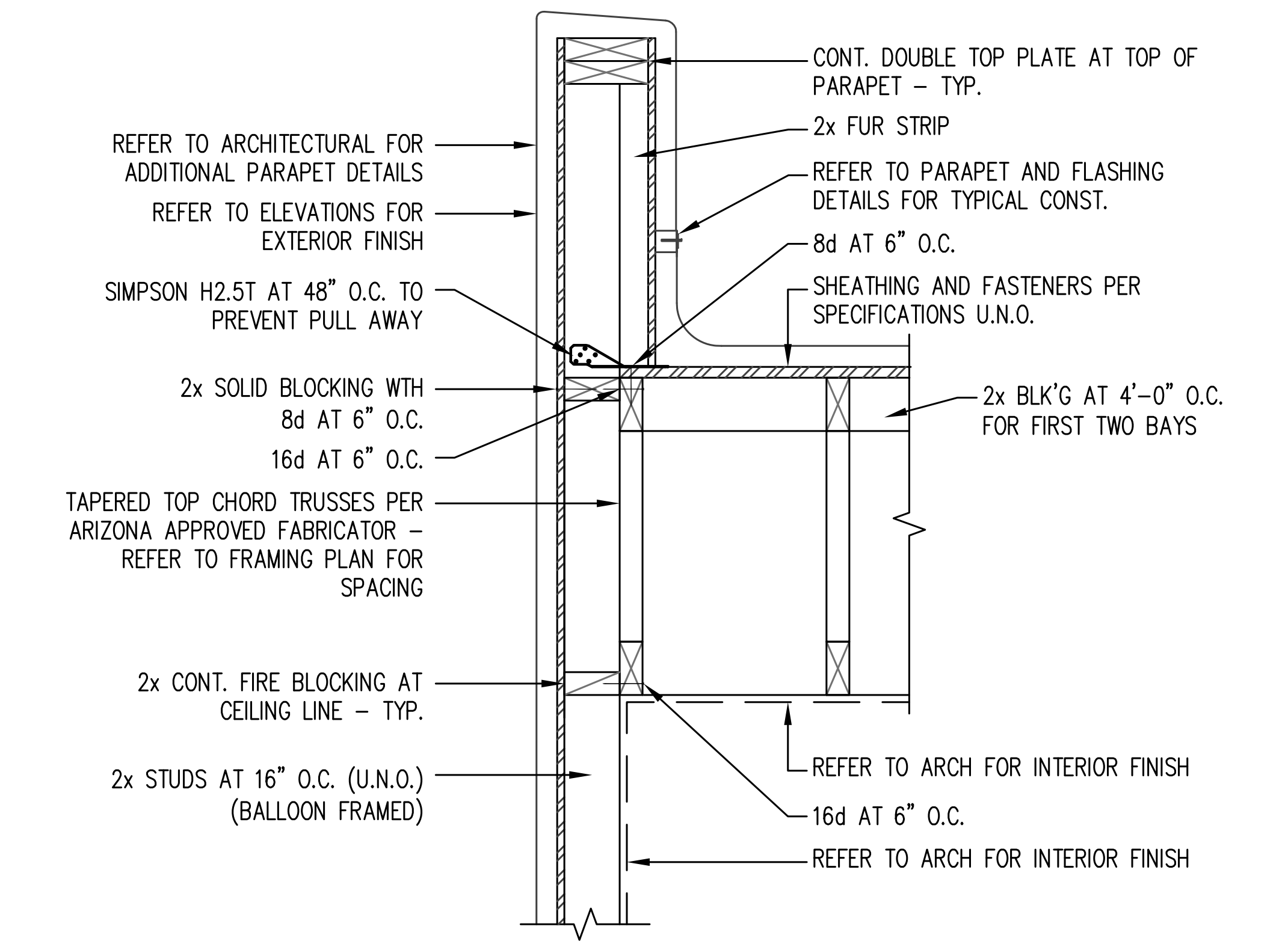
NOTE:
REFER TO ARCHITECTURAL FOR ADDITIONAL PARAPET DETAILS OR RAILING WHERE OCCURS


CONT. TOP PLATE AT TOP OF PARAPET (TYP.)
REFER TO PARAPET AND FLASHING DETAILS FOR TYP. CONSTRUCTION
16d AT 12" O.C.
SHEATHING AND FASTENERS PER SPECIFICATIONS U.N.O.
REFER TO ARCHITECTURAL FOR ADDITIONAL PARAPET DETAILS
2x SOLID BLOCKING WITH 8d AT 6" O.C.
REFER TO ELEVATIONS FOR EXTERIOR FINISH
2x6 PARAPET LEG PER TRUSS MANUFACTURER
⅜" SHEATHING FOR LATERAL SUPPORT
CONT. DOUBLE TOP PLATE
SIMP. H2.5T AT ALT. STUDS (TOP AND BOTTOM)
2x WALL OR POST AND BEAM PER FRAMING PLAN
CANTILEVERED SPAN SEE PLAN
ROOF TRUSSES PER PLAN
SIMPSON H2.5T AT EACH TRUSS TO TOP PLATE – GIRDER SIMILIAR
REFER TO SPEC'S. FOR INTERIOR FINISH

5 CANT. PERP. TRUSSES AT PARAPET WALL

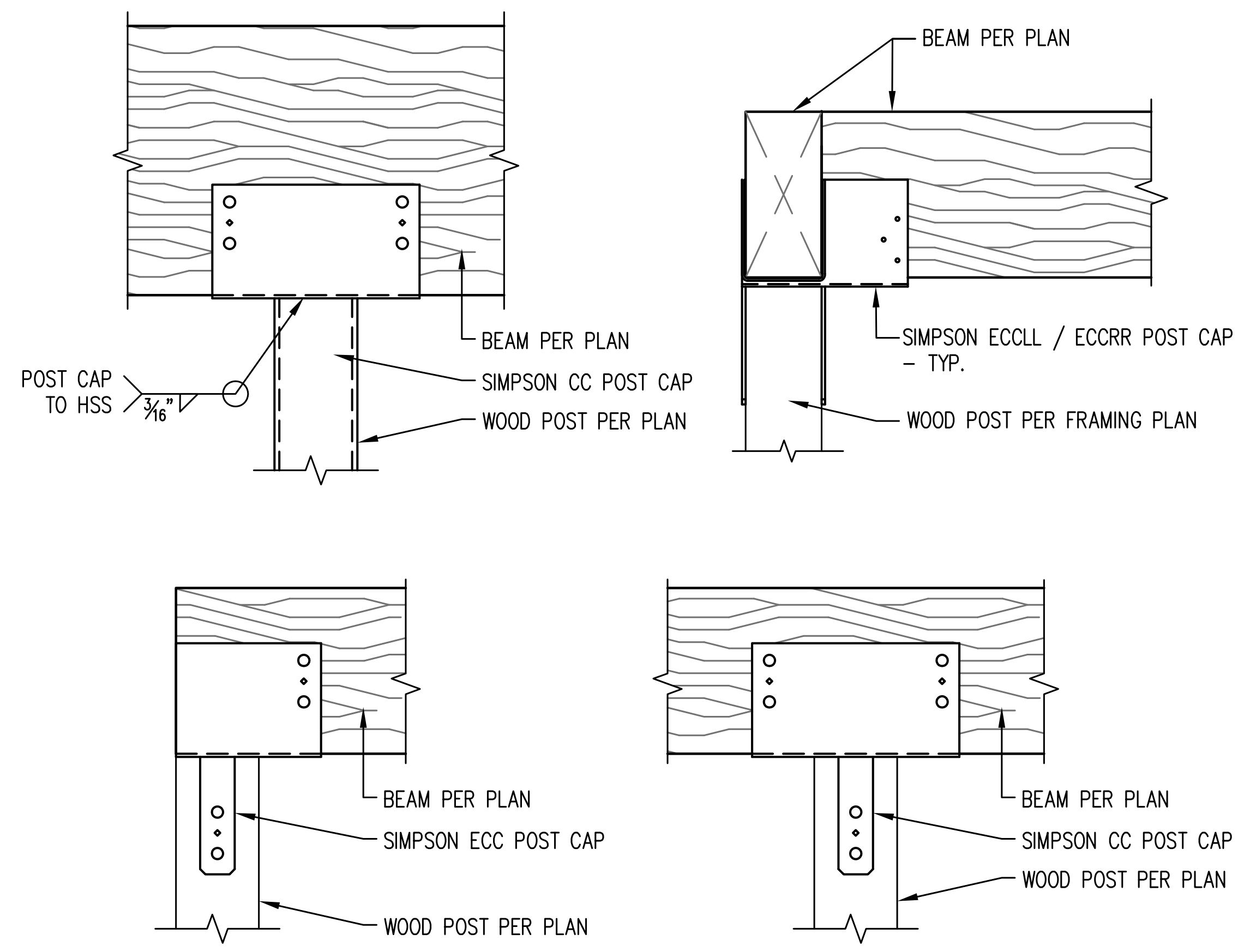
SCALE: 1" = 1'-0"

NOTE:
REFER TO ARCHITECTURAL FOR ADDITIONAL PARAPET DETAILS OR RAILING WHERE OCCURS


CONT. DOUBLE TOP PLATE AT TOP OF PARAPET – TYP.
2x FUR STRIP
REFER TO PARAPET AND FLASHING DETAILS FOR TYPICAL CONST.
8d AT 6" O.C.
SHEATHING AND FASTENERS PER SPECIFICATIONS U.N.O.
REFER TO ARCHITECTURAL FOR ADDITIONAL PARAPET DETAILS
REFER TO ELEVATIONS FOR EXTERIOR FINISH
SIMPSON H2.5T AT 48" O.C. TO PREVENT PULL AWAY
2x SOLID BLOCKING WITH 8d AT 6" O.C.
16d AT 6" O.C.
TAPERED TOP CHORD TRUSSES PER ARIZONA APPROVED FABRICATOR – REFER TO FRAMING PLAN FOR SPACING
2x BLK'G AT 4'–0" O.C. FOR FIRST TWO BAYS
2x CONT. FIRE BLOCKING AT CEILING LINE – TYP.
2x STUDS AT 16" O.C. (U.N.O.) (BALLOON FRAMED)
REFER TO ARCH FOR INTERIOR FINISH
16d AT 6" O.C.
REFER TO ARCH FOR INTERIOR FINISH

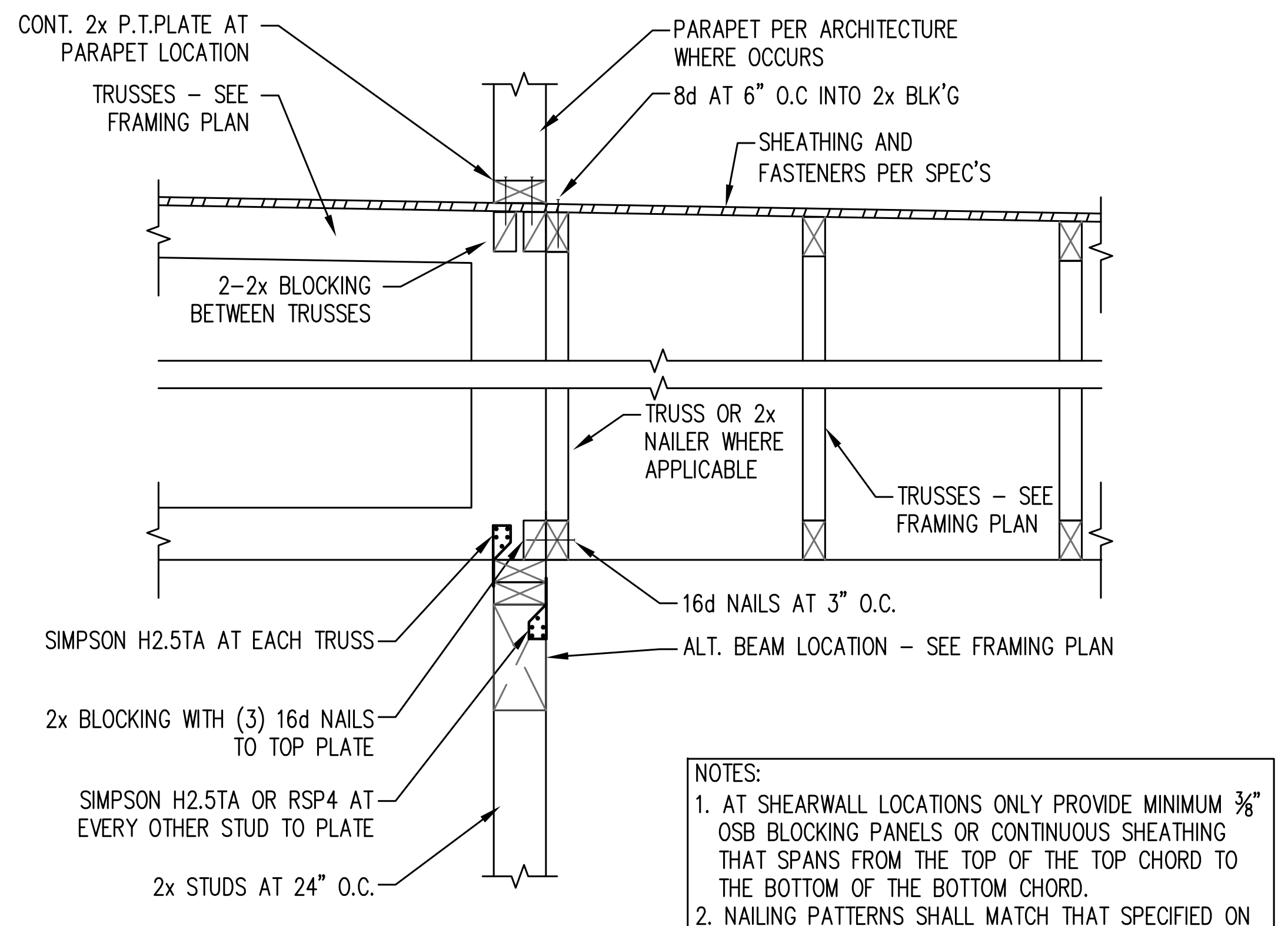
6 PARALLEL TRUSSES AT PARAPET WALL / RAILING

SCALE: 1" = 1'-0"


BEAM PER PLAN
POST CAP TO HSS
3/16
BEAM PER PLAN
SIMPSON CC POST CAP
WOOD POST PER PLAN
SIMPSON ECCLL / ECCRR POST CAP – TYP.
WOOD POST PER FRAMING PLAN
BEAM PER PLAN
SIMPSON ECC POST CAP
WOOD POST PER PLAN
BEAM PER PLAN
SIMPSON CC POST CAP
WOOD POST PER PLAN

7 TYPICAL BEAM / POST CONNECTION

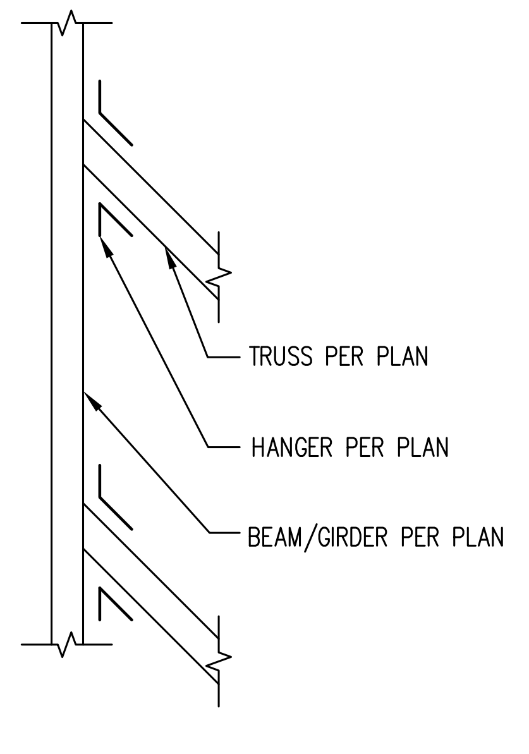
NOT TO SCALE


CONT. 2x P.T.PLATE AT PARAPET LOCATION
TRUSSES – SEE FRAMING PLAN
PARAPET PER ARCHITECTURE WHERE OCCURS
8d AT 6" O.C INTO 2x BLK'G
SHEATHING AND FASTENERS PER SPEC'S
2–2x BLOCKING BETWEEN TRUSSES
TRUSS OR 2x NAILER WHERE APPLICABLE
TRUSSES – SEE FRAMING PLAN
16d NAILS AT 3" O.C.
SIMPSON H2.5TA AT EACH TRUSS
ALT. BEAM LOCATION – SEE FRAMING PLAN
2x BLOCKING WITH (3) 16d NAILS TO TOP PLATE
SIMPSON H2.5TA OR RSP4 AT EVERY OTHER STUD TO PLATE
2x STUDS AT 24" O.C.

NOTES:
1. AT SHEARWALL LOCATIONS ONLY PROVIDE MINIMUM ⅜" OSB BLOCKING PANELS OR CONTINUOUS SHEATHING THAT SPANS FROM THE TOP OF THE TOP CHORD TO THE BOTTOM OF THE BOTTOM CHORD.
2. NAILING PATTERNS SHALL MATCH THAT SPECIFIED ON SHEARWALL PLAN.
3. AT NON SHEARWALL LOCATIONS, THE 2x BLOCKING SHOWN BETWEEN TRUSSES AT THE TOP AND BOTTOM CHORD IS STILL REQUIRED BUT SHEAR PANEL METERIAL IS NOT REQUIRED.

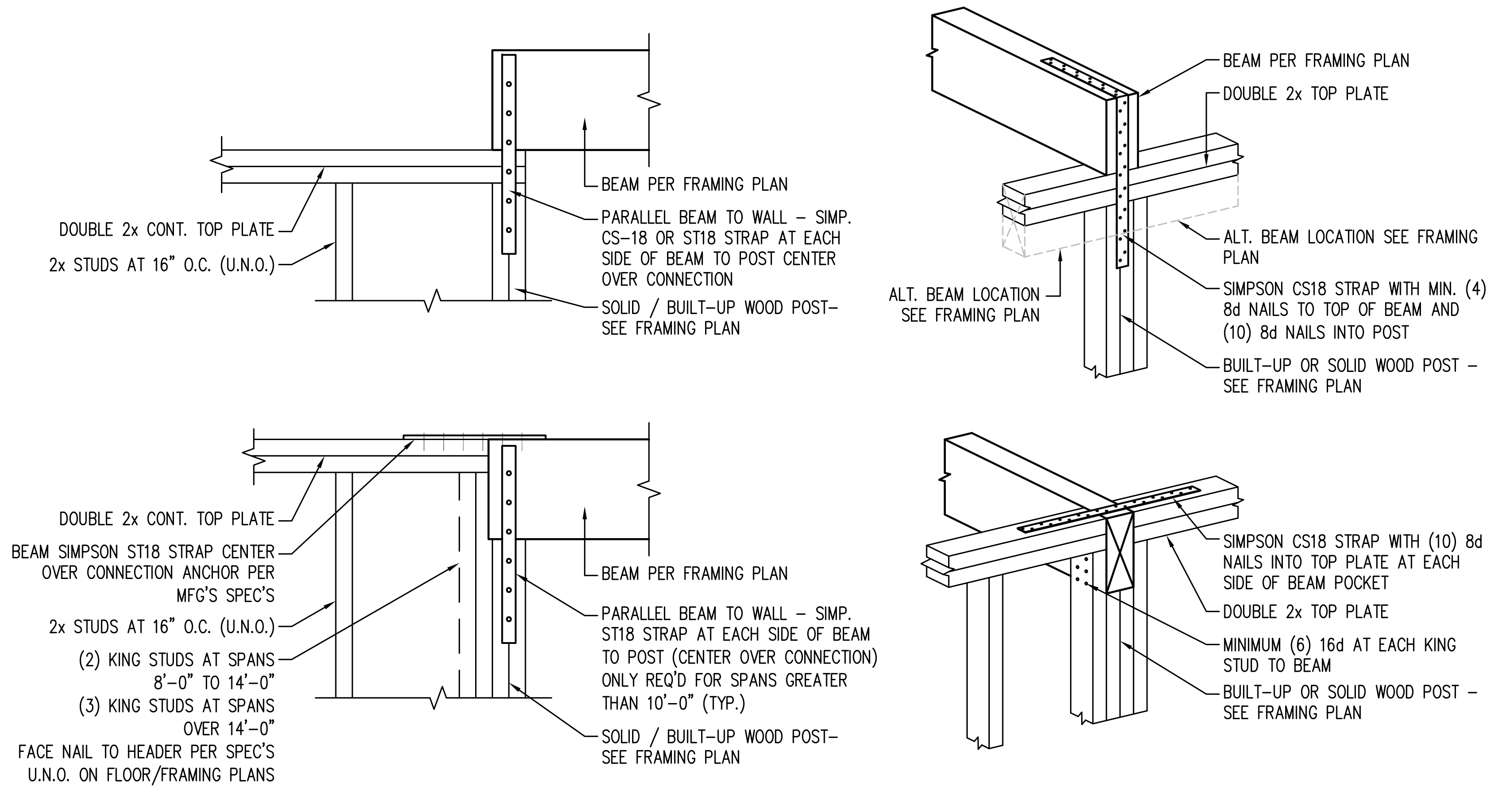
8 PERP. / PAR. ROOF TRUSSES AT WALL

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


TRUSS PER PLAN
HANGER PER PLAN
BEAM/GIRDER PER PLAN

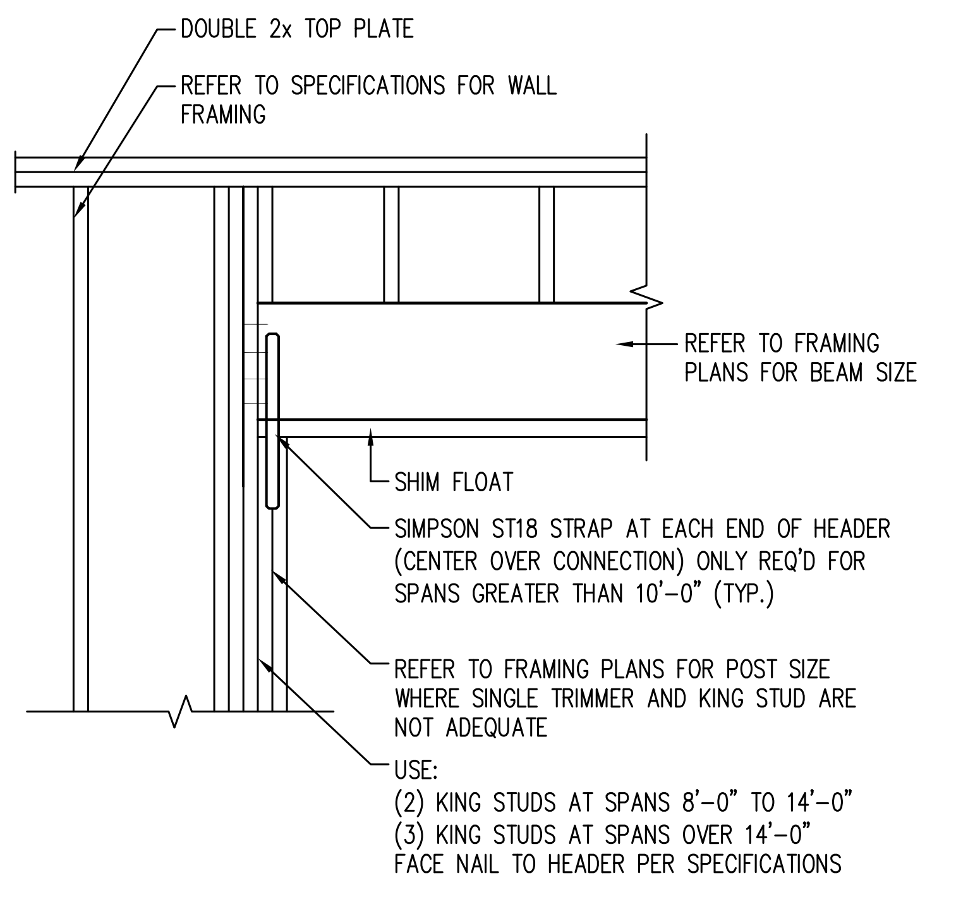
9 SKEWED TRUSS TO BEAM/GIRDER

SCALE: 1" = 1'-0"


DOUBLE 2x CONT. TOP PLATE
2x STUDS AT 16" O.C. (U.N.O.)
BEAM PER FRAMING PLAN
PARALLEL BEAM TO WALL – SIMP. CS–18 OR ST18 STRAP AT EACH SIDE OF BEAM TO POST CENTER OVER CONNECTION
SOLID / BUILT–UP WOOD POST– SEE FRAMING PLAN
BEAM PER FRAMING PLAN
DOUBLE 2x TOP PLATE
ALT. BEAM LOCATION SEE FRAMING PLAN
ALT. BEAM LOCATION SEE FRAMING PLAN
SIMPSON CS18 STRAP WITH MIN. (4) 8d NAILS TO TOP OF BEAM AND (10) 8d NAILS INTO POST
BUILT–UP OR SOLID WOOD POST – SEE FRAMING PLAN
DOUBLE 2x CONT. TOP PLATE
BEAM SIMPSON ST18 STRAP CENTER OVER CONNECTION ANCHOR PER MFG'S SPEC'S
2x STUDS AT 16" O.C. (U.N.O.)
(2) KING STUDS AT SPANS 8'–0" TO 14'–0"
(3) KING STUDS AT SPANS OVER 14'–0"
FACE NAIL TO HEADER PER SPEC'S U.N.O. ON FLOOR/FRAMING PLANS
BEAM PER FRAMING PLAN
PARALLEL BEAM TO WALL – SIMP. ST18 STRAP AT EACH SIDE OF BEAM TO POST (CENTER OVER CONNECTION) ONLY REQ'D FOR SPANS GREATER THAN 10'–0" (TYP.)
SOLID / BUILT–UP WOOD POST– SEE FRAMING PLAN
SIMPSON CS18 STRAP WITH (10) 8d NAILS INTO TOP PLATE AT EACH SIDE OF BEAM POCKET
DOUBLE 2x TOP PLATE
MINIMUM (6) 16d AT EACH KING STUD TO BEAM
BUILT–UP OR SOLID WOOD POST – SEE FRAMING PLAN

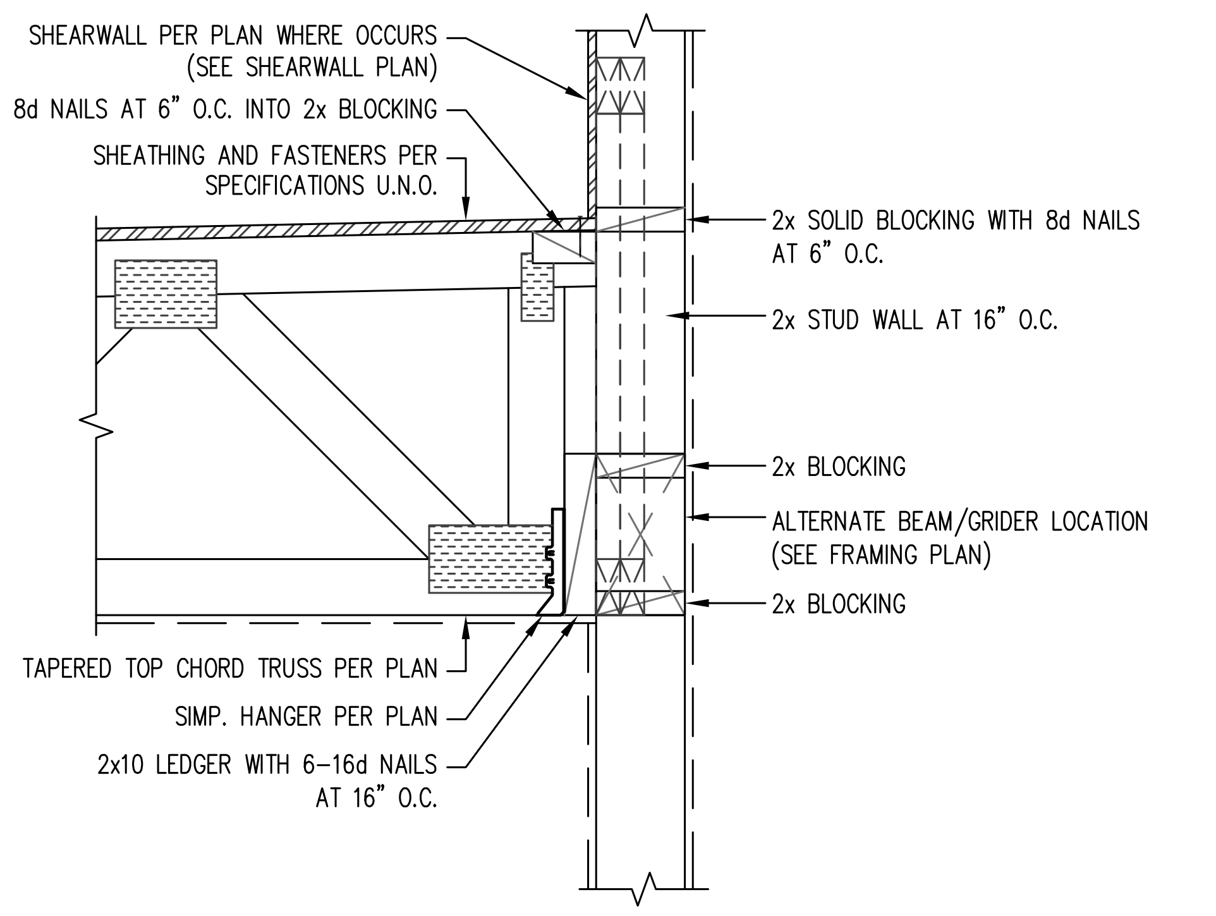
10 BEAM AT WALL CONNECTIONS

NOT TO SCALE


DOUBLE 2x TOP PLATE
REFER TO SPECIFICATIONS FOR WALL FRAMING
REFER TO FRAMING PLANS FOR BEAM SIZE
SHIM FLOAT
SIMPSON ST18 STRAP AT EACH END OF HEADER (CENTER OVER CONNECTION) ONLY REQ'D FOR SPANS GREATER THAN 10'–0" (TYP.)
REFER TO FRAMING PLANS FOR POST SIZE WHERE SINGLE TRIMMER AND KING STUD ARE NOT ADEQUATE
USE:
(2) KING STUDS AT SPANS 8'–0" TO 14'–0"
(3) KING STUDS AT SPANS OVER 14'–0"
FACE NAIL TO HEADER PER SPECIFICATIONS

11 HEADER CONNECTION AT WALLS

SCALE: 1" = 1'-0"


SHEARWALL PER PLAN WHERE OCCURS (SEE SHEARWALL PLAN)
8d NAILS AT 6" O.C. INTO 2x BLOCKING
SHEATHING AND FASTENERS PER SPECIFICATIONS U.N.O.
2x SOLID BLOCKING WITH 8d NAILS AT 6" O.C.
2x STUD WALL AT 16" O.C.
2x BLOCKING
ALTERNATE BEAM/GRIDER LOCATION (SEE FRAMING PLAN)
2x BLOCKING
TAPERED TOP CHORD TRUSS PER PLAN
SIMP. HANGER PER PLAN
2x10 LEDGER WITH 6–16d NAILS AT 16" O.C.

12 ROOF TRUSS TO LEDGER/GIRDER AT WALL

SCALE: 1"=1'-0"

SIVARAJAN RESIDENCE
LONE MOUNTAIN VISTAS - LOT 93

7899 EAST MARY SHARON DRIVE
SCOTTSDALE, ARIZONA 85266

CITY OF SCOTTSDALE
BUILDING PLANS
THESE PLANS HAVE BEEN APPROVED
AND ARE READY FOR A PERMIT
THIS DOES NOT AUTHORIZE VIOLATIONS OF ANY
CODE OR ORDINANCE

Gilbert Structural LLC
414 East Southern Avenue
Tempe, Arizona 85282
Office 480-398-8144

PROFESSIONAL SEAL

41931
WILLIAM L. GILBERT
Date Signed 11-26-2024

REVISIONS
1 .
2 .
3 .
4 .
5 .

PROJECT NUMBER:

DATE: 11.26.2024

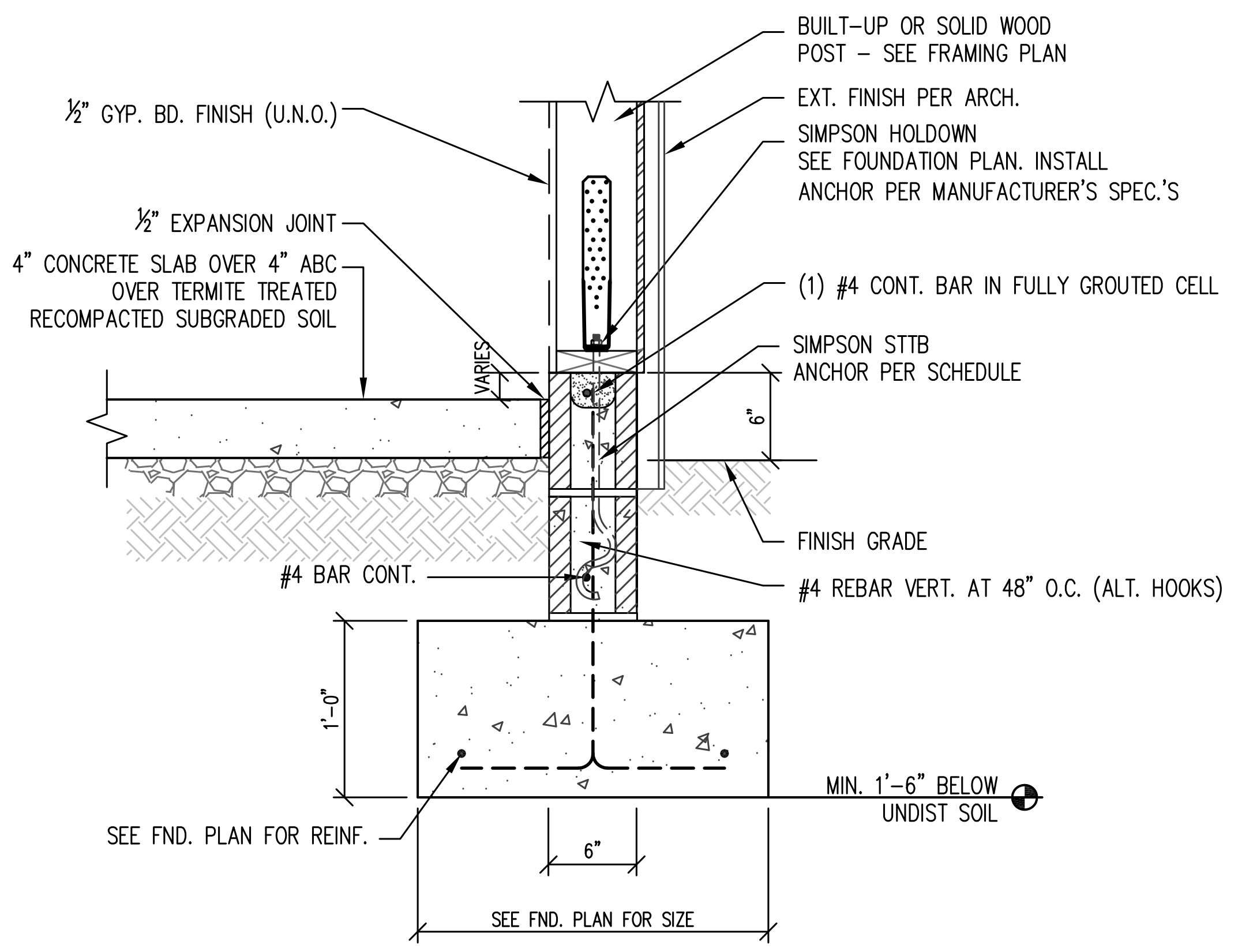
COS PLAN CHECK #9300-24

SHEET TITLE:

STRUCTURAL DETAILS

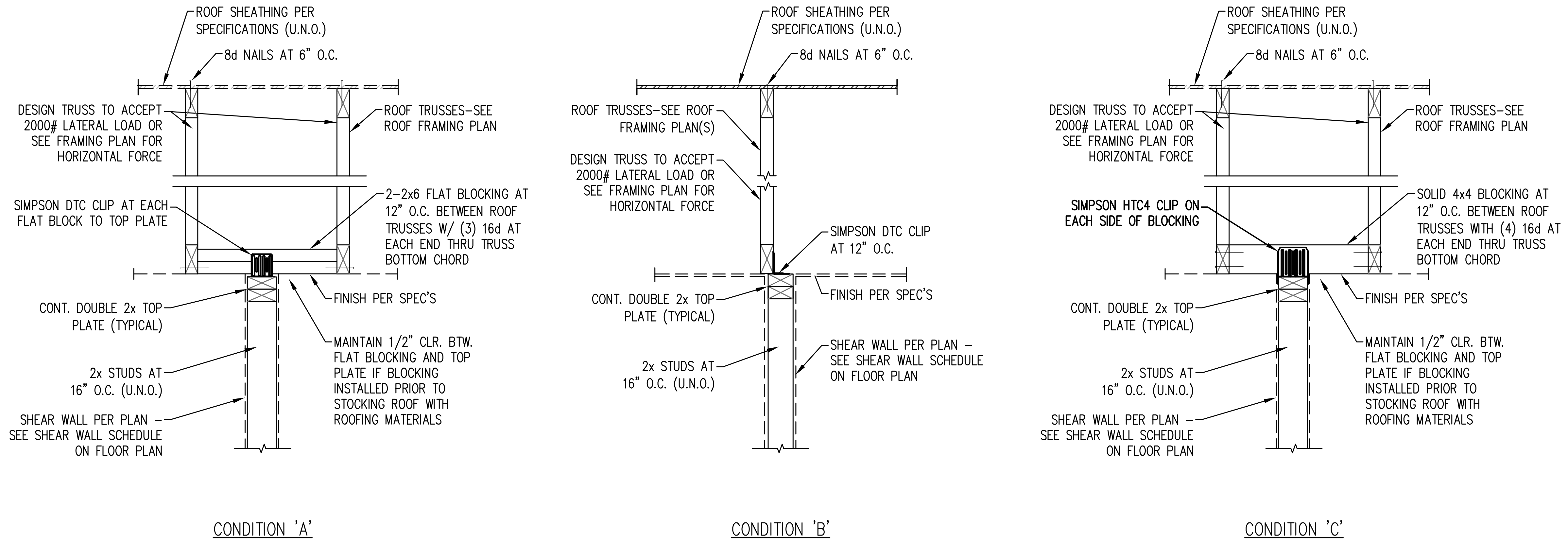
SHEET NUMBER:

SD2


BUILT-UP OR SOLID WOOD POST – SEE FRAMING PLAN
EXT. FINISH PER ARCH.
SIMPSON HOLDOWN SEE FOUNDATION PLAN. INSTALL ANCHOR PER MANUFACTURER'S SPEC.'S
½" GYP. BD. FINISH (U.N.O.)
½" EXPANSION JOINT
4" CONCRETE SLAB OVER 4" ABC OVER TERMITE TREATED RECOMPACTED SUBGRADED SOIL
(1) #4 CONT. BAR IN FULLY GROUTED CELL
SIMPSON STTB ANCHOR PER SCHEDULE
VARIES
6"
FINISH GRADE
#4 BAR CONT.
#4 REBAR VERT. AT 48" O.C. (ALT. HOOKS)
1'–0"
MIN. 1'–6" BELOW UNDIST SOIL
SEE FND. PLAN FOR REINF.
6"
SEE FND. PLAN FOR SIZE

1 HTT5 HOLDOWN AT EXTERIOR STEM WALL

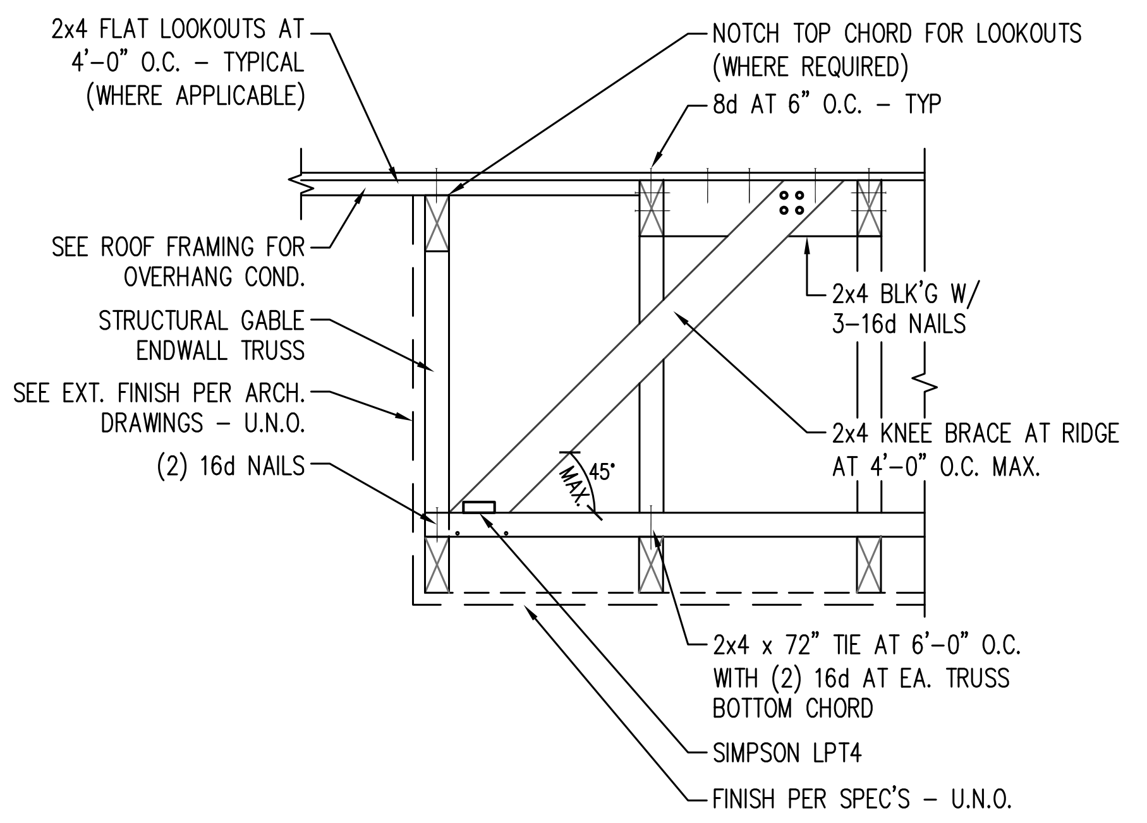
NOT TO SCALE


ROOF SHEATHING PER SPECIFICATIONS (U.N.O.)
8d NAILS AT 6" O.C.
DESIGN TRUSS TO ACCEPT 2000# LATERAL LOAD OR SEE FRAMING PLAN FOR HORIZONTAL FORCE
ROOF TRUSSES–SEE ROOF FRAMING PLAN
SIMPSON DTC CLIP AT EACH FLAT BLOCK TO TOP PLATE
2–2x6 FLAT BLOCKING AT 12" O.C. BETWEEN ROOF TRUSSES W/ (3) 16d AT EACH END THRU TRUSS BOTTOM CHORD
CONT. DOUBLE 2x TOP PLATE (TYPICAL)
FINISH PER SPEC'S
2x STUDS AT 16" O.C. (U.N.O.)
MAINTAIN 1/2" CLR. BTW. FLAT BLOCKING AND TOP PLATE IF BLOCKING INSTALLED PRIOR TO STOCKING ROOF WITH ROOFING MATERIALS
SHEAR WALL PER PLAN – SEE SHEAR WALL SCHEDULE ON FLOOR PLAN
ROOF SHEATHING PER SPECIFICATIONS (U.N.O.)
8d NAILS AT 6" O.C.
ROOF TRUSSES–SEE ROOF FRAMING PLAN(S)
DESIGN TRUSS TO ACCEPT 2000# LATERAL LOAD OR SEE FRAMING PLAN FOR HORIZONTAL FORCE
SIMPSON DTC CLIP AT 12" O.C.
CONT. DOUBLE 2x TOP PLATE (TYPICAL)
FINISH PER SPEC'S
2x STUDS AT 16" O.C. (U.N.O.)
SHEAR WALL PER PLAN – SEE SHEAR WALL SCHEDULE ON FLOOR PLAN
ROOF SHEATHING PER SPECIFICATIONS (U.N.O.)
8d NAILS AT 6" O.C.
DESIGN TRUSS TO ACCEPT 2000# LATERAL LOAD OR SEE FRAMING PLAN FOR HORIZONTAL FORCE
ROOF TRUSSES–SEE ROOF FRAMING PLAN
SIMPSON HTC4 CLIP ON EACH SIDE OF BLOCKING
SOLID 4x4 BLOCKING AT 12" O.C. BETWEEN ROOF TRUSSES WITH (4) 16d AT EACH END THRU TRUSS BOTTOM CHORD
CONT. DOUBLE 2x TOP PLATE (TYPICAL)
FINISH PER SPEC'S
2x STUDS AT 16" O.C. (U.N.O.)
MAINTAIN 1/2" CLR. BTW. FLAT BLOCKING AND TOP PLATE IF BLOCKING INSTALLED PRIOR TO STOCKING ROOF WITH ROOFING MATERIALS
SHEAR WALL PER PLAN – SEE SHEAR WALL SCHEDULE ON FLOOR PLAN

CONDITION 'A' CONDITION 'B' CONDITION 'C'

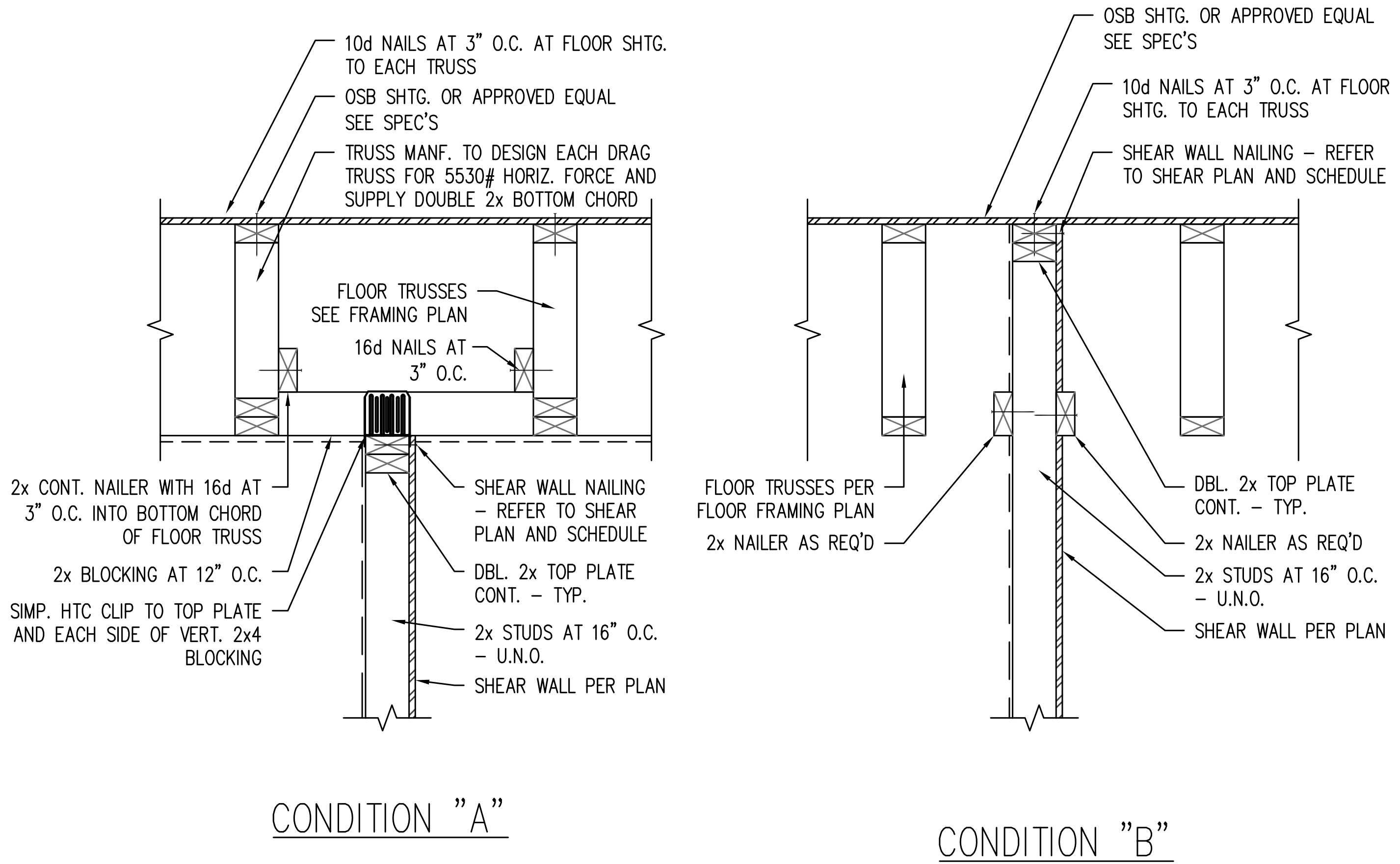
2 TRUSSES / WALL TYP. SHEAR TRANSFER CONDITIONS

NOT TO SCALE


2x4 FLAT LOOKOUTS AT 4'–0" O.C. – TYPICAL (WHERE APPLICABLE)
NOTCH TOP CHORD FOR LOOKOUTS (WHERE REQUIRED)
8d AT 6" O.C. – TYP
SEE ROOF FRAMING FOR OVERHANG COND.
STRUCTURAL GABLE ENDWALL TRUSS
2x4 BLK'G W/ 3–16d NAILS
SEE EXT. FINISH PER ARCH. DRAWINGS – U.N.O.
2x4 KNEE BRACE AT RIDGE AT 4'–0" O.C. MAX.
(2) 16d NAILS
45°
MAX.
2x4 x 72" TIE AT 6'–0" O.C. WITH (2) 16d AT EA. TRUSS BOTTOM CHORD
SIMPSON LPT4
FINISH PER SPEC'S – U.N.O.

3 TYPICAL GABLE END TRUSS

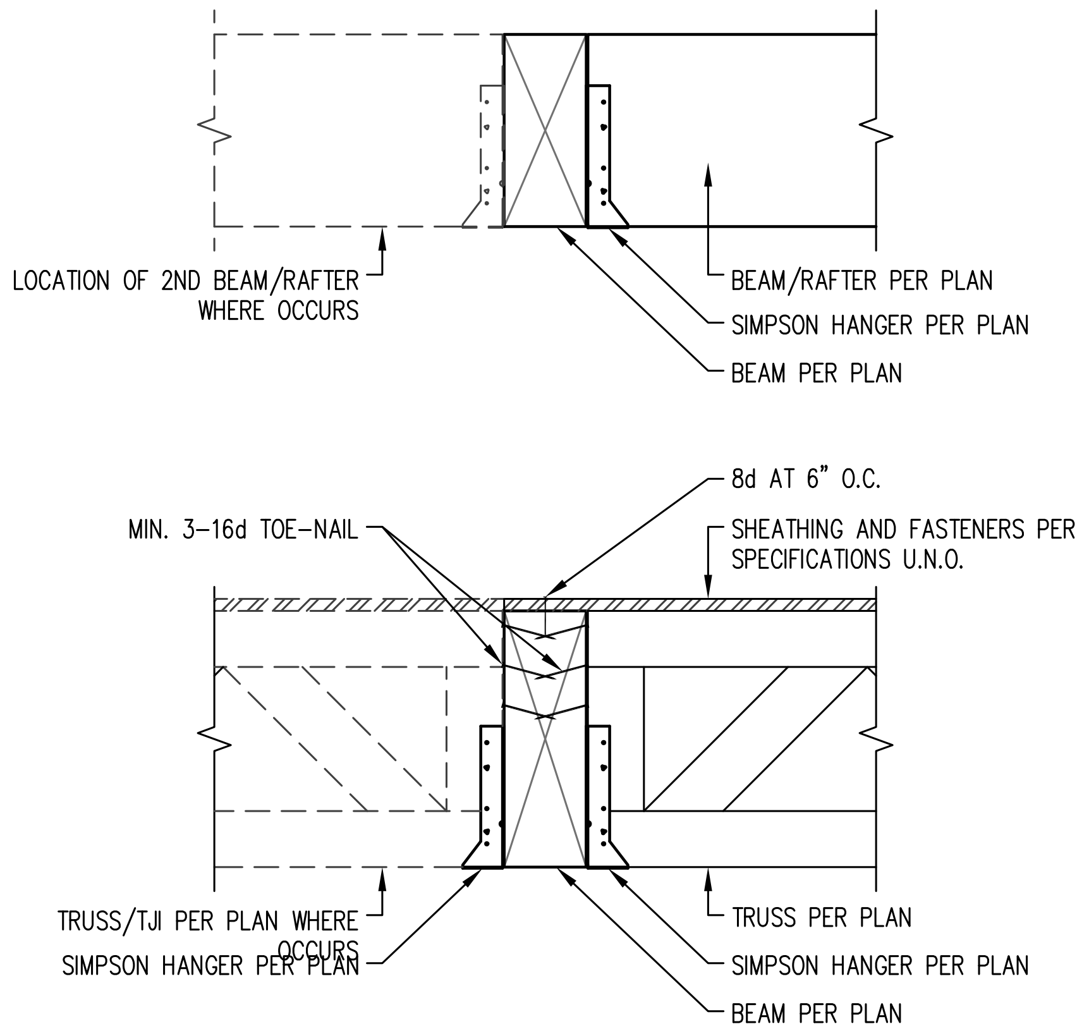
SCALE: 1" = 1'-0"


10d NAILS AT 3" O.C. AT FLOOR SHTG. TO EACH TRUSS
OSB SHTG. OR APPROVED EQUAL SEE SPEC'S
TRUSS MANF. TO DESIGN EACH DRAG TRUSS FOR 5530# HORIZ. FORCE AND SUPPLY DOUBLE 2x BOTTOM CHORD
FLOOR TRUSSES SEE FRAMING PLAN
16d NAILS AT 3" O.C.
2x CONT. NAILER WITH 16d AT 3" O.C. INTO BOTTOM CHORD OF FLOOR TRUSS
2x BLOCKING AT 12" O.C.
SIMP. HTC CLIP TO TOP PLATE AND EACH SIDE OF VERT. 2x4 BLOCKING
SHEAR WALL NAILING – REFER TO SHEAR PLAN AND SCHEDULE
DBL. 2x TOP PLATE CONT. – TYP.
2x STUDS AT 16" O.C. – U.N.O.
SHEAR WALL PER PLAN
OSB SHTG. OR APPROVED EQUAL SEE SPEC'S
10d NAILS AT 3" O.C. AT FLOOR SHTG. TO EACH TRUSS
SHEAR WALL NAILING – REFER TO SHEAR PLAN AND SCHEDULE
FLOOR TRUSSES PER FLOOR FRAMING PLAN
2x NAILER AS REQ'D
DBL. 2x TOP PLATE CONT. – TYP.
2x NAILER AS REQ'D
2x STUDS AT 16" O.C. – U.N.O.
SHEAR WALL PER PLAN

CONDITION "A" CONDITION "B"

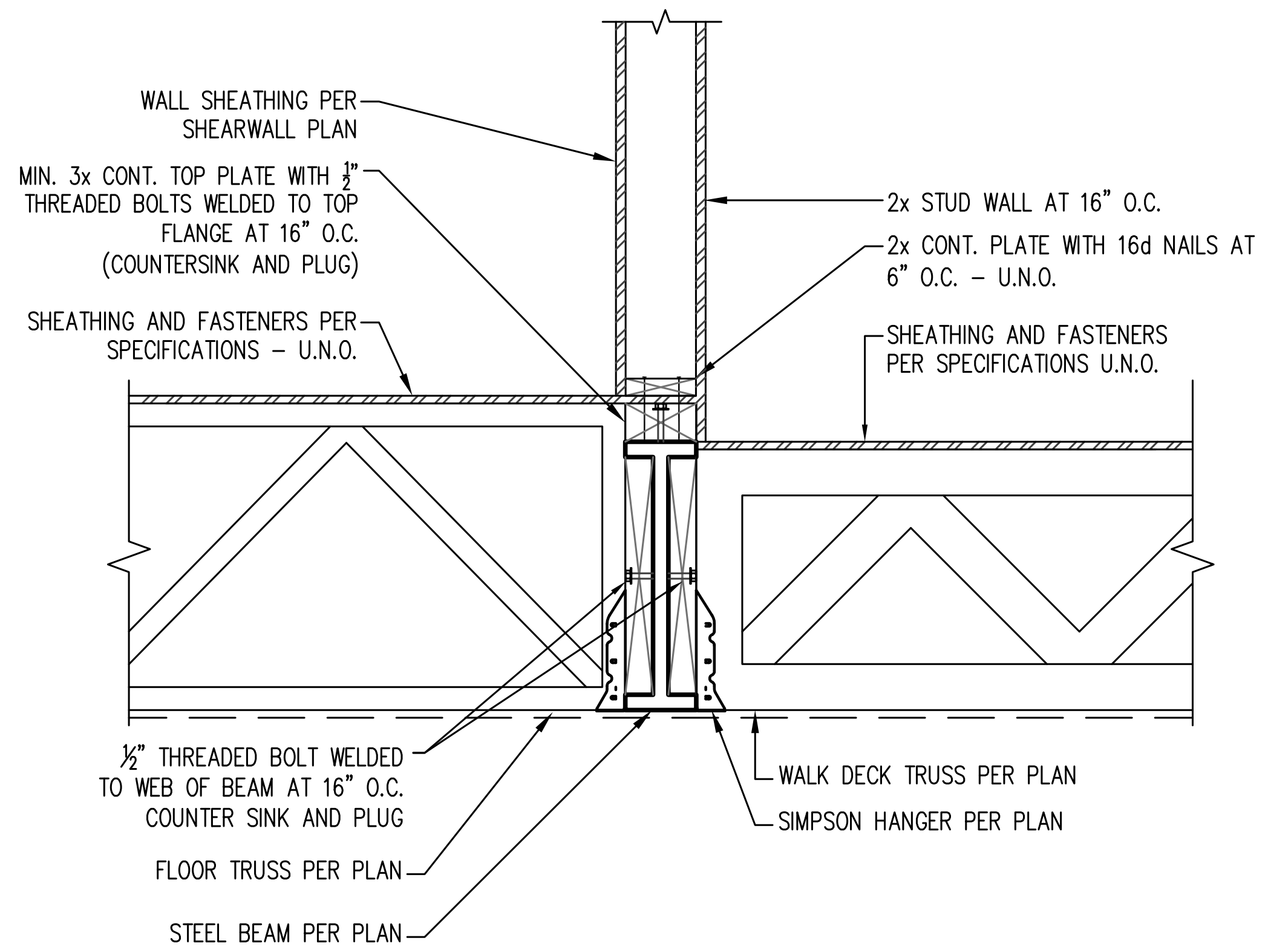
4 FLOOR TRUSSES AT INT. SHEAR WALL

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


LOCATION OF 2ND BEAM/RAFTER WHERE OCCURS
BEAM/RAFTER PER PLAN
SIMPSON HANGER PER PLAN
BEAM PER PLAN
8d AT 6" O.C.
MIN. 3–16d TOE–NAIL
SHEATHING AND FASTENERS PER SPECIFICATIONS U.N.O.
TRUSS/TJI PER PLAN WHERE OCCURS
SIMPSON HANGER PER PLAN
TRUSS PER PLAN
SIMPSON HANGER PER PLAN
BEAM PER PLAN

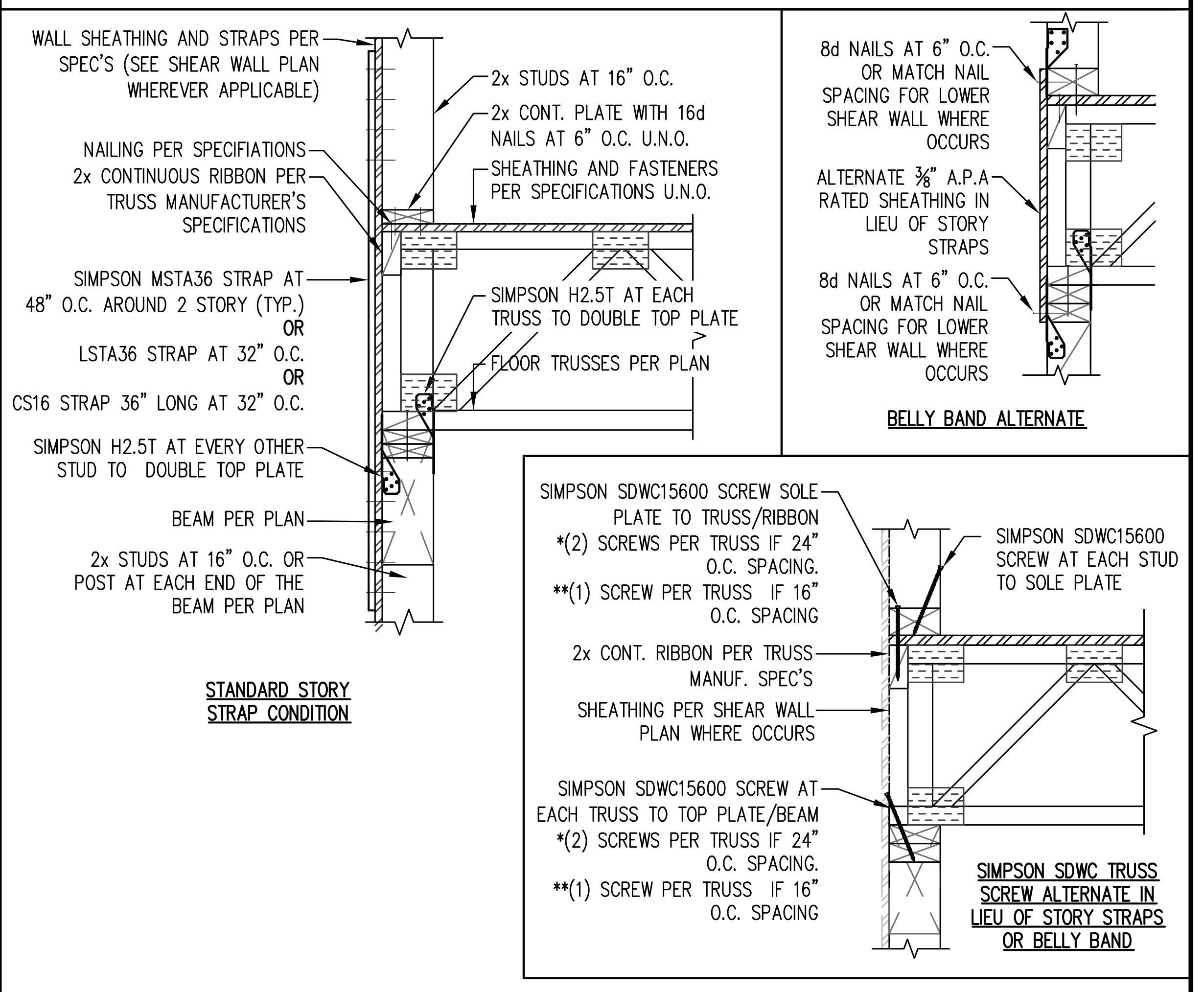
5 BEAM / TRUSS / RAFTER TO BEAM

SCALE: 1"=1'-0'


WALL SHEATHING PER SHEARWALL PLAN
MIN. 3x CONT. TOP PLATE WITH ½" THREADED BOLTS WELDED TO TOP FLANGE AT 16" O.C. (COUNTERSINK AND PLUG)
SHEATHING AND FASTENERS PER SPECIFICATIONS – U.N.O.
2x STUD WALL AT 16" O.C.
2x CONT. PLATE WITH 16d NAILS AT 6" O.C. – U.N.O.
SHEATHING AND FASTENERS PER SPECIFICATIONS U.N.O.
½" THREADED BOLT WELDED TO WEB OF BEAM AT 16" O.C. COUNTER SINK AND PLUG
FLOOR TRUSS PER PLAN
STEEL BEAM PER PLAN
WALK DECK TRUSS PER PLAN
SIMPSON HANGER PER PLAN

6 PERP. FLOOR / PERP WALK DECK TRUSS TO STEEL BEAM CONNECTION

SCALE: 1" = 1'-0"


WALL SHEATHING AND STRAPS PER SPEC'S (SEE SHEAR WALL PLAN WHEREVER APPLICABLE)
2x STUDS AT 16" O.C.
2x CONT. PLATE WITH 16d NAILS AT 6" O.C. U.N.O.
NAILING PER SPECIFIATIONS
2x CONTINUOUS RIBBON PER TRUSS MANUFACTURER'S SPECIFICATIONS
SHEATHING AND FASTENERS PER SPECIFICATIONS U.N.O.
SIMPSON MSTA36 STRAP AT 48" O.C. AROUND 2 STORY (TYP.) OR LSTA36 STRAP AT 32" O.C. OR CS16 STRAP 36" LONG AT 32" O.C.
SIMPSON H2.5T AT EACH TRUSS TO DOUBLE TOP PLATE
FLOOR TRUSSES PER PLAN
SIMPSON H2.5T AT EVERY OTHER STUD TO DOUBLE TOP PLATE
BEAM PER PLAN
2x STUDS AT 16" O.C. OR POST AT EACH END OF THE BEAM PER PLAN
8d NAILS AT 6" O.C. OR MATCH NAIL SPACING FOR LOWER SHEAR WALL WHERE OCCURS
ALTERNATE ⅜" A.P.A RATED SHEATHING IN LIEU OF STORY STRAPS
8d NAILS AT 6" O.C. OR MATCH NAIL SPACING FOR LOWER SHEAR WALL WHERE OCCURS
SIMPSON SDWC15600 SCREW SOLE PLATE TO TRUSS/RIBBON *(2) SCREWS PER TRUSS IF 24" O.C. SPACING. **(1) SCREW PER TRUSS IF 16" O.C. SPACING
SIMPSON SDWC15600 SCREW AT EACH STUD TO SOLE PLATE
2x CONT. RIBBON PER TRUSS MANUF. SPEC'S
SHEATHING PER SHEAR WALL PLAN WHERE OCCURS
SIMPSON SDWC15600 SCREW AT EACH TRUSS TO TOP PLATE/BEAM *(2) SCREWS PER TRUSS IF 24" O.C. SPACING. **(1) SCREW PER TRUSS IF 16" O.C. SPACING

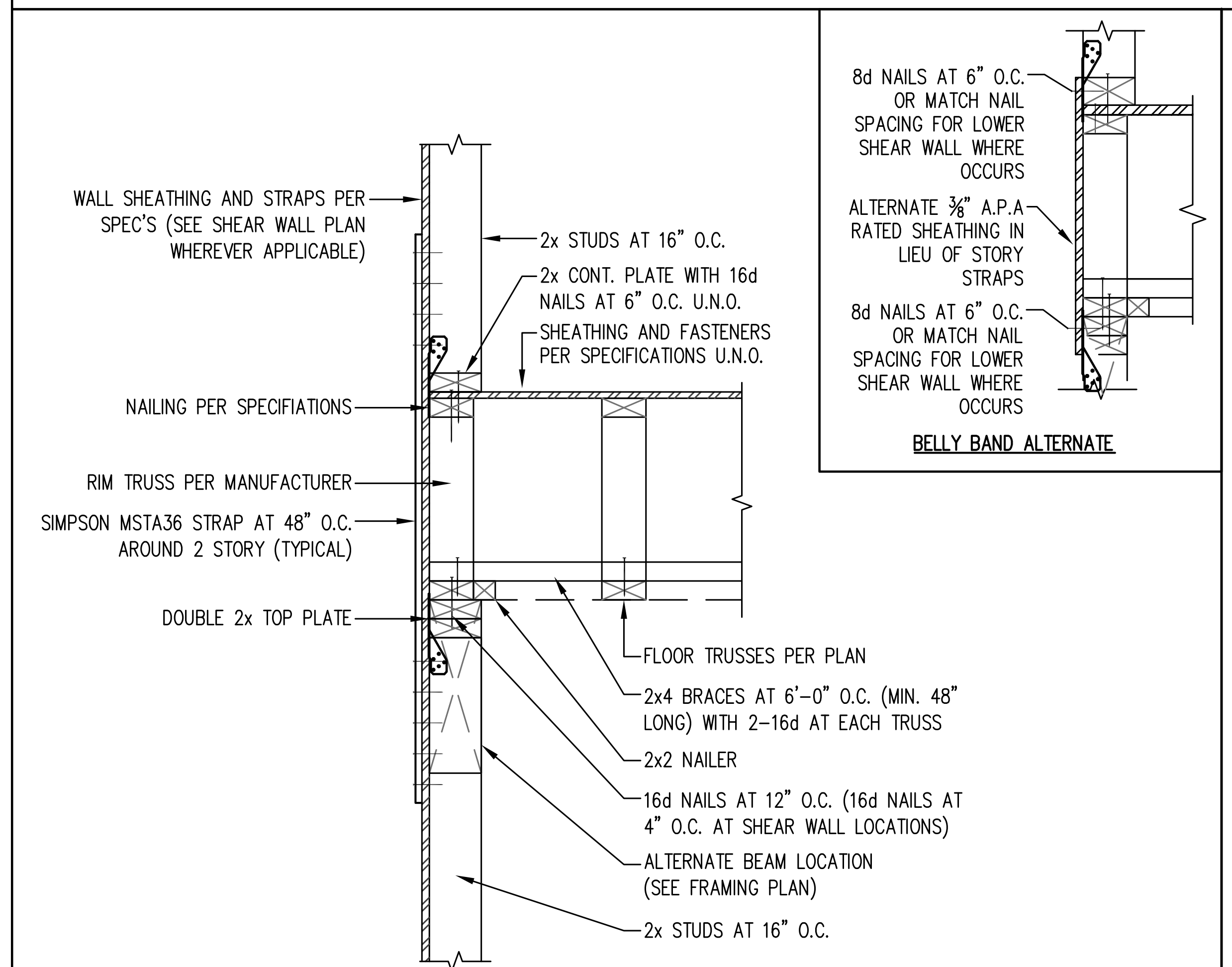
STANDARD STORY STRAP CONDITION

BELLY BAND ALTERNATE

SIMPSON SDWC TRUSS SCREW ALTERNATE IN LIEU OF STORY STRAPS OR BELLY BAND

7 FLOOR TRUSS AT WALL / BEAM (PERP.)

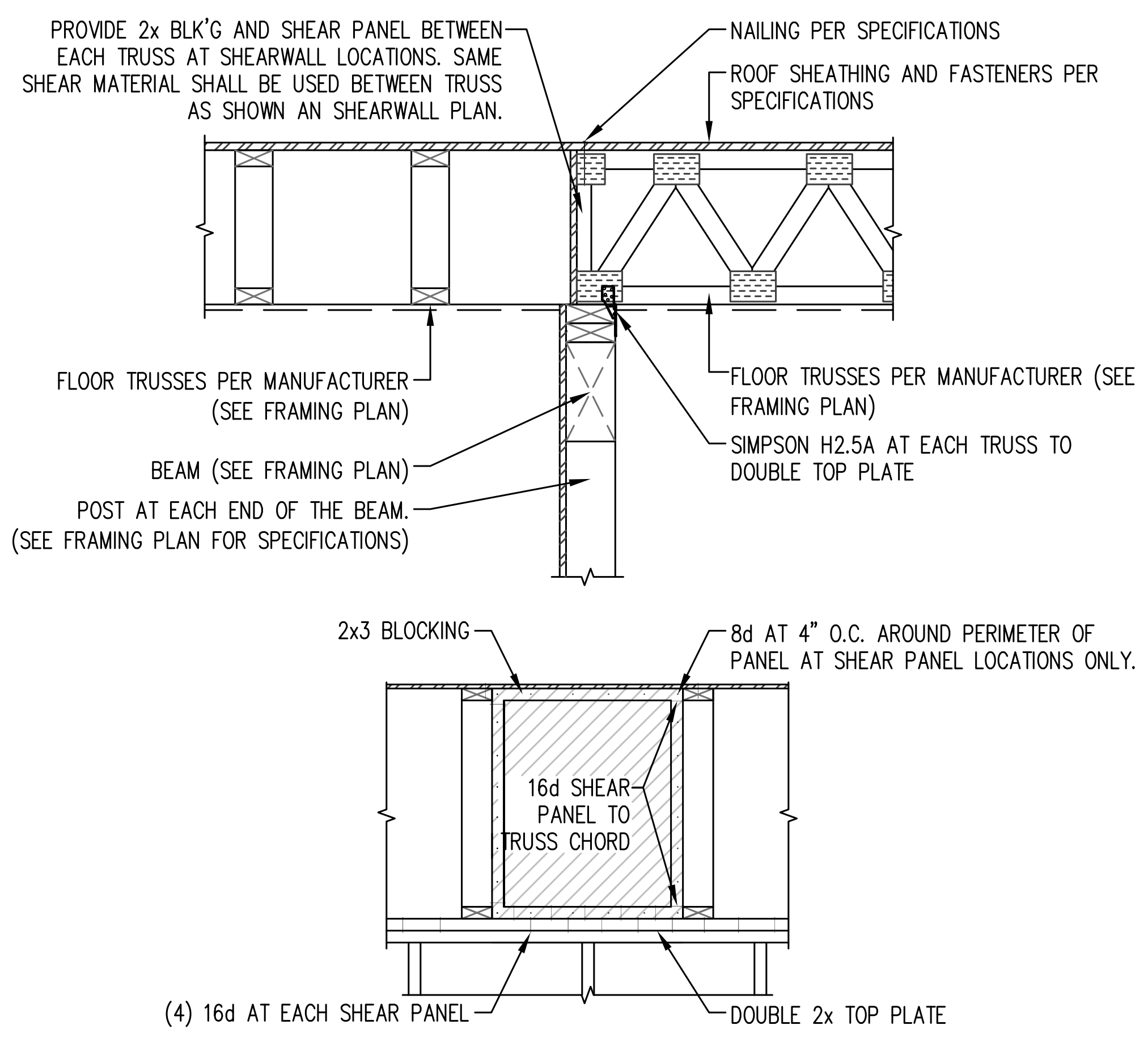
SCALE: 1"=1'-0"


WALL SHEATHING AND STRAPS PER SPEC'S (SEE SHEAR WALL PLAN WHEREVER APPLICABLE)
2x STUDS AT 16" O.C.
2x CONT. PLATE WITH 16d NAILS AT 6" O.C. U.N.O.
SHEATHING AND FASTENERS PER SPECIFICATIONS U.N.O.
NAILING PER SPECIFIATIONS
RIM TRUSS PER MANUFACTURER
SIMPSON MSTA36 STRAP AT 48" O.C. AROUND 2 STORY (TYPICAL)
DOUBLE 2x TOP PLATE
FLOOR TRUSSES PER PLAN
2x4 BRACES AT 6'–0" O.C. (MIN. 48" LONG) WITH 2–16d AT EACH TRUSS
2x2 NAILER
16d NAILS AT 12" O.C. (16d NAILS AT 4" O.C. AT SHEAR WALL LOCATIONS)
ALTERNATE BEAM LOCATION (SEE FRAMING PLAN)
2x STUDS AT 16" O.C.
8d NAILS AT 6" O.C. OR MATCH NAIL SPACING FOR LOWER SHEAR WALL WHERE OCCURS
ALTERNATE ⅜" A.P.A RATED SHEATHING IN LIEU OF STORY STRAPS
8d NAILS AT 6" O.C. OR MATCH NAIL SPACING FOR LOWER SHEAR WALL WHERE OCCURS

BELLY BAND ALTERNATE

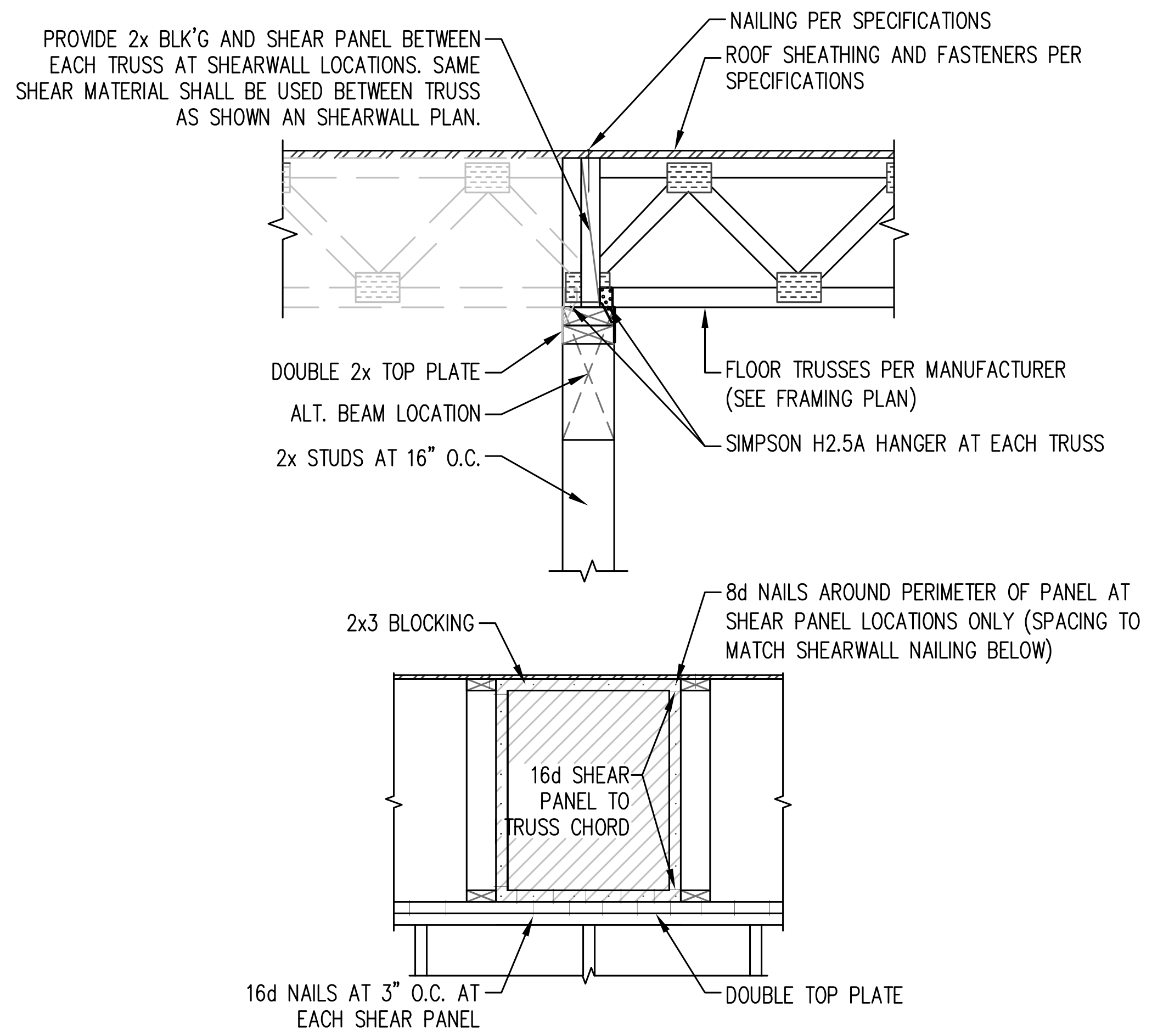
8 FLOOR TRUSS AT BEAM/ WALL (PARALLEL)

SCALE: 1" = 1'-0'


PROVIDE 2x BLK'G AND SHEAR PANEL BETWEEN EACH TRUSS AT SHEARWALL LOCATIONS. SAME SHEAR MATERIAL SHALL BE USED BETWEEN TRUSS AS SHOWN AN SHEARWALL PLAN.
NAILING PER SPECIFICATIONS
ROOF SHEATHING AND FASTENERS PER SPECIFICATIONS
FLOOR TRUSSES PER MANUFACTURER (SEE FRAMING PLAN)
FLOOR TRUSSES PER MANUFACTURER (SEE FRAMING PLAN)
BEAM (SEE FRAMING PLAN)
SIMPSON H2.5A AT EACH TRUSS TO DOUBLE TOP PLATE
POST AT EACH END OF THE BEAM. (SEE FRAMING PLAN FOR SPECIFICATIONS)
2x3 BLOCKING
8d AT 4" O.C. AROUND PERIMETER OF PANEL AT SHEAR PANEL LOCATIONS ONLY.
16d SHEAR PANEL TO TRUSS CHORD
(4) 16d AT EACH SHEAR PANEL
DOUBLE 2x TOP PLATE

9 FLOOR TRUSSES AT BEAM / WALL (PAR. / PERP.)

NOT TO SCALE

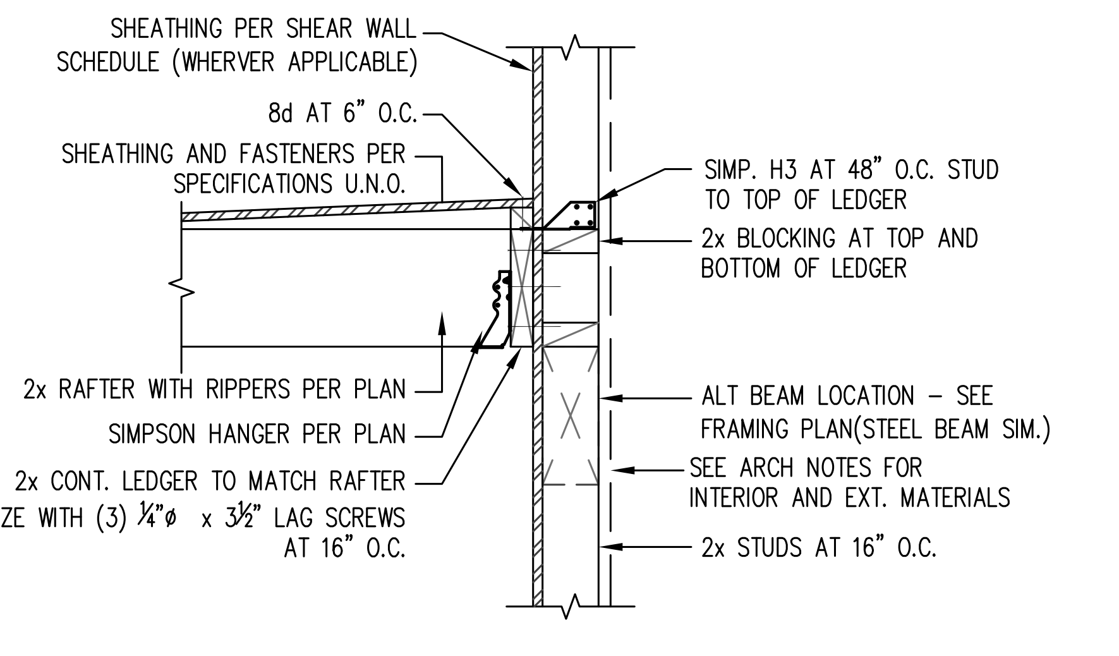

PROVIDE 2x BLK'G AND SHEAR PANEL BETWEEN EACH TRUSS AT SHEARWALL LOCATIONS. SAME SHEAR MATERIAL SHALL BE USED BETWEEN TRUSS AS SHOWN AN SHEARWALL PLAN.
NAILING PER SPECIFICATIONS
ROOF SHEATHING AND FASTENERS PER SPECIFICATIONS
DOUBLE 2x TOP PLATE
ALT. BEAM LOCATION
2x STUDS AT 16" O.C.
FLOOR TRUSSES PER MANUFACTURER (SEE FRAMING PLAN)
SIMPSON H2.5A HANGER AT EACH TRUSS
2x3 BLOCKING
8d NAILS AROUND PERIMETER OF PANEL AT SHEAR PANEL LOCATIONS ONLY (SPACING TO MATCH SHEARWALL NAILING BELOW)
16d SHEAR PANEL TO TRUSS CHORD
16d NAILS AT 3" O.C. AT EACH SHEAR PANEL
DOUBLE TOP PLATE

10 FLOOR TRUSSES AT INTERIOR BEARING WALL / BEAM

NOT TO SCALE

TRUSS SPAN	CONNECTION
0'0" TO 8'0"	(4) 16d AT 24" O.C. (MAX) (3" x 0.131)
8'1" TO 10'0"	(5) 16d AT 24" O.C. (MAX) (3" x 0.131)
10"1" TO 14'0"	(3) ¼"ø x 3½" SDS LAG SCREWS AT 24" O.C. (MAX)

NOTE:
SCHEDULE APPLIES TO COVERED PATIOS ONLY AND DOES NOT APPLY TO WALK DECKS.


SHEATHING PER SHEAR WALL SCHEDULE (WHERVER APPLICABLE)
8d AT 6" O.C.
SHEATHING AND FASTENERS PER SPECIFICATIONS U.N.O.
SIMP. H3 AT 48" O.C. STUD TO TOP OF LEDGER
2x BLOCKING AT TOP AND BOTTOM OF LEDGER
2x RAFTER WITH RIPPERS PER PLAN
SIMPSON HANGER PER PLAN
2x CONT. LEDGER TO MATCH RAFTER SIZE WITH (3) ¼"ø x 3½" LAG SCREWS AT 16" O.C.
ALT BEAM LOCATION – SEE FRAMING PLAN(STEEL BEAM SIM.)
SEE ARCH NOTES FOR INTERIOR AND EXT. MATERIALS
2x STUDS AT 16" O.C.

11 RAFTERS TO LEDGER AT WALL / BEAM

SCALE: 1" = 1'-0"

SIVARAJAN RESIDENCE
LONE MOUNTAIN VISTAS - LOT 93

7899 EAST MARY SHARON DRIVE
SCOTTSDALE, ARIZONA 85266

CITY OF SCOTTSDALE
BUILDING PLANS
THESE PLANS HAVE BEEN APPROVED
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THIS DOES NOT AUTHORIZE VIOLATIONS OF ANY
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Gilbert Structural LLC
414 East Southern Avenue
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PROFESSIONAL SEAL

41931
WILLIAM L.
GILBERT
Date Signed 11-26-2024

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PROJECT NUMBER:

DATE: 11.26.2024

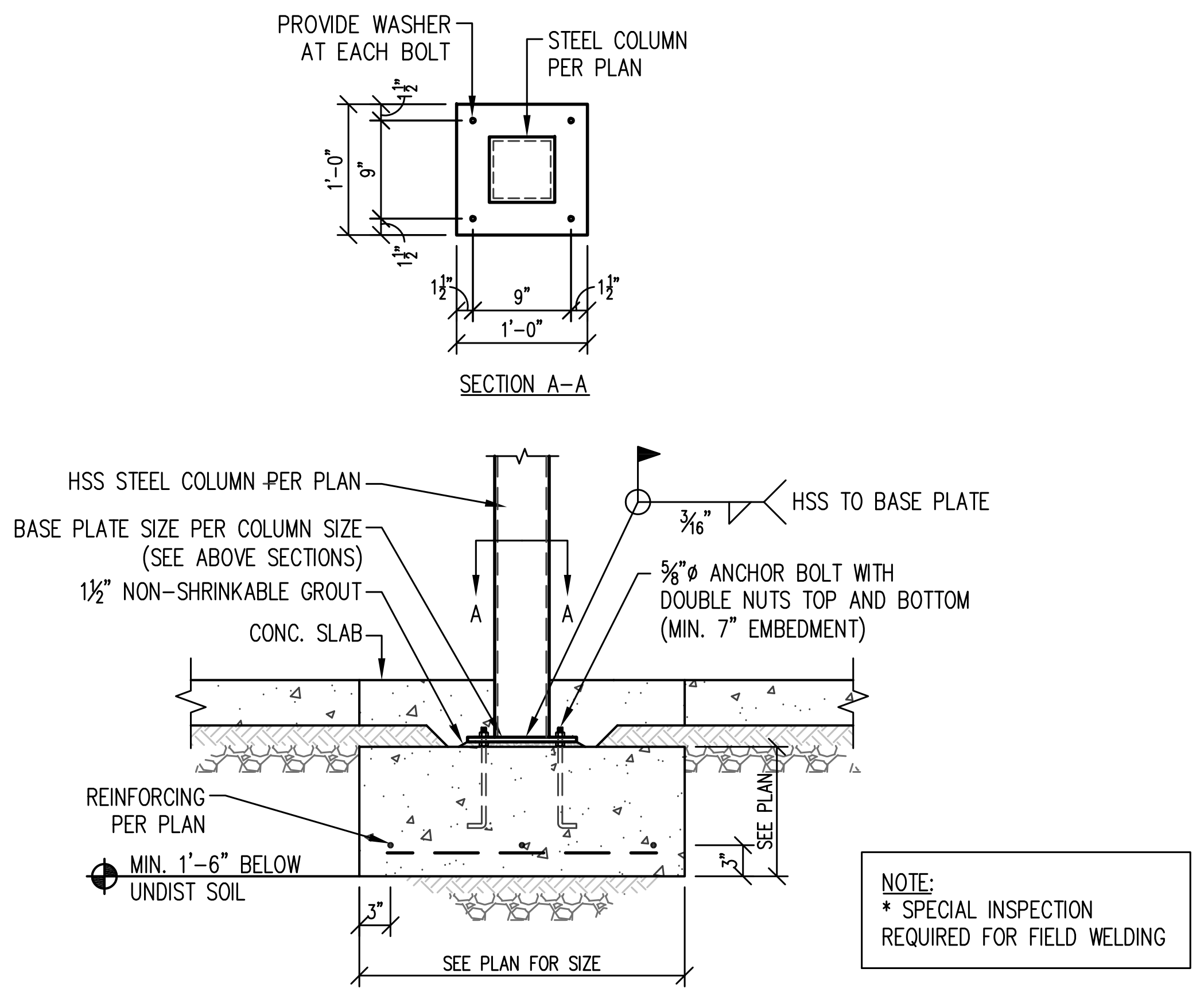
COS PLAN CHECK #9300-24

SHEET TITLE:

STRUCTURAL DETAILS

SHEET NUMBER:

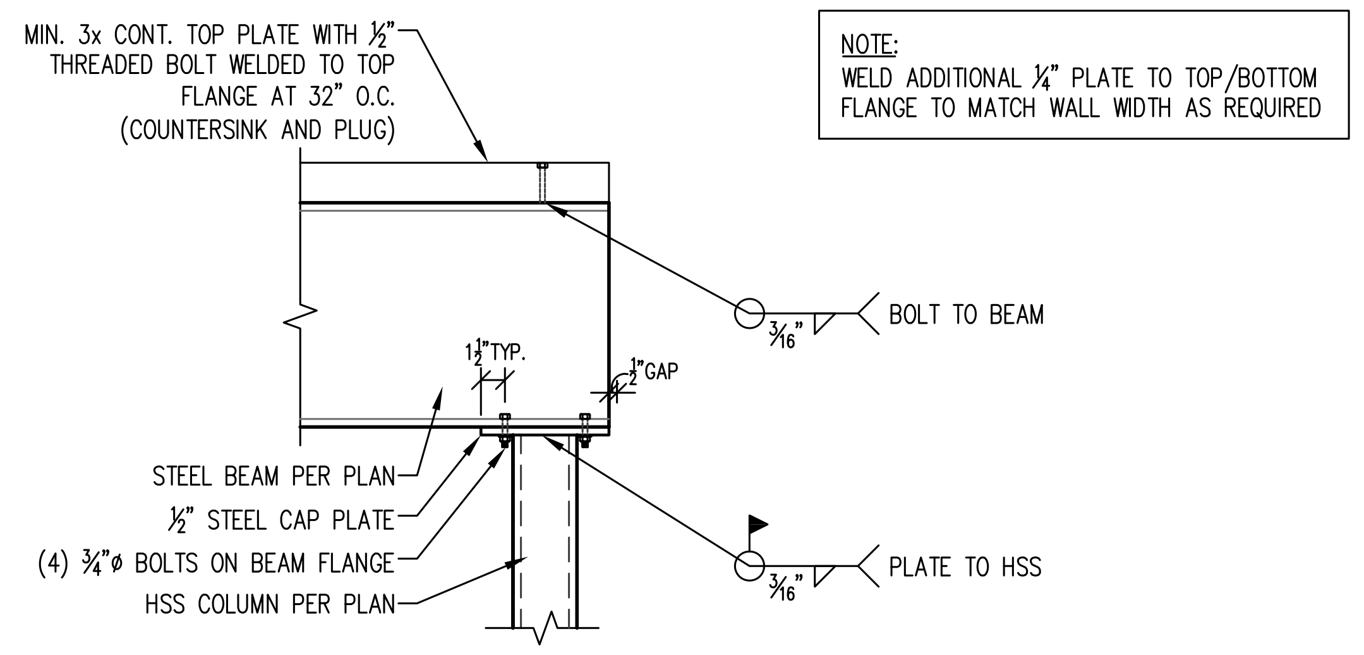
SD3


PROVIDE WASHER AT EACH BOLT
STEEL COLUMN PER PLAN
1'-0"
9"
1½"
1'-0"
SECTION A-A
HSS STEEL COLUMN PER PLAN
BASE PLATE SIZE PER COLUMN SIZE (SEE ABOVE SECTIONS)
1½" NON-SHRINKABLE GROUT
CONC. SLAB
3/16"
HSS TO BASE PLATE
⅝"ø ANCHOR BOLT WITH DOUBLE NUTS TOP AND BOTTOM (MIN. 7" EMBEDMENT)
A
A
REINFORCING PER PLAN
MIN. 1'-6" BELOW UNDIST SOIL
3"
SEE PLAN
SEE PLAN FOR SIZE

NOTE:
* SPECIAL INSPECTION REQUIRED FOR FIELD WELDING

1 HSS COLUMN BASE PLATE AND FOOTING

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


MIN. 3x CONT. TOP PLATE WITH ½" THREADED BOLT WELDED TO TOP FLANGE AT 32" O.C. (COUNTERSINK AND PLUG)
3/16"
BOLT TO BEAM
1½"TYP.
½"GAP
STEEL BEAM PER PLAN
½" STEEL CAP PLATE
(4) ¾"ø BOLTS ON BEAM FLANGE
HSS COLUMN PER PLAN
3/16"
PLATE TO HSS

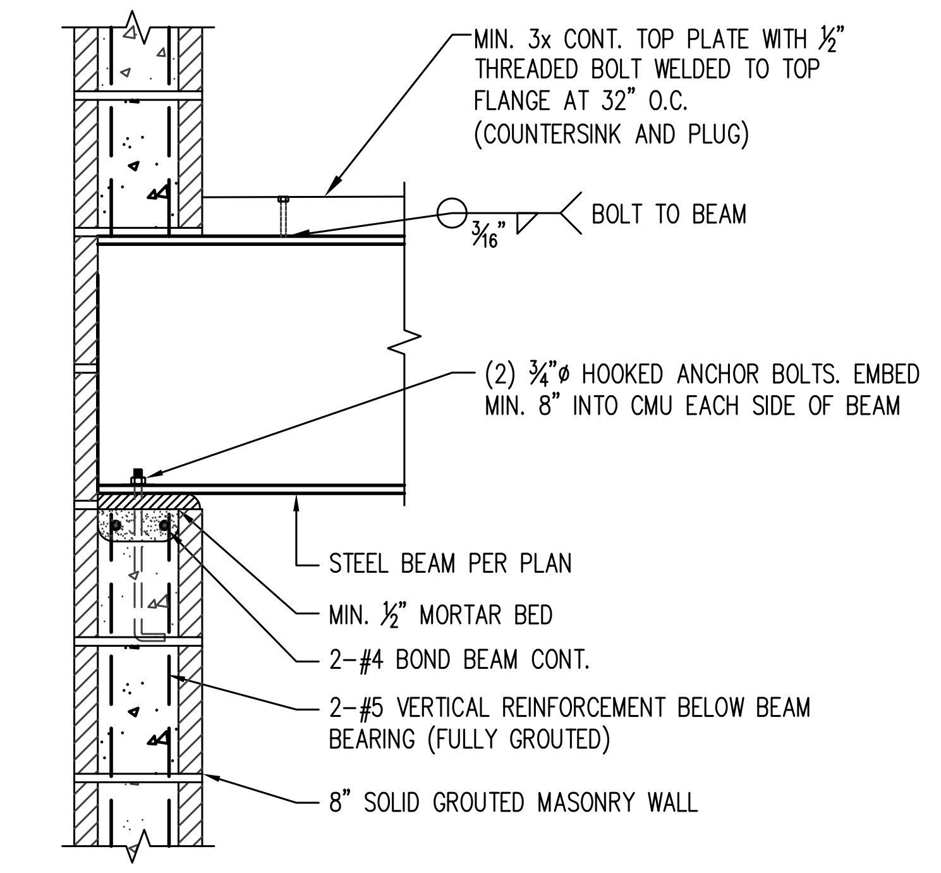
NOTE:
WELD ADDITIONAL ¼" PLATE TO TOP/BOTTOM FLANGE TO MATCH WALL WIDTH AS REQUIRED

2A STEEL BEAM TO STEEL COLUMN

SCALE: 1"=1'-0"

2 NOT USED

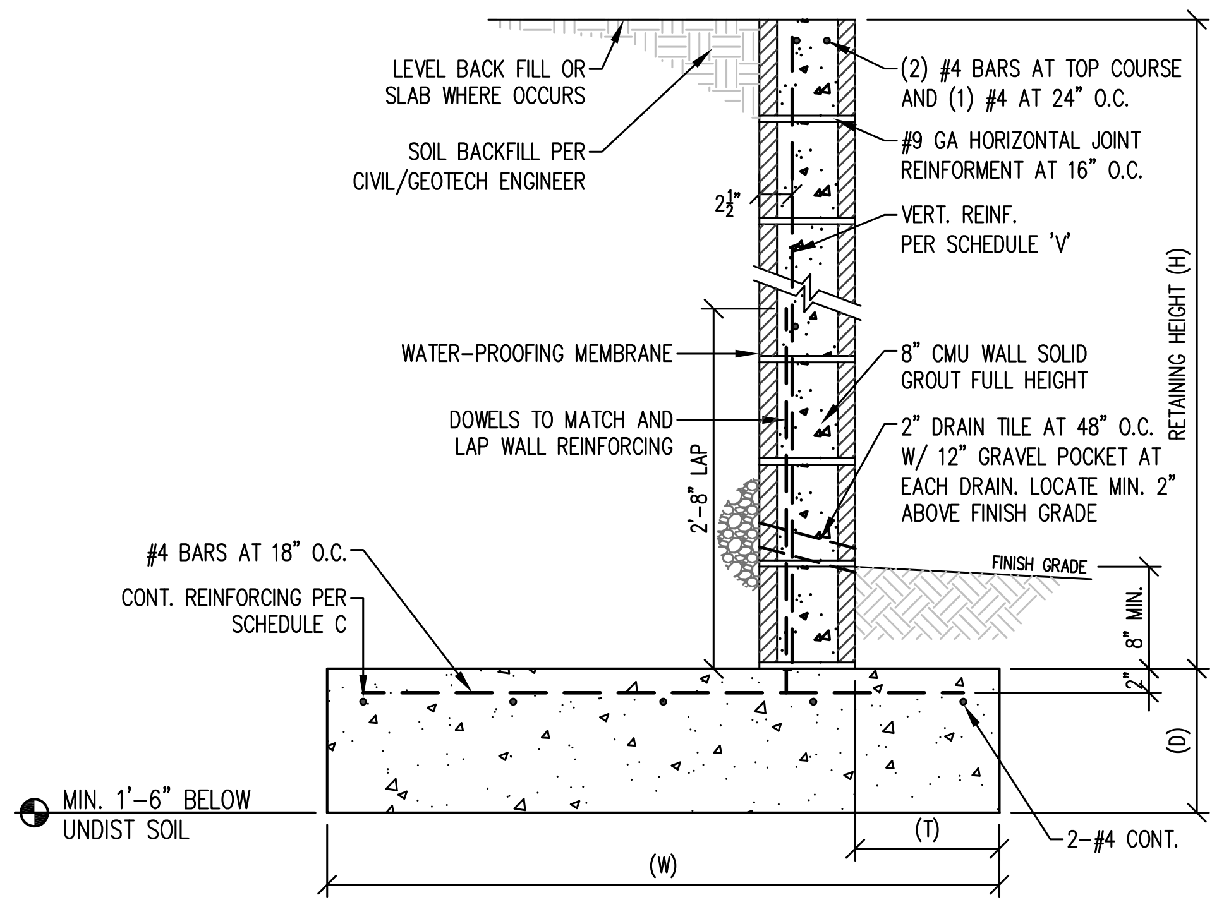
SCALE: 1"=1'-0'


MIN. 3x CONT. TOP PLATE WITH ½" THREADED BOLT WELDED TO TOP FLANGE AT 32" O.C. (COUNTERSINK AND PLUG)
3/16"
BOLT TO BEAM
(2) ¾"ø HOOKED ANCHOR BOLTS. EMBED MIN. 8" INTO CMU EACH SIDE OF BEAM
STEEL BEAM PER PLAN
MIN. ½" MORTAR BED
2-#4 BOND BEAM CONT.
2-#5 VERTICAL REINFORCEMENT BELOW BEAM BEARING (FULLY GROUTED)
8" SOLID GROUTED MASONRY WALL

3 STEEL BEAM AT CMU WALL

SCALE: 1"=1'-0'

NOTE:
SPECIAL INSPECTION REQUIRED


LEVEL BACK FILL OR SLAB WHERE OCCURS
SOIL BACKFILL PER CIVIL/GEOTECH ENGINEER
2½"
(2) #4 BARS AT TOP COURSE AND (1) #4 AT 24" O.C.
#9 GA HORIZONTAL JOINT REINFORMENT AT 16" O.C.
VERT. REINF. PER SCHEDULE 'V'
WATER-PROOFING MEMBRANE
DOWELS TO MATCH AND LAP WALL REINFORCING
2'-8" LAP
8" CMU WALL SOLID GROUT FULL HEIGHT
2" DRAIN TILE AT 48" O.C. W/ 12" GRAVEL POCKET AT EACH DRAIN. LOCATE MIN. 2" ABOVE FINISH GRADE
RETAINING HEIGHT (H)
FINISH GRADE
8" MIN.
2"
#4 BARS AT 18" O.C.
CONT. REINFORCING PER SCHEDULE C
MIN. 1'-6" BELOW UNDIST SOIL
(D)
(T)
(W)
2-#4 CONT.

RETAINING WALL AND FOOTING SCHEDULE

RETAINING HT.	FOOTING SIZE			VERT. REINF.	CONC. REINF.
H	T	W	D	V (8" CMU)	C
2'-0" OR LESS	0'-8"	2'-0"	12"	#4 AT 32" O.C.	3 - #4
4'-0" OR LESS	0'-8"	3'-10"	12"	#4 AT 32" O.C.	3 - #4
6'-0" OR LESS	10"	~~5'-8"~~ 6'-0"	12"	#5 AT 16" O.C.	5 - #4

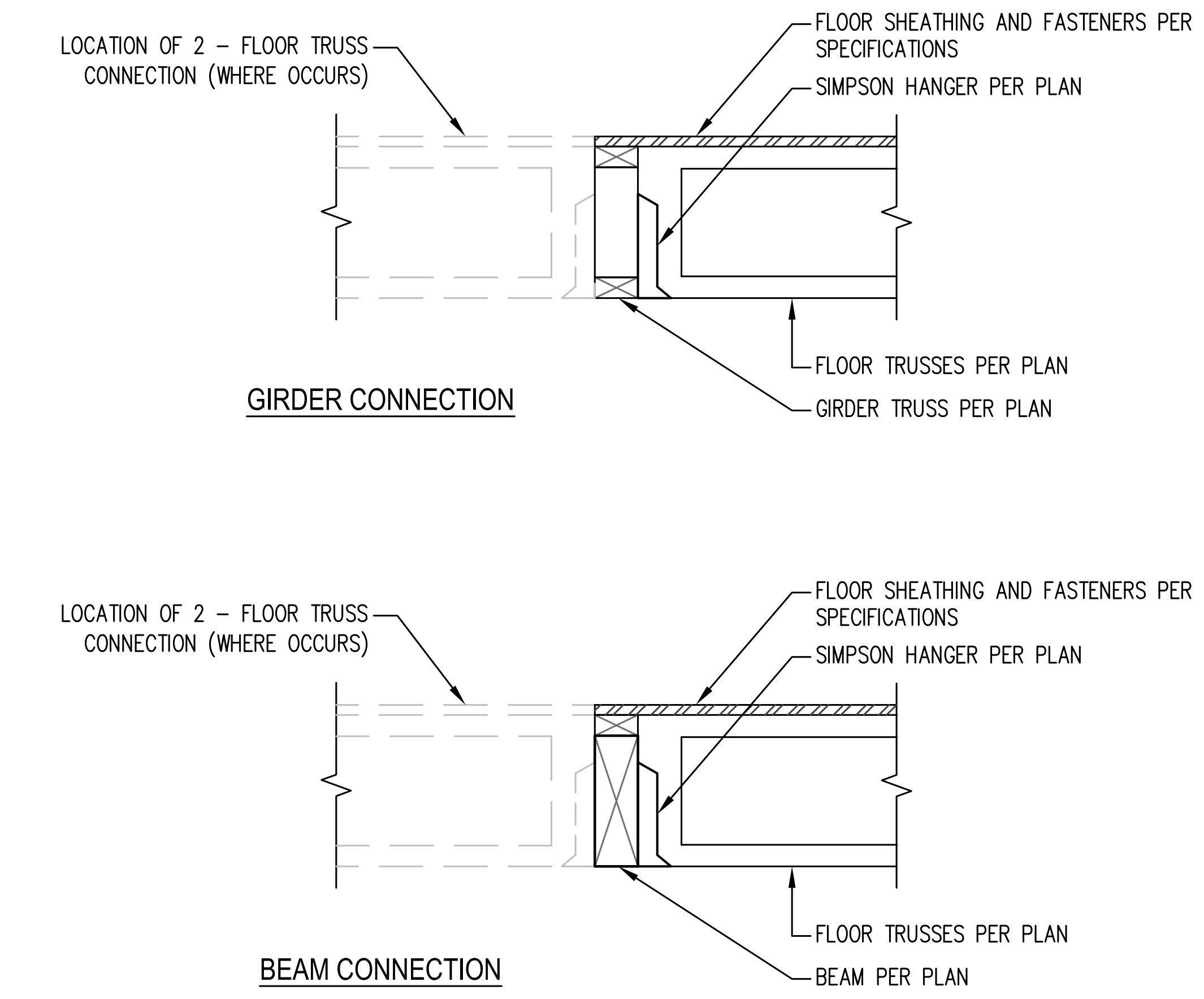
AS NOTED
To coordinate with structural calculations.

1

4 CMU RETAINING WALL

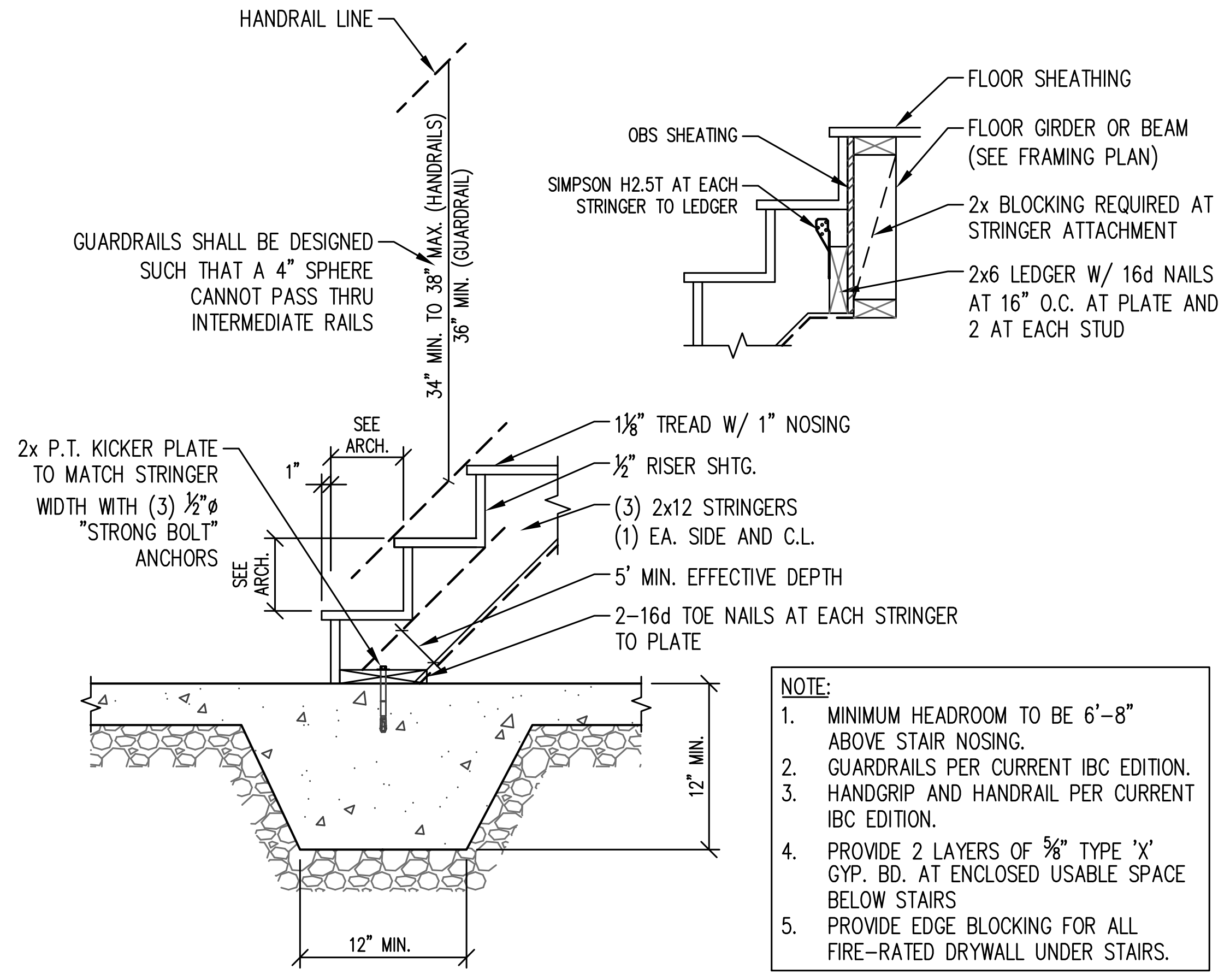
Amy Heckathorn, SE
COS Structural Engineer

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


LOCATION OF 2 - FLOOR TRUSS CONNECTION (WHERE OCCURS)
FLOOR SHEATHING AND FASTENERS PER SPECIFICATIONS
SIMPSON HANGER PER PLAN
FLOOR TRUSSES PER PLAN
GIRDER TRUSS PER PLAN
GIRDER CONNECTION
LOCATION OF 2 - FLOOR TRUSS CONNECTION (WHERE OCCURS)
FLOOR SHEATHING AND FASTENERS PER SPECIFICATIONS
SIMPSON HANGER PER PLAN
FLOOR TRUSSES PER PLAN
BEAM PER PLAN
BEAM CONNECTION

5 FLOOR TRUSSES AT BEAM OR GIRDER

NOT TO SCALE

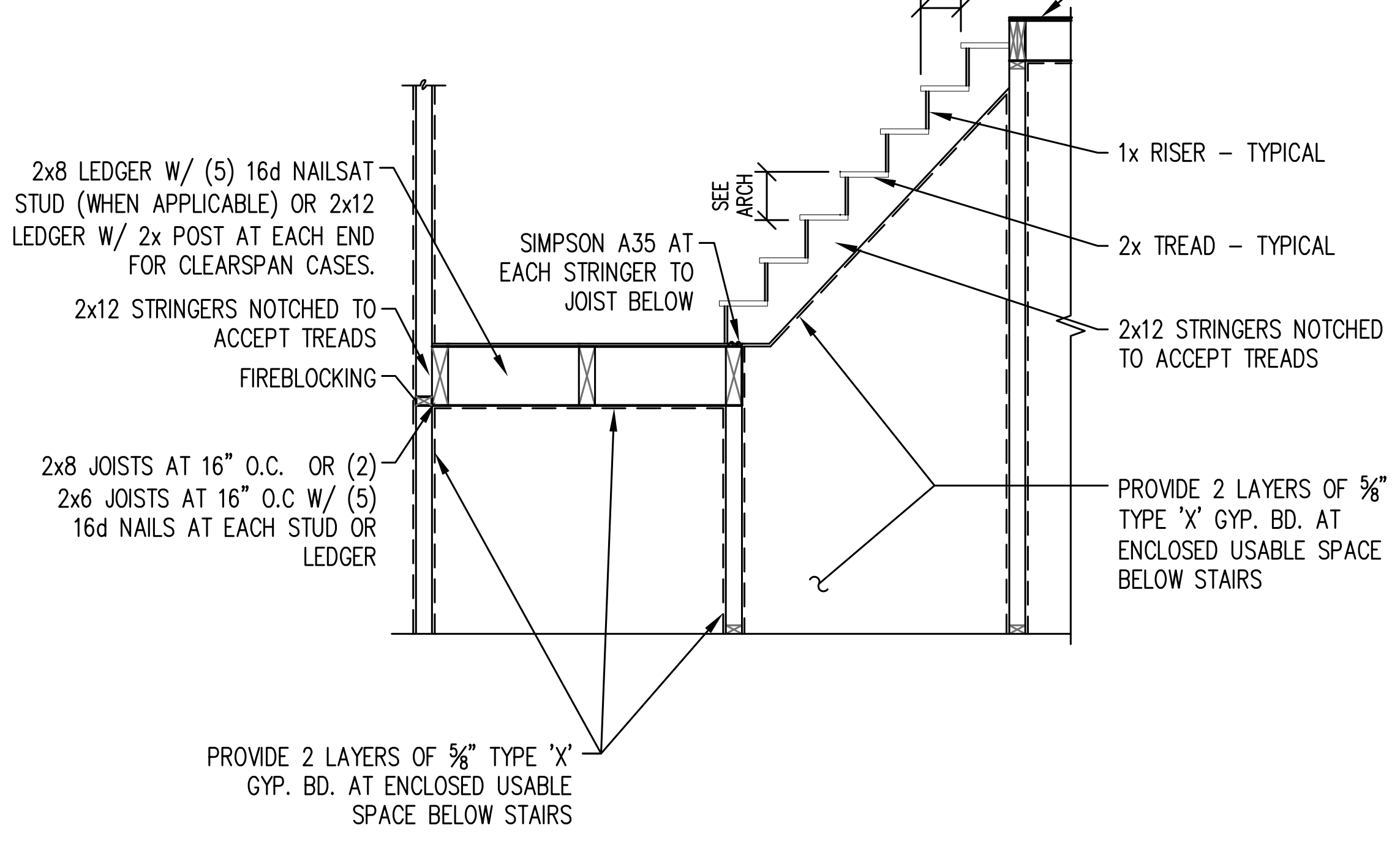

HANDRAIL LINE
GUARDRAILS SHALL BE DESIGNED SUCH THAT A 4" SPHERE CANNOT PASS THRU INTERMEDIATE RAILS
34" MIN. TO 38" MAX. (HANDRAILS)
36" MIN. (GUARDRAIL)
OBS SHEATING
SIMPSON H2.5T AT EACH STRINGER TO LEDGER
FLOOR SHEATHING
FLOOR GIRDER OR BEAM (SEE FRAMING PLAN)
2x BLOCKING REQUIRED AT STRINGER ATTACHMENT
2x6 LEDGER W/ 16d NAILS AT 16" O.C. AT PLATE AND 2 AT EACH STUD
2x P.T. KICKER PLATE TO MATCH STRINGER WIDTH WITH (3) ½"ø "STRONG BOLT" ANCHORS
SEE ARCH.
1"
SEE ARCH.
1⅛" TREAD W/ 1" NOSING
½" RISER SHTG.
(3) 2x12 STRINGERS (1) EA. SIDE AND C.L.
5' MIN. EFFECTIVE DEPTH
2-16d TOE NAILS AT EACH STRINGER TO PLATE
12" MIN.
12" MIN.

NOTE:
1. MINIMUM HEADROOM TO BE 6'-8" ABOVE STAIR NOSING.
2. GUARDRAILS PER CURRENT IBC EDITION.
3. HANDGRIP AND HANDRAIL PER CURRENT IBC EDITION.
4. PROVIDE 2 LAYERS OF ⅝" TYPE 'X' GYP. BD. AT ENCLOSED USABLE SPACE BELOW STAIRS
5. PROVIDE EDGE BLOCKING FOR ALL FIRE-RATED DRYWALL UNDER STAIRS.

6 TOP AND BOTTOM STAIR CONNECTION

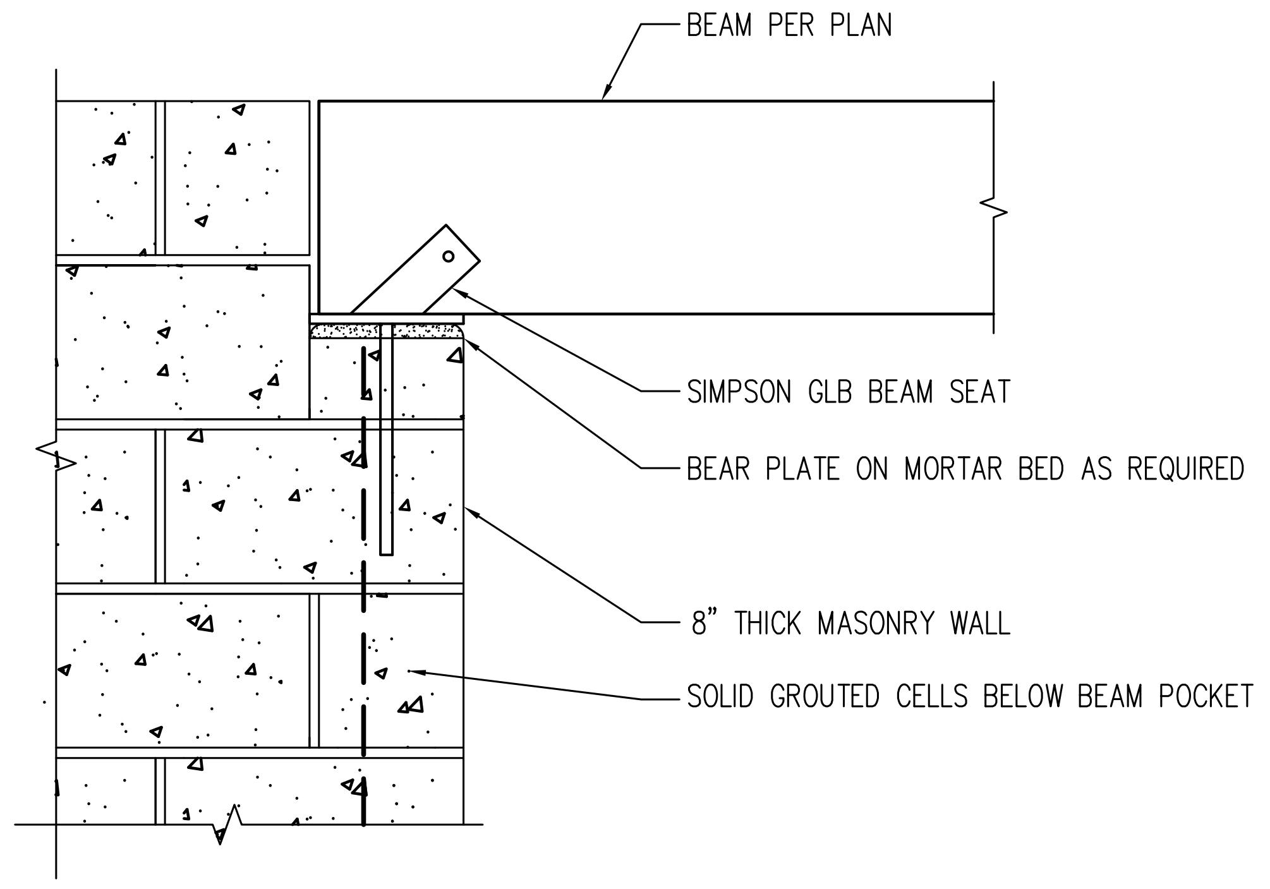
NOT TO SCALE

NOTE:
1. SEE DETAIL 6/SD4 FOR HANDRAIL AND STRINGER CONNECTION INFORMATION
2. MINIMUM HEADROOM TO BE 6'-8" ABOVE STAIR NOSING.
3. GUARDRAILS PER CURRENT IBC EDITION.
4. HANDGRIP AND HANDRAIL PER CURRENT IBC EDITION.
5. PROVIDE 2 LAYERS OF ⅝" TYPE 'X' GYP. BD. AT ENCLOSED USABLE SPACE BELOW STAIRS
6. PROVIDE EDGE BLOCKING FOR ALL FIRE-RATED DRYWALL UNDER STAIRS.


SEE ARCH
FINISH FLOOR
1x RISER - TYPICAL
2x TREAD - TYPICAL
2x12 STRINGERS NOTCHED TO ACCEPT TREADS
SEE ARCH
2x8 LEDGER W/ (5) 16d NAILSAT STUD (WHEN APPLICABLE) OR 2x12 LEDGER W/ 2x POST AT EACH END FOR CLEARSPAN CASES.
SIMPSON A35 AT EACH STRINGER TO JOIST BELOW
2x12 STRINGERS NOTCHED TO ACCEPT TREADS
FIREBLOCKING
2x8 JOISTS AT 16" O.C. OR (2) 2x6 JOISTS AT 16" O.C W/ (5) 16d NAILS AT EACH STUD OR LEDGER
PROVIDE 2 LAYERS OF ⅝" TYPE 'X' GYP. BD. AT ENCLOSED USABLE SPACE BELOW STAIRS
PROVIDE 2 LAYERS OF ⅝" TYPE 'X' GYP. BD. AT ENCLOSED USABLE SPACE BELOW STAIRS

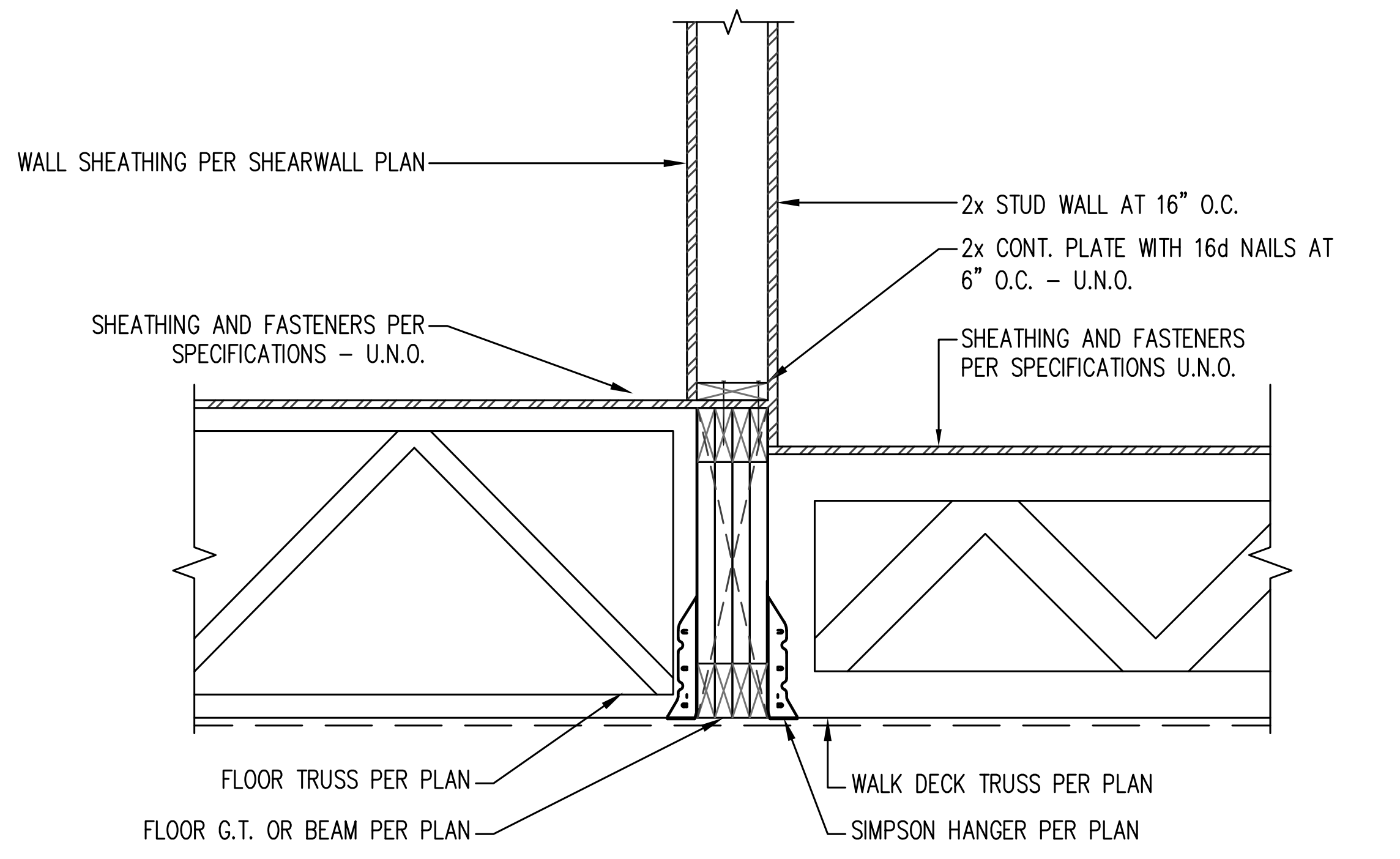
7 TYPICAL STAIR SECTION

NOT TO SCALE


BEAM PER PLAN
SIMPSON GLB BEAM SEAT
BEAR PLATE ON MORTAR BED AS REQUIRED
8" THICK MASONRY WALL
SOLID GROUTED CELLS BELOW BEAM POCKET

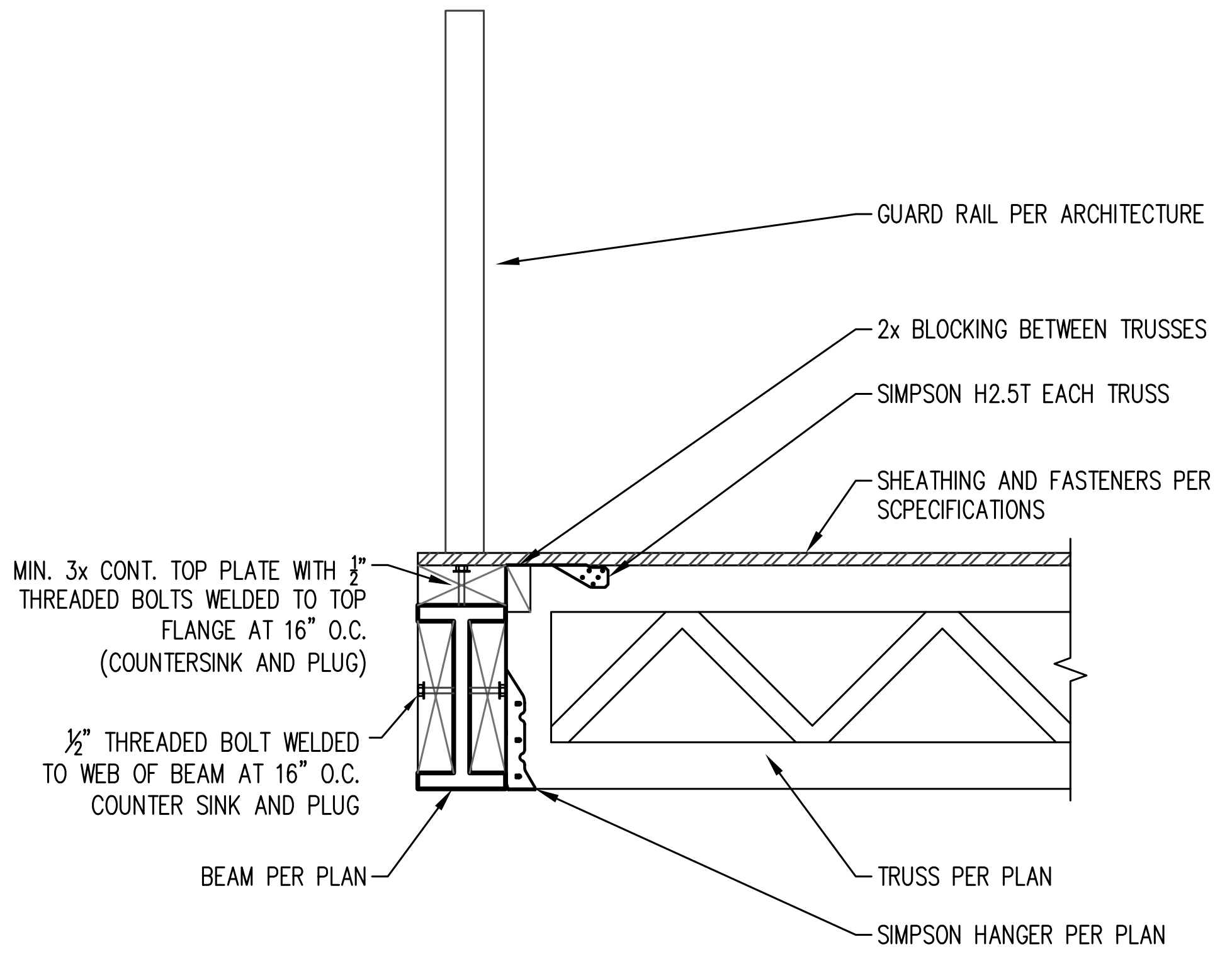
8 BEAM AT MASONRY WALL

NOT TO SCALE


WALL SHEATHING PER SHEARWALL PLAN
2x STUD WALL AT 16" O.C.
2x CONT. PLATE WITH 16d NAILS AT 6" O.C. - U.N.O.
SHEATHING AND FASTENERS PER SPECIFICATIONS - U.N.O.
SHEATHING AND FASTENERS PER SPECIFICATIONS U.N.O.
FLOOR TRUSS PER PLAN
FLOOR G.T. OR BEAM PER PLAN
WALK DECK TRUSS PER PLAN
SIMPSON HANGER PER PLAN

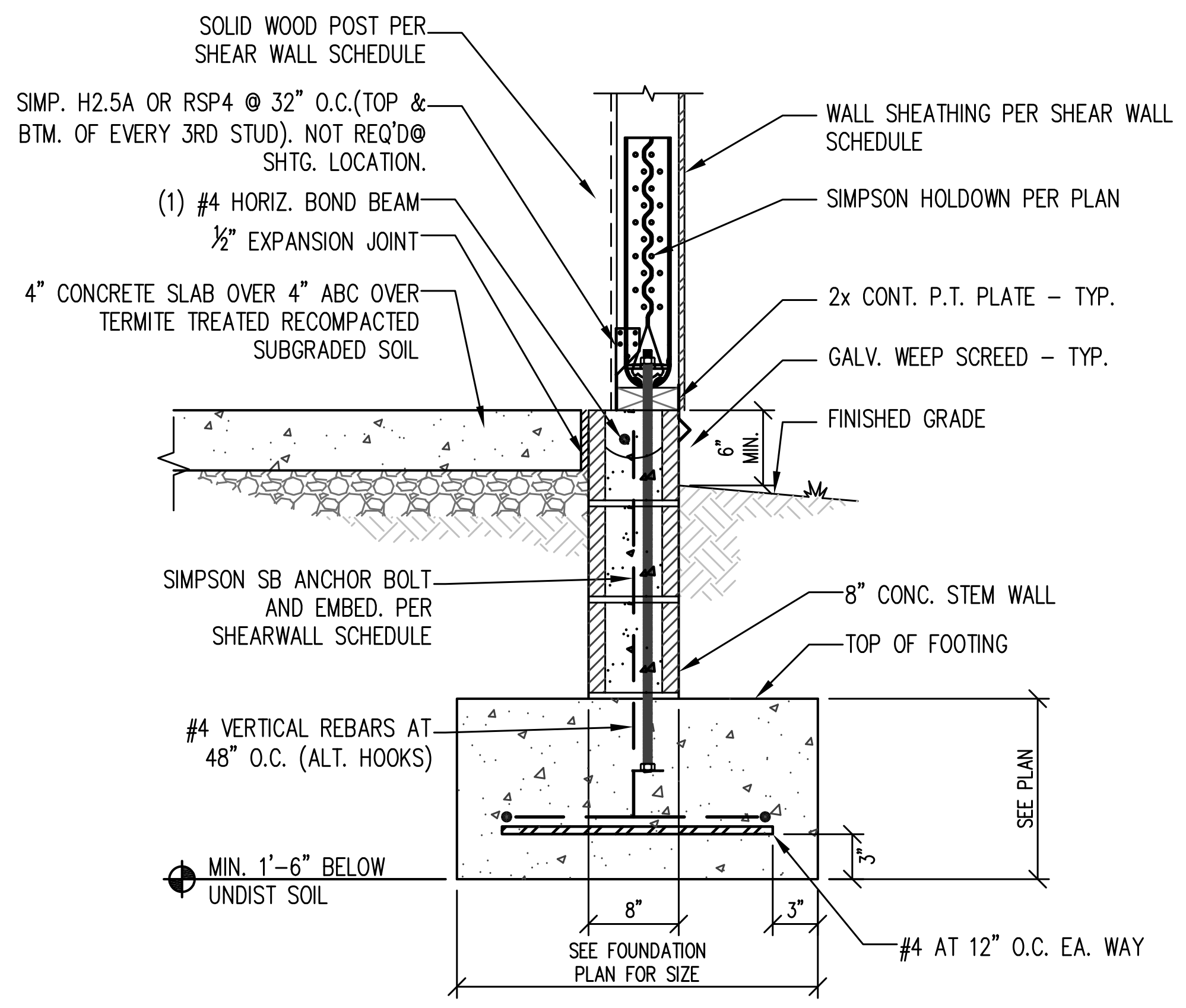
9 PERP. FLOOR / PERP WALK DECK TRUSS TO GIRDER /BEAM CONNECTION

SCALE: 1" = 1'-0"


GUARD RAIL PER ARCHITECTURE
2x BLOCKING BETWEEN TRUSSES
SIMPSON H2.5T EACH TRUSS
SHEATHING AND FASTENERS PER SCPECIFICATIONS
MIN. 3x CONT. TOP PLATE WITH ½" THREADED BOLTS WELDED TO TOP FLANGE AT 16" O.C. (COUNTERSINK AND PLUG)
½" THREADED BOLT WELDED TO WEB OF BEAM AT 16" O.C. COUNTER SINK AND PLUG
BEAM PER PLAN
TRUSS PER PLAN
SIMPSON HANGER PER PLAN

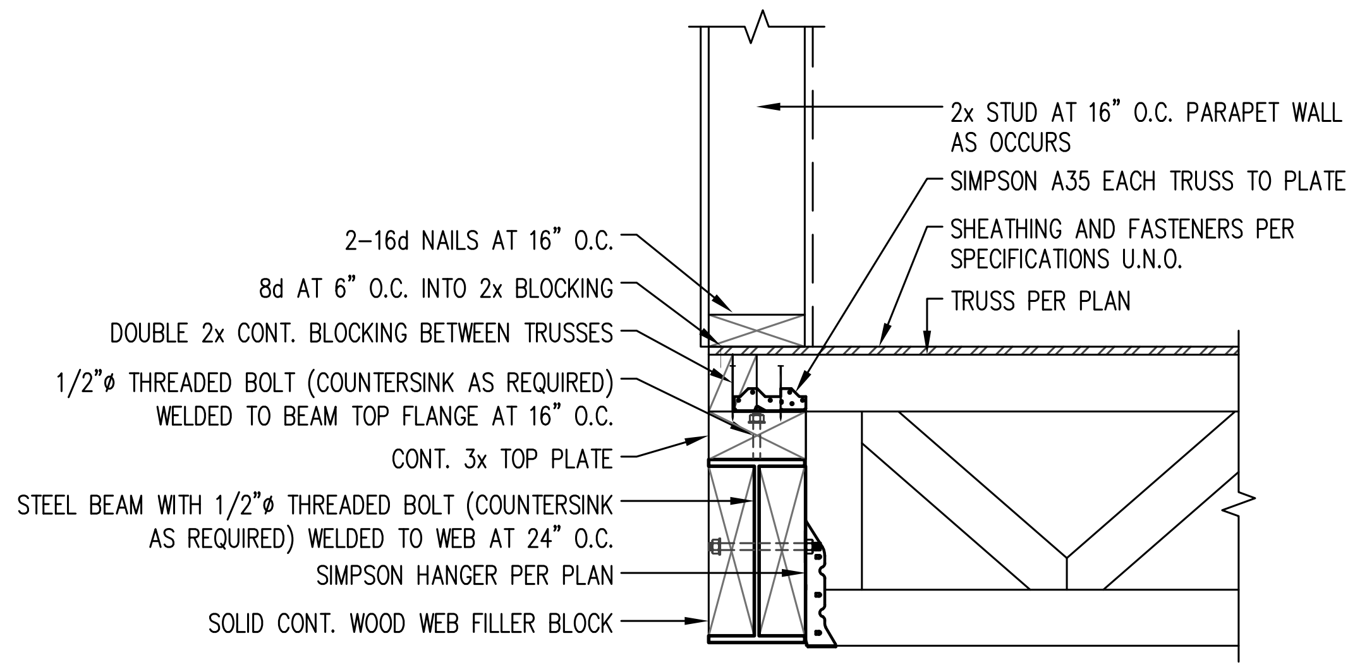
10 TRUSSES AT STEEL BEAM

SCALE: 1" = 1'-0"


SOLID WOOD POST PER SHEAR WALL SCHEDULE
SIMP. H2.5A OR RSP4 @ 32" O.C.(TOP & BTM. OF EVERY 3RD STUD). NOT REQ'D@ SHTG. LOCATION.
(1) #4 HORIZ. BOND BEAM
½" EXPANSION JOINT
4" CONCRETE SLAB OVER 4" ABC OVER TERMITE TREATED RECOMPACTED SUBGRADED SOIL
WALL SHEATHING PER SHEAR WALL SCHEDULE
SIMPSON HOLDOWN PER PLAN
2x CONT. P.T. PLATE - TYP.
GALV. WEEP SCREED - TYP.
FINISHED GRADE
6" MIN.
SIMPSON SB ANCHOR BOLT AND EMBED. PER SHEARWALL SCHEDULE
8" CONC. STEM WALL
TOP OF FOOTING
#4 VERTICAL REBARS AT 48" O.C. (ALT. HOOKS)
SEE PLAN
3"
MIN. 1'-6" BELOW UNDIST SOIL
8"
3"
SEE FOUNDATION PLAN FOR SIZE
#4 AT 12" O.C. EA. WAY

11 SIMPSON HTT5KT HOLDOWN TYPE ANCHORAGE AT CMU STEM WALL & FTNG.

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


2x STUD AT 16" O.C. PARAPET WALL AS OCCURS
SIMPSON A35 EACH TRUSS TO PLATE
SHEATHING AND FASTENERS PER SPECIFICATIONS U.N.O.
TRUSS PER PLAN
2-16d NAILS AT 16" O.C.
8d AT 6" O.C. INTO 2x BLOCKING
DOUBLE 2x CONT. BLOCKING BETWEEN TRUSSES
1/2"ø THREADED BOLT (COUNTERSINK AS REQUIRED) WELDED TO BEAM TOP FLANGE AT 16" O.C.
CONT. 3x TOP PLATE
STEEL BEAM WITH 1/2"ø THREADED BOLT (COUNTERSINK AS REQUIRED) WELDED TO WEB AT 24" O.C.
SIMPSON HANGER PER PLAN
SOLID CONT. WOOD WEB FILLER BLOCK

12 ROOF TRUSSES TO STEEL BEAM

NOT TO SCALE

SIVARAJAN RESIDENCE
LONE MOUNTAIN VISTAS - LOT 93

7899 EAST MARY SHARON DRIVE
SCOTTSDALE, ARIZONA 85266

CITY OF SCOTTSDALE
BUILDING PLANS
THESE PLANS HAVE BEEN APPROVED
AND ARE READY FOR A PERMIT
THIS DOES NOT AUTHORIZE VIOLATIONS OF ANY
CODE OR ORDINANCE

Gilbert Structural LLC
414 East Southern Avenue
Tempe, Arizona 85282
Office 480-398-8144

PROFESSIONAL SEAL

Registered Professional Engineer (Civil)
CERTIFICATE NO.
41931
WILLIAM L.
GILBERT
Date Signed..11-26-2024
Arizona, U.S.A.

REVISIONS

1	CITY COMMENTS	2.3.2025
2	.	
3	.	
4	.	
5	.	

PROJECT NUMBER:

DATE: 11.26.2024

COS PLAN CHECK #9300-24

SHEET TITLE:

STRUCTURAL DETAILS

SHEET NUMBER:

SD4

AS NOTED