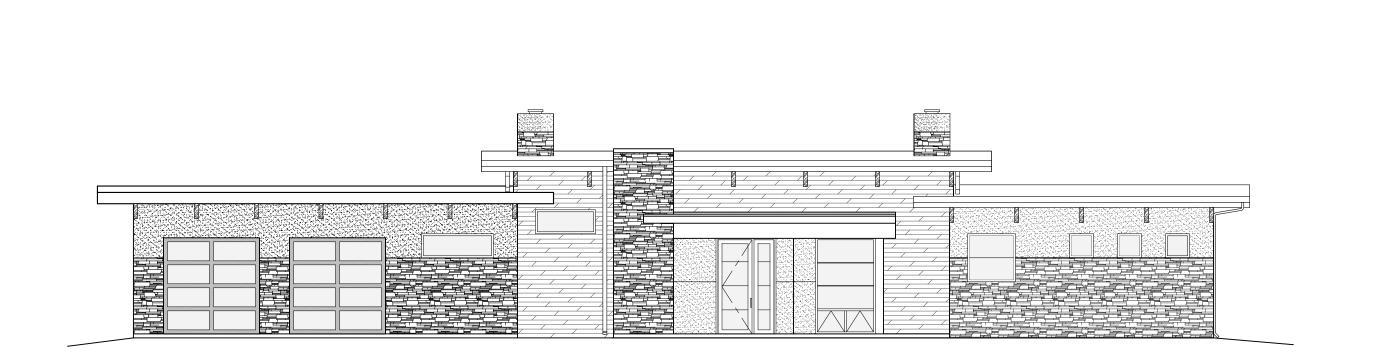
Randall Residence

Wildwood Estates, Prescott AZ

Enont Elevation



Chaphic Standards

NORTH ARROW INDICATOR

DETAIL DESIGNATOR

BUILDING SECTION DESIGNATOR

GRID LINE DESIGNATOR

REVISION DESIGNATOR

ELEVATION DESIGNATOR

DESCRIPTIVE NOTE DESIGNATOR

ROOM NUMBER / FINISH DESIGNATOR

DOOR TYPE DESIGNATOR

WALL TYPE DESIGNATOR

DOOR NUMBER DESIGNATOR

WINDOW TYPE DESIGNATOR

/ LETTER

Roject Information Steet Index

John and Janice Randall. 5862 W. Sleepy Hollow Dr. Prescott, AZ 86305

PH: 928-848-1616

PREPARED BY: P.O. Box 11593 Prescott, AZ 86304

W. Alan Kenson & Assoc., P.C. Contact: Alan Kenson PH: 928-443-5812

ADDRESS: **PARCEL NUMBER:**

CLIENT:

ZONING:

Prescott, AZ 86305 115-02-046

69 Wildwood Dr.

R1L-35 Residential Rural

SITE USE: Residential **OCCUPANCY:** Residential Group R

CONST. TYPE:

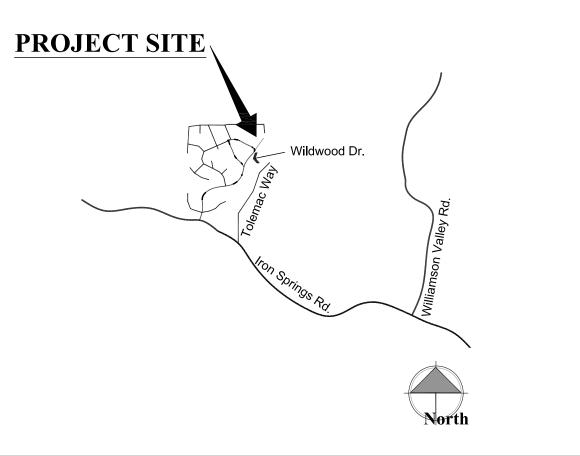
CURRENT CODE:

2012 International Residential Code 2012 International Fire Code 2012 International Plumbing Code 2012 International Mechanical Code 2012 International Fuel Gas Code 2012 International Electrical Code 2011 National Electrical Code 2012 International Energy Conservation Code

AREA SUMMARY:

Covered Porch Front Entry:

Cinity Map



ARCHITECTURAL

Cover Sheet / Project Information

Grading / Drainage / Utilities Site plan

A1.0 Site Plan

A2.0 Reference Floor Plan

A3.0 Dimension Floor Plan A4.0 Wall Types Plan

A5.0 Building Sections

A5.1 Building Sections

A6.0 Exterior Elevations

Exterior Elevations

A7.0 Interior Elevations

A8.0 Ceiling Framing Plan A9.0 Roof Plan

A9.1 Roof Details

A10.0 Door Schedule, Door and Window

A11.0 Room Finish Plan

A12.0 Details

STRUCTURAL

General Structural Notes continued

S1.2 Typical Details

S1.3 Plan Schedules

S3.0 Floor Framing Plan

S3.1 Roof Framing Plan

S3.2 Roof Framing Plan

S4.0 Foundation Details 100 Series

Framing Details 200 Series

MECHANICAL

M1.0 Mechanical Compliance

M2.0 Mechanical Floor Plan M3.0 Mechanical Schedules

M4.0 Mechanical Details

PLUMBING

P1.0 Plumbing Plan, Schedules and Gas Isometric

ELECTRICAL

E1.0 Electrical / Reflected Ceiling Plan

S1.0 General Structural Notes

S2.0 Foundation Plan

Framing Details 200 Series

Framing Details 200 Series

S5.3 Framing Details 200 Series

Architect:

W. Alan Kenson & Associates, P.C.

P 928-443-5812

P.O. Box 11593 Prescott, AZ 86304

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ARCHITECTURE & PLANNING



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Randall Residence

Wildwood Estates, Prescott AZ

General Notes

- 1. A COPY OF THE YAVAPAI COUNTY APPROVED CONSTRUCTION DRAWINGS SHALL BE KEPT AT THE JOB SITE.
- 2. EXTERIOR WALLS: CONSTRUCTION, PROJECTIONS, OPENINGS AND PENETRATIONS OF EXTERIOR WALLS OF DWELLINGS AND ACCESSORY BUILDINGS SHALL COMPLY WITH IRC 2012 TABLE 302.1.
- CEMENT, FIBER-CEMENT AND GLASS MAT GYPSUM BACKERS SHALL BE USED AS BACKERS FOR WALL TILE IN TUB AND SHOWER AREAS AND WALL PANELS IN SHOWER AREAS. SUCH WALL SURFACES SHALL EXTEND TO A HEIGHT OF NOT LESS THAN 6 FEET ABOVE THE FLOOR.
- EVERY SLEEPING ROOM AND BASEMENT WITH HABITABLE SPACE SHALL HAVE AT LEAST ONE WINDOW WITH A NET CLEAR OPENING OF 5.7 SQUARE FEET (MIN. 5 SQUARE FEET NET CLEAR OPENING AT GRADE FLOOR), MINIMUM OPENING WIDTH OF 20" MINIMUM OPENING HEIGHT OF 24" AND THE FINISHED SILL HEIGHT SHALL NOT BE MORE THAN 44" ABOVE THE FLOOR, OR PROVIDE EXTERIOR DOOR FOR EMERGENCY EGRESS.
- 5. WINDOWS SHALL BE FLASHED IN ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION INSTRUCTIONS.
- 6. GLAZING IN HAZARDOUS LOCATIONS SHALL COMPLY WITH IRC 308.
- 7. ALL INTERIOR AND EXTERIOR GLAZING IN BATHROOMS MUST BE SAFETY GLAZING WHEN THE BOTTOM EDGE IS LESS THAN FIFTY-SIX INCHES ABOVE THE FLOOR LEVEL. (BATHROOM SHALL BE DEFINED AS A ROOM PROVIDED WITH A TUB OR SHOWER.)
- CEILING INSULATION: 1-1/2" RIGID INSULATION BELOW TPO SINGLE PLY ROOFING MEMBRANE WITH 8" (R-38) CLOSED CELL SPRAY FOAM INSULATION BETWEEN ROOF JOISTS.
- 9. WOOD FRAMED WALLS: BLOWN-IN INSULATION SHALL BE IN SUBSTANTIAL CONTACT WITH THE SURFACE BEING INSULATED TO AVOID AIR PATHS THAT BYPASS THE INSULATION. INSULATION SHALL NOT BE COMPRESSED. INSULATION SHALL FILL CAVITIES COMPLETELY.

- 10. AIR LEAKAGE THE CODE ALLOWS THE USE OF AIRFLOW RETARDERS (HOUSE WRAPS) OR OTHER SOLID MATERIALS AS ACCEPTABLE METHODS TO MEET THIS REQUIREMENT. TO BE EFFECTIVE, THE BUILDING THERMAL SEAL MUST BE:
- IMPERMEABLE TO AIR FLOW.
- CONTINUOUS OVER THE ENTIRE BUILDING ENVELOPE.
- ABLE TO WITHSTAND THE FORCES THAT MAY ACT ON IT DURING AND AFTER CONSTRUCTION
- DURABLE OVER THE EXPECTED LIFETIME OF THE BUILDING.
- ALL SEAMS AND EDGES MUST BE SEALED/TAPED PER MANUFACTURER'S SPECIFICATIONS.
- BUILDING THERMAL ENVELOPE THE SEALING METHODS BETWEEN DISSIMILAR MATERIALS SHALL ALLOW FOR DIFFERENTIAL EXPANSION AND CONTRACTION. THE FOLLOWING SHALL BE CAULKED, GASKETED, WEATHER-STRIPPED OR OTHERWISE SEALED WITH AN AIR BARRIER MATERIAL, SUITABLE FILM OR SOLID MATERIAL:
- ALL JOINTS, SEAMS AND PENETRATIONS.
- SITE BUILT WINDOWS, DOORS AND SKYLIGHTS.
- OPENINGS BETWEEN WINDOW AND DOOR ASSEMBLIES AND THEIR RESPECTIVE JAMBS AND FRAMING.
- UTILITY PENETRATIONS.
- DROPPED CEILINGS OR CHASES ADJACENT TO THE THERMAL ENVELOPE.
- WALLS AND CEILINGS SEPARATING A GARAGE FROM CONDITIONED SPACES.
- BEHIND TUBS AND SHOWERS ON EXTERIOR WALLS.
- COMMON WALLS BETWEEN DWELLING UNITS.
- OTHER SOURCES OF INFILTRATION.
- 12. FENESTRATION AIR LEAKAGE WINDOW, SKYLIGHT AND SLIDING GLASS DOORS SHALL HAVE AN AIR INFILTRATION RATE OF NO MORE THAN 0.3 CFM PER SQUARE FOOT, AND SWINGING DOORS NO MORE THAN 0.5 CFM. SPECIFICATION SHALL BE LISTED ON THE MANUFACTURER LABEL. ALL WINDOWS AND EXTERIOR DOORS COMPRISING THE BUILDINGS THERMAL ENVELOPE, SHALL HAVE A FENESTRATION U-FACTOR OF NOT MORE THAN .40.

- THERMAL ENVELOPE SHALL BE SEALED TO LIMIT AIR LEAKAGE BETWEEN CONDITIONED AND UNCONDITIONED SPACES BY BEING:
- TO PREVENT AIR LEAKAGE TO THE CEILING CAVITY OR UNCONDITIONED SPACE

- 14. ALL CIRCULATING SERVICE HOT WATER PIPING SHALL BE INSULATED TO AT LEAST R-2. ALL NEW RESIDENCES EXCEEDING 1,800 SQUARE FEET WITH TWO OR MORE BATHROOMS SHALL HAVE A CIRCULATING HOT WATER SYSTEM. CIRCULATING HOT WATER SYSTEMS SHALL INCLUDE AN AUTOMATIC OR READILY ACCESSIBLE MANUAL SWITCH THAT CAN TURN OFF THE HOT WATER CIRCULATING PUMP WHEN THE SYSTEM IS NOT IN USE. THERMAL SIPHONING SYSTEMS SHALL HAVE A VALVE TO REDUCE FLOW. ALTERNATE SYSTEM SHALL BE CONSIDERED.
- 15. A MINIMUM 0.019 INCH, CORROSION RESISTANT WEEP SCREED, WITH MINIMUM VERTICAL ATTACHMENT FLANGE OF 3-1/2 INCHES SHALL BE PROVIDED AT OR BELOW THE FOUNDATION PLATE LINE ON THE EXTERIOR STUD WALL IN ACCORDANCE WITH ASTM C 926. THE WEEP SCREED SHALL BE PLACED A MINIMUM OF 4 INCHES ABOVE THE EARTH OR 2 INCHES ABOVE PAVED AREAS AND SHALL BE OF A TYPE THAT WILL ALLOW TRAPPED WATER TO DRAIN TO THE EXTERIOR OF THE BUILDING. THE WEATHER RESISTANT BARRIER SHALL LAP THE ATTACHMENT FLANGE. THE EXTERIOR LATH SHALL COVER AND TERMINATE ON THE ATTACHMENT FLANGE OF THE WEEP SCREED.
- 16. THE GARAGE SHALL BE SEPARATED FROM THE RESIDENCE AND ITS ATTIC AREA BY NOT LESS THAT 1/2" GPDW APPLIED TO THE GARAGE SIDE
- 17. A WATER HEATER RELIEF VALVE SHALL EXTEND OUTSIDE THE BUILDING WITH THE END OF PIPE NOT MORE THAN (2) TWO FEET OR LESS THAN (6) SIX INCHES ABOVE THE GROUND AND POINTING DOWNWARD.
- 18. MECHANICAL SYSTEM PIPING CAPABLE OF CARRYING FLUIDS ABOVE 105 F OR

13. RECESSED LIGHTING - RECESSED LUMINAIRES INSTALLED IN THE BUILDING IC-RATED AND LABELED WITH ENCLOSURES THAT ARE SEALED OR GASKETED

• IC-RATED AND LABELED AS MEETING ASTM E283

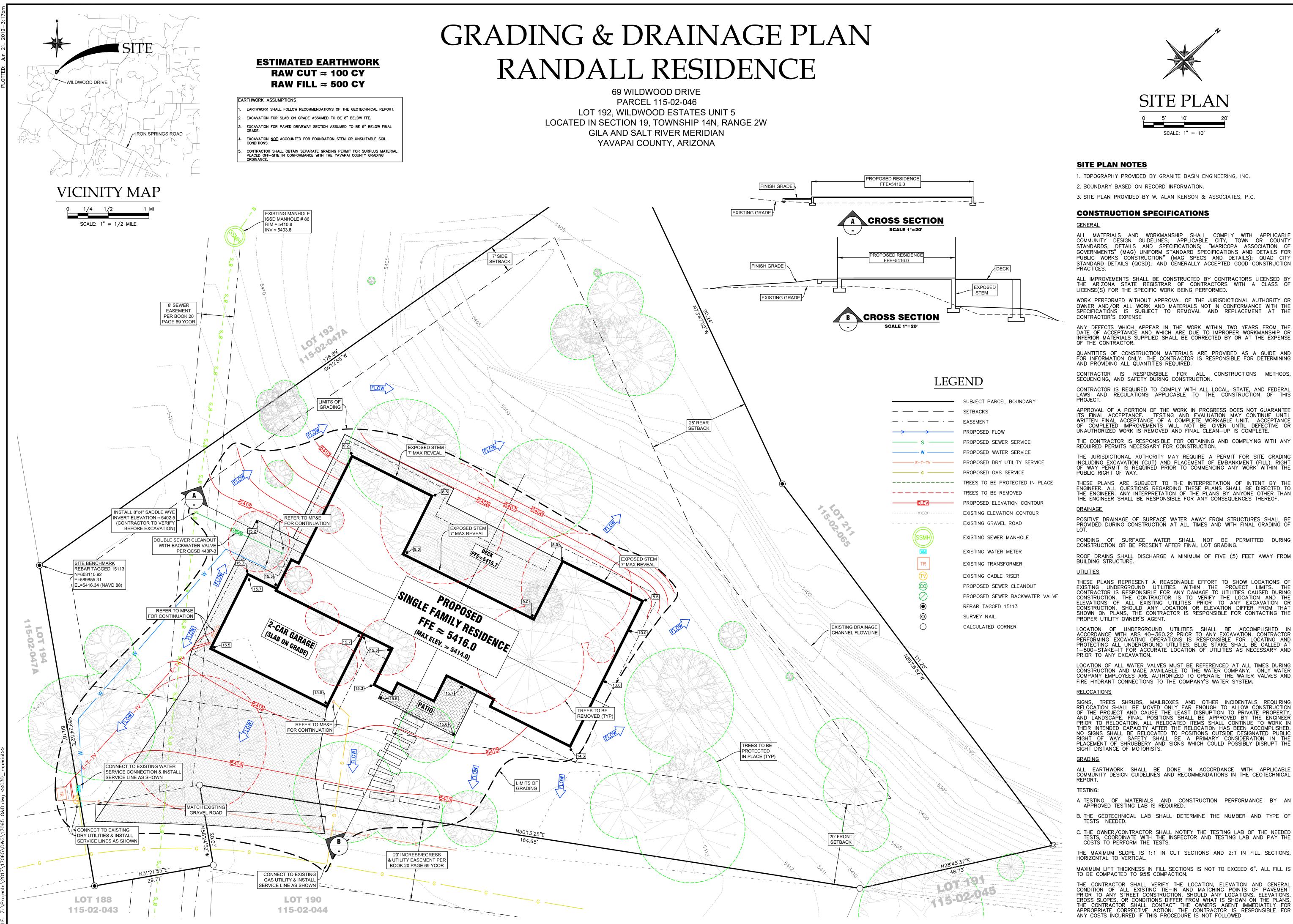
• LOCATED INSIDE AIRTIGHT SEALED BOX WITH CLEARANCES OF AT LEAST 0.5 INCH FROM COMBUSTIBLE MATERIAL AND 3 INCHES FROM INSULATION.

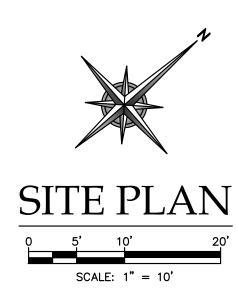
BELOW 55 F SHALL BE INSULATED TO A MINIMUM OF R-2.

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SITE PLAN NOTES

- 1. TOPOGRAPHY PROVIDED BY GRANITE BASIN ENGINEERING, INC.
- 2. BOUNDARY BASED ON RECORD INFORMATION.
- 3. SITE PLAN PROVIDED BY W. ALAN KENSON & ASSOCIATES, P.C.

CONSTRUCTION SPECIFICATIONS

GENERAL

ALL MATERIALS AND WORKMANSHIP SHALL COMPLY WITH APPLICABLE COMMUNITY DESIGN GUIDELINES; APPLICABLE CITY, TOWN OR COUNTY STANDARDS, DETAILS AND SPECIFICATIONS; "MARICOPA ASSOCIATION OF GOVERNMENTS" (MAG) UNIFORM STANDARD SPECIFICATIONS AND DETAILS FOR PUBLIC WORKS CONSTRUCTION" (MAG SPECS AND DETAILS); QUAD CITY STANDARD DETAILS (QCSD); AND GENERALLY ACCEPTED GOOD CONSTRUCTION

ALL IMPROVEMENTS SHALL BE CONSTRUCTED BY CONTRACTORS LICENSED BY THE ARIZONA STATE REGISTRAR OF CONTRACTORS WITH A CLASS OF LICENSE(S) FOR THE SPECIFIC WORK BEING PERFORMED.

WORK PERFORMED WITHOUT APPROVAL OF THE JURISDICTIONAL AUTHORITY OR OWNER AND/OR ALL WORK AND MATERIALS NOT IN CONFORMANCE WITH THE SPECIFICATIONS IS SUBJECT TO REMOVAL AND REPLACEMENT AT THE

ANY DEFECTS WHICH APPEAR IN THE WORK WITHIN TWO YEARS FROM THE DATE OF ACCEPTANCE AND WHICH ARE DUE TO IMPROPER WORKMANSHIP OR INFERIOR MATERIALS SUPPLIED SHALL BE CORRECTED BY OR AT THE EXPENSE OF THE CONTRACTOR.

QUANTITIES OF CONSTRUCTION MATERIALS ARE PROVIDED AS A GUIDE AND FOR INFORMATION ONLY. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING AND PROVIDING ALL QUANTITIES REQUIRED.

CONTRACTOR IS RESPONSIBLE FOR ALL CONSTRUCTIONS METHODS, SEQUENCING, AND SAFETY DURING CONSTRUCTION.

CONTRACTOR IS REQUIRED TO COMPLY WITH ALL LOCAL, STATE, AND FEDERAL LAWS AND REGULATIONS APPLICABLE TO THE CONSTRUCTION OF THIS

APPROVAL OF A PORTION OF THE WORK IN PROGRESS DOES NOT GUARANTEE ITS FINAL ACCEPTANCE. TESTING AND EVALUATION MAY CONTINUE UNTIL WRITTEN FINAL ACCEPTANCE OF A COMPLETE WORKABLE UNIT. ACCEPTANCE OF COMPLETED IMPROVEMENTS WILL NOT BE GIVEN UNTIL DEFECTIVE OR UNAUTHORIZED WORK IS REMOVED AND FINAL CLEAN-UP IS COMPLETE.

THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING AND COMPLYING WITH ANY REQUIRED PERMITS NECESSARY FOR CONSTRUCTION. THE JURISDICTIONAL AUTHORITY MAY REQUIRE A PERMIT FOR SITE GRADING

INCLUDING EXCAVATION (CUT) AND PLACEMENT OF EMBANKMENT (FILL). RIGHT OF WAY PERMIT IS REQUIRED PRIOR TO COMMENCING ANY WORK WITHIN THE PUBLIC RIGHT OF WAY. THESE PLANS ARE SUBJECT TO THE INTERPRETATION OF INTENT BY THE

ENGINEER. ALL QUESTIONS REGARDING THESE PLANS SHALL BE DIRECTED TO THE ENGINEER. ANY INTERPRETATION OF THE PLANS BY ANYONE OTHER THAN THE ENGINEER SHALL BE RESPONSIBLE FOR ANY CONSEQUENCES THEREOF.

POSITIVE DRAINAGE OF SURFACE WATER AWAY FROM STRUCTURES SHALL BE PROVIDED DURING CONSTRUCTION AT ALL TIMES AND WITH FINAL GRADING OF

PONDING OF SURFACE WATER SHALL NOT BE PERMITTED DURING CONSTRUCTION OR BE PRESENT AFTER FINAL LOT GRADING.

ROOF DRAINS SHALL DISCHARGE A MINIMUM OF FIVE (5) FEET AWAY FROM BUILDING STRUCTURE.

THESE PLANS REPRESENT A REASONABLE EFFORT TO SHOW LOCATIONS OF EXISTING UNDERGROUND UTILITIES WITHIN THE PROJECT LIMITS. THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE TO UTILITIES CAUSED DURING CONSTRUCTION. THE CONTRACTOR IS TO VERIFY THE LOCATION AND THE ELEVATIONS OF ALL EXISTING UTILITIES PRIOR TO ANY EXCAVATION OR CONSTRUCTION. SHOULD ANY LOCATION OR ELEVATION DIFFER FROM THAT SHOWN ON PLANS, THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING THE PROPER UTILITY OWNER'S AGENT.

LOCATION OF UNDERGROUND UTILITIES SHALL BE ACCOMPLISHED IN ACCORDANCE WITH ARS 40-360.22 PRIOR TO ANY EXCAVATION. CONTRACTOR PERFORMING EXCAVATING OPERATIONS IS RESPONSIBLE FOR LOCATING AND PERFORMING EXCAVATIONS OPERATIONS OF PERFORMING EXCAVATIONS OPERATIONS OF PERFORMING EXCAVATIONS OPERATIONS OPER PROTECTING ALL UNDERGROUND UTILITIES. BLUE STAKE SHALL BE CALLED AT 1-800-STAKE-IT FOR ACCURATE LOCATION OF UTILITIES AS NECESSARY AND

LOCATION OF ALL WATER VALVES MUST BE REFERENCED AT ALL TIMES DURING CONSTRUCTION AND MADE AVAILABLE TO THE WATER COMPANY. ONLY WATER COMPANY EMPLOYEES ARE AUTHORIZED TO OPERATE THE WATER VALVES AND FIRE HYDRANT CONNECTIONS TO THE COMPANY'S WATER SYSTEM. **RELOCATIONS**

SIGNS, TREES SHRUBS, MAILBOXES AND OTHER INCIDENTALS REQUIRING RELOCATION SHALL BE MOVED ONLY FAR ENOUGH TO ALLOW CONSTRUCTION OF THE PROJECT AND CAUSE THE LEAST DISRUPTION TO PRIVATE PROPERTY, AND LANDSCAPE. FINAL POSITIONS SHALL BE APPROVED BY THE ENGINEER PRIOR TO RELOCATION. ALL RELOCATED ITEMS SHALL CONTINUE TO WORK IN THEIR INTENDED CAPACITY AFTER THE RELOCATION HAS BEEN ACCOMPLISHED. NO SIGNS SHALL BE RELOCATED TO POSITIONS OUTSIDE DESIGNATED PUBLIC RIGHT OF WAY. SAFETY SHALL BE A PRIMARY CONSIDERATION IN THE RIGHT OF WAY. SAFETY SHALL BE A PRIMARY CONSIDERATION IN THE PLACEMENT OF SHRUBBERY AND SIGNS WHICH COULD POSSIBLY DISRUPT THE SIGHT DISTANCE OF MOTORISTS.

ALL EARTHWORK SHALL BE DONE IN ACCORDANCE WITH APPLICABLE COMMUNITY DESIGN GUIDELINES AND RECOMMENDATIONS IN THE GEOTECHNICAL

- A. TESTING OF MATERIALS AND CONSTRUCTION PERFORMANCE BY AN APPROVED TESTING LAB IS REQUIRED.
- B. THE GEOTECHNICAL LAB SHALL DETERMINE THE NUMBER AND TYPE OF
- C. THE OWNER/CONTRACTOR SHALL NOTIFY THE TESTING LAB OF THE NEEDED TESTS, COORDINATE WITH THE INSPECTOR AND TESTING LAB AND PAY THE COSTS TO PERFORM THE TESTS.

THE MAXIMUM SLOPE IS 1:1 IN CUT SECTIONS AND 2:1 IN FILL SECTIONS,

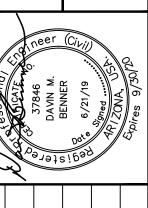
THE CONTRACTOR SHALL VERIFY THE LOCATION, ELEVATION AND GENERAL CONDITION OF ALL EXISTING TIE—IN AND MATCHING POINTS OF PAVEMENT PRIOR TO ANY STREET CONSTRUCTION. SHOULD ANY LOCATIONS, ELEVATIONS, CROSS SLOPES, OR CONDITIONS DIFFER FROM WHAT IS SHOWN ON THE PLANS THE CONTRACTOR SHALL CONTACT THE OWNERS AGENT IMMEDIATELY FOR APPROPRIATE CORRECTIVE ACTION. THE CONTRACTOR IS RESPONSIBLE FOR ANY COSTS INCURRED IF THIS PROCEDURE IS NOT FOLLOWED.

CALL TWO WORKING DAYS BEFORE YOU DIG 1-800-STAKE-IT 1-800-782-5348 (OUTSIDE MARICOPA COUNTY)
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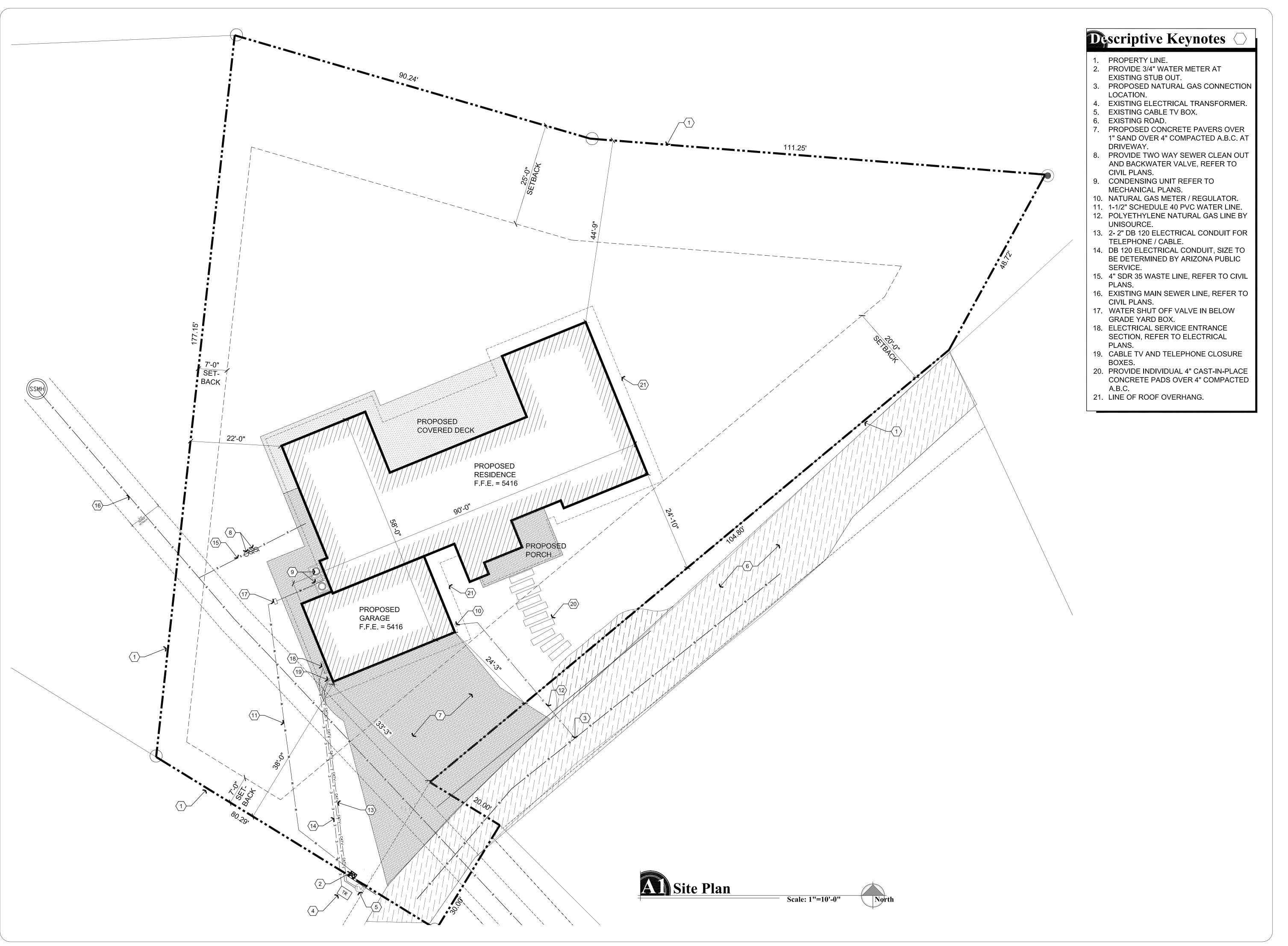
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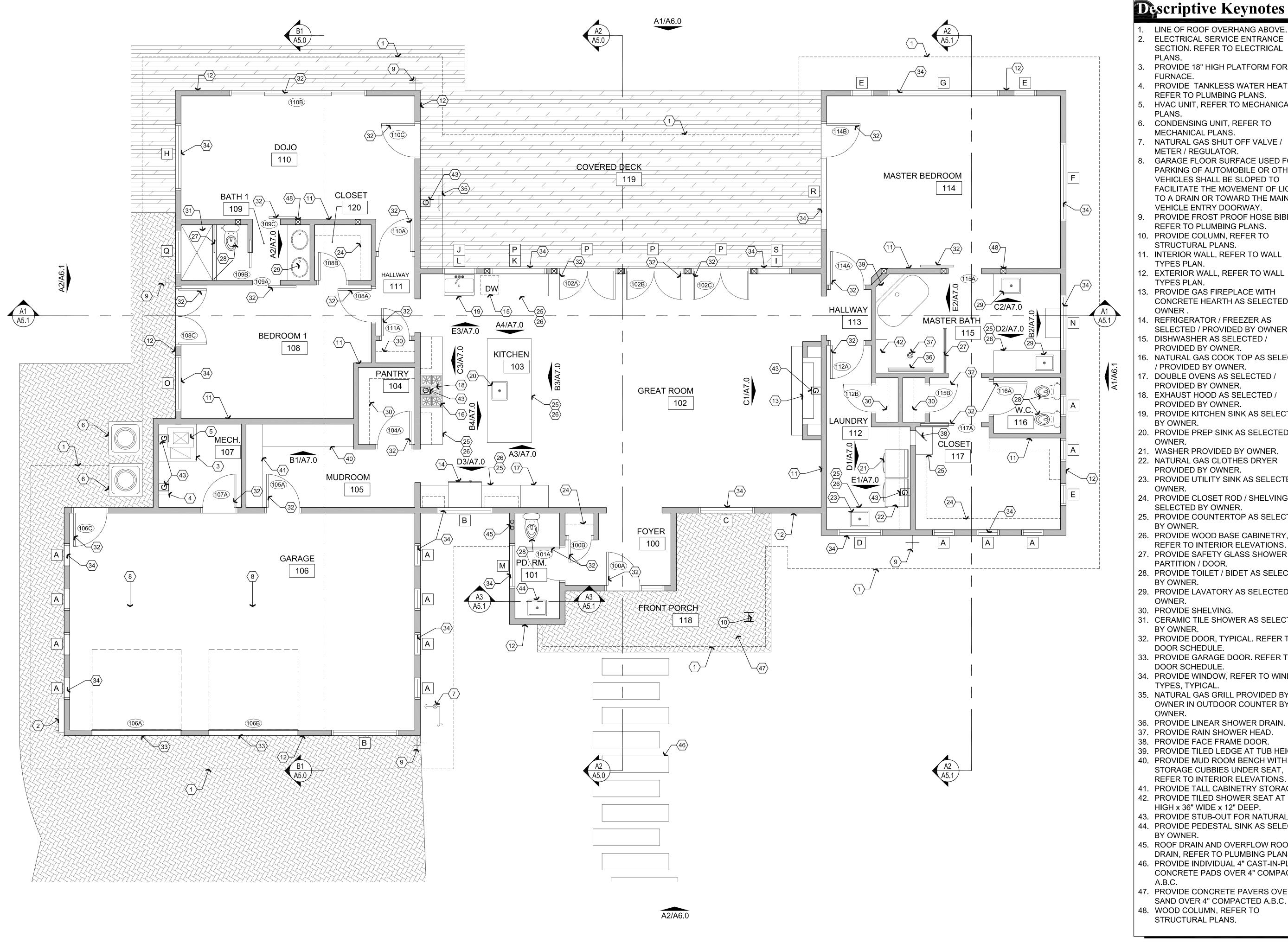


9/25/2017	10'			
9/25	1" = 10'	Π	TS	DB
DATE:	SCALE:	DRAWN:	DESIGNED: TS	CHECKED: DB



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CHECKED BY W.A.K. June 21st, 2019



Descriptive Keynotes

LINE OF ROOF OVERHANG ABOVE. ELECTRICAL SERVICE ENTRANCE SECTION. REFER TO ELECTRICAL

PROVIDE 18" HIGH PLATFORM FOR GAS

FURNACE. PROVIDE TANKLESS WATER HEATER,

REFER TO PLUMBING PLANS. HVAC UNIT, REFER TO MECHANICAL

PLANS. CONDENSING UNIT, REFER TO

MECHANICAL PLANS.

NATURAL GAS SHUT OFF VALVE / METER / REGULATOR.

GARAGE FLOOR SURFACE USED FOR PARKING OF AUTOMOBILE OR OTHER VEHICLES SHALL BE SLOPED TO FACILITATE THE MOVEMENT OF LIQUIDS TO A DRAIN OR TOWARD THE MAIN VEHICLE ENTRY DOORWAY.

PROVIDE FROST PROOF HOSE BIBB, REFER TO PLUMBING PLANS.

10. PROVIDE COLUMN, REFER TO STRUCTURAL PLANS.

TYPES PLAN. 12. EXTERIOR WALL, REFER TO WALL

TYPES PLAN. 13. PROVIDE GAS FIREPLACE WITH CONCRETE HEARTH AS SELECTED BY

OWNER REFRIGERATOR / FREEZER AS

SELECTED / PROVIDED BY OWNER. 15. DISHWASHER AS SELECTED /

PROVIDED BY OWNER. 16. NATURAL GAS COOK TOP AS SELECTED

/ PROVIDED BY OWNER. DOUBLE OVENS AS SELECTED /

PROVIDED BY OWNER.

18. EXHAUST HOOD AS SELECTED / PROVIDED BY OWNER.

19. PROVIDE KITCHEN SINK AS SELECTED BY OWNER.

20. PROVIDE PREP SINK AS SELECTED BY OWNER.

21. WASHER PROVIDED BY OWNER.

22. NATURAL GAS CLOTHES DRYER

PROVIDED BY OWNER. 23. PROVIDE UTILITY SINK AS SELECTED BY

24. PROVIDE CLOSET ROD / SHELVING AS SELECTED BY OWNER.

25. PROVIDE COUNTERTOP AS SELECTED

BY OWNER. 26. PROVIDE WOOD BASE CABINETRY,

REFER TO INTERIOR ELEVATIONS. 27. PROVIDE SAFETY GLASS SHOWER PARTITION / DOOR.

28. PROVIDE TOILET / BIDET AS SELECTED BY OWNER.

29. PROVIDE LAVATORY AS SELECTED BY

OWNER.

30. PROVIDE SHELVING.

31. CERAMIC TILE SHOWER AS SELECTED BY OWNER.

32. PROVIDE DOOR, TYPICAL. REFER TO DOOR SCHEDULE.

33. PROVIDE GARAGE DOOR. REFER TO DOOR SCHEDULE.

34. PROVIDE WINDOW, REFER TO WINDOW TYPES, TYPICAL. 35. NATURAL GAS GRILL PROVIDED BY

OWNER IN OUTDOOR COUNTER BY

36. PROVIDE LINEAR SHOWER DRAIN. 37. PROVIDE RAIN SHOWER HEAD.

38. PROVIDE FACE FRAME DOOR. 39. PROVIDE TILED LEDGE AT TUB HEIGHT.

STORAGE CUBBIES UNDER SEAT, REFER TO INTERIOR ELEVATIONS.

41. PROVIDE TALL CABINETRY STORAGE. 42. PROVIDE TILED SHOWER SEAT AT 18"

HIGH x 36" WIDE x 12" DEEP. 43. PROVIDE STUB-OUT FOR NATURAL GAS. 44. PROVIDE PEDESTAL SINK AS SELECTED

BY OWNER. 45. ROOF DRAIN AND OVERFLOW ROOF DRAIN, REFER TO PLUMBING PLANS. 46. PROVIDE INDIVIDUAL 4" CAST-IN-PLACE

CONCRETE PADS OVER 4" COMPACTED

47. PROVIDE CONCRETE PAVERS OVER 1" SAND OVER 4" COMPACTED A.B.C.

48. WOOD COLUMN, REFER TO STRUCTURAL PLANS.

Reference Floor Plan



REVISIONS

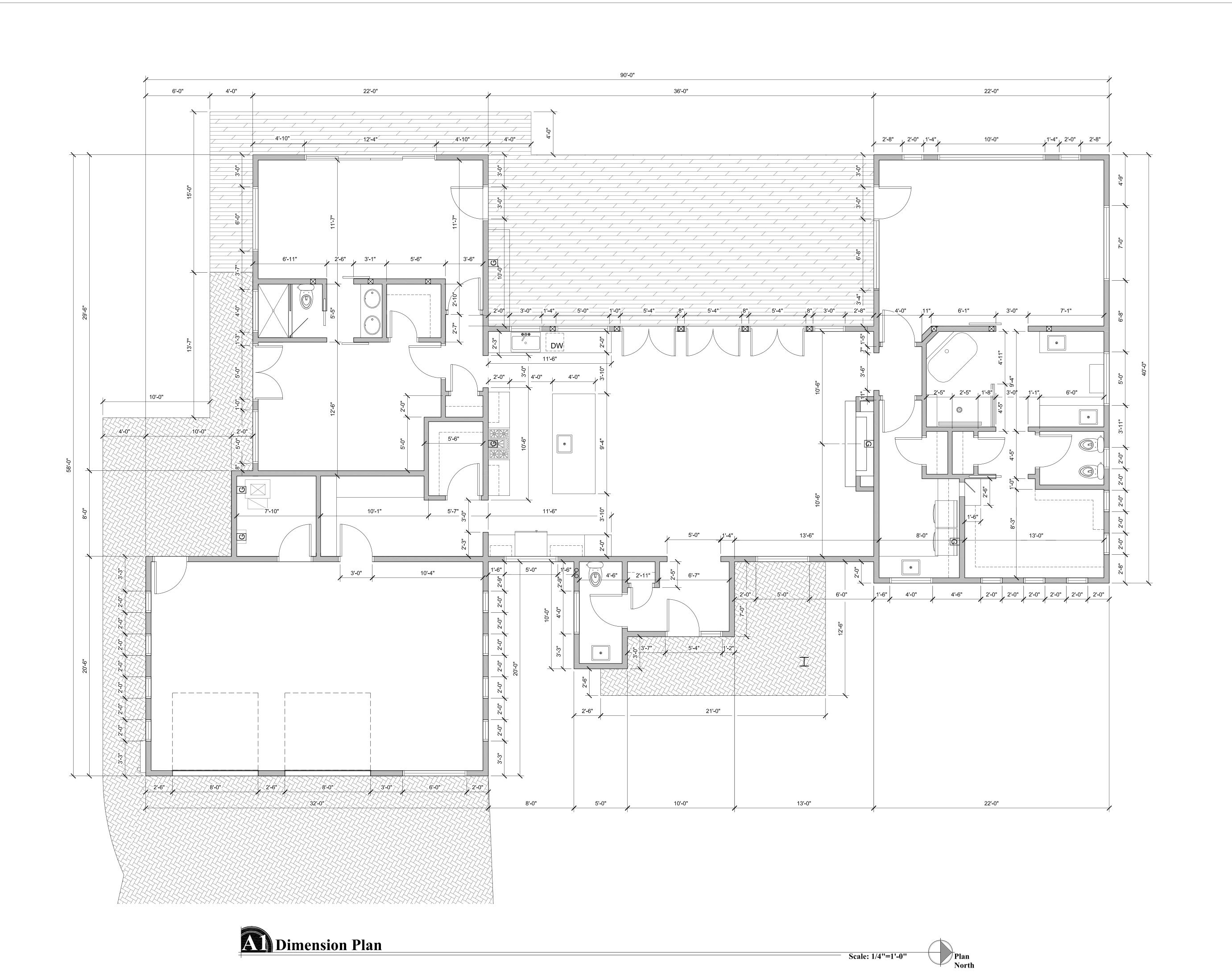
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SHEET



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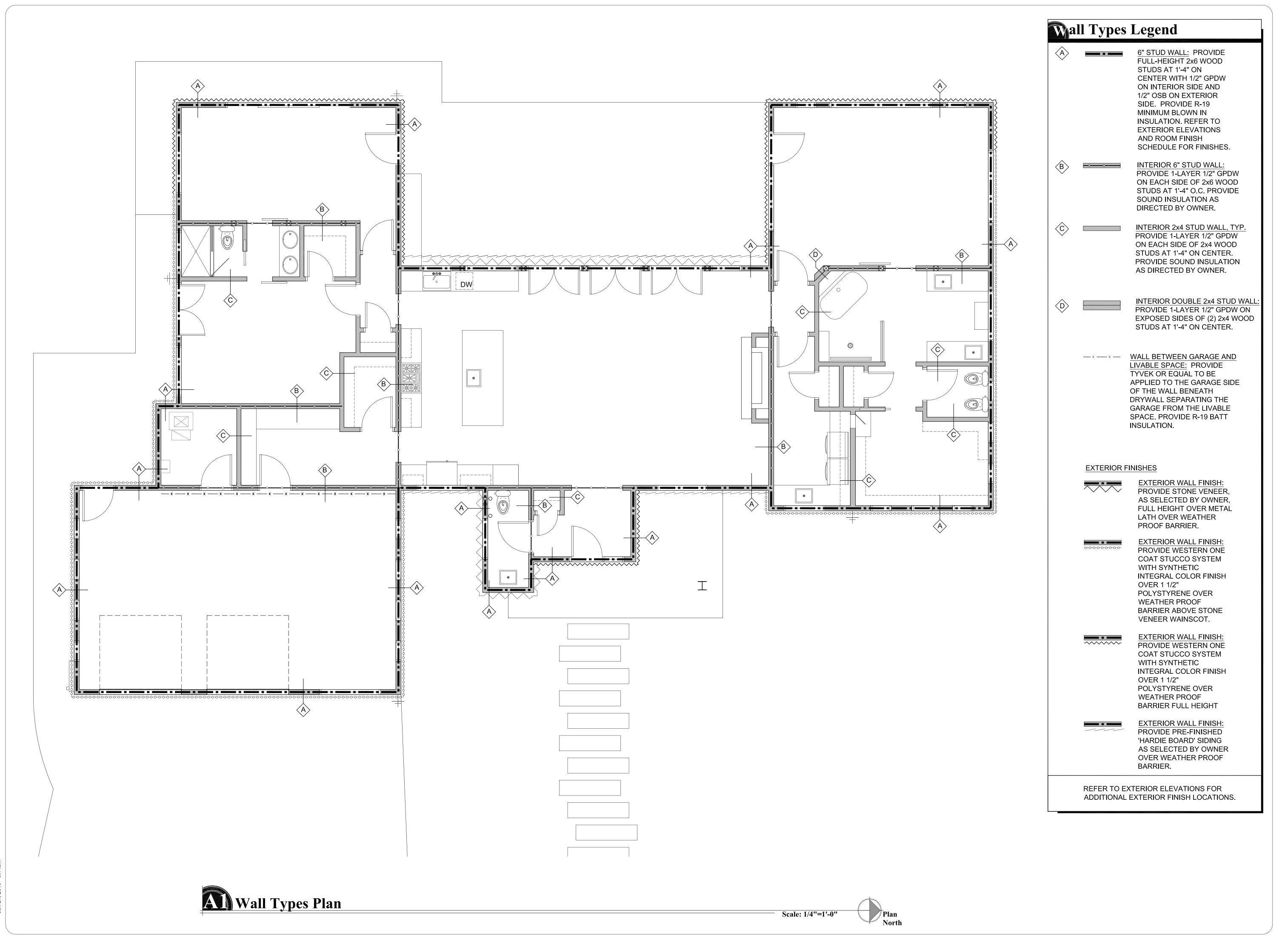
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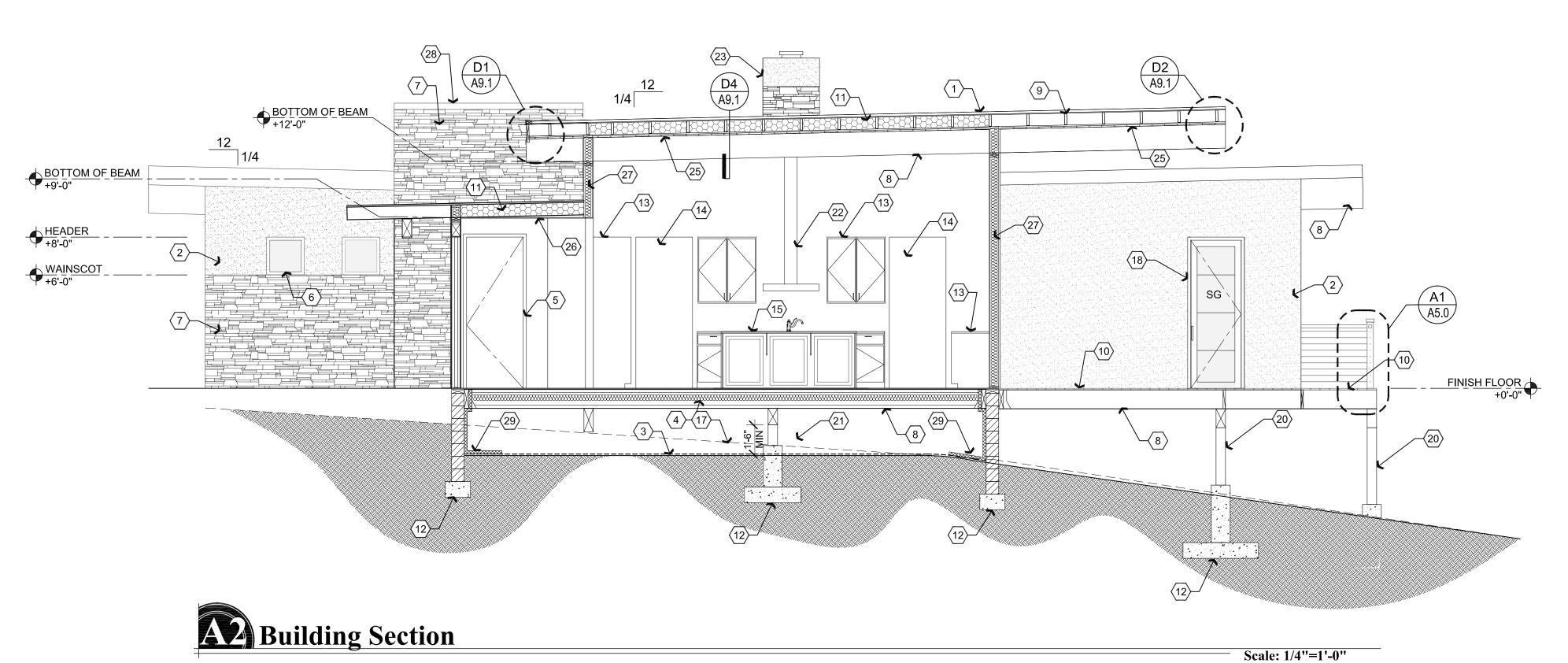
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SHEET

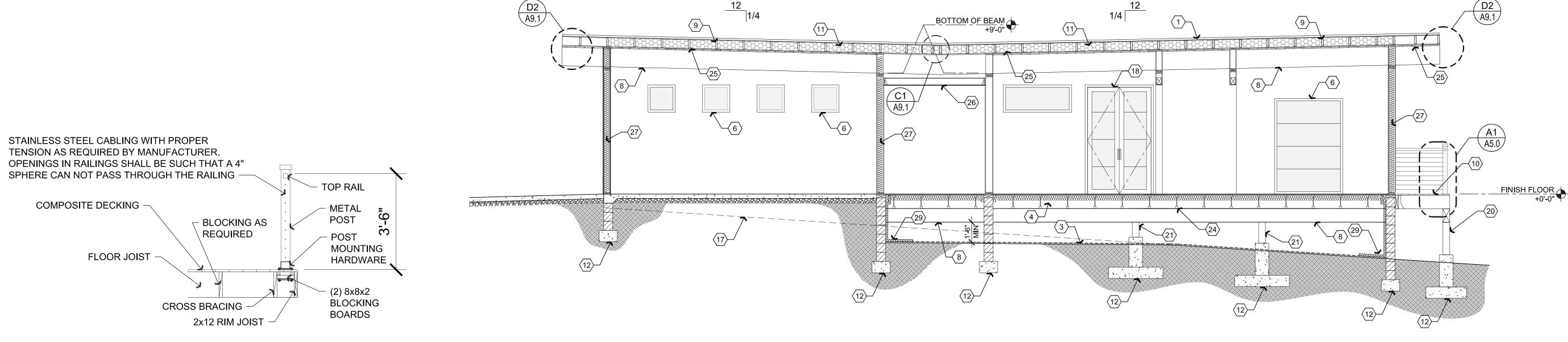




- 1. PROVIDE TPO ROOFING OVER 1-1/2" ROOF INSULATION, OVER O.S.B. SHEATHING, REFER TO STRUCTURAL PLANS.
- PROVIDE WESTERN ONE COAT STUCCO SYSTEM WITH SYNTHETIC INTEGRAL COLOR FINISH OVER 1-1/2" POLYSTYRENE OVER WEATHER PROOF BARRIER.
- 3. PROVIDE CONTINUOUS VAPOR RETARDER INSIDE CRAWL SPACE.
- 4. PROVIDE R-19 BATT INSULATION TIGHT AGAINST
- FLOOR WITH INSULATION SUPPORT WIRE.
 5. INTERIOR DOOR. REFER TO DOOR SCHEDULE.
- 6. EXTERIOR WINDOW, TYPICAL, REFER TO WINDOW
- ELEVATIONS.
 7. PROVIDE STONE VENEER, REFER TO WALL TYPES.
- PROVIDE BEAM, REFER TO STRUCTURAL PLANS.
 PROVIDE ROOF JOIST, REFER TO STRUCTURAL
- PLANS.

 10. PROVIDE COMPOSITE DECK, REFER TO STRUCTURAL PLANS.
- 11. PROVIDE R-38 CLOSED CELL SPRAY FOAM INSULATION.
- 12. PROVIDE CONCRETE FOOTING, REFER TO
- STRUCTURAL PLANS.

 13. PROVIDE WOOD CABINETRY. REFER TO REFERENCE FLOOR PLAN AND INTERIOR ELEVATIONS.
- 14. OPENING INTO HALLWAY.
- 15. PROVIDE KITCHEN ISLAND.
- 16. NOT USED.
- 17. APPROXIMATE LINE OF EXISTING GRADE.
- 18. EXTERIOR DOOR, REFER TO REFERENCE FLOOR PLAN AND DOOR SCHEDULE.
- 19. NOT USED.
- 20. PROVIDE STEEL COLUMN, REFER TO STRUCTURAL PLANS.
- 21. PROVIDE WOOD COLUMN, REFER TO STRUCTURAL PLANS.
- 22. RANGE HOOD AND VENT PIPE FOR COOKTOP BY OWNER.
- 23. PROVIDE ROCK / STUCCO DECORATIVE CHIMNEY
- SURROUNDING VENT PIPE.
 24. FLOOR JOIST, REFER TO STRUCTURAL PLANS.
- 25. 3/4" NO GROOVE WOOD DECKING AS SELECTED BY OWNER.
- 26. PROVIDE GPDW CEILING ATTACHED TO 2x4 CEILING JOISTS.
- 27. PROVIDE R-19 MINIMUM BLOWN IN INSULATION.
- 28. PROVIDE R-19 MINIMUM BLOWN IN INSULATION 28. PROVIDE SHEET METAL PARAPET CAP.
- 29. PROVIDE 2" RIGID INSULATION FROM THE FLOOR EXTENDING DOWNWARD ALONG THE STEM WALL TO THE FINISHED GROUND LEVEL, THEN EXTEND HORIZONTALLY ALONG FINISHED GROUND 24".







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

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CT: Randall Residence

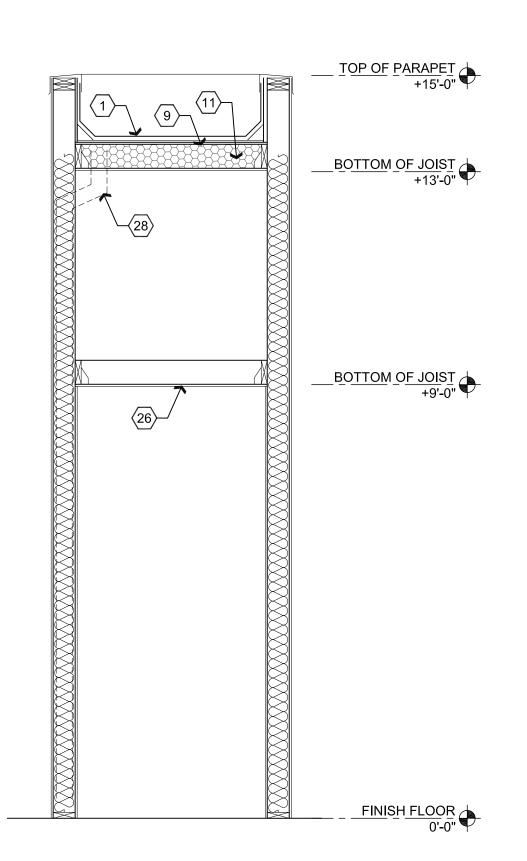
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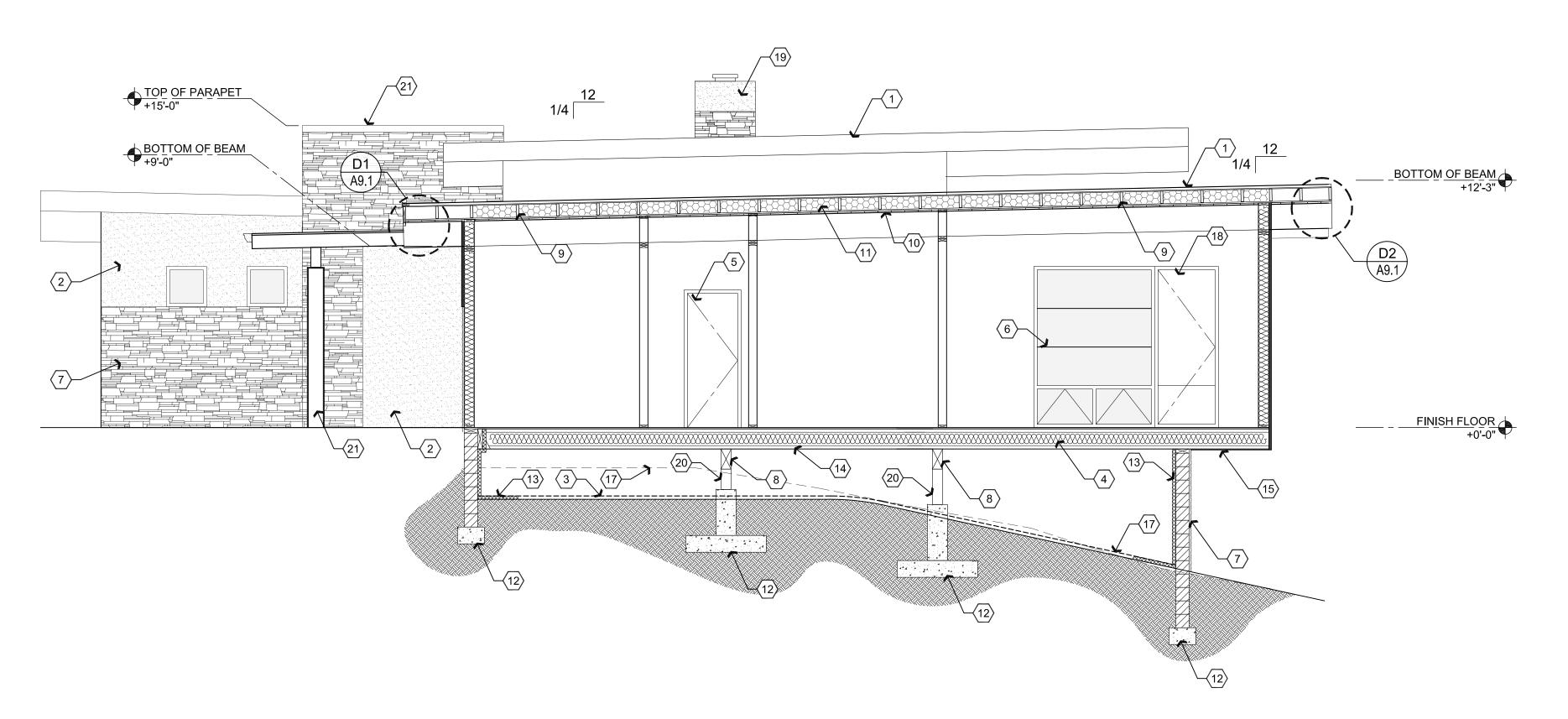
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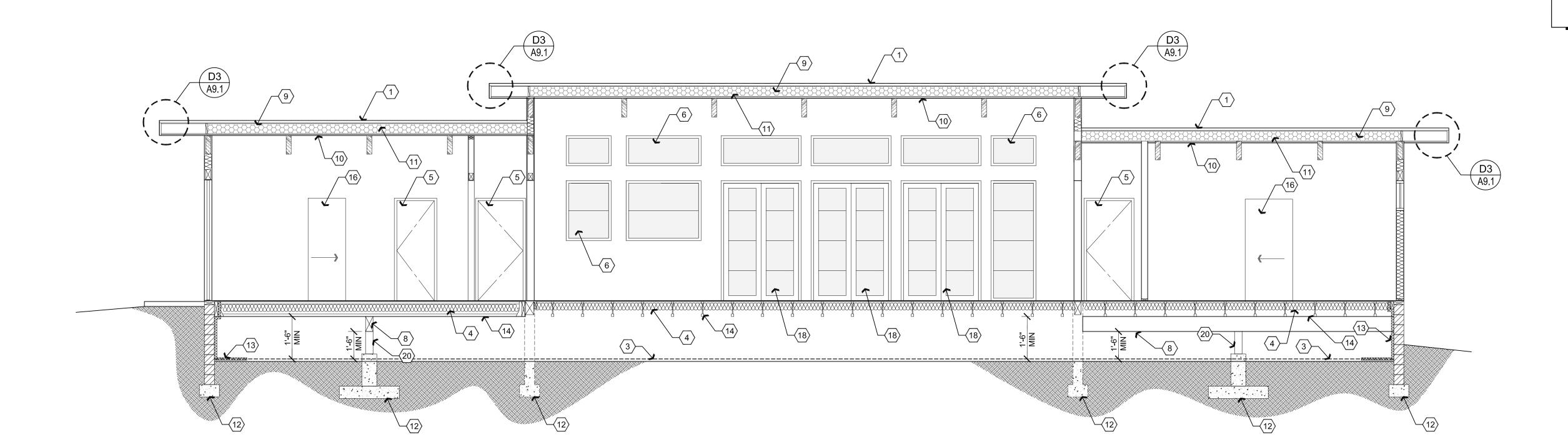








Scale: 1/4"=1'-0"



Building Section

Descriptive Keynotes

- PROVIDE TPO ROOFING OVER 1-1/2" ROOF INSULATION OVER O.S.B. SHEATHING, REFER TO STRUCTURAL
- 2. PROVIDE WESTERN ONE COAT STUCCO SYSTEM WITH SYNTHETIC INTEGRAL COLOR FINISH OVER 1-1/2" POLYSTYRENE OVER WEATHER PROOF BARRIER.
- PROVIDE CONTINUOUS VAPOR RETARDER INSIDE CRAWL SPACE.
- 4. PROVIDE R-19 BATT INSULATION TIGHT AGAINST FLOOR WITH INSULATION SUPPORT WIRE.
- 5. INTERIOR DOOR. REFER TO DOOR SCHEDULE.
- 6. EXTERIOR WINDOW, TYPICAL, REFER TO WINDOW ELEVATIONS.
- 7. PROVIDE STONE VENEER, REFER TO WALL TYPES.
- 8. PROVIDE BEAM, REFER TO STRUCTURAL PLANS.
- 9. PROVIDE ROOF JOIST, REFER TO STRUCTURAL PLANS.
- 10. 3/4" NO GROOVE SIDING.
- 11. PROVIDE R-38 CLOSED CELL SPRAY FOAM INSULATION.
- 12. PROVIDE CONCRETE FOOTING, REFER TO STRUCTURAL PLANS.
- 13. PROVIDE 2" RIGID INSULATION FROM THE FLOOR EXTENDING DOWNWARD ALONG THE STEM WALL TO THE FINISHED GROUND LEVEL, THEN EXTEND HORIZONTALLY ALONG FINISHED GROUND 24".
- 14. FLOOR JOIST, REFER TO STRUCTURAL
- 15. PROVIDE PLASTER SOFFIT SYSTEM TO MATCH WALL FINISH.
- 16. PROVIDE BARN DOOR, REFER TO REFERENCE FLOOR PLAN AND DOOR SCHEDULE.
- 17. APPROXIMATE LINE OF EXISTING GRADE.
- 18. EXTERIOR DOOR, REFER TO REFERENCE FLOOR PLAN AND DOOR SCHEDULE.
- 19. PROVIDE ROCK / STUCCO DECORATIVE CHIMNEY SURROUNDING VENT PIPE. 20. PROVIDE WOOD COLUMN, REFER TO
- STRUCTURAL PLANS.
 21. PROVIDE SHEET METAL PARAPET CAP.

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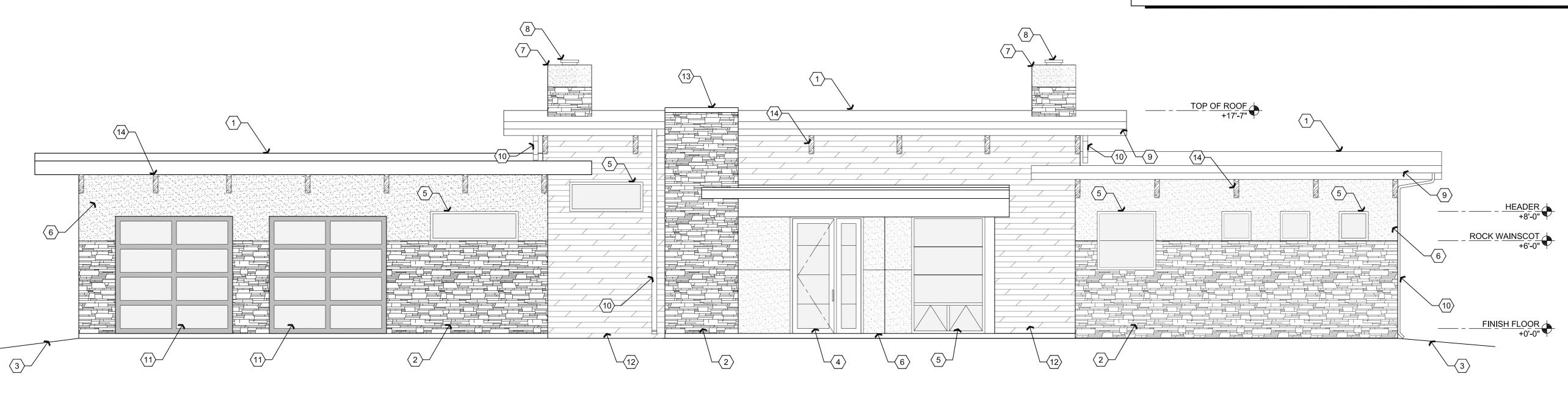
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Scale: 1/4"=1'-0"

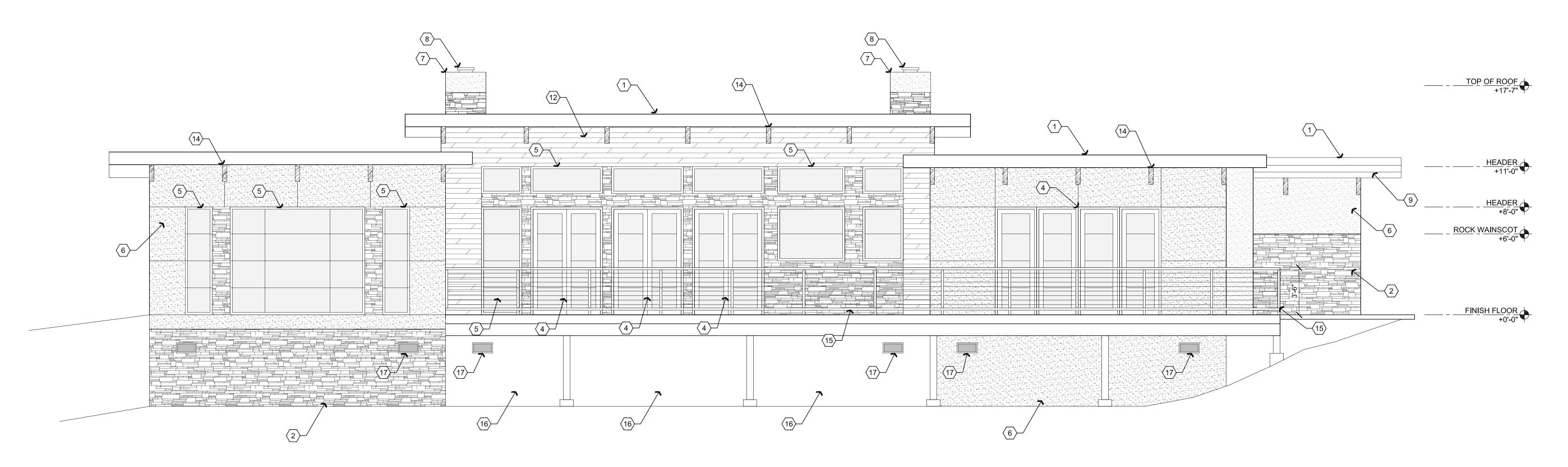


- 1. PROVIDE TPO ROOFING.
- PROVIDE STONE VENEER FINISH, REFER TO WALL TYPES PLAN.
- 3. FINISH GRADE TO SLOPE AWAY FROM STRUCTURE.
- 4. EXTERIOR DOOR. REFER TO REFERENCE FLOOR PLAN AND DOOR SCHEDULE.
- EXTERIOR WINDOW. REFER TO WINDOW TYPES
 PROVIDE WESTERN ONE COAT STUCCO SYSTEM WITH SYNTHETIC INTEGRAL COLOR FINISH OVER 1-1/2" POLYSTYRENE OVER WEATHER PROOF
- BARRIER.
 7. PROVIDE SIMULATED CHIMNEY WITH INDICATED FINISHES.
- 8. PROVIDE CHIMNEY FLUE WITH FLASHING REQUIRED BY MANUFACTURER.
- 9. PROVIDE SEAMLESS SHEET METAL GUTTER SYSTEM.
- 10. PROVIDE SHEET METAL DOWNSPOUT.
- 11. GARAGE DOOR, REFER TO REFERENCE FLOOR PLAN AND DOOR SCHEDULE.
- 12. PROVIDE PRE-FINISHED 'HARDIE BOARD' SIDING, REFER TO WALL TYPES PLAN.
- 13. PROVIDE BLACK SHEET METAL PARAPET CAP.
- 14. PROVIDE BEAM, REFER TO STRUCTURAL PLANS.15. PROVIDE SAFETY RAILING, REFER TO DETAIL
- A1/A5.0. 16. OPEN AREA UNDER DECKING.
- 17. 1'-4'x8" CRAWL SPACE VENT (TOTAL OF 9).



East Elevation

Scale: 1/4''=1'-0



West Elevation

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

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T: Randall Residence

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June 21st, 2019

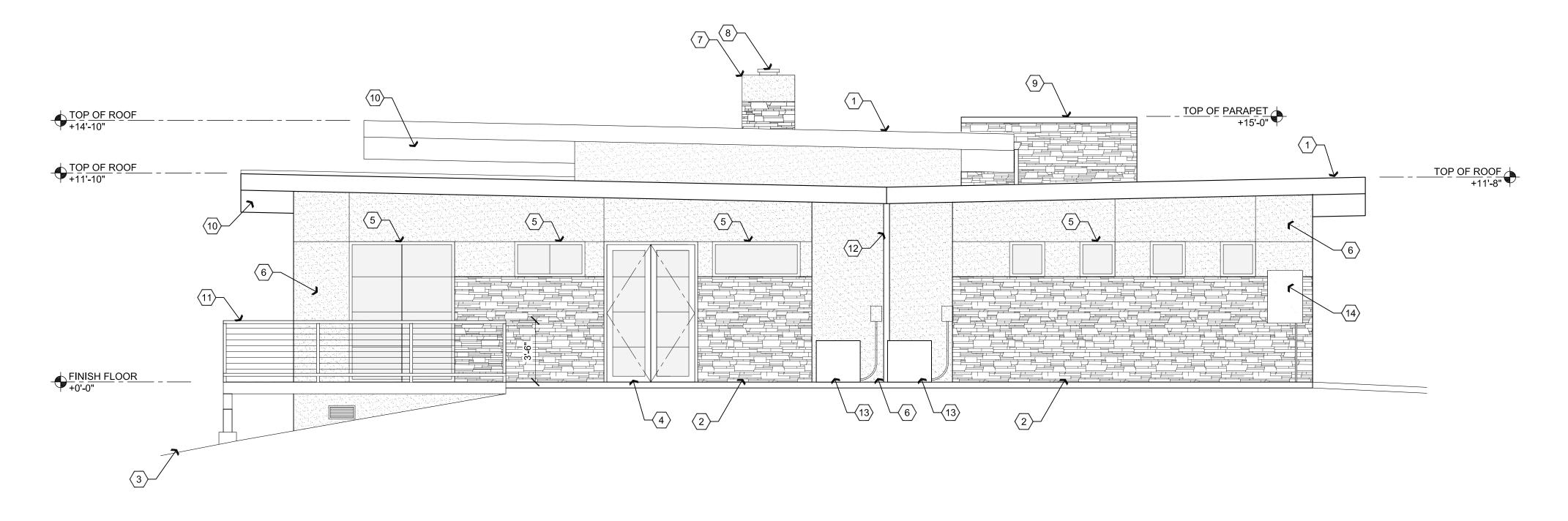
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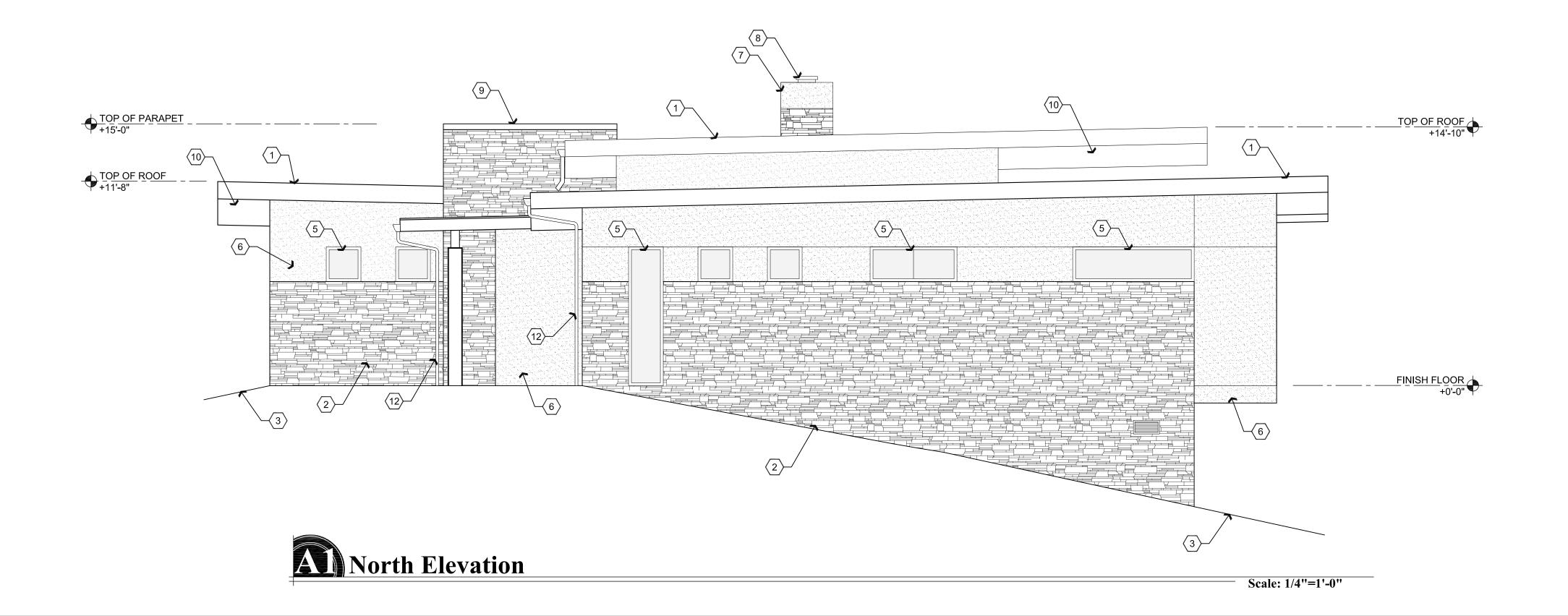
- 1. PROVIDE TPO ROOFING.
- 2. PROVIDE STONE VENEER FINISH, REFER TO WALL TYPES PLAN.
- FINISH GRADE TO SLOPE AWAY FROM STRUCTURE.
- 4. EXTERIOR DOOR. REFER TO REFERENCE FLOOR PLAN AND DOOR SCHEDULE.
- EXTERIOR WINDOW. REFER TO WINDOW TYPES
 PROVIDE WESTERN ONE COAT STUCCO SYSTEM WITH SYNTHETIC INTEGRAL COLOR FINISH OVER 1-1/2" POLYSTYRENE OVER WEATHER PROOF BARRIER, REFER TO WALL TYPES PLAN.
- 7. PROVIDE SIMULATED CHIMNEY WITH INDICATED FINISHES.
- 8. PROVIDE CHIMNEY FLUE WITH FLASHING AS
- REQUIRED BY MANUFACTURER.

 9. PROVIDE BLACK SHEET METAL PARAPET CAP.
- 10. PROVIDE BEAM, REFER TO STRUCTURAL PLANS.11. PROVIDE SAFETY RAILING, REFER TO DETAIL A1/A5.0.
- 12. PROVIDE SHEET METAL DOWNSPOUT TO BELOW GRADE DRAINAGE SYSTEM.
- 13. PROVIDE HVAC CONDENSER, REFER TO MECHANICAL PLANS.
- 14. ELECTRICAL SERVICE ENTRANCE SECTION, REFER TO ELECTRICAL PLANS.





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



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P 928-443. F 928-443.

andall Residence 9 Wildwood Dr. rescott, AZ 86305

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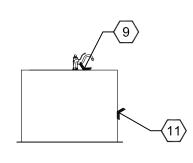
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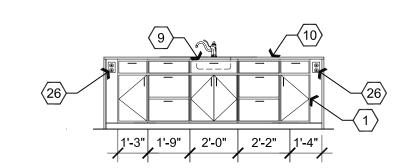
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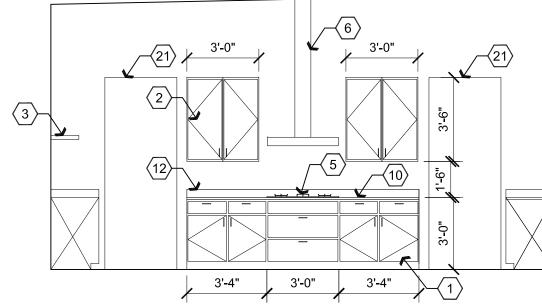
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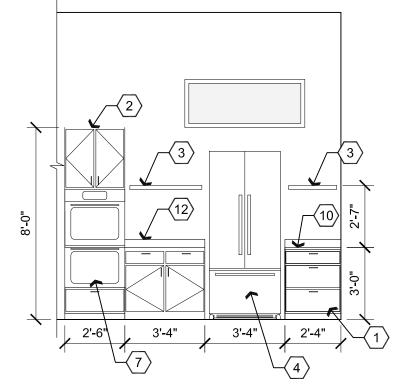


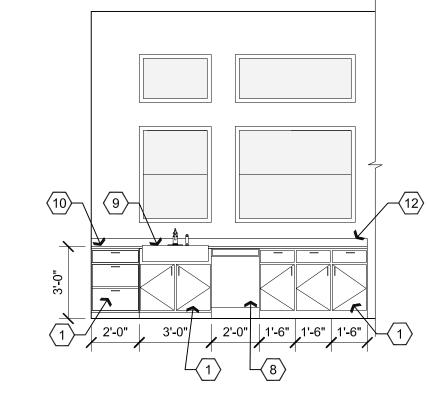












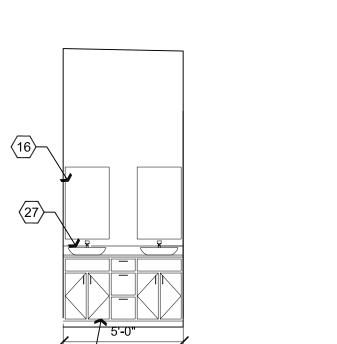


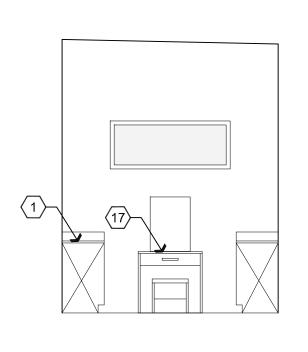


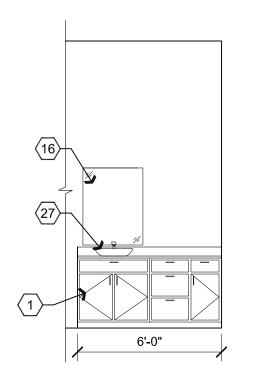


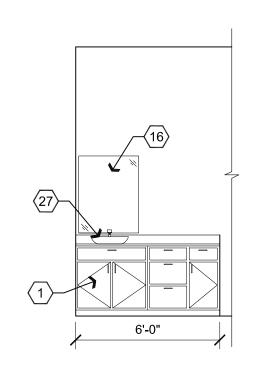


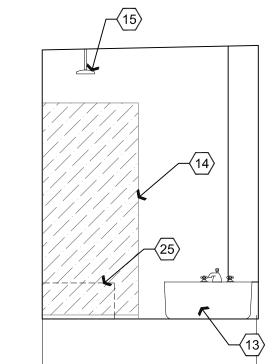
Kitchen Elevation
Scale: 1/4"=1'-0"











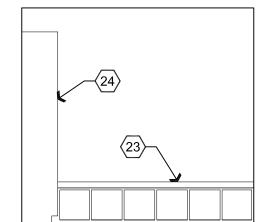




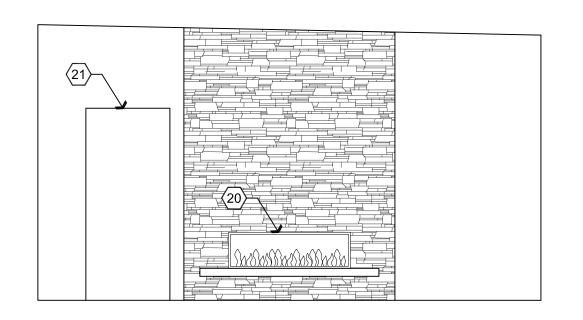


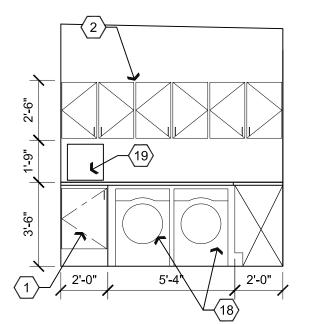






B Mudroom Elevation
Scale: 1/4"=1'-0"













1. PROVIDE WOOD BASE CABINETRY AS SELECTED BY OWNER.

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2. PROVIDE WOOD UPPER CABINETRY

AS SELECTED BY OWNER.

3. PROVIDE OPEN SHELVING. 4. REFRIGERATOR/FREEZER BY OWNER

5. COOKTOP BY OWNER.

6. RANGE HOOD BY OWNER.

7. DOUBLE OVENS BY OWNER.

8. DISHWASHER BY OWNER. 9. SINK AS SELECTED BY OWNER.

10. COUNTERTOP AS SELECTED BY

11. PROVIDE WATERFALL COUNTERTOP.

12. BACKSPLASH AS SELECTED BY

13. PROVIDE BATH TUB AS SELECTED BY

14. PROVIDE GLASS SHOWER WALL.

15. PROVIDE RAIN SHOWER HEAD.

16. PROVIDE MIRROR AS SELECTED BY

17. FURNITURE PROVIDED BY OWNER. 18. CLOTHES WASHER AND DRYER BY

OWNER. STUB OUT FOR GAS. 19. PROVIDE LAUNDRY OPENING INTO

CLOSET WITH FACE FRAME DOOR IN CLOSET SIDE. 20. FIREPLACE WITH CONCRETE HEARTH

BY OWNER.

21. OPENING INTO HALLWAY.

22. COUNTERTOP SUPPORT AS REQUIRED.

23. PROVIDE MUD ROOM BENCH WITH STORAGE CUBBIES UNDER SEAT.

24. PROVIDE TALL CABINETRY STORAGE AS SELECTED BY OWNER.

25. SHOWER SEAT AT 18" HIGH x 36" WIDE x 12" DEEP.

26. ELECTRIC OUTLET IN CABINET FILLER. 27. PROVIDE VANITY AS SELECTED BY OWNER.

3'-0" 2'-3" 2'-3"

Fireplace Elevation
Scale: 1/4"=1'-0"

Laundry Elevation
Scale: 1/4"=1'-0"

A7.0

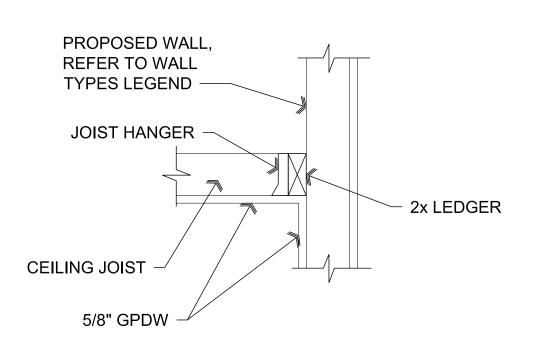
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June 21st, 2019

JOB NO. **703**

SHEET



Descriptive Keynotes

2x4 WOOD JOIST FRAMING AT 2'-0" O.C.
 2x4 WOOD JOIST FRAMING AT 2'-0" O.C.
 SISTERED TO ROOF JOISTS TO CREATE LEVEL CEILING, REFER TO BUILDING SECTION A2/A5.0.

Ceiling Joist Connection DOJO 110 COVERED DECK MASTER BEDROOM 119 CLOSET 120 109 HALLWAY HALLWAY 113 MASTER BATH BEDROOM 1 108 KITCHEN 103 PANTRY 🛧 W.C. GREAT ROOM 102 MUDROOM 105 CLOSET 117 LAUNDRY 112 GARAGE 106 PD. RM. FRONT PORCH Ceiling Framing Plan

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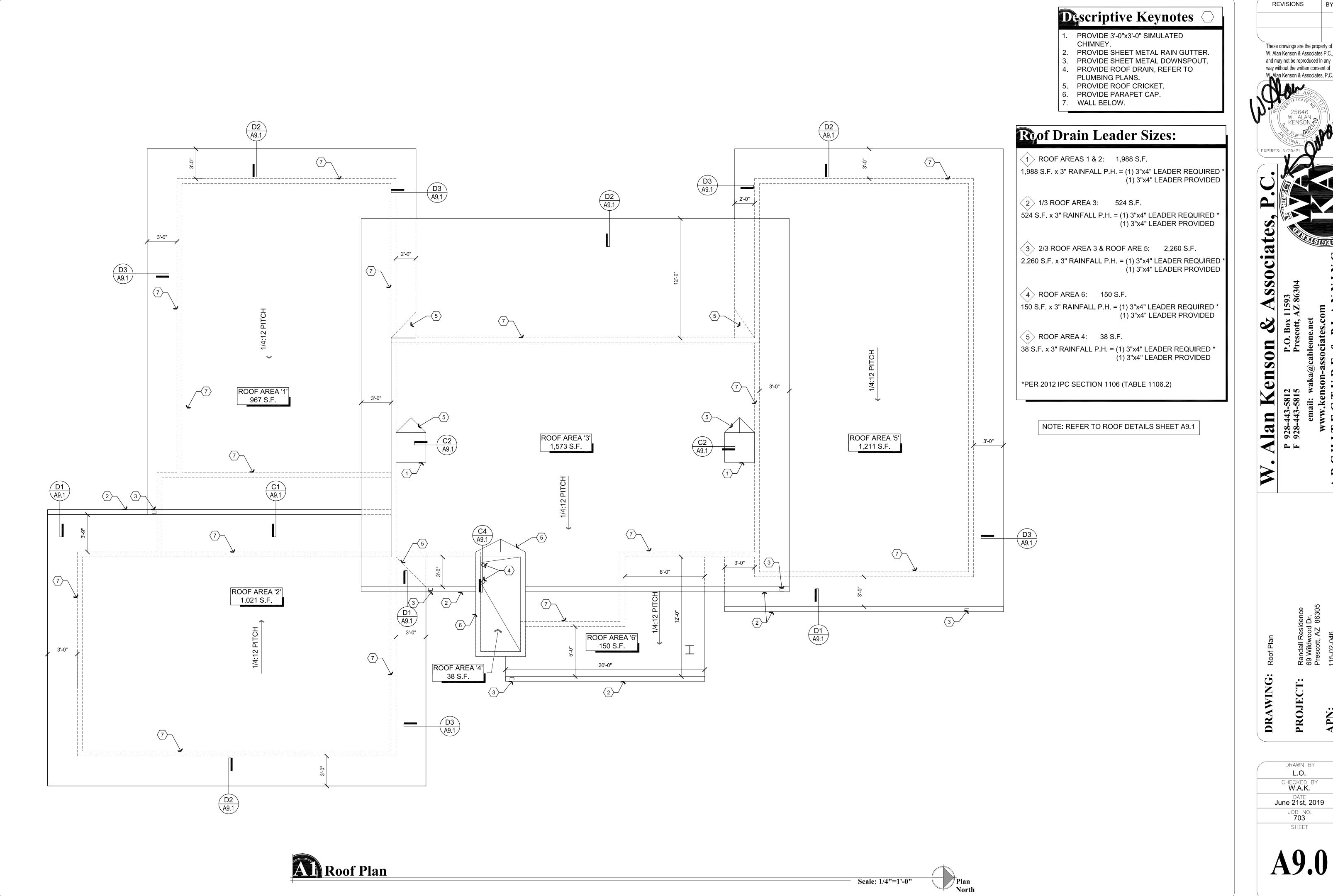
JECT: Randall Residence 69 Wildwood Dr.

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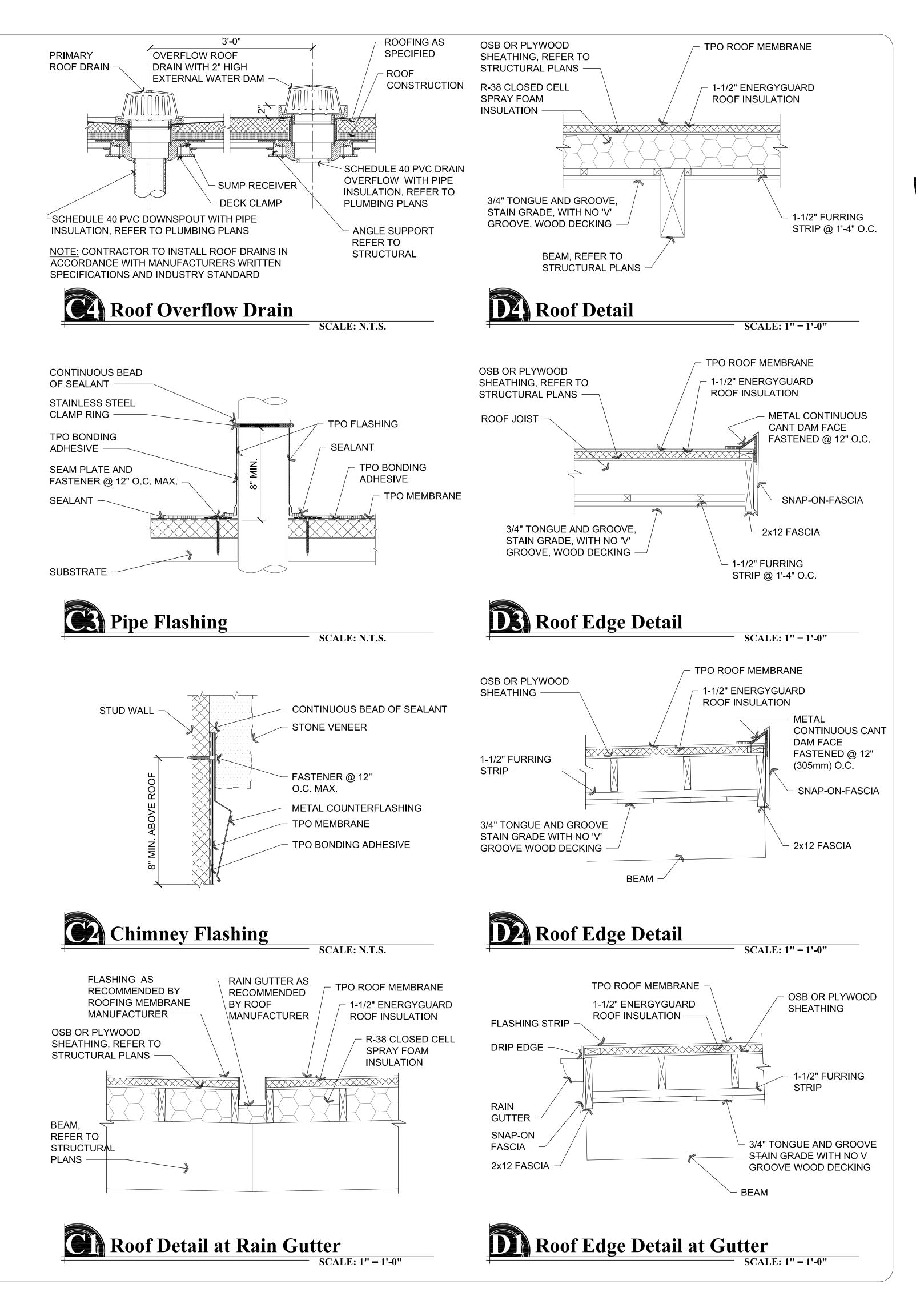
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Jun 21, 2019 - 9:16am

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June 21st, 2019

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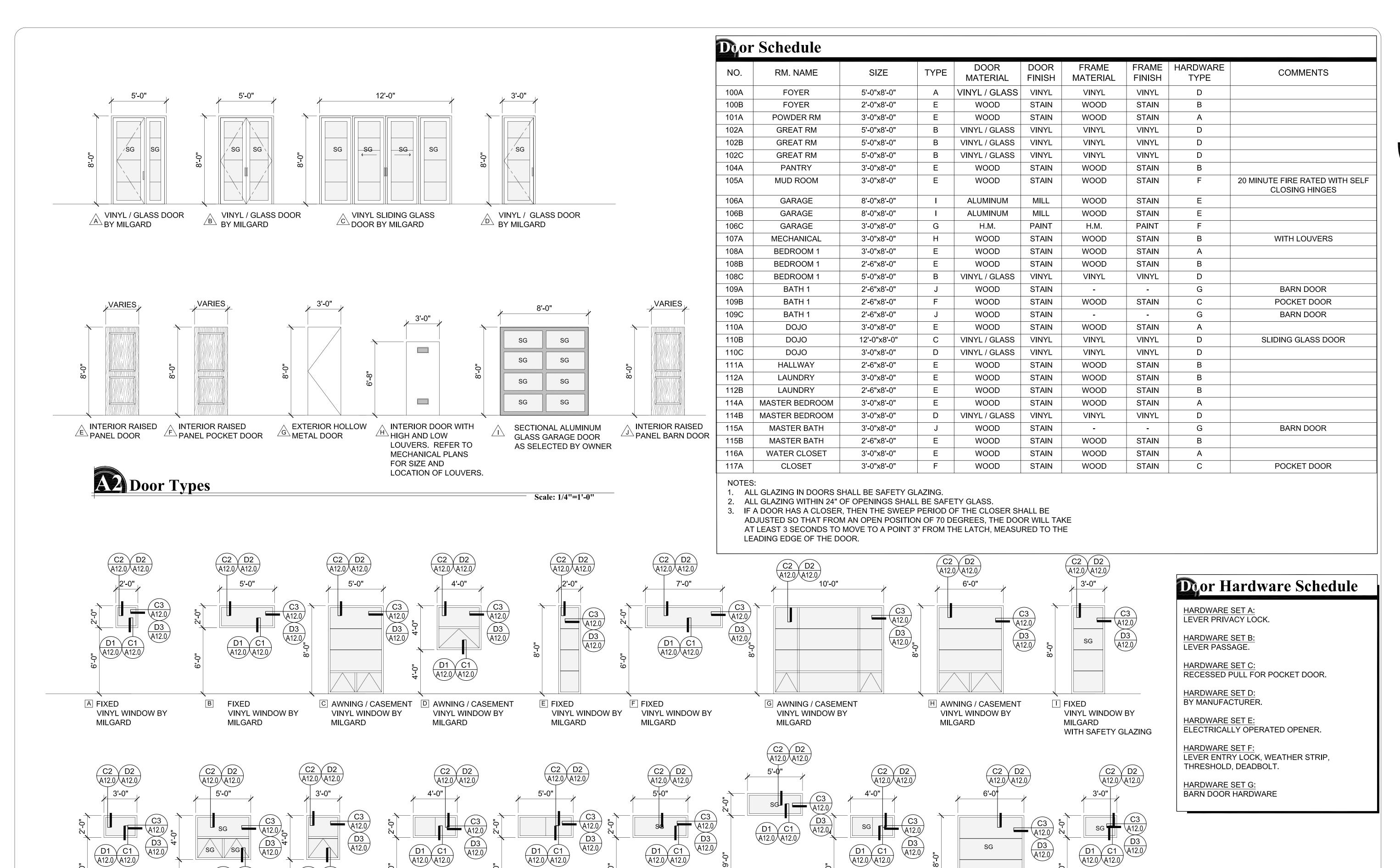
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Window Types

VINYL WINDOW BY

J FIXED

MILGARD

D1 C1 A12.0 A12.0

K AWNING / CASEMENT

VINYL WINDOW BY

WITH SAFETY GLAZING

MILGARD

D1 C1 A12.0 A12.0

MILGARD

L AWNING / CASEMENT M SLIDER

VINYL WINDOW BY

N SLIDER

MILGARD

VINYL WINDOW BY

VINYL WINDOW BY

MILGARD

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

FIXED

MILGARD

VINYL WINDOW BY

Q SLIDER

WITH SAFETY GLAZING WITH SAFETY GLAZING

MILGARD

VINYL WINDOW BY

FIXED

MILGARD

VINYL WINDOW BY

WITH SAFETY GLAZING

SG SG

R AWNING / CASEMENT

VINYL WINDOW BY

WITH SAFETY GLAZING

MILGARD

S FIXED

MILGARD

VINYL WINDOW BY

WITH SAFETY GLAZING

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P 928-443-5812 P.O.

C

088

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Randall Residence 69 Wildwood Dr. Prescott, AZ 86305 115-02-046

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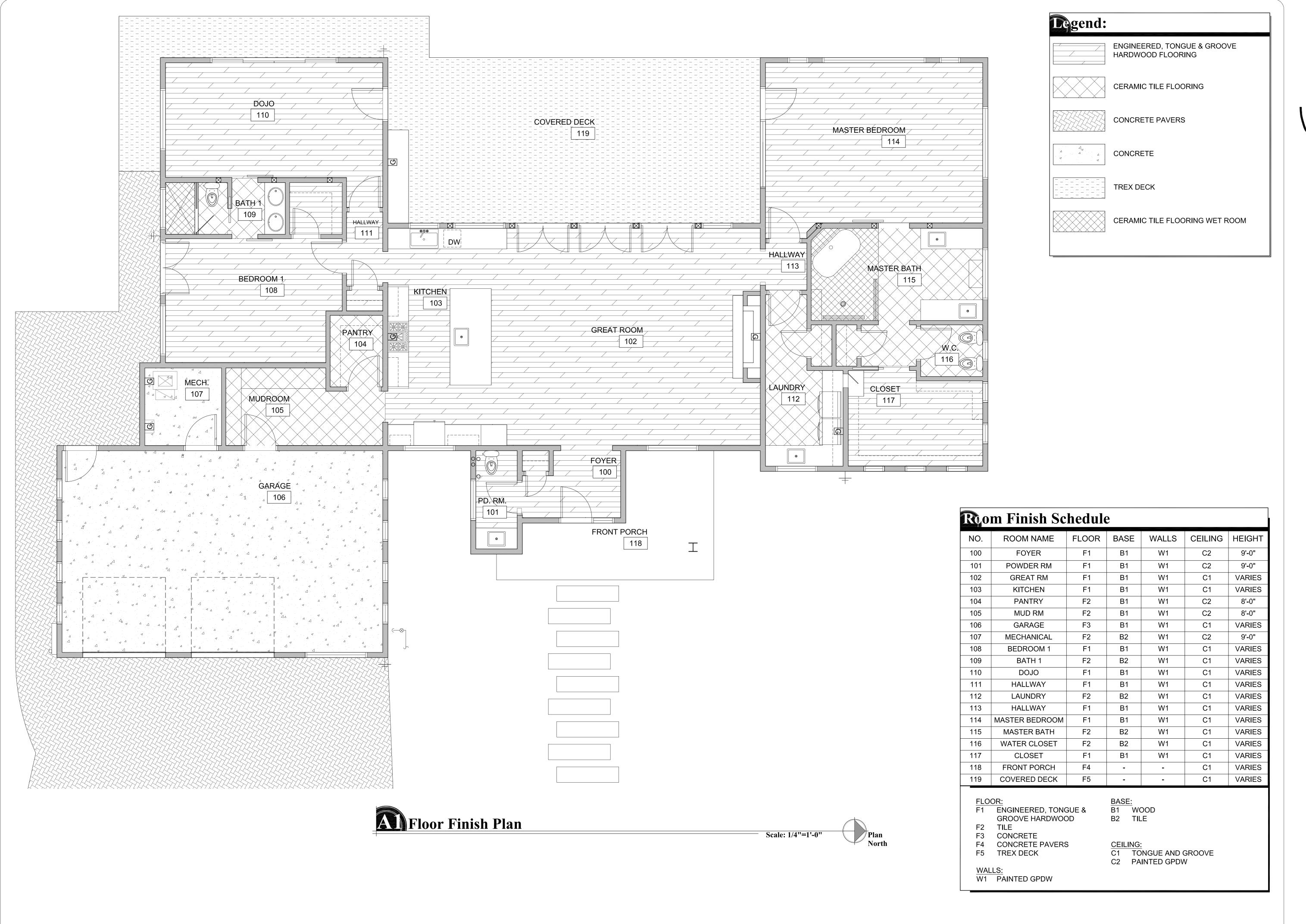
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W.A.K.

DATE
June 21st, 2019

JOB NO. **703** SHEET

A10.0



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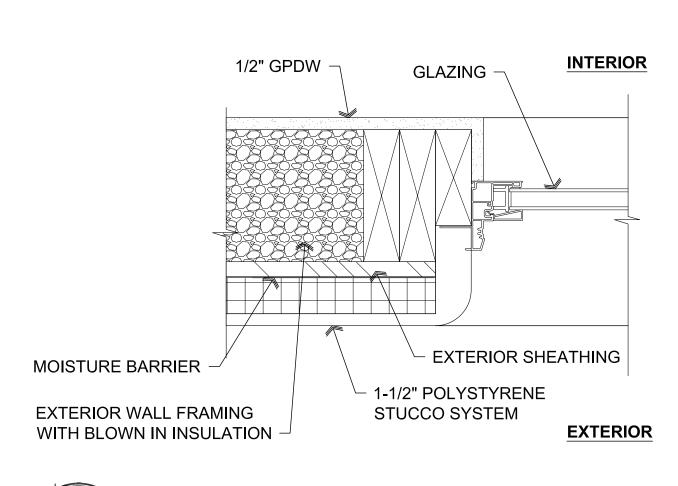
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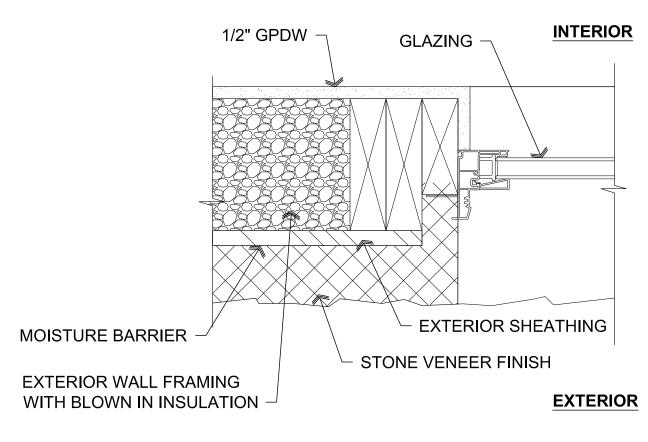
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June 21st, 2019

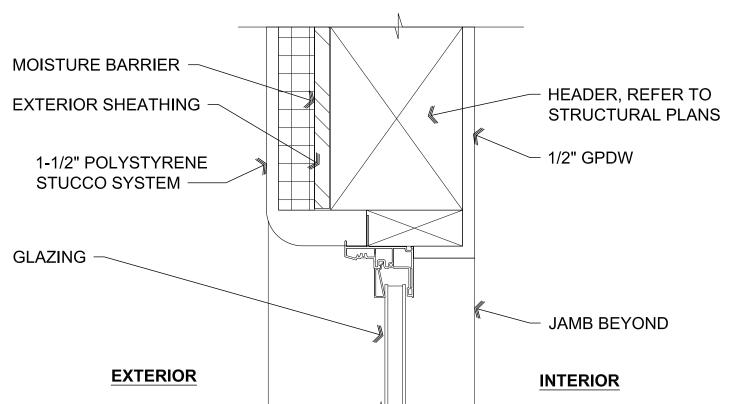
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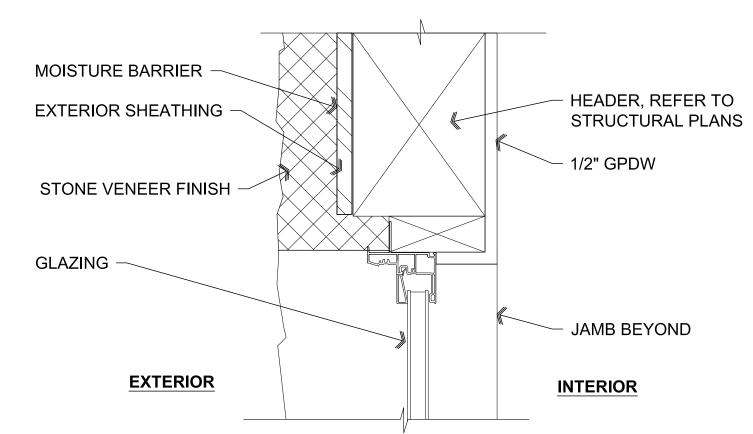




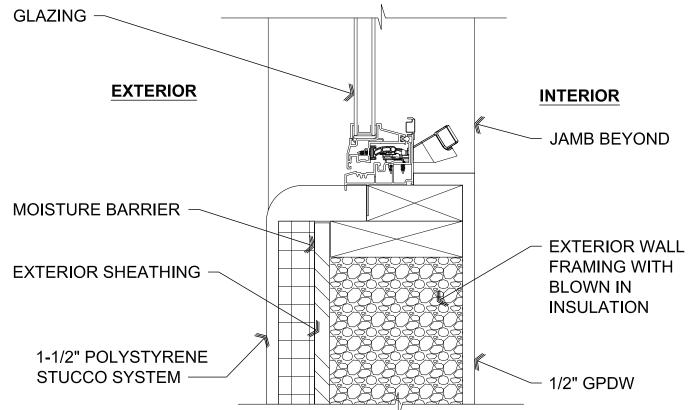
Window Jamb with Stucco SCALE: 3" = 1'-0"

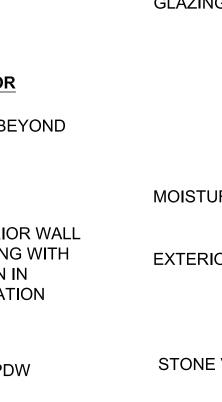


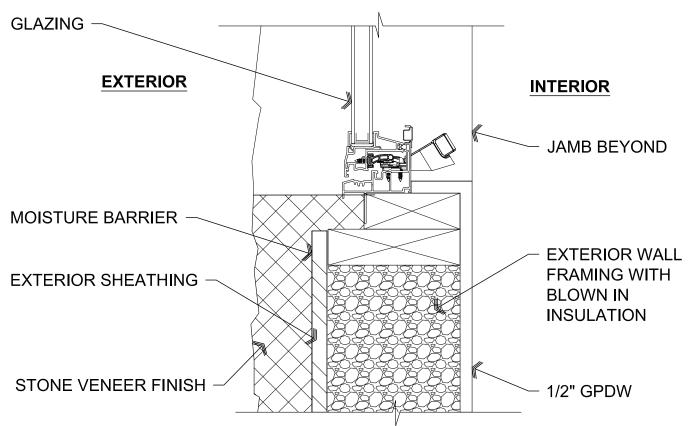
Window Jamb with Stone Veneer SCALE: 3" = 1'-0"



Window Head with Stucco







Window Head with Stone Veneer

SCALE: 3" = 1'-0"

Window Sill with Stone Veneer

SCALE: 3" = 1'-0"

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A12.0

Window Sill with Stucco

GENERAL REQUIREMENTS:

- 1. THESE DRAWINGS, AND THEIR ASSOCIATED STRUCTURAL CALCULATIONS, HAVE BEEN PERFORMED USING STANDARDS OF PROFESSIONAL CARE AND COMPLETENESS NORMALLY EXERCISED UNDER SIMILAR CIRCUMSTANCES BY REPUTABLE STRUCTURAL ENGINEER'S IN THIS OR SIMILAR LOCALITIES. THEY NECESSARILY ASSUME THAT THE WORK DEPICTED WILL BE PERFORMED BY AN EXPERIENCED CONTRACTOR AND/OR WORKMEN WHO HAVE A WORKING KNOWLEDGE OF THE INTERNATIONAL BUILDING CODE CONVENTIONAL FRAMING REQUIREMENTS AND OF INDUSTRY ACCEPTED STANDARD GOOD PRACTICE. AS NOT EVERY CONDITION OR FRAMING ELEMENT IS (OR CAN BE) EXPLICITLY SHOWN ON THESE DRAWINGS, IT IS UNDERSTOOD THAT THE CONTRACTOR WILL USE INDUSTRY ACCEPTED STANDARD GOOD PRACTICE FOR ALL MISCELLANEOUS WORK NOT EXPLICITLY SHOWN.
- 2. THESE DRAWINGS REPRESENT THE FINISHED STRUCTURE. THEY DO NOT INDICATE THE METHOD OF CONSTRUCTION. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES. CONSTRUCTION MATERIALS SHALL BE SPREAD OUT IF PLACED ON FRAMED CONSTRUCTION SUCH THAT DESIGN LIVE LOAD PER SQUARE FOOT AS STATED HEREIN IS NOT EXCEEDED. OPTIONS ARE FOR CONTRACTOR'S CONVENIENCE. IF AN OPTION IS USED, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL NECESSARY CHANGES, AND SHALL COORDINATE ALL DETAILS, AT NO ADDITIONAL COST TO OWNER.
- 3. WHERE DISCREPANCIES OCCUR BETWEEN PLANS, DETAILS, GENERAL STRUCTURAL NOTES AND SPECIFICATIONS, THE GREATER REQUIREMENTS SHALL GOVERN. TYPICAL DETAILS AND NOTES ARE NOT NECESSARILY INDICATED ON THE PLANS, BUT SHALL APPLY NONE-THE-LESS. WHERE NO DETAILS ARE SHOWN, CONSTRUCTION SHALL CONFORM TO SIMILAR WORK ON THE PROJECT. DETAILS MAY SHOW ONLY ONE SIDE OF CONNECTION OR MAY OMIT INFORMATION FOR CLARITY.
- 4. ESTABLISH AND VERIFY ALL OPENINGS AND INSERTS FOR ARCHITECTURAL, MECHANICAL, PLUMBING AND ELECTRICAL WITH APPROPRIATE TRADES, DRAWINGS AND SUBCONTRACTORS PRIOR TO CONSTRUCTION. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF ALL DIMENSIONS WITH ARCHITECTURAL DRAWINGS PRIOR TO START OF CONSTRUCTION. RESOLVE ANY DISCREPANCY WITH THE ARCHITECT AND STRUCTURAL
- 5. ANY INSPECTIONS, SPECIAL (IBC CHAPTER 17) OR OTHERWISE THAT ARE REQUIRED BY THE BUILDING CODES, LOCAL BUILDING DEPARTMENTS, OR BY THESE PLANS SHALL BE DONE BY AN INDEPENDENT INSPECTION COMPANY OR THE BUILDING DEPARTMENT, SITE VISITS BY THE STRUCTURAL ENGINEER DO NOT CONSTITUTE AN OFFICIAL INSPECTION, UNLESS SPECIFICALLY CONTRACTED FOR.

BASIS FOR DESIGN:

1. BUILDING CODE: 2012 EDITION OF THE IBC WITH CITY/COUNTY AMENDMENTS.

2. VERTICAL LOADS:

RISK CATEGORY = II

LOCATION	LIVE / SNOW LOAD	DEAD LOAD
ROOF	30 PSF	18 PSF
FLOOR	40 PSF	20 PSF

3. SEISMIC DESIGN PARAMETERS:

5. SEISIMIC DESIGN I ANAMETERS.	
ANALYSIS PROCEDURE	EQUIVALENT LATERAL FORCE PROCEDURE
IMPORTANCE FACTOR	le = 1.00
SITE CLASS	D
SEISMIC DESIGN CATEGORY	С
SPECTRAL RESPONSE ACCELERATIONS	Sms = 0.532, Sm1 = 0.244
SPECTRAL RESPONSE COEFFICIENTS	Sds = 0.355, Sd1 = 0.163
HORIZONTAL SHEAR TRANSFER ELEMENT	S:
PLYWOOD — FLEXIBLE DIAPHRAM(S)	R = 6.5
VERTICAL SHEAR TRANSFER ELEMENTS:	
GYPBOARD SHEARWALL(S)	R = 2.0
PLYWOOD SHEARWALL(S)	R = 6.5

4. WIND DESIGN PARAMETERS (STRENGTH):

ULTIMATE WIND SPEED	115 MPH (3 SECOND GUST)
WIND EXPOSURE	С
IMPORTANCE FACTOR	Iw = 1.00
INTERNAL PRESSURE COEFFICIENT	-0.18
COMPONENT AND CLADDING PRESSURE	18.6 PSF
NET UPLIFT ON ROOF	31.5 PSF

GENERAL STRUCTURAL NOTES

1. MINIMUM 28 DAY CONCRETE STRENGTH SHALL BE AS FOLLOWS:

CONCRETE:

(APPLY UNLESS NOTED OTHERWISE ON PLANS/DETAILS)

FOUNDATION NOTES:

- 1. FOUNDATIONS DESIGNED IN CONFORMANCE WITH RECOMMENDATIONS BY: ENGINEERING TESTING CONSULTANTS, INC. REPORT NO. 9734 DATED NOVEMBER 8, 2017.
- 2. SITE PREPARATION AND GRADING REQUIREMENTS OF THE SOIL REPORT AND ANY ADDENDUM'S SHALL BE COMPLETED PRIOR TO CONSTRUCTION OF FOUNDATIONS. ANY TESTS OR INSPECTIONS REQUIRED BY THE SOIL REPORT SHALL BE PERFORMED PRIOR TO PLACEMENT OF FOUNDATION REINFORCING STEEL OR CONCRETE. ALTERATIONS TO SITE PREPARATION OR GRADING SHALL BE REPORTED TO THE GEOTECHNICAL ENGINEER PRIOR TO FOUNDATION CONSTRUCTION.

THE SOIL DESIGN VALUES FOR THE FOUNDATION ARE:

ALLOWABLE BEARING PRESSURE	3000 PSF
ALLOWABLE LATERAL BEARING PRESSURE	400 PSF/FT
ALLOWABLE LATERAL SLIDING COEFFICIENT	0.38
LATERAL BACKFILL PRESSURE (UNRESTRAINED)	35 PSF/FT
LATERAL BACKFILL PRESSURE (RESTRAINED)	56 PSF/FT
SITE CLASS	D

3. A ONE-THIRD INCREASE IN BEARING PRESSURES IS ALLOWED WITH SEISMIC OR WIND LOAD COMBINATIONS. LATERAL BEARING AND LATERAL SLIDING RESISTANCE MAY BE COMBINED.

FOUNDATION BEARING DEPTH	
30" BELOW FINISHED GRADE	

- 4. ALL FOUNDATIONS SHALL BEAR ON FIRM NATIVE GRANULAR SOIL 30 INCHES MINIMUM BELOW FINISH GRADE. GRADE IS DEFINED AS TOP OF SLAB FOR INTERIOR FOOTINGS AND LOWEST ADJACENT GRADE WITHIN 5 FEET OF THE BUILDING FOR PERIMETER FOOTINGS. WHERE EXTERIOR PAVING OR CONCRETE IS DIRECTLY ADJACENT TO BUILDING, GRADE IS DEFINED AS TOP OF EXTERIOR PAVING AT LEAST 5 FEET FROM BUILDING. CONCRETE FOOTING EXCAVATIONS SHALL BE CLEAN AND FREE OF LOOSE DEBRIS OR UN-COMPACTED MATERIAL AT TIME OF CONCRETE PLACEMENT.
- 5. CONCRETE SLABS ON GRADE SHALL BE SUPPORTED ON A 10 INCH LAYER OF SELECT FILL MATERIAL ACCORDING TO THE SPECIFICATIONS OF THE SOIL REPORT. FILL MATERIAL SHOULD BE MOISTENED, BUT NOT SATURATED JUST PRIOR TO PLACING CONCRETE.
- 6. BACKFILL AGAINST RESTRAINED WALLS SHALL NOT BE PLACED UNTIL AFTER THE WALLS ARE SUPPORTED BY THE COMPLETION OF INTERIOR FLOOR SYSTEMS AND CONCRETE OR GROUT STRENGTH HAS REACHED THE 28 DAY STRENGTH LISTED BELOW.

MASONRY (CONCRETE BLOCK):

USE:	CONCRETE STRENGTH:	REMARKS:	1. VERTICAL REINFORCING: ;
FOUNDATIONS	2500 PSI	DESIGNED FOR 2500 PSI	IN GROUTED CELL AND A OVER LINTELS, AND EACH ON PLANS/DETAILS). TIE
CONCRETE SLABS ON GRADE	3000 PSI	W/O INSPECTION	EQUIVALENT. DOWEL ALL VERTICAL WALL OR COLU

- 2. ALL NORMAL WEIGHT CONCRETE SHALL BE REGULAR WEIGHT OF 150 POUNDS PER CUBIC FOOT USING HARD-ROCK AGGREGATES. AGGREGATE USED IN CONCRETE SHALL CONFORM TO ASTM C67 FOR 3/4", ASTM C57 FOR 1" AND ASTM C467 FOR 11/2" AGGREGATE.
- 3. TENSION LAP SPLICES OF REINFORCING STEEL IN CONCRETE SHALL BE AS FOLLOW:

REBAR SIZE	STANDARD LAP	RETAINING WALLS (AT FACE OF WALL)
#3	20"	20"
#4	32"	41"
#5	39"	51"
#6	47"	61"

LAP SPLICES FOR BEAMS AND FLOOR SLABS SHALL BE ACCORDING TO CHAPTER 12 OF ACI 318 OR LAP SCHEDULE ON THESE DRAWINGS.

NO TACK WELDING OF REINFORCING BARS ALLOWED WITHOUT PRIOR REVIEW OF PROCEDURE WITH THE STRUCTURAL ENGINEER. LATEST ACI CODE AND DETAILING MANUAL APPLY. PROVIDE BENT CORNER BARS TO MATCH AND LAP WITH HORIZONTAL BARS AT ALL CORNERS AND INTERSECTIONS PER TYPICAL DETAILS. VERTICAL WALL BARS SHALL BE SPLICED AT OR NEAR FLOOR LINES.

4. ALL DIMENSIONS SHOWING THE LOCATION OF REINFORCING STEEL NOT NOTED AS "CLEAR" OR "CLR" ARE TO CENTER OF STEEL. MINIMUM COVER FOR NON-PRESTRESSED CONCRETE REINFORCING SHALL BE AS FOLLOWS:

LOCATION:	MINIMUM COVER	TOLERANCE
CAST AGAINST EARTH (FOOTINGS)	3"	± ¾"
SLABS ON GRADE	1½"	± 1/4"
BEAMS AND COLUMNS (PRIMARY) REINFORCEMENT, TIES, STIRRUPS AND SPIRALS	1½"	3%"

- 5. MAXIMUM SLUMP FOR ALL CONCRETE SHALL BE 4". SLUMP FOR EXTERIOR SLABS SHALL BE 6". PORTLAND CEMENT SHALL CONFORM TO ASTM C150. TYPE V CEMENT SHALL BE USED FOR CONCRETE IN CONTACT WITH ALKALINE SOIL, AND TYPE II ELSEWHERE.
- 6. NO MORE THAN 90 MINUTES SHALL ELAPSE BETWEEN CONCRETE BATCHING AND CONCRETE PLACEMENT UNLESS APPROVED BY THE TESTING AGENCY.
- 7. CONCRETE PLACEMENT AND QUALITY SHALL BE PER RECOMMENDATIONS IN ACI 614, ACI 301 AND ACI 318. MECHANICALLY VIBRATE ALL CONCRETE WHEN PLACED, EXCEPT THAT SLABS ON GRADE NEED BE VIBRATED ONLY AROUND AND UNDER FLOOR DUCTS, ETC. CAST CLOSURE POUR, WHERE SHOWN ON PLANS AROUND COLUMNS AFTER COLUMN DEAD LOAD IS APPLIED. REMOVE ALL DEBRIS FROM FORMS BEFORE PLACING CONCRETE.

ALL ITEMS TO BE CAST IN CONCRETE SUCH AS REINFORCING, DOWELS, BOLTS, ANCHORS, PIPES, SLEEVES, ETC., SHALL BE SECURELY POSITIONED IN THE FORMS BEFORE PLACING THE CONCRETE.

- 8. ALL CONCRETE SLABS ON GRADE SHALL BE DIVIDED INTO AREAS BY CONTROL JOINTS (KEYED OR SAW CUT) SUCH THAT ONE SLAB AREA DOES NOT EXCEED 250 SQUARE FEET, OR BE MORE THAN TWO TIMES LONGER THAN THE SLAB AREA WIDTH. THE FOUNDATION PLAN SHOWS A SUGGESTED METHOD OF CONTROL JOINT LAYOUT. IT IS RECOMMENDED THAT SAW CUTS BE MADE WITHIN 16 HOURS OF CONCRETE BATCHING.
- KEYED CONTROL JOINTS NEED ONLY OCCUR AT EXPOSED EDGES DURING POURING, ALL OTHER JOINTS MAY BE SAW CUT.
- 9. HORIZONTAL PIPES AND ELECTRICAL CONDUITS SHALL NOT BE EMBEDDED IN STRUCTURAL CONCRETE AND SLABS ON GRADE EXCEPT WHERE SPECIFICALLY APPROVED OR NOTED BY THE STRUCTURAL ENGINEER. PIPES AND CONDUITS SHALL NOT IMPAIR THE STRENGTH OF THE WORK.
- 10. FLY ASH MAY BE USED ONLY IF PERMITTED BY ARCHITECTURAL SPECIFICATIONS AND SHALL BE LIMITED TO 18 PERCENT OF CEMENTITIOUS MATERIALS AND SHALL HAVE A REPLACEMENT FACTOR OF 1.2 RELATIVE TO CEMENT REPLACED. NO FLY ASH ADDITIVES SHALL BE USED IN FLATWORK OR ARCHITECTURALLY EXPOSED CONCRETE.
- 11. COLD/HOT WEATHER CONCRETE CONSTRUCTION: PROTECT CONCRETE FROM DAMAGE OR REDUCED STRENGTH IN COMPLIANCE WITH ACI 305 AND 306.

MINIMUM 28 DAY MASONRY STRENGTH SHALL BE 1500 PSI.

- 5 AT 48 INCHES ON CENTER FULL HEIGHT OF WALL, CENTERED T ALL WALL INTERSECTIONS, CORNERS, WALL ENDS, JAMBS, SIDE OF CONTROL JOINTS (MINIMUM UNLESS NOTED OTHERWISE AT 8'-0" VERTICALLY, WITH SINGLE WIRE LOOP TIE OR REINFORCING TO FOUNDATION WITH DOWELS TO MATCH AND LAP MN REINFORCING
- 2. CONTROL JOINTS: UNLESS NOTED OTHERWISE ON THE PLANS, PLACE CONTROL JOINTS IN MASONRY WALLS SUCH THAT NO STRAIGHT RUN OF WALL EXCEEDS 24'-0". CONTROL JOINTS SHALL NOT OCCUR AT WALL CORNERS, INTERSECTIONS, ENDS, WITHIN 24" OF CONCENTRATED POINTS OF BEARING OR JAMBS, OR OVER OPENINGS UNLESS SPECIFICALLY SHOWN ON THE STRUCTURAL DRAWINGS.
- 3. HORIZONTAL REINFORCING: (MINIMUM UNLESS NOTED OTHERWISE ON PLANS/DETAILS) (2) #4 BARS IN CENTER OF 16 INCH DEEP MINIMUM CONTINUOUS GROUTED BOND BEAM AT ELEVATED FLOOR AND ROOF LINES. FOR 8 INCH THICK WALLS, ONE #4 BAR IN CENTER OF 8 INCH DEEP CONTINUOUS GROUTED BOND BEAM AT INTERVALS NOT TO EXCEED 48 INCHES ON CENTER AND AT TOP OF PARAPET OR FREE STANDING WALLS.

HORIZONTAL BARS AT TOP OF PARAPET OR FREE STANDING WALLS SHALL BE PLACED 8 INCHES DOWN FROM THE TOP IN AN UPSIDE DOWN BOND BEAM BLOCK.

PLACE HORIZONTAL BARS CONTINUOUS THROUGH CONTROL JOINTS. PROVIDE BENT BARS PER TYPICAL DETAILS, TO MATCH HORIZONTAL BOND BEAM REINFORCING, AT CORNERS AND WALL INTERSECTION TO MAINTAIN BOND BEAM CONTINUITY.

4. TENSION LAP SPLICES OF REINFORCING STEEL IN MASONRY SHALL BE AS FOLLOWS:

REBAR SIZE	STANDARD LAP	RETAINING WALLS (AT FACE OF WALL)
#4	24"	30"
#5	30"	46"
#6	43"	55"

- 5. REINFORCING PLACEMENT TOLERANCES: ALL DIMENSIONS SHOWING THE LOCATION OF REINFORCING STEEL NOT NOTED AS "CLEAR" OR "CLR" ARE TO CENTER OF STEEL. TOLERANCES FOR PLACEMENT OF VERTICAL REINFORCING SHALL BE (±) 1/2" PERPENDICULAR TO WALL AND (\pm) 2" ALONG THE LENGTH OF THE WALL. PROVIDE $\frac{1}{2}$ " CLEARANCE BETWEEN MASONRY UNITS AND REINFORCING, AND REINFORCING RUNNING IN THE SAME DIRECTION. LAPS MAY BE BESIDE OR OVER THE REINFORCING BEING SPLICED.
- 6. BLOCK QUALITY: CONCRETE BLOCK SHALL BE HOLLOW LIGHTWEIGHT LOAD-BEARING CONCRETE MASONRY UNITS CONFORMING TO ASTM 90-75 WITH A MINIMUM COMPRESSIVE STRENGTH OF 1900 PSI. USE BOND BEAM UNITS AT HORIZONTAL REINFORCING.
- 7. MORTAR: MORTAR MIX SHALL CONFORM TO REQUIREMENTS OF THE IBC STANDARDS, TYPE M OR S. MORTAR SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 1800 PSI
- 8. GROUT: GROUT SHALL CONFORM TO REQUIREMENTS OF CHAPTER 21 OF THE IBC FOR COARSE GROUT. USE SUFFICIENT WATER FOR GROUT TO FLOW INTO ALL JOINTS OF THE MASONRY WITHOUT SEGREGATION. GROUT SHALL ATTAIN A MINIMUM COMPRESSIVE STRENGTH OF 2000 PSI AT 28 DAYS. ALL CELLS IN CONCRETE BLOCKS CONTAINING REINFORCING SHALL BE FILLED SOLID WITH GROUT. ALL MASONRY BELOW FINISHED FLOOR OR GRADE SHALL BE GROUTED SOLID. ALL GROUT SHALL BE MECHANICALLY VIBRATED.

GROUT LIFTS OF 5 FEET OR LESS IS RECOMMENDED. FOR HIGHER GROUT LIFTS, CLEANOUTS (3"X3") AT THE BOTTOM OF ALL VERTICALLY REINFORCED CELLS SHALL BE PROVIDED. IN ADDITION, MECHANICAL DEVICES SHALL BE USED TO POSITION AND SECURE REINFORCING WHEN GROUT LIFTS EXCEED 5 FEET IN HEIGHT. IN SOLID GROUTED MASONRY, CLEANOUTS SHALL NOT BE SPACED MORE THAN 32" O.C.

- 9. BLOCK CONSTRUCTION: ALL BLOCKS SHALL BE PLACED IN RUNNING BOND CONSTRUCTION (UNLESS OTHERWISE NOTED) WITH ALL VERTICAL CELLS IN ALIGNMENT.
- 10. MISCELLANEOUS LINTELS: FOR MISCELLANEOUS OPENINGS (4'-8" OR LESS) NOT SHOWN ON PLANS OR IN A SCHEDULE, BUT REQUIRED BY OTHER DISCIPLINES (MECHANICAL, ELECTRICAL, PLUMBING, ETC.) THE FOLLOWING OPTIONS MAY BE USED IN 8" MASONRY WALLS:

OPTION #1: GROUTED REINFORCED MASONRY LINTEL: REINFORCE WITH (2) #4 HORIZONTAL BARS IN BOTTOM OF BOND BEAM OR LINTEL BLOCK AND SHALL BE GROUTED SOLID TO A MINIMUM DEPTH OF 12 INCHES. ALL LINTEL REINFORCING AND GROUT SHALL EXTEND 24" PAST JAMBS.

OPTION #2: DOUBLE ANGLE LINTELS: USE (2) L31/2X31/2X1/4 BACK-TO-BACK. PROVIDE 12" MINIMUM OF GROUT OVER LINTELS. BEARING FOR STEEL ANGLE LINTELS SHALL BE $4"(\pm)$ 1" AT EACH JAMB.

OPTION #3: POWERS STEEL LINTEL: PS8-8. GROUT LINTEL 8" DEEP. BEARING FOR POWERS STEEL LINTELS SHALL BE 4" (\pm) 1" AT EACH JAMB.

THESE LINTELS. OR THE OPENING THEY SPAN, SHALL NOT BE PLACED SO AS TO INTERFERE WITH THE REQUIREMENTS OF OTHER STRUCTURAL ELEMENTS (I.E. BOND BEAMS, LINTELS, CONTROL JOINTS, CONCENTRATED POINTS OF BEARING, ETC.) WITHOUT THE PRIOR APPROVAL OF THE STRUCTURAL ENGINEER.

SOLID GROUT SHALL BE PROVIDED BETWEEN WEBS AND MASONRY FACE SHELLS FOR FULL LENGTH OF ALL STEEL LINTELS. MORTAR MAY BE USED FOR GROUT FOR THIS PURPOSE ONLY. FACE UNITS, SOAPS, ROMANS, ETC., SHALL BE LAID WITH FULL HEAD AND BED JOINTS.

FOR ADDITIONAL INFORMATION AT OPENINGS IN MASONRY WALLS, SEE TYPICAL

REINFORCING STEEL:

- 1. ASTM A615 GRADE 60 (FY = 60 KSI) DEFORMED BARS FOR ALL BARS #5 AND LARGER. ASTM A615 GRADE 40 (FY = 40 KSI) DEFORMED BARS FOR ALL BARS #4 AND SMALLER. GRADE 60 DEFORMED BARS SHALL BE USED FOR CONCRETE WALLS, BEAMS, ELEVATED SLABS AND COLUMN REINFORCING.
- WELDING OF REINFORCING BARS SHALL BE MADE ONLY TO ASTM A706 GRADE 60 BARS AND ONLY USING E90 SERIES RODS. WELDING OF REINFORCING BARS SHALL BE MADE ONLY AT LOCATIONS SHOWN ON PLANS
- 3. REINFORCING BAR SPACING GIVEN ARE MAXIMUM ON CENTERS. ALL BARS PER CRSI SPECIFICATIONS AND HANDBOOK. DOWEL ALL VERTICAL REINFORCING TO FOUNDATION. SECURELY TIE ALL BARS IN LOCATION BEFORE PLACING CONCRETE.

- 1. MATERIALS: ROLLED W SHAPES, SHALL CONFORM TO ASTM A992 (FY=50 KSI). ALL OTHER STRUCTURAL STEEL SHAPES, ROLLED SECTIONS, BARS AND PLATES SHALL CONFORM TO ASTM A36 (FY = 36 KSI). ALL PIPE STEEL SHALL BE ASTM A501 (FY = 36 KSI) OR ASTM A53, TYPE E OR S, GRADE B (FY = 35 KSI). ALL TUBULAR STEEL SHALL BE ASTM A500 (FY = 46 KSI).
- 2. ALL BOLTS AND STUDS SHALL BE ASTM A307, UNLESS NOTED OTHERWISE. ALL EXPANSION BOLTS TO HAVE CURRENT ICBO RATING FOR MATERIAL INTO WHICH INSTALLATION TAKES PLACE. HEADED STUDS SHALL CONFORM TO ALL REQUIREMENTS OF THE LATEST EDITION OF THE "RECOMMENDED PRACTICES FOR STUD WELDING" AND THE "STRUCTURAL WELDING CODE" PUBLISHED BY AWS. ALL BOLTS, ANCHOR BOLTS, EXPANSION BOLTS, ETC. SHALL BE INSTALLED WITH STEEL WASHERS AT FACE OF WOOD OR AT SLOTTED HOLES IN STEEL SECTIONS.
- 3. ALL STRUCTURAL AND MISCELLANEOUS STEEL SHALL BE FABRICATED AND ERECTED IN ACCORDANCE WITH AISC SPECIFICATIONS FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS. LATEST EDITION.
- 4. WELDING SHALL BE BY WELDERS HOLDING VALID CERTIFICATES AND HAVING CURRENT EXPERIENCE IN THE TYPE OF WELD SHOWN ON THE DRAWINGS OR NOTES. ALL WELDING SHALL USE E70 SERIES LOW HYDROGEN RODS UNLESS NOTED OTHERWISE. ALL WELDING PER LATEST AMERICAN WELDING SOCIETY STANDARDS. ALL WELDS ON DRAWINGS ARE SHOWN AS SHOP WELDS. CONTRACTOR MAY SHOP WELD OR FIELD WELD AT HIS DISCRETION. ALL FULL PENETRATION WELDS SHALL BE TESTED AND CERTIFIED BY AN INDEPENDENT TESTING LABORATORY.
- 5. STEEL TO STEEL BOLTED CONNECTIONS: HIGH STRENGTH BOLTS SHALL BE ASTM A325N AND SHALL BE INSTALLED AS BEARING-TYPE CONNECTIONS WITH THREADS INCLUDED IN SHEAR PLANE (TYPE "N" CONNECTION). BOLTS MAY BE TIGHTENED USING ANY AISC APPROVED METHOD.
- 6. DRYPACK SHALL BE 5,000 PSI FIVE STAR NON-SHRINK GROUT OR EQUIVALENT. INSTALL DRYPACK UNDER BEARING PLATES BEFORE FRAMING MEMBER IS INSTALLED. AT COLUMNS, INSTALL DRYPACK UNDER BASE PLATES AFTER COLUMN HAS BEEN PLUMBED BUT PRIOR TO FLOOR OR ROOF INSTALLATION.

DRAWING INDEX					
SHEET	DESCRIPTION	DETAILS			
S1.0	GENERAL STRUCTURAL NOTES				
S1.1	GENERAL STRUCTURAL NOTES (CONT.)				
S1.2	TYPICAL DETAILS	T-SERIES			
S1.3	PLAN SCHEDULES				
S2.0	FOUNDATION PLAN				
S3.0	FLOOR FRAMING PLAN				
S3.1	ROOF FRAMING PLAN				
S3.2	HIGH ROOF FRAMING PLAN				
S4.0	FOUNDATION DETAILS	100-SERIES			
S5.0	FRAMING DETAILS	200-SERIES			
S5.1	MORE FRAMING DETAILS	200-SERIES			
S5.2	MORE FRAMING DETAILS	200-SERIES			
S5.3	MORE FRAMING DETAILS	200-SERIES			

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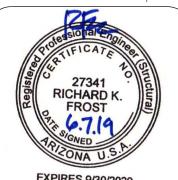
JOB NO.: 2018-0148 PROJECT MANAGER: STANFORD CAD OPERATOR: MJS

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EXPIRES 9/30/2020

MJS CHECKED BY Stanford 6/7/19 AS NOTED

2018-0148

WOOD:

1. SAWN LUMBER: FRAMING LUMBER SHALL COMPLY WITH THE LATEST EDITION OF THE GRADING RULES OF THE WESTERN WOOD PRODUCTS ASSOCIATION (WWPA) OR THE WEST COAST LUMBER INSPECTION BUREAU (WCLIB). ALL SAWN LUMBER SHALL BE STAMPED WITH THE GRADE MARK OF AN APPROVED LUMBER GRADING AGENCY. SAWN LUMBER SHALL HAVE THE FOLLOWING MINIMUM GRADE UNLESS NOTED OTHERWISE IN SCHEDULES:

USE:	MATERIAL:
2X4 STUDS	HEM-FIR STUD
2X6 STUDS	HEM-FIR NO. 2
JOISTS, TOP PLATES AND ALL OTHER SAWN LUMBER	DOUGLAS-FIR NO. 2 OR BETTER
BEAMS AND POSTS	DOUGLAS-FIR NO. 2 OR BETTER

2. PLYWOOD: ALL PLYWOOD SHALL BE C-D OR C-C SHEATHING CONFORMING TO STANDARD PS 1-95. LAY UP PLYWOOD WITH FACE GRAIN IN PERPENDICULAR TO SUPPORTS (ON ROOFS WHERE PLYWOOD IS LAID UP WITH FACE GRAIN PARALLEL TO SUPPORTS, USE A MINIMUM OF 5-PLY PLYWOOD, STAGGER JOINTS). ALL NAILING, COMMON NAILS. BLOCKING AT PANEL EDGES WHERE INDICATED ON PLANS. ALL PLYWOOD SHALL BE OF THE FOLLOWING NOMINAL THICKNESS, SPAN/INDEX RATING AND SHALL BE NAILED AS FOLLOWS UNLESS NOTED OTHERWISE ON THE PLANS:

LOCATION:	NOMINAL THICKNESS:	SPAN INDEX RATING:	EDGE ATTACHMENT:	FIELD ATTACHMENT:
WALLS	½" OR ¾"	24/0	8d AT 6" O.C.	8d AT 12" O.C.
ROOF	5/8"	40/20	10d AT 6" O.C.	10d AT 12" O.C.
FLOOR	3 ₄ " T&G	48/24	#8 SCREWS AT 6" O.C.	#8 SCREWS AT 12" O.C.

GENERAL STRUCTURAL NOTES (APPLY UNLESS NOTED OTHERWISE ON PLANS/DETAILS)

WOOD (CONTINUED):

SCREWS AT FLOOR SHEATHING SHALL BE #8 SCREWS AND SHALL PENETRATE AT LEAST 1½" INTO THE SUPPORTING MEMBER. ALL FLOOR SHEATHING SHALL BE GLUED TO SUPPORTING MEMBERS WITH ANAPA AFG-01 QUALIFIED GLUE.

- PLYWOOD ALTERNATE: AMERICAN PLYWOOD ASSOCIATION PERFORMANCE RATED SHEATHING MAY BE USED AS AN ALTERNATE TO PLYWOOD WITH PRIOR APPROVAL OF OWNER, ARCHITECT AND ROOFER. IT MAY NOT BE USED ON ROOFS WHERE BUILT-UP ROOF SYSTEM IS TO BE GUARANTEED BY ROOFER. RATED SHEATHING SHALL COMPLY WITH ICBO REPORT NER-108, EXPOSURE 1, AND SHALL HAVE A SPAN RATING EQUIVALENT TO OR BETTER THAN THE PLYWOOD IT REPLACES. ATTACHMENT AND THICKNESS (WITHIN $\frac{1}{32}$ ") SHALL BE THE SAME AS THE PLYWOOD IT REPLACES. INSTALL PER MANUFACTURER'S RECOMMENDATIONS.
- 3. NOMINAL 2 X 6 DECKING. TONGUE AND GROOVE TYPE. MINIMUM Fb = 1,600 PSI, MINIMUM E = 1,300,000 PSI. INSTALL WITH TONGUES UP SLOPE ON PITCHED ROOFS, AND OUTWARD IN THE DIRECTION OF LAYING ON FLAT ROOFS. NAIL EACH PLANK WITH 16d TOENAIL (THRU THE TONGUE) AND 16d FACE NAIL AT EACH SUPPORT. DECK SHALL BE INSTALLED AS SIMPLE SPAN WITH ALL PLANKS BEARING ON TWO SUPPORTS. FOR REFERENCE AND/OR ADDITIONAL INFORMATION, SEE "STANDARD FOR TWO INCH NOMINAL THICKNESS LUMBER ROOF DECKING FOR STRUCTURAL APPLICATIONS", AITC 118-71.
- NOMINAL 1 X 6 DECKING. TONGUE AND GROOVE TYPE. MINIMUM Fb 1,200 PSI, MINIMUM E = 1,800,000 PSI. INSTALL WITH TONGUES UP SLOPE ON PITCHED ROOFS, AND OUTWARD IN THE DIRECTION OF LAYING ON FLAT ROOFS. NAIL EACH PLANK WITH (2) 10d NAILS AT EACH SUPPORT. DECK SHALL BE INSTALLED AS SIMPLE SPAN WITH ALL PLANKS BEARING ON TWO SUPPORTS. FOR REFERENCE AND/OR ADDITIONAL INFORMATION, SEE SECTION TITLED "SHEATHING, FLOORING, AND DECKING," ON PAGE 4-105 OF THE SECOND EDITION OF THE AITC TIMBER CONSTRUCTION MANUAL.
- 4. GLUED-LAMINATED BEAMS (GLULAM): GLUED-LAMINATED BEAMS SHALL BE DOUGLAS FIR COMBINATION AT 24F-V4 AT SIMPLE SPAN BEAMS AND 24F-V8 AT CANTILEVERED BEAMS WITH THE FOLLOWING MINIMUM PROPERTIES: FB = 2,400 PSI, FV = 190 PSI, FC (PERPENDICULAR) = 650 PSI, E =1,800 KSI. ALL BEAMS SHALL BE FABRICATED USING WATERPROOF GLUE. FABRICATION AND HANDLING PER LATEST AITC AND WCLA STANDARDS. BEAMS TO BEAR GRADE STAMP AND AITC STAMP AND CERTIFICATE. CAMBER AS SHOWN ON DRAWINGS. STANDARD CAMBER IS BASED ON A RADIUS OF CURVATURE OF 2000 FEET.
- 5. LAMINATED VENEER LUMBER: DESIGN, FABRICATION AND ERECTION IN ACCORDANCE WITH LATEST EDITION OF ICBO REPORT NER-119, OR OTHER EQUIVALENT REPORT. LAMINATED VENEER LUMBER SHALL HAVE THE FOLLOWING MINIMUM PROPERTIES: $FB = 2,600 \, PSI$, $FV = 285 \, PSI$, $E = 1,900 \, KSI$.
- 6. PARALLEL STRAND LUMBER: DESIGN, FABRICATION AND ERECTION IN ACCORDANCE WITH LATEST EDITION OF ICBO REPORT NER-292, OR OTHER EQUIVALENT REPORT. LAMINATED VENEER LUMBER SHALL HAVE THE FOLLOWING MINIMUM PROPERTIES: FB = 2,900 PSI, FV = 290 PSI, E = 2,000 KSI.
- 7. SILL PLATES RESTING ON CONCRETE OR MASONRY WITHIN 12" OF SOIL SHALL BE OF TREATED FIR OR FOUNDATION GRADE REDWOOD. SHEAR WALLS AND EXTERIOR WALL SILLS AT CONCRETE SLAB SHALL HAVE A MINIMUM OF (2) ½" Ø ANCHOR BOLTS PER PIECE. PROVIDE ANCHOR BOLT AT 9" MAXIMUM, 4" MINIMUM FROM THE END OF EACH PIECE AT SPLICE OR END OF WALL. MAXIMUM ANCHOR BOLT SPACING SHALL BE 72" ON CENTER UNLESS NOTED OTHERWISE ON PLANS OR DETAILS. ALL ANCHOR BOLTS (OTHER THAN BOLTS FOR HOLDOWNS) SHALL EMBED 7" INTO CONCRETE. ANCHOR BOLTS FOR HOLDOWNS SHALL NOT BE CONSIDERED AS PART OF REQUIRED ANCHOR BOLTS ON SHEAR WALLS. ALL EXTERIOR WALLS SHALL BE SECURED WITH MINIMUM ANCHOR BOLTS. INTERIOR WALLS MAY BE SECURED TO CONCRETE WITH EITHER ANCHOR BOLTS OR POWER DRIVEN SHOT PINS UNLESS NOTED OTHERWISE ON PLANS.
- 8. GENERAL: DO NOT NOTCH OR DRILL JOISTS, BEAMS OR LOAD BEARING STUDS WITHOUT PRIOR APPROVAL OF THE STRUCTURAL ENGINEER THROUGH THE ARCHITECT. DOUBLE UP FLOOR JOISTS AND BLOCKING UNDER PARTITIONS. PROVIDE 2" (NOMINAL) SOLID BLOCKING AT SUPPORTS OF ALL JOISTS. UNLESS NOTED OTHERWISE ON PLANS/DETAILS PROVIDE 2X SOLID BLOCKING AT MID—HEIGHT OF BEARING STUD WALLS. ALL NAILING NOT NOTED SHALL BE ACCORDING TO IBC TABLE 2304.9.1. JOIST HANGERS AND OTHER MISCELLANEOUS FRAMING ANCHORS SHALL BE AS MANUFACTURED BY SIMPSON STRONG—TIE COMPANY, INC. OR OTHER MANUFACTURER WITH CURRENT ICBO APPROVAL.
- 9. BOLTING: ALL BOLTS IN WOOD CONNECTIONS SHALL CONFORM TO ASTM A307. BOLTS SHALL BE INSTALLED IN HOLES BORED WITH A BIT 1/6" LARGER THAN THE Ø (DIAMETER) OF THE BOLT. BOLTS AND NUTS SEATING ON WOOD SHALL HAVE CUT STEEL WASHERS UNDER HEADS AND NUTS. NICK THREADS TO PREVENT LOOSENING.
- 10. PREFABRICATED WOOD TRUSSES: PREFABRICATED WOOD TRUSSES SHALL BE DESIGNED TO SUPPORT SELF WEIGHT PLUS LIVE LOAD AND SUPERIMPOSED DEAD LOADS. WHERE ATTIC SPACE CAN BE USED FOR STORAGE, A 40 PSF LIVE LOAD ON THE BOTTOM CHORD SHALL BE INCLUDED IN THE ANALYSIS. BRIDGING SIZE AND SPACING BY TRUSS MANUFACTURER UNLESS NOTED OTHERWISE. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS WITH DESIGN CALCULATIONS SEALED BY A REGISTERED ENGINEER FOR REVIEW PRIOR TO MANUFACTURE.

SHOP DRAWINGS SHALL SHOW ANY SPECIAL DETAILS REQUIRED AT BEARING POINTS. ALL CONNECTORS SHALL HAVE CURRENT ICBO APPROVAL. ADDITIONAL TRUSSES SHALL BE SUPPLIED AS REQUIRED TO SUPPORT MECHANICAL EQUIPMENT. PER IBC SECTION 2303.4 AND TPI-1: EACH TRUSS SHALL BE LEGIBLY BRANDED, MARKED OR OTHERWISE HAVE PERMANENTLY AFFIXED THERETO THE IDENTITY OF THE COMPANY MANUFACTURING THE TRUSS, THE DESIGN LOADS, AND THE TRUSS SPACING — WITHIN TWO FEET OF THE CENTER OF THE SPAN ON THE FACE OF THE BOTTOM CHORD. TOTAL LOAD DEFLECTIONS SHALL BE LIMITED TO SPAN/240. FLOOR LIVE LOAD DEFLECTIONS SHALL BE LIMITED TO SPAN/480.

PREFABRICATED PLYWOOD WEB I-JOIST/PURLINS (TJI SERIES OR EQUAL): DESIGN, FABRICATION AND ERECTION IN ACCORDANCE WITH THE LATEST EDITION ICBO REPORT NER-119. CONNECTIONS AND BEARING MATERIAL TO BE DESIGNED AND FURNISHED BY JOIST FABRICATOR. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS WITH DESIGN CALCULATIONS SEALED BY A REGISTERED STRUCTURAL ENGINEER FOR REVIEW PRIOR TO MANUFACTURE. ADDITIONAL I-JOISTS SHALL BE SUPPLIED AS REQUIRED TO SUPPORT MECHANICAL EQUIPMENT. TOTAL LOAD DEFLECTIONS SHALL BE LIMITED TO SPAN/240. FLOOR LIVE LOAD DEFLECTIONS SHALL BE LIMITED TO SPAN/480.

DEFERRED SUBMITTALS:

(PER IBC SECTION 107.3.4.1)

- 1. FOR THE PURPOSES OF THIS SECTION, DEFERRED SUBMITTALS ARE DEFINED AS THOSE PORTIONS OF THE DESIGN WHICH ARE NOT SUBMITTED AT THE TIME OF THE APPLICATION AND WHICH ARE TO BE SUBMITTED TO THE BUILDING OFFICIAL WITH A
- 2. DEFERRAL OF ANY SUBMITTAL ITEMS SHALL HAVE PRIOR APPROVAL OF THE BUILDING OFFICIAL. THE ARCHITECT OR ENGINEER OF RECORD SHALL LIST THE DEFERRED SUBMITTALS ON THE PLANS AND SHALL SUBMIT THE DEFERRED SUBMITTAL DOCUMENTS FOR REVIEW BY THE BUILDING OFFICIAL.
- 3. SUBMITTAL DOCUMENTS FOR DEFERRED SUBMITTAL ITEMS SHALL BE SUBMITTED TO THE ARCHITECT OR ENGINEER OF RECORD WHO SHALL REVIEW THEM AND FORWARD THEM TO THE BUILDING OFFICIAL WITH A NOTATION INDICATING THAT THE DEFERRED SUBMITTAL DOCUMENTS HAVE BEEN REVIEWED AND THAT THEY HAVE BEEN FOUND TO BE IN GENERAL CONFORMANCE WITH THE DESIGN OF THE BUILDING. THE DEFERRED SUBMITTAL ITEMS SHALL NOT BE INSTALLED UNTIL THEIR DESIGN AND SUBMITTAL DOCUMENTS HAVE BEEN APPROVED BY THE BUILDING OFFICIAL.

DEFERRED SUBMITTAL ITEMS:

TRUSS JOIST MACMILLAN I-JOISTS

SPECIAL INSPECTION ITEMS:

1. THE OWNER SHALL EMPLOY A SPECIAL INSPECTOR DURING CONSTRUCTION OF CERTAIN TYPES OF WORK. PER IBC SECTION 1704 AND THE STRUCTURAL ENGINEER OF RECORD, SPECIAL INSPECTION IS (IS NOT) REQUIRED AS FOLLOWS:

TYPE OF WORK:	REQUIRED:	REMARKS:
SOIL BEARING SUBGRADE	YES	PER GEOTECHNICAL REPORT
CONCRETE SLAB ON GRADE	NO	DESIGN BASED ON f'c=2500 PSI
CONCRETE FOUNDATIONS	NO	DESIGN BASED ON f'c=2500 PSI
REINFORCING STEEL FOR ALL CONCRETE/ MASONRY THAT REQUIRES INSPECTION	YES	PRIOR TO PLACEMENT OF CONCRETE OR GROUT
EPOXY ANCHORS	YES	DURING INSTALLATION OF ANCHORS
MASONRY (CMU)	YES	DURING PLACEMENT OF GROUT

SPECIAL INSPECTIONS NOT LISTED ABOVE ARE NOT REQUIRED BY FSE HOWEVER, ADDITIONAL SPECIAL INSPECTIONS MAY BE REQUIRE BY THE BUILDING OFFICIAL.

- 2. DESIGNATION OF SPECIAL INSPECTOR: A SPECIAL INSPECTION CERTIFICATE CORRESPONDING TO THE REQUIREMENTS IN THE TABLE ABOVE HAS BEEN PROVIDED WITH THESE DRAWINGS BY FSE FOR PERMITTING PURPOSES.
- A. ACCORDING TO THE SI CERTIFICATE, THE SPECIAL INSPECTOR SHALL BE, OR WORK UNDER THE DIRECT SUPERVISION OF THE STRUCTURAL ENGINEER OF RECORD FROST STRUCTURAL ENGINEERING (FSE) (928)776—4757. FSE IS NOT RESPONSIBLE FOR SPECIAL INSPECTIONS IF WE ARE NOT CONTACTED OR CONTRACTED TO DO SO.
- B. TO SCHEDULE ANY SPECIAL INSPECTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE SPECIAL INSPECTOR AT LEAST ONE DAY IN ADVANCE.
- C. AN ALTERNATE SPECIAL INSPECTOR MAY BE USED BY OBTAINING A NEW SI CERTIFICATE, AND MAKE THE NECESSARY NOTIFICATIONS TO ALL PARTIES INVOLVED. THE ALTERNATE SPECIAL INSPECTOR SHALL BE AN ARIZONA LICENSED CIVIL OR STRUCTURAL ENGINEER OR AN ICC CERTIFIED SPECIAL INSPECTOR.
- D. FOR GEOTECHNICAL ITEMS LISTED ABOVE, THE SPECIAL INSPECTOR SHALL BE, OR WORK UNDER THE DIRECT SUPERVISION OF A GEOTECHNICAL ENGINEER OR THE BUILDING OFFICIAL.
- 3. QUALITY ASSURANCE PROGRAM:
- A. THE SPECIAL INSPECTOR SHALL OBSERVE THE WORK ASSIGNED TO BE CERTAIN IT CONFORMS WITH THE APPROVED DESIGN DRAWINGS AND SPECIFICATIONS.
- B. THE SPECIAL INSPECTOR SHALL FURNISH INSPECTION REPORTS TO THE BUILDING OFFICIAL, AND TO THE STRUCTURAL ENGINEER OF RECORD. ALL DISCREPANCIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE CONTRACTOR FOR CORRECTION, THEN, IF UNCORRECTED, TO THE DESIGN AUTHORITY AND THE BUILDING OFFICIAL.
- C. UPON COMPLETION OF THE ASSIGNED WORK THE STRUCTURAL ENGINEER SHALL COMPLETE AND SIGN THE APPROPRIATE FORMS CERTIFYING THAT TO THE BEST OF HIS KNOWLEDGE THE WORK IS IN CONFORMANCE WITH THE APPROVED PLANS AND SPECIFICATIONS, AND THE APPLICABLE WORKMANSHIP PROVISIONS OF THE INTERNATIONAL BUILDING CODE.

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JOB NO.: 2018-0148 PROJECT MANAGER: STANFORD CAD OPERATOR: MJS

FROST STRUCTURAL ENGINEERING

1678 Oaklawn Drive, Suite C phone: 928.776.4757
Prescott, Arizona 86305 fax: 928.776.4931
info@frost-structural.com

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iates, P.C.

x 11593 ; AZ 86304 st com

Prescott, / aka@cableone.net ion-associates.co

F 928-443-5815 email: wa

F 928-

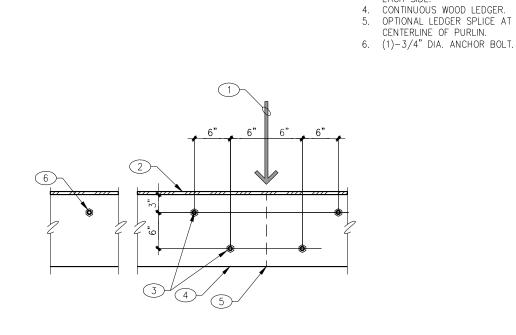
Randall Residence 39 Wildwood Dr. Prescott, Az

ROJECT:

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MJS
CHECKED BY
Stanford

DATE
6/7/19
SCALE
AS NOTED
JOB NO.
2018-0148

S1.1



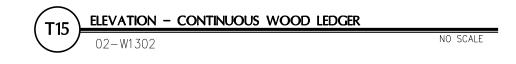
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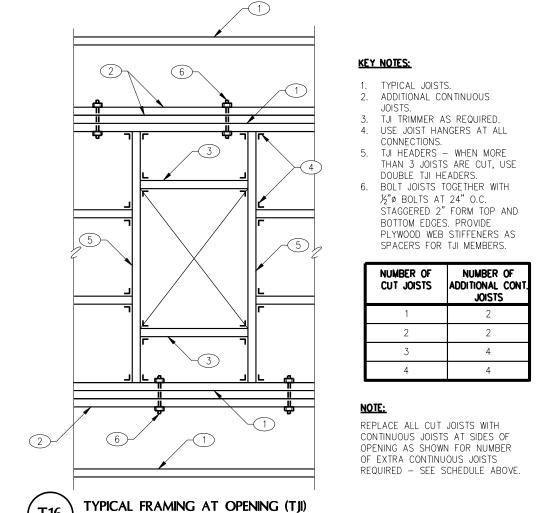
1. CENTERLINE OF PURLIN.

PLYWOOD SHEATHING.

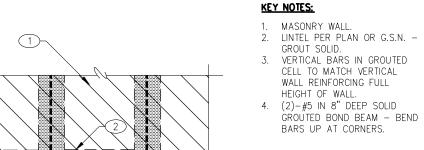
EACH SIDE.

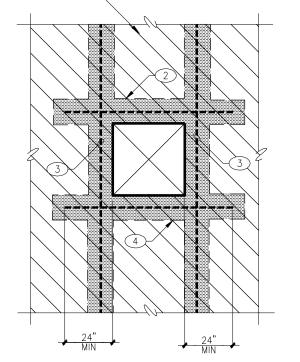
3. (2)-3/4" DIA. ANCHOR BOLTS



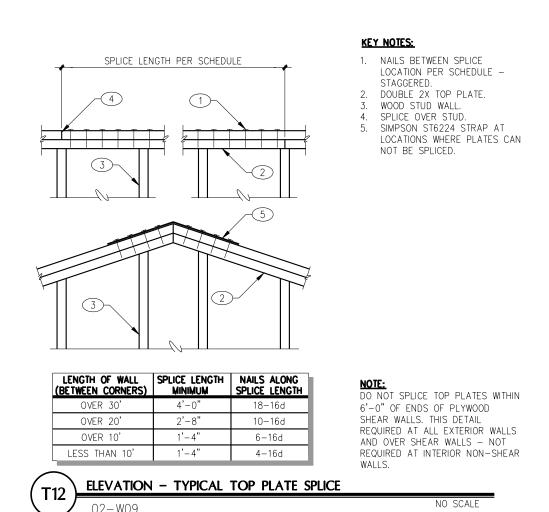


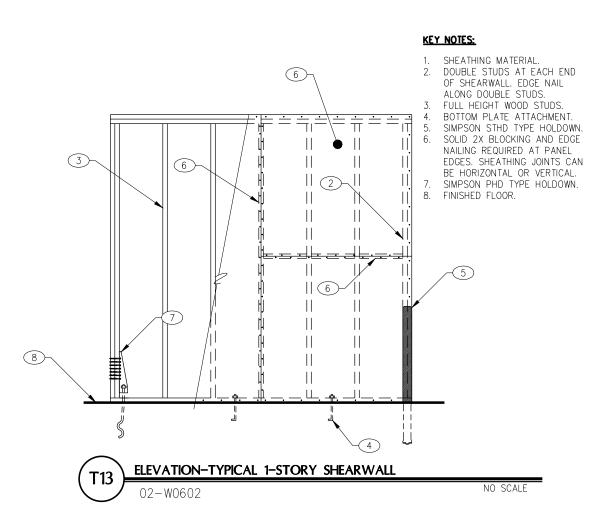
02-WIJ03

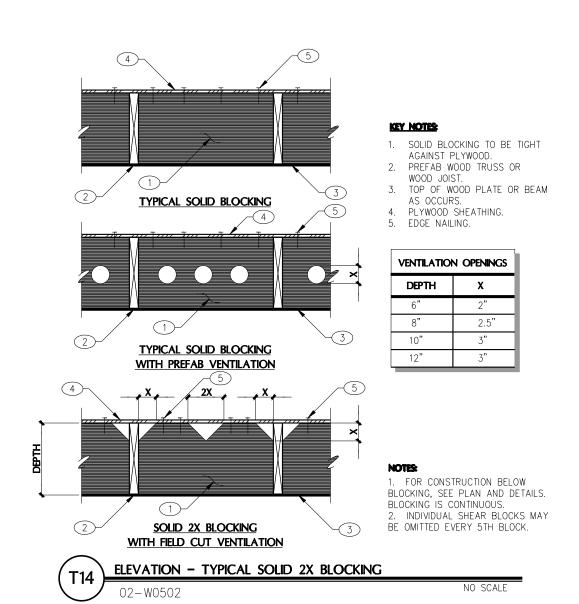


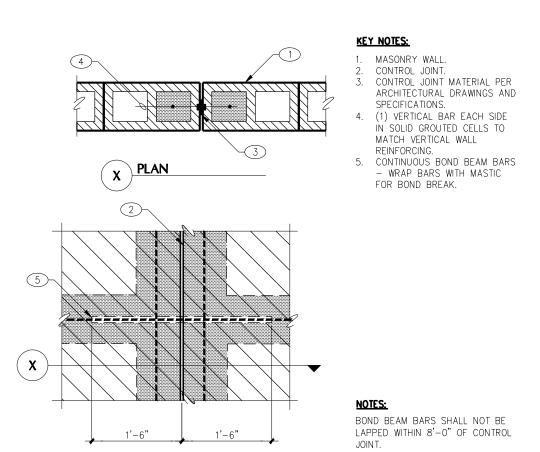


T17 ELEVATION - TYPICAL OPENING IN MASONRY WALL
02-M0401



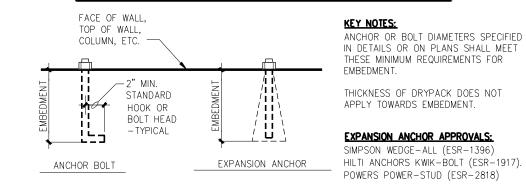






TR	CONTRO	L JOINT IN MASONRY W	ALL
	02-M03	01	NO SCALE
Г	R∩I T	CAST IN PLACE	EXPANSION ANCHOR

BOLT	CAST IN PLACE EMBEDMENT(MINIMUM)		EXPANSION ANCHOR EMBEDMENT(MINIMUM)		
SIZE	VERTICAL	HORIZONTAL	VERTICAL	HORIZONTAL	
1/4 " ø	4"	4"	2"	1.125"	
3/8 " ø	5"	4"	3"	1.5"	
1/2 " ø	7"	4"	4"	2"	
5/8 " ø	8"	5"	5"	2.5"	
3/4 " ø	9"	6"	6"	3"	
7/8 " ø	10"	7"	7"	3.5"	
1"ø	11"	8"	9"	4"	



TO	TYPICAL ANCHOR BOLT, AND EXPANSION BOLT SO	CHEDULE
	02-S0101	NO SCALE

all Thread Size	REBAR SIZE	SPACING OR EDGE DISTANCE	EMBEDMENT DEPTH	SPACING OR EDGE DISTANCE	EMBEDMENT DEPTH
3/8"ø	#3	2" TO 6"	8"	6" MIN.	6"
1/2"ø	#4	2" TO 6"	11"	6" MIN.	6"
5/8"ø	# 5	2" TO 7.5"	12"	7.5" MIN.	7"
3/4"ø	#6	2" TO 9"	14"	9" MIN.	9"
7/8"ø	#7	3" TO 10.5"	16"	10.5" MIN.	11"
1"ø	#8	3" TO 12"	20"	12" MIN.	14"

CONCRETE: USE HILTI HIT-RE 500-SD ADHESIVE (ESR-2322) OR SIMPSON SET-XP (ESR-2508).
 MASONRY: USE SIMPSON "SET" ADHESIVE (ESR-1772).
 INSTALL ALL SYSTEMS ACCORDING TO MANUFACTURERS RECOMMENDATIONS.
 DO NOT PLACE ALL-THREAD ROD WITHIN MINIMUM EDGE DISTANCE TO FREE FDGF OF CONCRETE OR ADJACENT BOLTS.

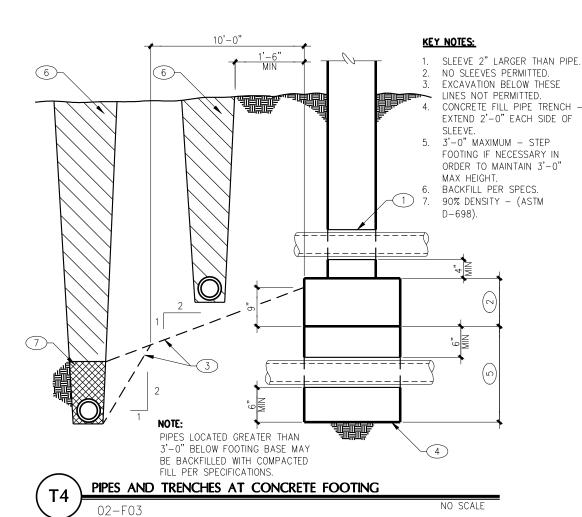
EDGE OF CONCRETE OR ADJACENT BOLTS.	
DRILLED HOLE TO BE 1/8" BIGGER THAN ANCHOR DIAMETER	MIN. EDGE DISTANCE
COLD JOINT OR POUR SEPARATION TYPICAL EPOXY ANCHOR INSTALLATION	EMBEDMENT
(T10)	NO SCAI
02-S0102	

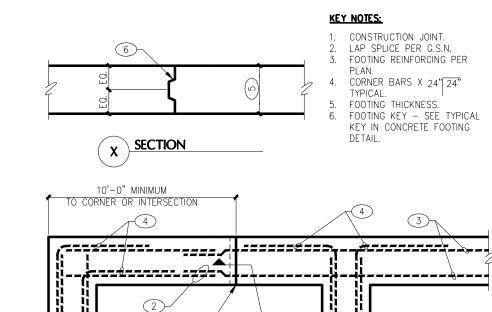
CONNECTION	NAILING	TYPE
JOIST OR TRUSS BEARING ON SILL OR GIRDER	(3) 8d	TOENAIL
BRIDGING TO JOIST	(2) 8d	TOENAIL
SOLE PLATE TO JOIST OR BLOCKING	16d AT 16" O.C.	FACE NAIL
TOP PLATE TO STUD	(2) 16d	END NAIL
STUD TO SOLE PLATE	(2) 16d, END NAIL	-NA-
DOUBLE STUDS	16d AT 24" O.C.	FACE NAIL
DOUBLE TOP PLATES	16d AT 16" O.C.	FACE NAIL
TOP PLATES, LAP AND INTERSECTIONS	(2) 16d	FACE NAIL
CONTINUOUS HEADER, TWO PIECES	16d AT 16" O.C. ALONG EACH EDGE	-NA-
CEILING JOISTS TO PLATE	(3) 8d	TOENAIL
CONTINUOUS HEADER TO STUD	(4) 8d	TOENAIL
CEILING JOISTS, LAPS OVER PARTITIONS	(3) 16d	FACE NAIL
CEILING JOISTS TO PARALLEL RAFTERS	(3) 16d	FACE NAIL
RAFTER OR TRUSS TO PLATE	(3) 8d	TOENAIL
1" BRACE TO EACH STUD AND PLATE	(2) 8d	FACE NAIL
BUILT-UP CORNER STUDS	16d AT 24" O.C.	-NA-

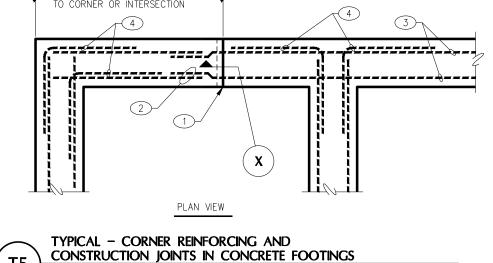
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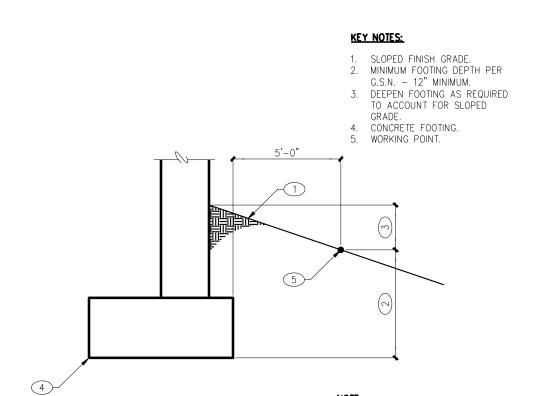
1. MINIMUM NAILING SPECIFIED HEREIN SHALL BE PROVIDE UNLESS NOTED OTHERWISE
ON PLANS, DETAILS OR GENERAL STRUCTURAL NOTES.
2. NAILING NOT NOTED ON THESE PLANS OR DETAILS SHALL BE PER I.B.C. TABLE 2304.9.1.







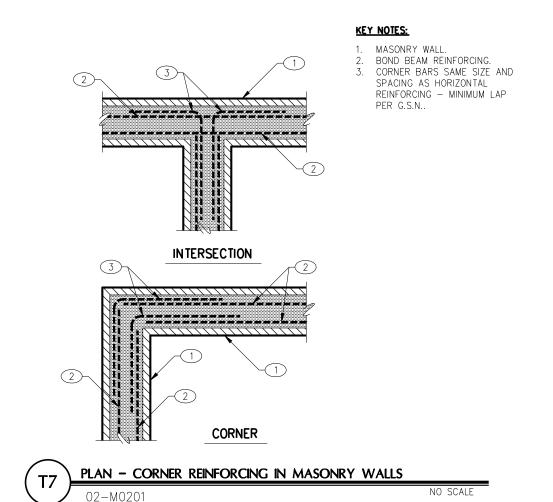


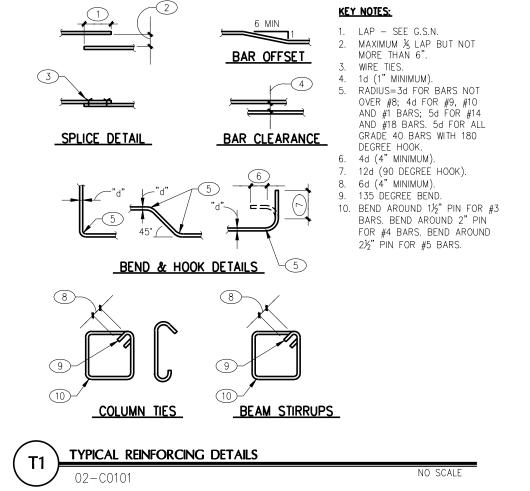


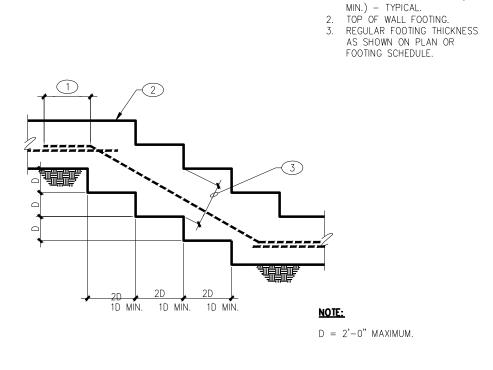
FOR ADDITIONAL INFORMATION, SEE

PLANS AND DETAILS.





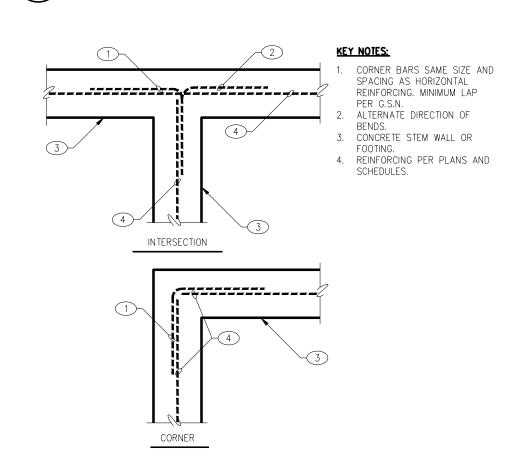




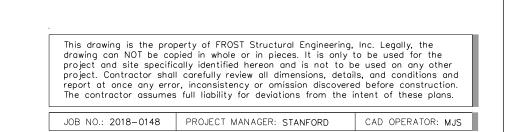
TYPICAL STEP IN CONCRETE FOOTING

KEY NOTES:

1. MINIMUM LAP PER G.S.N. (24"



(T3)	PLAN - CORNER REINFORCING IN CONCRETE FOOTING AND/OR CONCRETE STEM WALLS	GS
	02-F02	NO SCA



DRAWING: T

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27341

RICHARD K.

FROST

EXPIRES 9/30/2020

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DRAWN BY
MJS
CHECKED BY Stanford
DATE 6/7/19
SCALE AS NOTED
JOB NO. 2018-0148
SHEET

S1.2

SHEARWALL SCHEDULE

(ALL EXTERIOR WALLS ARE 5 UNLESS NOTED OTHERWISE)

1. SHEARWALL TYPES LISTED BELOW ARE NOT JOB SPECIFIC. SOME TYPES MAY NOT BE USED ON PLANS.
2. BLOCK ALL PANEL EDGES WHERE INDICATED ON SCHEDULE. EDGE NAIL SHEATHING AT BLOCKED EDGES.

- 3. FRAMING MEMBER SUPPORTING MATERIAL SHALL BE SPACED AT 16" ON CENTER MAXIMUM.

 4. ANCHOR BOLTS TO FOUNDATION SHALL BE 10 LONG AND SHALL BE EMBEDDED 7 INCHES INTO CONCRETE. EXPANSION BOLTS OR SHOT PINS MAY BE USED AT INTERIOR WALLS (AWAY FROM EDGE OF SLAB OR SLAB STEPDOWN) PER SUPPLEMENTAL INSTRUCTIONS.
- 5. A MINIMUM OF 2 ANCHOR BOLTS SHALL BE USED ON EACH BASE PLATE PIECE. PROVIDE 1 ANCHOR BOLT MINIMUM WITHIN 9 INCHES OF EACH END OF EACH PIECE.
 6. PROVIDE CONTINUOUS DOUBLE 2X PLATE TOP PLATE AT ALL SHEAR WALLS AND EXTERIOR WALLS. UNLESS NOTED OTHERWISE, LAP SPLICE TOP PLATE A MINIMUM OF 6'-0" WITH 16d NAILS STAGGERED AT 4" ON CENTER (18-16d NAILS TOTAL BETWEEN SPLICE JOINTS).
- 7. PROVIDE FULL HEIGHT DOUBLE STUDS AT ENDS OF SHEAR WALLS UNLESS NOTED OTHERWISE ON PLANS OR DETAILS.

 8. ELEVATED SHEAR WALLS TO BE FRAMED OVER DOUBLE JOIST OR SOLID BLOCKING UNLESS NOTED OTHERWISE.
- 9. "L=P.P." DESIGNATES LENGTH OF SHEARWALL $(\pm 3$ ").

MARK	SHEATHING MATERIAL	EDGE NAILING	FIELD NAILING	BOTTOM PLATE ATTACHMENT
1	兆" GYPBOARD (UNBLOCKED)	5d COOLER AT 7" O.C.	5d COOLER AT 7" O.C.	CONCRETE: ½"ø A.B. AT 72" O.C.
L=P.P.	ONE SIDE ÒF WALL	OR #6 SCREWS AT 6" O.C.	OR #6 SCREWS AT 12" O.C.	WOOD: 16d AT 16" O.C.
<u>^2</u>	%" GYPBOARD (UNBLOCKED)	5d COOLER AT 7" O.C.	5d COOLER AT 7" O.C.	CONCRETE: ½"ø A.B. AT 72" O.C.
L=P.P.	ONE SIDE OF WALL	OR #6 SCREWS AT 6" O.C.	OR #6 SCREWS AT 12" O.C.	WOOD: 16d AT 12" O.C.
3	A 5071 0050	5d COOLER AT 7" O.C.	5d COOLER AT 7" O.C.	CONCRETE: ½"ø A.B. AT 48" O.C.
3 L=P.P.	1 BOTH SIDES	OR #6 SCREWS AT 6" O.C.	OR #6 SCREWS AT 12" O.C.	WOOD: 16d AT 8" O.C.
4	1 ONE SIDE	SEE ABOVE	SEE ABOVE	CONCRETE: ½"ø A.B. AT 36" O.C.
L=P.P.	2 OTHER SIDE	SLL ABOVE	SLL ABOVE	WOOD: 16d AT 6" O.C.
5 L=P.P.	½" OR ¾" PLYWOOD OR OSB	8d COMMON AT 6"O.C.	8d COMMON AT 12" O.C.	CONCRETE: ½"ø A.B. AT 36" O.C.
L=P.P.	(BLOCKED) ONE SIDE OF WALL	WALL 8d COMMON AT 8 O.C. 8d COMMON AT 12 O.C. WOOD: 16d AT 6" O.C.	WOOD: 16d AT 6" O.C.	
6. L=P.P.	½" OR ¾" PLYWOOD OR OSB	8d COMMON AT 4"O.C.	8d COMMON AT 12" O.C.	CONCRETE: ½"ø A.B. AT 24" O.C.
L=P.P.	(BLOCKED) ONE SIDE OF WALL	OU COMMON AT 4 U.C.	ou Common AT 12 O.C.	WOOD: 16d AT 4" O.C.

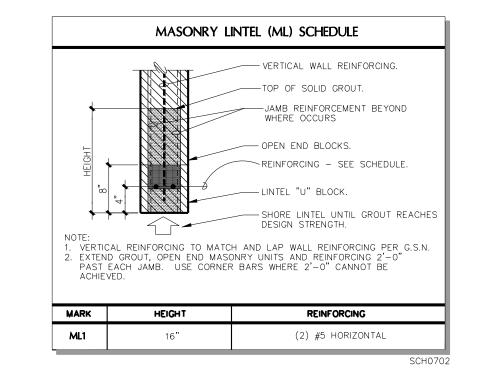
	SHEARWALL HOLDOWN SCHEDULE						
MARK	HOLDOWN	SHEARWALL END POST	DETAIL REFERENCE	ALTERNATE DETAIL			
1	SIMPSON MST37	(2) 2X STUDS	112	113			
2	SIMPSON HDU2	(2) 2X STUDS	114	115			
3	SIMPSON HDU4	(2) 2X STUDS	114	(115)			

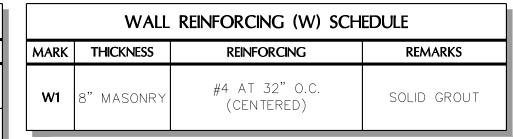
SHEARWALL HOLDOWN FASTENERS					
HOLDOWN	HOLDOWN CONNECTS TO STRUCTURE BELOW WITH:	HOLDOWN CONNECTS TO SHEARWALL ENDPOST WITH:			
SIMPSON HDU2	CAST-IN-PLACE SIMPSON SSTB16 ANCHOR BOLT	(6) ¼"øx2.5" SDS SCREWS			
SIMPSON HDU4	CAST-IN-PLACE SIMPSON SSTB16 ANCHOR BOLT	(10) ¼"øX2.5" SDS SCREWS			
SIMPSON MST37	(21) 16d SINKERS	(21) 16d SINKERS			

FLOOR JOIST (FJ) SCHEDULE				
MARK	JOIST	REMARKS		
FJ1	11.875 TJI 110 WOOD I-JOIST AT 16"O.C.			
FJ2	11.875 TJI 210 WOOD I-JOIST AT 16" O.C.			
FJ3	2X12 AT 16" O.C.			
FJ4	2X6 AT 16" O.C.			
FJ5	2X8 AT 16" O.C.			

	BEAM (B) SCHEDULE				
MARK	CAMBER				
B1	5%"X15" GLB				
B2	6X6	DF-L#2			
В3	6X10	DF-L#2			
B4	5%"X18" GLB				
B5	3%"X9" GLB				
В6	6X12	DF-L#2			
В7	6¾"X15" GLB				
В8	5%"X10.5" GLB				
В9	5½"X12" GLB				
B10	6¾"X10.5" GLB				
B11	6X8	DF-L#2			
B12	1.75X11.875 LVL	26F 2.0E			

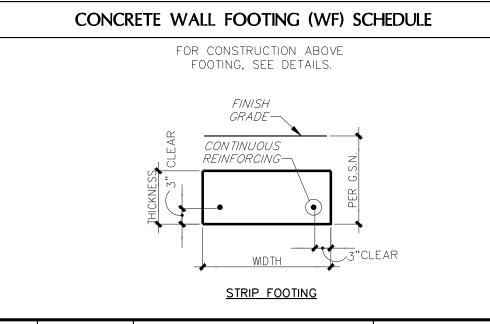
	HEADER (H) SCHEDULE			
MARK	SIZE	REMARKS		
H1	6X12			
H2	4X6			
НЗ	6X8			
H4	5%"X10.5" GLB			
H5	6X10			
H6	4X10			
H7	4X12			
H8	4X8			
Н9	6X6			



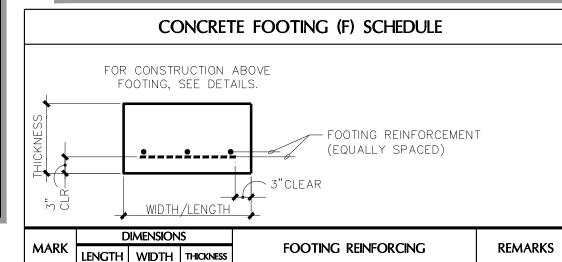


	ROOF JOIST (RJ) SCHEDULE		
MARK	JOIST	REMARKS	
RJ1	2X8 AT 24" O.C.		
RJ2	2X6 AT 24" O.C.		
RJ3	2X8 AT 24" O.C.	TYPICAL ON TOP OF B1 THRU B4	

LEDGER (L) SCHEDULE						
MARK	SIZE	CONNECTION				
L1	2X8	(2) ½"ø LAG BOLTS AT 16" O				
L2	2X6	½"ø LAG BOLTS AT 48" O.C				
L3	2X6	½"ø LAG BOLTS AT 16" O.C				
L4	4X12	3/4"ø ANCHOR BOLTS AT 24" (
L5	3X6	3/4"ø ANCHOR BOLTS AT 48" (
L6	2X12	34"ø ANCHOR BOLTS AT 16" C				
L7	2X12	3/4"ø ANCHOR BOLTS AT 48" (
L8	2X6	3/4"ø ANCHOR BOLTS AT 48" (

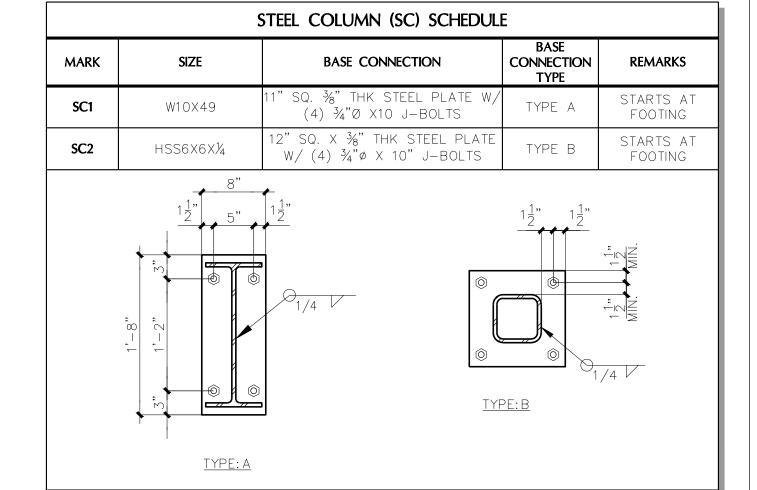


AAADK	DIMEN	ISIONS		FOOTING	
MARK	WIDTH	THICKNESS	FOOTING REINFORCING	TYPE	
WF1	16"	10"	(2) #4 CONTINUOUS	STRIP	
WF2	24"	10"	(3) #4 CONTINUOUS	STRIP	
CONCRETE EQUATING (E) COLEDI II E					



(6) #4 EACH WAY

(4) #5 EACH WAY



48"

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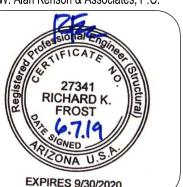
JOB NO.: 2018-0148 PROJECT MANAGER: STANFORD CAD OPERATOR: MJS

FROST STRUCTURAL ENGINEERING

1678 Oaklawn Drive, Suite C phone: 928.776.4757 Prescott, Arizona 86305 fax: 928.776.4931 info@frost-structural.com

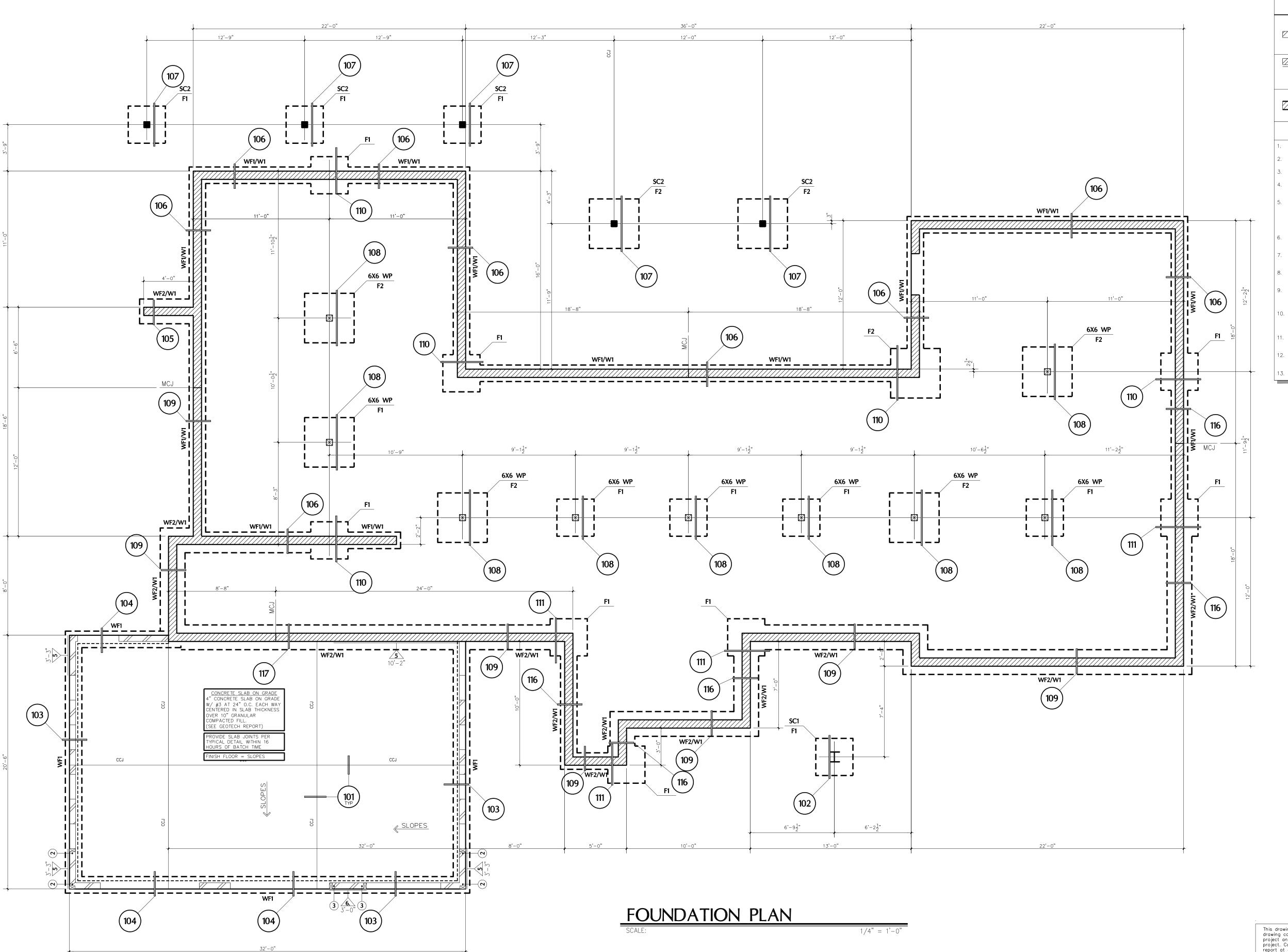
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EXPIRES 9/30/2020

MJS CHECKED BY Stanford DATE 6/7/19 SCALE AS NOTED JOB NO. 2018-0148



WALL SCHEDULE

-HATCHING INDICATES STRUCTURAL ELEMENT CONTINUES TO THE NEXT LEVEL (VERIFY WITH ARCHITECTURAL DRAWINGS).
-SEE PLAN SCHEDULES, DETAILS, AND GENERAL STRUCTURAL NOTES FOR ADDITIONAL INFORMATION.

TYPICAL STEM WALL 8" CMU STEM WALL UP TO 4'-0" RETAINING #4 AT 48" O.C. VERTICAL #4 AT 48" O.C. HORIZONTAL CENTERED

6" WOOD STUD WALL. STUDS: 2X6 AT 16" O.C. (2) TRIMMER/(2) KING STUD EACH JAMB U.N.O. BEAM/GIRDER POSTS: DOUBLE STUD (MIN. U.N.O.) SHEARWALL ENDPOSTS: DOUBLE STUD (MIN.

SHEARWALL SEE SHEARWALL SCHEDULE FOR WALL SHEATHING AND NAILING.

8" MASONRY (CMU) WALL. MINIMUM REINFORCING

HORIZONTAL: #4 AT 48" O.C. MAXIMUM.

FOUNDATION PLAN NOTES

UNLESS NOTED OTHERWISE: VERTICAL: #4 AT 32" O.C.

- FOR LOCATION OF DETAILS SEE SHEET INDEX ON SHEET S1.
- FOR PLAN SCHEDULES SEE SHEET S1.3.
- VERIFY ALL DIMENSIONS WITH ALL ARCHITECTURAL DRAWINGS.
- ALL SCHEDULED MARK DESIGNATIONS MAY NOT NECESSARILY BE FOUND ON THIS PLAN. SCHEDULES ARE TYPICAL TO THIS PROJECT.
- THE DEPTH OF FOOTING DIMENSION INDICATED IN THE G.S.N. IS A MINIMUM. FOUNDATION CONTRACTOR SHALL COORDINATE WITH THE SOILS REPORT AND OTHER TRADES TO INSURE THAT THESE MINIMUMS ARE SUFFICIENT FOR THE WORK. SEE TYPICAL DETAILS FOR ADDITIONAL
- WF1, WF2, ETC. AS SHOWN ON PLAN INDICATES A CONTINUOUS WALL FOOTING. SEE WALL FOOTING SCHEDULE FOR ADDITIONAL INFORMATION. F1, F2, ETC. — AS SHOWN ON PLAN INDICATES A CONCRETE FOOTING. SEE FOOTING SCHEDULE FOR ADDITIONAL INFORMATION.
- W1, W2, ETC. AS SHOWN ON PLAN INDICATES WALL REINFORCING. SEE WALL REINFORCING SCHEDULE FOR ADDITIONAL INFORMATION.
- SC1, SC2, ETC. AS SHOWN ON PLAN INDICATES A STEEL COLUMN. SEE STEEL COLUMN SCHEDULE FOR ADDITIONAL INFORMATION. COLUMNS STAR AT THE LEVEL THEY ARE CALLED OUT ON.
- CCJ AS SHOWN ON PLAN INDICATES LOCATION OF EITHER A KEYED OR A SAW CUT CONTROL JOINT IN THE SLAB ON GRADE AT CONTRACTOR'S OPTION. SEE GENERAL STRUCTURAL NOTES AND DETAIL 101.
- MCJ AS SHOWN ON PLAN INDICATES A MASONRY CONTROL JOINT IN A MASONRY WALL. SEE GENERAL STRUCTURAL NOTES AND TYPICAL DETAIL. VERIFY EXACT SIZE AND LOCATION OF DEPRESSED AND/OR RAISED SLABS
- 13. FOR SIDEWALK AND LANDING LOCATIONS, SEE ARCHITECTURAL DRAWINGS.

WITH ARCHITECTURAL DRAWINGS.

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FROST STRUCTURAL ENGINEERING

JOB NO.: 2018-0148 PROJECT MANAGER: STANFORD CAD OPERATOR: MJS

1678 Oaklawn Drive, Suite C Prescott, Arizona 86305 phone: 928.776.4757 fax: 928.776.4931 info@frost-structural.com

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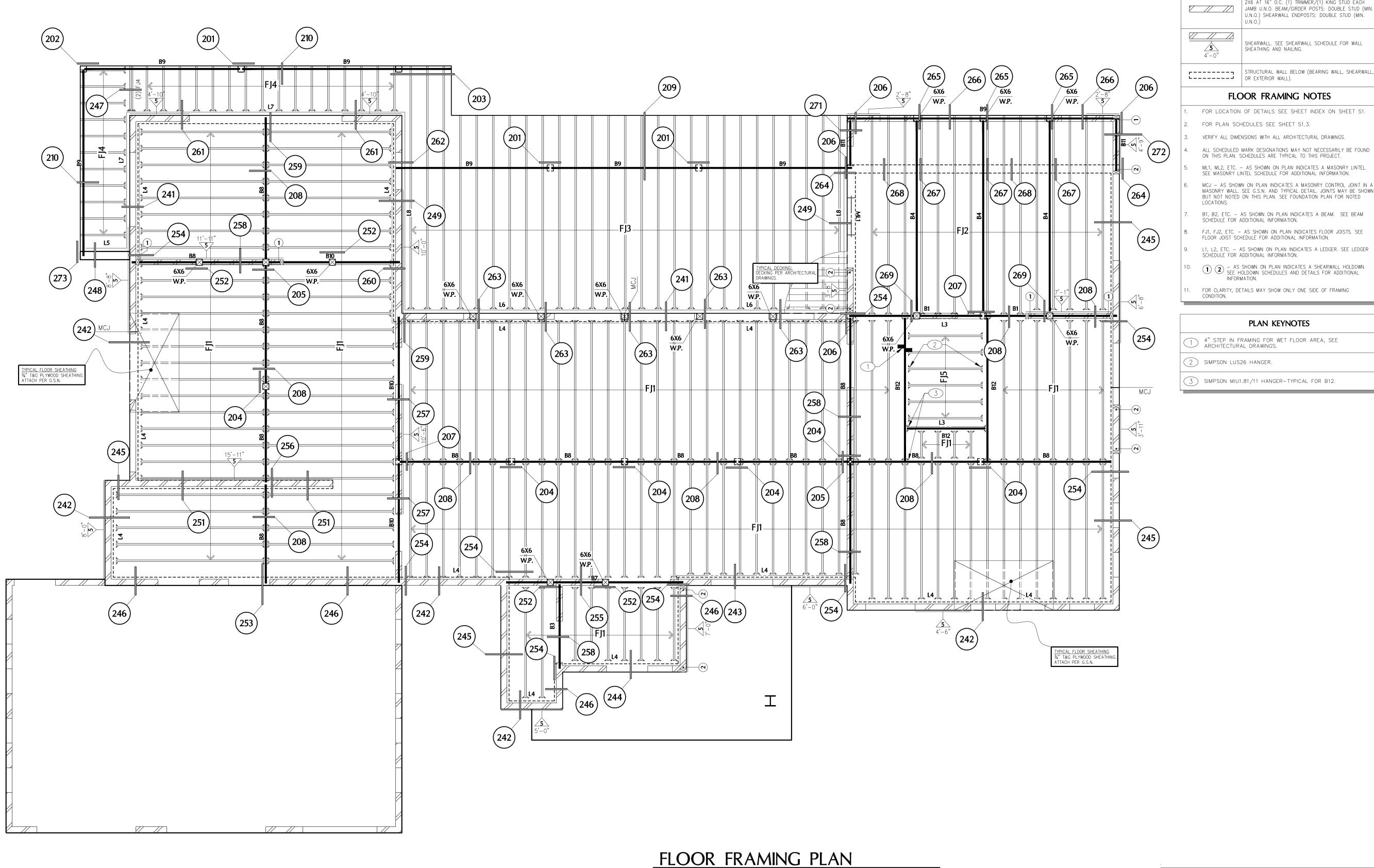
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WALL SCHEDULE

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-HATCHING INDICATES STRUCTURAL ELEMENT CONTINUES TO THE NEXT LEVEL (VERIFY WITH ARCHITECTURAL DRAWINGS).
—SEE PLAN SCHEDULES, DETAILS, AND GENERAL STRUCTURAL NOTES FOR ADDITIONAL INFORMATION.

AS SEEN ON PLANS INDICATES-4" WOOD STUD WALL. STUDS: 2X4 AT 16" O.C. (1) TRIMMER/(1) KING STUD EACH JAMB U.N.O. BEAM/GIRDER POSTS: DOUBLE STUD (MIN U.N.O.) SHEARWALL ENDPOSTS: DOUBLE STUD (MIN. 6" WOOD STUD WALL. STUDS: 2X6 AT 16" O.C. (1) TRIMMER/(1) KING STUD EACH JAMB U.N.O. BEAM/GIRDER POSTS: DOUBLE STUD (MIN. U.N.O.) SHEARWALL ENDPOSTS: DOUBLE STUD (MIN.

SHEARWALL. SEE SHEARWALL SCHEDULE FOR WALL

SHEATHING AND NAILING.

FLOOR FRAMING NOTES

FOR LOCATION OF DETAILS SEE SHEET INDEX ON SHEET S1.

- FOR PLAN SCHEDULES SEE SHEET S1.3.
- VERIFY ALL DIMENSIONS WITH ALL ARCHITECTURAL DRAWINGS.
- ALL SCHEDULED MARK DESIGNATIONS MAY NOT NECESSARILY BE FOUND ON THIS PLAN. SCHEDULES ARE TYPICAL TO THIS PROJECT.
- ML1, ML2, ETC. AS SHOWN ON PLAN INDICATES A MASONRY LINTEL. SEE MASONRY LINTEL SCHEDULE FOR ADDITIONAL INFORMATION.
- MCJ AS SHOWN ON PLAN INDICATES A MASONRY CONTROL JOINT IN A MASONRY WALL. SEE G.S.N. AND TYPICAL DETAIL. JOINTS MAY BE SHOWN, BUT NOT NOTED ON THIS PLAN. SEE FOUNDATION PLAN FOR NOTED
- B1, B2, ETC. AS SHOWN ON PLAN INDICATES A BEAM. SEE BEAM SCHEDULE FOR ADDITIONAL INFORMATION.
- FJ1, FJ2, ETC. AS SHOWN ON PLAN INDICATES FLOOR JOISTS. SEE FLOOR JOIST SCHEDULE FOR ADDITIONAL INFORMATION.
- L1, L2, ETC. AS SHOWN ON PLAN INDICATES A LEDGER. SEE LEDGER SCHEDULE FOR ADDITIONAL INFORMATION.
- 1 2 AS SHOWN ON PLAN INDICATES A SHEARWALL HOLDOWN.
 SEE HOLDOWN SCHEDULES AND DETAILS FOR ADDITIONAL
 INFORMATION.
- FOR CLARITY, DETAILS MAY SHOW ONLY ONE SIDE OF FRAMING

PLAN KEYNOTES

1 4" STEP IN FRAMING FOR WET FLOOR AREA, SEE ARCHITECTURAL DRAWINGS.

2 SIMPSON LUS26 HANGER.

3 SIMPSON MIU1.81/11 HANGER-TYPICAL FOR B12.

1/4" = 1'-0"

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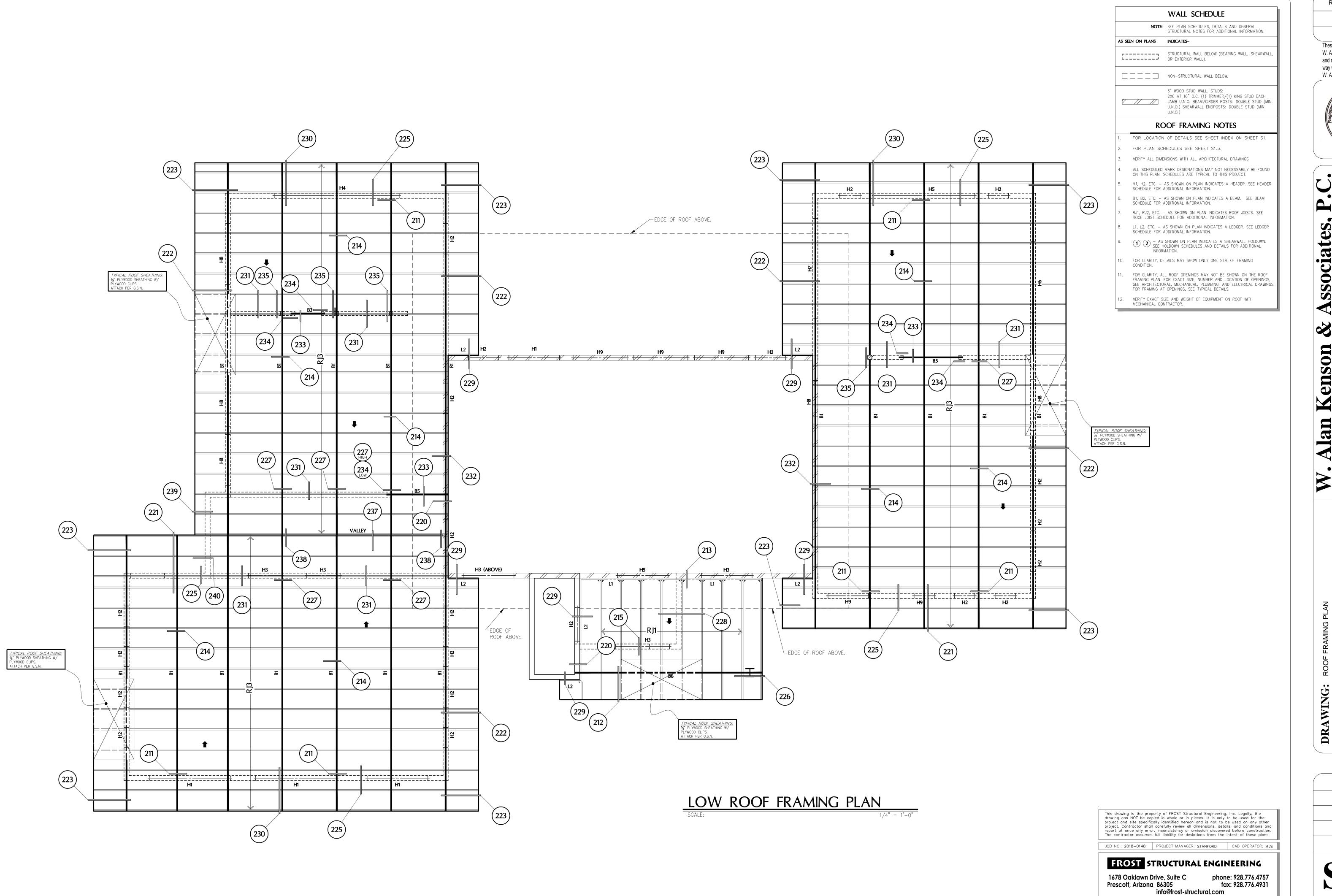
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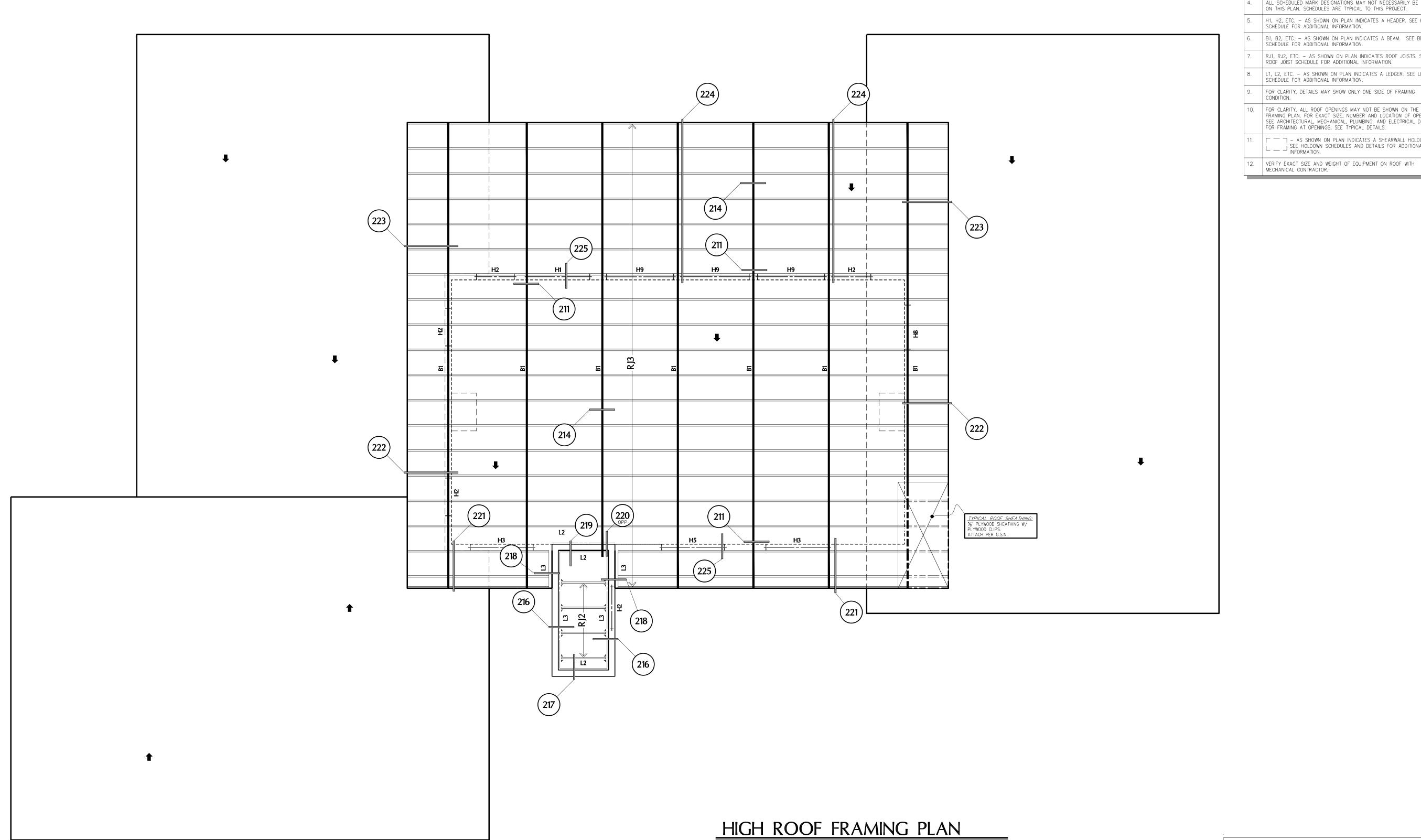
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WALL SCHEDULE NOTE: SEE PLAN SCHEDULES, DETAILS AND GENERAL STRUCTURAL NOTES FOR ADDITIONAL INFORMATION. AS SEEN ON PLANS INDICATESr----- STRUCTURAL WALL BELOW (BEARING WALL, SHEARWALL, └──── OR EXTERIOR WALL). PARAPET WALL. ROOF FRAMING NOTES

FOR LOCATION OF DETAILS SEE SHEET INDEX ON SHEET S1. FOR PLAN SCHEDULES SEE SHEET S1.3. VERIFY ALL DIMENSIONS WITH ALL ARCHITECTURAL DRAWINGS.

ALL SCHEDULED MARK DESIGNATIONS MAY NOT NECESSARILY BE FOUND ON THIS PLAN. SCHEDULES ARE TYPICAL TO THIS PROJECT.

H1, H2, ETC. – AS SHOWN ON PLAN INDICATES A HEADER. SEE HEADER SCHEDULE FOR ADDITIONAL INFORMATION. B1, B2, ETC. — AS SHOWN ON PLAN INDICATES A BEAM. SEE BEAM SCHEDULE FOR ADDITIONAL INFORMATION.

RJ1, RJ2, ETC. — AS SHOWN ON PLAN INDICATES ROOF JOISTS. SEE ROOF JOIST SCHEDULE FOR ADDITIONAL INFORMATION.

L1, L2, ETC. — AS SHOWN ON PLAN INDICATES A LEDGER. SEE LEDGER SCHEDULE FOR ADDITIONAL INFORMATION.

FOR CLARITY, DETAILS MAY SHOW ONLY ONE SIDE OF FRAMING CONDITION.

FOR CLARITY, ALL ROOF OPENINGS MAY NOT BE SHOWN ON THE ROOF FRAMING PLAN. FOR EXACT SIZE, NUMBER AND LOCATION OF OPENINGS, SEE ARCHITECTURAL, MECHANICAL, PLUMBING, AND ELECTRICAL DRAWINGS. FOR FRAMING AT OPENINGS, SEE TYPICAL DETAILS.

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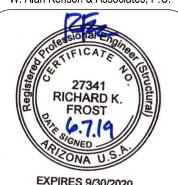
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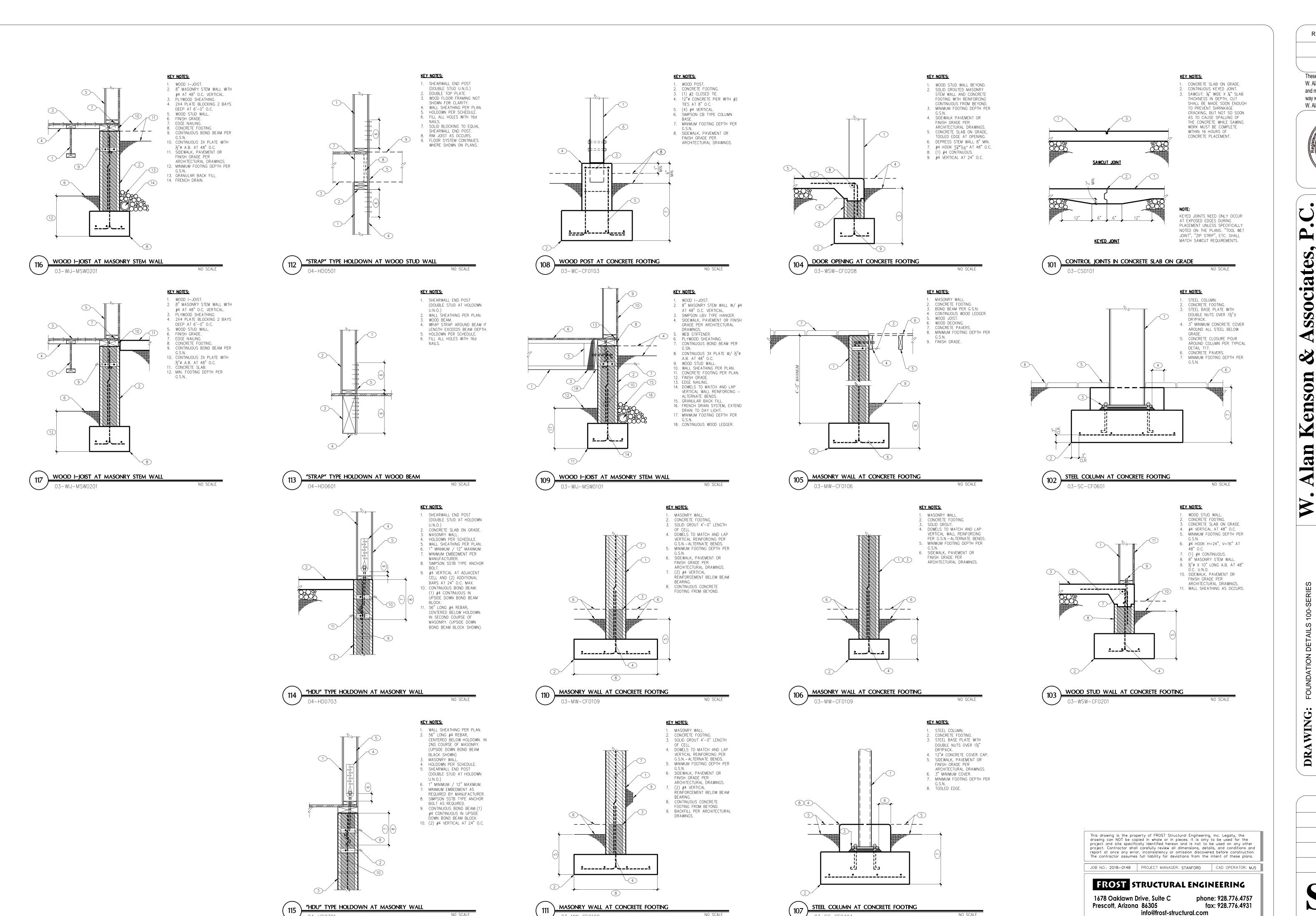


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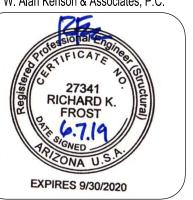
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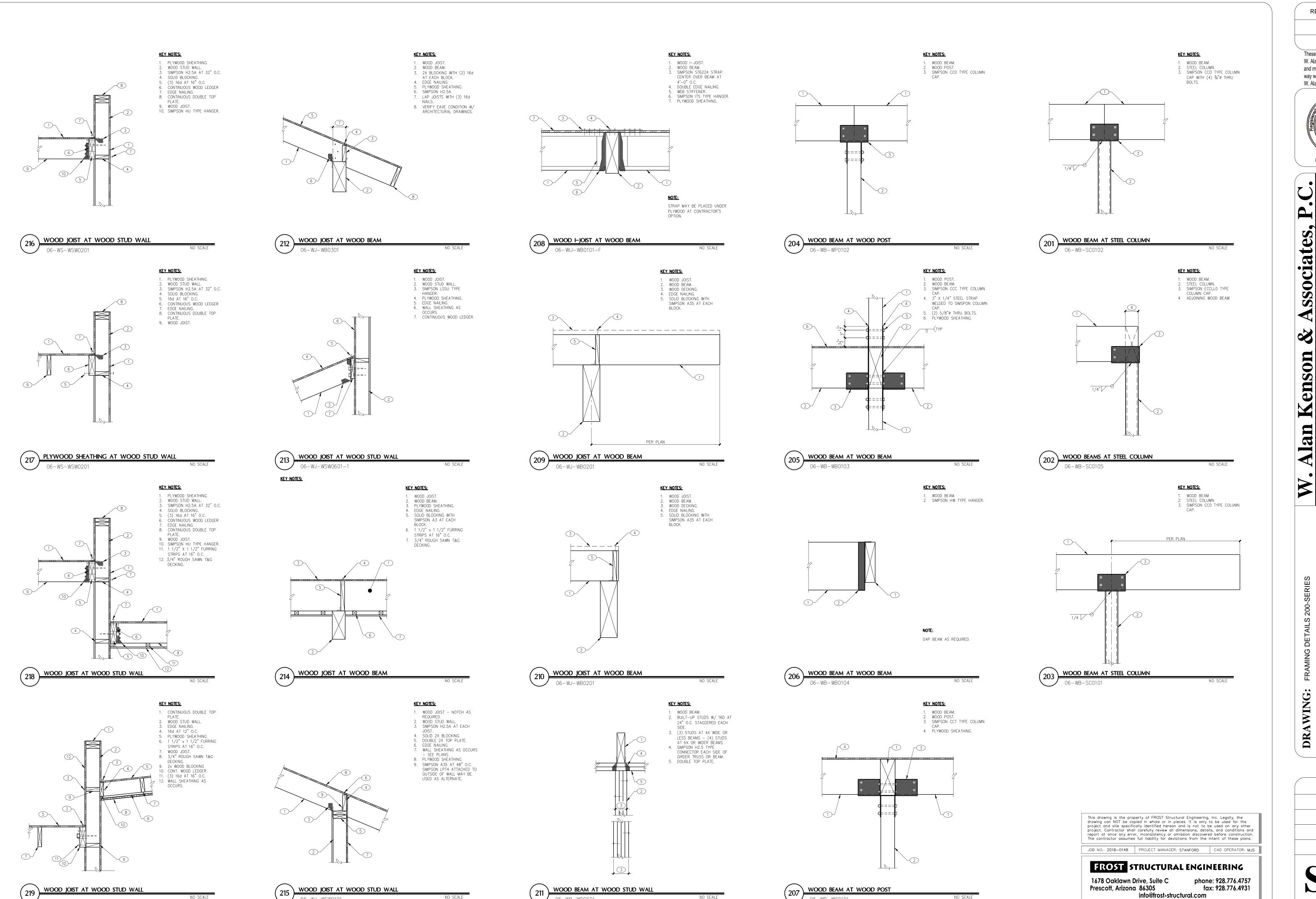
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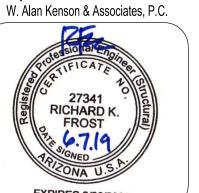
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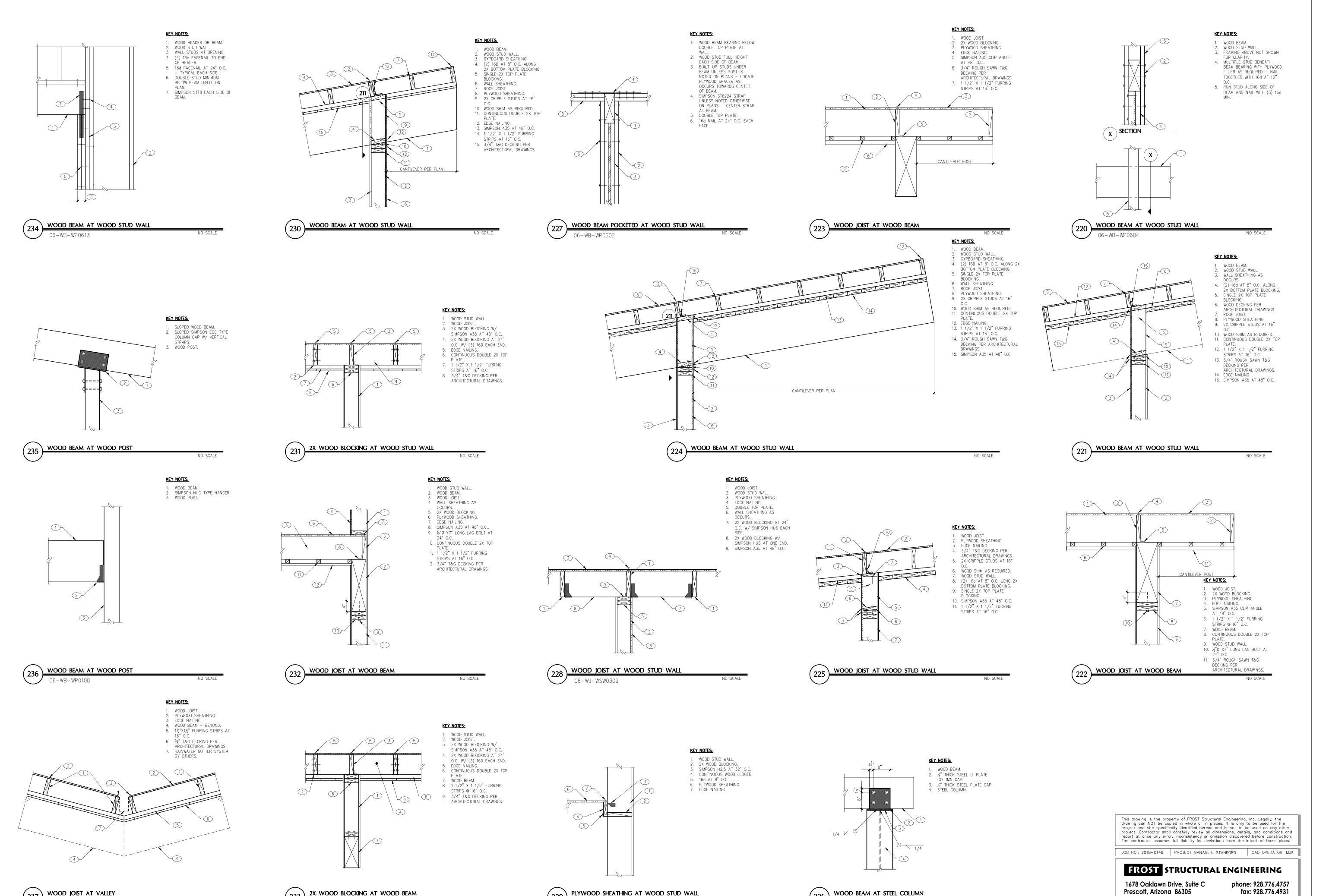
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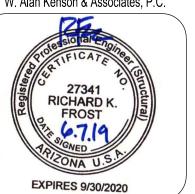
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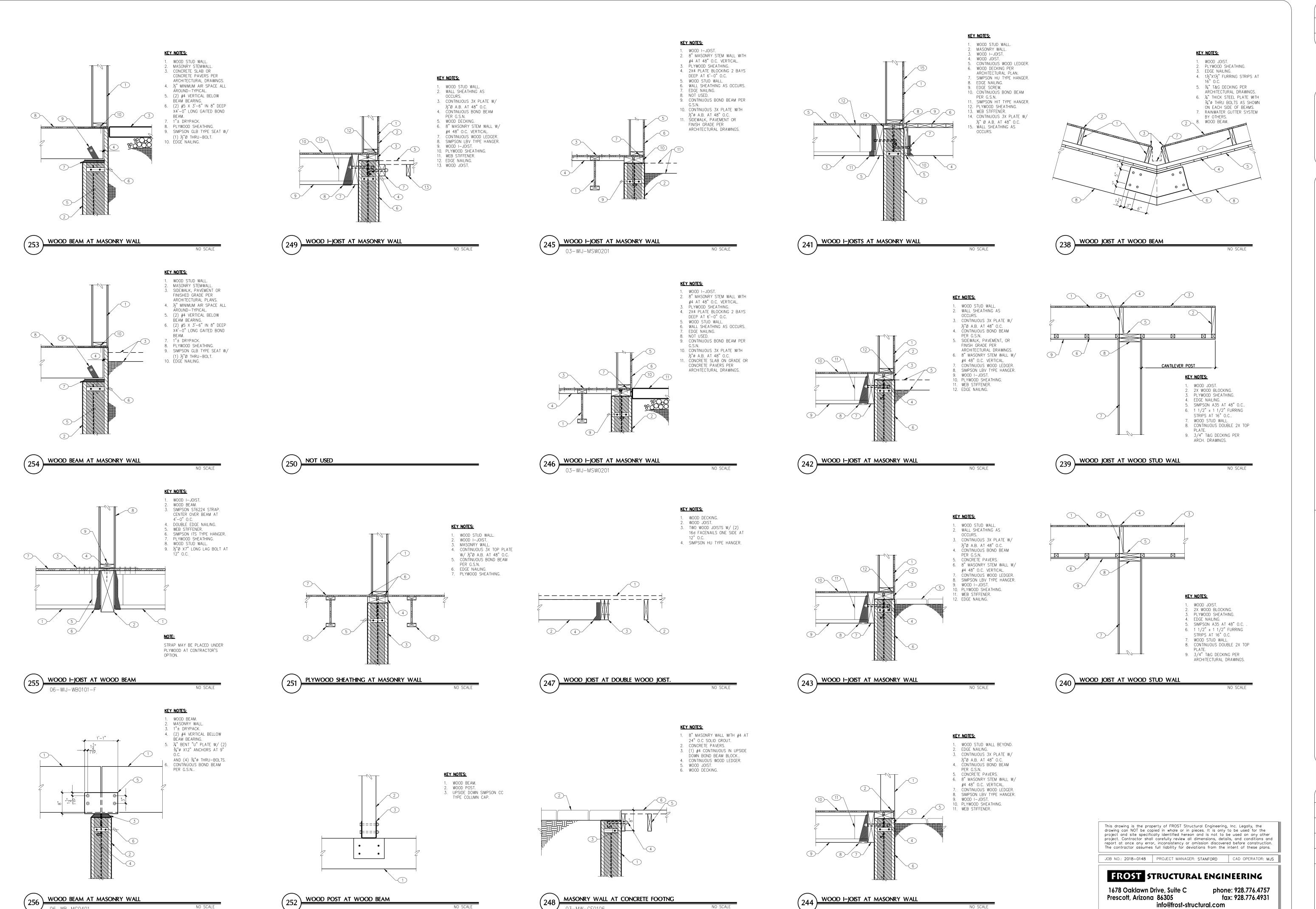


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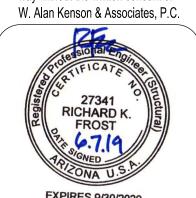
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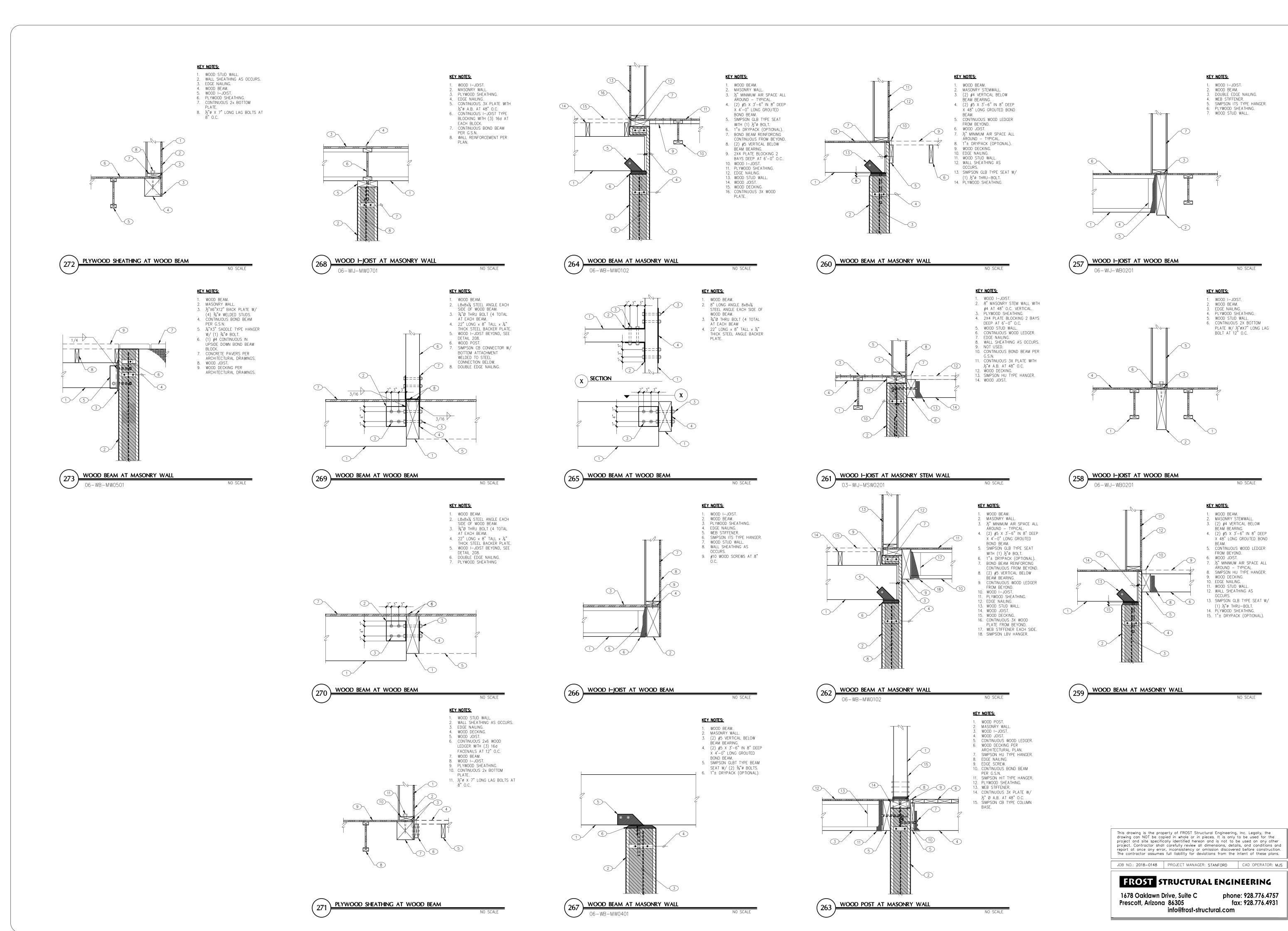


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SHEET

DUCT CONSTRUCTION NOTES

1 - ALL DUCTWORK SHALL BE CONSTRUCTED AND INSTALLED IN ACCORDANCE WITH "ASHRAE GUIDE" AND "SMACNA STANDARDS" AND IN CONFORMANCE WITH REQUIREMENTS OF LOCAL BUILDING, MECHANICAL AND ENERGY CONSERVATION CODES. WHERE MORE THAN ONE REGULATION OR CODE APPLIES, THE MORE STRINGENT REQUIREMENT SHALL GOVERN.

2 - FLEXIBLE DUCTWORK SHALL COMPLY WITH THE CLASS I REQUIREMENTS OF THE NFPA BULLETIN NO. 90A AND SHALL BE INSULATED WITH 1" FIBERGLASS, SUPPORTED BY HELICALLY WOUND STEEL WIRE WITH REINFORCED METALIZED OUTER JACKET RATED FOR USE IN PLENUMS. ATTACHMENT SHALL BE WITH WORM DRIVE CLAMPS. LENGTH SHALL NOT EXCEED 6'-0"

3 - PROVIDE MANUAL BALANCING DAMPER AT EACH BRANCH DUCT

4 - ALL DUCTWORK JOINTS SHALL BE SEALED WITH WATER-BASED

5 - ALL AIR SUPPLY AND RETURN DUCTS LOCATED IN UNCONDITIONED SPACES (OR ATTIC) SHALL HAVE A MIN. R-8 INSULATION VALUE.

6 - PROVIDE RADIUS ELBOWS, TURNING VANES, AND SPLITTER DAMPERS IN BRANCHES AND EXTRACTORS WHERE APPLICABLE.

7 - TURNING VANES SHALL BE INSTALLED IN ALL MITERED ELBOWS.

8 - BRANCH DUCT SERVING DIFFUSERS SHALL BE SIZE AS INDICATED. PROVIDE INCREASER OR SHEET METAL PLENUM TO CONNECT TO DIFFUSER AS REQUIRED.

9 - ALL DUCT DIMENSIONS SHOWN ARE INSIDE CLEAR DIMENSIONS. IF DUCT LINER IS USED FOR INSULATION, CONTRACTOR SHALL INCREASE DUCT SIZE ACCORDINGLY.

10 - HANGERS FOR SHEET METAL DUCTWORK SHALL BE INSTALLED AS REQUIRED BY 2012 IMC.

COORDINATION NOTES

1 - COORDINATE OPENING'S FOR GRILLES, REGISTERS, DIFFUSERS AND DUCTWORK WITH FRAMING CONTRACTOR PRIOR TO ROUGH-IN.

2 - COORDINATE EXACT LOCATION OF ALL GRILLES, REGISTERS AND DIFFUSERS WITH ARCHITECTURAL PLANS.

3 - LIGHTING & SPRINKLER HEADS TAKE PRECEDENCE OVER DIFFUSER LOCATION. CONTRACTOR SHALL MAKE NECESSARY ADJUSTMENTS TO DIFFUSERS TO AVOID ANY CONFLICT WITH LIGHTING LAYOUT & SPRINKLER HEADS.

4 - CONTRACTOR TO COORDINATE THERMOSTAT LOCATIONS WITH OWNER & ARCHITECT PRIOR TO MOUNTING.

5 - ALL THERMOSTATS ARE TO BE MOUNTED AT A HEIGHT OF 48" ABOVE THE FLOOR LEVEL FOR DISABLED ACCESS.

GENERAL REQUIREMENTS

1 - PROVIDE CLEARANCES AS PER MANUFACTURER'S RECOMMENDATIONS.

2 - PITCH CONDENSATE DRAIN LINE 1/8" PER 12" RUN TOWARDS TERMINATION. INSULATE IN CONDENSATE DRAIN LINE WITH 3/8" CLOSED CELL "ARMIFLEX" TUBE INSULATION, TO PREVENT CONDENSATE DRIP.

3 - PRIOR TO THE CONTRACTOR ORDERING OR SETTING ANY AIR CONDITIONING EQUIPMENT, DUCTWORK, OR AIR DEVICE, HE SHALL VERIFY LOCATION OF PLACEMENT WITH STRUCTURAL DRAWINGS AND CONFIRM WEIGHTS, DISCHARGE CONFIGURATION, SIZES, ELECTRICAL CHARACTERISTICS AND ANY OTHER DIMENSIONAL DATA WHICH MIGHT AFFECT THE SUCCESSFUL INSTALLATION OF THE EQUIPMENT.

4 - KEEP ALL VENTS THROUGH ROOF AND EXHAUST DISCHARGE DUCTS A MINIMUM OF 10'-0" FROM OUTSIDE AIR INTAKES OR WINDOWS AND FROM ALL VERTICAL PORTIONS OF THE BUILDING.

MAIN RESIDENCE 2012 IRC M1507 VENTILATION CALC

TABLE M1507.3.3(1)

CONTINUOUS WHOLE-HOUSE MECHANICAL VENTIALTION SYSTEM AIRFLOW RATE REQUIREMENTS

DWELLING UNIT	NUMBER OF BEDROOMS				
FLOOR AREA	0-1	2-3	4-5	6-7	7+
(SQUARE FEET)		AIF	RFLOW IN CF	M	
< 1,500	30	45	60	75	90
1,501 - 3,000	15	60	75	90	105
3,001 - 4,500	60	75	90	105	120
4,501 - 6,000	75	90	105	120	135
6,001 - 7,500	90	105	120	135	150
> 7,500	105	120	135	150	165

DWELLING UNIT FLOOR AREA = 2,350 NUMBER OF BEDROOMS = 3

MECHANICAL VENTILATION REQUIRED = 60 CFM (PER TABLE TABLE M1507.3.3(1)

Residential Requirements

- . Exterior wall penetrations by pipes, ducts or conduits shall be caulked.
- 2. Energy compliance shall be demonstrated by a passing REScheck energy compliance score. (N1101.2).
- 3. Supply and return ducts shall be insulated to a minimum R-8. Ducts in

floor trusses shall be insulated to minimum R-6. (N1103.2.1).

- 4. Registers, diffusers and grilles shall be mechanically fastened to rigid supports or structural members on at least two opposite sides in addition to being connected to the ductwork they serve.
- 5. Dryer exhaust ducts shall conform to the requirements of Sections (M1502.4.5 amended), M1502.4.1 thru M1502.4.6.
- 6. Exhaust air from kitchens, bathrooms and toilet rooms shall not be re—circulated within a residence or to another dwelling unit, shall not discharge into an attic and/or crawl space and shall be exhausted directly to the
- 7. Provide outside combustion air to all indoor fireplaces, with air intake located not higher than the firebox. (R1006.2).
- 8. At least one thermostat shall be provided for each separate heating and cooling system. (N1103.1).
- 9. The building shall be provided with ventilation that meets the requirements of Section M1507 or with other approved means of ventilation. Outdoor air intakes and exhausts shall have automatic or gravity dampers that close when the ventilation system is not operating. (N1103.5).
- 10. The building or dwelling unit shall be tested and verified as having an air leakage rate of not exceeding 5 air changes per hour. Testing shall be conducted with a blower door at a pressure of 0.2 inches w.g. (50 Pascals). Testing shall be conducted by an approved third party. A written report of the results of the test shall be signed by the party conducting the test and provided to the building official. Testing shall be performed at any time after creation of all penetrations of the building thermal envelope. (N1102.4.1.2).
- 11. Ducts, air handlers, and filter boxes shall be sealed. Joints and seams shall comply with Section M1601.4.1, (N1103.2.2). Duct tightness shall be verified by either of the following:
- 1. Post—construction test: Total leakage shall be less than or equal to 4 cfm (113.3 L/min) per 100 square feet (9.29 m2) of conditioned floor area when tested at a pressure differential of 0.1 inches w.g. (25 Pa) across the entire system. including the manufacturer's air handler enclosure. All register boots shall be taped or otherwise sealed during the test.
- 2. Rough—in test: Total leakage shall be less than or equal to 4 cfm (113.3 L/min) per 100 ft2 (9.29 m2) of conditioned floor area when tested at a pressure differential of 0.1 inches w.g. (25 Pa) across the system, including the manufacturer's air handler enclosure. All registers shall be taped or otherwise sealed during the test. If the air handler is not installed at the time of the test, total leakage shall be less than or equal to 3 cfm (85 L/min) per 100 square feet (9.29 m2) of conditioned floor area.

MECHANICAL SHEET INDEX

MECHANICAL

DESIGN CRITERIA

IMPORTANT NOTICE

MECHANICAL SYSTEMS SPECIFIED ON THESE DRAWINGS HAVE

CRITERIA TO MEET THE ENERGY CONSERVATION REQUIREMENTS

INSULATION AND/OR WINDOW VALUES DIFFERENT FROM THOSE

SHOWN BELOW MAY IMPACT THE SIZING OF THE MECHANICAL

96°F

75°F

70°F

R-38

R-19

U-VALUE

0.35

SYSTEMS WHICH SHOULD BE CONSIDERED AND EVALUATED

BEEN SIZED AND DESIGNED BASED ON A SPECIFIC DESIGN

OF THE 2012 INTERNATIONAL RESIDENTIAL CODE.

BEFORE IMPLEMENTATION.

SUMMER OUTDOOR TEMP

SUMMER INDOOR TEMP

WINTER OUTDOOR TEMP

WINTER INDOOR TEMP

ROOF INSULATION

WALL INSULATION

MECHANICAL DETAILS

MECHANICAL DESIGN CRITERIA AND CODE COMPLIANCE

MECHANICAL FLOOR PLAN MECHANICAL SCHEDULES

> 33491 | WILLIAM MARK | ODELL &

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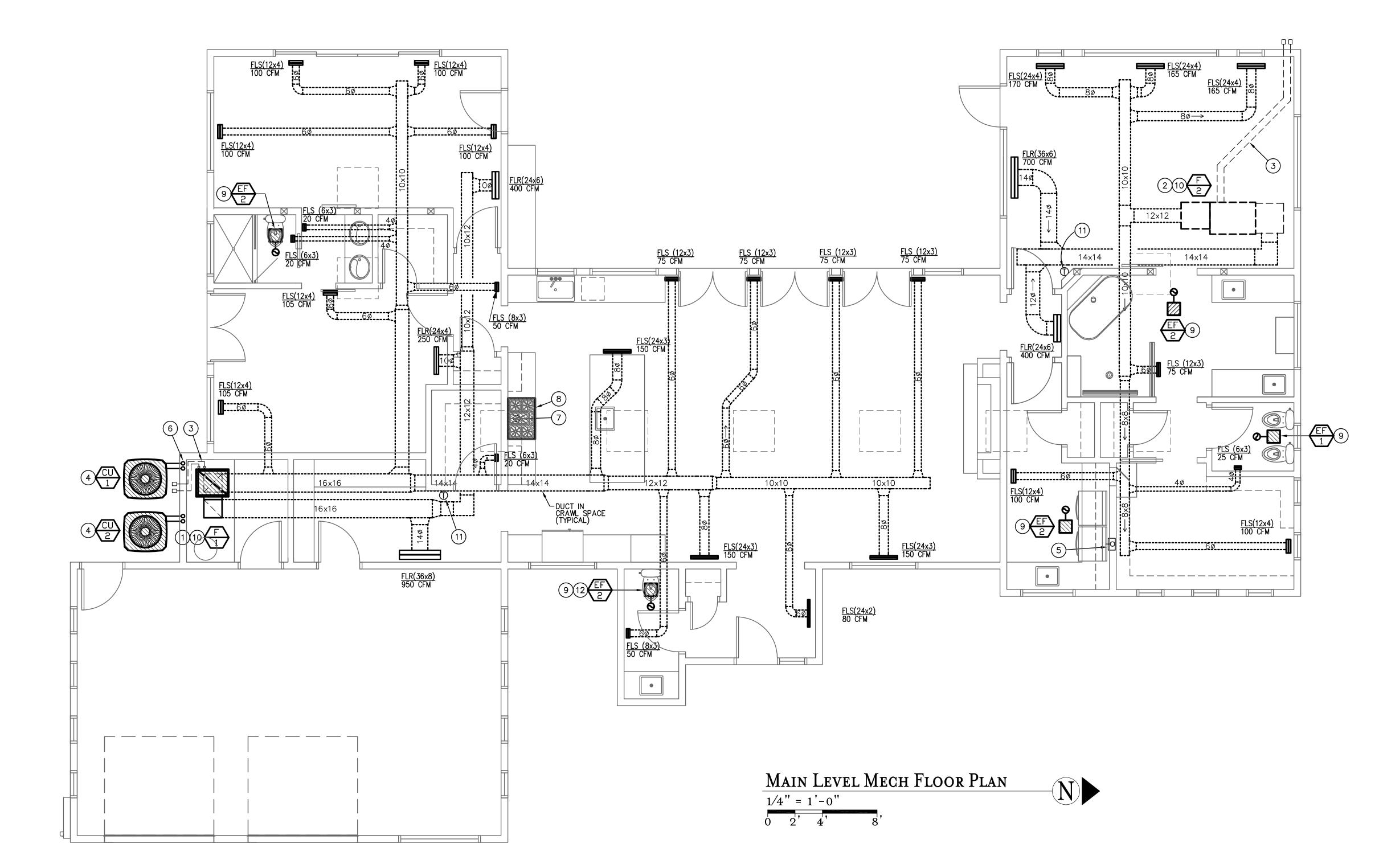
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Design Group, LLC

611 West Delano Ave Prescott, AZ 86301 Project Surprise, AZ 85379 (928) 443.7353 18052 (623) 444-6143

Consulting Engineers



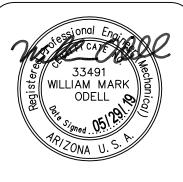
OKEYNOTES

- 1 VERTICAL, DOWNFLOW, SEALED COMBUSTION FURNACE ON DOWNFLOW SUBBASE. ROUTE RETURN DUCT FROM TOP CONNECTION AND DOWN THROUGH FLOOR. PROVIDE CLEARANCES AROUND FURNACE PER MANUFACTURER'S RECOMMENDATIONS.
- HORIZONTAL, SEALED COMBUSTION, FURNACE SUSPENDED FROM FLOOR JOISTS IN CRAWL SPACE. COORDINATE EXACT MOUNTING LOCATION WITH ARCHITECT. PROVIDE CLEARANCES AROUND FURNACE PER MANUFACTURER'S RECOMMENDATIONS.
- 3 PVC VENT PIPING UP TO MANUFACTURER'S WALL TERMINATION. OFFSET IN MECHANICAL ROOM AS NECESSARY TO ROUTE THROUGH ROOF, SIZE AND INSTALL PER MANUFACTURER'S RECOMMENDATIONS. REFER TO SCHEDULE FOR UNITS THAT ARE SEALED COMBUSITON.
- OUTDOOR CONDENSING UNIT ON 4" CONCRETE PAD. PAD SHALL BE A MINIMUM OF 4" LARGER ON ALL SIDES OF UNIT. DO NOT PLACE CONDENSING UNIT UNDER ROOF DRIP EDGE OR VALLEYS. COORDINATE FINAL LOCATION WITH ARCHITECT. PROVIDE CLEARANCES PER MANUFACTURER'S RECOMMENDATIONS.
- 4"ø RIGID DRYER DUCT WITH RECESSED DRYER BOX RECEPTACLE. INSTALL PER CODE IN CRAWL SPACE TO WALL DISCHARGE. MAXIMUM LENGTH SHALL NOT EXCEED 25 FEET (EXCEPT AS ALLOWED BY DRYER MANUFACTURER'S INSTALLATION INSTRUCTIONS). EXHAUST DUCT SHALL BE SECURED TO FRAMING MEMBERS WITH STRAPS AND NOT CONNECTED OR SECURED USING SCREWS OR OTHER FASTENING MEANS WHICH EXTEND INTO DUCT. PROVIDE DRYER DISCHARGE CAP, WITH BACKDRAFT DAMPER. DRYER BOX INSTALLATION SHALL MAINTAIN WALL FIRE RATING.
- ROUTE REFRIGERANT PIPING IN WALLS, ATTIC OR UNDERGROUND AS NECESSARY FROM CONDENSING UNIT TO CORRESPONDING FURNACE COIL. SIZE, INSULATED AND INSTALL PIPING PER MANUFACTURER'S RECOMMENDATIONS. FOLLOW MANUFACTURER'S PIPING GUIDE FOR ANY PIPING LENGTHS OVER 50 FEET. INSULATE REFRIGERANT PIPING PER SPECIFICATIONS.
- 7 6"Ø GALVANIZED STEEL EXHAUST DUCT UP FROM 36" RANGE HOOD. ROUTE AS INDICATED AND UP TO HIGH CAPACITY ROOF DISCHARGE CAP. HOOD SHALL EXHAUST 300-400 CFM, BUT SHALL NOT EXCEED 400 CFM.
- 8 KITCHEN HOOD SHALL BE SPECIFIED BY OWNER AND INSTALLED BY OTHERS. DUCT SIZE SHALL BE DESIGNED BY INSTALLING CONTRACTOR AS COORDINATED WITH KITCHEN RANGE HOOD SELECTED BY ARCHITECT.
- 9 CEILING MOUNTED EXHAUST FAN WITH BACK DRAFT DAMPER. FAN SHALL HAVE INDEPENDENT WALL SWITCH. ROUTE EXHAUST DUCT UP THROUGH ROOF TO MANUFACTURER'S ROOF DISCHARGE CAP.
- (10) EXTEND FULL SIZE CONDENSATE DRAIN PIPING FROM UNIT DRAIN CONNECTION, SLOPE PIPING AT 1/8" PER FOOT MINIMUM AND ROUTE TO EXTERIOR.
- PROGRAMMABLE THERMOSTAT MOUNTED 48" ABOVE FLOOR. VERIFY FINAL LOCATION WITH ARCHITECT.
- FAN SHALL BE PROVIDED WITH A "AIRCYCLER"

 #SMART EXHAUST SWITCH PROGRAMMED TO
 PROVIDE THE REQUIRED VENTILATION. REFER TO
 VENTILATION CALC ON M1 AND DETAIL ON SHEET
 M4.0

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ARIZONA U.S.

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emai www.] R C H I T E C

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DATE

JOB NO.
703
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Design Group, LLC
Consulting Engineers

611 West Delano Ave
Prescott, AZ 86301
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Project
18052

11759 N. 143rd Ave.
Surprise, AZ 85379
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MECHANICAL SPECIFICATIONS

DRAWINGS AND DATA

DRAWINGS ARE GENERALLY DIAGRAMMATIC AND ARE INTENDED TO CONVEY SCOPE OF WORK AND TO INDICATE GENERAL ARRANGEMENT OF EQUIPMENT. THEY ARE NOT INTENDED TO SHOW EVERY OFFSET OR FITTINGS OR EVERY STRUCTURAL DIFFICULTY THAT MAY BE ENCOUNTERED DURING INSTALLATION OF THE WORK. LOCATION OF ALL ITEMS NOT DEFINITELY FIXED BY DIMENSIONS ARE APPROXIMATE ONLY. EXACT LOCATIONS NECESSARY TO SECURE BEST CONDITIONS AND RESULTS MUST BE DETERMINED AT PROJECT AND SHALL HAVE APPROVAL OF ARCHITECT BEFORE BEING INSTALLED. DO NOT SCALE DRAWINGS. IF SO DIRECTED BY ARCHITECT. WITHOUT EXTRA CHARGE, MAKE REASONABLE MODIFICATIONS IN LAYOUT AS NEEDED TO PREVENT CONFLICT WITH WORK OF OTHER TRADES OR FOR PROPER EXECUTION OF WORK. INCLUDE MINOR DETAILS NOT USUALLY SHOWN OR SPECIFIED, BUT NECESSARY FOR PROPER INSTALLATION AND OPERATION 1/2 PCF, OF A SYSTEM OR PIECE OF EQUIPMENT.

INCLUDE IN WORK, WITHOUT EXTRA COST TO OWNER, LABOR, MATERIALS, SERVICES, APPARATUS, DRAWINGS (IN ADDITION TO CONTRACT DRAWINGS AND DOCUMENTS) REQUIRED TO COMPLY WITH APPLICABLE LAWS, ORDINANCES, RULES AND REGULATIONS. DRAWINGS AND SPECIFICATIONS TAKE PRECEDENCE WHEN THEY ARE MORE STRINGENT THAN CODES, ORDINANCES, STANDARDS AND STATUTES. CODES, ORDINANCES, STANDARDS AND STATUES TAKE PRECEDENCE WHEN THEY ARE MORE STRINGENT OR CONFLICT WITH DRAWINGS OR SPECIFICATIONS. FOLLOWING INDUSTRY STANDARDS, SPECIFICATIONS AND CODES ARE MINIMUM REQUIREMENTS:

A. APPLICABLE CITY, COUNTY, AND STATE MECHANICAL, ELECTRICAL, GAS, PLUMBING, HEALTH AND SANITARY CODES, LAWS AND ORDINANCES.

B. UNDERWRITER'S LABORATORIES, INC. STANDARDS. C. 2012 INTERNATIONAL RESIDENTIAL CODE WITH LOCAL AMENDMENTS. D 2012 INTERNATIONAL PLUMBING CODE WITH STATE

E. 2012 INTERNATIONAL MECHANICAL CODE WITH STATE AMENDMENTS. F. 2011 NEC

G. 2012 INTERNATIONAL FUEL GAS CODE WITH STATE AMENDMENTS.

GENERAL
THE WORK INCLUDED UNDER THIS SECTION CONSISTS OF FURNISHING ALL LABOR, MATERIALS, AND EQUIPMENT TO PROVIDE A COMPLETE FUNCTIONING HVAC SYSTEM AS SHOWN SONES. ACCEPTABLE MANUFACTURER'S ARE "BROAN", ON THE DRAWINGS AND SPECIFIED HEREIN. THE SYSTEM SHALL INCLUDE REQUIRED UNITS, THERMOSTATS, DUCTWORK, ARCHITECT. FANS, CONDENSATE DRAINS, REFRIGERANT PIPING, INSULATION CLEAN FILTERS, FLUES AND ALL APPURTENANCES AS REQUIRED. WHERE MORE THAN ONE UNIT IS REQUIRED OF ANY ITEM. FURNISHED BY THE SAME MANUFACTURER. EXCEPT WHERE SPECIFIED OTHERWISE. INSTALL MATERIAL AND EQUIPMENT IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

INSTRUCT THE OWNER AS TO PROPER OPERATION AND CARE OF THE EQUIPMENT AFTER START-UP AND CHECK-OUT. PROVIDE THE OWNER WITH ALL WARRANTY AND OPERATING INSTRUCTIONS AT THE COMPLETION OF THE PROJECT.

GUARANTEE

EACH COMPLETE SYSTEM GUARANTEED BY CONTRACTOR FOR UNIONS. PIPING BELOW GROUND SHALL BE TYPE L A PERIOD OF ONE YEAR, FROM DATE OF ACCEPTANCE OF WORK BY OWNER IN WRITING, TO BE FREE OF DEFECTS OF MATERIALS AND WORKMANSHIP, AND TO PERFORM SATISFACTORILY UNDER ALL CONDITIONS OF LOAD OR SERVICE. THE GUARANTEES PROVIDE THAT ANY ADDITIONAL CONTROLS, PROTECTIVE DEVICES, OR EQUIPMENT BE PROVIDED AS NECESSARY TO MAKE THE SYSTEM OF EQUIPMENT OPERATE SATISFACTORILY, AND THAT ANY FAULTY MATERIALS OR WORKMANSHIP BE REPLACED OR REPAIRED. LOSS OF REFRIGERANT IS CONSIDERED A DEFECT IN WORKMANSHIP AND/OR EQUIPMENT, TO BE CORRECTED AS REQUIRED AT NO EXTRA COST TO THE OWNER.

REGULATIONS, PERMITS & INSPECTIONS

COMPLY WITH ALL APPLICABLE CODES, RULES AND REGULATIONS. ALL MATERIALS, EQUIPMENT AND WORK MUST ARCHITECT AND GENERAL CONTRACTOR. CONFORM TO THE INTERNATIONAL RESIDENTIAL CODE. OBTAIN AND PAY FOR ALL REQUIRED PERMITS AND LICENSES. BALANCING WHEN REQUIRED BY CODE, ALL WORK MUST BE INSPECTED AND APPROVED BY LOCAL AUTHORITIES.

ALL DUCTWORK TO BE GALVANIZED LOCK FORMING SHEET METAL. SIZES SHOWN ARE CLEAR INSIDE DIMENSIONS. CONSTRUCT ALL DUCTWORK AND FITTINGS TO PROVIDE MINIMUM RESISTANCE AND NOISE LEVELS. DUCTWORK SHALL BE FABRICATED AND INSTALLED BY SKILLED MECHANICS IN A WORKMANLIKE MANNER USING THE LATEST EDITION OF THE "SMACNA" MANUAL AS A GUIDELINE. SEAL ALL SUPPLY AIR DUCTWORK AND RETURN AIR PLATFORMS/PLENUMS AIRTIGHT WITH APPROVED DUCT SEALER. TURNING VANES SHALL BE INSTALLED IN ALL MITERED ELBOWS.

UPON APPROVAL BY ARCHITECT, CONTRACTOR MAY USE FIBER SIMIALR) GLASS DUCT BOARD FOR ABOVE GROUND SUPPLY AND RETURN DUCT SYSTEMS. FIBER GLASS DUCT BOARD SHALL BE OWENS CORNING "ENDURAGOLD", TYPE 800, 1-1/2" THICK. (OR APPROVED EQUAL)

FLEXIBLE DUCT MAY BE USED FOR FINAL CONNECTION TO AIR DISTRIBUTION DEVICES, BUT SHALL NOT EXCEED 8 FEET IN LENGTH. FLEXIBLE DUCT SHALL HAVE A MINIMUM R-8

DUCT SIZES ON DRAWINGS ARE "CLEAR INSIDE." INCREASE SHEET METAL SIZES ACCORDINGLY FOR LINED DUCTWORK. ADHESIVE AND INSULATING MATERIALS SHALL HAVE COMPOSITE FIRE AND SMOKE HAZARD RATINGS MAXIMUM 25 FOR FLAME SPREAD AND 50 FOR SMOKE DEVELOPED. ADHESIVES SHALL

DUCTS IN FLOOR TRUSSES OR OTHER CONDITIONED SPACE: LINED DUCTWORK - SEMI-RIGID GLASS FIBER INSULATION, 1

1 1/2" THICK, THERMAL CONDUCTIVITY AT 75°. MAXIMUM 0.17 BTU/IN./SQ. FT./DEG./HR. MINIMUM "R-VALUE" SHALL

WRAPPED DUCTWORK - FIBER GLASS BLANKET WITH FRK VAPOR RETARDING FACING. 1 1/2 PCF, 2" THICK, WITH A MINIMUM INSTALLED "R-VALUE" OF 6.0. (ASSUMES 25% COMPRESSION)

DUCTS IN ATTICS OR OTHER UNCONDITIONED SPACE:

LINED DUCTWORK - SEMI-RIGID GLASS FIBER INSULATION, 1 1/2 PCF, 2" THICK, THERMAL CONDUCTIVITY AT 75°. MAXIMUM 0.13 BTU/IN./SQ. FT./DEG./HR. MINIMUM "R-VALUE" SHALL

WRAPPED DUCTWORK - FIBER GLASS BLANKET WITH FRK VAPOR RETARDING FACING. 0.75 PCF. 3" THICK, WITH A MINIMUM INSTALLED "R-VALUE" OF 8.0. (ASSUMES 25% COMPRESSION)

<u>GRILLES AND DIFFUSERS</u> ACCEPTABLE MANUFACTURERS ARE TITUS, ANEMOSTAT, KRUEGER, CARNES, BARBERCOMAN, AGITAIR, E.A.P.C., METAL-AIR OR HART AND COOLEY. CONFIRM FINISHED AND COLOR WITH ARCHITECT. ALL GRILLES AND DIFFUSERS SHALL BE SUBMITTED TO ARCHITECT FOR FINAL APPROVAL.

FURNISH AND INSTALL EXHAUST FANS AS REQUIRED BY ARCHITECTURAL DRAWINGS. PROVIDE FANS WITH FACTORY ROOF OR WALL CAPS AS SHOWN. PROVIDE ALL EXHAUST FANS WITH BACKDRAFT DAMPER. MAXIMUM NOISE RATING 4.0 "NUTONE" OR "GREENHECK" OR AS APPROVED BY

CONDENSATE AND FURNACE DRAIN PIPING SHALL BE SCHEDULE 40 PVC. RUN DRAIN LINE FULL SIZE TO NEAREST PLANTER AREA, FLOOR DRAIN, OR P-TRAP. INSTALL TRAPS IN LINES AS REQUIRED BY EQUIPMENT MANUFACTURER. COORDINATE SPECIAL REQUIREMENTS FOR DRAIN AND WATER LINES THAT MAY BE REQUIRED WITH SPECIAL EQUIPMENT WITH PLUMBING CONTRACTOR PRIOR TO COMPLETION OF ROUGH-IN.

ABOVE GROUND, WITHIN BUILDING PIPING SHALL BE TYPE ACR DRAWN-TEMPER COPPER TUBE WITH WROUGHT COPPER ANNEALED COPPER TUBING. EXPOSED SUCTION PIPING SHALL HAVE 1-1/2" INSULATION, CONCEALED SUCTION PIPING SHALL HAVE 1" INSULATION. INSULATION SHALL BE "ARMAFLEX" FLEXIBLE ELASOMERIC, OR EQUAL.

FURNACES AND CONDENSING UNITS AIR CONDITIONING EQUIPMENT SHALL BE AS SPECIFIED ON SCHEDULES UNLESS SPECIFICALLY ALLOWED BY OWNER OR

THERMOSTAT AND CONTROLS

FURNISH AND INSTALL PROGRAMMABLE THERMOSTATS AS REQUIRED BY THE EQUIPMENT MANUFACTURER OR AS SPECIFIED ON THE EQUIPMENT SCHEDULES. FIELD VERIFY EXACT LOCATION AND MOUNTING HEIGHT FOR CONTROLS WITH

AT A MINIMUM CONTRACTOR SHALL PROVIDE BALANCING OF ALL FRESH AIR SYSTEMS TO ENSURE COMPLIANCE WITH IRC M1507 AND A COMFORT BALANCE ON THE AIR DISTRIBUTION SYSTEM THROUGHOUT THE RESIDENCE. CONTRACTOR SHALL PROVIDE BALANCING DAMPERS AND/OR OBD'S AS MAY BE REQUIRED.

CONTRACTOR SHALL PROVIDE BALANCING OF FRESH AIR SYSTEM TO ENSURE COMPLIANCE WITH IRC M1507.

FRESH AIR SYSTEM SHALL INCLUDE A FRESH AIR INTAKE ON RETURN SIDE OF FURNACE AND AN EXHAUST FAN CONTROLLED TO PROVIDE REQUIRED VENTIALTION. (I.E. "AIR CYCLER" SMART EXHAUST CONTROLLER, OR

FURNACE SCHEDULE

MARK	ARFA SERVED	ORIENTATION	NOMINAL	MFG'R	MODEL #	CFM	CEM E.S.P.			FUEL	A.F.U.E.	ELECTRICAL DATA		FILTER	FILTER	NOTES
IVII (ICIC	TINEN SERVED	ORIENTATION	TONS	IVIII O IX	WODEL #	OT IVI	("W.G.)	INPUT OUTPUT	SIZE	TOLL	71.1 . O.L.	H.P.	V/Ø/Hz	SIZE	TYPE	110123
F-1	MAIN RESIDENCE	DOWNFLOW	4	TRANE	TDH1C085	1600	0.50	80,000 76,000	3"	NAT. GAS	95.0%	1/2	120/1/60	2-16x20	HIGH VELOCITY	1234
F-2	MASTER SUITE	HORIZONTAL	2	TRANE	TUH1B040	800	0.50	40,000 38,000	2"	NAT. GAS	95.0%	1/2	120/1/60	1-17x25	HIGH VELOCITY	(1)(2)(3)(5)

- (1) INSTALL WITH CLEARANCES PER MANUFACTURER'S RECOMMENDATIONS.
- (4) UNIT SHALL BE CONFIGURED FOR VERTICAL DOWNFLOW. (2) SIZE AND INSTALL 2 PIPE SEALED COMBUSTION VENT PIPING PER MANUFACTURER'S INSTRUCTIONS FOR
 - (5) UNIT SHALL BE CONFIGURED FOR HORIZONTAL INSTALLATION.

(3) PROVIDE HIGH ALTITUDE KIT.

OPERATIONAL SYSTEM.

CONDENSING UNIT SCHEDULE

ACTUAL INSTALLED LENGTHS. PROVIDE ROOF TERMINATION PER MANUFACTURER.

MADK	NOMINAL	MECID	MODEL #	Cod	oling	DESIGN COND.	INDOOR	COIL ENT. AIR	El	LECTRICAL	DATA	MINIMUM	DEEDICEDANT	NOTES
MARK	TONS	MFG'R	MODEL #	TOTAL	SENS.	DB/WB	COIL MODEL #	DB/WB	MCA	FUSE	V/Ø	SEER	REFRIGERANT	NOTES
CU-1	4	TRANE	4TTR6048	42.5	33.08	95/63	SELECTED BY MFG.	78 ° /63°	26.0	40	208/230 1ø	15	R-410A	1234567
CU-2	2	TRANE	4TTR6024	22.0	19.1	95/63	SELECTED BY MFG.	78 ° /63°	13.0	20	208/230 1ø	15	R-410A	1234567

- INSTALL UNIT PER MANUFACTURER'S WRITTEN DIRECTIONS. SLEEVE PIPING PENETRATIONS THROUGH EXTERIOR WALL, SEAL WATERTIGHT AND PROVIDE ESCUTCHEONS.
- (5) RUN ALL REFRIGERANT PIPING FULL SIZE PER MFG'RS. INSTRUCTIONS.

UNIT SHALL BE PROVIDED WITH A PROGRAMMABLE THERMOSTAT.

(6) PROVIDE INDOOR FAN COIL UNIT COMPLETE WITH MOTOR STARTER.

- (7) PROVIDE LOW AMBIENT CONTROL KIT FOR OPERATION DOWN TO 30°F.
- PROVIDE 10-YEAR COMPRESSOR WARRANTY AND 5-YEAR FOR OTHER COMPONENTS. PROVIDE UNIT COMPLETE WITH ALL NECESSARY OVERLOADS AND CONTROL COMPONENTS FOR A COMPLETE AND

F/	AN SCHE	DULE												
MARK	MOUNTING	MOUNTING MANUFACTURER		MANUFACTURER MODEL		CFM	FM E.S.P.	SONES	MOTOR		BAROM.	WIRE	DRIVE	REMARKS
WAICK	/LOCATION	WANDI ACTORER	WODEL	CTIVI	L.3.1 .	@ 0.1"	AMPS, HP OR WATTS	V/PH	DAMPER	SCREEN	REIVIARNS			
EF-1	CEILING	NUTONE	QTXEN80	65	0.3"	0.3	0.4 A	120/1	YES	YES	DIRECT	1234		
EF-2	CEILING	NUTONE	QTXEN150	125	0.3"	1.4	0.5 A	120/1	YES	YES	DIRECT	1234		

- PROVIDE UNIT WITH FACTORY SUPPLIED EXHAUST GRILLE. PROVIDE EXHAUST FAN WITH BACK DRAFT DAMPER.
- (3) EXHAUST FAN SHALL BE ENERGY STAR RATED. (4) UNIT SHALL BE CONTROLLED BY WALL SWITCH.

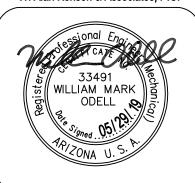
GRIL	LES A	AND REG	ISTERS	SCHE	DULE					
MARK	SIZE	DESCRIPTION	MFG.	MODEL.	FRAME TYPE	MAX. NC AT DESIGN CFM	DAMPER (OBD)	COLOR	MATERIAL	REMARKS
FLS(X)	PER PLAN	FLOOR SUPPLY LINEAR BAR GRILLE	HART & COOLEY	LF401	SURFACE	25	YES	SATIN ANODIZED	ALUMINUM	LENGTH AND WIDTH PER PLAN PROVIDE W/ PLENUM
FLR(X)	PER PLAN	FLOOR RETURN LINEAR BAR GRILLE	HART & COOLEY	LF110	SURFACE	25	YES	SATIN ANODIZED	ALUMINUM	LENGTH AND WIDTH PER PLAN PROVIDE W/ PLENUM

NECK SIZE SHOWN ON PLANS AND CORRESPONDS TO DUCT CONNECTION SIZE. 3. MOUNTING HEIGHT AND EXACT LOCATION TO BE DETERMINED BY THE ARCHITECT. CONTRACTOR SHALL PROVIDE SQUARE TO ROUND ADAPTERS AS REQUIRED FOR 4. VERIFY COLOR OF ALL DEVICES WITH ARCHITECT. INSTALLATION.

> Design Group, LLC Consulting Engineers 611 West Delano Ave Prescott, AZ 86301 Project Surprise, AZ 85379 (928) 443.7353 18052 (623) 444-6143

REVISIONS

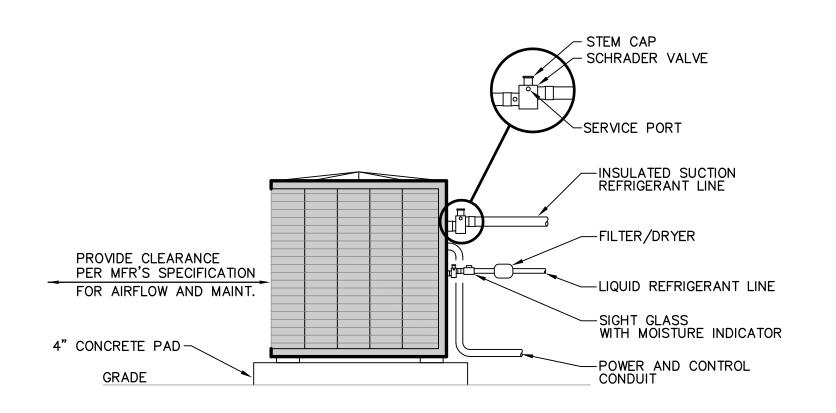
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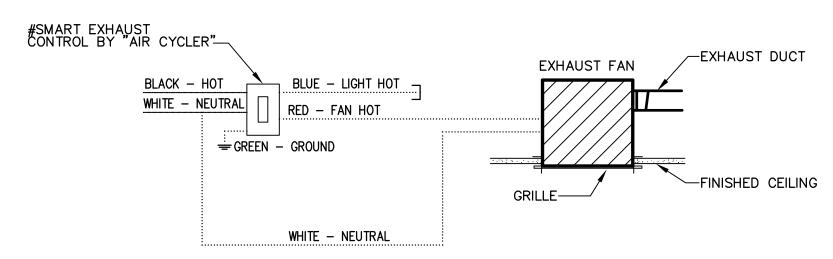
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CONDENSING UNIT DETAIL NOT TO SCALE

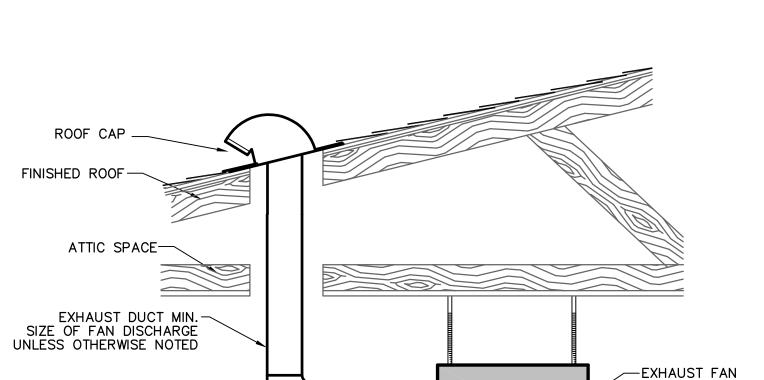


#SMART EXHAUST SETTINGS

60 CFM REQUIRED / 125 CFM PROVIDED = .48 RUNTIME FACTOR 0.48 RUNTIME FACTOR X 60 MINUTES = 29 MINUTES

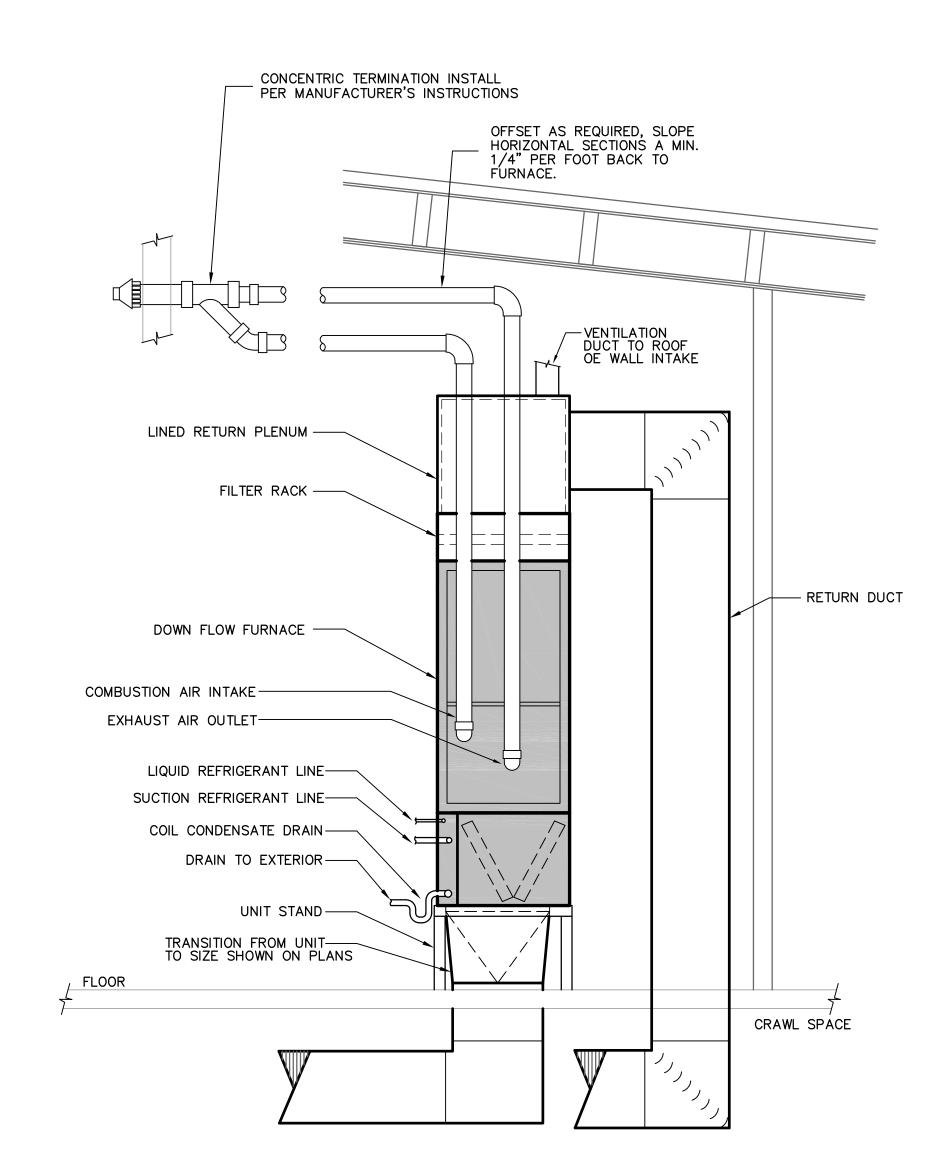
OSA VENTILATION CONTROL DETAIL

— MOUNTING **FLANGE**

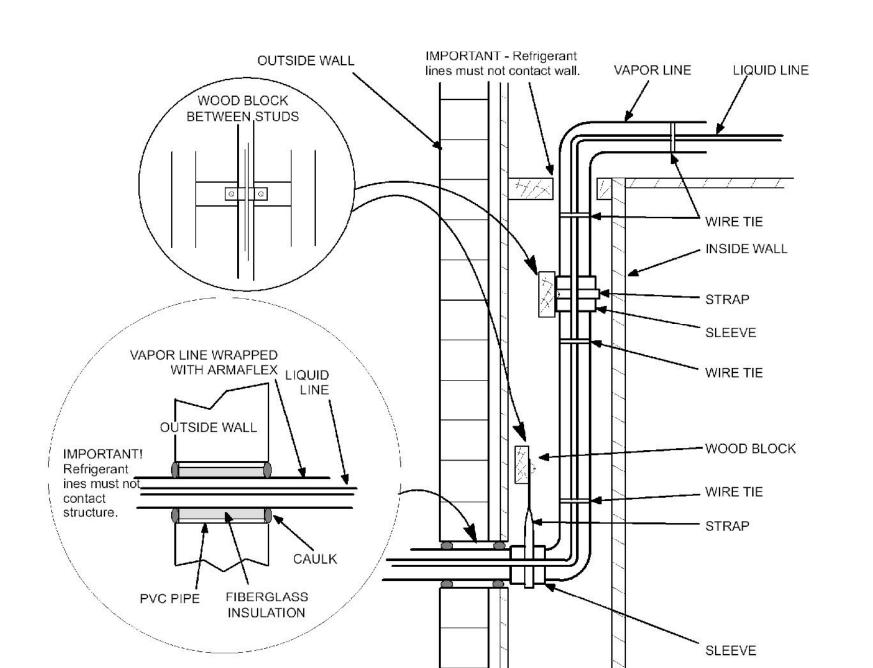


CEILING EXHAUST FAN DETAIL

BACK DRAFT DAMPER-

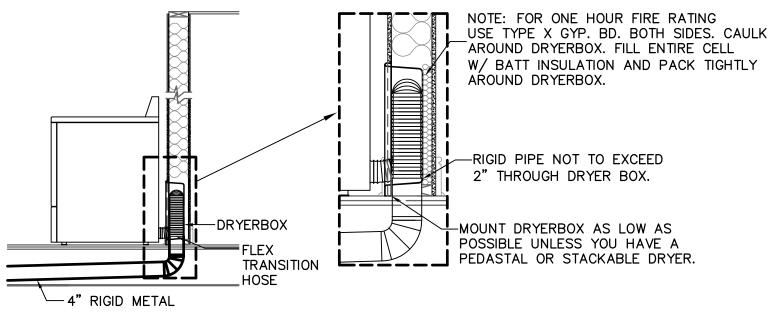


DOWN FLOW FURNACE DETAIL



REFRIGERANT PIPING DETAIL

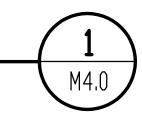


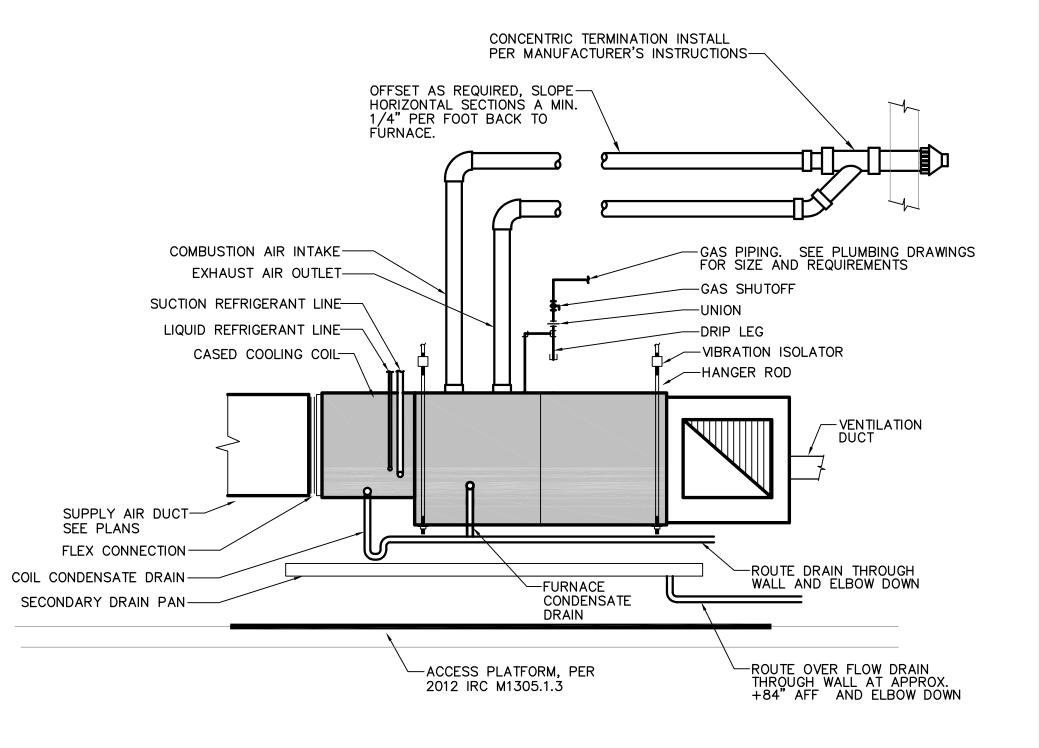


DRYERBOX INSTALLATION

DRYERBOX RECEPTACLE SHALL BE METAL AND BE INSTALLED AS TO PERMIT THE PROPER AND SAFE COLLECTION OF THE DRYER TRANSITION HOSE. DRYERBOX SHOULD BE RESTING ON THE BOTTOM PLATE AND BE LOCATED AT OR NEAR THE CENTERLINE OF THE PROPOSED DRYER APPLIANCE.

DRYER BOX DETAIL NOT TO SCALE



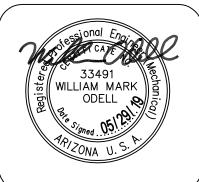






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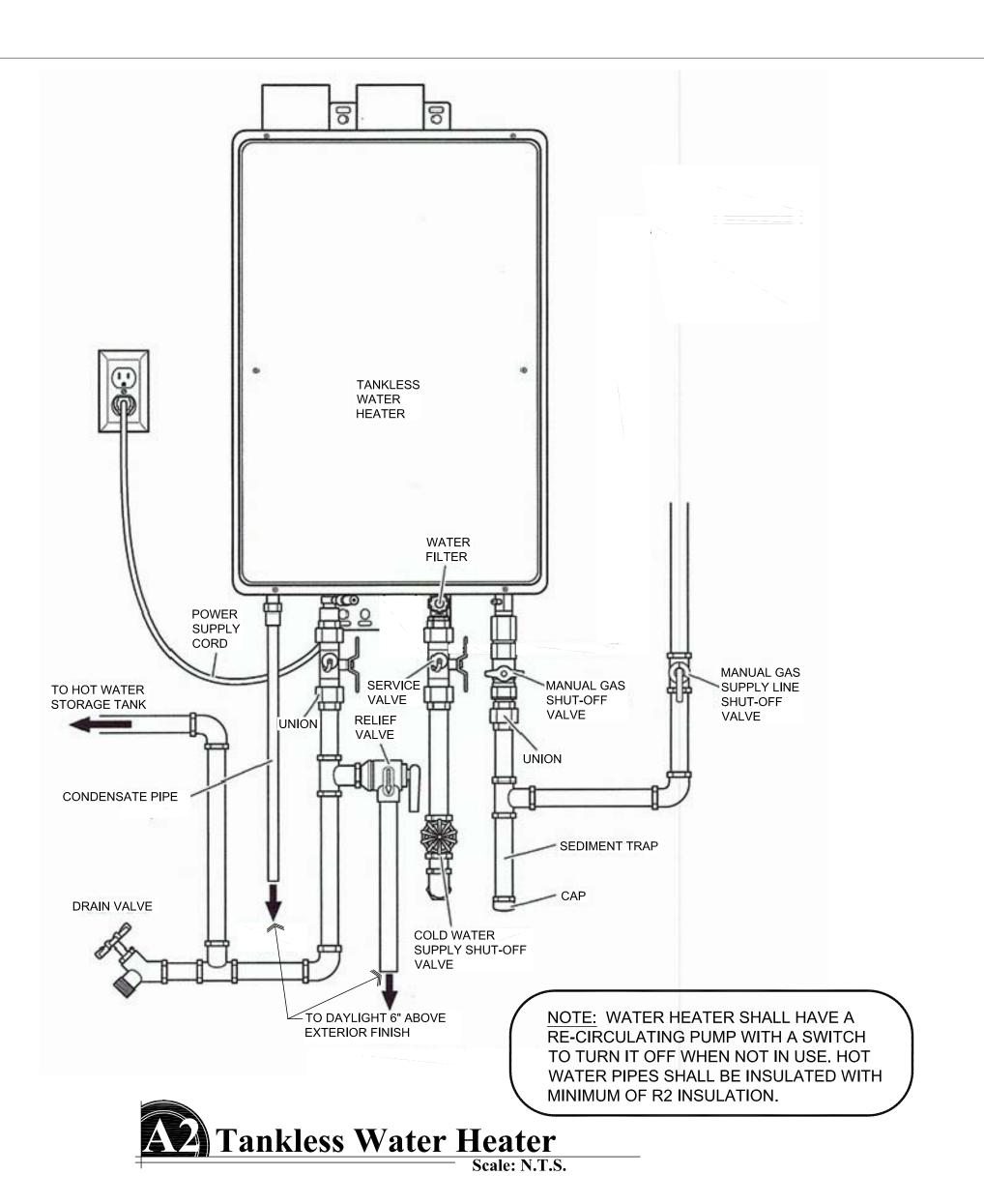
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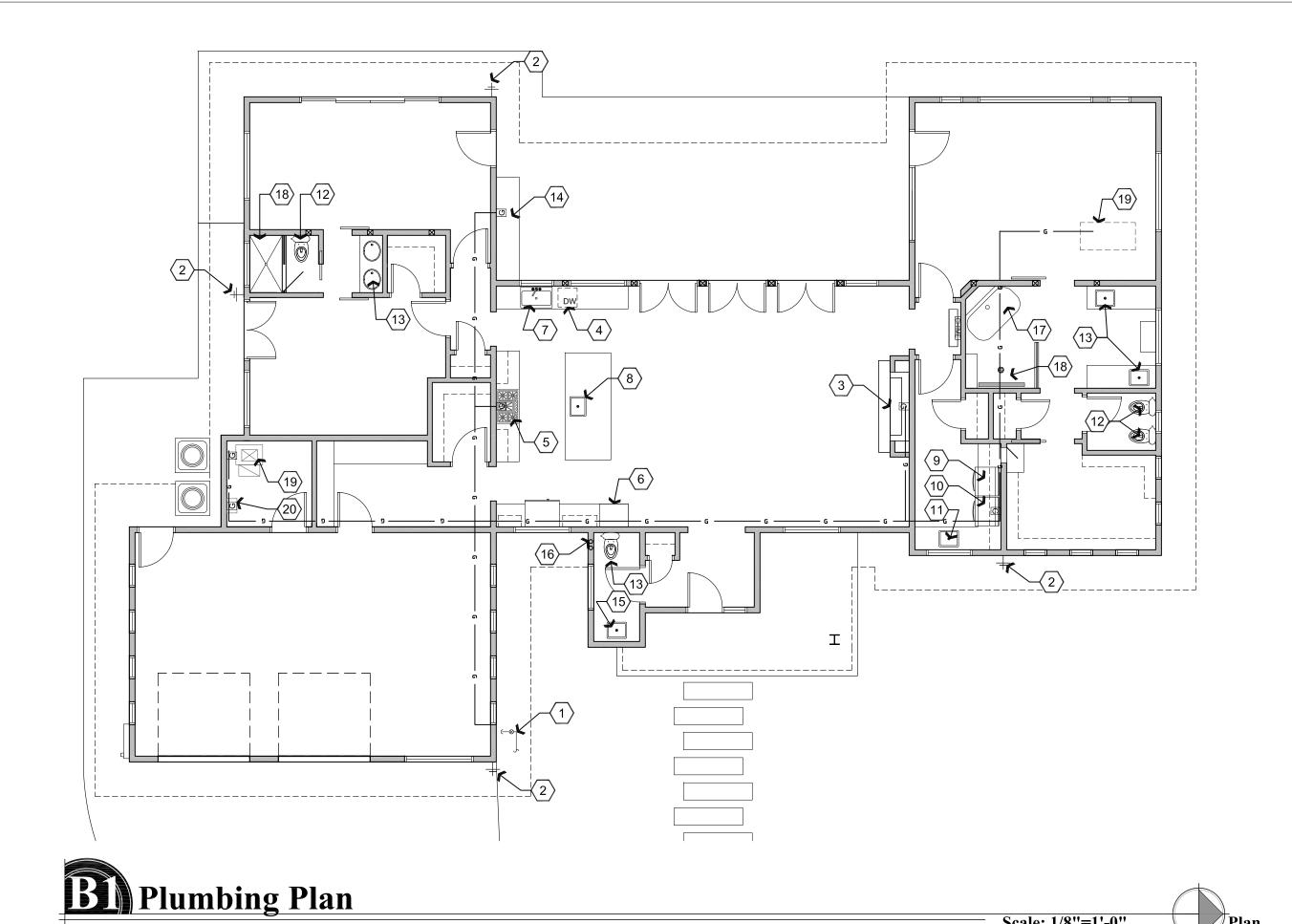
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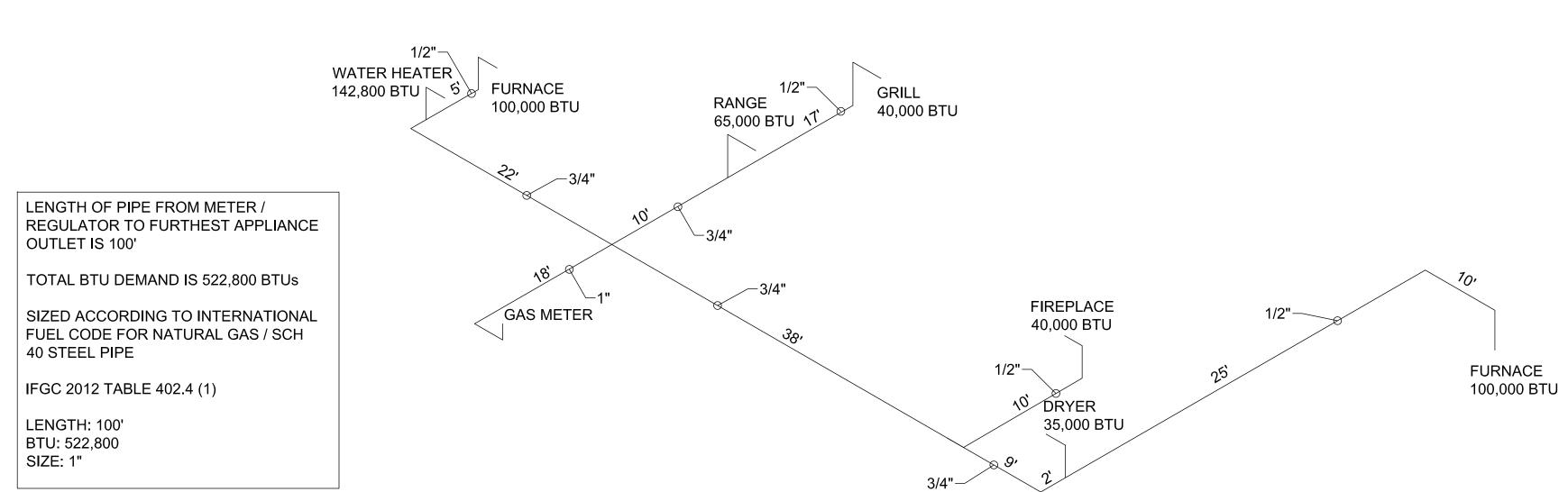




- NATURAL GAS SHUT OFF VALVE /
- METER / REGULATOR.
- FROST PROOF HOSE BIBB
- 4. DISHWASHER.
- KITCHEN SINK.

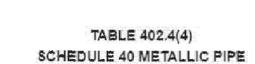
- 14. NATURAL GAS GRILL LOCATION.
- 15. PEDESTAL SINK.
- 16. ROOF DRAIN AND OVERFLOW ROOF
- 19. HVAC.

TYPE	COUNT	НОТ	COLD	COMBINED	TOTAL
FULL BATH GROUP	2	1.5	2.7	3.6	7.2
KITCHEN GROUP	1	1.9	1.0	2.5	2.5
LAUNDRY GROUP	1	1.8	1.8	2.5	2.5
HOSE BIBB	4	-	2.5	2.5	10
LAVATORY	1	.5	.5	.7	.7
WATER CLOSET	1	-	2.2	2.2	2.2
				TOTAL	25.1



Scale: N.T.S.





Gas	Natural
Inlet Pressure	Less than 2 psi
Pressure Drop	6.0 in. w.c.
Specific Gravity	0.60

PIPE SIZE (inch)												
Nominal	1/2	3/4	1	11/4	11/2	2	21/2	3	4			
Actual ID	0.622	0.824	1.049	1.380	1,610	2.067	2.469	3.068	4.026			
Length (ft) Capacity In Cubic Feet of Gas Per Hour												
10	660	1,380	2,600	5,340	8,000	15,400	24,600	43,400	88,500			
20	454	949	1,790	3,670	5,500	10,600	16,900	29,900	60,800			
30	364	762	1,440	2,950	4,420	8,500	13,600	24,000	48,900			
40	312	652	1,230	2,520	3,780	7,280	11,600	20,500	41,800			
50	276	578	1,090	2,240	3,350	6,450	10,300	18,200	37,100			
60	250	524	986	2,030	3,030	5,840	9,310	16,500	33,600			
70	230	482	907	1,860	2,790	5,380	8,570	15,100	30,900			
80	214	448	844	1,730	2,600	5,000	7,970	14,100	28,700			
90	201	420	792	1,630	2,440	4,690	7,480	13,200	27,000			
100	190	397	748	1,540	2,300	4,430	7,070	12,500	25,500			
125	168	352	663	1,360	2,040	3,930	6,260	11,100	22,600			
150	153	319	601	1,230	1,850	3,560	5,670	10,000	20,500			
175	140	293	553	1,140	1,700	3,280	5,220	9,230	18,800			

3. NATURAL GAS FIREPLACE. NATURAL GAS COOK TOP.

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6. ELECTRIC DOUBLE OVENS AS SELECTED BY OWNER.

PREP SINK.

9. WASHER.

10. NATURAL GAS CLOTHES DRYER. 11. UTILITY SINK.

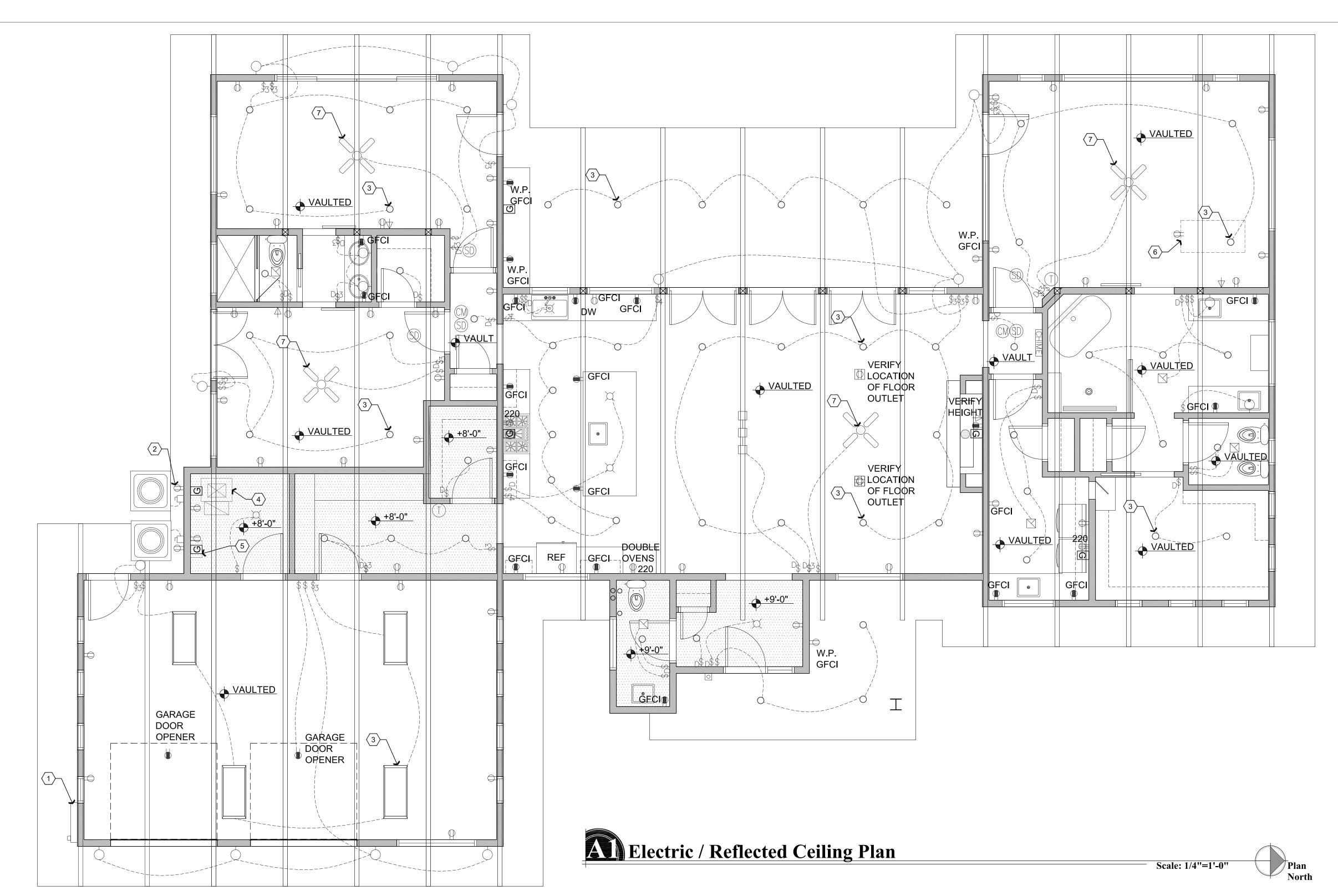
12. TOILET / BIDET. 13. LAVATORY.

DRAIN. 17. BATHTUB.

18. SHOWER.

20. TANKLESS WATER HEATER.

DRAWN BY L.O. CHECKED BY W.A.K. June 21st, 2019 JOB NO. **703** SHEET



Discriptive Keynotes

- PROVIDE ELECTRICAL SERVICE ENTRANCE SECTION AND METER, 200 AMP, SINGLE PHASE SERVICE.
- PROVIDE POWER TO CONDENSING UNIT.
 PROVIDE LIGHT FIXTURE, TYPICAL, REFER TO
- LEGEND FOR TYPE.
 4. FURNACE / AC.
- 5. PROVIDE NATURAL GAS TANKLESS WATER HEATER WITH RE-CIRCULATING PUMP, REFER TO PLUMBING PLANS.
- PROVIDE FURNACE / AC IN CRAWL SPACE,
- REFER TO MECHANICAL PLANS.

 Z. PROVIDE CEILING FAN.

Degend

ELECTRICAL SERVICE ENTRANCE SECTION

DISCONNECT

JUNCTION BOX

DUPLEX RECEPTACLE, AT 18" A.F.F.

DUPLEX RECEPTACLE ABOVE COUNTER OR HEIGHT AS INDICATED

HALF SWITCHED DUPLEX RECEPTACLE

SPECIAL RECEPTACLE

FOURPLEX RECEPTACLE

FLOOR MOUNTED DUPLEX RECEPTACLE

DUPLEX RECEPTACLE IN CEILING

SWITCH, SINGLE POLE AT 48" A.F.F.

3 SWITCH, THREE WAY AT 48" A.F.F. SWITCH, PRESET DIMMER, 48" A.F.F.

OWITOH, I RESET BINIMER, 40 7th I

LIGHT FIXTURE, FLUORESCENT

UNDER CABINET LIGHTING

LIGHT FIXTURE, CEILING MOUNTED

LIGHT FIXTURE, RECESSED,

TRIM TO BE DETERMINED

LIGHT FIXTURE, ADJUSTABLE SPOT

TELEPHONE AND DATA PORT AT 18" A.F.F.

CABLE TELEVISION OUTLET AT 18" A.F.F.

CABLE TELEVISION COTLET AT 16 A.I..I.

DOORBELL SWITCH

POORBELL CHIME

SMOKE DETECTOR / FIRE ALARM

EXHAUST FAN

THERMOSTAT

PENDANT OR CHANDELIER

General Electrical Notes

- 1. A MINIMUM OF TWO 20-AMPERE RATED BRANCH CIRCUITS SHALL BE PROVIDED FOR RECEPTACLES LOCATED IN THE KITCHEN, PANTRY, BREAKFAST, AND DINING AREAS. AN ADDITIONAL 20 AMPERE RATED BRANCH CIRCUIT SHALL BE PROVIDED TO THE LAUNDRY AND A SEPARATE 20 AMPERE RATED BRANCH CIRCUIT SHALL BE PROVIDED FOR BATHROOM RECEPTACLES.
- 2. ALL BRANCH CIRCUITS THAT SUPPLY 120-VOLT, SINGLE-PHASE, 15- AND 20-AMPERE OUTLETS INSTALLED IN FAMILY ROOMS, DINING ROOMS, LIVING ROOMS, PARLORS, LIBRARIES, DENS, BEDROOMS, SUNROOMS, RECREATIONS ROOMS, CLOSETS, HALLWAYS AND SIMILAR ROOMS OR AREAS SHALL BE PROTECTED BY A COMBINATION TYPE ARC-FAULT CIRCUIT INTERRUPTER INSTALLED TO PROVIDE PROTECTION OF THE BRANCH CIRCUIT.
- 3. IN EVERY KITCHEN, FAMILY ROOM, DINING ROOM, LIVING ROOM, PARLOR, LIBRARY, DEN, SUN ROOM, BEDROOM, RECREATION ROOM, OR SIMILAR ROOM OR AREA OF DWELLING UNITS, RECEPTACLES SHALL BE INSTALLED SO THAT NO POINT ALONG THE FLOOR LINE IN ANY WALL SPACE IS MORE THAT 6 FEET, MEASURED HORIZONTALLY, FROM AN OUTLET IN THAT SPACE, INCLUDING ANY WALL SPACE 2 FEET OR MORE IN WIDTH.
- 4. IN KITCHEN AND DINING ROOMS, AT LEAST ONE RECEPTACLE OUTLET SHALL BE INSTALLED AT EACH ISLAND OR PENINSULAR COUNTER SPACE WITH A LONG DIMENSION OF 24 INCHES OR GREATER AND A SHORT DIMENSION OF 12 INCHES.

- IN KITCHEN AND DINING ROOMS, AT LEAST ONE RECEPTACLE OUTLET SHALL BE INSTALLED AT EACH WALL COUNTER SPACE 12 INCHES OR WIDER SO THAT NO POINT ALONG THE WALL IS MORE THAN 24 INCHES FROM A RECEPTACLE OUTLET AND SHALL BE GFCI PROTECTED.
- PROVIDE AT LEAST ONE WEATHERPROOF RECEPTACLE OUTLET, NOT MORE THAT 6 FEET 6 INCHES ABOVE GRADE AND GFCI PROTECTED, AT THE FRONT AND BACK OF EACH DWELLING. ALL RECEPTACLES INSTALLED OUTDOORS MUST BE GFCI PROTECTED.
- 7. PROVIDE AT LEAST (1) ONE RECEPTACLE OUTLET IN HALLWAYS 10 FEET OR MORE IN LENGTH.
- 8. A 125 VOLT, SINGLE PHASE, 15 OR 20 AMPERE RATED RECEPTACLE OUTLET SHALL BE INSTALLED AT AN ACCESSIBLE LOCATION FOR THE SERVICING OF HEATING, AIR CONDITIONING AND REFRIGERATION EQUIPMENT. THE RECEPTACLE SHALL BE LOCATED ON THE SAME LEVEL AND WITHIN 25 FEET OF THE EQUIPMENT.
- 9. ALL 125 VOLT, SINGLE PHASE, 15 AND 20 AMPERE RECEPTACLES IN THE FOLLOWING LOCATIONS SHALL BE GFCI PROTECTED: BATHROOMS, GARAGES, UNFINISHED ACCESSORY BUILDINGS, CRAWL SPACES, UNFINISHED BASEMENTS, BAR SINKS (WITHIN 6 FEET) AND LAUNDRY ROOM SINKS (WITHIN

- 6 FEET).
- 10. PROVIDE AT LEAST (1) ONE WALL MOUNTED SWITCH CONTROLLED LIGHTING OUTLET IN EVERY HABITABLE ROOM AND BATHROOM.
- 11. PROVIDE A LIGHTING OUTLET ON THE EXTERIOR SIDE OF ALL EXITS/ENTRANCES.
- 12. A RECEPTACLE SHALL NOT BE INSTALLED WITHIN A BATHTUB OR SHOWER
- 13. FIXTURES, FITTINGS, BOXES AND RECEPTACLES LOCATED IN DAMP OR WET
- LOCATIONS SHALL BE "LISTED" TO BE SUITABLE FOR SUCH LOCATION.

 14. PROVIDE INTERCONNECTED SMOKE ALARMS IN EACH SLEEPING ROOM,
 IMMEDIATELY OUTSIDE EACH SLEEPING ROOM, ON EACH ADDITIONAL STORY
 INCLUDING BASEMENTS, AND IN THE HALLWAY. SMOKE ALARMS SHALL BE
- HARD WIRED WITH BATTERY BACKUP.

 15. PROVIDE A GROUNDING ELECTRODE SYSTEM. PROVIDE BONDING TO THE INTERIOR WATER PIPING AND ABOVE GROUND PORTION OF GAS PIPING
- 16. EXTERIOR LIGHTING SHALL BE DARK SKY COMPLIANT.

W. Alan Kenson & Asso

REVISIONS

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DATE
June 21st, 2019

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