



PROJECT TEAM			VICINITY MAP		
ARCHITECT:	ENGINEER	ENERGY			





AREA CALCULATION		DRAWING INDEX		DESIGN CRITERIA	
1. LOWER LEVEL CONDITIONED FLOOR AREA:	2,295 SF	T1	TITLE SHEET	<div>DESIGN CRITERIA:</div> <div>CODES AND STANDARDS:</div> <div>2016 CALIFORNIA RESIDENTIAL BUILDING CODE (CRC), BASED ON THE 2015 EDITION OF THE INTERNATIONAL RESIDENTIAL CODE (2015 IRC), EFFECTIVE DATE JANUARY 1, 2017, ASCE 7-10 AND THE 2015 EDITION OF THE NATIONAL DESIGN SPECIFICATIONS (NDS) FOR WOOD CONSTRUCTION.</div> <div>2016 CALIFORNIA BUILDING CODE (CBC)</div> <div>2016 CALIFORNIA PLUMBING CODE (CPC)</div> <div>2016 CALIFORNIA ELECTRICAL CODE (CEC)</div> <div>2016 CALIFORNIA MECHANICAL CODE (CMC)</div> <div>2016 CALIFORNIA GREEN BUILDING STANDARDS CODE (CGBSC)</div> <div>2016 CALIFORNIA FIRE CODE (CFC)</div> <div>2016 CALIFORNIA ENERGY CODE (CEC)</div> <div>OCCUPANCY</div> <div>SINGLE FAMILY RESIDENCE - R-3</div> <div>-CAR GARAGE - U</div> <div>TYPE OF CONSTRUCTION - VB</div> <div>WILDLAND URBAN INTERFACE: YES</div> <div>FIRE RESISTIVE CONSTRUCTION IS REQUIRED AT THIS RESIDENCE.</div> <div>FIRE SPRINKLERS: REQUIRED</div> <div>STORIES - TWO</div>	
2. UPPER LEVEL CONDITIONED FLOOR AREA:	1,646 SF	T2	SITE PLAN		
		T2.1	EROSION CONTROL PLAN		
		T3	NOTES		
		T4	CALGREEN CHECKLIST		
		T5	CALGREEN CHECKLIST		
3. NEW UNCONDITIONED GARAGE:	595 SF	A1	LOWER LEVEL FLOOR PLAN		
COVERED FRONT PORCH:	129 SF	A1.1	FOUNDATION VENTING PLAN		
LOWER LEVEL DECK:	330 SF	A2	UPPER LEVEL FLOOR PLAN		
UPPER LEVEL DECK:	710 SF	A3	ROOF PLAN		
		A4	EXTERIOR ELEVATIONS		
		A5	EXTERIOR ELEVATIONS		
		A6	SECTIONS		
		A7	SECTIONS		
		A8	SECTION DETAILS		
		E1	LOWER LEVEL ELECTRICAL		
		E2	UPPER LEVEL ELECTRICAL		
		E3	ELECTRICAL NOTES		
		S1- S1.2	STANDARD DETAILS & SCHEDULES		
		S2	FOUNDATION PLAN		
		S3	LOWER FLOOR FRAMING		
		S4	UPPER FLOOR FRAMING		
		S5	ROOF FRAMING PLAN		
		S5.1	SNOW DRIFTING PLAN		
		S6	LOWER LEVEL SHEAR WALL PLAN		
		S7	UPPER LEVEL SHEAR WALL PLAN		
		SD1-SD2	STRUCTURAL DETAILS		

GENERAL NOTES

■

SUBCONTRACTORS SHALL BE RESPONSIBLE FOR COORDINATION OF THEIR WORK WITH THE WORK OF OTHERS. SUBCONTRACTORS SHALL VERIFY THAT ANY WORK RELATED TO THEM, WHICH MUST BE PROVIDED BY OTHERS, HAS BEEN COMPLETED AND IS ADEQUATE PRIOR TO COMMENCING THEIR WORK.

■

THESE DRAWINGS AND SPECIFICATIONS ARE DIVIDED INTO SECTIONS FOR CONVENIENCE ONLY. CONTRACTORS, SUBCONTRACTORS AND MATERIAL SUPPLIERS SHALL REFER TO ALL RELEVANT SECTIONS IN BIDDING AND PERFORMING THEIR WORK, AND SHALL BE RESPONSIBLE FOR ALL ASPECTS OF THE WORK REGARDLESS OF WHERE THE INFORMATION OCCURS IN THE DRAWINGS.

■

ALL DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALE SHOWN ON PLANS. SECTIONS AND DETAILS. DIMENSIONS ARE TO FACE OF STUDS OR SLAB UNLESS NOTED OTHERWISE ON DRAWINGS. DO NOT SCALE DRAWINGS. DIMENSIONS NOTED AS "CLEAR" (CLR) ARE TAKEN TO THE FACE OF FINISH MATERIALS. THE CONTRACTOR SHALL VERIFY DIMENSIONS OF PREFABRICATED AND MANUFACTURED ITEMS AND COORDINATE ROUGH OPENINGS ACCORDINGLY.

■

ALL CONSTRUCTION SHALL BE IN STRICT CONFORMANCE WITH MANUFACTURER'S LATEST PUBLISHED SPECIFICATIONS AND INSTRUCTIONS. ALL DISCREPANCIES BETWEEN THESE SPECIFICATIONS AND INSTRUCTIONS AND THE CONTRACT DOCUMENTS PREPARED BY THE ARCHITECT AND CONSULTANTS, SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT IN WRITING PRIOR TO COMMENCING WORK.

■

THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS ON THESE PLANS, EXISTING UTILITY LOCATIONS, AND EXISTING CONDITIONS AFFECTED BY THE CONTRACT PRIOR TO STARTING CONSTRUCTION. ANY DISCREPANCIES OR INCONSISTENCIES FOUND SHALL BE BROUGHT TO THE ARCHITECT'S ATTENTION BEFORE WORK PROCEEDS.

■

STRUCTURAL SUPPORT AND/OR REINFORCEMENT IN STUD WALLS SHALL BE PROVIDED AT ALL WALL-MOUNTED CASEWORK, CABINETS, SHELVING, EQUIPMENT ETC., BY GENERAL CONTRACTOR.

PROJECT SCOPE

NEW SINGLE FAMILY HOME W. FOUR BEDROOMS, 3.5 BATHROOMS, SAUNA, 2 LIVING SPACES, AND 2 CAR GARAGE.

SITE ADDRESS
11965 ST. BERNARD DR.
TRUCKEE, CA 96161

APN: 045-700-038-000

TITLE 24 REQUIREMENTS

TITLE 24 ENERGY REQUIREMENTS SUMMARY
SEE ENERGY CALCULATION FOR FURTHER DETAILS

NEW ADDITION:

WALLS:

1. R-21 INSULATION W/ SIDING
2. R-21 INSULATION W/SIDING AT GARAGE

FLOORS:

1. NEW: SLAB ON GRADE @ GARAGE
2. NEW: R-30 INSULATION @ LOWER LEVEL FLOOR JOISTS
3.

ROOF:

1. R39 CLOSED CELL FOAM ATTIC INSULATION
2. RADIANT BARRIER REQUIRED

HVAC:

1. 2) 95 AFUE CENTRAL FURNACES
2. R8 INSULATED DUCTWORK W. 5% MAX LEAKAGE

PLUMBING:

1. .94 EFF. GAS ON-DEMAND WATER HEATER
2. PIPING INSULATION ALL LINES

WINDOWS:

1. .32 SHGC
2. .34 U-FACTOR

DOORS:

1. .25 SHGC
2. 1.0 U-FACTOR

HERS CERTIFICATIONS: PROVIDE 3RD PARTY VERIFICATION FOR ALL HERS CERTIFICATIONS.

BUILDING LEVEL VERIFICATIONS:

MECHANICAL VENTILATION

COOLING SYSTEM VERIFICATIONS:

NO COOLING SYSTEM

HVAC DISTRIBUTION SYSTEM VERIFICATIONS:

DUCT LEAKAGE SEALED AND TESTED

DEFERRED APPROVALS

1. NATURAL GAS SCHEMATIC
2. FIRE SPRINKLER
3. FIRE ALARM

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REVISIONS

Sym.	Description	Date

CONSULTANT

PLANS DRAWN IN CONJUNCTION WITH RAD STUDIOS, REDDING CA

TOWN OF TRUCKEE

PERMIT CENTER

New Single Family Residence

Bernard DR.
Nevada County, CA

ORIGINAL SCALE IN INCHES

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SCHEMATIC DESIGN

DESIGNED BY
RAD

DRAWN BY
WHV

REVIEWED BY

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

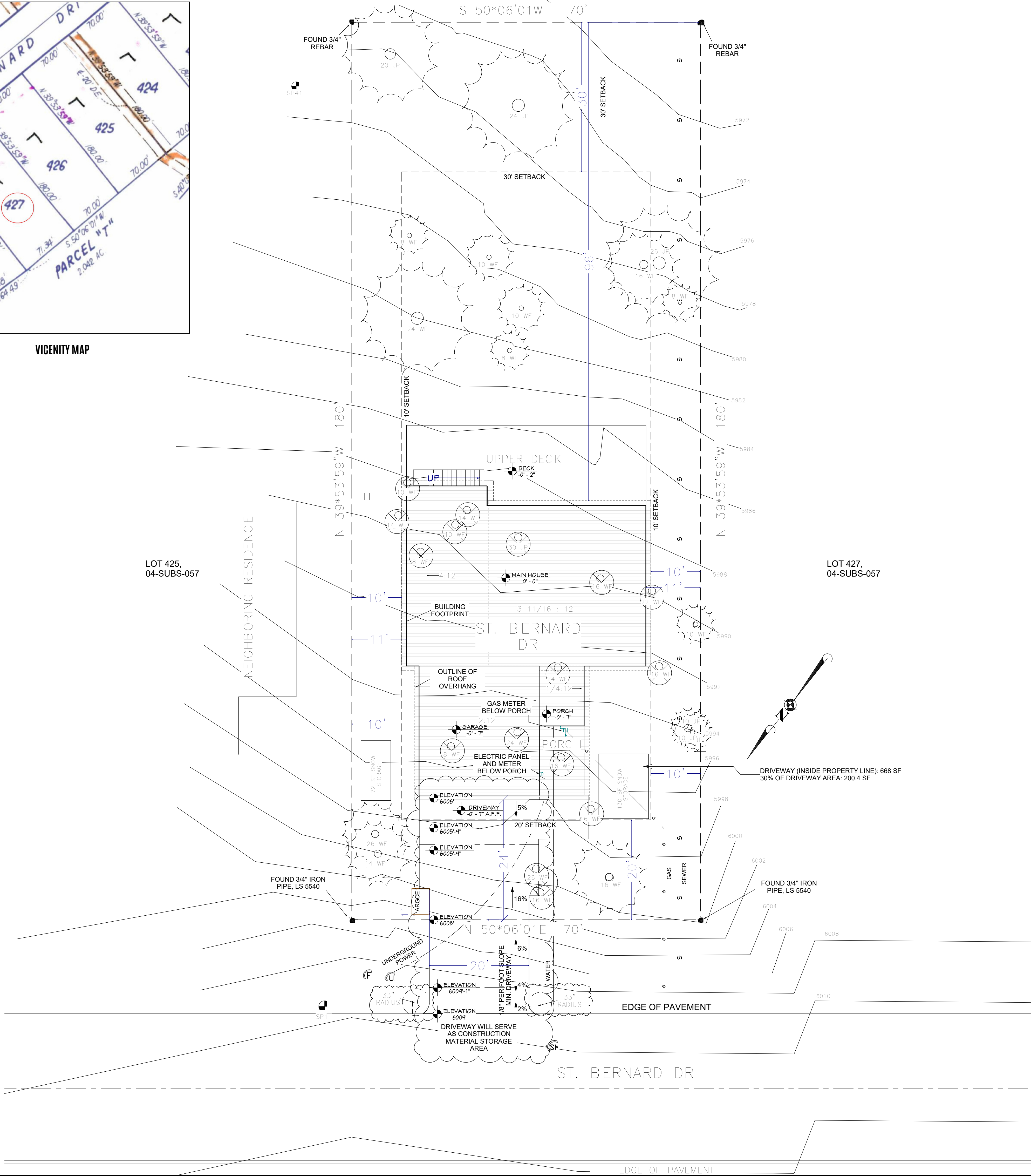
DATE:
9/23/2020

SHEET NO.
11

SHEET:
1 of 25



VICINITY MAP



PROJECT INFORMATION

OWNER:

OWNER MAILING ADDRESS:
SITE ADDRESS:

LOT #428
04-SUBS-057

LOT INFORMATION:
LOT SIZE: 12,600 SF
BUILDING FOOTPRINT: 2,342 SF
W/O EAVES
BUILDING FOOTPRINT: 2,689 SF
WITH EAVES
100% OF STAIRS: 42 SF
DECK FOOTPRINT: 237 SF
710 TOTAL 1/3
PORCH FOOTPRINT: 129 SF
PAVED SPACES: 671 SF
TOTAL FOOTPRINT: 3,421 SF
ALLOWABLE COVERAGE 40%: 4,410 SF
LOT COVERAGE: 27.08 %

AREA CALCULATION

1. LOWER LEVEL CONDITIONED FLOOR AREA:	1,713 SF
2. UPPER LEVEL CONDITIONED FLOOR AREA:	1,646 SF
TOTAL:	3,359 SF
3. NEW UNCONDITIONED	
GARAGE:	595 SF
COVERED FRONT PORCH:	129 SF
LOWER LEVEL DECK:	330 SF
UPPER LEVEL DECK:	710 SF

WILDLAND FIRE BREAK

REQUIREMENTS TO AVOID WILDLAND FIRE BREAK IN WILDLAND AREAS:
ELIMINATE ANY DEAD WOOD FROM TREES OVERHANGING BUILDING. MAINTAIN THE ROOF TO BE FREE OF LEAVES, NEEDLES OR DEAD VEGETATION.

REMOVE ANY TREE LIMBS WITHIN 10 FEET OF CHIMNEY OUTLET.

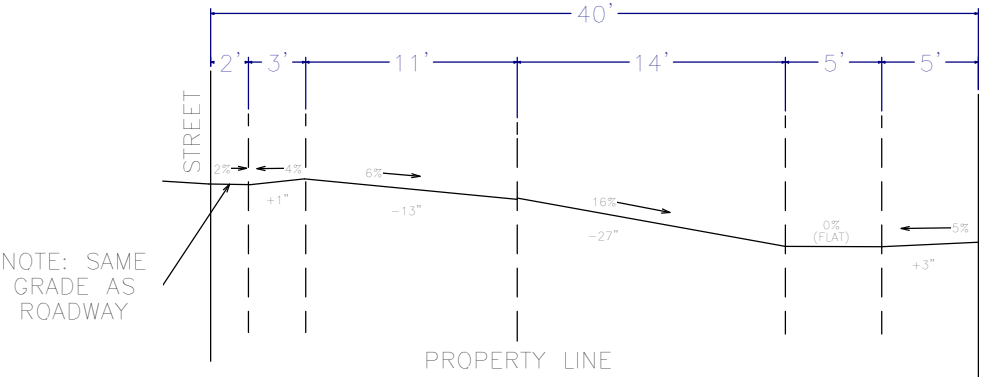
ELIMINATE ANY DEAD WOOD FROM TREES OVERHANGING BUILDING. MAINTAIN THE ROOF TO BE FREE OF LEAVES, NEEDLES OR DEAD VEGETATION.

INSPECTION AND WRITTEN APPROVAL BY THE FIRE MARSHALL SHALL BE OBTAINED PRIOR TO FINAL OF THE BUILDING PERMIT (FIRE MARSHALL TO SIGN INSPECTION CARD).

EROSION CONTROL PLAN:

- GRADE SOIL TO A MIN. 5% SLOPE AWAY FROM FOUNDATIONS FOR A MINIMUM OF 10'. WHEN FOUNDATIONS ARE LOCATED LESS THAN 10' AWAY FROM A PROPERTY LINE, GRADE SOIL TO A MINIMUM OF 5% AWAY FROM FOUNDATION TO AN APPROVED DRAINAGE SWALE, VALLEY GUTTER, DRAINAGE INLET OR SOME OTHER APPROVED MEANS OF DRAINAGE PER R401.3.
- REAR YARD FENCES ON ALL LOT ABUTTING AN OPEN SPACE AREA CREATED BY EASEMENT OR DEDICATION SHALL BE NON-COMBUSTIBLE MATERIAL SUCH AS CHAIN LINK, VINYL, OR MASONRY.
- WADDLES TO BE USED AT CONSTRUCTION SITE TO CONTROL ANY RUN-OFF WATER
- PROVIDE SANDBAGS AT NEAREST STORM DRAIN INLETS
- APPLY STRAW TO NEWLY DISTRIBUTED SOIL AREAS

P3 This project does not include landscaping. I am aware that future landscape installations may be required to comply with the Town of Truckee Water Efficient Landscape Ordinance requirements (Development Code Section 18.40.060).



STREET TO GARAGE SLAB

SCALE: 1" = 10'-0"

LEGEND:

- FIRE HYDRANT
- SEWER MANHOLE
- UTILITY POLE / NO TRANSFORMER
- SPIKE
- FOUND 3/4" REBAR
- FOUND 3/4" IRON PIPE, LS 5540

CONTOUR INTERVAL = 2'

CONTROL:

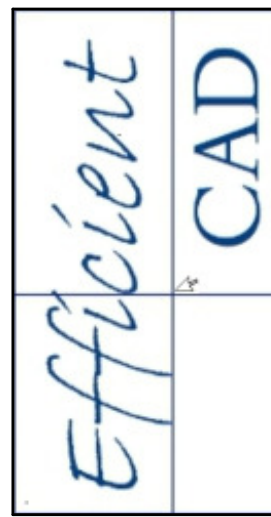
- SP1 - 3/8" X 8" SPIKE, ELEV. 6009.21'
 - SP2 - 3/8" X 8" SPIKE, ELEV. 5985.42'
 - SP41 - 3/8" X 8" SPIKE, ELEV. 5977.19'
- (ELEVATIONS ASSUMED ARBITRARY)

TREE LEGEND:
JP - JEFFERY PINE
WF- WHITE FIR

TREE'S REMOVED:
JP - JEFFERY PINE: 6
WF- WHITE FIR: 19

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REVISIONS

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CONSULTANT

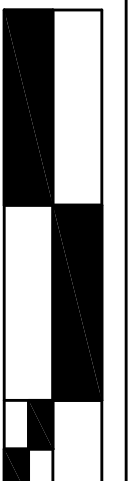
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ORIGINAL SCALE IN INCHES



SCHEMATIC DESIGN

DESIGNED BY

RAD

DRAWN BY

WHY

REVIEWED BY

SCALE:

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SHEET NO.

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SHEET:

2 of 25

I CERTIFY THAT I HAVE READ UNDERSTAND AND HAVE SUBMITTED PLANS AND INFORMATION COMPLYING WITH THE REQUIREMENTS CONTAINED IN ALL OF THE TOWN PLAN SUBMITTAL, INSPECTION, AND PLAN REVIEW REQUIREMENTS. I ALSO UNDERSTAND THAT THE ENGINEERING CALCULATION WILL NOT BE USED IN THE FIELD BY THE INSPECTOR BECAUSE THE RESULTS OF THE ENGINEER'S CALCULATIONS ARE ON THE PLANS AND THEY ARE MY AND MY ENGINEER'S RESPONSIBILITY TO SEE THAT THEY ARE COMPLIED WITH. I FURTHER UNDERSTAND THAT THE BUILDING DIVISION ONLY SPOT-CHECKS MY PLANS AND BUILDING WHEN PREFORMING THEIR PLAN REVIEW AND INSPECTIONS. THAT IT IS MY RESPONSIBILITY TO COMPLY WITH THESE REQUIREMENTS KNOWING THAT THE BUILDING DIVISION WILL NOT COMPROMISE SAFETY OR CODE COMPLIANCE FOR ANY REASON

APPLICANT SIGNATURE

DATE

APPLICANT'S PRINTED NAME

DATE

INFILTRATION WORKSHEET:

Percolation Rate = 1.09 inches per hour
Based upon NRCS Web Soil Survey
33% voids used for drain rock volume.
Design Storm Event = 1.1 in. per hour

11965 ST. BERNARD DR.

Trench Type	Trench Width, Ft	Trench Depth, Ft	Trench Length, Ft	Impervious Surface Sq. Ft.	Drainage Volume Cu. Ft.	Infiltration Volume Cu. Ft.	Trench Void Volume Cu. Ft.	Total Volume Cu. Ft.	Vd
A	4	4	42	2610	239.3	20.3	224.0	244.3	> 239.3
B	3	4	36	1616	148.1	14.2	144.0	158.2	> 148.1

Total Trench Volume = 672 cubic feet = 25 cubic yards

CONSTRUCTION SEQUENCE

Install temporary erosion prevention barriers.

Excavate foundation and install infiltration trenches.

Construct house.

Install permanent erosion prevention methods.

Excavated soil resulting from foundation and infiltration trenches is estimated to be 40 Cu. Yd.
Compacted fill material necessary for the driveway is estimated to be 170 Cu. Yd.

TEMPORARY EROSION PREVENTION METHODS:

TEMPORARY EROSION PREVENTION METHODS

PROVIDE TEMPORARY EROSION PREVENTION BARRIERS AT THE DOWNHILL PERIMETER OF ALL DISTURBED SOIL AREAS AS SHOWN ON THE PLANS.

STOCKPILES SHALL BE PROTECTED WITH TARPS OR OTHER WATERPROOF MEMBRANES ADEQUATELY SECURED TO RESIST WIND FORCES. AN EROSION PREVENTION BARRIER SHALL PROTECT THE PERIMETER OF STOCKPILES.

PROVIDE DRIVEWAY TRACK OFF CONTROL. SOIL AND CONSTRUCTION MATERIALS SHALL NOT BE TRACKED OFFSITE.

EROSION PREVENTION AND SEDIMENT BARRIERS SHALL BE CHECKED PRIOR TO ANTICIPATED STORM EVENTS, IMMEDIATELY AFTER STORM EVENTS AND WEEKLY BY THE CONTRACTOR OR OWNER/BUILDER.

WHERE BARRIERS ARE REMOVED AND/OR STOCKPILES ARE NOT COVERED, THEY SHALL BE AVAILABLE ON SITE FOR INSTALLATION AS NEEDED WITHIN 24 HOURS.

PROVIDE A CONCRETE WASHOUT AREA PER PLAN.

FOR JOB SITES THAT HAVE NOT RECEIVED AN APPROVED FINAL GRADING INSPECTION BY OCTOBER 15, ADDITIONAL EFFORT SHALL BE MADE TO PROTECT THE SITE FOR THE WINTER.

INCLUDE THE FOLLOWING:

INSTALL AND MAINTAIN EFFECTIVE TEMPORARY EROSION PREVENTION FOR DISTURBED AREAS. SILT FENCES SHALL HAVE HIRE BACKING AND METAL STAKES FOR WINTER USE.

STABILIZE DISTURBED AND BARE SOIL AREAS WITH VEGETATION, MULCH, WOOD CHIPS, EROSION CONTROL BLANKETS OR SIMILAR METHODS.

CLEAN UP AND REMOVE CONSTRUCTION DEBRIS AND SPOIL PILES.

REMOVE OR COVER DIRT STOCKPILES WITH TARPS OR OTHER WATERPROOF MEMBRANES ADEQUATELY SECURED TO RESIST WIND FORCES AND INSTALL PERIMETER CONTAINMENT PROTECTION SUCH AS WATTLES OR SILT FENCES.

INSTALL PERMANENT MECHANICAL STABILIZATION AND DRAINAGE IMPROVEMENTS WHERE FEASIBLE SUCH AS DRIP LINE TRENCHES, DRYWELLS OR CATCH BASINS.

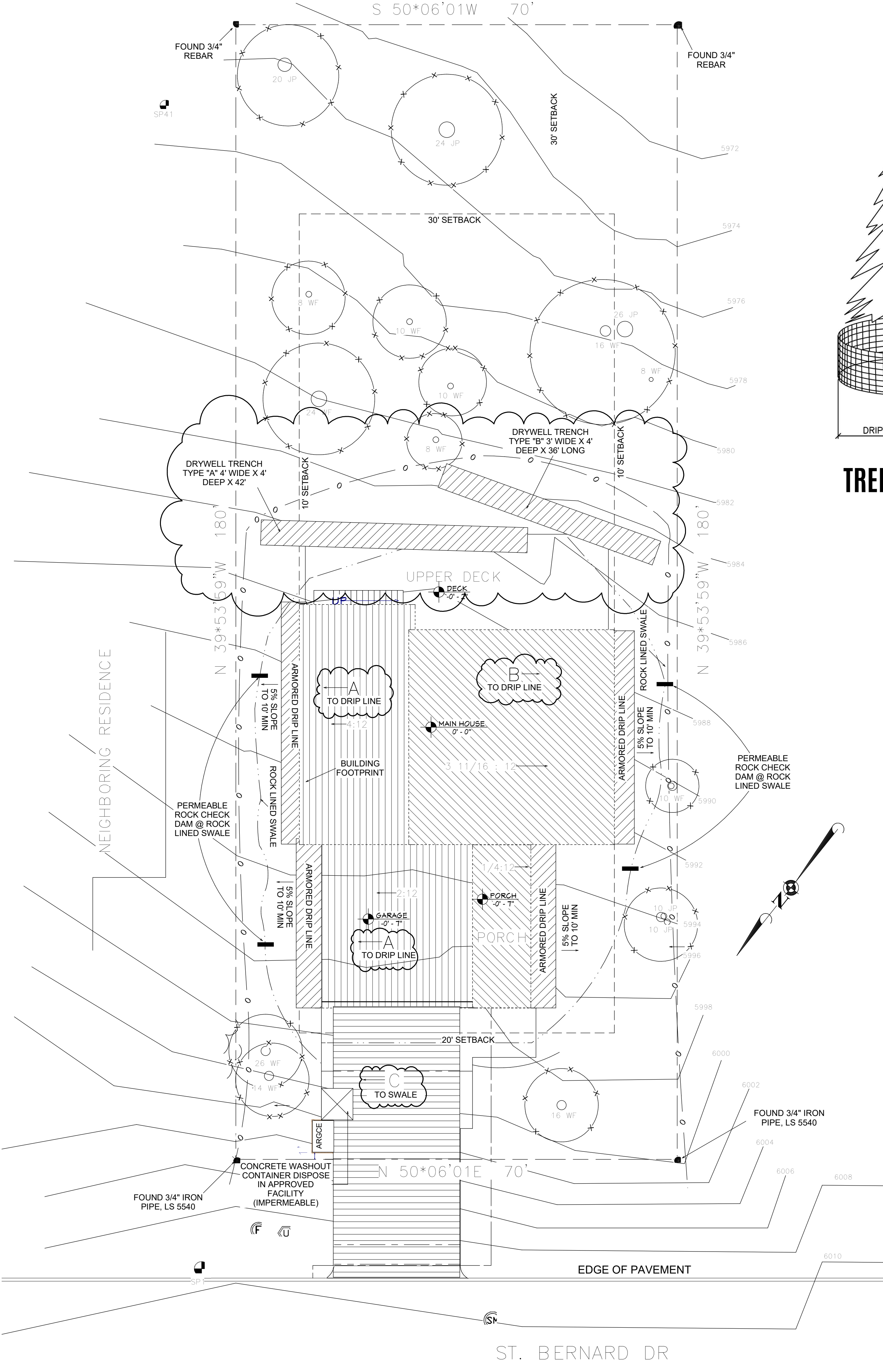
RESTRICT PARKING AND STORAGE TO PAVED AREAS AND/OR DRIVEWAYS THAT HAVE TRACK OFF CONTROL (GRAVEL).

FOR SITES THAT WILL BE ACTIVE BETWEEN OCTOBER 15 AND MAY 1 WHERE THE DRIVEWAYS WILL BE USED FOR MATERIAL STORAGE AND/OR VEHICLE ACCESS, DRIVEWAYS WITH SLOPES IN EXCESS OF 10 CONCRETE OR THE FUNCTIONAL EQUIVALENT AS APPROVED BY THE BUILDING OFFICIAL.

PERMANENT EROSION PREVENTION METHODS

PERMANENT EROSION PREVENTION BARRIERS SHALL BE INSTALLED PER PLAN.

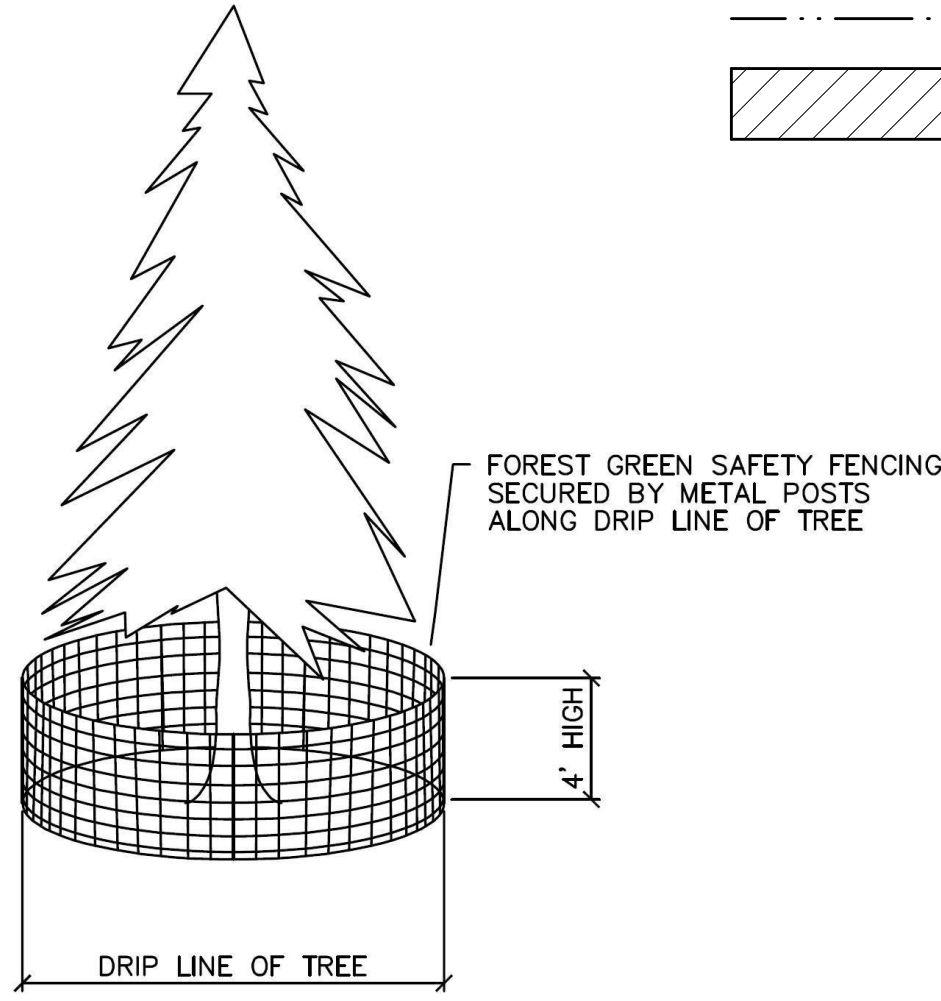
DISTURBED SOIL AREAS SHALL BE PROTECTED BY REVEGETATING OR BY INSTALLING PINE NEEDLES, WOOD CHIPS, MULCH, AND/OR OTHER APPROVED SUITABLE METHODS.



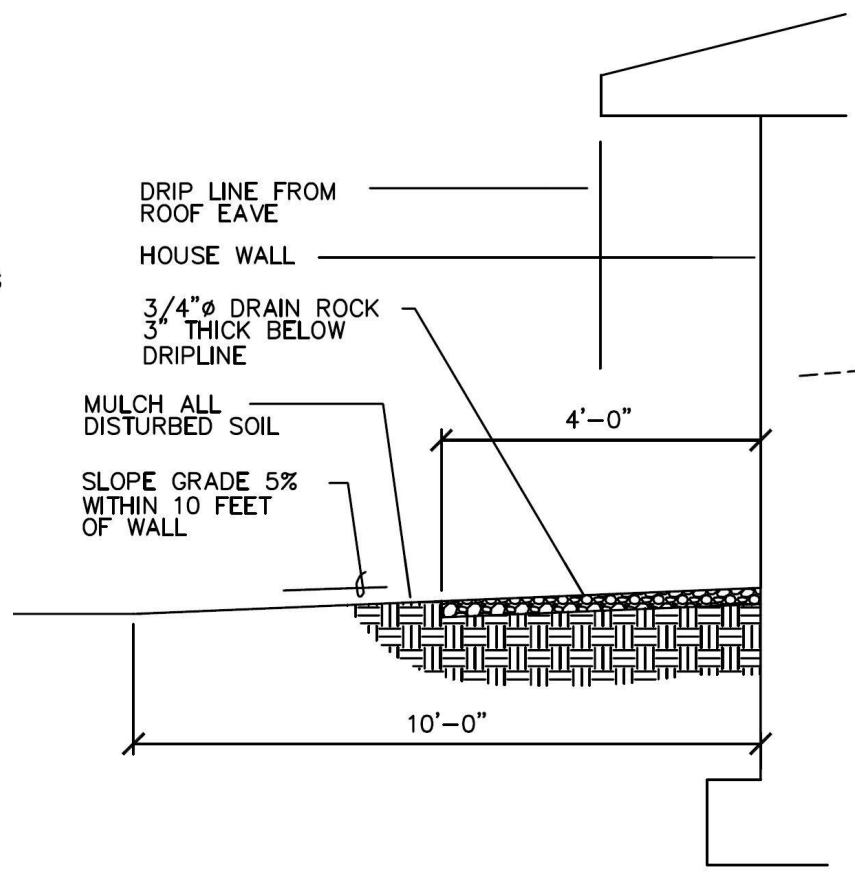
EROSION CONTROL PLAN

LEGEND:

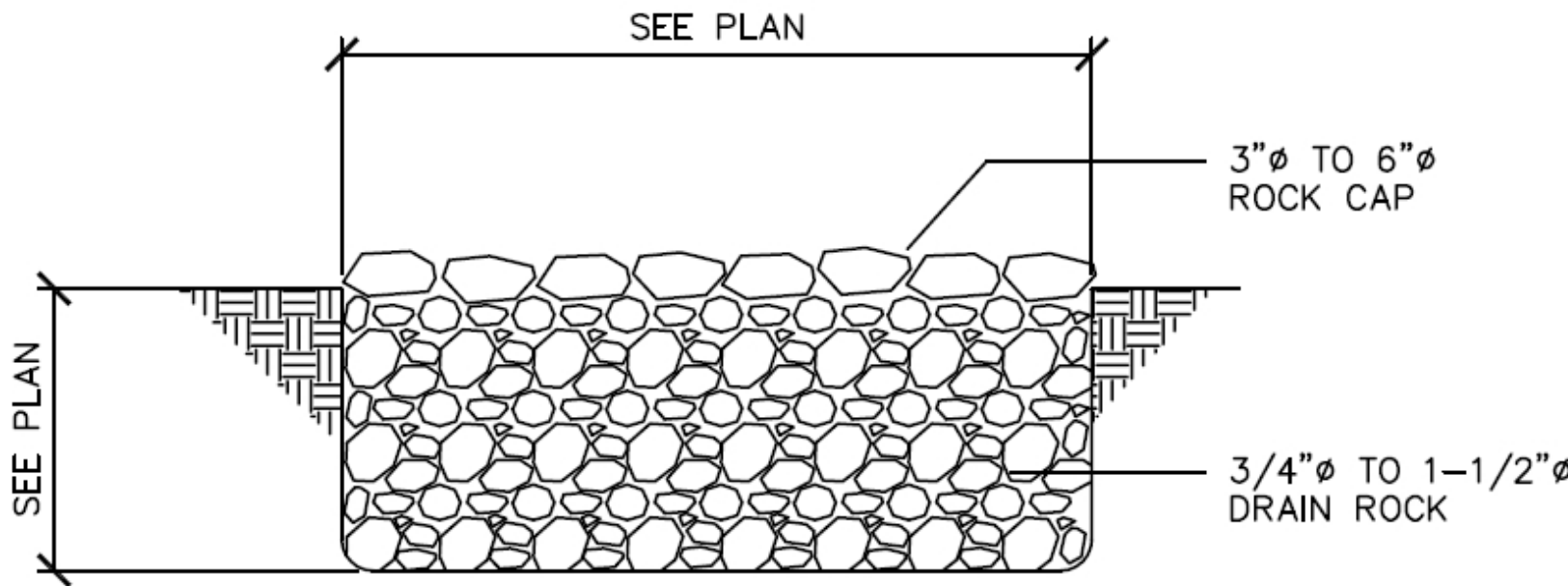
- TREE PROTECTION
- TEMPORARY FILTER FENCE OR FIBER ROLL
- ROCK LINED SWALE
- ARMORED INFILTRATION/ DRIP LINE TRENCH



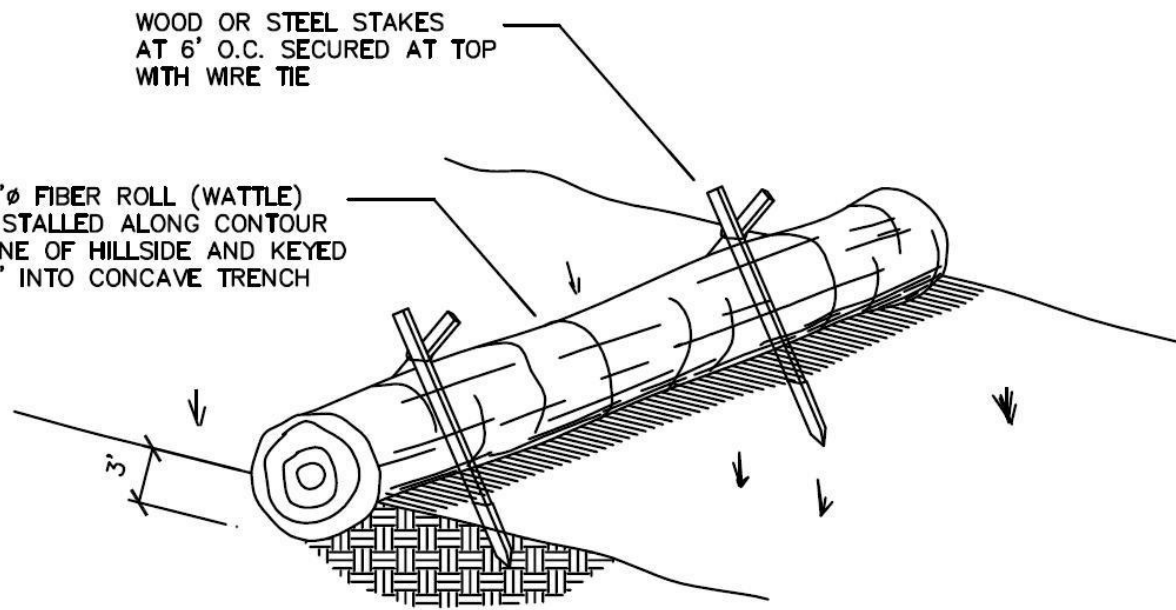
TREE PROTECTION



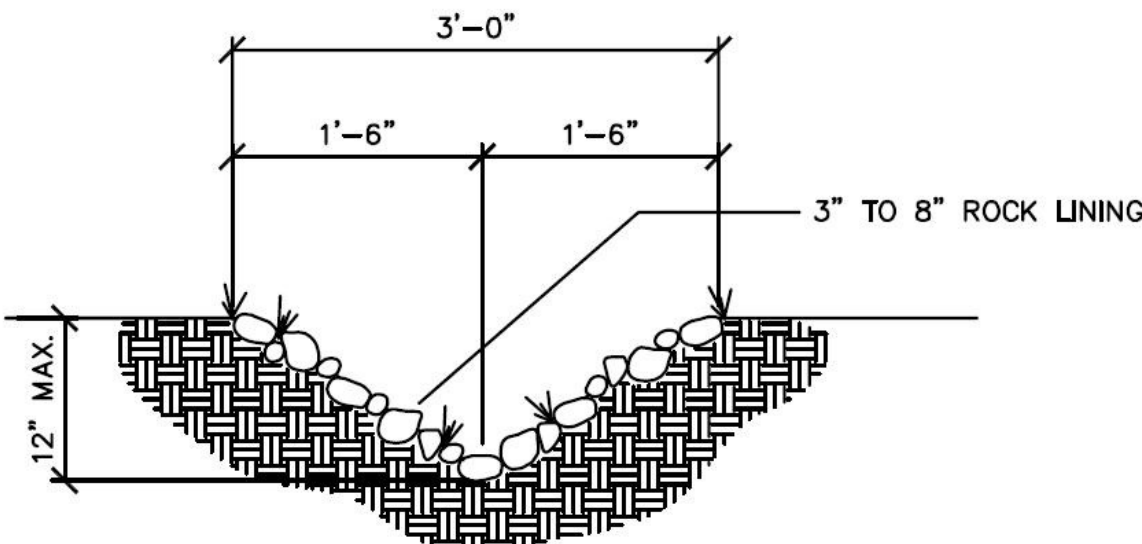
ARMORED DRIP LINE TRENCH DETAIL



DRYWELL DETAIL



TEMPORARY EROSION PREVENTION



ROCK LINED SWALE

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TOWN OF TRUCKEE
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New Single Family Residence
Bernard Dr.
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ORIGINAL SCALE IN INCHES



SCHEMATIC DESIGN

DESIGNED BY
RAD

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WHY

REVIEWED BY

SCALE:

1" = 10'-0"

DATE:

9/23/2020

SHEET NO.

T2.1

SHEET:

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WILDLAND URBAN INTERFACE

RESIDENCE SHALL COMPLY WITH NEW CONSTRUCTION REQUIREMENTS FOR THE FOLLOWING CHAPTERS OF THE 2016 CALIFORNIA BUILDING CODE:

- CHAPTER 7A MATERIALS AND CONSTRUCTION METHODS FOR EXTERIOR WILDFIRE EXPOSURE
- CHAPTER 15 ROOF ASSEMBLIES AND ROOFTOP STRUCTURES.

NOTE

- PRIOR TO BUILDING PERMIT FINAL APPROVAL, THE PROPERTY SHALL BE IN COMPLIANCE WITH THE VEGETATION MANAGEMENT REQUIREMENTS PRESCRIBED IN CALIFORNIA FIRE CODE SECTION 4906, INCLUDING CALIFORNIA PUBLIC RESOURCES CODE 4291 OR CALIFORNIA GOVERNMENT CODE SECTION 51162.

ROOFS

- FIRE SPRINKLERS SHALL BE PROVIDED

- WHERE THE ROOF COVERING ALLOWS SPACE BETWEEN THE ROOF COVERING AND ROOF DECKING THE SPACES SHALL BE CONSTRUCTED TO PREVENT THE INTRUSION OF FLAMES AND EMBERS.

- ROOF VALLEY FLASHINGS WHERE PROVIDED SHALL NOT BE LESS THAN 0.019 IN. NO. 26 GA. GALV. CORROSION-RESISTANT SHEET MTL. OVER A MIN. 36" WIDE UNDERLAYMENT CONSISTING OF ONE LAYER OF 72 POUND MINERAL-SURFACED NONPERFORATED CAP SHEET COMPLYING WITH ASTM D3909 RUNNING THE FULL LENGHT OF THE VALLEY INSTALLED OVER THE DECKING.

- ROOF GUTTERS SHALL BE PROVIDED WITH THE MEANS TO PREVENT ACCUMULATION OF LEAVES AND DEBRIS IN THE GUTTER AND BE OF NON-COMBUSTIBLE MATERIAL.

- EAVE OR CORNICE VENTS SHALL NOT BE INSTALLED UNLESS THEY ARE RATED AND APPROVED TO RESIST THE INTRUSION OF FLAME AND BURNING EMBERS INTO THE ATTIC AREA OF THE BUILDING.

- EAVES AND SOFFITS SHALL BE PROTECTED BY IGNITION-RESISTANT MATERIALS OR NONCOMBUSTIBLE ON THE UNDERSIDE.

- GABLE END AND OTHER ROOF MOUNTED VENTS SHALL HAVE 1/8" MAX OPENINGS AND LOUVERED OR BE SCREENED WITH NON-COMBUSTIBLE WIRE MESH W/ 1/8" MAX. OPENINGS AND BE LOUVERED.

- ROOFS SHALL HAVE A ROOFING ASSEMBLY INSTALLED IN ACCORDANCE WITH ITS LABEL AND THE MANUFACTURER'S INSTALLATION INSTRUCTIONS.

- VENTING SHALL NOT BE LOCATED ON THE DOWNHILL SIDE OF THE STRUCTURE WHEN CRC VENTING REGULATIONS CAN BE MET WITHOUT INSTALLATION OF DOWNHILL VENTING. MEANS TO PREVENT DOWNFLOOR VENTS ARE NECESSARY ON BUILDINGS, THEY SAHLL BE LOUVERED AND SCREENDED WITH 1/4"-INCH METAL MESH TO PREVENT ENTRY OF SPARKS OR BURNING EMBERS. TURBINE ATTIC VENTS SHALL BE SPECIFIED TO ALLOW ONE WAY DIRECTION ONLY

WALLS

- EXTERIOR WALLS SHALL BE APPROVED NONCOMBUSTIBLE IGNITION-RESISTANT MATERIAL EXTENDING FROM THE TOP OF THE FOUNDATION TO THE ROOF AND TERMINATE AT A 2" NOMINAL SOLID WOOD BLOCKING BETWEEN ROOF FRAMING AT ALL ROOF OVERHANGS, OR AT THE ENCLOSED EAVE.

- ACCEPTABLE WOOD SIDING SHALL MEET THE FOLLOWING STANDARDS:

SOLID-SAWN "WOOD" SIDING WITH NO THROUGH HOLES OR LOOSE KNOTS, INSTALLED OVER STRUCTURAL PLYWOOD OR ORIENTED STRAND BOARD (OSB) WITH A 7/16" MINIMUM THICKNESS AND COMPLYING WITH VOLUNTARY PRODUCT STANDARD PS1 OR VOLUNTARY PRODUCT STANDARD PS2, WITH THE FOLLOWING INTERLOCKING DESIGNS WHEN INSTALLED IN ACCORDANCE WITH INDUSTRIAL TECHNICAL GUIDE. REFER TO MANUFACTURER'S INSTALLATIONS FOR DETAILS. 1. TONGUED & GROOVED, SHIPLAP, CHANNEL SHIPLAP, V SHIPLAP, LOG CABIN: WHEN APPLIED IN A HORIZONTAL ORIENTATION WITH MINIMUM NOMINAL 6" WIDE AND NOMINAL 1" THICK BOARDS MADE OF "WOOD SPECIES "REDWOOD", "WESTERN RED CEDAR", "INCENSE CEDAR", "PORT ORFORD CEDAR", "ALASKA YELLOW CEDAR", "PONDEROSA PINE", "DOUGLAS FIR", "WHITE FIR", AND "WESTERN SPRUCE", OR OTHER WOOD SPECIES HAVING A FLAME SPREAD RATING NOT GREATER THAN 150 (CLASS C) WHEN TESTED 19 IN ACCORDANCE WITH ASTM E84.

- R337.7.3.1 EXTERIOR WALL COVERINGS SHALL EXTEND FROM THE TOP OF THE FOUNDATION TO THE ROOF, AND TERMINATE AT 2-INCH NOMINAL SOLID WOOD BLOCKING BETWEEN RAFTERS AT ALL ROOF OVERHANGS, OR IN THE CASE OF ENCLOSED EAVES, TERMINATE AT THE ENCLOSURE.

WINDOWS & DOORS

- EXTERIOR WINDOWS, WINDOW WALLS, GLAZED DOORS, AND GLAZED OPENINGS WITH EXTERIOR DOORS SHALL BE INSULATED GLASS UNITS WIHT A MIN. OF 1 TEMP. PANE. EITHER IN OR OUT, OR GLASS BLOCKS, OR HAVE A FIRE RESISTIVE RATION OF NOT LESS THAN 20 MIN., OR AS APPROVED BY THE CITY OF REDDING BUILDING OR FIRE DIVISION. GLAZING FRAMES MADE OF VYNL MATERIALS SHALL HAVE A WELDED CORNER, METAL REINFORCED IN THE INTERLOCK AREA AND DISPLAY ANSII/AAMN/WWO.

- EXTERIOR DOORS SHALL BE OF APPROVED NON-COMBUSTIBLE CONSTRUCTION, OR SOLID CORE HAVING STYLES AND RAILS NOT LESS THAN 13/8" THICK WITH INTERIOR FIELD PANEL THICKNESS NO LESS THAN 1 1/4" THICK, OR HAVE A 20 MIN. FIRE-RESISTIVE RATING WHEN TESTED ACCORDING TO ASTM E 2074.

- GARAGE DOOR TO BE NONCOMBUSTIBLE OR EXTERIOR FIRE TREATED WOOD.

PROJECTIONS & DECKS

- ANY PROJECTION INCLUDING, BUT NOT LIMITED TO EAVES, BALCONIES, AND PATIO COVERINGS SHALL BE ENCLOSED ON THE EXTERIOR SIDES AND/ OR UNDERSIDE WITH MATERIALS APPROVED FOR 1-HR FIRE-RESISTIVE CONSTRUCTION TO PREVENT HEAT FROM EXTERIOR FIRES FROM BEING TRAPPED UNDERNEATH THE PROJECTION.

- DECKING SURFACES, STAIR TREADS, RISERS, & LANDINGS OF DECKS, PORCHES, AND BALCONIES WHERE ANY SUCH PROTIION OF SUCH SURFACE IS WITHIN 10 FEET OF THE PRIMARY STRUCTURE SHALL BE CONSTRUCTED OF IGNITION RESISTANT MATERIALS AND PASS REQUIRED PERFORMANCE TESTS OR SHALL BE CONSTRUCTED WITH HEAVY TIMBER, EXTERIOR FIRE RETARDANT TREATED WOOD OR APPROVED NON COMBUSTIBLE MATERIAL, 1

- THE UNDERSIDE OF CANTILEVERED AND OVERHANGING APPENDAGES AND FLOOR PROJECTIONS SHALL MAINTAIN IGNITION RESISTANT INTEGRITY OF EXTERIOR WALLS

- STRUCTURES CONSTRUCTED IN SUCH A MANNER THAT THEY ARE SUSPENDED ON PIERS OR PILINGS OVER HILLSIDES SHALL BE OF NONCOMBUSTIBLE CONSTRUCTION. BUILDINGS SHALL HAVE UNDERFLOR AREAS ENCLOSED TO THE GRADE, UNLESS ALL EXPOSED FLOORS, STRUCTURAL COLUMNS, BEAMS AND SUPPORTING WALLS ARE PROTECTED AS REQUIRED WITH EXTERIOR IGNITION-RESISTANT MATERIAL CONSTRUCTION OR BE HEAVY TIMBER AS TO PREVENT THE UNDERSIDE OF THE STRUCTURE FROM BEING SUBJECT TO HEAT OR FLAME FROM THE HILLSIDE BELOW.

EXTERIOR FACING NOTES

R703.1.1 WATER RESISTANCE:

THE EXTERIOR WALL ENVELOPE SHALL BE DESIGNED AND CONSTRUCTED IN A MANNER THAT PREVENTS THE ACCUMULATION OF WATER WITHIN THE WALLS. THIS SHALL BE PROVIDED BY A WATER-RESISTANT BARRIER BEHIND THE EXTERIOR VENEER AS REQUIRED BY SECTION R703.2 AND A MEANS OF DRAINING TO THE EXTERIOR WATER THAT ENTERS THE ASSEMBLY. PROTECTION AGAINST CONDENSATION IN THE EXTERIOR WALL ASSEMBLY SHALL BE PROVIDED IN ACCORDANCE WITH THE CALIFORNIA ENERGY CODE.

R703.2 WATER-RESISTIVE BARRIER:

ONE LAYER OF NO. 15 ASPHALT FELT, FREE FROM HOLES AND BREAKS, COMPLYING WITH ASTM D226 FOR TYPE 1 FELT OR OTHER APPROVED WATER-RESISTIVE BARRIER SHALL BE APPLIED OVER STUDS OR SHEATHING OF ALL EXTERIOR WALLS. SUCH FELT OR MATERIAL SHALL BE APPLIED HORIZONTALLY, WITH THE UPPER LAYER LAPPED OVER THE LOWER LAYER NOT LESS THAN 2 INCHES (51 MM), WHERE JOINTS OCCUR, FELT SHALL BE LAPPED NOT LESS THAN 6 INCHES (152 MM), THE FELT OR OTHER APPROVED MATERIAL SHALL BE CONTINUOUS TO THE TOP OF WALLS AND TERMINATED INTO THE FOLLOWING BUILDING APPENDAGES IN A MANNER TO MEET THE REQUIREMENTS OF THE EXTERIOR WALL ENVELOPE AS DESCRIBED IN SECTION R703.1. THE WATER-RESISTIVE BARRIER IS NOT REQUIRED FOR DETACHED ACCESSORY BUILDINGS.

R703.3 NOMINAL THICKNESS AND ATTACHMENTS:

THE NOMINAL THICKNESS AND ATTACHMENT OF EXTERIOR WALL COVERINGS SHALL BE IN ACCORDANCE WITH TABLE R703.3(1). THE WALL COVERING MATERIAL REQUIREMENTS OF THIS SECTION, AND THE WALL COVERING MANUFACTURER 'S INSTALLATION INSTRUCTIONS, CLADDING ATTACHMENT OVER FOAM SHEATHING SHALL COMPLY WITH THE ADDITIONAL REQUIREMENTS AND LIMITATIONS OF SECTIONS R703.15 THROUGH R703.17. NOMINAL MATERIAL THICKNESSES IN TABLE R703.3(1) ARE BASED ON A MAXIMUM STUD SPACING OF 16 INCHES (406 MM) ON CENTER, WHERE SPECIFIED BY THE SIDING MANUFACTURER 'S INSTRUCTIONS AND SUPPORTED BY A TEST REPORT OR OTHER DOCUMENTATION, ATTACHMENT TO STUDS WITH GREATER SPACING IS PERMITTED. FASTENERS FOR EXTERIOR WALL COVERINGS ATTACHED TO WOOD FRAMING SHALL BE IN ACCORDANCE WITH SECTION R703.3.2 AND TABLE R703.3(1). EXTERIOR WALL COVERINGS SHALL BE ATTACHED TO COLD-FORMED STEEL LIGHT FRAME CONSTRUCTION IN ACCORDANCE WITH THE CLADDING MANUFACTURER 'S INSTALLATION INSTRUCTIONS, THE REQUIREMENTS OF TABLE R703.3(1) USING SCREW FASTENERS SUBSTITUTED FOR THE NAILS SPECIFIED IN ACCORDANCE WITH TABLE R703.3(2), OR AN APPROVED DESIGN.

R703.5.1 VERTICAL WOOD SIDING:

WOOD SIDING APPLIED VERTICALLY SHALL BE NAILED TO HORIZONTAL NAILING STRIPS OR BLOCKING SET NOT MORE THAN 24 INCHES (610 MM) ON CENTER.

R703.5.2 PANEL SIDING:

3/8-INCH (9.5 MM) WOOD STRUCTURAL PANEL SIDING SHALL NOT BE APPLIED DIRECTLY TO STUDS SPACED MORE THAN 16 INCHES (406 MM) ON CENTER WHERE LONG DIMENSION IS PARALLEL TO STUDS. WOOD STRUCTURAL PANEL SIDING SHALL BE APPLIED OVER STUDS NOT BE APPLIED DIRECTLY TO STUDS SPACED MORE THAN 24 INCHES (610 MM) ON CENTER, THE STUD SPACING SHALL NOT EXCEED THE PANEL SPAN RATING PROVIDED BY THE MANUFACTURER UNLESS THE PANELS ARE INSTALLED WITH THE FACE GRAIN PERPENDICULAR TO THE STUDS OR OVER SHEATHING APPROVED FOR THAT STUD SPACING. JOINTS IN WOOD, HARDBOARD OR WOOD STRUCTURAL PANEL SIDING SHALL BE MADE AS FOLLOWS UNLESS OTHERWISE APPROVED. VERTICAL JOINTS IN PANEL SIDING SHALL OCCUR OVER FRAMING MEMBERS, UNLESS WOOD OR WOOD STRUCTURAL PANEL SHEATHING IS USED, AND SHALL BE SHIPLAPPED OR COVERED WITH A BATTEN. HORIZONTAL JOINTS IN PANEL SIDING SHALL BE LAPPED NOT LESS THAN 1 INCH (25 MM) OR SHALL BE SHIPLAPPED OR FLASHED WITH Z-FLASHING AND OCCUR OVER SOLID BLOCKING, WOOD OR WOOD STRUCTURAL PANEL SHEATHING.

R703.5.3 HORIZONTAL WOOD SIDING:

HORIZONTAL LAP SIDING SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER 'S RECOMMENDATIONS, WHERE THERE ARE NO RECOMMENDATIONS THE SIDING SHALL BE LAPPED NOT LESS THAN 1 INCH (25 MM), OR 1/2 INCH (12.7 MM) IF RABBETED, AND SHALL HAVE THE ENDS CAULKED, COVERED WITH A BATTEN OR SEALED AND INSTALLED OVER A STRIP OF FLASHING.

R703.7.2 PLASTER

PLASTERING WITH PORTLAND CEMENT PLASTER SHALL BE NOT LESS THAN THREE COATS WHERE APPLIED OVER METAL LATH OR WIRE LATH AND SHALL BE NOT LESS THAN TWO COATS WHERE APPLIED OVER MASONRY, CONCRETE, PRESSURE-PRESERVATIVE-TREATED WOOD OR DECAY-RESISTANT WOOD AS SPECIFIED IN SECTION R317.1 OR GYPSUM BACKING. IF THE PLASTER SURFACE IS COMPLETELY COVERED BY VENEER OR OTHER FACING MATERIAL OR IS COMPLETELY CONCEALED, PLASTER APPLICATION NEED BE ONLY TWO COATS, PROVIDED THE TOTAL THICKNESS IS AS SET FORTH IN TABLE R702.1(1).

ON WOOD-FRAME CONSTRUCTION WITH AN ON-GRADE FLOOR SLAB SYSTEM, EXTERIOR PLASTER SHALL BE APPLIED TO COVER, BUT NOT EXTEND BELOW, LATH, PAPER AND SCREED.

THE PROPORTION OF AGGREGATE TO CEMENTITIOUS MATERIALS SHALL BE AS SET FORTH IN TABLE R702.1(3).

R703.7.2.1 WEEP SCREEDS

A MINIMUM 0.019-INCH (0.5 MM) (NO. 26 GALVANIZED SHEET GAGE), CORROSION-RESISTANT WEEP SCREED OR PLASTIC WEEP SCREED, WITH A MINIMUM VERTICAL ATTACHMENT FLANGE OF 31/2 INCHES (89 MM) SHALL BE PROVIDED AT OR BELOW THE FOUNDATION PLATE LINE ON EXTERIOR STUD WALLS IN ACCORDANCE WITH ASTM C926. THE WEEP SCREED SHALL BE PLACED NOT LESS THAN 4 INCHES (102 MM) ABOVE THE EARTH OR 2 INCHES (51 MM) 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.

R703.7.3 WATER-RESISTIVE BARRIERS

WATER-RESISTIVE BARRIERS SHALL BE INSTALLED AS REQUIRED IN SECTION R703.2 AND, WHERE APPLIED OVER WOOD-BASED SHEATHING, SHALL INCLUDE A WATER-RESISTIVE VAPOR-PERMEABLE BARRIER WITH A PERFORMANCE AT LEAST EQUIVALENT TO TWO LAYERS OF GRADE D PAPER. THE INDIVIDUAL LAYERS SHALL BE INSTALLED INDEPENDENTLY SUCH THAT EACH LAYER PROVIDES A SEPARATE CONTINUOUS PLANE AND ANY FLASHING (INSTALLED IN ACCORDANCE WITH SECTION R703.4) INTENDED TO DRAIN TO THE WATER-RESISTIVE BARRIER IS DIRECTED BETWEEN THE LAYERS.

EXCEPTION: WHERE THE WATER-RESISTIVE BARRIER THAT IS APPLIED OVER WOOD-BASED SHEATHING HAS A WATER RESISTANCE EQUAL TO OR GREATER THAN THAT OF 60-MINUTE GRADE D PAPER AND IS SEPARATED FROM THE STUCCO BY AN INTERVENING, SUBSTANTIALLY NONWATER-ABSORBING LAYER OR DESIGNED DRAINAGE SPACE.

FINISH NOTES

- THE MAXIMUM FLAME SPREAD CLASS OF FINISH MATERIALS USED ON INTERIOR WALLS AND CEILINGS SHALL NOT EXCEED CLASS B FOR EXIT WAYS AND CLASS C FOR ROOMS OR AREAS PER TABLE 803.5 CBC.

- IN ALL OCCUPANCIES, QUANTITIES OF FLAMMABLE AND COMBUSTIBLE LIQUIDS IN EXCESS OF 10 GAL. USED FOR MAINTENANCE PURPOSES AND THE OPERATION OF EQUIPMENT SHALL BE STORED IN LIQUID STORAGE CABINETS IN ACCORDANCE WITH THE CALIFORNIA FIRE CODE.

- GYP. BD. TEXTURE TO BE IMPERFECT SMOOTH.

- CONCRETE SLAB TO BE SEALED PRIOR TO INSTALLATION OF FLOORING MATERIALS. VERIFY REQUIRED ACCEPTABLE MOISTURE TOLERANCES WITH MANUFACTURER'S WRITTEN INSTRUCTIONS PRIOR TO SEALING CONCRETE.

- ALL INTERIOR FINISHES SHALL COMPLY WITH CBC SECTION 804.

- WALLS TO "EGG-SHELL" FINISH, U.O.N.

- DOORS, WOOD TRIM, CHAIR RAIL, & BASE TO BE "SEMI-GLOSS" FINISH, U.O.N.

- CEILINGS TO BE "FLAT" FINISH, U.O.N.

- DOOR VISION PANEL FRAME TO BE PAINTED SAME AS DOOR FRAME/CASING.

1. EXTERIOR SIDING:

- TWO COAT STUCCO

-

2. COVERED PORCHES AND PATIOS:

SOFFITS:

- HARDIE PANEL OVER 1 LAYER 5/8" TYPE X SHEETROCK

3. ROOF:

- CLASS 'A' COMPOSITION SHINGLES

- FASCIA: BUILT-UP PROFILE, METAL WRAPPED

-

- GUTTER: 5" SQUARE, U.N.O.

- DOWNSPOUTS: MATCH PAINT TO GUTTER AND FASCIA

4. WINDOWS & DOORS:

- WINDOWS PER ELEVATIONS
- COLOR TBD

-

5. INTERIOR FINISHES:

TYPICAL WALLS:

- 1/2" GYPSUM BOARD, IMPERFECT SMOOTH FINISH

-

CEILINGS:

- 1/2" GYPSUM BOARD, IMPERFECT SMOOTH FINISH TEXTURE

-

- 1/2" GYPSUM BOARD, IMPERFECT SMOOTH FINISH PAINT.

6. BASE:

- 5 1/4" 1/8" ROUND EDGE, PAINT.

-

- FASTENERS FOR ASPHALT SHINGLES SHALL BE GALVANIZED STEEL, STAINLESS STEEL, ALUMINUM OR COPPER ROOFING NAILS, MINIMUM 12-GAGE [0.105 INCH (3 MM)] SHANK WITH A MINIMUM 3/8-INCH-DIAMETER (9.5 MM) HEAD, COMPLYING WITH ASTM F1667, OF A LENGTH TO PENETRATE THROUGH THE ROOFING MATERIALS AND NOT LESS THAN 3/4 INCH (19.1 MM) TO THE ROOF SHEATHING, WHERE THE ROOF SHEATHING IS LESS THAN 3/4 INCH (19.1 MM) THICK, THE FASTENERS SHALL PENETRATE THROUGH THE SHEATHING. R905.2.5

- ASPHALT SHINGLES SHALL HAVE THE MINIMUM NUMBER OF FASTENERS REQUIRED BY THE MANUFACTURER, BUT NOT LESS THAN FOUR FASTENERS PER STRIP SHINGLE OR TWO FASTENERS PER INDIVIDUAL SHINGLE. R905.2.6

- BASE AND CAP FLASHING SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER 'S INSTRUCTIONS. BASE FLASHING SHALL BE OF EITHER CORROSION-RESISTANT METAL OF MINIMUM NOMINAL 0.019-INCH (0.5 MM) THICKNESS OR MINERAL-SURFACED ROLL ROOFING WEIGHING NOT LESS THAN 77 POUNDS PER 100 SQUARE FEET (4 KG/M2). CAP FLASHING SHALL BE CORROSION-RESISTANT METAL OF MINIMUM NOMINAL 0.019-INCH (0.5 MM) THICKNESS.

- VALLEY LININGS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER 'S INSTRUCTIONS BEFORE APPLYING SHINGLES. OTHER VALLEY LININGS PERMITTED PER R905.2.8.2

- BASE FLASHING AGAINST A VERTICAL SIDEWALL SHALL BE CONTINUOUS OR STEP FLASHING AND SHALL BE NOT LESS THAN 4 INCHES (102 MM) IN HEIGHT AND 4 INCHES (102 MM) IN WIDTH AND SHALL DIRECT WATER AWAY FROM THE VERTICAL SIDEWALL ONTO THE ROOF OR INTO THE GUTTER. FOR SIDING, VENEER, PLASTER OR AHERED VENEER INSTALL FLASHING AND COUNTERFLASHING PER R905.2.8.

- FLASHING AGAINST A VERTICAL FRONT WALL, AS WELL AS SOIL STACK, VENT PIPE AND CHIMNEY FLASHING, SHALL BE APPLIED IN ACCORDANCE WITH THE ASPHALT SHINGLE MANUFACTURER 'S PRINTED INSTRUCTIONS.
- A DRIP EDGE SHALL BE PROVIDED AT EAVES AND RAKE EDGES OF SHINGLE ROOFS. ADJACENT SEGMENTS OF DRIP EDGE SHALL NOT OVERLAP AND NOT LESS THAN 2 INCHES (51MM). DRIP EDGES SHALL EXTEND NOT LESS THAN 14 INCH (6.4 BELOW THE ROOF SHEATHING AND EXTEND UP BACK ONTO THE ROOF DECK NOT LESS THAN 2 INCHES (51 MM). DRIP EDGES SHALL BE MECHANICALLY FASTENED TO THE ROOF DECK AT NOT MORE THAN 12 INCHES (305 MM) O.C. WITH FASTENERS AS SPEC-IFIED IN SECTION R905.2.5. UNDERLAYMENT SHALL BE INSTALLED OVER THE DRIP EDGE ALONG EAVES AND UNDER THE DRIP EDGE ALONG RAKE EDGES. R905.2.8.5
- DUCT SYSTEM SPECIFIES BURIED DUCTS

- SEE ENGINEERING GENERAL NOTES FOR ROOF STRUCTURAL INFORMATION.

- REFER TO SHEET T2 FOR WILDLAND URBAN INTERFACE NOTES.

- CARPET AND CARPET SYSTEMS SHALL BE COMPLIANT WITH VOC LIMITS. (GBC SECTION 4.504.3)

- PARTICLEBOARD, MEDIUM DENSITY FIBERBOARD (MDF) AND HARDWOOD PLYWOOD USED IN INTERIOR FINISH SYSTEMS SHALL COMPLY WITH LOW FORMALDEHYDE EMISSION STANDARDS. (GBC SECTION 4.504.5)

- BATHTUB & SHOWER COMPARTMENTS SHALL HAVE A NONABSORBENT SURFACE EXTENDING 72" ABOVE THE FLOOR INSTALLED OVER A MOISTURE RESISTANT UNDERLAYMENT (GLASS MAT GYPSUM BACKER OR FIBER CEMENT. CRC R307.2 & R702.3.8

ROOF FLASHING NOTES

- ROOFING ASSEMBLY IS TO BE CLASS 'A'.

- ALL ROOF OVERHANGS TO BE 2'-0" UNLESS NOTED OTHERWISE.

- PROVIDE CONTINUOUS GUTTER WHERE OCCURS, WITH DOWNSPOUTS AS NOTED.

- FLASHINGS SHALL BE INSTALLED AT WALL AND ROOF INTERSECTIONS, WHEREVER THERE IS A CHANGE IN ROOF SLOPE OR DIRECTION AND AROUND ROOF OPENINGS, WHERE FLASHING IS OF METAL, THE METAL SHALL BE CORROSION RESISTANT WITH A THICKNESS OF NOT LESS THAN 0.019 INCH (0.5 MM) (NO. 26 GALVANIZED SHEET). R903.2.1

- FOR ROOF SLOPES OF FOUR UNITS VERTICAL IN 12 UNITS HORIZONTAL (33-PERCENT SLOPE) OR GREATER, UNDERLAYMENT SHALL BE ONE LAYER APPLIED IN THE FOLLOWING MANNER. UNDERLAYMENT SHALL BE APPLIED SINGLE FASHION, PARALLEL TO AND STARTING FROM THE EAVE AND LAPPED 2 INCHES (51 MM), FASTENED SUFFICIENTLY TO HOLD IN PLACE. DISTORTIONS IN THE UNDERLAYMENT SHALL NOT INTERFERE WITH THE ABILITY OF THE ROOF MATERIAL TO SEAL. END LAPS SHALL BE OFFSET BY 6 FEET (1828 MM). DESIGNER SHALL SPECIFY UNDERLAYMENT FOR ROOF SLOPES LESS THAN 4:12

- A TURN OUT OR KICK OUT FLASHING SHALL BE INSTALLED TO DIVERT THE WATER AWAY FROM WHERE THE EAVE OF A SLOPED ROOF INTERSECTS A VERTICAL SIDEWALL. R903.2.1

- ROOF DECKS SHALL BE COVERED WITH APPROVED ROOF COVERINGS SECURED TO THE BUILDING OR STRUCTURE IN ACCORDANCE WITH THE PROVISIONS OF THIS CHAPTER. ROOF WALL COVERINGS SHALL BE DESIGNED AND INSTALLED IN ACCORDANCE WITH THIS CODE AND THE APPROVED MANUFACTURER 'S INSTRUCTIONS SUCH THAT THE ROOF ASSEMBLY SHALL SERVE TO PROTECT THE BUILDING OR STRUCTURE. R903.2

- FLASHINGS SHALL BE INSTALLED IN A MANNER THAT PREVENTS MOISTURE FROM ENTERING THE WALL AND ROOF THROUGH JOINTS IN COPINGS, THROUGH MOISTURE PERMEABLE MATE-RIALS AND AT INTERSECTIONS WITH PARAPET WALLS AND OTHER PENETRATIONS THROUGH THE ROOF PLANE. R903.2

- FLASHINGS SHALL BE INSTALLED AT WALL AND ROOF INTERSECTIONS, WHEREVER THERE IS A CHANGE IN ROOF SLOPE OR DIRECTION AND AROUND ROOF OPENINGS. A FLASHING SHALL BE INSTALLED TO DIVERT THE WATER AWAY FROM WHERE THE EAVE OF A SLOPED ROOF INTERSECTS A VERTICAL SIDEWALL WHERE FLASHING IS OF METAL, THE METAL SHALL BE CORROSION RESISTANT WITH A THICKNESS OF NOT LESS THAN 0.019 INCH (0.5 MM) (NO. 26 GALVANIZED SHEET). R903.2.1

- ROOF COVERINGS SHALL BE APPLIED IN ACCORDANCE WITH THE APPLICABLE PROVISIONS OF THIS SECTION AND THE MANUFACTURER 'S INSTRUCTIONS. ROOF COVERINGS SHALL BE OTHERWISE SPECIFIED IN THIS SECTION, ROOF COVERINGS SHALL BE INSTALLED TO RESIST THE COMPONENT AND CLADDING LOADS SPECIFIED IN TABLE R301.2(2), ADJUSTED FOR HEIGHT AND EXPOSURE IN ACCORDANCE WITH TABLE R301.2(3).

- UNDERLAYMENT FOR ASPHALT SHIN-GLS, CLAY AND CONCRETE TILE, METAL ROOF SHINGLES, MINERAL-SURFACED ROLL ROOFING, SLATE AND SLATE-TYPE SHINGLES, WOOD SHINGLES, WOOD SHAKES AND METAL ROOF PANELS SHALL CONFORM TO THE APPLICABLE STANDARDS LISTED IN THIS CHAPTER. UNDERLAYMENT MATERIALS REQUIRED TO BE USED SHALL BE IDENTIFIED BY THE MANUFACTURER. R905.1.1(1). UNDERLAYMENT SHALL BE APPLIED IN ACCORDANCE WITH TABLE R905.1.1(2). UNDERLAYMENT SHALL BE ATTACHED IN ACCORDANCE WITH TABLE R905.1.1(3). R905.1.1

- ASPHALT SHINGLES SHALL COMPLY WITH ASTM D3462. R905.2.4 SHALL BE FASTENED TO SOLIDLY SHEATHED DECKS. THE INSTALLATION OF ASPHALT SHINGLES SHALL COMPLY WITH THE PROVISIONS OF SECTION 905.2.

- FASTENERS FOR ASPHALT SHINGLES SHALL BE GALVANIZED STEEL, STAINLESS STEEL, ALUMINUM OR COPPER ROOFING NAILS, MINIMUM 12-GAGE [0.105 INCH (3 MM)] SHANK WITH A MINIMUM 3/8-INCH-DIAMETER (9.5 MM) HEAD, COMPLYING WITH ASTM F1667, OF A LENGTH TO PENETRATE THROUGH THE ROOFING MATERIALS AND NOT LESS THAN 3/4 INCH (19.1 MM) TO THE ROOF SHEATHING, WHERE THE ROOF SHEATHING IS LESS THAN 3/4 INCH (19.1 MM) THICK, THE FASTENERS SHALL PENETRATE THROUGH THE SHEATHING. R905.2.5

- ASPHALT SHINGLES SHALL HAVE THE MINIMUM NUMBER OF FASTENERS REQUIRED BY THE MANUFACTURER, BUT NOT LESS THAN FOUR FASTENERS PER STRIP SHINGLE OR TWO FASTENERS PER INDIVIDUAL SHINGLE. R905.2.6

- BASE AND CAP FLASHING SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER 'S INSTRUCTIONS. BASE FLASHING SHALL BE OF EITHER CORROSION-RESISTANT METAL OF MINIMUM NOMINAL 0.019-INCH (0.5 MM) THICKNESS OR MINERAL-SURFACED ROLL ROOFING WEIGHING NOT LESS THAN 77 POUNDS PER 100 SQUARE FEET (4 KG/M2). CAP FLASHING SHALL BE CORROSION-RESISTANT METAL OF MINIMUM NOMINAL 0.019-INCH (0.5 MM) THICKNESS.

- VALLEY LININGS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER 'S INSTRUCTIONS BEFORE APPLYING SHINGLES. OTHER VALLEY LININGS PERMITTED PER R905.2.8.2

- BASE FLASHING AGAINST A VERTICAL SIDEWALL SHALL BE CONTINUOUS OR STEP FLASHING AND SHALL BE NOT LESS THAN 4 INCHES (102 MM) IN HEIGHT AND 4 INCHES (102 MM) IN WIDTH AND SHALL DIRECT WATER AWAY FROM THE VERTICAL SIDEWALL ONTO THE ROOF OR INTO THE GUTTER. FOR SIDING, VENEER, PLASTER OR AHERED VENEER INSTALL FLASHING AND COUNTERFLASHING PER R905.2.8.

- FLASHING AGAINST A VERTICAL FRONT WALL, AS WELL AS SOIL STACK, VENT PIPE AND CHIMNEY FLASHING, SHALL BE APPLIED IN ACCORDANCE WITH THE ASPHALT SHINGLE MANUFACTURER 'S PRINTED INSTRUCTIONS.

- A DRIP EDGE SHALL BE PROVIDED AT EAVES AND RAKE EDGES OF SHINGLE ROOFS. ADJACENT SEGMENTS OF DRIP EDGE SHALL NOT OVERLAP AND NOT LESS THAN 2 INCHES (51MM). DRIP EDGES SHALL EXTEND NOT LESS THAN 14 INCH (6.4 BELOW THE ROOF SHEATHING AND EXTEND UP BACK ONTO THE ROOF DECK NOT LESS THAN 2 INCHES (51 MM). DRIP EDGES SHALL BE MECHANICALLY FASTENED TO THE ROOF DECK AT NOT MORE THAN 12 INCHES (305 MM) O.C. WITH FASTENERS AS SPEC-IFIED IN SECTION R905.2.5. UNDERLAYMENT SHALL BE INSTALLED OVER THE DRIP EDGE ALONG EAVES AND UNDER THE DRIP EDGE ALONG RAKE EDGES. R905.2.8.5
- DUCT SYSTEM SPECIFIES BURIED DUCTS

- SEE ENGINEERING GENERAL NOTES FOR ROOF STRUCTURAL INFORMATION.

- REFER TO SHEET T2 FOR WILDLAND URBAN INTERFACE NOTES.

ROOF VENTILATION NOTES

- ENCLOSED ATTICS AND ENCLOSED RAFTER SPACES FORMED WHERE CEILINGS ARE APPLIED DIRECTLY TO THE UNDERSIDE OF ROOF RAFTERS SHALL HAVE CROSS VENTILATION FOR EACH SEPARATE SPACE BY VENTILATING OPENINGS PROTECTED AGAINST THE ENTRANCE OF RAIN OR SNOW. VENTILATION OPENINGS SHALL HAVE A LEAST DIMENSION OF 1/16 INCH (1.6 MM) MINIMUM AND 1/4 INCH (6.4 MM) MAXIMUM. R806.1

- WHERE EAVE VENTS ARE INSTALLED, INSULATION SHALL NOT BLOCK THE FREE FLOW OF AIR, NOT LESS THAN A 1-INCH (25 MM) SPACE SHALL BE MAINTAINED BETWEEN THE INSULATION AND THE ROOF SHEATHING AND AT THE LOCATION OF THE VENT. R806.3

- BUILDINGS WITH COMBUSTIBLE CEILING OR ROOF CONSTRUCTION SHALL HAVE AN ATTIC ACCESS OPENING TO ATTIC AREAS THAT HAVE A VERTICAL HEIGHT OF 30 INCHES (762 MM) OR GREATER OVER AN AREA OF NOT LESS THAN 30 SQUARE FEET (2.8 M2). THE VERTICAL HEIGHT SHALL BE MEASURED FROM THE TOP OF THE CEILING FRAMING MEMBERS TO THE UNDERSIDE OF THE ROOF FRAMING MEMBERS. THE ROUGH-FRAMED OPENING SHALL BE NOT LESS THAN 22 INCHES BY 30 INCHES (559 MM BY 762 MM) AND SHALL BE LOCATED IN A HALLWAY OR OTHER READILY ACCESSIBLE LOCATION.

MANUALS & FORMS NOTES

- AN OPERATION AND MAINTENANCE MANUAL, COMPACT DISC, WEB BASED REFERENCE OR OTHER MEDIA ACCEPTABLE TO THE ENFORCING AGENCY SHALL BE PROVIDED IN THE BUILDING PRIOR TO FINAL INSPECTION WHICH INCLUDES THE FOLLOWING . (GBC SECTION 4.410.1)

- DIRECTIONS TO THE OWNER OR OCCUPANT THAT THE MANUAL SHALL REMAIN WITH THE BUILDING THROUGHOUT THE LIFE CYCLE OF THE STRUCTURE.

- OPERATION AND MAINTENANCE INSTRUCTIONS FOR THE FOLLOWING: AI EQUIPMENT, APPLIANCES, INCLUDING WATER SAVING DEVICES AND SYSTEMS, HVAC SYSTEMS, WATER HEATING SYSTEMS AND OTHER MAJOR APPLIANCES AND EQUIPMENT, ROOF AND YARD DRAINAGE INCLUDING GUTTERS AND DOWNSPOUTS, SPACE CONDITIONING SYSTEMS INCLUDING CONDENSER AND AIR FILTERS, LANDSCAPE IRRIGATION SYSTEMS, & WATER RE-USE SYSTEMS.

- INFORMATION FROM LOCAL UTILITY, WATER AND WASTE RECOVERY PROVIDERS OR OTHERS FOR FURTHER REUSE RESOURCE CONSUMPTION INCLUDING RECYCLE PROGRAMS AND LOCATIONS

2016 CALIFORNIA GREEN BUILDING STANDARDS CODE

RESIDENTIAL MANDATORY MEASURES, SHEET 1

INSPECTOR SIGNOFF	CHAPTER 3 GREEN BUILDING SECTION 301 GENERAL 301.1 SCOPE. Buildings shall be designed to include the green building measures specified as mandatory in the application checklists contained in this code. Voluntary green building measures are also included in the application checklists and may be included in the design and construction of structures covered by this code, but are not required unless adopted by a city, county, or city and county as specified in Section 101.7. CHAPTER 4 RESIDENTIAL MANDATORY MEASURES DIVISION 4.1 PLANNING AND DESIGN 4.106 SITE DEVELOPMENT 4.102.1 DEFINITIONS The following terms are defined in Chapter 2 <i>(and are included here for reference)</i> FRENCH DRAIN. A trench, hole or other depressed area loosely filled with rock, gravel, fragments of brick or similar pervious material used to collect or channel drainage or runoff water. WATTLES. Wattles are used to reduce sediment in runoff. Wattles are often constructed of natural plant materials such as hay, straw or similar material shaped in the form of tubes and placed on a downflow slope. Wattles are also used for perimeter and inlet controls. 4.106 SITE DEVELOPMENT 4.106.1 GENERAL. Preservation and use of available natural resources shall be accomplished through evaluation and careful planning to minimize negative effects on the site and adjacent areas. Preservation of slopes, management of storm water drainage and erosion controls shall comply with this section. 4.106.2 STORM WATER DRAINAGE AND RETENTION DURING CONSTRUCTION. Projects which disturb less than one acre of soil and are not part of a larger common plan of development which in total disturbs one acre or more, shall manage storm water drainage during construction. In order to manage storm water drainage during construction, one or more of the following measures shall be implemented to prevent flooding of adjacent property, prevent erosion and retain soil runoff on the site. <ol style="list-style-type: none">Retention basins of sufficient size shall be utilized to retain storm water on the site.Where storm water is conveyed to a public drainage system, collection point, gutter or similar disposal method, water shall be filtered by use of a barrier system, wattle or other method approved by the enforcing agency.Compliance with a lawfully enacted storm water management ordinance. 4.106.3 GRADING AND PAVING. Construction plans shall indicate how the site grading or drainage system will manage all surface water flows to keep water from entering buildings. Examples of methods to manage surface water include, but are not limited to, the following: <ol style="list-style-type: none">SwalesWater collection and disposal systemsFrench drainsWater retention gardensOther water measures which keep surface water away from buildings and aid in groundwater recharge. Exception: Additions and alterations not altering the drainage path. 4.106.4 Electric vehicle (EV) charging for new construction. New construction shall comply with Sections 4.106.4.1 and 4.106.4.2 to facilitate future installation and use of EV chargers. Electric vehicle supply equipment (EVSE) shall be installed in accordance with the <i>California Electrical Code</i> , Article 625. Exceptions: On a case-by-case basis, where the local enforcing agency has determined EV charging and infrastructure are not feasible based upon one or more of the following conditions: <ol style="list-style-type: none">Where there is no commercial power supply.Where there is evidence substantiating that meeting the requirements will alter the local utility infrastructure design requirements on the utility side of the meter so as to increase the utility side cost to the homeowner or developer by more than \$400.00 per unit. 4.106.4.1 New one- and two-family dwellings and townhouses with attached private garages. For each dwelling unit, install a listed raceway to accommodate a dedicated 208/240-volt branch circuit. The raceway shall not be less than trade size 1 (nominal 1-inch inside diameter). The raceway shall originate at the main service or subpanel and shall terminate in a listed cabinet, box or other enclosure in close proximity to the proposed location of an EV charger. Raceways are required to be continuous at enclosed, inaccessible or concealed areas and spaces. The service panel and/or subpanel shall provide capacity to install a 40-ampere minimum dedicated branch circuit and space(s) reserved to permit installation of a branch circuit overcurrent protective device. 4.106.4.1.1 Identification. The service panel or subpanel circuit directory shall identify the overcurrent protective device space(s) reserved for future EV charging as "EV CAPABLE". The raceway termination location shall be permanently and visibly marked as "EV CAPABLE". DIVISION 4.3 WATER EFFICIENCY AND CONSERVATION 4.303 INDOOR WATER USE 4.303.1 WATER CONSERVING PLUMBING FIXTURES AND FITTINGS. Plumbing fixtures (water closets and urinals) and fittings (faucets and showerheads) shall comply with the following: 4.303.1.1 Water Closets. The effective flush volume of all water closets shall not exceed 1.28 gallons per flush. Tank-type water closets shall be certified to the performance criteria of the U.S. EPA WaterSense Specification for Tank-type Toilets. Note: The effective flush volume of dual flush toilets is defined as the composite, average flush volume of two reduced flushes and one full flush. 4.303.1.3 Showerheads. 4.303.1.3.1 Single Showerhead. Showerheads shall have a maximum flow rate of not more than 2.0 gallons per minute at 80 psi. Showerheads shall be certified to the performance criteria of the U.S. EPA WaterSense Specification for Showerheads. 4.303.1.3.2 Multiple showerheads serving one shower. When a shower is served by more than one showerhead, the combined flow rate of all the showerheads and/or other shower outlets controlled by a single valve shall not exceed 2.0 gallons per minute at 80 psi, or the shower shall be designed to only allow one shower outlet to be in operation at a time. Note: A hand-held shower shall be considered a showerhead. 4.303.1.4 Faucets. 4.303.1.4.1 Residential Lavatory Faucets. The maximum flow rate of residential lavatory faucets shall not exceed 1.2 gallons per minute at 60 psi. The minimum flow rate of residential lavatory faucets shall not be less than 0.8 gallons per minute at 20 psi. 4.303.1.4.3 Metering Faucets. Metering faucets when installed in residential buildings shall not deliver more than 0.25 gallons per cycle. 4.303.1.4.4 Kitchen Faucets. The maximum flow rate of kitchen faucets shall not exceed 1.8 gallons per minute at 60 psi. Kitchen faucets may temporarily increase the flow above the maximum rate, but not to exceed 2.2 gallons per minute at 60 psi, and must default to a maximum flow rate of 1.8 gallons per minute at 60 psi. 4.303.2 STANDARDS FOR PLUMBING FIXTURES AND FITTINGS. Plumbing fixtures and fittings shall be installed in accordance with the California Plumbing Code, and shall meet the applicable standards referenced in Table 1701.1 of the California Plumbing Code.																																																																		
INSPECTOR SIGNOFF	4.304 OUTDOOR WATER USE 4.304.1 IRRIGATION CONTROLLERS. Automatic irrigation system controllers for landscaping provided by the builder and installed at the time of final inspection shall comply with the following: <ol style="list-style-type: none">Controllers shall be weather- or soil moisture-based controllers that automatically adjust irrigation in response to changes in plants' needs as weather conditions change.Weather-based controllers without integral rain sensors or communication systems that account for local rainfall shall have a separate wired or wireless rain sensor which connects or communicates with the controller(s). Soil moisture-based controllers are not required to have rain sensor input. Note: More information regarding irrigation controller function and specifications is available from the Irrigation Association. DIVISION 4.4 MATERIAL CONSERVATION AND RESOURCE EFFICIENCY 4.406 ENHANCED DURABILITY AND REDUCED MAINTENANCE 4.406.1 RODENT PROOFING. Annular spaces around pipes, electric cables, conduits or other openings in sole/bottom plates at exterior walls shall be protected against the passage of rodents by closing such openings with cement mortar, concrete masonry or a similar method acceptable to the enforcing agency. 4.408 CONSTRUCTION WASTE REDUCTION, DISPOSAL AND RECYCLING 4.408.1 CONSTRUCTION WASTE MANAGEMENT. Recycle and/or salvage for reuse a minimum of 65 percent of the non-hazardous construction and demolition waste in accordance with either Section 4.408.2, 4.408.3 or 4.408.4, or meet a more stringent local construction and demolition waste management ordinance. Exceptions: <ol style="list-style-type: none">Excavated soil and land-clearing debris.Alternate waste reduction methods developed by working with local agencies if diversion or recycle facilities capable of compliance with this item do not exist or are not located reasonably close to the jobsite.The enforcing agency may make exceptions to the requirements of this section when isolated jobsite are located in areas beyond the haul boundaries of the diversion facility. 4.408.2 CONSTRUCTION WASTE MANAGEMENT PLAN. Submit a construction waste management plan in conformance with Items 1 through 5. The construction waste management plan shall be updated as necessary and shall be available during construction for examination by the enforcing agency. <ol style="list-style-type: none">Identify the construction and demolition waste materials to be diverted from disposal by recycling, reuse on the project or salvage for future use or sale.Specify if construction and demolition waste materials will be sorted on-site (source separated) or bulk mixed (single stream).Identify diversion facilities where the construction and demolition waste material collected will be taken.Identify construction methods employed to reduce the amount of construction and demolition waste generated.Specify that the amount of construction and demolition waste materials diverted shall be calculated by weight or volume, but not by both. 4.408.3 WASTE MANAGEMENT COMPANY. Utilize a waste management company, approved by the enforcing agency, which can provide verifiable documentation that the percentage of construction and demolition waste material diverted from the landfill complies with Section 4.408.1. Note: The owner or contractor may make the determination if the construction and demolition waste materials will be diverted by a waste management company. 4.408.4 WASTE STREAM REDUCTION ALTERNATIVE [LR]. Projects that generate a total combined weight of construction and demolition waste disposed of in landfills, which do not exceed 3.4 lbs./sq.ft. of the building area shall meet the minimum 65% construction waste reduction requirement in Section 4.408.1 4.408.4.1 WASTE STREAM REDUCTION ALTERNATIVE. Projects that generate a total combined weight of construction and demolition waste disposed of in landfills, which do not exceed 2 lbs./sq.ft. of the building area, shall meet the minimum 65% construction waste reduction requirement in Section 4.408.1 4.408.5 DOCUMENTATION. Documentation shall be provided to the enforcing agency which demonstrates compliance with Section 4.408.2, Items 1 through 5, Section 4.408.3 or Section 4.408.4. Notes: <ol style="list-style-type: none">Sample forms found in "A Guide to the California Green Building Standards Code (Residential)" located at www.hcd.ca.gov/CALGreen.html may be used to assist in documenting compliance with this section.Mixed construction and demolition debris (C & D) processors can be located at the California Department of Resources Recycling and Recovery (CalRecycle). 4.410 BUILDING MAINTENANCE AND OPERATION 4.410.1 OPERATION AND MAINTENANCE MANUAL. At the time of final inspection, a manual, compact disc, web-based reference or other media acceptable to the enforcing agency which includes all of the following shall be placed in the building: <ol style="list-style-type: none">Directions to the owner or occupant that the manual shall remain with the building throughout the life cycle of the structure.Operation and maintenance instructions for the following:<ol style="list-style-type: none">Equipment and appliances, including water-saving devices and systems, HVAC systems, photovoltaic systems, electric vehicle chargers, water-heating systems and other major appliances and equipment.Roof and yard drainage, including gutters and downspouts.Space conditioning systems, including condensers and air filters.Landscape irrigation systems.Water reuse systems.Information from local utility, water and waste recovery providers on methods to further reduce resource consumption, including recycle programs and locations.Public transportation and/or carpool options available in the area.Educational material on the positive impacts of an interior relative humidity between 30-60 percent and what methods an occupant may use to maintain the relative humidity level in that range.Information about water-conserving landscape and irrigation design and controllers which conserve water.Instructions for maintaining gutters and downspouts and the importance of diverting water at least 5 feet away from the foundation.Information on required routine maintenance measures, including, but not limited to, caulking, painting, grading around the building, etc.Information about state solar energy and incentive programs available.A copy of all special inspections verifications required by the enforcing agency or this [<i>California Green Building Standards</i>] code. DIVISION 4.5 ENVIRONMENTAL QUALITY SECTION 4.501 GENERAL 4.501.1 Scope The provisions of this chapter shall outline means of reducing the quality of air contaminants that are odorous, irritating and/or harmful to the comfort and well being of a building's installers, occupants and neighbors. SECTION 4.502 DEFINITIONS 5.102.1 DEFINITIONS The following terms are defined in Chapter 2 <i>(and are included here for reference)</i> AGRIFIBER PRODUCTS. Agrifiber products include wheatboard, strawboard, panel substrates and door cores, not including furniture, fixtures and equipment (FF&E) not considered base building elements. COMPOSITE WOOD PRODUCTS. Composite wood products include hardwood plywood, particleboard and medium density fiberboard. "Composite wood products" does not include hardwood, structural plywood, structural panels, structural composite lumber, oriented strand board, glued laminated timber, prefabricated wood I-joists or finger-jointed lumber, all as specified in California Code of regulations (CCR), title 17, Section 93120.1. DIRECT-VENT APPLIANCE. A fuel-burning appliance with a sealed combustion system that draws all air for combustion from the outside atmosphere and discharges all flue gases to the outside atmosphere.																																																																		
INSPECTOR SIGNOFF	MAXIMUM INCREMENTAL REACTIVITY (MIR). The maximum change in weight of ozone formed by adding a compound to the "Base Reactive Organic Gas (ROG) Mixture" per weight of compound added, expressed to hundredths of a gram (g O1g ROG). Note: MIR values for individual compounds and hydrocarbon solvents are specified in CCR, Title 17, Sections 94700 and 94701. MOISTURE CONTENT. The weight of the water in wood expressed in percentage of the weight of the oven-dry wood. PRODUCT-WEIGHTED MIR (PWMIR). The sum of all weight-MIR for all ingredients in a product subject to this article. The PWMIR is the total product reactivity expressed to hundredths of a gram of ozone formed per gram of product (excluding container and packaging). Note: PWMIR is calculated according to equations found in CCR, Title 17, Section 94521 (a). REACTIVE ORGANIC COMPOUND (ROC). Any compound that has the potential, once emitted, to contribute to ozone formation in the troposphere. VOC. A volatile organic compound (VOC) broadly defined as a chemical compound based on carbon chains or rings with vapor pressures greater than 0.1 millimeters of mercury at room temperature. These compounds typically contain hydrogen and may contain oxygen, nitrogen and other elements. See CCR Title 17, Section 94508(a). 4.503 FIREPLACES 4.503.1 GENERAL. Any installed gas fireplace shall be a direct-vent sealed-combustion type. Any installed woodstove or pellet stove shall comply with U.S. EPA New Source Performance Standards (NSPS) emission limits as applicable, and shall have a permanent label indication they are certified to meet the emission limits. Woodstoves, pellet stoves and fireplaces shall also comply with applicable local ordinances. 4.504 POLLUTANT CONTROL 4.504.1 COVERING OF DUCT OPENINGS & PROTECTION OF MECHANICAL EQUIPMENT DURING CONSTRUCTION. At the time of rough installation, during storage on the construction site and until final startup of the heating, cooling and ventilating equipment, all duct and other related air distribution component openings shall be covered with tape, plastic, sheet metal or other methods acceptable to the enforcing agency to reduce the amount of water, dust or debris which may enter the system. 4.504.2 FINISH MATERIAL POLLUTANT CONTROL. Finish materials shall comply with this section. 4.504.2.1 Adhesives, Sealants and Caulks. Adhesives, sealant and caulks used on the project shall meet the requirements of the following standards unless more stringent local or regional air pollution or air quality management district rules apply: <ol style="list-style-type: none">Adhesives, adhesive bonding primers, adhesive primers, sealants, sealant primers and caulks shall comply with local or regional air pollution control or air quality management district rules where applicable or SCAQMD Rule 1168 VOC limits, as shown in Table 4.504.1 or 4.504.2, as applicable. Such products also shall comply with the Rule 1168 prohibition on the use of certain toxic compounds (chloroform, ethylene dichloride, methylene chloride, perchloroethylene an trichloroethylene), except for aerosol products, as specified in Subsection 2 below.Aerosol adhesives, and smaller unit sizes of adhesives, and sealant or caulking compounds (in units of product, less packaging, which do not weigh more than 1 pound and do not consist of more than 16 fluid ounces) shall comply with statewide VOC standards and other requirements, including prohibitions on use of certain toxic compounds, of <i>California Code of Regulations</i>, Title 17, commencing with section 94507. 4.504.2.2 Paints and Coatings. Architectural paints and coatings shall comply with VOC limits in Table 1 of the ARB Architectural Suggested Control Measure, as shown in Table 4.504.3, unless more stringent local limits apply. The VOC content limit for coatings that do not meet the definitions for the specialty coatings categories listed in Table 4.504.3 shall be determined by classifying the coating as a Flat, Nonflat or Nonflat-High Gloss coating, based on its gloss, as defined in subsections 4.21, 4.36, and 4.37 of the 2007 California Air Resources Board, Suggested Control Measure, and the corresponding Flat, Nonflat or Nonflat-High Gloss VOC limit in Table 4.504.3 shall apply. 4.504.2.3 Aerosol Paints and Coatings. Aerosol paints and coatings shall meet the Product-weighted MIR Limits for ROC in Section 94522(a)(2) and other requirements, including prohibitions on use of certain toxic compounds and ozone depleting substances, in Sections 94522(e)(1) and (f)(1) of <i>California Code of Regulations</i> , Title 17, commencing with Section 94520; and in areas under the jurisdiction of the Bay Area Air Quality Management District additionally comply with the percent VOC by weight of product limits of Regulation 8, Rule 49. 4.504.2.4 Verification. Verification of compliance with this section shall be provided at the request of the enforcing agency. Documentation may include, but is not limited to, the following: <ol style="list-style-type: none">Manufacturer's product specification.Field verification of on-site product containers.																																																																		
INSPECTOR SIGNOFF	TABLE 4.504.1 - ADHESIVE VOC LIMIT ^{1,2} (Less Water and Less Exempt Compounds in Grams per Liter) <table><tr><th>ARCHITECTURAL APPLICATIONS</th><th>CURRENT VOC LIMIT</th></tr><tr><td>INDOOR CARPET ADHESIVES</td><td>50</td></tr><tr><td>CARPET PAD ADHESIVES</td><td>50</td></tr><tr><td>OUTDOOR CARPET ADHESIVES</td><td>150</td></tr><tr><td>WOOD FLOORING ADHESIVES</td><td>100</td></tr><tr><td>RUBBER FLOOR ADHESIVES</td><td>60</td></tr><tr><td>SUBFLOOR ADHESIVES</td><td>50</td></tr><tr><td>CERAMIC TILE ADHESIVES</td><td>65</td></tr><tr><td>VCT & ASPHALT TILE ADHESIVES</td><td>50</td></tr><tr><td>DRYWALL & PANEL ADHESIVES</td><td>50</td></tr><tr><td>COVE BASE ADHESIVES</td><td>50</td></tr><tr><td>MULTIPURPOSE CONSTRUCTION ADHESIVE</td><td>70</td></tr><tr><td>STRUCTURAL GLAZING ADHESIVES</td><td>100</td></tr><tr><td>SINGLE-PLY ROOF MEMBRANE ADHESIVES</td><td>250</td></tr><tr><td>OTHER ADHESIVES NOT LISTED</td><td>50</td></tr><tr><td>SPECIALTY APPLICATIONS</td><td></td></tr><tr><td>PVC WELDING</td><td>510</td></tr><tr><td>CPVC WELDING</td><td>490</td></tr><tr><td>ABS WELDING</td><td>325</td></tr><tr><td>PLASTIC CEMENT WELDING</td><td>250</td></tr><tr><td>ADHESIVE PRIMER FOR PLASTIC</td><td>550</td></tr><tr><td>CONTACT ADHESIVE</td><td>80</td></tr><tr><td>SPECIAL PURPOSE CONTACT ADHESIVE</td><td>250</td></tr><tr><td>STRUCTURAL WOOD MEMBER ADHESIVE</td><td>140</td></tr><tr><td>TOP & TRIM ADHESIVE</td><td>250</td></tr><tr><td>SUBSTRATE SPECIFIC APPLICATIONS</td><td></td></tr><tr><td>METAL TO METAL</td><td>30</td></tr><tr><td>PLASTIC FOAMS</td><td>50</td></tr><tr><td>POROUS MATERIAL (EXCEPT WOOD)</td><td>50</td></tr><tr><td>WOOD</td><td>30</td></tr><tr><td>FIBERGLASS</td><td>80</td></tr><tr><td>1. IF AN ADHESIVE IS USED TO BOND DISSIMILAR SUBSTRATES TOGETHER, THE ADHESIVE WITH THE HIGHEST VOC CONTENT SHALL BE ALLOWED.</td><td></td></tr><tr><td>2. FOR ADDITIONAL INFORMATION REGARDING METHODS TO MEASURE THE VOC CONTENT SPECIFIED IN THIS TABLE, SEE SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT RULE 1168.</td><td></td></tr></table>	ARCHITECTURAL APPLICATIONS	CURRENT VOC LIMIT	INDOOR CARPET ADHESIVES	50	CARPET PAD ADHESIVES	50	OUTDOOR CARPET ADHESIVES	150	WOOD FLOORING ADHESIVES	100	RUBBER FLOOR ADHESIVES	60	SUBFLOOR ADHESIVES	50	CERAMIC TILE ADHESIVES	65	VCT & ASPHALT TILE ADHESIVES	50	DRYWALL & PANEL ADHESIVES	50	COVE BASE ADHESIVES	50	MULTIPURPOSE CONSTRUCTION ADHESIVE	70	STRUCTURAL GLAZING ADHESIVES	100	SINGLE-PLY ROOF MEMBRANE ADHESIVES	250	OTHER ADHESIVES NOT LISTED	50	SPECIALTY APPLICATIONS		PVC WELDING	510	CPVC WELDING	490	ABS WELDING	325	PLASTIC CEMENT WELDING	250	ADHESIVE PRIMER FOR PLASTIC	550	CONTACT ADHESIVE	80	SPECIAL PURPOSE CONTACT ADHESIVE	250	STRUCTURAL WOOD MEMBER ADHESIVE	140	TOP & TRIM ADHESIVE	250	SUBSTRATE SPECIFIC APPLICATIONS		METAL TO METAL	30	PLASTIC FOAMS	50	POROUS MATERIAL (EXCEPT WOOD)	50	WOOD	30	FIBERGLASS	80	1. IF AN ADHESIVE IS USED TO BOND DISSIMILAR SUBSTRATES TOGETHER, THE ADHESIVE WITH THE HIGHEST VOC CONTENT SHALL BE ALLOWED.		2. FOR ADDITIONAL INFORMATION REGARDING METHODS TO MEASURE THE VOC CONTENT SPECIFIED IN THIS TABLE, SEE SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT RULE 1168.	
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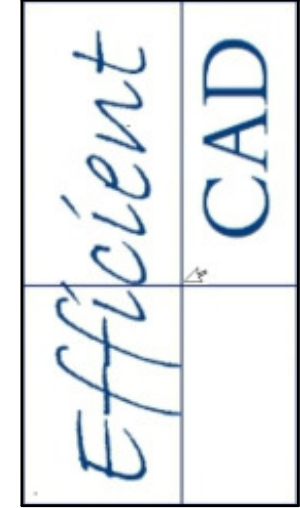
TABLE 4.504.2 - SEALANT VOC LIMIT	
(Less Water and Less Exempt Compounds in Grams per Liter)	
SEALANTS	CURRENT VOC LIMIT
ARCHITECTURAL	250
MARINE DECK	760
NONMEMBRANE ROOF	300
ROADWAY	250
SINGLE-PLY ROOF MEMBRANE	450
OTHER	420
SEALANT PRIMERS	
ARCHITECTURAL	
NON-POROUS	250
POROUS	775
MODIFIED BITUMINOUS	500
MARINE DECK	760
OTHER	750

TABLE 4.504.3 - VOC CONTENT LIMITS FOR ARCHITECTURAL COATINGS ^{2,3}	
GRAMS OF VOC PER LITER OF COATING, LESS WATER & LESS EXEMPT COMPOUNDS	
COATING CATEGORY	CURRENT VOC LIMIT
FLAT COATINGS	50
NON-FLAT COATINGS	100
NONFLAT-HIGH GLOSS COATINGS	150
SPECIALTY COATINGS	
ALUMINUM ROOF COATINGS	400
BASEMENT SPECIALTY COATINGS	400
BITUMINOUS ROOF COATINGS	50
BITUMINOUS ROOF PRIMERS	350
BOND BREAKERS	350
CONCRETE CURING COMPOUNDS	350
CONCRETE/MASONRY SEALERS	100
DRIVEWAY SEALERS	50
DRY FOG COATINGS	150
FAUX FINISHING COATINGS	350
FIRE RESISTIVE COATINGS	350
FLOOR COATINGS	100
FORM-RELEASE COMPOUNDS	250
GRAPHIC ARTS COATINGS (SIGN PAINTS)	500
HIGH TEMPERATURE COATINGS	420
INDUSTRIAL MAINTENANCE COATINGS	250
LOW SOLIDS COATINGS ¹	120
MAGNESITE CEMENT COATINGS	450
MASTIC TEXTURE COATINGS	100
METALLIC PIGMENTED COATINGS	500
MULTICOLOR COATINGS	250
PRETREATMENT WASH PRIMERS	420
PRIMERS, SEALERS, & UNDERCOATERS	100
REACTIVE PENETRATING SEALERS	350
RECYCLED COATINGS	250
ROOF COATINGS	50
RUST PREVENTATIVE COATINGS	250
SHELLACS	
CLEAR	730
OPAQUE	550
SPECIALTY PRIMERS; SEALERS & UNDERCOATERS	100
STAINS	250
STONE CONSOLIDANTS	450
SWIMMING POOL COATINGS	340
TRAFFIC MARKING COATINGS	100
TUB & TILE REFINISH COATINGS	420
WATERPROOFING MEMBRANES	250
WOOD COATINGS	275
WOOD PRESERVATIVES	350
ZINC-RICH PRIMERS	340
1. GRAMS OF VOC PER LITER OF COATING, INCLUDING WATER & EXEMPT COMPOUNDS	
2. THE SPECIFIED LIMITS REMAIN IN EFFECT UNLESS REVISED LIMITS ARE LISTED IN SUBSEQUENT COLUMNS IN THE TABLE.	
3. VALUES IN THIS TABLE ARE DERIVED FROM THOSE SPECIFIED BY THE CALIFORNIA AIR RESOURCES BOARD, ARCHITECTURAL COATINGS SUGGESTED CONTROL MEASURE, FEB. 1, 2008. MORE INFORMATION IS AVAILABLE FROM THE AIR RESOURCES BOARD.	

TABLE 4.504.5 - FORMALDEHYDE LIMITS ¹	
MAXIMUM FORMALDEHYDE EMISSIONS IN PARTS PER MILLION	
PRODUCT	CURRENT LIMIT
HARDWOOD PLYWOOD VENEER CORE	0.05
HARDWOOD PLYWOOD COMPOSITE CORE	0.05
PARTICLE BOARD	0.09
MEDIUM DENSITY FIBERBOARD	0.11
THIN MEDIUM DENSITY FIBERBOARD ²	0.13
1. VALUES IN THIS TABLE ARE DERIVED FROM THOSE SPECIFIED BY THE CALIF. AIR RESOURCES BOARD, AIR TOXICS CONTROL MEASURE FOR COMPOSITE WOOD AS TESTED IN ACCORDANCE WITH ASTM E-1933. FOR ADDITIONAL INFORMATION, SEE CALIF. CODE OF REGULATIONS, TITLE 17, SECTIONS 93120 THROUGH 93120.12.	
2. THIN MEDIUM DENSITY FIBERBOARD HAS A MAXIMUM THICKNESS OF 5/16" (8 MM).	

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REVISIONS		
Syn.	Description	Date

CONSULTANT

PLANS DRAWN IN CONJUNCTION WITH RAD STUDIOS, REDDING, CA

TOWN OF TRUCKEE
PERMIT CENTER

New Single Family Residence
Bernard Dr.
Nevada County, CA

ORIGINAL SCALE IN INCHES
1" = 1'-0"
SCHEMATIC DESIGN

DESIGNED BY RAD	DRAWN BY WHY	REVIEWED BY
ORIGINAL SCALE: 1/4" = 1'-0"		
DATE:	9/23/2020	SHEET NO. 14
SHEET:	5 of 25	

2016 CALIFORNIA GREEN BUILDING STANDARDS CODE

RESIDENTIAL MANDATORY MEASURES, SHEET 2

INSPECTOR SIGNOFF	DIVISION 4.5 ENVIRONMENTAL QUALITY (continued)
	4.504.3 CARPET SYSTEMS. All carpet installed in the building interior shall meet the testing and product requirements of at least one of the following: <ol style="list-style-type: none">Carpet and Rug Institute's Green Label Plus Program.California Department of Public Health, "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers" Version 1.1, February 2010 (also known as Specification 01350).NSF/ANSI 140 at the Gold level.Scientific Certifications Systems Indoor AdvantageTM Gold.
	4.504.3.1 Carpet cushion. All carpet cushion installed in the building interior shall meet the requirements of the Carpet and Rug Institute's Green Label program.
	4.504.3.2 Carpet adhesive. All carpet adhesive shall meet the requirements of Table 4.504.1.
	4.504.4 RESILIENT FLOORING SYSTEMS. Where resilient flooring is installed , at least 80% of floor area receiving resilient flooring shall comply with one or more of the following: <ol style="list-style-type: none">VOC emission limits defined in the Collaborative for High Performance Schools (CHPS) High Performance Products Database.Products compliant with CHPS criteria certified under the Greenguard Children & Schools program.Certification under the Resilient Floor Covering Institute (RFCI) FloorScore program.Meet the California Department of Public Health, "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers", Version 1.1, February 2010 (also known as Specification 01350).
	4.504.5 COMPOSITE WOOD PRODUCTS. Hardwood plywood, particleboard and medium density fiberboard composite wood products used on the interior or exterior of the buildings shall meet the requirements for formaldehyde as specified in ARE's Air Toxics Control Measure for Composite Wood (17 OCR 93120 et seq.), by or before the dates specified in those sections, as shown in Table 4.504.5
	4.504.5.1 Documentation. Verification of compliance with this section shall be addressed as requested by the enforcing agency. Documentation shall include at least one of the following: <ol style="list-style-type: none">Product certifications and specifications.Chain of custody certifications.Product labeled and invoiced as meeting the Composite Wood Products regulation (see CCR, Title 17, Section 93120, et seq.).Exterior grade products marked as meeting the PS-1 or PS-2 standards of the Engineered Wood Association, the Australian AS/NZS 2269 or European EN 338 standards.Other methods acceptable to the enforcing agency.
	4.505 INTERIOR MOISTURE CONTROL
	4.505.1 General. Buildings shall meet or exceed the provisions of the <i>California Building Standards Code</i> .
	4.505.2 CONCRETE SLAB FOUNDATIONS. Concrete slab foundations required to have a vapor retarder by California Building Code, Chapter 19, or concrete slab-on-ground floors required to have a vapor retarder by the California Residential Code, Chapter 5, shall also comply with this section.
	4.505.2.1 Capillary break. A capillary break shall be installed in compliance with at least one of the following: <ol style="list-style-type: none">A 4-inch (101.6 mm) thick base of 1/2 inch (12.7mm) or larger clean aggregate shall be provided with a vapor barrier in direct contact with concrete and a concrete mix design, which will address bleeding, shrinkage, and curling, shall be used. For additional information, see American Concrete Institute, ACI 302.2R-06.Other equivalent methods approved by the enforcing agency.A slab design specified by a licensed design professional.
	4.505.3 MOISTURE CONTENT OF BUILDING MATERIALS. Building materials with visible signs of water damage shall not be installed. Wall and floor framing shall not be enclosed when the framing members exceed 19 percent moisture content. Moisture content shall be verified in compliance with the following: <ol style="list-style-type: none">Moisture content shall be determined with either a probe-type or contact-type moisture meter. Equivalent moisture verification methods may be approved by the enforcing agency and shall satisfy requirements found in Section 101.8 of this code.Moisture readings shall be taken at a point 2 feet (610 mm) to 4 feet (1219 mm) from the grade stamped end of each piece verified.At least three random moisture readings shall be performed on wall and floor framing with documentation acceptable to the enforcing agency provided at the time of approval to enclose the wall and floor framing.

Insulation products which are visibly wet or have a high moisture content shall be replaced or allowed to dry prior to enclosure in wall or floor cavities. Wet-applied insulation products shall follow the manufacturers' drying recommendations prior to enclosure.

4.506 INDOOR AIR QUALITY AND EXHAUST

- 4.506.1 Bathroom exhaust fans.** Each bathroom shall be mechanically ventilated and shall comply with the following:
- Fans shall be ENERGY STAR compliant and be ducted to terminate outside the building.
 - Unless functioning as a component of a whole house ventilation system, fans must be controlled by a humidity control.
 - A humidity controls shall be capable of adjustment between a relative humidity range less than or equal to 50% to a maximum of 80%. A humidity control may utilize manual or automatic means of adjustment.
 - A humidity control may be a separate component to the exhaust fan and is not required to be integral (i.e., built-in)
- Notes:**
- For the purposes of this section, a bathroom is a room which contains a bathtub, shower or tub/shower combination.
 - Lighting integral to bathroom exhaust fans shall comply with the California Energy Code.

4.507 ENVIRONMENTAL COMFORT

- 4.507.2 HEATING AND AIR-CONDITIONING SYSTEM DESIGN.** Heating and air conditioning systems shall be sized, designed and have their equipment selected using the following methods:
- The heat loss and heat gain is established according to ANSI/ACCA 2 Manual J - 2011 (Residential Load Calculation), ASHRAE handbooks or other equivalent design software or methods.
 - Duct systems are sized according to ANSI/ACCA 1 Manual D - 2014 (Residential Duct Systems), ASHRAE handbooks or other equivalent design software or methods.
 - Select heating and cooling equipment according to ANSI/ACCA 3 Manual S - 2014 (Residential Equipment Selection), or other equivalent design software or methods.

Exception: Use of alternate design temperatures necessary to ensure the system functions are acceptable.

CHAPTER 7 INSTALLER & SPECIAL INSPECTOR QUALIFICATIONS

702 QUALIFICATIONS

702.1 INSTALLER TRAINING.

HVAC system installers shall be trained and certified in the proper installation of HVAC systems including ducts and equipment by a nationally or regionally recognized training or certification program. Uncertified persons may perform HVAC installations when under the direct supervision and responsibility of a person trained and certified to install HVAC systems or contractor licensed to install HVAC systems. Examples of acceptable HVAC training and certification programs include but are not limited to the following:

- State certified apprenticeship programs.
- Public utility training programs.
- Training programs sponsored by trade, labor or statewide energy consulting or verification organizations. Programs sponsored by manufacturing organizations.
- Other programs acceptable to the enforcing agency.

703 VERIFICATIONS

703.1 DOCUMENTATION.

Documentation used to show compliance with this code shall include but is not limited to, construction documents, plans, specifications, builder or installer certification, inspection reports, or other methods acceptable to the enforcing agency which demonstrate substantial conformance. When specific documentation or special inspection is necessary to verify compliance, that method of compliance will be specified in the appropriate section or identified applicable checklist.

CHAPTER 3 BUILDING PLANNING:

- OPENINGS AND PENETRATIONS THROUGH THE WALLS OR CEILINGS R302.11 AT OPENINGS AROUND VENTS, PIPES, DUCTS, CABLES AND WIRES AT CEILING AND FLOOR LEVEL, WITH AN APPROVED MATERIAL TO RESIST THE FREE PASSAGE OF FLAME AND PRODUCTS OF COMBUSTION.

- OPENINGS FROM A PRIVATE GARAGE DIRECTLY INTO A ROOM USED FOR SLEEPING PURPOSES SHALL NOT BE PERMITTED. OTHER OPENINGS BETWEEN THE GARAGE AND RESIDENCE SHALL BE EQUIPPED WITH SOLID WOOD DOORS NOT LESS THAN 1 3/8 INCHES (35 MM) IN THICKNESS, SOLID OR HONEYCOMB-CORE STEEL DOORS NOT LESS THAN 1 3/8 INCHES (35 MM) THICK, OR 20-MINUTE FIRE-RATED DOORS, EQUIPPED WITH A SELF-CLOSING AND SELF-LATCHING DEVICE.R302.5.1

- THE GARAGE SHALL BE SEPARATED FROM THE RESIDENCE AND ATTICS - NOT LESS THAN 1/2-INCH GYPSUM BOARD OR EQUIVALENT APPLIED TO THE GARAGE SIDE FROM HABITABLE ROOMS ABOVE THE GARAGE - NOT LESS THAN 5/8-INCH TYPE X GYPSUM BOARD OR EQUIVALENT TABLE R302.6 NOTE: PROVIDE 5/8" GYP ON CEILINGS USING A WATER BASED TEXTURE.

- WALL AND CEILING FINISHES SHALL HAVE A FLAME SPREAD INDEX OF NOT GREATER THAN 200. R302.9.1

- SMOKE-DEVELOPED INDEX, WALL AND CEILING FINISHES SHALL HAVE A SMOKE-DEVELOPED INDEX OF NOT GREATER THAN 450. R302.9.2

- FLAME SPREAD AND SMOKE-DEVELOPED INDEX FOR INSULATION SHALL BE IN ACCORDANCE WITH SECTIONS R302.10.1 THROUGH R302.10.5. R302.10

- FIRELOCKING SHALL BE PROVIDED IN WOOD-FRAMED CONSTRUCTION IN THE FOLLOWING LOCATIONS:

- IN CONCEALED SPACES OF STUD WALLS AND PARTITIONS, INCLUDING FURRED SPACES AND PARALLEL ROWS OF STUDS OR STAG-GERED STUDS, AS FOLLOWS:
 - VERTICALLY AT THE CEILING AND FLOOR LEVELS.
 - HORIZONTALLY AT INTERVALS NOT EXCEEDING 10 FEET (3048 MM).
 - AT INTERCONNECTIONS BETWEEN CONCEALED VERTICAL AND HORIZONTAL SPACES SUCH AS OCCUR AT SOFFITS, DROP CEILINGS AND COVE CEILINGS.
- IN CONCEALED SPACES BETWEEN STAIR STRINGERS AT THE TOP AND BOTTOM OF THE RUN, ENCLOSED SPACES UNDER STAIRS SHALL COMPLY WITH SECTION R302.7.
- AT OPENINGS AROUND VENTS, PIPES, DUCTS, CABLES AND WIRES AT CEILING AND FLOOR LEVEL, WITH AN APPROVED MATERIAL TO RESIST THE FREE PASSAGE OF FLAME AND PRODUCTS OF COMBUSTION. THE MATERIAL FILLING THIS ANNULAR SPACE SHALL NOT BE REQUIRED TO MEET THE ASTM E136 REQUIREMENTS.

- FIRELOCKING SHALL CONSIST OF THE FOLLOWING MATERIALS. R302.11.1
 - TWO-INCH (51 MM) NOMINAL LUMBER.
 - TWO THICKNESSES OF 1-INCH (25.4 MM) NOMINAL LUM-BER WITH BROKEN LAP JOINTS.
 - ONE THICKNESS OF 23/32-INCH (18.3 MM) WOOD STRUCTURAL PANELS WITH JOINTS BACKED BY 23/32-INCH (18.3 WOOD STRUCTURAL PANELS.
 - ONE-APPLIED MEET WITH AAMA 711 PARTICLEBOARD WITH JOINTS BACKED BY 3/4-INCH (19.1 MM) PARTICLE-BOARD.
 - ONE-HALF-INCH (12.7 MM) GYPSUM BOARD.
 - ONE-QUARTER-INCH (6.4 MM) CEMENT-BASED MILLBOARD.
 - BATTS OR BLANKETS OF MINERAL WOOL OR GLASS FIBER OR OTHER APPROVED MATERIALS INSTALLED IN SUCH A MANNER AS TO BE SECURELY RETAINED IN PLACE.

- R303.5.1 MECHANICAL OUTDOOR AIR INTAKE OPENINGS SHALL BE LOCATED NOT LESS THAN 10 FEET (3048 MM) FROM ANY HAZARDOUS OR NOXIOUS CONTAMINANT, SUCH AS VENTS, CHIMNEYS, PLUMBING VENTS, STREETS, FOR THE PURPOSE OF THIS SECTION, THE EXHAUST FROM DWELLING UNIT TOILET ROOMS, BATHROOMS AND KITCHENS SHALL NOT BE LOCATED IN SUCH A MANNER THAT THE EXHAUST AIR WILL BE DIRECTED INTO THE 10-FOOT (3048 MM) SEPARATION IS NOT REQUIRED WHERE THE INTAKE OPENING IS LOCATED 3 FEET (914 OR GREATER BELOW THE CONTAMINANT SOURCE.
- VENTS AND CHIMNEYS SERVING FUEL-BURNING APPLIANCES SHALL BE TERMINATED IN ACCORDANCE WITH THE APPLICABLE PROVISIONS OF CHAPTERS 18 AND 24.
- CLOTHES DRYER EXHAUST DUCTS SHALL BE TERMINATED IN ACCORDANCE WITH SECTION M1502.3.

- EXHAUST AIR SHALL NOT BE DIRECTED ONTO WALKWAYS. R303.5.2

- AIR EXHAUST AND INTAKE OPENINGS THAT TERMINATE OUTDOORS SHALL BE PROTECTED WITH CORROSION-RESISTANT SHIELDING OR GRATING HAVING AN OPENING SIZE OF NOT LESS THAN 1/4 INCH (6 MM) AND A MAXIMUM OPENING SIZE OF 1/2 INCH (13 MM), IN ANY DIMENSION. OPENINGS SHALL BE PROTECTED AGAINST LOCAL WEATHER CONDITIONS. OUTDOOR AIR EXHAUST AND INTAKE OPENINGS SHALL MEET THE PROVISIONS FOR EXTERIOR WALL OPENING PROTECTIVES IN ACCORDANCE WITH THIS CODE. R303.6

- BATHTUB AND SHOWER FLOORS AND WALLS ABOVE BATHTUBS WITH INSTALLED SHOWER HEADS AND IN SHOWER COMPARTMENTS SHALL BE FINISHED WITH A NONABSORBENT SURFACE. SUCH WALL SURFACES SHALL EXTEND TO A HEIGHT OF NOT LESS THAN 6 FEET (1829 MM) ABOVE THE FLOOR. R302.7

- GLAZING IN FIXED AND OPERABLE PANELS OF SWINGING, SLIDING AND BIFOLD DOORS SHALL BE CONSIDERED TO BE A HAZARDOUS LOCATION. R308.4.1

- GLAZING IN AN INDIVIDUAL FIXED OR OPERABLE PANEL ADJACENT TO A DOOR SHALL BE CONSIDERED TO BE A HAZARDOUS LOCATION WHERE THE BOTTOM EXPOSED EDGE OF THE GLAZING IS LESS THAN 40 INCHES (1024 MM) ABOVE THE FLOOR OR WALKING SURFACE AND IT MEETS EITHER OF THE FOLLOWING CONDITIONS:

- WHERE THE GLAZING IS WITHIN 24 INCHES (610 MM) OF EITHER SIDE OF THE DOOR IN THE PLANE OF THE DOOR IN A CLOSED POSITION.
 - WHERE THE GLAZING IS ON A WALL PERPENDICULAR TO THE PLANE OF THE DOOR IN A CLOSED POSITION AND WITHIN 24 INCHES (610 MM) OF THE HINGE SIDE OF AN IN-SWINGING DOOR
- EXCEPTIONS: GLAZING THAT IS ADJACENT TO THE FIXED PANEL OF PATIO DOORS.

- GLAZING IN AN INDIVIDUAL FIXED OR OPERABLE PANEL THAT MEETS ALL OF THE FOLLOWING CONDITIONS SHALL BE CONSIDERED TO BE A HAZARDOUS LOCATION: THE EXPOSED AREA OF AN INDIVIDUAL PANE IS LARGER THAN 9 SQUARE FEET (0.836 M2).

- THE BOTTOM EDGE OF THE GLAZING IS LESS THAN 18 INCHES (457 MM) ABOVE THE FLOOR.
- THE TOP EDGE OF THE GLAZING IS MORE THAN 36 INCHES (914 MM) ABOVE THE FLOOR, AND
- ONE OR MORE WALKING SURFACES ARE WITHIN 36 INCHES (914 MM), MEASURED HORIZONTALLY AND IN A STRAIGHT LINE, OF THE GLAZING.

- GLAZING IN WALLS CONTAINING BATHTUBS OR SHOWERS WHERE THE BOTTOM EXPOSED EDGE OF THE GLAZING IS LESS THAN 60 INCHES MEASURED VERTICALLY ABOVE ANY STANDING OR WALKING SURFACE SHALL BE CONSIDERED TO BE A HAZARDOUS LOCATION. THIS SHALL APPLY TO SINGLE GLAZING AND EACH PANE IN MULTIPLE GLAZING.

EXCEPTION: GLAZING THAT IS MORE THAN 60 INCHES MEASURED HORIZONTALLY AND IN A STRAIGHT LINE, FROM THE WATER 'S EDGE OF A BATHTUB OR FROM THE EDGE OF A SHOWER. R308.4.5

- AUTOMATIC GARAGE DOOR OPENERS. AUTOMATIC GARAGE DOOR OPENERS, IF PROVIDED, SHALL BE LISTED AND LABELED IN ACCORDANCE WITH UL 325. SEE HEALTH AND SAFETY CODE SECTIONS 19890 AND 19891 FOR ADDITIONAL PROVISIONS FOR RESIDENTIAL GARAGE DOOR OPENERS. R309.4

- EMERGENCY AND ESCAPE RESCUE OPENINGS SHALL HAVE A NET CLEAR OPENING OF NOT LESS THAN 5.7 SQUARE FEET. THE NET CLEAR OPENING DIMENSIONS REQUIRED SHALL BE OBTAINED BY THE NORMAL OPERATION OF THE EMERGENCY ESCAPE AND RESCUE OPENING FROM THE INSIDE. THE NET CLEAR HEIGHT OPENING SHALL BE NOT LESS THAN 24 INCHES AND THE NET CLEAR WIDTH SHALL BE NOT LESS THAN 20 INCHES. EXCEPTION: GRADE FLOOR OR BELOW GRADE OPENINGS SHALL HAVE A NET CLEAR OPENING OF NOT LESS THAN 5 SQUARE FEET R310.2.1

- NOT LESS THAN ONE EGRESS DOOR SHALL BE PROVIDED FOR EACH DWELLING UNIT. THE EGRESS DOOR SHALL BE LOCATED NOT LESS THAN 10 FEET (3048 MM) FROM THE DOOR OR LESS THAN 32 INCHES (813 MM) WHERE MEASURED BETWEEN THE FACE OF THE DOOR AND THE STOP, WITH THE DOOR OPEN 90 DEGREES (1.57 RAD). THE CLEAR HEIGHT OF THE DOOR OPENING SHALL BE NOT LESS THAN 78 INCHES (1981 MM) IN HEIGHT MEASURED FROM THE TOP OF THE THRESHOLD TO THE BOTTOM OF THE STOP. THE REQUIRED EGRESS DOOR SHALL OPEN DIRECTLY INTO A PUBLIC WAY OR TO A YARD OR COURT THAT OPENS TO A PUBLIC WAY. R311.1 R311.2

- THERE SHALL BE A LANDING OR FLOOR ON EACH SIDE OF EACH EXTERIOR DOOR. THE WIDTH OF EACH LANDING SHALL BE NOT LESS THAN THE DOOR SWEPT, EVERY LANDING SHALL HAVE A DIMENSION OF NOT LESS THAN 36 INCHES (914 MM) MEASURED IN THE DIRECTION OF TRAVEL. THE SLOPE AT EXTERIOR LANDINGS SHALL NOT EXCEED 1/4 UNIT VERTICAL IN 12 UNITS HORIZONTAL (2 PERCENT).

- LANDINGS OR FINISHED FLOORS AT THE REQUIRED EGRESS DOOR SHALL BE NOT MORE THAN 1 1/2 INCHES (38.1 MM) OVER THE TOP OF THE THRESHOLD. EXCEPTION: THE LANDING OR FLOOR ON THE EXTERIOR SIDE SHALL BE NOT MORE THAN 7 3/4 INCHES (196 MM) BELOW THE TOP OF THE THRESHOLD PROVIDED THE DOOR DOES NOT SWING OVER THE LANDING OR FLOOR. R311.3.1

- DOORS OTHER THAN THE REQUIRED EGRESS DOOR SHALL BE PRO-VIDED WITH LANDINGS OR FLOORS NOT MORE THAN 73/4 INCHES (196 MM) BELOW THE TOP OF THE THRESHOLD. EXCEPTION: A TOP LANDING IS NOT REQUIRED WHERE A STAIR-WAY OF NOT MORE THAN TWO RISERS IS LOCATED ON THE EXTE-RIOR SIDE OF THE DOOR, PROVIDED THAT THE DOOR DOES NOT SWING OVER THE STAIRWAY.

- AN AUTOMATIC RESIDENTIAL FIRE SPRINKLER SYSTEM SHALL BE INSTALLED IN ONE- AND TWO-FAMILY DWELLINGS. R313.2 DESIGN AND INSTALLATION, AUTOMATIC RESIDENTIAL FIRE SPRINKLER SYSTEMS SHALL BE DESIGNED AND INSTALLED IN ACCORDANCE WITH SECTION R313.3 OR NFPA 13D. R313.2.1

- SMOKE ALARMS SHALL COMPLY WITH NFPA 72 AND SECTION R314. R314.1 SMOKE ALARMS SHALL BE PROVIDED OUTSIDE EACH SEPARATE SLEEPING AREA IN THE IMMEDIATE VICINITY OF THE BEDROOMS AND ON EACH ADDITIONAL STORY OF THE DWELLING AND HABITABLE ATTICS. R314.3 SMOKE ALARMS SHALL BE INSTALLED NOT LESS THAN 3 FEET (914 MM) HORIZONTALLY FROM THE DOOR OR OPENING OF A BATHROOM THAT CONTAINS A BATHTUB OR SHOWER UNLESS THIS WOULD PREVENT PLACEMENT OF A SMOKE ALARM REQUIRED BY SECTION R314.3.

- SPECIFIC LOCATION REQUIREMENTS. THE INSTALLATION OF SMOKE ALARMS AND SMOKE DETECTORS SHALL COMPLY WITH THE FOLLOWING REQUIREMENTS 29.8.3.4: SMOKE ALARMS AND SMOKE DETECTORS SHALL NOT BE LOCATED WHERE AMBIENT CONDITIONS, INCLUDING HUMIDITY AND TEMPERATURE, ARE OUTSIDE THE LIMITS SPECIFIED BY THE MANUFACTURER'S PUBLISHED INSTRUCTIONS.

- SMOKE ALARMS AND SMOKE DETECTORS SHALL NOT BE LOCATED WITHIN UNFINISHED ATTICS OR GARAGES OR IN OTHER SPACES WHERE TEMPERATURES CAN FALL BELOW 40°F (4°C) OR EXCEED 100°F (38°C).
- WHERE THE MOUNTING SURFACE COULD BECOME CONSIDERABLY WARMER OR COOLER THAN THE ROOM, SUCH AS A POORLY INSULATED CEILING BELOW AN UNFINISHED ATTIC OR AN EXTERIOR WALL, SMOKE ALARMS AND SMOKE DETECTORS SHALL BE MOUNTED ON AN INSIDE WALL.
- SMOKE ALARMS OR SMOKE DETECTORS SHALL BE INSTALLED A MINIMUM OF 20 FEET HORIZONTAL DISTANCE FROM A PERMANENTLY INSTALLED COOKING APPLIANCE.
- INSTALLATION NEAR BATHROOMS. SMOKE ALARMS SHALL BE INSTALLED NOT LESS THAN A 3 FOOT (0.91 M) HORIZONTAL DISTANCE FROM THE DOOR OR OPENING OF A BATHROOM THAT CONTAINS A BATHTUB OR SHOWER UNLESS THIS WOULD PREVENT PLACEMENT OF A SMOKE ALARM REQUIRED BY OTHER SECTIONS OF THE CODE.
- SMOKE ALARMS AND SMOKE DETECTORS SHALL NOT BE INSTALLED WITHIN A 36 IN. (910 MM) HORIZONTAL PATH FROM THE SUPPLY REGISTERS OF A FORCED AIR HEATING OR COOLING SYSTEM AND SHALL BE INSTALLED OUTSIDE OF THE DIRECT AIRFLOW FROM THOSE REGISTERS.
- SMOKE ALARMS AND SMOKE DETECTORS SHALL NOT BE INSTALLED WITHIN A 36 IN. (910 MM) HORIZONTAL PATH FROM THE TIP OF THE BLADE OF A CEILING-SUSPENDED (PADDL E) FAN.

- WHERE STAIRS HAVE A FLOOR FINISH THAT IS NOT A HARD FINISH, SUCH AS FLAS HING IN EXTERIOR WALLS SHALL COMPLY WITH AAMA 714. THE FLASHING SHALL EXTEND TO THE SURFACE OF THE EXTERIOR WALL FINISH. APPROVED CORROSION-RESISTANT FLASHINGS SHALL BE INSTALLED AT THE FOLLOWING LOCATIONS DESCRIBED IN R703.4
- MINIMUM 0.019-INCH (0.5mm)/NO. 26 GALVANIZED SHEET GAGE), CORROSION-RESISTANT WEEP SCREED OR PLASTIC WEEP SCREED, WITH A MINIMUM VERTICAL ATTACHMENT FLANGE OF 3 1/2 INCHES (89 MM) SHALL BE PROVIDED AT OR BELOW THE FOUNDATION PLATE LINE ON EXTERIOR STUD WALLS IN ACCORDANCE WITH ASTM C926. THE WEEP SCREED SHALL BE PLACED NOT LESS THAN 4 INCHES (102 MM) ABOVE THE EARTH OR 2 INCHES (51 MM) 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 BE INSTALLED AT THE EXTERIOR LATH SHALL COVER AND TERMINATE ON THE ATTACHMENT FLANGE OF THE WEEP SCREED. R703.7.2.1

- INTERCONNECTION, WHERE MORE THAN ONE SMOKE ALARM IS REQUIRED TO BE INSTALLED WITHIN AN INDIVIDUAL DWELLING OR SLEEPING UNIT, THE SMOKE ALARMS SHALL BE INTERCONNECTED IN SUCH A MANNER THAT THE OPERATION OF ONE ALARM WILL ACTIVATE ALL OF THE ALARMS IN THE INDIVIDUAL UNIT. THE ALARM SHALL BE CLEARLY AUDIBLE IN ALL BEDROOMS OVER BACKGROUND NOISE LEVELS WITH ALL INTERVENING DOORS CLOSED.R314.4

- POWER SOURCE. SMOKE ALARMS SHALL RECEIVE THEIR PRIMARY POWER FROM THE BUILDING WIRING PROVIDED THAT SUCH WIRING IS SERVED FROM A COMMERCIAL SOURCE AND SHALL BE EQUIPPED WITH A BATTERY BACKUP. SMOKE ALARMS WITH INTEGRAL STROBES THAT ARE NOT EQUIPPED WITH BATTERY BACKUP SHALL BE CONNECTED TO AN EMERGENCY ELECTRICAL SYSTEM. SMOKE ALARMS SHALL EMIT A SIGNAL WHEN THE BATTERIES ARE LOW. WIRING SHALL BE PERMANENT AND WITHOUT A DISCONNECTING SWITCH OTHER THAN AS REQUIRED FOR OVERCURRENT PROTECTION.R314.6

- COMBINATION SMOKE AND CARBON MONOXIDE ALARMS SHALL BE PERMITTED TO BE USED IN LIEU OF SMOKE ALARMS. SYSTEMS AND COMPONENTS SHALL BE CALIFORNIA STATE FIRE MARSHAL LISTED AND APPROVED IN ACCORDANCE WITH CALIFORNIA CODE OF REGULATIONS, TITLE 19, DIVISION 1 FOR THE PURPOSE FOR WHICH THEY ARE INSTALLED. R314.5

- UNLESS OTHERWISE ALLOWED IN SECTION R316.5, FOAM PLASTIC OR FOAM PLASTIC CORES USED AS A COMPONENT IN MANUFACTURED ASSEMBLIES USED IN BUILDING CONSTRUCTION SHALL HAVE A FLAME SPREAD INDEX OF NOT MORE THAN 75 AND SHALL HAVE A SMOKE-DEVELOPED INDEX OF NOT MORE THAN 450. R316.3

- UNLESS OTHERWISE ALLOWED IN SECTION R316.5 FOAM PLASTIC SHALL BE SEPARATED FROM THE INTERIOR OF A BUILDING BY AN APPROVED THERMAL BARRIER OF NOT LESS THAN 1/2-INCH GYPSUM WALLBOARD, 23/32-INCH WOOD STRUCTURAL PANEL, R316.5

- PROTECTION OF WOOD AND WOOD-BASED PRODUCTS FROM DECAY SHALL BE PROVIDED IN THE LOCATIONS PROVIDE IN SECTION R317.1 BY THE USE OF NATURALLY DURABLE WOOD OR WOOD THAT IS PRESERVATIVE-TREATED IN ACCORDANCE WITH AWPA U1 FOR THE SPECIES, PRODUCT, PRESERVATIVE AND END USE. PRESERVATIVES SHALL BE LISTED IN SECTION 4 OF AWPA U1. SOME OF THE APPLICABLE LOCATIONS ARE:

- WOOD FRAMING MEMBERS THAT REST ON CONCRETE FOUNDATION WALLS AND ARE LESS THAN 8 INCHES (203 MM) FROM THE EXPOSED GROUND.
- WOOD SIDING, SHEATHING AND WALL FRAMING ON THE EXTERIOR OF A BUILDING HAVING A CLEARANCE OF LESS THAN 6 INCHES (152 MM) FROM THE GROUND OR LESS THAN 2 INCHES (51 MM) MEASURED VERTICALLY FROM CONCRETE STEPS, PORCH SLABS, PATIO SLABS AND SIMILAR HORIZONTAL SURFACES EXPOSED TO THE WEATHER.

- LUMBER AND PLYWOOD REQUIRED TO BE PRESSURE-PRESERVATIVE TREATED IN ACCORDANCE WITH SECTION R318.1 SHALL BEAR THE QUALITY MARK OF AN APPROVED INSPECTION AGENCY THAT MAINTAINS CONTINUING SUPERVISION, TESTING AND INSPECTION OVER THE QUALITY OF THE PRODUCT AND THAT HAS BEEN APPROVED BY THE FIRE CODE OFFICIAL. BODY THAT COMPLIES WITH THE REQUIREMENTS OF THE AMERICAN LUMBER STANDARD COMMITTEE TREATED WOOD PROGRAM.

- FASTENERS, INCLUDING NUTS AND WASHERS, AND CONNECTORS IN CONTACT WITH PRESERVATIVE-TREATED WOOD AND FIRE-RETARDANT-TREATED WOOD SHALL BE IN ACCORDANCE WITH SECTION 317.3

- FASTENERS, INCLUDING NUTS AND WASHERS, FOR PRESERVATIVE-TREATED WOOD SHALL BE OF HOT-DIPPED, ZINC-COATED GALVANIZED STEEL, STAINLESS STEEL, SILICON BRONZE OR COPPER. COATING TYPES AND WEIGHTS FOR CONNECTORS IN CONTACT WITH PRESERVATIVE-TREATED WOOD SHALL BE IN ACCORDANCE WITH THE CONNECTOR MANUF. REC. IN THE ABSENCE OF MANUF. REC., A MINIMUM OF ASTM A653 TYPE G185 ZINC-COATED GALVANIZED STEEL, OR EQUIVALENT, SHALL BE USED. R317.3.1

- BUILDINGS SHALL BE PROVIDED WITH APPROVED ADDRESS IDENTIFICATION. THE ADDRESS IDENTIFICATION SHALL BE LEGIBLE AND PLACED IN A POSITION THAT IS VISIBLE FROM THE STREET OR ROAD FRONTING THE PROPERTY. ADDRESS IDENTIFICATION CHARACTERS SHALL CONTRAST WITH THEIR BACKGROUND. ADDRESS NUMBERS SHALL BE ARABIC NUMBERS OR ALPHABETICAL LETTERS. NUMBERS SHALL NOT BE SPELLED OUT. EACH CHARACTER SHALL BE NOT LESS THAN 4 INCHES (102 MM) IN HEIGHT WITH A STROKE WIDTH OF NOT LESS THAN 0.5 INCHES (12.7 MM), WHERE REQUIRED BY THE FIRE CODE OFFICIAL. ADDRESS IDENTIFICATION SHALL BE PROVIDED IN ADDITIONAL APPROVED LOCATIONS TO FACILITATE EMERGENCY RESPONSE, WHERE ACCESS IS BY MEANS OF A PRIVATE ROAD AND THE BUILDING ADDRESS CANNOT BE VIEWED FROM THE PUBLIC WAY, A MONUMENT, POLE OR OTHER SIGN OR MEANS SHALL BE USED TO IDENTIFY THE STRUCTURE. ADDRESS IDENTIFICATION SHALL BE MAINTAINED.

CHAPTER 7 WALL COVERING:

- GYPSUM BOARD AND GYPSUM PANEL PRODUCTS SHALL BE APPLIED AT RIGHT ANGLES OR PARALLEL TO FRAMING MEMBERS. ALL EDGES AND ENDS OF FRAMING AND GYPSUM PANEL PRODUCTS SHALL OCCUR ON THE FRAMING MEMBERS, EXCEPT THOSE EDGES AND ENDS THAT ARE PERPENDICULAR TO THE FRAMING MEM-BERS. INTERIOR GYPSUM BOARD SHALL NOT BE INSTALLED WHERE IT IS DIRECTLY EXPOSED TO THE WEATHER OR TO WATER. R702.3.5

- SCREWS FOR ATTACHING GYPSUM BOARD AND GYPSUM PANEL PRODUCTS TO WOOD FRAMING SHALL BE TYPE W OR TYPE S IN ACCORDANCE WITH ASTM C1002 AND SHALL PENETRATE THE WOOD NOT LESS THAN 5/8 INCH (15.9 MM). R702.3.5.1

- GYPSUM BOARD USED AS THE BASE OR BACKER FOR ADHESIVE APPLICATION OF CERAMIC TILE OR OTHER REQUIRED NONABSORBENT FINISH MATERIAL SHALL CONFORM TO ASTM C1396, C1178 OR C1278. USE OF WATER-RESISTANT GYPSUM BACKING BOARD SHALL BE PERMITTED ON CEILINGS. R702.3.7

- MATERIALS USED AS BACKERS FOR WALL TILE IN TUB AND SHOWER AREAS AND WALL PANELS IN SHOWER AREAS SHALL BE OF MATERIALS LISTED IN TABLE R702.4.2, AND INSTALLED IN ACCORDANCE WITH THE MANUF. RECOMMENDATIONS. R702.4.2

- EXTERIOR WALLS SHALL PROVIDE THE BUILDING WITH A WEATHER-RESISTANT EXTERIOR WALL ENVELOPE. THE EXTERIOR WALL ENVELOPE SHALL INCLUDE FLASHING AS DESCRIBED IN SECTION R703.4.

- THE EXTERIOR WALL ENVELOPE SHALL BE DESIGNED AND CONSTRUCTED IN A MANNER THAT PREVENTS THE ACCUMULATION OF WATER WITHIN THE WALL ASSEMBLY BY PROVIDING A WATER-RESISTANT BARRIER BEHIND THE EXTERIOR VENEER AS REQUIRED BY SECTION R703.2 AND A MEANS OF PROTECTING THE EXTERIOR WATER THAT ENTERS THE ASSEMBLY. PROTECTION AGAINST CONDENSATION IN THE EXTERIOR WALL ASSEMBLY SHALL BE PROVIDED IN ACCORDANCE WITH THE CALIFORNIA ENERGY CODE. R703.1.1

- ONE LAYER OF NO. 15 ASPHALT FELT, FREE FROM HOLES AND BREAKS, COMPLYING WITH ASTM D226 FOR TYPE 1 FELT OR OTHER APPROVED WATER-RESISTIVE BARRIER SHALL BE APPLIED OVER STUDS OR SHEATHING OVER EXTERIOR WALLS. SUCH FELT OR MATERIAL SHALL BE LAPPED HORIZONTALLY, WITH THE UPPER LAYER LAPPED OVER THE LOWER LAYER NOT LESS THAN 2 INCHES (51 MM), WHERE JOINTS OCCUR, FELT SHALL BE LAPPED NOT LESS THAN 6 INCHES (152 MM). THE FELT OR OTHER APPROVED MATERIAL SHALL BE CONTINUOUS TO THE TOP OF WALLS AND TERMINATED AT PENETRATIONS AND BUILDING APPENDAGES IN A MANNER TO MEET THE REQUIREMENTS OF THE EXTERIOR WALL ENVELOPE AS DESCRIBED IN SECTION R703.1. R703.2

- THE NOMINAL THICKNESS AND ATTACHMENT OF EXTERIOR WALL COVERINGS SHALL BE IN ACCORDANCE WITH TABLE R703.3(1). THE WALL COVERING MATERIAL REQUIREMENTS OF THIS SECTION, AND THE WALL COVERING MANUFACTURER 'S INSTALLATION INSTRUCTIONS. NOMINAL MATERIAL THICKNESSES IN TABLE R703.3(1) ARE BASED ON A MAXIMUM STUD SPACING OF 16 INCHES (406 MM) ON CENTER, WHERE SPECIFIED BY THE SIDING MANUFACTURER 'S INSTRUCTIONS AND SUPPORTED BY A TEST REPORT OR OTHER DOCUMENTATION, ATTACHMENT TO STUDS WITH GREATER SPACING IS PERMITTED. FASTENERS FOR EXTERIOR WALL COVERINGS ATTACHED TO WOOD FRAMING SHALL BE IN ACCORDANCE WITH SECTION R703.3.2 AND TABLE R703.3(1).

- EXTERIOR WALL COVERINGS SHALL BE SECURELY FASTENED WITH ALUMINUM, GALVANIZED, STAINLESS STEEL OR RUST-PREVENTATIVE COATED NAILS OR STAPLES IN ACCOR-DANCE WITH TABLE R703.3(1) OR WITH OTHER APPROVED CORRO-SION-RESISTANT FASTENERS IN ACCORDANCE WITH THE WALL COVERING MANUFACTURER 'S INSTALLATION INSTRUCTIONS, AND THE REQUIREMENTS OF R703.3.2

- APPROVED CORROSION-RESISTANT FLASHING SHALL BE APPLIED SHINGLE-FASHION IN A MANNER TO PREVENT ENTRY OF WATER INTO THE WALL CAVITY OR PENETRATION OF WATER TO THE BUILDING STRUCTURAL FRAMING COMPONENTS. SELF-ADHERED MEMBRANES USED AS FLASHING SHALL COMPLY WITH AAMA 711. FLUID APPLIED MEMBRANES SHALL BE USED IN EXTERIOR WALLS SHALL COMPLY WITH AAMA 714. THE FLASHING SHALL EXTEND TO THE SURFACE OF THE EXTERIOR WALL FINISH. APPROVED CORROSION-RESISTANT FLASHINGS SHALL BE INSTALLED AT THE FOLLOWING LOCATIONS DESCRIBED IN R703.4

- MINIMUM 0.019-INCH (0.5mm)/NO. 26 GALVANIZED SHEET GAGE), CORROSION-RESISTANT WEEP SCREED OR PLASTIC WEEP SCREED, WITH A MINIMUM VERTICAL ATTACHMENT FLANGE OF 3 1/2 INCHES (89 MM) SHALL BE PROVIDED AT OR BELOW THE FOUNDATION PLATE LINE ON EXTERIOR STUD WALLS IN ACCORDANCE WITH ASTM C926. THE WEEP SCREED SHALL BE PLACED NOT LESS THAN 4 INCHES (102 MM) ABOVE THE EARTH OR 2 INCHES (51 MM) 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 BE INSTALLED AT THE EXTERIOR LATH SHALL COVER AND TERMINATE ON THE ATTACHMENT FLANGE OF THE WEEP SCREED. R703.7.2.1

- WATER-RESISTIVE BARRIERS SHALL BE INSTALLED AS REQUIRED IN SECTION R703.2 AND, WHERE APPLIED OVER WOOD-BASED SHEATHING, SHALL INCLUDE A WATER-RESISTIVE VAPOR-PERMEABLE BARRIER WITH A PERFORMANCE AT LEAST EQUIVALENT TO TWO LAYERS OF GRADE D PAPER. THE INDIVIDUAL LAYERS SHALL BE INSTALLED INDEPENDENTLY SUCH THAT EACH LAYER PROVIDES A SEPARATE CONTINUOUS PLANE AND ANY FLASHING (INSTALLED IN ACCORDANCE WITH SECTION R703.4) INTENDED TO DRAIN TO THE WATER-RESISTIVE BARRIER IS DIRECTED BETWEEN THE LAYERS. R703.7.3

2016 RESIDENTIAL COMPLIANCE MANUAL MANDATORY MEASURES

- AIR LEAKAGE THROUGH JOINTS, PENETRATIONS, CRACKS, HOLES, AND OPENINGS AROUND WINDOWS, DOORS, WALLS, ROOFS, AND FLOORS CAN RESULT IN HIGHER ENERGY USE FOR HOME HEATING AND COOLING THAN NECESSARY. THE FOLLOWING OPENINGS IN THE BUILDING ENVELOPE SHALL BE CAULKED, GASKETED, WEATHERSTRIPPED, OR OTHERWISE SEALED. 3.6.1.1

- EXTERIOR JOINTS AROUND WINDOW AND DOOR FRAMES, INCLUDING DOORS AND PARTITIONS BETWEEN THE HOUSE AND GARAGE, BETWEEN INTERIOR HVAC CLOSETS AND CONDITIONED SPACE, BETWEEN ATTIC ACCESS AND CONDITIONED SPACE.
- ALTERNATIVE TECHNIQUE TO BE USED FOR WALLS WESTERN ONE COAT STUCCO WITH TAPED JOINTS.
- OPENINGS FOR PLUMBING, ELECTRICITY, AND GAS LINES IN EXTERIOR AND INTERIOR WALLS, CEILINGS, AND FLOORS
- OPENINGS IN THE ATTIC FLOOR (SUCH AS WHERE CEILING PANELS MEET INTERIOR WALLS, EXTERIOR WALLS, AND MASONRY FIREPLACES)
- OPENINGS AROUND EXHAUST DUCTS SUCH AS THOSE FOR CLOTHES DRYERS
- ALL OTHER SUCH OPENINGS IN THE BUILDING ENVELOPE
- ALTERNATIVE TECHNIQUE TO BE USED FOR EXTERIOR WALLS

- RIGID WALL INSULATION INSTALLED CONTINUOUSLY ON THE EXTERIOR OF THE BUILDING

- LOOSE FILL INSULATION MUST BE BLOWN IN EVENLY, AND INSULATION LEVELS MUST BE DOCUMENTED ON THE CERTIFICATE OF INSTALLATION (CF2R). THE INSULATION LEVEL CAN BE VERIFIED BY CHECKING THAT THE DEPTH OF INSULATION CONFORMS TO THE MANUFACTURER 'S COVERAGE CHART FOR ACHIEVING THE REQUIRED R-VALUE. THE INSULATION MUST ALSO MEET THE MANUFACTURER 'S SPECIFIED MINIMUM WEIGHT PER FT³ FOR THE CORRESPONDING R-VALUE. WHEN INSTALLING LOOSE FILL INSULATION, THE FOLLOWING GUIDELINES IN 3.6.1.10 SHOULD BE FOLLOWED: 3.6.1.10

- FOR WOOD TRUSSES THAT PROVIDE A FLAT CEILING AND A SLOPED ROOF, THE SLOPE OF THE ROOF SHOULD BE 4:12 OR GREATER TO PROVIDE ADEQUATE ACCESS FOR INSTALLING THE INSULATION. INSULATION THICKNESS NEAR THE EDGE OF THE ATTIC WILL BE REDUCED WITH ALL STANDARD TRUSSES, BUT THIS IS ACCEPTABLE AS LONG AS THE AVERAGE THICKNESS IS ADEQUATE TO MEET THE MINIMUM INSULATION REQUIREMENT.

- IF THE CEILING IS SLOPED (FOR INSTANCE, WITH SCISSOR TRUSSES), LOOSE FILL INSULATION CAN BE USED AS LONG AS THE SLOPE OF THE CEILING IS NO MORE THAN 4:12. IF THE CEILING SLOPE IS GREATER THAN 4:12, LOOSE

FOUNDATION VENTING CALCULATIONS

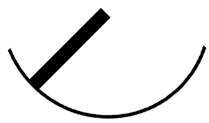
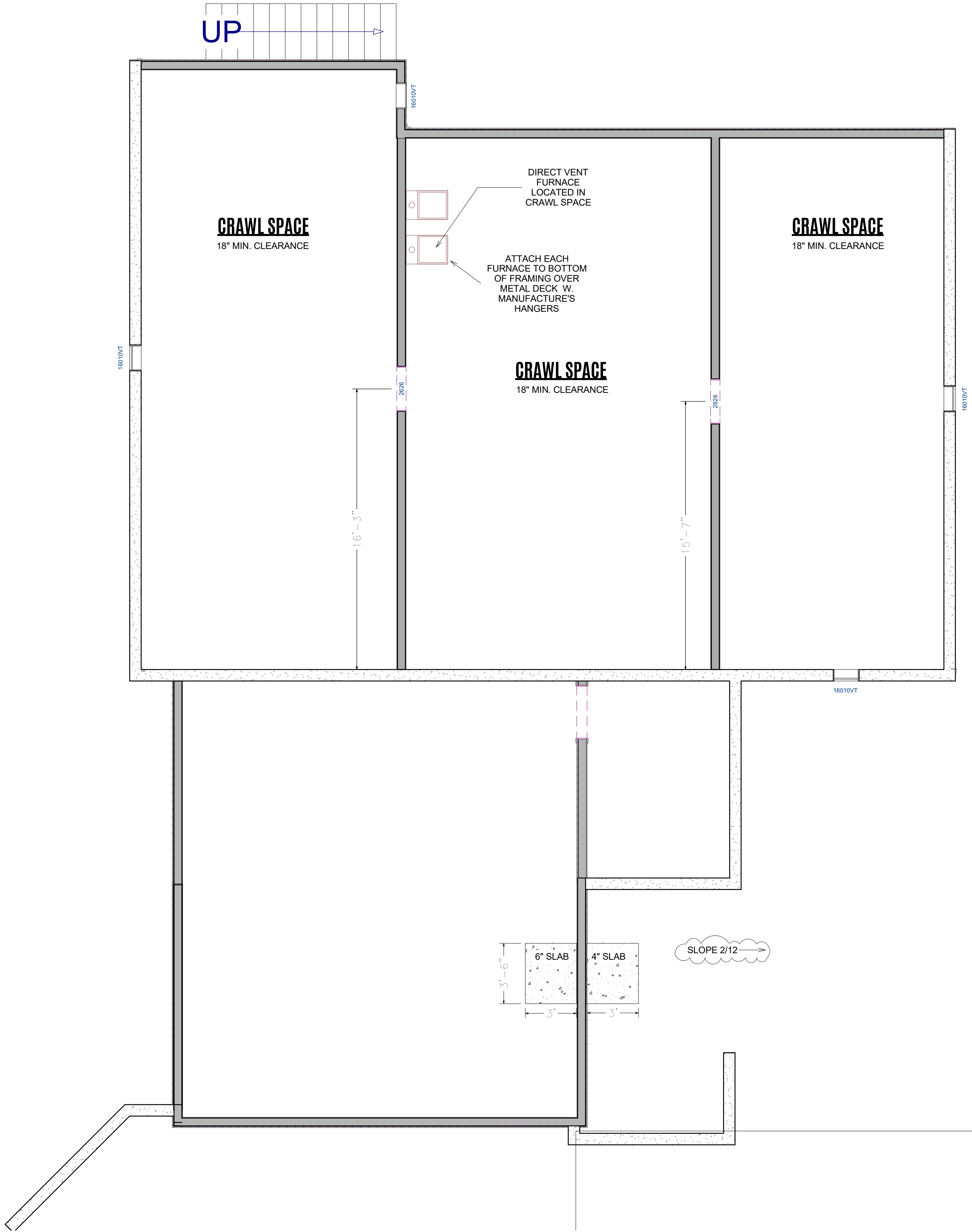
2331 CRAWL SPACE ÷ 1500 = 1.554 SQ FT
1.554 SQ FT X 144 = 224 SQ IN.

224 SQ. INCH TOTAL NFA: ————— REQUIRES (4) EACH 11.25" X 9.75" (4) VENTS ALONG WITH NEW
224 REQUIRED NFA @ 1/1500 RATIO FOUNDATION VENTS @ 65 NFA EA (260) VAPOR BARRIER MEET CRC R408.1
EXCEPTION

NOTE: INSTALL CLASS 1 VAPOR RETARDER MATERIAL TO BE
INSTALLED IN ENTIRE CRAWLSPACE

Note: Ventilation openings are covered with corrosion-resistant
wire mesh with openings not exceeding 1/16" to 1/8" maximum

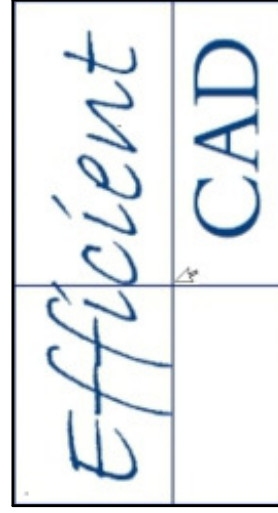
Rodent Proofing. Annular spaces around pipes, electric cables, conduits or other
openings in sole/bottom plates at exterior walls shall be rodent proofed by closing such
openings with cement mortar, concrete masonry, or similar method acceptable to the
enforcing agency per CGC 4.406.1.



FOUNDATION VENTING PLAN

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REVISIONS

Sym. Description Date

CONSULTANT

PLANS DRAWN IN
CONJUNCTION
WITH RAD
STUDIOS, REDDING
CA

TOWN OF TRUCKEE
PERMIT CENTER

New Single Family Residence
Bernard DR.
Nevada County, CA

ORIGINAL SCALE IN INCHES
1/4" = 1'-0"
SCHEMATIC DESIGN

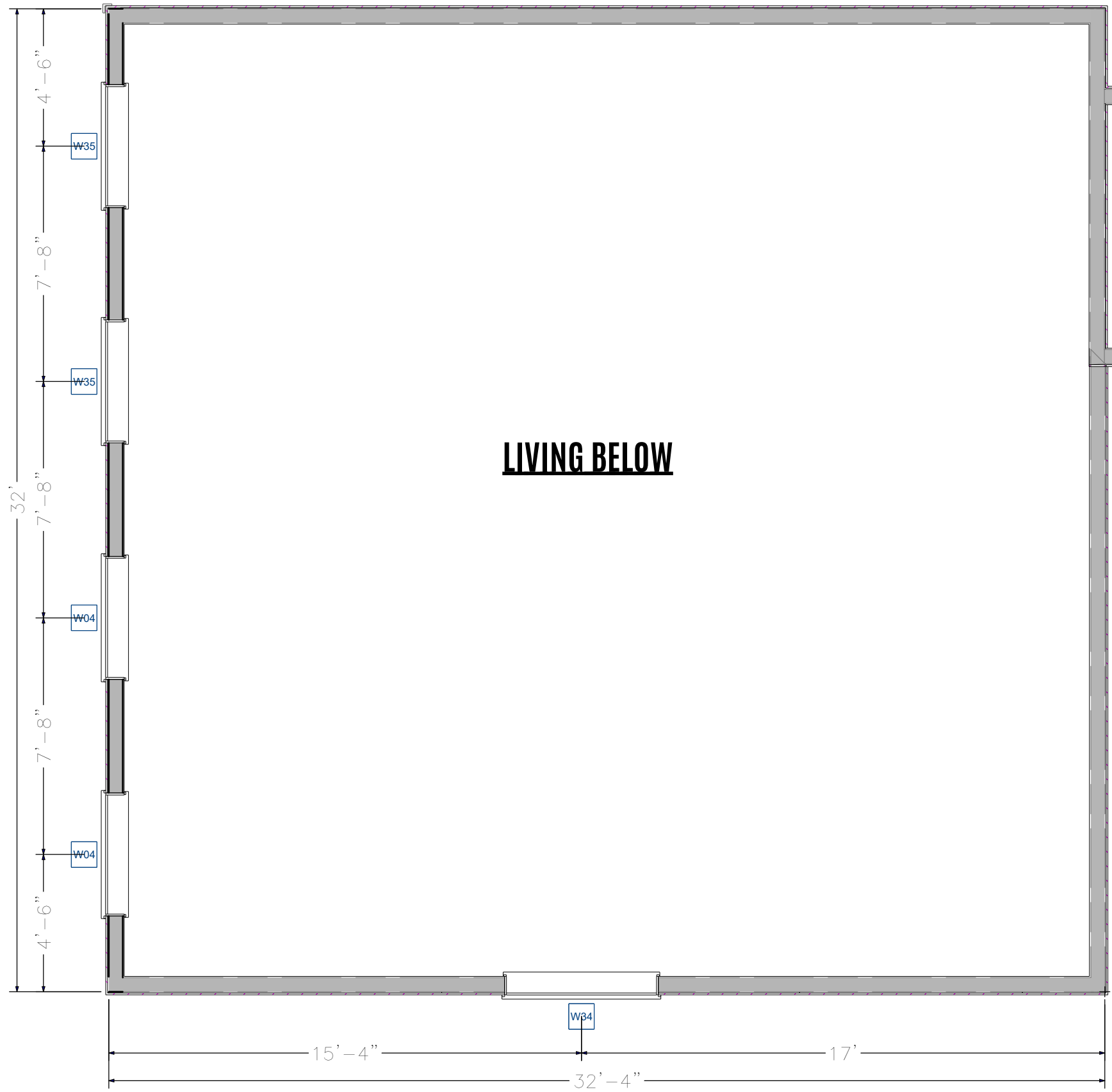
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WHY
REVIEWED BY

ORIGINAL SCALE:
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DATE: 9/23/2020

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A1.1

SHEET: 8 of 25



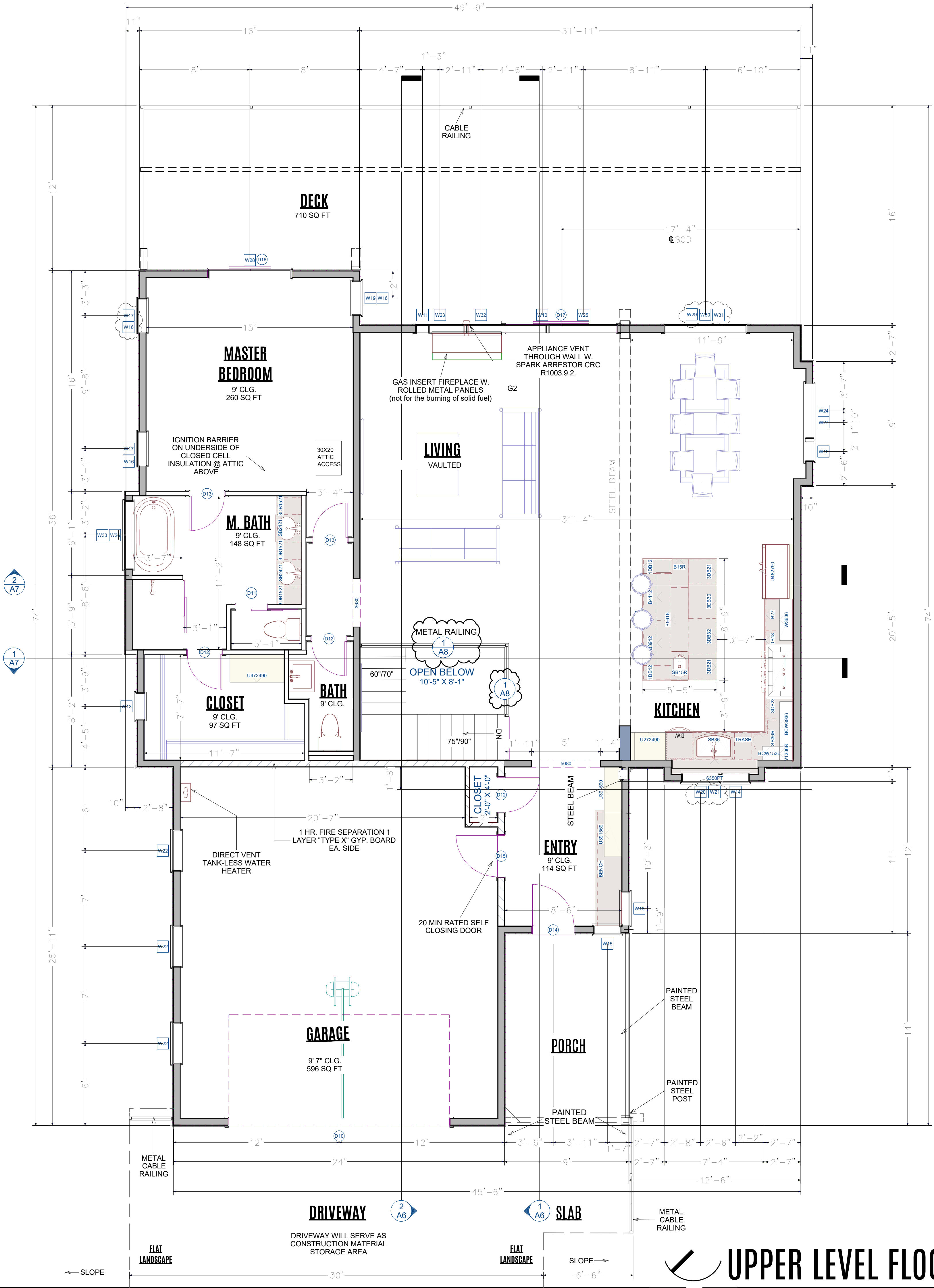
UPPER LEVEL CEILING PLAN

WALL TYPE LEGEND

- NON-RATED 2X4 WALLS
- NON-RATED 2X6 WALLS
- 8" CAST-IN-PLACE CONCRETE WALL
- FIRE SEPARATION 2X6 WALL, 1 LAYER 1/2" TYPE X GYPSUM BOARD, EACH SIDE

AREA CALCULATION

2. UPPER LEVEL CONDITIONED FLOOR AREA:	1,646 SF
3. NEW UNCONDITIONED GARAGE:	595 SF
COVERED FRONT PORCH:	129 SF
UPPER LEVEL DECK:	710 SF



UPPER LEVEL FLOOR PLAN

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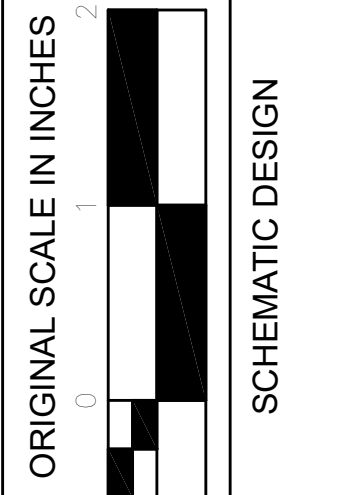


REVISIONS		
Sym.	Description	Date

CONSULTANT
PLANS DRAWN IN
CONJUNCTION
WITH RAD
STUDIOS, REDDING
CA

TOWN OF TRUCKEE
PERMIT CENTER

New Single Family Residence
Bernard DR.
Nevada County, CA
UPPER LEVEL FLOOR PLAN



DESIGNED BY RAD	DRAWN BY WHY	REVIEWED BY
ORIGINAL SCALE: 1/4" = 1'-0"		
DATE: 9/23/2020		
SHEET NO. A2		
SHEET: 9 of 25		

ROOF PLAN NOTES

- 1.ROOFING ASSEMBLY IS TO BE CLASS 'A'.
- 2.ALL ROOF OVERHANGS TO BE 1'-0" UNLESS NOTED OTHERWISE.
- 3.PROVIDE CONTINUOUS GUTTER WHERE OCCURS, WITH DOWNSPOUTS AS NOTED.
4. FLASHINGS SHALL BE INSTALLED AT WALL AND ROOF INTERSECTIONS, WHEREVER THERE IS A CHANGE IN ROOF SLOPE OR DIRECTION AND AROUND ROOF OPENINGS. WHERE FLASHING IS OF METAL, THE METAL SHALL BE CORROSION RESISTANT WITH A THICKNESS OF NOT LESS THAN 0.019 INCH (0.5 MM) (NO. 26 GALVANIZED SHEET). R903.2.1
5. FOR ROOF SLOPES OF FOUR UNITS VERTICAL IN 12 UNITS HORIZONTAL (33-PERCENT SLOPE) OR GREATER, UNDERLAYMENT SHALL BE ONE LAYER APPLIED IN THE FOLLOWING MANNER. UNDERLAYMENT SHALL BE APPLIED SHINGLE FASHION, PARALLEL TO AND STARTING FROM THE EAVE AND LAPPED 2 INCHES (51 MM), FASTENED SUFFICIENTLY TO HOLD IN PLACE. DISTORTIONS IN THE UNDERLAYMENT SHALL NOT INTERFERE WITH THE ABILITY OF THE ROOF MATERIAL TO SEAL. END LAPS SHALL BE OFFSET BY 6 FEET (1829 MM). DESIGNER SHALL SPECIFY UNDERLAYMENT FOR ROOF SLOPES LESS THAN 4:12
6. A TURN OUT OR KICK OUT FLASHING SHALL BE INSTALLED TO DIVERT THE WATER AWAY FROM WHERE THE EAVE OF A SLOPED ROOF INTERSECTS A VERTICAL SIDEWALL.R903.2.1
7. ROOF DECKS SHALL BE COVERED WITH APPROVED ROOF COVERINGS SECURED TO THE BUILDING OR STRUCTURE IN ACCORDANCE WITH THE PROVISIONS OF THIS CHAPTER. ROOF ASSEMBLIES SHALL BE DESIGNED AND INSTALLED IN ACCORDANCE WITH THIS CODE AND THE APPROVED MANUFACTURER 'S INSTRUCTIONS SUCH THAT THE ROOF ASSEMBLY SHALL SERVE TO PROTECT THE BUILDING OR STRUCTURE. R903.2
8. FLASHINGS SHALL BE INSTALLED IN A MANNER THAT PREVENTS MOISTURE FROM ENTERING THE WALL AND ROOF THROUGH JOINTS IN COPINGS, THROUGH MOISTURE PERMEABLE MATE-RIALS AND AT INTERSECTIONS WITH PARAPET WALLS AND OTHER PENETRATIONS THROUGH THE ROOF PLANE. R903.2
9. FLASHINGS SHALL BE INSTALLED AT WALL AND ROOF INTERSECTIONS, WHEREVER THERE IS A CHANGE IN ROOF SLOPE OR DIRECTION AND AROUND ROOF OPENINGS. A FLASHING SHALL BE INSTALLED TO DIVERT THE WATER AWAY FROM WHERE THE EAVE OF A SLOPED ROOF INTERSECTS A VERTICAL SIDEWALL. WHERE FLASHING IS OF METAL, THE METAL SHALL BE CORROSION RESISTANT WITH A THICKNESS OF NOT LESS THAN 0.019 INCH (0.5 MM) (NO. 26 GALVANIZED SHEET). R903.2.1
10. ROOF COVERINGS SHALL BE APPLIED IN ACCORDANCE WITH THE APPLICABLE PROVISIONS OF THIS SECTION AND THE MANUFACTURER 'S INSTALLATION INSTRUCTIONS. UNLESS OTHERWISE SPECIFIED IN THIS SECTION, ROOF COVERINGS SHALL BE INSTALLED TO RESIST THE COMPONENT AND CLADDING LOADS SPECIFIED IN TABLE R301.2(2), ADJUSTED FOR HEIGHT AND EXPOSURE IN ACCORDANCE WITH TABLE R301.2(3).
11. UNDERLAYMENT FOR ASPHALT SHIN-GLES, CLAY AND CONCRETE TILE, METAL ROOF SHINGLES, MINERAL-SURFACED ROLL ROOFING, SLATE AND SLATE-TYPE SHINGLES, WOOD SHINGLES, WOOD SHAKES AND METAL ROOF PANELS SHALL CONFORM TO THE APPLICABLE STANDARDS LISTED IN THIS CHAPTER. UNDERLAYMENT MATERIALS REQUIRED TO COMPLY WITH ASTM D226, D1970, D4869 AND D6757 SHALL BEAR A LABEL INDICATING COMPLIANCE TO THE STANDARD DESIGNATION AND, IF APPLICABLE, TYPE CLASSIFICATION INDICATED IN TABLE R905.1.1(1). UNDERLAYMENT SHALL BE APPLIED IN ACCORDANCE WITH TABLE R905.1.1(2). UNDERLAYMENT SHALL BE ATTACHED IN ACCORDANCE WITH TABLE R905.1.1(3). R905.1.1
12. ASPHALT SHINGLES SHALL COMPLY WITH ASTM D3462. R905.2.4 SHALL BE FASTENED TO SOLIDLY SHEATHED DECKS. THE INSTALLATION OF ASPHALT SHINGLES SHALL COMPLY WITH THE PROVISIONS OF SECTION 905.2.
13. FASTENERS FOR ASPHALT SHINGLES SHALL BE GALVANIZED STEEL, STAINLESS STEEL, ALUMINUM OR COPPER ROOFING NAILS, MINIMUM 12-GAGE [0.105 INCH (3 MM)] SHANK WITH A MINIMUM 3/8-INCH-DIAMETER (9.5 MM) HEAD, COMPLYING WITH ASTM F1667, OF A LENGTH TO PENETRATE THROUGH THE ROOFING MATERIALS AND NOT LESS THAN 3/4 INCH (19.1 MM) INTO THE ROOF SHEATHING. WHERE THE ROOF SHEATHING IS LESS THAN 3/4 INCH (19.1 MM) THICK, THE FASTENERS SHALL PENETRATE THROUGH THE SHEATHING. R905.2.5
14. ASPHALT SHINGLES SHALL HAVE THE MINIMUM NUMBER OF FASTENERS REQUIRED BY THE MANUFACTURER, BUT NOT LESS THAN FOUR FASTENERS PER STRIP SHINGLE OR TWO FASTENERS PER INDIVIDUAL SHINGLE. R905.2.6
15. BASE AND CAP FLASHING SHALL BE INSTALLED IN ACCORDAANCE WITH MANU-FACTURER 'S INSTRUCTIONS. BASE FLASHING SHALL BE OF EITHER CORROSION-RESISTANT METAL OF MINIMUM NOMINAL 0.019-INCH (0.5 MM) THICKNESS OR MINERAL-SURFACED ROLL ROOFING WEIGHING NOT LESS THAN 77 POUNDS PER 100 SQUARE FEET (4 KG/M2). CAP FLASHING SHALL BE CORROSION-RESISTANT METAL OF MINIMUM NOMINAL 0.019-INCH (0.5 MM) THICKNESS.
16. VALLEY LININGS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER 'S INSTRUCTIONS BEFORE APPLYING SHINGLES. OTHER VALLEY LININGS PERMITTED PER R905.2.8.2
17. BASE FLASHING AGAINST A VERTICAL SIDEWALL SHALL BE CONTINUOUS OR STEP FLASHING AND SHALL BE NOT LESS THAN 4 INCHES (102 MM) IN HEIGHT AND 4 INCHES (102 MM) IN WIDTH AND SHALL DIRECT WATER AWAY FROM THE VERTICAL SIDEWALL ONTO THE ROOF OR INTO THE GUTTER. FOR SIDING, VENEER, PLASTER OR AHERED VENEER INSTALL FLASHING AND COUNTERFLASHING PER R905.2.8.
18. FLASHING AGAINST A VERTICAL FRONT WALL, AS WELL AS SOIL STACK, VENT PIPE AND CHIMNEY FLASHING, SHALL BE APPLIED IN ACCORDANCE WITH THE ASPHALT SHINGLE MANUFACTURER 'S PRINTED INSTRUCTIONS.
19. A DRIP EDGE SHALL BE PROVIDED AT EAVES AND RAKE EDGES OF SHINGLE ROOFS. ADJACENT SEGMENTS OF DRIP EDGE SHALL BE OVERLAPPED NOT LESS THAN 2 INCHES (51MM). DRIP EDGES SHALL EXTEND NOT LESS THAN 1/4 INCH (6.4 BELOW THE ROOF SHEATHING AND EXTEND UP BACK ONTO THE ROOF DECK NOT LESS THAN 2 INCHES (51 MM). DRIP EDGES SHALL BE MECHANICALLY FASTENED TO THE ROOF DECK AT NOT MORE THAN 12 INCHES (305 MM) O.C. WITH FASTENERS AS SPEC-IFIED IN SECTION R905.2.5. UNDERLAYMENT SHALL BE INSTALLED OVER THE DRIP EDGE ALONG EAVES AND UNDER THE DRIP EDGE ALONG RAKE EDGES. R905.2.8.5
- DUCT SYSTEM SPECIFIES BUIRED DUCTS
20. SEE ENGINEERING GENERAL NOTES FOR ROOF STRUCTURAL INFORMATION.
21. REFER TO SHEET T2 FOR WILDLAND URBAN INTERFACE NOTES.

ROOF VENTALATION

CLOSED CELL FOAM IN ATTIC - NO ROOF VENTING REQ.

ROOF LEGEND

ROOFING MATERIAL

"CLASS A" STANDING SEAM METAL ROOF (TYP.)

ASC BUILDING MATERIALS: COLOR: OLD ZINC GREY

FLASHING, VENTS, CHIMNEY/SPLITTER

MFR: ASC BUILDING MATERIALS

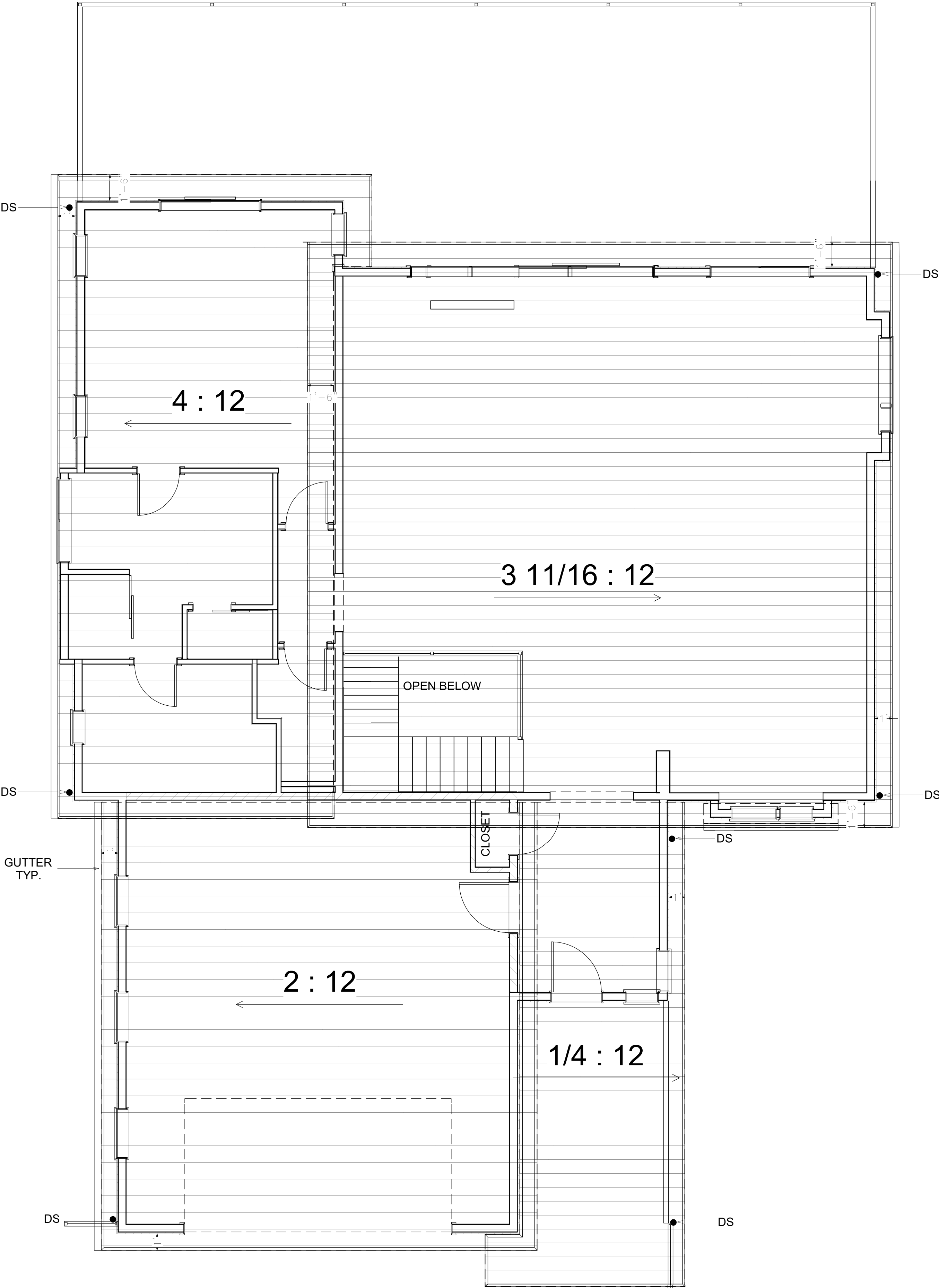
COLOR: PAINT, OLD ZINC GREY

2X12 ROOF FASCIA W. 1X8 SHADOW BOARD

2x12 & 2X8 CEDAR

STAIN: FLOOD SEMI TRANSPARENT

COLOR: EBONY



ROOF PLAN

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REVISIONS

Sym.	Description	Date

CONSULTANT

PLANS DRAWN IN CONJUNCTION WITH RAD STUDIOS, REDDING CA

TOWN OF TRUCKEE

PERMIT CENTER

New Single Family Residence

Bernard DR., Nevada County, CA

ORIGINAL SCALE IN INCHES

1" = 1'-0"

1" = 1'-0"

1" = 1'-0"

1" = 1'-0"

SCHEMATIC DESIGN

DESIGNED BY

RAD

DRAWN BY

WHY

REVIEWED BY

ORIGINAL SCALE:

1/4" = 1'-0"

DATE:

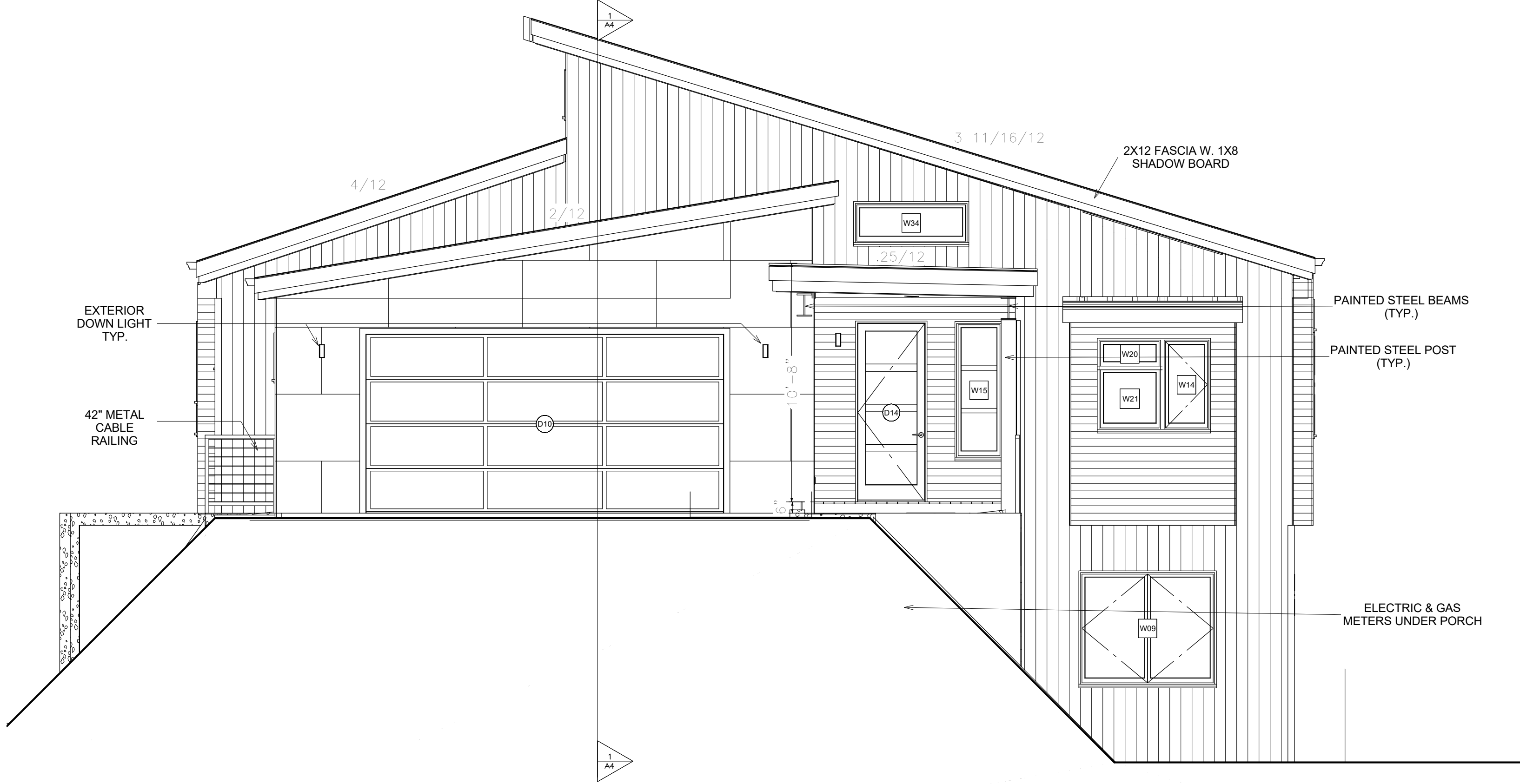
9/23/2020

SHEET NO.

A3

SHEET:

10 of 25



NORTH / STREET ELEVATION

AVERAGE HEIGHT @ MIDPOINT: 34' 6"
TOP ELEVATION: 5997
BOTTOM ELEVATION: 5988.8
TOTAL CHANGE IN ELEVATION: 8' 2"
MIDPOINT DIFFERENTIAL: 4' 1"
TOTAL HEIGHT: 38' 7"
MIDPOINT: 38'7" - 4'1" = 34 '6"



EAST / LEFT ELEVATION

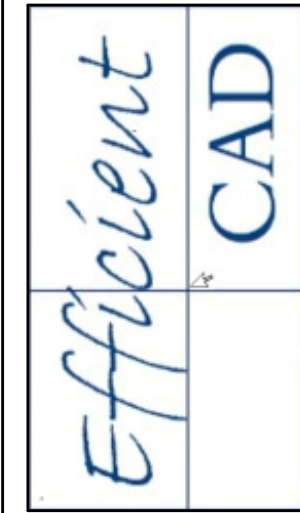
MATERIALS LEGEND

- TYPE A - 1X8 STAINED CEDAR, VERTICAL
STAIN: FLOOD SEMI TRANSPARENT
COLOR: 700 SIERRA "B"
- TYPE B - 1X5 T&G CEDAR, HORIZONTAL
STAIN: FLOOD SEMI TRANSPARENT
COLOR: 700 SIERRA "B"
- TYPE "C" - 3'X6'x1/16" SHEET STEEL PANELING O' 1'X2 FURRING STRIPS O' WEATHER BARRIER, FINISH: RAW STEEL W/ PERMALACK CLEAR COATING
- TYPE D - STANDING SEAM METAL ROOF
MFR: ASC BUILDING MATERIALS
COLOR: OLD ZINC GREY
- TYPE E - PLYWOOD FORMED CAST IN PLACE CONCRETE

MATERIALS LIST

- EAVES: 1X6 T&G OVER 1 LAYER 5/8" TYPE X SHEETROCK
MFR: BODIE GHOST TOWN
- ALL WALL CAPS, VENTS, METAL BRACKETS: TO MATCH ASC BUILDING MATERIALS
COLOR: OLD ZINC GREY
- FRONT DOOR: SIMPSON DOOR COMPANY
1604 CONTEMPORARY
COLOR: MATTE BLACK
- GARAGE DOOR: NORTHWEST MODERN
CLASSIC MC44 DARK BRONZE ANODIZED
SINGLE PANE SATIN ETCH GLASS
- WINDOW FRAME: SIERRA PACIFIC,
ALUMINUM & WOOD
COLOR: MATTE BLACK
- DECK TOP RAIL: 2X5 CEDAR SEMI FLOOD
TRANSPARENT STAIN
COLOR: 700 SIERRA
- DECK BOTTOM RAIL: 3/4" X 3/4"
- DECK POSTS: 3/8" X 3" METAL
COLOR: PAINTED BLACK MATTE
- DECK PICKETS: 3/16" CABLE
COLOR: STAINLESS STEEL
- DECK BOARDS: 2X6 CEDAR. STAIN: FLOOD
SEMI TRANSPARENT
COLOR: 700 SIERRA
- EXTERIOR LIGHTING: BLACK DOWNLIGHT

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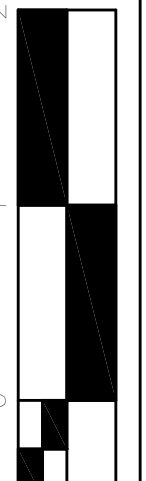
TOWN OF TRUCKEE
PERMIT CENTER

New Single Family Residence

Bernard DR.
Nevada County, CA

FRONT & LEFT ELEVATIONS

ORIGINAL SCALE IN INCHES



SCHEMATIC DESIGN

DESIGNED BY
RAD

DRAWN BY
WHY

REVIEWED BY

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

DATE: 9/23/2020

SHEET NO.

A4

SHEET: 11 of 25



MATERIALS LIST

EAVES: 1X6 T&G OVER 1 LAYER 5/8" TYPE X SHEETROCK
MFR: BODIE GHOST TOWN

ALL WALL CAPS, VENTS, METAL BRACKETS:
TO MATCH ASC BUILDING MATERIALS
COLOR: OLD ZINC GREY

FRONT DOOR: SIMPSON DOOR COMPANY
1604 CONTEMPORARY
COLOR: MATTE BLACK

GARAGE DOOR: NORTHWEST MODERN
CLASSIC MC44 DARK BRONZE ANODIZED
SINGLE PANE SATIN ETCH GLASS

WINDOW FRAME: SIERRA PACIFIC,
ALUMINUM & WOOD
COLOR: MATTE BLACK

DECK TOP RAIL: 2X5 CEDAR SEMI FLOOD
TRANSPARENT STAIN
COLOR: 700 SIERRA


DECK BOTTOM RAIL: 3/4" X 3/4"

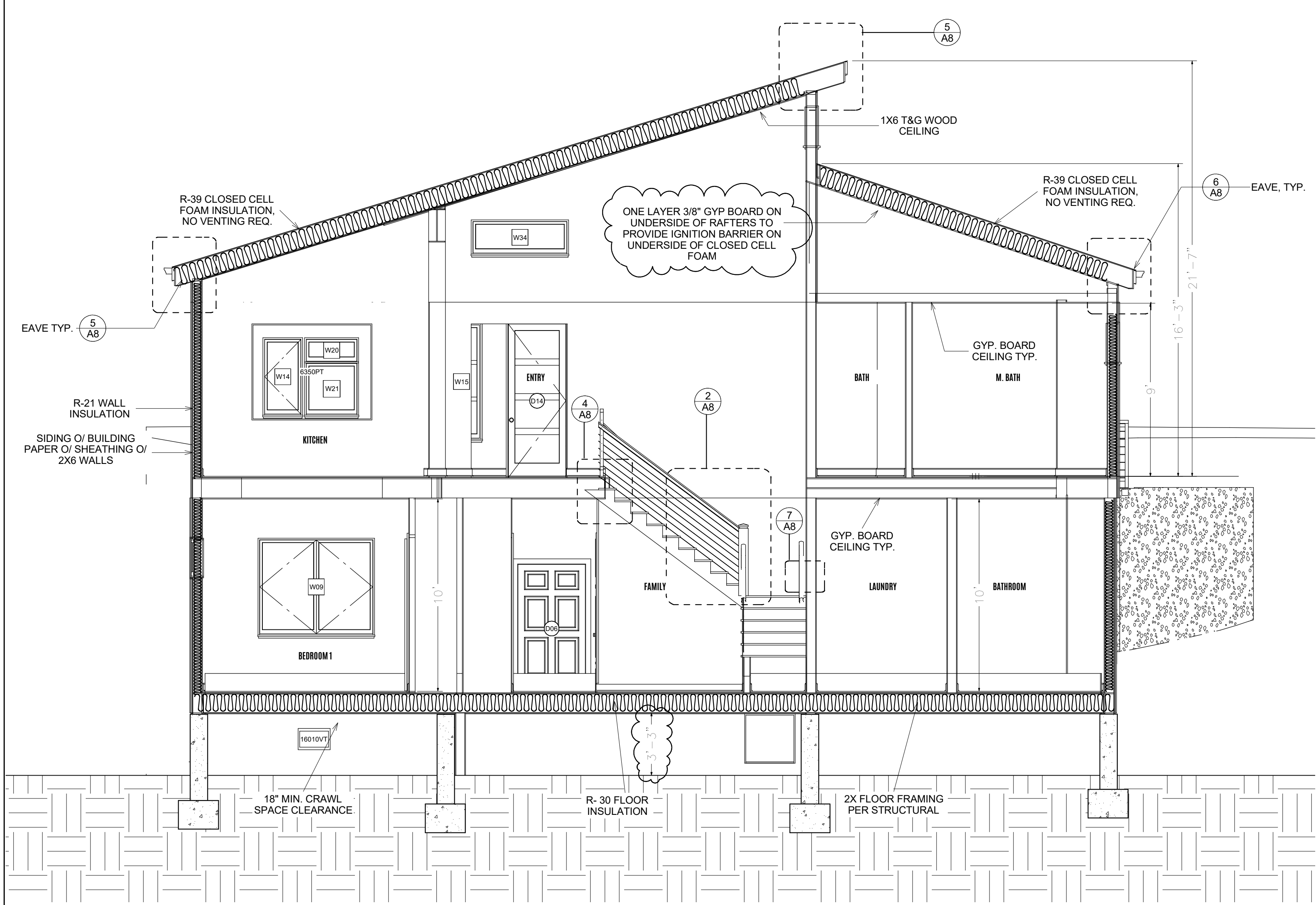
DECK POSTS: 3/8" X 3" METAL
COLOR: PAINTED BLACK MATTE

DECK PICKETS: 3/16" CABLE
COLOR: STAINLESS STEEL

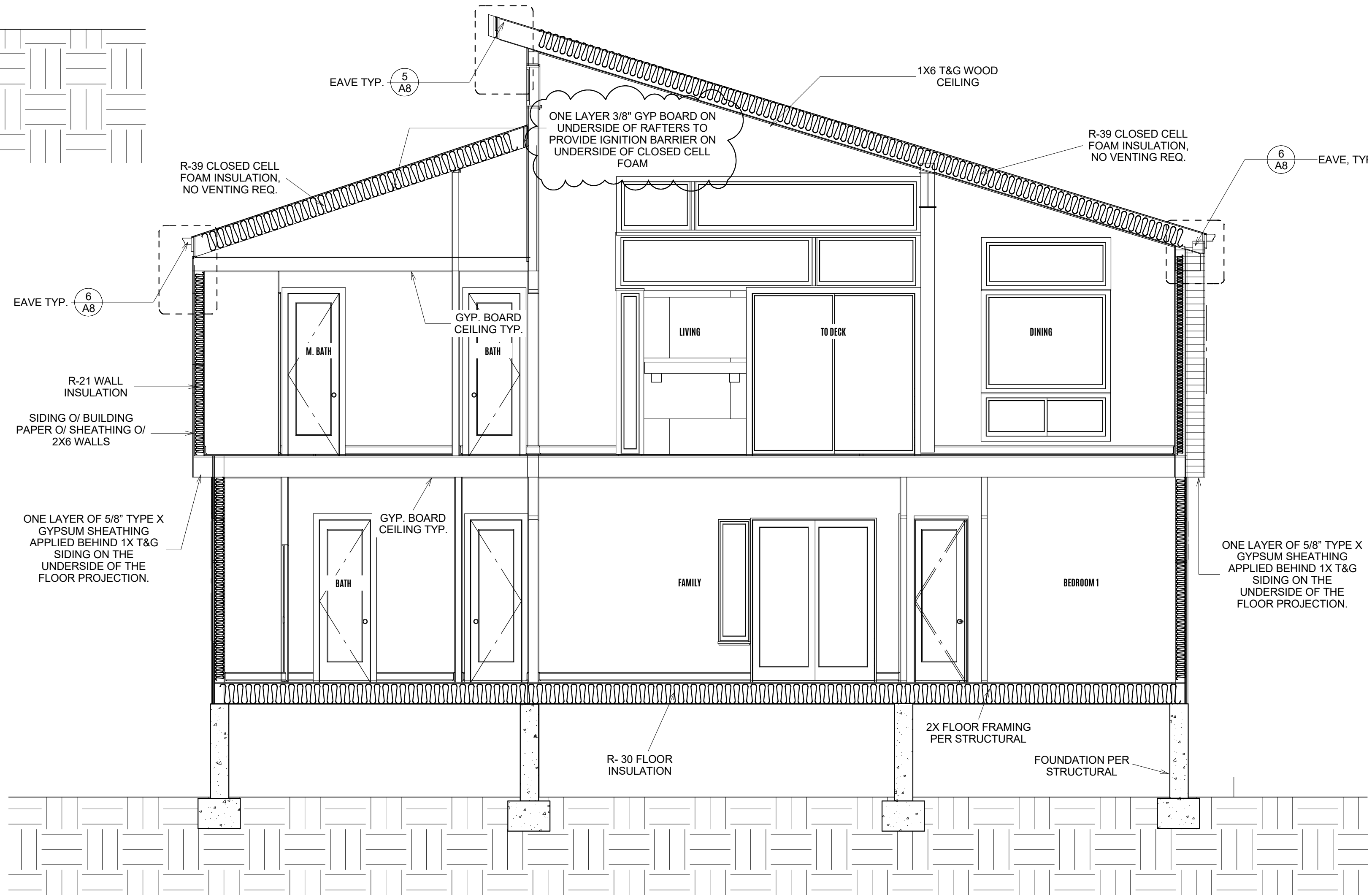
DECK BOARDS: 2X6 CEDAR, STAIN: FLOOD
SEMI TRANSPARENT
COLOR: 700 SIERRA

EXTERIOR LIGHTING: BLACK DOWNLIGHT

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<div><div><div>Efficient</div><div>CAD</div></div></div>	
REVISIONS	
Sym.	Description Date
CONSULTANT	
PLANS DRAWN IN CONJUNCTION WITH RAD STUDIOS, REDDING, CA	
TOWN OF TRUCKEE PERMIT CENTER	
New Single Family Residence Bernard Dr. Nevada County, CA	
REAR & RIGHT ELEVATIONS	
DESIGNED BY RAD	ORIGINAL SCALE IN INCHES 
DRAWN BY WHV	SCHEMATIC DESIGN
ORIGINAL SCALE: 1/4" = 1'-0"	
DATE: 9/23/2020	SHEET NO. A5
SHEET:	12 of 25



SECTION 7.1



SECTION 7.2

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REVISIONS		
Sym.	Description	Date
CONSULTANT		
PLANS DRAWN IN CONJUNCTION WITH RAD STUDIOS, REDDING CA		

TOWN OF TRUCKEE

PERMIT CENTER

New Single Family Residence

Bernard DR.
Nevada County, CA

ORIGINAL SCALE IN INCHES

0

1

2

3

4

5

6

7

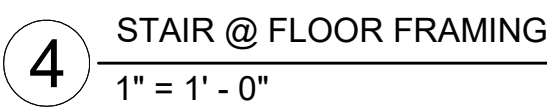
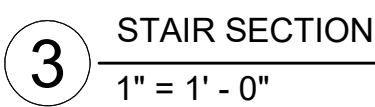
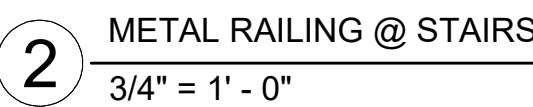
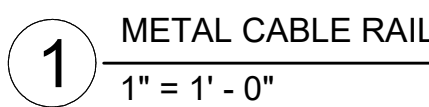
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9

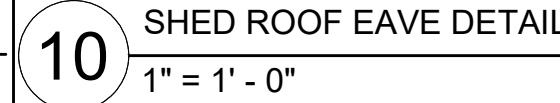
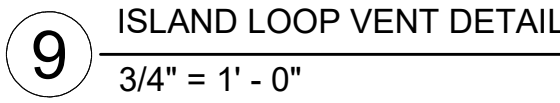
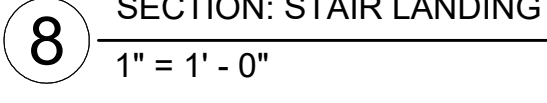
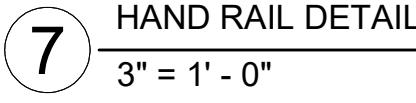
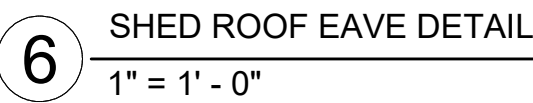
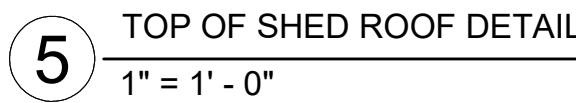
10

SCHEMATIC DESIGN

DESIGNED BY	RAD	ORIGINAL SCALE:
DRAWN BY	WHY	1/4" = 1'-0"
REVIEWED BY		DATE: 9/23/2020
		SHEET NO. A7
		SHEET: 14 of 25



Efficient	CAD
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CA

New Single Family Residence
Bernard DR.
Nevada County, CA

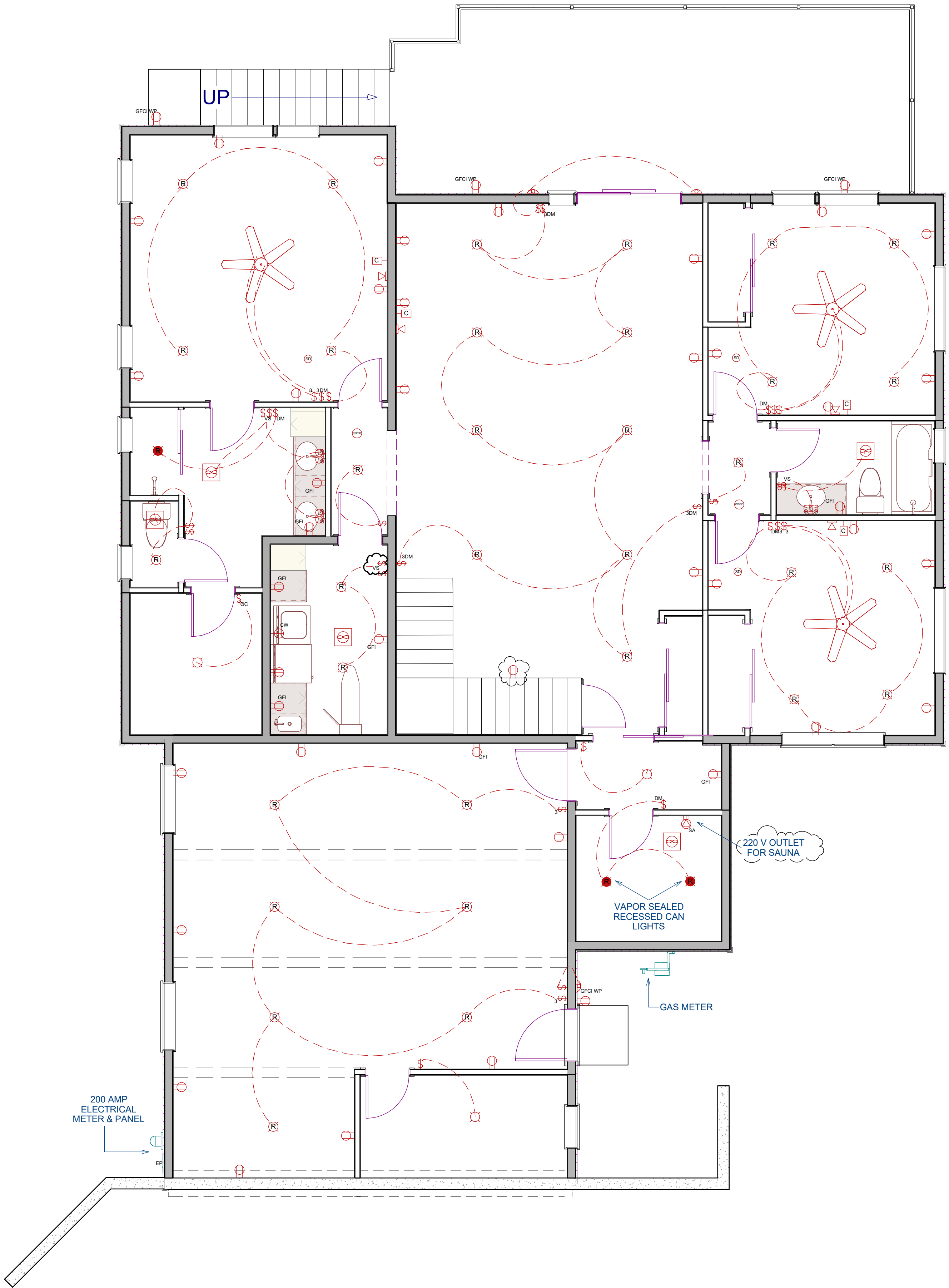
SCHEMATIC DESIGN

REVIEWED BY
WHV

SHEET: 15 of 25

ELECTRICAL - DATA - AUDIO LEGEND	
SYMBOL	DESCRIPTION
	Ceiling Fan
	Ventilation Fans: Ceiling Mounted, Wall Mounted
	Ceiling Mounted Light Fixtures: Surface/Pendant, Recessed, Heat Lamp, Low Voltage
	Wall Mounted Light Fixtures: Flush Mounted, Wall Sconce
	Chandelier Light Fixture
	Fluorescent Light Fixture
	240V Receptacle
	110V Receptacles: Duplex, Weather Proof, GFCI
	Switches: Single Pole, Weather Proof, 3-Way, 4-Way
	Switches: Dimmer, Timer
	Audio Video: Control Panel, Switch
	Speakers: Ceiling Mounted, Wall Mounted
	Wall Jacks: CAT5, CAT5 + TV, TV/Cable
	Telephone Jack
	Intercom
	Thermostat
	Door Chime, Door Bell Button
	Smoke Detectors: Ceiling Mounted, Wall Mounted
	Electrical Breaker Panel

ELECTRICAL SCHEDULE			
NUMBER	LABEL	QTY	ATTACHED TO FLOOR
E01	BARE BULB	1	CEILING 1
E02	SINGLE POLE	13	WALL 1
E03	CO/SMOKE DETECTOR	2	CEILING 1
E04	CABLE JACK	4	WALL 1
E05	220V	1	WALL 1
E06	CLOTHES WASHER	1	WALL 1
E07	DUPLEX	32	WALL 1
E08	ELECTRICAL PANEL	1	WALL 1
E09	EXHAUST	5	CEILING 1
E10	FAN	3	CEILING 1
E11	FLUSH MOUNTED	2	CEILING 1
E12	GFCI WP	4	WALL 1
E13	GFI	8	WALL 1
E14	OCCUPANCY SENSOR	1	WALL 1
E15	RECESSED DOWN LIGHT 6	33	CEILING 1
E16	RECESSED VAPOR LIGHT	3	CEILING 1
E17	SAUNA	1	WALL 1
E18	SCONCE 2	3	WALL 1
E19	SMOKE DETECTOR	3	CEILING 1
E20	TELEPHONE JACK	4	WALL 1
E21	BOX SCONCE VERTICAL	3	WALL 1
E22	SINGLE POLE DIMMER	5	WALL 1
E23	THREE WAY DIMMER	3	WALL 1
E24	THREE WAY	6	WALL 1
E25	VACANCY SENSOR	3	WALL 1



LOWER LEVEL ELECTRICAL

OUTDOOR LIGHTING NOTES:

ALL LIGHTING ATTACHED TO THE RESIDENCE OR TO OTHER BUILDINGS ON THE SAME LOT MUST BE HIGH EFFICACY, AND MUST BE CONTROLLED BY A MANUAL ON AND OFF SWITCH AND ONE OF THE FOLLOWING AUTOMATIC CONTROL TYPES:

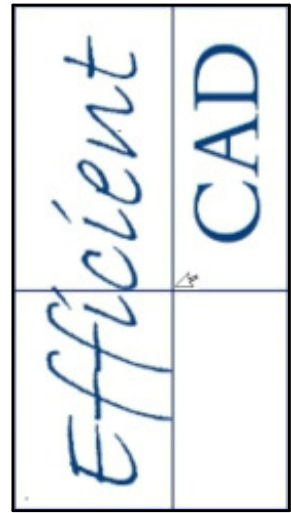
1. PHOTOCONTROL AND MOTION SENSOR.
2. PHOTOCONTROL AND AUTOMATIC TIME SWITCH CONTROL.
3. ASTRONOMICAL TIME CLOCK CONTROL THAT AUTOMATICALLY TURNS THE OUTDOOR LIGHTING OFF DURING DAYLIGHT HOURS.
4. EMCS THAT PROVIDES THE FUNCTIONALITY OF AN ASTRONOMICAL TIME CLOCK, DOES NOT HAVE AN OVERRIDE OR BYPASS SWITCH THAT ALLOWS THE LUMINAIRE TO BE ALWAYS ON, AND IS PROGRAMMED TO AUTOMATICALLY TURN THE OUTDOOR LIGHTING OFF DURING DAYLIGHT HOURS.

MANUAL ON AND OFF SWITCHES MUST NOT OVERRIDE THE AUTOMATIC CONTROL FUNCTIONS LISTED ABOVE, AND ANY CONTROL THAT OVERRIDES THE AUTOMATIC CONTROLS TO ON MUST AUTOMATICALLY REACTIVATE THOSE CONTROLS WITHIN SIX HOURS.

INSTALLATION NOTES:

1. SMOKE ALARMS SHALL BE INSTALLED A MIN. OF 20' HORIZONTAL DISTANCE FROM A PERMANENTLY INSTALLED COOKING APPLIANCE. EXCEPTION: IONIZATION SMOKE ALARMS SHALL BE PERMITTED 10' OR GREATER FROM COOKING APPLIANCES.
2. SMOKE ALARMS SHALL BE INSTALLED NOT LESS THAN A 3' HORIZONTAL DISTANCE FROM THE DOOR OR OPENING OF A FULL BATHROOM UNLESS IT PREVENTS THE PLACEMENT REQUIRED BY OTHER SECTIONS OF THE CODE. SEE PAGE 1.1 & PAGE 1.2 FOR GREEN BUILDING CODE STANDARDS FOR 4.106.4
3. ELECTRIC VEHICLE (EV) CHARGING FOR NEW CONSTRUCTION, AND 2016 RESIDENTIAL ENERGY CODE MANDATORY MEASURES FOR OTHER REQUIREMENTS NOT DESCRIBED.

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REVISIONS

Sym.	Description	Date

CONSULTANT

PLANS DRAWN IN CONJUNCTION WITH RAD STUDIOS, REDDING CA

TOWN OF TRUCKEE
PERMIT CENTER

New Single Family Residence
Bernard DR.
Nevada County, CA

ORIGINAL SCALE IN INCHES
1" = 1'-0"
SCHEMATIC DESIGN

DESIGNED BY
RAD
DRAWN BY
WHY
REVIEWED BY

ORIGINAL SCALE:
1/4" = 1'-0"
DATE: 9/23/2020
SHEET NO.
E1
SHEET: 16 of 25

ELECTRICAL - DATA - AUDIO LEGEND	
SYMBOL	DESCRIPTION
	Ceiling Fan
	Ventilation Fans: Ceiling Mounted, Wall Mounted
	Ceiling Mounted Light Fixtures: Surface/Pendant, Recessed, Heat Lamp, Low Voltage
	Wall Mounted Light Fixtures: Flush Mounted, Wall Sconce
	Chandelier Light Fixture
	Fluorescent Light Fixture
	240V Receptacle
	110V Receptacles: Duplex, Weather Proof, GFCI
	Switches: Single Pole, Weather Proof, 3-Way, 4-Way
	Switches: Dimmer, Timer
	Audio Video: Control Panel, Switch
	Speakers: Ceiling Mounted, Wall Mounted
	Wall Jacks: CAT5, CAT5 + TV, TV/Cable
	Telephone Jack
	Intercom
	Thermostat
	Door Chime, Door Bell Button
	Smoke Detectors: Ceiling Mounted, Wall Mounted
	Electrical Breaker Panel

ELECTRICAL SCHEDULE			
NUMBER	LABEL	QTY	FLOOR
E01	BOX SCONCE VERTICAL	7	WALL 2
E02	CO/SMOKE DETECTOR	3	CEILING 2
E03	CABLE JACK	1	WALL 2
E04	DISHWASHER	1	WALL 2
E05	DUPLEX	17	WALL 2
E06	DUPLEX, CEILING MOUNTED	1	CEILING 2
E07	EXHAUST	3	CEILING 2
E08	FAN	1	CEILING 2
E09	PENDANT	4	CEILING 2
E10	FLUSH MOUNTED	2	CEILING 2
E11	GFCI WP	3	WALL 2
E12	GFI	2	CABINET 2
E13	GFI	12	WALL 2
E14	GARBAGE DISPOSAL	1	WALL 2
E15	HOOD W/ VENT	1	WALL 2
E16	OCCUPANCY SENSOR	1	WALL 2
E17	VACANCY SENSOR	3	WALL 2
E18	RECESSED DOWN LIGHT 4	1	CEILING 2
E19	RECESSED DOWN LIGHT 6	48	CEILING 2
E20	220V	2	WALL 2
E21	RECTANGULAR	3	WALL 2
E22	REFRIGERATOR	1	WALL 2
E23	SCONCE 2	3	WALL 2
E24	SMOKE DETECTOR	1	CEILING 2
E25	TELEPHONE JACK	1	WALL 2
E26	THREE WAY DIMMER	6	WALL 2
E27	SINGLE POLE DIMMER	2	WALL 2
E28	SINGLE POLE	13	WALL 2
E29	THREE WAY	2	WALL 2
E30	FOUR WAY	1	WALL 2

OUTDOOR LIGHTING NOTES:

ALL LIGHTING ATTACHED TO THE RESIDENCE OR TO OTHER BUILDINGS ON THE SAME LOT MUST BE HIGH EFFICACY, AND MUST BE CONTROLLED BY A MANUAL ON AND OFF SWITCH AND ONE OF THE FOLLOWING AUTOMATIC CONTROL TYPES:

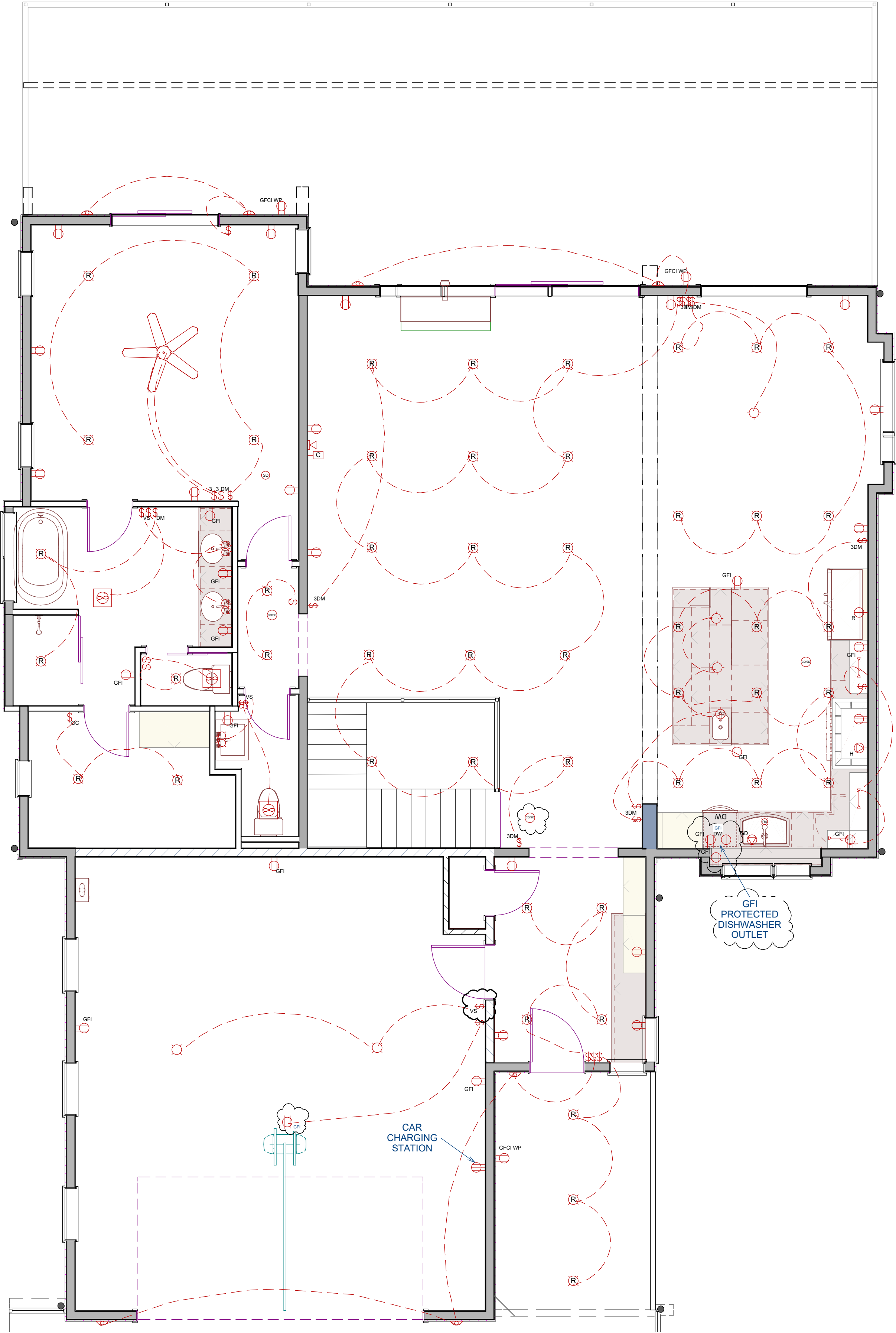
1. PHOTOCONTROL AND MOTION SENSOR.
2. PHOTOCONTROL AND AUTOMATIC TIME SWITCH CONTROL.
3. ASTRONOMICAL TIME CLOCK CONTROL THAT AUTOMATICALLY TURNS THE OUTDOOR LIGHTING OFF DURING DAYLIGHT HOURS.
4. EMCS THAT PROVIDES THE FUNCTIONALITY OF AN ASTRONOMICAL TIME CLOCK, DOES NOT HAVE AN OVERRIDE OR BYPASS SWITCH THAT ALLOWS THE LUMINAIRE TO BE ALWAYS ON, AND IS PROGRAMMED TO AUTOMATICALLY TURN THE OUTDOOR LIGHTING OFF DURING DAYLIGHT HOURS.

MANUAL ON AND OFF SWITCHES MUST NOT OVERRIDE THE AUTOMATIC CONTROL FUNCTIONS LISTED ABOVE, AND ANY CONTROL THAT OVERRIDES THE AUTOMATIC CONTROLS TO ON MUST AUTOMATICALLY REACTIVATE THOSE CONTROLS WITHIN SIX HOURS.

Exterior Lighting Note: All exterior lighting shall be in compliance with Development Code Section 18.30.060. Exterior lights are required to be night-sky compliant, fully shielded, and shall not trespass onto adjacent property or the public right-of-way.

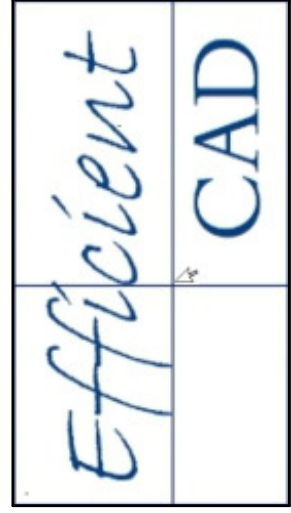
INSTALLATION NOTES:

1. SMOKE ALARMS SHALL BE INSTALLED A MIN. OF 20' HORIZONTAL DISTANCE FROM A PERMANENTLY INSTALLED COOKING APPLIANCE. EXCEPTION: IONIZATION SMOKE ALARMS SHALL BE PERMITTED 10' OR GREATER FROM COOKING APPLIANCES.
2. SMOKE ALARMS SHALL BE INSTALLED NOT LESS THAN A 3' HORIZONTAL DISTANCE FROM THE DOOR OR OPENING OF A FULL BATHROOM UNLESS IT PREVENTS THE PLACEMENT REQUIRED BY OTHER SECTIONS OF THE CODE. SEE PAGE 1.1 & PAGE 1.2 FOR GREEN BUILDING CODE STANDARDS FOR 4.106.4
3. ELECTRIC VEHICLE (EV) CHARGING FOR NEW CONSTRUCTION. AND 2016 RESIDENTIAL ENERGY CODE MANDATORY MEASURES FOR OTHER REQUIREMENTS NOT DESCRIBED.



UPPER LEVEL ELECTRICAL

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REVISIONS		
Sym.	Description	Date

CONSULTANT
PLANS DRAWN IN CONJUNCTION WITH RAD STUDIOS, REDDING CA

TOWN OF TRUCKEE
PERMIT CENTER

New Single Family Residence
Bernard Dr.,
Nevada County, CA

ORIGINAL SCALE IN INCHES
1/4" = 1'-0"
SCHEMATIC DESIGN

DESIGNED BY RAD	DRAWN BY WHY	REVIEWED BY
ORIGINAL SCALE: 1/4" = 1'-0"		
DATE: 9/23/2020		
SHEET NO. E2		
SHEET: 17 of 25		

ELECTRICAL NOTES

ELECTRICAL NOTES:

1. 210.8 GROUND FAULT CIRCUIT-INTERRUPTER PROTECTION FOR PERSONNEL SHALL BE PROVIDED AS REQUIRED IN 210.8(A) THROUGH (D). THE GROUND FAULT GFI SHALL BE INSTALLED IN A READILY ACCESSIBLE LOCATION. APPLICABLE REQUIRED GROUND FAULT INTERRUPTER RECEPTACLE CIRCUITS PER CEC ARTICLE 210.8:
- A. OUTDOORS

B. GARAGES, ACCESSORY STORAGE OR SIM. BUILDINGS

C. ALL BATHROOM COUNTER TOP RECEPTACLES, ALL RECEPTACLES WITHIN 6' OF A TUB OR SHOWER

D. ALL RECEPTACLES AT KITCHEN COUNTER TOPS. ALL RECEPTACLES WITHIN 6' OF THE EDGE OF A SINK.

E. CRAWL SPACES

F. LAUNDRY/UTILITY ROOM

G. DISHWASHERS
2. BRANCH CIRCUITS FOR LIGHTING AND FOR APPLIANCES SHALL BE PROVIDED TO SUPPLY THE LOADS CALCULATED IN ACCORDANCE WITH 220.10 IN ADDITION BRANCH CIRCUITS SHALL BE PROVIDED FOR SPECIFIC LOADS NOT COVERED BY 220.10 WHERE REQUIRED ELSEWHERE IN THIS CODE AND FOR DWELLING UNIT LOADS A SPECIFIED IN 210.11(C)
3. IN ADDITION TO THE NUMBER OF BRANCH CIRCUITS REQUIRED BY OTHER PARTS OF THE CODE, TWO SEPARATE 20 AMPERE SINGLE-PHASE, 15 AND 20 AMPERE BRANCH CIRCUITS SUPPLY OUTLETS OR DEVICES INSTALLED IN KITCHENS, FAMILY ROOMS, DINING ROOMS, LIVING ROOMS, PARLORS, LIBRARIES, DENS, BEDROOMS, SUNROOMS, REC ROOMS, CLOSETS, HALLWAYS, LAUNDRY AREAS OR SIMILAR ROOMS OR AREAS SHALL BE PROTECTED BY MEANS DESCRIBED IN 210.12(A)(1)-(6).
4. IN EA. ATTACHED GARAGE AND EA. DETACHED GARAGE RECEPTACLE OUTLETS MUST HAVE A SEPARATE BRANCH CIRCUIT WITH AT LEAST ONE RECEPTACLE FOR EACH CAR PARKING SPACE. 210.50(I)
5. OUTDOOR WEATHER PROOF 15 OR 20 AMP, 125 OR 250 VOLT RECEPTACLES MUST BE LISTED AS WEATHER-RESISTANT TYPE WHEN THE PLUG IS INSERTED. 406.8 (B)
6. ARC-FAULT CIRCUIT-INTERRUPTER PROTECTION PER 210.12 SHALL BE PROVIDED AS REQUIRED IN 210.12(A)(B) AND (C). THE ARC FAULT DEVICE SHALL BE INSTALLED IN A READILY ACCESSIBLE LOCATION. ALL 120-VOLT SINGLE PHASE, 15 AND 20 AMPERE BRANCH CIRCUITS SUPPLY OUTLETS OR DEVICES INSTALLED IN KITCHENS, FAMILY ROOMS, DINING ROOMS, LIVING ROOMS, PARLORS, LIBRARIES, DENS, BEDROOMS, SUNROOMS, REC ROOMS, CLOSETS, HALLWAYS, LAUNDRY AREAS OR SIMILAR ROOMS OR AREAS SHALL BE PROTECTED BY MEANS DESCRIBED IN 210.12(A)(1)-(6).
7. THE MAXIMUM LENGTH OF THE BRANCH CIRCUIT TO THE AFCI IS 50' FOR 14 AWG CONDUCTORS OR 70' FOR 12 AWG CONDUCTOR CEC 210.12
8. GROUND FAULT PROTECTION OF BRANCH CIRCUIT(S) 1000 AMPS OR MORE AND OVER 150V TO GROUND IS REQUIRED 210.13
9. AN OUTLET INSTALLED FOR THE PURPOSE OF CHARGING ELECTRIC VEHICLES SHALL BE SUPPLIED BY A SEPARATE BRANCH CIRCUIT. THIS CIRCUIT SHALL HAVE NO OTHER OUTLETS AND SHALL BE ON MIN. 40 AMP BREAKER
10. BRANCH CIRCUIT CONDUCTORS MIN. AMPACITY AND SIZE PER 210.19(A) & (B), 210.19 (A) (1) GENERAL. BRANCH CIRCUIT CONDUCTORS SHALL HAVE AN AMPACITY NOT LESS THAN THE MAXIMUM LOAD TO BE SERVED. CONDUCTORS SHALL BE SIZED TO CARRY NOT LESS THAN THE LARGER OF 210.19(A)(1)(a) OR (b).
11. OVERCURRENT PROTECTION PER 210.20 BRANCH-CIRCUIT CONDUCTORS AND EQUIPMENT SHALL BE PROTECTED BY OVERCURRENT PROTECTIVE DEVICES THAT HAVE A RATING OR SETTING THAT COMPLIES WITH 210.20(A)-(D)
12. OUTLET DEVICES SHALL HAVE AN AMPERE RATING THAT IS NOT LESS THAN THE LOAD TO BE SERVED AND SHALL COMPLY WIHT 210.21(A) & (B).
13. AN INDIVIDUAL BRANCH CIRCUIT SHALL BE PERMITTED TO SUPPLY ANY LOAD FOR WHICH IT IS RATED, BUT IN NO CASE SHALL THE LOAD EXCEED THE BRANCH-CIRCUIT AMPERE RATING. 210.22 MULTIPLE-OUTLET PERMISSIBLE LOADS PER 210.23
14. RECEPTACLE OUTLETS PER 210.52
- (1) SPACING. RECEPTACLES SHALL BE INSTALLED SUCH THAT NO POINT MEASURED HORIZONTALLY ALONG THE FLOOR LINE OF ANY WALL SPACE IS MORE THAN 6' FROM AN OUTLET.
15. KITCHEN RECEPTACLES PER 210.52 (3)(C)(1) A RECEPTACLE OUTLET SHALL BE INSTALLED AT EA. WALL COUNTERTOP SPACE THAT IS 12" OR WIDER.
- (3)(C)(2)AT LEAST ONE RECEPTACLE SHALL BE INSTALLED AT EACH ISLAND COUNTERTOP SPACE WHT A DIMENSION OF 24" OR GREATER AND A SHORT DIMENSION OF 12" OR GREATER.

(3)(C)(3) AT LEAST ONE RECEPTACLE OUTET SHALL BE INSTALLED AT EA. PENINSULAR COUNTERTOP SPACE WITH A LONG DIMENSION OF 24" OR GREATER AND A SHORT DIMENSION OF 12" OR GREATER
16. BATHROOMS TO HAVE AT LEAST ONE RECEPTACLE OUTLET INSTALLED IN WITHIN 3 FEET OF THE OUTSIDE EDGE OF EACH BASIN ADJACENT TO THE BASIN OR BASIN COUNTERTOP 210.52 (5)(D)
17. OUTDOOR RECEPTACLE OUTLETS SHALL BE INSTALLED IN ACCORDANCE WITH 210.52(E)(1)-(E)(3) AT LEAST ONE RECEPTACLE READILY ACCESSIBLE FROM GRADE AND NOT MORE THAN 6 1/2' ABOVE GRADE LEVEL SHALL BE INSTALLED IN THE FRONT AND BACK OF THE DWELLING.
18. PROVIDE AN OUTDOOR WEATHER PROOF GFI RECEPTACLE WITHIN 25' OF EXTERIOR MECHANICAL EQUIPMENT PER CEC 210-63.
19. PROVIDE DISCONNECT WITHIN SIGHT OF AIR CONDITIONING EQUIPMENT PER CEC 440-14. PROVIDE 30" WIDE X 36" DEEP WORKING CLEARANCE AT AC DISCONNECT PER CEC210-12.(b)
20. SMOKE DETECTORS REQUIRED IN ALL BEDROOMS, HALLWAYS LEADING TO BEDROOMS AND VAULTED CEILINGS MORE THAN 24" HIGHER THAN HALLWAY PER CRC R314
21. SMOKE DETECTORS SHALL BE HARD WIRED, INTERCONNECTED, W/ BATTERY BACKUP, & AUDIBLE IN ALL BEDROOMS PER CRC R314
22. AN APPROVED CARBON MONOXIDE ALARM SHALL BE INSTALLED IN DWELLING UNITS AND IN SLEEPING UNITS WITHIN WHICH FUEL-BURNING APPLIANCES ARE INSTALLED AND IN DWELLING UNITS THAT HAVE ATTACHED GARAGES. PER CRC SECTION R315.
23. CARBON MONOXIDE ALARMS SHALL RECEIVE THEIR PRIMARY POWER FROM ELECTRICAL MAIN & SHALL BE EQUIPPED WITH BATTERY BACKUP.
24. PROVIDE LIGHT & PLUG IN ATTIC TO ACCESS AND SERVICE MECHANICAL EQUIPMENT. LIGHT MUST BE FLOURESCENT OR HAVE A DIMMER SWITCH.
25. VENTILATION SYSTEM CONTROLS SHALL BE LABELED "TO MAINTAIN MIN. LEVELS OF OUTSIDE AIR VENTILATION REQUIRED FOR GOOD HEALTH THE FAN SHOULD BE ON AT ALL TIMES WHEN THE BUILDING IS OCCUPIED, UNLESS THERE IS SEVERE OUTDOOR AIR CONTAMINATION" AND THE HOME OWNER SHALL BE PROVIDED WITH WITH INSTRUCTIONS ON HOW TO OPERATE THE SYSTEM.
26. NEWLY CONSTRUCTED ONE AND TWO FAMILY DWELLINGS WITH AN ATTACHED PRIVATE GARAGE(S) SHALL COMPLY WITH ELECTRIC VEHICLE CHARGING INFRASTRUCTURE REQUIREMENTS IN ACCORDANCE WITH THE CGBC, CHAPER 4, DIVISION 4.1.
27. ALL 125 VOLT, 15 & 20 AMP RECEPTACLES INSTALLED IN A RESIDENCE OR ACCESSORY STRUCTURE SHALL BE LISTED TAMPER RESISTANT RECEPTACLES. NO EXCEPTIONS FOR RECEPTACLES ON CEILING, ABOVE COUNTERS, OR BEHIND APPLIANCES. CEC 406.11

MECHANICAL NOTES

1. FUEL BURNING APPLIANCES, INSTALLATION, TESTING, AND REPAIR PER 2016 CALIFORNIA MECHANICAL CODE. ALL APPLIANCES, FIXTURES AND EQUIPMENT TO BE INSTALLED AS PER CODE AND MANUFACTURERS SPECIFICATIONS.

2. GAS FIREPLACES SHALL BE LISTED AN INSTALLED IN ACCORDANCE WITH LISTING & MANUF. INSTALLATION INSTRUCTIONS. A DIRECT-VENT SEALED-COMBUSTION TYPE. WOOD/Pellet STOVES SHALL COMPLY WITH US EPA PHASE II EMISSION LIMITS. (GBC SECTION 4.503.1)

3. DUCT AND VENT OPENINGS SHALL BE COVERED DURING CONSTRUCTION. (GBC SECTION 4.504.1)

4. WHOLE HOUSE EXHAUST FANS SHALL HAVE INSULATED LOUVERS OR COVERS WHICH CLOSE WHEN THE FAN IS OFF. COVERS OR LOUVERS SHALL HAVE A MINIMUM INSULATION VALUE OF R-4.2.

5. HVAC SYSTEM INSTALLERS ARE TRAINED AND CERTIFIED IN THE PROPER INSTALLATION OF HVAC SYSTEMS. (GBC SECTION 702.1)

6. BATHROOMS ARE TO BE MECHANICALLY VENTILATED PER CMC TABLE 4-4. MIN. 20 CFM FOR CONTINUOUS OPERATION OF 50 CFM FOR INTERMITTENT. CRC R303.3

7. EQUIPMENT AND APPLIANCES SHALL BE ACCESSIBLE FOR INSPECTION, SERVICE, REPAIR, AND REPLACEMTN WITHOUT REMOVING PERMANENT CONSTRUCTION. NOT LESS THAN 30" IN DEPTH, WIDTH, AND HEIGHT OF WORKING SPACE SHALL BE PROVIDED

8. TERMINATE DRYER EXHAUST DUCT TO THE OUTSIDE OF BUILDING. DRYERTO BE EQUIPPED WITH A BACKRAFT DAMPER WITH NO SCREEN. DUCT TERMINATION, LENGTH TO BE REDUCED 2' FOR EVERY ADDITIONAL ELBOW OR PROVIDE MANUFACTURERS INSTALLATION DATA.

9. TERMINATION OF ENVIRONMENTAL AIR DUCTS SHALL BE A MIN. 3' AWAY FROM OPENINGS INTO THE BUILDING.

10. EXHAUST FANS LOCATED IN A ROOM WITH A SINK, BATHTUB, OR SHOWER ARE REQUIRED TO BE ENERGY STAR COMPLIANT. UNLESS FUNCTIONING AS A WHOLE HOUSE FAN FAN MUST BE CONTROLLED BY A READILY ACCESSIBLE HUMIDISTAT CAPABLE OF ADJUSTMENT BETWEEN A RELATIVE HUMIDITY RANGE OF 50-80% AND BE DUCTED TO TERMINATE OUTSIDE BUILDING.

11. WHEN COOLING COILS ARE LOCATED IN THE ATTIC, A SECONDARY OR OVERFLOW SHALL BE PROVIDED (IN ADDITION TO THE PRIMARY CONDENSATE DRAINS) THE REQUIRED OVERFLOW LINE SHALL BE SEPARATE FROM THE PRIMARY AND SHALL TERMINATE WHERE IT IS READILY OBSERVABLE (ABOVE WINDOWS OR DOORS). CMC 309.2

12. PROVIDE GAS SUPPLY FOR WATER HEATER WITH CAPACITY FOR 200k BTU. AND ELECTRICAL RECEPTACLE

13. ALL DOMESTIC HOT WATER SYSTEM PIPING CONDITIONS LISTED BELOW, WHETHER BURIED OR UNBURIED, MUST BE INSULATED PER TABLE 120.3-A:

- A. THE FIRST 5 FEET OF HOT AND COLD WATER PIPES FROM THE STORAGE TANK.
- B. ALL PIPE WITH A NOMINAL DIAMETER OF 3/4" OR LARGER.
- C. ALL PIPING ASSOCIATED WITH A DOMESTIC HOT WATER RECIRCULATION SYSTEM REGARDLESS OF THE PIPE DIAMETER..
- D. PIPING FROM THE HEATING SOURCE TO STORAGE TANK OR BETWEEN TANKS.
- E. PIPING BURIED BELOW GRADE.
- F. ALL HOTE WATER PIPES FROM THE HEATING SOURCE TO THE KITCHEN FIXTURES.

14. AIR CONDITIONING REFRIGERANT ACCESS PORTS LOCATED OUTDOORS SHALL BE PROTECTED WITH LOCKING TYPE TAMPER-RESISTANT CAPS.

15. AIR-CONDITIONING UNIT TO BE SIZED BY MECHANICAL CONTRACTOR IN COMPLIANCE WITH ALL STATE AND LOCAL CODES.

16. VERIFY LOCATION OF ELECTRICAL FURNACE & CONDENSER UNIT WITH MECHANICAL CONTRACTOR.

17. LOCATE AND INSTALL GAS APPLIANCE CONNECTIONS PER CMC.

18. VENT ALL EXHAUST FANS & HOODS TO OUTSIDE AIR (O.S.A.). TERMINATE 3' (MIN.) FROM OPENINGS INTO STRUCTURE.

19. ALL MECHANICAL EQUIPMENT TO MAINTAIN MANUF. RECOMMENDATIONS FOR CLEARANCES.

20. PROVIDE DISCONNECT SWITCH WITHIN SIGHT OF AIR CONDITIONING EQUIPMENT. CEC 440.12.

21. DUCT INSTALLATION SHALL COMPLY WIHT SECTIONS M1601.4.1 - M1601.4.10. TAPES AND MASTICS USED TO SEAL SHEET METAL DUCTS MUST BE LISTED TO UL 181 B. SNAP LOCK AND BUTTON LOCK SEAMS MUST BE SEALED.

22. WHERE PIPING WILL BE CONCEALED WITHIN LIGHT-FRAME CONSTRUCTION ASSEMBLIES THE PIPING SHALL BE PROTECTED AGAINST PENETRATION BY FASTENERS.

23. SEE PAGE 1.1 & 1.2 GREEN BUILDING CODE & 2016 ENERGY CODE MANDITORY MEASURES FOR OTHER REQUIREMENTS NOT LISTED HERE.

MECHANICAL VENTILATION

LOCATION	LABEL	MODEL	CFM	CFM @ .25" SP	SONES RATING	DUCT SIZE MIN. MAX. "W" "L"		DUCT TYPE
BATHS 1-8	LV-2	BFQ50	50	38	.5	4"	70'	FLEX
KITCHEN	LV-1	CX-183	600	N/A	1.3-2.8	7"	50'	RND
M. BATH	LV-2	BFQ50	50	38	.5	4"	70'	FLEX
UTILITY	WBV-1	FV-08VKI	85	82	.3	5"	70'	FLEX

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PRESCRIPTIVE DUCT SIZING REQ.

DUCT TYPE	FLEX DUCT				SMOOTH DUCT			
FAN RATING (cfm at .25 in w.g.)	50	80	100	125	50	80	100	125
Maximum Allowable Duct Length (ft)								
DIAMETER (in.)	FLEX DUCT				SMOOTH DUCT			
3	X	X	X	X	5	X	X	X
4	70	3	X	X	105	35	5	X
5	NL	70	35	20	NL	135	85	55
6	NL	NL	125	95	NL	NL	NL	145
7 and above	NL	NL	NL	NL	NL	NL	NL	NL
THIS TABLE ASSUMES NO ELBOWS. DEDUCT 15 FT. OF ALLOWABLE DUCT LENGTH FOR EACH TURN, ELBOW, OR FITTING. INTERPOLATION AND EXTRAPOLATION IN TABLE 7.1 IS NOT ALLOWED. FOR FAN RATING VALUES NOT LISTED, USE THE NEXT HIGHER VALUE. THIS TABLE IS NOT APPLICABLE FOR FAN RATINGS > 125 CFM. NL = NO LIMIT ON DUCT LENGTH OF THIS SIZE X= NOT ALLOWED; ANY LENGTH OF DUCT OF THIS SIZE WITH ASSUMED TURNS AND FITTINGS WILL EXCEED THE RATED PRESSURE DROP (0.25 IN W.G.). NOTE: WATER GAUGE (W.G.) IS THE SAME AS WATER COLUMN (W.C.)								

PLUMBING NOTES

1. INDOOR FIXTURES SHALL NOT EXCEED THE MAXIMUM FLOWS (GBC SECTION 4.303.1): FIXTURE TYPE AND MAXIMUM FLOW. SEE SHEET A1.3 CALGREEN CHECKLIST.

2. THE COMBINED FLOW RATE OF MULTIPLE SHOWERHEADS IN ONE SHOWER SHALL NOT EXCEED 1.8 GPM @ 80PSI OR A VALVE SHALL BE INSTALLED WHICH ALLOWS OPERATION OF ONLY ONE SHOWER HEAD AT A TIME. (GBC SECTION 4.303.2)

3. AUTOMATIC IRRIGATION SYSTEMS CONTROLLERS INSTALLED AT THE TIME OF FINAL INSPECTION SHALL BE PROVIDED WITH INTEGRAL RAIN SENSORS OR SOIL MOISTURE SENSORS THAT ADJUST IRRIGATION IN RESPONSE TO CHANGES IN PLANTS NEEDS AS WEATHER CONDITIONS CHANGE. (GBC SECTION 4.303.1.3.2)

4. ALL WATER PIPES INSTALLED IN THE EXTERIOR WALL SHALL BE LOCATED ON THE CONDITIONED SIDE OF THE WALL ADJACENT TO THE INTERIOR FINISH.

5. PREVENT BACKFLOW FROM IRRIGATION PIPING PER CPC SECTION 603.3

6. PLUMBING WALLS TO BE 2x6 AND MUST MEET CRC SECTIONS R602.6 FOR NOTCHING AND BORING.

7. SHOWER AND TUB / SHOWER COMBINATIONS SHALL BE PROVIDED WITH INDIVIDUAL CONTROL VALVES OF THE PRESSURE BALANCE OR THERMOSTATIC MIXING VALVE TYPE.

8. WATER CLOSET TO HAVE A MINIMUM 30" WIDE CLEAR SPACE, WITH 24" CLEAR SPACE IN FRONT PER CPC SECTION 407.6

9. BATHROOMS ARE TO BE MECHANICALLY VENTILATED PER CMC TABLE 4-4. MIN. 25 CFM FOR CONTINUOUS OPERATION OF 50 CFM FOR INTERMITTENT. CRC SECTION R303.3.

10. GAS VENTS, TYPE, TERMINATION PER CPC §10.6.

11. WATER HEATER TO HAVE A FIRST HOUR RATING PER CPC TABLE 501.1, IF WATER HEATER IS PROVIDED.

12. ALL APPLIANCES, FIXTURES AND EQUIPMENT TO BE INSTALLED AS PER 2013 CPC CODE AND MANUFACTURER'S SPECIFICATIONS.

13. IF WATER HEATER IS INSTALLED, PROVIDE SEISMIC BRACING STRAPS FOR TANK WATER HEATER. STRAPS TO BE LOCATED WITHIN THE UPPER AND LOWER ONE-THIRD OF IT'S VERTICAL DIMENSION, THE LOWER STRAP ALSO LOCATED TO MAINTAIN A MIN. OF 4" ABOVE CONTROLS.

14. INSULATE PIPES IN ANY UNCONDITIONED AREAS.

15. ALL HOSE BIBBS SHALL BE FROST-FREE.

16. ALL DOMESTIC HOT WATER PIPES THAT ARE BURIED BELOW GRADE MUST BE INSTALLED IN A WATERPROOF AND NON-CRUSHABLE CASING OR SLEEVE.

17. ALL DOMESTIC HOT WATER SYSTEM PIPING CONDITIONS LISTED BELOW, WHETHER BURIED OR UNBURIED, MUST BE INSULATED PER TABLE 120.3-A:

- A. THE FIRST 5 FEET OF HOT AND COLD WATER PIPES FROM THE STORAGE TANK.
- B. ALL PIPE WITH A NOMINAL DIAMETER OF 3/4" OR LARGER.
- C. ALL PIPING ASSOCIATED WITH A DOMESTIC HOT WATER RECIRCULATION SYSTEM REGARDLESS OF THE PIPE DIAMETER.
- D. PIPING FROM THE HEATING SOURCE TO STORAGE TANK OR BETWEEN TANKS.
- E. PIPING BURIED BELOW GRADE.
- F. ALL HOT WATER PIPES FROM THE HEATING SOURCE TO THE KITCHEN FIXTURES.

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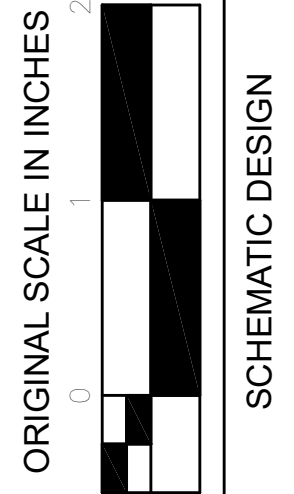
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PLANS DRAWN IN CONJUNCTION WITH RAD STUDIOS, REDDING CA

TOWN OF TRUCKEE PERMIT CENTER

New Single Family Residence
Bernard Dr.
Nevada County, CA

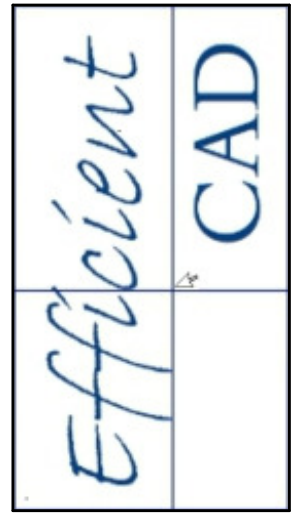


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DRAWN BY	WNY
REVIEWED BY	

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SHEET:	18 of 25



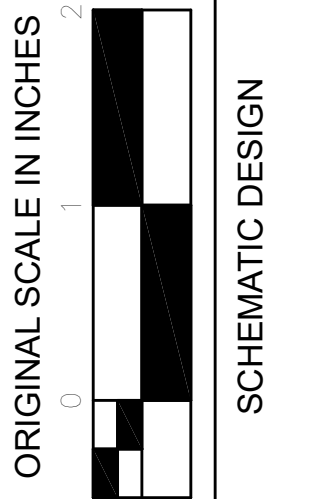
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REVISIONS		
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PLANS DRAWN IN CONJUNCTION WITH RAD STUDIOS, REDDING CA		

TOWN OF TRUCKEE
PERMIT CENTER

New Single Family Residence
Bernard DR.
Nevada County, CA



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