RESOURCE MANAGEMENT AGENCY

County of Ventura

BUILDING & SAFETY DIVISION

Ruben Barrera
Building Official

WEB SITE ADDRESS:

www.ventura.org/rma/build_safe/

REVIEW	FIRST	SECOND	THIRD	FOURTH
DATE				

PLAN REVIEW CORRECTION LIST

One and Two Family Residential Construction 2016 Code Edition Eff. Date January 1, 2017

Climatic and geographic design criteria (to be added to plans) CRC R301.2:					
Seismic Design Category	**Basic Wind Speed (mph)**	**Ground Snow Load (psf) / Elevation (ft)**	**Climate Zone**	**Flood Zone Designation**	**Design Flood Elevation**

Project Address Locality

Plan Check Number

Owner/Agent

Mailing Address (Number & Street)

City, State and Zip Code

Phone Number

INSTRUCTIONS

⦿ **RETURN THIS LIST with corrected plans. To facilitate rechecking of plans, please indicate Sheet Number, detail number and note number after each circled item where the corresponding correction has been made.**

⦿ The circled item numbers on the following list identify the required corrections. References following each item refer to the either California Building Code (CBC) 2016 Edition, the California Residential Code (CRC) 2016, the Ventura County Building Code 2016 (VCBC), the Ventura County Ordinance Code (VCOC), Ventura County Fire Protection District Fire Code Ordinance 30 (VCFC Ord. 30), Title 24 of the California Administrative Code (24CAC), the California Business and Professions Code (BPC), AISC 341 2010 edition (AISC 341), ASCE 7-10 (ASCE 7), ACI 318 (ACI 318-14) unless otherwise noted.

⦿ Please respond to marked-up corrections on the plans at the same location to facilitate resubmittal plan review.

⦿ Where handout number is referenced, please download it from our website noted above or you may request the copy at the counter

- Provide three new corrected sets of plans and two sets of corrected/revised calculations for recheck along with the marked-up set of drawings and calculations, which was originally submitted for plan review.
- Minor corrections may be made on plans in ink at the counter when approved by the plan checker. Such corrections shall be initialed by the designer.
- The set of plans you originally submitted for plan check, marked for correction, is available at the Division of Building and Safety in the (Ventura) (East County) office. However, you may request pickup of your plans from the office you originally submitted.

A. GENERAL REQUIREMENTS

1. Incomplete, inconsistent or illegible drawings and/or calculations cannot be accepted for review. VCBC 107.1
2. Plans are inadequate and incomplete for plan review at this time. Plan checking will continue after the receipt of complete plans and calculations. CBC 107. Please download handout B-1 from our website noted above for minimum requirements on plans for Residential Construction.
3. The (project) / (portion) of the project as shown on the plans deviate significantly from the requirements of the California Residential Code. Provide structural calculations per CRC R301.1.3 and details. The portion of the structural element which deviates must be prepared by a licensed architect or registered engineer. Sec. 6737.1(b), California Business and Professions Code.

4. Upon initial submittal (and all subsequent), calculations require the signature, stamp, and date of signature of a California-registered civil or structural engineer or architect. Plans require the signature, stamp, and date of signature of a California-registered civil or structural engineer or architect upon final submission. BPC 6735, 5536.1

5. The proposed 3-story structure is required to be prepared and stamped / signed by a California Licensed Engineer or Architect. CRC R301.1.3.2

6. Refer to comments in red ink on the first submittal marked-up set of plans.

7. Refer to comments in red ink on the first submittal marked up calculations.

8. Refer to marked-up set of plans and make the changes indicated by the comments circled in black ink.

9. Add owner's name and address of the project to each sheet of plans. VCBC 107

10. Show compliance with requirements of the High Fire Hazard Area/Fire Hazard Severity Zones on the plans. Refer to handout B-60. VCBC Chapter 7A, VCFC Ord. 30

11. Provide Building Code Data on the plan Title Sheet for each proposed building (VCBC 107):
    a. Occupancy Classification
    b. Description of use
    c. Code Edition
    d. Type of Construction
    e. Floor area
    f. Number of Stories
    g. Building Height
    h. Fire Hazard Severity Zone
    i. Sprinklers: Yes / No

12. In addition to the Climatic and geographic design table at the beginning of this correction list, add the following to the plans (CBC 1603, CRC R301.2, VCBC 107):
    a. Seismic Coefficients: S_{ds}, S_{d1}, C_s
    b. Wind Exposure Category: C (typical) or D (coastal). Or provide justification accordingly.

13. Add sheet index to the front sheet of the (Plans) / (Calculations).

14. To avoid additional plan review fee, please comply with all the remaining corrections by next resubmittal.

15. We have reviewed your plans three times and have provided the service covered by the plan review fee we received. Plan review fees will be charged by the hour until approved.

16. Provide site / plot plan; show size and location, setbacks, use, location and extent of retaining walls, and distance between each existing and proposed building. Show complete outline of parcel on the plot plan as well as all easements and their dedicated size and use. CRC R106

17. On the site / plot plan show the point of connection for sewer, electrical, and water for the Dwelling.

18. Provide a soil report to enable plan review of foundation design.

19. Provide a signed Soils Investigation Report Waiver Request. Download from our website handout B-50.

20. The Soil Engineer shall provide the expansive index of the soil to enable plan review of foundation.

21. The original soil report is more than one-year-old. Please provide an update letter. VCBC 107.1

22. Soil Engineer shall review and sign site/plot plan and foundation plan to affirm correctness and consistency with the soil report.

23. The Soil Engineer shall provide soil parameters for seismic design per CBC 1613.3.

24. The project consisting of a habitable structure / space is in a Fault-Rupture Hazard Zone (Alquist-Priolo Act). The Soil Engineer shall provide a geotechnical and / or geological report to address this issue.

25. A Pre-Plan Check Inspection of the site is required prior to resubmittal of plans for a second review. Please contact the counter staff to schedule.

26. Draw grid lines on the floor, framing and foundation plans to facilitate plan checking.

B. GRADING, SITE, DRAINAGE, LANDSCAPE

1. When a grading permit is required, submit grading plans and obtain a grading permit from the Public Work Development Services Division. VCBC Appendix J

2. Add Grading Permit number to the site plan.

3. When a grading permit is not required, add a signed statement to the drainage plan/site plan as noted here. "No grading required". VCBC Appendix J103.

4. Clearly show on the plans how the project meets the Model Water Efficiency Landscape Ordinance (MWELO). See the County website and handouts for more information.

5. 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. Include the Stormwater Quality Management Program BMP measures on the plans. See the SW-1 form. CALGreen 5.106.2

6. The grade adjacent to the dwelling is steeper than 3 horizontal to 1 vertical, the building must be designed to meet the VCBC Design Provisions for Hillside Buildings and the site plan shall be prepared by a California-registered engineer. CBC 1808.7 VCBC 1613.8.

7. Show drainage away from the structure for a minimum of 6-inches of fall for the first 10-feet horizontal to an approved drainage course. CRC R401.3

8. Drainage plan/site plan must show the existing and proposed topography by means of contours and elevations.

9. Show finished floor elevation of the garage, first floor, and basement.

10. Show property lines, driveways, access roads and streets. VCBC 107.1

11. Show retaining walls and finished grade elevations at top of stem and base of stem. CBC 1808.7.4, 1807, CRC R404

12. Show location and provide construction detail for all catch basins, sumps, concrete or asphalt drainage ditches and swales, culverts, drain pipes, collectors, or similar drainage devices. VCBC Appendix J

13. Show swales and drainage flow lines by means of arrows or other appropriate symbols. Indicate the high point(s) on the lot and a minimum slope of 2% toward a street, storm drain, or approved watercourse or disposal area. CRC R401.3, CBC 1808.7.4

14. Provide a cross section of the site topography at location(s) marked on the plans.

15. Show minimum building setback from ascending slopes and minimum footing setback from descending slopes. See Handout B-70 CRC R403.1.7

16. Add this note to the site/plot plan/foundation plan: "Soil compaction report shall be provided to the building inspector at the job site prior to placement of concrete for the foundation."

17. Add this note to the foundation plan: "Soil engineer shall inspect foundation prior to placement of concrete for the foundation." Evidence of such inspection shall be provided to the Building Inspector at Foundation Inspection"

18. Add this note to the plans: "A certification for 90% compaction of backfill from a geotechnical engineer shall be provided to the building inspector prior to final sign off and acceptance of retaining wall."

19. Identify existing structures on the site plan, which are not part of this permit application, as "Existing."

C. HEIGHT AND LOCATION

1. Exterior walls less than 5 feet from property line for a non-sprinklered building and less than 3 feet for sprinklered building, shall be of one-hour fire-resistive construction. CRC Tables R302.1 (1, 2)

2. Provide detail of one hour wall and projections CRC R302

3. Openings, projections, and penetrations in exterior walls located between 3 feet to 5 feet from a property line shall comply with CRC R302.1 and Tables R302.1 (1, 2)

4. Openings in exterior walls less than 3 feet from property line are not permitted per CRC Table R302.1 (1, 2)

5. Openings in exterior walls of a fire-sprinklered building with a fire separation distance of 3-feet and greater can be unlimited per CRC Table R302.1(2)

6. Openings in exterior walls of a non-sprinklered building with a fire separation distance less than 5-feet SHALL NOT exceed 25% per CRC Table (R302.1(1))

7. The height of the building exceeds the limits specified in Zoning Clearance.

D. EGRESS, EMERGENCY ESCAPE and RESCUE OPENINGS, and FIRE PROTECTION

1. Means of egress doors shall be side-hinged and shall provide a clear width of 32" measured between the face of the door and the stop, with the door open 90 degrees. The mean of egress door shall open directly into the public way or to a court or to a yard or to a court that opens to a public way. CRC R311.1, R311.2

2. For the (Single Family Dwelling) / (Multi-family dwellings) / (Townhouses) /(Building) add this note to the plans: "Provide automatic fire extinguishing system throughout." VCFC Ord. 30

3. The proposed three-story building has a travel distance from any point on that level to the stairs greater than 50 feet; provide an additional stairway. CRC R311.4

4. Hallway width shall be not less than 36". CRC R311.6

5. Add this note to the plans: "Provide emergency exit door or window from basement and/or sleeping room(s) and habitable attics. Net clear window opening area shall be not less than 5.7 sq. ft. (except at grade floor opening shall be minimum 5.0 sq. ft.). Min. net window opening height dimension, 24" clear; min. net opening width dimension, 20" clear. Finished sill height max. 44" above floor. The emergency escape and rescue opening shall be operational from inside of the room without the use of keys, tools, or special knowledge. Window opening control devices complying with ASTM F2090 shall be permitted." CRC R310.1

6. Where a basement contains one or more sleeping rooms, an emergency egress and rescue opening shall be required in each sleeping room. CRC R310.1

7. Provide construction details of stairway to show compliance with CRC R311.7. Indicate width, rise, run, headroom (6'-8" minimum), handrail shape, height (34"-38") and connections, stringer size and supporting arrangement, foundation and anchorage on the construction detail.

8. Provide stair nosing detail where tread depth is less than 11". CRC R311.7.5.3

9. (Winding) / (curved) / (spiral) stairway does not comply with CRC R311.7. Redesign stairs. See Ventura County Handout B-55.

10. The unobstructed width of stairway shall be a minimum of 36". CRC R311.7

11. Provide means to illuminate all interior and exterior stairways, including the landing and the treads. The light sources shall provide an illumination of 1 foot-candles (11 Lux) measured at the center of the treads and landings. For the exterior stairs, provide an artificial light source at the top landing. CRC R311.7.9

12. The depth of the stairway landing shall be not less than the width of the stairway. CRC R311.7.6

13. The depth of landing at door shall be 36" minimum. CRC R 311.3

14. Add this note. "All handrails shall have height between 34" to 38" measured from the tread nosing. Handrails with circular cross-section shall have outside diameter between 1.25" to 2". Handrails with non-circular cross-section shall have perimeter dimension between 4" and 6¼" with a maximum cross-section dimension of 2¼". Edges shall have a minimum radius of 0.01". Openings between the guards along the open side of stairs (balusters or ornamental patterns) shall not allow a sphere of 4-3/8" pass through the opening. Handrail shall be capable to resist a single concentrated load of 200# applied in any direction at any point along the top. The triangular openings at the open side of stair formed by the riser, tread and the bottom rail shall not allow passage of a 6" sphere." CRC R311.7.8.1, R311.7.8.3, R312.1.3

15. Walking surfaces, balconies, decks, and landings more than 30 inches above grade shall be provided with a guardrail, min. height of 42". The openings from the walking surface to the required guard height and the openings between the intermediate rails/balusters shall not allow the passage of a sphere 4 inches in diameter. Provide details. CRC R312

16. When an operable window is located more than 6' above finished grade with the lowest part of window opening being less than 24" above finished floor, and the opening is larger than a 4" diameter sphere, the window shall be provided with either a fall prevention device complying with ASTM F2090 or provided with a window opening control device. CRC R312.2

17. Walls and ceilings of the enclosed space under stairway shall be protected on the enclosed side with ½" thick gypsum board. CRC R302.7

18. Dwelling units in two-family dwellings shall be separated from each other by a 1-hour fire resistive rated wall or floor assembly. CRC R302.3

19. Provide detail of one hour walls, floors, and through penetrations of fire resistance rated wall or floor assemblies CRC R302.3, R302.4

20. Provide smoke alarms in sleeping room, corridor, basement and each floor level. CRC R314.3

21. Add this note to plans for new construction: "Where more than one smoke alarm is required they shall be interconnected in such a manner that the activation of one alarm will activate all alarms in the dwelling unit." CRC R314.4

22. Provide Carbon Monoxide Alarms outside each sleeping area, basement, and each floor level and in sleeping rooms containing a fuel burning appliance. CRC R315.1.4

23. Combination smoke alarms and carbon monoxide alarms shall be listed and approved in accordance with UL 217 and UL 2034. CRC R314.1.1

24. Add this note to plans: "Smoke alarms and Carbon Monoxide Alarms shall receive their primary power from the building wiring and shall be equipped with a battery backup." CRC R314.6, R315.5

25. The floor assembly is located above a space/crawlspace intended for storage or contains a fuel fired appliance provide, provide ½" minimum gypsum board on the underside of the floor framing. CRC R302.13

26. Add this note to the plan: "Draftstopping shall be provided where there is usable space above and below the concealed space of a floor ceiling assembly. The draft stop shall be installed so that the area of the concealed space does not exceed 1000 s.f". CRC R302.12

27. Draftstopping shall be installed parallel to the floor framing members and the integrity shall be maintained. The draft stopping material shall be minimum ½" gypsum board, 3/8" wood structural panels, or other approved material.

28. Add this note to the plan: "Where the assembly is enclosed by a floor membrane above and a ceiling membrane below, provide draftstopping for the following instances: CRC R302.12:
    a. Ceiling is suspended under the floor framing.
    b. The floor framing is constructed of truss type open web or perforated members."

29. Add these notes to the plans as applicable: "Provide fire blocking in wood-framed construction in the following locations: CRC R302.11
    a. In the concealed spaces of stud walls, including furred spaces: vertically at the ceiling and floor levels, as well as, horizontally at intervals not exceeding 10 feet,
    b. At interconnections between concealed vertical and horizontal spaces such as those that occur at soffits, drop ceilings and cove ceilings,
    c. Concealed spaces between stair stringers at the top and bottom of the run,
    d. At openings around vents, pipes ducts cables and wires are ceiling and floor levels with an approved material to resist free passage of flame and products of combustion.
    e. Cornices of a 2-family dwelling at the line of the dwelling unit separation."

E. LIGHT, VENTILATION, SANITATION and ELECTRICAL

1. Window area shall be not less than 8 percent of the floor area of the room and not less than 4 percent of the required window area shall be openable. CRC R303

2. For the purpose of humidity control, bathrooms containing a bathtub, shower or tub/shower combination, shall be mechanically ventilated at a rate of 20 cfm for continuous ventilation; otherwise a rate of 50 cfm shall be used for intermittent ventilation. An operable window is NOT a permissible method. Exhaust air shall be ducted to terminate outside the building. CRC R303.3.1, CGBC 4.506.1

3. Exhaust fans provided for humidity control shall meet the following:
    a. ENERGY STAR compliant, and
        i. Controlled by a humidity control unless functioning as a component of a whole house ventilation system. Humidity control shall operate as follows (CGBC4.506.1):
        ii. Humidity controls shall be capable of adjustment between a relative humidity range of a greater than or equal to 50% to a maximum of 80%. The humidity control may utilize manual or automatic means of adjustment and,
        iii. A humidity control may be a separate component to the exhaust fan and is not required to be integral.
        iv. Lighting integral to bathroom exhaust fans shall comply with the *California Energy Code*.

4. In bathroom, water closet compartments and other similar rooms, provide a window not less than 3 sq. ft. glazing area, ½ of which shall be openable, or provide exhaust fans with exhaust rate of 50 cfm for intermittent ventilation or 20 cfm for continuous ventilation. The exhaust air shall be exhausted directly to the outdoors. CRC 303.3.1,

5. Add this note to the plan: "The plumbing fixtures and plumbing fitting shall meet the standards noted below (CGBC 4.303):
    a. Water Closet = 1.28 gallons per flush max
    b. Showerheads = 2.0 gpm max (multiple showerheads in a single shower: combined flow is 2.0 gpm max)
    c. Kitchen faucets = 1.8 gpm max
    d. Lavatory faucets = 1.2 gpm max
    e. Urinals = 0.5 gallons per flush max (0.125 gallons per flush when wall mounted)

6. A (kitchen) / (bathroom) must be provided for the project to be classified as an Accessory Dwelling Unit (ADU). CRC Ch 2. A kitchen consists of a sink, stove and refrigerator

7. Kitchens hood, if provided, shall be mechanically vented, when used for intermittent ventilation 100 cfm minimum or if continuous ventilation 50 cfm minimum. If part of the Indoor Air Quality system, the exhaust hood shall terminate at the exterior of the building. CMC Table 403.7, CEnC 150.0(o)

8. Justify by calculations mechanical ventilating system in accordance with CRC R303.3 and the California Mechanical Code

9. To consider natural light and ventilation for the adjoining room, the common wall between the rooms shall be 50% open and unobstructed and shall provide opening of not less than 1/10 of floor area of interior room or 25 sq. ft., whichever is greater. CRC R303.2

10. Where artificial light is provided, it shall provide an average illumination of 6 foot-candles (65 Lux) over the area of the room at a height of 30" above the floor. CRC R303.1

11. Provide GFCI protection at: Bathrooms, garages, countertops within kitchens, laundry areas, dishwasher circuit, within 6 ft of either sinks, bathtubs, or showers. CEC 210.8

12. Provide AFCI protection for all outlets or devices in a readily accessible location in kitchens, family rooms, dining, living rooms, libraries, dens, bedrooms, laundry, or similar rooms and areas. CEC 100, 210.12

13. Provide a readily accessible outdoor receptacle, not more than 6.5 ft. from finished grade, balcony, deck, or porch walking surface. (CEC 210.52(E))

14. Provide one receptacle outlet for each car space in one-family dwelling garages. CEC 210.52(G)(1)

15. Label outdoor receptacles or add note that states receptacles located in damp and wet locations shall be listed as weather resistant. CEC 406.9.

16. Label plans or provide a note on the plans indicating that "Tamper-resistant receptacles" are required for receptacles that are 66" and less above the finished floor, and in any of the following locations: kitchens, family rooms, dining, living rooms, libraries dens, bedrooms, recreation rooms, laundry, or similar rooms or wall space. Receptacles in a dedicated space for a refrigerator, dishwasher, or washer/dryer are exempt. CEC 406.12(A)-(C), 210.52

17. The electrical panel or sub-panel is not allowed to be installed in closets for clothing. CEC 240.24 (D)

18. The electrical panel or sub-panel is not allowed to be installed in bathrooms. CEC 240.24 (E)

F. PLAN REQUIREMENTS AND ROOM DIMENSIONS

1. At least one habitable room shall have a floor area not less than 120 sq. ft.; min. 7 ft. in any dimension. CRC R304.1, R304.3

2. Ceiling height shall be not less than 7'-0" in the _____. CRC R305

3. Call out missing dimensions at locations indicated on plans. VCBC 107.1

4. Habitable or non-habitable use of attic space shall be designed in compliance with "R-3" occupancy requirements per CRC Table R301.5. Revise plans.

5. Label each room on the floor plan and cross sections to indicate its use. VCBC 107.1

6. Provide description of material used, handled, stored and product manufactured in the storage building and/or workshop. This is required to classify group occupancy per California Building Code Chapter 3.

7. Provide detail of one hour walls, floors, and through penetrations of fire resistance rated wall or floor assemblies CRC R302.3, R302.4

8. Identify existing and new construction. You may shade/cross-hatch new construction for clarity.

9. Add wall legend for clarity on floor, framing and foundation plans. VCBC 107.1

G. GARAGE

1. Provide 1/2"thick gypsum board between garage and dwelling on garage wall side only. CRC R302.6

2. Door opening between garage and dwelling shall be protected by a door that is self-closing and self-latching and either 1 3/8" thick solid core wood, 1 3/8" solid or honeycomb core steel, or 20-minute fire rated door. Specify on the plans. CRC R302.5.1

3. For dwelling/garage and or carport separation, show fire protection on all members supporting the ceiling unless covered with 5/8"type X gypsum board. CRC R302.6

4. Omit the direct opening between garage and bedroom. CRC R302.5.1

5. Garage shall be min. 18 ft. wide and 20 ft. deep, clear and unobstructed to comply with Zoning requirements. Show clear dimensions on the plan. VOC Sec. 8108-1.3.1

8. Add this note to plan: "Ducts in garage and ducts penetrating walls or ceilings separating garage from the dwelling shall be constructed of minimum #26 gage sheet steel." CRC R302.5.2

9. Revise the carport to be open on at least two sides or designed the structure as a garage. CRC 309.2

10. Show on the plans that the area of the floor used to park the vehicles is sloped to facilitate the movement of liquids to a drain or the main vehicle entry doorway. CRC R309.1

11. Note on the plans: “The automatic garage door openers shall be labeled in accordance with UL 325.” CRC R309.4

H. ROOFS

1. Indicate Class A, B or C roofing/decking materials. Call out ICC research report # and the materials used in the proposed roofing/ decking assembly, such as, underlayment felt, cap sheet, weight of rock, weight of asphalt per roofing square. CRC R905, VCFC 30 (Need to reference Class A roofing required for roofs in High Fire Hazard areas per VCBC 705A.2 and VCBC 1505.
2. Provide size and location of roof and overflow drains. CRC R903.4.1
3. Specify roof pitch for the roofing type shown per CRC R905
4. Specify thickness and span of roof/floor sheathing. CRC R803
5. Roof projection beyond exterior wall toward side property line shall comply with R302.1, R804.3.2.1.1 and R804.3.2.1.2
6. Provide construction detail of skylight/sloped glazing to show compliance with CRC R308.6 or call out an ICC-approved report number. CRC R308.6.9, CBC 107
7. Shade/hatch areas on the roof framing plan where "California” framing roofing occurs. VCBC 107.1
8. Gutters/downspouts are required when recommended by Soil Engineer or when the soil expansion index exceeds 50. Show on site/plot plan and on the elevations piping and/or other approved non-erosive devices to conduct water to a street or other approved watercourse. VCBC 1803
9. Provide attic ventilation per CRC R806 and under floor ventilation per CRC R408
10. Unvented attic and enclosed rafter assemblies are permitted if all the conditions of CRC R806.5 are met; provide detail(s) and ICC approved report number for insulation.

I. RESIDENTIAL ENERGY EFFICIENCY REQUIREMENTS Part 6, Title 24

1. Show on the PLANS the following to facilitate review for compliance with energy conservation standards:
    a. True north angle with respect to exterior walls.
    b. On the cross sections, show insulation envelope, call out R-values of insulation for wall, roof, and floor (slab or raised floor) assemblies corresponding to the energy calculations.
    c. Provide details of radiant barrier installation. 24 CAC 151(f)1A
    d. On the floor plans, identify thermal mass materials, thickness and square footage corresponding to energy calculations.
    e. Submit completed thermal mass worksheet "for slab floor construction" / "for raised floor construction" to justify compliance with thermal mass requirements.
    f. Add Mandatory Measures Summary, MF-1R, to the plans.
    g. Form CF-1R, Certificate of Compliance for Residential, shall be completely filled out including the required signatures and shall be added to the drawing sheets. Loose sheet CF-1R is not acceptable. 24 CAC, Sec. 10-103
    h. HERS rating is required; the CF1R forms shall be registered. Provide registered CF1R forms.
2. Provide energy calculation showing compliance with prescriptive or performance method per Title 24 requirements.
3. The ADU requires independent heat. Provide energy calculation for the ADU showing compliance with prescriptive or performance method per Title 24 requirements. The ADU requires a separate Thermostat to regulate the temperature in that unit. CRC R303.9, CEnC.
4. Provide a window schedule that includes the following:
    a. The U-factor, SHGC coefficients, and rating agency (NFRC rating).
    b. The window schedule callouts shall coordinate with the nomenclature used in the energy calculations.
    c. The window schedule shall include this note: “Window labeling shall to remain in place on the window(s) until the pre-wrap inspection and shall match the factors and coefficients on the T24 energy calculations.”
5. Glazing area is not consistent with the energy calculations, verify and revise schedule.
6. Provide an electrical and lighting plan. The plan is to clearly show the lighting controls required based on the space and the lighting Mandatory Measures. CEnC 110.9
7. Show high efficacy luminaires in the kitchen, bathroom, garages, laundry room and utility room. CEnC 150(k)
8. Provide and locate a separate water heater for the Accessory Dwelling Unit (ADU).
9. Provide the specifications and input rating for the Instantaneous Water Heater.

10. The Instantaneous water heater with an input rating greater than 6.8 kBTU/hr (2kW) shall be have isolation valves on both the cold water supply and the hot water pipe leaving the water heater, and hose bibs or other fittings on each valve for flushing the water heater when the valves are closed. CEnC 150.0(n), 110.3(c)7

11. Quality Insulation Installation (QII) for the building envelope is required for this project since the proposed water heater being installed in association with the (new dwelling) / (addition) is less than or equal to 55 gallons and has an input of 105,000Bth/ hr or less. CEnC 150.1(c)8, 150.2(a)1.D

12. At the location of the Water Heater, provide and show all the following components on the plans CEnC 150.0(n):

    a. A 120V electrical receptacle within 3 feet from the water heater and accessible to the water heater with no obstructions; and

    b. A Category III or IV vent, or a Type B vent with straight pipe between the outside termination and the space where the water is installed; and

    c. A condensate drain that is 2 inches max. higher than the base on the installed water heater, and allows natural draining without a pump; and

    d. A gas supply line with a capacity of at least 200,000 Btu/hr.

13. For the (new dwelling) / (addition > 1000 sf.) / (ADU > 1000 sf.) provide the Whole Building Ventilation requirements. On the plans provide: the airflow rate (cfm), the location of the unit(s), the max. sound rating of 1 sone and include switch labeling requirements. 24 CAC. 150(o)

14. Project is in Climate Zone 16, provide detail of wall showing the Class I or II vapor retarder on the interior side. For the vapor retarder, provide the manufacturer information and the ICC approval number. CRC R702.7

15. Ducts inside condition space shall be insulated with R-4.2 and when in unconditioned space shall be insulated with R-6.

16. See the Energy Code Ace plan check correction sheet attached for further information.

J. GREEN BUILDING STANDARDS Part 11, Title 24

1. Provide the Green Building Code Mandatory Measures. Please download Handout B-57 from our website. The handout shall be completely filled out and added to the drawing sheets. Loose sheets of the handout are not acceptable.

2. 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. Include the Stormwater Quality Management Program BMP measures on the plans. See the SW-1 form and attach BMP's to plan. CALGreen 4.106.)

3. Newly constructed one- and two- family dwellings with attached private garages shall comply with the EV infrastructure requirements in accordance with the CALGreen. CRC R309.8, CALGreen 4.106.4

4. Electric vehicle supply equipment (EVSE) shall be installed in accordance with the California Electrical Code, Article 625 within new (one- family dwellings / two-family dwellings / townhouses) with attached private garages shall install a listed raceway to accommodate a dedicated 208/240-volt branch circuit. The raceway shall meet the following:

    a. Shall be a minimum trade size 1 (nominal 1-inch inside diameter) and,

    b. Shall originate at the main service or subpanel and shall terminate into a listed cabinet, box or other enclosure in close proximity to the proposed location of an EV charger and,

    c. Shall be continuous at enclosed, inaccessible or concealed areas and spaces. The raceway termination location shall be permanently and visibly marked as "EV CAPABLE".

5. Provide a separate branch circuit for-the-purpose-of charging electric vehicles. This circuit shall have no other outlets. CEC 210.17

6. 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. The service panel or subpanel circuit directory shall identify the overcurrent protective device space(s) reserved for future EV charging as "EV CAPABLE". CALGreen 4.106.4

K. CONSTRUCTION REQUIREMENTS

1. For the conversion of non-habitable space to habitable space, show the required exterior wall weather protection/barrier and a weatherproofing exterior finish. CRC R703.1

2. Specify (species) / (grade of framing lumber) / (strength of structural steel) / (strength of concrete) / (mortar) / (grout) / (grade of masonry units) / (grade of reinforcing steel). VCBC 107.1

3. Add the (CRC) / (CBC) Fastening Schedule to the plans. CRC Table R602.3(1), CBC Table 2304.10.1

4. Provide a complete cross-section of the framing at the location indicated. VCBC 107.1

5. Mark the location of full height cross sections on the floor, framing and foundation plans. VCBC 107.1

6. Draw roof/floor framing plans in 1/4"= 1' scale. Show rafter/floor joist size, spacing and extent, posts and beams, drag struts, connection detail reference, or model # of connectors, shearwalls and their lengths, etc., on the plan. VCBC 107.1

7. Shade/hatch areas on the roof framing plan where "California" framing occurs. VCBC 107.1

8. Cross-reference details on the framing cross sections and on the framing plans. VCBC 107.1

9. Indicate structural information such as rafter, beams, plywood, detail reference, etc. on all the full height cross sections to justify load path. VCBC 107.1

10. Delete all notes and details on the drawings that do not apply to this project. VCBC 107.1

11. Specify the size, spacing, direction, and extent of rafters and floor joists. VCBC 107.1

12. Call out size of hip and valley rafters. VCBC 107.1

13. Provide details showing supporting arrangements of hip and valley rafters. VCBC 107.1

14. _____ Rafters @ _____" o.c., are over-spanned at the location(s) indicated on the marked-up set of plans. CRC Table R802.5.1 (1 thru 8)

15. Indicate rafter tie size and spacing or design ridge as a beam. CRC R802.2

16. Design ridge as a beam where roof pitch is less than 3:12. Show location and size of supporting column(s). CRC R802.3

17. Show rafter ties immediately above ceiling joists and at max. 4 ft. o.c. where joists do not parallel rafters. CRC R802.3.1

18. Roof purlins shall not be smaller in size than the supported rafters. Purlin braces shall be sloped not less than 45° from the horizontal. CRC R802.5.1

19. _____(Roof) / (floor) beam is over-spanned at location(s) indicated. CRC Table R602.7(1,2,3)

20. Specify metal connectors between ridge beams, rafters, and supports. Provide construction details. VCBC 107.1

21. Show location and size of posts which support beam. Specify post-beam connectors. CRC 301.1, VCBC 107.1

22. Specify: Floor joists under and parallel to bearing partitions shall be doubled. CRC R502.4

23. _____Floor joists @____" o.c., are over-spanned at location(s) indicated. CRC Table R502.3.1(1,2)

24. Specify metal tie straps max. 4 ft. o.c. for connection of roof beams / rafters at ridge. CRC R802.3, CBC 2304.10.6

25. Show (beam to beam) / (beam to post) / (post to foundation) connections. Specify approved metal connectors or provide details. CRC R407.3, R502.6, CBC 2304.10.6

26. Specify required header size for all openings in walls. CRC R602.7

27. _____Header is over-spanned at location(s) indicated. CRC Tables R602.7.1

28. Foundation cripple walls shall be supported on a continuous foundation, framed of studs not smaller than above, and when it exceeds 4' in height, shall be braced and framed of studs required for an additional story. CRC R602.9, R602.10.11

29. Make under floor cripple walls as shearwalls to match the length and type of shearwall above per CRC R602.10.9

30. _____ Studs @ _____" o.c. should not exceed _____ in height. You may justify proposed height with structural calculations for axial load plus bending. CRC Table R602.3(5)

31. Provide 2 x 6 at 16" on center or 3 x 4 at 16" on center studs at the first story of three story building. CRC Table R602.3(5)

32. Provide truss layout plans, details, and calculations signed by engineer/architect. Check top and bottom chords for axial load plus bending. CRC R802.10

33. Engineer of record shall review and sign truss plans to affirm their correctness and consistency with his or her structural calculations. The engineer of record shall provide an adequate load path from the roof to the foundation and provide details illustrating how the vertical and horizontal truss reactions are resisted. VCBC 107.1

34. Provide braced walls to meet CRC R602.10. See areas circled in red on the floor plan. Specify the length of the braced wall, thickness of plywood, nailing schedule, holdowns, anchor bolt size and spacing. CRC R602.10

35. Indicate the length and type of (braced wall panels) / (shearwalls) on framing/foundation plans. For braced wall panels, indicate the bracing method used and justify the required lengths. VCBC 107.1, CRC R602.10

36. Specify thickness and span of (roof) / (floor) sheathing. NDS SDPWS 3.2.2, 3.2.3

37. Provide nailing schedule for plywood (roof) / (floor) sheathing. CRC Table R602.3(1), NDS SDPWS 3.2.2, 3.2.3

38. Provide chord splice detail for roof/floor diaphragms. NDS SDPWS 4.2.5

39. Provide drag strut connection detail/reference. Show location on the framing plans. NDS SDPWS 4.2.5

40. Horizontal and/or vertical _____diaphragm dimension ratio shall comply with NDS SDPWS 4.2.4.

41. Spacing of boundary nailing for floor diaphragm and sill nailing of wall above to 2X perimeter blocking shall be sufficient to avoid splitting the 2X material. Provide a detail showing suitable nailing pattern or use 3X blocking. CRC Table R602.3(1), NDS SDPWS Table 4.2A

42. Provide shear transfer details showing how forces are transferred from roof / floor diaphragms to shear walls and foundation, and refer to such details on the cross sections. Please download County Handout B-40 from our website noted on the front page for guidance. R602.10.8, CBC 2304.10.6

43. Interior shear walls shall extend to roof/floor diaphragm. Provide shear transfer detail/reference. VCBC 107

44. Provide (concrete) / (masonry) wall anchorage connection detail between roof/floor and the wall per ASCE 7 12.11. Such anchorage connection shall provide a direct and positive connection to resist horizontal forces.

45. Show holdowns on the framing plans and provide a detail showing connection of upper and lower story shear walls. CRC 301.1, CBC 2304.10.6, VCBC 107.

46. Provide construction details for balcony railings, guard- rails and handrail post-base connections in compliance with the lateral load of 200# in any direction at any point. If glazing is used in the assembly, a safety factor of 4 must be included. CRC Table R301.5.

47. Wood structural members exposed to weather and supporting moisture permeable roofs or floors, shall be naturally durable or preservative treated wood. CRC R317.1

48. Provide full height structural cross section of fireplace to show compliance with CRC Chapter 10 or attach County Handout B-10 to the plans, or callout ICC research report number for factory built fireplaces on the plans. Please download this handout from our website.

49. Glazing within a (24" arc of the doorway) / (glazing within 18" of floor) / (glazing in shower and bathtub doors and enclosures) shall be tempered. CRC R308.4

50. Glazing in doors shall be tempered. CRC R308.4.1

51. Glazing in railing regardless of height above a walking surface shall be tempered. CRC R308.4.4

52. Provide structural details and calculations for glass-enclosed greenhouse/solarium. Design for wind, seismic and dead loads per CBC 1604.4, 2404.

53. Call out size and spacing of veneer ties and joint reinforcement for anchored veneer per CRC R703.8.

54. Provide construction detail of glass block masonry. CRC R607

L. FOUNDATION

1. The Soil Engineer shall provide recommendations and design parameters for (retaining wall) / (piles) / (caissons) / (helical anchors).

2. Piers are permitted for single floor loads only when expansion index is ≤ 50. Redesign. VCBC Table 1809.7

3. Refer to soil report and to VCBC Table 1809.7. Redesign foundation to meet requirements associated with the soil expansion index for this site.

4. Design foundation for expansive index range of 91-130 and foundation bearing pressure = 1,500 PSF. Revise.

5. Welded wire mesh is not permitted in the slab on grade. VCBC Sec.1803 and Table 1809.7. Revise.

6. Provide dowels: #3 @ 24" o.c. in exterior footing; bend 3' into slab. VCBC Table 1809.7.

7. Soil engineer shall provide recommendations for post tensioning slab system. Recommendations shall include but not limited to, allowable interior and exterior spans for slab design. Such allowable spans shall be justified according to expansiveness of the soil due to lateral migration of rainwater under the slab.

8. Engineer who prepared the post-tension design calculations shall also provide actual loads at bearing walls, posts, and holdowns.

9. Redesign the foundation to comply with recommendations of the soil report. VCBC 1803

10. Design of the cast-in-place concrete piles, caissons and pile caps in compliance with CBC 1810 to be provided by engineer.

11. Provide the Manufacturer information and the ICC / IAPMO approval number for the helical anchors. Meet the requirements of the approved report.

12. Provide pile analysis and construction details per CBC 1810 by a California licensed engineer.

13. Show location, size, and reinforcement of column footings. CBC 1801.2

14. Show location (dimensioned) of hold-downs/steel straps/post anchors on the foundation plan. VCBC 107.1

15. Add this note to foundation plans: "All holdowns and anchor bolts at (Braced Wall Panels) / (Shearwalls) shall be set in place by template prior to foundation inspection."

16. Indicate size and spacing of anchor bolts for (Braced Wall Panels) / (Shearwalls) on the foundation plan. Reference to (Braced Wall Panel) / (Shearwall) schedule is not acceptable. VCBC 107.1

17. Fasteners, connectors, including nuts and washers in contact with preservative-treated wood shall be either hot-dipped zinc-coated galvanized steel, stainless steel, silicone bronze or copper. The exception is when the lumber is SBX/DOT and zinc borate preservative-treated wood that is in an interior, dry environment. CBC 2304.10.5

18. Provide approved waterproofing material on the exterior surface of foundation retaining walls. Call out ICC research report number. CRC R406

19. For habitable areas / rooms, provide a vapor retarder (6 mil minimum) between the concrete slab and the base course or subgrade. CRC R506.2.3

20. Add this note to the plans: “Drilled in expansion bolt anchors shall be tested by an independent testing laboratory to a minimum of 1,000 pounds or to twice the allowable design value for the same size bolt, whichever is greater. Frequency of testing shall be: one to five bolts per site - two bolts shall be tested and certified. More than five bolts - 25 percent of such bolts shall be selected at random to be tested and certified. Failing bolts shall be reinstalled and retested to the same criteria.” VCBC 1613.7

M. STRUCTURAL DESIGN REQUIREMENTS

1. Wood frame buildings not conforming to conventional construction shall have the structural framing system designed by a CA Licensed Engineer to resist both vertical and lateral forces. Provide calculations and structural details. CRC R301.1.3. Plans must be prepared by a licensed architect or registered engineer. Sec. 6737.1(b), California Business and Professions Code.

2. The complexity of the proposed structure necessitates design analysis and submittal of structural calculations for horizontal and vertical loads. CRC 301.1.3

3. The structure is more than two stories and a basement OR the structure is constructed of materials other than wood. Provide structural calculations, plans, and details prepared, signed and stamped by a licensed architect or registered engineer. Sec. 6737.1(b), California Business and Professions Code. CRC R301.1.3.2, R301.1.3.3

4. Provide a complete Seismic Analysis and design for the project to meet the current Building Code. The change of use from a _____ to a _____ results in the structure being reclassified to a higher Risk Category. Ca Existing Bldg Code 407.4.

5. Provide the Statement of Special Inspections prepared by the registered design professional in responsible charge which include but not limited to listing of materials, components, and work requiring Special Inspection. Include the type and extent of each special inspection and/or test and indicate whether the special inspection is continuous or periodic. (CBC 1704.3 and 1704.3.1)

6. Add this note to the plans: "All structural welding shall be done in an approved fabricating shop. In absence of an approved fabricating shop, structural welding shall be done under the supervision of a Certified Special Inspector." CBC 1704.2.5

7. Add to the plans statement of required special inspections prepared by the Engineer of Record per CBC 1704.3.

8. Provide a special inspection program on the plans, "Special inspection is required per CBC 1705 for the following:" Include the appropriate “Required Special Inspection and Tests Table," on the plans.

    a. Concrete of $f'c$ over 2500 psi (Table 1705.3)

    b. Shotcrete (Table 1705.3)

    c. Post-tension concrete (Table 1705.3)

    d. Masonry construction (Section 1705.4. See TMS 402/ACI 530 and TMS 602/ACI 530.1)

    e. Structural steel including cantilever column systems, struts, collectors, chords (for multi-family, non-residential bldgs, and Irregular 1- or 2-family dwellings). Provide quality assurance inspections to meet AISC 360 and AISC 341. (CBC 1705.2.1 and 1705.12.1)

    f. Cold-formed steel deck, Open-Web Steel Joists and Girders (Table 1705.2.3)

    g. Soil: Fill placement (Table 1705.6)

Special Inspection correction cont'd:

h. Field welding and/or high-strength bolting (Section 1705.2.1)

i. Piles/Caissons/Helical Piles (Tables 1705.7 and 1705.8)

j. Structural wood for (multi-family) / (non-residential bldgs.) / (Irregular 1- or 2-family dwellings): Seismic Force Resisting System (shearwalls, diaphragms, drag struts, braces, hold downs) shearwalls and diaphragms with nailing 6"o.c. is exempt

k. Storage racks 8' or greater in height (CBC 1705.12.7)

l. Post-installed anchors (CBC 1705.1.1)

m. Cold-formed steel light-frame construction with seismic force-resisting systems other than those using APA rated sheathing with fasteners at 6"o.c. (CBC1705.12.3)

n. Anchorage of electrical equipment for emergency and standby power (CBC 1705.12.6)

o. Anchorage of other electrical equipment in structures assigned to SDC E or F (CBC 1705.12.6)

p. Other:_____

9. Provide structural observation program in the following format and sequence per CBC 1704.6. It is desirable to have this program on the front sheet of structural drawings.
   a. Write **heading** "Structural Observation Program".
   b. **Add this note:** "The owner shall employ the Engineer or Architect registered/licensed in State of California who is responsible for the structural design to do structural observation".
   c. **Name:** Write the name, reg./lic. # of Engineer or Architect responsible for structural design.
   d. **Designated name:** Write the name, reg./lic. # of the Engineer or Architect designated by the Engineer or Architect of Record to do structural observation.
   e. **Add This Note:** "The Engineer or Architect responsible for the Structural Observation, the Contractor, and appropriate Subcontractors shall hold a pre-construction meeting to review the details of the structural system to be structurally observed."
   f. **Foundation:** List the structural elements to be observed prior to placement of concrete in the foundation. If portions of structural elements are to be observed in two or three construction stages, identify clearly the structural elements to be observed at each stage.
   g. **Floor:** List the structural elements of floor framing to be observed prior to covering the roof.
   h. **Roof:** List the structural elements of roof framing to be observed prior to covering the roof.
   i. **Exterior Framing prior to prewrap:** List the exterior structural elements to be observed prior to weather-protecting the building.
   j. **Final Observation:** List the structural to be observed at the final visit for the complete structural system.
   k. **Reports:** Engineer of record or the designated engineer shall submit reports to this office on the prescribed form.
10. Check the Moment Frame for the load combinations of CBC 1605, AISC 341-10.
11. Design the Moment Frame per AISC 341-10.
12. Computer results for the Moment Frame(s) as received is difficult to follow. Revise the printout to indicate the following:
    a. Loading diagrams for each load case.
    b. Bending, shear and deflection diagrams, for the governing load combination.
    c. Vertical and horizontal reactions for each load combination.
    d. Actual stresses in each structural element.
    e. Axial plus bending (unity check) for column.
    f. Check the story drift per ASCE 7 12.12
13. Computer results for _____ as received is difficult to follow. Revise the printout to indicate the following:
    a. Loading diagrams for each load case.
    b. Bending, shear and deflection diagrams for the governing load combination.
    c. Vertical and horizontal reactions for each load combination.
    d. Actual stresses in each structural element.
    e. Axial plus bending (unity check) for column.
    f. Check the story drift per ASCE 7 12.12

14. Irregular structures shall be designed for lateral forces as specified in CRC R301.2.2.2.5, CBC 1604.4, CBC 2308.12.6. Distribute lateral loads per CBC 1613

15. Design the bases (plates and anchors) for the columns of the Moment Frame or other Seismic Load Resisting System per AISC 341-10 Sec D2.6.

16. Design the base plates for the columns that are NOT part of the Seismic Load Resisting System per CBC 1605, AISC 341-10

17. Design the base plate anchors for the columns that are NOT part of the Seismic Load Resisting System per AISC 360.

18. Design steel column and footing in compliance with CBC 1604.4, 1808, ASCE 7 12.13

19. Design the attachments to concrete: (cast in place anchors) / (post Installed anchors) / (hold-downs) to meet the requirements of ACI 318 Chapter 17. The loads shall be a strength level.

20. Design underfloor cripple walls as shearwalls per CBC 1604, 2304.10

21. Include redundancy factor in each Seismic Force Resisting System design at each story per CBC ASCE 7 12.3.4.

22. Design the cantilever column for resisting seismic forces per AISC 341 E5. Include over strength. Revise calculations.

23. Design the foundation supporting the cantilever column that is resisting seismic forces per ASCE 7 12.2.5.2. Revise calculations.

24. Since the upper story shearwalls are not continuous to the lower story, design lateral resistive elements for special seismic load combination as specified in ASCE 7 12.3.3.3. Where beams or columns occur under the shearwalls, they (and their connections) shall be designed for load combinations that include the "Ω_o" factor.

25. Design retaining wall for overturning and sliding for a factor of safety of at least 1.5 per CBC 1807.2.3

26. The Geotechnical Engineer shall provide dynamic seismic lateral earth pressures on the foundation walls and retaining wall supporting more than 6 feet of soil / backfill. CBC 1803.5.12

27. Revise the retaining wall design to include the requirements of CBC 1807.2.1 due to the inclusion of a key.

28. (Computer printout) / (Hand Calculation) for the retaining wall design is difficult to follow. Revise to indicate the following:
    a. Equivalent fluid pressure.
    b. Any building axial load, surcharge due to building setback and/or surcharge due to vehicle parking.
    c. Actual bearing pressure at heel and toe.
    d. Minimum factor of safety = 1.5 for overturning and sliding.
    e. Value of n (Es/Em) used in the calculations.
    f. Actual flexural stresses in masonry and steel.
    g. Actual bond stress.
    h. Special inspection "yes" or "no".

29. Submit structural design and details for retaining walls over 3 feet high or with surcharge. CRC R404.1

30. Check basement retaining walls for axial plus bending stresses. CRC R404.1

31. Separate permit is required for detached retaining walls. Contact permit processing staff.

32. Provide concrete/masonry wall anchorage connection details between roof/floor and the wall per ASCE 7 12.11. Provide supporting calculations. The anchorage connection shall provide a direct and positive connection to resist horizontal forces.

33. Submit structural design and details for fences or garden walls over 6 feet in height. VCBC 105.2

34. Design uninhabitable residential attic storage use area for 20 psf. CRC R301.5.

35. Provide a layout of rafters, joists, beams, posts, and shear resistive elements. Label the structural elements shown on the layout corresponding to calculations. VCBC 107.1

36. Sill plate size and anchorage in seismic design category D1, D2, and E shall have 3"x3"x0.229" washers. CRC 602.11.1 CBC 2308.3

37. The architect / engineer who prepared the calculations shall review and sign the plans to affirm their correctness and consistency with the calculations. VCBC 107.1

38. The new telecommunications tower is considered to be a "Class III Structure" subject to an importance factor of 1.5. Revise calculations / design. VCBC 3108

N. REQUIREMENTS BY OTHER AGENCIES

1. Obtain clearances approvals indicated on the attached Checklist.
2. Obtain a grading permit from the Public Works Development Services Division. CBC Appendix J
3. The soil report must to be reviewed and approved by Public Works Development Services Division. Please submit the soil report to Public Works for review. Comments or additional requirements, if any, will follow separately. VCBC 107.1
4. Change drawings to comply with Public Works Development Services Division requirements. Refer to comments attached to this letter.
5. Add the following notes to the plans: “The existing fire sprinkler system shall be extended into the addition.” VCFC Ord. 30
6. Add the following notes to the plans. VCFC Ord. 30
    a. The address shall be visible and legible from the street or frontage road.
    b. The address numbers shall be of minimum of four inches (4") in height.
    c. The address numbers shall be of contrasting color to their background (brass or gold numbers shall not be posted. (Address numbers on curbs are not acceptable).
    d. Permanent address numbers shall be provided on the mailbox or on a permanent sign or post adjacent to the driveway entrance of a flag lot.

O. FLOOD HAZARD AREAS

1. On the Site Plan and Elevation sheets, provide a Notes header that reads “FLOOD PLAIN CONSTRUCTION REQUIREMENTS”
2. Provide the design flood elevation for this project on the Site plan and elevations under the “FLOOD PLAIN CONSTRUCTION REQUIREMENTS” header. Contact the Public Works Agency Permitting for more information on establishment of the design flood elevation. VCBC 107.1
3. The site plan shall show the proposed finished grades, flood hazard areas, floodways, and design flood elevations. CRC R322
4. Provide the following note under “FLOOD PLAIN CONSTRUCTION REQUIREMENTS” header, “Upon placement of the lowest floor, including basement, and prior to further vertical construction, provide documentation of the elevation of the lowest floor, including basement, prepared and sealed by a registered design professional,” VCBC110.3.3
5. The scope of work (conversion of a garage to an ADU) / (conversion of a barn to an ADU) / (addition:_____) or (other: _____) constitutes a substantial improvement of existing structure and shall comply with the flood design requirements for new construction and all aspects of the existing structure shall also be brought into compliance with the requirements for new construction.
6. ASCE 24 is permitted to be used as an alternative to the Flood-resistant construction requirements of the CRC. CRC R322.1.1
7. The garage floor shall be built at or above the design flood elevation unless it is at or above grade on at least one side, and complies with CRC Section R322.2.2. CRC R309.3
8. All structural systems of all buildings and structures shall be designed, connected and anchored to resist flotation, collapse or permanent lateral movement due to structural loads and stresses from flooding equal to the design flood elevation. CRC R322.1.2
9. Add the following note under the “FLOOD PLAIN CONSTRUCTION REQUIREMENTS” header: All electrical, mechanical and plumbing systems shall be located at or above the flood elevation.” CRC R322.1.6
10. Add the following note under the “FLOOD PLAIN CONSTRUCTION REQUIREMENTS” header: “The sanitary sewage systems shall be designed to minimize or eliminate infiltration of floodwater into sanitary drainage systems and discharges from sanitary drainage systems into floodwaters.” CRC R322.1.7
11. Building materials used below the design flood elevations shall be flood resistant materials. CRC R322.1.8
12. The walls enclosing the under-floor space shall be provided with flood openings in accordance with R322.2.2 and the finished ground level of the under-floor space shall be equal to or higher than the outside finished ground level. CRC R408.7
13. Electrical systems, equipment and components; heating, ventilating, air condition; plumbing appliances and plumbing fixtures; duct systems; and other service equipment shall be located at or above the design flood elevation. CRC R322.1.6
14. In flood hazard areas, other than Coastal A Zones, the lowest floor shall be elevated to or above the design flood elevation. CRC R322.2.1 (1)

15. In Coastal A Zones flood hazard area, the lowest floor shall be elevated to or above the base flood elevation plus one foot, or to the design flood elevation, whichever is higher. CRC R322.2.1 (2)

16. In flood hazard areas designated as AO Zones, the lowest floor (including the basement) shall be elevated above the highest adjacent by the depth number specified on the FIRM or at least 2 ft. CRC R322.2.1 (3)

17. Basement floors that are below grade on all sides shall be elevated to or above the design flood elevation. CRC R322.2.1 (4)

18. Enclosed areas and crawl spaces below the design flood elevation shall be used solely for vehicle parking, building access, or storage and shall be provided with flood openings. CRC R322.2.2

19. In coastal high hazard areas, meet the elevation requirements of R322.3.2 for all structural members supporting the lowest floor.

20. Basements that are below grade on all sides are prohibited in coastal high hazard areas. CRC R322.3.2 (2)

21. Buildings and structures in coastal high hazard areas shall be supported on pilings. CRC R322.3.3

22. Walls and partitions located below the elevated floor in areas designated as coastal high hazard shall meet the requirements of CRC R322.3.4

ADDITIONAL COMMENTS AND CORRECTIONS

ADDITIONAL COMMENTS AND CORRECTIONS (Continued)

This plan review will expire on _____, 360 days from date of application. An extension may be granted for good cause, upon written application to the Division of Building and Safety prior to expiration of plan review. No extension may be granted until a new zone clearance is obtained for the project and (if applicable), a re-approval of the private sewage disposal system has been obtained from the Environmental Health Division.

Plans Checked By _____ Date _____
(First Review)

Plans Checked By _____ Date _____
(Second Review)

Plans Checked By _____ Date _____
(Third Review)

Plans Checked By _____ Date _____
(Final)

DIVISION OF BUILDING AND SAFETY OFFICES

Ventura County Government Center	(805) 654-2771	East County	(805) 582-8064
800 So. Victoria Avenue, Ventura, CA 93009	Mon. - Fri.	3855-F Alamo Street, Room #2019A	Mon. - Fri.
Plan Review Information	7:30 - 5:00	Simi Valley, CA 93065	
Plan Check Staff	7:30 - 12:00	Plan Review Information	7:30 - 5:00
		Plan Check Staff	7:30 - 12:00