October 27, 2016

California Building Standards Commission
2525 Natomas Park Drive, Suite 130
Sacramento, CA 95833

Re: Ordinance filing for adoption of the 2016 California Building Standards Code

The City of Ventura adopted local amendments to the 2016 California Building Standards Code, Title 24 of the California Code of Regulations. Enclosed are Attachment A: Finding of Local Conditions, Attachment B: Summary of Proposed Amendments, and a certified copy of each of the following signed Ordinances:

- Ordinance 2016-09 California Building Code
- Ordinance 2016-10 California Plumbing Code
- Ordinance 2016-11 California Mechanical Code
- Ordinance 2016-12 California Electrical Code
- Ordinance 2016-13 California Residential Code
- Ordinance 2016-14 California Existing Building Code
- Ordinance 2016-15 California Fire Code

Thank you for reviewing and responding to this submission on behalf of the City of Ventura.

Sincerely,

Yolanda Bundy, Chief Building Official
City of Ventura Building and Safety Division
Community Development Department
501 Poli Street, P.O. Box 99
Ventura, CA 93002-0099
ORDINANCE NO. 2016-009


The City Council of the City of San Buenaventura does ordain as follows:

SECTION 1: San Buenaventura Ordinance No. 2013-014 is hereby repealed.

SECTION 2: FINDINGS. The City Council finds that certain local climatic, geological, or topographical conditions exist as follows:

A. Climatic. The City experiences periods of high temperatures accompanied by low humidity and high winds each year. These conditions could create an environment in which the fire department may have great difficulty in controlling fires occurring in hillside brush areas as well as structures not having built-in fire protection. The City also experiences periods of intense rainfall, which create the need for special drainage precautions.

B. Geological. The City is located in an area with expansive soils and includes hillsides that are subject to mudflows and unstable conditions. Special foundation considerations and soils analyses requirements must be in place to provide a reasonable degree of structural integrity for buildings constructed in these areas. Several earthquake faults run through the City that, when active, will impose unique lateral loads on structures in the City. Special lateral structural design criteria are needed to resist these lateral loads imposed by active earthquake faults in the City.

C. Topographical. The City has hillside and flat land developments that require special drainage precautions. Structures would be subject to water damage without special requirements addressing site drainage.

D. After due consideration, the City Council finds and determines that these local climatic, geological, and topographical conditions make modifications and changes to the 2016 Edition of the California Building Code reasonably necessary to provide sufficient and effective protection of life, health, and property.

SECTION 3: Chapter 12.115 of Division 12 of the San Buenaventura Municipal Code ("SBMC") is amended in its entirety to read as follows:

Chapter 12.115 Building Standards

Pursuant to California Government Code sections 50022.1 to 50022.8, inclusive, Part 2 of Title 24 of the California Code of Regulations, known as the California Building Code, 2016 Edition ("CBC"), including all standard printed Chapters and Sections (whether adopted by the State matrix or not), is adopted by reference subject to the amendments, additions, and deletions set forth in this Chapter. The CBC will apply to all occupancies identified by this code. One true copy of the CBC is on file in the Offices of the City Clerk and Building Official and is available for public inspection as required by law.

Section 12.115.020. Amendments.

A. The City Council finds that certain local climatic, geological, and/or topographical conditions exist as follows:

1. Climatic. The City experiences periods of high temperatures accompanied by low humidity and high winds each year. These conditions could create an environment in which the fire department may have great difficulty in controlling fires occurring in hillside brush areas as well as structures not having built-in fire protection. The City also experiences periods of intense rainfall, which create the need for special drainage precautions.

2. Geological. The City is located in an area with expansive soils and includes hillsides that are subject to mudflows and unstable conditions. Special foundation considerations and soils analyses requirements must be in place to provide a reasonable degree of structural integrity for buildings constructed in these areas. Several earthquake faults run through the City that, when active, will impose unique lateral loads on structures in the City. Special lateral structural design criteria are needed to resist these lateral loads imposed by active earthquake faults in the City.

3. Topographical. The City has hillside and flat land developments that require special drainage precautions. Structures would be subject to water damage without special requirements addressing site drainage.

B. After due consideration, the City Council finds and determines that these local climatic, geological, and topographical conditions make modifications and changes to the CBC reasonably necessary to provide sufficient and effective protection of life, health, and property. The CBC is therefore modified, amended, added to, and changed as set forth below:

1. Section 101.4.8 is added to read as follows:
101.4.8 Post Damage Assessment. This section establishes standard placards to be used to indicate the condition of a structure for continued occupancy. The section further authorizes the Building Official and his/her authorized representatives to post the appropriate placard at each entry point to a building or structure upon completion of a safety assessment.

101.4.8.1 Application of Provisions. The provisions of this chapter are applicable to all buildings and structures of all occupancies regulated by the City of San Buenaventura. The City Council may extend the provisions as necessary.

101.4.8.2 Definition. Safety assessment is a visual, non-destructive examination of a building or structure for purposes of determining the condition for continued use or occupancy.

101.4.8.3 Placards. The following are verbal descriptions of the official placards to be used to designate the condition for continued occupancy of buildings or structures.

INSPECTED (Green) - Lawful Occupancy Permitted is to be posted on any building or structure wherein no apparent structural hazard has been found. This placard is not intended to mean that there is no damage to the building or structure.

RESTRICTED USE (Yellow) - is to be posted on each building or structure that has been damaged wherein the damage has resulted in some form of restriction to the continued occupancy. The individual who posts this placard will note in general terms the type of damage encountered and will clearly and concisely note the restrictions on continued occupancy.

UNSAFE (Red) - Do Not Enter or Occupy is to be posted on each building or structure that has been damaged such that continued occupancy poses a threat to life safety. Buildings or structures posted with this placard shall not be entered under any circumstance except as authorized in writing by the Building Official, or his/her authorized representative. Safety assessment teams shall be authorized to enter these buildings at any time. This placard is not to be used or considered as a demolition order.

The placard must note in general terms the type of damage encountered, the Municipal Code section violated and the following text: The City of Ventura, 501 Poli St, Room 117, Ventura, CA 93001 (805) 654-7869.

Once it has been attached to a building or structure, a placard is not to be removed, altered or covered until done so by an authorized representative of the Building Official. It shall be unlawful for any person, firm or
corporation to alter, remove, cover or deface a placard unless authorized pursuant to this section.

2. Section 104.5 is replaced in its entirety to read as follows:

104.5 Identification. The building officials shall wear official, City issued, photo identification at all times when serving the public.

3. Section 105.2 Item 1 is replaced in its entirety to read as follows:

1. Detached Sheds. A single, one-story, detached accessory structure used as a tool or light storage shed, playhouse, and similar uses, provided the floor area is not greater than 120 square feet, and that said structure is not taller than 8'6" in maximum height measured from grade (grade is defined as the lowest point within 5'0" of the perimeter of a structure), and is located on a residential lot R-3 Occupancy only, has no electrical, plumbing or mechanical equipment and in which the structure does not obstruct or divert the flow of rain water from one property to another. Only one detached shed per parcel; located in rear yard only and 5'0" from any existing building; eaves projections shall not exceed 16" nor extend over the property line.

4. Section 105.2 Item 2 is amended to read as follows:

2. 105.2 Fences not over 6 feet.

5. Section 105.2 Item 12 is replaced in its entirety to read as follows:

12. Window and Door Awnings. Window and door awnings in group R-3 and U occupancies, supported by an exterior wall that does not project more than 54 inches (1372 mm) from the exterior wall and that do not require additional support. Door awnings are to be lightweight construction (i.e., not to exceed 5 lbs. per sq. ft.). Required fire separation distance from property line to be maintained (min. 5 ft. from property line).

6. Section 105.3 Item 8 is added to read as follows:

8. Have obtained Planning Division approval to apply for a building permit.

7. Section 105.3 Item 9 is added to read as follows:

9. To ensure that adequate resources are available to correct errors in workmanship that affect adjacent units, buildings with more than 2 dwelling units and all non-residential buildings must have the permit issued to a State licensed contractor.
8. Section 105.3 Item 10 is added to read as follows:

10. Have paid all applicable application, plan check and/or permit fees as set forth in the City's most current User Fee resolution.

9. Section 109.2 is replaced in its entirety to read as follows:

Section 109.2. Schedule of Permit Fees. Fees shall be established, become effective and be applied to applications, plan checks and permits as approved by City Council resolution or ordinance.

10. Section 109.6 is amended to read as follows:

Section 109.6. Fee Refunds. The Building Official may authorize refunding of a fee paid hereunder which was erroneously paid or collected.

The Building Official may authorize refunding of not more than 80 percent of the building permit fee when no work has been done under a permit issued in accordance with this code.

The Building Official may authorize refunding of not more than 80 percent of the Plan Check Deposit fee paid when an application for a permit for which a plan check deposit has been paid is withdrawn or cancelled before any examination time has been expended.

The Building Official shall not authorize the refunding of any fee paid, except upon written application filed by the original permittee not later than 180 days after the date of the fee payment.

11. Section 111.1 Exception #2 is added to read as follows:

Exception: A signed City permit job card will serve as the Certificate of Occupancy for residential and residential accessory buildings of 2 units or less.

12. Section 113 is replaced in its entirety to read as follows:

Section 113 Local / Housing Appeals Board. A Local / Housing Appeals Board (also identified as "Board" or "Board of Appeals") is established to hear and decide appeals of orders, decisions, or determinations made by the Building Official or Fire Marshal relative to the application and interpretation of the building requirements of the city. The Board will consist of seven members who will be appointed by the City Council. In addition, the Building Official, or his or her designee, will be an ex-officio member and will act as secretary to the Board. Five of the voting members
will constitute a quorum; the ex-officio member will have no vote. Each of the voting members will be qualified by experience and training to consider matters pertaining to construction regulations and each will be an actual resident of the City during his/her incumbency. Whenever possible, the Board will be composed of members representing the following specialties: General Contractor, Licensed Professional Engineer, Licensed Architect, Handicapped Accessibility Advocate, Planning/Zoning Professional, Licensed Real Estate Professional. If a Board member ceases at any time to be an actual resident of the City, the office held by that member will be deemed vacant. Of the members of the Board first appointed, three will be appointed for initial terms of four years. Their successors will be appointed for terms of four years. Each member will serve until his or her successor is appointed. The Board will adopt reasonable rules and regulations for conducting its business and will render all decisions and findings in writing to the appellant with a copy to the Building Official. The Board may recommend to the City Council such new legislation as it may deem appropriate. The Local Housing Appeals Board will serve as the appellate board or body whenever any of the codes adopted by reference provide for the same. The Local Housing Appeals Board will also act as the Appeals Board for the Earthquake Hazard Reduction Ordinance. Appeals to the Board will be processed in accordance with administrative policies and on application forms provided by the Building Official. A fee established by City Council resolution will accompany an application for a hearing before the Board. Copies of any rules and regulations adopted by the Board will be delivered to the Building Official, who will make them freely accessible to the public. The Board will have no authority relative to interpretation of the administrative provisions of this Code nor will the Board be empowered to waive requirements of this Code or the technical codes.

113.1. Appeal to City Council.

A. Local Housing Appeals Board action. An application for appeal to the City Council may be filed by the applicant or an aggrieved person, as defined in Chapter 24.110, affected by a decision of the Local Housing Appeals Board, provided that the appeal is filed in writing within thirty days after the Board publishes a final decision. Notwithstanding the definition of an aggrieved person in Chapter 24.110, any member of the City Council may also be considered an aggrieved person affected by such a determination for purposes of this section. In addition, the City Council may on its own motion, within thirty days after the final decision, or at its next regular meeting for which Brown Act agenda requirements can be satisfied,
whichever is later, elect to review and consider any action of the Local/Housing Appeals Board.

B. Application for appeal. An application for appeal required by this section shall be filed by the appellant with the City Clerk and shall clearly state the grounds of appeal and the action which appellant requests the City Council to take. If the challenged decision consists of one or more actions based on particular findings or conditions that the appellant believes were erroneously or improperly included or omitted, the appeal shall specify which findings or conditions were erroneous or improper or which findings or conditions should additionally be imposed. Notwithstanding any provision of this section to the contrary, no application for appeal need be filed by the City Council, or any member or representative thereof, when the city council elects, by majority vote on its own motion, to review and consider an action pursuant to subsection A. of this section.

113.2 Action by City Council.

A. Hearing date. The City Manager or City Clerk shall fix the time for hearing the appeal.

B. Notice. The City Clerk shall notice the hearing before the City Council as required by chapter 24.560

C. Record on appeal. All materials on file with the director shall be part of the City Council hearing record. In addition, any party may offer supplemental evidence during the appeal hearing.

D. De novo review. The City Council is not limited to consideration of the material in the record on appeal. The City Council may review any matter or evidence relating to the action on the application regardless of the specific issue appealed.

E. Actions. The City Council may:

1. Continue action on the appeal for a period of time deemed appropriate by the City Council;

2. Sustain the Local / Housing Appeals Board action upon finding that all applicable findings have been correctly made and all provisions of local ordinance, or other provisions of law, are complied with;

3. Sustain the Local / Housing Appeals Board action but require whatever additional conditions or guarantees as it may deem necessary or desirable to further the purposes of local ordinance or comply with other provisions of law;

4. Overrule the Local / Housing Appeals Board, action without prejudice upon a finding that all applicable findings have not been correctly made or all provisions of local ordinance are
not complied with but that, in either case, the application has merit and may possibly be modified to comply with local ordinance or other provisions of law;

5. Overrule the Local / Housing Appeals Board action upon finding that all required findings have not been correctly made or all provisions of local ordinance, or other provisions of law, are not complied with; or

6. Take such other action as may be necessary or desirable to further the purposes of local ordinance or other provisions of law.

F. Vote required. A simple majority of the City Council members voting shall be required to sustain, overrule, or modify a decision by the Local / Housing Appeals Board which is appealed, or to grant an appealed application where the Local / Housing Appeals Board has failed to act within the time allowed pursuant to local ordinance.

G. Effective date. A decision of the City Council sustaining, overruling or modifying any decision, determination or requirement of the Local / Housing Appeals Board shall be final and conclusive upon the rendering of the decision unless otherwise provided by the city council in rules of procedure or elsewhere.

H. Effect of denial without prejudice. A decision that has been denied without prejudice on appeal may be refiled at any time but must be accompanied by the prescribed filing fee.

113.3 Hearing transcript not required.

No provision of this Code shall be construed to require the keeping of a verbatim hearing transcript except as may be required by state law.

13. Section 114.5 is added to read as follows:

114.5 Notice of Non-Compliance. Whenever the Building Official determines that work has been done without the required permit, or has not been completed in accordance with the requirements of this Code, the Building Official may record a Notice of Noncompliance with the office of the County Recorder and shall notify the owner of the property of such action. The Notice of Noncompliance shall describe the property, shall set forth the noncomplying conditions, and shall state that the property owner has been so notified.

The Building Official shall submit a Notice of Compliance to the County Recorder when it is determined that noncomplying conditions have been corrected or removed. A fee as set forth in the City User Fees Resolution
will be charged to the property owner for submittal of a Notice of Compliance.

14. Section 116 is replaced in its entirety to read as follows:

116 Unsafe Structures and Equipment. Unsafe structures and equipment are regulated by the 2012 International Property Maintenance Code as adopted, and amended from time to time, by the City of San Buenaventura.

15. Section 701A.3.1 is amended to read as follows:

Section 701A.3.1 Application date and when required. New buildings for which an application for a building permit is submitted on or after July 1, 2008 located in any Fire Hazard Severity Zone or Wildland Interface Fire Area shall comply with all sections of this chapter, including all of the following areas:

1. All unincorporated lands designated by the State Board of Forestry and Fire Protection as State Responsibility Area (SRA) including:
   1.1. Moderate Fire Hazard Severity Zones
   1.2. High Fire Hazard Severity Zones
   1.3. Very-High Fire Hazard Severity Zones

2. Land designated as High or Very-High Fire Hazard Severity Zone by the Office of State Fire Marshal pursuant to California Public Resources Code 4201 – 4204.

16. Section 808.1.1.1 is amended to read as follows:

Section 808.1.1.1 Suspended acoustical ceilings. Suspended acoustical ceilings shall be designed in accordance with ASCE-7-10 Section 13.5.6.

17. Section 808.1.1.1.1 is added to read as follows:

Sec. 808.1.1.1.1 Thermo-Tile Molded Polystyrene Ceiling Tiles and Ceiling Panels. Thermo-Tile Molded Polystyrene Ceiling Tiles and Ceiling Panels shall not be installed in buildings and/or rooms where an automatic fire sprinkler system is installed.

18. Section 903.2 is amended to read as follows:
Section 903.2 Where required. Approved automatic sprinkler systems in new buildings and structures shall be provided in the locations described in Sections 903.2.1 through 903.2.12 and locally adopted Appendix P of the California Fire Code.

19. Section 903.3.5 is amended to read as follows:

Section 903.3.5 Water supplies. Water supplies for automatic sprinkler systems shall comply with this section and the standards referenced in Section 903.3.1. The potable water supply shall be protected against backflow in accordance with Health and Safety Code Section 13114.7. For connections to public waterworks systems, the water supply test used for design of fire protection systems shall be adjusted by 5 psi or 10%, whichever is greater, to account for seasonal and daily pressure fluctuations.

20. Section 903.3.8 is amended to read as follows:

Section 903.3.8. Limited area sprinkler systems. Limited area sprinkler systems shall not be allowed.

21. Section 903.4 is amended to read as follows:

Section 903.4 Sprinkler system supervision and alarms. Valves controlling the water supply for automatic sprinkler systems, pumps, tanks, water levels and temperatures, critical air pressures and waterflow switches on all sprinkler systems shall be electrically supervised by a listed fire alarm control unit.

Exceptions:

1. Automatic sprinkler systems protection in one- and two-family dwellings.
2. Automatic sprinkler systems installed in accordance with NFPA 13R where a common supply main is used to supply both domestic water and the automatic sprinkler system, and a separate shutoff valve for the automatic sprinkler system is not provided.
3. Jockey pump control valves that are sealed or locked in the open position.
4. Control valves to commercial kitchen hoods, paint spray booths or dip tanks that are sealed or locked in the open position.
5. Valves controlling the fuel supply to fire pump engines that are sealed or locked in the open position.
6. Trim valves to pressure switches in dry, pre-action and deluge sprinkler systems that are sealed or locked in the open position.
22. Section 903.4.2.1 is added to read as follows:

Section 903.4.2.1 Buildings with fire sprinkler monitoring systems shall be provided with an approved audio/visual notification device in each suite or occupancy.

23. Section 903.4.4 is added to read as follows:

Section 903.4.4 Buildings with fire sprinkler monitoring systems shall be provided with at least one manual pull station at a location approved by the fire code official.

24. Section 907.6.2.1 is added to read as follows:

Section 907.6.2.1 Secondary power supply capacity. The secondary power supply capacity shall be of an approved type and shall provide a minimum of 60 hours of power under non-alarm conditions and shall be capable of operating all alarm notification appliances for 5 minutes after 60 hours.

Exception: Fire alarm and sprinkler monitoring systems meeting the requirements of a central station fire alarm system per NFPA 72.

25. Section 1505.1 is amended by removing the reference to Class C roof assemblies to read as follows:

Section 1505.1. General. Roof assemblies shall be divided into the classes defined below. Class A and B roof assemblies and roof coverings required to be listed by this section shall be tested in accordance with ASTM E 108 or UL 790. Wood roof coverings shall be tested in accordance with ASTM D 2898. The minimum roof coverings installed on structures shall comply with Table 1505.1.

26. Section 1505.1.2 is amended by deleting the Exception for moderate fire hazard severity zones.

27. Section 1505.1.3 is amended by changing the reference from Class C to Class B to read as follows:

Section 1505.1.3 Roof coverings within all other areas. The entire roof coverings of every existing structure where more than 50 percent of the total roof area is replaced within any one-year period, the entire roof covering of every new structure, and any roof covering applied in the alteration, repair or replacement of the roof of existing structures, shall be a fire-retardant roof covering that is at least Class B.
28. Section 1505.1.5 is added to read as follows:

1505.1 Additions to Existing Buildings. In any 12 month period, additions of less than 26% of the existing roof area may be of Class B materials that match the existing roof. Additions in high fire hazard areas must meet the current high fire hazard area roofing requirements in addition to this section.

29. Table 1505.1 is amended to replace all references to Class C with Class B.

30. Section 1505.6 is amended to read as follows:

Section 1505.6 Wood Shingles and Shakes. No wooden shakes or shingles, treated or untreated, shall be used for roof covering unless specifically allowed in Sections 1505.1.3 or 1505.1.5 of this code.

31. Section 1507.3.1 is amended to read as follows:

Section 1507.3.1 Deck requirements. Concrete and clay tile shall be installed only over solid structural sheathing boards.

32. Section 1613.7 is added as follows:

Section 1613.7. Local modification to standard ASCE 7-10. Standard ASCE 7-10, section 12.12.3, Equation 12.12-1 is amended to read as follows:

\[ \delta_M = C_\delta \delta_{\text{max}} \]  
(Eq. 12.12-1)

33. Section 1613.8 is added as follows:

Section 1613.8. Local modification to standard ASCE 7-10. Standard ASCE 7-10, section 12.2.3.1, Exception 3.

Detached one-and two-family dwellings up to two stories in height of light frame construction.

34. Section 1613.9 is added as follows:

Section 1613.9. Local modification to standard 7-10. Standard ASCE 7-10, section 12.11.2.2.3.

Wood Diaphragms. In wood diaphragms, the continuous ties shall be in addition to the diaphragm sheathing. Anchorage shall not be accomplished by use of toe nails or nails subject to withdrawal nor shall
wood ledgers or framing be used in cross-grain bending or cross-grain tension. The diaphragm sheathing shall not be considered effective as providing ties or struts required by this section.

For structures assigned to seismic design category D, E, or F wood diaphragms supporting concrete or masonry walls, wood diaphragms shall comply with the following:

1. The spacing of continuous ties shall not exceed 40 feet. Added chords of diaphragms may be used to form sub-diaphragms to transmit the anchorage forces to the main continuous cross-ties.

2. The maximum diaphragm shear used to determine the depth of the sub-diaphragm shall not exceed 75% of the maximum diaphragm shear.

Section 1613.10 is added to read as follows:


1613.10.1 Purpose. The purpose of this section is to establish minimum regulations for the design and construction of new buildings and additions to existing buildings when constructing such buildings on or into slopes steeper than one unit vertical in three units horizontal (33.3%). These regulations establish minimum standards for seismic force resistance to reduce the risk of injury or loss of life in the event of earthquakes.

1613.10.2 Scope. The provisions of this section shall apply to the design of the lateral-force-resisting system for hillside buildings at and below the base level diaphragm. The design of the lateral-force-resisting system above the base level diaphragm shall be in accordance with the provisions for seismic and wind design as required elsewhere in this Division.

Exception: Non-habitable accessory buildings and decks not supporting or supported from the main building are exempt from these regulations.

1613.10.3 Definitions. For the purposes of this section certain terms are defined as follows:

BASE LEVEL DIAPHRAGM is the floor at, or closest to, the top of the highest level of the foundation.

DIAPHRAGM ANCHORS are assemblies that connect a diaphragm to the adjacent foundation at the uphill diaphragm edge.

DOWNHILL DIRECTION is the descending direction of the slope approximately perpendicular to the slope contours.
FOUNDATION is concrete or masonry which supports a building, including footings, stem walls, retaining walls, and grade beams.

FOUNDATION EXTENDING IN THE DOWNHILL DIRECTION is a foundation running downhill and approximately perpendicular to the uphill foundation.

HILLSIDE BUILDING is any building or portion thereof constructed on or into a slope steeper than one unit vertical in three units horizontal (33.3%). If only a portion of the building is supported on or into the slope, these regulations apply to the entire building.

PRIMARY ANCHORS are diaphragm anchors designed for and providing a direct connection as described in Sections 1613.10.5 and 1613.10.7.3 between the diaphragm and the uphill foundation.

SECONDARY ANCHORS are diaphragm anchors designed for and providing a redundant diaphragm to foundation connection, as described in Sections 1613.10.6 and 1613.10.7.4.

UPHILL DIAPHRAGM EDGE is the edge of the diaphragm adjacent and closest to the highest ground level at the perimeter of the diaphragm.

UPHILL FOUNDATION is the foundation parallel and closest to the uphill diaphragm edge.

1613.10.4 Analysis and Design.

1613.10.4.1 General. Every hillside building within the scope of this section shall be analyzed, designed, and constructed in accordance with the provisions of this division. When the code-prescribed wind design produces greater effects, the wind design shall govern, but detailing requirements and limitations prescribed in this and referenced sections shall be followed.

1613.10.4.2 Base Level Diaphragm-Downhill Direction. The following provisions shall apply to the seismic analysis and design of the connections for the base level diaphragm in the downhill direction.

1613.10.4.2.1 Base for Lateral Force Design Defined. For seismic forces acting in the downhill direction, the base of the building shall be the floor at or closest to the top of the highest level of the foundation.

1613.10.4.2.2 Base Shear. In developing the base shear for seismic design, the response modification coefficient (R) shall not exceed 4.5 for
bearing wall and building frame systems. The total base shear shall include the forces tributary to the base level diaphragm including forces from the base level diaphragm.

1613.10.5 Base Shear Resistance-Primary Anchors.

1613.10.5.1 General. The base shear in the downhill direction shall be resisted through primary anchors from diaphragm struts provided in the base level diaphragm to the foundation.

1613.10.5.2 Location of Primary Anchors. A primary anchor and diaphragm strut shall be provided in line with each foundation extending in the downhill direction. Primary anchors and diaphragm struts shall also be provided where interior vertical lateral-force-resisting elements occur above and in contact with the base level diaphragm. The spacing of primary anchors and diaphragm struts or collectors shall in no case exceed 30 feet (9,144 mm).

1613.10.5.3 Design of Primary Anchors and Diaphragm Struts. Primary anchors and diaphragm struts shall be designed in accordance with the requirements of Section 1613.10.8.

1613.10.5.4 Limitations. The following lateral-force-resisting elements shall not be designed to resist seismic forces below the base level diaphragm in the downhill direction:

1. Wood structural panel wall sheathing,
2. Cement plaster and lath,
3. Gypsum wallboard, and
4. Tension only braced frames.

Braced frames designed in accordance with the requirements of Section 2205.2.1.2 may be used to transfer forces from the primary anchors and diaphragm struts to the foundation provided lateral forces do not induce flexural stresses in any member of the frame or in the diaphragm struts. Deflections of frames shall account for the variation in slope of diagonal members when the frame is not rectangular.


1613.10.6.1 General. In addition to the primary anchors required by Section 1613.10.5, the base shear in the downhill direction shall be
resisted through secondary anchors in the uphill foundation connected to diaphragm struts in the base level diaphragm.

Exception: Secondary anchors are not required where foundations extending in the downhill direction spaced at not more than 30 feet (9,144 mm) on center extend up to and are directly connected to the base level diaphragm for at least 70% of the diaphragm depth.

1613.10.6.2 Secondary Anchor Capacity and Spacing. Secondary anchors at the base level diaphragm shall be designed for a minimum force equal to the base shear, including forces tributary to the base level diaphragm, but not less than 600 pounds per lineal foot (8.76 kN/m). The secondary anchors shall be uniformly distributed along the uphill diaphragm edge and shall be spaced a maximum of four feet (1,219 mm) on center.

1613.10.6.3 Design. Secondary anchors and diaphragm struts shall be designed in accordance with Section 1613.10.8.

1613.10.7 Diaphragms Below the Base Level-Downhill Direction. The following provisions shall apply to the lateral analysis and design of the connections for all diaphragms below the base level diaphragm in the downhill direction.

1613.10.7.1 Diaphragm Defined. Every floor level below the base level diaphragm shall be designed as a diaphragm.

1613.10.7.2 Design Force. Each diaphragm below the base level diaphragm shall be designed for all tributary loads at that level using a minimum seismic force factor not less than the base shear coefficient.

1613.10.7.3 Design Force Resistance-Primary Anchors. The design force described in Section 1613.10.7.2 shall be resisted through primary anchors from diaphragm struts provided in each diaphragm to the foundation. Primary anchors shall be provided and designed in accordance with the requirements and limitations of Section 1613.10.5.

1613.10.7.4 Design Force Resistance-Secondary Anchors.

1613.10.7.4.1 General. In addition to the primary anchors required in Section 1613.10.7.3, the design force in the downhill direction shall be resisted through secondary anchors in the uphill foundation connected to diaphragm struts in each diaphragm below the base level.

Exception: Secondary anchors are not required where foundations extending in the downhill direction, spaced at not more than 30 feet (9,144
mm) on center, extend up to and are directly connected to each diaphragm below the base level for at least 70% of the diaphragm depth.

1613.10.7.4.2 Secondary Anchor Capacity. Secondary anchors at each diaphragm below the base level diaphragm shall be designed for a minimum force equal to the design force but not less than 300 pounds per lineal foot (4.38 kN/m). The secondary anchors shall be uniformly distributed along the uphill diaphragm edge and shall be spaced a maximum of four feet (1,219 mm) on center.

1613.10.7.4.3 Design. Secondary anchors and diaphragm struts shall be designed in accordance with Section 1613.10.8.

1613.10.8 Primary and Secondary Anchorage and Diaphragm Strut Design. Primary and secondary anchors and diaphragm struts shall be designed in accordance with the following provisions:

1. Fasteners. All bolted fasteners used to develop connections to wood members shall be provided with square plate washers at all bolt heads and nuts. Washers shall be minimum 3/16 inch (4.8 mm) thick and two inch (51 mm) square for 1/2-inch (12.7 mm) diameter bolts, and 1/4-inch (6.4 mm) thick and 2-1/2-inch (64 mm) square for 5/8-inch (15.9 mm) diameter or larger bolts. Nuts shall be wrench tightened prior to covering.

2. Fastening. The diaphragm to foundation anchorage shall not be accomplished by the use of toenailing, nails subject to withdrawal, or wood in cross-grain bending or cross-grain tension.

3. Size of Wood Members. Wood diaphragm struts collectors, and other wood members connected to primary anchors shall not be less than three-inch (76 mm) nominal width. The effects of eccentricity on wood members shall be evaluated as required per Item 9.

4. Design. Primary and secondary anchorage, including diaphragm struts, splices, and collectors shall be designed for 125% of the tributary force.

5. Allowable Stress Increase. The one-third allowable stress increase permitted under Section 1605.3.2 shall not be taken when the working (allowable) stress design method is used.

6. Seismic Load Factor. The seismic load factor shall be 1.7 for steel and concrete anchorage when the strength design method is used.
7. Primary Anchors. The load path for primary anchors and diaphragm struts shall be fully developed into the diaphragm and into the foundation. The foundation must be shown to be adequate to resist the concentrated loads from the primary anchors.

8. Secondary Anchors. The load path for secondary anchors and diaphragm struts shall be fully developed in the diaphragm but need not be developed beyond the connection to the foundation.

9. Symmetry. All lateral force foundation anchorage and diaphragm strut connections shall be symmetrical. Eccentric connections may be permitted when demonstrated by calculation or tests that all components of force have been provided for in the structural analysis or tests.

10. Wood Ledgers. Wood ledgers shall not be used to resist cross-grain bending or cross-grain tension.

1613.10.9 Lateral-Force-Resisting Elements Normal to the Downhill Direction.

1613.10.9.1 General. In the direction normal to the downhill direction, lateral-force-resisting elements shall be designed in accordance with the requirements of this section.

1613.10.9.2 Base Shear. In developing the base shear for seismic design, the response modification coefficient (R) shall not exceed 4.5 for bearing wall and building frame systems:

1613.10.9.3 Vertical Distribution of Seismic Forces. For seismic forces acting normal to the downhill direction the distribution of seismic forces over the height of the building using Section 12.8.3 of ASCE 7 shall be determined using the height measured from the top of the lowest level of the building foundation.

1613.10.9.4 Drift Limitations. The story drift below the base level diaphragm shall not exceed 0.005 times the story height. The total drift from the base level diaphragm to the top of the foundation shall not exceed 3/4 inch (19 mm). Where the story height or the height from the base level diaphragm to the top of the foundation varies because of a stepped footing or story offset, the height shall be measured from the average height of the top of the foundation. The story drift shall not be reduced by the effect of horizontal diaphragm stiffness.

Where code-prescribed wind forces govern the design of the lateral force resisting system normal to the downhill direction, the drift limitation shall
be 0.0025 for the story drift and the total drift from the base level diaphragm to the top of the foundation may exceed 3/4 inch (19 mm) when approved by Building and Safety. In no case, however, shall the drift limitations for seismic forces be exceeded.

1613.10.9.5 Distribution of Lateral Forces.

1613.10.9.5.1 General. The design lateral force shall be distributed to lateral-force-resisting elements of varying heights in accordance with the stiffness of each individual element.

1613.10.9.5.2 Wood Structural Panel Sheathed Walls. The stiffness of a stepped wood structural panel shear wall may be determined by dividing the wall into adjacent rectangular elements, subject to the same top of wall deflection. Deflections of shear walls may be estimated by Section 2305.3. Sheathing and fastening requirements for the stiffest section shall be used for the entire wall. Each section of wall shall be anchored for shear and uplift at each step. The minimum horizontal length of a step shall be eight feet (2,438 mm) and the maximum vertical height of a step shall be two feet, eight inches (813 mm).

1613.10.9.5.3 Reinforced Concrete or Masonry Shear Walls. Reinforced concrete or masonry shear walls shall have forces distributed in proportion to the rigidity of each section of the wall.

1613.10.9.6 Limitations. The following lateral force-resisting-elements shall not be designed to resist lateral forces below the base level diaphragm in the direction normal to the downhill direction:

1. Cement plaster and lath,
2. Gypsum wallboard, and
3. Tension-only braced frames.

Braced frames designed in accordance with the requirements of Chapter 22 of this Code may be designed as lateral-force-resisting elements in the direction normal to the downhill direction, provided lateral forces do not induce flexural stresses in any member of the frame. Deflections of frames shall account for the variation in slope of diagonal members when the frame is not rectangular.

1613.10.10 Specific Design Provisions.

1613.10.10.1 Footings and Grade Beams. All footings and grade beams shall comply with the following:
1. Grade beams shall extend at least 12 inches (305 mm) below the lowest adjacent grade and provide a minimum 5-foot distance horizontally from the bottom outside face of the grade beam to the face of the descending slope.

2. Continuous footings shall be reinforced with at least two No. 4 reinforcing bars at the top and two No. 4 reinforcing bars at the bottom.

3. All main footing and grade beam reinforcement steel shall be bent into the intersecting footing and fully developed around each corner and intersection.

4. All concrete stem walls shall extend from the foundation and reinforced as required for concrete or masonry walls.

1613.10.10.2 Protection Against Decay and Termites. All wood to earth separation shall comply with the following:

1. Where a footing or grade beam extends across a descending slope, the stem wall, grade beam, or footing shall extend up to a minimum 18 inches (457 mm) above the highest adjacent grade.

Exception: At paved garage and doorway entrances to the building, the stem wall need only extend to the finished concrete slab, provided the wood framing is protected with a moisture proof barrier.

2. Wood ledgers supporting a vertical load of more than 100 pounds per lineal foot (1.46 kN/m) and located within 48 inches (1,219 mm) of adjacent grade are prohibited. Galvanized steel ledgers and anchor bolts, with or without wood nailers, or treated or decay resistant sill plates supported on a concrete or masonry seat, may be used.

1613.10.10.3 Sill Plates. All sill plates and anchorage shall comply with the following:

1. All wood framed walls, including nonbearing walls, when resting on a footing, foundation, or grade beam stem wall, shall be supported on wood sill plates bearing on a level surface.

2. Power-driven fasteners shall not be used to anchor sill plates except at interior nonbearing walls not designed as shear walls.
1613.10.10.4 Column Base Plate Anchorage. The base of isolated wood posts (not framed into a stud wall) supporting a vertical load of 4,000 pounds (17.8 kN) or more and the base plate for a steel column shall comply with the following:

1. When the post or column is supported on a pedestal extending above the top of a footing or grade beam, the pedestal shall be designed and reinforced as required for concrete or masonry columns. The pedestal shall be reinforced with a minimum of four No. 4 bars extending to the bottom of the footing or grade beam. The top of exterior pedestals shall be sloped for positive drainage.

2. The base plate anchor bolts or the embedded portion of the post base, and the vertical reinforcing bars for the pedestal, shall be confined with two No. 4 or three No. 3 ties within the top five inches (127 mm) of the concrete or masonry pedestal. The base plate anchor bolts shall be embedded a minimum of 20 bolt diameters into the concrete or masonry pedestal. The base plate anchor bolts and post bases shall be galvanized and each anchor bolt shall have at least two galvanized nuts above the base plate.

1613.10.10.5 Steel Beam to Column Supports. All steel beam to column supports shall be positively braced in each direction. Steel beams shall have stiffener plates installed on each side of the beam web at the column. The stiffener plates shall be welded to each beam flange and the beam web. Each brace connection or structural member shall consist of at least two 5/8 inch (15.9 mm) diameter machine bolts.

36. Section 1613.11 is added to read as follows:

Section 1613.11 Maximum SDS Value in Determination of Cs and Ev. Modify ASCE 7 Section 12.8.1.3 as follows:

12.8.1.3 Maximum SDS Value in Determination of Cs and Ev. The value of Cs and Ev are permitted to be calculated using a value of SDS equal to 1.0 but not less than 70% of SDS as defined in Section 11.4.4, provided that all of the following criteria are met:

1. The structure does not have irregularities, as defined in Section 12.3.2;
2. The structure does not exceed five stories above the lower of the base or grade plane as defined in Section 11.2, and, where present, each mezzanine level shall be considered a story for the purpose of this limit;
3. The structure has a fundamental period, T, that does not exceed 0.5 seconds, as determined using Section 12.8.2;
4. The structure meets the requirements necessary for the redundancy factor, \( r \), to be permitted to be taken as 1.0, in accordance with Section 12.3.4.2;

5. The site soil properties are not classified as Site Classes E or F, as defined in Section 11.4.2; and

6. The structure is classified as Risk Category I or II, as defined in Section 1.5.1.

37. Section 1704.6 is amended to read as follows:

Section 1704.6 Structural Observations. Where required by the provisions of Section 1704.6.1 or 1704.6.2, the owner or the owner’s authorized agent shall employ a structural observer to perform structural observations. Structural observation does not include or waive the responsibility for the inspections in Section 110 or the special inspections in Section 1705 or other section of this code. The structural observer shall be one of the following individuals:

1. The registered design professional responsible for the structural design, or
2. A registered design professional designated by the registered design professional responsible for the structural design.

The owner or owner’s authorized agent shall coordinate and call a preconstruction meeting between the structural observer, contractors, affected subcontractors and inspectors, both special and municipal. The structural observer shall preside over the meeting. The purpose of the meeting shall be to identify the major structural elements and connections that affect the vertical and lateral load resisting systems of the structure and to review scheduling of the required observations, special inspections, and Building and Safety requirements for scheduling and documentation. A record of the meeting shall be included in the report submitted to the Building Official.

Observed deficiencies shall be reported in writing to the owner or owner’s authorized agent, special inspector, contractor and the Building Official. Upon the form prescribed by the Building Official, the structural observer shall submit to the Building Official a written statement at each significant construction stage stating that the site visits have been made and identifying any reported deficiencies which, to the best of the structural observer’s knowledge, have not been resolved. A final report by the registered design professional responsible for the structural design which states that all observed deficiencies have been resolved is required before acceptance of the work by the Building Official.
38. Section 1705.3 is amended to read as follows:

1705.3 Concrete construction. The special inspections and verifications for concrete construction shall be as required by this section and Table 1705.3.

Exception: Special Inspection shall not be required for:

1. Isolated spread concrete footings of buildings three stories or less above grade plane that are fully supported on earth or rock, where the structural design of the footing is based on a specified compressive strength, f'c, no greater than 2,500 pounds per square inch (psi) (17.2 Mpa) regardless of the compressive strength specified in the construction documents or used in the footing construction.

2. Continuous concrete footings supporting walls of buildings three stories or less in height that are fully supported on earth or rock where:
   2.1. The footings support walls of light-frame construction;
   2.2. The footings are designed in accordance with Table 1805.4.2; or
   2.3. The structural design of the footing is based on a specified compressive strength, f'c, no greater than 2,500 pounds per square inch (psi) (17.2 Mpa), regardless of the compressive strength specified in the construction documents or used in the footing construction.

3. Nonstructural concrete slabs supported directly on the ground, including prestressed slabs on grade, where the effective prestress in the concrete is less than 150 psi (1.03 Mpa).

4. Concrete patios, driveways and sidewalks, on grade.

39. Section 1705.12 is amended to read as follows:

Section 1705.12 Special inspections for seismic resistance. Special inspections for seismic resistance shall be required as specified in Sections 1705.12.1 through 1705.12.9, unless exempted by the exceptions of Section 1704.2.

Exception: The special inspections specified in Sections 1705.12.1 through 1705.12.9 are not required for structures designed and constructed in accordance with one of the following:

1. The structure consists of light-frame construction; the design spectral response acceleration at short periods, SDS, as
determined in Section 1613.3.4, does not exceed 0.5; and the building height of the structure does not exceed 35 feet (10 668 mm)

2. The seismic force-resisting system of the structure consists of reinforced masonry or reinforced concrete; the design spectral response acceleration at short periods, SDS, as determined in Section 1613.3.4, does not exceed 0.5; and the building height of the structure does not exceed 25 feet (7620 mm).

3. The structure is a detached one- or two-family dwelling not exceeding two stories above grade plane, is not assigned to Seismic Design Category D, E or F and does not have any of the following horizontal or vertical irregularities in accordance with Section 12.3 of ASCE 7:

   3.1 Torsional or extreme torsional irregularity.

   3.2 Nonparallel systems irregularity.

   3.3 Stiffness-soft story or stiffness-extreme soft story irregularity.

   3.4 Discontinuity in lateral strength-weak story irregularity.

40. Section 1801.3 is added to read as follows:

   1801.3 State Stormwater Discharge Permit Coordination. All site drainage components and system shall also comply with any State issued stormwater discharge permit requirements. Where State stormwater discharge permits conflict with this code, the City Engineer and Chief Building Official will determine the most appropriate regulations from both documents that assure clean water discharges into State waterways and promotes the safety and general welfare of the community.

41. Section 1803.2 is amended to read as follows:

   1803.2. Investigations required. Geotechnical investigations shall be conducted in accordance with Sections 1803.3 through 1803.5.

Exceptions:

1. The Building Official shall be permitted to waive the requirement for a geotechnical investigation where satisfactory data from adjacent areas is available that demonstrates an investigation is not necessary for any of the conditions in Sections 1803.5.1 through 1803.5.6, and Sections 1803.5.10 and 1803.5.11.
2. Sites having natural formations known by the Building Official to be free of adverse characteristics.

3. Sites for minor buildings and additions less than one thousand (1,000) square feet in area when the Building Official determines that no special site conditions exist.

42. Section 1803.3.2 is added to read as follows:

1803.3.2. Special Site Investigation. Whenever, in the Building Official’s opinion, test borings or excavations required by the provisions of CBC Section 1803.3 cannot determine the adequacy of a building’s overall stability, the Building Official may require a special geologic, hydrologic, seismic, liquefaction, or other investigation. Geologic investigations, such as hillside stability and potential fault activity, shall be conducted by a California Certified Engineering Geologist.

The engineering geologist’s work must be based upon a detailed, accurate topographic base map. The map shall be of suitable scale and shall cover the project area as well as any adjacent area which may be affected. The map shall include the existing and proposed contours, location of streets, pads, slopes, structures, and pertinent elevations.

1803.3.2.1. Hillside Stability.

A. Any report required by the Building Official to determine a building’s stability, will be based upon an investigation conducted to reveal any subsurface conditions that may lead to landslides, slump, or settlement. It shall include descriptions of topography relief, drainage, earth materials and structure, a detailed geological map, geologic cross sections and recommendations for site development, including consideration for site drainage.

B. Any such report will also describe the effects of the development on the site and adjacent properties and specific conclusions concerning the feasibility and anticipated future stability of the overall development. Specific recommendations for the correction of all known and/or anticipated geologic hazards on the site must be included.

1803.3.2.2. Fault Activity. A report required by the Building Official will include information and recommendations concerning:
A. Surface rupture along faults, including age, type of surface displacement and amount of reasonable anticipated future displacements of any faults within, or immediately adjacent to, the site; definition of any areas of high risk; and recommended building restrictions or use limitations within any designated high risk area.

B. Secondary ground effects, including estimated magnitude and distance of all relevant earthquakes, lurching and shallow ground rupture, liquefaction of sediments and soils, settlement of soils, and potential for earthquake induced landslides.

43. Section 1803.6 is amended to read as follows:

1803.6. Reporting. Where geotechnical investigations are required, a written report of the investigations shall be submitted to the Building Official by the permit applicant at the time of the permit application. This geotechnical report shall include, but need not be limited to, the following information:

1. A plot plan showing the location of all test borings and/or excavations and location of cut to-fill "daylight line."

2. Descriptions and classifications of materials encountered.

3. Elevation of the water table if encountered.

4. Expected total and differential settlement.

5. Location of property or site, including address or lot number and tract.

6. Description of site, including existing use of ground, topographical irregularities, such as barrancas, existing structures, and elevations or ground slopes.

7. Description of proposed structure.

8. Boring logs showing subsurface material to a depth of at least ten (10) feet.

9. Expansive indexes, including location and depth of samples.

10. Any information that may indicate geological or earthquake problems, or the potential for hydro consolidation.
11. Recommendations for foundation type and design criteria, including bearing capacity, provisions to minimize the effects of expansive soils and hydro consolidation, and the effects of adjacent loads.

12. Retaining wall design studies and recommendations (if applicable).

13. Special studies and recommendations concerning the expansion potential, erosion potential, erosion control, and irrigation requirements, and maintenance requirements on slopes steeper than two horizontal to one vertical whenever requested by the Building Official.

14. Pile and stilt design studies and recommendations (if applicable).

15. Swimming pool design studies and recommendations (if applicable).

16. Special site investigations (if applicable).

44. Section 1804.4.2 is added to read as follows:

1804.4.2 City Grading Ordinance. All grading in the City must comply with the current City Grading Ordinance. Where the City Grading Ordinance and this code conflict with respect to grading regulations, the City Grading Ordinance will take precedence. Building and foundation permits shall not be issued prior to the City Engineer's final approval of the associated grading work supporting or otherwise effected by the building or foundation.

45. Section 1804.5 is amended to begin with the following sentence:

1804.5 Grading and fill in flood hazard areas. Grading and filling in flood hazard areas must comply with the City Floodplain Management Ordinance. Where the City Floodplain Management Ordinance and this code conflict relative to grading and filling, the City Floodplain Management Ordinance takes precedence.

46. Section 1807.1.4 is amended by adding the following sentence:

Permanent wood foundation systems shall not be used for structures assigned to Seismic Design Category D, E or F.

47. Section 1807.1.6 is amended by adding the following sentence:

Prescriptive design of foundation walls shall not be used for structures assigned to Seismic Design Category D, E or F.
Section 1809.3 is amended by adding the following sentence and figure:

For structures assigned to Seismic Design Category D, E or F, the stepping requirement shall also apply to the top surface of grade beams, supporting wall. Footings shall be reinforced with four (4) one-half (1/2") inch diameter deformed reinforcing bars. Two bars shall be placed at the top and bottom of the footings as shown in Figure 1809.1.

![Figure 1809.1](image)

Section 1809.4 is amended to read as follows:

1809.4 Depth and width of footings. The minimum depth of footings below the undisturbed ground surface shall be 12 inches (305 mm), but not less than the depth as prescribed by Table 1809.7. Where applicable, the requirements of Section 1809.5 shall also be satisfied. The minimum width of footings shall be 12 inches (305 mm).

Section 1809.7 is amended to read as follows:

1809.7. Slab Floor Construction At Or Below Grade. Slab floors on grade for all structures, including carports, shall be of Portland cement concrete and comply with the minimum requirements of CBC Table No. 1809.7. The following requirements for slab floor construction shall be adhered to, except where engineered modifications are approved by the Building Official and continuous inspection during construction is provided.

1. Loose fill shall be pasted and compacted according to the Building Official's instructions.
2. Except for buildings, or portions thereof, used only for agricultural, storage, industrial, or similar uses, an approved vapor barrier of not less than six (6) mil thickness shall be installed under all slabs. Such vapor barrier shall cover all earth or fill material within the exterior boundaries of the building. At all footings or barriers, such vapor barrier shall be turned up or down at least three (3) inches. In no case shall the vapor barrier penetrate within three (3) inches horizontally of any fastener used to transfer shear or uplift, such as anchor bolts, tiedown bolts and shot pins. Joints shall be lapped a minimum of twelve (12) inches or be fastened together with a suitable compound with three (3) inches of minimum lap.

51. CBC Table 1809.7 is replaced to read as follows:
### TABLE 1809.7

<table>
<thead>
<tr>
<th>WEIGHTED EXPANSION INDEX (13)</th>
<th>FOUNDATION FOR SLAB &amp; RAISED FLOOR SYSTEM (4) (8)</th>
<th>CONCRETE SLABS (8) (12) (15)</th>
<th>PREMOISTENING OF SOILS UNDER FOOTINGS, PIERS AND SLABS (4) (5)</th>
<th>RESTRICTION ON PIERS UNDER RAISED FLOORS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Stories</td>
<td>Stem Thickness</td>
<td>Footing Width</td>
<td>Footing Thickness</td>
<td>All Perimeter Footings (5)</td>
</tr>
<tr>
<td>0 - 20 Very Low (non-expansive)</td>
<td>1</td>
<td>6</td>
<td>12</td>
<td>6</td>
</tr>
<tr>
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<td>2</td>
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<td>12</td>
<td>6</td>
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<tr>
<td>21-50 Low</td>
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<td>6</td>
<td>12</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>6</td>
<td>12</td>
<td>6</td>
</tr>
<tr>
<td>51-90 Medium</td>
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<td>12</td>
<td>6</td>
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<tr>
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</tr>
<tr>
<td>91-130 High</td>
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<td>6</td>
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<tr>
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</tr>
</tbody>
</table>

**PREScriptive Footings for Supporting Walls of Light Frame Construction**

* Refer to next page for footnotes (1) through (15).
FOOTNOTES TO TABLE 1809.7

1. Premoistening is required where specified in Table 1809.7 in order to achieve maximum and uniform expansion of the soil prior to construction and thus limit structural distress caused by uneven expansion and shrinkage. Other systems which do not include premoistening may be approved by the Building Official when such alternatives are shown to provide equivalent safeguards against the adverse effects of expansive soil.

2. Reinforcement for continuous foundations shall be placed not less than 3" above the bottom of the footing and not less than 3" below the top of the stem.

3. Reinforcement shall be placed at mid-depth of slab.

4. After premoistening, the specified moisture content of soils shall be maintained until concrete is placed. Required moisture content shall be verified by an approved testing laboratory not more than 24 hours prior to placement of concrete.

5. Crawl spaces under raised floors need not be pre-moistened except under interior footings. Interior footings which are not enclosed by a continuous perimeter foundation system or equivalent concrete or masonry moisture barrier complying with Footnote #12 of Table 1809.7 shall be designed and constructed as specified for perimeter footings in Table 1809.7.

6. Foundation stem walls which exceed a height of three times the stem thickness above lowest adjacent grade shall be reinforced in accordance with Chapter 19 and Chapter 21 in the CBC or as required by engineering design, whichever is more restrictive.

7. Bent reinforcing bars between exterior footing and slab shall be omitted when floor is designed as an independent, "floating" slab.

8. Where unusual conditions beyond the scope of this table are found, design shall be in accordance with recommendations of a foundation investigation. Concrete slabs shall have a minimum thickness of 4 inches when the expansion index exceeds 50.

9. The ground under a raised floor system may be excavated to the elevation of the top of the perimeter footing, except where otherwise required by engineering design or to mitigate groundwater conditions.

10. GRADE BEAM, GARAGE OPENING. A grade beam not less than 12" x 12" in cross section, or 12" x depth required by Table 1809.7, whichever is deeper, reinforced as specified for continuous foundations in Table 1809.7, shall be provided at garage door openings.

11. Not used.

12. An approved vapor barrier shall be installed below concrete slab-on-grade floors of all residential occupancies in such a manner as to form an effective barrier against the migration of moisture into the slab. When sheet plastic material is employed for this purpose it shall be not less than 6 mils (.006 inch) in thickness. The installation of a vapor barrier shall not impair the effectiveness of required anchor bolts or other structural parts of a building. Foundations at the perimeter of concrete floor slabs shall form a continuous moisture barrier of Portland cement concrete or solid grouted masonry to the depths required by Table 1809.7.

13. When buildings are located on expansive soil having an expansion index greater than 50, gutters, downspouts, piping, and/or other non-erosive devices shall be provided to collect and divert rainwater to a street, storm drain, or other approved watercourse or disposal area.

14. Fireplace footings shall be reinforced with a horizontal grid located 3" above the bottom of the footing and consisting of not less than No. 4 Bars at 12" on center each way. Vertical chimney reinforcing bars shall be hooked under the grid. Depth of fireplace chimney footings shall be no less than that required by Table 1809.7.

15. Concrete slabs shall be dowelled into footing with not less than No. 3 reinforcing steel bars bent twelve (12") inches into the footing and thirty-six (36") inches minimum into the slab at twenty-four (24") inches on center maximum.
52. Section 1809.8 is amended by adding the following sentence:

Plain concrete footings shall not be used in structures assigned to Seismic Design Category D, E or F.

53. Section 1809.12 is amended by adding the following sentence:

Timber footings shall not be used in structures assigned to Seismic Design Category D, E or F.

54. Section 1905.1.7 is replaced as follows:

1905.1.7 Section 14.1.4 of ACI 318 is not adopted. It is replaced with the following:

14.1.4 – Plain concrete in structures assigned to Seismic Design Category C, D, E, or F.

14.1.4.1 Structures assigned to Seismic Design Category C, D, E, or F shall not have elements of structural plan concrete, except as follows:

(a) Concrete used for fill with a minimum cement content of two (2) sacks of Portland cement per cubic yard.

(b) Isolated footings of plain concrete supporting pedestals or columns are permitted, provided the projection of the footing beyond the face of the supported member does not exceed the footing thickness.

(c) In detached one- and two-family dwellings three stories or less in height and constructed with stud-bearing walls, plain concrete footings having a total area of longitudinal reinforcing steel of not less than 0.002 times the gross cross-sectional area of the footing, with at least two continuous longitudinal reinforcing bars not smaller than No. 4 are permitted. In addition, where the foundation system consists of a plain concrete footing and a plain concrete stemwall, an additional longitudinal reinforcing bar not smaller than No. 4 shall be provided at the top of the stemwall, and vertical bars not less than No. 4 shall be placed in the stemwall at 24" on center, with a standard 90 degree hook into the footing.

55. Section 1905.1.8 is added to read as follows:

1905.1.8. Section 18.7.5.1 of ACI 318 is added to read as follows:
Where the calculated point of contraflexure is not within the middle half of the member clear height, provide transverse reinforcement as specified in ACI 318 Section 18.7.5.1, items (a) through (c), over the full height of the member.

56. Section 1905.1.9 is added to read as follows:

1905.1.9 Modify ACI 318 by adding Section 18.10.4.6 to read as follows:

18.10.4.6 - Walls and portions of walls with $P_u > 0.35P_o$ shall not be considered to contribute to the calculated strength of the structure for resisting earthquake-induced forces. Such walls shall conform and ACI 318 Section 18.12

57. Section 1905.1.10 is added to read as follows:

1905.1.10 Modify ACI 318 section 18.2.6 by adding the following:

Collector and boundary elements in topping slabs placed over precast floor and roof elements shall not be less than 3 inches (76mm) or $6d_b$ thick, where $d_b$ is the diameter of the largest reinforcement in the topping slab.

58. Section 2304.10.1 is amended by adding the following:

Staple fasteners in Table 2304.10.1 shall not be used to resist or transfer seismic forces in structures assigned to Seismic Design Category D, E or F.

59. Section 2304.12.5 is amended by adding the following sentence:

Wood shall not be used in retaining or crib walls for structures assigned to Seismic Design Category D, E or F.

60. Section 2306.2 is amended to read as follows:

2306.2 Wood-frame diaphragms. Wood-frame diaphragms shall be designed and constructed in accordance with AWC SDPWS. Where panels are fastened to framing members with staples, requirements and limitations of AWC SDPWS shall be met and the allowable shear values set forth in Table 2306.2(1) or 2306.2(2) shall only be permitted for structures assigned to Seismic Design Category A, B, or C.

Exception: Allowable shear values where panels are fastened to framing members with staples may be used if such values are substantiated by cyclic testing and approved by the Building Official. The allowable shear
values in Tables 2306.2(1) and 2306.2(2) are permitted to be increased 40 percent for wind design.

Wood structural panel diaphragms used to resist seismic forces in structures assigned to Seismic Design Category D, E or F shall be applied directly to the framing members.

Exception: Wood structural panel diaphragms are permitted to be fastened over solid lumber planking or laminated decking, provided the panel joints and lumber planking or laminated decking joints do not coincide.

61. Section 2306.3 is amended to read as follows:

2306.3 Wood structural panel shear walls. Wood structural panel shearwalls shall be designed and constructed in accordance with AWC SDPWS. For structures assigned to Seismic Design Category D, E or F, applications of Tables 4.3A and 4.3B of AWC SDPWS shall include the following:

1. Wood structural panel thickness for shear walls shall not be less than 3/8 inch thick and studs shall not be spaced at more than 16 inches on center.

2. The maximum nominal unit shear capacities for 3/8 inch wood structural panels resisting seismic forces in structures assigned to Seismic Design Category D, E, or F is 400 pounds per linear foot (plf).

Exception: Other nominal unit shear capacities may be permitted if such values are substantiated by cyclic testing and approved by the Building Official.

3. Where shear values using allow stress design (ASD) exceed 350 plf or load and resistance factor design (LRFD) exceed 500 plf, all framing members receiving edge nailing from abutting panels shall not be less than a single 3-inch nominal member, or two 2-inch nominal members fastened together in accordance with Section 2306.1 to transfer the design shear value between framing members. Wood structural panel joint and sill plate nailing shall be staggered at all panel edges. See Section 4.3.6.1 and 4.3.6.4.3 of AWC SDPWS for sill plate size and anchorage requirements.

4. Nails shall be placed not less than 1/2 inch in from the panel edges and not less than 3/8 inch from the edge of the connecting members for shear greater than 350 plf using ASD or 500 plf using LRFD. Nails shall be placed not less than 3/8 inch from panel
edges and not less than 1/4 inch from the edge of the connecting members for shears of 350 pounds per foot or less using ASD or 500 plf or less using LRFD.

5. Table 4.3B application is not allowed for structures assigned to Seismic Design Category D, E or F.

62. Section 2307.2 is added to read as follows:

Section 2307.2 Wood-frame shear walls. Wood-frame shear walls shall be designed and constructed in accordance with Section 2306.3 as applicable.
Table 2308.6.1 is amended to read as follows:

### TABLE 2308.6.1*
WALL BRACING REQUIREMENTS

<table>
<thead>
<tr>
<th>SEISMIC DESIGN CATEGORY</th>
<th>STORY CONDITION (SEE SECTION 2304.2)</th>
<th>MAXIMUM SPACING OF BRACED WALL LINES</th>
<th>BRACED PANEL LOCATION, SPACING (O.C.) AND MINIMUM PERCENTAGE (X)</th>
<th>MAXIMUM DISTANCE OF BRACED WALL PANELS FROM EACH END OF BRACED WALL LINE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>LIB</td>
<td>DWB, WSP</td>
<td>SFB, PBS, PCP, HPS, GB</td>
</tr>
<tr>
<td>A and B</td>
<td>35'-0&quot;</td>
<td>Each end and ≤ 25'-0&quot; o.c.</td>
<td>Each end and ≤ 25'-0&quot; o.c.</td>
<td>Each end and ≤ 25'-0&quot; o.c.</td>
</tr>
<tr>
<td>C</td>
<td>35'-0&quot;</td>
<td>Each end and ≤ 25'-0&quot; o.c.</td>
<td>Each end and ≤ 25'-0&quot; o.c.</td>
<td>Each end and ≤ 25'-0&quot; o.c.</td>
</tr>
<tr>
<td>D and E</td>
<td>35'-0&quot;</td>
<td>Each end and ≤ 25'-0&quot; o.c.</td>
<td>Each end and ≤ 25'-0&quot; o.c.</td>
<td>Each end and ≤ 25'-0&quot; o.c.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>S_{bd} &lt; 0.50: Each end and ≤ 25'-0&quot; o.c. (minimum 21% of wall length)*</td>
<td>S_{bd} &lt; 0.50: Each end and ≤ 25'-0&quot; o.c. (minimum 43% of wall length)*</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.5 ≤ S_{bd} &lt; 0.75: Each end and ≤ 25'-0&quot; o.c. (minimum 32% of wall length)*</td>
<td>0.5 ≤ S_{bd} &lt; 0.75: Each end and ≤ 25'-0&quot; o.c. (minimum 59% of wall length)*</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.75 ≤ S_{bd} ≤ 1.00: Each end and ≤ 25'-0&quot; o.c. (minimum 37% of wall length)*</td>
<td>0.75 ≤ S_{bd} ≤ 1.00: Each end and ≤ 25'-0&quot; o.c. (minimum 75% of wall length)*</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>S_{bd} &gt; 1.00: Each end and ≤ 25'-0&quot; o.c. (minimum 48% of wall length)*</td>
<td>S_{bd} &gt; 1.00: Each end and ≤ 25'-0&quot; o.c. (minimum 100% of wall length)*</td>
<td></td>
</tr>
</tbody>
</table>

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm.

NP = Not Permitted.

a. This table specifies minimum requirements for braced wall panels along interior or exterior braced wall lines.
b. See Section 2308.6.3 for full description of bracing methods.
c. For Method GB, gypsum wallboard applied to framing supports that are spaced at 16 inches on center.
d. The required lengths shall be doubled for gypsum board applied to only one face of a braced wall panel.
e. Percentage shown represents the minimum amount of bracing required along the building length (or wall length if the structure has an irregular shape).
f. DWB, SFB, PBS, and HPS wall braces are not permitted in Seismic Design Categories D or E.
g. Minimum length of panel bracing of one face of the wall for WSP sheathing shall be at least 6'-0" long. h/w ratio shall not exceed 2:1. Wall framing to which sheathing used for bracing is applied shall be nominal 2 inch wide (actual 1 1/2 inch [38 mm]) or larger members and spaced a minimum of 16 inches on center. Braced wall panel construction rakes shall not be mixed within a braced wall line.
h. WSP sheathing shall be a minimum of 15/32" thick nailed with 8d common placed 3/8 inches from panel edges and spaced not more than 6 inches on center and 12 inches on center along intermediate framing members.
Section 2308.6.5, Figure 2308.6.5.1, and Figure 2308.6.5.2 are amended to read as follows:

Section 2308.6.5 Alternative bracing. An alternate braced wall (ABW) or a portal frame with hold-downs (PFH) described in this section is permitted to substitute for a 48-inch (1219 mm) braced wall panel of Method DWB, WSP, SFB, PBS, PCP or HPS. For Method GB, each 96-inch (2438 mm) section (applied to one face) or 48-inch (1219 mm) section (applied to both faces) or portion thereof required by Table 2308.6.1 is permitted to be replaced by one panel constructed in accordance with Method ABW or PFH.

Section 2308.6.5.1 Alternate braced wall (ABW). An ABW shall be constructed in accordance with this section and Figure 2308.6.5.1. In one-story buildings, each panel shall have a length of not less than 2 feet 8 inches (813 mm) and a height of not more than 10 feet (3048 mm). Each panel shall be sheathed on one face with 3/8-inch (3.2 mm) minimum-thickness wood structural panel sheathing nailed with 8d common or galvanized box nails in accordance with Table 2304.10.1 and blocked at wood structural panel edges. For structures assigned to Seismic Design Category D or E, each panel shall be sheathed on one face with 15/32-inch-minimum-thickness (11.9 mm) wood structural panel sheathing nailed with 8d common nails spaced 3 inches on panel edges, 3 inches at intermediate supports. Two anchor bolts installed in accordance with Section 2308.3.1 shall be provided in each panel. Anchor bolts shall be placed at each panel outside quarter points. Each panel end stud shall have a hold-down device fastened to the foundation, capable of providing an approved uplift capacity of not less than 1,800 pounds (8006 N). The hold-down device shall be installed in accordance with the manufacturer's recommendations. The ABW shall be supported directly on a foundation or on floor framing supported directly on a foundation that is continuous across the entire length of the braced wall line. This foundation shall be reinforced with not less than one No. 4 bar top and bottom. Where the continuous foundation is required to have a depth greater than 12 inches (305 mm), a minimum 12-inch by 12-inch (305 mm by 305 mm) continuous footing is permitted at door openings in the braced wall line. This continuous footing shall be reinforced with not less than one No. 4 bar top and bottom. This reinforcement shall be lapped 24 inches (381 610 mm) with the reinforcement required in the continuous foundation located directly under the braced wall line.

Where the ABW is installed at the first story of two-story buildings, the wood structural panel sheathing shall be provided on both faces, three anchor bolts shall be placed at one-quarter points and tie-down device uplift capacity shall be not less than 3,000 pounds (13 344 N).
Section 2308.6.5.2 Portal frame with hold-downs (PFH). A PFH shall be constructed in accordance with this section and Figure 2308.6.5.2. The adjacent door or window opening shall have a full-length header.

In one-story buildings, each panel shall have a length of not less than 16 inches (406 mm) and a height of not more than 10 feet (3048 mm). Each panel shall be sheathed on one face with a single layer of 3/8-inch (9.5 mm) minimum-thickness wood structural panel sheathing nailed with 8d common or galvanized box nails in accordance with Figure 2308.6.5.2. For structures assigned to Seismic Design Category D or E, each panel shall be sheathed on one face with 15/32-inch-minimum-thickness (11.9 mm) wood structural panel sheathing nailed with 8d common nails spaced 3 inches on panel edges, 3 inches at intermediate supports and in accordance with Figure 2308.6.5.2. The wood structural panel sheathing shall extend up over the solid sawn or glued-laminated header and shall be nailed in accordance with Figure 2308.6.5.2. A built-up header consisting of at least two 2-inch by 12-inch (51 mm by 305 mm) boards, fastened in accordance with Item 24 of Table 2304.10.1 shall be permitted to be used. A spacer, if used, shall be placed on the side of the built-up beam opposite the wood structural panel sheathing. The header shall extend between the inside faces of the first full-length outer studs of each panel. The clear span of the header between the inner studs of each panel shall be not less than 6 feet (1829 mm) and not more than 18 feet (5486 mm) in length. A strap with an uplift capacity of not less than 1,000 pounds (4,400 N) shall fasten the header to the inner studs opposite the
sheathing. One anchor bolt not less than 5/8 inch (15.9 mm) diameter and installed in accordance with Section 2308.3.1 shall be provided in the center of each sill plate. The studs at each end of the panel shall have a hold-down device fastened to the foundation with an uplift capacity of not less than 3,500 pounds (15 570 N).

Where a panel is located on one side of the opening, the header shall extend between the inside face of the first full-length stud of the panel and the bearing studs at the other end of the opening. A strap with an uplift capacity of not less than 1,000 pounds (4400 N) shall fasten the header to the bearing studs. The bearing studs shall also have a hold-down device fastened to the foundation with an uplift capacity of not less than 1,000 pounds (4400 N). The hold-down devices shall be an embedded strap type, installed in accordance with the manufacturer’s recommendations. The PFH panels shall be supported directly on a foundation that is continuous across the entire length of the braced wall line. This foundation shall be reinforced with not less than one No. 4 bar top and bottom. Where the continuous foundation is required to have a depth greater than 12 inches (305 mm), a minimum 12-inch by 12-inch (305 mm by 305 mm) continuous footing is permitted at door openings in the braced wall line. This continuous footing shall be reinforced with not less than one No. 4 bar top and bottom. This reinforcement shall be lapped not less than 24 inches (381 610 mm) with the reinforcement required in the continuous foundation located directly under the braced wall line.

Where a PFH is installed at the first story of two-story buildings, each panel shall have a length of not less than 24 inches (610 mm).
65. Section 2308.6.8.1 is amended to read as follows:

Section 2308.6.8.1 Foundation requirements. Braced wall lines shall be supported by continuous foundation.

For structures in Seismic Design Categories D and E, exterior braced wall panels shall be in the same plane vertically with the foundation or the portion of the structure containing the offset shall be designed in accordance with accepted engineering practice and Section 2308.1.1.

66. Section 3100.1 AA is added to read as follows:

Section 3100.1 AA Swimming Pools: Location

1. No swimming pool, spa or hot tub will be constructed in a required front yard as defined by this code unless specific approval is granted through a variance.

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 pound = 4.448 N.

a. For structures assigned to Seismic Design Category D or E, sheathed on one face with 15/32-inch minimum thickness (11.9 mm) wood structural panel sheathing.

FIGURE 2308.6.5.2
PORTAL FRAME WITH HOLD-DOWNS (PFH)
2. The distance from the inner surface of a swimming pool, spa or hot tub wall to a property line will not be less than three feet. Swimming pool and spa walls adjacent to foundations and slopes will be designed in accordance with this code.

67. Section 3100.2 AA is added to read as follows:

Section 3100.2 AA Definitions. For the purpose of this section, certain terms are defined as follows:

Hillside Areas. Areas where there is a difference of four feet in original and/or final grade of any two sides of the pool.

Expansive Soils. The expansiveness of soils will be classified by the requirements of the California Building Code as adopted by the City Council.

68. Section 3100.3 AA is added to read as follows:

Section 3100.3 AA Pools in Uncertified Fill Soils. Permits may be issued for the construction of "floating" type pools in fill areas when the following conditions are met.

1. A complete soils investigation of the fill is made by an engineer qualified in soils design and, based on the findings, the engineer establishes the design conditions and extends recommendations that would lead to a stable and safe pool.

2. A structural design is prepared by a Registered Civil Engineer which incorporates the recommendations of the soils investigation as approved by the Building Official.

3. The pool is designed under the assumption that it receives vertical support from the soil lying under the pool bottom. The limits of the supporting soil will be below a line drawn around the perimeter of the pool and located on the bottom where a line sloping at 44 degrees with the horizontal is tangent to the pool bottom.

4. Pool walls will be designed assuming no support from the surrounding soil and in accordance with the minimum requirements as set forth in this Article.
5. The pit for the pool backwash will not be located within the fill material.

69. Section 3100.4 AA is added to read as follows:

Section 3100.4 AA Surface Water. The pool deck and all portions of the lot will drain to the street or to an approved drainage course. When a pool deck extends to within three feet of an adjacent property, means will be provided to conduct splash water to a satisfactory point of disposal.

70. Section 3100.5 AA is added to read as follows:

Section 3100.5 AA Waste Water. Disposal of swimming pool wastewater will be in conformance with this code.

71. Section 3100.6 AA is added to read as follows:

Section 3100.6 AA Hydrostatic Uplift. Any pool to be constructed in an area in which residual groundwater creates hydrostatic head against the pool structure will have a suitable underdrain relief to which a pump can be properly attached, sufficient mass weight to prevent floatation, or hydrostatic relief valves.

72. Section 3100.7 AA is added to read as follows:

Section 3100.7 AA Diving Boards. No diving board will be installed in a pool whose greatest depth is less than eight feet. A depth of not less than 8 feet, 6 inches, will be required for a one-meter board. A depth of not less than 10 feet will be required for a three-meter board.

73. Section 3100.8 AA is added to read as follows:

Section 3100.8 AA Materials for Pool Shell. Swimming pool shells will be of reinforced concrete, or other material equivalent in strength and durability, designed and built to withstand anticipated stresses, of watertight construction with smooth and impervious surfaces. A waterproof interior finish, which will withstand repeated brushing, scrubbing and cleaning procedures, will completely line the pool to the coping or cantilevered decking.

74. Section 3100.9 AA is added to read as follows:

Section 3100.9 AA Construction Changes. All changes will be approved in writing by the design engineer or architect before they will be reviewed by the Building Official.
75. Section 3100.10 AA is added to read as follows:
Section 3100.10 AA Signature of Design Professional. Structural plans and calculations will be signed by a Registered Civil Engineer or Architect licensed by the State of California for any pool where the maximum depth is more than three feet.

76. Section 3100.11 AA is added to read as follows:
Section 3100.11 AA Deck. A concrete deck will be provided around the pool with a minimum width of 4 feet, measured from the pool water line and with a 2% slope away from the pool. Natural soil under deck will slope 2% away from the pool and soil around the deck will slope at 1% minimum to drain away from the edge of the deck. The deck will have a minimum thickness of 4 inches nominal and will be reinforced with 3/8-inch reinforcement bars at 24 inches on center each way or equivalent reinforcing, bonded in accordance with CEC 680.26. The outer edge of the deck will have a cutoff wall not less than 15 inches below grade. A 6-foot deck may be used in lieu of a 4-foot deck and cutoff wall. Decks of lesser width may be utilized when the cutoff wall depth is increased by a proportionate amount of the reduced deck width. When the soil under decks has an expansive index of 91 or greater, it will be pre-saturated with water to a depth of 18 inches before the placement of the concrete deck. Approved joints will be provided in the deck at corners, at maximum 10-foot intervals, and wherever necessary in order to control cracking, to allow for differential movements, and to minimize damage to the deck from such movement should it occur. Joints in decks and coping will be made watertight with an approved permanent resilient sealant.

Exception: The deck may be omitted provided that the pool shell is designed to resist normal external forces plus 20 p.c.f.-equivalent fluid pressure, and the bond beam has a thickness of not less than 12 inches and is reinforced with a minimum of three (3) 1/2-inch reinforcement bars in each face with 1/4-inch reinforcement ties at 48 inches on center.

77. Section 3100.12 AA is added to read as follows:
Section 3100.12 AA Enclosures. Residential pool enclosures shall be designed, installed and maintained in accordance with Section 3109.4 of this code.

78. Section 3100.13. AA is added to read as follows:
Section 3100.13 AA Design.
1. **Minimum Standards.** Every swimming pool design will admit to rational analysis according to accepted engineering principles and all criteria hereafter noted are to be considered as minimum standards only.

2. **Expansive Soil Design.** Pools constructed below grade will be designed on the assumption that their construction is to be in an area of moderately expansive soil having an expansion index of 51-91 and an equivalent fluid pressure of not less than 45 pounds per cubic foot (45 p.c.f.).

   Exception: Where tests indicate that soils at a pool site are non-expansive or have low expansion characteristics from the ground surface to the full depth of the pool, structural design may be based on an equivalent fluid pressure not less than 30 p.c.f.

   In highly expansive soils having an expansion index of 91–130, pools will be designed for not less than 60 p.c.f.-equivalent fluid pressure.

   In very highly expansive soils having an expansion index over 130, pool design will be subject to special requirements based on a site investigation, soil testing, and engineering analysis by a registered civil engineer to determine appropriate design parameters for the site.

3. **Hydrostatic Pressure.** Hydrostatic pressure will be used in an outward direction as design criteria where concrete is not deposited against natural undisturbed earth or approved compacted fill.

4. **Reinforcing Steel.** Minimum reinforcing steel will be no less than 3/8-inch reinforcement bars at 12 inches O.C. both ways, with a minimum cover of two inches, except longitudinal steel in the bottom transition area from the shallow to the deep end will be 3/8-inch reinforcement bars at six inches O.C. minimum, extending a minimum distance of five feet beyond each side of the transition.

5. **Empty Pool Condition.** Pools will be designed for both empty and filled conditions.

6. **Surcharge Loads.** When located adjacent to building foundations, retaining walls and ascending earth slopes, appropriate surcharge loading will be incorporated in the pool design.
7. **Bond Beams.** A top bond beam will be provided with a minimum width and depth of 1-2 inches and with a minimum of four 1/2-inch reinforcement bars (two 1/2-inch reinforcement bars near each face) with 1/4-inch reinforcement ties at 48 inches on center. Vertical steel will be bent at least eight inches horizontally over top longitudinal steel and will be carried around the corner and lapped to form a rigid construction. Special design and plan details will be required for any niches or indentations in the steel or other special details.

8. **Pool Walls.** The minimum thickness of constructed pool walls will be five inches.

**SECTION 4: CALIFORNIA ENVIRONMENTAL QUALITY ACT.** The City Council determines that this Ordinance is exempt from review under the California Environmental Quality Act (California Public Resources Code §§ 21000 et seq., "CEQA") and the regulations promulgated thereunder (14 California Code of Regulations §§ 15000 et seq., the "State CEQA Guidelines") because it consists only of minor revisions and clarifications to an existing code of construction-related regulations and specification of procedures related thereto and will not have the effect of deleting or substantially changing any regulatory standards or findings required therefor. This Ordinance, therefore, is an action being taken for enhanced protection of the environment and does not have the potential to cause significant effects on the environment.

**SECTION 5: SAVINGS CLAUSE.** Repeal of any provision of the SBMC or any other City ordinance herein will not affect any penalty, forfeiture, or liability incurred before, or preclude prosecution and imposition of penalties for any violation occurring before, the effective date of this Ordinance. Any such repealed part will remain in full force and effect for sustaining action or prosecuting violations occurring before the effective date of this Ordinance.

**SECTION 6: SEVERABILITY.** If any part of this Ordinance is deemed invalid by a court of competent jurisdiction, the City Council intends that said invalidated part is severable and that such decision will not affect the validity of the remaining portions of this Ordinance, which shall remain in full force and effect.

**SECTION 7: VALIDITY OF PREVIOUS CODE SECTIONS.** If this entire Ordinance is repealed or is deemed invalid by a court of competent jurisdiction, such action will render this Ordinance void and cause such SBMC Ordinance previously in effect prior to amendment by this Ordinance to remain in full force and effect for all purposes.
SECTION 8: EFFECTIVE DATE. This Ordinance will take effect on the 31st day following its final passage and adoption or January 1, 2017, whichever is later.

PASSED AND ADOPTED this 17 day of October, 2016.

Erik Nasarenko
Mayor

ATTEST:

Antoinette Mann, MMC, CRM
City Clerk

APPROVED AS TO FORM:
Gregory G. Diaz
City Attorney

By:
Jennifer Lee
Assistant City Attorney
CERTIFICATION

STATE OF CALIFORNIA )
COUNTY OF VENTURA ) SS.
CITY OF SAN BUENAVENTURA )

I, ANTOINETTE M. MANN, City Clerk of the City of San Buenaventura, DO HEREBY CERTIFY that the foregoing is a full, true, and correct copy of Ordinance No. 2016-009 that was introduced by said City Council at a regular meeting held October 10, 2016, and adopted by said City Council at a regular meeting held October 17, 2016, by the following vote:

AYES: Councilmembers Morehouse, Weir, Tracy, Heitmann, Monahan, Deputy Mayor Andrews, and Mayor Nasarenko

NOES: None

ABSENT: None

I further certify that said Ordinance No. 2016-009 was published as required by law in the VENTURA COUNTY STAR, a newspaper of general circulation printed and published in said City.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the official seal of the City of San Buenaventura, California.

Antoinette M. Mann, MMC, CRM
City Clerk
City of San Buenaventura, California

October 18, 2016
Date Attested

I hereby certify these records are a true and correct copy of records on file with the City of San Buenaventura.

Jappeane Stouffles 10-26-16
Name
Assistant City Clerk
Title
ORDINANCE NO. 2016-011

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF SAN BUENAVENTURA ADOPTING BY REFERENCE THE 2016 EDITION OF THE CALIFORNIA MECHANICAL CODE AND AMENDING CERTAIN PROVISIONS THEREOF THROUGH EXPRESS FINDINGS OF LOCAL NECESSITY

The City Council of the City of San Buenaventura does ordain as follows:

SECTION 1: Chapter 12.130 of Division 12 of the San Buenaventura Municipal Code ("SBMC") is amended in its entirety to read as follows:

Chapter 12.130 Mechanical Standards


Pursuant to Government Code sections 50022.1 to 50022.8, inclusive, Part 4 of Title 24 of the California Code of Regulations, known as the California Mechanical Code, 2016 Edition ("CMC"), including Appendices B and C thereof, and standards contained therein, is adopted by reference, subject to changes set forth in this Chapter. One true copy of said Code is on file in the Offices of the City Clerk and Building Official and is available for public inspection as required by law.

Section 12.130.020. Amendments.

After due consideration, the City Council finds and determines that due to the need to establish administrative procedures to enforce the CMC, that changes to the California Mechanical Code, 2016 Edition, are needed and therefore, the CMC is modified, amended, added to, and changed as set forth below:

Section 107.0 is replaced in its entirety to read as follows:

107.0. Appeals. Appeals of the decision of the Building Official enforcing this code shall be filed and acted upon in accordance with Section 113 of the California Building Code as adopted by the City of San Buenaventura in Section 12.115.020 of the San Buenaventura Municipal Code.

Note: For administrative purposes, wherever the term “Authority Having Jurisdiction” is used in the CMC, it shall be understood to meaning “Building Official” or his/her designee.

SECTION 2: CALIFORNIA ENVIRONMENTAL QUALITY ACT. The City Council determines that this ordinance is exempt from review under the California Environmental Quality Act (California Public Resources Code Section 21000 et seq.,
"CEQA") and the regulations promulgated thereunder (14 California Code of Regulations Section 15000 et seq., the "State CEQA Guidelines") because it consists only of minor revisions and clarifications to an existing code of construction-related regulations and specification of procedures related thereto and will not have the effect of deleting or substantially changing any regulatory standards or findings required therefor. This ordinance, therefore, is an action being taken for enhanced protection of the environment and does not have the potential to cause significant effects on the environment.

SECTION 3: SAVINGS CLAUSE. Repeal of any provision of the SBMC or any other city ordinance herein will not affect any penalty, forfeiture, or liability incurred before, or preclude prosecution and imposition of penalties for any violation occurring before, this Ordinance's effective date. Any such repealed part will remain in full force and effect for sustaining action or prosecuting violations occurring before the effective date of this Ordinance.

SECTION 4: SEVERABILITY. If any part of this Ordinance is deemed invalid by a court of competent jurisdiction, the City Council intends that said invalidated part is severable and that such decision will not affect the validity of the remaining portions of this Ordinance, which shall remain in full force and effect.

SECTION 5: VALIDITY OF PREVIOUS CODE SECTIONS. If this entire Ordinance is repealed or is deemed invalid by a court of competent jurisdiction, such action will render this Ordinance void and cause such SBMC Ordinance previously in effect prior to amendment by this Ordinance to remain in full force and effect for all purposes.
SECTION 6: EFFECTIVE DATE. This Ordinance will take effect on the 31st day following its final passage and adoption or January 1, 2017, whichever is later.

PASSED AND ADOPTED this ___ day of ____________, 2016.

Erik Nasarenko
Mayor

ATTEST:

Antoinette M. Mann, MMC, CRM
City Clerk

APPROVED AS TO FORM:
Gregory G. Diaz
City Attorney

Jennifer Lee
Assistant City Attorney
CERTIFICATION

STATE OF CALIFORNIA )
COUNTY OF VENTURA ) SS.
CITY OF SAN BUENAVENTURA )

I, ANTOINETTE M. MANN, City Clerk of the City of San Buenaventura, DO HEREBY CERTIFY that the foregoing is a full, true, and correct copy of Ordinance No. 2016-011 that was introduced by said City Council at a regular meeting held October 10, 2016, and adopted by said City Council at a regular meeting held October 17, 2016, by the following vote:

AYES: Councilmembers Morehouse, Weir, Tracy, Heitmann, Monahan, Deputy Mayor Andrews, and Mayor Nasarenko

NOES: None

ABSENT: None

I further certify that said Ordinance No. 2016-011 was published as required by law in the VENTURA COUNTY STAR, a newspaper of general circulation printed and published in said City.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the official seal of the City of San Buenaventura, California.

Antoinette M. Mann, MMC, CRM
City Clerk
City of San Buenaventura, California

October 18, 2016
Date Attested

I hereby certify these records are a true and correct copy of records on file with the City of San Buenaventura.

Name: Josephine Scull
Date: 11-26-16
Title: Assistant City Clerk
ORDINANCE NO. 2016-010

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF SAN BUENAVENTURA ADOPTING BY REFERENCE THE 2016 EDITION OF THE CALIFORNIA PLUMBING CODE AND AMENDING CERTAIN PROVISIONS THEREOF THROUGH EXPRESS FINDINGS OF LOCAL NECESSITY

The City Council of the City of San Buenaventura does ordain as follows:

SECTION 1: FINDINGS. After due consideration, the City Council finds and determines that local climatic, geological, or topographical conditions exist as follows:

A. Climatic and Geological. The City has a limited supply of local water, some of which is corrosive in nature, and requires modification of plumbing fixtures to conserve water and protect the public health, safety and welfare.

B. After due consideration, the City Council finds and determines that these local climatic and geological conditions make modifications and changes to the 2016 Edition of the California Plumbing Code reasonably necessary to provide sufficient and effective protection of life, health and property.

SECTION 2: Chapter 12.120 of Division 12 of the San Buenaventura Municipal Code (“SBMC”) is amended in its entirety to read as follows:

Chapter 12.120 Plumbing Standards

Section 12.120.010. Adoption of California Plumbing Code, 2016 Edition.

Pursuant to California Government Code sections 50022.1 to 50022.8, inclusive, Part 5 of Title 24 of the California Code of Regulations, known as the California Plumbing Code, 2016 Edition (“CPC”), including Appendices A, B, D, H, I, and J thereof, is adopted by reference subject to the amendments, additions and deletions set forth in this Chapter. The CPC will apply to all occupancies identified by this code. One true copy of the CPC is on file in the Offices of the City Clerk and Building Official and is available for public inspection as required by law.

Section 12.120.020. Amendments.

A. After due consideration, the City Council finds and determines that local climatic, geological, or topographical conditions exist as follows: Climatic and Geological. The City has a limited supply of local water, some of which is corrosive in nature, and requires modification of plumbing fixtures to conserve water and protect the public health, safety and welfare.
B. These local climatic and geological conditions make modifications and changes to the CPC reasonably necessary to provide sufficient and effective protection of life, health and property. Therefore, the CPC is modified, amended, added to, and changed as set forth below:

1. Section 107.1 is replaced in its entirety to read as follows:

    107.1 Appeals. Appeals of the decision of the Building Official enforcing this code shall be filed and acted upon in accordance with Section 113 of the California Building Code as adopted by the City of San Buenaventura in Section 12.115.020 of the San Buenaventura Municipal Code.

2. Section 600 is added to read as follows:

    600. Sub-Metering Required. San Buenaventura Municipal Code sections 22.130.015, 22.130.030, 22.130.050 require or relate to sub-metering domestic water supplies serving multiple residential and non-residential units within the same building. Visit www.municode.com on the Internet or the City Hall permit counter for copies of these municipal code sections.

3. Section 604.3 is amended to read as follows:

    604.3 Copper or Copper Alloy Tube. Copper or copper alloy tube for water piping shall have a weight of not less than Type L.

4. Section 611.4 is amended by adding the following sentence to the beginning of the paragraph:

    611.4. Each new single-family and multi-family building shall have its water distribution system designed such that a water softener loop is provided at a location within 6 feet of building drainage system access for water softener discharge.

5. Section 713.4 is amended by adding the following sentence to the end of the paragraph:

    713.4. When the property owner can demonstrate to the Building Official that connection to the public sewer costs more than 150% of the cost of the private sewage disposal system approved by the State Water Resources Board, the Building Official shall grant replacement of the private sewage disposal system.

6. Section 1014.1 is amended by adding the following sentences to the end of the paragraph:
1014.1. All grease interceptor systems shall be subject to review, approval and inspection by the City public sewer authority - currently Ventura Water. While these reviews, approvals and inspections shall be in addition to the plumbing system review of the City Building and Safety Division, the Building and Safety Division will facilitate coordination of the review, approval and inspection processes. The owner or permittee is responsible for calling in inspections to Ventura Water and Building and Safety.

7. Section 1210.1.3 is amended to read as follows:

1210.1.3 Protection Against Corrosion. Gas piping in contact with earth or other material that is capable of corroding the piping shall be protected against corrosion in an approved manner. A listed material shall be used or IAPMO installation standard IS 13-2006. Field pipe and joint protection shall be by an approved primer followed by a minimum 20 mill black plastic PVC or PE tape; IAPMO PS 37 across piping and fittings. Where dissimilar metals are joined underground, an insulating coupling or fitting shall be used. Piping shall not be laid in contact with cinders. Uncoated threaded or socket welded joints shall not be used in piping in contact with soil or where internal or external crevice corrosion is known to occur. (NFPA 54:7.1.3)

8. Section 1210.2 is amended to read as follows:

1210.2 Installation of piping. Piping installed aboveground shall be securely supported where it will be protected from physical damage. Where passing through an exterior wall, the piping shall be protected against corrosion by coating or wrapping with an inert material approved for such applications. In exterior installations all piping and fittings shall be weather protected by approved paint for such materials. The piping shall be sealed around its circumference at the point of the exterior penetration to prevent the entry of water, insects, and rodents. Where piping is encased in a protective pipe sleeve, the annular spaces between the gas piping and the sleeve and between the sleeve and the wall opening shall be sealed. (NFPA 54:7.2.1)

9. H101.2 is amended to add the following:

H101.2. The soils report required in this section shall be performed under the supervision of a California registered Environmental Health Specialist, Civil Engineer, Geologist, or Engineering geologist. The soil report must specifically document the soil absorption rate for purposes of disposal system sizing. Where this Chapter conflicts with the City Municipal Code requirement mandating connection to the public sewer, the connection to public sewer shall be required.
10. Section H901.6 is deleted and replaced with the following:

H901.6 Waste Discharge. The discharge of industrial waste into a soil absorption system shall be prohibited unless sufficient analysis has been submitted to, reviewed, and approved by the Local Appeals Board.

SECTION 3: CALIFORNIA ENVIRONMENTAL QUALITY ACT. The City Council determines that this ordinance is exempt from review under the California Environmental Quality Act (California Public Resources Code §§ 21000 et seq., "CEQA") and the regulations promulgated thereunder (14 California Code of Regulations §§ 15000 et seq., the "State CEQA Guidelines") because it consists only of minor revisions and clarifications to an existing code of construction-related regulations and specification of procedures related thereto and will not have the effect of deleting or substantially changing any regulatory standards or findings required therefor. This ordinance, therefore, is an action being taken for enhanced protection of the environment and does not have the potential to cause significant effects on the environment.

SECTION 4: SAVINGS CLAUSE. Repeal of any provision of the SBMC or any other city ordinance herein will not affect any penalty, forfeiture, or liability incurred before, or preclude prosecution and imposition of penalties for any violation occurring before, this Ordinance's effective date. Any such repealed part will remain in full force and effect for sustaining action or prosecuting violations occurring before the effective date of this Ordinance.

SECTION 5: SEVERABILITY. If any part of this Ordinance is deemed invalid by a court of competent jurisdiction, the City Council intends that said invalidated part is severable and that such decision will not affect the validity of the remaining portions of this Ordinance which shall remain in full force and effect.

SECTION 6: VALIDITY OF PREVIOUS CODE SECTIONS. If this entire Ordinance is repealed or is deemed invalid by a court of competent jurisdiction, such action will render this Ordinance void and cause such SBMC Ordinance previously in effect prior to amendment by this Ordinance to remain in full force and effect for all purposes.

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SECTION 7: EFFECTIVE DATE. This Ordinance will take effect on the 31st day following its final passage and adoption or on January 1, 2017, whichever is later.

PASSED AND ADOPTED this 17th day of October 2016.

Erik Nasarenko
Mayor

ATTEST:

Antoinette M. Mann, MMC, CRM
City Clerk

APPROVED AS TO FORM:
Gregory G. Diaz
City Attorney

Jennifer Lee
Assistant City Attorney
I, ANTOINETTE M. MANN, City Clerk of the City of San Buenaventura, DO HEREBY CERTIFY that the foregoing is a full, true, and correct copy of Ordinance No. 2016-010 that was introduced by said City Council at a regular meeting held October 10, 2016, and adopted by said City Council at a regular meeting held October 17, 2016, by the following vote:

AYES: Councilmembers Morehouse, Weir, Tracy, Heitmann, Monahan, Deputy Mayor Andrews, and Mayor Nasarenko

NOES: None

ABSENT: None

I further certify that said Ordinance No. 2016-010 was published as required by law in the VENTURA COUNTY STAR, a newspaper of general circulation printed and published in said City.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the official seal of the City of San Buenaventura, California.

Antoinette M. Mann, MMC, CRM
City Clerk
City of San Buenaventura, California

Date Attested: October 18, 2016
ORDINANCE NO. 2016-012

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF SAN BUENAVENTURA ADOPTING BY REFERENCE THE 2016 EDITION OF THE CALIFORNIA ELECTRICAL CODE AND AMENDING CERTAIN PROVISIONS THEREOF THROUGH EXPRESS FINDINGS OF LOCAL NECESSITY

The City Council of the City of San Buenaventura does ordain as follows:

SECTION 1: FINDINGS. The City Council finds and determines that local climatic, geological or topographical conditions exist as follows:

A. Climatic and Geological. The City has moist coastal air and some corrosive native soil.

B. After due consideration, the City Council finds and determines that these local climatic and geological conditions make modifications and changes to the 2016 edition of the California Electrical Code reasonably necessary to provide sufficient and effective protection of life, health and property.

SECTION 2: AMENDMENTS. Chapter 12.125 of Division 12 of the San Buenaventura Municipal Code ("SBMC") is amended in its entirety to read as follows:

Chapter 12.125 - Electrical Standards


Pursuant to Government Code sections 50022.1 to 50022.8, inclusive, Part 3 of Title 24 of the California Code of Regulations, known as the California Electrical Code, 2016 Edition ("CEC"), including Annex C, is adopted by reference, subject to the amendments, additions and deletions set forth in this Chapter. One true copy of the CEC is on file and in the Offices of the Building Official and the City Clerk and is available for public inspection as required by law.

Section 12.125.020. - Amendments.

A. The City Council finds and determines that local climatic and geological conditions exist as follows: The City has moist coastal air and some corrosive native soil.

B. After due consideration, the City Council finds and determines that these local climatic and geological conditions make modifications and changes to the CEC reasonably necessary to provide sufficient and effective protection of life, health
and property. The CEC is therefore modified, amended, added to, and changed as set forth below:

1. CEC Article 90.8 (C) is added to read as follows:

90.8 (C) Wiring Planning. When one and two family dwelling flush mounted service panels are installed, a minimum of ¾-inch (19.05 mm) spare conduit shall be run to the accessible attic space where the extent of work being done makes access available. The conduit shall terminate in an accessible area for future connection. The same applies to the below floor locations when available. These provisions apply to both new, renovation, and remodel work.

2. CEC Article 230.70 (D) is added to read as follows:

230.70 (D) Multi-meter installations. Electrical service systems of 480 volts or 277/480 volts with provisions for more than one meter shall have a single service disconnecting means for all live parts downstream of the utility connection.

3. CEC Article 680.22 (E) is added to read as follows:

680.22 (E) Pool Shell, Lighting, Receptacles, and Equipment Including Covers, Heaters and Circulating Pumps. When there is a modification, addition, or repair of any of the equipment listed above, all GFCI protection provisions shall be field tested and verified to be in working order or replaced prior to final inspection. This applies to both residential and commercial pools and spas.

4. CEC Article 680.26 (D) is added to read as follows:

680.26 (D) Equipotential bonding. When there is a modification, addition, or repair of any pool shell, pool slide, hand rail, ladder, diving board, deck insert, pool cover, pool heater, pool pump, pool light, or surface deck within 5 feet (1524 mm) of the pool water’s edge, all provisions for Pool Equipotential Bonding shall be field-verified to be in good working condition or made to be in good working order prior to final inspection.

5. CEC Article 705.12 (D) 2 (3) (d) is added to read as follows:

705.12 (D) 2 (3) (d) Center Fed Panels. Load side connections shall be permitted on multiple ampacity busbars or center-fed panelboards where designed under engineering supervision that includes fault studies and busbar load calculations. When applying the 120% rule for load side connections of PV systems 10 KW or less with a single inverter at one and two family dwellings, determining existing loads under the provisions of
2016 CEC 220.87 shall be permitted. The existing load worst-case KW demand shall not exceed 75% of the service busbar rating. This provision shall apply to connections at service equipment only.

6. CEC Article 705.12 (D) (4) is amended to read as follows:

705.12 (D) (4) Suitable for Backfeed. Circuit breakers, if back-fed, shall be suitable for such operations. Quad (space-saving) circuit breakers with a PV system backfeed of more than 20 amps shall not be permitted.

SECTION 3: CALIFORNIA ENVIRONMENTAL QUALITY ACT. The City Council determines that this Ordinance is exempt from review under the California Environmental Quality Act (California Public Resources Code § 21000 et seq., "CEQA") and the regulations promulgated thereunder (14 California Code of Regulations § 15000 et seq., the "State CEQA Guidelines") because it consists only of minor revisions and clarifications to an existing code of construction-related regulations and specification of procedures related thereto and will not have the effect of deleting or substantially changing any regulatory standards or findings required therefor. This Ordinance, therefore, is an action being taken for enhanced protection of the environment and does not have the potential to cause significant effects on the environment.

SECTION 4: SAVINGS CLAUSE. Repeal of any provision of the SBMC or any other City ordinance herein will not affect any penalty, forfeiture, or liability incurred before, or preclude prosecution and imposition of penalties for any violation occurring before, this Ordinance's effective date. Any such repealed part will remain in full force and effect for sustaining action or prosecuting violations occurring before the effective date of this Ordinance.

SECTION 5: SEVERABILITY. If any part of this Ordinance is deemed invalid by a court of competent jurisdiction, the City Council intends that said invalidated part is severable and that such decision will not affect the validity of the remaining portions of this Ordinance, which shall remain in full force and effect.

SECTION 6: VALIDITY OF PREVIOUS CODE SECTIONS. If this entire Ordinance is repealed or is deemed invalid by a court of competent jurisdiction, such action will render this Ordinance void and cause such SBMC Ordinance previously in effect prior to amendment by this Ordinance to remain in full force and effect for all purposes.
SECTION 7: EFFECTIVE DATE. This Ordinance will take effect on the 31st day following its final passage and adoption or January 1, 2017, whichever is later.

PASSED AND ADOPTED this 17th day of October, 2016.

Eric Nasarenko
Mayor

ATTEST:

Antoinette M. Mann, MMC, CRM
City Clerk

APPROVED AS TO FORM:
Gregory G. Diaz
City Attorney

Jennifer Lee
Assistant City Attorney
STATE OF CALIFORNIA  
COUNTY OF VENTURA  
CITY OF SAN BUENAVENTURA  

I, ANTOINETTE M. MANN, City Clerk of the City of San Buenaventura, DO HEREBY CERTIFY that the foregoing is a full, true, and correct copy of Ordinance No. 2016-012 that was introduced by said City Council at a regular meeting held October 10, 2016, and adopted by said City Council at a regular meeting held October 17, 2016, by the following vote:

AYES: Councilmembers Morehouse, Weir, Tracy, Heitmann, Monahan, Deputy Mayor Andrews, and Mayor Nasarenko

NOES: None

ABSENT: None

I further certify that said Ordinance No. 2016-012 was published as required by law in the VENTURA COUNTY STAR, a newspaper of general circulation printed and published in said City.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the official seal of the City of San Buenaventura, California.

Antoinette M. Mann, MMC, CRM  
City Clerk  
City of San Buenaventura, California  

[Signature]  
October 18, 2016  
Date Attested

I hereby certify these records are a true and correct copy of records on file with the City of San Buenaventura.  

[Signature]  
10-26-16  
Name  
Assistant City Clerk  
Title
ORDINANCE NO. 2016-013

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF SAN BUENAVENTURA ADOPTING BY REFERENCE THE 2016 EDITION OF THE CALIFORNIA RESIDENTIAL CODE AND AMENDING CERTAIN PROVISIONS THEREOF THROUGH EXPRESS FINDINGS OF LOCAL NECESSITY

The City Council of the City of San Buenaventura does ordain as follows:

SECTION 1: FINDINGS. The City Council finds that certain local climatic, geological, or topographical conditions exist as follows:

A. Climatic. The City experiences periods of high temperatures accompanied by low humidity and high winds each year. These conditions could create an environment in which the fire department may have great difficulty in controlling fires occurring in hillside brush areas as well as structures not having built-in fire protection. The City also experiences periods of intense rainfall, which create the need for special drainage precautions.

B. Geological. The City is located in an area with expansive soils and includes hillsides that are subject to mudflows and unstable conditions. Special foundation considerations and soils analyses requirements must be in place to provide a reasonable degree of structural integrity for buildings constructed in these areas. Several earthquake faults run through the City that, when active, will impose unique lateral loads on structures in the City. Special lateral structural design criteria are needed to resist these lateral loads imposed by active earthquake faults in the City.

C. Topographical. The City has hillside and flat land developments that require special drainage precautions. Structures would be subject to water damage without special requirements addressing site drainage.

D. After due consideration, the City Council finds and determines that these local climatic, geological, and topographical conditions warrant modifications and changes to the 2016 Edition of the California Residential Code that are reasonably necessary to provide sufficient and effective protection of life, health, and property.
SECTION 2: Chapter 12.110 of Division 12 of the San Buenaventura Municipal Code ("SBMC") is amended in its entirety to read as follows:

Chapter 12.110 Residential Building Standards


Pursuant to California Government Code sections 50022.1 to 50022.8, inclusive, Part 2.5 of Title 24 of the California Code of Regulations, known as the California Residential Code, 2016 Edition ("CRC"), including all standard printed Chapters and Sections (whether adopted by the State matrix or not), is adopted by reference subject to the amendments, additions, and deletions set forth in this Chapter. The CRC will apply to residential occupancies identified by this code. One true copy of the CRC is on file in the Offices of the City Clerk and Building Official and is available for public inspection as required by law.

Section 12.110.020. - Amendments.

A. The City Council finds that certain local climatic, geological, and/or topographical conditions exist as follows:

1. Climatic. The City experiences periods of high temperatures accompanied by low humidity and high winds each year. These conditions could create an environment in which the fire department may have great difficulty in controlling fires occurring in hillside brush areas as well as structures not having built-in fire protection. The City also experiences periods of intense rainfall, which create the need for special drainage precautions.

2. Geological. The City is located in an area with expansive soils and includes hillsides that are subject to mudflows and unstable conditions. Special foundation considerations and soils analyses requirements must be in place to provide a reasonable degree of structural integrity for buildings constructed in these areas. Several earthquake faults run through the City that, when active, will impose unique lateral loads on structures in the City. Special lateral structural design criteria are needed to resist these lateral loads imposed by active earthquake faults in the City.

3. Topographical. The City has hillside and flat land developments that require special drainage precautions, as well as a system of roadways and highways that generate traffic noise. Structures would be subject to water damage without special requirements addressing site drainage.

B. After due consideration, the City Council finds and determines that these local climatic, geological, and topographical conditions make modifications and changes to the CRC reasonably necessary to provide sufficient and effective
protection of life, health, and property. The CRC is therefore modified, amended, added to, and changed as set forth below:

1. Chapter 1, Division II is replaced in its entirety with the following:

   Division II Administration.
   R100. Administration. Refer to Chapter 1, Division II, of the 2016 California Building Code, as adopted by the City of Ventura, for all administrative requirements and regulations.

2. Section R301.1 is amended by adding the following to the end of the section:

   Relocation of Existing Buildings. Relocated residential buildings shall comply with the relocation requirements found in the 2016 California Existing Building Code, Section 403.13.

3. Section R301.1.3.2 is added to read as follows:

   Section R301.1.3.2 Wood frame structures.
   The Building Official may require construction documents to be approved and stamped by a California licensed architect or engineer for all dwellings of wood frame construction more than one story in height located in Seismic Design Category D0, D1, D2, or E.

4. Section R301.1.4 is added to read as follows:

   Section R301.1.4 Seismic design provisions for buildings constructed on or into slopes steeper than one unit vertical in three units horizontal (33.3 percent slope). The design and construction of new buildings and additions to existing buildings when constructed on or into slopes steeper than one unit vertical three units horizontal (33.3 percent slope) shall comply with Section 1613.10 of the California Building Code.

5. Section R301.2 is amended in its entirety as follows:

   Section R301.2 Climatic and geographic design criteria.
   Buildings shall be constructed in accordance with the provisions of this code as limited by the provisions of this section. Additional Climatic and Geographic design criteria shall be established by the local jurisdiction and set forth with criteria from Chapter 16 of the California Building Code in Table R301.2(1).

6. Section R301.2.2.2.5 Items 1, 3, and 5 are amended as follows:

   Section R301.2.2.2.5 Irregular buildings.
   1. Where exterior shear wall lines or braced wall panels are not in one plane vertically from the foundation to the uppermost story in which they are required.
3. Where the end of a braced wall panel occurs over an opening in the wall below.
5. Where portions of a floor level are vertically offset.

7. Section R322.0 is added to read as follows:

Section R322.0 Grading and fill in flood hazard areas. Grading and filling in flood hazard areas must comply with the City Floodplain Management Ordinance. Where the City Floodplain Management Ordinance and this code conflict relative to grading and filling, the City Floodplain Management Ordinance takes precedence.

8. Section R337.1.3.1 is amended to read as follows:

Section R337.1.3.1. Application date and where required. New buildings for which an application for a building permit is submitted on or after July 1, 2008 located in any Fire Hazard Severity Zone or Wildland Interface Fire Area shall comply with all sections of this chapter, including all of the following areas:

1. All unincorporated lands designated by the State Board of Forestry and Fire Protection as State Responsibility Area (SRA) including:
   1.1. Moderate Fire Hazard Severity Zones
   1.2. High Fire Hazard Severity Zones
   1.3. Very-High Fire Hazard Severity Zones

2. Land designated as a High or Very-High Fire Hazard Severity Zone by the Office of State Fire Marshal pursuant to California Public Resources Code Sections 4201 – 4204.

9. Section R337.9.4 is added to read as follows:

Section R337.9.4 Restrictions in the Hillside Areas for deck and balcony construction.
The boundaries of the Hillside Area are identified to include properties north of Cedar St., north of Poli St. and north of Foothill Rd. Any deck or balcony complying with the requirements of the California Building and Residential Code may be erected, constructed, moved within or moved into the Hillside Areas provided the following additional requirements are complied with:

1. Deck and balcony support beams must be a minimum of nominal 4-inches (101.6 mm) wide and 6-inches (152.4 mm) deep (4x6).
2. Posts supporting elements noted in (1) must be a minimum of 4-inches (101.6 mm) x 4-inches (101.6 mm) (4x4).
3. Structural support beams and posts supporting interior floor loads must be a minimum of 6-inches (152.4 mm) x 6-inches (152.4 mm) (6x6).

4. Deck and balcony flooring must be a minimum of 2-inch (50.8 mm) thick material with spacing no greater than ¼-inch (6.35 mm).

Exceptions:
   a. When elevation of flooring is less than thirty (30) inches above grade, the flooring must be a minimum of 5/8-inch (15.88 mm) flooring without spacing or have a ½-inch (12.7 mm) thick solid skirt enclosure.
   b. Detached decks 200 sq. ft. or less, less than 30 inches (762 mm) above grade.

10. Section R401.1 is amended to add the following paragraph at the beginning of the section:

   All grading in the City must comply with the current City Grading Ordinance. Where the City Grading Ordinance and this code conflict with respect to grading regulations, the City Grading Ordinance will take precedence. Building and foundation permits shall not be issued prior to the City Engineer’s final approval of the associated grading work supporting, or otherwise affected by, the building or foundation.

11. The last sentence of Section R401.1 is amended to read as follows:

   Wood foundations in Seismic Design Category D0, D1, D2 or E shall not be permitted.

12. Section R401.3 is amended to add the following paragraph at the beginning of the section:

   All site drainage components and systems shall also comply with any State issued stormwater discharge permit requirements. Where State stormwater discharge permits conflict with this code, the City Engineer and Chief Building Official will determine the most appropriate regulations from both documents that assure clean water discharges into State waterways and promote the safety and general welfare of the community.

13. Section R401.5 is added to read as follows:

   Section R401.5 Grading. Also refer to the City of Ventura Municipal Code Grading Ordinance for requirements governing excavation, grading and earthwork construction including fills and embankments.

14. The first sentence of Section R403.1 is amended to read as follows:
All exterior walls and load bearing interior walls shall be supported on continuous concrete footings, or other approved structural systems which shall be of sufficient design to accommodate all loads according to Section R301 and to transmit the resulting loads to the soil within the limitations as determined from the character of the soil.

15. Section 403.1.1 is amended to read as follows:

Section 403.1.1 Minimum Size. All foundation and/or slab designs shall be predicated upon a soil analysis when required. Said design shall not be less than those minimum requirements set forth in Table 1809.7(1) for each soil expansion range.

16. Table R403.1(1) is deleted.

17. Section R403.1.2 is amended entirely to read as follows:

Section R403.1.2 Continuous footing in Seismic Design Categories D0, D1, D2 or E shall be supported by continuous solid or fully grouted masonry or concrete footings. All required interior braced wall panels in buildings located in Seismic Design Categories D0, D1, D2, or E shall be supported on continuous foundations.

18. Section R403.1.3.3 is amended to read as follows:

Section R403.1.3.3 Slabs on ground with turned-down footings. In Seismic Design Categories D0, D1, D2 or E, slabs on ground cast monolithically with turned-down footings shall have a minimum of one No. 4 bar at the top and the bottom of the footing. Where the slab is not cast monolithically with the footing, No. 3 or larger vertical dowels with standard hooks on each end shall be installed at not more than 4 feet (1219 mm) on center in accordance with Figure R403.1.3, Detail 2. Standard hooks shall comply with Section R608.5.4.5.

19. Sec. R403.1.5 is amended by adding the following to the end of the section:

For structures located in Seismic Design Categories D0, D1, D2 or E, stepped footings shall be reinforced with four one-half (1/2") inch diameter deformed reinforcing bars. Two (2) bars shall be placed at the top and bottom of the footings as shown in Figure R403.1.5.

20. Figure R403.1.5 is added.
21. Section 404.2 is amended by adding the following sentence:

Wood foundation walls shall not be used for structures located in Seismic Design Category D0, D1, D2, or E.

22. Section R503.2.4 is added to read as follows.

Section R503.2.4 Openings in Horizontal Diaphragms. Openings in horizontal diaphragms with a dimension perpendicular to the joist that is greater than 4 feet (1.2m) shall be constructed in accordance with Figure R503.2.4.

23. Figure R503.2.4 is added.
Blackings shall be provided beyond headers.

Metal ties not less than 0.058 inch (1.47 mm (16 galvanized gage)) by 1.5 inches (38 mm) wide with eight 16d common nails on each side of the header-joist intersection. The metal ties shall have a minimum yield of 33,000 psi.

Openings in diaphragms shall be further limited in accordance with Section R301.2.2.2.5.

Figure R503.2.4

24. Section R506.1 is amended by adding the following:

General. In lieu of a more detailed design per Sec. 1808.6 of the 2016 California Building Code, the following minimum requirements for concrete slab on ground shall apply:

Slab floors shall be reinforced as set forth in Table 1809.7.

25. Section R506.2.1 is amended to add the following to the end of the section:

Also refer to the City of Ventura Grading Ordinance for requirements governing excavation, grading and earthwork construction including fills and embankments.

Loose fill shall be compacted in an approved manner and to the satisfaction of the Building Official or shall be removed and replaced with coarse sand or gravel.
26. Section R506.2.3 is amended to read as follows:

Section R506.2.3 Vapor retarder. An approved moisture membrane with a minimum thickness of six (6) mils shall be installed in an approved manner under all interior concrete slab areas except residential garage slab areas. A layer of sand with a minimum depth of one (1") inch (24.5 mm) shall be placed over said membrane and shall be moist just prior to the placing of concrete. In cases where the foundation system proposed is a post tension slab and footing, a two (2") inch (50.8 mm) layer of sand shall be required.

27. Section R506.2.4 is amended to add the following sentence to the end of the section:

All reinforcing in slab floor shall be positioned at the center of the slab.

28. Footnote "j" is added to Table R602.3(1) to read as follows:

j. Use of Staples in braced wall panels shall be prohibited in Seismic Design Category D0, D1, D2 or E.
Table R602.3(1) is amended to read as follows:

### TABLE 602.3(1)

**FASTENING SCHEDULE—continued**

<table>
<thead>
<tr>
<th>ITEM</th>
<th>DESCRIPTION OF BUILDING ELEMENTS</th>
<th>NUMBER AND TYPE OF FASTENER&lt;sup&gt;b,c&lt;/sup&gt;</th>
<th>SPACING AND LOCATION</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Floor</td>
<td></td>
</tr>
<tr>
<td>24</td>
<td>2&quot; subfloor to joist or girder</td>
<td>3-16d box (3/8&quot; x 0.135&quot;) or 2-16d common (3/4&quot; x 0.162&quot;)</td>
<td>Blind and face nail</td>
</tr>
<tr>
<td>25</td>
<td>2&quot; planks (plank &amp; beam—floor &amp; roof)</td>
<td>3-16d box (3/8&quot; x 0.135&quot;) or 2-16d common (3/4&quot; x 0.162&quot;)</td>
<td>At each bearing, face nail</td>
</tr>
<tr>
<td>26</td>
<td>Band or rim joist to joist</td>
<td>3-16d common (3/8&quot; x 0.135&quot;) or 4-10 box (3/4&quot; x 0.128&quot;) or 4-3&quot; x 0.131&quot; nails or 4-3&quot; x 14 ga. staples, 1/16&quot; crown</td>
<td>End nail</td>
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<td>27</td>
<td>Built-up girders and beams, 2-inch lumber layers</td>
<td>20d common (4&quot; x 0.192&quot;) or 10d box (3&quot; x 0.128&quot;) or 3&quot; x 0.131&quot; nails</td>
<td>Nail each layer as follows: 32&quot; o.c. at top and bottom and staggered.</td>
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<tr>
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<td></td>
<td>And: 2-20d common (4&quot; x 0.192&quot;) or 3-10d box (3&quot; x 0.128&quot;) or 3&quot; x 0.131&quot; nails</td>
<td>Face nail at ends and at each splice</td>
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<tr>
<td>28</td>
<td>Ledger strip supporting joists or rafters</td>
<td>4-16d box (3/8&quot; x 0.135&quot;) or 3-16d common (3/4&quot; x 0.162&quot;) or 4-10d box (3&quot; x 0.128&quot;) or 4-3&quot; x 0.131&quot; nails</td>
<td>At each joist or rafter, face nail</td>
</tr>
<tr>
<td>29</td>
<td>Bridging to joist</td>
<td>2-10d (3&quot; x 0.128&quot;)</td>
<td>Each end, toe nail</td>
</tr>
</tbody>
</table>

**ITEM DESCRIPTION OF BUILDING ELEMENTS**

- **Floor**
  - Wood structural panels, subfloor, roof and interior wall sheathing to framing and particleboard wall sheathing to framing
    - [see Table R602.3(a) for wood structural panel exterior wall sheathing to wall framing]
  - Other wall sheathing
    - [see Table R602.3(c) for wood structural panel exterior wall sheathing to wall framing]
  - Wood structural panels, combination subfloor underlayment to framing

<table>
<thead>
<tr>
<th>ITEM</th>
<th>DESCRIPTION OF BUILDING ELEMENTS</th>
<th>NUMBER AND TYPE OF FASTENER&lt;sup&gt;b,c&lt;/sup&gt;</th>
<th>SPACING AND LOCATION</th>
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<tbody>
<tr>
<td>30</td>
<td>3/4&quot; - 1/2&quot;</td>
<td>6d common (2&quot; x 0.113&quot;) nail (subfloor, wall) or 8d common (2 1/2&quot; x 0.131&quot;) nail (roof)</td>
<td>6</td>
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<td>31</td>
<td>1/2&quot; - 1&quot;</td>
<td>8d common nail (2 1/2&quot; x 0.131&quot;)</td>
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<td>32</td>
<td>1/2&quot; - 1 1/4&quot;</td>
<td>10d common (3&quot; x 0.148&quot;) nail; or 8d (2 1/2&quot; x 0.131) deformed nail</td>
<td>6</td>
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<tr>
<td>33</td>
<td>1/2&quot; structural cellulosic fiberboard sheathing</td>
<td>1 1/2&quot; galvanized roofing nail, 1/16&quot; head diameter, or 1&quot; crown staple 16 ga., 1 1/4&quot; long</td>
<td>3</td>
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<tr>
<td>34</td>
<td>25/32&quot; structural cellulosic fiberboard sheathing</td>
<td>1 1/4&quot; galvanized roofing nail, 1/16&quot; head diameter, or 1&quot; crown staple 16 ga., 1 1/4&quot; long</td>
<td>3</td>
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<td>35</td>
<td>1/2&quot; gypsum sheathing&lt;sup&gt;d&lt;/sup&gt;</td>
<td>1 1/2&quot; galvanized roofing nail; staple galvanized, 1 1/2&quot; long; 1/4&quot; screws, Type W or S</td>
<td>7</td>
</tr>
<tr>
<td>36</td>
<td>5/8&quot; gypsum sheathing&lt;sup&gt;d&lt;/sup&gt;</td>
<td>1 1/4&quot; galvanized roofing nail; staple galvanized, 5/8&quot; long; 1/8&quot; screws, Type W or S</td>
<td>7</td>
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<tr>
<td>37</td>
<td>3/4&quot; and less</td>
<td>6d deformed (2&quot; x 0.120&quot;) nail; or 8d common (2 1/2&quot; x 0.131&quot;) nail</td>
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<td>38</td>
<td>7/8&quot; - 1&quot;</td>
<td>8d deformed (2 1/2&quot; x 0.131&quot;) nail; or 8d deformed (2 1/2&quot; x 0.120&quot;) nail</td>
<td>6</td>
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<td>39</td>
<td>1 1/8&quot; - 1 1/4&quot;</td>
<td>10d common (3&quot; x 0.148&quot;) nail; or 8d deformed (2 1/2&quot; x 0.120&quot;) nail</td>
<td>6</td>
</tr>
</tbody>
</table>

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 mile per hour = 0.447 m/s; 1 ksi = 6.895 MPa.
TABLE R602.3(1)—continued
FASTENING SCHEDULE

a. Nails are smooth-common, box or deformed shanks except where otherwise stated. Nails used for framing and sheathing connections shall have minimum average bending yield strengths as shown: 80 ksi for shank diameter of 0.192 inch (20d common nail), 90 ksi for shank diameters larger than 0.142 inch but not larger than 0.177 inch, and 100 ksi for shank diameters of 0.142 inch or less.
b. Staples are 18 gage wire and have a minimum 7/16-inch on diameter crown width.
c. Nails shall be spaced at not more than 6 inches on center at all supports where spans are 48 inches or greater.
d. Four-foot by 8-foot or 4-foot by 9-foot panels shall be applied vertically.
e. Spacing of fasteners not included in this table shall be based on Table R602.3(2).
f. Where the ultimate design wind speed is 130 mph or less, nails for attaching wood structural panel roof sheathing to gable end wall framing shall be spaced 6 inches on center. Where the ultimate design wind speed is greater than 130 mph, nails for attaching panel roof sheathing to intermediate supports shall be spaced 6 inches on center for minimum 48-inch distance from ridges, eaves and gable end walls; and 4 inches on center to gable end wall framing.
g. Gypsum sheathing shall conform to ASTM C 1396 and shall be installed in accordance with GA 253. Fiberboard sheathing shall conform to ASTM C 208.
h. Spacing of fasteners on floor sheathing panel edges applies to panel edges supported by framing members and required blocking and at floor perimeters only. Spacing of fasteners on roof sheathing panel edges applies to panel edges supported by framing members and required blocking. Blocking of roof or floor sheathing panel edges perpendicular to the framing members need not be provided except as required by other provisions of this code. Floor perimeter shall be supported by framing members or solid blocking.
i. Where a rafter is fastened to an adjacent parallel ceiling joist in accordance with this schedule, provide two toe nails on one side of the rafter and toe nails from the ceiling joist to top plate in accordance with this schedule. The toe nail on the opposite side of the rafter shall not be required.
j. Use of staples in braced wall panels shall be prohibited in Seismic Design Category D0, D1, D2 or D3.

30. Footnote “b” of Table R602.3(2) is amended as follows:

b. Staples shall have a minimum crown width of 7/16-inch on diameter except as noted. Use of staples in roof, floor, subfloor, and braced wall panels shall be prohibited in Seismic Design Category D0, D1, D2 or E.

31. Exception of Section R602.3.2 and Table R602.3(2) is being removed.
Table R602.10.3(3) is amended to read as follows:

<table>
<thead>
<tr>
<th>Braced Wall Line Length (feet)</th>
<th>Method</th>
<th>Method GB</th>
<th>Methods DWB, SFB, PBS, PCP, HPS, CS, SFB</th>
<th>Method WSP</th>
<th>Methods CS-WSP, CS-G</th>
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**SOIL CLASS D**

**15 PSF ROOF/CEILING DEAD LOAD**

**BRACED WALL LINE SPACING ≤ 25 FEET**

(continued)
TABLE R602.10.3(3)—continued
BRACING REQUIREMENTS BASED ON SEISMIC DESIGN CATEGORY

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<th>Seismic Design Category</th>
<th>Story Location</th>
<th>Braced Wall Line Length (feet)</th>
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<th>Method GB</th>
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Cripple wall below one- or two-story dwelling

|                         |               |                               | NP         | NP       | NP                                        | NP         | NP                   |
|                         |               | 10                            | NP         | NP       | NP                                        | 7.5        | 8.4                  |
|                         |               | 20                            | NP         | NP       | NP                                        | 15.0       | 12.8                 |
|                         |               | 30                            | NP         | NP       | NP                                        | 22.5       | 19.1                 |
|                         |               | 40                            | NP         | NP       | NP                                        | 30.0       | 25.5                 |
|                         |               | 50                            | NP         | NP       | NP                                        | 37.5       | 31.9                 |
33. Table R602.10.4 is amended to read as follows:

<table>
<thead>
<tr>
<th>METHODS, MATERIAL</th>
<th>MINIMUM THICKNESS</th>
<th>CONNECTION CRITERIA*</th>
<th>FIGURE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>LIB</strong> Let-in-bracing</td>
<td>1 x 4 wood or approved metal straps at 45° to 60° angles for maximum 16&quot; stud spacing</td>
<td>Wood: 2-8d common nails or 3-8d (2 1/2&quot; long x 0.113&quot; dia.) nails</td>
<td><img src="image1" alt="Diagram" /></td>
</tr>
<tr>
<td><strong>DWB</strong> Diagonal wood boards</td>
<td>1/4&quot; (1&quot; nominal) for maximum 24&quot; stud spacing</td>
<td>Metal strap: per manufacturer</td>
<td><img src="image2" alt="Diagram" /></td>
</tr>
<tr>
<td><strong>WSP</strong> Wood structural panel (See Section R604)</td>
<td>1/4&quot; See Figure R602.10.5</td>
<td>6d common (2 1/2&quot; x 0.131) nails</td>
<td><img src="image3" alt="Diagram" /></td>
</tr>
<tr>
<td><strong>BV-WSP</strong> Wood Structural Panels with Stone or Masonry Veneer (See Section R602.10.6.5)</td>
<td>1/4&quot; See Figure R602.10.5</td>
<td>8d common (2 1/2&quot; x 0.131) nails</td>
<td><img src="image4" alt="Diagram" /></td>
</tr>
<tr>
<td><strong>SFB</strong> Structural fiberboard sheathing</td>
<td>1/4&quot; or 3/8&quot; for maximum 16&quot; stud spacing</td>
<td>1 1/2&quot; long x 0.12&quot; dia. (for 1/4&quot; thick sheathing) 1 1/4&quot; long x 0.12&quot; dia. (for 3/8&quot; thick sheathing) galvanized roofing nails or 8d common (2 1/2&quot; long x 0.131&quot; dia.) nails</td>
<td><img src="image5" alt="Diagram" /></td>
</tr>
<tr>
<td><strong>GB</strong> Gypsum board</td>
<td>1/4&quot;</td>
<td>Nails or screws per Table R602.3(1) for exterior locations</td>
<td><img src="image6" alt="Diagram" /></td>
</tr>
<tr>
<td><strong>PBS</strong> Particleboard sheathing (See Section R605)</td>
<td>1/4&quot; or 1/2&quot; for maximum 16&quot; stud spacing</td>
<td>For 1/4&quot;, 6d common (2&quot; long x 0.113&quot; dia.) nails For 1/2&quot;, 8d common (2&quot; long x 0.131&quot; dia.) nails</td>
<td><img src="image7" alt="Diagram" /></td>
</tr>
<tr>
<td><strong>PCP</strong> Portland cement plaster</td>
<td>See Section R703.6 for maximum 16&quot; stud spacing</td>
<td>1 1/2&quot; long, 11 gage, 1 1/4&quot; dia. head nails or 1/2&quot; long, 16 gage staples</td>
<td><img src="image8" alt="Diagram" /></td>
</tr>
<tr>
<td><strong>HPS</strong> Hardboard panel siding</td>
<td>1/4&quot; for maximum 16&quot; stud spacing</td>
<td>0.092&quot; dia., 0.225&quot; dia. head nails with length to accommodate 1/2&quot; penetration into studs</td>
<td><img src="image9" alt="Diagram" /></td>
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<tr>
<td><strong>ABW</strong> Alternate braced wall</td>
<td>1/4&quot;</td>
<td>See Section R602.10.6.1</td>
<td><img src="image10" alt="Diagram" /></td>
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(*Note: Table continues on the next page.*)
### TABLE R602.10.4—continued  
BRACING METHODS  

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<th>METHODS, MATERIAL</th>
<th>MINIMUM THICKNESS</th>
<th>FIGURE</th>
<th>CONNECTION CRITERIA*</th>
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<tr>
<td><strong>PORTAL FRAME</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PFH <strong>Portal frame with hold-downs</strong></td>
<td>$\frac{3}{4}$ in.</td>
<td>See Section R602.10.6.2</td>
<td>See Section R602.10.6.2</td>
</tr>
<tr>
<td><strong>PORTAL FRAME AT GARAGE</strong></td>
<td>$\frac{3}{16}$ in.</td>
<td>See Section R602.10.6.3</td>
<td>See Section R602.10.6.3</td>
</tr>
<tr>
<td><strong>CONTINUOUSLY SHEATHED WOOD STRUCTURAL PANELS</strong></td>
<td>$\frac{3}{4}$ in.</td>
<td>See Section R602.10.6.2</td>
<td>See Section R602.10.6.3</td>
</tr>
<tr>
<td>CS-WSP <strong>Continuously sheathed wood structural panel</strong></td>
<td>$\frac{3}{8}$ in.</td>
<td>See Method CS-WSP</td>
<td>See Method CS-WSP</td>
</tr>
<tr>
<td>CS-SC <strong>Continuously sheathed wood structural panel adjacent to garage openings</strong></td>
<td>$\frac{3}{8}$ in.</td>
<td>See Method CS-WSP</td>
<td>See Method CS-WSP</td>
</tr>
<tr>
<td>CS-PF <strong>Continuously sheathed portal frame</strong></td>
<td>$\frac{3}{16}$ in.</td>
<td>See Section R602.10.6.4</td>
<td>See Section R602.10.6.4</td>
</tr>
<tr>
<td>CS-SFB <strong>Continuously sheathed structural fiberboard</strong></td>
<td>$\frac{1}{8}$ or $\frac{3}{16}$ in. for maximum 16” stud spacing</td>
<td>See Section R602.10.6.4</td>
<td>See Section R602.10.6.4</td>
</tr>
</tbody>
</table>

For SI: 1 inch = 25.4 mm, 1 foot = 305 mm, 1 degree = 0.0175 rad, 1 pound per square foot = 47.9 N/m², 1 mile per hour = 0.447 m/s.

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1. Adhesive attachment of wall sheathing, including Method GB, shall not be permitted in Seismic Design Categories C, D, and D₂.
2. Applies to panels next to garage door opening whose supporting gable and wall or roof load only. Shall only be used on one wall of the garage. In Seismic Design Categories D, D₁ and D₂, roof covering dead load shall not exceed 3 psf.
3. Garage openings adjacent to a Method CS-G panel shall be provided with a header in accordance with Table R602.5. A full height clear opening shall not be permitted adjacent to a Method CS-G panel.
4. Method CS-SFB does not apply in Seismic Design Categories D, D₁ and D₂.
5. Method applies to detached one- and two-family dwellings in Seismic Design Categories D, D₁ through D₂ only.
6. Methods LB and PCP braced wall panels by ratio shall not exceed 1:1 in SDC D₂, D₁, or D₂. Methods LB, DWP, SFB, PBS, HPS, and PPS are not permitted in SDC D₂, D₁, or D₂.
7. Use of stapler as braced wall panels shall be prohibited in SDC D₂, D₁, or D₂.
34. Figure R602.10.6.1 is amended to read as follows:

FIGURE R602.10.6.1
METHOD ABW—ALTERNATE BRACED WALL PANEL
35. Figure R602.10.6.2 is amended to read as follows:

**FIGURE R602.10.6.2**

**METHOD PFH—PORTAL FRAME WITH HOLD-DOWNS AT DETACHED GARAGE DOOR OPENINGS**

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm.
36. Table 602.10.5 is amended to read as follows:

<table>
<thead>
<tr>
<th>METHOD (See Table R602.10.4)</th>
<th>MINIMUM LENGTH&lt;sup&gt;a&lt;/sup&gt; (inches)</th>
<th>CONTRIBUTING LENGTH&lt;sup&gt;b&lt;/sup&gt; (inches)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0 feet</td>
<td>9 feet</td>
</tr>
<tr>
<td>DWB, WSP, SFB, PBS, PCP, HPS, BV-WSP</td>
<td>48</td>
<td>48</td>
</tr>
<tr>
<td>GB</td>
<td>48</td>
<td>48</td>
</tr>
<tr>
<td>LIB</td>
<td>55</td>
<td>62</td>
</tr>
<tr>
<td>ABW</td>
<td>SDC A, B and C, ultimate design wind speed &lt; 140 mph</td>
<td>28</td>
</tr>
<tr>
<td>SDC D&lt;sub&gt;i&lt;/sub&gt;, D&lt;sub&gt;j&lt;/sub&gt;, ultimate design wind speed &lt; 140 mph</td>
<td>32</td>
<td>32</td>
</tr>
<tr>
<td>PFH</td>
<td>Supporting roof only</td>
<td>24</td>
</tr>
<tr>
<td>Supporting one story and roof</td>
<td>24</td>
<td>24</td>
</tr>
<tr>
<td>PFG</td>
<td>24</td>
<td>24</td>
</tr>
<tr>
<td>CS-G</td>
<td>24</td>
<td>24</td>
</tr>
<tr>
<td>CS-PF</td>
<td>SDC A, B and C</td>
<td>16</td>
</tr>
<tr>
<td>SDC D&lt;sub&gt;i&lt;/sub&gt;, D&lt;sub&gt;j&lt;/sub&gt;, and D&lt;sub&gt;k&lt;/sub&gt;</td>
<td>24</td>
<td>24</td>
</tr>
<tr>
<td>Adjacent clear opening height (inches)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>≤ 64</td>
<td>24</td>
<td>27</td>
</tr>
<tr>
<td>68</td>
<td>26</td>
<td>27</td>
</tr>
<tr>
<td>72</td>
<td>27</td>
<td>27</td>
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<tr>
<td>76</td>
<td>30</td>
<td>29</td>
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<td>80</td>
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<td>30</td>
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<td>84</td>
<td>35</td>
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<td>88</td>
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<td>96</td>
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<td>100</td>
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<td>128</td>
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<td>132</td>
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<tr>
<td>136</td>
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<td>—</td>
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<tr>
<td>140</td>
<td>—</td>
<td>—</td>
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<tr>
<td>144</td>
<td>—</td>
<td>—</td>
</tr>
</tbody>
</table>

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 mile per hour = 0.447 m/s.
NP = Not Permitted.
a. Linear interpolation shall be permitted.
b. Use the actual length where it is greater than or equal to the minimum length.
c. Maximum header height for PFH is 10 feet in accordance with Figure R602.10.6.2, but wall height shall be permitted to be increased to 12 feet with pony wall.
d. Maximum opening height for PFG is 10 feet in accordance with Figure R602.10.6.3, but wall height shall be permitted to be increased to 12 feet with pony wall.
e. Maximum opening height for CS-PF is 10 feet in accordance with Figure R602.10.6.4, but wall height shall be permitted to be increased to 12 feet with pony wall.
37. Section R602.10.2.3 is amended as follows.

Section R602.10.3 Minimum number of braced wall panels. Braced wall lines with a length of 16 feet (4877 mm) or less shall have a minimum of two braced wall panels of any length or one braced wall panel equal to 48 inches (1219 mm) or more. Braced wall lines greater than 16 feet (4877 mm) shall have a minimum of two braced wall panels. No braced panel shall be less than 48 inches (1219 mm) in length in Seismic Design Category D0, D1, D2 or E.

38. Figure R602.10.6.4 is amended to read as follows.
39. Section R606.4.4 is amended to read as follows:

Section R606.4.4 Parapet walls. Unreinforced solid masonry parapet walls are not allowed in Seismic Design Category D0, D1, D2 or E.

40. Section R606.12.2.2.3 is amended to read as follows:

Section R606.12.2.2.3 Reinforcement requirements for masonry elements. Masonry elements listed in Section R606.12.2.2.2 shall be reinforced in either the horizontal or vertical direction as shown in Figure R606.11(3) and in accordance with the following:

1. Horizontal reinforcement. Horizontal joint reinforcement shall consist of at least one No. 4 bar spaced not more than 48 inches (1219 mm). Horizontal reinforcement shall be provided within 16 inches (406 mm) of the top and bottom of these masonry elements.

2. Vertical reinforcement. Vertical reinforcement shall consist of at least one No. 4 bar spaced not more than 48 inches (1219 mm). Vertical reinforcement shall be within 8 inches (203 mm) of the ends of masonry walls.

41. The first sentence of Section R802.8 is amended to read as follows:

Roof framing members and ceiling joists having a depth-to-thickness ratio exceeding 2 to 1, based on nominal dimensions, shall be provided with lateral support at points of bearing to prevent rotation.

42. Section R803.2.4 is added to read as follows:

Section R803.2.4 Openings in horizontal diaphragms. Openings in horizontal diaphragms shall conform with Section R503.2.4.

43. Section R805.2 is added to read as follows:

Section R805.2 Suspended ceilings. Suspended acoustical ceilings shall be designed in accordance with ASCE-7-10 Section 13.5.6.

44. Section R902.1 is amended to read as follows:

Section R902.1 Roof Covering Materials. Roofs shall be covered with materials as set forth in Sections R904 and R905. A minimum Class B roofing shall be installed. Roofing shall be listed and tested in accordance with UL 790 or ASTM E 108.

The “Exceptions” of this section remain as contained in the State Code.
45. Section R902.1.2 is re-titled to "Roof Coverings in Other Areas."

46. Section R902.1.3 is amended to read as follows:

Section R902.1.3 Additions to Existing Buildings. In any 12 month period, additions of less than 26% of the existing roof area may be of Class B materials that match the existing roof. Additions in high fire hazard areas must meet the current high fire hazard area roofing requirements in addition to this section.

47. Section R902.2 is amended to read as follows:

Section R902.2 Wood Shingles and Shakes. No wooden shakes or shingles, treated or untreated, shall be used for roof covering unless specifically allowed in Sections R902.1.1, R902.1.2, or R902.1.3 of this code.

48. Section R1001.3.1 is amended to read as follows.

Section R1001.3.1 Vertical reinforcing. For chimneys up to 40 inches (1016 mm) wide, four No. 4 continuous vertical bars adequately anchored into the concrete foundation shall be placed between wythes of solid masonry or within the cells of hollow unit masonry and grouted in accordance with Section R609. Grout shall be prevented from bonding with the flue liner so that the flue liner is free to move with thermal expansion. For chimneys more than 40 inches wide, two additional No. 4 vertical bars adequately anchored into the concrete foundation shall be provided for each additional flue incorporated into the chimney or for additional 40 inches (1016 mm) in width or fraction thereof.

SECTION 3: CALIFORNIA ENVIRONMENTAL QUALITY ACT. The City Council determines that this Ordinance is exempt from review under the California Environmental Quality Act (California Public Resources Code § 21000 et seq., "CEQA") and the regulations promulgated thereunder (14 California Code of Regulations § 15000 et seq., the "State CEQA Guidelines") because it consists only of minor revisions and clarifications to an existing code of construction-related regulations and specification of procedures related thereto and will not have the effect of deleting or substantially changing any regulatory standards or findings required therefor. This Ordinance, therefore, is an action being taken for enhanced protection of the environment and does not have the potential to cause significant effects on the environment.

SECTION 4: SAVINGS CLAUSE. Repeal of any provision of the SBMC or any other city ordinance herein will not affect any penalty, forfeiture, or liability incurred before, or preclude prosecution and imposition of penalties for any violation occurring before, the effective date of this Ordinance. Any such repealed part will remain in full force and effect for sustaining action or prosecuting violations occurring before the effective date of this Ordinance.
SECTION 5: SEVERABILITY. If any part of this Ordinance is deemed invalid by a court of competent jurisdiction, the City Council intends that said invalidated part is severable and that such decision will not affect the validity of the remaining portions of this Ordinance, which shall remain in full force and effect.

SECTION 6: VALIDITY OF PREVIOUS CODE SECTIONS. If this entire Ordinance is repealed or is deemed invalid by a court of competent jurisdiction, such action will render this Ordinance void and cause such SBMC Ordinance previously in effect prior to amendment by this Ordinance to remain in full force and effect for all purposes.

SECTION 7: EFFECTIVE DATE. This Ordinance will take effect on the 31st day following its final passage and adoption or January 1, 2017, whichever is later.

PASSED AND ADOPTED this 17 day of October, 2016.

Erik Nasarenko
Mayor

ATTEST:

Antoinette Mann, MMC, CRM
City Clerk

APPROVED AS TO FORM:
Gregory G. Diaz
City Attorney

Jennifer Lee
Assistant City Attorney
CERTIFICATION

STATE OF CALIFORNIA )
COUNTY OF VENTURA ) SS.
CITY OF SAN BUENAVENTURA )

I, ANTOINETTE M. MANN, City Clerk of the City of San Buenaventura, DO HEREBY CERTIFY that the foregoing is a full, true, and correct copy of Ordinance No. 2016-013 that was introduced by said City Council at a regular meeting held October 10, 2016, and adopted by said City Council at a regular meeting held October 17, 2016, by the following vote:

AYES: Councilmembers Morehouse, Weir, Tracy, Heitmann, Monahan, Deputy Mayor Andrews, and Mayor Nasarenko

NOES: None

ABSENT: None

I further certify that said Ordinance No. 2016-013 was published as required by law in the VENTURA COUNTY STAR, a newspaper of general circulation printed and published in said City.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the official seal of the City of San Buenaventura, California.

Antoinette M. Mann, MMC, CRM
City Clerk
City of San Buenaventura, California

Date Attested: October 18, 2016

I hereby certify these records are a true and correct copy of records on file with the City of San Buenaventura.

Name: Roxanne Bouells
Date: 10-26-16
Title: Assistant City Clerk
ORDINANCE NO. 2016-014


The City Council of the City of San Buenaventura does ordain as follows:

SECTION 1: FINDINGS. The City Council finds that certain local climatic, geological, or topographical conditions exist as follows:

A. Climatic. The City experiences periods of high temperatures accompanied by low humidity and high winds each year. These conditions could create an environment in which the fire department may have great difficulty in controlling fires occurring in hillside brush areas as well as structures not having built-in fire protection. The City also experiences periods of intense rainfall, which create the need for special drainage precautions.

B. Geological. The City is located in an area with expansive soils and includes hillsides that are subject to mudflows and unstable conditions. Special foundation considerations and soils analyses requirements must be in place to provide a reasonable degree of structural integrity for buildings constructed in these areas. Several earthquake faults run through the City that, when active, will impose unique lateral loads on structures in the City. Special lateral structural design criteria are needed to resist these lateral loads imposed by active earthquake faults in the City.

C. Topographical. The City has hillside and flat land developments that require special drainage precautions. Structures would be subject to water damage without special requirements addressing site drainage.

D. After due consideration, the City Council finds and determines that these local climatic, geological, and topographical conditions make modifications and changes to the 2016 Edition of the California Existing Building Code reasonably necessary to provide sufficient and effective protection of life, health, and property.
SECTION 2: Chapter 12.005 of Division 12 of the San Buenaventura Municipal Code ("SBMC") is hereby added to read as follows:

Chapter 12.005 Existing Building Standards


Pursuant to Government Code sections 50022.1 to 50022.8, inclusive, Part 10 of Title 24 of the California Code of Regulations, known as the California Existing Building Code, 2016 Edition ("CEBC"), including all standard printed Chapters and Sections (whether adopted by the State matrix or not), is adopted by reference, subject to the amendments, additions, and deletions set forth in this Chapter. The CEBC will apply to existing occupancies identified by this code. One true copy of the CEBC is on file in the Offices of the City Clerk and Building Official and is available for public inspection as required by law.

Section 12.005.020. Amendments.

A. The City Council finds that certain local climatic, geological, and/or topographical conditions exist as follows:

1. Climatic. The City experiences periods of high temperatures accompanied by low humidity and high winds each year. These conditions could create an environment in which the fire department may have great difficulty in controlling fires occurring in hillside brush areas as well as structures not having built-in fire protection. The City also experiences periods of intense rainfall, which create the need for special drainage precautions.

2. Geological. The City is located in an area with expansive soils and includes hillsides that are subject to mudflows and unstable conditions. Special foundation considerations and soils analyses requirements must be in place to provide a reasonable degree of structural integrity for buildings constructed in these areas. Several earthquake faults run through the City that, when active, will impose unique lateral loads on structures in the City. Special lateral structural design criteria are needed to resist these lateral loads imposed by active earthquake faults in the City.

3. Topographical. The City has hillside and flat land developments that require special drainage precautions, as well as a system of roadways and highways that generate traffic noise. Structures would be subject to water damage without special requirements addressing site drainage.

B. After due consideration, the City Council finds and determines that these local climatic, geological, and topographical conditions make modifications and changes to the CEBC reasonably necessary to provide sufficient and effective
protection of life, health, and property. The CEBC is therefore modified, amended, added to, and changed as set forth below:

1. Chapter 1, Division II is replaced in its entirety with the following:

Division II Administration.

Section 100. Administration. Refer to Chapter 1, Division II, of the 2016 California Building Code, as adopted by the City of San Buenaventura, for all administrative requirements and regulations.

2. Section 403.13 is added to read as follows:

403.13 Relocation of Existing Buildings. No person, firm or corporation shall move or relocate any building or structure into the City, or from one lot to another lot within the City, or from one portion of a lot to another location on the same lot without first obtaining a building permit; provided, however, nothing contained in this chapter shall be construed to apply to a factory-built building approved as such under the jurisdiction of the State. To obtain a permit, the applicant shall first file an application therefore in writing on a form furnished for that purpose. Any building relocation shall be subject to the following provisions:

Exception: Minor structures which do not require a building permit per Section 105 of this code.

403.13.1 The following information shall be filed for review and subject to the approval of the Building Official prior to the issuance of the building relocation permit:

1. The location and address of the current site and new site shown on a plot plan. This shall include the showing of adjacent lots on all sides of the property and an indication of all structures and improvements on such lot;

2. A letter of structural integrity from a State licensed structural engineer stating the age of the structure, it's structural capacity for lifting and relocating, and the specific location of supports to safely transport the building;

3. Plans and specifications for the proposed improvements at the new location, including utilities, emergency vehicle access, drainage, etc.;

4. A valid transportation permit issued by the City Engineer for the specific structure proposed for relocation;

5. A termite inspection report prepared by a legally qualified person;
6. The plan and details for abandonment of sewage disposal systems and/or sewer laterals as set forth in the California Plumbing Code;

7. A current photograph showing the front of each building to be relocated; and

8. Such additional information as shall be deemed reasonably necessary by the Building Official to carry out the intent and purpose of this Chapter.

403.13.2 Inspection.

403.13.2.1 Application investigation. Before any application for a permit is accepted, an investigation of the condition of the building to be moved and inspection of the proposed new location must be completed by the City Building Official. Fees for this investigation and inspection shall be based on the City Council approved hourly rate for Building & Safety multiplied by the estimated total travel, inspection and the post-inspection documentation time needed.

403.13.2.2 Outside City limits. If the building or structure is located outside the City limits, a mileage charge equivalent to the current mileage rate paid by the City may be charged for each mile traveled outside the City limits in the course of the investigation.

403.13.3 Regulatory compliance. Before the Building Official may grant a building relocation permit, there shall be evidence of full compliance with all pertinent ordinances, rules, regulations and other laws of the City and State.

403.13.4 Findings. The Building Official shall find prior to granting a building relocation permit:

1. That there is evidence of full compliance with the City Zoning Ordinance;

2. That all new or repair work in the moved building shall comply or be altered to comply with current State Title 24 requirements as adopted by the City; and

3. Before a building permit may be granted, there shall be required of the applicant the posting of a bond in such an amount as is determined by the Building Official to cover costs of any provisions stated in this chapter but not less than $100,000. The bond shall also cover the costs involved in cleaning up the vacated site and restoring it to a safe and healthy condition. The bonding time is a minimum of ninety (90) days and may be extended for good cause by the Building Official if final inspection of the moved building is not obtained within the ninety (90) days.
3. Section 407.5 is added to read as follows:

Section 407.5 Unreinforced Masonry Buildings. When an existing unreinforced masonry structure is being reclassified to a higher occupancy classification, the unreinforced masonry building shall be evaluated by a registered civil or structural engineer licensed in the State of California, experienced with unreinforced masonry buildings. The evaluation shall be based on the life and safety or immediate occupancy performance level, in accordance with current ASCE 31.

This evaluation shall establish whether the existing unreinforced masonry building is structurally damaged or in need of structural repair. This report must be submitted to the Building Official for review and further recommendations prior to the submittal for the change of occupancy classification.

SECTION 3: CALIFORNIA ENVIRONMENTAL QUALITY ACT. The City Council determines that this Ordinance is exempt from review under the California Environmental Quality Act (California Public Resources Code §§ 21000 et seq., "CEQA") and the regulations promulgated thereunder (14 California Code of Regulations §§ 15000 et seq., the "State CEQA Guidelines") because it consists only of minor revisions and clarifications to an existing code of construction-related regulations and specification of procedures related thereto and will not have the effect of deleting or substantially changing any regulatory standards or findings required therefor. This Ordinance, therefore, is an action being taken for enhanced protection of the environment and does not have the potential to cause significant effects on the environment.

SECTION 4: SAVINGS CLAUSE. Repeal of any provision of the SBMC or any other City ordinance herein will not affect any penalty, forfeiture, or liability incurred before, or preclude prosecution and imposition of penalties for any violation occurring before the effective date of this Ordinance. Any such repealed part will remain in full force and effect for sustaining action or prosecuting violations occurring before the effective date of this Ordinance.

SECTION 5: SEVERABILITY. If any part of this Ordinance is deemed invalid by a court of competent jurisdiction, the City Council intends that such decision will not affect the validity of the remaining portions of this Ordinance and, to this end, the provisions of this Ordinance are severable.

SECTION 6: VALIDITY OF PREVIOUS CODE SECTIONS. If this entire Ordinance is repealed or is deemed invalid by a court of competent jurisdiction, such action will render this Ordinance void and cause such SBMC Ordinance previously in effect prior to amendment by this Ordinance to remain in full force and effect for all purposes.
SECTION 7: EFFECTIVE DATE. This Ordinance will take effect on the 31st day following its final passage and adoption or January 1, 2017 whichever is later.

PASSED AND ADOPTED this 17 day of October, 2016.

Erik Nasarenko
Mayor

ATTEST:

Antoinette Mann, MMC, CRM
City Clerk

APPROVED AS TO FORM:
Gregory G. Diaz
City Attorney

Jennifer Lee
Assistant City Attorney
I, ANTOINETTE M. MANN, City Clerk of the City of San Buenaventura, DO HEREBY CERTIFY that the foregoing is a full, true, and correct copy of Ordinance No. 2016-014 that was introduced by said City Council at a regular meeting held October 10, 2016, and adopted by said City Council at a regular meeting held October 17, 2016, by the following vote:

AYES:   Councilmembers Morehouse, Weir, Tracy, Heitmann, Monahan, Deputy Mayor Andrews, and Mayor Nasarenko

NOES:   None

ABSENT: None

I further certify that said Ordinance No. 2016-014 was published as required by law in the VENTURA COUNTY STAR, a newspaper of general circulation printed and published in said City.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the official seal of the City of San Buenaventura, California.

Antoinette M. Mann, MMC, CRM
City Clerk
City of San Buenaventura, California

October 18, 2016
Date Attested
ORDINANCE NO. 2016 - 015

AN ORDINANCE ADOPTING BY REFERENCE THE 2016 EDITION OF THE CALIFORNIA FIRE CODE AND AMENDING CERTAIN PROVISIONS THEREOF THROUGH EXPRESS FINDINGS OF LOCAL NECESSITY

The City Council of the City of San Buenaventura does ordain as follows:

SECTION 1: FINDINGS. The City Council finds that certain local climatic, geological, or topographical conditions exist as follows:

A. Climatic. The City experiences periods of extremely high temperatures accompanied by low humidity and high winds each year. These conditions could create an environment in which the Fire Department may be unable to control fires occurring in vegetation as well as structures not having built-in fire protection.

B. Geological. The City is located in a seismically active area. A significant earthquake could render the Fire Department incapable of providing adequate fire protection. In that instance, built-in fire protection would be relied upon for controlling most structural fires.

C. Topographical. The City has developed areas of steep hillsides. These hillsides create Fire Department access problems that can prevent the timely extinguishment of fires in structures not having built-in fire protection. Additionally, many structures in the hillside area are subject to exposure from fires occurring in native vegetation remaining on undeveloped land parcels.

The City Council, following due consideration, finds and determines that due to these local climatic, geological, or topographical conditions, amendments, additions, and deletions to the California Fire Code, 2016 Edition, are reasonably necessary to provide sufficient and effective levels of fire safety for the protection of life, health and property. Specifically, these amendments are made through City Municipal Code Chapter 14.010 ("Fire Regulations"), which:

1. Allows the Fire Chief to apply fire appliance requirements to residential occupancies in order to address the periods of low humidity and high winds, potential seismic activity, or areas of restricted access present in the City.

2. Provides a means of ensuring that fire protection systems are installed and maintained in a manner that will provide adequate protection during periods of low humidity and high winds, potential seismic activity, or in areas of restricted access present in the City.
3. Requires the installation of fire sprinklers in most new buildings/structures, those structures/buildings to which specified additions are made, and structures/buildings in which occupancy use changes are made that increase the fire and life safety hazard of the structures/buildings in order to provide adequate fire protection during periods of low humidity and high winds, potential seismic activity, or in areas of restricted access present in the City.

4. Controls the storage of hazardous materials, including but not limited to flammable liquids in order to reduce the danger from fire during periods of low humidity and high winds, potential seismic activity, or in areas of restricted access present in the City.

5. Limits the use of fireworks and pyrotechnic devices to state-licensed technicians to reduce the danger from fire during periods of low humidity and high winds, or in areas of restricted access present in the City.

6. Limits the growth of hazardous vegetation and maintains defensible space around buildings and structures in order to reduce the danger from fire during periods of low humidity and high winds, or in areas of restricted access present in the City.

SECTION 2: Chapter 14.010 of Division 14 of the San Buenaventura Municipal Code (“SBMC”) is amended in its entirety to read as follows:

FIRE REGULATIONS


Pursuant to Government Code §§ 50022.1 to 50022.8, inclusive, Part 9 of Title 24 of the California Code of Regulations, known as the California Fire Code, 2016 Edition (“CFC”), is adopted by reference subject to the amendments, additions and deletions set forth in this chapter. Adoption of the CFC includes CFC Appendices Chapters 4, B, BB, C, CC, D, H, and N. The CFC will apply to all occupancies within the city’s jurisdiction. One (1) true copy of the CFC is on file in the Offices of the Fire Marshal and Building Official and is available for public inspection as required by law.

Section 14.010.020. Amendments.

A. The City Council further finds that certain local climatic, geological, or topographical conditions exist as follows:

1. Climatic - The City experiences periods of extremely high temperatures accompanied by low humidity and high winds each year. These conditions could create an environment in which the Fire Department may be unable to control fires occurring in vegetation as well as structures not having built in fire protection.
2. **Geological** - The City is located in a seismically active area. A significant earthquake could render the Fire Department incapable of providing adequate fire protection. In that instance, built-in fire protection would be relied upon for controlling most structural fires.

3. **Topographical** - The City has developed areas of steep hillsides. These hillsides create Fire Department access problems which can prevent the timely extinguishment of fires in structures not having built-in fire protection. Additionally, many structures in the hillside area are subject to exposure from fires occurring in native vegetation remaining on undeveloped land parcels.

B. After due consideration, the City Council finds and determines that these local climatic, geological, or topographical conditions make additions, modifications and changes to the CFC reasonably necessary to provide sufficient and effective levels of fire safety for the protection of life, health and property. The CFC is therefore modified, amended, added to, and changed as set forth below:

1. **CFC § 101 is amended to read as follows:**

   Section 101.1 Title. These regulations shall be known as the Fire Code of the City of San Buenaventura, hereinafter referred to as “this code.”

2. **CFC § 104.12 is added to read as follows:**

   Section 104.12 Reimbursement for Emergency Services and Code Enforcement

   Section 104.12.1 Purpose. The purpose of this section is to establish authority to obtain reimbursement from responsible individuals for the expenses of any emergency response and/or enforcement action by the Ventura City Fire Department to protect the public from fire or hazardous substances and situations.

   Section 104.12.2 Reimbursement. In accordance with Health and Safety Code section 13000 et seq., an individual who acts negligently or in violation of the law and thereby requires the jurisdiction to provide an emergency response to a danger posed by a fire or hazardous substance shall be liable for reimbursement to the agency for the costs incurred.

   In accordance with Government Code Sections 53150 through 53158, any individual who is under the influence of an alcoholic beverage or any drug or the combined influence of an alcoholic beverage and any drug, and whose negligent operation of a motor vehicle, boat or vessel, or civil aircraft caused by that influence, proximately causes any incident and thereby requires the agency to provide an emergency response shall reimburse the agency for costs incurred.

3. **CFC § 105.6.13 is deleted.**
4. **CFC § 105.6.18 is deleted.**

5. **CFC § 105.6.30 is amended to read as follows:**

   Open burning. An operational permit is required for the kindling or maintaining of an open fire, open burning, recreational fire, portable outdoor fireplace, or a fire on any public street, alley, road, or other public or private ground. Instructions and stipulations of the permit shall be adhered to.

   Exception: Recreational fires and portable outdoor fireplaces on private property.

6. **CFC § 105.6.41 is deleted.**

7. **CFC § 105.6.47 is deleted.**

8. **CFC § 105.6.50 is added to read as follows:**

   Section 105.6.50. Christmas Tree Lots. An operational permit is required for the operation of a site, lot, and/or facility where harvested trees are for sale to the public.

9. **CFC § 105.6.51 is added to read as follows:**

   105.6.51. Mobile Refueling. An operational permit is required for each location where mobile refueling is to occur. Mobile refueling shall meet all requirements set forth by the fire code official.

10. **CFC § 108.1 is amended to read as follows:**

   Section 108.1 Appeals to determine the suitability of alternate materials and types of construction and to provide for reasonable interpretations of the provisions of this code will be heard and determined in the following manner:

   1. The appeal will be first directed in writing to the fire code official. The fire code official will render an appeal decision and finding in writing to the appellant.

   2. In the event an appellant is not satisfied with an appeal decision and finding rendered by the fire code official, a further appeal may be made in writing to the Local Appeals Board (Board) within 30 days of the decision and finding made by the fire code official. This Board, established in Section 113 of the California Building Code as adopted by the City, will also act as the Board of Appeals with respect to the CFC.

11. **CFC § 109.4 is amended to read as follows:**

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Section 109.4 Violation penalties. Persons who shall violate a provision of this code or shall fail to comply with any of the requirements thereof or who shall erect, install, alter, repair or do work in violation of the approved construction documents or directive of the fire code official, or of a permit or certificate used under provisions of this code, shall be guilty of a misdemeanor. Fines and/or imprisonment shall be in accordance with the San Buenaventura Municipal Code. Each day that a violation continues after due notice has been served shall be deemed a separate offense.

12. *CFC § 111.4 is amended to read as follows:*

Section 111.4 Failure to comply. Any person who shall continue any work after having been served with a stop work order, except such work as that person is directed to perform to remove a violation or unsafe condition, shall be liable to a fine in accordance with the San Buenaventura Municipal Code or fee schedule adopted by the City Council.

13. *CFC § 202 is amended to add the following definition:*

**ADDITION TO A BUILDING OR STRUCTURE.** An extension or increase in floor area or height of a building or structure.

14. *CFC § 202 is amended to read as follows:*

**PERSON.** A natural person, his heirs, executors, administrators or assigns, and also includes a firm, partnership whether general or limited, or corporation, unincorporated association, union or organization, cooperative and trust, its or their successors or assigns, or the agent of any of the aforesaid. It shall include the plural as well as the singular number, the male and female gender, and all governmental entities subject in whole or in part to this Code and the codes adopted by reference herein.

15. *CFC § 202 is amended to add the following definition:*

**UNDETERMINED USE.** A building/structure will be considered of undetermined use if the specific occupancy type is not determined at the time of permit application for the installation of a fire protection system.

16. *CFC § 304.1.2 is amended to read as follows:*

Section 304.1.2 Vegetation. Weeds, grass, vines or other growth that is capable of being ignited and endangering property, shall be cut down and removed by the owner or occupant of the premises. Vegetation clearance requirements in urban-wildland interface areas, hazardous watershed fire areas, hazardous fire areas and parcels declared a public nuisance shall be in accordance with Chapter 49 and Appendix O.
17. **CFC § 307.1.1 is amended to read as follows:**

Prohibited burning. The fire code official is authorized to prohibit open burning, recreational fires, and the use of portable outdoor fireplaces when atmospheric conditions or local circumstances increase the risk of uncontrolled fires. The burning of rubbish (trash) is prohibited.

Exception: Prescribed burning for the purpose of reducing the impact of wildland fire when authorized by the fire code official.

18. **CFC § 307.3 is amended to read as follows:**

Extinguishment authority. When open burning, recreational fires, or the use of portable outdoor fireplaces creates or adds to a hazardous situation, is not in compliance with this code, or a required permit has not been obtained, the fire code official is authorized to prohibit the fire and extinguish it or order the extinguishment of the fire.

19. **CFC § 308.1.4 is amended to read as follows:**

Section 308.1.4 Open-flame cooking devices. Charcoal burners and other open-flame cooking devices shall not be operated on combustible balconies or within 10 feet (3048 mm) of combustible construction.

Exceptions:
1. One and two-family dwellings.
2. Where buildings, balconies and decks are protected by an automatic sprinkler system.
3. LP-gas cooking devices having LP-gas container with a water capacity not greater than 20 pounds.

20. **CFC § 308.1.6.3 is amended to read as follows:**

Section 308.1.6.3 Sky lanterns. The ignition and launching of sky lanterns is prohibited.

Exception: When approved by the fire code official, sky lanterns may be used when necessary for religious or cultural ceremonies and adequate safeguards have been taken. Sky lanterns shall be tethered in a safe manner to prevent them from leaving the area and must be constantly attended until extinguished.

21. **CFC § 311.7 is added to read as follows:**

Section 311.7 – Property or Materials Damaged by Fire.

Section 311.7.1 The owner or other person having under their control any property or materials damaged by fire will secure the property either by boarding up all openings, fencing, barricading or other appropriate measures as directed by the Chief.
Section 311.7.2 Removal. All debris and/or damaged materials will be removed from the property in the manner and within the time frame established by the Chief.

Section 311.7.3 Authority to secure property damaged by fire or other disaster. The fire code official shall be empowered to initiate necessary actions to secure property damaged by fire or other disaster and/or remove and dispose of debris, and other damaged materials when, after giving notice to the owner of record of the property, the owner fails to secure the property and/or remove debris as ordered by the fire code official.

Section 311.7.3.1 Cost Recovery. The fire code official is authorized to initiate any and all actions necessary to recover the costs of securing property damaged by fire or other disaster and/or removing and disposing of debris, and other damaged materials when, after giving notice to the owner of record of the property, the owner fails to secure the property and/or remove debris and the City provides the service either through the use of City resources or a contractor.

22. CFC § 320 is added to read as follows:

Section 320 Combustible Materials Subject to Spontaneous Ignition.

Section 320.1 General. Combustible materials subject to spontaneous ignition shall be in accordance with Section 320.

Section 320.2 Prevention of Ignition. Materials shall be stored, handled, treated and monitored as necessary and in such a manner as to prevent ignition.

Section 320.3 Provisions for Extinguishment. The owner or person responsible for materials regulated by Sec 320 shall provide the necessary means to extinguish a fire should ignition occur. Piles shall be arranged in a manner to not exceed the capability of available resources to extinguish a fire in a single pile. Access for firefighting apparatus shall be approved by the fire code official.

23. CFC § 401.3 is amended to read as follows:

Section 401.3 Emergency responder notification. Notification of emergency responders shall be in accordance with Sections 401.3.1 through 401.3.5.

Section 401.3.1 Fire events. In the event an unwanted fire occurs on a property, the owner or occupant shall immediately report such condition to the fire department.

Section 401.3.2 Alarm activations. Upon activation of a fire alarm signal, employees or staff shall immediately notify the fire department.
Section 401.3.3 Delayed notification. A person shall not, by verbal or written directive, require any delay in the reporting of a fire to the fire department.

Section 401.3.4 Group E fire alarm initiation. Every person and public officer managing, controlling, or in charge of any public, private, or parochial school shall cause the fire alarm signal to be sounded upon the discovery of fire.

Section 401.3.5 Hazardous Materials Events. In the event an unplanned or unwanted release of hazardous materials occurs on a property, the owner or occupant shall immediately report such condition to the fire department per Section 5003.3.1.

24. CFC § 403.4 is deleted.

25. CFC § 403.12.1 is amended to read as follows:

Section 403.12.1 Fire Watch.

Section 403.12.1.1 When required. Fire watch shall be provided as follows:

1. When required by other sections of this code.
2. When the fire code official deems a condition essential for public safety.
3. When the fire code official determines that conditions may result in a rekindle from a fire previously extinguished.

Section 403.12.1.2 Financial responsibility. The property owner, the tenant or occupant in control of the premises shall be responsible for all costs of providing a fire watch.

Section 403.12.1.3 Qualifications. Personnel assigned to fire watch duties shall possess the following minimum qualifications:

1. Shall be at least 18 years of age.
2. Shall be capable of executing the duties and responsibilities as specified in 403.12.1.
3. Shall be capable of operating a mobile telephone device and/or portable radio.
4. Shall be capable of inspecting all portions of assigned watch area.

Section 403.12.1.4 Number and hours. The fire code official shall specify the minimum number of fire watch personnel required and the hours during which they must be present based on the conditions and size of the facility.

Section 403.12.1.5 Duties & Responsibilities. Duties and responsibilities of persons assigned fire watch duties include, but are not limited to the following:

1. Know the address of the facility being watched.
2. Be equipped with a mobile telephone device that can be used to contact 9-1-1 or a portable radio that can be used to communicate with a constantly attended security/communications center.
3. Continuously make rounds and monitor all assigned areas.
4. Immediately report any sign of smoke, fire or other emergency to 9-1-1 or to the security/communications center.
5. Shall activate the building fire alarm system when the building is equipped with such a system or notify those present to evacuate the building or area.
6. Shall assist with the evacuation of people present in the area.
7. Keep a fire watch log that, as a minimum, includes the following information:
   a. Identifies the building or area by name and address that is under watch.
   b. The date and time each round or tour is completed, plus comments on what was observed. Each entry shall contain the name and signature of the person conducting the watch.
   c. Fire watch logs shall be immediately accessible for review by the fire code official. A copy of the fire watch log shall be retained by the owner or agent of the facility being protected.
8. Continue the fire watch until termination has been accepted by the fire code official.
9. Fire watch personnel shall not be assigned additional duties during their fire watch tour.

26. **CFC § 503.6 is amended to read as follows:**

Section 503.6 Security gates. The installation of security gates across a fire apparatus access road shall be approved by the fire chief. Where security gates are installed, they shall have an approved means of emergency operation. The security gates and the emergency operation shall be maintained operational at all times. Electric gate operators, where provided, shall be listed in accordance with UL 325. Gates intended for automatic operation shall be designed, constructed and installed to comply with the requirements of ASTM F2200 and be provided with a fire department approved key switch.

27. **CFC § 505.1 is amended to read as follows:**

Section 505.1 Address identification. New and existing buildings shall have approved address numbers, building numbers or approved building identification placed in a position that is plainly legible and visible from the street or road fronting the property. These numbers shall contrast with their background. Address numbers shall be Arabic numbers or alphabetical letters. Numbers shall be a minimum of 4 inches (101.6 mm) high with a minimum stroke width of 0.5 inch (12.7 mm). Where access is by means of a private road and the building cannot be viewed from the public way, a monument, pole or other sign or means shall be used to identify the structure. All new building
address numbering, building unit numbering, and street designation shall be approved by the fire code official.

Section 505.1.1 Directories. When required by the fire code official, complexes with multiple buildings may be required to provide directories, premise maps and directional signs. The scale, design and location of directories shall be approved by the fire code official and may be required to be illuminated.

Section 505.1.2 Rear Door Address Numbers. All commercial and industrial buildings with access via an alley or other similar roadways shall have the address number, unit or suite number provided on or adjacent to the rear door of the building or tenant space. These numbers shall contrast with their background. Address and suite numbers shall be Arabic numerals or alphabet letters that shall be a minimum of six (6) inches (152 mm) high with a minimum stroke width of 0.75 inch (19 mm). Numbers and/or letters of larger size may be required based on the size and design of the building or group of buildings.

28. CFC § 506.1 is amended to read as follows:

Section 506.1 Where Required. Where access to or within a structure or an area is restricted because of secured openings or where immediate access is necessary for life-saving or fire-fighting purposes, including but not limited to buildings protected by automatic fire sprinkler systems or fire alarm systems, the fire code official is authorized to require a key box to be installed in an approved location. The key box shall be of an approved type listed in accordance with UL 1037, and shall contain keys to gain necessary access as required by the fire code official.

29. CFC § 510.6.1 is amended to read as follows:

Section 510.6.1 Testing and Proof of Compliance. The emergency responder radio coverage system shall be inspected and tested annually or where structural changes occur including additions or remodels that could materially change the original field performance tests. Testing shall consist of the following:

1. In-building coverage test as described in Section 510.5.3.
2. Signal boosters shall be tested to verify that the gain is the same as it was upon initial installation and acceptance.
3. Backup batteries and power supplies shall be tested under load of a period of 1 hour to verify that they will properly operate during an actual power outage. If within the 1-hour test period the battery exhibits symptoms of failure, the test shall be extended for additional 1-hour periods until the integrity of the battery can be determined.
4. All other active components shall be checked to verify operation within the manufacturer's specifications.
5. At the conclusion of the testing, a report, which shall verify compliance with
30. **CFC § 603.4 is amended to read as follows:**

Section 603.4 Portable unvented heaters. Portable unvented fuel-fired heating equipment shall be prohibited in occupancies in Groups A, E, I, R-1, R-2, R-2.1, R-3, R-3.1 and R-4. All other occupancies shall obtain a permit from the fire code official.

Exception: Portable outdoor gas-fired heating appliances shall be allowed in accordance with Section 603.4.2.

31. **CFC § 603.6.6 is added to read as follows:**

Section 603.6.6. Chimneys used with fireplaces or heating appliances in which solid or liquid fuel is used will be maintained with a spark arrester as approved by the fire code official.

32. **CFC § 605.11.1.2.2 is amended to read as follows:**

Section 605.11.1.2.2 Hip roof layouts. Panels and modules installed on Group R-3 buildings with hip roof layouts shall be located in a manner that provides a 3-foot-wide clear access pathway from the eave to the ridge on each roof slope where panels and modules are located. The access pathway shall be at a location on the building capable of supporting the fire fighters accessing the roof.

Exception: R-3 buildings with roofs with a slope of two units vertical in 12 units horizontal (2:12) or less shall be provided with a 3-foot wide clear perimeter around the edges of the roof. A 3-foot wide clear path to and around the perimeter of all skylights shall be provided when present.

33. **CFC § 605.11.1.3.1 is amended to read as follows:**

Section 605.11.1.3.1 Access. There shall be a minimum 6-foot-wide clear perimeter around the edges of the roof measured from the exterior load bearing wall inward.

Exception: Where either axis of the building is 250 feet (76 200 mm) or less, the clear perimeter around the edges of the roof shall be permitted to be reduced to a minimum 4 foot wide (1290 mm).

34. **CFC § 901.4.2 is amended to read as follows:**

Section 901.4.2 Nonrequired fire protection systems. Any fire protection system or portion thereof not required by this code or the California Building Code shall be submitted to the fire code official. In addition, one complete copy of the report shall be posted in the building, on the wall immediately adjacent to the fire alarm control panel.
Code shall be allowed to be furnished for partial or complete protection provided such installed system meets the requirements of this code and the California Building Code. Partial automatic fire sprinkler systems shall not be installed in commercial buildings.

Exception: When designed to protect a specific hazard and approved by the fire code official.

35. CFC § 901.7 is amended to read as follows:

Section 901.7 Systems out of service. Where a required fire protection system is out of service, the fire code official shall be notified immediately and, where required by the fire code official, the building shall either be evacuated or an approved fire watch shall be provided for all occupants left unprotected by the shut down until the fire protection system has been returned to service. Where utilized, fire watches shall comply with the provisions of Section 403.12 of this code.

36. CFC § 903.2 is amended to read as follows:

Section 903.2 Where required. Approved automatic sprinkler systems in new buildings and structures shall be provided in the locations described in Sections 903.2.1 through 903.2.12 and Appendix P.

37. CFC § 903.3.5 is amended to read as follows:

Section 903.3.5 Water supplies. Water supplies for automatic sprinkler systems shall comply with this section and the standards referenced in Section 903.3.1. The potable water supply shall be protected against backflow in accordance with Health and Safety Code Section 13114.7. For connections to public waterworks systems, the water supply test used for design of fire protection systems shall be adjusted by 5 psi or 10%, whichever is greater, to account for seasonal and daily pressure fluctuations.

38. CFC § 903.3.8 is amended to read as follows:

Section 903.3.8 Limited area sprinkler systems. New limited area sprinkler systems shall not be allowed.

39. CFC § 903.4 is amended to read as follows:

Section 903.4 Sprinkler system supervision and alarms. Valves controlling the water supply for automatic sprinkler systems, pumps, tanks, water levels and temperatures, critical air pressures and waterflow switches on all sprinkler systems shall be electrically supervised by a listed fire alarm control unit.

Exceptions:

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1. Automatic sprinkler systems protecting one- and two-family dwellings.
2. Automatic sprinkler systems installed in accordance with NFPA 13R where a common supply main is used to supply both domestic water and the automatic sprinkler system, and a separate shutoff valve for the automatic sprinkler system is not provided.
3. Jockey pump control valves that are sealed or locked in the open position.
4. Control valves to commercial kitchen hoods, paint spray booths or dip tanks that are sealed or locked in the open position.
5. Valves controlling the fuel supply to fire pump engines that are sealed or locked in the open position.
6. Trim valves to pressure switches in dry, preaction and deluge sprinkler systems that are sealed or locked in the open position.

40. *CFC § 903.4.2.1 is added to read as follows:*

Section 903.4.2.1 Buildings with fire sprinkler monitoring systems shall be provided with an approved audio/visual notification device in each suite or occupancy.

*CFC § 903.4.4 is added to read as follows:*

Section 903.4.4 Buildings with fire sprinkler monitoring systems shall be provided with at least one manual pull station at a location approved by the fire code official.

41. *CFC § 903.6 is amended to read as follows:*

Section 903.6 Where required in existing buildings and structures. An automatic sprinkler system shall be provided in existing buildings and structures where required in Chapter 11 and Appendix P.

42. *CFC § 907.6.2.1 is added to read as follows:*

Section 907.6.2.1 Secondary power supply capacity. The secondary power supply capacity shall be of an approved type and shall provide a minimum of 60 hours of power under non alarm conditions and shall be capable of operating all alarm notification appliances for 5 minutes after 60 hours.

Exception: Fire alarm and sprinkler monitoring systems meeting the requirements of a central station fire alarm system per NFPA 72.

43. *CFC § 907.10 is added to read as follows:*

Section 907.10 False alarms. The fire code official is authorized to seek cost recovery for a fire department response to an alarm system activation which is
determined to be a false alarm caused by system malfunction, system misuse or other non-emergency causes.

Section 907.10.1 False alarm frequency. The cost recovery fee may be charged for all responses after the second false alarm in a calendar year.

Section 907.10.2 False alarm fee. The amount of the cost recovery fee will be in accordance with the San Buenaventura Municipal Code or City fee schedule. Additional fees may be charged for extraordinary circumstances.

44. **CFC § 2603.3 is amended to read as follows:**

Section 2603.3 Notification. Notification of fumigation and insecticidal fogging shall be in accordance with sections 2603.3.1 through 2603.3.5.

45. **CFC § 3304.5 is amended to read as follows:**

Section 3304.5 Fire watch. When required by the fire code official for building demolition that is hazardous in nature, qualified personnel shall be provided as an on-site fire watch. The fire watch shall meet the requirements set forth in Section 403.12.1.

46. **CFC § 3311.3 is added to read as follows:**

Section 3311.3 Temporary Exit Signage. All buildings under construction or undergoing demolition shall be provided with temporary exit signage when any one or more of the following conditions are present:

1. The building is two or more stories in height
2. The building is 10,000 square feet or larger
3. When in the opinion of the fire code official, exit signage is necessary due to the design of the building or other unusual circumstances are present, the location and design of the exit signs shall be determined by the fire code official.

47. **CFC § 4811.2 is amended to read as follows:**

Section 4811.2 Permits. A permit shall be obtained, unless waived by the fire code official, for any of the activities that follow:

a. Use of pyrotechnic special effects (See Section 3308.1.1 and California Code of Regulations, Title 19, Division 1, Chapter 6)
b. Open flames
c. Flammable or combustible liquids, gases and dust
d. Hot work
e. Presence of motor vehicles within a building
f. Tents and canopies (See Chapter 24)
g. Portable generators
h. Any additional permits as required by the agency having jurisdiction (AHJ)

48. **CFC § 4905.3 is amended to read as follows:**

Section 4905.3 Establishment of limits. Wildland-Urban Interface Fire Area’s required construction methods shall be required for all new structures built for human occupancy in the High, and Very High Fire Hazard Severity Zones within the City of Ventura per maps established by the Office of State Fire Marshal pursuant to California Public Resources Code Sections 4201 – 4204.

49. **CFC § 4906.2 is amended to read as follows:**

Section 4906.2 Application. Buildings and structures located in the following areas shall maintain the required hazardous vegetation and fuel management:

1. All unincorporated lands designated by the State Board of Forestry and Fire Protection as State Responsibility Area (SRA) including:
   1.1. Moderate Fire Hazard Severity Zones
   1.2. High Fire Hazard Severity Zones
   1.3. Very-High Fire Hazard Severity Zones
2. Land designated as Local Responsibility Area (LRA) and High or Very-High Fire Hazard Severity Zone by the Office of State Fire Marshal pursuant to California Public Resources Code Sections 4201 – 4204.

50. **CFC § 4907.1 is amended to read as follows:**

Section 4907.1 General. Defensible space will be maintained around all buildings and structures in State Responsibility Area (SRA) as required in Public Resources Code 4290 and "SRA Fire Safe Regulations" California Code of Regulations, Title 14, Division 1.5, Chapter 7, Subchapter 2, Section 1270.

Buildings and structures within the High and Very-High Fire Hazard Severity Zones of a Local Responsibility Areas (LRA) shall maintain defensible space as outlined in Government Code 51175- 51189 and Appendix O.

51. **CFC § 4907.2 is added to read as follows:**

Section 4907.2 When required. The Fire Department may require an applicant for all new residential custom homes, production tract homes, multi-family residential, and commercial buildings within High and Very-High Fire Hazard Severity Zones to submit a Fire Resistant Landscape Plan as part of the approval process.

Section 4907.2.1 Landscape Submittals. Fire Resistant Landscape Plans shall be submitted and approved by the Fire Department prior to the framing inspection. Landscape plan submittals shall include, at a minimum, a readable scale, the delineation of 100-foot fuel modification zone, the existing vegetation,
and all irrigated areas, a plant legend with both botanical and common names and identification of all plant material symbols.

Section 4907.2.2 Landscaping Requirements. Plant materials used shall be approved by the Fire Department for plant palette. Landscape plans shall be in accordance with the following criteria.

1. All non-fire resistive trees, including conifers, palms, pepper trees, and eucalyptus, species, shall be planted and maintained so that the tree's drip line at maturity is a minimum 30 feet from any combustible structure. All fire resistive tree species shall be planted and maintained at a minimum of 10 feet from the tree's drip line to any combustible structure.

2. For streetscape plantings, all non-fire resistive trees shall be planted so that the center of the tree trunk is 10 feet from edge of curb. Fire resistive trees can be planted 10 feet from edge of curb to center of tree trunk. Care should be given to the tree’s form selected so that the tree canopy will not encroach into the roadway, nor produce a closed canopy effect.

3. Fuel Mosaic. Limit planting of large unbroken masses, especially trees and large shrubs and comply with the requirements of Appendix O.

4. If shrubs are located underneath a tree’s drip line, the lowest branch should be at least three times as high as the understory shrubs or 10 feet, whichever is greater.

5. Existing trees can be pruned 10 feet away from roof, eave, or exterior siding, depending on the tree’s physical or flammable characteristics and the building construction features.

6. All tree branches and palm fronds shall be removed within 10 feet of a fireplace chimney or outdoor barbecue.

CFC § 5003.2.7 is amended as follows:

Section 5003.2.7 Liquid-level limit control. Atmospheric tanks having a capacity greater than 500 gallons (1893 L) and that contain hazardous material liquids shall be equipped with a liquid-level limit control or other approved means to prevent overfilling of the tank.

At the discretion of the fire code official, atmospheric tanks having a capacity less than 500 gallons and that contain hazardous material liquids shall be equipped with a liquid level indicator calibrated to the particular tank, the fill-port visible to the filling attendant, or other approved method to prevent overfilling of the tank.

54. CFC § 5608.1.2 is added to read as follows:
Section 5608.1.2 Storage. A permit is required to store fireworks in any quantity and will only be issued for storage associated with a display or for the use of pyrotechnic special effects material by state-licensed pyrotechnicians as described in section 5608.1.1.

55. CFC § 5608.2 is added to read as follows:

Section 5608.2 Prohibition. The manufacturing, possession, storage, sale, use and handling of fireworks is prohibited.

Exceptions:
1. Storage of fireworks in accordance with Section 5608.1.2.
2. Use and handling of fireworks for display in accordance with Section 5608.1.

56. CFC § 5608.3 is added to read as follows:

Section 5608.3 Firing. All fireworks displays shall be electrically fired.

57. CFC § 5611.1 is added to read as follows:

Section 5611.1 Model rockets. The use of model rockets and experimental high power rockets shall be prohibited. No model rocket user shall launch any model rocket from any site within the City of San Buenaventura.

58. CFC § 5611 [California Code of Regulations, Title 19, Division1, § 1022] is deleted.

59. CFC § 5611 [California Code of Regulations, Title 19, Division1, §1025 (a)] is deleted.

60. CFC § 5611 [California Code of Regulations, Title 19, Division1, §1025 (b)] is deleted.

61. CFC § 5611 [California Code of Regulations, Title 19, Division1, §1028] is deleted.

62. CFC § 5612 [California Code of Regulations, Title 19, Division1, §1036] is deleted.

63. CFC § 5612 [California Code of Regulations, Title 19, Division1, §1037] is deleted.

64. CFC § 5612 [California Code of Regulations, Title 19, Division1, §1038] is deleted.
65. CFC § 5612 [California Code of Regulations, Title 19, Division1, §1039] is deleted.

66. Section 5704.2.7.5.8 Overfill prevention. An approved means or method in accordance with Section 5704.2.9.7.6 shall be provided to prevent the overfill of all Class I, II and IIIA liquid storage tanks. Storage tanks in refineries, bulk plants or terminals regulated by Section 5706.4 or 5706.7 shall have overfill protection in accordance with API2350.

An approved means or method in accordance with Section 5704.2.9.7.5 shall be provided to prevent the overfilling of Class IIIB liquid storage tanks connected to fuel-burning equipment inside buildings.

Exception: Outside above-ground tanks with a capacity of 1,320 gallons or less.

67. CFC § 5704.2.9.6.1 is amended to read as follows:

Section 5704.2.9.6.1. Locations where above-ground tanks are prohibited. Storage of Class I or II liquids in above-ground tanks 500 gallons or larger outside of buildings is prohibited unless approved by the fire code official.

68. CFC § Appendix D105.1 is amended as follows:

Section D105.1 Where required. Where the vertical distance between the grade plane and the highest roof surface exceeds 30 feet, approved aerial fire apparatus access roads shall be provided. For purposes of this section, the highest roof surface shall be determined by measurement to the eave of a pitched roof, the intersection of the roof to the exterior wall, or the top of parapet walls, whichever is greatest.

Exception: An approved permanent means to provide firefighter access to the roof is provided and approved by the fire code official.

69. CFC § Appendix J is deleted.

70. CFC § Appendix K is deleted.

71. CFC § Appendix L is deleted.

72. CFC § Appendix M is deleted.

73. APPENDIX O is added to read as follows:

APPENDIX O – FIRE HAZARD ABATEMENT

O101.1 Scope. This appendix provides provisions intended to identify hazard areas and mitigate the risk to life and structures from intrusion of fire from wildland fire exposures and fire exposures from adjacent structures and to mitigate fires from spreading to
wildland fuels that may threaten to destroy life, overwhelm fire suppression capabilities, or result in large property loss.

0101.2 Purpose. The purpose of this appendix is to establish minimum requirements in wildland-urban interface areas that will increase the ability of buildings to resist the intrusion of flame or burning embers being projected by a vegetation fire including the identification of hazardous fire areas that require applicable defensible space provisions provided for in this code and enforced by the fire code official and applicable state and local fire-resistant building standards that are required by the local building official.

0102 Definitions.

0102.1 Definitions. For the purpose of this appendix, certain terms are defined as follows:

“Combustible Material” includes seasonal and recurrent weeds, stubble, brush, dry leaves, tumbleweeds, rubbish, litter or flammable materials of any kind.

“Defensible Space” is an area either natural or man-made, where material capable of allowing a fire to spread unchecked has been treated, cleared or modified to slow the rate and intensity of an advancing wildfire and to create an area for fire suppression operations to occur.

“Hazardous Fire Area” is land which is covered with grass, grain, brush, or forest, whether publicly or privately owned, which is so situated or is of such inaccessible location that a fire originating upon such land would present an abnormally difficult job of suppression or would potentially result in great and unusual damage through fire or resulting erosion. Such areas are designated by the fire code official. The fire code official is authorized to utilize as reference the definition of Hazardous Watershed Fire Area, Local Agency Fire Hazard Severity Zone Maps designated pursuant to California Government Code Sections 51175 through 51189 and the International Wildland-Urban Interface Code.

“Hazardous Watershed Fire Area” is a location within 500 feet of a forest or brush-, grass-, or grain-covered land, exclusive of small individual lots or parcels of land located outside of a forest or brush-, grass-, or grain-covered area.

“Parcel” is a portion of land of any size, the area of which is determined by the assessor’s maps and records and may be identified by an assessor’s parcel number whether or not any buildings are present.

“Public Nuisance” is a declaration by the fire code official that the presence of combustible material on a parcel creates a fire hazard.

“Wildland-Urban Interface Area” is that geographical area where structures and other human development meet or intermingle with wildland or vegetative fuels.
O103 Unlawful Disposal. Every person who places, deposits or dumps combustible material on a parcel whether or not he owns such parcel, or whether or not he so places, deposits or dumps on such parcel with the consent of the owner thereof, is subject to civil penalties as set forth in Chapter 1.050 of the San Buenaventura Municipal Code and to criminal penalties as set forth in the California Health and Safety Code Section 13871.

O104 Clearance of Brush, Vegetative Growth and Combustible Material from Parcels. All parcels declared a public nuisance shall be cleared entirely of combustible material. If the fire code official determines this impractical due to hazards posed by the resulting clearance, the provisions of Section O105 may be used.

O105 Clearance of Brush and Vegetative Growth Away from Structures. Any person owning, leasing, controlling, operating or maintaining any building in, upon, or adjoining any hazardous fire area, and any person owning, leasing or controlling any land adjacent to such building, shall at all times maintain around and adjacent to such building an effective firebreak made by removing and clearing away, all combustible material for a distance of not less than 100 feet from all portions of the building.

EXCEPTION: Single specimens or stands of protected species of trees, ornamental shrubbery or similar plants used as ground cover, provided they do not form a means of rapidly transmitting a fire from the native growth to any building.

O105.1 Trees. When allowed by Section O105, trees within the defensible space shall comply with the following:

1. Highly flammable trees are not allowed unless approved by the fire code official.

2. The horizontal distance between crowns of trees and crowns of adjacent trees or unmodified fuel is not less than 10 feet.

3. The vertical clearance distance above any roof is not less than 10 feet.

4. The horizontal clearance to any chimney, outdoor BBQ or heat producing device is not less than 10 feet.

5. Trees exceeding 6 feet in height shall be limbed up from the ground 5 feet or 1/3 the height of the tree, whichever is less.

6. Deadwood and litter shall be regularly removed from trees.

O105.2 Fuel mosaic. Fuel mosaic using shrubs shall comply with the following:

1. Flammable plants and shrubs are not allowed.

2. Shrubs shall not exceed 6 feet in height.

3. Single grouping of shrubs is limited to a 10-foot diameter grouping.
4. Each grouping shall be spaced a minimum of 15 feet from any other grouping.
5. Groupings shall be spaced a minimum of 30 feet from any structure subject to Section O105.1 or O105.2.

O105.3 Firewood. Firewood shall be located a minimum of 10 feet from structures. Firewood piles greater than 50 cu. ft. shall be located 30 feet or more from all structures.

O106 Prosecution. The fire code official shall serve a written order upon the owner or possessor of a parcel, when in the opinion of the fire code official, a public nuisance exists thereon. The order shall direct such owner or possessor to remove or abate the public nuisance per the procedures and timeframes outlined in Chapter 8.010 of the San Buenaventura Municipal Code.

74. **APPENDIX P is added to read as follows:**

APPENDIX P – FIRE PROTECTION SYSTEMS

P101 General. An automatic fire extinguishing system shall be installed in all occupancies and locations as set forth in Appendix P and Chapter 9.

P102 Definitions.

“Building/Structure, Existing” is a building or structure permitted, constructed and final-authorized for occupancy prior to November 6, 1991 by the authority having jurisdiction.

“Building/Structure, New” is a building or structure permitted, constructed and final-authorized for occupancy on or after November 6, 1991 by the authority having jurisdiction.

“Floor Area” is as defined in the California Building Code.

“Multiple Use Occupancies” are buildings or structures that contain more than one occupancy group listed in Section 202 as determined by the fire code official.

P103 Automatic Sprinkler Systems in New and Existing Buildings and Structures.

P103 Where required. Approved automatic sprinkler systems shall be provided in new and existing buildings/structures in the locations as described in this section.

P103.1 New Buildings/Structures. Approved automatic sprinkler systems shall be provided in all new buildings or structures, to be occupied by Groups A, B, E, F, H, I, L, M, R, S, U, or mixed use occupancy classifications when over 500 sq. ft. in floor area. For all new townhouses and one- and two- family dwellings, an automatic fire sprinkler system shall be installed per the California Residential Code.

**EXCEPTIONS:**
1. Detached U occupancy carports used for motor vehicle storage intended for no other use or storage that are open on sixty percent (60%) of exterior walls. Such carports are limited to three thousand (3,000) square feet or less in floor area and will be constructed entirely of noncombustible materials. Treated lumber is not allowed.

2. Detached residential U occupancy carports or garages limited to one thousand (1,000) square feet or less in floor area and located a minimum of 10 feet from adjacent structures.

3. Non combustible detached car wash structures, provided the car wash is separated from other structures with an assumed property line.

4. Public schools shall comply with Section 903.2.2 of this code.

P103.2 Existing Buildings/Structures – Approved Automatic Sprinklers are required in the following locations:

1. In all existing residential buildings or structures, when cumulative additions are made which result in a total floor area 100% or greater than the November 6, 1991 area of the building or structure.

2. In all other existing buildings/structures, when cumulative additions are made which results in a total building/structure floor area equal to or greater than five thousand (5000) square feet and the additions exceed the greater of the following:

   a) Ten percent (10%) of the original floor area, or
   b) Two thousand five hundred (2500) square feet.

EXCEPTION: Occupancy types required to have an automatic fire sprinkler system installed by the California Building Code when the square footage is less than 5,000 square feet shall comply with the requirements of the California Building Code.

3. In all existing buildings/structures having a total floor area equal to or greater than five thousand (5,000) square feet, when a change in occupancy classification or use occurs that results in a more hazardous use, based on life and fire risk than the existing occupancy classification or use.

EXCEPTION: Occupancy types required to have an automatic fire sprinkler system installed by the California Building Code when the square footage is less than 5,000 square feet shall comply with the requirements of the California Building Code.
4. In all existing buildings/structures where renovations occur requiring a building permit and the total area of the ceiling covering removed and/or previously exposed underside of roof/floor decking exceeds 75% or greater of the total floor area of the building/structure.

EXCEPTION: Occupancy types required to have an automatic fire sprinkler system installed by the California Building Code shall comply with the requirements of the California Building Code.

P104 Installation Requirements

P104.1 Modifications

P104.1 For the purposes of this Appendix, fire walls shall not be considered as creating separate buildings.

P104.1.2 Where allowed, sprinkler systems installed in accordance with NFPA 13D in Group R-3 occupancies shall provide sprinkler protection for attached Group U occupancies.

P104.1.2 When NFPA 13R sprinkler systems are provided in Group R occupancies, exceptions to, or reductions in, code requirements are not allowed based on the installation of either a NFPA 13R or NFPA 13 sprinkler system. This shall also include requirements in the California Code of Regulations, Title 24, Part 2 and Part 9.

P104.1.3 Buildings/structures containing multiple use occupancies which include one or more Group R occupancies shall be protected throughout with fire sprinklers that meet NFPA 13 standards.

SECTION 3: CALIFORNIA ENVIRONMENTAL QUALITY ACT. The City Council determines that this Ordinance is exempt from review under the California Environmental Quality Act (California Public Resources Code §§ 21000 et seq., "CEQA") and the regulations promulgated thereunder (14 California Code of Regulations §§ 15000 et seq., the "State CEQA Guidelines") because it consists only of minor revisions and clarifications to an existing code of construction-related regulations and specification of procedures related thereto and will not have the effect of deleting or substantially changing any regulatory standards or findings required therefore. This Ordinance, therefore, is an action being taken for enhanced protection of the environment and does not have the potential to cause significant effects on the environment.

SECTION 4: SAVINGS CLAUSE. Repeal of any provision of the SBMC or any other City ordinance will not affect any penalty, forfeiture, or liability incurred before, or preclude prosecution and imposition of penalties for any violation occurring before this Ordinance's effective date. Any such repealed part will remain in full force and effect for sustaining action or prosecuting violations occurring before the effective date of this Ordinance.
SECTION 5: SEVERABILITY. If any part of this Ordinance or its application is deemed invalid by a court of competent jurisdiction, the City Council intends that said invalidated part is severable and that such decision will not affect the validity of the remaining portions of this Ordinance, which shall remain in full force and effect.

SECTION 6: VALIDITY OF PREVIOUS CODE SECTIONS. If this entire Ordinance is repealed or deemed invalid by a court of competent jurisdiction, such action will render this Ordinance void and cause such SBMC Ordinance previously in effect prior to amendment by this Ordinance to remain in full force and effect for all purposes.

SECTION 7: EFFECTIVE DATE. This Ordinance will take effect on the 31st day following its final passage and adoption or January 1, 2017, whichever is later.

PASSED AND ADOPTED this 17 day of October, 2016.

Erik Nasarenko
Mayor

ATTEST:
Antoinette M. Mann, MMC, CRM
City Clerk

APPROVED AS TO FORM:
Gregory G. Diaz
City Attorney

Jennifer Lee
Assistant City Attorney
STATE OF CALIFORNIA )
COUNTY OF VENTURA ) SS.
CITY OF SAN BUENAVENTURA )

I, ANTOINETTE M. MANN, City Clerk of the City of San Buenaventura, DO HEREBY CERTIFY that the foregoing is a full, true, and correct copy of Ordinance No. 2016-015 that was introduced by said City Council at a regular meeting held October 10, 2016, and adopted by said City Council at a regular meeting held October 17, 2016, by the following vote:

AYES: Councilmembers Morehouse, Weir, Tracy, Heitmann, Monahan, Deputy Mayor Andrews, and Mayor Nasarenko

NOES: None

ABSENT: None

I further certify that said Ordinance No. 2016-015 was published as required by law in the VENTURA COUNTY STAR, a newspaper of general circulation printed and published in said City.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the official seal of the City of San Buenaventura, California.

Antoinette M. Mann, MMC, CRM
City Clerk
City of San Buenaventura, California

October 18, 2016
Date Attested

I hereby certify these records are a true and correct copy of records on file with the City of San Buenaventura.

Name
Assistant City Clerk

Date
10-26-16

Title
CITY OF VENTURA BUILDING & SAFETY

HOURS: Monday, Tuesday, Wednesday and Friday, 7:30 a.m. to 5:00 p.m.
       Thursday 9:00 a.m. to 5:00 p.m., City Hall closed alternate Fridays

LOCATION: Ventura City Hall, 501 Poli Street, Room 117

PHONE: (805) 654-7869

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