



City of Palo Alto

City Council Staff Report

(ID # 11134)

Report Type: Consent Calendar

Meeting Date: 10/26/2020

Summary Title: Second Reading: ADU Ordinance

Title: SECOND READING: Adoption of Several Ordinances Regarding Accessory Dwelling Units and Junior Accessory Dwelling Units Amending Palo Alto Municipal Code Titles 16 (Building) and 18 (Zoning); Amendments Include Repealing Section 18.42.040 (Accessory and Junior Accessory Dwelling Units) and Adding a new Chapter 18.09 (Accessory Dwelling Units and Junior Accessory Dwelling Units); and Updating Chapters 18.04 (Definitions), 16.58 (Development Impact Fees), 16.04 (California Building Code), 16.06 (California Residential Code), and 16.14 (California Green Building Standards Code) (FIRST READING: October 5, 2020 PASSED: 7-0)

From: City Manager

Lead Department: Planning and Development Services

This was heard by the City Council on October 5, 2020 where it passed 7-0. No changes were made to the Ordinance presented to the Council. It is now before you for the second reading.

Attachments:

Attachment A: ADU Ordinance

Attachment B: ADU 2nd Ordinance

Attachment C: ADU 3rd Ordinance

Attachment D: ADU Update to PAMC 16.04

Ordinance No. __
Ordinance of the Council of the City of Palo Alto Amending Title 18 (Zoning) of the Palo Alto
Municipal Code to Amend Requirements Relating to Accessory Dwelling Units and Junior
Accessory Dwelling Units

The Council of the City of Palo Alto does ORDAIN as follows:

SECTION 1. Findings and Declarations. The City Council finds and declares as follows:

- A. Housing in California is increasingly unaffordable. In 2017, the average California home cost about 2.5 times the national average home price and the monthly rent was 50% higher than the rest of the nation. Rents in San Francisco, San Jose, Oakland, and Los Angeles are among the top 10 most unaffordable in the nation.
- B. Housing in Palo Alto is especially unaffordable. The average Palo Alto home currently costs about 8 times the national average home price and the monthly rent is about 2.5 times the national average.
- C. Palo Alto has a jobs/housing imbalance. When addressing this imbalance, the City must not only provide housing but also ensure affordability.
- D. Assembly Bills (“ABs”) 68, 587, 671, and 881 and Senate Bill (“SB”) 13 (“State ADU Law”) pertain to accessory dwelling units (“ADUs”) and junior accessory dwelling units (“JADUs”) and were approved by the California Legislature on September 13, 2019 and signed by the Governor on October 9, 2019. These bills, codified primarily in California Government Code sections 65952.2 and 65952.22, are intended to spur the creation of lower cost housing by easing regulatory barriers to the creation of ADUs and JADUs.
- E. This ordinance is adopted to comply with the mandates of the State ADU Law.

SECTION 2. Section 18.42.040 (Accessory and Junior Accessory Dwelling Units) of Chapter 18.42 (Standards for Special Uses) of Title 18 (Zoning) of the Palo Alto Municipal Code (“PAMC”) is deleted in its entirety.

SECTION 3. Chapter 18.09 (Accessory Dwelling Units and Junior Accessory Dwelling Units) of Title 18 (Zoning) of the Palo Alto Municipal Code (“PAMC”) is added to read:

18.09.010 Purpose

The intent of this Chapter is to provide regulations to accommodate accessory and junior accessory dwelling units (ADU/JADU), in order to provide for variety to the city's housing stock and additional affordable housing opportunities. These units shall be separate, self-contained living units, with separate entrances from the main residence, whether attached or detached. The standards below are provided to minimize the impacts of units on nearby residents and throughout the city, and to assure that the size and location of such dwellings is compatible with the existing or proposed residence(s) on the site and with other structures in the area.

18.09.020 Applicable Zoning Districts

The establishment of an accessory dwelling unit is permitted in zoning districts when single-family or multi-family residential is a permitted land use.

18.09.030 Units Exempt from Generally Applicable Local Regulations

(a) Government Code section 65852.2, subdivision (e) provides that certain units shall be approved notwithstanding state or local regulations that may otherwise apply. The following types of units shall be governed by the standards in this section. In the event of a conflict between this section and Government Code section 65852.2, subdivision (e), the Government Code shall prevail.

- i. An ADU or JADU within the existing space of a single-family dwelling or an ADU within the existing space of an accessory structure (i.e. conversion without substantial addition).
- ii. An ADU or JADU within the proposed space of a single-family dwelling.
- iii. A detached, new construction ADU on a lot with a proposed or existing single-family dwelling, provided the ADU does not exceed 800 square feet, sixteen feet in height, or four-foot side and rear (i.e. interior) setbacks.
- iv. ADUs created by conversion of portions of existing multi-family dwellings not used as livable space.
- v. Up to two detached ADUs on a lot with an existing multi-family dwelling.

(b) The Development Standards for units governed by this section are summarized in Table 1.

//
//
//
//
//
//
//
//
//
//

Table 1: Development Standards for Units Described in Government Code Section 65852.2(e)

	Single-Family			Multi-Family	
	Conversion of Space Within an Existing Single-Family Home or Accessory Structure	Construction of Attached ADU Within the Space of a Proposed Single-Family Home	New Construction of Detached ADU	Conversion of Non-Habitable Space Within Existing Multi-family Dwelling Structure	Conversion or Construction of Detached ADU
Number of Units Allowed	1 ADU and 1 JADU			25% of the existing units (at least one)	2
Minimum size ¹	150 sf				
Maximum size ¹	N/A ²		800 sf	N/A	
Setbacks	N/A, if condition is sufficient for fire and safety	Underlying zone standard for Single Family Home (ADU must be within space of Single-Family Home)	4 feet from side and rear lot lines; underlying zoning for front setback	N/A	4 feet from side and rear lot lines; underlying zoning for front setback
Daylight Plane	N/A				
Maximum Height	N/A				
Parking	None				
State Law Reference	65852.2(e)(1)(A)	65852.2(e)(1)(A)	65852.2(e)(1)(B)	65852.2(e)(1)(C)	65852.2(e)(1)(D)

- (1) Lofts where the height from the floor level to the underside of the rafter or finished roof surface is 5' or greater shall count towards the unit's floor area.
- (2) Up to 150 sf may be added for the purpose of ingress and egress only.
- (3) Units built in a flood zone are not entitled to any height extensions granted to the primary dwelling.

(c) Development standards stated elsewhere in this Section or Title 18, including standards related to FAR, lot coverage, and privacy, are not applicable to ADUs or JADUs that qualify for approval under this section.

(d) The establishment of accessory dwelling units and junior accessory dwelling units pursuant to this section shall not be conditioned on the correction of non-conforming zoning conditions; provided, however, that nothing in this section shall limit the authority of the Chief Building Official to require correction of building standards relating to health and safety.

(e) The installation of fire sprinklers shall not be required in an accessory dwelling unit if sprinklers are not required for the primary residence. Nothing in this section shall preclude the Fire Marshal from accepting fire sprinklers as an alternative means of compliance with generally applicable fire protection requirements.

(f) Rental of any unit created pursuant to this section shall be for a term of 30 days or more.

(g) Attached units shall have independent exterior access from a proposed or existing single-family dwelling. Except for JADUs, attached units shall not have an interior access point to the primary dwelling (e.g. hotel door or other similar feature/apprtenance).

(h) Conversion of an existing accessory structure pursuant to Government Code section 65852.2(e)(1)(A) may include reconstruction in-place of a non-conforming structure, so long

as the renovation or reconstruction does not increase the degree of non-compliance, such as increased height, envelope, or further intrusion into required setbacks.

- (i) Street addresses shall be assigned to all units prior to building permit final to assist in emergency response.
- (j) The unit shall not be sold separately from the primary residence.
- (k) Replacement parking is not required when a garage, carport, or covered parking structure is converted to, or demolished in conjunction with the construction of, an ADU.
- (l) JADUs shall comply with the requirements of Section 18.09.050.

18.09.040 Units Subject to Local Standards

- (a) This section shall govern applications for ADUs and JADUs that do not qualify for approval under section 18.09.030 and for which the City may impose local standards pursuant to Government Code section 65852.2, subdivisions (a) through (d).
- (b) The Development Standards for units governed by this section are provided in Table 2.

Table 2: All other Units

	Attached	Detached	JADU
Number of Units Allowed ¹	1		1
Minimum size	150 sf		
Maximum size	900 sf (1,000 sf for two or more bedrooms); no more than 50% of the size of the single-family home	900 sf (1,000 sf for two or more bedrooms)	500 sf
Setbacks	4 feet from side and rear lot lines; underlying zone standard for front setback		
Daylight Plane Initial Height Angle	8 feet at lot line		
	45 degrees		
Maximum Height ³ Res. Estate (RE) Open Space (OS) All other eligible zones	30 feet		
	25 feet		
	16 feet		
Parking	None		
Square Footage Exemption	Up to 800 sf ⁽⁴⁾		Up to 500 sf ⁽⁴⁾

- (1) An attached or detached ADU may be built in conjunction with a JADU on a lot with an existing or proposed single family home
- (2) Lofts where the height from the floor level to the underside of the rafter or finished roof surface is 5' or greater shall count towards the unit's floor area.
- (3) Units built in a flood zone are not entitled to any height extensions granted to the primary dwelling.
- (4) Lots with both an ADU and a JADU may exempt a maximum combined total of 800 square feet of the ADU and JADU from FAR, Lot Coverage, and Maximum House Size calculations.

- (c) A single-family dwelling shall exist on the lot or shall be constructed on the lot in conjunction with the construction of an ADU/JADU.

- (d) ADU and/or JADU square footage shall not be included in FAR, Lot Coverage, and Maximum House Size calculations for a lot with an existing or proposed single family home, up to the amounts stated in Table 2. ADU and/or JADU square footage in excess of the exemptions provided in Table 2 shall be included in FAR, Lot Coverage, and Maximum House Size calculations for the lot.
- (e) Attached units shall have independent exterior access from a proposed or existing single-family dwelling. Except for JADUs, attached units shall not have an interior access point to the primary dwelling (e.g. hotel door or other similar feature/appurtenance).
- (f) No protected tree shall be removed for the purpose of establishing an accessory dwelling unit unless the tree is dead, dangerous or constitutes a nuisance under Section 8.04.050. Any protected tree removed pursuant to this subsection shall be replaced in accordance with the standards in the Tree Technical Manual.
- (g) For properties listed in the Palo Alto Historic Inventory, the California Register of Historical Resources, the National Register of Historic Places, or considered a historic resource after completion of a historic resource evaluation, compliance with the appropriate Secretary of Interior's Standards for the Treatment of Historic Properties shall be required.
- (h) Noise-producing equipment such as air conditioners, water heaters, and similar service equipment, shall be located outside of the setbacks for the ADU/JADU. All such equipment shall be insulated and housed, except that the planning director may permit installation without housing and insulation, provided that a combination of technical noise specifications, location of equipment, and/or other screening or buffering will assure compliance with the city's Noise Ordinance at the nearest property line. All service equipment must meet the city's Noise Ordinance in Chapter 9.10 of the Municipal Code.
- (i) Setbacks
 - i. Detached units shall maintain a minimum three-foot distance from the primary unit, measured from the exterior walls of structures.
 - ii. No basement or other subterranean portion of an ADU/JADU shall encroach into a setback required for the primary dwelling.
 - iii. Projections, including but not limited to windows, doors, mechanical equipment, venting or exhaust systems, are not permitted to encroach into the required setbacks, with the exception of a roof eave of up to 2 feet.
- (j) Design
 - i. Except on corner lots, the unit shall not have an entranceway facing the same lot line (property line) as the entranceway to the main dwelling unit unless the entranceway to the accessory unit is located in the rear half of the lot. Exterior staircases to second floor units shall be located toward the interior side or rear yard of the property.
 - ii. Privacy
 - A. Second story doors and decks shall not face a neighboring dwelling unit. Second story decks and balconies shall utilize screening barriers to prevent views into adjacent properties. These barriers shall provide a minimum five-foot, six-inch, screen wall from the floor level of the deck or balcony and shall not include perforations that would allow visibility between properties.

- B. Second story windows, excluding those required for egress, shall have a five-foot sill height as measured from the second-floor level, or utilize obscured glazing on the entirety of the window when facing adjacent properties. Second story egress windows shall utilize obscured glazing on the entirety of the windows which face adjacent properties.
- C. Second story windows shall be offset from neighbor's windows to maximize privacy.

(k) Parking

- i. Replacement parking is not required when a garage, carport, or covered parking structure is converted to, or demolished in conjunction with the construction of, an ADU.
- ii. Replacement parking is required when an existing attached garage is converted to a JADU. These replacement spaces may be provided as uncovered spaces in any configuration on the lot including within the front or street side yard setback for the property.
 - A. The Director shall have the authority to modify required replacement parking spaces by up to one foot in width and length upon finding that the reduction is necessary to accommodate parking in a location otherwise allowed under this code and is not detrimental to public health, safety or the general welfare.
 - B. Existing front and street side yard driveways may be enlarged to the minimum extent necessary to comply with the replacement parking requirement above. Existing curb cuts shall not be altered except when necessary to promote public health, safety or the general welfare.
- iii. When parking is provided, the unit shall have street access from a driveway in common with the main residence in order to prevent new curb cuts, excessive paving, and elimination of street trees, unless separate driveway access will result in fewer environmental impacts such as paving, grading or tree removal.
- iv. If covered parking for a unit is provided in any district, the maximum size of the covered parking area for the accessory dwelling unit is 220 square feet. This space shall count towards the total floor area for the site but does not contribute to the maximum size of the unit unless attached to the unit.

(l) Miscellaneous requirements

- i. Street addresses shall be assigned to all units prior to building permit final to assist in emergency response.
- ii. The unit shall not be sold separately from the primary residence.
- iii. Rental of any unit created pursuant to this section shall be for a term of 30 days or more.
- iv. The installation of fire sprinklers shall not be required in an accessory dwelling unit if sprinklers are not required for the primary residence. Nothing in this section shall preclude the Fire Marshal from accepting fire sprinklers as an alternative means of compliance with generally applicable fire protection requirements.

18.09.050 Additional Requirements for JADUs

- (a) A junior accessory dwelling unit shall be created within the walls of an existing or proposed primary dwelling.
- (b) The junior accessory dwelling unit shall include an efficiency kitchen, requiring the following components: A cooking facility with appliances, and; food preparation counter and storage cabinets that are of reasonable size in relation to the size of the junior accessory dwelling unit.
 - i. A cooking facility with appliances shall mean, at minimum a one burner installed range, an oven or convection microwave, a 10 cubic foot refrigerator and freezer combination unit, and a sink that facilitates hot and cold water.
 - ii. A food preparation counter and storage cabinets shall be of reasonable size in relation to a JADU if they provide counter space equal to a minimum 24-inch depth and 36-inch length.
- (c) For the purposes of any fire or life protection ordinance or regulation or for the purposes of providing service for water, sewer, or power, a junior accessory dwelling unit shall not be considered a separate or new unit.
- (d) The owner of a parcel proposed for a junior accessory dwelling unit shall occupy as a primary residence either the primary dwelling or the junior accessory dwelling. Owner-occupancy is not required if the owner is a governmental agency, land trust, or housing organization.
- (e) Prior to the issuance of a building permit for a junior accessory dwelling unit, the owner shall record a deed restriction in a form approved by the city that includes a prohibition on the sale of the junior accessory dwelling unit separate from the sale of the single-family residence, requires owner-occupancy consistent with subsection (m)(iv) above, does not permit short-term rentals, and restricts the size and attributes of the junior dwelling unit to those that conform with this section.

SECTION 4. Subsection (g) of Section 16.58.030 of Chapter 16.58 (Development Impact Fees) of Title 16 (Building) of the Palo Alto Municipal Code (“PAMC”) is amended to read:

- (f) Accessory dwelling units (ADU) less than 750 square feet in size. Any impact fees to be charged for an accessory dwelling unit of 750 square feet or more shall be proportional to the square footage of the primary dwelling unit ~~established by the conversion of an existing garage or carport, provided that the existing garage or carport was legally constructed, or received building permits, as of January 1, 2017, and is converted to an ADU with no expansion of the existing building envelope;~~

SECTION 5. Subsections (a)(4) and (a)(75) of Section 18.04.030 (Definitions) of Chapter 18.04 (Definitions) of Title 18 (Zoning) of the Palo Alto Municipal Code (“PAMC”) is amended to read:

[. . .]

- (4) “Accessory dwelling unit” means an attached or a detached residential dwelling unit which provides complete independent living facilities for one or more persons. It shall include permanent provisions for living, sleeping, eating, cooking, and sanitation on the same parcel as the single-

family dwelling is situated. An accessory dwelling unit also includes the following:

(A) An efficiency unit, as defined in Section 17958.1 of the Health and Safety Code.

(B) A manufactured home, as defined in Section 18007 of the Health and Safety Code.

In some instances this Code uses the term second dwelling unit interchangeably with accessory dwelling unit. For the purposes of this definition, in order to provide “complete independent living facilities,” a dwelling unit shall not have an interior access point to another dwelling unit (e.g. hotel door or other similar feature/appurtenance).

[. . .]

(75) “Kitchen” means a room designed, intended or used for cooking and the preparation of food and dishwashing. Kitchen facilities include the presence of major appliances, utility connections, sink, counter, for storing, preparing, cooking, and cleaning.

(A) For ADUs, major appliances shall mean a minimum two burner installed range, and an oven or convection microwave, as well as a minimum 16 cubic foot freezer and refrigerator combination unit. Kitchens shall also include counter space for food preparation equal to a minimum 24-inch depth and 36-inch length, and a sink that facilitates hot and cold water.

[. . .]

SECTION 6. Any provision of the Palo Alto Municipal Code or appendices thereto inconsistent with the provisions of this Ordinance, to the extent of such inconsistencies and no further, is hereby repealed or modified to that extent necessary to effect the provisions of this Ordinance.

SECTION 7. If any section, subsection, sentence, clause, or phrase of this Ordinance is for any reason held to be invalid or unconstitutional by a decision of any court of competent jurisdiction, such decision shall not affect the validity of the remaining portions of this Ordinance. The City Council hereby declares that it would have passed this Ordinance and each and every section, subsection, sentence, clause, or phrase not declared invalid or unconstitutional without regard to whether any portion of the ordinance would be subsequently declared invalid or unconstitutional.

SECTION 8. The Council finds that the adoption of this Ordinance is exempt from the provisions of the California Environmental Quality Act (CEQA) pursuant to Public Resources Code Section 21080.17 and CEQA Guidelines sections 15061(b)(3), 15301, 15302 and 15305 because it constitutes minor adjustments to the City’s zoning ordinance to implement State law requirements related to accessory dwelling units as established in Government Code Section 65852.2, and these changes are also likely to result in few additional dwelling units dispersed throughout the City. As such, it can be seen with certainty that the proposed action will not have the potential for causing a significant effect on the environment.

//

//

//

//

SECTION 9. This ordinance shall be effective on the thirty-first date after the date of its adoption.

INTRODUCED:

PASSED:

AYES:

NOES:

ABSENT:

NOT PARTICIPATING:

ATTEST:

City Clerk

Mayor

APPROVED AS TO FORM:

APPROVED:

Assistant City Attorney

City Manager

Director of Planning & Development
Services

Ordinance No.

Ordinance of the Council of the City of Palo Alto Repealing Chapter 16.06 of the Palo Alto Municipal Code and Amending Title 16 to Adopt a New Chapter 16.06, California Residential Code, 2019 Edition, and Local Amendments and Related Findings

The Council of the City of Palo Alto does ORDAIN as follows:

SECTION 1. Chapter 16.06 of Palo Alto Municipal Code is hereby amended by repealing the Chapter in its entirety and adopting a new Chapter 16.06 to read as follows:

16.06.010 2019 California Residential Code adopted.

The California Residential Code, 2019 Edition, Title 24, Part 2.5 of the California Code of Regulations, together with those omissions, amendments, exceptions and additions thereto, is adopted and hereby incorporated in this Chapter by reference and made a part hereof the same as if fully set forth herein.

Unless superseded and expressly repealed, references in City of Palo Alto forms, documents and regulations to the chapters and sections of the former California Code of Regulations, Title 24, 2016, shall be construed to apply to the corresponding provisions contained within the California Code of Regulations, Title 24, 2019. Ordinance No. 5479 of the City of Palo Alto and all other ordinances or parts of ordinances in conflict herewith are hereby suspended and expressly repealed.

Wherever the phrases "California Residential Code" or "Residential Code" are used in this code or any ordinance of the city, such phrases shall be deemed and construed to refer and apply to the California Residential Code, 2019 Edition, Title 24, Part 2.5 of the California Code of Regulations, as adopted by this Chapter.

One copy of the California Residential Code, 2019 Edition, has been filed for use and examination of the public in the Office of the Building Official of the City of Palo Alto.

16.06.020 2019 California Residential Code Appendix Chapters adopted.

The following Appendix Chapters of the California Residential Code, 2019 Edition, are adopted and hereby incorporated in this Chapter by reference and made a part hereof the same as if fully set forth herein:

- A. Appendix H – Patio Covers
- B. Appendix J – Existing Building and Structures
- C. Appendix K – Sound Transmission
- D. Appendix V – Swimming Pool Safety Act

16.06.030 Cross - References to California Residential Code.

The provisions of this Chapter contain cross-references to the provisions of the California Residential Code, 2019 Edition, in order to facilitate reference and comparison to those provisions.

16.06.40 Section 1.11.2.1.1 Duties and powers of the enforcing agency/Enforcement is amended with the following language:

Section 1.11.2.1.1 Duties and powers of the enforcing agency/Enforcement

The responsibility for enforcement of building standards adopted by the State Fire Marshal and published in the California Building Standards Code relating to fire and panic safety and other regulations of the State Fire Marshal shall, except as provided in Section 1.11.2.1.2, be as follows:

1. The city, county or city and county with jurisdiction in the area affected by the standard or regulation shall delegate the enforcement of the building standards relating to fire and panic safety and other regulations of the State Fire Marshal as they relate to Group R-3 occupancies, as described in Section 310.1 of Part 2 of the California Building Standards Code, to both enforcement divisions specific to their areas of enforcement disciplines:

- 1.1 The chief of the fire authority of the city, county or city and county, or an authorized representative and;
- 1.2. The chief building official of the city, county or city and county, or an authorized representative.

16.06.050 Violations -- Penalties.

It is unlawful for any person to violate any provision or to fail to comply with any of the requirements of this Chapter or any permits, conditions, or variances granted under this Chapter. Violators shall be subject to any penalty or penalties authorized by law, including but not limited to: administrative enforcement pursuant to Chapters 1.12 and 1.16 of the Palo Alto Municipal Code; and criminal enforcement pursuant to Chapter 1.08 of the Palo Alto Municipal Code. Each separate day or any portion thereof during which any violation of this Chapter occurs or continues shall be deemed to constitute a separate offense.

When the chief building official determines that a violation of this Chapter has occurred, the chief building official may record a notice of pendency of code violation with the Office of the County Recorder stating the address and owner of the property involved. When the violation has been corrected, the chief building official shall issue and record a release of the notice of pendency of code violation.

16.06.060 Enforcement -- Criminal Enforcement Authority.

The employee positions designated in this section are authorized to exercise the authority provided in California Penal Code section 836.5 for violations of this Chapter. The designated employee positions are: (1) chief building official, (2) assistant chief building official, (3) building

inspection manager, and (4) code enforcement officer.

16.06.070 Local Amendments.

The provisions of this Chapter shall constitute local amendments to the cross-referenced provisions of the California Residential Code, 2019 Edition, and shall be deemed to replace the cross-referenced sections of said Code with the respective provisions set forth in this Chapter.

16.06.080 Section R101.1 Title is amended to read:

R101.1 Title These provisions shall be known as the Residential Code for One- and Two-family Dwellings of City of Palo Alto, and shall be cited as such and will be referred to herein as “this code.”

16.06.090 Section R105.1.1 Demolition permits is added to read:

R105.1.1 Demolition permits. In addition to other requirements of law, every person seeking a permit to demolish a unit used for residential rental purposes shall furnish an affidavit or declaration under penalty of perjury that the unit proposed to be demolished is vacant, or that notice to vacate has been given to each tenant lawfully in possession thereof as required by law or by the terms of such tenancy. No work or demolition shall begin upon any portion of such a unit until each and every portion has been vacated by all tenants lawfully in possession thereof.

16.04.100 Section R105.5 Expiration is amended to read:

R105.5 Expiration. Every permit issued shall become invalid unless the work on the site authorized by such permit is commenced within 12 months after its issuance, or if the work authorized on the site by such permit is suspended or abandoned for a period of 12 months after the time the work is commenced. The chief building official is authorized to grant, in writing, one or more extensions of time, for periods not more than 180 days each and may require:

- 1) that the construction documents be revised to partially or fully comply with current codes, and
- 2) payment of a fee.

Extensions shall be requested in writing and justifiable cause demonstrated. For the purpose of this section, failure to progress a project to the next level of required inspection shall be deemed to be suspension of the work.

16.06.110 Section R108.5 Refunds is amended to read:

R108.5 Refunds. The building official or permit center manager may authorize the refund of any fee paid hereunder which was erroneously paid or collected. The building official or permit center manager may authorize the refund of not more than eighty

percent (80%) of the permit fee paid when no work has occurred under a permit issued pursuant to this Chapter. The building official or permit center manager may authorize the refund of not more than eighty percent (80%) of the Plan Review Fee paid when a permit application is withdrawn or canceled before any plan review work has started.

16.06.120 Section R109.1.3 Floodplain inspections is amended to read:

R109.1.3 Floodplain inspections. In flood hazard areas, upon placement of the lowest floor, including the basement, and prior to further vertical construction, the elevation certification shall be submitted to City Public Works Engineering for inspection approval prior to foundation inspection by city building inspection.

16.06.130 Section R109.5 Re-inspection fees assessed/authorized is added to read:

R109.5 Re-inspection fees. A Re-Inspection Fee may be assessed/authorized by the building official or building inspection supervisor for each re-inspection required when work for which an inspection is requested is not ready for inspection or when required corrections noted during prior inspections have not been completed. A “Re-Inspection Fee” may be assessed/authorized when:

1. The inspection record card is not posted or otherwise available on the work site; or
2. The approved plans are not readily available for the inspector at the time of inspection; or
3. The inspector is unable to access the work at the time of inspection; or
4. When work has substantially deviated from the approved plans without the prior approval of the building official.
5. When a Re-Inspection Fee is assessed, additional inspection of the work will not be performed until the fee has been paid.

16.06.140 Section R110.1 Use and occupancy is amended to read:

R110.1 Use and occupancy. A building or structure shall not be used or occupied, and a change of occupancy or change of use of a building or structure or portion thereof shall not be made, until the building official has issued a certificate of occupancy therefor as provided herein. Issuance of a certificate of occupancy shall not be construed as an approval of a violation of the provisions of this code or of other ordinances of the jurisdiction. Certificates presuming to give authority to violate or cancel the provisions of this code or other ordinances of the jurisdiction shall not be valid.

Exceptions: Certificates of occupancy are not required for:

1. Work exempt from permits under Section 105.2
2. Accessory buildings or structures
3. Group R - Division 3 occupancies
4. Group U occupancies

16.06.150 Section R202 amended – Definitions added.

Section R202 of the California Residential Code is amended to include the following definition:

WILDLAND-URBAN INTERFACE FIRE AREA is a geographical area identified by the State of California as a “Fire Hazard Severity Zone” in accordance with Public Resources Code Sections 4201 through 4202 and Government Code Sections 51175 through 51189, or other areas designated by the enforcing agency to be at a significant risk from wildfires. Within the city limits of the City of Palo Alto, “Wildland-Urban Fire Interface Area” shall also include all areas west of Interstate 280, and all other areas recommended as a “Very High Fire Hazard Severity Zone” by the Director of the California Department of Forestry.

16.06.160 Table 301.2(1) Climatic and Geographic Design Criteria: Section Table 301.2(1) of the California Residential Code is added to read:

**TABLE R301.2(1)
CLIMATIC AND GEOGRAPHIC DESIGN CRITERIA**

GROUND SNOW LOAD	WIND DESIGN		SEISMIC DESIGN CATEGORY	SUBJECT TO DAMAGE FROM		
	Speed (mph)	Topographic effects		Weathering	Frost line depth	Termite
0	110	No	D ₀ thru E	Negligible	5”	Very High

WINTER DESIGN TEMP. (°F)	ICE BARRIER UNDERLAYEMENT REQUIRED	FLOOD HAZARDS	AIR FREEZING INDEX	MEAN ANNUAL TEMP. (°F)
40	No	See Footnotes p thru r	0	55

^p The City of Palo Alto entered National Flood Insurance Program in 1979.

^q The effective date of the current Flood Insurance Study and Flood Insurance Rate Map is May 18, 2009.

^r The panel numbers and dates of all currently effective FIRMs and FBFMs: 06085CIND0A, 06085C0010H, 06085C0015H through 06085C0019H, 06085C0030H, 06085C0036H , 06085C0038H , 06085C0180H , 06085C0185H (May 18, 2009 for all)

16.06.165 Section R310 Emergency escape and rescue openings: Section R310 of the California Residential Code is amended to read:

R310.1 Emergency escape and rescue opening required. Basements, habitable attics and every sleeping room shall have not less than one operable emergency escape and rescue opening. Where basements contain one or more sleeping rooms, an emergency escape and rescue opening shall be required in each sleeping room. Emergency escape

and rescue openings shall open directly into a public way, or to a yard or court that opens to a public way.

Exceptions:

1. Storm shelters and basements used only to house mechanical equipment not exceeding a total floor area of 200 square feet (18.58 m²)

16.06.170 Section R310.2.3.3 Window well fall protection: Section R310.2.3.3 of the California Residential Code is added to read:

R310.2.3.3 Window well fall protection. Window wells with a vertical depth greater than 30 inches shall have guards on all sides. The guards shall be provided in accordance with Section R312.1. Openings shall comply with Section R312.1.3. Access ladder shall comply with Section R310.2.3.1 and shall extend from the bottom of the well to the top of the guard.

16.06.180 Section R310.4.1 Security bars: Section R310.4.1 of the California Residential Code is added to read:

R310.4.1 Security bars. Fire Department plan check review and approval of all security bar submittals shall be required prior to the issuance of a Building Permit.

16.06.190 Section R313.2 One- and two-family dwellings automatic fire sprinkler systems. Section R313.2 of the California Residential Code is amended to read:

R313.2 One- and two-family dwellings automatic fire sprinkler systems. Approved automatic sprinkler systems in new buildings and structures and in existing modified buildings and structures, shall be provided in the locations described in this section. Automatic fire sprinklers shall be installed per the requirements set forth in Sections 903.2.1 through 903.2.18 of the California Building Code and as follows, whichever is the more restrictive:

1. An automatic sprinkler system shall be provided throughout all new buildings and structures.

Exception: New residential occupancies, buildings or structures that do not exceed 350 square feet of building area.

2. An automatic sprinkler system shall be provided for all existing buildings or structures where modifications have been determined by the Building Official to trigger requirements for seismic retrofit.
3. An automatic sprinkler system shall be provided throughout all existing buildings when modifications are made that create an increase in fire area

to more than 3600 square feet or when the addition is equal or greater than 50% of the existing building square footage whichever is more restrictive.

4. An automatic sprinkler system shall be provided throughout all new basements regardless of size and throughout existing basements that are expanded by more than 50% or is conditioned for use. If the addition is only the basement, then only the basement is required to be fire sprinkler protection.
5. An automatic sprinkler system shall be installed throughout when either the roof structure and/or exterior wall structure have been removed and/or replaced by at least 50% of the existing structure.
6. An automatic sprinkler system shall be installed throughout when any change in use or occupancy creating a more hazardous fire/life safety condition, as determined by the Fire Chief.

16.04.193 Section R313.1.1 – Design and installation.

Section R313.1.1 of the California Residential Code is amended to read as follows:

R313.1.1 Design and installation. Where allowed, automatic sprinkler systems installed in townhouses shall be installed throughout in accordance with NFPA 13D and State and local standards.

16.04.195 Section R313.2.1 – Design and installation.

Section R313.2.1 of the California Residential Code is amended to read as follows:

R313.2.1 Design and installation. R313.2.1 Design and installation. Where allowed, automatic sprinkler systems installed in one- and two-family detached dwellings shall be installed throughout in accordance with NFPA 13D and State and local standards.

16.06.200 Section R314.1– Smoke detection and notification.

Section R314.1 of the California Residential Code is amended to read:

R314.1 Smoke detection and notification. Listed single- and multiple-station smoke alarms complying with UL 217 shall be installed in accordance with the California Fire Code Sections 907.2.11.1 through 907.2.11.5 and manufacturer's installation and use instructions.

Smoke alarms and smoke detectors shall be in compliance with this code or subject to the provisions of the Health and Safety Code, they shall also be listed and approved for rapid response to smoldering synthetic materials. All smoke

alarms or detectors shall be of the photoelectric type or shall have equivalent detection capabilities in compliance with UL 217.

Exception: A combination photoelectric/ionization smoke alarm or detector may be used if located no closer than 20 feet to a kitchen, bathroom, fireplace or woodburning stove.

16.06.205 Section R319.1 Address numbers.

The following subsections are added to Section R319.1 of the California Residential Code:

R319.1.1 Address illumination. Address identification required by Section R319.1 shall be illuminated.

R319.1.2 Address identification size. Address numbers and letters shall be sized as follows:

1. When the structure is between thirty-six (36) and fifty (50) feet from the road or other emergency means of access, a minimum of one-half inch (0.5") stroke by six inches (6") high is required.
2. When the structure is fifty (50) or more feet from the road or other emergency means of access, a minimum of one inch (1") stroke by nine inches (9") high is required.

16.06.210 Section R322.1 – General.

The following paragraph is added to Section R322.1 of the California Residential Code:

Palo Alto Flood Hazard Regulations. Notwithstanding the provisions of this section, all construction or development within a flood hazard area (areas depicted as a Special Flood Hazard Area on Flood Insurance Rate Maps published by the Federal Emergency Management Agency) shall comply with the City of Palo Alto Flood Hazard Regulations (Palo Alto Municipal Code Chapter 16.52). Where discrepancies exist between the requirements of this code and said regulations, the provisions of said regulations shall apply.

16.06.220 Section R337.1.5 Vegetation management compliance. Section R337.1.5 of the California Residential Code is amended to read:

R337.1.5 Vegetation management compliance. Prior to building permit final approval, the property shall be in compliance with the vegetation management requirements prescribed in California Fire Code section 4906, including California Public Resources Code 4291 or California Government Code Section 51182. Acceptable methods of compliance inspection and documentation shall be determined by the enforcing agency and may include any of the following:

1. Local, state, or federal fire authority or designee authorized to enforce vegetation management requirements.

2. Enforcing agency - City of Palo Alto Fire Inspection shall inspect the aforementioned requirements and indicate compliance prior to building division final inspection sign-off.
3. Third party inspection and certification authorized to enforce vegetation management requirements.
4. Property owner certification authorized by the enforcing agency.

16.06.230 Section R403.1.3 Footing and stem wall reinforcing in Seismic Design Categories D₀, D₁, and D₂. Section R403.1.3 of the California Residential Code is amended to read:

R403.1.3 Footing and stem wall reinforcing in Seismic Design Categories D₀, D₁, and D₂. Concrete footings located in Seismic Design Categories D₀, D₁ and D₂, as established in Table R301.2(1), shall have not fewer than three No. 4 horizontal bars. One No. 4 horizontal bar shall be installed within 12 inches (305 mm) of the top of the stem wall and two No. 4 horizontal bars shall be located 3 to 4 inches (76 mm to 102 mm) from the bottom of the footing.

R403.1.3.1 Concrete stem walls with concrete footings. In Seismic Design Categories D₀, D₁ and D₂ where a construction joint is created between a concrete footing and a stem wall, not fewer than one No. 4 vertical bar shall be installed at not more than 4 feet (1219 mm) on center. The vertical bar shall have a standard hook and extend to the bottom of the footing and shall have support and cover as specified in Section R403.1.3.5.3 and extend not less than 14 inches (357 mm) into the stem wall. Standard hooks shall comply with Section R608.5.4.5. Not fewer than one No. 4 horizontal bar shall be installed within 12 inches (305 mm) of the top of the stem wall and two No. 4 horizontal bars shall be located 3 to 4 inches (76 mm to 102 mm) from the bottom of the footing.

R403.1.3.2 Masonry stem walls with concrete footings. In Seismic Design Categories D₀, D₁ and D₂ where a grouted masonry stem wall is supported on a concrete footing, not fewer than one No. 4 vertical bar shall be installed at not more than 4 feet (1219 mm) on center. The vertical bar shall have a standard hook and extend to the bottom of the footing and have support and cover as specified in Section R403.1.3.5.3 and extend not less than 14 inches (357 mm) into the stem wall. Standard hooks shall comply with Section R608.5.4.5. Not fewer than one No. 4 horizontal bar shall be installed within 12 inches (305 mm) of the top of the wall and two No. 4 horizontal bars shall be located 3 to 4 inches (76 mm to 102 mm) from the bottom of the footing. Masonry stem walls shall be solid grouted.

In Seismic Design Categories D₀, D₁ and D₂ masonry stem walls without solid grout and vertical reinforcing are not permitted.

16.06.240 Section R403.1.8 – Foundations on expansive soils. Section R403.1.8 of the California Residential Code is amended to read:

R403.1.8 Foundations on expansive soils. Foundations and floor slabs for buildings located on expansive soils shall be designed in accordance with Section 1808.6 or Table 1809.7 of the California Building Code.

Table 1809.7 of the California Building Code is added and amended to read:

TABLE 1809.7

Prescriptive Footings Supporting Walls of Light-Frame Construction^{abcd}

Number of Floors Supported by the Footing^e	Thickness of Foundation Wall (inches)	Width of Footing (inches)	Thickness of Footing (inches)	Depth of Foundation Below Natural Surface of Ground or Finish Grade (inches)
1&2	8	15	8	20
3	8	18	8	30
Group U Occupancies	8	12	8	12
ADU Conversions ^f	8	12	8	12

- a) The ground under the floor shall be permitted to be excavated to the elevation of the top of the footing.
- b) Interior stud-bearing walls shall be permitted to be supported by isolated footings. The footing width and length shall be twice the width shown in this table, and footings shall be spaced not more than 6 feet on center.
- c) See Section 1905 of California Building Code for additional requirements for concrete footings of structures assigned to Seismic Design Category C, D, E or F.
- d) All foundations as required in the above Table shall be continuous and have a minimum of three #4 bars of reinforcing steel, except for one story, detached accessory buildings of Group U occupancy where two bars are required.
- e) Footings shall be permitted to support a roof in addition to the stipulated number of floors. Footings supporting roof only shall be as required for supporting one floor.
- f) If the existing detached accessory building is being converted to an Accessory Dwelling Unit (ADU) and the existing foundation is being utilized, then a designer, architect or engineer shall provide a letter that the existing foundation complies with the conditions above and is deemed structurally sound.

16.06.245 Section R504.3.1 Projections exposed to weather.

Section R504.3.1 of the California Residential Code is added to read:

R504.3.1 Projections exposed to weather. Floor projections exposed to the weather and sealed underneath, including but not limited to balconies, landings, decks, and stairs shall be constructed of naturally durable wood, preservative-treated wood, corrosion-resistant (e.g. galvanized) steel, or similar approved materials.

16.06.247 Section R602.10.4.5 Limits on methods GB and PCP. Section R602.10.4.5 of the California Residential Code is added to read:

R602.10.4.5 Limits on methods GB and PCP. In Seismic Design Categories D₀, D₁, and D₂, Method GB is not permitted for use as an intermittent braced wall panels, but gypsum board is permitted to be installed when required by this Section to be placed on the opposite side of the studs from other types of braced wall panel sheathing. In Seismic Design Categories D₀, D₁, and D₂, the use of Method PCP is limited to one-story single family dwelling and accessory structures.

16.06.250 Table R602.10.3(3) – Bracing requirements based on seismic design category.

Footnote e to Table R602.10.3(3) is amended to read as follows:

g. In Seismic Design Categories D₀, D₁ and D₂, Method GB is not permitted and PCP is limited to one-story dwellings and accessory structures.

16.06.253 Section R703.8.5.1 Locations.

Section R703.8.5.1 of the California Residential Code is added to read:

R703.8.5.1 Locations. Flashing shall be installed at wall and roof intersections, gutters, wherever there is a change in roof slope or direction, and around roof openings. Where flashing is of metal, the metal shall be corrosion resistant with a thickness of not less than 0.019 inches (0.483 mm) (e.g. no. 26 galvanized sheet) and shall be primed and painted.

16.06.255 Section R806.6 Ventilation of weather-exposed enclosed assemblies.

Section R806.6 of the California Residential Code is added to read:

R806.6 Ventilation of weather-exposed enclosed assemblies. Exterior projecting elements and appurtenances exposed to the weather and sealed underneath, including but not limited to balconies, landings, decks, and stairs, shall have cross ventilation for each separate enclosed space by ventilation openings protected against the entrance of rain and snow. Blocking and bridging shall be arranged so as not to interfere with the movement of air. The net free ventilating area shall not be less than 1/150th of the area of the space ventilated. Ventilation openings shall comply with Section R806.1 . An access panel of sufficient size shall be provided on the underside of the enclosed space to allow for periodic inspection.

Exceptions:

1. An access panel is not required where the exterior coverings applied to the underside of joists are easily removable using only common tools.

2. Removable soffit vents 4 inches minimum in width can be used to satisfy both ventilation and access panel requirements.

16.06.260 Section R902.1.4 – Roofing requirements in a Wildland-Urban Interface Fire Area.

Section R902.1.4 of the California Residential Code is amended to read:

R902.1.4 Roofing requirements in a Wild Land-Urban Interface Fire Area. The entire roof covering on new structures and existing structures on which more than 50 percent of the total roof area is replaced within any one-year period, and any roof covering applied in the alteration, repair or replacement of roofs on existing structures, shall be a fire-retardant roof covering that is at least Class A. Roofing requirements for structures located in a Wildland-Urban Interface Fire Area shall also comply with Section R337.5.

16.06.270 Section R1003.9.2.1 – Repairs, replacements and alterations.

Section R1003.9.2.1 is added to the California Residential Code to read:

R1003.9.2.1 Repairs, replacements and alterations. When any repair, replacement or alteration to the roof of an existing structure is performed, a spark arrester shall be installed on the existing chimney in accordance with Section R1003.9.2.

16.06.280 Section AJ103 – Preliminary Meeting. Section AJ103 of Appendix J of the California Residential Code is amended to read:

Section AJ103.1 General. If a building permit is required at the request of the prospective permit applicant, the building official or his or her designee may meet with the prospective applicant to discuss plans for any proposed work under these provisions prior to the application for the permit. The purpose of this preliminary meeting is for the building official to gain an understanding of the prospective applicant’s intentions for the proposed work, and to determine, together with the prospective applicant, the specific applicability of these provisions.

SECTION 2. The Council adopts the findings for local amendments to the California Residential Code, 2013 Edition, attached hereto as Exhibit “A” and incorporated herein by reference.

SECTION 3. The Council finds that this project is exempt from the provisions of the California Environmental Quality Act (“CEQA”), pursuant to Section 15061 of the CEQA Guidelines, because it can be seen with certainty that there is no possibility that the amendments herein adopted will have a significant effect on the environment.

//

//

SECTION 4. This ordinance shall be effective on the thirty-first day after the date of its adoption.

INTRODUCED:

PASSED:

AYES:

NOES:

ABSENT:

ABS

TENTIONS:

ATTEST:

City Clerk

Mayor

APPROVED AS TO FORM:

APPROVED:

Senior Deputy City Attorney

City Manager

Director of Planning &
Development Services

Director of Administrative Services

Ordinance No.

Ordinance of the Council of the City of Palo Alto Amending and Restating Chapter 16.14 of the Palo Alto Municipal Code, California Green Building Standards Code 2019 Edition, and Local Amendments and Related Findings, and Amending Section 16.12.035 of Chapter 16.12 to Make Conforming Changes

The Council of the City of Palo Alto does ORDAIN as follows:

SECTION 1. Title 16 of the Palo Alto Municipal Code is hereby amended by repealing in its entirety Chapter 16.14 and adopting a new Chapter 16.14 to read as follows:

16.14.010 2019 California Green Building Standards Code adopted.

The California Green Building Standards Code, 2019 Edition, Title 24, Part 11 of the California Code of Regulations, together with those omissions, amendments, exceptions and additions thereto, is adopted and hereby incorporated in this Chapter by reference and made a part hereof the same as if fully set forth herein.

Unless superseded and expressly repealed, references in City of Palo Alto forms, documents and regulations to the chapters and sections of the former California Code of Regulations, Title 24, shall be construed to apply to the corresponding provisions contained within the California Code of Regulations, Title 24, 2019. Ordinance No. 5481 of the City of Palo Alto and all other ordinances or parts of ordinances in conflict herewith are hereby suspended and expressly repealed.

Wherever the phrases “California Green Building Standards Code” or “CALGreen” are used in this code or any ordinance of the City, such phrases shall be deemed and construed to refer and apply to the California Green Building Standards Code, 2019 Edition, as adopted and amended by this chapter.

One copy of the California Green Building Standards Code, 2019 Edition, has been filed for use and examination of the public in the Office of the Building Official of the City of Palo Alto.

16.14.20 2019 California Green Building Standards Code Appendix Chapters adopted.

The following Appendix Chapters of the California Green Building Standards Code, 2019 Edition, are adopted and hereby incorporated in this Chapter by reference and made a part hereof the same as if fully set forth herein:

- A. Appendix A4 - Residential Voluntary Measures (Tier 1 and Tier2)
- B. Appendix A5 - Non-residential Voluntary Measures (Tier 1 and Tier 2)

16.14.030 Cross-References to California Green Building Standards Code.

The provisions of this Chapter contain cross-references to the provisions of the California Green Building Standards Code, 2019 Edition, in order to facilitate reference and comparison to those provisions.

16.14.040 Violations – Penalties.

It is unlawful for any person to violate any provision or to fail to comply with any of the requirements of this Chapter or any permits, conditions, or variances granted under this Chapter. Violators shall be subject to any penalty or penalties authorized by law, including but not limited to: administrative enforcement pursuant to Chapters 1.12 and 1.16 of the Palo Alto Municipal Code; and criminal enforcement pursuant to Chapter 1.08 of the Palo Alto Municipal Code. Each separate day or any portion thereof during which any violation of this Chapter occurs or continues shall be deemed to constitute a separate offense.

When the chief building official determines that a violation of this Chapter has occurred, the chief building official may record a notice of pendency of code violation with the Office of the County Recorder stating the address and owner of the property involved. When the violation has been corrected, the chief building official shall issue and record a release of the notice of pendency of code violation.

16.14.050 Enforcement -- Criminal Enforcement Authority.

The employee positions designated in this section are authorized to exercise the authority provided in California Penal Code section 836.5 for violations of this Chapter. The designated employee positions are: (1) chief building official, (2) assistant chief building official, (3) building inspection manager, and (4) code enforcement officer.

16.14.060 Local Amendments.

The provisions of this Chapter shall constitute local amendments to the cross-referenced provisions of the California Green Building Standards Code, 2019 Edition, and shall be deemed to replace the cross-referenced sections of said Code with the respective provisions set forth in this Chapter.

16.14.070 Section 202 amended – Definitions added.

Section 202 of the California Green Building Standards Code is amended to include the following definitions:

CPAU: The City of Palo Alto Utilities Department.

CALGREEN MANDATORY: CALGreen mandatory requirements are triggered for projects outlined in Section 301.1 Scope of the code, as amended. Projects that trigger only CALGreen mandatory measures are not required to fulfill CALGreen Tier 1 or Tier 2 as listed in Appendix A4 and A5.

CALGREEN “TIER 1”: To achieve Tier 1 status, a project must comply with the requirements identified in Appendix A4, section A4.601.4 for residential projects and Appendix A5, section A5.601.2 for non-residential projects. The local adaptations to these appendices are identified in this ordinance. Projects subject to Tier 1 must fulfill CALGreen mandatory measures and CALGreen Tier 1 prerequisite measures. Tier 1 projects must also select the minimum amount of CALGreen elective measures required for Tier 1.

CALGREEN “TIER 2”: To achieve Tier 2 status, a project must comply with the requirements identified in Appendix A4, section A4.601.5 for residential projects and Appendix A5, section A5.601.3 for non-residential projects. The local adaptations to these appendices are identified in this ordinance. Projects subject to Tier 2 must fulfill CALGreen mandatory measures and CALGreen Tier 2 prerequisite measures. Tier 2 projects must also select the minimum amount of CALGreen elective measures required for Tier 2.

CALGREEN “TIER 1” AND “TIER 2” PREREQUISITE MEASURES: Projects subject to CALGreen Tier 1 or Tier 2 must fulfill the minimum prerequisites as described within Appendix A4, section A4.6 for residential projects and Appendix A5, section A5.6 for non-residential Projects, and local amendments within this ordinance. Tier 1 and Tier 2 prerequisite and elective measures are generally preceded by an “A”.

CALGREEN “TIER 1” AND “TIER 2” ELECTIVE MEASURES: Projects subject to CALGreen Tier 1 or Tier 2 must fulfill the minimum number of electives as described within Appendix A4, section A4.6 for residential projects and Appendix A5, section A5.6 for non-residential Projects, and local amendments within this ordinance. Tier 1 and Tier 2 prerequisite and elective measures are generally preceded by an “A”.

CALGREEN INSPECTOR: An individual certified through the International Code Council (ICC) CALGreen Inspector/Plans Examiner Certification for demonstrating knowledge and application of Green Building concepts during plan review and inspection. For projects that require a CALGreen Inspector/Plans Examiner verification, the Inspector must be contracted directly with the owner and may not be a contractor or employee of the design or construction firm.

MODEL WATER EFFICIENT LANDSCAPE ORDINANCE. The California Department of Water Resources Model Water Efficient Landscape Ordinance.

PROCESS WATER. Process water means untreated wastewater, uncontaminated by toilet discharge or an unhealthy bodily waste, which is not a threat from unhealthful processing, manufacturing or operating wastes.

SALVAGE. Salvage means the controlled removal of items and material from a building, construction, or demolition site for the purpose of on- or off-site reuse, or storage for later reuse. Examples include air conditioning and heating systems, columns, balustrades, fountains, gazebos, molding, mantels, pavers, planters, quoins, stair treads, trim, wall caps, bath tubs, bricks, cabinetry, carpet, doors, ceiling fans, lighting fixtures, electrical panel boxes, fencing, fireplaces, flooring materials of wood, marble, stone or tile, furnaces, plate glass, wall mirrors, door knobs, door brackets, door hinges, marble, iron work, metal balconies, structural steel, plumbing fixtures, refrigerators, rock, roofing materials, siding materials, sinks, stairs, stone, stoves, toilets, windows, wood fencing, lumber and plywood.

SQUARE FOOTAGE. For application of green building requirements, square footage means all new square footage, including basement areas (7 feet or greater in height).

16.14.080 Section 301 amended – voluntary tiers added.

Section 301 of the California Green Building Standards Code is amended to read:

SECTION 301

GENERAL

301.1 Scope. Buildings shall be designed to include the green building measures specified as mandatory in the application checklists contained in this code and any applicable local amendments. In addition, the City requires the use of Voluntary Tiers, as provided in Appendices A4 and A5, for certain residential and non-residential new construction, additions, and alterations.

301.1.1 Residential additions and alterations. [HCD] The mandatory provisions of Chapter 4 shall be applied to additions and/or alterations of existing residential buildings where the addition and/or alteration increases the building's conditioned area, volume, or size. The requirements shall apply only to and/or within the specific area of the addition or alteration.

Tier 1 adopted (Residential). All residential building additions and/or alterations exceeding 1000 square feet must meet CALGREEN MANDATORY plus the Tier 1 requirements, as amended by this Chapter and as applicable to the scope of work.

For Tier 1 projects, the area of alterations will include any construction or renovation to an existing structure other than repair or addition. Alterations include remodeling, reconstruction, historic restoration, changes or rearrangements of the structural parts or elements, and changes or rearrangement in the plan configuration of walls and full height partitions. Normal maintenance, reroofing, painting or wall papering, floor finishes, or replacement-in-kind of mechanical, plumbing and electrical systems are not alterations for the purposes of establishing scope of Tier 1 projects. The area of alteration should be limited to the footprint of the component(s) being altered. This does not exclude mandatory CALGreen requirements.

~~**Exception:** Attached and detached Accessory Dwelling Units, ADU conversions of existing structures shall meet the California Green Building Standards Code Mandatory requirements only.~~

301.2 Low-rise and high-rise residential buildings. [HCD] The provisions of individual sections of CALGreen may apply to either low-rise residential buildings, high-rise residential buildings, or both. Individual sections will be designated by banners to indicate where the section applies specifically to low-rise only (LR) or high-rise only (HR). When the section applies to both low-rise and high-rise buildings, no banner will be used.

301.3 Non-residential additions and alterations. [BSC] The provisions of individual sections of Chapter 5 apply to building non-residential additions of 1,000 square feet or greater, and/or building alterations with a permit valuation of \$200,000 or above (for occupancies within the authority of California Building Standards Commission). Code sections relevant to additions and alterations shall only apply to the portions of the building being added or altered within the scope of the permitted work.

A code section will be designated by a banner to indicate where the code section only applies to newly constructed buildings [N] or to additions and alterations [A]. When the code section applies to both, no banner will be used.

Tier 1 adopted. Non-residential alterations (including tenant improvements or renovations) of 5,000 square feet that include replacement of at least two of the following: HVAC system, building envelope, hot water system, or lighting system, must

comply with CALGREEN MANDATORY plus Tier 1 requirements, as amended by this Chapter and as applicable to the scope of work.

Tier 2 adopted. Non-residential additions of 1000 square feet or greater must comply with CALGREEN MANDATORY plus Tier 2 requirements, as amended by this Chapter and as applicable to the scope of work.

~~**301.1.2 Residential new construction – Tier 2 adopted.**~~ All newly constructed Residential Buildings must meet CALGREEN MANDATORY plus Tier 2 requirements, as amended by this Chapter and as applicable to the scope of work.

~~**301.1.3 Exception:**~~ Free standing detached Accessory Dwelling Units of new construction shall meet the following:

~~California Green Building Standards Code Mandatory plus Tier 2 prerequisite requirements.
No Planning and Design electives.~~

~~Two (2) Water Efficiency and Conservation electives.~~

~~Two (2) Material Conservation and Resource Efficiency electives.~~

~~**301.1.4**~~~~**301.1.2**~~ ~~One (1) Environmental Quality elective.~~

301.1.3 Accessory Dwelling Units (ADUs) and Junior Accessory Dwelling Units (JADUs). Attached and detached Accessory Dwelling Units, ADU conversions of existing structures that increases the building's conditioned area and are less than 1,000 square feet shall meet the California Green Building Standards Code (CALGreen) Mandatory requirements only. ADU additions to existing residential buildings less than 1,000 square feet shall meet the CALGreen Mandatory requirements only. Junior Accessory Dwelling Units (JADUs) that increase the volume of the building's conditioned space shall meet the CALGreen Mandatory requirements only.

Tier 2 adopted. Free standing detached Accessory Dwelling Units of new construction shall meet the following:

1. California Green Building Standards Code (CALGreen) Mandatory plus Tier 2 prerequisite requirements.
2. No Planning and Design electives.
3. Two (2) Water Efficiency and Conservation electives.
4. Two (2) Material Conservation and Resource Efficiency electives.
5. One (1) Environmental Quality elective.

301.3.3 Non-residential new construction – Tier 2 adopted. All new non-residential construction must meet CALGREEN MANDATORY plus Tier 2 requirements, as amended by this Chapter and as applicable to the scope of work.

301.6 Special Inspector Requirements. Residential and non-residential project owners subject to CALGREEN MANDATORY plus Tier 1 or Tier 2 requirements shall contract a

Special Inspector in accordance with section 702.2 of CALGreen, as amended.

16.14.090 Section 702.2 Special Inspection.

Section 702.2 of the California Green Building Standards Code is amended to read:

702.2 Special Inspection. When required by the enforcing agency, the owner or responsible entity acting as the owner’s agent shall employ one or more Special Inspectors to provide inspection or other duties necessary to substantiate compliance with this code. Special Inspectors shall demonstrate competence to the satisfaction of the enforcing agency for the particular type of inspection or task to be performed. In addition to other certifications or qualifications acceptable to the enforcing agency, the following certifications or education may be considered by the enforcing agency when evaluating the qualifications of a Special Inspector. The City shall maintain a list of pre-

approved Special Inspectors in accordance with this section. The owner shall contract a Special Inspector from the pre-approved list meeting one of the following;

1) Certification by a national or regional green building program:

ICC Certified CALGreen Inspector/Plans Examiner: Contract a CALGreen Inspector to provide third-party verification of compliance prior to Permit Issuance and prior to Final Inspection.

2) Other programs acceptable to the enforcing agency.

When required by the enforcing agency, the owner or responsible entity acting as the owner's agent shall employ one or more Special Inspectors to provide inspection or other duties necessary to substantiate compliance with this code. Special Inspectors shall demonstrate competence to the satisfaction of the enforcing agency for the particular type of inspection or task to be performed. In addition, the Special Inspector shall have a certification from a recognized state, national or international association, as determined by the local agency. The city shall maintain a list of pre-approved Special Inspectors in accordance with this section.

Note: Special Inspectors shall be independent entities with no financial interest in the materials or the project they are inspecting for compliance with this code.

16.14.100 Reserved.

16.14.110 Residential Projects. Chapter 4 Preface: Green building requirements for project type and scope.

A preface is added to Chapter 4 of the California Green Building Standards Code to read:

Preface - Green Building Requirements for Project Type and Scope. For design and construction of residential projects, the City of Palo Alto requires compliance with the mandatory measures of Chapter 4, in addition to use of Tier 1 and Tier 2 as specified in Palo Alto Municipal Code Chapter 16.14. See Section 202 for definitions on CALGREEN MANDATORY, Tier 1 prerequisites and electives, and Tier 2 prerequisites and electives. All elective measures are adopted as written under Appendix A4 unless otherwise indicated in this Section.

16.14.120 Section A4.104 Site Preservation.

Section A4.104.1 is adopted as a Tier 1 and Tier 2 elective and is amended to read:

A4.104.1 Supervision and Education by a Special Inspector. Individuals with oversight authority on the project, as defined in section 16.14.090 of this code, who have been trained in areas related to environmentally friendly development, shall teach green concepts to other members of the builder’s staff and ensure training and written instruction has been provided to all parties associated with the development of the project. Prior to the beginning of the construction activities, the builder shall receive a written guideline and instruction specifying the green goals of the project.

Note: Lack of adequate supervision and dissemination of the project goals can result in negative effects on green building projects. If the theme of green building is not carried through the project, the overall benefit can be substantially reduced by the lack of knowledge and information provided to the various entities involved with the construction of the project.

16.14.130 Section A4.105 Deconstruction and Reuse of Existing Materials.

Section A4.105.1 Section A4.105.1 is adopted as an elective measure effective through June 30, 2020. Starting July 1, 2020 per Chapter 5.24 of Title 5 of the Municipal Code, Section A4.105.1 is not adopted as an elective measure. See Chapter 5.24 of the Municipal Code for the local deconstruction requirements.

Section A4.105.2 is adopted as a Tier 1 and Tier 2 elective measure.

A4.105.2 Reuse of materials. Nonhazardous materials which can be easily reused include but are not limited to the following:

1. Light fixtures
2. Plumbing fixtures
3. Doors and trim
4. Masonry
5. Electrical devices
6. Appliances
7. Foundations or portions of foundations

Note: Reused material must be in compliance with the appropriate Title 24 requirements.

16.14.140 ~~Reserved.~~ **Section A4.106.5 Cool roof for reduction of heat island effect.**

Section A4.106.5 is not adopted as a Tier 1 prerequisite. Section A4.106.5 is adopted as a Tier 1 elective.

16.14.150 **Section A4.106.8 Electric Vehicle (EV) Charging for New Construction.**

Section A4.106.8 is not adopted as a Tier 1 and Tier 2 elective measure. Projects must comply with the mandatory electric vehicle supply equipment (EVSE) requirements stated in Section A4.106.8, as amended.

16.14.160 **Section A4.106.9 Bicycle Parking.**

Section A4.106.9 is not adopted as a Tier 1 and Tier 2 elective measure. Projects must comply with the bicycle parking requirements in the Palo Alto Municipal Code.

16.14.170 **Section A4.106.10 Light Pollution Reduction.**

Section A4.106.10 is adopted as a Tier 1 and Tier 2 elective measure for all covered projects and is amended to read:

A4.106.10 Light pollution reduction. Outdoor lighting systems shall be designed and installed to comply with the following:

1. The minimum requirements in the California Energy Code for Lighting Zones 1-4 as defined in Chapter 10 of the California Administrative Code; and
2. Backlight, Uplight and Glare (BUG) ratings as defined in IES TM-15-11; and
3. Allowable BUG ratings not exceeding those shown in Table A4.106.10; or
4. Comply with a local ordinance lawfully enacted pursuant to Section 101.7 of this code, whichever is more stringent.

Projects may use an approved equal reference standard for light fixtures where BUG ratings are unavailable.

Exceptions:

1. Luminaires that qualify as exceptions to the California Energy Code.
2. Emergency lighting.
3. One- and two-family dwellings.

Note: The International Dark-Sky Association (IDA) and the Illuminating

Engineering Society of North America (IESNA) have developed a Model Lighting

Ordinance (MLO). The MLO was designed to help municipalities develop outdoor lighting standards that reduce glare, light trespass, and skyglow. The model ordinance and user guides for the ordinance may be accessed at the International Dark-Sky Association web site.

16.14.180 Section A4.203.1 Performance Approach for Newly Constructed Buildings.

Sections A4.203.1 is not adopted as a Tier 1 and Tier 2 elective measure. Projects shall comply with Chapter 16.17 of the Palo Alto Municipal Code (Energy Reach Code).

16.14.190 Reserved.

16.14.200 Reserved.

16.14.210 Reserved.

16.14.220 Section A4.304.3 Irrigation Metering Device.

Section A4.304.3 is adopted as a Tier 1 and Tier 2 elective measure and is amended to read:

A4.304.3 Irrigation Metering Device. Dedicated irrigation meters from CPAU are to be installed in all new construction and rehabilitated landscapes when the landscape is greater than 1,000 square feet.

16.14.230 Section A4.305 Water Reuse Systems.

Sections A4.305.1, A4.305.2, and A4.305.3 are adopted as Tier 1 and Tier 2 elective measures, and are amended to read:

A4.305.1 Graywater. Alternative plumbing piping is installed to permit the discharge from the clothes washer and other fixtures (except toilets and kitchen sinks) to be used for an irrigation system in compliance with the California Plumbing Code. In the event that the whole house graywater system is installed in compliance with the California Plumbing Code, then this measure shall count as 3 electives.

A4.305.2 Recycled Water Piping. Based on projected availability, dual water piping is installed for future use of recycled water at the following locations:

1. Interior piping for the use of recycled water is installed to serve all water closets, urinals, and floor drains.

2. Exterior piping is installed to transport recycled water from the point of connection to the structure. Recycled water systems shall be designed and installed in accordance with the California Plumbing Code.

A4.305.3 Recycled water for landscape irrigation. Recycled water piping is used for landscape irrigation.

Section A4.305.4 is added as Tier 1 and Tier 2 prerequisite and shall read as follows:

A4.305.4 Additions and alterations. All multifamily residential additions and alterations must install recycled water infrastructure for irrigation when the landscape area exceeds 1,000 square feet.

16.14.240 Section A4.403.1 Frost Protection Foundation Systems.

Sections A4.403.1 is not adopted as a Tier 1 and Tier 2 elective measure.

16.14.250 Section A4.403.2 Reduction in cement use.

Section A4.403.2 is not adopted as a Tier 1 and Tier 2 prerequisite. Section A4.403.2 is adopted as a Tier 1 and Tier 2 elective measure and shall read as:

A4.403.2 Reduction in cement use. As allowed by the enforcing agency, cement used in foundation mix design shall be reduced as follows:

Tier 1. Not less than a 20 percent reduction in cement.

Tier 2: Not less than a 25 percent reduction in cement.

Note: Products commonly used to replace cement in concrete mix designs include, but are not limited to:

1. Fly ash
2. Slag
3. Silica fume
4. Rice hull ash

16.14.255 Section A4.405.3.1 Recycled content

Section A.4.405.3.1 is not adopted as a Tier 1 prerequisite. Section A4.405.3.1 is adopted as a Tier 1 elective.

16.14.260 Section A4.408.1 Enhanced Construction Waste Reduction.

Section A4.408.1 is adopted as mandatory and is amended to read:

A4.408.1 Enhanced Construction Waste Reduction. Nonhazardous construction and demolition debris generated at the site is diverted to recycle or salvage in compliance with the following:

Projects with a given valuation of \$25,000 or more must have at least an 80-percent reduction. Any mixed recyclables that are sent to mixed-waste recycling facilities shall include a qualified third party verified facility average diversion rate. Verification of diversion rates shall meet minimum certification eligibility guidelines, acceptable to the local enforcing agency.

A4.408.1.1 Documentation. Documentation shall be provided to the enforcing agency which demonstrates compliance with all construction and demolition waste reduction requirements.

16.14.265 Section A4.504.1 Compliance with formaldehyde limits.

Section A4.504.1 is adopted as a Tier 1 and Tier 2 elective measure.

16.14.270 Section A4.504.3 Thermal insulation.

Section A4.504.3 is not adopted as a Tier 1 and Tier 2 prerequisite. Section A4.504.3 is adopted as a Tier 1 and Tier 2 elective measure.

16.14.280 Non-Residential Projects: Chapter 5 Preface Green Building Requirements for Project Type and Scope.

A Preface is added to Chapter 5 of the California Green Building Standards Code to read:

Preface – Green Building Requirements for Project Type and Scope. For design and construction of non-residential projects, the City requires compliance with the mandatory measures of Chapter 5, in addition to use of Tier 1 and Tier 2 as specified in Palo Alto Municipal Code Chapter 16.14. See Section 202 for definitions on CALGREEN MANDATORY, Tier 1 prerequisites and electives, and Tier 2 prerequisites and electives. All elective measures are adopted as written under Appendix A5 unless otherwise indicated in this Section.

16.14.290 Section 5.106.1.1 Local storm water pollution prevention.

Section 5.106.1.1 Local ordinance is amended to read:

5.106.1.1 Local ordinance. Newly constructed projects and additions shall comply with additional storm water pollution prevention measures as applicable. (See Chapter 16.11, Storm Water Pollution Prevention, of the Palo Alto Municipal Code.)

16.14.295 Section 5.106.8 Light pollution reduction

Section 5.106.8 Light pollution reduction is amended to read:

5.106.8 Light pollution reduction. Outdoor lighting systems shall be designed and installed to comply with the following:

1. The minimum requirements in the California Energy Code for Lighting Zones 0-4 as defined in Chapter 10, Section 10-114 of the California Administrative Code; and
2. Backlight (B) ratings as defined in IES TM-15-11 (shown in Table A-1 in Chapter 8);
3. Uplight and Glare ratings as defined in California Energy Code (shown in Tables 130.2-A and 130.2-B in Chapter 8); and
4. Allowable BUG ratings not exceeding those shown in Table 5.106.8 [N]; or
5. Comply with a local ordinance lawfully enacted pursuant to Section 101.7, whichever is more stringent.

Projects may use an approved equal reference standard for light fixtures where BUG ratings are unavailable.

Exceptions:

1. Luminaires that qualify as exceptions in Section 140.7 of the California Energy Code.
2. Emergency lighting.
3. Building facade meeting the requirements in Table 140.7-B of the California Energy Code, Part 6.
4. Custom lighting features as allowed by the local enforcing agency, as permitted by Section 101.8 Alternate materials, designs and methods of construction.

16.14.300 Section 5.305.1.3 Dual Plumbing.

Section 5.305.1.3 Dual plumbing is added as mandatory and is amended to read:

5.305.1.3 Dual plumbing. New buildings and facilities shall be dual plumbed for potable and recycled water systems for toilet flushing when recycled water is available. All building projects for which CPAU recycled water service is available must install dual Plumbing and use recycled water for toilet and urinal flushing when the building area is greater than 10,000 square feet or where installation of 25 or more toilets and urinals is proposed. All projects for which CPAU recycled water service is not yet available must install dual plumbing for use of recycled water for toilet and urinal flushing when the building area exceeds 50,000 square feet or where installation of 50 or more toilets and urinals is proposed.

16.14.310 Reserved.

16.14.320 Reserved.

16.14.330 Reserved.

16.14.340 Reserved.

16.14.350 Reserved.

16.14.360 Section 5.304.2 Invasive species prohibited.

Section 5.304.2 is added as mandatory to read:

5.304.2 Invasive species prohibited. All non-residential new construction, additions, and alterations shall not install invasive species in a landscape area of any size.

16.14.365 Section 5.306 Non-residential enhanced water budget.

Section 5.306 Non-residential enhanced water budget is added as mandatory to read:

5.306 Non-residential enhanced water budget. Non-residential buildings anticipated to use more than 1,000 gallons of water a day shall complete an Enhanced Water Budget Calculator as established by the Chief Building Official or designee .

16.14.370 Section A5.408 Construction Waste Reduction, Disposal and Recycling.

Section A5.408.3.1.1 Enhanced Construction Waste Reduction is adopted at Tier 2 (80% construction waste reduction) as a mandatory requirement for all non-residential construction, including new construction, additions, and alterations, as long as the construction has a

valuation exceeding \$25,000. Non-residential projects with a lower valuation shall remain subject to California Green Building Code Chapter 5 mandatory requirements.

16.14.375 Reserved.

16.14.380 Section 5.410.4.6 Energy STAR portfolio manager.

Section 5.410.4.6 Energy STAR portfolio manager is added as mandatory to read:

5.410.4.6 Energy STAR portfolio manager. All non-residential projects exceeding \$100,000 valuation must provide evidence of an Energy STAR Portfolio Manager project profile for both water and energy use prior to Permit Issuance, acquire an Energy STAR Portfolio Manager Rating, and submit the rating to the City of Palo Alto once the project has been occupied after 12 months.

16.14.390 Section 5.410.4.7 Performance reviews – energy.

Section 5.410.4.7 Performance reviews - energy is added to read:

5.410.4.7 Performance reviews – energy. All projects over 10,000 square feet. The City reserves the right to conduct a performance review, no more frequently than once every five years unless a project fails review, to evaluate the building's energy use to ensure that resources used at the building and/or site do not exceed the maximum allowance set forth in the rehabilitation or new construction design. Following the findings and recommendations of the review, the City may require adjustments to the energy usage or energy-using equipment or systems if the building is no longer compliant with the original design. Renovation or rehabilitation resulting from such audit activity shall be considered a project and shall be subject to applicable documentation submittal requirements of the City. This section is effective only for those projects for which a building permit was issued after January 1, 2009.

16.14.400 Section 5.410.4.8 Performance reviews – water.

Section 5.410.4.8 Performance reviews - water is added to read:

5.410.4.8 Performance reviews – water. All sites greater than one acre: The City reserves the right to conduct performance reviews, no more frequently than once every five years unless a project fails review, to evaluate water use to ensure that resources used at the building and/or site do not exceed a maximum allowance set forth in the rehabilitation or new construction design. Water use reviews may be initiated by the

Building Division, or as a coordinated effort between the CPAU and the Santa Clara Valley Water District (SCVWD), or as part of SCVWD's established water conservation programs. Following the findings and recommendations of the review, the City may require adjustments to irrigation usage, irrigation hardware, and/or landscape materials to reduce consumption and improve efficiency. Renovation or rehabilitation resulting from such audit activity shall be considered a project and shall be subject to applicable documentation submittal requirements of the City.

16.14.410 Section 5.506 Indoor Air Quality.

Section 5.506.3 is added as mandatory to read:

Section 5.506.3 Indoor Air Quality Management Plan. All commercial and multi-family projects must submit an Indoor Air Quality Management Plan (IAQ) with building permit application in accordance with the Sheet Metal and Air Conditioning Contractors National Association (SMACNA IAQ) Guidelines for Occupied Buildings Under Construction, 2nd edition ANSI/SMACNA 008-2008.

16.14.420 Section A4.106.8 Electric Vehicle (EV) Charging.

Section A4.106.8 of the California Green Building Standards Code is adopted as mandatory and amended to read:

A4.106.8 Electric Vehicle (EV) Charging for Residential Structures. Newly constructed single family and multifamily residential structures, including residential structures constructed as part of a mixed-use development, shall comply with the following requirements for electric vehicle supply equipment (EVSE). All parking space calculations under this section shall be rounded up to the next full space. The requirements stated in this section are in addition to those contained in Section 4.106.4 of the California Green Building Standards Code. In the event of a conflict between this section and Section 4.106.4 of the California Green Building Standards Code, the more robust EV Charging requirements shall prevail.

Definitions. For the purposes of this section, the following definitions shall apply:

- (a) Level 2 EVSE. "Level 2 EVSE" shall mean an EVSE capable of charging at 30 amperes or higher at 208 or 240 VAC. An EVSE capable of simultaneously charging at 30 amperes for each of two vehicles shall be counted as two Level 2 EVSE.

- (b) Conduit Only. “Conduit Only” shall mean, at minimum: (1) a panel capable to accommodate a dedicated branch circuit and service capacity to install a 208/240V, 50 amperes grounded AC outlet; and (2) raceway or wiring with capacity to accommodate a 100 ampere circuit; terminating in (3) a listed cabinet, box, enclosure, or NEMA receptacle. The raceway shall be installed so that minimal removal of materials is necessary to complete the final installation.
- (c) EVSE-Ready Outlet. “EVSE-Ready Outlet” shall mean, at minimum: (1) a panel capable to accommodate a dedicated branch circuit and service capacity to install a 208/240V, 50 amperes grounded AC outlet; (2) a two-pole circuit breaker; (3) raceway with capacity to accommodate 100-ampere circuit; (4) 50 ampere wiring; terminating in (5) a 50 ampere NEMA receptacle in a covered outlet box.
- (d) EVSE Installed. “EVSE Installed” shall mean an installed Level 2 EVSE.

A4.106.8.1 New one-family, two-family and townhouse dwellings. The following standards apply to newly constructed detached and attached single family, two-family and townhouse residences.

- (a) In general. The property owner shall provide Conduit Only, EVSE-Ready Outlet, or EVSE Installed for each residence.
- (b) Location. The proposed location of a charging station may be internal or external to the dwelling and shall be in close proximity to an on-site parking space consistent with City guidelines, rules, and regulations.

A4.106.8.2 New Multi-Family Dwellings. The following standards apply to newly constructed residences in a multi-family residential structure, except as provided in section A4.106.8.2.1.

- (a) Resident parking. The property owner shall provide at least one EVSE-Ready Outlet or EVSE Installed for each residential unit in the structure.
- (b) Guest parking. The property owner shall provide Conduit Only, EVSE-Ready Outlet, or EVSE Installed, for at least 25% of guest parking spaces, among which at least 5% (and no fewer than one) shall be EVSE Installed.
- (c) Accessible spaces. Projects shall comply with the 2019 California Building Code requirements for accessible electric vehicle parking.

- (d) Minimum total circuit capacity. The property owner shall ensure sufficient circuit capacity, as determined by the Chief Building Official or designee , to support a Level 2 EVSE in every location where Circuit Only, EVSE-Ready Outlet or EVSE Installed is required.
- (e) Location. The EVSE, receptacles, and/or raceway required by this section shall be placed in locations allowing convenient installation of and access to EVSE. In addition, if parking is deed-restricted to individual residential units, the EVSE or receptacles required by subsection (a) shall be located such that each unit has access to its own EVSE or receptacle. Location of EVSE or receptacles shall be consistent with all City guidelines, rules, and regulations.

A4.106.8.2.2 Exception – Multi-Family Residential Structures with Individual, Attached Parking. The property owner shall provide Conduit Only, EVSE-Ready Outlet, or EVSE Installed for each newly constructed residence in a multi-family residential structure featuring: (1) a parking space attached to the residence; and (2) a shared electrical panel between the residence and parking space (e.g., a multi-family structure with tuck-under garages).

A4.106.8.3 New Hotels. The following standards apply to newly constructed hotels.

- (a) In general. The property owner shall provide Conduit Only, EVSE-Ready Outlet, or EVSE Installed for at least 30% of parking spaces, among which at least 10% (and no fewer than one) shall be EVSE Installed.
- (b) Accessible spaces. Projects shall comply with the 2019 California Building Code requirements for accessible electric vehicle parking.
- (c) Minimum total circuit capacity. The property owner shall ensure sufficient circuit capacity, as determined by the Chief Building Official or designee , to support a Level 2 EVSE in every location where Circuit Only, EVSE-Ready Outlet or EVSE Installed is required.
- (d) Location. The EVSE, receptacles, and/or raceway required by this section shall be placed in locations allowing convenient installation of and access to EVSE. Location of EVSE or receptacles shall be consistent with all City guidelines, rules, and regulations.

16.14.430 Section A5.106.5.3 Electric Vehicle (EV) Charging for Non-Residential Structures.

Section A5.106.5.3 of the California Green Building Standards Code is adopted as mandatory and amended to read:

A5.106.5.3 Electric Vehicle (EV) Charging for Non-Residential Structures. New non-residential structures shall comply with the following requirements for electric vehicle supply equipment (EVSE). All parking space calculations under this section shall be rounded up to the next full space. The requirements stated in this section are in addition to those contained in Section 5.106.5.3 of the California Green Building Standards Code. In the event of a conflict between this section and Section 5.106.5.3, the more robust EV Charging requirements shall prevail.

Definitions. For the purposes of this section, the following definitions shall apply:

- (a) Level 2 EVSE. “Level 2 EVSE” shall mean an EVSE capable of charging at 30 amperes or higher at 208 or 240 VAC. An EVSE capable of simultaneously charging at 30 amperes for each of two vehicles shall be counted as two Level 2 EVSE.
- (b) Conduit Only. “Conduit Only” shall mean, at minimum: (1) a panel capable to accommodate a dedicated branch circuit and service capacity to install at least a 208/240V, 50 amperes grounded AC outlet; and (2) raceway or wiring with capacity to accommodate a 100 ampere circuit; terminating in (3) a listed cabinet, box, enclosure, or NEMA receptacle. The raceway shall be installed so that minimal removal of materials is necessary to complete the final installation.
- (c) EVSE-Ready Outlet. “EVSE-Ready Outlet” shall mean, at minimum: (1) a panel capable to accommodate a dedicated branch circuit and service capacity to install at least a 208/240V, 50 amperes grounded AC outlet; (2) a two-pole circuit breaker; (3) raceway with capacity to accommodate a 100-ampere circuit; (4) 50 ampere wiring; terminating in (5) a 50 ampere NEMA receptacle in a covered outlet box.
- (d) EVSE Installed. “EVSE Installed” shall mean an installed Level 2 EVSE.

A5.106.5.3.5 Non-Residential Structures Other than Hotels. The following standards apply to newly constructed non-residential structures other than hotels.

- (a) In general. The property owner shall provide Conduit Only, EVSE-Ready Outlet, or EVSE Installed for at least 25% of parking spaces, among which at least 5% (and no fewer than one) shall be EVSE Installed.
- (b) Accessible spaces. Projects shall comply with the 2019 California Building Code requirements for accessible electric vehicle parking.
- (c) Minimum total circuit capacity. The property owner shall ensure sufficient circuit capacity, as determined by the Chief Building Official or designee , to support a Level 2 EVSE in every location where Circuit Only, EVSE-Ready Outlet or EVSE Installed is required.
- (d) Location. The EVSE, receptacles, and/or raceway required by this section shall be placed in locations allowing convenient installation of and access to EVSE. Location of EVSE or receptacles shall be consistent with all City guidelines, rules, and regulations.

SECTION 2. The Council adopts the findings for local amendments to the California Green Building Standards Code, 2019 Edition, attached hereto as Exhibit “A” and incorporated herein by reference.

SECTION 3. Section 16.12.035 of Chapter 16.12 of Title 16 of the Palo Alto Municipal Code is hereby amended to read as follows:

16.12.035 New construction; recycled water use for toilet and urinal flushing and floor trap priming.

- (a) All applications for building permits for new or remodeled buildings or groups of buildings within the boundaries of a recycled water project area, filed after the adoption of this chapter, where the building square footage total, including both the original square footage and any addition, is greater than 10,000 square feet or where installation of twenty-five or more toilets and urinals is proposed, shall incorporate dual plumbing in the design of the facility to allow the use of recycled water, when it becomes available, for flushing toilets and urinals and priming floor traps. Dual plumbing requirements shall not apply to single family homes.
- (b) All applications for building permits for new or remodeled buildings or groups of buildings in geographic areas not within the boundaries of a recycled water project area, filed after the adoption of this chapter, where the building square footage total, including both the original square footage and any addition, is greater than 50,000-~~100,000~~ square feet or where installation of 50 ~~100~~ or more toilets and urinals is proposed, shall incorporate dual plumbing in the design of the facility to allow the use of

recycled water, when it becomes available, for flushing toilets and urinals and priming floor traps. Dual plumbing requirements shall not apply to single family homes.

- (c) When dual plumbing requirements are triggered by remodeling, only those restroom facilities located within the remodel project area shall be required to incorporate dual plumbing.

SECTION 4. If any section, subsection, clause or phrase of this Ordinance is for any reason held to be invalid, such decision shall not affect the validity of the remaining portion or sections of the Ordinance. The Council hereby declares that it should have adopted the Ordinance and each section, subsection, sentence, clause or phrase thereof irrespective of the fact that any one or more sections, subsections, sentences, clauses or phrases be declared invalid.

SECTION 5. The Council finds that this project is exempt from the provisions of the California Environmental Quality Act (“CEQA”), pursuant to Section 15061 of the CEQA Guidelines, because it can be seen with certainty that there is no possibility that the amendments herein adopted will have a significant effect on the environment.

//
//
//
//
//
//
//
//
//
//
//
//
//
//
//
//

SECTION 6. This Ordinance shall be effective on the thirty-first day after the date of its adoption.

INTRODUCED: ~~November 4, 2019~~

PASSED: ~~November 18, 2019~~

AYES: ~~CORMACK, DUBOIS, FILSETH, KNISS, KOU, TANAKA~~

NOES:

ABSENT: ~~FINE~~

ABSTENTIONS:

ATTEST:

DocuSigned by:
Beth Minor
27529117DA004D7...

City Clerk

DocuSigned by:
Eric Filseth
04244717295F422...

Mayor

APPROVED AS TO FORM:

APPROVED:

DocuSigned by:
Sandra Lee
36C6B9D557AF4E3...

Deputy City Attorney

DocuSigned by:
Ed Swkoda
F2DCA19CCC8D4F9...

City Manager

DocuSigned by:
[Signature]
293CF322E1294F6...

Director of Planning and Development Services

DocuSigned by:
Kiely S. Nare
0543042E39D4400...

Director of Administrative Services

NOT YET ADOPTED

Ordinance No.

Ordinance of the Council of the City of Palo Alto Repealing Chapter 16.04 of the Palo Alto Municipal Code and Amending Title 16 to Adopt a New Chapter 16.04, California Building Code, California Historical Building Code, and California Existing Building Code, 2019 Editions, and Local Amendments and Related Findings

The Council of the City of Palo Alto does ORDAIN as follows:

SECTION 1. Chapter 16.04 of the Palo Alto Municipal Code is hereby amended by repealing it in its entirety and adopting a new Chapter 16.04 to read as follows:

16.04 CALIFORNIA BUILDING CODE

16.04.010 2019 California Building Code adopted.

The California Building Code, 2019 Edition, Title 24, Part 2 of the California Code of Regulations, together with those omissions, amendments, exceptions and additions thereto, is adopted and hereby incorporated in this Chapter by reference and made a part hereof the same as if fully set forth herein.

Unless superseded and expressly repealed, references in City of Palo Alto forms, documents and regulations to the chapters and sections of the former California Code of Regulations, Title 24, 2016, shall be construed to apply to the corresponding provisions contained within the California Code of Regulations, Title 24, 2019. Ordinance No. 5477 of the City of Palo Alto and all other ordinances or parts of ordinances in conflict herewith are hereby suspended and expressly repealed.

Wherever the phrases “California Building Code” or “Building Code” are used in this code or any ordinance of the City, such phrases shall be deemed and construed to refer and apply to the California Building Code, 2019 Edition, Title 24, Part 2 of the California Code of Regulations, as adopted by this chapter.

One copy of the California Building Code, 2019 Edition, has been filed for use and examination of the public in the Office of the Building Official of the City of Palo Alto.

16.04.20 2019 California Building Code Appendix Chapters adopted.

The following Appendix chapters and section of the California Building Code, 2019 Edition, are adopted and hereby incorporated in this Chapter by reference and made a part hereof the same as if fully set forth herein:

- A. Appendix I – Patio Covers
- B. Section J109.4 – Drainage across Property Lines (Appendix J)
- C. Appendix O – Emergency Housing

16.04.030 Cross - References to California Building Code.

The provisions of this Chapter contain cross-references to the provisions of the California Building Code, 2019 Edition, in order to facilitate reference and comparison to those provisions.

16.04.040 Section 1.11.2.1.1 Duties and powers of the enforcing agency/Enforcement.

Section 1.11.2.1.1 of Chapter 1 of the California Building Code is amended to read:

1.11.2.1.1 The responsibility for enforcement of building standards adopted by the State Fire Marshal and published in the California Building Standards Code relating to fire and panic safety and other regulations of the State Fire Marshal shall, except as provided in Section 1.11.2.1.2, be as follows:

1. The city, county or city and county with jurisdiction in the area affected by the standard or regulation shall delegate the enforcement of the building standards relating to fire and panic safety and other regulations of the State Fire Marshal as they relate to Group R-3 occupancies, as described in Section 310.1 of Part 2 of the California Building Standards Code, to both enforcement divisions specific to their areas of enforcement disciplines:

- 1.1** The chief of the fire authority of the city or an authorized representative and;
- 1.2.** The chief building official of the city or an authorized representative.

16.04.050 Violations -- Penalties.

It is unlawful for any person to violate any provision or to fail to comply with any of the requirements of this Chapter or any permits, conditions, or variances granted under this Chapter. Violators shall be subject to any penalty or penalties authorized by law, including but not limited to: administrative enforcement pursuant to Chapters 1.12 and 1.16 of the Palo Alto Municipal Code; and criminal enforcement pursuant to Chapter 1.08 of the Palo Alto Municipal Code. Each separate day or any portion thereof during which any violation of this Chapter occurs or continues shall be deemed to constitute a separate offense.

When the chief building official determines that a violation of this Chapter has occurred, the chief building official may record a notice of pendency of code violation with the Office of the County Recorder stating the address and owner of the property involved. When the violation has been corrected, the chief building official shall issue and record a release of the notice of pendency of code violation.

16.04.060 Enforcement -- Criminal Enforcement Authority.

The employee positions designated in this section are authorized to exercise the authority provided in California Penal Code section 836.5 for violations of this Chapter. The designated employee positions are: (1) chief building official, (2) assistant chief building official, (3) building inspection manager, and (4) code enforcement officer.

16.04.070 Local Amendments.

The provisions of this Chapter shall constitute local amendments to the cross-referenced provisions of the California Building Code, 2019 Edition, and shall be deemed to replace the cross-referenced sections of said Code with the respective provisions set forth in this Chapter.

16.04.075 Section 101 General. Section 101 of Chapter 1 of the California Building Code is amended to read:

101.1 Title. The regulations shall be known as the Building Code of City of Palo Alto, hereinafter referred to as “this code.”

16.04.080 Section 105.1.3 Demolition permits. Section 105.1.3 of Chapter 1 of the California Building Code is added to read:

105.1.3 Demolition permits. In addition to other requirements of law, every person seeking a permit to demolish a unit used for residential rental purposes shall furnish an affidavit or declaration under penalty of perjury that the unit proposed to be demolished is vacant, or that notice to vacate has been given to each tenant lawfully in possession thereof as required by law or by the terms of such tenancy. No work or demolition shall begin upon any portion of such a unit until each and every portion has been vacated by all tenants lawfully in possession thereof.

16.04.085 Section 105.3.2 Time limitation of application. Section 105.3.2 of Chapter 1 of the California Building Code is amended to read:

Section 105.3.2 Time limitation of application. An application for a permit for any proposed work shall be deemed to have been abandoned 365 days after the date of filing, unless such application has been pursued in good faith or a permit has been issued; except that the building official is authorized to grant one or more extensions and/or reactivations for additional periods not exceeding 90 days each. The extension shall be required in writing and justifiable cause demonstrated.

16.04.090 Section 105.5 Expiration. Section 105.5 of Chapter 1 of the California Building Code is amended to read:

105.5 Expiration. Every permit issued shall become invalid unless the work on the site authorized by such permit is commenced within 180 days or 12 months for residential occupancies after its issuance, or if the work authorized on the site by such permit is suspended or abandoned for a period of 180 days after the time the work is commenced. For the purpose of this section, failure to progress a

project to the next level of required inspection shall be deemed to be suspension of the work.

The chief building official or designee is authorized to grant, in writing, no more than three extensions and reactivations of permits that would otherwise expire or reactivations of expired permits, for periods not more than 180 days each and may require:

- 1) that the construction documents be revised to partially or fully comply with current codes; and
- 2) payment of a fee; and
- 3) payment of a penalty pursuant to Chapter 16.62 of the Palo Alto Municipal Code, as it may be amended from time to time.

Extensions and reactivations shall be requested in writing and justifiable cause demonstrated. Additional extensions or reactivations beyond three may only be granted with the approval of the City Council.

105.5.1 Term Limit for Permits. All work associated with a building permit must be completed, and final inspection issued, within 48 months of permit issuance.

16.04.100 Section 109.6 Refunds. Section 109.6 of Chapter 1 of the California Building Code is amended to read:

109.6 Refunds The building official or designee may authorize the refund of any fee paid hereunder which was erroneously paid or collected. The building official or designee may authorize the refund of not more than eighty percent (80%) of the Permit Fee paid when no work has occurred under a permit issued pursuant to this Chapter. The building official or designee may authorize the refund of not more than eighty percent (80%) of the Plan Review Fee paid when a permit application is withdrawn or canceled before any plan review work has started.

16.04.110 Section 109.7 Re-Inspection fees. Section 109.7 of Chapter 1 of the California Building Code is added to read:

109.7 Re-Inspection Fees. A Re-Inspection Fee may be assessed/authorized by the building official or the building inspection supervisor for each re-inspection required when work for which an inspection is requested is not ready for inspection or when required corrections noted during prior inspections have not been completed. A "Re-Inspection Fee" may be assessed/authorized when:

1. The inspection record card is not posted or otherwise available on the work site; or
2. The approved plans are not readily available for the inspector at the time of inspection; or
3. The inspector is unable to access the work at the time of inspection; or

4. When work has substantially deviated from the approved plans without the prior approval of the building official.
5. When a Re-Inspection Fee is assessed, additional inspection of the work will not be performed until the fee has been paid.

16.04.115 Section 110.2.1 Preliminary accessibility compliance inspection. Section 110.2.1 of Chapter 1 of the California Building Code is added to read:

110.2.1 Preliminary accessibility compliance inspection. Before issuing a permit, the building official or designee is authorized to examine or cause to be examined the pre-construction accessibility compliance conditions of the buildings, structures, and sites for which an application has been filed.

16.04.120 Section 110.3.3 Lowest floor elevation. Section 110.3.3 of Chapter 1 of the California Building Code is amended to read:

110.3.3 Lowest floor elevation. In flood hazard areas, upon placement of the lowest floor, including the basement, and prior to further vertical construction, the elevation certification shall be submitted to City Public Works Engineering for inspection approval prior to foundation inspection by City Building Inspection.

16.04.130 Section 111.1 – Use and occupancy. Section 111.1 of Chapter 1 of the California Building Code is amended to read:

111.1 Use and occupancy. A building or structure shall not be used or occupied, and a change in the existing occupancy of a building or structure or portion thereof shall not be made, until the building official has issued a certificate of occupancy therefor as provided herein. Issuance of a certificate of occupancy shall not be construed as an approval of a violation of the provisions of this code or of other ordinances of the jurisdiction.

Exception: Certificates of occupancy are not required for:

1. Work exempt from permits under Section 105.2
2. Group R – Division 2, 3 occupancies
3. Group U occupancies

111.1.1 Change of occupancy or tenancy. Each change of occupancy, official name or tenancy of any building, structure or portion thereof, shall require a new certificate of occupancy, whether or not any alterations to the building are required by this code.

If a portion of any building does not conform to the requirements of this code for a proposed occupancy, that portion shall be made to conform. The building official may issue a new certificate of occupancy without requiring compliance with all such requirements if it is determined that the change in occupancy or

tenancy will result in no increased hazard to life or limb, health, property or public welfare.

When application is made for a new certificate of occupancy under this section, the building official and fire chief shall cause an inspection of the building to be made. The inspector(s) shall inform the applicant of those alterations necessary, or if none are necessary, and shall submit a report of compliance to the building official.

Before any application for a new certificate of occupancy is accepted, a fee shall be paid by the applicant to cover the cost of the inspection of the building required by the change of occupancy or tenancy.

16.04.140 Section 111.3– Temporary occupancy. Section 111.3 of Chapter 1 of the California Building Code is amended to read:

111.3 Temporary occupancy. The building official is authorized to issue a temporary certificate of occupancy before the completion of the entire work covered by the permit, or as otherwise required, provided that such portion or portions shall be occupied safely. The building official shall set a time period during which the temporary certificate of occupancy is valid.

16.04.150 Section 111.5 Posting. Section 111.5 of Chapter 1 of the California Building Code is added to read:

111.5 Posting. The certificate of occupancy shall be posted in a conspicuous, readily accessible place in the building or portion of building to be occupied and shall not be removed except when authorized by the building official.

16.04.153 Section 115 Stop Work Order. Section 115 of Chapter 1 of the California Building Code is amended to read:

SECTION 115 STOP WORK ORDER

115.1 Authority. Whenever the building official finds any work regulated by this code being performed in a manner that is contrary to the provisions of this code, without a permit, beyond the scope of the issued permit, in violation of the Palo Alto Municipal Code or Zoning Ordinance, or dangerous or unsafe, the building official is authorized to issue a stop work order.

115.2 Issuance. The stop work order shall be in writing and shall be posted in a visible location near the location where the work is being conducted. If the owner or owner's agent is not on site at the time of posting, a notice advising the reasons for the stop work order issuance shall be hand delivered or mailed first-class to the owner of the property

involved, or to the owner's agent, or to the person doing the work. Upon issuance of a stop work order, the cited work shall immediately cease. The stop work order shall state the reason for the order, the conditions under which the cited work will be permitted to resume, and the name and contact information of the official or agency issuing the order.

1153 Unlawful Continuance. Any person who continues to engage in 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 guilty of a misdemeanor.

1154 Removal of Posted Stop Work Order. Any person who removes a posted stop work order without written consent of the Building Official shall be guilty of a misdemeanor.

1155 Response Required. Violators receiving a stop work order are required to respond to the Building Division within five (5) business days of the issued notice to receive instructions on how to rescind the order.

1156 Permit Application Required. A building permit application with construction or demolition plans and supporting (structural calculations, energy calculations, accessible access) documents must be submitted for approval within fifteen (15) working days following response to the Building Division. Plans will be reviewed and correction letters issued or permit application approved by the Building Division. A response to any correction letter must be submitted within fifteen (15) working days of the date of the correction letter. Ten working days will be required to review this second submission and a permit approved for issuance. Permits ready for issuance must be issued within 5 working days thereafter. All construction must be inspected as work progresses and signed off by all (affected) departments within 180 days of building permit issuance.

1157 Stop Work Order Penalty. The Building Official may impose Stop Work Order Penalties in accordance with Section 1.14.050 of this code and/or other applicable law.

16.04.155 Section 502.1 Address identification. Section 502.1 of Chapter 5 of the California Building Code is amended to read:

502.1 Address identification. New and existing buildings shall be provided with approved address identification. The address identification shall be legible and placed in a position that is visible from the street or road fronting the property. Address identification characters shall contrast with their background. Address numbers shall be Arabic numbers or alphabetical letters. Numbers shall not be spelled out. Each character shall be a minimum of 4 inches (102 mm) high with a minimum stroke width of ½ inch (12.7 mm) unless required to be larger by Section 502.1.2. When required by the fire code official, address identification shall be provided in additional approved locations to facilitate emergency response. Where access is by means of a private road and the building address cannot be viewed from the public way, a monument, pole or other approved sign or means shall be used to identify the structure. Address numbers shall be maintained.

502.1.1 Address illumination. Address identification required by Section 501.2 shall be illuminated.

502.1.2 Address identification size. Address numbers and letters shall be sized as follows:

1. When the structure is between thirty-six (36) and fifty (50) feet from the road or other emergency means of access, a minimum of one-half inch (0.5") stroke by six inches (6") high is required.
2. When the structure is fifty (50) or more feet from the road or other emergency means of access, a minimum of one inch (1") stroke by nine inches (9") high is required.

16.04.160 Section 702A Definitions – Wildland-Urban Interface Fire Area.

Section 702A of Chapter 7A of the California Building Code is amended include the following definition of "Wildland-Urban Interface Fire Area":

WILDLAND-URBAN INTERFACE FIRE AREA is a geographical area identified by the State of California as a "Fire Hazard Severity Zone" in accordance with Public Resources Code Sections 4201 through 4202 and Government Code Sections 51175 through 51189, or other areas designated by the enforcing agency to be at a significant risk from wildfires. Within the city limits of the City of Palo Alto, "Wild Land-Urban Fire Interface Area" shall also include all areas west of Interstate 280, and all other areas recommended as a "Very High Fire Hazard Severity Zone" by the Director of the California Department of Forestry.

16.04.170 Reserved

16.04.180 Section 903.2 – Automatic Sprinkler Systems, Where Required.

Section 903.2 of Chapter 9 the California Building Code is amended to read as follows:

903.2 Automatic sprinkler systems, where required. Approved automatic sprinkler systems in new buildings and structures and in existing modified buildings and structures, shall be provided in the locations described in this section. Automatic fire sprinklers shall be installed per the requirements set forth in Sections 903.2.1 through 903.2.18 and as follows, whichever is the more restrictive:

1. An automatic sprinkler system shall be provided throughout all new buildings and structures.

Exception: New non-residential occupancies, buildings or structures that do not exceed 350 square feet of building area and contain no plumbing fixtures.

2. An automatic sprinkler system shall be provided for all existing buildings or structures where modifications have been determined by the Building Official to trigger requirements for seismic retrofit.
3. An automatic sprinkler system shall be provided throughout all existing buildings when modifications are made that create conditions described in Sections 903.2.1 through 903.2.18, or that create an increase in fire area to more than 3600 square feet or when the addition is equal or greater than 50% of the existing building square footage whichever is more restrictive.
4. An automatic sprinkler system shall be provided throughout all new or rendered usable for occupancy and/or storage space basements regardless of size and throughout existing basements that are expanded by more than 50% or is conditioned for use. If the addition is only the basement, then only the basement is required to be fire sprinkler protection.
5. An automatic sprinkler system shall be installed throughout when either the roof structure and/or exterior wall structure have been removed and/or replaced by at least 50% of the existing structure.
6. An automatic sprinkler system shall be installed throughout when any change in use or occupancy creating a more hazardous fire/life safety condition, as determined by the Fire Chief.

16.04.190 Section 903.3.1.1 NFPA sprinkler systems.

Section 903.3.1.1 of Chapter 9 of the California Building Code is amended to read as follows:

903.3.1.1 NFPA 13 sprinkler systems. Where the provisions of this code require that a building or portion thereof be equipped throughout with an automatic sprinkler system in accordance with this section, sprinklers shall be installed throughout in accordance with NFPA 13 and State and local requirements except as provided in Section 903.3.1.1.

1. For new buildings having no designated use or tenant, the minimum sprinkler design density shall be Ordinary Hazard Group II.
2. Where future use or tenant is determined to require a higher density, the sprinkler system shall be augmented to meet the higher density.

16.04.200 Section 903.3.1.2 – NFPA 13R sprinkler systems.

Section 903.3.1.2 of Chapter 9 of the California Building Code is amended to read as follows:

903.3.1.2 NFPA 13R sprinkler systems. Where allowed in buildings of Group R Occupancies, up to and including four stories in height, automatic sprinkler systems shall be installed throughout in accordance with NFPA 13 and State and local standards.

16.04.210 Section 903.3.1.3 – NFPA 13D sprinkler systems.

Section 903.3.1.3 of Chapter 9 of the California Building Code is amended to read as follows:

903.3.1.3 NFPA 13D sprinkler systems. Where allowed, automatic sprinkler systems installed in one-and two-family detached dwellings and townhouses shall be installed throughout in accordance with NFPA 13D and State and local standards. Fire sprinkler protection is required under rear covered patios extending 4 feet perpendicular from the exterior of the structure.

16.04.220 Reserved

16.04.230 Reserved

16.04.240 Section 903.4.3 - Floor control valves.

Section 903.4.3 of Chapter 9 of the California Building Code is amended to read as follows:

903.4.3 Floor control valves. Automatic sprinkler systems serving buildings two (2) or more stories in height shall have valves installed so as to control the system independently on each floor including basements.

16.04.250 Section 905.3.1 Standpipe Systems.

Section 905.3.1 of the California Building Code is amended to read as follows:

905.3.1 Height. A Class I standpipe system shall be installed in buildings 3 or more stories in height and in below grade occupied levels.

16.04.255 Section 1203.6 Ventilation of weather-exposed enclosed assemblies.

Section 1203.6 of Chapter 12 of the California Building Code is added to read:

1203.6 Ventilation of weather-exposed enclosed assemblies. Exterior projecting elements and appurtenances exposed to the weather and sealed underneath, including but not limited to balconies, landings, decks, and stairs, shall have cross ventilation for each separate enclosed space by ventilation openings protected against the entrance of rain and snow. Blocking and bridging shall be arranged so as not to interfere with the movement of air. The net free ventilating area shall not be less than 1/150th of the area of the space ventilated. Ventilation openings shall comply with Section 1203.2.1. An access panel of sufficient size shall be provided on the underside of the enclosed space to allow for periodic inspection.

Exceptions:

1. An access panel is not required where the exterior coverings applied to the underside of joists are easily removable using only common tools.

2. Removable soffit vents of at least four inches (4") in width can be used to satisfy both ventilation and access panel requirements.

16.04.260 Section 1206.3.4 – Roof guardrails at interior courts.

Section 1206.3.4 of Chapter 12 of the California Building Code is added to read:

1206.3.4 Roof guardrails at interior courts. Roof openings into interior courts that are bounded on all sides by building walls shall be protected with guardrails. The top of the guardrail shall not be less than 42 inches in height above the adjacent roof surface that can be walked on. Intermediate rails shall be designed and spaced such that a 12 inch diameter sphere cannot pass through.

Exception: Where the roof opening is greater than 600 square feet in area.

16.04.265 Section 1406.3.1 Projections exposed to weather.

Section 1406.3.1 of Chapter 14 of the California Building Code is added to read:

1406.3.1 Projections exposed to weather. Floor projections exposed to the weather and sealed underneath, including but not limited to balconies, landings, decks, and stairs shall be constructed of naturally durable wood, preservative-treated wood, corrosion-resistant (e.g. galvanized) steel, or similar approved materials.

16.04.270 Section 1503.2.1 Flashing Locations.

Section 1503.2.1 of Chapter 15 of the California Building Code is amended to read:

1503.2.1 Locations. Flashing shall be installed at wall and roof intersections, gutters, wherever there is a change in roof slope or direction, and around roof openings. Where flashing is of metal, the metal shall be corrosion resistant with a thickness of not less than 0.019 inches (0.483 mm) (e.g. no. 26 galvanized sheet) and shall be primed and painted.

16.04.275 Section 1613.5 ASCE 7, Section 13.1.4 Seismic Design Requirements for Nonstructural Components.

Section 1613.5 of Chapter 16 of the California Building Code is added to include the following:

13.1.4 Exemptions. The following nonstructural components are exempt from the requirements of this section:

1. Furniture (except storage cabinets as noted in Table 13.5-1).
2. Temporary or movable equipment
3. Architectural components in Seismic Design Category B other than parapets supported by bearing walls or shear walls provided that the component importance factor, I_p , is equal to 1.0.
4. Mechanical and electrical components in Seismic Design Category B.
5. Mechanical and electrical components in Seismic Design Category C provided that the component importance factor, I_p , is equal to 1.0.

6. Mechanical and electrical components in Seismic Design Categories D, E, or F where all of the following apply:
 - a. The component importance factor, I_p , is equal to 1.0;
 - b. The component is positively attached to the structures;
 - c. Flexible connections are provided at seismic separation joints and between the component and associated ductwork, piping, and conduit; and either:
 - i. The component weighs 400 lb (1,780 N) or less and has a center of mass located 4 ft (1.22 m) or less above the adjacent floor level; or
 - ii. The component weighs 20 lb (89 N) or less or, in the case of a distributed system, 5 lb/ft (73 N/m) or less; or
 - iii. The component weighs 200 lb (890 N) or less and is suspended from roof/floor or mounted on wall.

16.04.280 Section 1612.1.1 - Palo Alto Flood Hazard Regulations.

Section 1612.1.1 of Chapter 16 of the California Building Code is added to read:

1612.1.1 Palo Alto Flood Hazard Regulations. Notwithstanding the provisions of Section 1612.1, all construction or development within a flood hazard area (areas depicted as a Special Flood Hazard Area on Flood Insurance Rate Maps published by the Federal Emergency Management Agency) shall comply with the City of Palo Alto Flood Hazard Regulations (Palo Alto Municipal Code Chapter 16.52). Where discrepancies exist between the requirements of this code and said regulations, the provisions of said regulations shall apply.

16.04.290 Section 1705.3 Concrete Construction.

Section 1705.3 of Chapter 17 of the California Building Code is amended to read:

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

Exception: Special inspections 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 pound per square inch (psi) (17.2 Mpa).
2. Continuous concrete footings supporting walls of buildings three stories or less above grade plane 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 1809.7; 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 pre-stressed slabs on grade, where the effective pre-stress in the concrete is less than 150 psi (1.03 MPa).
4. Concrete foundation walls constructed in accordance with Table 1807.1.6.2.
5. Concrete patios, driveways and sidewalks, on grade.

16.04.300 Table 1809.7 Prescriptive Footings Supporting Walls of Light-Frame Construction.
Table 1809.7 of Chapter 18 of the California Building Code is amended to read:

TABLE 1809.7

Prescriptive Footings Supporting Walls of Light-Frame Construction^{abcd}

Number of Floors Supported by the Footing^e	Thickness of Foundation Wall (inches)	Width of Footing (inches)	Thickness of Footing (inches)	Depth of Foundation Below Natural Surface of Ground or Finish Grade (inches)
1&2	8	15	8	20
3	8	18	8	30
Group U Occupancies	8	12	8	12
ADU Conversions ^f	8	12	8	12

- a. The ground under the floor shall be permitted to be excavated to the elevation of the top of the footing.
- b. Interior stud-bearing walls shall be permitted to be supported by isolated footings. The footing width and length shall be twice the width shown in this table, and footings shall be spaced not more than 6 feet on center.
- c. See Section 1905 for additional requirements for concrete footings of structures assigned to Seismic Design Category C, D, E or F.
- d. All foundations as required in the above Table shall be continuous and have a minimum of three #4 bars of reinforcing steel, except for one story, detached accessory buildings of Group U occupancy where two bars are required.
- e. Footings shall be permitted to support a roof in addition to the stipulated number of floors. Footings supporting roof only shall be as required for supporting one floor.
- f. If the existing detached accessory building is being converted to an Accessory Dwelling Unit (ADU) and the existing foundation is being utilized, then a designer, architect or engineer shall provide a letter that the existing foundation complies with the conditions above and is deemed structurally sound.

16.04.305 Section 1905.1.7 ACI 318, Section 14.1.4.

Section 1905.1.7 of Chapter 19 of the California Building Code is amended to read:

1905.1.7 ACI 318, Section 14.1.4. Delete ACI 318, Section 14.1.4, and replace 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 plain concrete, except as follows:

- (a) Left intentionally blank.
- (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) Plain concrete footings supporting walls are permitted, provided the footings have at least three continuous longitudinal reinforcing bars not smaller than No. 4, with a total area of not less than 0.002 times the gross cross-sectional area of the footing except for one story, detached accessory buildings of Group U occupancy where two bars are required. A minimum of one bar shall be provided at the top and bottom of the footing. Continuity of reinforcement shall be provided at corners and intersections.

16.04.310 Section 2308.6 Wall Bracing. Section 2308.6 of Chapter 23 of the California Building Code is amended to read:

...

2308.6.4 Braced Wall panel construction. For Methods DWB, WSP, SFB, PBS, PCP and HPS, each panel must be not less than 48 inches (1219 mm) in length, covering three stud spaces where studs are spaced 16 inches (406 mm) on center and covering two stud spaces where studs are spaced 24 inches (610 mm) on center. Braced wall panels less than 48 inches (1219 mm) in length shall not contribute toward the amount of required bracing. Braced wall panels that are longer than the required length shall be credited for their actual length.

Vertical joints of panel sheathing shall occur over studs and adjacent panel joints shall be nailed to common framing members. Horizontal joints shall occur over blocking or other framing equal in size to the studding except where waived by the installation requirements for the specific sheathing materials. Sole plates shall be nailed to the floor framing in accordance with Section 2308.7 and top plates shall be connected to the framing above in accordance with Section 2308.6.7.2. Where joists are perpendicular to braced wall lines above, blocking shall be provided under and in line with the braced wall panels.

2308.6.5 Alternate 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, PCP or HPS.

Subsections 2308.6.1 through 2308.6.3 are unchanged.

16.04.315 Table 2308.6.1 – footnote b amended. Footnote “b” of table 2308.6.1 of Chapter 23 of the California Building Code is amended to read:

b. Method GB, gypsum wallboard is prohibited in Seismic Design Categories D & E.

16.04.317 Table 2308.6.3(1) Bracing Methods. Table 2308.6.3(1) – Bracing Methods of Chapter 23 of the California Building Code is amended to add footnote “b” as follows:

**Table 2308.6.3(1)
BRACING METHODS**

METHODS, MATERIAL	MINIMUM THICKNESS	FIGURE	CONNECTION CRITERIA ^a	
			Fasteners	Spacing

b. Method GB, gypsum wallboard is prohibited in Seismic Design Categories D & E.

16.04.320 Section 2308.9 Attachment of sheathing. Section 2308.9 of Chapter 23 of the California Building Code is added to read:

2308.9 Attachment of sheathing. Fastening of braced wall panel sheathing shall not be less than that prescribed in Table 2308.6.3(1) or 2304.10.1 Wall sheathing shall not be attached to framing members by adhesives.

All braced wall panels shall extend to the roof sheathing and shall be attached to parallel roof rafters or blocking above with framing clips (18 gauge minimum) spaced at maximum 24 inches on center with four 8d nails per leg (total eight-8d nails per clip). Braced wall panels shall be laterally braced at each top corner and at maximum 24 inch intervals along the top plate of discontinuous vertical framing.

16.04.322 Chapter 31B – Public Pools. Chapter 31B of the California Building Code has been adopted in its entirety.

The California Building Code, Chapter 31B shall apply to the construction, installation, renovation, alteration, addition, relocation, replacement or use of any public pool and its ancillary facilities, mechanical equipment and related piping.

16.04.325 Section 3304.1 Excavation and fill.

Section 3304.1 of Chapter 33 of the California Building Code is amended to read:

3304.1 Excavation and fill. Excavation and fill for buildings and structures shall be constructed or protected so as not to endanger life or property. Stumps and roots shall be removed from the soil to a depth of not less than 12 inches (305mm) below the surface of the ground in the area to be occupied by the building. Wood forms that have been used in placing concrete, if within the ground or between foundation sills and the ground, shall be removed before a building is occupied or used for any purpose. Wooden stakes shall not be embedded in concrete. Before completion, loose or casual wood shall be removed from direct contact with the ground under the building.

16.04.330 2019 California Existing Building Code Adopted.

The California Existing Building Code, 2019 Edition, Title 24, Part 10, which provides alternative building regulations for the rehabilitation, preservation restoration or relocation of existing buildings is adopted and hereby incorporated in this Chapter by reference and made a part hereof the same as if fully set forth herein. One copy of the California, 2019 Edition, has been filed for use and examination of the public in the Office of the Building Official of the City of Palo Alto.

16.04.335 2019 California Existing Building Code and International Existing Building Code Appendix Chapters Adopted.

The following Appendix Chapters of the California Existing Building Code (CEBC), 2019 Edition, and International Existing Building Code (IEBC), 2018 Edition, are adopted and hereby incorporated in this Chapter by reference and made a part hereof the same as if fully set forth herein:

- A. CEBC Appendix A1 – Seismic Strengthening Provisions for Unreinforced Masonry Bearing Wall Buildings
- B. IEBC Appendix Chapter A2 – Earthquake Hazard Reduction in Existing Reinforced Concrete and Reinforced Masonry Wall Buildings with Flexible Diaphragms.
- C. CEBC Appendix A3 – Prescriptive Provisions for Seismic Strengthening of Cripple Walls and Sill Plate Anchorage of Light, Wood-Frame Residential Buildings
- D. CEBC Appendix A4 – Earthquake Risk Reduction in Wood-Frame Residential Buildings with Soft, Weak or Open Front Walls
- E. CEBC Appendix A5 – Referenced Standards

16.04.340 Section 503.17 – Suspended ceiling systems.

Section 503.17 of the California Existing Building Code, Title 24, Part 10 is added to read:

503.17 Suspended ceiling systems. In existing buildings or structures, when a permit is issued for alterations or repairs, the existing suspended ceiling system within the area of the alterations or repairs shall comply with ASCE 7-16 Section 13.5.6.

16.04.345 Section 503.18 - Mechanical and electrical equipment in Seismic Design Categories D, E, or F. Section 503.18 of the California Existing Building Code, Title 24, Part 10 is added to read:

503.18 Mechanical and electrical equipment in Seismic Design Categories D, E, or F . In existing buildings or structures, when a permit is issued for alteration or repairs, the existing mechanical and electrical equipment on the area of the roof shall comply with ASCE 7-16 Section 13.4 Nonstructural Component Anchorage.

16.04.350 Section 405.2.3.1 – Seismic Evaluation and Design Procedures for Repairs. Section 405.2.3.1 of the California Existing Building Code, Title 24, Part 10 is amended to read:

405.2.3.1 Evaluation and design procedures. The building shall be evaluated by a registered design professional, and the evaluation findings shall be submitted to the code official. The evaluation shall establish whether the damaged building, if repaired to its pre-damage state, would comply with the provisions of the California Building Code for load combinations that include wind or earthquake effects, except that the seismic forces shall be reduced seismic forces. Evaluation for earthquake loads shall be required if the substantial structural damage was caused by or related to earthquake effects or if the building is in Seismic Design Category C, D, E or F. The seismic evaluation and design shall be based on the procedures specified in the building code, ASCE 41 Seismic Evaluation and Upgrade of Existing Buildings. The procedures contained in Appendix A of the International Existing Building Code (IEBC) shall be permitted to be used as specified in Section 405.2.3.1.

Wind loads for this evaluation shall be those prescribed in Section 1609.

405.2.3.1.1 CEBC level seismic forces. When seismic forces are required to meet the building code level, they shall be one of the following:

1. One hundred percent of the values in the building code. The R factor used for analysis in accordance with Chapter 16 of the building code shall be the R factor specified for structural systems classified as "Ordinary" unless it can be demonstrated that the structural system satisfies the proportioning and detailing requirements for systems classified as "intermediate" or "special".
2. Forces corresponding to BSE-1 and BSE-2 Earthquake Hazard Levels defined in ASCE 41. Where ASCE 41 is used, the corresponding performance levels shall be those shown in Table 405.2.3.1.

TABLE 405.2.3.1 ASCE 41 PERFORMANCE LEVELS		
RISK CATEGORY (BASED ON CBC TABLE 1604.5)	PERFORMANCE LEVEL FOR USE WITH ASCE 41 BSE-1 EARTHQUAKE HAZARD LEVEL	PERFORMANCE LEVEL FOR USE WITH ASCE 41 BSE-2 EARTHQUAKE HAZARD LEVEL *
I	Life Safety (LS)	Collapse Prevention (CP)
II	Life Safety (LS)	Collapse Prevention (CP)
III	Damage Control	Limited Safety
IV	Immediate Occupancy (IO)	Life Safety (LS)
* Only applicable when Tier 3 procedure is used.		

405.2.3.1.1 Reduced CEBC level seismic forces. When seismic forces are permitted to meet reduced building code levels, they shall be one of the following:

1. Seventy-five percent of the forces prescribed in the building code. The R factor used for analysis in accordance with Chapter 16 of the building code shall be the R factor as specified in Section 405.2.3.1.1.
2. In accordance with the California Existing Building Code and applicable chapters in Appendix A of the International Existing Building Code, as specified in Items a. through e. below. Structures or portions of structures that comply with the requirements of the applicable chapter in Appendix A shall be deemed to comply with the requirements for reduced building code force levels.
 - a. The seismic evaluation and design of unreinforced masonry bearing wall buildings in Risk Category I or II are permitted to be based on the procedures specified in CEBC Appendix Chapter A1.
 - b. Seismic evaluation and design of the wall anchorage system in reinforced concrete and reinforced masonry wall buildings with flexible diaphragms in Risk Category I or II are permitted to be based on the procedures specified in IEBC Appendix Chapter A2.
 - c. Seismic evaluation and design of cripple walls and sill plate anchorage in residential buildings of light-frame wood construction in Risk Category I or II are permitted to be based on the procedures specified in CEBC Appendix Chapter A3
 - d. Seismic evaluation and design of soft, weak, or open-front wall conditions in multi-unit residential buildings of wood construction in Risk Category I or II are permitted to be based on the procedures specified in CEBC Appendix Chapter A4.
 - e. Seismic evaluation and design of concrete buildings and concrete with masonry infill buildings in all risk categories are permitted to be based on the procedures specified in IEBC Appendix Chapter A5.

3. Those associated with the BSE-1 Earthquake Hazard Level defined in ASCE 41 and the performance level as shown in Table 405.2.3.1. Where ASCE 41 is used, the design spectral response acceleration parameters SXS and SX1 shall not be taken less than seventy-five percent of the respective design spectral response acceleration parameters SDS and SD1 defined by the California Building Code and its reference standards.

16.04.355 2019 California Historical Building Code adopted.

The California Historical Building Code, 2019 Edition, Title 24, Part 8 (authorized by Health and Safety Code Sections 18950 through 18961), which provides alternative building regulations for the rehabilitation, preservation, restoration, or relocation of designated historic buildings, is adopted and hereby incorporated in this Chapter by reference and made a part hereof the same as if fully set forth herein. One copy of the California Historical Building Code, 2019 Edition, has been filed for use and examination of the public in the Office of the Building Official of the City of Palo Alto.

SECTION 2. The Council adopts the findings for local amendments to the California Building Code, 2019 Edition, attached hereto as Exhibit “A” and incorporated herein by reference.

SECTION 3. The Council finds that this ordinance is exempt from the provisions of the California Environmental Quality Act (“CEQA”), pursuant to Section 15061 of the CEQA Guidelines, because it can be seen with certainty that there is no possibility that the amendments herein adopted will have a significant effect on the environment.

//

//

//

//

//

//

//

//

//

//

//

//

//

SECTION 4. This Ordinance shall be effective on the thirty-first day after the date of its adoption.

INTRODUCED:

PASSED:

AYES:

NOES:

ABSENT:

ABSTENTIONS:

ATTEST:

City Clerk

Mayor

APPROVED AS TO FORM:

APPROVED:

Deputy City Attorney

City Manager

Director of Planning and Development
Services

Director of Administrative Services

Exhibit A
FINDINGS FOR LOCAL AMENDMENTS
TO CALIFORNIA BUILDING CODE AND
CALIFORNIA EXISTING BUILDING CODE

Section 17958 of the California Health and Safety Code provides that the City may make changes to the provisions of the California Building Standards Code. Sections 17958.5 and 17958.7 of the Health and Safety Code require that for each proposed local change to those provisions of the California Building Standards Code which regulate buildings used for human habitation, the City Council must make findings supporting its determination that each such local change is reasonably necessary because of local climatic, geological, or topographical conditions.

Local building regulations having the effect of amending the uniform codes, which were adopted by the City prior to November 23, 1970, were unaffected by the regulations of Sections 17958, 17958.5 and 17958.7 of the Health and Safety Code. Therefore, amendments to the uniform codes which were adopted by the City Council prior to November 23, 1970, and have been carried through from year to year without significant change, need no required findings. Also, amendments to provisions not regulating buildings used for human habitation do not require findings.

Section	Title	Code: CBC			Justification (See below for keys)
		Add	Amended	Deleted	
101.1	Title		✓		T
105.5	Expiration		✓		T
109.6	Refunds		✓		T
501.2	Address Identification		✓		T
702A	Wild Land-Urban Interface Fire Area		✓		T
902.1	Definition (Dual Sensor Carbon Monoxide and Smoke Alarm)	-		✓	T
903.2	Where Automatic Sprinklers Required		✓		T
903.3.1.1	NFPA 13 Sprinkler Systems		✓		T
903.3.1.2	NFPA 13R Sprinkler Systems		✓		T
903.3.1.3	NFPA 13D Sprinkler Systems		✓		T
903.4.3	Floor Control Valves	✓			T
905.3.1	Standpipe Systems		✓		T
907.2.11	Single- and Multiple-Station Smoke Alarms			✓	T
1203.6.1	Ventilation of Weather-Exposed, Enclosed Assemblies	✓			G, T
1206.3.4	Roof Guardrails at Interior Courts	✓			T
1404.13	Projections Exposed to Weather	✓			G, T
1503.2.1	Flashing Locations		✓		T

1612.1.1	Palo alto Flood Hazard Regulations	✓			C, T
1616.10.15	ASCE 7 Sec. 13.1.4		✓		G
1705.3	Concrete Construction		✓		G
Table 1809.7	Prescriptive Footings Supporting Walls of Light Frame Construction		✓		G,T
16.04.305	ACI 318, Section 14.1.4	✓			G, T
2308.6	Wall Bracing		✓		G
2308.6.4	Braced wall panel construction		✓		G
2308.6.5	Alternate bracing		✓		G
Table 2306.1 & Table 2308.6.3(1)	Wall Bracing in Seismic Design Categories D & E		✓		G
2308.9	Attachment of Sheathing		✓		G
Chapter 31B	Public Pools	✓			G
3405.2.1	Evaluation and Design Procedures	✓	✓		T
Appendix H	Signs	✓			G, T
Appendix I	Patio Covers	✓			C
Appendix J; section J109.4	Drainage Across Property Lines	✓			T
Appendix O	Emergency Housing	✓			C, G, T

Code: CEBC					
Section	Title	Add	Amended	Deleted	Justification (See below for keys)
403.13	Excavation and fill		✓		G
404.2.1	Suspended Ceiling Systems	✓	✓		G
503.18	Mechanical and electrical equipment in Seismic Design Categories D, E, or F	✓			G
CEBC Appendix A1	Seismic Strengthening Provisions for Unreinforced Masonry Bearing Wall Buildings	✓			G
IEBC Appendix A2	Earthquake Hazard Reduction in Existing Reinforced Concrete and Reinforced Masonry Wall Buildings with Flexible Diaphragms.	✓			G
CEBC Appendix A3	Prescriptive Provisions for Seismic Strengthening of Cripple Walls and Sill Plate Anchorage of Light, Wood-Frame Residential Buildings	✓			G

CEBC Appendix A4	Earthquake Risk Reduction in Wood-Frame Residential Buildings with Soft, Weak or Open Front Walls	✓			G
IEBC Appendix A5	Earthquake Hazard Reduction in Existing Concrete Buildings	✓			G

Key to Justification for Amendments to Title 24 of the California Code of Regulations

- C** This amendment is justified on the basis of a local **climatic** condition. The seasonal climatic conditions during the late summer and fall create severe fire hazards to the public health and welfare in the City. The hot, dry weather frequently results in wild land fires on the brush covered slopes west of Interstate 280. The aforementioned conditions combined with the geological characteristics of the hills within the City create hazardous conditions for which departure from California Building Standards Code is required.
- G** This amendment is justified on the basis of a local **geological** condition. The City of Palo Alto is subject to earthquake hazard caused by its proximity to San Andreas fault. This fault runs from Hollister, through the Santa Cruz Mountains, epicenter of the 1989 Loma Prieta earthquake, then on up the San Francisco Peninsula, then offshore at Daly City near Mussel Rock. This is the approximate location of the epicenter of the 1906 San Francisco earthquake. The other fault is Hayward Fault. This fault is about 74 mi long, situated mainly along the western base of the hills on the east side of San Francisco Bay. Both of these faults are considered major Northern California earthquake faults which may experience rupture at any time. Thus, because the City is within a seismic area which includes these earthquake faults, the modifications and changes cited herein are designed to better limit property damage as a result of seismic activity and to establish criteria for repair of damaged properties following a local emergency.
- T** The City of Palo Alto **topography** includes hillsides with narrow and winding access, which makes timely response by fire suppression and emergency response vehicles difficult. Palo Alto is contiguous with the San Francisco Bay, resulting in a natural receptor for storm and waste water run-off. Also the City of Palo Alto is located in an area that is potentially susceptible to liquefaction during a major earthquake. The surface condition consists mostly of stiff to dense sandy clay, which is highly plastic and expansive in nature. The aforementioned conditions within the City create hazardous conditions for which departure from California Building Standards Code is warranted.

