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OAKLAND

2019 OCT 31 PM 1:03

AGENDA REPORT

TO: Sabrina B. Landreth
City Administrator

FROM: William Gilchrist
Director, PBD

SUBJECT: Local Amendments to 2019 California
Model Building Construction Codes

DATE: October 21, 2019

City Administrator Approval

Date:

10/31/19

RECOMMENDATION

Staff Recommends That The City Council Conduct A Public Hearing And Upon Conclusion Adopt The Following Pieces Of Legislation To Amend The 2019 Triennial Editions Of The California Building Standards Code:

- 1) A Resolution Of Findings Supporting Local Amendments To The 2019 Edition Of The California Building Standards Code To Comply With Changes To State Law And Adopting California Environmental Quality Act (CEQA) Exemption Findings; And**
- 2) An Ordinance (1) Repealing The Oakland Amendments To The 2016 Edition Of The California Building Standards Code, (2) Adopting Local Amendments To The 2019 Edition Of The California Building Standards Code, (3) Amending Oakland Municipal Code Chapter 15.04 To Comply With Changes To State Law And Adopting CEQA Exemption Findings.**

EXECUTIVE SUMMARY

Local jurisdictions are required to enforce the mandatory 2019 California Model Building Construction Codes as of January 1, 2020. Jurisdictions are permitted to require more stringent provisions to address local conditions. Staff recommends that City Council adopt new local building code provisions that are more restrictive than the 2019 California Model Building Construction Code requirements as a result of local climatic, topographic, and/or geologic conditions.

The proposed modifications to the California Model Building Construction Codes would satisfy and exceed California Model Building Construction Code requirements and are reasonably necessary because of specified local conditions.

BACKGROUND / LEGISLATIVE HISTORY

The state law that establishes statewide building standards code, known as the California Building Standards Code, located in the California Code of Regulations, Title 24, is found in the

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California Health and Safety Code (HSC). Within state law there are various provisions establishing requirements and building standards for the various types of buildings, building uses, features and equipment.

The first state law relating to building standards is known as the California Building Standards Law at HSC Division 13, Part 2.5, commencing with Section 18901. The provisions of Part 2.4 govern the work of the California Building Standards Commission (CBSC) and how Title 24 is adopted and published by the CBSC and applies to all building occupancies throughout California.

The second body of law is known as the State Housing Law (SHL), which is located in HSC Division 13, Part 1.5, commencing with Section 17910. Part 1.5 establishes authority for the Department of Housing and Community Development (HCD) to develop and propose building standards applicable to residential occupancies, including hotels, motels, lodging houses, apartment houses, and dwellings. Such proposals are presented to CBSC for adoption and publication in Title 24. Additionally, HCD has adopted administrative regulations (not building standards) to implement the State Housing Law, which are located in California Code of Regulations, Title 25, Division 1, Chapter 1, Subchapter 1, commencing with Section 1.

The State of California adopts new California Model Building Construction Codes every three years that go into effect throughout the State 180 days after publication. The California Model Building Construction Codes are contained in Title 24 of the California Code of Regulations, and consist of several parts that are based upon model codes with amendments made by various State agencies. The California Model Building Construction Codes will go into effect throughout California on January 1, 2020.

Local jurisdictions are required to enforce the California Model Building Construction Codes but may adopt local amendments with more stringent standards when reasonably necessary based on local climatic, geological, and topographical conditions (HSC Sections 17958, 17958.5 and 17958.7). Amendments may be administrative, such as adopting the City's Master Fee Schedule, and non-administrative, such as adopting special design standards in the Oakland Hills Fire Hazard Zone. Non-administrative amendments must be no less restrictive than statewide regulations and must be supported by a resolution of findings based on local climatic, topographic, and geologic conditions. The Ordinance and Resolution of findings establishing the amendment(s) must be adopted by the City Council and received by the State Building Standards Commission in Sacramento before the January 1, 2020 deadline.

The proposed amendments are an evolution of the same modifications that the City Council has adopted in the previous twenty-six (26) years for the Model Construction Codes. Administrative amendments supplement the City's legal authority to control the submittal, issuance, and inspections of ministerial construction permits. Technical amendments supplement building and fire regulations specific to the geographic location of Oakland (earthquake fault, urban wildfire, etc.) and unify code interpretations adopted by major jurisdictions in the Bay Area.

ANALYSIS AND POLICY ALTERNATIVES

The proposed administrative amendments accomplish the following objectives:

- Establish permit refund procedures and streamline the appeals process;
- Refine remote (“virtual”) inspections using electronic media provided by permittees;
- Substitute the City’s Master Fee Schedule for the Model Codes’ prescriptive fee tables;
- Conform requirements to California law for construction drawings, engineering calculations, installation specifications, and licensed designer preparation; and
- Unify the administrative sections of ten (10) Model Codes (administered by three (3) independent authorities) into a single, non-conflicting, legally consistent document.

The HSC requires that local technical amendments be equivalent to or more stringent than the Model Construction Codes and that before making any changes or modifications to the Model Construction Codes, the governing body, in this case the City Council, must make an express finding that each such change is reasonably necessary because of specified local topographic, climatic, or geologic conditions unique to the jurisdiction.

The proposed technical amendments accomplish the following general objectives:

- Establish minimum structural requirements for residential seismic safety;
- Establish supplemental requirements for sustainable green building construction;
- Establish requirements for grading and fire-rated construction in the Oakland Hills;
- Establish requirements for converting industrial buildings to residential use (Live/Work); and
- Clarify conflicting building, plumbing, mechanical, and electrical requirements for commercial and residential construction.

FISCAL IMPACT

There is no direct fiscal impact or cost associated with the proposed legislation. This is an administrative action mandated by State law. Resources from existing budgeted staff will continue to enforce the Model Construction Codes as amended by Oakland.

PUBLIC OUTREACH / INTEREST

The building construction industry, design professionals, and developers are generally familiar with the statewide process of triennial amendments to the Model Construction Codes and outreach is conducted through the code development process. Additionally, staff has done outreach to the general public with direct mailing, website and public counter postings, and information meetings.

COORDINATION

The Office of the City Attorney and the Budget Bureau have reviewed this report and legislation.

SUSTAINABLE OPPORTUNITIES

Economic: Oakland amendments to the Model Construction Codes support housing and commercial development opportunities for new and remodeled building construction.

Environmental: Oakland amendments to the Model Construction Codes include development permitting requirements for compliance with City and regional "Best Management Practices" for reducing storm water runoff pollutants, construction debris disposal, nuisance noise, and dust.

Social Equity: Oakland amendments to the Model Construction Codes support the affordable housing and economic revitalization policies of the City. The Model Construction Codes also include technical standards for the state handicapped accessibility requirements in new and remodeled buildings.

CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)

Staff has made the determination that the proposed amendments are exempt from the California Environmental Quality Act pursuant to CEQA Guidelines sections 15378; 15061(b)(3) (General Rule), 15301 (Existing Facilities), 15303 (New Construction or Conversion of Small Structures), and 15183 (Projects Consistent with a Community Plan, General Plan, or Zoning). Each of the foregoing provides a separate and independent basis for CEQA compliance and, when viewed either individually or collectively, provides an overall basis for CEQA compliance.

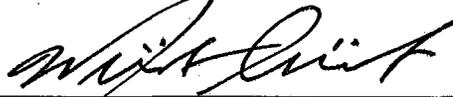
ACTION REQUESTED OF THE CITY COUNCIL

Staff Recommends that the City Council Conduct a Public Hearing and Upon Conclusion Adopt the Following Legislation to Amend the 2019 Triennial Editions Of the California Building Standards Code:

- 1) A Resolution of Findings Supporting Local Amendments to the 2019 Edition of the California Building Standards Code To Comply with Changes to State Law and Adopting CEQA Exemption Findings; And
- 2) An Ordinance (1) Repealing The Oakland Amendments To The 2016 Edition Of The California Building Standards Code, (2) Adopting Local Amendments To The 2019 Edition Of The California Building Standards Code, (3) Amending Oakland Municipal Code Chapter 15.04 To Comply With Changes To State Law And Adopting CEQA Exemption Findings

For questions regarding this report, please contact Tim Low, Acting Deputy Director/Building Official, at (510) 238-6315.

Respectfully submitted,



William A. Gilchrist, Director
Planning and Building Department

Reviewed by:

Timothy Low, Acting Deputy Director/Building
Official

Bureau of Building

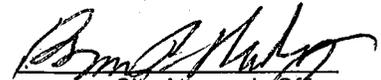
Prepared by:

David Harlan, Engineering Manager
Bureau of Building

FILED
OFFICE OF THE CITY CLERK
OAKLAND

2019 OCT 31 PM 3:49

Approved as to Form and Legality


City Attorney's Office

OAKLAND CITY COUNCIL

RESOLUTION NO. _____ C.M.S.

RESOLUTION OF FINDINGS SUPPORTING LOCAL AMENDMENTS TO THE 2019 EDITIONS OF THE CALIFORNIA BUILDING STANDARDS CODE TO COMPLY WITH CHANGES TO STATE LAW AND ADOPTING CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA) EXEMPTION FINDINGS

WHEREAS, the State Of California adopts a new California Building Standard Code every three years that goes into effect throughout the State 180 days after publication. The California Building Standards Code is contained in Title 24 of the California Code of Regulations ("C.C.R."), and consists of several parts that are based upon model codes with amendments made by various State agencies; and

WHEREAS, the following editions of the California Building Standards Code are the most current in publication:

- California Administrative Code, 2019 Edition, C.C.R., Title 24, Part 1;
- California Building Code, 2019 Edition, C.C.R., Title 24, Part 2;
- California Residential Code, 2019 Edition, C.C.R., Title 24, Part 2.5;
- California Electrical Code, 2019 Edition, C.C.R., Title 24, Part 3;
- California Mechanical Code, 2019 Edition, C.C.R., Title 24, Part 4;
- California Plumbing Code, 2019 Edition, C.C.R., Title 24, Part 5;
- California Energy Code, 2019 Edition, C.C.R., Title 24, Part 6;
- California Historical Building Code, 2019 Edition, C.C.R., Title 24, Part 8;
- California Existing Building Code, 2019 Edition, C.C.R., Title 24, Part 10;
- California Green Building Standards Code, 2019 Edition, C.C.R., Title 24, Part 11; and
- California Referenced Standards, 2019 Edition, C.C.R., Title 24, Part 12; and

WHEREAS, the 2019 Edition of the California Building Standards Code will go into effect throughout California on January 1, 2020; and

WHEREAS, local jurisdictions are required to enforce the California Building Standards Code but may also enact more stringent standards, or equivalent standards for residential occupancies, when reasonably necessary because of local conditions caused by climate, geology or topography; and

WHEREAS, California Health & Safety Code section 17958.7 provides that before making any changes or modifications to the California Building Standards Code and any other applicable provisions published by the State Building Standards Commission, the governing body must make an express finding that each such change or modification is reasonably necessary because of specified local conditions, and the findings must be filed with the State Building Standards Commission before the local changes or modifications can go into effect; and

WHEREAS, the actions contemplated in this Resolution are exempt from the California Environmental Quality Act (CEQA) pursuant to CEQA Guidelines sections 15378; 15061(b)(3) (General Rule), 15301 (Existing Facilities), 15303 (New Construction or Conversion of Small Structures), and 15183 (Projects Consistent with a Community Plan, General Plan, or Zoning); and

WHEREAS, each of the foregoing provides a separate and independent basis for CEQA compliance and, when viewed collectively, provides an overall basis for CEQA compliance; and; now, therefore, be it

RESOLVED: That the City of Oakland is unique among California communities with respect to local climatic, geological, topographical, and other conditions. A specific list of findings that support the City of Oakland's modifications to the 2019 California Building Standards Code and a section-by-section correlation of each modification with a specific finding are contained in **Exhibit A** entitled "Standard Findings for City of Oakland Amendments," attached hereto and hereby declared to be a part of this Resolution as if set forth fully herein; and be it

FURTHER RESOLVED: That pursuant to California Health & Safety Code section 17958.7, the City Council finds and determines that the local conditions described in **Exhibit A** constitute a general summary of the most significant local conditions giving rise to the need for modification of the 2019 California Building Standards Code provisions published by the State Building Standards Commission; and be it

FURTHER RESOLVED: That the City Council further finds and determines that the proposed modifications are reasonably necessary based upon the local conditions set forth in **Exhibit A** and that such modifications are required in order to provide specific and greater protections to the public health, safety and welfare than are afforded by the 2019 California Building Standards Code; and be it

FURTHER RESOLVED: That the City Council of the City of Oakland further finds and determines that the local amendments to the California Building Standards Code, as set forth in a separate companion ordinance adopting said amendments as the 2019 Oakland Building Construction Code, impose substantially the same non-administrative regulatory requirements as, and are thus equivalent to or more stringent than the most current California Building Standards Code requirements; and be it

FURTHER RESOLVED: That this Resolution shall become effective immediately, unless otherwise required by the Charter of the City of Oakland; and be it

FURTHER RESOLVED: The actions contemplated in this Resolution are exempt from the California Environmental Quality Act (CEQA) pursuant to CEQA Guidelines sections 15378; 15061(b)(3) (General Rule), 15301 (Existing Facilities), 15303 (New Construction or Conversion of Small Structures), and 15183 (Projects Consistent with a Community Plan, General Plan, or Zoning); and be it

FURTHER RESOLVED: Each of the foregoing provides a separate and independent basis for CEQA compliance and, when viewed collectively, provides an overall basis for CEQA compliance; and; now, therefore, be it

FURTHER RESOLVED: That the Building Official of the City of Oakland is hereby directed to transmit this Resolution with the **Exhibit A** attachment, along with a copy of said separate companion ordinance adopting local amendments to the 2019 Editions of the California Building Standards Code, to the California Building Standards Commission before January 1, 2020, pursuant to the applicable provisions of State law.

IN COUNCIL, OAKLAND, CALIFORNIA,

PASSED BY THE FOLLOWING VOTE:

AYES - FORTUNATO BAS, GALLO, GIBSON MCELHANEY, KALB, REID, TAYLOR, THAO AND
PRESIDENT KAPLAN

NOES -

ABSENT -

ABSTENTION -

ATTEST: _____

LATONDA SIMMONS
City Clerk and Clerk of the Council of the
City of Oakland, California

EXHIBIT A

STANDARD FINDINGS FOR CITY OF OAKLAND AMENDMENTS

The City Council of the City of Oakland finds that the following local amendments of the 2019 California Building Standards Code (explained in further detail in a separate companion ordinance) are reasonable and necessary as a result of the following unique local climatic, topographic, and geologic conditions:

I. California Building Code - Chapter 5 – General Building Heights and Areas

These changes establish added requirements to address identification size in the Very High Fire Hazard Severity Zone. These changes are needed and are necessary and reasonable due to the areas being physically isolated from the rest of the City and is characterized by heavily landscaped areas, natural wilderness, and open space, which result in poor sight lines and visibility.

II. California Building Code - Chapter 6- Types Of Construction

These changes establish added fire and panic design parameters for high-rise buildings by retaining passive life-safety construction elements from the 2019 edition of the California Building Code. The purpose, scope, and application of these changes were derived from forensic inspections following major building fires in jurisdictions in California and Nevada. These changes are needed, necessary, and reasonable due to the high number of non-fire sprinklered buildings in the downtown core area, the preponderance of seismic hazard zones (liquefaction) as identified by the California Geological Survey along transportation corridors, and the proximity of the Hayward earthquake fault that reduces the ability of adjoining jurisdictions to provide timely mutual response for building conflagrations.

III. California Building Code - Chapter 7 - Fire Resistance And Fire Rated Construction

These changes establish added fire and panic design parameters for high-rise buildings by retaining passive life-safety construction elements from the 2001 edition of the California Building Code. The purpose, scope, and application of these changes were derived from forensic inspections following major building fires in jurisdictions in California and Nevada. These changes are needed, necessary, and reasonable due to the high number of non-sprinklered buildings in the downtown core area, the preponderance of seismic hazard zones (liquefaction) as identified by the California Geological Survey along transportation corridors, and the proximity of the Hayward earthquake fault that reduces the ability of adjoining jurisdictions to provide timely mutual response for building conflagrations.

IV. California Building Code – Chapter 7A – Materials And Construction Methods For Exterior Wildfire Exposure

These changes establish consistency with the application of the already codified language for new construction. These changes are needed and are necessary and reasonable to establish consistent requirements for construction in the Very High Fire Hazard Severity Zone.

V. California Building Code - Chapter 12 - Interior Environment

These changes establish added habitability design parameters for high-rise buildings by retaining passive ventilation construction elements from the 2019 edition of the California Building Code. These changes are needed, necessary, and reasonable due to the moderated micro-climate and prevailing winds due to proximity to the marine estuary of the urban core area which contribute significantly to reduced comfort heating and cooling requirements for residential occupancies.

VI. California Building Code - Chapter 16B - Private Driveway Access Bridges

These changes clarify design loads for engineered structures in the Oakland hills. These changes are needed, necessary, and reasonable due to the inherently steep and circuitous topography, the rocky geology, and the risk of land subsidence due to poor soil quality and water saturation which dictates minimum excavation of hillsides.

VII. California Building Code - Chapter 18- Soils And Foundations

These changes establish minimum prescriptive construction requirements for non-engineered foundations supporting residential occupancies. The purpose, scope, and application of these changes were derived from forensic inspections following the 1989 Loma Prieta earthquake. These changes are needed, necessary, and reasonable due to the inherently unstable in situ soil geology throughout Oakland, the high non-seasonal ground water (phreatic) surface, the preponderance of seismic hazard zones (landslide and liquefaction) as identified by the California Geological Survey, and proximity of the Hayward earthquake fault.

VIII. California Building Code - Chapter 18B - Grading, Excavations, And Fills

This added chapter establishes alternative requirements for grading construction in the Oakland hills and is equivalent in purpose, scope, and application to Appendix Chapter J. These changes are needed, necessary, and reasonable due to the inherently steep and circuitous topography, unstable in situ soil geology, preponderance of seismic hazard zones (landslides) as identified by the California Geological Survey, and proximity of the Hayward earthquake fault.

IX. California Building Code - Chapter 19 – Concrete

These changes eliminate the use of plain (unreinforced) concrete in all occupancies. The purpose, scope, and application of these changes were derived from forensic inspections

following the 1989 Loma Prieta earthquake. These changes are needed, necessary, and reasonable due to the inherently unstable in situ soil geology throughout Oakland, the high non-seasonal ground water (phreatic) surface, the preponderance of seismic hazard zones (landslide and liquefaction) as identified by the California Geological Survey, and proximity of the Hayward earthquake fault.

X. California Building Code - Chapter 23 – Wood

These changes establish additional minimum prescriptive construction requirements for non-engineered light wood frame construction for residential occupancies. The purpose, scope, and application of these changes were derived from forensic inspections following the 1989 Loma Prieta earthquake. These changes are needed, necessary, and reasonable due to the inherently unstable in situ soil geology throughout Oakland, the high non-seasonal ground water (phreatic) surface, the preponderance of seismic hazard zones (landslide and liquefaction) as identified by the California Geological Survey, and proximity of the Hayward earthquake fault.

XI. California Building Code - Chapter 32 – Encroachments into the Public Right-of-Way

These changes establish enhanced criteria for offsite drainage especially in locations located in the Very High Fire Hazard Severity Zone. These changes are needed, necessary, and reasonable due to the inherently steep and circuitous topography, the rocky geology, and the risk of land subsidence due to poor soil quality and water saturation which dictates minimum excavation of hillsides.

XII. California Building Code - Appendix O – Emergency Housing

The proposed amendments are reasonably necessary because Oakland is an older, largely built-out, urbanized area with a diverse geography and topography, which results in housing affordability and availability issues and the need for Emergency Housing. These characteristics necessitate more flexible standards to address the variety of circumstances present in the city.

XIII. California Electrical Code - Chapters 2 - Wiring And Protection, 3 - Wiring Methods - And Materials, 4 - Equipment For General Use, 6 - Special Equipment, 7 - Special Conditions

This added section establishes supplemental regulations setting forth special requirements for ministerial electrical permits for construction in the Very High Fire Hazard Severity Zone. These changes are needed and are necessary and reasonable due to the following local conditions:

- The area is physically isolated from the rest of the City and is characterized by heavily landscaped areas, natural wilderness, and open space which have extremely dry

vegetation with a high fuel load for potential wildfire conflagrations annually from May through October.

- The topography is hilly and the geology is rocky and subject to land subsidence due to poor soil quality and water saturation, which dictates minimum excavation of hillsides and resulting narrow and winding streets. Emergency response time and access is adversely impacted.
- Electrical transmission facilities are necessarily above ground and subject to damage from land instability, seismic activity, and prevailing winds and resulting power failures supplying water pumping stations or natural vegetation fire hazards.

XIV. California Mechanical Code - Chapter 5 - Exhaust Systems

These changes establish added fire design parameters for residential buildings and commercial restaurant occupancies by retaining passive life-safety construction elements from the 2019 edition of the California Building Code. The purpose, scope, and application of these changes were derived from forensic inspections following structure fires in California and Oakland.

These changes are needed, necessary, and reasonable due to the high number of non-fire sprinklered residences in Oakland, the preponderance of seismic hazard zones (liquefaction) as identified by the California Geological Survey, and the proximity of the Hayward earthquake fault.

XV. California Mechanical Code - Chapter 13 – Fuel Piping

These changes establish added fire design parameters for residential and non-residential buildings by retaining passive life-safety construction elements from the 2019 edition of the California Building Code. The purpose, scope and application of these changes were derived from forensic inspections following structure fires in California and Oakland. These changes are needed, necessary, and reasonable due to the high number of non-fire sprinklered residences in Oakland, the preponderance of seismic hazard zones (liquefaction) as identified by the California Geological Survey, and the proximity of the Hayward earthquake fault.

XVI. California Plumbing Code - Chapter 7 - Sanitary Drainage

These changes establish added fire design parameters for residential buildings by retaining passive life-safety construction elements from the 2019 edition of the California Building Code. The purpose, scope, and application of these changes were derived from forensic inspections following structure fires in California and Oakland. These changes are needed, necessary, and reasonable due to the high number of non-fire sprinklered residences in Oakland, the preponderance of seismic hazard zones (liquefaction) as identified by the California Geological Survey, and the proximity of the Hayward earthquake fault, and the inadequacy of hillside geology to adequately dissipate and absorb effluent from septic system leach fields.

XVII. California Plumbing Code - Chapter 9 - Vents

These changes establish added fire design parameters for residential buildings by retaining passive life-safety construction elements from the 2019 edition of the California Building Code. The purpose, scope, and application of these changes were derived from forensic inspections following structure fires in California and Oakland. These changes are needed, necessary, and reasonable due to the high number of non-fire sprinklered residences in Oakland, the preponderance of seismic hazard zones (liquefaction) as identified by the California Geological Survey, and the proximity of the Hayward earthquake fault, and the inadequacy of hillside geology to adequately dissipate and absorb effluent from septic system leach fields.

XVIII. California Plumbing Code - Chapter 10 - Traps And Interceptors

These changes establish added fire design parameters for commercial restaurant occupancies in buildings by retaining passive life-safety construction elements from the 2019 edition of the California Building Code. The purpose, scope, and application of these changes were derived from forensic inspections following structure fires in California and Oakland. These changes are needed, necessary, and reasonable due to the high number of non-fire sprinklered residences in Oakland, the preponderance of seismic hazard zones (liquefaction) as identified by the California Geological Survey, and the proximity of the Hayward earthquake fault.

XIX. California Plumbing Code - Chapter 12 - Fuel Piping

These changes establish added fire design parameters for residential and non-residential buildings by retaining passive life-safety construction elements from the 2019 edition of the California Building Code. The purpose, scope and application of these changes were derived from forensic inspections following structure fires in California and Oakland. These changes are needed, necessary, and reasonable due to the high number of non-fire sprinklered residences in Oakland, the preponderance of seismic hazard zones (liquefaction) as identified by the California Geological Survey, and the proximity of the Hayward earthquake fault.

XX. California Residential Code - Chapter 3 - Building Planning

These changes establish additional minimum prescriptive construction requirements for non-engineered light wood frame construction for residential occupancies. The purpose, scope, and application of these changes were derived from forensic inspections following the 1989 Loma Prieta earthquake. These changes are needed, necessary, and reasonable due to the inherently unstable in situ soil geology throughout Oakland, the high non-seasonal ground water (phreatic) surface, the preponderance of seismic hazard zones (landslide and liquefaction) as identified by the California Geological Survey, and proximity of the Hayward earthquake fault.

XXI. California Residential Code - Chapter 4 - Foundations

These changes establish minimum prescriptive construction requirements for non-engineered foundations supporting residential occupancies. The purpose, scope, and application of these changes were derived from forensic inspections following the 1989 Loma Prieta earthquake. These changes are needed, necessary, and reasonable due to the inherently unstable in situ soil geology throughout Oakland, the high non-seasonal ground water (phreatic) surface, the preponderance of seismic hazard zones (landslide and liquefaction) as identified by the California Geological Survey, and proximity of the Hayward earthquake fault.

XXII. California Residential Code - Chapter 6 - Wall Construction

These changes establish additional minimum prescriptive construction requirements for non-engineered light wood frame construction for residential occupancies. The purpose, scope, and application of these changes were derived from forensic inspections following the 1989 Loma-Prieta earthquake. These changes are needed, necessary, and reasonable due to the inherently unstable in situ soil geology throughout Oakland, the high non-seasonal ground water (phreatic) surface, the preponderance of seismic hazard zones (landslide and liquefaction) as identified by the California Geological Survey, and proximity of the Hayward earthquake fault.

XXIII. California Residential Code - Chapter 7 - Wall Covering

These changes establish additional minimum prescriptive construction requirements for non-engineered light wood frame construction for residential occupancies. The purpose, scope, and application of these changes were derived from forensic inspections following the 1989 Loma Prieta earthquake. These changes are needed, necessary, and reasonable due to the inherently unstable in situ soil geology throughout Oakland, the high non-seasonal ground water (phreatic) surface, the preponderance of seismic hazard zones (landslide and liquefaction) as identified by the California Geological Survey, and proximity of the Hayward earthquake fault.

XXIV. California Existing Building Code

These changes establish clarifications and consistency of the previously cited changes and additions to the California Building Standards Code. These changes are needed, necessary, and reasonable in order to maintain consistent application of the California Building Standards Code as they relate to existing buildings.

XXV. California Green Building Standards Code

These changes establish clarifications and consistency of the previously cited changes and additions to the California Green Building Standards Code. These changes are needed, necessary, and reasonable in order to maintain consistent application of the Green Building Standards Code as it relates to buildings in the City.