2007 NOV 15 PM 3: 20

TO:

Office of the City Administrator

ATTN: Deborah Edgerly

FROM: Community and Economic Development Agency

DATE: November 27, 2007

RE:

A Report, Ordinance, And Resolution Adopting Local Amendments To The 2007

Editions Of The California Model Building Codes, California Code Of Regulations (CCR), Part 2 (Building), 3 (Electrical), 4 (Mechanical), And 5

(Plumbing), And Amending Oakland Municipal Code Chapter 15.04 To Establish

The 2007 Oakland Building Construction Code

#### **SUMMARY**

An ordinance and a resolution have been prepared adopting local amendments to the 2007 editions of the four (4) California model building codes and amending chapter 15.04 (Oakland Building Construction Code) of the Oakland Municipal Code. The proposed ordinance would preserve the City's existing amendments, retain some life-safety regulations from the prior editions of the model codes which have not been included in the new editions, and add some lifesafety regulations for residential construction.

The California Health and Safety Code allows cities and counties to adopt local amendments to the new editions of the state building, electrical, mechanical, and plumbing codes before the January 1, 2008, statewide effective date. 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, geologic, or topographic conditions. The amending ordinance and resolution of findings must be adopted by the City Council and received by the State Building Standards Commission in Sacramento before the January 1st deadline.

#### FISCAL IMPACT

There is no fiscal impact. This is an administrative action mandated by State law. Resources from existing budgeted staff will continue to enforce the model building code regulations.

#### BACKGROUND

The California model building codes establish minimum standards and uniform administrative guidelines for construction throughout the state. The model codes are comprised of the most current editions of the national model codes (International Building, Plumbing, and Mechanical Codes and National Electrical Code) as amended by the State Building Standards Commission (energy conservation, disabled accessibility, elevator safety, etc.). If a jurisdiction proposes

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adding equivalent or more restrictive alternative regulations, the local amendments must be be supported by findings pertinent to the City's local topography (emergency vehicle response), geology (earthquake fault and soil liquefaction zones), and climate (fire storm conditions).

#### KEY ISSUES AND IMPACTS

Previously adopted amendments to the California model codes that would be retained in this amending ordinance include the following:

- establishing alternative technical standards for Live-Work conversion occupancies; and
- consolidating technical appeals of building, electrical, plumbing, and mechanical regulations under a Hearing Examiner, rather than an Appeals Board; and
- establishing investigation, analysis, and construction regulations for grading permits.

Proposed new amendments that would retain life-safety regulations from prior editions that were not brought forward in the current editions of the California model codes include the following:

- requiring fire-corridors in "high-rise" buildings; and
- requiring reinforcing steel bars in concrete foundations for residences; and
- requiring fire-rated gypsum wallboard between a residence and an attached garage.

Major changes in the 2007 editions of the California model codes include the following:

- decreasing the "steepness" of residential stairs; and
- increasing the side-yard setback for residential windows from three (3) feet to five (5) feet.

Other Oakland Municipal Code regulations such as the Planning Code, Fire Code, the Administrative Penalty Ordinance, and the Blight Ordinance will not be affected by the adoption of this amending ordinance, which will become effective on January 1, 2008. Building Services will do an educational outreach to contractors, developers, and architects advising them of the approaching effective date, as well as a summary of the pending code changes.

### SUSTAINABLE OPPORTUNITIES

#### **Economic**

Oakland amendments to the California model building codes support housing and commercial development opportunities for new and remodeled building construction.

#### **Environmental**

Oakland amendments to the California model building 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 fugitive dust.

# **Social Equity**

Oakland amendments to the California model building codes support affordable housing opportunities and economic revitalization policies of the City.

### DISABILITY AND SENIOR CITIZEN ACCESS

The California model building codes include the technical standards for state handicapped accessibility requirements in new and remodeled building construction.

#### RECOMMENDATIONS

The City will not be able to enforce the proposed local amendments if the Council does not adopt the amending ordinance and resolution of findings before the January 1, 2008 deadline. Staff recommends that the Committee accept this report and forward it to the Council.

# **ACTION REQUESTED OF THE CITY COUNCIL**

Staff recommends that the Council accept this report and adopt the proposed ordinance and resolution of findings amending the 2007 edition of the California Model Building Codes and Chapter 15.04 of the Oakland Municipal Code.

Respectfully submitted,

CLAUDIA **CAPPIO**Development Director

Community and Economic Development Agency

Prepared by:

Raymond M. Derania Interim Building Official Building Services Division

APPROVED FOR FORWARDING TO THE

COMMUNITY AND CONOMIC DEVELOPMENT COMMITTEE

DIFFICE OF THE CITY ADMINISTRATOR

INTRODUCED BY

OFFICE OF THE CITY CLEPK GAKLAND

APPROVED FOR FORM AND LEGALITY

COUNCILMEMBER

2007 NOV 15 PH 3: 19

DEPUTY CITY ATTORNEY

# OAKLAND CITY COUNCIL

Resolution No.	• • • •	_ C.M.S.

RESOLUTION OF FINDINGS MADE AND SUPPORTING LOCAL AMENDMENTS TO THE 2007 EDITIONS OF THE CALIFORNIA MODEL BUILDING CODES, CALIFORNIA CODE OF REGULATIONS (CCR), TITLE 24, PART 2 (BUILDING), 3 (ELECTRICAL), 4 (MECHANICAL), AND 5 (PLUMBING)

WHEREAS, pursuant to California Health and Safety Code Sections 18938(b) and 18941.5, the 2007 editions of the California Model Building Codes, California Code of Regulations (CCR), Title 24, Part 2 (Building), 3 (Electrical), 4 (Mechanical), and 5 (Plumbing) shall become effective on January 1, 2008; and

WHEREAS, said editions of the California Model Building Codes are derived from the regulations set forth in the 2006 editions of the International Building Code (published by the International Code Council), International Mechanical Code (published by the International Code Council), International Plumbing Code (published by the International Association of Plumbing and Mechanical Officials), and the National Electrical Code (published by the National Fire Protection Association); and

WHEREAS, said editions of the California Model Building Codes shall be the governing codes for local jurisdictions on and after said effective date; and

WHEREAS, pursuant to California Health and Safety Code Section 17958.5, local jurisdictions may adopt local amendments to said editions of the California Model Building Codes in the intervening time between its date of publication on July 1, 2007, and its effective date; and

WHEREAS, said local amendments shall be set forth and adopted by the local jurisdiction through an ordinance before the effective date of the said edition of the California Model Building Codes; and

WHEREAS, the Council of the City of Oakland has considered the adoption of such an ordinance amending said editions of the California Model Building Codes; and

WHEREAS, said ordinance will establish said editions of the California Model Building Codes with said local amendments as the governing codes for the City of Oakland and will entitle said governing code as the Oakland Building Construction Code in Chapter 15.04 of the Oakland Municipal Code; and

WHEREAS, pursuant to California Health & Safety Code, Section 17958.7, as a condition of and concurrent with the adoption of such local amendments, the local jurisdiction is required to make express findings that such amendments are reasonably necessary because of local climatic, geologic, or topographic conditions; and

WHEREAS, the Council of the City of Oakland hereby finds that the requirements of the California Environmental Quality Act (CEQA) of 1970, the Guidelines as prescribed by the Secretary for Resources, and the provisions of the Statement of Objectives, Criteria and Procedures for Implementation of the California Environmental Quality Act: City of Oakland, have been satisfied, and that in accordance with Section 15061(b)(3) of the California Code of Regulations the adoption of local amendments to the California Model Building Codes, California Code of Regulations (CCR), Title 24, Part 2 (Building), 3 (Electrical), 4 (Mechanical), and 5 (Plumbing) and amending Chapter 15.04 of the Oakland Municipal Code are exempt from the provisions of the California Environmental Quality Act; now, therefore, be it

**RESOLVED**: That the City Council finds and determines that said local amendments of the California Model Building Codes, as set forth in said edition of the Oakland Building Construction Code, impose substantially the same requirements as, and are thus equivalent to or exceed, uniform industry codes and current California Model Building Codes requirements; and be it

**FURTHER RESOLVED**: That the Council of the City of Oakland finds that such local amendments of the California Model Building Codes are necessary as result of unique local conditions:

I. California Building Code - Appendix Chapters 3B, 3C, and 3D - Requirements For Joint Living And Work Quarters

These added appendix chapters establish alternative requirements for construction of Joint Living and Work Quarters (pursuant to Health and Safety Code Section 17958.11) and Conversion Residence Quarters. These changes are needed and necessary and reasonable due in part to the following local conditions:

- The level topography and the alluvial soil geology, which have resulted in wide and straight streets, intersections, sidewalks, and alleyways, have contributed to enhanced emergency response time to the existing building stock for fire rescue; and the maintained and upgraded water supply facilities in the urban core area, which have resulted in abundant fire hydrant locations and water pressure, have contributed to enhanced assets for fire suppression.
- The moderated micro-climate and prevailing winds, which is due to proximity to the marine estuary of the urban core area, have contributed significantly to reduced comfort heating and cooling requirements for residential occupancies.

- The alluvial soil geology and low water table levels, which have resulted in extensive prior basement construction and stiffened foundation support for the existing building stock in the urban core area, have contributed to a reduced likelihood of life-threatening seismicinduced building collapse due to sympathetic vibratory response of a flexible structural system.
- Abundant annual days of sunshine, which have resulted in prior location of occupied spaces along building perimeters and separated and away from stairwells and emergency exits and other points of congestion in panic egress situations for the existing building stock in the urban core area, have contributed to ready accessibility into the exiting system by occupants and emergency response personnel.
- II. California Building Code Appendix Chapter 7B Special Requirements For Construction In The Very High Fire Hazard Severity Zone

This added appendix chapter establishes special requirements for construction in the Very High Fire Hazard 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 results in 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, prevailing winds, and natural vegetation fire hazards, which results in power failures supplying water pumping stations.
- Sanitary sewer facilities are necessarily close to the ground surface and subject to similar damage, which results in vermin and other vector population explosions.
- III. California Building Code Appendix 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.

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

This added appendix 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.

# V. California Building Code - Chapter 4'- Special Detailed Requirements Based Upon Use And Occupancy

These changes establish added fire design parameters for residential 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 structure fires in California and Oakland. These changes are needed, necessary, and reasonable due to the high number of non-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.

# VI. 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 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.

# VII. 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.

# VIII. California Building Code - Chapter 10 - Means Of Egress

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.

# IX. 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 2001 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.

# X. California Building Code - Chapter 15 - Roof Assemblies And Roof Top Structures

These changes clarify fire design parameters for residential structures in the Very High Fire Hazard Severity Zone. The purpose, scope, and application of these changes were derived from forensic inspections following the 1991 Oakland Fire Storm. These changes are needed, necessary, and reasonable due to the local conditions as set forth in Section II above.

# XI. California Building Code - Chapter 16 - Structural Design

These changes clarify design loads for engineered structures. 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.

### XII. 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.

### XIII. California Building Code - Chapter 19 - Concrete

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.

# XIV. California Building Code - Chapter 23 - Wood

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.

# XV. California Building Code - Chapter 24 - Glass And Glazing

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.

XVI. 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.

# XVII. 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 2001 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-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.

# XVIII. California Mechanical Code - Chapter 8 - Chimneys And Vaults

These changes establish added fire design parameters for residential 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 structure fires in California and Oakland. These changes are needed, necessary, and reasonable due to the high number of non-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.

### IXX. California Plumbing Code - Chapter 5 - Water Heaters

These changes establish added fire design parameters for residential 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 structure fires in California and Oakland. These changes are needed, necessary, and reasonable due to the high number of non-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 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 2001 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-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.

#### XXII. California Plumbing Code - Chapter 10 - Traps And Interceptors

These changes establish added fire design parameters for commercial restaurant occupancies 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 structure fires in California and Oakland. These changes are needed, necessary, and reasonable due to the high number of non-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.

#### XXIII. 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 2001 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-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 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

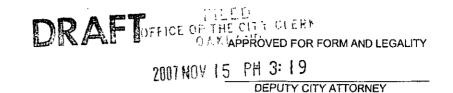
FURTHER RESOLVED: That the City Clerk of the City of Oakland is hereby directed to file a copy of this Resolution, along with a copy of said ordinance adopting local amendments to the 2007 editions of the California Model Building Codes, with the California Building Standards Commission.

of the City of Oakland, California

IN COUNCIL, OAKLAND, CALIFORNIA,	, 2007
PASSED BY THE FOLLOWING VOTE:	
AYES - BROOKS, BRUNNER, CHANG, KERNIGHAN, NA PRESIDENT DE LA FUENTE	ADEL, QUAN, REID, and
NOES -	
ABSENT -	•
ABSTENTION -	
ATTEST:	7 - MONTO - 67 - 11 - 10 - 10
· .	LATONDA SIMMONS ity Clerk and Clerk of the Council

INTRODUCED BY

COUNCILMEMBER



Ordinance No C.M.S.	
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OAKLAND CITY COUNCIL

ORDINANCE ADOPTING LOCAL AMENDMENTS TO THE 2007 EDITIONS OF THE CALIFORNIA MODEL BUILDING CODES, CALIFORNIA CODE OF REGULATIONS (CCR), TITLE 24, PART 2 (BUILDING), 3 (ELECTRICAL), 4 (MECHANICAL), AND 5 (PLUMBING), AND AMENDING OAKLAND MUNICIPAL CODE CHAPTER 15.04 TO ESTABLISH THE 2007 OAKLAND BUILDING CONSTRUCTION CODE

WHEREAS, the Council of the City of Oakland does hereby find that there is a need to enforce the most current editions of the California Model Building Codes, with local amendments thereof, as recited herein for regulating and controlling the design, erection, construction, enlargement, installation, alteration, repair, relocation, removal, use and occupancy, demolition, conversion, height and area, location and maintenance, and quality of materials of all buildings and structures and plumbing, mechanical, electrical, and fire suppression systems and certain equipment within the corporate boundaries of the City of Oakland; and

WHEREAS, the Council of the City of Oakland further hereby finds that there is a need to provide for the issuance of permits and the collection of fees there for and for penalties for the violation thereof, and for superseding other ordinances, in part or in whole, which are in conflict therewith; and

WHEREAS, the Council of the City of Oakland further hereby finds that the adoption of local amendments of the California Model Building Codes which provide for certain changes, supplements, and deletions thereof as recited herein will satisfy these needs by providing for minimum standards to safeguard life and limb, property, and public welfare; and

WHEREAS, the Council of the City of Oakland further hereby finds that the adoption of local amendments of the California Model Building Code are reasonably necessary because of local topographic, climatic, and geologic conditions; and

WHEREAS, the Council of the City of Oakland further hereby finds that the requirements of the California Environmental Quality Act (CEQA) of 1970, the Guidelines as prescribed by the Secretary for Resources, and the provisions of the Statement of Objectives, Criteria and Procedures for Implementation of the California Environmental Quality Act: City of Oakland, have been satisfied, and that in accordance with Section 15061(b)(3) of the California Code of Regulations the adoption of local amendments to the California Model Building Codes,

California Code of Regulations (CCR), Title 24, Parts 2, 3, 4, and 5, and amending the Oakland Municipal Code Chapter 15.04 are exempt from the provisions of the California Environmental Quality Act; and

WHEREAS, the Council of the City of Oakland further hereby finds that the California Model Building Codes, with local amendments thereof, as recited herein shall be the governing codes for the City of Oakland; and

WHEREAS, the editions of the California Model Building Codes as recited herein under are the most current in publication:

- California Building Code, 2007 Edition, California Code of Regulations (CCR), Title 24, Part 2;
- California Electrical Code, 2007 Edition, California Code of Regulations (CCR), Title 24, Part 3;
- California Mechanical Code, 2007 Edition, California Code of Regulations (CCR), Title 24, Part 4;
- California Plumbing Code, 2007 Edition, California Code of Regulations (CCR), Title 24, Part 5; now, therefore,

### THE COUNCIL OF THE CITY OF OAKLAND DOES ORDAIN AS FOLLOWS:

### **SECTION 1 - Ordinances Repealed**

City of Oakland Ordinance No. 12452 C.M.S. (Oakland Amendments To The 2001 California Model Building Codes) and Ordinance No. 12685 C.M.S. (Oakland Amendments To The 2005 California Electrical Code) and all amendments thereof that conflict within or between or among the provisions of this Code are hereby repealed.

## SECTION 2 - Oakland Municipal Code Adoptions

The following Articles, Parts, and Sections of the Oakland Municipal Code, Chapter 15.04, are hereby adopted:

- Article I Sections 15.04.010 through 15.04.075, inclusive General Administrative Amendments
- Article II Part 1 Sections 15.04.100 through 15.04.158, inclusive
   Administrative Amendments To The California Building Code
- Article II Part 2 Sections 15.04.200 through 15.04.285 inclusive
   Administrative Amendments To The California Electrical Code
- Article II Part 3 Sections 15.04.300 through 15.04.345, inclusive
   Administrative Amendments To The California Mechanical Code
- Article II Part 4 Sections 15.04.400 through 15.04.425, inclusive

# Administrative Amendments To The California Plumbing Code

- Article II Part 5 Sections 15.04.500 through 15.04.540, inclusive
   Administrative Amendments To The Uniform Swimming Pool, Spa, And
   Hot Tub Code
- Article III Part 1 Sections 15.04.600 through 15.04.698, inclusive
   Non-Administrative Amendments To The California Building Code
- Article III Part 2 Sections 15.04.700 through 15.04.770, inclusive
   Non-Administrative Amendments To The California Electrical Code
- Article III Part 3 Sections 15.04.800 through 15.04.825, inclusive
   Non-Administrative Amendments To The California Mechanical Code
- Article III Part 4, Sections 15.04.900 through 15.04.975, inclusive
   Non-Administrative Amendments To The California Plumbing Code

### **SECTION 3 - Amendments**

#### Article I

#### **General Administrative Amendments**

### 15.04.005 Title

This chapter of the Oakland Municipal Code shall be known as the "Oakland Amendments Of The Current Editions Of The California Building Standards Codes, Part 2 (Building), Part 3 (Electrical), Part 4 (Mechanical), and Part 5 (Plumbing)", may be cited as such, and will be referred to herein as "this chapter," "this Code," or the "Oakland Building Construction Codes."

### 15.04.010 Scope

Where any section of a model code recited herein is amended by this chapter, all provisions of the original section not so specifically amended shall remain in full force and effect and all amended provisions shall be considered as added thereto. Where provisions set forth herein conflict with the provisions of Title 24 of the California Code of Regulations Parts 2, 3, 4, 5, and 12, the enforcement of which by local jurisdictions is provided for in the Matrix Adoption Appendix, the provisions of the California Amendments shall prevail and control.

### 15.04.015 General Standards

#### A. Hazards

All materials, assemblies, appliances, fixtures, equipment, and installations thereof; all arrangements of occupancies, exits, aisles, stairs, and doors; all parapet walls, cornices, spires, towers, tanks, statuary, signage, structural members, appendages, and appurtenances thereto in buildings and structures regulated by this Code shall be so arranged, assembled, installed,

maintained and of sufficient size and so protected as to reduce and minimize all egress, fire, safety, and health hazards.

### **B.** Quality

The quality of all materials, assemblies, appliances, fixtures, and equipment; methods of connection, assembly, and installation; allowable stress, strain, deflection, rate and volume and velocity of flow, pressure, temperature, and ampacity; and assumed loads and capacities to be used in the design and construction of all buildings and structures, plumbing and mechanical installations, and electrical systems shall be consistent with requirements of this Code and nationally recognized standards of quality and generally recognized and well-established methods of testing, design, installation, and construction. Testing, listing, and affixed labeling shall be prima facie evidence of conformity with approved standards for safety to life and limb, property, and public welfare.

# C. Compliance

Failure to comply with any of the provisions of this Code, including failure to provide, obtain or maintain valid permits, certifications, tests, listings, affixed labeling, inspection approvals, or other conditions of permit; failure to repair, demolish, remove, or rehabilitate unsafe materials, appliances, fixtures, or equipment; or failure to prevent, restrain, correct, or abate conditions unsafe or hazardous for egress or fire protection or health due to inadequate maintenance, excess loading, dilapidation, or abandonment shall be and is declared to be prima facie evidence of an existing and continuing hazard to life or limb, property or public welfare.

### 15.04.020 Effect Of Adoption And Repeals

#### A. Other Codes And Ordinances

Unless expressly stated herein, this chapter is not intended to amend, repeal, or supersede provisions of any other codes, regulations or ordinances, including the demolition ordinance, earthquake damage abatement ordinance, dangerous building ordinance, creek protection ordinance, Planning Code, Building Maintenance Code, or Fire Code.

### B. Conflict

In any specific section or case where there is a conflict within or between or among provisions, the most restrictive that prescribes and establishes the higher standard of safety or public benefit shall prevail and control and where there is a conflict between a general requirement and a specific requirement, the specific requirement shall apply.

#### C. Validity

Neither the adoption of this Code nor the repeal by the ordinance codified in this chapter of any city ordinance shall in any manner affect the prosecution for violation of ordinances, which violations were committed prior to the effective date hereof or be construed as a waiver of any

license or penalty at said effective date due and unpaid under such ordinance relating to the collection of any such license or penalty or the penal provisions applicable to any violations hereof.

Provided further, neither the adoption of this Code nor the repeal by the ordinance codified in this chapter of any City ordinance shall in any manner affect the validity of an interlocutory or final action heretofore taken by the Hearing Examiner, or the validity of any such action to be taken upon matters pending before the Hearing Examiner at the time of the adoption of the ordinance codified in this chapter, and that the provisions of this Code, insofar as they are substantially the same as existing provisions relating to the same subject matter, shall be construed as restatement and continuation thereof, and not as new enactment.

### 15.04.025 Appeal

#### A. General

In order to hear and decide appeals of orders, decisions, or determinations made by the Building Official relative to the application and interpretation of the non-administrative (technical) requirements of this Code, the property owner may request an administrative hearing with a Hearing Examiner. The request shall be filed in writing with the Building Official and shall be accompanied with a fee as established in the Master Fee Schedule. The request for an administrative hearing shall contain the following information:

- 1. A brief statement setting forth the legal interest of the party or parties in the real property identified in the order, decision or determination made by the Building Official; and
- 2. A brief statement in ordinary and concise language of that (those) specific order(s), decision(s) or determination(s) protested; and
- 3. A brief statement in ordinary and concise language contending that issuance of the order, decision or determination was a result of error or abuse of discretion together with any material facts claimed to support such contention; and
- 4. A brief statement in ordinary and concise language of the relief sought and the reasons why it is claimed the protested order, decision or determination should be reversed, modified, or otherwise set aside; and
- 5. The signature of the property owner, and his or her mailing address; and
- 6. The verification (by declaration under penalty of perjury) of at least one person requesting a hearing as to the truth of the matters stated in the request for hearing; and

The written request for an administrative hearing with the accompanying fee shall be received by the Building Official within fourteen (14) calendar days from the date of the service of such order, decision or determination of the Building Official.

### B. Scheduling And Noticing

As soon as practicable after receiving the request for administrative hearing, the Building Official shall fix a date, time and place for the administrative hearing. Written notice of the time and place of the hearing shall be given to the appellant at least seven (7) calendar days prior to the date of the hearing.

The failure of the Building Official to serve any person required herein to be served shall not invalidate any proceedings hereunder as to any other person duly served or relieve any such person from any duty or obligation imposed by the provisions of this section.

### C. Scope Of Hearing

Only those technical matters or issues specifically raised by the appellant in the Request for Administrative Hearing shall be considered in the administrative hearing.

### D. Hearing Examiner

The Hearing Examiner shall not be an employee of the City of Oakland and shall be qualified by experience and training to pass on building construction and other matters pertaining to this Code.

### E. Limitations of Authority

The Hearing Examiner shall have no authority relative to interpretations of the administrative provisions of this Code and shall not be empowered to waive or otherwise set aside the non-administrative (technical) requirements of this Code.

### F. Effect Of Hearing

Decisions of the Hearing Examiner in all instances shall be final and conclusive.

### G. Review Of Administrative Determination

The limitation period provided pursuant to California Code of Civil Procedure Section 1094.6 shall apply to all petitions filed seeking judicial review of administrative determinations made by the Building Official or the Hearing Examiner.

#### 15.04.030 Violations

### A. Scope

It is unlawful for any person, group of persons, firm, partnership, company, or corporation to erect, construct, enlarge, alter, repair, move, improve, convert or demolish, equip, use, occupy or maintain any building or structure, or plumbing, mechanical, or electrical system, component, or equipment in the City or cause the same to be done contrary to or in violation of any of the provisions of this Code or other relevant ordinance, rule, or regulation.

#### **B.** Remuneration

In addition to the penalties provided by law, a violator shall be liable for such costs, expenses, disbursements, and attorneys' fees paid or incurred by the City or any of its officials, officers, representatives, employees, agents, volunteers, vendors, or third-party contractors in correction, abatement and prosecution of the violation.

# 15.04.035 Application For Permit

Every permit and application for a permit shall contain the information required by California Health and Safety Code, Division 13, Part 3, Chapter 9, Section 19825.

### A. Agreement

Every permit shall also contain an agreement as follows which shall be executed by the permit holder as a condition of issuance:

"I hereby agree to save, defend, indemnify and keep harmless the City of Oakland and its officials, officers, employees, representatives, agents, and volunteers from all actions, claims, demands, litigation, or proceedings, including those for attorneys' fees, against the City in consequence of the granting of this permit or from the use or occupancy of the public right-of-way, public easement, or any sidewalk, street or sub-sidewalk or otherwise by virtue thereof, and will in all things strictly comply with the conditions under which this permit is granted I further certify that I am the owner of the property involved in this permit or that I am fully authorized by the owner to access the property and perform the work authorized by this permit."

#### **B.** Contact Information

In addition to the information required by California Health and Safety Code Division 13, Part 3, Chapter 9, Section 19825 for architects and engineers, every permit shall contain the telephone numbers for any such persons, firms or designers responsible for the work proposed under the permit or application.

### C. Electronic Submittals

In the case of electronic submittals, signatures shall be provided as required and allowed by current California law.

#### D. Peer Review

A peer review may be required by law or other regulation. A peer review may also be required by the Building Official for the design of any element for a project requiring a permit that is based on a design methodology which is not addressed within this Code or that requires review by a registered design professional not employed by the City. The peer review shall be

performed in a form and manner as directed by the Building Official. When a peer review is required, the applicant shall bear all costs associated with the peer review.

#### E. Dust Control

A statement that dust will not be generated by the work under the permit shall be placed on the permit application, if applicable. If dust will be generated by the work under the permit, then dust control measures will be required. Dust control measures shall be based on "Best Management Practices" as developed by the City Engineer or any other appropriate reference approved by the Building Official and shall be used throughout all phases of construction. This includes measures during suspension of work, alleviation or prevention of any fugitive dust nuisance and the discharge of smoke or any other air contaminants into the atmosphere in such quantity as will violate any City or regional air pollution control rules, regulations, ordinances, or statutes. Water, dust palliatives or combinations of both shall be applied continuously and in sufficient quantity during the performance of work and at other times as required. Dust nuisance shall also be abated by cleaning, vacuuming, sweeping or other means as necessary. A Dust Control Plan may be required as a condition of permit issuance or at other times as necessary to assure compliance with this section.

Failure to control effectively or abate fugitive dust nuisance or the discharge of smoke or any other air contaminants into the atmosphere may result in suspension or revocation of the permit, in addition to any other applicable enforcement actions or remedies.

#### 15.04.040 Information On Submittals

### A. Required

When the Building Official determines that plans, diagrams, specifications, calculations, computations, reports, and other relevant data are necessary, the documents shall be submitted with the permit application for review and shall detail clearly the nature and extent of the work proposed and how it will conform to the provisions of this Code and all other relevant laws, ordinances, rules and regulations. All documents submitted for review shall identify the building number or County Assessor's parcel number and the street name of the work and the names and addresses of the property owner and person or firm who prepared them. All conditions of approval pursuant to the Planning Code shall be shown on the plans or otherwise submitted with the permit application.

#### B. Content

Unless otherwise approved by the Building Official, plans shall be drawn to a minimum scale of one-fourth inch to one foot upon substantial paper or polyester based film (mylar) and shall include a floor plan and a plot plan containing the following information as a minimum:

1. Location and perimeter dimensions of the proposed and existing buildings or additions and other pertinent structures, including orthogonal measurements from property lines and between structures and elevations of finished grade, floors, and slabs; and

- 2. Proposed and existing site improvements, including drainage facilities, utilities, public and private easements, grading, and paving; and
- 3. Proposed and existing off-street parking and loading facilities, including parking stall size, angle of parking aisle width, interior circulation, and driveway elevations and proposed gradients; and
- 4. Location and perimeter dimensions of ground level usable open space as required by the Planning Code; and
- 5. Location and size of existing and proposed trees and other landscaping and screening as required by City tree ordinances and regulations and other land use provisions; and
- 6. Addresses of contiguous properties; and
- 7. Locations, types, and dimensions of foundations, framing, windows, doors, finishes, adjoining rooms and uses, fire assemblies and dampers, fixtures, appliances, equipment, and distribution systems to the extent necessary for verification of compliance with all applicable regulations.

# C. Specifications

In lieu of detailed specifications, the Building Official may approve references on the plans to a specific section or part of this Code or other laws, ordinances, rules, or regulations.

### D. Supplemental Documents

Calculations, testing reports, certifications, computations, conditions of approval, conditions of compliance and other data sufficient to demonstrate the correctness of the plans shall be submitted with the permit application and when otherwise required by the Building Official.

### E. Drawings

Plans shall detail clearly how required structural and fire-resistive integrity will be maintained where penetrations are made for electrical, mechanical, plumbing, fire extinguishing, or communications conduits, pipes, ducts, vents, supports and similar components or systems.

#### F. Dust Control Measures

A statement that dust will not be generated by the work under the permit shall be placed on the plans, if applicable. If dust will be generated by the work under the permit, then dust control measures shall be required and indicated on the plans. Dust control measures shall be based on "Best Management Practices" as developed by the City Engineer or other reference approved by the Building Official and shall be used throughout all phases of construction. This includes measures during suspension of work, alleviation or prevention of any fugitive dust nuisance and the discharge of smoke or any other air contaminants into the atmosphere in such quantity as will violate any City of Oakland or regional air pollution control rules, regulations, ordinances, or

statutes. Water, dust palliatives or combinations of both shall be applied continuously and in sufficient quantity during the performance of work and at other times as required. Dust nuisance shall also be abated by cleaning, vacuuming, sweeping or other means as necessary.

Failure to control effectively or abate fugitive dust nuisance or the discharge of smoke or any other air contaminants into the atmosphere may result in suspension or revocation of the permit, in addition to any other applicable enforcement actions or remedies.

### 15.04.045 Signing And Sealing Of Plans And Other Submittal Documents

#### A. General

Plans and other submittal documents when submitted with a permit application shall be certified pursuant to this section. If any requirement of this section is contrary to state law, the state law shall govern.

### **B.** Nonprofessional

Plans or other submittal documents not required to be prepared by a registered design professional shall be signed by the preparer with the index sheet "wet" signed by the preparer. Name, address, telephone and facsimile number of preparer shall be typed or printed on the index sheet. If there is no index sheet then all the copies submitted shall be "wet" signed with at least one copy indicating preparer's name, etc. If a professional has prepared the calculations or a report that requires incorporation into the plans, the professional should appropriately sign the portion of the nonprofessionally prepared plans where the work for which he or she is responsible for has been shown and incorporated into the plans.

### C. Registered Design Professional

Plans and other submittal documents prepared by a registered design professional (architect, civil engineer, structural engineer, mechanical engineer, electrical engineer, landscape architect, etc.) shall be signed and sealed by the professional with the index sheet "wet" signed and sealed by the professional. Name, address, telephone and facsimile number of the professional shall be typed or printed on the index sheet. If there is no index sheet then all the copies submitted shall be "wet" signed and sealed with at least one copy indicating professional's name, etc.

If the professional is responsible for only a portion of the plan sheet (such as only for certain structural items of a building), then appropriate notes on the sheet(s) shall indicate the extent of responsibility with signatures as above. Alternatively, the professional preparing the plans may note on the plans a reference to the calculations or reports prepared by other professionals that were used in preparing the plans.

# D. Reports Prepared By A Registered Design Professional

Reports should have an appropriate page where "wet" seals and signatures of persons responsible for the report are displayed.

# E. Calculations Prepared By A Registered Design Professional

Calculations should have an index sheet where the "wet" seal and signature of person responsible for the calculations are displayed. If there is no index sheet then all the calculation sheets require a "wet" seal and signature. If the plans for which the calculations were prepared are appropriately signed by a different professional then the plan sheets do not require the additional signature of the professional preparing the calculations. If the plans were prepared by a nonprofessional, then the plan sheets where items for which calculations were prepared should be appropriately signed by the person preparing the calculations. The professional signing the plans may note on the plans that his or her responsibility is only for the items for which he or she prepared the calculations.

## F. Title 24 Energy Compliance Forms

Title 24 Energy Compliance Forms shall be shown on the plans and shall be "wet" signed by the appropriate parties.

### G. Signatures On Survey And Plot Plan

Four (4) copies shall be submitted of required boundary and topographic surveys and plot plans. The copies shall be appropriately signed with at least two copies having "wet" signatures and seals. Statements shall also be "wet" signed. The remaining copies shall be signed.

### H. Signatures And Seals On Revisions

Signatures and seals on revisions to drawings submitted after permit issuance for revision plan check shall be as required for new submittals. If a revised index sheet with "wet" seal and signature is not submitted then all of the revised plan sheets submitted shall be "wet" signed and, if appropriate, sealed as required.

### I. Corrections During Plan Check

Signatures and seals on revisions or corrections submitted during the plan check shall be as required for new submittals. If the appropriate signatory is not available to provide a "wet" seal and signature in person, a letter with seal and signature indicated thereon from the signatory and indicating revised or corrected drawings submitted may be by facsimile to the City and will be acceptable in order to issue permit (the original letter should be immediately mailed to the attention of the plan checker). The preparer shall provide "wet" seal and signature as soon as possible but prior to approval of a first inspection and a hold on final inspection shall be indicated until appropriate "wet" seal and signed plans are presented to the City of Oakland.

### 15.04.050 Persons Who May Prepare Plans

#### A. Definitions

See Section 15.04.085 of this chapter for definitions pertinent to this section.

# **B.** Limitations of Nonprofessional Designer

The following limitations apply to persons preparing plans and other documents for submittal with an application for building permit:

- 1. Persons not holding an active engineering or architecture license issued by the State of California may design single-family dwellings and multiple residential buildings containing no more than four dwelling units and with no more than four dwelling units on any single lot. The buildings are limited to conventional wood framed construction with no more than two stories and basement in height. The structure of basement foundations, retaining walls more than four feet high from base of footing to top of wall or with surcharge loads due to vehicles or embankment on top, and/or other unconventional foundation system for these dwellings requires a registered design professional to provide a structural design and structural calculations.
- 2. Garages or other appurtenant structures, agricultural and ranch buildings of wood framed construction not more than two stories and basement in height.
- 3. Subject to Building Official's approval, tenant improvements which do not constitute a change of occupancy, and do not affect the safety of any building or its occupants, including but not limited to exiting, fire-resistive construction, structural or seismic elements.

# 15.04.055 Expiration Of Issued Permit

Every issued permit shall expire by limitation and become null and void if the building or work authorized by such permit does not receive an approval of a major inspection, as further identified in Section 15.04.185 of this chapter, within one-hundred eighty (180) calendar days following the issuance date of such permit or following the approval date of a previous major inspection or does not receive successive approvals within the time constraints identified in the conditions of compliance for the abatement of violations of this Code and other codes and ordinances requiring permits for corrective work.

### 15.04.060 Suspension Or Revocation Of Issued Permit

The Building Official may suspend or revoke a permit issued under the provisions of this chapter whenever the permit is issued in error, or on the basis of incorrect or incomplete information supplied or in violation of any law, ordinance, rule, or regulation or any of the provisions of this chapter, including failure to pay fees, or the building or site becomes or continues to be, a public nuisance as declared by the Building Official, or conditions at the site or in the building become or continue to be in violation of the provisions of this chapter, any related City of Oakland code or ordinance or any condition of the permit issued hereunder.

### 15.04.065 Fees

#### A. General

Permit, plan review, processing, investigation, abatement and other relevant fees shall be established and assessed in accordance with the Master Fee Schedule and paid to the City of Oakland at time of submittal of the permit application for review or at other times as provided herein.

#### B. Additional

Whenever plans, calculations, computations, reports, or other required data are incomplete or changed so as to require additional review and/or processing; or whenever valuation of work has changed or has been re-evaluated based upon inspection, additional fees as established in accordance with the master fee schedule ordinance shall be assessed.

# C. Refunds

The Building Official may authorize the refunding of a fee collected hereunder which was erroneously assessed and paid. All requests for refunds shall be made in writing upon a City of Oakland form and shall be accompanied by the original receipt of payment. Refund requests shall be reviewed in accordance with the City of Oakland refund policy and procedure in effect when the request is filed.

### 15.04.070 Sanitary Accommodations For Construction Workers

Every person or firm constructing or repairing any building, structure, or infrastructure on private property or public right-of-way shall provide and maintain toilet facilities for employees and other workers as follows:

- A. Prior to issuance of the permit, the permit applicant shall submit evidence for approval that temporary or permanent toilet facilities are provided at or adjacent to the work site.
- **B**. The location of temporary toilet facilities shall be approved by the Building Official. Toilet facilities shall be maintained in accordance with the Alameda County Department of Environmental Health requirements for sanitation and vector control.
- C. Where work is performed in the public right-of-way, temporary toilet facilities may access a manhole directly serving a publicly maintained sewer nearest said work. Such facility shall not obstruct traffic and shall be removed immediately upon completion of said work.

#### **15.04.075 Definitions**

### A. ADMINISTRATIVE AUTHORITY

Wherever reference is made in this Code to "Administrative Authority," it shall mean the Building Official, except as it relates to the regulations concerning private sewage disposal systems, where it shall mean the Alameda County Health Officer.

#### **B. BUILDING DEPARTMENT**

Wherever reference is made in this Code to "Building Department," it shall mean the Building Services Division of the Community and Economic Development Agency, and its successor in title.

#### C. BUILDING OFFICIAL

Wherever reference is made in this Code to "Building Official," it shall mean the Deputy Director, Community and Economic Development Agency, and his or her successor in title, or his or her designated representative.

### D. CALIFORNIA BUILDING CODE

The International Building Code as amended and adopted by the State of California and is another name for the body of regulations known as the California Code of Regulations (C.C.R.), title 24, Part 2; a portion of the "California Building Standards Code," as defined in the "California Building Standards Law" commencing with Section 18901 of the Health and Safety Code.

### E. CALIFORNIA ELECTRIC CODE

The National Electric Code as amended and adopted by the State of California and is another name for the body of regulations known as the California Code of Regulations (C.C.R.), title 24, Part 3; a portion of the "California Building Standards Code," as defined in the "California Building Standards Law" commencing with Section 18901 of the Health and Safety Code.

### F. CALIFORNIA MECHANICAL CODE

The International Mechanical Code as amended and adopted by the State of California and is another name for the body of regulations known as the California Code of Regulations (C.C.R.), title 24, Part 4; a portion of the "California Building Standards Code," as defined in the "California Building Standards Law" commencing with Section 18901 of the Health and Safety Code.

# G. CALIFORNIA PLUMBING CODE

The International Plumbing Code as amended and adopted by the State of California and is another name for the body of regulations known as the California Code of Regulations (C.C.R.), title 24, Part 5; a portion of the "California Building Standards Code," as defined in the "California Building Standards Law" commencing with Section 18901 of the Health and Safety Code.

#### H. COMBINATION PERMIT

A Combination Permit allows the performance of building, electrical, plumbing, and mechanical work under a single permit and may be issued for certain types of work which the Building Official has identified as being appropriate for such consideration. Fees shall be assessed as established in the Master Fee Schedule.

### I. DEPARTMENT HAVING JURISDICTION

Wherever reference is made in this Code to "Department Having Jurisdiction," it shall mean the Building Services Division of the Community and Economic Development Agency, and its successor in title.

### J. VERY HIGH FIRE HAZARD SEVERITY ZONE

All of that area within the City as defined by the Fire Marshall of the City of Oakland, including, but not limited to, the area north and east of the following boundaries:

**BEGINNING** at the MacArthur Freeway at the San Leandro boarder to Foothill Boulevard; west on Foothill Boulevard to Stanley, west on Stanley to 98th Avenue; south on 98th Avenue to Stearns Avenue; west on Stearns to Burr Street; west on Burr Street to Thermal; west on Thermal to 8500 Thermal; south at 8500 Thermal to MacArthur Boulevard; west on MacArthur Boulevard to 82nd Avenue; north on 82nd Avenue to Utah Street; west on Utah Street to Partridge Avenue; south on Partridge Avenue to Outlook Avenue; west on Outlook Avenue to Seminary Avenue; south on Seminary Avenue to MacArthur Boulevard; west on MacArthur Boulevard to Buell Street; north on Buell Street to Tompkins Avenue; west on Tompkins Avenue to End; straight line from Tompkins Avenue to Wisconsin Street; west on Wisconsin Street to Carlsen Street; west on Carlsen Street to Maple Avenue; south on Maple Avenue to Morgan Avenue; west on Morgan Avenue to Barner; south on Barner to Morgan Avenue; west on Morgan Avenue to Coolidge Avenue; North on Coolidge Avenue to Alida Street; west on Alida Street to Lincoln Avenue; south on Lincoln Avenue to Tiffin Road; west on Tiffin Road to Whittle Avenue; west on Whittle Avenue to Fruitvale Avenue (Dimond Park); follow the southern and western boundary of Dimond Park to El Centro Road; west on El Centro Road to Dolores; west on Dolores to Park Boulevard; north on Park Boulevard to Piedmont boundary; Piedmont boundary to Mt. View Cemetery; northern boundary of Mt. View Cemetery to Clarewood Drive; west on Clarewood Drive to Broadway Terrace; south on Broadway Terrace to Margarido Drive; west on Margarido Drive to Lawton; west on Lawton to Broadway; north on Broadway to Keith Avenue; west on Keith Avenue to College Avenue; and north on College Avenue to the corporate limits of the City of Berkeley.

#### K. INDEX SHEET

A sheet located within the 1st or 2nd sheet of the plan set that lists all drawings and sheet numbers and a description of each drawing that are part of the plan set or other submittal document.

### L. NON-PROFESSIONAL

A person that is not licensed or certified by the State of California, but is not prohibited by state law from providing a certain service to others or performing certain work for oneself.

#### M. OAKLAND BUILDING CONSTRUCTION CODE

The Oakland Building Construction Code is the compiled editions of the California Building Standards Codes, California Code Of Regulations (CCR), Title 24, Part 2 (Building), Part 3 (Electrical), Part 4 (Mechanical), and Part 5 (Plumbing), and the Uniform Swimming Pool Spa and Hot Tub Code, with local amendments thereto as adopted by the Council of the City of Oakland.

### N. READILY ACCESSIBLE

As defined in the California Plumbing and Mechanical Codes.

# O. SEALED (STAMPED)

Indicates the plan(s) is/are sealed, as required by California Business & Professions Code Sections 5536.1 and 5536.2, with originally applied ink applied to the print or copy of the plans or other submittal documents submitted with an application for permit. Information provided on the seal (stamp) shall be in accordance with California Business & Professions Code Section 5536.1 and Title 16, Section 136 of the California Code of Regulations.

#### P. SIGNED

Indicates the originals of the indicated plan(s) have been "wet" signed (and sealed) and the image of such signing is apparent on the copies of the originals submitted for permit. Also refer to the definition of "wet signed."

### Q. SURVEYOR IN RESPONSIBLE CHARGE

A person who is actively licensed by the State of California to perform boundary and topographic surveys in accordance with the provisions of the California Business and Professions Code, Land Surveyors Act.

### R. UNIFORM SWIMMING POOL, SPA AND HOT TUB CODE

A compilation of minimum standards for the erection, installation, alteration, moving, repair, maintenance and use of any swimming pool, spa or hot tub plumbing system. It is published by the International Association of Plumbing and Mechanical Officials to safeguard life or limb, health, property and public welfare.

#### S. "WET" SIGNED

Indicates the plan(s) is/are signed with originally applied ink applied to the print or copy of the plans or other submittal documents submitted with an application for permit. Also refer to the

definition of "signed."

#### Article II

# Part 1 - Administrative Amendments To The California Building Code

- 15.04.100 Refer to Article I General Administrative Amendments of this chapter.
- 15.04.102 Adopt Appendix Chapter 1 of the California Building Code in its entirety.
- 15.04.104 In Section 101.2 of Appendix Chapter 1 of the California Building Code, delete the Exception and add also Section 15.04.010 of this Chapter.
- 15.04.106 In Section 102.1 of Appendix Chapter 1 of the California Building Code, replace this section in its entirety with section 15.04.015 of this Chapter.
- 15.04.108 In Section 102.2 of Appendix Chapter 1 of the California Building Code, replace this section in its entirety with section 15.04.020 of this Chapter.
- 15.04.110 In Section 103 of Appendix Chapter 1 of the California Building Code, delete this section in its entirety.
- **15.04.112** In Section 104 of Appendix Chapter 1 of the California Building Code, add section 15.04.030 of this Chapter as a new subsection 104:13.
- 15.04.114 In Section 105.1 of Appendix Chapter 1 of the California Building Code, delete sections 105.1.1 and 105.1.2 in their entirety.
- 15.04.116 In Section 105.2 of Appendix Chapter 1 of the California Building Code, delete all references to Electrical, Gas, Mechanical, and Plumbing in their entirety, and also replace subparagraph number 2 in its entirety with the following:
  - "Concrete or masonry fences not over 3 feet high and fences constructed of other materials when not over 6 feet high".
- **15.04.118** In Section 105.3 of Appendix Chapter 1 of the California Building Code, add section 15.04.035 of this Chapter as the number 8 subparagraph.
- **15.04.120** In Section 105.3 of Appendix Chapter 1 of the California Building Code, add section 15.04.040 of this Chapter as the number 9 subparagraph.
- **15.04.122** In Section 105.3.1 of Appendix Chapter 1 of the California Building Code, replace this section in its entirety with the following:
  - "When the Building Official finds that the work described in an application for a permit and the plans, specifications, and other data filed therewith conform to the requirements of this Code and other pertinent laws and ordinances and Conditions of Compliance for the abatement

- of violations of this code and other codes and ordinances requiring permits for corrective work, and that the fees, charges, costs, and assessments specified in the Master Fee Schedule along with all penalties have been paid, the Building Official shall issue a permit therefore to the applicant".
- 15.04.124 In Section 105.3.2 of Appendix Chapter 1 of the California Building Code, replace the phrase "... or more extensions of time for additional periods not exceed 90 days each" with "extension of time not exceeding 180 days".
- 15.04.126 In Section 105.5 of Appendix Chapter 1 of the California Building Code, replace this section in its entirety with section 15.04.055 of this Chapter.
- 15.04.128 In Section 105.6 of Appendix Chapter 1 of the California Building Code, replace this section in its entirety with section 15.04.060 of this Chapter.
- 15.04.130 In Section 105.7 of Appendix Chapter 1 of the California Building Code, replace the sentence in its entirety with the following:
  - "In addition to the building permit and the Inspection Record Card, it shall be the duty of the person requesting any inspections to have available, at the time of inspection, the following information (as applicable):
    - 1. The approved plans and specifications, including copies of approvals of any changes.
    - 2. Copies of all previous Correction Notices.
    - 3. Land use approvals (variances, Conditional Use Permits, Design Review, etc.).
    - 4. Other permits as may be required by the scope of work (excavation, encroachment, sidewalk, sewer, grading, etc.).
    - 5. Any other documents as may be necessary for the performance of the inspection (Special Inspection Reports, equipment and appliance installation instructions, payment of accrued fees, etc.)."
- 15.04.132 In Section 106.1 of Appendix Chapter 1 of the California Building Code, add section 15.04.045 as a new subsection 106.1.4.
- **15.04.134** In Section 106.1 of Appendix Chapter 1 of the California Building Code, add section 15.04.050 as a new subsection 106.1.5.
- 15.04.136 In Section 106.3 of Appendix Chapter 1 of the California Building Code, delete subsection 106.3.3 in its entirety.
- **15.04.138** In Section 106.1 of the California Building Code, replace the phrase "... one or more sets..." in the first sentence with "three or more sets, as the Building Official may require, ...".

**15.04.140** In Section 106.2 of the California Building Code, replace this section in its entirety with the following:

Section 106.2 Site Plan

# Section 106.2.1 Boundary And Topographic Survey Maps

# Section 106.2.1.1 Required Submittal

A combined map or separate maps of a boundary survey, including easement locations, and a topographic survey shall be submitted with all applications for a building permit for a new structure and as otherwise required by the Building Official. One (1) electronic copy in an approved format and two (2) non-electronic copies of the map or maps shall be submitted on approved media (compact disk, heavy bond paper, etc.) which shall bear the seal and wet signature of the Surveyor In Responsible Charge. The surveys shall have been performed (or recertified) not more than three (3) years prior to the date of the permit application. The surveys shall be drawn to a scale of not less than 1 inch equals 10 feet. The boundary survey shall be retraceable independent of the monuments or other markers that have been set during the survey.

# Section 106.2.1.2 Required Information

The following information shall be included on the map or maps:

1. The boundary lines of the subject property with their courses and lengths.

### **EXCEPTION**

Where approved by the Building Official for large sites, the extent of the survey may be limited to a minimum of 65 feet from the exterior wall of the proposed building, provided a vicinity map is shown indicating the location of the survey as it relates to the site as a whole.

- 2. Identification of and ties to the local, nearby, and permanent monuments. In areas where local monuments do not exist to control local boundaries, the Surveyor In Responsible Charge may be required to install permanent monuments conforming to City standards to perpetuate any boundary lines established.
- 3. A Basis Of Survey statement that identifies how the boundary lines for the site have been developed (i.e.: "This survey is based on the lines and dimensions shown on Parcel Map 1234, filed June 1, 1950, ...").
- 4. A Basis of Bearings statement that identifies how the bearings for the boundary lines have been derived (i.e.: "The bearings of this map are based upon the monument line of Smith Street, taken as N 45° W as shown ... ").
- 5. Identification of the locations and type of monuments or other makers set by the Surveyor In Responsible Charge with the elevations above and below City of Oakland datum or Port of Oakland datum, as applicable. A boundary survey map need not include references to elevations where shown on a separate topographic survey map. Boundary survey maps for vertical subdivisions of real property shall include references to elevations above and below

City of Oakland datum or Port of Oakland datum, as applicable. Where Port of Oakland datum is used, a graphical conversion to City of Oakland datum shall be provided.

- 6. The record distance along the public right-of-way line from a side property line to the nearest intersecting street.
- 7. The distance and direction from a frontage corner of the site to the nearest existing fire hydrant.
- 8. Contour lines of the existing ground surface elevations with an interval spacing not more than five (5) feet. Elevations shall be referenced to City of Oakland datum or Port of Oakland datum, as applicable.

### **EXCEPTION**

Where approved by the Building Official, elevations of selected points on the ground ("spot" elevations) may be provided in lieu of contour lines for sites with relatively level topography.

Where Port of Oakland datum is used, a graphical conversion to City of Oakland datum shall be provided.

- 9. Grades and contours shall extend to the centerline of improved streets and to the opposite side of the public right-of-way on unimproved streets and to a minimum of ten (10) feet beyond the side and rear property lines.
- 10. The location of all existing buildings or other pertinent structures (retaining walls, arbors, etc.) on the property.
- 11. The locations of existing public and private infrastructure improvements, including curbs, sidewalks, pavement, sewers, conduits, waterways, and culverts, either on or affecting the property and any proposed easements required in connection therewith.
- 12. The location, nature, and record information, of all public and private easements of record located on or directly affecting the site.
- 13. The location and width of existing driveways, referenced to any existing driveways within fifty (50) feet, with an indication of the percentage gradient of the existing driveway;
- 14. The location of traffic signal poles, street lighting standards, fire hydrants, sidewalk boxes, street trees, signs, pull boxes, parking meters or parking pay stations, utility poles, City Monuments and/or bench marks, and any other utilities or fixed objects within fifty (50) feet of a proposed driveway that may interfere with access to the property.
- 15. The location at the approximate center of the base and the diameter at breast height of all protected trees as required by Chapter 12.36 of the Oakland Municipal Code;
- **16.** A North arrow, the date that the field survey was performed, the area of the site, the scale of the plat, and a title block which includes the legal description of the site (i.e.: "Lot 2 of Parcel Map 1234, recorded June 1, 1950, ...");

- 17. Existing horizontal or vertical curves within three hundred (300) feet of a proposed driveway;
- 18. The location of existing crosswalks and bus stops within one hundred (100) feet of a proposed driveway.
- 19. Any additional information necessary to obtain compliance with this Code or related State laws and local ordinances as determined by the Building Official, including, but not limited to,:
  - a. boundary closure and area calculations (2 copies, sealed and signed by the surveyor);
  - **b.** evidence of compliance with State laws relating to mandatory filing of Corner Record(s) or a Record of Survey.
- 20. A statement signed by the Surveyor In Responsible Charge for the boundary survey map and/or topographic survey map as follows:
  - a. For use when the boundary survey (and/ or easement determination) and topographic survey are performed by, or under the responsible charge of, the same surveyor:

### BOUNDARY AND TOPOGRAPHIC SURVEY STATEMENT

This map correctly represents a survey made by me or under my direction in conformance with the requirements of the California Land Surveyors' Act at the request of insert owner or agent's name, ondate
I hereby state that all existing grades and contours are based upon <u>City of Oakland</u> <u>Port of Oakland</u> (select one) datum
I hereby further state that to the best of my knowledge all provisions of applicable state laws and local ordinances have been fully satisfied.
I hereby further state that the parcel(s) designated by my survey and shown on this map is (are) the same as that shown on (select the applicable statement from the following)
<ul> <li>that (those) certain deed(s), recorded <u>date</u>, <u>insert recording information:</u> <u>series, O.R., etc</u>, in the Office of the Alameda County Recorder, and identified on         the current equalized assessment roll of the Alameda County Assessor as Parcel No.:         <u>insert APN</u></li> </ul>
<ul> <li>that certain Map entitled: map name , filed on <u>date</u>, in Book of Maps, pages, in the Office of the Alameda County Recorder</li> </ul>
Parcel Map Waiver Map, recorded <u>date</u> , <u>insert recording information: series</u> , O.R., etc., in the Office of the Alameda County Recorder

I hereby further state that in accordance with the California Land Surveyors' Act the performance of this survey (select the applicable statement from the following choices)

• does not require a Corner Record or Record of Survey to be filed.

- requires that a Corner Record be filed and I will file (or have filed) a corner record within the time limits prescribed by State Law. Once filed by the County Surveyor in official records I will provide a copy to the City Surveyor's office.
- requires that a Record of Survey be filed with the Alameda County Surveyor, and I will (or have) file(d) same within the time limits prescribed by State Law. If, in the course of such filing, changes are necessary to the Record of Survey that reflect upon the survey submitted to the City of Oakland, I will promptly submit a corrected copy of said survey to the City.

I hereby acknowledge that this survey shall be a public record and may be available for inspection and distribution to the general public.

<u>signature</u>	_	date	, 20	
(typed name)	-			
P.L.S. (or P.E.) No	Expires	date	, 20	

**b.** For use when the boundary survey (and/ or easement determination) is not performed by, or under the responsible charge of, the surveyor who is responsible for the topographic survey:

### **BOUNDARY SURVEY STATEMENT**

This map correctly represents a boundary	survey n	nade by me or unde	r my direction in
conformance with the requirements of the	Californ	ia Land Surveyors'	Act at the request of
insert owner or agent's Name	, on	date	

I hereby further state that, to the best of my knowledge all provisions of applicable state laws and local ordinances have been fully satisfied.

I hereby further state that in accordance with the California Land Surveyors' Act the performance of this survey (select the applicable statement from the following choices)

- does not require a Corner Record or Record of Survey to be filed.
- requires that a Corner Record be filed and I will file (or have filed) a corner record within the time limits prescribed by State Law. Once filed by the County Surveyor in official records I will provide a copy to the City Surveyor's office.
- requires that a Record of Survey be filed with the Alameda County Surveyor, and I will (or have) file(d) same within the time limits prescribed by State Law. If, in the course of such filing, changes are necessary to the Record of Survey that reflect upon the survey submitted to the City of Oakland, I will promptly submit a corrected copy of said survey to the City.

I hereby acknowledge that this survey shall be a public record and may be available for inspection and distribution to the general public.

signature		<u>d</u> ate	20
(typed name)			
P.L.S. (or P.E.) No	Expires	date	, 20
c. For use when the topographic survey for the boundary survey (and/ or ease			he surveyor who is responsib
TOPOGRAPH	IC SURVEY	STATEM	1ENT
This map correctly represents a topo conformance with the requirements insert owner or agent's nam	of the Califor	rnia Land S	
I hereby state that the property bound performed by <u>insert name and work</u> , on <u>date</u> , 20 .			
I hereby state that all existing grades Oakland (select one) datum.	s and contour	s are based	upon City of Oakland/ Port o
I hereby further state that, to the bes laws and local ordinances have been			rovisions of applicable state
I hereby acknowledge that this surveinspection and distribution to the ge		oublic reco	rd and may be available for
signature (typed name)		date	, 20
P.L.S. (or P.E.) No	Expire	s <u>date</u>	, 20
21. A public advisory as follows:			

### **PUBLIC ADVISORY**

This map is based on private surveys performed by licensed professionals and will not be updated or corrected by the City of Oakland after its filing. No warranty, either expressed or implied, is made by the City of Oakland that this map and the survey information on which it is based is correct, accurate, and current, nor that the City will retain for public inspection any related information which may be subsequently submitted to the City, including alleged or actual discrepancies, inaccuracies, deficiencies, and errors.

Section 106.2.2 Plot Plan

# Section 106.2.2.1 Required Submittal

All applications for a building permit for a new building, or as otherwise required by the Building Official, shall be accompanied by a Plot Plan which has been certified within 3 years prior to date of permit application. The plot plan shall be based upon and show all information that is required to be shown upon the boundary survey and topographic survey maps of subject site. Four (4) wet signed and sealed copies of the plot plan shall be submitted with the permit application. Scale of the plot plan shall be no smaller than 1 inch equals 10 feet.

### Section 106.2.1.2 Required Information

The following information shall be included on the Plot Plan:

- 1. All relevant data from boundary survey and topographic survey.
- 2. Locations of the proposed building and other structures and improvements with proper references to every existing building and other structure and improvement on the property. Existing buildings and other structures and improvements indicated on the survey and that will be (or have been since the survey was prepared) demolished should be indicated as such on the plot plan.
- 3. Design of all off-street parking and loading facilities, including parking stall size, angle of parking, aisle width, interior circulation and proposed grades. If a parking structure is being constructed, a reference to this should be made on the plot plan.
- 4. Location and dimensions of ground level usable open space as required by the Planning Code.
- 5. Indication of landscaping and screening as required by the Planning Code.
- 6. Indication as to which protected trees, if any, as defined in Chapter 12.36 of the Oakland Municipal Code may be removed or damaged by proposed construction.
- 7. The proposed street grades along the property line contiguous to the street in not less than three places, where property shown on plat abuts on an unimproved street.
- 8. The location, ties to boundary monuments, and elevations of all proposed improvements, including parking pads, garages, buildings, interior floors, decks, retaining walls, exterior stairways, and driveways.
- 9. The location of the proposed building sewer connecting the proposed improvements to the main sewer with the flow line elevation shown at the main sewer connections.
- 10. The location, width, and grades of proposed driveways, properly referenced to any existing driveways, poles, signs, hydrants, or any fixed objects within 50 feet, that may interfere with access to the property.
- 11. All proposed grades, elevations, and contours based upon City of Oakland datum or Port of Oakland datum, as applicable.

- 12. All proposed contour lines at not more than five foot intervals, which contours shall extend over the portion of the public right-of-way proposed to be improved.
- 13. Where roof rain leaders cannot drain to the street or where storm water runoff is concentrated, an acceptable drainage plan prepared by a registered design professional is required.
- 14. Any additional information necessary to obtain compliance with this Code or related State laws or local ordinances as determined by the Building Official.
- 15. A Designer's Statement:

### **DESIGNER'S STATEMENT**

This plot plan correctly represents a plot plan made by me or under my direction.

I hereby state that to the best of my knowledge all provisions of applicable State laws and local ordinances have been fully satisfied.

	on a survey by (date of surve	(name and ey) that was in	license no. of	surveyor)
thereof as being based	upon City of Oakland	datum.		
(OR, if applicable):	·			
I hereby further state the		•		-
plot plan are based upo				
surveyor)	(da	te of survey) _	and	d a topographic
survey by	(name and license no.	of surveyor)	dat	ed
(date of survey)				
• • • • • • • • • • • • • • • • • • • •	kland/ Port of Oakland	•	•	
	•			, 20
(signature)		(dat	e)	_,
Title:	License No:		Expires	, 20

15.04.142 In Section 108.1 of Appendix Chapter 1 of the California Building Code, replace this section in its entirety with section 15.04.065 of this Chapter.

15.04.144 In Section 108.4 of Appendix Chapter 1 of the California Building Code, replace "... Building Official..." with "as established in the Master Fee Schedule".

15.04.146 In Section 108.5 of Appendix Chapter 1 of the California Building Code, replace "... that are prescribed by law..." with "as established in the Master Fee Schedule", and also add the following paragraph:

"Re-inspection fees may be assessed when the Inspection Record Card, Approved Plans, Correction Notices, Conditions of Approval, Conditions of Compliance, or other necessary permits or documents are not readily available to the inspector; or for failure to provide unimpeded access on the date and time for which the inspection is scheduled; or for failure to comply with a Stop Work Notice; or for deviating from Approved Plans requiring the approval of the Building Official or other City Department".

**15.04.148** In Section 108.6 of Appendix Chapter 1 of the California Building Code, delete this section in its entirety.

15.04.150 In Section 109.3.8 of Appendix Chapter 1 of the California Building Code, replace this section in its entirety with the following:

"In addition to the scheduled inspections specified above, the Building Official may make investigations, re-inspections, or compliance monitoring inspections, or require other inspections of any construction work to ascertain compliance with the provisions of this code and Conditions of Compliance and other laws which are enforced by the City and assess fees as established in the Master Fee Schedule."

**15.04.152** In Section 109.3 of Appendix Chapter 1 of the California Building Code, add the new subsection:

# 109.3.11 Re-inspections

To obtain a re-inspection, the applicant shall first pay the re-inspection fee as established in the Master Fee Schedule and then schedule a re-inspection.

**15.04.154** In Section 109.6 of Appendix Chapter 1 of the California Building Code, add the following subsections:

# 109.6.1 Major Inspection - Foundation

Before concrete or grout is placed, approval of a Foundation Inspection shall be contingent upon receipt and approval of required certifications, tests, and reports; receipt of fees, including investigation, re-inspection, compliance monitoring, and increased valuation of work; receipt of required City and outside agency approvals; removal of vegetation and completion of excavations for footings; installation and approval of required forms, reinforcing and prestressing steel, and structural embedments; and installation and approval of required electrical, mechanical, plumbing, fire extinguishing, and communication conduits, pipes, ducts, inserts, embedments, and similar systems, components, or ancillary equipment items.

Where inspection is performed under the requirements of California Building Code Chapter 17 (Special Inspections), receipt of certifications, tests and reports resulting from such inspection shall be received prior to approval or partial approval of any Major Inspection. All materials for the foundation not otherwise required to be secured in place shall be on the jobsite, except for concrete which is ready mixed in accordance with CBC Standard No. 19-3.

# 109.6.2 Major Inspection - Concrete Slab or Under Floor

Before concrete is placed or floor sheathing is installed, including subfloor, approval of a Concrete Slab or Under Floor Inspection shall be contingent upon receipt and approval of required certifications, tests, and reports; receipt of fees, including investigation, re-inspection, compliance monitoring, and increased valuation of work; receipt of required City and outside agency approvals; installation and approval of required forms, reinforcing and prestressing steel, and structural embedments; and installation and approval of required in-slab or underfloor required electrical, mechanical, plumbing, fire extinguishing, and communications conduits, pipes, ducts, vents, vapor barriers, insulation, and similar systems, components, or ancillary equipment items.

Where inspection is performed under the requirements of California Building Code Chapter 17 (Special Inspections) of the California Building Code, receipt of certifications, tests and reports resulting from such inspection shall be received and approved prior to approval or partial approval of any Major Inspection.

Where under-floor conditions and clearances are determined to be readily accessible as defined herein, the Building Official may authorize and approve the installation of sub-floor/floor sheathing prior to the satisfaction of all conditions specified in paragraph one of this section. All documents related to off-site manufacture, third party approval/inspection of materials or workmanship must be received and approved by the Building Official prior to approval or partial approval of any subsequent work which is supported by the concrete slab or foundation and sub-floor assembly.

# 109.6.3 Major Inspection - Frame

Approval of a Frame (Rough) Inspection shall be contingent upon receipt and approval of required certifications, tests, and reports; receipt of fees, including investigation, re-inspection, compliance monitoring, and increased valuation of work; receipt of required City and outside agency approvals, including off-site fabrication of components; installation and approval of weatherproofing for the roofing system, all framing, fire blocking, draft stopping, and bracing; installation of noise and energy-saving insulating materials; installation and approval of chimneys; and installation and approval of required electrical, mechanical, plumbing, fire extinguishing, and communication conduits, pipes, ducts, inserts, embedments, and similar systems, components, or ancillary equipment items. Additionally, approval of the Frame inspection shall be contingent upon approval of the lath or gypsum wallboard inspection. No work shall be concealed until specific approval has been given (framing, etc.).

# 109.6.4 Major Inspection - Final

Approval of a Final Inspection shall be contingent upon approval of all other required inspections; receipt and approval of required certifications, tests, and reports; receipt of fees; receipt of required City and outside agency approvals; completion and approval of finish grading and all public and site improvements; installation and approval of all electrical, mechanical, plumbing, fire extinguishing, and communication conduits, pipes, ducts, vents, insulation, vapor barriers, and similar systems, components, or ancillary equipment; and the building being completed and ready for occupancy.

**15.04.156** In Section 112 of Appendix Chapter 1 of the California Building Code, replace this section in its entirety with section 15.04.025 of this Chapter.

15.04.158 In Section 108.8 of the California Building Code, delete this section in its entirety.

### **Article II**

### Part 2 - Administrative Amendments To The California Electrical Code

15.04.200 Refer to Article I - General Administrative Amendments of this chapter.

### 15.04.205 Title

These regulations shall be known as the "Oakland Amendments Of The California Electrical Code," may be cited as such, and will be referred to herein as "this chapter," "this Code," or "the Oakland Building Construction Code."

# 15.04.210 Purpose

- A. The purpose of this Code is to provide minimum standards to safeguard life or limb, property and public welfare by regulating and controlling the design, construction, installation, quality of materials, location, operation, maintenance and use of electrical systems, equipment, machinery, fixtures, and appliances within this jurisdiction.
- **B.** The purpose of this Code is not to create or otherwise establish or designate any particular class or group of people who will or should be especially protected or benefited by the terms of this Code.

# 15.04.215 Scope

- A. The provisions of this Code shall apply to the installation, alteration, repair, relocation, replacement, addition, use, or maintenance of electrical systems, equipment, machinery, fixtures and appliances. Additions, alterations, repairs and replacement of electrical systems or equipment shall comply with the provisions for new equipment and systems.
- **B.** Where, in any specific case, different sections of this Code specify different materials, methods of construction or other requirements, the most restrictive shall govern. When there is a

conflict between a general requirement and a specific requirement, the specific requirement shall be applicable.

# 15.04.220 Existing Electrical Systems

- A. Additions, alterations, replacements, or repairs may be made to any electrical system without requiring existing electrical system to comply with all the requirements of this Code, provided the addition, alteration, replacement, or repair conform to the requirements for a new electrical system or equipment. Additions, alterations, replacements, or repairs shall not cause an existing system to become dangerous, hazardous, or otherwise unsafe.
- **B.** Electrical systems and equipment lawfully in existence at the time of the adoption of this Code may have their use, maintenance or repair continued if the use, maintenance or repair is in accordance with the original design and location and no hazard to life or limb, property, or public welfare has been created by such electrical system.
- C. Electrical systems and equipment which are a part of any building or structure undergoing a change in use or occupancy, as defined in the California Building Code, shall comply will all requirements of this Code which may be applicable to the new use or occupancy.
- **D**. All electrical systems, equipment, materials and appurtenances, both existing and new, and all parts thereof shall be maintained in proper operating condition. All devices or safeguards which are required by this Code shall be maintained in conformance with the code edition under which installed. The property owner or designated agent shall be responsible for maintenance of electrical systems and equipment. To determine compliance with this subsection, the Building Official may cause an electrical system or equipment to be inspected.
- E. Electrical systems or equipment which are a part of buildings or structures moved into or within this jurisdiction shall comply with the provisions of this Code for new installations.

### 15.04.225 Alternate Materials And Methods Of Construction

- A. The provisions of this Code are not intended to prevent the use of any material or method of construction not specifically prescribed by this Code provided any such alternate has been approved and the use authorized by the Building Official.
- **B**. The Building Official may authorize any alternate, provided the Building Official finds the proposed design is satisfactory for the intended use and complies with the provisions of this Code and that the material, method or work offered is for the purpose intended, at least equivalent to that prescribed by this Code in suitability, strength, effectiveness, fire resistivity, durability, ampacity, and safety.
- C. The Building Official shall require sufficient evidence or proof be submitted to substantiate claims made regarding the use of alternates. The details of any approval actions for an alternate shall be retained by the Building Official for the period required for retention of public records.

### 15.04.230 Modifications

Whenever there are practical difficulties involved in carrying out the provisions of this Code, the Building Official may grant modifications for individual cases. The Building Official shall first find that a special individual reason makes the strict letter of this Code impractical and the modification does not lessen health life and fire safety requirements. The details of actions granting modifications shall be recorded and shall be retained by the Building Official for the period required for retention of public records.

### 15.04.235 Tests

Whenever there is insufficient evidence of compliance with the provisions of this Code, or evidence that a material or method does not conform to the requirements of this Code or in order to substantiate claims for alternate materials or methods, the Building Official may require tests as evidence of compliance to be made at no expense to the jurisdiction. Test methods shall be as specified in this Code or by other recognized test standards. In the absence of recognized and accepted test methods, the Building Official shall specify the testing procedures. All tests shall be performed by an approved agency. Reports of tests shall be retained by the Building Official for the period required for retention of public records.

# 15.04.240 Powers And Duties Of The Building Official

- A. The Building Official is authorized and directed to enforce all the provisions of this Code. For such purposes, the Building Official shall have the powers of a law enforcement officer. The Building Official shall have the power to render interpretations of this Code and to adopt and enforce rules and regulations supplemental to this Code as may be deemed necessary in order to clarify the application of the provisions of this Code. Such interpretations, rules and regulations shall conform with the intent and purpose of this Code.
- **B.** In accordance with the prescribed procedures and with the approval of the appointing authority, the Building Official may appoint such number of technical officers, inspectors, other employees, or agents as shall be authorized from time to time. The Building Official may deputize such inspectors or employees as may be necessary to carry out the functions of the Code Enforcement Agency.
- C. When it is necessary to make an inspection to enforce the provisions of this Code, or when the Building Official has reasonable case to believe that there exists in a building or upon a premises a condition which is contrary to or in violation of this Code which makes the building or premises unsafe, hazardous, or dangerous, the Building Official may enter the building or premises at reasonable times to inspect or to perform the duties imposed by this Code, provided that if such building or premises be occupied that credentials be presented to the occupant and entry requested. If such building or premises be unoccupied and unsecured, the Building Official shall first make a reasonable effort to locate the property owner or other person having charge or control of the building or premises and request entry. If entry is refused, the Building Official shall have recourse to the remedies provided by law to secure entry.

- **D**. When any work is being done contrary to the provisions of this Code, the Building Official may order the work stopped by notice in writing served on any persons engaged in the doing or causing such work to be done and such persons shall forthwith stop work until authorized by the Building Official to proceed with the work.
- E. The Building Official shall have the authority to disconnect electrical utility service or energy supplies to a building, structure, premises, or equipment regulated by this Code in case of emergency where necessary to eliminate an immediate hazard to life or limb, property, or public welfare. The Building Official shall, whenever possible, notify the serving utility, the property owner and occupant of the building, structure or premises of the decision to disconnect prior to taking such action, and shall notify such serving utility, property owner and occupant for the building, structure or premises in writing of such disconnection immediately thereafter.
- F. When the Building Official determines that any equipment, or portion thereof, regulated by this Code has become unsafe, hazardous, or dangerous to life or limb, property, or public welfare, the Building Official shall order in writing that the equipment either be removed or restored to a safe condition, as appropriate, within a fixed time. Persons shall not use or maintain defective equipment after receiving a notice. When an electrical system or equipment is to be disconnected, written notice indicating the causes therefore shall be given within twenty-four (24) hours to the serving utility, the property owner and occupant of the building, structure or premises. When any electrical equipment or system is maintained in violation of this Code, and in violation of a notice issued as provided in this section, the Building Official shall institute an appropriate action to prevent, restrain, correct or abate the violation.
- **G.** Persons shall not make connections from an energy or power supply nor supply energy or power to any equipment regulated by this Code which has been disconnected or ordered to be disconnected by the Building Official or the use of which has been ordered to be discontinued by the Building Official until the Building Official authorizes the reconnection and use of such equipment.
- H. The Building Official or his or her authorized representative, charged with the enforcement of this Code, acting in good faith and without malice in the discharge of the duties required by this Code or other pertinent law or ordinance shall not thereby be rendered personally liable for damages that may accrue to persons or property as a result of an act or by reason of an act or omission in the discharge of such duties. A suit brought against the Building Official or another employee, representative, official, officer, agent, or volunteer of the City of Oakland because of such act or omission performed by the Building Official or another employee, representative, official, officer, agent, or volunteer of the City of Oakland in the enforcement of any provision of such codes or other pertinent laws or ordinances implemented through the enforcement of this Code or enforced by the Code Enforcement Agency shall be defended by this jurisdiction until final termination of such proceedings, and any judgment resulting there from shall be assumed by the City of Oakland.

This Code shall not be construed to relieve from or lessen the responsibility of any person owning, operating or controlling any electrical system or equipment regulated herein for damages to persons or property caused by defects, nor shall the Code Enforcement Agency or the

City of Oakland be held as assuming any such liability by reason of the inspections authorized by this Code or any permits or certificates issued under this Code.

I. The Building Official may request, and shall receive the assistance and cooperation of other officials of this jurisdiction so far as is required in the discharge of the duties required by this Code or other pertinent law or ordinance.

### 15.04.245

### A. General Standards

Refer to Section 15.04.015 of this chapter.

# B. Appeals

Refer to Section 15.04.025 of this chapter.

### C. Violations

Refer to Section 15.04.030 of this chapter.

# 15.04.250 Application For Permit

- A. Refer to Section 15.04.035 of this chapter.
- **B.** Except as permitted in subsection C of this section, no electrical system or equipment regulated by this Code shall be installed, altered, repaired, replaced or remodeled unless a separate electrical permit or "Combination Permit" has been obtained from the Building Official for each separate building or structure.
- C. Refer to National Electrical Code (NEC) Article 90-2(a).
- **D**. Exemption from the permit requirements of this Code shall not be deemed to grant authorization for work to be done in violation of the provisions of this Code or other laws or ordinances of this jurisdiction.
- E. A plant permit may be issued by the Building Official to a person not holding a California State Electrical Contractor License but who is regularly employed as an electrician in a plant or business. The permit shall be issued upon written application from the owner or manager of the plant or business in which the person is employed. The application shall certify that the proposed permittee is competent to perform the electrical work and shall certify that all work will be performed under the requirements of this chapter.

All electrical work shall be done under the direction and supervision of the permittee. All electrical work, excepting the maintenance and repair of existing electrical installation and repair, shall be done only under permits issued as otherwise required under this article.

The owner or manager of any plant or business employing the permittee shall immediately notify the Building Official in writing upon termination of the permittee and such notification shall cancel the plant permit.

Evidence of any electrical work being done under the plant permit that is in violation of any provisions of this chapter shall be grounds for immediate suspension or cancellation of the permit by the Building Official. The plant permit is renewable on an annual basis from the date of issuance for a fee established by the master fee schedule.

F. A meter reset permit shall be issued by the Building Official to any person for the purpose of reconnecting a supply of service or reinstalling a meter whenever the serving utility shall disconnect electrical service supply or remove any electrical meter to a structure or building for a period of ninety (90) days or more in a residential occupancy or thirty (30) days or more in a commercial or industrial occupancy. An inspection of the occupancy and other pertinent facilities is required. The serving utility will be authorized by the Building Official to reconnect the supply of service or reinstall any meter upon the condition that the occupancy is found to be void of hazardous or unsafe conditions.

Any hazardous or unsafe conditions found will require that an electrical permit (or combination permit) be obtained, as elsewhere contained in this chapter, to correct those same conditions. The meter reset permit does not cover electrical work as elsewhere contained in this chapter. Meter reset permit fee is established by the master fee schedule.

### 15.04.255

### A. Information On Submittals

Refer to Section 15.04.040 of this chapter.

# C. Signing And Sealing Of Plans And Other Submittal Documents

Refer to Section 15.04.045 of this chapter.

### D. Persons Who May Prepare Plans

Refer to Section 15.04.050 of this chapter.

### 15.04.260 Permit Issuance

A. The application, plans, diagrams, calculations, specifications, computations and other data filed by an applicant for permit shall be reviewed by the Building Official. Such data may be reviewed by other departments of this and other jurisdictions to verify compliance with applicable laws under their jurisdiction. When the Building Official finds that the work described in an application for a permit and the plans, diagrams, computations, calculations, specifications and other data filed therewith conform to the requirements of this Code and other pertinent laws, ordinances and conditions of compliance for the abatement of violations of this Code and other

codes and ordinances and that the fees, charges, costs and assessments specified in the master fee schedule, as well as all penalties, have been paid, the Building Official shall issue a permit therefore to the applicant.

When issuing a permit where plans are required, the Building Official shall endorse in writing or stamp the plans as provided in the California Building Code. Such approved plans shall not be changed, modified or altered without authorization from the Building Official, and all work regulated by this Code shall be done in accordance with the approved plans.

The Building Official may issue a permit for the construction of a part of an electrical system before the entire plans and specifications for the whole system have been submitted or approved, provided adequate information and detailed statements have been filed complying with all pertinent requirements of this Code. The holder of a partial permit may proceed without assurance that the permit for the entire building, structure or electrical system will be granted.

- **B**. One set of reviewed plans, diagrams, calculations, specifications and computations shall be retained by the Building Official until final approval of the work covered therein. One set of approved plans and specifications shall be returned to the applicant, and said set shall be kept on the site of the building or work at all times during which the work authorized thereby is in progress.
- C. The issuance of a permit or approval of plans, calculations, specifications, diagrams, and computations shall not be construed to be a permit for, or an approval of any violation of any of the provisions of this Code or of other ordinances, rules, or regulations of the jurisdiction. Permits presuming to give authority to violate or cancel the provisions of this Code or of other ordinances, rules, or regulations of the jurisdiction shall not be valid.

The issuance of a permit based upon plans, calculations, specifications, computations and other data shall not prevent the Building Official from thereafter requiring the correction of errors in said plans, calculations, computations, specifications, and other data or from preventing building operations being carried on there under when in violation of this Code or of other ordinances of this jurisdiction.

### 15.04.265

# A. Expiration Of Permit Application Or Issued Permit

Refer to Section 15.04.055 of this chapter.

### B. Suspension Or Revocation Of Issued Permit

Refer to Section 15.04.060 of this chapter.

### C. Fees

Refer to Section 15.04.065 of this chapter.

# **15.04.270** Inspections

A. Electrical equipment and systems for which permits are required by this Code shall be subject to inspection by the Building Official and such electrical equipment and systems shall remain accessible and exposed for inspection purposes until approved by the Building Official. It shall be the duty of the permit applicant to cause the electrical equipment and systems to remain accessible and exposed for inspection purposes. Neither the Building Official nor the City of Oakland shall be liable for expense entailed in the removal or replacement of any material required to permit inspection. When the installation of an electrical system or equipment is complete, an additional and final inspection shall be made. Electrical systems and equipment regulated by this Code shall not be connected to the energy supply lines until authorized by the Building Official.

Approval as a result of an inspection shall not be construed to be an approval of a violation of the provisions of this Code or of other ordinances, rules, or regulations of the jurisdiction. Inspections presuming to give authority to violate or cancel the provisions of this Code or of other ordinances of the City of Oakland shall not be valid.

- **B.** The requirements of this section shall not be considered to prohibit the operation of mechanical systems installed to replace existing equipment or fixtures serving an occupied portion of the building in the event a request for inspection of such equipment or fixture has been filed with the Building Official not more than forty-eight (48) hours after such replacement work is completed, and before any portion of such electrical system is concealed by any permanent portion of the building.
- C. It shall be the duty of the person doing the work authorized by a permit to notify the Building Official that such work is ready for inspection. Every request for inspection shall be filed at least one working day before such inspection is desired. Such request may be in writing or by telephone at the option of the Building Official. It shall be the duty of the person requesting inspections required by this Code to provide access to and means for inspection of such work.
- **D.** In addition to the called inspections required by this Code, the Building Official may make or require other inspections of electrical work to ascertain compliance with the provisions of this Code and other laws which are enforced by the Code Enforcement Agency.
- E. A re-inspection fee may be assessed for each inspection or re-inspection when such portion of work for which inspection is requested is not complete or when required corrections have not been made. This provision is not to be interpreted as requiring re-inspection fees the first time a job is rejected for failure to comply with the requirements of this Code, but as controlling the practice of calling for inspections before the job is ready for inspection or re-inspection.

Re-inspection fees may be assessed, when the approved plans are not readily available to the inspector for failure to provide access on the date for which inspection is requested or for deviating from plans requiring the approval of the Building Official. Re-inspection fees shall be established and assessed in accordance with the master fee schedule ordinance. In instances

where re-inspection fees have been assessed, no additional inspection of the work will be performed until the required fees have been paid.

**F.** In addition to the inspections identified in this section, the Building Official may allow inspection by others in accordance with Section 15.04.055 of this chapter.

# 15.04.275 Connection Approval

- A. No person shall make connections from a source of energy to any electrical system or equipment regulated by this Code and for which a permit is required until approved by the Building Official.
- **B.** Whenever any person engaged in the distribution or sale of electrical energy shall set or install, or reset or reinstall, in, or about any building any meter for the measurement of electrical energy; or shall connect or reconnect supply or service to any installation of electrical equipment in, on, or about any building; or shall change the nominal voltage of supply for service to any installation of electrical equipment, in, on, or about any building; or shall change any such supply for service from two-wire to three-wire or vice versa, or from single phase to polyphase or vice versa, or from direct current to alternating current or vice versa, said person shall receive written authorization from the Building Official or the Building Official's designated representative, which authorization shall specify the location and address of the installation affected, provided, however, that said authorization need not be received with respect to any such meter installation or reinstallation or any such supply or service connection or reconnection, authorized by the Building Official or the Building Official's designated representative within thirty (30) days or more in residential occupancies or ninety (90) days or more in other occupancies of previous authorization; provided further that the Building Official may, at his or her discretion, waive temporarily or permanently any or all requirements of this section by giving written notice of such waiver to all persons engaged in the distribution or sale of electrical energy; and said Building Official may likewise at any time revoke such waiver by written notice to all such persons.
- C. The Building Official may authorize temporary connection of the electrical equipment to the source of energy for the purpose of testing the equipment, or for use under a temporary certificate of occupancy.
- **D.** Provisions shall not be made for installing more than a single utility meter in the service equipment for a single-family dwelling, including other structures on the same property, without written authorization by the Building Official prior to their installation.

### **15.04.280 Definitions**

In Article 100 - Part A of the California Electrical Code, add the following definitions:

# A. Multiple Family Dwelling

Occupancies shall include Group R, Division 2 and Group I, Division 2, as defined and used in the California Building Code.

# B. Family Room

A room or area in a dwelling unit separate from and contiguous to a kitchen and not used for eating, sleeping or sanitation purposes.

#### C. Recreation Room

Refer to Family Room.

### D. Show Window

Applicability shall further include all occupancies engaged in public commerce, including banking and real estate.

15.04.285 In Article 110 of the California Electrical Code, add the following new article:

### Article 110-35 SAFETY

Electrical equipment and systems shall be constructed, installed, operated, and maintained safely and potentially free from electrical shock or fire hazard.

#### Article II

# Part 3 - Administrative Amendments To The California Mechanical Code

15.04.300 Refer to Article I – General Administrative Amendments of this chapter.

15.04.305 In Section 101 of the California Mechanical Code, replace "Uniform Mechanical Code" with "Oakland Amendments of the California Mechanical Code".

15.04.310 In Section 104.1 of the California Mechanical Code, at the end of the first sentence add "... unless superseded by California or Federal law."

15.04.315 In Section 109 of the California Mechanical Code, replace this section in its entirety with Section 15.04.15 of this chapter.

15.04.320 In Section 110.1 of the California Mechanical Code, replace this section in its entirety with Section 15.04.025 of this chapter.

15.04.325 In Section 111 of the California Mechanical Code, replace this section in its entirety with Section 15.04.030 of this chapter.

### 15.04.330

- A. In Section 113.1 of the California Mechanical Code, add Section 15.04.035 of this chapter as the number 7 subparagraph.
- **B.** In Section 113.2 of the California Mechanical Code, replace "one" in "... one or more sets. . " in the first sentence with "three (3)".
- C. In Section 113.3 of the California Mechanical Code, replace this section in its entirety with Section 15.04.040 of this chapter.

### 15.04.335

- A. In Section 114.4.1 of the California Mechanical Code, replace the first sentence of the first paragraph with Section 15.04.055 of this chapter.
- **B.** In Section 114.5 of the California Mechanical Code, replace this section in its entirety with Section 15.04.060 of this chapter.

# 15.04.335

- A. In Sections 115.1, 115.2, and 115.3 of the California Mechanical Code, replace these sections in their entirety with Sections 15.04.065 and 15.04.070 of this chapter.
- **B.** In Section 115.5 of the California Mechanical Code, replace the second sentence in the number 2 subparagraph beginning ". . . The investigation fee shall. . " with Section 15.04.075 of this chapter.
- 15.04.340 In Section 116.6 of the California Mechanical Code, replace the fourth paragraph beginning "To obtain a re-inspection, . . ." with Section 15.04.200B of this chapter.
- 15.04.345 In Table No. 1-A of the California Mechanical Code, delete this table in its entirety.

### Article II

# Part 4 - Administrative Amendments To The California Plumbing Code

15.04.400 Refer to Article I – General Administrative Amendments of this chapter.

### 15.04.405

- **A.** In Section 101.1 of the California Plumbing Code, replace "Uniform Plumbing Code" with "Oakland Amendments of the California Plumbing Code".
- **B.** In Section 101.5.3 of the California Plumbing Code, add the following to the end of the first sentence "... unless superseded by California or Federal law."

C. In Section 101.5.6 of the California Plumbing Code, add "or within" between "... moved into" and "this jurisdiction..."

### 15.04.410

- **A.** In Section 102.2 of the California Plumbing Code, add Section 15.04.025 of this chapter as a new subsection 102.2.7.
- **B.** In Sections 102.3.1 and 102.3.2 of the California Plumbing Code, replace these sections in their entirety with Section 15.04.030 of this chapter.

### 15.04.415

- A. In Section 103.2.1 of the California Plumbing Code, add Section 15.04.035 of this chapter as a new section 103.2.1.7.
- **B.** In Section 103.2.2 of the California Plumbing Code, replace "one" in "... one or more sets..." in the first sentence of the first paragraph with "three (3)".
- C. In Section 103.2.3 of the California Plumbing Code, replace this section in its entirety with Section 15.04.040 of this chapter.
- **D.** In Section 103.3.4 of the California Plumbing Code,, replace the first sentence of the first paragraph with Section 15.04.055 of this chapter.
- E. In Section 103.3.5 of the California Plumbing Code, replace this section in its entirety with Section 15.04.060 of this chapter.
- **F.** In Sections 103.4.1 and 103.4.2 of the California Plumbing Code, replace these sections in their entirety with Sections 15.04.065 and 15.04.070 of this chapter.
- G. In Section 103.4.4 of the California Plumbing Code, replace the second sentence in the subparagraph beginning "The investigation fee shall..." with Section 15.04.160 of this chapter.
- H. In Section 103.5.6 of the California Plumbing Code, replace the fourth paragraph beginning "To obtain a re-inspection, . . ." in its entirety with Section 15.04.205B of this chapter.

### 15.04.420

- A. In Section 202.0 of the California Plumbing Code, replace "Administrative Authority" in its entirety with Section 15.04.075(A) of this chapter.
- **B**. In Section 202.0 of the California Plumbing Code, replace "Department Having Jurisdiction" in its entirety with Section 15.04.075(I) of this chapter.

- 15.04.425 In Section 301.1 of the California Plumbing Code, add Section 15.04.015 of this chapter as a new section 301.1.5.
- 15.04.430 In Section 301.2 of the California Plumbing Code, replace the last sentence in the first paragraph with the following:
  - "The Building Official may approve the system, method, or device when determined to be equivalent or superior."
- 15.04.435 In Section 301.4.5 of the California Plumbing Code, replace the first sentence in its entirety with the following:
  - "The Building Official may approve an alternative engineered design of a plumbing system when determined to conform with the intent of this Code."
- 15.04.440 In Section 316.2.2 of the California Plumbing Code, delete the phase beginning with "... and in gas piping...", and also add the following sentence at the end of the paragraph:

### Article II

# Part 5 - Administrative Amendments To The Uniform Swimming Pool, Spa, and Hot Tub Code

- 15.04.500 Refer to Article I General Administrative Amendments of this chapter.
- 15.04.505 In Section 1.3(a) of the Uniform Swimming Pool, Spa, And Hot Tub Code, at the end of the first sentence add "... unless superseded by California or Federal law."
- 15.04.510 In Section 1.7 of the Uniform Swimming Pool, Spa, And Hot Tub Code, replace this section in its entirety with Section 15.04.030 of this chapter.

### 15.04.515

- A. In Section 1.10 of the Uniform Swimming Pool, Spa, And Hot Tub Code, replace "in duplicate" in "... accompanied by plans in duplicate..." in the first sentence of the first paragraph with "in three (3) sets" in lieu thereof.
- **B.** In Section 1.10 of the Uniform Swimming Pool, Spa, And Hot Tub Code, add Section 15.04.035 of this chapter as the fourth major subdivision lettered "(d)."
- 15.04.520 In Section 1.11 of the Uniform Swimming Pool, Spa, And Hot Tub Code, replace Section 1.11 in its entirety with Sections 15.04.065, 15.04.070, and 15.04.075 of this chapter.

<sup>&</sup>quot;See section 1211.3 for gas piping joints."

15.04.525 In Section 1.15 of the Uniform Swimming Pool, Spa, And Hot Tub Code, replace this section in its entirety with Section 15.04.060 of this chapter.

# 15.04.530

- A. In Section 1.18 of the Uniform Swimming Pool, Spa, And Hot Tub Code, replace this section in its entirety with Section 15.04.025 of this chapter.
- **B.** After Section 1.18 of the Uniform Swimming Pool, Spa, And Hot Tub Code, add Section 15.04.055 of this chapter as a new section 1.19.
- 15.04.535 In Section 102 of the Uniform Swimming Pool, Spa, And Hot Tub Code, replace the definition of "Administrative Authority" in its entirety with Section 15.04.075(A) of this chapter.
- 15.04.540 In Section 310 of the Uniform Swimming Pool, Spa, And Hot Tub Code, replace this section in its entirety with the following:

### Section 310 - WASTE WATER DISPOSAL.

- (a) Waste water shall not be disposed of through any storm drain, seepage pit, underground leaching pit, or subsoil drainage line, and any line connected to a swimming pool, spa or hot tub.
- (b) Waste water shall be disposed of as hereinafter set forth in this section and the type of disposal proposed shall be approved by the Administrative Authority prior to the commencement of any work. A means of disposal of the total contents of the pool (periodic emptying) without surface runoff shall be as follows:

Waste water shall be disposed of to the Sanitary Sewer through a minimum three (3) inch P trap. The tailpiece from the trap shall extend a minimum of three (3) inches above finished grade and below finished floor grade. Traps need not be vented when located on the exterior of the building. The connection between the filter waste discharge piping and the P trap shall be made by means of an air gap.

Plans and specifications for any deviation from the above manner of installation shall be approved by the Administrative Authority before any portion of any such system is installed.

### Article III

### Part 1 - California Building Code

### Non-Administrative (Technical) Amendments

15.04.600 In Section 406.1.4 of the California Building Code, replace paragraph numbers 1 and 3 in their entirety with the following:

- 1. A Group U private garage shall be separated from the dwelling unit and its attic area by not less than 5/8 inch Type X gypsum wallboard or equivalent applied to the garage side of the separation. Door openings shall be protected either with a minimum 1-3/8 inches thick solid core wood or solid or honey comb core steel door or with a door complying with section 715.4.3. Doors shall be self-closing and self-latching and shall not connect with a sleeping room. Window openings are prohibited.
- 3. A separation between a Group U private carport and the dwelling unit is not required provided the carport is entirely open on two or more sides and there are no enclosed areas above. Door openings shall be protected with a minimum 1-3/8 inches thick solid core wood or solid or honey comb core steel door. Window openings shall be fixed (non-openable) and dual-pane tempered glazing. Door and window openings shall not connect with a sleeping room.

15.04.602 In Section 501.2 of the California Building Code, add the following two new sentences:

"Such building numbers shall be in accordance with the Oakland Municipal Code. In the Very High Fire Hazard Severity Zone, the numbers shall be a minimum of six inches high with a minimum stroke of 0.5 inch".

**15.04.604** In Section 601.1 of the California Building Code, add the following two new paragraphs:

"In an existing building where a retrofit seismic bracing system is to be installed, if the existing lateral bracing system is intact and undamaged and the retrofit system is providing bracing to meet current code then, the retrofit lateral bracing system is not considered as part of the structural frame for the purposes of this chapter. However, if the retrofit bracing system is connected, through bolts or welding, directly to an existing steel structural frame which permits a path of heat transfer through conduction to the structural steel frame, and the existing structural steel frame is required to meet a 1 hour or higher fire-resistive requirement, then the retrofit frame shall be 1 hour minimum fire-resistive.

In an existing building where a retrofit seismic bracing system is to be installed, if the existing lateral bracing system has been or is to be removed or has been damaged and no longer has its original lateral capacity, then the retrofit lateral bracing system is considered as part of the structural frame and shall meet the appropriate fire-resistive code requirements for the structural frame."

15.04.606 In Section 602.2 of the California Building Code, add the following new paragraph:

"When a sliding door is otherwise permitted by code and an unlabeled door is also permitted, a pocket sliding door constructed of wood may be used in a Type I and Type II construction as long as the perimeter of the pocket door construction abutting the interior of the wall construction is fire blocked or constructed with a fire-resistive separation in accordance with code. The pocket portion of the pocket sliding door is then considered as part of the door and

not part of the wall construction."

**15.04.608** In Section 602.3 of the California Building Code, add the following new paragraph after the second paragraph:

"When a sliding door is otherwise permitted by code and an unlabeled door is also permitted, a pocket sliding door constructed of wood may be used in Type III construction as long as the perimeter of the pocket door construction abutting the interior of the wall construction is fire blocked or constructed with a fire-resistive separation in accordance with code. The pocket portion of the pocket sliding door is then considered as part of the door and not part of the wall construction."

15.04.610 In Section 602.4 of the California Building Code, add the following new paragraph:

"When a sliding door is otherwise permitted by code and an unlabeled door is also permitted, a pocket sliding door constructed of wood may be used in Type IV construction as long as the perimeter of the pocket door construction abutting the interior of the wall construction is fire blocked or constructed with a fire-resistive separation in accordance with code. The pocket portion of the pocket sliding door is then considered as part of the door and not part of the wall construction."

15.04.612 In Section 602.5 of the California Building Code, add the following new paragraph:

"When a sliding door is otherwise permitted by code and an unlabeled door is also permitted, a pocket sliding door constructed of wood may be used in a Type V building as long as the perimeter of the pocket door construction abutting the interior of the wall construction is fire blocked or constructed with a fire-resistive separation in accordance with code. The pocket portion of the pocket sliding door is then considered as part of the door and not part of the wall construction."

15.04.614 In Section 702 of the California Building Code, add the following new definitions:

**CABLE** Uninsulated non-ferrous electrical conductors that are a component of a premises wiring system in accordance with the provisions of the California Electrical Code.

**VENTS** Plumbing vents that are a component of a sanitary Drain Waste and Vent system in accordance with the provisions of the California Plumbing Code.

**WIRES** Uninsulated non-ferrous conductors that are a component of a premises wiring or communication system in accordance with the provisions of the California Electrical Code.

**15.04.616** In Section 707.3 of the California Building Code, replace this section in its entirety with the following:

"The shaft enclosure shall be of materials permitted by the building type of construction and shall also have an approved lining or ducted exhaust when used to convey moisture-laden air or

product-conveying air, fumes, vapors, or dust in accordance with the provisions of the California Mechanical Code and the California Fire Code.

**15.04.618** In Section 714.2.4 of the California Building Code, add the following new paragraph:

"Supports and hangers for piping, mechanical equipment, and/or other appurtenances shall not be attached to structural members unless the appropriate fire protection of the structural member can be maintained."

15.04.620 In Section 714 of the California Building Code, add the following new subsection:

# 714.8 Spray Applied Fireproofing

The required thickness for spray applied fireproofing is variable with required fire resistance, thickness of spray-applied fire protection, heated perimeter of the structural steel member, type of steel member, average weight of steel member, and spray applied fireproofing material-dependent constants as determined in accordance with California Building Code Standards. Due to this complexity and the large number of thicknesses that may occur in a building which entails spray applied fireproofing the following means to approve a permit application and provide inspections shall be followed. Alternatives to these requirements may be submitted prior to permit issuance and may be used if approved by the Building Official.

Notes on plans should indicate:

- 1. The code edition to which the fireproofing schedule or drawing conforms;
- 2. The fireproofing material;
- 3. The number of the ICC Evaluation Report or other approved listing for the fire-proofing material to be used;
- 4. The listing, certification, and/or description of any non-standard configuration or assembly that is proposed to be used;
- 5. The name, address, facsimile number, and telephone number of the person responsible for the preparation of the plans (or shop drawings) related to spray-on fireproofing.
- 6. The thickness of the required fireproofing for each member or shall have a schedule that clearly identifies the location of each member and the thickness required for the spray applied fireproofing;
- 7. If applicable, details of any non-standard configuration or assembly required to clarify compliance or obtain approval;
- 8. Manufacturer's installation instructions shall be included in the plan submittal. Submittal of this information does not guarantee approval of any non-standard configuration or assembly. Calculations shall be submitted to indicate how the thickness for each member was determined. Providing only a list of all structural member sizes, W/D ratios, and associated thicknesses is not acceptable. Special inspection pursuant to California Building

Code Chapter 17 shall be performed in accordance with Standard 7-6 to verify that spray applied fireproofing has been accomplished in accordance with the approved plan notes and plans. The special inspector shall verify that fireproofing has not been removed or damaged prior to permanent coverage of any area with fireproofing and for the entire project prior to final inspection. Special inspection does not relieve applicant from obtaining regular City inspection.

# 15.04.622 In Section 716.5.3 of the California Building Code,

- A. delete Exception number 1 in its entirety; and
- **B.** add "... and fire dampers..." after the phrase "... smoke dampers..." and add "... which are vented to the outside..." after the phrase "... at penetrations of shafts..." in the first sentence in Exception number 2; and
- C. add "... 909.10, and 909.12..." in Exception number 2.3 after the phrase "... in accordance with the provisions of Sections 909.11...".
- **D.** replace Exception number 3 in its entirety with "In parking garages, smoke dampers and fire dampers are not required at penetrations of exhaust shafts or supply shafts of 2-hour fire-resistive construction that have no openings which communicate with other building occupancies".
- E. Add "... and fire dampers..." in the first sentence in Exception number 4.
- **15.04.624** In Section 716.5.4 of the California Building Code, delete "... or corridor... "from Exception number 1 in the first sentence beginning "The partitions are tenant separation...".
- **15.04.626** Add the following new Chapter 7B for Construction in the Very High Fire Hazard Severity Zone:

### Chapter 7B

### Special Requirements For Construction In The Very High Fire Hazard Severity Zone

### Section 701B Fire Resistance of Walls

Notwithstanding any other requirements to the contrary, exterior walls of structures shall comply with the provisions of the California Building Code and with the following requirements:

(1) If 50% or more of the wall requires repair or replacement, the entire wall shall conform to this section and all other relevant provisions of this code. The exterior wall surface materials, other than 7/8" three-coat stucco, must have a tightly sealed under-layment of 1/2" Type 'C' gypsum sheathing under 3/8" plywood siding or 3/4" drop siding, 5/8" Type 'X' under other siding, or an approved alternate. If the wall covering is wood shingle, it may only be replaced

with fire-retardant, pressure-treated wood shingle applied over the fire resistant construction wall covering described above and only in conjunction with a vegetative management program. Wood shake wall covering shall not be allowed.

- (2) All exterior walls are required to be protected with double blocking (two 2 inch nominal solid blocking) or equivalent approved by the Building Official between rafters at all roof overhangs under the exterior wall covering. No attic ventilation openings or ventilation louvers shall be permitted in soffits, eave overhangs, between rafters at eaves, or other overhanging areas unless approved by the building official. Attic or foundation ventilation louvers or ventilation openings in vertical walls shall not exceed one hundred and forty-four (144) square inches per opening and shall be covered with 1/4 inch mesh corrosion resistant metal screen. Attic ventilation shall also comply with the requirements of the California Building Code.
- (3) If less than 50% of the wall requires repair or replacement, the existing wall may be repaired or replaced in-kind. If the wall covering is wood shingle or wood shake, it may only be repaired or replaced with fire-retardant, pressure-treated wood shingle.
- (4) For enclosed patio covers, enclosed decks, sun rooms, and solariums where the wall between the living area and the enclosure is more than 50% open, the exterior horizontal and vertical surfaces shall meet the requirements as provided in the California Building Code. If the wall between the living area and the enclosure is less than 50% open, that wall must meet the fire-resistive requirements as provided in the California Building Code. The exterior horizontal and vertical surfaces of the enclosure may be constructed of any approved materials and/or methods pursuant to this section or other provisions of this code as long as the attachment of such structures to the fire-resistive wall maintains the fire-resistive integrity of the wall.

# Section 702B Fire Resistive Projections and Minor Structures

Notwithstanding, any other requirements to the contrary in this code, projections from structures in the Very High Fire Hazard Severity Zone without walls, including, but not limited to decks, balconies, roof overhangs, carports and attached patio covers, may be constructed of any approved materials and/or methods pursuant to this section or other provisions of this code. The attachment of these projections to the exterior fire-resistive wall shall be constructed so as to maintain the fire-resistive integrity of the wall.

# Section 703B.1 Roof Covering

The roof covering assembly includes the roof deck, under-layment, inter-layment, insulation and covering which is assigned a roof-covering classification.

### Section 703B.2 Fire Resistive Roof Covering

Roof covering on structures shall be fire resistive and shall be as follows:

Roof covering for newly constructed structures and existing structures for which the roof covering is replaced shall be a minimum Class A rated roof assembly. An existing roof covering with greater than 25% damage of the roof area shall be completely replaced or covered with an assembly having a minimum Class A rating. A Class A roof covering shall be one of the following roofing:

- (1) Any Class A roofing assembly;
- (2) Fibrous cement shingles or sheets;
- (3) Exposed concrete slab roof;
- (4) Slate shingles;
- (5) Clay of concrete roof tile;
- (6) Roof coverings of wood shingle or shake with less than 25% damage of the roof area shall be repaired with pressure-treated fire-retardant wood shingle or shake with a Class A rating or with any other Class A rated roof covering.

Roof coverings of other roof material as identified in the California Building Code with less than 25% damage of the roof area may be repaired with the same roof material unless the repair will adversely affect the existing structural members or create or perpetuate an unsafe or substandard condition.

### **EXCEPTIONS**

- (1) Wood Shingles shall be not less than Class C as provided of the California Building Code or other approved systems in areas designated as Fire Hazard Severity Zones by the Chief of the Fire Department.
- (2) Wood Shakes shall be not less than Class C as provided of the California Building Code or other approved systems in areas designated as Very High Fire Hazard Severity Zones by the Chief of the Fire Department.

# Section 703B.3 Roof Covering Application Requirements

In addition to any other requirements imposed by this section, application of roof covering materials in the Very High Fire Hazard Severity Zone shall comply with the requirements contained herein.

A. Existing roof covering with greater than 25% damage of the roof area and existing roof covering which is to be replaced shall be completely removed prior to the application of the new roof covering material.

#### EXCEPTION

Existing roof covering material need not be completely removed prior to the application of the new roof covering material if the existing roof covering material is of Class A rating and contains no wood products and the owner can demonstrate to the Building Official that the roof framing construction can structurally support the combined weight of the existing roof covering material and the new Class A roof covering material.

- **B.** The vendor of roof covering material shall provide certification of the roof covering material classification to the building owner. The building owner must provide such certification to the Building Official upon inspection.
- C. Repair or replacement of "flat" roof coverings shall not begin until authorized by the Building Official. Where evidence of ponding of water is present, an analysis of the roof structure for compliance with the California Building Code shall be made. The Building Official may require that corrective measures be made.

### **EXCEPTION**

An inspection by the Building Official to verify the existing conditions may be waived if the structure owner submits an inspection report prepared by a qualified Special Inspector, approved by the Building Official.

Section 704B Buildings or building groups shall be located at least thirty (30) feet apart to minimize fire spread potential. This may be reduced to a minimum of six (6) feet for each building or group of buildings provided all exterior walls within thirty (30) feet of another building or group of buildings are one-hour fire resistive construction or equipped with an approved automatic fire extinguishing system. The distance shall be measured at right angles from the adjacent building. This provision shall not apply to walls at right angles to the adjacent building or group of buildings.

**Section 705B** Combustible projections located where openings are not permitted or where protection of openings is required shall be of one-hour fire-resistive or heavy-timber construction conforming to the provisions of the California Building Code.

Section 706B Combustible exterior balconies, unenclosed roofs and floors, eaves, and similar architectural appendages on structures located within thirty (30) feet of another building or group of buildings shall be one hour fire resistive construction or heavy timber construction conforming to the provisions of the California Building Code or protected with an approved automatic fire extinguishing system.

### Section 707B Group R Occupancies

All new or reconstructed dwelling units shall be equipped with an approved automatic fire extinguishing system.

15.04.628 In Section 1008.1.1 of the California Building Code, replace Exceptions 1 and 5 in their entirety with the following:

### **EXCEPTIONS**

- 1. Door openings in a dwelling unit or sleeping unit which are not part of the required means of egress and which serve occupiable spaces shall be not less than 28 inches in width.
- 5. Door openings in a dwelling unit or sleeping unit which serve occupiable spaces shall not be less than 80 inches in height.

**15.04.630** In Section 1008.1.1 of the California Building Code, delete Exceptions 6 and 7 in their entirety.

#### 15.04.632

A. In Section 1013 of the California Building Code, add the following new subsection:

#### 1013.7 Tensioned Cables

Spaced intermediate tensioned cables in guards (guardrails) shall not be considered as meeting the requirements of this section.

### **EXCEPTION**

A private dwelling unit with less than 10 occupants may use intermediate tensioned cables in guardrails to meet the requirements of this section if the tension cables are spaced no more than two and one-half inches on center and are positively anchored at each end and if anchored to wood rely only on compression in the wood to resist the tension in the cable.

15.04.34 In Table 1017.1 of the California Building Code, replace the number zero with the number 1 in the row for A, B, F, M, S,U occupancy under the column heading With Sprinkler System.

15.04.36 In Section 10024.6 of the California Building Code, delete the phrase "... for a Group E occupancy.." from the first sentence in the Exception and delete the first sentence beginning "For other than Group E buildings..." in its entirety from the number 2 Exception.

**15.04.38** In Section 1026.5.2 of the California Building Code, delete the word "ladder" throughout this section.

**15.04.640** In Section 1203.4.1 of the California Building Code, add the following new subsection:

### 1203.4.1.3 Closets

The ventilation for a domestic clothes washer and/or dryer located in a closet in a dwelling unit may also comply with the following:

1. The area of a closet containing a washer and/or dryer shall be included in the area under consideration for determining ventilation requirements for the room to which the closet is accessory. In the case where a closet containing a washer and/or dryer is located in a

hallway, the area of closet and hallway shall be included in the area under consideration for determining ventilation requirements for the room or rooms which will provide the ventilation to the hallway and closet.

- 2. Louvers shall be provided on doors to a closet containing a washer and/or dryer; and
- 3. Natural ventilation shall be not less than one twentieth of the total floor area, with a minimum of 1-1/2 square feet. Mechanical ventilation of five air exchanges per hour may be provided as an alternative.
- 4. A dryer vent installed in accordance with the California Mechanical Code is necessary but is not considered as providing any ventilation required by this section.

**15.04.642** In Section 1505.1.1 and 1505.1.3 of the California Building Code, add the new sentence:

"The roof covering shall include the roof deck, under-layment, inter-layment, insulation and weather-exposed covering which is assigned a roof-covering classification."

- **15.04.644** In Table 1607.01 of the California Building Code, add the following new footnote referenced to Occupancy Or Use number 5 Balconies:
  - "o. Balcony loading shall be applicable for a cantilevered or partially cantilevered structural system."

**15.04.646** Add the following new Chapter 16B for requirements for Private Driveway Access Bridges:

### Chapter 16B

### **Private Driveway Access Bridges**

# Section 1601B - Driveway Bridge Design and Repair

Every driveway bridge and portion thereof for vehicular access to private garages or private parking shall be designed and constructed as a minimum in accordance with the general requirements of this Code as amended by this Section.

This Section provides design loadings for driveway bridges, driveway approach decks, garage floors, and carport floors. Secondly, this division provides for minimum prescriptive requirements for alterations or repairs of varying scope to existing driveway bridges. This Section considers the possibility of temporary heavy loads on unroofed vehicle approach decks due to construction equipment, moving vans, and heavy emergency or other vehicles using the deck. On these bases, the appropriate design loads have been determined.

In all cases lateral loads for wind or seismic shall be considered and provided for. Repairs and alterations of existing decks shall conform to the criteria pursuant to this Chapter.

### Section 1602B - Design Loads

# Section 1602B.1 Case I

Design loads for driveway bridges serving private residential parking garages/carports with restricted headroom and no repair or refueling. Design loads shall be pursuant to Chapter 16 of the California Building Code for concentrated load and uniform live load (Private or pleasure-type motor vehicle storage). Reduction of live load may be determined pursuant to Chapter 16 of the California Building Code. Design load summary as follows:

#### Wheel load:

- o (2) 2,000 lb. loads spaced five (5) feet apart.
- Each concentrated load is to be placed upon any space a maximum of 2-1/2 feet square pursuant to Chapter 16 of the California Building Code.

### Uniform load:

o 100 psf with no allowable stress increase for duration of load. Live load reduction may be pursuant to Chapter 16 of the California Building Code.

#### Section 1602B.2 Case II

Design loads for private vehicle access bridges serving a single family dwelling on a single lot fronting unimproved streets where the length of the building access path crossing the driveway bridge is 50 feet or less. The following loads apply to the portion of such vehicle access bridges in the public right-of-way as well as the portion on private property. Pursuant to Chapter 16 of the California Building Code, this Section considers the gross weight of the maximum vehicle served to be 20,000 pounds for this condition (AASHTO H10 loading). The length of the access path is measured from the edge of pavement of the unimproved street to the building/ garage/ carport entry point. This concentrated load may be distributed in accordance with the provisions Chapter 16 of the California Building Code or, alternatively, the concentrated loads may be distributed in accordance with the Standard Specifications For Highway Bridges, 14th ed., 1989, or latest edition, as adopted by the American Association of State Highway and Transportation Officials, 444 North Capitol street, N.W., Suite 225, Washington, D.C. 20001. Allowable stress increases for a load duration of seven (7) days may be used for this concentrated load.

A minimum uniform live load of 100 PSF, (Garages--General storage and/or repair of the California Building Code), shall be used. Reduction of live loads may be determined pursuant to Chapter 23 of the California Building Code. The condition of concentrated or uniform live load producing the greater stresses shall govern. The summary of these loads are as follows:

### Wheel load:

o (2) - 8,000 lb. loads spaced five (5) feet apart.

- o Each concentrated load is to be placed upon any space a maximum of 2-1/2 feet square.
- o May alternatively use AASHTO load distribution.

### Uniform load:

o 100 psf with no allowable stress increase for duration of load. Live load reduction pursuant to Chapter 23 of the California Building Code.

#### Section 1602B.3 Case III

Same As Case II, except building entry access path crossing the driveway bridge is more than 50 feet. Same as for Case II, except the gross vehicle weight considered shall be 30,000 pounds (AASHTO H15).

### Wheel load:

- o (2) 12,000 lb. loads spaced five (5) feet apart.
- Each concentrated load is to be placed upon any space a maximum of 2-1/2 feet square.
- o May alternatively use AASHTO load distribution.

### Uniform load:

o 100 psf with no allowable stress increase for duration of load. Live load reduction pursuant to Chapter 23 of the California Building Code.

### Section 1602B.4 Case IV

Design Load for Private Residential Access Bridge Serving More Than One Dwelling Unit or More than a Single Lot Fronting an Unimproved Street. Design loads shall be the same as for Case III in this Chapter.

# Section 1603B - Alterations or Repairs to Existing Driveway Bridges

### Section 1603B.1 Case V

Existing driveway bridges may need repairs as their structural system or moisture barrier system is often inadequate. Plans with the permit submittal, including concrete deck removal to install new deck waterproofing, for driveway bridge repairs should show the existing structural system for the driveway bridge so its adequacy to the design criteria of this Section may be checked.

A structural evaluation by an architect or engineer of the structure based on the design load criteria of this Chapter, as appropriate, shall be provided for any driveway bridge repair for a bridge that does not have documented structural calculations.

### Section 1603B.2 Case VI

If there are practical constraints on accomplishing repair work to a bridge with a history of adequate performance, the following alternative minimum prescriptive requirements for driveway bridge repairs, when approved by the Building Official, may suffice in lieu of a structural evaluation pursuant to this Chapter:

Section 1603B.2.1 Prescriptive Requirements for Repairs Necessary Due To Faulty Waterproofing Where There Is Damage To Framing And Subfloor Around The Perimeter Of The Driveway Deck, But, Framing And Subfloor Within The Field Of The Deck Has No Damage Or Has Only Minor Damage.

These prescriptive requirements are as follows:

- 1. Remove concrete, replace damaged framing and subfloor as necessary. Install flexible waterproof membrane. 3-1/2 inches to 4 inches thick concrete replacement slab shall have No. 3 deformed steel reinforcement placed at 4 inches on center at center or slightly below center of slab and perpendicular to joist framing with similar reinforcement placed at 6 inches on center parallel to joist framing on top of perpendicular reinforcement. In lieu of reinforcing bar, steel fiber or glass fiber reinforced concrete may be used.
- 2. If the existing driveway deck joist span is greater than 10 feet, a supplemental support wall shall be installed at approximately the center of the existing joist span. This support wall shall include a 'T' foundation as for a two story conventional foundation and a minimum 1/2 inch plywood shear panel applied to the support wall on at least one side.
- 3. Surface of concrete shall receive a concrete water sealant treatment in accordance with manufacturer's instructions.
- 4. Existing structure and details for this work shall be shown on drawings and approved by the Building Official.

# Section 1603B.2.2 Prescriptive Requirements For Repairs Necessary Due To Faulty Waterproofing Where There Is Damage To Framing And Subfloor, And, The Existing Subfloor Is To Be Removed And Replaced

Since this repair will expose the joists, the existing deck framing can and shall be augmented. Prescriptive requirements for repairs shall be as follows:

- 1. Remove concrete, replace damaged framing, and augment existing framing by doubling two inch thick framing at twelve inches or less on center or four inch thick framing at sixteen inches or less on center. 2x framing more than twelve inches on center and 4x framing more than sixteen inches on center shall be tripled to provide additional support.
- 2. Replace damaged subfloor as necessary. Where 50% or more of the subfloor panels of the driveway deck are damaged and replaced, replace the damaged panels with minimum 1-1/8"

T&G plywood or minimum two layers of 3/4" plywood subfloor. Additional plywood subfloor panels shall be added on top of the undamaged subfloor for a level subfloor.

- 3. Install flexible membrane waterproofing in accordance with manufacturer's instructions. Hot mopped conventional waterproofing shall not be utilized unless specifically approved prior to installation by the Building Official.
- 4. 3-1/2 inches to 4 inches thick concrete replacement slab shall be reinforced with minimum No. 3 deformed steel reinforcement placed at 4 inches on center at center or slightly below center of slab and perpendicular to joist framing with similar reinforcement placed at 6 inches on center parallel to joist framing on top of perpendicular reinforcement. In lieu of reinforcing bar, steel fiber or glass fiber reinforced concrete may be used.
- 5. If the existing driveway deck joist span is greater than 10 feet, a supplemental support wall shall be installed at approximately the center of the existing joist span. This support wall shall include a 'T' foundation as for a two story conventional foundation and a minimum 1/2 inch plywood shear panel applied to the support wall on at least one side. Surface of concrete shall receive a concrete water sealant treatment in accordance with manufacturer's instructions.
- 6. Existing structure and details for this work shall be shown on drawings and approved by the City.

# Section 1604B - Wood Driveway Deck

Where a new wood subfloor deck is used it shall be a minimum of 2x T&G boards or 1-1/8 inch minimum T&G plywood subfloor.

# Section 1605B - Waterproof Membrane

A flexible membrane waterproofing shall be installed unless a solid inflexible substrate is provided for hot-mopped built-up waterproofing. The waterproofing membrane shall be suitable for the use intended and installed in accordance with the manufacturer's instructions.

# Section 1606B - Public Right-Of-Way Encroachment

The public right-of-way and any watercourse shall be clearly shown on the plans submitted for a permit. Any proposed or existing structure located within the public right-of-way and/or near a watercourse shall have an encroachment permit on file or one shall be issued, including appropriate fees, prior to building permit issuance. If the encroachment permit is denied, the proposed structure shall not be permitted.

# Section 1607B - Zoning/Design Review

If, as a result of alteration or repair work, the exterior appearance of any element of the structure, including guardrails, is proposed to be altered in such a way as to subject the project

to Design Review, such changes shall first be approved by the Zoning Division.

15.04.648 In Section 1704.1 of the California Building Code, replace Exception number 3 in its entirety with the following:

3. The provisions of California Health and Safety Code Division 13, Part 6 and the California Code of Regulations, Title 25, Division 1, Chapter 3, commencing with Section 3000, shall apply to the construction and inspection of factory-built housing as defined in Health and Safety Code section 19971.

**15.04.650** In Section 1704.4 of the California Building Code, delete Exception number 4 in its entirety:

15.04.652 In Section 1704.8 of the California Building Code, add "... and connecting grade beams" after "Pile foundations ... " in the section title.

15.04.654 In Section 1805.1 of the California Building Code, replace the first sentence in the second paragraph with the following:

"The top surface of footings, foundations, and grade beams shall be level."

15.04.656 In Section 1805.4.2.3, Section 1805.4.3.2, Section 1805.4.4, Section 1805.4.5, Section 1804.4.6, Section 1805.5.1.3, and Section 1805.5.4 of the California Building Code, delete these sections in their entirety.

15.04.658 In Section 1805.5 of the California Building Code, delete Table 1805.5(1) in its entirety.

**15.04.660** Add the following new Chapter 18B for requirements for Grading, Excavations, and Filss:

### Chapter 18B

# Grading, Excavations, And Fills

### Section 1801B - Definitions

The following words and phrases, wherever used is this Chapter, shall be construed as defined in this Section unless otherwise required by the context. The singular shall be taken to mean the plural, and the plural shall mean the singular when required by the context of this Chapter.

**APPLICANT** is the property owner and his authorized agents who apply for a Grading Permit pursuant to this Chapter.

**BENCH** is a relatively level surface interrupting the slope of an excavation or embankment in sloping natural ground or cut or fill surfaces.

**BUILDING PERMIT** is a currently valid building permit issued by the City of Oakland.

CITY is the City of Oakland.

CITY COUNCIL is the City Council of the City of Oakland.

CITY ENGINEER is the Deputy Director, Community and Economic Development Agency, and his or her successor in title.

**CITY ADMINISTRATOR** is the City Administrator of the City of Oakland.

CIVIL ENGINEER is an engineer currently possessing an active license issued by the State of California for the practice of civil engineering.

CIVIL ENGINEER IN RESPONSIBLE CHARGE is that particular civil engineer whose signature appears on the initial Statement Of The Engineer as submitted to the City with an application for a Grading Permit.

CLEARING & GRUBING is site preparation for grading or construction by mechanical or manual means consisting primarily of, but not limited to, the removal of vegetation.

**COMPACTION** is the densification of fill by mechanical means.

**CUT SLOPE** is a finished or interim surface of graded material caused by the removal of existing soils which exist naturally or as the result of previous filling, dumping or other method of placement.

**DIRECTOR OF CITY PLANNING** is the Deputy Director, Community and Economic Development Agency, and his or her successor in title.

**ELEVATION** is the vertical distance above City of Oakland datum.

**EROSION** is the wearing away of ground surface due to natural action of the elements.

**EXCAVATION** is cutting, digging or moving of earth, rock or similar materials and includes the conditions resulting there from.

**EXPANSIVE SOIL** is those soils which are likely to cause damage to improvements such as streets, structures and buildings from their natural actions depending on water content.

**FILL** is the depositing or placing of earth, rock or similar materials, from the same or different site, and includes the conditions resulting there from.

**GRADING** is excavation or filling, or any combination thereof, and shall include the conditions resulting from any excavating or filling.

**GRADING PERMIT** is a currently valid grading permit issued by the City of Oakland.

**HOLIDAY** is New Year's Day, Martin Luther King Jr. Day, President's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas Day.

**LAND DISTURBANCE** is any moving or removing of the soil mantle or top 6 inches of soil, whichever is shallower, by manual or mechanical means whether or not that soil is removed

from the site, when the disturbed site area is greater than 10,000 square feet measured horizontally, for all purposes except gardening or agriculture.

LAND STABILITY PROBLEM AREA is any site where there is information available that indicates special consideration should be undertaken due to purported land stability problems on or in the vicinity of the site.

**NATURAL PLANTING** is the planting of varieties of plants which will survive under the natural conditions of graded areas without regular irrigation and maintenance after establishment.

**PERMANENT EXCAVATION OR FILL** is excavation or fill created other than as defined herein as "Temporary" excavation or fill.

**PERSON** includes an individual, business and any other legally constituted entity such as, but not limited to, a limited partnership, limited liability company, and a corporation.

**PLANS** are maps, sketches, profiles, construction drawings and specifications, or any combination thereof as required to adequately describe the work, all as prepared by a Civil Engineer, all in accordance with this Article. Plans shall also include grading plans, drainage plans, erosion control plans and sedimentation control plans.

**PROTECTED TREES** shall be as defined in Chapter 12.36 of the Oakland Municipal Code.

**SEDIMENT** is earth material deposited by water.

**SOILS REPORT** is a report prepared by a Civil Engineer which shall include, but is not limited to, field test results and observations regarding the nature, distribution and strength of existing soils and recommendations and conclusions for grading procedures and design(s) for corrective action if necessary (including specifications for doing the work).

**SITE** is all that contiguous parcel of land where grading is required to be accomplished under a permit.

**SLOPE** is an inclined ground surface, the inclinations or rate of slope of which is expressed as a ratio of horizontal distance to vertical distance, or as a percentage using a ratio of vertical distance to horizontal distance.

SUPERINTENDENT is the owner or that particular agent of the owner, who is fully responsible for the performance of the work required by this Chapter.

**TEMPORARY EXCAVATION OR FILL** is an excavation or fill created as a temporary condition to accommodate construction of a structure authorized by a valid building permit, and which will not remain after completion of the work.

WATERCOURSE is a stream, stream bed, creek, canal, paved ditch, lake or other open drainage way as also defined in Chapter 9.16, Watercourses, of the Oakland Municipal Code.

WET (OR RAINY) SEASON is October 15th until April 15th inclusive.

Section 1802B.1 Permit - When Required

No person shall do or cause any grading in private or public property without first having obtained a permit to do so from the City Engineer whenever such grading will result in any of the following:

- 1. The volume of excavation or fill will exceed 50 cubic yards provided either:
  - a. the existing or the resulting rate of slope will exceed 20%; or
  - **b.** the vertical distance between the top and bottom of excavation or fill will exceed 5 feet at any location.
- 2. Any permanently unretained excavation or fill exceeding 5 cubic yards where the vertical distance between the top and bottom of the excavation or fill exceeds 5 feet at any location, disregarding benches; and the rate of slope of the surface exceeds 2 to 1 (2:1) for fill or 1.5 to 1 (1.5:1) for excavation, regardless of findings in the Soils Report.
- 3. An excavation or fill exceeding 5 cubic yards within 15 horizontal feet of any property line if the bottom of such excavation is below a line descending at a rate of slope of 2 to 1 from the existing ground surface at such property line, or if the top of such fill is above a line ascending at a rate of two to one from such property line, regardless of the findings in the Soils Report.
- 4. Grading in connection with a building, swimming pool, retaining wall or other structure where the vertical distance between top and bottom of the unretained slope will exceed five feet at any point, disregarding benches, when the cut slope exceeds 1.5 to 1 or the fill slope exceeds 2 to 1.
- 5. Any retained or unretained excavation or fill of any volume and height where the City has information of purported land stability problems on or in the vicinity of the site (i.e., "Land Stability Problem Area").
- 6. Any "Land Disturbance" where the rate of slope of the ground surface exceeds 20%. Grading of an emergency nature to safeguard life or property may be undertaken prior to the issuance of a Grading Permit.
- 7. If a grading permit is not otherwise required, the necessity for a grading permit involving ground slopes 20 per cent or less and greater than 10 per cent, where a Grading Permit would be required if the ground slope were greater than 20 per cent, will be determined, for cause, by the City Engineer or his duly authorized representative.
- **8.** The volume of excavation or fill will exceed 500 cubic yards on a parcel or contiguous parcels.
- 9. Grading, clearing or grubbing, or land disturbance activity that otherwise does not require a grading permit involves an area of one (1) acre or more.

A separate permit shall be required for each non-contiguous site. One permit may cover both an excavation and a fill on the same site.

### Section 1802B.1 Permit - When Not Required

No permit shall be required pursuant to this chapter for any of the following:

- 1. Temporary excavations in a public street or public right-of-way for which a permit has been issued under Title 12 of the Oakland Municipal Code.
- 2. Any public agency which has a reciprocity agreement with the City of Oakland pursuant to work under this Chapter.
- 3. An excavation below finished grade for a basement, footing, retaining wall, swimming pool or other structure authorized by a valid building or foundation permit, which excavation will be completely occupied by and retained by the structure, provided such excavation is conducted in accordance with the laws of the State of California relating to lateral support when the existing and finished ground slope will not exceed 10%.
- 4. A fill above existing grade, which fill will be retained by the exterior wall of a building, a retaining wall, swimming pool or other structure authorized by a valid Building Permit when the existing and finished ground slope will not exceed 10%.
- 5. Grading within a street to conform to elevations established by the City Engineer and for which a permit has been issued under the provision of Title 12 of the Oakland Municipal Code.
- 6. For test trenches, pits and borings done under the supervision of a Civil Engineer or Registered Geologist or Certified Engineering Geologist in accordance with the applicable regulations of the City of Oakland and the State of California.
- 7. Cemetery graves.
- 8. Water wells.
- 9. For work to be done under the Surface Mining and Quarrying Ordinance of the Oakland Municipal Code.
- 10. Gardening and agriculture.

### Section 1802B.3 Permit - Items to Include in Application

The application for a Grading Permit must include all of the following items in triplicate:

- 1. Application Form.
- 2. Vicinity Map, Site Map and Grading Plan.
- 3. Erosion and Sedimentation Control Plan, where required by the City Engineer.
- 4. Statement(s) of the Civil Engineer(s) In Responsible Charge.
- 5. Soils Report.
- **6.** A landscape addendum to the erosion and sediment control plans by a licensed landscape architect when required by the Director of City Planning.

- 7. Proposed work schedule.
- 8. Deposit for review of the application in accordance with the current Master Fee Schedule.
- 9. Itemized estimate of cost of work by a Civil Engineer.
- 10. Such other items as may be required by the City Engineer his duly authorized representative to aid in the understanding and review of the proposed grading work.
- 11. Proposed Dust Control Measures.

# Section 1802B.4 Permit - Application Form

The following information is required on the application form:

- 1. A description of the property in sufficient detail to permit its identification and general location.
- 2. The name(s) and address(es) and phone number(s) of the owner or owners of the property.
- 3. The reason for the grading.
- 4. Whether the grading is for the purpose of preparing the site for a subdivision under the provisions of the California Subdivision Map Act and Title 16 of the Oakland Municipal Code.
- 5. The name, address, telephone number and contractor's license number of the person in firm who will be doing the grading.
- 6. The names, addresses, and registration numbers of the Civil Engineer(s) In Responsible Charge who will direct the work, who prepared the grading plans and who will provide the testing and inspection of the work.
- 7. The amount in cubic yards of the proposed excavation and fill and the amount of the cumulative total of grading work.
- **8.** The equipment and methods to be used in the work.
- 9. Whether any material will be hauled from or imported onto the site over public streets, and if so, the site from which or to which said material will be moved and the routes to be used.
- **10.** The approximate starting and completion dates of the work to be covered by the Grading Permit.
- 11. An estimate of total cost of all work covered by the application.
- 12. Whether the grading is located within the Special Studies Zone, Seismic Hazard Zone, Flood Hazard Area, watercourse, or Land Stability Problem Area or a site containing expansive soils.
- 13. The signature of the owner or his authorized agent and the date of the application.

# Section 1802B.5 Permit Application - Vicinity Map

The vicinity map shall show the project site in relationship to the surrounding area's watercourses, water bodies and other significant geographic features, roads and other significant structures.

# Section 1802B.6 Permit Application - Site Map and Grading Plan

The site map and grading plan shall be prepared by a Civil Engineer, are subject to approval of the City Engineer, and shall include all of the following:

- 1. A topographic and boundary survey of the site, as provided in Section 15.04.140 of this Code, for all sites to be graded containing up to and including 5 acres. Sites containing more than 5 acres shall have contours at intervals and a minimum scale subject to the approval of the City Engineer. Enough off-site contours shall be included to show how surface runoff of storm water will flow on to and off the site.
- 2. Proposed limits of cuts and fills, both temporary and permanent, and other earthwork clearly designated.
- 3. Proposed retaining structures.
- 4. Drainage Plan to include existing, temporary, and final drainage facilities which shall be coordinated with erosion and sediment control plans. Supporting hydrology and hydraulic calculations for on-site and downstream systems shall be submitted when required.
- 5. Existing and proposed improvements to the site.
- **6.** Existing off-site structures within fifteen feet of the site boundary and other off-site improvements which may be affected by the grading work.
- 7. Public and private easements of record.
- 8. A Soils Report, as hereinbefore defined, prepared by a registered design professional.
- **9.** Typical sections of areas to be graded and profiles of all proposed traveled ways for vehicles and pedestrians.
- 10. Measures to be taken to protect against potential hazards arising during the progress of the grading work.
- 11. If the site is in the Special Studies Zone, the plan shall show any purported fault trace which may or does cross or affect the site to be graded.
- 12. All proposed corrective actions to be taken to alleviate existing site conditions detrimental to the improvements proposed including expansive soils, land stability problems, and seismic liquefaction and landslide.

- 13. The location of the base and diameter at breast height of all protected trees, and indication as to which protected trees, if any, may be subject to removal or damage during construction per Chapter 12.36 of the Oakland Municipal Code.
- 14. Any such additional items as required by the City Engineer to clarify or provide additional information which may be necessary to allow a complete review of the proposed work.

# Section 1802B.7 Permit Application - Erosion & Sedimentation Control Plans

Erosion Control and Sedimentation Control Plans shall be prepared by a Civil Engineer, are subject to approval of the City Engineer, and shall include all of the following:

#### 1. Interim Measures

The plans shall include interim erosion and sedimentation control measures to be taken during wet seasons until permanent erosion and sedimentation control measures can adequately minimize erosion, excessive storm water runoff and sedimentation measures.

The plans shall include all necessary measures to be taken to prevent excessive storm water runoff or carrying by storm water runoff of solid materials on to lands of adjacent property owners, public streets, or to watercourses as a result of conditions created by grading operations.

The plan shall include, but not be limited to, such measures as short-term erosion control planting, waterproof slope covering, check dams, interceptor ditches, benches, storm drains, dissipation structures, diversion dikes, retarding berms and barriers, devices to trap, store and filter out sediment, and storm water retention basins. Off-site work by the Applicant may be necessary. The Applicant shall provide any off-site permission or easements necessary to present written proof thereof to the City Engineer.

Erosion control work and sediment control work shall be coordinated with the grading work. A narrative description shall also be provided of measures to be taken, planting materials and specifications, and maintenance provision.

There shall be a clear notation that the plans are subject to changes as changing conditions occur. Calculations of anticipated storm water runoff and sediment volumes shall be included, if required by the City Engineer.

#### 2. Permanent Measures

The plans shall include permanent erosion and sedimentation control measures which shall be primarily oriented towards prevention of erosion and shall include, but not be limited to, such measures as permanent erosion control planting, paved ditches, planted swales, benches, storm drains, dissipation structures, rip rap, and storm water retention basins.

A narrative description shall also be provided of measures to be taken, specifications for planting materials, fertilizers, planting and maintenance procedures.

An estimate of the length of time which will be required for the planting to produce a permanent coverage which will be sufficient to provide the degree of erosion control protection for which it is designed.

# Section 1802B.8 Permit Application - Initial Statement(s) of the Civil Engineer(s) In Responsible Charge

# 1. One Civil Engineer In Responsible Charge

Where one Civil Engineer will be in responsible charge of the entire grading project, including, but not limited to the preparation of the grading plans, the exact following Initial Statement of the Engineer is required:

DATE

City Engineer
City of Oakland
Dalziel Administration Building
250.Frank Ogawa Plaza
Oakland, CA 94612

RE: Grading at (Same address as on application)

#### INITIAL STATEMENT OF THE ENGINEER

I have been retained by \_\_\_\_\_\_ (Applicant) to be in responsible charge of the grading work at property referenced above. I will assume full responsibility, as responsibility is defined in Section 15.04.660 of the Oakland Municipal Code, for carrying out the following to the best of my knowledge and ability:

- a. Assuring that testing and inspection required for the work in progress and the completed work shall be accomplished in a timely and professional manner to determine whether all the work is being/was done in accordance with plans, schedule and specifications approved by the City Engineer.
- b. Notifying the Applicant, verbally and in writing (with a copy to the City Engineer), of any work not being performed in accordance with the approved plans, schedule and specifications.
- c. Notifying the Applicant, verbally and in writing (with a copy to the City Engineer), of any work not meeting the requirements of the approved plans and specifications.
- d. Notifying the Applicant, verbally and in writing, of the modifications(s) required in his performance and the necessary corrective measures to be taken to cure all deficiencies.
- e. Submitting an amended grading plan (through the Applicant) to the City Engineer for his review and approval for any significant changes caused by unforeseen conditions, along

with a report setting forth the reasons for these changes and the recommended changes to the improvement plans necessitated by the amendments to the grading plan.

- f. Notifying the Applicant, verbally and in writing (with a copy to the City Engineer), of any portion of the grading work affected by the amended plans and shall recommend whether or not the Applicant should proceed with the work before the amended plans are approved by the City Engineer.
- g. Submitting in a timely manner upon the Applicant's satisfactory completion of the work under the permit, a Statement of Completion with the results of all tests and inspections attached thereto.
- h. Stating in writing, along with the Statement of Completion, that the interim erosion control and sediment control measures appear to be adequate if properly maintained until the permanent erosion control measures are fully established, if any are required.

If my services on the job are terminated, I will, at said time of termination, submit to the City Engineer, a Statement of Partial Completion addressing the progress and conditions of all of the applicable items above and attach thereto the results of such inspections and tests which have been completed.

Signed:			
	License No.	Expiration	
(Registered Civil Engineer)		 _	

# 2. Multiple Responsibility

When the Civil Engineer In Responsible Charge is other than the Civil Engineer who prepared the approved grading plan, the following paragraph will be added to the letter in Item (1) above:

"I have examined the plans to be used for this work as prepared by (name and registration of Civil Engineer) dated and hereby approve and adopt them as to the portions concerning the work to be performed under this permit."

# 3. Divided Responsibility

Where more than one Civil Engineer shall function as Civil Engineer In Responsible Charge and divide their responsibilities, each will submit in the exact text, the following Initial Statement of the Engineer:

DATE

City Engineer
City of Oakland
Dalziel Administration Building
250 Frank Ogawa Plaza
Oakland, CA 94612

RE: Grading at (Same address as on application)

# INITIAL STATEMENT OF THE ENGINEER (DIVIDED RESPONSIBILITY)

IMITAL STATEMENT		(DIVIDED RESI ONSIDIEITI)
portions of grading work enume	erated below. I will my knowledge and	ant) to be in responsible charge of the assume full responsibility for carrying ability (Each individual engineer shall be responsible for).
City Engineer a Statement of Pa	artial Completion ad	aid time of termination, submit to the dressing the progress and conditions of the results of such inspections and test
Signed:	License No:	Expiration

- 4. When those Civil Engineers In Responsible Charge, as specified in Item three (3) above, are not the Civil Engineers who prepared the approved plan, each Civil Engineer In Responsible Charge shall add the paragraph shown in Item 2 above.
- 5. No Initial Statement(s) of the Engineer shall be accepted as complete until all responsibilities addressed in Item 1 above have been covered by one or more Civil Engineer(s) In Responsible Charge.

# Section 1802B.9 Permit Application: Initial Statement(s) of the Civil Engineer(s) In Responsible Charge - Responsibilities Defined

The responsibilities of the Civil Engineer(s) In Responsible Charge defined for purposes of this Article are defined as follows:

# 1. Inspection and Testing

(Registered Civil Engineer)

The Civil Engineer In Responsible Charge shall inspect the work in progress and perform such tests as may be necessary during the progress of the work to determine whether all grading work is done in accordance with the Plans and Specifications approved by the City Engineer. The City Engineer or his authorized representative may conduct unscheduled inspections of grading work in progress to assess whether such work poses a hazard to life and public or private property.

2. Substandard Performance, Notification of Applicant

When the inspection and testing reveals that the work is not being properly performed, and/or all or any portion of the work does not meet with the requirements of the approved Plans, Schedule and Specifications, the Civil Engineer in Charge shall immediately notify the Applicant, verbally and in writing (with a copy to the City Engineer). The Civil Engineer In

Responsible Charge shall also notify the Applicant of any modifications which are required in his performance and the necessary corrective measures to be taken to cure the deficiencies in the work.

3. Changes in the Approved Plans, Schedule and Specifications Due to Unforeseen Conditions:

If, during the progress of the grading work, the Civil Engineer In Responsible Charge finds it necessary to require significant changes due to unforeseen conditions, he shall submit (through the Applicant), amended Plans, Schedule and Specifications for the approval of the City Engineer. He shall also submit, at that time, a report setting forth the reason for the changes. The report shall also include any recommended changes to future improvement plans necessitated by the amended plan. The Civil Engineer In Responsible Charge shall also notify, verbally and in writing (with a copy to the City Engineer), the Applicant of any portion of the grading work affected by the amended plans and recommend whether or not work should proceed before the amended plans are approved by the City Engineer.

- 4. Upon completion of the grading work, the Civil Engineer In Responsible Charge shall submit in a timely manner a Statement of Completion. He or she shall, at that time, also state in writing that interim erosion and sedimentation control measures, where required by the City Engineer, have been taken and appear to be adequate until permanent erosion control planting is effectively established.
- 5. It shall not be the responsibility of the Civil Engineer In Responsible Charge to perform the direction or supervision of the personnel and equipment performing the actual grading work unless they are in the employ of the Civil Engineer In Responsible Charge.
- 6. It shall not be the responsibility of the Civil Engineer In Responsible Charge to supervise, direct, inspect, or test any improvements being constructed coincidentally with the grading work but not a part of the approved grading plan.

### Section 1802B.10 Permit Application - Proposed Work Schedule

The applicant must submit a master work schedule showing the following information:

- 1. Proposed grading schedule.
- 2. Proposed conditions of the site on each July 15, August 15, September 15, October 1, and October 15, during which the permit is in effect.
- 3. Proposed schedule for installation of all interim drainage, erosion and sediment control measures including, but not limited to the stage of completion of erosion and sediment control devices and vegetative measures on each of the dates set forth in Subsection (2) above.
- 4. Schedule for construction of final improvements, if any.

5. Schedule for installation of permanent erosion and sediment control devices where required.

# Section 1802B.11 Permit Application - Itemized Estimate of Cost of Work by Civil Engineer

Quantities and costs of all the work to be done under the Grading Permit shall be submitted by a Civil Engineer to aid in establishing values for security deposits or surety bonds which may be required. The actual value of security shall be determined by the City Engineer.

# Section 1802B.12 Permit Application - Related to Special Studies Zones And Seismic Hazard Zones Designated by State Geologist (Geologic Report)

No Grading Permit shall be issued for any site in the Special Studies Zones or Seismic Hazard Zones designated by the State Geologist before a Geologic Report has been submitted and approved pursuant to the requirements of Chapter 15.20 of the Oakland Municipal Code. Said report and review shall be submitted as a part of the application for Grading Permit along with all other material required by this Chapter.

# Section 1802B.13 Permit Application - Related to Flood Hazard Area

No Grading Permit shall be issued for any site located in a designated Flood Hazard Area unless the grading plan provides for mitigation measures relative to the projected flood hazard. The mitigation methods are subject to the review and approval of the City Engineer.

### Section 1802B.14 Permit Application - Related to Expansive Soils Conditions

No Grading Permit shall be issued for any site which is underlain by expansive soils unless the grading plan includes mitigation measures to prevent structural damages which may be caused by conditions due to expansive soils.

### Section 1802B.15 Permit Application - Dust Control Measures

"Best Management Practices," as developed by the City Engineer or an appropriate reference approved by the City Engineer, shall be used throughout all phases of construction. This includes any suspension of work, alleviation or prevention of any fugitive dust nuisance and the discharge of smoke or any other air contaminants into the atmosphere in such quantity as will violate any City of Oakland or regional air pollution control rules, regulations, ordinances, or statutes.

Water, dust palliatives or combinations of both shall be applied continuously and in sufficient quantity during the performance of work and at other times as required. Dust nuisance shall also be abated by cleaning, vacuuming and sweeping or other means as necessary.

A Dust Control Plan may be required as a condition of permit issuance or at other times as deemed necessary to assure compliance with this section. Failure to control effectively or abate

fugitive dust nuisance or the discharge of smoke or any other air contaminants into the atmosphere may result in suspension or revocation of the permit, in addition to any other applicable enforcement actions or remedies.

# Section 1802B.16 Permit Application - Soils Report Contents

All Soils Reports shall be based, at least in part, on information obtained from on-site testing. The minimum contents of a Soils Report submitted pursuant to this Chapter shall be as follows:

- 1. Logs of borings and/or profiles of test pits and trenches
  - a. Borings:
    - i. The minimum number of borings acceptable, when not used in combination with test pits or trenches, shall be two (2), when in the opinion of the Soils Engineer such boring shall be sufficient to establish a soils profile suitable for the design of all footings, foundations and retaining structures.
    - ii. The depth of each boring shall be sufficient to provide adequate design criteria for all proposed structures.
    - iii. All boring logs shall be included in the soils report.
  - b. Test Pits and Trenches:
    - i. Test pits and trenches shall be of sufficient length and depth to establish a suitable soils profile for the design of all proposed structures.
    - ii. Soils profiles of all test pits and trenches shall be included in the soils report.
- 2. A plat shall be included which shows the relationship of all borings, test pits and trenches to the exterior boundary of the site. The plat shall also show the location of all proposed site improvements. All proposed improvements shall be labeled.
- 3. Copies of all data generated by field and/or laboratory testing to determine allowable soil bearing pressures, shear strength, active and passive pressures, maximum allowable slopes where applicable and any such other information which may be required for the proper design of foundations, retaining walls and other structures to be erected subsequent to or concurrent with work done under the Grading Permit.
- 4. A written report which shall include, but is not limited to the following:
  - a. Site description.
  - **b.** Local and site geology:
  - **c.** Review of previous field and laboratory investigations on the site, if any.
  - d. Review of information on or in the vicinity of the site on file with the City Engineer, if any.

- 5. Site stability shall be addressed with particular attention to existing conditions and proposed corrective actions at locations where land stability problems exist.
- **6.** Conclusions and recommendations for foundations and retaining structures, resistance to lateral loading, slopes and specifications for fills and pavement design as required.
- 7. Conclusions and recommendations for temporary and permanent erosion control and drainage. If not provided in a separate report they shall be appended to the required soils report.
- 8. All other items which the Soils Engineer deems necessary.
- 9. The signature and registration number of the Civil Engineer preparing the report.
- 10. When the certification date by the Soils Engineer In Responsible Charge is more than three years old, the soils report be re-certified, or a new soils report shall be provided.

# Section 1802B.17 Permit Application Referred to City Planning

All applications for Grading Permits shall be referred to City Planning. City Planning shall report on any aspect of the proposed grading, excavation, or fill that relates to or affects the Oakland General Plan, and District or Area Plan, the zoning and subdivision regulations of the City, the preservation of natural scenic character, and any other environmental requirements, including the requirements of the California Environmental Quality Act.

# Section 1802B.18 Permit Application Referred to City Planning Landscape Addendum to the Grading Plans

A Landscape Addendum to the Grading Plans may be required at the discretion of City Planning. The landscaping plan, when required, shall be prepared by a licensed Landscape Architect to the current professional standards in landscape architecture and is subject to the approval of City Planning.

### Section 1803B Report of City Planning - Time Limit for Review

City Planning, upon completion of its investigation including review of the Landscape Addendum (when required) shall transmit its report and recommendations to the City Engineer and no permit shall be issued until such report has been received.

# Section 1804B Permit - Conditions Upon Issuance

In granting any permit under this Chapter, the City Engineer may attach such conditions thereto as he deems reasonably necessary to safeguard life, public and private property, and to ensure that the work will be carried out in an orderly manner in conformance with all regulations and without creating a public nuisance; and he/she may add to, remove, or change such conditions from time to time during the duration of the permit as he/she deems reasonably

necessary as a result of changed conditions or otherwise. Such conditions may include, but shall not be limited to:

- 1. Limitations on the hours of operations, days of operations or the portion of the year in which the work may be performed.
- 2. Restrictions as to the size and type of equipment to be used.
- 3. Prohibition or restriction on the use of explosives.
- 4. Designation of the routes over which the materials may be transported.
- 5. Requirements as to the suppression of dust and prevention against spilling or tracking of dirt, and the prevention of excessive noise or other results offensive or injurious to the neighborhood and the general public, or any portion thereof.
- 6. Regulations as to the use of public streets and places in the course of the work.
- 7. Regulations for the repair and cleaning of streets and other public facilities if their safe, operable, and clean condition has been jeopardized.
- 8. Requirements for safe and adequate drainage of the site.
- 9. A requirement that approval of the City Engineer be secured before any work which has been commenced, may be discontinued.
- 10. A requirement that personnel and equipment be provided at the site during storms to prevent damage to other property from flooding or the depositing of material washed from the site.
- 11. Requirements for fences, barricades or other protective devices.
- 12. Requirements pertaining to reshaping and planting the site, including the time limit for such work.

# Section 1805B.1 Statement of Completion of Civil Engineer(s) In Responsible Charge - Final Completion

Within 14 calendar days after completion of the work authorized by the Grading Permit, the Civil Engineer(s) In Responsible Charge shall provide the following Statement of Completion in his/her areas of responsibility with respect to the Grading Permit in writing. The grading work under any permit shall not be considered complete until each of the following items have been addressed by the Civil Engineer In Responsible Charge, who shall file with City Engineer a written statement stating that said items have been completed and/or are true to the best of his/her knowledge and belief:

1. Her/his/their appropriate portion of grading work has been done in accordance with the plans and amended plans prepared or adjusted by her/him and approved by the City Engineer. All modifications made by the Civil Engineer In Responsible Charge shall be specifically set forth in the Statement of Completion.

- 2. In the Civil Engineer's opinion, the finish graded slopes in the subject area are in a stable condition.
- 3. Where required by the City Engineer, interim and/or permanent erosion and sedimentation control measures have been taken, and that where interim measures have been taken, they will adequately control erosion and sedimentation if properly maintained, until permanent erosion control planting is effectively established.
- 4. The magnitude of the total settlements and differential settlements which are likely to occur, the allowable loads of bearing pressures which may be imposed, and stating that compaction is adequate for the uses proposed for the property and adequate to develop the recommended bearing pressures.
- 5. Any limitations which should be imposed on the development of the property because of soil conditions and amendments to the approved grading plan.
- 6. The Civil Engineer(s) In Responsible Charge shall also submit with the above items, all documentation necessary to support her/his/their Statement(s) of Completion (i.e., records of inspections, tests, observations, etc.).

# Section 1805B.2 Statement of Completion of Civil Engineer(s) In Responsible Charge - Partial Completion

When, in the estimation of the City Engineer, an entire grading project cannot be completed before phased construction may proceed on structural foundations or retaining structures in order to provide for the public and private welfare, safety and convenience, the City Engineer may require the Civil Engineer In Responsible Charge to submit a partial written statement addressing the satisfactory completion of those items. Separate building permits shall be required for the necessary structures. The total grading work shall be addressed in Statement of Completion prior to final inspection of any structures.

# Section 1805B.3 Statement of Completion of Civil Engineer(s) In Responsible Charge - Responsibility Changes Hands

In all grading operations, if one Civil Engineer In Responsible Charge's services are terminated and another Civil Engineer In Responsible Charge assumes the responsibility for the remainder of the work, each Civil Engineer shall immediately file the Statement of Completion with respect to the portion of the work for which she/he is responsible and stating what work was completed and what work was improperly or inadequately done at the time of the termination of her/his responsibility. No grading work shall proceed unless the Civil Engineer In Responsible Charge takes the responsibilities, and the City Engineer shall suspend any permit when the grading work is not under the responsibility of a Civil Engineer In Responsible Charge approved by the City.

# Section 1805B.4 Statement of Completion of Civil Engineer(s) In Responsible Charge - Grounds for Denial of Building Permit

When a Grading Permit is issued on a site, the Building Official shall be notified that no Building Permit for the construction or repair of any structure on the property shall be issued until Statement(s) of Completion covering the completed grading work has/have been filed, unless the issuance of a Building Permit is required to allow construction of retaining walls or other structures designed in accordance with the Oakland Building Construction Code in order to allow completion of the grading work, in which case a cash bond may be required to guarantee the filing of Statement(s) of Completion covering the completed grading work.

# Section 1805B.5 Statement of Completion of the Civil Engineer(s) In Responsible Charge - Related to Final Inspection and Certification of Occupancy

No Final Inspection, as required by the Oakland Building Construction Code, shall be made and no Temporary Certificate of Occupancy or Certification of Occupancy shall be issued by the Building Official for any structures located on a site for which a Grading Permit has been issued prior to the acceptance by the City Engineer of the Statement of Completion of the Civil Engineer In Responsible Charge. The City Engineer may reject a Statement of Completion which, in her/his judgment, does not adequately meet the requirements of this Chapter.

# Section 1806B Responsibility for Performance of Grading Work

The Permittee shall bear full responsibility for the performance and maintenance of the work in accordance with the approved Plans, Schedule, Conditions and Specifications and any approved modifications thereof, and also shall bear full responsibility for accomplishing the work in accordance with the recommendations of the Civil Engineer In Responsible Charge during the progress of the work. The Permitee shall be present at all times work is in progress and shall be completely responsible for the supervision and direction of all personnel and equipment performing work under the Grading Permit.

# Section 1807B Applications and Permits - Time of Validity

- 1. Applications for grading permits shall expire 180 days after the date of application. One extension of the application may be requested for not more than 180 additional days (one year total from the date of application). Fees as established in the Master Fee Schedule shall be paid at the time of application submittal and extension request.
- 2. Grading permits shall expire when the work has not commenced within 180 days from the date of issuance of the grading permit or when the work has not been completed within one year following the date of commencement.
- 3. No grading work shall occur during the grading moratorium (wet season). Temporary shoring or permanent retaining structures shall be installed before commencement of the grading moratorium (wet season). The Civil Engineer In Responsible Charge shall show what actions will be implemented to eliminate any dangerous conditions which may result from the incomplete grading work, or shall state no such actions are necessary. The addendum shall bear the Civil Engineer's signature and registration number.

#### Section 1808B Grounds for Denial - Hazard

The City Engineer shall deny a permit for any violation of this Code, other laws, rules and regulations in effect in the City, or whenever, in her/his judgment, the proposed work will directly or indirectly create a hazard to human life or endanger public or private property. If, in the opinion of the City Engineer, the danger or hazard can be eliminated by the erection or installation of protective devices or by performing the work in a particular manner approved by the City Engineer, the City Engineer may grant a permit upon conditions that the protective and precautionary work or manner of performing the work, as approved, shall be used.

### Section 1809B Grounds for Denial - Disinterested Civil Engineer In Responsible Charge

In all cases where a Grading Permit is required, to prevent potential conflicts of interest and to assure that inspection and testing of the grading work is performed by a disinterested party, neither the owner of the property nor the builder who is to construct the improvements on the property or perform the grading work, shall be the "Civil Engineer In Responsible Charge" that provides any "Statement of Engineer" pursuant to the requirements of this Chapter.

# Section 1810B General Requirements Applicable for All Grading Work Unless Modified by the City Engineer

The following shall apply to all grading work:

- 1. Grading, erosion control and sedimentation control work shall be done in accordance with plans hereinbefore described.
- 2. No grading work shall be done during the wet season except for emergency stabilization of geotechnical instability.
- 3. Temporary erosion and sedimentation control facilities shall be completely in place prior to October 15th, and shall be diligently maintained to ensure effectiveness through April 15th.
- 4. The hours of grading operations shall be only between 7:00 a.m. to 9:00 p.m. weekdays, 8:30 a.m. to 6:00 p.m. Saturdays, and prohibited on Sundays and Holidays unless otherwise approved by the City Engineer. Exceptions will only be granted if it can be shown that there is a compelling public interest to grade during prohibited times.
- 5. No clearing and grubbing shall take place on any site for which a Grading Permit is required prior to the issuance of a valid Grading Permit.
- 6. Where required, a valid Tree Removal Permit must be obtained prior to the issuance of a Grading Permit. No tree removal shall take place until both Tree Removal Permit and a Grading Permit, if required, have been issued.
- 7. No grading shall be approved on properties adjacent to the site without the written permission of the adjacent property owner. Such written permission shall be notarized and

acknowledged and presented to the City Engineer as a part of the items required with the application for a Grading Permit.

- 8. The rate of slope of the surface of permanent fills shall not be steeper than 2 to 1 and the rate of permanent cut slopes shall not be steeper than 1.5 to 1, unless otherwise recommended in the Soils Report and approved by the City Engineer.
- 9. Areas to receive fill shall be adequately prepared by stripping unsuitable material and by benching slopes. Where past sliding is known or suspected or where unstable material exists, all such unstable material shall be stripped, with slip surfaces destroyed by benching and subdrainage installed before the fill is placed.
- 10. Drainage facilities shall be provided to convey stormwater to a natural watercourse, swale or other drainage way, or to a public storm drainage system at locations and in a manner satisfactory to the City Engineer. Adequate temporary measures shall be taken to control stormwater during grading operations.
- 11. Erosion control shall include planting of all graded areas to be left exposed to the elements in accordance with the planned maintenance of such areas.
- 12. No grading shall be done which will cause sloughing of materials from or onto adjoining property

# **Section 1811B.1 Security - Grading Performance**

A performance security shall be required for every grading permit issued under this Chapter. A minimum of \$1,000 or 2% of the Civil Engineer's estimate of cost of grading work, whichever is greater, shall be provided in cash or cashier's check. The total amount of the security shall be determined by the City Engineer after consideration of the estimated cost of the work, the possible consequences of non-completion, particularly with respect to adjacent properties, public safety and any other relevant factors. The minimum security required shall be 100% of the engineer's estimate of cost of grading work. The form of the security shall be cash, cashier's check, approved surety bond (for an indefinite duration), irrevocable letter of credit, or other liquid financial instrument approved by the City Engineer.

The security shall remain in full force and effect until the Statement of Completion has been accepted by the City Engineer. The security shall obligate the principal, his or her executors, administrators, successors and assigns, jointly and severally, with the surety, and shall inure to the benefit of the City and to any person aggrieved by the principal's (owner/applicant's) failure to comply with the conditions thereof.

The security shall be conditioned on the faithful performance of the work under the Grading Permit and the immediate abatement of the hazards above-named. Failure of the person to whom the permit is issued to abate such hazard(s) in a timely manner shall result in Summary Abatement.

#### Section 1811B.2 Security - Erosion and Sedimentation Control Performance

Where erosion and sedimentation control work is required as a part of the approved grading plan, the City Engineer may require such work to be secured either separately from, or along with, any grading security which may be required.

The Erosion and Sedimentation Control security shall be conditioned on the performance of the erosion and sedimentation control portion of the approved grading plan and shall remain in full force and effect during the "Wet Season" or such other time period which shall be determined by the City Engineer.

### Section 1812B.3 Security - Term and Completion

The term of each security shall begin upon the date of the posting thereof and shall end upon the completion to the satisfaction of the City Engineer of all of the terms and conditions of the permit for the work. Such completion shall be evidenced by a statement thereof signed by the City Engineer.

# Section 1812B.1 Notice of Default - General

Whenever the City Engineer finds that a default has occurred in the performance of any term of condition of any permit, written notice thereof shall be given to the contractor, property owner, and the surety of the security. Such notice shall state the work to be done and the period of time deemed by the City Engineer to be reasonably necessary for the completion of the work.

The Owner shall have 14 calendar days from the date of service of the Notice Of Default to comply with same or to appeal to the Hearing Examiner. In an emergency, the City Engineer shall have the authority to take action three (3) calendar days after service of the Notice, and to use liquid funds of the security to initiate remediation actions.

### Section 1812B.2 Notice of Default - Duty of Surety

After 14 calendar days from the date of service of a Notice of Default, the surety shall cause the required work to be performed expeditiously and within the time therein specified or, failing therein, pay to the City the estimated cost of completing the work, as determined by the City Engineer, but not to exceed the principal sum of the security.

# Section 1812B.3 Notice of Default - Right of Entry

In the event of any default in the performance of any term or condition of the permit for the work, the surety or any person employed or engaged on his behalf shall have the right to enter upon the premises to complete the required work or make it safe. Representatives of the City shall have the right to enter upon the premises during the course of the work or upon completion to check for compliance with the terms or conditions of the permit and the provisions of this Chapter.

#### Section 1812B.4 Notice of Default - Performance Interference Prohibited

No person shall interfere with or obstruct the ingress or egress to or from any such premises by an authorized representative or agent of any surety or of the City engaged in completing the work required to be performed under the permit, checking on compliance of the work with the terms or conditions of the permit and the provisions of this Chapter, or taking emergency actions deemed necessary for the protection of the public and adjoining properties.

#### Section 1813B Violation and Abatement

Violations of this chapter shall be abated by the City and costs, fees, penalties, and accruing interest for abatement shall be assessed by the City and collected in accordance with the provisions of Chapters 1.08, 1.12, and 15.08 of the Oakland Municipal Code.

#### Section 1814B Erosion and Sedimentation Control

# Section 1814B.1 Responsibility for Preventative Measures to Control Erosion and Sedimentation

Any person who performs grading, clearing and grubbing or other activities that disturb the existing soil shall take appropriate preventative measures to control erosion, sedimentation of eroded materials onto adjacent lands, public streets or rights-of-way, or carrying of eroded materials to any watercourse by any route. The person in possession and the owner of the property on which the soil is disturbed are responsible to perform necessary preventative measures to control erosion and sedimentation.

#### Section 1814B.2 Preventative Measures to Control Erosion and Sedimentation

Preventative measures shall be those prescribed in the "Manual of Standards for Erosion and Sediment Control Measures" of the Association of Bay Area Governments and as subsequently amended. Preventative measures shall include both interim and permanent measures to control erosion and sedimentation.

Interim preventative measures shall be taken during the period October 15 to April 15 until permanent control measures are complete and effective. Interim measures shall include, but not be limited to, waterproof slope covering, drainage ditches around slopes, short-term control planting, slope benching, rip-rap, storm drains and energy dissipation structures.

Permanent preventative measure shall include, but not be limited to, completion of buildings, walls or other structures, permanent planting, paved ditches, slope benching, rip-rap storm drains, paving and energy dissipation structures.

The City Engineer may require an erosion and sedimentation control plan prior to issuance of any building permit on lots where the conditions of lot location, configuration or contour may result in increased problems of erosion or sedimentation control.

# Section 1814B.3 Classification of Erosion and Sedimentation Conditions as Constituting a Hazard

Any grading, clearing and grubbing or other activities that disturb the existing soil so that erosion, sedimentation of eroded materials onto adjacent lands, public streets or rights-of-way or carrying of eroded materials to any watercourse occurs, such activities shall constitute an dangerous condition and shall be abated as set forth in this Chapter.

# Section 1815B Discharge of Concentrated Flow

#### Section 1815B.1 General

Except as established in this Section, it shall be unlawful for anyone to discharge or channel concentrated flow of storm water onto neighboring property.

#### Section 1815B.2 Methods

Approved methods of discharge may be achieved in the following ways:

#### 1. Drain to streets

For property located on an improved street which abuts the property frontage, storm water may drain to the public right-of-way when directed under the sidewalk in accordance with the Oakland Municipal Code. If the property is located on an unimproved street, the property owner shall submit, for approval by the City Engineer, a detail showing how storm water discharges to the street. The drainage detail shall show the size and type of conduits, the points where conduit day-lights on the slope, and the type and location of slope protection.

#### 2. Dissipation of storm water within the property boundaries

The dissipator system shall be designed by a Civil Engineer and shall not be closer than 15 feet from a property line. The system shall be approved by the City Engineer prior to construction. A Special Inspection letter shall be submitted to the City Engineer and approved prior to issuance of a Temporary Certificate of Occupancy or a Certificate of Occupancy.

#### 3. Pumping of storm water to a City approved means of disposal

Storm water may be collected in a catch basin and discharged by a pump to the street surface.

### 4. Discharging storm water to a public storm sewer system

The connection shall be designed by a licensed professional and approved by the City Engineer. A permit issued by the Building Official for direct connection to the public storm sewer system shall be required. Granting of such permit shall be a discretionary action.

15.04.662 In Section 1908.1.15 of the California Building Code, delete subsection (a) in its entirety and delete the exceptions to subsection (b) and subsection (c) in their entirety.

15.04.664 In Section 1909.2 of the California Building Code, delete "Walls and ..." from subsection number 3.

15.04.666 In Section 1909.4 of the California Building Code, delete "... walls..." from the sentence beginning "Structural plain concrete...", and also delete the Exception in its entirety.

15.04.668 In Section 1909.6 of the California Building Code, delete this section in its entirety.

15.04.670 In Section 2304.7.1 of the California Building Code, delete 2304.7(1) and 2304.7(2) after "Floor sheathing conforming to the provisions of Table . . . "in the second paragraph.

15.04.672 In Section 2304.7.2 of the California Building Code, delete 2304.7(1) and 2304.7(2) after "Roof sheathing conforming to the provisions of Table . . . " in the second paragraph.

15.04.674 In Section 2308.3.3 of the California Building Code, replace the second sentence in its entirety with the following:

"Such anchorage shall conform to the requirements of Section 2308.6."

**15.04.676** In Section 2406.3 of the California Building Code, replace the fourth sentence in its entirety with the following:

"Bolts shall be embedded at least 7 inches into concrete or masonry, spaced apart not more than 4 feet, and adequately secured in-place by an approved method before placement of concrete or grout."

15.04.678 In Section 2308.6 of the California Building Code, add "... or within 3 feet measured horizontally of such fixtures or compartments..." in the second sentence after the phrase "... a building wall enclosing these compartments...".

### 15.04.680

A. In Section 3201.4 of the California Building Code, replace this section in its entirety with the following:

#### 3201.4 Site drainage

Surface, subsurface, potable, and equipment drainage water shall be conveyed in an approved manner to an adequate and approved downstream transportation facility.

**B.** In Section 3202 of the California Building Code, replace this section in its entirety with the following:

# 3202.1 Encroachments below grade

Encroachments into the public right-of-way below grade shall conform with the requirements of Oakland Municipal Code Chapter 12.08.

C. In Section 3201.2 of the California Building Code, replace this section in its entirety with the following:

# 3202.2 Encroachments above grade

Encroachments into the public right-of-way above grade shall conform with the provisions of Chapter 12.08 of the Oakland Municipal Code and as provided for in Sections 3202.2.1 through 3202. 2.3.

#### 3202.2.1 Doors

Doors shall not swing over the public right-of-way in any position by more than 12 inches.

# 3202.2.2 Signs

Encroachments of signs over the public right-of-way shall conform with the provisions of the Oakland Sign Code.

#### 3202.2.3 Unenclosed balconies, architectural features, awnings, canopies

Unenclosed balconies, architectural features, canopies over entrance doors, and awnings over windows may cantilever over the public right-of-way by not more than 1 inch horizontally for each 1 inch of vertical clearance exceeding 8 feet, measured from the higher of finished grade or public walking surface to the lowest overhead element of the encroachment. The encroachment shall not project more than 4 feet. Projecting structural elements shall be fire-resistive construction or noncombustible.

**15.04.682** In Section 3305.1 of the California Building Code, replace ". . . the California Plumbing Code" with ". . . Section 15.04.070 of this Code".

**15.04.684** In Section 3307.1 of the California Building Code, replace the fourth sentence beginning with "The person making or causing an excavation . . ." in its entirety with the following:

"Adjoining property owners shall be provided adequate notice of pending excavation and sufficient time allowance for completing protective measures, and their buildings and structures shall be provided adequate subjacent support in accordance with the provisions of California Civil Code Section 832."

**15.04.686** In Section 3401.2 of the California Building Code, replace this section in its entirety with the following:

"Buildings, structures, portions thereof, and fire-protection, detection, and alarm systems shall be maintained in accordance with the Oakland Building Maintenance Code and the Oakland Fire Code."

15.04.688 In Section 3403.4 of the California Building Code, replace this section in its entirety with the following:

"Where the partial repair of a stairway, guardrail, or handrail does not exceed 33% of the existing section of repaired elements, and the existing section is in accordance with the code that was current at the time of original construction, and the existing section does not continue or exacerbate an unsafe condition, then the repair may match the existing construction. Repairs to existing stairways with masonry or concrete surfacing exceeding four (4) inches in thickness and supported by wood framing may conform with the provisions of this section.

If the repair of the wood framing does not exceed 33% of the existing wood frame section being repaired, and the masonry or concrete surfacing is in sound condition with nothing more than shrinkage cracks, and the rise and run of the stairway are in accordance with the code that was current at the time of original construction, and the stairway has positive drainage and has not settled excessively towards or away from the building; and the existing section does not continue or exacerbate an existing condition, the repair may match the existing construction.

All replacement of the wood framing supporting the masonry or concrete surfacing shall be factory pressure preservative treated. All replacement wood framing within six (6) inches of the ground shall be pressure preservative treated approved for direct ground contact. All end field cuts of pressure preservative treated wood shall be properly treated with preservative."

15.04.690 In Section 3404 of the California Building Code, delete Section 3401.1.1, Section 3404.1.3, Section 3404.1.4, Section 3404.2, Section 3404.3, and Section 3404.4 in their entirety.

15.04.692 In Section 3406.1 of the California Building Code, delete the sentence beginning "Subject to the approval of the Building Official . . . " in its entirety

15.04.694 In Section 3406.3 and Section 3410 of the California Building Code, delete these two sections in their entirety

15.04.696 Adopt Appendix I - Patio Covers of the California Building Code in its entirely.

15.04.698 Add the following new Chapter 3B for Joint Living and Work Quarters:

# Chapter 3B

#### **Use and Occupancy**

#### **Division 1**

Requirements For Joint Living And Work Quarters

# Group F - Division 7 and 8 Group R - Division 7, 7.1, and 8

#### SECTION 3B.1 - General

# Section 3B.1.1 Purpose

The purpose of this division is to provide alternative building standards and minimum standards of safety for commercially/ industrially-oriented and residentially-oriented Joint Living and Work Quarters (JLWQ) purposes pursuant to California State Health and Safety Code Section 17958.11. For clarification purposes, portions of Health and Safety Code Section 17958.11 are repeated as follows:

(a) Any city or county may adopt alternative building regulations for the conversion of commercial or industrial buildings, or portions thereof, to joint living and work quarters. As used In this section, "joint living and work quarters" means residential occupancy by a family maintaining a common household, or by not more than four unrelated persons, of one or more rooms or floors in a building originally designed for industrial or commercial occupancy which include: (1) cooking space and sanitary facilities in conformance with local building standards adopted pursuant to Section 17958 or 17958.5 and (2) adequate working space reserved for, and regularly used by, one or more persons residing therein. . .

It is the intent of the (California) Legislature that local governments have discretion to define geographic areas which may be utilized for joint living and work quarters and to establish standards for such occupancy, consistent with the needs and conditions peculiar to the local environment. The Legislature recognizes that building code regulations applicable to residential housing may have to be relaxed to provide joint living and work quarters in buildings previously used for commercial or industrial purposes."

# Section 3B.1.2 Scope

The provisions of this division shall apply to and may be used only for buildings or portions thereof originally designed for commercial or industrial purposes that have received City Planning approval for use as Joint Living and Work Quarters (JLWQ). City Planning approval shall be pursuant to Section 17.102.190 of the Oakland Planning Code or other City Planning approval indicating that the proposed use is consistent with California State Health and Safety Code Section 17958.11.

# Section 3B.1.3 Applicability of City Planning and Other Criteria for Joint Living and Work Quarters.

As provided in California Health and Safety Code Section 17958.11 and the Oakland Planning Code, the residential occupancy of joint living and work quarters is an accessory use to its primary use as a place of work. Accordingly, the provisions of this division shall apply only to buildings or portions of buildings that meet the following criteria:

- 1. The minimum floor area of an individual JLWQ shall be 660 square feet.
- 2. A minimum of 67% of the floor area of an individual JLWQ shall be designated as work area and the remainder shall be designated as residential area pursuant to 3 below. Up to 25% of the designated work area may be used for dual purposes such as telephoning, drawing, accounting, reading, planning, development of work projects, and sanitary facilities.
- 3. The areas of an individual JLWQ used for living, sleeping, eating, and cooking (habitable space) shall be designated as residential area. The residential area shall be secondary to the work area and shall not exceed 33% of the floor area of the individual JLWQ.
- 4. In an individual JLWQ, a designated residential area of up to 300 square feet may provide residence for no more than two persons. An additional resident can be accommodated for each additional 150 square feet of designated residential area. No individual JLWQ shall accommodate more than 10 persons regardless of the size of the designated residential area.

**EXCEPTION**: Residentially-Oriented Live-Work in the Urban Core may be in compliance with Planning Approval pursuant to interim measures adopted by the City Council or other City Planning approval as applicable.

# Sec. 3B.1.4 - Applicability Of Other Provisions

Except as specified within this division, JLWQ that are commercially/ industrially-oriented shall meet all applicable provisions of this code as for an F-1 Occupancy and JLWQ that are residentially-oriented shall meet all applicable provisions of this code as for an R-1 Occupancy apartment residential dwelling unit.

#### Section 3B.2 - Definitions

#### Section 3B.2.1 Joint Living and Work Quarters (JLWQ)

Joint Living and Work Quarters are defined in Section 17.102.190(b) of the Oakland Planning Code, which is repeated here for clarification purposes as follows:

Joint living and work quarters means residential occupancy by not more than four persons, maintaining a common household of one or more rooms or floors in a building originally designed for industrial or commercial occupancy which includes: (1) Cooking space and sanitary facilities which satisfy the provisions of other applicable codes, and (2) Adequate working space reserved for, and regularly used by, one or more persons residing therein."

Section 3B.2.2 Joint Living and Work Quarters shall meet all of the criteria of Section 3B.1.1.

### Section 3B.2.3 Commercially/Industrially Oriented JLWQ

A single-tenant space combining working and living uses with or without interior walls where the work use is the same as a use that by itself would be classified as a Group F, Division 1 or Division 2 Occupancy or as a Group B Occupancy (excluding drinking and dining establishments and food handling activities with on-site food sales and excluding certain business occupancies similar to animal hospitals, kennels, pounds; automobile and other motor vehicle showrooms; banks; car washes; civic administration; outpatient clinic and medical offices; dry cleaning or laundry pick-up and delivery stations and self-service; fire stations; police stations; and post offices), and where the residential use is the same as one that by itself would be classified as a Group R, Division 2 or 3 Occupancy. A Commercially/ Industrially-Oriented JLWQ consists of a Designated Work Area and a Designated Residential Area.

#### Section 3B.2.4 Residentially Oriented JLWO

A single-tenant space combining working and living uses with or without interior walls where the residential use is the same as a use that by itself would be classified as a Group R, Division 2 Occupancy, and where the work use, by itself, is no more hazardous than that which is normally permitted in residential facilities, and the work use is the same as one that by itself would be classified as a Group B Occupancy (excluding drinking and dining establishments and food handling activities with on-site food sales and excluding certain business occupancies similar to animal hospitals, kennels, pounds; automobile and other motor vehicle showrooms; banks; car washes; civic administration; outpatient clinic and medical offices; dry cleaning or laundry pickup and delivery stations and self-service; educational occupancies above the 12th grade with more than ten occupants; fire stations; police stations; and post offices) and Group F, Division-1 Occupancy. Work uses classified as Group F, Division 2 Occupancies, when the scale and intensity of the activity is limited may be permitted if a request in approved form and content for alternate materials, alternate design and methods of construction is submitted to and approved by the Building Official. A Residentially-Oriented JLWQ consists of a Designated Residential Area and a Designated Work Area.

#### Section 3B.2.5 Residentially Oriented Live-Work In The Urban Core

A change of use of an existing commercial and non-residential use to a residentially-oriented JLWQ in the Central Business District designation of the Planning Regulations General Plan or other designation as determined by the Planning Division in accordance with the Planning Regulations.

# Section 3B.2.6 Designated Residential Area

The portion of an individual space that is designed and used for living, sleeping, eating, and cooking by one or more persons who also work in the Designated Work Area of that space. It is considered Habitable Space.

### Section 3B.2.7 Designated Work Area

The portion of an individual space that is designed and used for work purposes by one or more persons residing in the Designated Residential Area of that space. It is not considered Habitable Space.

# Section 3B.2.8 Group F, Division 7 Occupancy

Commercially/ industrially oriented Joint Living and Work Quarters.

#### Section 3B.2.9 Group F, Division 8 Occupancy

Commercially/ industrially oriented Joint Living and Work Quarters that meet current code with allowance for certain specific equivalent alternatives.

# Section 3B.2.10 Group R, Division 7 Occupancy

Residentially-oriented Joint Living and Work Quarters.

### Section 3B.2.11 Group R, Division 7.1 Occupancy

Residentially-oriented live-work (Joint Living and Work Quarters) in the Urban Core.

# Sec. 3B.2.12 Group R, Division 8 Occupancy

Residentially-oriented Joint Living and Work Quarters that meet current code with allowance for certain specific equivalent alternatives.

#### Section 3B.2.13 Related Definitions

For Floor Area, see Section 207 of the California Building Code.

For Habitable Space (Room), see Section 209 of the California Building Code

### Sec. 3B.3 - Additional Permit Application Requirements

### Section 3B.3.1 Plans and Specifications

In addition to the provisions of the California Building Code and this chapter for Information on Plans and Specifications, the plans for JLWQ shall contain and clearly show the following:

- 1. The architect or civil engineer of record for the project along with pertinent contact information pursuant to this Code;
- 2. Nature of all City Planning approvals required and obtained, including use as JLWQ pursuant to this Chapter, and show any City Planning conditions of approval within the plans;
- 3. The California Energy Commission Standards (Residential or Non-residential) which are being applied and the areas of the building and the individual JLWQ to which they are being applied and show the required energy documents within the plans;
- 4. Note regarding the nature of "notice of limitations" to be filed, or if previously filed show the notices within the plans;

- 5. Note on plans regarding the nature of the permit: for (complete)(partial) conversion of an existing building to the specific occupancy with complete build-out of individual spaces; or for (complete) (partial) shell conversion of existing building to the specific occupancy with individual spaces to be completed under separate permit; or for finished improvement of an individual tenant space within a previously converted or constructed shell building or portion of building; [or as applicable for other than JLWQ: for new complete building; or for new shell building];
- 6. Any additional information as required or requested by the Fire Marshal or Building Official;
- 7. Occupancy -- all existing occupancies of the building and the boundaries of the occupancies;
- 8. Type of construction -- all existing types of construction of the building and the boundaries of the types of construction, indicate the fire-resistance of the building elements. The building elements to be indicated are listed in Table 6-A.
- 9. Location on property -- indicate the distance from property line to the existing exterior walls and openings. Indicate any openings that are protected. Indicate the fire-resistance of the existing exterior walls.
- 10. Floor area -- indicate existing floor areas including mezzanine areas. Show floor areas of existing occupancies.
- 11. Height and number of stories indicate existing building height and number of stories and mezzanines within a story.
- 12. Occupant load -- indicate existing occupant load and exits or lack of exits for various portions and rooms of the building based on Table 10-A.
- 13. Indicate number and location of any existing individual spaces and the extent of their conformance with current code provisions ("notice of limitation" on file?, fire-resistive construction? etc. also see Numbers 25 through 33 below) and percentage of the story and building floor area they occupy;
- · 14. Indicate extent and nature of any existing fire-protection systems within the building;
- 15. Nature, location, and extent of any existing hazardous material control areas;
- 16. Occupancy -- show all proposed occupancies of the building and for existing buildings the portions which are changing occupancy and the boundaries of the proposed occupancies;
- 17. Type of construction -- show all the types of construction proposed for the building and the boundaries of the type of construction. If some elements of an existing building are upgraded to achieve a certain type of construction indicate the nature of the upgrade to achieve the proposed type of construction;
- 18. Location on property -- indicate fire-resistive requirements based on location of property and for existing buildings those openings or walls that are being upgraded to meet current code provisions for existing and proposed occupancies;

- 19. Floor area -- indicate floor areas including mezzanine areas of proposed occupancies and calculate allowable floor areas for existing and proposed occupancies to meet current code provisions;
- 20. Height and number of stories -- indicate proposed building height and number of stories and the allowable height and number of stories for existing and proposed occupancies to meet current code provisions;
- 21. Occupant load -- indicate occupant load of the proposed and existing occupancies to remain based on current code provisions;
- 22. Indicate number and location of any proposed individual JLWQ spaces and percentage of the building floor area they occupy and also, if there are existing JLWQ in the building, the combined percentage of the story floor area and the building floor area that the proposed and existing JLWQ occupy;
- 23. Indicate extent and nature of any proposed, or changes to existing, fire-protection systems within the building;
- 24. Indicate nature, location, extent, and details of any proposed and existing hazardous material control areas;
- 25. Nature of "notice of limitations" that affect the specific spaces(s));
- 26. Nature of application of disabled regulations that affect the specific individual space(s);
- 27. Nature of California Energy Commission Standards that affect the specific individual space(s) or for JLWQ if the prescriptive insulation and heating provisions are being used;
- 28. Total floor area of each individual space and location and floor area of its designated work area and its designated residential area and their respective percentages of the individual unit total floor area:
- 29. The maximum number of persons that may be accommodated (reside in) within each individual space;
- 30. The floor and mezzanine areas and number of floors and mezzanines (including sleeping mezzanines) within each individual space;
- 31. Whether Section 341 B.2.3.1, 341 B.2.3.2, or 341 B.2.3.3 for increased mezzanine (including sleeping mezzanine) percentage of superficial floor area is being applied;
- 32. Location of the sleeping area(s) of each individual space; and
- 33. Amount of hazardous materials to be involved or allowed pursuant to Section 348B and location and details for any hazardous control area(s) necessary within the individual space.
- Section 3B.3.2 Notice of Limitation Regarding an Individual F-7 or 8 or R-7, 7.1, or 8
  Occupancy Space Having Employees and/or Being Regularly Open to the Public.

When an individual F-7 or 8 or R-7, 7.1 or 8 Occupancy space is proposed in a building or a portion of a building the following shall be provided:

- 1. A "notice of limitation" for the building is recorded with the Alameda County Recorder's Office indicating whether or not employees are permitted and/or if the individual space is regularly open to the public; and
- 2. If appropriate, the Conditions, Covenants, and Restrictions administered by a owner's association shall delineate the conditions by which employees and/or being regularly open to the public are or are not permitted OR if appropriate, the standard lease shall delineate the conditions by which employees of the tenant of the individual space are or are not permitted and/or whether or not the individual space is regularly open to the public. A copy of either shall be attached as Exhibit "A" to the "notice of limitation."

Reference to this notice and whether employees and/or being regularly open to the public or not shall be indicated on the permit application.

Recording such a notice of limitation stating that employees are allowed and that an individual space is regularly open to the public shall not permit employees or being regularly open to the public if this is contrary to City Planning or other superseding conditions or regulations.

# Section 3B.3.3 Notice of Limitation for Use of Ship Stair or Ladder within an Individual F-7 or R-7 or R-7.1 Occupancy JLWQ

A "notice of limitation" shall be recorded with the Alameda County Recorder's Office with a waiver of damages and holding the City harmless for any litigation relating to access provisions in an individual JLWQ provided pursuant to Sections 345B.1.3.2.1, 345B.1.3.2.2, and 345B.1.3.2.3.

# Section 3B.3.4 Notice of Limitation for Use of Alternative Emergency Escape and Rescue for Existing Buildings

A "notice of limitation" shall be recorded with the Alameda County Recorder's Office with a waiver of damages and holding the City harmless for any litigation relating to alternative emergency escape and rescue provisions when such alternatives are used and provided for in an existing building pursuant to Section 345B.5.3.

# Section 3B.3.5 Notice of Limitation Regarding an Individual F-7 or 8 Occupancy Space Being a Noise Source Greater than 60db

When F-7 or 8 Occupancy individual spaces are proposed in a building or a portion of a building the following shall be provided:

1. A "notice of limitation" for the building is recorded with the Alameda County Recorder's Office indicating the limitations and requirements for mitigation of excessive noise generation; and

2. As appropriate, the Conditions, Covenants, and Restrictions administered by a owner's association or the Standard Lease Agreement for the space shall state that when an individual JLWQ has a regular use on a continuing basis that has a noise source above 60db the individual tenant and/or owner will comply with the provisions of Section 355B.2.2 relating to additional airborne sound and impact insulation for the space.

# Section 3B.4 - Change of Occupancy

#### Section 3B.4.1 General

Changing the occupancy of an existing building to a commercially/industrially-oriented JLWQ, Group F, Division 7 or 8 Occupancy, or to a residentially-oriented Group R, Division 7, 7.1 or 8 Occupancy shall be considered a change of occupancy and such buildings shall comply with the applicable requirements of the of the California Building Code and this chapter including the fire, life safety, structural, and seismic requirements.

#### **EXCEPTIONS:**

- 1. For Group F-7 or R-7 Occupancies in existing buildings minimum seismic requirements may be met if the building substantially conforms, or is altered to conform, to 75% of the California Building Code seismic and wind load design standards. Unreinforced masonry (URM) bearing wall buildings, in lieu of the above design standards, may comply with the current Uniform Code of Building Conservation (UCBC) Appendix Chapter 1. Concrete tiltup and nonductile concrete framed buildings that conform to the above standards will still be subject to any future seismic upgrade regulations for these types of buildings unless these buildings conform, or are altered to conform, to current code requirements.
- 2. For Group R-7.1 Occupancies in existing buildings minimum structural requirements may be met if the building substantially conforms, or is altered to conform to Sections 339B and 340B. Unreinforced masonry (URM) bearing wall buildings, in-lieu of the above design standards, may comply with the current Uniform Code of Building Conservation (UCBC) Appendix Chapter 1. Concrete tilt-up and non-ductile concrete framed buildings that conform to the above standards will still be subject to any future seismic upgrade regulations for these types of buildings unless these buildings conform, or are altered to conform, to current code requirements.
- 3. The occupancy of a story of an existing building or portion of the building may be changed to a Group F, Division 7 Occupancy or a Group R, Division 7 Occupancy or a Group R, Division 7.1 Occupancy without requiring that the entire building comply with all the requirements of this code if all of the following conditions are present or provided:
  - 3.1 No more than 10% of the floor area of the entire building or of an individual story is or will become designated residential area and no more than ten residents are accommodated on an individual story of the building pursuant to Section 334B.2.2;

- 3.2 The existing building, its use, its appendages, and/or its structural system is not declared an unsafe building or structure pursuant to this code or considered unsafe pursuant to other regulations;
- 3.3 The entire building is made to conform with all the minimum standards for existing buildings in Chapter 4 of the current Uniform Code for Building Conservation;
- 3.4 Other than for work required to comply with the current UCBC pursuant to 3.3 above, additions, alterations, and repairs shall comply with current code; and
- 3.5 The designated work area and the designated residential area of each individual JLWQ comply with the requirements of this chapter.

# Section 3B.4.2 - Structural Survey For R-7.1 Occupancy

Section 3B.4.2.1 Every structure or portion of a structure to be evaluated for structural capacity under this code shall be surveyed for structural conditions by an architect or engineer knowledgeable in historical structures. The survey shall document deterioration or signs of structural distress. The survey shall determine the details of the structural framing and the system for resistance of gravity and lateral loads. Details, reinforcement and anchorage of structural systems and veneers shall be determined and documented.

Section 3B.4.2.2 The results of the survey shall be utilized for designing modifications to the structural system to reach compliance with this code.

#### Section 3B.5 - Structural Regulations for R-7.1 Occupancy

### Section 3B.5.1 Gravity Loads

The capacity of the structure to resist gravity loads shall be evaluated and the structure strengthened as necessary. The evaluation shall include all parts of the load path, if the evaluation indicates that no structural distress is evident, and a complete load path is present, the structure may be assumed adequate for gravity loads by having withstood the test of time if anticipated dead and live loads will not exceed those historically present.

#### Section 3B.5.2 Wind and Seismic Loads

The ability of the structure to resist wind and seismic load shall be evaluated. The evaluation shall be based on the requirements of CSHBC Section 8-706 (see CBC Chapter 34, Division II). Any unsafe conditions in the lateral-load-resisting system shall be corrected, or alternative resistance shall be provided. Additional resistance shall be provided to meet the minimum requirements of this code. The architect or engineer shall consider additional measures with minimal loss of, and impact to, historic materials which will reduce damage and needed repairs in future earthquakes to better preserve the historical structure in perpetuity. These additional measures shall be presented to the owner for consideration as part of the rehabilitation or restoration.

# Section 3B.5.3 - Lateral Load Regulations For R-7.1 Occupancy

#### Section 3B.5.3.1 Lateral Loads

The forces used to evaluate the structure for resistance to wind and seismic loads need not exceed 0.75 times the seismic forces prescribed by the 1995 edition of the California Building Code (CBC). The seismic forces may be computed based on the Rw values tabulated in the CBC for similar lateral force-resisting systems. All deviations of the detailing provisions of the lateral-force-resisting systems shall be evaluated for stability and the ability to maintain load-carrying capacity at increased lateral loads. Unreinforced masonry bearing wall buildings shall comply with Appendix Chapter 1 of the Uniform Code for Building Conservation TM (UCBC), 1994 edition, and as modified by this code. Reasonably equivalent standards may be used on a case-by-case basis when approved by the authority having jurisdiction.

# Section 3B.5.3.2 Existing Building Performance

The seismic resistance may be based upon the ultimate capacity of the structure to perform, giving due consideration to ductility and reserve strength of the lateral-force-resisting system and materials while maintaining a reasonable factor of safety. Professional engineering judgment may be exercised regarding the strength and performance of materials not recognized by regular code requirements. (See California Historical Building Code, Chapter 8-8, Archaic Materials and Methods of Construction.)

Section 3B.5.3.3 All structural materials or members that do not comply with detailing and proportioning requirements of the regular code shall be evaluated for potential seismic performance and the consequence of noncompliance. All members which might fail and lead to possible collapse, or threaten life safety, shall be judged unacceptable and appropriate structural strengthening shall be developed. The building should be evaluated as a system to ensure against progressive collapse.

#### Section 3B.5.3.4 Load Path

A complete and continuous load path, including connections, from every part or portion of the structure to the ground shall be provided for the required forces. It shall be verified that the structure is adequately tied together to perform as a coherent system when subjected to earthquake forces.

# Section 3B.5.3.5 Parapets

Parapets and exterior decoration shall be investigated for conformance to the regular code requirements for anchorage and ability to resist prescribed seismic forces. An exception to regular code requirements shall be permitted for those parapets and decorations which are judged not to be a hazard to life safety.

#### Section 3B.5.3.6 Historical Records

Historical records of the structure or similar structures may be used in the evaluation, including the effects of subsequent alterations.

#### Section 3B.5.3.7 Nonstructural Features

Nonstructural features of a structure converted to R-7.1 use, such as exterior veneer, cornices and decorations, which might fail and create a life-safety hazard in an earthquake, shall be investigated. Their ability to resist seismic forces shall be verified, or the feature shall be strengthened.

**Section 3B.5.3.8** Partitions and ceilings of corridors and stairways serving an occupant load of 30 or more or located above the first story shall be investigated to determine their ability to remain in place when the building is subjected to earthquake forces.

# Section 3B.6 - Minimum Facilities and Shell Construction

#### Section 3B.6.1 General

All individual spaces and JLWQ shall be provided with facilities pursuant to applicable code with not less than the minimum facilities as provided herein. See Table 339B-A.

#### Section 3B.6.2 Minimum Shell Facilities

Where a building shell is proposed to be constructed or an existing building shell conversion with improvements and facilities within an individual space or JLWQ to be constructed later under separate permits, roughed-in facilities shall be provided pursuant to applicable code sufficient to serve the proposed facilities with not less than the minimum facilities pursuant to Table 339B-A. The shell shall be constructed pursuant to applicable code with minimum facilities as provided herein.

#### Section 3B.6.3 Finished Facilities

Where the individual space is to be completely finished, facilities shall be provided pursuant to applicable code with not less than the minimum facilities pursuant to Table 339B-A. All fixtures, equipment and appurtenances plus all plumbing, mechanical, and electrical requirements shall be installed for a complete and finished space.

#### Section 3B.6.4 Combustion Air Through Infiltration

If the individual space cannot provide sufficient combustion air or ventilation through infiltration as defined in and pursuant to the California Plumbing Code and/or California Mechanical Code, as applicable, then the minimum facilities in a room, individual space, or building of unusually tight construction shall provide roughed-in or completed facilities for combustion air and ventilation.

#### Section 3B.6.5 Shell Construction

The building shell construction shall meet all requirements of this code and this division. The building shell itself, public use areas, common use areas, and walls and floor/ceilings separating and common to the individual space or JLWQ shall be completely constructed as part of the building permit work for the shell. All plumbing work, mechanical work, and electrical work, including the provisions for minimum facilities pursuant to Table 342B-A, serving an individual space of F-7 or R-7 OR R-7.1 Occupancy JLWQ or F-8 or R-8 Occupancy shall be appropriately enclosed, terminated and labeled.

# Section 3B.6.6 Individual Space or JLWQ

The individual space or JLWQ that will be improved at a later time will be required to obtain a separate permit and shall comply with all permit and inspection requirements of the applicable code in effect at the time of permit application.

# Section 3B.7 - Construction, Height, and Allowable Area

#### Section 3B.7.1 General

Group F-7 or 8 Occupancy JLWQ shall conform to code requirements for F-1 Occupancies and Group R-7 or 8 Occupancies shall conform to code requirements for R-2 Occupancies as to construction, height and allowable area pursuant to Chapter 3, Chapter 5, Chapter 6, and to related code requirements and to the specific requirements herein.

**EXCEPTION**: For Group F-7 or R-7.1 Occupancies the following alternatives may be used:

- 1. Where one-hour fire-resistive construction is required, floors in existing buildings constructed with valid permits may be accepted which have the separation limited to the installation of materials approved for the underside of a one-hour fire-resistive floor/ceiling assembly when the existing flooring system is air-tight and equivalent to a minimum nominal 3/4" thick wood floor.
- 2. Where one-hour fire-resistive construction is required, wails or ceiling surfaces in existing buildings constructed with valid permits, with wood lath and piaster in good condition or one-half inch thick gypsum wall board may be accepted when approved by the Building Official.
- 3. In an existing building, an approved automatic sprinkler system, as specified in Chapter 38, may be substituted for one-hour fire-resistive construction, provided such system is not otherwise required throughout the building, including a requirement for sprinklers due to inadequate pressure and flow in the fire hydrants or fire supply that would provide protection to the building.

#### Section 3B.7.2 Unlimited Area

Section 505.2 is not applicable to commercially/industrially-oriented F-7 or 8 Occupancy JLWQ in existing buildings except Section 505.2 may be applied if a request in approved form and content for alternate materials, alternate design and methods of construction is submitted to and approved by the Building Official (approval is not guaranteed).

# Section 3B.7.3 Mixed Occupancies

Group F-7 or 8 Occupancies shall be separated from other occupancies as for an F-1 Occupancy and Group R-7 or 8 Occupancies as for an R-1 Occupancy with a minimum one-hour fire-resistive occupancy separation to all other occupancies, 343B.3 Special Provision. Walls and floors separating individual Group F-7 or 8 and Group R-7 or 7.1 or 8 Occupancy JLWQ from other individual JLWQ spaces shall be not less than one-hour fire-resistive construction. Storage or laundry rooms that are used in common by occupants of F-7 or 8 and R-7 or 7.1 or 8 Occupancies shall be separated from the rest of the building by not less than one-hour fire-resistive occupancy separation.

# Section 3B.7.4 Exceptions to Table No. 6-A

Exceptions to Table No. 6-A of the California Building Code relating to fire-resistive requirements for types of construction pursuant to Section 601.5 applies to individual spaces of Group F, Division 7 or 8 Occupancies including provisions for hotels and apartments pursuant to Section 601.5.2.2. Exceptions to Table No. 6-A shall apply to individual spaces of Group R-7 or 7.1 or 8 Occupancies pursuant to Section 601.5.2.2.

#### Section 3B.8 - Specific Use Provisions

### Section 3B.8.1 Room and Space Dimensions

#### Section 3B.8.1.1 General

Room dimensions and floor areas of Designated Residential Area in an individual JLWQ used for living, sleeping, eating, and cooking (habitable space) shall meet, as a minimum, the requirements of Section 310.6 and the provisions for Efficiency Dwelling Units pursuant to Section 310.7 and requirements herein. Dimensions of areas other than the designated residential area within an individual F-7 or 8 Occupancy space shall be as for an F-1 Occupancy. Also, comply with Section 334B.2.

### Section 3B.8.1.2 Sleeping Mezzanine Space Dimensions

A sleeping mezzanine, which is permitted only in an individual F-7 or R-7 Occupancy JLWQ shall have space dimensions as provided herein.

#### Section 3B.8.1.3 Headroom

The minimum sleeping mezzanine headroom shall be a headroom "envelope" clearance to the ceiling or any projections from the ceiling that has a height of 4' with an increasing height of

4" vertical to 12" horizontal or steeper running towards the access to the loft. A horizontal ceiling shall be a minimum of 5'-8" above the sleeping mezzanine floor. See Figures A-3B-1A and 1B.

#### Section 3B.8.1.5 Floor Area

The area dimensions of a sleeping mezzanine may be 5' minimum deep by 7' minimum long or 7' minimum deep by 5' minimum long with a maximum area of 120 square feet. At least fifty percent (50%) of the sleeping loft area perimeter shall be open to the common atmosphere of the space in which it is located unless mechanical ventilation or openable window pursuant to Section 1203.2 is provided. The floor area of a sleeping mezzanine shall not exceed the allowable floor area for mezzanines pursuant to Section 341B.2. See Figures A-3B-1A and 1B. Sec. 344B.1.3 Built-in Sleeping Bunk Space Dimensions. A built-in sleeping bunk, which is permitted only in an individual F-7 or R-7 JLWQ shall have space dimensions as provided herein.

#### Section 3B.8.1.6 Headroom

The minimum built-in sleeping bunk headroom clearance shall be a headroom "envelope" clearance to the ceiling or any projections from the ceiling with a height of 3' and with an increasing height of 4" vertical to 12" horizontal or steeper running towards the access to the built-in sleeping bunk. The minimum clearance for a flat ceiling shall be 42 inches above the built-in sleeping bunk floor. See Figures A-3B-2A and 2B.

#### Section 3B.8.1.7 Floor Area

A built-in sleeping bunk shall meet the area dimensions requirements for a sleeping mezzanine pursuant to Section 341 B.1.2.2. However, the area of the built-in sleeping bunk may not exceed 60 square feet. See Figures A-3B-2A and 2B.

#### Section 3B.8.2 Mezzanines in Individual JLWQ

#### Section 3B.8.2.1 General

Mezzanines shall conform to other requirements of this code or as herein provided.

# Section 3B.8.2.2 Mezzanine Ceiling Height

The ceiling height of a sloping ceiling above a mezzanine may be measured in accordance with Section 310.6.1.

#### Section 3B.8.2.3 Mezzanine Area in Individual JLWQ

#### Section 3B.8.2.3.1

The area of a mezzanine within an F-7 or R-7 Occupancy JLWQ may be one third of the gross area of the individual JLWQ if the building is fire-sprinkle red throughout.

#### Section 3B.8.2.3.2

The area of a mezzanine within an individual F-7 or R-7 Occupancy JLWQ may be one half of the gross area of the individual JLWQ if the building is fire-sprinklered throughout and fire-sprinklers are not otherwise required, including the requirement for fire-sprinklers due to inadequate fire flow in the water supply serving the building. The total area of the mezzanines within and outside the individual JLWQ on any floor or story of the building shall not exceed one-third of the area of the floor or story.

#### Section 3B.8.2.3.3

If the area and type of construction of an existing building and/or the use of area separation walls pursuant to Section 504.6 will not permit additional number of stories for the building the area of the mezzanine of an individual F-7 or R-7 may be one half of the gross area of the individual JLWQ without being classified as an additional story when the building is firesprinklered throughout and all of the following conditions exist:

- 1. The individual JLWQ has a layer of 5/8" Type "X" gypsum board applied to the existing ceiling and wall on the unit's side of a common ceiling or wall with another unit and also with any corridor;
- 2. The buildings interior exit path (corridor, etc.) serving the individual JLWQ has been constructed as for an extent of stairway enclosure appropriate to the configuration of the building, including requirements for smoke-proof enclosure as applicable, pursuant to Section 1005.3.3.3. When a stairway enclosure is not required, the interior exit path shall be constructed as for an exit passageway pursuant to Section 1005.3.4. Unless otherwise required, other individual JLWQ's in the building not using the requirements of this section need not be provided with fire-resistive protection on their side of the corridor or exit passageway.
- 3. Glazed openings are allowed between the unit and the building's interior exit path (corridor, etc.) if they are double glazed wire glass in steel frames of no more than 15 square feet per unit fronting on the exit path outside of the JLWQ (corridor, etc.). See Figure A-3B-4.

#### Section 3B.8.3 Yards and Courts

Yards and courts with required windows for natural light and ventilation shall be provided pursuant to Section 1203.4.

#### Section 3B.8.4 Eaves

Eaves over required windows for natural light and ventilation shall be pursuant to Section 1204.

### **Section 3B.8.5 Smoke Detectors**

Smoke detectors shall be provided in individual spaces that shall conform as applicable for new construction and R occupancy to Sections 310.9.1.1, 310.9.1.3, and as appropriate either 310.9.1.4 or 310.9.1.5.

# Section 3B.8.6 Heating

### Section 3B.8.6.1 General

The designated residential area of an F-7 or R-7 JLWQ and the habitable area of an F-8 or R-8 Occupancy shall conform to the requirements of Section 310.11. Space heating equipment shall be configured or located so the heated air will be directly circulated to the designated residential portion of the individual JLWQ.

# Section 3B.9 - Uniform and Concentrated Loads

Uniform and concentrated loads shall be pursuant to Table 16-A and to new categories added as follows:

Table 16-A

Category	Description	Uniform Load	Concentrated Load
21. R-7 JLWQ, R-8 Occupancy	Floors at grade or immediately above and below grade and other floors accessible by ramp or elevator.	60	2,000
	Floors other than described above including mezzanines.	50	0
	Mezzanines, if posting of allowable live load is provided.	40	0
22. F-7 JLWQ, F-8 Occupancy	Floors at grade or immediately above and below grade and other floors accessible by ramp or elevator.	75 .	2,0002
	Floors other than described above including mezzanines.	60	0
	Mezzanines, if posting of allowable live load is provided.	40	0
23. F-7 JLWQ R-7 JLWQ Occupancy	Sleeping Mezzanine	40	0
	Built-in Sleeping Bunk	40	0
24. F-7 JLWQ R-7 JLWQ Occupancy; F-8 or R-8 Occupancy in existing buildings	Roof Exit Path For Alternative Emergency Escape and Rescue. (3' minimum wide)	60	0
	Roof Exit Queuing Area (area = 3 SF per occupant served at the designated escape point off of the roof).	60	0

# **Section 3B.10 - Conventional Framing Provisions**

#### Section 3B.10.1 General

Section 2320 Conventional Light-Frame Construction Provisions of the California Building Code shall apply to F-7 or R-7 JLWQ Occupancy as for a Group R Occupancy.

#### Section 3B.10.2 - Fire Blocks And Draft Stops

### Section 3B.10.2.1 General

Section 708 - Fire Blocks and Draft Stops of the California Building Code applies to F-7 or 8 and R-7 or 8 Occupancies and as herein provided.

# Section 3B.10.2.2 Floor Ceiling Assembly

Draft stops in floor-ceiling assemblies pursuant to Section 708.3.1.1.2 as for 2 or more dwelling units and hotels applies to F-7 or 8 and R-7 or 8 Occupancies.

#### Section 3B.10.2.3 Attics

Draft stops in attics pursuant to Section 708.3.1.2.1 as for 2 or more dwelling units and hotels applies to F-7 or 8 and R-7 or 8 Occupancies.

# Section 3B.11 - Location on Property

#### Section 3B.11.1 General

For an F-7 JLWQ, the fire resistance of the exterior walls and openings may comply with the provisions for an R-2 Occupancy when the entire use of an existing building or a portion of an existing building which is being converted to F-7 JLWQ has been for commercial or industrial purposes. See Section 503 and Chapter 6. Provided that the requirements for an R-2 Occupancy does not create a more hazardous condition to fire and life safety than the existing condition of the walls and openings. Otherwise, requirements for an F-1 Occupancy shall apply to commercially/ industrially-oriented F-7 JLWQ Occupancy.

**EXCEPTION**: When a building complies with the allowable area requirements as for an R-2 occupancy and the F-7 Occupancy is fire-sprinklered, the fire resistance of the exterior walls and openings may comply with the provisions for an R-2 Occupancy.

### Section 3B.12 - Access and Means of Egress Facilities and Emergency Escapes

#### Section 3B.12.1 General

Access and means of egress facilities and emergency escapes shall be in conformance with CBC Chapters, Section 310.4 and as provided herein.

## Section 3B.12.2 Accessibility

#### Section 3B.12.2.1 General

Spaces Open to the General Public Or Common Use Spaces. Provisions of this chapter notwithstanding, buildings with JLWQ occupancies that have spaces regularly open to the public or for common use of the occupants of the building shall comply with the applicable accessibility regulations pursuant to Chapter 11B.

# Section 3B.12.2.2 JLWQ Occupancies without Employees and/or Not Regularly Open to the Public and Not Publicly-funded

Buildings or portions of buildings with JLWQ Occupancies that are not publicly funded, do not have employees nor are regularly open to the public, nor are commercial spaces may comply either with the residential accessibility requirements of Chapter 11A or with the non-residential accessibility requirements of Chapter 11 B of the California Building Code.

# Section 3B.12.2.3 JLWQ Occupancies with Employees and/or Regularly Open to the Public and Not Publicly-funded.

Buildings or portions of buildings with JLWQ Occupancies that are not publicly funded, but do have employees and/or are regularly open to the public shall comply with the non-residential accessibility requirements of Chapter 11 B of the California Building Code.

# Section 3B.12.2.4 Publicly-funded JLWQ without Employees and Not Regularly Open to the Public.

Buildings with F-7 Occupancy JLWQ that are publicly funded (owned, operated, or maintained by a public jurisdiction) and do not have employees and are not regularly open to the public shall comply with the applicable accessibility regulations for publicly funded residential occupancy pursuant to Chapter 11B and also Federal requirements if more stringent.

# Section 3B.12.2.5 Publicly-funded JLWQ with Employees and/or are Regularly Open to the Public.

Buildings with F-7 Occupancy JLWQ that are publicly funded (owned, operated, or maintained by a public jurisdiction) and do have employees and/or are regularly open to the public shall comply with the applicable accessibility regulations pursuant to Chapter 11B and also Federal requirements if more stringent.

## Section 3B.12.3 Means of Egress Facilities

#### Section 3B.12.3.1 Number of Exits

Number of Exits shall be in conformance with CBC Chapter 10. Occupant Load Factor shall be pursuant to Section 345B.6.

## Section 3B.12.3.2 Individual Units of Group F-7 or 8 and R-7 or 8 Occupancies

In individual spaces of Group F-7 or 8 or R-7 or 8 Occupancies a minimum of two exits shall be required from the individual space when the number of occupants is 10 or more. For special provision for exits due to hazardous materials in an individual space see Section 348B. 1.2.

## Section 3B.12.3.3 Existing Building Exits

One of the required exits for an existing Building serving an F-7 or R-7 Occupancy may be a fire escape in conformance with Section 8-502 of the 1998 California Historical Building Code.

#### Section 3B.12.4 Stairways

#### Section 3B.12.4.1 General

Stairways within an individual JLWQ Occupancy unit shall comply as a minimum with the requirements for a residential or other private stair where the occupant load is less than 10 and as herein provided. Stairways serving two or more individual JLWQ Occupancy units or an occupant load of 10 or more shall comply with CBC Chapter 10, Section 1003.3 and as herein provided.

#### Section 3B.12.4.2 Stairways in an Individual F-7 or R-7 JLWO Occupancy Unit

Stairways in an individual unit of F-7 or R-7 or R-9 Occupancy may alternatively comply with Section 345B.1.3.2.1 for a ship stair access, Section 345B.1.3.2.2 for a ladder access, or with Section 345B.1.3.2.3 for other means of access to a mezzanine, sleeping mezzanine, or built-in sleeping bunk. See Figures A-3B-1A & 1B; A-3B-2A and 2B; and A-3B-3.

#### Section 3B.12.4.3 Ship Stair

A ship stair (ships ladder) which is a fixed ladder within the pitch range of 41.5 to 75 degrees from the horizontal, equipped with treads and stair rails may provide access to a private mezzanine, sleeping mezzanine, or built-in sleeping bunk within an individual unit of F-7 or R-7 Occupancy provided a warning sign and illumination are installed at the ship stair to meet the requirements of the Building Official. There shall be 6-8" minimum headroom provided at the top of the ship stair except the headroom clearance for access to a built-in steeping bunk may be 3'-6" minimum.

#### Section 3B.12.4.4 Ladder

A ladder may provide access to a sleeping mezzanine or a built-in sleeping bunk within an individual F-7 or R-7 Occupancy if the rungs are 14" maximum on center, 20 inches minimum

wide, with 7 inches minimum toe space (measured horizontally from the outside of the rung to the face of a wall or other surface) and a safety cage of 30 inches minimum clear dimension is provided above 6'-8" height above the bottom of the ladder when the floor to floor height traversed by the ladder is greater than 9 feet and provided that a warning sign and illumination are installed at the ladder to meet the requirements of the building official.

# Section 3B.12.4.5 Other Means of Individual Unit Stairway Access

Other means of access to a sleeping mezzanine or built-in bunk bed by means of prefabricated access equipment (folding stairs, etc.) may be used if equivalent to the above, subject to building official approval and provided a warning sign and illumination are installed at the access. Alternative stairways pursuant to 1998 CBC Section 1003.3.3.7 may be utilized in F-7 or 8 and R-7 or 8 Occupancies.

## Section 3B.12.4.6 Landing at a Sleeping Mezzanine

A stairway, ship stair (ships ladder), ladder or similar equipment providing access to a sleeping mezzanine in a JLWQ shall terminate in a landing with a 3' minimum dimension in any direction. The landing shall have 6'-8" minimum headroom. There may be a single step up to the floor of the sleeping mezzanine of 12" maximum rise or otherwise steps complying with individual unit residential requirements shall be provided the same width of the landing in the direction up to the floor of the sleeping loft. See Figures A-3B-1A and 1B.

#### Section 3B.12.4.7 Notice of Limitation

See Section 337B.3 for a "notice of limitation" required for any access based on Sections 349B.1.3.2.1, 349B.1.3.2.2, and 349B.1.3.2.3.

# Section 3B.12.4.8 Existing Stairways Serving Two or More Individual Units or Ten or More Occupants of an F-7 or R-7 Occupancy

Existing stairways serving two or more individual units of F-7 or R-7 Occupancies may alternatively comply as provided herein. Fire escapes shall comply with Section 345B.1.2.1.2.

# Section 3B.12.4.9 Existing Width

Width of existing stairways shall not be less than 30" clear from wall to wall. Projections into this minimum width shall conform to current code.

#### Section 3B.12.4.10 Rise and Run

Rise and run of existing stairways may conform to the code applicable at the time the existing stairway was constructed provided that the maximum rise does not exceed eight inches and the minimum tread is not less than nine inches.

#### Section 3B.12.4.11 Headroom

Headroom of existing stairways shall not be less than 6 feet 6 inches.

## Section 3B.12.4.12 Landings

Existing landings of existing stairways may conform to the code applicable at the time the existing stairway was constructed but shall not be less than 30 inches in the direction of travel.

#### Section 3B.12.4.13 Handrails

Existing handrails may conform to the code applicable at the time the existing stairway was constructed. Handrails on both sides of an existing stairway are not required if the existing stairway was originally constructed with a handrail only on one side and the stairway is less than 36 inches in width. The top of existing handrails shall not be less than 32 inches in height above landings and the nosing of treads.

#### Section 3B.12.4.14 Guardrails

Guardrails shall conform to CBC Section 509 but need not exceed 36 inches on existing stairways.

## Section 3B.12.4.14 Interior Stairway Construction

Existing interior stairway construction may remain if the stairway construction is structurally adequate and the stairway is fully fire-sprinklered.

#### Section 3B.12.5 The Exit Access

#### Section 3B.12.5.1 General

The exit access shall be pursuant to Section 1004 of the California Building Code and as herein provided.

## Section 3B.12.5.2 Separation of Exits

When two exits are required in a building that has only one existing exit stairway, a second exit that complies with current code may be constructed next to the existing stairway if the arrangement of the stairways meet the following conditions:

- 1. The entry to the stairways are at opposite ends.
- 2. Any hallway or corridor connecting the entries to the stairways is constructed pursuant to Section 1004.3.4.3 of the California Building Code.
- 3. A horizontal exit wall bisects the building and stairways.
- 4. All areas of the floor have access to either stairway. See Figure A-3B-8.

## Section 3B.12.6 Emergency Escape and Rescue

#### Section 3B.12.6.1 General

Every joint living and work quarters (JLWQ) shall have at least one emergency escape and rescue window or door for each separate sleeping room or sleeping area pursuant to Section 310.4 and as provided herein.

# Section 3B.12.6.2 Sleeping Area

If a sleeping area is located in the common atmosphere of a room, even if the room is at a different level from the sleeping area and/or has multiple levels, and is not separated from the room with a wall greater than 42 inches high above the finish floor level of the sleeping area, the required emergency escape and rescue window or door may be located in the room provided:

- 1. The required emergency escape and rescue window or door is directly visually ascertainable from the sleeping area which it serves.
- 2. A direct path of travel, which may include stairways, etc., is provided between each sleeping area and its required window or door. More than one sleeping area may use the same egress window or door as long as the emergency escape and rescue window or door serving each sleeping area meets the above requirements.

#### Section 3B.12.6.3 Alternative Emergency Escape and Rescue in Existing Buildings

Section 3B.12.6.3.1 In an existing building where no exterior wall of the sleeping area of an individual space or JLWQ abuts a public street, public alley, yard or exit court any one of the following alternatives may be used. Signage to indicate the point of emergency egress and rescue and other facilities to ensure ease of access and egress along the escape and rescue path shall be installed to meet the recommendations of the Fire Marshal and the Building Official:

- 1. An escape and rescue door may open directly into a corridor if the corridor is constructed to meet the requirements for an extent of stairway enclosure pursuant to Section 1009.4 including provisions for openings and doors, appropriate for the configuration of the building in which it is located. A "Knox Box" with keys shall be provided in an approved location for the Fire Department's use.
- 2. A one-hour fire-resistive compartment with one-hour label exit door and equipped with a ships ladder to the roof. A minimum 36 inches by 48 inches clear landing shall be provided in front of the bottom of the ships ladder. Emergency lighting, a counter-balanced roof hatch, and marked exit path across the roof to an approved fire escape or escape ladder shall be provided.
- 3. If a court without access to a public way on the property is available, then an approved fire escape or escape ladders may either lead to the roof similar to alternative 2 above, or to the bottom of the court. An approved fire department access path to the bottom of the court shall

be provided to meet the recommendations of the Fire Marshal and Building Official. A "Knox Box" shall be provided if there are any locked doors or gates along the fire department access path.

4. When the roof is part of an alternative emergency escape and rescue method, the roof structure at the exit path and the queuing area to the escape ladder or stair off of the roof shall consider the live loads added to Table 16-A in Section 342B. The queuing area provided shall be 3 square feet per occupant for the occupant load served by the alternative emergency escape and rescue.

#### Section 3B.12.6.3.2 Notice of Limitation

If any alternative emergency escape and rescue method is used a "notice of limitation" shall be recorded with the Alameda County Recorder's Office with a waiver of damages and holding the City harmless for any litigation relating to alternative emergency escape and rescue provided.

#### Section 3B.12.6.3.3 Exit Path Roof Load

The roof exit path and a minimum 10 feet square queuing area at the escape stair or ladder off of the roof shall be structurally designed for the loads pursuant to Section 342B.

# Section 3B.12.7 Occupant Load.

#### Section 3B.12.7.1 General

Occupant loads for buildings with F-7 occupancies shall comply with Table 10-A--Minimum Egress Requirements for the appropriate use and as herein provided. See Section 353B.1.2 for special provision related to exits for individual spaces due to presence of hazardous materials. Sec. 349B.6.2 Occupant Load Factor for Individual JLWQ without Employees or Having Regular Hours for Being Open to the Public. Occupant load factor for individual JLWQ without employees or having regular hours open to the public shall be 200 square feet per occupant with area based on the superficial floor area of the individual unit.

# Section 3B.12.7.2 Occupant Load Factor for Individual JLWQ with Employees and/or Having Regular Hours Open to the Public

Occupant load factor for individual JLWQ with employees and/or regular hours open to the public shall be 200 square feet per occupant for the superficial floor area of the designated residential portion of the individual JLWQ and 100 square feet per occupant for the superficial floor area of the non-residential portion of the individual JLWQ.

#### Section 3B.12.8 Guardrails

# Section 3B.12.8.1 General

Code provisions pertinent to guardrails apply to F-7 occupancies as for an F-1 Occupancy except as herein provided for the individual JLWQ.

# Section 3B.12.8.2 Required

Guardrails including sleeping mezzanine guardrails for an individual JLWQ may be a minimum of 36 inches in height. A built-in sleeping bunk need not have a guardrail but shall have a railing that has a height of at least one-third of the clear floor to ceiling height measured vertically at the rail. This railing need not exceed 36 inches.

## Section 3B.13 - Light and Ventilation

#### Section 3B.13.1 General

Code provisions pertinent to the designated residential area of an individual F-7 or R-7.1 Occupancy shall comply with Section 1203 with alternative minimums as provided herein. The remaining area of the individual F-7 or R-7 or R-7.1 Occupancy shall be provided with light, ventilation, and sanitation appropriate to an F-1 Occupancy. F-8 and R-8 Occupancies shall comply with Section 1203. Alternative means of ventilation pursuant to Appendix Chapter 12 may be utilized.

#### Section 3B.13.2 Light

If due to legal or physical constraints the requirements for natural light in an existing building are not readily achievable, natural light may be provided by means of exterior glazed openings with an area of not less than one-twentieth of the superficial residential floor area of the individual JLWQ with a minimum of 5 square feet if additional artificial light to meet the requirements of the building official is provided. If the sleeping area of an individual space is separated from its required source of natural light by more than 25 feet measured horizontally, then the sleeping area (only) shall be doubled and added to the designated residential area in calculating the required natural light area for a space.

#### Section 3B.13.3 Ventilation

If due to legal or physical constraints the requirements for natural ventilation in an existing building are not readily achievable, natural ventilation may be provided by means of exterior openings with an area of not less than one-fortieth of the superficial residential floor area of the individual space or JLWQ with a minimum of 2-1/2 square feet if additional mechanical ventilation to meet the requirements of the building official is provided. If the sleeping area of an individual space or JLWQ is separated from its required source of natural ventilation by more than 25 feet measured horizontally, then the sleeping area (only) shall be doubled and added to the base superficial residential area in calculating the required natural ventilation area for an individual space or JLWQ.

#### Section 3B.14 - Shaft and Exit Enclosures

**Section 3B.14.1** Code provisions pertinent to F-1 occupancies for shaft and exit enclosures shall apply to an F-7 occupancy JLWQ except that shaft enclosures that serve or are within an individual JLWQ may be the same as required for within an individual dwelling unit of an R-1 Occupancy.

#### Section 3B.15 - Fire Sprinkler and Standpipe Systems

## Section 3B.15.1 Fire Sprinkler System

Fire sprinklers for F-7 or R-7 or R-7.1 JLWQ Occupancies shall be provided when required by Section 904.2.2 and as for an R-2 apartment house pursuant to Section 904.2.8 with an individual JLWQ counted as a dwelling unit in calculating the total number of dwelling units in the building.

# Section 3B.15.2 Standpipe System

F-7 JLWQ occupancies shall be furnished with standpipes when required by Section 904.5 as for an F-1 Occupancy. R-7 and R-7.1 Occupancies shall be furnished with standpipes when required by Section 904.5 as for an R-1 Occupancy.

#### Section 3B.15.3 Buildings Under Construction

Buildings or portions of buildings being converted to JLWQ shall comply with the provisions of Section 904.6 as for new construction.

# Section 3B.15.4 Special Provisions for Sprinkler at a Mezzanine, Sleeping Mezzanine, or Built-in Sleeping Bunk

A mezzanine with access other than by a stairway, a sleeping mezzanine, or a built-in sleeping bunk shall have a residential quick response sprinkler head at the top of the access to the mezzanine, sleeping mezzanine, or built-in sleeping bunk. See Figure A-3B-4.

## Section 3B.16 - Special Hazards

## Section 3B.16.1 Storage of Flammable Liquids or Hazardous Materials

Allowable Materials and Quantities. Individual F-7 or R-7 Occupancy JLWQ shall comply with Table 3B.16 A and as provided herein. R-7.1 Occupancies shall comply with the Fire Code as for an R-2 Occupancy.

Table 3B.16 A

Criteria for Defining Limits on Use, Storage, and Quantities of Hazardous Materials Permitted in Individual JLWQ Spaces		
Description	R-7 or R-8 Occupancy	F-7 or F-8 Occupancy
a) Flammable Liquids:		
Class I-A	Prohibited	10 gal per CA*
Class I-B or C	1 gal per unit	15 gal per CA*
Class II	5 gal per unit	30 gal/CA*
Class III	5 gal per unit	80 gal per CA*
combined all class	10 gal per unit	NA
combined I-A, B, C	No	30 gal per CA*
b) Compressed Gas:		
flammable	(2) - 1 quart per unit	Table 3-D.1 & 3-E UBC per CA*
corrosives	1 gal per unit	Table 3-D.1 & 3-E UBC per CA*
Others		Table 3-D.1 & 3-E UBC per CA*
c) Corrosives and Toxics	10 gal per unit, includes quantities from a) and b) above	Table 3-E UBC per CA*
d) additional quantities of a), b), and c) above permitted in approved storage units	Yes	Table 3-D.1 & 3-E UBC per CA*
e) Woodworking:		
less than 3 appliances with dust collectors	Yes	Yes
Others	No	. No
f) Other hazardous materials	No	Table 3-D.1 & 3-E UBC per CA*

CA\* = Control Area: the space bounded by 1 hour fire-resistive separation from the other portions of the building. Each building shall have no more than 4 control areas.

# Section 3B.16.2 Special Provision

When the quantities of hazardous materials in individual F-7 or R-7 Occupancies do not exceed the following Table 353B-A no additional requirements apply. If the quantities of hazardous materials in an individual F-7 Occupancy JLWQ exceed the following Table 353B-A but do not exceed those listed in Table No. 3-D.1 or 3-E, the requirements of Sections 304.2.2.1 and 305.2.4 apply and occupants in such individual spaces where the work area

exceeds 200 square feet (which is the case for all individual spaces or JLWQ) shall have access to at least two exits from the room and all portions of the work area shall be within 75 feet of an exit. When the quantities of hazardous materials in such uses exceed those allowed by Table No. 3-D.1 or 3-E, the use shall be classified by the Building Official in the appropriate Group H Occupancy.

An F-7 Occupancy shall not be used for storage of flammable liquids or hazardous materials where welding, any work involving an open flame, or similar hazardous operations or processes are accomplished except as herein provided.

## **EXCEPTION**

- 1. Open flame may be used for art work, craft work, or similar activities provided the quantity of compressed gas or flammable liquid stored within an individual F-7 Occupancy JLWQ complies with Table 353B-A.
- 2. Open flame and welding may be permitted in an individual F-7 Occupancy JLWQ if the individual F-7 Occupancy JLWQ with the open flame and welding has an occupancy separation from the remainder of the building or other JLWQ in the building pursuant to Section 307 for the appropriate Group H occupancy.

#### Section 3B.17 - Fire Alarms

#### Section 3B.17.1 General

F-7 JLWQ occupancies shall conform to the requirements as for an R-1 apartment house pursuant to Section 310.10 and as provided herein. An individual JLWQ is considered a dwelling unit for purposes of this section.

## **Section 3B.17.2** Special Provision for Local Alarm

If a common interior exit path serves more than 4 individual F-7 and/or R-7 or R-7.1 Occupancy JLWQ or serves F-7 and/or R-7 or R-7.1 Occupancy JLWQ spaces that combined accommodate more than 10 persons, and the exit path or the spaces it serves are not firesprinklered, then an approved local manual or automatic fire alarm system shall be installed in the exit path. The local alarm shall be capable of sounding an audible alarm to the individual JLWQs served by the common interior exit path to meet the recommendations of the Fire Marshal and Building Official.

#### Section 3B.18 - Sound Transmission Control

#### Section 3B.18.1 General

Individual JLWQ shall comply with Division IIA of Appendix Chapter 12 as for apartment houses and as provided in this division. Existing buildings being converted to JLWQ Occupancies are not required to, but, are recommended to consider exterior noise sources pursuant to Section 1208A.8.4.

**EXCEPTION**: In existing buildings existing walls and floor/ceilings are not required to meet these requirements unless they are opened or altered.

#### Section 3B.18.2 Notice of Limitation

A "notice of limitation" pursuant to Section 337B.5 shall be provided for all F-7 or 8 Occupancies where individual JLWQ are abutting other habitable spaces.

#### Section 3B.18.3 Airborne Sound Insulation

# Section 3B.18.3.1 General

Buildings or a portion of buildings classified as F-7 or 8 or R-7 or R-7.1 or 8 Occupancies shall comply with Division IIA of Appendix Chapter 12 as for apartment houses by providing STC 50 walls and floor/ceilings where a designated residential area abuts another occupied area and as provided in this division.

## Section 3B.18.3.2 Commercially/Industrially Oriented JLWQ as Noise Source

Any individual F-7 or 8 Occupancy space that is a source of noise above 60db such as a rock band practice shall add construction elements that provide an additional 50 STC to the existing walls and floor/ceiling that abuts adjacent residential occupancies. Alternatively, the space may comply with the recommendations of an acoustic analysis report, prepared under the supervision of a person experienced in the field of acoustical engineering, submitted with an application for building permit.

#### **Section 3B.18.4 Impact Insulation**

#### Section 3B.18.4.1 General

-Buildings or a portion of buildings with individual spaces or JLWQ shall comply with Division IIA of Appendix Chapter 12 as for apartment houses by providing IIC 50 floor/ceilings where a designated residential area abuts another occupied area and as provided in this division.

## Section 3B.18.4.2 Commercially/Industrially Oriented JLWQ as Noise Source

Any individual F-7 JLWQ space that is a source of impact noise above 60db shall add construction elements to separate the source of impact noise or provide an additional IIC 50 to the floor/ceiling that abuts adjacent residential occupancies. Alternatively, the space may comply with the recommendations of an acoustic analysis.

# Section 3B.19 - Energy Conservation Requirements

#### Section 3B.19.1 General

The space of buildings or portions of buildings with commercially/ industrially-oriented JLWQ outside the area of the individual JLWQ shall comply with the appropriate California Energy Commission's Residential or the residential portion of the Non-residential Standards. Individual JLWQ units themselves shall comply as follows:

- 1. Either the Residential Standards may be applied or alternatively the residential portion of the Non-residential Standards may be applied (as appropriately indicated on information on plans) to individual JLWQ in buildings as follows:
  - 1.1 Buildings of any number of stories with a maximum of two JLWQ and/or dwelling units.
  - 1.2 Buildings with any number of individual JLWQ and/or dwelling units and with three or fewer habitable stories.
- 2. The residential portion of the Non-residential Standards shall apply to individual JLWQ in buildings as follows:
  - 2.1 Buildings of any number of stories with more than two JLWQ and/or dwelling units.
  - 2.2 Buildings with more than three habitable stories.

## Section 3B.20 - Plumbing Systems Requirements

#### Section 3B.20.1 General

F-7 or 8 and R-7, R-7.1 or 8 Occupancies shall comply with the more stringent requirements of 1998 CBC Chapter 29 or Appendix Chapter 29 as herein provided.

## Section 3B.20.2 Plumbing Code Application

Plumbing Code requirements as for an F occupancy apply to Group F-7 or 8 Occupancies except that Section 701.1.2 of the California Plumbing Code which allows ABS and PVC installations in residential construction not more than two stories in height may be applied to plumbing within individual commercial/ industrially oriented JLWQ that individually have no more than two stories. Plumbing in party and common walls and floor/ceilings are not considered within the individual JLWQ.

## Section 3B.20.3 Number of Fixtures

Individual JLWQ shall meet the requirements of Section 2902.6 of the California Building Code or Appendix Chapter 29 for Group R Occupancies. The common use areas of the building and areas with employees or open to the public shall comply with the requirements of Section 2902.3 or Appendix Chapter 29 for F Occupancies. The fixtures located within individual JLWQ may be used to meet Section 2902.3 requirements.

## Section 3B.21 - Electrical Code Requirements

# Section 3B.21.1 General

A Group F-7 or 8 Occupancy shall conform with the California Electrical Code requirements as for an F-1 Occupancy. The designated residential area of an individual F-7 or 8 Occupancy JLWQ shall comply with Section 210-52 relating to dwelling unit receptacle outlets. Group R-7, R-7.1 or 8 Occupancy shall conform with requirements as for an R-1 Occupancy.

15.04.670 Add the following new Appendix Chapter 3C for Joint Living and Work Quarters:

# Appendix Chapter 3C

## Requirements For Group R, Division 7 Occupancy

Section 3C.1 - General

#### Section 3C.1.1 Purpose

The purpose of this division is to provide alternative building standards and minimum standards of safety for residentially-oriented Joint Living and Work Quarters (JLWQ) purposes pursuant to California State Health and Safety Code Section 17958.11. See Section 322B.1 for portions of Section 17958.11 repeated for clarification purposes.

## Section 3C.1.2 Scope

#### Section 3C.1.2.1 General

Same as Section 322B.2.1 which is repeated for clarification: "The provisions of this division shall apply to and may be used only for buildings or portions thereof originally designed for commercial or industrial purposes that have received City Planning approval for use as Joint Living and Work Quarters (JLWQ). City Planning approval shall be pursuant to Section 17.102.190 of the Oakland Planning Code or other City Planning approval indicating that the proposed use is consistent with California State Health and Safety Code Section 17958.11."

# Section 3C.1.2.2 Applicability of City Planning and Other Criteria for Joint Living and Work Quarters

Same as Section 322B.2.2 which is repeated for clarification: "As provided in CSHSC Section 17958.11 and the Oakland Planning Code, the residential occupancy of joint living and work quarters is accessory to its primary use as a place of work. Accordingly, the provisions of this division shall apply only to buildings or portions of buildings that meet the following criteria:

- 1. The minimum floor area of an individual JLWQ shall be 660 square feet.
- 2. A minimum of 67% of the floor area of an individual JLWQ shall be designated as work area and the remainder shall be designated as residential area pursuant to 3 below. Up to 25% of the designated work area may be used for dual purposes such as telephoning, drawing, accounting, reading, planning, development of work projects, and sanitary facilities.

- 3. The areas of an individual JLWQ used for living, sleeping, eating, and cooking (habitable space) shall be designated as residential area. The residential area shall be secondary to the work area and shall not exceed 33% of the floor area of the individual JLWQ.
- 4. The designated residential area of an individual JLWQ with up to 300 square feet may provide residence for a maximum of two persons. An additional resident can be accommodated for each additional 150 square feet of designated residential area. No individual JLWQ shall accommodate more than 10 persons regardless of the size of the designated residential area."

## Section 3C.1.3 Applicability Of Other Provisions

Except as specifically required or allowed by this division JLWQ that are residentially-oriented shall meet all applicable provisions of this code as for an R-1 Occupancy apartment house dwelling unit.

#### Section 3C.2 - Definitions

For the purpose of this division, certain terms are defined as follows:

# Section 3C.2.1 Residentially Oriented Joint Living and Work Quarters

A single-tenant space combining working and living uses with or without interior walls where the residential use is the same as a use that by itself would be classified as a Group R, Division 2 Occupancy, and where the work use, by itself, is no more hazardous than that which is normally permitted in residential facilities, and the work use is the same as one that by itself would be classified as a Group B Occupancy (excluding drinking and dining establishments and food handling activities with on-site food sales and excluding certain business occupancies similar to animal hospitals, kennels, pounds; automobile and other motor vehicle showrooms; banks; car washes; civic administration; outpatient clinic and medical offices; dry cleaning or laundry pick-up and delivery stations and self-service; educational occupancies above the 12th grade with more than ten occupants; fire stations; police stations; and post offices) and Group F, Division 1 Occupancy. Work uses classified as Group F, Division 2 Occupancies, when the scale and intensity of the activity is limited may be permitted if a request in approved form and content for alternate materials, design and methods of construction is submitted to and approved by the Building Official. A Residentially-Oriented JLWQ consists of a Designated Residential Area and a Designated Work Area.

# Section 3C.2.2 Group R, Division 7 Occupancy

Residentially oriented Joint Living and Work Quarters (JLWQ) that meet all the requirements of this division.

#### Section 3C.2.3 Related Definitions

For **Designated Residential Area**, see Section 324B.3 of this chapter.

For **Designated Work Area**, see Section 324B.4 of this chapter.

For Floor Area, see Section 207.12 of the California Building Code.

For Habitable Space (Room), see Section 209.1 of the California Building Code.

For Joint Living and Work Quarters (JLWQ), see Section 324B.1 of this chapter

## Section 3C.3 - Additional Permit Application Requirements

#### Section 3C.3.1 General

In addition to the requirements of this Code, plans for JLWQ shall clearly designate the information pursuant to Section 325B.1.

#### Section 3C.3.2 Notice of Limitations

For "notice of limitation" regarding an individual space or JLWQ Having Employees and/or Being Regularly Open to the Public; for Use of Ship Stair or Ladder; for Use of Alternative Emergency Escape and Rescue; or Regarding an Individual Space or JLWQ Being a Noise Source Greater Than 60 db see Sections 325B.2, 325B.3, 325B.4, and 325B.5 of this chapter.

# Section 3C.4 - Change of Use

# Section 3C.4.1 General

All proposed work to legally convert the uses of an existing building to residentially-oriented JLWQ shall be considered a change in use and such buildings shall comply with the applicable requirements in this code including the fire, life safety, structural, and seismic requirements. See Section 326B.1 of this chapter for exceptions.

#### Section 3C.4 - Minimum Facilities and Shell Construction

Shall be pursuant to Section 327B of this chapter.

#### Section 3C.5 - Construction, Height, and Allowable Area

#### Section 3C.5.1 General

Group R-7 Occupancy JLWQ shall conform to code requirements for R-1 Occupancies as to construction, height and allowable area pursuant to Chapter 3, Chapter 5, and Chapter 6 of the California Building Code, and to related code requirements and to the specific requirements herein. For exceptions see Section 328B.1 of this chapter.

#### Section 3C.5.2 Unlimited Area

Section 505.2 is not applicable to residentially-oriented JLWQ except Section 505.2 may be applied if a request in approved form and content for alternate materials, alternate design and methods of construction is submitted to and approved by the Building Official.

## Section 3C.5.3 Mixed Occupancies

Group R, Division 7 JWLQ shall be separated from other occupancies as for an R-1 Occupancy with a minimum one-hour fire-resistive occupancy separation to all other occupancies.

## Section 3C.5.4 Special Provision

Walls and floors separating individual Group R-7 JLWQ from other R-7 Occupancy JLWQ in the same building shall be not less than one-hour fire-resistive construction.

# Section 3C.6 - Specific Use Provisions

All of the provisions of Section 329B of this chapter for an F-7 JLWQ Occupancy apply to an R-7 JLWQ Occupancy.

#### Section 3C.7 - Uniform and Concentrated Loads

Uniform and concentrated loads shall be pursuant to Table 16-A of the California Building Code and to the additional categories added in Section 330B of this chapter.

#### Section 3C.8 - Access and Exit Facilities and Emergency Escapes

Access and exit facilities and emergency escapes shall be pursuant to Section 334B of this chapter as for an F-7 JLWQ Occupancy.

# Section 3C.9 - Light and Ventilation

Light, ventilation and sanitation shall be pursuant to Section 335B of this chapter as for an F-7 JLWQ Occupancy.

#### Section 3C.10 - Shaft and Exit Enclosures

Code provisions pertinent to R-1 JLWQ Occupancies for shaft and exit enclosures shall apply to R-7 JLWQ Occupancy except that shaft enclosures that only serve and are within an individual JLWQ shall be the same as required for within an individual dwelling unit of an R-1 Occupancy.

# Section 3C.11 - Fire Sprinkler and Standpipe Systems

## Section 3C.11.1 Fire Sprinkler System

Fire sprinklers for an R-7 JLWQ Occupancy shall be provided when required by Section 904.2.2 of the California Building Code and as for an R-1 apartment house pursuant to Section 904.2.8 with an individual JLWQ counted as a dwelling unit in calculating the total number of dwelling units in the building.

#### Section 3C.11.2 Standpipe System

R-7 JLWQ Occupancies shall be furnished with standpipes when required by Section 904.5 of the California Building Code as for an R-1 Occupancy.

## Section 3C.11.3 Buildings Under Construction

Buildings or portions of buildings being converted to R-7 JLWQ shall comply with the provisions of Section 904.6 of the California Building Code as for new construction.

# Section 3C.11.4 Special Provision for Sprinkler at a Mezzanine, Sleeping Mezzanine, or Built-in Sleeping Bunk

A mezzanine with access other than by a stairway, a sleeping mezzanine, or a built-in sleeping bunk shall have a residential quick response sprinkler head at the top of the access to the mezzanine, sleeping mezzanine, or built-in sleeping bunk. See Figure A-3B-4 of this chapter.

# Section 3C.12 - Special Hazards

## Section 3C.12.1 Storage Of Flammable Liquids Or Hazardous Materials

Allowable materials and quantities of flammable liquids or hazardous materials stored within individual R-7 JLWQ Occupancy shall comply with Table 338B-A of this chapter.

## Section 3C.12.2 Hazardous Activities

An R-7 Occupancy shall not be used for storage of flammable liquids or hazardous materials where welding, any work involving an open flame, or similar hazardous operations or processes are accomplished except as herein provided.

#### **EXCEPTION:**

- 1. Open flame may be used for art work, craft work, or similar activities provided the quantity of compressed gas or flammable liquid stored within an individual R-7 Occupancy JLWO complies with Table 338B-A.
- 2. Open flame and welding may be permitted in an individual R-7 Occupancy JLWQ if the individual R-7 Occupancy JLWQ with the open flame and welding has an occupancy separation from the remainder of the building or other JLWQ in the building pursuant to Section 307 for the appropriate Group H occupancy.

#### Section 3C.13 - Fire Alarms

#### Section 3C.13.1 General

R-7 JLWQ occupancies shall conform to the requirements as for an R-1 apartment house pursuant to Section 310.10 of the California Building Code and as provided herein. An individual JLWQ is considered a dwelling unit for purposes of this section.

# Section 3C.13.2 Special Provision for Local Alarm

If a common interior exit path serves more than 4 individual R-7 Occupancy JLWQ or serves R-7 Occupancy JLWQ spaces that combined accommodate more than 10 persons, and the exit path or the spaces it serves are not fire-sprinklered, then an approved local manual or automatic fire alarm system shall be installed in the exit path. The local alarm shall be capable of sounding an audible alarm to the individual JLWQs served by the common interior exit path to meet the recommendations of the Fire Marshal and Building Official.

#### Section 3C.14 - Sound Transmissions Control

#### Section 3C.14.1 Notice Of Limitation

A "notice of limitation" pursuant to Section 325B.5 shall be provided for all F-7 Occupancies where individual JLWQ are abutting other habitable spaces.

#### Section 3C.14.2 Airborne Sound Insulation

#### Section 3C.14.2.1 General

Buildings or a portion of buildings classified as R-7 Occupancies shall comply with Division IIA of Appendix Chapter 12A of the California Building Code as for apartment houses by providing STC 50 walls and floor/ceilings where a designated residential area abuts another occupied or public area and as provided in this division.

## Section 3C.14. 2.2 Residentially Oriented JLWQ As Noise Source

Any individual R-7 JLWQ space that is a source of noise above 60 db shall add construction elements that provide an additional 35 STC to the existing walls and floor/ceiling that abuts adjacent residential occupancies or a public area serving a residential occupancy. Alternatively, the space may comply with the recommendations of an acoustic analysis.

#### Section 3C.14.3 Impact Insulation

#### Section 3C.14.3.1 General

Buildings or a portion of buildings classified as R-7 JLWQ shall comply with Division IIA of Appendix Chapter 12A of the California Building Code as for apartment houses and as provided herein.

## Section 3C.14.3.2 Residentially Oriented JLWQ As Noise Source

Any individual R-7 JLWQ space that is a source of impact noise above 60 db shall add construction elements to separate the source of impact noise or provide an additional IIC 50 to the floor/ceiling that abuts adjacent residential occupancies or a public area serving a residential occupancy. Alternatively, the space may comply with the recommendations of an acoustic analysis.

## Section 3C.15 - Energy Conservation Requirements

Comply with energy conservation requirements as for an F-7 JLWQ Occupancy pursuant to Section 341B of this chapter.

## Section 3C.16 - Plumbing Systems Requirements

#### Section 3C.16.1 General

R-7 Occupancies shall comply with Chapter 29 of the California Building Code and as herein provided.

## Section 3C.16.2 Plumbing Code Application

Plumbing Code requirements as for an R occupancy apply to Group R-7 occupancies except that Section 701.1 of the California Building Code which allows ABS and PVC installations in residential construction not more than two stories in height may be applied to plumbing within individual R-7 Occupancy JLWQ that individually have no more than two stories. Plumbing in party and common walls and floor/ceilings are not considered within the individual JLWQ.

#### **Section 3C.16.3** Number of Fixtures

Individual JLWQ shall meet the requirements of Section 2902.6 of the California Building Code for Group R Occupancies. The common use areas of the building and areas with employees or open to the public shall comply with the requirements of Section 2902.3 for F Occupancies. The fixtures located within individual JLWQ may be used to meet Section 2902.3 requirements.

#### **Section 3C.17 - Electrical Code Requirements**

A Group R-7 Occupancy shall conform with the requirements of the California Electrical Code as for an R-1 occupancy. Both the designated residential area and designated work area of an individual R-7 occupancy JLWQ shall comply with the Section 210-52 relating to dwelling unit receptacle outlets.

# 15.04.672 Add the following new Appendix Chapter 3D for Joint Living And Work Ouarters:

## **Appendix Chapter 3D**

## Requirements For Group F, Division 8 Occupancy

#### Section 3D.1 - General

## Section 3D.1.1 Purpose

The purpose of this division is to provide minimum standards of safety for Work/Live Spaces in buildings or portions of buildings.

## Section 3D.1.2 Scope

The provisions of this division shall apply to buildings or portions thereof that have received City Planning approval for use as work/live space as defined herein. [Note: Verify with City Planning that planning approval is feasible for buildings of this occupancy. Also, the F-8 Occupancy has no relaxation from code regulations pursuant to California State Health and Safety Code Section 17958.11 as is the case for Group F, Division 7 and Group R, Division 7 JLWQ Occupancies.

## Section 3D.1.3 Applicability Of Other Provisions

Except as specifically required or allowed by this division work/live spaces shall meet all applicable provisions of this chapter as for an F-1 Occupancy.

#### Section 3D.2 - Definitions

For the purpose of this division, certain terms are defined as follows:

## Section 3D.2.1 Work/ Live Space

A commercially/ industrially oriented single-tenant space combining working and living uses with or without interior walls where the work use is the same as a use that by itself would be classified as a Group F, Division 1 or Division 2 Occupancy or as a Group B Occupancy (excluding drinking and dining establishments and food handling activities with on-site food sales and excluding certain business occupancies similar to animal hospitals, kennels, pounds; automobile and other motor vehicle showrooms; banks; car washes; civic administration; outpatient clinic and medical offices; dry cleaning or laundry pick-up and delivery stations and self-service; fire stations; police stations; and post offices), and where the residential use is the same as one that by itself would be classified as a Group R, Division 2 or 3 Occupancy. A Work/Live Space consists of a Designated Work Area and a Designated Residential Area. The Designated Residential Area may be no more than 33% of the Floor Area of the individual space and the Designated Work Area may be no less than 67% of the Floor Area of the individual space.

## Section 3D.2.2 Group F, Division 8 Occupancies

Work/live spaces that meet all the requirements of this division.

#### Section 3D.2.3 Related Definitions

For Designated Residential Area, see Section 324B.3 of this chapter.

For Designated Work Area, see Section 324B.4 of this chapter.

For Floor Area, see Section 207.12 of the California Building Code.

For Habitable Space (Room), see Section 209.1 of the California Building Code.

For Joint Living And Work Quarters (JLWQ), see Section 324B.1 of this chapter.

## Section 3D.3 - Additional Permit Application Requirements

# Section 3D.3.1 General

In addition to the requirements of this chapter and this Code, plans for F-8 Occupancies shall clearly designate and include the information as appropriate pursuant to Section 325B.1 of this chapter as for an F-7 JLWQ Occupancy.

#### Section 3D.3.2 Notices of Limitation

For "notice of limitation" regarding an individual space or JLWQ Having Employees and/or Being Regularly Open to the Public; for use of Alternative Emergency Escape and Rescue in an existing building; or Regarding an Individual Space or JLWQ Being a Noise Source Greater Than 60 db, see Sections 325B.2, 325B.4, and 325B.5 of this chapter.

## Section 3D.4 - Change of Use

Changing the occupancy of an existing building or portion of an existing building to work/live Group F, Division 8 Occupancy, shall be considered a change in use and such buildings shall comply with the applicable requirements in this code including the fire, life safety, structural, and seismic requirements.

#### Section 3D.5 - Minimum Facilities and Shell Construction

All individual F-8 Occupancy spaces shall be provided with facilities pursuant to applicable code with not less than the minimum facilities pursuant to Table 327B-A of this chapter. Where a building shell is proposed to be constructed or an existing building is converted as a shell with improvements within individual F-8 Occupancy spaces to be constructed later under separate permits, roughed-in facilities shall be provided pursuant to applicable code sufficient to serve the proposed facilities with not less than the minimum facilities pursuant to Table 327B-A. The shell shall be constructed pursuant to applicable code and pursuant to Section 327B.

#### Section 3D.6 - Construction, Height, and Allowable Area

#### Section 3D.6.1 General

Group F, Division 8 Occupancies shall conform to code requirements for F-1 Occupancies pursuant to Chapter 3, Chapter 5, and Chapter 6 of the California Building Code and to related code requirements and to the specific requirements herein.

#### Section 3D.6.2 Unlimited Area

Section 505.2 of the California Building Code shall not be applicable to F-8 Occupancies except Section 505.2 may be applied if a request in approved form and content for alternate materials, design and methods of construction is submitted to and approved by the Building Official.

## Section 3D.6.3 Mixed Occupancies

Group F, Division 8 Occupancies shall be separated from other occupancies as for an F-1 . Occupancy with a minimum one-hour fire-resistive occupancy separation to all other occupancies.

# Section 3D.6.43 Special Provision

Walls and floors separating individual Group F-8 Occupancy spaces from other F-8 Occupancy Spaces shall not be less than one-hour fire-resistive construction.

## Section 3D.7 - Specific Use Provisions

# Section 3D.7.1 Room Dimensions and Floor Areas of Designated Residential Area

The room dimensions and floor areas in an individual space used for living, sleeping, eating, and cooking shall meet, as a minimum, the requirements of Section 310.6 and the provisions for Efficiency Dwelling Units pursuant to Section 310.7. Dimensions of areas other than the designated residential area within an individual F-8 Occupancy space shall be as for an F-1 Occupancy.

#### Section 3D.7.2 Mezzanine Ceiling Height

The ceiling height of a sloping ceiling above a mezzanine may be measured in accordance with Section 310.6.1 of the California Building Code.

#### Section 3D.7.3 Mezzanine Area in Individual Space

The area of a mezzanine within an individual F-7 Occupancy space may be one-third of the gross area of the individual space if the building is fire-sprinklered throughout.

#### Section 3D.7.4 Yards and Courts

Yards and courts with required windows for natural light and ventilation shall be provided pursuant to Section 2103.4 of the California Building Code.

#### Section 3D.7.5 Eaves

Eaves over required windows for natural light and ventilation shall be pursuant to the provisions of the California Building Code.

#### Section 3D.7.6 Smoke Detectors

Smoke detectors shall be provided in individual spaces that shall conform as applicable for new construction and R occupancy to Sections 310.9.1.1 and 310.9.1.3 of the California Building Code, and as appropriate either 310.9.1.4 or 310.9.1.5.

#### Section 3D.7.7 Heating

The designated residential area of an F-8 space shall conform to the space heating requirement of Section 310.11 of the California Building Code. See Section 381D of this chapter for energy conservation requirements.

#### Section 3D.8 - Uniform and Concentrated Loads

Uniform and concentrated loads shall be pursuant to Table 16-A of the California Building Code and to the applicable new categories added in Section 330B of this chapter.

## Section 3D.9 - Conventional Framing Provisions

Section 2326 - Conventional Light-Frame Construction Provisions of the California Building Code shall apply to an F-8 Occupancy as for a Group R Occupancy.

## Section 3D.10 - Fire Blocks and Draft Stops

Section 708 - Fire Blocks and Draft Stops of the California Building Code shall apply to an F-8 Occupancy and pursuant to Section 331B of this chapter as for an F-7 Occupancy.

#### Section 3D.11 - Access and Exit Facilities and Emergency Escapes

#### Section 3D.11.1 Accessibility

An F-8 Occupancy shall comply with Section 334B.1 of this chapter as for an F-7 JLWQ.

#### Section 3D.11.2 Number of Exits

In individual spaces of Group F-8 Occupancies a minimum of two exits shall be required from the individual space where the number of occupants is 10 or more. For special provision for exits due to hazardous materials in an individual space see Section 338B.1.2 of this chapter.

# Section 3D.11.3 Stairways

Stairways within an individual F-8 Occupancy unit shall comply as a minimum with the requirements for a non-residential stair or a private stair where the occupant load served by the private stairway is less than 10 occupants.

## Section 3D.11.4 Emergency Escape and Rescue.

#### Section 3D.11.4.1 General

Every individual F-8 Occupancy Space shall have at least one emergency escape and rescue window or door for each separate sleeping room or sleeping area pursuant to Section 310.4 and pursuant to Section 334B.5.2 of this chapter as for an F-7 Occupancy.

## Section 3D.11.4.2 Alternative Emergency Escape and Rescue

When an individual F-8 Occupancy space is located in an existing building and the building is fire-sprinklered throughout, emergency escape and rescue for the individual space may be by the alternative means pursuant to Section 334B.5.3 of this chapter as for an F-7 Occupancy JLWO.

# Section 3D.11.5 Occupant Load

The occupant load of an individual F-8 Occupancy space shall be pursuant to Section 334B.6 of this chapter as for an F-7 Occupancy.

#### Section 3D.11.6 Guardrails

The guardrails for an individual F-8 Occupancy space shall be pursuant to Section 334B.7 of this chapter as for an F-7 Occupancy.

## Section 3D.12 - Light and Ventilation

Code provisions pertinent to the designated residential area of an individual F-8 Occupancy shall comply with Section 1203. The remaining area of the individual F-8 Occupancy shall be provided with light, ventilation, and sanitation appropriate to an F-1 Occupancy. Alternative means of ventilation pursuant to Appendix Chapter 12 may be utilized.

If the sleeping area of an individual space is separated from its required source of natural light and/or ventilation by more than 25 feet measured horizontally, then the floor area of the sleeping area (only) shall be doubled and added to the designated floor area of the residential area in calculating the required natural light area and/or ventilation for a space.

#### Section 3D.13 - Shaft and Exit Enclosures

Code provisions pertinent to F-1 occupancies for shaft and exit enclosures shall apply to an F-8 Occupancy except that shaft enclosures that only serve and are within an individual F-8 Occupancy Space may be the same as required for within an individual dwelling unit of an R-1 Occupancy.

## Section 3D.14 - Fire Sprinkler and Standpipe Systems

#### Section 3D.14.1 Fire Sprinkler System

Fire sprinklers for an F-8 occupancy shall be provided when required by Section 904.2.2 of the California Building Code and as for an R-1 apartment house pursuant to Section 904.2.8 with an individual work/live space counted as a dwelling unit in calculating the total number of dwelling units in the building.

## Section 3D.14.2 Standpipe System-

F-8 Occupancies shall be furnished with standpipes when required by Section 904.5 of the California Building Code.

# Section 3D.14.3 Buildings Under Construction

Buildings or portions of buildings being converted or constructed to an F-8 Occupancy shall comply with the provisions of Section 904.6 of the California Building Code as for new construction.

## Section 3D.14.4 Special Provision

Each individual F-8 Occupancy space shall be fire-sprinklered to meet residential fire sprinkler standards when the limits on use, storage, and quantities of hazardous materials pursuant to Table 338B-A of this chapter for an R-7 or R-8 Occupancy are exceeded or where welding, any work involving an open flame, or similar hazardous operations or processes are accomplished even though fire sprinklers are not otherwise required.

#### Section 3D.15 - Special Hazards

Special Hazards for an F-8 Occupancy shall be pursuant to Section 338B of this chapter as for an F-7 JLWQ Occupancy. See Section 377D.5 for fire sprinkler requirement in individual F-8 Occupancy spaces due to special hazards.

#### Section 3D.16 - Fire Alarms

Fire alarms for an F-8 Occupancy shall be pursuant to Section 339B of this chapter as for an F-7 Occupancy.

# Section 3D.17 - Sound Transmission Control

Sound Transmission Control for an F-8 Occupancy space shall be pursuant to Section 340B of this chapter as for an F-7 JLWQ Occupancy.

## Section 3D.18 - Energy Conservation Requirements

Energy Conservation Requirements for F-8 Occupancy shall comply with the California Energy Commission Non-residential Standards and the individual F-8 Occupancy space shall comply with the residential portion of the California Energy Commission Non-residential Standards.

## Section 3D.19 - Plumbing Systems and Plumbing Code Requirements

Plumbing systems and plumbing code requirements shall comply with Section 342B of this chapter as for an F-7 JLWQ Occupancy.

# Section 3D.20 - Electrical Code Requirements

A Group F-8 Occupancy shall conform with CEC requirements as for an F-1 occupancy. The designated residential area of an individual F-8 occupancy JLWQ shall comply with Section 210-52 of the California Electrical Code relating to dwelling unit receptacle outlets.

## 15.04.674 Add the following Appendix Chapter 3E for Joint Living and Work Quarters:

## Appendix Chapter 3E

## Requirements For Group R, Division 8 Occupancy

#### Section 3E.1 - General

## Section 3E.1.1 Purpose

The purpose of this division is to provide minimum standards of safety for Live/Work Spaces in buildings or portions of buildings.

# Section 3E.1.2 - Scope

The provisions of this division shall apply to buildings or portions thereof that have received City Planning approval for use as live/work space as defined herein. [Note: Verify with City Planning that planning approval is feasible for buildings of this occupancy. Also, the R-8 Occupancy has no relaxation from code regulations pursuant to California State Health and Safety Code Section 17958.11 as is the case for Group F, Division 7 and Group R, Division 7 JLWQ Occupancies.]

## Section 3E.1.3 Applicability Of Other Provisions

Except as specifically required or allowed by this division live/work spaces shall meet all applicable provisions of the California Building Code as for an R-1 Occupancy apartment house dwelling unit.

#### Section 3E.2 - Definitions

For the purpose of this division, certain terms are defined as follows:

## Section 3E.2.1 Live/ Work Space

A residentially-oriented single-tenant space combining living and working uses with or without interior walls where the residential use is the same as a use that by itself would be classified as a Group R, Division 1 Occupancy (excluding hotels, motels, and care facilities), and the work use, by itself, is no more hazardous than that which is normally permitted in residential facilities, and the work use is the same as one that by itself would be classified as a Group B Occupancy (excluding drinking and dining establishments and food handling activities with on-site food sales and excluding certain business occupancies similar to animal hospitals, kennels, pounds; automobile and other motor vehicle showrooms; banks; car washes; civic administration; outpatient clinic and medical offices; dry cleaning or laundry pick-up and delivery stations and self-service; educational occupancies above the 12th grade with more than ten occupants; fire stations; police stations; and post offices) and Group F, Division 1 Occupancy. Work uses classified as Group F, Division 2 Occupancies, when the scale and intensity of the activity is limited may be permitted if a request in approved form and content for alternate materials, design and methods of construction is submitted to and approved by the Building Official: A Live/Work Space consists of a Designated Residential Area and a Designated Work Area. The Designated Residential Area may be no more than 49% of the Floor Area of the individual space and the Designated Work Area may be no less than 51% of the Floor Area of the individual space.

## Section 3E.2.2 Group R, Division 8 Occupancy

A live/work spaces that meet all the requirements of this division.

# Section 3E.2.3 Related Definitions

For Designated Residential Area, see Section 324B.3 of this chapter.

For Designated Work Area, see Section 324B.4 of this chapter.

For Floor Area, see Section 207.12 of the California Building Code.

For Habitable Space (Room), see Section 209.1 of the California Building Code.

For Joint Living And Work Quarters (JLWQ), see Section 324B.1 of this chapter.

## Section 3E.3 - Additional Permit Application Requirements

## Section 3E.3.1 General

In addition to the requirements of this chapter and Chapter 1 of the California Building Code, plans for R-8 Occupancies shall clearly designate and include as appropriate the information pursuant to Section 325B.1 of this chapter as for an F-7 JLWQ Occupancy.

#### Section 3E.3.2 Notices of Limitation

For "notice of limitation" regarding an individual space or JLWQ Having Employees and/or Being Regularly Open to the Public; for Use of Alternative Emergency Escape and Rescue in an existing building; or Regarding an Individual Space or JLWQ Being a Noise Source Greater Than 60 db, see Sections 325B.2, 325B.4, and 325B.5 of this chapter.

## Section 3E.4 - Change of Use

Changing the occupancy of an existing building or portion of an existing building to live/work Group R, Division 8 Occupancy, shall be considered a change in use and such buildings shall comply with the applicable requirements in this code including the fire, life safety, structural, and seismic requirements.

## Section 3E.5 - Minimum Facilities and Shell Construction

All individual R-8 Occupancy spaces shall be provided with facilities pursuant to applicable code with not less than the minimum facilities pursuant to Table 327B-A of this chapter. Where a building shell is proposed to be constructed with improvements within individual R-8 Occupancy to be constructed later under separate permits, roughed-in facilities shall be provided pursuant to applicable code sufficient to serve the proposed facilities with not less than the minimum facilities pursuant to Table 327B-A. The shell shall be constructed pursuant to applicable code and pursuant to Section 327B of this chapter.

#### Section 3E.6 - Construction, Height, and Allowable Area

#### Section 3E.6.1 General

The Group R-8 Occupancy shall conform to code requirements for R-1 Occupancies pursuant to Chapter 3, Chapter 5, Chapter 6 and to related code requirements and to the specific requirements herein. An individual R-8 space shall be considered an apartment dwelling unit for purposes of code application.

#### Section 3E.6.2 Unlimited Area

Section 505.2 of the California Building Code shall not be applicable to an R-8 Occupancy except Section 505.2 may be applied if a request in approved form and content for alternate materials, design and methods of construction is submitted to and approved by the Building Official.

#### Section 3E.6.3 Mixed Occupancies

Group R, Division 8 Occupancies shall be separated from other occupancies as for an R-1 Occupancy with a minimum one-hour fire-resistive occupancy separation to all other occupancies.

## Section 3E.6.4 Special Provision

Walls and floors separating individual Group R-8 Occupancy spaces from other R-8 Occupancy spaces shall be not less than one-hour fire-resistive construction.

## Section 3E.7 - Specific Use Provisions

## Section 3E.7.1 Room Dimensions and Floor Areas of Individual Space

The area of an individual R-8 Occupancy space shall comply with the requirements for an R-1 Occupancy.

#### Section 3E.7.2 Mezzanine Ceiling Height

The ceiling height of a sloping ceiling above a mezzanine may be measured in accordance with Section 310.6.1 of the California Building Code.

## Section 3E.7.3 Mezzanine Area in Individual Space

The area of a mezzanine within an individual space may be one-third of the gross area of the individual JLWQ if the building is fire-sprinklered throughout.

#### Section 3E.8 - Uniform and Concentrated Loads

Uniform and concentrated loads shall be pursuant to Table 16-A of the California Building Code and to the additional categories added in Section 330B of this chapter.

# Section 3E.9 - Access and Exit Facilities and Emergency Escapes

## Section 3E.9.1 Accessibility

An R-8 Occupancy shall comply with Section 334B.1 of this chapter as for an F-7 JLWQ.

#### Section 3E.9.2 Number of Exits

In individual spaces of Group R-8 Occupancies a minimum of two exits shall be required from the individual space where the number of occupants is 10 or more. For special provision for exits due to hazardous materials in an individual space see Section 338B.1.2 of this chapter.

#### Section 3E.9.3 Stairways

Stairways within an individual R-8 Occupancy shall comply as a minimum with the requirements for a residential or other private stair where the stair serves an occupant load that is less than 10.

#### Section 3E.9.4 Emergency Escape and Rescue

Every individual R-8 Occupancy Space shall have at least one emergency escape and rescue window or door for each separate sleeping room or sleeping area pursuant to Section 310.4 of the California Building Code and pursuant to Section 334B.5.2 of this chapter as for an F-7 JLWQ Occupancy.

#### Section 3E.9.5 Occupant Load

The occupant load of an individual R-8 Occupancy space shall be pursuant to Section 334B.6 of this chapter as for an F-7 Occupancy.

#### Section 3E.9.6 Guardrails

The guardrails for an individual R-8 Occupancy space shall be pursuant to Section 334B.7 of this chapter as for an F-7 Occupancy.

# Section 3E.10 - Light and Ventilation

Code provisions pertinent to the designated residential area of an individual R-8 Occupancy shall comply with Section 1203 of the California Building Code. The remaining area of the individual R-8 Occupancy shall be provided with light and ventilation appropriate to an F-1 Occupancy. Alternative means of ventilation pursuant to Appendix Chapter 12 of the California Building Code may be utilized.

If the sleeping area of an individual space is separated from its required source of natural light and/or ventilation by more than 25 feet measured horizontally, then the floor area of the sleeping area (only) shall be doubled and added to the designated floor area of the residential area in calculating the required natural light and/or ventilation area for a space.

#### Section 3E.11 - Shaft and Exit Enclosures

Code provisions pertinent to an R-1 Occupancy of the California Building Code for shaft and exit enclosures shall apply to an R-8 Occupancy.

#### Section 3E.12 - Fire Sprinkler and Standpipe Systems

## Section 3E.12.1 Fire Sprinkler System

Fire sprinklers for R-8 Occupancy shall be provided when required by Section 904.2.2 of the California Building Code and as for an R-1 apartment house pursuant to Section 904.2.8 with

an individual R-8 Occupancy counted as a dwelling unit in calculating the total number of dwelling units in the building.

## Section 3E.12.2 Standpipe System

R-8 Occupancies shall be furnished with standpipes when required by Section 904.5 of the California Building Code as for an R-1 Occupancy.

# Section 3E.12.3 Buildings Under Construction

Buildings or portions of buildings being converted or constructed to an R-8 Occupancy shall comply with the provisions of Section 904.6 of the California Building Code as for new construction.

## Section 3E.12.4 Special Provision

Each individual R-8 Occupancy space shall be fire-sprinklered to meet residential fire sprinkler standards where welding, any work involving an open flame, or similar hazardous operations or processes are accomplished even though sprinklers are not otherwise required.

#### Section 3E.13 - Special Hazards

Comply with Section 357C of this chapter as for an R-7 Occupancy.

#### Section 3E.14 - Fire Alarms

Comply with Section 358C of this chapter as for an R-7 Occupancy.

#### Section 3E.15 - Sound Transmission Control

Comply with Section 359C of this chapter as for an R-7 Occupancy.

## Section 3E.16 - Energy Conservation Requirements

Comply with Section 360C of this chapter as for an R-7 JLWQ.

## Section 3E.17 - Plumbing Systems Requirements

Comply with Section 361C of this chapter as for an R-7 JLWQ.

## Section 3E.18 - Electrical Code Requirements

A Group R-8 Occupancy shall conform with requirements of the California Electrical Code as for an R-1 occupancy. Both the designated residential area and designated work area of an individual R-8 occupancy shall comply with Section 210-52 relating to dwelling unit receptacle outlets.

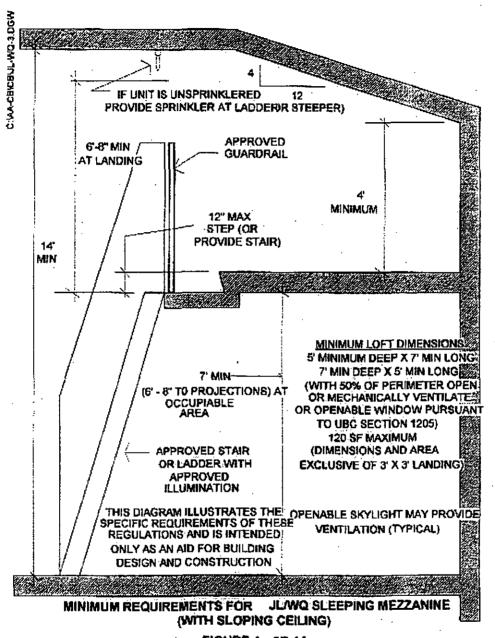


FIGURE A - 3B-1A

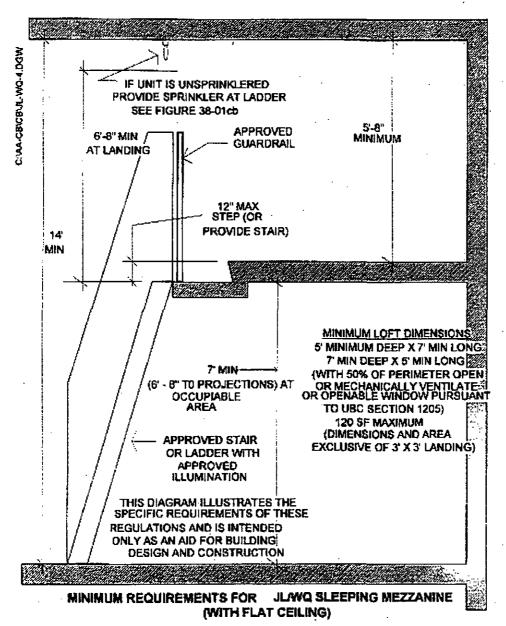
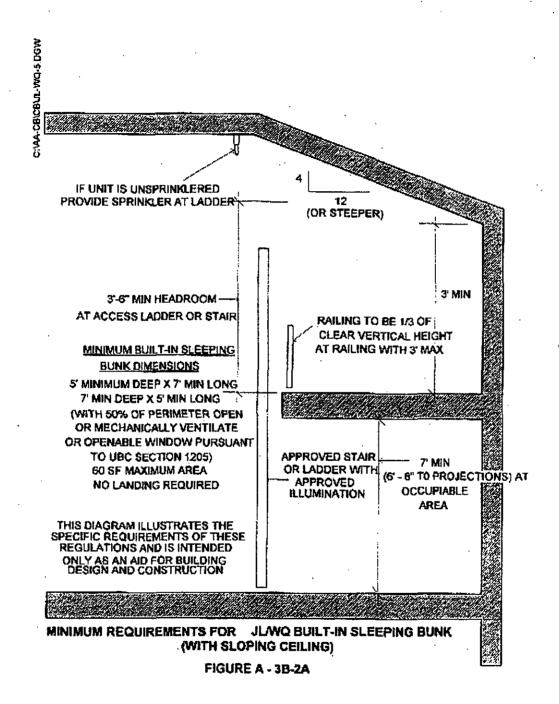
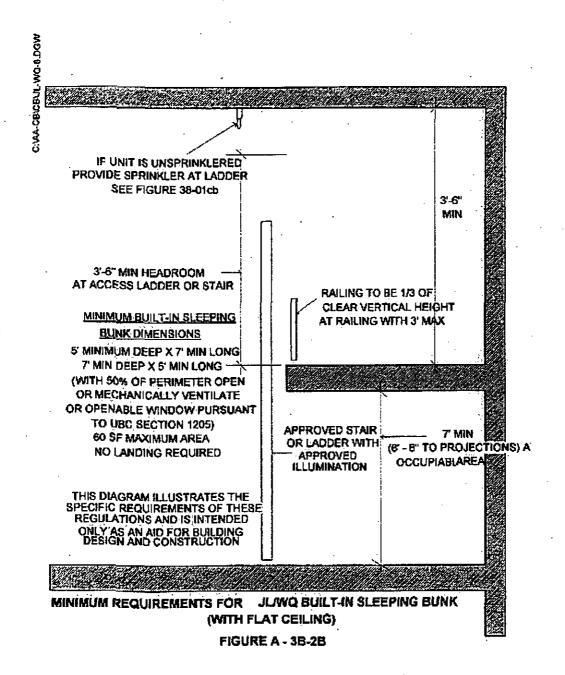
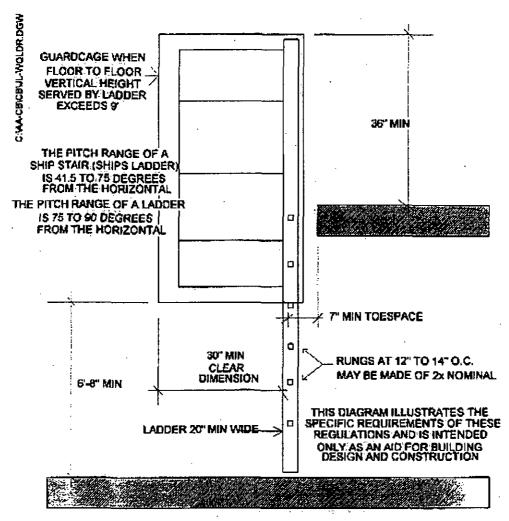


FIGURE A - 3B-1B







ACCESS LADDER TO SLEEPING MEZZANINE OR BUILT-IN SLEEPING BUNK FOR JLWQ

FIGURE A - 3B-3

FROM MAIN

RESIDENTIAL QUICK RESPONSE SPRINKLER HEAD AT ACCESS TO SLEEPING

\* 3/4" MINIMUM FIRE-SPRINKLER SUPPLY

## NOTE:

IF THE JLWQ OR JHW/LQ UNIT IS NOT OTHERWISE FIRE-SPRINKLERED A FIRE SPRINKLER AS INDICATED SHALL BE PROVIDED AT THE ACCESS TO A SLEEPING MEZZANINE OR A BUILT-IN SLEEPING BUNK

INDIMIDUAL UNIT
MAIN SUPPLY SHUTOFF
(ONLY SHUTOFF FOR
THE FIRE SPRINKLER)

**CHECK VALVE** 

THIS DIAGRAM ILLUSTRATES THE SPECIFIC REQUIREMENTS OF THESE REGULATIONS AND IS INTENDED ONLY AS AN AID FOR BUILDING DESIGN AND CONSTRUCTION

SCHEMATIC FOR FIRE SPRINKLER AT SLEEPING MEZZANINE OR BUILT-IN SLEEPING BUNK FOR JL/WQ

FIGURE A - 38-4

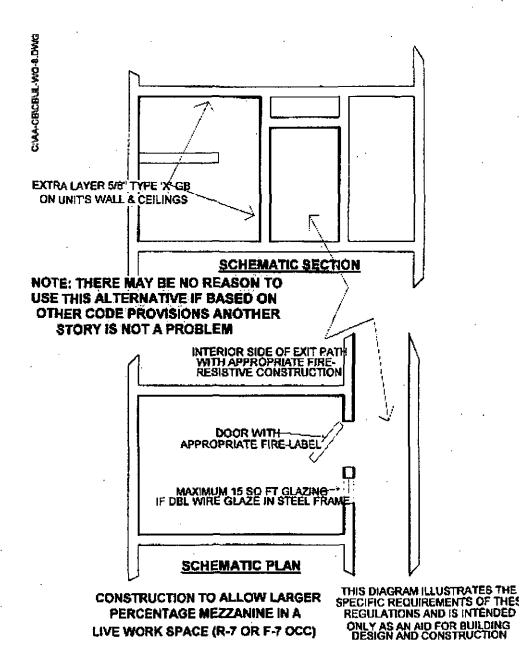
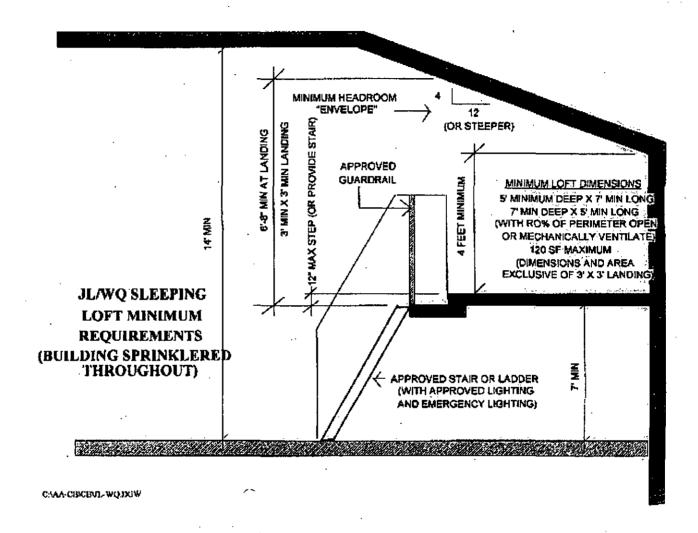
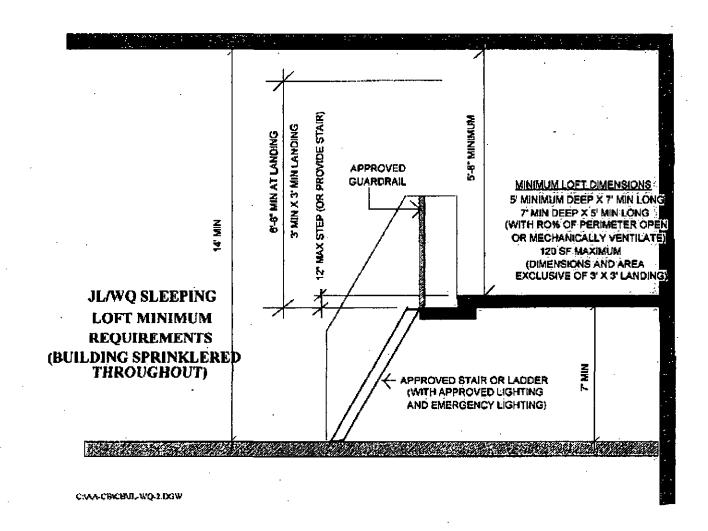


FIGURE A - 3B-5





#### Article III

#### Part 2 - California Electrical Code

#### Non-Administrative (Technical) Amendments

15.04.700 In Article 210.8(a)(7) of the California Electrical Code, delete the words "wet bar".

15.04.705 In Article 210.11(c)(1) of the California Electrical Code, add the following new sentence.

"Appliances fastened in place (fixed) including but not limited to dishwashers, garbage disposals, trash compactors, and microwave ovens, shall be supplied by a separate branch circuit rated for the appliance or load served."

**15.04.710** In Article 210.12(B) of the California Electrical Code, add the following new sentence:

"Existing bedroom circuits shall have arc-fault protection as follows:

- (1) in an upgraded service panel of subpanel
- (2) where altered or extended. "

15.04.715 In Article 230.26 of the California Electrical Code, add the following new paragraph:

"The service point of attachment shall be installed on the building or structure wall facing the serving line. The service point of attachment on a periscope-type service shall be installed within eighteen (18) inches of the building or structure wall facing the serving line."

**15.04.720** In Article 230.28 of the California Electrical Code, add the following new paragraphs:

"Whereas service conduit may be used as a mast to support service-drop conductors, it shall be rigid metal conduit or intermediate metal conduit not less than on and one-quarter (1.25) inch trade size. Aluminum rigid metal conduit shall be not smaller than two (2) inches trade size where used as a periscope.

Service conduit above a building or structure roof shall not extend more than thirty (30) inches beyond the last support without bracing. The outer or upper end of overhead service conduit shall extend horizontally not more than eighteen (18) inches beyond the point of support or fastening. Service conduit coupled above a structure or past the edge of same shall be braced or supported between the coupling and the point of attachment."

**15.04.725** In Article 230.43 of the California Electrical Code, replace the section in its entirety with the following:

"Service entrance conductors shall be installed in approved rigid metal conduit or intermediate metal conduit on the outside of building or structures and in approved rigid metal conduit, intermediate metal conduit, or electrical metallic tubing with water-tight connectors within the building. Rigid non-metallic conduit (schedule 40 or schedule 80) shall be permitted to be installed for service lateral conduit where not exposed to physical damage.

Termination cans for service lateral conductors shall not encroach into the public way."

15.04.730 In Article 230.44 of the California Electrical Code, delete this section in its entirety.

15.04.735 In Article 300.11(a) of the California Electrical Code, add the following new paragraph:

"Boxes shall be supported independently of the ceiling assembly. A maximum of three raceways or metal cables not to exceed one inch trade size shall be supported by independent support wires within the top or bottom 12 inches. Suspended ceiling framework and support wires shall be designed to support the additional loads imposed by electrical attachments."

**15.04.740** In Article 334.15(b) of the California Electrical Code, add the following new paragraph and exception:

"The cable shall not be protected by other raceways for more than six feet. The cable shall be concealed at less than eight (8) feet above finished floor or grade.

## **EXCEPTION**

In underfloor areas less that three (3) feet above grade when the cable is protected by guard strips, running boards, or installed through holes bored in joists or installed parallel with joists or other framing members."

**15.04.745** In Article 334.23 of the California Electrical Code, replace the section in its entirely with the following:

"Non-metallic sheathed cable shall be covered in attics or roof spaces accessible by permanently installed ladder or stairs. Cable installed in attics or roof spaces otherwise accessible shall be protected by guard strips, running boards, or installed through holes bored in joists, or installed parallel with rafters or joists.

#### **EXCEPTION**

Cable may be installed perpendicular to top of ceiling joists wherever the headroom above the joist is not more than eighteen (18) inches."

15.04.750 In Article 358.12 of the California Electrical Code, add the following new section:

Article 358.12(7) In concrete in direct contact with the earth.

15.04.755 In Article 410.16(c) of the California Electrical Code, add the following new paragraph:

"Fastening to the structure with no. 12 gage hangers and to the grid shall occur at diagonally opposite sides of 2x4 drop-in fixtures. Fixture installations shall further conform with the California Building Code Section 2504 and Standard 25-2, Section 25.213."

15.04.760 In Article 600.1 of the California Electrical Code, add the following new sentence:

"The provisions herein shall further include the requirements of the Oakland Sign Code."

15.04.765 In Article 695.1 of the California Electrical Code, add the following new sentence:

"Installations of fire pumps shall further conform with the requirements of the Oakland Fire Code as it pertains to Standard 20 of the National Fire Protection Association."

15.04.770 In Article 760.1 of the California Electrical Code, add the following new sentence:

"Installation of Fire Protection Signaling systems shall further conform with the requirements of the National Fire Protection Association recommended standards, the Oakland Building Construction Code and the Oakland Building Maintenance Code."

#### Article III

#### Part 3 - California Mechanical Code

## Non-Administrative (Technical) Amendments

15.04.800 Adopt Appendix A - Standards of the California Mechanical Code in its entirety.

15.04.805 Adopt Appendix B, Chapters 10 – Steam and Hot Water Boilers, 12 - Hydronics, 14 – Process Piping, and 15 – Solar Systems in their entirety.

**15.04.810** In Section 504.3.2.1 of the California Mechanical Code, at the following sentence after and separate from the Exception:

"Clothes dryers which are connected to a subduct exhaust system, as provided in the California Building Code, shall be equipped with an accessible secondary lint trap."

**15.04.815** In Section 507.1.5 and Section 507.1.6 and Section 507.1.7 and section 516 of the California Mechanical Code, delete these sections in their entirety.

15.04.820 In Section 802.6.3 of the California Mechanical Code, add the following sentence at the end of the paragraph:

"Vents shall not be smaller in size than the cross-sectional area of the combined vent connector."

- 15.04.825 In Section 802.6.4 of the California Mechanical Code, add the following subsection:
  - "(4) Vertical vent systems conforming with the provisions of this section shall be designed by a registered design professional and approved by the Building Official."

#### Article III

#### Part 4 - California Plumbing Code

## Non-Administrative (Technical) Amendments

**15.04.900** In Section 505.1.1 of the California Plumbing Code, add the following sentence at the end of the paragraph:

"Doors shall comply with the requirements of section 15.04.600.1 of this Code."

15.04.905 In Section 505.5 of the California Plumbing Code, add the following sentence at the end of the paragraph:

"When approved by the Building Official to discharge into a sanitary sewer system, water temperature shall not exceed 160° F."

**15.04.910** In Section 510.6.4 of the California Plumbing Code, add the following sentence at the end of the first paragraph:

"Common gas vent systems conforming with the provisions of this section shall be designed by a registered design professional and approved by the Building Official."

15.04.915 In Section 510.10.3 of the California Plumbing Code, add the following sentence at the end of the first paragraph:

"Vents shall not be smaller in size than the cross-sectional area of the combined vent connector."

**15.04.920** In Section 701.1.2 of the California Plumbing Code, replace this section in its entirety with the following:

"ABS and PVC DWV piping installation are limited to residential construction not more than two (2) stories in height and to relocatable public school buildings.

#### **EXCEPTION**

ABS and PVC DWV piping may be installed in residential hillside construction, where the building is classified as three (3) stories, with only two (2) habitable levels. One additional level that is not designed for human habitation and is used only for vehicle parking, storage, or similar use outside the individual dwelling unit shall be permitted."

- 15.04.925 In Section 713 Private Sewage Disposal Systems of the California Plumbing Code, replace this section in its entirety with the following:
  - Section 713.1 Performance, maintenance, repair, or abandonment of an existing private sewage disposal system shall conform with the requirements of the Alameda County Department of Environmental Health.
  - Section 713.2 Installation, replacement, repair, maintenance, or modification of a water supply system and piping, in-ground pools, or other infrastructure with respect to an existing private sewage disposal system shall conform with the requirements of the Alameda County Health Department.
  - Sec. 713.3 New or additional connections of a building sewer, waste pipe, or soil pipe to a proposed or existing private sewage disposal system shall be prohibited.
  - Sec. 713.4 Proposed increases of the quantity or quality of sewage and liquid waste which may or will exceed the existing designed capacity of a private sewage disposal system shall be prohibited.
  - Sec. 713.5 Modification or replacement of an existing private sewage disposal system for the purpose of increasing the existing capacity is prohibited.
- 15.04.930 In Section 908.4 of the California Plumbing Code, delete this section in its entirety.
- 15.04.935 In Section 1013 of the California Plumbing Code, add the following new section:
  - Section 1013.1 Commercial garbage or food waste grinders shall not be installed in produce markets, food markets or similar establishments.
- 15.04.940 In Section 1211.3.2 of the California Plumbing Code, replace the phrase in subsection (4) beginning with "... or the use of a ground nut..." with "... or left-right couplings".
- 15.04.945 In Section 1214.3 of the California Plumbing Code, add the following new section:

## 1214.4.4 Installed Piping Inspection

An inspection shall be required after all fuel piping and all concealments and intended coverings of the piping have been installed but before any fixtures, appliances, or shutoff valves have been attached. All necessary apparatus for conducting pressure tests shall be furnished in good working order by the permit holder. Gauges shall comply with section 319.0. All pressure tests shall be witnessed during the inspection, and there shall be no perceptible reduction in pressure throughout the time period of the test.

15.04.950 In Section 1214.3.2 of the California Plumbing Code, replace this section in its entirety with the following:

"The test pressure shall be not less than 1.5 times the proposed maximum working pressure, but not less than 10 psi gauge pressure. For welded fuel piping and for fuel piping with proposed maximum working pressure exceeding 14 inches of water column, the test pressure shall be not less than 60 psi gauge pressure."

- 15.04.955 In Section 1214.3.3 of the California Plumbing Code, replace the phrase "...a minimum of 10 minutes" in the sentence beginning "When testing a system ... " with "...a minimum of 15 minutes".
- 15.04.960 Adopt Appendix A of the California Plumbing Code in its entirety.
- 15.04.965 Adopt Appendix B of the California Plumbing Code in its entirety.
- 15.04.970 Adopt Appendix D of the California Plumbing Code in its entirety.
- 15.04.975 In Appendix D of the California Plumbing Code, add Part D as follows:

## Part D - Disposal of Rainwater Drainage

- Section D4.1 Rainwater drainage shall not be conveyed to a sanitary sewer.
- **Section D4.2** Rainwater drainage below main storm drain level shall conform with the requirements of Section 409.
- **Section D4.3** Approval shall be obtained from the Building Official prior to connecting rainwater drainage directly to a publicly maintained storm water drainage system. Issuance of a permit for such connections shall be discretionary.
- Section D4.4 Rain water drainage may be conveyed by a public street gutter to a publicly maintained storm water drainage system provided such gutter is continuously paved and further provided such drainage is conducted under a public sidewalk and through the curb by methods approved by the Building Official.
- Section D4.5 Exterior rainwater piping on that part of a building contiguous with a public walking surface shall be galvanized wrought iron, galvanized steel, or cast iron piping for not

less than five (5) feet above the walking surface. 15.04.935 Adopt Appendix F of the California Plumbing Code in its entirety. 15.04.940 Adopt Appendix H of the California Plumbing Code in its entirety. 15.04.945 Adopt Appendix "IAPMO Installation Standards" of the California Plumbing Code in its entirety; and be it **FURTHER ORDAINED**: That this Ordinance shall become effective on and after January 1, 2008; and be it FURTHER ORDAINED: That the City Clerk of the City of Oakland is hereby directed to file a copy of this Ordinance, along with a copy of the Resolution of findings supporting the adoption of local amendments to the 2007 editions of the California Model Building Codes, with the California Building Standards Commission. IN COUNCIL, OAKLAND, CALIFORNIA, PASSED BY THE FOLLOWING VOTE: AYES - BROOKS, BRUNNER, CHANG, KERNIGHAN, NADEL, QUAN, REID, and PRESIDENT DE LA FUENTE NOES -**ABSENT** -

ABSTENTION -

ATTEST:

LATONDA SIMMONS

City Clerk and Clerk of the Council

of the City of Oakland, California