



CITY COUNCIL AGENDA REPORT

MEETING DATE: OCTOBER 2, 2007

ITEM NUMBER:

SUBJECT: BUILDING AND FIRE CODE ADOPTION

DATE: SEPTEMBER 20, 2007

FROM: DEVELOPMENT SERVICES DEPARTMENT AND FIRE DEPARTMENT

PRESENTATION BY: KHANH NGUYEN, CBO, BUILDING OFFICIAL

FOR FURTHER INFORMATION CONTACT: KHANH NGUYEN (714) 754-5277

SUMMARY

The State's Health and Safety Code requires local governments to adopt the most recent editions of the model codes related to construction. The Construction Codes include: the California Building, Fire, Plumbing, Mechanical, and Electrical Codes. If the City Council approves Ordinance No. 07-___, the most recent editions of the Construction Codes with the applicable amendments will be in effect within the City of Costa Mesa as required by State law.

RECOMMENDATION

That the Council:

1. Adopt Resolution 07-___, a resolution of the City Council of the City of Costa Mesa, California, setting forth findings with respect to local conditions within the City of Costa Mesa which make certain modifications and changes to the California Building Code and California Fire Code as amended by the State of California; and,
2. Introduce Ordinance No. 07-___ and set for Second Reading at the Council's October 16, 2007 meeting. This procedure is in accordance with California Government Code Title 5, Division 1, Part 1, as published by the Building Standards Bulletin 99-01.

BACKGROUND

The State's Health and Safety Code (Section 17958) mandates that the California Building Standards Commission adopt and publish the California Building Standards Code (Title 24 California Code of Regulations) every three (3) years. The 2007 Edition of the California Code of Regulations Title 24, which incorporates the below-listed model codes, becomes effective on January 1, 2008.

If approved, Ordinance No. 07-___ would amend Title 5 and Title 7 by repealing references to the prior editions of the model codes.

The list below identifies the model codes upon which the 2007 Title 24 is based:

| California Building Standards Code | Reference Model Code |
|------------------------------------|--|
| 2007 California Building Code | 2006 International Building Code (ICC) |
| 2007 California Fire Code | 2006 International Fire Code (ICC) |
| 2007 California Plumbing Code | 2006 Uniform Plumbing Code (IAPMO) |
| 2007 California Mechanical Code | 2006 Uniform Mechanical Code (IAPMO) |
| 2007 California Electrical Code | 2005 National Electrical Code (NFPA) |

The Construction Codes and Fire Code proposed for adoption by reference with amendments include the following:

2007 California Building Code
2007 California Fire Code
2007 California Plumbing Code
2007 California Mechanical Code
2007 California Electrical Code
2006 International Property Maintenance Code
1997 Uniform Code for the Abatement of Dangerous Buildings
Orange County Grading Code

The Development Services Department and Fire Department are recommending that changes and modifications be made to the Codes and are advising that certain changes and modifications to the 2007 Edition of the California Building Code and 2007 Edition of the California Fire Code are reasonably necessary due to local conditions in the City of Costa Mesa. Other modifications are of an administrative or procedural nature and concern themselves with subjects that are not covered by the Codes or are reasonably necessary to safeguard life and property within the City of Costa Mesa.

Resolution No. 07-___ sets forth a number of findings, summarized below, which are necessary to enable the City to amend the new building code to meet our local conditions. Ordinance No. 07-___ updates Sections 5-1.1 of the Costa Mesa Municipal Code by amending the 2007 edition of the California Building Code.

Title 5 of the Costa Mesa Municipal Code was last updated in 1999. There are a total of 6 findings in Resolution No. 07-___ which address 3 amendments to the California Building Code and 1 amendment to the California Fire Code as follows:

1. Building Code Section 202 and Fire Code Section 202 – Due to Fire Department logistical limitations and local high winds, the requirement of high rise buildings is amended to apply to buildings over 55 feet high instead of over 75 feet high. This provision already exists in the current Costa Mesa Building and Fire policy.
2. Building Code Sections 403.10.2 and 403.11.1 – Due to Fire Department logistical limitation, local traffic, and seismic condition, the requirement of high-rise buildings for standby and emergency power loads are revised to place smokeproof enclosures in the emergency power category.

3. Building Code Section 1505 – Due to serious hazard of rapid fire spread in local high winds, the use of untreated wood roof is prohibited for new buildings and re-roofing of existing buildings. This new provision is also in response to the recent grand jury report and recommendations.

The 3 proposed amendments are consistent with the Orange County Code Uniformity Group and have the support of the Orange County Building Industry Association. The remainders of the proposed amendments are administrative or procedural in nature, such as amendments to change references from “Uniform Codes” to “Construction Codes”.

FISCAL REVIEW

No fiscal impact.

LEGAL REVIEW

The City Attorney has approved the Resolution and Ordinance as to form.

ALTERNATIVES CONSIDERED

No alternatives recommended.

CONCLUSION

If the City Council approves Ordinance No. 07-____, the most recent editions of the Construction Codes with the applicable amendments will be in effect within the City of Costa Mesa as required by State law.


KHANH Q. NGUYEN, CBO
Building Official


GREG STEWARD
Deputy Fire Chief/Fire Marshal


DONALD D. LAMM, AICP
Deputy City Mgr.- Dev. Services Dir.

ATTACHMENTS:

1. Resolution No. 07-____
2. Ordinance No. 07-____

DISTRIBUTION: City Manager
Assistant City Manager
City Attorney
Fire Chief
Public Services Director
City Clerk (2)
Staff (4)
File (2)

| | | |
|--------------------------|--------------|------------------|
| 100207BuildFireCodeAdopt | Date: 092007 | Time: 10:15 a.m. |
|--------------------------|--------------|------------------|

RESOLUTION NO. 07-___

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF COSTA MESA, CALIFORNIA, SETTING FORTH FINDINGS FOR REQUIRED AMENDMENTS TO THE 2007 CALIFORNIA BUILDING CODE AND TO THE 2007 CALIFORNIA FIRE CODE WITH RESPECT TO HOUSING OCCUPANCIES RELATIVE TO LOCAL CLIMATIC AND GEOGRAPHIC CONDITIONS

Section 1

The City Council of the City of Costa Mesa finds and resolves as follow:

WHEREAS, Health and Safety Code Section 17958 provides that the City of Costa Mesa ("City") shall adopt Ordinances and regulations imposing the same or modified or changed requirements as are contained in the regulations adopted by the State pursuant to Health and Safety Code Section 17922; and

WHEREAS, the State of California is mandated by Health and Safety Code Section 17922 to impose the same requirements as are contained in the most recent edition of the California Building Code, the California Fire Code, the California Plumbing Code, the California Mechanical Code, and the California Electrical Code (hereinafter referred to collectively as "Codes"); and

WHEREAS, Health and Safety Code Section 17958.5(a) permits the City to make modifications or changes to the Codes, which are reasonably necessary because of local climatic, geographic, or topographic conditions; and

WHEREAS, Health and Safety Code Section 17958.7 requires that the City Council, before making any modifications or changes to the Codes, shall make an express finding that such changes or modifications are reasonably necessary because of local climatic, geographic, or topographic conditions; and

WHEREAS, the Development Services Department have recommended that changes and modifications be made to the Codes and have advised that certain said changes and modifications to the California Building Code, 2007 Edition, are reasonably necessary due to local conditions in the City of Costa Mesa and have further advised that the remainder of said changes and modifications are of an administrative or procedural nature, or concern themselves with subjects not covered by the Codes or are reasonably necessary to safeguard life and property within the City of Costa Mesa.

Amendments related to life and fire safety contained in Sections 202, 403.10.2, 403.11.1, 1505.1, and 1505.1.3 of the 2007 Edition of the California Building Code, and Section 202 of the 2007 Edition of the California Fire Code as recommended by the Development Services Department and Fire Department are hereby found to be reasonably necessary due to the following local conditions:

A. Climatic Conditions

1. Hot, dry Santa Ana winds are common to all areas within the City of Costa Mesa and Orange County in general. These winds, which can cause small fires to spread quickly, are a contributing factor to the high fire danger in the area, and create the need for an increased level of fire protection. This added protection will supplement normal fire department response available and provide immediate protection for life and safety of multiple occupants during fire occurrences.
2. Orange County and the City of Costa Mesa are located in a semi-arid Mediterranean type climate which predisposes all fuels, including wood shingles, to rapid ignition and spread of fire. Therefore, there exists a need for additional fire protection measures.

B. Geographic Conditions

1. Orange County and the City of Costa Mesa are located in Seismic Zone 4. There are earthquake faults that run along both the northeastern and southwestern boundaries of Orange County. The Newport-Inglewood Fault Zone (NIFZ) which runs through Orange County was the source of the destructive 1933 Long Beach earthquake (6.3 magnitude, hypocenter off Newport Beach coast), which took 120 lives, with areas damaged from Laguna Beach to Marina del Rey and inland to Whittier, and poses one of the greatest hazards to lives and property in the nation. Regional planning for reoccurrence is recommended by the State of California, Department of Conservation. There was also an earthquake in December 1989, with the epicenter located near the City of Irvine. The fault on which this quake occurred was unknown prior to this activity. The October 17, 1989, Santa Cruz earthquake resulted in only one major San Francisco fire in the Marina district, but when combined with the 34 other fires and over 500 responses, the department was taxed to its full capabilities. The Marina fire was difficult to contain because mains supplying water to the district burst during the earthquake. If more fires had been ignited by the earthquake, it would have been difficult for the fire department to contain them. Experts predict a major earthquake in our area within the next 50 years. This situation creates the need for both additional fire protection measures and automatic on-site fire protection for building occupants since a multitude of fires may result from breakage of gas and electric lines as a result of an earthquake. As noted by "Planning Scenario on a Major Earthquake on the Newport-Inglewood Fault Zone, 1988, State Department of Conservation," page 59, "unfortunately, barely meeting the minimum earthquake standards of building codes places a building on the verge of being legally unsafe";
2. Traffic and circulation congestion presently existing in the City of Costa Mesa often places fire department response time to fire occurrences at risk. This condition will be exacerbated by any major disaster, including any earthquake wherein damage to the highway system will occur. This condition makes the need for additional on-site protection for property occupants necessary.

3. Placement of multiple occupancy buildings, location of arterial roads, and fire department staffing constraints due to recent revenue-limiting state legislation have made it difficult for the fire department to locate additional fire stations and provide manpower sufficient to concentrate fire companies and personnel to control fires in high density apartment or condominium buildings. Fire Department equipment does not allow easy access to areas of buildings greater than 55 feet above the level of Fire Department vehicle access. These conditions create the need for built-in on-site fire protection systems to protect occupants and property until fire fighting apparatus and personnel arrive on the scene.

The City of Costa Mesa is located in an area subject to a climatic condition of high winds and low humidity. This combination of events creates an environment, which is conducive to rapidly spreading fires. Control of such fires requires rapid response. Obstacles generated by a strong wind, such as fallen trees, street lights and utility poles, and the requirement to climb 75 feet vertically up flights of stairs will greatly impact the response time to reach an incident scene. Additionally, Section 6, Figure 6-2 of ASCE 7 identifies a significant increase in the amount of wind force at 60 feet above the ground. Use of aerial type fire fighting apparatus above this height would place rescue personnel at increased risk of injury.

The City of Costa Mesa is located in the middle of the seismically active area identified as Seismic Zone 4. The viability of the public water system would be questionable at best after a major seismic event. This would leave tall buildings vulnerable to uncontrolled fires due to a lack of available water and an inability to pump sufficient quantities of any available water to floors above the 55-foot level. A severe seismic event has the potential to negatively impact any rescue or fire suppression activities because it is likely to create obstacles similar to those indicated under the high wind section above. With the probability of strong aftershocks there exists a need to provide increased protection for anyone on upper floors.

4. Untreated wood roofs cause or contribute to serious fire hazard and to the rapid spread of fires when such fires are accompanied by high winds. Pieces of burning wooden roofs become flying brands and are carried by the wind to other locations and thereby spread fire quickly. Recent Grand Jury Report findings support this concern.

Additional amendments have been made to the California Building Code, 2007 Edition and the California Fire Code, 2007 Edition. On the recommendation of the Development Services Department and Fire Department, such amendments are hereby found to be either administrative or procedural in nature or concern themselves with subjects not covered in the California Building Code or California Fire Code. The changes made include provisions making each of said Codes compatible with other Codes enforced by the City.

The aforementioned amendments have been incorporated in detail in Ordinance 07-

Section 2

The Development Services Department and Fire Department shall file copies of Resolution 07-_____ and Ordinance 07-_____ with the California Building Standards Commission as required by Health and Safety Code Section 17958.7.

PASSED and ADOPTED at a regular meeting of the Costa Mesa City Council, held on the 2nd day of October 2007.

ALLAN MANSOOR
Mayor

JULIE FOLCIK
City Clerk

STATE OF CALIFORNIA)
COUNTY OF ORANGE) SS
CITY OF COSTA MESA)

CERTIFICATION FOR RESOLUTION NO. 07-_____.

JULIE FOLCIK, City Clerk and ex-officio Clerk of the City Council of the City of Costa Mesa, California, does hereby certify that the whole number of the members of the City Council of the City of Costa Mesa is five; that the above and foregoing Resolution No. 07-_____ was passed and adopted at a regular meeting of the City Council held on the 2nd day of October 2007 by the following vote:

COUNCILMEMBER
COUNCILMEMBER
COUNCILMEMBER
COUNCILMEMBER

Julie Folcik
City Clerk

ORDINANCE NO. 07-_____

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF COSTA MESA, CALIFORNIA, AMENDING SECTIONS 5-1, 5-1.1, 5-2, 5-3, 5-12, AND 5-95 OF TITLE 5 AND SECTIONS 7-14 THROUGH 7-21 OF TITLE 7 OF THE COSTA MESA MUNICIPAL CODE BY ADOPTING THE 2007 EDITIONS OF THE CALIFORNIA CODES AND RELATED MODEL CODES WITH APPENDICES AND AMENDMENTS THERETO

THE CITY COUNCIL OF THE CITY OF COSTA MESA DOES HEREBY ORDAIN AS FOLLOWS:

Section 1

Section 5-1 of Chapter I, Title 5, of the Costa Mesa Municipal Code is hereby amended to read as follows:

“Sec. 5-1 Construction Codes Adopted.

For the purpose of prescribing regulations for erecting, construction, enlargement, alteration, repair, improving, removal, conversion, demolition, occupancy, equipment use, height, and area of buildings and structures, the following construction codes subject to the modifications set forth in this Chapter, are hereby adopted: the California Building Code, 2007 Edition, based on the 2006 International Building Code as published by the International Code Council, including Appendix Chapter 1; the California Plumbing Code, 2007 Edition, based on the 2006 Uniform Plumbing Code as published by the International Association of Plumbing and Mechanical Officials, including Appendix A and Appendix L; the California Mechanical Code, 2007 Edition, based on the 2006 Uniform Mechanical Code as published by the International Association of Plumbing and Mechanical Officials; the California Electrical Code, 2007 Edition, based on the 2005 National Electrical Code as published by the National Fire Protection Association; the International Property Maintenance Code, 2006 Edition, as published by the International Code Council; the Uniform Code For The Abatement of Dangerous Buildings, 1997 Edition, as published by the International Code Council. For the purpose of prescribing regulations for grading and excavations, the most current Orange County Grading and Excavation Code is hereby adopted. The provisions of these Construction Codes as amended by this chapter shall constitute the Building Regulations of the City of Costa Mesa. Where the California Code of Regulations and State Building Standards Code of Regulations differ from any sections of the Construction Codes, State regulations shall prevail over the Construction Codes.

One (1) copy of all the above codes and standards therefore are on file in the office of the building official pursuant to Health and Safety Code Section 18942 (d) (1) and are made available for public inspection.

Notwithstanding the provisions of the above-referenced construction codes, all fees for services provided pursuant to the construction codes shall not take effect until a resolution for such fees is adopted by the City Council pursuant to California Government Code Sections 66016 and 66020.”

Section 2

Section 5-1.1 of Chapter 1, Title 5, of the Costa Mesa Municipal Code is hereby amended to read as follows:

“Sec. 5-1.1 Amendments to the 2007 California Building Code.

a) **202 “High-rise structure”** means every building of any type of construction or occupancy having floors used for human occupancy located more than 55 feet (16,764 mm) above the lowest floor level having building access (see Section 403.1.2), except buildings used as hospitals as defined in Health and Safety Code Section 1250.

b) **403.10.2 Standby power loads.** The following are classified as standby power loads:

1. Power and lighting for the fire command center required by Section 403.8;
2. Electrically powered fire pumps.

Standby power shall be provided for elevators in accordance with Sections 1007.4 and 3003.

c) **403.11.1 Emergency power loads.** The following are classified as emergency power loads:

1. Exit signs and means of egress illumination required by Chapter 10;
2. Elevator car lighting;
3. Emergency voice/alarm communications systems;
4. Automatic fire detection systems;
5. Fire alarm systems; and
6. Ventilation and automatic fire detection equipment for smokeproof enclosures.

d)

**TABLE 1505.1^a
MINIMUM ROOF COVERING CLASSIFICATIONS
TYPES OF CONSTRUCTION**

| | | | | | | | | |
|----|----|-----|-----|------|------|----|----|----|
| IA | IB | IIA | IIB | IIIA | IIIB | IV | VA | VB |
| B | B | B | B | B | B | B | B | B |

For SI: 1 foot = 304.8 mm, 1 square foot = 0.0929 m².

a. Unless otherwise required in accordance with Chapter 7A.

- e) **1505.1.3 Roof coverings within all other areas.** The entire roof covering of every existing structure where more than 50 percent of the total roof area is replaced within any one-year period, the entire roof covering of every new structure, and any roof covering applied in the alteration, repair or replacement of the roof of every existing structure, shall be a fire-retardant roof covering that is at least Class B.

Section 3

Section 5-2 (a) of Chapter I, Title 5, of the Costa Mesa Municipal Code is hereby amended to read as follows:

“(a) Enforcement of the Construction Codes adopted by section 5-1 shall be the responsibility of the building official. All references to the building official or director of building and safety shall deem to mean the building official responsible for the division of building and code enforcement.”

Section 5-2 (d) of Chapter I, Title 5, of the Costa Mesa Municipal Code is hereby amended to read as follows:

“(d) Where, in any specific case, different sections of the Construction Codes specify different materials, methods of construction or other requirements, the most restrictive shall govern.”

Section 5-3 (b) of Chapter I, Title 5, of the Costa Mesa Municipal Code is hereby amended to read as follows:

“(b) The above-referenced appeals shall be filed with the building official on application forms established by the appeals board and consistent with the Construction Codes adopted in section 5-1. An appeal application fee shall be paid to process the appeal as set by resolution of city council. Notice of the appeal and appeal hearing shall comply with the Construction Codes adopted in section 5-1.”

Section 5-3 (f) of Chapter I, Title 5, of the Costa Mesa Municipal Code is hereby amended to read as follows:

“(f) Where a notice and order of the building official or decision of an appeals board under this section becomes final and a violation of this title has been determined to exist, the city attorney is hereby authorized to commence civil or criminal proceedings to abate the violation of the provisions of this title. A violation of any provision of this title shall constitute a public nuisance and costs for abatement, including attorney’s fees and court costs, shall be subject to reimbursement from the property owner to the city pursuant to the Construction Codes adopted in section 5-1.”

Section 5-12 of Chapter I, Title 5, of the Costa Mesa Municipal Code is hereby amended to read as follows:

“Refund of any fee paid by the applicant pursuant to this title may be made as provided in the Construction Codes adopted in section 5-1 or by established policy.”

Section 5-95 of Chapter V, Title 5, of the Costa Mesa Municipal Code is hereby amended to read as follows:

“Except as hereinafter provided all words and phrases as used in this chapter shall have the same meanings as set forth in the California Building Code, and amendments thereto:

Street. Shall mean a public street, road, alley, highway, right-of-way or other ways dedicated to and for the public’s use for travel.”

Section 4

Section 7-14 of Chapter II, Title 7, of the Costa Mesa Municipal Code is hereby amended to read as follows:

“Sec. 7-14 Adoption of the California Fire Code.

There is hereby adopted by the city council of the City of Costa Mesa, for the purpose of prescribing regulations governing conditions hazardous to life and property from fire, hazardous materials or explosion, that certain code known as the California Fire Code, 2007 Edition, based on the 2006 International Fire Code as published by the International Code Council, including Appendix Chapter 1, Appendix Chapter 4, Appendix B, Appendix C, and Appendix H, of which not less than one (1) copy is filed in the office of the city clerk and the same is hereby adopted and incorporated as fully as if set out at length herein, and from the date on which this chapter shall take effect, the provisions thereof shall be controlling within the limits of the City of Costa Mesa.”

Section 5

Section 7-15 of Chapter II, Title 7, of the Costa Mesa Municipal Code is hereby amended to read as follows:

“Sec. 7-15. Amendments to the 2007 California Fire Code.

202 “High-rise structure” means every building of any type of construction or occupancy having floors used for human occupancy located more than 55 feet above the lowest floor level having building access (see California Building Code, Section 403.1.2), except buildings used as hospitals as defined in Health and Safety Code Section 1250.”

Section 6

Sec. 7-21 of Chapter II, Title 7, of the Costa Mesa Municipal Code is hereby amended to read as follows:

“Sec. 7-21. Modification in code.

The chief of the fire department shall have the power to modify application of any of the provisions of the California Fire Code upon application in writing by the owner or lessee, or his duly authorized agent, when there are practical difficulties in the way of carrying out the strict letter of the code, provided that the intent and spirit of

the code shall be observed, public safety secured, and substantial justice done. The particulars of such modification when granted or allowed and the decision of the chief of the fire department thereon shall be entered upon the records of the department, and a signed copy shall be furnished to the applicant."

Sec. 7-15, 7-16, 7-18, 7-19, and 7-20 of Chapter II, Title 7, of the Costa Mesa Municipal Code is hereby amended to delete all section no. referencing the previous Uniform Code.

Section 7

If any section, subsection, sentence, clause, phrase or portion of this Ordinance is for any reason held out to be invalid or unconstitutional by the decision of any court of competent jurisdiction, such decision shall not affect the validity of the remaining portions of this ordinance. The City Council of the City of Costa Mesa hereby declares that it would have adopted this ordinance and each section, subsection, sentence, clause, phrase or portion thereof irrespective of the fact that any one or more sections, subsection, sentence clause, phrases or portions be declared valid or unconstitutionally.

PASSED AND ADOPTED at a regular meeting of the City Council of the City of Costa Mesa, held on the 16th day of October, 2007.

ALLAN MANSOOR
Mayor

JULIE FOLCIK
City Clerk

STATE OF CALIFORNIA)
COUNTY OF ORANGE) SS
CITY OF COSTA MESA)

CERTIFICATION FOR ORDINANCE NO. 07- ____.

I, JULIE FOLCIK, City Clerk and ex-officio Clerk of the City Council of the City of Costa Mesa, California, does hereby certify that the whole number of the members of the City Council of the City of Costa Mesa is 5; that the above and foregoing Ordinance No. 07- ____ was duly and regularly introduced, passed and adopted at a regular meeting of the City Council held on the 16th day of October, 2007 by the following vote:

COUNCILMEMBER
COUNCILMEMBER
COUNCILMEMBER
COUNCILMEMBER

Julie Folcik, City Clerk